

3R - 104

REPORTS

DATE:

MAY 2006



320104

May 15, 2006

Mr. Glenn von Gonten
Hydrologist – Groundwater Remediation
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Annual Groundwater Remediation Reports

Dear Mr. von Gonten:

XTO Energy Inc. (XTO) is presenting a second submission of the Annual Groundwater Remediation Report in accordance with the NMOCD approved Groundwater Management Plan (GMP), which will complete this years reporting. Enclosed are summary reports with analytical data, summary tables, site maps, potentiometric surface diagrams and recommendations/proposed actions for:

- Baca Gas Com A #1A
- Frost, Jack B #2
- Haney Gas Com B #1E
- Hare Gas Com B #1E
- Masden Gas Com #1E
- McDaniel Gas Com B #1E
- Snyder Gas Com #1A
- Stedje Gas Com #1
- Sullivan Frame A #1E

Thank you for your review of the reports and allowing some flexibility with this years reporting schedule. If you have any questions please do not hesitate to contact me at (505) 566-7942.

Sincerely,

A handwritten signature in cursive script that reads 'Lisa Winn'.

Lisa Winn
Environmental Specialist
San Juan Division

cc: Mr. Denny Foust, Environmental, NMOCD District III Office, Aztec, NM
File – San Juan Groundwater

3R0104

XTO ENERGY INC.

ANNUAL GROUNDWATER REPORT

2005

**BACA GC A #1A
(F) SECTION 26 – T29N – R10W, NMPM
SAN JUAN COUNTY, NEW MEXICO**

**PREPARED FOR:
MR. GLENN VON GONTEN
NEW MEXICO OIL CONSERVATION DIVISION**

APRIL 2006

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Laboratory Reports

Pit Closure Report (4/94)

**XTO Energy Inc.
Baca GC A #1A
SE/4 NW/4 S26, T29N, R10W**

Pit Closure Date: 4/1/94

Monitor Well Installations: 6/7/96

Monitor Well Sampling: 6/12/96, 5/25/99

Historical Information:

- April 1994- Groundwater impacts were suspected during closure of an Amoco Production Company (Amoco) earthen blow pit. Less than 70 cubic yards of impacted soil was excavated and landfarmed on site. Groundwater was found at about 3 feet below surface grade.
- June 1996- Amoco conducted a groundwater investigation by installing and sampling monitoring wells MW1, MW2 and MW3.
- January 1998- XTO Energy Inc. (XTO) acquired the Baca GC A #1A from Amoco.
- May 1999- Groundwater samples were collected from site monitoring wells to investigate potential cation/anion impacts to groundwater.
- February 2000- Request submitted for site closure.
- December 2000- Correspondence was received from New Mexico Oil Conservation Division (NMOCD) denying the request for closure pending submittal of four consecutive quarters of sample analyses.
- April 2006- XTO submits annual groundwater report recommending continued monitoring.

Groundwater Monitor Well Sampling Procedures:

Groundwater samples were collected from site monitor wells (Figure 1) following US EPA: SW-846 protocol. Samples were collected using new disposable bailers and placed in laboratory supplied containers and stored in a cooler on ice. The samples were delivered to an accredited environmental laboratory according to chain-of-custody procedures. The samples were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX) per US EPA Method 8021B and general water chemistry per US EPA Method 600/4-79-020. Analytical results are summarized on Tables 1, 2 & 3. Waste generated (groundwater) during monitor well sampling and development was placed in the produced water separator tank located on the well site.

Water Quality and Gradient Information:

Groundwater elevation data (Figure 2) indicates that groundwater trends towards the northwest.

XTO understands the initial evaluation of groundwater impact came from samples of groundwater collected from the bottom of the blow pit following excavation of hydrocarbon impacted soil. Laboratory analysis of the initial samples indicated elevated levels of dissolved phase BTEX constituents in groundwater. In 1999 three groundwater monitoring wells were installed to delineate the extent of hydrocarbon impact to groundwater. Monitoring well numbered MW#2 was installed near the center of the source area, (closed and backfilled earthen blow pit). Monitoring well numbered MW#3 was placed down gradient of MW#2. BTEX constituents were not detected above the laboratory equipment detection limits (0.2 ug/L) in any of the three monitoring wells. Sampling was terminated and site closure requests were submitted.

Summary:

Analytical data from the November 1999 groundwater monitor well sampling event indicates that groundwater quality standards were observed. Correspondence from NMOCD in 2000 requested four consecutive quarters of testing, in compliance with XTO's Groundwater Management Plan. XTO proposes to install an additional monitoring well down gradient of MW#2 and place this site on a quarterly sampling schedule.

TABLE 1
GENERAL WATER QUALITY
XTO ENERGY INC.
BACA GC A # 1A
SAMPLE DATE : May 25 , 1999

PARAMETERS	MW # 1	MW # 2	MW # 3	Units
LAB pH	6.88	7.29	7.19	s. u.
LAB CONDUCTIVITY @ 25 C	10,700	8,800	6,470	umhos / cm
TOTAL DISSOLVED SOLIDS @ 180 C	5,350	4,380	3,230	mg / L
TOTAL DISSOLVED SOLIDS (Calc)	5,317	4,351	3,209	mg / L
SODIUM ABSORPTION RATIO	9.9	7.9	8.7	ratio
TOTAL ALKALINITY AS CaCO3	570	352	326	mg / L
TOTAL HARDNESS AS CaCO3	1,795	975	934	mg / L
BICARBONATE as HCO3	570	352	326	mg / L
CARBONATE AS CO3	< 1	< 1	< 1	mg / L
HYDROXIDE AS OH	< 1	< 1	< 1	mg / L
NITRATE NITROGEN	0.2	0.4	0.2	mg / L
NITRITE NITROGEN	0.003	0.025	< 0.001	mg / L
CHLORIDE	11.5	58.8	54.0	mg / L
FLUORIDE	6.30	1.80	1.55	mg / L
PHOSPHATE	< 0.1	23.2	< 0.1	mg / L
SULFATE	3,300	2,710	1,920	mg / L
IRON	1.15	0.15	0.27	mg / L
CALCIUM	552	520	328	mg / L
MAGNESIUM	101.0	79.4	27.8	mg / L
POTASSIUM	40.0	14.0	70.0	mg / L
SODIUM	960	730	610	mg / L
CATION / ANION DIFFERENCE	0.09	0.14	0.12	

TABLE 2
GENERAL WATER QUALITY
XTO ENERGY INC.
BACA GC A # 1A
SAMPLE DATE : JUNE 12, 1996

PARAMETERS		MW # 1	MW # 2	MW # 3	Units
GENERAL	LAB pH	7.3	7.5	7.2	s. u.
	LAB CONDUCTIVITY (25 DEG. CELCIUS)	8,210	3,720	5,670	umhos cm
	TOTAL DISSOLVED SOLIDS (180 DEG. CELCIUS)	8,210	2,860	4,710	mg / L
	TOTAL DISSOLVED SOLIDS (CALCULATED)	7,860	2,560	4,130	mg / L
ANIONS	TOTAL ALKALINITY AS CaCO3	764	239	358	mg / L
	BICARBONATE ALKALINITY (AS CaCO3)	764	239	358	mg / L
	CARBONATE ALKALINITY (AS CaCO3)	NA	NA	NA	mg / L
	HYDROXIDE ALKALINITY (AS CaCO3)	NA	NA	NA	mg / L
	CHLORIDE	40.0	17.5	342	mg / L
	SULFATE	4,960	1,600	2,250	mg / L
	NITRATE + NITRITE - N	NA	NA	NA	
	NITRATE - N NITRITE - N	NA NA	NA NA	NA NA	
CATIONS	TOTAL HARDNESS AS CaCO3	4,620	900	1,460	mg / L
	CALCIUM	497	311	498	mg / L
	MAGNESIUM	91.6	30.2	53.2	mg / L
	POTASSIUM	17.0	36.0	12.00	mg / L
	SODIUM	1,800	420	760	mg / L
DATA VALIDATION					ACCEPTANCE LEVEL
	CATION/ANION DIFFERENCE	3.75	1.87	0.80	+/- 5 %
	TDS (180):TDS (CALCULATED)	1.0	1.1	1.1	1.0 - 1.2

TABLE 3

XTO ENERGY INC. GROUNDWATER MONITOR WELL LAB RESULTS SUBMITTED BY BLAGG ENGINEERING, INC.

**BACA GC A #1A - SEPARATOR PIT
UNIT F, SEC. 26, T29N, R10W**

REVISED DATE: JANUARY 13, 1997

FILENAME: (BA-2Q-96.WK3) NJV

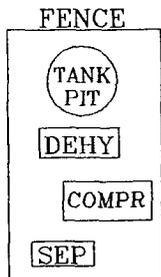
SAMPLE DATE	MONITOR WELL No:	D.T.W. (ft)	T.D. (ft)	TDS mg/L	COND. umhos	pH	PRODUCT (in)	BTEX EPA METHOD 8020 (PPB)			
								Benzene	Toluene	Ethyl Benzene	Total Xylene
12-Jun-96	MW #1	4.92	7.79	8210	5000	7.1		0.67	6	ND	1
12-Jun-96	MW #2	6.97	10.03	2860	2500	7.0		ND	ND	ND	ND
12-Jun-96	MW #3	6.77	9.24	4710	2400	6.9		ND	4	ND	ND

FIGURE 1



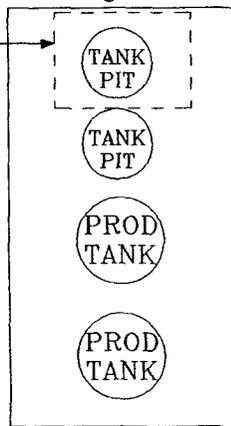
⊕
BACA GC A1A
WELL HEAD

⊕
McDANIEL GC B1E
WELL HEAD



● MW #3

ORIGINAL
PIT
EXCAVATION

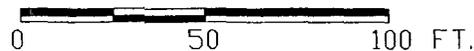


● MW #1

SWAMP
WETLAND
AREA

MONITOR WELL LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE AND BEARING FROM THE WELL HEAD (BRUNTON COMPASS AND LASER RANGE FINDER). ALL OTHER STRUCTURES DISPLAYED ON THE SITE MAP ARE SOLELY FOR REFERENCE AND MAY NOT BE TO SCALE.

ONE INCH = 50 FEET



XTO ENERGY INC.

BACA GC A1A

SE/4 NW/4 SEC. 26, T29N, R10W

SAN JUAN COUNTY, NEW MEXICO

BLAGG ENGINEERING, INC.

CONSULTING PETROLEUM / RECLAMATION SERVICES

P.O. BOX 87
BLOOMFIELD, NEW MEXICO 87413

PHONE: (505) 632-1199

PROJECT: MW INSTALL.

DRAWN BY: NJV

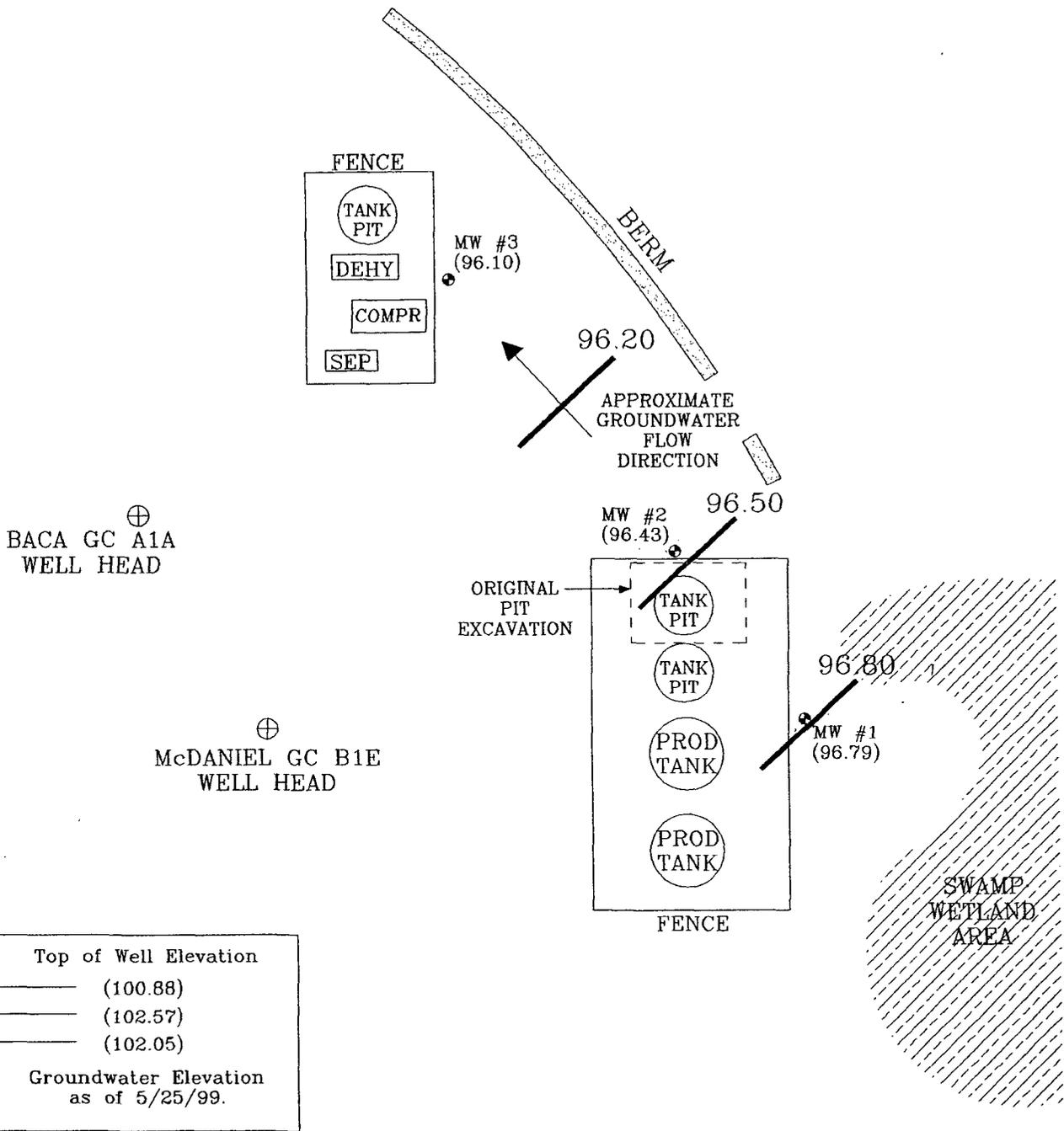
FILENAME: BACA-SM

REVISED: 1/17/97 NJV

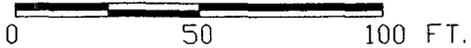
SITE
MAP

6/96

FIGURE 2 (2nd 1/4, 1999)



MONITOR WELL LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE AND BEARING FROM THE WELL HEAD (BRUNTON COMPASS AND LASER RANGE FINDER). ALL OTHER STRUCTURES DISPLAYED ON THE SITE MAP ARE SOLELY FOR REFERENCE AND MAY NOT BE TO SCALE.



XTO ENERGY INC.
BACA GC A1A
SE/4 NW/4 SEC. 26, T29N, R10W
SAN JUAN COUNTY, NEW MEXICO

BLAGG ENGINEERING, INC.
CONSULTING PETROLEUM / RECLAMATION SERVICES
P.O. BOX 87
BLOOMFIELD, NEW MEXICO 87413
PHONE: (505) 632-1199

PROJECT: 1/4ly Monitor.
DRAWN BY: NJV
FILENAME: 05-25-GW.SKD
REVISED: 6/14/99 NJV

GROUNDWATER GRADIENT MAP
5/99

BLAGG ENGINEERING, INC.
MONITOR WELL SAMPLING DATA

CLIENT : XTO ENERGY INC.

CHAIN-OF-CUSTODY # : 6681

BACA GC A #1A - SEPARATOR PIT
UNIT F, SEC. 26, T29N, R10W

LABORATORY (S) USED : ENVIROTECH, INC.

Date : May 25, 1999

SAMPLER : N J V

Filename : 05-25-99.WK4

PROJECT MANAGER : N J V

WELL #	WELL ELEV. (ft)	WATER ELEV. (ft)	DEPTH TO WATER (ft)	TOTAL DEPTH (ft)	SAMPLING	pH TIME	CONDUCT (umhos)	VOLUME PURGED (gal.)	FREE PRODUCT (ft)
1	100.88	96.79	4.09	7.79	0800	-	-	1.50	-
2	102.57	96.43	6.14	10.03	0830	-	-	1.50	-
3	102.05	96.10	5.95	9.24	0900	-	-	1.25	-

NOTES : Volume of water purged from well prior to sampling: $V = \pi \times r^2 \times h \times 7.48 \text{ gal./ft}^3 \times 3 \text{ (wellbores)}$.
 (i.e. 2" MW $r = (1/12) \text{ ft. } h = 1 \text{ ft.}$) (i.e. 4" MW $r = (2/12) \text{ ft. } h = 1 \text{ ft.}$)

Ideally a minimum of three (3) wellbore volumes:

1.25" well diameter = 0.19 gallons per foot of water (or 24 oz.).

2 bails per foot - small teflon bailer.

3 bails per foot - 3/4" teflon bailer.

2.00" well diameter = 0.49 gallons per foot of water.

4.00" well diameter = 1.95 gallons per foot of water.

Comments or note well diameter if not standard 2".

Collected anion / cation for all MW's listed above.

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

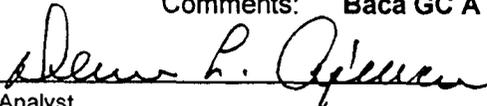
CATION / ANION ANALYSIS

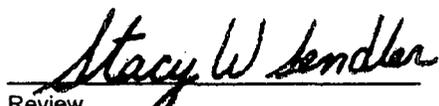
Client:	Blagg / Cross Timbers	Project #:	403410
Sample ID:	MW #1	Date Reported:	05-27-99
Laboratory Number:	F383	Date Sampled:	05-25-99
Chain of Custody:	6681	Date Received:	05-25-99
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	05-26-99
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		Units
pH	6.88	s.u.		
Conductivity @ 25° C	10,700	umhos/cm		
Total Dissolved Solids @ 180C	5,350	mg/L		
Total Dissolved Solids (Calc)	5,317	mg/L		
SAR	9.9	ratio		
Total Alkalinity as CaCO3	570	mg/L		
Total Hardness as CaCO3	1,795	mg/L		
Bicarbonate as HCO3	570	mg/L	9.34	meq/L
Carbonate as CO3	<1	mg/L	0.00	meq/L
Hydroxide as OH	<1	mg/L	0.00	meq/L
Nitrate Nitrogen	0.2	mg/L	0.00	meq/L
Nitrite Nitrogen	0.003	mg/L	0.00	meq/L
Chloride	11.5	mg/L	0.32	meq/L
Fluoride	6.30	mg/L	0.33	meq/L
Phosphate	<0.1	mg/L	0.00	meq/L
Sulfate	3,300	mg/L	68.71	meq/L
Iron	1.15	mg/L		
Calcium	552	mg/L	27.54	meq/L
Magnesium	101	mg/L	8.31	meq/L
Potassium	40.0	mg/L	1.02	meq/L
Sodium	960	mg/L	41.76	meq/L
Cations			78.64	meq/L
Anions			78.71	meq/L
Cation/Anion Difference			0.09%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Water And Waste Water", 18th ed., 1992.

Comments: Baca GC A #1A.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

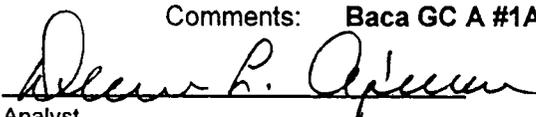
CATION / ANION ANALYSIS

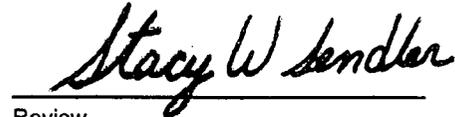
Client:	Blagg / Cross Timbers	Project #:	403410
Sample ID:	MW #2	Date Reported:	05-27-99
Laboratory Number:	F384	Date Sampled:	05-25-99
Chain of Custody:	6681	Date Received:	05-25-99
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	05-26-99
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		Units
pH	7.29	s.u.		
Conductivity @ 25° C	8,800	umhos/cm		
Total Dissolved Solids @ 180C	4,380	mg/L		
Total Dissolved Solids (Calc)	4,351	mg/L		
SAR	7.9	ratio		
Total Alkalinity as CaCO3	352	mg/L		
Total Hardness as CaCO3	975	mg/L		
Bicarbonate as HCO3	352	mg/L	5.77	meq/L
Carbonate as CO3	<1	mg/L	0.00	meq/L
Hydroxide as OH	<1	mg/L	0.00	meq/L
Nitrate Nitrogen	0.4	mg/L	0.01	meq/L
Nitrite Nitrogen	0.025	mg/L	0.00	meq/L
Chloride	58.8	mg/L	1.66	meq/L
Fluoride	1.80	mg/L	0.09	meq/L
Phosphate	23.2	mg/L	0.73	meq/L
Sulfate	2,710	mg/L	56.42	meq/L
Iron	0.150	mg/L		
Calcium	520	mg/L	25.95	meq/L
Magnesium	79.4	mg/L	6.53	meq/L
Potassium	14.0	mg/L	0.36	meq/L
Sodium	730	mg/L	31.76	meq/L
Cations			64.59	meq/L
Anions			64.68	meq/L
Cation/Anion Difference			0.14%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Water And Waste Water", 18th ed., 1992.

Comments: Baca GC A #1A.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

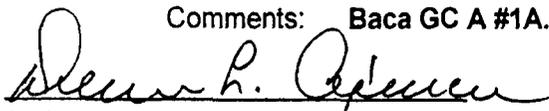
CATION / ANION ANALYSIS

Client:	Blagg / Cross Timbers	Project #:	403410
Sample ID:	MW #3	Date Reported:	05-27-99
Laboratory Number:	F385	Date Sampled:	05-25-99
Chain of Custody:	6681	Date Received:	05-25-99
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	05-26-99
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		Units
pH	7.19	s.u.		
Conductivity @ 25° C	6,470	umhos/cm		
Total Dissolved Solids @ 180C	3,230	mg/L		
Total Dissolved Solids (Calc)	3,209	mg/L		
SAR	8.7	ratio		
Total Alkalinity as CaCO3	326	mg/L		
Total Hardness as CaCO3	934	mg/L		
Bicarbonate as HCO3	326	mg/L	5.34	meq/L
Carbonate as CO3	<1	mg/L	0.00	meq/L
Hydroxide as OH	<1	mg/L	0.00	meq/L
Nitrate Nitrogen	0.2	mg/L	0.00	meq/L
Nitrite Nitrogen	<0.001	mg/L	0.00	meq/L
Chloride	54.0	mg/L	1.52	meq/L
Fluoride	1.55	mg/L	0.08	meq/L
Phosphate	<0.1	mg/L	0.00	meq/L
Sulfate	1,920	mg/L	39.97	meq/L
Iron	0.270	mg/L		
Calcium	328	mg/L	16.37	meq/L
Magnesium	27.8	mg/L	2.29	meq/L
Potassium	70.0	mg/L	1.79	meq/L
Sodium	610	mg/L	26.54	meq/L
Cations			46.98	meq/L
Anions			46.93	meq/L
Cation/Anion Difference			0.12%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Water And Waste Water", 18th ed., 1992.

Comments: Baca GC A #1A.


Analyst


Review

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)
 SE 1/4 NW 1/4 S-26 T29N R10W NMAPM

5. Lease Designation and Serial No.

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation
 COM. AGMT: NM01SP3586C

8. Well Name and No.
 BACA 6C A #1A

9. API Well No.
 3004526180

10. Field and Pool, or Exploratory Area
 MESA VERDE

11. County or Parish, State
 SAN JUAN, NM

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 checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<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

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

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 DOCUMENTS

① BLOW PIT / SEPARATOR PIT - STEEL TANK ^{INSTALLED}, GROUNDWATER, PERMANENT CLOSURE UNDER Amoco's GW PLAN (SEC. 2.3) - REVERSED 5/11/98.

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

Signed B. Shaw

Title Enviro. Coordinator

Date 7/19/98 ⁹¹⁵
4/25/99 ⁹¹⁵

(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.

Date Remediation Started: _____ Date Completed: 4/1/94

Remediation Method: Excavation Approx. cubic yards 69
(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

Ground Water Encountered: No _____ Yes Depth 3'

Final Pit: Sample location see Attached Documents

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 4/25/94

SIGNATURE

B. Shaw

PRINTED NAME AND TITLE

Buddy D. Shaw
Environmental Coordinator

B - 14.8
 T - 68
 E - 20.2
 X - 337.8

RESULTS TO BOB MCLOY 4-11-94

PEO

TH = NO

NAME: MCDANIEL GC "B" #1E

ENVIROTECH Inc.

PIT NO: C4961

NEW

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

COO. NO: 3472

FIELD REPORT: CLOSURE VERIFICATION

JOB No: 92140
 PAGE No: 1 of 1

LOCATION: LEASE BACA GC "A" WELL: 1A QD. SE/4, NW/4 (F)
 SEC. 26 TWP: 29N RNG: 10W BM: NM CNTY: SJ ST NM PIT: Blow/sep
 CONTRACTOR: PAUL VELASQUEZ
 EQUIPMENT USED: EXCAVATOR

DATE STARTED: 4-1-94
 DATE FINISHED: 4-1-94

ENVIRONMENTAL SPECIALIST: PEO

SOIL REMEDIATION: QUANTITY: PIT ~ 25' x 25' x 3' DEEP

DISPOSAL FACILITY: LAND FARM ON SITE

LAND USE: SWAMP LAND

SURFACE CONDITIONS: EXCAVATED PRIOR TO ARRIVAL.

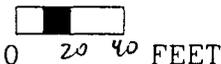
FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 160 FEET N 75° E FROM WELLHEAD.
 PIT EXCAVATED TO GROUNDWATER @ 3'
 APPEARS TO SERVICE 3 SEPARATE OPS + BLOW FOR POSSIBLY BOTH WELLS.
 GAS BLOWING INTO PIT AT ARRIVAL.
 WAITED FOR GAS TO STOP PRIOR TO SAMPLING

FIELD 418: CALCULATIONS

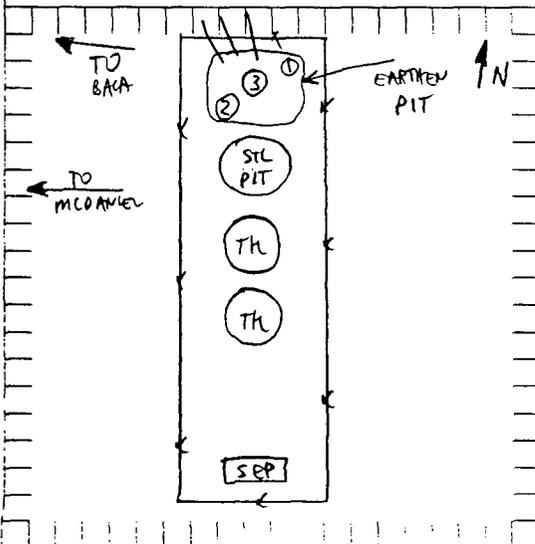
SAMPLE I.D.	LAB No:	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. ppm

DEPTH TO GROUNDWATER: 3'
 NEAREST WATER SOURCE: SAN JUAN → NORTH
 NEAREST SURFACE WATER: SWAMP 20' EAST
 WIND DIRECTION: > 20
 WIND SPEED: 100 MPH XH

SCALE



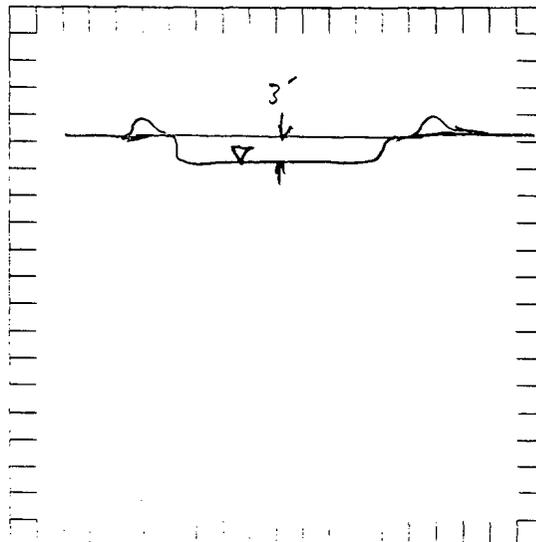
PIT PERIMETER



OVM RESULTS

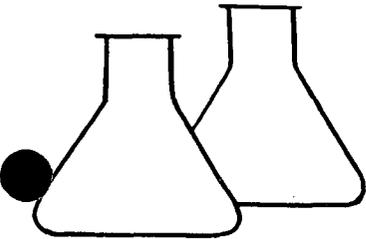
SAMPLE	FIELD HEADSPACE PID (ppm)
① MESOZ'	18
② SWS @ 2'	79
③ B @ 3'	WATER
	LAB
③	87X
②	418.1

PIT PROFILE



TRAVEL NOTES: DATE OUT: 3-31-94 ONSITE: 4-1-94 1300 HRS

Y



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EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Amoco	Project #:	92140
Sample ID:	3 @ 3'	Date Reported:	04-05-94
Laboratory Number:	7140	Date Sampled:	04-01-94
Sample Matrix:	Water	Date Received:	04-04-94
Preservative:	HgCl & Cool	Date Analyzed:	04-04-94
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	14.8	0.2
Toluene	68	0.4
Ethylbenzene	20.2	0.2
p,m-Xylene	298	0.2
o-Xylene	39.8	0.2

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	97 %
	Bromofluorobenzene	86 %

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

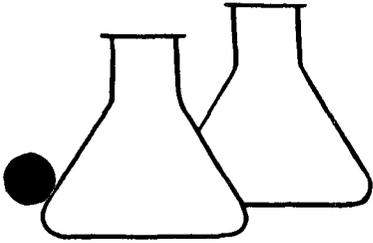
Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

ND - Parameter not detected at the stated detection limit.

Comments: Baca GC "A" #1A Blow/Sep C4961

Tony Tristano
Analyst

Morris D. Young
Review



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EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Amoco	Project #:	92140
Sample ID:	2 SWS @ 2'	Date Sampled:	04-01-94
Laboratory Number:	7139	Date Received:	04-04-94
Sample Matrix:	Soil	Date Analyzed:	04-08-94
Preservative:	Cool	Date Reported:	04-08-94
Condition:	Cool & Intact	Analysis Needed:	TPH

Parameter -----	Concentration (mg/kg) -----	Det. Limit (mg/kg) -----
Total Petroleum Hydrocarbons	ND	20.0

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: Baca GC "A" #1A Blow/Sep Pit C4961

Tony Tristano
Analyst

Marion D. Young
Review

