

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

Blow - OK
sep - Risk below
SUBMIT 1 COPY TO
APPROPRIATE
DISTRICT OFFICE
AND 1 COPY TO
SANTA FE OFFICE
(Revised 3/9/94)

PIT REMEDIATION AND CLOSURE REPORT

Denied 11/21/95

Operator: <u>AMOCO PRODUCTION COMPANY</u>		Telephone: <u>(505) 326-9219</u>	
Address: <u>200 AMOCO COURT, FARMINGTON, NM 87401</u>			
Facility Or: <u>JAMES F. BELL #1E</u>			
Well Name			
Location: Unit or Qtr/Qtr Sec <u>SE/SE</u> Sec <u>10</u> T <u>30</u> R <u>13</u> County <u>SAN JUAN</u>			
Pit Type: Separator _____ Dehydrator _____ Other <u>BLOW DOWN</u>			
Land Type: BLM <u>XX</u> State _____ Fee _____ Other _____			
Pit Location: Pit dimensions: Length <u>45</u> width <u>45</u> depth <u>5</u>			
(Attach diagram) See Attached			
Reference: wellhead _____ Other _____			
Footage from reference: _____			
Direction from reference: _____ Degrees _____ East North _____			
_____ West South _____			
Depth To Ground Water:			
(Vertical Distance from		Less than 50 feet	(20 points)
contaminants to seasonal		50 feet to 99 feet	(10 points)
high water elevation of		Greater than 100 feet	(0 points)
ground water)			<u>0</u>
Wellhead Protection Area:		Yes	(20 points)
(less than 200 feet from a private		No	(0 points)
domestic water source, or, less than			<u>0</u>
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)
irrigation canals and ditches)			<u>0</u>
RANKING SCORE (TOTAL POINTS): <u>0</u>			

Date Remediation Started: 05/19/94 Date Completed: 05/19/94

Remediation Method: Excavation XX Approx. cubic yards 375

Landfarmed _____ Insitu Bioremediation _____

Other _____

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

Onsite XX Offsite _____

General Description of Remediation Action: _____

CONTAMINATION WAS REMEDIATED BY DILUTION AND AERATION.

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

Sample depth 5

Sample date 05/19/94

Sample time 09:00:00

Sample Results

Benzene (ppm) _____

Total BTEX (ppm) _____

Field headspace (ppm) 0.0 @ 2' 95 11/18/97

TPH 764

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

11

1-11-95

1/26/98 95

SIGNATURE

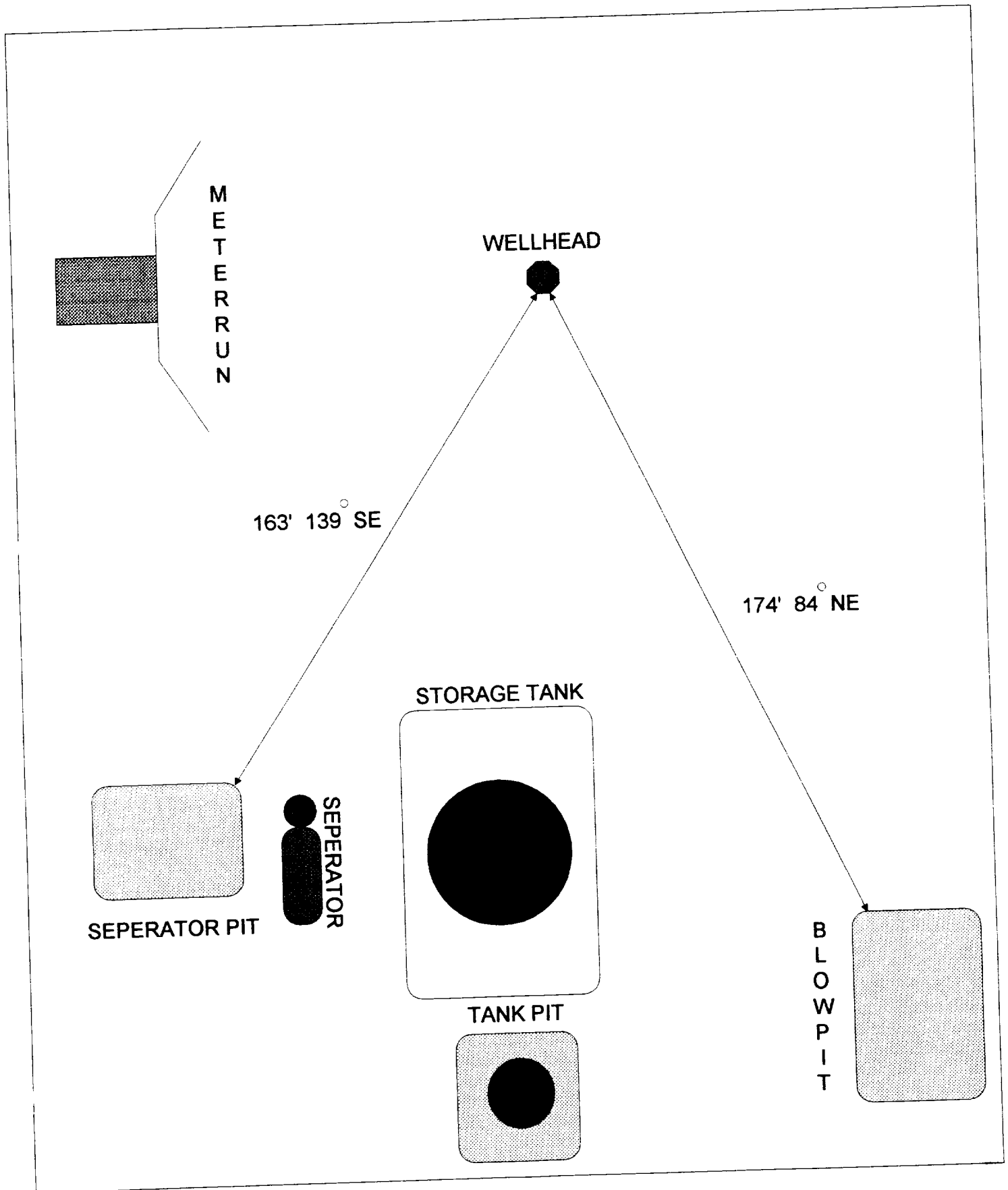
BS Shaw

PRINTED NAME
AND TITLE

Environmental
Coordinator

AMOCO PRODUCTION COMPANY

JAMES A. BELL #1E



FINAL PIT CLOSURE SAMPLING REPORT

OPERATOR : AMOCO PRODUCTION COMPANY

ADDRESS : 200 AMOCO COURT FARMINGTON, NM

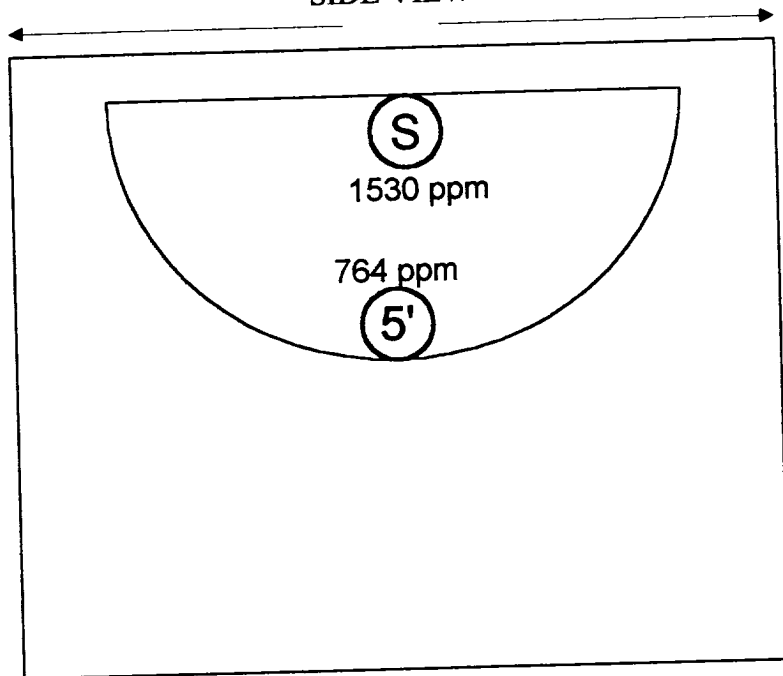
WELL NAME
OR FACILITY : JAMES ~~F~~ BELL #1E

PIT TYPE : BLOW PIT LEGALS : SE/SE SEC.10 T30N R13W

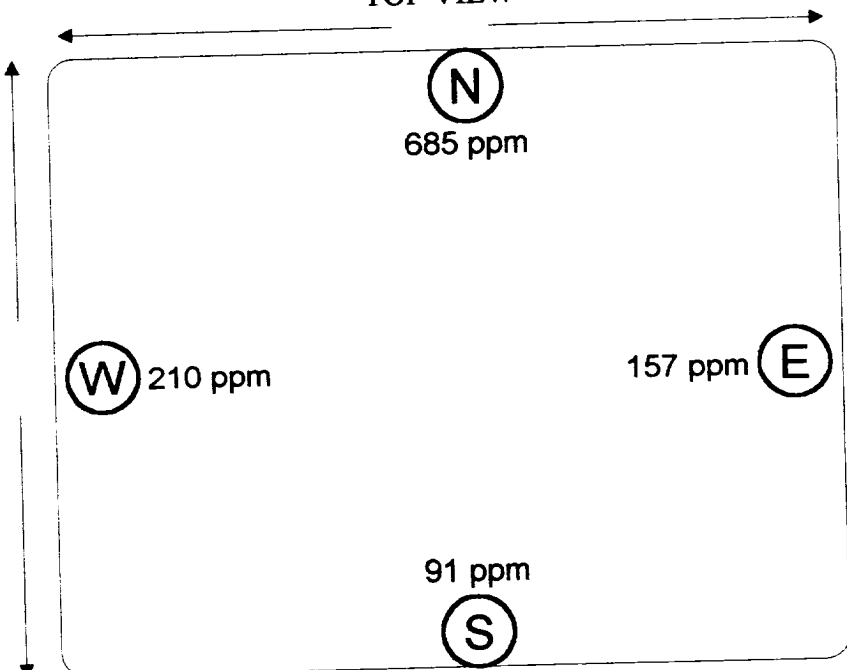
DEPTH	TPH/PPM
SURFACE	1530
5'	764
	<i>0.0</i>
2'	<i>0.0</i>

24V

SIDE VIEW



TOP VIEW



WALL	DEPTH	TPH
NORTH	5'	685
WEST	5'	210
SOUTH	5'	91
EAST	5'	157

CLIENT: AMOCOBLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 632-1199LOCATION: WEE
C.D.C. NO: 5435FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATIONLOCATION: NAME: BELL, JAMES F. WELL #: 1E PITS: BLOW
QUAD/UNIT: P SEC: 10 TWP: 30N RNG: 13W PM: NM CNTY: 3J ST: NM
DTP/FOOTAGE: SE/4 SE/4 CONTRACTOR: WHOLE EARTHDATE STARTED: 11/18/97
DATE FINISHED: _____
ENVIRONMENTAL
SPECIALIST: NV/EP

SOIL REMEDIATION:

REMEDICATION SYSTEM: DILUTION & AERATIONAPPROX. CUBIC YARDAGE: 375LAND USE: RANGELIFT 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

ENCOUNTERED COMPETENT SANDSTONE @ 2' BELOW GRADE, SOIL CONSIST OF DK. YELL. BROWN SAND, NO DISCOLORATION OR HC ODOR OBSERVED @ ANY OF THE SAMPLE PTS. COLLECTED USING A HAND AUGER, 5 FT. COMPOSITE COLLECTED FOR LAB ANALYSIS OF SUPPOSEDLY DILUTED & AERATED SOIL PLACED BACK INTO EXCAVATED AREA, PIT AREA LOCATED ACCORDING TO PIT CLOSURE RECORD.

FIELD 418.1 CALCULATIONS

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

SKETCH/SAMPLE LOCATIONS

SEE SITE MAP

OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
DA-1	0.0
⑤ @ 2'	0.0

LAB SAMPLES

SAMPLE ID	TPH (8015)	TPH	TPH
DA-1	1145	9.8	

SCALE



0

FT

TRAVEL NOTES:

CALLOUT: NA

ONSITE:

11/18/97

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

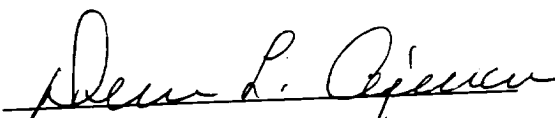
Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	DA - 1	Date Reported:	11-20-97
Laboratory Number:	C526	Date Sampled:	11-18-97
Chain of Custody No:	5435	Date Received:	11-19-97
Sample Matrix:	Soil	Date Extracted:	11-19-97
Preservative:	Cool	Date Analyzed:	11-19-97
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

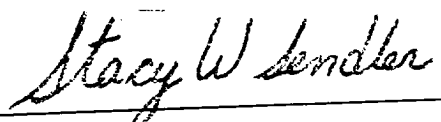
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	9.8	0.1
Total Petroleum Hydrocarbons	9.8	0.2

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: **Bell, James F. #1E Blow Pit. 5 Pt. Composite.**


Analyst


Review

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PIT REMEDIATION AND CLOSURE REPORT

Operator: AMOCO PRODUCTION COMPANY Telephone: (505) 326-9219
Address: 200 AMOCO COURT, FARMINGTON, NM 87401
Facility Or: JAMES F. BELL #1E
Well Name _____
Location: Unit or Qtr/Qtr Sec SE/SE Sec 10 T 30 R 13 County SAN JUAN
Pit Type: Separator XX Dehydrator _____ Other _____
Land Type: BLM XX State _____ Fee _____ Other _____

Pit Location: (Attach diagram) Pit dimensions: Length 21 width 24 depth 8
Reference: wellhead _____ Other _____ See Attached
Footage from reference: _____
Direction from reference: _____ Degrees _____ East North _____
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)	<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 200 feet	(20 points)	
	200 feet to 1000 feet	(10 points)	
	Greater than 1000 feet	(0 points)	<u>0</u>

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: 05/19/94 Date Completed: 05/19/94
Remediation Method: Excavation XX Approx. cubic yards 149

Landfarmed _____ Insitu Bioremediation _____

Other _____

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

General Description of Remediation Action: _____

CONTAMINATION WAS REMEDIATED BY DILUTION AND AERATION. RISK ASSESSMENT

ATTACHED. W 5/11/98

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

Sample depth 8

Sample date 05/19/94 Sample time 09:30:00

Sample Results

Benzene (ppm) _____

Total BTEX (ppm) _____ ③ @ 4 1/2' < 100 ppm

Field headspace (ppm) UNABLE TO COLLECT W (SEE LANDFARM REPORT)

TPH 895

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 11-11-95 11/20/98

SIGNATURE

B. Shaw

PRINTED NAME
AND TITLE

Environmental
Coordinator

FINAL PIT CLOSURE SAMPLING REPORT

OPERATOR : AMOCO PRODUCTION COMPANY

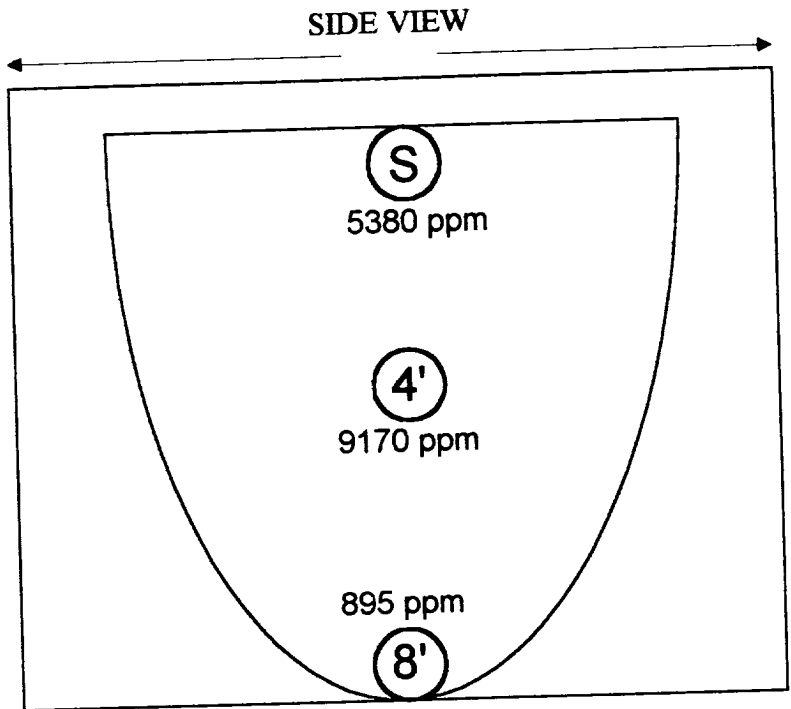
ADDRESS : 200 AMOCO COURT FARMINGTON, NM

WELL NAME
OR FACILITY : JAMES F BELL #1E

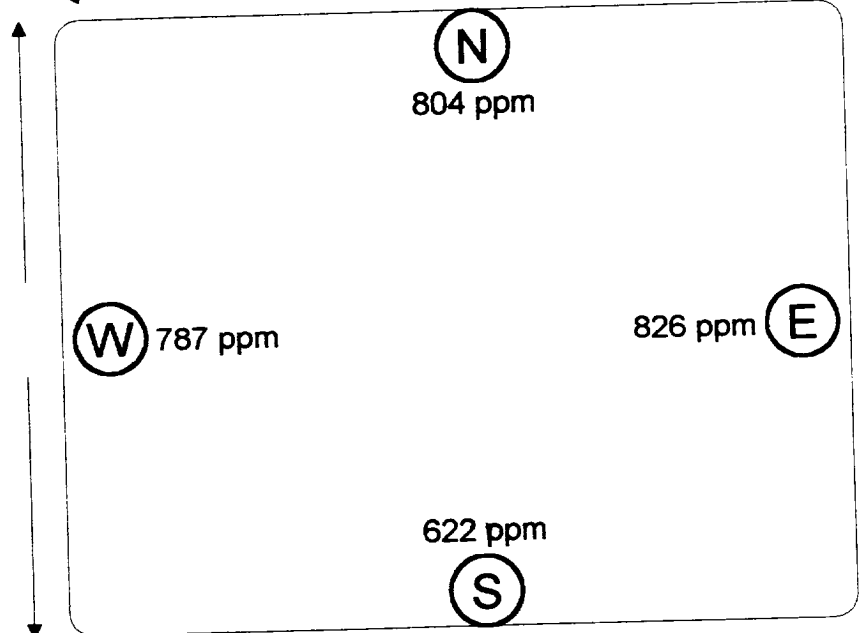
PIT TYPE : SEPERATOR LEGALS : SE/SE SEC.10 T30N R13W

DEPTH	TPH/PPM
SURFACE	5380
4'	9170
8'	895
	6.0M
4.5'	<100

4.5'



TOP VIEW



WALL	DEPTH	TPH
NORTH	6'	804
WEST	6'	787
SOUTH	6'	622
EAST	6'	826

Well Name:
Well Site location:
Pit Type:
Producing Formation:
Pit Category:
Horizontal Distance to Surface Water:
Vicinity Groundwater Depth:

Bell, James F. #1E
Unit P, Sec. 10, T30N, R13W
Separator Pit
Basin Dakota
Non Vulnerable
> 1000 ft.
> 100 ft.

RISK ASSESSMENT (non-vulnerable area)

Pit remediation activities were terminated when excavator encountered competent sandstone at 8 feet below grade.

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 shallow sandstone bedrock encountered at 8 feet below grade.
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 on the fringe of the nearest vulnerable area boundary (South Twin Wash).

(Refer to Farmington North Quadrangle, New Mexico - San Juan 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 lateral impact from the earthen pit is very limited and that the sandstone bottom creates enough of a 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.

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>5435</u>
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FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: <u>BELL, JAMES F.</u> WELL #: <u>1E</u> PITS: <u>SEP</u>	DATE STARTED: <u>11/18/97</u> DATE FINISHED: _____
QUAD/UNIT: <u>P</u> SEC: <u>10</u> TWP: <u>30N</u> RNG: <u>13W</u> PM: <u>NM</u> CNTY: <u>SJ</u> STNM: _____	ENVIRONMENTAL SPECIALIST: <u>NV/EP</u>
OTP/FOOTAGE: <u>5E/4</u> <u>5E/4</u> CONTRACTOR: <u>WHOLE EARTH</u>	

SOIL REMEDIATION:	APPROX. CUBIC YARDAGE: <u>149</u>
REMEDICATION SYSTEM: <u>DURATION & AERATION</u>	LIFT DEPTH (ft): <u>NA</u>
LAND USE: <u>RANGE</u>	

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

2 BORINGS CONDUCTED @ OR NEAR PIT CENTER ACCORDING TO PIT CLOSURE RECORD, ENCOUNTERED COMPETENT SANDSTONE @ 4 1/2' BELOW GRADE. SOIL CONSISTED OF DR. YELL. BROWN SAND @ GROUND SURFACE TO DR. GRAY TO BLACK SILTY CLAY TO CLAY THROUGHOUT REMAINING PORTION OF BORINGS, STRONG HC ODOR APPARENTLY ASSOCIATED W/ DISCOLORATION. UNABLE TO COLLECT SUFFICIENT AMOUNT OF SOIL FROM EITHER BORING @ TOTAL DEPTHS FOR OUR SAMPLE. COLLECTED SAMPLES @ 2' & 4' BELOW GRADE FROM BOTH BORINGS. COLLECTED 1 HAND AUGERED SAMPLE PT. @ 2' BELOW GRADE, 5 PT. COMPOSITE COLLECTED FOR LAB ANALYSIS OF SUPPOSEDLY DILUTED & AERATED SOIL PLACED BACK INTO EXCAVATED 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	103.1	DA-1	TPH (8015)	1125	131

SCALE



0 FT

TRAVEL NOTES: CALLOUT: NA ONSITE: 11/18/97

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

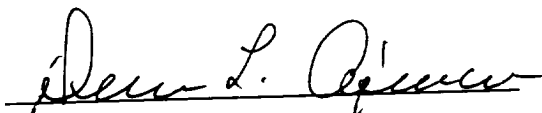
Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	DA - 1	Date Reported:	11-20-97
Laboratory Number:	C525	Date Sampled:	11-18-97
Chain of Custody No:	5435	Date Received:	11-19-97
Sample Matrix:	Soil	Date Extracted:	11-19-97
Preservative:	Cool	Date Analyzed:	11-19-97
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

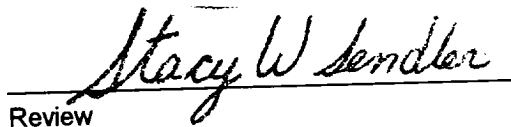
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	131	0.1
Total Petroleum Hydrocarbons	131	0.2

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: **Bell, James F. #1E Separator Pit. 5 Pt. Composite.**


Analyst


Review

CHAIN OF CUSTODY RECORD

Client/Project Name			Project Location			ANALYSIS/PARAMETERS									
Sampler: (Signature)			Chain of Custody Tape No.			No. of Containers		Remarks							
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	Remarks									
DR-1	11/18/97	1125	CS25	SOIL	1	✓	SEARCHED PIT								
DR-1	11/18/97	1145	CS26	SOIL	1	✓	BLAU PIT								
BOTH SAMPLES															
PRESERV. - COAL d															
ARE 5 PT.															
COMPOSTES															
Relinquished by: (Signature)			Date	Time	Received by: (Signature)	Date	Time								
Relinquished by: (Signature)			11/19/97	0805	Wendy D. O'Brien	11-19-97	0801								
Relinquished by: (Signature)					Received by: (Signature)										
Relinquished by: (Signature)					Received by: (Signature)										

28-COC'S 5431, 5433, 5434, 5435,
 5436, 5437

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