

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

AUG 20 1999

OIL CON. DIV.
phone: (505) 336-9200

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: _____ Date Completed: 5/1/98

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, SPRAYED PIT BOTTOM w/ FERTILIZER.

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 10' (PIT BOTTOM)

Sample date 4/30/98 Sample time 1000

Sample Results

Soil: Benzene (ppm)	<u>ND</u>	Water: Benzene (ppb)	_____
Total BTEX (ppm)	<u>0.690</u>	Toluene (ppb)	_____
Field Headspace (ppm)	<u>1,419</u>	Ethylbenzene (ppb)	_____
TPH (ppm)	<u>10.4</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 5/1/98 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: Keen C. Mamm DATE: 5-7-98

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>8T551</u> C.O.C. NO: <u>5764</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. TABAL 151</u> WELL # <u>8</u> PIT: <u>Blow (I)</u>	DATE STARTED: <u>4/30/98</u> DATE FINISHED: _____
QUAD/UNIT: <u>0</u> SEC: <u>3</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>
DTR/FOOTAGE: <u>SW/4 SE/4</u> CONTRACTOR: <u>P+S</u>	

EXCAVATION APPROX. <u>12</u> FT. x <u>13</u> FT. x <u>10</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>JIC 151</u> FORMATION: <u>DK</u>

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY <u>117</u> FT. <u>N64E</u> FROM WELLHEAD.	CHECK ONE: <input checked="" type="checkbox"/> PIT ABANDONED <input type="checkbox"/> STEEL TANK INSTALLED <input type="checkbox"/> FIBERGLASS TANK INSTALLED
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:	

MOSTLY OK. YELL. BROWN THROUGHOUT ENTIRE EXCAVATION, TOP HALF CONSIST OF SILTY SAND TO SILTY CLAY BOTTOM HALF CONSIST OF CLAY - HIGHLY PLASTIC, SLIGHTLY MOIST STIFF TO VERY STIFF, NO APPARENT STRAINING OBSERVED W/IN EXCAVATION, NO APPARENT HE EOODR IN ANY OF THE SIDEWALL OVM SAMPLES, PIT BOTTOM CONTAINED STRONG HE EOODR IN OVM SAMPLE, VERY COMPACT MATERIAL.

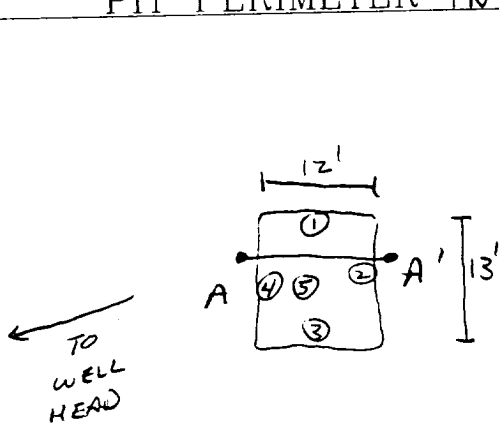
CLOSED

SCALE
0 FT

FIELD 418.1 CALCULATIONS

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

PIT PERIMETER



OVM RESULTS

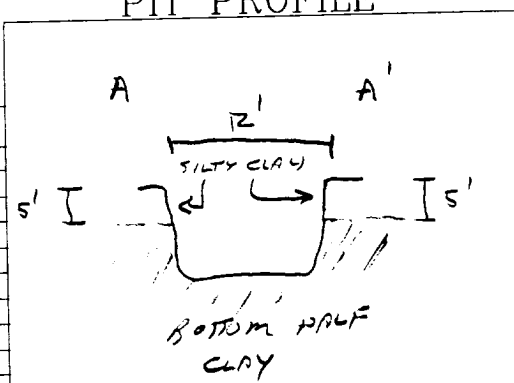
SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 e 5'	0.0
2 e 5'	0.0
3 e 5'	0.0
4 e 5'	0.0
5 e 10'	1,419

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME
5 e 10'	TAH/BTEX	1,000

BOTH PASSED

PIT PROFILE



TRAVEL NOTES: CALLOUT: <u>4/29/98 - MORN.</u> ONSITE: <u>4/30/98 - MORN.</u>
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EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client: Blagg / AMOCO
Sample ID: 5 @ 10'
Laboratory Number: D205
Chain of Custody No: 5764
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

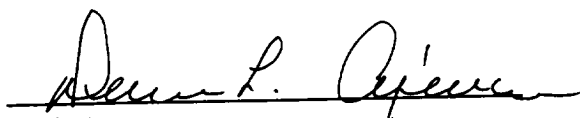
Project #: 04034-10
Date Reported: 05-01-98
Date Sampled: 04-30-98
Date Received: 04-30-98
Date Extracted: 05-01-98
Date Analyzed: 05-01-98
Analysis Requested: 8015 TPH

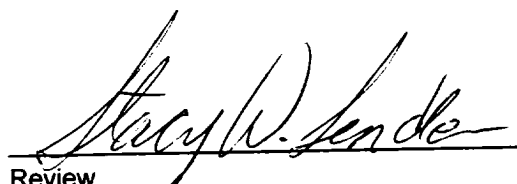
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	8.1	0.2
Diesel Range (C10 - C28)	2.3	0.1
Total Petroleum Hydrocarbons	10.4	0.2

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 Tribal 151 - 8 Blow Pit (I).


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	5 @ 10'	Date Reported:	05-01-98
Laboratory Number:	D205	Date Sampled:	04-30-98
Chain of Custody:	5764	Date Received:	04-30-98
Sample Matrix:	Soil	Date Analyzed:	05-01-98
Preservative:	Cool	Date Extracted:	05-01-98
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	17.5
Toluene	41.9	16.7
Ethylbenzene	495	15.2
p,m-Xylene	58.9	21.6
o-Xylene	93.9	10.4
Total BTEX	690	

ND - Parameter not detected at the stated detection limit.

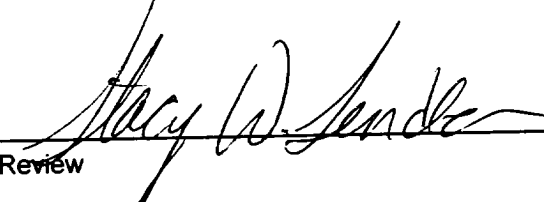
Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	101 %
	Bromofluorobenzene	101 %

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 Tribal 151 - 8 Blow Pit (I).


Analyst


Review

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

8J551

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 151-8
Location: Unit or Qtr/Qtr Sec 0 Sec 3 T 26N R 4W County RIO ARriba
Pit Type: Separator Dehydrator Other BLOW (II)
Land Type: RANGE

Pit Location: Pit dimensions: length 30', width 17', depth 2'
(Attach diagram) Reference: wellhead X, other
Footage from reference: 240'
Direction from reference: 61 Degrees East of North X
X 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: 4/30/98

Remediation Method: Excavation ☒
Check all appropriate
actions) Landfarmed ☒

Approx. cubic yards 30

In situ Bioremediation _____

Other _____

Remediation Location: _____

Onsite ☒ Offsite _____

(i.e. landfarmed onsite,
name and location of
offsite facility)

General Description of Remedial Action: Excavation. ONLY BEDROCK BOTTOM WAS SAMPLED

(PIT VERY SHALLOW), 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 _____

2' (PIT BOTTOM)

Sample date _____

4/30/98

Sample time _____

1115

Sample Results

Soil: Benzene

(ppm) _____

Water: Benzene

(ppb) _____

Total BTEX

(ppm) _____

Toluene

(ppb) _____

Field Headspace (ppm)

385

Ethylbenzene

(ppb) _____

TPH

(ppm) _____

NA

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

5/1/98

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: _____

Kate C. Mamm

DATE: _____

5-7-98

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>8J551</u> C.D.C. NO: _____
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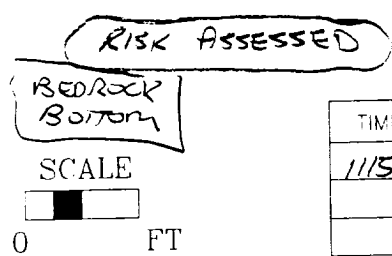
FIELD REPORT: CLOSURE VERIFICATION		PAGE No: <u>1</u> of <u>1</u>
LOCATION: NAME: <u>JICA. AP. TRIBAL</u> ISI WELL # <u>8</u> PIT: <u>Blow (II)</u>		DATE STARTED: <u>4/30/98</u> DATE FINISHED: _____
QUAD/UNIT: <u>0 SEC. 3</u> TWP: <u>26N</u> RNG: <u>4W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u>		ENVIRONMENTAL SPECIALIST: <u>NV</u>
DTP/FOOTAGE: <u>SW/4 SE/4</u> CONTRACTOR: <u>P+S</u>		

EXCAVATION APPROX. <u>30</u> FT x <u>17</u> FT x <u>2</u> FT. DEEP.	CUBIC YARDAGE: <u>30</u>
DISPOSAL FACILITY: <u>ON-SITE</u>	REMEDATION METHOD: <u>LANDFARM</u>
LAND USE: <u>RANGE</u>	LEASE: <u>JICA ISI</u> FORMATION: <u>DK</u>

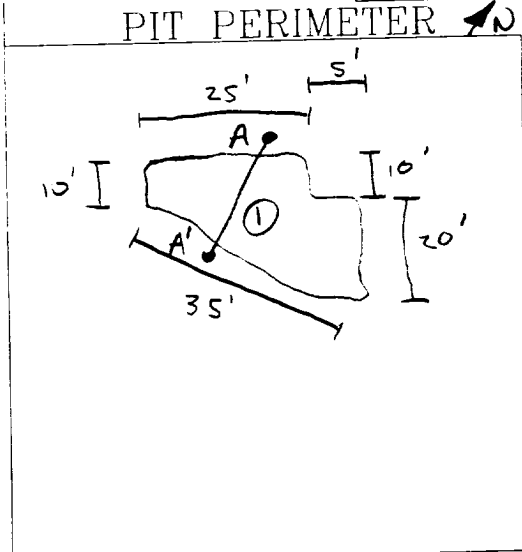
FIELD NOTES & REMARKS:	PIT LOCATED APPROXIMATELY <u>240</u> FT. <u>N 61 W</u> FROM WELLHEAD.
DEPTH TO GROUNDWATER: <u>>100'</u>	NEAREST WATER SOURCE: <u>>1000'</u> NEAREST SURFACE WATER: <u>>1000'</u>
NMOC D RANKING SCORE: <u>0</u>	NMOC D TPH CLOSURE STI: <u>5000</u> PPM
SOIL AND EXCAVATION DESCRIPTION:	

CHECK ONE:
<input checked="" type="checkbox"/> PIT ABANDONED
<input type="checkbox"/> STEEL TANK INSTALLED
<input type="checkbox"/> FIBERGLASS TANK INSTALLED

ENTIRE EXCAVATION CONSIST OF MOSTLY BEDROCK (SANDSTONE), LT. TO MED. GRAY IN COLOR, VERY HARD, NO EVIDENCE OF ANY GROSSLY STAINED SOIL NEAR GROUND SURFACE & EXCAVATION & ADJACENT PERIMETER, HC ODOR DETECTED IN OVM SAMPLE.

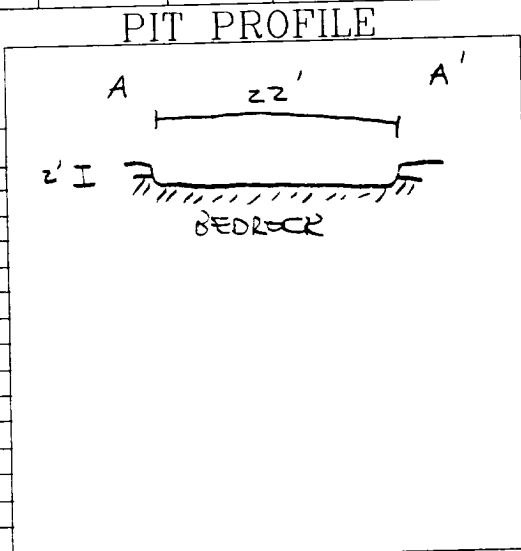


TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1115							



SAMPLE ID	FIELD HEADSPACE PID (ppm)
1	22'
2	385
3	
4	
5	

SAMPLE ID	ANALYSIS	TIME



TRAVEL NOTES:	CALLOUT: <u>4/29/98 - MORN.</u>	ONSITE: <u>4/30/98 - MORN.</u>
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Well Name:	Jicarilla Apache Tribal 151 #8
Well Site location:	Unit O, Sec. 3, T26N, R5W
Pit Type:	Blow Pit (II)
Producing Formation:	Basin Dakota
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 2 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 2 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 1.6 miles south of the nearest vulnerable area boundary (Cereza Canyon wash).

(Refer to Vigas Canyon 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).

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.

BT551

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 TRIBAL 151-8
Location: Unit or Qtr/Qtr Sec 0 Sec 3 T 26N R 4W County RIO ARriba
Pit Type: Separator ☒ Dehydrator ☐ Other ☐
Land Type: RANGE

Pit Location: Pit dimensions: length 35', width 29', depth 15'
(Attach diagram) Reference: wellhead ☒, other ☐
Footage from reference: 172'
Direction from reference: 11 Degrees ☒ East of North ☒
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)	<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

BJSS1

SEP. PIT

Date Remediation Started: _____

Date Completed: 5/1/98Remediation 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. SPRAYEDNORTH & SOUTH SIDEWALLS & PIT BOTTOM w/ FERTILIZER.

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 10' (SOUTH SIDEWALL)Sample date 4/30/98 Sample time 1045

Sample Results

Soil: Benzene	(ppm)	<u>0.121</u>	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	<u>31.750</u>	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>1673</u>	Ethylbenzene	(ppb)	_____
TPH	(ppm)	<u>4310</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 5/1/98 PRINTED NAME Buddy D. ShawSIGNATURE 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. Marshall DATE: 5-7-98

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 332-1199	LOCATION NO: <u>8J551</u> C.O.C. NO: <u>5764</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. TRIBAL IS1 WELL # 8</u> PIT: <u>SEP</u> QUAD/UNIT: <u>0 SEC 3</u> TWP: <u>26N</u> RNG: <u>4W</u> PM: <u>NM CNTY RA</u> ST: <u>NM</u> QTR/FOOTAGE: <u>SW1/4 SE1/4</u> CONTRACTOR: <u>P+S</u>	DATE STARTED: <u>4/30/98</u> DATE FINISHED: _____ ENVIRONMENTAL SPECIALIST: <u>NV</u>
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EXCAVATION APPROX. <u>35</u> FT. x <u>29</u> FT. x <u>15</u> FT. DEEP.	CUBIC YARDAGE: <u>500</u>	DISPOSAL FACILITY: <u>ON-SITE</u>
LAND USE: <u>RANGE</u>	LEASE: <u>TR 151</u>	FORMATION: <u>OK</u>
REMEDIAL METHOD: <u>LANDFARMED</u>		

FIELD NOTES & REMARKS:	PIT LOCATED APPROXIMATELY <u>172</u> FT. <u>N1/2E</u> FROM WELLHEAD. DEPTH TO GROUNDWATER: <u>>100'</u> NEAREST WATER SOURCE: <u>>1000'</u> NEAREST SURFACE WATER: <u>>1000'</u>
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NMOC RANKING SCORE: <u>0</u> NMOC TPH CLOSURE STD: <u>5000</u> PPM	CHECK ONE: <input checked="" type="checkbox"/> PIT ABANDONED <input type="checkbox"/> STEEL TANK INSTALLED <input type="checkbox"/> FIBERGLASS TANK INSTALLED
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SOIL AND EXCAVATION DESCRIPTION:

TOP 2/3 OF EXCAVATION CONSISTED OF DR. YELL. ORANGE TO BROWN SILTY SAND TO SILTY CLAY CALICHE LAYER APPROX 1' THICK OBSERVED APPROX. 9' BELOW GROUND SURFACE BOTTOM HALF CONSIST OF CLAY - PLASTIC TO HIGHLY PLASTIC SLIGHTLY MOIST TO MOIST (SOUTH SIDEWALL OVM SAMPLE) FIRM TO VERY STIFF STAINING APPARENT ON NORTH SIDEWALL SMALL PATCH NEAR NORTH WEST CORNER @ APPROX. 12-14' BELOW GRADE, MOST OF SOUTH SIDEWALL OBSERVED AS STAINED (SEE PIT PROFILE), STRONG HC OOR IN NORTH & SOUTH SIDEWALL OVM SAMPLES ONLY. BOTTOM - GREENISH GRAY TO DR. YELL. GREEN BEDROCK, VERY HARD, STRONG HC OOR IN OVM SAMPLE.

BEDROCK BOTTOM SCALE 0 FT	FIELD 418.1 CALCULATIONS <table border="1" style="width:100%"> <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> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	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																																		

PIT PERIMETER 	OVM RESULTS <table border="1" style="width:100%"> <thead> <tr> <th>SAMPLE ID</th> <th>FIELD HEADSPACE PID (ppm)</th> </tr> </thead> <tbody> <tr><td>1 @ 9'</td><td>1,623</td></tr> <tr><td>2 @ 10'</td><td>0.0</td></tr> <tr><td>3 @ 10'</td><td>1,673</td></tr> <tr><td>4 @ 10'</td><td>0.0</td></tr> <tr><td>5 @ 15'</td><td>1,666</td></tr> </tbody> </table> LAB SAMPLES <table border="1" style="width:100%"> <thead> <tr> <th>SAMPLE ID</th> <th>ANALYSIS</th> <th>TIME</th> </tr> </thead> <tbody> <tr><td>(3) @ 10'</td><td>TAH / BSA</td><td>1045</td></tr> <tr><td colspan="3" style="text-align:center;">BOTH PASSED</td></tr> </tbody> </table>	SAMPLE ID	FIELD HEADSPACE PID (ppm)	1 @ 9'	1,623	2 @ 10'	0.0	3 @ 10'	1,673	4 @ 10'	0.0	5 @ 15'	1,666	SAMPLE ID	ANALYSIS	TIME	(3) @ 10'	TAH / BSA	1045	BOTH PASSED			PIT PROFILE
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BOTH PASSED																							

TRAVEL NOTES:	CALLOUT: _____	ONSITE: <u>4/30/98</u>
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EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client: Blagg / AMOCO
Sample ID: 3 @ 10'
Laboratory Number: D206
Chain of Custody No: 5764
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

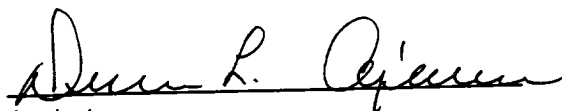
Project #: 04034-10
Date Reported: 05-01-98
Date Sampled: 04-30-98
Date Received: 04-30-98
Date Extracted: 05-01-98
Date Analyzed: 05-01-98
Analysis Requested: 8015 TPH

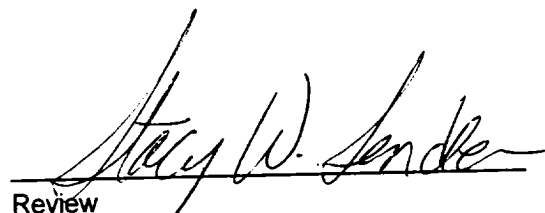
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	3,320	0.2
Diesel Range (C10 - C28)	990	0.1
Total Petroleum Hydrocarbons	4,310	0.2

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 151 - 8 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 @ 10'	Date Reported:	05-01-98
Laboratory Number:	D206	Date Sampled:	04-30-98
Chain of Custody:	5764	Date Received:	04-30-98
Sample Matrix:	Soil	Date Analyzed:	05-01-98
Preservative:	Cool	Date Extracted:	05-01-98
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	121	17.5
Toluene	3,800	16.7
Ethylbenzene	2,320	15.2
p,m-Xylene	19,470	21.6
o-Xylene	6,040	10.4
Total BTEX	31,750	

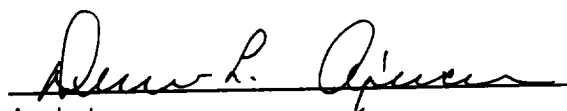
ND - Parameter not detected at the stated detection limit.

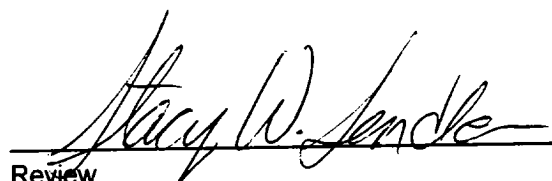
Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	101 %
	Bromofluorobenzene	101 %

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 Tribal 151 - 8 Separator Pit.


Analyst


Review

CHAIN OF CUSTODY RECORD

Client/Project Name			Project Location		ANALYSIS/PARAMETERS									
Sampler: (Signature)			Chain of Custody Tape No.											
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers					Remarks				
⑤ @ 10'	4/30/98	1000	D205	SOIL	1	✓	✓					Preserv. - cool		
③ @ 10'	4/30/98	1045	D206	SOIL	1	✓	✓					Blow Pit (I)		
												SEPARATOR PIT		
												IF TPH < 5000 ppm,		
												then Run BTEX		
												(For both samples)		
Relinquished by: (Signature)			Date	Time	Received by: (Signature)									
Relinquished by: (Signature)			4/30/98	1443	Shawn L. Johnson									
Relinquished by: (Signature)					Received by: (Signature)									
Relinquished by: (Signature)					Received by: (Signature)									

ENVIROTECH INC.

5796 U.S. Highway 64-3014

Farmingington, New Mexico 87401

(505) 632-0615

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

B3551
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 TRIBAL 151-8
Location: Unit or Qtr/Qtr Sec 0 Sec 3 T 26N R 5W County RIO ARIZONA
Land Type: RANGE

Date Remediation Started: 4.30.98 Date Completed: 1.22.99
Remediation Method: Landfarmed ☒ Approx. cubic yards 580
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: 1.19.99 Time: 1140
Sample Results:
Field Headspace (ppm) 0.0
TPH (ppm) 0.7 Method 8015
Other ☐

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

DATE 1/22/99 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: Ka C Ma DATE: 3-31-99

CLIENT: AMOCOBLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 632-1199LOCATION NO: 85551C.O.C. NO: 4558

FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: JICARILLA APACHE TRIBAL WELL #: 8 PITS: SEP, BLOW 1, BLOW 2
QUAD/UNIT: 0 SEC: 3 TWP: 26N RNG: 5W PM: NM CNTY: RA ST: NM
QTR/FOOTAGE: SW/4 SE/4 CONTRACTOR: P+SDATE STARTED: 1.19.99DATE FINISHED: 1.22.99ENVIRONMENTAL SPECIALIST: REP

SOIL REMEDIATION:

REMEDICATION SYSTEM: LANDFARMAPPROX. CUBIC YARDAGE: 580LAND USE: RANGELIFT DEPTH (ft): 1-2

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

MODERATE YELLOWISH BROWN CLAY, COHESIVE, SLIGHTLY MOIST, FIRM.

NO STAINING OBSERVED OR HC ODOR DETECTED. SAMPLING DEPTHS

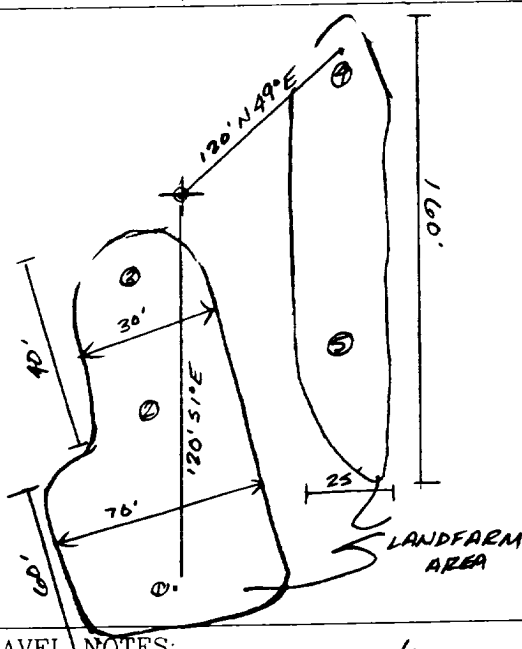
RANGE FROM 6" - 18". TOOK A SPT COMPOSITE SAMPLE FOR LAB ANALYSIS

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	0.0	LF-1	TPH (8015)	1140	0.7

SCALE

0 25 FT

TRAVEL NOTES: CALLOUT: 1.1AONSITE: 1.19.99

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

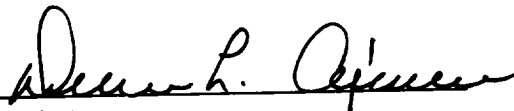
Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	LF - 1	Date Reported:	01-22-99
Laboratory Number:	E560	Date Sampled:	01-19-99
Chain of Custody No:	6558	Date Received:	01-21-99
Sample Matrix:	Soil	Date Extracted:	01-22-99
Preservative:	Cool	Date Analyzed:	01-22-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

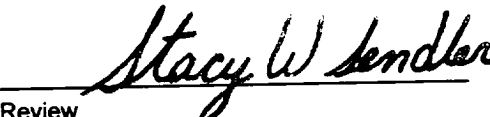
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	0.4	0.2
Diesel Range (C10 - C28)	0.3	0.1
Total Petroleum Hydrocarbons	0.7	0.2

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 151 - 8 Landfarm. 5 Pt. Composite.


Analyst


Review

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