

District I
P.O. Box 1980, Hobbs, NM
District II
P.O. Drawer DD, Azusa, 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

ACICY
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: R. P. Hargrave K No. 1
Well Name
Location: Unit or Qtr/Qtr Sec M Sec 16 T 27 R 10 County San Juan
Pit Type: Separator Dehydrator Other BLOW
Land Type: BLM X, State , Fee , Other SF-077382

Pit Location: Pit dimensions: length 50, width 36, depth 13
(Attach diagram) See Note
Reference: wellhead X, other
DEPUTY OIL & GAS INSPECTOR
Footage from reference: 240
DEC 19 1996
Direction from reference: 30 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) 10

Wellhead Protection Area:

(Less than 200 feet from a private
domestic water source, or; less than
1000 feet from all other water sources)

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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): 10

Date Remediation Started: _____ Date Completed: 8/31/94

Remediation Method: Excavation X Approx. cubic yards 870

(Check all appropriate
actions)

Landfarmed X Insitu Bioremediation _____

Other 70% Landfarm, 30% Compost

Remediation Location: Onsite X Offsite _____

(i.e. landfarmed onsite,
name and location of
offsite facility)

General Description Of Remedial Action: _____

Excavation

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 11'

Sample date 8-31-94

Sample time _____

Sample Results

Benzene(ppm) 0.090

Total BTEX(ppm) 28.300

Field headspace(ppm) 487

TPH 3600 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 9/16/94

SIGNATURE

B.D. Shaw

PRINTED NAME
AND TITLE

Buddy D. Shaw
Environmental Coordinator

CLIENT ENVIROTECH Inc. PIT NO A0104
5796 US HWY 64, FARMINGTON, NM 87401 COC NO 3901
(505) 632-0615

FIELD REPORT: CLOSURE VERIFICATION

JOB No _____
 PAGE No _____ of _____

LOCATION: NAME: 6.0 HAZARDOUS WASTE WELL # 1 PIT: 2
 QUAD/UNIT: 41 SEC: 16 TWP: 37N RNG: 10W BM: XXXX CNTY: ST
 QTR/FOOTAGE: _____ CONTRACTOR: ENVIROTECH ENVIRONMENTAL SPECIALIST: _____

SOIL REMEDIATION: EXCAVATION APPROX. 50 FT. x 30 FT. x 4 FT. DEEP.
 DISPOSAL FACILITY: San Juan Co. Landfill CUBIC YARDAGE: 870
 LAND USE: Industrial LEASE: EF-077327

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY _____ FEET _____ FROM WELLHEAD
 DEPTH TO GROUNDWATER _____ NEAREST WATER SOURCE _____ NEAREST SURFACE WATER _____
 NMCD RANKING SCORE _____ NMCD TPH CLOSURE STD: _____ PPM
 SOIL AND EXCAVATION DESCRIPTION: _____

No further action required as per NMCD requirements.
Amount of soil excavated: 870 cu yd.

FIELD 4181 CALCULATIONS

SAMPLE NO. _____ LAB No. _____ (WEIGHT (g) mL FREDN DILUTION READING CALD ppm)

SCALE



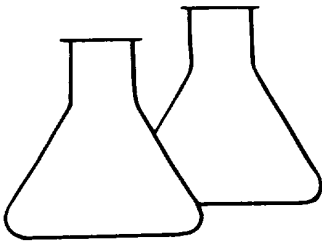
FEET
PIT PERIMETER

OVM
RESULTS

PIT PROFILE

| SAMPLE NO. | FIELD HEADSPACE (ID, DEPTH) | PIT PROFILE |
|------------|-----------------------------|--|
| 1 | 1.0 | <div style="text-align: center;"> </div> |
| 2 | 1.0 | |
| 3 | 1.0 | |
| 4 | 1.0 | |
| 5 | 1.0 | |
| 6 | 1.0 | |
| 7 | 1.0 | |
| 8 | 1.0 | |
| 9 | 1.0 | |
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| 96 | 1.0 | |
| 97 | 1.0 | |
| 98 | 1.0 | |
| 99 | 1.0 | |
| 100 | 1.0 | |

TRAVEL NOTES: CALLOUT: _____ ON SITE: _____



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: | 2@11" | Date Sampled: | 08-31-94 |
| Laboratory Number: | 7871 | Date Received: | 08-31-94 |
| Sample Matrix: | Soil | Date Analyzed: | 09-02-94 |
| Preservative: | Cool | Date Reported: | 09-02-94 |
| Condition: | Cool and Intact | Analysis Needed: | TPH |

| Parameter | Concentration (mg/kg) | Det. Limit (mg/kg) |
|---------------------------------|--------------------------|--------------------------|
| ----- | ----- | ----- |
| Total Petroleum Hydrocarbons | 3600 | 10.0 |

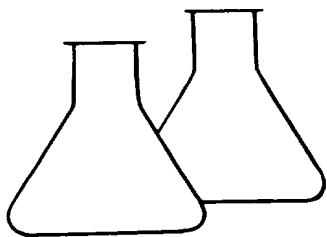
ND = Parameter not detected at the stated detection limit.
N/A = Not applicable

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

Comments: RP Hargrave K #1 Blow Pit A0104

Rex L. Griffin
Analyst

Maris O. Young
Review



ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
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EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

| | | | |
|--------------------|---------------|---------------------|----------|
| Client: | Amoco | Project #: | 92140 |
| Sample ID: | 2@11' | Date Reported: | 09-06-94 |
| Laboratory Number: | 7871 | Date Sampled: | 08-30-94 |
| Sample Matrix: | Soil | Date Received: | 08-30-94 |
| Preservative: | Cool | Date Extracted: | 09-01-94 |
| Condition: | Cool & Intact | Date Analyzed: | 09-02-94 |
| | | Analysis Requested: | BTEX |

| Parameter | Concentration (ug/Kg) | Det. Limit (ug/Kg) |
|--------------|--------------------------|--------------------------|
| Benzene | 90 | 19.1 |
| Toluene | 1190 | 19.1 |
| Ethylbenzene | 24300 | 12.7 |
| p,m-Xylene | ND | 19.1 |
| o-Xylene | 2720 | 19.1 |

| SURROGATE RECOVERIES: | Parameter | Percent Recovery |
|-----------------------|------------------|------------------|
| | Trifluorotoluene | 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: RP Hargrave K #1 blow pit A0104

Rex L. Griffin
Analyst

Marie S. Young
Review

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PIT REMEDIATION AND CLOSURE REPORT

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

Address: 200 Amoco Court, Farmington, New Mexico 87401

Facility or: R.P. Hargrave K No. 1
Well Name

Location: Unit or Qtr/Qtr Sec M sec 16 T 27 R 10 County San Juan

Pit Type: Separator ☒ Dehydrator ☐ Other ☐

Land Type: BLM ☒ State ☐ Fee ☐ Other SF-077382

Pit Location: Pit dimensions: length 30, width 30, depth 9
(Attach diagram)

Reference: wellhead ☒, other ☐

Footage from reference: 255

Direction from reference: 30 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) 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) 0
Greater than 1000 feet (0 points)

RANKING SCORE (TOTAL POINTS): 10

Date Remediation Started: _____ Date Completed: 8/31/94

Remediation Method: Excavation ☒ Approx. cubic yards 300
(Check all appropriate sections)
Landfarmed ☒ Insitu Bioremediation _____
Other 70% Landfarm, 30% Compact

Remediation Location: Onsite ☒ Offsite ☒ 7
(i.e. 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 9'

Sample date 8-31-94 Sample time _____

Sample Results

Benzene(ppm) 1.360

Total BTEX(ppm) 20.11

Field headspace(ppm) 463

TPH 5900 ppm

Ground Water Sample: Yes _____ No ☒ (If yes, attach sample results)

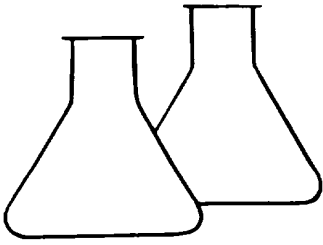
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE 9/16/94

SIGNATURE B.D. Shaw

PRINTED NAME
AND TITLE

Buddy D. Shaw
Environmental Coordinator



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: | 409' | Date Sampled: | 08-31-94 |
| Laboratory Number: | 7872 | Date Received: | 08-31-94 |
| Sample Matrix: | Soil | Date Analyzed: | 09-02-94 |
| Preservative: | Cool | Date Reported: | 09-02-94 |
| Condition: | Cool and Intact | Analysis Needed: | TPH |

| Parameter ----- | Concentration (mg/kg) ----- | Det. Limit (mg/kg) ----- |
|---------------------------------|-----------------------------------|-----------------------------------|
| Total Petroleum Hydrocarbons | 5900 | 10.0 |

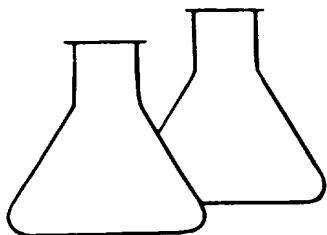
ND = Parameter not detected at the stated detection limit.
N/A = Not applicable

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

Comments: RP Hargrave K #1 Sep Pit A0104

Ray L. Gaffin
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: | 409' | Date Reported: | 09-08-94 |
| Laboratory Number: | 7872 | Date Sampled: | 08-31-94 |
| Sample Matrix: | Soil | Date Received: | 08-31-94 |
| Preservative: | Cool | Date Extracted: | 09-02-94 |
| Condition: | Cool & Intact | Date Analyzed: | 09-07-94 |
| | | Analysis Requested: | BTEX |

| Parameter | Concentration (ug/Kg) | Det. Limit (ug/Kg) |
|--------------|--------------------------|--------------------------|
| ----- | ----- | ----- |
| Benzene | 1360 | 330.2 |
| Toluene | 1290 | 188.7 |
| Ethylbenzene | 4760 | 94.3 |
| p,m-Xylene | 5700 | 141.5 |
| o-Xylene | 7000 | 141.5 |

| SURROGATE RECOVERIES: | Parameter | Percent Recovery |
|-----------------------|------------------|------------------|
| | ----- | ----- |
| | Trifluorotoluene | 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: RP Hargrave K #1 sep pit A0104

Reg L. Gaffin
Analyst

Mari S. Young
Review