

District I

P.O. Box 1980, Hobbs, NM

District II

Donna J. Frost
District III
Oil & Gas Inspector
1000 N. Broadway St., Alamogordo, NM 88310

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

FEB 06 99

Approved **PIT REMEDIATION AND CLOSURE REPORT**

Operator: Amoco Production Company Telephone: (505) - 326-9200
Address: 200 Amoco Court, Farmington, New Mexico 87401
Facility Or: LACKEY B LS #4
Well Name _____
Location: Unit or Qtr/Qtr sec A sec 29 T 28N R 9W County SAN JUAN
Pit Type: Separator ___ Dehydrator ___ Other ABANDONED
Land Type: BLM X, State ___, Fee ___, Other GOV'T USE.

Pit Location: Pit dimensions: length 15', width 15', depth 19'
(Attach diagram) Reference: wellhead X, other _____
Footage from reference: 50'
Direction from reference: 90 Degrees ___ East North X
of
X 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) 10
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): 10

Date Remediation Started: _____ Date Completed: 4/28/94
Remediation Method: Excavation X Approx. cubic yards 158
(Check all appropriate sections) Landfarmed X Insitu Bioremediation _____
Other Compost

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

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 15'
Sample date 4-28-94 Sample time _____
Sample Results

Benzene (ppm) _____
Total BTEX (ppm) _____
Field headspace (ppm) 90
TPH 44 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 4/29/94

SIGNATURE

B. Shaw

PRINTED NAME
AND TITLE

Buddy D. Shaw
ENVIRONMENTAL COORDINATOR

RESULTS TO JOHNNY: 4-27-99

CLOSE

CLIENT: AMOCO

ENVIROTECH Inc.

PIT NO: C4977LEASE # SF-0771065796 US HWY. 64, FARMINGTON, NM 87401
(505) 632-0615C.O.C. NO:

FIELD REPORT: CLOSURE VERIFICATION

JOB No: 92140PAGE No: 1 of 1

790' FNL LOCATION: LEASE: LACKEY B LS WELL #: 4 PIT: ABANDONED
 790' FEL UNIT: A SEC: 29 TWP: 28 N RNG: 9 W BM: NM CNTY: SJ ST: NM
 CONTRACTOR: EPC

DATE STARTED: DATE FINISHED: 4-28-99ENVIRONMENTAL
SPECIALIST: REOSOIL REMEDIATION: EXCAVATION APPROX. 15 FT. x 15 FT. x 19 FT. DEEP.DISPOSAL FACILITY: ON SITE - COMPOSTLAND USE: RANGE ELEV = 5975' CH/MVFIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 50 FEET WEST FROM WELLHEAD.DEPTH TO GROUNDWATER: 750' NEAREST SURFACE WATER: >1000' NEAREST WATER SOURCE: >1000'NMCD RANKING SCORE: 10 NMCD TPH CLOSURE STD: 1000 PPMSOIL AND EXCAVATION DESCRIPTION: EXCAVATED DEEP + NARROW.MOIST, BULKY, SILTY SANDY SOILS - NO OIL.RESULTS BELOW STANDARDS - CLOSE PIT.

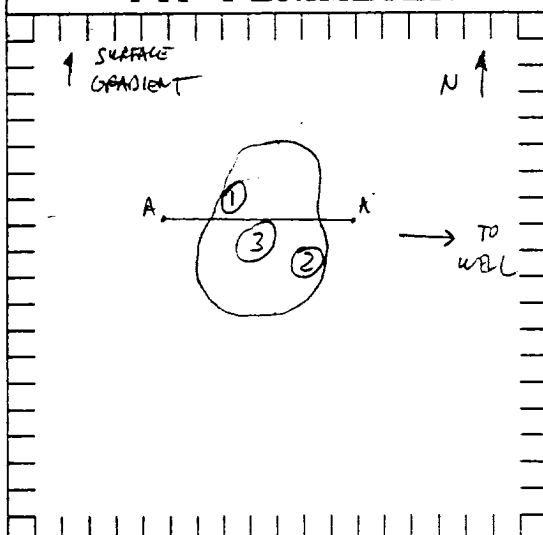
FIELD 418.1 CALCULATIONS

SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
① WS@15'	GAC 432	10.00	20	—	22	44

SCALE

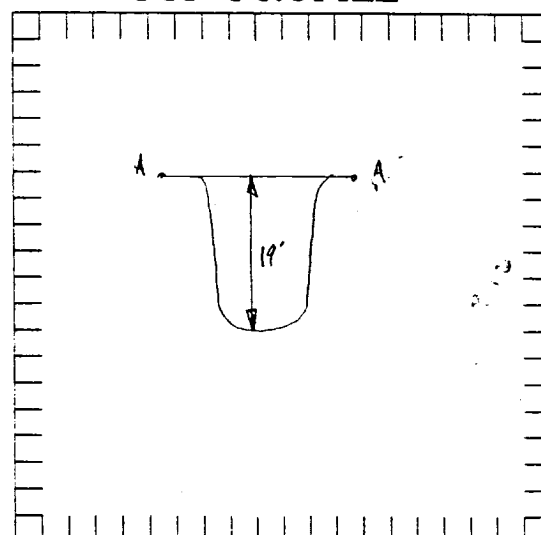
0 5 10 FEET

PIT PERIMETER

OVM
RESULTS

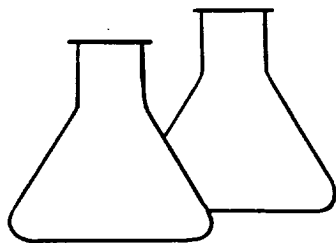
SAMPLE ID	FIELD HEADSPACE PID (ppm)
① WS@15'	90
② ES@12'	3
③ BS@20'	8

PIT PROFILE



TRAVEL NOTES:

CALLOUT: 4-27-99ONSITE: 4-28-99 0900



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: WS @ 15'
Project Location: Lackey B LS 4
Laboratory Number: GAC0432

Project #: 92140
Date Analyzed: 4-28-94
Date Reported: 4-28-94
Sample Matrix: Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	44	10

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	750	820	9

*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: Abandoned Pit C4977

R. E. O'Neil
Analyst

Tony Tistano
Review

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DISTRICT OFFICE
AND 1 COPY TO
SANTA FE OFFICE

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

RANKING SCORE (TOTAL POINTS): 10

Date Remediation Started: _____ Date Completed: 4/28/94

Remediation Method: Excavation ☒ Approx. cubic yards 222
(Check all appropriate sections) Landfarmed ☒ Insitu Bioremediation _____
Other Compost

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

General Description Of Remedial Action: _____
Excavation

Ground Water Encountered: No ☒ 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 12'

Sample date 4-28-94 Sample time _____

Sample Results

Benzene(ppm) ND

Total BTEX(ppm) 0.5

Field headspace(ppm) 794

TPH 12 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

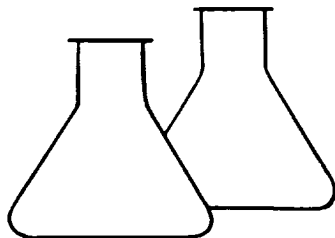
DATE 4/29/94

SIGNATURE B. Shaw

PRINTED NAME
AND TITLE

Buddy D. Shaw
Environmental Coordinator

ONSITE: 4-28-94 1030



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: NS @ 10'
Project Location: Lackey B LS 4
Laboratory Number: GAC0433

Project #: 92140
Date Analyzed: 4-28-94
Date Reported: 4-28-94
Sample Matrix: Soil

Parameter -----	Result, mg/kg -----	Detection Limit, mg/kg -----
Total Recoverable Petroleum Hydrocarbons	12	10

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg -----	Duplicate TPH mg/kg -----	% *Diff. -----
	750	820	9

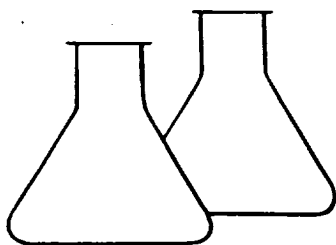
*Administrative Acceptance limits set at 30%.

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

Comments: Blow Pit C4976

R. E. O'Neil
Analyst

Tony Testano
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:	NS @ 12'	Date Reported:	04-29-94
Laboratory Number:	7312	Date Sampled:	04-28-94
Sample Matrix:	Soil	Date Received:	04-28-94
Preservative:	Cool	Date Extracted:	04-29-94
Condition:	Cool & Intact	Date Analyzed:	04-29-94
		Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
-----	-----	-----
Benzene	ND	13.2
Toluene	205	26.5
Ethylbenzene	33.9	13.2
p,m-Xylene	225	19.8
o-Xylene	117	13.2

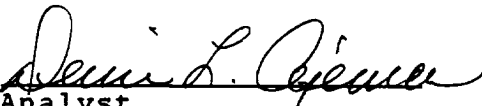
SURROGATE RECOVERIES:	Parameter	Percent Recovery
	-----	-----
	Trifluorotoluene	101 %
	Bromofluorobenzene	100 %

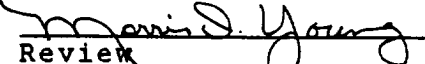
Method: Method 5030, Purge-and-Trap, Test Methods for
Evaluating Solid Waste, SW-846, USEPA, July 1992

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: Lackey B LS #4, Blow Pit C4976


Analyst


Review

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

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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: LACKEY B LS #4
Well Name _____
Location: Unit or Qtr/Qtr Sec A Sec 29 T 28N R 9W County SAN JUAN
Pit Type: Separator X Dehydrator _____ Other _____
Land Type: BLM X, State _____, Fee _____, Other GOVMT. LSE.

Pit Location: Pit dimensions: length 30', width 30', depth 25'
(Attach diagram) Reference: wellhead X, other _____
Footage from reference: 60'
Direction from reference: 0 Degrees _____ East North _____
_____ of _____
_____ West South X

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) 10
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): 10

Date Remediation Started: _____ Date Completed: 4/28/94

Remediation Method: Excavation X Approx. cubic yards 833
(Check all appropriate sections) Landfarmed X Insitu Bioremediation _____
Other Compost

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

General Description Of Remedial Action: _____
Excavation

Ground Water Encountered: No X Yes _____ Depth _____

Final Pit: Closure Sampling: Sample location see Attached Documents

(if multiple samples, attach sample results and diagram of sample locations and depths) Sample depth 20'

Sample date 4-28-94 Sample time _____

Sample Results

Benzene(ppm) ND

Total BTEX(ppm) 0.4

Field headspace(ppm) 1196

TPH 560 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

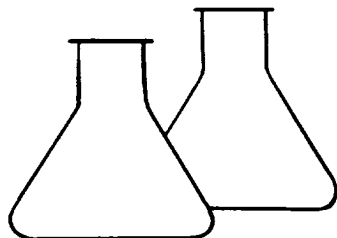
DATE 4/29/94

SIGNATURE B. Shaw

PRINTED NAME
AND TITLE

Buddy D. Shaw
Environmental Coordinator

1130



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: NWS @ 20'
Project Location: Lackey B LS 4
Laboratory Number: GAC0434

Project #: 92140
Date Analyzed: 4-28-94
Date Reported: 4-28-94
Sample Matrix: Soil

Parameter -----	Result, mg/kg -----	Detection Limit, mg/kg -----
Total Recoverable Petroleum Hydrocarbons	560	10

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg -----	Duplicate TPH mg/kg -----	% *Diff. -----
	750	820	9

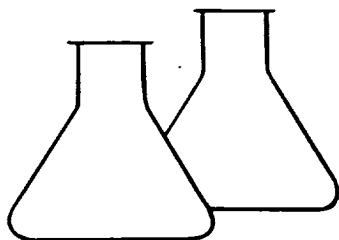
*Administrative Acceptance limits set at 30%.

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

Comments: Production/Separator Pit C4975

P. E. O'Neil
Analyst

Tony Tristano
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:	NWS @ 20'	Date Reported:	04-29-94
Laboratory Number:	7311	Date Sampled:	04-28-94
Sample Matrix:	Soil	Date Received:	04-28-94
Preservative:	Cool	Date Extracted:	04-29-94
Condition:	Cool & Intact	Date Analyzed:	04-29-94
		Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	13.1
Toluene	121	26.1
Ethylbenzene	41.3	13.1
p,m-Xylene	206	19.6
o-Xylene	111	13.1


SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	94 %
	Bromofluorobenzene	99 %

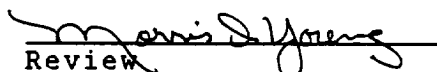
Method: Method 5030, Purge-and-Trap, Test Methods for
Evaluating Solid Waste, SW-846, USEPA, July 1992

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: Lackey B LS #4 Prod/Sep Pit C4975


Analyst


Review