

**3R -**

**107**

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# **REPORTS**

**DATE:**

**1999**

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## **BLAGG ENGINEERING, INC.**

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

February 17, 1999

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

**RECEIVED**

**FEB 19 1999**

ENVIRONMENTAL BUREAU  
OIL CONSERVATION DIVISION

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

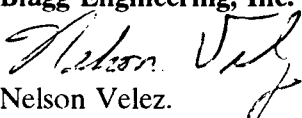
Dear Mr. Olson:

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  
P.O. Drawer DD, Artesia, NM 88211  
District III  
P.O. Box 1980, Hobbs, NM 88240

State of New Mexico  
Energy, Minerals and Natural Resources Department

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

C 4921  
SUBMIT 1 COPY TO  
APPROPRIATE  
DISTRICT OFFICE  
AND 1 COPY TO  
SANTA FE OFFICE

RECEIVED

FEB 19 1999

**PIT REMEDIATION AND CLOSURE REPORT**

ENVIRONMENTAL BUREAU  
OIL CONSERVATION DIVISION

APPROVED

Operator: Amoco Production Company Telephone: (505) - 326-9200  
Address: 200 Amoco Court, Farmington, New Mexico 87401  
Facility Or: CHAVEZ GC C #1R  
Well Name \_\_\_\_\_  
Location: Unit or Qtr/Qtr Sec J Sec 23 T 29N R 10W County SAN JUAN  
Pit Type: Separator ☒ Dehydrator \_\_\_\_\_ Other BLOW  
Land Type: BLM \_\_\_\_\_, State \_\_\_\_\_, Fee \_\_\_\_\_, Other \_\_\_\_\_

Pit Location: Pit dimensions: length 25', width 60', depth 13'  
(Attach diagram) Reference: wellhead ☒, other \_\_\_\_\_  
Footage from reference: 155' 150'  
Direction from reference: 8 Degrees ☒ East North \_\_\_\_\_  
\_\_\_\_\_ of \_\_\_\_\_  
\_\_\_\_\_ 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) 20  
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) 10  
lakes, ponds, rivers, streams, creeks,  
irrigation canals and ditches) Greater than 1000 feet (0 points)

RANKING SCORE (TOTAL POINTS): 30

C492

SEP/BLOW PIT

Date Remediation Started: \_\_\_\_\_

Date Completed: 8/4/93Remediation Method: Excavation ☒

Approx. cubic yards \_\_\_\_\_

(Check all appropriate sections)

Landfarmed ☒

Insitu Bioremediation \_\_\_\_\_

Other \_\_\_\_\_

Remediation Location: \_\_\_\_\_

Onsite ☒ Offsite \_\_\_\_\_(ie. landfarmed onsite,  
name and location of  
offsite facility)

General Description Of Remedial Action: \_\_\_\_\_

Excavation GROUNDWATER ENCOUNTERED.

Ground Water Encountered: \_\_\_\_\_

No \_\_\_\_\_

Yes ☒Depth 13'

Final Pit: \_\_\_\_\_

Sample location see Attached Documents

Closure Sampling: \_\_\_\_\_

(if multiple samples,  
attach sample results  
and diagram of sample  
locations and depths)Sample depth 13'Sample date 8/2/93Sample time 1140

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

8/4/93

SIGNATURE

B.D. ShawPRINTED NAME  
AND TITLEBuddy D. Shaw  
ENVIRONMENTAL COORDINATOR

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

Coc 2875  
C4921

JOB No: 92140  
PAGE No: 1 of 1

LOCATION: LEASE: DUAL CHAVEZ GAS COM "C" 1R  
SEC: 23 TWP: 29N RNG: 10W BM: NMPM CNTY: SJ QD: NE/4 SW/4 (3)  
CONTRACTOR: VELASQUEZ & SONS  
EQUIPMENT USED: TRACK - HOLE

DATE STARTED: 8-2-93  
DATE FINISHED: 8-2-93  
ENVIRONMENTAL SPECIALIST: Rmy

SOIL REMEDIATION: QUANTITY: 25'x60'x15' deep  
DISPOSAL FACILITY: ON-SITE REMEDIATION NO. NMD15P358C423  
LAND USE: PRIVATE LEASE (MISS SIGN SAYS "FED. LSE  
SURFACE CONDITIONS: PIT EXCAVATED UPON ARRIVAL - NO VISIBLE CONTAM. MINOR VEGETATION.

X FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY            YARDS            FROM WELLHEAD.

DEPTH TO GROUNDWATER: 13'

NEAREST WATER SOURCE: >1000'

NEAREST SURFACE WATER: 500' (IRRIGATION DITCH)

CAN'T SEE BOTTOM OF PIT. NO STAINING  
OBSERVABLE ON SIDOWALLS. CAN'T SAMPLE  
SIDOWALLS OR PIT BOTTOM.


RECOMMEND EMPLACEMENT OF ONE DOWN  
GRABENT TEST HOLE TO VERIFY GROUND  
WATER IS NOT CONTAMINATED.

LAB SAMPLE "PIT WATER @ 13" Taken For BTGX ANALYSIS.

## FIELD 418.1 CALCULATIONS

FIELD TEST CALCULATIONS						
SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm

SCALE



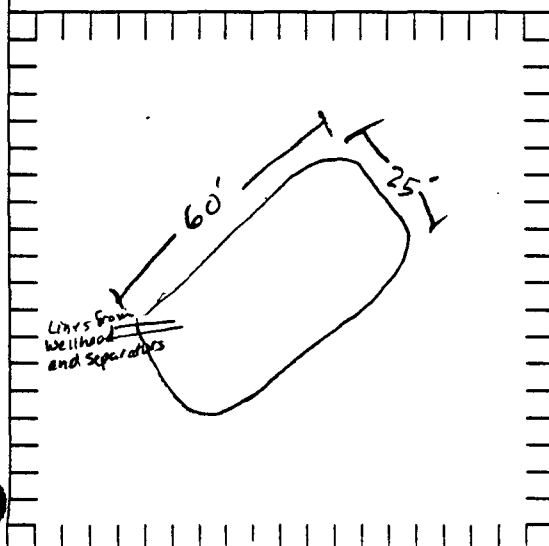
0 10 20 FEET

SURFACE  
FLOW

## PIT PERIMETER

## OVM RESULTS

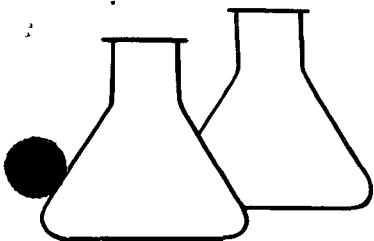
PIT PROFILE

[illegible]

UNIFORM SOIL PROFILE TO  
DEPTH OF GROUNDWATER @ 13'  
SW/GW

Pale Yellowish Brown well graded  
SANDS AND GRAVELS. LOOSE. MOIST  
TO SATURATED. NON-COESIVE.  
NO VISIBLE CONTAMINATION.  
NO APPARENT OIL

TRAVEL NOTES:    CALLOUT: \_\_\_\_\_    ONSITE: \_\_\_\_\_



# 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:	Pit Water @ 13'	Date Reported:	08-04-93
Laboratory Number:	5800	Date Sampled:	08-02-93
Sample Matrix:	Water	Date Received:	08-02-93
Preservative:	HgCl & Cool	Date Analyzed:	08-03-93
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	ND	0.2
Toluene	1.3	0.4
Ethylbenzene	0.5	0.2
p,m-Xylene	3.1	0.4
o-Xylene	7.2	0.3

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	87 %
	Bromofluorobenzene	90 %

Method: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

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: Chavez Gas Com "C" 1R Moss Federal "A" No. 1  
Separator/Blow pit C4921

*Steven L. Cline*  
Analyst

*Meris D. Young*  
Review

## CHAIN OF CUSTODY RECORD

[illegible]



CLIENT: AMOCOBLAGG ENGINEERING, INC.  
P.O. BOX 87, BLOOMFIELD, NM 87413  
(505) 632-1199LOCATION NO: C4921C.O.C. NO: 5644

## FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: MOSS FEDERAL A  
CHAVEZ GC C WELL #: 1R PITS: BLOW/SEP  
QUAD/UNIT: (5) SEC: 23 TWP: 29N RNG: 10W PM: NM CNTY: ST ST: NM  
QTR/FOOTAGE: NW/4 SW/4 CONTRACTOR: P & SDATE STARTED: 12.4.97

DATE FINISHED: \_\_\_\_\_

ENVIRONMENTAL  
SPECIALIST: NV/EP

## SOIL REMEDIATION:

REMEDICATION SYSTEM: LANDFARM

APPROX. CUBIC YARDAGE: \_\_\_\_\_

LAND USE: RANGELIFT DEPTH (ft): NA

## FIELD NOTES &amp; REMARKS:

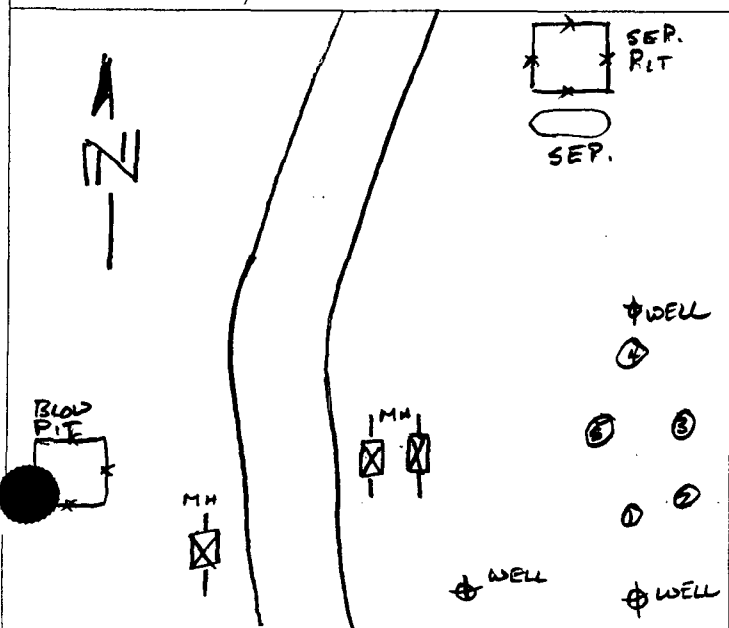
DEPTH TO GROUNDWATER: <50' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: <1000'NMOCID RANKING SCORE: 30 NMOCID TPH CLOSURE STD: 100 PPMSOIL IS DRY DARK YELLOW W/LIGHT BROWN SILTY SAND,  
NO STAIN OR HC ODOR.

TOOK SPT COMP. SAMPLE FOR LAB ANALYSIS

## 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	1100	ND

## SCALE



0 FT

## TRAVEL NOTES:

CALLOUT: N/AONSITE: 12.4.97 1100

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

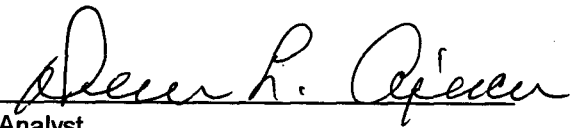
Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	LF - 1	Date Reported:	12-09-97
Laboratory Number:	C648	Date Sampled:	12-04-97
Chain of Custody No:	5644	Date Received:	12-05-97
Sample Matrix:	Soil	Date Extracted:	12-08-97
Preservative:	Cool	Date Analyzed:	12-08-97
Condition:	Cool and Intact	Analysis 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: Chavez GC A #1R / Moss Federal A #1 Landfarm. 5 Pt. Composite.

  
Analyst

  
Review

# 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:	12-08-TPH QA/QC	Date Reported:	12-09-97
Laboratory Number:	C640	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	12-08-97
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	2.9715E-04	3.0698E-04	3.31%	0 - 15%
Diesel Range C10 - C28	10-28-97	2.9167E-04	3.0288E-04	3.84%	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

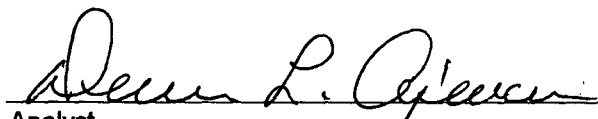
Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	1,384	1,315	5.0%	0 - 30%
Diesel Range C10 - C28	388	369	5.0%	0 - 30%

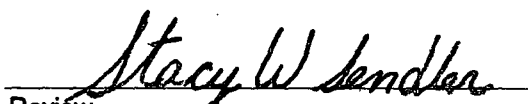
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	1,384	250	1,629	100%	75 - 125%
Diesel Range C10 - C28	388	250	637	100%	75 - 125%

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: QA/QC for samples C640 and C642 - C648.

  
Analyst

  
Review

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

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 SE/4, SEC. 23, T29N, R10W, N.M.P.M.  
1590' FSL/1590' FEL

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.

CHAVEZ GC C #1R

9. API Well No.

3004523162

10. Field and Pool, or Exploratory Area

Basin DAKOTA

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

- ☐ Notice of Intent  
☒ Subsequent Report  
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment  
☐ Recompletion  
☐ Plugging Back  
☐ Casing Repair  
☐ Altering Casing  
☒ Other Pit closure  
☐ Change of Plans  
☐ New Construction  
☐ Non-Routine Fracturing  
☐ Water Shut-Off  
☐ Conversion to Injection  
☐ 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/SEPARATOR PIT - ABANDONED, GROUNDWATER ENCOUNTERED,  
CLOSED 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 7/26/98

(This space for Federal or State office use)

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

Title \_\_\_\_\_

Date \_\_\_\_\_