

OK  
Olson  
4/3/2003  
submitted 2/28/03

**EPFS GROUNDWATER SITES  
2002 ANNUAL GROUNDWATER REPORT**

**Ramenta et al #1  
Meter Code: 75155**

**SITE DETAILS**

**LEGAL DESCRIPTION:** Twn: 27N Rng: 9W Sec: 13 Unit: J  
**NMOCD Haz Ranking:** 30 **Land Type:** Navajo **Operator:** Burlington Resources

**PREVIOUS ACTIVITIES**

**Site Assessment:** Jun-96 **Excavation:** Nov-96 (436 cy) **Soil Boring:** May-97  
**Monitor Well:** May-97 **Geoprobe:** Feb-97 **Additional MWs:** Jun-99  
**Downgradient MWs:** Jun-99 **Replace MW:** NA **Quarterly Initiated:** Jun-97  
**ORC Nutrient Injection:** NA **Re-Excavation:** NA **PSH Removal Initiated:** NA  
**Annual Initiated:** NA **Quarterly Resumed:** NA

**SUMMARY OF 2002 ACTIVITIES**

**MW-1:** Quarterly groundwater sampling and water level monitoring was performed.  
**MW-2:** Annual groundwater sampling (June 02) and quarterly water level monitoring was performed.  
**MW-3:** Annual groundwater sampling (June 02) and quarterly water level monitoring was performed.  
**Site-Wide Activities:** In March 2002 El Paso Field Services requested that both Navajo Nation EPA and New Mexico OCD close this site. Notice of decision is pending.

**SUMMARY TABLES AND GRAPHS**

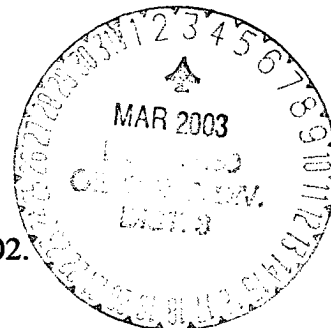
- Analytical data are summarized in Table 1 and presented graphically in Figures 5 through 7.
- Laboratory reports are presented in Attachment 1.
- Field documentation is presented in Attachment 2.

**SITE MAP**

Site maps are attached as Figures 1 through 4.

**GEOLOGIC LOGS AND WELL COMPLETION DIAGRAMS**

No subsurface activities were performed at this site during 2002.



**EPFS GROUNDWATER SITES  
2002 ANNUAL GROUNDWATER REPORT**

**Ramenta et al #1  
Meter Code: 75155**

---

**DISPOSITION OF GENERATED WASTES**

No wastes were generated at this site during 2002.

**ISOCONCENTRATION MAPS**

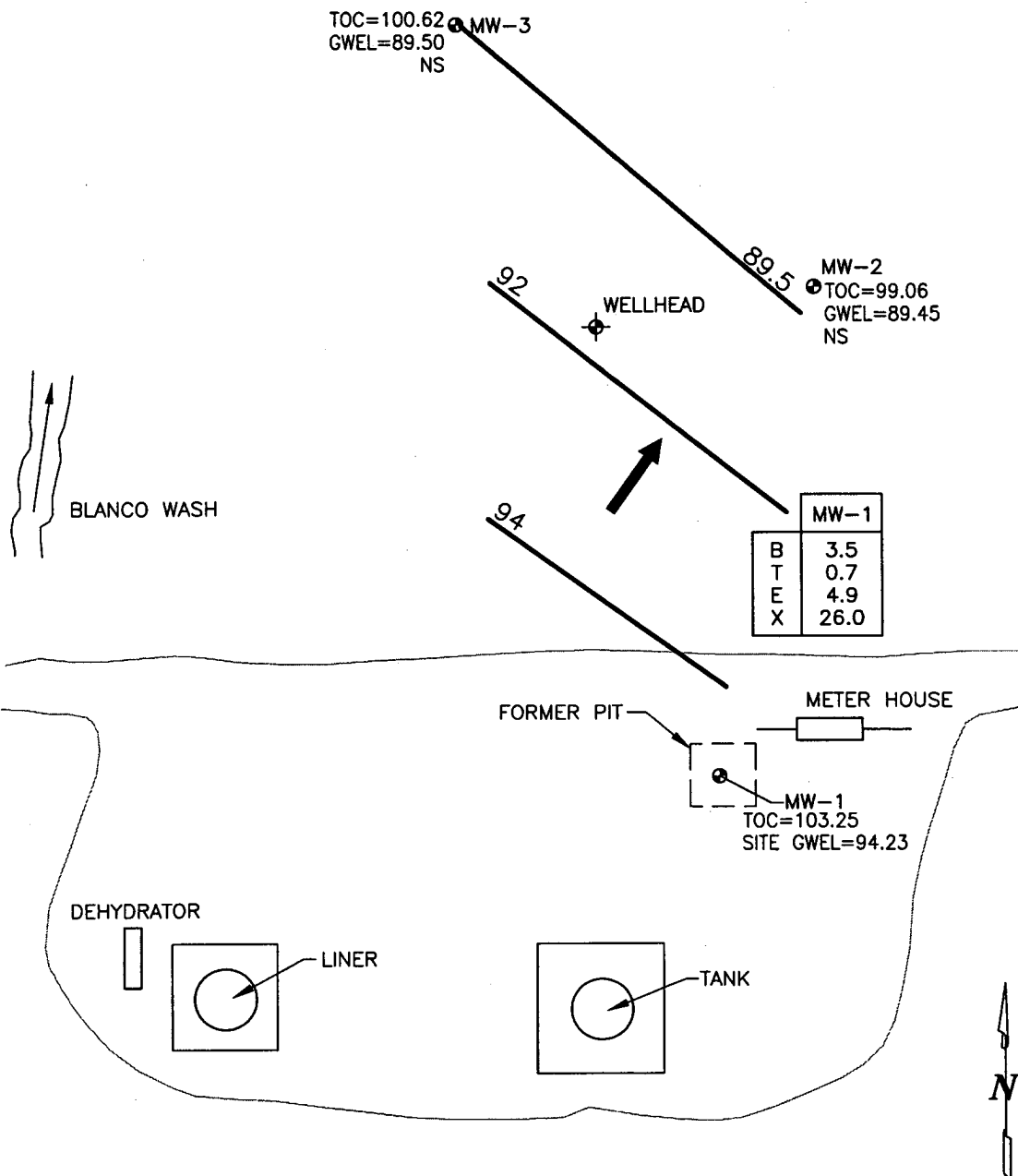
No isoconcentration maps were generated for this site. However, the attached site maps present both potentiometric surface and analytical data collected during 2002.

**CONCLUSIONS**

- The groundwater flow direction at this site trends toward the northeast.
- Analytical results from groundwater samples collected from this site during 2002 have continued to be below New Mexico OCD closure criteria.
- Analytical results from samples collected at MW-1 were below NNEPA closure criteria for three out of four quarters in 2002.
- Analytical results from samples collected at MW-2 and MW-3 were below NNEPA closure criteria.
- NMOCD closure criteria have been achieved, and closure of this site has been requested (see 2001 Annual Report).
- This site requires two additional consecutive quarterly groundwater sample results below closure standards at MW-1 to qualify for closure under the Navajo Nation EPA guidelines.

**RECOMMENDATIONS**

- EPFS will continue quarterly sampling at MW-1 until the Navajo Nation EPA closure criteria are met.
- EPFS reiterates the NMOCD closure request for this site presented in the 2001 Annual Report.
- Following approval for closure by both the Navajo Nation EPA and New Mexico OCD, all monitoring wells will be removed in accordance with the approved EPFS Monitoring Well Abandonment Plan.



# LEGEND

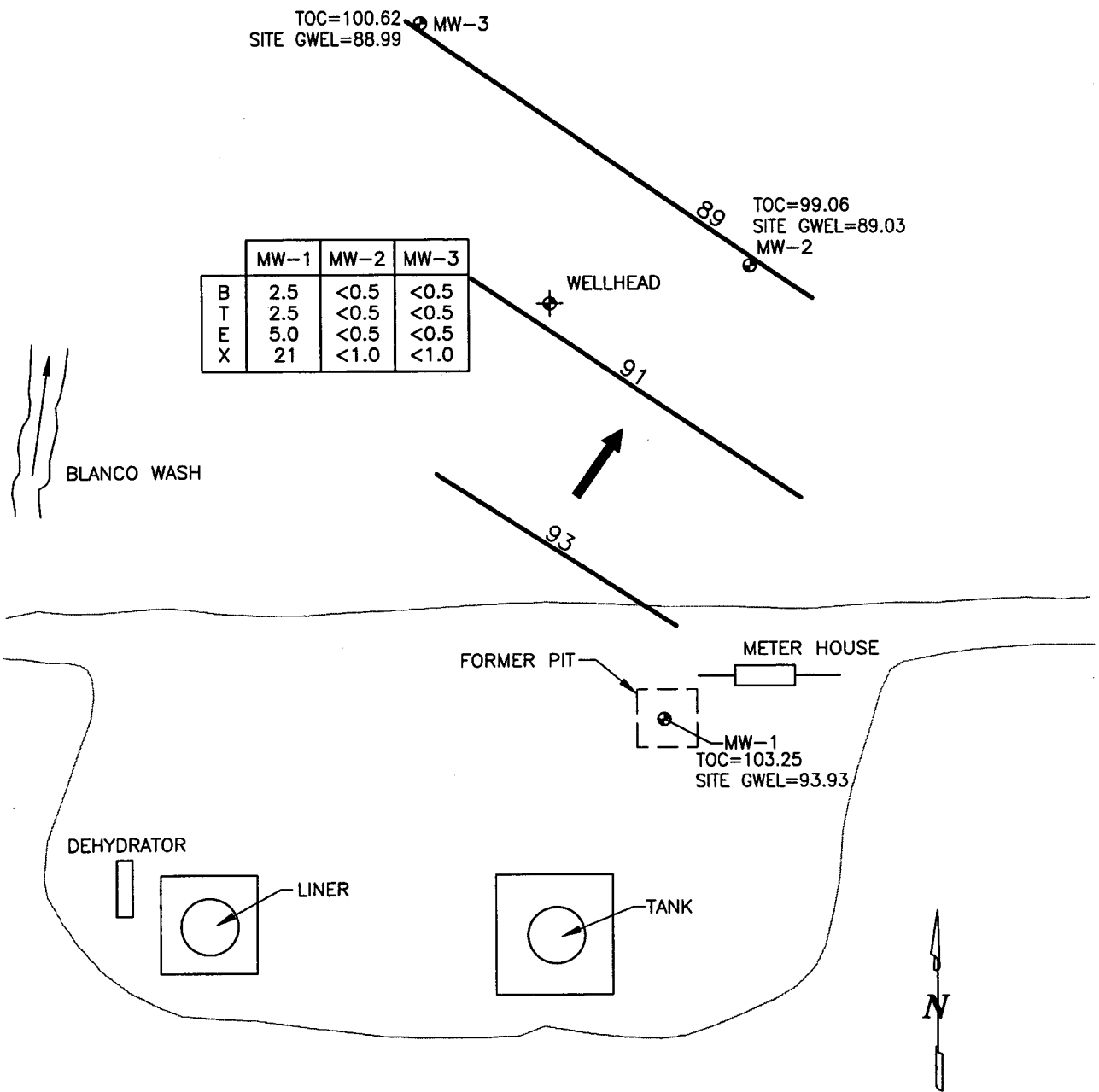
● MW-1	Approximate Monitoring Well Location and Number	6566.0	Potentiometric Surface (Assumed Where Dashed)
B	Benzene (µg/L)	→	Direction of Groundwater Flow
T	Toluene (µg/L)	GWEL	Groundwater Elevation (FT Above Mean Sea Level Unless Noted Otherwise)
E	Ethylbenzene (µg/L)	TOC	Top of Casing
X	Total Xylenes (µg/L)		
NS	Not Sampled		

NOT TO SCALE

RAMENTA ET AL #1, METER 75155  
MARCH, 2002

GROUNDWATER SITES  
EL PASO FIELD SERVICES

FIGURE 1



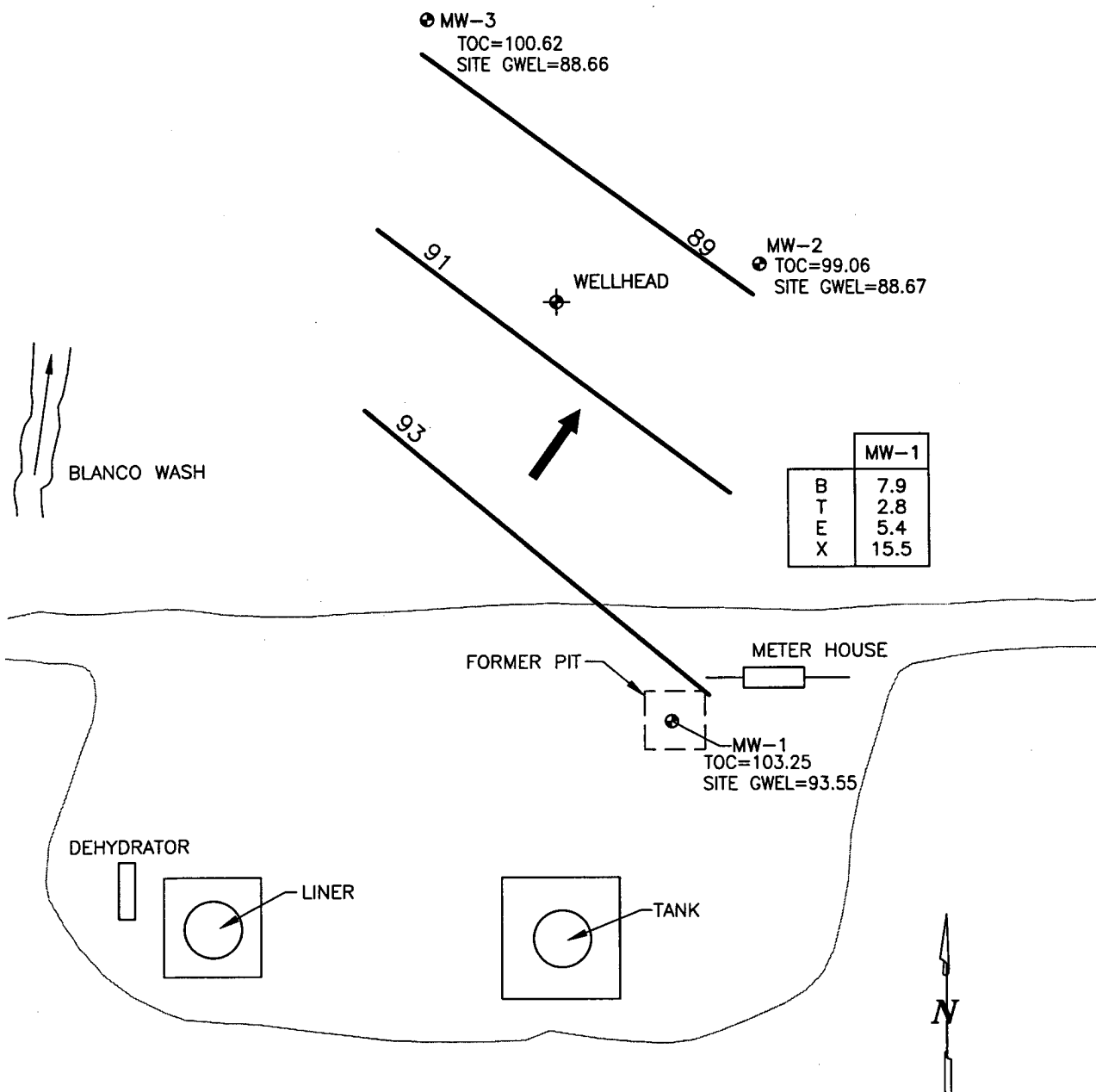
### LEGEND

● MW-1	Approximate Monitoring Well Location and Number		
B	Benzene ( $\mu\text{g/L}$ )	6566.0	Potentiometric Surface (Assumed Where Dashed)
T	Toluene ( $\mu\text{g/L}$ )	→	Direction of Groundwater Flow
E	Ethylbenzene ( $\mu\text{g/L}$ )		Groundwater Elevation (FT Above Mean Sea Level Unless Noted Otherwise)
X	Total Xylenes ( $\mu\text{g/L}$ )	GWEL	
NS	Not Sampled	TOC	Top of Casing

RAMENTA ET AL #1, METER 75155  
JUNE, 2002

GROUNDWATER SITES  
EL PASO FIELD SERVICES

FIGURE 2



# LEGEND

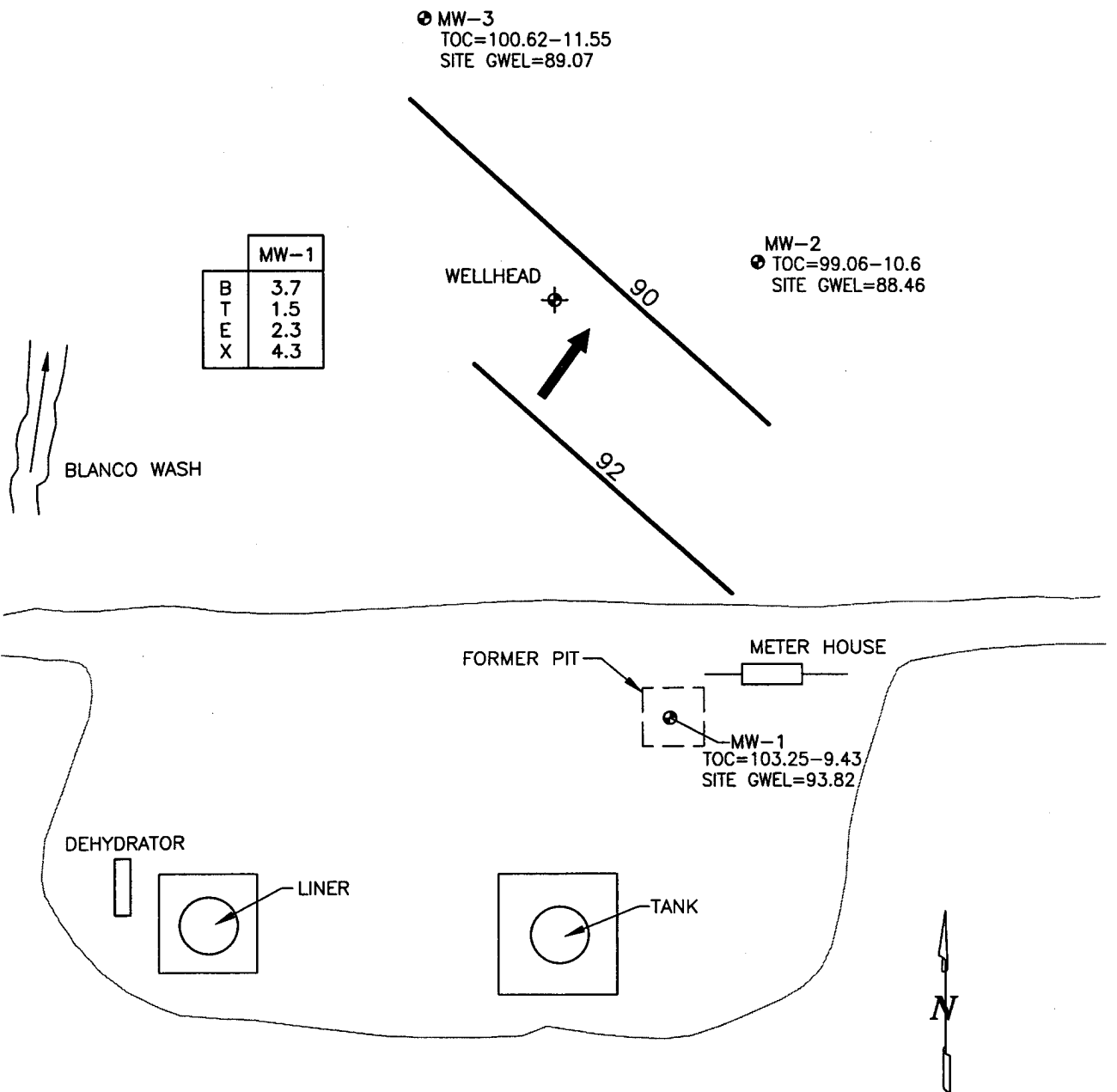
⊕ MW-1	Approximate Monitoring Well Location and Number		
B	Benzene ( $\mu\text{g/L}$ )	6566.0	Potentiometric Surface (Assumed Where Dashed)
T	Toluene ( $\mu\text{g/L}$ )	→	Direction of Groundwater Flow
E	Ethylbenzene ( $\mu\text{g/L}$ )		Groundwater Elevation (FT Above Mean Sea Level Unless Noted Otherwise)
X	Total Xylenes ( $\mu\text{g/L}$ )	GWEL	
NS	Not Sampled	TOC	Top of Casing

NOT TO SCALE

RAMENTA ET AL #1, METER 75155  
SEPTEMBER, 2002

GROUNDWATER SITES  
EL PASO FIELD SERVICES

FIGURE 3



# LEGEND

⊕ MW-1	Approximate Monitoring Well Location and Number	6566.0	Potentiometric Surface (Assumed Where Dashed)
B	Benzene ( $\mu\text{g/L}$ )	→	Direction of Groundwater Flow
T	Toluene ( $\mu\text{g/L}$ )	GWEL	Groundwater Elevation (FT Above Mean Sea Level Unless Noted Otherwise)
E	Ethylbenzene ( $\mu\text{g/L}$ )	TOC	Top of Casing
X	Total Xylenes ( $\mu\text{g/L}$ )		
NS	Not Sampled		

NOT TO SCALE

RAMENTA ET AL #1, METER 75155  
JANUARY, 2003

GROUNDWATER SITES  
EL PASO FIELD SERVICES

FIGURE 4

TABLE 1

**SUMMARY OF BTEX COMPOUNDS IN GROUNDWATER**  
**RAMENTA ET AL #1 (METER #75155)**

(Page 1 of 1)

Sample Identification	Sample Date	MW Identification	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	m,p-Xylene (µg/l)	o-Xylene (µg/l)	Total Xylenes (µg/l)
REM-0203-MW1	18-Mar-2002	1	3.50	0.70	4.90	NA	NA	26
REM-0206-MW1	05-Jun-2002	1	<2.50	<2.50	5.00	NA	NA	21
02-4944-2	17-Sep-2002	1	7.90	2.80	5.40	13	2.50	15.50
03-1026-1	03-Jan-2003	1	3.7	1.5	2.3	3.3	1	4.3
REM-0206-MW2	13-Jun-2002	2	<0.50	<0.50	<0.50	NA	NA	<1.00
REM-0206-MW3	13-Jun-2002	3	<0.50	<0.50	<0.50	NA	NA	<1.00