

Blow - OK
Sep - risk bedrock A 0010

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

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

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

PIT REMEDIATION AND CLOSURE REPORT

Operator: Amoco Production Company Telephone: (505) - 326-9200
Address: 200 Amoco Court, Farmington, New Mexico 87401
Facility Or: SHELLY GC * IE
Well Name _____
Location: Unit or Qtr/Qtr Sec 0 Sec 32 T 29N R 10W County SAN JUAN
Pit Type: Separator _____ Dehydrator _____ Other BLOW
Land Type: BLM _____, State X, Fee _____, Other COM. AGMT.

Pit Location: Pit dimensions: length 40', width 40', depth 18'
(Attach diagram) Reference: wellhead X, other _____
Footage from reference: 150
Direction from reference: 45 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) <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: _____

Date Completed: 5-13-99

Remediation Method: Excavation X

(Check all appropriate sections)

Approx. cubic yards _____

Landfarmed X

Insitu Bioremediation _____

Other _____

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 13' + 18'

Sample date 5-13-99

Sample time _____

Sample Results

Benzene(ppm) 0.032 @ 13'

Total BTEX(ppm) 0.931 @ 13'

Field headspace(ppm) 1009 @ 13'

TPH 270 @ 18'

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 5/25/99

SIGNATURE

B. Shaw

PRINTED NAME
AND TITLE

Buddy D. Shaw
Environmental Engineer

RESULTS TO BOB McLOY 5/15/11 R E O A O O K O

CLIENT: AMOCO

ENVIROTECH Inc.

PIT NO: ~~C4741~~

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

C.D.C. NO: 3622

FIELD REPORT: CLOSURE VERIFICATION

JOB No: 92140

PAGE No: 1 of 1

LOCATION: LEASE: SHELLEY GC WELL #: 1E PIT: BLOW

DATE STARTED: 5-13-94

UNIT: 0 SEC: 32 TWP: 29 RNG: 10 BM: Nm CNTY: SJ ST: Nm

DATE FINISHED: 11

CONTRACTOR: PAUL VENSQUEZ

ENVIRONMENTAL SPECIALIST: *REO*

SOIL REMEDIATION: EXCAVATION APPROX. 40 FT. x 40 FT. x 18 FT. DEEP.

DISPOSAL FACILITY: LANDFARM - ONSITE

LAND USE: RANGE

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 150 FEET N 45° W FROM WELLHEAD.

DEPTH TO GROUNDWATER: 7100' NEAREST SURFACE WATER: 71000' NEAREST WATER SOURCE: 71000'

NMCCD RANKING SCORE: 0 NMCCD TPH CLOSURE STD: 5000 ppm

SOIL AND EXCAVATION DESCRIPTION: EXCAVATED TO SANDSTONE BOTTOM. Some straw visible
ON EAST BOTTOM WALL + NORTH WALL ~ 3' ABOVE BOTTOM.
WEST, SOUTH, AND EAST WALLS HARD SILTSTONE/SANDSTONE.
NORTH WALL SILTY, CLAYEY SAND - SILTSTONE (ca ~ 15'

CLOSED

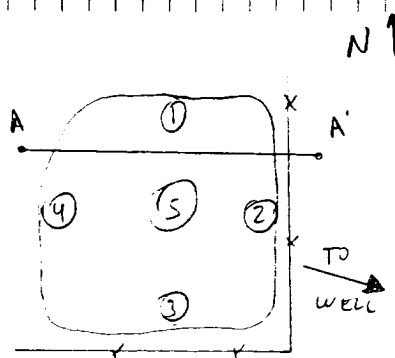
FIELD 418.1 CALCULATIONS

SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FRECN	DILUTION	READING	CALC. ppm
CB@18'	6AL# 495	10.00	20.0	1	133	266

SCALE

0 10 20 FEET

PIT PERIMETER

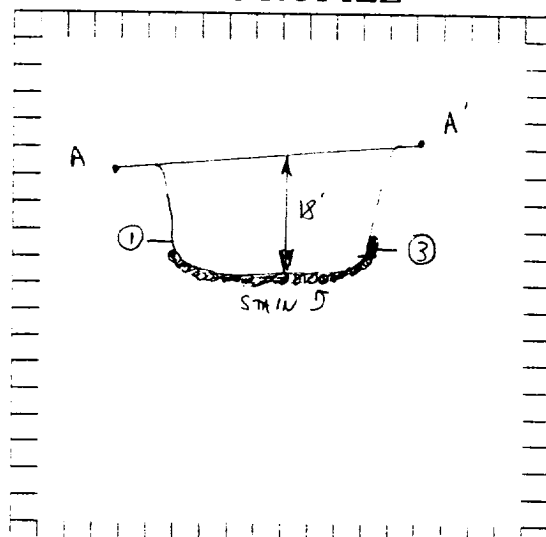


SURFACE GRADIENT

OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm):
① NSE11'	9
② ESE13'	574
③ SSE13'	1009
④ WSE12'	24
⑤ CCE13'	962
⑦ SSE13'	LAB BACK

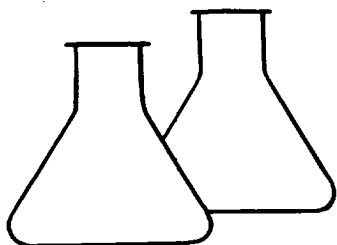
PIT PROFILE



TRAVEL NOTES.

CALLOUT: 5-13-94

ONSITE. 5-13-94 1500



ENVIROTECH LABS

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

FIELD MODIFIED EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client: Amoco
Sample ID: CB @ 18'
Project Location: Skelly GC 1E
Laboratory Number: GAC0495

Project #: 93163
Date Analyzed: 5-13-94
Date Reported: 5-16-94
Sample Matrix: Soil

Parameter -----	Result, mg/kg -----	Detection Limit, mg/kg -----
Total Recoverable Petroleum Hydrocarbons	270	10

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg -----	Duplicate TPH mg/kg -----	% *Diff. -----
	11,000	12,600	14

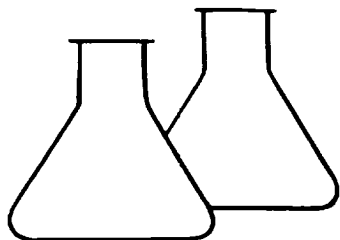
*Administrative Acceptance limits set at 30%.

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

Comments: Blow Pit A0010

R. E. O'Neil
Analyst

Morris D. Young
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:	SS @ 13'	Date Reported:	05-17-94
Laboratory Number:	7419	Date Sampled:	05-13-94
Sample Matrix:	Soil	Date Received:	05-16-94
Preservative:	Cool	Date Extracted:	05-16-94
Condition:	Cool & Intact	Date Analyzed:	05-16-94
		Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
-----	-----	-----
Benzene	31.8	13.1
Toluene	369	32.7
Ethylbenzene	23.6	13.1
p,m-Xylene	397	19.6
o-Xylene	110	13.1

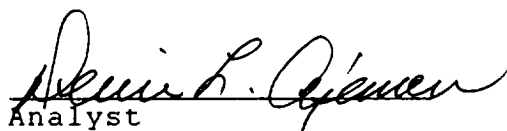
SURROGATE RECOVERIES:	Parameter	Percent Recovery
	-----	-----
	Trifluorotoluene	95 %
	Bromofluorobenzene	99 %

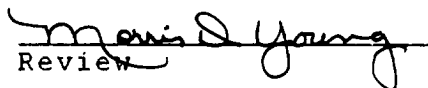
Method: Method 5030, Purge-and-Trap, Test Methods for
Evaluating Solid Waste, SW-846, USEPA, July 1992

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: Skelly GC #1E Blow Pit C4741


Analyst


Review

San Juan reoro Form 578-01

District I
P.O. Box 1980, Hobbs, NM
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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: SKELLY GC #1E
Well Name _____
Location: Unit or Qtr/Qtr Sec 0 Sec 32 T 29N R 10W County SAN JUAN
Pit Type: Separator X Dehydrator _____ Other _____
Land Type: BLM _____, State _____, Fee _____, Other COM. AGMT

Pit Location: Pit dimensions: length 35', width 30', depth 15'
(Attach diagram) Reference: wellhead X, other _____
Footage from reference: 160
Direction from reference: 30 Degrees X East North X
of
_____ West South _____

Depth To Ground Water: Less than 50 feet (20 points)
(Vertical distance from 50 feet to 99 feet (10 points)
contaminants to seasonal Greater than 100 feet (0 Points) 0
high water elevation of
ground water)

Wellhead Protection Area: Yes (20 points)
(Less than 200 feet from a private No (0 points) 0
domestic water source, or; less than
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) 0
irrigation canals and ditches)

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: _____ Date Completed: 5-16-94

Remediation Method: Excavation X Approx. cubic yards ~ 580
(Check all appropriate sections) Landfarmed X Insitu Bioremediation _____
Other _____

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

General Description Of Remedial Action: _____
Excavation. BELOW BOTTOM. RISK ASSESSED. ^{AV}

Ground Water Encountered: No X Yes _____ Depth _____

Final Pit: Sample location see Attached Documents
Closure Sampling: _____
(if multiple samples, attach sample results and diagram of sample locations and depths)
Sample depth 10'
Sample date 5-16-94 Sample time _____

Sample Results

Benzene(ppm) _____

Total BTEX(ppm) _____

Field headspace(ppm) 744

TPH 9000 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 5/25/98 ^{AV}

SIGNATURE B. Shaw

PRINTED NAME
AND TITLE

Buddy D. Shaw
Environmental Coordinator

C.D.C. NO: 3626

PAGE No: 1 of 1

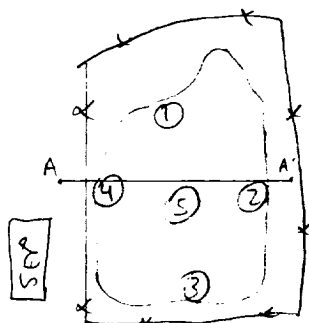
ENVIRONMENTAL SPECIALIST: PEO

RISK ASSESSED

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

[illegible]

PIT PERIMETER



TO
WFL

SURFACE
(GRADIENT)

OVM RESULTS

[illegible]

PIT PROFILE



ONSITE: 5-16-94 1130

Well Name:

Well Site location:

Pit Type:

Producing Formation:

Pit Category:

Horizontal Distance to Surface Water:

Vicinity Groundwater Depth:

Skelly GC #1E

Unit O, Sec. 32, T29N, R10W

Separator Pit

Basin Dakota

Non Vulnerable

> 1000 ft.

> 100 ft.

RISK ASSESSMENT (non-vulnerable area)

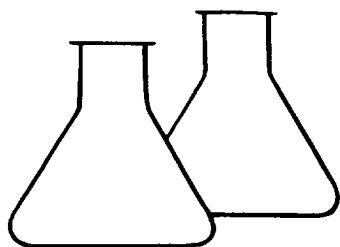
Pit remediation activities were terminated when trackhoe encountered sandstone bedrock at 18 feet below grade.

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 18 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 (pit abandoned). Prior discharge into the pit is believed to be under 5 barrels per day.
4. Well site located on the fringe of the Creighton Canyon wash vulnerable area boundary.

(Refer to Bloomfield Quadrangle, New Mexico - Rio Arriba 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 an 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.



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:	WS @ 10'	Date Sampled:	05-16-94
Laboratory Number:	7438	Date Received:	05-16-94
Sample Matrix:	Soil	Date Analyzed:	05-20-94
Preservative:	Cool	Date Reported:	05-20-94
Condition:	Cool and Intact	Analysis Needed:	TPH

Parameter -----	Concentration (mg/kg) -----	Det. Limit (mg/kg) -----
Total Petroleum Hydrocarbons	9,000	150

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: Skelly GC #1E Sep Pit A0010

Tony Tristano
Analyst

Marisa D. Young
Review

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>A0010</u> C.D.C. NO: <u>5617</u>
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FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: <u>SKELLY</u> G/L WELL #: <u>1E</u> PITS: <u>SEP, BLOW</u>	DATE STARTED: <u>11-24-97</u>
QUAD/UNIT: <u>0</u> SEC: <u>32</u> TWP: <u>29N</u> RNG: <u>10W</u> PM: <u>NM</u> CNTY: <u>SJ</u> ST: <u>NM</u>	DATE FINISHED: _____
UTM/FOOTAGE: <u>SW/4 SE/4</u> CONTRACTOR: <u>P+S</u>	ENVIRONMENTAL SPECIALIST: <u>NV/EP</u>

SOIL REMEDIATION:

REMEDICATION SYSTEM: <u>LANDFARM</u>	APPROX. CUBIC YARDAGE: <u>1,580</u>
LAND USE: <u>RANGE</u>	LIFT DEPTH (ft): <u>NA</u>

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

SOIL IS A LIGHT GRAY W/ DARK YELLOW SILTY SAND. DRY

NO STAIN OR HC ODOR

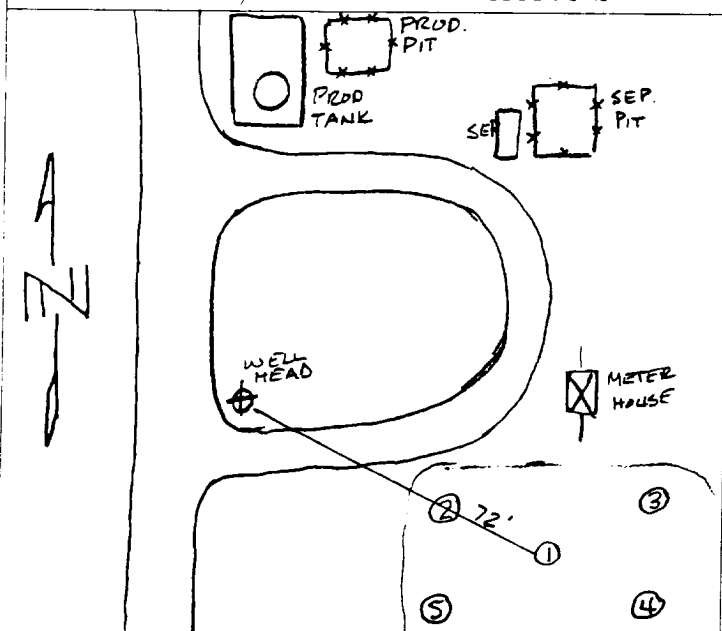
TOOK SP COMPOSITE SAMPLE FOR LAB ANALYSIS.

NO ACTUAL LANDFARM OBSERVED ON WELL SITE.

FIELD 418.1 CALCULATIONS

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

SKETCH/SAMPLE LOCATIONS



OVM RESULTS

LAB SAMPLES

SAMPLE ID	FIELD HEADSPACE PID (ppm)	SAMPLE ID	ANALYSIS	TIME	RESULTS
LF-1	13.0	LF-1	8015	0950	ND

SCALE



0 FT

TRAVEL NOTES:

CALLOUT: N/A

ONSITE: 11-24-97 0950

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

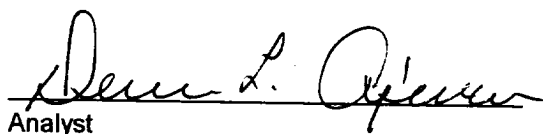
Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	LF - 1	Date Reported:	12-03-97
Laboratory Number:	C589	Date Sampled:	11-24-97
Chain of Custody No:	5617	Date Received:	11-26-97
Sample Matrix:	Soil	Date Extracted:	11-26-97
Preservative:	Cool	Date Analyzed:	12-01-97
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

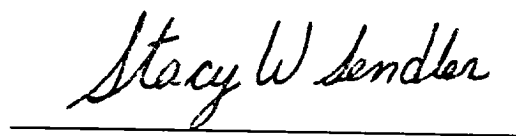
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

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: **Skelly GC # 1E Landfarm. 5 Pt. Composite.**


Analyst


Review

(505) 632-0615