

DISTRICT I

P.O. Box 1980, Hobbs, NM

DISTRICT II

P.O. Drawer DD, Aztec, NM 87410

DISTRICT III OIL & GAS INSPECTOR

1000 Rio Brazos Rd, Aztec, NM 87410

DEC 0/3 1996

State of New Mexico

Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

SUBMIT 1 COPY TO

APPROPRIATE

DISTRICT OFFICE

AND 1 COPY TO

SANTA FE OFFICE

PIT REMEDIATION AND CLOSURE REPORT

Approved

Operator: Amoco Production Company Telephone: (505) - 326-9200

Address: 200 Amoco Court, Farmington, New Mexico 87401

Facility Or: FEASEL, FRED JIE

Well Name

Location: Unit or Qtr/Qtr Sec 0 Sec 34 T28N R 10W County SAN JUAN

Pit Type: Separator Dehydrator other BLOW

Land Type: BLM X, State , Fee , Other

Pit Location: Pit dimensions: length 16', width 14', depth 17'

(Attach diagram) Reference: wellhead X, other

Footage from reference: 300'

Direction from reference: 57 Degrees X East North X
of
West South

Depth To Ground Water:
(Vertical distance from
contaminants to seasonal
high water elevation of
ground water)

Less than 50 feet (20 points)
50 feet to 99 feet (10 points)
Greater than 100 feet (0 Points) 0

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) 0

Distance To Surface Water:
(Horizontal distance to perennial
lakes, ponds, rivers, streams, creeks,
irrigation canals and ditches)

Less than 200 feet (20 points)
200 feet to 1000 feet (10 points)
Greater than 1000 feet (0 points) 0

RANKING SCORE (TOTAL POINTS): 0

RECEIVED
NOV - 8 1994
OIL CON. DIV.
DIST. 3

Date Remediation Started: _____ Date Completed: 11/1/94Remediation Method: Excavation ☒ Approx. cubic yards 140
(Check all appropriate sections) Landfarmed ☒ Insitu Bioremediation _____

Other _____

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

General Description Of Remedial Action: _____

Excavation

Ground Water Encountered: No ☒ Yes _____ Depth _____Final Pit: Sample location see Attached DocumentsClosure Sampling: MULTIPLE SAMPLES
(if multiple samples, attach sample results and diagram of sample locations and depths)Sample depth 14' + 18'Sample date 10-26-94 Sample time _____

Sample Results

Benzene(ppm) 0.587 @ 14', 0.091 @ 18'Total BTEX(ppm) 179 @ 14', 103 @ 18'Field headspace(ppm) 1165 @ 14', 1639 @ 18'TPH 4100 @ 14', 2300 @ 18'
(ppm)Ground Water 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 11/1/94SIGNATURE B. ShawPRINTED NAME
AND TITLEBuddy D. Shaw
ENVIRONMENTAL COORDINATOR

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>80136</u> C.D.C. NO: <u>2242</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>FEASEL, FRED</u> WELL #: <u>JIE</u> PIT: <u>BLOW</u>	DATE STARTED: <u>10/26/94</u> DATE FINISHED: _____
QUAD/UNIT: <u>0</u> SEC: <u>34</u> TWP: <u>28N</u> RNG: <u>10W</u> PM: <u>NM</u> CNTY: <u>ST</u> ST: <u>NM</u>	ENVIRONMENTAL SPECIALIST: <u>NV</u>
QTR/FOOTAGE: <u>SW 1/4 SE 1/4</u> CONTRACTOR: <u>EPC</u>	

EXCAVATION APPROX. <u>16</u> FT. x <u>14</u> FT. x <u>17</u> FT. DEEP. CUBIC YARDAGE: <u>140</u>
DISPOSAL FACILITY: <u>ON-SITE</u> REMEDIATION METHOD: <u>LANDFARM</u>
LAND USE: <u>RANGE</u> LEASE: <u>SF-046563</u> FORMATION: <u>DK</u>

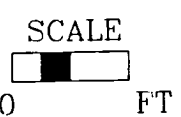
FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY <u>300</u> FT. <u>N57E</u> FROM WELLHEAD.
DEPTH TO GROUNDWATER: <u>7100'</u> NEAREST WATER SOURCE: <u>71000'</u> NEAREST SURFACE WATER: <u>71000'</u>
NMOC D RANKING SCORE: <u>0</u> NMOC D TPH CLOSURE STD: <u>5000</u> PPM
SOIL AND EXCAVATION DESCRIPTION:
CHECK ONE: <input type="checkbox"/> PIT ABANDONED <input checked="" type="checkbox"/> STEEL TANK INSTALLED

MOD. TO OK. YELL. BROWN SAND, NON-COHESIVE, SLIGHTLY MOIST, FIRM,
STRONG HC ODOR ONLY IN EAST, SOUTH, + BOTTOM DUM SAMPLES.
BOTTOM CONSIST OF HARD SANDSTONE, LT. GRAY IN COLOR.

CONDITIONAL CLOSURE

FIELD 418.1 CALCULATIONS

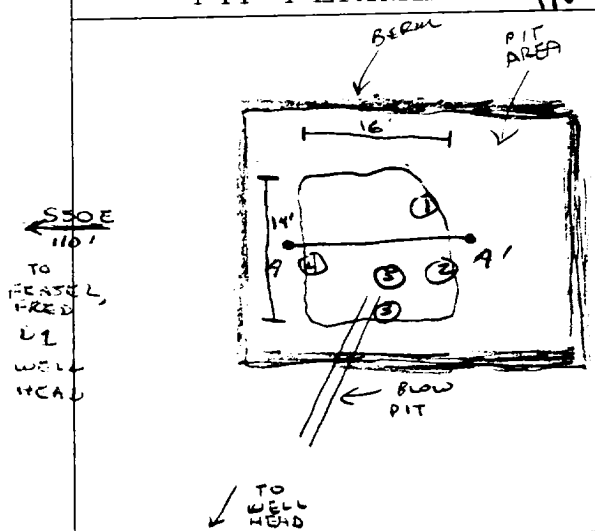
TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1045	⑤ @ 18'	TPH-1228	5	20	10:1	58	2320
1055	③ @ 14'	TPH-2229	5	20	10:1	102	4,080



PIT PERIMETER

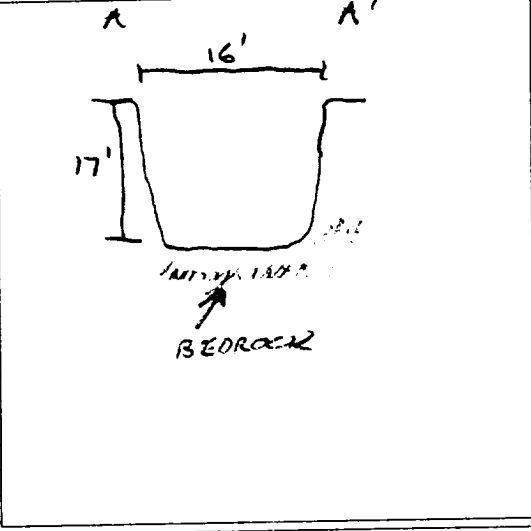
OVN RESULTS

PIT PROFILE



SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 11'	145
2 @ 13'	1020
3 @ 14'	1165
4 @ 11'	10.8
5 @ 18'	1639

SAMPLE ID	ANALYSIS	TIME
⑤ @ 18'	BTEX	1045
③ @ 14'	BTEX	1055



TRAVEL NOTES: CALLOUT: <u>10/26/94</u> ONSITE: <u>10/26/94</u>
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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:	3 @ 14'	Date Analyzed:	10-26-94
Project Location:	Feasel, Fred J 1 E	Date Reported:	10-26-94
Laboratory Number:	TPH-1229	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	4,100	200

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	3400	2920	15.19

*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 - B0136

Nelson Tely
Analyst

P. E. O'Neil
Review

OFF: (505) 325-8786



LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

Attn: *Nelson Velez*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *10/27/94*
Lab ID: *2242*
Sample ID: *3752*
Job No. *2-1000*

Project Name: *Feasel, Fred J1E*
Project Location: *3 @ 14' - Blow Pit*
Sampled by: *NV* Date: *10/26/94*
Analyzed by: *DLA* Date: *10/27/94*
Sample Matrix: *Soil*

Time: *10:55*

Aromatic Volatile Organics

Component	Measured Concentration ug/kg	Detection Limit Concentration ug/kg
<i>Benzene</i>	<i>587</i>	<i>0.2</i>
<i>Toluene</i>	<i>39,306</i>	<i>0.2</i>
<i>Ethylbenzene</i>	<i>11,532</i>	<i>0.2</i>
<i>m,p-Xylene</i>	<i>105,629</i>	<i>0.2</i>
<i>o-Xylene</i>	<i>21,791</i>	<i>0.2</i>
	TOTAL <i>178,844 ug/kg</i>	

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *[Signature]*
Date: *10/27/94*

P. O. BOX 2606 • FARMINGTON, NM 87499

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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
Sample ID: 5 @ 18'
Project Location: Feasel, Fred J 1 E
Laboratory Number: TPH-1228

Project #:
Date Analyzed: 10-26-94
Date Reported: 10-26-94
Sample Matrix: Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	2,300	200

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	3400	2920	15.19

*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 - B0136

Nelson Velly
Analyst

P. E. O'Neill
Review

OFF: (505) 325-8786



LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

Attn: *Nelson Velez*
Company: *Blagg Engineering*
Address: *P.O. Box 87*
City, State: *Bloomfield, NM 87413*

Date: *10/27/94*
Lab ID: *2242*
Sample ID: *3751*
Job No. *2-1000*

Project Name: *Feasel, Fred J1E*
Project Location: *5 @ 18' - Blow Pit*
Sampled by: *NV* Date: *10/26/94*
Analyzed by: *DLA* Date: *10/27/94*
Sample Matrix: *Soil*

Time: *10:45*

Aromatic Volatile Organics

Component	Measured Concentration ug/kg	Detection Limit Concentration ug/kg
<i>Benzene</i>	<i>91</i>	<i>0.2</i>
<i>Toluene</i>	<i>9,619</i>	<i>0.2</i>
<i>Ethylbenzene</i>	<i>2,586</i>	<i>0.2</i>
<i>m,p-Xylene</i>	<i>67,512</i>	<i>0.2</i>
<i>o-Xylene</i>	<i>23,272</i>	<i>0.2</i>
	<i>TOTAL 103,080 ug/kg</i>	

ND - Not Detectable

Method - SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography

Approved by: *[Signature]*
Date: *10/27/94*

P. O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

District I
P.O. Box 1980, Hobbs, NM
District II
P.O. Drawer DD, Artesia, NM 88211
District III
1000 Rio Brazos Rd, Aztec, NM 87410

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Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

80136
SUBMIT 1 COPY TO
APPROPRIATE
DISTRICT OFFICE
AND 1 COPY TO
SANTA FE OFFICE

PIT REMEDIATION AND CLOSURE REPORT

Operator: Amoco Production Company Telephone: (505) - 326-9200
Address: 200 Amoco Court, Farmington, New Mexico 87401
Facility Or: FEASEL, FRED J1E
Well Name
Location: Unit or Qtr/Qtr Sec 0 Sec 34 T 28N R 10W County SAN JUAN
Pit Type: Separator ☒ Dehydrator ☐ Other ☐
Land Type: BLM ☒ State ☐ Fee ☐ Other ☐

Pit Location: Pit dimensions: length 16', width 13', depth 5'
(Attach diagram) Reference: wellhead ☒, other ☐
Footage from reference: 120'
Direction from reference: 65 Degrees ☐ East North ☐
☒ West ^{of} South ☒

Depth To Ground Water:
(Vertical distance from
contaminants to seasonal
high water elevation of
ground water)

Less than 50 feet (20 points)
50 feet to 99 feet (10 points)
Greater than 100 feet (0 Points) 0

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) 0

Distance To Surface Water:
(Horizontal distance to perennial
lakes, ponds, rivers, streams, creeks,
irrigation canals and ditches)

Less than 200 feet (20 points)
200 feet to 1000 feet (10 points)
Greater than 1000 feet (0 points) 0

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: _____ Date Completed: 10-26-94

Remediation Method: Excavation X Approx. cubic yards 25
(Check all appropriate sections) Landfarmed _____ Insitu Bioremediation _____

Other COMPOSTED

Remediation Location: Onsite X Offsite _____
(ie. landfarmed onsite, name and location of offsite facility)

General Description Of Remedial Action: _____

Excavation

Ground Water Encountered: No X 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 5'

Sample date 10-26-94 Sample time _____

Sample Results

Benzene(ppm) _____

Total BTEX(ppm) _____

Field headspace(ppm) 1130

TPH 66,400 IN SAMPLE Bottom

Ground Water Sample: Yes _____ No X (If yes, attach sample results)

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


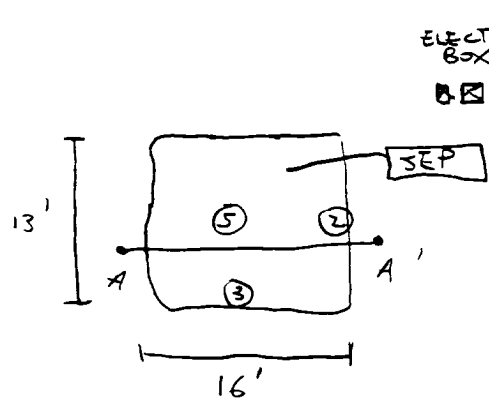
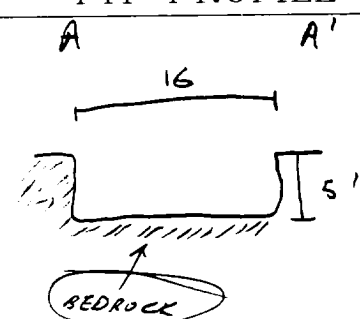
DATE 10/26/94

SIGNATURE

Buddy D. Shaw

PRINTED NAME
AND TITLE

Buddy D. Shaw
Environmental Coordinator

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>80136</u> C.O.C. NO: _____																																								
FIELD REPORT: CLOSURE VERIFICATION		PAGE No: <u>1</u> of <u>1</u>																																								
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FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY <u>120</u> FT. <u>565W</u> FROM WELLHEAD.																																										
DEPTH TO GROUNDWATER: <u>2100'</u> NEAREST WATER SOURCE: <u>21000'</u> NEAREST SURFACE WATER: <u>21000'</u>																																										
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<p>NORTH, WEST, & BOTTOM CONSIST OF HARD SANDSTONE, UNABLE TO OBTAIN SAMPLES FOR NORTH & WEST SIDEWALLS.</p> <p>EAST & SOUTH SIDEWALLS CONSIST OF MOD. YELL. BROWN SAND, NON-COHESIVE, SLIGHTLY MOIST, FIRM, NO APPARENT HC ODOR.</p> <p>BOTTOM SAMPLE OK. GRAY TO BLACK DISCOLORATION, STRONG HC ODOR.</p>																																										
CLOSED SCALE 	FIELD 4181 CALCULATIONS <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>0945</td> <td>⑤ @ 5'</td> <td>TPH-1227</td> <td>5</td> <td>20</td> <td>100:1</td> <td>166</td> <td>66,400</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	0945	⑤ @ 5'	TPH-1227	5	20	100:1	166	66,400																								
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PIT PERIMETER 	OVM RESULTS <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</td><td>-</td></tr> <tr><td>2 @ 3'</td><td>1.2</td></tr> <tr><td>3 @ 3'</td><td>0.8</td></tr> <tr><td>4</td><td>-</td></tr> <tr><td>5 @ 5'</td><td>1130</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>	SAMPLE ID	FIELD HEADSPACE PID (ppm)	1	-	2 @ 3'	1.2	3 @ 3'	0.8	4	-	5 @ 5'	1130											PIT PROFILE 																		
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TRAVEL NOTES: CALLOUT: <u>10/26/94</u> ONSITE: <u>10/26/94</u>																																										

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 @ 5'	Date Analyzed:	10-26-94
Project Location:	Feasel, Fred J 1 E	Date Reported:	10-26-94
Laboratory Number:	TPH-1227	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
-----	-----	-----
Total Recoverable Petroleum Hydrocarbons	66,400	2,000

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	-----	-----	-----
	3400	2920	15.19

*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: Separator Pit - B0136

Melissa Vely
Analyst

R. E. Ornel
Review