

3R - 99

REPORTS

DATE:

1999

BLAGG ENGINEERING, INC.

P.O. Box 87, Bloomfield, New Mexico 87413
Phone: (505) 632-1199 Fax: (505) 632-3903

February 17, 1999

RECEIVED

FEB 19 1999

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

Mr. William C. Olson -Hydrogeologist
Environmental Bureau
New Mexico Oil Conservation Division
2040 Pacheco
State Land Building
Santa Fe, New Mexico 87505

RE: Cross Timbers Oil Co. (Amoco) Pit Closure/Groundwater Monitoring Reports
San Juan County, New Mexico

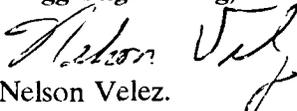
Dear Mr. Olson:

The attached reports on pit closure/groundwater monitoring at nineteen (19) previously owned Amoco well locations is being submitted for your review. These well sites have been acquired by Cross Timbers Co. as of December, 1997. The well names are listed on the following page of this correspondence. The reports for each individual well site are laid out in the following order;

- 1) Pit Closure documentation and/or a brief description of all activities which occurred during the investigation, sampling procedures, and/or interpretations, conclusions, and possible recommendations.
- 2) A summary spreadsheet (when applicable) containing laboratory BTEX, general chemistry (if applicable), and any other pertinent information.
- 3) When applicable: site and groundwater gradient maps, boring logs, and monitor well detail schematics.
- 4) Laboratory reports for each sampling event.
- 5) Quality Assurance/Quality Control data.

A copy of this report is also being submitted to Mr. Denny Foust at the Aztec NMOCD office. If you have any questions or comments concerning this report, please contact Blagg Engineering at 632-1199.

Respectfully submitted,
Blagg Engineering, Inc.


Nelson Velez.
Staff Geologist

Attachments: Pit Closure/Groundwater Monitoring Reports

xc: Denny Foust, NMOCD Aztec Office; Nina Hutton, Cross Timbers Oil Co.

NJV/njv

FEB99-PC.COV

Cross Timbers Oil Company
Pit Closure/Groundwater Monitoring Reports
Well Sites being submitted, February 1999

- | | |
|------------------------|-----------------------------|
| 1) Abrams GC C # 1 | Unit F, Sec. 25, T29N, R10W |
| 2) Abrams L # 1A | Unit I, Sec. 26, T29N, R10W |
| 3) Anderson GC A # 1 | Unit C, Sec. 28, T29N, R10W |
| 4) Armenta GC A # 1 | Unit D, Sec. 27, T29N, R10W |
| 5) Baca GC A # 1 | Unit H, Sec. 26, T29N, R10W |
| 6) Baca GC A # 1A | Unit F, Sec. 26, T29N, R10W |
| 7) Chavez GC C # 1R | Unit J, Sec. 23, T29N, R10W |
| 8) Federal GC 3-1 | Unit N, Sec. 23, T29N, R10W |
| 9) Garcia GC B # 1E | Unit M, Sec. 21, T29N, R10W |
| 10) Haney GC B # 1E | Unit M, Sec. 20, T29N, R10W |
| 11) Hare GC C # 1 | Unit M, Sec. 25, T29N, R10W |
| 12) Hare GC C # 1E | Unit F, Sec. 25, T29N, R10W |
| 13) Hare GC F # 1 | Unit G, Sec. 23, T29N, R11W |
| 14) Lefkovitz GC B # 1 | Unit A, Sec. 25, T29N, R10W |
| 15) Masden GC # 1 | Unit A, Sec. 28, T29N, R11W |
| 16) Romero GC A # 1 | Unit K, Sec. 27, T29N, R10W |
| 17) Stedje GC # 1 | Unit F, Sec. 27, T30N, R12W |
| 18) Stedje GC # 1E | Unit A, Sec. 27, T30N, R12W |
| 19) Trujillo GC A # 1 | Unit C, Sec. 28, T29N, R10W |

District I
P.O. Box 1980, Hobbs, NM
District II

State of New Mexico
Energy, Minerals and Natural Resources Department

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

District III
1000 Rio Brazos Rd, Aztec, NM 87410

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

RECEIVED
FEB 19 1999

APPROVED

PIT REMEDIATION AND CLOSURE REPORT

C4341

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

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

Address: 200 Amoco Court, Farmington, New Mexico 87401

Facility Or: ABRAMS GC C1
Well Name

Location: Unit or Qtr/Qtr Sec F Sec 25 T29N R10W County SAN JUAN

Pit Type: Separator Dehydrator Other Blow

Land Type: BLM , State , Fee , Other

Location: Pit dimensions: length 57', width 45', depth 7'
(attach diagram)

Reference: wellhead , other

Footage from reference: 45'

Direction from reference: 62 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) | <u>20</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) | <u>10</u> |
| Greater than 1000 feet | (0 points) | |

RANKING SCORE (TOTAL POINTS): 30

Date Remediation Started: _____ Date Completed: 3/14/94

Remediation Method: Excavation (Check all appropriate sections) Landfarmed Approx. cubic yards 950 Insitu Bioremediation _____

Other _____

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

General Description Of Remedial Action: PIT EXCAVATED & SOILS LANDFARMED ON-SITE

Ground Water Encountered: No _____ Yes Depth 7'

Final Pit: Sample location REFER TO "CLOSURE VERIFICATION" SHEET
Closure Sampling: (if multiple samples, attach sample results and diagram of sample locations and depths) Sample depth _____
Sample date _____ Sample time _____

Sample Results
Benzene (ppm) _____
Total BTEX (ppm) _____
Field headspace (ppm) _____
TPH _____

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 4/27/94
SIGNATURE B. 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 8020 AROMATIC VOLATILE ORGANICS

| | | | |
|--------------------|-----------------|---------------------|----------|
| Client: | Amoco | Project #: | 92140 |
| Sample ID: | 1 @ GW (7') | Date Reported: | 03-16-94 |
| Laboratory Number: | 7055 | Date Sampled: | 03-14-94 |
| Sample Matrix: | Water | Date Received: | 03-15-94 |
| Preservative: | HgCl and Cool | Date Analyzed: | 03-15-94 |
| Condition: | Cool and Intact | Analysis Requested: | BTEX |

| Parameter | Concentration (ug/L) | Det. Limit (ug/L) |
|--------------|-------------------------|-------------------------|
| Benzene | 0.6 | 0.2 |
| Toluene | 3.2 | 0.4 |
| Ethylbenzene | 1.8 | 0.2 |
| p,m-Xylene | 11.1 | 0.3 |
| o-Xylene | 5.8 | 0.3 |

| SURROGATE RECOVERIES: | Parameter | Percent Recovery |
|-----------------------|--------------------|------------------|
| | Trifluorotoluene | 97 % |
| | Bromofluorobenzene | 100 % |

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: Abrams GC C1 Blow Pit C4341

Kevin L. Jensen
Analyst

Morris D. Young
Review

CLIENT: AMOCO

BLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 632-1199

LOCATION NO: 64341

C.O.C. NO: 5625

FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: ABRAMS GC C WELL #: 1 PITS: BLW

DATE STARTED: 11 25 97

QUAD/UNIT: (F) SEC: 25 TWP: 29N RNG: 10W PM: _____ CNTY: SS ST: NM

DATE FINISHED: _____

QTP/FODTAGE: SW/4 NW/4 CONTRACTOR: P & S

ENVIRONMENTAL SPECIALIST: NV/EP

SOIL REMEDIATION:

REMEDICATION SYSTEM: LANDFARM

APPROX. CUBIC YARDAGE: 450

LAND USE: RANGE

LIFT DEPTH (ft): NA

FIELD NOTES & REMARKS:

DEPTH TO GROUNDWATER: < 50' NEAREST WATER SOURCE: < 1000' NEAREST SURFACE WATER: < 1000'

NMOCID RANKING SCORE: 40 NMOCID TPH CLOSURE STD: 100 PPM

SOIL IS DARK YELLOW W/ LIGHT BROWN. SILTY SAND. SLIGHTLY MOIST

NO STAIN OR HC ODOR.

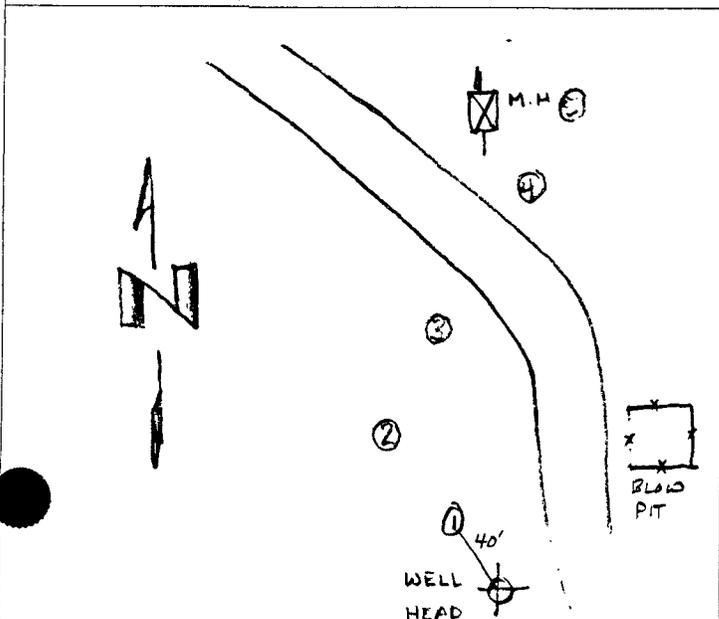
TOOK SPT COMPOSITE OF ENTIRE LOCATION.

NO ACTUAL LANDFARM OBSERVED ON-SITE.

FIELD 418.1 CALCULATIONS

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

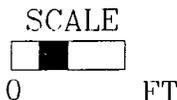
SKETCH/SAMPLE LOCATIONS



OVM RESULTS

LAB SAMPLES

| SAMPLE ID | FIELD HEADSPACE PID (ppm) | SAMPLE ID | ANALYSIS | TIME | RESULTS |
|-----------|---------------------------|-----------|----------|------|---------|
| LF-1 | 0.0 | LF-1 | 8015 | 0850 | ND |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |



TRAVEL NOTES: CALLOUT: N/A

ONSITE: 11 25 97 0850

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: | C597 | Date Sampled: | 11-25-97 |
| Chain of Custody No: | 5625 | 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 |

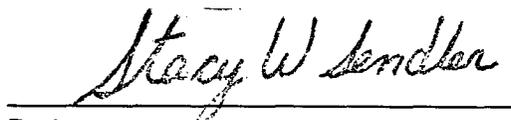
| Parameter | Concentration (mg/Kg) | Det. Limit (mg/Kg) |
|------------------------------|--------------------------|--------------------------|
| Gasoline Range (C5 - C10) | ND | 0.2 |
| Diesel Range (C10 - C28) | ND | 0.1 |
| Total Petroleum Hydrocarbons | ND | 0.2 |

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: **Abrams GC C #1 Landfarm. 5 Pt. Composite.**


Analyst


Review

CHAIN OF CUSTODY RECORD

| Client/Project Name BLRG-1 Anoco | | | Project Location LANDFARM | | | Chain of Custody Tape No. 04034-10 | | | ANALYSIS/PARAMETERS | | |
|--|-------------|-------------|-------------------------------------|---------------|--|--|--|----------|---|--|--|
| Sampler: (Signature) <i>[Signature]</i> | | | ABRMS GC C#1 | | | No. of Containers TPH (8015) | | | Remarks PREPRED. - COOL 5 PT. COMPOSITE | | |
| Sample No./ Identification | Sample Date | Sample Time | Lab Number | Sample Matrix | No. of Containers | REMARKS | | | Remarks | | |
| LF-1 | 11/25/97 | 0850 | CS97 | SOIL | 1 | SAMPLE RECEIVED COOL & INSTANTLY | | | | | |
| Relinquished by: (Signature) <i>[Signature]</i> | | | Date | Time | Received by: (Signature) <i>[Signature]</i> | | | Date | Time | | |
| Relinquished by: (Signature) <i>[Signature]</i> | | | 11/25/97 | 0700 | Received by: (Signature) <i>[Signature]</i> | | | 11/25/97 | 0700 | | |
| Relinquished by: (Signature) <i>[Signature]</i> | | | 11/25/97 | 0944 | Received by: (Signature) <i>[Signature]</i> | | | 11-26-97 | 0944 | | |

ENVIROTECH INC.
5796 U.S. Highway 64-3014
Farrington, New Mexico 87401
(505) 632-0615

Ref Coe's Suite → 5628

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

| | | | |
|--------------------|--------------------|---------------------|----------|
| Client: | QA/QC | Project #: | N/A |
| Sample ID: | 12-01-PM-TPH QA/QC | Date Reported: | 12-03-97 |
| Laboratory Number: | C597 | Date Sampled: | N/A |
| Sample Matrix: | Methylene Chloride | Date Received: | N/A |
| Preservative: | N/A | Date Analyzed: | 12-01-97 |
| Condition: | N/A | Analysis Requested: | TPH |

| Calibration | I-Cal Date | I-Cal RF | C-Cal RF | % Difference | Accept. Range |
|-------------------------|------------|------------|------------|--------------|---------------|
| Gasoline Range C5 - C10 | 10-28-97 | 6.1686E-04 | 6.4457E-04 | 4.49% | 0 - 15% |
| Diesel Range C10 - C28 | 10-28-97 | 6.1629E-04 | 6.4736E-04 | 5.04% | 0 - 15% |

| Blank Conc. (mg/L - mg/Kg) | Concentration | Detection Limit |
|------------------------------|---------------|-----------------|
| Gasoline Range C5 - C10 | ND | 0.2 |
| Diesel Range C10 - C28 | ND | 0.1 |
| Total Petroleum Hydrocarbons | ND | 0.2 |

| Duplicate Conc. (mg/Kg) | Sample | Duplicate | % Difference | Accept. Range |
|-------------------------|--------|-----------|--------------|---------------|
| Gasoline Range C5 - C10 | ND | ND | 0.0% | 0 - 30% |
| Diesel Range C10 - C28 | ND | ND | 0.0% | 0 - 30% |

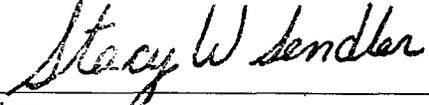
| Spike Conc. (mg/Kg) | Sample | Spike Added | Spike Result | % Recovery | Accept. Range |
|-------------------------|--------|-------------|--------------|------------|---------------|
| Gasoline Range C5 - C10 | ND | 250 | 249 | 100% | 75 - 125% |
| Diesel Range C10 - C28 | ND | 250 | 250 | 100% | 75 - 125% |

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Wast SW-846, USEPA, December 1996.

Comments: QA/QC for samples C597 - C604.


Analyst


Review

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

24341

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well

Oil Well Gas Well Other

2. Name of Operator

Amoco Production Company

3. Address and Telephone No.

200 Amoco Court, Farmington, N.M. 87401 Tel: (505) 326-9200

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

SW/4 NW/4, SEC. 25, T29 N, R10 W, N.M.P.M.
1650' FWL | 1650' FWL

5. Lease Designation and Serial No.
6. If Indian, Allottee or Tribe Name
7. If Unit or CA, Agreement Designation
8. Well Name and No.
ABRAMS GC C # 1
9. API Well No.
3004507880
10. Field and Pool, or Exploratory Area
PICTURED CLIFFS
11. County or Parish, State
SAN JUAN, N.M.

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| TYPE OF SUBMISSION | TYPE OF ACTION | |
|---|--|--|
| <input type="checkbox"/> Notice of Intent | <input type="checkbox"/> Abandonment | <input type="checkbox"/> Change of Plans |
| <input checked="" type="checkbox"/> Subsequent Report | <input type="checkbox"/> Recompletion | <input type="checkbox"/> New Construction |
| <input type="checkbox"/> Final Abandonment Notice | <input type="checkbox"/> Plugging Back | <input type="checkbox"/> Non-Routine Fracturing |
| | <input type="checkbox"/> Casing Repair | <input type="checkbox"/> Water Shut-Off |
| | <input type="checkbox"/> Altering Casing | <input type="checkbox"/> Conversion to Injection |
| | <input checked="" type="checkbox"/> Other <u>Pit closure</u> | <input type="checkbox"/> Dispose Water |

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Pit closure verification - see attached documentation.

① BLOW PIT - ABANDONED, GROUNDWATER, PERMANENT CLOSURE
UNDER AMOCO'S GW PLAN (SEC. 1.2).

14. I hereby certify that the foregoing is true and correct

Signed

[Signature]

Title

Enviro. Coordinator

Date

7/19/98

(This space for Federal or State office use)

Approved by

Title

Date

Conditions of approval, if any: