

**Table 00-9. Selected Non-Radiological Constituents  
in Brantley Lake Surface Water Samples Collected During 2000**

See CEMRC 2000 Report "Radiological and non-radiological constituents in surface water and sediments  
at selected reservoirs" for descriptions of locations and methods of data collection.

Analyte	Collection Date and Sampling Depth					
	May 31, 2000 (0.5 m depth)			May 31, 2000 (13.7 m depth)		
	Method	<sup>a</sup> MDL (mg/L)	Result (mg/L)	Method	MDL (mg/L)	Result (mg/L)
Ag	<sup>b</sup> ICPMS	8.66E-06	<MDL	ICPMS	8.66E-06	1.11E-05
Al	ICPMS	5.13E-02	1.59E-01	ICPMS	5.13E-02	4.89E-01
As	<sup>c</sup> AA	4.40E-05	1.09E-03	AA	4.40E-05	2.37E-03
Ba	ICPMS	3.44E-04	4.41E-02	ICPMS	3.44E-04	6.43E-02
Be	ICPMS	5.00E-05	<MDL	ICPMS	5.00E-05	<MDL
Ca	ICPMS	8.58E+00	4.16E+02	ICPMS	8.58E+00	6.22E+02
Cd	ICPMS	5.00E-05	<MDL	ICPMS	5.00E-05	<MDL
Ce	ICPMS	5.66E-05	1.09E-04	ICPMS	5.66E-05	4.63E-04
Chloride	<sup>d</sup> IC	8.00E-01	5.25E+02	IC	8.00E-01	1.38E+03
Co	ICPMS	4.66E-05	4.10E-03	ICPMS	4.66E-05	6.75E-03
Cr	ICPMS	2.89E-04	1.03E-03	ICPMS	2.89E-04	2.08E-03
Cu	ICPMS	7.22E-04	5.76E-03	ICPMS	7.22E-04	8.06E-03
Dy	ICPMS	7.99E-06	1.05E-05	ICPMS	7.99E-06	2.40E-05
Er	ICPMS	5.55E-06	<MDL	ICPMS	5.55E-06	2.16E-05
Eu	ICPMS	1.01E-05	1.55E-05	ICPMS	1.01E-05	3.35E-05
Fe	<sup>e</sup> GFAA	1.67E-02	1.00E-01	GFAA	1.67E-02	3.68E-01
Fluoride	IC	1.00E+00	1.54E+00	IC	1.00E+00	1.98E+00
Gd	ICPMS	7.22E-06	1.39E-05	ICPMS	7.22E-06	5.26E-05
Hg	AA	2.00E-07	<MDL	AA	2.00E-07	3.60E-07
K	ICPMS	1.29E+00	1.14E+01	ICPMS	1.29E+00	1.51E+01
La	ICPMS	7.77E-05	<MDL	ICPMS	7.77E-05	1.82E-04
Li	ICPMS	1.78E-04	3.89E-02	ICPMS	1.78E-04	7.76E-02
Mg	ICPMS	1.14E+00	9.62E+01	ICPMS	1.14E+00	2.05E+02
Mn	ICPMS	1.22E-04	8.99E-03	ICPMS	2.44E-04	7.53E-01
Mo	ICPMS	1.08E-04	3.83E-03	ICPMS	1.08E-04	3.71E-03

Na	ICPMS	4.26E+00	3.69E+02	ICPMS	4.26E+00	1.07E+03
Nd	ICPMS	5.33E-05	7.03E-05	ICPMS	5.33E-05	2.18E-04
Ni	ICPMS	7.22E-04	1.89E-02	ICPMS	7.22E-04	2.91E-02
Nitrate	IC	4.50E-01	<MDL	IC	4.50E-01	<MDL
Pb	ICPMS	1.89E-04	2.88E-04	ICPMS	1.89E-04	6.78E-04
Phosphate	IC	3.60E-01	<MDL	IC	3.60E-01	<MDL
Pr	ICPMS	5.44E-05	<MDL	ICPMS	5.44E-05	5.87E-05
Sb	ICPMS	1.55E-04	3.01E-04	ICPMS	1.55E-04	2.53E-04
Sc	GFAA	7.66E-05	2.61E-03	GFAA	7.66E-05	4.00E-03
Se	ICPMS	4.22E-03	<MDL	ICPMS	4.22E-03	<MDL
Sm	ICPMS	1.02E-04	<MDL	ICPMS	1.02E-04	<MDL
Sn	ICPMS	8.33E-03	<MDL	ICPMS	8.33E-03	<MDL
Sulfate	IC	3.50E-01	1.35E+03	IC	3.50E-01	2.18E+03
Sr	ICPMS	5.66E-02	6.43E+00	ICPMS	5.66E-02	1.02E+01
Th	ICPMS	6.22E-06	2.62E-05	ICPMS	6.22E-06	8.69E-05
Ti	ICPMS	2.66E-04	4.09E-01	ICPMS	2.66E-04	6.59E-01
Tl	ICPMS	3.22E-05	<MDL	ICPMS	3.22E-05	4.81E-05
U	ICPMS	3.33E-06	5.36E-03	ICPMS	3.33E-06	7.93E-03
V	ICPMS	1.44E-04	5.63E-03	ICPMS	1.44E-04	5.27E-03
Zn	ICPMS	1.44E-03	1.09E-02	ICPMS	1.44E-03	1.12E-02

<sup>a</sup>MDL = Method Detection Limit; ICPMS values for 1998 and 1999 were calculated using the manufacturer's recommended method, values for 2000 were calculated using the EPA recommended method.

<sup>b</sup>ICPMS = Inductively-Coupled Mass Spectrometry

<sup>c</sup>AA = Atomic Absorption Spectroscopy

<sup>d</sup>IC = Ion Chromatography

<sup>e</sup>GFAA = Graphite Furnace Atomic Adsorption Spectroscopy