

3R - 348

REPORTS

DATE:

2001

3R348



Environmental Services
187 County Road 4980
Bloomfield, New Mexico 87413
(505) 632-4409 (office)
(505) 632-4405 (fax)

March 20, 2002

Mr. William Olson
Hydrologist
Oil Conservation Division
1220 S. St. Francis Dr.
Santa Fe, NM 87505

RECEIVED

APR 04 2002

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

RE: 2001 GROUND WATER SUMMARY REPORT

Dear Mr. Olson:

Enclosed for your review is the 2001 Ground Water Summary Report. The report presents monitoring data for eighteen sites having petroleum hydrocarbon impacted ground water, which resulted from the past use of unlined surface impoundments. The sites included in the report are listed in Table 1.

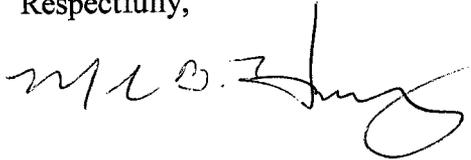
In 2001, three sites met the required remediation standards and were closed with OCD approval. The sites, listed in Table 2, achieved clean closure through a combination of contaminant source removal actions and monitored natural attenuation. Ground water cleanup objectives at each site were met in roughly three years, or less.

Of the eighteen active sites, five have accumulations of LNAPL in one or more monitoring well. In December 2001, the LNAPL accumulations were removed from these wells to evaluate LNAPL recovery rates and to augment the natural attenuation process. In 2002, passive LNAPL collection devices will be deployed or manual LNAPL removal events will be scheduled at some of the sites.

The remaining thirteen active sites either contain concentrations of dissolved BTEX in excess of cleanup standards or have met cleanup standards but have not yet demonstrated four consecutive clean quarters. Pursuant to discussions on the subject with OCD, Williams intends to implement various methods to accelerate the attenuation at select sites. These augmentation methods will be incorporated into an addendum to the Ground Water Management plan.

Thank you for your time to review this submittal. If you have any questions regarding the report, you may call me at (505) 632-4409 or Jim Struhs at (505) 632-4457.

Respectfully,



Mark B. Harvey
Project Coordinator
Mark.Harvey@Williams.com



James P. Struhs
Project Hydrogeologist
Jim.Struhs@Williams.com

Attachment
Enclosure

c: Denny Foust, OCD Aztec District Office
Bill Liess, BLM Farmington District Office

Table 1. List of Active Sites for 2001 Report

Count	Site Name	Unit Letter	Section	Township	Range	Longitude	Latitude	OCD Initial Notification
1	Blanco Wash Drip	J	31	27N	8W	-107.721574	36.530995	19-Feb-99
2	Chamberlain 1	F	14	32N	12W	-108.068853	36.990549	30-Sep-99
3	Davis 1	E	11	31N	12W	-108.068919	36.916257	2-Mar-99
4	Dogie East Pit	D	4	25N	6W	-107.478874	36.434196	7-Jul-97
5	Dogie North Pit	D	4	25N	6W	-107.479158	36.435784	7-Jul-97
6	Florance 124	C	27	29N	9W	-107.76698	36.70209	12-Aug-96
7	Florance 40	G	21	30N	8W	-107.67775	36.800088	27-Jan-97
8	Florance M 47X	G	5	30N	9W	-107.799823	36.843166	27-Jan-97
9	Grenier 4A	M	7	31N	11W	-108.036001	36.910167	18-Oct-99
10	Honolulu Drip	B	15	26N	4W	-107.238469	36.492341	18-Jun-96
11	Ice Canyon Drip	J	13	26N	7W	-107.52226	36.484972	1-Dec-97
12	Jicarilla Contract 147-6	C	6	25N	5W	-107.402363	36.433963	13-Aug-98
13	Kaufman 1	H	33	31N	13W	-108.202128	36.860121	9-Mar-00
14	O'Shea 1M	F	3	31N	13W	-108.193596	36.932228	6-Jun-98
15	Patterson A Com A1	G	2	31N	12W	-108.061165	36.930755	2-Mar-99
16	Pritchard 2	J	6	30N	8W	-107.712068	36.837817	22-Feb-99
17	Wilmerding 1M	C	10	31N	13W	-108.193158	36.91846	5-Jun-98
18	Zachry 18E	O	11	28N	10W	-107.860007	36.670885	6-Sep-96

Table 2. List of Sites Closed in 2001

Count	Site Name	Unit Letter	Section	Township	Range	Longitude	Latitude	OCD Initial Notification	Status
1	Albright #4 Drip	F	22	29N	10W	-107.868451	36.715299	9-Jul-99	Approved; Wells Abandoned
2	Miles Federal 1E Drip	N	5	26N	7W	-107.602489	36.510939	23-Jun-97	Approved; Wells Abandoned
3	Randleman 1	K	13	31N	11W	-107.945067	36.896329	9-May-97	Pending OCD Approval

Site Summary Report

Site Name: Zachry 18E

Reporting Period: 2001

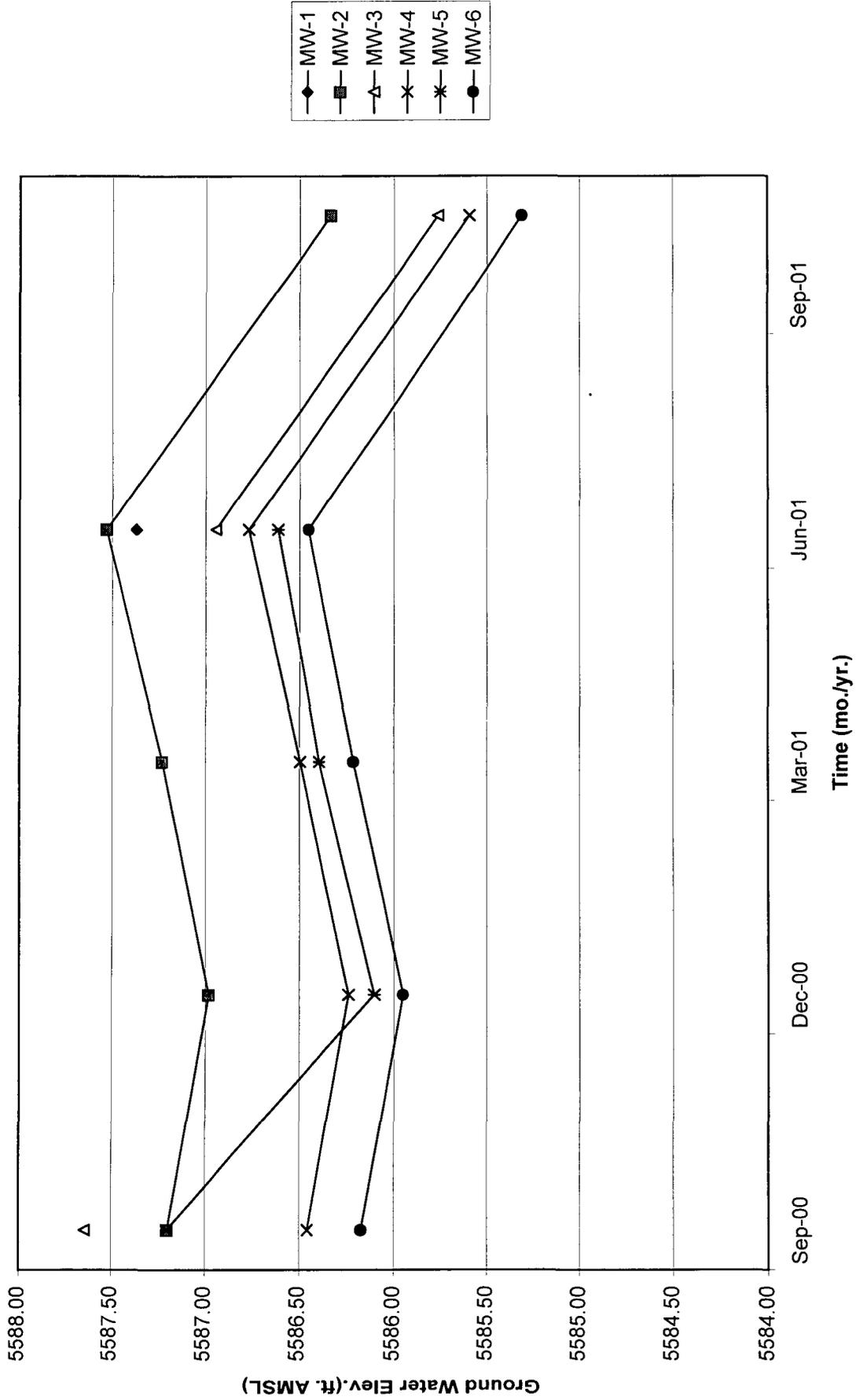
Location: Unit O, Sec 11, Twn 28N, Rng 10W
Canyon: Armenta
Operator: Burlington

Vulnerable Class: original
OCD Ranking: 40
Lead Agency: NMOCD

Status Narrative

This site has six monitoring wells, with twenty-two quarters of ground water monitoring completed to date. Contaminant levels in all monitoring wells except MW-4 have been below WQCC standards for over four consecutive quarters. Concentrations in MW-4 have shown a decreasing trend and it is anticipated that this site will be eligible for closure in the near future.

Zachry 18E Hydrograph



Analytical Data Summary

Site Name:

Zachry 18E

Reporting Period:

7/1/00 To 12/31/01

Well ID	Sample Date	Sample ID	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Xylene (Total) ug/l
MW-1	6/8/01	102308JUN01	<1	<1	<1	<1
MW-2	6/8/01	104008JUN01	<1	<1	<1	1.78
	10/26/01	110326OCT01	<1.0	<2.0	<2.0	<2.0
MW-3	6/8/01	104908JUN01	<1	<1	<1	<1
	10/26/01	111626OCT01	<1.0	<2.0	<2.0	<2.0
MW-4	9/29/00	100129SEP00	5.91	7.96	4.91	10.20
	12/7/00	171607DEC00	4.70	3.09	2.43	4.17
	3/14/01	124114MAR01	2.48	2.43	1.29	1.22
	5/11/01	095611MAY01	84.1	22.8	6.15	14.0
	6/8/01	105708JUN01	52.6	10.9	4.94	14.9
	10/26/01	115526OCT01	3.9	4.4	3.5	13
MW-5	6/8/01	110708JUN01	<1	<1	<1	<1
MW-6	6/8/01	111408JUN01	<1	<1	<1	<1
	10/26/01	114926OCT01	<1.0	<2.0	<2.0	<2.0

Sample ID: ZAC-SA-MW-4

Sample Matrix: WATER

Collection Date: 09/29/00 10:01:00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
BTEX	OA1/8021B			3.0		
BENZENE	71-43-2	5.91	UG/L	1.0	10/06/00MB	
TOLUENE	108-88-3	7.96	UG/L	1.0	10/06/00MB	
ETHYLBENZENE	100-41-4	4.91	UG/L	1.0	10/06/00MB	
TOTAL XYLENES	1330-20-7	10.20	UG/L	1.0	10/06/00MB	
BFB (SURROGATE)	-	90	125	75		

Sample ID: TRIP BLANK

Sample Matrix: WATER

Collection Date: 09/21/00

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
BTEX	OA1/8021B			3.0		
BENZENE	71-43-2	ND	UG/L	1.0	10/05/00MB	
TOLUENE	108-88-3	ND	UG/L	1.0	10/05/00MB	
ETHYLBENZENE	100-41-4	ND	UG/L	1.0	10/05/00MB	
TOTAL XYLENES	1330-20-7	ND	UG/L	1.0	10/05/00MB	
BFB (SURROGATE)	-	89.5	125	75		

REFERENCE #: 0010036

PAGE: 2

Q W A L L A B O R A T O R I E S , I N C .

2911 ROTARY TERRACE, P.O. BOX 562/ PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0012307

SENT WILLIAMS GAS PIPELINE
 TO: 187 COUNTY ROAD # 4980
 BLOOMFIELD, NM 87413
 JIM STRUHS
 PROJECT:WES/ZACHARY 18E

DATE REPORTED: 12/14/00
 DATE COLLECTED: 12/07/00
 DATE RECEIVED: 12/09/00
 P.O. #: JPS-120800-02

Sample ID: ZAC18E-SA-MW4
 Collection Date: 12/07/00 17:16:00

Sample Matrix: WATER

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
BTEX	OA1/8021B			3.0		
BENZENE	71-43-2	4.70	UG/L	1.0	12/12/00TK	
TOLUENE	108-88-3	3.09	UG/L	1.0	12/12/00TK	
ETHYLBENZENE	100-41-4	2.43	UG/L	1.0	12/12/00TK	
TOTAL XYLENES	1330-20-7	4.17	UG/L	1.0	12/12/00TK	
BFB (SURROGATE)	-	90.5	125	75		

NONE DETECTED
 P=PRACTICAL QUANTITATION LIMIT
 SU=STANDARD UNITS
 *BACKGROUND CONTAMINATION
 Q=OUTSIDE LIMITS
 B=DETECTED IN METHOD BLANK
 SUR=SURROGATE

APPROVED BY: TERRY KOESTER
 TERRY KOESTER
 LABORATORY DIRECTOR

Q W A L L A B O R A T O R I E S, I N C.

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0103419

SENT WILLIAMS GAS PIPELINE
 TO: 187 COUNTY ROAD #4980
 BLOOMFIELD, NM 87413
 JIM STRUHS
 PROJECT: WES/ZACHARY

DATE REPORTED: 03/20/01
 DATE COLLECTED: 03/14/01
 DATE RECEIVED: 03/16/01
 P.O. #: SWA-031501-02

Sample ID: ZAC18E-DG-MW4
 Collection Date: 03/14/01 12:41:00

Sample Matrix: WATER

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
BTEX	OA1/8021B			3.0		
BENZENE	71-43-2	2.48	UG/L	1.0	03/19/01MB	
TOLUENE	108-88-3	2.43	UG/L	1.0	03/19/01MB	
ETHYLBENZENE	100-41-4	1.29	UG/L	1.0	03/19/01MB	
TOTAL XYLENES	1330-20-7	1.22	UG/L	1.0	03/19/01MB	
BFB (SURROGATE)	-	102	125	75		

NONE DETECTED
 PRACTICAL QUANTITATION LIMIT
 SU=STANDARD UNITS
 *BACKGROUND CONTAMINATION
 SUR=SURROGATE
 Q=OUTSIDE LIMITS
 B=DETECTED IN METHOD BLANK

APPROVED BY:

TERRY KOESTER
 TERRY KOESTER
 LABORATORY DIRECTOR

Q W A L L A B O R A T O R I E S, I N C.

2911 ROTARY TERRACE, P.O. BOX 562/ PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0105417

SENT WILLIAMS GAS PIPELINE
 TO: 187 COUNTY ROAD # 4980
 BLOOMFIELD, NM 87413
 JIM STRUHS
 PROJECT:WES/ZACHARY 18E

DATE REPORTED: 05/21/01
 DATE COLLECTED: 05/11/01
 DATE RECEIVED: 05/15/01
 P.O. #: SWA-051401-02

Sample ID: ZAC18E-DG-MW4
 Collection Date: 05/11/01 09:56:00

Sample Matrix: WATER

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
BTEX	OA1/8021B			3.0		
BENZENE	71-43-2	84.1	UG/L	1.0	05/18/01MB	
TOLUENE	108-88-3	22.8	UG/L	1.0	05/18/01MB	
ETHYLBENZENE	100-41-4	6.15	UG/L	1.0	05/18/01MB	
TOTAL XYLENES	1330-20-7	14.0	UG/L	1.0	05/18/01MB	
BFB (SURROGATE)	-	97	125	75		

NONE DETECTED
 =PRACTICAL QUANTITATION LIMIT
 SU=STANDARD UNITS
 *BACKGROUND CONTAMINATION
 Q=OUTSIDE LIMITS
 B=DETECTED IN METHOD BLANK
 SUR=SURROGATE

APPROVED BY: _____

Terry Koester
 TERRY KOESTER
 LABORATORY DIRECTOR

Q W A L L A B O R A T O R I E S , I N C .

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0106210

SENT WILLIAMS GAS PIPELINE
 TO: 187 COUNTY ROAD #4980
 BLOOMFIELD, NM 87413
 JIM STRUHS

DATE REPORTED: 06/15/01
 DATE COLLECTED: 06/08/01
 DATE RECEIVED: 06/09/01

PROJECT: WES / ZACHERY 18E

Reference Fraction:0106210-05A

Sample ID: ZAC18E-UG-MW1

Sample Matrix: WATER

Sample Date Collected: 06/08/0110:23:00

TEST	METHOD	RESULT	UNITS	PQL	ANALYZED	BY
BTEX	OA1/8021B			3.0		
BENZENE		ND	UG/L	1.0	06/13/01	MB
TOLUENE		ND	UG/L	1.0	06/13/01	MB
ETHYLBENZENE		ND	UG/L	1.0	06/13/01	MB
TOTAL XYLENES		ND	UG/L	1.0	06/13/01	MB
BFB (SURROGATE)		87	125	75		

NONE DETECTED
 PL=PRACTICAL QUANTITAION LIMIT
 SU=STANDARD UNITS
 B=DETECTED IN METHOD BLANK

APPROVED BY:


 TERRY KOESTER
 LABORATORY DIRECTOR

Q W A L L A B O R A T O R I E S, I N C.

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0106210

SENT WILLIAMS GAS PIPELINE
 TO: 187 COUNTY ROAD #4980
 BLOOMFIELD, NM 87413
 JIM STRUHS

DATE REPORTED: 06/15/01
 DATE COLLECTED: 06/08/01
 DATE RECEIVED: 06/09/01

PROJECT: WES / ZACHERY 18E

Reference Fraction: 0106210-04A

Sample ID: ZAC18E-SA-MW2

Sample Matrix: WATER

Sample Date Collected: 06/08/01 10:40:00

TEST	METHOD	RESULT	UNITS	PQL	ANALYZED	BY
BTEX	OA1/8021B			3.0		
BENZENE		ND	UG/L	1.0	06/13/01	MB
TOLUENE		ND	UG/L	1.0	06/13/01	MB
ETHYLBENZENE		ND	UG/L	1.0	06/13/01	MB
TOTAL XYLENES		1.78	UG/L	1.0	06/13/01	MB
BFB (SURROGATE)		88	125	75		

NONE DETECTED
 L=PRACTICAL QUANTITAION LIMIT
 SU=STANDARD UNITS
 B=DETECTED IN METHOD BLANK

APPROVED BY:



TERRY KOESTER
 LABORATORY DIRECTOR

Q W A L L A B O R A T O R I E S, I N C.

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0106210

SENT WILLIAMS GAS PIPELINE
 TO: 187 COUNTY ROAD #4980
 BLOOMFIELD, NM 87413
 JIM STRUHS
 PROJECT: WES / ZACHERY 18E

DATE REPORTED: 06/15/01
 DATE COLLECTED: 06/08/01
 DATE RECEIVED: 06/09/01

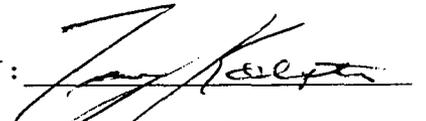
Reference Fraction: 0106210-03A
 Sample ID: ZAC18E-CG-MW3
 Sample Date Collected: 06/08/01 10:49:00

Sample Matrix: WATER

TEST	METHOD	RESULT	UNITS	PQL	ANALYZED	BY
BTEX	OA1/8021B			3.0		
BENZENE		ND	UG/L	1.0	06/13/01	MB
TOLUENE		ND	UG/L	1.0	06/13/01	MB
ETHYLBENZENE		ND	UG/L	1.0	06/13/01	MB
TOTAL XYLENES		ND	UG/L	1.0	06/13/01	MB
BFB (SURROGATE)		81	125	75		

ND=NONE DETECTED
 PQL=PRACTICAL QUANTITATION LIMIT
 SU=STANDARD UNITS
 B=DETECTED IN METHOD BLANK

APPROVED BY:


 TERRY KOESTER
 LABORATORY DIRECTOR

Q W A L L A B O R A T O R I E S , I N C .

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0106210

SENT WILLIAMS GAS PIPELINE
 TO: 187 COUNTY ROAD #4980
 BLOOMFIELD, NM 87413
 JIM STRUHS
 PROJECT: WES / ZACHERY 18E

DATE REPORTED: 06/15/01
 DATE COLLECTED: 06/08/01
 DATE RECEIVED: 06/09/01

Reference Fraction: 0106210-02A

Sample ID: ZAC18E-DG-MW4

Sample Matrix: WATER

Sample Date Collected: 06/08/01 10:57:00

TEST	METHOD	RESULT	UNITS	PQL	ANALYZED	BY
BTEX	OA1/8021B				3.0	
BENZENE		52.6	UG/L		1.0	06/14/01 MB
TOLUENE		10.9	UG/L		1.0	06/14/01 MB
ETHYLBENZENE		4.94	UG/L		1.0	06/14/01 MB
TOTAL XYLENES		14.9	UG/L		1.0	06/14/01 MB
BFB (SURROGATE)		88	125		75	

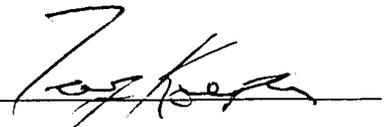
ND=NONE DETECTED

PL=PRACTICAL QUANTITAION LIMIT

SU=STANDARD UNITS

B=DETECTED IN METHOD BLANK

APPROVED BY:



TERRY KOESTER
 LABORATORY DIRECTOR

Q W A L L A B O R A T O R I E S, I N C.

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0106210

SENT WILLIAMS GAS PIPELINE
 TO: 187 COUNTY ROAD #4980
 BLOOMFIELD, NM 87413
 JIM STRUHS
 PROJECT: WES / ZACHERY 18E

DATE REPORTED: 06/15/01
 DATE COLLECTED: 06/08/01
 DATE RECEIVED: 06/09/01

Reference Fraction: 0106210-01A
 Sample ID: ZAC18E-DG-MW5
 Sample Date Collected: 06/08/01 11:07:00

Sample Matrix: WATER

TEST	METHOD	RESULT	UNITS	PQL	ANALYZED	BY
BTEX	OA1/8021B			3.0		
BENZENE		ND	UG/L	1.0	06/13/01	MB
TOLUENE		ND	UG/L	1.0	06/13/01	MB
ETHYLBENZENE		ND	UG/L	1.0	06/13/01	MB
TOTAL XYLENES		ND	UG/L	1.0	06/13/01	MB
BFB (SURROGATE)		90	125	75		

N= NONE DETECTED
 P= PRACTICAL QUANTITATION LIMIT
 SU= STANDARD UNITS
 B= DETECTED IN METHOD BLANK

APPROVED BY: 
 TERRY KOESTER
 LABORATORY DIRECTOR

Q W A L L A B O R A T O R I E S, I N C.

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0106210

SENT WILLIAMS GAS PIPELINE
 TO: 187 COUNTY ROAD #4980
 BLOOMFIELD, NM 87413
 JIM STRUHS

DATE REPORTED: 06/15/01
 DATE COLLECTED: 06/08/01
 DATE RECEIVED: 06/09/01

PROJECT: WES / ZACHERY 18E

Reference Fraction: 0106210-06A

Sample ID: ZAC18E-DG-MW6

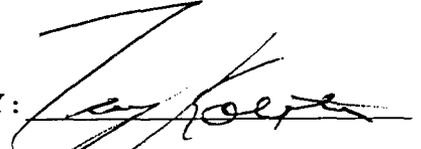
Sample Matrix: WATER

Sample Date Collected: 06/08/01 11:14:00

TEST	METHOD	RESULT	UNITS	PQL	ANALYZED	BY
BTEX	OA1/8021B			3.0		
BENZENE		ND	UG/L	1.0	06/13/01	MB
TOLUENE		ND	UG/L	1.0	06/13/01	MB
ETHYLBENZENE		ND	UG/L	1.0	06/13/01	MB
TOTAL XYLENES		ND	UG/L	1.0	06/13/01	MB
BFB (SURROGATE)		95	125	75		

NONE DETECTED
 PL=PRACTICAL QUANTIFICATION LIMIT
 SU=STANDARD UNITS
 B=DETECTED IN METHOD BLANK

APPROVED BY:


 TERRY KOESTER
 LABORATORY DIRECTOR



ORGANIC ANALYSIS REPORT

Client: Mile High Environmental

Contact: Jim Struhs

Collected: October 26, 2001

Analyzed: November 9, 2001

Received: October 31, 2001

AMERICAN
WEST
ANALYTICAL
LABORATORIES

Analysis Requested: SW8260B/5030A

Lab Sample ID: L48186-01A

Field Sample ID: ZAC-SA-MW2

Site ID: Zachry 18E/JPS-103001-02

463 West 3600 South
Salt Lake City, Utah
84115

Analytical Results

MBTEXN/TPH-P

Units = mg/L

Final Dilution Factor: 1

Compound

Reporting
Limit

Amount
Detected

Benzene

0.0010

< 0.0010

Toluene

0.0020

< 0.0020

Ethylbenzene

0.0020

< 0.0020

Total Xylene

0.0020

< 0.0020

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687
e-mail: awal@xmission.com

Kyle F. Gross
Laboratory Director

Peggy McNicol
QA Officer

Released by:

Laboratory Supervisor

Report Date:

November 13, 2001

Page 1 of 1



ORGANIC ANALYSIS REPORT

Client: Mile High Environmental
Collected: October 26, 2001
Received: October 31, 2001

Contact: Jim Struhs
Analyzed: November 9, 2001

AMERICAN
WEST
ANALYTICAL
LABORATORIES

Analysis Requested: SW8260B/5030A

Lab Sample ID: L48186-02A
Field Sample ID: ZAC-DG-MW3
Site ID: Zachry 18E/JPS-103001-02

463 West 3600 South
Salt Lake City, Utah
84115

Analytical Results

MBTEXN/TPH-P

Units = mg/L

Final Dilution Factor: 1

Compound

Reporting
Limit

Amount
Detected

Benzene

0.0010

< 0.0010

Toluene

0.0020

< 0.0020

Ethylbenzene

0.0020

< 0.0020

Total Xylene

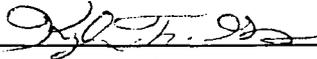
0.0020

< 0.0020

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687
e-mail: awal@xmission.com

Kyle F. Gross
Laboratory Director

Peggy McNicol
QA Officer

Released by: 
Laboratory Supervisor

Report Date: November 13, 2001 Page 1 of 1



ORGANIC ANALYSIS REPORT

Client: Mile High Environmental
Collected: October 26, 2001
Received: October 31, 2001

Contact: Jim Struhs
Analyzed: November 9, 2001

AMERICAN
WEST
ANALYTICAL
LABORATORIES

Analysis Requested: SW8260B/5030A

Lab Sample ID: L48186-03A
Field Sample ID: ZAC18E-SA-MW4
Site ID: Zachry 18E/JPS-103001-02

463 West 3600 South
Salt Lake City, Utah
84115

Analytical Results

MBTEXN/TPH-P

Units = mg/L

Final Dilution Factor: 1

Compound

Reporting
Limit

Amount
Detected

Benzene

0.0010

0.0039

Toluene

0.0020

0.0044

Ethylbenzene

0.0020

0.0035

Total Xylene

0.0020

0.013

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687
e-mail: awal@xmission.com

Kyle F. Gross
Laboratory Director

Peggy McNicol
QA Officer

Released by:

Laboratory Supervisor

Report Date:

November 13, 2001

Page 1 of 1



ORGANIC ANALYSIS REPORT

Client: Mile High Environmental
Collected: October 26, 2001
Received: October 31, 2001

Contact: Jim Struhs
Analyzed: November 9, 2001

AMERICAN
WEST
ANALYTICAL
LABORATORIES

Analysis Requested: SW8260B/5030A

Lab Sample ID: L48186-04A
Field Sample ID: ZAC18E-DG-MW6
Site ID: Zachry 18E/JPS-103001-02

463 West 3600 South
Salt Lake City, Utah
84115

Analytical Results

MBTEXN/TPH-P

Units = mg/L

Final Dilution Factor: 1

Compound

Reporting
Limit

Amount
Detected

Benzene

0.0010

< 0.0010

Toluene

0.0020

< 0.0020

Ethylbenzene

0.0020

< 0.0020

Total Xylene

0.0020

< 0.0020

(801) 263-8686
Toll Free (888) 263-8686
Fax (801) 263-8687
e-mail: awal@xmission.com

Kyle F. Gross
Laboratory Director

Peggy McNicol
QA Officer

Released by:

Laboratory Supervisor

Report Date:

November 13, 2001

Page 1 of 1