Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator
Amoco Production Company

3. Address and Telephone No.
200 Amoco Court, Farmington, N.M. 87401 Tel: (505) 326-9200

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
SE/4 NE/4, SEC. 32, T 28 N, R 10W, NMPM
H

5. Lease Designation and Serial No.
SF-046563

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.
FEASEL, FRED LI

9. API Well No.
3004507030

10. Field and Pool, or Exploratory Area
DAKOTA

11. County or Parish, State
SAN JUAN, NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☐ Abandonment	☐ Change of Plans
☒ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☒ Other Pit closure	☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Pit closure verification - see attached documentation.

BLOW PIT - ABANDONED

SEPARATOR PIT - STEEL TANK INSTALLED

Denny Foust
DEPUTY OIL & GAS INSPECTOR

JUL 18 1996

RECEIVED
APR 11 1995
OIL CON. DIV.
DIST. 3

14. I hereby certify that the foregoing is true and correct

Signed [signature] Title ENVIRO. COORDINATOR Date 2/27/95

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

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

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

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

Address: 200 Amoco Court, Farmington, New Mexico 87401

Facility Or: Well Name FRED FEASEL L1

Location: Unit or Qtr/Qtr Sec H Sec 32 T 28N R 10W County SAN JUAN

Pit Type: Separator ___ Dehydrator ___ Other BLOW

Land Type: BLM X, State ___, Fee ___, Other ___

Pit Location: (Attach diagram)
Pit dimensions: length 36, width 24, depth 5
Reference: wellhead X, other ___
Footage from reference: 190'
Direction from reference: 85 Degrees ___ East North X of X 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
APR 11 1995
OIL CON. DIV.
DIST. 3

B0232

Date Remediation Started: _____ **Date Completed:** 2/23/95

Remediation Method: (Check all appropriate sections)
Excavation X Approx. cubic yards 65
Landfarmed ___ Insitu Bioremediation ___
Other COMPOSTED

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

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 3'
Sample date 2/22/95 Sample time 1130

Sample Results

Benzene(ppm) ND
Total BTEX(ppm) 0.2778
Field headspace(ppm) 559
TPH 220 ppm

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 2/23/95
SIGNATURE B J Shaw
PRINTED NAME AND TITLE Buddy D. Shaw Environmental Coordinator

CLIENT: AMOCO

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

LOCATION NO: 30237
C.O.C. NO: 2628

FIELD REPORT: CLOSURE VERIFICATION

PAGE No: 1 of 1

LOCATION: NAME: FRED FEASEL WELL #: 2 1 PIT: BLOW
QUAD/UNIT: H SEC: 32 TWP: 28N RNG: 10W PM: NM CNTY: SJ ST: NM
QTR/FOOTAGE: SE/4 NE/4 CONTRACTOR: EPC

DATE STARTED: 2/22/95
DATE FINISHED:
ENVIRONMENTAL SPECIALIST: NV

EXCAVATION APPROX. 36 FT. x 24 FT. x 5 FT. DEEP. CUBIC YARDAGE: 65
DISPOSAL FACILITY: ON-SITE REMEDIATION METHOD: COMPOSTED
LAND USE: RANGE LEASE: SF-046563 FORMATION: DK

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 190 FT. N85W FROM WELLHEAD.
DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'
NMOCD RANKING SCORE: 0 NMOCD TPH CLOSURE STD: 5000 PPM

CHECK ONE:
✓ PIT ABANDONED
___ STEEL TANK INSTALLED

SOIL AND EXCAVATION DESCRIPTION:

PALE YELL. BROWN (NORTH SIDEWALL), DK. YELL. ORANGE (EAST SIDEWALL), DK. YELL. BROWN (SOUTH SIDEWALL), PALE ORANGE (WEST SIDEWALL), NON-COHESIVE, SLIGHTLY MOIST, FIRM TO DENSE, STRONG HC ODOR IN WEST SIDEWALL.

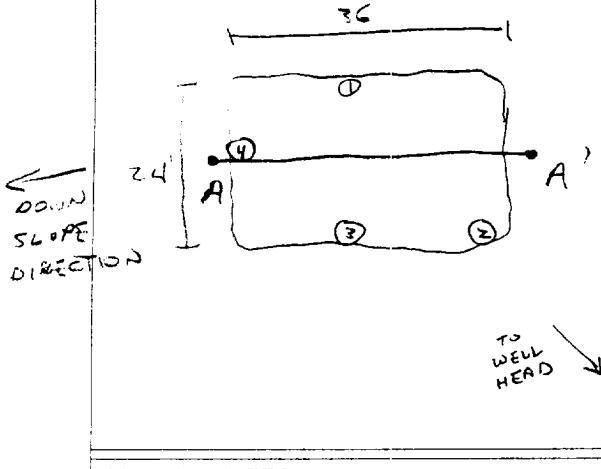
BOTTOM - SANDSTONE BEDROCK, LT. GRAY, STRONG HC ODOR.

FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1130	④ @ 3'	TPH-1388	5	20	1:1	54	216

SCALE
0 FT

PIT PERIMETER



OVM RESULTS

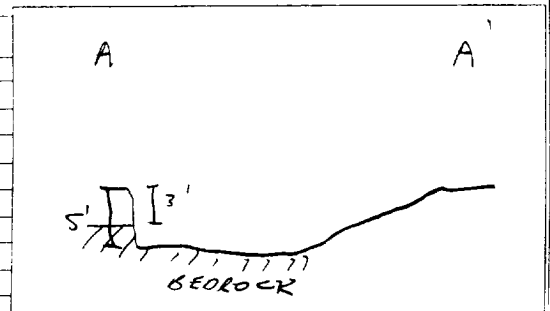
SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 3'	7.2
2 @ 2'	6.6
3 @ 2'	1.6
4 @ 3'	559
5 @ 5'	1203

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME
④ @ 3'	BTEX	1130
BEN.	ND	ppb
TOT BTEX	227.5	ppb

(RINSED)

PIT PROFILE



TRAVEL NOTES: CALLOUT: 2/22/95 ONSITE: 2/22/95

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:	4 @ 3'	Date Analyzed:	02-22-95
Project Location:	Fred Feasel L 1	Date Reported:	02-22-95
Laboratory Number:	TPH-1388	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	**220**	**20**

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	4760	4400	7.86

*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 - B0232

Analyst

Review

ON SITE
TECHNOLOGIES, LTD.
OFF: (505) 325-8786
LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

Attn:	*Nelson Velez*	Date:	2/23/95
Company:	*Blagg Engineering*	*COC No.*	*2628*
Address:	*P.O. Box 87*	*Sample ID:*	*5266*
City, State:	*Bloomfield, NM 87413*	*Job No.*	*2-1000*

Project Name:	***Fred Feasel L 1***				
Project Location:	***4 @ 3' - Blow Pit***				
Sampled by:	NV	Date:	2/22/95	Time:	11:30
Analyzed by:	DLA	Date:	2/23/95		
Sample Matrix:	*Soil*				

Aromatic Volatile Organics

Component	***Measured Concentration ug/kg***	***Detection Limit Concentration ug/kg***
Benzene	*ND*	*0.2*
Toluene	*17.9*	*0.2*
Ethylbenzene	*38.3*	*0.2*
m,p-Xylene	*102.7*	*0.2*
o-Xylene	*118.9*	*0.2*
	TOTAL 277.8 ug/kg	

ND - Not Detectable

Method - *SW-846 EPA Method 8020 Aromatic Volatiie Organics by Gas Chromatography*

Approved by: DA
Date: 2/23/95

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

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

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

Address: 200 Amoco Court, Farmington, New Mexico 87401

Facility Or: Well Name FRED FEASEL 1

Location: Unit or Qtr/Qtr Sec H Sec 32 T 28N R 10W County SAN JUAN

Pit Type: Separator X Dehydrator ___ Other ___

Land Type: BLM X, State ___, Fee ___, Other ___

Pit Location: (Attach diagram)
Pit dimensions: length 13', width 25', depth 5'
Reference: wellhead X, other ___
Footage from reference: 150'
Direction from reference: 50 Degrees ___ East North X of X 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

B0232

Date Remediation Started: _____ **Date Completed:** _____

Remediation Method: (Check all appropriate sections) Excavation X Approx. cubic yards 36

Landfarmed ___ Insitu Bioremediation ___

Other COMPOSTED

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

General Description Of Remedial Action: Excavation - BEDROCK BOTTOM (SPECIFICALLY 1' TO 5' INTERVAL BELOW GROUND SURFACE.

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 3'

Sample date 2/22/95 Sample time 1307

Sample Results

Benzene(ppm) 0.0573

Total BTEX(ppm) 99.666

Field headspace(ppm) 1,078

TPH 2,300 ppm

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 2/23/95

SIGNATURE B J Shaw

PRINTED NAME AND TITLE Buddy D. Shaw Environmental Coordinator

CLIENT: AMOCO

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

LOCATION NO: 80232
C.O.C. NO: 2628

FIELD REPORT: CLOSURE VERIFICATION

PAGE No: 1 of 1

LOCATION: NAME: FRED PEASEL WELL #: 1 PIT: SEP

QUAD/UNIT: H SEC: 32 TWP: 28N RNG: 10W PM: NM CNTY: SJ ST: NM

QTR/FOOTAGE: SE/4 NE/4 CONTRACTOR: EPC

DATE STARTED: 2/22/95
DATE FINISHED:

ENVIRONMENTAL SPECIALIST: NV

EXCAVATION APPROX. 13 FT. x 25 FT. x 5 FT. DEEP. CUBIC YARDAGE: 36

DISPOSAL FACILITY: ON SITE REMEDIATION METHOD: COMPOSTED

LAND USE: RANGE LEASE: SF-046563 FORMATION: DK

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 150 FT. N50W FROM WELLHEAD.

DEPTH TO GROUNDWATER: >50' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'

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

CHECK ONE:
___ PIT ABANDONED
✓ STEEL TANK INSTALLED

SOIL AND EXCAVATION DESCRIPTION:

LT. GRAY (NORTH & EAST SIDEWALLS), DK. YELL. BROWN (SOUTH SIDEWALL), OLIVE GRAY (WEST SIDEWALL), NON-COHESIVE, DRY TO SLIGHTLY MOIST, DENSE, STRONG HC ODOR IN ALL SIDEWALLS EXCEPT SOUTH END. SANDSTONE FROM ONE FOOT TO TOTAL DEPTH BELOW GROUND SURFACE.

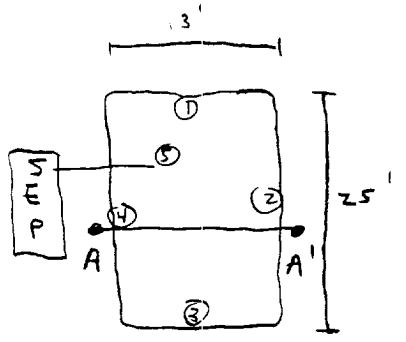
BOTTOM - SANDSTONE, VERY HARD, LT. MED GRAY, STRONG HC ODOR.

FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1307	②@3'	TPH-1389	5	20	1:1	570	2,280

SCALE
0 FT

PIT PERIMETER



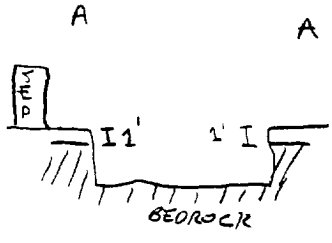
OVM RESULTS

SAMPLE ID	FIELD HEADSPACE P.D. (ppm)
1 @ 3'	643
2 @ 3'	1078
3 @ 3'	0.0
4 @ 2'	753
5 @ 5'	507

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME
②@3'	BTEX	1307
BEN.	7.3	ppb
TOT. BTEX	77,666	ppb
	FILED	

PIT PROFILE



TRAVEL NOTES: CALLOUT: 2/22/95 ONSITE: 2/22/95

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:	2 @ 3'	Date Analyzed:	02-22-95
Project Location:	Fred Feasel L 1	Date Reported:	02-22-95
Laboratory Number:	TPH-1389	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	**2,300**	**20**

ND = Not Detectable at stated detection limits.

QA/QC:

QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
4760	4400	7.86

*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 - B0232

Analyst

R. E. O'Neill
Review

OFF: (505) 325-8786

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

Attn:	*Nelson Velez*	Date:	2/23/95
Company:	*Blagg Engineering*	*COC No.*	*2628*
Address:	*P.O. Box 87*	*Sample ID:*	*5267*
City, State:	*Bloomfield, NM 87413*	*Job No.*	*2-1000*

Project Name:	***Fred Feasel L 1***				
Project Location:	***2 @ 3' - Sep. Pit***				
Sampled by:	NV	Date:	2/22/95	Time:	13:07
Analyzed by:	DLA	Date:	2/23/95		
Sample Matrix:	*Soil*				

Aromatic Volatile Organics

Component	***Measured Concentration ug/kg***	***Detection Limit Concentration ug/kg***
Benzene	*7.3*	*0.2*
Toluene	*11,776*	*0.2*
Ethylbenzene	*9,619*	*0.2*
m,p-Xylene	*53,783*	*0.2*
o-Xylene	*24,480*	*0.2*
	TOTAL 99,666 ug/kg	

ND - Not Detectable

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

Approved by: DaL
Date: 2/23/95

Well Name:	**Fred Feasel L#1**
Well Site location:	Unit H, Sec. 32, T28N, R10W
Pit Type:	Separator Pit
Producing Formation:	Basin Dakota
Pit Category:	Area III
Horizonal Distance to Surface Water:	> 1000 ft.
Vicinity Groundwater Depth:	> 100 ft.

RISK ASSESSMENT

Pit remediation activities were terminated when trackhoe encountered sandstone bedrock at 5 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 sandstone bedrock located 5 feet below grade. Groundwater levels located on or close to the well pad are estimated to be at a much greater depth below sandstone 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 (double sidewall steel tank installed). Prior discharge into the pit is believed to be under 5 barrels per day.

4. Field headspace readings (OVM/PID) on Basin Dakota type locations do not reflect direct correlation to total BTEX per USEPA Method 8020 concentrations. Listed below are several typical AMOCO Basin Dakota pit soil analyses comparing headspace to Benzene and total BTEX results.

LOCATION	HEADSPACE (ppm)	BENZENE (ppm)	TOTAL BTEX (ppm)
Frost, Jack B 1E	1100	0.011	5.889
Berger A1	482	0.084	0.681
Mudge Com B 1E	684	0.017	16.438
L.C. Kelly #5	1235	0.643	13.908

The comparisons listed above demonstrates that headspace testing is not an accurate measurement to Benzene or total BTEX concentrations when above standards for Basin Dakota type pits.

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 permeable 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: AMOCO

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

LOCATION NO: 80232
C.O.C. NO: 2628

FIELD REPORT: CLOSURE VERIFICATION

PAGE No: 1 of 1

LOCATION: NAME: FRED FEASEL WELL #: 1 PIT: SEP

QUAD/UNIT: H SEC: 32 TWP: 28N RNG: 10W PM: NM CNTY: SJ ST: NM

QTR/FOOTAGE: SE/4 NE/4 CONTRACTOR: EPC

DATE STARTED: 2/22/95
DATE FINISHED:

ENVIRONMENTAL SPECIALIST: NV

EXCAVATION APPROX. 13 FT. x 25 FT. x 5 FT. DEEP. CUBIC YARDAGE: 36

DISPOSAL FACILITY: ON SITE REMEDIATION METHOD: COMPOSTED

LAND USE: RANGE LEASE: SF-046563 FORMATION: DK

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 150 FT. N50W FROM WELLHEAD.

DEPTH TO GROUNDWATER: >50' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'

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

CHECK ONE:
___ PIT ABANDONED
✓ STEEL TANK INSTALLED

SOIL AND EXCAVATION DESCRIPTION:

LT. GRAY (NORTH & EAST SIDEWALLS), DK. YELL. BROWN (SOUTH SIDEWALL), OLIVE GRAY (WEST SIDEWALL), NON-COHESIVE, DRY TO SLIGHTLY MOIST, DENSE, STRONG HC ODOR IN ALL SIDEWALLS EXCEPT SOUTH END. SANDSTONE FROM ONE FOOT TO TOTAL DEPTH BELOW GROUND SURFACE.

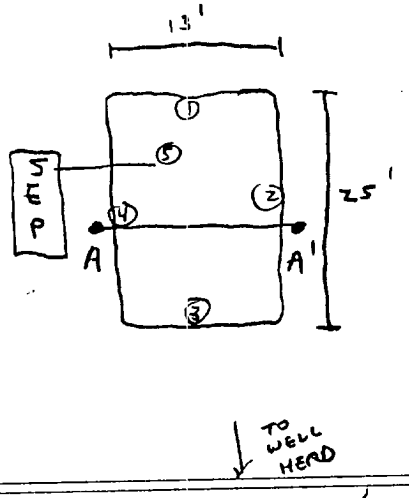
BOTTOM - SANDSTONE, VERY HARD, LT. MED GRAY, STRONG HC ODOR.

FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1307	②@3'	TPH-1389	5	20	1:1	570	2,280

SCALE
0 FT

PIT PERIMETER



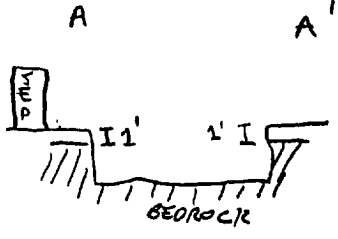
OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1@3'	643
2@3'	1078
3@2'	0.9
4@2'	753
5@5'	507

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME
②@3'	BTEX	1307
BEN.	7.3	ppb
TOT. BTEX	99,666	ppb
	FAILED	

PIT PROFILE



TRAVEL NOTES: CALLOUT: 2/22/95 ONSITE: 2/22/95