



703 South Main Street, Suite 15 • Cottonwood Arizona 86326
(602) 639-0044 • Fax (602) 639-0146 • Toll Free 1 (800) 786-USTM

ATEX GAS INC. / ATC REALTY

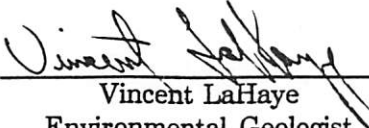
STATUS REPORT

ISLETA/RIO BRAVO SITE
3501 ISLETA BOULEVARD SW
ALBUQUERQUE, NEW MEXICO

RECEIVED
APR 01 1992
UST-Pgm

USTank Management Inc., Cottonwood, Arizona

March 1992



Vincent LaHaye
Environmental Geologist

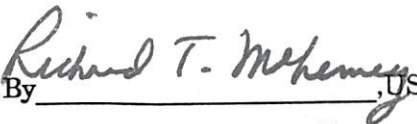
Reviewed By  USTM

TABLE OF CONTENTS

1.0	INTRODUCTION
2.0	MONITORING DATA
2.1	GROUNDWATER DISPARGING VAPOR EXTRACTION SYSTEM
2.2	HYDROLOGIC CHARACTERIZATION
2.3	ORGANIC WATER QUALITY
2.4	WELL ABANDONMENT
3.0	VAPOR MONITORING & PUMP RATES
4.0	DISCUSSION & RECOMMENDATIONS

FIGURES:

1	BASE MAP
2	POTENTIOMETRIC SURFACE PLOT
3	ISOCONCENTRATION: BTEX
4	ISOCONCENTRATION: MTBE

APPENDICES:

A	FREE PRODUCT INFORMATION
B	WATER DEPTH INFORMATION
C	SURVEY DATA
D	ORGANIC WATER QUALITY
E	TBD ENVIRONMENTAL LABORATORIES ANALYSIS REPORTS
F	SOIL BORING & WELL LOGS



ATEX - STATUS REPORT
ISLETA/RIO BRAVO SITE, 1 ISLETA BOULEVARD SW, ALBUQUERQUE, NM

1.0 INTRODUCTION

Aqueous sampling for the Isleta/Rio Bravo site was completed on 03-10-92. These data are compiled into this report.

Since the sampling performed in December 1991, two (2) additional wells (MW-37 and MW-29) were sampled to further define the groundwater plume. On 02-25-92, MW-29 was replaced as a result of its destruction during road construction.

Furthermore, 5 soil borings, SB-1 through SB-5, were drilled on-site around the gas pumps per the request of the New Mexico Environmental Department (NM ED). *WHERE?*

Also, per request of the NM ED, 3 new wells were installed and sampled, BB-1, BB-2, and BB-3. The soil boring and well logs are located in Appendix F. *SOILS WERE SATURATED WHAT ABOUT SB-5A? SA w/ MCA 1/16/92 ADNC.*

Evidence of a new release, which occurred during the period between January and August of 1990, is clearly demonstrated by the presence of MTBE compounds in monitor wells MW-2, MW-4, MW-5, MW-23, MW-26, MW-27, MW-34, MW-36, MW-38, BB-1, and BB-3. The presence of MTBE was not exhibited in aqueous samples taken prior to the 1990 release. The new release can be effectively contained with an addition to the existing remediation system. This addition should be positioned parallel to Isleta Boulevard between MW-2 and MW-5 and tied-in with the existing system. ** NO WAY!*

Charts, graphs, and isoconcentration maps were generated in order to evaluate the remedial system effectiveness.

2.0 MONITORING DATA

Construction activities have destroyed many of the monitor wells on properties adjacent to the ATEX Gas Inc. property; therefore, the sampling program had to be adjusted accordingly. Sampling to demonstrate the effectiveness of the remediation system was de-emphasized in favor of sampling to demonstrate contaminant extent and degree of contamination.

Of the original 60+ monitor wells completed in the area, 21 were located. Nine are not appropriate for monitor sampling; 4 are redundant to other existing wells; and, 2 wells are too far removed from the incident to be of value.

In addition to the monitor wells already in place, 2 new monitor wells, BB-1 and BB-2, respectively, were added on the east and west flanks of the contaminant plume along Pajarito Lateral Drainage Canal for better lateral definition of the plume and remediation process.

Monitor wells W-7, W-12, W-15, MW-15, MW-16, W-18, MW-19, MW-20, MW-30, and MW-31, located along Pajarito Lateral Drainage Canal, were destroyed by construction activities. These wells were plugged and abandoned during the week of January 20, 1992.



2.1 GROUNDWATER DISPARGING VAPOR EXTRACTION SYSTEM

The Groundwater Disparging Vapor Extraction System operated continuously during the first quarter of 1992.

A 2" FAP Westinghouse Pump System, installed in NMW-2 in March 1991 was inoperable upon installation. The necessary repairs have been made on the FAP and re-installation and recovery were initiated in January 1992. The FAP recovery system is actively removing free floating product from the water table under continuous operation at a rate of approximately 1.5 gallons per day. The pump will remain in operation until all free product has been removed.

2.2 HYDROLOGIC CHARACTERIZATION

Water level and free product measurements were completed as part of the quarterly monitoring program. Water level measurements were converted to water table elevations and a potentiometric surface was generated (Figure 2).

The horizontal extent of contamination is depicted by the isoconcentration maps, Figures 3 and 4. These isoconcentrations were generated from data obtained by laboratory analysis of aqueous samples from groundwater monitor wells on and adjacent to the site. The vertical extent of contamination is the top of the water table.

The potentiometric surface map (Figure 2) was constructed from water levels from monitor wells which were surveyed in relation to sea level. Survey data are tabulated in Appendix C. The direction of migration of groundwater in March 1992 for the site is to the south/southeast. Utilizing the Darcy equation which applies to laminar flow in porous media the velocity of groundwater can be calculated.

$$V = -K dh/dl$$

where

V = Average interstitial velocity of groundwater

-K = Hydraulic conductivity

h = Total head

l = Length along the total head

(Groundwater Hydrology, Second Edition, David Keith Todd, ©1980, Chapter 3)

In this case, the average interstitial velocity of groundwater across the site is in a range between 3.2 ft/yr and 15.52 ft/yr.

All groundwater monitor wells for the site are completed as per EIB/USTR Part 13 with the following:

- a) screen of appropriate length spanning the air/water interface;
- b) cement grout;
- c) bentonite seal; and,
- d) cap on the bottom of the well and locking cap on the top of the well.

The free product recovery system, amount of free product recovered to date, and soil treatment system have been addressed previously in Sections 2.0 and 2.1 of this report.

All aqueous sampling for the site is performed according to EIB/USTR Part 12, Section 1207, which allows for 48-hour notice prior to sampling. All samples are collected in 40 ml aqueous vials and preserved with concentrated HCl. The samples are collected allowing no headspace to prevent volatilization in the vial. Strict chain of custody procedures are followed.



ATEX - STATUS REPORT
ISLETA/RIO BRAVO SITE, 1 ISLETA BOULEVARD SW, ALBUQUERQUE, NM

2.3 ORGANIC WATER QUALITY

Aqueous sampling with analysis results for BTEX and MTBE are tabulated in Appendix D, Organic Water Quality. The TBD Environmental Laboratories analysis reports are located in Appendix E.

Due to the new release which occurred in 1990, an increased amount of BTEX and MTBE is observed in the March 1992 Organic Water Quality analysis report as compared to previous quarters.

2.4 WELL ABANDONMENT

The following is a list of monitor wells which were plugged and abandoned during February 1992.

W-7	W-18
W-12	MW-19
W-15	MW-20
MW-15	MW-30
MW-16	MW-31
	MW-32



3.0 VAPOR MONITORING & PUMP RATES

The exhaust stack emissions from the D2W Rotron Regenerative Blower and existing vapor extraction system, taken with an HNU Model PI-101 Photoionization Analyzer, equal 22 ppm with 0.3 ppm background.

The air velocity taken from the same port in the exhaust stack is approximately 21 cfm.

The velocity of air being pumped by the recovery well most distant from the blower is approximately 1.5 cfm.

These values give an indication that the GDVES is actively remediating the contaminants from the soil and groundwater.

4.0 DISCUSSION & RECOMMENDATIONS

Operation and maintenance of the volatilization system should continue as scheduled.

The free product recovery pump has been re-installed and included in the operation and maintenance schedule in the first quarter of 1992.

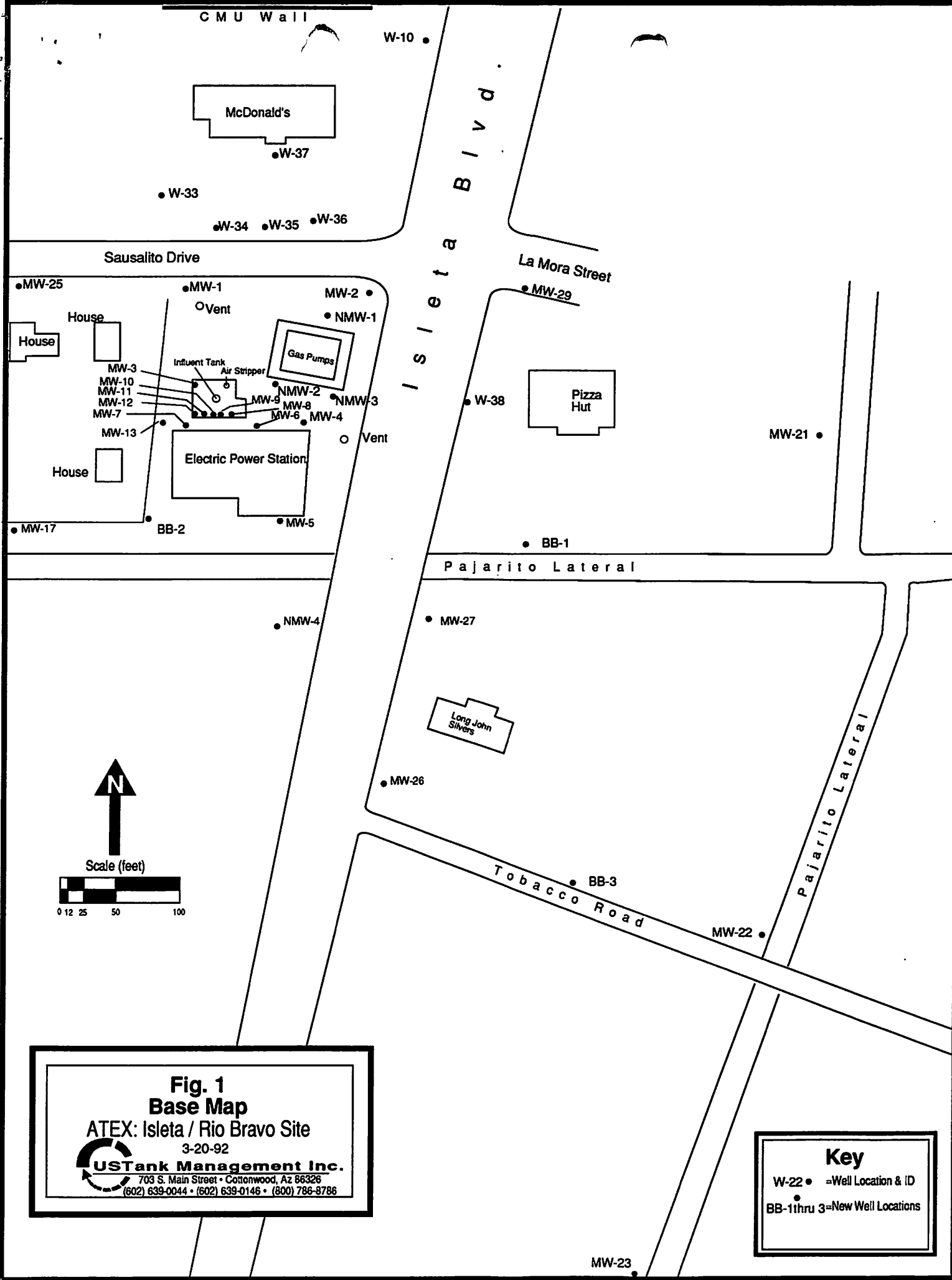
All monitor wells not in use or not needed were plugged and abandoned.



FIGURES

- 1 **BASE MAP**
- 2 **POTENTIOMETRIC SURFACE PLOT**
- 3 **ISOCONCENTRATION: BTEX**
- 4 **ISOCONCENTRATION: MTBE**





Scale (feet)



Fig. 1
Base Map
 ATEX: Isleta / Rio Bravo Site
 3-20-92
USTank Management Inc.
 703 S. Main Street • Cottonwood, Az 86326
 (602) 639-0044 • (602) 639-0146 • (800) 786-8786

Key
 W-22 • =Well Location & ID
 • =Well Location
 BB-1 thru 3 =New Well Locations

MW-23

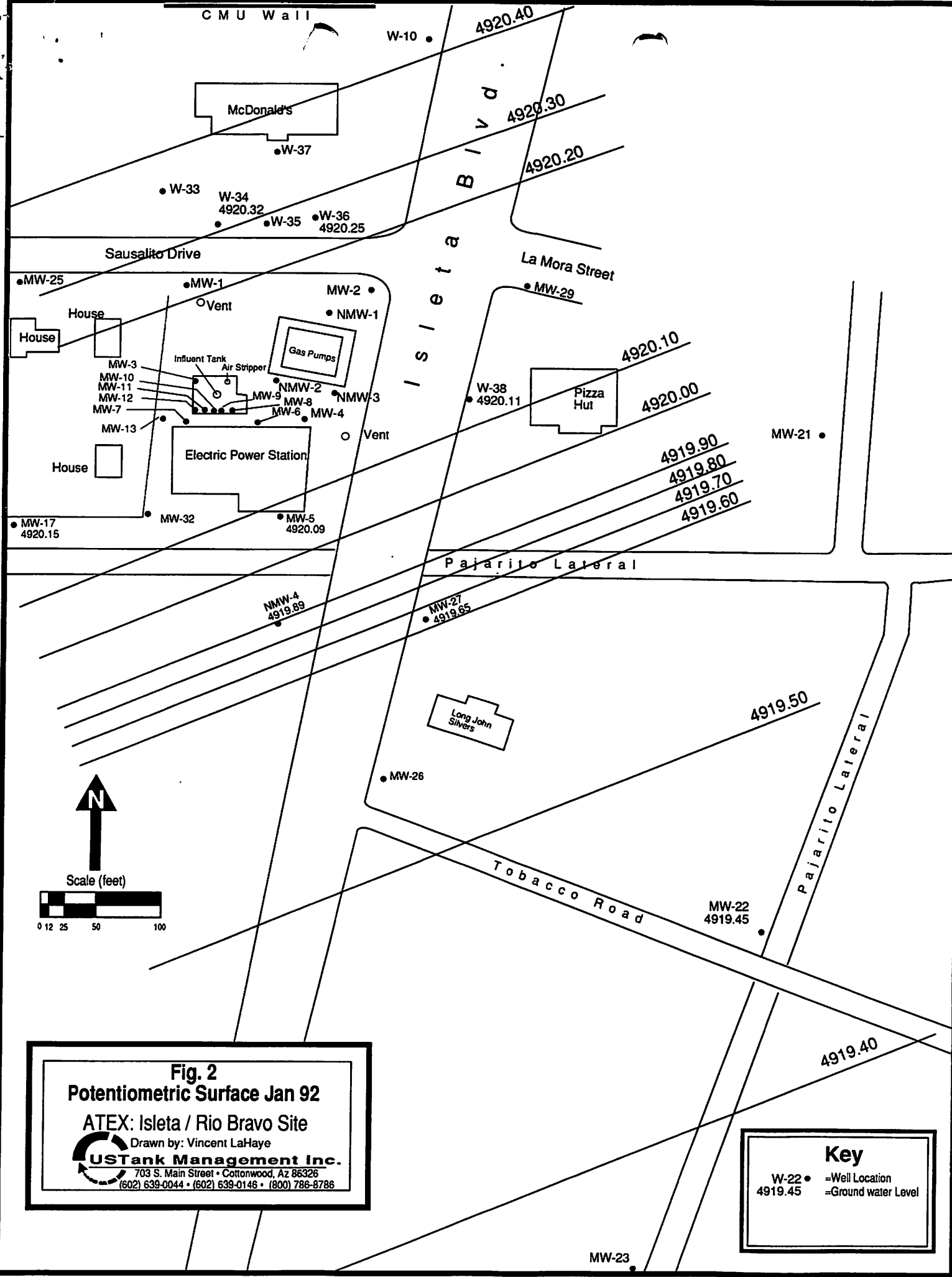
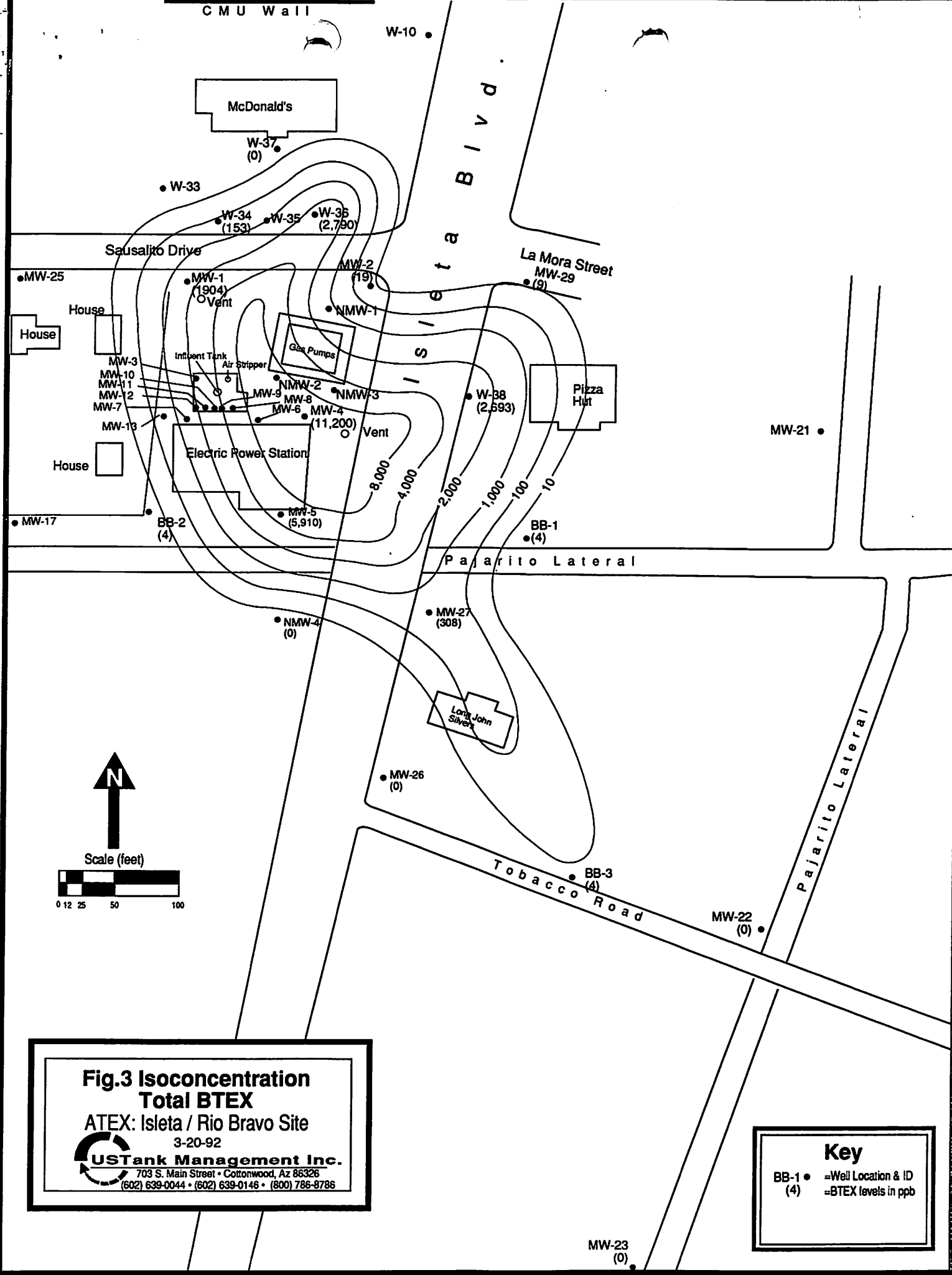


Fig. 2
Potentiometric Surface Jan 92
ATEX: Isleta / Rio Bravo Site
 Drawn by: Vincent LaHaye
USTank Management Inc.
 703 S. Main Street • Cottonwood, Az 86326
 (602) 639-0044 • (602) 639-0146 • (800) 786-8786

Key

- W-22 • =Well Location
- 4919.45 =Ground water Level



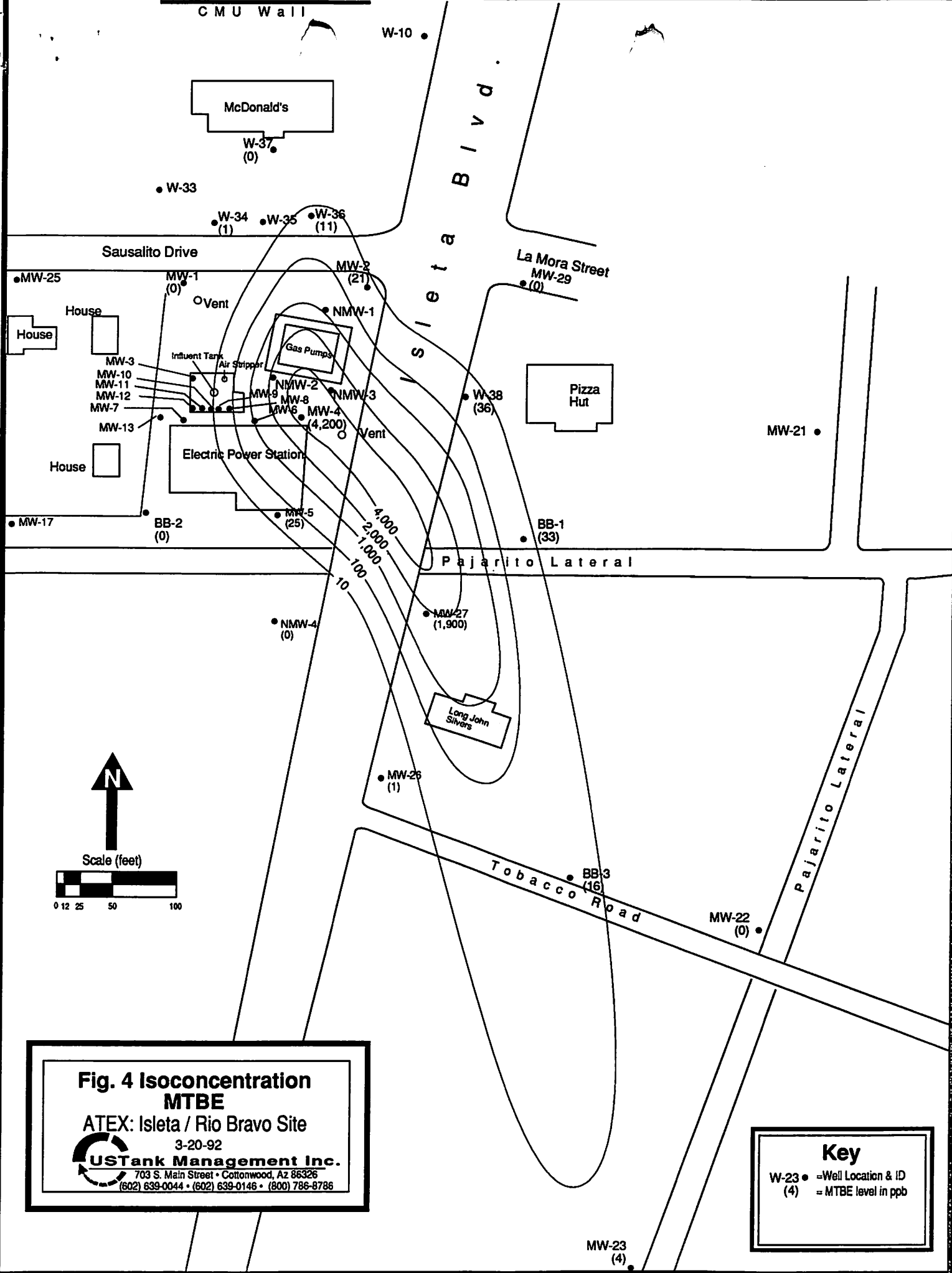
**Fig.3 Isoconcentration
Total BTEX**

ATEX: Isleta / Rio Bravo Site
3-20-92

USTank Management Inc.
703 S. Main Street • Cottonwood, Az 86326
(602) 639-0044 • (602) 639-0146 • (800) 786-8786

Key	
BB-1 ●	=Well Location & ID
(4)	=BTEX levels in ppb

MW-23
(0)



**Fig. 4 Isoconcentration
MTBE**

ATEX: Isleta / Rio Bravo Site

3-20-92



USTank Management Inc.
703 S. Main Street • Cottonwood, Az 86326
(602) 639-0044 • (602) 639-0146 • (800) 786-8786

Key

- W-23 ● = Well Location & ID
- (4) = MTBE level in ppb

MW-23
(4)

APPENDIX A

FREE PRODUCT INFORMATION

ATEX GAS INC. / ATC REALTY
ISLETA/RIO BRAVO SITE
ALBUQUERQUE, NEW MEXICO



FREE PRODUCT MEASUREMENTS

ATEX GAS INC., ISLETA/RIO BRAVO SITE, ALBUQUERQUE, NM

MARCH 1991

<u>HOLE</u>	<u>FREE PRODUCT (inches)</u>
NMW-1	2.75"
NMW-2	Recovery Well (FAP pump)
NMW-3	1.75"

JUNE 1991

<u>HOLE</u>	<u>FREE PRODUCT (inches)</u>
NMW-1	4.0"
NMW-2	Recovery Well FAP Pump
NMW-3	6.0"

JANUARY 1992

<u>HOLE</u>	<u>FREE PRODUCT (inches)</u>
NMW-1	2.0"
NMW-2	Recovery Well (FAP Pump)
NMW-3	2.5"

MARCH 1992

NO DATA COLLECTED.



APPENDIX B

WATER DEPTH INFORMATION

ATEX GAS INC. / ATC REALTY
ISLETA/RIO BRAVO SITE
ALBUQUERQUE, NEW MEXICO



DEPTHS TO WATER: OBSERVATION WELLS: STATUS REPORT

<u>ATEX GAS</u> <u>SITE</u>	<u>INC.: ISLETA/RIO BRAVO SITE, ALBUQUERQUE, NM</u> <u>DATE</u>	<u>TIME</u>	<u>DEPTH TO WATER (ft)</u>	<u>REMARKS</u>
MW-1	10-27-89		10.41	STRONG AROMA
MW-1	12-06-89		10.73	
MW-1	01-30-90		11.16	NO NOTICEABLE HC AROMA
MW-1	04-25-90		10.35	
MW-1	01-21-90		10.14	
MW-1	04-17-91		9.55	NO ODOR
MW-1	07-18-91		8.58	WATER CLEAN, NO ODOR
MW-1	12-30-91		9.95	CLEAR, NO SUSPENDED SOLIDS; SLIGHT AROMA
MW-1	03-10-92		10.23	CLEAR COLOR; STRONG HC ODOR
MW-2	10-27-89		10.71	QUESTIONABLE AROMA
MW-2	12-06-89		11.04	
MW-2	12-30-91		11.96	CLOUDY, STRONG HC AROMA
MW-2	03-10-92		12.44	CLOUDY, SUSPENDED SOLIDS, STRONG HC ODOR
MW-3	10-27-89		9.96	
MW-3	12-06-89		10.26	
MW-3	01-30-90		10.68	NO NOTICEABLE HC AROMA
MW-3	04-25-90		9.84	
MW-3	05-21-90		9.63	
MW-3	01-08-91		10.583	
MW-3	04-04-91			SLIGHT ODOR
MW-3	07-18-91		9.12	STRONG ODOR
MW-4	10-27-89		11.52	
MW-4	01-30-90		12.18	
MW-4	05-21-90		11.04	
MW-4	07-19-91		11.95	
MW-4	12-30-91		12.66	CLOUDY, MODERATE HC AROMA
MW-4	03-10-92		13.14	CLOUDY, SUSPENDED SOLIDS, STRONG HC ODOR
MW-5	01-30-90		11.70	MILD HC AROMA
MW-5	04-25-90		10.72	
MW-5	05-21-90		10.48	
MW-5	04-04-91			NO ODOR
MW-5	07-19-91		11.43	WATER CLEAN, MILD HC ODOR
MW-5	12-30-91		12.17	CLOUDY, MODERATE HC AROMA
MW-5	03-10-92		12.67	CLEAR COLOR, STRONG HC ODOR
MW-7	05-21-90		8.61	
MW-10	10-27-89		9.29	
MW-10	12-06-89		9.49	

<u>ATEX GAS INC. : ISLETA/RIO BRAVO SITE, ALBUQUERQUE, NM</u>	<u>SITE</u>	<u>DATE</u>	<u>TIME</u>	<u>DEPTH TO WATER (ft)</u>	<u>REMARKS</u>
MW-11		12-06-89			CLOGGED
MW-12		10-27-89		8.92	
MW-12		12-06-89		9.97	
MW-13		10-27-89		8.87	
MW-13		12-06-89		9.18	
MW-14		10-27-89		7.74	
MW-14		12-06-89			WASTED BY TACO BELL CONSTRUCTION CREW
MW-15		12-06-89			WASTED
MW-16		10-27-89		10.75	
MW-16		12-06-89		11.22	
MW-17		10-27-89		11.82	
MW-17		12-06-89		12.07	
MW-17		12-30-91		12.90	
MW-18		10-27-89		9.39	
MW-18		12-06-89		9.86	
MW-18		01-30-90		10.48	NO NOTICEABLE HC AROMA
MW-18		05-21-90		9.90	
MW-18		04-04-91			WELL P&A
MW-19		10-27-89			BURIED
MW-19		12-06-89			BURIED
MW-20		10-27-89		8.97	
MW-20		12-06-89		9.67	
MW-21		10-27-89		8.84	
MW-21		12-06-89		9.31	
MW-21		03-01-90		9.86	TEMP. 17.4C; NO NOTICEABLE HYDROCARBON AROMA
MW-21		12-30-91		9.71	
MW-22		10-27-89		8.22	MILKY COLORED H2O
MW-22		12-06-89		8.65	
MW-22		03-01-90		9.18	TEMP. 14.1C; NO NOTICEABLE HYDROCARBON AROMA
MW-22		12-30-91		9.05	CLOUDY, NO HC AROMA
MW-22		03-10-92		10.00	CLEAR COLOR, NO HC ODOR

<u>SITE</u>	<u>DATE</u>	<u>DEPTH TO WATER (ft)</u>	<u>REMARKS</u>
MW-23	10-27-89	9.23	
MW-23	12-06-89	9.62	
MW-23	03-01-90	10.16	TEMP. 14.6C; NO NOTICEABLE HYDROCARBON AROMA
MW-23	12-30-91	9.53	STRONG HC AROMA WITH 1ST BAILER; AFTER REMOVING 5 GALLONS FROM WELL, THE AROMA DIMINISHED; NEEDS NEW MANHOLE COVER.
MW-23	03-10-92	10.92	CLEAR COLOR, NO HC ODOR
MW-24	12-06-89		LOST
MW-25	12-06-89		PLUGGED
MW-26	10-27-89	7.76	
MW-26	12-06-89	8.20	
MW-26	01-30-90	8.57	NO NOTICEABLE HC AROMA
MW-26	03-01-90	8.72	TEMP. 15.9C; SLIGHT HYDROCARBON AROMA
MW-26	04-25-90	7.70	QUESTIONABLE HYDROCARBON AROMA
MW-26	05-21-90	7.45	
MW-26	06-18-91		SPLIT SAMPLE AEBD
MW-26	12-30-91	9.03	CLOUDY, SLIGHT HC AROMA
MW-26	03-10-92	8.96	CLEAR COLOR, SEWER ODOR, NO HC ODOR
MW-27	10-27-89	7.87	
MW-27	12-06-89	8.30	
MW-27	01-30-90	8.69	NO NOTICEABLE HC AROMA
MW-27	03-01-90	8.84	TEMP. 16.6C; SLIGHT HYDROCARBON AROMA
MW-27	04-25-90	7.71	
MW-27	05-21-90	7.46	
MW-27	06-18-91		SPLIT SAMPLE AEBD
MW-27	12-30-91	9.04	CLOUDY, SLIGHT HC AROMA
MW-27	03-10-92	8.39	CLEAR COLOR, SEWER ODOR, NO HC ODOR
MW-28	10-27-89	7.49	
MW-28	12-06-89		BURIED BY TACO BELL CONSTRUCTION CREW
MW-29	10-27-89	7.82	
MW-29	12-06-89	-7.5	
MW-29	03-01-90	-7.5	
MW-29	01-08-91		NO DEPTH
MW-29	04-04-91		NO WATER, BAILOR TURNED BLACK
MW-29	07-19-91		RECOMMEND P&A WELL, WELL CASING BLACK
MW-30	10-27-89	8.91	
MW-30	12-06-89	9.35	
MW-31	10-26-89		WASTED
MW-31	12-06-89		WASTED

<u>ATKINS GAS INC. ISLETA/RIO BRAVO S, ALBUQUERQUE, NM</u>	<u>SITE</u>	<u>DATE</u>	<u>TIME</u>	<u>DEPTH TO WATER (ft)</u>	<u>REMARKS</u>
	W-35	04-17-91		8.70	NO ODOR
	W-35	07-19-91		7.78	WATER CLEAN, MILD ODOR
	W-36	12-06-89		8.09	
	W-36	01-30-90		8.51	MILD AROMA
	W-36	05-21-90		7.52	
	W-36	01-08-91		8.552	
	W-36	04-17-91		8.84	NO ODOR, WATER BLACK
	W-36	07-19-91		7.93	WATER CLEAN, MILD HC ODOR
	W-36	03-10-92		8.95	CLOUDY, SUSPENDED SOLIDS, SLIGHT HC ODOR
	W-37	12-06-89		9.02	
	W-37	04-17-91		9.83	NO ODOR
	W-37	03-10-92		10.39	CLEAR COLOR, NO ODOR
	W-38	01-30-90		8.73	LIGHT SHEEN
	W-38	03-01-90		8.89	TEMP. 17.3C; SLIGHT HYDROCARBON AROMA
	W-38	05-21-90		7.58	
	W-38	01-08-91		8.828	
	W-38	04-17-91		8.93	NO HC ODOR, SEWER SMELL
	W-38	07-17-91			WATER CLEAN, MILD AROMA
	NMW-1	12-30-91			2.00" FREE PRODUCT; NEEDS NEW MANHOLE COVER.
	NMW-3	12-30-91			2.50" FREE PRODUCT
	NMW-4	04-17-91		10.58	NO ODOR
	NMW-4	07-17-91		10.18	NO ODOR, WATER CLEAN
	NMW-4	12-30-91		10.88	CLOUDY, NO HC AROMA
	NMW-4	03-10-92		11.30	CLEAR COLOR, SLIGHT HC ODOR
	NMW-29	03-10-92		10.67	CLEAR COLOR, NO ODOR
	BB-1	03-10-92		11.67	BROWN COLOR, SLIGHT HC ODOR, SUSPENDED SOLIDS, REMOVED 25 GAL. H2O
	BB-2	03-10-92		12.00	BROWN COLOR, NO ODOR, REMOVED 25 GAL. H2O
	BB-3	03-10-92		8.54	CLEAR COLOR, SEWER ODOR

APPENDIX C

SURVEY DATA

ATEX GAS INC. / ATC REALTY
ISLETA/RIO BRAVO SITE
ALBUQUERQUE, NEW MEXICO



SURVEY DATA

ATEX GAS INC., ISLETA/RIO BRAVO SITE, ALBUQUERQUE, NM

03-01-90:

<u>WELL ID</u>	<u>STARTING ELEVATION</u>	<u>SEA LEVEL ELEVATION</u>
W-12	100.00	4931.06
W-15	99.11	4930.17
NMW-4	99.71	4930.77
MW-5	101.20	4932.26
MW-17	101.99	4933.05
NMW-1	99.08	4930.14
W-36	98.38	4929.44
W-35	98.20	4929.26
W-34	97.96	4929.02
NMW-2	99.65	4930.71
NMW-3	99.82	4930.88
W-38	98.35	4929.41
MW-3	100.57	4931.63
MW-27	97.63	4928.69
MW-22	97.44	4928.50



APPENDIX D

ORGANIC WATER QUALITY

ATEX GAS INC. / ATC REALTY
ISLETA/RIO BRAVO SITE
ALBUQUERQUE, NEW MEXICO



**ORGANIC WATER QUALITY: STATUS REPORT
(PPB)**

ATEX GAS INC., ISLETA/RIO BRAVO SITE, ALBUQUERQUE, NM

WELL	DATE	LAB	B	T	E	X	KDC	KDB	MTBE	REMARKS
W-1	11-01-84	TR	20							LOST
W-2	10-31-84	TR	20							LOST
W-3	11-2-84	SLD	7							LOST
W-3	11-02-84	TR	20							LOST
W-4	11-02-84	SLD	8500							LOST
W-5	10-31-84	TR	20							LOST
W-6	11-01-84	TR	20							
W-6	11-02-84	SLD	ND							LOST
W-7	10-31-84	TR	300							
W-7	11-02-84	STATE	330.0							
W-7	01-15-87	WILSON	1500.0							
W-7	02-20-87	ROCKY	2600.0							
W-7	05-11-87	FOXES QR	1000.0							
W-7	12-21-87	ASG	1320.0	600.0		755.0				ND = 1
W-7	03-30-88	ASG	2745.0	6.2		1940.0				ND = 1
W-7	06-27-88	ASG	36.0	4.6		341.0				
W-7	08-16-88	ASG	49.0							
W-7	12-28-88		61.0	6.0	77.0	278.0				ND = 0.1
W-7	03-30-89	ASG	2.4	2.3	10.0	7.5				
W-7	06-27-89	ASG	9.6	4.0	165	81				

ORGANIC WATER QUALITY: STATUS REPORT

ATEX GAS INC., ISLETA/RIO BRAVO SITE, ALBUQUERQUE, NM

WELL	DATE	LAB	B	T	E	X	KDC	KDB	MTBE	REMARKS
W-12	10-31-84	TR	<10							
W-12	12-21-87		<1.0	330.0		143.0				ND = 1
W-12	03-30-88		<1.0	<1.0		<1.0				ND = 1
W-12	06-27-88		30.0	<1.0		<1.0				
W-12	08-16-88		<1.0							
W-12	08-15-88	ATI	<1	<1	<1	<1				
W-12	01-30-90	ASG	<1	<1	<1	<1				
W-12	03-23-90	ASG	<1	<1	<1	<1				
W-12	10-11-90	ATI	<0.5	<0.5	<0.5	<0.5			<0.5	
W-12	01-08-91	ASG	120	<1.0	<1.0	<1.0			22	
W-13	10-31-84	TR	100							LOST
W-14	11-02-84	SLD	2.9							LOST
W-15	12-21-87		<1.0	131.0		162.0				ND = 1
W-15	03-30-88		3.9	1.0		<1.0				ND = 1
W-15	08-15-89	ATI	<1	<1	<1	<1				
W-15	03-23-90	ASG	<1	<1	<1	<1				
W-15	10-11-90	ATI	<0.5	<0.5	<0.5	<0.5			<0.5	
W-15	01-08-91									LOST
W-32	08-29-90									SILTED, LOST
W-33	12-20-89	ASG	<1	5.1	<1	1.5				

ORGANIC WATER QUALITY: STATUS REPORT

ATKX GAS INC., ISLETA/RIO BRAVO SITE, ALBUQUERQUE, NM

WELL	DATE	LAB	B	T	E	X	EDC	EDB	MTBE	REMARKS
W-34	12-20-89	ASG	20	2810	1110	4320				
W-34	10-11-90	ATI	<25	550	400	1800			<25	
W-35	12-20-89	ASG	547	5020	1510	8820				
W-36	12-20-89	ASG	1360	7020	1330	7040				
W-36	01-30-90	ASG	230	1200	260	1200				
W-36	03-23-90	ASG	140	780	250	1100				
W-36	10-11-90	ATI	120	240	190	540			<25	
W-36	01-08-91	ASG	8.4	4.6	22	49			<1	
W-36	04-05-91	ASG	100	320	150	550			<100	
W-36	07-10-91	ASG	1000	3800	1100	4100			<100	
W-37	12-20-89	ASG	<1	7.3	<1	3.2				
W-38	01-30-90	ASG	600	720	620	2900				
W-38	03-23-90	ASG	560	220	270	1100				
W-38	10-11-90	ATI	1400	360	600	830			<25	
W-38	10-15-90	ATI	1400	360	600	830			<25.0	
W-38	01-08-91	ASG	1040	98	260	210			<50.0	
W-38	04-05-91	ASG	700	110	<100	240			<100	
W-38	07-10-91	ASG	730	410	570	3000			<100	

ORGANIC WATER QUALITY: STATUS REPORT

ATEX GAS INC., ISLETA/RIO BRAVO SITE, ALBUQUERQUE, NM

WELL	DATE	LAB	B	T	E	X	EDC	HDB	MTBE	REMARKS
MW-1	06-07-84	SLD	4600	6000	1400	6200				
MW-1	07-24-84	SLD	2400	4600	800	3720				
MW-1	11-01-84	SLD	8000	8000	1500	7500				
MW-1	11-04-86	WILSON	2300.0							
MW-1	02-20-87	ROCKY	2600.0							
MW-1	05-11-87	FOXES QR	540.0							
MW-1	08-31-87	ANALYTICAL	1600.0							
MW-1	12-21-87	ASG	2040.0	1480.0	1214.0					ND = 1
MW-1	03-30-88	ASG	1880.0	750.0		1880.0				ND = 1
MW-1	06-27-88	ASG	773.0	199.0		638.0				
MW-1	08-16-88	ASG	1830.0							
MW-1	12-28-88		1160.0	1310.0	256.0	3850.0				ND = .1
MW-1	03-09-89	ASG	1040.0	510.0	<50.0	2240.0				
MW-1	04-17-89	ASG	3300.0							
MW-1	06-27-89	ASG	68	284	439	1130				
MW-1	08-15-89	ATI	20	90	75	360				
MW-1	10-27-89	ASG	96	181	329	767				
MW-1	12-20-89	ASG	4.2	46	49	216				
MW-1	01-30-90	ASG	5.4	18	22	49				
MW-1	03-23-90	ASG	10	24	66	150				
MW-1	04-25-90	ASG	2.8	8.6	23	45				
MW-1	05-21-90		5.2	3.5	<1	15				
MW-1	01-20-91									CASING PARTED, LOST
MW-1	04-04-91	ASG	<1.0	2.1	<1.0	2.8			<1.0	RE-DRILLED 03-91
MW-1	07-10-91	ASG	<1.0	<1.0	<1.0	<1.0			<1.0	
MW-1	01-07-92	TBD	10	30	410	1510			BRL	
MW-1	03-10-92	TBD	4	30	430	1440			BRL	

ORGANIC WATER QUALITY: STATUS REPORT

ATEX GAS INC., ISLETA/RIO BRAVO SITE, ALBUQUERQUE, NM

WELL	DATE	LAB	B	T	E	X	EDC	EDB	MTBE	REMARKS
MW-2	11-29-82	SLD	3477	2602	1348	2753				
MW-2	06-07-84	SLD	1800	170	240	110				
MW-2	07-24-84	SLD	1800	130	24	95				
MW-2	11-01-84	SLD	1200	70		68				
MW-2	12-21-87		1900.0	78.0		316.0				ND = 1
MW-2	03-30-88		618.0	<1.0		<1.0				ND = 1
MW-2	01-07-92	TBD	17	BRL	8	2			34	
MW-2	03-10-92	TBD	13	BRL	5	1			21	
MW-3	11-29-82	SLD	23216	10043	2526	7592				
MW-3	06-07-84	SLD	41000	66000	7600	51000				
MW-3	07-24-84	SLD	17500	22400	2100	10200				
MW-3	11-01-84	SLD	24000	25000	3400	13900				
MW-3	06-10-85	FOXS QR	3800.0							
MW-3	05-05-86	STATE	3800.0							
MW-3	01-15-87	WILSON	10000.0							
MW-3	02-20-87	ROCKY	16000.0							
MW-3	08-31-87	ANALYTICAL	12100.0							
MW-3	12-21-87	ASG	15350.0	19390.0		19530.0				ND = 1
MW-3	03-30-88	ASG	17130.0	12150.0		19606.0				ND = 1
MW-3	06-27-88	ASG	9530.0	11900.0		15600.0				
MW-3	08-16-88	ASG	5260.0							
MW-3	12-28-88		5760.0	10200.0	1210.0	18000.0				ND = .1
MW-3	03-09-89	ASG	2680.0	6130.0	1530.0	10500.0				
MW-3	04-17-89	ASG	2370.0							
MW-3	06-27-89	ASG	1180	1480	994	4750				
MW-3	08-15-89	ATI	1170	730	850	3250				

ORGANIC WATER QUALITY: STATUS REPORT

AT&T GAS INC., ISLETA/RIO BRAVO SITE, ALBUQUERQUE, NM

WELL	DATE	LAB	B	T	E	X	KDC	KDB	MTBE	REMARKS
MW-3	10-27-89	ASG	1990	4070	1430	4560				
MW-3	12-20-89	ASG	754	1430	885	5060				
MW-3	01-30-90	ASG	610	1300	660	3600				
MW-3	03-23-90	ASG	520	1500	710	3400				
MW-3	04-25-90	ASG	270	870	440	2200				
MW-3	05-21-90		420	1300	590	3000				
MW-3	10-11-90	ATI	1900	7800	1900	1100			<25	
MW-3	01-08-91	ASG	920	3310	950	4800			<100	
MW-3	04-05-91	ASG	850	2000	1000	5000			<50	STRONG ODOR
MW-4	06-07-84	SLD	1100	20	250	205				
MW-4	07-24-84	SLD	3000	ND	ND	ND				
MW-4	10-31-84	TR	0.4							
MW-4	11-01-84	SLD	ND	ND	ND	ND				
MW-4	12-27-87		<1.0	<1.0		<1.0				ND = 1
MW-4	03-30-88		83.1	<1.0		<1.0				ND = 1
MW-4	08-15-89	ATI	2030	6	6	50				
MW-4	01-30-90	ASG	420	1.5	1.9	2.2				
MW-4	03-23-90	ASG	570	<5	<5	<5				
MW-4	10-11-90	ATI	5.7	<0.5	<0.5	<0.5			260	
MW-4	01-07-92	TBD	8800	820	400	1110			550	
MW-4	03-10-92	TBD	5700	1800	1000	2700			4200	
MW-5	07-24-84	SLD	3100	3700	360	1650				
MW-5	10-31-84	TR	3000							
MW-5	10-31-84	SLD	1250	760	130	990				
MW-5	01-15-87	WILSON	3800.0							

ORGANIC WATER QUALITY: STATUS REPORT

ATEX GAS INC., ISLETA/RIO BRAVO SITE, ALBUQUERQUE, NM

WELL	DATE	LAB	B	T	E	X	EDC	EDB	MTBE	REMARKS
MW-21	03-30-88		<1.0	<1.0		<1.0				ND = 1
MW-22	03-30-88		<1.0	<1.0		<1.0				ND = 1
MW-22	01-07-92	TBD	BRL	BRL	BRL	BRL			BRL	
MW-22	03-10-92	TBD	BRL	BRL	BRL	BRL			BRL	
MW-23	03-30-88		<1.0	<1.0		<1.0				ND = 1
MW-23	01-07-92	TBD	BRL	BRL	BRL	BRL			BRL	
MW-23	03-10-92	TBD	BRL	BRL	BRL	BRL			4	
MW-24	06-27-88		7250.0	17500.0		17900.0				
MW-24	08-16-88		8660.0							
MW-24	-----89									LOST
MW-25	06-26-88		23.0	<1.0		<1.0				
MW-25	08-16-88		<1.0							
MW-25	-----89									PLUGGED
MW-26	05-13-88		<1.0	<1.0		<1.0				
MW-26	06-27-88		<1.0	<1.0		<1.0				
MW-26	08-16-88		<1.0							
MW-26	08-15-89	ATI	140	9	160	<10				
MW-26	09-06-89	ASG	3.1	3.1	<1	<1				
MW-26	12-20-89	ASG	<1	3.6	<1	3.3				
MW-26	01-30-90	ASG	<1	3.8	<1	<1				
MW-26	03-23-90	ASG	20	3.5	<1	1.9				
MW-26	04-25-90	ASG	67	2.6	<1	2.5				

ORGANIC WATER QUALITY: STATUS REPORT

ATEX GAS INC., ISLETA/RIO BRAVO SITE, ALBUQUERQUE, NM

WELL	DATE	LAB	B	T	E	X	EDC	EDB	MTBE	REMARKS
MW-29	06-27-88		<1.0	1.9		<1.0				
MW-29	08-16-88		<1.0							
MW-29	-----89									PLUGGED
MW-29	03-10-92	TBD	1	8	BRL	BRL			BRL	
MW-30	08-16-88		<1.0							
MW-30	-----91									LOST
MW-31	08-16-88		7.2							
MW-31	-----91									LOST
MW-32	08-15-89	ATI	<1	<1	<1	<1				
MW-32	01-30-90	ASG	<1	<1	<1	<1				
MW-32	03-23-90	ASG	<1	<1	<1	<1				
MW-32	-----89									PLUGGED
MW-34	01-07-92	TBD	BRL	100	160	320			2	
MW-34	03-10-92	TBD	2	14	57	80			1	
MW-36	01-07-92	TBD	320	1600	530	1640			7	
MW-36	03-10-92	TBD	210	930	380	1270			11	
MW-37	03-10-92	TBD	BRL	BRL	BRL	BRL			BRL	
MW-38	01-07-92	TBD	1100	270	310	1100			39	
MW-38	03-10-92	TBD	1800	43	220	630			36	

ORGANIC WATER QUALITY: STATUS REPORT

ATEX GAS INC., ISLETA/RIO BRAVO SITE, ALBUQUERQUE, NM

WELL	DATE	LAB	B	T	E	X	EDC	EDB	MTBE	REMARKS
NMW-1	09-18-90	ATL	130000	129000	2500	13100			2500	
NMW-1	01-08-91	ASG	15000	6520	1460	6040			3740	
NMW-1	04-04-91									FREE PRODUCT
NMW-1	07-19-91									FREE PRODUCT
NMW-2	09-18-90	ATL	5500	4800	1000	7900			5600	
NMW-2	01-08-91									FREE PRODUCT
NMW-2	04-04-91									RECOVERY WELL
NMW-2	07-19-91									RECOVERY WELL
NMW-3	09-18-90	ATL	24000	9000	1600	8000			7000	
NMW-3	01-08-91									FREE PRODUCT
NMW-3	04-04-91									FREE PRODUCT
NMW-3	07-19-91									FREE PRODUCT
NMW-4	09-18-90	ATL	<0.5	<0.5	<0.5	<0.5			<0.5	
NMW-4	01-08-91	ASG	<1.0	1.4	<1.0	1.0			<1	
NMW-4	04-04-91	ASG	<1.0	1.9	<1.0	2.4			<1.0	
NMW-4	07-22-91	ASG	<1.0	<1.0	<1.0	<1.0			<1.0	
NMW-4	01-07-92	TBD	BRL	BRL	BRL	BRL			BRL	
NMW-4	03-10-92	TBD	BRL	BRL	BRL	BRL			BRL	
BB-1	03-10-92	TBD	2	1	BRL	1			33	
BB-2	03-10-92	TBD	1	2	BRL	1			BRL	
BB-3	03-10-92	TBD	BRL	4	BRL	BRL			16	

ATEX - STATUS REPORT
ISLETA/RIO BRAVO SITE, 3. ISLETA BOULEVARD SW, ALBUQUERQUE, NM

APPENDIX E

TBD ENVIRONMENTAL LABORATORIES ANALYSIS REPORTS

ATEX GAS INC. / ATC REALTY
ISLETA/RIO BRAVO SITE
ALBUQUERQUE, NEW MEXICO





tbd environmental laboratories
 2261 Federal Avenue
 Los Angeles, California 90064-1403

Telephone: (310) 478-4050 Fax: (310) 478-6604

Analytical Laboratory Report MTBE/BTEX - Volatile Organics by GC

Job No: 920311A
 Received: 3/11/92
 Prep: 3/12/92
 Analyzed: 3/12/92
 Method: PAT
 By: NG

Client: US Tank Management
 Project: Rio Bravo/ISLETA
 Field: MW - 1
 Matrix: Aqueous
 Batch: P205/PC022
 Lab ID: 920311A-20

Compound	Conc. Found		Percent Recovery			Reporting Limit	Units
	Sample	Blank	Spike 1	Spike 2	LCS		
	.59R	.42R	0311A-18 .61R	0311A-18 .65R	.60R		
Benzene	4	0.32	87	78	85	1 ug/L	
Toluene	30	0.80	85	79	84	1 ug/L	
Chlorobenzene	BRL	0.61	95	91	93	1 ug/L	
Ethylbenzene	430	0.30	91	86	90	1 ug/L	
Xylene (para + meta)	1200	0.80	91	85	90	5 ug/L	
Xylene (ortho)	240	0.45	93	87	92	1 ug/L	
1,3-Dichlorobenzene	BRL	0.27	97	96	94	1 ug/L	
1,4-Dichlorobenzene	BRL	0.60	97	90	95	1 ug/L	
1,2-Dichlorobenzene	BRL	0.22	99	95	96	1 ug/L	
Tert Methyl Butyl Ether	BRL	ND	93	91	91	1 ug/L	

Notes: LCS - Laboratory Control Standard, ND - Not Detected, BRL - Below Reporting Limit

Comments: Reporting limit for m,p-Xylene elevated due to matrix interferences requiring dilution.

Approved:

Robert P. [Signature]
 Laboratory Director Date 3/18/92

[Signature]
 QA Coordinator Date 3/18/92



Analytical Laboratory Report MTBE/BTEX - Volatile Organics by GC

Job No: 920311A Client: US Tank Management
 Received: 3/11/92 Project: Rio Bravo/ISLETA
 Prep: 3/12/92 Field: MW - 2
 Analyzed: 3/12/92 Matrix: Aqueous
 Method: PAT Batch: P205/PC022
 By: NG Lab ID: 920311A-18

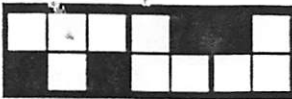
Compound	Conc. Found		Percent Recovery			Reporting Limit	Units
	Sample	Blank	Spike 1	Spike 2	LCS		
	.58R	.42R	0311A-18 .61R	0311A-18 .65R	.60R		
Benzene	13	0.32	87	78	85	1	ug/L
Toluene	BRL	0.80	85	79	84	1	ug/L
Chlorobenzene	BRL	0.61	95	91	93	1	ug/L
Ethylbenzene	5	0.30	91	86	90	1	ug/L
Xylene (para + meta)	1	0.80	91	85	90	1	ug/L
Xylene (ortho)	BRL	0.45	93	87	92	1	ug/L
1,3-Dichlorobenzene	BRL	0.27	97	96	94	1	ug/L
1,4-Dichlorobenzene	BRL	0.60	97	90	95	1	ug/L
1,2-Dichlorobenzene	BRL	0.22	99	95	96	1	ug/L
Tert Methyl Butyl Ether	21	ND	93	91	91	1	ug/L

Notes: LCS - Laboratory Control Standard, ND - Not Detected, BRL - Below Reporting Limit

Comments:

Approved: Robert Rosen 3/18/92
 Laboratory Director Date

John Starnes 3/18/92
 QA Coordinator Date



Analytical Laboratory Report
MTBE/BTEX - Volatile Organics by GC

Job No: 920311A
 Received: 3/11/92
 Prep: 3/15/92
 Analyzed: 3/15/92
 Method: PAT
 By: NG

Client: US Tank Management
 Project: Rio Bravo/ISLETA
 Field: MW - 4
 Matrix: Aqueous
 Batch: P206/PC022
 Lab ID: 920311A-15

Compound	Conc. Found		Percent Recovery			Reporting Limit	Units
	Sample	Blank	Spike 1	Spike 2	LCS		
	.15R	.11R	0311A-19 .13R	0311A-19 .24R	.12R		
Benzene	5700	0.18	91	79	99	18	ug/L
Toluene	1800	0.44	93	80	98	13	ug/L
Chlorobenzene	BRL	ND	94	83	101	14	ug/L
Ethylbenzene	1000	0.37	93	80	100	20	ug/L
Xylene (para + meta)	2000	0.76	92	81	99	45	ug/L
Xylene (ortho)	700	0.36	93	82	100	17	ug/L
1,3-Dichlorobenzene	BRL	0.34	94	84	100	10	ug/L
1,4-Dichlorobenzene	BRL	0.55	95	86	101	27	ug/L
1,2-Dichlorobenzene	BRL	ND	95	88	101	9	ug/L
Tert Methyl Butyl Ether	4200	ND	94	100	101	19	ug/L

Notes: LCS - Laboratory Control Standard, ND - Not Detected, BRL - Below Reporting Limit

Comments: Reporting limits elevated due to matrix interferences requiring dilution.

Approved:


 Laboratory Director Date 3/18/92


 QA Coordinator Date 3/18/92



Analytical Laboratory Report
MTBE/BTEX - Volatile Organics by GC

Job No: 920311A
 Received: 3/11/92
 Prep: 3/15/92
 Analyzed: 3/15/92
 Method: PAT
 By: NG

Client: US Tank Management
 Project: Rio Bravo/ISLETA
 Field: NMW - 4
 Matrix: Aqueous
 Batch: P206/PC022
 Lab ID: 920311A-19

Compound	Conc. Found		Percent Recovery			Reporting Limit	Units
	Sample	Blank	Spike 1	Spike 2	LCS		
	.25R	.11R	0311A-19 .13R	0311A-19 .24R	.12R		
Benzene	BRL	0.18	91	79	99	1	ug/L
Toluene	BRL	0.44	93	80	98	1	ug/L
Chlorobenzene	BRL	ND	94	83	101	1	ug/L
Ethylbenzene	BRL	0.37	93	80	100	1	ug/L
Xylene (para + meta)	BRL	0.76	92	81	99	1	ug/L
Xylene (ortho)	BRL	0.36	93	82	100	1	ug/L
1,3-Dichlorobenzene	BRL	0.34	94	84	100	1	ug/L
1,4-Dichlorobenzene	BRL	0.55	95	86	101	1	ug/L
1,2-Dichlorobenzene	BRL	ND	95	88	101	1	ug/L
Tert Methyl Butyl Ether	BRL	ND	94	100	101	1	ug/L

Notes: LCS - Laboratory Control Standard, ND - Not Detected, BRL - Below Reporting Limit

Comments:

Approved:

Robert P. ...
 Laboratory Director

3/18/92
 Date

[Signature]
 QA Coordinator

3/18/92
 Date



Analytical Laboratory Report
MTBE/BTEX - Volatile Organics by GC

Job No: 920311A
 Received: 3/11/92
 Prep: 3/12/92
 Analyzed: 3/12/92
 Method: PAT
 By: NG

Client: US Tank Management
 Project: Rio Bravo/ISLETA
 Field: MW - 5
 Matrix: Aqueous
 Batch: P205/PC022
 Lab ID: 920311A-16

Compound	Conc. Found		Percent Recovery			Reporting Limit	Units
	Sample	Blank	Spike 1	Spike 2	LCS		
	.57R	.42R	0311A-18 .61R	0311A-18 .65R	.60R		
Benzene	980	0.32	87	78	85	4	ug/L
Toluene	2000	0.80	85	79	84	3	ug/L
Chlorobenzene	BRL	0.61	95	91	93	2	ug/L
Ethylbenzene	490	0.30	91	86	90	4	ug/L
Xylene (para + meta)	1600	0.80	91	85	90	9	ug/L
Xylene (ortho)	840	0.45	93	87	92	3	ug/L
1,3-Dichlorobenzene	BRL	0.27	97	96	94	2	ug/L
1,4-Dichlorobenzene	BRL	0.60	97	90	95	5	ug/L
1,2-Dichlorobenzene	BRL	0.22	99	95	96	2	ug/L
Tert Methyl Butyl Ether	25	ND	93	91	91	4	ug/L

Notes: LCS - Laboratory Control Standard, ND - Not Detected, BRL - Below Reporting Limit

Comments: Reporting limit elevated due to matrix interferences requiring dilution.

Approved:

Robert P. ...
 Laboratory Director Date 3/18/92

J. ...
 QA Coordinator Date 3/18/92



Analytical Laboratory Report
MTBE/BTEX - Volatile Organics by GC

Job No: 920311A
 Received: 3/11/92
 Prep: 3/15/92
 Analyzed: 3/15/92
 Method: PAT
 By: NG

Client: US Tank Management
 Project: Rio Bravo/ISLETA
 Field: MW - 22
 Matrix: Aqueous
 Batch: P206/PC022
 Lab ID: 920311A-11

Compound	Conc. Found		Percent Recovery			Reporting Limit	Units
	Sample	Blank	Spike 1	Spike 2	LCS		
	.17R	.11R	0311A-19 .13R	0311A-19 .24R	.12R		
Benzene	BRL	0.18	91	79	99	1	ug/L
Toluene	BRL	0.44	93	80	98	1	ug/L
Chlorobenzene	BRL	ND	94	83	101	1	ug/L
Ethylbenzene	BRL	0.37	93	80	100	1	ug/L
Xylene (para + meta)	BRL	0.76	92	81	99	1	ug/L
Xylene (ortho)	BRL	0.36	93	82	100	1	ug/L
1,3-Dichlorobenzene	BRL	0.34	94	84	100	1	ug/L
1,4-Dichlorobenzene	BRL	0.55	95	86	101	1	ug/L
1,2-Dichlorobenzene	BRL	ND	95	88	101	1	ug/L
Tert Methyl Butyl Ether	BRL	ND	94	100	101	1	ug/L

Notes: LCS - Laboratory Control Standard, ND - Not Detected, BRL - Below Reporting Limit

Comments:

Approved

Robert P. Pasa
 Laboratory Director

3/18/92
 Date

[Signature]
 QA Coordinator

3/18/92
 Date



Analytical Laboratory Report
MTBE/BTEX - Volatile Organics by GC

Job No: 920311A Client: US Tank Management
 Received: 3/11/92 Project: Rio Bravo/ISLETA
 Prep: 3/15/92 Field: MW - 23
 Analyzed: 3/15/92 Matrix: Aqueous
 Method: PAT Batch: P206/PC022
 By: NG Lab ID: 920311A-12

Compound	Conc. Found		Percent Recovery			Reporting Limit	Units
	Sample	Blank	Spike 1	Spike 2	LCS		
	.21R	.11R	0311A-19 .13R	0311A-19 .24R	.12R		
Benzene	BRL	0.18	91	79	99	1	ug/L
Toluene	BRL	0.44	93	80	98	1	ug/L
Chlorobenzene	BRL	ND	94	83	101	1	ug/L
Ethylbenzene	BRL	0.37	93	80	100	1	ug/L
Xylene (para + meta)	BRL	0.76	92	81	99	1	ug/L
Xylene (ortho)	BRL	0.36	93	82	100	1	ug/L
1,3-Dichlorobenzene	BRL	0.34	94	84	100	1	ug/L
1,4-Dichlorobenzene	BRL	0.55	95	86	101	1	ug/L
1,2-Dichlorobenzene	BRL	ND	95	88	101	1	ug/L
Tert Methyl Butyl Ether	4	ND	94	100	101	1	ug/L

Notes: LCS - Laboratory Control Standard, ND - Not Detected, BRL - Below Reporting Limit

Comments:

Approved: Robert P. Rosen 3/18/92
 Laboratory Director Date

[Signature] 3/18/92
 QA Coordinator Date



Analytical Laboratory Report
MTBE/BTEX - Volatile Organics by GC

Job No: 920311A
 Received: 3/11/92
 Prep: 3/16/92
 Analyzed: 3/16/92
 Method: PAT
 By: NG

Client: US Tank Management
 Project: Rio Bravo/ISLETA
 Field: MW - 26
 Matrix: Aqueous
 Batch: P207/PC022
 Lab ID: 920311A-13

Compound	Conc. Found		Percent Recovery			Reporting Limit	Units
	Sample	Blank	Spike 1	Spike 2	LCS		
	.31R	.28R	0311A-26 .40R	0311A-26 .41R	.29R		
Benzene	BRL	0.11	82	78	91	1	ug/L
Toluene	BRL	0.36	86	81	91	1	ug/L
Chlorobenzene	BRL	ND	90	85	91	1	ug/L
Ethylbenzene	BRL	0.12	87	82	90	1	ug/L
Xylene (para + meta)	BRL	0.28	88	83	91	1	ug/L
Xylene (ortho)	BRL	0.16	89	84	92	1	ug/L
1,3-Dichlorobenzene	BRL	0.28	91	86	93	1	ug/L
1,4-Dichlorobenzene	BRL	0.15	92	87	93	1	ug/L
1,2-Dichlorobenzene	BRL	0.35	95	90	96	1	ug/L
Tert Methyl Butyl Ether	1	ND	96	95	106	1	ug/L

Notes: LCS - Laboratory Control Standard, ND - Not Detected, BRL - Below Reporting Limit

Comments:

Approved:

Robert P. ...
 Laboratory Director Date 3/18/92

...
 QA Coordinator Date 3/18/92



Analytical Laboratory Report MTBE/BTEX - Volatile Organics by GC

Job No: 920311A
 Received: 3/11/92
 Prep: 3/12/92
 Analyzed: 3/12/92
 Method: PAT
 By: NG

Client: US Tank Management
 Project: Rio Bravo/ISLETA
 Field: MW - 27
 Matrix: Aqueous
 Batch: P205/PC022
 Lab ID: 920311A-14

Compound	Conc. Found		Percent Recovery			Reporting Limit	Units
	Sample	Blank	Spike 1	Spike 2	LCS		
	.56R	.42R	0311A-18 .61R	0311A-18 .65R	.60R		
Benzene	300	0.32	87	78	85	1	ug/L
Toluene	1	0.80	85	79	84	1	ug/L
Chlorobenzene	BRL	0.61	95	91	93	1	ug/L
Ethylbenzene	4	0.30	91	86	90	1	ug/L
Xylene (para + meta)	3	0.80	91	85	90	1	ug/L
Xylene (ortho)	BRL	0.45	93	87	92	1	ug/L
1,3-Dichlorobenzene	BRL	0.27	97	96	94	1	ug/L
1,4-Dichlorobenzene	BRL	0.60	97	90	95	1	ug/L
1,2-Dichlorobenzene	BRL	0.22	99	95	96	1	ug/L
Tert Methyl Butyl Ether	1900	ND	93	91	91	4	ug/L

Notes: LCS - Laboratory Control Standard, ND - Not Detected, BRL - Below Reporting Limit

Comments: Reporting limit for Tert Methyl Butyl Ether elevated due to matrix interferences requiring sample dilution.

Approved: Robert P. [Signature] 3/18/92 Laboratory Director Date
[Signature] 3/18/92 QA Coordinator Date



Analytical Laboratory Report
MTBE/BTEX - Volatile Organics by GC

Job No: 920311A
 Received: 3/11/92
 Prep: 3/15/92
 Analyzed: 3/15/92
 Method: PAT
 By: NG

Client: US Tank Management
 Project: Rio Bravo/ISLETA
 Field: MW - 29
 Matrix: Aqueous
 Batch: P206/PC022
 Lab ID: 920311A-24

Compound	Conc. Found		Percent Recovery			Reporting Limit	Units
	Sample	Blank	Spike 1	Spike 2	LCS		
	.19R	.11R	0311A-19 .13R	0311A-19 .24R	12R		
Benzene	1	0.18	91	79	99	1	ug/L
Toluene	8	0.44	93	80	98	1	ug/L
Chlorobenzene	BRL	ND	94	83	101	1	ug/L
Ethylbenzene	BRL	0.37	93	80	100	1	ug/L
Xylene (para + meta)	BRL	0.76	92	81	99	1	ug/L
Xylene (ortho)	BRL	0.36	93	82	100	1	ug/L
1,3-Dichlorobenzene	BRL	0.34	94	84	100	1	ug/L
1,4-Dichlorobenzene	BRL	0.55	95	86	101	1	ug/L
1,2-Dichlorobenzene	BRL	ND	95	88	101	1	ug/L
Tert Methyl Butyl Ether	BRL	ND	94	100	101	1	ug/L

Notes: LCS - Laboratory Control Standard, ND - Not Detected, BRL - Below Reporting Limit

Comments:

Approved:

Robert A. French
 Laboratory Director
 Date 3/18/92

[Signature]
 QA Coordinator
 Date 3/18/92



Analytical Laboratory Report
MTBE/BTEX - Volatile Organics by GC

Job No: 920311A
 Received: 3/11/92
 Prep: 3/16/92
 Analyzed: 3/16/92
 Method: PAT
 By: NG

Client: US Tank Management
 Project: Rio Bravo/ISLETA
 Field: MW - 34
 Matrix: Aqueous
 Batch: P207/PC022
 Lab ID: 920311A-21

Compound	Conc. Found		Percent Recovery			Reporting Limit	Units
	Sample	Blank	Spike 1	Spike 2	LCS		
	.30R	.28R	0311A-26 .40R	0311A-26 .41R	.29R		
Benzene	2	0.11	82	78	91	1	ug/L
Toluene	14	0.36	86	81	91	1	ug/L
Chlorobenzene	BRL	ND	90	85	91	1	ug/L
Ethylbenzene	57	0.12	87	82	90	1	ug/L
Xylene (para + meta)	48	0.28	88	83	91	1	ug/L
Xylene (ortho)	32	0.16	89	84	92	1	ug/L
1,3-Dichlorobenzene	BRL	0.28	91	86	93	1	ug/L
1,4-Dichlorobenzene	BRL	0.15	92	87	93	1	ug/L
1,2-Dichlorobenzene	BRL	0.35	95	90	96	1	ug/L
Tert Methyl Butyl Ether	1	ND	96	95	106	1	ug/L

Notes: LCS - Laboratory Control Standard, ND - Not Detected, BRL - Below Reporting Limit

Comments:

Approved:

Robert R. [Signature]
 Laboratory Director Date 3/18/92

[Signature]
 QA Coordinator Date 3/18/92



tbd environmental laboratories
 2261 Federal Avenue
 Los Angeles, California 90064-1403

Telephone: (310) 478-4050 Fax: (310) 478-8604

Analytical Laboratory Report MTBE/BTEX - Volatile Organics by GC

Job No: 920311A
 Received: 3/11/92
 Prep: 3/15/92
 Analyzed: 3/15/92
 Method: PAT
 By: NG


Client: US Tank Management
 Project: Rio Bravo/ISLETA
 Field: MW - 36
 Matrix: Aqueous
 Batch: P206/PC022
 Lab ID: 920311A-22

Compound	Conc. Found		Percent Recovery			Reporting Limit	Units
	Sample	Blank	Spike 1	Spike 2	LCS		
	.16R	.11R	0311A-19 .13R	0311A-19 .24R	.12R		
Benzene	210	0.18	91	79	99	1	ug/L
Toluene	930	0.44	93	80	98	2	ug/L
Chlorobenzene	BRL	ND	94	83	101	1	ug/L
Ethylbenzene	380	0.37	93	80	100	1	ug/L
Xylene (para + meta)	870	0.76	92	81	99	3	ug/L
Xylene (ortho)	400	0.36	93	82	100	1	ug/L
1,3-Dichlorobenzene	BRL	0.34	94	84	100	1	ug/L
1,4-Dichlorobenzene	BRL	0.55	95	86	101	1	ug/L
1,2-Dichlorobenzene	BRL	ND	95	88	101	1	ug/L
Tert Methyl Butyl Ether	11	ND	94	100	101	1	ug/L

Notes: LCS - Laboratory Control Standard, ND - Not Detected, BRL - Below Reporting Limit

Comments: Reporting limit elevated for Toluene and m,p-Xylene due to matrix interferences requiring dilution.

Approved:


 Laboratory Director

3/15/92
 Date


 QA Coordinator

3/15/92
 Date



Analytical Laboratory Report
MTBE/BTEX - Volatile Organics by GC

Job No: 920311A Client: US Tank Management
 Received: 3/11/92 Project: Rio Bravo/ISLETA
 Prep: 3/15/92 Field: MW - 37
 Analyzed: 3/15/92 Matrix: Aqueous
 Method: PAT Batch: P206/PC022
 By: NG Lab ID: 920311A-23

Compound	Conc. Found		Percent Recovery			Reporting Limit	Units
	Sample	Blank	Spike 1	Spike 2	LCS		
	.18R	.11R	0311A-19 .13R	0311A-19 .24R	.12R		
Benzene	BRL	0.18	91	79	99	1	ug/L
Toluene	BRL	0.44	93	80	98	1	ug/L
Chlorobenzene	BRL	ND	94	83	101	1	ug/L
Ethylbenzene	BRL	0.37	93	80	100	1	ug/L
Xylene (para + meta)	BRL	0.76	92	81	99	1	ug/L
Xylene (ortho)	BRL	0.36	93	82	100	1	ug/L
1,3-Dichlorobenzene	BRL	0.34	94	84	100	1	ug/L
1,4-Dichlorobenzene	BRL	0.55	95	86	101	1	ug/L
1,2-Dichlorobenzene	BRL	ND	95	88	101	1	ug/L
Tert Methyl Butyl Ether	BRL	ND	94	100	101	1	ug/L

Notes: LCS - Laboratory Control Standard, ND - Not Detected, BRL - Below Reporting Limit

Comments:

Approved:

Robert P. ...
 Laboratory Director Date 3/15/92

[Signature]
 QA Coordinator Date 3/18/92



Analytical Laboratory Report
MTBE/BTEX - Volatile Organics by GC

Job No: 920311A
 Received: 3/11/92
 Prep: 3/16/92
 Analyzed: 3/16/92
 Method: PAT
 By: NG

Client: US Tank Management
 Project: Rio Bravo/ISLETA
 Field: MW - 38
 Matrix: Aqueous
 Batch: P207/PC022
 Lab ID: 920311A-17

Compound	Conc. Found		Percent Recovery			Reporting Limit	Units
	Sample	Blank	Spike 1	Spike 2	LCS		
	.35R	.28R	0311A-26 .40R	0311A-26 .41R	.29R		
Benzene	1800	0.11	82	78	91	4	ug/L
Toluene	43	0.36	86	81	91	1	ug/L
Chlorobenzene	BRL	ND	90	85	91	1	ug/L
Ethylbenzene	220	0.12	87	82	90	1	ug/L
Xylene (para + meta)	430	0.28	88	83	91	1	ug/L
Xylene (ortho)	200	0.16	89	84	92	1	ug/L
1,3-Dichlorobenzene	BRL	0.28	91	86	93	1	ug/L
1,4-Dichlorobenzene	BRL	0.15	92	87	93	1	ug/L
1,2-Dichlorobenzene	BRL	0.35	95	90	96	1	ug/L
Tert Methyl Butyl Ether	36	ND	96	95	106	1	ug/L

Notes: LCS - Laboratory Control Standard, ND - Not Detected, BRL - Below Reporting Limit

Comments: Reporting limit for Benzene elevated due to matrix interferences requiring dilution.

Approved:

Robert P. ...
 Laboratory Director

3/18/92
 Date

...
 QA Coordinator

3/18/92
 Date



tbd environmental laboratories
 2261 Federal Avenue
 Los Angeles, California 90064-1403

Telephone: (310) 478-4050 Fax: (310) 478-5504

Analytical Laboratory Report
MTBE/BTEX - Volatile Organics by GC

Job No: 920311A
 Received: 3/11/92
 Prep: 3/16/92
 Analyzed: 3/16/92
 Method: PAT
 By: NG

Client: US Tank Management
 Project: Rio Bravo/ISLETA
 Field: BB1
 Matrix: Aqueous
 Batch: P207/PC022
 Lab ID: 920311A-26

Compound	Conc. Found		Percent Recovery			Reporting Limit	Units
	Sample	Blank	Spike 1	Spike 2	LCS		
	.36R	.28R	0311A-26 .40R	0311A-26 .41R	.29R		
Benzene	2	0.11	82	78	91	1	ug/L
Toluene	1	0.36	86	81	91	1	ug/L
Chlorobenzene	BRL	ND	90	85	91	1	ug/L
Ethylbenzene	BRL	0.12	87	82	90	1	ug/L
Xylene (para + meta)	1	0.28	88	83	91	1	ug/L
Xylene (ortho)	BRL	0.16	89	84	92	1	ug/L
1,3-Dichlorobenzene	BRL	0.28	91	86	93	1	ug/L
1,4-Dichlorobenzene	BRL	0.15	92	87	93	1	ug/L
1,2-Dichlorobenzene	BRL	0.35	95	90	96	1	ug/L
Tert Methyl Butyl Ether	33	ND	96	95	106	1	ug/L

Notes: LCS - Laboratory Control Standard, ND - Not Detected, BRL - Below Reporting Limit

Comments:

Approved:

Robert P. Proulx 3/18/92
 Laboratory Director Date

John S. Sainel 3/18/92
 QA Coordinator Date



Analytical Laboratory Report
MTBE/BTEX - Volatile Organics by GC

Job No: 920311A
 Received: 3/11/92
 Prep: 3/16/92
 Analyzed: 3/16/92
 Method: PAT
 By: NG

Client: US Tank Management
 Project: Rio Bravo/ISLETA
 Field: BB2
 Matrix: Aqueous
 Batch: P207/PC022
 Lab ID: 920311A-27

Compound	Conc. Found		Percent Recovery			Reporting Limit	Units
	Sample	Blank	Spike 1	Spike 2	LCS		
	34R	.28R	0311A-26 40R	0311A-26 41R	.29R		
Benzene	1	0.11	82	78	91	1	ug/L
Toluene	2	0.36	86	81	91	1	ug/L
Chlorobenzene	BRL	ND	90	85	91	1	ug/L
Ethylbenzene	BRL	0.12	87	82	90	1	ug/L
Xylene (para + meta)	1	0.28	88	83	91	1	ug/L
Xylene (ortho)	BRL	0.16	89	84	92	1	ug/L
1,3-Dichlorobenzene	BRL	0.28	91	86	93	1	ug/L
1,4-Dichlorobenzene	BRL	0.15	92	87	93	1	ug/L
1,2-Dichlorobenzene	BRL	0.35	95	90	96	1	ug/L
Tert Methyl Butyl Ether	BRL	ND	96	95	106	1	ug/L

Notes: LCS - Laboratory Control Standard, ND - Not Detected, BRL - Below Reporting Limit

Comments:

Approved: Robert P. Roswell 3/18/92 Daniel 3/18/92
 Laboratory Director Date QA Coordinator Date



tbd environmental laboratories
 2261 Federal Avenue
 Los Angeles, California 90064-1403

Telephone: (310) 478-4050 Fax: (310) 478-8604

Analytical Laboratory Report
MTBE/BTEX - Volatile Organics by GC

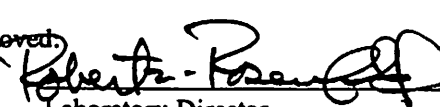
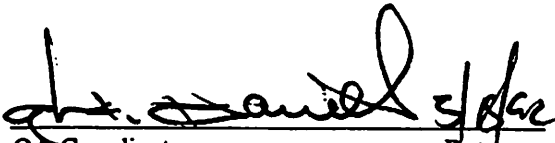
Job No: 920311A
 Received: 3/11/92
 Prep: 3/16/92
 Analyzed: 3/16/92
 Method: PAT
 By: NG

Client: US Tank Management
 Project: Rio Bravo/ISLETA
 Field: BB3
 Matrix: Aqueous
 Batch: P207/PC022
 Lab ID: 920311A-25

Compound	Conc. Found		Percent Recovery			Reporting Limit	Units
	Sample	Blank	Spike 1	Spike 2	LCS		
	.33R	.28R	0311A-26 .40R	0311A-26 .41R	.29R		
Benzene	BRL	0.11	82	78	91	1 ug/L	
Toluene	4	0.36	86	81	91	1 ug/L	
Chlorobenzene	BRL	ND	90	85	91	1 ug/L	
Ethylbenzene	BRL	0.12	87	82	90	1 ug/L	
Xylene (para + meta)	BRL	0.28	88	83	91	1 ug/L	
Xylene (ortho)	BRL	0.16	89	84	92	1 ug/L	
1,3-Dichlorobenzene	BRL	0.28	91	86	93	1 ug/L	
1,4-Dichlorobenzene	BRL	0.15	92	87	93	1 ug/L	
1,2-Dichlorobenzene	BRL	0.35	95	90	96	1 ug/L	
Tert Methyl Butyl Ether	16	ND	96	95	106	1 ug/L	

Notes: LCS - Laboratory Control Standard, ND - Not Detected, BRL - Below Reporting Limit

Comments:

Approved:  3/18/92 Date
 Laboratory Director
 3/18/92 Date
 QA Coordinator

ATEX - STATUS REPORT
ISLETA/RIO BRAVO SITE, 501 ISLETA BOULEVARD SW, ALBUQUERQUE, NM

APPENDIX F

SOIL BORING & WELL LOGS

ATEX GAS INC. / ATC REALTY
ISLETA/RIO BRAVO SITE
ALBUQUERQUE, NEW MEXICO





USTank Management Excavation Log

Job Name:
ATEX - RIO BRAVO

Location:
Isleta Blvd
Albug NM

Date:
2-25-92

To be used for all type drilling & excavation zones where applicable. Note any groundwater encountered and any fluid rise in borehole under Observation Notes.

Vertical Scale

Excavation only

Number
Monitor well Soil Bore

Sec. _____ T _____ R _____

MW 29

BB 1

BB 2

BB 3

SB 1

From	Depth To	Formation Description	HNU Number	Sampling Reading	Soil Sample Number if Taken	Blow Count	Observation Notes
0	5	SANDY LOAM, BL, NO GRAVEL, CLAY	0715-0740	BG. 2 0			NO odor
	8	SANDY LOAM BR, NO GRAVEL CLAY content ≈ 33% (plastic)	0720-0740	BG. 2 0			
	11	100% 19 GR SD, well sorted	0740-0750	BG. 2 1.0			gasoline odor
	16.5	"	-				WL 10.60
0	5'	SANDY LOAM, BR, NO GRAVEL, NO CLAY	0815-0830	BG. 2 0			
	8'	SANDY LOAM, BR, NO GR. SMALL AMT CLAY (plastic)	0830-0840	BG. 2 0			
	11'	100% 19 GR SD, well sorted	0840-	BG. 2 15.1			gasoline odor
	16.5'	"	0850-0900	BG. 2 1.5			WL 11.00
0	5	SAME AS BB 1	0925-0935	BG. 2 0			
	8'	↓	0935-0945	BG. 2 0			
	11'		0945-	BG. 2 1.0			
	16.5'		0950-1005	BG. 2 1.0			WL 11.20 NO odor
0	5'	SANDY LOAM, BR, small amt clay	1030-1040	BG. 2 0			
	8'	SANDY LOAM, BR, greater amt clay (plastic)	1035-1045	BG. 2 0			
	11'	100% Fg SD, BR well sorted	1042-1052	BG. 2 0			
	16.5'	"	1046-1056	BG. 2 0			WL 9.20
0	5	SANDY LOAM BR 100% 10	1130-1145	BG. 2 0			
	10	BR "	1135-1145	BG. 2 220			strong odor
	15	SANDY LOAM, BL 100% 10	1140-1145	BG. 2 330			strong odor

Crew Chief _____



USTank Management Excavation Log

Job Name:
ATEX - Rio BRAVO

Location:
Isleta Blvd
Albuquerque, NM

Date:
2-25-92

To be used for all type drilling & excavation zones where applicable. Note any groundwater encountered and any fluid rise in borehole under Observation Notes.

Vertical Scale

Excavation only

Number
Monitor well Soil Bore

Sec. — T — R —

SB2

SB5

SB3

SB4

From	Depth To	Formation Description	HNU Sampling Number	HNU Sampling Reading	Soil Sample Number if taken	Blow Count	Observation Notes
0	5'	SANDY LOAM 100% BR	1200-1210	BG.2 12.2			
	10'	SANDY LOAM 100% BR	1205-1210	BG.2 172.0			strong odor
	15'	Bl SANDY LOAM some CLAY (PLASTIC)	1210-1215	BG.2 164.0			"
0	5'	SANDY LOAM SOME CLAY BR	1225-1237	BG.2 62.0			strong odor
	10'	SANDY LOAM, CLAY 50% BR - BL	1237-	BG.2 360.0			strong odor
0	5'	Bl SAND + GRAVEL	1250-1300	BG.2 320.0			strong odor
	10'	BR SANDY LOAM + CLAY	1300-1310	BG.2 160.0			7' PLASTIC CLAY + sd
	14'	BR F9 SD, NO CLAY	1305-1310	BG.2 26.0			
0	5'	BR F9 SD NO CLAY	1315-1330	BG.2 320.0			
	10'	BR F9 SD, CLAY	1325-1335	BG.2 336.0			7' PLASTIC CLAY + sd strong odor
	15'	BR F9 SD NO CLAY	1330-1340	BG.2 260.0			strong odor

Crew Chief _____

WHOLE ARE "2ND BURING LOGS FOR SB-5A3 SB-4A1"