

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

Approved
12/14/00
01504

PIT REMEDIATION AND CLOSURE REPORT

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

Address: 200 Amoco Court, Farmington, New Mexico 87401

Facility Or: HARE GC C #1
Well Name

Location: Unit or Qtr/Qtr Sec M Sec 25 T 29 N R 10 W County SAN JUAN

Pit Type: Separator X Dehydrator Other

Land Type: BLM , State , Fee , Other COM. AGMT.

Pit Location: Pit dimensions: length 100', width 50', depth 12'
(Attach diagram)

Reference: wellhead X, other

Footage from reference: 120'

Direction from reference: 0 Degrees East North X
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

C4364 SEP. PIT

Date Remediation Started: 4/1/94 Date Completed: 4/6/94

Remediation Method: Excavation X Approx. cubic yards 2222
(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. REFER TO ATTACHED NMOC LETTER DATED
APRIL 22, 1999 FOR LANDFARM/COMPOST
SOIL APPROVAL - SECTION A, #9 - BLOW PIT. 91V
2/3/00

Ground Water Encountered: No Yes X Depth 14'

Final Pit: Closure Sampling: (if multiple samples, attach sample results and diagram of sample locations and depths)

Sample location see Attached DocumentsSample depth Sample date Sample time

Sample Results

Benzene(ppm) Total BTEX(ppm) Field headspace(ppm) TPH Ground Water Sample: Yes X 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 4/25/94

SIGNATURE

B. ShawPRINTED NAME
AND TITLEBuddy D. Shaw
Environmental Coordinator

SOIL BTEX - FAILED > 400 PPB, PH = 11.40
EXCAVATED SOIL ∴ WATER OK

CLOSE

RESULTS TO Bob McLoi 4-11-94

ENVIROTECH Inc

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

PIT NO C4364

SOIL NO 3475
3489

FIELD REPORT CLOSURE VERIFICATION

OB NO 92140
PAGE NO 1 of 1

LOCATION LEASE HARE GC "C" WELL 1 QD SW/4 SW/4 (M)
SEC 25 TWP 29 N RNG 10 W BM NM CNTY SJ ST NM PIT SEP
CONTRACTOR PAUL C. LARSEN
EQUIPMENT USED EXCAVATOR

DATE STARTED 4-1-94
DATE FINISHED 4-6-94
ENVIRONMENTAL SPECIALIST RGO

SOIL REMEDIATION QUANTITY ~ 50' x 100' x 12' DEEP

DISPOSAL FACILITY LANDFARM / COMPOST ON SITE

LAND USE FARMING / RANGE

SURFACE CONDITIONS EXCAVATED PRIOR TO AERIAL

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 120' FEET NORTH FROM WELL HEAD

PIT BOTTOM IS WET @ ~ 13' - GROUNDWATER ESTIMATED 13-15'

NO VISIBLE CONTAMINATION ON SIDE WALLS

PIT BOTTOM IS GRAY/BROWN/BLACK MUDY WATER TABLE - HYDROCARBON ODOOR.

4-6-94 EXCAVATION CONTINUED INTO GROUNDWATER - BOTTOM CONTAMINATED SOIL REMOVED.
GROUNDWATER SAMPLED.

FIELD DATA CALCULATIONS

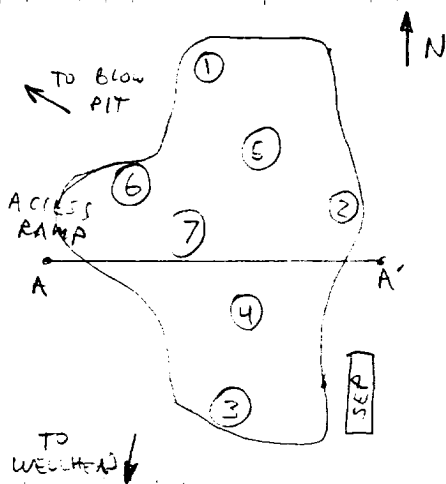
SAMPLE ID	LAB NO	WEIGHT (g)	ML	DILUTION	READING (CALC)	CONC

DEPTH TO GROUNDWATER ~ < 20'
NEAREST WATER SOURCE > 1000'
NEAREST SURFACE WATER > 1000'
WINDS BLOWING TORE > 20
WINDS FROM WINDS TO 100 MPH WH

SCALE

0 15 30 FEET

PIT PERIMETER



OVM RESULTS

SAMPLE	FIELD HEADSPACE
1 NS@7'	7
2 ES@6'	3
3 SS@7'	3
4 SB@13'	1062
5 NE@13'	246
6 WS@6'	ND

LAB

(4) 418.1

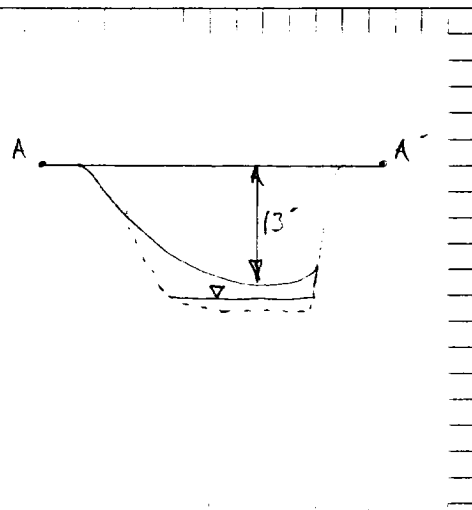
BTEX

4-6-94

(7) @ 14' WATER

BTEX

PIT PROFILE



TRAVEL NOTES

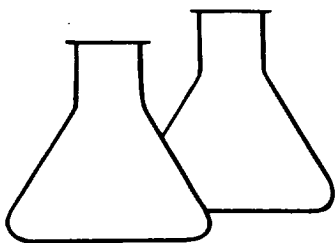
DATE 1-31-94

DATE 4-1-94

4-6-94

0930

1000



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:	4 SB @ 13'	Date Reported:	04-05-94
Laboratory Number:	7143	Date Sampled:	04-01-94
Sample Matrix:	Soil	Date Received:	04-04-94
Preservative:	Cool	Date Extracted:	04-04-94
Condition:	Cool & Intact	Date Analyzed:	04-04-94
		Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	8,300	20.2
Toluene	140,100	40.5
Ethylbenzene	16,200	20.2
p,m-Xylene	207,400	20.2
o-Xylene	46,700	20.2

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	108 %
	Bromofluorobenzene	111 %

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

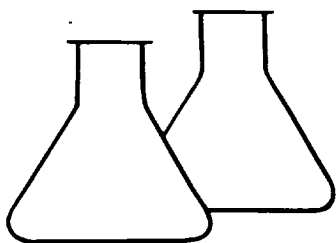
Method 8020, Aromatic Volatile Organics, Test Methods
for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

ND - Parameter not detected at the stated detection limit.

Comments: Hare GC "C" #1 Sep C4364

Tony Tostano
Analyst

Maria D. Young
Review



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

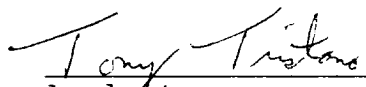
Client:	Amoco	Project #:	92140
Sample ID:	4 SB @ 13'	Date Sampled:	04-01-94
Laboratory Number:	7143	Date Received:	04-01-94
Sample Matrix:	Soil	Date Analyzed:	04-08-94
Preservative:	Cool	Date Reported:	04-08-94
Condition:	Cool & Intact	Analysis Needed:	TPH

Parameter -----	Concentration (mg/kg) -----	Det. Limit (mg/kg) -----
Total Petroleum Hydrocarbons	1,140	20.0

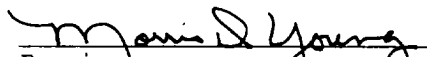
ND = Parameter not detected at the stated detection limit.
N/A = Not applicable

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

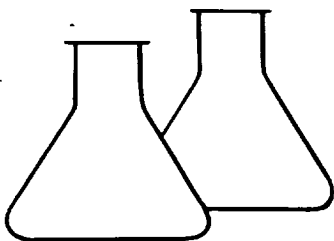
Comments: Hare GC "C" #1 Sep C4364



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:	7 water @ 14'	Date Reported:	04-07-94
Laboratory Number:	7154	Date Sampled:	04-06-94
Sample Matrix:	Water	Date Received:	04-06-94
Preservative:	HgCl and Cool	Date Analyzed:	04-06-94
Condition:	Cool and Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	4.1	0.2
Toluene	3.1	0.6
Ethylbenzene	ND	0.2
p,m-Xylene	2.4	0.2
o-Xylene	25.1	0.2

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	109 %
	Bromofluorobenzene	116 %

Method: Method 5030A, 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: Hare GC "C" #1 Sep Pit C4364

Tony Tistone
Analyst

Morris D. Young
Review

CHAIN OF CUSTODY RECORD

[illegible]

Manuel Juan reedro Form 578-81