

District I
P.O. Box 1980, Hobbes, NM

District II
P.O. Drawer DD, Artes, NM 88211

District III
1000 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resource 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
(Revised 3/9/94)

Blow - OK
comp - Risk non-vulnerable
SF 081239

PIT REMEDIATION AND CLOSURE REPORT

Denied 12/17/96
due to Landform

Operator: AMOCO PRODUCTION COMPANY Telephone: (505) 326-9216
Address: 200 AMOCO COURT, FARMINGTON, NM 87401
Facility Or: L.C. KELLY #2
Well Name _____
Location: Unit or Qtr: Qtr Sec NW/NE Sec 5 T 30 R 12 County SAN JUAN
Pit Type: Separator _____ Dehydrator _____ Other BLOW DOWN
Land Type: BLM XX State _____ Fee _____ Other _____

Pit Location: Pit dimensions: Length 50 width 50 depth 10
(Attach diagram)
Reference: wellhead XX Other _____
Footage from reference: 262'
Direction from reference: 163° Degrees _____ East North _____
of
_____ West South EAST

Depth To Ground Water:	Less than 50 feet	(20 points)	
(Vertical Distance from	50 feet to 99 feet	(10 points)	
contaminants to seasonal	Greater than 100 feet	(0 points)	<u>0</u>
high water elevation of			
ground water)			

Wellhead Protection Area:	Yes	(20 points)	
(less than 200 feet from a private	No	(0 points)	<u>0</u>
domestic water source, or, less than			
1000 feet from all other water sources)			

Distance To Surface Water:	Less than 200 feet	(20 points)	
(Horizontal distance to perennial	200 feet to 1000 feet	(10 points)	
lakes, ponds, rivers, streams, creeks,	Greater than 1000 feet	(0 points)	<u>0</u>
irrigation canals and ditches)			

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: 05/11/94 Date Completed: 05/11/94
Remediation Method: Excavation XX Approx. cubic yards 925

Landfarmed _____ Insitu Bioremediation _____

Other _____

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

General Description of Remediation Action: _____
CONTAMINATED SOIL WAS REMEDITED BY DILUTION AND AERATION.

Ground Water 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

Sample depth _____

Sample date _____ Sample time _____

Sample Results 05/11/94 01:23:

Benzene (ppm) _____

Total BTEX (ppm) _____

Field headspace (ppm) 0.0 11/4/97 915

TPH 200 ppm

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

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

DATE 5/23/98 915

SIGNATURE 05/23/98

B. Shaw

PRINTED NAME
AND TITLE

BUDDY SHAW EH&S

PIT LOCATION DIAGRAM

Operator: AMOCO PRODUCTION CO.

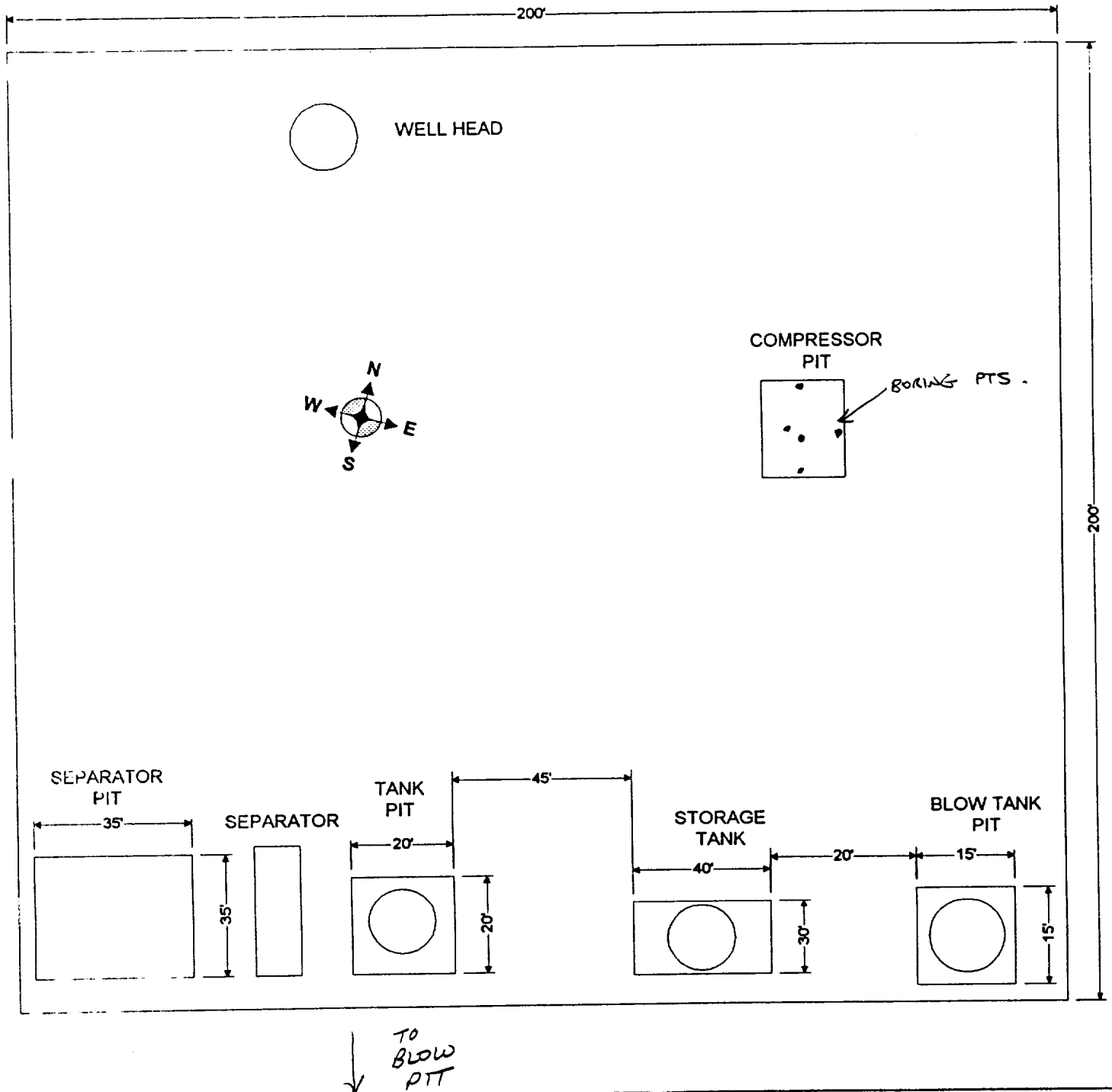
Telephone: (505) 326-9219

Address: 200 AMOCO COURT, FARMINGTON, NM 87401

Utility Or: L. C. KELLEY 2

Well Name

Location: Unit or Qtr/Qtr Sec B Sec 5 T 30N R 12W County SAN JUAN, NM



FINAL PIT CLOSURE SAMPLING REPORT

Operator: AMOCO PRODUCTION COMPANY

Telephone: (505) 326-9216

Address: 200 AMOCO COURT, FARMINGTON, NM 87401

Facility Or: KELLY #2

Well Name

Location: Unit or Qtr/Qtr Sec NW/NE Sec 5 T 30 R 12 County SAN JUAN

Depth

TPH

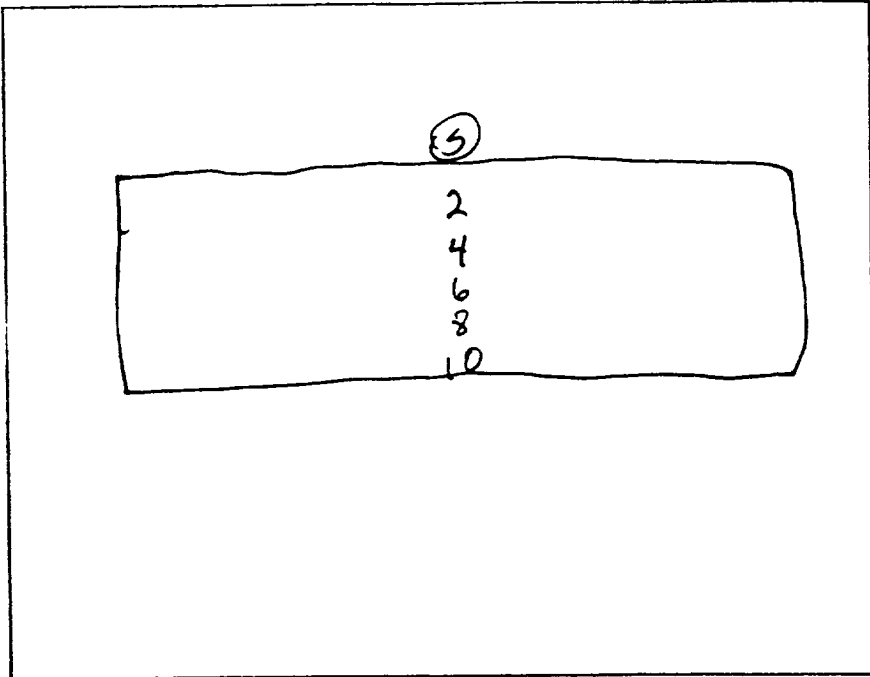
Surface	513 ppm
2 ft.	7630 ppm
4 ft.	8740 ppm
6 ft.	4670 ppm
8 ft.	3250 ppm
10 ft.	200 ppm
12 ft.	ppm
14 ft.	ppm
16 ft.	ppm
18 ft.	ppm
20 ft.	ppm
ft.	ppm
ft.	ppm
ft.	ppm

0.0 ppm

10 FT.

0.0 ppm

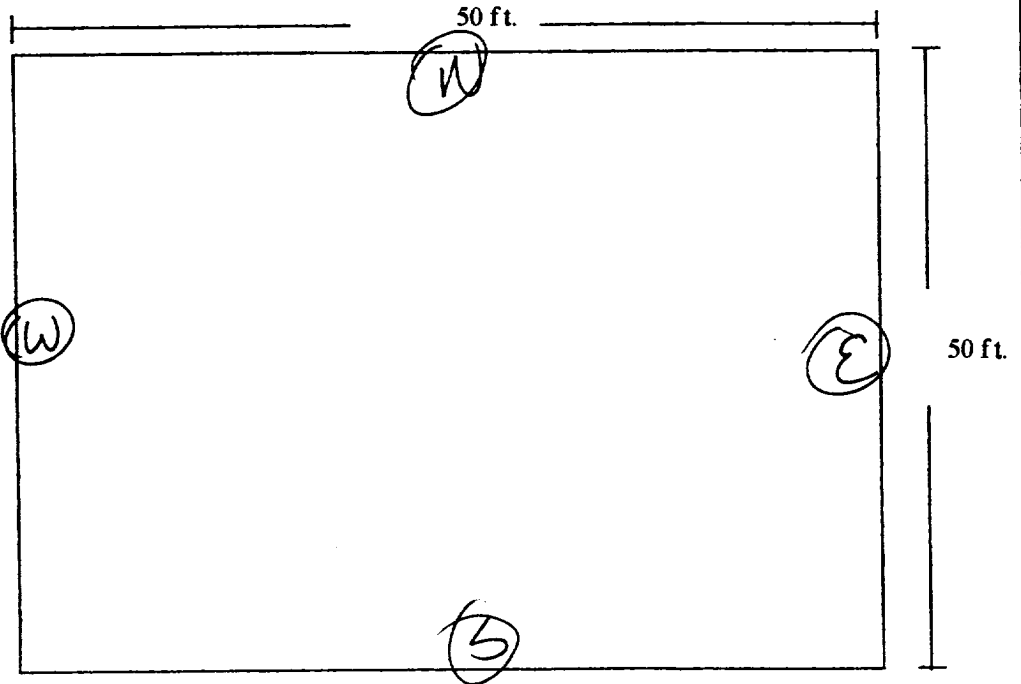
SIDE VIEW



TOP VIEW

North Side	280 ppm
East Side	965 ppm
South Side	669 ppm
West Side	260 ppm

North



CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>WEE</u> C.D.C. NO: <u>5424</u>
----------------------	--	---

FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: <u>L.C. KELLY</u>	WELL #: <u>2</u>	PITS: <u>BLOW</u>	DATE STARTED: <u>11/4/97</u>
QUAD/UNIT: <u>8</u>	SEC: <u>5</u>	TWP: <u>30N</u>	RNG: <u>12W</u> PM: <u>NM</u> CNTY: <u>SJ</u> ST: <u>NM</u>
QTR/FOOTAGE: <u>NW14 NE14</u>	CONTRACTOR: <u>WHOLE EARTH</u>		ENVIRONMENTAL SPECIALIST: <u>W/JCB</u>

SOIL REMEDIATION:

REMEDICATION SYSTEM: DILUTION + AERATION

APPROX. CUBIC YARDAGE: 925

LAND USE: RANGE

LIFT DEPTH (ft): NA

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

BORING CONDUCTED @ PIT CENTER ACCORDING TO PIT CLOSURE RECORD, REACHED 11' DEPTH FROM GRADE, NO DISCOLORATION OR HC ODOOR OBSERVED THROUGHOUT BORING, COLLECTED 2 SAMPLE PTS. FROM BORING @ 5' + 10' BELOW GRADE, COLLECTED 3 SAMPLE PTS. USING HAND AUGER (DEPTHS RANGING FROM 1'-2' BELOW GRADE) IN PIT AREA NO DISCOLORATION OR HC ODOOR ENCOUNTERED, COLLECTED 5 PT. COMPOSITE FOR LAB ANALYSIS OF DILUTED & AERATED SOIL, PLACED BACK IN EXCAVATED PIT AREA.

FIELD 418.1 CALCULATIONS

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

SKETCH/SAMPLE LOCATIONS

SEE SITE MAP

OVM RESULTS

LAB SAMPLES

SAMPLE ID	FIELD HEADSPACE PID (ppm)	SAMPLE ID	ANALYSIS	TIME	RESULT
DA-1	0.0	DA-1	TPH (8015)	1220	18.2
③ @ 10'	0.0				

SCALE

0  FT

TRAVEL NOTES:

CALLOUT: NA

CNSITE: 11/4/97

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

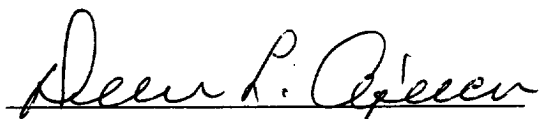
Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	DA - 1	Date Reported:	11-06-97
Laboratory Number:	C409	Date Sampled:	11-04-97
Chain of Custody No:	5424	Date Received:	11-05-97
Sample Matrix:	Soil	Date Extracted:	11-05-97
Preservative:	Cool	Date Analyzed:	11-05-97
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

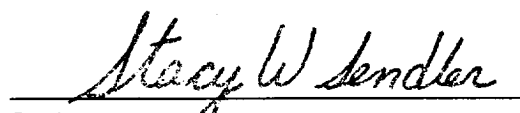
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	18.2	0.1
Total Petroleum Hydrocarbons	18.2	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Comments: L. C. Kelly #2 Blow Pit 5 Pt. Composite.


Analyst


Review

District I
P.O. Box 1980, Hobbes, NM

State of New Mexico
Energy, Minerals and Natural Resource Department

SUBMIT 1 COPY TO
APPROPRIATE
DISTRICT OFFICE
AND 1 COPY TO
SANTA FE OFFICE
(Revised 3/9/94)

District II
P.O. Drawer DD, Artes, NM 88211

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

District III
1000 Rio Brazos Rd, Aztec, NM 87410

PIT REMEDIATION AND CLOSURE REPORT

Operator: <u>AMOCO PRODUCTION COMPANY</u>		Telephone: <u>(505) 326-9216</u>	
Address: <u>200 AMOCO COURT, FARMINGTON, NM 87401</u>			
Facility Or: <u>KELLY #2</u>			
Well Name _____			
Location: Unit or Qtr: Qtr Sec <u>NW/NE</u> Sec <u>5</u> T <u>30</u> R <u>12</u> County <u>SAN JUAN</u>			
Pit Type: Separator _____ Dehydrator _____ Other <u>COMPRESSOR</u>			
Land Type: BLM <u>XX</u> State _____ Fee _____ Other _____			
Pit Location: Pit dimensions: Length <u>15</u> width <u>15</u> depth <u>26</u> (Attach diagram)			
Reference: wellhead <u>XX</u> Other _____			
Footage from reference: <u>112'</u>			
Direction from reference: <u>78</u> Degrees _____ East North <u>EAST</u> of _____ West South _____			
Depth To Ground Water: Less than 50 feet (20 points) (Vertical Distance from 50 feet to 99 feet (10 points) contaminants to seasonal Greater than 100 feet (0 points) <u>0</u> high water elevation of ground water)			
Wellhead Protection Area: Yes (20 points) (less than 200 feet from a private No (0 points) <u>0</u> domestic water source, or, less than 1000 feet from all other water sources)			
Distance To Surface Water: Less than 200 feet (20 points) (Horizontal distance to perennial 200 feet to 1000 feet (10 points) lakes, ponds, rivers, streams, creeks, Greater than 1000 feet (0 points) <u>0</u> irrigation canals and ditches)			
RANKING SCORE (TOTAL POINTS): <u>0</u>			

Date Remediation Started: 05/11/94 Date Completed: 05/11/94
Remediation Method: Excavation XX Approx. cubic yards 216

Landfarmed _____ Insitu Bioremediation _____

Other _____

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

General Description of Remediation Action: _____

CONTAMINATED SOIL WAS REMEDITED BY DILUTION AND AERATION. VERY HARD CLAY

ENCOUNTERED @ 16' BELOW GROUND. NO APPARENT HC ODOR
OBSERVED @ THAT DEPTH. RISK ASSESSED.

Ground Water Encountered: No X ^{9/5} Yes _____ Depth _____

Final Pit:

Closure Sampling:

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

Sample location _____

See Attached

Sample depth _____

Sample date _____ Sample time _____

Sample Results 05/11/94 02:05:

Benzene (ppm) _____

Total BTEX (ppm) _____

Field headspace (ppm) < 100' @ 16' 11/4/97 9/5

TPH 3,420 ppm @ 16'

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

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

DATE 5/23/98 9/5

SIGNATURE 05/27/94

B. Shaw

PRINTED NAME
AND TITLE

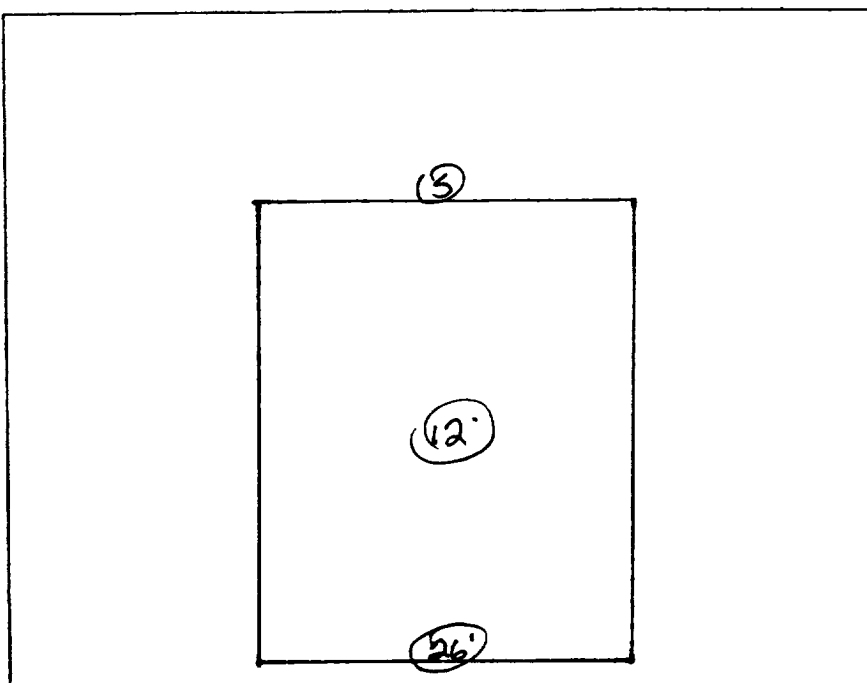
BUDDY SHAW EH&S

FINAL PIT CLOSURE SAMPLING REPORT

Operator: AMOCO PRODUCTION COMPANY Telephone: (505) 326-9216
 Address: 200 AMOCO COURT, FARMINGTON, NM 87401
 Facility Or: KELLY #2
 Well Name _____
 Location: Unit or Qtr/Qtr Sec NW/NE Sec 5 T 30 R 12 County SAN JUAN

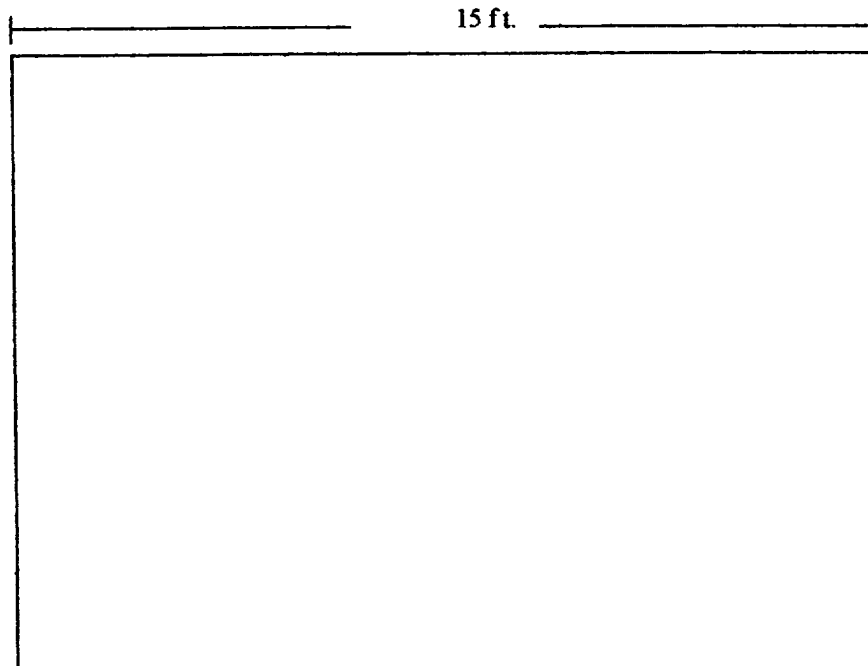
SIDE VIEW

Depth	TPH
Surface	8650 ppm
2 ft.	13890 ppm
4 ft.	45200 ppm
6 ft.	ppm
8 ft.	9860 ppm
10 ft.	ppm
12 ft.	7630 ppm
14 ft.	ppm
16 ft.	3420 ppm
18 ft.	ppm
20 ft.	4850 ppm
26' ft.	622 ppm
ft.	ppm
ft.	ppm



TOP VIEW

North Side	218 ppm
East Side	707 ppm
South Side	38 ppm
West Side	556 ppm



91V
<100 ppm

Well Name:	Kelly, L.C. #2
Well Site location:	Unit B, Sec. 5, T30N, R12W
Pit Type:	Compressor Pit
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 mobile drill rig developed auger refusal at 16 ft. below grade (hard clay).

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

1. Groundwater levels located on or close to the well pad are estimated to be at a much greater depth below presumed shallow sandstone bedrock (based on informal site observation of adjacent sandstone outcrop).
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 0.14 miles northwest of the nearest vulnerable area boundary (Flora Vista Arroyo).

(Refer to Flora Vista Quadrangle, New Mexico - Rio Arriba County, 7.5 Minute Series (Topographic), photorevised 1979, (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 vertical and lateral contamination is limited and impact to groundwater is very unlikely. AMOCO requests pit closure approval on this location.

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>WEE</u> C.D.C. NO: <u>5424</u>
----------------------	--	---

FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: <u>L.C. KELLY</u> WELL #: <u>2</u> PITS: <u>COMPRESSOR</u>	DATE STARTED: <u>11/4/97</u>
QUAD/UNIT: <u>B</u> SEC: <u>5</u> TWP: <u>30N</u> RNG: <u>12W</u> PM: <u>Nm</u> CNTY: <u>ST</u> ST: <u>Nm</u>	DATE FINISHED: _____
QTR/FOOTAGE: <u>NW1/4 NE1/4</u> CONTRACTOR: <u>WHOLE EARTH</u>	ENVIRONMENTAL SPECIALIST: <u>NV/JCB</u>

SOIL REMEDIATION:

REMEDICATION SYSTEM: DILUTION + AERATION

APPROX. CUBIC YARDAGE: 216

LAND USE: RANGE

LIFT DEPTH (ft): NA

FIELD NOTES & REMARKS:

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

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

UNABLE TO REACH 26' DEPTH @ PIT AREA (PIT BOTTOM CLOSURE DEPTH INDICATED ON PIT VERIFICATION FORM), REACHED MAX. DEPTH OF 16' HARD CLAY, CONDUCTED 5 INDIVIDUAL BURLINGS @ PIT AREA, BLACK DISCOLORATION ENCOUNTERED @ DEPTHS RANGING FROM 5' TO 8' BELOW GRADE @ PIT CENTER, STRONG HC ODOR ASSOCIATED W/ DISCOLORATION, COLLECTED 5 PT. COMPOSITE FOR LAB ANALYSIS OF DILUTED + AERATED SOIL PLACED BACK IN EXCAVATED PIT AREA.

FIELD 418.1 CALCULATIONS

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

SKETCH/SAMPLE LOCATIONS

SEE SITE
MAP

OVM RESULTS

LAB SAMPLES

SAMPLE ID	FIELD HEADSPACE PID (ppm)	SAMPLE ID	ANALYSIS	TIME	RESULTS
DA-1	188	DA-1	TPH (BOLIS)	1145	199
OC16'	<100				

SCALE

0  FT

TRAVEL NOTES:

CALLOUT: NA

ONSITE: 11/4/97

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

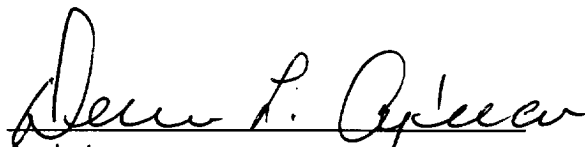
Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	DA - 1	Date Reported:	11-06-97
Laboratory Number:	C408	Date Sampled:	11-04-97
Chain of Custody No:	5424	Date Received:	11-05-97
Sample Matrix:	Soil	Date Extracted:	11-05-97
Preservative:	Cool	Date Analyzed:	11-05-97
Condition:	Cool and Intact	Analysis Requested:	8015 TPH


Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	144	0.2
Diesel Range (C10 - C28)	55.4	0.1
Total Petroleum Hydrocarbons	199	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Comments: L. C. Kelly #2 Compressor Pit 5 Pt. Composite.


Analyst


Review

CHAIN OF CUSTODY RECORD

Client/Project Name <i>BASS / Ameco</i>			Project Location <i>L.C. KELLY #2</i>			ANALYSIS/PARAMETERS											
Sampler: (Signature) <i>McDon VLK</i>			Chain of Custody Tape No. <i>04034-10</i>			No. of Containers		TPH (8/15)								Remarks	
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix		No. of Containers	TPH (8/15)										
<i>DA -1</i>	<i>11/4/97</i>	<i>1145</i>	<i>C408</i>	<i>SOIL</i>		<i>1</i>	<i>✓</i>										<i>COMPRESSOR PIT</i>
<i>DA -1</i>	<i>11/4/97</i>	<i>1220</i>	<i>C409</i>	<i>SOIL</i>		<i>1</i>	<i>✓</i>										<i>BLOW PIT</i>
																	<i>BOTH SAMPLES</i>
																	<i>RESETU. - COOL &</i>
																	<i>ARE 5 PT.</i>
																	<i>COMPOSITES.</i>
<i>Samples received cool & intact</i>																	
Relinquished by: (Signature) <i>McDon VLK</i>			Date <i>11/5/97</i>			Time <i>0708</i>			Received by: (Signature) <i>David L. Opusca</i>			Date <i>11-5-97</i>			Time <i>0708</i>		
Relinquished by: (Signature)									Received by: (Signature)								
Relinquished by: (Signature)									Received by: (Signature)								

Ref Coe S 5424, 5425, 5426, 5427

ENVIROTECH INC.
5796 U.S. Highway 64-3014
Farmington, New Mexico 87401
(505) 632-0615