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

RECEIVED
OCT 7 1992
OIL CON. DIV.
DIST. 3

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

PIT REMEDIATION AND CLOSURE REPORT

A0079

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

Address: 200 Amoco Court, Farmington, New Mexico 87401

Facility Or Well Name: Jack Frost "B" #2

Location: Unit or Qtr/Qtr Sec D Sec 27 T 27N R 10W County San Juan

Pit Type: Separator ___ Dehydrator ___ Other Blow

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

Pit Location: (Attach diagram)
Pit dimensions: length 25, width 25, depth 8
Reference: wellhead ✓, other ___
Footage from reference: 300'
Direction from reference: 50 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)	20
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): 20

Date Remediation Started: _____ **Date Completed:** 13 July 1994

Remediation Method: (Check all appropriate boxes)
Excavation ✓ Approx. cubic yards 185
Landfarmed ✓ Insitu Bioremediation ___
Other _____

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

General Description Of Remedial Action:
Excavation

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 Documents

Sample depth 8'

Sample date 13 July 94 Sample time _____

Sample Results

Benzene(ppm) ND

Total BTEX(ppm) 0.34

Field headspace(ppm) 306

TPH 62 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 13 July 1994

SIGNATURE B D Shaw

PRINTED NAME AND TITLE Buddy D. Shaw, Environmental Coordinator

CLIENT: Amoco

ENVIROTECH Inc.

5796 US HWY. 64, FARMINGTON, NM 87401
(505) 632-0615

PIT NO: A0079
C.O.C. NO: 3804

FIELD REPORT: CLOSURE VERIFICATION

JOB No: 92740
PAGE No: 1 of 1

LOCATION: NAME: Jack Frost "B" WELL #: 2 PIT: B/OW
QUAD/UNIT: (D) SEC: 27 TWP: 27N RNG: 10W BM: NM CNTY: SJ ST: NM
QTR/FOOTAGE: NW/4 NW/4 CONTRACTOR: EPL

DATE STARTED:
DATE FINISHED: 13 July 94
ENVIRONMENTAL SPECIALIST: FM

SOIL REMEDIATION: EXCAVATION APPROX. 25 FT. x 25 FT. x 8 FT. DEEP.
DISPOSAL FACILITY: Land Farm - on site CUBIC YARDAGE: 185
LAND USE: Range LEASE: SF-077951A

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 300 FEET 50° EAST FROM WELLHEAD.
DEPTH TO GROUNDWATER: <50' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'
NMOCD RANKING SCORE: 20 NMOCD TPH CLOSURE STD: 100 PPM

SOIL AND EXCAVATION DESCRIPTION: Soil is yellow-Brown Silty Sand w/ white Silty Sand on North wall. Soil is slightly moist w/ Gray shale @ TD = 8'

BEDROCK BOTTOM

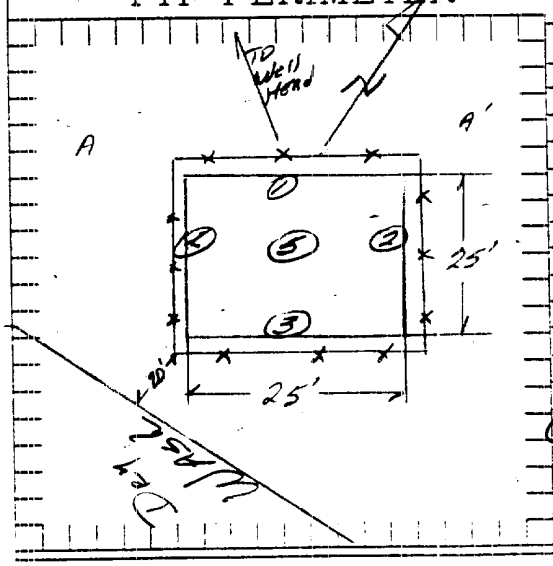
CLOSED

FIELD 418.1 CALCULATIONS

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

SCALE
0 FEET

PIT PERIMETER



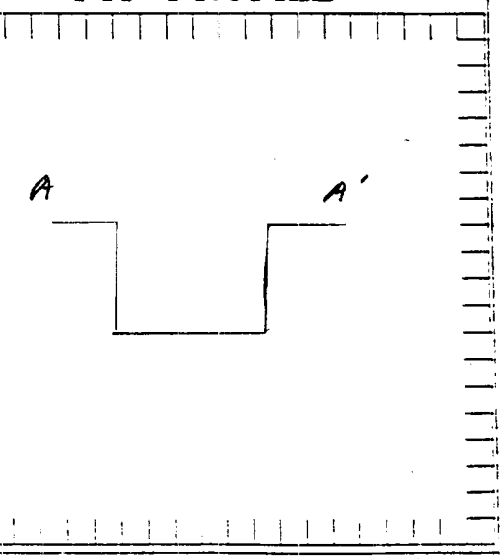
OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 6'	56
2 @ 6'	2.8
3 @ 6'	1.7
4 @ 6'	3.2
5 @ 8'	306

LAB SAMPLES

(5) @ 8' TPH (418.1)
BTEX (8020)

PIT PROFILE



TRAVEL NOTES: CALLOUT: ONSITE:

ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Amoco	Project #:	92140
Sample ID:	5 @ 8'	Date Sampled:	07-13-94
Laboratory Number:	7720	Date Received:	07-13-94
Sample Matrix:	Soil	Date Analyzed:	07-19-94
Preservative:	Cool	Date Reported:	07-21-94
Condition:	Cool and Intact	Analysis Needed:	TPH

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	62	10.0

ND = Parameter not detected at the stated detection limit.
N/A = Not applicable

Method: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No.4551, 1978

Comments: Jack Frost "B" #2 Blow Pit A0079.

Analyst

Review

ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 8020
AROMATIC VOLATILE ORGANICS

Client:	Amoco	Project #:	92140
Sample ID:	5@8'	Date Reported:	07-27-94
Laboratory Number:	7720	Date Sampled:	07-13-94
Sample Matrix:	Soil	Date Received:	07-13-94
Preservative:	Cool	Date Extracted:	07-18-94
Condition:	Cool & Intact	Date Analyzed:	07-26-94
		Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	20.1
Toluene	93	20.1
Ethylbenzene	43	13.4
p,m-Xylene	130	20.1
o-Xylene	74	20.1

SURROGATE RECOVERIES:

Parameter	Percent Recovery
Trifluorotoluene	96 %
Bromofluorobenzene	109 %

Method: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992

Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

ND - Parameter not detected at the stated detection limit.

Comments: Jack Frost "B" #2 Blow Pit A0079

Analyst

Review

V #.,0079

3804

A0079

CHAIN OF CUSTODY RECORD

Client/Project Name	Project Location	ANALYSIS/PARAMETERS
Amoco 92140	Jack Frost "B" #2	BLOW PIT
Sampler: (Signature)	Chain of Custody Tape No.	

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TPH (418.1)	BTEX (8020)					Remarks
(5) @ 8'	7/13/94	12:50	7720	Soil	1	✓	✓					BLOW PIT

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	7/13/94	15:00	Robert M Young	7/13/94	1500
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

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

san juan repro Form 578-81

RW

CLIENT: AMOCO	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: 80114 C.O.C. NO: ANALYTICA

FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: JACK FROST B 2 LEASE: SF-077951A DATE STARTED: 2-6-96 DATE FINISHED: 4-22-96

QUAD/UNIT: D SEC: 27 TWP: 27 N RNG: 10 W BM: NM CNTY: SJ ST: NM

QTR/FOOTAGE: NW/NW CONTRACTOR: EPC ENVIRONMENTAL SPECIALIST: REW

SOIL REMEDIATION:

REMEDIATION SYSTEM: COMPOST APPROX. CUBIC YARDAGE: 585

LAND USE: RANGE

FIELD NOTES & REMARKS:

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

NMOCD RANKING SCORE: 20 NMOCD TPH CLOSURE STD: 100 PPM

2/6 SOIL IS MOIST BROWN, SANDY COMPOST MATERIAL -
NO ODOR / STAIN, COMPOST MATERIAL VISIBLE.

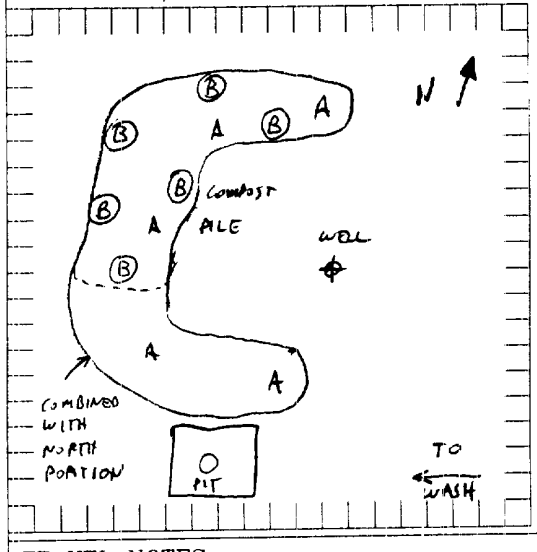
4/22 PILE HAS BEEN MOVED + TURNED - SAMPLE COMPOSITE "B".

CLOSE C.P.

FIELD 418.1 CALCULATIONS

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

SKETCH/SAMPLE LOCATIONS



OVM RESULTS

	SAMPLE ID	FIELD HEADSPACE PID (ppm)
2/6	Comp. A	60
4/22	Comp. B	0

LAB SAMPLES

SAMPLE ID	ANALYSIS	
Comp. A	8015	= 480
	8:45	
Comp. B	8015	= 24.8
	0830	

SCALE

0 FT

TRAVEL NOTES: CALLOUT: ONSITE: 2-6-96 0830
4-22-96 0815

FORM REVISED 1/96

ANAITAS
ENVIRONMENTAL LABS

TOTAL VOLATILE PETROLEUM HYDROCARBONS
Gasoline Range Organics

Blagg Engineering, Inc.

Project ID:	Jack Frost B2	Report Date:	05/09/96
Sample Matrix:	Soil	Date Sampled:	04/22/96
Preservative:	Cool	Date Received:	04/22/96
Condition:	Intact	Date Extracted:	05/01/96
		Date Analyzed:	05/06/96

Sample ID	Lab ID	Concentration (mg/kg)	Detection Limit (mg/kg)
Comp. B	3203	ND	8.26

ND- Analyte not detected at the stated detection limit.

Quality Control:

Surrogate	% Recovery	Acceptance Limits
Trifluorotoluene	97%	50 - 150%

Reference: Method for the Determination of Gasoline Range Organics, State of Tennessee, Department of Environment and Conservation, Division of Underground Storage Tanks.

Comments:

Analyst

Review

ANAITAS
ENVIRONMENTAL LABS

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Diesel Range Organics

Blagg Engineering, Inc.

Project ID:	Jack Frost B2	Report Date:	05/09/96
Sample Matrix:	Soil	Date Sampled:	04/22/96
Preservative:	Cool	Date Received:	04/22/96
Condition:	Intact	Date Extracted:	05/06/96
		Date Analyzed:	05/07/96

Sample ID	Lab ID	Concentration (mg/kg)	Detection Limit (mg/kg)
Comp. B	3203	24.8	15.7

ND- Analyte not detected at the stated detection limit.

Quality Control:

Surrogate	% Recovery	Acceptance Limits
o - Terphenyl	74%	50 - 150%

Reference: EPA Method 8015A, modified. "Nonhalogenated Volatile Organics by Gas Chromatography." Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods, SW-846, 3rd Ed, Final Update I, July, 1992. USEPA.

Comments:

Analyst

Review

ANALYTICA ENVIRONMENTAL LABORATORY
807 S. CARLTON • FARMINGTON, NM 87401 • (505) 326-2395

CHAIN OF CUSTODY

PROJECT MANAGER:
Analytica Lab I.D.:

Company: BLAGG
Address:

Phone: 632-1199
Fax:

Bill To: SAME
Company:
Address:

Sample ID	Date	Time	Matrix	Lab ID	Petroleum Hydrocarbons (418.1)	Gasoline / Diesel (mod. 8015)	Gasoline (GRO)	Aromatic HCs BTEX/MTBE (602 / 8020)	Chlorinated Hydrocarbons (8010)	SDWA Volatiles (502.1 / 503.1)	Chlorinated Pesticides / PCBs (608 / 8080)	Herbicides (615 / 8150)	Volatiles GC/MS (624 / 8240 / 8260)	Base / Neutral / Acid GC/MS (625 / 8270)	Polynuclear Aromatic Hydrocarbons (8100)	TCLP Extraction	Other (specify):	Cation / Anion	Specific Cations (specify):	Specific Anions (specify):	BOD / Fecal / Total Coliform	Solids: TDS / TSS / SS	Nutrients: NH4+ / NO2- / NO3- / TKN	Oil and Grease	Other (specify):	Priority Pollutants	RCRA Metals (Total)	RCRA Metals TCLP (1311)	Other (specify):	COMMENTS
COMP. A	4-22	1135	SOIL			✓																			EPC					PIPKIN 6C A 1E
COMP. A	"	1110	"			✓																			EPC					P.D. PIPKIN 4E
COMP. B	"	1030	"			✓																			EPC					J.C. GORDON D 2
COMP. A	"	0950	"			✓																			EPC					J.C. GORDON E 1
COMP. B	"	0910	"			✓																			EPC					J.C. GORDON D 1
COMP. B	"	0830				✓																			EPC					JACK FROST B 2

Project Information	Sample Receipt
Proj. #:	No. Containers:
Proj. Name: AMOCO	Custody Seals: Y / N / NA
P. O. No:	Received Intact:
Shipped Via: DEL'D	Received Cold:

Required Turnaround Time (Prior Authorization Required for Rush)

Sampled By:	Relinquished By:	Relinquished By:
Signature: R. E. O'Neill Date: 4-22-96	Signature: R. E. O'Neill Date: 4-22-96	Signature: Date:
Company: BEI Time: —	Company: BEI Time: 1315	Company: Time:
Received By:	**Received By:**	**Received By:**
Signature: Date:	Signature: Date:	Signature: Date: 4/22
Company: Time:	Company: Time:	Company: Analytas Time: 1:15

Please Fill Out Thoroughly.

Shaded areas for lab use only.

White/Yellow: Analytica
Pink: Client

ANALYTICA

ENVIRONMENTAL LABORATORY

TOTAL VOLATILE PETROLEUM HYDROCARBONS

Gasoline Range Organics

Blagg Engineering, Inc.

Project ID:	Jack Frost B2	Report Date:	02/09/96
Sample Matrix:	Soil	Date Sampled:	02/06/96
Preservative:	Cool	Date Received:	02/06/96
Condition:	Intact	Date Extracted:	02/06/96
		Date Analyzed:	02/06/96

Sample ID	Lab ID	Concentration (mg/kg)	Detection Limit (mg/kg)
Comp A Compost Pile	2592	ND	16.2

ND- Analyte not detected at the stated detection limit.

Quality Control:

Surrogate	% Recovery	Acceptance Limits
Trifluorotoluene	101%	50 - 150%

Reference: Method for the Determination of Gasoline Range Organics, State of Tennessee, Department of Environment and Conservation, Division of Underground Storage Tanks.

Comments:

Analyst

Review

ANALYTICA
ENVIRONMENTAL LABORATORY

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Diesel Range Organics

Blagg Engineering, Inc.

Project ID:	Jack Frost B2	Report Date:	02/09/96
Sample Matrix:	Soil	Date Sampled:	02/06/96
Preservative:	Cool	Date Received:	02/06/96
Condition:	Intact	Date Extracted:	02/07/96
		Date Analyzed:	02/07/96

Sample ID	Lab ID	Concentration (mg/kg)	Detection Limit (mg/kg)
Comp A Compost Pile	2592	480	16.9

ND- Analyte not detected at the stated detection limit.

Quality Control:

Surrogate	% Recovery	Acceptance Limits
o - Terphenyl	108%	50 - 150%

Reference: EPA Method 8015A, modified. "Nonhalogenated Volatile Organics by Gas Chromatography." Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods, SW-846, 3rd Ed, Final Update I, July, 1992. USEPA.

Comments:

Analyst

Review

ANALYTICA
ENVIRONMENTAL LABORATORY
807 S. CARLTON • FARMINGTON, NM 87401 • (505) 326-2395

CHAIN OF CUSTODY

PROJECT MANAGER:
Analytica Lab I.D.:

Company: BLAGG
Address:

Phone: 632-1199
Fax:

Bill To: SAME
Company:
Address:

Sample ID	Date	Time	Matrix	Lab ID	Petroleum Hydrocarbons (418.1)	Gasoline / Diesel (mod. 8015)	Gasoline (GRO)	Aromatic HCs BTEX/MTBE (602 / 8020)	Chlorinated Hydrocarbons (8010)	SDWA Volatiles (502.1 / 503.1)	Chlorinated Pesticides / PCBs (608 / 8080)	Herbicides (615 / 8150)	Volatiles GC/MS (624 / 8240 / 8260)	Base / Neutral / Acid GC/MS (625 / 8270)	Polynuclear Aromatic Hydrocarbons (8100)	TCLP Extraction	Other (specify):	Cation / Anion	Specific Cations (specify):	Specific Anions (specify):	BOD / Fecal / Total Coliform	Solids: TDS / TSS / SS	Nutrients: NH4+ / NO2- / NO3- / TKN	Oil and Grease	Other (specify):	Priority Pollutants	RCRA Metals (Total)	RCRA Metals TCLP (1311)	Other (specify):	COMMENTS
Comp. A	2-6	0845	SOIL			✓																								Cool
Compost Pile																														

Project Information	Sample Receipt
Proj. #: AMOCO	No. Containers:
Proj. Name: JACK FROST	Custody Seals: Y / N / NA
~~P.O. No.:~~ B 2	Received Intact:
Shipped Via: DEL'D	Received Cold:
Required Turnaround Time (Prior Authorization Required for Rush)	

EPC

Sampled By:		Relinquished By:		Relinquished By:	
Signature: R E O'Neal	Date: 2-6-96	Signature: [illegible]	Date: 2-6-96	Signature:	Date:
Company: BLAGG	Time: 0845	Company: BLAGG	Time: 1450	Company:	Time:
Received By:		Received By:		Received By:	
Signature:	Date:	Signature:	Date:	Signature: [illegible]	Date: 2/6
Company:	Time:	Company:	Time:	Company: Analytica	Time: 2:50

Please Fill Out Thoroughly.

Shaded areas for lab use only.

White/Yellow: Analytica
Pink: Client