

BJ639
SUBMIT COPY TO
NATURAL RESOURCE DEPT
OIL & GAS ADMINISTRATION
RECEIVED
AUG 16 1999

OIL CON. DIV.
DIST. 3

Land Type: RANGE

Pit Location:
(Attach diagram)

Pit dimensions: length 41', width 45', depth 9'

Reference: wellhead X, other _____

Footage from reference: 170'

Direction from reference: 39 Degrees X East of North X
West of South _____

Less than 100 feet (20 points)
100 feet to 1000 feet (10 points)
Greater than 1000 feet (0 points) 0

RANKING SCORE (TOTAL POINTS):

Date Remediation Started: _____ Date Completed: 9/17/98
 Remediation Method: Excavation ☒ Approx. cubic yards 500
 Check all appropriate sections) Landfarmed ☒ Insitu Bioremediation _____
 Other _____

Remediation Location: Onsite ☒ Offsite ☒ JICA. CONTR. 146-43 (0-4-25-5)
 (i.e. landfarmed onsite, name and location of offsite facility)

General Description of Remedial Action: Excavation. BEDROCK BOTTOM. 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 4' (NORTH SIDEWALL)

Sample date 9/17/98 Sample time 1100

Sample Results

Soil: Benzene	(ppm)	_____	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	_____	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>0.0</u>	<small>PIT BOTTOM</small> 135.4 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 9/17/98 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) R.A. Attached

SIGNED: Ken C Mammall DATE: 10-1-98

3003922520

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>BJ639</u> C.O.C. NO: _____
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FIELD REPORT: CLOSURE VERIFICATION		PAGE No: <u>1</u> of <u>1</u>
LOCATION: NAME: <u>TICA CONTR. 146</u> WELL #: <u>11E</u> PIT: <u>BLW</u>		DATE STARTED: <u>9/17/98</u> DATE FINISHED: _____
QUAD/UNIT: <u>0 SEC: 4 TWP: 25N</u> RING: <u>5W</u> PM: <u>NM CNTY: RA ST: NM</u>		ENVIRONMENTAL SPECIALIST: <u>NV</u>
QTR/FOOTAGE: <u>980' SL / 1660' FEL</u> CONTRACTOR: <u>P+S</u>		

EXCAVATION APPROX. 41 FT. x 45 FT. x 9 FT. DEEP. CUBIC YARDAGE: 500
DISPOSAL FACILITY: ON-SITE / TICA CONTR. 146-43 REMEDIATION METHOD: LANDFARM
LAND USE: RANGE LEASE: TIC 146 FORMATION: DK/MV

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 170 FT. N39E FROM WELLHEAD.
DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'
NMOC D RANKING SCORE: 0 NMOC D TPH CLOSURE STD: 5000 PPM
SOIL AND EXCAVATION DESCRIPTION:

CHECK ONE:

- ☒ PIT ABANDONED
☐ STEEL TANK INSTALLED
☐ FIBERGLASS TANK INSTALLED

SIDEWALLS - MOSTLY DK. YELL. DRANGE SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM TO DENSE APPARENT STAINING OBSERVED ON WEST SIDEWALL (BOTTOM 3') & NORTH SIDEWALL (BOTTOM 2'), ENTIRE SOUTH SIDEWALL COMPOSED MOSTLY OF BEDROCK, NO APPARENT HC ODOR DETECTED W/IN EXCAVATION OR IN ANY OF THE DUM SAMPLES.

BOTTOM - BEDROCK (SILTSTONE), LT. TO MED. GRAY DISCOLORATION, VERY HARD, HC ODOR DETECTED IN DUM SAMPLE.

BEDROCK BOTTOM

RISK ASSESSED

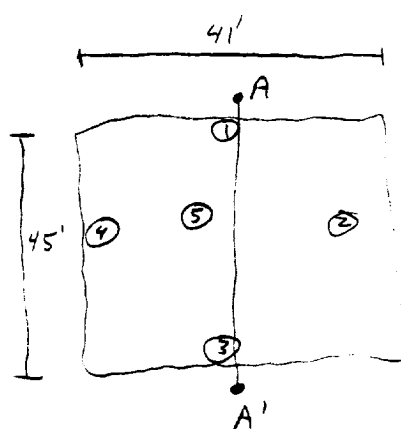
FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1100	① @ 4'	TPH - 2039	5	20	1:1	3	ND

SCALE

0 FT

PIT PERIMETER



TO WELL HEAD

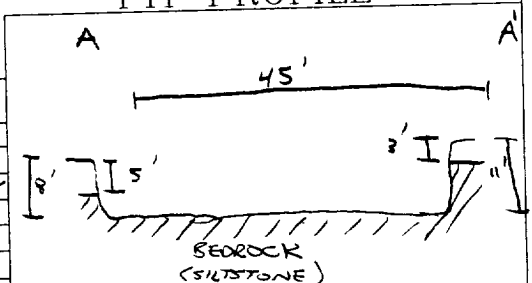
OVM RESULTS

SAMPLE ID	FIELD HEADSPACE P10 (ppm)
1 @ 4'	0.0
2 @ 6'	0.0 RK
3 @ 6'	0.0 RK
4 @ 4'	0.0
5 @ 9'	135.4

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME

PIT PROFILE



TRAVEL NOTES:

CALLOUT: _____

ONSITE: 9/17/98 - MORN.

Well Name:	Jicarilla Contract 146 #11E
Well Site location:	Unit O, Sec. 4, T25N, R5W
Pit Type:	Blow Pit
Producing Formation:	Basin Dakota/Mesa Verde
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 siltstone bedrock at 9 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 siltstone bedrock located 9 feet below grade. Groundwater levels located on or close to the well pad are estimated to be at a much greater depth below siltstone 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 0.80 miles north of the nearest vulnerable area boundary (Gonzales Canyon wash).

(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 siltstone 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.

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:	1 @ 4'	Date Analyzed:	09-17-98
Project Location:	Jicarilla Contract # 146 - 11E	Date Reported:	09-17-98
Laboratory Number:	TPH-2039	Sample Matrix:	Soil

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

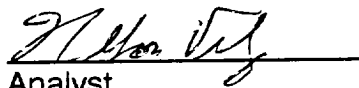
ND = Not Detectable at stated detection limits.

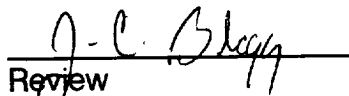
QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	-----	-----	-----
	236	220	7.02

*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 - BJ639


Analyst


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:

Amoco

Project #:

Sample ID:

1 @ 4'

Date Analyzed:

09-17-98

Project Location:

Jicarilla Contract # 146 - 11E

Date Reported:

09-17-98

Laboratory Number:

TPH-2039

Sample Matrix:

Soil

Sample Weight:

5.00 grams

Volume Freon:

20.00 mL

Dilution Factor:

1 (unitless)

TPH Reading:

3 mg/kg

TPH Result:

12.0 mg/kg

Reported TPH Result:

12 mg/kg

Actual Detection Limit:

20.0 mg/kg

Reported Detection Limit:

20 mg/kg

QA/QC:

Original
TPH mg/kg

Duplicate
TPH mg/kg

%
Diff.

236

220

7.02

Comments:

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

Comments:

Blow Pit - BJ639

8J639

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 CONTRACT # 46-11E

Location: Unit or Qtr/Qtr Sec 0 Sec 4 T 25N R 5W County RIO ARRIBA

Pit Type: Separator ☒ Dehydrator ☐ Other ☐

Land Type: RANGE

Pit Location:
(Attach diagram)

Pit dimensions: length 32', width 17', depth 20'

Reference: wellhead X, other ☐

Footage from reference: 155'

Direction from reference: 84 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: 9/21/98

Remediation Method: Excavation ☒ Approx. cubic yards 300
Check all appropriate sections) Landfarmed ☒ Insitu Bioremediation _____
Other _____

Remediation Location: Onsite ☒ Offsite ☒ JICA. CONTR. HG-43 (0-4-25-5)
(i.e. landfarmed onsite, name and location of offsite facility)

General Description of Remedial Action: Excavation. BEDROCK BOTTOM. RISK ASSESSED.

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 14'

Sample date 9/17/98 Sample time 1230

Sample Results

Soil: Benzene	(ppm)	<u>6.050</u>	Water: Benzene	(ppb)	_____
Total BTEX	(ppm)	<u>113.190</u>	Toluene	(ppb)	_____
Field Headspace	(ppm)	<u>800</u>	Ethylbenzene	(ppb)	_____
TPH	(ppm)	<u>4,680</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) R.A. Attached

SIGNED: Keith C. Marshall DATE: 10-1-98

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>8J639</u> C.O.C. NO: <u>6207</u>																																								
FIELD REPORT: CLOSURE VERIFICATION		PAGE No: <u>1</u> of <u>1</u>																																								
LOCATION: NAME: <u>JICA. CONTR. 146</u> WELL #: <u>11E</u> PIT: <u>SEP.</u> QUAD/UNIT: <u>0 SEC. 4 TWP. 25N RNG. 5W PM: NM CNTY: RA ST: NM</u> QTR/FOOTAGE: <u>980' FSL/1660' FEL</u> CONTRACTOR: <u>P & S</u>		DATE STARTED: <u>9/17/98</u> DATE FINISHED: _____ ENVIRONMENTAL SPECIALIST: <u>NJ</u>																																								
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FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY <u>155</u> FT. <u>584E</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:																																										
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<div style="text-align: center;">PIT PERIMETER</div>	<div style="text-align: center;">OVM RESULTS</div> <table border="1" style="width:100%; border-collapse: collapse; font-size: small;"> <thead> <tr> <th>SAMPLE ID</th> <th>FIELD HEADSPACE PID (ppm)</th> </tr> </thead> <tbody> <tr><td>1 @ 15'</td><td>0.0</td></tr> <tr><td>2 @ 15'</td><td>0.0</td></tr> <tr><td>3 @ 14'</td><td>571</td></tr> <tr><td>4 @ 14'</td><td>800</td></tr> <tr><td>5 @ 20'</td><td>549 RR</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> <div style="text-align: center; font-size: small;">LAB SAMPLES</div> <table border="1" style="width:100%; border-collapse: collapse; font-size: x-small;"> <thead> <tr> <th>SAMPLE ID</th> <th>ANALYSIS</th> <th>TIME</th> </tr> </thead> <tbody> <tr> <td>0214'</td> <td>TPH/TEX</td> <td>1230</td> </tr> </tbody> </table> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; text-align: center; margin-top: 5px;"> TPH - PASSED TPH. BTEX - FAILED </div>	SAMPLE ID	FIELD HEADSPACE PID (ppm)	1 @ 15'	0.0	2 @ 15'	0.0	3 @ 14'	571	4 @ 14'	800	5 @ 20'	549 RR											SAMPLE ID	ANALYSIS	TIME	0214'	TPH/TEX	1230	<div style="text-align: center;">PIT PROFILE</div>												
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TRAVEL NOTES: _____ CALLOUT: _____ ONSITE: <u>9/17/98 - MORN.</u>																																										

Well Name:	Jicarilla Contract 146 #11E
Well Site location:	Unit O, Sec. 4, T25N, R5W
Pit Type:	Separator Pit
Producing Formation:	Basin Dakota/Mesa Verde
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 siltstone bedrock at 20 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 siltstone bedrock located 20 feet below grade. Groundwater levels located on or close to the well pad are estimated to be at a much greater depth below siltstone 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 0.80 miles north of the nearest vulnerable area boundary (Gonzales Canyon wash).

(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 siltstone 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.

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client: Blagg / AMOCO
Sample ID: 4 @ 14'
Laboratory Number: D944
Chain of Custody No: 6207
Sample Matrix: Soil
Preservative: Cool
Condition: Cool and Intact

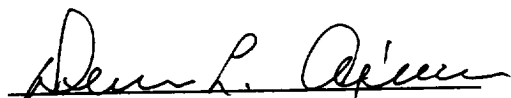
Project #: 04034-10
Date Reported: 09-21-98
Date Sampled: 09-17-98
Date Received: 09-18-98
Date Extracted: 09-19-98
Date Analyzed: 09-20-98
Analysis Requested: 8015 TPH


Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	2,460	0.2
Diesel Range (C10 - C28)	2,220	0.1
Total Petroleum Hydrocarbons	4,680	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 Contract #146 - 11E 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:	4 @ 14'	Date Reported:	09-21-98
Laboratory Number:	D944	Date Sampled:	09-17-98
Chain of Custody:	6207	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	6,050	17.5
Toluene	29,360	16.7
Ethylbenzene	8,600	15.2
p,m-Xylene	46,960	21.6
o-Xylene	22,220	10.4
Total BTEX	113,190	

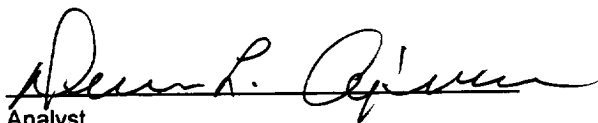
ND - Parameter not detected at the stated detection limit.

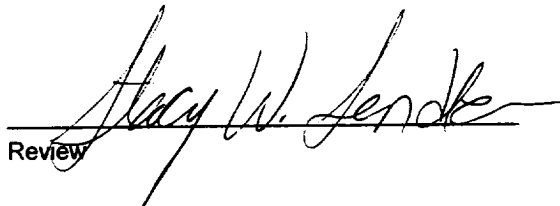
Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	96 %
	Bromofluorobenzene	96 %

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

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

Comments: Jicarilla Contract #146 - 11E Separator Pit.


Analyst


Review

6207

ENVIROTECH INC.

85639

**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 CONTRACT 146-11E

Location: Unit or Qtr/Qtr Sec 0 Sec 4 T 25N R 5W County RIO ARriba

Land Type: RANGE

Date Remediation Started: 9.17.98

Date Completed: 4/22/99

Remediation Method: Landfarmed ☒

Approx. cubic yards 200

Composted ☐

Other ☐

Depth To Groundwater: (pts.) 0

Distance to an Ephemeral Stream (pts.) 0

Distance to Nearest Lake, Playa, or Watering Pond (pts.) 0

Wellhead Protection Area: (pts.) 0

Distance To Surface Water: (pts.) 0

RANKING SCORE (TOTAL POINTS): 0

Final Closure Sampling:

Sampling Date: 4.20.99 Time: 1000

Sample Results:

Field Headspace (ppm) 61.4

TPH (ppm) 3,760 Method TPH (805)

Other ☐

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

DATE 4/22/99 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: _____ DATE: _____

CLIENT: <u>Amoco</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>85639</u> C.O.C. NO: <u>6899</u>
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FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME <u>JICARILLA CONTRACT 146</u> WELL #: <u>11E</u>	PITS: <u>SEP, BLOW</u>	DATE STARTED: <u>4.20.99</u>
QUAD/UNIT <u>0</u> SEC: <u>4</u> TWP: <u>25N</u> RNG: <u>5W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u>		DATE FINISHED: _____
QTR/FEETAGE: <u>SW/4 SE/4</u>	CONTRACTOR: <u>P+S</u>	ENVIRONMENTAL SPECIALIST: <u>REP</u>

SOIL REMEDIATION:

REMEDICATION SYSTEM: <u>LANDFARM</u>	APPROX. CUBIC YARDAGE: <u>200</u>
LAND USE: <u>RANGE</u>	LIFT DEPTH (ft): <u>1.5</u>

FIELD NOTES & REMARKS:

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

NMOC10 BANKING SCORE 0 NMOC10 TPH CLOSURE STD: 5000 PPM

DK. YELLOWISH ORANGE SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM.
NO APPARENT STAINING, HC ODOR DETECTED IN SAMPLING PT. ②.
SAMPLING DEPTHS RANGE FROM 6" - 18". COLLECTED A 5PT COMPOSITE SAMPLE FOR LAB ANALYSIS.

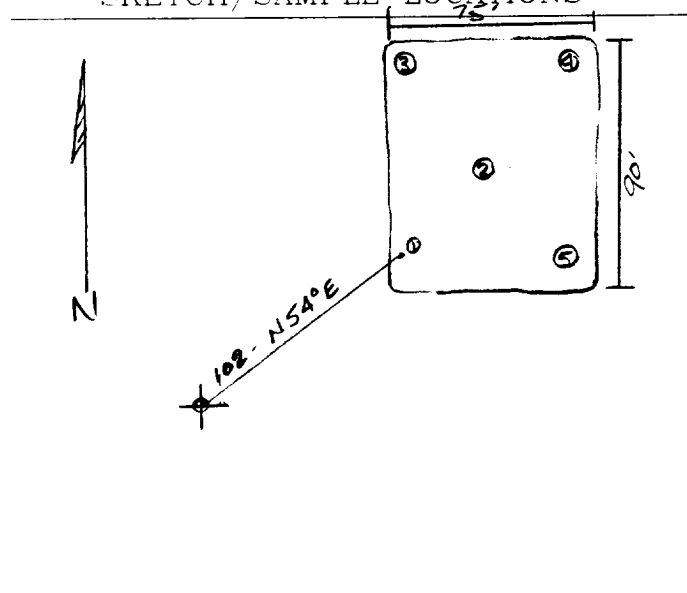
CLOSED

FIELD 418.1 CALCULATIONS

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

APPROX. 600 C.Y.
DISPOSED TO JICA.
CONTR. 146-43

SKETCH/SAMPLE LOCATIONS



OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
LF-1	61.4

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME	RESULTS
LF-1	TPH (BOS)	1000	3,760

SCALE

0 1 FT

TRAVEL NOTES: CALLOUT: N/A ONSITE: 4.20.99

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

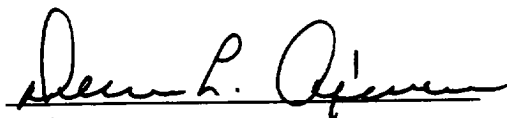
Client:	Blagg / AMOCO	Project #:	403410
Sample ID:	LF - 1	Date Reported:	04-22-99
Laboratory Number:	F068	Date Sampled:	04-20-99
Chain of Custody No:	6899	Date Received:	04-21-99
Sample Matrix:	Soil	Date Extracted:	04-21-99
Preservative:	Cool	Date Analyzed:	04-22-99
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

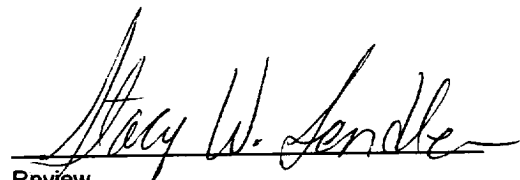
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	184	0.2
Diesel Range (C10 - C28)	3,580	0.1
Total Petroleum Hydrocarbons	3,760	0.2

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 Contract 146 - 11E Landfarm. 5 Pt. Composite.


Analyst


Review

6899

[illegible]