Sep - OK
Blow - VPSK bed 32983

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

Denied 12/11/96 due to LF

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 JC Gordon "D" #3

Location: Unit or Qtr/Qtr Sec K Sec 23 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 20, width 25, depth 10
Reference: wellhead ✓, other ___
Footage from reference: 128
Direction from reference: 70 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)	GW 0 ~~10~~
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):	GW 0 ~~20~~

Date Remediation Started: _____ **Date Completed:** 22 July 1994

Remediation Method: (Check all appropriate sections) Excavation ✓ Approx. cubic yards 185

Landfarmed ✓ Insitu Bioremediation ___

Other _____

Remediation Location: (ie. landfarmed onsite, name and location of offsite facility) Onsite ✓ Offsite X COMBINED w/ J.C. GORDON E #1

General Description Of Remedial Action: _____

Excavation. BEDROCK BOTTOM. RISK ASSESSED.

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 10'

Sample date 7-22-94 Sample time _____

Sample Results

Benzene(ppm) ND

Total BTEX(ppm) 61.338

Field headspace(ppm) 228

TPH 393 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 22 July 1994 5/23/98 BDS

SIGNATURE B D Shaw PRINTED NAME AND TITLE Buddy D. Shaw Environmental Coordinator

TPH - Passed
BTEX - Failed

CLIENT: Amoco

ENVIROTECH Inc.

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

PIT NO: 20283
C.D.C. NO: 3810

FIELD REPORT: CLOSURE VERIFICATION

JOB No: 92140
PAGE No: 1 of 1

LOCATION: NAME: JC Gordon "D" WELL #: 3 PIT: BGW
QUAD/UNIT: K SEC: 23 TWP: 27N RNG: 10W BM: NM CNTY: SJ ST: NM
QTR/FOOTAGE: NE/4 SW/4 CONTRACTOR: EPC

DATE STARTED:
DATE FINISHED: 22 Jul 94
ENVIRONMENTAL SPECIALIST: FH

SOIL REMEDIATION: EXCAVATION APPROX. 20 FT x 25 FT. x 10 FT. DEEP.
DISPOSAL FACILITY: ~~On Site~~ Land Farm CUBIC YARDAGE: 185
LAND USE: Range - BLM LEASE: SF-077952

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 128 FEET 70° WofN FROM WELLHEAD.
DEPTH TO GROUNDWATER: ~~100~~ >100 NEAREST WATER SOURCE: >1000 NEAREST SURFACE WATER: >1000
NMOCD RANKING SCORE: 10 NMOCD TPH CLOSURE STD: 1000 PPM

SOIL AND EXCAVATION DESCRIPTION: Soil is Yellow-Brown Silty Sand, Slightly Moist.
TD = 10' - Bedrock @ 10 feet
@ TD
Soil is poorly graded gray Sand

4-22-96 | NO SOIL ON LOCATION
Combined with J. C. Gordon E

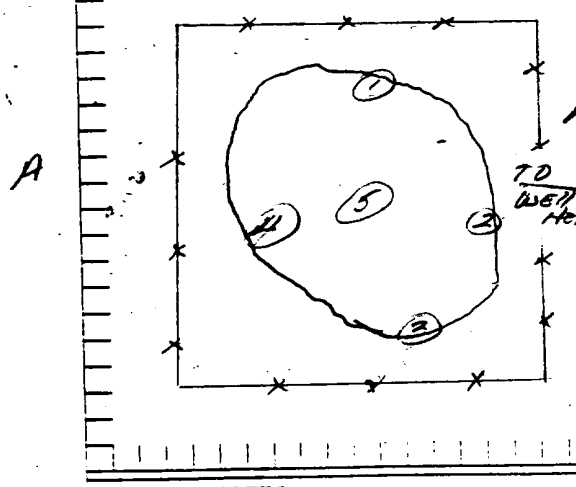
BEDROCK BOTTOM
BGW ASSESSED

FIELD 418.1 CALCULATIONS

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

SCALE
0 FEET

PIT PERIMETER

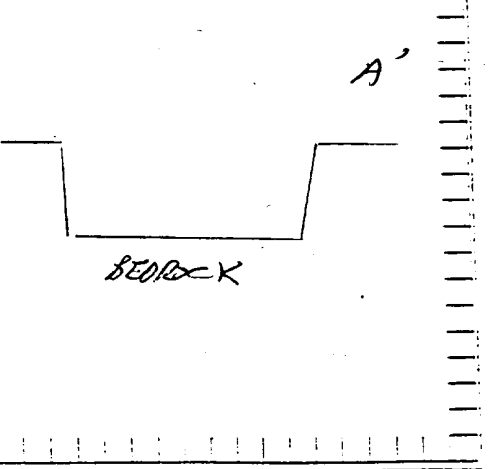


OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 5'	1.0
2 @ 5'	175
3 @ 5'	6.7
4 @ 5'	2.9
5 @ 10'	228

LAB SAMPLES
(5 @ 10' TPH (418.1)
BTEX (8020)

PIT PROFILE



TRAVEL NOTES: DATE:

Well Name:	**Gordon, J.C. D #3**
Well Site location:	Unit K, Sec. 23, T27N, R10W
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)

Pit remediation activities were terminated when trackhoe encountered competent sandstone at 10 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.

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 0.3 miles west of the nearest vulnerable area boundary (Armenta Canyon Wash).

   (Refer to Huerfanito Peak Quadrangle, New Mexico - San Juan County, 7.5 Minute Series (Topographic), Provisional edition, 1985, (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 therefore request pit closure approval on this location.

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@10'	Date Sampled:	07-22-94
Laboratory Number:	7737	Date Received:	07-22-94
Sample Matrix:	Soil	Date Analyzed:	07-29-94
Preservative:	Cool	Date Reported:	08-01-94
Condition:	Cool and Intact	Analysis Needed:	TPH

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	393	30.0

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: JC Gordon "D" #3 Blow Pit A0083

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@10'	Date Reported:	08-09-94
Laboratory Number:	7737	Date Sampled:	07-22-94
Sample Matrix:	Soil	Date Received:	07-22-94
Preservative:	Cool	Date Analyzed:	08-09-94
Condition:	Cool & Intact	Date Extracted:	08-09-94
		Analysis Requested:	BTEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	ND	13.1
Toluene	5450	13.1
Ethylbenzene	2888	13.1
p,m-Xylene	11500	13.1
o-Xylene	41500	13.1

SURROGATE RECOVERIES:

Parameter	Percent Recovery
Trifluorotoluene	137 %
Bromfluorobenzene	123 %

Method: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

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: JC GORDON "D" #3 A0083 BLOW PIT
EXCESSIVE SURROGATE RECOVERY DUE TO COELUTION

Analyst

Review

A0083

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: JC Gordon "D" # 3

Location: Unit or Qtr/Qtr Sec K Sec 23 T 27N R 10W County San Juan

Pit Type: Separator ✓ Dehydrator ___ Other ___

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

Pit Location: (Attach diagram)

Pit dimensions: length 25, width 30, depth 8

Reference: wellhead ✓, other ___

Footage from reference: 93

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 ~~10~~
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 ~~10~~

Date Remediation Started: _____ **Date Completed:** 22 July 1994

Remediation Method: (Check all appropriate sections) Excavation ✓ Approx. cubic yards 222

Landfarmed ✓ Insitu Bioremediation ___

Other _____

~~nv~~

Remediation Location: (ie. landfarmed onsite, name and location of offsite facility) Onsite ~~✓~~ Offsite & COMBINED W/ J.C. GORDON E #1

General Description Of Remedial Action: _____

Excavation. BEDROCK BOTTOM. ~~BSR ASSESSED~~ nv

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 22 July 1994 Sample time _____

Sample Results

Benzene(ppm) 0.027

Total BTEX(ppm) 2.549

Field headspace(ppm) 212

TPH 279 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 ~~22 July 1994~~ 5/23/98 nv

SIGNATURE B J Shaw PRINTED NAME AND TITLE Buddy D. Shaw Environmental Coordinator

TPH - Passed
BTEX - Passed

CLIENT: Amoco

ENVIROTECH Inc.

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

PIT NO: 40083
C.E.C. NO: 3810

FIELD REPORT: CLOSURE VERIFICATION

JOB No: 92140
PAGE No: 1 of 1

LOCATION: NAME: JC Gordon "D" WELL #: 3 PIT: Sep
QUAD/UNIT: K SEC: 23 TWP: 27N RNG: 10W BM: NM CNTY: SJ ST: NM
QTR/FOOTAGE: NE/4 SW/4 CONTRACTOR: EPC

DATE STARTED:
DATE FINISHED: 22 Jul 94
ENVIRONMENTAL SPECIALIST: FM

SOIL REMEDIATION: EXCAVATION APPROX. 25 FT. x 30 FT. x 8 FT. DEEP.
DISPOSAL FACILITY: ~~LAND FARM - BM SVE~~ CUBIC YARDAGE: 222
LAND USE: RANGE - BLM LEASE: SF-077952

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 93 FEET S FROM WELLHEAD.
DEPTH TO GROUNDWATER: ~~100'~~ >100' NEARSET WATER SOURCE: >1000' NEARSET SURFACE WATER: >1000'
NMOCD RANKING SCORE: ~~10~~ 0 NMOCD TPH CLOSURE STD: ~~1000~~ 5000 PPM

SOIL AND EXCAVATION DESCRIPTION:

4-22-96 NO SOIL ON LOCATION
COMBINED WITH J.C. GORDON E1

0-5': Soil is yellow to Brown, Slightly Moist, Silty Sand
5'-8': Soil is gray Sandy clay, Compacted
8'+: Bedrock

* UNABLE TO EXCAVATE FURTHER SOUTH DUE TO CONGESTION (PIPELINE)

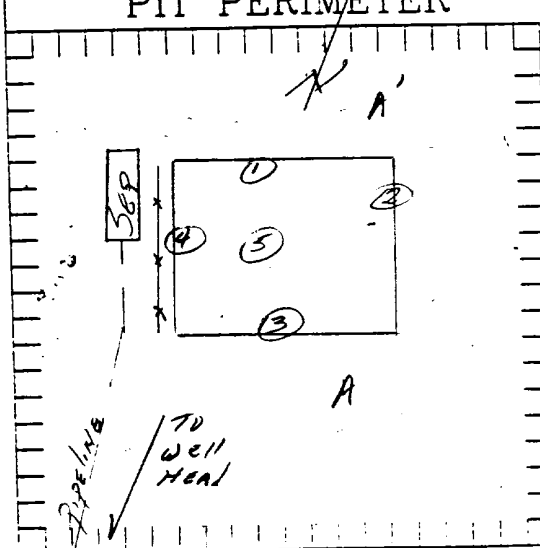
FIELD 418.1 CALCULATIONS

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

Bedrock Bottom

SCALE
0 FEET

PIT PERIMETER

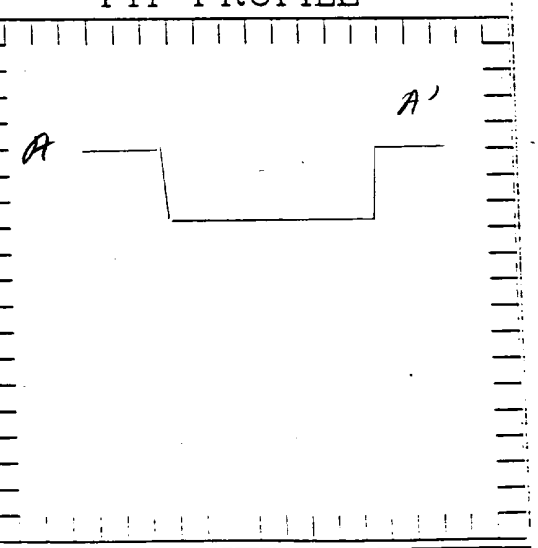


OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 6'	225
2 @ 5'	5.5
3 @ 6'	192
4 @ 5'	322
5 @ 8'	212

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

PIT PROFILE



TRAVEL NOTES: CALLED TO:

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:	07-22-94
Laboratory Number:	7738	Date Received:	07-22-94
Sample Matrix:	Soil	Date Analyzed:	07-29-94
Preservative:	Cool	Date Reported:	08-01-94
Condition:	Cool and Intact	Analysis Needed:	TPH

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	279	30.0

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: JC Gordon "D" #3 Sep Pit A0083

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:	08-09-94
Laboratory Number:	7738	Date Sampled:	07-22-94
Sample Matrix:	Soil	Date Received:	07-22-94
Preservative:	Cool	Date Analyzed:	08-09-94
Condition:	Cool & Intact	Date Extracted:	08-09-94
		Analysis Requested:	BTEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	26.7	13.1
Toluene	680	13.1
Ethylbenzene	291	13.1
p,m-Xylene	311	13.1
o-Xylene	1240	13.1

SURROGATE RECOVERIES:

Parameter	Percent Recovery
Bromfluorobenzene	103 %

Method: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

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: JC GORDON "D" #3 SEP PIT A0083

Rex L. Griffin
Analyst

Review

Pit # A0083

3810

CHAIN OF CUSTODY RECORD

Client/Project Name	Project Location	ANALYSIS/PARAMETERS
Amoco 92140	JC Gordon "D" #3	
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) @ 10'	7/22/94	10:35	7737	Soil	1	✓	—					Blow Pit
(5) @ 8'	7/22/94	11:15	7738	Soil	1	✓	—					Sep Pit

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	7/22/94	14:31	Robert M Young	7/24/94	1431
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