

Z-AREA GROUNDWATER MONITORING REPORT FOR 2003 (U)
WSRC-MS-2004-00004
January 5, 2004

Introduction

In accordance with SRS Z-Area Saltstone Industrial Solid Waste Permit, #025500-1603, wells ZBG-1, ZBG-1A and ZBG-2 are monitored for the parameters listed below:

pH
Specific Conductance
Water level
Arsenic
Antimony
Barium
Cadmium
Chromium
Lead
Mercury
Nitrate as Nitrogen
Nitrite as Nitrogen
Selenium
Silver
Benzene and Toluene
Radium 226 and 228 (sum)
Gross alpha
Nonvolatile beta

New wells ZBG-3, ZBG-4 and ZBG-5 were also monitored although the permit has not yet been modified to include them. Sampling was done during the first and third quarters of 2003. The well sampling and analyses were conducted in accordance with Procedure Manual 3Q5, Hydrogeologic Data Collection. The analytical results are attached. The sampling did not reveal any evidence of a release from the Saltstone vaults. Flow directions and velocities were similar to those observed in past years.

Flow Direction and Rate

Potentiometric surface maps for the water table aquifer were constructed using first and third quarter data. The general shape of the potentiometric contour lines is known from years of monitoring, but the 2003 data are interesting in that they show the response of the aquifer to recharge after years of drought conditions. During the 4 months between sampling events, water levels within Z Area rose by as much as 5 feet and there was a noticeable steepening of the hydraulic gradient.

The change in gradient led to an increase in flow velocity. Flow rate can be estimated using the following equation:

$$\text{Flow(ft/day)} = \frac{\text{Hydraulic Conductivity (ft/day)}}{\text{Porosity (unitless)}} \times \frac{dh(ft)}{dl(ft)}$$

Where the hydraulic conductivity constant is 1.7 ft/day, the effective porosity value is 30 percent, the change in head is dh, and the horizontal distance is simply the distance between potentiometric contours (figures 2 and 3).

For first quarter of 2002, the calculation is as follows:

$$\frac{1.7 \text{ ft/day}}{0.30} \times \frac{15 \text{ ft}}{1360 \text{ ft}} = 0.062 \text{ ft/day or } 23 \text{ ft/year}$$

For third quarter of 2002, the calculation is as follows:

$$\frac{1.7 \text{ ft/day} \times 20 \text{ ft}}{0.30 \times 1000 \text{ ft}} = 0.11 \text{ ft/day or } 40 \text{ ft/year}$$

Analytical results

Nitrate/nitrite and tritium were detected in downgradient wells, but higher concentrations were found in background well ZBG-1. Therefore the downgradient detections do not represent evidence of a release from the vaults.

All samples collected from ZBG-4 and ZBG-5 contained elevated levels of chromium (as high as 188.7 ppb). The chromium was probably derived from native clays. This theory is supported by several lines of evidence:

-There is no known source of potential contamination upgradient of the wells. The closest saltstone cells are empty.

-The original samples were turbid, and showed a strong correlation between turbidity and chromium (Table 1).

Table 1. Turbidity and chromium results for ZBG-4 and ZBG-5.

WELL	QUARTER	Cr (ppb)	Turbidity (ntu)
ZBG-4	1 st	188.7	745
ZBG-5	3 rd	129.9	630
ZBG-4	3 rd	44.2	185
ZBG-5	1 st	23.4	81

To further test the connection to turbidity, turbid confirmatory samples were collected in December. The unfiltered samples had chromium levels as high as 230 ppb, but field filtering eliminated the chromium in one sample and dropped it below the practical quantitation limit in another. If the chromium were dissolved in the groundwater, filtering might remove some of it through adsorption, but a concentration drop of the magnitude observed would only be expected if the chromium were present in suspended clay particles that could be physically removed by filtering.

-Even though the unfiltered December samples contained high concentrations of chromium, the *proportion* of chromium to other naturally occurring metals was unremarkable. Ratios of chromium to aluminum and chromium to manganese were well within the normal range (based on historical data from ZBG-1 and ZBG-2). The Cr/Al ratios ranged from .0029 to .0436 compared to historical ranges of .036 to .132. The Cr/Mn ratios ranged from .165 to .378 compared to historical ratios of .383 to .4. The ratios would be higher if the water or the sediments surrounding ZBG-4 and ZBG-5 had been contaminated with chromium from some anthropogenic source.

Elevated chromium concentrations may continue to appear in ZBG-4 and 5. These wells were installed in a clayey zone because that zone contained the watertable surface at the time of their installation. But as the sandier upper portions of the screen zones experience recharge, it is hoped that turbidity and chromium will decrease in the well samples.

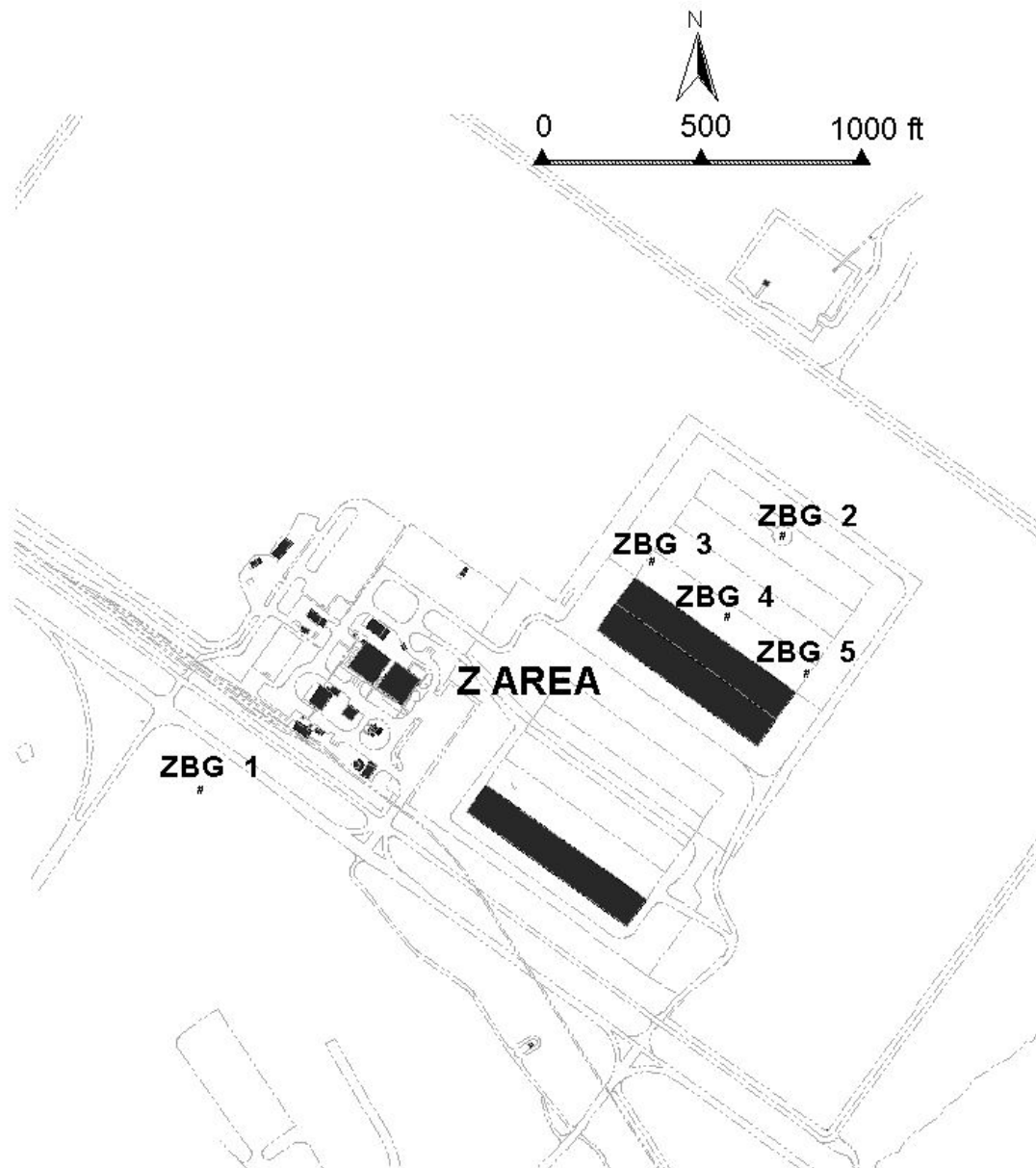
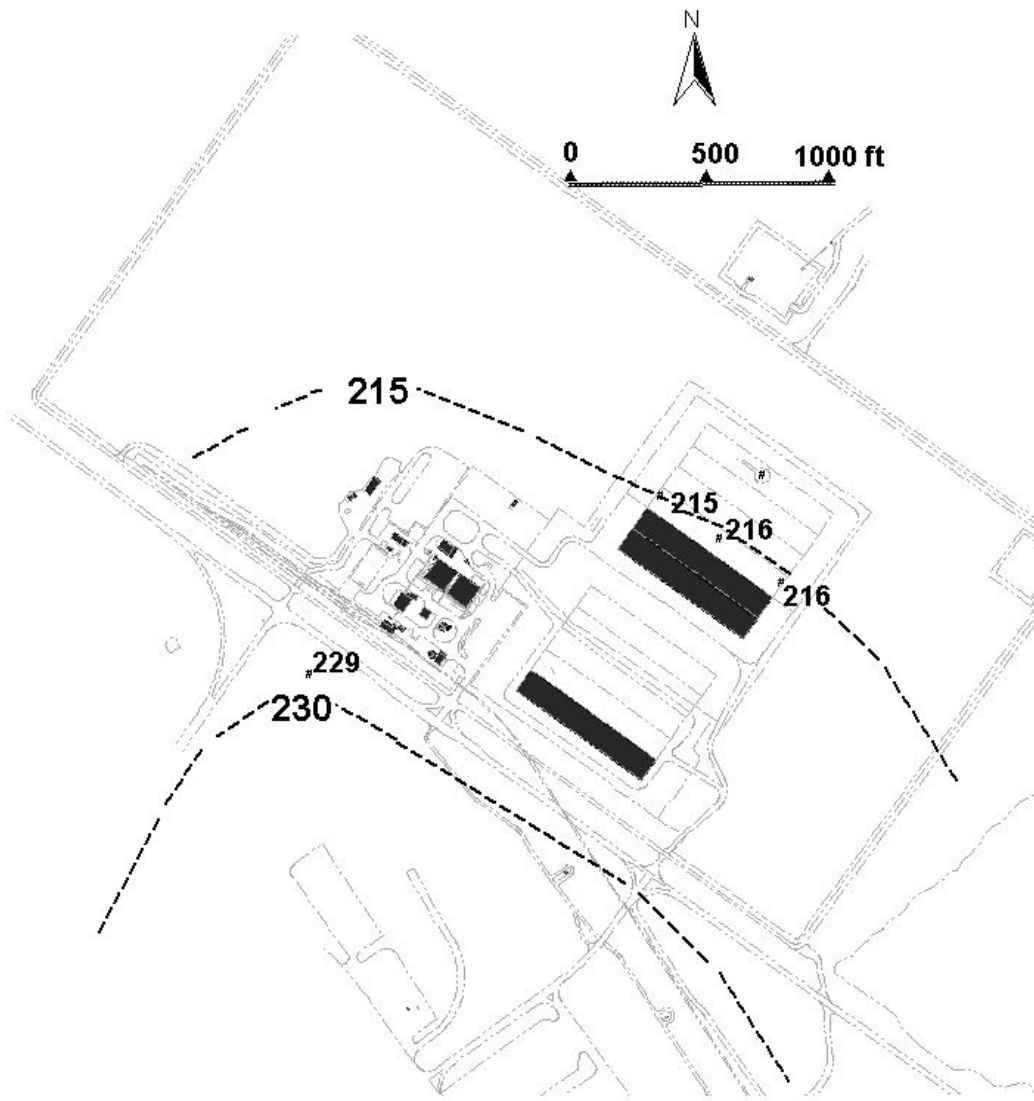


Figure 1. Monitoring wells at Z Area.



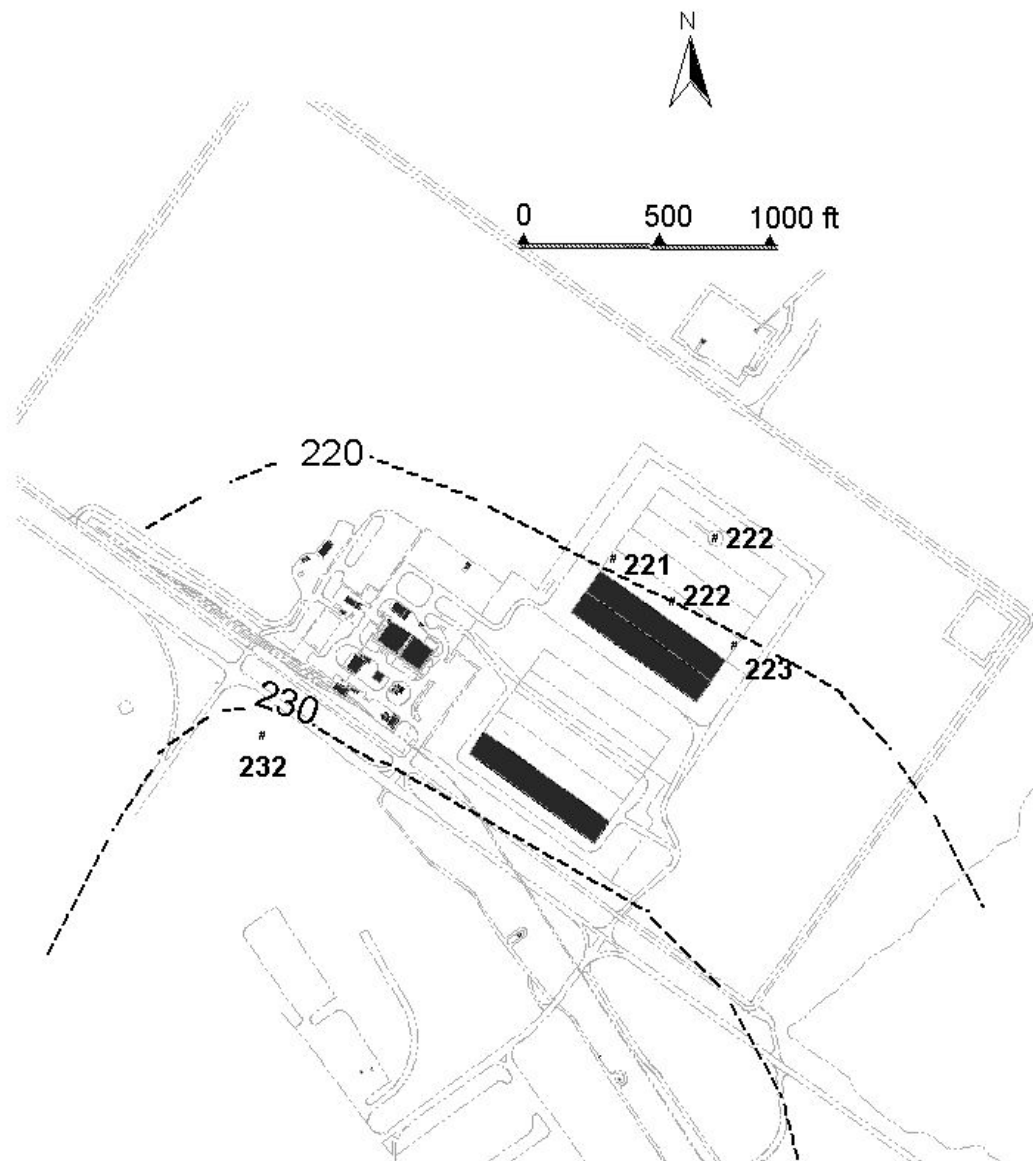


Figure 2. Water elevation data in Z-Area for first quarter of 2003.

Figure 3. Water elevation data in Z-Area for third quarter of 2003.

Table 2. Analytical data for 2003.

WELL	DATE	ANALYTE_NAME	METHOD	MDL	PQL	QUALIFIER	RESULT	UNITS
ZBG 1	4/2/2003 0:00	ANTIMONY	EPA6010B	8		80 J	16.7	ug/L
ZBG 1	8/13/2003 0:00	ANTIMONY	EPA6010B	8		80 U	80	ug/L
ZBG 1	8/13/2003 0:00	ANTIMONY	EPA6010B	8		80 U	80	ug/L
ZBG 1A	3/19/2003 0:00	ANTIMONY	EPA6010B	8		80 J	21.25	ug/L
ZBG 2	3/19/2003 0:00	ANTIMONY	EPA6010B	8		80 J	12.99	ug/L
ZBG 2	8/13/2003 0:00	ANTIMONY	EPA6010B	8		80 U	80	ug/L
ZBG 3	3/18/2003 0:00	ANTIMONY	EPA6010B	8		80 J	15.06	ug/L
ZBG 3	8/13/2003 0:00	ANTIMONY	EPA6010B	8		80 U	80	ug/L
ZBG 4	4/1/2003 0:00	ANTIMONY	EPA6010B	8		80 J	23.28	ug/L
ZBG 4	8/13/2003 0:00	ANTIMONY	EPA6010B	8		80 U	80	ug/L
ZBG 5	4/1/2003 0:00	ANTIMONY	EPA6010B	8		80 J	21.46	ug/L
ZBG 5	8/13/2003 0:00	ANTIMONY	EPA6010B	8		80 U	80	ug/L
ZBG 1	4/2/2003 0:00	ARSENIC	EPA6010B	4		40 U	40	ug/L
ZBG 1	8/13/2003 0:00	ARSENIC	EPA6010B	4		40 U	40	ug/L
ZBG 1	8/13/2003 0:00	ARSENIC	EPA6010B	4		40 U	40	ug/L
ZBG 1A	3/19/2003 0:00	ARSENIC	EPA6010B	4		40 U	40	ug/L
ZBG 2	3/19/2003 0:00	ARSENIC	EPA6010B	4		40 U	40	ug/L
ZBG 2	8/13/2003 0:00	ARSENIC	EPA6010B	4		40 U	40	ug/L
ZBG 3	3/18/2003 0:00	ARSENIC	EPA6010B	4		40 U	40	ug/L
ZBG 3	8/13/2003 0:00	ARSENIC	EPA6010B	4		40 U	40	ug/L
ZBG 4	4/1/2003 0:00	ARSENIC	EPA6010B	4		40 U	40	ug/L
ZBG 4	8/13/2003 0:00	ARSENIC	EPA6010B	4		40 U	40	ug/L
ZBG 5	4/1/2003 0:00	ARSENIC	EPA6010B	4		40 U	40	ug/L
ZBG 5	8/13/2003 0:00	ARSENIC	EPA6010B	4		40 U	40	ug/L
ZBG 1	4/2/2003 0:00	BARIUM	EPA6010B	1		10	41.42	ug/L
ZBG 1	8/13/2003 0:00	BARIUM	EPA6010B	1		10	17.56	ug/L
ZBG 1	8/13/2003 0:00	BARIUM	EPA6010B	1		10	16.24	ug/L
ZBG 1A	3/19/2003 0:00	BARIUM	EPA6010B	1		10	22.68	ug/L
ZBG 2	3/19/2003 0:00	BARIUM	EPA6010B	1		10	17.34	ug/L
ZBG 2	8/13/2003 0:00	BARIUM	EPA6010B	1		10	18.83	ug/L
ZBG 3	3/18/2003 0:00	BARIUM	EPA6010B	1		10 J	7.333	ug/L
ZBG 3	8/13/2003 0:00	BARIUM	EPA6010B	1		10 J	4.825	ug/L
ZBG 4	4/1/2003 0:00	BARIUM	EPA6010B	1		10	1487	ug/L
ZBG 4	8/13/2003 0:00	BARIUM	EPA6010B	1		10	196.5	ug/L
ZBG 5	4/1/2003 0:00	BARIUM	EPA6010B	1		10	188.9	ug/L
ZBG 5	8/13/2003 0:00	BARIUM	EPA6010B	1		10	581	ug/L
ZBG 1	4/2/2003 0:00	BENZENE	EPA8260B	0.33		1 U	1	ug/L
ZBG 1	8/13/2003 0:00	BENZENE	EPA8260B	0.33		1 U	1	ug/L
ZBG 1A	3/19/2003 0:00	BENZENE	EPA8260B	0.33		1 U	1	ug/L
ZBG 2	3/19/2003 0:00	BENZENE	EPA8260B	0.33		1 U	1	ug/L
ZBG 2	8/13/2003 0:00	BENZENE	EPA8260B	0.33		1 U	1	ug/L
ZBG 3	3/18/2003 0:00	BENZENE	EPA8260B	0.33		1 U	1	ug/L
ZBG 3	3/18/2003 0:00	BENZENE	EPA8260B	0.33		1 U	1	ug/L
ZBG 3	8/13/2003 0:00	BENZENE	EPA8260B	0.33		1 U	1	ug/L
ZBG 4	4/1/2003 0:00	BENZENE	EPA8260B	0.33		1 U	1	ug/L
ZBG 4	8/13/2003 0:00	BENZENE	EPA8260B	0.33		1 U	1	ug/L
ZBG 5	4/1/2003 0:00	BENZENE	EPA8260B	0.33		1 U	1	ug/L
ZBG 5	8/13/2003 0:00	BENZENE	EPA8260B	0.33		1 U	1	ug/L
ZBG 1	4/2/2003 0:00	CADMIUM	EPA6010B	0.1		1 J	0.5488	ug/L
ZBG 1	8/13/2003 0:00	CADMIUM	EPA6010B	0.1		1 J	0.9714	ug/L
ZBG 1	8/13/2003 0:00	CADMIUM	EPA6010B	0.1		1 J	0.1985	ug/L
ZBG 1A	3/19/2003 0:00	CADMIUM	EPA6010B	0.1		1	2.355	ug/L
ZBG 2	3/19/2003 0:00	CADMIUM	EPA6010B	0.1		1 J	0.2353	ug/L
ZBG 2	8/13/2003 0:00	CADMIUM	EPA6010B	0.1		1 J	0.2349	ug/L
ZBG 3	3/18/2003 0:00	CADMIUM	EPA6010B	0.1		1	1.38	ug/L
ZBG 3	8/13/2003 0:00	CADMIUM	EPA6010B	0.1		1	1.267	ug/L
ZBG 4	4/1/2003 0:00	CADMIUM	EPA6010B	0.1		1	1.8	ug/L
ZBG 4	8/13/2003 0:00	CADMIUM	EPA6010B	0.1		1 J	0.9091	ug/L
ZBG 5	4/1/2003 0:00	CADMIUM	EPA6010B	0.1		1	2.249	ug/L
ZBG 5	8/13/2003 0:00	CADMIUM	EPA6010B	0.1		1	3.455	ug/L
ZBG 1	4/2/2003 0:00	CHROMIUM	EPA6010B	0.9		9 J	6.599	ug/L
ZBG 1	8/13/2003 0:00	CHROMIUM	EPA6010B	0.9		9 J	2.631	ug/L
ZBG 1	8/13/2003 0:00	CHROMIUM	EPA6010B	0.9		9 J	1.337	ug/L
ZBG 1A	3/19/2003 0:00	CHROMIUM	EPA6010B	0.9		9	11.54	ug/L
ZBG 2	3/19/2003 0:00	CHROMIUM	EPA6010B	0.9		9 J	2.057	ug/L

WELL	DATE	ANALYTE_NAME	METHOD	MDL	PQL	QUALIFIER	RESULT	UNITS
ZBG 2	8/13/2003 0:00	CHROMIUM	EPA6010B	0.9		9 J	0.9464	ug/L
ZBG 3	3/18/2003 0:00	CHROMIUM	EPA6010B	0.9		9 J	2.837	ug/L
ZBG 3	8/13/2003 0:00	CHROMIUM	EPA6010B	0.9		9 J	1.862	ug/L
ZBG 4	4/1/2003 0:00	CHROMIUM	EPA6010B	0.9		9	188.7	ug/L
ZBG 4	8/13/2003 0:00	CHROMIUM	EPA6010B	0.9		9	23.38	ug/L
ZBG 5	4/1/2003 0:00	CHROMIUM	EPA6010B	0.9		9	44.16	ug/L
ZBG 5	8/13/2003 0:00	CHROMIUM	EPA6010B	0.9		9	129.9	ug/L
ZBG 1	4/2/2003 7:20	DEPTH_TO_WA TER					62.2	ft
ZBG 1	8/13/2003	DEPTH_TO_WA 10:40 TER					59.3	ft
ZBG 1A	3/19/2003 8:40	DEPTH_TO_WA TER					6.3	ft
ZBG 1A	8/13/2003	DEPTH_TO_WA 10:00 TER					15.5	ft
ZBG 2	3/19/2003 7:45	DEPTH_TO_WA TER					56.4	ft
ZBG 2	8/13/2003 9:10	DEPTH_TO_WA TER					56.4	ft
ZBG 3	3/18/2003 7:40	DEPTH_TO_WA TER					57.3	ft
ZBG 3	8/13/2003 8:10	DEPTH_TO_WA TER					51.5	ft
ZBG 4	4/1/2003 8:00	DEPTH_TO_WA TER					58.6	ft
ZBG 4	8/13/2003 9:40	DEPTH_TO_WA TER					52.6	ft
ZBG 5	4/1/2003 7:40	DEPTH_TO_WA TER					56.8	ft
ZBG 5	8/13/2003 9:30	DEPTH_TO_WA TER					49.7	ft
ZBG 1	4/2/2003 0:00	ETHYLBENZENE	EPA8260B	0.21		1 U	1	ug/L
ZBG 1	8/13/2003 0:00	ETHYLBENZENE	EPA8260B	0.21		1 U	1	ug/L
ZBG 1A	3/19/2003 0:00	ETHYLBENZENE	EPA8260B	0.21		1 U	1	ug/L
ZBG 2	3/19/2003 0:00	ETHYLBENZENE	EPA8260B	0.21		1 U	1	ug/L
ZBG 2	8/13/2003 0:00	ETHYLBENZENE	EPA8260B	0.21		1 U	1	ug/L
ZBG 3	3/18/2003 0:00	ETHYLBENZENE	EPA8260B	0.21		1 U	1	ug/L
ZBG 3	3/18/2003 0:00	ETHYLBENZENE	EPA8260B	0.21		1 U	1	ug/L
ZBG 3	8/13/2003 0:00	ETHYLBENZENE	EPA8260B	0.21		1 U	1	ug/L
ZBG 4	4/1/2003 0:00	ETHYLBENZENE	EPA8260B	0.21		1 U	1	ug/L
ZBG 4	8/13/2003 0:00	ETHYLBENZENE	EPA8260B	0.21		1 U	1	ug/L
ZBG 5	4/1/2003 0:00	ETHYLBENZENE	EPA8260B	0.21		1 U	1	ug/L
ZBG 5	8/13/2003 0:00	ETHYLBENZENE	EPA8260B	0.21		1 U	1	ug/L
ZBG 1	4/2/2003 0:00	GROSS ALPHA	3Q1-6- 1020	0.87		2.99 J	2.16	pCi/L
ZBG 1	8/13/2003 0:00	GROSS ALPHA	L3.21- 10001	0.76		2.02 J	0.799	pCi/L
ZBG 1A	3/19/2003 0:00	GROSS ALPHA	3Q1-6- 1020	1.57		4.77 J	3.79	pCi/L
ZBG 2	3/19/2003 0:00	GROSS ALPHA	3Q1-6- 1020	0.93		2.21 U	0.654	pCi/L
ZBG 2	8/13/2003 0:00	GROSS ALPHA	L3.21- 10001	0.75		2.08 J	0.893	pCi/L
ZBG 3	3/18/2003 0:00	GROSS ALPHA	3Q1-6- 1020	0.95		1.89 U	0.0505	pCi/L
ZBG 3	8/13/2003 0:00	GROSS ALPHA	L3.21- 10001	0.78		1.64 U	0.197	pCi/L
ZBG 4	4/1/2003 0:00	GROSS ALPHA	3Q1-6- 1020	1.02		4.2 J	4.09	pCi/L
ZBG 4	8/13/2003 0:00	GROSS ALPHA	L3.21- 10001	0.82		1.81 U	0.306	pCi/L
ZBG 5	4/1/2003 0:00	GROSS ALPHA	3Q1-6- 1020	2		6.38 J	3.8	pCi/L
ZBG 5	8/13/2003 0:00	GROSS ALPHA	L3.21- 10001	1.3		3.11 U	0.776	pCi/L
ZBG 1	4/2/2003 0:00	LEAD	EPA6010B	3		30 J	22.65	ug/L
ZBG 1	8/13/2003 0:00	LEAD	EPA6010B	3		30 J	13.04	ug/L
ZBG 1	8/13/2003 0:00	LEAD	EPA6010B	3		30 J	12.83	ug/L
ZBG 1A	3/19/2003 0:00	LEAD	EPA6010B	3		30 J	13.45	ug/L
ZBG 2	3/19/2003 0:00	LEAD	EPA6010B	3		30 J	6.369	ug/L

WELL	DATE	ANALYTE_NAME	METHOD	MDL	PQL	QUALIFIER	RESULT	UNITS
ZBG 2	8/13/2003 0:00	LEAD	EPA6010B	3		30 U		30 ug/L
ZBG 3	3/18/2003 0:00	LEAD	EPA6010B	3		30 J		19.92 ug/L
ZBG 3	8/13/2003 0:00	LEAD	EPA6010B	3		30 U		30 ug/L
ZBG 4	4/1/2003 0:00	LEAD	EPA6010B	3		30		41.36 ug/L
ZBG 4	8/13/2003 0:00	LEAD	EPA6010B	3		30 J		6.049 ug/L
ZBG 5	4/1/2003 0:00	LEAD	EPA6010B	3		30 J		8.785 ug/L
ZBG 5	8/13/2003 0:00	LEAD	EPA6010B	3		30		75.33 ug/L
ZBG 1	4/2/2003 0:00	MERCURY	EPA7470A	0.01		0.1 J		0.01974 ug/L
ZBG 1	8/13/2003 0:00	MERCURY	EPA7470A	0.01		0.1 U		0.1 ug/L
ZBG 1A	3/19/2003 0:00	MERCURY	EPA7470A	0.01		0.1 J		0.03158 ug/L
ZBG 2	3/19/2003 0:00	MERCURY	EPA7470A	0.01		0.1 J		0.01866 ug/L
ZBG 2	8/13/2003 0:00	MERCURY	EPA7470A	0.01		0.1 U		0.1 ug/L
ZBG 3	3/18/2003 0:00	MERCURY	EPA7470A	0.01		0.1 J		0.01957 ug/L
ZBG 3	8/13/2003 0:00	MERCURY	EPA7470A	0.01		0.1 U		0.1 ug/L
ZBG 3	8/13/2003 0:00	MERCURY	EPA7470A	0.01		0.1 U		0.1 ug/L
ZBG 4	4/1/2003 0:00	MERCURY	EPA7470A	0.01		0.1 J		0.07882 ug/L
ZBG 4	8/13/2003 0:00	MERCURY	EPA7470A	0.01		0.1 U		0.1 ug/L
ZBG 5	4/1/2003 0:00	MERCURY	EPA7470A	0.01		0.1 J		0.02627 ug/L
ZBG 5	8/13/2003 0:00	MERCURY	EPA7470A	0.01		0.1 J		0.0372 ug/L
ZBG 1	4/2/2003 0:00	NITRATE- NITRITE AS NITROGEN	EPA353.1	0.01		0.05		1.6 mg/L
ZBG 1	4/2/2003 0:00	NITRATE- NITRITE AS NITROGEN	EPA353.1	0.01		0.05		1.59 mg/L
ZBG 1	4/2/2003 0:00	NITRATE- NITRITE AS NITROGEN	EPA353.1	0.01		0.05		1.6 mg/L
ZBG 1	8/13/2003 0:00	NITRATE- NITRITE AS NITROGEN	EPA353.1	0.01		0.05		0.77 mg/L
ZBG 1A	3/19/2003 0:00	NITRATE- NITRITE AS NITROGEN	EPA353.1	0.01		0.05 U		0.05 mg/L
ZBG 2	3/19/2003 0:00	NITRATE- NITRITE AS NITROGEN	EPA353.1	0.01		0.05		0.83 mg/L
ZBG 2	3/19/2003 0:00	NITRATE- NITRITE AS NITROGEN	EPA353.1	0.01		0.05		0.84 mg/L
ZBG 2	8/13/2003 0:00	NITRATE- NITRITE AS NITROGEN	EPA353.1	0.01		0.05		0.6 mg/L
ZBG 3	3/18/2003 0:00	NITRATE- NITRITE AS NITROGEN	EPA353.1	0.01		0.05		0.91 mg/L
ZBG 3	8/13/2003 0:00	NITRATE- NITRITE AS NITROGEN	EPA353.1	0.01		0.05		0.9 mg/L
ZBG 4	4/1/2003 0:00	NITRATE- NITRITE AS NITROGEN	EPA353.1	0.01		0.05		0.8 mg/L
ZBG 4	8/13/2003 0:00	NITRATE- NITRITE AS NITROGEN	EPA353.1	0.01		0.05		0.78 mg/L
ZBG 5	4/1/2003 0:00	NITRATE- NITRITE AS NITROGEN	EPA353.1	0.01		0.05		0.39 mg/L
ZBG 5	8/13/2003 0:00	NITRATE- NITRITE AS NITROGEN	EPA353.1	0.01		0.05		0.23 mg/L
ZBG 5	8/13/2003 0:00	NITRATE- NITRITE AS NITROGEN	EPA353.1	0.01		0.05		0.22 mg/L
ZBG 1	4/2/2003 0:00	NITRITES	EPA9056	0.05		0.1 U		0.1 mg/L
ZBG 1	8/13/2003 0:00	NITRITES	EPA9056	0.05		0.1 U		0.1 mg/L
ZBG 1A	3/19/2003 0:00	NITRITES	EPA9056	0.05		0.1 U		0.1 mg/L
ZBG 2	3/19/2003 0:00	NITRITES	EPA9056	0.05		0.1 U		0.1 mg/L
ZBG 2	8/13/2003 0:00	NITRITES	EPA9056	0.05		0.1 U		0.1 mg/L
ZBG 3	3/18/2003 0:00	NITRITES	EPA9056	0.05		0.1 U		0.1 mg/L

WELL	DATE	ANALYTE_NAME	METHOD	MDL	PQL	QUALIFIER	RESULT	UNITS
ZBG 3	3/18/2003 0:00	NITRITES	EPA300.0	0.05		0.1 U		0.1 mg/L
ZBG 3	8/13/2003 0:00	NITRITES	EPA9056	0.05		0.1 U		0.1 mg/L
ZBG 4	4/1/2003 0:00	NITRITES	EPA300.0	0.05		0.1 U		0.1 mg/L
ZBG 4	4/1/2003 0:00	NITRITES	EPA9056	0.05		0.1 U		0.1 mg/L
ZBG 4	8/13/2003 0:00	NITRITES	EPA9056	0.05		0.1 U		0.1 mg/L
ZBG 5	4/1/2003 0:00	NITRITES	EPA9056	0.05		0.1 U		0.1 mg/L
ZBG 5	8/13/2003 0:00	NITRITES	EPA9056	0.05		0.1 U		0.1 mg/L
ZBG 5	8/13/2003 0:00	NITRITES	EPA9056	0.05		0.1 U		0.1 mg/L
ZBG 1	4/2/2003 0:00	NONV BETA	3Q1-6-1020	1.79		4.13 U		1.31 pCi/L
ZBG 1	8/13/2003 0:00	NONV BETA	L3.21-10001	1.21		2.76 U		0.705 pCi/L
ZBG 1A	3/19/2003 0:00	NONV BETA	3Q1-6-1020	1.54		3.84 J		2.46 pCi/L
ZBG 2	3/19/2003 0:00	NONV BETA	3Q1-6-1020	1.4		3.15 U		0.783 pCi/L
ZBG 2	8/13/2003 0:00	NONV BETA	L3.21-10001	1.21		2.73 U		0.705 pCi/L
ZBG 3	3/18/2003 0:00	NONV BETA	3Q1-6-1020	1.4		3.03 U		0.328 pCi/L
ZBG 3	8/13/2003 0:00	NONV BETA	L3.21-10001	1.22		2.62 J		0.153 pCi/L
ZBG 4	4/1/2003 0:00	NONV BETA	3Q1-6-1020	1.85		4.47 J		2.02 pCi/L
ZBG 4	8/13/2003 0:00	NONV BETA	L3.21-10001	1.25		2.61 U		-0.122 pCi/L
ZBG 5	4/1/2003 0:00	NONV BETA	3Q1-6-1020	2.05		4.91 J		2.45 pCi/L
ZBG 5	8/13/2003 0:00	NONV BETA	L3.21-10001	1.43		3.18 U		0.658 pCi/L
ZBG 1	4/2/2003 0:00	RADIUM-226	RADA-008	0.31		1.08		1.16 pCi/L
ZBG 1	4/2/2003 0:00	RADIUM-226	RADA-008	0.21		0.82 J		0.802 pCi/L
ZBG 1	8/13/2003 0:00	RADIUM-226	RADA-008	0.3		1.42 U		1.89 pCi/L
ZBG 1	8/13/2003 0:00	RADIUM-226	RADA-008	0.55		1.48 J		0.976 pCi/L
ZBG 1A	3/19/2003 0:00	RADIUM-226	RADA-008	0.33		1.23		1.72 pCi/L
ZBG 2	3/19/2003 0:00	RADIUM-226	RADA-008	0.39		1.23		1.24 pCi/L
ZBG 2	8/13/2003 0:00	RADIUM-226	RADA-008	0.59		1.67 UJ		1.33 pCi/L
ZBG 3	3/18/2003 0:00	RADIUM-226	RADA-008	0.48		1.1 U		0.317 pCi/L
ZBG 3	3/18/2003 0:00	RADIUM-226	RADA-008	0.64		1.34 U		0.18 pCi/L
ZBG 3	8/13/2003 0:00	RADIUM-226	RADA-008	0.61		2.06 U		2.7 pCi/L
ZBG 4	4/1/2003 0:00	RADIUM-226	RADA-008	0.35		1.23		1.59 pCi/L
ZBG 4	8/13/2003 0:00	RADIUM-226	RADA-008	0.63		2.11 U		2.64 pCi/L
ZBG 5	4/1/2003 0:00	RADIUM-226	RADA-008	0.39		0.96 J		0.441 pCi/L
ZBG 5	8/13/2003 0:00	RADIUM-226	RADA-008	0.57		1.78 UJ		1.75 pCi/L
ZBG 1	4/2/2003 0:00	RADIUM-228	RADA-009	1.3		2.82 U		0.14 pCi/L
ZBG 1	8/13/2003 0:00	RADIUM-228	RADA-009	0.64		1.37 U		0.382 pCi/L
ZBG 1A	3/19/2003 0:00	RADIUM-228	RADA-009	0.73		1.61 U		0.67 pCi/L
ZBG 2	3/19/2003 0:00	RADIUM-228	RADA-009	0.71		1.55 U		0.405 pCi/L
ZBG 2	3/19/2003 0:00	RADIUM-228	RADA-009	0.72		1.58 U		0.259 pCi/L
ZBG 2	8/13/2003 0:00	RADIUM-228	RADA-009	1.08		2.31 U		0.353 pCi/L
ZBG 3	3/18/2003 0:00	RADIUM-228	RADA-009	0.86		1.85 U		0.029 pCi/L
ZBG 3	8/13/2003 0:00	RADIUM-228	RADA-009	0.68		1.49 J		0.829 pCi/L
ZBG 4	4/1/2003 0:00	RADIUM-228	RADA-009	0.7		1.49 J		0.994 pCi/L
ZBG 4	8/13/2003 0:00	RADIUM-228	RADA-009	0.71		1.51 U		0.324 pCi/L
ZBG 5	4/1/2003 0:00	RADIUM-228	RADA-009	0.7		1.47 J		0.905 pCi/L
ZBG 5	8/13/2003 0:00	RADIUM-228	RADA-009	0.73		1.59 J		0.765 pCi/L
ZBG 1	4/2/2003 0:00	SELENIUM	EPA6010B	5		50 U		50 ug/L
ZBG 1	8/13/2003 0:00	SELENIUM	EPA6010B	5		50 U		50 ug/L
ZBG 1	8/13/2003 0:00	SELENIUM	EPA6010B	5		50 U		50 ug/L
ZBG 1A	3/19/2003 0:00	SELENIUM	EPA6010B	5		50 U		50 ug/L
ZBG 2	3/19/2003 0:00	SELENIUM	EPA6010B	5		50 U		50 ug/L
ZBG 2	8/13/2003 0:00	SELENIUM	EPA6010B	5		50 U		50 ug/L
ZBG 3	3/18/2003 0:00	SELENIUM	EPA6010B	5		50 U		50 ug/L
ZBG 3	8/13/2003 0:00	SELENIUM	EPA6010B	5		50 U		50 ug/L
ZBG 4	4/1/2003 0:00	SELENIUM	EPA6010B	5		50 U		50 ug/L
ZBG 4	8/13/2003 0:00	SELENIUM	EPA6010B	5		50 U		50 ug/L
ZBG 5	4/1/2003 0:00	SELENIUM	EPA6010B	5		50 U		50 ug/L
ZBG 5	8/13/2003 0:00	SELENIUM	EPA6010B	5		50 U		50 ug/L
ZBG 1	4/2/2003 0:00	SILVER	EPA6010B	1		10 U		10 ug/L
ZBG 1	8/13/2003 0:00	SILVER	EPA6010B	1		10 U		10 ug/L

WELL	DATE	ANALYTE_NAME	METHOD	MDL	PQL	QUALIFIER	RESULT	UNITS
ZBG 1	8/13/2003 0:00	SILVER	EPA6010B	1		10 U		10 ug/L
ZBG 1A	3/19/2003 0:00	SILVER	EPA6010B	1		10 J	1.406	ug/L
ZBG 2	3/19/2003 0:00	SILVER	EPA6010B	1		10 U		10 ug/L
ZBG 2	8/13/2003 0:00	SILVER	EPA6010B	1		10 U		10 ug/L
ZBG 3	3/18/2003 0:00	SILVER	EPA6010B	1		10 U		10 ug/L
ZBG 3	8/13/2003 0:00	SILVER	EPA6010B	1		10 U		10 ug/L
ZBG 4	4/1/2003 0:00	SILVER	EPA6010B	1		10 J	9.747	ug/L
ZBG 4	8/13/2003 0:00	SILVER	EPA6010B	1		10 U		10 ug/L
ZBG 5	4/1/2003 0:00	SILVER	EPA6010B	1		10 U		10 ug/L
ZBG 5	8/13/2003 0:00	SILVER	EPA6010B	1		10 J	7.936	ug/L
ZBG 1	4/2/2003 0:00	TOLUENE	EPA8260B	0.39		1 U		1 ug/L
ZBG 1	8/13/2003 0:00	TOLUENE	EPA8260B	0.39		1 U		1 ug/L
ZBG 1A	3/19/2003 0:00	TOLUENE	EPA8260B	0.39		1 U		1 ug/L
ZBG 2	3/19/2003 0:00	TOLUENE	EPA8260B	0.39		1 U		1 ug/L
ZBG 2	8/13/2003 0:00	TOLUENE	EPA8260B	0.39		1 U		1 ug/L
ZBG 3	3/18/2003 0:00	TOLUENE	EPA8260B	0.39		1 U		1 ug/L
ZBG 3	3/18/2003 0:00	TOLUENE	EPA8260B	0.39		1 U		1 ug/L
ZBG 3	8/13/2003 0:00	TOLUENE	EPA8260B	0.39		1 U		1 ug/L
ZBG 4	4/1/2003 0:00	TOLUENE	EPA8260B	0.39		1 U		1 ug/L
ZBG 4	8/13/2003 0:00	TOLUENE	EPA8260B	0.39		1 U		1 ug/L
ZBG 5	4/1/2003 0:00	TOLUENE	EPA8260B	0.39		1 U		1 ug/L
ZBG 5	8/13/2003 0:00	TOLUENE	EPA8260B	0.39		1 U		1 ug/L
ZBG 1	4/2/2003 0:00	TRITIUM	3Q1-6-1330	0.31	0.83		5.27	pCi/mL
ZBG 1	8/13/2003 0:00	TRITIUM	L3.21-10015	0.31	0.77 U		3.295	pCi/mL
ZBG 1	8/13/2003 0:00	TRITIUM	L3.21-10015	0.31	0.76 U		3.059	pCi/mL
ZBG 1A	3/19/2003 0:00	TRITIUM	3Q1-6-1330	0.31	0.83		4.86	pCi/mL
ZBG 2	3/19/2003 0:00	TRITIUM	3Q1-6-1330	0.31	0.78		3.78	pCi/mL
ZBG 2	8/13/2003 0:00	TRITIUM	L3.21-10015	0.3	0.75 U		3.239	pCi/mL
ZBG 3	3/18/2003 0:00	TRITIUM	3Q1-6-1330	0.31	0.79		3.94	pCi/mL
ZBG 3	8/13/2003 0:00	TRITIUM	L3.21-10015	0.31	0.78 U		3.286	pCi/mL
ZBG 4	4/1/2003 0:00	TRITIUM	3Q1-6-1330	0.31	0.79		3.37	pCi/mL
ZBG 4	8/13/2003 0:00	TRITIUM	L3.21-10015	0.3	0.73 U		2.696	pCi/mL
ZBG 5	4/1/2003 0:00	TRITIUM	3Q1-6-1330	0.31	0.72		1.13	pCi/mL
ZBG 5	8/13/2003 0:00	TRITIUM	L3.21-10015	0.3	0.7 U		0.994	pCi/mL
ZBG 1	4/2/2003 0:00	XYLENES	EPA8260B	0.25		1 U		1 ug/L
ZBG 1	8/13/2003 0:00	XYLENES	EPA8260B	0.25		1 U		1 ug/L
ZBG 1A	3/19/2003 0:00	XYLENES	EPA8260B	0.25		1 U		1 ug/L
ZBG 2	3/19/2003 0:00	XYLENES	EPA8260B	0.25		1 U		1 ug/L
ZBG 2	8/13/2003 0:00	XYLENES	EPA8260B	0.25		1 U		1 ug/L
ZBG 3	3/18/2003 0:00	XYLENES	EPA8260B	0.25		1 U		1 ug/L
ZBG 3	3/18/2003 0:00	XYLENES	EPA8260B	0.25		1 U		1 ug/L
ZBG 3	8/13/2003 0:00	XYLENES	EPA8260B	0.25		1 U		1 ug/L
ZBG 4	4/1/2003 0:00	XYLENES	EPA8260B	0.25		1 U		1 ug/L
ZBG 4	8/13/2003 0:00	XYLENES	EPA8260B	0.25		1 U		1 ug/L
ZBG 5	4/1/2003 0:00	XYLENES	EPA8260B	0.25		1 U		1 ug/L
ZBG 5	8/13/2003 0:00	XYLENES	EPA8260B	0.25		1 U		1 ug/L

Table 3. Field data for 2003.

DATE	WELL	ANALYTE_NAME	QUANTIFIER	VALUE	UNITS
7/10/2003	LFW 74D	PH		5.6	pH
4/2/2003	ZBG 1	PH		4.9	pH
8/13/2003	ZBG 1	PH		6.9	pH
3/19/2003	ZBG 1A	PH		4.6	pH
8/13/2003	ZBG 1A	PH		0	pH
3/19/2003	ZBG 2	PH		4	pH
8/13/2003	ZBG 2	PH		21.1	pH
3/18/2003	ZBG 3	PH		4.7	pH
8/13/2003	ZBG 3	PH		6	pH
4/1/2003	ZBG 4	PH		4.6	pH
8/13/2003	ZBG 4	PH		6.1	pH
4/1/2003	ZBG 5	PH		6.2	pH
8/13/2003	ZBG 5	PH		7.4	pH
7/10/2003	LFW 74D	SPECIFIC CONDUCTANCE		54	uS/cm
4/2/2003	ZBG 1	SPECIFIC CONDUCTANCE		45	uS/cm
8/13/2003	ZBG 1	SPECIFIC CONDUCTANCE		14	uS/cm
3/19/2003	ZBG 1A	SPECIFIC CONDUCTANCE		67	uS/cm
8/13/2003	ZBG 1A	SPECIFIC CONDUCTANCE		0	uS/cm
3/19/2003	ZBG 2	SPECIFIC CONDUCTANCE		27	uS/cm
8/13/2003	ZBG 2	SPECIFIC CONDUCTANCE		14	uS/cm
3/18/2003	ZBG 3	SPECIFIC CONDUCTANCE		10	uS/cm
8/13/2003	ZBG 3	SPECIFIC CONDUCTANCE		15	uS/cm
4/1/2003	ZBG 4	SPECIFIC CONDUCTANCE		42	uS/cm
8/13/2003	ZBG 4	SPECIFIC CONDUCTANCE		29	uS/cm
4/1/2003	ZBG 5	SPECIFIC CONDUCTANCE		149	uS/cm
8/13/2003	ZBG 5	SPECIFIC CONDUCTANCE		169	uS/cm
7/10/2003	LFW 74D	TURBIDITY		4.3	NTU
4/2/2003	ZBG 1	TURBIDITY		82	NTU
8/13/2003	ZBG 1	TURBIDITY		9	NTU
3/19/2003	ZBG 1A	TURBIDITY		10	NTU
8/13/2003	ZBG 1A	TURBIDITY		0	NTU
3/19/2003	ZBG 2	TURBIDITY		6.7	NTU
8/13/2003	ZBG 2	TURBIDITY		1.9	NTU
3/18/2003	ZBG 3	TURBIDITY		9.7	NTU
8/13/2003	ZBG 3	TURBIDITY		2.1	NTU
4/1/2003	ZBG 4	TURBIDITY		745	NTU
8/13/2003	ZBG 4	TURBIDITY		81	NTU
4/1/2003	ZBG 5	TURBIDITY		185	NTU
8/13/2003	ZBG 5	TURBIDITY		630	NTU
7/10/2003	LFW 74D	VOLUME PURGED		14	gal

DATE	WELL	ANALYTE_NAME	QUANTIFIER	VALUE	UNITS
4/2/2003	ZBG 1	VOLUME PURGED			0 gal
8/13/2003	ZBG 1	VOLUME PURGED			7 gal
3/19/2003	ZBG 1A	VOLUME PURGED			9 gal
8/13/2003	ZBG 1A	VOLUME PURGED			0 gal
3/19/2003	ZBG 2	VOLUME PURGED			17 gal
8/13/2003	ZBG 2	VOLUME PURGED			13 gal
3/18/2003	ZBG 3	VOLUME PURGED			74 gal
8/13/2003	ZBG 3	VOLUME PURGED			10 gal
4/1/2003	ZBG 4	VOLUME PURGED			3 gal
8/13/2003	ZBG 4	VOLUME PURGED			5 gal
4/1/2003	ZBG 5	VOLUME PURGED			5 gal
8/13/2003	ZBG 5	VOLUME PURGED			7 gal
7/10/2003	LFW 74D	WATER TEMPERATURE			23.8 degC
4/2/2003	ZBG 1	WATER TEMPERATURE			15.5 degC
8/13/2003	ZBG 1	WATER TEMPERATURE			20.8 degC
3/19/2003	ZBG 1A	WATER TEMPERATURE			15 degC
8/13/2003	ZBG 1A	WATER TEMPERATURE			0 degC
3/19/2003	ZBG 2	WATER TEMPERATURE			20 degC
8/13/2003	ZBG 2	WATER TEMPERATURE			5.6 degC
3/18/2003	ZBG 3	WATER TEMPERATURE			20 degC
8/13/2003	ZBG 3	WATER TEMPERATURE			21.5 degC
4/1/2003	ZBG 4	WATER TEMPERATURE			17.5 degC
8/13/2003	ZBG 4	WATER TEMPERATURE			21 degC
4/1/2003	ZBG 5	WATER TEMPERATURE			20.4 degC
8/13/2003	ZBG 5	WATER TEMPERATURE			21.5 degC
4/1/2003	ZBG 5	AIR TEMPERATURE			14 degC
4/1/2003	ZBG 4	AIR TEMPERATURE			14 degC
3/18/2003	ZBG 3	AIR TEMPERATURE			0 degC
3/19/2003	ZBG 2	AIR TEMPERATURE			18 degC
3/19/2003	ZBG 1A	AIR TEMPERATURE			18 degC
4/2/2003	ZBG 1	AIR TEMPERATURE			18 degC
7/10/2003	LFW 74D	AIR TEMPERATURE			33 degC
8/13/2003	ZBG 5	AIR TEMPERATURE			27.2 degC
8/13/2003	ZBG 4	AIR TEMPERATURE			26.9 degC
8/13/2003	ZBG 3	AIR TEMPERATURE			26.7 degC
8/13/2003	ZBG 2	AIR TEMPERATURE			54.9 degC
8/13/2003	ZBG 1A	AIR TEMPERATURE			28 degC
8/13/2003	ZBG 1	AIR TEMPERATURE			28.6 degC

Table 4. Resample data from December 2003.

WELL	DATE	ANALYTE	QUALIFIER	RESULT	UNIT
ZBG-4	120303	AGTOT	U	0.01	MGL
ZBG-4	120403	AGTOT	U	0.01	MGL
ZBG-4 Filtered	120403	AGTOT	U	0.01	MGL
ZBG-5	120303	AGTOT	U	0.01	MGL
ZBG-5	120303	AGTOT		0.04539	MGL
ZBG-5	120303	AGTOT		0.04553	MGL
ZBG-5	120403	AGTOT		0.01244	MGL
ZBG-5 Filtered	120403	AGTOT	U	0.01	MGL
ZBG-4	120303	ALTOT		5.821	MGL
ZBG-4	120303	ALTOT		5.005	MGL
ZBG-4	120403	ALTOT		2.658	MGL
ZBG-4 Filtered	120403	ALTOT	U	0.3	MGL
ZBG-5	120303	ALTOT		2.529	MGL
ZBG-5	120303	ALTOT		4.796	MGL
ZBG-5	120303	ALTOT		4.871	MGL
ZBG-5	120403	ALTOT		53.61	MGL
ZBG-5 Filtered	120403	ALTOT	U	0.3	MGL
ZBG-4	120303	ASTOT	U	0.04	MGL
ZBG-4	120303	ASTOT	U	0.04	MGL
ZBG-4	120403	ASTOT	U	0.04	MGL
ZBG-4 Filtered	120403	ASTOT	U	0.04	MGL
ZBG-5	120303	ASTOT	U	0.04	MGL
ZBG-5	120303	ASTOT		1.913	MGL
ZBG-5	120303	ASTOT		1.907	MGL
ZBG-5	120403	ASTOT	U	0.04	MGL
ZBG-5 Filtered	120403	ASTOT	U	0.04	MGL
ZBG-4	120303	BATOT		0.2148	MGL
ZBG-4	120303	BATOT		0.2134	MGL
ZBG-4	120403	BATOT		0.09887	MGL
ZBG-4 Filtered	120403	BATOT	J	0.005191	MGL
ZBG-5	120303	BATOT		0.08047	MGL
ZBG-5	120303	BATOT		2.235	MGL
ZBG-5	120303	BATOT		2.24	MGL
ZBG-5	120403	BATOT		1.015	MGL
ZBG-5 Filtered	120403	BATOT		0.04162	MGL
ZBG-4	120303	BETOT	J	0.0008669	MGL
ZBG-4	120303	BETOT	J	0.0009336	MGL
ZBG-4	120403	BETOT	J	0.0004644	MGL
ZBG-4 Filtered	120403	BETOT	J	0.000141	MGL

WELL	DATE	ANALYTE	QUALIFIER	RESULT	UNIT
ZBG-5	120303	BETOT	J	0.0009927	MGL
ZBG-5	120303	BETOT		0.05158	MGL
ZBG-5	120303	BETOT		0.05173	MGL
ZBG-5	120403	BETOT		0.02972	MGL
ZBG-5 Filtered	120403	BETOT	U	0.001	MGL
ZBG-4	120303	CDTOT	J	0.000686	MGL
ZBG-4	120303	CDTOT	J	0.0007371	MGL
ZBG-4	120403	CDTOT	J	0.0003471	MGL
ZBG-4 Filtered	120403	CDTOT	J	0.0001558	MGL
ZBG-5	120303	CDTOT	J	0.0004791	MGL
ZBG-5	120303	CDTOT		0.05269	MGL
ZBG-5	120303	CDTOT		0.05271	MGL
ZBG-5	120403	CDTOT		0.005556	MGL
ZBG-5 Filtered	120403	CDTOT	U	0.001	MGL
ZBG-4	120303	COTOT		0.005859	MGL
ZBG-4	120303	COTOT		0.005617	MGL
ZBG-4	120403	COTOT	J	0.002543	MGL
ZBG-4 Filtered	120403	COTOT	J	0.001142	MGL
ZBG-5	120303	COTOT	J	0.002122	MGL
ZBG-5	120303	COTOT		0.5188	MGL
ZBG-5	120303	COTOT		0.5193	MGL
ZBG-5	120403	COTOT		0.05537	MGL
ZBG-5 Filtered	120403	COTOT	U	0.004	MGL
ZBG-4	120303	CRTOT		0.01698	MGL
ZBG-4	120303	CRTOT		0.01632	MGL
ZBG-4	120403	CRTOT		0.01075	MGL
ZBG-4 Filtered	120403	CRTOT	U	0.009	MGL
ZBG-5	120303	CRTOT		0.01087	MGL
ZBG-5	120303	CRTOT		0.2117	MGL
ZBG-5	120303	CRTOT		0.2125	MGL
ZBG-5	120403	CRTOT		0.2302	MGL
ZBG-5 Filtered	120403	CRTOT	J	0.002181	MGL
ZBG-4	120303	CUTOT	J	0.0008655	MGL
ZBG-4	120303	CUTOT	J	0.0006734	MGL
ZBG-4	120403	CUTOT	J	0.001997	MGL
ZBG-4 Filtered	120403	CUTOT	J	0.004416	MGL
ZBG-5	120303	CUTOT	U	0.005	MGL
ZBG-5	120303	CUTOT		0.233	MGL
ZBG-5	120303	CUTOT		0.2333	MGL
ZBG-5	120403	CUTOT		0.01182	MGL
ZBG-5 Filtered	120403	CUTOT	J	0.0009509	MGL
ZBG-4	120303	FETOT		4.483	MGL
ZBG-4	120303	FETOT		4.436	MGL
ZBG-4	120403	FETOT		1.943	MGL
ZBG-4 Filtered	120403	FETOT	U	0.4	MGL
ZBG-5	120303	FETOT		2.054	MGL
ZBG-5	120303	FETOT		3.135	MGL
ZBG-5	120303	FETOT		3.147	MGL
ZBG-5	120403	FETOT		50.57	MGL
ZBG-5 Filtered	120403	FETOT	J	0.006047	MGL
ZBG-4	120303	MNTOT		0.1029	MGL
ZBG-4	120303	MNTOT		0.09733	MGL

WELL	DATE	ANALYTE	QUALIFIER	RESULT	UNIT
ZBG-4	120403	MNTOT		0.04404	MGL
ZBG-4 Filtered	120403	MNTOT		0.02226	MGL
ZBG-5	120303	MNTOT		0.04452	MGL
ZBG-5	120303	MNTOT		0.5607	MGL
ZBG-5	120303	MNTOT		0.5619	MGL
ZBG-5	120403	MNTOT		1.274	MGL
ZBG-5 Filtered	120403	MNTOT		0.004578	MGL
ZBG-4	120303	MOTOT	J	0.001072	MGL
ZBG-4	120303	MOTOT	J	0.001175	MGL
ZBG-4	120403	MOTOT	J	0.001199	MGL
ZBG-4 Filtered	120403	MOTOT	U	0.005	MGL
ZBG-5	120303	MOTOT	U	0.005	MGL
ZBG-5	120303	MOTOT	J	0.002059	MGL
ZBG-5	120303	MOTOT	U	0.005	MGL
ZBG-5	120403	MOTOT		0.007208	MGL
ZBG-5 Filtered	120403	MOTOT	U	0.005	MGL
ZBG-4	120303	NITOT	J	0.01264	MGL
ZBG-4	120303	NITOT	J	0.01165	MGL
ZBG-4	120403	NITOT	J	0.007068	MGL
ZBG-4 Filtered	120403	NITOT	U	0.04	MGL
ZBG-5	120303	NITOT	J	0.004841	MGL
ZBG-5	120303	NITOT		0.5135	MGL
ZBG-5	120303	NITOT		0.5144	MGL
ZBG-5	120403	NITOT		0.2032	MGL
ZBG-5 Filtered	120403	NITOT	J	0.005274	MGL
ZBG-4	120303	PBTOT	J	0.007701	MGL
ZBG-4	120303	PBTOT	J	0.00799	MGL
ZBG-4	120403	PBTOT	J	0.007175	MGL
ZBG-4 Filtered	120403	PBTOT	U	0.03	MGL
ZBG-5	120303	PBTOT	J	0.00324	MGL
ZBG-5	120303	PBTOT		0.4942	MGL
ZBG-5	120303	PBTOT		0.4968	MGL
ZBG-5	120403	PBTOT	J	0.02844	MGL
ZBG-5 Filtered	120403	PBTOT	U	0.03	MGL
ZBG-4	120303	SBTOT	J	0.03849	MGL
ZBG-4	120303	SBTOT		0.1299	MGL
ZBG-4	120403	SBTOT	U	0.08	MGL
ZBG-4 Filtered	120403	SBTOT	J	0.02392	MGL
ZBG-5	120303	SBTOT		0.3072	MGL
ZBG-5	120303	SBTOT		0.5156	MGL
ZBG-5	120303	SBTOT		0.5073	MGL
ZBG-5	120403	SBTOT		0.1571	MGL
ZBG-5 Filtered	120403	SBTOT	J	0.07051	MGL
ZBG-4	120303	SETOT	J	0.007949	MGL
ZBG-4	120303	SETOT	U	0.05	MGL
ZBG-4	120403	SETOT	U	0.05	MGL
ZBG-4 Filtered	120403	SETOT	U	0.05	MGL
ZBG-5	120303	SETOT	U	0.05	MGL
ZBG-5	120303	SETOT		1.932	MGL
ZBG-5	120303	SETOT		1.923	MGL
ZBG-5	120403	SETOT	U	0.05	MGL
ZBG-5 Filtered	120403	SETOT	U	0.05	MGL

WELL	DATE	ANALYTE	QUALIFIER	RESULT	UNIT
ZBG-4	120303	SRTOT		0.02377	MGL
ZBG-4	120303	SRTOT		0.02026	MGL
ZBG-4	120403	SRTOT	J	0.009882	MGL
ZBG-4 Filtered	120403	SRTOT	J	0.002822	MGL
ZBG-5	120303	SRTOT		0.02618	MGL
ZBG-5	120303	SRTOT		0.02711	MGL
ZBG-5	120303	SRTOT		0.02628	MGL
ZBG-5	120403	SRTOT		0.2315	MGL
ZBG-5 Filtered	120403	SRTOT		0.02937	MGL
ZBG-4	120303	TLTOT	U	0.06	MGL
ZBG-4	120303	TLTOT	U	0.06	MGL
ZBG-4	120403	TLTOT	U	0.06	MGL
ZBG-4 Filtered	120403	TLTOT	U	0.06	MGL
ZBG-5	120303	TLTOT	U	0.06	MGL
ZBG-5	120303	TLTOT		1.935	MGL
ZBG-5	120303	TLTOT		1.946	MGL
ZBG-5	120403	TLTOT	U	0.06	MGL
ZBG-5 Filtered	120403	TLTOT	U	0.06	MGL
ZBG-4	120303	VTOT	J	0.009954	MGL
ZBG-4	120303	VTOT	J	0.009456	MGL
ZBG-4	120403	VTOT	J	0.004803	MGL
ZBG-4 Filtered	120403	VTOT	U	0.01	MGL
ZBG-5	120303	VTOT	J	0.007333	MGL
ZBG-5	120303	VTOT		0.5022	MGL
ZBG-5	120303	VTOT		0.5036	MGL
ZBG-5	120403	VTOT		0.08577	MGL
ZBG-5 Filtered	120403	VTOT	J	0.002975	MGL
ZBG-4	120303	ZNTOT	J	0.01802	MGL
ZBG-4	120303	ZNTOT	J	0.0221	MGL
ZBG-4	120403	ZNTOT	J	0.0128	MGL
ZBG-4 Filtered	120403	ZNTOT	J	0.01417	MGL
ZBG-5	120303	ZNTOT	J	0.02939	MGL
ZBG-5	120303	ZNTOT		0.5355	MGL
ZBG-5	120303	ZNTOT		0.536	MGL
ZBG-5	120403	ZNTOT		0.3186	MGL
ZBG-5 Filtered	120403	ZNTOT	U	0.1	MGL