Blow-Risk-bedrock
Sep - Risk-non-vulnerable

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

District II
P.O. Drawer DD, Arteus, 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)

Denied 11/25/96

PIT REMEDIATION AND CLOSURE REPORT

Operator: AMOCO PRODUCTION COMPANY Telephone: (505) 326-9219

Address: 200 AMOCO COURT, FARMINGTON, NM 87401

Facility Or: FEDERAL GAS COM F -1
Well Name

Location: Unit or Qtr/Qtr Sec ~~P~~ NE/NE Sec 7 T 27 R 12 County SAN JUAN

Pit Type: Separator ____ Dehydrator ____ Other BLOW DOWN

Land Type: BLM XX State ____ Fee ____ Other ____

Pit Location: (Attach diagram) Pit dimensions: Length 50 width 50 depth 21

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)	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: 11/02/94 Date Completed: 11/07/94

Remediation Method: Excavation XX Approx. cubic yards 1944

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 AERIATION. ENCOUNTERED SANDSTONE @ 8 FT. BELOW GRADE W/ DRILL RIG (12/12/97).

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 21

Sample date 11/02/94 Sample time 08:00:00

Sample Results

Benzene (ppm) _____

Total BTEX (ppm) _____

Field headspace (ppm) @8' 0.0 ppm 12/12/97 NV

TPH 24 ~~974~~

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 NV

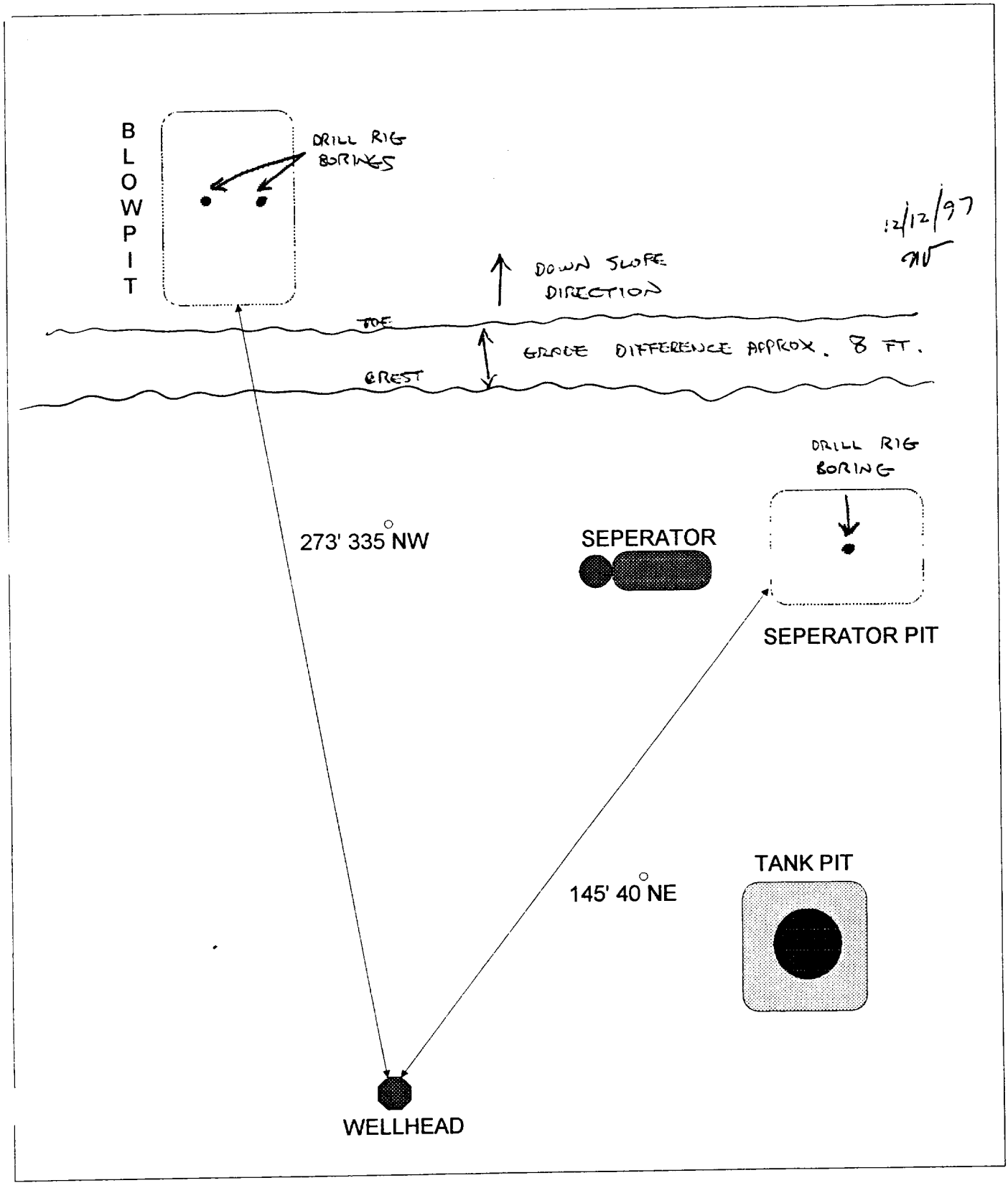
DATE / / ~~11/28/94~~ 5/22/98

SIGNATURE B Shaw

PRINTED NAME BUDDY SHAW
AND TITLE ENVIRO. COORDINATOR

AMOCO PRODUCTION COMPANY

FEDERAL GAS COM F #1



FINAL PIT CLOSURE SAMPLING REPORT

OPERATOR : AMOCO PRODUCTION

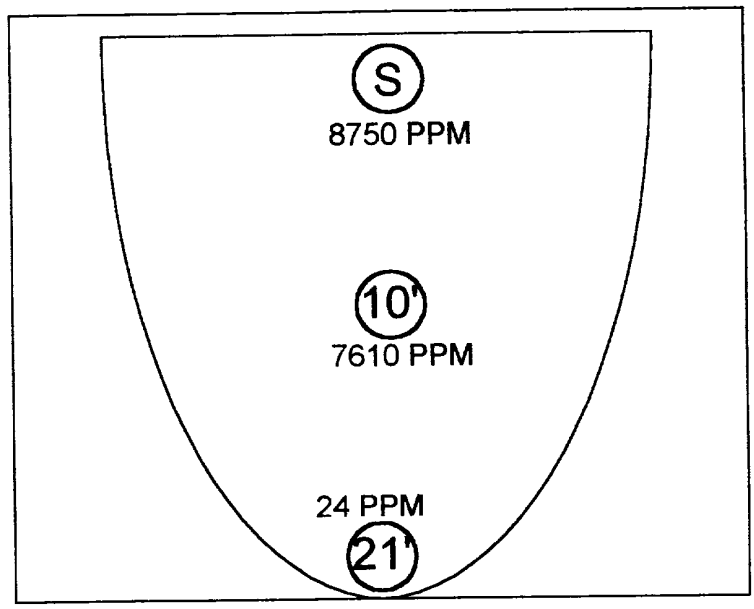
ADDRESS : 200 AMOCO COURT FARMINGTON, NM 87401

WELL NAME OR FACILITY : FEDERAL GAS COM #1F

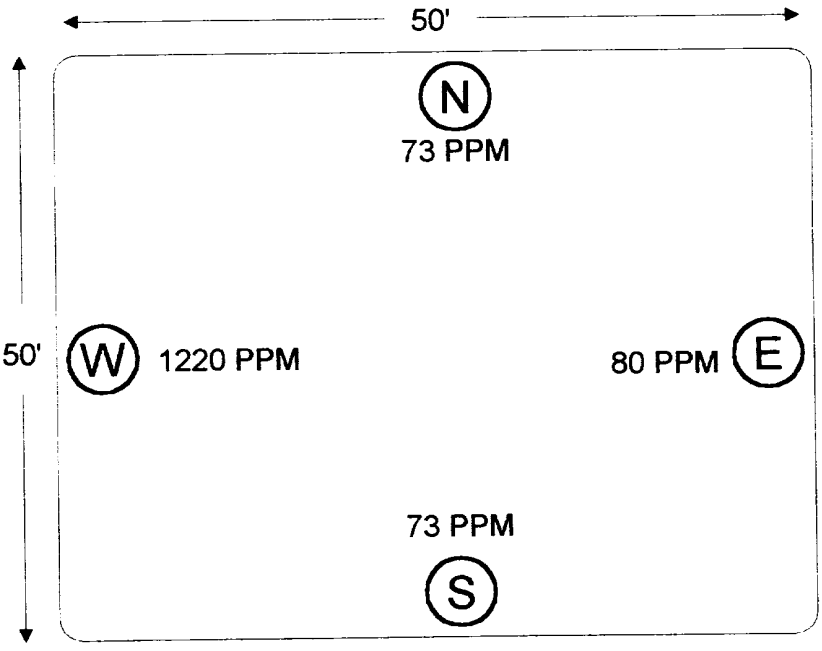
PIT TYPE : BLOW DOWN LEGALS :

DEPTH	TPH - PPM
SURFACE	8750
4'	17300
8'	11900
10'	7610
14'	4990
18'	2440
21'	24
	0.0
8'	0.0

SIDE VIEW



TOP VIEW



WALL	DEPTH	TPH - PPM
NORTH	7'	73
WEST	7'	1220
SOUTH	7'	73
EAST	7'	80

Well Name:	**Federal GC F #1**
Well Site location:	Unit A, Sec. 7, T27N, R12W
Pit Type:	Blow Pit
Producing Formation:	Basin Dakota
Pit Category:	Non Vulnerable
Horizonal Distance to Surface Water:	> 1000 ft.
Vicinity Groundwater Depth:	> 100 ft.

RISK ASSESSMENT (non-vulnerable area)

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 (steel tank installed). 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 0.06 miles west of the nearest vulnerable area boundary (Gallegos Canyon Wash).

   (Refer to Hugh Lake 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 vertical extent poses very little, if any, threat to groundwater. AMOCO therefore request approval of this pit closure.

CLIENT: AMOCO

BLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 632-1199

LOCATION NO: WEE
C.O.G. NO: 5651

FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: FEDERAL GC F WELL #: 1 PITS: BLOW
QUAD/UNIT: A SEC: 7 TWP: 27N RNG: 12W PM: NM CNTY: SJ ST: NM
QTR/FOOTAGE: NE/4 NE/4 CONTRACTOR: WHOLE EARTH

DATE STARTED: 12/12/97
DATE FINISHED:
ENVIRONMENTAL SPECIALIST: NV/EP

SOIL REMEDIATION:
REMEDIATION SYSTEM: DILUTION & AERATION
APPROX. CUBIC YARDAGE: 1,944
LAND USE: RANGE
LIFT DEPTH (ft): NA

FIELD NOTES & REMARKS:
DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'
NMOCD RANKING SCORE: 0 NMOCD TPH CLOSURE STD: 5000 PPM
2 BORINGS CONDUCTED @ OR NEAR PIT CENTER ACCORDING TO PIT CLOSURE RECORD ENCOUNTERED COMPETENT SANDSTONE @ 8' BELOW GRADE @ BOTH BORINGS, SOIL CONSISTED OF DK. YELL. BROWN SAND NO DISCOLORATION OR HC ODOR OBSERVED, 5 PT. COMPOSITE COLLECTED FOR LAB ANALYSIS OF SUPPOSEDLY DILUTED & AERATED SOIL PLACED BACK INTO EXCAVATED AREA. UNABLE TO COLLECTED OVM SAMPLE OF SANDSTONE.

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

SAMPLE ID	FIELD HEADSPACE P.D (ppm)
DA-1	0.0
@8'	0.0

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME	RESULTS
DA-1	TPH (8015)	1350	ND

SCALE
0 FT

TRAVEL NOTES: CALLOUT: NA ONSITE: 12/12/97

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:	12-16-97
Laboratory Number:	C693	Date Sampled:	12-12-97
Chain of Custody No:	5651	Date Received:	12-15-97
Sample Matrix:	Soil	Date Extracted:	12-15-97
Preservative:	Cool	Date Analyzed:	12-15-97
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)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**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: **Federal GC F #1 Blow Pit. 5 Pt. Composite.**

Analyst

Review

5796 U.S. Highway 64-3014 • Farmington, NM 87401 • Tel 505 • 632 • 0615 • Fax 505 • 632 • 1865

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

District II
P.O. Drawer DD, Arteus, 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)

PIT REMEDIATION AND CLOSURE REPORT

Operator: AMOCO PRODUCTION COMPANY Telephone: (505) 326-9219

Address: 200 AMOCO COURT, FARMINGTON, NM 87401

Facility Or: FEDERAL GAS COM F -1

Well Name

Location: Unit or Qtr/Qtr Sec SE NE/NE Sec 7 T 27 R 12 County SAN JUAN

Pit Type: Separator XX Dehydrator ____ Other ____

Land Type: BLM XX State ____ Fee ____ Other ____

Pit Location: (Attach diagram)
Pit dimensions: Length 30 width 25 depth 20

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)	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: 10/31/94 Date Completed: 11/07/94

Remediation Method: Excavation XX Approx. cubic yards 555

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 AERIATION.

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 20

Sample date 11/02/94 Sample time 02:15:00

Sample Results

Benzene (ppm) _____

Total BTEX (ppm) _____

Field headspace (ppm) 1,347 C 20' 12/12/97 AV

TPH 974 ~~24~~

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 ~~11-25-94~~ 5/22/98 AV

SIGNATURE BA Shaw

PRINTED NAME BUDDY SHAW AND TITLE Envir. Coordinator

FINAL PIT CLOSURE SAMPLING REPORT

OPERATOR : AMOCO PRODUCTION

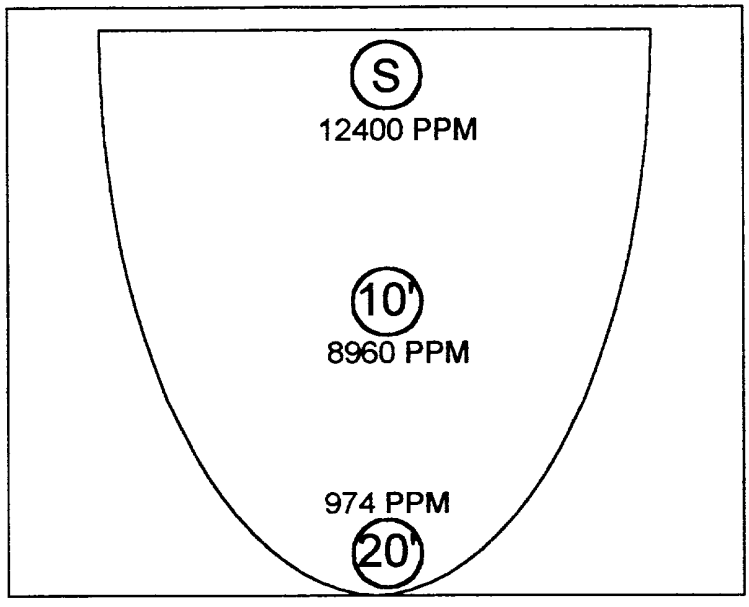
ADDRESS : 200 AMOCO COURT FARMINGTON, NM 87401

WELL NAME OR FACILITY : FEDERAL GAS COM #1F

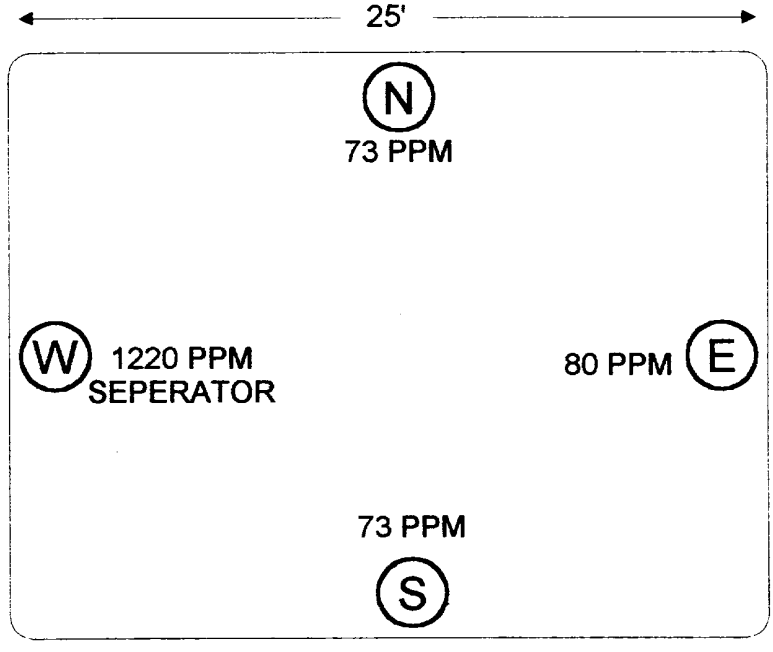
PIT TYPE : SEPERATOR LEGALS :

DEPTH	TPH
SURFACE	12400
4'	23600
8'	19500
10'	8960
14'	7220
18'	4830
20'	974
	o/m
20'	1,347

SIDE VIEW



TOP VIEW



WALL	DEPTH	TPH - PPM
NORTH	7'	73
WEST	7'	1220
SOUTH	7'	73
EAST	7'	80

Well Name:	**Federal GC F #1**
Well Site location:	Unit A, Sec. 7, T27N, R12W
Pit Type:	Separator Pit
Producing Formation:	Basin Dakota
Pit Category:	Non Vulnerable
Horizonal Distance to Surface Water:	> 1000 ft.
Vicinity Groundwater Depth:	> 100 ft.

RISK ASSESSMENT (non-vulnerable area)

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 (steel tank installed). 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 0.06 miles west of the nearest vulnerable area boundary (Gallegos Canyon Wash).

   (Refer to Hugh Lake 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 vertical extent poses very little, if any, threat to groundwater. AMOCO therefore request approval of this pit closure.

CLIENT: AMOCO

BLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 632-1199

LOCATION NO: WEE
C.O.C. NO: 5651

FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: FEDERAL GC F WELL #: 1 PITS: SEP.
QUAD/UNIT: A SEC: 7 TWP: 27N RNG: 12W PM: NM CNTY: SJ ST: NM
QTR/FOOTAGE: NE/4 NE/4 CONTRACTOR: WHOLE EARTH

DATE STARTED: 12/12/97
DATE FINISHED:
ENVIRONMENTAL SPECIALIST: NV/EP

SOIL REMEDIATION:
REMEDIATION SYSTEM: DILUTION/AERATION
APPROX. CUBIC YARDAGE: 555
LAND USE: RANGE
LIFT DEPTH (ft): NA

FIELD NOTES & REMARKS:

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

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

1 BORING CONDUCTED @ OR NEAR PIT CENTER ACCORDING TO PIT CLOSURE RECORD, SOIL CONSISTED OF DK. YELL. BROWN SAND BETWEEN GROUND SURFACE TO APPROX. 13' BELOW GRADE, LT. TO MED. GRAY SAND FROM 13'-18', LT. GRAY FROM 18'-20', STRONG HC ODOR APPARENTLY ASSOCIATED W/ DISCOLORATION, COLLECTED COMPOSITE SAMPLE FOR LAB ANALYSIS, COLLECTED SAMPLE PTS. FROM BORING (@ 5', 10', 15', 18', & 20').

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

SCALE
0 FT

OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
DA-1	1,391
(5) @20'	1,347

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME	RESULTS
DA-1	TPH (8015)	1315	69.8

TRAVEL NOTES: CALLOUT: NA ONSITE: 12/12/97

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:	12-16-97
Laboratory Number:	C692	Date Sampled:	12-12-97
Chain of Custody No:	5651	Date Received:	12-15-97
Sample Matrix:	Soil	Date Extracted:	12-15-97
Preservative:	Cool	Date Analyzed:	12-15-97
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**61.1**	**0.2**
Diesel Range (C10 - C28)	**8.7**	**0.1**
Total Petroleum Hydrocarbons	**69.8**	**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: **Federal GC F #1 Separator Pit. 5 Pt. Composite.**

Analyst

Review

5796 U.S. Highway 64-3014 • Farmington, NM 87401 • Tel 505 • 632 • 0615 • Fax 505 • 632 • 1865

5651

CHAIN OF CUSTODY RECORD

Client/Project Name	Project Location	ANALYSIS/PARAMETERS
BLAGG / AMOCO	~~SEPARATOR 9N~~ FEDERAL GC F #1	
Sampler: (Signature) Nelson Velez	Chain of Custody Tape No. 04034-10	

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TPH (8015)						Remarks
OA-1	12/12/97	1315	C692	SOIL	1	✓						SEPARATOR PIT
OA-1	12/12/97	1350	C693	SOIL	1	✓						BLOW PIT
												BOTH SAMPLES
												PRESERV. - COOL
												& ARE 5 PT.
												COMPOSITES.
				SAMPLES RECEIVED COOL & INTACT								DLH

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Nelson Velez	12/15/97	0716	Ann L. Aguirre	12-15-97	0216
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

Ref COC's 5648 → 5656

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