



PATHFINDER

January 26, 2005

Mr. Gary Janosko, Branch Chief
Fuel Cycle Facilities Branch
Division of Fuel Cycle Safety and Safeguards
Office of Nuclear Material Safety and Safeguards
U. S. Nuclear Regulatory Commission
11545 Rockville Pike
Rockville, Maryland 20852

Ref: Docket No. 40-2259, Source Material License No. SUA-672

Dear Mr. Janosko:

Enclosed please find two copies of the semi-annual ground water monitoring report as required by condition 60B of the referenced license. Please let us know if there are any questions regarding the report.

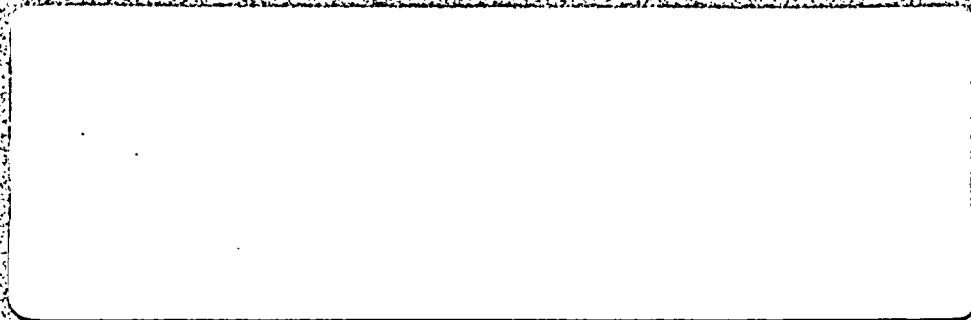
Sincerely,

T. W. Hardgrove
Manager, Reclamation Operations

Enclosure

Cc: J. Whitten, USNRC Region IV
D. L. Wichers
Hydro-Engineering, LLC, w/o encl.

NMSSD/



HYDRO - ENGINEERING, LLC

**SEMI-ANNUAL
GROUND-WATER MONITORING
FOR LUCKY Mc MINE**

PREPARED FOR:
PATHFINDER MINES CORPORATION
LUCKY Mc MINE

BY:
HYDRO-ENGINEERING, L.L.C.
JANUARY, 2005


GEORGE L. HOFFMAN, P.E.
HYDROLOGIST

1/24/05

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1.0 Introduction and Summary of Results

This semi-annual report presents the results of ground-water monitoring for the second half of 2004 for the Lucky Mc tailings area. This report covers the requirement of NRC License SUA-672, License Condition 60B.

The following table lists the site standards that are in effect at Lucky Mc tailings POC well T1-12. The tabulation also lists the measured December 2004 concentrations for POC well T1-12. All of the present concentrations in POC well T1-12 are significantly below the site standards. Plots of the key constituent concentrations for POC well T1-12 show that the concentrations at this well are steady or gradually declining. Comparison of the present concentrations at the POC and POE wells to the ACL model predictions indicates that the model results were conservative (higher than observed).

GROUND-WATER PROTECTION STANDARDS FOR POINT-OF COMPLIANCE WELL T1-12
AND DECEMBER 2004 POC CONCENTRATION

POC STANDARD & CONCENTRATION	CONSTITUENT								
	Arsenic	Beryllium	Cadmium	Chromium	Nickel	RA-226 + RA-228	Selenium	Thorium-230	Uranium
SITE STANDARD	0.05	0.07	0.02	0.05	0.85	7.5	1.10	13.2	1.70
T1-12, DEC 2004	<0.002	<.01	<0.01	<0.05	0.28	<2.6	0.51	<0.2	0.33

NOTE: All concentrations in mg/l except for radium and thorium in pCi/l

2.0 Piezometric Data

The water-level data collected during the second six months of 2004 is presented in Table 1 along with the 2003 water-level data. Figure 1 presents the piezometric surface of the Lucky Mc aquifer from the POC well through the Fraser Draw alluvium, while Figure 2 presents plots of the water-level elevations versus time for wells AL-6, T1-6, T1-12, AL-1, AL-7, AL-8 and AL-9. The corresponding water-level elevation or constituent concentration is posted adjacent to the well location on the plan view figures of the area (such as Figure 1). Water-level elevations in 2004 have been steady in these wells except for some water level rise in well T1-6, which had been used as a supply well for the Lucky Mc office. Well AL-9 was dry during the second half of 2004.

3.0 Water-Quality Data

License Condition 60B requires monitoring of water from the POC and POE wells and other selected wells for the constituents presented in Table 1. An analysis of the selenium, uranium, combined radium-226 plus radium-228, sulfate, chloride and TDS concentrations is required.

Figure 3 presents the December 2004 chloride concentrations for the Lucky Mc aquifer. The chloride concentrations are highest in the Wind River Channel at POC well T1-12 and decrease significantly beyond POE well AL-6. Figure 4 presents the plots of chloride concentrations versus time for the seven monitored wells. Overall, chloride concentrations are gradually declining in POC well T1-12.

Figure 5 presents the TDS concentrations for December 2004 water samples from the Lucky Mc aquifer. The TDS concentrations are greater than 5000 mg/l at POC well T1-12 and are generally slightly less than 4000 mg/l in the western portion of the Fraser Draw alluvium. Figure 6 presents the plots of TDS concentrations versus time and illustrates that the 2004 TDS concentrations are less than the average value for the previous few years for wells AL-1, AL-6, AL-7 and AL-8.

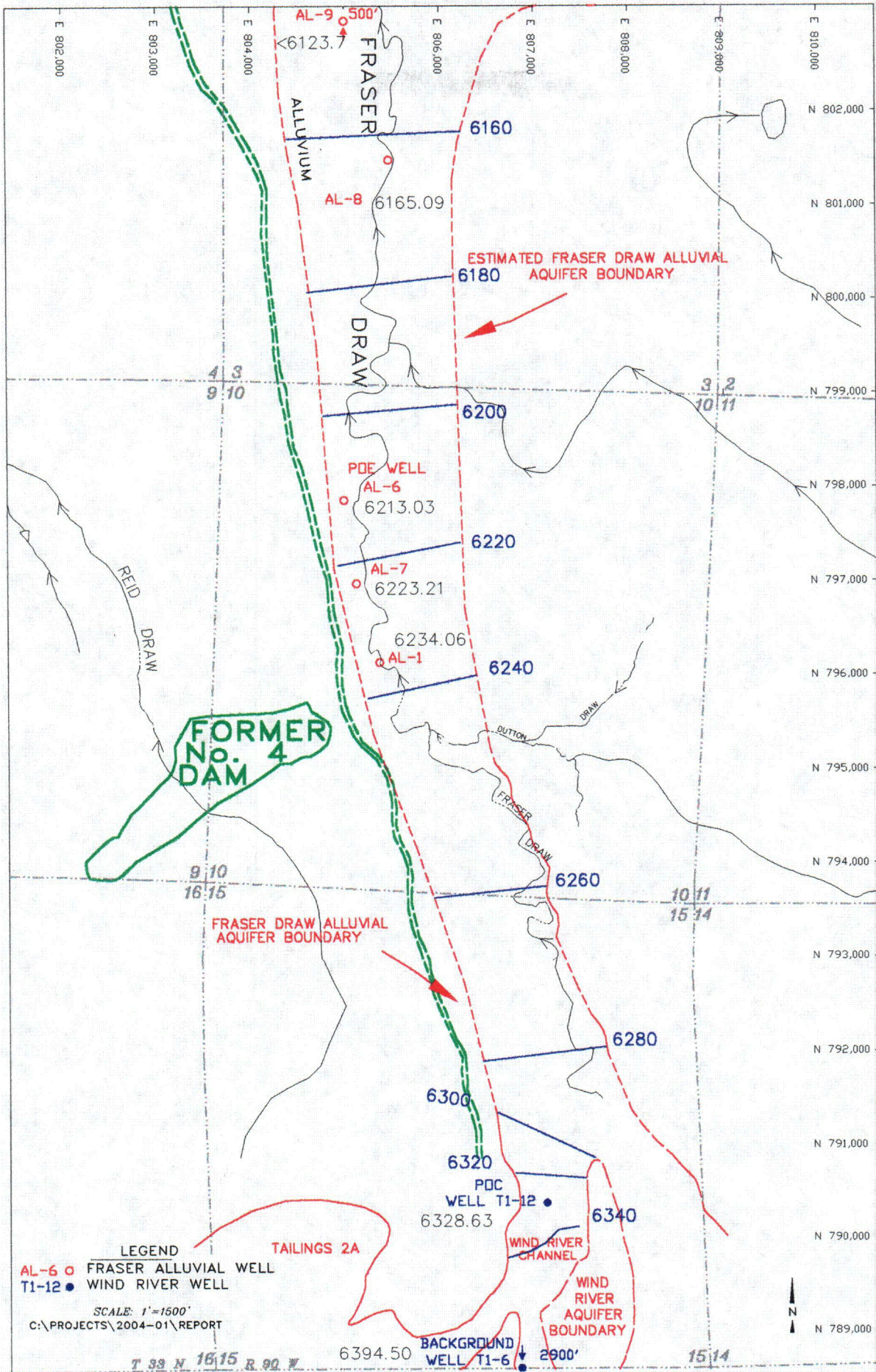
The measured sulfate concentrations for the Lucky Mc aquifer during December of 2004 are presented in Figure 7 and show that the sulfate concentrations in the western portion of the Fraser Draw alluvium are greater than 2000 mg/l while concentrations are less than 2000 mg/l in the eastern half. The sulfate concentrations versus time plots in Figure 8 show that sulfate concentrations have been fairly steady in 2004 in POC well T1-12 near the 2003 average.

Uranium concentrations for the Lucky Mc aquifer during December of 2004 are presented in Figure 9 and show the highest observed uranium concentration at POE well AL-6. Figure 10 shows that the uranium concentration in the POE well has gradually declined over the last few years. The uranium concentrations have overall been steady in POC well T1-12.

Figure 11 presents the selenium concentrations for December 2004 for the Lucky Mc aquifer. Selenium concentrations are greatest at POC well T1-12. Selenium concentrations in POC well T1-12 have overall been steady for the last year except for a low outlier in the first quarter (see Figure 12).

Figure 13 presents the radium-226 plus radium-228 activity for December 2004 at the Lucky Mc aquifer in pCi/l. All of these concentrations are below significant levels and therefore no contours are shown on this figure. Figure 14 shows plots of the radium-226 plus radium-228 activity versus time for the monitored wells. These plots show significant variability in these values, which is thought to be due to variability in the laboratory analysis. The values in the first quarter of 2004 for wells AL-6, T1-6 and T1-12 were larger than the three other values in 2004. The previous measurement and the remainder of the 2004 activities are significantly smaller and therefore the larger values (first quarter, 2004) are thought to be due to analytical variations.

Concentrations of the remainder of the constituents at the site are gradually decreasing or are not significant at POC well T1-12.



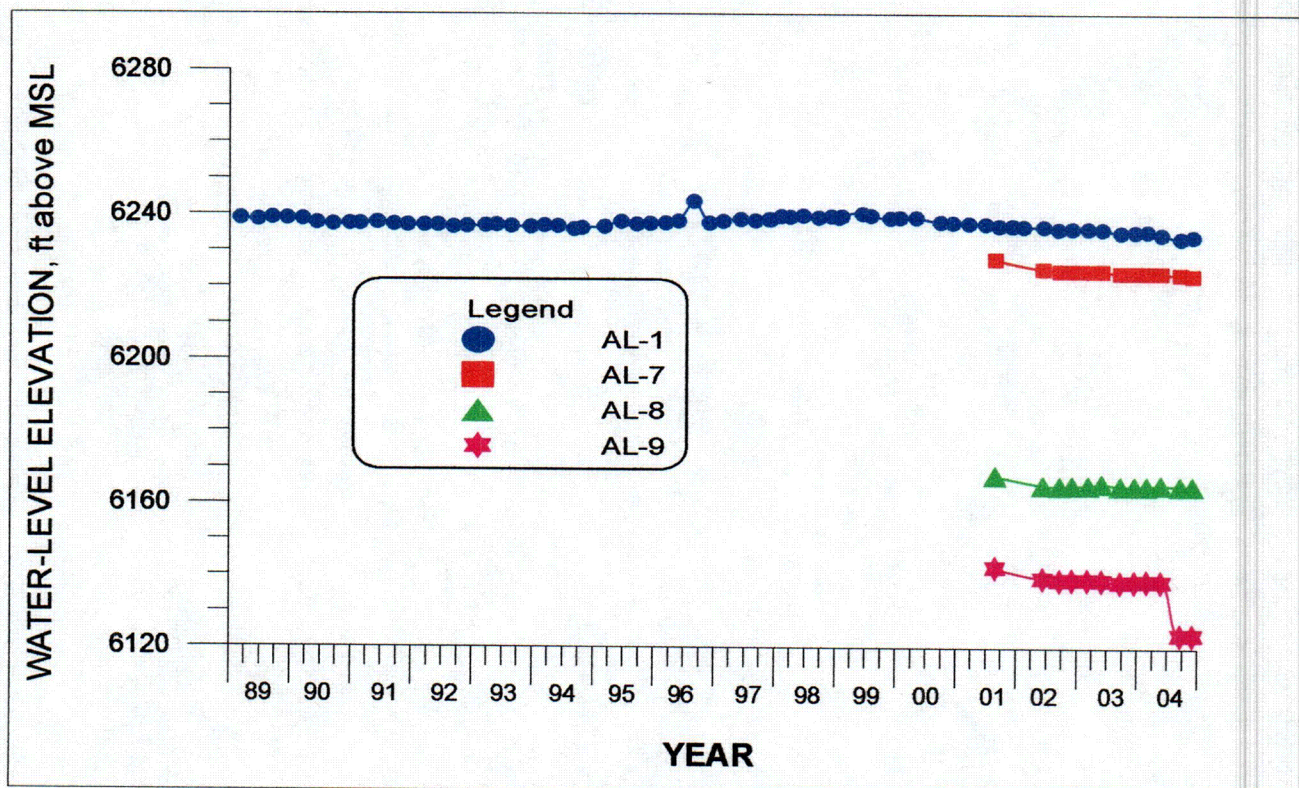
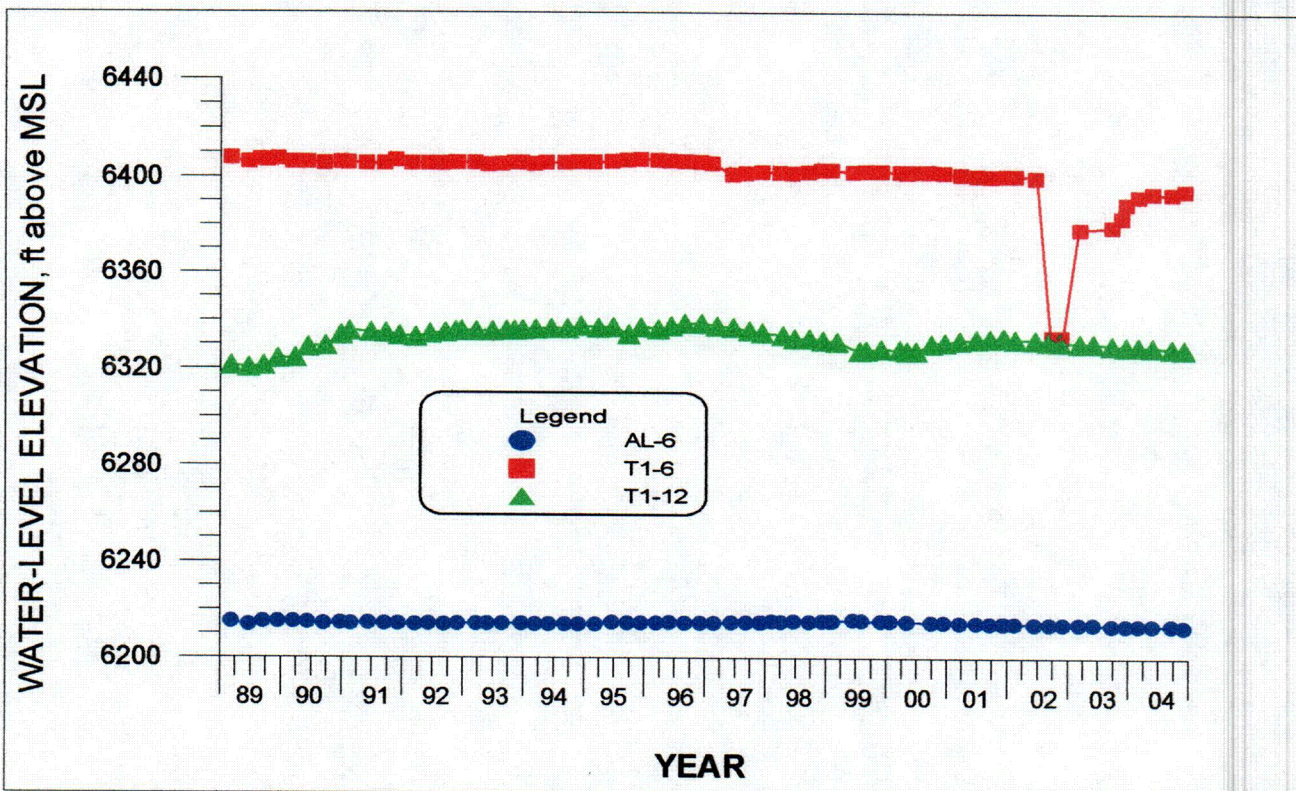
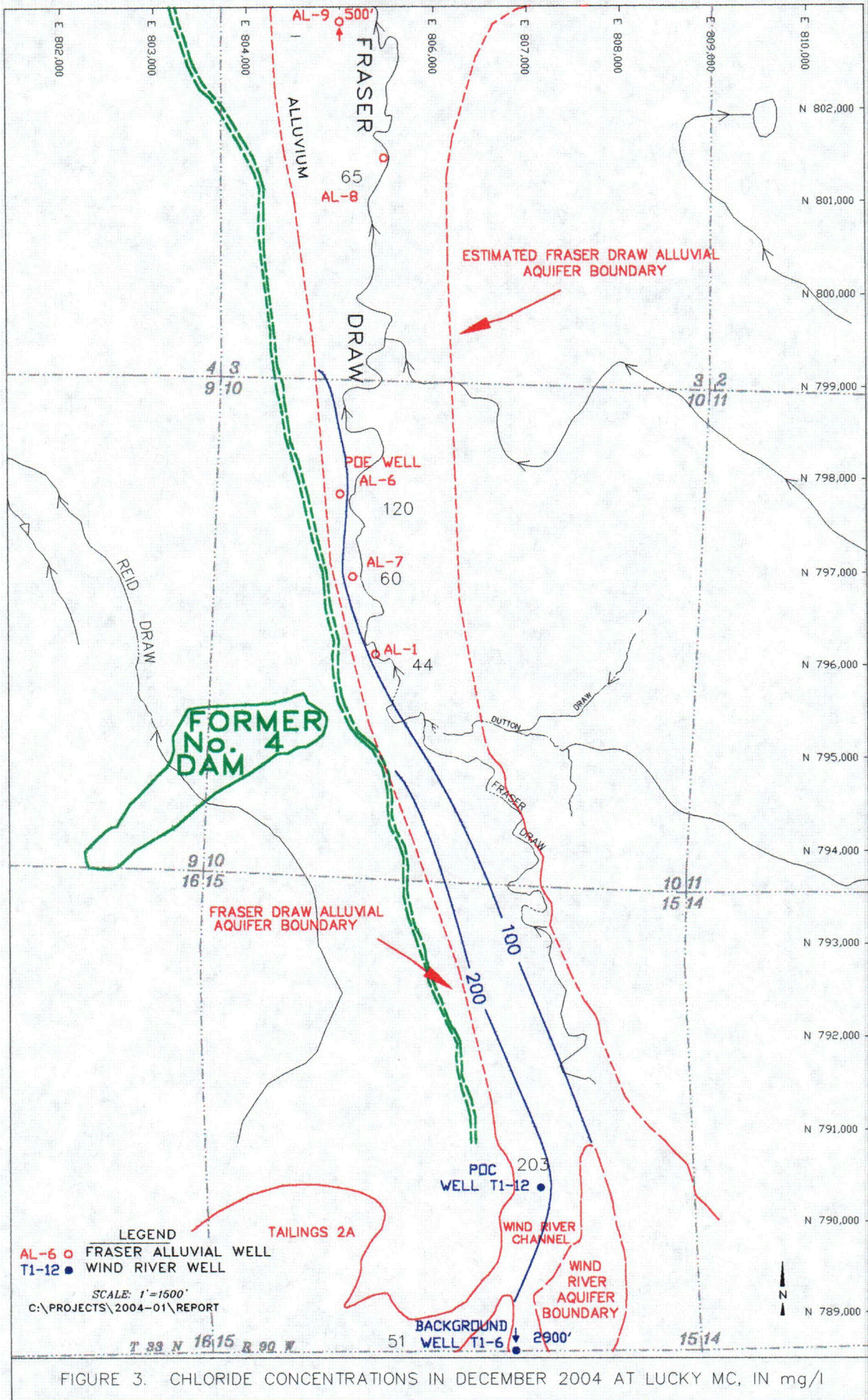


FIGURE 2. WATER-LEVEL ELEVATION VERSUS TIME FOR WELLS T1-6, T1-12, AL-1, AL-6, AL-7, AL-8 AND AL-9.



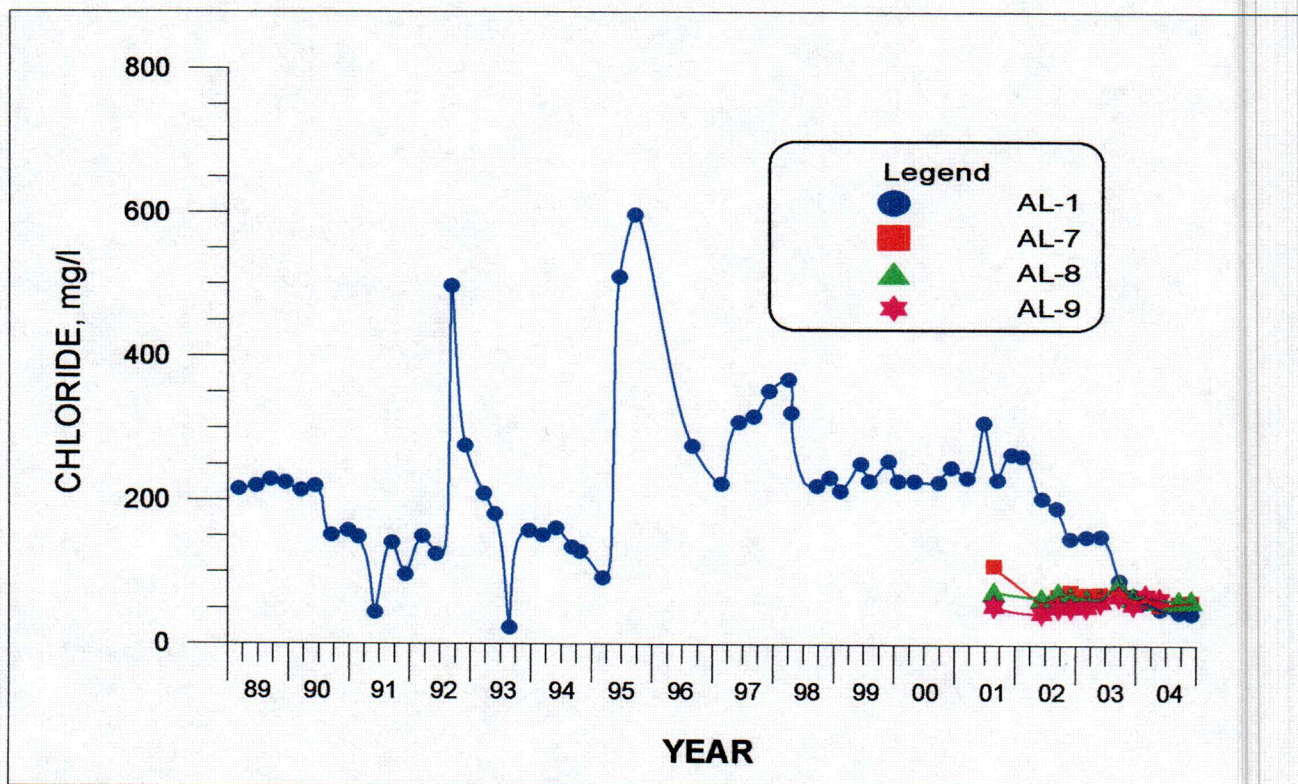
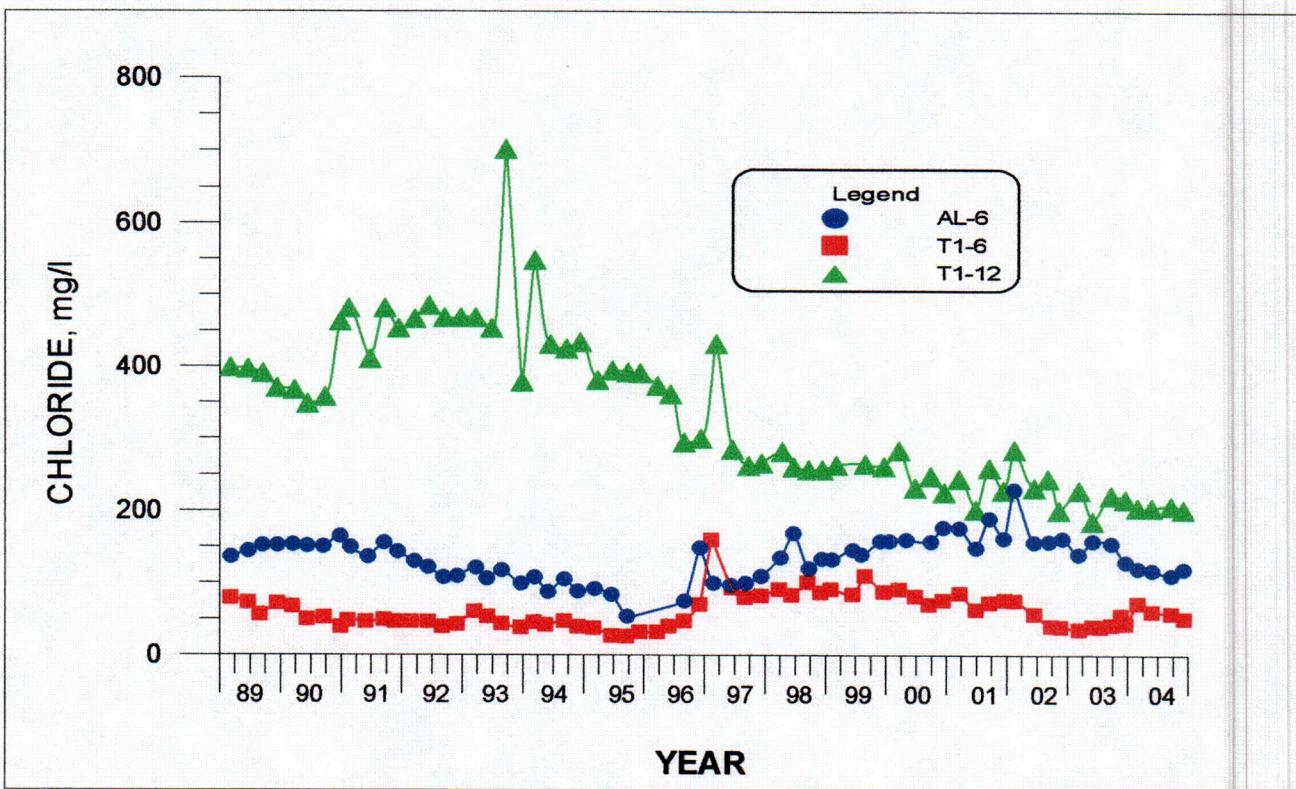


FIGURE 4. CHLORIDE CONCENTRATIONS VERSUS TIME FOR WELLS T1-6, T1-12, AL-1, AL-6, AL-7, AL-8 AND AL-9.

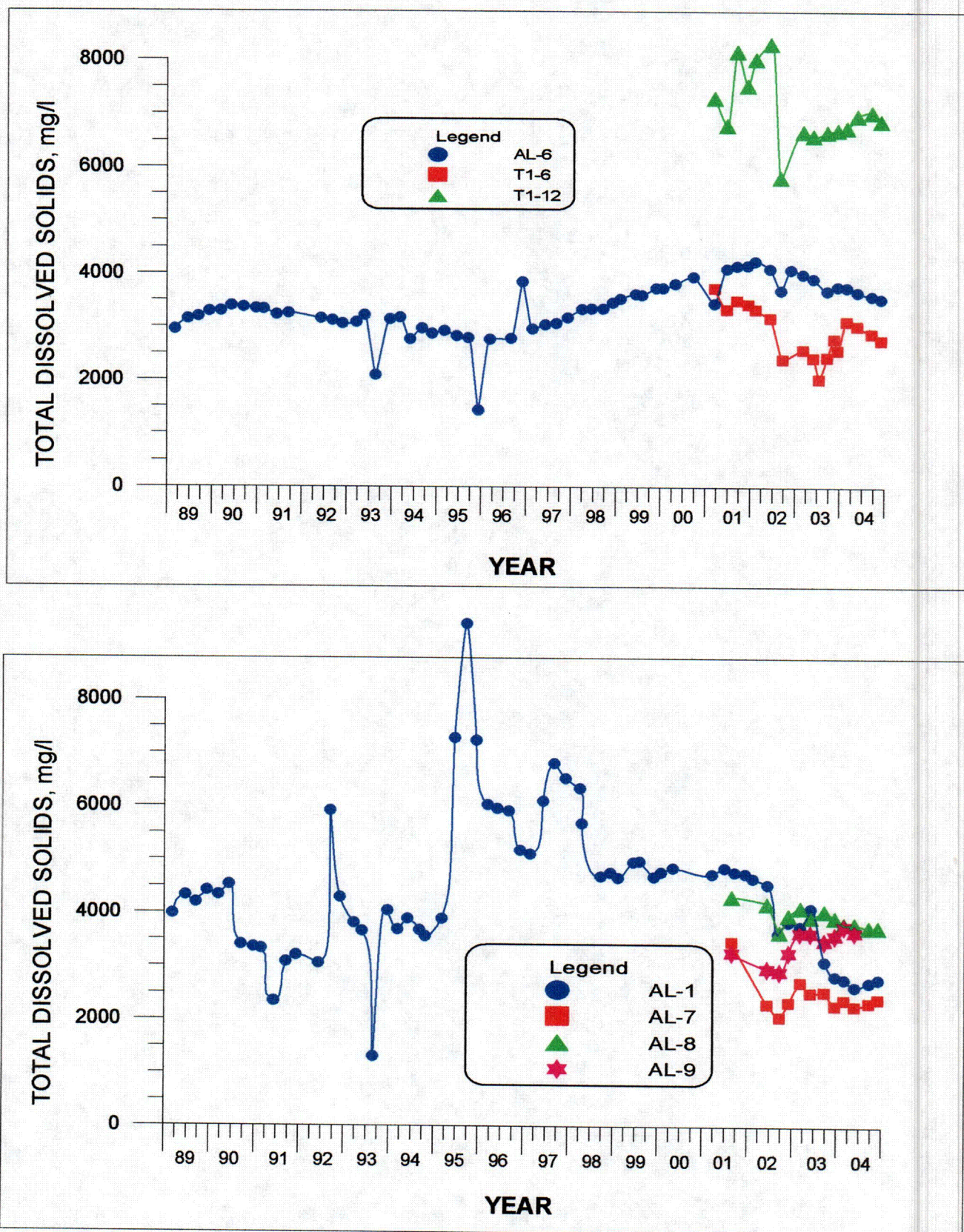
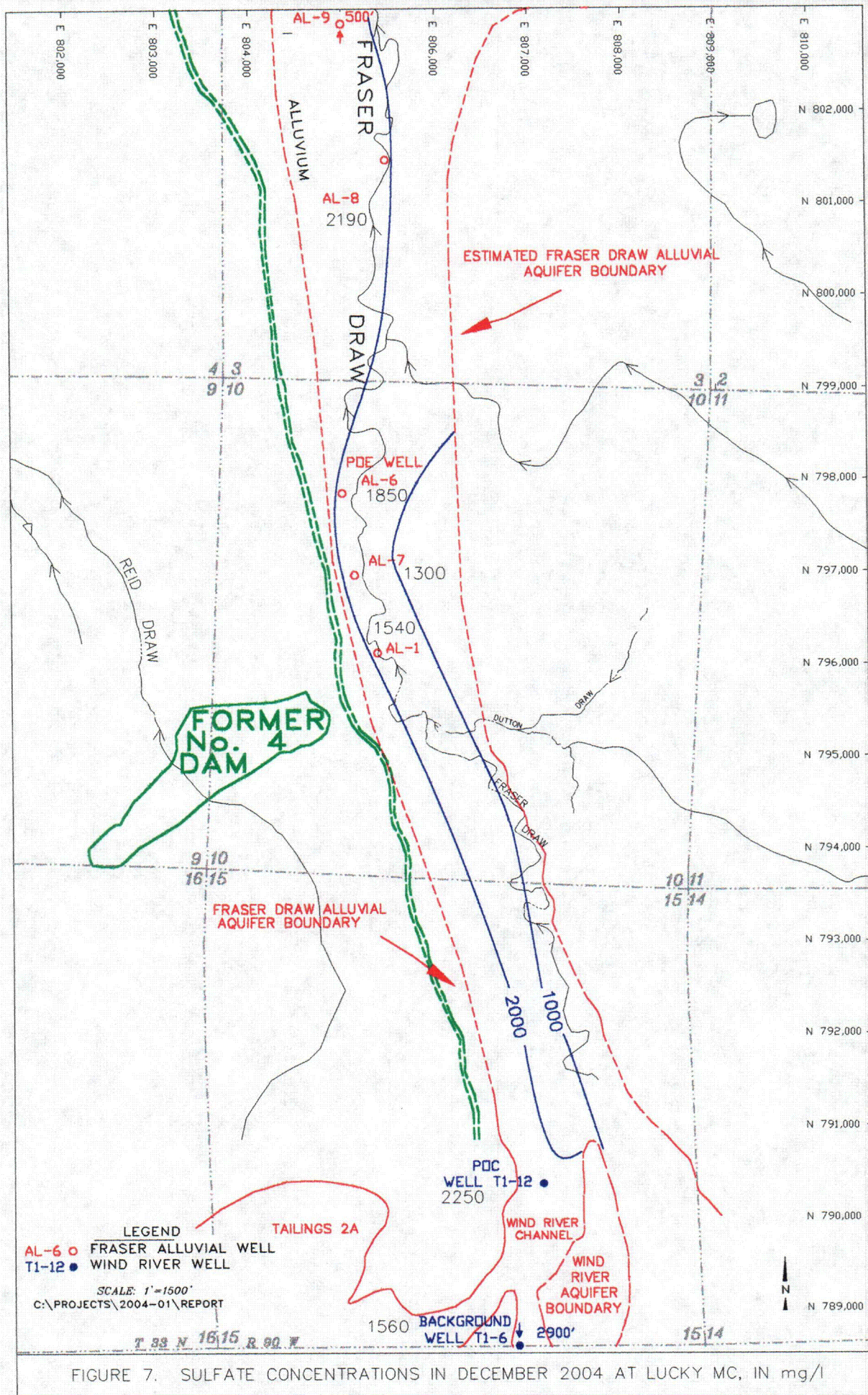


FIGURE 6. TDS CONCENTRATIONS VERSUS TIME FOR WELLS T1-6, T1-12, AL-1, AL-6, AL-7, AL-8 AND AL-9.



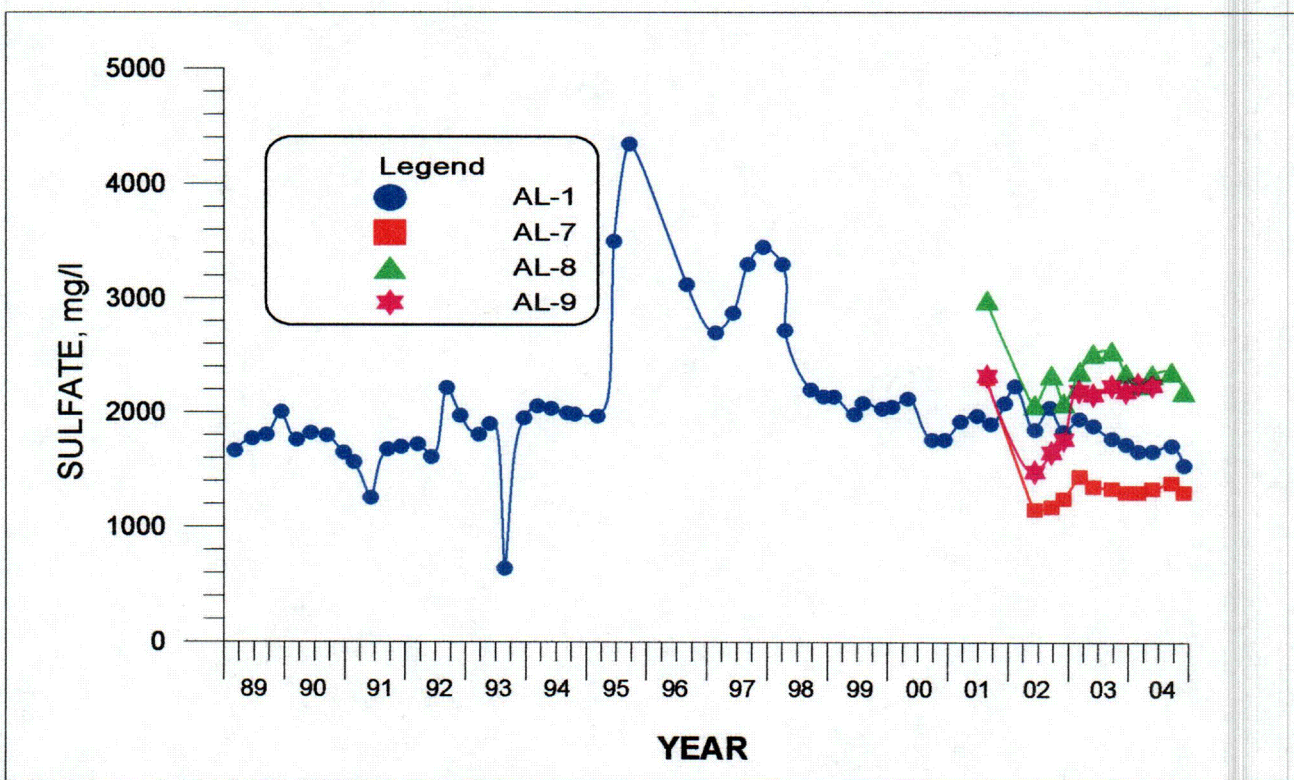
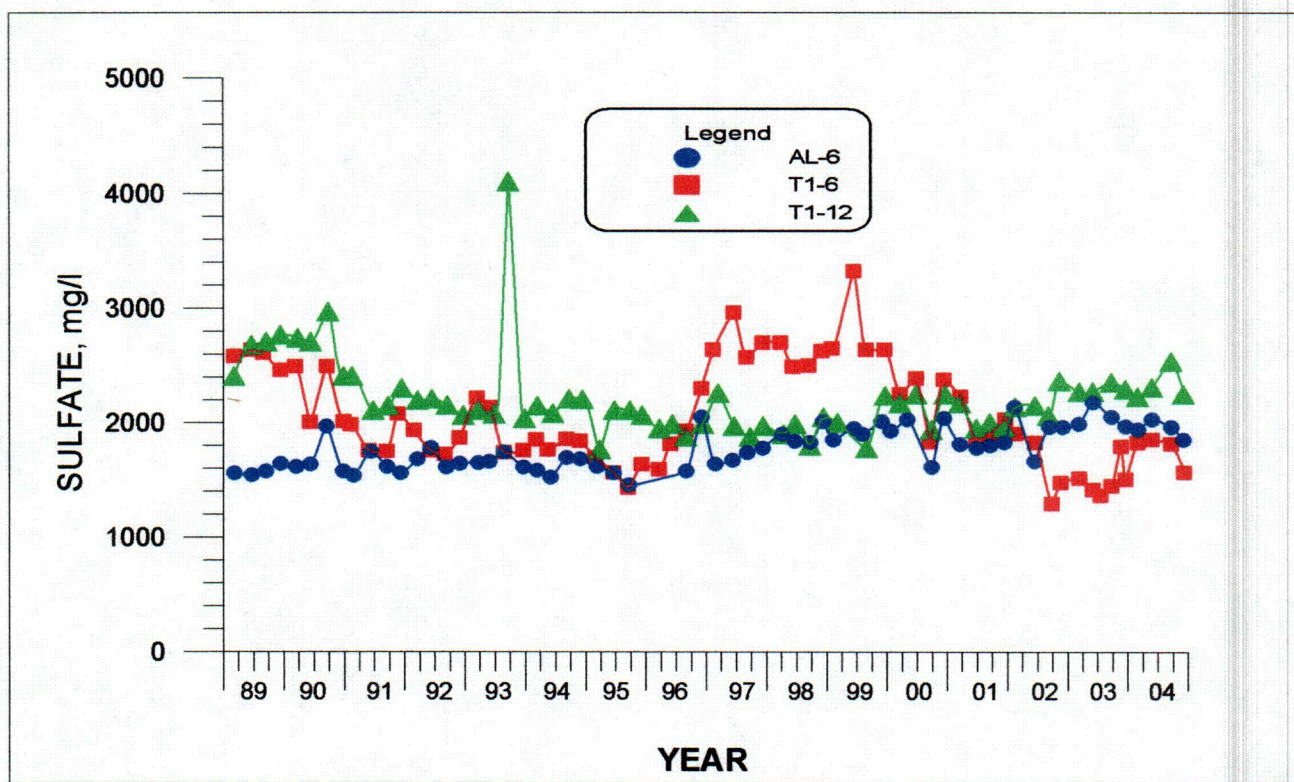
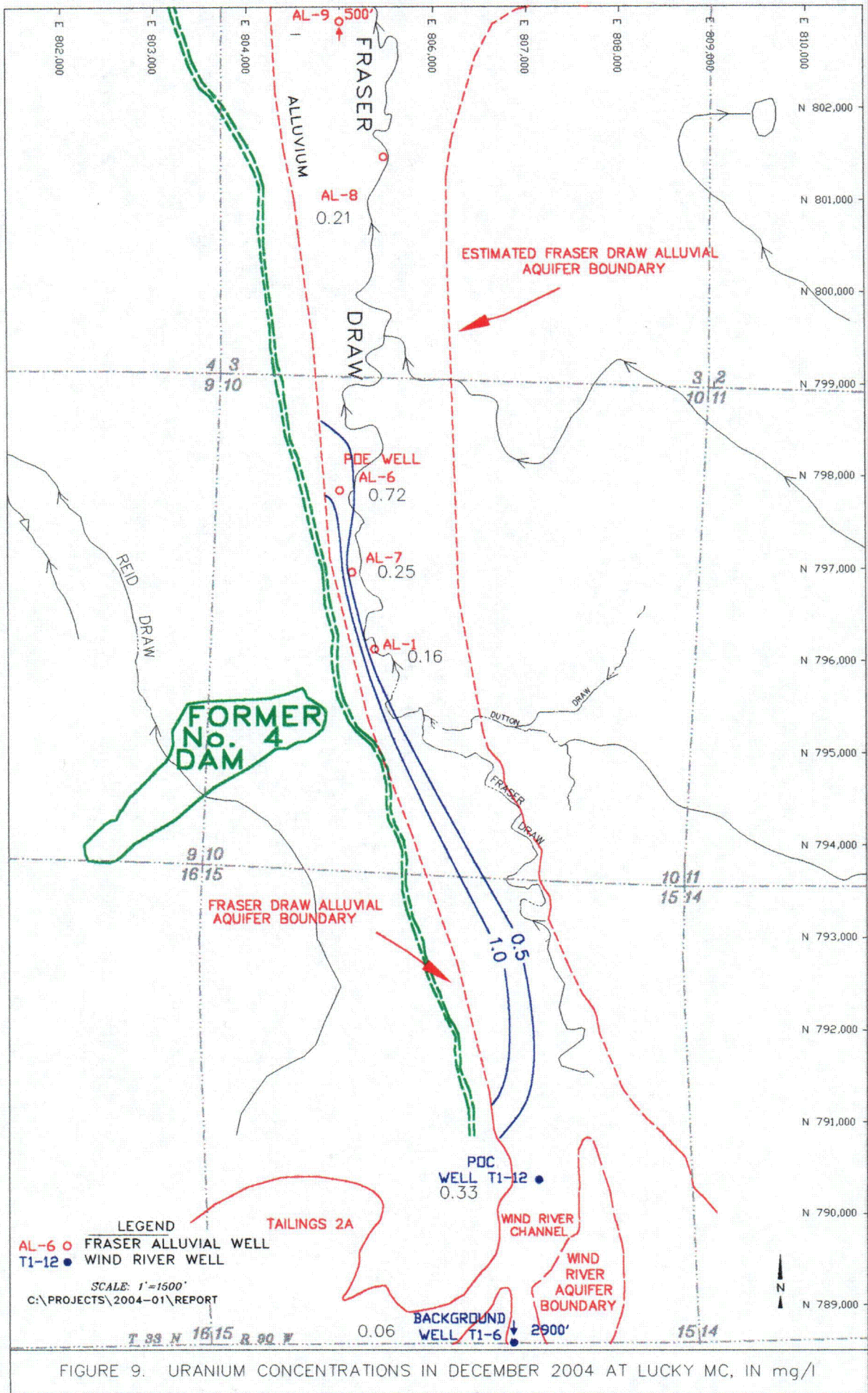


FIGURE 8. SULFATE CONCENTRATIONS VERSUS TIME FOR WELLS T1-6, T1-12, AL-1, AL-6, AL-7, AL-8 AND AL-9.



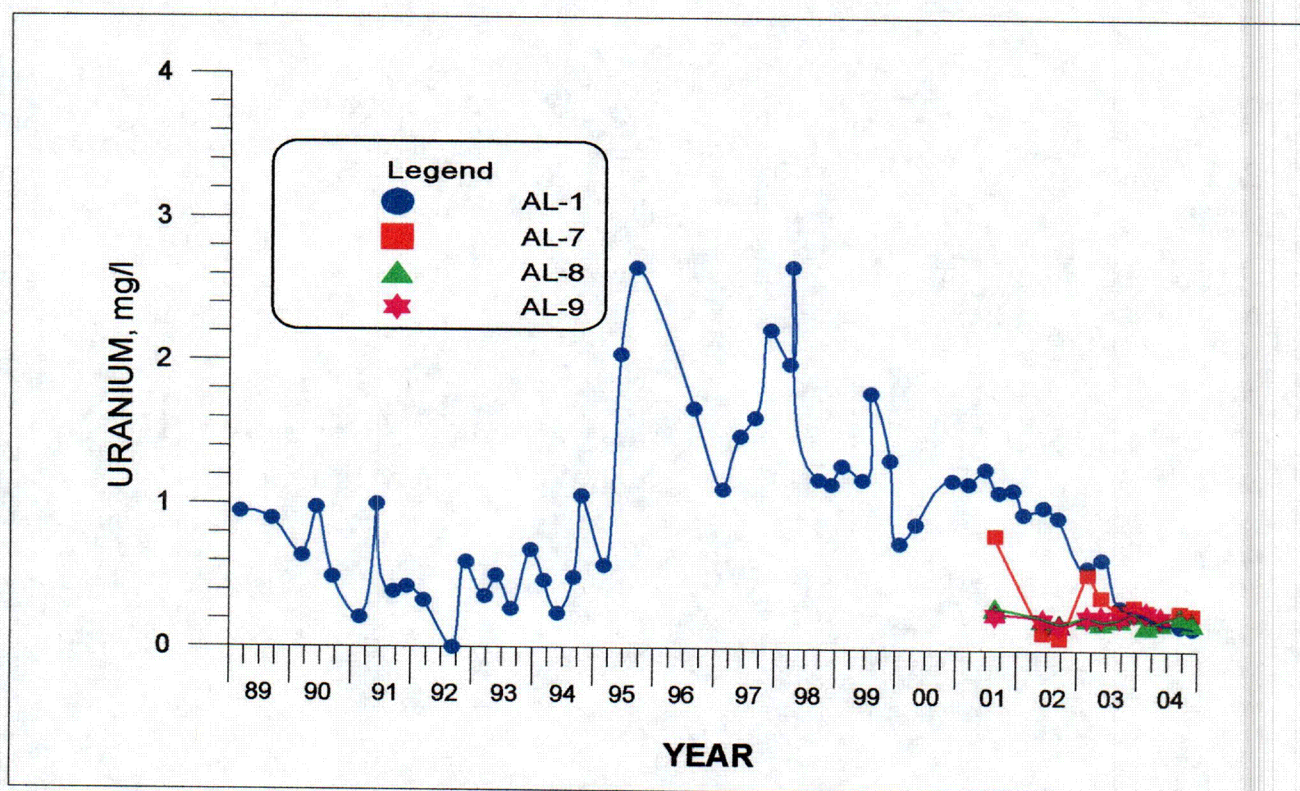
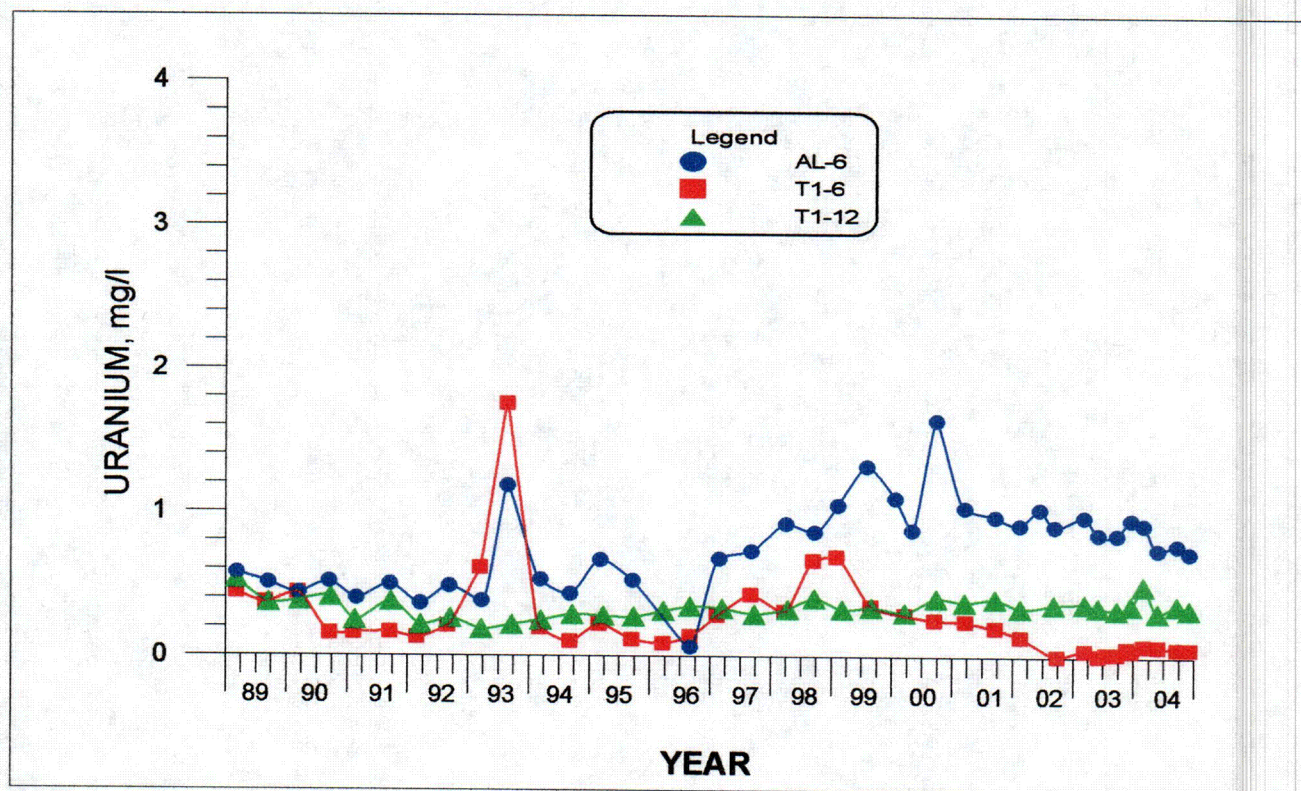


FIGURE 10. URANIUM CONCENTRATIONS VERSUS TIME FOR WELLS T1-6, T1-12, AL-1, AL-6, AL-7, AL-8 AND AL-9.

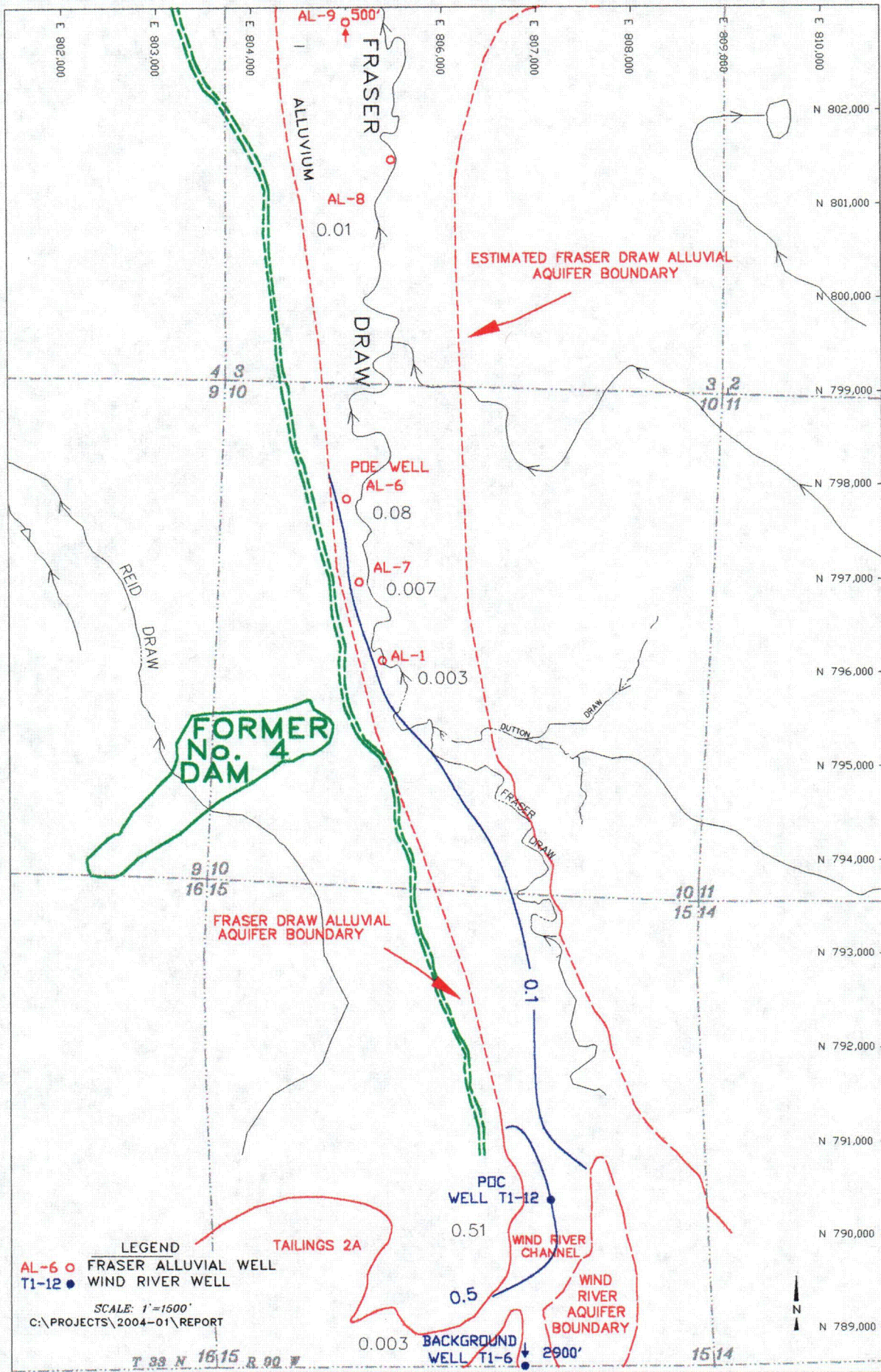


FIGURE 11. SELENIUM CONCENTRATIONS IN DECEMBER 2004 AT LUCKY MC, IN mg/l

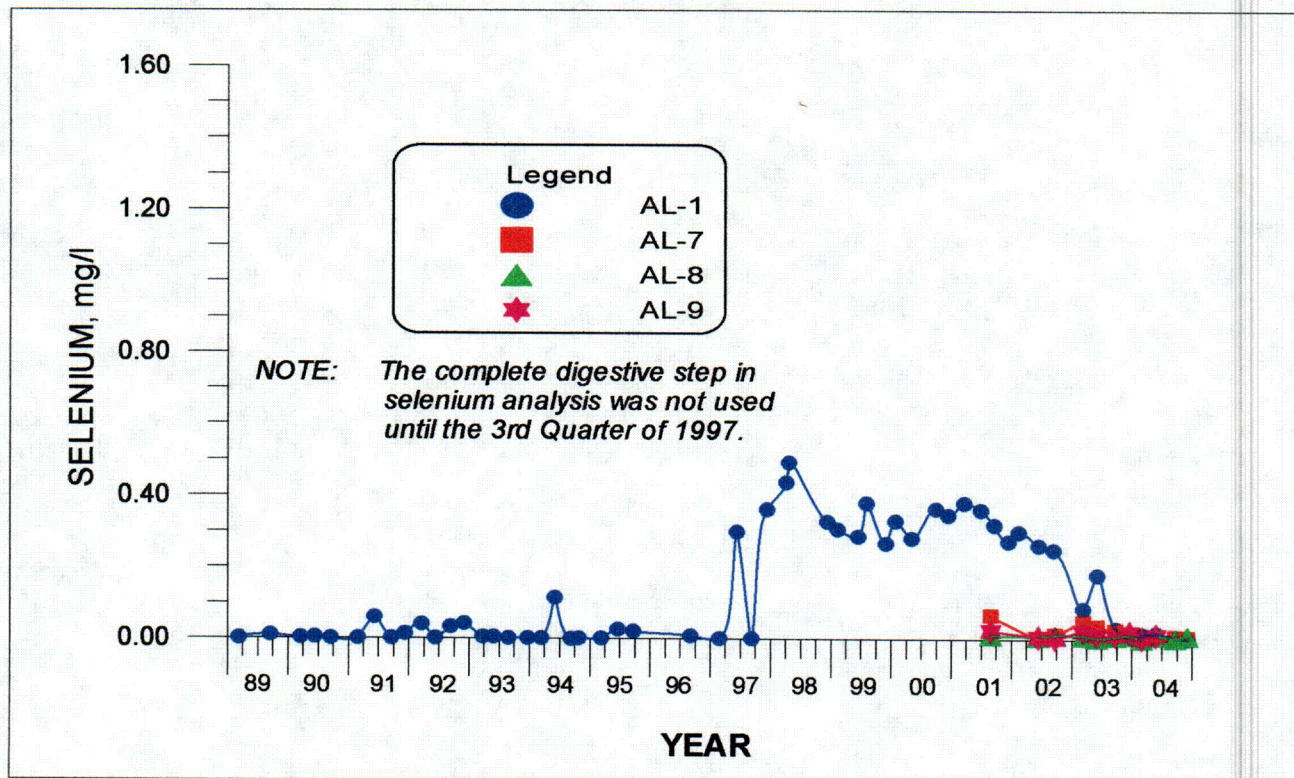
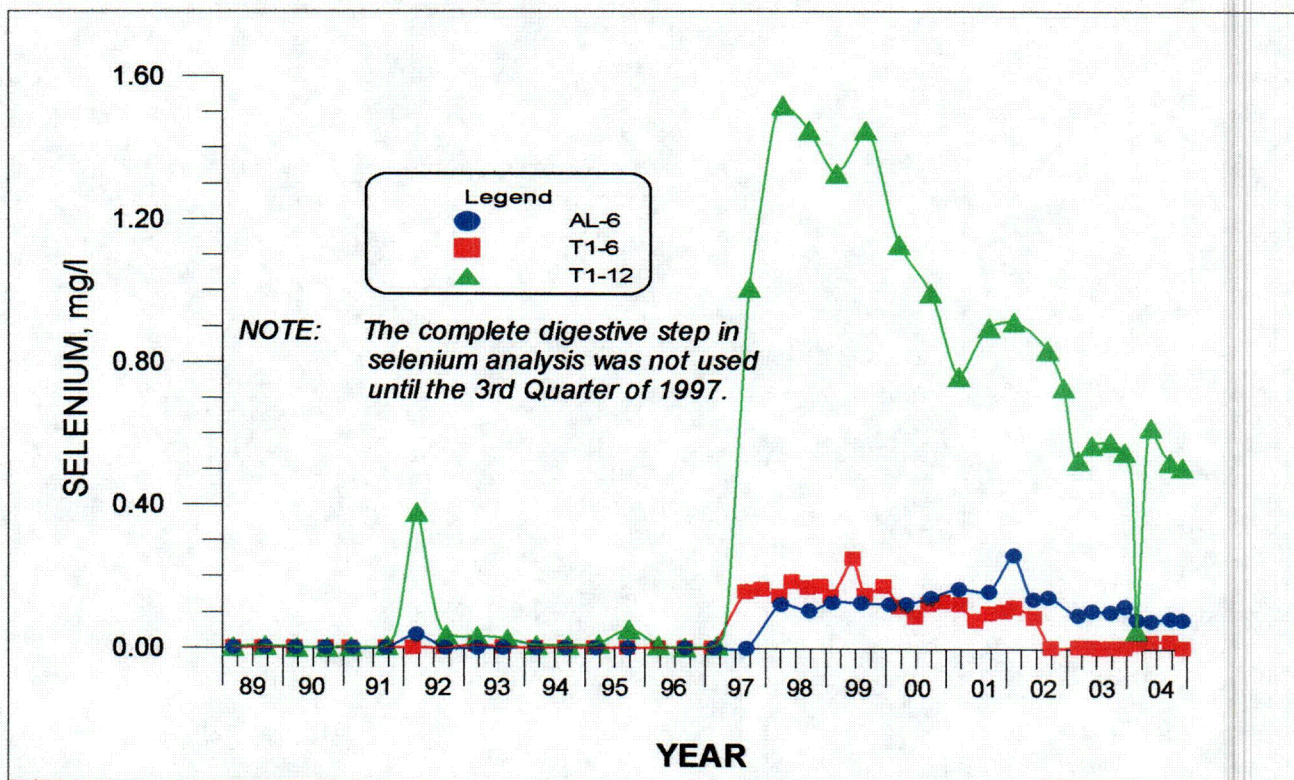


FIGURE 12. SELENIUM CONCENTRATIONS VERSUS TIME FOR WELLS T1-6, T1-12, AL-1, AL-6, AL-7, AL-8 AND AL-9.

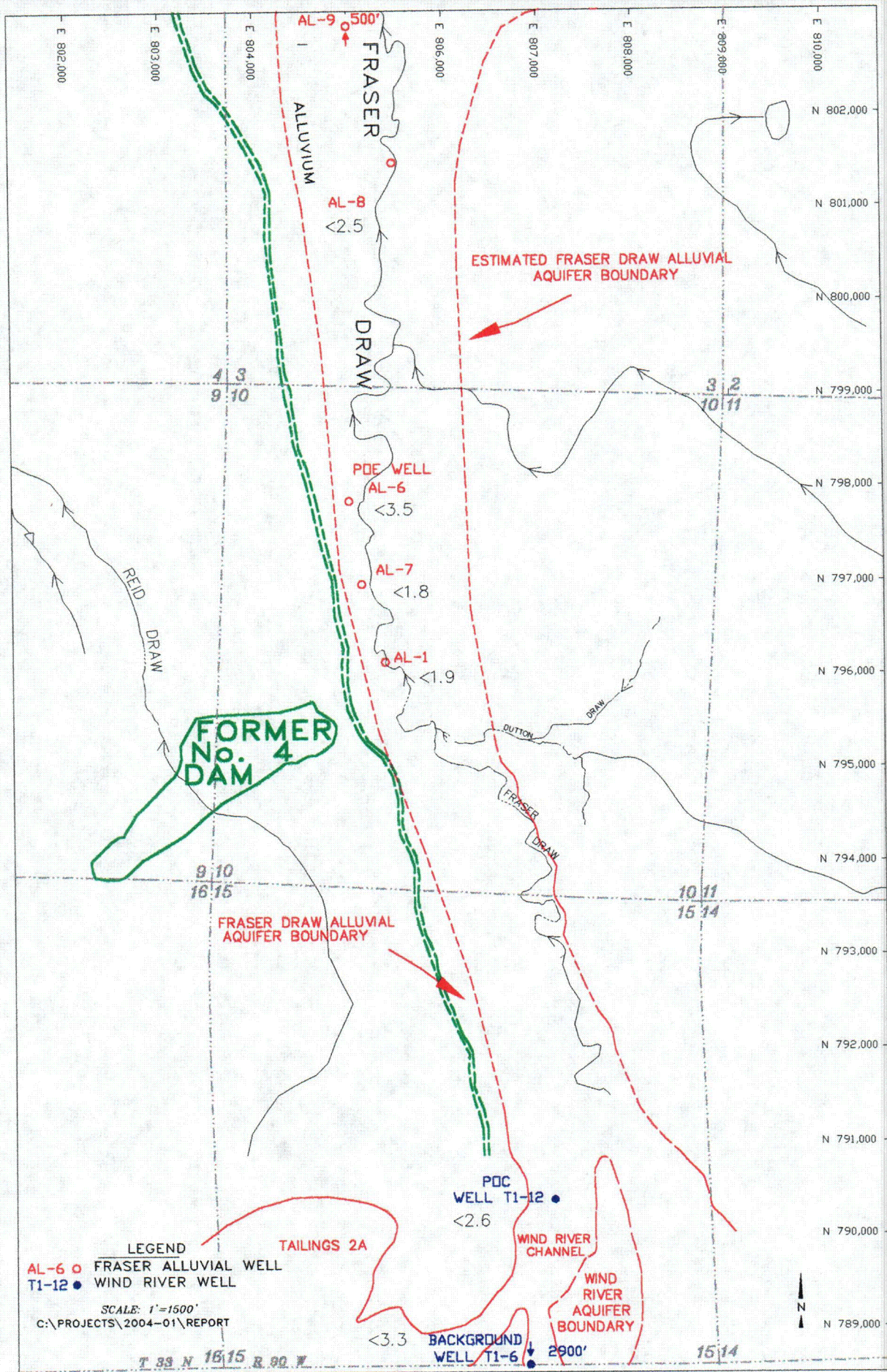


FIGURE 13. RADIUM-226 + RADIUM-228 ACTIVITY IN DEC. 2004 AT LUCKY MC, IN pCi/l

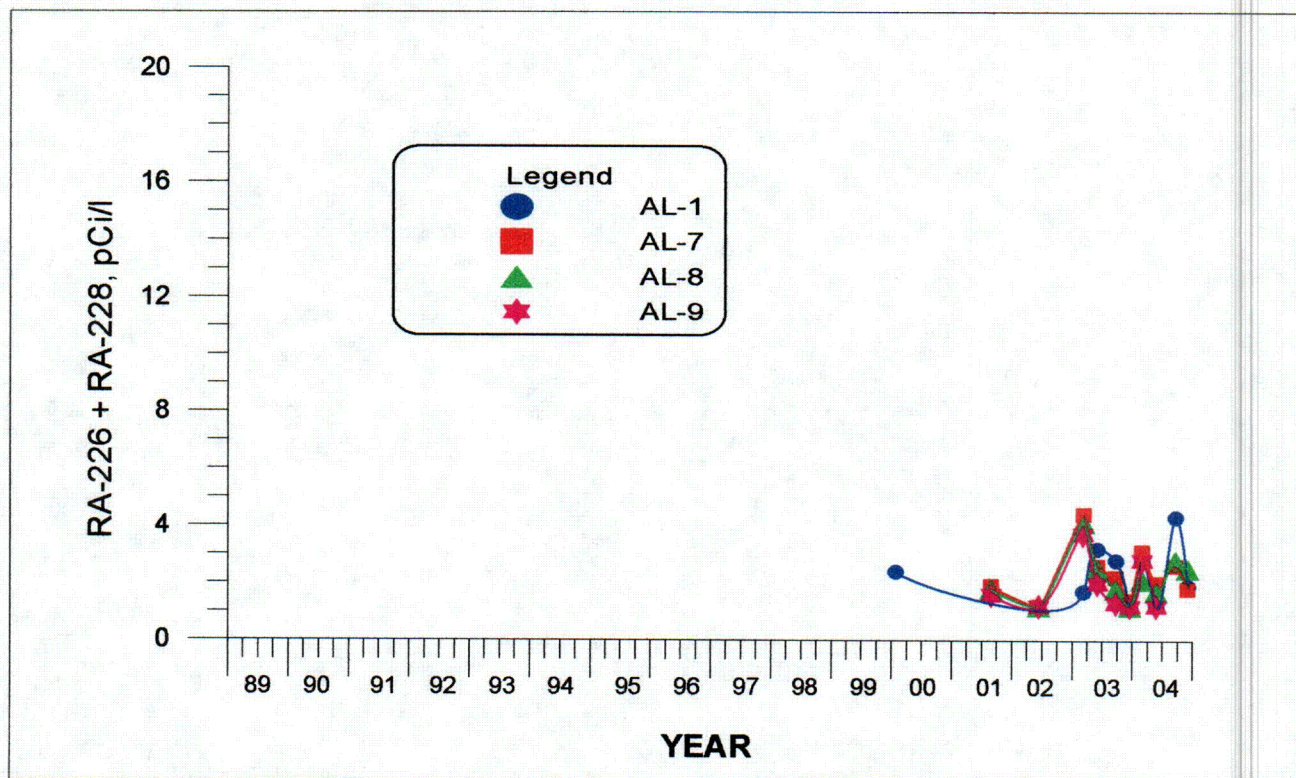
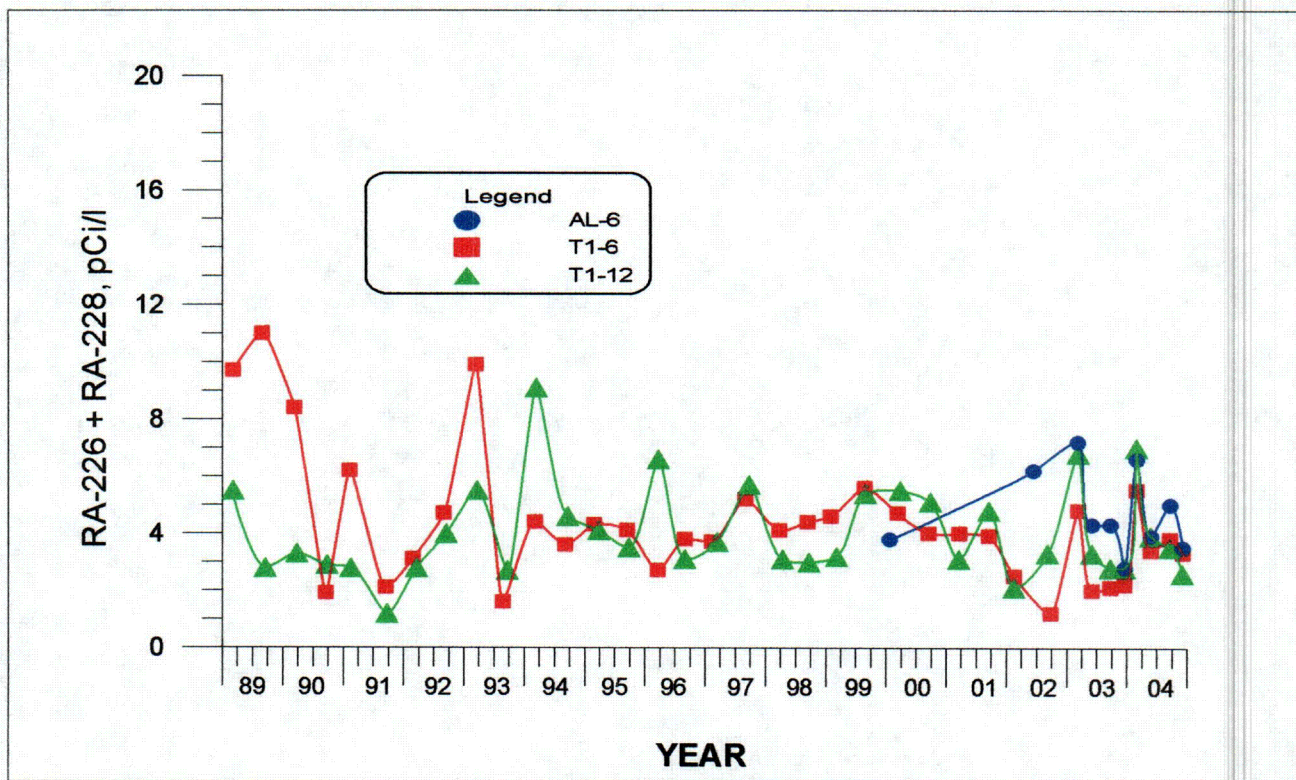


FIGURE 14. RADIUM-226 + RADIUM-228 ACTIVITY VERSUS TIME FOR WELLS T1-6, T1-12, AL-1, AL-6, AL-7, AL-8 AND AL-9.

TABLE 1. WATER-LEVEL AND WATER-QUALITY DATA.

Lucky MC Mine - Pathfinder Mines Corp.

Sample Point Name	Date	WL (feet)	WL_ELEV (ft-msl)	pH(f) (std. units)	Cond(f) (µmhos)	TDS (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3+NO2 (mg/l)	Unat (mg/l)
AL-1	3/11/2003	28.27	6236.33	7.2	3840	3761	1944.00	150.6	42.6	0.582
	6/2/2003	28.49	6236.11	7.1	4370	4097	1884.00	151.4	78.8	0.642
	9/24/2003	29.47	6235.13	6.4	4210	3103	1774.00	90.8	6.5	0.304
	12/18/2003	29.29	6235.31	6.6	4280	2828	1721.71	70.1	9.9	0.278
	3/2/2004	29.15	6235.45	—	3380	2770	1660.00	61.2	2.9	0.245
	5/26/2004	29.93	6234.67	7.2	3080	2630	1660.00	50.1	1.6	0.190
	9/22/2004	30.96	6233.64	7.5	2830	2710	1710.00	46.0	0.3	0.175
	12/6/2004	30.54	6234.06	7.0	2910	2770	1540.00	44.0	0.1	0.159
AL-6	3/11/2003	22.83	6213.97	7.3	4160	3995	1986.00	139.9	59.6	0.969
	6/4/2003	22.82	6213.98	6.9	4210	3914	2175.00	159.1	59.4	0.850
	9/24/2003	23.11	6213.69	6.4	4360	3681	2050.00	155.4	47.8	0.843
	12/18/2003	23.18	6213.62	6.4	4040	3757	1967.77	130.2	58.1	0.952
	3/2/2004	23.18	6213.62	7.0	3970	3740	1940.00	121.0	41.5	0.916
	5/26/2004	23.14	6213.66	7.0	3820	3650	2030.00	118.0	40.3	0.740
	9/22/2004	23.31	6213.49	7.3	3500	3580	1960.00	111.0	69.1	0.772
	12/6/2004	23.77	6213.03	6.9	3490	3530	1850.00	120.0	41.7	0.718
AL-7	3/11/2003	27.59	6224.41	7.3	3070	2710	1436.00	70.0	18.8	0.531
	6/4/2003	27.48	6224.52	6.7	2910	2515	1352.00	71.3	12.5	0.371
	9/24/2003	27.96	6224.04	6.5	3510	2535	1335.00	75.0	9.3	0.278
	12/18/2003	28.13	6223.87	6.3	3120	2278	1295.84	62.5	3.4	0.309
	3/2/2004	28.12	6223.88	6.9	2710	2380	1300.00	62.5	3.6	0.274
	5/26/2004	28.04	6223.96	7.2	2580	2270	1330.00	56.3	0.4	0.210
	9/22/2004	28.33	6223.67	7.4	2360	2330	1380.00	59.0	1.9	0.272
	12/6/2004	28.79	6223.21	7.4	2400	2400	1300.00	60.0	2.3	0.255
AL-8	3/11/2003	29.67	6165.33	7.3	4630	4100	2365.00	65.7	< 0.1	0.237
	6/4/2003	29.17	6165.83	6.9	4580	3935	2520.00	65.8	0.2	0.210
	9/24/2003	29.90	6165.10	6.6	5390	4039	2545.00	86.2	< 0.1	0.230
	12/18/2003	29.89	6165.11	6.5	4860	3923	2346.33	68.1	0.2	0.271
	3/2/2004	29.85	6165.15	7.2	4910	3800	2250.00	69.5	< 0.1	0.180
	5/26/2004	29.53	6165.47	7.1	4310	3800	2340.00	65.1	< 0.1	0.210
	9/22/2004	29.89	6165.11	7.5	3950	3740	2360.00	64.0	0.2	0.242
	12/6/2004	29.91	6165.09	7.1	3960	3740	2190.00	65.0	< 0.1	0.206
AL-9	3/11/2003	34.98	6139.02	7.3	4110	3638	2189.00	53.8	0.1	0.233
	6/4/2003	35.18	6138.82	7.0	4290	3628	2156.00	61.2	< 0.1	0.236
	9/24/2003	35.63	6138.37	6.6	4700	3474	2232.00	69.7	< 0.1	0.239
	12/18/2003	35.50	6138.50	6.4	4420	3578	2180.71	57.3	< 0.1	0.279
	3/2/2004	35.38	6138.62	7.3	4290	3760	2250.00	68.8	0.6	0.266
	5/26/2004	35.53	6138.47	6.9	4020	3640	2240.00	64.5	< 0.1	0.230
	9/22/2004	50.30	6123.70	—	—	—	—	—	—	—
	12/6/2004	> 50.30	6123.70	—	—	—	—	—	—	—
T1-6	3/12/2003	49.98	6378.24	7.3	3220	2570	1510.00	35.7	0.3	0.044
	6/4/2003	—	—	6.8	3070	2412	1411.00	40.1	0.9	0.007

TABLE 1. WATER-LEVEL AND WATER-QUALITY DATA. (cont.)

Lucky MC Mine - Pathfinder Mines Corp.

Sample Point Name	Date	WL (feet)	WL_ELEV (ft-msl)	pH(f) (std. units)	Cond(f) (µmhos)	TDS (mg/l)	SO4 (mg/l)	Cl (mg/l)	NO3+NO2 (mg/l)	Unat (mg/l)
T1-6	7/22/2003	—	—	7.4	3060	2020	1360.00	38.8	0.6	0.021
	9/24/2003	49.03	6379.19	6.7	3680	2428	1447.00	41.8	0.6	0.021
	11/20/2003	45.19	6383.03	7.1	3460	2772	1786.00	55.5	< 0.1	0.061
	12/18/2003	39.51	6388.71	6.5	3640	2562	1499.31	43.3	< 0.1	0.042
	3/2/2004	36.18	6392.04	7.6	4090	3100	1820.00	72.3	0.5	0.080
	5/26/2004	35.00	6393.22	6.8	3400	3010	1850.00	60.7	0.2	0.075
	9/22/2004	35.25	6392.97	7.8	3230	2870	1810.00	58.0	0.3	0.059
	12/7/2004	33.72	6394.50	7.5	2900	2750	1560.00	51.0	0.3	0.056
T1-12	3/12/2003	9.77	6331.03	6.9	6510	6671	2270.00	229.6	305.0	0.369
	6/4/2003	9.88	6330.92	7.0	6900	6592	2272.00	186.5	342.0	0.345
	9/24/2003	10.62	6330.18	6.3	7770	6665	2357.00	222.5	327.0	0.330
	12/18/2003	11.26	6329.54	6.3	7230	6705	2294.28	216.7	354.0	0.360
	3/2/2004	11.26	6329.54	6.7	7060	6750	2230.00	205.0	310.0	0.493
	5/26/2004	11.40	6329.40	6.3	7240	6970	2310.00	205.0	340.0	0.310
	9/22/2004	11.95	6328.85	6.6	6550	7030	2540.00	208.0	550.0	0.361
	12/6/2004	12.17	6328.63	6.7	6450	6870	2250.00	203.0	321.0	0.333

TABLE 1. WATER-LEVEL AND WATER-QUALITY DATA. (cont.)

Lucky MC Mine - Pathfinder Mines Corp.

Sample Point Name	Date	Th230 (pCi/l)	Th230(e) (pCi/l)	Ra226 (pCi/l)	Ra226(e) (pCi/l)	Ra228 (pCi/l)	Ra228(e) (pCi/l)	Ra226+Ra228 (pCi/l)
AL-1	3/11/2003	< 0.2	—	0.7	± 0.2	< 1.0	—	< 1.7
	6/2/2003	1.1	± 0.5	2.2	± 0.2	< 1.0	—	< 3.2
	9/24/2003	1.4	0.5	1.8	0.2	< 1.0	—	< 2.8
	12/18/2003	0.2	—	< 0.2	—	< 1.0	—	< 1.2
	3/2/2004	< 0.2	—	1.8	0.4	< 1.0	—	< 2.8
	5/26/2004	< 0.2	—	< 0.2	—	< 1.0	—	< 1.2
	9/22/2004	< 0.2	—	1.3	—	3.0	—	4.3
	12/6/2004	< 0.2	—	0.9	—	< 1.0	—	< 1.9
AL-6	3/11/2003	< 0.2	—	4.4	± 0.3	2.8	± 1.2	7.2
	6/4/2003	0.3	± 0.3	3.3	± 0.2	< 1.0	—	< 4.3
	9/24/2003	0.7	0.4	3.3	0.2	< 1.0	—	< 4.3
	12/18/2003	0.2	—	1.8	± 0.5	< 1.0	—	< 2.8
	3/2/2004	< 0.2	—	3.4	0.5	3.2	1.2	6.6
	5/26/2004	< 0.2	—	2.9	0.7	< 1.0	—	< 3.9
	9/22/2004	< 0.2	—	4.0	—	< 1.0	—	< 5.0
	12/6/2004	< 0.2	—	2.5	—	< 1.0	—	< 3.5
AL-7	3/11/2003	< 0.2	—	1.6	± 0.2	2.8	± 1.2	4.4
	6/4/2003	0.3	± 0.3	1.6	± 0.2	< 1.0	—	< 2.6
	9/24/2003	< 0.2	—	1.2	0.2	< 1.0	—	< 2.2
	12/18/2003	0.2	—	0.4	± 0.3	< 1.0	—	< 1.4
	3/2/2004	< 0.2	—	2.1	0.5	< 1.0	—	< 3.1
	5/26/2004	< 0.2	—	1.0	0.5	< 1.0	—	< 2.0
	9/22/2004	< 0.2	—	1.6	—	< 1.0	—	< 2.6
	12/6/2004	< 0.2	—	0.8	—	< 1.0	—	< 1.8
AL-8	3/11/2003	< 0.2	—	1.3	± 0.2	2.8	± 1.2	4.1
	6/4/2003	0.4	± 0.4	1.5	± 0.2	< 1.0	—	< 2.5
	9/24/2003	< 0.2	—	0.8	0.2	< 1.0	—	< 1.8
	12/18/2003	0.2	—	< 0.2	—	< 1.0	—	< 1.2
	3/2/2004	< 0.2	—	1.1	0.4	< 1.0	—	< 2.1
	5/26/2004	< 0.2	—	0.7	0.5	< 1.0	—	< 1.7
	9/22/2004	< 0.2	—	1.8	—	< 1.0	—	< 2.8
	12/6/2004	< 0.2	—	1.5	—	< 1.0	—	< 2.5
AL-9	3/11/2003	0.3	± 0.2	0.9	± 0.2	2.8	± 1.2	3.7
	6/4/2003	0.3	± 0.3	1.0	± 0.2	< 1.0	—	< 2.0
	9/24/2003	< 0.2	—	0.3	0.2	< 1.0	—	< 1.3
	12/18/2003	0.2	—	< 0.2	—	< 1.0	—	< 1.2
	3/2/2004	0.7	0.4	1.8	0.4	< 1.0	—	< 2.8
T1-6	5/26/2004	< 0.2	—	< 0.2	—	< 1.0	—	< 1.2
	3/12/2003	0.3	± 0.2	2.0	± 0.2	2.8	± 1.2	4.8
	6/4/2003	0.3	± 0.3	1.0	± 0.2	< 1.0	—	< 2.0
	7/22/2003	—	—	1.7	0.5	—	—	—
	9/24/2003	< 0.2	—	1.1	0.2	< 1.0	—	< 2.1
	11/20/2003	—	—	2.9	0.5	—	—	—
	12/18/2003	0.2	—	1.2	± 0.4	< 1.0	—	< 2.2
	3/2/2004	< 0.2	—	4.5	0.6	< 1.0	—	< 5.5

TABLE 1. WATER-LEVEL AND WATER-QUALITY DATA. (cont.)

Lucky MC Mine - Pathfinder Mines Corp.

Sample Point Name	Date	Th230 (pCi/l)	Th230(e) (pCi/l)	Ra226 (pCi/l)	Ra226(e) (pCi/l)	Ra228 (pCi/l)	Ra228(e) (pCi/l)	Ra226+Ra228 (pCi/l)
T1-6	5/26/2004	< 0.2	—	2.4	0.7	< 1.0	—	< 3.4
	9/22/2004	< 0.2	—	2.8	—	< 1.0	—	< 3.8
	12/7/2004	< 0.2	—	2.3	—	< 1.0	—	< 3.3
T1-12	3/12/2003	0.4	± 0.4	2.1	± 0.3	4.7	± 2.0	6.8
	6/4/2003	0.3	± 0.3	2.3	± 0.2	< 1.0	—	< 3.3
	9/24/2003	< 0.2	—	1.8	0.2	< 1.0	—	< 2.8
	12/18/2003	< 0.2	—	1.8	± 0.5	< 1.0	—	< 2.8
	3/2/2004	< 0.2	—	6.0	0.7	< 1.0	—	< 7.0
	5/26/2004	< 0.2	—	2.9	0.7	< 1.0	—	< 3.9
	9/22/2004	< 0.2	—	2.5	—	< 1.0	—	< 3.5
	12/6/2004	< 0.2	—	1.6	—	< 1.0	—	< 2.6

TABLE 1. WATER-LEVEL AND WATER-QUALITY DATA. (cont.)

Lucky MC Mine - Pathfinder Mines Corp.

Sample Point Name	Date	As (mg/l)	Be (mg/l)	Cd (mg/l)	Cr (mg/l)	Ni (mg/l)	Se (mg/l)
AL-1	3/11/2003	< 0.002	< 0.010	< 0.010	< 0.050	< 0.05	0.087
	6/2/2003	0.032	< 0.001	0.002	< 0.002	0.07	0.181
	9/24/2003	0.007	< 0.001	< 0.001	< 0.001	0.06	0.032
	12/18/2003	< 0.001	< 0.001	< 0.001	< 0.001	0.05	0.008
	3/2/2004	0.003	< 0.010	< 0.005	< 0.050	0.04	0.015
	5/26/2004	< 0.004	< 0.010	< 0.010	< 0.050	< 0.05	0.020
	9/22/2004	< 0.001	—	< 0.010	< 0.050	< 0.05	0.007
	12/6/2004	0.002	< 0.010	< 0.010	< 0.050	< 0.05	0.003
AL-6	3/11/2003	0.007	< 0.010	< 0.010	< 0.050	< 0.05	0.094
	6/4/2003	0.003	< 0.001	< 0.001	< 0.002	0.01	0.107
	9/24/2003	0.007	< 0.001	< 0.001	< 0.001	0.01	0.103
	12/18/2003	0.008	< 0.001	< 0.001	< 0.001	0.01	0.120
	3/2/2004	0.007	< 0.001	< 0.005	< 0.050	0.01	0.081
	5/26/2004	0.006	< 0.010	< 0.010	< 0.050	< 0.05	0.079
	9/22/2004	0.006	—	< 0.010	< 0.050	< 0.05	0.085
	12/6/2004	0.007	< 0.010	< 0.010	< 0.050	< 0.05	0.082
AL-7	3/11/2003	0.002	< 0.010	< 0.010	< 0.050	< 0.05	0.050
	6/4/2003	0.005	< 0.001	< 0.001	< 0.002	0.01	0.038
	9/24/2003	0.003	< 0.001	< 0.001	0.007	0.02	0.026
	12/18/2003	< 0.001	< 0.001	< 0.001	< 0.001	0.01	0.010
	3/2/2004	0.001	< 0.001	< 0.005	< 0.050	0.01	0.006
	5/26/2004	0.001	< 0.010	< 0.010	< 0.050	< 0.05	0.003
	9/22/2004	0.001	—	< 0.010	< 0.050	< 0.05	0.009
	12/6/2004	0.002	< 0.010	< 0.010	< 0.050	< 0.05	0.007
AL-8	3/11/2003	0.007	< 0.010	< 0.010	< 0.050	< 0.05	0.011
	6/4/2003	0.003	< 0.001	< 0.001	< 0.002	0.05	< 0.005
	9/24/2003	0.003	< 0.001	< 0.001	< 0.001	0.02	0.009
	12/18/2003	0.006	< 0.001	< 0.001	0.001	0.01	0.014
	3/2/2004	0.002	< 0.001	< 0.005	< 0.050	0.01	0.004
	5/26/2004	0.002	< 0.010	< 0.010	< 0.050	< 0.05	0.012
	9/22/2004	0.004	—	< 0.010	< 0.050	< 0.05	0.006
	12/6/2004	0.005	< 0.010	< 0.010	< 0.050	< 0.05	0.013
AL-9	3/11/2003	0.003	< 0.010	< 0.010	< 0.050	< 0.05	0.024
	6/4/2003	< 0.002	< 0.001	< 0.001	< 0.002	0.01	0.015
	9/24/2003	0.003	< 0.001	< 0.001	< 0.001	0.02	0.014
	12/18/2003	0.003	< 0.001	< 0.001	< 0.001	0.01	0.021
	3/2/2004	0.002	< 0.001	< 0.005	< 0.050	0.01	0.006
	5/26/2004	0.002	< 0.010	< 0.010	< 0.050	< 0.05	0.014
T1-6	3/12/2003	< 0.002	< 0.010	< 0.010	< 0.050	< 0.05	< 0.005
	6/4/2003	< 0.002	< 0.001	< 0.001	< 0.002	0.02	< 0.005
	7/22/2003	< 0.001	—	< 0.005	< 0.050	< 0.05	< 0.002
	9/24/2003	0.001	0.001	< 0.001	< 0.001	0.02	< 0.003
	11/20/2003	0.001	—	< 0.001	< 0.001	—	0.003
	12/18/2003	< 0.001	< 0.001	< 0.001	< 0.001	0.02	< 0.003
	3/2/2004	0.003	< 0.001	< 0.005	< 0.050	0.06	0.016

TABLE 1. WATER-LEVEL AND WATER-QUALITY DATA. (cont.)

Lucky MC Mine - Pathfinder Mines Corp.

Sample Point Name	Date	As (mg/l)	Be (mg/l)	Cd (mg/l)	Cr (mg/l)	Ni (mg/l)	Se (mg/l)
T1-6	5/26/2004	< 0.001	< 0.010	< 0.010	< 0.050	< 0.05	0.020
	9/22/2004	< 0.001	—	< 0.010	< 0.050	< 0.05	0.021
	12/7/2004	0.001	< 0.010	< 0.010	< 0.050	< 0.05	0.003
T1-12	3/12/2003	< 0.002	< 0.010	< 0.010	< 0.050	0.29	0.528
	6/4/2003	0.005	< 0.001	< 0.001	< 0.002	0.28	0.570
	9/24/2003	< 0.002	< 0.001	< 0.001	0.006	0.37	0.579
	12/18/2003	< 0.002	< 0.001	< 0.001	< 0.002	0.27	0.551
	3/2/2004	< 0.001	< 0.001	< 0.005	< 0.050	0.03	0.054
	5/26/2004	< 0.004	< 0.001	< 0.001	< 0.050	0.28	0.620
	9/22/2004	< 0.002	—	< 0.010	< 0.050	0.29	0.523
	12/6/2004	< 0.002	< 0.010	< 0.010	< 0.050	0.28	0.509