

3R -

109

REPORTS

DATE:

FEB. 1999

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

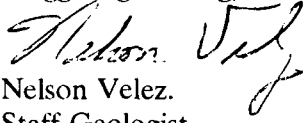
Dear Mr. Olson:

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
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

C4920
SUBMIT 1 COPY TO
APPROPRIATE
DISTRICT OFFICE
AND 1 COPY TO
SANTA FE OFFICE

RECEIVED

FEB 19 1999

PIT REMEDIATION AND CLOSURE REPORT

APPROVED

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

Operator: Amoco Production Company Telephone: (505) - 326-9200
Address: 200 Amoco Court, Farmington, New Mexico 87401
Facility Or: FEDERAL GC 3-1
Well Name _____
Location: Unit or Qtr/Qtr Sec N Sec 23 T 29N R 10W County SAN JUAN
Pit Type: Separator ___ Dehydrator ___ Other Blow
Land Type: BLM X, State ___, Fee ___, Other _____

Pit Location: Pit dimensions: length 40', width 40', depth 14'
(attach diagram) Reference: wellhead X, other _____
Footage from reference: 39'
Direction from reference: 0 Degrees ___ East North X
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)
lakes, ponds, rivers, streams, creeks, Greater than 1000 feet (0 points) 10
irrigation canals and ditches)

RANKING SCORE (TOTAL POINTS): 30

Date Remediation Started: _____ Date Completed: 8/4/93

Remediation Method: Excavation ☒ (Check all appropriate sections) Approx. cubic yards _____
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 14'

Final Pit: Sample location see Attached Documents

Closure Sampling: (if multiple samples, attach sample results and diagram of sample locations and depths)
Sample depth 14'
Sample date 8/2/93 Sample time 1230

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. Shaw PRINTED NAME AND TITLE Buddy D. Shaw Environmental Coordinator

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

Col 2874
C4920,

JOB No: 92140

PAGE No: 1 of 1

LOCATION: LEASE: FEDERAL GAS UNIT 3 WELL: 1 QD: SE/4 SW/4 (N)
SEC: 23 TWP: 29N RNG: 10W BM: NMM CNTY: JS ST: NM PIT: Blow
CONTRACTOR: P. VELASQUEZ
EQUIPMENT USED: TRACK HOE

DATE STARTED: 8-2-93
DATE FINISHED: 8-2-93

ENVIRONMENTAL SPECIALIST: RMY

SOIL REMEDIATION: QUANTITY: 40' x 40' x 14' deep

DISPOSAL FACILITY:

LAND USE: RANGE - FED LSE NO. NM-020502

SURFACE CONDITIONS:

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 13 YARDS N^OE FROM WELLHEAD.

DEPTH TO GROUNDWATER: 14'

NEAREST WATER SOURCE: >1000'

NEAREST SURFACE WATER: 700'-1000'

SURFACE^{ALL} VISIBLE CONTAMINATION NOT APPARENT.

BLACK SOILS ENCOUNTERED IN CENTER BOTTOM, BELOW
THE STATIC GROUNDWATER LEVEL. THEN FILM

OF DARK BROWN OIL PRESENT ON GROUNDWATER.

RECOMMEND Additional Remediation and

Emplacement of a down-gradient test hole

to monitor CONTAMINATION of GROUNDWATER

LAB SAMPLES:

PET WATER @ 14' FOR BTX WATER.

CB014' for 418.1 SWZ

FIELD 418.1 CALCULATIONS

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

SCALE

SURF FLOW
+ SUSP GWD
DOWN FRED
FEET

PIT PERIMETER

OVM RESULTS

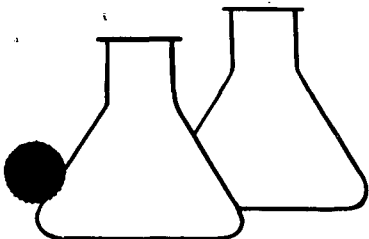
[illegible]

PIT PROFILE

0-6' SM/MC PALL YELLOWISH
BROWN SILTY SAND. DRY.
FIRM. NON-COH. NO VISIBLE
CONTAMINATION.

6' - 14' .
SW/GW. PALE YELLOWISH BROWN
SANDS WITH GRAVELS
AND CORBELS. WGT.
LOOSE. NON-COH. NO
VISIBLE CONTAM ABOVE
STATIC GROUNDWATER LEVEL.

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 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Amoco	Project #:	92140
Sample ID:	CB @ 14'	Date Sampled:	08-02-93
Laboratory Number:	5798	Date Received:	08-02-93
Sample Matrix:	Soil	Date Analyzed:	08-03-93
Preservative:	Cool	Date Reported:	08-03-93
Condition:	Cool & Intact	Analysis Needed:	TPH

Parameter -----	Concentration (mg/kg) -----	Det. Limit (mg/kg) -----
Total Petroleum Hydrocarbons	132	5.0

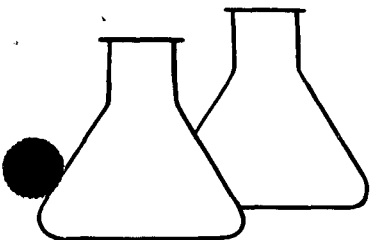
ND = Parameter not detected at the stated detection limit.
N/A = Not applicable

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

Comments: Federal Gas Unit 3-1, Blow Pit, C4920.

Ar Chakraborty
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:	Pit Water @ 14'	Date Reported:	08-04-93
Laboratory Number:	5799	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	ND	0.4
Ethylbenzene	ND	0.2
p,m-Xylene	ND	0.4
o-Xylene	ND	0.3

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	91 %
	Bromofluorobenzene	99 %

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: Federal Gas Unit 3-1 Blow Pit C4920

Kevin L. Jensen
Analyst

Marvin D. Young
Review

CHAIN OF CUSTODY RECORD

[illegible]**ENVIROTECH INC.**

5796 U.S. Highway 64-3014

Farmington, New Mexico 87401

(505) 632-0615

CLIENT: AMOCOBLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 632-1199LOCATION NO: C4920C.D.C. NO: 5649

FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: FEDERAL GC WELL #: 3-1 PITS: BLOWQUAD/UNIT: (N) SEC: 23 TWP: 29N RNG: 10W PM: NM CNTY: SJ ST: NMQTR/FOOTAGE: SE/4 SW/4CONTRACTOR: P & SDATE STARTED: 12-5-97

DATE FINISHED: _____

ENVIRONMENTAL
SPECIALIST: NV/EP.

SOIL REMEDIATION:

REMEDICATION SYSTEM: LANDFARMAPPROX. CUBIC YARDAGE: 830LAND USE: PANCRELIFT DEPTH (ft): NA

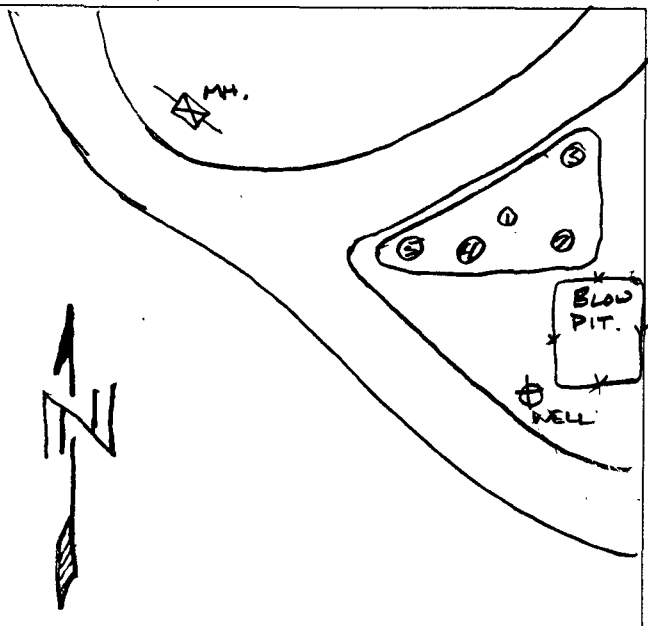
FIELD NOTES & REMARKS:

DEPTH TO GROUNDWATER: < 50' NEAREST WATER SOURCE: > 1000' NEAREST SURFACE WATER: < 1000'NMOCB RANKING SCORE: 30 NMOCB TPH CLOSURE STD: 100 PPMSOIL IS A DRY DARK YELLOW W/ LIGHT BROWN SILTY SAND.
NO STAIN OR HC ODOR.TOOK A 5 PT COMPOSITE SAMPLE FROM LANDFARM
AREA 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

SAMPLE ID	FIELD HEADSPACE PID (ppm)
LF-1	0.0

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME	RESULTS
LF-1	8015	1010	ND

SCALE



0 FT

TRAVEL NOTES:

CALLOUT: N/AONSITE: 12-5-971010

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

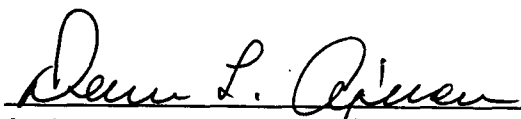
Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	LF - 1	Date Reported:	12-16-97
Laboratory Number:	C690	Date Sampled:	12-05-97
Chain of Custody No:	5649	Date Received:	12-15-97
Sample Matrix:	Soil	Date Extracted:	12-15-97
Preservative:	Cool	Date Analyzed:	12-15-97
Condition:	Cool and Intact	Analysis 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: Federal GC 3 - 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:	12-15-PM-TPH QA/QC	Date Reported:	12-16-97
Laboratory Number:	C689	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	12-15-97
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	3.0446E-04	2.46%	0 - 15%
Diesel Range C10 - C28	10-28-97	2.9167E-04	3.0038E-04	2.99%	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%

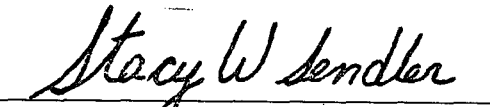
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
Gasoline Range C5 - C10	ND	250	249	100%	75 - 125%
Diesel Range C10 - C28	ND	250	250	100%	75 - 125%

ND - Parameter not detected at the stated detection limit.

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

Comments: QA/QC for samples C689 - C695.


Analyst


Review

CHAIN OF CUSTODY RECORD

Client/Project Name <i>BRGS / AMO CO</i>			Project Location <i>LANDFARM</i>			ANALYSIS/PARAMETERS					
Sampler: (Signature) <i>Ed Potts JR</i>			Chain of Custody Tape No. <i>04034-10</i>								
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	Remarks					
<i>LF-1</i>	<i>12/5/97</i>	<i>1010</i>	<i>CL90</i>	<i>SOIL</i>	<i>1</i>						
						<i>RESERV. - COOL</i> <i>5 PT. COMPOSITE</i>					
Relinquished by: (Signature) <i>Ed Potts JR</i>			Date <i>12/14/97</i>	Time <i>1200</i>	Received by: (Signature) <i>Ed Potts JR</i>	Date <i>12/14/97</i>					Time <i>1200</i>
Relinquished by: (Signature) <i>Ed Potts JR</i>			Date <i>12/15/97</i>	Time <i>0716</i>	Received by: (Signature) <i>Ed Potts JR</i>	Date <i>12-15-97</i>					Time <i>0716</i>
Relinquished by: (Signature)			Date	Time	Received by: (Signature)	Date					Time

RAF COCIS 5648 → 5656

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

C4920

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)

SE/4 SW/4, SEC. 23, T 29 N, R 10 W, N.M.P.M.

5. Lease Designation and Serial No.

NM 020502

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

FEDERAL GC 3-1

9. API Well No.

3004507973

10. Field and Pool, or Exploratory Area

PICURED 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

- ☐ 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 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