

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

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 - 25
Location: Unit or Qtr/Qtr Sec 0 Sec 9 T 26N R 4W County RIO ARRIBA
Pit Type: Separator Dehydrator Other COMPRESSOR
Land Type: RANGE

Pit Location: Pit dimensions: length 30', width 30', depth 3'
(Attach diagram) Reference: wellhead X, other
Footage from reference: 110'
Direction from reference: 33 Degrees X East of North
 West of South X

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

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: _____ Date Completed: 10/18/98

Remediation Method: Excavation ☒ Approx. cubic yards 50
(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. ENTIRE EXCAVATION IN BEDROCK
THEREFORE NO TPH ANALYSIS WAS CONDUCTED. RISK ASSESSED.

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 3' (PIT BOTTOM)

Sample date 10/18/98 Sample time 1300

Sample Results

Soil: Benzene	(ppm)	_____	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	_____	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>351</u>	Ethylbenzene	(ppb)	_____
TPH	(ppm)	<u>NA</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 10/18/98 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: Kurt C. Mendenhall DATE: 12-28-98

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>8J674</u> C.O.C. NO: <u> </u>																																																	
FIELD REPORT: CLOSURE VERIFICATION		PAGE No: <u>1</u> of <u>1</u>																																																	
LOCATION: NAME: <u>JCA APACHE 102</u> WELL #: <u>25</u> PIT: <u>COMPRESSOR</u>		DATE STARTED: <u>10-18-98</u> DATE FINISHED: <u>10-21-98</u>																																																	
QUAD/UNIT: <u>0 SEC: 9</u> TWP: <u>26N</u> RNG: <u>4W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u>		ENVIRONMENTAL SPECIALIST: <u>JCG</u>																																																	
QTR/FOOTAGE: <u>SW/4</u> <u>SE/4</u> CONTRACTOR: <u>PAUL</u>																																																			
EXCAVATION APPROX. <u>30'</u> FT. x <u>30'</u> FT. x <u>3'</u> FT. DEEP. CUBIC YARDAGE: <u>50</u>																																																			
DISPOSAL FACILITY: <u>ON SITE</u> REMEDIATION METHOD: <u>LANDFARM</u>																																																			
LAND USE: <u>RANGE</u> LEASE: <u>FED LSE 102</u> FORMATION: <u> </u>																																																			
FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY <u>110'</u> FT. <u>S33E</u> FROM WELLHEAD.																																																			
DEPTH TO GROUNDWATER: <u>>100</u> NEAREST WATER SOURCE: <u>>1000</u> NEAREST SURFACE WATER: <u>>1000</u>																																																			
NMOC D RANKING SCORE: <u>0</u> NMOC D TPH CLOSURE STD: <u>5000</u> PPM																																																			
SOIL AND EXCAVATION DESCRIPTION:																																																			
<p><u>BLUE/GREEN SANDSTONE ON PIT BOTTOM + SIDES, HARD, CRYSTALLINE,</u> <u>HC ODOR. SAMPLE BOTTOM CORNER SANDSTONE FOR OVM.</u></p>																																																			
<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 30%;"> <p>ENTIRE EXCAVATION (IN BEDROCK)</p> <p>SCALE</p> <p>0 FT</p> </div> <div style="width: 30%; text-align: center;"> <p>RISK ASSESSED</p> </div> <div style="width: 35%;"> <p>FIELD 418.1 CALCULATIONS</p> <table border="1" style="width:100%; border-collapse: collapse;"> <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> </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																																									
TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm																																												
<p>PIT PERIMETER</p>	<p>OVM RESULTS</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>SAMPLE ID</th> <th>FIELD HEADSPACE PID (ppm)</th> </tr> </thead> <tbody> <tr><td>1 @ 3'</td><td>351</td></tr> <tr><td>2 @</td><td> </td></tr> <tr><td>3 @</td><td> </td></tr> <tr><td>4 @</td><td> </td></tr> <tr><td>5 @</td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table> <p>LAB SAMPLES</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>SAMPLE ID</th> <th>ANALYSIS</th> <th>TIME</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	SAMPLE ID	FIELD HEADSPACE PID (ppm)	1 @ 3'	351	2 @		3 @		4 @		5 @												SAMPLE ID	ANALYSIS	TIME																									<p>PIT PROFILE</p>
SAMPLE ID	FIELD HEADSPACE PID (ppm)																																																		
1 @ 3'	351																																																		
2 @																																																			
3 @																																																			
4 @																																																			
5 @																																																			
SAMPLE ID	ANALYSIS	TIME																																																	
TRAVEL NOTES: CALLOUT: <u> </u> ONSITE: <u> </u>																																																			

Well Name:	Jicarilla Apache 102 #25
Well Site location:	Unit O, Sec. 9, T26N, R4W
Pit Type:	Compressor Pit
Producing Formation:	Pictured Cliffs
Pit Category:	Non Vulnerable
Horizontal Distance to Surface Water:	> 1000 ft.
Vicinity Groundwater Depth:	> 100 ft.

RISK ASSESSMENT (non-vulnerable area)

Pit remediation activities were terminated when trackhoe encountered sandstone bedrock at 3 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 sandstone bedrock located 3 feet below grade. Groundwater levels located on or close to the well pad are estimated to be at a much greater depth below sandstone 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 0.88 miles north of the nearest vulnerable area boundary (Tapacito Creek).

(Refer to Lapis Point 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 sandstone bottom creates enough of an 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.

BT674

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**

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 - 25
Location: Unit or Qtr/Qtr Sec 0 Sec 9 T 26N R 4W County RIO ARRIBA
Pit Type: Separator ☒ Dehydrator ☐ Other BLOW
Land Type: RANGE

Pit Location: Pit dimensions: length 40', width 27', depth 14'
(Attach diagram) Reference: wellhead ☒ other ☐
Footage from reference: 120'
Direction from reference: 55 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)	
Greater than 100 feet	(0 points)	<u>0</u>

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

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: _____ Date Completed: 10/22/98

Remediation Method: Excavation ☒ Approx. cubic yards 630
 Check all appropriate sections) Landfarmed ☒ Insitu Bioremediation _____
 Other _____

Remediation Location: Onsite ☒ Offsite ☒ JICA. AP. 102-12E (0-9-26-4)
 (i.e. landfarmed onsite, name and location of offsite facility) (APPROX. 180 C.Y.)

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 DocumentsSample depth 8' (WEST SIDEWALL)Sample date 10/28/98 Sample time 1415

Sample Results

Soil: Benzene	(ppm)	<u>2,510</u>	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	<u>43,130</u>	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>473</u>	Ethylbenzene	(ppb)	_____
TPH	(ppm)	<u>2,140</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 10/22/98 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. Mandle DATE: 3-31-99

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>BT674</u> C.O.C. NO: <u>6363</u>
----------------------	--	---

FIELD REPORT: CLOSURE VERIFICATION	PAGE No: <u>1</u> of <u>1</u>
---	-------------------------------

LOCATION: NAME: <u>JICA AP. 102</u> WELL #: <u>25</u> PIT: <u>SEP/BLOW</u> QUAD/UNIT: <u>6 SEC: 9</u> TWP: <u>26N</u> RNG: <u>4W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u> QTR/FOOTAGE: <u>SW/4 SE/4</u> CONTRACTOR: <u>PAUL</u>	DATE STARTED: <u>10/18/12</u> DATE FINISHED: <u>10/21/12</u> ENVIRONMENTAL SPECIALIST: <u>AC</u>
--	--

EXCAVATION APPROX. <u>40</u> FT. x <u>27</u> FT. x <u>14</u> FT. DEEP.	CUBIC YARDAGE: <u>630</u>	
DISPOSAL FACILITY: <u>ON SITE JICA AP. 102-12E</u> REMEDIATION METHOD: <u>LANDFARM</u>		
LAND USE: <u>RANGE</u> LEASE: <u>FED LSE 102</u> FORMATION: _____		

FIELD NOTES & REMARKS:	PIT LOCATED APPROXIMATELY <u>120'</u> FT. <u>N55W</u> FROM WELLHEAD. DEPTH TO GROUNDWATER: <u>>100</u> NEAREST WATER SOURCE: <u>>1000</u> NEAREST SURFACE WATER: <u>>1000</u> NMOC RANKING SCORE: <u>0</u> NMOC TPH CLOSURE STD: <u>5000</u> PPM
------------------------	---

SOIL AND EXCAVATION DESCRIPTION:

SANDSTONE BENCH, YELLOW BROWN, HARD, ON EAST SIDE
 PIT ONLY. HARD CLAYSTONE BEDROCK BELOW SANDSTONE.
 WEST SIDE OF PIT YELLOW ORANGE CLAY, DRY TO MOIST, COHESIVE, UN CONSOLIDATED.
 MINOR HC ODOR ON ALL SAMPLES, except ②. NO HC STAIN.

CHECK ONE:

☒ PIT ABANDONED

☐ STEEL TANK INSTALLED

☐ FIBERGLASS TANK INSTALLED

SCALE

0 FT

FIELD 418.1 CALCULATIONS

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

BECKROCK BOTTOM

CLOSED

PIT PERIMETER

OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 8'	305
2 @ 5'	5.5
3 @ 8'	210
4 @ 8'	473
5 @ 14'	105

PIT PROFILE

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME
④ W @ 8'	BTEX/TPH	1415
BOTH PASSED		

TRAVEL NOTES: CALLOUT: _____ ONSITE: _____

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

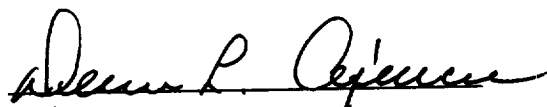
Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	Sep / Blow W @ 8'	Date Reported:	10-22-98
Laboratory Number:	E094	Date Sampled:	10-21-98
Chain of Custody No:	6363	Date Received:	10-22-98
Sample Matrix:	Soil	Date Extracted:	10-22-98
Preservative:	Cool	Date Analyzed:	10-22-98
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

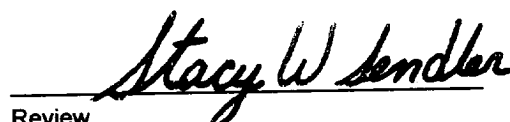
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	878	0.2
Diesel Range (C10 - C28)	1,260	0.1
Total Petroleum Hydrocarbons	2,140	0.2

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: Jica. Apa. 102 - 25.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / Amoco	Project #:	04034-10
Sample ID:	Sep / Blow W @ 8'	Date Reported:	10-22-98
Laboratory Number:	E094	Date Sampled:	10-21-98
Chain of Custody:	6363	Date Received:	10-22-98
Sample Matrix:	Soil	Date Analyzed:	10-22-98
Preservative:	Cool	Date Extracted:	10-22-98
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	2,510	8.8
Toluene	12,010	8.4
Ethylbenzene	3,750	7.6
p,m-Xylene	18,110	10.8
o-Xylene	6,750	5.2
Total BTEX	43,130	

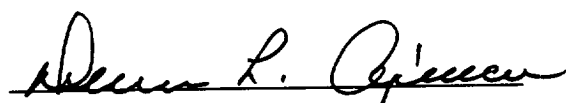
ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	98 %
	Bromofluorobenzene	98 %

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: Jica. Apa. 102 - 25.


Analyst


Review

6363

Ref Cox's 6360-6363

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

5/16/99
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 102-25

Location: Unit or Qtr/Qtr Sec 0 Sec 9 T26N R4W County BLAIRE

Land Type: _____

Date Remediation Started: 10-21-98 Date Completed: 5/17/99

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: 5.13.99 Time: 1220

Sample Results:

Field Headspace (ppm) 172.4 TPH(8015)

TPH (ppm) 1,670 Method BTEX(8021)

Other BENZENE 0.309 ppm

TOT. BTEX 8.800 ppm

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE 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 ☒ NO ☐ (REASON) _____

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

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>85674</u> C.D.C. NO: <u>6928</u>
----------------------	--	---

FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME <u>SICAPILLA APACHE 102</u> WELL #: <u>25</u>	PITS: <u>SEP, BLOW, COMP</u>	DATE STARTED: <u>5.13.99</u>
QUAD/UNIT: <u>0</u> SEC: <u>9</u> TWP: <u>26N</u> RNG: <u>4W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u>		DATE FINISHED: _____
GTP/FOOTAGE: <u>SW/4 SE/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): 1.5'

FIELD NOTES & REMARKS:

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

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

DK YELLOWISH BROWN SAND, NON COHESIVE, SLIGHTLY MOIST. MOIST, FIRM
LARGE AREA OF STAINING OBSERVED IN LANDFARM AREA #1 (SEE SKETCH BELOW)
HC ODOR DETECTED IN SAMPLING PTS. ①, ④ + ⑤. SAMPLING DEPTHS RANGE FROM
6"-12" COLLECTED A SPT COMPOSITE SAMPLE FOR LAB ANALYSIS.

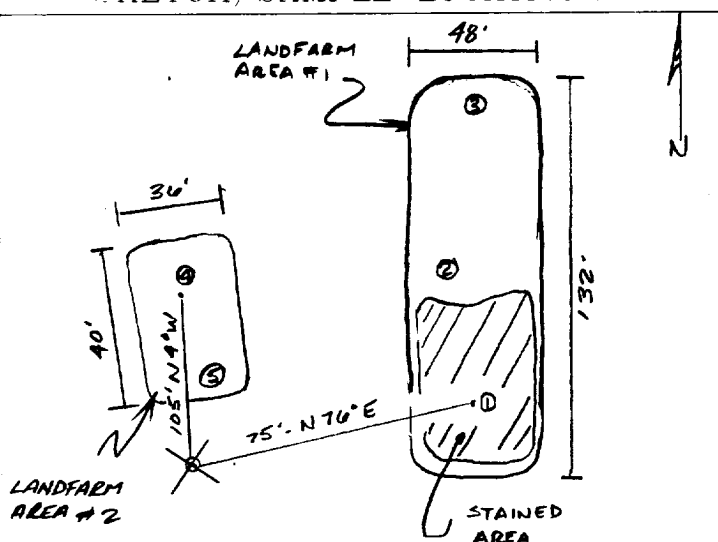
CLOSED

APPROX. 180 C.Y. DEPOSED
TO JICA. AP. 102-12E

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	172.4	LF-1	TPH (80 IS)	1220	1,670
		"	BENZENE	"	309 ppb
		"	TOT. STX	"	8800 ppb

SCALE

0 1 FT

TRAVEL NOTES:

CALLOUT: NA

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
Sample ID: LF - 1
Laboratory Number: F251
Chain of Custody No: 6928
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

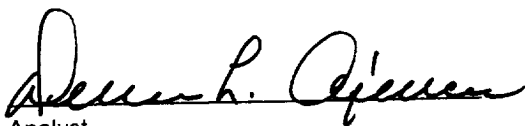
Project #: 403410
Date Reported: 05-17-99
Date Sampled: 05-13-99
Date Received: 05-14-99
Date Extracted: 05-17-99
Date Analyzed: 05-17-99
Analysis Requested: 8015 TPH


Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1,100	0.2
Diesel Range (C10 - C28)	568	0.1
Total Petroleum Hydrocarbons	1,670	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 - 25 Landfarm. 5 Pt. Composite.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	LF - 1	Date Reported:	05-17-99
Laboratory Number:	F251	Date Sampled:	05-13-99
Chain of Custody:	6928	Date Received:	05-14-99
Sample Matrix:	Soil	Date Analyzed:	05-17-99
Preservative:	Cool	Date Extracted:	05-17-99
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	309	8.8
Toluene	2,210	8.4
Ethylbenzene	1,100	7.6
p,m-Xylene	3,550	10.8
o-Xylene	1,630	5.2
Total BTEX	8,800	

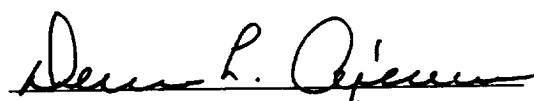
ND - Parameter not detected at the stated detection limit.

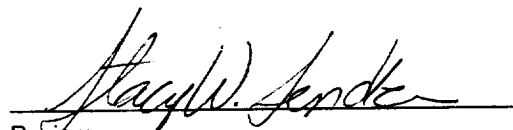
Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	98 %
	Bromofluorobenzene	98 %

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 - 25 Landfarm. 5 Pt. Composite.


Analyst


Review

6928

ENVIROTECH INC.

5796 U.S. Highway 64

Farmington, New Mexico 87401

(505) 632-0615

Sample Receipt

Received Intact

Cool - Ice/Blue Ice