3R196

2010 AGWMR

03/02/2011

BUILDING A BETTER WORLD

March 2, 2011

Mr. Glenn von Gonten New Mexico Oil Conservation Division (NMOCD) 1220 South St., Francis Drive Santa Fe, New Mexico 87505 ECEIVED O(

RE: El Paso Tennessee Pipeline Company Pit Groundwater Remediation Sites 2010 Annual Reports

Dear Mr. Von Gonten:

MWH Americas, Inc., on behalf of El Paso Tennessee Pipeline Company (EPTPC), is submitting the enclosed 2010 Annual Reports for each of EPTPC's 21 remaining San Juan River Basin pit groundwater remediation sites. The reports present the 2010 sampling and product recovery data and include recommendations for 2011 activities at these sites.

The 2010 Annual Reports are divided into three volumes based on location type. The volumes are as follows:

<u>Volume</u>	Location Type
1	Federal Land
2	Non-Federal Land (Excl. Navajo Nation)
3	Navajo Nation

If you have any questions concerning the enclosed reports, please call either lan Yanagisawa of EPTPC (713-420-7361) or myself (303-291-2276).

Sincerely,

Jed Smith

Project Manager

encl.

CC:

Bill Freeman - NNEPA, Shiprock, NM (Volume 3 Only)

Bill Liese -- BLM, Farmington, NM (Volume 1 Only)

Brandon Powell - NMOCD, Aztec, NM (Volumes 1, 2, and 3)

Ian Yanagisawa – EPTPC (Volumes 1, 2, and 3 - Electronic)



El Paso Tennessee Pipeline Company

San Juan Basin Pit Program Groundwater Sites Project

Final 2010 Annual Report Federal Sites (Volume 1)

March 2011



2010 ANNUAL GROUNDWATER REPORT FEDERAL SITES VOLUME I

EL PASO TENNESSEE PIPELINE COMPANY

TABLE OF CONTENTS

METER or LINE ID	NMOGD CASE NO.	SITENAME	TOWNSHIP	RANGE	SECTION	UNIT
87640	3RP-155-0	Canada Mesa #2	24N	06W	24	I
89961	3RP-170-0	Fields A#7A	32N	11W	34	Е
73220	3RP-068-0	Fogelson 4-1 Com. #14	29N	11W	4	Р
89894	3RP-186-0	Haṃmond #41A	27N	08W	25	0
97213	3RP-190-0	Hamner #9	29N	09W	20	A
94715	3RP-196-0	James F. Bell #1E	30N	13W	10	Р
89232	3RP-202-0	Johnston Fed #6A	31N	09W	35	F
LD072	3RP-204-0	K27 LD072	25N	06W	4	E
LD174	3RP-212-0	LAT L 40	28N	04W	13	Н
LD151	3RP-213-0	Lat 0-21 Line Drip	30N	09W	12	0
94810	3RP-223-0	Miles Fed 1A	26N	07W	5	F
89620	3RP-235-0	Sandoval GC A #1A	30N	09W	35	С

^{*} The Hamner #9 site was submitted for closure in January 2009 and is pending approval from NMOCD. There were no monitoring activities for this site in 2010.





LIST OF ACRONYMS

AMSL above mean sea level

B benzene

btoc below top of casing

E ethylbenzene

EPTPC El Paso Tennessee Pipeline Company

ft foot/feet

GWEL groundwater elevation

ID identification

MW monitor well

NMWQCC New Mexico Water Quality Control Commission

T toluene

TOC top of casing

NA not applicable

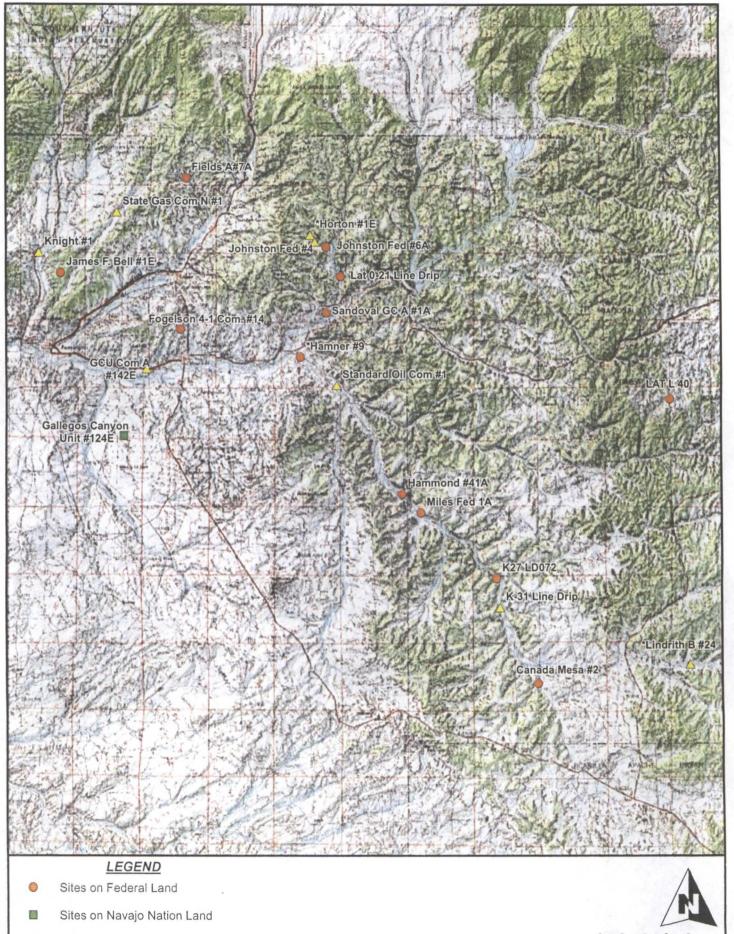
NMOCD New Mexico Oil Conservation Division

NS not sampled

ORC oxygen-releasing compound

 $\mu g/L$ micrograms per liter

X total xylenes



△ Sites on State/Fee "Non-Federal" Lands

*Closure Request Pending with the NMOCD.

0 2 4 6 8 Miles





PROJECT: SAN JUAN RIVER BASIN

TITLE:

Site Locations, February 2011

1

EPTPC GROUNDWATER SITES 2010 ANNUAL GROUNDWATER REPORT

James F. Bell #1E Meter Code: 94715

SITE DETAILS

Legal Description:Town:30NRange:13WSec:10Unit:PNMOCD Haz Ranking:40LandFederalOperator:BP / Amoco Production

Type:

Company

<u>PREVIOUS ACTIVITIES</u>

Site Assessment:	3/94	Excavation:	4/94	Soil Boring:	10/95
Monitor Well:	10/95	Geoprobe:	NA	Additional MWs:	6/99
Downgradient MWs:	11/95	Replace MW:	NA ·	Quarterly Initiated:	NA
ORC Nutrient Injection:	NA	Re-Excavation:	NA	PSH Removal Initiated:	7/97
Annual Initiated:	10/00	Quarterly Resumed:	NA	PSH Removal in 2010?	Yes

^{*} Additional downgradient monitoring wells were attempted in 1995 and in 1999; however, these borings were dry and wells were not installed.

SUMMARY OF 2010 ACTIVITIES

- **MW-1:** Annual groundwater sampling (May) and quarterly product recovery were performed during 2010.
- MW-2: Quarterly water level monitoring was performed during 2010.
- **MW-3:** Annual groundwater sampling (May) and quarterly water level monitoring were performed during 2010.
- **MW-4:** Quarterly water level monitoring was performed during 2010.

Site-Wide Activities: No other activities were performed at this Site during 2010.

SITE MAP

A Site map (May) is attached as Figure 1.

SUMMARY TABLES AND GRAPHS

• Historic analytical and water level data are summarized in Table 1 and presented graphically in Figures 2 through 5. Where applicable, static water level elevations were corrected for measurable thicknesses of free-product (specific gravity of 0.8).

EPTPC GROUNDWATER SITES 2010 ANNUAL GROUNDWATER REPORT

James F. Bell #1E Meter Code: 94715

- Historic free-product recovery data are summarized in Table 2 and presented graphically in Figures 2 and 4.
- The 2010 laboratory report is presented in Attachment 1 (included on CD).
- The 2010 field documentation is presented in Attachment 2 (included on CD).

GEOLOGIC LOGS AND WELL COMPLETION DIAGRAMS

No subsurface activities were performed at this Site during 2010.

DISPOSITION OF GENERATED WASTES

All purge water was taken to the El Paso Natural Gas Rio Vista Compressor Station.

ISOCONCENTRATION MAPS

No isoconcentration maps were prepared for this Site; however, the attached Site map presents the analytical data collected during the May 2010 event.

RESULTS

- Free-product was observed in MW-1 during the May 2010 sampling event. Product had last been measured in this well in 2005. Based on a review of the historic fluid level trends (see Figure 2), the reappearance of free-product in MW-1 seems to correlate with the return of the water table back to its lower 2005 elevations. This is commonly observed when smear zone soils drain, allowing for higher pore oil saturations and the resultant free-product entry into adjacent well screens. Free-product and groundwater were bailed from the well at the time of May sampling event, and oil-absorbing socks were installed and checked during the remainder of 2010. The total product recovered in 2010 was approximately 1.07 gallons; bringing the historic cumulative total product recovered from MW-1 to 786.17 gallons.
- MW-1 was sampled in May 2010, and the BTEX results were significantly above the NMWQCC standards. The BTEX concentrations were similar to those observed historically in this well.
- Free-product has not been detected in MW-3 since January 2004. Benzene and toluene concentrations (517 μg/L and <50 μg/L) have significantly attenuated over time, though benzene remains above its NMWQCC standard. Ethylbenzene (971 μg/L) and total xylenes concentrations (9,680 μg/L) both exceed their respective standards and are presently at concentrations consistent with their historic levels.

EPTPC GROUNDWATER SITES 2010 ANNUAL GROUNDWATER REPORT

James F. Bell #1E Meter Code: 94715

REMAINING CLOSURE REQUIREMENTS

- This site is being managed per the procedures set forth in the document entitled, "Remediation Plan for Groundwater Encountered During Pit Closure Activities" (El Paso Natural Gas Company / El Paso Field Services Company, 1995). This remediation plan was conditionally approved by the New Mexico Oil Conservation Division (OCD) in correspondence dated November 30, 1995; and the OCD approval conditions were adopted into El Paso's program methods.
- In order to meet the remaining closure requirements at this site, the following conditions must be achieved:
 - 1. Recoverable free-product must be removed from the subsurface. Generally, this corresponds with an absence of measurable free-product in the monitor wells. Currently, product recovery efforts are still required at MW-1.
 - 2. Groundwater contaminant concentrations in the monitor wells must meet the NMWQCC standards for at least 4 consecutive quarters. Alternatively, concentrations must be reduced to below background levels; however, there are no established background concentrations for the remaining constituents of concern. Currently, MW-1, MW-2, and MW-3 require additional monitoring. The remaining applicable standards are:

Constituent	NMWQCC GW Standard (μg/L)
Benzene	10
Toluene	750
Ethylbenzene	750
Total Xylenes	620

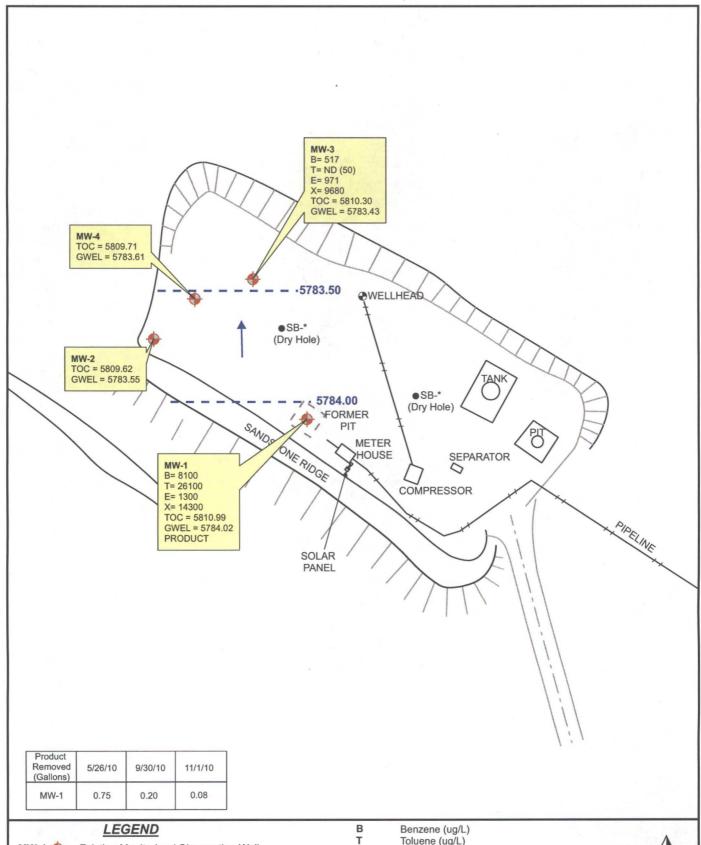
RECOMMENDATIONS

- The dissolved phase BTEX concentrations in MW-1 generally appear to be stable over the last 14 years. EPTPC will continue to sample this well annually in conjunction with MW-3. MW-1 will be gauged quarterly to check for free-product.
- EPTPC recommends that annual sampling be discontinued at MW-2. This well has been clean during the last 6 annual sampling events. EPTPC will not sample this well until the Site closure samples are collected. Water level monitoring will continue on a quarterly basis.
- EPTPC will continue annual groundwater sample collection and quarterly water level monitoring at MW-3.

EPTPC GROUNDWATER SITES 2010 ANNUAL GROUNDWATER REPORT

James F. Bell #1E Meter Code: 94715

• Because historic data collected at MW-4 indicate concentrations of BTEX constituents below analytical detection limits, EPTPC will not sample this well until the Site closure samples are collected. Water level monitoring will continue on a quarterly basis.



MW-4 🏶 Existing Monitoring / Observation Well

Z-01 Abandoned Monitoring Well

Groundwater Flow Direction

Potentiometric Surface Contour (Inferred Where Dashed)

ND

X TOC GWEL

Е

Toluene (ug/L)
Ethylbenzene (ug/L)
Total Xylenes (ug/L)
Top of Casing (ft. AMSL)

Groundwater Elevation (ft. AMSL)
Not Detected



Not To Scale



-1275-



PROJECT:

JAMES F BELL #1E

FIGURE:

Groundwater Potentiometric Surface Map, and BTEX Concentrations - May 26, 2010

FIGURE 2
SUMMARY OF GROUNDWATER BTEX CONCENTRATIONS, FLUID LEVELS, AND PRODUCT RECOVERY
JAMES F. BELL #1E (METER #94715)

MW01

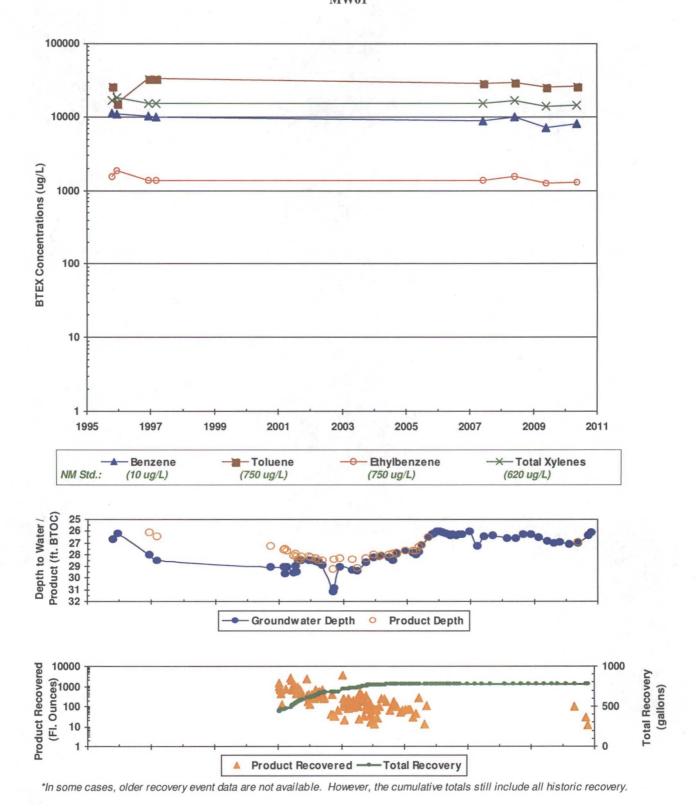


FIGURE 3
SUMMARY OF GROUNDWATER BTEX CONCENTRATIONS AND FLUID LEVELS
JAMES F. BELL #1E (METER #94715)
MW02

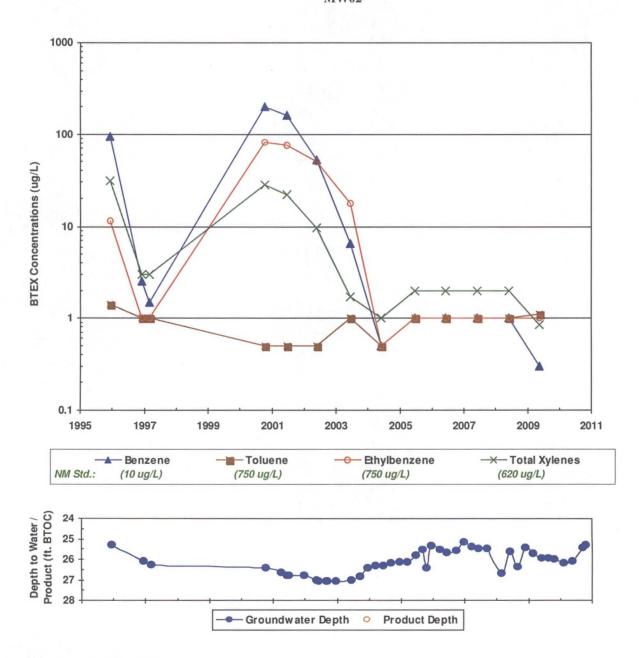


FIGURE 4
SUMMARY OF GROUNDWATER BTEX CONCENTRATIONS, FLUID LEVELS, AND PRODUCT RECOVERY
JAMES F. BELL #1E (METER #94715)
MW03

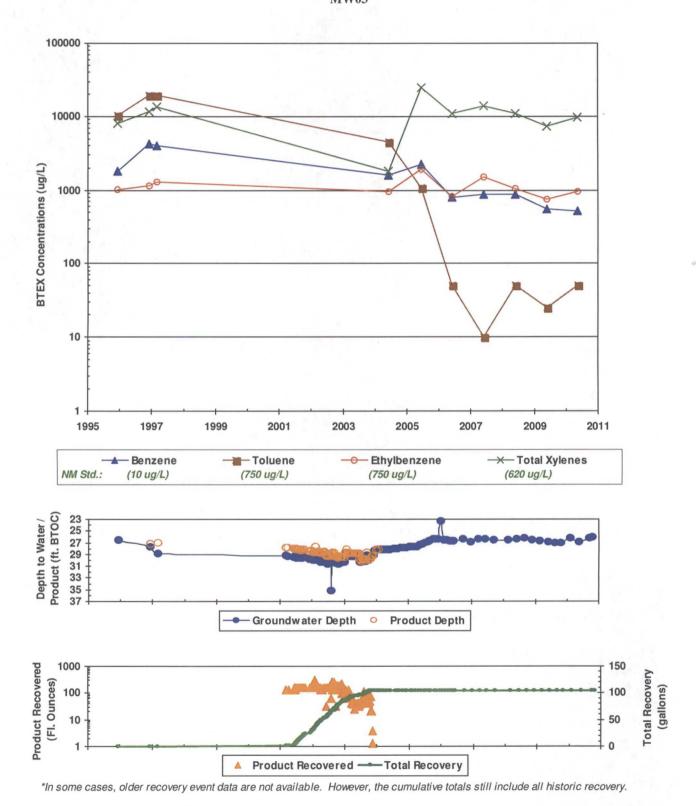


FIGURE 5
SUMMARY OF GROUNDWATER BTEX CONCENTRATIONS AND FLUID LEVELS
JAMES F. BELL #1E (METER #94715)
MW04

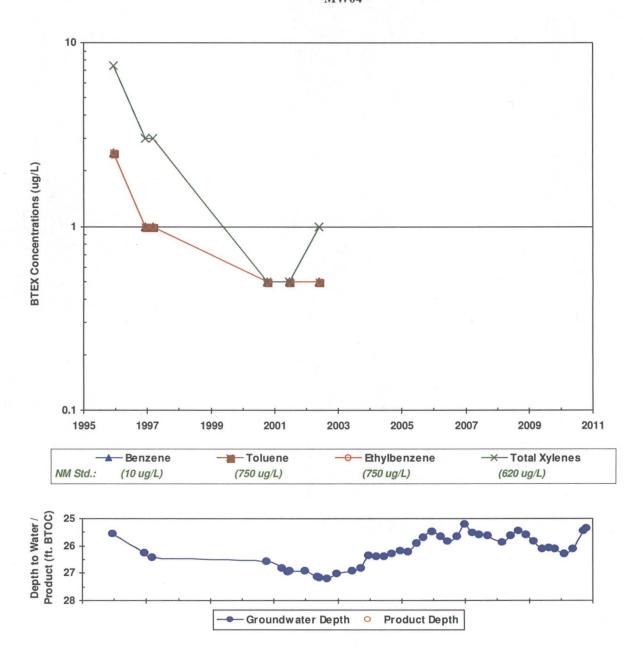


TABLE 1
SUMMARY OF BTEX COMPOUNDS IN GROUNDWATER SAMPLES
JAMES F. BELL #1E (METER #94715)

-	Monitor Well	Sample Date	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	Depth to Water (ft	Corrected GW Elevation
	NMWQCC	GW Std.:	10	750	750	620	BTOC)	(ft AMSL)
	MW01	10/17/1995	11200	26400	1540	16500	26.67	5784.32
o' a .	MW01	12/1/1/1995	10800	15400	1870	18400	26.23	5784.76
	MW01	12/4/1996	10300	33200	1400	15200	28.00	5784.46
	MW01	3/5/1997	9850	33400	1370	15200	28.47	5784.12
	MW01	6/11/2007	8910	29200	1360	15000	26.47	5784.52
	MW01	6/12/2008	10000	29700	1550	16800	26.60	5784.39
	MW01	6/3/2009	7120	25200	1270	13800	26.86	5784.13/
4 12 2	MW01	5/26/2010	8100	26100	1300	14300	27.07	5784.02
	MW02	12/11/1995	94.7	1.4	11.3	31.1	25.32	5784.30
	MW02	12/4/1996	2.52	<1.0	<1.0	<3.0	26.09	5783.53
	MW02	3/5/1997	1.49	<1.0	<1.0	<3.0	26.30	5783.32
14 m	MW02	10/11/2000	200 3	<0.5	81	- 28	26:41	5783.21
	MW02	6/25/2001	160	<0.5	77	22	26.79	5782.83
	MW02	6/5/2002	53	<0.5	50	9.7	27.06	5782.56
	MW02	6/19/2003	6.5	<1.0	17.8	1.7	27.04	5782.58
	MW02	6/9/2004	<0.5	> <0.5	<0.5	<1.0	26.34	5783!28
	MW02	6/23/2005	<1.0	<1.0	<1.0	<2.0	25.81	5783.81
	MW02	6/14/2006	<1.0	<1.0	<1.0	<2.0	25.66	5783.96
	MW02	6/11/2007	<1.0	<1.0	<1.0	<2.0	25.48	5784.14
er Som	MW02	6/12/2008	≤1∴0	<1.0	* <1.0	<2.0	25.62	5784.00
	MW02	6/3/2009	0.30J	1.1	<1.0	0.84J	25.95	5783.67
	MW03	12/11/1995	1790	10400	1010	8070	26.52	5783.78
	MW03	12/4/1996	4210	19200	1140	11700	27.72	5783.03
	MW03	² 3/5/1997	4000	19200	1280	13600	28.87	5782.85
	MW03	6/9/2004	1590	4520	· 966	1830	28.21	5782.09
	MW03	6/23/2005	2260	1090	1920	24800	27.18	./ 5783.11
	MW03	6/14/2006	795	<50	818	10900	26.71	5783.59
	MW03	6/11/2007	868	<10	1490	13900	26.42	5783.88
	MW03	6/12/2008	876	<50	1060	11000	26.42	5783.88
	MW03	6/3/2009	549	<25 → 3	750	7320	26.97	5783.33
	MW03	5/26/2010	> 517	<50	971	9680	26.87	5783.43
	MW04	12/11/1995	<2.5	<2.5	<2.5	<7.5	25.55	5784.16
	MW04	12/4/1996	<1.0	<1.0	<1.0	<3.0	26.27	5783.44
	MW04	3/5/1997	<1:0	<1.0	<1.0	<3.0	26.44	5783.27

TABLE 1

SUMMARY OF BTEX COMPOUNDS IN GROUNDWATER SAMPLES **JAMES F. BELL #1E (METER #94715)**

Monitor Well	Sample Date	Benzene (ug/L)	(ug/L)	Ethylbenzene (ug/L)	(ug/L)	Depth to Water (ft BTOC)	Corrected GW Elevation (ft AMSL)
NMWQCC	GW Std.:	10	750	750	620	втос	(It AMSL)
MW04	10/11/2000	<0.5	<0.5	<0.5	√ ₹0.5	26.56	5783.15
MW04	6/25/2001	<0.5	<0.5	<0.5	<0.5	26.93	5782.78
MW04	6/5/2002	<0.5	<0.5	<0.5	<1.0	27.16	5782.55

Notes:

Results shown in bold typeface exceed their respective New Mexico Water Quality Control Commission standards.

[&]quot;J" = result is qualified as estimated. See laboratory report and/or supplemental data validation report for further detail. "<" = analyte was not detected at the indicated reporting limit.

Static groundwater elevations have been corrected for product thickness where applicable. Specific gravity of 0.8 used.

TABLE 2
SUMMARY OF FREE-PRODUCT REMOVAL
JAMES F. BELL #1E (METER #94715)

Monitor Well	Removal Date	Depth to Product (ft BTOC)	Depth to Water (ft BTOC)	Product Thickness (feet)	Volume Removed (gallons)	Cumulative Removal (gallons)	Corrected GW Elevation (ft AMSL)
MW01	12/4/1996	26.16	28.00	1.84	NA	NA	∖ 5784.46
MW01	3/5/1997	26.47	28.47	2.00	ŇĄ	NA .	5784.12
MW01	9/29/2000	27.29	29.09	1.80	NA	NA	5783.34
:MW01	1/16/2001	NA	NA.	NA.	14.86	443.26	NA
MW01	1/24/2001	NA	NA	NA	7.27	450.53	NA .
MW01	1/31/2001	. NA	· NA	. NA	5.93	456.46	NA
MW01	2/8/2001	NA	NA	NA	3.25	459.71	NA
MW01	2/16/2001	, NA	NA	NA	5.48	465.19	NA
MW01	2/26/2001	27.61	29.06	1.45	1.00	466.19	5783.09
_MW01	. 3/14/2001	27.49	29.60	2.11	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	466.19	5783.08
MW01	4/6/2001	27.67	29.08	1.41	5.93	472.12	5783.04
MW01	6/5/2001	NA	NA.	NA	20.85	492.97	NA.
MW01	6/14/2001	NA	NA	NA	15.50	508.47	NA
MW01	6/22/2001	28.10	29.57	1.47	7.00	515.47	5782.60
· MW01	6/28/2001	NA	NA	NA	5.00	520.47	NA
MW01	7/6/2001	* NA	NA	NA	5.00	525.47	NA NA
MW01	7/11/2001	27.95	28.95	1.00		525.47	5782.84
MW01 :	7/20/2001	NA	NA NA	NA:	9!00	534.47	NA NA
MW01	7/26/2001	28.21	. 29.51	1.30	5.00	539.47	5782.52
MW01	8/2/2001	* NA	NA 3	NA	5.40	544.87	NA NA
MW01	8/8/2001	NA	NA	NA	3.25	548.12	NA
MW01	8/16/2001	28.40	28.49	0.09	7.00	555.12	5782.57
MW01	8/20/2001	NA	NA	NA	3.40	558.52	NA
-MW01	- 8/31/2001	NA	NA *	NA	6.30	564.82	NA
MW01	9/6/2001	28.41	28.46	0.05	3.80	568.62	5782.57
MW01	9/17/2001	28.19	28.46	0.27	5.36	573.98	5782.75
MW01	9/26/2001	NA	NA	NA	5.17	579.15	NA
MW01	10/3/2001	, NA	NA -	NA	2.70	581.85	NA
MW01	10/11/2001	NA	NA	NA NA	2.70	584.55	NA
MW01	. 12/4/2001 -	. NA	NA .	NA NA	19.13		NA NA
MW01	12/13/2001	28.20	28.50	0.30	2.70	606.38	5782.73
MW01	12/21/2001	ŇA	NA	NA	1.34	607.72	NA
MW01	12/28/2001	. NA	NA	NA	3.00	610.72	NA NA
- MW01	1/4/2002	NA NA	NA	NA	. 2.49	613.21	NA

TABLE 2

SUMMARY OF FREE-PRODUCT REMOVAL

JAMES F. BELL #1E (METER #94715)

Monitor Well	Removal Date	Depth to Product (ft BTOC)	Depth to Water (ft BTOC)	Product Thickness (feet)	Volume Removed (gallons)	Cumulative Removal (gallons)	Corrected GW Elevation (ft AMSL)
MW01	1/8/2002	28.25	28,54	0.29	1.00%	614.21	5782.68
MW01	1/17/2002	NA	· NA	NA	2.50	616.71	NA
MW01	1/23/2002	NA:	NA:	· NA	2.50	619.21	NA .
MW01	1/31/2002	NA	NA	NA	3.00	622.21	NA
MW01	* 12/7/2002	NA	NA NA	• NA	2.50	624.71	NA .
MW01	2/14/2002	NA	NA	NA	2.50	627.21	NA
MW01	2/20/2002	NA	.NA	NA	2.50	629.71	NA*
MW01	2/28/2002	28.31	28.62	0.31	3.50	633.21	5782.62
MW01	3/6/2002	NA	NA	NA	3.00	636.21	NA
MW01	3/11/2002	NA	NA	NA ·	2.00	638.21	NA
MW01	3/21/2002	NA 😘	NA	, NA	->5.00	643.21	NA .
MW01	3/28/2002	28.51	28.64	0.13	3.00	646.21	5782.45
MW01	4/4/2002	NA .	NA T	NA 🎨	2.50	648.71	NA
MW01	4/12/2002	NA	NA	NA	3.44	652.15	NA
MW01	4/19/2002	NA	, NA	NA	4.00	656.15	NA.
MW01	4/25/2002	NA	NA	NA ·	4.37	660.52	NA,
MW01	5/3/2002	NA	:NA	NA	4:23	664.75	NÄ
MW01	5/15/2002	28.48	28.87	0.39	3.95	668.70	5782.43
MW01	5/31/2002	NA 😹	NA	NA 🤾	5.00	673.70	NÂ
MW01	6/7/2002	NA	NA	NA	2.50	676.20	NA
MW01	6/14/2002	NA	NA.	NA **	2.00	678.20	NA
MW01	6/21/2002_	NA	NA	NA ·	2.10	680.30	NA
MW01	9/10/2002	NA	. NA	NA	0.33	680.63	NA
MW01	9/13/2002	29.20	31.17	1.97		680.63	5781.40
MW01	9/19/2002	28.45	30.82	2.37	3,00	683.63	5782.07
MW01	10/4/2002	NA	NA	NA	0.33	683.96	NA
MW01	10/10/2002	NA 🔧	NA .	NA	0.33	684.29	NA.
MW01	10/15/2002	NA	NA	NA ·	0.25	684.54	NA
MW01	10/23/2002	NA	NA:	NA	0.25	684.79	NA
MW01	10/30/2002	NA	NA	NA	0.25	685.04	NA
MW01	12/4/2002	28.37	29.07	0.70	0.50	685.54	5782.48
MW01	1/22/2003	NA	NA	NA	28.50	714.04	. NA
MW01	1/29/2003	NA	NA NA	NA	0.75	714.79	NA
MW01	2/5/2003	NA	NA	NA	2.00	716.79	NA

TABLE 2
SUMMARY OF FREE-PRODUCT REMOVAL
JAMES F. BELL #1E (METER #94715)

	****	Depth to	Depth to	Product	Volume	Cumulative	Corrected
Monitor	Removal	Product (ft	Water (ft	Thickness	Removed	Removal	GW Elevation
Well	Date	BTOC)	BTOC)	(feet)	(gallons)	(gallons)	(ft AMSL)
MW01	2/12/2003	NA	NA	NA ·	1.38	718.17	NA
MW01	2/20/2003	NA	NA 🌝	NA .	0.17	718.34	NA
MW01	3/6/2003	NA	NA	NA	1.38	719.72	NA
MW01	3/12/2003	L NA	NA	NA	0.98	720.70	NA .
MW01	3/19/2003	NA	NA	NA	1.38	722.08	NA
MW01	3/26/2003	NA .	NA 🛴	NA	0.60	722.68	NA .
MW01	4/2/2003	NA	NA	NA	1.96	724.64	NA
MW01	4/10/2003	NA.	NA	NA:	1.57	726.21	NA '
MW01	4/18/2003	28.44	29.29	0.85		726.21	5782.38
MW01	4/28/2003	NA	NA .	NA	1.18	727.39	NA
MW01	5/7/2003	NA	NA	NA	1.18	728.57	NA
MW01	5/13/2003	NA NA	NA 💥	NA NA	1.00	729.57	NA ,
MW01	5/21/2003	NA	NA	NA	0.69	730.26	NA
MW01	5/27/2003	NA	NA.	NA	1.47	731:73	NA
MW01	6/3/2003	NA ·	NA	NA	0.98	732.71	NA
MW01	6/9/2003	* NA	NA	NA NA	1.18	733.89	NA .
MW01	6/19/2003	29.19	29.41	0.22 ·		733.89	5781.76
MW01	6/23/2003	NA	NĄ	, NA	1.77	735.66	NA
MW01	7/10/2003	NA	NA	NA	2.00	737.66	NA
::MW01	7/15/2003	NA	NA -	NA	0.79	738.45	NA:
MW01	7/21/2003	NA	NA	NA	0.88	739.33	NA
MW01	7/29/2003	NA .	NA	NA .	0.19	739.52	NA .
MW01	8/11/2003	NA	NA	NA	3.96	743.48	NA
4 MW01	8/18/2003	[*] NA	NA	[*] NA	2.85	746.33	NA
MW01	8/25/2003	NA	NA	NA	1.57	747.90	NA
MW01	9/2/2003	NA	NA	, NA	2.78	750.68	NA
MW01	9/8/2003	NA	NA .	NA	1.37	752.05	NA
MW01	9/15/2003	NA	NA.	NA	2.16	754.21	NA NA
MW01	9/22/2003	28.31	28.64	0.33	0.25	754.46	5782.61
/* MW01	9/29/2003	NA NA	NA 🗦	NA	1.77	756.23	NA
MW01	10/6/2003	NA	NA	NA	1.57	757.80	NA
MW01	10/13/2003	. NA	NA	NA	0.78	758.58	NA .
MW01	10/20/2003	NA	NA	NA	2.55	761.13	NA
MW01	10/27/2003	ŅĀ	NA .	NA.	0.55	761.68	NA .

TABLE 2
SUMMARY OF FREE-PRODUCT REMOVAL
JAMES F. BELL #1E (METER #94715)

Monitor Well	Removal Date	Depth to Product (ft BTOC)	Depth to Water (ft BTOC)	Product Thickness (feet)	Volume Removed (gallons)	Cumulative Removal (gallons)	Corrected GW Elevation (ft AMSL)
MW01	11/3/2003	* NA	NÁ	NA /	0.79	762.47	NA
MW01	11/10/2003	NA	NA	NA ,	0.79	763.26	NA
∵MW01	11/17/2003	NA NA	NA	, NA	0.79	764.05	NA
. MW01	11/26/2003	NA	NA	NA	1.18	765.23	NA
MW01	12/4/2003	NA .	NA	NA .	0.30	765.53	, NA
MW01	12/9/2003	NA	NA	NA	0.79	766.32	· NA
MW01	12/15/2003	28.04	28.24	0.20	0.13	766.45	5782.91
MW01	1/2/2004	NA	. NA	NA	0.20	766.65	NA .
MW01	1/11/2004	. NA	ŊĄ.	NA .	0.59	767.24	· NA · ·
MW01	1/23/2004	NA	NA	NA	0.59	767.83	NA
MW01	1/30/2004	. NA	NA	· NA	0.10	767.93	NA
MW01	2/6/2004	NA	NA	NA	0.49	768.42	NA
MW01	2/12/2004	NA	NA	NA	0.20	768.62	NA
MW01	2/18/2004	NA	NA	NA	0.59	769.21	NA
MW01	2/27/2004	28.19	28:21	0.02	0.20	769.41	5782.80
MW01	3/16/2004	28.08	28.13	0.05	0.79	770.20	5782.90
MW01	4/13/2004	NA ·	NA	<- NA →	1.87	772.07	NA
MW01	5/10/2004	NA .	NA	NA	1.87	773.94	NA
MW01	6/2/2004	NA	ΝA	NA ,	1.37	775.31	NA
MW01	6/9/2004	28.03	28.27	0.24		775.31	5782.91
* MW01	7/26/2004	27.95	, ₂ 8.48	0.53	0.50	775.81,	5782.93
MW01	8/16/2004	NA	NĄ	NA	0.79	776.60	NA
MW01	9/9/2004	NA	NA	NA	1:37	777.97	NA
MW01	9/10/2004	27.82	27.89	0.07		777.97	5783.16
MW01	10/11/2004:	NA	ŅĀ	NA	0.79	778.76	NA
MW01	11/17/2004	NA	NA	NA	0.39	779.15	NA
MW01	12/13/2004	∵ NA	ÑΑ	NA ,	0.49	779.64	NA
MW01	12/14/2004	27.67	27.68	. 0.01		779.64	5783.31
MW01	12/18/2004	27.67	27.71	0.04	A Division	779.64	5-5783.31 · ·
MW01	1/17/2005	NA	NA	· NA	0.58	780.22	NA
MW01	2/15/2005	* NA	na.	. NA	0.58	780.80	NA 🤻
MW01	3/16/2005	·NA	NA	NA	0.59	781.39	NA
MW01	3/17/2005	27.65	27.83	0.18		781.39	5783.30
MW01	4/15/2005	27.72	28.03	0.31	0.22	781.61	5783.21

TABLE 2
SUMMARY OF FREE-PRODUCT REMOVAL
JAMES F. BELL #1E (METER #94715)

Monitor Well	Removal Date	Depth to Product (ft BTOC)	Depth to Water (ft BTOC)	Product Thickness (feet)	Volume Removed (gallons)	Cumulative Removal (gallons)	Corrected GW Elevation (ft AMSL)
MW01	5/17/2005	27.35	27.78	0.43	0.36	781.97	5783.55
MW01	6/17/2005	NA.	NA ·	NA .	2:15	784.12	NA.
MW01	6/23/2005	27.21	27.23	0.02		784.12	5783.78
MW01	8/22/2005	NA NA	NA	NA .	0.10	784.22	NA
MW01	9/12/2005	26.52	26.56	0.04	0.88	785.10	5784.46
MW01	5/26/2010	26.95	27.07	0.12	0.75	785.85	\$784.02
MW01	9/30/2010		26.40	0.00	0.23	786.08	5784.59
MW01	. 11/1/2010		26.14	0.00	0.09	786.17	5784.85
MW03	12/4/1996	27.16	27.72	0.56		0.00	5783.03
MW03	3/5/1997	27.09	28.87	1.78		0.00	5782.85
MW03	3/12/2001	27.84	29.18	1.34	1.00	1.00	5782.19
MW03	4/6/2001	27.86	29.27	1.41	1.00	2.00	5782.16
MW03	6/5/2001	28.06	29.48	1.42	1.00	3.00	5781.96
MW03	6/14/2001	27.98	29.41	1.43	1.25	4.25	5782.03
MW03	6/22/2001	NA	NA	NA	1.00	5.25	NA
MW03*	6/28/2001	28.15	29.57	1.42	1.25	6.50	5781.87
MW03	7/6/2001	28.06	29.41	1.35	1.25	7.75	5781.97
MW03	7/11/2001	28.26	29.61	1.35	* 1.25	9.00	5781.77
MW03	7/20/2001	28.13	29.43	1.30	1.25	10.25	5781.91
MW03	7/26/2001 ⁷	NA	· NA	NA	1.25	11.50	NA
MW03	8/2/2001	28.22	29.50	1.28	1.25	12.75	5781.82
MW03	8/8/2001	28.16	29.40	1.24 ••.	1.25	14.00	5781.89
MW03	8/16/2001	28.21	29.46	1.25	1.25	15.25	5781.84
MW03	8/20/2001	28.31	29.61	1.30	1.25	16.50	5781.73
MW03	8/31/2001	28.17	29.47	1.30	1.25	17.75	5781.87
MW03	<i>≥</i> 9/6/2001	28.31	29.62	1.31	1.25	19.00	5781.73
MW03	9/17/2001	28.34	29.62	1.28	1.25	20.25	5781.70
MW03	9/25/2001	28:22	29.48	1.26	1.25	21.50	5781.83
MW03	10/3/2001	28.25	29.47	1.22	1.25	22.75	5781.81
MW03	10/11/2001	28.23	29.50	1.27	1:25	24.00	57,81.82
MW03	12/4/2001	28.55	29.89	1.34	1.25	25.25	5781.48
MW03	12/13/2001	28.54	29.89	1.35	1.25	26.50	5781.49
MW03	12/21/2001	28.36	29.63	1.27	1.25	27.75	5781.69
MW03 3.3.3	12/28/2001	28.43	29.68	1.25	1.25	29.00	5781.62

TABLE 2
SUMMARY OF FREE-PRODUCT REMOVAL
JAMES F. BELL #1E (METER #94715)

Monitor Well	Removal Date	Depth to Product (ft BTOC)	Depth to Water (ft BTOC)	Product Thickness (feet)	Volume Removed (gallons)	Cumulative Removal (gallons)	Corrected GW Elevation (ft AMSL)
MW03	1/4/2002	28.39	29.63	1.24	1.25	30.25	5781.66
MW03	1/8/2002	28.41	29.59	1.18	1.25	31.50	5781.65
MW03	1/17/2002	28.70	30.00	1.30	1.25	32.75	5781.34
MW03	1/23/2002	28.70	28.71	0.01	1.25	34.00	5781.60
MW03	1/31/2002	28.68	28.70	0.02	2.50	36.50	5781.62
MW03	2/7/2002	28.70	30.00	. 1.30	1.25	37.75	5781.34
MW03	2/14/2002	27.80	28.80	1.00	1.25	39.00	5782.30
MW03	2/20/2002	28.74	28.76	0.02	1.25	40.25	5781.56
MW03	2/28/2002	28.64	29.82	1.18	1.25	41.50	5784.42
MW03	3/6/2002	28.55	29.72	1.17	1.25	42.75	5781.52
MW03	3/11/2002	28:72	29.90	1.18	1.25	44.00	5781.34
MW03	3/21/2002	28.61	29.82	1.21	1.25	45.25	5781.45
MW03	3/28/2002	28.57	29.74	1.17	1.25	46.50	5781.50
MW03	4/4/2002	28.66	29.84	1.18	1.25	47.75	5781.40
MW03	4/12/2002	28.93	30.28	1.35	1.00	48.75	5781.10
MW03	4/19/2002	28.93	30.25	1.32	1.00	49.75	5781.11
MW03	4/25/2002	28.93	30.24	1.31	1.00	50.75	5781.11
MW03	5/3/2002		28.96	0.00	1.00	51.75	5781.34
MW03	5/15/2002	*28.69	29.86	1.17	1.25	53.00	5781.38
MW03	5/24/2002	28.53	29.53	1.00		53.00	5781.57
MW03	5/31/2002:-	28.72	29.96₺ ₹	1.24	1.25	54.25	5781.33
MW03	6/7/2002	28.72·	29.91	1.19	1.25	55.50	5781.34
MW03	6/14/2002	28.97	30.31	1.34	0.25	55.75	5781.06
MW03	6/21/2002	29.32	30.54	1.22	1.25	57.00	5780.74
MW03	6/27/2002	29.30	30.65	1.35	1.25	58.25	57,80.73
MW03	7/2/2002	29.25	30.56	1.31	-1.25	59.50	5780.79
MW03	7/11/2002	29.31	30.66	1.35	1.25	.60.75	5780.72
MW03	7/22/2002	29.17	30.54	1.37	1.50	62.25	5780.86
MW03	7/25/2002	29.25	30.40	1.15	1.25	63.50	5780.82
MW03	7/31/2002	29.04	30.38	1.34	1.50	65.00	5780.99
MW03	8/8/2002	29.13	30.15	1.02	∂0.50 ·	65.50	5780.97
MW03	8/16/2002	29.30	35.25	5.95	2.00	67.50	5779.81
MW03	8/22/2002	28.74	30:07	1.33	1.00	68.50	5781.29
MW03	8/28/2002	28.78	29.75	0.97		68.50	5781.33

TABLE 2
SUMMARY OF FREE-PRODUCT REMOVAL
JAMES F. BELL #1E (METER #94715)

Monitor Well	Removal Date	Depth to Product (ft BTOC)	Depth to Water (ft BTOC)	Product Thickness (feet)	Volume Removed (gallons)	Cumulative Removal (gallons)	Corrected GW Elevation (ft AMSL)
MW03	9/6/2002	28.98	30.03	1.06		68.50	5781.11
MW03	9/10/2002	NA **	NA	NA-	2.00.	70:50	NA
MW03	9/13/2002	28.63	29.29	0.66		70.50	5781.54
MW03	9/19/2002	.29.42	30.43	1.01	1.00	71.50	5780.68
MW03	9/25/2002	29.40	30.28	0.88	0.25	71.75	5780.72
MW03	10/4/2002	29.34	30.19	0.85	1.50	73.25	5780.79
MW03	10/10/2002	29.45	30.32	0.86	1.50	74.75	5780.67
MW03	10/15/2002	29.50	30.28	0.79	1.50	76.25	5780.65
MW03	10/23/2002	29.66	30.32	0.66	1.50	77.75	5780.51
MW03	10/30/2002	29.32	30.58	1.26	1.25	79.00	5780.73
MW03	11/8/2002	29.36	30.58	1.22	1.50	80.50	5780.70
MW03	11/21/2002	29.45	30.45	1.00	1.50	82.00	5780.65
MW03	12/4/2002	29.48	30.47	0.99	1.75	83.75	5780.62
MW03	12/10/2002	29.48	30.23	0.75	0.75	84.50	5780.67
MW03	12/18/2002	29.38	30.28	0.90	1.00	85.50	5780.74
MW03	12/27/2002	29:45	30.21	0.76	0.50	86.00	5780.70.,
MW03	1/7/2003	29.45	30.26	0.81		86.00	5780.69
MW03	1/22/2003	28:75	29.46	0.71	1.00	87.00	5781.41
MW03	1/29/2003	28.76	29.34	0.58	0.75	87.75	5781.42
MW03	.2/5/2003	28.29	28.77	0.48	0.66	88.41	5781.91
MW03	2/12/2003	28.78	29.33	0.55	0.80	89.21	5781.41
MW03	£ 2/20/2003	28.77	29.33	0.56	1.00	90.21	5781.42
MW03	2/28/2003	28.80	29.31	0.51	0.60	90.81	5781.40
MW03	3/2/2003	28.81	29:27	···· /0:46	0.50	91:31	5781.40
MW03	3/6/2003	28.79	29.31	0.52	0.75	92.06	5781.41
MW03	3/19/2003	28.82	29.30	0.48	0.50	92.56	5781.38
MW03	3/26/2003	28.82	29.33	0.51	0.33	92.89	5781.38
MW03	4/2/2003	28.80	29.33	0.53	0.50	93.39	5781.39
MW03	4/10/2003	28.84	29.32	0.48	0.33	93.72	5781.36
MW03	4/18/2003	28.85	29.29	0.44	0.30	94.02	5781.36
MW03	4/28/2003	28.86	29.19	0.33	0.20	94.22	5781.37
MW03	5/7/2003	28.83	29.25	0.42	0.30	94.52	5781.39
MW03	5/13/2003	28.85	29.27	0.42	0.30	94.82	5781.37
MW03	5/21/2003	28.86	29.29	0.43	0.30	95.12	5781.35

TABLE 2

SUMMARY OF FREE-PRODUCT REMOVAL
JAMES F. BELL #1E (METER #94715)

Monitor Well	Removal Date	Depth to Product (ft BTOC)	Depth to Water (ft BTOC)	Product Thickness (feet)	Volume Removed (gallons)	Cumulative Removal (gallons)	Corrected GW Elevation (ft AMSL)
MW03	5/27/2003	28.85	- : 29.21	0.36	0.25	95.37	5781.38
MW03	6/3/2003	28.84	29.23	0.39	0.33	95.70	5781.38
MW03	6/9/2003	28.84	29.20	0.36	0.33	96.03	5781.39
MW03	6/16/2003	28.82	29.20	0.38	0.25	96.28	5781.40
MW03	6/19/2003	28.86	29.16	0.30		96.28	5781.38
MW03	6/23/2003	28.83	29.23	0.40	0.25	96.53	5781.39
MW03	7/1/2003	29.78	29.85	0.07	0.30	96.83	5780.51
MW03	7/10/2003	29.96	30.39	0.43		96.83	5780.25
MW03	7/15/2003	30:12	30.29	0.17	0.40	97.23	5780.15
MW03	7/21/2003	30.11	30.24	0.13	0.40	97.63	5780.16
MW03	7/29/2003	29.89	30.14	0.25	0.40	98.03	5780.36
MW03	8/4/2003	29.62	29.94	0.32	0.36	98.39	5780.62
MW03	× 8/11/2003×	30.02	30.09	0.07	÷ 0.86	99.25	5780.27
MW03	8/18/2003	30.01	30.09	0.08	0.59	99.84	5780.27
MW03	8/25/2003	30.00	30.09	0.09	0.53	100.37	5780.28
MW03	9/2/2003	30.03	30.12	0.09	0.49	100.86	5780.25
MW03	9/8/2003	30.05	30.15	0.10	0.38	101.24	5780.23
MW03	9/15/2003	29.97	30.05	0.08	0.47	101.71	5780.31
MW03	9/22/2003	28.70	29.14	0.44	0.33	102.04	5781.51
MW03	9/29/2003	29.95	29.98	0.03	0.73	102.77	5780.34
MW03	10/6/2003	29.94	30.00	0.06	0.31	103.08	5780.35
MW03	10/13/2003	29.89	29.95	0.06	0.42	103.50	5780.40
MW03	10/20/2003	29.80	29.86	0.06	0.38	103.88	5780.49
MW03	10/27/2003	29.80	29.85	0.05	0.59	104.47	5780.49
MW03	11/3/2003	29.80	29.83	0.03	; 0.16	i 104.63	5780.49
MW03	11/10/2003	29.65	29.66	0.01	0.16	104.79	5780.65
MW03	11/17/2003	29.31	29.32	0.01	0.03	104.82	5780.99
MW03	11/26/2003	29.31	29.32	0.01	0.01	104.83	5780.99
MW03	1/1 1/2004	28.36	28.37	-0.01	n / 10 22 50 10 10 10 10 10 10 10 10 10 10 10 10 10	104.83	5781.94
MW03	1/16/2004	28.25	28.25	0.00		104.83	5782.05
MW03	1/30/2004	28.22	28.22	0.00		104.83	5782.08

TABLE 2

SUMMARY OF FREE-PRODUCT REMOVAL JAMES F. BELL #1E (METER #94715)

Monitor	Removal	Depth to Product (ft	Depth to Water (ft	Product Thickness	Volume Removed	Cumulative Removal	Corrected GW Elevation
Well	Date	BTOC)	BTOC)	(feet)	(gallons)	(gallons)	(ft AMSL)

Notes:

Groundwater elevations may not be static due to removal of equipment. Corrections for product thickness utilize SG of 0.8.

[&]quot;--" indicates either that product was not measurably detected or that product was not recovered.

[&]quot;NA" indicates that the respective data point is not available.