

**3R -** 1002

**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

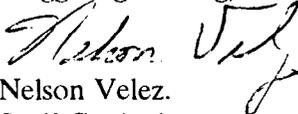
Dear Mr. Olson:

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 |

C4288

District I  
P.O. Box 1980, Hobbs, NM  
District II  
Drawer DD, Artesia, NM 88211  
District III  
Rio Brazos Rd, Aztec, NM 87410

State of New Mexico  
Energy, Minerals and Natural Resources Department

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

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

RECEIVED

APPROVED

FEB 19 1999

**PIT REMEDIATION AND CLOSURE REPORT**

ENVIRONMENTAL BUREAU  
OIL CONSERVATION DIVISION

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

**Address:** 200 Amoco Court, Farmington, New Mexico 87401

**Facility Or:** ARMENTA GC A #1  
**Well Name**

**Location:** Unit or Qtr/Qtr Sec D Sec 27 T 29N R 10W County SAN JUAN

**Pit Type:** Separator \_\_\_ Dehydrator \_\_\_ Other BLOW

**Land Type:** BLM \_\_\_, State \_\_\_, Fee \_\_\_, Other \_\_\_

**Pit Location:** Pit dimensions: length 30', width 50', depth 12'  
(Attach diagram)

**Reference:** wellhead X, other \_\_\_

**Footage from reference:** 10 YDS.

**Direction from reference:** 0 Degrees \_\_\_ East North \_\_\_  
of  
\_\_\_ West South X

<b>Depth To Ground Water:</b> (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>
<b>Wellhead Protection Area:</b> (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>
<b>Distance To Surface Water:</b> (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>10</u>
<b>RANKING SCORE (TOTAL POINTS):</b>			<u>30</u>

Date Remediation Started: \_\_\_\_\_ Date Completed: 10/1/93

Remediation Method: Excavation  Approx. cubic yards 600  
(Check all appropriate sections) Landfarmed \_\_\_\_\_ Insitu Bioremediation \_\_\_\_\_  
Other STOCKPILED

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 11'

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 9/30/98 Sample time 1015

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 7/19/98  
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:	B @ 11'	Date Reported:	10-01-93
Laboratory Number:	6211	Date Sampled:	09-30-93
Sample Matrix:	Water	Date Received:	09-30-93
Preservative:	HgCl and Cool	Date Analyzed:	10-01-93
Condition:	Cool and Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	ND	0.2
Toluene	1.3	0.4
Ethylbenzene	ND	0.2
p,m-Xylene	5.1	0.3
o-Xylene	6.9	0.2

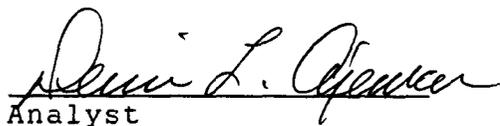
SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	103 %
	Bromofluorobenzene	105 %

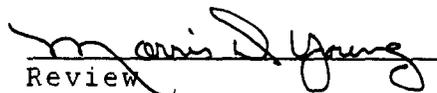
Method: Method 5030A, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992

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: Armenta Gas Com A #1 Blow Pit C4288

  
Analyst

  
Review



RESULTS TO P.V. 5-9-95 PEO

CLIENT: <u>AMOCO</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: <u>80282</u> C.D.C. NO: _____
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FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: <u>ARMENTA GC A WELL # 1</u> PITS: <u>-</u>	DATE STARTED: <u>5-9-95</u> DATE FINISHED: _____
QUAD/UNIT: <u>D</u> SEC: <u>27</u> TWP: <u>29N</u> RNG: <u>10W</u> BM: <u>NM</u> CNTY: <u>SJ</u> ST: <u>NM</u>	ENVIRONMENTAL SPECIALIST: <u>PEO</u>
QTR/FOOTAGE: <u>NW/NW</u> CONTRACTOR: <u>PAUL + SONS</u>	

SOIL REMEDIATION:	W: <u>125 x 5 x 10</u> E: <u>100 x 5 x 10</u>
REMEDICATION SYSTEM: <u>STOCKPILE - COMPOSTED</u>	APPROX. CUBIC YARDAGE: <u>600</u>
LAND USE: <u>FARMING</u>	LEASE: <u>PRIVATE</u>

FIELD NOTES & REMARKS:  
 DEPTH TO GROUNDWATER: < 50' NEAREST WATER SOURCE: ~ 250' HOME NEAREST SURFACE WATER: ~ 500' SAN JUAN RIVER  
 NMDCD RANKING SCORE: 40 NMDCD TPH CLOSURE STD: 100 PPM

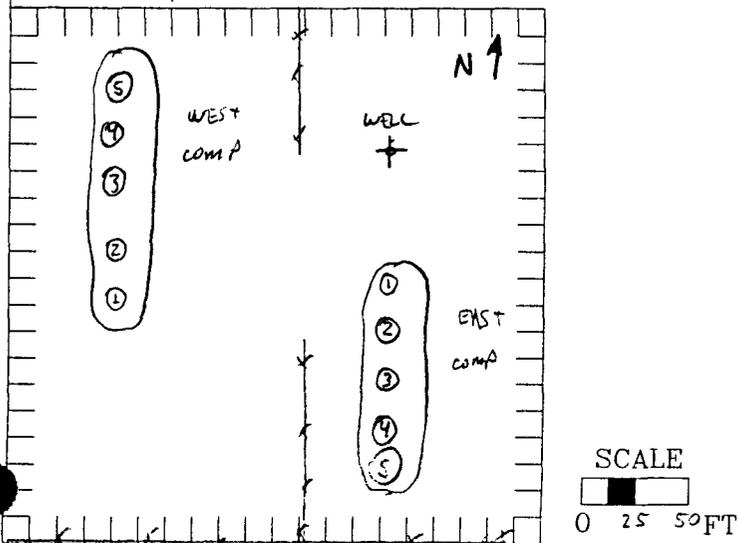
COLLECT 5-POINT COMPOSITE SAMPLES FROM EACH STOCKPILE.

CLOSE PILES

FIELD 418.1 CALCULATIONS

SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
WEST COMP	1498	10.0	20.0	-	7	14
EAST COMP	1499	10.0	20.0		4	8

SKETCH/SAMPLE LOCATIONS



OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
WEST COMP	2
EAST COMP	2

LAB SAMPLES

SAMPLE ID	ANALYSIS

TRAVEL NOTES: CALLOUT: 5-8-95 ONSITE: 5-9-95 1020

**BLAGG ENGINEERING, INC.**

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

**FIELD MODIFIED EPA METHOD 418.1  
TOTAL PETROLEUM HYDROCARBONS**

Client:	Amoco	Project #:	
Sample ID:	West Stockpile Composite	Date Analyzed:	5-9-95
Project Location:	Armenta GC A 1	Date Reported:	5-9-95
Laboratory Number:	TPH-1498	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	14	10

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	2,596	2,588	0

\*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: Compost Pile - C4288 / B0282

R. E. O'Neill  
Analyst

Michael V. [Signature]  
Review

**BLAGG ENGINEERING, INC.**

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

**FIELD MODIFIED EPA METHOD 418.1  
TOTAL PETROLEUM HYDROCARBONS**

Client:	Amoco	Project #:	
Sample ID:	East Stockpile Composite	Date Analyzed:	5-9-95
Project Location:	Armenta GC A 1	Date Reported:	5-9-95
Laboratory Number:	TPH-1499	Sample Matrix:	Soil

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

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	2,596	2,588	0

\*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: Compost Pile - C4288 / B0282

P. E. Small  
Analyst

Heather Velf  
Review

C 4288

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

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)  
 NW/4 NW/4, SEC. 27, T29 N, R10 W, N.M.P.M.  
 400' FWL | 1190' 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.  
 ARMENTA GC A #1

9. API Well No.  
 3004507926

10. Field and Pool, or Exploratory Area

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 checked="" type="checkbox"/> Subsequent Report <input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Abandonment <input type="checkbox"/> Recompletion <input type="checkbox"/> Plugging Back <input type="checkbox"/> Casing Repair <input type="checkbox"/> Altering Casing <input checked="" type="checkbox"/> Other <u>Pit closure</u>
	<input type="checkbox"/> Change of Plans <input type="checkbox"/> New Construction <input type="checkbox"/> Non-Routine Fracturing <input type="checkbox"/> Water Shut-Off <input type="checkbox"/> Conversion to Injection <input type="checkbox"/> Dispose Water <small>(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)</small>

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 B. Shaw Title Enviro. Coordinator Date 7/19/98

(This space for Federal or State office use)

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_  
 Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.