

1310W
Sep - 12-5K-bedrock
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 20 1999

PIT REMEDIATION AND CLOSURE REPORT

**OIL CON. DIV
DIST. 3**

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

Address: 200 Amoco Court, Farmington, NM 87401

Facility or Well Name: JICARILLA APACHE TRIBAL 35 #2

Location: Unit or Qtr/Qtr Sec E Sec 2 T 24N R 5W County RIO ARriba

Pit Type: Separator Dehydrator Other BLOW

Land Type: RANGE

Pit Location: Pit dimensions: length 50', width 50', depth 27'
(Attach diagram) Reference: wellhead X, other

Footage from reference: 180'

Direction from reference: 45 Degrees East of North
X West of South X

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)	<u>0</u>
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)	<u>0</u>
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)	<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 No	(20 points) (0 points)	<u>0</u>
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)	<u>0</u>

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: _____ Date Completed: 12/22/97

Remediation Method: Excavation ☒ Approx. cubic yards 1,500
 (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

Groundwater Encountered: No ☒ Yes _____ Depth _____

Final Pit: Sample location see Attached Documents

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

Sample depth 28'

Sample date 12/22/97 Sample time 1215

Sample Results

Soil: Benzene	(ppm) _____	Water: Benzene	(ppb) _____
Total BTEX	(ppm) _____	Toluene	(ppb) _____
Field Headspace	(ppm) <u>0.0</u>	Ethylbenzene	(ppb) _____
TPH	(ppm) <u>ND</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 12/22/97 PRINTED NAME Buddy D. Shaw


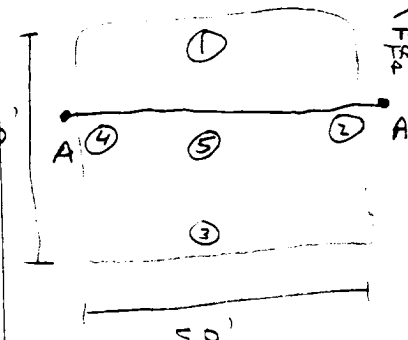
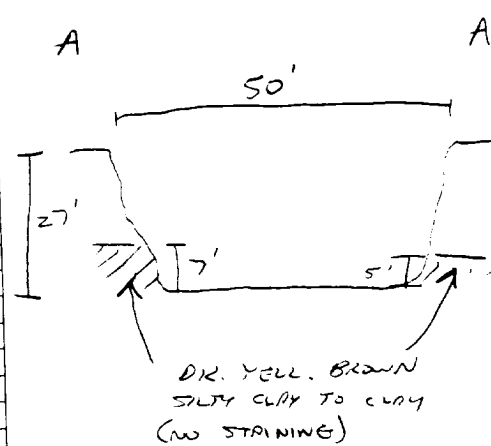
SIGNATURE Buddy D. Shaw AND TITLE Environmental Coordinator

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: Kenn C Marshall DATE: 1-6-98

3003921993

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>8JSIS</u> C.D.C. NO: _____																																								
FIELD REPORT: CLOSURE VERIFICATION		PAGE No: <u>1</u> of <u>1</u>																																								
LOCATION: NAME: <u>JICA APACHE TRIBAL</u> SWELL #: <u>2</u> PIT: <u>Blow</u>		DATE STARTED: <u>12/22/97</u> DATE FINISHED: _____																																								
QUAD/UNIT: <u>E</u> SEC: <u>2</u> TWP: <u>24N</u> RNG: <u>5W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u>		ENVIRONMENTAL SPECIALIST: <u>NV</u>																																								
DTP/FOOTAGE: <u>5W NW</u> CONTRACTOR: <u>P+S</u>																																										
EXCAVATION APPROX. <u>50</u> FT. x <u>50</u> FT. x <u>27</u> FT. DEEP. CUBIC YARDAGE: <u>1,500</u>																																										
DISPOSAL FACILITY: <u>ON-SITE</u> REMEDIATION METHOD: <u>LANDFARMED</u>																																										
LAND USE: <u>RANGE</u> LEASE: <u>JIC35</u> FORMATION: <u>DK</u>																																										
FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY <u>180</u> FT. <u>S45W</u> FROM WELLHEAD.																																										
DEPTH TO GROUNDWATER: <u>7100'</u> NEAREST WATER SOURCE: <u>71000'</u> NEAREST SURFACE WATER: <u>71000'</u>																																										
NMOC PANING SCORE: <u>0</u> NMOC TPH CLOSURE STD: <u>5000</u> PPM																																										
COIL AND EXCAVATION DESCRIPTION:																																										
<p> MOSTLY MOD. YELL. BROWN SAND, NON COHESIVE SLIGHTLY MOIST FIRM, NO APPARENT STRAINING OR HC ODOR OBSERVED THROUGHOUT ENTIRE EXCAVATION, NO APPARENT HC ODOR OBSERVED IN ANY OF THE OVM SAMPLES, DK. YELL. BROWN SILTY CLAY TO CLAY @ BOTTOM 1/3 OF EXCAVATION, NO APPARENT STRAINING OR HC ODOR OBSERVED w/ IT. </p>																																										
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <p>CLOSED</p> <p>SCALE</p>  <p>0 FT</p> </div> <div style="width: 65%;"> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <caption>FIELD 418.1 CALCULATIONS</caption> <thead> <tr> <th>TIME</th> <th>SAMPLE I.D.</th> <th>LAB No:</th> <th>WEIGHT (g)</th> <th>mL. FREON</th> <th>DILUTION</th> <th>READING</th> <th>CALC. ppm</th> </tr> </thead> <tbody> <tr> <td>1215</td> <td>③ @ 28'</td> <td>TPH-1950</td> <td>5</td> <td>20</td> <td>1:1</td> <td>5</td> <td>ND</td> </tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table> </div> </div>			TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm	1215	③ @ 28'	TPH-1950	5	20	1:1	5	ND																								
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BLAGG ENGINEERING, INC.

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:	5 @ 28'	Date Analyzed:	12-22-97
Project Location:	Jicarilla Apache Tribal 35 # 2	Date Reported:	12-22-97
Laboratory Number:	TPH-1950	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	ND	20

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% * Diff.
	608	568	6.80

* 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 - BJ515

Melanie Telford
Analyst

J.C. Blagg
Review

BLAGG ENGINEERING, INC.

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

5 @ 28'

Jicarilla Apache Tribal 35 # 2

TPH-1950

Project #:

Date Analyzed:

Date Reported:

Sample Matrix:

12-22-97

12-22-97

Soil

Sample Weight:

5.00 grams

Volume Freon:

20.00 mL

Dilution Factor:

1 (unitless)

TPH Reading:

5 mg/kg

TPH Result:

20.0 mg/kg

Reported TPH Result:

20 mg/kg

Actual Detection Limit:

20.0 mg/kg

Reported Detection Limit:

20 mg/kg

QA/QC:

Original
TPH mg/kg

608

Duplicate
TPH mg/kg

568

%
Diff.

6.80

Comments:

*****Max Characters*****

Comments:

Blow Pit - BJ515

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

87515

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

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 TRIBAL 35 #2
Location: Unit or Qtr/Qtr Sec E Sec 2 T24N R5W County RIO ARriba
Pit Type: Separator ☒ Dehydrator ☐ Other ☐
Land Type: RANGE

Pit Location: Pit dimensions: length 41', width 53', depth 23'
(Attach diagram) Reference: wellhead ☒, other ☐
Footage from reference: 170'
Direction from reference: 47 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 SurfaceWater:

(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: 12/23/97

Remediation Method: Excavation ☒
 (check all appropriate sections)
 Landfarmed ☒
 Other _____

Approx. cubic yards 1,250
 Insitu Bioremediation _____

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

General Description of Remedial Action: Excavation. PIT BOTTOM CONSIST OF BEDROCK.
APPLIED FERTILIZER ON EAST SIDEWALL.

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 17'

Sample date 12/22/97 Sample time 1315

Sample Results

Soil: Benzene	(ppm)	<u>0.0420</u>	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	<u>51.870</u>	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>1,508</u>	Ethylbenzene	(ppb)	_____
TPH	(ppm)	<u>4,638</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 12/23/97 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) conditional closure Total BTEX 51.8

SIGNED: Kerr C Marshall DATE: 1-6-98

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>BJ515</u> C.O.C. NO: <u>5666</u>
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FIELD REPORT: CLOSURE VERIFICATION

LOCATION: NAME <u>JICA APACHE TRIBAL</u> SWELL #: <u>2</u> PIT: <u>SEP.</u>	PAGE No: <u>1</u> of <u>1</u>
QUAD/UNIT: <u>E</u> SEC: <u>2</u> TWP: <u>24N</u> RNG: <u>5W</u> PM: <u>Nm</u> CNTY: <u>RA</u> ST: <u>Nm</u>	DATE STARTED: <u>12/22/97</u> DATE FINISHED: _____
OTF/EQUIPAGE: <u>SW</u> <u>NW</u> CONTRACTOR: <u>P+S</u>	ENVIRONMENTAL SPECIALIST: <u>NI</u>

EXCAVATION APPROX. 41 FT. x 53 FT. x 23 FT. DEEP. CUBIC YARDAGE: 1,250

DISPOSAL FACILITY: ON-SITE REMEDIATION METHOD: LANDFIRMED

LAND USE: RANGE LEASE: JIC 35 FORMATION: DK

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 170 FT. N47W FROM WELLHEAD.

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

NMOC PAIRING SCORE: 0 NMOC TPH CLOSURE STD: 5000 PPM

COIL AND EXCAVATION DESCRIPTION:

CHECK ONE:

☒ PIT ABANDONED

☐ STEEL TANK INSTALLED

☐ FIBERGLASS TANK INSTALLED

SIDEWALLS CONSIST OF MOSTLY MED. YELL. BROWN SAND EXCEPT EAST SIDEWALL WHICH K LT. TO DK. OLIVE GRAY (STAINED) W/ STRONG HC ODOR (SEE PIT PROFILE FOR NORTH & SOUTH SIDEWALL STAINED AREAS) NON COHESIVE SLIGHTLY MOIST, FIRM, STRONG HC ODOR IN NORTH, EAST, & SOUTH SIDEWALL OVM SAMPLES ONLY.

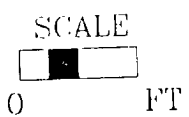
PIT BOTTOM - DARK RED SHALE BEDROCK, VERY HARD, NO APPARENT HC ODOR IN OVM SAMPLE.

BEDROCK BOTTOM

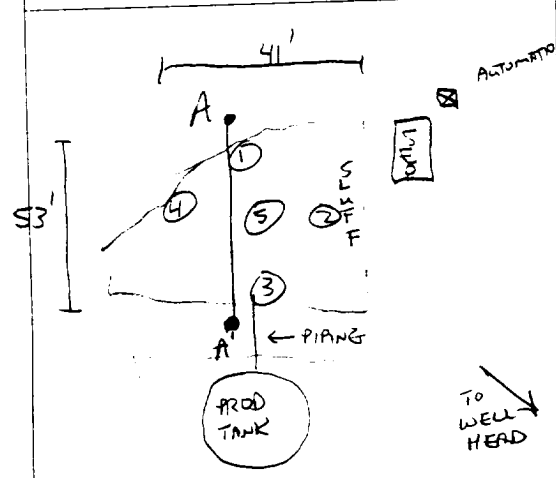
RISK ASSESSED

FIELD 418.1 CALCULATIONS

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



PIT PERIMETER

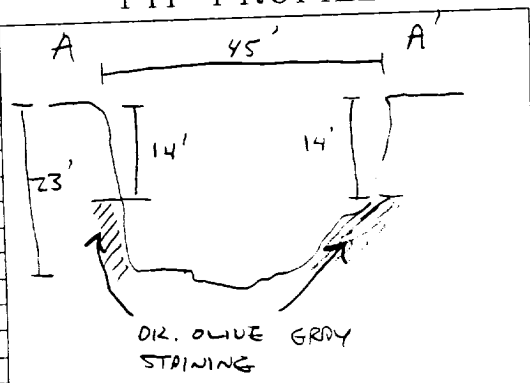


OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 18'	508
2 @ 17'	1,508
3 @ 17'	281
4 @ 18'	47.2
5 @ 26'	7.6

SAMPLE ID	ANALYSIS	TIME
2 @ 17' TPH	BTEX	1315
(80 FT)		
TPH - PASSED		
BTEX - FAILED		

PIT PROFILE



TRAVEL NOTES: CALLOUT: 12/17/97 - AFTER ONSITE: 12/22/97 - AFTER

Well Name:

Well Site location:

Pit Type:

Producing Formation:

Pit Category:

Horizontal Distance to Surface Water:

Vicinity Groundwater Depth:

Jicarilla Apache Tribal 35 # 2

Unit E, Sec. 2, T24N, R5W

Separator Pit

W. Lindrith Gallup Dakota

Non Vulnerable

> 1000 ft.

> 100 ft.

RISK ASSESSMENT - (non vulnerable)

Pit remediation activities were terminated when trackhoe encountered shale bedrock at 26 feet below grade.

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

1. Past production fluids were contained locally by a relatively shallow shale bedrock located 26 feet below grade. Groundwater levels located on or close to the well pad are estimated to be at a much greater depth below shale bedrock.
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 **non-vulnerable area** and is approximately 1.23 miles north of the nearest vulnerable area boundary (Canada Largo wash).

(Refer to Otero Store Quadrangle, New Mexico - Rio Arriba County, 7.5 Minute Series (Topographic), 1963, (vulnerable area boundary developed by Mr. William C. Olson, Hydrogeologist, Environmental Bureau, New Mexico Oil Conservation Division).

Based upon the information given, we conclude that the subsurface lateral impact from the earthen pit is very limited and that the shale bottom creates enough of a impermeable barrier as to subdue impact to groundwater below it (please refer to AMOCO's report "Post Excavation Pit Closure Investigation Summary, July, 1995", with cover letter dated November 30, 1995). AMOCO requests pit closure approval on this location.

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client: Blagg / AMOCO
Sample ID: 2 @ 17'
Laboratory Number: C727
Chain of Custody No: 5666
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

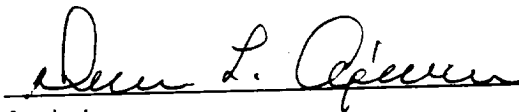
Project #: 04034-10
Date Reported: 12-23-97
Date Sampled: 12-22-97
Date Received: 12-23-97
Date Extracted: 12-23-97
Date Analyzed: 12-23-97
Analysis Requested: 8015 TPH

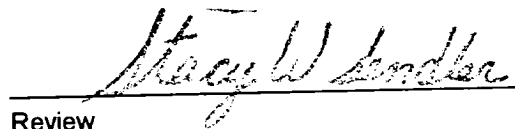
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	2,024	0.2
Diesel Range (C10 - C28)	2,614	0.1
Total Petroleum Hydrocarbons	4,638	0.2

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 Tribal #2 Separator Pit.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client: Blagg / AMOCO
Sample ID: 2 @ 17'
Laboratory Number: C727
Chain of Custody: 5666
Sample Matrix: Soil
Preservative: Cool
Condition: Cool & Intact

Project #: 04034-10
Date Reported: 12-23-97
Date Sampled: 12-22-97
Date Received: 12-23-97
Date Analyzed: 12-23-97
Date Extracted: 12-23-97
Analysis Requested: BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	42.0	8.8
Toluene	6,930	8.4
Ethylbenzene	8,940	7.6
p,m-Xylene	13,040	10.8
o-Xylene	22,920	5.2
Total BTEX	51,870	


ND - Parameter not detected at the stated detection limit.

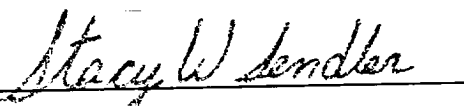
Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	96 %
	Bromofluorobenzene	96 %

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 Tribal #2 Separator Pit.


Analyst


Review

(505) 632-0615

8J515

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NATURAL RESOURCE DEPT
AND OIL & GAS ADMINISTRATION

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

ON-SITE SOIL REMEDIATION REPORT

Operator: <u>AMOCO PRODUCTION COMPANY</u>		Telephone: <u>(505) 326-9200</u>
Address: <u>200 Amoco Court, Farmington, NM 87401</u>		
Facility or Well Name: <u>JICARILLA APACHE TRIBAL # 35 - 2</u>		
Location: Unit or Qtr/Qtr Sec <u>E</u> Sec <u>2</u> T <u>24N</u> R <u>5W</u> County <u>RIO ARriba</u>		
Land Type: <u>RANGE</u>		
Date Remediation Started: <u>12/22/97</u>		Date Completed: <u>9/11/98</u>
Remediation Method: Landfarmed <input checked="" type="checkbox"/> Composted <input type="checkbox"/> Other <input type="checkbox"/>		Approx. cubic yards <u>2,750</u>
Depth To Groundwater: (pts.) <u>0</u>		Final Closure Sampling: Sampling Date: <u>9/9/98</u> Time: <u>-</u> Sample Results: Field Headspace (ppm) <u> </u> TPH (ppm) <u> </u> Method <u>8015</u> Other <u>MULTIPLE SAMPLES - SEE ATTACHED FORM.</u>
Distance to an Ephemeral Stream (pts.) <u>0</u>		
Distance to Nearest Lake, Playa, or Watering Pond (pts.) <u>0</u>		
Wellhead Protection Area: (pts.) <u>0</u>		
Distance To Surface Water: (pts.) <u>0</u>		
RANKING SCORE (TOTAL POINTS): <u>0</u>		
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF		
DATE <u>9/11/98</u> PRINTED NAME <u>Buddy D. Shaw</u>		AND TITLE <u>Environmental Coordinator</u>
SIGNATURE <u>Buddy D. Shaw</u>		
AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.		
APPROVED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> (REASON) <u> </u>		
SIGNED: <u>Kurt M...</u>		DATE: <u>10-1-98</u>

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>BJSIS</u> C.O.C. NO: <u>6201</u>
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FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: <u>NAMEJICA. AP. TRIPAL 35 WELL # 2</u>	PITS: <u>SEP, BOW</u>	DATE STARTED: <u>9/9/98</u>
QUAD/UNIT: <u>E</u> SEC: <u>2</u> TWP: <u>24N</u> RNG: <u>5W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u>		DATE FINISHED: _____
OTP/FOOTAGE: <u>5014 NW/4</u>	CONTRACTOR: <u>P&S</u>	ENVIRONMENTAL SPECIALIST: <u>NV</u>

SOIL REMEDIATION:

REMEDATION SYSTEM: LANDFARM

APPROX. CUBIC YARDAGE: 2,000

LAND USE: RANGE

LIFT DEPTH (ft): 1'-2'

FIELD NOTES & REMARKS:

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

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

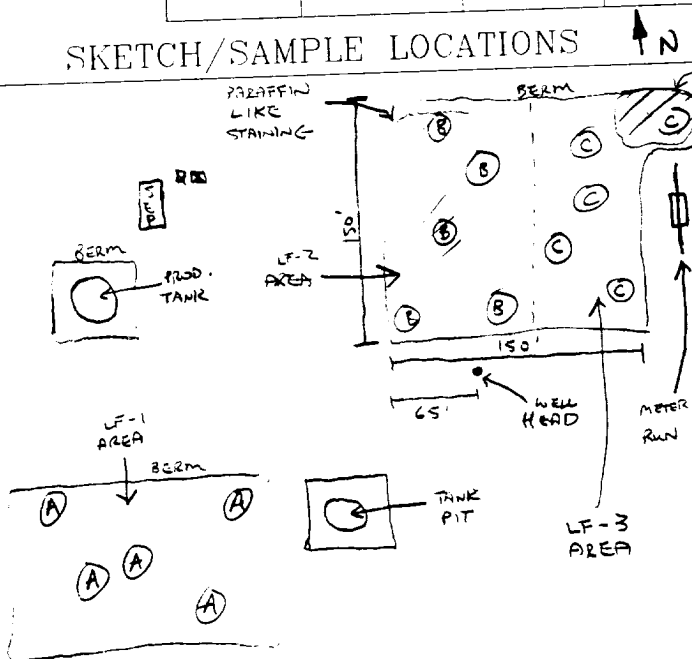
APPROX. 750 C.Y. DEPOSED TO JICARILLA APACHE TRIBAL #35-7 (J-2-24-5). SOIL CONSISTED OF VERY FINE ORANGE TO DR. YELL - BROWN SAND NON COHESIVE, SLIGHTLY MOIST, FIRM, PARAFFIN LIKE STAINING OBSERVED WITH LF-2 & LF-3 AREAS (SEE SKETCH BELOW). MED. GRAY DISCOLORATION OBSERVED WITH SAMPLING PT. LOCATED IN CENTER OF LF-3, BLACK DISCOLORATION W/ STRONG HC ODOOR OBSERVED/DETECTED WITH SAMPLING PT. LOCATED W FAR NE CORNER OF LF-3 SAMPLING DEPTHS RANGED FROM 6" TO 1 1/2', COLLECTED 5 PT. COMPOSITE SAMPLES 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

SAMPLE ID	FIELD HEADSPACE PID (ppm)
LF-1	0.0
LF-2	50.9
LF-3	18.2

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME	RESULTS
LF-1	TPH (8015)	0815	163
LF-2	TPH (8015)	0900	1,110
LF-3	TPH (8015)	0945	909

SCALE

0 FT

TRAVEL NOTES:

CALLOUT: _____

ONSITE: _____

9/9/98 - noon.

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

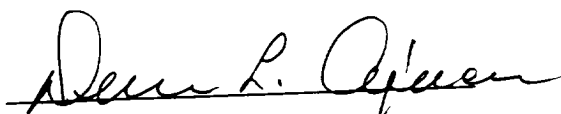
Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	LF - 1	Date Reported:	09-11-98
Laboratory Number:	D916	Date Sampled:	09-09-98
Chain of Custody No:	6201	Date Received:	09-09-98
Sample Matrix:	Soil	Date Extracted:	09-10-98
Preservative:	Cool	Date Analyzed:	09-11-98
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

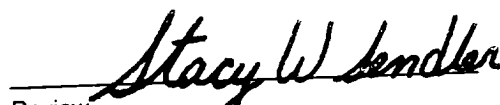
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	14.5	0.2
Diesel Range (C10 - C28)	148	0.1
Total Petroleum Hydrocarbons	163	0.2

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 Tribal 35 - 2 Landfarm. 5 Pt. Compostie.


Analyst


Review

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

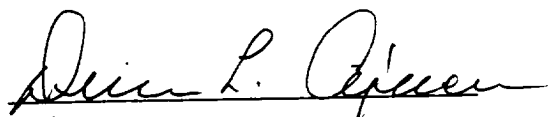
Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	LF - 2	Date Reported:	09-11-98
Laboratory Number:	D917	Date Sampled:	09-09-98
Chain of Custody No:	6201	Date Received:	09-09-98
Sample Matrix:	Soil	Date Extracted:	09-10-98
Preservative:	Cool	Date Analyzed:	09-11-98
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

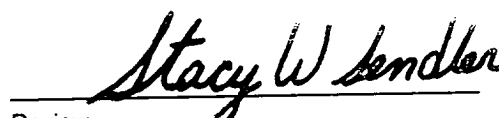
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	68.4	0.2
Diesel Range (C10 - C28)	1,030	0.1
Total Petroleum Hydrocarbons	1,100	0.2

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 Tribal 35 - 2 Landfarm. 5 Pt. Compostie.


Analyst


Review

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

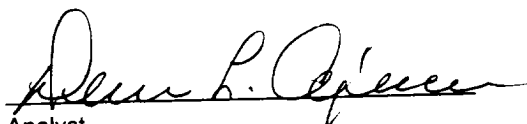
Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	LF - 3	Date Reported:	09-11-98
Laboratory Number:	D918	Date Sampled:	09-09-98
Chain of Custody No:	6201	Date Received:	09-09-98
Sample Matrix:	Soil	Date Extracted:	09-10-98
Preservative:	Cool	Date Analyzed:	09-11-98
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	55.6	0.2
Diesel Range (C10 - C28)	853	0.1
Total Petroleum Hydrocarbons	909	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 Tribal 35 - 2 Landfarm. 5 Pt. Compostie.


Analyst


Review

CHAIN OF CUSTODY RECORD

6201

Client / Project Name Bugs / Amoco				Project Location LANDFARM		ANALYSIS / PARAMETERS													
Client No. 04034-10				Remarks ALL SAMPLES PRESERV. - COOL															
Sampler: NTV				No. of Containers TPH (8015)															
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers						Remarks								
LF-1	9/9/98	0815	D916	SOIL	1	✓						5 PT. COMPOSITE							
LF-2	9/9/98	0900	D917	SOIL	1	✓						5 PT. COMPOSITE							
LF-3	9/9/98	0945	D918	SOIL	1	✓						5 PT. COMPOSITE							
Relinquished by: (Signature) <i>[Signature]</i>				Date	Time	Received by: (Signature) <i>[Signature]</i>					Date	Time							
Relinquished by: (Signature) <i>[Signature]</i>						Received by: (Signature) <i>[Signature]</i>													
Relinquished by: (Signature)						Received by: (Signature)													
<div style="display: flex; justify-content: space-between;"> <div> ENVIROTECH INC. 5796 U.S. Highway 64 Farmington, New Mexico 87401 (505) 632-0615 </div> <div> Sample Receipt <table border="1"> <tr> <td>Received Intact</td> <td>Y</td> <td>N</td> <td>N/A</td> </tr> <tr> <td>Cool - Ice/Blue Ice</td> <td>✓</td> <td></td> <td></td> </tr> </table> </div> </div>												Received Intact	Y	N	N/A	Cool - Ice/Blue Ice	✓		
Received Intact	Y	N	N/A																
Cool - Ice/Blue Ice	✓																		