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Informal Report

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Uranium Hydrogeochemical and Stream Sediment Reconnaissance Data Release for the Billings NTMS Quadrangle, Montana, Including Concentrations of Forty-Three Additional Elements

University of California

U. S. DEPARTMENT OF ENERGY
Assistant Secretary for Resource Applications
Grand Junction Office, Colorado

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Uranium Hydrogeochemical and Stream Sediment Reconnaissance Data Release for the Billings NTMS Quadrangle, Montana, Including Concentrations of Forty-Three Additional Elements

David E. Broxton

AND

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Lorenzo A. Trujillo - Plasma-Source Emission Spectrography
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URANIUM HYDROGEOCHEMICAL AND STREAM SEDIMENT RECONNAISSANCE DATA RELEASE FOR THE BILLINGS NTMS QUADRANGLE, MONTANA, INCLUDING CONCENTRATIONS OF FORTY-THREE ADDITIONAL ELEMENTS

by

David E. Broxton

SUMMARY

This report contains data collected during a geochemical survey for uranium in the Billings National Topographic Map Series (NTMS) quadrangle of south-central Montana (Fig. 1) by the Los Alamos Scientific Laboratory (LASL) as part of the nationwide Hydrogeochemical and Stream Sediment Reconnaissance (HSSR). The LASL is responsible for conducting the HSSR primarily in the Rocky Mountain states of New Mexico, Colorado, Wyoming, and Montana and in Alaska. The HSSR program is part of the United States Department of Energy's (DOE) National Uranium Resource Evaluation (NURE), which is designed to provide an improved estimate of the availability and economics of nuclear fuel resources and to make available to industry information for use in the development and production of uranium resources. The HSSR data ultimately will be integrated with data from airborne radiometric surveys and geological investigations to complete the entire NURE program by 1988.

Totals of 1665 water and 1424 sediment samples were collected from 1998 locations in the quadrangle. Histograms and statistical data for uranium concentrations in water and sediment samples and thorium concentrations in sediment samples are given in Figs. 2-4. Most of the samples were collected between May 1978 and January 1979 by personnel from Eastern Montana College. Also included in this report are data for eleven samples (M38095 through M38105) that were collected from sites along the Stillwater River in the Beartooth Mountains in September and October 1976 by a commercial contractor while sampling the area west of the Billings quadrangle.

Elemental concentration, field measurement, weather, geologic, and geographic data for each sample location are listed for waters in Appendix I-A and for sediments in Appendix I-B. Uranium/thorium ratios for sediment samples are also included in Appendix I-B. The data presented in Appendix I are also available on magnetic tape from GJOIS Project, Union Carbide Corporation (UCC-ND), 4500 North Building, Oak Ridge National Laboratory, P. O. Box X, Oak Ridge, Tennessee 37830. Appendix II describes standard LASL HSSR field and analytical procedures and explains the codes used in Appendix I. The rear pocket of this report contains a geologic map (Plate I), sample location overlay (Plate II), uranium concentration overlay for waters (Plate III), conductivity overlay for waters (Plate IV), uranium concentration overlay for sediments (Plate V), and thorium concentration overlay for sediments (Plate VI). All plates are 1:250 000 scale for use in conjunction with the Billings

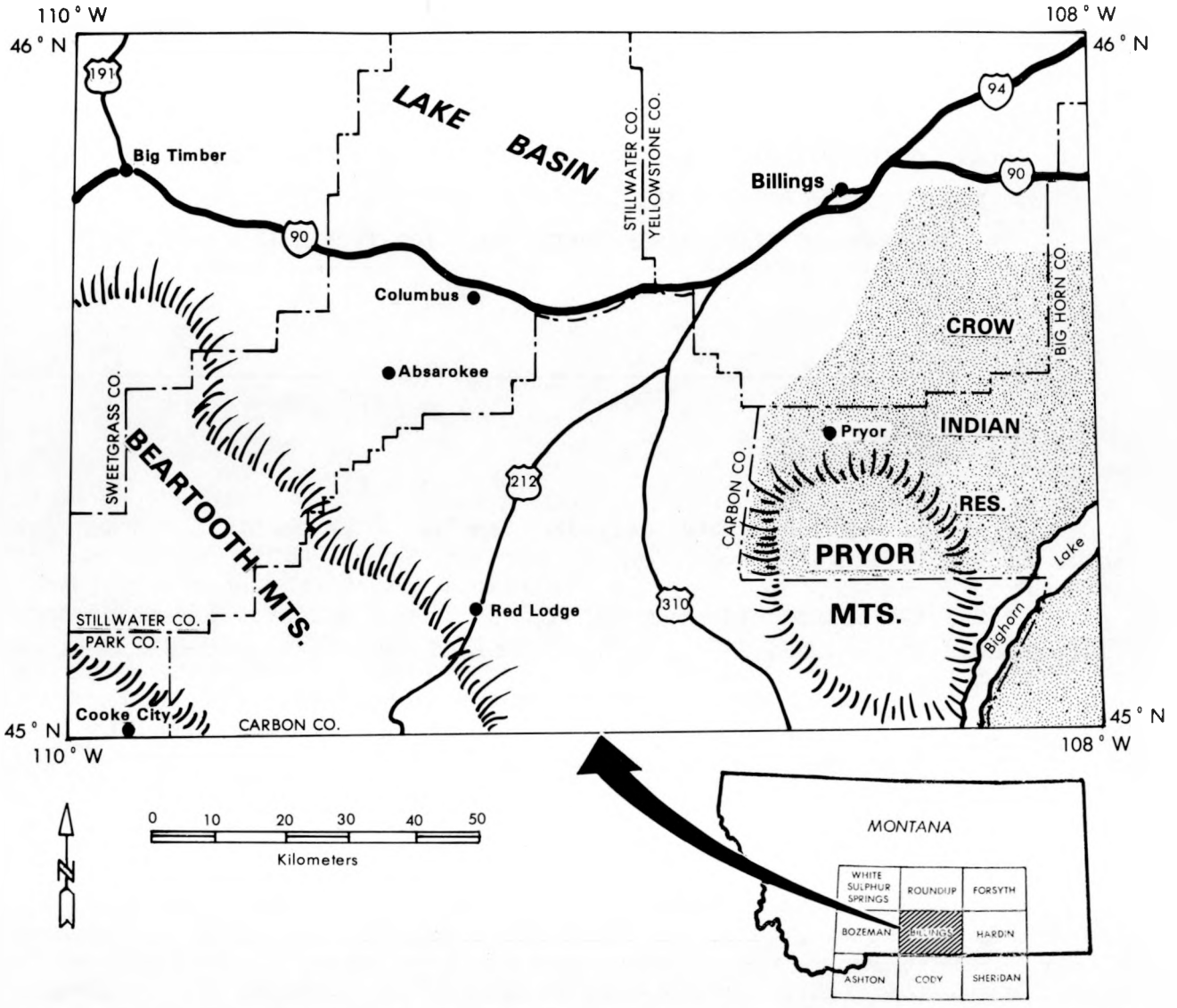
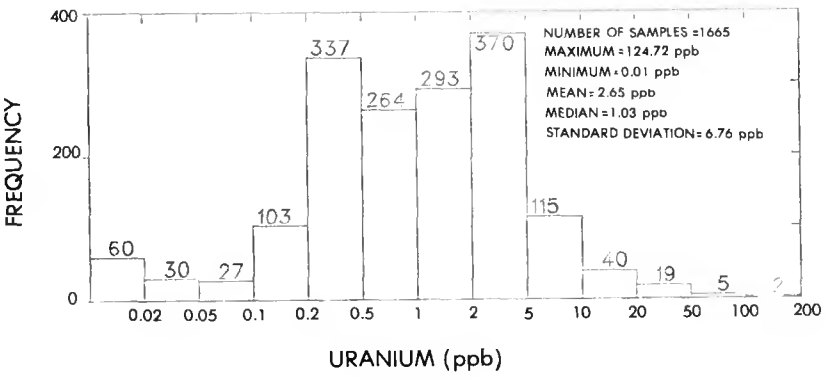


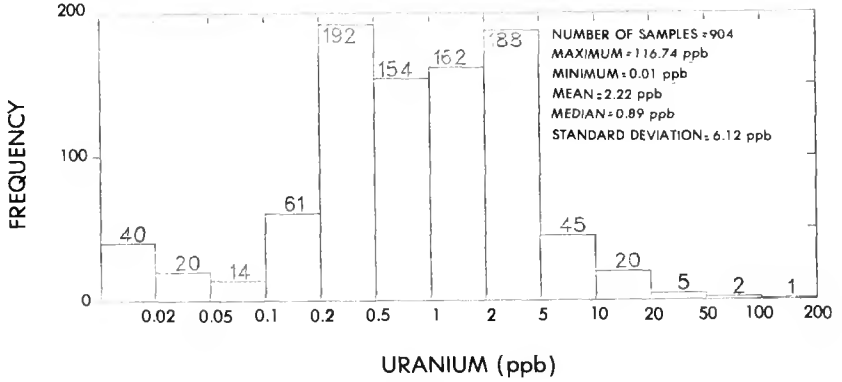
Fig. 1. Location map for the Billings NTMS quadrangle, Montana.

NTMS quadrangle sheet (US Geological Survey, 1954). Additional HSSR data are available for the adjacent Bozeman quadrangle (Bolivar, 1979).

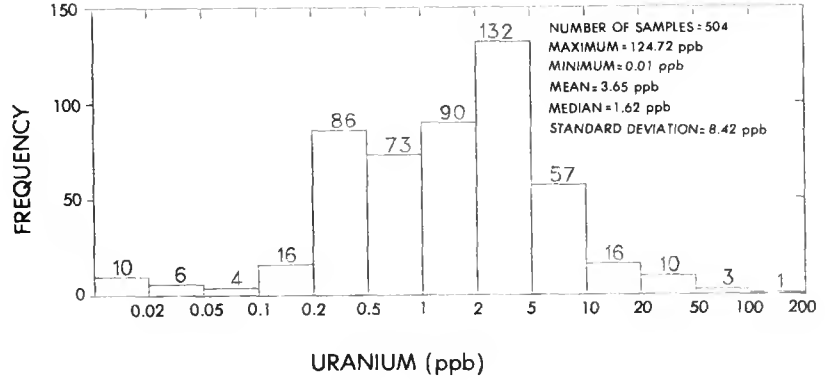
In addition to uranium, waters were analyzed for calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, molybdenum, nickel, titanium, and zinc (Appendix I-A). Sediments were analyzed for uranium and thorium as well as aluminum, antimony, barium, beryllium, bismuth, cadmium, calcium, cerium, cesium, chlorine, chromium, cobalt, copper, dysprosium, europium, gold, hafnium, iron, lanthanum, lead, lithium, lutetium, magnesium, manganese, nickel, niobium, potassium, rubidium, samarium, scandium, silver, sodium, strontium, tantalum, terbium, tin, titanium, tungsten, vanadium, ytterbium, and zinc (Appendix I-B). All elemental analyses were performed at the LASL. Water samples were initially analyzed for uranium by fluorometry. All water samples containing more than 40 parts per billion (ppb) uranium



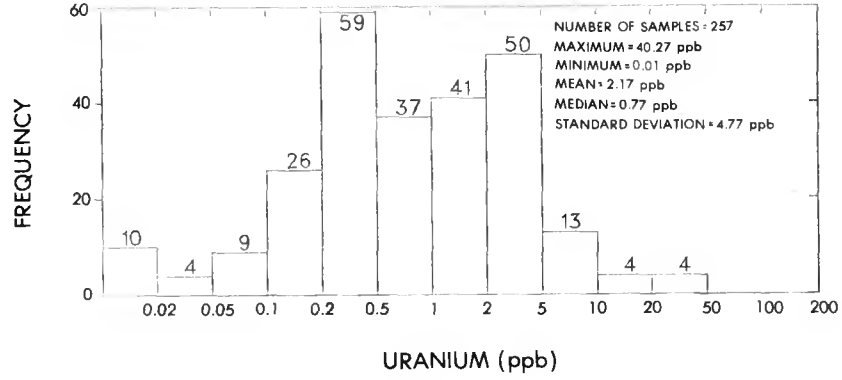
a. All waters



b. Stream waters

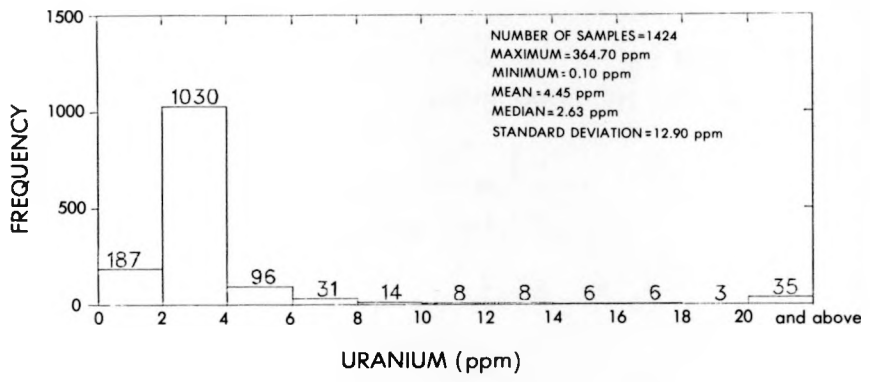


c. Well waters

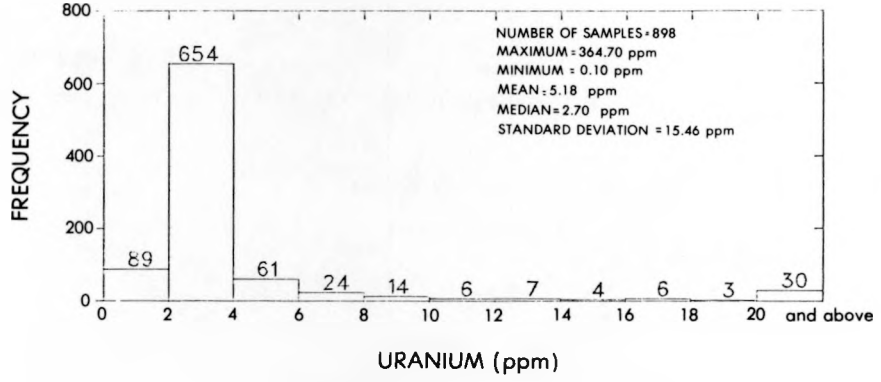


b. Spring waters

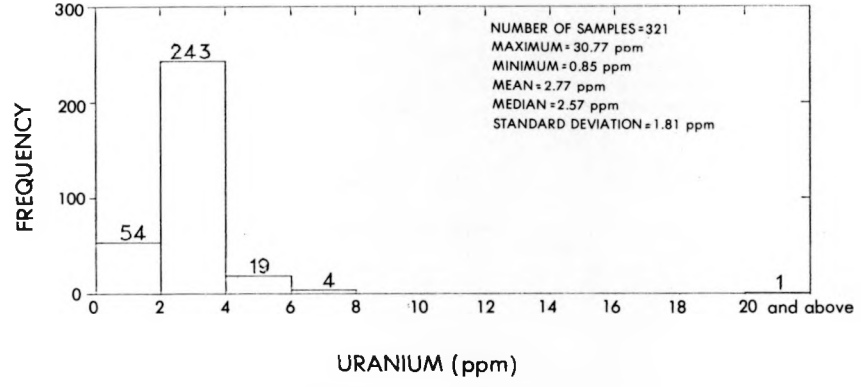
Fig. 2. Semilogarithmic histograms and statistical data for uranium concentrations in water samples from the Billings quadrangle, Montana.



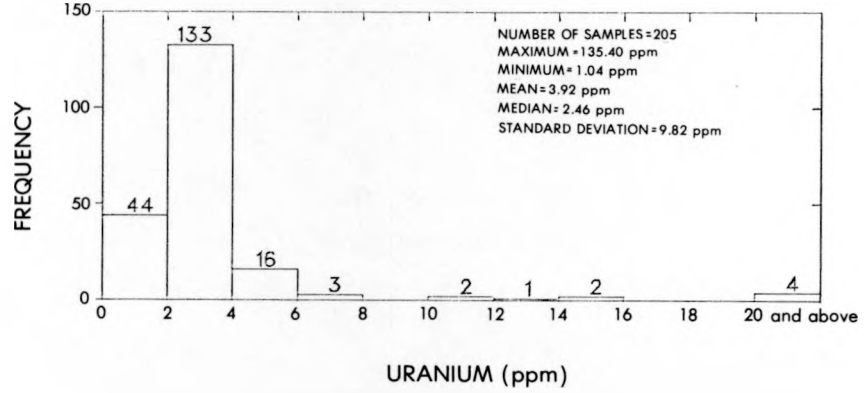
a. All sediments



b. Wet stream sediments

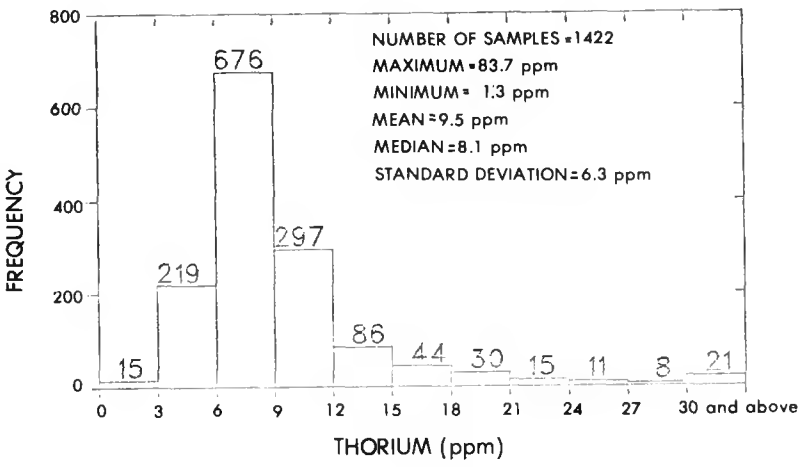


c. Dry stream sediments

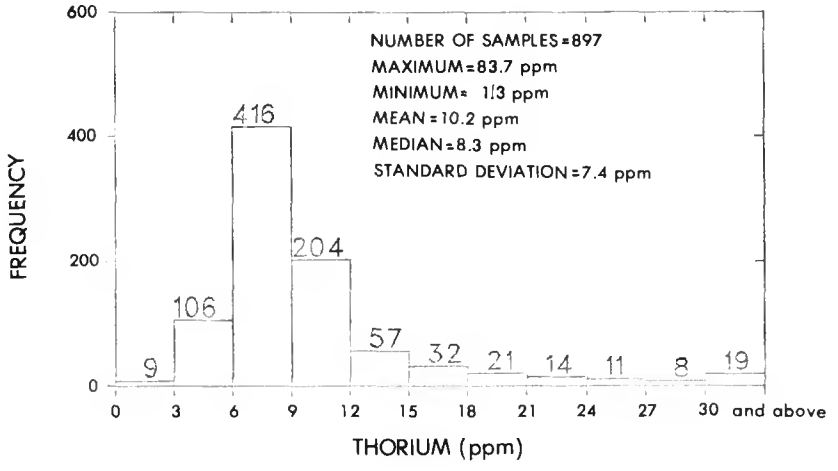


d. Wet spring sediments

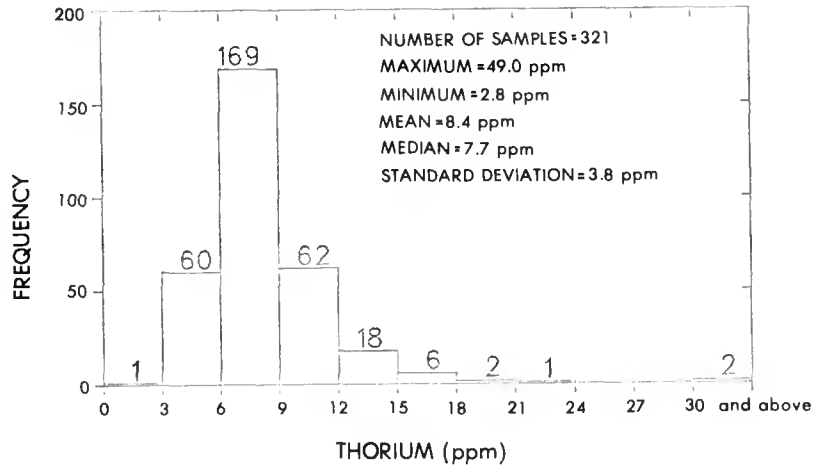
Fig. 3. Histograms and statistical data for uranium concentrations in sediment samples from the Billings quadrangle, Montana.



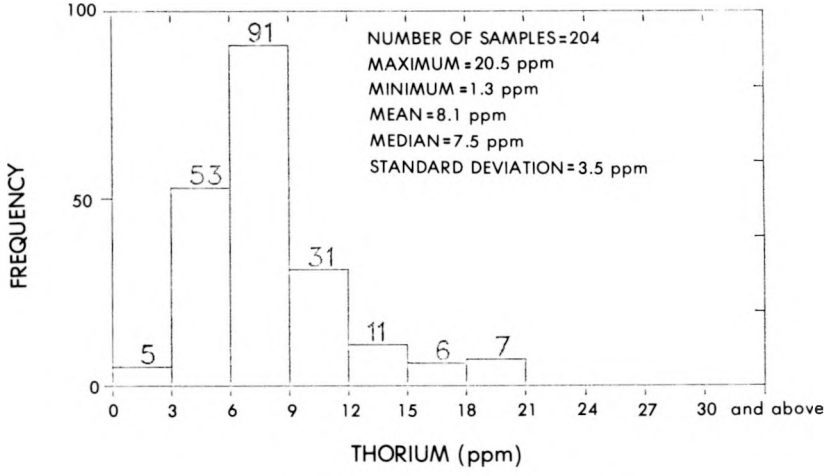
a. All sediments



b. Wet stream sediments



c. Dry stream sediments



d. Wet spring sediments

Fig. 4. Histograms and statistical data for thorium concentrations in sediment samples from the Billings quadrangle, Montana.

were reanalyzed by delayed-neutron counting (DNC). Concentrations of the 12 other elements in water were determined by plasma-source emission spectrography. All sediments were analyzed for uranium by DNC. Other elemental concentrations in sediments were determined by neutron-activation analysis for 31 elements, by x-ray fluorescence for 9 elements, and by arc-source emission spectrography for 2 elements. Analytical results for sediments are reported as parts per million (ppm).

Because this release is intended to make these data available to the DOE and the public as quickly as possible, no further discussion of the data is included. However, the Montana College of Mineral Science and Technology, under contract to the LASL, is preparing a report that will include a description of the geology and mineral occurrences as well as an evaluation of the HSSR data for the Billings quadrangle.

ACKNOWLEDGMENTS

Sincere appreciation is expressed to Prof. Arthur G. Davidson of Eastern Montana College, who was responsible for the design of this study, and to students working under his direction who collected and processed the samples. The support and assistance of the following LASL groups and individuals are also gratefully acknowledged. Nearly all analyses of the water samples and the x-ray fluorescence and emission spectrometry of sediment samples were performed by the Analytical Chemistry Group, under the direction of Glenn R. Waterbury. The delayed-neutron counting and neutron activation analyses of the sediments were performed by the Research Reactor Group, directed by Merle E. Bunker. Stephen L. Stein and Walter K. Hensley deserve special recognition for their extra effort, much of which was on personal time, to complete the neutron activation analysis of sediments for this report. The Statistics Group, headed by Ray A. Waller, was responsible for the data management and computer graphics. Special thanks are due the following members of the Geochemical Applications Group: Patricia R. O'Rourke who typed and edited the report and Mary Ann Olson who drafted the figures and plates. Sincere appreciation is also expressed to the Crow Tribal Council, the US Forest Service, and the landowners who granted access to lands under their control so that the survey could be completed.

APPENDIX I

LISTINGS OF FIELD DATA AND ELEMENTAL CONCENTRATIONS FOR SAMPLES FROM THE BILLINGS NTMS QUADRANGLE, MONTANA

APPENDIX I-A

Listings of Field Data and Elemental Concentrations
for Water Samples from the Billings Quadrangle, Montana
(Pages 8 through 73)

* Molybdenum and lead analyses are subject to interference from calcium, as described in Appendix II-A.

Note that two pages, numbered (1) and (2) in the upper right hand corner, are necessary to provide the complete data listing for each numerically ordered sequence of samples.

(1)- Lists field data and uranium concentrations determined by fluorometry or delayed-neutron counting.
(2)- Lists concentrations of 12 additional elements determined by plasma-source emission spectrography.

(See Appendix II for Code to Listings)

APPENDIX I-A. Elemental Concentrations for Water Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																											U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (*) UNITS IN ppb
30-45.3767-	108.3433-	2-08-	0-	M38001-	01/19/79-	9-	1-	6.5-	C-	-	7.5-	330-		-1-	4-	-	-	-	-	-	-	-	-3-	3-	4-	1-	-3-	3-	6-	70-	60-	0.48
30-45.3772-	108.3436-	2-08-	0-	M38002-	01/19/79-	9-	1-	6.0-	C-	-	7.6-	370-		-1-	4-	-	-	-	-	-	-	-	-3-	3-	4-	1-	-3-	3-	6-	70-	60-	0.44
30-45.3794-	108.3469-	2-07-	0-	M38003-	01/19/79-	9-	1-	2.5-	C-	-	7.5-	350-		-1-	4-	3-	4-	3-	3-	1-	2-	3-	3-	4-	1-	-3-	-	-	-	-		0.37
30-45.3953-	108.2736-	2-07-	0-	M38006-	01/19/79-	10-	2-	1.0-	C-	-	7.1-	350-		-1-	4-	4-	6-	2-	2-	1-	3-	4-	3-	3-	1-	-3-	-	-	-	-		0.15
30-45.3797-	108.2558-	2-07-	0-	M38007-	01/19/79-	10-	2-	1.5-	C-	-	7.2-	275-		-1-	4-	4-	4-	2-	2-	1-	2-	4-	3-	4-	1-	-3-	-	-	-	-		0.45
30-45.3783-	108.2567-	2-08-	0-	M38008-	01/19/79-	11-	2-	1.0-	C-	-	7.3-	320-		-1-	4-	4-	6-	3-	3-	1-	2-	4-	3-	4-	1-	-3-	-	-	-	-		0.82
30-45.4639-	108.3219-	2-08-	0-	M38010-	01/19/79-	11-	2-	7.0-	C-	-	7.5-	350-		-1-	6-	-	-	-	-	-	-	-4-	4-	3-	1-	-3-	3-	6-	75-	65-		1.30
30-45.4633-	108.3222-	2-08-	0-	M38011-	01/19/79-	11-	3-	7.0-	C-	-	7.2-	305-		-1-	6-	-	-	-	-	-	-	-4-	4-	3-	1-	-3-	3-	6-	75-	65-		1.48
30-45.4608-	108.3322-	2-07-	0-	M38012-	01/19/79-	12-	3-	1.0-	C-	-	7.3-	400-		-1-	6-	5-	6-	2-	2-	1-	1-	4-	4-	3-	1-	-3-	-	-	-	-		0.65
30-45.4672-	108.3197-	2-07-	0-	M38013-	01/19/79-	12-	3-	1.0-	C-	-	7.2-	380-		-1-	6-	5-	6-	2-	2-	1-	1-	4-	3-	3-	1-	-3-	-	-	-	-		0.18
30-45.4758-	108.3258-	2-07-	0-	M38014-	01/19/79-	12-	3-	0.5-	C-	-	7.1-	350-		-1-	6-	5-	6-	2-	2-	1-	1-	4-	3-	3-	1-	-3-	-	-	-	-		0.18
30-45.4722-	108.2797-	2-07-	0-	M38015-	01/19/79-	13-	3-	1.0-	C-	-	7.4-	450-		-1-	6-	5-	6-	2-	2-	1-	2-	4-	3-	3-	1-	-3-	-	-	-	-		0.33
30-45.5047-	108.3644-	2-08-	0-	M38019-	01/19/79-	9-	-8-		C-	-	8.3-	2200-		-1-	6-	4-	6-	-	-	-	-	-4-	4-	3-	3-	-3-	8-	-	-	-		0.34
30-45.5508-	108.2869-	2-07-	0-	M38020-	01/19/79-	10-	-8-		C-	-	7.4-	300-		-1-	6-	4-	6-	2-	2-	1-	1-	3-	4-	4-	3-	-3-	-	-	-	-		0.01
30-45.5633-	108.2706-	2-07-	0-	M38021-	01/19/79-	11-	-8-		C-	-	7.4-	290-		-1-	6-	5-	6-	2-	2-	1-	3-	4-	3-	3-	3-	-3-	-	-	-	-		0.01
30-45.5650-	108.2719-	2-07-	0-	M38022-	01/19/79-	11-	-8-		C-	-	7.0-	270-		-1-	6-	5-	6-	2-	2-	1-	3-	3-	4-	3-	3-	-3-	-	-	-	-		0.01
30-45.5828-	108.2650-	2-08-	0-	M38024-	01/19/79-	11-	-7-	7.5-	C-	-	8.2-	1375-		-1-	6-	5-	6-	-	-	-	-	-4-	4-	4-	3-	-3-	3-	6-	70-	60-		0.01
30-45.5844-	108.2667-	2-06-	0-	M38025-	01/19/79-	11-	-6-	7.0-	C-	-	8.2-	1875-		-1-	6-	-	-	-	-	-	-	-4-	4-	3-	2-	-3-	-	-	-	-		0.34
30-45.6081-	108.2228-	2-07-	0-	M38027-	01/19/79-	12-	-5-		C-	-	7.3-	650-		-1-	6-	5-	6-	-	-	-	-	-3-	3-	4-	2-	-3-	-	-	-	-		0.45
30-45.5997-	108.1981-	2-07-	0-	M38029-	01/19/79-	12-	-5-		C-	-	7.1-	600-		-1-	5-	4-	6-	-	-	-	-	-4-	4-	3-	2-	-3-	-	-	-	-		0.56
30-45.5531-	108.1953-	2-07-	0-	M38033-	01/19/79-	12-	-3-		C-	-	7.4-	700-		-1-	6-	4-	6-	-	-	-	-	-3-	4-	4-	1-	-3-	-	-	-	-		0.99
30-45.5653-	108.1550-	2-07-	0-	M38034-	01/19/79-	13-	-2-		C-	-	7.3-	450-		-1-	6-	5-	6-	-	-	-	-	-4-	4-	4-	1-	-3-	-	-	-	-		0.39
30-45.5128-	108.1164-	2-07-	0-	M38036-	01/19/79-	14-	-2-	1.0-	C-	-	7.4-	270-		-1-	6-	3-	4-	2-	2-	1-	2-	3-	3-	4-	1-	-3-	-	-	-	-		0.01
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30-45.5353-	108.0672-	2-07-	0-	M38038-	01/19/79-	13-	1-	1.5-	C-	-	7.4-	270-		-1-	6-	5-	6-	2-	2-	1-	1-	4-	4-	3-	1-	-3-	-	-	-	-		0.01
30-45.5422-	108.0436-	2-07-	0-	M38039-	01/19/79-	14-	1-	1.5-	C-	-	7.0-	270-		-1-	6-	5-	6-	2-	2-	1-	3-	4-	4-	3-	1-	-3-	-	-	-	-		0.01
30-45.5683-	108.0144-	2-07-	0-	M38040-	01/19/79-	14-	2-	1.0-	C-	-	7.1-	270-		-1-	6-	5-	6-	2-	2-	1-	3-	4-	4-	3-	1-	-3-	-	-	-	-		0.01
30-45.6036-	108.0097-	2-08-	0-	M38042-	01/19/79-	15-	3-	1.5-	C-	-	7.0-	1280-		-1-	6-	-	-	-	-	-	-	-4-	4-	3-	1-	-3-	8-	-	-	-		0.01
30-45.5922-	108.0747-	2-07-	0-	M38043-	01/19/79-	15-	3-	1.5-	C-	-	7.3-	1300-		-1-	6-	5-	6-	3-	2-	1-	2-	4-	3-	3-	1-	-3-	-	-	-	-		0.26
30-45.4242-	108.2036-	2-07-	0-	M38045-	01/19/79-	14-	2-	1.0-	C-	-	7.7-	400-		-1-	3-	5-	2-	2-	2-	1-	2-	4-	3-	3-	1-	-3-	-	-	-	-		0.30
30-45.4358-	108.1725-	2-07-	0-	M38048-	01/19/79-	14-	3-	1.0-	C-	-	7.6-	350-		-1-	3-	5-	2-	2-	2-	1-	2-	4-	3-	3-	1-	-3-	-	-	-	-		0.27
30-45.4408-	108.1617-	2-07-	0-	M38049-	01/19/79-	14-	3-	1.0-	C-	-	7.7-	450-		-1-	3-	5-	2-	2-	2-	1-	2-	4-	3-	3-	1-	-3-	-	-	-	-		0.36
30-45.4161-	108.1719-	2-07-	0-	M38050-	01/19/79-	14-	4-	1.5-	C-	-	7.7-	425-		-1-	6-	5-	6-	2-	2-	1-	2-	4-	4-	3-	1-	-3-	-	-	-	-		0.22
30-45.4150-	108.1703-	2-07-	0-	M38051-	01/19/79-	15-	4-	1.5-	C-	-	7.6-	375-		-1-	6-	5-	6-	2-	2-	1-	2-	4-	4-	3-	1-	-3-	-	-	-	-		0.40
30-45.4478-	108.1450-	2-08-	0-	M38052-	01/19/79-	15-	4-	7.0-	C-	-	7.6-	500-		-1-	6-	-	-	-	-	-	-	-4-	4-	3-	1-	-3-	3-	4-	55-	40-		38.26*
30-45.4708-	108.1300-	2-07-	0-	M38054-	01/19/79-	15-	3-	1.0-	C-	-	7.6-	500-		-1-	6-	5-	6-	2-	2-	1-	2-	4-	4-	3-	1-	-3-	-	-	-	-		1.63
30-45.3789-	108.0486-	2-07-	0-	M38056-	01/19/79-	15-	-		-	-	7.7-	575-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		2.74
30-45.4308-	108.0461-	2-07-	0-	M38057-	01/19/79-	15-	-		-	-	7.6-	490-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		1.10
30-45.4314-	108.0517-	2-07-	0-	M38058-	01/19/79-	15-	-		-	-	7.7-	500-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		1.35
30-45.4178-	108.0958-	2-06-	0-	M38059-	01/19/79-	15-	-		-	-	7.7-	1525-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		37.79*
30-45.4656-	108.0117-	2-07-	0-	M38060-	01/19/79-	15-	-		-	-	7.5-	450-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		3.07
30-45.4642-	108.0336-	2-07-	0-	M38061-	01/19/79-	15-	-		-	-	7.6-	525-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		2.98
30-45.4631-	108.0897-	2-07-	0-	M38062-	01/19/79-	15-	-		-	-	7.7-	550-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		1.59
30-45.4694-	108.1094-	2-07-	0-	M38063-	01/19/79-	15-	-		-	-	7.8-	500-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		0.70
30-45.3347-	108.3297-	2-06-	0-	M38065-	01/20/79-	9-	-9-	0.5-	C-	-	7.7-	1290-		-1-	4-	5-	4-	2-	2-	2-	-	3-	3-	3-	3-	-3-	-	-	-	-		2.52
30-45.3303-	108.3700-	2-07-	0-	M38066-	01/20/79-	9-	-9-		C-	-	7.3-	550-		-1-	6-	5-	6-	2-	2-	1-	2-	4-	3-	3-	3-	-3-	-	-	-	-		0.61
30-45.2517-	108.2814-	2-07-	0-	M38069-	01/20/79-	10-	-7-	0.5-	C-	-	7.7-	1100-		-1-	4-	5-	6-	2-	2-	1-	2-	4-	3-	3-	3-	-3-	-	-	-	-		0.03
30-45.2742-	108.2519-	2-07-	0-	M38070-	01/20/79-	10-	-7-	1.0-	C-	-	7.4-	880-		-1-	6-	4-	6-	2-	2-	1-	2-	1-	3-	4-	3-	-3-	-	-	-	-		0.63
30-45.3514-	108.2553-	2-08-	0-	M38071-	01/20/79-	10-	-6-	1.0-	C-	-	8.3-	2200-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		1.95
30-45.3508-	108.2544-	2-07-	0-	M38072-	01/20/79-	11-	-6-	1.0-	C-	-	8.2-	2100-		-1-	6-	5-	6-	2-	2-	1-	3-	1-	3-	4-	2-	-3-	-	-	-	-		0.40
30-45.2833-	108.2169-	2-07-	0-	M38073-	01/20/79-	11-	-5-	0.5-	C-	-	7.2-	625-		-1-	6-	5-	6-	2-	2-	1-	2-	4-	3-	3-	2-	-3-	-	-	-	-		0.74

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY Concentrations reported in weight parts per billion (ppb)											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.3767-108.3433-2-08-						0-438001	69637	107	-25	21	-25	2 305	-3	-25	-25	726	-4	311
30-45.3772-108.3436-2-08-						0-438002	67802	177	-25	17	-25	26672	-3	-25	-25	573	-4	210
30-45.3794-108.3469-2-07-						0-438003	71523	56	-25	15	-25	27301	-3	-25	-25	573	-4	242
30-45.3953-108.2736-2-07-						0-438006	69753	-55	-25	48	48	28649	5	-25	-25	629	-4	173
30-45.3797-108.2558-2-07-						0-438007	57360	211	-25	39	47	40298	51	-25	-25	743	-4	320
30-45.3783-108.2567-2-08-						0-438008	70173	-55	-25	47	42	28828	5	-25	-25	501	-4	156
30-45.4639-108.3219-2-08-						0-438010	17505	92	-25	17	72	6121	73	-25	-25	-200	-4	81
30-45.4633-108.3222-2-08-						0-438011	17177	86	-25	16	63	6085	66	-25	-25	-200	-4	-50
30-45.4608-108.3322-2-07-						0-438012	17507	-55	-25	16	77	6097	70	-25	-25	-200	-4	-50
30-45.4672-108.3197-2-07-						0-438013	82496	291	-25	34	55	32415	385	-25	-25	569	-4	657
30-45.4758-108.3259-2-07-						0-438014	79552	194	-25	283	35	31223	342	-25	36	934	-4	287
30-45.4722-108.2797-2-07-						0-438015	79571	110	-25	57	229	31608	508	-25	-25	870	-4	737
30-45.5047-108.3644-2-08-						0-438019	16892	-55	-25	27	49	5743	65	-25	59	308	-4	59
30-45.5508-108.2869-2-07-						0-438020	50420	222	-25	44	289	20664	32	-25	-25	395	-4	142
30-45.5633-108.2706-2-07-						0-438021	49446	235	-25	41	299	20254	32	-25	-25	270	-4	136
30-45.5650-108.2719-2-07-						0-438022	51025	141	-25	43	1289	21007	67	-25	-25	307	-4	108
30-45.5828-108.2650-2-08-						0-438024	50158	172	-25	46	1247	20158	70	-25	-25	586	-4	140
30-45.5844-108.2667-2-06-						0-438025	86155	350	-25	32	56	41561	12	-25	-25	1056	-4	232
30-45.6081-108.2228-2-07-						0-438027	79784	176	-25	33	244	28824	34	-25	30	794	-4	135
30-45.5997-108.1981-2-07-						0-438028	79215	122	-25	30	296	28635	38	-25	33	717	-4	229
30-45.5531-108.1953-2-07-						0-438033	117000	170	-25	43	166	37640	15	-25	-25	1142	-4	221
30-45.5653-108.1550-2-07-						0-438034	120000	289	43	49	168	38011	15	-25	72	1457	-4	365
30-45.5128-108.1164-2-07-						0-438036	47486	93	-25	53	289	18833	34	-25	-25	323	-4	95
30-45.5247-108.0769-2-07-						0-438037	49416	255	-25	46	284	18387	31	-25	-25	419	-4	142
30-45.5353-108.0672-2-07-						0-438038	49445	311	-25	45	272	19326	30	-25	-25	493	-4	185
30-45.5422-108.0436-2-07-						0-438039	48129	60	-25	41	1136	19098	65	-25	-25	378	-4	145
30-45.5683-108.0144-2-07-						0-438040	49213	152	-25	44	1107	18474	66	-25	-25	281	-4	82
30-45.6036-108.0097-2-08-						0-438042	47264	-55	-25	43	1111	17867	62	-25	-25	356	-4	141
30-45.5922-108.0747-2-07-						0-438043	19299	83	-25	-4	37	9313	-3	-25	-25	-200	-4	391
30-45.4242-108.2036-2-07-						0-438045	69741	311	-25	25	-25	33699	12	-25	-25	562	-4	157
30-45.4359-108.1725-2-07-						0-438048	73099	142	-25	26	47	33182	16	-25	-25	668	-4	138
30-45.4408-108.1617-2-07-						0-438049	77532	162	-25	27	38	35688	18	-25	-25	585	-4	133
30-45.4161-108.1719-2-07-						0-438050	81730	260	-25	30	-25	38989	19	-25	-25	705	-4	222
30-45.4150-108.1703-2-07-						0-438051	81686	257	-25	29	43	36445	13	-25	-25	820	-4	162
30-45.4478-108.1450-2-08-						0-438052	61106	350	-25	28	63	64827	-3	-25	-25	820	-4	656
30-45.4708-108.1300-2-07-						0-438054	89914	280	-25	7	92	47209	11	-25	-25	896	-4	211
30-45.3789-108.0486-2-07-						0-438056	96984	252	-25	17	114	55922	20	-25	-25	801	-4	313
30-45.4308-108.0461-2-07-						0-438057	94353	112	-25	8	93	54129	22	-25	-25	547	-4	-50
30-45.4314-108.0517-2-07-						0-438058	95919	56	-25	8	97	54601	22	-25	-25	660	-4	131
30-45.4178-108.0958-2-06-						0-438059	66665	76	-25	29	47	77732	4	-25	-25	555	-4	656
30-45.4656-108.0117-2-07-						0-438060	95086	123	-25	13	113	54934	27	-25	-25	690	-4	91
30-45.4642-108.0336-2-07-						0-438061	93575	-55	-25	-4	67	54407	31	-25	-25	475	-4	85
30-45.4631-108.0897-2-07-						0-438062	95074	136	-25	7	69	55255	24	-25	-25	542	-4	186
30-45.4694-108.1094-2-07-						0-438063	82709	63	-25	31	44	41741	20	-25	-25	712	-4	159
30-45.3347-108.3297-2-06-						0-438065	107000	140	-25	47	51	93128	59	-25	-25	1010	-4	345
30-45.3303-108.3700-2-07-						0-438066	71873	-55	-25	41	54	29907	19	-25	-25	546	-4	-50
30-45.2517-108.2814-2-07-						0-438069	71323	305	-25	54	57	29803	20	-25	-25	642	-4	161
30-45.2742-108.2519-2-07-						0-438070	85549	309	-25	48	68	34557	420	-25	-25	544	-4	716
30-45.3514-108.2553-2-08-						0-438071	339000	1003	60	40	164	301000	159	-25	65	4265	-4	599
30-45.3508-108.2544-2-07-						0-438072	18532	144	30	27	116	7111	84	-25	39	299	-4	79
30-45.2833-108.2169-2-07-						0-438073	87215	208	-25	67	122	50465	29	-25	-25	766	-4	171

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																											U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (#) UNITS IN ppb
30-45.2833-108.2158-2-08-						0-M38074-01/20/79-11-	-4-	1.5-C-	-		8.1-	640-		-1-6-	-	-	-	-	-	-4-	4-	3-	2-	-3-	8-	-	6-	-	0.68		
30-45.3111-108.2131-2-06-						0-M38075-01/20/79-12-	-2-	1.5-C-	-		8.1-	640-		-1-4-	5-	6-	2-	2-	1-	-4-	3-	4-	1-	-3-	-	-	-	-	0.45		
30-45.3606-108.2211-2-07-						0-M38076-01/20/79-12-	-1-	1.0-C-	-		7.2-	680-		-1-4-	3-	6-	3-	3-	1-	2-	3-	3-	3-	1-	-3-	-	-	-	-	1.17		
30-45.3586-108.1908-2-07-						0-M38077-01/20/79-12-	1-	1.0-C-	-		7.3-	650-		-1-6-	4-	6-	2-	3-	1-	2-	4-	4-	3-	1-	-3-	-	-	-	-	0.16		
30-45.3181-108.1883-2-07-						0-M38078-01/20/79-12-	1-	1.0-C-	-		7.1-	600-		-1-6-	5-	6-	2-	2-	1-	3-	4-	3-	3-	1-	-3-	-	-	-	-	0.49		
30-45.2775-108.1789-2-07-						0-M38079-01/20/79-13-	2-	1.0-C-	-		7.4-	700-		-1-6-	4-	4-	2-	2-	1-	2-	4-	4-	3-	1-	-3-	-	-	-	-	5.09*		
30-45.2883-108.1575-2-07-						0-M38080-01/20/79-13-	3-	1.0-C-	-		7.3-	580-		-1-6-	5-	7-	2-	2-	1-	2-	4-	4-	3-	1-	-3-	-	-	-	-	0.52		
30-45.2894-108.1572-2-07-						0-M38081-01/20/79-13-	4-	1.0-C-	-		7.2-	670-		-1-6-	5-	7-	2-	2-	1-	2-	4-	3-	3-	1-	-3-	-	-	-	-	1.52		
30-45.3144-108.1056-2-07-						0-M38082-01/20/79-13-	4-	2.5-C-	-		7.2-	375-		-1-4-	5-	6-	2-	2-	1-	-4-	4-	4-	1-	-3-	-	-	-	-	0.82		
30-45.3396-108.0983-2-06-						0-M38083-01/20/79-14-	4-	1.0-C-	-		7.2-	400-		-1-6-	5-	6-	2-	2-	1-	-4-	3-	3-	1-	-3-	-	-	-	-	0.26		
30-45.3558-108.1061-2-07-						0-M38084-01/20/79-14-	4-	1.5-C-	-		7.4-	670-		-1-6-	5-	6-	2-	2-	1-	1-	3-	3-	3-	1-	-3-	-	-	-	-	1.55		
30-45.3397-108.0503-2-07-						0-M38085-01/20/79-14-	4-	1.5-C-	-		7.1-	400-		-1-6-	5-	6-	2-	2-	1-	2-	4-	4-	3-	1-	-3-	-	-	-	-	0.16		
30-45.3375-108.0436-2-07-						0-M38086-01/20/79-14-	4-	1.5-C-	-		7.2-	500-		-1-6-	5-	6-	2-	2-	1-	1-	4-	3-	3-	1-	-3-	-	-	-	-	0.14		
30-45.3181-108.0919-2-06-						0-M38087-01/20/79-15-	5-	1.5-C-	-		8.0-	690-		-1-6-	5-	6-	2-	2-	1-	-4-	4-	4-	3-	1-	-3-	-	-	-	-	0.72		
30-45.2958-108.0272-2-07-						0-M38088-01/20/79-16-	3-	1.0-C-	-		7.7-	1350-		-1-6-	5-	6-	2-	2-	1-	1-	4-	4-	4-	1-	-3-	-	-	-	-	0.74		
30-45.2981-108.0239-2-07-						0-M38089-01/20/79-16-	-1-	1.0-C-	-		7.8-	1425-		-1-6-	5-	6-	2-	2-	1-	2-	4-	4-	4-	3-	-8-	-	-	-	-	0.30		
30-45.4994-108.3606-2-07-						0-M38090-01/21/79-10-	3-	1.0-C-	-		8.2-	920-		-1-6-	5-	6-	2-	2-	1-	2-	4-	3-	3-	1-	-3-	-	-	-	-	0.40		
30-45.4872-108.3375-2-07-						0-M38091-01/21/79-10-	2-	1.0-C-	-		8.3-	680-		-1-6-	5-	6-	2-	2-	1-	2-	4-	4-	3-	1-	-3-	-	-	-	-	0.65		
30-45.4483-108.3147-2-07-						0-M38092-01/21/79-11-	3-	1.0-C-	-		7.3-	500-		-1-7-	5-	7-	2-	2-	1-	1-	7-	3-	3-	1-	-3-	-	-	-	-	0.23		
30-45.3939-108.2953-2-07-						0-M38093-01/21/79-11-	3-	1.0-C-	-		7.3-	475-		-1-4-	4-	4-	2-	2-	1-	2-	3-	3-	4-	1-	-3-	-	-	-	-	0.18		
30-45.3933-108.2797-2-07-						0-M38094-01/21/79-12-	3-	1.0-C-	-		7.4-	490-		-1-4-	5-	4-	2-	2-	1-	2-	3-	4-	4-	1-	-3-	-	-	-	-	0.23		
30-45.2986-109.9810-2-07-						0-M38095-09/20/76-19-	19-	10.6-	-	-	5.8-	96-		-3-7-	4-	4-	3-	3-	1-	2-	1-	4-	5-	1-	-1-	-	-	-	-	4.28		
30-45.2358-109.9842-2-07-						0-M38096-09/20/76-10-	20-	11.2-	-	-	5.6-	110-		-3-6-	2-	6-	4-	2-	1-	2-	1-	3-	4-	1-	-1-	-	-	-	-	5.14		
30-45.2205-109.9861-2-07-						0-M38097-09/20/76-11-	11-	7.6-	-	-	5.7-	98-		-3-7-	4-	8-	3-	3-	1-	2-	1-	3-	4-	1-	-1-	-	-	-	-	2.16		
30-45.1992-109.9921-2-07-						0-M38098-09/20/76-12-	11-	7.5-	-	-	5.8-	81-		-3-7-	4-	8-	3-	3-	1-	2-	1-	3-	5-	1-	-1-	-	-	-	-	1.18		
30-45.1718-109.9978-2-07-						0-M38099-09/20/76-13-	12-	7.5-C-	-	-	5.7-	80-		-3-7-	1-	7-	4-	3-	1-	2-	1-	3-	4-	1-	-1-	-	-	-	-	0.19		
30-45.1592-109.9925-2-07-						0-M38100-09/20/76-14-	13-	7.4-	-	-	5.4-	180-		-3-7-	3-	7-	3-	3-	1-	2-	1-	3-	4-	1-	-1-	-	-	-	-	0.32		
30-45.1594-109.9948-2-07-						0-M38101-09/20/76-14-	12-	7.1-	-	-	5.5-	76-		-3-6-	3-	6-	3-	3-	1-	3-	1-	3-	4-	1-	-1-	-	-	-	-	0.22		
30-45.0974-109.9938-2-07-						0-M38102-09/20/76-15-	11-	7.0-	-	-	5.2-	144-		-3-6-	3-	6-	4-	2-	1-	2-	1-	3-	4-	1-	-1-	-	-	-	-	0.64		
30-45.0954-109.9958-2-07-						0-M38103-09/20/76-15-	11-	7.1-	-	-	5.2-	148-		-3-6-	3-	6-	3-	3-	1-	2-	3-	4-	4-	1-	-1-	-	-	-	-	0.10		
30-45.4218-109.9319-2-07-						0-M38104-10/29/76-12-	3-	-	-	-	5.5-	210-		-1-6-	4-	6-	3-	3-	1-	2-	3-	1-	3-	2-	-1-	-	-	-	-	1.47		
30-45.4843-109.9788-2-07-						0-M38105-10/29/76- 8-		2.0-	-	-	5.2-	46-		-1-6-	4-	6-	3-	3-	1-	2-	1-	3-	4-	2-	-1-	-	-	-	-	1.50		
30-45.6747-108.4753-2-07-						0-M38106-05/13/78-15-	23-	16.0-C-	-		8.4-	900-		10-1-6-	5-	6-	3-	4-	2-	2-	4-	3-	3-	1-	-3-	-	-	-	-	1.93		
30-45.6744-108.4656-2-07-						0-M38107-05/13/78-16-	23-	23.0-C-	-		7.9-	3300-		9-1-6-	4-	6-	2-	3-	1-	1-	4-	3-	3-	1-	-3-	-	-	-	-	0.32		
30-45.6775-108.4889-2-08-						0-M38108-05/13/78-11-	23-	19.0-C-	-		8.1-	2300-		15-1-6-	-	-	-	-	-1-	-	4-	3-	3-	1-	-3-	4-	30-	-	-	124.72*		
30-45.6897-108.4806-2-07-						0-M38109-05/14/78- 9-	20-	10.5-C-	-		8.0-	1420-		9-1-6-	5-	6-	3-	3-	4-	2-	4-	3-	4-	3-	-3-	-	-	-	-	2.24		
30-45.6942-108.4714-2-08-						0-M38110-05/14/78-10-	20-	16.0-	-	-	7.2-	3000-		13-1-6-	-	-	-	-	-1-	-	4-	3-	4-	3-	-1-	3-	-	-	-	0.93		
30-45.6303-108.4919-2-08-						0-M38111-06/06/78-14-	26-	14.0-C-	-		7.0-	850-		2-1-6-	-	-	-	-	-	-	4-	3-	3-	1-	-1-	8-	-	-	-	43.04*		
30-45.6592-108.4919-2-07-						0-M38112-06/06/78-15-	28-	18.0-C-	-		7.8-	900-		6-1-7-	3-	6-	3-	4-	3-	1-	4-	3-	3-	1-	-3-	-	-	-	-	0.53		
30-45.6892-108.4756-2-07-						0-M38113-06/06/78-15-	30-	23.5-C-	-		8.5-	4400-		9-1-7-	4-	7-	2-	3-	1-	1-	3-	3-	3-	2-	-3-	-	-	-	-	3.39		
30-45.6692-108.4275-2-08-						0-M38114-06/06/78-16-	25-	12.5-C-	-		7.2-	1700-		12-1-6-	-	-	-	-	-	-	4-	3-	3-	3-	-3-	3-	-	-	-	20.84		
30-45.7431-108.4942-2-07-						0-M38115-06/08/78- 9-	18-	15.5-C-	-		8.2-	50000-		8-1-6-	3-	6-	2-	3-	1-	1-	4-	3-	3-	1-	-3-	-	-	-	-	8.71		
30-45.7453-108.4444-2-07-						0-M38116-06/08/78-10-	23-	19.0-C-	-		7.9-	2900-		15-1-6-	4-	6-	2-	3-	1-	1-	4-	3-	3-	1-	-3-	-	-	-	-	1.02		
30-45.7450-108.4472-2-07-						0-M38117-06/08/78-10-	23-	20.0-C-	-		8.1-	49000-		11-1-6-	4-	6-	2-	2-	1-	1-	4-	3-	3-	1-	-3-	-	-	-	-	12.05		
30-45.7214-108.4133-2-07-						0-M38118-06/13/78- 9-	19-	13.0-C-	-		8.0-	4650-		4-1-6-	3-	6-	3-	3-	1-	1-	4-	3-	3-	2-	-3-	-	-	-	-	3.10		
30-45.7217-108.4144-2-07-						0-M38119-06/13/78- 9-	19-	15.0-C-	-		8.2-	32000-		8-1-6-	3-	6-	3-	3-	1-	1-	4-	3-	3-	2-	-3-	-	-	-	-	1.95		
30-45.7258-108.5314-2-07-						0-M38120-06/14/78- 8-	19-	15.0-C-	-		7.9-	29000-		9-1-6-	3-	6-	3-	4-	1-	2-	4-	3-	3-	3-	-3-	-	-	-	-	1.60		
30-45.7181-108.5100-2-07-						0-M38121-06/14/78- 8-	18-	14.0-C-	-		7.9-	1700-		10-1-6-	3-	6-	3-	3-	1-	1-	2-	3-	3-	3-	-3-	-	-	-	-	4.42		
30-45.7017-108.5056-2-07-						0-M38122-06/14/78- 9-	18-	13.0-C-	-		8.0-	4300-		22-1-6-	3-	6-	3-	4-	1-	2-	2-	3-	3-	3-	-3-	-	-	-	-	8.13		
30-45.6519-108.5053-2-07-						0-M38123-06/14/78- 9-	21-	13.5-C-	-		7.9-	950-		12-1-6-	3-	6-	3-	3-	1-	2-	4-	3-	3-	2-	-3-	-	-	-	-	2.08		
30-45.6336-108.5283-2-08-						0-M38124-06/14/78-10-	23-	12.0-C-	-		6.9-	1000-		10-1-6-	-	-	-	-	-	-	4-	3-	3-	1-	-3-	3-	8-	-	-	2.33		

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY Concentrations reported in weight parts per billion (ppb)											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.2933-108.2158-2-08-						0-438074	1615	-55	29	84	1584	877	24	26	76	223	-4	266
30-45.3111-108.2131-2-06-						0-438075	1279	157	-25	77	1508	613	20	-25	-25	-200	-4	110
30-45.3606-108.2211-2-07-						0-438076	85973	390	-25	59	84	48040	16	-25	-25	688	-4	137
30-45.3586-108.1908-2-07-						0-438077	88079	503	-25	62	90	49593	7	-25	-25	507	-4	344
30-45.3181-108.1893-2-07-						0-438078	87263	404	-25	63	80	49487	4	-25	-25	779	-4	288
30-45.2775-108.1789-2-07-						0-438079	85960	505	-25	64	85	49296	8	-25	29	687	-4	322
30-45.2883-108.1575-2-07-						0-438080	89861	365	-25	65	85	51037	13	-25	-25	806	-4	463
30-45.2894-108.1572-2-07-						0-438081	84687	354	-25	46	65	48917	-3	-25	-25	-200	-4	260
30-45.3144-108.1056-2-07-						0-438082	86837	139	-25	64	105	50854	17	-25	-25	863	-4	189
30-45.3386-108.0983-2-06-						0-438083	80437	243	-25	36	285	31142	46	-25	-25	611	-4	135
30-45.3558-108.1061-2-07-						0-438084	83264	106	-25	53	43	48339	21	-25	-25	547	-4	-50
30-45.3397-108.0503-2-07-						0-438085	73728	306	-25	36	251	28615	43	-25	45	696	-4	166
30-45.3375-108.0436-2-07-						0-438086	77846	103	-25	42	251	29707	60	-25	-25	704	-4	-50
30-45.3181-108.0919-2-06-						0-438087	1150	-55	-25	64	1467	547	31	-25	-25	-200	-4	-50
30-45.2959-108.0272-2-07-						0-438088	77974	229	-25	30	219	29606	55	-25	-25	558	-4	55
30-45.2881-108.0239-2-07-						0-438089	78613	129	-25	33	246	29488	49	-25	-25	633	-4	133
30-45.4994-108.3606-2-07-						0-438090	1125	103	-25	76	1529	531	20	-25	-25	-200	-4	127
30-45.4872-108.3375-2-07-						0-438091	1168	-55	-25	75	1536	539	22	-25	38	-200	-4	108
30-45.4483-108.3147-2-07-						0-438092	79170	259	-25	40	253	30670	55	-25	34	764	-4	147
30-45.3939-108.2953-2-07-						0-438093	69749	250	-25	36	-25	30069	11	-25	-25	498	-4	169
30-45.3933-108.2797-2-07-						0-438094	70351	304	-25	39	36	30339	12	-25	-25	427	-4	146
30-45.2986-109.9810-2-07-						0-438095	12389	-55	-25	-4	-25	2628	-3	47	-25	-200	-4	-50
30-45.2358-109.9842-2-07-						0-438096	12092	-55	-25	-4	-25	2475	-3	45	-25	-200	-4	95
30-45.2205-109.9861-2-07-						0-438097	11174	-55	-25	-4	-25	2309	-3	-25	-25	-200	-4	-50
30-45.1992-109.9921-2-07-						0-438098	3764	-55	-25	-4	-25	968	-3	-25	-25	-200	-4	-50
30-45.1718-109.9978-2-07-						0-438099	3725	-55	-25	-4	-25	1002	-3	30	-25	-200	-4	-50
30-45.1592-109.9925-2-07-						0-438100	3752	-55	-25	-4	-25	990	-3	-25	-25	-200	-4	-50
30-45.1594-109.9948-2-07-						0-438101	4613	70	-25	-4	-25	1256	-3	-25	-25	-200	-4	84
30-45.0974-109.9938-2-07-						0-438102	5113	-55	-25	-4	-25	1378	-3	30	-25	-200	-4	-50
30-45.0964-109.9958-2-07-						0-438103	4289	-55	-25	-4	-25	1211	-3	-25	-25	-200	-4	59
30-45.4218-109.9318-2-07-						0-438104	27121	-55	-25	-4	26	5312	-3	90	-25	-200	-4	62
30-45.4843-109.9788-2-07-						0-438105	49357	69	-25	5	-25	8883	-3	192	-25	492	9	181
30-45.6747-108.4753-2-07-						0-438106	91746	178	-25	15	132	39332	23	-25	-25	919	14	263
30-45.6744-108.4656-2-07-						0-438107	227000	308	46	24	260	97760	177	-25	40	2353	44	-50
30-45.6775-108.4889-2-08-						0-438108	42521	133	26	133	112	58302	11	80	-25	918	17	77
30-45.6897-108.4806-2-07-						0-438109	128000	201	33	16	81	59920	58	-25	-25	1352	25	-50
30-45.6942-108.4714-2-08-						0-438110	170000	327	43	1990	122	111000	32	-25	55	2309	42	127
30-45.6303-108.4919-2-08-						0-438111	54965	163	-25	135	113	47970	12	-25	-25	807	8	-50
30-45.6592-108.4919-2-07-						0-438112	95194	159	-25	14	244	40893	18	-25	57	1031	22	-50
30-45.6892-108.4756-2-07-						0-438113	391000	511	72	35	180	195000	140	-25	83	4185	64	291
30-45.6692-108.4275-2-08-						0-438114	135000	227	-25	107	128	105000	22	-25	-25	2041	20	-50
30-45.7431-108.4942-2-07-						0-438115	414000	826	91	48	315	607000	237	-25	264	12066	73	332
30-45.7453-108.4444-2-07-						0-438116	281000	442	87	34	167	196000	87	-25	141	4170	69	313
30-45.7450-108.4472-2-07-						0-438117	498000	764	95	52	296	570000	159	-25	203	10273	77	768
30-45.7214-108.4133-2-07-						0-438118	525000	698	91	43	222	333000	71	-25	108	6946	73	595
30-45.7217-108.4144-2-07-						0-438119	419000	589	120	46	226	240000	87	-25	221	5714	87	463
30-45.7258-108.5314-2-07-						0-438120	405000	606	145	50	231	217000	123	-25	342	5756	102	244
30-45.7181-108.5100-2-07-						0-438121	140000	270	81	25	130	65115	41	46	164	2360	61	358
30-45.7017-108.5056-2-07-						0-438122	306000	463	123	41	183	133000	31	-25	234	3993	88	238
30-45.6519-108.5053-2-07-						0-438123	84129	186	72	19	84	36574	26	72	170	1454	49	-50
30-45.6336-108.5283-2-08-						0-438124	106000	215	82	28	77	43920	23	-25	214	1663	60	-50

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																												U CONCENTRATION
							TIME SAMPLED																												
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (µg) UNITS IN ppb
30-	45.6222-	108.5433-	2-	07-	0-	M39125-	06/14/78-	10-	24-	13.0-	C-	-	7.8-	925-	5-	1-	6-	3-	6-	3-	3-	1-	2-	4-	3-	3-	1-	-3-	-	-	-	-	3.77
30-	45.6222-	108.5425-	2-	07-	0-	M39126-	06/14/78-	10-	24-	14.0-	C-	-	7.7-	800-	9-	1-	6-	3-	6-	3-	3-	1-	2-	4-	3-	3-	1-	-3-	-	-	-	-	0.96
30-	45.6708-	108.5583-	2-	08-	0-	M39127-	06/14/78-	13-	26-	17.0-	C-	-	7.2-	16000-	6-	1-	6-	-	-	-	-	-	-	4-	3-	3-	1-	-3-	5-	-	10-	-	6.79
30-	45.6400-	108.5744-	2-	08-	0-	M39128-	06/14/78-	13-	29-	17.5-	C-	-	6.7-	31500-	13-	1-	6-	-	-	-	-	-	-	4-	3-	3-	1-	-1-	3-	-	-	-	0.25
30-	45.5950-	108.6092-	2-	08-	0-	M39129-	06/14/78-	14-	30-	16.0-	C-	-	6.5-	6200-	15-	1-	6-	-	-	-	-	-	-	4-	3-	3-	1-	-1-	3-	-	-	-	5.87
30-	45.5956-	108.6103-	2-	08-	0-	M39130-	06/14/78-	14-	28-	14.0-	C-	-	7.1-	8000-	5-	1-	6-	-	-	-	-	-	-	4-	3-	3-	1-	-	4-	60-	30-	-	2.96
30-	45.6072-	108.5619-	2-	08-	0-	M39131-	06/14/78-	15-	27-	21.5-	C-	-	6.8-	9000-	11-	1-	6-	-	-	-	-	-	-	2-	2-	3-	1-	-1-	3-	36-	-	-	2.33
30-	45.6125-	108.5575-	2-	07-	0-	M39132-	06/14/78-	16-	28-	21.0-	C-	-	8.2-	900-	8-	1-	6-	3-	6-	3-	3-	1-	1-	4-	3-	3-	1-	-3-	-	-	-	-	8.73
30-	45.5556-	108.5492-	2-	06-	0-	M39133-	06/14/78-	16-	26-	12.0-	-	-	6.8-	800-	16-	1-	6-	6-	6-	2-	3-	1-	3-	4-	3-	3-	2-	-3-	-	-	-	-	3.96
30-	45.5886-	108.5303-	2-	08-	0-	M39134-	06/14/78-	17-	25-	15.0-	C-	-	6.7-	850-	11-	1-	6-	-	-	-	-	-	-	4-	3-	3-	3-	-3-	3-	-	-	-	16.70
30-	45.6011-	108.5425-	2-	07-	0-	M39135-	06/14/78-	17-	32-	19.0-	C-	-	7.7-	700-	11-	1-	6-	3-	6-	3-	3-	1-	2-	4-	3-	3-	2-	-3-	-	-	-	-	1.53
30-	45.5822-	108.5706-	2-	08-	0-	M39136-	06/14/78-	17-	26-	13.0-	-	-	6.9-	700-	13-	1-	6-	-	-	-	-	-	-	4-	3-	3-	2-	-3-	3-	-	-	-	3.33
30-	45.5717-	108.5614-	2-	07-	0-	M39137-	06/14/78-	18-	23-	17.5-	C-	-	7.7-	700-	9-	1-	6-	3-	6-	3-	3-	1-	2-	4-	3-	3-	2-	-3-	-	-	-	-	1.61
30-	45.5911-	108.5808-	2-	07-	0-	M39138-	06/14/78-	19-	20-	18.0-	C-	-	7.8-	900-	5-	1-	7-	3-	7-	3-	3-	1-	2-	4-	3-	3-	1-	-3-	-	-	-	-	1.02
30-	45.5917-	108.5797-	2-	07-	0-	M39139-	06/14/78-	19-	19-	16.5-	C-	-	8.0-	700-	11-	1-	7-	3-	7-	3-	3-	1-	2-	4-	3-	3-	1-	-3-	-	-	-	-	3.17
30-	45.5689-	108.6083-	2-	07-	0-	M39140-	06/14/78-	20-	18-	17.5-	C-	-	7.8-	1000-	-1-	6-	3-	6-	3-	3-	1-	2-	4-	3-	3-	2-	-3-	-	-	-	-	-	1.19
30-	45.5686-	108.6078-	2-	07-	0-	M39141-	06/14/78-	20-	18-	15.0-	C-	-	8.0-	900-	17-	1-	6-	3-	6-	3-	3-	1-	2-	4-	3-	3-	2-	-3-	-	-	-	-	2.52
30-	45.7125-	108.5733-	2-	07-	0-	M39142-	06/15/78-	11-	23-	16.8-	C-	-	6.9-	25000-	13-	1-	7-	3-	7-	3-	3-	1-	1-	3-	3-	3-	2-	-3-	-	-	-	-	4.95
30-	45.7031-	108.5981-	2-	07-	0-	M39143-	06/15/78-	11-	21-	18.0-	C-	-	8.6-	23500-	11-	1-	6-	3-	6-	3-	3-	1-	1-	3-	4-	3-	2-	-3-	-	-	-	-	4.88
30-	45.7400-	108.5747-	2-	08-	0-	M39144-	06/15/78-	13-	20-	20.0-	C-	-	7.1-	2525-	18-	1-	6-	-	-	-	-	-	-	4-	3-	3-	2-	-3-	3-	8-	-	-	4.95
30-	45.7258-	108.5953-	2-	08-	0-	M39145-	06/15/78-	13-	20-	15.5-	C-	-	7.1-	2700-	11-	1-	6-	-	-	-	-	-	-	4-	3-	1-	4-	-3-	8-	-	-	-	15.03*
30-	45.7411-	108.6194-	2-	08-	0-	M39146-	06/15/78-	14-	26-	12.0-	C-	-	6.9-	900-	6-	1-	6-	-	-	-	-	-	-	4-	3-	1-	2-	-3-	8-	-	-	-	1.60
30-	45.6864-	108.6392-	2-	07-	0-	M39147-	06/15/78-	14-	21-	16.2-	C-	-	8.4-	2575-	13-	1-	7-	3-	7-	4-	3-	1-	2-	3-	3-	3-	2-	-3-	-	-	-	-	10.12
30-	45.6489-	108.6314-	2-	07-	0-	M39148-	06/15/78-	15-	21-	16.0-	C-	-	8.2-	1825-	9-	1-	7-	3-	7-	4-	3-	1-	2-	2-	3-	3-	2-	-3-	-	-	-	-	8.13
30-	45.6447-	108.6203-	2-	06-	0-	M39149-	06/15/78-	15-	21-	9.0-	C-	-	7.2-	3000-	13-	1-	6-	3-	6-	4-	3-	1-	1-	3-	4-	3-	2-	-3-	-	-	-	-	6.83
30-	45.6444-	108.6119-	2-	07-	0-	M39150-	06/15/78-	16-	31-	18.2-	C-	-	7.8-	3525-	9-	1-	7-	3-	7-	3-	3-	1-	1-	4-	3-	3-	1-	-3-	-	-	-	-	1.06
30-	45.6439-	108.6128-	2-	07-	0-	M39151-	06/15/78-	16-	31-	18.4-	C-	-	8.2-	1900-	17-	1-	7-	3-	7-	3-	3-	1-	1-	4-	3-	3-	1-	-3-	-	-	-	-	3.83
30-	45.6975-	108.6583-	2-	08-	0-	M39152-	06/15/78-	17-	25-	13.5-	C-	-	7.0-	925-	9-	1-	6-	-	-	-	-	-	-	4-	3-	1-	1-	-3-	5-	4-	27-	-	0.68
30-	45.6853-	108.6783-	2-	08-	0-	M39153-	06/15/78-	17-	28-	18.0-	C-	-	6.8-	675-	18-	1-	6-	-	-	-	-	-	-	4-	3-	1-	1-	-3-	8-	-	-	-	0.74
30-	45.6686-	108.7197-	2-	08-	0-	M39154-	06/15/78-	17-	29-	12.5-	C-	-	6.9-	1100-	13-	1-	6-	-	-	-	-	-	-	4-	3-	1-	1-	-3-	5-	8-	33-	-	2.07
30-	45.7111-	108.6381-	2-	08-	0-	M39155-	06/16/78-	9-	19-	12.0-	C-	-	7.3-	1500-	20-	1-	6-	-	-	-	-	-	-	4-	3-	1-	2-	-3-	5-	2-	27-	-	7.70
30-	45.6053-	108.6372-	2-	08-	0-	M39156-	06/16/78-	10-	19-	12.0-	C-	-	6.8-	1175-	6-	1-	6-	-	-	-	-	-	-	3-	4-	3-	1-	-3-	5-	-	-	-	2.33
30-	45.6056-	108.6367-	2-	07-	0-	M39157-	06/16/78-	10-	20-	13.0-	C-	-	7.9-	1125-	13-	1-	6-	3-	6-	3-	3-	1-	1-	3-	3-	3-	2-	-3-	-	-	-	-	3.19
30-	45.5364-	108.6322-	2-	08-	0-	M39158-	06/16/78-	11-	20-	10.5-	C-	-	8.3-	825-	15-	1-	6-	-	-	-	-	-	-	3-	3-	3-	2-	-3-	9-	-	-	-	4.81
30-	45.5017-	108.6600-	2-	07-	0-	M39159-	06/16/78-	11-	19-	15.0-	C-	-	8.0-	1550-	5-	1-	6-	3-	6-	3-	3-	1-	1-	4-	3-	3-	2-	-3-	-	-	-	-	2.90
30-	45.4714-	108.6600-	2-	08-	0-	M39160-	06/16/78-	12-	26-	12.0-	C-	-	6.9-	900-	6-	1-	6-	-	-	-	-	-	-	2-	2-	3-	1-	-3-	5-	-	-	-	3.38
30-	45.4781-	108.6650-	2-	07-	0-	M39161-	06/16/78-	12-	24-	16.5-	C-	-	8.1-	825-	9-	1-	6-	3-	6-	2-	4-	3-	1-	1-	4-	3-	3-	1-	-3-	-	-	-	-	3.71
30-	45.4850-	108.6500-	2-	07-	0-	M39162-	06/16/78-	13-	26-	18.5-	C-	-	7.2-	625-	12-	1-	6-	3-	6-	2-	3-	1-	1-	2-	2-	3-	1-	-3-	-	-	-	-	-	1.66
30-	45.4939-	108.6600-	2-	07-	0-	M39163-	06/16/78-	13-	26-	17.0-	C-	-	7.9-	800-	6-	1-	6-	3-	6-	4-	3-	1-	1-	3-	3-	3-	1-	-3-	-	-	-	-	1.70
30-	45.5472-	108.7281-	2-	08-	0-	M39164-	06/16/78-	16-	23-	22.5-	C-	-	7.3-	2400-	9-	1-	6-	-	-	-	-	-	-	4-	3-	1-	2-	-9-	9-	8-	-	32-	0.79
30-	45.5491-	108.7072-	2-	07-	0-	M39165-	06/16/78-	17-	19-	16.8-	C-	-	7.8-	1075-	13-	1-	7-	3-	7-	4-	3-	1-	2-	4-	3-	3-	2-	-3-	-	-	-	-	-	7.84
30-	45.5461-	108.7083-	2-	06-	0-	M39166-	06/16/78-	17-	20-	9.0-	C-	-	6.6-	2000-	13-	1-	7-	6-	7-	3-	3-	1-	1-	3-	4-	3-	2-	-3-	-	-	-	-	-	7.14
30-	45.5933-	108.7061-	2-	08-	0-	M39167-	06/16/78-	17-	23-	24.0-	C-	-	8.4-	325-	16-	1-	6-	-	-	-	-	-	-	4-	3-	3-	2-	-3-	3-	6-	9	70-	380-	1.06
30-	45.6233-	108.7050-	2-	07-	0-	M39168-	06/16/78-	17-	24-	21.0-	C-	-	8.4-	1950-	18-	1-	7-	3-	7-	3-	3-	1-	1-	4-	3-	3-	1-	-3-	-	-	-	-	-	2.76
30-	45.6067-	108.6953-	2-	07-	0-	M39169-	06/17/78-	14-	22-	20.0-	C-	-	8.3-	1725-	8-	1-	7-	3-	6-	3-	3-	4-	1-	1-	4-	3-	3-	1-	-3-	-	-	-	-	4.18
30-	45.6025-	108.7117-	2-	08-	0-	M39170-	06/17/78-	14-	23-	17.0-	C-	-	8.4-	3100-	8-	1-	6-	-	-	-	-	-	-	4-	3-	2-	1-	-3-	3-	6-	-	800-	-	0.41
30-	45.5659-	108.6896-	2-	07-	0-	M39171-	06/17/78-	15-	24-	19.5-	C-	-	8.3-	1500-	13-	1-	7-	3-	6-	3-	3-	4-	1-	1-	4-	3-	3-	1-	-3-	-	-	-	-	-	4.33
30-	45.5578-	108.7031-	2-	08-	0-	M39172-	06/17/78-	15-	25-	11.5-	C-	-	7.2-	1600-	8-	1-	6-	-	-	-	-	-	-	4-	3-	3-	1-	-3-	5-	-	98-	-	1.22
30-	45.6292-	108.7128-	2-	07-	0-	M39173-	06/17/78-	16-	24-	20.5-	C-	-	8.3-	2100-	10-	1-	6-	3-	6-	3-	3-	1-	2-	4-	3-	3-	1-	-3-	-	-	-	-	-	6.48
30-	45.6450-	108.7158-	2-	08-	0-	M39174-	06/17/78-	17-	25-	18.5-	C-	-	6.8-	2425-	13-	1-	6-	-	-	-	-	-	-	4-	3-	3-	1-	-3-	3-	6-	20-	12-	-	1.65
30-	45.6500-	108.7083-	2-	07-	0-	M39175-	06/17/78-	15-	25-	21.5-	C-	-	8.4-	4500-	8-	1-	6-	3-	6-	3-	3-	1-	2-	4-	3-	3-	1-	-3-	-	-	-	-	-	4.17

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY Concentrations reported in weight parts per billion (ppb)											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.6222-108.5433-2-07-						0-M38125	94243	184	88	25	105	43885	22	59	248	1756	62	-50
30-45.6222-108.5425-2-07-						0-M38126	84088	102	-25	6	98	40507	9	-25	-25	692	8	-50
30-45.6708-108.5583-2-08-						0-M38127	475000	479	30	32	204	230000	33	-25	-25	3905	41	8534
30-45.6400-108.5744-2-08-						0-M38128	42633	-55	-25	7	2043	16670	983	-25	-25	618	11	-50
30-45.5950-108.6092-2-08-						0-M38129	81445	89	-25	8	64	29899	16	-25	-25	-200	-4	-50
30-45.5956-108.6103-2-08-						0-M38130	54636	-55	-25	60	36	65923	-3	-25	-25	411	-4	-50
30-45.6072-108.5619-2-08-						0-M38131	94179	114	-25	679	65	39262	-3	-25	-25	502	-4	256
30-45.6125-108.5575-2-07-						0-M38132	76894	100	-25	6	95	53687	-3	-25	-25	654	-4	51
30-45.5556-108.5492-2-06-						0-M38133	42888	-55	-25	-4	73	49157	-3	-25	-25	-200	-4	88
30-45.5886-108.5303-2-08-						0-M38134	65323	100	-25	47	102	56862	-3	-25	-25	607	-4	60
30-45.6011-108.5425-2-07-						0-M38135	64230	76	-25	-4	30	33374	-3	-25	-25	530	-4	-50
30-45.5822-108.5706-2-08-						0-M38136	48553	105	-25	142	96	56665	6	-25	-25	750	11	122
30-45.5717-108.5614-2-07-						0-M38137	64857	127	-25	8	70	36859	6	-25	-25	784	14	-50
30-45.5911-108.5808-2-07-						0-M38138	108000	257	35	11	88	48503	12	-25	49	1197	23	-50
30-45.5917-108.5797-2-07-						0-M38139	58090	137	-25	9	121	43119	4	-25	30	778	15	59
30-45.5689-108.6083-2-07-						0-M38140	121000	273	-25	12	96	45937	28	-25	39	1173	20	165
30-45.5686-108.6078-2-07-						0-M38141	83993	186	-25	10	118	39776	10	-25	-25	951	17	-50
30-45.7125-108.5733-2-07-						0-M38142	481000	591	102	43	238	226000	356	-25	378	4442	76	404
30-45.7031-108.5981-2-07-						0-M38143	342000	466	117	37	195	167000	27	-25	277	3792	76	483
30-45.7400-108.5747-2-08-						0-M38144	133000	258	26	10	137	133000	-3	-25	39	2108	25	424
30-45.7258-108.5953-2-08-						0-M38145	250000	330	75	28	196	129000	23	-25	132	2933	57	503
30-45.7411-108.6194-2-08-						0-M38146	79844	146	-25	70	45	64299	10	-25	91	1321	26	163
30-45.6864-108.6392-2-07-						0-M38147	182000	229	-25	12	70	105000	19	-25	65	2152	29	117
30-45.6489-108.6314-2-07-						0-M38148	124000	152	37	17	69	69082	8	-25	116	1646	33	244
30-45.6447-108.6203-2-06-						0-M38149	221000	267	45	16	112	115000	9	-25	91	2402	42	135
30-45.6444-108.6119-2-07-						0-M38150	250000	287	78	25	71	134000	34	-25	202	2935	59	277
30-45.6439-108.6128-2-07-						0-M38151	129000	147	33	10	84	73583	10	-25	73	1751	28	239
30-45.6975-108.6583-2-08-						0-M38152	81632	139	32	12	41	56673	80	-25	175	1350	25	287
30-45.6853-108.6783-2-08-						0-M38153	84591	141	29	41	51	33862	9	-25	176	1055	22	83
30-45.6686-108.7197-2-08-						0-M38154	105000	218	42	32	57	64992	8	-25	151	1512	32	142
30-45.7111-108.6381-2-08-						0-M38155	96193	147	67	56	68	70685	11	35	204	1903	49	304
30-45.6053-108.6372-2-08-						0-M38156	105000	156	64	143	110	52974	38	-25	171	1548	40	419
30-45.6056-108.6367-2-07-						0-M38157	94741	93	59	18	59	53562	13	-25	205	1548	39	191
30-45.5364-108.6322-2-08-						0-M38158	55645	83	-25	13	40	53666	11	-25	132	1090	23	361
30-45.5017-108.6600-2-07-						0-M38159	128000	160	75	21	94	53843	60	-25	247	1908	52	610
30-45.4714-108.6600-2-08-						0-M38160	13948	74	63	10	-25	41827	5	129	241	1133	34	370
30-45.4781-108.6650-2-07-						0-M38161	46824	108	53	12	56	39993	15	58	208	1219	33	305
30-45.4950-108.6500-2-07-						0-M38162	62400	107	55	12	56	31729	97	34	222	1337	36	381
30-45.4939-108.6600-2-07-						0-M38163	79275	82	-25	-4	-25	30274	8	-25	-25	732	6	77
30-45.5472-108.7281-2-08-						0-M38164	8660	-55	-25	-4	289	1953	40	-25	-25	-200	-4	-50
30-45.5481-108.7072-2-07-						0-M38165	93852	131	-25	-4	-25	48978	14	-25	-25	1103	10	79
30-45.5461-108.7083-2-06-						0-M38166	187000	239	-25	11	41	105000	9	-25	32	2397	26	299
30-45.5833-108.7061-2-08-						0-M38167	38677	-55	-25	48	-25	9621	-3	-25	38	494	12	-50
30-45.6233-108.7050-2-07-						0-M38168	131000	147	-25	-4	36	58960	10	-25	31	1482	14	190
30-45.6067-108.6953-2-07-						0-M38169	121000	154	-25	-4	-25	57635	7	-25	-25	1443	16	205
30-45.6025-108.7117-2-08-						0-M38170	2015	-55	-25	-4	-25	588	4	57	-25	-200	-4	246
30-45.5653-108.6886-2-07-						0-M38171	118000	178	-25	-4	-25	48584	12	-25	-25	1267	10	412
30-45.5578-108.7031-2-08-						0-M38172	84542	98	-25	-4	2284	39708	908	33	52	1288	24	482
30-45.6292-108.7128-2-07-						0-M38173	122000	179	-25	6	49	56302	13	-25	-25	1582	23	280
30-45.6450-108.7158-2-08-						0-M38174	114000	125	-25	6	228	41535	417	-25	-25	1275	17	503
30-45.6500-108.7083-2-07-						0-M38175	300000	327	27	19	92	130000	29	-25	48	3049	33	320

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
							TIME SAMPLED																										
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (θ) UNITS IN ppb
30-45.6597-109.6853-2-08-						0-M38175-06/17/78-17-			26-20.0-C-	-	7.1-28500-					11-1-7-	-	-	-	-	-1-	3-	3-	1-	-3-	3-	6-	24-	-	4.16
30-45.6225-108.7378-2-07-						0-M38177-06/18/78-10-			25-13.0-C-	-	8.5- 2250-					16-1-7-3-6-3-4-1-2-4-3-3-1-														-3-	-	-	-	7.15
30-45.5089-108.7472-2-07-						0-M38178-06/18/78-12-			28-19.0-C-	-	8.1- 2250-					12-1-6-3-6-3-3-1-2-2-2-3-1-														-3-	-	-	-	2.84
30-45.5083-108.7472-2-07-						0-M38179-06/18/78-12-			28-23.0-C-	-	8.5- 4100-					13-1-6-3-6-3-3-1-2-2-2-3-1-														-3-	-	-	-	3.64
30-45.6978-108.7019-2-08-						0-M38180-06/18/78-15-			32-14.0-C-	-	6.9- 1000-					13-1-6-	-	-	-	-	-	-	-4-	3-	1-	1-	-3-	8-	-	-	-	7.19
30-45.6972-108.7456-2-08-						0-M38181-06/18/78-15-			31-22.0-C-	-	7.3- 2575-					12-1-6-	-	-	-	-	-	-	-2-	3-	2-	1-	-3-	5-	6-	54-	24-	10.18
30-45.7136-108.7206-2-08-						0-M38182-06/18/78-15-			30-15.0-C-	-	6.9- 2150-					15-1-6-	-	-	-	-	-	-	-2-	3-	2-	1-	-3-	5-	-	-	-	17.13
30-45.7119-108.6761-2-08-						0-M38183-06/18/78-16-			31-13.0-C-	-	7.3- 1300-					15-1-6-	-	-	-	-	-	-	-3-	3-	1-	1-	-3-	5-	6-	25-	5-	4.51
30-45.7414-108.6375-2-08-						0-M38184-06/18/78-16-			32-13.0-C-	-	7.0- 1700-					11-1-6-	-	-	-	-	-	-	-4-	3-	1-	1-	-3-	5-	-	-	-	9.29
30-45.7414-108.6794-2-08-						0-M38185-06/18/78-17-			30-17.0-C-	-	7.5- 425-					6-1-6-	-	-	-	-	-	-	-2-	2-	1-	1-	-3-	8-	-	-	-	1.89
30-45.7391-108.6986-2-08-						0-M38186-06/18/78-17-			31-15.0-C-	-	7.1- 725-					11-1-6-	-	-	-	-	-	-	-4-	3-	1-	1-	-3-	8-	-	-	-	3.40
30-45.4331-108.6950-2-06-						0-M38187-06/20/78-11-			22-13.0-C-	-	6.4- 475-					8-1-2-4-2-	-	-	-	-	-	-	-4-	3-	3-	1-	-3-	-	-	-	-	1.78
30-45.4508-108.7272-2-08-						0-M38188-06/20/78-11-			18-11.0-C-	-	7.3-31000-					3-1-6-	-	-	-	-	-	-	-4-	3-	3-	1-	-3-	3-	-	-	-	16.36
30-45.4494-108.7283-2-06-						0-M38189-06/20/78-11-			19-12.0-C-	-	7.2- 3525-					13-1-6-3-6-2-3-1-							-4-	3-	3-	1-	-3-	3-	-	-	-	9.65
30-45.4644-108.7161-2-07-						0-M38190-06/20/78-12-			20-13.0-C-	-	8.2- 750-					2-1-6-4-6-3-4-1-1-3-4-3-1-														-3-	-	-	-	4.50
30-45.4711-108.7461-2-08-						0-M38191-06/20/78-12-			21-13.0-C-	-	7.1-29250-					9-1-6-	-	-	-	-	-	-	-3-	3-	3-	1-	-3-	5-	-	-	-	2.90
30-45.4989-108.7250-2-07-						0-M38192-06/20/78-15-			27-24.5-C-	-	8.4- 2525-					11-1-5-3-6-3-4-1-2-4-3-3-1-														-3-	-	-	-	5.39
30-45.4889-108.7064-2-07-						0-M38193-06/20/78-21-			21-17.0-C-	-	8.2- 3025-					1-1-6-3-6-3-3-1-2-4-3-3-1-														-3-	-	-	-	3.94
30-45.4889-108.7050-2-07-						0-M38194-06/20/78-21-			21-11.5-C-	-	8.1- 1200-					5-1-6-3-6-3-3-1-2-2-2-3-1-														-3-	-	-	-	1.93
30-45.4353-108.7356-2-07-						0-M38195-06/22/78-11-			25-16.5-C-	-	8.2- 825-					6-1-6-4-6-3-3-1-1-3-4-3-1-														-3-	-	-	-	3.90
30-45.4311-108.7347-2-07-						0-M38196-06/22/78-11-			23-18.5-C-	-	7.9- 700-					16-1-6-3-6-3-3-1-1-2-3-3-1-														-3-	-	-	-	1.46
30-45.4006-108.7128-2-07-						0-M38198-06/22/78-14-			30-17.5-C-	-	8.1- 550-					6-1-6-3-6-3-3-1-2-3-3-3-1-														-3-	-	-	-	1.29
30-45.4128-108.7214-2-07-						0-M38199-06/22/78-14-			22-19.0-C-	-	8.2- 600-					4-1-6-3-6-3-3-1-1-3-3-3-1-														-3-	-	-	-	1.39
30-45.3964-108.7394-2-07-						0-M38200-06/22/78-15-			28-18.0-C-	-	7.8- 1025-					13-1-6-3-6-3-3-1-1-3-3-3-1-														-3-	-	-	-	1.87
30-45.3942-108.7469-2-07-						0-M38201-06/22/78-15-			29-34.0-C-	-	8.1- 1625-					13-1-6-6-6-1-4-1-3-4-3-3-1-														-3-	-	-	-	3.81
30-45.7236-108.0119-2-07-						0-M38202-06/23/78-10-			25-22.0-C-	-	7.8-50000-					18-1-6-6-6-1-4-1-2-4-3-2-1-														-3-	-	-	-	19.42
30-45.7164-108.0406-2-07-						0-M38203-06/23/78-11-			27-25.5-C-	-	7.4-50000-					9-1-6-6-6-1-4-2-1-6-3-2-1-														-3-	-	-	-	13.15
30-45.8583-108.8719-2-08-						0-M38206-05/25/78-13-			19-15.0-C-	-	7.3- 1400-					17-1-1-	-	-	-	-	-1-	-	4-	3-	2-	2-	-1-	3-	-	-	-	0.21
30-45.8464-108.8592-2-08-						0-M38207-05/25/78-14-			20-11.0-C-	-	7.2- 1800-					10-1-1-	-	-	-	-	-1-	-	4-	3-	2-	2-	-3-	4-	8-	90-	20-	7.57
30-45.8367-108.8183-2-08-						0-M38208-05/25/78-15-			21-11.0-C-	-	7.3- 2600-					4-1-6-	-	-	-	-	-1-	-	4-	3-	2-	3-	-1-	-	-	-	-	27.58
30-45.8506-108.8178-2-07-						0-M38209-05/25/78-15-			24-19.0-	-	8.6- 1300-					15-1-6-6-6-3-4-5-1-4-4-2-2-														-1-	-	-	-	13.39
30-45.7700-108.7575-2-08-						0-M38210-06/06/78- 8-			21-13.0-	-	9.6- 1250-					8-1-7-	-	-	-	-	-2-	-	4-	2-	1-	3-	-1-	7-	6-	13-	10-	0.38
30-45.7689-108.7844-2-08-						0-M38211-06/06/78- 9-			23-11.0-	-	6.7- 4000-					5-1-7-	-	-	-	-	-3-	-	4-	3-	2-	2-	-3-	4-	24-	18-	6-	2.49
30-45.7775-108.8239-2-07-						0-M38212-06/06/78-10-			24-16.0-	-	7.4- 3500-					10-1-6-4-	-	4-	4-	1-	1-	3-	3-	3-	2-	-	-	-	-	-	-	-	1.73
30-45.7786-108.8381-2-08-						0-M38213-06/06/78-11-			26-10.0-	-	7.3- 4200-					10-1-7-	-	-	-	-	-1-	-	4-	3-	3-	2-	-1-	4-	6-	26-	13-	3.01
30-45.7817-108.8425-2-07-						0-M38214-06/06/78-11-			27-17.0-	-	7.7- 2600-					11-1-6-4-6-4-4-2-2-4-3-3-2-														-1-	-	-	-	-	7.95
30-45.7878-108.8508-2-07-						0-M38215-06/06/78-12-			29-21.0-	-	7.7- 5000-					9-1-7-4-7-2-3-1-1-4-4-3-2-														-3-	-	-	-	-	2.88
30-45.7836-108.8211-2-07-						0-M38216-06/06/78-13-			30-24.5-	-	7.8- 4750-					4-1-4-5-4-3-3-1-1-3-3-3-2-														-3-	-	-	-	-	2.11
30-45.8028-108.8272-2-07-						0-M38217-06/06/78-14-			29-24.0-	-	7.9- 4900-					5-1-6-4-7-3-3-1-2-4-3-3-2-														-3-	-	-	-	-	2.25
30-45.8008-108.8294-2-07-						0-M38218-06/06/78-14-			29-24.0-	-	8.0- 4800-					5-1-6-4-7-3-3-1-2-4-3-3-2-														-3-	-	-	-	-	2.41
30-45.8569-108.8400-2-07-						0-M38219-06/06/78-14-			26-24.0-	-	8.2- 3400-					5-1-6-5-6-2-3-1-1-4-5-2-2-														-3-	-	-	-	-	3.62
30-45.8397-108.7967-2-08-						0-M38220-06/06/78-15-			28-15.5-	-	7.9- 2200-					10-1-7-	-	-	-	-	-1-	-	4-	3-	2-	2-	-1-	5-	84-	50-	25-	22.89
30-45.8519-108.7917-2-08-						0-M38221-06/06/78-		-	28-12.0-	-	7.4- 1150-					4-1-6-	-	-	-	-	-1-	-	4-	4-	2-	3-	-3-	5-	6-	110-	-	0.11
30-45.8611-108.7764-2-08-						0-M38222-06/07/78- 8-			21-10.5-	-	6.8- 1500-					4-1-6-	-	-	-	-	-1-	-	4-	4-	2-	2-	-1-	3-	8-	120-	-	0.37
30-45.8600-108.8064-2-06-						0-M38223-06/07/78- 9-			18-11.0-	-	7.8- 1200-					5-1-6-5-7-3-4-1-							-4-	4-	2-	2-	-1-	-	-	-	-	4.73
30-45.8572-108.8186-2-08-						0-M38224-06/07/78- 9-			16-14.0-	-	7.6- 2100-					9-1-6-	-	-	-	-	-1-	-	4-	4-	1-	2-	-1-	3-	6-	100-	20-	3.35
30-45.8789-108.7753-2-08-						0-M38225-06/07/78-10-			22-12.0-	-	7.1- 1150-					8-1-6-	-	-	-	-	-1-	-	4-	3-	2-	2-	-1-	4-	10-	110-	8-	4.93
30-45.8997-108.7664-2-07-						0-M38226-06/07/78-11-			24-16.0-	-	7.5- 2600-					11-1-1-5-6-3-4-1-3-4-3-2-3-														-1-	-	-	-	-	3.82
30-45.9122-108.7764-2-08-						0-M38227-06/07/78-12-			24-10.8-	-	7.6- 1450-					10-1-6-	-	-	-	-	-1-	-	4-	3-	2-	2-	-1-	5-	14-	100-	10-	2.64
30-45.9439-108.8089-2-07-						0-M38228-06/07/78-13-			26-24.0-C-	-	8.2- 1750-					11-1-1-5-7-3-4-1-1-4-4-1-2-														-1-	-	-	-	-	5.38
30-45.9489-108.8383-2-07-						0-M38229-06/07/78-13-			28-22.0-	-	8.0- 6000-					9-1-4-5-6-2-3-5-1-4-3-1-3-														-3-	-	-	-	-	6.58

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY Concentrations reported in weight parts per billion (ppb)											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.6597-108.6853-2-08-						0-M38176	335000	403	44	363	81	157000	17	-25	46	3711	42	446
30-45.6225-108.7378-2-07-						0-M38177	140000	188	28	10	50	69082	13	-25	31	1899	25	259
30-45.5089-108.7472-2-07-						0-M38178	135000	209	-25	8	-25	64880	23	-25	-25	1731	24	338
30-45.5083-108.7472-2-07-						0-M38179	215000	247	46	18	67	89510	18	-25	58	2643	39	368
30-45.6978-108.7019-2-08-						0-M38180	103000	141	-25	9	-25	63609	6	-25	29	1472	15	350
30-45.6972-108.7456-2-08-						0-M38181	291000	396	78	98	91	140000	32	-25	114	3827	55	2652
30-45.7136-108.7206-2-08-						0-M38182	274000	341	78	107	96	106000	16	-25	142	3346	52	489
30-45.7119-108.6761-2-08-						0-M38183	114000	127	-25	11	31	69514	5	-25	36	1605	16	297
30-45.7414-108.6375-2-08-						0-M38184	174000	259	-25	31	53	93317	10	-25	-25	2298	24	424
30-45.7414-108.6794-2-08-						0-M38185	42554	75	-25	10	-25	13636	18	29	35	660	8	138
30-45.7381-108.6986-2-08-						0-M38186	58125	93	-25	-4	-25	40385	5	-25	-25	925	7	271
30-45.4331-108.6950-2-06-						0-M38187	42047	65	-25	5	-25	18724	6	-25	-25	578	7	323
30-45.4508-108.7272-2-08-						0-M38188	277000	392	68	21	2068	202000	598	-25	92	4423	44	560
30-45.4494-108.7283-2-06-						0-M38189	134000	219	38	9	116	142000	26	-25	39	2750	31	397
30-45.4644-108.7161-2-07-						0-M38190	60080	105	37	-4	-25	38407	29	53	64	1172	25	165
30-45.4711-108.7461-2-08-						0-M38191	273000	347	59	31	121	173000	17	-25	78	3872	45	397
30-45.4999-108.7250-2-07-						0-M38192	121000	198	36	8	49	90310	17	-25	26	2030	27	330
30-45.4889-108.7064-2-07-						0-M38193	154000	244	40	10	-25	108000	77	-25	50	2413	30	270
30-45.4889-108.7050-2-07-						0-M38194	83312	157	48	8	43	41890	80	29	107	1373	27	-50
30-45.4353-108.7356-2-07-						0-M38195	69193	116	36	7	28	53352	49	53	58	1287	23	-50
30-45.4311-108.7347-2-07-						0-M38196	63571	109	-25	-4	31	38442	18	-25	-25	824	12	518
30-45.4006-108.7128-2-07-						0-M38198	61630	73	-25	-4	43	37679	9	-25	-25	915	17	355
30-45.4128-108.7214-2-07-						0-M38199	59244	104	-25	-4	77	36892	42	-25	-25	907	15	168
30-45.3964-108.7394-2-07-						0-M38200	95523	156	-25	-4	66	55796	13	-25	27	1431	20	603
30-45.3942-108.7469-2-07-						0-M38201	149000	177	-25	9	66	51794	172	-25	-25	1603	25	295
30-45.7236-108.0119-2-07-						0-M38202	372000	578	39	33	229	443000	81	-25	28	10005	37	915
30-45.7164-108.0406-2-07-						0-M38203	356000	646	40	28	228	424000	185	-25	-25	10183	39	784
30-45.8583-108.8719-2-08-						0-M38206	13641	105	-25	-4	-25	36799	24	93	76	518	-4	-50
30-45.8464-108.8592-2-08-						0-M38207	114000	256	49	13	1026	99002	66	60	140	2321	33	288
30-45.8367-108.8183-2-08-						0-M38208	83240	259	48	41	66	130000	11	91	95	2327	23	410
30-45.8506-108.8178-2-07-						0-M38209	74938	180	40	11	38	75522	60	66	100	1527	23	144
30-45.7700-108.7575-2-08-						0-M38210	12449	139	30	5	-25	23670	18	46	66	439	6	-50
30-45.7689-108.7844-2-08-						0-M38211	467000	600	103	37	502	157000	5794	-25	197	4704	62	16293
30-45.7775-108.8239-2-07-						0-M38212	289000	495	74	28	131	209000	58	-25	138	4478	42	597
30-45.7786-108.8381-2-08-						0-M38213	172000	303	69	29	84	140000	19	-25	127	3200	39	597
30-45.7817-108.8425-2-07-						0-M38214	126000	243	49	12	45	107000	21	30	102	2353	28	459
30-45.7878-108.8508-2-07-						0-M38215	498000	601	96	37	230	312000	49	-25	142	6030	58	495
30-45.7836-108.8211-2-07-						0-M38216	341000	273	49	26	186	250000	26	-25	56	4688	44	540
30-45.8008-108.8272-2-07-						0-M38217	364000	278	65	30	227	243000	27	-25	68	5373	56	418
30-45.8008-108.8294-2-07-						0-M38218	287000	243	72	28	204	231000	28	-25	130	5100	59	267
30-45.8569-108.8400-2-07-						0-M38219	162000	232	-25	8	96	175000	117	-25	-25	3118	14	96
30-45.8397-108.7967-2-08-						0-M38220	56396	204	-25	25	66	133000	13	29	-25	1826	-4	317
30-45.8519-108.7917-2-08-						0-M38221	59746	85	-25	-4	233	58673	43	-25	-25	1004	-4	546
30-45.8611-108.7764-2-08-						0-M38222	51504	57	-25	-4	93	52641	29	-25	-25	876	-4	-50
30-45.8600-108.8064-2-06-						0-M38223	98497	104	-25	16	81	73573	10	-25	-25	1442	10	-50
30-45.8572-108.8186-2-08-						0-M38224	2432	-55	-25	117	27	2140	13	-25	-25	-200	-4	-50
30-45.8789-108.7753-2-08-						0-M38225	70181	-55	-25	6	60	67424	16	-25	-25	1296	-4	101
30-45.8997-108.7664-2-07-						0-M38226	209000	328	-25	8	115	157000	92	-25	-25	3099	26	157
30-45.9122-108.7764-2-08-						0-M38227	98661	300	-25	20	89	84215	18	-25	-25	1543	-4	-50
30-45.9439-108.8089-2-07-						0-M38228	77376	152	-25	-4	40	78586	23	-25	39	1442	8	-50
30-45.9489-108.8383-2-07-						0-M38229	31819	226	-25	-4	59	80127	13	27	-25	1325	10	-50

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																												U CONCENTRATION
							TIME SAMPLED																											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (#) UNITS IN ppb
30-45.9456-108.8269-2-08-						0-438230-06/07/78-14-			28-11.8-C-		-	-	8.9-	8000-		9-1-6-	-	-	-	-6-	-4-	3-1-2-	-1-1-	6-200-		-		2.02
30-45.9978-108.7772-2-08-						0-438231-06/08/78- 8-			24-11.5-C-		-	-	7.2-	1150-		9-1-6-	-	-	-	-1-	-4-	3-1-1-	-1-4-42-	30-	17-		4.13
30-45.9972-108.7733-2-08-						0-438232-06/08/78- 9-			26-11.0-C-		-	-	7.3-	1400-		4-1-6-	-	-	-	-1-	-4-	4-1-1-	-1-3-42-	30-	8-		4.98
30-45.9214-108.7628-2-08-						0-438233-06/08/78-10-			22-21.5-		-	-	7.1-	4400-		6-1-6-	-	-	-	-1-	-4-	4-1-1-	-1-4-36-	20-	13-		8.75
30-45.9597-108.8531-2-08-						0-438234-06/08/78-11-			23- 9.0-		-	-	7.6-	22000-		6-1-1-	-	-	-	-1-	-4-	3-1-1-	-1-3-	6-280-	20-		2.60
30-45.9450-108.8622-2-08-						0-438235-06/08/78-11-			23-13.5-		-	-	8.2-	3500-		6-1-1-	-	-	-	-1-	-4-	3-1-2-	-3-1-	6-360-	20-		0.04
30-45.9947-108.8719-2-08-						0-438236-06/08/78-12-			25-12.0-		-	-	7.8-	1000-		11-1-4-	-	-	-	-1-	-4-	3-3-2-	-3-3-	5-100-	30-		8.40
30-45.9875-108.8378-2-08-						0-438237-06/08/78-12-			29-10.6-C-		-	-	7.9-	4620-		8-1-6-	-	-	-	-1-	-4-	2-1-2-	-1-9-	6-463-		-		0.81
30-45.9939-108.9136-2-06-						0-438238-06/08/78-14-			30-13.5-C-		-	-	6.9-	55-		6-1-6-6-6-2-3-1-					-4-	3-2-2-	-1-	-	-	-		0.34
30-45.9928-108.9036-2-07-						0-438239-06/07/78-14-			29-21.5-		-	-	7.1-	3300-		6-1-4-6-6-2-4-1-				1-4-3-2-2-			-1-	-	-	-		1.32
30-45.9792-108.8817-2-06-						0-438240-06/08/78-15-			31-22.1-		-	-	7.3-	2900-		9-1-6-5-6-2-3-1-					-4-	2-3-1-	-3-	-	-	-		6.23
30-45.8808-108.8869-2-06-						0-438241-06/09/78- 9-			25-10.5-		-	-	6.0-	6000-		10-1-3-5-6-	-	-	-	1-	-4-	4-2-2-	-1-	-	-	-		11.70
30-45.8856-108.8872-2-08-						0-438242-06/09/78- 9-			26-12.5-C-		-	-	6.4-	5800-		9-1-3-	-	-	-	-1-	-4-	3-2-2-	-1-5-	6-100-		-		13.69*
30-45.8814-108.8717-2-08-						0-438243-06/09/78-10-			24-12.1-		-	-	7.6-	2450-		9-1-6-	-	-	-	-1-	-4-	3-2-2-	-	-3-	6-100-	5-		0.59
30-45.9136-108.8300-2-08-						0-438244-06/09/78-11-			25-12.0-		-	-	7.0-	2775-		6-1-6-	-	-	-	-1-	-4-	3-2-2-	-1-4-60-	30-	10-		2.61
30-45.9128-108.8292-2-07-						0-438245-06/09/78-11-			26-18.0-		-	-	7.8-	2200-		15-1-4-6-8-2-3-1-				3-4-3-2-2-			-3-	-	-	-		1.67
30-45.9114-108.8686-2-07-						0-438246-06/09/78-12-			28-23.0-		-	-	7.6-	3950-		13-1-7-	-	-3-	4-1-1-	4-3-2-2-			-1-	-	-	-		6.92
30-45.9339-108.8786-2-08-						0-438247-06/09/78-13-			27-12.9-		-	-	8.2-	1990-		9-1-7-	-	-	-	-1-	-4-	3-2-2-	-1-4-	6-	40-	15-		1.78
30-45.9647-108.8786-2-08-						0-438248-06/09/78-13-			27-10.9-		-	-	7.8-	2750-		6-1-6-	-	-	-	-1-	-4-	3-2-2-	-1-3-	5-335-	50-		0.74
30-45.9669-108.8811-2-07-						0-438249-06/09/78-14-			31-28.2-		-	-	7.8-	9000-		8-1-6-6-8-2-3-1-				3-4-2-2-2-			-1-	-	-	-		3.77
30-45.9461-108.8878-2-07-						0-438250-06/09/78-15-			31-27.3-		-	-	8.3-	12900-		11-1-6-6-6-2-3-1-				3-4-3-2-2-			-1-	-	-	-		13.34
30-45.9450-108.8875-2-07-						0-438251-06/09/78-15-			30-25.3-		-	-	8.1-	5550-		10-1-6-6-8-2-3-1-				1-4-3-2-2-			-3-	-	-	-		4.18
30-45.9464-108.9111-2-06-						0-438252-06/09/78-15-			28-11.2-C-		-	-	8.0-	1820-		11-1-6-	-	-	-	-1-	-4-	4-2-2-	-1-	-	-	-		2.55
30-45.9292-108.9214-2-08-						0-438253-06/09/78-16-			30-14.4-		-	-	6.9-	3850-		10-1-6-	-	-	-	-1-	-4-	4-3-2-	-1-3-	8-120-		3-		0.84
30-45.9309-108.9425-2-08-						0-438254-06/09/78-17-			26-12.5-		-	-	7.2-	3900-		8-1-6-	-	-	-	-1-	-4-	3-2-2-	-1-3-	6-120-		3-		1.40
30-45.9006-108.9639-2-07-						0-438255-06/09/78-17-			24-21.5-		-	-	7.4-	3520-		12-1-6-6-6-3-3-1-				3-4-4-2-2-			-1-	-	-	-		6.98
30-45.8606-108.9286-2-08-						0-438256-06/12/78-11-			22-12.0-		-	-	6.2-	5800-		11-1-7-	-	-	-	-1-	-4-	4-2-3-	-	-3-	13-	70-	27-		12.81
30-45.9017-108.9647-2-08-						0-438257-06/12/78-12-			19-10.5-C-		-	-	6.4-	5900-		9-1-6-	-	-	-	-1-	-4-	4-2-2-	-1-4-	12-	30-		-		6.20
30-45.9386-108.9836-2-08-						0-438258-06/12/78-13-			24-12.8-C-		-	-	7.1-	1600-		9-1-7-	-	-	-	-1-	-4-	3-2-2-	-3-5-	6-	60-		-		1.53
30-45.9461-108.9847-2-07-						0-438259-06/12/78-13-			25-15.5-		-	-	7.3-	6100-		6-1-6-5-7-3-3-1-				3-4-4-2-2-			-1-	-	-	-		3.58
30-45.9919-108.9858-2-08-						0-438260-06/12/78-14-			23-11.5-C-		-	-	9.4-	1550-		12-1-7-	-	-	-	-2-	-4-	3-2-2-	-1-3-	6-	575-	340-		0.22
30-45.9828-109.0167-2-08-						0-438261-06/12/78-14-			27- 9.8-C-		-	-	7.5-	4500-		11-1-7-	-	-	-	-1-	-4-	3-2-2-	-1-1-	-	-	-		1.52
30-45.9864-109.0414-2-06-						0-438262-06/12/78-15-			27-10.5-C-		-	-	7.1-	3750-		16-1-7-5-8-	-	-	-	1-	-4-	3-2-2-	-1-	-	-	-		5.06
30-45.9744-109.0883-2-07-						0-438263-06/12/78-15-			29-22.0-		-	-	7.5-	8200-		5-1-7-	-	-1-	3-5-1-	4-3-2-2-			-1-	-	-	-		6.44
30-45.9644-109.0681-2-07-						0-438264-06/12/78-16-			30-19.5-		-	-	7.9-	3450-		6-1-7-6-8-2-3-1-				1-4-3-2-2-			-3-	-	-	-		0.76
30-45.9483-109.0369-2-08-						0-438265-06/12/78-16-			28-11.5-		-	-	7.7-	2400-		12-1-7-	-	-	-	-1-	-4-	3-2-2-	-3-1-	6-	90-	30-		2.94
30-45.9311-109.0233-2-08-						0-438266-06/12/78-17-			26-13.7-C-		-	-	7.7-	700-		8-1-6-	-	-	-	-1-	-4-	3-2-2-	-1-4-	6-110-		-		0.23
30-45.9164-109.0397-2-08-						0-438267-06/12/78-17-			21- 9.5-		-	-	7.7-	2000-		10-1-7-	-	-	-	-1-	-4-	3-1-2-	-	-1-	6-200-		3-		0.57
30-45.9106-109.0667-2-07-						0-438268-06/12/78-18-			21-20.8-		-	-	7.9-	2300-		8-1-6-5-7-3-4-2-3-4-3-1-2-							-1-	-	-	-		2.47
30-45.8942-109.1081-2-08-						0-438269-06/12/78-18-			25-11.5-C-		-	-	7.1-	5200-		6-1-7-	-	-	-	-1-	-4-	3-2-2-	-1-3-	6-120-		-		7.22
30-45.8764-109.1047-2-08-						0-438270-06/12/78-18-			21-15.3-C-		-	-	8.2-	3580-		11-1-7-	-	-	-	-1-	-4-	3-2-2-	-1-3-	6-600-		-		0.63
30-45.9458-109.0033-2-08-						0-438271-06/12/78-19-			22-15.5-		-	-	7.4-	1700-		11-1-7-	-	-	-	-1-	-4-	3-2-2-	-3-3-	6-132-	60-			3.40
30-45.8500-108.8878-2-08-						0-438272-06/13/78- 9-			25-11.5-C-		-	-	7.3-	1650-		10-1-6-	-	-	-	-1-	-4-	3-2-2-	-1-3-	6-	75-	40-		1.09
30-45.8519-108.8906-2-06-						0-438273-06/13/78- 9-			23- 9.0-C-		-	-	7.4-	1800-		13-1-6-	-	-	-	-1-	-4-	3-2-2-	-1-	-	-	-		0.29
30-45.8439-108.9328-2-08-						0-438274-06/13/78-10-			24-15.5-C-		-	-	7.1-	4450-		9-1-7-	-	-	-	-1-	-4-	3-2-2-	-1-4-	6-	80-		-		5.58
30-45.8431-108.9753-2-08-						0-438275-06/13/78-10-			23-15.0-		-	-	8.2-	4800-		10-1-7-	-	-	-	-1-	-4-	4-2-4-	-3-3-	6-	280-	240-		0.11
30-45.8289-108.9561-2-07-						0-438276-06/13/78-11-			21-11.2-		-	-	7.9-	6000-		9-1-6-3-7-3-3-1-				1-4-3-2-2-			-1-	-	-	-		31.28*
30-45.8299-108.9539-2-07-						0-438277-06/13/78-11-			21-16.5-		-	-	7.1-	2400-		9-1-6-4-7-3-4-4-1-				4-3-2-2-2-			-1-	-	-	-		7.03
30-45.8272-108.9392-2-08-						0-438278-06/13/78-11-			22-11.1-C-		-	-	6.6-	2775-		10-1-7-	-	-	-	-1-	-4-	3-2-2-	-1-3-	9-	80-		-		11.38
30-45.8128-108.9111-2-08-						0-438279-06/13/78-12-			24-11.8-C-		-	-	7.4-	1200-		10-1-7-	-	-	-	-1-	-4-	4-2-2-	-3-1-	6-	80-		-		2.93
30-45.8142-108.9431-2-07-						0-438280-06/13/78-13-			26-23.5-		-	-	7.8-	1150-		9-1-6-5-7-1-4-5-1-				4-3-2-2-2-			-1-	-	-	-		14.56

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY Concentrations reported in weight parts per billion (ppb)											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.9456-108.8269-2-08-						0-M38230	238000	359	34	15	113	180000	255	-25	-25	3992	29	-50
30-45.9979-108.7772-2-08-						0-M38231	76551	186	-25	39	43	34965	12	-25	-25	978	-4	256
30-45.9972-108.7733-2-08-						0-M38232	76056	125	-25	10	70	71001	12	-25	-25	1344	6	1641
30-45.9214-108.7628-2-08-						0-M38233	165000	344	-25	31	118	245000	36	-25	-25	4406	14	415
30-45.9597-108.8531-2-08-						0-M38234	126000	288	-25	9	98	90974	62	-25	43	2250	14	-50
30-45.9450-108.8622-2-08-						0-M38235	4647	-55	-25	-4	38	990	133	-25	-25	-200	-4	70
30-45.9947-108.8719-2-08-						0-M38236	54314	75	-25	7	91	16494	80	-25	-25	593	-4	254
30-45.9875-108.8378-2-08-						0-M38237	4356	-55	-25	-4	-25	1530	5	-25	-25	-200	-4	168
30-45.9939-108.9136-2-06-						0-M38238	5636	-55	-25	-4	39	1619	5	-25	-25	-200	-4	209
30-45.9928-108.9036-2-07-						0-M38239	243000	389	-25	13	123	179000	93	-25	-25	2931	24	1400
30-45.9792-108.8817-2-06-						0-M38240	55866	111	-25	5	86	44123	7	-25	-25	907	8	451
30-45.9808-108.8869-2-06-						0-M38241	408000	549	40	21	176	219000	16	-25	-25	4596	45	1169
30-45.8856-108.8872-2-08-						0-M38242	354000	473	52	132	228	228000	126	-25	67	4347	45	3937
30-45.8814-108.8717-2-08-						0-M38243	4739	81	-25	7	-25	861	-3	-25	30	-200	5	-50
30-45.9136-108.8300-2-08-						0-M38244	160000	340	-25	11	90	129000	12	-25	-25	2306	20	128
30-45.9128-108.8292-2-07-						0-M38245	153000	281	30	9	75	125000	49	-25	62	2193	28	223
30-45.9114-108.8686-2-07-						0-M38246	296000	463	42	17	111	151000	21	-25	75	3170	40	644
30-45.9339-108.8786-2-08-						0-M38247	4116	-55	-25	-4	42	1288	14	-25	-25	-200	9	-50
30-45.9547-108.8786-2-08-						0-M38248	8019	-55	-25	7	171	2549	14	46	76	251	9	-50
30-45.9669-108.8811-2-07-						0-M38249	323000	396	81	39	247	314000	63	-25	147	7763	67	569
30-45.9461-108.8878-2-07-						0-M38250	486000	756	65	43	279	448000	384	-25	105	7961	58	570
30-45.9450-108.8875-2-07-						0-M38251	253000	124	71	23	161	166000	240	-25	141	3632	57	261
30-45.9464-108.9111-2-06-						0-M38252	21259	-55	54	128	57	7117	5	79	172	880	36	224
30-45.9292-108.9214-2-08-						0-M38253	336000	268	100	45	191	175000	19	-25	219	4295	77	844
30-45.9308-108.9425-2-08-						0-M38254	158000	342	49	15	60	84493	91	-25	114	2682	31	369
30-45.9006-108.9639-2-07-						0-M38255	272000	492	58	23	101	117000	30	-25	120	4019	44	227
30-45.8606-108.9286-2-08-						0-M38256	401000	638	87	65	180	173000	24	-25	173	6138	59	786
30-45.9017-108.9647-2-08-						0-M38257	526000	523	46	160	352	235000	28	-25	35	4686	52	596
30-45.9386-108.9836-2-08-						0-M38258	129000	202	-25	19	100	71830	10	26	59	1612	22	207
30-45.9461-108.9847-2-07-						0-M38259	256000	541	39	21	182	446000	166	-25	33	6196	33	462
30-45.9919-108.9858-2-08-						0-M38260	1283	62	-25	-4	62	734	5	-25	89	-200	5	266
30-45.9828-109.0167-2-08-						0-M38261	287000	432	59	25	20072	201000	685	-25	134	3895	56	2095
30-45.9864-109.0414-2-06-						0-M38262	300000	404	78	27	385	130000	250	-25	168	3603	67	345
30-45.9744-109.0883-2-07-						0-M38263	332000	589	71	32	206	304000	89	-25	142	7148	58	486
30-45.9644-109.0681-2-07-						0-M38264	167000	244	65	19	209	120000	45	89	161	2894	55	261
30-45.9483-109.0369-2-08-						0-M38265	81073	154	51	15	518	51695	54	86	140	1499	32	2061
30-45.9311-109.0233-2-08-						0-M38266	32046	118	72	56	55	21246	14	136	260	1115	43	901
30-45.9164-109.0397-2-08-						0-M38267	42067	175	83	15	1139	57922	111	147	235	1503	48	219
30-45.9106-109.0667-2-07-						0-M38268	78725	219	86	20	99	112000	29	137	238	2221	49	-50
30-45.8942-109.1081-2-08-						0-M38269	347000	511	111	39	158	209000	27	-25	294	5037	81	339
30-45.8764-109.1047-2-08-						0-M38270	9849	71	73	19	68	2501	13	126	238	799	38	-50
30-45.9458-109.0033-2-08-						0-M38271	93971	204	55	25	78	67181	164	109	166	1796	38	627
30-45.8500-108.8878-2-08-						0-M38272	9007	80	54	12	32	8032	13	115	210	670	26	57
30-45.8519-108.8906-2-06-						0-M38273	9901	87	58	12	43	8624	8	111	168	677	29	-50
30-45.8439-108.9328-2-08-						0-M38274	118000	386	90	57	109	100000	19	134	265	2554	58	1738
30-45.8431-108.9753-2-08-						0-M38275	6685	148	83	20	99	1475	32	150	256	869	43	-50
30-45.8289-108.9561-2-07-						0-M38276	159000	390	102	31	161	206000	315	150	257	4213	68	238
30-45.8289-108.9539-2-07-						0-M38277	107000	288	103	23	96	105000	123	162	303	2407	65	136
30-45.8272-108.9392-2-08-						0-M38278	133000	269	57	38	81	119000	15	78	179	2480	33	282
30-45.8128-108.9111-2-08-						0-M38279	26468	211	58	13	199	27197	21	140	229	1000	30	285
30-45.8142-108.9431-2-07-						0-M38280	64954	223	89	18	47	48106	19	165	295	1545	51	-50

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																												U CONCENTRATION
							TIME SAMPLED																											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (*) UNITS IN ppb
30-45.8239-108.9428-2-07-						0-M38281-06/13/78-13-	26-	25.7-	-	-	7.9-	1100-		12-1-6-6-6-2-3-5-1-4-2-2-2-	-3-	-	-	-	-	5.90
30-45.7847-108.9678-2-06-						0-M38282-06/13/78-14-	29-	9.8-	-	-	7.5-	1150-		8-1-7-	-	-3-3-1-	-4-3-2-2-	-1-	-	-	-	-	4.82
30-45.7814-108.9683-2-07-						0-M38283-06/13/78-14-	29-	21.0-	-	-	8.4-	1100-		8-1-7-4-6-3-3-1-3-4-3-2-2-	-1-	-	-	-	-	9.52
30-45.7683-108.9869-2-08-						0-M38284-06/13/78-15-	27-	10.5-	C-	-	8.0-	1650-		15-1-7-	-	-	-	-1-	-4-4-2-3-	-3-1-	6-	120-	-	11.23
30-45.7753-109.0106-2-08-						0-M38285-06/13/78-15-	28-	16.0-	-	-	7.9-	990-		6-1-7-	-	-	-	-1-	-4-3-2-2-	-3-4-	8-	25-	6-	7.42
30-45.7789-109.0059-2-07-						0-M38286-06/13/78-16-	31-	21.8-	-	-	8.3-	2100-		13-1-7-6-8-3-3-1-1-4-3-2-2-	-1-	-	-	-	-	4.25
30-45.7950-109.0014-2-06-						0-M38287-06/13/78-16-	30-	10.2-	-	-	7.4-	1500-		8-1-7-6-8-2-3-1-	-4-3-2-2-	-1-	-	-	-	4.64
30-45.7956-109.0044-2-07-						0-M38288-06/13/78-17-	28-	17.0-	C-	-	7.7-	1290-		8-1-6-	-	-3-4-1-1-4-3-2-2-	-1-	-	-	-	-	1.85
30-45.8450-109.0547-2-08-						0-M38289-06/13/78-17-	27-	18.0-	C-	-	6.9-	4510-		6-1-7-	-	-	-	-1-	-4-4-1-2-	-1-3-	6-	135-	-	1.70
30-45.8081-108.9706-2-06-						0-M38290-06/14/78-	9-	21-	9.5-	C-	-	6.6-	980-		9-1-7-5-7-2-3-1-	-4-3-3-2-	-1-	-	-	-	0.56
30-45.8039-108.9683-2-07-						0-M38291-06/14/78-	9-	18-	11.1-	C-	-	7.7-	1400-		12-1-7-4-6-4-3-2-3-3-3-3-3-	-1-	-	-	-	-	9.23
30-45.8061-108.9703-2-07-						0-M38292-06/14/78-10-	20-	13.9-	C-	-	7.3-	3000-		10-1-7-3-6-3-3-1-3-4-3-3-2-	-1-	-	-	-	-	7.32
30-45.7767-108.9100-2-08-						0-M38293-06/14/78-11-	28-	10.9-	C-	-	7.6-	4000-		11-1-6-	-	-	-	-1-	-4-3-1-2-	-1-3-	6-	300-	295-	6.04
30-45.7756-108.9122-2-06-						0-M38294-06/14/78-11-	29-	16.0-	-	-	7.2-	1400-		10-1-7-4-6-2-3-1-2-4-3-2-2-	-1-	-	-	-	-	0.66
30-45.7883-108.8764-2-07-						0-M38295-06/14/78-12-	28-	19.0-	C-	-	7.9-	2400-		10-1-7-4-6-4-4-1-1-4-3-3-1-	-1-	-	-	-	-	3.09
30-45.7703-108.9447-2-08-						0-M38296-06/14/78-13-	30-	11.0-	-	-	7.5-	1150-		13-1-6-	-	-	-	-	-	-4-3-1-1-	-1-4-	6-	75-	7-	12.20
30-45.7833-108.9394-2-06-						0-M38297-06/14/78-13-	29-	15.8-	C-	-	7.2-	1700-		9-1-7-	-	-2-3-1-	-4-4-3-2-	-1-	-	-	-	-	4.24
30-45.7997-109.0458-2-06-						0-M38298-06/14/78-14-	29-	9.0-	C-	-	7.4-	610-		6-1-7-4-7-3-4-1-	-4-3-2-2-	-1-	-	-	-	-	1.53
30-45.8014-109.0464-2-08-						0-M38299-06/14/78-14-	29-	13.8-	-	-	7.4-	610-		12-1-7-	-	-	-	-1-	-4-3-2-2-	-3-3-	4-	45-	20-	1.42
30-45.8175-109.0461-2-06-						0-M38300-06/14/78-15-	32-	12.5-	C-	-	7.5-	525-		10-1-7-4-7-4-3-1-	-4-3-3-2-	-1-	-	-	-	-	3.52
30-45.7742-109.1036-2-08-						0-M38301-06/14/78-15-	29-	15.2-	-	-	7.1-	1120-		8-1-7-	-	-	-	-1-	-4-3-3-2-	-1-3-	6-	110-	60-	1.50
30-45.7736-109.1044-2-06-						0-M38302-06/14/78-16-	29-	12.2-	-	-	7.3-	1270-		10-1-7-4-7-3-3-1-	-4-3-3-2-	-1-	-	-	-	-	0.49
30-45.7733-109.1028-2-07-						0-M38303-06/14/78-16-	29-	20.0-	-	-	7.6-	1750-		12-1-7-4-7-2-3-1-1-4-3-3-2-	-3-	-	-	-	-	0.65
30-45.8296-109.0892-2-08-						0-M38304-06/14/78-17-	26-	12.5-	C-	-	7.3-	1160-		6-1-7-	-	-	-	-1-	-4-3-2-3-	-1-3-	7-	80-	-	4.98
30-45.8639-109.0917-2-08-						0-M38305-06/14/78-18-	23-	13.5-	-	-	7.6-	3430-		6-1-7-	-	-	-	-1-	-4-4-1-4-	-3-5-	6-	110-	70-	0.24
30-45.4156-109.6022-2-07-						0-M38306-06/16/78-	9-	19-	10.1-	C-	-	5.6-	360-		9-1-6-6-6-3-3-1-3-4-4-4-2-	-	-	-	-	-	-	0.18
30-45.4328-109.5669-2-08-						0-M38307-06/16/78-10-	19-	22.0-	C-	-	6.2-	185-		-1-6-	-	-2-	-1-	-2-3-3-2-	-	-4-	8-	17-	4-	0.31
30-45.4336-109.5444-2-07-						0-M38308-06/16/78-11-	20-	17.5-	C-	-	7.2-	312-		9-1-1-5-6-3-3-	-3-3-3-3-2-	-	-	-	-	-	-	0.33
30-45.4497-109.5361-2-08-						0-M38309-06/16/78-11-	20-	10.5-	C-	-	6.6-	320-		9-1-6-	-	-	-	-	-	-4-3-1-3-	-1-8-	-	-	-	0.35
30-45.4091-109.5244-2-08-						0-M38310-06/16/78-12-	25-	11.5-	C-	-	7.2-	250-		3-1-1-	-	-	-	-	-	-2-3-2-2-	-	-3-	-	-	-	0.57
30-45.3978-109.5406-2-07-						0-M38311-06/16/78-13-	26-	11.5-	C-	-	7.9-	500-		-1-6-5-7-4-4-1-3-1-3-3-2-	-	-	-	-	-	-	0.01
30-45.3911-109.5428-2-07-						0-M38312-06/16/78-14-	27-	11.0-	C-	-	7.2-	360-		4-1-6-4-6-3-3-3-2-3-3-3-2-	-	-	-	-	-	-	0.56
30-45.3839-109.5908-2-06-						0-M38313-06/16/78-16-	29-	11.0-	C-	-	6.5-	160-		6-2-4-	-	-	-	-1-	-4-3-3-3-3-	-	-	-	-	-	0.01
30-45.4228-109.5172-2-07-						0-M38314-06/16/78-16-	22-	14.0-	C-	-	7.5-	500-		3-1-6-6-6-2-4-3-3-6-3-2-3-	-	-	-	-	-	-	0.03
30-45.4642-109.5489-2-08-						0-M38315-06/17/78-10-	27-	12.2-	C-	-	6.6-	450-		8-2-6-	-	-	-	-	-	-3-2-2-	-	-	-3-	8-	80-	-	3.33
30-45.4606-109.5378-2-06-						0-M38316-06/17/78-11-	27-	16.0-	C-	-	7.6-	140-		9-1-6-	-	-2-4-1-1-4-3-2-2-	-	-	-	-	-	-	0.07
30-45.4581-109.5350-2-06-						0-M38317-06/17/78-12-	27-	21.0-	C-	-	7.2-	500-		2-1-1-6-6-2-3-5-	-4-3-3-2-	-	-	-	-	-	1.07
30-45.4958-109.5661-2-06-						0-M38318-06/17/78-12-	27-	11.0-	C-	-	7.2-	700-		3-1-1-	-	-	-	-	-3-4-3-2-2-	-	-	-	-	-	1.00
30-45.4956-109.5825-2-07-						0-M38319-06/17/78-14-	27-	15.0-	C-	-	8.2-	250-		9-1-1-5-6-3-3-1-3-4-3-2-2-	-	-	-	-	-	-	0.16
30-45.4750-109.5808-2-06-						0-M38320-06/17/78-13-	28-	16.0-	C-	-	7.9-	210-		4-1-1-4-7-3-3-1-1-3-3-3-2-	-3-	-	-	-	-	-	0.05
30-45.4633-109.5656-2-06-						0-M38321-06/18/78-	9-	27-	12.5-	C-	-	7.2-	325-		12-1-6-4-6-3-3-1-1-4-3-2-1-	-3-	-	-	-	-	0.35
30-45.4711-109.5414-2-08-						0-M38322-06/18/78-	9-	27-	11.0-	C-	-	7.6-	500-		18-1-6-1-6-	-	-1-	-4-3-1-1-	-	-3-	36-	15-	15-	1.28
30-45.4900-109.5414-2-08-						0-M38323-06/18/78-	9-	27-	15.0-	C-	-	7.5-	400-		15-1-6-	-	-	-	-1-	-4-3-3-1-	-	-8-	-	-	-	0.02
30-45.4308-109.8325-2-06-						0-M38324-06/20/78-	-	20-	10.2-	C-	-	8.2-	700-		11-2-1-	-	-	-	-	-1-3-3-4-1-	-	-	-	-	-	3.41
30-45.3942-109.8622-2-07-						0-M38325-06/20/78-	-	20-	7.2-	C-	-	8.4-	120-		9-1-1-4-7-3-4-1-1-3-4-2-1-	-2-	-	-	-	-	0.01
30-45.3822-109.8839-2-07-						0-M38326-06/20/78-	8-	22-	10.0-	C-	-	7.5-	150-		-2-6-7-6-4-4-	-1-2-3-5-1-	-2-	-	-	-	-	0.01
30-45.3606-109.8953-2-08-						0-M38327-06/20/78-	9-	24-	13.5-	C-	-	8.0-	600-		16-2-7-	-	-	-	-1-	-2-3-4-1-	-	-4-	48-	16-	1-	4.23
30-45.3583-109.9019-2-07-						0-M38328-06/20/78-10-	25-	7.5-	C-	-	6.7-	650-		10-2-1-3-7-4-4-1-3-1-3-4-1-	-	-	-	-	-	-	2.97
30-45.3553-109.8936-2-07-						0-M38329-06/20/78-10-	25-	4.5-	C-	-	7.3-	240-		4-2-7-4-6-5-4-1-2-1-3-5-1-	-	-	-	-	-	-	2.56
30-45.3583-109.8775-2-07-						0-M38330-06/20/78-11-	25-	10.0-	C-	-	7.6-	500-		-2-7-4-4-5-4-1-3-1-3-5-1-	-1-	-	-	-	-	0.53
30-45.4053-109.8689-2-07-						0-M38331-06/20/78-12-	25-	15.0-	C-	-	6.7-	500-		5-2-1-4-6-3-3-1-3-	-3-4-1-	-1-	-	-	-	0.06

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY Concentrations reported in weight parts per billion (ppb)											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.8239-108.9428-2-07-						0-M38291	64357	221	87	19	49	33061	30	163	298	1494	58	133
30-45.7847-108.9678-2-06-						0-M38292	73619	160	26	10	53	47390	11	60	113	1100	17	81
30-45.7814-108.9683-2-07-						0-M38293	63195	200	35	11	54	60390	17	74	125	1166	15	273
30-45.7683-108.9869-2-08-						0-M38294	17951	207	-25	9	79	14356	10	63	84	430	10	430
30-45.7753-109.0106-2-08-						0-M38295	53022	258	33	15	-25	41508	8	88	131	1024	21	261
30-45.7789-109.0058-2-07-						0-M38296	57699	209	37	10	74	47949	51	79	117	1052	19	104
30-45.7950-109.0014-2-06-						0-M38297	75090	212	39	10	-25	34469	149	87	97	1126	19	158
30-45.7956-109.0044-2-07-						0-M38298	67707	177	44	10	42	47592	39	104	103	1244	23	229
30-45.8450-109.0547-2-08-						0-M38299	471000	626	96	46	778	270000	100	-25	188	5532	76	7895
30-45.8081-108.9706-2-06-						0-M38290	93924	239	49	17	69	53203	11	86	146	1452	28	116
30-45.8039-108.9683-2-07-						0-M38291	73961	266	48	16	-25	62430	21	80	119	1406	27	-50
30-45.8061-108.9703-2-07-						0-M38292	100000	252	47	17	29	62479	60	75	120	1564	26	76
30-45.7767-108.9100-2-08-						0-M38293	56722	184	63	18	39	69662	23	110	171	1459	29	274
30-45.7756-108.9122-2-06-						0-M38294	170000	328	72	26	104	102000	21	80	174	2540	49	211
30-45.7883-108.8764-2-07-						0-M38295	125000	406	57	18	66	114000	17	79	175	2118	27	278
30-45.7703-108.9447-2-08-						0-M38296	50968	151	52	20	68	61049	11	118	170	1199	27	371
30-45.7833-108.9394-2-06-						0-M38297	105000	271	55	17	77	94574	21	109	179	1907	35	159
30-45.7997-109.0458-2-06-						0-M38298	52154	258	59	13	69	25700	8	133	171	977	25	180
30-45.8014-109.0464-2-08-						0-M38299	60678	279	62	19	43	22009	7	134	177	1030	28	195
30-45.8175-109.0461-2-06-						0-M38300	53098	224	50	12	-25	24505	8	124	140	919	26	98
30-45.7742-109.1036-2-08-						0-M38301	92087	204	80	48	58	45998	10	158	229	1639	53	384
30-45.7736-109.1044-2-06-						0-M38302	106000	262	79	20	54	49756	12	136	231	1755	49	229
30-45.7733-109.1028-2-07-						0-M38303	171000	383	107	30	92	81801	67	109	274	2468	65	395
30-45.8286-109.0892-2-08-						0-M38304	130000	296	77	24	61	50958	7	98	208	1701	44	213
30-45.8639-109.0917-2-08-						0-M38305	48872	209	79	19	99	30773	36	162	239	1343	43	126
30-45.4156-109.6022-2-07-						0-M38306	56409	64	-25	46	38	7637	19	39	314	564	23	681
30-45.4328-109.5669-2-08-						0-M38307	23413	-55	-25	164	76	6998	12	-25	80	246	11	761
30-45.4336-109.5444-2-07-						0-M38308	42942	67	26	15	52	11736	27	41	66	620	23	113
30-45.4497-109.5361-2-08-						0-M38309	18532	-55	-25	10	34	4377	-3	49	46	375	24	425
30-45.4081-109.5244-2-08-						0-M38310	4463	-55	-25	39	59	304	5	28	51	207	20	222
30-45.3978-109.5406-2-07-						0-M38311	5552	-55	-25	44	65	1856	6	36	71	265	19	268
30-45.3911-109.5428-2-07-						0-M38312	44494	97	32	24	91	12541	29	39	90	627	26	246
30-45.3839-109.5908-2-06-						0-M38313	18891	-55	33	21	44	7174	7	50	155	525	27	293
30-45.4228-109.5172-2-07-						0-M38314	6566	78	75	17	121	2086	16	121	265	721	45	305
30-45.4642-109.5489-2-08-						0-M38315	47044	167	90	50	67	7662	22	137	313	1043	47	333
30-45.4606-109.5378-2-06-						0-M38316	16475	-55	-25	-4	58	5614	37	-25	-25	-200	-4	-50
30-45.4691-109.5350-2-06-						0-M38317	67736	88	-25	-4	-25	28866	21	-25	-25	493	-4	-50
30-45.4958-109.5661-2-06-						0-M38318	27051	-55	-25	6	-25	6486	8	-25	-25	-200	-4	-50
30-45.4856-109.5825-2-07-						0-M38319	36777	102	-25	21	-25	6141	17	-25	-25	-200	-4	-50
30-45.4750-109.5808-2-06-						0-M38320	29097	-55	-25	-4	-25	5358	6	-25	-25	-200	-4	-50
30-45.4633-109.5656-2-06-						0-M38321	45729	-55	-25	13	-25	8134	58	-25	29	226	-4	-50
30-45.4711-109.5414-2-08-						0-M38322	60639	-55	-25	13	-25	13870	6	-25	31	441	-4	-50
30-45.4900-109.5414-2-08-						0-M38323	27751	-55	-25	-4	54	3163	51	-25	46	-200	-4	-50
30-45.4308-109.8325-2-06-						0-M38324	76538	165	-25	61	78	55350	14	-25	131	827	8	-50
30-45.3942-109.8622-2-07-						0-M38325	10540	-55	-25	10	45	9331	7	-25	107	-200	-4	-50
30-45.3822-109.8839-2-07-						0-M38326	16563	-55	26	13	48	14014	5	-25	68	265	6	-50
30-45.3606-109.8953-2-08-						0-M38327	9391	-55	-25	5	34	1793	-3	-25	28	-200	7	-50
30-45.3583-109.9019-2-07-						0-M38328	8894	-55	-25	-4	63	1557	-3	-25	-25	-200	-4	190
30-45.3553-109.8936-2-07-						0-M38329	3065	-55	-25	-4	107	719	-3	33	91	-200	15	278
30-45.3683-109.8775-2-07-						0-M38330	3818	-55	-25	32	89	4114	10	32	155	233	13	228
30-45.4053-109.8689-2-07-						0-M38331	78666	109	36	10	-25	31330	6	37	133	1007	30	458

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																									U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (%) UNITS IN ppb
30-	45.4403-	109.8119-	2-	08-		0-	438332-	06/20/78-	12-	25-	9.0-	C-	-	7.8-	260-	4-	2-	1-	-	-	-	-1-	-2-	3-	2-	1-	-	-8-	-	-	-	0.78
30-	45.4597-	109.8989-	2-	06-		0-	438333-	06/20/78-	13-	25-	12.0-	C-	-	7.0-	370-	6-	2-	4-	-	-	-	-2-	-	2-	2-	1-	-1-	-	-	-	-	0.49
30-	45.4631-	109.8928-	2-	07-		0-	438334-	06/20/78-	13-	25-	14.0-	C-	-	7.5-	500-	5-	2-	7-	4-	6-	3-	4-	-	3-	4-	3-	4-	1-	-3-	-	-	-	-	0.19
30-	45.4917-	109.9039-	2-	06-		0-	438335-	06/20/78-	14-	25-	12.0-	C-	-	6.2-	600-	10-	1-	1-	-	-	-	4-	3-	-	2-	3-	5-	1-	-	-	-	-	2-	0.40
30-	45.4833-	109.9006-	2-	07-		0-	438336-	06/20/78-	15-	25-	13.0-	C-	-	7.2-	235-	3-	1-	7-	4-	7-	3-	4-	1-	1-	2-	3-	4-	1-	-3-	-	-	-	-	0.16
30-	45.4725-	109.8972-	2-	06-		0-	438337-	06/20/78-	16-	25-	15.0-	C-	-	7.2-	330-	9-	1-	1-	4-	1-	4-	3-	1-	1-	2-	3-	5-	1-	-1-	-	-	-	-	0.11
30-	45.4667-	109.8000-	2-	07-		0-	438338-	06/23/78-	7-	22-	10.0-	C-	-	7.7-	230-	8-	1-	1-	3-	7-	3-	3-	1-	3-	1-	3-	4-	1-	-1-	-	-	-	-	0.20
30-	45.4561-	109.7739-	2-	06-		0-	438340-	06/23/78-	8-	23-	14.5-	C-	-	7.6-	400-	2-	2-	6-	-	-	-	-	-	4-	3-	2-	1-	-2-	-	-	-	-	0.13
30-	45.4658-	109.7769-	2-	07-		0-	438341-	06/23/78-	8-	25-	12.0-	C-	-	8.0-	270-	6-	2-	8-	4-	7-	3-	3-	1-	3-	3-	2-	4-	1-	-2-	-	-	-	-	0.71
30-	45.4400-	109.7942-	2-	07-		0-	438342-	06/23/78-	9-	25-	7.0-	C-	-	7.2-	720-	4-	2-	1-	4-	6-	5-	4-	1-	3-	2-	3-	2-	1-	-1-	-	-	-	-	0.58
30-	45.4328-	109.7536-	2-	06-		0-	438343-	06/23/78-	10-	25-	15.0-	C-	-	6.6-	440-	10-	2-	1-	-	-	-	-1-	-	2-	3-	2-	1-	-	-1-	-	-	-	-	1.67
30-	45.3606-	109.8025-	2-	07-		0-	438344-	06/23/78-	14-	27-	14.5-	C-	-	7.2-	500-	11-	2-	7-	5-	6-	2-	3-	1-	3-	2-	3-	5-	1-	-	-	-	-	-	1.80
30-	45.3553-	109.8036-	2-	07-		0-	438345-	07/23/78-	10-	27-	4.0-	C-	-	8.6-	155-	4-	2-	6-	7-	8-	3-	3-	1-	3-	1-	5-	4-	3-	-2-	-	-	-	-	0.15
30-	45.4081-	109.7489-	2-	06-		0-	438346-	06/23/78-	15-	24-	12.5-	C-	-	6.8-	260-	5-	2-	1-	4-	7-	3-	3-	1-	1-	2-	3-	2-	3-	-	-	-	-	-	0.44
30-	45.4022-	109.7400-	2-	07-		0-	438347-	06/23/78-	15-	25-	16.0-	C-	-	6.9-	195-	9-	2-	1-	-	-	3-	3-	1-	3-	4-	4-	3-	3-	-	-	-	-	-	2.86
30-	45.5611-	109.4875-	2-	06-		0-	438348-	06/26/78-	13-	25-	12.0-	-	-	8.4-	420-	2-	2-	1-	4-	2-	3-	3-	1-	3-	4-	3-	2-	2-	-3-	-	-	-	-	0.36
30-	45.5589-	109.4244-	2-	06-		0-	438349-	06/26/78-	14-	25-	13.0-	C-	-	7.6-	650-	4-	2-	7-	-	-	4-	3-	1-	3-	4-	4-	3-	2-	-	-	-	-	-	0.96
30-	45.4178-	109.7775-	2-	06-		0-	438350-	06/28/78-	-	19-	8.0-	C-	-	7.6-	330-	11-	2-	1-	7-	6-	3-	3-	1-	2-	1-	3-	4-	3-	-3-	-	-	-	-	2.00
30-	45.4136-	109.7914-	2-	06-		0-	438351-	06/28/78-	9-	24-	8.0-	-	-	7.9-	550-	4-	2-	7-	6-	4-	6-	3-	3-	1-	3-	2-	3-	3-	-3-	-	-	-	-	1.51
30-	45.3497-	109.7806-	2-	07-		0-	438352-	07/01/78-	10-	18-	4.0-	C-	-	8.9-	325-	27-	2-	7-	3-	3-	4-	4-	1-	3-	5-	2-	5-	3-	-3-	-	-	-	-	0.07
30-	45.5397-	109.6494-	2-	07-		0-	438353-	07/10/78-	9-	29-	12.0-	C-	-	8.6-	510-	8-	4-	2-	-	-	3-	3-	1-	2-	4-	3-	2-	2-	-	-	-	-	-	0.38
30-	45.4908-	109.9303-	2-	06-		0-	438354-	06/30/78-	17-	29-	11.0-	-	-	8.6-	430-	8-	2-	7-	-	-	3-	3-	1-	3-	4-	4-	3-	2-	-	-	-	-	-	0.14
30-	45.4217-	109.7394-	2-	07-		0-	438355-	06/27/78-	8-	25-	8.0-	C-	-	7.2-	110-	11-	2-	6-	-	-	4-	4-	1-	3-	2-	3-	2-	1-	-3-	-	-	-	-	0.28
30-	45.3947-	109.7131-	2-	06-		0-	438356-	06/27/78-	9-	26-	12.5-	C-	-	5.9-	80-	11-	2-	6-	-	-	-	-1-	-	2-	4-	3-	1-	-	-	-	-	-	-	0.17
30-	45.4122-	109.7067-	2-	06-		0-	438357-	06/27/78-	10-	25-	12.0-	C-	-	6.2-	420-	11-	2-	6-	5-	6-	3-	3-	1-	3-	4-	3-	3-	1-	-	-	-	-	-	2.29
30-	45.4056-	109.6631-	2-	08-		0-	438358-	06/26/78-	11-	26-	12.0-	-	-	6.5-	30-	2-	2-	1-	-	-	-	-1-	3-	4-	3-	2-	1-	-3-	8-	8-	808-	8-	-	0.05
30-	45.4217-	109.6319-	2-	07-		0-	438359-	06/27/78-	11-	25-	18.5-	C-	-	6.7-	420-	15-	2-	4-	-	-	-	-	-	4-	2-	2-	1-	-3-	-	-	-	-	-	0.39
30-	45.4897-	109.9175-	2-	07-		0-	438360-	06/30/78-	18-	29-	11.0-	-	-	8.5-	460-	13-	2-	4-	5-	4-	3-	3-	1-	3-	4-	3-	3-	2-	-	-	-	-	-	0.31
30-	45.4869-	109.9806-	2-	07-		0-	438361-	06/30/78-	16-	27-	7.0-	-	-	8.5-	550-	3-	2-	7-	3-	9-	3-	3-	1-	3-	2-	3-	4-	3-	-3-	-	-	-	-	0.15
30-	45.5131-	109.9406-	2-	07-		0-	438362-	06/30/78-	9-	27-	2.0-	C-	-	8.6-	267-	4-	2-	7-	4-	6-	3-	3-	1-	2-	2-	2-	4-	1-	-9-	-	-	-	-	0.19
30-	45.5131-	109.9261-	2-	07-		0-	438363-	06/29/78-	10-	28-	2.0-	C-	-	8.0-	385-	4-	2-	7-	4-	6-	3-	3-	1-	2-	2-	2-	3-	2-	-3-	-	-	-	-	0.54
30-	45.5175-	109.9261-	2-	07-		0-	438365-	06/29/78-	12-	29-		-C-	-	8.4-	160-	6-	2-	7-	4-	6-	3-	3-	1-	2-	1-	3-	3-	2-	-	-	-	-	-	0.43
30-	45.5064-	109.9106-	2-	07-		0-	438366-	06/30/78-	12-	30-	9.0-	C-	-	8.3-	385-	4-	2-	4-	4-	6-	3-	3-	1-	3-	2-	3-	3-	2-	-3-	-	-	-	-	0.21
30-	45.4161-	109.8181-	2-	07-		0-	438367-	07/01/78-	12-	30-	22.0-	C-	-	8.5-	470-	6-	2-	7-	5-	6-	3-	3-	1-	2-	2-	3-	3-	1-	-8-	-	-	-	-	0.64
30-	45.5458-	109.6878-	2-	06-		0-	438369-	07/07/78-	10-	29-	8.0-	C-	-	8.3-	280-	6-	2-	6-	6-	6-	3-	3-	1-	3-	4-	3-	2-	2-	-	-	-	-	-	0.38
30-	45.5506-	109.7078-	2-	08-		0-	438370-	07/07/78-	12-	24-	12.0-	C-	-	8.6-	250-	11-	2-	6-	-	-	3-	3-	1-	-	3-	2-	3-	3-	-	-8-	-160-	-	-	0.14
30-	45.5544-	109.7344-	2-	07-		0-	438371-	07/07/78-	12-	25-	15.0-	C-	-	9.0-	250-	9-	2-	6-	4-	6-	2-	3-	1-	2-	4-	3-	2-	3-	-3-	-	-	-	-	0.15
30-	45.5561-	109.7339-	2-	07-		0-	438372-	07/07/78-	13-	24-	16.0-	C-	-	8.9-	232-	9-	2-	6-	4-	6-	3-	3-	1-	2-	4-	2-	3-	3-	-3-	-	-	-	-	0.15
30-	45.4197-	109.6264-	2-	06-		0-	438373-	06/27/78-	12-	25-	9.0-	C-	-	6.7-	450-	4-	2-	1-	6-	6-	2-	3-	1-	1-	2-	3-	3-	2-	-	-	-	-	-	0.86
30-	45.4089-	109.6642-	2-	07-		0-	438374-	06/27/78-	12-	25-	15.5-	C-	-	8.1-	283-	8-	2-	2-	4-	7-	3-	3-	3-	3-	4-	3-	2-	1-	-3-	-	-	-	-	0.21
30-	45.3911-	109.6769-	2-	08-		0-	438375-	06/27/78-	13-	26-	15.0-	C-	-	7.7-	452-	6-	2-	6-	-	-	-	-1-	3-	2-	3-	2-	1-	-	-4-	8-	8-	8-	-	0.58
30-	45.3789-	109.6986-	2-	06-		0-	438376-	06/27/78-	13-	25-	11.0-	C-	-	8.4-	92-	20-	2-	1-	-	-	-	-1-	3-	2-	2-	2-	1-	-3-	-	-	-	-	-	0.63
30-	45.3783-	109.6578-	2-	06-		0-	438377-	06/27/78-	14-	26-	19.0-	C-	-	8.2-	500-	4-	2-	3-	6-	6-	2-	3-	1-	1-	3-	2-	3-	1-	-3-	-	-	-	-	0.30
30-	45.3767-	109.6900-	2-	07-		0-	438378-	06/27/78-	15-	27-	7.0-	C-	-	8.9-	67-	13-	2-	1-	5-	6-	4-	3-	1-	3-	2-	4-	2-	1-	-8-	-	-	-	-	0.56
30-	45.4811-	109.6842-	2-	07-		0-	438379-	06/28/78-	13-	27-	15.0-	C-	-	7.0-	220-	16-	2-	6-	7-	9-	3-	3-	1-	2-	2-	3-	5-	1-	-3-	-	-	-	-	0.35
30-	45.4422-	109.7392-	2-	06-		0-	438380-	06/27/78-	15-	27-	10.0-	C-	-	7.0-	400-	11-	2-	6-	5-	6-	3-	3-	1-	2-	4-	3-	3-	2-	-3-	-	-	-	-	10.22
30-	45.4325-	109.6914-	2-	06-		0-	438381-	06/27/78-	18-	26-	18.0-	C-	-	8.6-	192-	10-	2-	6-	-	-	-	-1-	3-	4-	3-	3-	2-	-3-	-	-	-	-	-	0.21
30-	45.5467-	109.6283-	2-	07-		0-	438382-	07/07/78-	14-	25-	15.0-	C-	-	8.0-	270-	6-	2-	6-	-	-	3-	3-	1-	3-	4-	4-	2-	3-	-3-	-	-	-	-	-	0.67
30-	45.4797-	109.7228-	2-	07-		0-	438383-	06/24/78-	10-	22-	14.0-	C-	-	7.8-	160-	11-	2-	4-	4-	6-	4-	4-	1-	3-	2-	3-	2-	2-	-	-	-	-	-	0.37
30-	45.4767-	109.7197-	2-	07-		0-	438384-	06/24/78-	10-	22-	10.0-	-	-	6.3-	50-	10-	2-	1-	4-	6-	3-	3-	1-	3-	2-	3-	3-	2-	-	-	-	-	-	0.91
30-	45.4733-	109.6675-	2-	07-		0-	438385-	06/24/78-	12-	25-	16.0-	-	-	5.8-	244-	5-	4-	2-	-	-	3-	3-	1-	3-	4-	2-	3-	2-	-3-	-	-	-	-	-	0.52

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(2)

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per billion (ppb)											
							Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.4403-109.8119-2-08-						0-M38332	44040	-55	-25	48	51	15281	5	32	93	606	17	431
30-45.4597-109.8989-2-06-						0-M38333	45799	-55	36	122	88	12812	38	39	169	715	22	506
30-45.4631-109.8928-2-07-						0-M38334	71360	-55	34	8	61	21625	6	26	112	884	28	476
30-45.4917-109.9039-2-06-						0-M38335	78381	-55	34	68	86	20372	10	36	153	917	25	870
30-45.4833-109.9006-2-07-						0-M38336	31309	-55	57	32	182	4300	24	89	221	808	39	-50
30-45.4725-109.8972-2-06-						0-M38337	45808	-55	66	12	62	16926	-3	83	248	1097	40	-50
30-45.4667-109.8000-2-07-						0-M38338	30058	-55	75	17	88	4481	6	138	319	1057	51	-50
30-45.4561-109.7739-2-06-						0-M38340	52296	-55	31	154	91	12340	31	50	116	790	29	65
30-45.4658-109.7769-2-07-						0-M38341	35587	-55	39	12	86	7032	5	51	153	727	29	-50
30-45.4400-109.7942-2-07-						0-M38342	10131	-55	44	44	91	3559	5	69	314	568	25	326
30-45.4328-109.7536-2-06-						0-M38343	47623	-55	41	90	69	20451	5	71	188	907	27	630
30-45.3606-109.8025-2-07-						0-M38344	72749	-55	61	13	85	28116	4	97	220	1397	43	94
30-45.3553-109.8036-2-07-						0-M38345	17112	-55	87	16	105	18866	5	139	309	1126	48	-50
30-45.4081-109.7489-2-06-						0-M38346	37983	-55	-25	-4	134	10859	-3	-25	-25	-200	-4	389
30-45.4022-109.7400-2-07-						0-M38347	19074	-55	-25	-4	109	5477	-3	-25	-25	-200	-4	346
30-45.5611-109.4875-2-06-						0-M38348	42631	-55	-25	-4	280	11423	13	-25	-25	-200	-4	403
30-45.5589-109.4244-2-06-						0-M38349	64970	121	-25	6	149	19214	4	-25	-25	417	-4	1295
30-45.4178-109.7775-2-06-						0-M38350	51694	-55	-25	-4	61	8014	-3	-25	-25	-200	-4	-50
30-45.4136-109.7914-2-06-						0-M38351	79806	107	-25	-4	57	22872	15	-25	-25	778	9	337
30-45.3497-109.7806-2-07-						0-M38352	3132	-55	-25	-4	41	834	-3	-25	-25	-200	-4	254
30-45.5397-109.6494-2-07-						0-M38353	6868	-55	-25	-4	54	1630	-3	-25	-25	-200	-4	-50
30-45.4908-109.9303-2-06-						0-M38354	72123	103	-25	-4	30	17595	-3	-25	-25	451	-4	-50
30-45.4217-109.7394-2-07-						0-M38355	15990	56	-25	-4	215	4347	8	-25	-25	-200	-4	369
30-45.3947-109.7131-2-06-						0-M38356	10795	-55	-25	348	287	2690	-3	-25	-25	-200	15	493
30-45.4122-109.7067-2-06-						0-M38357	62368	135	-25	11	86	15923	8	-25	-25	610	6	271
30-45.4056-109.6631-2-08-						0-M38358	35694	-55	-25	25	110	11074	4	-25	-25	241	-4	706
30-45.4217-109.6319-2-07-						0-M38359	59849	109	-25	-4	35	15761	-3	-25	-25	435	-4	255
30-45.4897-109.9175-2-07-						0-M38360	76564	146	-25	-4	58	17427	-3	-25	-25	431	-4	208
30-45.4969-109.9806-2-07-						0-M38361	27005	73	-25	23	31	7332	-3	-25	-25	390	7	138
30-45.5131-109.9406-2-07-						0-M38362	48632	67	-25	-4	37	7941	-3	-25	-25	352	-4	407
30-45.5131-109.9261-2-07-						0-M38363	61186	120	-25	-4	164	11077	9	-25	-25	476	6	205
30-45.5175-109.9261-2-07-						0-M38365	23616	-55	-25	-4	74	4381	-3	35	-25	254	-4	375
30-45.5064-109.9106-2-07-						0-M38366	61850	125	-25	5	76	12443	-3	-25	61	640	9	579
30-45.4161-109.8181-2-07-						0-M38367	57911	78	-25	5	162	24145	29	-25	-25	505	-4	546
30-45.5458-109.6878-2-06-						0-M38368	41647	-55	-25	-4	69	5573	12	-25	-25	307	6	339
30-45.5506-109.7078-2-08-						0-M38370	37339	75	-25	9	55	5391	5	-25	-25	278	-4	1247
30-45.5544-109.7344-2-07-						0-M38371	36937	-55	-25	-4	151	6151	9	-25	-25	288	8	99
30-45.5561-109.7339-2-07-						0-M38372	35923	74	-25	6	138	6119	14	48	46	474	14	186
30-45.4197-109.6264-2-06-						0-M38373	91940	109	-25	7	65	27006	-3	-25	37	808	12	99
30-45.4089-109.6642-2-07-						0-M38374	41928	86	33	10	150	12559	13	56	110	643	18	148
30-45.3911-109.6769-2-08-						0-M38375	66247	118	-25	111	48	16612	4	-25	-25	540	6	361
30-45.3789-109.6986-2-06-						0-M38376	12634	-55	-25	7	128	3940	-3	-25	32	224	9	474
30-45.3783-109.6578-2-06-						0-M38377	94935	101	30	9	144	25953	12	-25	71	889	16	68
30-45.3767-109.6900-2-07-						0-M38378	5516	63	-25	-4	49	1632	-3	-25	-25	-200	-4	245
30-45.4811-109.6842-2-07-						0-M38379	41123	119	-25	6	-25	5189	-3	-25	31	374	-4	157
30-45.4422-109.7392-2-06-						0-M38380	52795	-55	28	33	28	12971	5	34	69	620	14	411
30-45.4325-109.6914-2-06-						0-M38381	29352	-55	-25	9	133	3695	78	-25	36	307	6	307
30-45.5467-109.6283-2-07-						0-M38382	36990	58	-25	-4	61	6192	5	28	62	408	9	183
30-45.4797-109.7228-2-07-						0-M38383	26307	-55	34	7	130	3072	-3	66	102	436	18	426
30-45.4767-109.7197-2-07-						0-M38384	6478	99	-25	-4	74	1602	-3	-25	-25	-200	-4	325
30-45.4733-109.6675-2-07-						0-M38385	32883	100	-25	-4	46	4466	-3	-25	-25	217	-4	-50

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
							TIME SAMPLED																										
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmhos/cm)	SCINTILLOMETER (rel. ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (θ) UNITS IN ppb
30-	45.4464-	109.7047-	2-	06-		0-M38386-	06/24/78-	12-	25-	14.0-	0-	-	7.0-	175-		8-	2-	4-	-	-	-	-1-	-2-	3-	4-	2-	-	-	-	-	-	0.38
30-	45.4544-	109.6808-	2-	07-		0-M38387-	06/24/78-	13-	22-	22.0-	0-	-	7.3-	390-		8-	2-	4-	5-	6-	3-	3-	1-	3-	4-	2-	4-	2-	3-	-	-	-	-	1.00
30-	45.4867-	109.6694-	2-	07-		0-M38388-	06/24/78-	14-	25-	17.0-	0-	-	7.8-	268-		11-	2-	5-	3-	6-	3-	3-	1-	1-	4-	3-	4-	4-	3-	-	-	-	-	0.25
30-	45.5589-	109.4139-	2-	07-		0-M38389-	06/25/78-	11-	20-	14.0-	0-	-	7.9-	520-		4-	1-	6-	7-	6-	2-	3-	1-	2-	4-	3-	2-	6-	-	-	-	-	-	0.56
30-	45.5983-	109.4039-	2-	06-		0-M38390-	06/25/78-	11-	22-	17.0-	0-	-	7.8-	510-		9-	4-	6-	6-	6-	2-	3-	5-	3-	4-	4-	2-	6-	3-	-	-	-	-	1.03
30-	45.6050-	109.4575-	2-	06-		0-M38391-	06/25/78-	12-	22-	16.0-	0-	-	8.3-	590-		12-	1-	1-	-	-	3-	3-	1-	3-	4-	3-	2-	6-	-	-	-	-	-	0.19
30-	45.6083-	109.4633-	2-	07-		0-M38392-	06/25/78-	13-	22-	15.0-	0-	-	8.5-	600-		12-	1-	1-	3-	6-	3-	3-	3-	2-	4-	3-	2-	3-	3-	-	-	-	-	0.29
30-	45.6050-	109.4828-	2-	06-		0-M38393-	06/25/78-	13-	23-	17.0-	0-	-	8.7-	720-		9-	1-	4-	6-	6-	2-	3-	2-	3-	4-	3-	2-	3-	3-	-	-	-	-	0.21
30-	45.5947-	109.4378-	2-	06-		0-M38394-	06/25/78-	14-	22-	12.0-	0-	-	9.4-	375-		11-	2-	3-	7-	6-	3-	3-	1-	3-	4-	2-	3-	3-	-	-	-	-	-	0.09
30-	45.5969-	109.4078-	2-	07-		0-M38395-	06/25/78-	15-	20-	18.0-	0-	-	8.2-	670-		4-	1-	6-	5-	6-	2-	3-	3-	2-	4-	3-	2-	4-	3-	-	-	-	-	1.04
30-	45.5783-	109.4131-	2-	07-		0-M38396-	06/25/78-	15-	20-	14.0-	0-	-	6.5-	480-		9-	1-	1-	5-	6-	2-	3-	1-	2-	4-	3-	2-	4-	-	-	-	-	-	0.19
30-	45.5728-	109.4167-	2-	06-		0-M38397-	06/25/78-	15-	20-	12.5-	0-	-	6.5-	580-		8-	1-	6-	-	-	3-	3-	1-	3-	4-	3-	1-	4-	-	-	-	-	-	1.06
30-	45.5078-	109.4814-	2-	06-		0-M38398-	06/26/78-	9-	20-	12.0-	0-	-	7.5-	400-		11-	2-	3-	4-	6-	2-	3-	1-	3-	2-	3-	4-	3-	3-	-	-	-	-	1.00
30-	45.5333-	109.4083-	2-	07-		0-M38399-	06/26/78-	11-	22-	15.5-	0-	-	-	-		11-	2-	4-	7-	6-	3-	3-	1-	1-	4-	3-	3-	3-	3-	-	-	-	-	3.41
30-	45.5328-	109.4111-	2-	07-		0-M38400-	06/26/78-	11-	23-	17.0-	0-	-	6.3-	600-		4-	2-	4-	4-	6-	3-	3-	3-	1-	2-	3-	3-	3-	3-	-	-	-	-	0.61
30-	45.5617-	109.4072-	2-	07-		0-M38401-	06/26/78-	12-	25-	10.0-	0-	-	8.5-	610-		4-	2-	1-	5-	6-	3-	3-	1-	2-	4-	3-	2-	2-	3-	-	-	-	-	0.72
30-	45.5661-	109.4433-	2-	07-		0-M38402-	06/26/78-	-	25-	14.0-	0-	-	8.0-	580-		11-	-	-	-	-	3-	3-	1-	3-	4-	3-	2-	2-	3-	-	-	-	-	0.19
30-	45.5722-	109.4811-	2-	06-		0-M38403-	06/26/78-	12-	13-	11.0-	0-	-	8.0-	320-		11-	2-	6-	4-	6-	3-	3-	1-	3-	4-	3-	2-	2-	3-	-	-	-	-	0.52
30-	45.7189-	109.0797-	2-	07-		0-M38406-	06/23/78-	14-	31-	26.0-	0-	-	7.6-	50000-		10-	1-	6-	6-	6-	1-	4-	2-	1-	4-	3-	2-	1-	3-	-	-	-	-	15.03
30-	45.7236-	108.0883-	2-	08-		0-M38407-	06/23/78-	15-	34-	18.0-	0-	-	7.2-	1800-		15-	1-	6-	-	-	-	-	-	-	4-	3-	3-	1-	3-	8-	-	-	-	1.42
30-	45.7392-	108.0808-	2-	07-		0-M38408-	06/23/78-	15-	30-	29.0-	0-	-	8.3-	50000-		13-	1-	6-	4-	6-	1-	4-	1-	2-	4-	3-	3-	1-	3-	-	-	-	-	13.88
30-	45.7392-	109.0822-	2-	08-		0-M38409-	06/23/78-	15-	30-	12.5-	0-	-	6.8-	29500-		10-	1-	6-	-	-	-	-	-	-	4-	3-	3-	1-	3-	1-	6-	-	-	2.57
30-	45.7328-	108.0803-	2-	07-		0-M38410-	06/23/78-	15-	32-	28.5-	0-	-	8.8-	37000-		9-	1-	6-	6-	6-	2-	4-	5-	1-	4-	3-	3-	1-	3-	-	-	-	-	3.01
30-	45.7392-	108.2194-	2-	07-		0-M38412-	06/24/78-	9-	24-	21.5-	-	-	8.1-	1800-		4-	1-	6-	3-	6-	2-	3-	1-	1-	4-	3-	3-	1-	3-	-	-	-	-	2.18
30-	45.7350-	108.2158-	2-	06-		0-M38413-	06/24/78-	9-	25-	15.0-	0-	-	6.9-	2400-		9-	1-	6-	6-	8-	3-	3-	1-	-	4-	3-	3-	2-	3-	-	-	-	-	0.01
30-	45.7142-	108.2342-	2-	07-		0-M38417-	06/24/78-	11-	30-	24.5-	-	-	7.7-	4600-		12-	1-	6-	4-	6-	3-	4-	1-	2-	3-	4-	3-	2-	3-	-	-	-	-	2.76
30-	45.7158-	108.2358-	2-	07-		0-M38418-	06/24/78-	11-	29-	26.0-	0-	-	8.2-	4575-		16-	1-	6-	4-	6-	3-	4-	2-	2-	3-	4-	3-	2-	3-	-	-	-	-	2.92
30-	45.7150-	108.2381-	2-	06-		0-M38419-	06/24/78-	12-	29-	13.5-	0-	-	7.6-	2400-		13-	1-	6-	3-	6-	4-	3-	1-	-	3-	3-	3-	2-	3-	-	-	-	-	0.37
30-	45.7325-	109.1883-	2-	07-		0-M38420-	06/24/78-	13-	30-	20.5-	0-	-	7.2-	2400-		9-	1-	6-	6-	6-	3-	4-	1-	1-	4-	3-	3-	1-	3-	-	-	-	-	2.03
30-	45.7872-	108.1844-	2-	06-		0-M38421-	06/24/78-	14-	30-	11.5-	0-	-	6.6-	1000-		9-	1-	6-	3-	6-	4-	3-	1-	-	4-	3-	3-	1-	3-	-	-	-	-	2.77
30-	45.7972-	108.1717-	2-	08-		0-M38422-	06/24/78-	14-	29-	21.5-	0-	-	6.8-	425-		9-	1-	6-	-	-	-	-	-	-	4-	3-	3-	2-	3-	3-	-	-	-	0.01
30-	45.8283-	108.1911-	2-	06-		0-M38423-	06/24/78-	15-	30-	16.5-	0-	-	6.8-	1050-		5-	1-	6-	6-	6-	-	-	-	-	3-	5-	3-	3-	3-	-	-	-	-	1.73
30-	45.8453-	108.2122-	2-	07-		0-M38424-	06/24/78-	15-	27-	19.5-	0-	-	7.8-	1200-		13-	1-	6-	3-	6-	3-	4-	1-	1-	1-	4-	3-	3-	3-	-	-	-	-	4.23
30-	45.8647-	108.2422-	2-	07-		0-M38425-	06/24/78-	15-	27-	19.5-	0-	-	7.7-	1025-		12-	1-	6-	4-	6-	2-	3-	1-	1-	1-	3-	3-	3-	3-	-	-	-	-	1.53
30-	45.7814-	108.2261-	2-	06-		0-M38426-	06/24/78-	16-	26-	11.5-	0-	-	6.5-	1625-		3-	1-	6-	4-	6-	-	-	-	-	2-	2-	3-	3-	3-	-	-	-	-	1.38
30-	45.7764-	108.2108-	2-	07-		0-M38427-	06/24/78-	16-	26-	26.5-	-	-	7.3-	2500-		9-	1-	6-	6-	6-	1-	3-	2-	1-	3-	3-	3-	3-	3-	-	-	-	-	1.96
30-	45.7594-	108.1992-	2-	06-		0-M38429-	06/24/78-	16-	26-	23.0-	0-	-	6.8-	1200-		13-	1-	6-	-	-	-	-	-	-	4-	3-	3-	3-	3-	-	-	-	-	2.12
30-	45.7681-	108.1639-	2-	09-		0-M38430-	06/24/78-	17-	24-	11.5-	0-	-	7.1-	975-		10-	1-	6-	-	-	-	-	-	-	4-	3-	3-	3-	3-	9-	6-	75-	40-	0.01
30-	45.7972-	108.1072-	2-	07-		0-M38431-	06/26/78-	10-	17-	11.5-	0-	-	8.6-	800-		12-	1-	6-	4-	6-	3-	4-	1-	1-	2-	3-	3-	3-	3-	-	-	-	-	0.49
30-	45.8650-	108.1028-	2-	06-		0-M38432-	06/26/78-	10-	18-	14.0-	0-	-	8.5-	675-		9-	1-	6-	6-	8-	-	-	-	-	3-	4-	3-	1-	3-	-	-	-	-	2.30
30-	45.9581-	108.1375-	2-	08-		0-M38433-	06/26/78-	11-	20-	10.0-	0-	-	7.8-	1675-		10-	1-	6-	-	-	-	-	-	-	3-	2-	1-	2-	3-	5-	-	-	-	0.21
30-	45.9583-	108.1375-	2-	07-		0-M38434-	06/26/78-	11-	21-	16.0-	0-	-	8.0-	1300-		12-	1-	6-	4-	6-	3-	4-	4-	2-	2-	3-	1-	2-	3-	-	-	-	-	0.60
30-	45.9583-	108.0664-	2-	08-		0-M38435-	06/26/78-	11-	21-	16.0-	0-	-	7.4-	775-		9-	1-	6-	-	-	-	-	-	-	4-	3-	1-	2-	3-	5-	-	-	-	0.48
30-	45.9556-	108.0383-	2-	08-		0-M38436-	06/26/78-	12-	21-	14.5-	0-	-	7.5-	500-		13-	1-	6-	-	-	-	-	-	-	2-	2-	1-	2-	3-	9-	6-	25-	9-	1.92
30-	45.9472-	108.0150-	2-	08-		0-M38437-	06/26/78-	12-	24-	12.0-	0-	-	7.5-	1800-		13-	1-	6-	-	-	-	-	-	-	4-	3-	1-	2-	3-	9-	18-	20-	-	5.14
30-	45.9853-	108.0269-	2-	08-		0-M38438-	06/26/78-	12-	24-	15.0-	0-	-	8.2-	2750-		8-	1-	5-	-	-	-	-	-	-	2-	3-	1-	2-	3-	5-	6-	19-	9-	11.65
30-	45.9886-	108.0675-	2-	08-		0-M38439-	06/26/78-	12-	26-	13.0-	0-	-	7.7-	1450-		4-	1-	6-	-	-	-	-	-	-	4-	3-	1-	2-	3-	5-	-	-	-	7.54
30-	45.9706-	108.0897-	2-	08-		0-M38440-	06/26/78-	13-	24-	14.0-	0-	-	7.5-	800-		13-	1-	6-	-	-	-	-	-	-	4-	3-	1-	2-	3-	5-	2-	16-	-	3.32
30-	45.9947-	108.1219-	2-	08-		0-M38441-	06/26/78-	13-	27-	12.0-	0-	-	7.1-	2000-		5-	1-	6-	-	-	-	-	-	-	4-	3-	1-	2-	3-	5-	2-	18-	-	4.52
30-	45.9717-	108.1422-	2-	07-		0-M38442-	06/26/78-	15-	27-	19.5-	0-	-	8.1-	1150-		17-	1-	6-	4-	6-	3-	4-	4-	1-	4-	3-	1-	2-	3-	-	-	-	-	1.19
30-	45.9875-	108.1422-	2-	08-		0-M38443-	06/26/78-	15-	24-	14.0-	0-	-	7.4-	1100-		9-	1-	6-	-	-	-	-	-	-	2-	2-	1-	2-	3-	5-	12-	35-	-	2.44

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAB. SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per billion (ppb)											
							Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.4464-109.7047-2-06-						0-M38396	21251	-55	-25	10	214	2629	-3	-25	30	253	-4	-50
30-45.4544-109.6808-2-07-						0-M38397	44268	79	-25	7	88	5560	10	-25	-25	356	-4	-50
30-45.4867-109.6694-2-07-						0-M38398	35932	93	-25	-4	46	4941	-3	-25	-25	-200	-4	192
30-45.5589-109.4139-2-07-						0-M38399	57149	110	-25	-4	51	15921	6	-25	-25	595	-4	346
30-45.5983-109.4039-2-06-						0-M38400	65971	162	-25	6	153	29230	15	-25	-25	921	9	584
30-45.6050-109.4575-2-06-						0-M38401	55189	169	29	7	54	24169	-3	32	44	921	18	964
30-45.6083-109.4633-2-07-						0-M38402	58257	117	-25	-4	189	19034	8	-25	-25	802	6	535
30-45.6050-109.4828-2-06-						0-M38403	87652	147	-25	6	325	20957	690	-25	-25	960	12	477
30-45.5947-109.4378-2-06-						0-M38404	45484	64	-25	-4	49	12036	-3	-25	-25	326	-4	263
30-45.5869-109.4078-2-07-						0-M38405	52803	75	-25	6	164	16689	19	-25	-25	490	-4	198
30-45.5783-109.4131-2-07-						0-M38406	65532	-55	-25	10	93	18804	6	-25	26	619	12	146
30-45.5728-109.4167-2-06-						0-M38407	57415	-55	-25	-4	-25	19810	-3	-25	32	655	8	-50
30-45.5078-109.4814-2-06-						0-M38408	38761	-55	-25	6	64	11690	15	28	-25	302	-4	-50
30-45.5333-109.4083-2-07-						0-M38409	58211	98	-25	11	56	15502	9	49	42	694	16	-50
30-45.5328-109.4111-2-07-						0-M38410	54802	75	-25	5	486	14900	33	-25	-25	537	13	-50
30-45.5617-109.4072-2-07-						0-M38411	57148	86	-25	7	79	16805	-3	-25	28	589	9	-50
30-45.5661-109.4433-2-07-						0-M38412	50739	-55	-25	8	138	13252	4	30	57	611	14	-50
30-45.5722-109.4811-2-06-						0-M38413	41841	66	-25	6	148	12527	12	-25	63	423	9	-50
30-45.7189-108.0797-2-07-						0-M38406	488000	671	33	39	234	570000	1087	-25	-25	9686	44	504
30-45.7236-108.0883-2-08-						0-M38407	105000	191	-25	29	43	104000	20	-25	-25	2032	16	3353
30-45.7392-108.0808-2-07-						0-M38408	420000	638	33	31	163	329000	140	-25	-25	6662	37	293
30-45.7392-108.0822-2-08-						0-M38409	292000	498	32	17	2348	231000	316	-25	-25	4424	35	2753
30-45.7328-108.0803-2-07-						0-M38410	370000	559	67	28	167	287000	51	-25	71	6251	54	456
30-45.7392-108.2194-2-07-						0-M38412	220000	346	-25	14	72	109000	18	-25	59	2429	27	151
30-45.7350-108.2158-2-06-						0-M38413	287000	385	47	18	90	133000	21	-25	78	3174	52	-50
30-45.7142-108.2342-2-07-						0-M38417	370000	492	33	23	137	242000	23	-25	-25	4491	50	642
30-45.7158-108.2358-2-07-						0-M38418	351000	489	-25	19	127	247000	22	-25	-25	4400	37	869
30-45.7150-108.2381-2-06-						0-M38419	233000	338	-25	11	100	128000	12	-25	-25	2560	26	568
30-45.7325-108.1883-2-07-						0-M38420	255000	397	-25	14	102	141000	27	-25	-25	2833	30	364
30-45.7972-108.1844-2-06-						0-M38421	145000	247	-25	7	32	53900	6	-25	-25	1376	17	419
30-45.7972-108.1717-2-08-						0-M38422	12545	89	-25	23	-25	8485	18	-25	-25	-200	-4	204
30-45.8283-108.1911-2-06-						0-M38423	123000	184	-25	10	64	60588	9	-25	-25	1231	14	717
30-45.8453-108.2122-2-07-						0-M38424	165000	162	-25	10	41	70741	15	-25	-25	1596	21	130
30-45.8647-108.2422-2-07-						0-M38425	118000	150	-25	7	58	41131	24	-25	-25	1121	20	141
30-45.7814-108.2261-2-06-						0-M38426	175000	165	-25	8	-25	68862	8	-25	-25	1598	15	217
30-45.7764-108.2108-2-07-						0-M38427	200000	241	-25	12	100	144000	57	-25	-25	2597	30	221
30-45.7594-108.1992-2-06-						0-M38429	140000	139	-25	311	31	63629	14	-25	-25	1361	16	1136
30-45.7681-108.1639-2-08-						0-M38430	63267	64	-25	5	1634	48309	128	-25	-25	883	9	867
30-45.7972-108.1072-2-07-						0-M38431	92312	83	-25	6	34	46792	32	-25	-25	1039	13	234
30-45.8650-108.1028-2-06-						0-M38432	98227	99	-25	456	47	38612	19	-25	-25	1016	17	475
30-45.9581-108.1375-2-08-						0-M38433	157000	152	-25	73	47	59508	5	-25	-25	1620	19	264
30-45.9583-108.1375-2-07-						0-M38434	82685	59	-25	8	793	57618	40	-25	-25	918	-4	229
30-45.9583-108.0664-2-08-						0-M38435	112000	120	-25	12	33	25444	5	-25	-25	844	10	700
30-45.9656-108.0383-2-08-						0-M38436	81694	123	-25	9	54	29949	-3	-25	-25	690	8	334
30-45.9472-108.0150-2-08-						0-M38437	90385	85	-25	-4	34	73575	5	-25	-25	1020	-4	245
30-45.9853-108.0269-2-08-						0-M38438	47358	-55	-25	7	49	31576	5	-25	-25	516	-4	-50
30-45.9886-108.0675-2-08-						0-M38439	47200	-55	-25	29	-25	15092	28	-25	-25	316	-4	211
30-45.9706-108.0897-2-08-						0-M38440	54661	-55	-25	8	30	42273	19	-25	-25	642	-4	600
30-45.9947-108.1219-2-08-						0-M38441	192000	176	-25	67	37	41831	40	-25	-25	1384	24	205
30-45.9717-108.1422-2-07-						0-M38442	89886	83	-25	9	35	57057	36	-25	-25	1010	7	134
30-45.9875-108.1422-2-08-						0-M38443	86633	78	-25	-4	-25	31792	-3	-25	-25	753	5	134

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																											U CONCENTRATION
							TIME SAMPLED																											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (#) UNITS IN ppb
30-	45.9828-	108.1525-	2-	07-		0-M38444-	06/26/78-	15-	26-	19.0-	C-	-	7.4-	550-		13-	1-	6-	-	-	-	-	-	-4-	3-	1-	2-	-3-	-	-	-	-	1.24
30-	45.9872-	108.1842-	2-	08-		0-M38445-	06/26/78-	16-	26-	15.5-	C-	-	6.9-	850-		12-	1-	6-	-	-	-	-	-	-4-	3-	1-	2-	-3-	5-	2-	22-	12-	5.31
30-	45.9622-	108.1942-	2-	08-		0-M38446-	06/26/78-	16-	26-	14.0-	C-	-	7.5-	1525-		8-	1-	6-	-	-	-	-	-	-7-	1-	1-	2-	-3-	5-	-	-	-	3.52
30-	45.9617-	108.2158-	2-	08-		0-M38447-	06/26/78-	16-	26-	14.0-	C-	-	6.8-	800-		9-	1-	6-	-	-	-	-	-	-4-	3-	1-	2-	-3-	5-	6-	25-	-	0.79
30-	45.9292-	108.2431-	2-	08-		0-M38448-	06/26/78-	17-	27-	15.5-	C-	-	6.9-	1500-		5-	1-	6-	-	-	-	-	-	-4-	3-	1-	2-	-3-	8-	2-	25-	-	5.43
30-	45.9317-	108.2039-	2-	08-		0-M38449-	06/26/78-	17-	27-	13.0-	C-	-	7.0-	550-		18-	1-	6-	-	-	-	-	-	-4-	3-	1-	1-	-3-	5-	-	-	-	0.99
30-	45.8811-	108.3022-	2-	07-		0-M38450-	06/27/78-	10-	20-	19.5-	C-	-	8.7-	1175-		6-	1-	6-	4-	6-	4-	4-	2-	1-	2-	1-	2-	1-	-3-	-	-	-	-	2.61
30-	45.8894-	108.3086-	2-	08-		0-M38451-	06/27/78-	10-	23-	12.5-	C-	-	8.7-	1400-		15-	1-	6-	-	-	-	-	-	-4-	3-	1-	1-	-3-	3-	-130-		-	0.61
30-	45.9331-	108.2692-	2-	08-		0-M38452-	06/27/78-	11-	26-	13.5-	C-	-	7.4-	800-		10-	1-	6-	-	-	-	-	-	-4-	3-	1-	1-	-3-	5-	-	-	-	3.02
30-	45.9481-	108.2731-	2-	08-		0-M38453-	06/27/78-	11-	23-	18.5-	C-	-	7.0-	925-		10-	1-	6-	-	-	-	-	-	-2-	3-	1-	1-	-3-	5-	2-	12-	-	0.56
30-	45.9097-	108.2839-	2-	08-		0-M38455-	06/27/78-	12-	27-	17.0-	C-	-	9.0-	1075-		13-	1-	6-	-	-	-	-	-	-2-	2-	1-	1-	-3-	5-	4-	60-	-	0.40
30-	45.9114-	108.3414-	2-	08-		0-M38456-	06/27/78-	13-	28-	16.5-	C-	-	6.7-	1650-		8-	1-	6-	-	-	-	-	-	-4-	3-	1-	1-	-3-	5-	6-	22-	-	2.58
30-	45.9433-	108.3417-	2-	08-		0-M38457-	06/27/78-	14-	31-	12.5-	C-	-	7.2-	1300-		16-	1-	6-	-	-	-	-	-	-4-	3-	1-	1-	-3-	8-	-	30-	-	2.27
30-	45.9597-	108.3103-	2-	08-		0-M38458-	06/27/78-	14-	30-	13.0-	C-	-	6.8-	750-		8-	1-	6-	-	-	-	-	-	-4-	3-	1-	1-	-3-	5-	-	-	-	2.19
30-	45.9672-	108.2972-	2-	07-		0-M38459-	06/27/78-	14-	30-	22.5-	C-	-	7.5-	725-		16-	1-	6-	4-	6-	3-	4-	4-	1-	4-	3-	1-	1-	-3-	-	-	-	-	0.76
30-	45.9811-	108.2767-	2-	08-		0-M38460-	06/27/78-	14-	31-	12.5-	C-	-	7.1-	1300-		9-	1-	6-	-	-	-	-	-	-4-	3-	2-	1-	-3-	8-	-	-	-	9.02
30-	45.9864-	108.3422-	2-	07-		0-M38461-	06/27/78-	15-	29-	23.0-	C-	-	7.6-	400-		8-	1-	6-	4-	6-	3-	4-	4-	1-	4-	3-	2-	1-	-3-	-	-	-	-	0.27
30-	45.9194-	108.3622-	2-	08-		0-M38462-	06/27/78-	16-	31-	15.5-	C-	-	7.9-	2200-		5-	1-	6-	-	-	-	-	-	-7-	2-	1-	1-	-3-	8-	-	-	-	0.23
30-	45.9017-	108.3631-	2-	07-		0-M38463-	06/27/78-	16-	30-	25.0-	C-	-	7.5-	1300-		5-	1-	6-	4-	6-	3-	4-	2-	2-	4-	3-	2-	1-	-3-	-	-	-	-	2.28
30-	45.8861-	108.3650-	2-	08-		0-M38464-	06/27/78-	16-	30-	15.5-	C-	-	6.8-	325-		10-	1-	6-	-	-	-	-	-	-4-	3-	2-	1-	-1-	8-	-	-	-	0.22
30-	45.8214-	108.1078-	2-	08-		0-M38465-	06/28/78-	10-	27-	14.0-	C-	-	8.9-	825-		5-	1-	6-	-	-	-	-	-	-4-	3-	1-	1-	-3-	8-	-	-	-	7.23
30-	45.7994-	108.0853-	2-	08-		0-M38466-	06/27/78-	10-	19-	15.0-	C-	-	8.3-	725-		10-	1-	6-	-	-	-	-	-	-2-	3-	3-	1-	-3-	3-	8-	40-	-	0.25
30-	45.7964-	108.0567-	2-	07-		0-M38467-	06/28/78-	10-	26-	15.0-	C-	-	7.9-	925-		12-	1-	6-	6-	8-	3-	4-	1-	1-	4-	3-	2-	1-	-3-	-	-	-	-	1.42
30-	45.7939-	108.0536-	2-	07-		0-M38468-	06/28/78-	11-	25-	24.5-	C-	-	8.3-	32000-		8-	1-	6-	4-	6-	2-	4-	1-	2-	4-	3-	2-	1-	-3-	-	-	-	-	3.11
30-	45.7761-	108.0367-	2-	06-		0-M38469-	06/28/78-	11-	28-	18.5-	C-	-	7.8-	27000-		10-	1-	6-	6-	7-	1-	-1-		-4-	3-	2-	1-	-3-	-	-	-	-	-	0.95
30-	45.7597-	108.0450-	2-	08-		0-M38472-	06/28/78-	13-	30-	15.0-	C-	-	7.2-	2300-		6-	1-	6-	-	-	-	-	-	-2-	2-	3-	1-	-3-	3-	8-	360-	-	0.07
30-	45.7978-	108.0333-	2-	07-		0-M38474-	06/28/78-	14-	32-	21.5-	C-	-	7.6-	875-		12-	1-	6-	6-	7-	2-	4-	1-	2-	4-	3-	3-	1-	-3-	-	-	-	-	0.41
30-	45.8508-	108.0050-	2-	08-		0-M38475-	06/28/78-	15-	30-	17.0-	C-	-	8.9-	2025-		10-	1-	6-	-	-	-	-	-	-4-	3-	3-	1-	-3-	3-	8-	310-	-	0.16
30-	45.8492-	108.0014-	2-	07-		0-M38476-	06/28/78-	16-	30-	16.0-	C-	-	8.3-	1150-		8-	1-	6-	4-	6-	4-	4-	1-	2-	4-	3-	3-	1-	-3-	-	-	-	-	1.20
30-	45.8508-	108.0392-	2-	06-		0-M38477-	06/28/78-	16-	29-	17.5-	C-	-	7.7-	1400-		10-	1-	6-	4-	6-	-	-	-	-3-	3-	3-	1-	-3-	-	-	-	-	-	2.23
30-	45.8500-	108.0569-	2-	07-		0-M38478-	06/28/78-	16-	30-	21.5-	C-	-	8.3-	825-		8-	1-	6-	4-	6-	3-	4-	1-	1-	2-	4-	3-	1-	-3-	-	-	-	-	2.38
30-	45.8125-	108.0011-	2-	07-		0-M38480-	06/28/78-	18-	31-	26.5-	C-	-	7.9-	1200-		6-	1-	6-	6-	8-	2-	4-	1-	1-	6-	2-	3-	2-	-3-	-	-	-	-	1.28
30-	45.7906-	108.2656-	2-	07-		0-M38481-	06/29/78-	9-	24-	17.0-	C-	-	8.6-	2600-		8-	1-	6-	5-	6-	3-	4-	1-	1-	4-	3-	3-	3-	-3-	-	-	-	-	2.07
30-	45.7836-	108.2478-	2-	07-		0-M38482-	06/29/78-	9-	22-	26.0-	C-	-	8.2-	2625-		8-	1-	6-	4-	6-	2-	4-	1-	1-	3-	3-	3-	3-	-3-	-	-	-	-	2.91
30-	45.8175-	108.1283-	2-	08-		0-M38483-	06/29/78-	10-	24-	13.0-	C-	-	7.9-	600-		13-	1-	6-	-	-	-	-	-	-4-	3-	1-	1-	-3-	8-	-	-	-	-	28.62
30-	45.8272-	108.1581-	2-	07-		0-M38484-	06/29/78-	10-	24-	18.0-	C-	-	8.2-	700-		8-	1-	6-	4-	6-	3-	4-	1-	1-	4-	3-	3-	3-	-3-	-	-	-	-	1.96
30-	45.9356-	108.1408-	2-	07-		0-M38485-	06/29/78-	11-	26-	17.5-	C-	-	8.5-	1700-		15-	1-	6-	4-	6-	3-	4-	2-	2-	4-	3-	2-	3-	-3-	-	-	-	-	1.36
30-	45.9294-	108.1225-	2-	07-		0-M38486-	06/29/78-	14-	30-	34.0-	C-	-	9.0-	36000-		6-	1-	6-	5-	6-	1-	4-	1-	1-	4-	3-	2-	1-	-3-	-	-	-	-	12.73
30-	45.9275-	108.0608-	2-	07-		0-M38489-	06/29/78-	15-	33-	32.0-	C-	-	8.1-	34000-		3-	1-	6-	6-	6-	1-	4-	2-	1-	4-	3-	2-	2-	-3-	-	-	-	-	5.19
30-	45.8850-	108.0478-	2-	07-		0-M38493-	06/30/78-	14-	32-	25.5-	C-	-	8.3-	2650-		5-	1-	6-	3-	6-	2-	4-	1-	1-	4-	3-	3-	1-	-3-	-	-	-	-	4.40
30-	45.8928-	108.0450-	2-	07-		0-M38494-	06/30/78-	15-	33-	33.0-	C-	-	8.6-	40500-		12-	1-	6-	6-	6-	2-	4-	1-	2-	4-	3-	3-	1-	-3-	-	-	-	-	3.29
30-	45.8925-	108.0092-	2-	07-		0-M38495-	06/30/78-	15-	33-	29.0-	C-	-	8.2-	4025-		6-	1-	6-	4-	6-	3-	3-	1-	1-	4-	3-	3-	1-	-3-	-	-	-	-	7.82
30-	45.9261-	108.1858-	2-	07-		0-M38498-	07/03/78-	10-	24-	21.5-	C-	-	9.1-	33250-		8-	1-	6-	6-	6-	2-	4-	1-	2-	4-	3-	2-	1-	-3-	-	-	-	-	0.70
30-	45.9064-	108.2175-	2-	07-		0-M38500-	07/03/78-	12-	29-	21.5-	C-	-	9.1-	4075-		10-	1-	6-	4-	6-	3-	4-	1-	1-	4-	3-	2-	1-	-3-	-	-	-	-	3.19
30-	45.8978-	108.2056-	2-	08-		0-M38501-	07/03/78-	12-	27-	11.5-	C-	-	7.9-	3350-		11-	1-	6-	-	-	-	-	-	-4-	3-	2-	1-	-3-	3-	-	-	-	-	5.39
30-	45.8964-	108.2039-	2-	07-		0-M38502-	07/03/78-	13-	27-	25.0-	C-	-	8.9-	2750-		6-	1-	6-	4-	6-	3-	4-	1-	2-	3-	2-	2-	1-	-3-	-	-	-	-	1.17
30-	45.8069-	108.2878-	2-	07-		0-M38503-	07/03/78-	15-	30-	24.0-	C-	-	8.4-	2625-		13-	1-	6-	6-	6-	3-	4-	1-	2-	6-	3-	2-	2-	-3-	-	-	-	-	1.28
30-	45.7111-	108.7817-	2-	07-		0-M38504-	05/13/78-	15-	25-	22.4-	-	-	7.5-	46000-		6-	1-	6-	4-	6-	2-	2-	1-	1-	4-	3-	3-	1-	-3-	-	-	-	-	16.88
30-	45.7319-	108.8503-	2-	08-		0-M38507-	05/13/78-	16-	23-	14.2-	C-	-	7.0-	2100-		9-	1-	7-	-	-	-	-	-1-	-4-	2-	3-	1-	-	-3-	6-	125-	-	0.43
30-	45.7236-	108.8464-	2-	06-		0-M38508-	05/13/78-	17-	22-	12.0-	-	-	7.5-	7000-		6-	1-	6-	5-	6-	2-	2-	1-	2-	4-	3-	2-	1-	-3-	-	-	-	-	26.36
30-	45.6947-	108.7797-	2-	08-		0-M38509-	06/06/78-	9-	19-	20.2-	C-	-	7.6-	2500-		4-	1-	6-	-	-	-	-	-	-4-	3-	3-	3-	-	-3-	-110-		-	3.15

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

DOE SAMPLE NUMBER						LAB SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY Concentrations reported in weight parts per billion (ppb)											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.9828-108.1525-2-07-			0-	M	38444		45762	-55	-25	-4	68	18491	31	-25	-25	349	-4	-50
30-45.9877-108.1842-2-08-			0-	M	38445		105000	105	-25	-4	49	48465	13	-25	-25	867	5	203
30-45.9622-108.1842-2-08-			0-	M	38446		52232	-55	-25	5	38	30200	-3	-25	-25	647	5	96
30-45.9617-108.2158-2-08-			0-	M	38447		90666	87	-25	7	118	38422	566	-25	-25	827	9	-50
30-45.9292-108.2431-2-08-			0-	M	38448		45117	-55	-25	-4	-25	28880	-3	65	-25	470	-4	-50
30-45.9317-108.2039-2-08-			0-	M	38449		53466	120	-25	-4	-25	29579	4	37	55	613	7	-50
30-45.8811-108.3022-2-07-			0-	M	38450		110000	59	-25	-4	71	56380	45	-25	-25	993	-4	-50
30-45.8894-108.3086-2-08-			0-	M	38451		1471	-55	-25	-4	-25	285	7	-25	-25	-200	-4	-50
30-45.9331-108.2692-2-08-			0-	M	38452		65317	-55	-25	59	-25	31962	-3	-25	-25	528	-4	-50
30-45.9481-108.2731-2-08-			0-	M	38453		142000	140	-25	-4	217	31364	468	-25	-25	954	12	102
30-45.9097-108.2839-2-08-			0-	M	38455		996	-55	-25	12	-25	209	9	-25	47	-200	-4	-50
30-45.9114-108.3414-2-08-			0-	M	38456		122000	155	36	17	44	67184	9	71	104	1659	23	65
30-45.9433-108.3417-2-08-			0-	M	38457		93821	197	35	20	28	69479	366	41	142	1588	24	-50
30-45.9597-108.3103-2-08-			0-	M	38458		67408	173	-25	17	26	42407	8	39	102	1101	15	211
30-45.9672-108.2972-2-07-			0-	M	38459		42559	120	70	20	3926	26585	112	113	245	1273	77	-50
30-45.9811-108.2767-2-08-			0-	M	38460		40620	75	112	29	32	24092	5	188	305	1633	58	290
30-45.9864-108.3422-2-07-			0-	M	38461		20680	71	136	25	73	9938	7	211	388	1582	65	410
30-45.9194-108.3622-2-08-			0-	M	38462		2604	70	64	13	27	697	6	122	227	664	25	574
30-45.9017-108.3631-2-07-			0-	M	38463		95993	161	53	17	55	47652	63	70	175	1611	29	416
30-45.8861-108.3650-2-08-			0-	M	38464		34545	119	85	26	-25	9854	41	134	244	1120	36	380
30-45.8214-108.1078-2-08-			0-	M	38465		64777	110	77	20	65	38864	27	117	269	1584	43	767
30-45.7994-108.0853-2-08-			0-	M	38466		75424	129	104	22	472	27755	48	140	316	1782	59	269
30-45.7964-108.0567-2-07-			0-	M	38467		90685	203	94	21	56	39331	19	103	290	1787	50	283
30-45.7939-108.0536-2-07-			0-	M	38468		153000	441	115	33	135	268000	67	107	316	4793	58	741
30-45.7761-108.0367-2-06-			0-	M	38469		86821	230	138	29	39	67375	289	170	396	2543	68	2009
30-45.7597-108.0450-2-08-			0-	M	38472		40319	107	88	21	3864	11683	279	168	314	1368	42	620
30-45.7978-108.0333-2-07-			0-	M	38474		64854	144	67	16	73	35976	15	117	273	1529	33	627
30-45.8508-108.0050-2-08-			0-	M	38475		1646	-55	57	12	47	707	4	142	251	738	23	393
30-45.8492-108.0014-2-07-			0-	M	38476		72710	190	69	17	53	38772	12	132	294	1649	39	405
30-45.8508-108.0392-2-06-			0-	M	38477		80953	193	-25	7	38	51247	6	32	82	1128	-4	390
30-45.8500-108.0569-2-07-			0-	M	38478		83263	174	-25	8	41	40064	11	45	152	1201	11	496
30-45.8125-108.0011-2-07-			0-	M	38480		103000	143	-25	6	62	65651	10	-25	-25	1186	-4	117
30-45.7906-108.2656-2-07-			0-	M	38481		229000	325	-25	15	94	124000	26	-25	-25	2672	27	140
30-45.7836-108.2478-2-07-			0-	M	38482		233000	328	-25	17	113	129000	51	-25	-25	2700	25	394
30-45.8175-108.1283-2-08-			0-	M	38483		57483	109	-25	-4	41	41728	93	-25	-25	563	-4	252
30-45.8272-108.1581-2-07-			0-	M	38484		73510	132	-25	-4	26	31536	19	117	-25	837	7	141
30-45.9356-108.1408-2-07-			0-	M	38485		108000	171	-25	11	44	71985	60	84	-25	1741	19	92
30-45.9294-108.1225-2-07-			0-	M	38486		254000	506	39	26	141	285000	36	-25	45	5452	32	71
30-45.9275-108.0608-2-07-			0-	M	38489		230000	339	-25	20	129	229000	346	-25	-25	4409	31	239
30-45.8950-108.0478-2-07-			0-	M	38493		152000	241	-25	11	90	119000	22	103	-25	2423	20	-50
30-45.8928-108.0450-2-07-			0-	M	38494		230000	393	-25	22	155	288000	35	111	-25	5474	27	188
30-45.8925-108.0092-2-07-			0-	M	38495		180000	321	-25	12	94	161000	29	159	-25	3047	19	204
30-45.9261-108.1858-2-07-			0-	M	38499		229000	439	-25	19	105	260000	20	130	-25	4851	27	419
30-45.9064-108.2175-2-07-			0-	M	38500		102000	174	-25	6	93	101000	9	196	-25	2003	14	402
30-45.8978-108.2056-2-08-			0-	M	38501		79438	177	-25	6	-25	68389	-3	218	-25	1554	20	290
30-45.8964-108.2039-2-07-			0-	M	38502		76221	136	-25	6	43	65446	20	164	-25	1433	16	233
30-45.8069-108.2878-2-07-			0-	M	38503		165000	222	-25	11	75	101000	26	89	48	2430	27	608
30-45.7111-108.7817-2-07-			0-	M	38504		324000	525	-25	27	167	294000	32	-25	-25	6125	26	511
30-45.7319-108.8503-2-08-			0-	M	38507		212000	269	-25	271	89	97549	237	-25	-25	2596	20	1515
30-45.7236-108.8464-2-06-			0-	M	38508		39513	-55	-25	5	198	41829	90	-25	-25	747	7	-50
30-45.6947-108.7797-2-08-			0-	M	38509		148000	220	-25	158	124	119000	12	-25	-25	2394	22	290

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
							TIME SAMPLED																									
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (W) UNITS IN ppb
30-45.6939-108.8050-2-09-						0-M38510-06/06/78-	9-	22-17.0-C-	-	8.0-	310-			9-1-6-	-	-	-	-	-	-4-	3-	2-	3-	-3-	-	-	-	-	0.47
30-45.6679-108.8092-2-08-						0-M38511-06/06/78-10-		23-14.0-C-	-	7.1-	3400-			9-1-6-	-	-	-	-	-	-4-	3-	1-	2-	-3-	4-	6-	30-	20-	2.55
30-45.6900-108.8425-2-07-						0-M38512-06/06/78-10-		25-20.5-	-	7.8-	40000-			9-1-6-	6-	6-	2-	3-	5-	2-	4-	3-	2-	2-	-3-	-	-	-	-	38.13*
30-45.6689-108.8442-2-08-						0-M38513-06/06/78-11-		25-14.2-C-	-	7.9-	3700-			11-1-6-	-	-	-	-	-	-4-	3-	1-	2-	-3-	3-	6-	60-	-	11.50
30-45.6608-108.8625-2-08-						0-M38514-06/06/78-11-		24-13.0-C-	-	7.2-	2400-			9-1-6-	-	-	-	-	-	-4-	3-	1-	2-	-3-	4-	2-	24-	-	2.38
30-45.6831-108.8581-2-07-						0-M38515-06/06/78-12-		27-24.0-	-	8.0-	8000-			11-1-6-	5-	6-	2-	2-	1-	2-	4-	3-	2-	3-	-3-	-	-	-	-	2.13
30-45.6567-108.8417-2-08-						0-M38517-06/06/78-13-		25-13.0-	-	7.4-	3400-			11-1-6-	-	-	-	-	-	-4-	3-	2-	2-	-1-	3-	-	35-	-	5.48
30-45.6536-108.8017-2-08-						0-M38518-06/06/78-14-		32-12.6-C-	-	7.4-	2800-			11-1-6-	-	-	-	-	-	-4-	3-	1-	2-	-3-	4-	-	20-	15-	9.81
30-45.6397-108.8419-2-08-						0-M38519-06/06/78-14-		29-12.8-C-	-	7.5-	800-			9-1-6-	-	-	-	-	-	-4-	3-	1-	2-	-3-	-	-	-	-	1.17
30-45.6247-108.8600-2-08-						0-M38520-06/06/78-14-		27-13.0-C-	-	7.3-	800-			11-1-6-	-	-	-	-	-	-4-	3-	1-	2-	-1-	3-	6-	32-	-	0.64
30-45.6328-108.7661-2-08-						0-M38521-06/06/78-15-		27-18.0-C-	-	7.0-	800-			13-1-6-	-	-	-	-	-	-4-	3-	1-	2-	-3-	3-	6-	30-	20-	1.44
30-45.5975-108.7811-2-07-						0-M38522-06/06/78-16-		30-24.4-	-	8.0-	3000-			13-1-6-	2-	7-	3-	3-	5-	2-	3-	3-	2-	3-	-3-	-	-	-	-	11.23
30-45.7339-108.8814-2-07-						0-M38523-06/07/78-11-		24-20.0-	-	7.4-	4000-			11-1-6-	3-	6-	3-	3-	5-	2-	4-	3-	3-	3-	-3-	-	-	-	-	1.62
30-45.7269-108.9153-2-08-						0-M38524-06/07/78-11-		21-11.0-C-	-	7.0-	900-			11-1-6-	-	-	-	-	-	-3-	3-	3-	3-	-4-	3-	6-	165-	65-	0.41
30-45.7406-108.9244-2-08-						0-M38525-06/07/78-12-		22-11.0-C-	-	7.1-	1300-			2-1-6-	-	-	-	-	-	-4-	3-	4-	3-	-3-	3-	6-	75-	-	0.69
30-45.6647-108.8789-2-08-						0-M38526-06/07/78-13-		25-19.2-C-	-	7.3-	900-			9-1-6-	-	-	-	-	-	-4-	3-	1-	3-	-3-	4-	6-	40-	-	2.77
30-45.6736-108.8894-2-07-						0-M38527-06/07/78-13-		29-29.0-	-	7.9-	4300-			9-1-6-	6-	6-	3-	3-	5-	2-	4-	3-	3-	3-	-3-	-	-	-	-	1.47
30-45.6408-108.9147-2-08-						0-M38528-06/07/78-13-		26-14.0-C-	-	7.7-	800-			11-1-6-	-	-	-	-	-	-4-	3-	2-	3-	-3-	-	-	-	-	0.79
30-45.6392-108.9550-2-08-						0-M38529-06/07/78-14-		26-15.6-C-	-	7.5-	900-			6-1-6-	-	-	-	-	-	-4-	3-	3-	3-	-3-	-	-	-	-	0.81
30-45.6394-108.9542-2-06-						0-M38530-06/07/78-15-		23-11.2-C-	-	7.4-	800-			4-1-6-7-	-	-	-	-	-	-3-	3-	3-	3-	-3-	-	-	-	-	1.13
30-45.6092-108.8117-2-08-						0-M38531-06/08/78-	9-	20-16.0-C-	-	7.7-	800-			16-1-1-	-	-	-	-1-	-	-4-	3-	3-	1-	-3-	-	-	35-	-	0.40
30-45.5539-108.8444-2-06-						0-M38532-06/08/78-	9-	21-14.0-C-	-	7.2-	900-			9-1-6-	-	-	-	-1-	-	-4-	3-	3-	1-	-3-	-	-	-	-	7.62
30-45.5233-108.8592-2-08-						0-M38533-06/08/78-10-		21-18.2-C-	-	7.1-	3200-			11-1-6-	-	-	-	-	-	-4-	3-	3-	1-	-3-	4-	6-	22-	-	9.86
30-45.5078-108.8617-2-08-						0-M38534-06/08/78-10-		25-11.5-C-	-	7.4-	600-			11-1-6-	-	-	-	-	-	-4-	3-	1-	1-	-3-	4-	4-	35-	-	2.43
30-45.4928-108.8625-2-08-						0-M38535-06/08/78-11-		25-15.0-C-	-	7.3-	800-			13-1-6-	-	-	-	-	-	-4-	3-	1-	1-	-3-	4-	8-	20-	10-	3.25
30-45.4669-108.8708-2-08-						0-M38536-06/08/78-11-		25-13.2-C-	-	7.3-	1100-			4-1-6-	-	-	-	-	-	-4-	3-	3-	1-	-3-	4-	6-	65-	-	3.78
30-45.4411-108.8444-2-07-						0-M38537-06/08/78-12-		27-19.0-C-	-	8.0-	5300-			11-1-7-	3-	6-	3-	3-	1-	2-	3-	3-	3-	1-	-3-	-	-	-	-	81.70*
30-45.4211-108.8631-2-08-						0-M38538-06/08/78-12-		26-20.2-C-	-	7.6-	2200-			9-1-7-	-	-	-	-	-	-4-	3-	2-	1-	-3-	3-	2-	140-	-	6.17
30-45.4122-108.8253-2-07-						0-M38539-06/08/78-13-		29-21.5-C-	-	8.5-	2800-			16-1-7-	4-	6-	4-	3-	1-	2-	3-	2-	4-	1-	-3-	-	-	-	-	116.74*
30-45.4031-108.8556-2-07-						0-M38540-06/08/78-12-		26-27.0-	-	8.2-	4600-			13-1-7-	5-	8-	3-	4-	1-	2-	3-	2-	2-	1-	-3-	-	-	-	-	38.92*
30-45.4069-108.8806-2-08-						0-M38541-06/08/78-14-		28-11.5-C-	-	7.7-	1500-			4-1-6-	-	-	-	-	-	-4-	3-	1-	1-	-3-	4-	6-	15-	-	4.43
30-45.3917-108.8814-2-08-						0-M38542-06/08/78-14-		28-15.0-C-	-	7.4-	1900-			16-1-6-	-	-	-	-1-	-	-4-	2-	3-	1-	-3-	5-	6-	175-	-	3.98
30-45.5511-108.8019-2-07-						0-M38543-06/15/78-10-		22-20.0-	-	8.4-	2600-			9-2-7-	4-	6-	3-	3-	2-	2-	4-	2-	4-	2-	-3-	-	-	-	-	5.48
30-45.5675-108.8139-2-08-						0-M38544-06/15/78-11-		17-16.5-C-	-	7.5-	2100-			13-1-6-	-	-	-	-1-	-	-4-	3-	3-	2-	-3-	3-	6-	-	-	3.83
30-45.5928-108.7806-2-08-						0-M38545-06/15/78-11-		27-19.0-C-	-	6.9-	3950-			8-1-6-	-	-	-	-1-	-	-4-	3-	3-	2-	-3-	4-	6-	25-	15-	25.79
30-45.5917-108.7808-2-08-						0-M38546-06/15/78-11-		23-22.5-C-	-	7.3-	2700-			9-1-6-	-	-	-	-2-	-	-4-	3-	4-	3-	-3-	4-	6-	-	-	3.87
30-45.5775-108.7817-2-07-						0-M38547-06/15/78-11-		23-19.5-	-	8.7-	3500-			16-2-7-	4-	2-	2-	2-	1-	1-	4-	5-	3-	2-	-3-	-	-	-	-	23.97*
30-45.5411-108.8350-2-08-						0-M38548-06/15/78-12-		24-20.5-C-	-	7.5-	1300-			9-1-6-	-	-	-	-1-	-	-4-	3-	3-	2-	-3-	4-	3-	26-	18-	2.00
30-45.5400-108.8350-2-06-						0-M38549-06/15/78-12-		24-19.5-C-	-	8.1-	750-			4-1-6-	4-	8-	2-	2-	2-	1-	4-	3-	2-	2-	-3-	-	-	-	-	3.83
30-45.5236-108.8361-2-08-						0-M38550-06/15/78-13-		24-15.5-C-	-	7.4-	460-			15-1-6-	-	-	-	-1-	-	-4-	3-	2-	2-	-3-	4-	6-	30-	-	4.24
30-45.5144-108.8444-2-06-						0-M38551-06/15/78-14-		20-15.0-C-	-	7.3-	700-			10-1-6-	-	-	-	-1-	-	-4-	3-	3-	2-	-3-	-	-	-	-	4.76
30-45.2422-108.7661-2-07-						0-M38552-06/15/78-14-		22-21.5-C-	-	8.5-	2850-			11-1-3-	5-	8-	3-	3-	2-	2-	4-	3-	3-	2-	-3-	-	-	-	-	5.01
30-45.4514-108.7808-2-08-						0-M38553-06/15/78-15-		22-15.0-C-	-	8.0-	4800-			10-1-6-	-	-	-	-1-	-	-4-	3-	3-	2-	-3-	4-	6-	-	-	1.13
30-45.4589-108.7572-2-08-						0-M38554-06/15/78-15-		23-18.0-C-	-	9.2-	1800-			16-1-6-	-	-	-	-1-	-	-4-	3-	2-	2-	-3-	3-	6-	410-	-	1.57
30-45.4644-108.8511-2-08-						0-M38555-06/15/78-15-		24-17.0-C-	-	7.7-	1150-			11-1-6-	-	-	-	-1-	-	-4-	2-	2-	2-	-3-	7-	4-	6-	-	2.28
30-45.5603-108.8644-2-07-						0-M38556-06/18/78-	8-	23- 5.5-	-	8.2-	60000-			13-3-7-	5-	8-	2-	2-	2-	1-	4-	2-	4-	1-	-3-	-	-	-	-	10.80
30-45.4306-108.7672-2-07-						0-M38557-06/18/78-	9-	20-10.0-C-	-	9.2-	21000-			1-2-6-	5-	6-	2-	2-	2-	2-	4-	3-	3-	1-	-3-	-	-	-	-	67.44*
30-45.4208-108.7550-2-06-						0-M38558-06/18/78-	9-	21-13.0-C-	-	8.4-	1300-			15-1-6-	-	-	-	-1-	-	-4-	3-	2-	1-	-3-	-	-	-	-	0.10
30-45.4550-108.8633-2-08-						0-M38559-06/18/78-10-		25-12.0-C-	-	8.1-	1200-			5-1-6-	-	-	-	-1-	-	-4-	3-	3-	1-	-3-	8-	-	-	-	2.68
30-45.4283-108.8739-2-08-						0-M38560-06/18/78-10-		20-15.0-C-	-	7.9-	3000-			8-1-6-	-	-	-	-1-	-	-4-	3-	3-	1-	-3-	3-	-	-	-	6.53
30-45.3947-108.8992-2-08-						0-M38561-06/18/78-11-		22-12.5-C-	-	7.8-	1550-			6-1-6-	-	-	-	-1-	3-	4-	3-	-1-	-3-	8-	-	-	-	-	2.57

APPENDIX 1-A. (continued). Elemental Concentrations for Water Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY Concentrations reported in weight parts per billion (ppb)											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.6839-108.8050-2-08-						0-M38510	26036	63	-25	-4	39	8784	-3	-25	-25	-200	-4	215
30-45.6678-108.8092-2-08-						0-M38511	260000	366	27	66	121	127000	311	-25	-25	3370	30	592
30-45.6900-108.8425-2-07-						0-M38512	328000	460	78	31	160	207000	81	-25	62	4957	43	841
30-45.6689-108.8442-2-08-						0-M38513	14751	-55	-25	93	-25	9453	10	-25	-25	267	7	612
30-45.6608-108.8625-2-08-						0-M38514	174000	293	45	14	173	106000	63	-25	-25	2641	29	626
30-45.6831-108.8581-2-07-						0-M38515	333000	551	62	26	188	277000	33	-25	41	6145	47	770
30-45.6567-108.8417-2-08-						0-M38517	255000	365	-25	82	97	152000	59	-25	-25	3389	30	409
30-45.6536-108.8017-2-08-						0-M38518	173000	249	-25	16	40	114000	293	-25	-25	2409	19	329
30-45.6397-108.8419-2-08-						0-M38519	54807	76	-25	6	-25	44681	266	-25	-25	896	8	-50
30-45.6247-108.8600-2-08-						0-M38520	60392	108	-25	19	40	43186	9	-25	-25	935	6	-50
30-45.6328-108.7661-2-08-						0-M38521	79452	145	-25	2070	33	38093	7	32	42	1157	13	-50
30-45.5975-108.7811-2-07-						0-M38522	111000	214	-25	16	42	62280	11	27	-25	1617	14	-50
30-45.7339-108.8814-2-07-						0-M38523	279000	433	30	22	98	191000	95	-25	-25	4135	29	416
30-45.7269-108.9153-2-08-						0-M38524	76931	146	-25	27	101	44963	9	-25	-25	1079	7	494
30-45.7406-108.9244-2-08-						0-M38525	57619	147	-25	17	35	54989	6	36	-25	1217	14	402
30-45.6647-108.8789-2-08-						0-M38526	90441	162	-25	71	37	43348	7	42	36	1248	15	273
30-45.6736-108.8894-2-07-						0-M38527	296000	470	47	23	125	229000	115	-25	-25	5002	35	503
30-45.6408-108.9147-2-08-						0-M38528	83650	184	-25	61	-25	37085	8	68	68	1306	19	348
30-45.6392-108.9550-2-08-						0-M38529	67176	166	-25	19	-25	44501	5	40	27	1150	13	985
30-45.6394-108.9542-2-06-						0-M38530	66775	126	-25	6	-25	46849	8	53	-25	1249	12	686
30-45.6092-108.8117-2-08-						0-M38531	55476	151	-25	621	41	51132	7	74	34	1185	15	565
30-45.5539-108.8444-2-06-						0-M38532	78131	162	-25	65	-25	52015	7	50	51	1264	14	425
30-45.5233-108.8592-2-08-						0-M38533	234000	400	50	30	206	110000	18	-25	41	3229	36	5271
30-45.5078-108.8617-2-08-						0-M38534	66775	138	-25	11	65	36385	9	56	34	1117	16	453
30-45.4928-108.8625-2-08-						0-M38535	74868	156	-25	440	85	33060	9	50	45	1084	10	1431
30-45.4669-108.8708-2-08-						0-M38536	166000	267	27	22	205	40511	17	-25	76	1919	31	933
30-45.4411-108.8444-2-07-						0-M38537	129000	291	-25	11	75	76541	10	57	38	2004	23	57
30-45.4211-108.8631-2-08-						0-M38538	166000	316	39	29	106	96109	10	27	81	2470	30	1682
30-45.4122-108.8253-2-07-						0-M38539	113000	166	34	8	74	70108	7	94	82	1917	27	-50
30-45.4031-108.8556-2-07-						0-M38540	151000	298	45	14	118	100000	41	52	71	2614	30	-50
30-45.4069-108.8806-2-08-						0-M38541	181000	298	33	15	118	61687	10	-25	43	2184	29	360
30-45.3917-108.8814-2-08-						0-M38542	241000	342	35	21	133	85754	12	-25	-25	2740	34	66
30-45.5511-108.8019-2-07-						0-M38543	110000	239	-25	-4	53	60383	20	-25	-25	1440	10	-50
30-45.5675-108.8139-2-08-						0-M38544	113000	183	-25	9	95	43753	6	-25	-25	1235	9	-50
30-45.5828-108.7806-2-08-						0-M38545	166000	330	-25	65	222	119000	85	-25	-25	2566	18	1638
30-45.5917-108.7808-2-08-						0-M38546	142000	304	-25	14	47	62509	7	-25	-25	1824	19	320
30-45.5775-108.7817-2-07-						0-M38547	111000	252	-25	6	53	66189	12	43	32	1571	10	-50
30-45.5411-108.8350-2-08-						0-M38548	140000	250	-25	5	2338	54837	884	-25	29	1695	15	-50
30-45.5400-108.8350-2-06-						0-M38549	69673	172	-25	-4	779	35921	78	58	84	1218	33	-50
30-45.5236-108.8361-2-08-						0-M38550	37145	126	-25	19	-25	17762	-3	58	31	714	9	-50
30-45.5144-108.8444-2-06-						0-M38551	57424	172	-25	-4	-25	41260	-3	40	39	941	8	-50
30-45.2422-108.7661-2-07-						0-M38552	159000	274	-25	8	102	92994	99	-25	31	2281	20	-50
30-45.4514-108.7808-2-08-						0-M38553	42008	146	-25	-4	325	28483	179	-25	-25	419	-4	108
30-45.4589-108.7572-2-08-						0-M38554	818	-55	-25	-4	-25	384	-3	-25	-25	-200	-4	-50
30-45.4644-108.8511-2-08-						0-M38555	79096	156	-25	33	35	58720	5	-25	-25	1001	-4	288
30-45.5603-108.8644-2-07-						0-M38556	257000	500	-25	25	126	266000	29	-25	-25	4962	24	541
30-45.4306-108.7672-2-07-						0-M38557	306000	686	-25	37	174	513000	154	-25	-25	7831	28	634
30-45.4208-108.7550-2-06-						0-M38558	68360	210	26	12	49	61455	16	68	44	1123	-4	305
30-45.4550-108.8633-2-08-						0-M38559	100000	254	35	18	68	65993	14	38	81	1417	-4	259
30-45.4283-108.8739-2-08-						0-M38560	355000	518	64	28	148	175000	2111	-25	127	3754	31	444
30-45.3947-108.8992-2-08-						0-M38561	254000	413	44	22	147	67125	23	-25	113	2345	15	422

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																												U CONCENTRATION
							TIME SAMPLED																											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (θ) UNITS IN ppb
30-	45.3922-	108.8983-	2-	08-		0-M38562-	06/18/78-	11-	28-	13.0-	C-	-	7.5-	1300-		8-	1-	6-	-	-	-	-1-	-4-	3-	2-	1-	-3-	3-	-	-	-		8.65
30-	45.3997-	108.9128-	2-	08-		0-M38563-	06/18/78-	12-	28-	12.0-	C-	-	7.5-	3000-		4-	1-	6-	-	-	-	-1-	-4-	3-	3-	1-	-3-	5-	8-	57-	32-		38.16*
30-	45.4644-	108.9097-	2-	07-		0-M38564-	06/18/78-	13-	28-	19.5-	-	-	8.5-	2150-		6-	1-	6-	4-	6-	3-	3-	2-	2-	3-	3-	4-	1-	-3-	-	-	-		5.39
30-	45.4150-	108.9150-	2-	07-		0-M38565-	06/18/78-	12-	25-	22.5-	C-	-	8.2-	4700-		5-	1-	6-	6-	8-	2-	2-	5-	1-	4-	2-	4-	1-	-3-	-	-	-		3.51
30-	45.4442-	108.9222-	2-	08-		0-M38566-	06/18/78-	13-	25-	16.0-	C-	-	7.5-	3100-		9-	1-	6-	-	-	-	-1-	-4-	3-	3-	1-	-3-	4-	-	-	-		12.40
30-	45.4147-	108.9131-	2-	08-		0-M38567-	06/19/78-	12-	25-	14.0-	-	-	7.5-	3500-		13-	1-	6-	-	-	-	-1-	-4-	3-	3-	1-	-3-	3-	6-	42-	-		10.34
30-	45.4967-	108.9119-	2-	08-		0-M38568-	06/18/78-	14-	27-	10.5-	-	-	8.0-	600-		12-	1-	6-	-	-	-	-1-	-4-	3-	3-	1-	-3-	4-	6-	30-	20-		1.42
30-	45.4964-	108.9331-	2-	08-		0-M38569-	06/18/78-	14-	21-	11.5-	-	-	7.7-	650-		10-	1-	6-	-	-	-	-1-	-4-	3-	3-	1-	-3-	4-	6-	40-	30-		0.38
30-	45.4864-	108.9467-	2-	08-		0-M38570-	06/18/78-	14-	25-	13.0-	C-	-	7.5-	1900-		9-	1-	6-	-	-	-	-1-	-4-	3-	3-	1-	-3-	3-	6-	100-	-		2.11
30-	45.4956-	108.9933-	2-	08-		0-M38571-	06/18/78-	15-	24-	12.0-	C-	-	7.9-	1100-		9-	1-	6-	-	-	-	-1-	-4-	3-	3-	1-	-3-	3-	6-	80-	-		0.93
30-	45.4975-	108.9406-	2-	08-		0-M38572-	06/18/78-	15-	25-	13.0-	C-	-	7.3-	1000-		16-	1-	6-	-	-	-1-	-1-	-4-	3-	3-	1-	-3-	3-	6-	50-	-		1.70
30-	45.6339-	108.8828-	2-	08-		0-M38573-	06/20/78-	9-	22-	13.0-	C-	-	8.6-	1000-		20-	1-	6-	-	-	-	-1-	-4-	3-	3-	1-	-3-	4-	6-	28-	-		3.16
30-	45.6600-	108.9719-	2-	07-		0-M38574-	06/20/78-	10-	19-	12.0-	-	-	9.0-	2900-		9-	1-	6-	3-	8-	3-	3-	1-	1-	4-	3-	4-	1-	-3-	-	-	-		1.77
30-	45.6750-	108.9800-	2-	07-		0-M38575-	06/20/78-	10-	19-	18.0-	-	-	9.8-	1500-		10-	1-	6-	4-	6-	2-	3-	1-	1-	4-	3-	3-	1-	-3-	-	-	-		0.99
30-	45.6861-	108.9861-	2-	07-		0-M38576-	06/20/78-	11-	18-	15.0-	-	-	9.3-	1300-		12-	1-	6-	3-	6-	2-	3-	1-	2-	3-	3-	4-	1-	-3-	-	-	-		0.93
30-	45.7036-	108.9897-	2-	07-		0-M38577-	06/20/78-	11-	21-	13.0-	-	-	9.0-	2000-		12-	1-	6-	2-	6-	3-	3-	2-	1-	4-	3-	4-	1-	-3-	-	-	-		1.02
30-	45.6256-	108.9456-	2-	08-		0-M38578-	06/20/78-	12-	26-	19.0-	C-	-	7.7-	1000-		11-	1-	6-	-	-	-	-1-	-4-	3-	3-	1-	-3-	4-	6-	30-	-		0.80
30-	45.6311-	108.9164-	2-	08-		0-M38579-	06/20/78-	13-	20-	15.8-	C-	-	8.7-	850-		9-	1-	6-	-	-	-	-1-	-	-	-	3-	1-	-3-	4-	3-	23-	-		1.08
30-	45.6283-	108.9179-	2-	08-		0-M38580-	06/20/78-	13-	21-	12.5-	C-	-	9.0-	800-		13-	1-	6-	-	-	-	-1-	-4-	3-	2-	1-	-1-	4-	8-	45-	-		2.09
30-	45.4475-	109.1011-	2-	08-		0-M38581-	06/23/78-	10-	20-	10.0-	-	-	7.7-	210-		10-	2-	7-	-	-	-	-1-	-4-	3-	3-	1-	-1-	4-	6-	44-	30-		0.36
30-	45.4575-	109.1064-	2-	08-		0-M38582-	06/23/78-	10-	16-	14.0-	C-	-	8.6-	900-		11-	-	-	-	-	-	-1-	-4-	3-	3-	1-	-3-	4-	6-	60-	50-		0.17
30-	45.4731-	109.0869-	2-	08-		0-M38583-	06/23/78-	11-	24-	16.0-	C-	-	7.7-	460-		12-	1-	7-	-	-	-	-1-	-4-	2-	3-	1-	-3-	3-	-	-	-		0.61
30-	45.4900-	109.0775-	2-	08-		0-M38584-	06/23/78-	11-	20-	2.1-	-	-	7.5-	2400-		10-	1-	6-	-	-	-	-1-	-4-	3-	3-	1-	-3-	4-	6-	47-	-		2.22
30-	45.4892-	109.0789-	2-	07-		0-M38585-	06/23/78-	11-	25-	16.0-	C-	-	8.3-	900-		12-	1-	1-	6-	6-	2-	2-	3-	1-	4-	4-	4-	2-	-3-	-	-	-		0.55
30-	45.4781-	109.0014-	2-	07-		0-M38586-	06/23/78-	12-	22-	14.0-	C-	-	8.1-	1700-		10-	1-	1-	3-	6-	3-	2-	2-	1-	4-	3-	4-	2-	-3-	-	-	-		3.52
30-	45.4689-	108.9925-	2-	08-		0-M38588-	06/23/78-	13-	25-	14.0-	C-	-	7.4-	1300-		12-	1-	6-	-	-	-	-1-	-4-	2-	3-	1-	-1-	3-	8-	400-	-		0.89
30-	45.4525-	108.9592-	2-	07-		0-M38589-	06/23/78-	13-	27-	24.0-	-	-	6.9-	1250-		13-	1-	6-	5-	6-	2-	2-	4-	1-	3-	2-	4-	2-	-3-	-	-	-		0.81
30-	45.4567-	108.9564-	2-	08-		0-M38590-	06/23/78-	14-	28-	14.5-	C-	-	8.9-	2600-		11-	1-	6-	-	-	-	-1-	-4-	3-	3-	1-	-3-	3-	6-	181-	160-		0.65
30-	45.4578-	109.0606-	2-	08-		0-M38591-	06/24/78-	11-	22-	18.5-	C-	-	7.9-	600-		5-	1-	6-	-	-	-	-1-	-4-	3-	4-	1-	-3-	3-	6-	50-	-		2.07
30-	45.4400-	109.0542-	2-	07-		0-M38592-	06/24/78-	11-	28-	16.0-	-	-	8.8-	800-		16-	1-	6-	5-	8-	3-	2-	3-	1-	4-	3-	3-	1-	-3-	-	-	-		4.01
30-	45.4244-	109.0925-	2-	08-		0-M38593-	06/24/78-	12-	30-	13.5-	C-	-	7.7-	900-		9-	1-	6-	-	-	-	-1-	-3-	-3-	3-	1-	-3-	3-	6-	80-	-		3.57
30-	45.4200-	109.1047-	2-	08-		0-M38594-	06/24/78-	12-	30-	9.0-	C-	-	7.6-	650-		5-	1-	6-	-	-	-	-1-	-4-	3-	3-	1-	-3-	7-	6-	13-	-		1.52
30-	45.4219-	109.1022-	2-	07-		0-M38595-	06/24/78-	12-	30-	17.0-	C-	-	8.6-	450-		10-	1-	6-	4-	6-	3-	3-	2-	2-	4-	3-	3-	1-	-3-	-	-	-		0.50
30-	45.4033-	109.0547-	2-	07-		0-M38596-	06/24/78-	13-	29-	22.5-	C-	-	9.0-	375-		15-	1-	6-	5-	5-	3-	3-	2-	-	4-	3-	4-	1-	-3-	-	-	-		0.65
30-	45.3919-	109.0525-	2-	08-		0-M38597-	06/24/78-	13-	27-	14.5-	C-	-	9.0-	1500-		9-	1-	6-	-	-	-	-1-	-4-	3-	3-	1-	-3-	3-	6-	190-	-		1.28
30-	45.4614-	109.0253-	2-	07-		0-M38599-	06/24/78-	15-	29-	15.2-	-	-	8.0-	110-		9-	1-	6-	5-	8-	3-	3-	3-	2-	4-	4-	4-	2-	-3-	-	-	-		0.21
30-	45.4578-	109.0653-	2-	08-		0-M38600-	06/24/78-	15-	28-	10.0-	C-	-	7.7-	800-		10-	1-	6-	-	-	-	-1-	-4-	3-	2-	2-	-1-	3-	6-	80-	-		4.20
30-	45.5083-	108.9025-	2-	08-		0-M38601-	06/27/78-	10-	21-	11.0-	C-	-	8.6-	2100-		18-	1-	6-	-	-	-	-1-	-4-	3-	2-	1-	-3-	4-	6-	27-	20-		2.10
30-	45.5086-	108.9011-	2-	08-		0-M38602-	06/27/78-	10-	21-	13.0-	C-	-	7.5-	2200-		16-	1-	6-	-	-	-	-1-	-4-	3-	3-	1-	-3-	3-	6-	-	-		8.90
30-	45.1942-	108.9831-	2-	07-		0-M38603-	06/09/78-	15-	34-	2.1-	C-	-	8.4-	-		9-	1-	6-	4-	6-	2-	3-	2-	1-	4-	2-	2-	1-	-3-	-	-	-		3.79
30-	45.2139-	109.0189-	2-	07-		0-M38608-	06/10/78-	7-	14-	14.0-	-	-	8.6-	2400-		11-	1-	1-	3-	7-	3-	3-	1-	2-	3-	3-	2-	2-	-3-	-	-	-		12.32
30-	45.2333-	109.0644-	2-	07-		0-M38609-	06/10/78-	7-	16-	13.0-	-	-	8.5-	1900-		5-	1-	2-	3-	7-	2-	3-	1-	2-	3-	3-	2-	2-	-3-	-	-	-		5.54
30-	45.2431-	109.1239-	2-	08-		0-M38610-	06/10/78-	8-	13-	8.0-	C-	-	7.4-	475-		13-	1-	2-	-	-	-	-1-	-	3-	3-	5-	3-	-1-	-	-	-		0.09
30-	45.2372-	109.0961-	2-	07-		0-M38611-	06/10/78-	9-	18-	14.0-	C-	-	8.6-	1200-		4-	1-	2-	6-	6-	2-	3-	2-	2-	3-	3-	3-	3-	-3-	-	-	-		6.61
30-	45.2119-	109.0822-	2-	08-		0-M38612-	06/10/78-	10-	15-	10.5-	C-	-	7.4-	1000-		8-	1-	2-	6-	6-	-	-	1-	-	3-	3-	2-	2-	-3-	-	-	-		8.22
30-	45.2106-	109.0808-	2-	07-		0-M38613-	06/10/78-	10-	15-	13.0-	-	-	8.2-	1650-		11-	1-	2-	6-	6-	2-	2-	2-	2-	3-	3-	2-	2-	-3-	-	-	-		10.53
30-	45.2036-	108.9711-	2-	08-		0-M38614-	06/10/78-	11-	22-	20.0-	C-	-	7.4-	1350-		11-	1-	2-	-	-	-	-	-	-	4-	3-	1-	2-	-3-	4-	-	-		9.40
30-	45.2369-	108.9586-	2-	08-		0-M38615-	06/10/78-	12-	23-	13.0-	C-	-	8.0-	9500-		9-	1-	6-	-	-	-	-	-	-	3-	3-	4-	3-	-1-	3-	-180-	-		51.79*
30-	45.2306-	108.9203-	2-	08-		0-M38616-	06/10/78-	13-	19-	12.0-	C-	-	7.6-	1150-		5-	1-	2-	-	-	-	-	-	-	4-	3-	2-	2-	-1-	8-	-	-		5.38
30-	45.2033-	108.9439-	2-	08-		0-M38617-	06/10/78-	14-	19-	13.0-	C-	-	7.8-	1700-		9-	1-	2-	-	-	-	-	-	-	4-	2-	2-	2-	-	-4-	-	30-	-		6.44
30-	45.1797-	108.9919-	2-	07-		0-M38618-	06/10/78-	14-	16-	13.0-	-	-	8.2-	550-		10-	1-	2-	5-	7-	2-	3-	4-	2-	4-	3-	1-	2-	-3-	-	-	-		0.21

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(2)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY Concentrations reported in weight parts per billion (ppb)											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.3922-108.8983-2-08-						0-M38562	202000	290	-25	26	116	54804	19	-25	-25	1646	-4	238
30-45.3997-108.9128-2-08-						0-M38563	644000	676	77	39	161	156000	23	-25	57	4012	45	494
30-45.4544-108.9097-2-07-						0-M38564	153000	328	29	14	57	101000	144	34	67	2359	-4	224
30-45.4150-108.9150-2-07-						0-M38565	501000	762	85	35	156	205000	331	-25	84	5134	41	628
30-45.4442-108.9222-2-08-						0-M38566	318000	599	54	30	109	116000	206	-25	28	3758	22	2203
30-45.4147-108.9131-2-08-						0-M38567	437000	646	70	37	306	162000	54	-25	34	5362	34	508
30-45.4867-108.9119-2-08-						0-M38568	60819	242	39	11	44	21431	17	146	67	1226	-4	262
30-45.4864-108.9331-2-08-						0-M38569	71478	267	36	39	92	21951	12	172	64	1507	-4	384
30-45.4864-108.9467-2-08-						0-M38570	169000	437	63	26	103	75779	19	171	91	2975	22	344
30-45.4856-108.9933-2-08-						0-M38571	50305	107	-25	6	-25	57927	7	84	-25	1175	-4	-50
30-45.4975-108.9406-2-08-						0-M38572	110000	219	-25	13	86	30123	13	71	-25	1741	22	117
30-45.6339-108.8828-2-08-						0-M38573	79116	168	-25	111	42	47442	6	63	28	1476	10	116
30-45.6600-108.9719-2-07-						0-M38574	194000	408	30	21	118	155000	36	62	-25	4117	37	303
30-45.6750-108.9800-2-07-						0-M38575	69811	209	-25	8	42	64154	20	88	-25	1736	17	-50
30-45.6861-108.9861-2-07-						0-M38576	75250	69	-25	-4	45	34585	10	52	-25	1313	12	101
30-45.7036-108.9897-2-07-						0-M38577	156000	197	-25	20	105	82470	44	-25	-25	2466	25	202
30-45.6256-108.9456-2-08-						0-M38578	85302	136	-25	32	57	47952	8	-25	-25	1378	9	555
30-45.6311-108.9164-2-08-						0-M38579	76797	93	-25	36	63	56879	6	32	-25	1355	11	118
30-45.6283-108.9178-2-08-						0-M38580	59687	106	-25	7	66	55739	5	34	-25	1194	8	124
30-45.4475-109.1011-2-08-						0-M38581	22796	-55	-25	17	-25	8064	12	-25	75	468	-4	78
30-45.4575-109.1064-2-08-						0-M38582	58961	96	-25	19	-25	31410	9	-25	90	901	-4	284
30-45.4731-109.0869-2-08-						0-M38583	60581	86	-25	10	-25	16498	5	28	86	811	11	268
30-45.4900-109.0775-2-08-						0-M38584	213000	317	36	69	102	93702	21	-25	67	2765	37	1435
30-45.4892-109.0789-2-07-						0-M38585	69269	152	-25	7	56	37919	96	-25	68	1079	5	188
30-45.4781-109.0014-2-07-						0-M38586	75936	180	-25	14	90	62059	290	44	83	1431	12	331
30-45.4689-108.9925-2-08-						0-M38588	107000	195	28	10	349	82246	35	-25	76	1948	20	850
30-45.4525-108.9592-2-07-						0-M38589	30873	82	-25	8	46	57428	5	57	67	1091	6	439
30-45.4567-108.9564-2-08-						0-M38590	8245	-55	36	14	-25	5093	9	68	176	634	15	561
30-45.4578-109.0606-2-08-						0-M38591	73851	121	-25	63	28	29574	7	115	85	1046	11	1320
30-45.4400-109.0542-2-07-						0-M38592	66304	142	-25	11	101	44537	23	31	123	1166	13	201
30-45.4244-109.0925-2-08-						0-M38593	91067	186	-25	33	87	70472	19	-25	47	1463	6	494
30-45.4200-109.1047-2-08-						0-M38594	82182	155	-25	17	81	40575	15	-25	65	1099	5	321
30-45.4219-109.1022-2-07-						0-M38595	55474	200	-25	9	70	29306	42	41	83	929	13	187
30-45.4033-109.0547-2-07-						0-M38596	39277	117	-25	12	387	23511	14	39	90	746	12	372
30-45.3919-109.0525-2-08-						0-M38597	4939	-55	-25	8	29	4240	5	-25	68	-200	-4	410
30-45.4614-109.0253-2-07-						0-M38599	14065	104	-25	10	147	6027	15	27	90	338	6	183
30-45.4578-109.0653-2-08-						0-M38600	90503	218	-25	19	96	56229	10	-25	80	1417	12	548
30-45.5083-108.9025-2-08-						0-M38601	251000	454	28	24	128	136000	16	-25	86	3218	30	535
30-45.5086-108.9011-2-08-						0-M38602	264000	445	33	22	216	143000	25	-25	124	3514	39	759
30-45.1942-108.9831-2-07-						0-M38603	63592	149	-25	15	112	50913	26	33	-25	1219	10	380
30-45.2139-109.0189-2-07-						0-M38608	65161	97	-25	19	106	52612	22	53	-25	1125	-4	457
30-45.2333-109.0644-2-07-						0-M38609	45783	-55	-25	6	105	28714	37	54	-25	806	10	298
30-45.2431-109.1239-2-08-						0-M38610	43561	122	-25	-4	26	16081	-3	47	-25	541	5	348
30-45.2372-109.0961-2-07-						0-M38611	43571	-55	-25	8	97	23210	22	53	-25	794	12	309
30-45.2119-109.0822-2-08-						0-M38612	46963	107	-25	11	66	38928	-3	62	-25	1047	10	298
30-45.2106-109.0808-2-07-						0-M38613	85427	169	-25	10	78	71663	33	-25	-25	1475	11	340
30-45.2036-108.9711-2-08-						0-M38614	108000	184	-25	75	86	40737	9	58	-25	1468	22	179
30-45.2369-108.9586-2-08-						0-M38615	105000	205	32	32	96	51951	30	162	48	2019	29	178
30-45.2306-108.9203-2-08-						0-M38616	73266	135	-25	27	79	42989	-3	56	-25	1216	12	93
30-45.2033-108.9439-2-08-						0-M38617	31977	60	-25	12	68	23781	7	-25	-25	456	-4	146
30-45.1797-108.9919-2-07-						0-M38618	26912	-55	-25	8	129	9629	17	-25	-25	439	11	246

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																									U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (W) UNITS IN ppb
30-45.1608-108.9700-2-08-						0-M38619-06/10/78-15-	26-13.0-C-		-	7.4-	1400-		13-1-3-	-	-	-	-	-	-4-3-1-2-	-1-3-	-130-	-									6.69
30-45.1450-108.0056-2-07-						0-M38620-06/10/78-15-	24-13.0-	-	-	8.4-	330-		11-1-2-5-7-3-3-4-2-2-3-2-2-	-7-	-	-	-														0.56
30-45.1453-109.0069-2-08-						0-M38621-06/10/78-16-	24-16.0-C-		-	7.2-	1100-		9-1-2-	-	-	-	-	-	-3-2-2-3-	-1-8-	12-134-	-									6.80
30-45.1608-109.1228-2-07-						0-M38622-06/10/78-17-	19-17.0-C-		-	8.4-	2400-		6-1-4-5-6-3-3-2-2-3-2-3-4-	-3-	-	-	-														3.61
30-45.1628-109.1228-2-08-						0-M38623-06/10/78-17-	19-12.0-C-		-	7.4-	4300-		16-4-4-	-	-	-	-	-	-3-2-3-4-	-1-8-	-	-	-									3.99
30-45.1406-109.0303-2-07-						0-M38627-06/10/78-20-	13-16.0-	-	-	8.4-	2500-		-1-2-6-6-2-3-4-1-3-3-3-2-	-3-	-	-	-														3.38
30-45.1714-108.9319-2-06-						0-M38629-06/12/78-17-	28-13.0-C-		-	7.5-	3750-		6-1-2-	-	-	-	-	-	-3-2-3-1-	-1-	-	-	-									4.70
30-45.1531-108.9661-2-07-						0-M38631-06/12/78-19-	26-20.0-	-	-	8.2-	29500-		9-1-2-6-8-3-3-4-2-3-2-2-1-	-3-	-	-	-	10-													4.22
30-45.1592-108.9953-2-08-						0-M38632-06/12/78-20-	26-12.5-C-		-	7.3-	650-		13-1-2-	-	-	-	-	-	-4-3-1-1-	-1-3-	-	-	-									2.30
30-45.1064-109.0336-2-07-						0-M38633-06/13/78- 9-	21-10.0-	-	-	7.6-	110-		11-1-3-4-7-2-3-2-1-4-3-3-1-	-3-	-	-	-														0.30
30-45.1058-109.0081-2-08-						0-M38636-06/13/78-12-	27-16.5-C-		-	7.2-	750-		11-1-2-	-	-	-	-	-	-4-3-1-1-	-	-3-	6-	44-	32-								5.27
30-45.0258-109.0772-2-08-						0-M38642-06/13/78-19-	24-12.5-C-		-	7.0-	1000-		13-1-3-	-	-	-	-	-	-3-2-3-2-	-3-8-	-	-	-									11.51
30-45.0042-109.0953-2-06-						0-M38644-06/13/78-19-	26-11.0-	-	-	7.6-	500-		13-1-2-6-7-2-3-1-3-4-4-4-2-	-1-	-	-	-														3.20
30-45.0806-109.1211-2-07-						0-M38645-06/14/78-10-	22-15.0-	-	-	8.1-	750-		11-1-3-6-6-2-3-2-1-3-3-2-1-	-3-	-	-	-														8.45
30-45.0808-109.1044-2-09-						0-M38646-06/14/78-10-	26-11.5-	-	-	-	23500-		13-1-3-	-	-	-	-	-	-3-3-2-1-	-3-3-	-	-	-									2.48
30-45.0753-109.0383-2-08-						0-M38648-06/14/78-14-	29-15.5-C-		-	7.3-	600-		23-1-3-	-	-	-	-	-	-4-3-2-1-	-	-3-	-	12-	-								2.50
30-45.0517-109.0539-2-08-						0-M38649-06/14/78-14-	27-15.0-C-		-	7.4-	650-		23-1-3-	-	-	-	-	-	-3-2-2-1-	-1-3-	8-	60-	-									2.87
30-45.0456-109.0872-2-07-						0-M38651-06/14/78-15-	35-23.5-	-	-	8.3-	950-		4-1-1-4-6-2-3-1-3-4-3-3-2-	-3-	-	-	-														2.83
30-45.0350-108.9844-2-08-						0-M38652-06/14/78-17-	32-12.0-	-	-	7.9-	2000-		9-1-3-	-	-	-	-	-	-3-2-4-2-	-1-1-	-	-	-									0.08
30-45.0561-108.9583-2-07-						0-M38653-06/14/78-17-	33-20.0-	-	-	7.9-	6000-		9-1-2-4-6-3-3-3-2-3-2-3-2-	-3-	-	-	-														3.13
30-45.0325-108.9444-2-07-						0-M38655-06/14/78-18-	32-27.5-C-		-	7.6-	5000-		11-1-2-6-7-3-3-3-2-3-2-3-2-	-3-	-	-	-														11.22
30-45.0794-109.0558-2-08-						0-M38660-06/14/78-20-	26-12.0-C-		-	7.3-	1100-		13-1-2-	-	-	-	-	-	-4-3-2-2-	-1-3-	6-100-											1.57
30-45.0125-108.8353-2-06-						0-M38663-06/16/78-13-	17- 9.3-C-		-	7.1-	1950-		11-1-7-6-8-	-	-	-	-	-	-4-2-2-2-	-3-	-	-	-									0.20
30-45.1156-108.9064-2-08-						0-M38668-06/16/78-18-	19-10.?-C-		-	7.4-	1750-		6-1-2-	-	-	-	-	-	-4-2-4-3-	-9-7-	-	-	-									0.85
30-45.0972-108.8222-2-07-						0-M38671-06/16/78-20-	14-14.5-	-	-	8.2-	4450-		10-1-1-4-7-2-3-1-1-4-3-3-3-	-1-	-	-	-														4.97
30-45.0597-108.6569-2-06-						0-M38683-06/17/78-19-	28-14.5-C-		-	8.5-	250-		16-1-4-	-	-	-	-	-	-4-3-2-1-	-1-	-	-	-									0.03
30-45.1544-108.8706-2-07-						0-M38692-06/20/78-12-	20-20.0-	-	-	8.7-	3550-		9-1-1-5-6-2-2-1-1-4-2-4-1-	-3-	-	-	-														0.46
30-45.0747-108.6414-2-07-						0-M38693-06/20/78-13-	21-10.5-	-	-	8.4-	350-		9-1-1-5-6-3-3-1-3-2-4-2-1-	-1-	-	-	-														0.31
30-45.0094-108.6111-2-07-						0-M38695-06/20/78-14-	22-25.0-	-	-	8.5-	360-		4-1-1-5-6-2-3-1-1-3-3-2-1-	-	-	-	-														0.40
30-45.0392-108.6047-2-07-						0-M38696-06/20/78-20-	21-20.2-	-	-	8.5-	380-		13-1-1-5-6-3-3-1-3-3-2-2-1-	-3-	-	-	-														2.99
30-45.0619-108.5558-2-07-						0-M38697-06/20/78-21-	18-11.5-	-	-	8.5-	345-		2-1-1-4-1-3-3-1-3-3-2-2-1-	-3-	-	-	-														0.56
30-45.0197-108.6314-2-07-						0-M38698-06/20/78-21-	18-15.0-	-	-	8.2-	700-		13-1-1-5-6-3-3-2-1-4-4-2-1-	-	-	-	-														1.47
30-45.0472-108.6514-2-07-						0-M38700-06/23/78-12-	25-12.5-	-	-	7.3-	625-		6-1-3-5-6-4-3-2-2-4-3-2-2-	-1-	-	-	-														2.76
30-45.0967-108.6400-2-08-						0-M38701-06/23/78-13-	29-11.0-C-		-	7.2-	750-		13-1-3-	-	-	-	-	-	-4-3-1-1-	-1-3-	-	30-	-									1.88
30-45.0964-108.6358-2-07-						0-M38702-06/23/78-13-	27- 9.5-	-	-	7.3-	210-		8-1-3-4-3-3-3-1-3-4-4-1-1-	-1-	-	-	-														0.25
30-45.0892-108.6247-2-08-						0-M38703-06/23/78-13-	30-11.0-	-	-	7.4-	600-		8-1-3-	-	-	-	-	-	-4-3-2-1-	-1-	-	-	-									0.90
30-45.0883-108.6222-2-07-						0-M38704-06/23/78-13-	31-10.5-	-	-	7.3-	240-		6-1-3-5-6-4-3-1-3-4-3-1-1-	-3-	-	-	-														0.18
30-45.0983-108.5983-2-07-						0-M38705-06/23/78-14-	29- 6.0-C-		-	7.1-	200-		10-1-1-4-6-3-3-1-3-3-4-3-1-	-1-	-	-	-														0.32
30-45.1051-108.5944-2-06-						0-M38706-06/23/78-14-	30- 6.0-	-	-	7.0-	195-		10-1-1-5-6-3-3-1-	-3-5-3-1-	-1-	-	-	-														0.08
30-45.1158-108.5994-2-08-						0-M38707-06/23/78-15-	31-11.5-	-	-	7.2-	1000-		9-1-3-	-	-	-	-	-	-3-2-4-1-	-1-3-	-120-											3.60
30-45.0756-108.6172-2-07-						0-M38708-06/23/78-15-	31-16.0-	-	-	7.1-	210-		6-1-1-5-4-3-3-2-2-3-2-3-2-	-3-	-	-	-														0.21
30-45.0842-108.6622-2-07-						0-M38711-06/23/78-17-	29-18.5-	-	-	7.1-	450-		4-1-1-6-8-2-3-2-3-4-4-2-2-	-3-	-	-	-														0.25
30-45.1014-108.6839-2-07-						0-M38712-06/23/78-18-	27-20.5-	-	-	7.3-	600-		10-1-7-5-6-2-3-2-3-4-4-2-3-	-3-	-	-	-														0.43
30-45.1697-108.7053-2-08-						0-M38714-06/23/78-19-	28-13.0-C-		-	7.0-	850-		4-1-1-	-	-	-	-	-	-4-4-2-3-	-1-	-	-	-									1.85
30-45.1681-108.7058-2-07-						0-M38715-06/23/78-19-	28-14.5-	-	-	6.8-	600-		3-1-1-5-3-2-3-1-3-4-4-2-3-	-3-	-	-	-														0.44
30-45.1567-108.6358-2-06-						0-M38717-06/23/78-20-	24- 6.5-	-	-	6.8-	165-		4-1-7-3-3-4-3-1-3-4-3-4-3-	-1-	-	-	-														0.20
30-45.1342-108.7194-2-07-						0-M38719-06/24/78- 8-	17-15.0-	-	-	7.1-	700-		10-1-2-5-6-3-3-2-2-4-3-2-1-	-3-	-	-	-														0.96
30-45.1881-108.6997-2-07-						0-M38721-06/24/78-10-	25-15.5-	-	-	7.4-	445-		4-1-4-3-2-3-2-2-2-4-4-1-2-	-3-	-	-	-														0.71
30-45.1994-108.7747-2-06-						0-M38723-06/24/78-12-	25-15.5-	-	-	7.5-	2400-		9-1-1-3-1-2-3-1-3-3-2-5-1-	-1-	-	-	-														0.58
30-45.2106-108.8292-2-06-						0-M38724-06/24/78-13-	31-20.6-C-		-	7.0-	3000-		15-1-1-6-8-2-3-1-2-3-2-2-1-	-1-	-	-	-														0.01
30-45.2164-108.8419-2-07-						0-M38725-06/24/78-13-	31-22.5-C-		-	7.0-	1600-		9-1-6-4-7-3-2-3-2-3-4-3-2-	-9-	-	-	-														1.10

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY Concentrations reported in weight parts per billion (ppb)											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.1608-108.9700-2-08-						0-M38610	234000	407	51	34	142	134000	9	-25	63	3781	50	355
30-45.1450-109.0056-2-07-						0-M38620	22042	116	-25	9	109	13533	5	52	50	573	19	-50
30-45.1453-109.0069-2-08-						0-M38621	15045	125	-25	25	40	32587	-3	59	36	628	14	120
30-45.1608-109.1228-2-07-						0-M38622	172000	352	31	18	126	127000	250	43	-25	2867	34	226
30-45.1628-109.1228-2-08-						0-M38623	132000	331	33	21	148	138000	16	75	-25	3115	27	1772
30-45.1406-109.0303-2-07-						0-M38627	143000	239	-25	16	91	127000	224	59	-25	2757	24	254
30-45.1714-108.9319-2-06-						0-M38629	20587	-55	-25	8	47	12288	10	69	-25	409	7	93
30-45.1531-108.9661-2-07-						0-M38631	242000	396	43	27	121	99287	28	-25	73	3262	47	182
30-45.1592-108.9953-2-08-						0-M38632	71814	135	-25	18	138	24342	11	59	-25	1108	14	388
30-45.1064-109.0336-2-07-						0-M38633	11962	63	-25	-4	81	3201	4	-25	-25	-200	-4	246
30-45.1058-109.0081-2-08-						0-M38636	88520	193	-25	235	87	29862	-3	37	-25	1074	5	283
30-45.0258-109.0772-2-08-						0-M38642	102000	176	-25	20	91	31656	8	90	-25	1532	19	390
30-45.0042-109.0953-2-06-						0-M38644	34643	107	-25	5	64	12670	5	63	-25	663	11	184
30-45.0806-109.1211-2-07-						0-M38645	53194	191	-25	8	106	32515	18	82	-25	1013	11	202
30-45.0808-109.1044-2-08-						0-M38646	165000	413	29	22	5876	143000	63	107	-25	3625	27	526
30-45.0753-109.0383-2-08-						0-M38648	61460	184	-25	40	78	17810	-3	66	-25	769	-4	321
30-45.0517-109.0539-2-08-						0-M38649	49764	131	-25	7	60	17288	-3	72	-25	754	-4	523
30-45.0456-109.0872-2-07-						0-M38651	56143	227	-25	5	60	34506	9	98	-25	1219	6	439
30-45.0350-108.9844-2-08-						0-M38652	4398	131	-25	7	360	3763	12	63	-25	353	9	69
30-45.0561-108.9583-2-07-						0-M38653	169000	412	34	23	116	54293	380	274	-25	3610	43	520
30-45.0325-108.9444-2-07-						0-M38655	153000	497	44	21	108	46734	353	373	29	4054	49	230
30-45.0794-109.0558-2-08-						0-M38660	54155	195	-25	8	76	28746	5	187	-25	1495	9	456
30-45.0125-108.8353-2-06-						0-M38663	70944	204	-25	10	122	34341	20	64	-25	1096	-4	151
30-45.1156-108.9064-2-08-						0-M38668	26201	106	-25	6	1259	16703	26	86	35	833	16	162
30-45.0972-108.8222-2-07-						0-M38671	71683	247	-25	10	93	50553	56	124	35	1725	17	129
30-45.0597-108.6569-2-06-						0-M38683	23539	66	-25	29	63	6995	4	48	-25	268	-4	81
30-45.1544-108.8706-2-07-						0-M38692	130000	331	-25	20	93	64976	199	61	-25	2125	20	470
30-45.0747-108.6414-2-07-						0-M38693	44327	110	-25	9	75	16472	13	54	27	674	5	362
30-45.0094-108.6111-2-07-						0-M38695	44212	160	-25	8	71	16625	9	58	45	573	7	314
30-45.0392-108.6047-2-07-						0-M38696	49231	178	-25	16	153	18267	40	60	-25	703	5	429
30-45.0619-108.5558-2-07-						0-M38697	41257	163	-25	5	61	15123	5	62	-25	562	-4	399
30-45.0197-108.6314-2-07-						0-M38698	64957	231	-25	14	105	34254	64	80	-25	1193	20	627
30-45.0472-108.6514-2-07-						0-M38700	33883	171	-25	-4	53	10133	8	33	-25	342	-4	685
30-45.0967-108.6400-2-08-						0-M38701	58906	191	-25	5	84	31616	6	89	-25	1047	11	711
30-45.0964-108.6358-2-07-						0-M38702	25110	-55	-25	6	-25	6666	-3	45	-25	570	8	71
30-45.0892-108.6247-2-08-						0-M38703	73548	69	-25	12	393	21519	10	67	69	1342	18	1554
30-45.0883-108.6222-2-07-						0-M38704	29962	-55	-25	-4	-25	8134	-3	-25	-25	239	-4	152
30-45.0983-108.5983-2-07-						0-M38705	26862	-55	-25	-4	-25	7156	-3	-25	-25	486	7	-50
30-45.1061-108.5944-2-06-						0-M38706	28893	-55	-25	9	-25	8174	-3	-25	37	491	6	-50
30-45.1158-108.5994-2-08-						0-M38707	94182	77	-25	15	38	40769	4	36	36	1577	15	188
30-45.0756-108.6172-2-07-						0-M38708	30821	-55	-25	-4	-25	8903	-3	-25	-25	454	-4	-50
30-45.0842-108.6622-2-07-						0-M38711	40696	-55	-25	-4	28	22461	11	26	28	882	8	-50
30-45.1014-108.6839-2-07-						0-M38712	61313	-55	-25	11	-25	32278	37	-25	-25	1121	8	51
30-45.1697-108.7053-2-08-						0-M38714	89335	97	-25	18	31	38616	-3	66	57	1871	22	142
30-45.1681-108.7058-2-07-						0-M38715	67031	-55	-25	11	-25	29293	35	-25	-25	1122	5	116
30-45.1567-108.6358-2-06-						0-M38717	22700	-55	-25	-4	-25	4840	-3	-25	-25	406	-4	56
30-45.1342-108.7194-2-07-						0-M38719	73734	62	-25	8	46	33864	32	53	-25	1417	11	146
30-45.1981-108.6997-2-07-						0-M38721	53909	56	-25	8	-25	23492	-3	77	73	1163	17	115
30-45.1994-108.7747-2-06-						0-M38723	193000	150	32	24	38	60790	6	-25	26	3314	29	200
30-45.2106-108.8292-2-06-						0-M38724	580000	310	215	71	138	140000	27	-25	407	5046	99	311
30-45.2164-108.8419-2-07-						0-M38725	371000	265	66	29	83	62612	39	-25	111	2027	53	130

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (ff) UNITS IN ppb
30-45.2236-108.8264-2-08-						0-M38735-06/24/78-14-	33-12.5-C-		-	7.2-	800-		6-1-4-	-	-	-	-	-	-4-4-3-2-	-1-	-	-	-	-	0.45
30-45.2172-108.9164-2-06-						0-M38737-06/24/78-15-	31-15.0-C-		-	7.4-	2450-		4-1-4-6-6-3-3-1-3-3-1-3-2-	-1-	-	-	-	-	0.22
30-45.2294-108.8422-2-07-						0-M38738-06/24/78-15-	32-25.5-	-	-	7.9-	2000-		8-1-4-6-6-2-2-4-2-3-3-3-2-	-3-	-	-	-	-	2.47
30-45.2425-108.8625-2-07-						0-M38739-06/24/78-16-	34-26.0-	-	-	8.0-	1950-		12-1-7-4-6-3-3-2-2-4-4-3-3-	-3-	-	-	-	-	1.48
30-45.2039-108.8247-2-07-						0-M38730-06/24/78-17-	28-20.5-	-	-	8.0-	1600-		6-1-4-	-	-3-4-2-2-4-3-2-3-	-3-	-	-	-	-	1.52
30-45.2194-108.7253-2-07-						0-M38731-06/24/78-17-	24-20.0-	-	-	8.2-	440-		8-1-7-5-6-2-3-4-3-4-5-1-3-	-3-	-	-	-	-	0.23
30-45.2086-108.6914-2-07-						0-M38732-06/24/78-18-	26-14.5-	-	-	-	470-		6-1-1-	-	-4-3-2-3-4-3-1-3-	-3-	-	-	-	-	0.65
30-45.2111-108.6300-2-08-						0-M38733-06/24/78-18-	24-10.5-	-	-	7.5-	550-		4-1-1-	-	-	-	-	-	-4-1-2-3-	-1-3-	6-	-	-	-	0.56
30-45.0744-108.5722-2-07-						0-M38738-06/25/78-10-	23-11.5-	-	-	7.0-	210-		11-1-4-5-6-2-3-1-3-3-2-2-1-	-3-	-	-	-	-	0.25
30-45.0772-108.5419-2-07-						0-M38740-06/25/78-11-	23-11.5-	-	-	7.1-	320-		4-1-1-4-4-4-3-1-3-1-3-5-1-	-1-	-	-	-	-	0.11
30-45.0033-108.5342-2-07-						0-M38741-06/25/78-14-	23-18.5-C-		-	7.0-	19000-		17-1-7-4-6-2-2-1-3-4-1-3-2-	-3-	-	-	-	-	10.46*
30-45.0061-108.4286-2-06-						0-M38747-06/25/78-17-	16-12.0-C-		-	7.0-	2100-		6-1-4-6-8-2-2-1-3-2-3-3-3-	-3-	-	-	-	-	1.82
30-45.1275-108.4222-2-07-						0-M38754-06/26/78-10-	14- 5.5-	-	-	7.3-	340-		8-1-1-4-6-4-3-1-3-2-4-6-2-	-1-	-	-	-	-	0.24
30-45.1164-108.4175-2-06-						0-M38755-06/26/78-14-	17- 6.5-C-		-	7.0-	650-		9-1-1-4-6-3-3-1-3-1-4-5-3-	-1-	-	-	-	-	2.92*
30-45.1344-108.4311-2-07-						0-M38756-06/26/78-14-	14- 6.0-C-		-	7.0-	500-		3-1-4-4-6-4-3-1-3-4-4-5-3-	-1-	-	-	-	-	0.16
30-45.1514-108.4397-2-07-						0-M38757-06/26/78-15-	18- 7.0-C-		-	7.0-	410-		6-1-6-4-6-4-3-1-3-4-4-5-2-	-1-	-	-	-	-	0.46
30-45.1536-108.4364-2-07-						0-M38758-06/26/78-15-	18- -C-		-	7.0-	320-		10-1-6-3-4-4-3-1-2-4-4-5-2-	-1-	-	-	-	-	0.21
30-45.1828-108.4294-2-06-						0-M38760-06/26/78-18-	13- 6.0-C-		-	7.0-	385-		4-1-4-3-4-3-3-1-3-4-4-3-2-	-1-	-	-	-	-	0.09
30-45.1969-108.4328-2-06-						0-M38761-06/26/78-18-	14- 7.0-C-		-	7.0-	420-		4-1-4-3-7-2-3-1-3-1-4-5-2-	-1-	-	-	-	-	0.56
30-45.1969-108.4203-2-06-						0-M38762-06/26/78-19-	15- 9.0-	-	-	7.0-	425-		6-1-1-6-6-3-3-1-3-4-4-5-2-	-1-	-	-	-	-	0.06
30-45.2089-108.4175-2-06-						0-M38763-06/26/78-20-	14- 8.0-C-		-	7.0-	420-		9-1-4-6-8-4-3-1-3-4-4-5-2-	-1-	-	-	-	-	0.30
30-45.2078-108.4139-2-07-						0-M38764-06/26/78-20-	14-11.0-C-		-	7.0-	390-		9-1-4-4-6-3-3-1-3-4-4-5-2-	-1-	-	-	-	-	0.53
30-45.2117-108.4356-2-06-						0-M38765-06/27/78- 8-	19- 7.5-C-		-	7.2-	445-		11-1-1-5-6-2-3-1-	-4-4-2-1-	-1-	-	-	-	0.54
30-45.2144-108.4436-2-06-						0-M38766-06/27/78- 8-	17- 8.5-C-		-	7.0-	390-		5-1-1-4-6-2-3-1-	-4-4-4-1-	-1-	-	-	-	0.14
30-45.2061-108.4781-2-07-						0-M38767-06/27/78-10-	25-11.0-C-		-	-	430-		11-1-4-5-6-2-3-1-2-4-4-4-1-	-3-	-	-	-	-	0.40
30-45.2172-108.5703-2-07-						0-M38769-06/29/78-15-	27-14.0-	-	-	8.0-	490-		10-1-1-5-4-3-3-2-2-4-3-4-3-	-3-	-	-	-	-	0.30
30-45.2067-108.5569-2-07-						0-M38769-06/29/78-15-	23- 9.0-C-		-	8.6-	300-		2-1-1-3-8-4-3-1-	-4-4-5-3-	-1-	-	-	-	0.20
30-45.2150-108.5506-2-07-						0-M38770-06/29/78-15-	25-10.5-C-		-	7.9-	700-		11-1-1-3-7-2-3-1-	-4-5-4-3-	-1-	-	-	-	0.73
30-45.2108-108.5447-2-07-						0-M38772-06/29/78-17-	20-12.5-	-	-	8.5-	480-		4-1-1-6-4-3-3-2-2-4-4-3-3-	-3-	-	-	-	-	0.15
30-45.2136-108.5119-2-07-						0-M38773-06/29/78-18-	20-10.5-C-		-	8.4-	450-		5-1-1-6-8-4-3-1-	-4-3-4-3-	-1-	-	-	-	0.79
30-45.2100-108.5100-2-07-						0-M38774-06/29/78-18-	23-11.0-	-	-	8.3-	600-		6-1-1-5-4-3-3-1-2-4-4-4-2-	-3-	-	-	-	-	0.74
30-45.2039-108.4950-2-07-						0-M38775-06/29/78-19-	28-11.5-	-	-	8.4-	650-		5-1-4-5-4-3-3-1-2-4-4-4-2-	-3-	-	-	-	-	0.76
30-45.2156-108.4878-2-06-						0-M38776-06/29/78-19-	25- 6.5-C-		-	7.9-	440-		4-1-1-4-7-3-3-1-	-4-4-5-1-	-1-	-	-	-	0.55
30-45.2147-108.5006-2-07-						0-M38777-06/29/78-20-	21-12.5-C-		-	8.0-	410-		4-1-1-5-6-3-3-1-2-3-4-4-1-	-1-	-	-	-	-	1.08
30-45.1869-108.2289-2-06-						0-M38779-06/30/78-13-	30- 9.5-C-		-	7.8-	850-		10-1-4-5-6-3-3-1-	-4-2-3-1-	-	-	-	-	0.26
30-45.1864-108.2403-2-07-						0-M38780-06/30/78-14-	31-25.0-	-	-	8.9-	650-		4-1-4-5-4-3-3-1-2-4-1-3-1-	-3-	-	-	-	-	0.61
30-45.1858-108.2367-2-07-						0-M38781-06/30/78-15-	31-20.5-	-	-	8.4-	420-		6-1-4-4-6-3-3-2-3-4-1-3-1-	-3-	-	-	-	-	0.35
30-45.1589-108.2147-2-06-						0-M38787-06/30/78-19-	31-22.0-	-	-	8.0-	1500-		9-1-2-6-8-2-3-1-	-3-3-2-1-	-3-	-	-	-	1.52
30-45.1600-108.2158-2-07-						0-M38788-06/30/78-19-	31-24.0-	-	-	7.5-	1700-		9-1-4-5-4-2-3-1-2-3-2-3-1-	-3-	-	-	-	-	3.26
30-45.1514-108.2431-2-07-						0-M38789-06/30/78-19-	29-15.0-	-	-	8.6-	525-		12-1-2-4-7-3-3-3-2-4-4-3-2-	-3-	-	-	-	-	0.42
30-45.1419-108.2458-2-06-						0-M38790-06/30/78-20-	26-15.0-	-	-	8.6-	1700-		6-1-4-4-4-2-3-1-	-2-3-3-2-	-1-	-	-	-	4.13
30-45.1417-108.2442-2-07-						0-M38791-06/30/78-20-	23-16.0-	-	-	8.6-	1650-		12-1-4-4-4-2-3-1-2-2-3-3-2-	-3-	-	-	-	-	0.86
30-45.1069-108.2269-2-07-						0-M38792-07/05/78- 8-	13-11.5-	-	-	7.6-	1500-		9-1-4-3-1-3-3-1-2-2-3-4-1-	-1-	-	-	-	-	0.97
30-45.1075-108.2417-2-06-						0-M38793-07/05/78- 8-	20-10.6-	-	-	7.3-	3350-		8-1-4-4-4-2-3-1-	-4-4-3-1-	-1-	-	-	-	3.10
30-45.0996-108.2306-2-07-						0-M38794-07/05/78- 8-	22-11.0-	-	-	8.4-	750-		6-1-4-5-6-4-3-1-3-4-5-4-1-	-1-	-	-	-	-	1.82
30-45.1019-108.2353-2-06-						0-M38795-07/05/78- 9-	21-10.5-C-		-	7.0-	900-		8-1-4-5-6-3-3-1-	-2-4-5-2-	-1-	-	-	-	0.18
30-45.1164-108.2103-2-07-						0-M38796-07/05/78-11-	23-13.0-	-	-	8.4-	800-		6-1-4-5-6-3-3-2-2-3-2-5-2-	-3-	-	-	-	-	0.47
30-45.1367-108.2425-2-06-						0-M38797-07/05/78-12-	23-11.0-	-	-	7.5-	1700-		11-1-4-5-4-2-2-1-	-1-3-3-2-	-1-	-	-	-	3.22
30-45.1675-108.2969-2-06-						0-M38799-07/05/78-14-	22-13.0-	-	-	8.4-	410-		5-1-1-3-1-3-3-1-	-2-5-5-2-	-1-	-	-	-	0.81
30-45.1608-108.2669-2-06-						0-M38800-07/05/78-15-	20- 7.0-	-	-	7.4-	600-		6-1-1-3-7-2-3-1-	-2-3-3-3-	-1-	-	-	-	0.33
30-45.1725-108.2531-2-06-						0-M38801-07/05/78-17-	19- 6.0-C-		-	7.3-	950-		4-1-1-3-7-3-3-1-	-4-2-2-2-	-1-	-	-	-	0.03

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(2)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY Concentrations reported in weight parts per billion (ppb)											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.	2236-	108.8264-	2-	08-	0-	438726	68963	126	112	22	535	33888	29	93	280	1846	58	-50
30-45.	2172-	108.8164-	2-	06-	0-	438727	665000	308	114	44	134	81181	23	-25	166	1626	85	149
30-45.	2294-	108.8422-	2-	07-	0-	438728	271000	292	345	75	192	77165	55	-25	764	5160	166	109
30-45.	2425-	108.8625-	2-	07-	0-	438729	376000	229	-25	18	69	78573	41	-25	-25	1583	35	80
30-45.	2039-	108.8247-	2-	07-	0-	438730	400000	249	69	27	109	59554	16	-25	123	1463	60	63
30-45.	2194-	108.7253-	2-	07-	0-	438731	36897	87	-25	7	-25	28923	-3	-25	39	694	12	-50
30-45.	2086-	108.6914-	2-	07-	0-	438732	72827	105	-25	10	33	30029	4	-25	37	880	20	-50
30-45.	2111-	108.6300-	2-	08-	0-	438733	69756	96	31	14	60	33169	10	-25	61	933	22	1782
30-45.	0744-	108.5722-	2-	07-	0-	438738	36729	-55	34	8	55	9919	8	-25	83	607	17	-50
30-45.	0772-	108.5419-	2-	07-	0-	438740	54243	97	-25	8	28	18107	4	-25	38	690	16	-50
30-45.	0033-	108.5342-	2-	07-	0-	438741	438000	369	82	43	110	290000	4462	-25	218	4106	53	90
30-45.	0061-	108.4286-	2-	06-	0-	438747	534000	318	134	80	173	70248	65	-25	196	1398	65	-50
30-45.	1275-	108.4222-	2-	07-	0-	438754	55100	127	-25	8	43	17765	-3	-25	71	633	12	-50
30-45.	1164-	108.4175-	2-	06-	0-	438755	80386	150	27	12	38	43806	8	-25	99	1067	22	-50
30-45.	1344-	108.4311-	2-	07-	0-	438756	67270	120	-25	11	44	34165	-3	-25	89	1004	23	-50
30-45.	1514-	108.4397-	2-	07-	0-	438757	53823	103	52	14	47	21700	5	40	155	1100	29	-50
30-45.	1536-	108.4364-	2-	07-	0-	438758	50797	92	46	10	37	15476	4	-25	130	878	26	-50
30-45.	1828-	108.4294-	2-	06-	0-	438760	53287	141	-25	6	-25	25757	5	38	-25	753	8	261
30-45.	1869-	108.4328-	2-	06-	0-	438761	55652	73	-25	-4	-25	25528	4	-25	-25	622	-4	269
30-45.	1969-	108.4203-	2-	06-	0-	438762	69486	-55	-25	-4	35	21155	11	-25	-25	625	6	428
30-45.	2089-	108.4175-	2-	06-	0-	438763	69982	102	-25	-4	-25	23182	6	-25	-25	804	12	410
30-45.	2078-	108.4139-	2-	07-	0-	438764	62430	-55	-25	-4	-25	20934	-3	-25	-25	-200	-4	120
30-45.	2117-	108.4356-	2-	06-	0-	438765	60207	-55	-25	-4	-25	40911	-3	-25	-25	284	-4	-50
30-45.	2144-	108.4436-	2-	06-	0-	438766	65364	-55	-25	-4	-25	24731	-3	-25	-25	-200	-4	-50
30-45.	2061-	108.4781-	2-	07-	0-	438767	71525	-55	-25	-4	-25	29985	-3	-25	-25	271	-4	-50
30-45.	2172-	108.5703-	2-	07-	0-	438768	76266	-55	-25	44	-25	26660	-3	-25	-25	342	-4	144
30-45.	2067-	108.5569-	2-	07-	0-	438769	47997	-55	-25	11	-25	18194	-3	-25	-25	-200	-4	289
30-45.	2150-	108.5506-	2-	07-	0-	438770	98782	-55	-25	-4	-25	57570	-3	-25	-25	646	-4	188
30-45.	2108-	108.5447-	2-	07-	0-	438772	73380	-55	-25	14	59	31359	9	-25	39	1132	17	64
30-45.	2136-	108.5119-	2-	07-	0-	438773	63746	150	-25	-4	-25	35704	-3	-25	47	1011	14	-50
30-45.	2100-	108.5100-	2-	07-	0-	438774	99321	192	36	11	32	35305	14	-25	96	1563	30	-50
30-45.	2039-	108.4950-	2-	07-	0-	438775	124000	185	33	14	102	39860	22	-25	98	1655	23	-50
30-45.	2156-	108.4878-	2-	06-	0-	438776	59780	59	-25	11	-25	31590	4	-25	109	1172	18	-50
30-45.	2147-	108.5006-	2-	07-	0-	438777	66064	68	51	13	72	32998	11	44	162	1397	33	-50
30-45.	1869-	108.2289-	2-	06-	0-	438779	102000	165	-25	15	78	51391	11	-25	121	1619	18	-50
30-45.	1864-	108.2403-	2-	07-	0-	438780	37374	127	-25	8	94	44725	-3	28	93	995	5	-50
30-45.	1858-	108.2367-	2-	07-	0-	438781	53991	80	-25	19	119	33771	8	-25	92	963	13	-50
30-45.	1589-	108.2147-	2-	06-	0-	438787	231000	290	38	22	55	89509	20	-25	90	2857	35	180
30-45.	1600-	108.2158-	2-	07-	0-	438788	293000	331	68	24	100	91013	76	-25	109	3312	43	723
30-45.	1514-	108.2431-	2-	07-	0-	438789	70389	171	30	12	78	35803	9	36	115	1400	21	286
30-45.	1419-	108.2458-	2-	06-	0-	438790	217000	270	65	19	123	112000	48	-25	144	3409	42	271
30-45.	1417-	108.2442-	2-	07-	0-	438791	213000	272	60	20	89	110000	41	-25	158	3398	43	498
30-45.	1069-	108.2269-	2-	07-	0-	438792	262000	316	58	22	73	86606	17	-25	130	3371	46	533
30-45.	1075-	108.2417-	2-	06-	0-	438793	512000	503	134	49	238	167000	27	-25	228	5250	83	598
30-45.	0986-	108.2306-	2-	07-	0-	438794	91297	245	32	13	57	40656	5	-25	111	1544	26	332
30-45.	1019-	108.2353-	2-	06-	0-	438795	136000	240	43	13	47	46829	9	-25	107	1923	25	404
30-45.	1164-	108.2103-	2-	07-	0-	438796	94690	185	58	15	36	50087	4	29	144	1859	37	774
30-45.	1367-	108.2425-	2-	06-	0-	438797	260000	287	71	26	88	93231	16	-25	161	3557	52	874
30-45.	1675-	108.2969-	2-	06-	0-	438799	57300	96	52	13	28	24721	-3	54	182	1207	29	316
30-45.	1608-	108.2669-	2-	06-	0-	438800	60476	140	53	14	-25	31879	6	68	160	1473	31	150
30-45.	1725-	108.2531-	2-	06-	0-	438801	84817	123	59	15	46	47532	5	60	185	1841	35	100

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
							TIME SAMPLED																										
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (*) UNITS IN ppb
30-	45.9086-	109.9594-	2-	06-		0-438802-	06/07/78-	10-	20-	13.0-	0-	-	6.8-	400-	12-	1-	6-	-	-3-	3-	1-	-4-	3-	4-	2-	-1-	-	-	-	-	1.06
30-45.7669-	109.9900-	2-	08-		0-438803-	06/07/78-	11-	20-	13.0-	0-	-	6.4-	400-	13-	1-	6-	-	-	-	-1-	-4-	3-	4-	2-	-1-	3-	-	-	-	-	0.87
30-45.8358-	109.9603-	2-	06-		0-438804-	06/07/78-	12-	22-	10.5-	-	-	6.5-	390-	13-	-	-	-	-	-	-	-	-4-	3-	4-	2-	-1-	-	-	-	-	2.03
30-45.8300-	109.9367-	2-	08-		0-438805-	06/07/78-	14-	25-	9.5-	0-	-	6.7-	465-	9-	1-	6-	-	-	-	-1-	-4-	3-	4-	2-	-3-	4-	-	-	-	-	2.26
30-45.7847-	109.9614-	2-	08-		0-438806-	06/07/78-	14-	20-	12.0-	0-	-	6.3-	340-	11-	1-	6-	-	-	-	-1-	-4-	3-	4-	2-	-3-	3-	6-	75-	20-	-	1.61
30-45.8522-	109.9728-	2-	07-		0-438808-	06/07/78-	16-	20-	16.0-	-	-	6.6-	410-	8-	1-	7-	3-	6-	2-	2-	1-	2-	3-	2-	4-	2-	-3-	-	-	-	-	0.86
30-45.8525-	109.9758-	2-	07-		0-438809-	06/07/78-	16-	24-	16.0-	-	-	6.5-	380-	12-	1-	7-	3-	6-	2-	2-	4-	2-	3-	2-	4-	2-	-3-	-	-	-	-	0.97
30-45.8611-	109.9067-	2-	08-		0-438810-	06/07/78-	17-	22-	9.0-	-	-	6.7-	700-	13-	1-	6-	-	-	-	-1-	-4-	3-	4-	2-	-1-	3-	6-	57-	27-	-	0.55
30-45.8597-	109.9069-	2-	07-		0-438811-	06/07/78-	18-	26-	18.0-	-	-	6.8-	600-	6-	1-	7-	4-	6-	3-	3-	4-	1-	4-	3-	2-	2-	-3-	-	-	-	-	0.51
30-45.8572-	109.9381-	2-	08-		0-438813-	06/07/78-	18-	23-	8.0-	0-	-	6.5-	370-	11-	1-	6-	-	-	-	-1-	-4-	3-	3-	2-	-3-	3-	6-	50-	-	-	0.63
30-45.8108-	109.9742-	2-	08-		0-438814-	06/10/78-	11-	19-	12.0-	0-	-	6.5-	425-	9-	1-	6-	-	-	-	-1-	-4-	2-	4-	3-	-3-	3-	6-	60-	-	-	2.61
30-45.8164-	109.9825-	2-	08-		0-438815-	06/10/78-	12-	18-	10.5-	0-	-	6.4-	600-	9-	1-	6-	-	6-	-	-1-	-4-	3-	4-	3-	-3-	4-	-	-	-	-	1.70
30-45.8878-	109.9569-	2-	08-		0-438816-	06/10/78-	14-	24-	11.0-	0-	-	6.4-	270-	9-	1-	6-	-	-	-	-	-4-	3-	4-	3-	-1-	3-	6-	300-	15-	-	0.42
30-45.8944-	109.9956-	2-	07-		0-438817-	06/10/78-	14-	24-	9.5-	-	-	6.0-	190-	16-	1-	6-	1-	7-	4-	3-	2-	2-	3-	3-	3-	3-	-3-	-	-	-	-	1.63
30-45.8833-	109.9742-	2-	08-		0-438818-	06/10/78-	15-	12-	10.0-	0-	-	6.3-	700-	6-	1-	6-	-	-	-	-1-	-4-	2-	3-	3-	-3-	4-	8-	-	-	-	2.83
30-45.8764-	109.9517-	2-	08-		0-438819-	06/10/78-	15-	9-	13.0-	-	-	6.5-	440-	13-	1-	6-	-	-	-	-	-4-	3-	4-	4-	-3-	4-	6-	30-	15-	-	0.72
30-45.8325-	109.9214-	2-	08-		0-438820-	06/13/78-	9-	18-	15.0-	-	-	7.2-	420-	9-	1-	7-	-	-	-	-1-	-4-	3-	3-	2-	-	-4-	6-	37-	30-	-	1.15
30-45.9200-	109.9778-	2-	08-		0-438821-	06/13/78-	10-	18-	16.0-	0-	-	7.4-	490-	16-	1-	-	-	-	-	-1-	-4-	3-	3-	4-	-3-	-	-	-	-	-	0.79
30-45.9333-	109.9891-	2-	07-		0-438822-	06/13/78-	10-	18-	8.5-	-	-	7.9-	137-	4-	1-	6-	4-	6-	4-	4-	3-	2-	3-	3-	4-	-3-	-	-	-	-	0.22
30-45.9639-	109.9706-	2-	08-		0-438823-	06/13/78-	11-	22-	11.0-	-	-	7.1-	800-	6-	1-	-	-	-	-	-1-	-4-	3-	3-	2-	-3-	4-	6-	25-	20-	-	0.90
30-45.9631-	109.9711-	2-	07-		0-438824-	06/13/78-	11-	21-	15.0-	-	-	8.3-	410-	9-	1-	6-	5-	6-	3-	2-	2-	2-	4-	3-	3-	2-	-3-	-	-	-	-	0.74
30-45.9894-	109.9792-	2-	08-		0-438825-	06/13/78-	11-	20-	12.0-	-	-	7.7-	360-	13-	1-	6-	-	-	-	-1-	-4-	3-	4-	2-	-3-	4-	6-	40-	30-	-	1.67
30-45.9947-	109.9206-	2-	08-		0-438826-	06/13/78-	12-	20-	11.0-	-	-	7.7-	600-	13-	1-	6-	-	-	-	-1-	-4-	3-	4-	2-	-3-	4-	6-	30-	20-	-	0.20
30-45.9892-	109.8889-	2-	07-		0-438827-	06/13/78-	13-	20-	17.0-	-	-	8.6-	630-	9-	1-	7-	4-	6-	2-	2-	2-	1-	4-	3-	3-	2-	-3-	-	-	-	-	1.28
30-45.9881-	109.8897-	2-	07-		0-438828-	06/13/78-	13-	20-	2.0-	-	-	8.5-	650-	4-	1-	7-	4-	6-	2-	2-	2-	1-	4-	3-	3-	2-	-3-	-	-	-	-	1.25
30-45.9494-	109.8989-	2-	08-		0-438829-	06/13/78-	14-	27-	13.5-	-	-	7.3-	700-	-1-	6-	-	-	-	-	-1-	-4-	3-	3-	2-	-3-	4-	6-	30-	15-	-	1.74
30-45.9475-	109.8992-	2-	07-		0-438830-	06/13/78-	14-	26-	18.0-	-	-	8.1-	500-	-1-	7-	5-	6-	3-	3-	4-	2-	4-	3-	3-	2-	-3-	-	-	-	-	0.15
30-45.9175-	109.9325-	2-	06-		0-438831-	06/13/78-	15-	22-	14.5-	0-	-	7.7-	300-	4-	1-	7-	-	-	-	-	-1-	-4-	2-	4-	2-	-3-	-	-	-	-	0.49
30-45.9183-	109.9175-	2-	07-		0-438832-	06/13/78-	14-	23-	19.0-	0-	-	8.1-	700-	6-	1-	7-	5-	5-	2-	2-	3-	1-	4-	4-	3-	2-	-3-	-	-	-	-	1.11
30-45.9089-	109.9158-	2-	08-		0-438833-	06/13/78-	16-	25-	12.0-	-	-	7.3-	800-	11-	1-	-	-	-	-	-1-	-4-	3-	3-	3-	-3-	3-	6-	60-	40-	-	0.33
30-45.7989-	109.8658-	2-	08-		0-438835-	06/13/78-	17-	21-	12.0-	-	-	7.3-	600-	6-	1-	6-	-	-	-	-1-	-4-	3-	3-	2-	-3-	3-	6-	70-	30-	-	2.88
30-45.7692-	109.8500-	2-	08-		0-438836-	06/13/78-	18-	20-	10.0-	-	-	7.3-	245-	6-	1-	6-	-	-	-	-1-	-	-	3-	3-	2-	-3-	4-	6-	30-	10-	-	1.13
30-45.7583-	109.8622-	2-	07-		0-438837-	06/13/78-	18-	20-	13.0-	-	-	7.5-	215-	6-	1-	6-	4-	6-	4-	3-	1-	2-	4-	3-	4-	2-	-3-	-	-	-	-	0.15
30-45.7756-	109.8053-	2-	07-		0-438838-	06/13/78-	19-	24-	15.0-	-	-	8.3-	190-	9-	1-	6-	4-	6-	4-	3-	1-	2-	4-	3-	3-	2-	-3-	-	-	-	-	0.25
30-45.5064-	108.9222-	2-	08-		0-438839-	06/27/78-	11-	27-	24.5-	0-	-	7.7-	3150-	10-	1-	6-	-	-	-	-1-	-4-	3-	3-	1-	-3-	4-	6-	30-	-	-	3.72
30-45.5419-	108.9150-	2-	07-		0-438840-	06/27/78-	12-	38-	20.0-	0-	-	8.6-	4200-	5-	1-	6-	5-	6-	2-	2-	3-	1-	4-	4-	3-	1-	-3-	-	-	-	-	3.40
30-45.5433-	108.9147-	2-	07-		0-438841-	06/27/78-	12-	38-	21.0-	0-	-	8.8-	3700-	3-	1-	6-	5-	6-	2-	2-	2-	1-	4-	4-	3-	1-	-3-	-	-	-	-	5.34
30-45.5733-	108.9492-	2-	08-		0-438842-	06/27/78-	13-	31-	17.0-	0-	-	7.7-	2800-	8-	1-	6-	-	-	-	-	-1-	-	4-	4-	4-	1-	-3-	4-	6-	-	-	0.25
30-45.5628-	108.9519-	2-	07-		0-438843-	06/27/78-	15-	32-	17.0-	0-	-	8.0-	2000-	5-	1-	6-	4-	8-	-	3-	1-	1-	6-	4-	4-	1-	-3-	-	-	-	-	1.27
30-45.5664-	108.9964-	2-	08-		0-438844-	06/27/78-	16-	29-	11.0-	0-	-	7.6-	1100-	12-	1-	6-	-	-	-	-	-1-	-	4-	3-	3-	1-	-3-	4-	6-	-	-	0.31
30-45.5678-	108.9972-	2-	07-		0-438845-	06/27/78-	16-	29-	18.0-	-	-	8.5-	1100-	12-	1-	6-	5-	6-	3-	3-	3-	1-	2-	3-	3-	1-	-3-	-	-	-	-	1.98
30-45.5797-	108.9931-	2-	08-		0-438846-	06/27/78-	15-	29-	14.0-	0-	-	7.5-	1550-	6-	1-	6-	-	-	-	-	-1-	-	4-	3-	3-	1-	-1-	3-	6-	265-	-	0.23
30-45.5978-	108.9844-	2-	08-		0-438847-	06/27/78-	15-	29-	19.0-	0-	-	8.8-	2000-	17-	1-	6-	-	-	-	-	-1-	-	4-	3-	3-	1-	-3-	3-	6-	380-	-	0.31
30-45.6186-	108.9867-	2-	08-		0-438848-	06/28/78-	9-	26-	12.0-	0-	-	7.3-	700-	12-	1-	6-	-	-	-	-	-1-	-	4-	3-	3-	1-	-1-	4-	6-	15-	-	1.56
30-45.6203-	108.9614-	2-	08-		0-438849-	06/28/78-	9-	26-	12.0-	0-	-	7.2-	650-	5-	1-	6-	-	-	-	-	-1-	-	4-	3-	2-	1-	-3-	4-	6-	40-	-	1.61
30-45.6247-	108.9492-	2-	07-		0-438850-	06/28/78-	10-	21-	18.0-	-	-	7.9-	1800-	8-	1-	6-	5-	6-	3-	3-	3-	2-	4-	4-	2-	1-	-3-	-	-	-	-	3.51
30-45.6133-	108.9244-	2-	08-		0-438851-	06/28/78-	11-	21-	12.0-	0-	-	7.2-	900-	11-	1-	6-	-	-	-	-	-1-	-	4-	3-	2-	1-	-3-	4-	6-	16-	10-	3.44
30-45.6247-	108.9289-	2-	08-		0-438852-	06/28/78-	11-	21-	13.0-	0-	-	7.3-	900-	15-	1-	6-	-	-	-	-	-1-	-	3-	2-	1-	-3-	4-	6-	16-	-	-	2.66
30-45.6200-	108.8842-	2-	08-		0-438853-	06/28/78-	11-	34-	24.0-	0-	-	7.0-	850-	4-	1-	6-	-	-	-	-	-1-	-	4-	3-	2-	1-	-3-	4-	6-	40-	-	3.94
30-45.6167-	109.0069-	2-	07-		0-438854-	06/28/78-	12-	22-	20.0-	-	-	8.2-	1300-	9-	1-	6-	4-	6-	2-	2-	1-	2-	2-	4-	3-	1-	-3-	-	-	-	-	0.87
30-45.6267-	109.0058-	2-	08-		0-438855-	06/28/78-	12-	21-	16.0-	0-	-	7.5-	2450-	19-	1-	6-	-	-	-	-	-1-	-	4-	3-	2-	1-	-3-	3-	6-	46-	-	2.88

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(2)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY Concentrations reported in weight parts per billion (ppb)											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.8086-109.9594-2-06-						0-M38802	48944	163	-25	13	-25	16047	9	33	-25	711	7	79
30-45.7669-109.9900-2-08-						0-M38803	54209	65	-25	24	-25	14570	7	27	-25	700	7	690
30-45.8358-109.9603-2-06-						0-M38804	44487	138	-25	10	-25	13680	7	38	-25	588	8	164
30-45.8300-109.9367-2-08-						0-M38805	52729	125	-25	54	-25	19075	8	33	-25	731	8	288
30-45.7947-109.9614-2-08-						0-M38806	36432	108	-25	9	-25	14268	9	28	-25	649	12	-50
30-45.8522-109.9728-2-07-						0-M38808	39003	144	-25	9	-25	10488	6	67	-25	745	16	-50
30-45.8525-109.9758-2-07-						0-M38809	39784	114	-25	10	50	9116	12	40	-25	731	15	-50
30-45.8411-109.9067-2-08-						0-M38810	35558	70	-25	9	82	6553	96	74	-25	833	15	797
30-45.8597-109.9069-2-07-						0-M38811	40518	103	-25	6	-25	12765	10	35	-25	690	-4	300
30-45.8572-109.9381-2-08-						0-M38813	49782	82	-25	10	-25	8013	7	38	-25	762	14	97
30-45.8108-109.9742-2-08-						0-M38814	44353	70	28	13	-25	21225	4	38	-25	891	18	-50
30-45.8164-109.9825-2-08-						0-M38815	73869	92	-25	28	-25	20878	7	46	48	1136	20	-50
30-45.8878-109.9569-2-08-						0-M38816	5804	-55	-25	-4	-25	551	5	-25	31	-200	10	-50
30-45.8944-109.9956-2-07-						0-M38817	27884	104	-25	5	-25	4927	13	-25	-25	325	5	-50
30-45.8833-109.9742-2-08-						0-M38818	67822	167	-25	12	30	17452	5	43	-25	1086	16	462
30-45.8764-109.9517-2-08-						0-M38819	61798	106	-25	22	-25	10102	5	32	-25	788	12	-50
30-45.8325-109.9214-2-08-						0-M38820	48875	63	-25	934	-25	17672	5	30	-25	778	7	85
30-45.9200-109.9778-2-08-						0-M38821	27445	84	-25	13	-25	5611	18	38	37	581	14	1514
30-45.9333-109.9881-2-07-						0-M38822	19538	-55	-25	5	-25	3059	10	-25	-25	299	7	-50
30-45.9639-109.9706-2-08-						0-M38823	51666	157	-25	10	-25	19571	4	80	26	1195	17	77
30-45.9631-109.9711-2-07-						0-M38824	28032	82	-25	12	-25	13626	17	34	38	745	19	-50
30-45.9994-109.9792-2-08-						0-M38825	29174	111	-25	8	-25	10165	-3	33	-25	729	12	-50
30-45.9947-109.9206-2-08-						0-M38826	21929	77	-25	5	31	4850	39	60	27	606	14	-50
30-45.9892-109.8889-2-07-						0-M38827	36721	148	-25	8	-25	15328	23	72	41	925	24	-50
30-45.9881-109.8897-2-07-						0-M38828	39731	112	26	6	-25	15359	26	90	-25	1114	18	-50
30-45.9494-109.8989-2-08-						0-M38829	58217	105	-25	10	-25	15428	5	90	-25	1388	22	-50
30-45.9475-109.8992-2-07-						0-M38830	38927	-55	34	10	28	13137	24	96	57	1112	24	-50
30-45.9175-109.9325-2-06-						0-M38831	17907	-55	-25	7	-25	3949	4	51	57	506	17	-50
30-45.9183-109.9175-2-07-						0-M38832	58065	119	29	14	61	15688	46	89	-25	1229	25	-50
30-45.9089-109.9158-2-08-						0-M38833	60993	126	29	12	-25	18774	7	88	42	1377	25	-50
30-45.7989-109.8658-2-08-						0-M38835	83690	152	-25	17	43	24328	13	-25	-25	986	-4	-50
30-45.7692-109.8500-2-08-						0-M38836	39393	130	-25	-4	-25	6970	10	46	-25	577	-4	-50
30-45.7583-109.8622-2-07-						0-M38837	31195	120	-25	-4	-25	5070	12	34	-25	466	-4	-50
30-45.7756-109.8053-2-07-						0-M38838	29161	110	-25	-4	26	4719	11	32	-25	359	-4	-50
30-45.5064-108.9222-2-08-						0-M38839	655000	661	72	262	193	165000	34	-25	34	4535	48	527
30-45.5419-108.9150-2-07-						0-M38840	401000	603	56	53	157	187000	104	-25	49	5219	34	309
30-45.5433-108.9147-2-07-						0-M38841	256000	484	29	21	131	177000	47	-25	-25	4192	13	344
30-45.5733-108.9492-2-08-						0-M38842	329000	563	52	29	164	211000	35	-25	-25	4649	20	488
30-45.5628-108.9519-2-07-						0-M38843	276000	475	46	21	124	137000	145	-25	40	3867	23	323
30-45.5464-108.9964-2-08-						0-M38844	101000	279	-25	69	417	78303	1192	72	-25	1899	-4	562
30-45.5678-108.9972-2-07-						0-M38845	93687	241	-25	8	252	56199	52	101	-25	1849	11	-50
30-45.5797-108.9931-2-08-						0-M38846	135000	332	50	13	477	80459	117	93	60	2592	21	1993
30-45.5978-108.9844-2-08-						0-M38847	9178	124	52	11	71	4528	13	116	131	825	11	-50
30-45.6186-108.9867-2-08-						0-M38848	49262	155	47	47	26	46003	10	139	97	1547	15	147
30-45.6203-108.9614-2-08-						0-M38849	61951	258	55	15	48	36023	13	133	135	1490	19	107
30-45.6247-108.9492-2-07-						0-M38850	159000	404	60	22	111	100000	80	77	131	2972	25	479
30-45.6133-108.9244-2-08-						0-M38851	84469	271	52	17	55	56062	15	122	116	1814	16	-50
30-45.6247-108.9289-2-08-						0-M38852	56784	77	-25	11	33	52683	6	49	-25	1072	11	145
30-45.6200-108.8842-2-08-						0-M38853	80756	158	-25	2090	33	45786	7	35	-25	1187	13	350
30-45.6167-109.0069-2-07-						0-M38854	87949	210	-25	22	54	87429	8	37	-25	1538	10	317
30-45.6267-109.0058-2-08-						0-M38855	181000	333	-25	30	70	165000	17	-25	-25	3107	27	890

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
							TIME SAMPLED																										
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (#) UNITS IN ppb
30-45.6014-109.0603-2-07-						0-M38856-06/28/78-13-	28-22.0-	-	-	8.1-	1000-		9-1-6-4-6-2-2-2-1-3-3-3-1-	-3-	-	-	-	-	2.19
30-45.5925-109.0800-2-08-						0-M38857-06/28/78-13-	32-17.0-C-	-	-	7.2-	1300-		8-1-6-	-	-	-	-1-	-4-3-2-1-	-3-3-	6-	70-	-	2.85
30-45.5914-109.0833-2-07-						0-M38858-06/28/78-13-	27-25.0-	-	-	8.4-	650-		11-1-6-5-6-2-2-1-2-4-3-2-1-	-3-	-	-	-	-	0.25
30-45.8550-109.8506-2-08-						0-M38860-07/01/78-10-	24-15.0-C-	-	-	7.7-	900-		16-1-6-	-	-	-	-1-	-4-3-2-1-	-3-4-	6-	30-	-	1.59
30-45.8528-109.8344-2-07-						0-M38861-07/01/78-10-	21-19.0-	-	-	8.3-	800-		18-1-6-4-7-2-2-2-1-4-3-2-1-	-3-	-	-	-	-	2.59
30-45.8736-109.7481-2-08-						0-M38856-07/01/78-11-	28-15.0-C-	-	-	8.7-	430-		5-1-6-	-	-	-	-1-	-4-3-2-1-	-3-3-	6-	80-	-	0.16
30-45.8644-109.7469-2-08-						0-M38857-07/01/78-12-	28-15.0-C-	-	-	7.5-	600-		10-1-6-	-	-	-	-1-	-4-3-2-1-	-3-4-	6-	20-	-	3.06
30-45.8608-109.7400-2-08-						0-M38868-07/01/78-13-	27-15.0-C-	-	-	7.2-	900-		12-1-6-	-	-	-	-1-	-4-3-3-1-	-3-	-	-	-	2.86
30-45.8656-109.7306-2-07-						0-M38869-07/01/78-13-	27-18.0-	-	-	7.7-	750-		15-1-6-5-7-2-2-1-1-3-3-3-1-	-3-	-	-	-	-	1.97
30-45.8356-109.7536-2-08-						0-M38872-07/01/78-	-	31-15.0-C-	-	-	6.9-	550-		8-1-6-	-	-	-	-1-	-4-3-3-2-	-3-4-	6-	-	-	0.76
30-45.8139-109.7342-2-07-						0-M38873-07/01/78-15-	31-28.0-	-	-	7.7-	800-		11-1-6-5-5-2-2-5-1-4-4-2-2-	-3-	-	-	-	-	3.62
30-45.7972-109.7103-2-07-						0-M38874-07/01/78-15-	20-17.0-	-	-	7.7-	650-		10-1-6-5-6-3-2-1-1-4-3-3-2-	-3-	-	-	-	-	0.22
30-45.7783-109.7719-2-08-						0-M38875-07/01/78-15-	26-12.0-C-	-	-	7.0-	250-		9-1-6-	-	-	-	-1-	-4-3-2-2-	-3-3-	6-	40-	-	1.82
30-45.7708-109.7731-2-08-						0-M38876-07/01/78-16-	27-12.0-	-	-	7.3-	485-		10-1-6-	-	-	-	-1-	-4-3-3-4-	-3-4-	6-	28-	20-	1.65
30-45.7636-109.7842-2-08-						0-M38877-07/01/78-16-	22-25.0-C-	-	-	7.1-	465-		4-1-6-	-	-	-	-1-	-4-3-2-4-	-1-4-	6-	17-	-	0.40
30-45.7728-109.8036-2-07-						0-M38878-07/01/78-17-	19-11.5-	-	-	7.5-	240-		6-1-6-5-8-3-3-2-1-2-4-2-2-	-3-	-	-	-	-	0.01
30-45.7739-109.8000-2-08-						0-M38879-07/01/78-17-	18-10.0-C-	-	-	7.4-	275-		9-1-6-	-	-	-	-1-	-4-3-2-2-	-3-4-	6-	22-	-	0.58
30-45.7639-109.8183-2-08-						0-M38880-07/01/78-17-	28-15.0-C-	-	-	7.0-	215-		6-1-6-	-	-	-	-1-	-4-3-4-2-	-3-4-	6-	10-	4-	0.42
30-45.7514-109.8331-2-08-						0-M38881-07/01/78-18-	20-12.0-C-	-	-	6.7-	220-		4-1-6-	-	-	-	-1-	-1-3-3-2-	-3-4-	6-	8-	4-	1.09
30-45.7900-109.8639-2-07-						0-M38882-07/01/78-17-	26-17.0-	-	-	7.5-	270-		16-1-6-5-6-2-3-2-1-4-4-4-2-	-3-	-	-	-	-	0.46
30-45.8097-109.8764-2-08-						0-M38883-07/01/78-19-	25-15.0-C-	-	-	7.7-	360-		12-1-6-	-	-	-	-1-	-4-3-2-2-	-3-4-	6-	20-	-	0.05
30-45.7972-109.8917-2-07-						0-M38884-07/01/78-19-	25-12.0-	-	-	7.5-	150-		17-1-6-	-	-4-3-2-2-4-3-3-2-	-3-	-	-	-	0.28
30-45.7922-109.9008-2-08-						0-M38885-07/01/78-19-	21-11.0-C-	-	-	7.1-	700-		9-1-6-	-	-	-	-1-	-4-3-2-2-	-3-5-	6-	33-	-	2.69
30-45.7742-109.9083-2-08-						0-M38886-07/01/78-19-	20-19.0-C-	-	-	8.9-	175-		11-1-6-	-	-	-	-1-	-4-3-3-2-	-3-5-	6-	80-	-	0.01
30-45.7997-109.8858-2-08-						0-M38887-07/01/78-20-	19-16.0-C-	-	-	6.8-	355-		10-1-6-	-	-	-	-1-	-4-3-3-2-	-3-4-	6-	30-	-	0.27
30-45.8194-109.9028-2-08-						0-M38888-07/01/78-20-	19-14.0-C-	-	-	7.0-	300-		16-1-6-	-	-	-	-1-	-4-3-2-2-	-3-9-	-	-	-	0.30
30-45.8972-109.8394-2-08-						0-M38889-07/02/78- 8-	16-13.0-C-	-	-	7.9-	550-		12-1-6-	-	-	-	-1-	-4-3-2-2-	-3-5-	6-	50-	-	1.91
30-45.9172-109.8133-2-07-						0-M38890-07/02/78- 8-	17-14.0-	-	-	7.9-	550-		13-1-6-6-8-2-2-5-1-4-3-2-2-	-3-	-	-	-	-	1.82
30-45.9728-109.7453-2-07-						0-M38893-07/02/78- 9-	21-15.0-	-	-	8.5-	600-		12-1-6-3-7-3-3-3-2-1-4-3-2-	-3-	-	-	-	-	1.70
30-45.9153-109.7119-2-08-						0-M38897-07/02/78-11-	22-13.0-C-	-	-	6.8-	700-		13-1-6-	-	-	-	-1-	-4-3-3-2-	-3-3-	6-	160-	-	1.58
30-45.9133-109.7131-2-07-						0-M38898-07/02/78-11-	22-17.0-	-	-	8.4-	700-		12-1-6-5-6-3-3-2-2-4-3-3-2-	-3-	-	-	-	-	2.02
30-45.9056-109.7172-2-08-						0-M38899-07/02/78-11-	26-11.0-C-	-	-	6.9-	700-		10-1-6-	-	-	-	-1-	-4-3-3-2-	-3-3-	6-	90-	-	0.48
30-45.8981-109.7164-2-07-						0-M38900-07/02/78-12-	25-12.0-	-	-	7.5-	650-		8-1-6-4-6-3-3-2-2-4-3-3-2-	-3-	-	-	-	-	1.14
30-45.8969-109.6594-2-08-						0-M38902-07/02/78-12-	24-10.0-C-	-	-	8.2-	800-		13-1-6-	-	-	-	-1-	-4-3-3-2-	-3-7-	-	20-	-	0.35
30-45.9008-109.6106-2-07-						0-M38903-07/02/78-12-	24-17.0-	-	-	8.2-	650-		12-1-6-5-6-2-2-1-1-6-4-3-2-	-3-	-	-	-	-	1.64
30-45.9103-109.5958-2-08-						0-M38904-07/02/78-13-	21-16.0-	-	-	7.2-	600-		8-1-6-	-	-	-	-1-	-4-3-3-2-	-3-4-	-	-	-	1.20
30-45.9047-109.6461-2-08-						0-M38905-07/02/78-13-	27-12.0-	-	-	7.7-	800-		8-1-6-	-	-	-	-1-	-4-3-3-2-	-3-5-	6-	21-	-	1.10
30-45.9089-109.6475-2-07-						0-M38906-07/02/78-13-	27-18.0-C-	-	-	7.9-	800-		10-1-6-5-8-2-2-5-1-4-2-3-2-	-3-	-	-	-	-	1.14
30-45.8933-109.7269-2-08-						0-M38907-07/02/78-14-	24-16.0-	-	-	7.5-	900-		10-1-6-	-	-	-	-1-	-4-3-3-2-	-3-8-	6-	40-	-	1.00
30-45.5094-109.0797-2-07-						0-M38909-07/06/78-10-	22-16.0-	-	-	8.3-	1300-		16-1-6-4-6-3-2-1-1-6-4-3-3-	-3-	-	-	-	-	3.15
30-45.7619-109.5458-2-07-						0-M38910-07/08/78-10-	19-15.0-	-	-	8.5-	900-		16-1-6-6-8-2-2-2-1-4-3-4-3-	-3-	-	-	-	-	1.28
30-45.7719-109.5469-2-07-						0-M38911-07/08/78-10-	19-18.0-	-	-	7.9-	800-		17-1-6-3-6-3-3-3-2-4-3-4-3-	-3-	-	-	-	-	4.06
30-45.7603-109.5319-2-08-						0-M38912-07/08/78-11-	18-12.0-	-	-	8.0-	1300-		12-1-6-	-	-	-	-1-	-4-3-3-3-	-3-4-	6-	35-	-	4.43
30-45.7700-109.5325-2-08-						0-M38913-07/08/78-11-	18-18.0-	-	-	9.2-	1600-		6-1-6-3-6-2-2-2-1-4-3-3-4-	-3-	-	-	-	-	5.29
30-45.7599-109.5214-2-07-						0-M38914-07/08/78-12-	19-18.0-C-	-	-10.0-	1900-			9-1-6-5-8-2-2-5-1-4-3-2-3-	-3-	-	-	-	-	4.89
30-45.7744-109.5575-2-08-						0-M38915-07/08/78-12-	19-22.0-	-	-	9.4-	800-		10-1-6-	-	-	-	-1-	-4-3-3-3-	-3-3-	6-	120-	80-	0.49
30-45.7614-109.5461-2-08-						0-M38917-07/09/78-12-	21-15.0-	-	-	8.2-	120-		15-1-6-	-	-	-	-1-	-4-3-2-3-	-3-3-	6-	80-	40-	0.83
30-45.8158-109.5664-2-08-						0-M38920-08/07/78-14-	27-15.0-	-	-	9.5-	800-		12-1-6-	-	-	-	-1-	-4-3-3-2-	-3-3-	6-	60-	45-	2.12
30-45.8178-109.5689-2-07-						0-M38921-08/07/78-14-	25-16.5-	-	-	8.3-	700-		13-1-6-3-6-3-2-2-2-4-4-3-2-	-3-	-	-	-	-	1.83
30-45.7831-109.5728-2-07-						0-M38922-08/07/78-15-	24-18.0-C-	-	-	8.7-	750-		8-1-6-4-6-3-2-2-2-4-3-2-2-	-3-	-	-	-	-	1.07
30-45.7644-109.4486-2-07-						0-M38923-07/12/78-10-	20-16.0-	-	-	8.8-	800-		15-1-6-4-8-3-3-4-2-4-3-3-1-	-3-	-	-	-	-	2.75

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per billion (ppb)											
							Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.6014-109.0603-2-07-						0-M38856	62778	107	-25	11	101	29450	9	-25	-25	916	11	216
30-45.5925-109.0800-2-08-						0-M38857	86003	135	-25	15	-25	40794	6	-25	-25	1162	10	651
30-45.5914-109.0833-2-07-						0-M38858	19138	-55	-25	12	71	6287	41	48	46	332	16	64
30-45.8550-109.8506-2-08-						0-M38859	69938	141	-25	14	49	16671	10	72	-25	839	9	968
30-45.8529-109.8344-2-07-						0-M38861	57668	77	-25	26	78	30556	11	44	-25	1106	17	-50
30-45.8736-109.7481-2-08-						0-M38866	2895	-55	-25	12	26	91	9	47	-25	-200	5	-50
30-45.8644-109.7469-2-08-						0-M38867	24199	65	-25	13	82	8601	41	-25	-25	241	5	-50
30-45.8608-109.7400-2-08-						0-M38868	82552	154	-25	12	-25	42538	10	70	-25	1375	12	458
30-45.8656-109.7306-2-07-						0-M38869	76415	161	-25	9	-25	39350	7	41	-25	1161	7	97
30-45.8356-109.7536-2-08-						0-M38872	63069	136	-25	7	32	24180	8	35	-25	824	7	360
30-45.8139-109.7342-2-07-						0-M38873	62648	67	-25	8	27	32022	9	61	-25	1050	14	265
30-45.7972-109.7103-2-07-						0-M38874	67117	129	-25	7	93	33772	9	78	-25	1154	15	232
30-45.7783-109.7719-2-08-						0-M38875	73192	129	-25	23	-25	29234	8	51	-25	1018	13	362
30-45.7708-109.7731-2-08-						0-M38876	57081	117	-25	7	1260	18559	161	63	-25	881	12	343
30-45.7636-109.7842-2-08-						0-M38877	64160	-55	-25	16	38	14625	22	49	-25	902	14	2780
30-45.7728-109.8036-2-07-						0-M38878	43180	-55	-25	-4	38	7895	10	51	-25	645	14	382
30-45.7739-109.8000-2-08-						0-M38879	46578	-55	-25	11	52	8183	-3	65	-25	682	16	-50
30-45.7639-109.8183-2-08-						0-M38880	33409	-55	-25	12	-25	5709	-3	50	-25	490	11	123
30-45.7514-109.8331-2-08-						0-M38881	37969	-55	-25	6	35	6208	-3	46	-25	579	13	224
30-45.7900-109.8639-2-07-						0-M38882	35858	-55	31	6	1058	10847	45	67	41	770	82	412
30-45.8097-109.8764-2-08-						0-M38883	32082	-55	-25	9	-25	2753	5	61	49	630	19	401
30-45.7972-109.8917-2-07-						0-M38884	22111	-55	-25	6	60	6260	-3	37	32	424	12	266
30-45.7922-109.9008-2-08-						0-M38885	80986	102	-25	15	39	26005	-3	-25	-25	1002	9	778
30-45.7742-109.9083-2-08-						0-M38886	2539	-55	-25	-4	-25	267	-3	-25	-25	-200	-4	179
30-45.7997-109.8858-2-08-						0-M38887	58760	76	-25	61	39	14836	-3	-25	-25	607	7	-50
30-45.8194-109.9028-2-08-						0-M38888	45298	62	-25	8	37	17143	-3	-25	-25	636	13	370
30-45.8972-109.8394-2-08-						0-M38889	55356	80	-25	12	53	18637	-3	55	-25	991	25	1161
30-45.9172-109.8133-2-07-						0-M38890	64456	80	-25	11	126	27090	178	53	-25	1192	22	121
30-45.9728-109.7453-2-07-						0-M38893	63509	118	-25	7	41	39959	10	32	-25	1128	19	90
30-45.9153-109.7119-2-08-						0-M38897	68808	72	-25	23	75	47085	-3	32	-25	1330	23	149
30-45.9133-109.7131-2-07-						0-M38898	57642	143	-25	6	54	47345	-3	47	-25	1230	19	-50
30-45.9056-109.7172-2-08-						0-M38899	67513	77	-25	7	71	44440	-3	50	-25	1286	22	218
30-45.8981-109.7164-2-07-						0-M38900	57728	96	-25	5	43	45755	-3	31	-25	1242	18	74
30-45.8969-109.6594-2-08-						0-M38902	14805	-55	-25	-4	-25	8738	7	-25	-25	-200	-4	478
30-45.9008-109.6106-2-07-						0-M38903	67190	81	-25	-4	63	41962	12	50	47	1377	13	52
30-45.9103-109.5958-2-08-						0-M38904	58019	-55	-25	-4	33	41176	4	-25	-25	822	-4	790
30-45.9047-109.6461-2-08-						0-M38905	73419	70	-25	-4	-25	51303	-3	-25	-25	1212	-4	140
30-45.9089-109.6475-2-07-						0-M38906	73837	71	-25	-4	-25	49731	21	-25	-25	1112	-4	-50
30-45.8933-109.7269-2-08-						0-M38907	100000	88	-25	-4	34	56356	6	-25	-25	1643	10	495
30-45.5094-109.0797-2-07-						0-M38909	144000	101	-25	11	139	77527	40	-25	-25	1878	15	122
30-45.7619-109.5458-2-07-						0-M38910	76843	69	-25	-4	69	34535	83	-25	-25	1000	5	-50
30-45.7719-109.5469-2-07-						0-M38911	71654	72	-25	-4	73	45740	11	-25	-25	1180	6	77
30-45.7603-109.5319-2-08-						0-M38912	84774	88	-25	12	79	52575	8	29	-25	1563	14	-50
30-45.7700-109.5325-2-08-						0-M38913	61909	-55	33	10	97	46833	7	-25	-25	1441	17	-50
30-45.7589-109.5214-2-07-						0-M38914	31714	56	-25	9	75	35826	8	-25	-25	804	10	-50
30-45.7744-109.5575-2-08-						0-M38915	3395	-55	-25	31	-25	1434	5	-25	-25	222	9	-50
30-45.7614-109.5461-2-08-						0-M38917	86811	98	-25	41	64	46338	9	-25	-25	1468	14	365
30-45.8158-109.5664-2-08-						0-M38920	2185	-55	-25	-4	-25	672	4	-25	-25	-200	-4	-50
30-45.8178-109.5689-2-07-						0-M38921	69418	67	-25	-4	65	39172	12	-25	-25	1075	7	-50
30-45.7831-109.5728-2-07-						0-M38922	74641	90	26	13	67	40752	13	60	60	1634	20	-50
30-45.7644-109.4486-2-07-						0-M38923	64380	97	66	18	135	44064	14	111	135	1754	30	57

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																												U CONCENTRATION
							TIME SAMPLED																											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmhos/cm)	SCINTILLOMETER (alt. ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (#) UNITS IN ppb
30-	45.7696-	109.4744-	2-	07-	0-	M38925-	07/12/78-	10-	21-	16.0-	-	-	8.8-	1700-		-1-	6-	5-	6-	2-	3-	5-	1-	4-	3-	2-	1-	-3-	-	-	-	-	3.66
30-	45.7994-	109.4661-	2-	07-	0-	M38928-	07/12/78-	11-	22-	15.0-	0-	-	8.6-	1050-		9-	1-	6-	3-	6-	3-	3-	5-	2-	4-	3-	2-	1-	-3-	-	-	-	-	5.01
30-	45.8139-	109.4714-	2-	08-	0-	M38929-	07/12/78-	11-	21-	11.0-	-	-	7.5-	1200-		12-	1-	6-	-	-	-	-	1-	-	4-	2-	3-	1-	-3-	3-	6-	55-	40-	2.97
30-	45.8153-	109.4700-	2-	07-	0-	M38930-	07/12/78-	11-	21-	19.0-	-	-	8.4-	900-		12-	1-	6-	4-	7-	3-	3-	1-	2-	4-	2-	4-	1-	-3-	-	-	-	-	6.29
30-	45.8178-	109.4414-	2-	07-	0-	M38931-	07/12/78-	12-	28-	21.0-	-	-	8.2-	1700-		12-	1-	6-	5-	7-	2-	2-	2-	1-	4-	3-	2-	1-	-3-	-	-	-	-	3.58
30-	45.8564-	109.4419-	2-	07-	0-	M38933-	07/12/78-	12-	22-	17.0-	-	-	8.0-	600-		9-	1-	6-	5-	8-	2-	2-	2-	1-	6-	3-	3-	1-	-3-	-	-	-	-	3.21
30-	45.8694-	109.4414-	2-	07-	0-	M38934-	07/12/78-	12-	27-	18.0-	-	-	7.7-	650-		16-	1-	6-	4-	6-	2-	2-	2-	1-	4-	4-	2-	1-	-3-	-	-	-	-	2.04
30-	45.8917-	109.4653-	2-	07-	0-	M38936-	07/12/78-	13-	25-	17.0-	-	-	8.4-	600-		12-	1-	6-	5-	8-	3-	2-	1-	2-	4-	3-	3-	1-	-3-	-	-	-	-	2.04
30-	45.8953-	109.4653-	2-	07-	0-	M38937-	07/12/78-	13-	29-	20.0-	-	-	8.2-	500-		11-	1-	6-	3-	6-	2-	2-	2-	2-	4-	3-	2-	1-	-3-	-	-	-	-	1.33
30-	45.9139-	109.4647-	2-	07-	0-	M38938-	07/12/78-	13-	26-	16.0-	-	-	8.2-	500-		9-	1-	6-	3-	6-	3-	2-	2-	1-	4-	3-	2-	1-	-3-	-	-	-	-	1.64
30-	45.9356-	109.4658-	2-	07-	0-	M38940-	07/12/78-	14-	25-	23.0-	-	-	7.9-	600-		15-	1-	6-	5-	7-	2-	2-	2-	1-	4-	2-	3-	1-	-3-	-	-	-	-	2.71
30-	45.9408-	109.4689-	2-	07-	0-	M38941-	07/12/78-	14-	27-	22.0-	-	-	7.8-	600-		12-	1-	6-	5-	6-	2-	2-	2-	2-	1-	4-	2-	3-	1-	-3-	-	-	-	2.99
30-	45.9497-	109.4825-	2-	08-	0-	M38942-	07/12/78-	15-	22-	13.0-	-	-	7.8-	650-		15-	1-	6-	-	-	-	-	1-	-	4-	2-	3-	1-	-1-	3-	6-	110-	90-	5.46
30-	45.9814-	109.4611-	2-	08-	0-	M38943-	07/12/78-	15-	26-	13.0-	0-	-	7.4-	950-		12-	1-	6-	-	-	-	-	1-	-	4-	3-	3-	1-	-3-	3-	6-	-	-	0.89
30-	45.9879-	109.4728-	2-	06-	0-	M38944-	07/12/78-	15-	28-	20.0-	0-	-	8.3-	550-		11-	1-	6-	6-	6-	2-	2-	1-	1-	4-	3-	2-	1-	-3-	-	-	-	-	1.50
30-	45.9858-	109.4428-	2-	07-	0-	M38945-	07/12/78-	16-	26-	21.0-	-	-	8.1-	950-		12-	1-	6-	3-	8-	3-	3-	1-	1-	4-	3-	2-	1-	-3-	-	-	-	-	0.69
30-	45.9742-	109.3767-	2-	07-	0-	M38946-	07/12/78-	15-	29-	22.0-	-	-	8.0-	1850-		11-	1-	6-	6-	8-	2-	3-	5-	1-	6-	3-	2-	1-	-3-	-	-	-	-	0.44
30-	45.9161-	109.4525-	2-	07-	0-	M38947-	07/12/78-	16-	25-	20.0-	-	-	7.9-	800-		10-	1-	6-	5-	6-	2-	3-	2-	1-	6-	4-	2-	1-	-3-	-	-	-	-	3.35
30-	45.9161-	109.4467-	2-	07-	0-	M38948-	07/12/78-	16-	27-	22.0-	-	-	8.0-	600-		16-	1-	6-	3-	6-	2-	3-	3-	1-	6-	3-	2-	1-	-3-	-	-	-	-	3.04
30-	45.8858-	109.4028-	2-	08-	0-	M38949-	07/12/78-	18-	24-	13.0-	0-	-	7.5-	600-		10-	1-	6-	-	-	-	-	1-	-	4-	3-	2-	1-	-1-	-	6-	45-	33-	2.15
30-	45.8386-	109.3944-	2-	07-	0-	M38950-	07/12/78-	18-	27-	21.0-	0-	-	8.2-	650-		13-	1-	6-	3-	7-	3-	3-	1-	1-	4-	3-	2-	1-	-3-	-	-	-	-	2.94
30-	45.8036-	109.4231-	2-	08-	0-	M38953-	07/12/78-	19-	25-	13.0-	0-	-	7.5-	1550-		18-	1-	6-	-	-	-	-	1-	-	4-	3-	2-	1-	-1-	-	-	-	-	7.40
30-	45.8025-	109.4222-	2-	07-	0-	M38954-	07/12/78-	19-	25-	22.0-	0-	-	8.5-	1500-		9-	1-	6-	6-	8-	2-	3-	2-	1-	3-	3-	2-	1-	-3-	-	-	-	-	8.01
30-	45.7953-	109.4375-	2-	07-	0-	M38955-	07/12/78-	19-	21-	20.0-	-	-	8.0-	1950-		5-	1-	6-	5-	8-	2-	3-	4-	1-	4-	3-	3-	1-	-3-	-	-	-	-	1.28
30-	45.7558-	109.4139-	2-	08-	0-	M38956-	07/12/78-	20-	22-	20.0-	-	-	7.4-	1200-		10-	1-	6-	-	-	-	-	1-	-	4-	3-	3-	1-	-1-	3-	6-	90-	80-	6.94
30-	45.9231-	109.5483-	2-	07-	0-	M38958-	07/15/78-	11-	33-	16.0-	0-	-	8.4-	550-		10-	1-	6-	5-	6-	3-	3-	3-	2-	2-	4-	4-	3-	2-	-1-	-	-	-	-	1.59
30-	45.9264-	109.5458-	2-	08-	0-	M38959-	07/15/78-	11-	29-	15.0-	-	-	9.0-	800-		15-	1-	6-	-	-	-	-	1-	-	4-	3-	2-	2-	-1-	-	6-	80-	65-	2.73
30-	45.9744-	109.5492-	2-	08-	0-	M38961-	07/15/78-	12-	29-	10.0-	-	-	8.0-	700-		9-	1-	6-	-	-	-	-	1-	-	4-	3-	2-	2-	-1-	5-	6-	150-	130-	3.00
30-	45.9756-	109.5744-	2-	08-	0-	M38962-	07/15/78-	12-	27-	12.0-	0-	-	8.6-	850-		9-	1-	6-	-	-	-	-	1-	-	4-	3-	2-	2-	-1-	4-	6-	50-	-	1.86
30-	45.9731-	109.5814-	2-	07-	0-	M38963-	07/15/78-	12-	26-	20.0-	-	-	8.4-	600-		9-	1-	6-	5-	7-	3-	3-	2-	1-	4-	3-	2-	2-	-3-	-	-	-	-	3.19
30-	45.9733-	109.5314-	2-	07-	0-	M38967-	07/12/78-	13-	26-	16.0-	-	-	7.5-	620-		9-	1-	6-	5-	6-	2-	2-	1-	1-	4-	4-	2-	2-	-3-	-	-	-	-	2.79
30-	45.9778-	109.5006-	2-	08-	0-	M38968-	07/15/78-	13-	28-	11.0-	0-	-	7.3-	550-		9-	1-	6-	-	-	-	-	1-	-	4-	3-	2-	2-	-1-	3-	6-	90-	-	0.75
30-	45.9708-	109.4761-	2-	07-	0-	M38969-	07/15/78-	13-	27-	16.0-	-	-	8.1-	460-		9-	1-	6-	6-	6-	3-	3-	3-	1-	1-	4-	4-	3-	2-	-3-	-	-	-	-	0.92
30-	45.8894-	109.4408-	2-	08-	0-	M38970-	07/15/78-	13-	27-	13.0-	0-	-	7.3-	750-		8-	1-	6-	-	-	-	-	1-	-	4-	3-	2-	1-	-1-	-	-	-	-	3.40
30-	45.5228-	109.0256-	2-	07-	0-	M38971-	08/02/78-	11-	17-	12.0-	0-	-	7.8-	1000-		8-	1-	6-	4-	6-	3-	3-	1-	2-	4-	3-	4-	3-	-3-	-	-	-	-	2.84
30-	45.5367-	109.0294-	2-	06-	0-	M38972-	08/02/78-	12-	21-	14.5-	0-	-	7.7-	1100-		17-	1-	6-	-	-	-	-	1-	-	4-	2-	3-	3-	-3-	-	-	-	-	2.07
30-	45.5397-	109.0192-	2-	07-	0-	M38973-	08/02/78-	13-	22-	13.0-	0-	-	8.5-	1000-		16-	1-	6-	5-	6-	3-	3-	1-	1-	3-	3-	3-	3-	-3-	-	-	-	-	3.00
30-	45.5669-	109.0467-	2-	06-	0-	M38974-	08/02/78-	13-	23-	9.0-	-	-	7.5-	1100-		12-	1-	5-	-	-	3-	-	1-	2-	2-	4-	3-	3-	-3-	-	-	-	-	8.28
30-	45.5614-	109.0600-	2-	07-	0-	M38975-	08/02/78-	15-	14-	11.0-	-	-	8.5-	1900-		16-	1-	6-	5-	8-	2-	2-	2-	2-	4-	3-	4-	3-	-3-	-	-	-	-	2.55
30-	45.5075-	109.0767-	2-	06-	0-	M38976-	08/02/78-	15-	19-	14.0-	-	-	7.2-	1700-		12-	1-	6-	-	-	-	-	1-	-	4-	2-	3-	3-	-3-	-	-	-	-	2.94
30-	45.5042-	109.0731-	2-	08-	0-	M38977-	08/02/78-	16-	18-	12.5-	0-	-	7.1-	2000-		10-	1-	6-	-	-	-	-	1-	-	4-	2-	3-	3-	-3-	3-	6-	140-	80-	7.56
30-	45.5275-	109.1019-	2-	08-	0-	M38978-	08/02/78-	16-	18-	12.0-	-	-	8.2-	1200-		9-	1-	6-	-	-	-	-	1-	-	4-	2-	3-	3-	-3-	3-	6-	80-	55-	0.58
30-	45.5447-	109.1153-	2-	07-	0-	M38979-	08/02/78-	16-	18-	11.0-	0-	-	7.7-	1150-		9-	1-	6-	-	-	-2-	2-	-1-	2-	5-	3-	3-	-3-	-	-	-	-	-	3.04
30-	45.5567-	109.1014-	2-	07-	0-	M38980-	08/02/78-	17-	16-	12.5-	-	-	8.3-	1050-		11-	1-	6-	4-	6-	4-	3-	2-	2-	1-	3-	4-	3-	-3-	-	-	-	-	2.68
30-	45.5636-	109.0906-	2-	08-	0-	M38981-	08/02/78-	17-	19-	11.0-	0-	-	7.2-	1300-		10-	1-	6-	-	-	-	-	1-	-	4-	3-	3-	3-	-3-	9-	4-	30-	10-	1.57
30-	45.6917-	109.0017-	2-	07-	0-	M38982-	08/04/78-	10-	20-	15.5-	-	-	8.3-	1400-		15-	1-	6-	4-	6-	3-	3-	1-	2-	3-	2-	4-	1-	-1-	-	-	-	-	1.18
30-	45.9592-	108.3636-	2-	08-	0-	M38988-	07/28/78-	13-	25-	22.0-	-	-	8.2-	4350-		9-	1-	6-	-	-	-	-	1-	-	4-	2-	2-	2-	-3-	3-	6-	30-	-	0.29
30-	45.9656-	108.3622-	2-	07-	0-	M38989-	07/28/78-	13-	26-	21.5-	-	-	8.2-	3100-		9-	1-	6-	5-	6-	2-	3-	2-	1-	4-	3-	2-	2-	-3-	-	-	-	-	2.93
30-	45.9900-	108.3394-	2-	09-	0-	M38990-	07/28/78-	14-	25-	17.0-	0-	-	7.3-	4700-		9-	1-	6-	-	-	-	-	1-	-	4-	2-	2-	2-	-1-	9-	6-	15-	12-	24.36*
30-	45.9303-	108.3214-	2-	08-	0-	M38991-	07/28/78-	15-	24-	12.0-	-	-	7.2-	1400-		16-	1-	6-	-	-	-	-	1-	-	4-	2-	2-	2-	-1-	3-	6-	30-	10-	3.43
30-	45.6892-	109.0183-	2-	07-	0-	M38992-	08/04/78-	10-	22-	16.0-	-	-	8.3-	1150-		6-	1-	6-	3-	6-	2-	2-	2-	2-	4-	2-	3-	1-	-3-	-	-	-	-	0.19

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY Concentrations reported in weight parts per billion (ppb)											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.7694-109.4744-2-07-						0-M38925	99894	115	87	20	87	90181	10	124	189	2711	35	124
30-45.7994-109.4661-2-07-						0-M38928	73887	103	73	16	54	90097	8	136	142	2251	30	106
30-45.8139-109.4714-2-08-						0-M38929	85280	105	-25	17	34	58726	7	-25	-25	1667	12	-50
30-45.8153-109.4700-2-07-						0-M38930	63816	119	99	19	71	62620	9	177	200	2289	35	-50
30-45.8178-109.4414-2-07-						0-M38931	60784	109	74	16	84	117000	12	155	137	2522	31	-50
30-45.8564-109.4419-2-07-						0-M38933	53789	-55	-25	-4	53	32483	17	-25	-25	868	-4	-50
30-45.8694-109.4414-2-07-						0-M38934	70861	81	-25	8	42	37828	67	53	39	1466	17	-50
30-45.8917-109.4653-2-07-						0-M38936	49686	-55	-25	5	-25	30256	11	47	41	1216	16	-50
30-45.8953-109.4653-2-07-						0-M38937	54756	58	43	8	31	32500	4	108	88	1538	21	-50
30-45.9139-109.4647-2-07-						0-M38938	57841	68	32	7	-25	31633	18	79	68	1389	19	-50
30-45.9356-109.4658-2-07-						0-M38940	60697	67	34	9	57	36620	42	85	64	1464	21	-50
30-45.9404-109.4689-2-07-						0-M38941	50878	70	39	10	63	36037	22	125	87	1516	21	-50
30-45.9497-109.4825-2-08-						0-M38942	42024	66	-25	18	-25	40449	5	37	-25	991	9	-50
30-45.9814-109.4611-2-08-						0-M38943	97284	-55	-25	-4	27	36474	-3	-25	-25	874	-4	136
30-45.9878-109.4728-2-06-						0-M38944	44956	-55	-25	-4	-25	19330	6	-25	-25	504	-4	-50
30-45.9858-109.4428-2-07-						0-M38945	67314	-55	-25	-4	60	35211	58	38	-25	1233	13	-50
30-45.9742-109.3767-2-07-						0-M38946	150000	121	-25	10	135	89807	32	-25	-25	2333	23	89
30-45.9161-109.4525-2-07-						0-M38947	69752	66	-25	-4	90	50351	66	-25	-25	1348	12	-50
30-45.9161-109.4467-2-07-						0-M38948	66016	62	-25	-4	104	45926	22	-25	-25	1034	9	118
30-45.8858-109.4028-2-08-						0-M38949	61968	-55	-25	68	-25	36529	-3	-25	-25	521	-4	52
30-45.8386-109.3944-2-07-						0-M38950	39750	-55	-25	-4	34	40963	-3	-25	-25	830	-4	-50
30-45.8036-109.4231-2-08-						0-M38953	73143	114	32	25	43	60261	7	-25	90	1971	23	305
30-45.8025-109.4222-2-07-						0-M38954	58875	92	36	14	91	56421	20	-25	48	1727	23	171
30-45.7853-109.4375-2-07-						0-M38955	70443	125	-25	12	124	88647	12	-25	27	1773	22	260
30-45.7558-109.4139-2-08-						0-M38956	89108	110	-25	27	59	62762	10	-25	28	1908	21	701
30-45.9231-109.5483-2-07-						0-M38958	56142	84	40	17	39	32626	12	-25	66	1417	23	206
30-45.9264-109.5458-2-08-						0-M38959	4335	-55	38	15	30	2315	-3	91	77	477	19	195
30-45.9744-109.5492-2-08-						0-M38961	26660	70	-25	19	81	23055	4	-25	37	894	12	270
30-45.9756-109.5744-2-08-						0-M38962	15513	-55	-25	21	33	15345	-3	-25	-25	461	-4	393
30-45.9731-109.5814-2-07-						0-M38963	27778	83	38	10	93	40792	26	-25	81	1219	17	287
30-45.9733-109.5314-2-07-						0-M38967	68995	101	34	17	150	38386	385	-25	86	1547	22	272
30-45.9778-109.5006-2-09-						0-M38968	48907	59	-25	18	67	22168	8	-25	-25	819	8	320
30-45.9708-109.4761-2-07-						0-M38969	46539	58	-25	-4	44	18819	6	-25	-25	743	9	-50
30-45.8894-109.4408-2-08-						0-M38970	77454	87	-25	16	67	42046	8	-25	-25	1225	8	487
30-45.5228-109.0256-2-07-						0-M38971	65882	83	-25	10	57	27731	39	-25	-25	1289	14	163
30-45.5367-109.0294-2-06-						0-M38972	87339	97	-25	10	39	42052	5	-25	-25	1471	14	192
30-45.5397-109.0192-2-07-						0-M38973	78242	105	-25	9	31	37452	20	-25	-25	1311	10	232
30-45.5669-109.0467-2-06-						0-M38974	78123	90	-25	9	30	38528	5	-25	-25	1267	10	80
30-45.5614-109.0600-2-07-						0-M38975	36935	-55	-25	12	218	22948	47	-25	-25	713	10	145
30-45.5075-109.0767-2-06-						0-M38976	128000	116	-25	13	29	63690	8	-25	-25	1813	10	132
30-45.5042-109.0731-2-08-						0-M38977	73872	-55	-25	-4	48	31726	18	-25	-25	405	-4	652
30-45.5275-109.1019-2-08-						0-M38978	20593	-55	-25	-4	-25	9460	69	-25	-25	-200	-4	118
30-45.5447-109.1153-2-07-						0-M38979	103000	82	-25	-4	-25	45117	19	-25	-25	1157	-4	123
30-45.5567-109.1014-2-07-						0-M38980	84822	65	-25	-4	40	45371	12	-25	-25	694	-4	94
30-45.5636-109.0906-2-08-						0-M38981	100000	71	-25	14	72	40020	8	-25	-25	701	-4	302
30-45.6917-109.0017-2-07-						0-M38982	81077	65	-25	-4	-25	38385	6	-25	-25	610	-4	-50
30-45.9592-108.3636-2-08-						0-M38988	7124	-55	-25	-4	-25	2700	6	-25	-25	-200	-4	-50
30-45.9656-108.3622-2-07-						0-M38989	88030	80	-25	-4	-25	72831	86	-25	-25	471	-4	-50
30-45.9800-108.3394-2-08-						0-M38990	129000	137	-25	9	-25	219000	16	-25	-25	1808	-4	-50
30-45.9303-108.3214-2-08-						0-M38991	96472	78	-25	9	-25	57095	8	-25	-25	694	-4	-50
30-45.6892-109.0183-2-07-						0-M38992	59070	-55	-25	-4	-25	41517	10	-25	-25	-200	-4	-50

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (#) UNITS IN ppb
30-45.7193-109.0025-2-07-						0-439933-08/04/78-11-	28-19.0-	- -	8.2-	1900-			6-1-6-3-6-2-2-2-2-4-2-3-1-	-3-	-	-	-	-															2.26
30-45.7167-109.0014-2-06-						0-438994-08/04/78-11-	28-10.0-	- -	7.2-	1700-			5-1-6-4-6-3-	-1-	-4-2-3-1-	-1-	-	-	-	-	-												2.01
30-45.7364-109.0042-2-07-						0-438996-08/04/78-12-	24-19.0-	- -	8.2-	1300-			13-1-6-2-6-3-3-1-1-4-3-2-1-	-3-	-	-	-	-															3.74
30-45.7478-108.9861-2-08-						0-438937-08/04/78-12-	24-12.0-C-	- -	7.3-	2100-			4-1-6-	-	-	-	-1-	-4-2-3-1-	-3-4-	6-	70-	50-												3.71
30-45.7200-109.0172-2-07-						0-438998-08/04/78-13-	25-13.0-	- -	8.3-	2700-			11-1-6-3-6-3-3-1-2-4-3-3-1-	-3-	-	-	-	-															4.30
30-45.6389-108.8636-2-08-						0-438999-08/04/78-14-	28-14.0-	- -	7.2-	1200-			11-1-6-	-	-	-	-1-	-4-2-1-1-	-3-3-	6-	30-	15-												1.49
30-45.6314-108.8108-2-08-						0-439000-08/04/78-14-	30-13.0-	- -	7.1-	1450-			16-1-6-	-	-	-	-1-	-4-3-1-1-	-3-4-	6-	40-	20-												2.26
30-45.8417-109.0653-2-07-						0-439001-06/15/78- 9-	22-14.9-C-	-	6.9-	2000-			9-1-6-4-6-3-3-1-1-4-3-2-3-	-1-	-	-	-	-															1.64
30-45.8511-109.0667-2-08-						0-439002-06/15/78- 9-	17-22.0-C-	-	7.4-	5200-			5-1-6-	-	-	-	-1-	-4-3-3-3-	-1-5-	8-	130-	65-												1.91
30-45.8522-109.1108-2-06-						0-439003-06/15/78-10-	17- 8.9-C-	-	7.2-	1100-			4-1-6-4-6-3-3-1-	-4-3-2-3-	-1-	-	-	-	-															4.88
30-45.8592-109.0889-2-07-						0-439004-06/15/78-10-	17-11.5-	- -	7.3-	3025-			9-1-6-4-6-3-3-1-1-4-3-2-3-	-3-	-	-	-	-															1.17
30-45.8967-109.0208-2-08-						0-439005-06/15/78-11-	20-10.8-C-	-	7.3-	2000-			11-1-7-	-	-	-	-1-	-4-4-2-3-	-3-1-10-	60-	15-												0.37
30-45.9744-109.1375-2-08-						0-439006-06/15/78-12-	19-12.0-C-	-	7.8-	1625-			12-1-6-	-	-	-	-1-	-4-3-2-3-	-1-3-	6-	80-	-												0.66
30-45.9725-109.1728-2-07-						0-439007-06/15/78-12-	19-17.3-	- -	7.9-	9200-			9-1-7-6-8-2-3-5-1-4-4-1-3-	-1-	-	-	-	-															4.40
30-45.9908-109.1725-2-06-						0-439008-06/15/78-13-	22- 8.5-	- -	7.8-	2300-			10-1-7-4-7-2-3-1-1-	-4-2-2-2-	-1-	-	-	-	-															2.80
30-45.9522-109.1708-2-08-						0-439009-06/14/78-14-	24-11.3-C-	-	7.7-	3800-			6-1-7-	-	-	-	-1-	-4-4-1-3-	-1-1-	-	-	-												3.93
30-45.9092-109.1722-2-07-						0-439010-06/15/78-14-	22-20.0-	- -	8.6-	1200-			12-1-7-6-8-2-4-5-1-4-3-1-3-	-1-	-	-	-	-															1.18
30-45.8861-109.1553-2-07-						0-439011-06/16/78- 9-	20-13.5-	- -	6.9-	1280-			16-1-6-5-7-3-3-1-3-4-3-2-2-	-1-	-	-	-	-															2.07
30-45.9072-109.2339-2-07-						0-439012-06/16/78- 9-	20-10.5-	- -	6.8-	4550-			11-1-6-5-7-2-3-1-1-4-3-2-2-	-1-	-	-	-	-															2.77
30-45.9100-109.2350-2-08-						0-439013-06/16/78-10-	17- 8.5-C-	-	7.2-	1050-			8-1-6-	-	-	-	-1-	-4-3-2-2-	-1-3-	6-	60-	25-												1.44
30-45.8822-109.2186-2-06-						0-439014-06/16/78-10-	17- 9.2-	- -	7.5-	550-			13-1-6-4-6-2-3-1-	-4-3-3-2-	-1-	-	-	-	-															5.51
30-45.8706-109.1747-2-07-						0-439015-06/16/78-11-	21-18.0-	- -	7.8-	800-			12-1-7-6-8-3-4-1-1-4-3-2-2-	-1-	-	-	-	-															2.53
30-45.8564-109.1442-2-08-						0-439016-06/16/78-11-	18-11.8-C-	-	7.2-	5500-			5-1-7-	-	-	-	-1-	-4-3-2-2-	-1-5-	6-	90-	-												1.89
30-45.8431-109.1317-2-07-						0-439017-06/16/78-11-	18-15.0-	- -	7.6-	2400-			15-1-6-5-6-3-3-1-1-4-4-2-2-	-3-	-	-	-	-															3.43
30-45.8556-109.1819-2-07-						0-439018-06/16/78-12-	20-14.9-	- -	8.0-	800-			6-1-6-5-7-3-4-2-1-4-3-2-2-	-1-	-	-	-	-															2.43
30-45.8425-109.1897-2-06-						0-439019-06/16/78-13-	21-11.0-C-	-	7.8-	1900-			13-1-1-5-7-	-4-1-	-4-2-3-2-	-1-	-	-	-	-	-												7.24
30-45.8442-109.1919-2-08-						0-439020-06/16/78-13-	23-12.2-C-	-	6.9-	1200-			10-1-6-	-	-	-	-1-	-4-3-3-2-	-1-4-24-	70-	-												0.94
30-45.8342-109.1719-2-07-						0-439021-06/16/78-13-	27-15.2-	- -	7.8-	850-			12-1-6-5-7-3-3-1-3-4-3-2-2-	-1-	-	-	-	-															2.08
30-45.8292-109.2111-2-06-						0-439022-06/16/78-14-	20- 9.2-C-	-	7.7-	550-			13-1-1-5-7-3-3-1-	-4-3-2-2-	-1-	-	-	-	-															1.63
30-45.7708-109.2444-2-07-						0-439023-06/16/78-15-	26-13.5-	- -	7.1-	550-			6-1-6-4-6-3-3-1-1-4-3-2-2-	-1-	-	-	-	-															1.90
30-45.7547-109.2428-2-07-						0-439024-06/16/78-15-	26-14.0-	- -	7.7-	600-			9-1-1-4-7-3-4-3-3-4-3-2-2-	-1-	-	-	-	-															1.52
30-45.7581-109.1967-2-08-						0-439025-06/16/78-16-	25-11.5-	- -	7.4-	950-			5-1-6-	-	-	-	-1-	-4-3-2-2-	-1-3-	6-	180-	16-												5.60
30-45.7822-109.1311-2-07-						0-439026-06/16/78-16-	21-17.0-	- -	7.4-	1400-			9-1-6-5-7-3-3-1-1-4-3-2-2-	-1-	-	-	-	-															0.85
30-45.7556-109.1333-2-07-						0-439027-06/16/78-16-	19-19.0-	- -	7.8-	1550-			9-1-6-5-7-3-3-1-1-4-4-2-3-	-1-	-	-	-	-															1.84
30-45.8908-109.1419-2-08-						0-439028-06/17/78- 9-	15-13.0-	- -	7.1-	650-			51-1-6-	-	-	-	-1-	-4-3-2-2-	-1-5-	6-	160-	95-												0.30
30-45.9267-109.1736-2-08-						0-439029-06/17/78-10-	19-10.2-C-	-	5.8-	5200-			15-1-7-	-	-	-	-1-	-4-3-2-2-	-1-1-	6-	-	-												2.45
30-45.9294-109.2133-2-08-						0-439030-06/17/78-10-	25-11.5-C-	-	6.5-	3120-			9-1-6-	-	-	-	-1-	-4-3-2-2-	-1-1-	-	-	-												1.57
30-45.9308-109.2142-2-07-						0-439031-06/17/78-11-	22-17.5-	- -	7.2-	4300-			8-1-7-5-7-2-4-5-1-4-3-1-2-	-3-	-	-	-	-															3.35
30-45.9425-109.2136-2-07-						0-439032-06/17/78-11-	19-14.0-	- -	7.4-	2650-			12-1-7-5-7-3-4-1-1-4-3-1-2-	-3-	-	-	-	-															1.88
30-45.9450-109.2131-2-08-						0-439033-06/17/78-11-	23-13.5-C-	-	7.0-	8200-			18-1-7-	-	-	-	-1-	-4-3-1-2-	-1-4-	6-	-	-												2.55
30-45.9461-109.2156-2-07-						0-439034-06/17/78-11-	24-14.9-	- -	7.6-	2350-			9-1-7-5-7-3-3-1-3-4-3-2-2-	-1-	-	-	-	-															1.43
30-45.9756-109.2122-2-07-						0-439035-06/17/78-12-	20-16.5-	- -	7.8-	4150-			12-1-7-5-7-2-4-1-1-4-3-1-2-	-3-	-	-	-	-															3.84
30-45.9547-109.2356-2-08-						0-439036-06/17/78-12-	28-12.3-	- -	7.4-	3210-			5-1-6-	-	-	-	-1-	-4-3-2-2-	-1-5-	5-	60-	40-												1.84
30-45.9672-109.2528-2-08-						0-439037-06/17/78-14-	26-11.9-C-	-	6.7-	2400-			9-1-6-	-	-	-	-1-	-4-3-1-2-	-1-4-99-	25-	3-												8.04
30-45.9675-109.2550-2-07-						0-439038-06/17/78-14-	28-23.2-	- -	7.9-	2320-			20-1-6-4-6-2-3-1-1-4-3-2-2-	-3-	-	-	-	-															8.28
30-45.9567-109.2553-2-07-						0-439039-06/17/78-15-	30-18.7-C-	-	8.0-	2200-			9-1-6-5-6-3-4-2-1-4-3-2-2-	-3-	-	-	-	-															0.95
30-45.9497-109.2553-2-07-						0-439040-06/17/78-15-	28-24.0-	- -	8.2-	1925-			5-1-6-5-7-2-3-1-1-4-3-1-2-	-1-	-	-	-	-															1.45
30-45.9758-109.3394-2-08-						0-439041-06/19/78-10-	17- 9.9-C-	-	6.2-	2320-			4-1-6-	-	-	-	-1-	-4-3-2-2-	-3-5-	5-	90-	-												2.23
30-45.9828-109.3597-2-08-						0-439042-06/19/78-10-	18-14.7-C-	-	6.7-	1650-			6-1-6-	-	-	-	-1-	-4-3-2-2-	-3-3-	4-	48-	12-												2.30
30-45.9814-109.3594-2-07-						0-439043-06/19/78-10-	17-13.2-	- -	7.5-	1340-			13-1-6-5-6-3-3-1-1-4-3-2-2-	-3-	-	-	-	-															0.22
30-45.9769-109.3597-2-07-						0-439044-06/19/78-11-	15-14.2-	- -	7.6-	2200-			15-1-6-5-7-2-3-1-1-4-3-2-2-	-3-	-	-	-	-															0.91

APPENDIX 1-A. (continued). Elemental Concentrations for Water Samples

(2)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY Concentrations reported in weight parts per billion (ppb)											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.7193-109.0025-2-07-						0-439993	106000	77	-25	-4	-25	111000	12	-25	-25	979	-4	-50
30-45.7157-109.0014-2-06-						0-439994	111000	97	-25	-4	-25	121000	9	-25	-25	1016	-4	-50
30-45.7364-109.0042-2-07-						0-439996	84285	-55	-25	-4	-25	51508	8	-25	-25	416	-4	-50
30-45.7478-108.9861-2-08-						0-439997	132000	162	36	17	55	75377	10	-25	64	2630	22	209
30-45.7200-109.0172-2-07-						0-439998	190000	214	59	22	84	119000	13	-25	115	3627	34	197
30-45.6389-108.8636-2-08-						0-439999	101000	163	55	20	101	78023	8	-25	197	2629	35	409
30-45.6314-108.8108-2-08-						0-440000	119000	176	57	21	245	85231	533	132	178	2924	38	2502
30-45.8417-109.0653-2-07-						0-440001	109000	524	-25	18	151	90669	109	-25	-25	2224	12	779
30-45.8511-109.0667-2-08-						0-440002	60712	186	-25	42	-25	41135	52	-25	-25	951	-4	1093
30-45.8522-109.1108-2-06-						0-440003	92281	392	-25	-4	-25	46776	7	-25	-25	1067	-4	694
30-45.8592-109.0889-2-07-						0-440004	248000	554	-25	15	126	156000	23	-25	-25	4277	16	631
30-45.8967-109.0208-2-08-						0-440005	89551	226	-25	5	1117	50945	135	-25	-25	1476	-4	355
30-45.9744-109.1375-2-08-						0-440006	12271	96	-25	6	-25	5761	34	-25	-25	-200	-4	616
30-45.9725-109.1728-2-07-						0-440007	188000	467	-25	17	204	326000	31	-25	-25	7348	11	695
30-45.9908-109.1725-2-06-						0-440008	113000	289	-25	9	-25	79170	41	-25	-25	2052	-4	2099
30-45.9522-109.1708-2-08-						0-440009	138000	309	-25	9	4319	104000	128	-25	-25	2532	-4	1159
30-45.9092-109.1722-2-07-						0-440010	43239	174	-25	-4	48	60059	15	-25	-25	842	-4	176
30-45.8861-109.1553-2-07-						0-440011	85385	183	109	153	117	50803	71	96	26	1930	27	651
30-45.9072-109.2339-2-07-						0-440012	149000	328	69	71	271	97244	404	172	42	3819	48	592
30-45.9100-109.2350-2-08-						0-440013	78528	266	39	98	43	41610	7	128	32	2067	29	475
30-45.8822-109.2186-2-06-						0-440014	38917	97	-25	35	50	12828	5	49	-25	691	9	499
30-45.8706-109.1747-2-07-						0-440015	67302	210	27	8	28	32465	15	48	30	1357	27	420
30-45.8554-109.1442-2-08-						0-440016	314000	574	61	9	184	155000	151	-25	92	5289	77	843
30-45.8431-109.1317-2-07-						0-440017	236000	423	32	-4	111	115000	40	-25	33	3808	60	483
30-45.8556-109.1819-2-07-						0-440018	71628	127	-25	-4	42	32411	16	40	-25	1247	22	224
30-45.8425-109.1897-2-06-						0-440019	3058	-55	-25	-4	-25	745	-3	108	-25	-200	6	572
30-45.8442-109.1919-2-08-						0-440020	111000	279	-25	-4	109	41333	8	59	-25	1959	33	1172
30-45.8342-109.1719-2-07-						0-440021	80838	247	-25	-4	29	35442	7	72	-25	1583	31	661
30-45.8292-109.2111-2-06-						0-440022	54635	229	-25	-4	-25	25016	-3	32	-25	1044	-4	84
30-45.7708-109.2444-2-07-						0-440023	58143	220	-25	-4	-25	30659	8	38	-25	1277	-4	-50
30-45.7547-109.2428-2-07-						0-440024	53926	109	-25	-4	26	32395	19	36	-25	1136	-4	131
30-45.7581-109.1967-2-08-						0-440025	54361	323	-25	12	33	45273	17	57	-25	1638	-4	1238
30-45.7822-109.1311-2-07-						0-440026	138000	406	-25	9	65	63617	161	68	-25	3366	-4	60
30-45.7556-109.1333-2-07-						0-440027	146000	315	-25	11	48	79213	33	72	-25	3921	-4	223
30-45.8908-109.1419-2-08-						0-440028	23741	56	-25	8	-25	16601	4	66	-25	285	-4	82
30-45.9267-109.1736-2-08-						0-440029	214000	679	36	22	402	158000	64	85	-25	7119	15	2658
30-45.9294-109.2133-2-08-						0-440030	148000	401	-25	13	527	80714	82	110	-25	4624	5	245
30-45.9308-109.2142-2-07-						0-440031	168000	654	-25	16	80	169000	37	116	-25	6308	12	163
30-45.9425-109.2136-2-07-						0-440032	123000	600	-25	10	58	110000	54	103	-25	4362	-4	396
30-45.9450-109.2131-2-08-						0-440033	208000	675	49	23	1333	177000	167	131	64	7511	25	808
30-45.9461-109.2156-2-07-						0-440034	115000	647	41	14	72	88428	42	137	35	4092	11	64
30-45.9756-109.2122-2-07-						0-440035	119000	340	-25	-4	46	120000	32	-25	-25	3143	-4	322
30-45.9547-109.2356-2-08-						0-440036	82151	521	88	20	93	56360	105	230	168	3722	34	273
30-45.9672-109.2528-2-08-						0-440037	114000	704	66	37	99	80581	10	217	104	4371	10	303
30-45.9675-109.2550-2-07-						0-440038	100000	212	-25	5	56	75064	29	138	-25	3545	7	333
30-45.9567-109.2553-2-07-						0-440039	104000	287	-25	-4	52	84224	50	113	-25	3796	8	211
30-45.9497-109.2553-2-07-						0-440040	98137	313	-25	-4	37	77158	13	138	-25	3588	-4	144
30-45.9758-109.3394-2-08-						0-440041	205000	548	27	29	86	94708	19	132	-25	5534	17	464
30-45.9828-109.3597-2-08-						0-440042	95007	309	-25	26	38	58301	37	128	-25	3319	9	3256
30-45.9814-109.3594-2-07-						0-440043	81948	238	-25	-4	47	52217	15	92	-25	2328	-4	391
30-45.9769-109.3597-2-07-						0-440044	145000	455	-25	8	65	75120	37	152	-25	4443	14	437

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																									U CONCENTRATION
							TIME SAMPLED																								
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (rel. ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (#) UNITS IN ppb
30-45.9739-109.2983-2-08-						0-M39045-06/19/78-11-			18-10.8-C-		-	-	7.4-	3900-		9-1-6-	-	-	-	-1-	-4-3-2-2-	-1-5-	5-		-	-	3.49				
30-45.9736-109.3000-2-07-						0-M39046-06/19/78-11-			18-15.0-		-	-	7.6-	3520-		11-1-6-5-7-2-4-1-1-4-3-2-2-				-1-	-	-			-	-	3.27				
30-45.9511-109.3164-2-07-						0-M39047-06/19/78-12-			18-15.0-		-	-	8.2-	1300-		9-1-6-5-7-3-3-1-1-4-3-2-2-				-1-	-	-			-	-	2.05				
30-45.9383-109.3103-2-08-						0-M39048-06/19/78-12-			16-	9.7-C-	-	-	7.7-	2900-		16-1-6-	-	-	-	-6-	-4-3-2-3-	-1-2-	4-	80-	42-		0.39				
30-45.9247-109.3686-2-08-						0-M39049-06/19/78-13-			15-	8.8-C-	-	-	7.7-	730-		23-1-7-	-	-	-	-1-	-4-3-3-3-	-1-2-20-		22-	16-		0.76				
30-45.9211-109.3164-2-07-						0-M39050-06/19/78-13-			17-16.5-		-	-	8.1-	7250-		8-1-6-5-7-2-3-5-1-4-3-2-2-				-1-	-	-			-	-	2.51				
30-45.9131-109.3172-2-07-						0-M39051-06/17/78-13-			18-17.0-		-	-	8.3-	1200-		9-1-7-5-6-2-3-5-1-4-3-2-2-				-3-	-	-			-	-	3.68				
30-45.9033-109.3164-2-08-						0-M39052-06/19/78-14-			17-11.5-		-	-	7.7-	1750-		13-1-6-	-	-	-	-1-	-4-3-2-4-	-1-4-	6-	65-	20-		0.93				
30-45.8872-109.3239-2-06-						0-M39053-06/19/78-14-			21-13.0-C-		-	-	7.7-	650-		15-1-6-4-6-2-3-1-1-4-3-3-2-				-1-	-	-			-	-	0.39				
30-45.8658-109.2964-2-06-						0-M39054-06/19/78-15-			17-	9.0-	-	-	8.3-	500-		13-1-7-4-6-3-3-1-1-4-3-3-3-				-1-	-	-			-	-	1.26				
30-45.8714-109.3256-2-06-						0-M39055-06/19/78-15-			16-14.5-		-	-	7.6-	975-		9-1-1-5-6-2-3-1-1-4-2-2-2-				-1-	-	-			-	-	5.73				
30-45.9311-109.2761-2-08-						0-M39056-06/19/78-16-			18-12.5-C-		-	-	7.0-	1900-		13-1-6-	-	-	-	-1-	-4-4-3-2-	-1-3-		-	-		6.21				
30-45.9150-109.2533-2-08-						0-M39057-06/19/78-10-			18-	9.9-C-	-	-	7.3-	975-		6-1-6-	-	-	-	-1-	-4-3-2-2-	-1-5-	4-	30-	20-		4.22				
30-45.8911-109.2547-2-07-						0-M39058-06/19/78-17-			18-15.2-		-	-	7.3-	4610-		19-1-7-5-6-2-2-1-3-4-4-2-2-				-1-	-	-			-	-	1.39				
30-45.8703-109.2242-2-06-						0-M39059-06/20/78- 9-			19-	9.8-C-	-	-	6.7-	500-		10-1-6-5-6-3-3-1-2-4-3-3-1-				-1-	-	-			-	-	3.95				
30-45.8614-109.2553-2-07-						0-M39060-06/20/78-10-			21-10.5-		-	-	7.5-	625-		15-1-6-	-	-3-3-1-2-4-3-3-1-			-1-	-	-			-	-	1.39				
30-45.8339-109.2675-2-06-						0-M39061-06/20/78-10-			21-	8.7-	-	-	7.4-	525-		18-1-7-5-7-3-3-1-1-4-3-3-1-				-1-	-	-			-	-	1.47				
30-45.8156-109.2753-2-07-						0-M39062-06/20/78-10-			21-11.0-		-	-	7.8-	550-		6-1-7-5-6-3-3-1-1-4-3-3-1-				-1-	-	-			-	-	1.68				
30-45.7742-109.2528-2-07-						0-M39063-06/20/78-11-			23-11.1-		-	-	7.8-	550-		9-1-7-5-7-3-3-2-1-4-3-3-1-				-1-	-	-			-	-	1.43				
30-45.7725-109.2544-2-08-						0-M39064-06/20/78-11-			24-13.5-C-		-	-	7.6-	750-		12-1-7-	-	-	-	-1-	-4-3-3-1-	-1-5-	5-		-	-	0.77				
30-45.7697-109.2222-2-06-						0-M39065-06/20/78-12-			27-12.6-		-	-	7.6-	720-		16-1-7-5-7-2-3-1-				-4-3-3-1-		-1-	-	-	-		3.96				
30-45.8089-109.1669-2-06-						0-M39066-06/20/78-12-			24-13.2-C-		-	-	7.4-	1250-		6-1-6-	-	-	-	-1-	-4-3-2-1-	-1-	-	-	-		2.62				
30-45.8056-109.1667-2-08-						0-M39067-06/20/78-12-			28-10.6-		-	-	7.4-	1510-		9-1-7-	-	-	-	-1-	-4-3-2-1-	-3-1-	8-	78-	70-		1.74				
30-45.8081-109.1656-2-07-						0-M39068-06/20/78-13-			32-20.0-		-	-	7.8-	1200-		9-1-7-5-6-3-3-1-1-4-3-2-1-				-3-	-	-			-	-	3.60				
30-45.7703-109.3086-2-06-						0-M39069-06/20/78-13-			28-10.5-C-		-	-	7.5-	875-		15-1-7-5-7-3-4-1-1-4-3-2-1-				-1-	-	-			-	-	7.28				
30-45.7703-109.3114-2-07-						0-M39070-06/20/78-14-			29-19.2-C-		-	-	7.9-	650-		13-1-7-5-7-2-3-5-1-4-3-2-1-				-1-	-	-			-	-	2.34				
30-45.7692-109.3386-2-07-						0-M39071-06/20/78-14-			31-19.7-		-	-	8.0-	650-		8-1-7-3-6-3-3-1-1-4-3-3-1-				-1-	-	-			-	-	3.13				
30-45.7614-109.2744-2-07-						0-M39072-06/20/78-14-			26-22.0-		-	-	8.2-	625-		8-1-7-5-6-3-3-2-1-4-3-2-1-				-1-	-	-			-	-	4.03				
30-45.8464-109.3717-2-08-						0-M39073-06/20/78-16-			30-	8.3-C-	-	-	7.3-	1350-		9-1-6-	-	-	-	-1-	-7-1-2-1-	-3-1-32-		14-	8-		9.80				
30-45.8431-109.3722-2-07-						0-M39074-06/20/78-16-			30-18.0-		-	-	8.1-	600-		9-1-7-3-7-3-3-3-3-4-3-2-1-				-1-	-	-			-	-	2.51				
30-45.7831-109.2736-2-08-						0-M39075-06/20/78-18-			28-13.6-		-	-	7.6-	1580-		9-1-7-	-	-	-	-1-	-4-3-3-1-	-3-3-	6-100-		45-		2.71				
30-45.7969-109.2828-2-07-						0-M39076-06/20/78-18-			28-17.2-		-	-	7.8-	525-		12-1-6-5-6-3-3-1-1-4-3-2-1-				-1-	-	-			-	-	3.18				
30-45.8239-109.3042-2-06-						0-M39077-06/20/78-19-			24-	9.9-C-	-	-	7.3-	525-		5-1-7-	-	-	-	-1-	-4-3-2-1-	-1-	-	-	-		1.43				
30-45.8639-109.2561-2-08-						0-M39078-06/20/78-19-			24-10.9-C-		-	-	7.8-	500-		9-1-7-	-	-	-	-1-	-4-3-3-1-	-1-3-	8-		-	-	2.08				
30-45.9925-109.3025-2-08-						0-M39079-06/20/78-19-			21-18.0-		-	-	7.7-	4050-		13-1-7-	-	-	-	-1-	-4-3-3-1-	-1-5-	8-	70-	10-		2.77				
30-45.0044-109.5150-2-07-						0-M39090-06/22/78-13-			21-	4.2-C-	-	-	6.8-	18-		12-2-9-7-9-4-4-1-2-4-2-5-2-				-1-	-	-			-	-	0.50				
30-45.0028-109.5150-2-07-						0-M39091-06/22/78-13-			21-	3.5-C-	-	-	6.7-	12-		12-2-9-7-9-4-4-1-2-4-2-5-2-				-1-	-	-			-	-	0.30				
30-45.0025-109.4792-2-07-						0-M39082-06/22/78-14-			27-	6.5-C-	-	-	7.3-	20-		9-2-9-7-9-4-4-1-2-4-2-5-2-				-1-	-	-			-	-	1.23				
30-45.0094-109.4647-2-07-						0-M39083-06/22/78-14-			26-	9.7-C-	-	-	7.1-	21-		13-2-9-4-9-4-4-1-2-4-2-5-2-				-1-	-	-			-	-	0.26				
30-45.0211-109.4522-2-07-						0-M39084-06/22/78-15-			27-	6.5-C-	-	-	7.2-	36-		8-2-9-7-9-4-4-1-2-4-3-5-2-				-1-	-	-			-	-	0.34				
30-45.0283-109.4378-2-07-						0-M39085-06/22/78-15-			29-	8.3-C-	-	-	7.2-	27-		15-2-9-7-9-4-4-1-2-4-3-5-2-				-1-	-	-			-	-	1.61				
30-45.0411-109.4250-2-07-						0-M39086-06/22/78-16-			26-	8.7-C-	-	-	6.1-	37-		9-2-9-4-9-4-3-1-2-4-3-5-2-				-1-	-	-			-	-	0.27				
30-45.0458-109.4247-2-07-						0-M39087-06/22/78-16-			22-	9.0-C-	-	-	6.7-	20-		10-2-9-4-9-4-4-1-2-1-3-5-2-				-1-	-	-			-	-	0.56				
30-45.0539-109.4153-2-07-						0-M39088-06/22/78-17-			25-	9.0-C-	-	-	6.3-	62-		11-2-9-7-9-4-3-1-2-4-3-5-2-				-1-	-	-			-	-	0.97				
30-45.0586-109.4078-2-07-						0-M39089-06/22/78-17-			26-	7.5-C-	-	-	6.6-	31-		8-2-9-7-9-4-4-1-2-7-3-5-2-				-1-	-	-			-	-	1.32				
30-45.1697-109.4933-2-07-						0-M39090-06/23/78-10-			11-	2.5-C-	-	-	7.2-	13-		13-2-9-4-9-4-4-1-2-1-4-5-1-				-1-	-	-			-	-	0.95				
30-45.1731-109.4761-2-07-						0-M39091-06/23/78-10-			21-	4.5-C-	-	-	7.2-	22-		11-2-9-4-4-4-3-1-2-1-4-4-1-				-1-	-	-			-	-	0.07				
30-45.1714-109.4575-2-07-						0-M39092-06/23/78-11-			19-	4.2-C-	-	-	7.1-	21-		15-2-9-4-2-5-4-1-2-1-4-4-1-				-1-	-	-			-	-	0.42				
30-45.1747-109.4467-2-07-						0-M39093-06/23/78-11-			27-	4.0-C-	-	-	7.7-	17-		13-1-9-7-9-4-4-1-2-1-4-4-1-				-1-	-	-			-	-	0.17				
30-45.1717-109.4358-2-07-						0-M39094-06/23/78-11-			20-	4.1-C-	-	-	7.2-	24-		13-2-9-4-2-4-4-1-2-1-4-4-1-				-1-	-	-			-	-	0.73				
30-45.1689-109.4167-2-07-						0-M39095-06/23/78-12-			27-	4.0-C-	-	-	7.3-	23-		10-2-9-4-9-4-4-1-2-1-4-4-1-				-1-	-	-			-	-	0.17				

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(2)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY Concentrations reported in weight parts per billion (ppb)											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.9739-109.2983-2-08-						0-M39045	195000	662	55	50	277	146000	22	206	29	7289	34	666
30-45.9736-109.3000-2-07-						0-M39046	211000	690	53	18	103	138000	46	182	38	7123	33	377
30-45.9511-109.3164-2-07-						0-M39047	60695	300	-25	-4	36	39952	14	139	-25	1970	7	-50
30-45.9383-109.3103-2-08-						0-M39048	371000	776	77	30	759	130000	115	66	60	8390	55	3777
30-45.9247-109.3686-2-08-						0-M39049	49708	330	-25	20	346	22324	25	135	28	1580	7	1019
30-45.9211-109.3164-2-07-						0-M39050	170000	800	82	25	110	202000	100	295	138	8860	41	658
30-45.9131-109.3172-2-07-						0-M39051	46958	212	-25	-4	55	31252	13	122	48	1780	13	164
30-45.9033-109.3164-2-08-						0-M39052	69325	256	44	11	37	36550	68	208	84	3131	19	115
30-45.8872-109.3239-2-06-						0-M39053	50167	287	34	7	-25	14976	17	161	89	1665	15	232
30-45.8658-109.2964-2-06-						0-M39054	10785	315	39	-4	-25	4612	17	110	81	699	8	-50
30-45.8714-109.3256-2-06-						0-M39055	52740	436	62	12	-25	38885	20	226	99	2689	28	219
30-45.9311-109.2761-2-08-						0-M39056	82000	450	58	47	75	63718	18	231	116	4108	26	3029
30-45.9150-109.2533-2-08-						0-M39057	59884	-55	-25	24	-25	41443	9	59	-25	1975	-4	236
30-45.8911-109.2547-2-07-						0-M39058	291000	643	41	26	129	148000	209	52	35	7268	34	626
30-45.8703-109.2242-2-06-						0-M39059	38670	-55	-25	-4	-25	15731	-3	-25	-25	415	-4	55
30-45.8614-109.2553-2-07-						0-M39060	46835	-55	-25	-4	-25	25939	6	-25	-25	859	-4	-50
30-45.8339-109.2675-2-06-						0-M39061	30130	-55	38	30	34	31746	42	86	37	1701	-4	-50
30-45.8156-109.2753-2-07-						0-M39062	45229	-55	-25	-4	-25	30578	8	-25	-25	1135	-4	76
30-45.7742-109.2528-2-07-						0-M39063	48860	-55	-25	-4	-25	33157	30	78	-25	1787	-4	60
30-45.7725-109.2544-2-08-						0-M39064	23125	-55	-25	14	-25	17489	6	79	37	1068	5	185
30-45.7697-109.2222-2-06-						0-M39065	48426	197	-25	-4	-25	44319	9	42	-25	1691	-4	271
30-45.8089-109.1669-2-06-						0-M39066	136000	396	-25	47	38	60448	10	56	-25	3154	7	329
30-45.8056-109.1667-2-08-						0-M39067	95148	405	-25	-4	26	47609	13	52	-25	2424	-4	1696
30-45.8081-109.1656-2-07-						0-M39068	87194	379	-25	-4	33	49005	4	78	-25	2464	-4	314
30-45.7703-109.3086-2-06-						0-M39069	48045	270	-25	-4	-25	53207	12	-25	-25	1177	-4	115
30-45.7703-109.3114-2-07-						0-M39070	49800	200	-25	-4	-25	37902	12	-25	-25	915	-4	325
30-45.7692-109.3386-2-07-						0-M39071	56275	196	-25	-4	33	38150	14	38	-25	1163	-4	101
30-45.7614-109.2744-2-07-						0-M39072	35995	317	-25	-4	36	40059	19	-25	-25	948	-4	172
30-45.8464-109.3717-2-08-						0-M39073	78855	467	-25	25	55	72833	12	56	-25	2157	7	381
30-45.8431-109.3722-2-07-						0-M39074	51935	371	-25	-4	46	35506	21	41	-25	1188	5	318
30-45.7831-109.2736-2-08-						0-M39075	54843	372	-25	7	39	34303	13	65	30	1368	9	437
30-45.7869-109.2828-2-07-						0-M39076	45746	299	-25	-4	28	34463	10	38	-25	1128	7	292
30-45.8239-109.3042-2-06-						0-M39077	47662	473	-25	-4	109	32697	28	88	35	1328	14	197
30-45.8639-109.2561-2-08-						0-M39078	21178	279	-25	10	-25	12851	11	46	-25	626	8	94
30-45.9925-109.3025-2-08-						0-M39079	17107	269	-25	11	-25	9307	22	62	39	857	14	103
30-45.0044-109.5150-2-07-						0-M39080	2097	223	-25	-4	-25	541	7	-25	-25	-200	-4	-50
30-45.0028-109.5150-2-07-						0-M39081	1264	195	-25	-4	-25	352	14	-25	-25	-200	-4	-50
30-45.0025-109.4792-2-07-						0-M39082	2032	299	-25	-4	-25	540	14	-25	58	-200	-4	103
30-45.0094-109.4647-2-07-						0-M39083	2047	114	26	-4	28	614	15	49	90	416	15	68
30-45.0211-109.4522-2-07-						0-M39084	4987	-55	-25	-4	-25	1391	7	41	-25	243	8	-50
30-45.0283-109.4378-2-07-						0-M39085	4027	-55	-25	-4	-25	875	-3	-25	34	-200	5	-50
30-45.0411-109.4250-2-07-						0-M39086	4165	-55	-25	-4	27	2174	-3	43	38	244	9	-50
30-45.0458-109.4247-2-07-						0-M39087	2107	-55	-25	-4	-25	914	-3	28	-25	-200	-4	-50
30-45.0539-109.4153-2-07-						0-M39088	8738	124	-25	-4	-25	2807	4	44	-25	307	12	-50
30-45.0586-109.4078-2-07-						0-M39089	4101	-55	-25	-4	47	1491	-3	41	29	299	12	-50
30-45.1697-109.4933-2-07-						0-M39090	1508	-55	-25	-4	-25	309	-3	-25	-25	-200	10	-50
30-45.1731-109.4761-2-07-						0-M39091	2537	-55	27	-4	-25	771	-3	56	61	322	12	-50
30-45.1714-109.4575-2-07-						0-M39092	2547	116	-25	-4	-25	701	-3	-25	41	-200	11	-50
30-45.1747-109.4467-2-07-						0-M39093	1657	-55	-25	-4	-25	564	-3	-25	-25	-200	7	-50
30-45.1717-109.4358-2-07-						0-M39094	2737	-55	-25	-4	-25	821	-3	-25	-25	-200	-4	-50
30-45.1689-109.4167-2-07-						0-M39095	2993	-55	-25	-4	-25	637	7	26	28	-200	8	-50

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																											U CONCENTRATION
							TIME SAMPLED																											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (ppb) UNITS IN ppb
30-	45.1633-	109.3991-	2-	07-		0-M39096-	06/23/78-	13-	28-	4.7-	C-	-	7.2-	49-	6-1-1-	-	-4-	3-	1-	2-	1-	4-	4-	2-	-1-	-	-	-	-				0.25
30-	45.1614-	109.3897-	2-	08-		0-M39097-	06/23/78-	13-	27-	4.5-	C-	-	6.9-	55-	10-2-9-	-	-	-	-1-	-1-	3-	4-	1-	-1-	9-	6-	41-	9-				0.29
30-	45.1586-	109.3856-	2-	07-		0-M39098-	06/23/78-	13-	29-	8.0-	-	-	7.1-	31-	11-2-1-	4-	4-	4-	4-	1-	2-	1-	4-	4-	2-	-1-	-	-	-	-				0.19
30-	45.1564-	109.3628-	2-	07-		0-M39099-	06/23/78-	14-	31-	9.1-	C-	-	6.7-	60-	12-2-9-	5-	8-	2-	4-	1-	1-	1-	3-	4-	1-	-1-	-	-	-	-				0.53
30-	45.1564-	109.3539-	2-	06-		0-M39100-	06/23/78-	14-	32-	14.5-	C-	-	7.3-	40-	9-1-1-	-	-	-	-1-	-1-	4-	4-	2-	-8-	-	-	-	-				0.79
30-	45.1586-	109.3511-	2-	07-		0-M39101-	06/26/78-	12-	21-	6.7-	C-	-	6.7-	42-	8-2-9-	4-	9-	4-	4-	1-	2-	1-	3-	4-	2-	-1-	-	-	-	-				0.85
30-	45.1533-	109.3656-	2-	07-		0-M39102-	06/26/78-	13-	20-	4.0-	C-	-	6.8-	50-	9-2-9-	4-	4-	5-	4-	1-	2-	1-	4-	4-	2-	-1-	-	-	-	-				0.02
30-	45.1481-	109.3367-	2-	07-		0-M39103-	06/26/78-	14-	20-	5.1-	C-	-	6.9-	80-	15-2-9-	4-	6-	4-	4-	1-	2-	2-	3-	4-	3-	-1-	-	-	-	-				0.17
30-	45.1558-	109.3139-	2-	07-		0-M39104-	06/26/78-	14-	18-	8.3-	-	-	7.0-	58-	13-2-7-	4-	3-	4-	3-	1-	2-	1-	3-	4-	3-	-1-	-	-	-	-				0.59
30-	45.1717-	109.2997-	2-	07-		0-M39105-	06/26/78-	15-	21-	6.9-	C-	-	7.1-	72-	15-2-2-	4-	3-	4-	4-	2-	2-	2-	4-	5-	2-	-1-	-	-	-	-				0.64
30-	45.0797-	109.3867-	2-	06-		0-M39106-	06/26/78-	15-	21-	7.8-	C-	-	6.8-	155-	16-2-9-	-	-	-	-1-	-1-	4-	4-	2-	-1-	-	-	-	-				1.78
30-	45.0811-	109.3836-	2-	07-		0-M39107-	06/26/78-	16-	16-	6.5-	C-	-	7.3-	29-	12-2-9-	6-	4-	4-	4-	1-	2-	1-	3-	5-	3-	-1-	-	-	-	-				0.29
30-	45.0869-	109.3719-	2-	07-		0-M39108-	06/26/78-	17-	18-	4.6-	C-	-	7.2-	21-	6-2-9-	4-	7-	5-	3-	1-	2-	1-	3-	4-	4-	-1-	-	-	-	-				0.45
30-	45.0886-	109.3675-	2-	07-		0-M39109-	06/26/78-	17-	15-	4.5-	C-	-	7.1-	21-	12-2-9-	4-	7-	4-	4-	1-	2-	7-	3-	5-	4-	-1-	-	-	-	-				0.07
30-	45.0817-	109.3475-	2-	06-		0-M39110-	06/26/78-	17-	19-	4.5-	C-	-	6.7-	78-	35-2-9-	4-	6-	3-	4-	1-	2-	3-	3-	4-	2-	-1-	-	-	-	-				0.14
30-	45.0881-	109.3636-	2-	07-		0-M39111-	06/26/78-	17-	15-	5.2-	C-	-	7.1-	56-	9-2-9-	4-	9-	4-	3-	1-	2-	7-	4-	4-	4-	-1-	-	-	-	-				0.76
30-	45.0847-	109.3364-	2-	07-		0-M39112-	06/27/78-	9-	18-	4.3-	-	-	6.9-	47-	16-2-1-	4-	6-	4-	4-	1-	2-	1-	3-	5-	1-	-1-	-	-	-	-				0.15
30-	45.0856-	109.3267-	2-	07-		0-M39113-	06/27/78-	10-	19-	4.0-	C-	-	7.4-	64-	16-2-1-	4-	6-	5-	4-	1-	2-	7-	4-	5-	1-	-1-	-	-	-	-				0.10
30-	45.0864-	109.3228-	2-	07-		0-M39114-	06/27/78-	10-	21-	4.5-	C-	-	7.7-	91-	9-2-9-	7-	9-	4-	4-	1-	2-	7-	3-	5-	1-	-1-	-	-	-	-				0.76
30-	45.0878-	109.3242-	2-	08-		0-M39115-	06/27/78-	11-	20-	8.0-	C-	-	7.3-	83-	9-2-1-	-	-	-	-1-	-7-	4-	5-	1-	-1-	9-	6-	40-	-				0.30
30-	45.0950-	109.3119-	2-	07-		0-M39116-	06/27/78-	11-	19-	6.9-	C-	-	7.4-	81-	15-2-1-	4-	9-	4-	4-	1-	2-	1-	3-	4-	1-	-8-	-	-	-	-				0.08
30-	45.1028-	109.3053-	2-	08-		0-M39117-	06/27/78-	11-	18-	7.2-	C-	-	7.2-	75-	6-2-1-	-	-	-	-1-	-1-	4-	4-	1-	-1-	9-	6-	40-	3-				0.23
30-	45.1031-	109.3019-	2-	07-		0-M39118-	06/27/78-	12-	19-	5.5-	C-	-	7.5-	80-	11-2-9-	4-	9-	5-	5-	1-	2-	1-	4-	5-	1-	-1-	-	-	-	-				0.44
30-	45.1167-	109.2967-	2-	07-		0-M39119-	06/27/78-	12-	19-	8.3-	C-	-	7.6-	42-	13-2-1-	4-	9-	2-	2-	1-	2-	7-	4-	4-	1-	-1-	-	-	-	-				0.28
30-	45.1042-	109.3083-	2-	07-		0-M39120-	06/27/78-	13-	22-	8.5-	C-	-	7.4-	65-	9-2-9-	5-	8-	4-	3-	1-	2-	2-	4-	4-	1-	-1-	-	-	-	-				0.71
30-	45.1144-	109.3008-	2-	07-		0-M39121-	06/27/78-	13-	27-	9.8-	C-	-	7.2-	102-	9-2-9-	5-	8-	4-	4-	1-	2-	2-	4-	5-	2-	-1-	-	-	-	-				0.95
30-	45.1200-	109.2750-	2-	07-		0-M39122-	06/27/78-	14-	26-	8.8-	C-	-	7.3-	41-	10-2-4-	4-	9-	4-	4-	3-	1-	2-	1-	3-	4-	1-	-1-	-	-	-	-				0.85
30-	45.1122-	109.2989-	2-	08-		0-M39123-	06/27/78-	14-	26-	8.2-	C-	-	6.9-	95-	10-2-9-	-	-	-	-1-	-2-	2-	5-	2-	-9-	3-	8-	27-	8-				1.05
30-	45.2250-	109.2572-	2-	07-		0-M39124-	06/27/78-	16-	29-	12.0-	-	-	7.1-	44-	11-2-4-	4-	4-	4-	4-	4-	1-	3-	4-	4-	2-	-3-	-	-	-	-				0.17
30-	45.2142-	109.2786-	2-	07-		0-M39125-	06/27/78-	17-	27-	15.1-	-	-	7.0-	285-	13-2-1-	4-	6-	3-	3-	1-	3-	4-	4-	2-	2-	-1-	-	-	-	-				0.49
30-	45.1622-	109.2092-	2-	07-		0-M39126-	06/28/78-	9-	17-	13.5-	C-	-	7.7-	1680-	10-1-9-	5-	7-	3-	3-	1-	2-	3-	3-	3-	2-	-3-	-	-	-	-				5.34
30-	45.1617-	109.2106-	2-	07-		0-M39127-	06/28/78-	9-	18-	8.8-	-	-	8.2-	71-	13-1-4-	5-	6-	4-	3-	4-	1-	3-	3-	4-	2-	-3-	-	-	-	-				0.11
30-	45.1572-	109.1825-	2-	07-		0-M39128-	06/28/78-	9-	21-	11.8-	C-	-	7.7-	500-	9-1-9-	5-	6-	3-	3-	2-	1-	3-	3-	3-	2-	-2-	-	-	-	-				1.10
30-	45.1533-	109.2153-	2-	07-		0-M39129-	06/28/78-	10-	23-	12.2-	C-	-	7.4-	361-	16-1-6-	5-	8-	3-	3-	2-	1-	2-	4-	3-	1-	-3-	-	-	-	-				0.94
30-	45.1525-	109.2156-	2-	07-		0-M39130-	06/28/78-	10-	23-	11.0-	C-	-	7.4-	290-	16-1-6-	5-	8-	3-	3-	2-	1-	2-	4-	3-	1-	-3-	-	-	-	-				0.77
30-	45.1547-	109.2069-	2-	06-		0-M39131-	06/28/78-	10-	25-	11.2-	-	-	7.0-	1050-	10-1-6-	5-	6-	3-	3-	1-	1-	4-	3-	3-	1-	-1-	-	-	-	-				1.61
30-	45.1631-	109.1731-	2-	07-		0-M39132-	06/28/78-	11-	26-	24.7-	C-	-	8.0-	1850-	13-1-4-	5-	6-	2-	2-	1-	1-	3-	3-	3-	1-	-3-	-	-	-	-				3.02
30-	45.1628-	109.1603-	2-	06-		0-M39134-	06/28/78-	12-	32-	19.0-	C-	-	7.4-	140-	16-1-1-	-	-	-	-	-1-	-4-	3-	4-	1-	-1-	-	-	-	-				0.76
30-	45.1694-	109.1950-	2-	06-		0-M39135-	06/28/78-	13-	36-	12.0-	C-	-	7.1-	950-	8-1-9-	-	-	-	-	-1-	-3-	3-	3-	2-	-9-	-	-	-	-				1.28
30-	45.1906-	109.2397-	2-	06-		0-M39136-	06/28/78-	13-	30-	7.8-	C-	-	6.6-	660-	9-1-6-	-	-	-	-	-1-	-2-	3-	3-	2-	-1-	-	-	-	-				0.36
30-	45.2142-	109.1864-	2-	06-		0-M39137-	06/28/78-	14-	28-	24.0-	-	-	7.9-	452-	9-1-2-	-	-2-	2-	1-	3-	4-	4-	4-	2-	-3-	-	-	-	-				1.42
30-	45.2214-	109.1275-	2-	08-		0-M39138-	06/28/78-	14-	29-	13.7-	C-	-	7.4-	1475-	9-1-6-	-	-	-	-1-	-4-	4-	2-	2-	-1-	3-	8-	90-	-				2.33
30-	45.2131-	109.1372-	2-	07-		0-M39139-	06/28/78-	15-	35-	17.0-	-	-	8.0-	100-	6-1-4-	5-	6-	4-	4-	4-	2-	3-	3-	4-	2-	-1-	-	-	-	-				0.83
30-	45.2353-	109.1367-	2-	07-		0-M39140-	06/28/78-	15-	34-	24.1-	-	-	8.0-	190-	9-1-6-	5-	6-	3-	3-	4-	1-	4-	4-	2-	2-	-1-	-	-	-	-				1.39
30-	45.2144-	109.2397-	2-	08-		0-M39141-	06/30/78-	11-	25-	13.9-	-	-	5.9-	90-	9-2-1-	-	-	-	-1-	-2-	3-	3-	2-	-1-	4-	5-	15-	4-				0.18
30-	45.2275-	109.2225-	2-	08-		0-M39142-	06/30/78-	12-	27-	15.5-	C-	-	6.5-	95-	10-2-6-	-	-	-	-1-	-4-	3-	2-	2-	-1-	-	-	-	-				0.46
30-	45.2293-	109.2211-	2-	06-		0-M39143-	06/30/78-	12-	28-	7.0-	C-	-	6.7-	103-	5-2-1-	4-	6-	3-	3-	1-	-4-	4-	2-	2-	-3-	-	-	-	-				0.85
30-	45.2428-	109.1975-	2-	06-		0-M39144-	06/30/78-	12-	27-	10.2-	-	-	6.7-	290-	10-1-1-	5-	8-	-	-1-	-4-	4-	3-	2-	-1-	-	-	-	-				0.73
30-	45.2414-	109.1956-	2-	07-		0-M39145-	06/30/78-	12-	29-	19.2-	C-	-	7.0-	76-	4-2-1-	5-	6-	4-	4-	1-	3-	4-	4-	2-	2-	-3-	-	-	-	-				0.64
30-	45.1958-	109.2747-	2-	08-		0-M39146-	06/30/78-	13-	29-	16.8-	-	-	6.5-	411-	13-2-4-	-	-	-	-1-	-4-	4-	4-	2-	-1-	3-	5-	55-	10-				0.86
30-	45.2081-	109.3153-	2-	06-		0-M39147-	06/30/78-	13-	27-	8.0-	C-	-	7.5-	492-	8-1-9-	4-	6-	3-	3-	1-	-2-	3-	3-	2-	-3-	-	-	-	-				0.34

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY Concentrations reported in weight parts per billion (ppb)											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.1633-109.3981-2-07-						0-M39096	6405	116	-25	-4	-25	1917	9	29	-25	-200	-4	-50
30-45.1614-109.3897-2-08-						0-M39097	5881	141	-25	-4	53	2588	23	35	33	-200	-4	184
30-45.1586-109.3856-2-07-						0-M39098	4186	112	-25	-4	-25	1070	6	-25	-25	-200	-4	69
30-45.1564-109.3629-2-07-						0-M39099	6597	91	-25	-4	-25	3006	5	26	-25	-200	-4	-50
30-45.1564-109.3539-2-06-						0-M39100	3954	-55	-25	127	-25	2222	5	37	28	-200	5	-50
30-45.1586-109.3511-2-07-						0-M39101	4178	-55	-25	5	74	1416	-3	-25	-25	-200	-4	-50
30-45.1533-109.3656-2-07-						0-M39102	6148	-55	-25	-4	40	1693	-3	-25	-25	-200	7	64
30-45.1481-109.3367-2-07-						0-M39103	10269	-55	-25	-4	57	3001	-3	-25	-25	294	13	-50
30-45.1558-109.3139-2-07-						0-M39104	5681	-55	-25	-4	-25	2497	-3	-25	-25	-200	10	-50
30-45.1717-109.2997-2-07-						0-M39105	9075	-55	-25	-4	93	2570	-3	-25	-25	-200	9	-50
30-45.0797-109.3867-2-06-						0-M39106	20824	-55	-25	-4	31	5601	-3	-25	-25	258	5	174
30-45.0911-109.3836-2-07-						0-M39107	3434	-55	-25	-4	30	917	-3	-25	-25	-200	6	-50
30-45.0969-109.3719-2-07-						0-M39108	2322	-55	-25	-4	-25	602	-3	-25	-25	-200	6	117
30-45.0886-109.3675-2-07-						0-M39109	2403	-55	-25	-4	48	631	-3	-25	-25	-200	6	-50
30-45.0817-109.3475-2-06-						0-M39110	9337	-55	-25	-4	48	1441	-3	28	-25	-200	5	153
30-45.0881-109.3636-2-07-						0-M39111	7565	-55	-25	-4	46	1411	-3	-25	-25	-200	-4	283
30-45.0847-109.3364-2-07-						0-M39112	6471	-55	-25	-4	42	1146	-3	-25	-25	-200	-4	-50
30-45.0856-109.3267-2-07-						0-M39113	10203	-55	-25	-4	-25	1742	-3	-25	-25	-200	6	-50
30-45.0864-109.3228-2-07-						0-M39114	14285	-55	-25	-4	-25	1583	-3	-25	-25	232	7	-50
30-45.0878-109.3242-2-08-						0-M39115	11080	-55	-25	6	137	2438	151	-25	-25	215	9	477
30-45.0950-109.3119-2-07-						0-M39116	11998	-55	-25	-4	-25	1877	-3	-25	-25	-200	8	-50
30-45.1028-109.3053-2-08-						0-M39117	9144	-55	-25	-4	412	2524	50	-25	-25	-200	6	287
30-45.1031-109.3019-2-07-						0-M39118	11280	-55	-25	-4	50	2178	-3	27	-25	246	7	-50
30-45.1167-109.2967-2-07-						0-M39119	4450	-55	-25	-4	110	1487	-3	-25	-25	-200	-4	-50
30-45.1042-109.3083-2-07-						0-M39120	8690	-55	-25	-4	-25	2266	-3	-25	-25	-200	-4	-50
30-45.1144-109.3008-2-07-						0-M39121	10456	-55	-25	-4	-25	4579	-3	-25	-25	-200	-4	-50
30-45.1200-109.2750-2-07-						0-M39122	4289	-55	-25	-4	-25	1367	-3	-25	-25	-200	-4	-50
30-45.1122-109.2989-2-08-						0-M39123	9876	-55	-25	-4	-25	3369	-3	-25	-25	-200	-4	289
30-45.2250-109.2572-2-07-						0-M39124	5056	-55	-25	-4	-25	1676	-3	-25	-25	-200	-4	-50
30-45.2142-109.2786-2-07-						0-M39125	41477	-55	-25	-4	-25	11073	-3	-25	-25	221	-4	-50
30-45.1622-109.2092-2-07-						0-M39126	103000	79	-25	-4	119	62178	22	-25	-25	1282	9	-50
30-45.1617-109.2106-2-07-						0-M39127	7958	-55	-25	-4	-25	2876	-3	-25	-25	-200	-4	91
30-45.1572-109.1825-2-07-						0-M39128	40099	-55	-25	-4	34	16543	8	-25	-25	325	-4	-50
30-45.1533-109.2153-2-07-						0-M39129	37391	-55	-25	-4	31	14068	50	-25	-25	375	-4	-50
30-45.1525-109.2156-2-07-						0-M39130	33796	-55	-25	-4	-25	10538	14	-25	-25	260	-4	-50
30-45.1547-109.2069-2-06-						0-M39131	39911	-55	-25	-4	-25	26198	-3	-25	-25	460	-4	-50
30-45.1631-109.1731-2-07-						0-M39132	143000	151	-25	8	68	136000	10	-25	-25	2350	16	123
30-45.1628-109.1603-2-06-						0-M39134	21918	-55	-25	131	-25	5931	-3	-25	-25	241	-4	72
30-45.1694-109.1950-2-06-						0-M39135	51427	73	-25	-4	-25	46215	-3	-25	-25	809	5	-50
30-45.1906-109.2397-2-06-						0-M39136	34556	-55	-25	-4	-25	13864	-3	-25	-25	428	7	-50
30-45.2142-109.1864-2-06-						0-M39137	55360	-55	-25	-4	52	35570	18	39	-25	872	12	-50
30-45.2214-109.1275-2-08-						0-M39138	6323	-55	-25	96	-25	1658	15	-25	-25	-200	-4	-50
30-45.2131-109.1372-2-07-						0-M39139	11562	-55	-25	-4	72	3756	-3	-25	-25	-200	-4	-50
30-45.2353-109.1367-2-07-						0-M39140	7476	-55	-25	18	373	1451	4	42	-25	-200	50	-50
30-45.2144-109.2397-2-08-						0-M39141	10349	-55	-25	62	115	3937	-3	-25	-25	-200	-4	-50
30-45.2275-109.2225-2-08-						0-M39142	10343	-55	-25	262	81	4349	-3	-25	-25	-200	-4	108
30-45.2293-109.2211-2-06-						0-M39143	12657	-55	-25	-4	-25	5302	-3	-25	-25	-200	-4	-50
30-45.2428-109.1975-2-06-						0-M39144	49153	-55	-25	5	-25	6478	-3	-25	-25	267	-4	122
30-45.2414-109.1956-2-07-						0-M39145	9855	-55	-25	-4	91	2954	11	-25	-25	-200	-4	-50
30-45.1958-109.2747-2-08-						0-M39146	45857	-55	-25	23	-25	12802	16	-25	-25	403	5	348
30-45.2091-109.3153-2-06-						0-M39147	66389	-55	-25	-4	-25	19340	-3	-25	-25	567	-4	-50

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																									U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (#) UNITS IN ppb
30-45.2353-109.2711-2-06-						0-M39148-06/30/78-14-	30-	8.7-C-	-	-	7.1-	142-	4-2-4-5-8-3-3-1-	-4-4-2-2-	-3-	-	-	-	-	0.05
30-45.2481-109.2822-2-07-						0-M39149-06/30/78-14-	27-	17.4-C-	-	-	8.1-	287-	9-1-1-3-1-4-3-2-3-4-4-3-2-	-3-	-	-	-	-	-	0.33
30-45.2492-109.2808-2-08-						0-M39150-06/30/78-14-	28-	9.2-	-	-	7.1-	550-	12-1-1-	-	-	-	-1-	-4-4-3-2-	-1-4-	4-	30-	20-	0.03
30-45.2475-109.2792-2-07-						0-M39151-06/30/78-15-	28-	14.5-	-	-	7.5-	182-	8-1-1-4-6-3-3-1-1-4-4-2-2-	-1-	-	-	-	-	0.32
30-45.2256-109.3022-2-08-						0-M39152-06/30/78-16-	32-	11.8-	-	-	7.5-	85-	11-2-2-	-	-	-	-1-	-4-4-4-2-	-1-3-	5-	85-	10-	0.90
30-45.2489-109.3086-2-07-						0-M39153-06/30/78-16-	33-	16.9-	-	-	8.2-	489-	8-1-1-4-7-3-3-1-1-4-4-2-2-	-1-	-	-	-	-	0.72
30-45.2347-109.4703-2-07-						0-M39154-06/30/78-17-	31-	6.2-C-	-	-	7.8-	96-	4-2-4-4-6-4-4-1-2-7-4-3-2-	-1-	-	-	-	-	0.32
30-45.2450-109.4522-2-07-						0-M39155-06/30/78-18-	28-	12.5-C-	-	-	7.7-	310-	6-1-9-4-6-3-3-1-2-4-4-3-2-	-1-	-	-	-	-	1.32
30-45.0106-109.1764-2-07-						0-M39156-07/05/78-14-	28-	25.3-C-	-	-	7.7-	147-	13-2-6-5-6-2-2-1-3-3-3-1-2-	-1-	-	-	-	-	0.49
30-45.0128-109.2394-2-06-						0-M39157-07/05/78-14-	26-	24.0-C-	-	-	7.3-	450-	12-2-9-3-9-3-4-1-2-3-3-3-2-	-1-	-	-	-	-	3.16
30-45.0156-109.2539-2-07-						0-M39158-07/05/78-15-	29-	11.0-C-	-	-	8.0-	157-	13-2-9-7-6-4-3-1-2-1-3-4-2-	-1-	-	-	-	-	0.66
30-45.0067-109.2617-2-07-						0-M39159-07/05/78-15-	25-	10.8-C-	-	-	7.9-	150-	5-2-9-3-9-4-4-2-2-3-3-4-2-	-1-	-	-	-	-	1.50
30-45.0014-109.2808-2-07-						0-M39160-07/05/78-16-	23-	7.9-C-	-	-	7.7-	82-	10-2-9-4-6-5-4-1-2-2-3-4-3-	-1-	-	-	-	-	0.93
30-45.0019-109.2781-2-06-						0-M39161-07/05/78-16-	20-	12.9-C-	-	-	7.1-	1000-	16-2-9-4-6-2-3-1-2-4-3-4-2-	-1-	-	-	-	-	1.96
30-45.0275-109.2283-2-07-						0-M39164-07/05/78-19-	20-	15.8-C-	-	-	7.6-	485-	9-2-9-4-6-3-3-1-2-3-3-4-2-	-1-	-	-	-	-	4.39
30-45.0922-109.1486-2-07-						0-M39165-07/06/78-11-	19-	12.2-C-	-	-	7.4-	600-	16-2-7-4-6-3-3-1-1-2-4-4-4-	-3-	-	-	-	-	3.30
30-45.0908-109.2206-2-07-						0-M39169-07/07/78-10-	17-	7.8-C-	-	-	7.5-	148-	9-2-9-3-6-5-4-1-2-7-4-5-1-	-1-	-	-	-	-	2.72
30-45.0672-109.2289-2-07-						0-M39170-07/07/78-11-	18-	7.6-C-	-	-	7.4-	99-	28-2-9-4-6-4-4-1-2-7-3-4-2-	-1-	-	-	-	-	1.95
30-45.0747-109.1900-2-08-						0-M39172-07/07/78-11-	23-	9.9-C-	-	-	7.1-	315-	9-2-9-	-	-3-3-1-	-3-3-2-2-	-1-9-	2-	-	-	3.85
30-45.0769-109.1886-2-06-						0-M39173-07/07/78-12-	22-	10.0-C-	-	-	7.5-	320-	13-2-9-	-	-2-2-1-	-3-4-4-2-	-3-	-	-	-	3.66
30-45.0678-109.1772-2-06-						0-M39174-07/07/78-12-	37-	12.8-C-	-	-	7.8-	285-	13-2-7-3-6-4-4-1-2-3-3-3-2-	-1-	-	-	-	-	4.76
30-45.0600-109.1536-2-06-						0-M39176-07/07/78-13-	28-	17.1-C-	-	-	7.3-	830-	13-1-6-	-	-3-3-1-	-3-3-3-2-	-1-	-	-	-	3.98
30-45.0600-109.1550-2-07-						0-M39177-07/07/78-14-	28-	17.1-	-	-	8.1-	650-	10-1-6-4-7-3-3-1-1-3-4-3-2-	-1-	-	-	-	-	1.06
30-45.0653-109.1481-2-07-						0-M39178-07/07/78-14-	30-	24.0-C-	-	-	8.4-	255-	9-2-4-4-6-3-3-1-2-3-3-3-2-	-3-	-	-	-	-	3.76
30-45.0042-109.9978-2-07-						0-M39180-07/10/78-17-	27-	7.1-C-	-	-	7.2-	58-	9-2-9-4-6-5-4-3-2-1-4-3-2-	-1-	-	-	-	-	0.46
30-45.0008-109.9964-2-07-						0-M39181-07/10/78-17-	26-	4.5-	-	-	7.9-	24-	9-2-7-4-6-5-4-4-2-1-4-5-4-	-1-	-	-	-	-	0.38
30-45.0033-109.9856-2-06-						0-M39182-07/10/78-18-	27-	5.5-	-	-	7.2-	240-	8-2-6-5-7-3-3-1-2-4-4-4-2-	-1-	-	-	-	-	0.43
30-45.0099-109.9717-2-07-						0-M39183-07/10/78-18-	24-	5.0-	-	-	7.5-	31-	4-2-7-4-6-4-4-4-2-1-4-5-2-	-1-	-	-	-	-	0.45
30-45.0147-109.9489-2-07-						0-M39184-07/10/78-19-	23-	5.0-C-	-	-	7.2-	55-	9-2-6-3-6-4-4-1-2-1-4-5-2-	-1-	-	-	-	-	0.44
30-45.0150-109.9319-2-07-						0-M39185-07/10/78-19-	21-	5.0-	-	-	7.3-	41-	11-2-7-4-6-5-4-4-2-1-4-5-2-	-1-	-	-	-	-	0.35
30-45.0086-109.9861-2-06-						0-M39186-07/11/78-	9-	17-	4.4-C-	-	-	7.0-	270-	6-2-7-4-6-2-3-1-	-2-4-5-2-	-1-	-	-	-	-	0.15
30-45.0189-109.9597-2-07-						0-M39187-07/11/78-	9-	15-	3.8-C-	-	-	7.4-	95-	8-2-9-4-6-5-4-1-2-1-4-3-2-	-1-	-	-	-	-	0.41
30-45.0219-109.9389-2-06-						0-M39188-07/11/78-	9-	19-	9.0-C-	-	-	6.9-	340-	11-2-9-5-6-2-3-1-	-1-4-5-2-	-1-	-	-	-	-	0.31
30-45.0272-109.9283-2-07-						0-M39189-07/11/78-10-	20-	4.1-C-	-	-	7.4-	102-	15-2-9-3-9-5-5-1-2-1-4-5-2-	-1-	-	-	-	-	0.44
30-45.0223-109.9178-2-07-						0-M39190-07/11/78-10-	17-	5.8-C-	-	-	7.6-	180-	11-2-9-4-6-4-4-1-2-1-4-5-1-	-1-	-	-	-	-	0.28
30-45.0228-109.9203-2-06-						0-M39191-07/11/78-10-	18-	6.1-C-	-	-	7.5-	172-	18-2-9-3-9-4-4-1-2-1-3-3-2-	-1-	-	-	-	-	0.36
30-45.0233-109.8997-2-07-						0-M39192-07/11/78-11-	18-	6.0-C-	-	-	7.6-	120-	15-2-9-4-6-4-4-1-2-1-4-5-1-	-1-	-	-	-	-	0.01
30-45.0297-109.8828-2-07-						0-M39193-07/11/78-11-	19-	7.5-	-	-	7.1-	44-	12-2-7-3-6-4-4-1-2-1-4-3-2-	-1-	-	-	-	-	0.21
30-45.0222-109.8778-2-07-						0-M39194-07/11/78-12-	26-	8.0-C-	-	-	7.4-	155-	12-2-9-4-6-4-3-1-2-1-4-5-2-	-1-	-	-	-	-	1.24
30-45.0297-109.8972-2-06-						0-M39195-07/11/78-12-	24-	7.1-	-	-	7.2-	132-	13-2-4-5-8-4-3-1-2-1-4-5-2-	-1-	-	-	-	-	0.15
30-45.2469-109.7197-2-06-						0-M39196-07/12/78-	7-	11-	5.7-C-	-	-	6.4-	58-	13-2-7-4-6-4-4-1-	-1-4-5-1-	-8-	-	-	-	-	0.30
30-45.2222-109.8039-2-07-						0-M39197-07/12/78-12-	19-	10.0-	-	-	7.0-	21-	11-2-7-5-8-4-4-1-2-1-3-5-2-	-1-	-	-	-	-	0.79
30-45.2203-109.7994-2-07-						0-M39198-07/12/78-12-	16-	8.1-C-	-	-	6.9-	22-	18-2-9-3-9-5-4-1-2-1-4-5-2-	-1-	-	-	-	-	0.17
30-45.2200-109.7931-2-06-						0-M39199-07/12/78-13-	17-	2.2-C-	-	-	6.7-	45-	15-2-9-4-6-3-3-1-2-1-4-5-2-	-1-	-	-	-	-	0.84
30-45.2175-109.7747-2-07-						0-M39200-07/12/78-14-	20-	4.8-C-	-	-	6.8-	19-	15-2-7-3-9-4-4-1-2-3-4-5-2-	-1-	-	-	-	-	0.48
30-45.5372-109.5844-2-07-						0-M39201-07/10/78-	9-	30-12.0-C-	-	-	7.2-	490-	11-2-6-4-6-3-3-1-2-2-3-2-1-	-3-	-	-	-	-	0.70
30-45.5575-109.6000-2-07-						0-M39202-07/10/78-	9-	30-14.0-	-	-	7.8-	383-	6-2-6-5-6-3-3-1-3-4-3-2-1-	-	-	-	-	-	0.20
30-45.5394-109.5789-2-08-						0-M39203-07/10/78-10-	30-12.0-C-	-	-	7.2-	450-	6-2-6-	-	-	-1-	-4-3-2-1-	-	-4-	8-	9-	8-	0.97
30-45.5472-109.5136-2-07-						0-M39204-07/10/78-10-	30-14.0-	-	-	6.8-	520-	16-2-6-4-6-3-3-1-2-2-3-2-1-	-	-	-	-	-	0.31
30-45.5775-109.5883-2-06-						0-M39206-07/10/78-11-	31-15.0-C-	-	-	7.1-	72-	13-2-6-5-8-3-3-1-2-4-3-2-1-	-9-	-	-	-	-	0.94
30-45.6092-109.6150-2-06-						0-M39207-07/10/78-12-	31-18.5-C-	-	-	9.4-	900-	11-2-6-5-6-2-3-1-2-4-3-2-1-	-3-	-	-	-	-	2.05

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(2)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY Concentrations reported in weight parts per billion (ppb)											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.2353-109.2711-2-06-						0-M39148	17114	-55	-25	-4	-25	6130	-3	-25	-25	-200	-4	-50
30-45.2481-109.2822-2-07-						0-M39149	40228	-55	-25	-4	-25	10498	-3	-25	-25	282	-4	-50
30-45.2492-109.2808-2-08-						0-M39150	48125	-55	-25	-4	242	18566	32	-25	-25	524	-4	-50
30-45.2475-109.2792-2-07-						0-M39151	24603	-55	-25	12	32	7508	12	-25	-25	-200	-4	-50
30-45.2256-109.3022-2-08-						0-M39152	17306	-55	-25	5	-25	7977	7	-25	-25	-200	-4	-50
30-45.2489-109.3086-2-07-						0-M39153	62107	-55	-25	-4	-25	22617	8	-25	-25	791	10	-50
30-45.2347-109.4703-2-07-						0-M39154	12821	-55	-25	-4	-25	4210	-3	-25	-25	-200	-4	-50
30-45.2450-109.4522-2-07-						0-M39155	47594	-55	-25	-4	-25	12685	-3	-25	-25	323	-4	66
30-45.0106-109.1764-2-07-						0-M39156	21657	-55	-25	-4	-25	6588	-3	-25	-25	-200	-4	-50
30-45.0128-109.2394-2-06-						0-M39157	70995	-55	-25	-4	-25	18419	943	-25	-25	732	11	57
30-45.0156-109.2539-2-07-						0-M39158	21393	-55	-25	-4	-25	7845	-3	-25	-25	-200	-4	-50
30-45.0067-109.2617-2-07-						0-M39159	19270	-55	-25	10	-25	5881	-3	-25	-25	-200	-4	-50
30-45.0014-109.2808-2-07-						0-M39160	10657	-55	-25	-4	-25	2810	-3	-25	-25	-200	-4	-50
30-45.0019-109.2781-2-06-						0-M39161	110000	68	-25	9	155	38627	260	-25	-25	1227	15	-50
30-45.0275-109.2283-2-07-						0-M39164	47524	-55	-25	-4	-25	19026	-3	-25	-25	653	10	-50
30-45.0922-109.1486-2-07-						0-M39165	87912	-55	-25	-4	-25	33713	4	-25	-25	948	14	-50
30-45.0908-109.2206-2-07-						0-M39169	20495	-55	-25	-4	-25	7562	-3	-25	-25	-200	5	-50
30-45.0672-109.2289-2-07-						0-M39170	13065	-55	-25	-4	-25	3546	-3	-25	-25	-200	-4	-50
30-45.0767-109.1900-2-08-						0-M39172	44053	-55	-25	5	-25	13888	-3	-25	-25	454	-4	-50
30-45.0769-109.1886-2-06-						0-M39173	40970	-55	-25	-4	-25	12311	-3	-25	-25	401	7	-50
30-45.0678-109.1772-2-06-						0-M39174	35178	-55	-25	-4	-25	9779	-3	-25	-25	427	8	-50
30-45.0600-109.1536-2-06-						0-M39176	68492	57	-25	118	-25	33079	-3	58	-25	1093	18	-50
30-45.0600-109.1550-2-07-						0-M39177	55606	71	-25	-4	-25	18432	-3	78	-25	1096	21	-50
30-45.0553-109.1481-2-07-						0-M39178	30835	-55	-25	-4	-25	8592	-3	39	-25	451	16	-50
30-45.0042-109.9978-2-07-						0-M39180	6072	-55	-25	-4	-25	1514	-3	-25	-25	-200	9	-50
30-45.0008-109.9964-2-07-						0-M39181	1296	-55	-25	9	122	849	-3	-25	-25	-200	14	-50
30-45.0033-109.9856-2-06-						0-M39182	37408	-55	-25	-4	-25	10221	-3	-25	-25	362	10	-50
30-45.0089-109.9717-2-07-						0-M39183	1962	-55	-25	-4	-25	910	-3	-25	-25	-200	7	-50
30-45.0147-109.9489-2-07-						0-M39184	6634	-55	-25	-4	-25	1832	-3	-25	-25	-200	14	-50
30-45.0150-109.9319-2-07-						0-M39185	3804	-55	-25	5	41	1377	-3	28	-25	-200	15	-50
30-45.0086-109.9861-2-06-						0-M39186	32127	-55	-25	-4	-25	8986	-3	47	-25	505	17	-50
30-45.0189-109.9597-2-07-						0-M39187	12565	-55	-25	-4	-25	3883	-3	-25	-25	247	12	-50
30-45.0219-109.9389-2-06-						0-M39188	54248	-55	-25	-4	-25	10611	-3	52	-25	687	19	-50
30-45.0272-109.9283-2-07-						0-M39189	15545	-55	-25	8	-25	2258	-3	32	-25	254	10	-50
30-45.0222-109.9178-2-07-						0-M39190	30512	-55	-25	-4	-25	5917	-3	59	-25	478	18	-50
30-45.0228-109.9203-2-06-						0-M39191	28198	-55	-25	7	-25	5555	-3	-25	-25	-200	7	-50
30-45.0233-109.8997-2-07-						0-M39192	18469	-55	-25	-4	-25	4539	-3	-25	-25	208	-4	-50
30-45.0297-109.8828-2-07-						0-M39193	5074	-55	-25	18	-25	1201	7	-25	-25	-200	-4	-50
30-45.0222-109.8778-2-07-						0-M39194	25468	-55	-25	-4	-25	5555	-3	-25	-25	322	9	-50
30-45.0297-109.8972-2-06-						0-M39195	17365	-55	-25	-4	-25	6176	-3	36	-25	327	11	-50
30-45.2469-109.7197-2-06-						0-M39196	6478	-55	-25	-4	-25	2196	-3	-25	-25	-200	8	-50
30-45.2222-109.8039-2-07-						0-M39197	2240	-55	-25	-4	-25	613	-3	-25	-25	-200	-4	-50
30-45.2203-109.7994-2-07-						0-M39198	2367	-55	-25	-4	-25	748	-3	26	-25	-200	7	-50
30-45.2200-109.7931-2-06-						0-M39199	5167	-55	-25	-4	-25	1389	-3	28	-25	-200	11	-50
30-45.2175-109.7747-2-07-						0-M39200	1956	-55	-25	-4	-25	604	-3	28	-25	-200	-4	-50
30-45.5372-109.5844-2-07-						0-M39201	63712	85	-25	8	62	15505	12	-25	-25	652	9	234
30-45.5575-109.6000-2-07-						0-M39202	50590	156	-25	8	34	14720	11	53	52	806	21	55
30-45.5394-109.5789-2-08-						0-M39203	54286	85	-25	23	34	16827	7	47	-25	743	17	74
30-45.5472-109.5136-2-07-						0-M39204	51204	74	-25	5	129	19161	10	47	-25	822	15	131
30-45.5775-109.5883-2-06-						0-M39206	61079	109	-25	-4	41	34444	4	67	-25	963	13	333
30-45.6092-109.6150-2-06-						0-M39207	110000	253	-25	13	177	69114	109	50	-25	1645	24	148

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																								U CONCENTRATION
							TIME SAMPLED																							
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (ℓℓ) UNITS IN ppb
30-45.5867-109.6083-2-07-						0-439208-07/10/78-12-			31-20.0-C-		-	-	9.0-	75-	13-2-6-5-6-3-3-1-2-4-3-2-1-														-1-	-	-	-	-	0.37
30-45.5133-109.5708-2-07-						0-439209-07/10/78-13-			31-22.0-C-		-	-	8.8-	70-	4-2-6-5-6-2-3-1-3-4-3-2-1-														-	-	-	-	-	3.27
30-45.5844-109.5936-2-07-						0-439210-07/10/78-13-			31-14.0-C-		-	-	8.8-	71-	11-2-6-3-6-3-3-1-2-4-3-2-1-														-3-	-	-	-	-	1.32
30-45.6781-109.6064-2-06-						0-439211-07/11/78-10-			31-12.0-C-		-	-	8.9-	500-	9-2-6-5-6-2-3-1-3-7-3-3-1-														-3-	-	-	-	-	2.93
30-45.6956-109.5829-2-07-						0-439212-07/10/78-11-			31-10.5-C-		-	-	8.9-	620-	10-2-6-3-6-3-3-3-2-7-3-2-2-														-3-	-	-	-	-	2.19
30-45.7072-109.5653-2-08-						0-439213-07/11/78-12-			32-15.0-C-		-	-	8.9-	500-	4-2-6-	-	-	-	-1-3-4-3-2-1-										-9-3-10-			80-	-	0.41
30-45.7056-109.6219-2-07-						0-439214-07/11/78-12-			31-12.0-C-		-	-	6.4-	510-	5-2-6-4-6-3-3-			-2-2-2-2-2-										-9-	-	-	-	-	0.56
30-45.7231-109.5067-2-06-						0-439215-07/11/78-13-			31-15.0-C-		-	-	7.4-	720-	6-2-6-	-	-	-	-1-	-2-3-2-2-									-7-	-	-	-	-	0.30
30-45.7217-109.5069-2-07-						0-439216-07/11/78-13-			31-20.5-C-		-	-	8.1-	800-	4-2-6-5-9-3-3-3-3-2-3-2-2-														-3-	-	-	-	-	2.86
30-45.7292-109.5558-2-07-						0-439217-07/11/78-13-			31-20.1-C-		-	-	8.2-	710-	9-2-6-4-6-2-2-1-2-1-2-2-2-														-1-	-	-	-	-	2.82
30-45.7331-109.5953-2-08-						0-439218-07/11/78-14-			31-13.5-C-		-	-	8.6-	500-	6-2-6-	-	-	-	-1-	-1-2-2-3-									-3-	-	-	-	-	2.17
30-45.7044-109.5067-2-07-						0-439219-07/11/78-15-			31-26.0-C-		-	-	8.4-	700-	9-2-7-5-6-3-3-1-2-4-3-2-3-														-7-	-	-	-	-	2.39
30-45.6356-109.5344-2-07-						0-439220-07/11/78-16-			31-18.0-C-		-	-	8.4-	600-	4-2-6-3-6-3-3-1-2-4-3-2-2-														-3-	-	-	-	-	0.34
30-45.6314-109.5417-2-07-						0-439221-07/11/78-16-			31-18.5-C-		-	-	7.8-	625-	6-2-6-	-	-3-3-1-2-2-3-2-2-														-	-	-	-	-	0.91
30-45.6917-109.4147-2-07-						0-439222-07/12/78- 9-			29-18.0-C-		-	-	8.6-	880-	9-2-6-4-6-3-2-1-2-4-3-2-2-														-7-	-	-	-	-	5.01
30-45.7008-109.3933-2-07-						0-439223-07/12/78-10-			30-20.0-C-		-	-	8.5-	750-	9-2-6-4-6-3-2-1-3-4-3-2-1-														-9-	-	-	-	-	4.20
30-45.7433-109.4003-2-06-						0-439225-07/12/78-11-			31-18.5-C-		-	-	8.5-	1520-	11-1-7-5-7-2-3-1-1-4-3-2-1-														-3-	-	-	-	-	6.13
30-45.7283-109.4008-2-07-						0-439226-07/12/78-11-			31-20.5-C-		-	-	8.5-	1150-	10-2-6-	-	-2-2-1-1-1-2-2-1-														-1-	-	-	-	-	6.64
30-45.7222-109.4086-2-06-						0-439227-07/12/78-		-	31-25.5-C-		-	-	8.6-	800-	9-2-7-	-	-2-2-1-1-3-3-2-1-														-1-	-	-	-	-	1.50
30-45.6906-109.4389-2-07-						0-439228-07/12/78-13-			31-20.5-C-		-	-	8.7-	1125-	6-2-6-4-6-3-3-1-2-4-3-2-1-														-	-	-	-	-	6.10
30-45.6833-109.4514-2-06-						0-439229-07/12/78-13-			31-20.0-C-		-	-	8.2-	990-	9-2-6-5-6-1-2-4-1-4-3-2-1-														-3-	-	-	-	-	2.58
30-45.6919-109.3994-2-08-						0-439230-07/12/78-14-			31-15.5-C-		-	-	8.3-	600-	18-2-6-	-	-	-	-1-	-4-3-2-1-									-	-9-			-	-	1.49
30-45.6814-109.4136-2-07-						0-439231-07/12/78-14-			31-25.0-C-		-	-	8.0-	1050-	13-2-6-5-6-3-3-1-2-7-3-3-1-														-1-	-	-	-	-	6.75
30-45.6808-109.4694-2-07-						0-439233-07/12/78-15-			31-26.5-C-		-	-	8.8-	800-	5-2-6-5-9-3-3-1-3-4-3-2-1-														-1-	-	-	-	-	2.13
30-45.6369-109.4097-2-07-						0-439234-07/12/78-16-			31-20.0-		-	-	8.5-	820-	9-2-6-5-7-3-3-		-3-4-3-2-1-														-1-	-	-	-	-	1.51
30-45.6278-109.4775-2-06-						0-439235-07/12/78-16-			31-10.0-C-		-	-	7.0-	880-	4-2-6-	-	-3-	-1-	-4-3-2-1-														-1-	-	-	-	-	0.86
30-45.6275-109.3119-2-07-						0-439236-07/13/78-10-			31-15.0-C-		-	-	9.1-	900-	6-2-1-4-6-3-3-1-2-4-3-2-1-														-1-	-	-	-	-	3.15
30-45.6244-109.3400-2-07-						0-439237-07/13/78-10-			31-15.0-C-		-	-	8.5-	725-	12-2-1-5-8-2-2-1-3-1-3-3-1-														-1-	-	-	-	-	2.44
30-45.6403-109.3864-2-07-						0-439238-07/13/78-11-			32-17.0-C-		-	-	8.7-	875-	9-2-6-4-7-3-3-1-		-2-3-3-1-														-7-	-	-	-	-	0.74
30-45.5622-109.3264-2-07-						0-439239-07/17/78- 9-			30-14.0-C-		-	-	8.9-	780-	11-2-6-4-7-3-3-1-2-4-3-2-2-														-1-	-	-	-	-	1.33
30-45.5317-109.3267-2-07-						0-439241-07/17/78- 9-			29-16.0-C-		-	-	8.5-	725-	11-2-6-4-6-3-3-1-2-2-3-2-2-														-1-	-	-	-	-	0.47
30-45.5106-109.3233-2-07-						0-439242-07/17/78-10-			30-15.0-C-		-	-	8.6-	730-	13-2-6-4-7-3-3-1-3-4-3-2-2-														-1-	-	-	-	-	1.13
30-45.5181-109.3258-2-07-						0-439243-07/17/78-10-			30-15.0-C-		-	-	8.5-	600-	9-2-6-5-6-3-3-1-1-4-3-2-2-														-3-	-	-	-	-	0.40
30-45.5697-109.3028-2-07-						0-439244-07/17/78-10-			29-16.0-C-		-	-	8.6-	760-	16-2-1-4-6-3-3-1-1-2-3-2-2-														-1-	-	-	-	-	1.46
30-45.5078-109.2628-2-06-						0-439245-07/17/78-12-			29-12.0-C-		-	-	8.5-	700-	3-2-1-	-	-3-	-1-3-4-2-2-2-									-1-	-	-	-	-	1.58
30-45.5342-109.2653-2-06-						0-439247-07/17/78-13-			30-17.0-C-		-	-	8.8-	600-	13-2-1-	-	-3-3-1-1-6-3-2-2-										-1-	-	-	-	-	0.91
30-45.5850-109.2811-2-06-						0-439248-07/17/78-13-			29-25.0-	-	-	-	8.2-	720-	11-2-1-5-6-2-2-1-3-1-3-3-2-														-	-	-	-	-	2.26
30-45.5964-109.2561-2-07-						0-439249-07/17/78-15-			29-15.0-C-		-	-	8.9-	600-	9-2-7-4-6-3-3-1-3-7-3-2-2-														-1-	-	-	-	-	1.28
30-45.6000-109.2664-2-06-						0-439250-07/17/78-15-			30-10.0-C-		-	-	8.5-	780-	13-2-1-4-6-4-3-1-1-3-3-2-2-														-9-	-	-	-	-	3.18
30-45.5978-109.7192-2-06-						0-439252-06/29/78-12-			27-12.0-C-		-	-	8.2-	350-	12-2-6-5-6-3-3-1-3-4-4-3-2-														-3-	-	-	-	-	0.17
30-45.5947-109.6794-2-08-						0-439253-06/29/78-13-			27-11.0-C-		-	-	8.2-	37000-	8-2-6-	-	-	-	-1-	-4-2-	-2-	-	-3-	8-120-118-								1.03
30-45.5956-109.6356-2-08-						0-439254-06/29/78-14-			27-22.0-C-		-	-	8.1-	39000-	11-2-6-	-	-	-	-1-	-4-3-2-2-		-3-8-	8-	8-	8-								1.01
30-45.6019-109.6711-2-06-						0-439256-06/29/78-15-			27-14.0-C-		-	-	8.3-	36000-	6-2-6-	-	-2-3-1-		-4-3-2-2-														-	-	-	-	-	0.38
30-45.5883-109.6769-2-06-						0-439257-06/29/78-15-			28-14.5-C-		-	-	8.1-	21500-	3-2-6-5-6-2-3-1-2-4-3-3-2-														-3-	-	-	-	-	0.47
30-45.5722-109.6478-2-07-						0-439258-06/29/78-16-			28-18.0-C-		-	-	8.5-	365-	9-2-6-5-6-3-3-1-2-4-3-3-2-														-3-	-	-	-	-	0.18
30-45.5108-109.6614-2-07-						0-439259-07/10/78- 8-			29-12.0-C-		-	-	8.2-	210-	6-2-6-4-6-3-3-1-3-2-3-2-1-														-	-	-	-	-	0.03
30-45.5189-109.5108-2-07-						0-439260-07/10/78-14-			29-18.0-C-		-	-	9.3-	35-	11-2-6-	-	-3-3-1-2-4-4-2-4-														-3-	-	-	-	-	0.86
30-45.6147-109.3397-2-07-						0-439261-07/18/78- 9-			27-13.0-C-		-	-	8.4-	795-	11-2-6-5-6-3-2-1-2-2-2-2-2-														-1-	-	-	-	-	2.71
30-45.5533-109.2458-2-08-						0-439263-07/18/78-10-			10-15.0-C-		-	-	8.5-	720-	13-2-1-1-	-	-	-1-	-2-3-2-3-										-8-			-	-	1.96
30-45.5911-109.6958-2-06-						0-439264-06/29/78-16-			26-14.5-C-		-	-	6.5-	382-	11-2-6-5-6-3-3-1-2-4-3-2-6-														-3-	-	-	-	-	0.77
30-45.5250-109.2125-2-07-						0-439266-07/18/78-11-			30-15.0-C-		-	-	8.2-	650-	13-2-1-3-6-2-2-5-3-2-2-2-2-														-3-	-	-	-	-	2.19

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY Concentrations reported in weight parts per billion (ppb)											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.5867-109.6083-2-07-				0-M39208			73705	77	-25	8	57	43275	13	41	-25	1143	18	176
30-45.5133-109.5708-2-07-				0-M39209			50656	-55	-25	11	399	14389	32	59	-25	780	24	110
30-45.5844-109.5936-2-07-				0-M39210			62020	119	-25	-4	68	36994	10	37	-25	881	5	123
30-45.6781-109.6064-2-06-				0-M39211			48311	96	-25	13	96	15402	14	39	-25	701	11	389
30-45.6956-109.5828-2-07-				0-M39212			69959	157	-25	30	79	38402	11	41	-25	1278	15	263
30-45.7072-109.5653-2-08-				0-M39213			14720	77	-25	10	106	3240	12	-25	-25	-200	-4	94
30-45.7056-109.6219-2-07-				0-M39214			59096	102	-25	7	125	18913	-3	52	-25	882	16	227
30-45.7231-109.5067-2-06-				0-M39215			2143	-55	-25	-4	127	494	4	46	-25	-200	7	314
30-45.7217-109.5069-2-07-				0-M39216			57501	60	-25	8	89	41932	10	67	-25	1072	13	220
30-45.7292-109.5558-2-07-				0-M39217			12360	-55	-25	-4	66	4415	-3	48	-25	328	8	390
30-45.7331-109.5953-2-08-				0-M39218			42196	105	-25	16	74	13443	4	47	-25	628	12	826
30-45.7044-109.5067-2-07-				0-M39219			45612	129	-25	6	154	42147	7	65	-25	992	16	228
30-45.6356-109.5344-2-07-				0-M39220			59104	108	-25	10	63	32387	6	46	-25	922	10	162
30-45.6314-109.5417-2-07-				0-M39221			54327	125	-25	20	135	30975	17	40	-25	878	13	244
30-45.6917-109.4147-2-07-				0-M39222			46678	-55	-25	9	134	32467	8	40	-25	748	5	314
30-45.7008-109.3933-2-07-				0-M39223			42249	84	-25	12	152	39324	11	51	-25	771	7	175
30-45.7433-109.4003-2-06-				0-M39225			83816	123	-25	10	116	60526	102	33	-25	1402	12	347
30-45.7283-109.4008-2-07-				0-M39226			52790	112	-25	16	106	39855	46	82	-25	1094	15	332
30-45.7222-109.4086-2-06-				0-M39227			30800	94	27	13	82	36141	9	72	-25	1000	20	382
30-45.6906-109.4389-2-07-				0-M39228			40485	-55	32	11	80	29931	-3	98	-25	1086	26	284
30-45.6933-109.4514-2-06-				0-M39229			82645	175	26	37	137	58815	223	35	-25	1271	11	141
30-45.6919-109.3994-2-08-				0-M39230			38713	-55	-25	89	87	11308	54	-25	-25	398	-4	252
30-45.6814-109.4136-2-07-				0-M39231			61777	183	-25	35	146	43817	6	78	-25	1686	14	188
30-45.6808-109.4694-2-07-				0-M39233			45012	146	-25	26	95	45105	9	77	-25	1493	14	281
30-45.6369-109.4097-2-07-				0-M39234			74649	197	-25	24	107	53703	8	72	-25	1914	16	189
30-45.6278-109.4775-2-06-				0-M39235			63634	143	-25	27	111	30722	6	76	-25	1497	16	209
30-45.6275-109.3119-2-07-				0-M39236			72695	125	-25	20	187	41231	10	58	-25	1566	16	368
30-45.6244-109.3400-2-07-				0-M39237			51265	107	-25	64	121	28954	7	54	-25	1238	9	283
30-45.6403-109.3864-2-07-				0-M39238			54360	122	35	21	91	31658	7	84	53	1599	19	335
30-45.5622-109.3264-2-07-				0-M39239			64788	139	29	18	179	23379	8	51	49	1349	20	326
30-45.5317-109.3267-2-07-				0-M39241			56793	109	26	23	113	19784	11	53	43	1134	16	210
30-45.5106-109.3233-2-07-				0-M39242			78071	122	43	21	118	20354	28	85	59	1533	27	514
30-45.5181-109.3258-2-07-				0-M39243			60837	59	42	19	140	16339	16	77	79	1371	26	369
30-45.5697-109.3028-2-07-				0-M39244			53126	138	42	29	102	24714	8	110	65	1565	26	-50
30-45.5078-109.2628-2-06-				0-M39245			49365	92	51	26	97	16906	4	74	81	1275	24	328
30-45.5342-109.2653-2-06-				0-M39247			51785	116	59	18	124	23190	60	100	83	1540	27	546
30-45.5850-109.2811-2-06-				0-M39248			57663	147	74	22	124	37777	7	115	103	1966	37	239
30-45.5864-109.2561-2-07-				0-M39249			54041	92	53	168	72	27210	12	134	72	1807	27	103
30-45.6000-109.2664-2-06-				0-M39250			53279	142	-25	-4	284	32186	192	-25	-25	-200	-4	364
30-45.5978-109.7192-2-06-				0-M39252			39879	90	28	15	150	12567	6	57	66	940	16	137
30-45.5947-109.6794-2-08-				0-M39253			4719	-55	28	11	150	660	5	-25	42	263	11	55
30-45.5956-109.6356-2-08-				0-M39254			100000	212	38	19	111	51969	9	27	27	1809	21	453
30-45.6019-109.6711-2-06-				0-M39256			77727	152	43	20	1014	13134	61	39	37	1285	24	482
30-45.5883-109.6769-2-06-				0-M39257			48298	69	27	11	103	14190	30	-25	48	958	16	95
30-45.5722-109.6478-2-07-				0-M39258			52350	148	31	10	102	12934	8	39	41	973	17	260
30-45.5108-109.6614-2-07-				0-M39259			35207	70	-25	7	129	3848	4	-25	43	513	11	104
30-45.5189-109.5108-2-07-				0-M39260			45351	140	-25	9	161	10080	11	53	32	839	16	205
30-45.6147-109.3397-2-07-				0-M39261			61371	133	39	22	127	41086	9	113	38	1933	22	806
30-45.5533-109.2458-2-08-				0-M39263			57809	172	39	19	104	29059	5	172	44	1937	22	198
30-45.5811-109.6958-2-06-				0-M39264			54302	118	-25	10	176	16730	31	49	-25	1024	13	275
30-45.5250-109.2125-2-07-				0-M39266			85051	168	42	14	155	37385	172	76	41	1857	23	335

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																											U CONCENTRATION
							TIME SAMPLED																										
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (%) UNITS IN ppb
30-45.5347-109.2272-2-07-						0-439267-07/18/78-11-			30-15.0-C-	-			8.0-	520-		8-2-1-3-6-3-3-1-2-2-3-2-2-													-3-	-	-	-	-	1.50
30-45.5242-109.2308-2-07-						0-439268-07/18/78-12-			30-17.0-	-			8.4-	610-		4-2-7-4-6-3-2-1-2-3-3-2-2-													-3-	-	-	-	-	1.08
30-45.5861-109.2100-2-07-						0-439269-07/18/78-13-			31-20.0-C-	-			8.5-	790-		9-2-1-5-8-3-2-1-3-4-2-2-2-													-3-	-	-	-	-	3.03
30-45.5853-109.2103-2-08-						0-439270-07/18/78-13-			30-14.3-C-	-			8.2-	800-		3-2-1- - - - -1- -4-3-2-3- -1-8-														-	-	-	-	1.69
30-45.6022-109.2250-2-08-						0-439271-07/18/78-13-			30-17.0-C-	-			7.7-	1900-		9-2-1- - - - - -1- -2-2-2-2- -1-4-48- 24- 23-																		4.85
30-45.5397-109.1269-2-07-						0-439272-07/18/78-14-			30-15.0-C-	-			8.2-	1100-		10-2-6-5-8-3-3-1-3-2-3-2-2-													-1-	-	-	-	-	1.99
30-45.5614-109.1472-2-07-						0-439273-07/18/78-15-			30-16.0-C-	-			7.7-	1620-		9-2-1-4-6-3-3-1-2-2-3-2-3-													-3-	-	-	-	-	1.67
30-45.5975-109.1986-2-07-						0-439274-07/22/78-10-			30-15.0-C-	-			8.9-	1490-		10-2-6-5-6-2-3-1-3-4-3-2-1-													-3-	-	-	-	-	3.07
30-45.5822-109.1806-2-08-						0-439275-07/22/78-10-			30-17.5-C-	-			7.9-	4000-		6-2-1- - - - - -1- -1-2-2-1- -9-8-														-	-	-	-	0.59
30-45.5811-109.1850-2-07-						0-439276-07/22/78-10-			30-14.0-C-	-			7.8-	3350-		11-2-1-3-7-3-3-1-3-2-3-2-1-													-1-	-	-	-	-	1.57
30-45.5483-109.1761-2-06-						0-439277-07/22/78-11-			30-12.0-C-	-			7.6-	825-		10-2-6-3-6-3-3-1-1-4-3-3-1-													-1-	-	-	-	-	2.04
30-45.5492-109.1744-2-08-						0-439278-07/22/78-11-			30-17.0-C-	-			7.8-	1150-		13-2-1- - - - -1- -2-3-3-1- -9-														-	-	-	-	0.23
30-45.5469-109.1778-2-07-						0-439279-07/22/78-11-			31-12.0-C-	-			8.5-	300-		8-2-1-3-6-3-3-1-1-2-3-3-1-													-3-	-	-	-	-	3.10
30-45.5750-109.1672-2-08-						0-439280-07/22/78-12-			31-16.0-C-	-			8.2-	1350-		11-2-1- - - - -1- -2-2-2-1- - -3- 6- 58- 20-																		2.22
30-45.5733-109.1681-2-07-						0-439281-07/22/78-12-			31-15.0-C-	-			8.0-	1600-		9-2-1-3-6-3-3-1-3-2-3-3-1-													-1-	-	-	-	-	3.45
30-45.6458-109.1781-2-08-						0-439282-07/22/78-13-			31-17.0-C-	-			8.4-	1600-		11-2-1- - - - - - -3-3-2-1- -1-3- -220-200-																		0.28
30-45.6447-109.1806-2-07-						0-439283-07/22/78-13-			31-22.0-C-	-			8.0-	4000-		9-2-1-6-8-2-3-1-3-6-3-2-1-													-1-	-	-	-	-	3.23
30-45.6850-109.1578-2-07-						0-439284-07/22/78-14-			31-19.0-C-	-			7.5-	1950-		5-2-1-6-8-3-3-1-2-4-3-2-1-													-1-	-	-	-	-	0.40
30-45.7303-109.1333-2-07-						0-439285-07/22/78-14-			31-20.0-C-	-			7.7-	3000-		11-2-1-3-6-2-3-1-1-6-3-1-1-													-1-	-	-	-	-	1.66
30-45.7422-109.1339-2-07-						0-439286-07/22/78-15-			31- 2.0-C-	-			8.2-	3200-		16-2-1-5-6-2-3-1-1-4-3-2-1-													-3-	-	-	-	-	0.40
30-45.7122-109.1728-2-07-						0-439287-07/22/78-15-			31-18.5-C-	-			8.7-	1360-		12-2-1-4-6-2-3-1-1-4-4-1-1-													-1-	-	-	-	-	0.92
30-45.6959-109.1708-2-08-						0-439288-07/22/78-16-			31-12.0-C-	-			8.1-	1590-		4-2-1- - - - -1- -4-3-1-1- - -8-														-	-	-	-	0.18
30-45.7039-109.1853-2-07-						0-439289-07/22/78-16-			30-21.0-C-	-			8.3-	750-		9-2-1-4-7-2-3-1-1-4-3-1-1-													-3-	-	-	-	-	1.04
30-45.5481-109.3678-2-07-						0-439290-07/23/78- 8-			30-13.5-C-	-			9.4-	155-		10-2-6-4-6-3-3-1-1-4-3-2-1-													-1-	-	-	-	-	0.33
30-45.6725-109.2800-2-07-						0-439291-07/23/78- 9-			30-14.0-C-	-			7.8-	70-		13-2-1-4-6-3-3-1-3-4-3-2-1-													-1-	-	-	-	-	2.33
30-45.6864-109.1906-2-07-						0-439292-07/22/78-16-			30-25.5-C-	-			8.3-	890-		9-2-1-3-7-2-3-1-1-4-3-2-2-													-1-	-	-	-	-	0.20
30-45.6881-109.2958-2-07-						0-439293-07/23/78- 9-			30-15.0-C-	-			8.4-	70-		6-2-1-4-6-3-3-3-1-3-2-3-1-													-1-	-	-	-	-	1.92
30-45.7364-109.2578-2-07-						0-439296-07/23/78-10-			30-17.5-C-	-			8.5-	90-		-2-6- - -3-2-3-1-2-3-3-1- -3- - -														-	-	-	-	3.11
30-45.7383-109.2603-2-08-						0-439297-07/23/78-10-			30-22.0-C-	-			8.5-	90-		18-2-1- - - - -1- -4-3-3-1- -1-3-80-														-	-	-	-	4.88
30-45.7372-109.2333-2-07-						0-439298-07/22/78-11-			30-16.5-C-	-			8.7-	79-		11-2-1-3-6-3-3-1-1-4-3-3-1-													-1-	-	-	-	-	3.98
30-45.7139-109.2000-2-06-						0-439299-07/22/78-11-			30-12.0-C-	-			8.8-	60-		11-2-6- - -3-3-1-3-4-2-2-1-													-1-	-	-	-	-	1.37
30-45.6859-109.1353-2-06-						0-439300-07/23/78-12-			30-21.5-C-	-			8.9-	39-		9-2-6-4-7-3-3-1-1-4-3-2-1-													-1-	-	-	-	-	0.50
30-45.6725-109.1525-2-07-						0-439301-07/23/78-13-			30-12.0-C-	-			8.6-	60-		11-2-1-4-6-3-3-1-2-2-3-3-1-													-1-	-	-	-	-	0.02
30-45.6778-109.1678-2-07-						0-439302-07/23/78-13-			31-24.0-C-	-			8.2-	195-		11-2-6-3-8-2-3-5-1-4-2-2-1-													-3-	-	-	-	-	1.27
30-45.6097-109.1492-2-07-						0-439303-07/23/78-14-			31-18.0-C-	-			8.9-	160-		6-2-1-4-6-3-3-1-1-2-2-3-1-													-3-	-	-	-	-	0.76
30-45.6092-109.1678-2-07-						0-439304-07/23/78-16-			31-23.5-C-	-			8.7-	250-		16-2-6-3-7-3-3-1-1-4-3-3-1-													-7-	-	-	-	-	4.03
30-45.6136-109.1803-2-06-						0-439305-07/23/78-15-			31-24.0-	-			8.5-	155-		11-2-6-3-7-3-3-1-3-3-2-3-1-													-9-	-	-	-	-	1.07
30-45.6175-109.1861-2-07-						0-439306-07/23/78-15-			31-21.5-C-	-			8.4-	275-		11-2-1- - -3-3- -1-1-2-3-1-													-9-	-	-	-	-	3.48
30-45.6511-109.3483-2-07-						0-439307-07/24/78- 9-			28-18.0-C-	-			9.2-	80-		9-2-6-4-6-3-3-3-1-2-2-3-2-													-3-	-	-	-	-	1.49
30-45.6361-109.3411-2-08-						0-439309-07/24/78-10-			30-11.0-C-	-			8.7-	82-		16-2-6-1- - - -1- -2-3-3-1- -1-4-28- 30- 28-																		1.92
30-45.6517-109.3142-2-06-						0-439309-07/24/78-12-			30-20.0-C-	-			9.0-	90-		11-2-6-4-6- -2-1-1-1-2-3-1- -1- - - - -																		4.32
30-45.7242-109.3736-2-07-						0-439310-07/24/78-12-			30-22.0-C-	-			9.3-	70-		4-2-6- - -3-3-1-1-4-2-3-1- -3- - - - -																		4.07
30-45.4472-109.2453-2-07-						0-439311-07/25/78- 9-			31-15.5-C-	-			9.2-	110-		16-1-4-4-6-2-3-1-1-3-2-3-1- -7- - - - -																		2.74
30-45.4547-109.2017-2-07-						0-439312-07/25/78-10-			30-14.5-C-	-			9.0-	70-		9-1-6-5-6-2-3-1-1-2-4-3-1-													-3-	-	-	-	-	0.99
30-45.4739-109.1714-2-07-						0-439313-07/25/78-10-			31-15.0-C-	-			9.1-	50-		10-1-6-3-7-2-2-1-3-3-4-3-1-													-3-	-	-	-	-	1.31
30-45.4703-109.1725-2-06-						0-439314-07/25/78-11-			31-13.0-C-	-			9.0-	66-		6-1-6-4-6-3-3-1-1-3-4-3-1-													-1-	-	-	-	-	1.17
30-45.4703-109.1819-2-07-						0-439315-07/25/78-11-			31-16.5-C-	-			8.9-	50-		11-1-6- - -2-2-1-3-5-3-3-1-													-1-	-	-	-	-	1.16
30-45.4700-109.1853-2-06-						0-439316-07/25/78-11-			30-13.0-	-			8.6-	58-		11-1-6-4-6-3-3-1-1-5-3-3-1-													-1-	-	-	-	-	0.25
30-45.4369-109.2486-2-07-						0-439318-07/25/78-14-			31-14.5-C-	-			8.8-	24-		9-1-1-5-6-3-4-4-1-4-3-3-1-													-3-	-	-	-	-	0.32
30-45.4247-109.2306-2-07-						0-439319-07/25/78-14-			31-16.5-C-	-			8.7-	21-		11-1-1- - -3-4-4-2-2-3-3-1-													-1-	-	-	-	-	0.56
30-45.4378-109.1903-2-08-						0-439320-07/25/78-14-			31-10.0-C-	-			8.5-	123-		9-1-1- - - - -1-3-4-2-3-1-													-1-4-28-		15-	13-		0.33

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(2)

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAB SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per billion (ppb)											
							Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.5347-109.2272-2-07-						0-M39267	71544	167	35	11	243	29291	24	95	36	1542	20	160
30-45.5242-109.2308-2-07-						0-M39268	51415	224	41	17	179	20587	17	125	48	1584	25	62
30-45.5861-109.2100-2-07-						0-M39269	41639	145	27	13	173	28101	8	88	-25	1297	20	-50
30-45.5853-109.2103-2-08-						0-M39270	46183	156	-25	45	102	23033	12	58	-25	1096	9	902
30-45.6022-109.2250-2-08-						0-M39271	139000	188	-25	27	95	75861	7	54	-25	1694	5	453
30-45.5397-109.1269-2-07-						0-M39272	108000	145	-25	19	75	47948	24	-25	-25	1103	-4	269
30-45.5614-109.1472-2-07-						0-M39273	160000	227	-25	21	91	64661	44	38	-25	1745	11	477
30-45.5975-109.1986-2-07-						0-M39274	125000	156	-25	13	105	70009	7	-25	-25	1450	-4	175
30-45.5822-109.1806-2-09-						0-M39275	353000	425	-25	48	142	159000	104	-25	-25	4030	27	464
30-45.5811-109.1850-2-07-						0-M39276	331000	367	49	33	116	159000	133	-25	41	3857	33	246
30-45.5483-109.1761-2-06-						0-M39277	67650	73	-25	11	26	43040	4	78	-25	961	6	173
30-45.5492-109.1744-2-08-						0-M39278	13540	-55	-25	9	60	8173	23	34	-25	302	7	-50
30-45.5469-109.1778-2-07-						0-M39279	66052	72	-25	8	-25	41406	6	105	-25	1113	14	54
30-45.5750-109.1672-2-08-						0-M39280	111000	89	-25	15	43	60859	8	105	-25	1513	15	119
30-45.5733-109.1681-2-07-						0-M39281	146000	194	-25	11	165	82258	38	99	-25	1993	18	-50
30-45.6458-109.1781-2-08-						0-M39282	90533	84	-25	8	58	44217	54	116	-25	1444	15	315
30-45.6447-109.1806-2-07-						0-M39283	414026	770	94	35	236	207222	54	-25	92	-200	66	684
30-45.6850-109.1578-2-07-						0-M39284	167000	244	34	11	53	107000	19	147	-25	2573	24	290
30-45.7303-109.1333-2-07-						0-M39285	325000	351	61	26	147	168000	73	58	81	4202	42	617
30-45.7422-109.1339-2-07-						0-M39286	322000	375	99	45	163	167000	140	100	177	4375	57	264
30-45.7122-109.1728-2-07-						0-M39287	150000	151	73	26	203	67861	57	213	162	2361	42	344
30-45.6969-109.1708-2-08-						0-M39288	154000	272	70	24	76	73469	15	215	179	2528	43	448
30-45.7039-109.1853-2-07-						0-M39289	57454	110	54	12	40	33704	22	164	124	1265	28	382
30-45.5481-109.3678-2-07-						0-M39290	17045	-55	51	16	80	6470	14	154	151	836	25	432
30-45.6725-109.2800-2-07-						0-M39291	55971	66	35	22	-25	36105	15	193	34	1381	20	161
30-45.6864-109.1906-2-07-						0-M39292	59544	99	28	10	85	24808	56	162	27	1102	19	588
30-45.6881-109.2958-2-07-						0-M39293	55362	121	36	9	64	36761	8	170	53	1258	21	529
30-45.7364-109.2578-2-07-						0-M39296	59200	93	39	11	-25	42974	13	191	95	1459	21	476
30-45.7383-109.2603-2-08-						0-M39297	65873	90	34	48	-25	43261	8	196	41	1549	19	351
30-45.7372-109.2333-2-07-						0-M39298	62282	108	42	8	-25	39864	12	200	70	1448	23	227
30-45.7139-109.2000-2-06-						0-M39299	54358	97	38	8	35	24982	10	178	58	1271	19	76
30-45.6869-109.1353-2-06-						0-M39300	41229	63	26	-4	37	16671	24	161	32	913	16	214
30-45.6725-109.1525-2-07-						0-M39301	90516	-55	-25	8	-25	21118	9	93	-25	2278	-4	160
30-45.6778-109.1678-2-07-						0-M39302	175000	409	-25	11	92	87509	27	128	-25	4852	20	392
30-45.6097-109.1492-2-07-						0-M39303	168000	196	-25	13	59	71466	21	116	-25	4278	14	257
30-45.6092-109.1678-2-07-						0-M39304	205000	299	37	19	80	115000	23	154	-25	6077	21	428
30-45.6136-109.1803-2-06-						0-M39305	125000	68	-25	-4	49	55025	11	105	-25	3499	-4	195
30-45.6175-109.1861-2-07-						0-M39306	214000	235	33	16	64	99539	20	110	32	5661	27	261
30-45.6511-109.3483-2-07-						0-M39307	61665	-55	-25	-4	-25	43394	16	100	-25	2312	-4	185
30-45.6361-109.3411-2-08-						0-M39308	61558	-55	-25	83	34	48428	7	93	-25	2478	6	378
30-45.6517-109.3142-2-06-						0-M39309	21248	-55	-25	5	71	42560	15	-25	-25	855	-4	144
30-45.7242-109.3736-2-07-						0-M39310	37572	-55	-25	-4	87	38289	11	66	-25	1331	-4	246
30-45.4472-109.2453-2-07-						0-M39311	73087	-55	-25	23	27	21143	41	70	-25	1577	-4	206
30-45.4547-109.2017-2-07-						0-M39312	70062	-55	-25	24	36	24757	18	76	-25	1780	-4	91
30-45.4739-109.1714-2-07-						0-M39313	62052	-55	-25	-4	62	29615	19	77	-25	1583	-4	-50
30-45.4703-109.1725-2-06-						0-M39314	76969	-55	-25	-4	93	33157	16	86	-25	2268	5	123
30-45.4703-109.1819-2-07-						0-M39315	60913	92	-25	6	37	24551	35	79	-25	1497	-4	-50
30-45.4700-109.1853-2-06-						0-M39316	67325	-55	-25	-4	-25	25930	34	82	-25	2064	-4	-50
30-45.4369-109.2486-2-07-						0-M39318	32141	-55	-25	5	-25	11247	10	76	-25	779	-4	60
30-45.4247-109.2306-2-07-						0-M39319	29146	-55	-25	-4	142	9982	19	58	-25	680	-4	-50
30-45.4378-109.1903-2-08-						0-M39320	59291	143	-25	-4	-25	25658	14	153	38	1986	8	135

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples (1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																											U CONCENTRATION
							TIME SAMPLED																											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (H) UNITS IN ppb
30-45.3906-109.1889-2-07-						0-M39321-07/25/78-15-			31-21.0-C-		-		9.3-	210-		13-1-2-	-	-3-4-3-3-4-3-2-1-	-1-	-	-	-	-									0.04
30-45.3939-109.2422-2-07-						0-M39322-07/25/78-15-			30-19.5-C-		-		9.3-	210-		13-1-1-4-6-3-4-4-3-5-3-3-1-		-3-	-	-	-	-									0.02
30-45.3997-109.2164-2-07-						0-M39323-07/25/78-16-			31-19.5-C-		-		8.3-	1100-		9-1-1-3-6-2-2-1-1-4-3-2-1-		-3-	-	-	-	-									7.70
30-45.4650-109.2228-2-08-						0-M39324-07/25/78-11-			30-11.5-C-		-		9.6-	980-		9-1-1-1-	-	-	-1-	-4-3-3-1-	-1-3-	9-	68-	65-									0.38
30-45.3786-109.1686-2-07-						0-M39325-07/26/78-10-			31-16.0-C-		-		9.3-	155-		9-1-1-	-	-4-4-1-3-2-3-2-1-	-3-	-	-	-	-									0.26
30-45.3886-109.1558-2-06-						0-M39326-07/26/78-11-			30-15.5-C-		-		7.4-	1000-		11-1-1-1-	-3-3-3-3-4-3-1-1-		-1-	-	-	-	-									1.59
30-45.4061-109.1411-2-07-						0-M39327-07/26/78-11-			31-14.5-C-		-		7.2-	465-		11-1-1-4-6-3-3-1-3-2-3-1-1-			-3-	-	-	-	-									1.03
30-45.4078-109.1400-2-07-						0-M39328-07/26/78-11-			31-19.5-C-		-		7.7-	410-		12-1-1-3-7-3-3-1-3-4-3-1-1-			-3-	-	-	-	-									0.84
30-45.3717-109.1464-2-08-						0-M39329-07/26/78-12-			31-16.5-C-		-		8.0-	825-		25-1-1-1-	-	-	-1-3-5-2-3-1-	-1-4-	8-	7-	5-									3.52
30-45.3714-109.1472-2-07-						0-M39330-07/26/78-13-			31-16.0-C-		-		8.5-	240-		-1-1-4-6-3-4-3-	-2-3-3-1-		-3-	-	-	-	-									0.68
30-45.3408-109.1361-2-07-						0-M39331-07/26/78-13-			31-22.5-	-	-		7.9-	810-		5-1-1-3-8-2-3-1-1-6-3-2-1-			-3-	-	-	-	-									5.84
30-45.3339-109.1419-2-07-						0-M39332-07/26/78-13-			31-20.0-C-		-		7.9-	175-		9-1-1-6-8-3-3-1-1-6-3-2-1-			-3-	-	-	-	-									3.91
30-45.3217-109.1325-2-08-						0-M39333-07/26/78-14-			31-17.5-C-		-		7.8-	170-		11-1-1-1-	-	-	-1-	-4-3-2-1-	-1-8-		-	-									2.19
30-45.3033-109.1764-2-06-						0-M39334-07/26/78-14-			31-11.0-C-		-		8.9-	33-		9-1-1-1-	-	-3-3-1-3-4-2-3-1-		-1-	-	-	-	-									0.61
30-45.2781-109.1889-2-07-						0-M39335-07/26/78-14-			31-18.5-C-		-		9.0-	190-		9-1-1-4-6-4-4-1-2-2-3-3-1-			-3-	-	-	-	-									0.69
30-45.2847-109.1533-2-08-						0-M39336-07/26/78-15-			32-14.5-C-		-		8.1-	1900-		9-1-1-1-	-	-3-3-1-3-2-2-3-1-		-1-8-	8-	10-	8-									1.17
30-45.2833-109.1539-2-08-						0-M39337-07/26/78-15-			32-11.0-C-		-		8.2-	230-		12-1-1-1-	-	-3-3-1-1-	-2-3-3-1-		-1-	-	-	-									7.22
30-45.2950-109.1483-2-07-						0-M39338-07/26/78-15-			32-22.0-C-		-		8.4-	310-		11-1-1-1-	-	-3-4-4-2-5-2-3-1-		-3-	-	-	-	-									0.35
30-45.4942-109.2264-2-07-						0-M39339-07/26/78-16-			32-20.5-C-		-		8.1-	770-		1-1-6-3-6-2-3-1-1-2-3-3-1-			-3-	-	-	-	-									0.73
30-45.3622-109.1867-2-07-						0-M39340-07/29/78- 9-			30-15.0-C-		-		8.8-	130-		11-1-1-3-7-3-3-4-3-2-3-2-1-			-3-	-	-	-	-									0.25
30-45.3647-109.2258-2-07-						0-M39341-07/29/78-10-			31-18.0-C-		-		8.0-	1125-		9-1-1-5-6-3-3-1-1-2-2-3-1-			-3-	-	-	-	-									1.52
30-45.3611-109.2428-2-07-						0-M39342-07/29/78-10-			30-20.5-C-		-		8.1-	1500-		9-1-1-3-7-2-3-1-1-2-3-3-1-			-3-	-	-	-	-									2.97
30-45.3644-109.2286-2-06-						0-M39343-07/29/78-10-			30-21.5-C-		-		8.2-	700-		11-1-1-5-6-2-3-1-1-6-3-3-1-			-1-	-	-	-	-									3.01
30-45.3694-109.1803-2-08-						0-M39344-07/29/78-11-			30-12.5-C-		-		7.5-	750-		16-1-1-1-	-	-	-1-	-2-3-2-2-	-1-4-	8-	30-	28-									3.19
30-45.3514-109.1494-2-08-						0-M39345-07/29/78-11-			30-13.5-C-		-		7.6-	550-		13-1-1-1-	-	-3-3-1-3-4-3-3-2-		-1-	-	-	-	-									2.64
30-45.3286-109.1639-2-08-						0-M39346-07/29/78-12-			31-11.5-C-		-		8.0-	575-		-1-1-1-	-	-	-	-1-3-4-3-2-2-	-1-4-	48-	30-	22-									1.64
30-45.3267-109.1619-2-07-						0-M39347-07/29/78-12-			31-19.0-C-		-		8.1-	380-		13-1-1-7-9-3-3-1-1-4-3-2-2-			-3-	-	-	-	-									1.35
30-45.3275-109.1667-2-07-						0-M39348-07/29/78-12-			31-13.5-C-		-		8.3-	245-		11-1-1-3-6-3-4-4-2-2-3-2-2-			-3-	-	-	-	-									0.57
30-45.3608-109.1578-2-07-						0-M39349-07/29/78-13-			31-16.5-C-		-		8.9-	65-		9-1-1-4-6-4-4-1-1-2-2-2-2-			-7-	-	-	-	-									0.65
30-45.3283-109.2108-2-07-						0-M39350-07/29/78-14-			30-20.5-C-		-		8.8-	97-		11-1-1-4-6-3-4-3-2-4-3-2-2-2-			-3-	-	-	-	-									0.05
30-45.2578-109.3144-2-07-						0-M39351-07/30/78-10-			30-12.5-C-		-		8.9-	185-		11-2-6-3-6-3-3-1-1-2-2-3-2-2-			-3-	-	-	-	-									0.19
30-45.2581-109.3097-2-08-						0-M39352-07/30/78-10-			30-12.0-C-		-		8.0-	525-		11-2-6-	-	-	-	-1-3-4-3-3-2-	-1-4-	8-	12-	8-									0.47
30-45.2619-109.3319-2-07-						0-M39353-07/30/78-10-			30-14.5-C-		-		8.1-	352-		6-2-6-3-6-3-3-1-1-2-3-3-2-			-3-	-	-	-	-									0.25
30-45.2806-109.3450-2-07-						0-M39354-07/30/78-11-			30-16.0-C-		-		8.3-	445-		11-1-1-4-6-3-3-1-1-3-3-3-2-			-1-	-	-	-	-									1.07
30-45.3058-109.3489-2-07-						0-M39355-07/30/78-11-			30-20.0-C-		-		8.0-	525-		11-1-1-4-6-2-2-2-1-4-3-3-2-			-3-	-	-	-	-									1.11
30-45.3144-109.3367-2-07-						0-M39356-07/30/78-11-			30-14.5-C-		-		8.4-	270-		11-1-1-4-6-4-4-4-2-2-3-3-2-			-3-	-	-	-	-									0.65
30-45.3147-109.3367-2-08-						0-M39357-07/30/78-	-		30-23.0-C-		-		7.6-	490-		11-1-1-	-	-	-	-1-3-2-3-3-2-	-1-4-	8-	12-	8-									0.84
30-45.3211-109.3131-2-07-						0-M39358-07/30/78-12-			30-12.0-C-		-		7.8-	385-		11-1-1-4-6-3-4-3-2-3-3-3-2-			-3-	-	-	-	-									0.85
30-45.3075-109.3100-2-08-						0-M39359-07/30/78-12-			30-12.5-C-		-		7.8-	700-		11-1-1-1-	-	-	-3-1-	-4-3-3-2-	-	-3-	8-	25-	8-									1.78
30-45.3122-109.3033-2-06-						0-M39360-07/30/78-12-			30-11.5-C-		-		8.1-	1100-		11-1-1-1-	-	-3-3-1-1-4-3-3-2-		-	-	-	-	-									3.86
30-45.2925-109.3017-2-07-						0-M39361-07/30/78-13-			30-16.5-C-		-		7.7-	355-		11-1-1-4-6-3-3-3-1-3-3-2-2-			-3-	-	-	-	-									0.56
30-45.2914-109.3047-2-07-						0-M39362-07/30/78-13-			30-	-C-	-		7.8-	420-		11-1-1-4-6-3-3-3-1-4-3-2-2-			-3-	-	-	-	-									0.27
30-45.2658-109.2733-2-07-						0-M39363-07/30/78-13-			30-10.5-C-		-		8.1-	230-		11-1-1-4-6-2-4-2-1-2-3-3-2-			-3-	-	-	-	-									0.77
30-45.2581-109.2514-2-07-						0-M39364-07/30/78-14-			30-12.5-C-		-		8.0-	700-		9-1-1-4-7-4-4-1-1-2-2-2-2-			-3-	-	-	-	-									0.38
30-45.2603-109.2514-2-08-						0-M39365-07/30/78-15-			30-11.0-C-		-		8.4-	125-		11-1-1-1-	-	-3-3-1-3-2-2-2-2-		-1-8-	8-	8-	-									0.43
30-45.2925-109.2617-2-07-						0-M39367-07/30/78-15-			30-18.5-C-		-		7.7-	160-		11-1-1-4-6-3-4-4-3-2-3-3-2-			-3-	-	-	-	-									0.23
30-45.3050-109.2722-2-08-						0-M39368-07/30/78-16-			30-13.5-C-		-		8.0-	775-		9-1-1-1-	-	-	-	-1-	-4-3-3-2-	-1-3-	48-	75-	30-									2.26
30-45.3328-109.2592-2-07-						0-M39369-07/30/78-16-			30-20.5-C-		-		8.3-	255-		11-1-1-4-6-4-4-4-2-3-3-3-2-			-3-	-	-	-	-									0.20
30-45.3372-109.2906-2-06-						0-M39370-07/30/78-16-			30-23.5-C-		-		8.2-	1100-		13-1-1-1-	-	-3-3-1-2-4-3-4-2-		-9-	-	-	-	-									1.17
30-45.4800-109.4533-2-07-						0-M39371-07/31/78- 8-			25-13.0-C-		-		8.7-	73-		16-2-6-3-6-4-4-1-3-2-3-3-2-			-1-	-	-	-	-									0.36
30-45.4803-109.4475-2-07-						0-M39372-07/31/78- 9-			25-14.5-C-		-		7.9-	240-		8-2-6-4-6-3-3-4-1-3-3-2-2-			-3-	-	-	-	-									0.55

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(2)

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAB. SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per billion (ppb)											
							Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.3906-109.1889-2-07-						0-M39321	11344	-55	-25	-4	89	4619	15	-25	-25	-200	-4	-50
30-45.3839-109.2422-2-07-						0-M39322	30363	-55	-25	-4	146	10156	25	26	-25	608	-4	-50
30-45.3897-109.2164-2-07-						0-M39323	58115	-55	-25	-4	98	37521	97	55	-25	1427	-4	-50
30-45.4550-109.2228-2-08-						0-M39324	6405	-55	-25	44	31	1086	56	-25	-25	-200	-4	-50
30-45.3786-109.1686-2-07-						0-M39325	18403	-55	-25	-4	153	7079	39	-25	-25	-200	-4	-50
30-45.3886-109.1558-2-06-						0-M39326	98916	-55	-25	5	72	43015	622	83	-25	2504	5	226
30-45.4061-109.1411-2-07-						0-M39327	41003	-55	-25	-4	113	19791	44	40	-25	795	-4	-50
30-45.4078-109.1400-2-07-						0-M39328	38802	-55	-25	-4	180	18491	82	-25	-25	661	-4	-50
30-45.3717-109.1464-2-08-						0-M39329	75595	-55	-25	67	-25	46503	20	89	-25	2416	-4	793
30-45.3714-109.1472-2-07-						0-M39330	31095	-55	-25	-4	53	10517	34	-25	-25	416	-4	-50
30-45.3408-109.1361-2-07-						0-M39331	98349	197	-25	-4	63	57916	69	83	-25	2847	-4	-50
30-45.3339-109.1419-2-07-						0-M39332	142000	295	-25	-4	105	108000	75	131	-25	4391	10	172
30-45.3217-109.1325-2-08-						0-M39333	121000	118	-25	-4	523	94805	41	83	-25	3841	5	205
30-45.3033-109.1764-2-06-						0-M39334	51947	-55	-25	11	-25	14039	15	61	-25	1054	-4	-50
30-45.2781-109.1889-2-07-						0-M39335	19822	-55	-25	-4	73	6222	40	-25	-25	303	-4	-50
30-45.2847-109.1533-2-08-						0-M39336	7001	-55	-25	-4	-25	5253	25	-25	-25	-200	-4	-50
30-45.2833-109.1539-2-08-						0-M39337	236000	536	-25	169	164	161000	37	69	-25	6676	20	203
30-45.2850-109.1483-2-07-						0-M39338	22901	-55	-25	-4	43	9020	26	-25	-25	-200	-4	-50
30-45.4942-109.2264-2-07-						0-M39339	71736	-55	-25	-4	-25	25744	39	67	-25	1402	-4	-50
30-45.3622-109.1867-2-07-						0-M39340	15065	-55	-25	-4	205	6089	41	-25	-25	-200	-4	-50
30-45.3647-109.2258-2-07-						0-M39341	102000	203	-25	6	179	59224	50	57	-25	2661	-4	60
30-45.3611-109.2428-2-07-						0-M39342	45625	-55	-25	-4	-25	53933	18	91	-25	1257	-4	-50
30-45.3644-109.2286-2-06-						0-M39343	50132	-55	-25	-4	269	18953	47	-25	-25	735	-4	-50
30-45.3694-109.1803-2-08-						0-M39344	82068	115	-25	8	-25	36879	20	63	-25	1462	-4	-50
30-45.3514-109.1494-2-08-						0-M39345	67343	-55	-25	9	-25	41794	20	48	-25	1381	-4	-50
30-45.3286-109.1639-2-08-						0-M39346	71613	-55	-25	221	-25	34960	29	77	-25	1614	5	-50
30-45.3267-109.1619-2-07-						0-M39347	53732	-55	-25	7	44	21376	42	69	-25	1155	-4	-50
30-45.3275-109.1667-2-07-						0-M39348	37368	-55	-25	-4	95	11451	55	52	-25	675	-4	-50
30-45.3608-109.1578-2-07-						0-M39349	6661	-55	-25	-4	-25	2395	22	-25	-25	-200	-4	-50
30-45.3283-109.2108-2-07-						0-M39350	11531	-55	-25	-4	190	4407	48	-25	-25	214	-4	-50
30-45.2578-109.3144-2-07-						0-M39351	26006	-55	-25	-4	-25	10663	32	33	-25	573	-4	-50
30-45.2581-109.3097-2-08-						0-M39352	75492	-55	-25	68	45	41317	40	90	-25	1854	5	-50
30-45.2619-109.3319-2-07-						0-M39353	49589	-55	-25	-4	35	17443	36	69	-25	1053	-4	-50
30-45.2806-109.3450-2-07-						0-M39354	52235	-55	-25	6	104	27422	56	91	-25	1494	8	-50
30-45.3058-109.3489-2-07-						0-M39355	20558	-55	-25	6	458	37393	135	-25	-25	832	-4	-50
30-45.3144-109.3367-2-07-						0-M39356	34826	-55	-25	-4	179	9971	46	49	-25	727	-4	-50
30-45.3147-109.3367-2-08-						0-M39357	90865	124	-25	63	-25	23555	27	106	-25	1940	7	-50
30-45.3211-109.3131-2-07-						0-M39358	47983	74	-25	5	-25	20480	35	116	-25	1465	11	-50
30-45.3075-109.3100-2-08-						0-M39359	90917	315	-25	6	2370	37267	136	114	-25	2292	10	582
30-45.3122-109.3033-2-06-						0-M39360	447	-55	-25	117	-25	108	23	-25	-25	-200	-4	-50
30-45.2925-109.3017-2-07-						0-M39361	43146	-55	-25	-4	32	17351	44	66	-25	1038	-4	-50
30-45.2914-109.3047-2-07-						0-M39362	61225	-55	-25	-4	54	23785	44	89	-25	1458	10	-50
30-45.2658-109.2733-2-07-						0-M39363	33775	-55	-25	-4	79	10549	32	58	-25	749	-4	-50
30-45.2581-109.2514-2-07-						0-M39364	7774	-55	-25	-4	85	3146	36	-25	-25	-200	-4	-50
30-45.2603-109.2514-2-08-						0-M39365	15258	-55	-25	-4	-25	6031	28	-25	-25	326	5	-50
30-45.2925-109.2617-2-07-						0-M39367	22150	-55	-25	-4	78	7492	42	-25	-25	-200	-4	-50
30-45.3050-109.2722-2-08-						0-M39368	73145	70	-25	25	29	49198	37	71	-25	1832	6	-50
30-45.3328-109.2592-2-07-						0-M39369	25438	-55	-25	-4	84	8767	36	-25	-25	433	-4	-50
30-45.3372-109.2906-2-06-						0-M39370	136000	134	-25	7	41	77503	37	77	-25	3449	8	-50
30-45.4800-109.4533-2-07-						0-M39371	5834	-55	-25	-4	-25	1962	26	-25	-25	-200	-4	-50
30-45.4803-109.4475-2-07-						0-M39372	29835	-55	-25	8	-25	9923	30	33	-25	514	-4	-50

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																													U CONCENTRATION
							TIME SAMPLED																												
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (#) UNITS IN ppb
30-45.4425-109.4450-2-07-						0-M39373-07/31/78- 8-			25-14.5-C-		-	7.5-	320-	13-2-6-	-	-3-	4-	4-	2-	3-	3-	3-	2-	-3-	-	-	-	-	0.33					
30-45.4358-109.4592-2-07-						0-M39374-07/31/78- 9-			25-14.5-C-		-	7.6-	270-	12-1-1-3-6-3-3-1-1-3-2-3-2-		-2-	-	-	-	-	-	-	-	-	-	-	-	-	0.41					
30-45.4122-109.4722-2-07-						0-M39375-07/31/78- 9-			27-11.5-C-		-	8.0-	60-	11-1-1-4-6-4-4-4-1-2-3-3-2-		-7-	-	-	-	-	-	-	-	-	-	-	-	-	0.34					
30-45.4089-109.4917-2-07-						0-M39376-07/31/78-10-			28-14.5-C-		-	8.1-	263-	9-1-1-3-6-3-3-3-1-3-2-3-3-		-3-	-	-	-	-	-	-	-	-	-	-	-	-	0.24					
30-45.3489-109.4947-2-07-						0-M39377-07/31/78-10-			28-12.0-C-		-	8.3-	60-	11-1-1-3-6-4-4-1-1-2-3-3-2-		-7-	-	-	-	-	-	-	-	-	-	-	-	-	0.22					
30-45.3192-109.4706-2-07-						0-M39378-07/31/78-10-			29-13.5-C-		-	8.4-	300-	9-1-1-4-6-3-3-1-1-3-3-3-2-		-3-	-	-	-	-	-	-	-	-	-	-	-	-	0.60					
30-45.3057-109.4653-2-07-						0-M39379-07/31/78-11-			29-16.0-C-		-	7.2-	350-	11-1-1-3-6-3-3-3-1-3-3-3-2-		-3-	-	-	-	-	-	-	-	-	-	-	-	-	0.27					
30-45.2897-109.4794-2-07-						0-M39380-07/31/78-11-			29-12.0-C-		-	7.6-	445-	11-1-6-4-6-3-3-1-1-3-2-3-2-		-3-	-	-	-	-	-	-	-	-	-	-	-	-	0.25					
30-45.2889-109.4775-2-07-						0-M39381-07/31/78-11-			29-13.5-C-		-	8.1-	200-	11-1-6-3-6-3-3-1-2-3-4-3-2-		-3-	-	-	-	-	-	-	-	-	-	-	-	-	0.01					
30-45.2883-109.4792-2-07-						0-M39382-07/31/78-12-			29-16.0-C-		-	8.1-	270-	11-1-6-4-6-2-3-1-1-3-4-3-2-		-3-	-	-	-	-	-	-	-	-	-	-	-	-	0.33					
30-45.2900-109.4803-2-08-						0-M39383-07/31/78-12-			30-11.5-C-		-	7.6-	700-	8-1-6-	-	-	-	-1-	-4-	4-	3-	2-	-9-	4-	6-	62-	25-	0.71					
30-45.3208-109.4547-2-07-						0-M39384-08/03/78- 8-			30- 9.0-C-		-	6.5-	301-	11-1-6-4-6-3-3-1-1-3-2-3-1-		-3-	-	-	-	-	-	-	-	-	-	-	-	-	0.83					
30-45.3061-109.3883-2-07-						0-M39385-08/03/78- 8-			30- 9.5-C-		-	7.7-	215-	11-1-6-4-6-4-4-1-1-2-3-3-1-		-1-	-	-	-	-	-	-	-	-	-	-	-	-	0.40					
30-45.3053-109.3761-2-07-						0-M39386-08/03/78- 9-			30- 9.5-C-		-	8.1-	360-	11-1-6-4-6-3-3-3-1-2-2-3-3-1-		-3-	-	-	-	-	-	-	-	-	-	-	-	-	0.58					
30-45.3219-109.3853-2-07-						0-M39387-08/03/78- 9-			30-11.5-C-		-	8.7-	180-	9-1-6-4-6-3-3-4-2-3-2-3-1-		-3-	-	-	-	-	-	-	-	-	-	-	-	-	1.06					
30-45.3211-109.3814-2-06-						0-M39388-08/03/78- 9-			30-13.0-C-		-	8.2-	525-	9-1-6-	-	-3-	3-	1-	3-	4-	3-	3-	1-	-1-	-	-	-	-	1.63					
30-45.3508-109.3778-2-06-						0-M39389-08/03/78- 9-			30-15.5-C-		-	8.2-	1075-	11-1-6-	-	-3-	3-	1-	3-	4-	3-	3-	1-	-1-	-	-	-	-	1.69					
30-45.3414-109.3828-2-07-						0-M39390-08/03/78-10-			30-11.5-C-		-	8.7-	90-	11-1-6-5-6-2-2-2-1-4-3-3-1-		-3-	-	-	-	-	-	-	-	-	-	-	-	-	0.46					
30-45.3803-109.3647-2-07-						0-M39392-08/03/78-10-			30-12.5-C-		-	7.0-	490-	11-1-6-	-	-2-	2-	3-	1-	3-	3-	3-	1-	-3-	-	-	-	-	0.96					
30-45.3931-109.3536-2-06-						0-M39393-08/03/78-11-			30-13.5-C-		-	8.8-	1100-	11-1-6-	-	-3-	3-	1-	3-	4-	3-	3-	1-	-9-	-	-	-	-	0.69					
30-45.3911-109.3559-2-08-						0-M39394-08/03/78-11-			30-10.5-C-		-	9.2-	700-	11-1-6-	-	-	-	-1-	3-	4-	3-	3-	2-	-1-	4-	6-	8-	6-	0.72					
30-45.4042-109.3433-2-07-						0-M39395-08/03/78-11-			30-15.0-C-		-	7.3-	395-	11-1-6-4-6-3-3-1-1-2-3-3-2-		-3-	-	-	-	-	-	-	-	-	-	-	-	-	0.56					
30-45.3911-109.3203-2-07-						0-M39396-08/03/78-12-			30-14.5-C-		-	7.9-	308-	11-1-6-3-6-3-3-2-2-2-3-3-2-		-3-	-	-	-	-	-	-	-	-	-	-	-	-	1.53					
30-45.2839-109.4283-2-07-						0-M39399-08/03/78-13-			26-13.0-C-		-	8.5-	157-	11-1-1-4-6-3-3-1-1-2-3-3-2-		-1-	-	-	-	-	-	-	-	-	-	-	-	-	0.55					
30-45.2531-109.4531-2-07-						0-M39400-08/03/78-14-			30-11.5-C-		-	8.6-	90-	11-2-7-3-6-3-3-1-1-2-3-4-2-		-1-	-	-	-	-	-	-	-	-	-	-	-	-	1.41					
30-45.2583-109.4472-2-07-						0-M39401-08/03/78-15-			31-12.0-C-		-	8.2-	240-	11-2-7-4-7-3-3-1-1-2-4-4-2-		-1-	-	-	-	-	-	-	-	-	-	-	-	-	0.27					
30-45.2647-109.4500-2-08-						0-M39402-08/03/78-15-			31-14.5-C-		-	7.4-	500-	11-2-7-	-	-	-	-1-	3-	4-	3-	3-	2-	-1-	8-	6-	90-	30-	0.45					
30-45.2947-109.4419-2-08-						0-M39403-08/03/78-15-			31-17.0-C-		-	8.6-	800-	9-2-7-	-	-	-	-1-	3-	4-	3-	3-	2-	-1-	3-	6-	58-	30-	0.61					
30-45.2928-109.4436-2-06-						0-M39404-08/03/78-15-			31-15.0-C-		-	7.9-	600-	11-2-7-	-	-3-	3-	1-	3-	2-	3-	3-	2-	-1-	-	-	-	-	1.39					
30-45.2886-109.4475-2-07-						0-M39405-08/03/78-16-			31-11.5-C-		-	8.5-	280-	13-2-7-4-6-3-3-3-1-3-2-3-2-		-3-	-	-	-	-	-	-	-	-	-	-	-	-	0.74					
30-45.3711-109.5447-2-06-						0-M39406-08/04/78- 9-			31-10.0-C-		-	8.5-	380-	11-2-7-	-	-3-	3-	1-	3-	4-	3-	3-	2-	-3-	-	-	-	-	0.83					
30-45.3706-109.5472-2-08-						0-M39407-08/04/78- 9-			31- 9.5-C-		-	8.2-	420-	11-2-7-	-	-	-	-1-	3-	4-	3-	3-	1-	-1-	3-	6-	155-	-	0.83					
30-45.3731-109.5439-2-08-						0-M39408-08/04/78- 9-			31-12.5-C-		-	9.1-	190-	11-2-7-	-	-	-	-1-	3-	4-	3-	3-	1-	-1-	3-	-	300-	-	0.44					
30-45.3664-109.5242-2-07-						0-M39409-08/04/78- 9-			31-11.0-C-		-	8.6-	570-	11-2-7-4-6-3-3-1-1-3-3-3-1-		-3-	-	-	-	-	-	-	-	-	-	-	-	-	0.73					
30-45.3450-109.5042-2-07-						0-M39410-08/04/78-10-			31-13.0-C-		-	8.4-	480-	11-2-7-4-7-3-3-1-1-4-3-3-1-		-3-	-	-	-	-	-	-	-	-	-	-	-	-	0.60					
30-45.3047-109.3642-2-07-						0-M39411-08/04/78-10-			31-14.0-C-		-	8.6-	445-	11-2-7-4-6-3-3-1-1-3-3-3-1-		-3-	-	-	-	-	-	-	-	-	-	-	-	-	1.13					
30-45.3056-109.3739-2-07-						0-M39412-08/04/78-10-			31-14.0-C-		-	8.8-	350-	11-2-7-4-6-3-3-1-1-3-3-3-1-		-3-	-	-	-	-	-	-	-	-	-	-	-	-	0.07					
30-45.2992-109.3725-2-07-						0-M39413-08/04/78-11-			31-13.5-C-		-	8.6-	410-	9-1-	-	4-	6-	3-	3-	5-	1-	4-	3-	3-	1-	-3-	-	-	-	-	1.54					
30-45.2811-109.4103-2-07-						0-M39415-08/04/78-12-			27-12.0-C-		-	9.0-	400-	11-1-1-4-6-3-3-1-1-3-4-3-1-		-3-	-	-	-	-	-	-	-	-	-	-	-	-	0.20					
30-45.3356-109.4494-2-08-						0-M39416-08/04/78-12-			27-12.5-C-		-	8.6-	750-	11-1-1-	-	-	-	-1-	3-	4-	3-	3-	1-	-1-	8-	-	-	-	-	0.25					
30-45.3736-109.4558-2-07-						0-M39417-08/04/78-12-			27-17.5-C-		-	8.6-	312-	11-1-1-4-6-3-3-3-3-3-3-1-		-3-	-	-	-	-	-	-	-	-	-	-	-	-	0.38					
30-45.3878-109.4464-2-08-						0-M39418-08/04/78-13-			27- 9.0-C-		-	8.3-	550-	11-1-1-	-	-	-	-1-	3-	4-	3-	3-	1-	-1-	4-	48-	20-	10-	0.47					
30-45.4081-109.4261-2-07-						0-M39419-08/04/78-13-			27-25.0-C-		-	8.3-	480-	11-1-1-3-6-2-3-1-1-4-3-3-1-		-3-	-	-	-	-	-	-	-	-	-	-	-	-	0.49					
30-45.4108-109.3889-2-06-						0-M39420-08/04/78-14-			28-11.5-C-		-	8.1-	410-	11-1-1-	-	-3-	3-	1-	3-	4-	3-	3-	1-	-3-	-	-	-	-	1.37					
30-45.4208-109.4336-2-07-						0-M39421-08/04/78-14-			31-18.0-C-		-	8.5-	293-	11-1-1-4-6-3-4-4-2-3-4-3-1-		-3-	-	-	-	-	-	-	-	-	-	-	-	-	0.68					
30-45.3431-109.6000-2-07-						0-M39422-08/08/78- 9-			31- 8.5-C-		-	6.7-	44-	11-2-6-4-6-5-3-1-1-2-3-5-1-		-8-	-	-	-	-	-	-	-	-	-	-	-	-	1.49					
30-45.4700-109.4758-2-07-						0-M39423-08/05/78- 9-			30-13.5-C-		-	8.4-	70-	11-1-6-4-6-4-3-1-1-2-3-2-2-		-3-	-	-	-	-	-	-	-	-	-	-	-	-	0.06					
30-45.4856-109.4697-2-07-						0-M39425-08/05/78-10-			30-14.5-C-		-	8.0-	120-	10-1-6-4-6-3-3-1-1-2-2-3-2-		-3-	-	-	-	-	-	-	-	-	-	-	-	-	0.06					
30-45.4714-109.3869-2-07-						0-M39426-08/05/78-10-			30-18.0-C-		-	9.1-	600-	12-1-1-7-6-3-3-3-2-3-1-3-1-		-3-	-	-	-	-	-	-	-	-	-	-	-	-	1.90*					
30-45.4822-109.4008-2-07-						0-M39427-08/05/78-11-			31-22.5-C-		-	8.7-	525-	10-1-1-5-6-2-3-1-1-3-3-3-2-		-3-	-	-	-	-	-	-	-	-	-	-	-	-	1.58					
30-45.4969-109.4097-2-07-						0-M39428-08/05/78-11-			31-19.5-C-		-	8.1-	500-	10-1-1-5-6-3-3-1-1-4-3-3-2-		-3-	-	-	-	-	-	-	-	-	-	-	-	-	1.01					

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY Concentrations reported in weight parts per billion (ppb)											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.4425-109.4450-2-07-						0-M39373	44790	-55	-25	-4	40	14550	38	45	-25	808	-4	-50
30-45.4358-109.4592-2-07-						0-M39374	37643	-55	-25	-4	43	10518	49	35	-25	679	-4	-50
30-45.4122-109.4722-2-07-						0-M39375	4153	-55	-25	-4	-25	1509	26	-25	-25	-200	-4	-50
30-45.4089-109.4917-2-07-						0-M39376	36682	68	-25	-4	46	10125	74	41	-25	646	-4	-50
30-45.3439-109.4947-2-07-						0-M39377	3263	74	-25	-4	-25	1165	27	-25	-25	-200	-4	-50
30-45.3192-109.4706-2-07-						0-M39378	37173	106	-25	-4	30	11819	54	49	-25	803	-4	-50
30-45.3067-109.4653-2-07-						0-M39379	53826	117	-25	7	37	16216	87	85	-25	1243	8	-50
30-45.2897-109.4794-2-07-						0-M39380	66033	93	-25	14	-25	20424	63	117	-25	1628	12	-50
30-45.2889-109.4775-2-07-						0-M39381	30709	-55	-25	-4	86	7261	59	38	-25	623	-4	-50
30-45.2883-109.4792-2-07-						0-M39382	41464	110	-25	5	93	11339	52	72	-25	1053	11	-50
30-45.2900-109.4803-2-08-						0-M39383	25436	-55	-25	-4	82	7977	98	28	-25	531	-4	-50
30-45.3208-109.4547-2-07-						0-M39384	34750	155	-25	559	-25	10991	48	49	-25	722	-4	-50
30-45.3061-109.3883-2-07-						0-M39385	30402	165	-25	31	-25	8520	34	28	-25	549	-4	-50
30-45.3053-109.3761-2-07-						0-M39386	71906	91	-25	22	52	15942	23	-25	66	1146	17	-50
30-45.3219-109.3853-2-07-						0-M39387	26988	-55	-25	-4	84	9788	24	-25	34	456	-4	-50
30-45.3211-109.3814-2-06-						0-M39388	48745	-55	30	6	52	19521	5	-25	91	1155	19	-50
30-45.3508-109.3778-2-06-						0-M39389	38887	-55	-25	13	51	14580	8	27	89	976	17	-50
30-45.3414-109.3828-2-07-						0-M39390	59652	-55	27	7	142	24115	216	-25	109	1349	19	-50
30-45.3803-109.3647-2-07-						0-M39392	53583	-55	36	8	102	18192	36	27	119	1322	27	125
30-45.3931-109.3536-2-06-						0-M39393	46073	67	-25	-4	2312	14343	103	-25	-25	887	13	132
30-45.3911-109.3558-2-08-						0-M39394	67602	89	-25	-4	31	21768	5	-25	44	1179	14	-50
30-45.4042-109.3423-2-07-						0-M39395	48348	-55	-25	-4	54	14200	9	-25	32	779	10	-50
30-45.3911-109.3203-2-07-						0-M39396	46813	-55	-25	-4	56	14710	14	-25	-25	754	13	-50
30-45.2839-109.4283-2-07-						0-M39399	25865	-55	-25	-4	-25	6223	-3	-25	43	451	9	-50
30-45.2531-109.4531-2-07-						0-M39400	12221	-55	-25	-4	-25	3461	-3	-25	-25	-200	5	-50
30-45.2583-109.4472-2-07-						0-M39401	37292	-55	-25	-4	-25	9926	-3	-25	-25	421	-4	-50
30-45.2547-109.4500-2-08-						0-M39402	75035	167	-25	7	34	23678	9	-25	-25	1036	8	188
30-45.2947-109.4419-2-08-						0-M39403	2661	-55	-25	-4	58	481	-3	-25	-25	-200	-4	-50
30-45.2928-109.4436-2-06-						0-M39404	67970	100	-25	6	-25	24702	-3	-25	-25	993	10	-50
30-45.2886-109.4475-2-07-						0-M39405	35240	-55	-25	-4	83	9677	59	-25	-25	346	-4	-50
30-45.3711-109.5447-2-06-						0-M39406	43415	-55	-25	-4	-25	10667	-3	-25	-25	464	-4	-50
30-45.3706-109.5472-2-08-						0-M39407	26629	-55	-25	-4	198	3546	56	-25	-25	204	-4	92
30-45.3731-109.5439-2-08-						0-M39408	8647	-55	-25	-4	-25	1101	-3	-25	-25	-200	-4	-50
30-45.3664-109.5242-2-07-						0-M39409	89376	175	-25	-4	42	26053	24	-25	-25	1270	14	-50
30-45.3450-109.5042-2-07-						0-M39410	62789	108	-25	-4	63	28106	30	-25	-25	1016	5	-50
30-45.3047-109.3642-2-07-						0-M39411	72597	58	-25	-4	53	23346	13	-25	-25	1077	11	-50
30-45.3056-109.3739-2-07-						0-M39412	67679	90	-25	-4	51	15464	10	-25	37	911	9	-50
30-45.2992-109.3725-2-07-						0-M39413	59028	146	-25	-4	46	22439	6	-25	-25	909	5	-50
30-45.2811-109.4103-2-07-						0-M39415	79545	231	-25	-4	60	16339	12	-25	31	1150	11	186
30-45.3356-109.4494-2-08-						0-M39416	300	86	-25	-4	-25	28	-3	-25	-25	-200	-4	-50
30-45.3736-109.4558-2-07-						0-M39417	45405	-55	-25	-4	74	13186	10	-25	-25	592	-4	-50
30-45.3878-109.4464-2-08-						0-M39418	78108	-55	-25	10	54	18524	5	-25	-25	1001	5	179
30-45.4081-109.4261-2-07-						0-M39419	59963	150	-25	-4	50	19518	12	-25	-25	850	7	-50
30-45.4108-109.3889-2-06-						0-M39420	47234	77	-25	-4	41	20261	4	-25	-25	776	-4	-50
30-45.4208-109.4336-2-07-						0-M39421	36461	-55	-25	-4	59	11075	15	-25	-25	414	-4	-50
30-45.3431-109.6000-2-07-						0-M39422	3788	-55	-25	-4	71	1055	-3	-25	-25	-200	-4	-50
30-45.4700-109.4758-2-07-						0-M39423	8537	-55	-25	-4	57	2703	4	-25	-25	-200	-4	56
30-45.4856-109.4697-2-07-						0-M39425	13983	-55	-25	-4	109	4243	11	-25	-25	-200	-4	-50
30-45.4714-109.3869-2-07-						0-M39426	59153	233	-25	-4	52	20283	20	-25	-25	869	-4	-50
30-45.4822-109.4008-2-07-						0-M39427	56263	127	-25	-4	128	18430	59	-25	-25	805	5	-50
30-45.4969-109.4097-2-07-						0-M39428	53292	65	-25	-4	102	17833	11	-25	-25	689	-4	-50

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																											U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (θ) UNITS IN ppb
30-45.2836-109.6342-2-07-						0-M39429-08/08/78- 9-			32-	11.0-C-	-	-	6.8-	60-	11-2-6-3-6-4-3-1-1-2-4-5-1-													-8-	-	-	-	-	0.77
30-45.2769-109.6425-2-08-						0-M39430-08/08/78- 9-			31-	9.5-C-	-	-	6.2-	308-	11-2-6-	-	-	-	-6-3-1-3-5-1-									-1-7-	6-	60-	8-	-	0.22
30-45.2747-109.6453-2-08-						0-M39431-08/08/78-10-			31-	9.5-C-	-	-	7.0-	100-	11-2-6-	-	-	-	-1-3-1-3-5-1-									-8-7-	6-	60-	-	-	0.03
30-45.2503-109.7158-2-07-						0-M39432-08/08/78-10-			31-	14.0-C-	-	-	7.7-	28-	11-2-6-4-6-3-3-1-1-1-3-5-1-													-6-	-	-	-	-	0.59
30-45.2531-109.7092-2-07-						0-M39433-08/08/78-10-			31-	12.0-C-	-	-	7.5-	60-	11-2-6-4-7-2-3-1-1-3-3-5-1-													-8-	-	-	-	-	0.18
30-45.2531-109.7028-2-08-						0-M39434-08/08/78-11-			31-	11.5-C-	-	-	8.1-	130-	11-2-6-	-	-	-	-4-3-1-3-5-1-									-9-7-	6-	60-	-	-	0.18
30-45.2519-109.7017-2-07-						0-M39435-08/08/78-11-			31-	8.7-C-	-	-	8.6-	100-	11-2-6-3-6-3-3-1-1-7-4-5-1-													-1-	-	-	-	-	0.80
30-45.2611-109.6775-2-07-						0-M39437-08/08/78-11-			31-	10.5-C-	-	-	8.6-	26-	11-2-6-3-6-4-3-1-1-7-3-5-1-													-8-	-	-	-	-	0.15
30-45.2731-109.6547-2-07-						0-M39439-08/08/78-12-			31-	15.0-C-	-	-	8.3-	50-	9-2-6-3-6-3-3-1-1-7-3-5-1-													-8-	-	-	-	-	0.56
30-45.2625-109.6739-2-07-						0-M39439-08/08/78-12-			31-	13.5-C-	-	-	8.2-	80-	11-2-6-3-6-3-3-1-1-3-4-5-1-													-8-	-	-	-	-	0.18
30-45.2803-109.6317-2-07-						0-M39440-08/08/78-10-			31-	14.0-C-	-	-	8.9-	37-	11-2-5-4-6-2-3-1-1-6-4-5-1-													-8-	-	-	-	-	0.17
30-45.2583-109.5644-2-07-						0-M39442-08/08/78-15-			31-	11.0-C-	-	-	8.5-	70-	11-2-7-4-7-3-3-1-2-2-4-5-2-													-3-	-	-	-	-	0.01
30-45.2661-109.5586-2-06-						0-M39443-08/08/78-15-			31-	11.5-C-	-	-	8.4-	160-	11-2-7-	-	-	-3-3-1-3-2-3-4-2-									-1-	-	-	-	-	0.24
30-45.3081-109.5158-2-07-						0-M39444-08/08/78-16-			31-	21.5-C-	-	-	7.8-	140-	11-1-1-3-6-3-3-1-2-3-3-3-2-													-3-	-	-	-	-	0.33
30-45.3081-109.5253-2-07-						0-M39445-08/08/78-16-			31-	18.5-C-	-	-	8.9-	29-	9-1-1-4-6-2-3-1-1-4-3-3-2-													-3-	-	-	-	-	0.06
30-45.3667-109.5194-2-07-						0-M39447-08/08/78-16-			31-	18.5-C-	-	-	8.1-	450-	9-1-1-4-6-3-3-4-1-3-4-3-2-													-3-	-	-	-	-	1.42
30-45.2697-109.2381-2-08-						0-M39448-08/09/78-10-			27-	12.0-C-	-	-	7.7-	110-	11-1-1-	-	-	-	-1-3-4-3-2-1-									-1-3-	4-	50-	3-	-	0.05
30-45.2736-109.2378-2-08-						0-M39449-08/09/78-10-			27-	14.0-C-	-	-	7.2-	140-	11-1-1-	-	-	-	-1-3-4-3-2-1-									-1-5-54-		28-	3-	-	0.29
30-45.2744-109.2372-2-08-						0-M39450-08/09/78-10-			27-	11.0-C-	-	-	7.2-	135-	11-1-1-	-	-	-	-1-3-4-3-2-1-									-1-4-40-		25-	3-	-	0.01
30-45.3114-109.2269-2-08-						0-M39451-08/09/78-11-			27-	18.5-C-	-	-	7.3-	390-	11-1-1-	-	-	-	-1-3-4-3-2-1-									-1-4-48-		10-	2-	-	0.63
30-45.2775-109.2083-2-07-						0-M39452-08/09/78-11-			31-	13.5-C-	-	-	8.1-	130-	11-1-1-4-6-4-3-1-1-2-3-2-1-													-8-	-	-	-	-	0.19
30-45.3461-109.2586-2-08-						0-M39453-08/09/78-12-			31-	11.0-C-	-	-	8.6-	1100-	11-1-1-	-	-	-	-1-3-4-3-3-1-									-1-4-48-		25-	10-	-	2.69
30-45.3194-109.2703-2-08-						0-M39454-08/09/78-12-			31-	13.0-C-	-	-	8.1-	60-	11-1-1-	-	-	-	-1-3-4-3-3-1-									-1-4-48-		25-	10-	-	0.38
30-45.3194-109.2689-2-07-						0-M39455-08/09/78-12-			31-	16.0-C-	-	-	8.5-	180-	11-1-1-4-6-4-4-4-2-3-4-3-1-													-3-	-	-	-	-	0.62
30-45.3408-109.3161-2-06-						0-M39456-08/09/78-13-			31-	13.0-C-	-	-	8.0-	725-	11-1-1-	-	-	-3-3-1-3-4-3-3-1-									-1-	-	-	-	-	1.35
30-45.3708-109.3192-2-08-						0-M39457-08/09/78-13-			31-	19.0-C-	-	-	8.5-	70-	11-1-1-	-	-	-	-3-4-3-3-1-									-1-4-	-	8-	-	-	0.37
30-45.3594-109.6442-2-07-						0-M39458-08/09/78-14-			31-	22.0-C-	-	-	9.7-	55-	11-1-1-3-6-3-3-1-1-4-3-3-1-													-3-	-	-	-	-	0.16
30-45.3553-109.6342-2-07-						0-M39459-08/09/78-15-			31-	15.0-C-	-	-	9.1-	51-	11-1-1-3-6-3-3-1-1-2-3-3-2-													-1-	-	-	-	-	0.03
30-45.3719-109.6525-2-07-						0-M39460-08/09/78-15-			31-	18.5-C-	-	-	8.6-	200-	11-1-1-4-6-6-3-3-1-2-3-3-3-2-													-3-	-	-	-	-	0.12
30-45.3644-109.6583-2-08-						0-M39461-08/09/78-16-			31-	16.0-C-	-	-	8.2-	475-	11-1-1-	-	-	-	-1-3-4-3-4-2-									-1-5-40-		16-	2-	-	0.18
30-45.3633-109.6606-2-07-						0-M39462-08/09/78-16-			31-	17.0-C-	-	-	8.7-	193-	11-1-1-3-6-2-3-2-2-4-4-4-2-													-3-	-	-	-	-	0.25
30-45.3689-109.6622-2-07-						0-M39463-08/09/78-16-			31-	18.0-C-	-	-	9.1-	100-	11-1-1-4-6-6-2-3-1-1-3-2-4-2-													-3-	-	-	-	-	0.03
30-45.3667-109.6589-2-07-						0-M39465-08/09/78-17-			31-	18.0-C-	-	-	8.3-	165-	11-1-1-3-6-3-3-1-2-1-4-3-3-2-													-3-	-	-	-	-	0.22
30-45.6578-109.6461-2-06-						0-M39468-08/10/78-10-			30-	8.5-C-	-	-	9.1-	510-	11-1-6-4-6-3-3-1-1-2-3-3-2-													-1-	-	-	-	-	0.49
30-45.6457-109.6708-2-07-						0-M39470-08/10/78-11-			30-	12.5-C-	-	-	8.9-	400-	9-1-6-3-7-2-3-1-3-2-3-4-2-													-	-	-	-	-	0.28
30-45.6464-109.6681-2-07-						0-M39471-08/10/78-12-			30-	17.0-C-	-	-	9.2-	470-	9-1-6-5-6-2-3-3-1-3-4-4-2-													-1-	-	-	-	-	0.35
30-45.6497-109.6550-2-07-						0-M39472-08/10/78-12-			30-	18.0-C-	-	-	8.8-	650-	11-1-6-3-6-2-3-1-1-7-3-4-2-													-3-	-	-	-	-	0.40
30-45.6911-109.7125-2-06-						0-M39479-08/10/78-14-			30-	16.5-C-	-	-	9.9-	310-	11-1-6-4-7-2-3-1-1-3-3-3-2-													-3-	-	-	-	-	0.17
30-45.6911-109.7158-2-07-						0-M39480-08/10/78-14-			30-	19.0-C-	-	-	9.0-	300-	11-1-6-7-6-4-3-1-1-2-2-3-2-													-3-	-	-	-	-	0.12
30-45.6758-109.7469-2-06-						0-M39483-08/10/78-14-			30-	8.0-C-	-	-	8.9-	340-	11-1-6-3-7-3-3-1-1-5-3-4-2-													-1-	-	-	-	-	0.01
30-45.6750-109.7447-2-08-						0-M39484-08/10/78-15-			30-	16.0-C-	-	-	8.3-	325-	9-1-6-	-	-	-	-1-3-4-3-4-2-									-1-8-		-	-	-	0.06
30-45.6742-109.7444-2-07-						0-M39485-08/10/78-15-			30-	12.5-C-	-	-	8.5-	320-	11-1-6-3-7-3-3-1-1-2-3-4-2-													-1-	-	-	-	-	0.30
30-45.6700-109.7531-2-07-						0-M39486-08/10/78-15-			30-	17.5-C-	-	-	8.4-	280-	11-1-6-4-6-3-3-1-1-7-3-4-2-													-3-	-	-	-	-	0.19
30-45.6275-109.8389-2-07-						0-M39488-08/10/78-15-			30-	9.5-C-	-	-	8.8-	260-	11-1-7-3-7-3-3-1-1-2-3-4-2-													-1-	-	-	-	-	0.30
30-45.6272-109.8272-2-07-						0-M39489-08/10/78-16-			30-	12.0-C-	-	-	8.7-	325-	9-1-7-3-6-3-3-2-1-1-2-3-4-2-													-1-	-	-	-	-	0.01
30-45.6294-109.8144-2-07-						0-M39490-08/10/78-16-			30-	9.0-C-	-	-	9.1-	270-	11-1-7-3-6-3-3-2-1-1-2-2-3-4-3-2-													-1-	-	-	-	-	0.23
30-45.6436-109.7772-2-07-						0-M39491-08/10/78-16-			30-	14.5-C-	-	-	8.5-	260-	11-1-7-4-6-3-3-2-1-1-2-3-4-2-													-3-	-	-	-	-	0.22
30-45.7197-109.9950-2-07-						0-M39493-08/12/78-10-			30-	14.5-C-	-	-	8.8-	165-	9-1-6-2-2-3-3-1-3-2-2-3-2-													-3-	-	-	-	-	0.99
30-45.7233-109.9967-2-07-						0-M39495-08/12/78-11-			30-	15.0-C-	-	-	8.6-	165-	6-1-6-4-6-4-3-1-3-2-3-3-2-													-3-	-	-	-	-	0.74
30-45.7256-109.9889-2-07-						0-M39496-08/12/78-11-			30-	11.5-C-	-	-	9.1-	170-	6-1-6-3-6-4-3-1-1-2-3-3-2-													-3-	-	-	-	-	1.02
30-45.7483-109.9208-2-07-						0-M39499-08/12/78-13-			30-	18.0-C-	-	-	8.3-	400-	13-1-6-3-6-2-2-1-2-3-3-3-2-													-3-	-	-	-	-	0.33

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(2)

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAB. SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per billion (ppb)											
							Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.2836-109.6342-2-07-						0-M39429	7843	-55	-25	-4	61	1937	-3	-25	-25	-200	-4	-50
30-45.2769-109.6425-2-08-						0-M39430	6484	-55	-25	-4	1642	2322	246	-25	-25	-200	-4	7824
30-45.2747-109.6453-2-08-						0-M39431	10273	-55	-25	-4	94	3810	31	-25	-25	310	10	3067
30-45.2503-109.7158-2-07-						0-M39432	3119	-55	-25	-4	33	830	-3	-25	-25	-200	7	-50
30-45.2531-109.7092-2-07-						0-M39433	6502	-55	-25	-4	41	2367	-3	-25	-25	-200	-4	-50
30-45.2531-109.7028-2-08-						0-M39434	7776	-55	-25	-4	55	2489	76	-25	-25	251	8	1881
30-45.2519-109.7017-2-07-						0-M39435	14932	-55	-25	-4	32	3373	-3	-25	-25	355	14	-50
30-45.2611-109.6775-2-07-						0-M39437	2417	-55	36	-4	35	877	4	43	87	462	20	55
30-45.2731-109.6547-2-07-						0-M39438	6669	-55	28	5	32	1858	5	47	108	476	18	117
30-45.2625-109.6739-2-07-						0-M39439	9143	-55	-25	-4	72	4802	6	29	74	418	12	-50
30-45.2903-109.6317-2-07-						0-M39440	4527	-55	29	6	51	1270	5	46	101	382	17	-50
30-45.2583-109.5644-2-07-						0-M39442	9482	-55	29	-4	49	2565	4	42	89	454	14	89
30-45.2661-109.5586-2-06-						0-M39443	27414	137	-25	5	47	9916	6	26	77	652	13	-50
30-45.3081-109.5158-2-07-						0-M39444	17919	-55	28	8	127	7655	19	40	83	612	19	-50
30-45.3081-109.5253-2-07-						0-M39445	3757	62	31	-4	41	1275	7	42	100	416	20	-50
30-45.3667-109.5194-2-07-						0-M39447	63186	214	34	7	214	13589	44	-25	88	1217	20	-50
30-45.2697-109.2381-2-08-						0-M39448	12114	-55	-25	11	138	6251	11	31	85	464	16	69
30-45.2736-109.2378-2-08-						0-M39449	16311	150	-25	13	128	8653	16	29	75	582	13	510
30-45.2744-109.2372-2-08-						0-M39450	16913	112	32	403	185	9086	30	37	76	557	14	-50
30-45.3114-109.2269-2-08-						0-M39451	71046	150	26	33	44	21339	8	-25	80	1234	22	-50
30-45.2775-109.2083-2-07-						0-M39452	20233	154	-25	-4	69	5460	5	38	68	526	13	-50
30-45.3461-109.2586-2-08-						0-M39453	165000	322	45	24	93	46497	78	-25	115	2325	28	129
30-45.3194-109.2703-2-08-						0-M39454	70141	297	31	12	36	30161	7	-25	86	1442	22	-50
30-45.3194-109.2689-2-07-						0-M39455	27449	181	29	-4	196	9132	12	40	78	726	21	-50
30-45.3408-109.3161-2-06-						0-M39456	113000	328	32	8	97	48892	6	-25	89	2002	26	-50
30-45.3708-109.3192-2-08-						0-M39457	117000	270	34	28	73	42770	5	-25	80	1889	24	-50
30-45.3594-109.6442-2-07-						0-M39458	6570	-55	29	-4	129	2066	8	45	80	413	14	-50
30-45.3553-109.6342-2-07-						0-M39459	6220	148	-25	-4	151	1904	15	40	65	359	16	-50
30-45.3719-109.6525-2-07-						0-M39460	26089	116	37	14	152	10554	25	36	97	670	15	-50
30-45.3644-109.6583-2-08-						0-M39461	77910	214	47	1571	109	23576	9	-25	127	1542	27	908
30-45.3633-109.6606-2-07-						0-M39462	22370	-55	45	26	262	7748	51	60	144	856	23	-50
30-45.3689-109.6622-2-07-						0-M39463	12968	132	52	8	278	4840	4	81	156	898	37	-50
30-45.3667-109.6589-2-07-						0-M39465	20293	133	47	9	211	8604	15	80	173	989	28	-50
30-45.6578-109.6461-2-06-						0-M39468	62230	224	70	10	53	19700	6	66	207	1750	37	-50
30-45.6467-109.6708-2-07-						0-M39470	52979	180	66	12	76	16399	-3	73	182	1568	36	-50
30-45.6464-109.6681-2-07-						0-M39471	57192	249	63	11	189	17782	10	62	198	1592	36	-50
30-45.6497-109.6550-2-07-						0-M39472	51387	301	57	9	-25	31653	9	56	181	1681	27	-50
30-45.6911-109.7125-2-06-						0-M39479	54287	174	59	8	-25	8210	-3	51	187	1347	30	-50
30-45.6911-109.7158-2-07-						0-M39480	53942	-55	-25	-4	-25	8101	-3	-25	-25	728	12	162
30-45.6759-109.7469-2-06-						0-M39483	61662	-55	-25	5	38	8594	-3	-25	35	896	15	-50
30-45.6750-109.7447-2-08-						0-M39484	61097	-55	-25	6	54	8448	-3	-25	-25	729	12	163
30-45.6742-109.7444-2-07-						0-M39485	61378	98	-25	5	-25	8662	21	-25	-25	793	11	87
30-45.6700-109.7531-2-07-						0-M39486	49877	-55	-25	-4	29	7546	-3	-25	32	717	12	-50
30-45.6275-109.8389-2-07-						0-M39488	49842	-55	-25	-4	30	8518	-3	-25	29	811	17	60
30-45.6272-109.8272-2-07-						0-M39489	57748	-55	-25	5	46	10381	9	-25	-25	806	12	59
30-45.6294-109.8144-2-07-						0-M39490	41960	135	-25	-4	53	6858	7	-25	43	733	19	120
30-45.6436-109.7772-2-07-						0-M39491	44479	100	-25	-4	44	6949	4	-25	47	694	16	155
30-45.7197-109.9950-2-07-						0-M39493	24283	104	-25	-4	38	8293	7	-25	52	512	12	117
30-45.7233-109.9967-2-07-						0-M39495	25815	-55	-25	-4	99	8653	7	-25	30	506	14	-50
30-45.7256-109.9889-2-07-						0-M39496	23432	88	-25	-4	45	7895	5	-25	50	607	14	67
30-45.7483-109.9208-2-07-						0-M39499	57523	117	-25	7	65	16919	14	-25	47	1023	17	130

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples (1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
							TIME SAMPLED																										
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (θ) UNITS IN ppb
30-45.1789-108.2697-2-06-						0-M39500-07/05/78-17-	21-	8.5-C-	-	7.4-	850-																							0.54
30-45.1800-108.2894-2-06-						0-M39501-07/05/78-18-	19-	9.0-	-	7.4-	650-																							1.33
30-45.1897-108.2864-2-06-						0-M39502-07/05/78-19-	18-	7.0-	-	7.7-	650-																							0.78
30-45.0806-108.2589-2-07-						0-M39503-07/06/78- 9-	16-	8.5-C-	-	7.8-	-																							0.01
30-45.1939-108.4600-2-07-						0-M39509-07/09/78-17-	16-	7.5-	-	7.4-	440-																							0.18
30-45.1794-108.4575-2-06-						0-M39510-07/09/78-18-	15-	11.0-	-	7.6-	335-																							0.46
30-45.3269-109.0078-2-07-						0-M39511-07/10/78-11-	27-	21.0-	-	8.2-	2150-																							3.24
30-45.3511-109.1022-2-06-						0-M39512-07/10/78-11-	24-	12.5-C-	-	7.2-	1050-																							40.27*
30-45.3703-109.0281-2-07-						0-M39513-07/10/78-12-	21-	16.0-C-	-	7.5-	380-																							0.56
30-45.3542-109.0556-2-07-						0-M39514-07/10/78-13-	30-	17.0-C-	-	7.8-	370-																							0.22
30-45.3419-109.0628-2-07-						0-M39515-07/10/78-13-	31-	17.0-C-	-	7.9-	360-																							0.38
30-45.3272-109.0742-2-07-						0-M39516-07/10/78-14-	27-	16.0-C-	-	7.7-	345-																							0.39
30-45.3011-109.1028-2-07-						0-M39517-07/10/78-15-	28-	15.0-C-	-	7.8-	305-																							1.05
30-45.2742-109.0397-2-06-						0-M39518-07/10/78-16-	25-	11.5-C-	-	7.3-	1650-																							0.45
30-45.2697-109.0294-2-07-						0-M39520-07/10/78-16-	27-	22.5-C-	-	8.4-	4350-																							8.00
30-45.2722-109.0253-2-07-						0-M39521-07/10/78-16-	24-	19.0-	-	8.3-	2850-																							4.95
30-45.3594-109.0522-2-07-						0-M39522-07/10/78-17-	27-	18.0-C-	-	8.4-	1000-																							1.03
30-45.3200-108.9658-2-08-						0-M39523-07/10/78-18-	27-	8.0-	-	7.6-	3300-																							2.25
30-45.3156-108.9875-2-08-						0-M39525-07/10/78-18-	24-	12.5-	-	7.3-	2700-																							2.48
30-45.3156-108.9847-2-08-						0-M39526-07/10/78-19-	27-	13.0-	-	7.2-	4000-																							3.27
30-45.3081-109.0069-2-06-						0-M39527-07/10/78-19-	13-	13.0-C-	-	7.6-	3500-																							13.52
30-45.3097-108.9756-2-07-						0-M39528-07/10/78-20-	22-	12.0-	-	8.2-	3400-																							7.99
30-45.3639-109.0700-2-08-						0-M39529-07/11/78-10-	18-	10.5-C-	-	8.3-	1100-																							1.71
30-45.2539-108.9417-2-08-						0-M39530-07/11/78-11-	25-	12.5-C-	-	7.4-	900-																							8.87
30-45.3369-108.9317-2-08-						0-M39531-07/11/78-11-	25-	17.5-C-	-	7.1-	1400-																							3.19
30-45.3381-108.9336-2-07-						0-M39532-07/11/78-12-	26-	15.0-	-	7.5-	325-																							0.65
30-45.3292-108.9444-2-07-						0-M39533-07/11/78-12-	28-	16.0-C-	-	8.2-	270-																							0.32
30-45.3414-108.9244-2-08-						0-M39534-07/11/78-12-	28-	13.0-C-	-	7.2-	2000-																							5.08
30-45.2819-108.8822-2-08-						0-M39537-07/11/78-14-	31-	14.0-C-	-	7.1-	2400-																							8.33
30-45.3294-108.8908-2-08-						0-M39538-07/11/78-14-	30-	13.0-C-	-	7.2-	1200-																							6.23
30-45.3700-108.8822-2-08-						0-M39539-07/11/78-15-	30-	16.0-C-	-	6.8-	1800-																							0.58
30-45.3647-108.8558-2-08-						0-M39540-07/11/78-15-	28-	15.0-C-	-	7.8-	9500-																							3.10
30-45.3681-108.8506-2-06-						0-M39541-07/11/78-16-	31-	22.0-	-	8.0-	3300-																							4.51
30-45.3675-108.8261-2-06-						0-M39542-07/11/78-16-	28-	9.0-C-	-	7.3-	2450-																							35.93*
30-45.3389-108.8661-2-06-						0-M39543-07/11/78-16-	27-	12.5-C-	-	7.0-	3000-																							1.98
30-45.3381-108.8344-2-08-						0-M39544-07/11/78-17-	28-	16.0-C-	-	7.3-	2450-																							2.04
30-45.2900-108.8339-2-07-						0-M39545-07/11/78-17-	27-	18.0-	-	8.9-	4350-																							2.40
30-45.2589-108.8147-2-07-						0-M39546-07/11/78-18-	27-	19.0-	-	8.5-	800-																							0.35
30-45.2631-108.7889-2-06-						0-M39547-07/11/78-19-	26-	13.5-	-	8.2-	650-																							0.13
30-45.2458-108.7944-2-07-						0-M39548-07/11/78-19-	25-	16.5-	-	8.5-	900-																							0.13
30-45.2422-108.7661-2-06-						0-M39549-07/11/78-20-	20-	11.5-	-	8.1-	600-																							0.14
30-45.2886-108.7514-2-06-						0-M39550-07/12/78- 9-	24-	11.0-C-	-	7.1-	900-																							0.32
30-45.3122-108.7681-2-06-						0-M39552-07/12/78-10-	21-	12.5-C-	-	7.1-	900-																							0.11
30-45.3122-108.7617-2-07-						0-M39553-07/12/78-11-	21-	13.5-	-	7.4-	900-																							1.14
30-45.3289-108.7828-2-06-						0-M39554-07/12/78-11-	24-	11.0-C-	-	7.0-	1150-																							0.42
30-45.3264-108.8281-2-07-						0-M39555-07/12/78-11-	22-	17.0-	-	8.2-	1700-																							0.40
30-45.3228-108.8147-2-06-						0-M39556-07/12/78-12-	20-	17.0-	-	7.7-	2200-																							1.02
30-45.3208-108.8136-2-07-						0-M39557-07/12/78-12-	20-	18.5-	-	7.9-	2100-																							0.43
30-45.3361-108.8075-2-06-						0-M39558-07/12/78-13-	22-	11.0-C-	-	7.0-	1400-																							0.46
30-45.3322-108.8022-2-07-						0-M39559-07/12/78-13-	24-	14.0-C-	-	8.3-	1550-																							0.83
30-45.3306-108.7958-2-06-						0-M39560-07/12/78-13-	22-	20.0-	-	7.4-	2500-																							1.17

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(2)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY Concentrations reported in weight parts per billion (ppb)											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.1789-108.2697-2-06-						0-M39500	66706	716	-25	-4	-25	63179	19	-25	-25	782	-4	-50
30-45.1800-108.2894-2-06-						0-M39501	78780	747	-25	-4	45	44763	25	-25	-25	697	-4	120
30-45.1997-108.2864-2-06-						0-M39502	63181	658	-25	-4	-25	42628	11	-25	-25	531	-4	56
30-45.0806-108.2589-2-07-						0-M39503	54467	685	-25	-4	-25	21369	9	-25	-25	345	-4	195
30-45.1939-108.4600-2-07-						0-M39508	69344	655	-25	-4	48	24773	12	-25	-25	547	10	160
30-45.1794-108.4575-2-06-						0-M39510	54975	552	-25	-4	-25	17300	8	-25	-25	-200	-4	149
30-45.3269-109.0078-2-07-						0-M39511	47584	612	-25	8	28	46958	32	-25	-25	534	-4	185
30-45.3511-109.1022-2-06-						0-M39512	98963	660	-25	-4	-25	36287	13	-25	-25	832	-4	192
30-45.3703-109.0281-2-07-						0-M39513	30626	485	-25	-4	183	17690	20	-25	-25	-200	-4	-50
30-45.3542-109.0556-2-07-						0-M39514	31097	560	-25	-4	170	16137	25	-25	-25	-200	-4	-50
30-45.3419-109.0628-2-07-						0-M39515	30229	512	-25	-4	220	15704	30	-25	-25	-200	-4	-50
30-45.3272-109.0742-2-07-						0-M39516	30574	660	-25	-4	71	16129	33	-25	-25	-200	-4	-50
30-45.3011-109.1028-2-07-						0-M39517	29529	645	-25	-4	151	14877	39	-25	-25	-200	-4	-50
30-45.2742-109.0397-2-06-						0-M39519	122000	712	-25	-4	71	81433	24	-25	-25	1609	-4	97
30-45.2697-109.0294-2-07-						0-M39520	63753	281	-25	7	68	96340	35	-25	-25	1926	-4	-50
30-45.2722-109.0253-2-07-						0-M39521	60652	117	-25	-4	31	65301	74	-25	-25	1535	-4	-50
30-45.3594-109.0522-2-07-						0-M39522	72655	209	-25	-4	33	42318	6	-25	-25	1243	-4	-50
30-45.3200-108.9658-2-08-						0-M39523	41382	88	-25	552	40	73580	-3	-25	-25	1461	5	-50
30-45.3156-108.9875-2-08-						0-M39525	154000	491	26	20	97	156000	16	-25	53	3833	22	335
30-45.3156-108.9847-2-08-						0-M39526	49853	73	-25	-4	34	75967	-3	-25	-25	1710	5	-50
30-45.3091-109.0069-2-06-						0-M39527	63873	221	-25	11	39	62999	-3	-25	41	1768	14	-50
30-45.3097-108.9756-2-07-						0-M39528	58895	281	-25	5	35	63918	20	-25	55	1623	7	-50
30-45.3639-109.0700-2-08-						0-M39529	3121	65	-25	8	-25	854	-3	-25	-25	-200	-4	-50
30-45.2539-108.9417-2-08-						0-M39530	31700	163	-25	11	-25	24316	-3	-25	-25	669	-4	-50
30-45.3369-108.9317-2-08-						0-M39531	88317	242	-25	6	42	46359	17	-25	-25	1620	6	-50
30-45.3381-108.9336-2-07-						0-M39532	22707	92	-25	-4	78	10081	16	-25	-25	356	-4	-50
30-45.3292-108.9444-2-07-						0-M39533	20025	90	-25	-4	83	7961	13	-25	-25	397	-4	-50
30-45.3414-108.9244-2-08-						0-M39534	123000	267	-25	18	44	61164	4	-25	37	2099	10	-50
30-45.2819-108.8822-2-08-						0-M39537	294000	639	41	26	89	119000	17	-25	69	3977	26	357
30-45.3294-108.8908-2-08-						0-M39538	122000	273	-25	18	65	47521	-3	-25	30	2012	9	183
30-45.3700-108.8822-2-08-						0-M39539	234000	528	40	18	78	74179	12	-25	63	3296	23	257
30-45.3647-108.8558-2-08-						0-M39540	37699	-55	27	16	1541	17085	73	27	90	1134	9	-50
30-45.3681-108.8506-2-06-						0-M39541	158000	398	31	14	109	87942	166	-25	97	2775	17	-50
30-45.3675-108.8261-2-06-						0-M39542	82402	121	-25	7	73	52733	6	-25	61	1765	15	-50
30-45.3389-108.8661-2-06-						0-M39543	3712	105	-25	134	264	2138	9	-25	41	299	-4	-50
30-45.3381-108.8344-2-08-						0-M39544	366000	715	67	2909	96	99669	37	-25	119	4646	39	405
30-45.2900-108.8339-2-07-						0-M39545	111000	427	40	20	68	116000	50	-25	89	2838	16	-50
30-45.2589-108.8147-2-07-						0-M39546	81565	364	26	7	35	50158	-3	-25	66	1658	8	-50
30-45.2631-108.7889-2-06-						0-M39547	70733	221	-25	6	35	38905	17	-25	60	1380	-4	-50
30-45.2458-108.7944-2-07-						0-M39548	87764	340	-25	7	-25	57855	8	-25	55	1788	6	-50
30-45.2422-108.7661-2-06-						0-M39549	70591	371	-25	6	44	36399	9	-25	66	1424	8	-50
30-45.2986-108.7514-2-06-						0-M39550	111000	277	31	7	53	49352	4	-25	68	1932	11	-50
30-45.3122-108.7681-2-06-						0-M39552	126000	439	39	9	33	50006	14	-25	92	2158	17	-50
30-45.3122-108.7617-2-07-						0-M39553	118000	377	27	7	36	48099	10	-25	63	1893	15	-50
30-45.3289-108.7828-2-06-						0-M39554	148000	429	29	9	51	64716	7	-25	35	2331	16	-50
30-45.3264-108.8281-2-07-						0-M39555	82387	371	-25	5	40	56358	18	-25	54	1724	12	-50
30-45.3228-108.8147-2-06-						0-M39556	82109	464	-25	6	70	58529	198	-25	39	1585	6	-50
30-45.3208-108.8136-2-07-						0-M39557	73963	385	-25	17	56	56001	102	-25	56	1570	13	-50
30-45.3361-108.8075-2-06-						0-M39558	271000	672	54	203	52	60974	34	-25	80	3138	28	1201
30-45.3322-108.8022-2-07-						0-M39559	247000	443	52	15	78	58628	16	-25	106	3132	25	-50
30-45.3306-108.7958-2-06-						0-M39560	667000	677	113	39	112	66585	21	-25	242	3791	63	191

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
							TIME SAMPLED																									
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (#) UNITS IN ppb
30-45.3381-108.7842-2-08-						0-M39561-07/12/78-14-	24-13.0-C-		-	7.4-	1700-				8-1-1-	-	-	-	-	-	-4-	4-	2-	1-	-1-	9-		-	-	-	0.01
30-45.3364-108.7775-2-06-						0-M39562-07/12/78-14-	29-15.0-	-	-	8.2-	1700-				10-1-1-	5-	4-	3-	3-	1-	2-	4-	4-	2-	1-	-1-	-	-	-	-	0.90
30-45.3653-108.8669-2-07-						0-M39564-06/12/78-17-	30-19.0-C-		-	8.5-	1600-				8-1-1-	6-	6-	3-	3-	1-	2-	4-	4-	2-	1-	-3-	-	-	-	-	0.49
30-45.1922-108.3078-2-06-						0-M39565-04/14/78-11-	27- 9.5-C-		-	7.4-	-				4-1-	2-	4-	6-	3-	3-	1-	-	4-	4-	4-	1-	-1-	-	-	-	-	0.09
30-45.1933-108.3094-2-07-						0-M39566-07/14/78-12-	28-12.0-C-		-	7.5-	-				9-1-	2-	5-	7-	3-	3-	6-	2-	2-	3-	4-	1-	-1-	-	-	-	-	0.04
30-45.2044-108.3247-2-07-						0-M39567-07/14/78-13-	28-14.0-C-		-	7.4-	-				6-1-	2-	5-	7-	1-	2-	1-	-	2-	4-	4-	1-	-3-	-	-	-	-	0.25
30-45.2189-108.3439-2-07-						0-M39568-07/14/78-14-	31-13.0-C-		-	7.4-	-				2-1-	2-	3-	2-	3-	3-	1-	2-	2-	4-	4-	1-	-3-	-	-	-	-	0.25
30-45.2150-108.2869-2-06-						0-M39569-07/14/78-15-	31- 9.0-C-		-	7.6-	-				6-1-	1-	6-	8-	3-	3-	1-	-	4-	3-	4-	1-	-1-	-	-	-	-	2.21
30-45.2164-108.2889-2-07-						0-M39570-07/14/78-15-	32-17.0-C-		-	8.0-	-				9-1-	1-	5-	6-	3-	3-	2-	2-	2-	4-	4-	1-	-3-	-	-	-	-	0.41
30-45.2181-108.2856-2-06-						0-M39571-07/14/78-15-	28-15.0-C-		-	7.8-	-				9-1-	4-	5-	6-	2-	2-	1-	2-	2-	3-	4-	1-	-1-	-	-	-	-	0.58
30-45.0400-108.3867-2-07-						0-M39572-07/15/78-11-	31- 9.0-C-		-	7.0-	350-				9-1-	4-	4-	4-	4-	3-	1-	2-	2-	3-	4-	1-	-1-	-	-	-	-	0.39
30-45.1639-108.3803-2-06-						0-M39574-07/15/78-	-	33-20.0-C-	-	7.0-	13-				8-1-	1-	5-	6-	2-	2-	2-	1-	4-	4-	5-	2-	-	-	-	-	-	0.21
30-45.1486-108.3189-2-06-						0-M39575-07/15/78-15-	31-10.0-C-		-	6.9-	63-				3-1-	1-	5-	6-	2-	2-	1-	1-	4-	4-	5-	2-	-1-	-	-	-	-	0.30
30-45.1586-108.3306-2-07-						0-M39576-07/15/78-15-	20-13.0-C-		-	7.0-	10-				11-1-	1-	5-	6-	3-	3-	1-	1-	4-	3-	5-	2-	-1-	-	-	-	-	0.36
30-45.1147-108.4483-2-06-						0-M39578-07/16/78-15-	24-10.5-C-		-	7.0-	370-				4-1-	4-	4-	4-	2-	3-	1-	-	4-	3-	5-	2-	-1-	-	-	-	-	0.23
30-45.1719-108.5781-2-06-						0-M39579-07/16/78-16-	26- 5.0-C-		-	7.2-	350-				5-1-	1-	6-	6-	3-	3-	1-	-	4-	4-	5-	3-	-1-	-	-	-	-	0.26
30-45.1758-108.5964-2-06-						0-M39580-07/16/78-17-	19- 5.0-C-		-	7.1-	460-				9-1-	4-	6-	6-	3-	3-	1-	-	4-	4-	5-	3-	-3-	-	-	-	-	0.22
30-45.1642-108.5714-2-06-						0-M39581-07/16/78-17-	13-11.5-C-		-	7.0-	310-				9-1-	4-	5-	6-	2-	3-	1-	-	4-	4-	5-	3-	-1-	-	-	-	-	0.19
30-45.1514-108.5144-2-06-						0-M39583-07/16/78-19-	13- 6.0-C-		-	7.1-	150-				4-1-	1-	6-	7-	4-	3-	1-	-	4-	4-	5-	3-	-1-	-	-	-	-	0.21
30-45.1144-108.5369-2-06-						0-M39584-07/16/78-19-	15- 7.5-C-		-	7.2-	550-				10-1-	4-	6-	6-	3-	3-	1-	-	4-	4-	5-	3-	-1-	-	-	-	-	1.00
30-45.7900-108.5178-2-08-						0-M39585-07/26/78-13-	26-14.5-	-	-	7.0-5	0000-				13-1-	6-	-	-	-	-1-	-	4-	3-	1-	1-	-1-	4-	3-	30-	13-	37.36*
30-45.7794-108.5483-2-07-						0-M39586-07/28/78-14-	27-19.5-	-	-	7.4-	700-				17-1-	6-	5-	8-	-	-	4-	1-	6-	3-	2-	1-	-7-	-	-	-	-	2.67
30-45.7842-108.5511-2-08-						0-M39587-07/26/78-14-	31-20.0-C-		-	6.7-	230-				12-1-	6-	-	-	-	-1-	-	4-	2-	1-	1-	-1-	3-	-	-	-	0.22
30-45.7692-108.6314-2-08-						0-M39588-07/26/78-15-	27-12.0-	-	-	7.1-	1900-				11-1-	6-	-	-	-	-1-	-	4-	3-	1-	1-	-1-	3-	6-	50-	40-	5.33
30-45.7706-108.6717-2-08-						0-M39589-07/26/78-15-	28-11.0-	-	-	7.2-	5000-				17-1-	6-	-	-	-	-1-	-	4-	3-	1-	1-	-1-	8-	-	-	-	7.99
30-45.7700-108.6794-2-08-						0-M39590-08/26/78-15-	27-22.0-	-	-	7.0-	350-				10-1-	6-	-	-	-	-1-	-	4-	3-	1-	1-	-1-	3-	3-	70-	45-	0.20
30-45.7411-108.6994-2-08-						0-M39591-07/26/78-16-	31-19.0-	-	-	7.6-	550-				12-1-	6-	-	-	-	-1-	-	4-	3-	1-	1-	-1-	3-	6-	45-	32-	2.55
30-45.7428-108.6997-2-08-						0-M39592-07/26/78-16-	31-13.0-	-	-	6.9-	5000-				5-1-	6-	-	-	-	-1-	-	4-	3-	1-	1-	-1-	4-	6-	25-	15-	3.21
30-45.8222-108.4647-2-08-						0-M39593-07/28/78-	8-	23-14.0-	-	-	7.4-	1000-				13-1-	6-	-	-	-	-1-	-	4-	2-	1-	1-	-7-	4-	6-	25-	15-	0.79
30-45.8558-108.4736-2-08-						0-M39594-07/28/78-	9-	24-16.0-C-	-	-	8.1-	5050-				15-1-	6-	-	-	-	-1-	-	4-	2-	2-	2-	-3-	3-	6-	200-	140-	0.27
30-45.8561-108.4828-2-08-						0-M39595-07/28/78-	9-	24-15.5-	-	-	8.4-	4300-				15-1-	6-	-	-	-	-1-	-	4-	2-	2-	2-	-3-	3-	6-	181-	175-	1.16
30-45.8519-108.4867-2-08-						0-M39596-07/28/78-	9-	23-20.0-C-	-	-	7.3-	850-				8-1-	6-	-	-	-	-1-	-	4-	3-	2-	2-	-3-	3-	6-	40-	20-	1.91
30-45.8711-108.5128-2-07-						0-M39597-07/28/78-10-	22-21.0-C-		-	7.9-5	0000-				9-1-	6-	4-	6-	2-	3-	5-	1-	4-	4-	2-	2-	-3-	-	-	-	-	4.95
30-45.8193-108.2850-2-08-						0-M39601-07/03/78-15-	29-15.5-C-		-	7.6-	3550-				9-1-	6-	-	-	-	-	-	-	4-	3-	2-	2-	-3-	8-	-	-	-	0.49
30-45.8192-108.2767-2-07-						0-M39602-07/03/78-15-	30-20.0-C-		-	8.1-	1125-				8-1-	6-	6-	6-	6-	2-	4-	1-	1-	6-	2-	3-	2-	-3-	-	-	-	-	0.71
30-45.8703-108.2706-2-07-						0-M39604-07/03/78-18-	30-22.0-C-		-	7.8-	1100-				17-1-	6-	6-	6-	6-	3-	4-	1-	1-	6-	4-	2-	2-	-3-	-	-	-	-	0.90
30-45.8706-108.2969-2-07-						0-M39605-07/03/78-18-	29-24.5-C-		-	8.3-	900-				9-1-	6-	5-	6-	4-	4-	4-	2-	2-	3-	2-	2-	-3-	-	-	-	-	1.77
30-45.8725-108.3314-2-07-						0-M39606-07/03/78-19-	26-18.0-C-		-	7.5-	2175-				6-1-	6-	5-	6-	3-	4-	1-	1-	4-	3-	2-	3-	-3-	-	-	-	-	2.54
30-45.7892-108.3442-2-07-						0-M39607-07/05/78-10-	24-19.0-C-		-	8.1-	1550-				13-1-	6-	4-	6-	3-	4-	1-	1-	2-	2-	3-	2-	-3-	-	-	-	-	0.95
30-45.7989-108.3122-2-07-						0-M39608-07/05/78-11-	24-16.0-C-		-	7.9-	2600-				11-1-	6-	4-	6-	3-	4-	1-	1-	2-	4-	3-	2-	-3-	-	-	-	-	0.47
30-45.7994-108.3103-2-08-						0-M39609-07/05/78-11-	23-12.5-C-		-	8.3-	2250-				12-1-	6-	-	-	-	-	-	-2-	3-	3-	2-	-3-	9-	-	-	-	1.43
30-45.8250-108.3847-2-07-						0-M39610-07/05/78-11-	25-21.0-C-		-	8.4-	2900-				13-1-	6-	4-	6-	3-	4-	1-	2-	2-	2-	3-	2-	-7-	-	-	-	-	2.05
30-45.8353-108.3797-2-07-						0-M39611-07/05/78-12-	22-19.5-C-		-	8.2-	2375-				6-1-	6-	4-	6-	3-	4-	1-	1-	4-	4-	3-	3-	2-	-3-	-	-	-	-	1.52
30-45.8181-108.4114-2-08-						0-M39612-07/05/78-12-	26-14.0-C-		-	7.2-	3000-				10-1-	6-	-	-	-	-	-	-4-	3-	2-	2-	-3-	5-	-	-	-	1.99
30-45.7903-108.4150-2-08-						0-M39614-07/05/78-15-	23-13.5-C-		-	7.4-	2000-				18-1-	6-	-	-	-	-	-	-4-	3-	2-	3-	-3-	8-	6-	95-	-	0.23
30-45.7506-108.4347-2-07-						0-M39618-07/05/78-15-	22-22.5-C-		-	8.4-	2875-				8-1-	6-	6-	8-	3-	4-	1-	1-	1-	3-	3-	3-	-3-	-	-	-	-	2.72
30-45.8375-108.4883-2-08-						0-M39620-07/05/78-17-	23-13.5-C-		-	9.6-	725-				12-1-	6-	-	-	-	-	-	-4-	3-	2-	3-	-1-	3-	6-	310-	292-	0.65
30-45.8478-108.4656-2-07-						0-M39621-07/05/78-17-	24-20.0-C-		-	8.5-2	6250-				12-1-	6-	4-	6-	3-	4-	1-	2-	4-	3-	2-	3-	-3-	-	-	-	-	3.21
30-45.8528-108.4600-2-08-						0-M39622-07/05/78-17-	21-22.0-C-		-	6.5-	200-				13-1-	6-	-	-	-	-	-	-2-	3-	2-	3-	-1-	8-	8-	57-	45-	0.46
30-45.8703-108.4150-2-08-						0-M39623-07/05/78-18-	21-14.0-C-		-	8.3-	1325-				10-1-	6-	-	-	-	-	-	-2-	3-	1-	3-	-3-	5-	-	-	-	1.52
30-45.8703-108.4142-2-07-						0-M39624-07/05/78-18-	21-19.0-C-		-	8.5-	550-				9-1-	6-	4-	6-	-	-	-	-4-	3-	1-	3-	-3-	-	-	-	-	2.32

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY Concentrations reported in weight parts per billion (ppb)											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.3381-108.7842-2-08-						0-M39561	329000	601	212	47	135	55665	21	-25	552	5225	103	96
30-45.3364-108.7775-2-06-						0-M39562	360000	496	-25	17	114	84187	14	-25	-25	3169	28	514
30-45.3653-108.8669-2-07-						0-M39564	303000	531	81	22	101	81759	187	-25	224	3856	60	340
30-45.1922-108.3078-2-06-						0-M39565	70648	288	62	13	83	35057	6	-25	182	1744	40	127
30-45.1933-108.3094-2-07-						0-M39566	51720	-55	55	7	41	21457	-3	30	160	1473	35	-50
30-45.2044-108.3247-2-07-						0-M39567	120000	112	-25	-4	118	89500	49	-25	50	2123	20	87
30-45.2189-108.3439-2-07-						0-M39568	51053	-55	-25	-4	73	21249	-3	-25	-25	467	-4	-50
30-45.2150-108.2869-2-06-						0-M39569	251000	297	-25	5	66	65234	-3	-25	-25	2321	-4	192
30-45.2164-108.2889-2-07-						0-M39570	83885	247	-25	5	74	25201	9	-25	-25	1205	7	133
30-45.2181-108.2856-2-06-						0-M39571	86568	249	-25	-4	27	24630	-3	-25	-25	1210	-4	-50
30-45.0400-108.3867-2-07-						0-M39572	63430	214	-25	-4	31	18684	-3	-25	-25	948	8	-50
30-45.1639-108.3803-2-06-						0-M39574	1013	244	69	8	27	214	-3	72	153	913	27	96
30-45.1486-108.3189-2-06-						0-M39575	57530	285	52	12	-25	25338	8	99	206	1478	22	-50
30-45.1586-108.3306-2-07-						0-M39576	1255	197	37	-4	-25	558	10	49	164	469	11	-50
30-45.1147-108.4483-2-06-						0-M39578	34879	219	39	7	-25	23539	6	101	162	1064	15	-50
30-45.1719-108.5781-2-06-						0-M39579	44724	304	49	7	-25	19732	5	97	182	1258	24	-50
30-45.1758-108.5964-2-06-						0-M39580	18981	249	44	6	-25	26685	7	87	185	1011	19	-50
30-45.1642-108.5714-2-06-						0-M39581	45674	252	56	10	-25	17440	-3	123	245	1383	31	-50
30-45.1514-108.5144-2-06-						0-M39583	22837	243	66	9	-25	7693	-3	106	271	1114	29	-50
30-45.1144-108.5369-2-06-						0-M39584	39557	282	56	10	-25	40591	-3	119	260	1529	28	-50
30-45.7900-108.5178-2-08-						0-M39585	267000	775	91	32	240	199000	41	127	325	5562	56	-50
30-45.7794-108.5483-2-07-						0-M39586	70446	426	44	14	140	35591	19	95	207	1641	28	-50
30-45.7842-108.5511-2-08-						0-M39587	25548	155	-25	2779	-25	7543	34	-25	-25	508	7	376
30-45.7692-108.6314-2-08-						0-M39588	167000	633	32	38	58	85443	19	-25	35	3120	23	455
30-45.7706-108.6717-2-08-						0-M39589	423000	971	87	62	132	203000	71	-25	99	7391	44	864
30-45.7700-108.6794-2-08-						0-M39590	27477	296	-25	735	-25	8272	23	-25	-25	444	-4	523
30-45.7411-108.6994-2-08-						0-M39591	41623	288	-25	11	-25	24815	5	30	-25	813	6	321
30-45.7428-108.6997-2-08-						0-M39592	447000	1078	94	67	186	192000	296	-25	91	8359	48	3840
30-45.8222-108.4647-2-08-						0-M39593	116000	314	65	16	35	58622	11	61	102	2643	30	-50
30-45.8558-108.4736-2-08-						0-M39594	4882	236	37	6	-25	1640	-3	87	78	626	15	-50
30-45.8561-108.4828-2-08-						0-M39595	3085	203	37	8	-25	1163	-3	72	43	593	22	113
30-45.8519-108.4867-2-08-						0-M39596	77408	299	44	8	-25	43642	-3	69	74	1953	22	73
30-45.8711-108.5128-2-07-						0-M39597	210000	919	100	32	114	281000	115	68	154	7979	49	487
30-45.8192-108.2850-2-08-						0-M39601	214000	580	50	17	3718	146000	1023	-25	87	4822	29	875
30-45.8192-108.2767-2-07-						0-M39602	105000	291	-25	-4	40	50462	31	34	32	2096	11	457
30-45.8703-108.2706-2-07-						0-M39604	101000	324	-25	5	67	44481	26	34	51	1936	12	558
30-45.8706-108.2969-2-07-						0-M39605	86282	231	-25	5	27	45287	6	28	-25	1647	8	121
30-45.8725-108.3314-2-07-						0-M39606	151000	595	-25	8	38	100000	116	-25	36	3232	12	287
30-45.7892-108.3442-2-07-						0-M39607	151000	450	31	10	52	80364	36	38	58	3203	23	373
30-45.7989-108.3122-2-07-						0-M39608	197000	498	37	10	83	109000	136	-25	59	3845	21	807
30-45.7994-108.3103-2-08-						0-M39609	167000	406	-25	7	232	104000	16	-25	-25	3393	13	603
30-45.8250-108.3847-2-07-						0-M39610	178000	472	-25	12	98	105000	52	27	-25	3804	18	646
30-45.8353-108.3797-2-07-						0-M39611	171000	432	-25	7	49	78828	61	-25	-25	3160	15	189
30-45.8181-108.4114-2-08-						0-M39612	243000	316	44	22	102	131000	25	88	102	4830	47	624
30-45.7903-108.4150-2-08-						0-M39616	168000	158	42	37	73	92302	6	91	119	3356	30	360
30-45.7506-108.4347-2-07-						0-M39619	238000	418	76	20	119	180000	26	100	173	5617	51	492
30-45.8375-108.4883-2-08-						0-M39620	2645	-55	-25	-4	-25	1495	-3	36	59	297	10	188
30-45.8478-108.4656-2-07-						0-M39621	203000	486	61	17	113	178000	163	102	138	5087	44	482
30-45.8528-108.4600-2-08-						0-M39622	24416	-55	-25	95	-25	7111	6	-25	31	457	10	272
30-45.8703-108.4150-2-08-						0-M39623	19132	158	-25	9	39	22938	4	59	54	804	11	-50
30-45.8703-108.4142-2-07-						0-M39624	28117	-55	-25	-4	66	13273	5	56	80	810	14	-50

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (#) UNITS IN ppb
30-45.8356-108.4439-2-08-	0-M39625-07/05/78-19-	19-12.5-C-	-	7.8-	650-	22-1-6-	-	-	-	-	-7-1-1-3-	-3-5-	2-	25-	-	0.32
30-45.7586-108.4875-2-08-	0-M39626-07/05/78-22-	21-12.2-C-	-	7.5-	600-	15-1-6-	-	-	-	-	-4-3-1-3-	-1-5-	2-	-	-	0.54
30-45.8861-108.4044-2-08-	0-M39627-07/06/78-10-	21-11.5-C-	-	7.5-	2800-	15-1-6-	-	-	-	-	-7-2-2-3-	-3-3-	-	25-	-	4.04
30-45.9147-108.4097-2-07-	0-M39628-07/06/78-10-	19-17.2-C-	-	9.3-	33000-	11-1-6-6-8-3-4-5-1-4-3-1-4-	-3-	-	-	-	-	4.95
30-45.9172-108.4033-2-08-	0-M39629-07/06/78-10-	20-13.0-C-	-	7.4-	50000-	9-1-6-	-	-	-	-	-4-3-1-3-	-3-3-	6-	470-	-	1.25
30-45.9392-108.3831-2-08-	0-M39630-07/06/78-11-	20-13.5-C-	-	8.4-	50000-	12-1-6-	-	-	-	-	-4-3-1-4-	-3-5-	24-	10-	-	5.31
30-45.9672-108.3839-2-08-	0-M39633-07/06/78-11-	19-14.5-C-	-	8.9-	3225-	9-1-6-	-	-	-	-	-4-3-1-4-	-3-3-	6-	640-	580-	0.01
30-45.9875-108.4133-2-06-	0-M39634-07/06/78-12-	18-12.0-C-	-	7.0-	28000-	16-1-6-4-6-	-	-	-	-	-2-3-2-3-	-3-	-	-	-	-	7.25
30-45.9803-108.4094-2-07-	0-M39635-07/06/78-12-	19-17.3-C-	-	8.5-	2925-	17-1-6-6-7-1-4-2-1-6-4-2-3-	-3-	-	-	-	-	2.23
30-45.9306-108.4786-2-08-	0-M39640-07/06/78-14-	23-15.5-C-	-	8.5-	1850-	8-1-6-	-	-	-	-	-4-3-2-3-	-3-3-	6-	103-	-	1.52
30-45.9211-108.4628-2-07-	0-M39642-07/06/78-15-	20-21.0-C-	-	8.8-	50000-	6-1-6-4-6-2-4-1-1-4-3-2-3-	-3-	-	-	-	-	4.17
30-45.9011-108.4644-2-08-	0-M39643-07/06/78-16-	24-14.0-C-	-	8.5-	2175-	5-1-6-	-	-	-	-	-4-3-2-3-	-1-3-	6-	200-	-	0.35
30-45.9003-108.4644-2-08-	0-M39644-07/06/78-16-	20-13.5-C-	-	8.3-	1400-	11-1-6-	-	-	-	-	-4-3-2-3-	-1-3-	6-	135-	-	0.30
30-45.9028-108.6581-2-07-	0-M39645-07/07/78- 9-	18-16.8-C-	-	7.9-	50000-	12-1-6-4-6-3-4-1-1-4-3-2-1-	-3-	-	-	-	-	14.20*
30-45.8936-108.6433-2-07-	0-M39646-07/07/78- 9-	18-16.0-C-	-	8.5-	50000-	8-1-6-4-6-3-4-1-2-4-3-3-1-	-3-	-	-	-	-	3.68
30-45.9431-108.6336-2-07-	0-M39647-07/07/78-10-	19-20.0-C-	-	8.8-	50000-	13-1-6-6-6-3-4-2-2-4-3-3-1-	-3-	-	-	-	-	11.09
30-45.9647-108.6028-2-08-	0-M39648-07/07/78-11-	20-15.0-C-	-	7.6-	1025-	10-1-6-	-	-	-	-	-4-3-2-1-	-3-5-	8-	109-	-	10.55
30-45.9736-108.7139-2-07-	0-M39650-07/07/78-12-	20-16.5-C-	-	7.3-	975-	5-1-6-6-6-3-4-1-1-4-3-1-1-	-3-	-	-	-	-	1.38
30-45.9728-108.7378-2-08-	0-M39652-07/07/78-12-	23-11.0-C-	-	7.6-	3400-	4-1-6-	-	-	-	-	-4-3-1-1-	-3-9-	-	25-	-	64.82*
30-45.9003-108.7458-2-07-	0-M39653-07/07/78-13-	26-24.0-C-	-	7.2-	27000-	6-1-6-4-6-4-4-1-2-4-3-2-1-	-3-	-	-	-	-	4.16
30-45.8903-108.7331-2-08-	0-M39654-07/07/78-14-	25-11.5-C-	-	7.0-	31000-	9-1-6-	-	-	-	-	-4-4-2-1-	-3-9-	-	-	-	5.94
30-45.9056-108.7142-2-07-	0-M39655-07/07/78-14-	26-26.0-C-	-	8.9-	50000-	12-1-6-6-8-2-4-2-2-4-4-2-1-	-3-	-	-	-	-	29.33*
30-45.9442-108.7394-2-08-	0-M39656-07/07/78-15-	24-13.5-C-	-	7.8-	4550-	8-1-6-	-	-	-	-	-4-3-1-1-	-3-5-	-	15-	-	7.82
30-45.8786-108.6717-2-07-	0-M39657-07/07/78-15-	26-29.0-C-	-	8.6-	31000-	13-1-6-4-6-2-4-4-1-4-3-3-1-	-3-	-	-	-	-	3.98
30-45.8575-108.5031-2-08-	0-M39659-07/10/78-10-	23-15.5-C-	-	6.5-	1875-	5-1-6-	-	-	-	-	-4-3-2-1-	-3-3-	5-	70-	-	5.07
30-45.8836-108.5447-2-06-	0-M39661-07/10/78-10-	24-13.0-C-	-	6.5-	24250-	6-1-6-6-6-	-	-	-	-	-6-4-2-1-	-3-	-	-	-	4.47
30-45.8708-108.5292-2-07-	0-M39662-07/10/78-10-	22-19.8-C-	-	7.4-	34250-	10-1-6-4-6-2-4-1-1-4-3-2-1-	-3-	-	-	-	-	1.16
30-45.8792-108.5286-2-07-	0-M39663-07/10/78-11-	24-22.0-C-	-	7.9-	50000-	12-1-6-4-6-2-4-5-2-4-3-2-1-	-3-	-	-	-	-	1.82
30-45.9147-108.5289-2-08-	0-M39664-07/10/78-14-	28-16.5-C-	-	7.8-	3500-	10-1-6-	-	-	-	-	-4-2-2-1-	-3-3-	6-	120-	-	0.39
30-45.9042-108.6081-2-08-	0-M39665-07/10/78-14-	27-13.5-C-	-	6.7-	1975-	6-1-6-	-	-	-	-	-4-3-3-1-	-3-3-	6-	-	-	0.01
30-45.9217-108.6017-2-07-	0-M39667-07/10/78-15-	28-32.0-C-	-	8.1-	38000-	12-1-6-6-8-2-4-1-1-4-3-2-1-	-3-	-	-	-	-	10.23
30-45.9247-108.6011-2-07-	0-M39668-07/10/78-15-	29-29.5-C-	-	7.8-	50000-	6-1-6-4-6-3-4-1-2-4-3-2-1-	-3-	-	-	-	-	6.00
30-45.9256-108.5617-2-07-	0-M39669-07/10/78-16-	31-25.0-C-	-	7.9-	32250-	4-1-6-6-6-2-4-1-1-6-3-2-2-	-3-	-	-	-	-	0.64
30-45.9256-108.5639-2-08-	0-M39670-07/10/78-16-	31-18.0-C-	-	7.3-	3425-	10-1-6-	-	-	-	-	-4-3-3-2-	-3-	-60-	10-	-	0.25
30-45.8172-108.5211-2-08-	0-M39673-07/11/78- 9-	20-17.2-C-	-	6.5-	1450-	10-1-6-	-	-	-	-	-4-3-3-2-	-1-3-	-	-	-	0.14
30-45.8256-108.5347-2-07-	0-M39674-07/11/78-10-	21-18.0-C-	-	7.5-	32000-	22-1-6-4-6-2-4-1-1-4-3-3-2-	-3-	-	-	-	-	0.72
30-45.8442-108.5808-2-06-	0-M39675-07/11/78-10-	21-13.5-C-	-	6.6-	28500-	13-1-6-4-6-	-	-	-	-	-4-3-3-1-	-3-	-	-	-	2.57
30-45.8436-108.5825-2-08-	0-M39676-07/11/78-10-	21-14.5-C-	-	6.8-	4175-	5-1-6-	-	-	-	-	-4-3-3-1-	-3-3-	2-	8-	-	0.91
30-45.8442-108.5814-2-07-	0-M39677-07/11/78-11-	23-17.5-C-	-	7.7-	27500-	6-1-6-4-6-2-4-1-1-4-3-3-1-	-3-	-	-	-	-	1.43
30-45.8433-108.5803-2-07-	0-M39678-07/11/78-11-	23-17.8-C-	-	7.4-	3625-	6-1-6-6-6-3-2-4-1-1-6-3-3-1-	-3-	-	-	-	-	0.88
30-45.8581-108.5681-2-07-	0-M39680-07/11/78-13-	27-23.0-C-	-	6.9-	4250-	10-1-6-6-8-2-4-1-1-4-3-2-1-	-3-	-	-	-	-	3.34
30-45.8378-108.5419-2-08-	0-M39681-07/11/78-13-	25-16.0-C-	-	7.2-	27000-	9-1-6-	-	-	-	-	-3-3-3-2-3-	-5-	-60-	600-	-	1.13
30-45.8389-108.5439-2-06-	0-M39682-07/11/78-14-	22-15.0-C-	-	6.8-	1750-	4-1-6-4-6-3-3-1-	-4-3-3-2-	-3-	-	-	-	0.53
30-45.8194-108.5261-2-07-	0-M39683-07/11/78-14-	19-25.3-C-	-	8.3-	28000-	10-1-6-6-6-3-4-1-1-4-3-3-2-	-3-	-	-	-	-	1.99
30-45.8386-108.6403-2-08-	0-M39684-07/11/78-16-	25-19.5-C-	-	6.9-	1575-	11-1-6-	-	-	-	-	-1-3-3-3-	-1-3-	4-	80-	-	1.56
30-45.8531-108.6475-2-07-	0-M39685-07/11/78-16-	23-26.5-C-	-	8.2-	4400-	13-1-6-4-6-2-4-1-1-4-3-2-3-	-3-	-	-	-	-	1.21
30-45.7819-108.6181-2-08-	0-M39687-07/11/78-17-	25-21.0-C-	-	6.9-	3500-	9-1-6-	-	-	-	-	-3-3-1-2-3-	-5-	-	-	-	7.53
30-45.8114-108.6729-2-07-	0-M39688-07/12/78-10-	19-17.5-C-	-	8.1-	3675-	12-1-6-4-6-2-4-1-1-4-3-3-1-	-3-	-	-	-	-	4.55
30-45.8203-108.6978-2-08-	0-M39689-07/12/78-10-	16-19.5-C-	-	6.9-	3300-	15-1-6-	-	-	-	-	-4-3-3-1-	-1-3-	6-	90-	-	0.33
30-45.8303-108.7219-2-07-	0-M39690-07/12/78-10-	21-18.5-C-	-	7.2-	4300-	15-1-6-6-6-3-4-1-2-4-3-3-1-	-3-	-	-	-	-	0.60
30-45.8456-108.7142-2-07-	0-M39691-07/12/78-10-	19-19.0-C-	-	7.2-	3950-	8-1-6-4-6-2-4-1-1-4-3-2-1-	-3-	-	-	-	-	3.27

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY Concentrations reported in weight parts per billion (ppb)											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.9356-108.4439-2-08-						0-M39625	68943	170	27	7	39	29339	-3	104	89	1579	16	266
30-45.7586-108.4875-2-08-						0-M39626	58677	-55	33	13	79	19122	12	88	101	1459	18	-50
30-45.8961-108.4044-2-08-						0-M39627	372000	686	97	37	138	103000	19	29	219	6186	70	305
30-45.9147-108.4097-2-07-						0-M39628	89900	329	344	64	159	94171	71	428	770	5827	185	193
30-45.9172-108.4033-2-08-						0-M39629	198000	493	587	111	325	58512	277	544	1327	9553	304	116
30-45.9392-108.3831-2-08-						0-M39630	297000	1869	403	113	465	765000	125	497	924	23890	220	1144
30-45.9572-108.3839-2-08-						0-M39633	4630	63	-25	-4	-25	1894	4	-25	-25	-200	-4	-50
30-45.9875-108.4133-2-06-						0-M39634	357000	709	52	22	130	200000	24	149	64	7069	59	386
30-45.9803-108.4094-2-07-						0-M39635	58725	389	-25	11	201	69265	63	122	37	1823	18	-50
30-45.9306-108.4786-2-08-						0-M39640	61318	386	-25	11	28	26940	7	111	-25	1302	9	87
30-45.9211-108.4628-2-07-						0-M39642	236000	749	62	25	134	310000	51	283	128	8875	60	-50
30-45.9011-108.4644-2-08-						0-M39643	3623	107	-25	6	-25	2751	11	30	30	203	11	-50
30-45.9003-108.4644-2-08-						0-M39644	28462	100	-25	-4	124	23497	42	58	39	702	-4	183
30-45.9028-108.6581-2-07-						0-M39645	378000	976	70	26	170	329000	175	176	111	10459	64	552
30-45.8936-108.6433-2-07-						0-M39646	300000	839	48	23	135	216000	301	201	81	7463	59	586
30-45.9431-108.6336-2-07-						0-M39647	331000	1084	64	28	181	374000	222	243	135	11624	67	628
30-45.9647-108.6028-2-08-						0-M39648	77676	293	-25	13	69	42372	12	129	-25	1623	6	739
30-45.9736-108.7139-2-07-						0-M39650	54617	225	-25	-4	138	24947	33	91	-25	983	-4	-50
30-45.9728-108.7378-2-08-						0-M39652	267000	644	32	15	214	157000	31	186	45	5789	44	120
30-45.9003-108.7458-2-07-						0-M39653	291000	749	53	59	159	227000	52	229	100	7639	53	268
30-45.8903-108.7331-2-08-						0-M39654	625000	991	71	31	188	236000	49	-25	105	8694	79	528
30-45.9056-108.7142-2-07-						0-M39655	1047	-55	-25	-4	-25	1813	-3	-25	-25	-200	-4	-50
30-45.9442-108.7394-2-08-						0-M39656	83367	559	55	40	88	182000	20	259	154	4905	64	75
30-45.8786-108.6717-2-07-						0-M39657	384000	825	62	24	160	230000	42	-25	49	8975	35	686
30-45.8575-108.5031-2-08-						0-M39659	109000	463	-25	-4	67	111000	74	-25	-25	3857	5	327
30-45.8836-108.5447-2-06-						0-M39661	198000	669	36	8	248	134000	398	-25	51	5177	24	346
30-45.8708-108.5292-2-07-						0-M39662	1651	-55	-25	-4	-25	1523	-3	-25	-25	-200	-4	-50
30-45.8792-108.5286-2-07-						0-M39663	339000	1050	49	23	122	293000	51	-25	134	10263	41	200
30-45.9147-108.5289-2-08-						0-M39664	23960	236	-25	-4	-25	11276	4	-25	-25	748	-4	-50
30-45.9042-108.6081-2-08-						0-M39665	42514	257	-25	-4	3055	30479	137	-25	-25	1247	-4	96
30-45.9217-108.6017-2-07-						0-M39667	378000	779	75	21	136	167000	33	-25	115	7649	43	317
30-45.9247-108.6011-2-07-						0-M39668	368000	1210	83	25	170	322000	457	-25	137	13044	45	281
30-45.9256-108.5617-2-07-						0-M39669	246000	819	50	10	110	159000	233	-25	74	6111	27	58
30-45.9256-108.5639-2-08-						0-M39670	43358	196	-25	-4	60	14551	169	-25	-25	1089	-4	-50
30-45.9172-108.5211-2-08-						0-M39673	134000	432	-25	27	72	76624	6	-25	-25	2836	-4	-50
30-45.8256-108.5347-2-07-						0-M39674	290000	856	59	13	173	227000	222	-25	84	8420	32	138
30-45.8442-108.5808-2-06-						0-M39675	310000	825	59	20	115	176000	27	-25	101	7281	30	320
30-45.8436-108.5825-2-08-						0-M39676	234000	752	39	21	128	133000	16	-25	55	5339	16	602
30-45.8442-108.5814-2-07-						0-M39677	273000	961	54	14	145	196000	146	-25	78	7808	28	561
30-45.8433-108.5803-2-07-						0-M39678	282000	858	46	8	123	176000	306	-25	69	7046	30	510
30-45.8581-108.5681-2-07-						0-M39680	299000	1016	46	13	264	201000	1189	-25	71	7888	31	-50
30-45.8378-108.5419-2-08-						0-M39681	203000	786	47	9	11725	185000	507	31	80	6752	23	369
30-45.8389-108.5439-2-06-						0-M39682	164000	657	-25	-4	154	110000	64	-25	-25	4105	10	-50
30-45.8194-108.5261-2-07-						0-M39683	243000	915	44	10	143	209000	215	-25	62	7955	27	577
30-45.8386-108.6403-2-08-						0-M39684	99416	386	-25	140	63	43652	17	32	-25	2160	-4	63
30-45.8531-108.6475-2-07-						0-M39685	326000	1050	54	19	149	210000	80	-25	100	8393	32	791
30-45.7819-108.6181-2-08-						0-M39687	296000	977	76	19	151	143000	30	-25	186	7031	51	600
30-45.8114-108.6728-2-07-						0-M39688	255000	884	63	13	102	167000	23	-25	131	7025	37	611
30-45.8203-108.6978-2-08-						0-M39689	174000	696	48	13	72	115000	56	-25	87	4631	26	337
30-45.8303-108.7219-2-07-						0-M39690	244000	985	70	13	105	192000	61	-25	132	7373	37	643
30-45.8456-108.7142-2-07-						0-M39691	294000	859	72	15	103	170000	32	-25	132	7510	33	412

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																											U CONCENTRATION
							TIME SAMPLED																										
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (ϕ) UNITS IN ppb
30-45.9694-108.6981-2-08-						0-M39692-07/12/78-11-			18-14.5-C-		-	-	7.5-	3100-		10-1-6-	-	-	-	-	-	-4-3-3-1-	-3-3-		-120-		-		0.46			
30-45.8678-108.6983-2-07-						0-M39693-07/12/78-11-			19-19.0-C-		-	-	7.5-	33000-		6-1-6-6-8-2-4-5-1-4-3-3-1-							-3-	-	-	-		-		2.02			
30-45.7914-108.6933-2-08-						0-M39694-07/12/78-11-			20-12.0-C-		-	-	7.2-	3600-		16-1-6-	-	-	-	-	-	-4-3-1-1-	-1-3-		-	30-	-		0.46			
30-45.7614-108.7406-2-07-						0-M39697-07/12/78-12-			19-18.8-C-		-	-	6.9-	1125-		10-1-6-4-6-3-4-2-2-4-3-2-1-							-3-	-	-	-		-		1.95			
30-45.7544-108.7311-2-08-						0-M39698-07/12/78-13-			20-13.5-C-		-	-	7.0-	2675-		12-1-6-	-	-	-	-	-	-2-3-2-1-	-3-	-	-	-	-		4.40			
30-45.7556-108.6903-2-08-						0-M39699-07/12/78-13-			22-13.0-C-		-	-	6.9-	2550-		9-1-6-	-	-	-	-	-	-4-3-1-1-	-1-3-	6-	52-		-		0.91			
30-45.2194-109.7694-2-07-						0-M39700-07/12/78-14-			24- 6.8-		-	-	6.9-	26-		15-2-1-4-6-3-4-1-2-1-4-5-2-							-1-	-	-	-		-		0.02			
30-45.2233-109.7608-2-07-						0-M39701-07/12/78-14-			17-11.0-C-		-	-	6.6-	43-		13-2-9-3-9-3-4-1-2-1-4-5-2-							-1-	-	-	-		-		0.30			
30-45.2408-109.7350-2-07-						0-M39702-07/12/78-16-			24- 7.8-C-		-	-	7.0-	37-		17-2-9-3-9-4-4-1-2-2-3-4-2-							-1-	-	-	-		-		0.15			
30-45.2433-109.7336-2-07-						0-M39703-07/12/78-16-			19-14.0-C-		-	-	7.0-	52-		9-2-7-4-9-3-4-1-2-2-3-4-2-							-1-	-	-	-		-		0.21			
30-45.2461-109.7278-2-07-						0-M39704-07/12/78-17-			22- 9.0-C-		-	-	7.0-	36-		16-2-7-4-6-4-3-1-2-7-3-5-2-							-1-	-	-	-		-		0.02			
30-45.2481-109.7219-2-07-						0-M39705-07/12/78-17-			24-10.1-C-		-	-	6.6-	17-		15-2-9-2-9-5-5-1-2-3-4-4-2-							-1-	-	-	-		-		0.05			
30-45.0775-109.4283-2-07-						0-M39707-07/15/78-14-			29-12.8-C-		-	-	7.1-	21-		9-2-9-3-9-3-3-1-2-1-3-4-2-							-1-	-	-	-		-		0.05			
30-45.0792-109.4483-2-07-						0-M39708-07/15/78-14-			30- 8.0-C-		-	-	6.8-	80-		10-2-9-3-9-3-3-1-2-1-4-5-2-							-1-	-	-	-		-		0.70			
30-45.0811-109.4744-2-07-						0-M39709-07/15/78-15-			28- 7.2-C-		-	-	7.1-	75-		11-2-9-3-9-3-3-1-2-3-4-4-2-							-1-	-	-	-		-		1.28			
30-45.0811-109.4794-2-07-						0-M39710-07/15/78-15-			24- 4.6-C-		-	-	7.2-	48-		11-2-9-3-9-3-3-1-2-1-3-4-4-							-1-	-	-	-		-		1.23			
30-45.0803-109.4850-2-07-						0-M39711-07/15/78-16-			23- 3.7-C-		-	-	7.0-	48-		13-2-9-4-9-3-3-1-2-4-5-4-3-							-1-	-	-	-		-		0.53			
30-45.0817-109.4944-2-07-						0-M39712-07/15/78-16-			22- 7.5-C-		-	-	6.9-	25-		16-2-9-4-9-4-3-1-2-4-3-4-3-							-1-	-	-	-		-		0.68			
30-45.0853-109.5144-2-07-						0-M39714-07/15/78-18-			21- 7.0-C-		-	-	6.7-	33-		12-2-9-4-6-4-3-1-2-3-4-5-2-							-1-	-	-	-		-		0.32			
30-45.0833-109.5139-2-07-						0-M39715-07/15/78-18-			21- 6.3-C-		-	-	6.8-	34-		10-2-9-4-9-3-3-1-2-1-3-5-2-							-1-	-	-	-		-		0.32			
30-45.0847-109.5122-2-07-						0-M39716-07/15/78-18-			20- 7.2-C-		-	-	6.9-	23-		4-2-9-3-9-4-3-1-2-1-3-5-2-							-1-	-	-	-		-		0.01			
30-45.0906-109.5256-2-06-						0-M39717-07/16/78-14-			29- 4.6-C-		-	-	6.7-	46-		2-2-9-5-8-2-3-1-2-7-3-5-2-							-1-	-	-	-		-		0.01			
30-45.0936-109.5344-2-07-						0-M39718-07/16/78-15-			22- 8.3-C-		-	-	7.0-	31-		19-2-9-3-9-4-3-1-2-1-4-5-2-							-1-	-	-	-		-		0.32			
30-45.1253-109.7244-2-07-						0-M39719-07/18/78- 9-			17- 4.3-		-	-	6.9-	22-		8-2-7-5-8-3-4-1-2-1-3-5-1-							-1-	-	-	-		-		0.01			
30-45.1264-109.7189-2-06-						0-M39720-07/18/78-10-			20-13.9-C-		-	-	6.6-	42-		9-2-3-4-3-2-3-1-2-4-3-5-1-							-1-	-	-	-		-		0.01			
30-45.1253-109.7133-2-06-						0-M39721-07/18/78-10-			20-10.4-C-		-	-	6.4-	28-		16-2-3-5-8-2-3-1-1-7-4-5-2-							-1-	-	-	-		-		0.01			
30-45.1225-109.7156-2-07-						0-M39722-07/18/78-10-			25- 8.8-C-		-	-	7.1-	23-		11-2-3-4-6-4-3-1-2-1-4-5-2-							-1-	-	-	-		-		0.01			
30-45.1311-109.7008-2-06-						0-M39723-07/18/78-11-			21- 5.7-C-		-	-	6.7-	27-		4-2-6-5-8-2-3-1-2-1-4-5-2-							-1-	-	-	-		-		0.18			
30-45.1311-109.6967-2-07-						0-M39724-07/18/78-12-			20- 6.7-		-	-	6.9-	13-		10-2-3-3-3-5-4-1-2-1-4-5-2-							-1-	-	-	-		-		0.01			
30-45.1322-109.6972-2-07-						0-M39725-07/18/78-12-			21- 7.0-		-	-	6.8-	29-		16-2-3-3-3-3-3-1-2-1-4-5-2-							-1-	-	-	-		-		0.37			
30-45.1381-109.6928-2-06-						0-M39726-07/18/78-12-			22- 8.8-C-		-	-	6.8-	85-		6-2-3-5-8-4-4-1-2-1-4-5-2-							-1-	-	-	-		-		0.07			
30-45.1436-109.6894-2-07-						0-M39728-07/18/78-13-			22- 5.5-C-		-	-	7.1-	19-		10-2-7-3-3-4-3-1-2-1-4-5-2-							-1-	-	-	-		-		0.25			
30-45.1461-109.6872-2-07-						0-M39729-07/18/78-14-			19- 9.7-C-		-	-	6.9-	25-		18-2-9-3-9-3-3-1-2-7-4-5-2-							-1-	-	-	-		-		0.28			
30-45.1492-109.6817-2-06-						0-M39730-07/18/78-14-			19- 9.8-C-		-	-	7.1-	72-		30-2-7-5-8-2-3-1-2-3-1-5-2-							-1-	-	-	-		-		0.43			
30-45.1597-109.6681-2-07-						0-M39732-07/18/78-15-			26- 7.0-C-		-	-	7.2-	22-		16-2-9-4-6-4-3-1-2-1-4-5-2-							-1-	-	-	-		-		0.33			
30-45.1706-109.6486-2-07-						0-M39733-07/18/78-16-			25-10.0-C-		-	-	7.2-	17-		4-2-9-3-9-4-3-1-2-1-4-5-2-							-1-	-	-	-		-		0.15			
30-45.1761-109.6439-2-07-						0-M39734-07/18/78-16-			25- 9.7-C-		-	-	6.9-	18-		16-2-9-3-9-5-3-1-2-1-4-5-2-							-1-	-	-	-		-		0.01			
30-45.1794-109.6428-2-07-						0-M39735-07/18/78-16-			22-11.7-C-		-	-	6.6-	22-		9-2-9-3-9-4-4-1-2-1-4-5-2-							-1-	-	-	-		-		0.04			
30-45.1850-109.6447-2-07-						0-M39736-07/18/78-17-			20- 4.2-C-		-	-	7.2-	87-		16-2-9-4-6-4-4-1-2-1-4-5-3-							-1-	-	-	-		-		0.07			
30-45.1883-109.6453-2-07-						0-M39737-07/21/78-10-			15- 7.4-C-		-	-	7.2-	22-		5-2-7-4-6-3-3-1-2-7-4-5-3-							-1-	-	-	-		-		0.03			
30-45.1908-109.6417-2-07-						0-M39738-07/21/78-10-			14- 7.4-C-		-	-	7.3-	100-		11-2-9-4-6-3-3-1-2-7-3-5-3-							-1-	-	-	-		-		0.06			
30-45.1958-109.6350-2-07-						0-M39739-07/21/78-11-			14- 4.5-C-		-	-	7.2-	82-		15-2-9-5-8-3-4-1-2-1-4-5-3-							-1-	-	-	-		-		0.33			
30-45.2017-109.6339-2-07-						0-M39740-07/21/78-11-			14- 4.8-C-		-	-	7.8-	56-		10-2-9-7-9-4-3-1-2-2-4-5-3-							-1-	-	-	-		-		0.68			
30-45.2008-109.6369-2-08-						0-M39741-07/21/78-12-			14-10.7-C-		-	-	7.1-	90-		9-2-9-	-	-	-	-	-	-4-4-5-3-	-1-3-	5-	70-		-		0.25			
30-45.2003-109.6461-2-07-						0-M39742-07/21/78-12-			13- 5.8-C-		-	-	7.3-	25-		13-2-9-4-6-5-4-1-2-1-3-5-3-							-1-	-	-	-		-		0.41			
30-45.2131-109.6356-2-07-						0-M39744-07/21/78-12-			20- 6.7-C-		-	-	7.1-	44-		9-2-9-4-2-5-4-1-2-7-4-5-3-							-1-	-	-	-		-		0.87			
30-45.2149-109.6272-2-07-						0-M39745-07/21/78-13-			16- 7.2-		-	-	7.0-	67-		13-2-7-4-6-4-4-1-2-4-4-5-3-							-1-	-	-	-		-		0.50			
30-45.2269-109.6053-2-07-						0-M39747-07/21/78-13-			16- 6.9-C-		-	-	6.8-	55-		12-2-7-5-8-3-3-1-2-7-4-5-2-							-1-	-	-	-		-		0.76			
30-45.2328-109.6017-2-07-						0-M39748-07/21/78-14-			15- 6.8-C-		-	-	6.8-	41-		13-2-9-5-6-3-4-1-1-2-4-5-2-							-1-	-	-	-		-		0.01			
30-45.2472-109.5853-2-07-						0-M39749-07/21/78-14-			16- 8.1-C-		-	-	7.2-	19-		9-2-9-4-2-4-4-1-2-7-4-5-2-							-1-	-	-	-		-		0.01			
30-45.2494-109.5831-2-07-						0-M39750-07/21/78-14-			17- 8.5-C-		-	-	7.1-	21-		11-2-9-3-9-3-3-1-2-2-4-5-2-							-1-	-	-	-		-		0.01			

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(2)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY Concentrations reported in weight parts per billion (ppb)											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.8594-108.6981-2-08-						0-439692	214000	801	57	11	1989	121000	114	32	122	5378	34	645
30-45.8479-108.6983-2-07-						0-439693	288000	969	26	20	140	327000	44	-25	29	9723	26	582
30-45.7914-108.6933-2-08-						0-439694	294000	548	69	22	192	146000	24	-25	150	6919	49	446
30-45.7614-108.7406-2-07-						0-439697	55597	62	-25	-4	92	45812	18	38	27	1610	14	275
30-45.7544-108.7311-2-08-						0-439698	190000	459	-25	22	95	124000	17	-25	39	4546	20	369
30-45.7556-108.6903-2-08-						0-439699	176000	474	28	11	105	118000	16	-25	74	4443	26	958
30-45.2194-109.7694-2-07-						0-439700	3572	78	45	15	57	1209	16	103	72	1259	13	122
30-45.2233-109.7608-2-07-						0-439701	6273	82	40	4	39	1049	10	124	54	1375	10	104
30-45.2408-109.7350-2-07-						0-439702	5329	110	36	9	62	1519	8	127	60	1358	9	93
30-45.2433-109.7336-2-07-						0-439703	7890	101	30	6	160	1937	10	105	55	1320	9	110
30-45.2461-109.7278-2-07-						0-439704	4598	-55	-25	5	-25	929	10	-25	-25	-200	-4	61
30-45.2481-109.7219-2-07-						0-439705	1771	-55	-25	-4	-25	296	-3	-25	-25	-200	-4	-50
30-45.0775-109.4283-2-07-						0-439707	1991	-55	-25	-4	-25	664	4	-25	-25	-200	-4	119
30-45.0792-109.4483-2-07-						0-439708	3752	131	-25	-4	-25	3303	-3	-25	-25	-200	-4	-50
30-45.0811-109.4744-2-07-						0-439709	7584	-55	-25	-4	-25	3472	-3	-25	-25	-200	-4	80
30-45.0811-109.4794-2-07-						0-439710	4687	-55	-25	-4	-25	1977	-3	-25	-25	-200	-4	104
30-45.0803-109.4850-2-07-						0-439711	4876	-55	-25	-4	-25	2074	-3	-25	-25	-200	-4	-50
30-45.0817-109.4944-2-07-						0-439712	2762	76	-25	-4	-25	795	-3	-25	-25	-200	-4	-50
30-45.0853-109.5144-2-07-						0-439714	3579	-55	-25	-4	41	940	-3	-25	-25	-200	-4	200
30-45.0833-109.5139-2-07-						0-439715	3507	-55	-25	-4	60	1240	5	-25	-25	-200	-4	-50
30-45.0847-109.5122-2-07-						0-439716	2634	140	-25	-4	-25	595	-3	-25	-25	-200	-4	-50
30-45.0906-109.5256-2-06-						0-439717	5102	-55	-25	-4	72	1668	7	-25	-25	-200	-4	88
30-45.0936-109.5344-2-07-						0-439719	3551	-55	-25	-4	34	893	4	-25	-25	-200	-4	-50
30-45.1253-109.7244-2-07-						0-439719	2393	125	-25	-4	-25	958	-3	-25	-25	-200	-4	-50
30-45.1264-109.7189-2-06-						0-439720	4344	-55	-25	-4	-25	1979	-3	-25	-25	-200	-4	-50
30-45.1253-109.7133-2-06-						0-439721	3846	150	-25	-4	58	1102	24	-25	-25	-200	-4	76
30-45.1225-109.7156-2-07-						0-439722	1335	60	-25	-4	-25	430	-3	-25	-25	-200	-4	-50
30-45.1311-109.7008-2-06-						0-439723	3074	94	-25	-4	-25	1204	4	-25	-25	-200	-4	-50
30-45.1311-109.6967-2-07-						0-439724	1337	147	-25	-4	-25	455	-3	-25	-25	-200	-4	52
30-45.1322-109.6972-2-07-						0-439725	2846	-55	-25	-4	-25	1449	-3	-25	-25	-200	-4	-50
30-45.1381-109.6928-2-06-						0-439726	9483	165	-25	-4	-25	4325	-3	-25	-25	-200	-4	-50
30-45.1436-109.6894-2-07-						0-439728	1875	-55	-25	-4	-25	701	-3	-25	-25	-200	-4	231
30-45.1461-109.6872-2-07-						0-439729	2780	110	-25	-4	-25	861	-3	-25	-25	-200	-4	66
30-45.1492-109.6817-2-06-						0-439730	8449	76	-25	6	-25	3694	5	-25	-25	-200	-4	129
30-45.1597-109.6681-2-07-						0-439732	2311	137	-25	-4	-25	815	-3	-25	-25	-200	-4	163
30-45.1706-109.6486-2-07-						0-439733	1978	-55	-25	-4	-25	602	-3	-25	-25	-200	-4	364
30-45.1761-109.6439-2-07-						0-439734	1946	162	-25	5	27	607	-3	-25	-25	-200	-4	242
30-45.1794-109.6428-2-07-						0-439735	2374	137	-25	-4	-25	763	-3	-25	-25	-200	8	-50
30-45.1850-109.6447-2-07-						0-439736	10394	171	-25	-4	-25	3538	-3	-25	43	206	6	97
30-45.1883-109.6453-2-07-						0-439737	2228	-55	-25	-4	27	813	-3	-25	-25	-200	-4	97
30-45.1908-109.6417-2-07-						0-439738	14433	214	-25	-4	26	4075	-3	-25	-25	238	-4	235
30-45.1958-109.6350-2-07-						0-439739	12186	-55	-25	-4	43	2616	-3	-25	-25	203	-4	278
30-45.2017-109.6339-2-07-						0-439740	9017	208	-25	8	-25	1693	8	-25	31	227	-4	351
30-45.2008-109.6369-2-08-						0-439741	10419	131	-25	7	28	3200	4	-25	-25	-200	-4	513
30-45.2003-109.6461-2-07-						0-439742	3113	202	-25	-4	30	874	-3	-25	-25	-200	8	372
30-45.2131-109.6356-2-07-						0-439744	6399	134	-25	-4	-25	1030	-3	-25	-25	-200	-4	397
30-45.2169-109.6272-2-07-						0-439745	8974	57	-25	-4	-25	2128	-3	-25	-25	-200	-4	571
30-45.2269-109.6053-2-07-						0-439747	6831	97	-25	-4	26	1665	-3	-25	-25	-200	-4	267
30-45.2328-109.6017-2-07-						0-439748	5459	217	-25	-4	-25	1338	-3	-25	-25	-200	-4	358
30-45.2472-109.5853-2-07-						0-439749	2608	-55	-25	-4	44	621	4	-25	-25	-200	-4	160
30-45.2494-109.5831-2-07-						0-439750	2304	214	-25	6	50	573	-3	-25	-25	-200	-4	96

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																											U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (θ) UNITS IN ppb
30-45.0264-109.8303-2-07-			0-	M39751	-09/29/78-13-	21-14.7-C-	-	6.9-	54-		13-2-3-5-8-2-3-1-2-1-4-3-2-	-1-	-	-	-	-	0.01
30-45.0378-109.8103-2-07-			0-	M39753	-09/29/78-15-	19- 9.6-C-	-	7.6-	24-		8-2-3-4-6-3-3-1-2-1-3-3-2-	-1-	-	-	-	-	0.09
30-45.0342-109.8050-2-07-			0-	M39754	-09/29/78-15-	23-12.1-C-	-	7.3-	8-		13-2-7-4-6-3-3-1-2-1-3-3-2-	-1-	-	-	-	-	0.01
30-45.0344-109.8022-2-07-			0-	M39755	-09/29/78-16-	14-12.8-	-	7.1-	7-		17-2-7-4-6-3-3-1-2-1-3-3-3-	-1-	-	-	-	-	0.21
30-45.0408-109.8039-2-07-			0-	M39756	-09/29/78-17-	13- 7.8-C-	-	7.0-	19-		26-2-9-4-9-3-3-1-2-1-3-3-3-	-1-	-	-	-	-	0.34
30-45.0469-109.7961-2-07-			0-	M39757	-09/30/78- 9-	5- 7.5-C-	-	7.0-	15-		28-2-7-5-6-3-3-1-2-7-2-4-2-	-1-	-	-	-	-	0.30
30-45.0569-109.7889-2-06-			0-	M39758	-09/30/78- 9-	12- 6.9-C-	-	6.8-	16-		9-2-7-4-7-3-3-1-2-4-3-4-2-	-1-	-	-	-	-	0.19
30-45.0622-109.7856-2-07-			0-	M39759	-09/30/78-10-	11- 8.9-C-	-	7.3-	7-		15-2-7-3-7-4-3-1-2-1-4-4-1-	-1-	-	-	-	-	0.01
30-45.0672-109.7864-2-07-			0-	M39760	-09/30/78-11-	15- 9.7-	-	7.0-	8-		15-2-7-4-7-3-3-1-2-1-2-4-1-	-1-	-	-	-	-	0.25
30-45.0769-109.7931-2-06-			0-	M39762	-09/30/78-12-	16-10.4-C-	-	6.2-	13-		13-2-7-4-6-2-3-1-2-4-4-4-2-	-1-	-	-	-	-	0.23
30-45.0806-109.7972-2-07-			0-	M39763	-09/30/78-13-	25-12.2-	-	6.8-	16-		15-2-3-3-3-4-3-1-2-5-4-4-2-	-1-	-	-	-	-	0.54
30-45.0992-109.7753-2-07-			0-	M39764	-09/30/78-14-	14- 9.0-	-	7.0-	8-		15-2-3-3-3-4-3-1-2-4-4-4-2-	-1-	-	-	-	-	0.01
30-45.1069-109.7567-2-07-			0-	M39765	-09/31/78- 8-	11- 6.9-	-	7.5-	12-		16-2-7-4-6-3-3-1-2-1-3-4-2-	-1-	-	-	-	-	0.47
30-45.1144-109.7544-2-07-			0-	M39766	-09/31/78- 9-	16- 8.5-	-	7.1-	19-		15-2-7-4-6-4-3-1-2-3-3-4-2-	-1-	-	-	-	-	0.44
30-45.1167-109.7475-2-07-			0-	M39767	-09/31/78-10-	14- 6.7-	-	6.5-	17-		10-2-7-4-6-2-3-1-2-1-3-4-2-	-1-	-	-	-	-	0.52
30-45.5942-109.7550-2-07-			0-	M39768	-09/27/78-10-	14- 8.8-	-	7.8-	243-		9-1-7-5-7-3-3-1-2-4-3-3-2-	-1-	-	-	-	-	0.16
30-45.5961-109.7764-2-06-			0-	M39769	-09/27/78-10-	16- 7.9-	-	6.8-	200-		10-2-7-5-6-3-3-1-2-4-3-3-2-	-1-	-	-	-	-	0.14
30-45.6192-109.7744-2-07-			0-	M39772	-09/27/78-11-	19-10.2-	-	7.2-	192-		10-2-7-3-7-3-3-1-2-2-2-3-2-	-1-	-	-	-	-	0.35
30-45.6119-109.8275-2-07-			0-	M39774	-09/27/78-12-	24-10.5-	-	7.4-	215-		15-2-7-4-7-3-3-1-2-3-3-3-2-	-1-	-	-	-	-	0.05
30-45.6111-109.8269-2-07-			0-	M39775	-09/27/78-12-	24- 8.7-	-	7.5-	210-		15-2-7-3-7-4-3-1-2-3-3-3-2-	-1-	-	-	-	-	0.01
30-45.6225-109.8606-2-07-			0-	M39776	-09/27/78-13-	22- 9.7-	-	7.5-	190-		10-2-6-4-6-4-3-1-2-1-3-3-2-	-1-	-	-	-	-	0.18
30-45.6214-109.8586-2-07-			0-	M39777	-09/27/78-13-	23-10.7-	-	7.8-	325-		8-2-7-4-6-3-3-1-2-1-3-3-2-	-1-	-	-	-	-	0.23
30-45.5464-109.8239-2-07-			0-	M39779	-09/28/78-11-	17- 8.7-C-	-	7.4-	147-		9-2-9-4-6-4-3-1-2-3-3-3-2-	-1-	-	-	-	-	0.24
30-45.5461-109.8222-2-06-			0-	M39780	-09/28/78-11-	17- 7.8-C-	-	7.7-	190-		12-2-9-4-6-3-3-1-2-2-2-3-3-	-1-	-	-	-	-	0.39
30-45.6714-109.8800-2-06-			0-	M39785	-10/03/78-12-	15- 8.9-	-	6.9-	210-		9-3-7-4-7-3-3-1-2-4-3-3-2-	-1-	-	-	-	-	0.43
30-45.6719-109.8811-2-07-			0-	M39786	-10/03/78-12-	16- 6.3-	-	7.4-	195-		12-3-7-3-7-4-3-1-2-3-3-3-2-	-1-	-	-	-	-	0.04
30-45.6753-109.8800-2-06-			0-	M39789	-10/03/78-12-	20- 7.9-	-	7.2-	238-		6-1-7-4-7-3-3-1-2-4-4-3-2-	-1-	-	-	-	-	0.56
30-45.7067-109.9292-2-06-			0-	M39794	-10/03/78-15-	24-12.7-C-	-	7.5-	220-		12-2-9-5-8-3-3-1-2-4-3-3-2-	-1-	-	-	-	-	0.01
30-45.7083-109.9286-2-07-			0-	M39795	-10/03/78-16-	21-10.4-C-	-	7.7-	225-		8-2-9-4-6-3-3-1-2-3-4-3-2-	-1-	-	-	-	-	0.34
30-45.7109-109.9256-2-07-			0-	M39796	-10/03/78-16-	21- 9.9-	-	7.7-	243-		10-2-7-5-8-3-3-1-2-4-3-3-2-	-1-	-	-	-	-	0.49
30-45.7183-109.9133-2-07-			0-	M39798	-10/03/78-16-	20-11.9-	-	7.5-	232-		15-2-6-4-6-3-3-1-2-4-4-2-2-	-1-	-	-	-	-	0.21
30-45.7206-109.9067-2-06-			0-	M39799	-10/03/78-17-	19-12.4-	-	7.4-	230-		6-2-6-5-8-2-3-1-1-4-4-2-2-	-1-	-	-	-	-	0.22
30-45.7856-108.6589-2-08-			0-	M39800	-07/12/78-13-	24-15.0-C-	-	7.3-	3100-		16-1-6- - - - - - -4-3-1-1-	-3-8-		-270-	-	4.88
30-45.7556-108.6325-2-08-			0-	M39801	-07/12/78-14-	25-12.5-C-	-	8.1-	1400-		13-1-6- - - - - - -4-3-1-1-	-3-	-	-	-	1.71
30-45.7708-108.6025-2-08-			0-	M39802	-07/12/78-14-	26-18.5-C-	-	7.4-	1400-		10-1-6- - - - - - -4-3-1-1-	-1-	-	-	-	1.91
30-45.8861-108.5383-2-08-			0-	M39803	-07/12/78-15-	30-12.5-C-	-	8.0-	25250-		8-1-6- - - - - - -4-3-2-1-	-3-9-		-	-	1.45
30-45.8858-108.5342-2-07-			0-	M39804	-07/12/78-16-	29-25.0-C-	-	8.8-	34500-		20-1-6-6-8-2-4-1-1-4-3-2-1-	-3-	-	-	-	1.72
30-45.8861-108.5331-2-07-			0-	M39805	-07/12/78-16-	30-31.2-C-	-	8.6-	42500-		8-1-6-6-6-1-4-1-1-4-3-2-1-	-3-	-	-	-	1.73
30-45.7406-109.9283-2-06-			0-	M39806	-08/12/78-13-	30-20.0-C-	-	8.9-	410-		11-1-6-4-6-2-3-3-1-3-3-3-2-	-3-	-	-	-	0.67
30-45.7333-109.8575-2-06-			0-	M39807	-08/12/78-15-	30-13.0-C-	-	9.9-	220-		16-1-6-4-6-3-3-1-1-4-3-3-2-	-1-	-	-	-	0.63
30-45.7342-109.8561-2-06-			0-	M39808	-08/12/78-15-	30-14.0-C-	-	8.7-	220-		9-1-6-4-7-3-3-1-1-4-3-4-2-	-1-	-	-	-	0.28
30-45.7128-109.8669-2-06-			0-	M39809	-08/12/78-15-	27-14.0-C-	-	9.0-	210-		6-1-7-4-6-2-3-1-3-3-3-4-3-	-1-	-	-	-	0.21
30-45.7200-109.8678-2-07-			0-	M39811	-08/12/78-17-	29-11.5-C-	-	8.6-	220-		11-1-7-7-9-3-3-1-3-3-3-4-3-	-3-	-	-	-	0.03
30-45.4108-109.7594-2-06-			0-	M39812	-09/13/78-14-	22- 2.0-C-		-10.0-	250-		11-1-6- - -4-3-1-1-3-4-4-3-	-1-	-	-	-	0.36
30-45.3161-109.9375-2-06-			0-	M39814	-09/01/78-12-	26- 7.5-C-	-	5.9-	36-		11-2-7-3-6-3-3-1-3-3-4-4-2-	-1-	-	-	-	0.15
30-45.3183-109.9375-2-07-			0-	M39815	-09/01/78-12-	26- 8.0-C-	-	5.1-	21-		16-2-7-3-6-3-3-3-3-2-4-5-2-	-1-	-	-	-	0.19
30-45.3231-109.9403-2-07-			0-	M39816	-09/01/78-13-	25- 8.5-C-	-	4.9-	16-		12-2-7-3-6-4-3-1-3-3-4-5-2-	-1-	-	-	-	0.51
30-45.3292-109.9358-2-07-			0-	M39817	-09/01/78-13-	26- 9.5-C-	-	5.0-	26-		9-2-7- - -3-3-1-3-2-4-5-2-	-1-	-	-	-	0.32
30-45.3325-109.9347-2-07-			0-	M39818	-09/01/78-13-	26- 7.0-C-	-	4.8-	31-		8-2-7-4-1-4-3-1-3-2-3-5-2-	-1-	-	-	-	0.03
30-45.3342-109.9306-2-07-			0-	M39819	-09/01/78-14-	26-11.0-C-	-	6.0-	38-		17-2-7-4-6-3-3-1-3-2-4-5-2-	-1-	-	-	-	0.39
30-45.3367-109.9300-2-07-			0-	M39820	-09/01/78-14-	26-11.0-C-	-	6.2-	100-		12-2-7-4-6-3-3-1-3-2-4-5-2-	-1-	-	-	-	3.12

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY Concentrations reported in weight parts per billion (ppb)											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.0264-109.8303-2-07-						0-M39751	6743	122	-25	5	103	3134	7	-25	-25	-200	-4	207
30-45.0379-109.8103-2-07-						0-M39753	2643	190	-25	-4	57	675	5	-25	-25	-200	-4	244
30-45.0342-109.8050-2-07-						0-M39754	807	174	-25	5	48	201	-3	-25	-25	-200	7	111
30-45.0344-109.8022-2-07-						0-M39755	846	177	-25	6	49	186	8	-25	-25	-200	7	174
30-45.0409-109.8039-2-07-						0-M39756	2305	306	-25	8	36	600	-3	-25	30	-200	11	215
30-45.0469-109.7961-2-07-						0-M39757	1643	122	-25	7	49	508	4	-25	-25	-200	6	244
30-45.0569-109.7889-2-06-						0-M39758	1619	76	-25	6	36	558	7	-25	-25	-200	8	119
30-45.0622-109.7856-2-07-						0-M39759	664	119	-25	-4	-25	160	8	-25	-25	-200	6	-50
30-45.0672-109.7864-2-07-						0-M39760	798	153	-25	10	33	230	10	-25	-25	-200	7	-50
30-45.0769-109.7931-2-06-						0-M39762	1278	128	-25	5	55	237	10	-25	-25	-200	-4	76
30-45.0806-109.7972-2-07-						0-M39763	1667	248	-25	5	28	488	6	-25	-25	-200	5	160
30-45.0992-109.7753-2-07-						0-M39764	901	128	-25	-4	51	409	12	-25	-25	-200	9	349
30-45.1069-109.7567-2-07-						0-M39765	938	208	-25	5	28	337	13	-25	-25	-200	7	76
30-45.1144-109.7544-2-07-						0-M39766	2092	137	-25	-4	36	439	-3	-25	-25	-200	9	218
30-45.1167-109.7475-2-07-						0-M39767	2053	251	-25	5	52	320	17	-25	-25	-200	9	137
30-45.5942-109.7550-2-07-						0-M39768	35747	205	-25	9	52	6642	10	30	-25	499	11	418
30-45.5961-109.7764-2-06-						0-M39769	34013	322	-25	5	59	5750	6	-25	-25	537	14	320
30-45.6192-109.7744-2-07-						0-M39772	31638	-55	-25	-4	26	3739	-3	-25	-25	463	12	-50
30-45.6119-109.8275-2-07-						0-M39774	35075	-55	-25	-4	-25	5888	-3	-25	-25	530	-4	-50
30-45.6111-109.8269-2-07-						0-M39775	35256	91	-25	-4	-25	5427	4	-25	-25	644	6	-50
30-45.6225-109.8606-2-07-						0-M39776	32584	113	-25	-4	-25	4285	-3	29	-25	526	8	-50
30-45.6214-109.8586-2-07-						0-M39777	55198	-55	-25	-4	-25	10920	-3	42	-25	1011	13	-50
30-45.5464-109.8239-2-07-						0-M39779	23500	79	-25	-4	-25	2169	-3	-25	-25	396	-4	-50
30-45.5461-109.8222-2-06-						0-M39780	33530	137	-25	-4	-25	3481	-3	-25	-25	484	7	284
30-45.6714-109.8800-2-06-						0-M39785	37889	159	-25	-4	27	5248	-3	27	-25	722	9	311
30-45.6719-109.8811-2-07-						0-M39786	34592	66	-25	-4	32	5088	-3	37	-25	662	8	667
30-45.6753-109.8800-2-06-						0-M39789	42739	109	-25	-4	-25	6600	-3	29	-25	853	12	150
30-45.7067-109.9292-2-06-						0-M39794	36749	-55	-25	-4	33	5872	-3	31	-25	673	11	72
30-45.7093-109.9286-2-07-						0-M39795	38360	88	-25	-4	-25	5806	-3	43	-25	739	15	332
30-45.7108-109.9256-2-07-						0-M39796	40473	128	-25	-4	-25	6429	-3	32	-25	777	9	-50
30-45.7183-109.9133-2-07-						0-M39798	40007	171	-25	-4	-25	6310	-3	39	-25	836	16	59
30-45.7206-109.9067-2-06-						0-M39799	36873	60	-25	-4	35	5817	-3	29	-25	698	12	275
30-45.7856-108.6589-2-08-						0-M39800	207000	618	-25	10	83	151000	21	-25	-25	5021	16	343
30-45.7556-108.6325-2-08-						0-M39801	93695	301	-25	6	61	76929	164	-25	-25	2124	-4	216
30-45.7708-108.6025-2-08-						0-M39802	108000	354	-25	11	28	62797	10	-25	-25	2090	-4	494
30-45.8861-108.5383-2-08-						0-M39803	28097	475	-25	-4	74	190000	97	31	-25	3366	7	976
30-45.8859-108.5342-2-07-						0-M39804	297000	878	37	13	89	178000	45	-25	74	6534	35	566
30-45.8861-108.5331-2-07-						0-M39805	231000	644	69	21	141	198000	37	-25	150	6650	51	363
30-45.7406-109.9283-2-06-						0-M39806	51572	143	-25	7	413	20534	36	29	67	1387	30	-50
30-45.7333-109.8575-2-06-						0-M39807	40365	91	36	5	45	6479	10	67	138	1335	32	-50
30-45.7342-109.8561-2-06-						0-M39808	40403	88	35	-4	114	6347	13	50	136	1323	30	126
30-45.7128-109.8669-2-06-						0-M39809	34852	-55	33	-4	47	4887	13	56	115	1157	31	-50
30-45.7200-109.8678-2-07-						0-M39811	39102	197	-25	17	-25	5447	14	60	-25	736	7	-50
30-45.4108-109.7594-2-06-						0-M39812	39421	111	-25	-4	-25	11021	18	69	34	995	11	81
30-45.3161-109.9375-2-06-						0-M39814	3373	-55	-25	-4	33	868	9	-25	-25	-200	-4	-50
30-45.3183-109.9375-2-07-						0-M39815	1763	-55	-25	-4	28	438	7	-25	-25	-200	-4	-50
30-45.3231-109.9403-2-07-						0-M39816	1510	77	-25	-4	-25	353	7	-25	-25	-200	-4	-50
30-45.3292-109.9358-2-07-						0-M39817	2505	97	-25	-4	-25	581	8	-25	-25	-200	-4	-50
30-45.3325-109.9347-2-07-						0-M39818	3681	138	-25	-4	36	726	6	-25	-25	-200	-4	-50
30-45.3342-109.9306-2-07-						0-M39819	4275	87	-25	-4	-25	811	14	-25	-25	-200	-4	-50
30-45.3367-109.9300-2-07-						0-M39820	12466	156	-25	-4	-25	2680	11	54	54	518	-4	-50

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
							TIME SAMPLED																									
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (#) UNITS IN ppb
30-45.5931-108.4119-2-08-						0-M39822-09/07/78-12-	30-21.2-C-		-	7.1-	1600-																							1.96
30-45.5917-108.4108-2-07-						0-M39823-09/07/78-13-	34-21.9-C-		-	8.5-	630-																							0.48
30-45.4636-108.5300-2-07-						0-M39824-09/08/78-16-	29-18.2-C-		-	7.9-	950-																							2.09
30-45.4869-109.2569-2-06-						0-M39825-08/14/78-11-	30-13.5-C-		-	8.6-	650-																							0.65
30-45.4856-109.2581-2-07-						0-M39826-08/14/78-11-	30-14.0-C-		-	8.4-	720-																							1.41
30-45.4853-109.3050-2-07-						0-M39827-08/14/78-12-	29-15.0-C-		-	8.9-	700-																							0.26
30-45.4758-109.3361-2-08-						0-M39828-08/16/78- 9-	25-18.0-C-		-	9.2-	770-																							0.35
30-45.4794-109.3250-2-07-						0-M39829-08/16/78-10-	25-13.0-		-	9.2-	900-																							1.30
30-45.4842-109.3069-2-07-						0-M39830-08/16/78-10-	25-15.5-C-		-	8.7-	800-																							1.07
30-45.4692-109.3006-2-08-						0-M39831-08/16/78-10-	25-12.5-C-		-	8.6-	1200-																							4.20
30-45.4647-109.3144-2-07-						0-M39833-08/16/78-10-	25- 9.5-C-		-	8.9-	900-																							1.12
30-45.4661-109.3175-2-07-						0-M39834-08/16/78-11-	25-13.5-C-		-	8.6-	800-																							1.87
30-45.4311-109.2558-2-07-						0-M39838-08/16/78-12-	25-14.0-C-		-	9.2-	990-																							1.17
30-45.4325-109.2631-2-08-						0-M39839-08/16/78-13-	25-14.0-C-		-	9.0-	710-																							0.60
30-45.4294-109.2789-2-08-						0-M39840-08/16/78-13-	25-12.0-C-		-	8.6-	625-																							0.40
30-45.4203-109.2911-2-07-						0-M39841-08/16/78-13-	25-11.5-C-		-	9.1-	385-																							0.43
30-45.4114-109.3072-2-08-						0-M39843-08/16/78-14-	25-12.5-C-		-	8.9-	500-																							2.81
30-45.4628-109.9422-2-07-						0-M39844-08/19/78-11-	27- 8.5-C-		-	6.3-	370-																							0.31
30-45.4600-109.9361-2-06-						0-M39846-08/19/78-12-	29- 8.5-C-		-	6.4-	330-																							0.38
30-45.4558-109.9378-2-06-						0-M39847-08/19/78-12-	29- 7.0-C-		-	6.4-	300-																							0.13
30-45.4444-109.9472-2-07-						0-M39849-08/19/78-13-	29- 6.5-C-		-	6.7-	150-																							0.54
30-45.4425-109.9436-2-07-						0-M39850-08/19/78-14-	29-10.0-C-		-	6.4-	110-																							0.47
30-45.3772-109.9992-2-07-						0-M39852-08/23/78-10-	22- 7.0-C-		-	6.9-	48-																							0.92
30-45.3786-109.9919-2-07-						0-M39853-08/23/78-11-	27- 5.5-C-		-	7.0-	15-																							0.38
30-45.3883-109.9833-2-06-						0-M39854-08/23/78-11-	25-10.0-C-		-	6.7-	151-																							0.18
30-45.3956-109.9750-2-06-						0-M39855-08/23/78-12-	27- 6.5-C-		-	7.2-	123-																							0.18
30-45.3978-109.9631-2-06-						0-M39856-08/23/78-12-	27- 2.0-C-		-	7.0-	55-																							0.34
30-45.3975-109.9569-2-07-						0-M39857-08/23/78-13-	27- 6.0-C-		-	6.9-	45-																							0.19
30-45.2497-109.9747-2-07-						0-M39858-08/25/78-14-	25- 9.0-C-		-	8.9-	85-																							1.91
30-45.2539-109.9744-2-07-						0-M39859-08/26/78-14-	25-11.5-C-		-	4.8-	14-																							0.02
30-45.2558-109.9703-2-07-						0-M39860-08/26/78-14-	22- 1.0-C-		-	5.5-	43-																							0.63
30-45.2569-109.9631-2-07-						0-M39861-08/26/78-15-	22-11.0-C-		-	5.5-	41-																							0.15
30-45.2636-109.9614-2-07-						0-M39862-08/26/78-15-	22- 0.5-C-		-	6.0-	42-																							1.39
30-45.2656-109.9528-2-07-						0-M39863-08/26/78-16-	22- 8.5-C-		-	5.0-	32-																							0.97
30-45.2750-109.9500-2-07-						0-M39864-08/26/78-16-	21- 9.0-C-		-	5.5-	40-																							0.82
30-45.3008-109.9386-2-07-						0-M39865-08/26/78-17-	22-11.0-C-		-	7.0-	16-																							1.04
30-45.5714-108.4197-2-08-						0-M39867-09/07/78-13-	36-15.2-C-		-	7.4-	1100-																							0.49
30-45.5419-108.4239-2-07-						0-M39868-09/07/78-14-	31-20.2-C-		-	8.2-	1100-																							2.47
30-45.5039-108.4558-2-08-						0-M39869-09/07/78-15-	32-15.2-C-		-	7.4-	1200-																							0.97
30-45.4056-109.9528-2-07-						0-M39870-08/23/78-13-	27- 2.5-C-		-	7.2-	250-																							0.01
30-45.4075-109.9517-2-07-						0-M39872-08/23/78-15-	27-10.5-C-		-	7.6-	60-																							0.23
30-45.4167-109.9167-2-06-						0-M39873-08/23/78-	-		27-	8.5-C-	-	7.3-	285-																							0.01
30-45.5361-108.4286-2-08-						0-M39879-09/07/78-16-	32-14.4-C-		-	8.4-	1000-																							0.35
30-45.5636-108.4258-2-07-						0-M39881-09/07/78-17-	34-20.4-C-		-	8.4-	1250-																							3.66
30-45.5756-108.4253-2-07-						0-M39882-09/08/78-18-	33-20.0-C-		-	8.2-	1200-																							3.79
30-45.3092-109.9319-2-07-						0-M39883-09/01/78-11-	25-10.0-C-		-	7.0-	37-																							0.01
30-45.4956-108.4575-2-08-						0-M39884-09/08/78-11-	20-13.0-		-	7.5-	750-																							0.16
30-45.4992-108.4658-2-06-						0-M39886-09/08/78-12-	24-19.2-C-		-	7.6-	2000-																							3.17
30-45.4972-108.4675-2-07-						0-M39887-09/08/78-12-	25-16.1-C-		-	7.4-	1810-																							2.02
30-45.4897-108.4653-2-08-						0-M39888-09/08/78-12-	25-13.0-C-		-	9.4-	900-																							1.21
30-45.4906-108.4664-2-08-						0-M39889-09/08/78-12-	26-17.7-C-		-	9.1-	800-																							0.28

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY Concentrations reported in weight parts per billion (ppb)											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.5931-108.4119-2-08-						0-439822	174000	485	-25	54	68	68942	677	89	-25	3013	-4	403
30-45.5917-108.4108-2-07-						0-439823	63207	277	-25	-4	244	32779	66	98	45	1560	10	97
30-45.4636-108.5300-2-07-						0-439824	71269	267	-25	-4	705	38556	47	51	-25	1243	-4	121
30-45.4869-109.2569-2-06-						0-439825	66477	234	-25	-4	60	19775	11	47	-25	1046	-4	86
30-45.4856-109.2581-2-07-						0-439826	74983	1257	-25	84	36	30998	41	-25	-25	917	-4	394
30-45.4853-109.3050-2-07-						0-439827	68245	128	-25	-4	123	19540	102	57	-25	1192	-4	73
30-45.4758-109.3361-2-08-						0-439828	67873	218	-25	-4	-25	18379	54	-25	-25	688	-4	772
30-45.4794-109.3250-2-07-						0-439829	109000	228	-25	14	93	35478	36	68	-25	2007	-4	157
30-45.4842-109.3069-2-07-						0-439830	75068	182	-25	-4	69	29597	142	-25	-25	876	-4	77
30-45.4692-109.3006-2-08-						0-439831	120000	301	-25	-4	121	43332	25	92	-25	2289	-4	366
30-45.4647-109.3144-2-07-						0-439833	90561	265	-25	-4	51	32521	22	84	-25	1672	-4	101
30-45.4661-109.3175-2-07-						0-439834	65544	296	-25	-4	54	24976	43	57	-25	1298	-4	123
30-45.4311-109.2558-2-07-						0-439838	72703	323	33	-4	44	23997	23	150	74	1875	12	104
30-45.4325-109.2631-2-08-						0-439839	116000	356	-25	-4	620	26737	22	109	-25	1996	16	215
30-45.4234-109.2789-2-08-						0-439840	19610	291	33	-4	76	4920	65	82	66	789	13	68
30-45.4203-109.2911-2-07-						0-439841	55484	196	-25	-4	29	16984	30	-25	-25	413	-4	-50
30-45.4114-109.3072-2-08-						0-439843	105000	300	-25	13	54	22433	20	83	-25	1460	5	301
30-45.4628-109.9422-2-07-						0-439844	55995	301	50	-4	80	24975	27	135	85	1770	38	120
30-45.4600-109.9361-2-06-						0-439846	59935	228	-25	-4	-25	21837	19	112	67	1367	16	55
30-45.4558-109.9378-2-06-						0-439847	49399	136	42	25	81	19397	19	99	69	1323	13	70
30-45.4444-109.9472-2-07-						0-439849	27019	170	-25	-4	-25	6381	19	-25	-25	-200	-4	99
30-45.4425-109.9436-2-07-						0-439850	21818	-55	-25	-4	-25	3559	11	-25	-25	-200	-4	-50
30-45.3772-109.9992-2-07-						0-439852	5100	-55	-25	-4	-25	2019	30	-25	-25	-200	-4	-50
30-45.3796-109.9919-2-07-						0-439853	1332	-55	-25	-4	-25	522	68	-25	-25	-200	-4	-50
30-45.3883-109.9833-2-06-						0-439854	18302	-55	-25	-4	-25	10861	25	-25	-25	-200	-4	-50
30-45.3956-109.9750-2-06-						0-439855	21398	-55	-25	-4	-25	4504	22	-25	-25	-200	-4	-50
30-45.3978-109.9631-2-06-						0-439856	4630	-55	-25	-4	-25	3345	30	-25	-25	-200	-4	-50
30-45.3975-109.9569-2-07-						0-439857	4163	-55	-25	-4	-25	3077	24	-25	-25	-200	-4	-50
30-45.2497-109.9747-2-07-						0-439858	9959	-55	-25	-4	-25	2918	12	37	-25	282	10	-50
30-45.2539-109.9744-2-07-						0-439859	1749	-55	-25	-4	-25	387	12	-25	-25	-200	13	-50
30-45.2558-109.9703-2-07-						0-439860	5749	-55	-25	-4	-25	1012	19	-25	-25	-200	10	-50
30-45.2569-109.9631-2-07-						0-439861	4645	-55	-25	-4	49	1253	11	-25	38	-200	10	63
30-45.2636-109.9614-2-07-						0-439862	5070	68	-25	-4	-25	1196	8	41	-25	211	15	-50
30-45.2656-109.9528-2-07-						0-439863	3369	-55	-25	-4	62	572	13	-25	-25	-200	7	-50
30-45.2750-109.9500-2-07-						0-439864	4254	-55	-25	-4	-25	882	7	-25	-25	-200	5	-50
30-45.3008-109.9386-2-07-						0-439865	2448	-55	-25	-4	399	623	37	29	-25	212	15	-50
30-45.5714-108.4197-2-08-						0-439867	106000	179	-25	-4	68	37695	14	125	-25	2058	26	103
30-45.5419-108.4239-2-07-						0-439868	86816	184	-25	-4	73	35402	33	88	-25	1734	23	188
30-45.5039-108.4558-2-08-						0-439869	100000	219	-25	7	72	39078	15	132	-25	2132	30	160
30-45.4056-109.9528-2-07-						0-439870	39911	95	-25	-4	55	13455	13	56	-25	698	22	-50
30-45.4075-109.9517-2-07-						0-439872	7033	-55	-25	-4	-25	2819	18	-25	-25	-200	11	-50
30-45.4167-109.9167-2-06-						0-439873	44570	-55	-25	-4	-25	14736	21	64	-25	664	25	-50
30-45.5361-108.4286-2-08-						0-439879	4223	-55	-25	-4	32	1410	28	-25	-25	-200	10	-50
30-45.5536-108.4258-2-07-						0-439881	76512	-55	-25	-4	32	40171	26	75	-25	1591	24	-50
30-45.5755-108.4253-2-07-						0-439882	102000	117	-25	-4	80	52590	29	88	-25	2000	27	-50
30-45.3092-109.9319-2-07-						0-439883	4645	159	40	-4	88	1326	4	49	59	493	29	67
30-45.4956-108.4575-2-08-						0-439884	82527	236	46	6	102	41334	1316	147	69	2113	40	173
30-45.4992-108.4658-2-06-						0-439886	214000	580	-25	5	623	97449	3563	-25	-25	1588	26	638
30-45.4972-108.4675-2-07-						0-439887	184000	290	-25	5	81	83217	77	-25	-25	1367	32	465
30-45.4897-108.4653-2-08-						0-439888	956	191	-25	-4	-25	284	-3	-25	-25	-200	-4	122
30-45.4906-108.4664-2-08-						0-439889	774	226	-25	-4	-25	246	-3	-25	-25	-200	-4	180

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																													U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (#) UNITS IN ppb
30-45.4841-108.4608-2-08-						0-439890-09/08/78-13-	22	15.9	C	-	-	9.0	900	-	2	1	7	-	-	-	-	-	-	-4	-3	-3	2	-3	-4	6	32	-	0.11
30-45.4917-108.4703-2-08-						0-439891-09/08/78-13-	22	15.5	-	-	-	6.8	1200	-	2	1	7	-	-	-	-	-	-	-4	-3	-3	2	-3	-3	4	36	22	1.62
30-45.4800-108.4733-2-07-						0-439892-09/08/78-14-	21	17.1	C	-	-	7.9	550	-	4	1	7	5	6	3	3	3	2	4	3	3	2	-3	-	-	-	-	-	1.08
30-45.4767-108.4764-2-08-						0-439893-09/08/78-14-	25	17.5	C	-	-	6.9	1200	-	9	1	6	-	-	-	-	-	-	-4	-3	-3	2	-3	-4	4	20	-	3.63
30-45.4628-108.5286-2-08-						0-439895-09/08/78-16-	27	15.5	-	-	-	7.2	1120	-	11	1	7	-	-	-	-	-	-	-4	-3	-3	1	-3	-4	10	-	-	-	2.51
30-45.4542-108.5553-2-08-						0-439896-09/08/78-16-	25	13.3	-	-	-	6.9	1450	-	9	1	6	-	-	-	-	-	-	-4	-3	-3	2	-3	-3	-	25	20	1.01
30-45.4539-108.5586-2-07-						0-439897-09/08/78-16-	26	16.4	C	-	-	7.8	780	-	9	1	7	5	6	3	3	2	2	4	3	3	1	-3	-	-	-	-	-	0.55
30-45.6275-108.4447-2-07-						0-439893-06/29/78-10-	21	15.2	-	-	-	7.8	1300	-	18	1	6	3	6	3	6	3	4	1	2	4	3	3	3	-3	-	-	-	-	3.58
30-45.6269-108.4036-2-08-						0-439900-06/29/78-10-	25	14.0	C	-	-	6.6	1900	-	11	1	6	-	-	-	-	-	-	-4	-3	-3	2	-3	-8	8	60	-	0.99
30-45.6392-108.3994-2-08-						0-439901-06/29/78-11-	24	13.0	C	-	-	6.7	2400	-	11	1	6	-	-	-	-	-	-	-4	-2	-3	3	-3	-4	4	30	15	3.35
30-45.6458-108.3867-2-07-						0-439902-06/29/78-11-	24	19.0	-	-	-	5.6	850	-	11	1	6	5	6	2	4	2	2	4	2	3	2	-3	-	-	-	-	-	0.67
30-45.6467-108.3858-2-07-						0-439903-06/29/78-11-	28	15.0	-	-	-	5.5	200	-	13	1	1	3	6	3	3	1	1	4	3	3	2	-3	-	-	-	-	-	3.05
30-45.6511-108.3967-2-07-						0-439904-06/29/78-11-	33	17.0	-	-	-	6.1	1700	-	11	1	6	5	6	2	3	1	1	4	3	3	2	-3	-	-	-	-	-	3.46
30-45.6658-108.3819-2-08-						0-439905-06/29/78-13-	33	25.0	C	-	-	7.1	4700	-	9	1	6	-	-	-	-	-	-	-4	-3	-2	2	-3	-	-	30	-	-	3.68
30-45.6781-108.3683-2-07-						0-439906-06/29/78-13-	34	22.0	C	-	-	7.5	880	-	9	1	6	4	6	3	4	2	2	4	3	3	2	-3	-	-	-	-	-	1.68
30-45.6900-108.3667-2-07-						0-439907-06/29/78-14-	33	24.0	-	-	-	7.7	2900	-	13	1	6	4	6	2	2	1	1	4	3	4	2	-3	-	-	-	-	-	0.68
30-45.6953-108.3617-2-07-						0-439908-06/30/78-11-	24	17.0	C	-	-	7.7	900	-	11	1	6	3	6	3	3	2	2	4	3	2	2	-3	-	-	-	-	-	0.43
30-45.7197-108.3200-2-07-						0-439909-06/30/78-12-	30	13.0	-	-	-	7.0	950	-	11	1	1	3	1	3	3	1	2	4	3	3	1	-3	-	-	-	-	-	3.88
30-45.6978-108.4964-2-08-						0-439910-09/14/78-11-	18	15.2	C	-	-	6.9	1200	-	6	1	6	-	-	-	-	-	-	-4	-3	-3	2	-3	-4	2	12	4	-	1.34
30-45.6553-108.4975-2-07-						0-439911-09/14/78-11-	20	13.5	C	-	-	7.8	1100	-	18	1	6	4	6	3	4	1	2	4	4	3	2	-3	-	-	-	-	-	2.10
30-45.6322-108.4908-2-06-						0-439912-09/14/78-12-	21	11.0	C	-	-	7.0	900	-	12	1	6	-	-	-	-	-	-	-4	-4	-3	2	-3	-	-	-	-	-	15.46
30-45.5825-108.4494-2-08-						0-439913-09/14/78-13-	22	16.2	C	-	-	6.9	850	-	18	1	6	-	-	-	-	-	-	-4	-3	-3	2	-3	-3	4	35	10	-	1.49
30-45.5819-108.4508-2-06-						0-439914-09/14/78-13-	21	13.4	C	-	-	7.3	850	-	13	1	6	5	6	3	3	1	1	3	3	3	2	-3	-	-	-	-	-	1.96
30-45.5800-108.4369-2-07-						0-439915-09/14/78-13-	21	13.9	C	-	-	7.9	1050	-	18	1	6	4	6	3	3	1	2	3	4	3	2	-3	-	-	-	-	-	2.95
30-45.6172-108.4053-2-08-						0-439917-09/14/78-14-	22	17.5	C	-	-	7.2	1220	-	11	1	6	-	-	-	-	-	-	-4	-4	-3	2	-3	-3	8	65	-	-	0.71
30-45.6453-108.3008-2-07-						0-439918-09/14/78-15-	23	18.2	C	-	-	7.6	2720	-	18	1	6	6	6	3	3	1	1	4	3	3	2	-3	-	-	-	-	-	3.26
30-45.6214-108.3006-2-08-						0-439919-09/14/78-16-	22	14.9	C	-	-	6.9	700	-	13	1	6	-	-	-	-	-	-	-4	-3	-3	2	-3	-	-	-	-	-	1.55
30-45.7008-108.3378-2-08-						0-439923-09/14/78-17-	20	19.8	C	-	-	6.7	3800	-	11	1	6	-	-	-	-	-	-	-4	-3	-3	2	-3	-4	-	-	-	-	6.52
30-45.7078-108.3286-2-08-						0-439924-09/14/78-17-	21	17.1	-	-	-	6.8	2500	-	9	1	6	-	-	-	-	-	-	-4	-3	-3	2	-3	-3	6	65	30	-	4.08
30-45.7114-108.3247-2-08-						0-439925-09/14/78-18-	20	15.2	C	-	-	6.9	3110	-	4	1	6	-	-	-	-	-	-	-4	-3	-3	2	-3	-5	6	65	-	-	2.07
30-45.4450-108.6492-2-07-						0-439926-09/15/78-13-	22	12.1	C	-	-	7.7	300	-	11	1	6	5	6	3	3	1	2	3	4	3	1	-3	-	-	-	-	-	0.42
30-45.4094-108.6319-2-07-						0-439931-09/15/78-15-	24	12.9	C	-	-	7.9	1100	-	13	1	6	5	6	3	3	3	2	4	4	3	2	-3	-	-	-	-	-	0.74
30-45.4178-108.6294-2-07-						0-439932-09/15/78-15-	25	20.0	C	-	-	8.4	750	-	18	1	6	5	6	3	3	1	2	4	4	3	2	-3	-	-	-	-	-	0.33
30-45.4367-108.6217-2-07-						0-439933-09/15/78-16-	25	14.9	C	-	-	7.7	420	-	11	1	6	4	6	3	3	1	1	3	3	3	2	-3	-	-	-	-	-	1.11
30-45.4375-108.6194-2-07-						0-439934-09/15/78-16-	25	14.9	C	-	-	7.6	500	-	9	1	6	5	6	2	3	3	2	3	4	3	2	-3	-	-	-	-	-	0.35
30-45.4286-108.6097-2-08-						0-439935-09/15/78-16-	25	18.9	-	-	-	7.0	800	-	11	1	6	-	-	-	-	-	-	-4	-3	-2	2	-3	-3	6	55	35	-	1.56
30-45.4294-108.6108-2-07-						0-439936-09/15/78-16-	25	15.5	-	-	-	8.3	550	-	2	1	6	5	6	3	3	1	2	4	3	3	2	-3	-	-	-	-	-	0.91
30-45.4247-108.5758-2-08-						0-439937-09/15/78-17-	24	11.9	C	-	-	7.1	1230	-	13	1	6	-	-	-	-	-	-	-4	-3	-3	2	-3	-3	6	35	32	-	0.36
30-45.4236-108.5794-2-07-						0-439938-09/15/78-17-	24	14.0	C	-	-	7.9	1400	-	9	1	6	4	6	3	3	2	2	3	4	3	2	-3	-	-	-	-	-	0.28
30-45.4272-108.5608-2-07-						0-439939-09/15/78-17-	21	13.8	C	-	-	7.8	1050	-	6	1	6	5	6	3	3	2	1	3	4	3	2	-3	-	-	-	-	-	0.91
30-45.5153-108.3906-2-07-						0-439940-09/24/78-12-	23	11.5	-	-	-	8.0	900	-	16	1	7	5	7	3	2	4	1	2	3	2	1	-3	-	-	-	-	-	1.91
30-45.5142-108.3908-2-08-						0-439941-09/24/78-12-	23	13.0	C	-	-	7.0	2300	-	9	1	7	5	7	-	-	3	-	-2	-3	-2	1	-3	7	6	-	-	-	6.43
30-45.4842-108.4003-2-07-						0-439942-09/24/78-12-	21	12.0	C	-	-	8.2	700	-	10	1	6	5	6	3	3	3	1	3	3	2	1	-3	-	-	-	-	-	1.00
30-45.4744-108.3747-2-08-						0-439943-09/24/78-14-	21	14.5	C	-	-	7.5	1575	-	5	1	2	-	-	-	-	1	-	-4	-3	-3	1	-1	-	-	-	-	-	1.08
30-45.4553-108.4017-2-07-						0-439944-09/24/78-15-	21	13.0	-	-	-	7.9	1675	-	13	1	1	5	6	2	3	1	2	2	2	2	1	-3	-	-	-	-	-	1.17
30-45.4283-108.3819-2-08-						0-439945-09/24/78-16-	25	15.0	C	-	-	7.2	1150	-	15	1	1	-	-	-	-	1	-	-4	-3	-2	1	-1	-3	-	50	-	-	0.30
30-45.4269-108.3822-2-07-						0-439946-09/24/78-16-	25	14.0	-	-	-	7.9	500	-	11	1	6	5	6	3	3	2	2	3	3	2	1	-3	-	-	-	-	-	0.23
30-45.4219-108.4183-2-07-						0-439947-09/24/78-16-	23	14.0	-	-	-	8.3	725	-	13	1	6	3	6	2	3	1	2	4	3	2	1	-3	-	-	-	-	-	0.49
30-45.4208-108.4494-2-07-						0-439948-09/24/78-16-	24	16.0	-	-	-	8.2	500	-	6	1	6	6	6	2	3	1	2	4	3	2	1	-3	-	-	-	-	-	0.35
30-45.4308-108.4772-2-09-						0-439949-09/24/78-16-	25	14.0	C	-	-	7.3	1475	-	13	1	6	-	-	-	-	1	-	-4	-3	-2	1	-9	-5	5	30	12	-	51.96*
30-45.4278-108.4839-2-07-						0-439950-09/24/78-17-	27	14.0	-	-	-	8.0	700	-	9	1	6	5	7	3	3	2	2	4	4	2	1	-3	-	-	-	-	-	0.31

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(2)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY Concentrations reported in weight parts per billion (ppb)											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.4861-108.4608-2-08-						0-M33890	866	164	-25	11	39	184	6	-25	-25	-200	-4	200
30-45.4917-108.4703-2-08-						0-M33891	101000	201	-25	23	100	48192	26	-25	-25	820	-4	868
30-45.4800-108.4733-2-07-						0-M33892	65496	88	-25	13	84	34744	21	-25	-25	330	-4	189
30-45.4767-108.4764-2-08-						0-M33893	116000	91	-25	42	78	52684	9	-25	-25	920	-4	325
30-45.4628-108.5286-2-08-						0-M33895	93112	73	-25	8	-25	39505	-3	-25	-25	557	-4	311
30-45.4542-108.5553-2-08-						0-M33896	89728	-55	-25	16	33	54652	34	-25	-25	639	-4	210
30-45.4539-108.5586-2-07-						0-M33897	67877	134	-25	9	62	34185	16	-25	-25	406	-4	143
30-45.6275-108.4447-2-07-						0-M33899	114000	215	-25	17	33	50388	10	-25	-25	1384	-4	225
30-45.6269-108.4036-2-08-						0-M33900	169000	439	39	84	-25	65748	13	-25	-25	1963	-4	530
30-45.6392-108.3994-2-08-						0-M33901	195000	433	41	22	134	84603	4921	-25	53	2286	-4	355
30-45.6458-108.3867-2-07-						0-M33902	88190	143	29	15	35	39933	35	-25	30	1135	-4	171
30-45.6467-108.3858-2-07-						0-M33903	195000	419	-25	14	31	85280	15	-25	-25	2036	-4	329
30-45.6511-108.3967-2-07-						0-M33904	158000	428	-25	18	-25	76164	14	-25	-25	1806	-4	324
30-45.6658-108.3819-2-08-						0-M33905	299000	774	41	23	113	137000	233	-25	-25	3378	-4	1168
30-45.6781-108.3683-2-07-						0-M33906	90407	286	-25	8	27	41088	28	-25	-25	1123	-4	221
30-45.6800-108.3667-2-07-						0-M33907	230000	636	53	21	86	178000	21	-25	44	3813	-4	482
30-45.6853-108.3617-2-07-						0-M33908	91277	143	34	13	63	42358	30	-25	-25	1377	-4	182
30-45.7197-108.3200-2-07-						0-M33909	79878	308	-25	10	48	38178	-3	-25	-25	1233	-4	156
30-45.6978-108.4964-2-08-						0-M33910	105000	290	-25	97	50	40922	6	-25	-25	1348	-4	346
30-45.6553-108.4975-2-07-						0-M33911	95749	88	-25	17	56	38321	11	-25	35	1256	-4	202
30-45.6322-108.4908-2-06-						0-M33912	51145	238	-25	32	79	41581	6	-25	-25	1036	-4	156
30-45.5825-108.4494-2-08-						0-M33913	92560	267	-25	13	38	35539	13	-25	-25	1182	-4	672
30-45.5819-108.4508-2-06-						0-M33914	84026	237	26	14	30	38423	35	-25	59	1275	-4	214
30-45.5800-108.4369-2-07-						0-M33915	93048	287	28	14	29	47250	11	-25	29	1592	-4	304
30-45.6172-108.4053-2-08-						0-M33917	102000	253	-25	14	4058	49117	1160	-25	-25	1378	-4	1548
30-45.6453-108.3008-2-07-						0-M33918	196000	626	54	22	207	131000	28	-25	80	2976	-4	471
30-45.6214-108.3006-2-08-						0-M33919	80609	57	-25	2111	122	36786	5	-25	36	1194	-4	229
30-45.7008-108.3378-2-08-						0-M33923	375000	887	40	204	94	155000	28	-25	-25	4041	-4	693
30-45.7078-108.3286-2-08-						0-M33924	215000	450	39	18	3263	90884	563	-25	-25	2531	-4	505
30-45.7114-108.3247-2-08-						0-M33925	227000	712	29	21	2640	145000	1036	-25	36	3309	-4	567
30-45.4450-108.6492-2-07-						0-M33926	48016	301	-25	10	46	13410	33	-25	33	660	-4	252
30-45.4094-108.6319-2-07-						0-M33931	117000	402	35	20	93	48875	173	-25	-25	1637	-4	370
30-45.4178-108.6294-2-07-						0-M33932	64074	451	-25	16	39	46561	15	-25	58	1151	-4	200
30-45.4367-108.6217-2-07-						0-M33933	57664	286	39	14	50	21886	13	-25	82	1051	-4	195
30-45.4375-108.6194-2-07-						0-M33934	64536	147	-25	12	79	18161	96	-25	37	779	-4	296
30-45.4296-108.6097-2-08-						0-M33935	86037	114	-25	134	49	36245	5	-25	-25	605	-4	697
30-45.4294-108.6108-2-07-						0-M33936	71676	-55	-25	5	42	29969	10	-25	-25	437	-4	215
30-45.4247-108.5758-2-08-						0-M33937	128000	154	-25	25	4201	58572	369	-25	-25	1272	-4	373
30-45.4236-108.5794-2-07-						0-M33938	154000	101	-25	11	93	67312	37	-25	-25	1738	-4	294
30-45.4272-108.5608-2-07-						0-M33939	123000	-55	-25	10	104	51378	69	-25	-25	1081	-4	298
30-45.5153-108.3906-2-07-						0-M33940	109000	202	-25	16	127	39449	108	-25	-25	843	-4	329
30-45.5142-108.3908-2-08-						0-M33941	276000	345	-25	20	390	99347	2426	-25	-25	2254	-4	800
30-45.4842-108.4003-2-07-						0-M33942	90284	143	-25	8	104	34496	333	-25	-25	415	-4	295
30-45.4744-108.3747-2-08-						0-M33943	39330	-55	-25	-4	-25	35441	-3	-25	-25	-200	-4	103
30-45.4553-108.4017-2-07-						0-M33944	189000	321	-25	13	104	95970	154	-25	-25	1868	-4	379
30-45.4283-108.3819-2-08-						0-M33945	2102	-55	-25	8	-25	543	9	-25	-25	-200	-4	83
30-45.4259-108.3822-2-07-						0-M33946	81147	105	-25	-4	47	27828	31	-25	-25	423	-4	211
30-45.4219-108.4183-2-07-						0-M33947	71922	112	-25	-4	48	42793	11	-25	-25	615	-4	177
30-45.4208-108.4494-2-07-						0-M33948	61351	130	-25	-4	82	37395	6	-25	-25	442	-4	135
30-45.4308-108.4772-2-08-						0-M33949	87910	224	-25	7	145	99358	11	-25	-25	1275	-4	546
30-45.4278-108.4839-2-07-						0-M33950	82621	248	-25	-4	39	47076	18	-25	-25	592	-4	219

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
							TIME SAMPLED																										
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (θ) UNITS IN ppb
30-	45.5131-	108.4475-	2-	08-		0-439951-	09/26/78-	14-	24-	15.0-	C-	-	6.8-	1000-		11-	1-	6-	3-	6-	-	-	-	-4-	2-	2-	1-	-3-	3-	-	-	-	2.02
30-	45.5108-	108.4442-	2-	07-		0-439952-	09/26/78-	15-	26-	14.5-	C-	-	7.9-	700-		8-	1-	6-	4-	6-	3-	3-	4-	1-	2-	3-	2-	1-	-3-	-	-	-	-	1.12
30-	45.4231-	108.5478-	2-	08-		0-439953-	09/26/78-	15-	27-	15.5-	-	-	6.9-	500-		10-	1-	6-	3-	6-	-	-	-	-4-	2-	2-	1-	-3-	3-	-	-	-	0.61
30-	45.4139-	108.5531-	2-	08-		0-439954-	09/26/78-	16-	28-	11.5-	-	-	7.2-	500-		5-	1-	6-	3-	6-	-	-	-	-4-	2-	1-	1-	-3-	5-	-	-	-	0.61
30-	45.4092-	108.5606-	2-	08-		0-439955-	09/26/78-	16-	26-	14.0-	C-	-	7.0-	598-		10-	1-	6-	3-	6-	-	-	-	-2-	3-	2-	1-	-1-	4-	4-	10-	8-	0.80
30-	45.4014-	108.5628-	2-	08-		0-439956-	09/26/78-	17-	26-	13.6-	C-	-	7.0-	800-		8-	1-	6-	-	-	-	-	-	-2-	3-	2-	1-	-3-	5-	12-	12-	8-	1.16
30-	45.4008-	108.5622-	2-	07-		0-439957-	09/26/78-	17-	27-	14.5-	C-	-	7.9-	498-		11-	1-	6-	5-	6-	4-	3-	1-	2-	2-	3-	2-	1-	-3-	-	-	-	-	0.22
30-	45.3944-	108.5592-	2-	08-		0-439958-	09/26/78-	17-	29-	13.0-	C-	-	7.0-	500-		-1-	6-	3-	6-	-	-	-	-	-2-	3-	2-	1-	-3-	5-	12-	12-	8-	0.64
30-	45.3978-	108.5558-	2-	07-		0-439959-	09/26/78-	17-	26-	14.0-	-	-	7.0-	500-		4-	1-	6-	5-	6-	3-	3-	1-	1-	4-	2-	2-	1-	-1-	-	-	-	-	0.27
30-	45.3954-	108.5375-	2-	07-		0-439960-	09/26/78-	17-	27-	15.3-	C-	-	7.6-	300-		9-	1-	6-	5-	6-	2-	2-	1-	1-	4-	2-	2-	1-	-3-	-	-	-	-	0.01
30-	45.3569-	108.4947-	2-	07-		0-439962-	09/26/78-	18-	26-	12.0-	C-	-	7.9-	350-		8-	1-	6-	2-	1-	3-	2-	1-	2-	4-	2-	3-	1-	-3-	-	-	-	-	0.05
30-	45.3683-	108.4989-	2-	07-		0-439963-	09/26/78-	18-	20-	12.5-	C-	-	7.8-	498-		8-	1-	6-	5-	6-	2-	2-	1-	2-	3-	3-	3-	1-	-3-	-	-	-	-	0.77
30-	45.3608-	108.4700-	2-	07-		0-439964-	09/26/78-	18-	20-	8.0-	-	-	7.5-	350-		13-	1-	6-	5-	6-	6-	2-	3-	1-	2-	2-	4-	5-	1-	-3-	-	-	-	0.03
30-	45.4267-	108.5309-	2-	08-		0-439965-	10/01/78-	12-	18-	11.0-	C-	-	7.0-	750-		10-	1-	6-	-	-	-	-	-1-	-4-	2-	2-	1-	-3-	4-	2-	45-	-	0.27
30-	45.4144-	108.5203-	2-	06-		0-439967-	10/01/78-	14-	23-	11.0-	C-	-	6.5-	370-		6-	1-	6-	-	-3-	3-	1-	-	-2-	3-	2-	1-	-3-	-	-	-	-	-	0.01
30-	45.4206-	108.4819-	2-	07-		0-439968-	10/01/78-	14-	30-	12.0-	-	-	7.7-	700-		10-	1-	6-	5-	7-	2-	2-	1-	1-	2-	2-	2-	1-	-3-	-	-	-	-	0.70
30-	45.4103-	108.4694-	2-	07-		0-439970-	10/01/78-	15-	28-	14.0-	C-	-	7.5-	675-		10-	1-	6-	5-	7-	2-	2-	1-	1-	4-	2-	2-	1-	-3-	-	-	-	-	0.88
30-	45.4006-	108.4714-	2-	06-		0-439971-	10/01/78-	15-	20-	9.5-	C-	-	7.0-	490-		6-	1-	6-	5-	1-	3-	3-	1-	-2-	3-	3-	1-	-3-	-	-	-	-	-	0.22
30-	45.3675-	108.5989-	2-	07-		0-439972-	10/13/78-	14-	16-	11.0-	-	-	7.9-	775-		6-	1-	6-	5-	7-	2-	2-	2-	2-	1-	4-	2-	2-	1-	-3-	-	-	-	1.93
30-	45.3583-	108.5636-	2-	08-		0-439973-	10/13/78-	15-	23-	13.0-	C-	-	7.2-	440-		6-	1-	6-	-	-	-	-	-	-4-	2-	2-	1-	-3-	-	-	-	-	-	0.21
30-	45.3386-	108.5694-	2-	07-		0-439974-	10/13/78-	15-	24-	7.5-	C-	-	7.2-	440-		9-	1-	6-	1-	1-	3-	2-	1-	2-	2-	3-	3-	1-	-3-	-	-	-	-	0.40
30-	45.3381-	108.5697-	2-	08-		0-439975-	10/13/78-	15-	24-	8.0-	C-	-	7.1-	400-		8-	1-	6-	-	-	-	-	-1-	-2-	3-	3-	1-	-3-	-	-	-	-	-	0.18
30-	45.3292-	108.5656-	2-	08-		0-439976-	10/13/78-	16-	22-	10.0-	C-	-	7.1-	395-		8-	1-	6-	-	-	-	-	-1-	-2-	3-	4-	1-	-3-	4-	4-	165-	150-	-	0.21
30-	45.3300-	108.5647-	2-	07-		0-439978-	10/13/78-	16-	21-	9.0-	-	-	7.1-	400-		9-	1-	6-	4-	6-	3-	3-	1-	1-	2-	3-	5-	1-	-3-	-	-	-	-	0.03
30-	45.3192-	108.5403-	2-	07-		0-439979-	10/13/78-	16-	20-	8.0-	-	-	7.0-	420-		4-	1-	6-	5-	8-	3-	3-	1-	2-	2-	3-	5-	1-	-3-	-	-	-	-	0.01
30-	45.2989-	108.5933-	2-	07-		0-439982-	10/13/78-	17-	15-	8.0-	C-	-	7.9-	550-		15-	1-	6-	5-	6-	2-	2-	2-	1-	4-	2-	5-	1-	-3-	-	-	-	-	0.15
30-	45.3709-	108.5294-	2-	07-		0-439986-	10/14/78-	14-	26-	12.5-	C-	-	7.9-	340-		15-	1-	1-	3-	1-	3-	3-	4-	2-	4-	2-	3-	1-	-3-	-	-	-	-	0.05
30-	45.2217-	108.5794-	2-	06-		0-439990-	10/14/78-	16-	24-	7.0-	-	-	7.1-	415-		12-	1-	7-	4-	4-	3-	3-	1-	2-	2-	3-	4-	1-	-3-	-	-	-	-	0.24
30-	45.2125-	108.5400-	2-	06-		0-439992-	10/14/78-	16-	26-	13.0-	C-	-	7.8-	770-		9-	1-	6-	5-	6-	2-	2-	2-	1-	2-	3-	3-	4-	1-	-1-	-	-	-	2.08
30-	45.2083-	108.5206-	2-	06-		0-439993-	10/14/78-	17-	21-	10.0-	C-	-	7.2-	360-		10-	1-	6-	5-	6-	3-	3-	1-	2-	3-	3-	4-	1-	-3-	-	-	-	-	0.08
30-	45.2444-	108.5428-	2-	06-		0-439994-	10/14/78-	18-	17-	8.0-	C-	-	7.3-	490-		5-	1-	6-	5-	8-	2-	3-	1-	2-	1-	3-	5-	1-	-3-	-	-	-	-	0.11
30-	45.2228-	108.5783-	2-	07-		0-439996-	10/14/78-	19-	8-	7.0-	C-	-	7.4-	500-		12-	1-	7-	5-	6-	3-	3-	1-	1-	2-	3-	4-	1-	-3-	-	-	-	-	0.51
30-	45.7125-	108.3086-	2-	07-		0-439997-	10/22/78-	9-	5-	5.5-	C-	-	6.2-	13000-		12-	1-	6-	4-	6-	2-	2-	2-	1-	2-	3-	2-	1-	-3-	-	-	-	-	8.40

APPENDIX I-A. (continued). Elemental Concentrations for Water Samples

(2)

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per billion (ppb)											
							Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.5131-108.4475-2-08-						0-M39951	118000	344	-25	46	59	42072	19	-25	-25	884	-4	850
30-45.5108-108.4442-2-07-						0-M39952	83979	126	-25	5	40	43379	22	-25	-25	784	-4	320
30-45.4231-108.5478-2-08-						0-M39953	62591	143	-25	6	30	33618	9	-25	-25	326	-4	360
30-45.4139-108.5531-2-08-						0-M39954	59283	174	-25	-4	-25	39130	9	-25	-25	316	-4	247
30-45.4092-108.5606-2-08-						0-M39955	73140	283	-25	19	-25	42677	9	-25	-25	808	-4	327
30-45.4014-108.5628-2-08-						0-M39956	97484	303	-25	17	26	56380	10	-25	-25	1177	-4	839
30-45.4009-108.5622-2-07-						0-M39957	68723	179	-25	8	35	33370	12	-25	-25	702	-4	199
30-45.3944-108.5592-2-08-						0-M39958	69271	282	-25	12	-25	35654	12	-25	-25	882	-4	470
30-45.3978-108.5558-2-07-						0-M39959	68723	355	-25	12	77	34913	22	-25	-25	873	-4	222
30-45.3964-108.5375-2-07-						0-M39960	48397	112	-25	9	57	21382	13	-25	-25	502	-4	169
30-45.3569-108.4947-2-07-						0-M39962	56356	182	-25	7	-25	21493	11	-25	-25	485	-4	272
30-45.3683-108.4989-2-07-						0-M39963	67552	158	-25	8	47	33802	20	-25	-25	853	-4	236
30-45.3508-108.4700-2-07-						0-M39964	56976	247	-25	8	41	28137	14	-25	-25	678	-4	171
30-45.4267-108.5308-2-08-						0-M39965	79904	222	-25	27	74	40922	15	-25	59	809	-4	363
30-45.4144-108.5203-2-06-						0-M39967	49979	202	-25	18	798	20001	66	-25	61	581	-4	340
30-45.4206-108.4819-2-07-						0-M39968	84310	376	-25	12	254	47118	36	-25	-25	931	-4	272
30-45.4103-108.4694-2-07-						0-M39970	90666	391	34	17	59	45613	150	-25	46	1213	-4	353
30-45.4006-108.4714-2-06-						0-M39971	72724	238	-25	12	43	31140	9	-25	32	835	-4	256
30-45.3675-108.5989-2-07-						0-M39972	85551	195	-25	11	36	46256	11	-25	-25	1110	-4	383
30-45.3583-108.5636-2-08-						0-M39973	62428	452	-25	33	31	28340	5	-25	-25	617	-4	365
30-45.3386-108.5694-2-07-						0-M39974	62288	331	-25	32	35	27115	5	-25	-25	630	-4	400
30-45.3381-108.5697-2-08-						0-M39975	56254	278	-25	12	44	24072	4	-25	-25	573	-4	406
30-45.3292-108.5656-2-08-						0-M39976	55545	163	-25	15	49	24233	12	-25	-25	486	-4	542
30-45.3300-108.5647-2-07-						0-M39978	62144	345	26	11	175	25971	19	-25	44	799	-4	250
30-45.3192-108.5403-2-07-						0-M39979	60101	430	26	9	48	29821	11	-25	50	825	-4	271
30-45.2989-108.5933-2-07-						0-M39982	69530	186	-25	7	50	33370	6	-25	-25	742	-4	114
30-45.3708-108.5294-2-07-						0-M39985	48974	303	-25	9	114	20619	14	-25	-25	784	-4	143
30-45.2217-108.5794-2-06-						0-M39990	65136	169	29	12	2172	29076	105	-25	46	1036	-4	222
30-45.2125-108.5400-2-06-						0-M39992	116000	214	-25	15	2666	58051	117	-25	57	1606	-4	284
30-45.2083-108.5206-2-06-						0-M39993	49297	170	51	7	52	21386	-3	-25	80	1037	-4	110
30-45.2444-108.5428-2-06-						0-M39994	75228	273	42	8	46	30889	9	-25	79	1122	-4	182
30-45.2228-108.5783-2-07-						0-M39996	77084	277	35	9	92	30716	6	-25	63	1072	-4	146
30-45.7125-108.3086-2-07-						0-M39997	333000	976	85	32	185	274000	104	-25	87	5852	-4	702

APPENDIX I-B

Listings of Field Data and Elemental Concentrations
for Sediment Samples from the Billings Quadrangle, Montana
(Pages 76 through 187)

Note that four pages, numbered (1) through (4) in the upper right hand corner, are necessary to provide the complete data listing for each numerically ordered sequence of samples.

(1)- Lists field data and uranium concentrations determined by delayed-neutron counting.
(2)- Lists concentrations of 11 elements determined by x-ray fluorescence and arc-source emission spectrography.
(3) and (4)- List concentrations of 31 elements determined by neutron activation analysis and computed U/Th ratios.

(See Appendix II for Code to Listings)

APPENDIX I-B. Elemental Concentrations for Sediment Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																								U CONCENTRATION
							TIME SAMPLED																							
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
30-	45.3794-	108.3469-	2-	12-		0-M38003-	01/19/79-	9-	1-	2.5-	0-	-	7.5-	350-		-1-	4-	3-	4-	3-	3-	1-	2-	3-	3-	4-	1-	-3-	-	-	-	-	2.08
30-	45.3994-	108.3339-	2-	15-		0-M38004-	01/19/79-	9-	2-		-0-	-	-	-		-1-	7-	7-	8-	-	-	-	-	-4-	3-	4-	1-	-3-	-	-	-	-	4.63
30-	45.3956-	108.2917-	2-	15-		0-M38005-	01/19/79-	10-	2-		-0-	-	-	-		-1-	4-	4-	4-	-	-	-	-	-4-	3-	4-	1-	-3-	-	-	-	-	2.01
30-	45.3953-	108.2736-	2-	11-		0-M38006-	01/19/79-	10-	2-	1.0-	0-	-	7.1-	350-		-1-	4-	4-	6-	2-	2-	1-	3-	4-	3-	3-	1-	-3-	-	-	-	-	2.06
30-	45.3797-	108.2558-	2-	12-		0-M38007-	01/19/79-	10-	2-	1.5-	0-	-	7.2-	275-		-1-	4-	4-	4-	2-	2-	1-	2-	4-	3-	4-	1-	-3-	-	-	-	-	4.42
30-	45.4397-	108.3056-	2-	15-		0-M38009-	01/19/79-	11-	2-		-0-	-	-	-		-1-	7-	7-	7-	-	-	-	-	-4-	3-	3-	1-	-3-	-	-	-	-	4.65
30-	45.4609-	108.3322-	2-	12-		0-M38012-	01/19/79-	12-	3-	1.0-	0-	-	7.3-	400-		-1-	6-	5-	6-	2-	2-	1-	1-	4-	4-	3-	1-	-3-	-	-	-	-	2.05
30-	45.4672-	108.3197-	2-	12-		0-M38013-	01/19/79-	12-	3-	1.0-	0-	-	7.2-	380-		-1-	6-	5-	6-	2-	2-	1-	1-	4-	3-	3-	1-	-3-	-	-	-	-	2.78
30-	45.4758-	108.3258-	2-	12-		0-M38014-	01/19/79-	13-	3-	0.5-	0-	-	7.1-	350-		-1-	6-	5-	6-	2-	2-	1-	1-	4-	3-	3-	1-	-3-	-	-	-	-	1.99
30-	45.4722-	108.2797-	2-	12-		0-M38015-	01/19/79-	13-	3-	1.0-	0-	-	7.4-	450-		-1-	6-	5-	6-	2-	2-	1-	2-	4-	3-	3-	1-	-3-	-	-	-	-	2.03
30-	45.5536-	108.3578-	2-	15-		0-M38016-	01/19/79-	9-	-9-		-0-	-	-	-		-1-	6-	5-	6-	-	-	-	-	-3-	4-	3-	3-	-3-	-	-	-	-	3.17
30-	45.5522-	108.3583-	2-	15-		0-M38017-	01/19/79-	9-	-9-		-0-	-	-	-		-1-	6-	4-	6-	-	-	-	-	-4-	3-	4-	3-	-3-	-	-	-	-	3.46
30-	45.5036-	108.3667-	2-	15-		0-M38018-	01/19/79-	9-	-9-		-0-	-	-	-		-1-	6-	4-	6-	-	-	-	-	-3-	3-	3-	3-	-3-	-	-	-	-	2.66
30-	45.5508-	108.2869-	2-	12-		0-M38020-	01/19/79-	10-	-8-		-0-	-	7.4-	300-		-1-	6-	4-	6-	2-	2-	1-	1-	3-	4-	4-	3-	-3-	-	-	-	-	4.05
30-	45.5633-	108.2706-	2-	12-		0-M38021-	01/19/79-	11-	-8-		-0-	-	7.4-	290-		-1-	6-	5-	6-	2-	2-	1-	3-	4-	3-	3-	3-	-3-	-	-	-	-	2.64
30-	45.5650-	108.2719-	2-	12-		0-M38022-	01/19/79-	11-	-8-		-0-	-	7.0-	270-		-1-	6-	5-	6-	2-	2-	1-	3-	3-	4-	3-	3-	-3-	-	-	-	-	3.91
30-	45.5811-	108.2647-	2-	15-		0-M38023-	01/19/79-	11-	-7-		-0-	-	-	-		-1-	6-	5-	6-	-	-	-	-	-4-	4-	3-	3-	-3-	-	-	-	-	2.53
30-	45.6089-	108.2258-	2-	15-		0-M38026-	01/19/79-	12-	-6-		-0-	-	-	-		-1-	6-	5-	6-	-	-	-	-	-4-	3-	4-	2-	-3-	-	-	-	-	3.70
30-	45.6081-	108.2228-	2-	12-		0-M38027-	01/19/79-	12-	-5-		-0-	-	7.3-	650-		-1-	6-	5-	6-	-	-	-	-	-3-	3-	4-	2-	-3-	-	-	-	-	2.30
30-	45.5997-	108.1981-	2-	12-		0-M38028-	01/19/79-	12-	-5-		-0-	-	7.1-	600-		-1-	6-	4-	6-	-	-	-	-	-4-	4-	3-	2-	-3-	-	-	-	-	3.59
30-	45.5881-	108.2153-	2-	15-		0-M38029-	01/19/79-	12-	-4-		-0-	-	-	-		-1-	6-	5-	6-	-	-	-	-	-3-	4-	4-	2-	-3-	-	-	-	-	2.94
30-	45.5653-	108.2206-	2-	15-		0-M38030-	01/19/79-	12-	-3-		-0-	-	-	-		-1-	6-	5-	6-	-	-	-	-	-4-	3-	3-	2-	-3-	-	-	-	-	3.68
30-	45.5317-	108.2228-	2-	15-		0-M38031-	01/19/79-	12-	-3-		-0-	-	-	-		-1-	6-	5-	6-	-	-	-	-	-4-	3-	3-	1-	-3-	-	-	-	-	2.54
30-	45.5314-	108.2128-	2-	15-		0-M38032-	01/19/79-	12-	-3-		-0-	-	-	-		-1-	6-	4-	6-	-	-	-	-	-3-	3-	4-	1-	-3-	-	-	-	-	2.57
30-	45.5531-	108.1953-	2-	12-		0-M38033-	01/19/79-	12-	-3-		-0-	-	7.4-	700-		-1-	6-	4-	6-	-	-	-	-	-3-	4-	4-	1-	-3-	-	-	-	-	2.43
30-	45.5653-	108.1550-	2-	12-		0-M38034-	01/19/79-	13-	-2-		-0-	-	7.3-	450-		-1-	6-	5-	6-	-	-	-	-	-4-	4-	4-	1-	-3-	-	-	-	-	2.12
30-	45.5581-	108.1472-	2-	15-		0-M38035-	01/19/79-	13-	-2-		-0-	-	-	-		-1-	6-	4-	6-	-	-	-	-	-4-	3-	3-	1-	-3-	-	-	-	-	1.48
30-	45.5128-	108.1164-	2-	12-		0-M38036-	01/19/79-	14-	-2-	1.0-	0-	-	7.4-	270-		-1-	6-	3-	4-	2-	2-	1-	2-	3-	3-	4-	1-	-3-	-	-	-	-	1.96
30-	45.5247-	108.0769-	2-	12-		0-M38037-	01/19/79-	13-	-2-	1.0-	0-	-	7.4-	280-		-1-	6-	5-	6-	2-	2-	1-	2-	4-	4-	3-	1-	-3-	-	-	-	-	2.39
30-	45.5353-	108.0672-	2-	12-		0-M38038-	01/19/79-	13-	1-	1.5-	0-	-	7.4-	270-		-1-	6-	5-	6-	2-	2-	1-	1-	4-	4-	3-	1-	-3-	-	-	-	-	2.47
30-	45.5422-	108.0436-	2-	12-		0-M38039-	01/19/79-	14-	1-	1.5-	0-	-	7.0-	270-		-1-	6-	5-	6-	2-	2-	1-	3-	4-	4-	3-	1-	-3-	-	-	-	-	2.39
30-	45.5583-	108.0144-	2-	12-		0-M38040-	01/19/79-	14-	2-	1.0-	0-	-	7.1-	270-		-1-	6-	5-	6-	2-	2-	1-	3-	4-	4-	3-	1-	-3-	-	-	-	-	2.69
30-	45.5925-	108.0306-	2-	15-		0-M38041-	01/19/79-	14-	2-		-0-	-	-	-		-1-	6-	4-	6-	-	-	-	-	-1-	4-	4-	3-	1-	-3-	-	-	-	-	3.08
30-	45.5922-	108.0747-	2-	12-		0-M38043-	01/19/79-	15-	3-	1.5-	0-	-	7.3-	1300-		-1-	6-	5-	6-	3-	2-	1-	2-	4-	3-	3-	1-	-3-	-	-	-	-	2.89
30-	45.6211-	108.0575-	2-	15-		0-M38044-	01/19/79-	16-	1-		-0-	-	-	-		-1-	6-	6-	8-	-	-	-	-	-4-	4-	3-	1-	-3-	-	-	-	-	3.43
30-	45.4242-	109.2036-	2-	12-		0-M38045-	01/19/79-	14-	2-	1.0-	0-	-	7.7-	400-		-1-	3-	5-	2-	2-	2-	1-	2-	4-	3-	3-	1-	-3-	-	-	-	-	3.45
30-	45.4250-	108.2033-	2-	15-		0-M38046-	01/19/79-	14-	2-		-	-	-	-		-1-	3-	5-	2-	-	-	-	-	-4-	3-	3-	1-	-3-	-	-	-	-	4.73
30-	45.4353-	108.1853-	2-	15-		0-M38047-	01/19/79-	14-	3-		-0-	-	-	-		-1-	3-	5-	2-	-	-	-	-	-4-	3-	4-	1-	-3-	-	-	-	-	4.90
30-	45.4358-	108.1725-	2-	12-		0-M38048-	01/19/79-	14-	3-	1.0-	0-	-	7.6-	350-		-1-	3-	5-	2-	2-	2-	1-	2-	4-	3-	3-	1-	-3-	-	-	-	-	3.89
30-	45.4409-	108.1617-	2-	12-		0-M38049-	01/19/79-	14-	3-	1.0-	0-	-	7.7-	450-		-1-	3-	5-	2-	2-	2-	1-	2-	4-	3-	3-	1-	-3-	-	-	-	-	3.87
30-	45.4161-	108.1719-	2-	12-		0-M38050-	01/19/79-	14-	4-	1.5-	0-	-	7.7-	425-		-1-	6-	5-	6-	2-	2-	1-	2-	4-	4-	3-	1-	-3-	-	-	-	-	3.35
30-	45.4150-	108.1703-	2-	12-		0-M38051-	01/19/79-	15-	4-	1.5-	0-	-	7.6-	375-		-1-	6-	5-	6-	2-	2-	1-	2-	4-	3-	3-	1-	-3-	-	-	-	-	2.84
30-	45.4697-	108.1311-	2-	15-		0-M38053-	01/19/79-	15-	4-		-0-	-	-	-		-1-	6-	5-	6-	-	-	-	-	-4-	3-	3-	1-	-3-	-	-	-	-	4.22
30-	45.4708-	108.1300-	2-	12-		0-M38054-	01/19/79-	15-	3-	1.0-	0-	-	7.6-	500-		-1-	6-	5-	6-	2-	2-	1-	2-	4-	4-	3-	1-	-3-	-	-	-	-	3.49
30-	45.3908-	108.1175-	2-	15-		0-M38055-	01/19/79-	15-	-		-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.63
30-	45.3789-	108.0486-	2-	12-		0-M38056-	01/19/79-	15-	-		-	-	7.7-	575-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.44
30-	45.4308-	108.0461-	2-	12-		0-M38057-	01/19/79-	15-	-		-	-	7.6-	490-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.57
30-	45.4314-	108.0517-	2-	12-		0-M38058-	01/19/79-	15-	-		-	-	7.7-	500-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50
30-	45.4178-	108.0958-	2-	11-		0-M38059-	01/19/79-	15-	-		-	-	7.7-	1525-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.42
30-	45.4656-	108.0117-	2-	12-		0-M38060-	01/19/79-	15-	-		-	-	7.5-	450-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.62
30-	45.4642-	108.0336-	2-	12-		0-M38061-	01/19/79-	15-	-		-	-	7.6-	525-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.45

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE (Concentrations reported in weight parts per million (ppm))									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY (Concentrations in weight ppm)	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
30-45.3794-108.3469-2-12-						0-M38033	-5	-5	-5	14	-20	-15	-5	-10	-15	-1	65
30-45.3994-108.3339-2-15-						0-M38034	-5	5	-5	25	-20	-15	5	-10	-15	2	26
30-45.3956-108.2917-2-15-						0-M38035	-5	-5	-5	23	-20	-15	-5	-10	-15	1	68
30-45.3953-108.2736-2-11-						0-M38036	-5	5	-5	22	-20	15	8	-10	-15	-1	44
30-45.3797-108.2558-2-12-						0-M38037	-5	5	-5	20	-20	-15	-5	-10	-15	2	23
30-45.4397-108.3056-2-15-						0-M38039	-5	5	-5	22	-20	-15	-5	-10	-15	2	26
30-45.4608-108.3322-2-12-						0-M38042	-5	-5	-5	24	-20	-15	-5	-10	-15	1	67
30-45.4572-108.3197-2-12-						0-M38043	-5	-5	-5	23	-20	-15	5	-10	-15	-1	61
30-45.4758-108.3258-2-12-						0-M38044	-5	-5	-5	11	-20	-15	6	-10	-15	-1	74
30-45.4722-108.2797-2-12-						0-M38045	-5	-5	-5	-10	-20	-15	-5	-10	-15	-1	68
30-45.5536-108.3578-2-15-						0-M38046	-5	6	-5	20	-20	-15	6	-10	-15	2	21
30-45.5522-108.3583-2-15-						0-M38047	-5	-5	-5	24	-20	-15	15	-10	-15	1	23
30-45.5036-108.3667-2-15-						0-M38048	-5	-5	-5	31	-20	-15	11	-10	-15	2	18
30-45.5508-108.2869-2-12-						0-M38050	-5	5	-5	25	-20	31	6	-10	-15	2	63
30-45.5633-108.2706-2-12-						0-M38051	-5	-5	-5	23	-20	-15	-5	-10	-15	2	18
30-45.5650-108.2719-2-12-						0-M38052	-5	6	-5	24	-20	-15	11	-10	-15	2	27
30-45.5811-108.2647-2-15-						0-M38053	-5	5	-5	22	-20	-15	-5	-10	-15	1	28
30-45.6089-108.2259-2-15-						0-M38056	-5	6	-5	23	-20	28	11	-10	-15	2	52
30-45.6081-108.2228-2-12-						0-M38057	-5	-5	-5	25	-20	-15	5	-10	-15	1	28
30-45.5997-108.1981-2-12-						0-M38058	-5	-5	-5	12	-20	-15	-5	-10	-15	2	21
30-45.5881-108.2153-2-15-						0-M38059	-5	6	-5	33	-20	-15	12	-10	-15	1	14
30-45.5653-108.2206-2-15-						0-M38060	-5	-5	-5	21	-20	-15	12	-10	-15	1	22
30-45.5317-108.2228-2-15-						0-M38061	-5	-5	-5	24	-20	-15	-5	-10	-15	2	25
30-45.5314-108.2128-2-15-						0-M38062	-5	-5	-5	26	-20	-15	-5	-10	-15	1	42
30-45.5531-108.1953-2-12-						0-M38063	-5	-5	-5	17	-20	-15	-5	-10	-15	-1	39
30-45.5653-108.1550-2-12-						0-M38064	-5	6	-5	19	-20	-15	6	-10	-15	-1	25
30-45.5581-108.1472-2-15-						0-M38065	-5	-5	-5	19	-20	-15	-5	-10	-15	1	13
30-45.5128-108.1164-2-12-						0-M38066	-5	5	-5	16	-20	-15	-5	-10	-15	1	45
30-45.5247-108.0769-2-12-						0-M38067	-5	6	-5	18	-20	15	13	-10	-15	2	16
30-45.5353-108.0672-2-12-						0-M38068	-5	9	-5	30	-20	23	12	-10	-15	2	15
30-45.5422-108.0436-2-12-						0-M38069	-5	5	-5	30	-20	-15	12	-10	-15	1	19
30-45.5683-108.0144-2-12-						0-M38070	-5	-5	-5	26	-20	18	19	-10	-15	2	23
30-45.5925-108.0306-2-15-						0-M38071	-5	-5	-5	35	-20	-15	5	-10	-15	1	31
30-45.5922-108.0747-2-12-						0-M38073	-5	-5	-5	27	-20	19	12	-10	-15	2	25
30-45.6211-108.0575-2-15-						0-M38074	-5	-5	-5	48	-20	-15	5	-10	-15	2	33
30-45.4242-108.2036-2-12-						0-M38075	-5	-5	-5	28	-20	27	15	-10	-15	2	35
30-45.4250-108.2033-2-15-						0-M38076	-5	-5	-5	50	-20	33	12	-10	-15	2	51
30-45.4353-108.1853-2-15-						0-M38077	-5	-5	-5	27	-20	37	17	-10	-15	2	56
30-45.4358-108.1725-2-12-						0-M38078	-5	-5	-5	36	-20	25	15	-10	-15	2	35
30-45.4408-108.1617-2-12-						0-M38079	-5	6	-5	32	-20	24	10	-10	-15	2	41
30-45.4161-108.1719-2-12-						0-M38080	-5	-5	-5	26	-20	22	15	-10	-15	2	27
30-45.4150-108.1703-2-12-						0-M38081	-5	-5	-5	32	-20	27	5	-10	-15	2	33
30-45.4697-108.1311-2-15-						0-M38083	-5	-5	-5	37	-20	15	23	-10	-15	2	49
30-45.4708-108.1300-2-12-						0-M38084	-5	-5	-5	34	-20	-15	11	-10	-15	2	31
30-45.3909-108.1175-2-15-						0-M38085	-5	-5	-5	32	-20	36	13	-10	-15	1	49
30-45.3789-108.0486-2-12-						0-M38086	-5	-5	-5	36	-20	41	11	-10	-15	2	38
30-45.4308-108.0461-2-12-						0-M38087	-5	-5	-5	33	-20	29	10	-10	-15	1	54
30-45.4314-108.0517-2-12-						0-M38088	-5	5	-5	34	-20	20	11	-10	-15	1	31
30-45.4178-108.0958-2-11-						0-M38089	-5	-5	-5	22	-20	16	10	-10	-15	3	26
30-45.4656-108.0117-2-12-						0-M38090	-5	-5	5	37	-20	33	18	-10	-15	1	45
30-45.4642-108.0336-2-12-						0-M38091	-5	-5	-5	40	-20	27	13	-10	-15	1	43

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAB. SAMPLE LOCATION NUMBER	Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
30-45.3794-109.3469-2-12-			0	M	3	38003	30480	-0.06	296	131700	28	-67	5.8	27	1.9	2	0.7	9117	5.3	11030	23	0.2
30-45.3994-108.3339-2-15-			0	M	3	38004	54090	-0.08	524	5802	83	-71	8.7	55	3.3	4	1.2	16050	7.8	14200	42	0.5
30-45.3956-108.2917-2-15-			0	M	3	38005	29820	-0.09	372	114800	32	-55	4.9	24	1.6	2	0.5	7773	6.2	10580	-6	0.2
30-45.3953-108.2736-2-11-			0	M	3	38006	29620	-0.05	350	89020	33	-60	5.3	29	1.5	3	0.5	7455	7.0	10440	16	0.2
30-45.3797-108.2558-2-12-			0	M	3	38007	54980	-0.07	565	7467	66	-98	9.3	39	3.9	4	0.8	14560	7.0	11880	42	0.3
30-45.4397-108.3056-2-15-			0	M	3	38009	55710	-0.08	491	5056	75	-72	9.6	58	3.8	4	1.1	15370	8.3	14640	46	0.5
30-45.4608-108.3322-2-12-			0	M	3	38012	31220	-0.08	439	125900	32	-58	5.3	30	2.4	3	0.7	8563	4.8	11190	17	0.2
30-45.4672-108.3197-2-12-			0	M	3	38013	45300	-0.07	434	61940	52	-72	8.3	42	2.0	4	0.9	12520	7.3	12700	29	0.3
30-45.4758-108.3258-2-12-			0	M	3	38014	29880	-0.07	377	148000	31	-73	5.5	28	1.7	2	0.6	8576	4.0	10570	21	0.2
30-45.4722-108.2797-2-12-			0	M	3	38015	29100	-0.07	383	128200	38	-58	6.7	35	1.4	2	0.8	8383	6.3	11430	23	0.2
30-45.5536-108.3578-2-15-			0	M	3	38016	48760	-0.08	669	17240	52	-63	6.4	74	-1.4	3	0.9	11440	8.0	13730	33	0.3
30-45.5522-108.3583-2-15-			0	M	3	38017	52920	-0.07	584	22400	56	-77	7.2	72	-1.1	4	0.9	12530	8.5	15050	39	0.3
30-45.5036-108.3667-2-15-			0	M	3	38018	51500	-0.07	593	9686	59	-79	9.4	66	2.0	4	0.9	13430	10.5	12930	27	0.4
30-45.5508-108.2869-2-12-			0	M	3	38020	70000	-0.10	771	14770	83	-53	10.1	85	4.4	5	1.1	16820	5.9	18420	39	0.4
30-45.5633-108.2706-2-12-			0	M	3	38021	47960	-0.09	687	12520	48	-69	7.6	53	3.2	4	1.2	13830	9.1	13150	33	0.4
30-45.5650-108.2719-2-12-			0	M	3	38022	53420	-0.07	547	12250	65	-88	10.2	53	3.7	4	0.9	14840	5.5	17980	35	0.4
30-45.5911-108.2647-2-15-			0	M	3	38023	39760	-0.07	754	34590	52	-76	8.0	48	2.5	4	0.9	12560	12.9	10820	29	0.4
30-45.6089-108.2258-2-15-			0	M	3	38026	68210	-0.09	894	15540	61	-70	11.6	82	4.8	5	1.0	18060	6.0	18020	40	0.4
30-45.6081-108.2228-2-12-			0	M	3	38027	40890	-0.07	573	41990	48	-75	7.2	42	2.1	3	0.9	11610	8.4	11280	26	0.3
30-45.5997-108.1981-2-12-			0	M	3	38028	43720	-0.06	591	11590	57	-49	4.8	37	2.3	3	0.8	7389	7.5	15850	30	0.4
30-45.5881-108.2153-2-15-			0	M	3	38029	52910	-0.10	893	12290	64	-67	7.6	66	1.9	4	1.1	15770	8.5	10890	36	0.3
30-45.5653-108.2206-2-15-			0	M	3	38030	57710	-0.08	589	14750	51	-79	9.1	75	3.0	4	0.8	15740	6.5	16150	36	0.3
30-45.5317-108.2228-2-15-			0	M	3	38031	49140	-0.07	497	8297	58	-79	8.1	51	2.5	4	1.0	14850	7.3	17000	28	0.4
30-45.5314-108.2129-2-15-			0	M	3	38032	49870	-0.09	612	37320	68	-70	10.1	57	2.9	4	1.0	17410	10.4	15040	31	0.4
30-45.5531-108.1953-2-12-			0	M	3	38033	39590	-0.08	746	21580	39	-59	5.3	47	-1.2	3	1.0	10540	9.2	10930	27	0.4
30-45.5653-108.1550-2-12-			0	M	3	38034	45100	-0.06	719	14910	45	-67	6.5	50	2.0	3	0.8	10790	6.9	10990	25	0.4
30-45.5581-108.1472-2-15-			0	M	3	38035	26740	-0.05	832	5894	30	-49	4.5	29	0.9	2	0.2	6525	7.4	5062	18	0.2
30-45.5128-108.1164-2-12-			0	M	3	38036	30140	-0.06	269	87070	32	-54	5.2	25	1.7	3	0.6	9227	7.0	11140	19	0.2
30-45.5247-108.0769-2-12-			0	M	3	38037	55120	-0.09	586	17230	80	-84	10.0	73	3.0	4	1.2	18620	8.7	11810	39	0.5
30-45.5353-108.0672-2-12-			0	M	3	38038	54720	-0.10	525	17080	57	-92	7.5	68	-1.7	3	0.9	16490	8.1	13240	42	0.3
30-45.5422-108.0436-2-12-			0	M	3	38039	56090	-0.08	645	17000	59	-77	8.9	71	2.3	4	0.9	16350	7.8	12050	28	0.4
30-45.5583-108.0144-2-12-			0	M	3	38040	57370	-0.09	619	20230	64	-79	9.7	69	3.0	4	1.0	19260	6.6	12750	28	0.3
30-45.5925-108.0306-2-15-			0	M	3	38041	60420	-0.10	621	24330	64	-87	8.4	84	-1.7	4	1.5	17420	7.2	14500	36	0.3
30-45.5922-108.0747-2-12-			0	M	3	38043	58580	-0.07	599	23190	63	-71	8.9	75	2.5	5	1.0	17020	7.3	15800	35	0.4
30-45.6211-108.0575-2-15-			0	M	3	38044	61220	-0.08	604	20340	75	-71	10.8	70	2.8	5	1.1	19990	7.3	12210	39	0.4
30-45.4242-108.2036-2-12-			0	M	3	38045	60110	-0.09	551	22150	86	-79	10.6	82	3.0	5	1.3	21290	8.0	12320	46	0.5
30-45.4250-108.2033-2-15-			0	M	3	38046	66690	-0.12	354	6922	92	-76	11.7	62	3.3	5	1.3	23230	7.4	12090	44	0.5
30-45.4353-108.1853-2-15-			0	M	3	38047	67320	-0.08	440	6367	100	-64	12.2	65	2.9	7	1.3	22380	7.5	13830	45	0.5
30-45.4358-108.1725-2-12-			0	M	3	38048	64770	-0.09	444	18170	81	-70	12.1	71	3.6	6	1.2	22000	7.2	12720	48	0.4
30-45.4409-108.1617-2-12-			0	M	3	38049	60470	-0.10	528	17090	95	-78	12.1	79	3.4	5	1.3	22050	8.5	11670	44	0.6
30-45.4161-108.1719-2-12-			0	M	3	38050	58280	-0.10	512	31450	72	-98	10.3	77	-1.8	4	1.0	18670	10.3	15040	37	0.4
30-45.4150-108.1703-2-12-			0	M	3	38051	51590	-0.07	445	24710	58	-71	8.8	69	2.1	4	0.9	15620	9.7	11180	35	0.3
30-45.4697-108.1311-2-15-			0	M	3	38053	65380	-0.09	463	14440	87	-66	11.6	67	3.4	6	1.3	22100	7.7	13750	50	0.5
30-45.4708-108.1300-2-12-			0	M	3	38054	59610	-0.10	468	34080	84	-81	11.9	78	3.3	5	1.3	21030	6.2	12750	43	0.4
30-45.3908-108.1175-2-15-			0	M	3	38055	63880	-0.11	400	7176	85	-74	11.0	71	3.2	5	1.4	23290	8.4	12200	49	0.4
30-45.3789-108.0486-2-12-			0	M	3	38056	59990	-0.09	597	33470	69	-71	10.2	61	3.3	5	1.0	18510	5.4	13390	36	0.3
30-45.4308-108.0461-2-12-			0	M	3	38057	64230	-0.09	592	35710	71	-72	11.6	64	3.5	5	1.1	19320	5.7	13180	39	0.4
30-45.4314-108.0517-2-12-			0	M	3	38058	61460	-0.11	538	35680	84	-80	11.8	68	4.0	5	1.3	22340	6.8	12770	45	0.6
30-45.4179-108.0958-2-11-			0	M	3	38059	53200	-0.10	613	6009	61	-99	9.0	36	2.6	3	0.9	14210	6.8	13320	34	0.3
30-45.4656-108.0117-2-12-			0	M	3	38060	63660	-0.09	458	35770	76	107	10.9	60	3.0	5	1.0	18930	5.3	13960	38	0.4
30-45.4642-108.0336-2-12-			0	M	3	38061	61850	-0.09	545	33170	69	101	11.1	58	3.5	5	1.1	20350	5.3	13700	44	0.3

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)												U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
30-45.	3794-	108.3469-	2-	12-	0-	M38003	24530	305	3713	33	-2	4.6	2.8	473	-1		4.9	2174	45	2.3	-48	0.424
30-45.	3994-	108.3339-	2-	15-	0-	M38004	6110	979	5779	-20	-3	7.0	6.9	-359	-1	-1	14.3	3754	68	3.7	74	0.324
30-45.	3956-	108.2917-	2-	15-	0-	M38005	23180	274	3945	-21	-2	4.0	2.0	234	-1	-1	4.4	2063	33	-1.6	-30	0.457
30-45.	3953-	108.2736-	2-	11-	0-	M38006	20260	242	4395	-13	-2	3.7	2.5	-217			5.9	1901	40	2.4	32	0.349
30-45.	3797-	108.2558-	2-	12-	0-	M38007	10350	1151	7382	35	-2	6.1	5.2	-459	-1	-1	10.9	2641	55	3.9	99	0.406
30-45.	4397-	108.3056-	2-	15-	0-	M38009	8307	972	5733	60	-3	6.9	6.2	-358	-1	-1	13.5	3455	68	6.0	-51	0.344
30-45.	4508-	108.3322-	2-	12-	0-	M38012	22450	311	4130	-19	-2	4.2	2.2	509	-1	-1	5.2	1874	38	-1.7	56	0.394
30-45.	4672-	108.3197-	2-	12-	0-	M38013	19480	440	5888	-16	-2	5.9	4.0	-282	-1	-1	6.4	2686	61	2.4	49	0.434
30-45.	4758-	108.3258-	2-	12-	0-	M38014	25370	314	3605	27	-2	4.4	2.9	633	-1	-1	4.2	1664	42	-1.2	59	0.474
30-45.	4722-	108.2797-	2-	12-	0-	M38015	23330	287	3659	-17	-2	4.3	3.1	436	-1	-1	4.8	1930	38	1.6	51	0.423
30-45.	5536-	108.3578-	2-	15-	0-	M38016	15730	305	9267	-23	-3	5.8	3.1	-217	-1	1	8.1	2480	68	-1.9	-37	0.391
30-45.	5522-	108.3583-	2-	15-	0-	M38017	14440	394	9645	48	-2	6.0	3.7	490	-1	-1	9.2	2977	72	3.9	-46	0.376
30-45.	5036-	108.3667-	2-	15-	0-	M38018	10170	405	9070	30	-2	6.7	3.8	-287	-1	-1	8.3	3103	70	4.2	54	0.320
30-45.	5508-	108.2869-	2-	12-	0-	M38020	18960	199	5467	70	-3	9.7	5.9	-204	-1	-1	13.7	3851	142	3.5	93	0.296
30-45.	5633-	108.2706-	2-	12-	0-	M38021	15750	867	7932	-22	-3	6.8	3.1	-309	-1	-1	7.3	2938	54	2.7	-30	0.362
30-45.	5650-	108.2719-	2-	12-	0-	M38022	11570	1102	6074	37	-2	6.2	4.3	-424	-1	-1	10.6	2873	65	3.3	68	0.369
30-45.	5811-	108.2647-	2-	15-	0-	M38023	9596	610	6082	26	-2	5.7	3.8	-327	-1	-1	6.7	2504	49	3.9	63	0.378
30-45.	6089-	108.2258-	2-	15-	0-	M38026	18220	286	6074	44	-3	9.0	4.8	-290	-1	-1	9.7	3760	179	2.8	-86	0.381
30-45.	6081-	108.2228-	2-	12-	0-	M38027	16720	440	7473	32	-2	5.7	3.4	-296	-1	-1	6.4	2476	50	2.4	59	0.359
30-45.	5997-	108.1981-	2-	12-	0-	M38028	6746	156	6231	35	-2	4.0	4.3	288	-1	1	9.6	2059	49	3.2	68	0.374
30-45.	5881-	108.2153-	2-	15-	0-	M38029	10310	548	6994	-27	-3	7.7	3.3	-280	-1	-1	8.6	3433	71	4.0	-47	0.342
30-45.	5653-	108.2206-	2-	15-	0-	M38030	12810	522	7404	50	-2	7.2	4.1	-328	-1	-1	11.5	2923	83	4.2	-55	0.320
30-45.	5317-	108.2228-	2-	15-	0-	M38031	12610	429	8069	-17	-2	6.9	4.6	-309	-1	-1	7.0	2927	65	3.3	-74	0.363
30-45.	5314-	108.2128-	2-	15-	0-	M38032	16650	571	7177	42	-3	7.4	4.9	-287	-1	-1	9.7	3049	66	3.7	-20	0.265
30-45.	5531-	108.1953-	2-	12-	0-	M38033	11820	365	6620	-20	-3	5.2	3.0	-224	-1	-1	6.0	2706	49	2.9	-32	0.405
30-45.	5653-	108.1550-	2-	12-	0-	M38034	8483	336	7868	36	-2	5.3	3.8	-245		-1	6.8	2572	54	2.4	32	0.312
30-45.	5581-	108.1472-	2-	15-	0-	M38035	4388	242	4442	-11	-1	3.2	1.8	-196			3.6	1513	34	1.6	45	0.411
30-45.	5128-	108.1164-	2-	12-	0-	M38036	23340	248	4376	-14	-2	4.0	3.2	346	-1	-1	5.1	2166	35	-1.2	47	0.384
30-45.	5247-	108.0769-	2-	12-	0-	M38037	15440	361	9731	-25	-3	7.6	4.9	-302	-1	-1	9.8	3294	69	4.5	-82	0.244
30-45.	5353-	108.0672-	2-	12-	0-	M38038	13490	375	9907	-29	-3	7.0	3.9	-322	-1	-1	7.7	2940	69	-2.4	-49	0.321
30-45.	5422-	108.0436-	2-	12-	0-	M38039	16320	367	10010	38	-2	6.8	3.9	368	-1	-1	9.2	3443	69	1.9	74	0.260
30-45.	5683-	108.0144-	2-	12-	0-	M38040	16160	444	9122	-24	-3	7.9	4.4	284	-1	-1	8.6	3510	80	3.7	137	0.313
30-45.	5925-	108.0306-	2-	15-	0-	M38041	17300	515	9251	-28	-3	8.6	3.6	-330	-1	-1	9.1	3246	86	3.0	-41	0.338
30-45.	5922-	108.0747-	2-	12-	0-	M38043	20110	488	9149	49	-2	7.8	4.8	-268	-1	-1	8.4	4452	86	2.5	60	0.344
30-45.	6211-	108.0575-	2-	15-	0-	M38044	16130	602	7659	50	-3	9.1	6.0	-291	-1	-1	10.1	4274	92	3.1	86	0.340
30-45.	4242-	108.2036-	2-	12-	0-	M38045	16560	562	7883	32	-3	9.5	6.4	-320	-1	-1	11.2	4753	88	5.0	80	0.308
30-45.	4250-	108.2033-	2-	15-	0-	M38046	9918	749	4483	-33	-4	10.5	4.8	-385	-1	-1	11.6	5193	99	3.7	-52	0.408
30-45.	4353-	108.1853-	2-	15-	0-	M38047	12940	752	4427	44	-3	10.4	6.4	-324	-1	-1	12.3	5237	105	4.3	91	0.398
30-45.	4358-	108.1725-	2-	12-	0-	M38048	11300	707	6403	38	-3	10.1	6.2	-320	-1	-1	11.2	4655	99	4.2	107	0.347
30-45.	4408-	108.1617-	2-	12-	0-	M38049	13650	664	6259	44	-3	10.0	7.6	-344	-1	-1	13.0	5118	90	5.2	-85	0.298
30-45.	4161-	108.1719-	2-	12-	0-	M38050	16410	626	9988	-30	-3	7.8	3.7	-377	-1	-1	10.2	3877	82	3.6	-42	0.328
30-45.	4150-	108.1703-	2-	12-	0-	M38051	14510	538	8741	-17	-2	6.3	4.2	-272	-1	-1	9.1	3169	72	2.7	-50	0.312
30-45.	4697-	108.1311-	2-	15-	0-	M38053	13140	690	5531	34	-3	10.6	5.6	-302	-1	-1	11.3	4987	106	4.3	96	0.373
30-45.	4708-	108.1300-	2-	12-	0-	M38054	15980	608	5680	59	-3	9.4	6.2	-365	-1	-1	11.7	3444	75	4.8	-74	0.298
30-45.	3908-	108.1175-	2-	15-	0-	M38055	10290	737	4730	-32	-4	10.5	6.4	-373	-1	-1	12.0	4327	93	4.9	75	0.386
30-45.	3789-	108.0486-	2-	12-	0-	M38056	15170	617	5872	41	-3	8.2	5.2	-319	-1	-1	9.0	4194	82	4.0	109	0.382
30-45.	4308-	108.0461-	2-	12-	0-	M38057	14320	634	5397	40	-3	9.4	5.1	-325	-1	-1	9.5	4146	89	3.1	97	0.376
30-45.	4314-	108.0517-	2-	12-	0-	M38058	16890	629	5181	-27	-3	9.8	6.7	-380	-1	-1	12.1	4040	97	4.6	122	0.289
30-45.	4178-	108.0958-	2-	11-	0-	M38059	8793	1149	7457	51	-3	6.2	4.6	-476	-1	-1	9.8	3764	53	3.9	-45	0.451
30-45.	4556-	108.0117-	2-	12-	0-	M38060	16270	656	4876	-24	-3	8.8	4.9	-339	-1	-1	10.9	3724	84	-1.7	81	0.332
30-45.	4642-	108.0336-	2-	12-	0-	M38061	16570	653	4741	-24	-3	9.3	6.3	-326	-1	-1	9.5	3859	86	3.4	117	0.363

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																											U CONCENTRATION
							TIME SAMPLED																											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
30-45.4631-108.0897-2-12-						0-M38062-01/19/79-15-	-		-	-	-	-	7.7-	550-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.22
30-45.4694-108.1094-2-12-						0-M38063-01/19/79-15-	-		-	-	-	-	7.8-	500-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40
30-45.3692-108.3336-2-15-						0-M38064-01/20/79- 9-	-8-		-C-	-			-	-		-1-	4-	5-	8-	-	-	-	-	-	-1-	2-	3-	3-	-3-	-	-	-	-	3.09
30-45.3347-108.3297-2-11-						0-M38065-01/20/79- 9-	-8-	0.5-	C-	-	7.7-	1290-		-1-	4-	5-	4-	2-	2-	2-	-3-	3-	3-	3-	-3-	-	-	-	-	3.45				
30-45.3303-108.3700-2-12-						0-M38066-01/20/79- 9-	-8-		-C-	-	7.3-	550-		-1-	6-	5-	6-	2-	2-	1-	2-	4-	3-	3-	3-	-3-	-	-	-	-	2.61				
30-45.3019-108.3411-2-15-						0-M38067-01/20/79- 9-	-9-		-C-	-			-	-		-1-	4-	5-	6-	-	-	-	-	-1-	4-	3-	3-	-3-	-	-	-	-	-	2.06	
30-45.2983-108.3489-2-15-						0-M38068-01/20/79-10-	-8-		-C-	-			-	-		-1-	4-	5-	6-	-	-	-	-	-4-	4-	3-	3-	-3-	-	-	-	-	-	2.04	
30-45.2517-108.2814-2-12-						0-M38069-01/20/79-10-	-7-	0.5-	C-	-	7.7-	1100-		-1-	4-	5-	6-	2-	2-	1-	2-	4-	3-	3-	3-	-3-	-	-	-	-	4.43				
30-45.2742-108.2519-2-12-						0-M38070-01/20/79-10-	-7-	1.0-	C-	-	7.4-	880-		-1-	6-	4-	6-	2-	3-	1-	2-	1-	3-	4-	3-	-3-	-	-	-	-	2.90				
30-45.3508-108.2544-2-12-						0-M38072-01/20/79-11-	-6-	1.0-	C-	-	8.2-	2100-		-1-	6-	5-	6-	2-	2-	1-	3-	1-	3-	4-	2-	-3-	-	-	-	-	4.07				
30-45.2833-108.2169-2-12-						0-M38073-01/20/79-11-	-5-	0.5-	C-	-	7.2-	625-		-1-	6-	5-	6-	2-	2-	1-	2-	4-	3-	3-	2-	-3-	-	-	-	-	3.21				
30-45.3111-108.2131-2-11-						0-M38075-01/20/79-12-	-2-	1.5-	C-	-	8.1-	640-		-1-	4-	5-	6-	2-	2-	1-	-4-	3-	4-	1-	-3-	-	-	-	-	3.11				
30-45.3606-108.2211-2-12-						0-M38076-01/20/79-12-	-1-	1.0-	C-	-	7.2-	680-		-1-	4-	3-	6-	3-	3-	1-	2-	3-	3-	3-	1-	-3-	-	-	-	-	3.42				
30-45.3586-108.1908-2-12-						0-M38077-01/20/79-12-	1-	1.0-	C-	-	7.3-	650-		-1-	6-	4-	6-	2-	3-	1-	2-	4-	4-	3-	1-	-3-	-	-	-	-	4.19				
30-45.3191-108.1883-2-12-						0-M38078-01/20/79-12-	1-	1.0-	C-	-	7.1-	600-		-1-	6-	5-	6-	2-	2-	1-	3-	4-	3-	3-	1-	-3-	-	-	-	-	4.11				
30-45.2775-108.1789-2-12-						0-M38079-01/20/79-13-	2-	1.0-	C-	-	7.4-	700-		-1-	6-	4-	4-	2-	2-	1-	2-	4-	4-	3-	1-	-3-	-	-	-	-	4.02				
30-45.2883-108.1575-2-12-						0-M38080-01/20/79-13-	3-	1.0-	C-	-	7.3-	580-		-1-	6-	5-	7-	2-	3-	1-	2-	4-	4-	3-	1-	-3-	-	-	-	-	3.90				
30-45.2894-108.1572-2-12-						0-M38081-01/20/79-13-	4-	1.0-	C-	-	7.2-	670-		-1-	6-	5-	7-	2-	2-	1-	2-	4-	3-	3-	1-	-3-	-	-	-	-	3.92				
30-45.3144-108.1056-2-12-						0-M38082-01/20/79-13-	4-	2.5-	C-	-	7.2-	375-		-1-	4-	5-	6-	2-	2-	1-	-4-	4-	4-	1-	-3-	-	-	-	-	3.76				
30-45.3386-108.0983-2-11-						0-M38083-01/20/79-14-	4-	1.0-	C-	-	7.2-	400-		-1-	5-	5-	6-	2-	2-	1-	-4-	3-	3-	1-	-3-	-	-	-	-	3.04				
30-45.3558-108.1061-2-12-						0-M38084-01/20/79-14-	4-	1.5-	C-	-	7.4-	670-		-1-	6-	5-	6-	2-	2-	1-	1-	3-	3-	3-	1-	-3-	-	-	-	-	3.67				
30-45.3397-108.0503-2-12-						0-M38085-01/20/79-14-	4-	1.5-	C-	-	7.1-	400-		-1-	6-	5-	6-	2-	2-	1-	2-	4-	4-	3-	1-	-3-	-	-	-	-	3.03				
30-45.3375-108.0436-2-12-						0-M38086-01/20/79-14-	4-	1.5-	C-	-	7.2-	500-		-1-	6-	5-	6-	2-	2-	1-	1-	4-	3-	3-	1-	-3-	-	-	-	-	2.90				
30-45.3181-108.0919-2-11-						0-M38087-01/20/79-15-	5-	1.5-	C-	-	8.0-	690-		-1-	6-	5-	6-	2-	2-	1-	-4-	4-	3-	1-	-3-	-	-	-	-	3.05				
30-45.2958-108.0272-2-12-						0-M38088-01/20/79-16-	3-	1.0-	C-	-	7.7-	1350-		-1-	6-	5-	6-	2-	2-	1-	1-	4-	4-	4-	1-	-3-	-	-	-	-	3.10				
30-45.2881-108.0239-2-12-						0-M38089-01/20/79-16-	-1-	1.0-	C-	-	7.8-	1425-		-1-	6-	5-	6-	2-	2-	1-	2-	4-	4-	4-	3-	-8-	-	-	-	-	3.23				
30-45.4994-108.3606-2-11-						0-M38090-01/21/79-10-	3-	1.0-	C-	-	8.2-	920-		-1-	6-	5-	6-	2-	2-	1-	2-	4-	3-	3-	1-	-3-	-	-	-	-	2.94				
30-45.4872-108.3375-2-12-						0-M38091-01/21/79-10-	2-	1.0-	C-	-	8.3-	680-		-1-	6-	5-	6-	2-	2-	1-	2-	4-	4-	3-	1-	-3-	-	-	-	-	3.13				
30-45.4483-108.3147-2-12-						0-M38092-01/21/79-11-	3-	1.0-	C-	-	7.3-	500-		-1-	7-	5-	7-	2-	2-	1-	1-	7-	3-	3-	1-	-3-	-	-	-	-	3.67				
30-45.3939-108.2953-2-12-						0-M38093-01/21/79-11-	3-	1.0-	C-	-	7.3-	475-		-1-	4-	4-	4-	2-	2-	1-	2-	3-	3-	4-	1-	-3-	-	-	-	-	1.89				
30-45.3933-108.2797-2-12-						0-M38094-01/21/79-12-	3-	1.0-	C-	-	7.4-	490-		-1-	4-	5-	4-	2-	2-	1-	2-	3-	3-	4-	1-	-3-	-	-	-	-	1.99				
30-45.2986-109.9810-2-12-						0-M38095-09/20/76-19-	19-	10.6-	-	-	5.8-	96-		-3-	7-	4-	4-	3-	3-	1-	2-	1-	4-	5-	1-	-1-	-	-	-	-	10.67				
30-45.2358-109.9842-2-12-						0-M38096-09/20/76-10-	20-	11.2-	-	-	5.6-	110-		-3-	6-	2-	6-	4-	2-	1-	2-	1-	3-	4-	1-	-1-	-	-	-	-	14.42				
30-45.2205-109.9861-2-12-						0-M38097-09/20/76-11-	11-	7.6-	-	-	5.7-	98-		-3-	7-	4-	8-	3-	3-	1-	2-	1-	3-	4-	1-	-1-	-	-	-	-	3.97				
30-45.1992-109.9921-2-12-						0-M38098-09/20/76-12-	11-	7.5-	-	-	5.8-	81-		-3-	7-	4-	8-	3-	3-	1-	2-	1-	3-	5-	1-	-1-	-	-	-	-	2.86				
30-45.1592-109.9925-2-12-						0-M38100-09/20/76-14-	13-	7.4-	-	-	5.4-	180-		-3-	7-	3-	7-	3-	3-	1-	2-	1-	3-	4-	1-	-1-	-	-	-	-	4.21				
30-45.1594-109.9948-2-12-						0-M38101-09/20/76-14-	12-	7.1-	-	-	5.5-	76-		-3-	6-	3-	6-	3-	3-	1-	3-	1-	3-	4-	1-	-1-	-	-	-	-	4.40				
30-45.0974-109.9938-2-12-						0-M38102-09/20/76-15-	11-	7.0-	-	-	5.2-	144-		-3-	6-	3-	6-	4-	2-	1-	2-	1-	3-	4-	1-	-1-	-	-	-	-	4.98				
30-45.0964-109.9958-2-12-						0-M38103-09/20/76-15-	11-	7.1-	-	-	5.2-	148-		-3-	6-	3-	6-	3-	3-	1-	2-	3-	4-	4-	1-	-1-	-	-	-	-	4.88				
30-45.4218-109.9318-2-12-						0-M38104-10/29/76-12-	3-		-	-	5.5-	210-		-1-	6-	4-	6-	3-	3-	1-	2-	3-	1-	3-	2-	-1-	-	-	-	-	3.37				
30-45.4843-109.9788-2-12-						0-M38105-10/29/76- 8-			-	2.0-	-	-	5.2-	46-		-1-	6-	4-	6-	3-	3-	1-	2-	1-	3-	4-	2-	-1-	-	-	-	-	3.88	
30-45.6747-108.4753-2-12-						0-M38106-05/13/78-15-	23-	16.0-	C-	-	8.4-	900-		10-	1-	6-	5-	6-	3-	4-	2-	2-	4-	3-	3-	1-	-3-	-	-	-	-	3.67				
30-45.6744-108.4656-2-12-						0-M38107-05/13/78-16-	23-	23.0-	C-	-	7.9-	3300-		9-	1-	6-	4-	6-	2-	3-	1-	1-	4-	3-	3-	1-	-3-	-	-	-	-	3.78				
30-45.6897-108.4806-2-12-						0-M38109-05/14/78- 9-	20-	10.5-	C-	-	8.0-	1420-		9-	1-	6-	5-	6-	3-	3-	4-	2-	4-	3-	4-	3-	-3-	-	-	-	-	3.72				
30-45.6592-108.4919-2-12-						0-M38112-06/06/78-15-	28-	18.0-	C-	-	7.8-	900-		6-	1-	7-	3-	6-	3-	4-	3-	1-	4-	3-	3-	1-	-3-	-	-	-	-	3.43				
30-45.6832-108.4756-2-12-						0-M38113-06/06/78-15-	30-	23.5-	C-	-	8.5-	4400-		9-	1-	7-	4-	7-	2-	3-	1-	1-	3-	3-	3-	2-	-3-	-	-	-	-	3.99				
30-45.7431-108.4942-2-12-						0-M38115-06/08/78- 9-	18-	15.5-	C-	-	8.2-	50000-		8-	1-	6-	3-	6-	2-	3-	1-	1-	4-	3-	3-	1-	-3-	-	-	-	-	3.33				
30-45.7453-108.4444-2-12-						0-M38116-06/08/78-10-	23-	19.0-	C-	-	7.9-	2900-		15-	1-	6-	4-	6-	2-	3-	1-	1-	4-	3-	3-	1-	-3-	-	-	-	-	3.89				
30-45.7450-108.4472-2-12-						0-M38117-06/08/78-10-	23-	20.0-	C-	-	8.1-	49000-		11-	1-	6-	4-	6-	2-	2-	1-	1-	4-	3-	3-	1-	-3-	-	-	-	-	3.11				
30-45.7214-108.4133-2-12-						0-M38118-06/13/78- 9-	19-	13.0-	C-	-	8.0-	4550-		4-	1-	6-	3-	6-	3-	3-	1-	1-	4-	3-	3-	2-	-3-	-	-	-	-	2.02				
30-45.7217-108.4144-2-12-						0-M38119-06/13/78- 9-	19-	15.0-	C-	-	8.2-	32000-		8-	1-	6-	3-	6-	3-	3-	1-	1-	4-	3-	3-	2-	-3-	-	-	-	-	2.88				

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
30-45.4631-108.0897-2-12-						0-438062	-5	5	-5	30	-20	21	18	-10	-15	2	44
30-45.4694-108.1094-2-12-						0-438063	-5	-5	-5	28	-20	31	13	-10	-15	2	37
30-45.3692-108.3336-2-15-						0-438064	-5	-5	-5	30	-20	-15	10	-10	16	-1	80
30-45.3347-108.3297-2-11-						0-438065	-5	-5	-5	33	-20	17	5	-10	-15	1	76
30-45.3303-108.3700-2-12-						0-438066	-5	-5	-5	22	-20	-15	-5	-10	-15	1	59
30-45.3019-108.3411-2-15-						0-438067	-5	-5	-5	26	-20	-15	-5	-10	-15	-1	41
30-45.2983-108.3489-2-15-						0-438068	-5	-5	-5	18	-20	-15	-5	-10	-15	1	38
30-45.2517-108.2814-2-12-						0-438069	-5	5	-5	25	-20	-15	10	-10	-15	3	27
30-45.2742-108.2519-2-12-						0-438070	-5	-5	-5	26	-20	-15	6	-10	-15	2	19
30-45.3508-108.2544-2-12-						0-438072	-5	-5	-5	28	-20	-15	7	-10	-15	2	20
30-45.2833-108.2169-2-12-						0-438073	-5	6	-5	23	-20	-15	-5	-10	-15	2	23
30-45.3111-108.2131-2-11-						0-438075	-5	5	-5	30	-20	-15	9	-10	-15	2	44
30-45.3606-108.2211-2-12-						0-438076	-5	-5	-5	21	-20	-15	7	-10	-15	2	38
30-45.3586-108.1908-2-12-						0-438077	-5	6	-5	41	-20	24	16	-10	-15	2	40
30-45.3181-108.1883-2-12-						0-438078	-5	5	-5	37	-20	16	9	-10	-15	3	25
30-45.2775-108.1789-2-12-						0-438079	-5	5	-5	25	-20	23	-5	-10	-15	3	26
30-45.2883-108.1575-2-12-						0-438080	-5	-5	-5	28	-20	-15	17	-10	-15	3	25
30-45.2894-108.1572-2-12-						0-438081	-5	5	-5	36	-20	21	9	-10	-15	2	36
30-45.3144-108.1056-2-12-						0-438082	-5	-5	-5	26	-20	19	11	-10	-15	2	23
30-45.3386-108.0983-2-11-						0-438083	-5	5	-5	29	-20	16	-5	-10	-15	2	19
30-45.3558-108.1061-2-12-						0-438084	-5	-5	-5	29	-20	-15	8	-10	-15	3	36
30-45.3397-108.0503-2-12-						0-438085	-5	-5	-5	30	-20	18	9	-10	-15	2	22
30-45.3375-108.0436-2-12-						0-438086	-5	-5	-5	24	-20	-15	-5	-10	-15	2	23
30-45.3181-108.0919-2-11-						0-438087	-5	-5	-5	22	-20	26	6	-10	-15	2	19
30-45.2958-108.0272-2-12-						0-438088	-5	-5	-5	26	-20	-15	7	-10	-15	1	22
30-45.2881-108.0239-2-12-						0-438089	-5	-5	-5	38	-20	-15	12	-10	-15	2	18
30-45.4094-108.3606-2-11-						0-438090	-5	5	-5	23	-20	-15	9	-10	-15	2	20
30-45.4872-108.3375-2-12-						0-438091	-5	-5	-5	33	-20	-15	-5	-10	-15	1	22
30-45.4483-108.3147-2-12-						0-438092	-5	-5	-5	30	-20	-15	5	-10	-15	2	22
30-45.3939-108.2953-2-12-						0-438093	-5	-5	-5	18	-20	-15	-5	-10	-15	1	38
30-45.3933-108.2797-2-12-						0-438094	-5	-5	-5	22	-20	-15	-5	-10	-15	1	39
30-45.2986-109.9810-2-12-						0-438095	-5	-5	-5	11	-20	21	15	-10	-15	2	39
30-45.2358-109.9842-2-12-						0-438096	-5	-5	-5	15	-20	32	8	-10	-15	2	38
30-45.2205-109.9861-2-12-						0-438097	-5	-5	-5	14	-20	32	14	-10	-15	2	45
30-45.1992-109.9921-2-12-						0-438098	-5	-5	-5	20	-20	15	15	-10	-15	2	47
30-45.1592-109.9925-2-12-						0-438100	-5	-5	-5	34	-20	33	20	-10	-15	2	57
30-45.1594-109.9948-2-12-						0-438101	-5	-5	-5	38	-20	35	18	-10	-15	2	63
30-45.0974-109.9938-2-12-						0-438102	-5	-5	-5	22	-20	28	30	-10	-15	2	52
30-45.0964-109.9958-2-12-						0-438103	-5	-5	-5	32	-20	23	49	-10	-15	1	58
30-45.4218-109.9318-2-12-						0-438104	-5	-5	-5	50	-20	36	-5	-10	-15	2	47
30-45.4843-109.9788-2-12-						0-438105	-5	-5	-5	11	-20	24	9	-10	-15	1	32
30-45.6747-108.4753-2-12-						0-438106	-5	-5	-5	16	-20	-15	6	-10	-15	2	28
30-45.6744-108.4656-2-12-						0-438107	-5	-5	-5	19	-20	-15	13	-10	-15	2	34
30-45.6897-108.4806-2-12-						0-438109	-5	-5	-5	16	-20	-15	9	-10	-15	2	39
30-45.6592-108.4919-2-12-						0-438112	-5	-5	-5	14	-20	-15	6	-10	-15	2	33
30-45.6892-108.4756-2-12-						0-438113	-5	-5	-5	19	-20	-15	11	-10	-15	2	33
30-45.7431-108.4942-2-12-						0-438115	-5	-5	-5	21	-20	47	12	-10	-15	2	61
30-45.7453-108.4444-2-12-						0-438116	-5	-5	-5	35	-20	18	18	-10	18	2	67
30-45.7450-108.4472-2-12-						0-438117	-5	-5	-5	16	-20	19	9	-10	-15	2	31
30-45.7214-108.4133-2-12-						0-438118	-5	-5	-5	-10	-20	-15	-5	-10	-15	2	30
30-45.7217-108.4144-2-12-						0-438119	-5	-5	-5	17	-20	-15	-5	-10	-15	2	59

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
30-45.4631-108.0897-2-12-						0-M38062	52650	-0.08	450	30440	86	-90	12.6	72	2.6	4	1.2	21510	7.9	9818	42	0.4
30-45.4694-108.1094-2-12-						0-M38063	59430	-0.10	570	19650	77	-85	9.6	72	2.5	4	1.0	19030	8.6	13030	40	0.3
30-45.3692-108.3336-2-15-						0-M38064	40490	-0.07	346	136300	55	-64	8.1	39	2.2	3	0.8	13230	5.0	9987	30	0.2
30-45.3347-108.3297-2-11-						0-M38065	49070	-0.08	445	99190	62	-66	9.1	46	3.3	4	1.1	16230	6.0	12950	35	0.3
30-45.3303-108.3700-2-12-						0-M38066	39560	-0.08	364	115600	61	-73	8.3	44	2.1	3	0.9	13920	6.1	11680	22	0.3
30-45.3019-108.3411-2-15-						0-M38067	29020	-0.08	317	114000	31	-69	4.6	30	2.0	2	0.7	8868	5.2	10940	-7	0.2
30-45.2983-108.3489-2-15-						0-M38068	31570	-0.05	325	90620	34	-54	5.4	30	2.0	2	0.6	7786	6.3	11870	17	0.2
30-45.2517-108.2814-2-12-						0-M38069	55860	-0.07	582	8623	69	-83	9.9	46	3.8	4	1.0	15530	6.8	14710	41	0.4
30-45.2742-108.2519-2-12-						0-M38070	53330	-0.09	6601	18430	73	-74	11.6	66	2.3	5	1.9	17400	12.0	8985	41	0.5
30-45.3508-108.2544-2-12-						0-M38072	51990	-0.09	540	6549	58	-96	7.6	35	2.7	4	0.8	14740	6.1	12560	35	0.3
30-45.2933-108.2169-2-12-						0-M38073	53700	-0.07	532	10280	54	-73	8.8	50	2.6	4	0.8	14400	6.7	14550	31	0.3
30-45.3111-108.2131-2-11-						0-M38075	52960	-0.08	520	10160	59	-71	8.2	49	2.7	4	0.8	14460	7.0	19630	36	0.3
30-45.3606-108.2211-2-12-						0-M38076	52440	-0.10	460	45470	113	-101	16.0	61	2.6	4	1.3	25790	8.5	13080	50	0.5
30-45.3586-108.1908-2-12-						0-M38077	59760	-0.09	409	16960	97	-104	14.7	62	3.2	5	1.3	25290	7.1	11840	48	0.5
30-45.3181-108.1883-2-12-						0-M38078	65100	-0.09	386	17970	66	-85	10.7	56	3.9	3	1.0	18550	7.7	14970	40	0.3
30-45.2775-108.1789-2-12-						0-M38079	62550	-0.09	455	14610	95	-70	11.5	59	3.7	4	1.1	18570	6.8	14440	44	0.5
30-45.2893-108.1575-2-12-						0-M38080	60670	-0.10	483	15550	74	-75	10.8	49	3.1	5	1.2	18880	6.8	14850	37	0.4
30-45.2894-108.1572-2-12-						0-M38081	60150	-0.08	495	15050	70	-84	11.5	53	2.8	4	1.0	18790	6.8	13940	41	0.3
30-45.3144-108.1056-2-12-						0-M38082	55830	-0.08	346	12140	69	-87	11.7	53	3.4	5	1.2	19970	7.6	9660	40	0.5
30-45.3386-108.0983-2-11-						0-M38083	51770	-0.08	616	9348	72	-69	9.1	62	2.8	4	0.9	14360	8.7	15910	36	0.4
30-45.3558-108.1061-2-12-						0-M38084	57360	-0.10	494	12220	60	-73	9.9	50	3.4	4	0.9	17720	6.5	9918	35	0.4
30-45.3397-108.0503-2-12-						0-M38085	50620	-0.07	522	9608	60	-76	8.3	52	2.4	3	0.9	12830	6.6	15470	33	0.3
30-45.3375-108.0436-2-12-						0-M38086	51610	-0.07	530	18680	62	-84	8.4	55	2.6	3	0.9	14590	7.2	14740	36	0.3
30-45.3181-108.0919-2-11-						0-M38087	52180	-0.08	513	9097	75	-69	8.4	57	2.8	4	0.9	13690	8.1	13460	35	0.4
30-45.2958-108.0272-2-12-						0-M38088	53650	-0.10	538	9289	49	-72	8.0	54	2.6	4	0.8	13800	5.7	12910	30	0.3
30-45.2981-108.0239-2-12-						0-M38089	53450	-0.10	547	9617	54	120	7.6	37	2.8	4	0.8	13980	6.1	14400	36	0.2
30-45.4994-108.3606-2-11-						0-M38090	50730	-0.07	579	8162	58	82	7.4	46	2.8	4	0.9	12640	6.9	16000	31	0.3
30-45.4872-108.3375-2-12-						0-M38091	53900	-0.07	515	10050	60	-85	8.2	48	2.6	3	0.9	12900	7.3	17920	36	0.4
30-45.4483-108.3147-2-12-						0-M38092	53600	-0.08	648	12690	80	-70	9.0	56	3.1	4	1.0	15470	8.2	17220	38	0.5
30-45.3939-108.2953-2-12-						0-M38093	30040	-0.08	379	71530	28	-52	4.5	24	1.6	2	0.6	6876	6.6	11390	13	0.2
30-45.3933-108.2797-2-12-						0-M38094	30380	-0.05	396	76130	35	-59	5.6	27	1.2	2	0.6	7253	7.1	10200	19	0.2
30-45.2986-109.9810-2-12-						0-M38095	67080	-0.07	388	20210	79	176	13.7	107	-1.6	3	1.3	23760	10.6	10350	37	0.3
30-45.2358-109.9842-2-12-						0-M38096	69410	-0.07	585	20420	65	-112	13.0	113	-1.5	3	1.1	22250	8.8	10430	33	0.3
30-45.2205-109.9861-2-12-						0-M38097	62430	-0.06	731	27300	18	-98	10.2	36	2.0	3	0.5	8152	3.0	14250	13	-0.1
30-45.1992-109.9921-2-12-						0-M38098	51790	-0.06	623	22220	72	-65	12.1	75	5.0	3	1.5	21060	11.7	13290	32	0.3
30-45.1592-109.9925-2-12-						0-M38100	63320	-0.08	630	26930	114	-90	23.8	259	4.8	4	2.0	35630	19.7	14930	47	0.4
30-45.1594-109.9948-2-12-						0-M38101	59070	-0.08	581	29480	166	-92	21.4	250	4.4	4	1.9	34560	21.8	14500	62	0.4
30-45.0974-109.9939-2-12-						0-M38102	73230	-0.06	424	21770	20	-124	11.2	104	-1.3	3	0.4	8690	2.5	15170	10	-0.1
30-45.0954-109.9958-2-12-						0-M38103	69770	-0.08	568	24250	91	142	21.9	654	3.8	3	1.7	32100	13.0	13060	40	0.4
30-45.4218-109.9318-2-12-						0-M38104	65820		836	28550		-111		41		4		9276		14110		
30-45.4843-109.9788-2-12-						0-M38105	41290	-0.06	571	22010	105	-68	14.9	139	3.2	4	1.6	27820	41.8	13680	48	0.5
30-45.6747-108.4753-2-12-						0-M38106	46630	-0.05	645	13040	56	-50	5.5	38	2.7	4	0.8	9288	8.4	16180	33	0.4
30-45.6744-108.4656-2-12-						0-M38107	49670	-0.06	729	5263	66	-54	6.9	51	3.4	3	0.9	14260	6.5	15560	30	0.3
30-45.6897-108.4806-2-12-						0-M38109	47570	-0.06	584	9475	51	-59	5.4	48	3.0	4	0.8	11060	6.9	14760	28	0.3
30-45.6592-108.4919-2-12-						0-M38112	43790	-0.04	495	7361	48	-58	4.5	35	2.0	3	0.8	7008	6.4	16410	28	0.3
30-45.6892-108.4756-2-12-						0-M38113	50870	-0.05	690	11370	55	-54	6.4	42	3.1	3	0.8	13400	6.6	15290	29	0.3
30-45.7431-108.4942-2-12-						0-M38115	48500	-0.06	874	14540	70	-49	10.4	71	3.6	7	1.4	16800	8.6	13870	32	0.5
30-45.7453-108.4444-2-12-						0-M38116	61840	-0.08	903	44760	57	-71	7.3	72	3.8	4	0.9	16200	4.2	15370	30	0.3
30-45.7450-108.4472-2-12-						0-M38117	41210	-0.04	711	25440	63	-68	4.5	40	1.7	3	1.1	8615	14.1	12230	30	0.4
30-45.7214-108.4133-2-12-						0-M38118	40590	-0.04	586	25230	47	67	5.1	43	1.6	3	0.8	9798	5.5	11020	30	0.2
30-45.7217-108.4144-2-12-						0-M38119	54960	-0.06	599	30430	72	-83	6.6	51	3.4	4	0.9	13300	7.2	15440	34	0.3

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued)														U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per million (ppm)														
							Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
30-45.4631-108.0897-2-12-						0-M38062	12610	1292	5719	36	-3	7.9	6.3	-456	-1	-1	11.0	2959	65	3.9	89	0.293
30-45.4694-108.1094-2-12-						0-M38063	13360	557	8290	-27	-3	8.8	4.7	-342	-1	-1	9.9	4257	100	-2.5	64	0.343
30-45.3692-108.3336-2-15-						0-M38064	19590	510	3113	34	-2	6.1	4.2	511	-1	-1	6.7	2976	64	2.7	66	0.461
30-45.3347-108.3297-2-11-						0-M38065	18640	569	3769	40	-2	7.7	5.7	528	-1	-1	8.0	3662	73	2.9	85	0.431
30-45.3303-108.3700-2-12-						0-M38066	20890	472	4517	-19	-2	6.1	4.3	371	-1	-1	7.6	2310	62	1.9	-56	0.343
30-45.3019-108.3411-2-15-						0-M38067	25820	272	4019	-21	-2	3.9	2.0	446	-1	-1	4.6	2088	36	-1.6	51	0.448
30-45.2983-108.3489-2-15-						0-M38068	20190	246	4395	-14	-2	3.8	2.2	-198	-1		5.0	1764	39	2.2	-20	0.408
30-45.2517-108.2814-2-12-						0-M38069	8906	1171	7533	54	-2	6.4	5.5	-389	-1	-1	10.8	3103	77	3.1	92	0.410
30-45.2742-108.2519-2-12-						0-M38070	13810	735	5044	-22	-3	8.3	5.9	-360	-1	-1	9.7	3097	79	4.1	-56	0.299
30-45.3508-108.2544-2-12-						0-M38072	7832	1191	7332	-25	-3	5.9	3.5	-448	-1	-1	11.0	2660	64	3.9	-76	0.370
30-45.2833-108.2169-2-12-						0-M38073	9572	793	6576	-19	-2	6.2	4.2	-337	-1	-1	8.6	3040	65	2.8	75	0.373
30-45.3111-108.2131-2-11-						0-M38075	7727	720	6567	40	-2	6.7	4.3	-324	-1	-1	9.4	3114	63	3.3	99	0.331
30-45.3606-108.2211-2-12-						0-M38076	11640	1970	4790	34	-3	8.7	6.9	-532	-1	1	12.5	3272	76	5.2	99	0.274
30-45.3586-108.1908-2-12-						0-M38077	8399	1772	4464	54	-3	9.1	7.2	-548	-1	-1	13.9	3339	89	4.2	-94	0.301
30-45.3181-108.1883-2-12-						0-M38078	12780	834	5332	43	-3	8.9	5.0	-424	-1	-1	11.9	3251	84	3.8	77	0.345
30-45.2775-108.1789-2-12-						0-M38079	11460	934	5462	47	-3	8.4	5.8	-345	-1	-1	12.2	3024	82	3.9	52	0.330
30-45.2883-108.1575-2-12-						0-M38080	11240	994	5545	-27	-3	8.1	4.4	-353	-1	-1	11.1	3473	83	-2.0	-46	0.351
30-45.2994-108.1572-2-12-						0-M38081	10420	1070	5276	33	-2	7.8	5.6	-423	-1	-1	12.2	3916	74	3.0	82	0.321
30-45.3144-108.1056-2-12-						0-M38082	10700	1049	5732	37	-2	7.9	5.6	-429	-1	-1	11.0	3254	81	3.1	119	0.342
30-45.3386-108.0983-2-11-						0-M38083	8286	687	6708	70	-3	6.6	5.1	-313	-1	-1	10.5	3473	66	3.1	105	0.290
30-45.3558-108.1061-2-12-						0-M38084	11350	1005	5648	-28	-3	7.8	3.4	-347	-1	-1	10.4	3231	79	2.7	81	0.353
30-45.3397-108.0503-2-12-						0-M38085	11020	679	6442	48	-2	6.0	4.5	-344	-1	-1	9.3	3447	56	2.7	66	0.326
30-45.3375-108.0436-2-12-						0-M38086	10880	634	7163	37	-2	6.6	3.7	-352	-1	-1	9.6	2348	68	3.1	83	0.302
30-45.3181-108.0919-2-11-						0-M38087	11250	710	6516	43	-3	6.5	5.1	-318	-1	-1	10.4	3429	59	4.3	112	0.293
30-45.2959-108.0272-2-12-						0-M38088	12970	700	6681	-26	-3	6.3	2.8	-310	-1	-1	8.8	2616	57	-2.0	-34	0.352
30-45.2881-108.0239-2-12-						0-M38089	10130	742	6303	-26	-3	6.5	2.8	-318	-1	-1	8.2	3410	60	3.6	-37	0.394
30-45.4994-108.3606-2-11-						0-M38090	8952	684	6324	34	-2	5.7	3.6	-345	-1	-1	9.4	3220	56	3.1	-46	0.313
30-45.4872-108.3375-2-12-						0-M38091	10340	695	6743	44	-2	6.5	4.5	-379	-1	-1	9.3	2881	55	2.8	99	0.337
30-45.4483-108.3147-2-12-						0-M38092	9358	975	5987	36	-3	6.7	5.0	-339	-1	-1	10.8	2977	68	3.8	-70	0.340
30-45.3939-108.2953-2-12-						0-M38093	20970	233	4522	-19	-2	3.7	2.1	251	-1	-1	4.1	1821	33	2.1	-30	0.461
30-45.3933-108.2797-2-12-						0-M38094	19850	236	4520	-13	-2	3.7	2.5	-216			4.4	2208	40	-1.0	45	0.452
30-45.2986-109.9810-2-12-						0-M38095	13300	326	28750	-20	-2	15.7	3.0	-303	-1	-1	22.3	2143	53	4.2	-26	0.478
30-45.2358-109.9842-2-12-						0-M38096	16400	313	29200	35	-2	15.1	4.1	-311	-1	1	19.7	1997	53	2.2	58	0.732
30-45.2205-109.9861-2-12-						0-M38097	18480	621	13160	-20	-2	4.2	0.9	-352	-1	-1	2.9	3614	84	-1.4	-36	1.369
30-45.1992-109.9921-2-12-						0-M38098	17080	546	7593	31	-2	10.4	4.0	-258	1	-1	11.1	3125	70	2.4	113	0.258
30-45.1592-109.9925-2-12-						0-M38100	23080	680	13550	40	-3	18.6	5.1	-325	-1	1	22.1	4364	95	3.8	104	0.190
30-45.1594-109.9948-2-12-						0-M38101	23300	616	12880	61	-3	16.8	7.4	-331	-1	-1	34.3	4434	97	6.5	84	0.128
30-45.0974-109.9938-2-12-						0-M38102	19490	607	22120	-22	-2	4.8	-0.6	-399	-1	-1	5.5	3957	87	-1.5	-35	0.905
30-45.0964-109.9958-2-12-						0-M38103	23740	604	21800	51	-2	17.8	4.5	-337	-1	-1	29.3	4078	88	3.7	158	0.167
30-45.4218-109.9318-2-12-						0-M38104	21270	720	13530	-22	-2			-416	-1	-1		3623	101		-37	
30-45.4843-109.9788-2-12-						0-M38105	19280	683	7410	40	-2	12.0	5.2	-286	2	-1	14.2	8792	81	4.2	141	0.273
30-45.6747-108.4753-2-12-						0-M38106	8370	157	6319	39	-1	4.7	4.7	287	-1	-1	10.2	2302	54	3.3	48	0.360
30-45.6744-108.4656-2-12-						0-M38107	7909	359	6131	55	-2	5.7	5.1	-220	-1	-1	10.8	2073	72	2.8	76	0.350
30-45.6997-108.4806-2-12-						0-M38109	8389	230	6326	41	-2	5.2	4.0	-220	-1	-1	9.0	2650	61	2.5	-31	0.413
30-45.6592-108.4919-2-12-						0-M38112	6732	155	6573	31	-1	3.3	3.5	-198		-1	8.6	2192	49	2.4	76	0.399
30-45.6892-108.4756-2-12-						0-M38113	9937	350	5614	35	-1	5.6	3.6	-218	-1	-1	9.4	2501	76	3.4	74	0.424
30-45.7431-108.4942-2-12-						0-M38115	13790	161	5194	45	-2	7.5	7.0	-179	-1	-1	9.3	3116	127	3.5	136	0.358
30-45.7453-108.4444-2-12-						0-M38116	28070	243	7284	52	-2	7.8	3.9	-256	-1	-1	8.6	2921	155	-2.0	-39	0.452
30-45.7450-108.4472-2-12-						0-M38117	21130	166	8734	-11	-1	3.9	4.2	-205		-1	7.4	2667	63	3.0	-8	0.420
30-45.7214-108.4133-2-12-						0-M38118	7204	167	7616	27	-1	4.4	4.1	-174	-1	-1	5.8	2042	61	1.4	45	0.348
30-45.7217-108.4144-2-12-						0-M38119	26180	198	9207	52	-2	6.4	5.2	273	-1	-1	8.3	2506	88	3.0	92	0.347

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																											U CONCENTRATION
							TIME SAMPLED																											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (alu.ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
30-45.7258-108.5314-2-12-						0-M38120-06/14/78- 8-	19-15.0-C-		-	7.9-29000-					9-1-6-3-6-3-4-1-2-4-3-3-3-	-3-	-	-	-	-	4.56
30-45.7181-108.5100-2-12-						0-M38121-06/14/78- 8-	18-14.0-C-		-	7.9- 1700-					10-1-6-3-6-3-3-1-1-2-3-3-3-	-3-	-	-	-	-	3.42
30-45.7017-108.5056-2-12-						0-M38122-06/14/78- 9-	18-13.0-C-		-	8.0- 4300-					22-1-6-3-6-3-4-1-2-2-3-3-3-	-3-	-	-	-	-	4.15
30-45.6519-108.5053-2-12-						0-M38123-06/14/78- 9-	21-13.5-C-		-	7.9- 950-					12-1-6-3-6-3-3-1-2-4-3-3-2-	-3-	-	-	-	-	3.60
30-45.6222-108.5433-2-12-						0-M38125-06/14/78-10-	24-13.0-C-		-	7.8- 925-					5-1-6-3-6-3-3-1-2-4-3-3-1-	-3-	-	-	-	-	3.66
30-45.6222-108.5425-2-12-						0-M38126-06/14/78-10-	24-14.0-C-		-	7.7- 800-					9-1-6-3-6-3-3-1-2-4-3-3-1-	-3-	-	-	-	-	3.79
30-45.6125-108.5575-2-12-						0-M38132-06/14/78-16-	29-21.0-C-		-	8.2- 900-					8-1-6-3-6-3-3-1-1-4-3-3-1-	-3-	-	-	-	-	3.94
30-45.5556-108.5492-2-11-						0-M38133-06/14/78-16-	26-12.0- -		-	6.8- 800-					16-1-6-6-6-2-3-1-3-4-3-3-2-	-3-	-	-	-	-	4.18
30-45.6011-108.5425-2-12-						0-M38135-06/14/78-17-	32-19.0-C-		-	7.7- 700-					11-1-6-3-6-3-3-1-2-4-3-3-2-	-3-	-	-	-	-	3.75
30-45.5717-108.5614-2-12-						0-M38137-06/14/78-18-	23-17.5-C-		-	7.7- 700-					9-1-6-3-6-3-3-1-2-4-3-3-2-	-3-	-	-	-	-	5.98
30-45.5911-108.5808-2-12-						0-M38138-06/14/78-19-	20-18.0-C-		-	7.8- 900-					5-1-7-3-7-3-3-1-2-4-3-3-1-	-3-	-	-	-	-	3.76
30-45.5917-108.5797-2-12-						0-M38139-06/14/78-19-	19-16.5-C-		-	8.0- 700-					11-1-7-3-7-3-3-1-2-4-3-3-1-	-3-	-	-	-	-	4.43
30-45.5889-108.6083-2-12-						0-M38140-06/14/78-20-	18-17.5-C-		-	7.8- 1000-					-1-6-3-6-3-3-1-2-4-3-3-2-	-3-	-	-	-	-	3.62
30-45.5686-108.6078-2-12-						0-M38141-06/14/78-20-	18-15.0-C-		-	8.0- 800-					17-1-6-3-6-3-3-1-2-4-3-3-2-	-3-	-	-	-	-	3.92
30-45.7125-108.5733-2-12-						0-M38142-06/15/78-11-	23-16.8-C-		-	6.9-25000-					13-1-7-3-7-3-3-1-1-3-3-3-2-	-3-	-	-	-	-	5.46
30-45.7031-108.5981-2-12-						0-M38143-06/15/78-11-	21-18.0-C-		-	8.6-23500-					11-1-6-3-6-3-3-1-1-3-4-3-2-	-3-	-	-	-	-	4.10
30-45.6864-108.6392-2-12-						0-M38147-06/15/78-14-	21-16.2-C-		-	8.4- 2575-					13-1-7-3-7-4-3-1-2-3-3-3-2-	-3-	-	-	-	-	3.57
30-45.6489-108.6314-2-12-						0-M38148-06/15/78-15-	21-16.0-C-		-	8.2- 1825-					9-1-7-3-7-4-3-1-2-2-3-3-2-	-3-	-	-	-	-	3.74
30-45.6447-108.6203-2-11-						0-M38149-06/15/78-15-	21- 9.0-C-		-	7.2- 3000-					13-1-6-3-6-4-3-1-1-3-4-3-2-	-3-	-	-	-	-	4.58
30-45.6444-108.6119-2-12-						0-M38150-06/15/78-16-	31-18.2-C-		-	7.8- 3525-					9-1-7-3-7-3-3-1-1-4-3-3-1-	-3-	-	-	-	-	3.95
30-45.6439-108.6128-2-12-						0-M38151-06/15/78-16-	31-18.4-C-		-	8.2- 1900-					17-1-7-3-7-3-3-1-1-4-3-3-1-	-3-	-	-	-	-	3.48
30-45.6056-108.6367-2-12-						0-M38157-06/16/78-10-	20-13.0-C-		-	7.9- 1125-					13-1-6-3-6-3-3-1-1-3-3-3-2-	-3-	-	-	-	-	3.74
30-45.5017-108.6600-2-12-						0-M38159-06/16/78-11-	19-15.0-C-		-	8.0- 1550-					5-1-6-3-6-3-3-1-1-4-3-3-2-	-3-	-	-	-	-	4.60
30-45.4781-108.6650-2-12-						0-M38161-06/16/78-12-	24-16.5-C-		-	8.1- 825-					9-1-6-3-2-4-3-1-1-4-3-3-1-	-3-	-	-	-	-	3.69
30-45.4850-108.6500-2-12-						0-M38162-06/16/78-13-	26-18.5-C-		-	7.2- 625-					12-1-6-3-6-2-3-1-1-2-2-3-1-	-3-	-	-	-	-	4.31
30-45.4939-108.6600-2-12-						0-M38163-06/16/78-13-	26-17.0-C-		-	7.9- 800-					6-1-6-3-6-4-3-1-1-3-3-3-1-	-3-	-	-	-	-	4.29
30-45.5481-108.7072-2-12-						0-M38165-06/16/78-17-	19-16.8-C-		-	7.8- 1075-					13-1-7-3-7-4-3-1-2-4-3-3-2-	-3-	-	-	-	-	3.72
30-45.5461-108.7083-2-11-						0-M38166-06/16/78-17-	20- 9.0-C-		-	6.6- 2000-					13-1-7-6-7-3-3-1-1-3-4-3-2-	-3-	-	-	-	-	5.41
30-45.6233-108.7050-2-12-						0-M38168-06/17/78-14-	24-21.0-C-		-	8.4- 1950-					18-1-7-3-7-3-3-1-1-4-3-3-1-	-3-	-	-	-	-	3.32
30-45.6067-108.6953-2-12-						0-M38169-06/17/78-14-	22-20.0-C-		-	8.3- 1725-					8-1-7-3-6-3-4-1-1-4-3-3-1-	-3-	-	-	-	-	3.47
30-45.5653-108.6886-2-12-						0-M38171-06/17/78-15-	24-19.5-C-		-	8.3- 1500-					13-1-7-3-6-3-4-1-1-4-3-3-1-	-3-	-	-	-	-	3.69
30-45.6292-108.7128-2-12-						0-M38173-06/17/78-16-	24-20.5-C-		-	8.3- 2100-					10-1-6-3-6-3-3-1-2-4-3-3-1-	-3-	-	-	-	-	3.44
30-45.6500-108.7083-2-12-						0-M38175-06/17/78-15-	25-21.5-C-		-	8.4- 4500-					8-1-6-3-6-3-3-1-2-4-3-3-1-	-3-	-	-	-	-	3.77
30-45.6225-108.7378-2-12-						0-M38177-06/18/78-10-	25-13.0-C-		-	8.5- 2250-					16-1-7-3-6-3-4-1-2-4-3-3-1-	-3-	-	-	-	-	3.15
30-45.5089-108.7472-2-12-						0-M38178-06/18/78-12-	28-19.0-C-		-	8.1- 2250-					12-1-6-3-6-3-3-1-2-2-2-3-1-	-3-	-	-	-	-	3.30
30-45.5083-108.7472-2-12-						0-M38179-06/18/78-12-	28-23.0-C-		-	8.5- 4100-					13-1-6-3-6-3-3-1-2-2-2-3-1-	-3-	-	-	-	-	4.20
30-45.4331-108.6950-2-11-						0-M38187-06/20/78-11-	22-13.0-C-		-	6.4- 475-					8-1-2-4-2- - - - -4-3-3-1-	-3-	-	-	-	-	7.15
30-45.4494-108.7283-2-11-						0-M38189-06/20/78-11-	19-12.0-C-		-	7.2- 3525-					13-1-6-3-6-2-3-1- -4-3-3-1-	-3-	-	-	-	-	4.12
30-45.4644-108.7161-2-12-						0-M38190-06/20/78-12-	20-13.0-C-		-	8.2- 750-					2-1-6-4-6-3-4-1-1-3-4-3-1-	-3-	-	-	-	-	2.97
30-45.4989-108.7250-2-12-						0-M38192-06/20/78-15-	27-24.5-C-		-	8.4- 2525-					11-1-6-3-6-3-4-1-2-4-3-3-1-	-3-	-	-	-	-	2.88
30-45.4989-108.7064-2-12-						0-M38193-06/20/78-21-	21-17.0-C-		-	8.2- 3025-					1-1-6-3-6-3-3-1-2-4-3-3-1-	-3-	-	-	-	-	3.09
30-45.4889-108.7050-2-12-						0-M38194-06/20/78-21-	21-11.5-C-		-	8.1- 1200-					5-1-6-3-6-3-3-1-2-2-2-3-1-	-3-	-	-	-	-	3.16
30-45.4353-108.7356-2-12-						0-M38195-06/22/78-11-	25-16.5-C-		-	8.2- 825-					6-1-6-4-6-3-3-1-1-3-4-3-1-	-3-	-	-	-	-	3.05
30-45.4311-108.7347-2-12-						0-M38196-06/22/78-11-	23-18.5-C-		-	7.9- 700-					16-1-6-3-6-3-3-1-1-2-3-3-1-	-3-	-	-	-	-	2.54
30-45.4150-108.7406-2-15-						0-M38197-06/22/78-13-	29- - - -			- -					18-1-6-3-6- - - - -4-3-3-1-	-3-	-	-	-	-	3.47
30-45.4006-108.7128-2-12-						0-M38198-06/22/78-14-	30-17.5-C-		-	8.1- 550-					6-1-6-3-6-3-3-1-2-3-3-3-1-	-3-	-	-	-	-	3.01
30-45.4128-108.7214-2-12-						0-M38199-06/22/78-14-	22-19.0-C-		-	8.2- 600-					4-1-6-3-6-3-3-1-1-3-3-3-1-	-3-	-	-	-	-	2.95
30-45.3964-108.7394-2-12-						0-M38200-06/22/78-15-	28-18.0-C-		-	7.8- 1025-					13-1-6-3-6-3-3-1-1-3-3-3-1-	-3-	-	-	-	-	3.71
30-45.3942-108.7469-2-12-						0-M38201-06/22/78-15-	29-34.0-C-		-	8.1- 1625-					13-1-6-6-6-1-4-1-3-4-3-3-1-	-3-	-	-	-	-	4.20
30-45.7236-108.0119-2-12-						0-M38202-06/23/78-10-	25-22.0-C-		-	7.8-50000-					18-1-6-6-6-1-4-1-2-4-3-2-1-	-3-	-	-	-	-	3.04
30-45.7164-108.0406-2-12-						0-M38203-06/23/78-11-	27-25.5-C-		-	7.4-50000-					9-1-6-6-6-1-4-2-1-6-3-2-1-	-3-	-	-	-	-	3.36

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
30-45.	7258-	108.5314-	2-	12-	0-	M38120	-5	-5	-5	16	-20	15	18	-10	-15	2	47
30-45.	7181-	108.5100-	2-	12-	0-	M38121	-5	-5	-5	12	-20	-15	14	-10	-15	2	34
30-45.	7017-	108.5056-	2-	12-	0-	M38122	-5	-5	-5	14	-20	-15	10	-10	-15	2	36
30-45.	6519-	108.5053-	2-	12-	0-	M38123	-5	-5	-5	-10	-20	-15	9	-10	-15	2	38
30-45.	6222-	108.5433-	2-	12-	0-	M38125	-5	-5	-5	13	-20	-15	10	-10	-15	2	25
30-45.	6222-	108.5425-	2-	12-	0-	M38126	-5	-5	-5	14	-20	-15	14	-10	-15	2	42
30-45.	6125-	108.5575-	2-	12-	0-	M38132	-5	-5	-5	15	-20	-15	6	-10	-15	2	39
30-45.	5556-	108.5492-	2-	11-	0-	M38133	-5	-5	-5	19	-20	-15	21	-10	-15	1	25
30-45.	6011-	108.5425-	2-	12-	0-	M38135	-5	-5	-5	10	-20	-15	8	-10	-15	2	27
30-45.	5717-	108.5614-	2-	12-	0-	M38137	-5	-5	-5	13	-20	20	17	-10	-15	3	43
30-45.	5911-	108.5808-	2-	12-	0-	M38138	-5	-5	-5	17	-20	-15	12	-10	-15	2	30
30-45.	5917-	108.5797-	2-	12-	0-	M38139	-5	-5	-5	24	-20	-15	14	-10	-15	2	36
30-45.	5589-	108.6083-	2-	12-	0-	M38140	-5	5	-5	11	-20	-15	13	-10	-15	3	40
30-45.	5686-	108.6078-	2-	12-	0-	M38141	-5	-5	-5	15	-20	-15	16	-10	-15	2	30
30-45.	7125-	108.5733-	2-	12-	0-	M38142	-5	-5	-5	12	-20	44	17	-10	-15	3	50
30-45.	7031-	108.5981-	2-	12-	0-	M38143	-5	-5	-5	25	-20	-15	14	-10	-15	2	33
30-45.	6864-	108.6392-	2-	12-	0-	M38147	-5	-5	-5	14	-20	-15	7	-10	-15	2	31
30-45.	6489-	108.6314-	2-	12-	0-	M38148	-5	-5	-5	10	-20	-15	13	-10	-15	2	25
30-45.	5447-	108.6203-	2-	11-	0-	M38149	-5	-5	-5	16	-20	-15	25	-10	-15	2	35
30-45.	6444-	108.6119-	2-	12-	0-	M38150	-5	-5	-5	13	-20	-15	12	-10	-15	2	46
30-45.	6439-	108.6128-	2-	12-	0-	M38151	-5	-5	-5	-10	-20	-15	12	-10	-15	2	34
30-45.	6056-	108.6367-	2-	12-	0-	M38157	-5	-5	-5	13	-20	-15	-5	-10	-15	2	30
30-45.	5017-	108.6600-	2-	12-	0-	M38159	-5	5	-5	22	-20	23	18	-10	-15	2	42
30-45.	4781-	108.6650-	2-	12-	0-	M38161	-5	-5	-5	27	-20	26	13	-10	-15	1	30
30-45.	4850-	108.6500-	2-	12-	0-	M38162	-5	-5	-5	33	-20	29	24	-10	-15	2	46
30-45.	4939-	108.6600-	2-	12-	0-	M38163	-5	-5	-5	35	-20	26	21	-10	-15	2	61
30-45.	5491-	108.7072-	2-	12-	0-	M38165	-5	-5	-5	19	-20	-15	11	-10	-15	2	35
30-45.	5461-	108.7083-	2-	11-	0-	M38166	-5	-5	-5	18	-20	18	21	-10	-15	2	37
30-45.	6233-	108.7050-	2-	12-	0-	M38168	-5	5	-5	14	-20	-15	7	-10	-15	2	31
30-45.	6067-	108.6953-	2-	12-	0-	M38169	-5	-5	-5	13	-20	-15	10	-10	-15	2	40
30-45.	5553-	108.6886-	2-	12-	0-	M38171	-5	-5	-5	14	-20	-15	13	-10	-15	2	28
30-45.	6292-	108.7128-	2-	12-	0-	M38173	-5	-5	-5	12	-20	-15	5	-10	-15	2	37
30-45.	6500-	108.7083-	2-	12-	0-	M38175	-5	-5	-5	23	-20	23	8	-10	-15	2	47
30-45.	6225-	108.7378-	2-	12-	0-	M38177	-5	-5	-5	15	-20	-15	7	-10	-15	2	28
30-45.	5089-	108.7472-	2-	12-	0-	M38178	-5	-5	-5	31	-20	21	16	-10	-15	2	29
30-45.	5083-	108.7472-	2-	12-	0-	M38179	-5	-5	-5	27	-20	16	22	-10	-15	3	54
30-45.	4331-	108.6950-	2-	11-	0-	M38187	-5	-5	-5	47	-20	16	34	-10	-15	3	13
30-45.	4494-	108.7283-	2-	11-	0-	M38189	-5	-5	-5	26	-20	31	17	-10	-15	2	35
30-45.	4644-	108.7161-	2-	12-	0-	M38190	-5	-5	-5	21	-20	-15	-5	-10	-15	2	28
30-45.	4989-	108.7250-	2-	12-	0-	M38192	-5	-5	-5	26	-20	-15	14	-10	-15	2	40
30-45.	4889-	108.7064-	2-	12-	0-	M38193	-5	-5	-5	42	-20	-15	7	-10	-15	2	22
30-45.	4989-	108.7050-	2-	12-	0-	M38194	-5	-5	-5	21	-20	25	9	-10	-15	3	77
30-45.	4353-	108.7356-	2-	12-	0-	M38195	-5	-5	-5	20	-20	-15	8	-10	-15	3	51
30-45.	4311-	108.7347-	2-	12-	0-	M38196	-5	-5	-5	26	-20	-15	-5	-10	-15	2	43
30-45.	4150-	108.7406-	2-	15-	0-	M38197	-5	-5	-5	17	-20	-15	12	-10	-15	2	39
30-45.	4006-	108.7128-	2-	12-	0-	M38198	-5	-5	-5	24	-20	20	-5	-10	-15	2	26
30-45.	4128-	108.7214-	2-	12-	0-	M38199	-5	-5	-5	32	-20	21	5	-10	-15	1	12
30-45.	3964-	108.7394-	2-	12-	0-	M38200	-5	-5	-5	24	-20	23	12	-10	-15	2	37
30-45.	3942-	108.7469-	2-	12-	0-	M38201	-5	-5	-5	28	-20	25	23	-10	-15	2	55
30-45.	7236-	108.0119-	2-	12-	0-	M38202	-5	-5	-5	19	-20	-15	14	-10	-15	2	58
30-45.	7164-	108.0406-	2-	12-	0-	M38203	-5	-5	-5	23	-20	-15	13	-10	-15	2	64

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per million (ppm)														
							Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
30-45.7258-108.5314-2-12-		0-M38120	69490	-0.08	854	8632	63	-65	7.0	70	4.3	5	0.8	15810	6.0	17990	36	0.4
30-45.7181-108.5100-2-12-		0-M38121	43350	-0.04	677	7833	43	-63	5.2	41	1.8	3	0.7	8772	7.8	13530	28	0.3
30-45.7017-108.5056-2-12-		0-M38122	51780	-0.05	708	14720	52	-51	5.3	43	2.5	4	0.8	11450	7.8	15190	34	0.4
30-45.6519-108.5053-2-12-		0-M38123	45950	-0.05	641	7725	57	-49	4.9	39	3.2	4	0.8	8281	6.9	15140	33	0.3
30-45.6222-108.5433-2-12-		0-M38125	44850	-0.06	602	12200	51	-57	4.2	40	2.7	4	0.9	8542	5.9	15750	34	0.3
30-45.6222-108.5425-2-12-		0-M38126	47280	-0.04	537	7550	48	-58	5.3	29	2.1	3	0.8	7425	5.4	15720	26	0.3
30-45.6125-108.5575-2-12-		0-M38132	50600	-0.05	568	12840	53	-57	5.6	35	2.5	4	0.8	8481	6.3	15310	32	0.3
30-45.5556-108.5492-2-11-		0-M38133	51520	-0.06	609	8805	70	-61	6.5	41	3.8	4	0.9	11010	5.9	15690	34	0.4
30-45.6011-108.5425-2-12-		0-M38135	46990	-0.06	586	9077	46	-56	4.3	23	2.3	3	0.6	7738	5.6	16550	30	0.3
30-45.5717-108.5614-2-12-		0-M38137	60550	-0.05	797	10300	66	-64	5.5	25	2.1	4	0.9	8792	6.1	16090	37	0.4
30-45.5911-108.5808-2-12-		0-M38138	48160	-0.05	585	15350	54	-54	5.5	38	2.5	4	0.9	8607	7.1	16140	35	0.3
30-45.5917-108.5797-2-12-		0-M38139	53930	-0.06	597	13090	71	-55	6.3	40	2.9	4	0.9	9855	7.4	18360	37	0.4
30-45.5689-108.6083-2-12-		0-M38140	50000	-0.07	600	12010	58	-63	5.5	44	2.1	4	0.8	10550	5.9	16360	28	0.4
30-45.5696-108.6078-2-12-		0-M38141	42150	-0.04	588	8501	52	-60	5.2	36	2.0	3	0.7	7515	8.4	17100	30	0.3
30-45.7125-108.5733-2-12-		0-M38142	68960	-0.05	922	8584	65	-58	6.4	42	2.9	7	1.2	11340	7.3	17470	34	0.5
30-45.7031-108.5981-2-12-		0-M38143	57450	-0.06	668	7494	79	-57	6.1	62	3.2	4	1.1	13430	9.3	17260	40	0.4
30-45.6864-108.6392-2-12-		0-M38147	43020	-0.06	626	12730	46	-57	4.3	39	1.5	3	0.7	8731	8.0	12850	28	0.3
30-45.6489-108.6314-2-12-		0-M38148	42890	-0.04	541	12930	47	-66	5.4	47	1.5	3	0.7	7713	8.1	16130	26	0.3
30-45.6447-108.6203-2-11-		0-M38149	43590	-0.05	515	32770	55	70	4.5	32	2.4	4	0.8	7913	6.3	15170	34	0.3
30-45.6444-108.6119-2-12-		0-M38150	51180	-0.05	678	10730	62	-57	7.2	39	3.3	4	0.9	13480	6.4	16760	32	0.4
30-45.6439-108.6128-2-12-		0-M38151	44040	-0.05	623	11670	47	-53	4.1	28	2.5	3	0.8	9143	4.9	14520	29	0.3
30-45.6056-108.6367-2-12-		0-M38157	47050	-0.04	635	10990	50	-60	5.1	39	1.7	3	0.7	8028	6.2	14300	28	0.3
30-45.5017-108.6600-2-12-		0-M38159	63540	-0.06	579	13900	76	-76	10.9	53	4.6	5	1.0	19490	5.8	12450	38	0.4
30-45.4781-108.6650-2-12-		0-M38161	58450	-0.07	551	18840	87	-60	10.9	83	3.2	5	1.2	26320	8.5	9099	38	0.5
30-45.4850-108.6500-2-12-		0-M38162	55130	-0.09	448	7319	72	-81	10.4	55	-1.8	5	1.2	19800	7.1	13240	40	0.4
30-45.4939-108.6600-2-12-		0-M38163	61090	-0.06	407	8772	74	-76	11.3	59	3.1	4	1.0	18990	7.5	11120	42	0.5
30-45.5481-108.7072-2-12-		0-M38165	50620	-0.05	644	18250	54	-60	6.0	38	2.5	3	0.7	9592	5.9	15420	31	0.3
30-45.5451-108.7083-2-11-		0-M38166	65550	-0.06	608	37990	95	-51	5.1	34	3.2	6	0.8	12120	7.1	9384	50	0.5
30-45.6233-108.7050-2-12-		0-M38168	43630	-0.06	579	13370	54	-61	4.3	32	-1.1	3	0.7	8213	6.1	15410	30	0.3
30-45.6067-108.6953-2-12-		0-M38169	39260	-0.04	627	42250	50	-70	5.4	31	2.1	3	0.8	7247	6.5	12720	26	0.3
30-45.5653-108.6886-2-12-		0-M38171	46340	-0.05	647	13530	52	-54	5.4	37	2.4	3	0.8	9835	7.2	14360	32	0.4
30-45.6292-108.7128-2-12-		0-M38173	42820	-0.05	629	13080	61	-55	6.1	47	2.1	3	0.8	9624	8.9	14330	30	0.4
30-45.6500-108.7083-2-12-		0-M38175	51860	-0.07	619	35110	63	78	7.0	54	2.5	4	0.9	13190	4.6	14800	32	0.4
30-45.6225-108.7378-2-12-		0-M38177	46340	-0.04	599	15000	51	-71	5.5	58	1.9	3	0.8	8974	8.3	16150	27	0.3
30-45.5089-108.7472-2-12-		0-M38178	51470	-0.05	730	16700	55	-68	9.0	45	2.8	4	0.9	17540	5.6	10980	33	0.4
30-45.5083-108.7472-2-12-		0-M38179	62170	-0.07	601	10070	85	-74	11.3	60	4.2	4	1.1	21070	5.7	15620	40	0.4
30-45.4331-108.6950-2-11-		0-M38187	46830	-0.09	527	6445	169	-68	16.5	133	2.0	5	1.8	33310	10.7	10000	63	0.5
30-45.4494-108.7283-2-11-		0-M38189	52570	-0.08	299	9991	67	-87	11.1	55	-1.6	4	1.3	24620	9.2	10380	29	0.3
30-45.4644-108.7161-2-12-		0-M38190	51860	-0.06	599	21530	54	-75	9.5	107	1.7	4	1.0	20310	11.8	9610	28	0.4
30-45.4989-108.7250-2-12-		0-M38192	52430	-0.06	965	47700	53	-68	9.0	45	3.0	4	0.9	15990	6.3	6865	30	0.4
30-45.4989-108.7064-2-12-		0-M38193	60630	-0.07	1037	30320	61	-62	10.5	61	3.8	4	1.1	19910	5.9	7416	29	0.4
30-45.4889-108.7050-2-12-		0-M38194	46130	-0.08	569	63820	42	-109	8.7	36	2.2	4	1.2	14690	6.9	-5445	31	0.3
30-45.4353-108.7356-2-12-		0-M38195	46450	-0.05	457	10800	64	-66	8.9	57	2.0	4	1.0	13740	9.1	10570	32	0.4
30-45.4311-108.7347-2-12-		0-M38196	42110	-0.06	730	70430	48	-70	7.6	58	-1.2	3	0.9	16330	10.9	6509	25	0.3
30-45.4150-108.7406-2-15-		0-M38197	47050	-0.06	375	21490	75	-82	10.4	69	2.1	4	1.2	17140	8.9	9180	33	0.5
30-45.4006-108.7128-2-12-		0-M38198	53680	-0.08	470	29110	57	-77	8.5	57	2.1	3	1.0	18900	7.6	11070	28	0.4
30-45.4128-108.7214-2-12-		0-M38199	44040	-0.05	500	19600	49	-70	8.8	58	1.8	4	0.9	17180	10.2	8974	28	0.4
30-45.3964-108.7394-2-12-		0-M38200	51110	-0.06	376	23730	67	-65	11.2	50	2.8	5	1.1	19960	6.8	10170	39	0.4
30-45.3942-108.7469-2-12-		0-M38201	62060	-0.08	441	17670	95	-73	11.7	67	3.7	6	1.5	18800	7.0	11480	50	0.5
30-45.7236-108.0119-2-12-		0-M38202	57500	-0.07	687	22300	54	370	7.6	51	3.8	3	0.6	14510	6.0	16250	29	0.3
30-45.7164-108.0406-2-12-		0-M38203	56000	0.12	690	46510	46	194	6.9	42	2.6	3	0.8	10150	4.5	15400	27	0.2

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
30-45.7258-108.5314-2-12-			0	M	38120		14820	209	6484	37	-2	8.4	4.9	-238	-1	-1	13.4	2787	104	3.7	-43	0.340
30-45.7181-108.5100-2-12-			0	M	38121		6915	227	6703	28	-1	3.8	3.3	-225		-1	8.2	1570	61	2.4	42	0.417
30-45.7017-108.5056-2-12-			0	M	38122		10980	259	6370	38	-1	5.4	4.6	206	-1	-1	11.2	2290	66	2.8	53	0.371
30-45.6519-108.5053-2-12-			0	M	38123		7543	166	6319	47	-1	4.2	4.4	-170	-1	-1	10.4	1996	50	2.9	56	0.346
30-45.6222-108.5433-2-12-			0	M	38125		8331	197	5905	32	-2	4.2	2.9	-217	-1	-1	9.4	2078	56	2.3	-29	0.389
30-45.6222-108.5425-2-12-			0	M	38126		6654	192	5663	35	-1	3.6	3.6	-210	-1	-1	9.5	1782	51	2.3	50	0.399
30-45.6125-108.5575-2-12-			0	M	38132		10060	219	6790	44	-2	4.7	3.7	-204	-1	-1	10.5	2126	50	2.8	61	0.375
30-45.5556-108.5492-2-11-			0	M	38133		10690	266	6394	42	3	5.2	4.8	-222	-1	-1	11.9	2137	49	2.8	138	0.351
30-45.6011-108.5425-2-12-			0	M	38135		7381	158	5966	-19	-2	4.1	3.5	-193	-1	-1	8.8	1868	45	3.0	65	0.426
30-45.5717-108.5614-2-12-			0	M	38137		10870	242	5648	45	-1	4.6	5.9	-244	1	-1	16.8	1861	50	3.2	66	0.356
30-45.5911-108.5808-2-12-			0	M	38138		7511	226	6114	54	-1	4.5	4.0	-197	-1	-1	9.8	2235	52	2.6	63	0.384
30-45.5917-108.5797-2-12-			0	M	38139		11040	250	5675	-17	-2	5.3	5.1	-205	-1	-1	13.7	2269	54	3.1	-62	0.323
30-45.5689-108.6083-2-12-			0	M	38140		7973	242	6281	-23	-2	5.2	3.6	-239	-1	-1	10.0	2640	61	3.0	-67	0.362
30-45.5586-108.6078-2-12-			0	M	38141		7471	206	5704	44	-1	3.7	3.6	-213	-1	-1	9.3	2673	56	2.3	-20	0.422
30-45.7125-108.5733-2-12-			0	M	38142		11350	165	7941	44	-2	5.6	7.2	-191	-1	-1	13.3	2617	78	3.5	105	0.411
30-45.7031-108.5981-2-12-			0	M	38143		11110	224	6971	44	-2	6.9	5.2	-201	-1	-1	12.2	2522	87	3.4	110	0.336
30-45.6864-108.6392-2-12-			0	M	38147		7426	201	6954	-18	-2	4.2	2.7	-199	-1	-1	8.9	2034	47	3.1	54	0.401
30-45.6489-108.6314-2-12-			0	M	38148		8228	191	7275	46	-1	3.7	4.2	-219	-1	-1	8.9	2242	54	2.9	42	0.420
30-45.6447-108.6203-2-11-			0	M	38149		13150	126	5089	33	-1	4.5	5.0	274	-1	-1	10.2	1961	49	2.9	-66	0.449
30-45.6444-108.6119-2-12-			0	M	38150		9674	357	6190	53	-2	5.4	5.3	-217	-1	-1	11.7	2066	64	3.2	72	0.338
30-45.6439-108.6128-2-12-			0	M	38151		7830	214	5958	46	-2	4.3	3.0	-193	-1	-1	8.1	1732	55	2.1	28	0.430
30-45.6056-108.6367-2-12-			0	M	38157		7693	225	6385	39	-1	3.9	4.6	-221	-1	-1	10.4	1966	57	3.2	49	0.360
30-45.5017-108.6600-2-12-			0	M	38159		10600	1144	5218	37	-2	8.4	5.7	-387	-1	-1	11.5	3629	89	3.4	-57	0.400
30-45.4781-108.6650-2-12-			0	M	38161		10920	505	5141	26	-2	9.9	7.5	-260	-1	-1	9.6	5028	121	3.9	104	0.384
30-45.4850-108.6500-2-12-			0	M	38162		9265	1027	4946	-29	-3	8.9	5.0	-420	-1	-1	10.3	4289	86	4.5	-109	0.418
30-45.4939-108.6600-2-12-			0	M	38163		12090	937	4259	41	-2	9.2	7.1	-407	1	-1	11.1	4191	87	3.8	69	0.386
30-45.5481-108.7072-2-12-			0	M	38165		10640	330	6887	40	-2	5.0	4.1	-227	-1	-1	10.7	1915	57	2.7	177	0.348
30-45.5461-108.7083-2-11-			0	M	38166		16780	174	3390	-18	-2	6.3	8.3	225	-1	-1	19.2	1841	39	4.5	166	0.282
30-45.6233-108.7050-2-12-			0	M	38168		8998	238	6716	34	-2	4.0	2.9	-217	-1	-1	9.3	1702	50	2.5	66	0.357
30-45.6067-108.6953-2-12-			0	M	38169		10790	271	6105	44	-1	3.5	3.6	-256		-1	8.3	1493	52	2.5	-23	0.418
30-45.5653-108.6886-2-12-			0	M	38171		9008	341	5968	51	-1	4.7	4.0	-217	-1	-1	9.5	1934	61	3.2	63	0.388
30-45.6292-108.7128-2-12-			0	M	38173		9157	261	7129	44	-1	4.3	4.4	-193	-1	-1	9.8	1996	48	3.2	-63	0.351
30-45.6500-108.7083-2-12-			0	M	38175		12500	395	6089	-26	-2	6.0	3.9	378	-1	-1	10.7	2672	76	3.2	92	0.352
30-45.6225-108.7378-2-12-			0	M	38177		10470	237	8623	30	-1	4.3	3.4	-236		-1	8.8	1982	58	2.6	48	0.358
30-45.5089-108.7472-2-12-			0	M	38178		12720	765	6712	40	-2	7.3	4.7	-305	-1	-1	8.0	3248	77	2.9	85	0.413
30-45.5083-108.7472-2-12-			0	M	38179		11870	1084	5755	40	-2	8.6	5.9	-355	-1	-1	12.2	2763	76	3.7	82	0.344
30-45.4331-108.6950-2-11-			0	M	38187		5943	461	6915	-25	-3	20.0	10.9	740	-1	-1	13.3	3824	122	5.0	-36	0.538
30-45.4494-108.7283-2-11-			0	M	38189		-4158	1170	5398	-27	-2	8.9	4.6	-441	-1	-1	8.8	3049	91	3.9	-42	0.468
30-45.4644-108.7161-2-12-			0	M	38190		10330	674	9004	23	-2	7.6	4.4	-306	-1	-1	7.2	3623	123	3.2	-50	0.413
30-45.4989-108.7250-2-12-			0	M	38192		17430	704	4885	25	-2	8.1	3.8	-311	-1	-1	8.4	3378	81	3.1	70	0.343
30-45.4889-108.7064-2-12-			0	M	38193		16660	573	3690	-20	-2	9.7	4.7	-308	-1	-1	10.2	3794	97	3.3	101	0.303
30-45.4889-108.7050-2-12-			0	M	38194		7091	1623	4825	-26	-2	6.7	2.4	-566	-1	-1	8.0	2969	57	3.9	-41	0.395
30-45.4353-108.7356-2-12-			0	M	38195		8360	459	8071	-15	-2	6.2	4.9	-255	-1	-1	7.5	3781	65	2.9	59	0.407
30-45.4311-108.7347-2-12-			0	M	38196		14330	546	5219	-18	-2	6.3	3.6	-280	-1	-1	6.6	3488	77	1.8	68	0.385
30-45.4150-108.7406-2-15-			0	M	38197		14510	813	7460	-19	-2	7.7	6.0	-366	-1	-1	9.8	3263	69	3.4	-43	0.354
30-45.4006-108.7128-2-12-			0	M	38198		16880	546	6753	-24	-2	8.5	3.5	-331	-1	-1	8.9	4036	96	3.0	-42	0.338
30-45.4128-108.7214-2-12-			0	M	38199		12450	528	7277	-14	-2	6.2	4.2	-283		-1	7.0	3629	75	2.7	58	0.421
30-45.3964-108.7394-2-12-			0	M	38200		13740	901	4634	43	-2	8.5	5.6	-321	-1	-1	9.7	3851	77	5.0	95	0.382
30-45.3942-108.7469-2-12-			0	M	38201		11670	742	5595	-24	-3	10.0	7.4	-341	-1	-1	12.2	5008	90	4.9	-67	0.344
30-45.7236-108.0119-2-12-			0	M	38202		30330	293	15460	47	-2	7.3	3.2	352	-1	-1	6.4	3438	94	2.1	-33	0.475
30-45.7164-108.0406-2-12-			0	M	38203		30240	644	10470	32	-2	5.4	3.4	517	-1	-1	6.9	3058	101	1.5	-62	0.487

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples (1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																												U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
30-45.6917-108.0386-2-15-						0-M38204-06/23/78-13-	31-	-C-	-	-			-	-	-	6-1-6-7-6-	-	-	-	-7-1-1-1-	-3-	-	-	-	-							2.58
30-45.6836-108.0419-2-15-						0-M38205-06/23/78-13-	31-	-C-	-	-			-	-	-	11-1-6-7-6-	-	-	-	-4-3-2-1-	-3-	-	-	-	-							2.73
30-45.8506-108.8178-2-12-						0-M38209-05/25/78-15-	24-	19.0-	-	-			8.6-	1300-		15-1-6-6-6-3-4-5-1-4-4-2-2-					-1-	-	-	-	-							2.90
30-45.7775-108.8239-2-12-						0-M38212-06/06/78-10-	24-	16.0-	-	-			7.4-	3500-		10-1-6-4-	-4-4-1-1-3-3-3-2-				-	-	-	-	-							2.35
30-45.7817-108.8425-2-12-						0-M38214-06/06/78-11-	27-	17.0-	-	-			7.7-	2600-		11-1-6-4-6-4-4-2-2-4-3-3-2-					-1-	-	-	-	-							2.20
30-45.7878-108.8508-2-12-						0-M38215-06/06/78-12-	29-	21.0-	C-	-			7.7-	5000-		9-1-7-4-7-2-3-1-1-4-4-3-2-					-3-	-	-	-	-							2.75
30-45.7936-108.8211-2-12-						0-M38216-06/06/78-13-	30-	24.5-	-	-			7.8-	4750-		4-1-4-5-4-3-3-1-1-3-3-3-2-					-3-	-	-	-	-							2.17
30-45.8008-108.8272-2-12-						0-M38217-06/06/78-14-	29-	24.0-	-	-			7.9-	4900-		5-1-6-4-7-3-3-1-2-4-3-3-2-					-3-	-	-	-	-							2.15
30-45.8008-108.8294-2-12-						0-M38218-06/06/78-14-	29-	24.0-	-	-			8.0-	4800-		5-1-6-4-7-3-3-1-2-4-3-3-2-					-3-	-	-	-	-							2.14
30-45.8569-108.8400-2-12-						0-M38219-06/06/78-14-	26-	24.0-	-	-			8.2-	3400-		5-1-6-5-6-2-3-1-1-4-5-2-2-					-3-	-	-	-	-							2.75
30-45.8600-108.8064-2-11-						0-M38223-06/07/78- 9-	18-	11.0-	-	-			7.8-	1200-		5-1-6-5-7-3-4-1-	-4-4-2-2-				-1-	-	-	-	-							2.61
30-45.8997-108.7664-2-12-						0-M38226-06/07/78-11-	24-	16.0-	-	-			7.5-	2600-		11-1-1-5-6-3-4-1-3-4-3-2-3-					-1-	-	-	-	-							2.63
30-45.9439-108.8089-2-12-						0-M38228-06/07/78-13-	26-	24.0-	C-	-			8.2-	1750-		11-1-1-5-7-3-4-1-1-4-4-1-2-					-1-	-	-	-	-							2.64
30-45.9489-108.8383-2-12-						0-M38229-06/07/78-13-	28-	22.0-	-	-			8.0-	6000-		9-1-4-5-6-2-3-5-1-4-3-1-3-					-3-	-	-	-	-							2.83
30-45.9939-108.9136-2-11-						0-M38238-06/08/78-14-	30-	13.5-	C-	-			6.9-	55-		6-1-6-6-6-2-3-1-	-4-3-2-2-				-1-	-	-	-	-							1.42
30-45.9928-108.9036-2-12-						0-M38239-06/07/78-14-	29-	21.5-	-	-			7.1-	3300-		6-1-4-6-6-2-4-1-1-4-3-2-2-					-1-	-	-	-	-							2.18
30-45.9792-108.8817-2-11-						0-M38240-06/08/78-15-	31-	22.1-	-	-			7.3-	2900-		9-1-6-5-6-2-3-1-	-4-2-3-1-				-3-	-	-	-	-							3.24
30-45.8808-108.8869-2-11-						0-M38241-06/09/78- 9-	25-	10.5-	-	-			6.0-	6000-		10-1-3-5-6-	-	-1-	-4-4-2-2-		-1-	-	-	-	-							2.95
30-45.9128-108.8292-2-12-						0-M38245-06/09/78-11-	26-	18.0-	-	-			7.8-	2200-		15-1-4-6-8-2-3-1-3-4-3-2-2-					-3-	-	-	-	-							3.31
30-45.9114-108.8686-2-12-						0-M38246-06/09/78-12-	28-	23.0-	-	-			7.6-	3950-		13-1-7-	-	-3-4-1-1-4-3-2-2-			-1-	-	-	-	-							2.78
30-45.9669-108.8811-2-12-						0-M38249-06/09/78-14-	31-	28.2-	-	-			7.8-	9000-		8-1-6-6-8-2-3-1-3-4-2-2-2-					-1-	-	-	-	-							2.89
30-45.9461-108.8878-2-12-						0-M38250-06/09/78-15-	31-	27.3-	-	-			8.3-	12900-		11-1-6-6-6-2-3-1-3-4-3-2-2-					-1-	-	-	-	-							2.61
30-45.9450-108.8875-2-12-						0-M38251-06/09/78-15-	30-	25.3-	-	-			8.1-	5550-		10-1-6-6-8-2-3-1-1-4-3-2-2-					-3-	-	-	-	-							3.38
30-45.9006-108.9639-2-12-						0-M38255-06/09/78-17-	24-	21.5-	-	-			7.4-	3520-		12-1-6-6-6-3-3-1-3-4-4-2-2-					-1-	-	-	-	-							2.79
30-45.9461-108.9847-2-12-						0-M38259-06/12/78-13-	25-	15.5-	-	-			7.3-	6100-		6-1-6-5-7-3-3-1-3-4-4-2-2-					-1-	-	-	-	-							2.92
30-45.9864-109.0414-2-11-						0-M38262-06/12/78-15-	27-	10.5-	C-	-			7.1-	3750-		16-1-7-5-8-	-	-1-	-4-3-2-2-		-1-	-	-	-	-							1.56
30-45.9744-109.0883-2-12-						0-M38263-06/12/78-15-	29-	22.0-	-	-			7.5-	8200-		5-1-7-	-	-1-3-5-1-4-3-2-2-			-1-	-	-	-	-							3.32
30-45.9644-109.0681-2-12-						0-M38264-06/12/78-16-	30-	19.5-	-	-			7.9-	3450-		6-1-7-6-8-2-3-1-1-4-3-2-2-					-3-	-	-	-	-							3.60
30-45.9106-109.0667-2-12-						0-M38268-06/12/78-18-	21-	20.8-	-	-			7.9-	2300-		8-1-6-5-7-3-4-2-3-4-3-1-2-					-1-	-	-	-	-							2.89
30-45.8289-108.9561-2-12-						0-M38276-06/13/78-11-	21-	11.2-	-	-			7.9-	6000-		9-1-5-3-7-3-3-1-1-4-3-2-2-					-1-	-	-	-	-							2.92
30-45.8289-108.9539-2-12-						0-M38277-06/13/78-11-	21-	16.5-	-	-			7.1-	2400-		9-1-6-4-7-3-4-4-1-4-3-2-2-					-1-	-	-	-	-							2.48
30-45.8142-108.9431-2-12-						0-M38280-06/13/78-13-	26-	23.5-	-	-			7.8-	1150-		9-1-6-5-7-1-4-5-1-4-3-2-2-					-1-	-	-	-	-							3.20
30-45.8239-108.9428-2-12-						0-M38281-06/13/78-13-	26-	25.7-	-	-			7.9-	1100-		12-1-6-6-6-2-3-5-1-4-2-2-2-					-3-	-	-	-	-							2.76
30-45.7947-108.9678-2-11-						0-M38282-06/13/78-14-	29-	9.8-	-	-			7.5-	1150-		8-1-7-	-	-3-3-1-	-4-3-2-2-		-1-	-	-	-	-							2.51
30-45.7814-108.9683-2-12-						0-M38283-06/13/78-14-	29-	21.0-	-	-			8.4-	1100-		8-1-7-4-6-3-3-1-3-4-3-2-2-					-1-	-	-	-	-							2.43
30-45.7789-109.0058-2-12-						0-M38286-06/13/78-16-	31-	21.8-	-	-			8.3-	2100-		13-1-7-6-8-3-3-1-1-4-3-2-2-					-1-	-	-	-	-							3.33
30-45.7950-109.0014-2-11-						0-M38287-06/13/78-16-	30-	10.2-	-	-			7.4-	1500-		8-1-7-6-8-2-3-1-	-4-3-2-2-				-1-	-	-	-	-							3.86
30-45.7956-109.0044-2-12-						0-M38288-06/13/78-17-	28-	17.0-	C-	-			7.7-	1290-		8-1-6-	-	-3-4-1-1-4-3-2-2-			-1-	-	-	-	-							3.77
30-45.8081-108.9706-2-11-						0-M38290-06/14/78- 9-	21-	9.5-	C-	-			6.6-	980-		9-1-7-5-7-2-3-1-	-4-3-3-2-				-1-	-	-	-	-							3.38
30-45.8039-108.9683-2-12-						0-M38291-06/14/78- 9-	18-	11.1-	C-	-			7.7-	1400-		12-1-7-4-6-4-3-2-3-3-3-3-3-					-1-	-	-	-	-							2.37
30-45.8061-108.9703-2-12-						0-M38292-06/14/78-10-	20-	13.9-	C-	-			7.3-	3000-		10-1-7-3-6-3-3-1-3-4-3-3-2-					-1-	-	-	-	-							2.33
30-45.7756-108.9122-2-11-						0-M38294-06/14/78-11-	29-	16.0-	-	-			7.2-	1400-		10-1-7-4-6-2-3-1-2-4-3-2-2-					-1-	-	-	-	-							2.85
30-45.7883-108.8764-2-12-						0-M38295-06/14/78-12-	28-	19.0-	C-	-			7.9-	2400-		10-1-7-4-6-4-4-1-1-4-3-3-1-					-1-	-	-	-	-							2.33
30-45.7997-109.0458-2-11-						0-M38298-06/14/78-14-	29-	9.0-	C-	-			7.4-	610-		6-1-7-4-7-3-4-1-	-4-3-2-2-				-1-	-	-	-	-							2.29
30-45.8175-109.0461-2-11-						0-M38300-06/14/78-15-	32-	12.5-	C-	-			7.5-	525-		10-1-7-4-7-4-3-1-	-4-3-3-2-				-1-	-	-	-	-							3.60
30-45.7736-109.1044-2-11-						0-M38302-06/14/78-16-	29-	12.2-	-	-			7.3-	1270-		10-1-7-4-7-3-3-1-	-4-3-3-2-				-1-	-	-	-	-							2.37
30-45.7733-109.1029-2-12-						0-M38303-06/14/78-16-	29-	20.0-	-	-			7.6-	1750-		12-1-7-4-7-2-3-1-1-4-3-3-2-					-3-	-	-	-	-							2.47
30-45.4156-109.6022-2-12-						0-M38306-06/16/78- 9-	19-	10.1-	C-	-			5.6-	360-		9-1-6-6-6-3-3-1-3-4-4-4-2-					-	-	-	-	-							2.34
30-45.4336-109.5444-2-12-						0-M38308-06/16/78-11-	20-	17.5-	C-	-			7.2-	312-		9-1-1-5-6-3-3-	-3-3-3-3-2-				-	-	-	-	-							2.24
30-45.3978-109.5406-2-12-						0-M38311-06/16/78-13-	26-	11.5-	C-	-			7.9-	500-		-1-6-5-7-4-4-1-3-1-3-3-2-					-	-	-	-	-							3.81
30-45.3911-109.5428-2-12-						0-M38312-06/16/78-14-	27-	11.0-	C-	-			7.2-	360-		4-1-6-4-6-3-3-3-2-3-3-3-2-					-	-	-	-	-							2.11

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
30-45.6917-108.0386-2-15-					0	0-M38204	-5	-5	-5	24	-20	-15	12	-10	-15	2	54
30-45.6836-108.0419-2-15-					0	0-M38205	-5	-5	-5	16	-20	19	5	-10	-15	2	48
30-45.8506-108.8178-2-12-					0	0-M38209	-5	-5	-5	14	-20	-15	9	-10	-15	3	40
30-45.7775-108.8239-2-12-					0	0-M38212	-5	-5	-5	18	-20	-15	10	-10	-15	3	56
30-45.7817-108.8425-2-12-					0	0-M38214	-5	-5	-5	18	-20	-15	6	-10	-15	2	45
30-45.7878-108.8508-2-12-					0	0-M38215	-5	-5	-5	23	-20	-15	7	-10	-15	2	43
30-45.7836-108.8211-2-12-					0	0-M38216	-5	-5	-5	19	-20	-15	6	-10	-15	2	59
30-45.8008-108.8272-2-12-					0	0-M38217	-5	-5	-5	19	-20	-15	11	-10	-15	2	45
30-45.8009-108.8294-2-12-					0	0-M38218	-5	-5	-5	24	-20	-15	13	-10	-15	2	52
30-45.8569-108.8400-2-12-					0	0-M38219	-5	-5	-5	31	-20	17	14	-10	-15	2	45
30-45.8600-108.8064-2-11-					0	0-M38223	-5	-5	-5	23	-20	16	11	-10	-15	2	42
30-45.8997-108.7664-2-12-					0	0-M38226	-5	-5	-5	29	-20	-15	12	-10	-15	3	36
30-45.9439-108.8089-2-12-					0	0-M38228	-5	-5	-5	19	-20	-15	11	-10	-15	2	30
30-45.9489-108.8383-2-12-					0	0-M38229	-5	-5	-5	22	-20	-15	11	-10	-15	3	31
30-45.9939-108.9136-2-11-					0	0-M38238	-5	-5	-5	13	-20	-15	-5	-10	-15	2	24
30-45.9928-108.9036-2-12-					0	0-M38239	-5	-5	-5	19	-20	-15	11	-10	-15	2	37
30-45.9792-108.8817-2-11-					0	0-M38240	-5	-5	-5	19	-20	-15	15	-10	-15	2	33
30-45.8808-108.8869-2-11-					0	0-M38241	-5	-5	-5	22	-20	-15	8	-10	-15	1	38
30-45.9128-108.8292-2-12-					0	0-M38245	-5	-5	-5	15	-20	26	10	-10	-15	2	48
30-45.9114-108.8686-2-12-					0	0-M38246	-5	-5	-5	18	-20	16	10	-10	-15	2	56
30-45.9669-108.8811-2-12-					0	0-M38249	-5	-5	-5	27	-20	-15	11	-10	-15	2	47
30-45.9461-108.8878-2-12-					0	0-M38250	-5	-5	-5	19	-20	-15	13	-10	-15	2	34
30-45.9450-108.8875-2-12-					0	0-M38251	-5	-5	-5	21	-20	-15	11	-10	-15	2	40
30-45.9006-108.9639-2-12-					0	0-M38255	-5	-5	-5	13	-20	-15	10	-10	-15	2	46
30-45.9461-108.9847-2-12-					0	0-M38259	-5	-5	-5	16	-20	17	11	-10	-15	2	55
30-45.9864-109.0414-2-11-					0	0-M38262	-5	-5	-5	14	-20	-15	7	-10	-15	2	49
30-45.9744-109.0883-2-12-					0	0-M38263	-5	-5	-5	13	-20	-15	18	-10	-15	2	61
30-45.9644-109.0681-2-12-					0	0-M38264	-5	-5	-5	-10	-20	17	7	-10	-15	1	41
30-45.9106-109.0667-2-12-					0	0-M38268	-5	-5	-5	15	-20	-15	9	-10	-15	2	50
30-45.8289-108.9561-2-12-					0	0-M38276	-5	-5	-5	26	-20	-15	9	-10	-15	2	35
30-45.8289-108.9539-2-12-					0	0-M38277	-5	-5	-5	18	-20	-15	12	-10	-15	2	29
30-45.8142-108.9431-2-12-					0	0-M38280	-5	-5	-5	20	-20	-15	14	-10	-15	2	39
30-45.8239-108.9428-2-12-					0	0-M38281	-5	-5	-5	21	-20	-15	8	-10	-15	2	46
30-45.7847-108.9678-2-11-					0	0-M38282	-5	-5	-5	27	-20	22	8	-10	-15	2	30
30-45.7814-108.9683-2-12-					0	0-M38283	-5	-5	-5	23	-20	-15	13	-10	-15	1	45
30-45.7789-109.0058-2-12-					0	0-M38286	-5	-5	-5	25	-20	-15	14	-10	-15	2	41
30-45.7950-109.0014-2-11-					0	0-M38287	-5	-5	-5	30	-20	-15	14	-10	-15	2	58
30-45.7956-109.0044-2-12-					0	0-M38288	-5	-5	-5	23	-20	-15	11	-10	-15	2	39
30-45.8081-108.9706-2-11-					0	0-M38290	-5	-5	-5	30	-20	26	20	-10	-15	3	58
30-45.8039-108.9683-2-12-					0	0-M38291	-5	-5	-5	21	-20	18	12	-10	-15	2	36
30-45.8061-108.9703-2-12-					0	0-M38292	-5	-5	-5	17	-20	-15	9	-10	-15	2	47
30-45.7756-108.9122-2-11-					0	0-M38294	-5	-5	-5	18	-20	20	8	-10	-15	2	66
30-45.7883-108.8764-2-12-					0	0-M38295	-5	-5	-5	25	-20	-15	11	-10	-15	2	35
30-45.7997-109.0458-2-11-					0	0-M38298	-5	-5	-5	13	-20	-15	6	-10	-15	2	31
30-45.8175-109.0461-2-11-					0	0-M38300	-5	-5	-5	-10	-20	-15	-5	-10	-15	2	35
30-45.7736-109.1044-2-11-					0	0-M38302	-5	-5	-5	12	-20	-15	-5	-10	-15	2	30
30-45.7733-109.1028-2-12-					0	0-M38303	-5	-5	-5	-10	-20	-15	13	-10	-15	2	42
30-45.4156-109.6022-2-12-					0	0-M38306	-5	-5	-5	18	-20	-15	16	-10	-15	1	12
30-45.4336-109.5444-2-12-					0	0-M38309	-5	-5	-5	23	-20	25	8	-10	-15	2	14
30-45.3978-109.5406-2-12-					0	0-M38311	-5	-5	-5	-10	-20	16	5	-10	-15	2	14
30-45.3911-109.5428-2-12-					0	0-M38312	-5	-5	-5	15	-20	-15	9	-10	-15	1	21

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
30-45.6917-108.0386-2-15-						0-M38204	62230	-0.06	648	15430	61	-76	5.8	43	3.7	3	0.9	13090	6.0	17850	33	0.4
30-45.6836-108.0419-2-15-						0-M38205	60670	-0.06	643	25910	69	194	7.0	49	3.8	3	1.0	13860	5.8	18260	29	0.3
30-45.8506-108.8178-2-12-						0-M38209	58030	-0.07	563	30930	73	-68	8.6	53	3.5	3	1.1	17540	5.8	17250	32	0.3
30-45.7775-108.8239-2-12-						0-M38212	51670	-0.06	531	36680	51	-69	5.1	26	2.4	3	0.9	11480	5.6	15350	28	0.3
30-45.7817-108.8425-2-12-						0-M38214	43090	-0.03	469	31820	45	67	5.2	40	1.9	2	0.7	9240	6.9	13920	23	0.3
30-45.7878-108.8508-2-12-						0-M38215	57320	-0.06	525	37630	58	101	8.1	45	3.4	4	1.0	15130	5.9	16530	33	0.4
30-45.7836-108.8211-2-12-						0-M38216	39230	-0.05	455	40640	47	106	6.3	29	1.8	3	1.0	11510	6.0	12040	24	0.3
30-45.8008-108.8272-2-12-						0-M38217	40390	-0.05	449	43260	40	-61	5.3	31	2.0	3	0.8	11690	5.1	13090	23	0.2
30-45.8008-108.8294-2-12-						0-M38218	38730	-0.03	383	36680	31	77	4.9	25	2.0	3	0.7	9072	4.4	11950	18	0.2
30-45.8569-108.8400-2-12-						0-M38219	63530	-0.07	623	37750	85	-106	11.2	94	2.9	3	1.1	18550	5.6	10920	42	0.4
30-45.8600-108.8064-2-11-						0-M38223	56580	-0.07	581	22160	51	110	6.9	48	2.6	3	0.9	14570	4.7	17570	30	0.4
30-45.8997-108.7664-2-12-						0-M38226	56560	-0.05	514	23750	52	-69	7.3	55	2.6	3	0.9	13270	6.6	13920	31	0.3
30-45.9439-108.8089-2-12-						0-M38228	63300	-0.05	520	10330	62	-79	6.6	43	3.3	3	1.0	13550	7.2	13800	36	0.3
30-45.9489-108.8383-2-12-						0-M38229	64330	-0.06	564	10920	76	-83	7.7	56	4.2	3	1.0	14420	6.2	17040	39	0.4
30-45.9939-108.9136-2-11-						0-M38238	37370	-0.05	605	3103	36	-48	3.7	26	-1.0	2	0.6	8760	4.0	11310	26	0.1
30-45.9928-108.9036-2-12-						0-M38239	46850	-0.04	476	25450	44	-59	6.1	35	2.4	3	0.9	10560	4.8	13760	25	0.2
30-45.9792-108.8817-2-11-						0-M38240	71230	-0.05	817	17420	65	-88	6.5	31	4.1	3	0.9	14250	5.5	14150	35	0.3
30-45.8908-108.8869-2-11-						0-M38241	67830	-0.06	572	30390	64	-88	7.4	42	4.2	3	1.1	13600	6.7	13060	36	0.3
30-45.9128-108.8292-2-12-						0-M38245	49270	-0.08	461	34150	47	161	6.2	46	2.8	3	0.7	11710	5.0	15600	24	0.2
30-45.9114-108.8686-2-12-						0-M38246	53790	-0.06	508	53300	49	129	7.4	35	3.4	3	0.9	10660	4.5	15910	26	0.3
30-45.9669-108.8811-2-12-						0-M38249	56910	-0.05	607	21650	52	489	6.7	47	3.4	3	0.9	12540	5.4	14440	31	0.3
30-45.9461-108.8878-2-12-						0-M38250	64940	-0.05	561	11110	67	-87	8.6	52	3.4	3	1.0	17160	5.6	15540	34	0.3
30-45.9450-108.8875-2-12-						0-M38251	53910	-0.06	556	32430	54	208	6.8	46	3.3	3	0.8	13340	5.4	13940	32	0.3
30-45.9006-108.9639-2-12-						0-M38255	61460	-0.05	596	29780	55	123	8.5	44	2.8	3	0.8	13960	4.9	12960	29	0.3
30-45.9461-108.9847-2-12-						0-M38259	54040	-0.05	610	33950	52	144	7.4	39	3.3	3	0.8	14350	5.5	13540	30	0.3
30-45.9864-109.0414-2-11-						0-M38262	46690	-0.05	549	22660	59	-77	4.2	27	1.9	2	1.0	12020	4.9	9694	28	0.2
30-45.9744-109.0883-2-12-						0-M38263	58260	-0.08	531	28330	82	186	8.5	56	3.4	4	1.0	19400	5.4	15780	37	0.4
30-45.9644-109.0681-2-12-						0-M38264	40060	-0.05	453	31280	90	177	9.7	61	1.7	4	1.0	27640	13.5	9726	47	0.4
30-45.9106-109.0667-2-12-						0-M38268	65140	-0.06	640	18270	77	-83	8.2	68	3.6	4	1.0	18140	7.3	15820	47	0.3
30-45.8289-108.9561-2-12-						0-M38276	64150	-0.06	603	15890	69	154	8.7	76	3.1	4	1.2	14770	6.3	14140	41	0.4
30-45.8289-108.9539-2-12-						0-M38277	58410	-0.06	719	21660	49	118	6.5	67	2.0	3	0.9	11770	6.0	10310	30	0.3
30-45.8142-108.9431-2-12-						0-M38280	55740	-0.05	539	32260	59	-78	7.7	61	3.0	3	0.8	13540	5.3	14640	30	0.3
30-45.8239-108.9428-2-12-						0-M38281	60150	-0.06	750	46770	59	-118	11.0	76	2.8	3	1.0	15960	6.4	12360	36	0.3
30-45.7847-108.9678-2-11-						0-M38282	68490	-0.06	846	20750	78	-101	9.5	238	1.8	2	1.3	15830	8.8	13250	37	0.3
30-45.7814-108.9683-2-12-						0-M38283	69310	-0.08	647	41160	67	-100	10.5	158	2.3	3	1.2	18100	5.8	12140	37	0.3
30-45.7789-109.0059-2-12-						0-M38286	60330	-0.05	766	21880	54	107	7.3	36	3.1	3	0.9	12980	5.5	11900	28	0.3
30-45.7950-109.0014-2-11-						0-M38287	48030	-0.05	485	67040	46	-121	7.9	42	2.8	2	0.5	10820	3.8	8867	22	0.2
30-45.7956-109.0044-2-12-						0-M38288	46310	-0.06	641	68930	48	-122	8.7	34	3.2	2	0.8	14150	4.0	8973	25	0.3
30-45.8081-108.9706-2-11-						0-M38290	67430	-0.07	481	38260	71	302	8.7	69	4.4	3	1.0	17320	6.0	19020	42	0.5
30-45.8039-108.9683-2-12-						0-M38291	64800	-0.08	670	24480	67	-79	8.9	109	2.8	3	1.5	18250	7.4	13630	43	0.3
30-45.8061-108.9703-2-12-						0-M38292	61760	-0.04	659	35870	56	-89	7.6	56	2.4	3	0.8	12010	4.6	12070	31	0.3
30-45.7756-108.9122-2-11-						0-M38294	69470	-0.06	535	28140	59	-68	9.0	67	5.3	3	0.9	20000	5.1	17320	36	0.3
30-45.7883-108.8764-2-12-						0-M38295	46350	-0.05	464	32770	57	115	6.2	49	2.3	3	0.9	11600	6.9	10670	26	0.3
30-45.7997-109.0458-2-11-						0-M38298	42510	-0.06	861	26140	51	-68	3.5	26	-1.1	3	0.9	7954	7.7	11610	25	0.3
30-45.8175-109.0461-2-11-						0-M38300	53400	-0.04	631	20730	80	-76	5.4	29	-0.8	4	0.9	9866	17.6	11950	43	0.4
30-45.7736-109.1044-2-11-						0-M38302	50300	-0.04	501	14410	52	-79	3.9	40	1.8	3	0.9	8631	9.8	13320	31	0.3
30-45.7733-109.1029-2-12-						0-M38303	58550	-0.06	525	33790	72	-95	8.8	52	2.7	3	1.0	14590	6.8	13260	37	0.3
30-45.4156-109.6022-2-12-						0-M38306	69400	-0.07	758	14160	71	-79	6.9	68	2.2	3	1.0	14060	7.2	16820	41	0.3
30-45.4336-109.5444-2-12-						0-M38308	63330	-0.06	728	22010	61	-88	11.1	419	-1.2	3	1.0	29960	12.1	14090	39	0.3
30-45.3978-109.5406-2-12-						0-M38311	54150	-0.05	576	14630	76	-85	5.4	72	1.2	4	0.9	12420	15.6	9617	52	0.4
30-45.3911-109.5428-2-12-						0-M38312	57550	-0.05	517	13950	82	-88	7.1	44	-1.1	3	1.1	13190	10.8	12010	38	0.4

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
30-45.6917-108.0386-2-15-						0-M38204	20780	248	9951	46	-2	6.7	4.2	-263	-1	-1	8.0	2951	103	2.4	78	0.323
30-45.6936-108.0419-2-15-						0-M38205	28350	259	10800	58	-2	7.3	4.9	-281	-1	-1	8.9	2723	109	2.5	80	0.307
30-45.8506-108.8178-2-12-						0-M38209	20210	524	6892	40	-2	7.5	5.9	-270	-1	-1	9.3	3801	75	2.7	82	0.312
30-45.7775-108.8239-2-12-						0-M38212	26980	207	9706	-20	-2	5.3	2.7	302	-1	-1	5.6	2384	67	-1.4	-28	0.420
30-45.7917-108.8425-2-12-						0-M38214	25180	233	9398	23	-1	3.9	3.2	-225			5.8	1381	47	2.4	42	0.379
30-45.7878-108.8508-2-12-						0-M38215	27860	312	8664	43	-2	7.2	4.4	396	-1	-1	8.6	2845	71	2.4	-55	0.320
30-45.7836-108.8211-2-12-						0-M38216	26770	299	7167	43	-1	4.8	3.6	-193	-1	-1	6.4	1785	47	2.6	77	0.339
30-45.8008-108.8272-2-12-						0-M38217	30890	297	7157	41	-2	4.7	2.5	-219	-1	-1	5.9	1565	49	1.9	76	0.364
30-45.8008-108.8294-2-12-						0-M38218	26410	313	6754	20	-1	3.7	2.4	-203	-1		4.6	1798	45	1.7	46	0.465
30-45.8569-108.8400-2-12-						0-M38219	14780	960	10310	38	-2	9.8	5.9	868	-1	-1	9.0	2492	71	2.9	68	0.306
30-45.8600-108.8064-2-11-						0-M38223	16410	412	7016	39	-2	6.5	3.2	-242	-1	-1	7.4	2579	61	-1.4	-74	0.353
30-45.8997-108.7664-2-12-						0-M38224	14290	426	9213	33	-1	5.8	4.1	-251		-1	7.5	2605	60	2.4	72	0.351
30-45.9439-108.8089-2-12-						0-M38228	11950	330	12700	35	-1	6.3	4.8	257	-1	-1	9.2	2658	53	3.3	78	0.287
30-45.9489-108.8383-2-12-						0-M38229	10560	272	12170	40	-2	7.0	5.0	-271	-1	-1	10.0	2389	60	2.9	87	0.283
30-45.9939-108.9136-2-11-						0-M38238	4675	58	7698	-17	-1	3.1	2.0	-143	-1	-1	3.8	1484	49	-1.2	-25	0.374
30-45.9928-108.9036-2-12-						0-M38239	23320	253	8036	34	-1	4.8	2.9	-200		-1	6.2	2007	57	1.4	61	0.352
30-45.9792-108.8817-2-11-						0-M38240	9196	429	13590	35	-2	6.0	4.0	403	-1	1	7.8	2274	50	3.4	89	0.415
30-45.8808-108.8869-2-11-						0-M38241	13560	219	12100	46	-2	6.0	5.2	795	-1	-1	9.8	2325	49	2.8	-82	0.301
30-45.9128-108.8292-2-12-						0-M38245	16270	243	7683	-26	-2	5.6	2.7	388	-1	-1	8.0	2271	57	-1.6	61	0.414
30-45.9114-108.8686-2-12-						0-M38246	11160	248	9054	33	-2	4.9	4.0	758	-1	-1	7.1	2432	51	1.7	-59	0.392
30-45.9669-108.8811-2-12-						0-M38249	15970	436	17470	35	-2	6.1	3.7	409	-1	-1	7.1	2178	55	2.2	70	0.407
30-45.9461-108.8878-2-12-						0-M38250	14910	355	12140	42	-2	7.6	4.8	-295	-1	-1	9.6	3042	73	2.7	81	0.272
30-45.9450-108.8875-2-12-						0-M38251	15510	819	16840	-21	-2	6.0	3.0	896	-1	-1	7.4	2410	48	2.6	-31	0.457
30-45.9006-108.9639-2-12-						0-M38255	16180	826	10240	36	-2	6.3	4.1	-336	-1	-1	8.4	2299	70	2.8	87	0.332
30-45.9461-108.9847-2-12-						0-M38259	23110	389	7848	32	-2	6.6	3.4	441	-1	-1	8.2	2169	66	1.7	70	0.356
30-45.9864-109.0414-2-11-						0-M38262	12030	102	13350	31	-1	3.5	3.9	-212	-1	-1	6.0	2033	52	2.0	-23	0.260
30-45.9744-109.0883-2-12-						0-M38263	24300	491	9199	43	-2	7.9	4.1	312	-1	-1	9.4	3103	101	2.6	-66	0.353
30-45.9644-109.0681-2-12-						0-M38264	16790	635	8490	26	-2	5.6	6.2	-298	-1	-1	13.3	7169	153	2.8	74	0.271
30-45.9106-109.0667-2-12-						0-M38268	17310	400	11120	48	-2	8.3	4.6	-286	-1	-1	10.9	3070	90	3.2	103	0.265
30-45.8299-108.9561-2-12-						0-M38276	14290	440	14260	33	-2	7.2	4.9	-320	-1	-1	9.4	2840	63	2.3	58	0.311
30-45.8289-108.9539-2-12-						0-M38277	11040	470	13560	-19	-2	5.9	2.9	587	-1	-1	7.8	2615	55	-1.5	-56	0.318
30-45.8142-108.9431-2-12-						0-M38280	19690	668	9635	37	-2	6.2	3.7	-299	1	-1	7.3	2288	61	2.6	62	0.438
30-45.8233-108.9428-2-12-						0-M38281	8649	1340	11330	-19	-2	9.4	4.1	-485	-1	-1	7.4	3935	84	2.0	87	0.373
30-45.7847-108.9678-2-11-						0-M38282	9500	349	17370	-18	-2	8.0	4.7	-306	-1	-1	6.8	2605	70	2.8	65	0.369
30-45.7814-108.9683-2-12-						0-M38283	12480	1019	15260	-25	-2	10.9	3.8	525	-1	-1	5.8	2699	87	-1.6	-47	0.419
30-45.7789-109.0058-2-12-						0-M38286	13470	456	12650	51	-2	5.6	3.8	589	-1	-1	7.7	2297	54	2.5	72	0.432
30-45.7950-109.0014-2-11-						0-M38287	12450	1482	8840	25	-1	4.1	2.9	1206	-1	-1	5.7	-1321	41	-1.1	85	0.677
30-45.7956-109.0044-2-12-						0-M38288	13920	1498	8996	-19	-2	5.0	3.4	1004	-1	-1	6.2	-1293	41	1.7	-49	0.608
30-45.8081-108.9706-2-11-						0-M38290	33460	260	9350	58	-2	9.4	5.4	-266	-1	-1	12.2	3506	89	3.5	97	0.277
30-45.8039-108.9683-2-12-						0-M38291	11060	450	14720	32	-2	9.2	4.0	671	-1	-1	7.2	2883	64	2.4	-41	0.329
30-45.8061-108.9703-2-12-						0-M38292	15460	832	13470	29	-1	5.7	3.5	722	-1	-1	7.0	1870	50	2.1	67	0.333
30-45.7756-108.9122-2-11-						0-M38294	27310	342	7311	62	-2	10.1	3.9	-261	-1	-1	9.4	3348	99	3.8	100	0.303
30-45.7893-108.9764-2-12-						0-M38295	21300	279	9913	35	-1	5.0	4.1	-241	-1	-1	7.4	2407	53	3.2	67	0.315
30-45.7997-109.0458-2-11-						0-M38298	9251	289	11990	-18	-2	4.1	2.5	-219	-1	-1	6.7	1935	38	2.6	62	0.342
30-45.8175-109.0461-2-11-						0-M38300	9324	297	16470	34	-1	4.1	4.7	-226	-1	1	11.0	2396	48	2.9	77	0.327
30-45.7736-109.1044-2-11-						0-M38302	8453	204	15400	23	-1	4.2	3.3	-233	-1	-1	6.2	2351	40	2.8	72	0.382
30-45.7733-109.1028-2-12-						0-M38303	11650	351	12160	43	-2	6.6	4.2	-306	-1	-1	9.7	2642	63	3.3	84	0.255
30-45.4156-109.6022-2-12-						0-M38306	9343	367	13790	-22	-2	5.8	3.7	593	-1	-1	7.4	2812	55	2.2	-34	0.316
30-45.4336-109.5444-2-12-						0-M38308	18930	643	16700	36	-2	9.7	4.0	539	-1	-1	7.5	6157	155	2.3	73	0.299
30-45.3978-109.5406-2-12-						0-M38311	10910	257	16390	-15	-1	6.7	5.0	469	-1	-1	19.0	3490	50	3.9	69	0.201
30-45.3911-109.5428-2-12-						0-M38312	6962	478	12010	34	-2	5.2	4.3	397	-1	-1	9.8	2983	57	3.2	59	0.215

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples (1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																													U CONCENTRATION
							TIME SAMPLED																													
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
30-	45.4228-	109.5172-	2-	12-		0-M39314-	06/16/78-	16-	22-	14.0-	C-		- 7.5-	500-	3-1-6-6-6-2-4-3-3-6-3-2-3-	-	-	-	-	-	-												2.38
30-	45.4681-	109.5350-	2-	11-		0-M39317-	06/17/78-	12-	27-	21.0-	C-		- 7.2-	500-	2-1-1-6-6-2-3-5- -4-3-3-2-	-	-	-	-	-	-												2.73
30-	45.4856-	109.5825-	2-	12-		0-M39319-	06/17/78-	14-	27-	15.0-	C-		- 8.2-	250-	9-1-1-5-6-3-3-1-3-4-3-2-2-	-	-	-	-	-	-												1.65
30-	45.4750-	109.5808-	2-	11-		0-M39320-	06/17/78-	13-	28-	16.0-	C-		- 7.9-	210-	4-1-1-4-7-3-3-1-1-3-3-3-2-	-3-	-	-	-	-	-												1.98
30-	45.4633-	109.5656-	2-	11-		0-M39321-	06/18/78-	9-	27-	12.5-	C-		- 7.2-	325-	12-1-6-4-6-3-3-1-1-4-3-2-1-	-3-	-	-	-	-	-												1.89
30-	45.3942-	109.8622-	2-	12-		0-M39325-	06/20/78-	-	20-	7.2-	C-		- 8.4-	120-	9-1-1-4-7-3-4-1-1-3-4-2-1-	-2-	-	-	-	-	-												0.10
30-	45.3822-	109.8839-	2-	12-		0-M39326-	06/20/78-	8-	22-	10.0-	C-		- 7.5-	150-	-2-6-7-6-4-4- -1-2-3-5-1-	-2-	-	-	-	-	-												0.92
30-	45.3583-	109.9019-	2-	12-		0-M39329-	06/20/78-	10-	25-	7.5-	C-		- 6.7-	650-	10-2-1-3-7-4-4-1-3-1-3-4-1-	-	-	-	-	-	-												109.40
30-	45.3553-	109.8936-	2-	12-		0-M39329-	06/20/78-	10-	25-	4.5-	C-		- 7.3-	240-	4-2-7-4-6-5-4-1-2-1-3-5-1-	-	-	-	-	-	-												8.16
30-	45.3683-	109.8775-	2-	12-		0-M39330-	06/20/78-	11-	25-	10.0-	C-		- 7.6-	500-	-2-7-4-4-5-4-1-3-1-3-5-1-	-1-	-	-	-	-	-												2.87
30-	45.4053-	109.8689-	2-	12-		0-M39331-	06/20/78-	12-	25-	15.0-	C-		- 6.7-	500-	5-2-1-4-6-3-3-1-3- -3-4-1-	-1-	-	-	-	-	-												1.76
30-	45.4631-	109.8928-	2-	12-		0-M39334-	06/20/78-	13-	25-	14.0-	C-		- 7.5-	500-	5-2-7-4-6-3-4- -3-4-3-4-1-	-3-	-	-	-	-	-												1.87
30-	45.4833-	109.9006-	2-	12-		0-M39336-	06/20/78-	15-	25-	13.0-	C-		- 7.2-	235-	3-1-7-4-7-3-4-1-1-2-3-4-1-	-3-	-	-	-	-	-												1.98
30-	45.4725-	109.8972-	2-	11-		0-M39337-	06/20/78-	16-	25-	15.0-	C-		- 7.2-	330-	9-1-1-4-1-4-3-1-1-2-3-5-1-	-1-	-	-	-	-	-												1.14
30-	45.4557-	109.8000-	2-	12-		0-M39338-	06/23/78-	7-	22-	10.0-	C-		- 7.7-	230-	8-1-1-3-7-3-3-1-3-1-3-4-1-	-1-	-	-	-	-	-												1.17
30-	45.4599-	109.8031-	2-	15-		0-M39339-	06/23/78-	9-	22-	-C-			- -	-	6-2-4-4-7- -1- -3-3-2-3-1-	-3-	-	-	-	-	-												0.85
30-	45.4658-	109.7769-	2-	12-		0-M39341-	06/23/78-	8-	25-	12.0-	C-		- 8.0-	270-	6-2-8-4-7-3-3-1-3-3-2-4-1-	-2-	-	-	-	-	-												1.07
30-	45.4400-	109.7942-	2-	12-		0-M39342-	06/23/78-	9-	25-	7.0-	C-		- 7.2-	720-	4-2-1-4-6-5-4-1-3-2-3-2-1-	-1-	-	-	-	-	-												2.83
30-	45.3606-	109.8025-	2-	12-		0-M39344-	06/23/78-	14-	27-	14.5-	C-		- 7.2-	500-	11-2-7-5-6-2-3-1-3-2-3-5-1-	-	-	-	-	-	-												2.29
30-	45.3553-	109.8036-	2-	12-		0-M39345-	07/23/78-	10-	27-	4.0-	C-		- 8.6-	155-	4-2-6-7-8-3-3-1-3-1-5-4-3-	-2-	-	-	-	-	-												1.92
30-	45.4081-	109.7489-	2-	11-		0-M39346-	06/23/78-	15-	24-	12.5-	C-		- 6.8-	260-	5-2-1-4-7-3-3-1-1-2-3-2-3-	-	-	-	-	-	-												3.09
30-	45.4022-	109.7400-	2-	12-		0-M39347-	06/23/78-	15-	25-	16.0-	C-		- 6.9-	195-	9-2-1- - -3-3-1-3-4-4-3-3-	-	-	-	-	-	-												2.72
30-	45.5611-	109.4875-	2-	11-		0-M39349-	06/26/78-	13-	25-	12.0-	C-		- 8.4-	420-	2-2-1-4-2-3-3-1-3-4-3-2-2-	-3-	-	-	-	-	-												2.30
30-	45.4179-	109.7775-	2-	11-		0-M39350-	06/28/78-	-	19-	8.0-	C-		- 7.6-	330-	11-2-1-7-6-3-3-1-2-1-3-4-3-	-3-	-	-	-	-	-												3.10
30-	45.4136-	109.7914-	2-	11-		0-M39351-	06/28/78-	9-	24-	8.0-	C-		- 7.9-	550-	4-2-6-4-6-3-3-1-3-2-3-3-3-	-3-	-	-	-	-	-												2.23
30-	45.3497-	109.7806-	2-	12-		0-M39352-	07/01/78-	10-	18-	4.0-	C-		- 6.9-	325-	27-2-7-3-3-4-4-1-3-5-2-5-3-	-3-	-	-	-	-	-												11.45
30-	45.5397-	109.6494-	2-	12-		0-M39353-	07/10/78-	9-	29-	12.0-	C-		- 8.6-	510-	8-4-2- - -3-3-1-2-4-3-2-2-	-	-	-	-	-	-												3.18
30-	45.4217-	109.7394-	2-	12-		0-M39355-	06/27/78-	8-	25-	8.0-	C-		- 7.2-	110-	11-2-6- - -4-4-1-3-2-3-2-1-	-3-	-	-	-	-	-												2.22
30-	45.4122-	109.7067-	2-	11-		0-M39357-	06/27/78-	10-	25-	12.0-	C-		- 6.2-	420-	11-2-6-5-6-3-3-1-3-4-3-3-1-	-	-	-	-	-	-												2.37
30-	45.4217-	109.6319-	2-	12-		0-M39359-	06/27/78-	11-	25-	18.5-	C-		- 6.7-	420-	15-2-4- - - - - - -4-2-2-1-	-3-	-	-	-	-	-												2.33
30-	45.4897-	109.9175-	2-	12-		0-M39360-	06/30/78-	19-	29-	11.0-	-	-	- 8.5-	460-	13-2-4-5-4-3-3-1-3-4-3-3-2-	-	-	-	-	-	-												2.51
30-	45.4869-	109.9806-	2-	12-		0-M39361-	06/30/78-	16-	27-	7.0-	-	-	- 8.5-	550-	3-2-7-3-9-3-3-1-3-2-3-4-3-	-3-	-	-	-	-	-												3.02
30-	45.5131-	109.9406-	2-	12-		0-M39362-	06/30/78-	9-	27-	2.0-	C-		- 8.6-	267-	4-2-7-4-6-3-3-3-1-2-2-2-4-1-	-9-	-	-	-	-	-												2.19
30-	45.5131-	109.9261-	2-	12-		0-M39363-	06/29/78-	10-	28-	2.0-	C-		- 8.0-	385-	4-2-7-4-6-3-3-3-1-2-2-2-3-2-	-3-	-	-	-	-	-												1.99
30-	45.5231-	109.9303-	2-	12-		0-M39364-	06/29/78-	11-	28-	-	-	-	- 8.5-	190-	12-2-7-4-7-2-3-1-2-2-3-3-2-	-	-	-	-	-	-												2.40
30-	45.5175-	109.9261-	2-	12-		0-M39365-	06/29/78-	12-	29-	-C-			- 8.4-	160-	6-2-7-4-6-3-3-1-2-1-3-3-2-	-	-	-	-	-	-												3.20
30-	45.5064-	109.9106-	2-	12-		0-M39366-	06/30/78-	13-	30-	9.0-	C-		- 8.3-	385-	4-2-4-4-6-3-3-1-3-2-3-3-2-	-3-	-	-	-	-	-												1.87
30-	45.4161-	109.8181-	2-	12-		0-M39367-	07/01/78-	12-	30-	22.0-	C-		- 8.5-	470-	6-2-7-5-6-3-3-1-2-2-3-3-1-	-8-	-	-	-	-	-												1.93
30-	45.5458-	109.6878-	2-	11-		0-M39368-	07/07/78-	10-	29-	8.0-	C-		- 8.3-	280-	6-2-6-6-6-3-3-1-3-4-3-2-2-	-	-	-	-	-	-												1.96
30-	45.5431-	109.6997-	2-	15-		0-M39369-	07/07/78-	11-	25-	-C-			- -	-	9-2-6- - - -1- -3-4-2-3-2-	-3-	-	-	-	-	-												1.38
30-	45.5544-	109.7344-	2-	12-		0-M39371-	07/07/78-	12-	25-	15.0-	C-		- 9.0-	250-	9-2-6-4-6-2-3-1-2-4-3-2-3-	-3-	-	-	-	-	-												1.67
30-	45.5561-	109.7339-	2-	12-		0-M39372-	07/07/78-	13-	24-	16.0-	C-		- 8.9-	232-	9-2-6-4-6-3-3-1-2-4-2-3-3-	-3-	-	-	-	-	-												1.52
30-	45.4197-	109.6264-	2-	11-		0-M39373-	06/27/78-	12-	25-	9.0-	C-		- 6.7-	450-	4-2-1-6-6-2-3-1-1-2-3-3-2-	-	-	-	-	-	-												3.12
30-	45.4089-	109.6642-	2-	12-		0-M39374-	06/27/78-	12-	25-	15.5-	C-		- 8.1-	283-	8-2-2-4-7-3-3-3-3-4-3-2-1-	-3-	-	-	-	-	-												2.16
30-	45.3783-	109.6578-	2-	11-		0-M39377-	06/27/78-	14-	26-	19.0-	C-		- 8.2-	500-	4-2-3-6-6-2-3-1-1-3-2-3-1-	-3-	-	-	-	-	-												2.41
30-	45.3767-	109.6900-	2-	12-		0-M39378-	06/27/78-	15-	27-	7.0-	C-		- 8.9-	67-	13-2-1-5-6-4-3-1-3-2-4-2-1-	-8-	-	-	-	-	-												7.78
30-	45.4811-	109.6842-	2-	12-		0-M39379-	06/28/78-	13-	27-	15.0-	C-		- 7.0-	220-	16-2-6-7-9-3-3-1-2-2-3-5-1-	-3-	-	-	-	-	-												3.68
30-	45.4422-	109.7392-	2-	11-		0-M39380-	06/27/78-	15-	27-	10.0-	C-		- 7.0-	400-	11-2-6-5-6-3-3-1-2-4-3-3-2-	-3-	-	-	-	-	-												3.08
30-	45.4325-	109.6914-	2-	11-		0-M39381-	06/27/78-	13-	26-	18.0-	C-		- 8.6-	192-	10-2-6- - - - -1-3-4-3-3-2-	-3-	-	-	-	-	-												2.51
30-	45.5467-	109.6283-	2-	12-		0-M39382-	07/07/78-	14-	25-	15.0-	C-		- 8.0-	270-	6-2-6- - -3-3-1-3-4-4-2-3-	-3-	-	-	-	-	-												1.69
30-	45.4797-	109.7228-	2-	12-		0-M39383-	06/24/78-	10-	22-	14.0-	C-		- 7.8-	160-	11-2-4-4-6-4-4-1-3-2-3-2-2-	-	-	-	-	-	-												1.06

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
30-45.4228-109.5172-2-12-						0-M38314	-5	-5	-5	29	-20	17	-5	-10	-15	2	14
30-45.4681-109.5350-2-11-						0-M38317	-5	-5	-5	27	-20	25	6	-10	-15	1	25
30-45.4856-109.5825-2-12-						0-M38319	-5	-5	-5	12	-20	-15	9	-10	-15	2	33
30-45.4750-109.5808-2-11-						0-M38320	-5	-5	-5	-10	-20	-15	5	-10	-15	2	15
30-45.4633-109.5656-2-11-						0-M38321	-5	-5	-5	19	-20	-15	8	-10	-15	2	14
30-45.3942-109.8622-2-12-						0-M38325	-5	-5	-5	13	-20	1690	-5	-10	-15	5	2
30-45.3822-109.8839-2-12-						0-M38326	-5	-5	-5	44	-20	748	-5	-10	-15	1	7
30-45.3583-109.9019-2-12-						0-M38328	-5	-5	-5	24	-20	-15	11	-10	-15	1	37
30-45.3553-109.8936-2-12-						0-M38329	-5	-5	-5	10	-20	-15	13	-10	-15	2	17
30-45.3683-109.8775-2-12-						0-M38330	-5	-5	-5	2129	-20	1502	-5	-10	-15	-1	36
30-45.4053-109.8689-2-12-						0-M38331	-5	-5	-5	20	-20	244	-5	-10	-15	1	15
30-45.4631-109.8928-2-12-						0-M38334	-5	-5	-5	20	-20	15	-5	-10	-15	1	33
30-45.4933-109.9006-2-12-						0-M38336	-5	-5	-5	14	-20	-15	7	-10	-15	1	26
30-45.4725-109.8972-2-11-						0-M38337	-5	-5	-5	17	-20	-15	-5	-10	-15	-1	6
30-45.4667-109.8000-2-12-						0-M38338	-5	-5	-5	100	-20	79	10	-10	-15	-1	27
30-45.4589-109.8031-2-15-						0-M38339	-5	-5	-5	-10	-20	-15	-5	-10	-15	1	9
30-45.4658-109.7769-2-12-						0-M38341	-5	-5	-5	31	-20	56	7	-10	-15	2	46
30-45.4400-109.7942-2-12-						0-M38342	-5	-5	-5	26	-20	127	5	-10	-15	1	53
30-45.3606-109.8025-2-12-						0-M38344	-5	-5	-5	17	-20	-15	5	-10	-15	2	62
30-45.3553-109.8036-2-12-						0-M38345	-5	-5	-5	72	-20	688	-5	-10	-15	2	15
30-45.4081-109.7489-2-11-						0-M38346	-5	-5	-5	12	-20	-15	7	-10	-15	1	14
30-45.4022-109.7400-2-12-						0-M38347	-5	-5	-5	20	-20	-15	12	-10	-15	2	11
30-45.5611-109.4875-2-11-						0-M38348	-5	-5	-5	24	-20	22	-5	-10	-15	1	32
30-45.4178-109.7775-2-11-						0-M38350	-5	-5	-5	15	-20	-15	-5	-10	-15	2	13
30-45.4136-109.7914-2-11-						0-M38351	-5	-5	-5	11	-20	-15	-5	-10	-15	2	29
30-45.3497-109.7806-2-12-						0-M38352	-5	7	-5	13	-20	-15	17	-10	-15	2	83
30-45.5397-109.6494-2-12-						0-M38353	-5	-5	-5	34	-20	46	13	-10	-15	2	28
30-45.4217-109.7394-2-12-						0-M38355	-5	-5	-5	19	-20	-15	-5	-10	-15	1	18
30-45.4122-109.7067-2-11-						0-M38357	-5	-5	-5	20	-20	214	-5	-10	-15	2	18
30-45.4217-109.6319-2-12-						0-M38359	-5	-5	-5	14	-20	-15	-5	-10	-15	1	20
30-45.4997-109.9175-2-12-						0-M38360	-5	-5	-5	25	-20	-15	-5	-10	-15	2	44
30-45.4969-109.9806-2-12-						0-M38361	-5	-5	-5	22	-20	30	-5	-10	-15	2	131
30-45.5131-109.9406-2-12-						0-M38362	-5	-5	-5	28	-20	-15	5	-10	-15	2	58
30-45.5131-109.9261-2-12-						0-M38363	-5	-5	-5	31	-20	23	6	-10	-15	1	44
30-45.5231-109.9303-2-12-						0-M38364	-5	-5	-5	16	-20	-15	6	-10	-15	2	26
30-45.5175-109.9261-2-12-						0-M38365	-5	-5	-5	27	-20	-15	6	-10	-15	2	28
30-45.5064-109.9106-2-12-						0-M38366	-5	-5	-5	28	-20	-15	-5	-10	-15	1	32
30-45.4161-109.8181-2-12-						0-M38367	-5	-5	-5	13	-20	17	13	-10	-15	1	29
30-45.5458-109.6878-2-11-						0-M38368	-5	-5	-5	32	-20	-15	9	-10	-15	1	25
30-45.5431-109.6997-2-15-						0-M38369	-5	-5	-5	30	-20	-15	-5	-10	-15	-1	8
30-45.5544-109.7344-2-12-						0-M38371	-5	-5	-5	27	-20	-15	-5	-10	-15	1	20
30-45.5561-109.7339-2-12-						0-M38372	-5	-5	-5	23	-20	-15	12	-10	-15	-1	19
30-45.4197-109.6264-2-11-						0-M38373	-5	-5	-5	20	-20	-15	15	-10	-15	1	21
30-45.4089-109.6642-2-12-						0-M38374	-5	-5	-5	-10	-20	-15	18	-10	-15	1	15
30-45.3783-109.6578-2-11-						0-M38377	-5	-5	-5	15	-20	-15	5	-10	-15	1	15
30-45.3767-109.6900-2-12-						0-M38378	-5	-5	-5	20	-20	15	10	-10	-15	1	17
30-45.4811-109.6842-2-12-						0-M38379	-5	-5	-5	23	-20	31	5	-10	-15	1	21
30-45.4422-109.7392-2-11-						0-M38380	-5	-5	-5	15	-20	-15	-5	-10	-15	2	35
30-45.4325-109.6914-2-11-						0-M38381	-5	-5	-5	21	-20	-15	8	-10	-15	2	26
30-45.5467-109.6283-2-12-						0-M38382	-5	-5	-5	25	-20	21	5	-10	-15	2	26
30-45.4797-109.7228-2-12-						0-M38383	7	-5	-5	40	-20	-15	-5	-10	-15	-1	-1

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)													
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
30-45.4228-109.5172-2-12-					0-	M38314	65430	-0.08	647	16990	68	-102	11.8	183	2.2	3	1.0	24750	7.5	15550	37	0.4
30-45.4681-109.5350-2-11-					0-	M38317	63810	-0.05	516	9880	64	-58	9.1	113	3.5	4	0.8	16240	5.8	15380	35	0.3
30-45.4856-109.5825-2-12-					0-	M38319	71270	-0.06	936	37340	61	-114	13.1	138	-1.4	3	1.1	40280	4.7	10320	34	0.3
30-45.4750-109.5808-2-11-					0-	M38320	57520	-0.04	664	13500	69	-93	5.6	103	1.2	2	1.0	8768	13.8	11670	39	0.4
30-45.4633-109.5656-2-11-					0-	M38321	77860	-0.08	1053	23370	68	-102	11.0	164	-1.6	3	0.9	28300	5.1	11740	37	0.3
30-45.3942-109.8622-2-12-					0-	M38325	18850	-0.07	-173	14150	907	115	67.5	33800	-1.3	-1	-0.3	45980	-1.1	-3440	-3	-0.2
30-45.3822-109.8839-2-12-					0-	M38326	27670	-0.08	-178	22820	15	298	58.8	6619	-1.7	-1	-0.3	47370	1.7	-3685	7	-0.1
30-45.3583-109.9019-2-12-					0-	M38328	68220	-0.09	-193	31100	138	262	15.1	133	-1.8	4	1.4	33270	11.7	11140	109	1.0
30-45.3553-109.8936-2-12-					0-	M38329	67890	-0.08	498	21040	105	-106	8.3	408	-1.6	3	1.0	20150	9.3	12150	68	0.5
30-45.3683-109.8775-2-12-					0-	M38330	58810	-0.07	286	18870	27	-83	78.8	1257	-1.7	2	0.6	69710	3.4	-3236	19	0.2
30-45.4053-109.8689-2-12-					0-	M38331	52310	-0.07	193	41930	45	-99	29.6	6564	-1.6	2	0.6	31060	6.7	-3513	33	0.2
30-45.4631-109.8928-2-12-					0-	M38334	46660	-0.06	626	45100	65	-71	10.2	54	1.3	3	0.9	27510	9.1	12290	27	0.3
30-45.4833-109.9006-2-12-					0-	M38336	59980	-0.07	594	31600	52	-84	10.6	22	-1.5	3	0.9	30170	5.3	12020	25	0.3
30-45.4725-109.8972-2-11-					0-	M38337	7754	-0.04	-144	259300	7	-73	5.2	14	1.2	-1	-0.2	2097	1.8	4497	7	0.1
30-45.4667-109.8000-2-12-					0-	M38338	70380	-0.07	764	40540	52	-101	16.1	193	-1.5	4	1.1	39980	3.5	11730	28	0.3
30-45.4589-109.8031-2-15-					0-	M38339	65020	-0.08	542	48240	60	-124	21.0	154	-1.6	2	1.4	81830	4.0	9284	36	0.4
30-45.4658-109.7769-2-12-					0-	M38341	66690	-0.08	736	33260	56	-112	15.2	294	-1.8	2	1.1	28300	3.4	11140	29	0.2
30-45.4400-109.7942-2-12-					0-	M38342	54370	-0.06	380	30180	40	-81	17.6	895	-1.2	2	0.6	29030	4.6	10050	27	0.2
30-45.3606-109.8025-2-12-					0-	M38344	49090	-0.06	417	44620	48	64	7.5	98	2.1	3	0.7	12480	5.8	13660	24	0.3
30-45.3553-109.8036-2-12-					0-	M38345	44660	-0.09	335	10630	1657	-88	64.7	27220	-1.9	2	0.5	49990	5.3	5914	21	-0.3
30-45.4081-109.7489-2-11-					0-	M38346	39120	-0.04	527	3281	58	-42	6.2	77	2.5	3	0.8	10410	10.4	13710	30	0.3
30-45.4022-109.7400-2-12-					0-	M38347	39470	-0.04	443	5389	54	-45	5.8	179	2.2	3	0.8	9419	10.7	13770	32	0.3
30-45.5511-109.4875-2-11-					0-	M38348	60600	-0.06	948	15140	90	-86	11.5	252	1.6	3	1.2	25990	9.1	15040	45	0.3
30-45.4178-109.7775-2-11-					0-	M38350	41080	-0.07	494	5268	54	-54	5.4	60	2.2	3	0.8	7166	10.5	13480	32	0.4
30-45.4136-109.7914-2-11-					0-	M38351	33280	-0.05	436	47120	46	-49	5.3	76	2.3	3	0.7	7670	7.0	11240	26	0.2
30-45.3497-109.7806-2-12-					0-	M38352	71670	-0.08	486	10950	189	-108	11.9	80	2.1	5	1.3	33030	22.7	17150	96	0.6
30-45.5397-109.6494-2-12-					0-	M38353	75740	-0.06	904	18430	53	-101	12.3	232	1.7	3	0.9	21240	4.8	13820	31	0.3
30-45.4217-109.7394-2-12-					0-	M38355	40090	-0.05	354	19120	55	191	16.0	5604	1.4	2	0.6	15410	4.6	11490	22	0.2
30-45.4122-109.7067-2-11-					0-	M38357	47800	-0.05	546	10910	46	-55	5.3	79	2.2	3	0.8	9949	5.8	13080	28	0.3
30-45.4217-109.6319-2-12-					0-	M38359	52880	-0.06	548	21120	71	-75	7.2	148	2.7	3	1.1	14000	8.7	13550	33	0.4
30-45.4897-109.9175-2-12-					0-	M38360	34630	-0.06	411	64620	44	-64	5.4	44	1.7	2	0.8	9922	11.7	10150	27	0.4
30-45.4869-109.9806-2-12-					0-	M38361	67680	-0.07	303	68390	73	-48	10.8	88	2.7	6	1.2	22010	5.3	17010	47	0.4
30-45.5131-109.9406-2-12-					0-	M38362	47310	-0.05	539	55000	54	-67	8.0	82	2.0	3	0.8	15600	8.0	12450	32	0.3
30-45.5131-109.9261-2-12-					0-	M38363	45570	-0.06	489	61610	57	-75	9.1	89	1.5	3	0.9	14490	7.4	13550	26	0.2
30-45.5231-109.9303-2-12-					0-	M38364	46390	-0.06	642	15200	45	-71	4.8	-8	-1.1	2	0.8	11200	5.4	14940	26	0.2
30-45.5175-109.9261-2-12-					0-	M38365	62140	-0.05	603	16870	53	-67	9.0	29	2.4	3	0.8	22950	4.9	13650	33	0.3
30-45.5064-109.9106-2-12-					0-	M38366	56370	-0.05	624	28940	48	-75	10.0	66	2.1	3	0.9	24910	5.9	11950	32	0.3
30-45.4161-109.8181-2-12-					0-	M38367	71250	-0.07	463	37230	86	-77	11.1	590	-1.5	4	1.2	17970	4.7	9568	42	0.3
30-45.5458-109.6878-2-11-					0-	M38368	71350	-0.10	856	37670	59	-139	13.6	40	-2.1	3	1.3	30050	2.9	13980	30	0.2
30-45.5431-109.6997-2-15-					0-	M38369	64080	-0.06	654	37100	62	-125	17.5	60	-1.4	3	1.1	68640	3.4	8669	40	0.3
30-45.5544-109.7344-2-12-					0-	M38371	72410	-0.07	936	35610	67	-111	15.9	49	-1.5	4	1.2	40310	4.1	11460	41	0.3
30-45.5561-109.7339-2-12-					0-	M38372	72410	-0.08	1126	33360	93	-131	17.6	48	-1.6	3	1.3	46950	4.8	11500	43	0.3
30-45.4197-109.6264-2-11-					0-	M38373	46330	-0.08	441	7016	53	-52	7.0	66	3.3	3	0.9	10570	6.2	13600	29	0.3
30-45.4089-109.6642-2-12-					0-	M38374	43360	-0.04	535	11530	45	-61	5.4	66	1.9	3	0.6	8077	7.3	10450	29	0.3
30-45.3783-109.6578-2-11-					0-	M38377	38300	-0.05	463	6135	51	-43	4.5	36	2.4	3	0.8	7478	7.5	12050	30	0.3
30-45.3767-109.6900-2-12-					0-	M38378	46310	-0.07	463	9015	74	-76	7.8	145	2.7	3	1.1	12050	8.6	12850	44	0.4
30-45.4811-109.6842-2-12-					0-	M38379	66790	-0.10	613	32410	67	-127	12.9	845	-2.0	3	1.0	35500	4.4	12510	34	0.4
30-45.4422-109.7392-2-11-					0-	M38380	71860	-0.06	872	20190	69	-106	10.7	54	2.6	3	0.9	21510	5.6	15360	38	0.3
30-45.4325-109.6914-2-11-					0-	M38381	54750	-0.05	630	14450	49	-69	7.7	456	2.2	3	0.9	13440	6.9	11210	31	0.3
30-45.5457-109.6283-2-12-					0-	M38382	75310	-0.07	1079	29990	93	-110	13.3	212	-1.3	3	1.2	34080	6.7	10030	41	0.3
30-45.4737-109.7228-2-12-					0-	M38383	51460	-0.10	458	40160	56	-135	27.6	163	-2.1	3	1.3	110300	3.1	-5383	32	0.3

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAB. SAMPLE LOCATION NUMBER	Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
30-45.4228-109.5172-2-12-						0-M38314	15620	625	14400	-28	-3	9.8	3.1	-368	-1	-1	9.4	4327	99	2.6	-45	0.253
30-45.4681-109.5350-2-11-						0-M38317	15620	432	5942	40	-2	7.4	4.2	-248	-1	-1	8.6	3287	80	2.9	54	0.317
30-45.4856-109.5825-2-12-						0-M38319	19890	226	16280	-22	-2	9.9	4.0	556	-1	-1	5.8	4952	155	3.2	127	0.284
30-45.4750-109.5908-2-11-						0-M38320	-3831	182	19570	21	-1	3.8	4.3	498	-1	-1	8.4	2367	44	3.2	35	0.236
30-45.4633-109.5656-2-11-						0-M38321	15180	393	17700	-26	-2	9.1	2.7	706	-1	-1	5.0	4681	116	-1.7	-94	0.378
30-45.3942-109.8622-2-12-						0-M38325	305800	1065	1148	-23	-2	14.4	-0.8	-398	-1	-1	-2.2	1285	189	-1.6	-33	
30-45.3822-109.8839-2-12-						0-M38326	203400	1147	4196	-25	-2	21.3	0.9	-424	-1	-1	3.8	2141	120	-1.7	-39	0.242
30-45.3583-109.9019-2-12-						0-M38328	19000	677	21270	-24	-3	16.8	21.8	-418	-1	-1	22.6	4278	130	3.5	-37	4.841
30-45.3553-109.8936-2-12-						0-M38329	16810	407	27450	-26	-2	9.7	6.0	-306	-1	-1	34.4	3083	70	4.7	-45	0.237
30-45.3693-109.8775-2-12-						0-M38330	64800	307	10890	-28	-2	18.7	1.6	-333	-1	-1	6.3	5811	169	2.2	72	0.456
30-45.4053-109.8689-2-12-						0-M38331	101900	802	13040	-22	-2	18.2	2.8	-382	-1	-1	14.2	3033	127	2.6	-25	0.124
30-45.4631-109.8928-2-12-						0-M38334	20910	545	9502	-18	-2	6.6	3.9	407	-1	-1	5.8	3445	110	2.4	-60	0.322
30-45.4833-109.9006-2-12-						0-M38335	17320	706	12780	-26	-2	7.4	3.1	527	-1	-1	5.3	4018	125	2.0	96	0.374
30-45.4725-109.8972-2-11-						0-M38337	10400	87	737	-13	-1	1.0	0.6	-222			1.3	-593	14	-0.9	92	0.877
30-45.4667-109.8000-2-12-						0-M38338	35580	844	17860	-22	-2	12.3	3.5	955	-1	-1	4.3	4649	148	2.0	117	0.272
30-45.4589-109.8031-2-15-						0-M38339	24930	1471	13930	-27	-2	12.6	5.4	-483	-1	-1	4.4	6981	270	2.7	-56	0.193
30-45.4658-109.7769-2-12-						0-M38341	35090	721	17700	-29	-3	12.8	2.7	848	-1	-1	3.8	2912	106	-1.9	-82	0.282
30-45.4400-109.7942-2-12-						0-M38342	53360	793	11750	24	-2	12.2	3.1	-312	-1	-1	8.2	3096	111	-1.2	51	0.345
30-45.3606-109.8025-2-12-						0-M38344	18720	310	5002	36	-2	6.6	3.1	326	-1	-1	7.7	2460	58	1.7	94	0.297
30-45.3553-109.8036-2-12-						0-M38345	94240	1057	7030	-31	-3	15.2	3.2	-404	-1	-1	9.6	4092	161	-2.1	-43	0.200
30-45.4081-109.7489-2-11-						0-M38346	5690	213	3910	33	-1	4.3	4.3	-172	-1	-1	8.1	2601	54	3.2	19	0.381
30-45.4022-109.7400-2-12-						0-M38347	6320	291	4920	44	-1	4.5	4.1	-180	-1	1	8.7	2823	50	2.0	39	0.313
30-45.5611-109.4875-2-11-						0-M38348	12460	479	13640	40	-2	7.5	4.9	611	-1	-1	8.9	3515	105	3.0	84	0.258
30-45.4178-109.7775-2-11-						0-M38350	5059	91	4799	-21	-2	4.6	3.1	-180	-1	-1	7.4	3181	50	2.7	-62	0.419
30-45.4136-109.7914-2-11-						0-M38351	8896	350	3598	33	-1	4.3	3.1	-212	-1	-1	6.2	2140	44	2.6	61	0.360
30-45.3497-109.7806-2-12-						0-M38352	11310	651	23730	51	-2	10.5	12.2	-342	-1	-1	48.2	5226	110	6.4	47	0.238
30-45.5397-109.6494-2-12-						0-M38353	17400	515	14530	39	-2	9.1	3.9	580	-1	1	7.2	2878	98	2.9	76	0.442
30-45.4217-109.7394-2-12-						0-M38355	17330	406	6409	-15	-1	6.4	2.7	-220		-1	8.2	2427	81	-0.9	36	0.271
30-45.4122-109.7067-2-11-						0-M38357	8023	162	8075	29	-2	5.1	3.1	318	-1	-1	6.6	2285	55	2.1	54	0.359
30-45.4217-109.6319-2-12-						0-M38358	10430	305	9877	29	-2	5.5	3.9	-263	-1	-1	7.5	2544	57	2.5	-65	0.311
30-45.4897-109.9175-2-12-						0-M38360	31390	271	5545	-19	-2	4.8	2.9	-236	-1	-1	5.6	2322	39	2.4	-38	0.448
30-45.4869-109.9806-2-12-						0-M38361	11580	326	2040	-20	-2	10.4	6.0	317	-1	1	11.5	4457	95	3.9	60	0.263
30-45.5131-109.9406-2-12-						0-M38362	32400	485	7944	37	-2	6.5	3.5	-244	-1	-1	6.8	2743	59	2.1	92	0.322
30-45.5131-109.9261-2-12-						0-M38363	26850	422	8638	33	-2	6.1	4.8	-272	-1	1	6.7	2282	55	2.6	-43	0.297
30-45.5231-109.9303-2-12-						0-M38364	8017	207	9824	-18	-2	3.7	2.4	324	-1	-1	6.8	1579	55	-1.5	29	0.353
30-45.5175-109.9261-2-12-						0-M38365	13870	575	7874	32	-2	6.7	3.8	350	-1	-1	8.3	4097	121	2.8	-49	0.386
30-45.5064-109.9106-2-12-						0-M38366	20030	563	11200	26	-2	6.9	4.0	-276	-1	-1	5.9	3507	97	1.9	112	0.317
30-45.4161-109.8181-2-12-						0-M38367	15750	545	6553	-21	-2	9.6	5.8	-315	-1	-1	8.5	3303	75	2.7	103	0.227
30-45.5459-109.6878-2-11-						0-M38368	21120	755	20280	-33	-3	8.3	3.4	-481	-2	-1	4.1	2850	107	-2.3	163	0.478
30-45.5431-109.6997-2-15-						0-M38369	25520	1695	16480	-23	-2	10.3	4.3	-479	-1	-1	6.2	6082	262	2.4	137	0.223
30-45.5544-109.7344-2-12-						0-M38371	26950	1056	18480	-24	-2	10.4	4.8	669	-1	-1	6.1	3873	135	2.0	149	0.274
30-45.5561-109.7339-2-12-						0-M38372	25740	1193	19520	-24	-2	10.9	4.7	708	-1	-1	6.5	3696	142	2.9	107	0.234
30-45.4197-109.6264-2-11-						0-M38373	9325	215	3198	-24	-2	6.4	3.4	-225	-1	-1	7.8	3108	66	2.8	-28	0.400
30-45.4089-109.6642-2-12-						0-M38374	6872	256	9481	31	-1	4.1	3.3	-201		-1	8.1	2657	46	2.2	-18	0.267
30-45.3783-109.6578-2-11-						0-M38377	4870	98	3842	37	-1	4.6	3.0	-148	-1	-1	6.7	2098	44	2.7	-54	0.360
30-45.3767-109.6900-2-12-						0-M38378	10770	269	9337	37	-2	6.1	6.6	-274	-1	-1	13.9	2384	57	2.9	110	0.560
30-45.4811-109.6842-2-12-						0-M38379	25420	872	15600	-35	-3	7.9	3.0	-478	-2	-1	7.2	3566	124	-1.9	-78	0.511
30-45.4422-109.7392-2-11-						0-M38380	17500	1316	12640	38	-2	7.1	3.9	-444	-1	-1	8.2	3655	77	2.6	74	0.376
30-45.4325-109.6914-2-11-						0-M38381	12760	369	9551	33	-2	6.0	3.6	397	-1	-1	6.8	2671	59	2.6	81	0.369
30-45.5467-109.6283-2-12-						0-M38382	10520	609	22080	-21	-2	8.8	4.6	1202	-1	-1	5.4	4663	131	2.9	82	0.313
30-45.4797-109.7228-2-12-						0-M38383	31200	1706	11660	-40	-3	14.6	3.4	-528	-1	-1	4.2	8844	375	3.1	-86	0.252

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																											U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (umho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
30-	45.4767-	109.7197-2-12-				0-M38834-	06/24/78-	10-	22-	10.0-	-	-	6.3-	50-	10-2-1-4-6-3-3-1-3-2-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.26
30-	45.4733-	109.6675-2-11-				0-M38835-	06/24/78-	12-	25-	16.0-	-	-	5.8-	244-	5-4-2-	-	-3-3-1-3-4-2-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.23
30-	45.4544-	109.6808-2-12-				0-M38837-	06/24/78-	13-	22-	22.0-	C-	-	7.3-	390-	8-2-4-5-6-3-3-1-3-4-2-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.72
30-	45.4967-	109.6694-2-12-				0-M38838-	06/24/78-	14-	25-	17.0-	C-	-	7.8-	268-	11-2-6-3-6-3-3-1-1-4-3-4-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.73
30-	45.5589-	109.4139-2-12-				0-M38839-	06/25/78-	11-	20-	14.0-	C-	-	7.9-	520-	4-1-6-7-6-2-3-1-2-4-3-2-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50
30-	45.5983-	109.4039-2-11-				0-M38840-	06/25/78-	11-	22-	17.0-	C-	-	7.8-	510-	9-4-6-6-6-2-3-5-3-4-4-2-6-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.14
30-	45.6083-	109.4633-2-12-				0-M38842-	06/25/78-	13-	22-	15.0-	C-	-	8.5-	600-	12-1-1-3-6-3-3-3-2-4-3-2-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.37
30-	45.6050-	109.4828-2-11-				0-M38843-	06/25/78-	13-	23-	17.0-	C-	-	8.7-	720-	9-1-4-6-6-2-3-2-3-4-3-2-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.09
30-	45.5947-	109.4378-2-11-				0-M38844-	06/25/78-	14-	22-	12.0-	C-	-	9.4-	375-	11-2-3-7-6-3-3-1-3-4-2-3-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.22
30-	45.5869-	109.4078-2-12-				0-M38845-	06/25/78-	15-	20-	18.0-	C-	-	8.2-	670-	4-1-6-5-6-2-3-3-2-4-3-2-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50
30-	45.5783-	109.4131-2-12-				0-M38846-	06/25/78-	15-	20-	14.0-	C-	-	6.5-	480-	9-1-1-5-6-2-3-1-2-4-3-2-4-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.21
30-	45.5078-	109.4814-2-11-				0-M38848-	06/26/78-	9-	20-	12.0-	C-	-	7.5-	400-	11-2-3-4-6-2-3-1-3-2-3-4-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.31
30-	45.5333-	109.4083-2-12-				0-M38849-	06/26/78-	11-	22-	15.5-	C-	-	-	-	11-2-4-7-6-3-3-1-1-4-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.73
30-	45.5328-	109.4111-2-12-				0-M38400-	06/26/78-	11-	23-	17.0-	C-	-	6.3-	600-	4-2-4-4-6-3-3-3-1-2-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.43
30-	45.5617-	109.4072-2-12-				0-M38401-	06/26/78-	12-	25-	10.0-	C-	-	8.5-	610-	4-2-1-5-6-3-3-1-2-4-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50
30-	45.5661-	109.4433-2-12-				0-M38402-	06/26/78-	-	25-	14.0-	C-	-	8.0-	580-	11-	-	-	-3-3-1-3-4-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.34
30-	45.5722-	109.4811-2-11-				0-M38403-	06/26/78-	12-	13-	11.0-	C-	-	8.0-	320-	11-2-6-4-6-3-3-1-3-4-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.39
30-	45.6825-	108.0428-2-15-				0-M38404-	06/23/78-	13-	31-	-C-	-	-	-	-	16-1-6-7-6-	-	-	-	-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.77
30-	45.7100-	108.0367-2-15-				0-M38405-	06/23/78-	14-	32-	-C-	-	-	-	-	5-1-6-7-6-	-	-	-	-7-2-1-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.76
30-	45.7189-	108.0797-2-12-				0-M38406-	06/23/78-	14-	31-	26.0-	C-	-	7.6-	50000-	10-1-6-6-6-1-4-2-1-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.94
30-	45.7392-	108.0808-2-12-				0-M38409-	06/23/78-	15-	30-	29.0-	C-	-	8.3-	50000-	13-1-6-4-6-1-4-1-2-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.07
30-	45.7328-	108.0803-2-12-				0-M38410-	06/23/78-	15-	32-	28.5-	C-	-	8.8-	37000-	9-1-6-6-6-2-4-5-1-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.37
30-	45.7481-	108.2411-2-15-				0-M38411-	06/24/78-	9-	28-	-	-	-	-	-	2-1-6-4-6-	-	-	-	-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.90
30-	45.7392-	108.2194-2-12-				0-M38412-	06/24/78-	9-	24-	21.5-	-	-	8.1-	1800-	4-1-6-3-6-2-3-1-1-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.14
30-	45.7350-	108.2158-2-11-				0-M38413-	06/24/78-	9-	25-	15.0-	C-	-	6.9-	2400-	9-1-6-6-8-3-3-1-	-4-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.25
30-	45.7158-	108.2047-2-15-				0-M38414-	06/24/78-	10-	25-	-C-	-	-	-	-	16-1-6-4-6-	-	-	-	-4-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.94
30-	45.7061-	108.2053-2-15-				0-M38415-	06/24/78-	10-	28-	-	-	-	-	-	15-1-6-4-6-	-	-	-	-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.32
30-	45.7142-	108.2331-2-15-				0-M38416-	06/24/78-	11-	30-	-C-	-	-	-	-	12-1-6-4-6-	-	-	-	-4-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.21
30-	45.7142-	108.2342-2-12-				0-M38417-	06/24/78-	11-	30-	24.5-	-	-	7.7-	4600-	12-1-6-4-6-3-4-1-2-3-4-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.36
30-	45.7158-	108.2358-2-12-				0-M38418-	06/24/78-	11-	29-	26.0-	C-	-	8.2-	4575-	16-1-6-4-6-3-4-2-2-3-4-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.22
30-	45.7150-	108.2381-2-11-				0-M38419-	06/24/78-	12-	29-	12.5-	C-	-	7.6-	2400-	13-1-6-3-6-4-3-1-	-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.31
30-	45.7325-	108.1883-2-12-				0-M38420-	06/24/78-	13-	30-	20.5-	C-	-	7.2-	2400-	9-1-6-6-6-3-4-1-1-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.65
30-	45.7872-	108.1844-2-11-				0-M38421-	06/24/78-	14-	30-	11.5-	C-	-	6.6-	1000-	9-1-6-3-6-4-3-1-	-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.17
30-	45.8283-	108.1911-2-11-				0-M38423-	06/24/78-	15-	30-	16.5-	C-	-	6.8-	1050-	5-1-6-6-6-	-	-	-	-3-5-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.09
30-	45.8453-	108.2122-2-12-				0-M38424-	06/24/78-	15-	27-	19.5-	C-	-	7.8-	1200-	13-1-6-3-6-3-4-1-1-1-4-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.41
30-	45.8647-	108.2422-2-12-				0-M38425-	06/24/78-	15-	27-	19.5-	C-	-	7.7-	1025-	12-1-6-4-6-2-3-1-1-1-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.16
30-	45.7814-	108.2261-2-11-				0-M38426-	06/24/78-	16-	26-	11.5-	C-	-	6.5-	1625-	3-1-6-4-6-	-	-	-	-2-2-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.69
30-	45.7764-	108.2108-2-12-				0-M38427-	06/24/78-	16-	26-	26.5-	-	-	7.3-	2500-	9-1-6-6-6-1-3-2-1-3-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.67
30-	45.7764-	108.2067-2-15-				0-M38428-	06/24/78-	16-	26-	-	-	-	-	-	9-1-6-4-6-	-	-	-	-3-2-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.82
30-	45.7972-	108.1072-2-12-				0-M38431-	06/26/78-	10-	17-	11.5-	C-	-	8.6-	800-	12-1-6-4-6-3-4-1-1-2-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.47
30-	45.8650-	108.1028-2-11-				0-M38432-	06/26/78-	10-	18-	14.0-	C-	-	8.5-	675-	9-1-6-6-8-	-	-	-	-3-4-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.61
30-	45.9583-	108.1375-2-12-				0-M38434-	06/26/78-	11-	21-	16.0-	C-	-	8.0-	1300-	12-1-6-4-6-3-4-4-2-2-3-1-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.77
30-	45.9717-	108.1422-2-12-				0-M38443-	06/26/78-	15-	27-	19.5-	C-	-	8.1-	1150-	17-1-6-4-6-3-4-4-1-4-3-1-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.62
30-	45.9828-	108.1525-2-12-				0-M38444-	06/26/78-	15-	26-	19.0-	C-	-	7.4-	550-	13-1-6-	-	-	-	-4-3-1-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.33
30-	45.8811-	108.3022-2-12-				0-M38450-	06/27/78-	10-	20-	19.5-	C-	-	8.7-	1175-	6-1-6-4-6-4-4-2-1-2-1-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.52
30-	45.8956-	108.2792-2-15-				0-M38454-	06/27/78-	12-	26-	-C-	-	-	-	-	11-1-6-4-6-	-	-	-	-3-3-1-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.66
30-	45.9672-	108.2972-2-12-				0-M38459-	06/27/78-	14-	30-	22.5-	C-	-	7.5-	725-	16-1-6-4-6-3-4-4-1-4-3-1-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.75
30-	45.9864-	108.3422-2-12-				0-M38461-	06/27/78-	15-	29-	23.0-	C-	-	7.6-	400-	8-1-6-4-6-3-4-4-1-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.82
30-	45.9917-	108.3631-2-12-				0-M38463-	06/27/78-	16-	30-	25.0-	C-	-	7.5-	1300-	5-1-6-4-6-3-4-2-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.69
30-	45.7964-	108.0567-2-11-				0-M38467-	06/28/78-	10-	26-	15.0-	C-	-	7.9-	925-	12-1-6-6-8-3-4-1-1-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.15
30-	45.7939-	108.0536-2-12-				0-M38469-	06/28/78-	11-	25-	24.5-	C-	-	8.3-	32000-	8-1-6-4-6-2-4-1-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.65

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

(2)

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
30-45.4767-109.7197-2-12-						0-M38384	-5	5	-5	23	-20	27	-5	-10	-15	1	16
30-45.4733-109.6675-2-11-						0-M38385	-5	-5	-5	22	-20	-15	-5	-10	-15	1	17
30-45.4544-109.6808-2-12-						0-M38387	-5	-5	-5	18	-20	-15	10	-10	-15	2	25
30-45.4367-109.6694-2-12-						0-M38388	-5	-5	-5	22	-20	-15	-5	-10	-15	1	22
30-45.5589-109.4139-2-12-						0-M38389	-5	-5	-5	35	-20	31	12	-10	-15	2	26
30-45.5983-109.4039-2-11-						0-M38390	-5	-5	-5	20	-20	-15	6	-10	-15	1	41
30-45.6083-109.4633-2-12-						0-M38392	-5	-5	-5	24	-20	31	8	-10	-15	1	22
30-45.6050-109.4828-2-11-						0-M38393	-5	-5	-5	35	-20	31	13	-10	-15	1	31
30-45.5947-109.4378-2-11-						0-M38394	-5	-5	-5	36	-20	51	20	-10	-15	1	24
30-45.5869-109.4078-2-12-						0-M38395	-5	-5	-5	33	-20	15	16	-10	-15	2	26
30-45.5783-109.4131-2-12-						0-M38396	-5	-5	-5	15	-20	24	-5	-10	-15	2	28
30-45.5078-109.4814-2-11-						0-M38398	-5	-5	-5	18	-20	26	-5	-10	-15	1	14
30-45.5333-109.4083-2-12-						0-M38399	-5	-5	-5	27	-20	40	13	-10	-15	1	17
30-45.5328-109.4111-2-12-						0-M38400	-5	-5	-5	22	-20	-15	13	-10	-15	2	19
30-45.5617-109.4072-2-12-						0-M38401	-5	-5	-5	31	-20	33	12	-10	-15	2	36
30-45.5661-109.4433-2-12-						0-M38402	-5	-5	-5	30	-20	39	12	-10	-15	2	28
30-45.5722-109.4811-2-11-						0-M38403	-5	-5	-5	17	-20	20	13	-10	-15	2	37
30-45.6925-108.0428-2-15-						0-M38404	-5	-5	-5	15	-20	-15	15	-10	-15	2	49
30-45.7100-108.0367-2-15-						0-M38405	-5	-5	-5	21	-20	16	-5	-10	-15	2	42
30-45.7189-108.0797-2-12-						0-M38406	-5	-5	-5	23	-20	-15	5	-10	-15	2	34
30-45.7392-108.0808-2-12-						0-M38408	-5	-5	-5	23	-20	-15	-5	-10	-15	2	34
30-45.7328-108.0803-2-12-						0-M38410	-5	-5	-5	23	-20	-15	8	-10	-15	2	46
30-45.7481-108.2411-2-15-						0-M38411	-5	-5	-5	19	-20	-15	-5	-10	-15	2	31
30-45.7392-108.2194-2-12-						0-M38412	-5	-5	-5	13	-20	-15	10	-10	-15	2	33
30-45.7350-108.2158-2-11-						0-M38413	-5	-5	-5	14	-20	-15	-5	-10	-15	2	28
30-45.7158-108.2047-2-15-						0-M38414	-5	-5	-5	12	-20	-15	5	-10	-15	2	34
30-45.7061-108.2053-2-15-						0-M38415	-5	-5	-5	14	-20	-15	9	-10	-15	2	41
30-45.7142-108.2331-2-15-						0-M38416	-5	-5	-5	14	-20	-15	9	-10	-15	2	35
30-45.7142-108.2342-2-12-						0-M38417	-5	-5	-5	-10	-20	-15	7	-10	-15	2	34
30-45.7158-108.2358-2-12-						0-M38418	-5	-5	-5	-10	-20	-15	9	-10	-15	2	34
30-45.7150-108.2381-2-11-						0-M38419	-5	-5	-5	13	-20	-15	-5	-10	-15	2	29
30-45.7325-108.1883-2-12-						0-M38420	-5	-5	-5	11	-20	-15	-5	-10	-15	2	40
30-45.7872-108.1844-2-11-						0-M38421	-5	-5	-5	24	-20	21	15	-10	-15	1	40
30-45.8283-108.1911-2-11-						0-M38423	-5	-5	-5	30	-20	-15	24	-10	-15	1	23
30-45.8453-108.2122-2-12-						0-M38424	-5	-5	-5	22	-20	22	14	-10	-15	2	40
30-45.8647-108.2422-2-12-						0-M38425	-5	-5	-5	21	-20	-15	7	-10	-15	2	36
30-45.7814-108.2261-2-11-						0-M38426	-5	-5	-5	-10	-20	-15	-5	-10	-15	2	17
30-45.7764-108.2108-2-12-						0-M38427	-5	-5	-5	20	-20	-15	10	-10	-15	2	35
30-45.7764-108.2067-2-15-						0-M38428	-5	-5	-5	21	-20	25	5	-10	-15	1	36
30-45.7972-108.1072-2-12-						0-M38431	-5	-5	-5	31	-20	-15	8	-10	-15	1	32
30-45.8650-108.1028-2-11-						0-M38432	-5	-5	-5	18	-20	-15	14	-10	-15	2	27
30-45.9583-108.1375-2-12-						0-M38434	-5	-5	-5	34	-20	-15	11	-10	-15	2	39
30-45.9717-108.1422-2-12-						0-M38442	-5	-5	-5	19	-20	-15	15	-10	-15	2	37
30-45.9828-108.1525-2-12-						0-M38444	-5	-5	-5	27	-20	-15	5	-10	-15	2	24
30-45.8811-108.3022-2-12-						0-M38450	-5	-5	-5	14	-20	-15	10	-10	-15	2	38
30-45.8956-108.2792-2-15-						0-M38454	-5	-5	-5	15	-20	15	7	-10	-15	2	39
30-45.9672-108.2972-2-12-						0-M38459	-5	-5	-5	23	-20	-15	-5	-10	-15	2	32
30-45.9864-108.3422-2-12-						0-M38461	-5	-5	-5	23	-20	17	18	-10	-15	2	43
30-45.9017-108.3631-2-12-						0-M38463	-5	-5	-5	15	-20	-15	10	-10	-15	2	47
30-45.7964-108.0567-2-11-						0-M38457	-5	-5	-5	19	-20	22	5	-10	-15	1	52
30-45.7939-108.0536-2-12-						0-M38458	-5	-5	-5	24	-20	-15	12	-10	-15	2	36

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS													
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per million (ppm)													
							Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
30-45.4767-109.7197-2-12-						0-M38384	67590	-0.05	942	27640	49	-95	10.5	453	-1.1	2	0.8	23460	4.4	14550	28	0.2
30-45.4733-109.6675-2-11-						0-M38385	65420	-0.06	591	28530	70	-95	12.5	383	1.8	3	1.0	37560	7.5	11060	43	0.3
30-45.4544-109.6808-2-12-						0-M38387	71710	-0.07	741	23070	80	-106	12.9	128	2.4	3	1.1	25670	5.9	15460	40	0.3
30-45.4867-109.6694-2-12-						0-M38388	71930	-0.04	852	31870	60	-109	13.3	298	-1.2	3	1.1	41560	6.6	14740	39	0.2
30-45.5589-109.4139-2-12-						0-M38389	73170	-0.05	846	11570	51	-69	11.2	126	3.5	3	1.0	22560	5.0	15150	36	0.3
30-45.5983-109.4039-2-11-						0-M38390	47710	-0.03	474	31370	38	-85	6.3	77	1.6	3	0.8	9616	4.1	14680	21	0.2
30-45.6083-109.4633-2-12-						0-M38392	61130	-0.05	563	18550	43	-92	7.7	100	-1.4	3	0.7	15030	4.6	12570	26	0.2
30-45.6050-109.4828-2-11-						0-M38393	59270	-0.04	770	21020	47	-83	8.3	144	2.4	3	0.7	16790	3.1	15310	23	0.2
30-45.5947-109.4378-2-11-						0-M38394	73510	-0.05	1036	37540	61	-95	12.6	208	3.0	3	0.8	26800	5.0	14800	37	0.2
30-45.5869-109.4078-2-12-						0-M38395	63870	-0.06	831	12620	58	-73	10.2	114	2.9	3	0.9	22540	5.6	14390	33	0.2
30-45.5783-109.4131-2-12-						0-M38396	62280	-0.06	951	12030	67	-76	9.4	185	2.4	3	1.2	21500	6.6	14840	33	0.3
30-45.5078-109.4814-2-11-						0-M38398	62020	-0.07	1065	14610	58	-93	7.7	212	-1.4	2	0.9	19700	6.6	15650	36	0.2
30-45.5333-109.4083-2-12-						0-M38399	67500	-0.06	873	11120	57	-69	10.3	113	2.5	3	1.0	20400	6.2	16570	33	0.3
30-45.5328-109.4111-2-12-						0-M38400	48330	-0.06	652	9314	67	-51	8.4	71	2.4	3	1.0	14020	8.8	11810	36	0.3
30-45.5617-109.4072-2-12-						0-M38401	68420	-0.05	736	12930	55	-69	10.1	121	3.0	3	0.9	19020	6.0	15610	32	0.3
30-45.5661-109.4433-2-12-						0-M38402	64920	-0.06	885	14770	56	-80	9.4	159	3.3	3	1.0	20670	5.0	14840	33	0.3
30-45.5722-109.4811-2-11-						0-M38403	66030	-0.08	833	12560	58	-99	10.8	216	-1.7	3	1.2	23540	6.9	15310	37	0.3
30-45.6825-108.0428-2-15-						0-M38404	66060	-0.05	624	18480	59	-64	7.1	47	3.5	3	0.8	13080	4.2	17350	33	0.3
30-45.7100-108.0367-2-15-						0-M38405	66620	-0.06	715	32260	53	-70	6.1	42	3.8	4	1.0	12920	5.0	15570	30	0.3
30-45.7189-108.0797-2-12-						0-M38406	61360	-0.07	536	18380	70	-83	8.5	66	3.5	3	1.1	18170	6.1	14780	35	0.3
30-45.7392-108.0808-2-12-						0-M38408	48830	-0.07	776	16760	46	-77	5.8	51	3.2	2	0.9	12770	4.1	11970	30	0.2
30-45.7328-108.0803-2-12-						0-M38410	47270	0.09	654	25160	43	96	6.3	46	2.4	3	0.8	10620	4.9	13530	27	0.2
30-45.7481-108.2411-2-15-						0-M38411	42340	-0.04	541	26330	47	99	5.2	28	1.9	3	0.8	9170	4.5	13780	23	0.2
30-45.7392-108.2194-2-12-						0-M38412	43040	-0.05	574	30350	59	257	6.1	47	2.9	3	1.1	10880	6.1	12100	29	0.3
30-45.7350-108.2158-2-11-						0-M38413	38220	-0.07	504	23270	47	-67	4.1	31	1.5	2	0.8	7995	6.1	11870	30	0.3
30-45.7158-108.2047-2-15-						0-M38414	40750	-0.03	485	27070	52	87	4.8	40	2.2	4	0.8	7341	12.3	11870	25	0.3
30-45.7061-108.2053-2-15-						0-M38415	47450	-0.05	590	23050	47	93	4.5	32	2.6	3	0.8	11940	5.5	12820	27	0.3
30-45.7142-108.2331-2-15-						0-M38416	46130	-0.04	624	15360	50	66	5.0	37	1.9	3	0.7	10960	5.7	12650	23	0.3
30-45.7142-108.2342-2-12-						0-M38417	41160	-0.04	498	20870	50	-56	4.6	36	2.0	2	0.8	11330	7.8	11680	28	0.2
30-45.7158-108.2358-2-12-						0-M38418	42260	-0.05	560	23190	63	81	6.1	42	2.4	3	1.0	11060	8.2	13300	31	0.3
30-45.7150-108.2381-2-11-						0-M38419	40860	-0.06	516	22770	53	-52	4.6	37	-1.3	4	1.0	11570	9.0	11950	33	0.3
30-45.7325-108.1883-2-12-						0-M38420	41240	-0.04	524	32160	59	88	5.5	46	1.7	3	0.8	8654	11.0	12920	32	0.3
30-45.7872-108.1844-2-11-						0-M38421	58720	-0.06	774	50120	56	-110	8.5	58	2.0	2	1.0	15980	5.0	12160	31	0.2
30-45.8283-108.1911-2-11-						0-M38422	44240	-0.08	-323	26470	82	-184	13.1	148	-1.9	3	1.0	24800	7.4	-8209	43	0.3
30-45.8453-108.2122-2-12-						0-M38424	61760	-0.08	737	42360	65	-83	9.6	129	-1.8	3	1.0	19040	5.4	12370	38	0.3
30-45.8647-108.2422-2-12-						0-M38425	60310	-0.05	713	25340	52	-94	8.7	143	1.7	3	0.9	14260	5.9	14290	32	0.2
30-45.7814-108.2261-2-11-						0-M38426	31900	-0.04	373	22510	40	-59	3.2	26	1.3	2	0.7	5799	4.7	10790	24	0.2
30-45.7764-108.2108-2-12-						0-M38427	60900	0.10	592	20820	59	95	9.9	81	3.3	3	1.0	19800	6.8	15690	30	0.3
30-45.7764-108.2067-2-15-						0-M38428	62320	-0.07	707	23780	51	-79	8.4	137	-1.4	3	1.0	17500	3.9	13650	25	0.2
30-45.7972-108.1072-2-12-						0-M38431	63160	-0.05	744	14130	58	96	9.6	82	2.6	4	1.0	15600	5.9	14070	30	0.3
30-45.8650-108.1028-2-11-						0-M38432	55950	-0.07	649	23450	60	-106	10.6	68	2.7	3	0.9	18860	5.0	13030	32	0.3
30-45.9583-108.1375-2-12-						0-M38434	64100	-0.07	767	26060	76	-75	11.3	95	5.4	4	1.2	21520	6.9	13480	35	0.3
30-45.9717-108.1422-2-12-						0-M38442	58670	-0.07	772	24240	57	-71	7.6	80	2.5	4	0.9	17840	8.5	16180	34	0.3
30-45.9828-108.1525-2-12-						0-M38444	59050	-0.05	690	23540	57	-82	8.5	80	2.8	3	0.9	14570	5.6	13630	31	0.3
30-45.8811-108.3022-2-12-						0-M38450	44030	-0.05	435	23330	51	-83	6.6	43	2.2	3	0.9	12030	4.7	12100	27	0.3
30-45.8956-108.2792-2-15-						0-M38454	55700	-0.06	703	24730	73	-76	7.9	121	2.3	3	1.1	16210	9.4	13210	39	0.5
30-45.9672-108.2972-2-12-						0-M38459	55130	-0.07	774	34430	46	-69	7.1	42	2.9	4	0.9	15210	6.7	15200	32	0.3
30-45.9964-108.3422-2-12-						0-M38461	65430	-0.05	1019	18900	49	-85	8.8	53	2.9	4	0.8	15630	5.7	16800	31	0.3
30-45.9017-108.3631-2-12-						0-M38463	58430	-0.05	588	29210	58	-90	6.9	45	2.3	3	1.0	14710	6.9	14160	32	0.3
30-45.7964-108.0567-2-11-						0-M38467	54510	-0.07	647	58430	61	-83	9.0	126	-1.4	3	1.1	15180	6.5	13540	33	0.4
30-45.7939-108.0536-2-12-						0-M38468	60250	-0.08	716	16770	53	-76	8.7	86	3.3	3	1.0	17140	6.0	14800	33	0.4

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
30-45.4767-109.7197-2-12-			0-	M	3	M38394	20050	638	16580	-17	-2	6.7	3.3	740	-1	-1	7.1	3039	93	2.1	59	0.318
30-45.4733-109.6675-2-11-			0-	M	3	M38395	21420	766	15810	25	-2	8.5	4.1	848	-1	-1	7.1	5017	150	2.1	111	0.314
30-45.4544-109.6808-2-12-			0-	M	3	M38397	16940	754	13830	42	-2	8.3	5.0	886	-1	-1	8.5	3732	87	3.1	-84	0.320
30-45.4867-109.6694-2-12-			0-	M	3	M38398	21070	946	16770	41	-1	8.4	3.9	684	-1	-1	5.8	4724	166	1.7	98	0.298
30-45.5589-109.4139-2-12-			0-	M	3	M38399	19250	410	7231	38	-1	9.8	4.1	-271	-1	-1	8.2	3101	112	2.1	98	0.305
30-45.5983-109.4039-2-11-			0-	M	3	M38390	19160	505	7750	23	-1	4.2	3.0	-344	-1	-1	4.8	2471	54	1.9	-34	0.446
30-45.6083-109.4633-2-12-			0-	M	3	M38392	17420	515	9507	-22	-1	5.6	1.7	-350	-1	-1	5.0	3156	92	1.6	-38	0.474
30-45.6050-109.4828-2-11-			0-	M	3	M38393	16200	645	7692	31	-1	7.1	2.8	432	-1	-1	5.2	3140	87	2.0	81	0.402
30-45.5947-109.4378-2-11-			0-	M	3	M38394	23260	662	12560	35	-2	12.6	4.0	539	-1	-1	8.6	4014	121	2.2	115	0.258
30-45.5869-109.4078-2-12-			0-	M	3	M38395	14500	795	7836	49	-2	9.2	4.2	-301	-1	-1	8.1	3165	92	2.4	124	0.309
30-45.5783-109.4131-2-12-			0-	M	3	M38396	12930	348	11370	42	-2	7.6	4.4	476	-1	-1	6.9	2885	85	2.3	90	0.320
30-45.5078-109.4814-2-11-			0-	M	3	M38398	11330	429	14580	-26	-2	6.5	2.5	-302	-1	-1	5.7	2994	89	-1.4	80	0.405
30-45.5333-109.4083-2-12-			0-	M	3	M38399	12450	608	8273	47	-2	9.5	4.4	-279	-1	-1	9.0	3590	105	2.2	103	0.303
30-45.5328-109.4111-2-12-			0-	M	3	M38400	10300	295	5779	39	-2	5.8	4.6	-205	-1	-1	8.3	3295	77	3.2	-50	0.293
30-45.5617-109.4072-2-12-			0-	M	3	M38401	15190	555	9487	36	-2	8.0	3.9	-275	-1	-1	7.6	3696	103	2.2	-43	0.329
30-45.5661-109.4433-2-12-			0-	M	3	M38402	12160	363	9663	45	-2	8.9	3.9	436	-1	-1	6.4	3340	93	2.7	109	0.366
30-45.5722-109.4811-2-11-			0-	M	3	M38403	9884	536	13000	-27	-3	8.6	3.3	-353	-1	-1	6.7	3113	101	-2.1	-44	0.357
30-45.6825-108.0428-2-15-			0-	M	3	M38404	24520	244	7769	54	-2	6.7	4.5	-220	-1	-1	7.3	3230	122	2.5	65	0.379
30-45.7100-108.0367-2-15-			0-	M	3	M38405	23750	235	10700	51	-2	6.6	4.3	-226	-1	-1	7.7	2967	96	1.8	73	0.358
30-45.7189-108.0797-2-12-			0-	M	3	M38406	25090	646	7093	43	-2	8.9	6.2	-365	-1	-1	9.4	3257	109	4.2	107	0.313
30-45.7392-108.0808-2-12-			0-	M	3	M38409	16550	233	10710	-21	-2	5.8	2.6	-254	-1	-1	6.5	2544	73	1.7	-55	0.318
30-45.7329-108.0803-2-12-			0-	M	3	M38410	22350	166	7093	35	-1	5.1	3.7	-187		-1	6.4	2579	98	-0.9	43	0.370
30-45.7481-108.2411-2-15-			0-	M	3	M38411	24140	192	7244	34	-1	5.0	3.5	-177		-1	5.9	1967	63	2.1	-55	0.322
30-45.7392-108.2194-2-12-			0-	M	3	M38412	26660	217	7424	29	-2	5.4	4.1	190	-1	-1	7.7	2229	65	2.2	54	0.278
30-45.7350-108.2158-2-11-			0-	M	3	M38413	18230	95	6798	-20	-2	4.2	2.7	-212	-1	-1	5.6	1884	61	-1.4	-67	0.402
30-45.7159-108.2047-2-15-			0-	M	3	M38414	30610	139	6426	27	-1	3.8	3.7	-170		-1	7.2	2758	71	2.6	27	0.408
30-45.7061-108.2053-2-15-			0-	M	3	M38415	7670	150	6084	-21	-2	5.8	2.9	-157	-1	-1	7.4	2606	86	-1.3	-31	0.314
30-45.7142-108.2331-2-15-			0-	M	3	M38416	17910	133	5988	36	-1	4.7	3.9	-175		-1	7.0	2385	85	2.1	42	0.316
30-45.7142-108.2342-2-12-			0-	M	3	M38417	23130	118	6377	30	-1	4.9	3.5	-183	-1	-1	6.7	2219	83	2.7	39	0.352
30-45.7158-108.2358-2-12-			0-	M	3	M38418	2251	143	6821	36	-2	5.0	4.7	-163	-1	-1	7.7	2096	76	2.9	68	0.288
30-45.7150-108.2381-2-11-			0-	M	3	M38419	19100	176	6484	-20	-2	4.9	3.3	-176	-1	-1	6.9	2334	78	-1.4	-33	0.335
30-45.7325-108.1883-2-12-			0-	M	3	M38420	23040	175	6726	-14	-1	4.5	3.7	326		-1	7.6	2638	58	2.5	53	0.349
30-45.7872-108.1844-2-11-			0-	M	3	M38421	22500	701	13090	30	-2	6.5	3.8	675	-1	-1	6.5	3788	115	1.7	112	0.334
30-45.8283-108.1911-2-11-			0-	M	3	M38423	15050	3619	8696	-27	-3	12.0	4.9	-824	-1	-1	8.9	-1904	63	2.8	419	0.235
30-45.8453-108.2122-2-12-			0-	M	3	M38424	17970	599	11000	-29	-3	9.4	4.2	649	-1	-1	10.5	3464	85	-2.4	-44	0.230
30-45.8647-108.2422-2-12-			0-	M	3	M38425	15340	490	14110	-16	-2	7.2	3.6	-315	-1	-1	6.0	3062	75	-1.4	73	0.360
30-45.7814-108.2261-2-11-			0-	M	3	M38426	15360	101	7932	-12	-1	3.1	3.1	-180			4.8	1715	43	1.9	-27	0.352
30-45.7764-108.2108-2-12-			0-	M	3	M38427	22110	284	8941	35	-2	9.1	4.4	377	-1	-1	8.3	2964	101	3.2	-26	0.322
30-45.7764-108.2067-2-15-			0-	M	3	M38428	14670	477	15230	-22	-2	8.5	3.0	706	-1	-1	6.1	2589	77	2.5	-57	0.298
30-45.7972-108.1072-2-12-			0-	M	3	M38431	15800	538	11220	37	-2	7.6	4.3	-328	-1	-1	7.7	2540	81	2.9	-31	0.321
30-45.8650-108.1028-2-11-			0-	M	3	M38432	19210	917	9392	33	-2	7.9	3.9	-462	-1	-1	8.8	2163	85	3.6	81	0.297
30-45.9583-108.1375-2-12-			0-	M	3	M38434	20690	401	11140	45	-2	9.2	5.1	491	-1	-1	11.3	3130	103	2.3	-47	0.245
30-45.9717-108.1422-2-12-			0-	M	3	M38442	16890	390	12920	-23	-2	7.6	3.1	418	-1	-1	7.2	3311	82	2.5	40	0.364
30-45.9828-108.1525-2-12-			0-	M	3	M38444	19490	376	17660	33	-1	7.1	3.7	-279		-1	7.4	2924	71	2.6	44	0.315
30-45.8811-108.3022-2-12-			0-	M	3	M38450	15860	714	8454	-15	-1	5.3	3.6	-353	-1	-1	6.4	1597	59	2.1	47	0.394
30-45.8956-108.2792-2-15-			0-	M	3	M38454	17300	380	14210	40	-2	6.6	5.8	365	-1	-1	9.4	3174	68	2.7	73	0.283
30-45.9672-108.2972-2-12-			0-	M	3	M38459	23410	332	10580	-22	-2	6.3	2.8	-231	-1	-1	7.2	2723	66	3.0	-34	0.382
30-45.9864-108.3422-2-12-			0-	M	3	M38461	18900	297	13630	45	-2	6.8	4.0	390	-1	-1	7.6	3033	77	2.4	79	0.371
30-45.9017-108.3631-2-12-			0-	M	3	M38463	15780	363	12830	37	-2	6.2	4.0	-298	-1	-1	8.2	2534	59	3.0	78	0.328
30-45.7964-108.0567-2-11-			0-	M	3	M38457	12460	358	12370	-21	-2	7.0	5.5	579	-1	-1	6.7	2901	62	2.2	64	0.321
30-45.7939-108.0536-2-12-			0-	M	3	M38458	19270	361	12330	36	-2	7.9	4.0	-254	-1	-1	7.9	3050	86	2.6	-45	0.335

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																									U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (umho cm)	SCINTILLOMETER (eU ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
30-45.7761-108.0367-2-11-						0-438469-06/28/78-11-	28	-18.5-C-	-	7.8-	27000-		10-1-6-6-7-1-	-1-	-4-3-2-1-	-3-	-	-	-	-	1.92
30-45.7764-108.0381-2-15-						0-438470-06/28/78-11-	29	-C-	-	-	-		9-1-6-6-8-	-	-	-	-4-3-2-1-	-3-	-	-	-	-	1.97
30-45.7625-108.0300-2-15-						0-438471-06/28/78-12-	26	-C-	-	-	-		10-1-6-5-8-	-	-	-	-4-3-3-1-	-3-	-	-	-	-	2.40
30-45.7669-108.0856-2-15-						0-438473-06/28/78-14-	30	-C-	-	-	-		9-1-6-4-6-	-	-	-	-4-3-3-1-	-3-	-	-	-	-	2.40
30-45.7978-108.0333-2-12-						0-438474-06/28/78-14-	32	-21.5-C-	-	7.6-	875-		12-1-6-6-7-2-4-1-2-4-3-3-1-	-3-	-	-	-	-	2.53
30-45.8497-108.0014-2-12-						0-438476-06/28/78-16-	30	-16.0-C-	-	8.3-	1150-		8-1-6-4-6-4-4-1-2-4-3-3-1-	-3-	-	-	-	-	2.20
30-45.8508-108.0392-2-11-						0-438477-06/28/78-16-	29	-17.5-C-	-	7.7-	1400-		10-1-6-4-6-	-	-	-	-3-3-3-1-	-3-	-	-	-	-	2.11
30-45.8500-108.0569-2-12-						0-438478-06/28/78-16-	30	-21.5-C-	-	8.3-	825-		8-1-6-4-6-3-4-1-1-2-4-3-1-	-3-	-	-	-	-	2.46
30-45.8608-108.0358-2-15-						0-438479-06/28/78-17-	31	-C-	-	-	-		5-1-6-6-8-	-	-	-	-4-3-3-1-	-3-	-	-	-	-	3.12
30-45.8125-108.0011-2-12-						0-438480-06/28/78-18-	31	-26.5-C-	-	7.9-	1200-		6-1-6-6-8-2-4-1-1-6-2-3-2-	-3-	-	-	-	-	2.59
30-45.7906-108.2656-2-12-						0-438481-06/29/78-	9	-17.0-C-	-	8.6-	2600-		8-1-6-5-6-3-4-1-1-4-3-3-3-	-3-	-	-	-	-	2.32
30-45.7936-108.2478-2-12-						0-438482-06/29/78-	9	-26.0-C-	-	8.2-	2625-		8-1-6-4-6-2-4-1-1-3-3-3-3-	-3-	-	-	-	-	2.17
30-45.8272-108.1581-2-12-						0-438484-06/29/78-10-		24-18.0-C-	-	8.2-	700-		8-1-6-4-6-3-4-1-1-4-3-3-3-	-3-	-	-	-	-	2.66
30-45.9356-108.1408-2-12-						0-438485-06/29/78-11-		26-17.5-C-	-	8.5-	1700-		15-1-6-4-6-3-4-2-2-4-3-2-3-	-3-	-	-	-	-	2.65
30-45.9294-108.1225-2-12-						0-438486-06/29/78-14-		30-34.0-C-	-	9.0-	36000-		6-1-6-5-6-1-4-1-1-4-3-2-1-	-3-	-	-	-	-	3.17
30-45.9428-108.0903-2-15-						0-438487-06/29/78-15-	32	-C-	-	-	-		16-1-6-4-6-	-	-	-	-4-3-1-1-	-3-	-	-	-	-	2.76
30-45.9389-108.0689-2-15-						0-438488-06/29/78-15-	32	-C-	-	-	-		17-1-6-4-6-	-	-	-	-4-3-3-2-	-3-	-	-	-	-	3.06
30-45.9275-108.0608-2-12-						0-438489-06/29/78-15-		33-32.0-C-	-	8.1-	34000-		3-1-6-6-6-1-4-2-1-4-3-2-2-	-3-	-	-	-	-	3.04
30-45.9392-108.1133-2-15-						0-438490-06/29/78-17-	32	-C-	-	-	-		15-1-6-4-6-	-	-	-	-4-3-2-3-	-3-	-	-	-	-	2.82
30-45.9042-108.1397-2-15-						0-438491-06/30/78-12-	31	-C-	-	-	-		12-1-6-4-6-	-	-	-	-4-3-2-1-	-3-	-	-	-	-	2.91
30-45.9003-108.1397-2-15-						0-438492-06/30/78-12-	31	-C-	-	-	-		10-1-6-6-8-	-	-	-	-4-3-2-1-	-3-	-	-	-	-	2.96
30-45.8950-108.0478-2-12-						0-438493-06/30/78-14-		32-25.5-C-	-	8.3-	2650-		5-1-6-3-6-2-4-1-1-4-3-3-1-	-3-	-	-	-	-	3.36
30-45.8928-108.0450-2-12-						0-438494-06/30/78-15-		33-33.0-C-	-	8.6-	40500-		12-1-6-6-6-2-4-1-2-4-3-3-1-	-3-	-	-	-	-	3.44
30-45.8925-108.0092-2-12-						0-438495-06/30/78-16-		33-29.0-C-	-	8.2-	4025-		6-1-6-4-6-3-3-1-1-4-3-3-1-	-3-	-	-	-	-	3.25
30-45.9156-108.0158-2-15-						0-438496-06/30/78-16-	32	-C-	-	-	-		13-1-6-6-6-	-	-	-	-4-3-3-1-	-3-	-	-	-	-	3.21
30-45.9378-108.0125-2-15-						0-438497-06/30/78-17-	33	-C-	-	-	-		13-1-6-4-6-	-	-	-	-4-3-2-1-	-3-	-	-	-	-	2.75
30-45.9261-108.1858-2-12-						0-438498-07/03/78-10-		24-21.5-C-	-	9.1-	33250-		8-1-6-6-6-2-4-1-2-4-3-2-1-	-3-	-	-	-	-	3.00
30-45.8983-108.2472-2-15-						0-438499-07/03/78-11-	25	-C-	-	-	-		8-1-6-4-6-	-	-	-	-4-3-2-1-	-3-	-	-	-	-	2.62
30-45.9064-108.2175-2-12-						0-438500-07/03/78-12-		29-21.5-C-	-	9.1-	4075-		10-1-6-4-6-3-4-1-1-4-3-2-1-	-3-	-	-	-	-	2.46
30-45.8964-108.2039-2-12-						0-438502-07/03/78-13-		27-25.0-C-	-	8.9-	2750-		6-1-6-4-6-3-4-1-2-3-2-2-1-	-3-	-	-	-	-	2.77
30-45.8069-108.2878-2-12-						0-438503-07/03/78-15-		30-24.0-C-	-	8.4-	2625-		13-1-6-6-6-3-4-1-2-6-3-2-2-	-3-	-	-	-	-	2.50
30-45.7111-108.7817-2-12-						0-438504-05/13/78-15-		25-22.4-	-	-	7.5-	46000-	6-1-6-4-6-2-2-1-1-4-3-3-1-	-3-	-	-	-	-	3.56
30-45.7197-108.8011-2-15-						0-438505-05/13/78-16-	27	-	-	-	-	-	13-1-6-5-6-	-	-	-	-4-3-3-1-	-3-	-	-	-	-	2.73
30-45.7278-108.8022-2-15-						0-438506-05/13/78-16-	26	-	-	-	-	-	9-1-6-6-6-	-	-	-	-2-4-3-3-1-	-3-	-	-	-	-	2.48
30-45.7236-108.8464-2-11-						0-438508-05/13/78-17-		22-12.0-	-	-	7.5-	7000-	6-1-6-5-6-2-2-1-2-4-3-2-1-	-3-	-	-	-	-	3.16
30-45.6900-108.8425-2-12-						0-438512-06/06/78-10-		25-20.5-	-	-	7.8-	40000-	9-1-6-6-6-2-3-5-2-4-3-2-2-	-3-	-	-	-	-	2.69
30-45.6831-108.8581-2-12-						0-438515-06/06/78-12-		27-24.0-	-	-	8.0-	8000-	11-1-6-5-6-2-2-1-2-4-3-2-3-	-3-	-	-	-	-	2.63
30-45.6831-108.8756-2-15-						0-438516-06/06/78-13-		25-25.0-C-	-	-	7.6-	-	13-1-6-4-6-	-	-	-2-3-2-2-2-	-3-	-	-	-	-	2.32
30-45.5975-108.7811-2-12-						0-438522-06/06/78-16-		30-24.4-	-	-	8.0-	3000-	13-1-6-2-7-3-3-5-2-3-3-2-3-	-3-	-	-	-	-	4.14
30-45.7339-108.8814-2-12-						0-438523-06/07/78-11-		24-20.0-	-	-	7.4-	4000-	11-1-6-3-6-3-3-5-2-4-3-3-3-	-3-	-	-	-	-	2.29
30-45.6736-108.8894-2-12-						0-438527-06/07/78-13-		29-29.0-	-	-	7.9-	4300-	9-1-6-6-6-3-3-5-2-4-3-3-3-	-3-	-	-	-	-	2.63
30-45.4411-108.8444-2-12-						0-438537-06/08/78-12-		27-19.0-C-	-	8.0-	5300-		11-1-7-3-6-3-3-1-2-3-3-3-1-	-3-	-	-	-	-	3.66
30-45.4122-108.8253-2-12-						0-438539-06/08/78-13-		29-21.5-C-	-	8.5-	2800-		16-1-7-4-6-4-3-1-2-3-2-4-1-	-3-	-	-	-	-	3.67
30-45.4031-108.8556-2-12-						0-438540-06/08/78-12-		26-27.0-	-	-	8.2-	4600-	13-1-7-5-8-3-4-1-2-3-2-2-1-	-3-	-	-	-	-	5.20
30-45.5511-108.8019-2-12-						0-438543-06/15/78-10-		22-20.0-	-	-	8.4-	2600-	9-2-7-4-6-3-3-2-2-4-2-4-2-	-3-	-	-	-	-	3.59
30-45.5775-108.7817-2-12-						0-438547-06/15/78-11-		23-19.5-	-	-	8.7-	3500-	16-2-7-4-2-2-2-1-1-4-5-3-2-	-3-	-	-	-	-	2.70
30-45.5400-108.8350-2-11-						0-438549-05/15/78-12-		24-19.5-C-	-	-	8.1-	750-	4-1-6-4-8-2-2-2-1-4-3-2-2-	-3-	-	-	-	-	10.62
30-45.2422-108.7661-2-12-						0-438552-06/15/78-14-		22-21.5-C-	-	-	8.5-	2850-	11-1-3-5-8-3-3-2-2-4-3-3-2-	-3-	-	-	-	-	3.88
30-45.5603-108.8644-2-12-						0-438556-06/18/78-	8	23-	5.5-	-	-	8.2-	60000-	13-3-7-5-8-2-2-2-1-4-2-4-1-	-3-	-	-	-	-	5.43
30-45.4306-108.7672-2-12-						0-438557-06/18/78-	9	20-	10.0-C-	-	-	9.2-	21000-	1-2-6-5-6-2-2-2-2-4-3-3-1-	-3-	-	-	-	-	3.66
30-45.4644-108.9097-2-12-						0-438564-06/18/78-13-		28-19.5-	-	-	-	8.5-	2150-	6-1-6-4-6-3-3-2-2-3-3-4-1-	-3-	-	-	-	-	1.79

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

(2)

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAB. SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per million (ppm)									Concentrations in weight ppm	
							Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
30-45.	7761-	108.0367-	2-	11-		0-M38469	-5	-5	-5	-10	-20	-15	9	-10	-15	1	79
30-45.	7764-	108.0381-	2-	15-		0-M38470	-5	-5	-5	26	-20	-15	7	-10	-15	1	72
30-45.	7625-	108.0300-	2-	15-		0-M38471	-5	-5	-5	27	-20	-15	13	-10	-15	1	41
30-45.	7669-	108.0856-	2-	15-		0-M38473	-5	-5	-5	30	-20	-15	7	-10	-15	2	48
30-45.	7978-	108.0333-	2-	12-		0-M38474	-5	-5	-5	29	-20	23	10	-10	-15	2	47
30-45.	8492-	108.0014-	2-	12-		0-M38476	-5	-5	-5	15	-20	15	9	-10	-15	2	35
30-45.	8508-	108.0392-	2-	11-		0-M38477	-5	-5	-5	18	-20	-15	11	-10	-15	2	54
30-45.	8500-	108.0569-	2-	12-		0-M38478	-5	-5	-5	15	-20	-15	8	-10	-15	2	45
30-45.	8608-	108.0358-	2-	15-		0-M38479	-5	-5	-5	28	-20	-15	12	-10	-15	2	56
30-45.	8125-	108.0011-	2-	12-		0-M38480	-5	-5	-5	21	-20	15	6	-10	-15	2	55
30-45.	7906-	108.2656-	2-	12-		0-M38481	-5	-5	-5	10	-20	20	11	-10	-15	2	52
30-45.	7836-	108.2478-	2-	12-		0-M38482	-5	-5	-5	13	-20	-15	10	-10	-15	2	51
30-45.	8272-	108.1581-	2-	12-		0-M38484	-5	-5	-5	28	-20	21	7	-10	-15	2	44
30-45.	9356-	108.1408-	2-	12-		0-M38485	-5	-5	-5	24	-20	-15	15	-10	-15	2	57
30-45.	9294-	108.1225-	2-	12-		0-M38486	-5	-5	-5	25	-20	21	12	-10	-15	2	53
30-45.	9428-	108.0903-	2-	15-		0-M38487	-5	-5	-5	19	-20	19	11	-10	-15	2	43
30-45.	9389-	108.0689-	2-	15-		0-M38488	-5	-5	-5	23	-20	18	6	-10	-15	2	47
30-45.	9275-	108.0608-	2-	12-		0-M38489	-5	-5	-5	24	-20	-15	18	-10	-15	2	58
30-45.	9392-	108.1133-	2-	15-		0-M38490	-5	-5	-5	32	-20	20	21	-10	-15	2	43
30-45.	9042-	108.1397-	2-	15-		0-M38491	-5	-5	-5	22	-20	17	14	-10	-15	3	58
30-45.	9003-	108.1397-	2-	15-		0-M38492	-5	-5	-5	32	-20	19	9	-10	-15	1	63
30-45.	8850-	108.0478-	2-	12-		0-M38493	-5	-5	-5	23	-20	18	6	-10	-15	2	62
30-45.	8928-	108.0450-	2-	12-		0-M38494	-5	-5	-5	33	-20	31	12	-10	-15	2	64
30-45.	8925-	108.0092-	2-	12-		0-M38495	-5	-5	-5	36	-20	18	20	-10	-15	2	79
30-45.	9156-	108.0158-	2-	15-		0-M38496	-5	-5	-5	32	-20	-15	15	-10	-15	2	68
30-45.	9379-	108.0125-	2-	15-		0-M38497	-5	-5	-5	29	-20	17	19	-10	-15	2	36
30-45.	9261-	108.1858-	2-	12-		0-M38498	-5	-5	-5	26	-20	20	11	-10	-15	1	65
30-45.	8983-	108.2472-	2-	15-		0-M38499	-5	-5	-5	18	-20	-15	13	-10	-15	2	45
30-45.	9054-	108.2175-	2-	12-		0-M38500	-5	-5	-5	22	-20	18	11	-10	-15	2	50
30-45.	8964-	108.2039-	2-	12-		0-M38502	-5	-5	-5	24	-20	20	6	-10	-15	2	49
30-45.	8069-	108.2878-	2-	12-		0-M38503	-5	-5	-5	29	-20	-15	-5	-10	-15	2	48
30-45.	7111-	108.7817-	2-	12-		0-M38504	-5	-5	-5	16	-20	24	15	-10	-15	1	72
30-45.	7197-	108.8011-	2-	15-		0-M38505	-5	-5	-5	20	-20	-15	5	-10	-15	3	56
30-45.	7278-	108.8022-	2-	15-		0-M38506	-5	-5	-5	11	-20	-15	7	-10	-15	2	41
30-45.	7236-	108.8464-	2-	11-		0-M38508	-5	-5	-5	20	-20	-15	9	-10	-15	2	24
30-45.	6900-	108.8425-	2-	12-		0-M38512	-5	-5	-5	17	-20	-15	6	-10	-15	2	32
30-45.	6831-	108.8581-	2-	12-		0-M38515	-5	-5	-5	26	-20	16	7	-10	-15	2	16
30-45.	6831-	108.8756-	2-	15-		0-M38516	-5	-5	-5	22	-20	-15	7	-10	-15	2	33
30-45.	5975-	108.7811-	2-	12-		0-M38522	-5	-5	-5	26	-20	18	5	-10	-15	2	28
30-45.	7339-	108.8814-	2-	12-		0-M38523	-5	-5	-5	16	-20	-15	8	-10	-15	2	35
30-45.	6736-	108.8894-	2-	12-		0-M38527	-5	-5	-5	12	-20	-15	7	-10	-15	2	40
30-45.	4411-	108.8444-	2-	12-		0-M38537	-5	-5	-5	13	-20	-15	5	-10	-15	2	35
30-45.	4122-	108.8253-	2-	12-		0-M38539	-5	-5	-5	-10	-20	-15	-5	-10	-15	2	17
30-45.	4031-	108.8556-	2-	12-		0-M38540	-5	-5	-5	18	-20	-15	5	-10	-15	2	25
30-45.	5511-	108.8019-	2-	12-		0-M38543	-5	-5	-5	17	-20	-15	7	-10	-15	2	21
30-45.	5775-	108.7817-	2-	12-		0-M38547	-5	-5	-5	19	-20	16	13	-10	16	2	21
30-45.	5400-	108.8350-	2-	11-		0-M38549	-5	-5	-5	21	-20	26	7	-10	-15	2	23
30-45.	2422-	108.7661-	2-	12-		0-M38552	-5	-5	-5	30	-20	30	10	-10	-15	2	14
30-45.	5503-	108.8644-	2-	12-		0-M38556	-5	6	-5	14	-20	-15	-5	-10	-15	1	74
30-45.	4306-	108.7672-	2-	12-		0-M38557	-5	-5	-5	22	-20	-15	14	-10	-15	2	42
30-45.	4644-	108.9097-	2-	12-		0-M38564	-5	-5	-5	-10	-20	-15	-5	-10	-15	2	25

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
30-45.7761-108.0367-2-11-						0-M38459	43980	-0.05	506	80310	41	-75	6.7	41	2.3	3	0.7	10180	4.8	11780	20	0.2
30-45.7764-108.0381-2-15-						0-M38470	49030	-0.07	631	33550	61	-103	8.7	76	4.4	2	1.1	18510	6.3	13460	34	0.3
30-45.7625-108.0300-2-15-						0-M38471	54220	-0.07	613	12480	64	64	8.2	58	3.4	3	1.0	14390	5.7	14920	32	0.3
30-45.7659-108.0856-2-15-						0-M38473	66350	-0.08	723	24420	56	-73	10.0	134	3.0	3	0.9	19310	4.3	15210	30	0.3
30-45.7978-108.0333-2-12-						0-M38474	65470	-0.05	562	16150	55	-76	9.3	64	3.2	4	0.9	15640	5.6	19360	29	0.3
30-45.8492-108.0014-2-12-						0-M38476	54580	-0.05	592	24980	50	-86	6.3	59	2.2	2	0.9	11950	6.0	13770	30	0.2
30-45.8508-108.0392-2-11-						0-M38477	56090	-0.06	661	39490	57	-74	8.0	54	2.4	3	0.9	13660	5.6	15660	31	0.4
30-45.8500-108.0569-2-12-						0-M38478	56970	-0.07	788	23750	47	-75	6.8	75	2.5	3	0.9	13950	7.2	14900	36	0.2
30-45.8608-108.0358-2-15-						0-M38479	58130	-0.05	653	19230	61	-96	7.6	46	2.4	3	0.9	12090	6.2	12630	33	0.3
30-45.8125-108.0011-2-12-						0-M38480	59300	-0.06	541	31960	55	-85	8.2	60	3.8	3	0.9	15990	5.8	14410	30	0.3
30-45.7906-108.2656-2-12-						0-M38481	50600	-0.06	654	48200	66	-67	9.2	82	2.6	3	1.0	14230	7.1	13060	32	0.3
30-45.7836-108.2478-2-12-						0-M38482	54580	-0.13	539	32250	100	-68	12.7	175	3.4	3	1.9	28300	12.0	14400	57	0.5
30-45.8272-108.1581-2-12-						0-M38484	64440	-0.05	762	17160	54	-84	8.4	65	2.3	3	0.9	13990	6.9	17260	33	0.3
30-45.9356-108.1408-2-12-						0-M38485	59630	-0.06	705	28240	65	-88	7.8	78	3.0	3	0.9	17480	6.9	14930	34	0.3
30-45.9294-108.1225-2-12-						0-M38486	64450	-0.07	878	18950	86	-78	9.8	91	3.6	4	1.2	21950	8.2	17030	43	0.4
30-45.9428-108.0903-2-15-						0-M38487	69810	-0.08	739	10090	64	-75	9.5	65	3.4	4	1.2	20590	5.1	17760	34	0.3
30-45.9389-108.0689-2-15-						0-M38488	67410	-0.05	672	13740	58	-82	8.7	73	3.3	4	0.9	18210	5.9	16580	32	0.3
30-45.9275-108.0608-2-12-						0-M38489	64720	-0.06	621	22390	54	-101	9.0	69	3.4	3	1.0	18980	5.0	16080	32	0.3
30-45.9392-108.1133-2-15-						0-M38490	70000	-0.08	740	11030	78	-79	12.9	97	3.9	4	1.1	23060	4.9	16400	39	0.3
30-45.9042-108.1397-2-15-						0-M38491	65950	-0.08	718	24130	71	-70	10.1	83	3.8	4	0.9	20500	5.7	18300	37	0.3
30-45.9003-108.1397-2-15-						0-M38492	67220	-0.06	609	23060	62	-87	13.0	66	4.1	3	0.9	20330	4.8	17860	29	0.3
30-45.8850-108.0478-2-12-						0-M38493	62830	-0.06	545	38760	51	-92	9.4	55	4.7	3	1.0	18840	5.9	13460	30	0.3
30-45.8928-108.0450-2-12-						0-M38494	71790	-0.07	795	14560	76	-73	10.6	84	4.8	4	1.2	24520	6.3	17560	46	0.4
30-45.8925-108.0092-2-12-						0-M38495	69110	-0.08	714	22350	61	136	10.9	68	4.2	4	0.9	21410	5.9	15550	31	0.3
30-45.9156-108.0158-2-15-						0-M38496	64470	-0.06	709	20030	50	231	9.7	62	3.0	3	1.0	17690	5.4	17840	31	0.3
30-45.9378-108.0125-2-15-						0-M38497	64790	-0.06	793	14530	78	-95	10.5	96	2.8	3	1.1	22030	6.8	15960	48	0.3
30-45.9261-108.1858-2-12-						0-M38498	68330	-0.07	763	16450	80	-74	10.1	80	4.4	4	1.2	20550	6.9	16540	35	0.5
30-45.8983-108.2472-2-15-						0-M38499	62380	-0.07	768	19500	63	-70	8.0	70	3.0	4	1.0	18870	7.7	14290	38	0.3
30-45.9064-108.2175-2-12-						0-M38500	58440	-0.05	670	19130	54	-87	8.5	75	2.1	3	0.9	14390	6.7	13370	26	0.4
30-45.8964-108.2039-2-12-						0-M38502	59640	-0.05	616	20510	64	-93	7.7	70	2.4	3	1.0	16050	8.5	13650	32	0.3
30-45.8069-108.2878-2-12-						0-M38503	53120	-0.06	555	31990	64	88	8.2	88	3.0	3	1.1	15730	8.0	13250	31	0.4
30-45.7111-108.7817-2-12-						0-M38504	44940	-0.08	-363	79270	45	-220	24.4	59	3.4	-2	0.8	16260	3.8	-9556	25	0.2
30-45.7197-108.8011-2-15-						0-M38505	58720	-0.04	619	34570	56	-61	6.1	42	3.3	3	0.8	12200	4.9	15790	30	0.3
30-45.7278-108.8022-2-15-						0-M38506	56020	-0.04	629	35110	47	106	5.7	30	3.3	2	0.8	11340	4.4	15000	31	0.2
30-45.7236-108.8464-2-11-						0-M38508	52740	-0.06	553	6697	68	-76	7.3	51	2.8	3	1.0	15050	7.3	13830	34	0.3
30-45.6900-108.8425-2-12-						0-M38512	51990	-0.07	517	37280	58	150	5.9	35	1.9	3	1.0	11660	4.5	15450	28	0.3
30-45.6831-108.8581-2-12-						0-M38515	61050	-0.05	572	19020	49	-64	7.0	45	3.0	3	0.8	13140	4.7	14910	28	0.2
30-45.6831-108.8756-2-15-						0-M38516	50460	-0.05	442	34360	49	79	6.3	44	2.9	3	0.8	13900	4.2	13760	27	0.3
30-45.5975-108.7811-2-12-						0-M38522	55280	-0.06	612	14550	82	-72	7.4	86	2.7	3	1.0	14350	11.4	15240	39	0.4
30-45.7339-108.8814-2-12-						0-M38523	47940	-0.06	594	47630	47	113	5.8	35	3.0	3	0.9	11960	5.2	13220	23	0.3
30-45.6736-108.8894-2-12-						0-M38527	60160	-0.05	547	25490	62	-62	7.4	53	3.2	4	0.8	14220	5.1	15390	28	0.2
30-45.4411-108.8444-2-12-						0-M38537	43690	-0.04	624	16550	50	-60	4.5	49	2.2	3	0.8	8027	9.2	15760	30	0.3
30-45.4122-108.8253-2-12-						0-M38539	41950	-0.05	591	14080	62	-55	5.5	55	2.5	3	0.9	8974	13.4	14380	35	0.4
30-45.4031-108.8556-2-12-						0-M38540	49030	-0.07	581	40000	61	131	6.0	79	2.3	3	1.0	12690	9.9	12580	32	0.4
30-45.5511-108.8019-2-12-						0-M38543	47190	-0.04	807	13570	54	-69	8.4	45	2.1	4	0.9	14770	6.6	13640	30	0.4
30-45.5775-108.7817-2-12-						0-M38547	53650	-0.05	605	24930	57	-80	7.7	66	2.4	3	0.8	13280	6.0	14210	29	0.3
30-45.5400-108.8350-2-11-						0-M38549	57470	-0.07	505	23320	77	-86	9.4	72	2.8	2	1.1	15370	7.9	10570	46	0.4
30-45.2422-108.7661-2-12-						0-M38552	52070	-0.08	568	18760	65	-79	8.9	65	2.6	4	0.9	17430	7.8	12230	30	0.4
30-45.5603-108.8644-2-12-						0-M38556	42730	-0.05	644	130300	38	294	8.1	41	2.2	3	0.7	10970	3.7	12070	24	0.2
30-45.4306-108.7672-2-12-						0-M38557	51110	-0.05	503	14150	50	516	5.3	37	1.6	4	0.9	9019	7.5	14380	29	0.3
30-45.4644-108.9097-2-12-						0-M38564	36640	-0.05	549	18690	58	-67	7.2	48	2.1	2	0.7	12000	6.2	10660	31	0.3

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)														U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
30-45.7761-108.0367-2-11-						0-M38469	31100	245	8244	39	-1	5.1	3.0	619	-1	-1	5.9	2564	62	-1.2	95	0.325
30-45.7764-108.0381-2-15-						0-M38470	24150	316	16240	57	-2	8.6	4.5	444	-1	-1	7.8	2566	73	3.1	71	0.253
30-45.7625-108.0300-2-15-						0-M38471	18200	257	7251	54	-2	7.0	4.6	-222	-1	-1	9.3	2703	85	3.0	-62	0.258
30-45.7569-108.0856-2-15-						0-M38473	20710	380	11940	-26	-2	9.0	3.3	398	-1	-1	7.5	3153	86	2.0	125	0.320
30-45.7978-108.0333-2-12-						0-M38474	15710	210	10130	35	-2	7.7	3.7	-245	-1	-1	7.9	3269	91	2.6	61	0.320
30-45.8492-108.0014-2-12-						0-M38476	17460	265	13090	47	-1	5.6	3.7	-268	-1	-1	7.1	2948	66	2.7	77	0.310
30-45.8508-108.0392-2-11-						0-M38477	13280	426	10810	32	-2	6.1	4.3	501	-1	-1	7.9	2326	61	2.5	-63	0.267
30-45.8500-108.0569-2-12-						0-M38478	10920	255	12880	-25	-2	6.4	2.6	420	-1	-1	7.0	3467	71	3.0	64	0.351
30-45.8508-108.0358-2-15-						0-M38479	12770	380	16960	39	-1	5.2	4.0	526	-1	-1	8.5	2871	58	2.5	57	0.367
30-45.8125-108.0011-2-12-						0-M38480	26130	365	9111	42	-2	8.3	4.5	-313	-1	-1	7.3	3071	86	2.7	104	0.355
30-45.7906-108.2656-2-12-						0-M38481	23730	304	9249	29	-2	7.0	4.4	381	-1	-1	7.8	2854	73	3.6	89	0.297
30-45.7836-108.2478-2-12-						0-M38482	23200	326	10790	42	-4	13.9	5.7	-223	-2	-2	11.2	2469	70	4.7	-70	0.194
30-45.8272-108.1581-2-12-						0-M38484	12430	330	12480	46	-2	6.8	4.1	-276	-1	-1	8.3	3195	73	2.3	74	0.320
30-45.9356-108.1408-2-12-						0-M38485	12880	313	11390	41	-2	7.6	4.0	-286	-1	-1	8.3	2684	85	2.6	-21	0.319
30-45.9294-108.1225-2-12-						0-M38486	23370	351	12200	71	-2	9.0	5.7	-263	-1	-1	11.7	3573	107	2.4	-82	0.271
30-45.9428-108.0903-2-15-						0-M38487	16270	517	10070	59	-3	10.3	4.6	-274	-1	-1	9.6	3818	98	3.2	-72	0.288
30-45.9389-108.0689-2-15-						0-M38488	17960	363	12270	49	?	8.0	4.3	-281	-1	-1	9.0	3395	94	2.5	65	0.340
30-45.9275-108.0608-2-12-						0-M38489	19990	402	13330	42	-2	8.7	5.1	-335	-1	-1	9.1	3509	95	2.5	108	0.334
30-45.9392-108.1133-2-15-						0-M38490	17850	534	9336	39	-2	11.1	6.6	-299	-1	-1	12.3	4059	105	3.7	112	0.229
30-45.9042-108.1397-2-15-						0-M38491	22370	377	10960	-26	-2	8.9	3.5	-250	-1	-1	10.5	2848	107	2.4	-42	0.277
30-45.9003-108.1397-2-15-						0-M38492	24290	624	9166	49	-2	8.5	4.1	-365	-1	-1	8.8	3810	112	2.3	81	0.336
30-45.8860-108.0478-2-12-						0-M38493	24720	413	9268	44	-2	8.4	4.0	-331	-1	-1	8.4	2838	103	2.5	-26	0.400
30-45.8923-108.0450-2-12-						0-M38494	28160	349	10650	43	-2	10.9	5.3	-256	-1	-1	12.2	4039	134	4.0	-60	0.282
30-45.8925-108.0092-2-12-						0-M38495	25670	413	11660	56	-3	9.5	3.1	-267	-1	-1	8.0	3135	111	4.0	-82	0.406
30-45.9156-108.0158-2-15-						0-M38496	26430	536	15750	55	-2	7.4	4.0	-360	-1	-1	8.8	2791	87	2.7	94	0.365
30-45.9378-108.0125-2-15-						0-M38497	14550	588	10610	57	-2	10.0	4.8	-368	-1	-1	12.3	3401	98	2.7	85	0.224
30-45.9261-108.1858-2-12-						0-M38498	23190	377	11530	45	-2	9.3	5.6	-256	-1	-1	10.8	3432	106	2.8	81	0.278
30-45.8983-108.2472-2-15-						0-M38499	16390	410	11600	56	-2	7.9	3.9	474	-1	-1	8.5	2999	86	3.2	-42	0.308
30-45.9064-108.2175-2-12-						0-M38500	12700	333	13850	35	-1	6.2	3.7	304	-1	-1	7.1	2926	75	2.6	76	0.346
30-45.8964-108.2039-2-12-						0-M38502	19580	364	13360	34	-2	7.0	4.2	-302	-1	-1	8.7	2194	74	2.8	72	0.318
30-45.8069-108.2878-2-12-						0-M38503	28900	289	8749	38	-2	7.8	4.9	286	-1	-1	8.5	2847	80	2.6	76	0.294
30-45.7111-108.7817-2-12-						0-M38504	15280	4387	5901	-29	-3	6.7	2.1	-931	-1	-1	6.5	-2139	92	-1.9	64	0.548
30-45.7197-108.8011-2-15-						0-M38505	30260	211	9114	47	-1	5.7	4.3	502		-1	7.2	2607	100	2.4	52	0.379
30-45.7278-108.8022-2-15-						0-M38506	20790	222	12550	43	-1	5.3	3.1	541	-1	-1	6.3	2365	75	2.0	95	0.394
30-45.7236-108.8464-2-11-						0-M38508	8502	296	9583	40	-2	6.2	4.7	-262	-1	-1	8.3	2828	69	3.1	61	0.381
30-45.6900-108.8425-2-12-						0-M38512	21040	535	11360	38	-2	5.1	3.2	308	-1	-1	7.0	2282	75	1.7	60	0.384
30-45.6831-108.8581-2-12-						0-M38515	22500	260	8764	39	-2	6.0	4.0	-224	-1	-1	7.5	2849	98	-1.1	54	0.351
30-45.6831-108.8756-2-15-						0-M38516	29930	278	7706	32	-1	6.1	3.6	-232	-1	-1	7.6	2292	69	2.5	74	0.305
30-45.5975-108.7811-2-12-						0-M38522	13240	280	8340	51	-2	7.2	5.0	-254	-1	1	14.2	2233	82	4.9	71	0.292
30-45.7339-108.8814-2-12-						0-M38523	35530	297	8355	-22	-2	5.4	2.5	313	-1	-1	6.6	2448	62	2.4	92	0.347
30-45.6736-108.8894-2-12-						0-M38527	26850	211	8211	35	-2	6.5	4.1	-209	-1	-1	8.5	3312	94	2.5	69	0.309
30-45.4411-108.8444-2-12-						0-M38537	7961	175	7650	25	-1	4.8	3.6	-198	-1	-1	9.7	2215	53	3.2	51	0.377
30-45.4122-108.8253-2-12-						0-M38539	9044	198	7459	43	-2	4.9	4.3	-223	-1	-1	11.0	2607	59	3.0	42	0.334
30-45.4031-108.8556-2-12-						0-M38540	15030	378	9688	-22	-2	6.9	3.5	409	-1	-1	10.3	2511	73	3.3	-35	0.505
30-45.5511-108.8019-2-12-						0-M38543	9063	813	7250	31	-1	5.1	4.4	-293		-1	8.7	1921	68	2.9	62	0.413
30-45.5775-108.7817-2-12-						0-M38547	13910	351	11480	37	-2	6.8	3.8	-268	-1	-1	8.6	2462	62	2.4	43	0.314
30-45.5400-108.8350-2-11-						0-M38549	16530	226	10520	34	-2	7.5	7.1	-283	-1	-1	14.1	2909	79	3.2	75	0.753
30-45.2422-108.7661-2-12-						0-M38552	10210	911	7013	-26	-2	7.3	4.2	-357	-1	-1	9.9	3089	72	3.4	-76	0.392
30-45.5603-108.8644-2-12-						0-M38555	22750	414	8005	31	-2	5.1	2.7	911	-1	-1	5.3	2291	102	1.8	-48	1.025
30-45.4306-108.7672-2-12-						0-M38557	11190	640	13940	26	-1	4.0	3.5	-345	-1	-1	6.2	2732	70	2.1	65	0.590
30-45.4644-108.9097-2-12-						0-M38564	11880	239	9558	31	-1	5.4	4.3	-218	-1	-1	9.5	1384	34	3.0	81	0.188

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																											U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
30-45.4150-108.9150-2-12-						0-M38565-06/18/78-12-	25-	22.5-C-	-	-	8.2-	4700-	5-1-6-6-8-2-2-5-1-4-2-4-1-	-3-	-	-	-	-	-	4.36
30-45.6600-108.9719-2-12-						0-M38574-06/20/78-10-	19-	12.0-	-	-	9.0-	2900-	9-1-6-3-8-3-3-1-1-4-3-4-1-	-3-	-	-	-	-	-	2.28
30-45.6750-108.9800-2-12-						0-M38575-06/20/78-10-	19-	18.0-	-	-	9.8-	1500-	10-1-6-4-6-2-3-1-1-4-3-3-1-	-3-	-	-	-	-	-	2.24
30-45.6961-108.9861-2-12-						0-M38576-06/20/78-11-	18-	15.0-	-	-	9.3-	1300-	12-1-6-3-6-2-3-1-2-3-3-4-1-	-3-	-	-	-	-	-	2.26
30-45.7036-108.9897-2-12-						0-M38577-06/20/78-11-	21-	13.0-	-	-	9.0-	2000-	12-1-6-2-6-3-3-2-1-4-3-4-1-	-3-	-	-	-	-	-	2.45
30-45.4892-109.0789-2-12-						0-M38595-06/23/78-11-	25-	16.0-C-	-	-	8.3-	900-	12-1-1-6-6-2-2-3-1-4-4-4-2-	-3-	-	-	-	-	-	2.45
30-45.4781-109.0014-2-12-						0-M38586-06/23/78-12-	22-	14.0-C-	-	-	8.1-	1700-	10-1-1-3-6-3-2-2-1-4-3-4-2-	-3-	-	-	-	-	-	2.58
30-45.4669-108.9939-2-15-						0-M38587-06/23/78-13-	24-	-	-	-	-	-	8-1-6-4-1-	-	-	-1-3-2-4-1-	-1-	-	-	-	-	2.62
30-45.4525-108.9592-2-12-						0-M38589-06/23/78-13-	27-	24.0-	-	-	6.9-	1250-	13-1-6-5-6-2-2-4-1-3-2-4-2-	-3-	-	-	-	-	-	2.53
30-45.4400-109.0542-2-12-						0-M38592-06/24/78-11-	28-	16.0-	-	-	8.8-	800-	16-1-6-5-8-3-2-3-1-4-3-3-1-	-3-	-	-	-	-	-	2.35
30-45.4219-109.1022-2-12-						0-M38595-06/24/78-12-	30-	17.0-C-	-	-	8.6-	450-	10-1-6-4-6-3-3-2-2-4-3-3-1-	-3-	-	-	-	-	-	2.06
30-45.4033-109.0547-2-12-						0-M38596-06/24/78-13-	28-	22.5-C-	-	-	9.0-	375-	15-1-6-5-5-3-3-2-	-4-3-4-1-	-3-	-	-	-	-	2.42
30-45.4131-109.0544-2-15-						0-M38598-06/24/78-13-	27-	-C-	-	-	-	-	6-1-6-7-	-	-1-	-3-4-3-4-2-	-3-	-	-	-	-	2.57
30-45.4614-109.0253-2-12-						0-M38599-06/24/78-15-	29-	15.2-	-	-	8.0-	110-	9-1-6-5-8-3-3-2-4-4-4-2-	-3-	-	-	-	-	-	2.44
30-45.1942-108.9831-2-12-						0-M38603-06/09/78-15-	34-	2.1-C-	-	-	8.4-	-	9-1-6-4-6-2-3-2-1-4-2-2-1-	-3-	-	-	-	-	-	2.73
30-45.2172-108.9056-2-15-						0-M38604-06/09/78-17-	30-	-	-	-	-	-	11-1-3-5-7-	-	-	-	-3-2-4-2-	-1-	-	-	-	3.29
30-45.1878-108.9103-2-15-						0-M38605-06/09/78-18-	32-	-	-	-	-	-	9-1-1-4-1-	-	-	-2-3-2-2-2-	-3-	-	-	-	-	2.49
30-45.1854-108.9069-2-15-						0-M38606-06/09/78-18-	32-	-	-	-	-	-	9-1-1-4-1-	-	-	-2-3-2-2-2-	-3-	-	-	-	-	2.14
30-45.1781-108.8881-2-15-						0-M38607-06/09/78-18-	32-	-C-	-	-	-	-	3-1-1-4-7-	-	-	-2-3-2-4-2-	-3-	-	-	-	-	2.64
30-45.2139-109.0189-2-12-						0-M38608-06/10/78-	7-	14-14.0-	-	-	8.6-	2400-	11-1-1-3-7-3-3-1-2-3-3-2-2-	-3-	-	-	-	-	-	2.61
30-45.2333-109.0644-2-12-						0-M38609-06/10/78-	7-	16-13.0-	-	-	8.5-	1800-	5-1-2-3-7-2-3-1-2-3-3-2-2-	-3-	-	-	-	-	-	2.90
30-45.2372-109.0961-2-12-						0-M38611-06/10/78-	9-	18-14.0-C-	-	-	8.6-	1200-	4-1-2-6-6-2-3-2-2-3-3-3-3-	-3-	-	-	-	-	-	2.57
30-45.2106-109.0808-2-12-						0-M38613-06/10/78-10-	15-13.0-	-	-	8.2-	1650-	11-1-2-6-6-2-3-2-2-3-3-2-2-	-3-	-	-	-	-	-	3.16
30-45.1797-108.9919-2-12-						0-M38618-06/10/78-14-	16-13.0-	-	-	8.2-	550-	10-1-2-5-7-2-3-4-2-4-3-1-2-	-3-	-	-	-	-	-	2.85
30-45.1450-109.0056-2-12-						0-M38620-06/10/78-15-	24-13.0-	-	-	8.4-	330-	11-1-2-5-7-3-3-4-2-2-3-2-2-	-7-	-	-	-	-	-	2.36
30-45.1608-109.1228-2-12-						0-M38622-06/10/78-17-	19-17.0-C-	-	-	8.4-	2400-	6-1-4-5-6-3-3-2-2-3-2-3-4-	-3-	-	-	-	-	-	2.55
30-45.1656-109.1108-2-15-						0-M38624-06/10/78-18-	16-	-	-	-	-	-	6-1-4-5-6-	-	-	-	-4-3-3-4-	-3-	-	-	-	2.76
30-45.1550-109.0681-2-15-						0-M38625-06/10/78-18-	13-	-C-	-	-	-	-	11-1-6-7-1-	-	-	-	-3-4-3-4-	-3-	-	-	-	2.92
30-45.1733-109.0339-2-15-						0-M38626-06/10/78-19-	16-	-	-	-	-	-	9-1-7-5-7-	-	-	-2-3-2-3-3-	-3-	-	-	-	-	2.60
30-45.1406-109.0303-2-12-						0-M38627-06/10/78-20-	13-16.0-	-	-	8.4-	2500-	-1-2-6-6-2-3-4-1-3-3-3-2-	-3-	-	-	-	-	-	3.34
30-45.1667-108.9525-2-15-						0-M38629-06/12/78-16-	26-	-	-	-	-	-	4-1-2-4-7-	-	-	-2-3-2-2-2-	-3-	-	-	-	-	2.98
30-45.1447-108.9383-2-15-						0-M38630-06/12/78-18-	26-	-	-	-	-	-	9-1-6-4-6-	-	-	-2-4-2-4-1-	-3-	-	-	-	-	2.74
30-45.1531-108.9661-2-12-						0-M38631-06/12/78-19-	26-20.0-	-	-	8.2-	29500-	9-1-2-6-8-3-3-4-2-3-2-2-1-	-3-	-	-	-	-	-	2.82
30-45.1064-109.0336-2-12-						0-M38633-06/13/78-	9-	21-10.0-	-	-	7.6-	110-	11-1-3-4-7-2-3-2-1-4-3-3-1-	-3-	-	-	-	-	-	2.68
30-45.1394-109.0733-2-15-						0-M38634-06/13/78-10-	22-	-	-	-	-	-	6-1-3-4-6-	-	-	-2-3-2-3-1-	-3-	-	-	-	-	2.76
30-45.1083-109.0711-2-15-						0-M38635-06/13/78-11-	26-	-	-	-	-	-	9-1-2-4-6-	-	-	-2-3-2-3-1-	-3-	-	-	-	-	3.25
30-45.0856-109.0108-2-15-						0-M38637-06/13/78-13-	27-	-C-	-	-	-	-	4-1-3-4-6-	-	-	-2-3-1-3-1-	-3-	-	-	-	-	3.93
30-45.0836-108.9708-2-15-						0-M38638-06/13/78-15-	27-	-	-	-	-	-	11-1-3-4-6-	-	-	-2-3-1-4-2-	-3-	-	-	-	-	2.83
30-45.0739-109.0303-2-15-						0-M38639-06/13/78-17-	26-	-	-	-	-	-	11-1-3-4-2-	-	-	-2-4-2-4-2-	-3-	-	-	-	-	2.60
30-45.0278-109.0214-2-15-						0-M38640-06/13/78-17-	25-	-	-	-	-	-	6-1-3-4-6-	-	-	-2-3-2-4-2-	-3-	-	-	-	-	2.68
30-45.0103-109.0531-2-15-						0-M38641-06/13/78-18-	28-	-	-	-	-	-	9-1-3-4-6-	-	-	-2-3-2-3-2-	-1-	-	-	-	-	2.86
30-45.0197-109.0856-2-15-						0-M38643-06/13/78-19-	26-	-	-	-	-	-	9-1-3-4-2-	-	-	-3-2-3-2-	-3-	-	-	-	-	3.21
30-45.0042-109.0953-2-11-						0-M38644-06/13/78-19-	26-11.0-	-	-	7.6-	500-	13-1-2-6-7-2-3-1-3-4-4-4-2-	-1-	-	-	-	-	-	3.41
30-45.0806-109.1211-2-12-						0-M38645-06/14/78-10-	22-15.0-	-	-	8.1-	750-	11-1-3-6-6-2-3-2-1-3-3-2-1-	-3-	-	-	-	-	-	2.49
30-45.1108-109.1117-2-15-						0-M38647-06/14/78-12-	26-	-	-	-	-	-	11-1-3-4-6-	-	-	-2-3-2-3-1-	-3-	-	-	-	-	2.94
30-45.0394-109.0839-2-15-						0-M38650-06/14/78-15-	30-	-	-	-	-	-	11-1-1-4-1-	-	-	-2-3-2-2-2-	-3-	-	-	-	-	2.61
30-45.0456-109.0872-2-12-						0-M38651-06/14/78-15-	35-23.5-	-	-	8.3-	950-	4-1-1-4-6-2-3-1-3-4-3-3-2-	-3-	-	-	-	-	-	4.05
30-45.0561-108.9583-2-12-						0-M38653-06/14/78-17-	33-20.0-	-	-	7.9-	6000-	9-1-2-4-6-3-3-3-2-3-2-3-2-	-3-	-	-	-	-	-	3.40
30-45.0544-108.9594-2-15-						0-M38654-06/14/78-18-	34-	-	-	-	-	-	9-1-2-4-6-	-	-	-	-3-2-3-2-	-3-	-	-	-	2.63
30-45.0325-108.9444-2-12-						0-M38655-06/14/78-18-	32-27.5-C-	-	-	7.6-	5000-	11-1-2-6-7-3-3-3-2-3-2-3-2-	-3-	-	-	-	-	-	2.27
30-45.0306-108.9444-2-15-						0-M38656-06/14/78-18-	32-	-	-	-	-	-	6-1-2-4-6-	-	-	-	-3-2-3-2-	-3-	-	-	-	2.77

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY	
							Concentrations reported in weight parts per million (ppm)									Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAB. SAMPLE LOCATION NUMBER	Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
30-45.4150-108.9150-2-12-						0-M38565	-5	-5	-5	-10	-20	-15	-5	-10	-15	1	22
30-45.6600-108.9719-2-12-						0-M38574	-5	-5	-5	-10	-20	-15	-5	-10	-15	1	36
30-45.6750-108.9800-2-12-						0-M38575	-5	-5	-5	20	-20	-15	7	-10	-15	2	21
30-45.6861-108.9861-2-12-						0-M38576	-5	-5	-5	-10	-20	-15	-5	-10	-15	1	27
30-45.7036-108.9897-2-12-						0-M38577	-5	-5	-5	15	-20	-15	10	-10	-15	2	23
30-45.4892-109.0789-2-12-						0-M38585	-5	-5	-5	26	-20	-15	6	-10	-15	2	31
30-45.4781-109.0014-2-12-						0-M38586	-5	-5	-5	17	-20	24	12	-10	-15	2	22
30-45.4669-108.9939-2-15-						0-M38587	-5	-5	-5	17	-20	23	11	-10	-15	2	14
30-45.4525-108.9592-2-12-						0-M38589	-5	-5	-5	19	-20	-15	7	-10	-15	2	53
30-45.4400-109.0542-2-12-						0-M38592	-5	-5	-5	21	-20	-15	-5	-10	-15	2	24
30-45.4219-109.1022-2-12-						0-M38595	-5	-5	-5	14	-20	-15	7	-10	-15	2	23
30-45.4033-109.0547-2-12-						0-M38596	-5	-5	-5	27	-20	18	5	-10	-15	2	40
30-45.4131-109.0544-2-15-						0-M38598	-5	-5	-5	25	-20	22	14	-10	-15	2	22
30-45.4614-109.0253-2-12-						0-M38599	-5	-5	-5	27	-20	45	9	-10	-15	2	16
30-45.1942-108.9831-2-12-						0-M38603	-5	-5	-5	21	-20	-15	7	-10	-15	2	18
30-45.2172-108.9056-2-15-						0-M38604	-5	-5	-5	-10	-20	-15	8	-10	-15	2	23
30-45.1878-108.9103-2-15-						0-M38605	-5	-5	-5	16	-20	22	9	-10	-15	2	33
30-45.1864-108.9069-2-15-						0-M38606	-5	-5	-5	15	-20	25	11	-10	-15	2	35
30-45.1781-108.8881-2-15-						0-M38607	-5	-5	-5	14	-20	-15	-5	-10	-15	2	22
30-45.2139-109.0189-2-12-						0-M38608	-5	-5	-5	14	-20	-15	7	-10	-15	2	16
30-45.2333-109.0644-2-12-						0-M38609	-5	-5	-5	24	-20	-15	-5	-10	-15	-1	32
30-45.2372-109.0961-2-12-						0-M38611	-5	-5	-5	14	-20	-15	17	-10	-15	1	10
30-45.2106-109.0808-2-12-						0-M38613	-5	-5	-5	24	-20	-15	12	-10	-15	2	18
30-45.1797-108.9919-2-12-						0-M38618	-5	-5	-5	18	-20	-15	17	-10	-15	2	27
30-45.1450-109.0056-2-12-						0-M38620	-5	-5	-5	17	-20	25	-5	-10	-15	1	30
30-45.1608-109.1228-2-12-						0-M38622	-5	-5	-5	24	-20	18	5	-10	-15	2	24
30-45.1656-109.1108-2-15-						0-M38624	-5	-5	-5	31	22	22	7	-10	-15	2	34
30-45.1550-109.0681-2-15-						0-M38625	-5	-5	-5	31	-20	21	6	-10	-15	2	52
30-45.1733-109.0339-2-15-						0-M38626	-5	-5	-5	16	-20	20	10	-10	-15	2	18
30-45.1406-109.0303-2-12-						0-M38627	-5	-5	-5	27	-20	-15	7	-10	-15	1	47
30-45.1567-108.9525-2-15-						0-M38628	-5	-5	-5	13	-20	-15	14	-10	-15	2	21
30-45.1447-108.9383-2-15-						0-M38630	-5	-5	-5	13	-20	-15	16	-10	-15	2	26
30-45.1531-108.9661-2-12-						0-M38631	-5	-5	-5	25	-20	18	14	-10	-15	2	37
30-45.1064-109.0336-2-12-						0-M38633	-5	-5	-5	20	21	23	9	-10	-15	1	26
30-45.1394-109.0733-2-15-						0-M38634	-5	-5	-5	29	22	25	12	-10	-15	2	28
30-45.1083-109.0711-2-15-						0-M38635	-5	-5	-5	27	-20	28	10	-10	-15	2	32
30-45.0856-109.0108-2-15-						0-M38637	-5	-5	-5	30	22	23	18	-10	-15	2	38
30-45.0836-108.9708-2-15-						0-M38638	-5	-5	-5	22	24	-15	5	-10	-15	2	31
30-45.0739-109.0303-2-15-						0-M38639	-5	-5	-5	19	-20	-15	6	-10	-15	1	34
30-45.0278-109.0214-2-15-						0-M38640	-5	-5	-5	25	-20	30	15	-10	-15	2	35
30-45.0103-109.0531-2-15-						0-M38641	-5	-5	-5	32	-20	-15	8	-10	-15	1	38
30-45.0197-109.0856-2-15-						0-M38643	-5	-5	-5	13	-20	-15	6	-10	-15	1	18
30-45.0042-109.0953-2-11-						0-M38644	-5	-5	-5	18	-20	20	14	-10	-15	2	29
30-45.0806-109.1211-2-12-						0-M38645	-5	-5	-5	11	-20	-15	10	-10	-15	1	29
30-45.1108-109.1117-2-15-						0-M38647	-5	-5	-5	22	-20	20	10	-10	-15	2	21
30-45.0394-109.0839-2-15-						0-M38650	-5	-5	-5	12	-20	-15	8	-10	-15	1	16
30-45.0456-109.0872-2-12-						0-M38651	-5	-5	-5	29	-20	22	14	-10	-15	1	41
30-45.0561-108.9583-2-12-						0-M38653	-5	-5	-5	15	-20	-15	6	-10	-15	1	17
30-45.0544-108.9594-2-15-						0-M38654	-5	-5	-5	15	-20	-15	9	-10	-15	2	22
30-45.0325-108.9444-2-12-						0-M38655	-5	-5	-5	14	-20	-15	10	-10	-15	2	25
30-45.0306-108.9444-2-15-						0-M38656	-5	-5	-5	21	-20	15	6	-10	-15	1	22

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
30-45.4150-108.9150-2-12-						0-M38565	40050	-0.06	484	41980	39	-76	5.0	23	2.5	2	0.8	8557	6.2	13240	23	0.3
30-45.6600-108.9719-2-12-						0-M38574	35040	-0.04	365	36750	38	143	4.6	30	1.5	3	0.6	6323	8.1	11320	21	0.3
30-45.6750-108.9800-2-12-						0-M38575	44020	-0.04	431	32080	43	-73	5.5	35	2.2	3	0.8	9626	7.7	9620	27	0.3
30-45.6861-108.9861-2-12-						0-M38576	51930	-0.05	588	24730	69	-85	6.3	45	2.2	2	1.0	11370	10.0	11830	30	0.3
30-45.7036-108.9897-2-12-						0-M38577	49480	-0.06	592	31460	50	-68	5.6	54	-1.2	3	1.0	11140	7.1	13300	28	0.2
30-45.4892-109.0789-2-12-						0-M38595	56840	-0.05	610	36570	63	-71	7.0	51	2.4	3	0.9	12030	6.3	13910	33	0.3
30-45.4781-109.0014-2-12-						0-M38596	44730	-0.05	499	37680	59	-77	6.0	49	2.1	3	0.9	11810	8.2	13310	32	0.3
30-45.4669-108.9939-2-15-						0-M38597	45930	-0.05	357	28110	67	-70	6.0	47	2.7	2	0.9	10990	8.1	12750	37	0.3
30-45.4525-108.9592-2-12-						0-M38598	51170	-0.07	500	33540	50	-66	7.1	30	3.2	3	0.9	13510	6.0	15440	29	0.2
30-45.4400-109.0542-2-12-						0-M38599	48540	-0.04	513	23370	50	-67	6.6	53	2.1	3	0.8	9806	6.9	13420	28	0.3
30-45.4219-109.1022-2-12-						0-M38595	47400	-0.05	529	17880	54	-60	6.7	57	2.0	3	0.8	13070	5.4	12330	30	0.3
30-45.4033-109.0547-2-12-						0-M38596	55940	-0.06	528	53920	77	-83	8.0	70	3.3	4	1.1	16440	7.7	13640	38	0.4
30-45.4131-109.0544-2-15-						0-M38598	60490	-0.07	568	29210	50	-84	8.1	55	3.3	3	1.0	15740	5.1	16640	33	0.3
30-45.4614-109.0253-2-12-						0-M38599	53190	-0.05	531	14080	56	-77	7.4	62	1.8	3	0.8	13780	8.9	13350	32	0.2
30-45.1942-108.9831-2-12-						0-M38603	38670	-0.05	692	16820	51	-49	6.8	37	2.1	3	0.9	12240	8.4	11590	30	0.3
30-45.2172-108.9056-2-15-						0-M38604	34670	-0.05	673	19480	69	-62	3.6	54	1.8	4	0.9	8751	16.8	10050	40	0.4
30-45.1878-108.9103-2-15-						0-M38605	50950	-0.04	552	30380	51	-71	7.0	58	2.1	3	0.8	11820	6.4	16580	30	0.3
30-45.1964-108.9069-2-15-						0-M38606	52130	-0.04	625	18830	52	-66	6.0	42	2.6	3	0.8	12440	4.9	15380	27	0.2
30-45.1781-108.8881-2-15-						0-M38607	40120	-0.04	654	24370	67	-62	4.5	41	1.7	3	0.9	9045	11.6	10960	36	0.4
30-45.2139-109.0189-2-12-						0-M38608	36220	-0.05	688	15710	48	-55	5.6	34	1.8	3	0.9	11480	8.0	10720	26	0.3
30-45.2333-109.0644-2-12-						0-M38609	50010	-0.04	654	11320	55	-51	6.4	40	2.6	4	0.9	11840	9.1	12290	32	0.3
30-45.2372-109.0961-2-12-						0-M38611	52370	-0.04	659	9658	65	-51	6.6	34	2.4	4	0.9	13330	6.8	11930	37	0.3
30-45.2106-109.0908-2-12-						0-M38613	37790	-0.05	564	25190	57	46	6.3	42	2.2	4	0.9	12130	11.5	12000	30	0.4
30-45.1797-108.9919-2-12-						0-M38618	43880	-0.05	663	19860	49	121	5.6	43	2.1	3	0.9	11930	7.7	14630	28	0.3
30-45.1450-109.0056-2-12-						0-M38620	39090	-0.04	659	23290	40	-50	6.6	39	1.7	3	0.7	10810	5.6	12840	23	0.2
30-45.1608-109.1228-2-12-						0-M38622	37960	-0.04	600	17900	51	-48	6.6	38	2.0	3	0.7	11760	6.3	13150	27	0.2
30-45.1656-109.1108-2-15-						0-M38624	45820	-0.06	502	35020	59	-64	7.7	63	2.8	3	0.9	14660	8.5	16050	32	0.2
30-45.1550-109.0681-2-15-						0-M38625	54820	-0.07	581	29830	54	74	7.2	55	3.0	3	0.8	14250	6.7	13980	34	0.2
30-45.1733-109.0339-2-15-						0-M38626	37360	-0.04	518	16120	45	-40	5.9	36	1.9	3	0.7	10080	7.3	11450	24	0.2
30-45.1406-109.0303-2-12-						0-M38627	50810	-0.05	527	33280	59	81	7.3	56	3.1	4	1.0	15620	9.3	15650	32	0.3
30-45.1667-108.9525-2-15-						0-M38628	43710	-0.05	710	17110	67	44	6.3	47	2.3	4	0.8	11610	11.3	13410	37	0.3
30-45.1447-108.9383-2-15-						0-M38630	50800	-0.06	700	15670	57	-61	6.3	48	3.1	3	0.8	12220	5.7	13680	30	0.4
30-45.1531-108.9661-2-12-						0-M38631	44440	-0.04	562	24400	45	181	6.6	41	2.6	3	0.8	10810	6.3	14940	29	0.3
30-45.1064-109.0336-2-12-						0-M38633	45150	0.09	634	23030	53	-53	7.6	53	2.0	3	0.8	14030	7.6	12040	25	0.2
30-45.1394-109.0733-2-15-						0-M38634	46360	-0.05	679	30700	56	-59	8.8	65	2.8	3	1.0	17240	5.9	13050	31	0.3
30-45.1083-109.0711-2-15-						0-M38635	43250	-0.06	614	21840	52	-59	7.2	43	2.0	3	1.0	15360	8.9	11140	32	0.3
30-45.0856-109.0108-2-15-						0-M38637	59830	-0.05	642	14770	64	42	8.7	61	3.6	4	0.9	16270	5.9	14280	33	0.3
30-45.0836-108.9708-2-15-						0-M38638	40800	-0.04	701	21230	48	-48	6.5	40	2.0	3	0.8	12800	6.6	11650	25	0.3
30-45.0739-109.0303-2-15-						0-M38639	40130	-0.05	670	28080	56	-56	7.5	42	2.5	3	0.8	13170	6.5	11580	26	0.3
30-45.0278-109.0214-2-15-						0-M38640	42230	-0.05	484	24500	47	-57	6.4	39	2.3	3	0.7	11920	6.2	12200	28	0.2
30-45.0103-109.0531-2-15-						0-M38641	45770	-0.04	591	31280	45	-54	7.1	41	2.2	3	0.8	12740	6.1	12360	26	0.3
30-45.0197-109.0856-2-15-						0-M38643	38800	-0.04	609	13470	66	-46	5.7	49	2.2	4	0.8	12130	10.1	11260	39	0.3
30-45.0042-109.0953-2-11-						0-M38644	49700	-0.05	625	13100	64	47	6.4	55	2.6	4	0.9	13120	10.2	13410	33	0.3
30-45.0806-109.1211-2-12-						0-M38645	39910	-0.05	600	44360	37	-75	4.2	30	-1.0	2	0.8	7441	5.6	12710	20	0.2
30-45.1108-109.1117-2-15-						0-M38647	38770	-0.04	646	16550	46	-44	6.5	43	1.8	3	0.6	11560	8.3	11590	26	0.3
30-45.0394-109.0839-2-15-						0-M38650	42040	-0.04	673	9450	58	-79	6.2	48	2.3	2	0.8	11780	6.3	18640	31	0.2
30-45.0456-109.0872-2-12-						0-M38651	59580	-0.06	617	13620	80	-46	7.8	62	3.6	4	0.9	16620	7.9	15340	40	0.4
30-45.0561-108.9583-2-12-						0-M38653	31730	-0.05	900	18150	63	368	4.2	41	-1.1	4	1.2	9707	19.5	11130	37	0.4
30-45.0544-108.9594-2-15-						0-M38654	41340	-0.04	558	20990	43	-47	6.5	37	1.9	3	0.7	10870	6.5	13000	24	0.3
30-45.0325-108.9444-2-12-						0-M38655	39580	-0.04	646	23710	44	122	5.4	32	2.1	3	0.7	9035	6.4	11290	29	0.3
30-45.0306-108.9444-2-15-						0-M38656	35410	-0.05	1079	23570	55	-53	7.1	35	2.0	3	0.9	14220	9.4	8452	31	0.3

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
30-45.4150-108.9150-2-12-				0-		M38565	18260	700	8967	-18	-2	3.4	2.1	498	-1		5.7	1927	48	-1.2	54	0.765
30-45.6600-108.9719-2-12-				0-		M38574	20060	137	8118	18	-1	3.2	3.0	414			5.3	1671	41	2.1	38	0.430
30-45.6750-108.9800-2-12-				0-		M38575	21180	296	10350	34	-1	4.5	3.0	-243	-1	-1	5.6	2159	43	1.9	-37	0.400
30-45.6861-108.9861-2-12-				0-		M38576	14660	272	14110	39	-2	4.8	3.9	-268	-1	-1	7.4	1849	45	2.6	76	0.305
30-45.7036-108.9897-2-12-				0-		M38577	24090	307	10780	-19	-2	5.4	2.7	-225	-1	-1	7.3	2170	51	2.4	-30	0.336
30-45.4992-109.0789-2-12-				0-		M38585	27300	373	10790	31	-1	5.7	4.0	-245		-1	7.8	2587	57	2.7	64	0.314
30-45.4781-109.0014-2-12-				0-		M38586	16880	430	9749	29	-1	5.1	3.7	-283	-1	-1	11.2	2246	55	2.2	73	0.230
30-45.4669-108.9939-2-15-				0-		M38587	20130	307	8118	32	-2	5.3	5.7	-245	-1	-1	10.9	2135	55	2.6	-55	0.240
30-45.4525-108.9592-2-12-				0-		M38589	22280	501	7332	-23	-2	6.6	2.9	-262	-1	-1	7.0	2839	70	-1.7	90	0.361
30-45.4400-109.0542-2-12-				0-		M38592	15090	342	10940	33	-1	4.5	3.5	314		-1	8.3	2110	49	2.2	60	0.283
30-45.4219-109.1022-2-12-				0-		M38595	14130	297	8583	47	-1	5.8	3.6	-206	-1	-1	8.5	2403	61	2.3	-58	0.242
30-45.4033-109.0547-2-12-				0-		M38596	25210	434	9221	38	-2	7.3	5.2	-298	-1	-1	10.7	3121	61	2.9	97	0.226
30-45.4131-109.0544-2-15-				0-		M38598	26750	453	9638	-24	-2	7.7	3.3	-312	-1	-1	8.2	2594	63	-1.6	-43	0.313
30-45.4614-109.0253-2-12-				0-		M38599	8789	300	13650	24	-1	4.8	3.6	214	-1	1	10.7	2256	59	2.7	78	0.228
30-45.1942-108.9831-2-12-				0-		M38603	13820	285	4771	36	-1	4.3	4.6	-200	-1	-1	7.2	2174	50	2.8	52	0.379
30-45.2172-108.9056-2-15-				0-		M38604	15730	271	7906	-17	-1	3.5	3.7	-214	-1	-1	8.4	2501	35	3.6	46	0.392
30-45.1978-108.9103-2-15-				0-		M38605	17970	424	11680	39	-1	4.9	3.8	-241		-1	7.8	2384	44	2.7	50	0.319
30-45.1964-108.9069-2-15-				0-		M38606	16890	342	11100	42	-1	5.3	3.2	-216	-1	-1	6.7	2209	49	2.4	70	0.319
30-45.1781-108.8891-2-15-				0-		M38607	13290	272	8529	31	-1	3.7	4.5	-211	-1	-1	7.1	2246	39	3.1	64	0.372
30-45.2139-109.0189-2-12-				0-		M38608	13480	298	4955	-19	-2	4.1	3.0	-214	-1	-1	6.3	2506	49	2.6	-28	0.414
30-45.2333-109.0644-2-12-				0-		M38609	9346	291	6030	29	-1	5.0	3.7	-190		-1	8.2	3186	64	3.1	40	0.354
30-45.2372-109.0961-2-12-				0-		M38611	8257	368	6348	-15	-1	5.2	3.7	-196	-1	-1	6.4	3221	63	2.0	55	0.402
30-45.2106-109.0808-2-12-				0-		M38613	19050	282	4280	24	-1	4.8	5.1	-198	-1	-1	8.0	2922	51	2.7	-28	0.395
30-45.1797-108.9919-2-12-				0-		M38618	15300	343	6693	-20	-2	5.2	2.9	-229	-1	-1	7.3	2378	58	3.0	-55	0.390
30-45.1450-109.0056-2-12-				0-		M38620	16330	309	6095	25	-1	4.2	3.2	-189		-1	6.2	2297	53	1.9	40	0.381
30-45.1608-109.1228-2-12-				0-		M38622	15310	309	5175	40	-1	4.7	3.2	-183	-1	-1	7.0	2168	54	2.3	-59	0.364
30-45.1656-109.1108-2-15-				0-		M38624	25260	315	6684	-19	-2	6.1	4.6	-241	-1	-1	9.4	2609	52	2.9	-30	0.294
30-45.1550-109.0681-2-15-				0-		M38625	21590	385	5913	-24	-2	6.9	3.8	-271	-1	-1	8.9	3519	72	2.6	-42	0.328
30-45.1733-109.0339-2-15-				0-		M38626	19830	268	3598	32	-1	4.4	3.1	-167	-1	-1	7.0	2399	49	2.4	47	0.371
30-45.1406-109.0303-2-12-				0-		M38627	26220	367	5988	34	-2	6.9	4.1	-223	-1	-1	9.9	3291	67	3.0	-61	0.337
30-45.1667-108.9525-2-15-				0-		M38628	11720	388	5618	30	-1	4.8	5.3	-229	-1	1	9.4	2183	49	3.0	67	0.317
30-45.1447-108.9383-2-15-				0-		M38630	13530	338	5466	-21	-2	5.5	3.0	-242	-1	-1	7.6	2507	64	2.9	52	0.361
30-45.1531-108.9661-2-12-				0-		M38631	18520	304	6705	21	-1	4.7	4.0	-200		1	7.7	2718	57	2.3	66	0.366
30-45.1064-109.0336-2-12-				0-		M38633	18190	359	6330	33	-1	6.6	3.6	-200	-1	-1	7.3	2480	69	1.9	75	0.367
30-45.1394-109.0733-2-15-				0-		M38634	19490	478	4571	34	-2	6.3	4.3	-256	-1	-1	7.8	2325	62	2.5	62	0.354
30-45.1083-109.0711-2-15-				0-		M38635	15200	462	4653	-20	-2	5.8	3.4	-264	-1	-1	8.4	2290	65	2.4	37	0.387
30-45.0856-109.0108-2-15-				0-		M38637	19520	310	3326	59	-2	7.5	3.9	-196	-1	-1	10.0	3349	102	2.8	84	0.393
30-45.0836-108.9708-2-15-				0-		M38638	15050	361	5019	26	-1	5.3	3.3	-192	-1	-1	7.0	2236	62	2.1	52	0.404
30-45.0739-109.0303-2-15-				0-		M38639	19490	437	4921	29	-1	5.1	3.6	-239	-1	1	6.9	2135	48	2.5	64	0.377
30-45.0278-109.0214-2-15-				0-		M38640	19550	346	5367	33	-2	5.3	2.4	-230	-1	-1	6.3	2247	51	2.3	87	0.425
30-45.0103-109.0531-2-15-				0-		M38641	22270	429	5451	36	-1	5.5	3.5	-223		-1	7.0	2522	54	2.4	56	0.409
30-45.0197-109.0856-2-15-				0-		M38643	12150	317	5230	30	-1	5.1	4.1	-185	-1	-1	13.5	2563	58	2.6		0.238
30-45.0042-109.0953-2-11-				0-		M38644	11170	190	3782	39	-2	6.1	4.1	-185	-1	-1	11.7	3074	76	3.7	71	0.291
30-45.0806-109.1211-2-12-				0-		M38645	16170	273	10170	33	-1	3.5	2.6	-240	-1	-1	6.5	1533	33	1.6	-33	0.383
30-45.1108-109.1117-2-15-				0-		M38647	14100	332	4008	27	1	4.6	3.3	-185		-1	7.4	2527	60	3.0	44	0.397
30-45.0394-109.0839-2-15-				0-		M38650	11980	302	19140	47	-1	5.0	3.4	455	-1	-1	13.3	2192	49	2.0	63	0.196
30-45.0456-109.0872-2-12-				0-		M38651	15480	277	3370	51	-2	7.6	5.5	-208	-1	-1	13.9	3480	94	3.7	-17	0.291
30-45.0561-108.9583-2-12-				0-		M38653	13970	312	6141	-19	-2	4.3	3.9	-228	-1	-1	10.7	3307	43	3.9	-32	0.318
30-45.0544-108.9594-2-15-				0-		M38654	15030	347	5050	34	-1	4.7	3.2	-190		-1	6.5	2594	50	2.4	41	0.405
30-45.0325-108.9444-2-12-				0-		M38655	13140	270	7440	31	-1	4.0	3.2	291			6.1	1893	42	1.8	53	0.372
30-45.0306-108.9444-2-15-				0-		M38656	10340	563	3317	33	-1	4.6	3.9	-253	-1	-1	8.2	2237	48	2.7	70	0.338

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																											U CONCENTRATION
							TIME SAMPLED																											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
30-45.0089-108.9067-2-15-						0-M38657-06/14/78-19-			30-		-	-	-	-		6-1-2-4-2-	-	-	-	-3-2-3-2-	-1-	-	-	-	-							6.61
30-45.0378-108.9178-2-15-						0-M38658-06/14/78-19-			27-		-	-	-	-		9-1-2-4-2-	-	-	-	-3-3-4-2-	-	-	-	-	-							2.53
30-45.1033-108.9603-2-15-						0-M38659-06/14/78-20-			23-		-0-	-	-	-		6-1-2-4-2-	-	-	-	-3-3-3-3-	-	-	-	-	-							2.64
30-45.0711-108.9339-2-15-						0-M38661-06/16/78-10-			19-		-	-	-	-		11-1-2-4-2-	-	-	-	-3-2-4-2-	-1-	-	-	-	-							3.15
30-45.0575-108.8991-2-15-						0-M38662-06/16/78-11-			19-		-	-	-	-		13-1-2-4-1-	-	-	-	-3-2-4-2-	-1-	-	-	-	-							3.07
30-45.0125-108.8353-2-11-						0-M38663-06/16/78-13-			17-	9.3-	0-	-	7.1-	1950-		11-1-7-6-8-	-	-	-	-4-2-2-2-	-3-	-	-	-	-							2.95
30-45.0072-108.8186-2-15-						0-M38664-06/16/78-14-			21-		-	-	-	-		9-1-1-4-6-	-	-	-	-3-2-2-2-	-3-	-	-	-	-							2.85
30-45.0831-108.9078-2-15-						0-M38665-06/16/78-15-			26-		-	-	-	-		4-1-2-4-2-	-	-	-	-3-2-3-2-	-	-	-	-	-							3.81
30-45.1078-108.9339-2-15-						0-M38666-06/16/78-16-			25-		-	-	-	-		4-1-2-4-2-	-	-	-	-3-2-3-3-	-1-	-	-	-	-							3.19
30-45.1222-108.9172-2-15-						0-M38667-06/16/78-18-			20-		-	-	-	-		9-1-1-4-6-	-	-	-	-3-2-2-3-	-3-	-	-	-	-							2.95
30-45.0892-108.8739-2-15-						0-M38669-06/16/78-20-			15-		-	-	-	-		6-1-2-4-7-	-	-	-	-3-2-4-3-	-1-	-	-	-	-							2.43
30-45.0881-108.8194-2-15-						0-M38670-06/16/78-20-			14-		-	-	-	-		6-1-1-4-7-	-	-	-	-4-3-4-3-	-1-	-	-	-	-							2.79
30-45.0972-108.8222-2-12-						0-M38671-06/16/78-20-			14-	14.5-	-	-	8.2-	4450-		10-1-1-4-7-2-3-1-1-4-3-3-3-					-1-	-	-	-	-							2.50
30-45.0622-108.8250-2-15-						0-M38672-06/17/78-10-			20-		-	-	-	-		8-1-2-4-2-	-	-	-	-3-2-4-1-	-1-	-	-	-	-							3.96
30-45.1236-108.8586-2-15-						0-M38673-06/17/78-13-			22-		-	-	-	-		13-1-2-4-7-	-	-	-	-3-3-3-2-	-1-	-	-	-	-							2.91
30-45.0675-108.7822-2-15-						0-M38674-06/17/78-13-			25-		-	-	-	-		11-1-2-4-7-	-	-	-	-3-2-3-2-	-	-	-	-	-							2.34
30-45.0489-108.7561-2-15-						0-M38675-06/17/78-14-			28-		-	-	-	-		15-1-2-4-7-	-	-	-	-3-2-4-1-	-3-	-	-	-	-							2.88
30-45.0508-108.7547-2-15-						0-M38676-06/17/78-14-			28-		-	-	-	-		11-1-2-4-7-	-	-	-	-3-2-4-1-	-3-	-	-	-	-							4.46
30-45.0897-108.8131-2-15-						0-M38677-06/17/78-15-			28-		-0-	-	-	-		13-1-2-4-7-	-	-	-	-3-2-4-1-	-3-	-	-	-	-							2.51
30-45.0622-108.6658-2-15-						0-M38678-06/17/78-15-			22-		-	-	-	-		9-1-4-5-6-	-	-	-	-4-3-2-1-	-3-	-	-	-	-							3.94
30-45.0634-108.6669-2-15-						0-M38679-06/17/78-16-			22-		-	-	-	-		13-1-4-6-6-	-	-	-	-4-3-2-1-	-3-	-	-	-	-							3.34
30-45.0597-108.7128-2-15-						0-M38680-06/17/78-16-			22-		-	-	-	-		9-1-4-5-6-	-	-	-	-4-2-2-1-	-1-	-	-	-	-							2.38
30-45.0169-108.6858-2-15-						0-M38691-06/17/78-17-			25-		-	-	-	-		9-1-3-5-6-	-	-	-	-3-2-2-1-	-1-	-	-	-	-							2.21
30-45.0372-108.6936-2-15-						0-M38682-06/17/78-18-			26-		-	-	-	-		13-1-4-5-6-	-	-	-	-4-3-2-1-	-3-	-	-	-	-							2.59
30-45.1000-108.7303-2-15-						0-M38684-06/17/78-19-			28-		-0-	-	-	-		6-1-4-	-	-	-	-4-3-2-1-	-1-	-	-	-	-							3.57
30-45.1158-108.7492-2-15-						0-M38685-06/17/78-20-			25-		-	-	-	-		13-1-3-5-6-	-	-	-	-4-3-3-1-	-1-	-	-	-	-							2.91
30-45.1283-108.7650-2-15-						0-M38686-06/17/78-20-			25-		-	-	-	-		9-1-3-4-6-	-	-	-	-4-3-3-1-	-1-	-	-	-	-							3.07
30-45.1500-108.7967-2-15-						0-M38687-06/17/78-20-			24-		-	-	-	-		16-1-1-4-6-	-	-	-	-4-2-4-1-	-1-	-	-	-	-							3.74
30-45.1547-108.8178-2-15-						0-M38688-06/17/78-21-			24-		-	-	-	-		11-1-4-5-6-	-	-	-	-4-3-3-1-	-1-	-	-	-	-							3.75
30-45.1619-108.8236-2-15-						0-M38689-06/17/78-21-			24-		-	-	-	-		11-1-4-3-7-	-	-	-	-4-3-3-1-	-1-	-	-	-	-							3.19
30-45.1758-108.8383-2-15-						0-M38690-06/17/78-21-			22-		-	-	-	-		11-1-3-4-7-	-	-	-	-4-4-3-1-	-1-	-	-	-	-							3.05
30-45.1950-108.8558-2-15-						0-M38691-06/17/78-21-			20-		-	-	-	-		13-1-3-4-6-	-	-	-	-3-2-3-1-	-1-	-	-	-	-							3.18
30-45.1544-108.8706-2-12-						0-M38692-06/20/78-12-			20-	20.0-	-	-	8.7-	3550-		9-1-1-5-6-2-2-1-1-4-2-4-1-					-3-	-	-	-	-							4.26
30-45.0747-108.6414-2-12-						0-M38693-06/20/78-13-			21-	10.5-	-	-	8.4-	350-		9-1-1-5-6-3-3-1-3-2-4-2-1-					-1-	-	-	-	-							1.91
30-45.0089-108.5906-2-15-						0-M38694-06/20/78-14-			23-		-	-	-	-		18-1-1-5-1-	-	-	-	-4-2-2-1-	-	-	-	-	-							3.35
30-45.0094-108.6111-2-12-						0-M38695-06/20/78-14-			22-	25.0-	-	-	8.5-	360-		4-1-1-5-6-2-3-1-1-3-3-2-1-					-	-	-	-	-							2.74
30-45.0392-108.6047-2-12-						0-M38696-06/20/78-20-			21-	20.2-	-	-	8.5-	380-		13-1-1-5-6-3-3-1-3-3-2-2-1-					-3-	-	-	-	-							2.52
30-45.0619-108.5558-2-12-						0-M38697-06/20/78-21-			18-	11.5-	-	-	8.5-	345-		2-1-1-4-1-3-3-1-3-3-2-2-1-					-3-	-	-	-	-							2.40
30-45.0197-108.6314-2-12-						0-M38698-06/20/78-21-			18-	15.0-	-	-	8.2-	700-		13-1-1-5-6-3-3-2-1-4-4-2-1-					-	-	-	-	-							3.36
30-45.0403-108.6458-2-15-						0-M38699-06/23/78-12-			20-		-	-	-	-		6-1-3-5-6-	-	-	-	-3-3-2-2-	-1-	-	-	-	-							2.46
30-45.0472-108.6514-2-12-						0-M38700-06/23/78-12-			25-	12.5-	-	-	7.3-	625-		6-1-3-5-6-4-3-2-2-4-3-2-2-					-1-	-	-	-	-							2.70
30-45.0964-108.6358-2-12-						0-M38702-06/23/78-13-			27-	9.5-	-	-	7.3-	210-		8-1-3-4-3-3-3-1-3-4-4-1-1-					-1-	-	-	-	-							1.97
30-45.0983-108.6222-2-12-						0-M38704-06/23/78-13-			31-	10.5-	-	-	7.3-	240-		6-1-3-5-6-4-3-1-3-4-3-1-1-					-3-	-	-	-	-							2.09
30-45.0983-108.5983-2-12-						0-M38705-06/23/78-14-			29-	6.0-	0-	-	7.1-	200-		10-1-1-4-6-3-3-1-3-3-4-3-1-					-1-	-	-	-	-							2.16
30-45.1061-108.5944-2-11-						0-M38706-06/23/78-14-			30-	6.0-	-	-	7.0-	195-		10-1-1-5-6-3-3-1-					-3-5-3-1-	-1-	-	-	-							2.38
30-45.0756-108.6172-2-12-						0-M38708-06/23/78-15-			31-	16.0-	-	-	7.1-	210-		6-1-1-5-4-3-3-2-2-3-2-3-2-					-3-	-	-	-	-							2.15
30-45.1300-108.6414-2-15-						0-M38709-06/23/78-16-			31-		-	-	-	-		3-1-2-	-	-	-	-3-2-1-2-	-1-	-	-	-	-							2.11
30-45.1181-108.6569-2-15-						0-M38710-06/23/78-17-			31-		-	-	-	-		6-1-4-5-4-	-	-	-	-4-3-1-2-	-3-	-	-	-	-							1.90
30-45.0842-108.6622-2-12-						0-M38711-06/23/78-17-			29-	18.5-	-	-	7.1-	450-		4-1-1-6-8-2-3-2-3-4-4-2-2-					-3-	-	-	-	-							2.19
30-45.1014-108.6839-2-12-						0-M38712-06/23/78-18-			27-	20.5-	-	-	7.3-	600-		10-1-7-5-6-2-3-2-3-4-4-2-3-					-3-	-	-	-	-							2.70
30-45.1456-108.6864-2-15-						0-M38713-06/23/78-18-			28-		-	-	-	-		10-1-2-5-4-	-	-	-	-3-2-1-3-	-1-	-	-	-	-							2.19

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LAS SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
30-45.0089-108.9067-2-15-						0-M38657	-5	-5	-5	10	-20	15	13	-10	-15	1	11
30-45.0378-108.9178-2-15-						0-M38658	-5	-5	-5	21	-20	-15	14	-10	-15	1	20
30-45.1033-108.9603-2-15-						0-M38659	-5	-5	-5	10	-20	-15	10	-10	-15	1	24
30-45.0711-108.9339-2-15-						0-M38661	-5	-5	-5	26	-20	23	22	-10	17	1	41
30-45.0575-108.8981-2-15-						0-M38662	-5	-5	-5	34	-20	18	15	-10	-15	2	18
30-45.0125-108.8353-2-11-						0-M38663	-5	-5	-5	36	-20	16	14	-10	-15	2	30
30-45.0072-108.9186-2-15-						0-M38664	-5	-5	-5	27	-20	23	18	-10	-15	2	22
30-45.0831-108.9078-2-15-						0-M38665	-5	-5	-5	27	-20	-15	6	-10	-15	1	17
30-45.1078-108.9339-2-15-						0-M38666	-5	-5	-5	20	-20	17	8	-10	-15	2	13
30-45.1222-108.9172-2-15-						0-M38667	-5	-5	-5	19	-20	-15	9	-10	-15	2	21
30-45.0892-108.8739-2-15-						0-M38669	-5	-5	-5	21	-20	-15	9	-10	-15	2	12
30-45.0981-108.8194-2-15-						0-M38670	-5	-5	-5	22	-20	-15	-5	-10	-15	-1	17
30-45.0972-108.8222-2-12-						0-M38671	-5	-5	-5	17	-20	-15	6	-10	-15	1	15
30-45.0622-108.8250-2-15-						0-M38672	-5	-5	-5	-10	-20	-15	12	-10	-15	1	7
30-45.1236-108.8586-2-15-						0-M38673	-5	-5	-5	22	-20	-15	-5	-10	-15	2	14
30-45.0675-108.7822-2-15-						0-M38674	-5	-5	-5	-10	-20	-15	8	-10	-15	1	21
30-45.0489-108.7561-2-15-						0-M38675	-5	6	-5	21	-20	-15	10	-10	-15	2	17
30-45.0508-108.7547-2-15-						0-M38676	-5	-5	-5	11	-20	-15	10	10	-15	2	17
30-45.0897-108.8131-2-15-						0-M38677	-5	-5	-5	13	-20	-15	6	-10	-15	1	18
30-45.0622-108.6658-2-15-						0-M38678	-5	-5	-5	26	-20	17	15	-10	-15	3	84
30-45.0636-108.6669-2-15-						0-M38679	-5	-5	-5	19	-20	22	16	-10	-15	2	45
30-45.0597-108.7128-2-15-						0-M38680	-5	-5	-5	16	-20	17	6	-10	-15	2	31
30-45.0169-108.6858-2-15-						0-M38681	-5	-5	-5	15	-20	-15	6	-10	-15	2	25
30-45.0372-108.6936-2-15-						0-M38682	-5	-5	-5	29	-20	21	14	-10	-15	2	29
30-45.1000-108.7303-2-15-						0-M38684	-5	-5	-5	23	-20	-15	5	-10	-15	2	45
30-45.1158-108.7492-2-15-						0-M38685	-5	-5	-5	15	-20	-15	10	-10	-15	2	28
30-45.1283-108.7650-2-15-						0-M38686	-5	-5	-5	-10	-20	20	5	-10	-15	2	27
30-45.1500-108.7967-2-15-						0-M38687	-5	-5	-5	12	-20	-15	14	-10	-15	2	34
30-45.1547-108.8178-2-15-						0-M38688	-5	-5	-5	27	-20	33	8	-10	-15	2	53
30-45.1619-108.8236-2-15-						0-M38689	-5	-5	-5	16	-20	-15	10	-10	-15	2	34
30-45.1758-108.8383-2-15-						0-M38690	-5	-5	-5	28	-20	21	11	-10	-15	2	46
30-45.1950-108.8558-2-15-						0-M38691	-5	-5	-5	18	-20	-15	10	-10	-15	2	40
30-45.1544-108.8706-2-12-						0-M38692	-5	-5	-5	-10	-20	-15	-5	-10	-15	1	14
30-45.0747-108.6414-2-12-						0-M38693	-5	-5	-5	-10	-20	-15	5	-10	-15	-1	42
30-45.0089-108.5906-2-15-						0-M38694	-5	-5	-5	15	-20	-15	-5	-10	-15	2	34
30-45.0094-108.6111-2-12-						0-M38695	-5	-5	-5	20	-20	-15	11	-10	-15	2	51
30-45.0392-108.6047-2-12-						0-M38696	-5	-5	-5	11	-20	-15	10	-10	-15	2	34
30-45.0619-108.5558-2-12-						0-M38697	-5	-5	-5	14	-20	-15	5	-10	-15	1	50
30-45.0197-108.6314-2-12-						0-M38698	-5	-5	-5	25	-20	-15	14	-10	-15	1	72
30-45.0403-108.6458-2-15-						0-M38699	-5	-5	-5	17	-20	-15	6	-10	-15	1	45
30-45.0472-108.6514-2-12-						0-M38700	-5	-5	-5	-10	-20	-15	-5	-10	-15	1	46
30-45.0964-108.6358-2-12-						0-M38702	-5	-5	-5	20	-20	-15	-5	-10	-15	1	52
30-45.0883-108.6222-2-12-						0-M38704	-5	-5	-5	22	-20	15	-5	-10	-15	2	73
30-45.0983-108.5983-2-12-						0-M38705	-5	-5	-5	18	-20	-15	11	-10	-15	2	40
30-45.1061-108.5944-2-11-						0-M38706	-5	-5	-5	12	-20	-15	-5	-10	-15	2	72
30-45.0756-108.6172-2-12-						0-M38708	-5	-5	-5	16	-20	17	-5	-10	-15	2	71
30-45.1300-108.6414-2-15-						0-M38709	-5	-5	-5	14	-20	-15	-5	-10	-15	-1	6
30-45.1181-108.6569-2-15-						0-M38710	-5	-5	-5	17	-20	-15	7	-10	-15	2	39
30-45.0942-108.6622-2-12-						0-M38711	-5	-5	-5	-10	-20	-15	-5	-10	-15	1	45
30-45.1014-108.6839-2-12-						0-M38712	-5	-5	-5	21	-20	-15	-5	-10	-15	2	76
30-45.1456-108.6864-2-15-						0-M38713	-5	-5	-5	23	-20	-15	8	-10	-15	1	52

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)													
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
30-45.0089-108.9067-2-15-			0-	M38657			33540	-0.06	1361	17470	136	127	5.0	92	1.9	6	1.4	13320	49.9	11670	79	0.9
30-45.0378-108.9178-2-15-			0-	M38658			41190	-0.04	594	9180	49	-41	5.7	34	2.1	3	0.7	10190	6.3	12350	26	0.3
30-45.1033-108.9603-2-15-			0-	M38659			32790	-0.04	804	15870	46	-42	5.5	38	1.5	3	0.8	10680	9.6	10340	29	0.3
30-45.0711-108.9339-2-15-			0-	M38661			47700	-0.06	1053	37640	68	-70	10.3	53	3.0	3	1.1	18700	6.5	12460	33	0.4
30-45.0575-108.8981-2-15-			0-	M38662			48830	-0.06	548	12760	51	-51	5.9	48	2.2	3	0.9	12890	6.7	13240	26	0.3
30-45.0125-108.8353-2-11-			0-	M38663			52500	-0.05	626	14220	53	-53	7.5	49	2.6	4	0.9	12930	7.3	14260	30	0.3
30-45.0072-108.8186-2-15-			0-	M38664			53880	-0.05	559	5958	59	-53	7.4	57	3.6	4	0.8	15250	6.4	13240	33	0.3
30-45.0831-108.9078-2-15-			0-	M38665			36460	0.08	699	9113	79	-47	6.0	53	2.3	4	0.8	11500	23.0	10360	41	0.5
30-45.1078-108.9339-2-15-			0-	M38666			42370	-0.06	746	12390	53	-52	6.5	43	-1.2	3	1.1	13970	9.8	11490	30	0.3
30-45.1222-108.9172-2-15-			0-	M38667			34760	-0.04	888	11000	56	-43	5.1	35	2.4	4	0.9	10690	12.1	10570	35	0.3
30-45.0892-108.8739-2-15-			0-	M38668			35550	-0.05	618	6315	44	-43	5.9	25	1.8	3	0.6	10180	4.3	12260	24	0.2
30-45.0881-108.8194-2-15-			0-	M38670			33590	-0.04	815	11440	58	111	5.2	42	1.7	3	0.8	9388	10.4	11370	32	0.3
30-45.0972-108.8222-2-12-			0-	M38671			37960	-0.04	770	17060	55	-53	5.2	35	1.8	3	0.8	8845	9.2	12500	30	0.3
30-45.0622-108.8250-2-15-			0-	M38672			27230	-0.05	921	3542	79	-41	5.9	46	2.1	4	1.0	10860	25.0	9987	41	0.5
30-45.1236-108.8586-2-15-			0-	M38673			37200	-0.05	645	19300	61	-60	4.8	47	1.7	3	0.8	9565	14.6	11660	39	0.3
30-45.0675-108.7822-2-15-			0-	M38674			41000	-0.03	654	17440	49	68	4.6	33	1.9	3	0.7	6381	7.2	12600	29	0.3
30-45.0489-108.7561-2-15-			0-	M38675			51890	-0.04	915	16020	70	-68	5.5	38	1.8	4	1.0	9587	11.2	11910	40	0.4
30-45.0508-108.7547-2-15-			0-	M38676			52670	-0.05	1480	16530	171	-86	6.7	63	2.0	5	1.5	14650	36.1	10810	93	0.8
30-45.0897-108.8131-2-15-			0-	M38677			30740	-0.05	393	28700	40	83	3.5	22	1.4	3	0.7	6365	7.6	11960	30	0.3
30-45.0622-108.6658-2-15-			0-	M38678			79400	-0.06	772	24130	68	-50	10.0	84	5.5	3	0.9	18750	3.7	19000	39	0.4
30-45.0636-108.6669-2-15-			0-	M38679			59230	-0.05	681	24790	59	-56	6.8	51	3.8	3	0.8	14810	5.1	18050	35	0.3
30-45.0597-108.7128-2-15-			0-	M38680			53320	-0.05	592	11400	67	-64	6.5	47	2.4	3	1.0	12550	7.0	14310	36	0.3
30-45.0169-108.6858-2-15-			0-	M38681			47380	-0.05	463	22900	49	148	5.3	44	1.8	3	0.7	10940	7.6	12430	27	0.2
30-45.0372-108.6936-2-15-			0-	M38682			61630	-0.05	732	10940	58	109	8.5	55	3.6	3	0.8	16250	5.3	17760	30	0.4
30-45.1000-108.7303-2-15-			0-	M38684			58230	-0.05	605	16400	57	957	6.3	47	4.0	4	0.9	13470	6.8	18190	39	0.3
30-45.1158-108.7492-2-15-			0-	M38685			41770	-0.04	521	10790	63	537	5.7	32	1.9	3	0.9	8253	10.4	13020	30	0.4
30-45.1283-108.7650-2-15-			0-	M38686			38250	-0.05	770	9750	40	479	3.2	38	1.7	3	0.8	6886	12.9	13640	29	0.4
30-45.1500-108.7967-2-15-			0-	M38687			49630	-0.05	813	17920	54	81	6.1	32	2.9	3	0.9	10530	8.0	14720	29	0.3
30-45.1547-108.8178-2-15-			0-	M38688			70950	-0.06	655	24630	62	-58	7.2	55	5.0	4	0.9	16630	4.4	18600	38	0.3
30-45.1619-108.8236-2-15-			0-	M38689			46020	-0.05	684	12750	60	-59	5.3	35	2.3	3	0.9	9159	8.1	15470	30	0.3
30-45.1758-108.8383-2-15-			0-	M38690			53410	-0.07	774	31830	60	-70	6.2	41	3.0	2	0.7	12250	5.7	15600	28	0.3
30-45.1950-108.8558-2-15-			0-	M38691			50470	-0.04	850	22150	54	63	6.7	48	2.6	3	0.9	12120	9.0	15490	30	0.3
30-45.1544-108.8706-2-12-			0-	M38692			35040	-0.04	1419	19800	98	-56	5.3	73	1.7	5	1.6	11430	26.6	12850	57	0.6
30-45.0747-108.6414-2-12-			0-	M38693			29560	-0.05	450	56280	32	-61	5.6	48	1.5	2	0.7	7172	7.7	10180	20	0.2
30-45.0089-108.5906-2-15-			0-	M38694			51660	-0.06	551	16460	59	-67	5.4	45	2.6	3	1.0	10910	7.1	14920	32	0.3
30-45.0094-108.6111-2-12-			0-	M38695			48860	-0.05	524	48080	49	65	7.3	52	2.4	3	0.7	12640	5.8	15020	29	0.3
30-45.0392-108.6047-2-12-			0-	M38696			44890	-0.05	587	35460	41	-58	6.4	51	2.3	3	0.7	12530	7.1	13540	28	0.2
30-45.0619-108.5558-2-12-			0-	M38697			34220	-0.05	397	65480	53	-55	6.4	53	2.0	3	0.7	11090	11.2	10310	24	0.4
30-45.0197-108.6314-2-12-			0-	M38698			60570	-0.08	656	37580	53	-74	7.5	61	3.8	3	1.2	14880	4.7	19830	34	0.3
30-45.0403-108.6458-2-15-			0-	M38699			43770	-0.04	549	37420	43	66	6.4	48	2.1	3	0.8	11410	6.7	12110	24	0.3
30-45.0472-108.6514-2-12-			0-	M38700			41100	-0.04	474	45930	45	-50	5.2	52	2.4	3	0.8	11130	9.5	12520	29	0.3
30-45.0964-108.6358-2-12-			0-	M38702			32950	-0.06	347	79140	36	-54	7.0	47	1.7	2	0.6	9441	7.6	8685	22	0.3
30-45.0883-108.6222-2-12-			0-	M38704			40480	-0.09	499	107900	38	-70	6.9	47	-1.5	3	0.7	11640	5.8	13740	25	0.3
30-45.0983-108.5983-2-12-			0-	M38705			39950	-0.06	410	80360	42	-68	7.0	49	1.7	3	0.7	11260	6.1	11090	23	0.3
30-45.1061-108.5944-2-11-			0-	M38706			37600	-0.06	192	71460	44	-70	6.2	50	2.3	2	0.7	12100	7.8	10280	30	0.3
30-45.0756-108.6172-2-12-			0-	M38708			43940	-0.07	364	65230	52	65	7.3	71	1.7	3	0.8	14150	9.5	9176	28	0.3
30-45.1300-108.6414-2-15-			0-	M38709			15600	-0.05	202	31130	12	-29	2.4	26	-0.8	1	0.4	3732	11.1	7277	11	-0.1
30-45.1181-108.6569-2-15-			0-	M38710			37390	-0.05	446	57290	34	-55	6.2	44	1.9	2	0.6	9760	4.6	10210	18	0.2
30-45.0842-108.6622-2-12-			0-	M38711			33990	-0.06	274	77870	36	-69	6.3	44	1.3	2	0.6	8778	6.4	9290	20	0.2
30-45.1014-108.6839-2-12-			0-	M38712			45070	-0.07	562	79430	55	70	6.9	53	2.8	3	0.8	12660	6.1	12770	32	0.3
30-45.1456-108.6864-2-15-			0-	M38713			36620	-0.07	363	48450	34	-47	4.7	44	-1.1	2	0.7	9808	7.8	12250	20	0.3

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)														U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
30-45.0089-108.9067-2-15-						0-M38657	10500	449	8385	-19	-2	5.4	6.9	-257	-1	-1	18.5	7117	58	7.3		0.357
30-45.0378-108.9178-2-15-						0-M38658	9944	277	4449	33	-1	4.3	3.5	-172		-1	6.8	2697	55	1.7	61	0.372
30-45.1033-108.9603-2-15-						0-M38659	13480	340	4056	22	-1	4.2	3.4	-178		-1	7.1	2164	44	2.8	54	0.372
30-45.0711-108.9339-2-15-						0-M38661	19370	762	4764	39	-2	6.5	5.2	-322	-1	-1	8.2	2203	57	3.6	81	0.384
30-45.0575-108.8981-2-15-						0-M38662	14980	267	4503	46	-2	6.0	2.9	-209	-1	-1	8.7	2875	68	3.1	-23	0.353
30-45.0125-108.8353-2-11-						0-M38663	15390	244	6056	47	-1	6.0	4.0	-196	-1	-1	8.5	3260	69	2.7	79	0.347
30-45.0072-108.8186-2-15-						0-M38664	12460	437	5387	30	-2	6.9	4.3	-221	-1	-1	8.8	2846	74	2.2	75	0.324
30-45.0831-108.9078-2-15-						0-M38665	8416	285	3795	34	-1	4.8	5.8	-198	-1	-1	13.7	2713	49	3.6	54	0.278
30-45.1078-108.9339-2-15-						0-M38666	8744	430	3222	-20	-2	5.4	3.9	-248	-1	-1	8.0	2255	64	1.9	-30	0.399
30-45.1222-108.9172-2-15-						0-M38667	6839	372	3496	29	-1	4.2	3.7	-188	-1	-1	8.4	2511	53	2.3	51	0.351
30-45.0892-108.8739-2-15-						0-M38669	7681	215	3201	-19	-2	4.0	2.8	-183	-1	-1	5.7	2517	56	2.6	-28	0.426
30-45.0981-108.8194-2-15-						0-M38670	7645	279	6396	26	-1	3.6	3.3	-180		-1	7.4	2816	42	2.7	36	0.377
30-45.0972-108.8222-2-12-						0-M38671	12140	297	8017	21	-1	3.9	3.5	-185	-1		6.7	2410	42	2.2	55	0.373
30-45.0622-108.8250-2-15-						0-M38672	5818	249	3046	33	-1	3.9	4.4	-178	-1	-1	11.3	4157	50	4.2	55	0.350
30-45.1236-108.8586-2-15-						0-M38673	13820	289	7295	-16	-1	3.9	3.9	-215	-1	-1	8.3	2953	44	2.7	-27	0.351
30-45.0675-108.7822-2-15-						0-M38674	10020	238	10020	30	-1	2.9	3.3	-184			6.0	2391	33	2.6	29	0.390
30-45.0489-108.7561-2-15-						0-M38675	8785	300	13920	24	-1	4.1	4.3	360	-1	-1	8.0	3728	36	2.6	66	0.360
30-45.0508-108.7547-2-15-						0-M38676	4799	502	15470	19	-2	5.4	9.4	-293	1	-1	19.5	6942	54	6.3	-13	0.229
30-45.0897-108.8131-2-15-						0-M38677	21280	212	4522	21	-1	3.5	2.4	-189	-1	-1	5.3	2121	38	2.8	-49	0.474
30-45.0622-108.6658-2-15-						0-M38678	19800	335	3452	61	-2	10.6	5.5	-230	-1	-1	10.1	4114	230	3.1	131	0.390
30-45.0636-108.6669-2-15-						0-M38679	18390	285	6303	48	-2	7.3	4.0	-207	-1	-1	9.5	2963	81	3.0	-33	0.352
30-45.0597-108.7128-2-15-						0-M38680	14280	291	8253	28	-2	6.0	4.7	-231	-1	-1	8.5	2502	79	2.9	60	0.280
30-45.0169-108.6858-2-15-						0-M38681	16770	266	8565	40	-2	5.4	2.7	-221	-1	-1	6.9	2403	67	1.8	49	0.320
30-45.0372-108.6936-2-15-						0-M38682	18720	507	6797	38	-2	7.5	4.0	-262	-1	-1	9.3	3149	94	2.8	87	0.278
30-45.1000-108.7303-2-15-						0-M38684	18260	221	7956	56	-2	6.9	4.4	-202	-1	-1	9.5	3151	93	2.7	61	0.376
30-45.1158-108.7492-2-15-						0-M38685	10060	236	8559	-13	-1	3.9	3.7	289	-1	-1	8.3	1985	50	3.2	38	0.351
30-45.1283-108.7650-2-15-						0-M38686	8264	139	8271	26	-1	3.3	2.8	-186	-1	-1	7.1	2004	45	2.4	-25	0.432
30-45.1500-108.7967-2-15-						0-M38687	12710	247	6706	43	-1	4.7	3.5	404		-1	9.0	2393	69	2.2	-52	0.416
30-45.1547-108.8178-2-15-						0-M38688	27860	252	6650	70	-2	8.8	4.6	-207	-1	-1	10.4	3086	127	2.5	112	0.361
30-45.1619-108.8236-2-15-						0-M38689	11190	258	7044	38	-1	4.1	4.0	-214	-1	-1	9.8	1978	48	2.5	-52	0.326
30-45.1758-108.8383-2-15-						0-M38690	15880	263	7191	-23	-2	6.0	3.7	398	-1	-1	7.8	2605	87	2.7	98	0.391
30-45.1950-108.8558-2-15-						0-M38691	15070	253	7630	32	-1	5.6	3.9	-197		-1	9.1	2568	97	2.6	-40	0.349
30-45.1544-108.8706-2-12-						0-M38692	12900	440	7453	27	-1	4.8	5.7	449	1	1	11.3	4559	51	4.4	63	0.377
30-45.0747-108.6414-2-12-						0-M38693	20360	265	5798	19	-1	3.8	2.2	-228	-1	-1	5.8	2000	34	2.4	57	0.329
30-45.0089-108.5906-2-15-						0-M38694	15380	301	7194	-21	-2	5.4	3.1	-248	-1	-1	10.2	2570	57	3.0	-18	0.328
30-45.0094-108.6111-2-12-						0-M38695	20760	355	6043	31	-2	6.1	3.5	-229	-1	-1	7.6	2689	64	3.4	71	0.361
30-45.0392-108.6047-2-12-						0-M38696	21020	389	6381	-17	-2	6.0	3.3	-226	-1	-1	7.2	2704	55	1.7	40	0.350
30-45.0619-108.5558-2-12-						0-M38697	38820	246	4249	28	-2	5.3	3.1	-210	-1	-1	7.5	2382	54	2.7	46	0.320
30-45.0197-108.6314-2-12-						0-M38698	31400	384	5599	-27	-3	7.9	3.9	-300	-1	-1	10.7	3091	116	-2.3	-46	0.314
30-45.0403-108.6458-2-15-						0-M38699	23620	322	5946	32	-1	5.3	3.0	-201		-1	7.5	2411	62	2.7	48	0.328
30-45.0472-108.6514-2-12-						0-M38700	25790	235	5389	29	-1	5.4	3.4	-178	-1	-1	7.6	2729	61	2.9	64	0.355
30-45.0964-108.6358-2-12-						0-M38702	25470	226	5223	26	-2	4.6	2.6	-191	-1	-1	5.6	2017	49	2.0	-36	0.352
30-45.0883-108.6222-2-12-						0-M38704	34940	289	5591	-26	-3	5.3	-3.9	-238	-1	-1	6.0	2438	56	-1.9	54	0.348
30-45.0983-108.5983-2-12-						0-M38705	44150	344	5486	22	-2	5.2	2.8	-264	-1	-1	5.9	1963	62	2.3	50	0.366
30-45.1061-108.5944-2-11-						0-M38706	48490	345	5128	29	-2	5.6	3.4	-272	-1	-1	6.9	2445	59	2.9	86	0.345
30-45.0756-108.6172-2-12-						0-M38708	35030	245	4027	29	-2	6.9	3.7	-195	-1	-1	7.8	2984	68	-1.4	56	0.276
30-45.1300-108.6414-2-15-						0-M38709	6332	114	1707	-13	-1	2.0	-0.6	-116	-1		2.8	970	21	2.0	-19	0.754
30-45.1181-108.6569-2-15-						0-M38710	23670	231	4703	27	-2	5.0	2.3	-204		-1	5.4	2045	50	1.6	39	0.352
30-45.0842-108.6622-2-12-						0-M38711	29750	292	5304	-16	-2	4.6	2.4	340	-1	-1	5.4	1872	40	-1.5	54	0.406
30-45.1014-108.6839-2-12-						0-M38712	36730	266	6541	-19	-2	6.1	4.1	314	-1	-1	7.8	2724	58	2.4	61	0.346
30-45.1456-108.6864-2-15-						0-M38713	28290	271	5061	-19	-2	4.9	1.5	275	-1	-1	5.1	2203	54	-1.3	76	0.429

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																													U CONCENTRATION
							TIME SAMPLED																													
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (umho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
30-	45.1681-	108.7058-	2-	12-	0-	M38715-	06/23/78-	19-	28-	14.5-	-	-	6.8-	600-	3-1-1-5-3-2-3-1-3-4-4-2-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.40
30-	45.1569-	108.6653-	2-	15-	0-	M38716-	06/23/78-	17-	26-	-	-	-	-	-	6-1-1-5-6-	-	-	-	-	-1-	3-	2-	3-	-1-	-	-	-	-	-	-	-	-	2.16
30-	45.1567-	108.6358-	2-	11-	0-	M38717-	06/23/78-	20-	24-	6.5-	-	-	6.8-	165-	4-1-7-3-3-4-3-1-3-4-3-4-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.08
30-	45.1569-	108.6331-	2-	15-	0-	M38718-	06/23/78-	20-	24-	-	C-	-	-	-	8-1-7-4-6-	-	-	-	-	-4-	3-	4-	3-	-1-	-	-	-	-	-	-	-	-	1.93
30-	45.1342-	108.7194-	2-	12-	0-	M38719-	06/24/78-	8-	17-	15.0-	-	-	7.1-	700-	10-1-2-5-6-3-3-2-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.49
30-	45.1344-	108.7283-	2-	15-	0-	M38720-	06/24/78-	10-	20-	-	-	-	-	-	11-1-1-5-6-	-	-	-	-	-3-	3-	2-	2-	-3-	-	-	-	-	-	-	-	-	3.68
30-	45.1881-	108.6997-	2-	12-	0-	M38721-	06/24/78-	10-	25-	15.5-	-	-	7.4-	445-	4-1-4-3-2-3-2-2-2-4-4-1-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.83
30-	45.2194-	108.7344-	2-	15-	0-	M38722-	06/24/78-	11-	25-	-	-	-	-	-	6-1-7-4-6-	-	-	-	-	-3-	3-	2-	2-	-3-	-	-	-	-	-	-	-	-	1.74
30-	45.1994-	108.7747-	2-	11-	0-	M38723-	06/24/78-	12-	25-	15.5-	-	-	7.5-	2400-	9-1-1-3-1-2-3-1-3-3-2-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.28
30-	45.2106-	108.8292-	2-	11-	0-	M38724-	06/24/78-	13-	31-	20.6-	C-	-	7.0-	3000-	15-1-1-6-8-2-3-1-2-3-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.88
30-	45.2164-	108.8419-	2-	12-	0-	M38725-	06/24/78-	13-	31-	22.5-	C-	-	7.0-	1600-	9-1-6-4-7-3-2-3-2-3-4-3-2-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.54
30-	45.2172-	108.8164-	2-	11-	0-	M38727-	06/24/78-	15-	31-	15.0-	C-	-	7.4-	2450-	4-1-4-6-6-3-3-1-3-3-1-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.28
30-	45.2294-	108.8422-	2-	12-	0-	M38728-	06/24/78-	15-	32-	25.5-	-	-	7.9-	2000-	8-1-4-6-6-2-2-4-2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.64
30-	45.2425-	108.8625-	2-	12-	0-	M38729-	06/24/78-	16-	34-	26.0-	-	-	8.0-	1950-	12-1-7-4-6-3-3-2-2-4-4-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.89
30-	45.2039-	108.8247-	2-	12-	0-	M38730-	06/24/78-	17-	28-	20.5-	-	-	8.0-	1600-	6-1-4-	-	-3-	4-	2-	2-	4-	3-	2-	2-	3-	-	-	-	-	-	-	-	-	2.03
30-	45.2194-	108.7253-	2-	12-	0-	M38731-	06/24/78-	17-	24-	20.0-	-	-	8.2-	440-	8-1-7-5-6-2-3-4-3-4-5-1-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.72
30-	45.2086-	108.6914-	2-	12-	0-	M38732-	06/24/78-	18-	26-	14.5-	-	-	-	470-	6-1-1-	-	-4-	3-	2-	3-	4-	3-	1-	3-	-3-	-	-	-	-	-	-	-	-	2.24
30-	45.2103-	108.6369-	2-	15-	0-	M38734-	06/24/78-	19-	24-	-	-	-	-	-	3-1-1-5-6-	-	-	-	-4-	1-	2-	3-	-3-	-	-	-	-	-	-	-	-	-	-	2.37
30-	45.2111-	108.6394-	2-	15-	0-	M38735-	06/24/78-	19-	24-	-	-	-	-	-	4-1-1-5-6-	-	-	-	-4-	1-	2-	3-	-3-	-	-	-	-	-	-	-	-	-	-	2.29
30-	45.2047-	108.6575-	2-	15-	0-	M38736-	06/24/78-	19-	24-	-	-	-	-	-	6-1-1-5-6-	-	-	-	-4-	2-	2-	3-	-3-	-	-	-	-	-	-	-	-	-	-	2.27
30-	45.2050-	108.6783-	2-	15-	0-	M38737-	06/24/78-	19-	23-	-	-	-	-	-	6-1-1-5-6-	-	-	-	-4-	1-	1-	3-	-3-	-	-	-	-	-	-	-	-	-	-	2.18
30-	45.0744-	108.5722-	2-	12-	0-	M38738-	06/25/78-	10-	23-	11.5-	-	-	7.0-	210-	11-1-4-5-6-2-3-1-3-3-2-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.78
30-	45.0911-	108.5817-	2-	15-	0-	M38739-	06/25/78-	11-	23-	-	-	-	-	-	6-1-4-5-4-	-	-	-	-3-	2-	2-	1-	-3-	-	-	-	-	-	-	-	-	-	-	2.08
30-	45.0772-	108.5419-	2-	12-	0-	M38740-	06/25/78-	11-	23-	11.5-	-	-	7.1-	320-	4-1-1-4-4-4-3-1-3-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.16
30-	45.0033-	108.5342-	2-	12-	0-	M38741-	06/25/78-	14-	23-	18.5-	C-	-	7.0-	19000-	17-1-7-4-6-2-2-1-3-4-1-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.02
30-	45.0064-	108.5272-	2-	15-	0-	M38742-	06/25/78-	15-	22-	-	-	-	-	-	13-1-7-4-7-	-	-	-	-3-	1-	2-	2-	-3-	-	-	-	-	-	-	-	-	-	-	5.99
30-	45.0097-	108.4803-	2-	15-	0-	M38743-	06/25/78-	16-	20-	-	-	-	-	-	9-1-1-5-4-	-	-	-	-1-	2-	3-	3-	-3-	-	-	-	-	-	-	-	-	-	-	1.45
30-	45.0328-	108.4856-	2-	15-	0-	M38744-	06/25/78-	16-	20-	-	-	-	-	-	9-1-1-4-6-	-	-	-	-3-	3-	2-	2-	-3-	-	-	-	-	-	-	-	-	-	-	2.02
30-	45.0028-	108.4478-	2-	15-	0-	M38745-	06/25/78-	17-	18-	-	-	-	-	-	11-1-1-4-1-	-	-	-	-3-	1-	2-	3-	-	-	-	-	-	-	-	-	-	-	-	2.10
30-	45.0339-	108.4569-	2-	15-	0-	M38746-	06/25/78-	17-	17-	-	-	-	-	-	11-1-2-4-4-	-	-	-	-3-	2-	3-	3-	-3-	-	-	-	-	-	-	-	-	-	-	2.13
30-	45.0061-	108.4286-	2-	11-	0-	M38747-	06/25/78-	17-	16-	12.0-	C-	-	7.0-	2100-	6-1-4-6-8-2-2-1-3-2-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.32
30-	45.0072-	108.4300-	2-	15-	0-	M38748-	06/25/78-	18-	16-	-	-	-	-	-	30-1-4-5-4-	-	-	-	-3-	2-	3-	3-	-3-	-	-	-	-	-	-	-	-	-	-	1.95
30-	45.0167-	108.4381-	2-	15-	0-	M38749-	06/25/78-	18-	16-	-	-	-	-	-	3-1-4-5-4-	-	-	-	-4-	3-	2-	3-	-3-	-	-	-	-	-	-	-	-	-	-	2.21
30-	45.0467-	108.4403-	2-	15-	0-	M38750-	06/25/78-	18-	16-	-	-	-	-	-	9-1-1-5-4-	-	-	-	-3-	2-	3-	3-	-2-	-	-	-	-	-	-	-	-	-	-	5.55
30-	45.0547-	108.4628-	2-	15-	0-	M38751-	06/25/78-	18-	15-	-	-	-	-	-	6-1-4-5-4-	-	-	-	-1-	3-	3-	3-	-2-	-	-	-	-	-	-	-	-	-	-	1.56
30-	45.0625-	108.5194-	2-	15-	0-	M38752-	06/25/78-	19-	14-	-	-	-	-	-	9-1-1-5-4-	-	-	-	-4-	3-	2-	3-	-1-	-	-	-	-	-	-	-	-	-	-	2.29
30-	45.0608-	108.4044-	2-	15-	0-	M38753-	06/26/78-	8-	13-	-	C-	-	-	-	9-1-4-4-4-	-	-	-	-1-	2-	5-	3-	-3-	-	-	-	-	-	-	-	-	-	-	2.23
30-	45.1275-	108.4222-	2-	12-	0-	M38754-	06/26/78-	10-	14-	5.5-	-	-	7.3-	340-	8-1-1-4-6-4-3-1-3-2-4-6-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.20
30-	45.1164-	108.4175-	2-	11-	0-	M38755-	06/26/78-	14-	17-	6.5-	C-	-	7.0-	650-	9-1-1-4-6-3-3-1-3-1-4-5-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.96
30-	45.1344-	108.4311-	2-	12-	0-	M38756-	06/26/78-	14-	14-	6.0-	C-	-	7.0-	500-	3-1-4-4-6-4-3-1-3-4-4-5-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.59
30-	45.1514-	108.4397-	2-	12-	0-	M38757-	06/26/78-	15-	18-	7.0-	C-	-	7.0-	410-	6-1-6-4-6-4-3-1-3-4-4-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.78
30-	45.1536-	108.4364-	2-	12-	0-	M38758-	06/26/78-	15-	18-	-	C-	-	7.0-	320-	10-1-6-3-4-4-3-1-2-4-4-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.32
30-	45.1314-	108.4081-	2-	15-	0-	M38759-	06/26/78-	17-	15-	-	-	-	-	-	10-1-1-4-6-	-	-	-	-1-	3-	5-	2-	-1-	-	-	-	-	-	-	-	-	-	-	-	2.43
30-	45.1828-	108.4294-	2-	11-	0-	M38760-	06/26/78-	18-	13-	6.0-	C-	-	7.0-	385-	4-1-4-3-4-3-3-1-3-4-4-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.54
30-	45.1869-	108.4328-	2-	11-	0-	M38761-	06/26/78-	19-	14-	7.0-	C-	-	7.0-	420-	4-1-4-3-7-2-3-1-3-1-4-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.38
30-	45.1959-	108.4203-	2-	11-	0-	M38762-	06/26/78-	19-	15-	9.0-	-	-	7.0-	425-	6-1-1-6-6-3-3-1-3-4-4-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.02
30-	45.2089-	108.4175-	2-	11-	0-	M38763-	06/26/78-	20-	14-	9.0-	C-	-	7.0-	420-	9-1-4-6-8-4-3-1-3-4-4-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.22
30-	45.2078-	108.4139-	2-	12-	0-	M38764-	06/26/78-	20-	14-	11.0-	C-	-	7.0-	390-	9-1-4-4-6-3-3-1-3-4-4-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.76
30-	45.2117-	108.4356-	2-	11-	0-	M38765-	06/27/78-	8-	19-	7.5-	C-	-	7.2-	445-	11-1-1-5-6-2-3-1-	-4-	4-	2-	1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.44
30-	45.2144-	108.4436-	2-	11-	0-	M38766-	06/27/78-	8-	17-	8.5-	C-	-	7.0-	390-	5-1-1-4-6-2-3-1-	-4-	4-	4-	1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.98
30-	45.2061-	108.4781-	2-	12-	0-	M38767-	06/27/78-	10-	25-	11.0-	C-	-	-	430-	11-1-4-5-6-2-3-1-2-4-4-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.26

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

(2)

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per million (ppm)									Concentrations in weight ppm	
							Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
30-45.	1681-	108.7058-	2-	12-		0-M38715	-5	-5	-5	18	-20	-15	8	-10	-15	1	35
30-45.	1549-	108.6653-	2-	15-		0-M38716	-5	-5	-5	23	-20	18	18	-10	-15	2	24
30-45.	1567-	108.6358-	2-	11-		0-M38717	-5	-5	-5	10	-20	-15	-5	-10	-15	2	69
30-45.	1569-	108.6331-	2-	15-		0-M38718	-5	-5	-5	18	-20	-15	-5	-10	-15	1	38
30-45.	1342-	108.7194-	2-	12-		0-M38719	-5	-5	-5	12	-20	-15	-5	-10	-15	1	37
30-45.	1344-	108.7283-	2-	15-		0-M38720	-5	-5	-5	16	-20	18	12	-10	-15	2	20
30-45.	1881-	108.6997-	2-	12-		0-M38721	-5	-5	-5	19	-20	19	6	-10	-15	1	34
30-45.	2194-	108.7344-	2-	15-		0-M38722	-5	-5	-5	17	-20	15	-5	-10	-15	1	23
30-45.	1994-	108.7747-	2-	11-		0-M38723	-5	5	-5	26	-20	-15	-5	-10	-15	2	147
30-45.	2106-	108.8292-	2-	11-		0-M38724	-5	-5	-5	22	-20	-15	6	-10	-15	2	59
30-45.	2164-	108.8419-	2-	12-		0-M38725	-5	-5	-5	22	-20	-15	-5	-10	-15	2	35
30-45.	2172-	108.8164-	2-	11-		0-M38727	-5	-5	-5	12	-20	-15	-5	-10	-15	1	34
30-45.	2294-	108.8422-	2-	12-		0-M38728	-5	-5	-5	33	-20	19	7	-10	-15	2	32
30-45.	2425-	108.8625-	2-	12-		0-M38729	-5	-5	-5	24	-20	-15	6	-10	-15	2	42
30-45.	2039-	108.8247-	2-	12-		0-M38730	-5	-5	-5	10	-20	-15	-5	-10	-15	2	55
30-45.	2194-	108.7253-	2-	12-		0-M38731	-5	-5	-5	18	-20	-15	7	-10	-15	1	33
30-45.	2086-	108.6914-	2-	12-		0-M38732	-5	-5	-5	16	-20	-15	-5	-10	-15	2	59
30-45.	2103-	108.6369-	2-	15-		0-M38734	-5	-5	-5	24	-20	-15	29	-10	-15	2	46
30-45.	2111-	108.6394-	2-	15-		0-M38735	-5	-5	-5	20	-20	-15	10	-10	-15	1	60
30-45.	2047-	108.6575-	2-	15-		0-M38736	-5	-5	-5	14	-20	-15	11	-10	-15	1	24
30-45.	2050-	108.6783-	2-	15-		0-M38737	-5	-5	-5	36	-20	15	15	-10	-15	1	32
30-45.	0744-	108.5722-	2-	12-		0-M38738	-5	-5	-5	-10	-20	-15	-5	-10	-15	-1	31
30-45.	0811-	108.5817-	2-	15-		0-M38739	-5	-5	-5	18	-20	33	11	-10	-15	2	46
30-45.	0772-	108.5419-	2-	12-		0-M38740	-5	-5	-5	17	-20	-15	9	-10	-15	2	84
30-45.	0033-	108.5342-	2-	12-		0-M38741	-5	-5	-5	26	-20	41	16	-10	-15	3	37
30-45.	0064-	108.5272-	2-	15-		0-M38742	10	-5	-5	23	-20	28	-5	-10	-15	-1	7
30-45.	0097-	108.4808-	2-	15-		0-M38743	-5	-5	-5	21	-20	-15	6	-10	-15	2	21
30-45.	0328-	108.4856-	2-	15-		0-M38744	-5	-5	-5	31	-20	-15	10	-10	-15	2	144
30-45.	0028-	108.4478-	2-	15-		0-M38745	-5	-5	-5	15	-20	-15	5	-10	-15	1	72
30-45.	0339-	108.4569-	2-	15-		0-M38746	-5	-5	-5	14	-20	-15	14	-10	-15	2	63
30-45.	0061-	108.4286-	2-	11-		0-M38747	-5	-5	-5	17	-20	-15	-5	-10	-15	2	82
30-45.	0072-	108.4300-	2-	15-		0-M38748	-5	-5	-5	16	-20	16	6	-10	-15	2	108
30-45.	0167-	108.4381-	2-	15-		0-M38749	-5	-5	-5	14	-20	17	-5	-10	-15	2	50
30-45.	0467-	108.4403-	2-	15-		0-M38750	-5	-5	-5	-10	-20	17	6	-10	-15	1	45
30-45.	0547-	108.4628-	2-	15-		0-M38751	-5	-5	-5	14	-20	-15	-5	-10	-15	-1	41
30-45.	0625-	108.5194-	2-	15-		0-M38752	-5	-5	-5	14	-20	20	8	-10	-15	-1	53
30-45.	0608-	108.4044-	2-	15-		0-M38753	-5	-5	-5	20	-20	-15	17	-10	-15	1	45
30-45.	1275-	108.4222-	2-	12-		0-M38754	-5	-5	-5	15	-20	-15	-5	-10	-15	1	59
30-45.	1164-	108.4175-	2-	11-		0-M38755	-5	-5	-5	-10	-20	-15	5	-10	-15	-1	29
30-45.	1344-	108.4311-	2-	12-		0-M38756	-5	-5	-5	-10	-20	-15	-5	-10	-15	-1	10
30-45.	1514-	108.4397-	2-	12-		0-M38757	-5	-5	-5	10	-20	-15	6	-10	-15	-1	30
30-45.	1536-	108.4364-	2-	12-		0-M38758	-5	-5	-5	22	-20	25	7	-10	-15	1	72
30-45.	1314-	108.4081-	2-	15-		0-M38759	-5	-5	-5	31	-20	-15	7	-10	-15	1	58
30-45.	1828-	108.4294-	2-	11-		0-M38760	-5	-5	-5	-10	-20	-15	-5	-10	-15	-1	70
30-45.	1869-	108.4328-	2-	11-		0-M38761	-5	-5	-5	12	-20	-15	-5	-10	-15	-1	73
30-45.	1969-	108.4203-	2-	11-		0-M38762	-5	-5	-5	17	-20	-15	-5	-10	-15	2	23
30-45.	2089-	108.4175-	2-	11-		0-M38763	-5	-5	-5	23	-20	-15	5	-10	-15	1	74
30-45.	2078-	108.4139-	2-	12-		0-M38764	-5	-5	-5	15	-20	-15	-5	-10	-15	-1	28
30-45.	2117-	108.4356-	2-	11-		0-M38765	-5	-5	-5	17	-20	-15	9	-10	-15	1	83
30-45.	2144-	108.4436-	2-	11-		0-M38766	-5	-5	-5	22	-20	-15	6	-10	-15	-1	47
30-45.	2061-	108.4781-	2-	12-		0-M38767	-5	-5	-5	22	-20	-15	6	-10	-15	2	56

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
30-45.1681-108.7058-2-12-				0-	M38715		26460	-0.04	334	50420	17	-53	3.8	22	-0.6	1	0.4	4281	4.4	11970	11	0.2
30-45.1569-108.6653-2-15-				0-	M38716		44900	-0.06	334	40990	45	-71	7.4	48	2.3	2	0.7	12960	5.7	13110	28	0.2
30-45.1567-108.6358-2-11-				0-	M38717		21900	-0.06	129	98330	27	123	6.9	44	-1.0	3	0.8	8997	7.6	8095	17	0.2
30-45.1569-108.6331-2-15-				0-	M38718		31770	-0.08	-102	85690	22	99	6.2	38	1.4	3	0.5	9934	3.4	10000	20	0.2
30-45.1342-108.7194-2-12-				0-	M38719		38320	-0.06	1002	63240	43	-61	7.3	49	1.9	3	0.6	10700	9.5	9414	29	0.3
30-45.1344-108.7283-2-15-				0-	M38720		56120	-0.07	503	14420	53	-80	8.3	53	3.1	3	0.9	16180	6.7	14870	34	0.4
30-45.1881-108.6997-2-12-				0-	M38721		31250	-0.06	344	65510	38	-49	5.9	51	1.3	2	0.7	8810	8.8	10290	19	0.3
30-45.2194-108.7344-2-15-				0-	M38722		31340	-0.07	369	38170	28	-49	4.1	40	1.1	3	0.7	8579	6.5	10010	20	0.2
30-45.1994-108.7747-2-11-				0-	M38723		55280	-0.07	335	108900	49	-78	9.5	41	2.2	3	0.8	16500	4.0	17010	30	0.3
30-45.2106-108.8292-2-11-				0-	M38724		41620	-0.07	248	91160	38	-73	7.7	44	5.8	2	0.7	19350	5.1	15790	24	0.3
30-45.2164-108.8419-2-12-				0-	M38725		39380	-0.06	653	35780	54	-61	7.2	40	1.8	3	0.8	11860	8.0	12320	28	0.4
30-45.2172-108.8164-2-11-				0-	M38727		30360	-0.07	296	76710	26	-59	3.7	29	2.5	2	0.6	8527	5.4	12810	18	0.2
30-45.2294-108.8422-2-12-				0-	M38728		52060	-0.06	564	27580	59	-67	8.8	49	2.9	4	0.8	13940	6.2	15510	32	0.4
30-45.2425-108.8625-2-12-				0-	M38729		55140	-0.08	618	32700	62	-77	8.2	49	2.9	4	1.0	15640	8.3	12770	34	0.4
30-45.2039-108.8247-2-12-				0-	M38730		41000	-0.06	392	51440	46	-63	6.7	46	2.0	3	0.7	10190	6.8	15460	22	0.4
30-45.2194-108.7253-2-12-				0-	M38731		37110	-0.07	393	41430	35	-54	4.9	36	1.6	3	0.6	9064	5.1	10840	18	0.2
30-45.2086-108.6914-2-12-				0-	M38732		41480	-0.06	332	73620	42	-57	6.9	48	2.6	3	0.7	11690	7.8	13360	24	0.2
30-45.2103-108.6369-2-15-				0-	M38734		48360	-0.07	523	47870	53	-78	7.7	61	2.3	3	0.8	13710	7.4	13190	32	0.3
30-45.2111-108.6394-2-15-				0-	M38735		38570	-0.07	345	71000	47	-57	7.2	54	2.1	2	0.7	11440	5.6	12450	26	0.2
30-45.2047-108.6575-2-15-				0-	M38736		42880	-0.08	506	52960	37	-63	5.7	57	2.5	3	0.7	11990	6.6	13960	28	0.2
30-45.2050-108.6783-2-15-				0-	M38737		53020	-0.07	540	51570	63	100	9.0	68	2.9	3	0.9	16350	6.3	13100	30	0.3
30-45.0744-108.5722-2-12-				0-	M38738		23180	-0.05	181	39960	22	-45	3.6	26	-0.9	1	0.4	5957	8.7	8438	8	0.1
30-45.0811-108.5817-2-15-				0-	M38739		43670	-0.05	502	69330	39	-63	7.2	54	1.9	2	0.7	11450	6.0	13440	23	0.3
30-45.0772-108.5419-2-12-				0-	M38740		44600	-0.05	257	63590	43	-46	5.9	56	1.2	3	0.7	13710	6.4	7519	22	0.3
30-45.0033-108.5342-2-12-				0-	M38741		52750	-0.07	772	17780	81	-148	12.5	59	4.5	4	1.2	21150	6.4	17630	38	0.5
30-45.0064-108.5272-2-15-				0-	M38742		22060	-0.07	6209	8339	69	-77	15.9	323	-1.4	4	2.3	100500	66.9	-3810	47	0.9
30-45.0097-108.4808-2-15-				0-	M38743		40530	-0.07	1090	25320	39	-48	5.9	23	2.0	3	0.8	10960	5.7	9374	26	0.3
30-45.0328-108.4856-2-15-				0-	M38744		43450	-0.05	504	120800	42	-65	7.9	34	1.9	3	0.7	13490	2.9	16650	24	0.2
30-45.0029-108.4478-2-15-				0-	M38745		29830	-0.05	334	189900	61	-68	7.1	32	1.3	4	0.9	11400	4.8	6824	37	0.3
30-45.0339-108.4569-2-15-				0-	M38746		36240	-0.05	313	59130	55	-65	7.0	47	2.3	4	0.9	11630	11.3	13910	27	0.4
30-45.0361-108.4286-2-11-				0-	M38747		41020	-0.08	289	70550	45	-77	7.4	56	-1.6	3	0.8	13090	7.6	15290	24	0.4
30-45.0072-108.4300-2-15-				0-	M38748		45490	-0.05	324	62650	39	-67	7.5	41	2.5	3	0.8	11840	4.2	17350	21	0.3
30-45.0157-108.4381-2-15-				0-	M38749		45380	-0.05	390	61780	49	-65	7.5	48	2.4	4	0.9	13580	5.7	16480	26	0.3
30-45.0467-108.4403-2-15-				0-	M38750		35110	-0.05	414	58280	53	-54	7.2	61	2.5	3	0.9	11850	9.7	9069	27	0.4
30-45.0547-108.4628-2-15-				0-	M38751		22340	-0.05	186	74350	24	-47	4.5	26	-1.0	2	0.5	7314	5.1	7688	12	0.2
30-45.0625-108.5194-2-15-				0-	M38752		32360	-0.04	355	77450	34	-48	6.4	50	1.3	2	0.5	9313	9.0	8608	19	0.3
30-45.0608-108.4044-2-15-				0-	M38753		47220	-0.05	473	38030	50	-66	7.0	54	2.2	4	0.9	13540	8.2	16870	29	0.3
30-45.1275-108.4222-2-12-				0-	M38754		43080	-0.07	321	72120	51	-60	7.4	66	-1.3	3	0.7	14710	8.1	8168	22	0.3
30-45.1154-108.4175-2-11-				0-	M38755		18370	-0.05	276	31980	25	-45	3.4	32	-1.0	2	-0.2	4463	13.6	6921	9	0.2
30-45.1344-108.4311-2-12-				0-	M38756		15190	-0.03	251	37700	15	-35	3.6	30	-0.6	1	0.3	3279	11.2	6360	10	0.2
30-45.1514-108.4397-2-12-				0-	M38757		30900	-0.05	434	29350	26	-55	5.5	37	-0.9	2	0.6	7440	8.2	11720	18	0.2
30-45.1536-108.4364-2-12-				0-	M38758		42450	-0.06	249	50430	60	-51	7.5	94	1.6	3	0.8	18140	15.2	6793	30	0.4
30-45.1314-108.4081-2-15-				0-	M38759		51880	-0.08	320	18450	56	-69	8.0	77	3.3	4	1.0	16290	7.4	13540	29	0.3
30-45.1828-108.4294-2-11-				0-	M38760		12800	-0.03	-84	138300	15	202	4.1	26	-0.6	1	0.2	3665	5.3	6302	9	0.1
30-45.1869-108.4328-2-11-				0-	M38761		13880	-0.04	-89	134000	18	233	5.0	24	-0.8	1	0.3	4407	4.6	5191	-4	-0.1
30-45.1969-108.4203-2-11-				0-	M38762		38170	-0.05	541	10510	46	-68	6.6	55	2.1	3	0.8	9686	11.0	14250	21	0.3
30-45.2089-108.4175-2-11-				0-	M38763		28630	-0.05	186	45430	30	77	4.5	37	1.5	2	0.5	7570	8.8	11580	18	0.2
30-45.2078-108.4139-2-12-				0-	M38764		23970	-0.03	300	12430	26	-42	4.1	26	1.1	2	0.5	5415	9.3	11660	13	0.2
30-45.2117-108.4356-2-11-				0-	M38765		46260	-0.06	442	38690	46	-63	6.4	55	2.5	4	0.9	13000	7.0	15360	26	0.3
30-45.2144-108.4436-2-11-				0-	M38766		24530	-0.05	257	21110	31	-52	5.0	33	1.4	2	0.7	6721	14.7	10500	14	0.3
30-45.2061-108.4781-2-12-				0-	M38767		40630	-0.07	272	32820	32	-67	6.0	42	2.5	3	0.6	11770	7.4	16500	25	0.2

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued)														U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per million (ppm)														
							Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
30-45.1691-108.7058-2-12-						0-M38715	23130	158	6293	22	-1	2.4	1.3	-190	-1		2.1	1273	28	-0.8	32	0.667
30-45.1559-108.6653-2-15-						0-M38716	25690	426	5802	31	-2	6.2	3.4	-291	-1	-1	6.4	2297	58	3.0	70	0.337
30-45.1567-108.6358-2-11-						0-M38717	111700	139	1027	-17	-2	3.7	3.6	-183	-1	-1	5.4	1424	50	2.8	-63	0.385
30-45.1569-108.6331-2-15-						0-M38718	85320	269	2887	-20	-2	4.5	2.1	-199	-1	-1	4.4	1809	55	-1.7	72	0.439
30-45.1342-108.7194-2-12-						0-M38719	25800	345	5098	26	-2	5.2	3.1	-241		-1	6.6	2239	52	2.4	59	0.377
30-45.1344-108.7283-2-15-						0-M38720	13000	744	6242	51	-2	7.4	4.5	-359	-1	-1	9.9	3072	75	4.2	107	0.372
30-45.1881-108.6997-2-12-						0-M38721	45920	135	4734	32	-2	4.3	2.8	245	-1	-1	6.7	1958	42	2.5	48	0.273
30-45.2194-108.7344-2-15-						0-M38722	14690	232	5461	-17	-2	4.4	2.0	277	-1	-1	4.6	1907	40	2.1	-31	0.378
30-45.1994-108.7747-2-11-						0-M38723	36740	471	5330	55	-2	7.8	3.8	-310	-1	-1	8.1	3116	60	2.8	59	0.281
30-45.2106-108.8292-2-11-						0-M38724	23070	337	4825	30	-2	6.1	3.0	400	-1	-1	6.0	2347	52	-1.4	-38	0.313
30-45.2164-108.8419-2-12-						0-M38725	13500	544	6413	30	-2	4.8	4.1	-252	-1	-1	7.1	2092	45	2.4	63	0.358
30-45.2172-108.8164-2-11-						0-M38727	9150	110	7241	-20	-2	3.4	1.2	763	-1	-1	3.7	2334	25	-1.6	-28	0.616
30-45.2294-108.8422-2-12-						0-M38728	15040	508	5336	40	2	6.7	4.3	-286	-1	-1	9.5	3070	68	3.5	-47	0.383
30-45.2425-108.8625-2-12-						0-M38729	14890	528	5685	46	-2	7.6	5.6	-333	-1	-1	9.9	3308	73	3.5	82	0.393
30-45.2039-108.8247-2-12-						0-M38730	27790	313	8940	32	-2	5.1	3.7	-217	-1	-1	6.3	2610	41	2.4	48	0.322
30-45.2194-108.7253-2-12-						0-M38731	23650	249	6641	-19	-2	4.6	1.9	-184	-1	-1	4.9	1875	45	2.6	-27	0.351
30-45.2086-108.6914-2-12-						0-M38732	34890	284	4055	28	-2	5.8	3.1	-223		-1	6.8	2325	56	2.1	-57	0.329
30-45.2103-108.6369-2-15-						0-M38734	37310	443	7037	53	-2	6.7	3.9	-303	-1	-1	8.3	2483	61	2.7	-22	0.286
30-45.2111-108.6394-2-15-						0-M38735	92810	315	4787	-18	-2	5.6	2.4	448	-1	-1	6.5	2151	51	1.9	-24	0.352
30-45.2047-108.6575-2-15-						0-M38736	37540	403	6341	-24	-3	6.0	2.7	-236	-1	-1	7.5	2395	63	-2.3	96	0.303
30-45.2050-108.6783-2-15-						0-M38737	30610	448	5586	33	-2	7.8	4.6	-292	-1	-1	9.5	2739	68	2.4	-64	0.229
30-45.0744-108.5722-2-12-						0-M38738	26080	119	2689	-15	-2	3.2	0.6	-166	-1	-1	2.9	1672	29	-1.2	-27	0.614
30-45.0811-108.5817-2-15-						0-M38739	31680	303	6965	-14	-2	5.5	2.9	-225	-1	-1	6.8	2315	59	2.6	63	0.306
30-45.0772-108.5419-2-12-						0-M38740	35550	224	3035	-15	-2	7.2	3.4	-182	-1	-1	6.8	3112	64	1.8	68	0.318
30-45.0033-108.5342-2-12-						0-M38741	-6534	2558	7465	52	-2	7.7	5.8	-694	-1	-1	14.5	-1614	72	4.0	72	0.346
30-45.0064-108.5272-2-15-						0-M38742	4632	1412	2543	-27	-2	7.0	6.2	-407	-1	-1	13.7	8234	456	6.8	-94	0.437
30-45.0097-108.4808-2-15-						0-M38743	12270	316	2093	-20	-2	5.4	3.4	-237	-1	-1	4.9	2207	42	2.7	72	0.296
30-45.0328-108.4856-2-15-						0-M38744	35510	559	4793	28	-1	6.5	3.1	910		-1	6.5	2267	63	2.3	42	0.311
30-45.0028-108.4478-2-15-						0-M38745	17040	712	3197	22	-1	5.0	5.2	359	-1	-1	7.7	1540	42	2.1	59	0.273
30-45.0339-108.4569-2-15-						0-M38746	30080	395	6399	47	-2	5.9	5.3	-258	-1	-1	7.0	3357	42	3.1	57	0.304
30-45.0061-108.4286-2-11-						0-M38747	42400	336	5986	-25	-2	6.4	2.4	-305	-1	-1	6.2	2693	72	-1.8	-69	0.535
30-45.0072-108.4300-2-15-						0-M38748	38500	400	7506	33	-2	6.2	3.4	-251	-1	-1	5.7	2882	48	2.3	50	0.342
30-45.0167-108.4381-2-15-						0-M38749	54000	417	7338	37	-2	6.9	3.9	-241	-1	-1	7.3	3258	52	2.7	47	0.303
30-45.0447-108.4403-2-15-						0-M38750	39380	256	3402	-16	-2	5.9	4.5	-220	-1	-1	6.2	2221	91	1.9	68	0.895
30-45.0547-108.4628-2-15-						0-M38751	39330	186	2313	-16	-1	3.4	1.3	-184	-1	-1	3.4	1441	33	1.7	-27	0.459
30-45.0625-108.5194-2-15-						0-M38752	32090	217	3846	19	-1	4.7	2.7	-185		-1	5.8	2082	50	1.9	-26	0.395
30-45.0608-108.4044-2-15-						0-M38753	31920	387	9598	-15	-2	7.1	3.9	-241	-1	-1	6.9	3314	56	2.8	84	0.323
30-45.1275-108.4222-2-12-						0-M38754	31980	254	3680	-19	-2	6.6	3.9	-247	-1	-1	8.8	2736	66	3.1	58	0.250
30-45.1164-108.4175-2-11-						0-M38755	22540	110	2998	-16	-1	2.7	-1.4	-169	-1	-1	4.1	1556	27	-1.1	-24	0.478
30-45.1344-108.4311-2-12-						0-M38756	21210	77	2732	-8	-1	1.9	1.3	-123			3.0	1426	19	1.4	-10	0.530
30-45.1514-108.4397-2-12-						0-M38757	21540	219	5496	32	-1	3.8	2.0	-195	-1	-1	4.4	2128	41	2.9	-37	0.405
30-45.1536-108.4364-2-12-						0-M38758	24060	219	3000	-19	-2	7.1	4.6	-214	-1	-1	9.5	2992	78	2.9	37	0.244
30-45.1314-108.4081-2-15-						0-M38759	20450	455	4790	-28	-2	7.8	4.0	-317	-1	-1	9.0	2824	78	-1.9	-45	0.270
30-45.1828-108.4294-2-11-						0-M38760	155800	125	1223	-11	-1	1.8	1.0	-177	-1		2.4	856	25	0.9	28	0.642
30-45.1869-108.4328-2-11-						0-M38761	159200	117	1363	-14	-1	2.3	1.1	-180	-1		2.4	1160	25	-0.9	42	0.575
30-45.1969-108.4203-2-11-						0-M38762	10380	178	8579	39	-2	4.7	3.4	-226	-1	-1	6.8	2947	37	3.1	-59	0.297
30-45.2089-108.4175-2-11-						0-M38763	49000	157	3624	-18	-2	3.8	2.0	-192	-1	-1	4.5	2217	37	1.8	-39	0.493
30-45.2078-108.4139-2-12-						0-M38764	14140	155	4233	25	-1	2.6	1.7	-151			3.6	1717	28	1.7	-15	0.489
30-45.2117-108.4356-2-11-						0-M38765	43580	303	7647	36	-2	6.6	3.4	-234	-1	-1	7.6	3122	52	2.4	72	0.321
30-45.2144-108.4436-2-11-						0-M38766	16880	154	5274	-15	-1	3.2	2.1	-185	-1	-1	4.8	1660	23	2.4	-14	0.413
30-45.2061-108.4781-2-12-						0-M38767	32580	387	4649	-24	-2	5.6	-3.4	-281	-1	-1	5.8	2821	47	3.1	-44	0.390

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples (1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																								U CONCENTRATION
							TIME SAMPLED																							
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU,ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
30-45.2172-108.5703-2-12-						0-M38769-06/29/78-15-	27-14.0-	-	-	8.0-				490-	10-1-1-5-4-3-3-2-2-4-3-4-3-	-3-	-	-	-	-	2.21
30-45.2067-108.5569-2-12-						0-M38769-06/29/78-15-	23- 9.0-C-	-	-	8.6-				300-	2-1-1-3-8-4-3-1-	-4-4-5-3-	-1-	-	-	-	-	1.78
30-45.2150-108.5506-2-12-						0-M38770-06/29/78-16-	25-10.5-C-	-	-	7.9-				700-	11-1-1-3-7-2-3-1-	-4-5-4-3-	-1-	-	-	-	-	2.05
30-45.2157-108.5872-2-15-						0-M38771-06/29/78-16-	22-	-	-	-				-	2-3-1-5-6-	- - -	-3-2-5-3-	-1-	-	-	-	-	2.46
30-45.2108-108.5447-2-12-						0-M38772-06/29/78-17-	20-12.5-	-	-	8.5-				480-	4-1-1-6-4-3-3-2-2-4-4-3-3-	-3-	-	-	-	-	2.16
30-45.2136-108.5119-2-12-						0-M38773-06/29/78-18-	20-10.5-C-	-	-	8.4-				450-	5-1-1-6-8-4-3-1-	-4-3-4-3-	-1-	-	-	-	-	2.14
30-45.2100-108.5100-2-12-						0-M38774-06/29/78-18-	23-11.0-	-	-	8.3-				600-	6-1-1-5-4-3-3-1-2-4-4-4-2-	-3-	-	-	-	-	2.17
30-45.2039-108.4950-2-12-						0-M38775-06/29/78-19-	28-11.5-	-	-	8.4-				650-	5-1-4-5-4-3-3-1-2-4-4-4-2-	-3-	-	-	-	-	2.11
30-45.2156-108.4878-2-11-						0-M38776-06/29/78-19-	25- 6.5-C-	-	-	7.9-				440-	4-1-1-4-7-3-3-1-	-4-4-5-1-	-1-	-	-	-	-	1.66
30-45.2147-108.5006-2-12-						0-M38777-06/29/78-20-	21-12.5-C-	-	-	8.0-				410-	4-1-1-5-6-3-3-1-2-3-4-4-1-	-1-	-	-	-	-	1.73
30-45.1706-108.3694-2-15-						0-M38778-06/30/78- 9-	20-	-C-	-	-				-	9-1-1-4-6-	- - -	-4-2-2-2-	-1-	-	-	-	-	2.87
30-45.1869-108.2289-2-11-						0-M38779-06/30/78-13-	30- 9.5-C-	-	-	7.8-				850-	10-1-4-5-6-3-3-1-	-4-2-3-1-	-	-	-	-	-	2.16
30-45.1864-108.2403-2-12-						0-M38780-06/30/78-14-	31-25.0-	-	-	8.9-				650-	4-1-4-5-4-3-3-1-2-4-1-3-1-	-3-	-	-	-	-	-	2.07
30-45.1858-108.2367-2-12-						0-M38781-06/30/78-15-	31-20.5-	-	-	8.4-				420-	6-1-4-4-6-3-3-2-3-4-1-3-1-	-3-	-	-	-	-	-	2.55
30-45.2047-108.1878-2-15-						0-M38782-06/30/78-16-	32-	-	-	-				-	8-1-2-5-6-	- -	-2-3-3-3-1-	-1-	-	-	-	-	1.47
30-45.2003-108.1786-2-15-						0-M38783-06/30/78-16-	32-	-	-	-				-	13-1-1-5-6-	- - -	-4-2-3-1-	-3-	-	-	-	-	2.41
30-45.1908-108.1636-2-15-						0-M38784-06/30/78-17-	34-	-	-	-				-	6-1-1-4-6-	- - -	-4-1-3-1-	-1-	-	-	-	-	2.02
30-45.1756-108.1881-2-15-						0-M38785-06/30/78-17-	35-	-	-	-				-	11-1-1-5-6-	- - -	-4-2-2-1-	-1-	-	-	-	-	2.41
30-45.1664-108.2172-2-15-						0-M38786-06/30/78-18-	32-	-	-	-				-	3-1-4-5-4-	- - -	-3-3-2-1-	-1-	-	-	-	-	2.06
30-45.1589-108.2147-2-11-						0-M38787-06/30/78-19-	31-22.0-	-	-	8.0-				1500-	9-1-2-6-8-2-3-1-	-3-3-2-1-	-3-	-	-	-	-	2.61
30-45.1600-108.2158-2-12-						0-M38788-06/30/78-19-	31-24.0-	-	-	7.5-				1700-	9-1-4-5-4-2-3-1-2-3-2-3-1-	-3-	-	-	-	-	2.55
30-45.1514-108.2431-2-12-						0-M38789-06/30/78-19-	29-15.0-	-	-	9.6-				525-	12-1-2-4-7-3-3-3-2-4-4-3-2-	-3-	-	-	-	-	2.20
30-45.1419-108.2458-2-11-						0-M38790-06/30/78-20-	26-15.0-	-	-	8.6-				1700-	6-1-4-4-4-2-3-1-	-2-3-3-2-	-1-	-	-	-	-	2.06
30-45.1417-108.2442-2-12-						0-M38791-06/30/78-20-	23-15.0-	-	-	8.6-				1650-	12-1-4-4-4-2-3-1-2-2-3-3-2-	-3-	-	-	-	-	-	2.08
30-45.1069-108.2269-2-12-						0-M38792-07/05/78- 8-	13-11.5-	-	-	7.6-				1500-	9-1-4-3-1-3-3-1-2-2-3-4-1-	-1-	-	-	-	-	2.12
30-45.1075-108.2417-2-11-						0-M38793-07/05/78- 8-	20-10.6-	-	-	7.3-				3350-	8-1-4-4-4-2-3-1-	-4-4-3-1-	-1-	-	-	-	-	2.22
30-45.0986-108.2306-2-12-						0-M38794-07/05/78- 8-	22-11.0-	-	-	8.4-				750-	6-1-4-5-6-4-3-1-3-4-5-4-1-	-1-	-	-	-	-	-	2.02
30-45.1019-108.2353-2-11-						0-M38795-07/05/78- 9-	21-10.5-C-	-	-	7.0-				900-	8-1-4-5-6-3-3-1-	-2-4-5-2-	-1-	-	-	-	-	2.24
30-45.1164-108.2103-2-12-						0-M38796-07/05/78-11-	23-13.0-	-	-	8.4-				800-	6-1-4-5-6-3-3-2-2-3-2-5-2-	-3-	-	-	-	-	1.62
30-45.1367-108.2425-2-11-						0-M38797-07/05/78-12-	23-11.0-	-	-	7.5-				1700-	11-1-4-5-4-2-2-1-	-1-3-3-2-	-1-	-	-	-	-	2.35
30-45.1356-108.2442-2-15-						0-M38798-07/05/78-13-	23-	-	-	-				-	10-1-4-4-4-	- - -	-1-3-3-2-	-3-	-	-	-	-	2.05
30-45.1675-108.2969-2-11-						0-M38799-07/05/78-14-	22-13.0-	-	-	8.4-				410-	5-1-1-3-1-3-3-1-	-2-5-5-2-	-1-	-	-	-	-	1.77
30-45.1608-108.2669-2-11-						0-M38800-07/05/78-15-	20- 7.0-	-	-	7.4-				600-	6-1-1-3-7-2-3-1-	-2-3-3-3-	-1-	-	-	-	-	2.20
30-45.1725-108.2531-2-11-						0-M38801-07/05/78-17-	19- 6.0-C-	-	-	7.3-				950-	4-1-1-3-7-3-3-1-	-4-2-2-2-	-1-	-	-	-	-	1.81
30-45.7628-109.9711-2-15-						0-M38807-06/07/78-14-	20-	-	-	-				-	16-2-6-5-6-	- - -	-4-4-4-2-	-3-	-	-	-	-	4.13
30-45.8522-109.9728-2-12-						0-M38808-06/07/78-16-	20-16.0-	-	-	6.6-				410-	8-1-7-3-6-2-2-1-2-3-2-4-2-	-3-	-	-	-	-	2.13
30-45.8525-109.9758-2-12-						0-M38809-06/07/78-16-	24-16.0-	-	-	6.5-				380-	12-1-7-3-6-2-2-4-2-3-2-4-2-	-3-	-	-	-	-	2.22
30-45.8597-109.9069-2-12-						0-M38811-06/07/78-18-	26-18.0-	-	-	6.8-				600-	6-1-7-4-6-3-3-4-1-4-3-2-2-	-3-	-	-	-	-	2.08
30-45.8597-109.8958-2-15-						0-M38812-06/07/78-18-	22-	-	-	-				-	9-1-6-5-6-	- -	-1-4-3-3-2-	-3-	-	-	-	-	2.08
30-45.8944-109.9956-2-12-						0-M38817-06/10/78-14-	24- 9.5-	-	-	6.0-				190-	16-1-6-1-7-4-3-2-2-3-3-3-3-	-3-	-	-	-	-	2.26
30-45.9333-109.9881-2-12-						0-M38822-06/13/78-10-	18- 8.5-	-	-	7.9-				137-	4-1-6-4-6-4-4-3-2-3-3-3-4-	-3-	-	-	-	-	2.15
30-45.9631-109.9711-2-12-						0-M38824-06/13/78-11-	21-15.0-	-	-	8.3-				410-	9-1-6-5-6-3-2-2-2-4-3-3-2-	-3-	-	-	-	-	2.03
30-45.9892-109.8889-2-12-						0-M38827-06/13/78-13-	20-17.0-	-	-	8.6-				630-	9-1-7-4-6-2-2-2-1-4-3-3-2-	-3-	-	-	-	-	2.31
30-45.9881-109.8897-2-12-						0-M38828-06/13/78-13-	20-15.0-	-	-	8.5-				650-	4-1-7-4-6-2-2-2-1-4-3-3-2-	-3-	-	-	-	-	2.25
30-45.9475-109.8992-2-12-						0-M38830-06/13/78-14-	26-18.0-	-	-	8.1-				500-	-1-7-5-6-3-3-4-2-4-3-3-2-	-3-	-	-	-	-	2.20
30-45.9183-109.9175-2-12-						0-M38832-06/13/78-14-	23-19.0-C-	-	-	8.1-				700-	6-1-7-5-5-2-2-3-1-4-4-3-2-	-3-	-	-	-	-	2.24
30-45.8959-109.9297-2-15-						0-M38834-06/13/78-15-	24-	-	-	-				-	8-1-6-7-6-	- -	-1-4-3-3-2-	-3-	-	-	-	-	2.27
30-45.7583-109.8622-2-12-						0-M38837-06/13/78-18-	20-13.0-	-	-	7.5-				215-	6-1-6-4-6-4-3-1-2-4-3-4-2-	-3-	-	-	-	-	1.13
30-45.7756-109.8053-2-12-						0-M38838-06/13/78-19-	24-15.0-	-	-	8.3-				190-	9-1-6-4-6-4-3-1-2-4-3-3-2-	-3-	-	-	-	-	1.22
30-45.5419-108.9150-2-12-						0-M38840-06/27/78-12-	38-20.0-C-	-	-	8.6-				4200-	5-1-6-5-6-2-2-3-1-4-4-3-1-	-3-	-	-	-	-	2.60
30-45.5433-108.9147-2-12-						0-M38841-06/27/78-12-	38-21.0-C-	-	-	8.8-				3700-	3-1-6-5-6-2-2-2-1-4-4-3-1-	-3-	-	-	-	-	2.36

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAB. SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per million (ppm)									Concentrations in weight ppm	
							Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
30-45.2172-108.5703-2-12-						0-M38768	-5	-5	-5	19	-20	-15	10	-10	-15	1	71
30-45.2067-108.5569-2-12-						0-M38769	-5	-5	-5	16	-20	-15	-5	-10	-15	1	96
30-45.2150-108.5506-2-12-						0-M38770	-5	-5	-5	-10	-20	-15	5	-10	-15	-1	32
30-45.2167-108.5872-2-15-						0-M38771	-5	-5	-5	22	-20	20	11	-10	-15	2	67
30-45.2108-108.5447-2-12-						0-M38772	-5	-5	-5	13	-20	-15	5	-10	-15	1	56
30-45.2136-108.5119-2-12-						0-M38773	-5	-5	-5	12	-20	-15	-5	-10	-15	-1	39
30-45.2100-108.5100-2-12-						0-M38774	-5	-5	-5	14	-20	-15	-5	-10	-15	-1	61
30-45.2039-108.4950-2-12-						0-M38775	-5	-5	-5	20	-20	16	9	-10	-15	1	54
30-45.2156-108.4878-2-11-						0-M38776	-5	-5	-5	-10	-20	-15	-5	-10	-15	1	62
30-45.2147-108.5006-2-12-						0-M38777	-5	-5	-5	11	-20	-15	-5	-10	-15	-1	7
30-45.1706-108.3694-2-15-						0-M38778	-5	-5	-5	17	-20	18	14	-10	-15	2	54
30-45.1869-108.2289-2-11-						0-M38779	-5	-5	-5	17	-20	-15	8	-10	-15	2	81
30-45.1864-108.2403-2-12-						0-M38780	-5	-5	-5	12	-20	-15	9	-10	-15	1	76
30-45.1858-108.2367-2-12-						0-M38781	-5	-5	-5	22	-20	-15	5	-10	-15	2	46
30-45.2047-108.1878-2-15-						0-M38782	-5	-5	-5	17	-20	-15	-5	-10	-15	1	22
30-45.2003-108.1786-2-15-						0-M38783	-5	-5	-5	27	-20	-15	5	-10	-15	2	30
30-45.1908-108.1636-2-15-						0-M38784	-5	-5	-5	21	-20	-15	12	-10	-15	1	40
30-45.1756-108.1881-2-15-						0-M38785	-5	-5	-5	22	-20	19	10	-10	-15	1	38
30-45.1664-108.2172-2-15-						0-M38786	-5	-5	-5	26	-20	-15	9	-10	-15	1	64
30-45.1589-108.2147-2-11-						0-M38787	-5	-5	-5	20	-20	21	7	-10	-15	1	87
30-45.1600-108.2158-2-12-						0-M38788	-5	-5	-5	19	-20	-15	8	-10	-15	-1	93
30-45.1514-108.2431-2-12-						0-M38789	-5	-5	-5	-10	-20	-15	9	-10	-15	-1	59
30-45.1419-108.2458-2-11-						0-M38790	-5	-5	-5	22	-20	-15	6	-10	-15	2	66
30-45.1417-108.2442-2-12-						0-M38791	-5	-5	-5	25	-20	21	-5	-10	-15	2	116
30-45.1069-108.2269-2-12-						0-M38792	-5	-5	-5	26	-20	-15	-5	-10	-15	1	73
30-45.1075-108.2417-2-11-						0-M38793	-5	-5	-5	18	-20	-15	13	-10	-15	-1	83
30-45.0986-108.2306-2-12-						0-M38794	-5	-5	-5	19	-20	-15	5	-10	-15	-1	82
30-45.1019-108.2353-2-11-						0-M38795	-5	-5	-5	13	-20	-15	5	-10	-15	-1	69
30-45.1164-108.2103-2-12-						0-M38796	-5	-5	-5	10	-20	-15	-5	-10	-15	2	65
30-45.1367-108.2425-2-11-						0-M38797	-5	-5	-5	20	-20	-15	-5	-10	-15	1	103
30-45.1356-108.2442-2-15-						0-M38798	-5	-5	-5	17	-20	-15	-5	-10	-15	1	53
30-45.1675-108.2969-2-11-						0-M38799	-5	-5	-5	16	-20	-15	7	-10	-15	1	76
30-45.1608-108.2669-2-11-						0-M38800	-5	-5	-5	14	-20	-15	10	-10	-15	1	31
30-45.1725-108.2531-2-11-						0-M38801	-5	-5	-5	-10	-20	-15	10	-10	-15	-1	49
30-45.7628-109.9711-2-15-						0-M38807	-5	-5	-5	43	-20	64	15	-10	-15	1	21
30-45.8522-109.9728-2-12-						0-M38808	-5	-5	-5	34	-20	56	6	-10	-15	1	42
30-45.8525-109.9758-2-12-						0-M38809	-5	-5	-5	30	-20	28	9	-10	-15	1	53
30-45.8597-109.9069-2-12-						0-M38811	-5	-5	-5	25	-20	36	-5	-10	-15	2	36
30-45.8597-109.8958-2-15-						0-M38812	-5	-5	-5	39	-20	63	10	-10	-15	1	53
30-45.8944-109.9956-2-12-						0-M38817	-5	-5	-5	26	-20	27	10	-10	-15	1	37
30-45.9333-109.9881-2-12-						0-M38822	-5	-5	-5	21	-20	23	8	-10	-15	2	28
30-45.9631-109.9711-2-12-						0-M38824	-5	-5	-5	28	-20	28	-5	-10	-15	1	42
30-45.9892-109.8889-2-12-						0-M38827	-5	-5	-5	27	-20	-15	6	-10	-15	1	26
30-45.9881-109.8897-2-12-						0-M38828	-5	-5	-5	23	-20	26	-5	-10	-15	1	34
30-45.9475-109.8992-2-12-						0-M38830	-5	-5	-5	24	-20	32	5	-10	-15	1	44
30-45.9183-109.9175-2-12-						0-M38832	-5	-5	-5	32	-20	18	5	-10	-15	2	33
30-45.8969-109.9297-2-15-						0-M38834	-5	-5	-5	43	-20	39	19	-10	-15	2	32
30-45.7583-109.8622-2-12-						0-M38837	-5	-5	-5	22	-20	-15	-5	-10	-15	1	24
30-45.7756-109.8053-2-12-						0-M38838	-5	-5	-5	22	-20	22	-5	-10	-15	-1	24
30-45.5419-108.9150-2-12-						0-M38840	-5	-5	-5	19	-20	-15	10	-10	-15	2	55
30-45.5433-108.9147-2-12-						0-M38841	-5	-5	-5	17	-20	-15	8	-10	-15	2	65

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per million (ppm)														
							Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
30-45.2172-108.5703-2-12-						0-M38768	37370	-0.04	500	59190	42	101	6.1	46	1.9	3	0.6	8767	8.8	12970	24	0.3
30-45.2067-108.5569-2-12-						0-M38769	24950	-0.05	281	94360	23	96	5.2	36	1.7	2	0.5	7661	5.8	9851	18	0.2
30-45.2150-108.5506-2-12-						0-M38770	24990	-0.04	354	39540	40	-54	4.7	45	1.0	2	0.7	6633	14.8	8327	19	0.3
30-45.2147-108.5872-2-15-						0-M38771	54110	-0.05	538	25480	40	-86	5.6	49	-1.4	2	0.7	11380	5.8	15060	20	0.3
30-45.2108-108.5447-2-12-						0-M38772	27160	-0.03	315	34530	34	61	4.6	32	1.3	3	0.6	6511	10.6	12700	18	0.3
30-45.2136-108.5119-2-12-						0-M38773	15630	-0.03	265	29410	13	-32	3.2	18	0.8	1	0.5	4133	13.9	6667	8	0.2
30-45.2100-108.5100-2-12-						0-M38774	27240	-0.05	317	61160	47	-54	6.6	44	1.5	3	0.8	8671	13.9	12960	21	0.4
30-45.2039-108.4950-2-12-						0-M38775	38470	-0.07	323	44900	38	-62	6.3	41	2.1	3	0.6	10610	7.0	16800	27	0.3
30-45.2156-108.4878-2-11-						0-M38776	10190	-0.02	219	11960	8	-21	2.8	11	0.6	1	0.4	1624	9.6	6636	5	0.1
30-45.2147-108.5006-2-12-						0-M38777	18860	-0.03	257	12010	15	-35	3.6	21	-0.7	2	0.5	4084	10.6	8526	11	0.2
30-45.1706-108.3694-2-15-						0-M38778	62540	-0.08	515	9873	88	-77	9.7	91	4.1	4	1.0	22490	10.4	16220	45	0.5
30-45.1869-108.2289-2-11-						0-M38779	42550	-0.07	389	49780	41	-78	6.8	40	-1.4	3	0.8	11570	8.0	16760	32	0.3
30-45.1864-108.2403-2-12-						0-M38780	45610	-0.05	346	56070	44	-68	8.0	40	2.2	3	0.9	12970	6.6	16100	25	0.3
30-45.1858-108.2367-2-12-						0-M38781	46850	-0.05	489	34410	54	-67	7.4	53	2.2	4	1.0	13110	12.3	13840	35	0.4
30-45.2047-108.1878-2-15-						0-M38782	36390	-0.05	502	11110	34	-59	6.4	42	1.7	2	0.7	9577	4.8	13590	20	0.2
30-45.2003-108.1786-2-15-						0-M38783	45840	-0.06	544	13910	47	-73	6.6	59	2.1	3	0.9	12440	9.9	13940	27	0.3
30-45.1908-108.1636-2-15-						0-M38784	40100	-0.04	614	25590	44	-58	6.4	52	1.0	2	0.7	10130	7.2	13130	23	0.2
30-45.1756-108.1881-2-15-						0-M38785	48330	-0.05	592	26550	56	-64	7.4	68	2.0	3	0.8	14020	8.1	13350	29	0.3
30-45.1664-108.2172-2-15-						0-M38786	51730	-0.06	474	35780	62	-76	9.2	53	2.6	3	1.0	16350	6.5	15270	31	0.3
30-45.1589-108.2147-2-11-						0-M38787	45820	-0.07	350	75270	47	-75	7.7	48	2.8	3	0.9	14370	4.9	20610	20	0.3
30-45.1600-108.2158-2-12-						0-M38788	43510	-0.05	358	67710	57	103	7.5	49	2.2	4	0.9	13370	7.8	16670	27	0.3
30-45.1514-108.2431-2-12-						0-M38789	31070	-0.04	449	54920	41	-53	4.4	40	1.4	3	0.8	8453	9.4	12310	21	0.3
30-45.1419-108.2459-2-11-						0-M38790	46160	-0.06	403	58580	72	-75	9.2	55	2.5	4	1.1	15340	7.9	20560	32	0.4
30-45.1417-108.2442-2-12-						0-M38791	45580	-0.07	337	60920	43	-75	6.2	42	-1.4	3	0.9	12920	6.8	16960	25	0.4
30-45.1069-108.2269-2-12-						0-M38792	30370	-0.04	246	71710	37	78	5.9	35	1.2	3	0.6	8120	10.7	12280	18	0.3
30-45.1075-108.2417-2-11-						0-M38793	38510	-0.05	389	82570	44	115	6.8	47	2.3	3	0.9	10970	6.4	14520	22	0.3
30-45.0986-108.2306-2-12-						0-M38794	31390	-0.05	342	78370	43	77	6.3	46	1.8	3	0.8	7989	8.6	13170	22	0.4
30-45.1019-108.2353-2-11-						0-M38795	26980	-0.05	294	94930	29	123	4.5	28	-1.1	2	0.6	7595	5.0	11680	9	0.1
30-45.1164-108.2103-2-12-						0-M38796	42220	-0.04	389	61190	39	-74	6.5	28	1.9	2	0.7	8988	3.6	15120	20	0.3
30-45.1367-108.2425-2-11-						0-M38797	39690	-0.05	317	83500	44	127	6.9	43	3.0	3	0.7	12360	5.9	19330	27	0.3
30-45.1356-108.2442-2-15-						0-M38798	37820	-0.05	268	70890	57	94	6.3	44	2.0	4	0.9	11510	8.9	15820	27	0.4
30-45.1675-108.2969-2-11-						0-M38799	36480	-0.07	428	99370	56	105	6.2	44	-1.5	3	0.6	9729	6.3	17490	24	0.2
30-45.1608-108.2669-2-11-						0-M38800	38990	-0.04	740	26920	46	-63	6.0	36	1.9	3	0.8	9815	9.1	15050	25	0.3
30-45.1725-108.2531-2-11-						0-M38801	19660	-0.04	1806	127700	25	-56	3.3	22	-0.7	2	1.0	5193	11.9	8883	19	0.2
30-45.7629-109.9711-2-15-						0-M38807	74420	-0.09	910	19490	61	-97	14.7	169	3.6	4	1.0	25900	4.2	19090	34	0.3
30-45.9522-109.9728-2-12-						0-M38808	66970	-0.06	724	25680	59	-109	14.0	188	2.7	3	0.9	26990	4.3	12790	33	0.3
30-45.8525-109.9758-2-12-						0-M38809	61300	-0.06	656	42410	63	-82	11.4	129	3.1	3	1.0	23190	5.7	12900	34	0.3
30-45.8597-109.9069-2-12-						0-M38811	57910	-0.06	806	28970	68	-83	11.7	184	1.5	3	1.1	22440	7.3	11220	38	0.4
30-45.8597-109.8958-2-15-						0-M38812	69280	-0.08	763	34020	59	-97	13.8	182	3.4	3	1.0	26260	3.8	13780	31	0.4
30-45.8944-109.9956-2-12-						0-M38817	62870	-0.06	742	19430	55	-105	11.2	135	2.0	3	0.9	22160	7.1	11920	35	0.3
30-45.9333-109.9881-2-12-						0-M38822	68080	-0.06	767	24530	53	-84	11.2	93	2.2	3	1.0	24600	4.2	14890	34	0.3
30-45.9631-109.9711-2-12-						0-M38824	49210	-0.06	571	39290	70	-80	10.4	134	1.8	3	1.1	20280	7.0	11350	33	0.3
30-45.9892-109.8889-2-12-						0-M38827	56830	-0.08	691	17880	62	-100	10.6	100	-1.7	3	0.8	19370	6.5	11130	32	0.2
30-45.9881-109.8897-2-12-						0-M38828	56350	-0.06	615	25930	54	-110	11.2	126	2.0	2	0.9	19980	6.2	10670	32	0.3
30-45.9475-109.8992-2-12-						0-M38830	57530	-0.06	698	35110	61	-85	11.2	130	2.0	3	0.9	20830	6.2	11040	33	0.3
30-45.9183-109.9175-2-12-						0-M38832	63680	-0.07	874	23260	71	-90	13.0	197	2.7	3	1.1	24040	6.4	9838	39	0.3
30-45.8969-109.9297-2-15-						0-M38834	71840	-0.09	895	21210	61	-107	14.0	146	3.1	3	1.2	25830	3.9	14830	33	-0.2
30-45.7583-109.8622-2-12-						0-M38837	78870	-0.06	729	43970	53	-124	13.1	41	-1.3	2	1.0	33470	2.9	11180	34	0.2
30-45.7756-109.8053-2-12-						0-M38838	74900	0.54	728	40540	67	-112	16.4	64	-1.4	2	1.0	58790	3.6	12050	36	0.3
30-45.5419-108.9150-2-12-						0-M38840	59560	-0.06	587	36580	66	153	6.9	40	2.8	3	1.0	13050	6.2	14130	32	0.3
30-45.5433-108.9147-2-12-						0-M38841	55630	-0.06	619	31730	56	126	5.0	27	2.2	3	0.9	10870	7.0	12890	33	0.3

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
30-45.2172-108.5703-2-12-						0-438758	35670	251	5216	24	-1	4.7	2.8	-206		-1	6.1	2778	43	2.2	36	0.362
30-45.2067-108.5569-2-12-						0-438769	70130	199	3921	-18	-2	3.7	1.9	-214	-1	-1	4.4	1643	35	-1.0	81	0.405
30-45.2150-108.5506-2-12-						0-438770	26990	124	5898	-14	-1	3.4	2.4	321	-1	-1	5.8	1748	29	2.4	46	0.353
30-45.2167-108.5872-2-15-						0-438771	21440	537	7708	-22	-2	5.5	1.8	-351	-1	-1	6.3	3092	69	2.1	-31	0.390
30-45.2108-108.5447-2-12-						0-438772	22040	179	4111	-11	-1	3.3	2.6	-157		-1	5.1	2196	31	2.5	58	0.424
30-45.2136-108.5119-2-12-						0-438773	2185	74	2087	-11	-1	2.0	1.0	-115	-1		3.2	967	18	2.0	-28	0.669
30-45.2100-108.5100-2-12-						0-438774	29370	314	3283	-15	-2	4.3	3.6	-226	-1	-1	7.3	2999	32	2.9	-45	0.297
30-45.2039-108.4950-2-12-						0-438775	27300	267	4267	-22	-2	5.8	2.4	-247	-1	-1	6.2	2864	41	2.3	-39	0.340
30-45.2156-108.4878-2-11-						0-438776	10740	24	1001	-8	-1	0.9	0.6	-83			1.5	715	10	0.9	-13	1.107
30-45.2147-108.5006-2-12-						0-438777	10410	82	3110	-12	-1	2.2	1.1	-121	-1		2.6	1304	17	1.3	-26	0.665
30-45.1706-108.3694-2-15-						0-438778	17230	464	7426	53	-2	9.8	5.7	-322	-1	-1	12.7	4462	100	3.7	106	0.226
30-45.1869-108.2289-2-11-						0-438779	21250	348	7719	-23	-2	5.6	2.6	-283	-1	-1	7.1	2738	53	2.1	-36	0.304
30-45.1864-108.2403-2-12-						0-438780	21980	417	7918	37	-2	6.3	3.6	-255	-1	-1	6.6	3244	54	3.0	67	0.314
30-45.1858-108.2367-2-12-						0-438781	17340	438	7287	37	-2	6.7	4.1	-248	-1	-1	8.2	3383	56	3.0	85	0.311
30-45.2047-108.1878-2-15-						0-438782	9115	324	6541	-15	-1	4.5	2.7	-229	-1	-1	5.3	1863	38	-1.3	-52	0.277
30-45.2003-108.1786-2-15-						0-438783	11990	381	8635	-21	-2	6.1	2.7	-271	-1	-1	6.6	2752	63	2.4	-34	0.365
30-45.1908-108.1636-2-15-						0-438784	21270	291	7954	27	-1	5.0	2.8	294		-1	5.9	2360	56	2.8	46	0.342
30-45.1756-108.1891-2-15-						0-438785	24650	368	8058	34	-2	6.6	3.8	-233	-1	-1	7.1	3242	66	2.9	70	0.339
30-45.1654-108.2172-2-15-						0-438786	30800	476	8028	45	-2	7.7	4.5	-299	-1	-1	9.0	3157	60	2.7	94	0.229
30-45.1589-108.2147-2-11-						0-438787	57240	384	5619	-24	-2	7.0	2.6	345	-1	-1	6.3	2582	54	-1.7	-41	0.414
30-45.1600-108.2158-2-12-						0-438788	56910	470	6280	40	-1	6.7	4.3	-258		-1	7.3	3433	55	2.7	53	0.349
30-45.1514-108.2431-2-12-						0-438789	17210	243	6654	33	-1	3.7	3.9	-183	-1	-1	6.3	2379	37	3.0	43	0.349
30-45.1419-108.2458-2-11-						0-438790	30280	421	6136	53	-2	7.3	5.1	-302	-1	-1	9.3	3279	47	3.4	-47	0.222
30-45.1417-108.2442-2-12-						0-438791	35640	398	6847	-22	-2	6.3	3.4	-288	-1	-1	7.7	2882	48	2.7	-34	0.270
30-45.1069-108.2269-2-12-						0-438792	42370	298	5003	25	-1	4.2	2.6	-211		-1	4.5	2374	37	2.0	-39	0.471
30-45.1075-108.2417-2-11-						0-438793	55700	380	6180	33	-1	6.0	3.1	-229	-1	-1	5.4	2585	53	1.7	-27	0.411
30-45.0986-108.2306-2-12-						0-438794	42350	233	6927	37	-2	4.3	3.1	-210	-1	-1	5.9	2452	35	3.0	63	0.342
30-45.1019-108.2353-2-11-						0-438795	57080	234	3048	-17	-2	3.8	2.2	-209	-1	-1	3.6	1895	36	2.0	-33	0.622
30-45.1154-108.2103-2-12-						0-438796	32240	271	8470	31	-1	4.5	3.2	-257		-1	5.3	2077	39	2.7	37	0.306
30-45.1367-108.2425-2-11-						0-438797	110800	297	3571	40	-2	6.3	3.2	-239	-1	-1	6.0	3015	59	2.3	58	0.392
30-45.1356-108.2442-2-15-						0-438798	46870	446	7201	20	-2	5.8	4.2	-239	-1	-1	6.9	2585	45	2.7	70	0.297
30-45.1675-108.2969-2-11-						0-438799	40390	244	3200	-24	-2	4.4	2.5	-265	-1	-1	7.8	1791	34	-1.7	106	0.227
30-45.1608-108.2669-2-11-						0-438800	11470	188	6220	23	-1	4.8	3.5	-218	-1	-1	5.3	2468	64	2.0	37	0.415
30-45.1725-108.2531-2-11-						0-438801	9389	318	4572	24	-1	2.1	2.3	357	-1		3.5	1204	19	1.7	36	0.517
30-45.7628-109.9711-2-15-						0-438807	27680	481	12190	-33	-3	11.9	2.1	425	-1	-1	6.9	3915	106	-2.0	-84	0.599
30-45.8522-109.9728-2-12-						0-438808	22310	759	13420	30	-2	10.7	3.6	-416	-1	-1	6.2	4006	111	2.4	101	0.344
30-45.8525-109.9758-2-12-						0-438809	26380	666	10520	-21	-2	9.6	4.0	622	-1	-1	6.9	3995	93	2.8	121	0.322
30-45.8597-109.9069-2-12-						0-438811	20460	635	14090	-19	-2	8.0	4.2	-297	-1	-1	6.9	3686	95	2.6	81	0.301
30-45.8597-109.8958-2-15-						0-438812	29300	683	12290	-29	-3	11.5	3.0	641	-1	-1	6.4	3628	106	2.2	-45	0.325
30-45.8944-109.9956-2-12-						0-438817	21830	603	13660	31	-2	8.9	3.8	-371	-1	-1	6.8	4130	93	2.2	65	0.332
30-45.9333-109.9881-2-12-						0-438822	28490	566	14110	45	-2	9.9	3.8	-292	-1	-1	6.6	3942	100	2.1	111	0.326
30-45.9631-109.9711-2-12-						0-438824	21500	710	11140	26	-2	7.5	4.3	628	-1	-1	6.5	2825	73	3.1	85	0.312
30-45.9892-109.8889-2-12-						0-438827	16340	630	13840	-26	-2	8.0	-2.4	-361	-1	-1	6.9	2868	80	-1.7	-38	0.335
30-45.9881-109.8897-2-12-						0-438828	15980	735	14020	-18	-2	7.9	3.4	-402	-1	-1	6.9	3254	89	-1.2	-34	0.326
30-45.9475-109.8992-2-12-						0-438830	22970	636	11900	36	-2	8.5	3.9	-311	-1	-1	6.3	3477	92	2.8	103	0.349
30-45.9183-109.9175-2-12-						0-438832	18980	595	15190	-21	-2	9.5	4.7	669	-1	-1	7.2	3523	99	3.4	93	0.311
30-45.8969-109.9297-2-15-						0-438834	22720	868	12110	-33	-3	11.2	3.4	633	-1	-1	7.0	3566	118	3.1	-50	0.324
30-45.7583-109.8622-2-12-						0-438837	22100	927	18110	-20	-2	9.9	3.7	982	-1	-1	4.6	3488	123	2.3	108	0.246
30-45.7756-109.8053-2-12-						0-438838	21790	1180	17720	-23	-2	10.3	3.5	774	-1	-1	4.4	5662	224	1.9	141	0.277
30-45.5419-108.9150-2-12-						0-438840	21450	367	11890	43	-2	5.8	4.6	-257	-1	-1	7.8	2445	79	3.6	84	0.333
30-45.5433-108.9147-2-12-						0-438841	15410	209	12820	-23	-2	4.7	2.6	476	-1	-1	6.1	2100	66	-1.5	89	0.387

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																											U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
30-45.5628-108.9519-2-12-						0-M38943-06/27/78-15-	32-	17.0-	C-	-	-	8.0-	2000-	5-1-6-4-8-	-3-1-1-6-4-4-1-	-3-	-	-	-	-	2.28											
30-45.5678-108.9972-2-12-						0-M38945-06/27/78-16-	29-	18.0-	-	-	-	8.5-	1100-	12-1-6-5-6-3-3-3-1-2-3-3-1-	-3-	-	-	-	-	2.56											
30-45.6247-108.9492-2-12-						0-M38950-06/28/78-10-	21-	18.0-	-	-	-	7.9-	1800-	8-1-6-5-6-3-3-3-2-4-4-2-1-	-3-	-	-	-	-	2.34											
30-45.6167-109.0069-2-12-						0-M38954-06/28/78-12-	22-	20.0-	-	-	-	8.2-	1300-	9-1-6-4-6-2-2-1-2-2-4-3-1-	-3-	-	-	-	-	2.72											
30-45.6014-109.0603-2-12-						0-M38956-06/28/78-13-	28-	22.0-	-	-	-	8.1-	1000-	9-1-6-4-6-2-2-2-1-3-3-3-1-	-3-	-	-	-	-	2.58											
30-45.8569-109.8489-2-15-						0-M38859-07/01/78-10-	20-		-C-	-		-	-	10-1-6-7-6-	- - - -4-4-2-1-	-3-	-	-	-	-	2.11											
30-45.8528-109.8344-2-12-						0-M38861-07/01/78-10-	21-	19.0-	-	-	-	8.3-	800-	18-1-6-4-7-2-2-2-1-4-3-2-1-	-3-	-	-	-	-	2.17											
30-45.8297-109.8406-2-15-						0-M38862-07/01/78-	-	24-	-C-	-	-	-	-	11-1-6-7-7-	- - -1-4-3-4-1-	-3-	-	-	-	-	1.91											
30-45.8564-109.8017-2-15-						0-M38863-07/01/78-11-	22-		-C-	-	-	-	-	12-1-6-7-6-	- - -1-4-3-3-1-	-3-	-	-	-	-	2.46											
30-45.8564-109.7972-2-15-						0-M38864-07/01/78-11-	30-		- - -	-	-	-	-	8-1-6-7-7-	- - -1-4-3-2-1-	-3-	-	-	-	-	2.10											
30-45.8497-109.7547-2-15-						0-M38865-07/01/78-11-	29-		- - -	-	-	-	-	12-1-6-7-7-	- - - -4-3-3-1-	-3-	-	-	-	-	2.08											
30-45.8656-109.7306-2-12-						0-M38869-07/01/78-13-	27-	18.0-	-	-	-	7.7-	750-	15-1-6-5-7-2-2-1-1-3-3-3-1-	-3-	-	-	-	-	3.15											
30-45.8539-109.7517-2-15-						0-M38870-07/01/78-13-	28-		- - -	-	-	-	-	13-1-6-4-6-	-1- - -4-3-3-1-	-3-	-	-	-	-	2.23											
30-45.8433-109.7342-2-15-						0-M38871-07/01/78-14-	29-		-C-	-	-	-	-	10-1-6-	-6- -1- -1-4-4-3-1-	-3-	-	-	-	-	2.28											
30-45.8139-109.7342-2-12-						0-M38873-07/01/78-15-	31-	28.0-	-	-	-	7.7-	800-	11-1-6-5-5-2-2-5-1-4-4-2-2-	-3-	-	-	-	-	2.35											
30-45.7972-109.7103-2-12-						0-M38874-07/01/78-15-	20-	17.0-	-	-	-	7.7-	650-	10-1-6-5-6-3-2-1-1-4-3-3-2-	-3-	-	-	-	-	2.47											
30-45.7728-109.8036-2-12-						0-M38878-07/01/78-17-	19-	11.5-	-	-	-	7.5-	240-	6-1-6-5-8-3-3-2-1-2-4-2-2-	-3-	-	-	-	-	1.31											
30-45.7900-109.8639-2-12-						0-M38882-07/01/78-17-	26-	17.0-	-	-	-	7.5-	270-	16-1-6-5-6-2-3-2-1-4-4-4-2-	-3-	-	-	-	-	2.09											
30-45.7972-109.8917-2-12-						0-M38884-07/01/78-19-	25-	12.0-	-	-	-	7.5-	150-	17-1-6-	- -4-3-2-2-4-3-3-2-	-3-	-	-	-	-	2.14											
30-45.9172-109.8133-2-12-						0-M38890-07/02/78-	8-	17-	14.0-	-	-	7.9-	550-	13-1-6-6-8-2-2-5-1-4-3-2-2-	-3-	-	-	-	-	2.32											
30-45.9378-109.7889-2-15-						0-M38891-07/02/78-	9-	19-		-C-	-	-	-	11-1-6-7-6-	-1- - -4-2-2-2-	-3-	-	-	-	-	2.25											
30-45.9611-109.7678-2-15-						0-M38892-07/02/78-	9-	22-		-C-	-	-	-	12-1-6-7-6-	-1- - -4-2-3-2-	-3-	-	-	-	-	2.32											
30-45.9728-109.7453-2-12-						0-M38893-07/02/78-	9-	21-	15.0-	-	-	8.5-	600-	12-1-6-3-7-3-3-3-2-1-4-3-2-	-3-	-	-	-	-	2.31											
30-45.9350-109.8028-2-15-						0-M38894-07/02/78-10-	24-		-C-	-	-	-	-	18-1-6-7-6-	- - - -4-3-3-2-	-3-	-	-	-	-	2.65											
30-45.9067-109.7778-2-15-						0-M38895-07/02/78-10-	25-		-C-	-	-	-	-	11-1-6-7-6-	- - - -4-3-3-2-	-3-	-	-	-	-	2.39											
30-45.9150-109.7678-2-15-						0-M38896-07/02/78-11-	23-		-C-	-	-	-	-	13-1-6-7-6-	- - -2-1-4-3-2-	-3-	-	-	-	-	2.59											
30-45.9133-109.7131-2-12-						0-M38898-07/02/78-11-	22-	17.0-	-	-	-	8.4-	700-	12-1-6-5-6-3-3-2-2-4-3-3-2-	-3-	-	-	-	-	2.58											
30-45.8981-109.7164-2-12-						0-M38900-07/02/78-12-	25-	12.0-	-	-	-	7.5-	650-	8-1-6-4-6-3-3-2-2-4-3-3-2-	-3-	-	-	-	-	2.57											
30-45.8981-109.6722-2-15-						0-M38901-07/02/78-12-	27-		- - -	-	-	-	-	9-1-6-7-6-	- - - -4-3-3-2-	-3-	-	-	-	-	2.64											
30-45.9008-109.6106-2-12-						0-M38903-07/02/78-12-	24-	17.0-	-	-	-	8.2-	650-	12-1-6-5-6-2-2-1-1-6-4-3-2-	-3-	-	-	-	-	2.91											
30-45.9089-109.6475-2-11-						0-M38906-07/02/78-13-	27-	18.0-	C-	-	-	7.9-	800-	10-1-6-5-8-2-2-5-1-4-2-3-2-	-3-	-	-	-	-	2.91											
30-45.8906-109.7336-2-15-						0-M38908-07/02/78-14-	24-		- - -	-	-	-	-	15-1-6-	-6- -1- -2-4-3-3-2-	-3-	-	-	-	-	2.53											
30-45.5094-109.0797-2-12-						0-M38909-07/06/78-10-	22-	16.0-	-	-	-	8.3-	1300-	16-1-6-4-6-3-2-1-1-6-4-3-3-	-3-	-	-	-	-	2.85											
30-45.7619-109.5458-2-12-						0-M38910-07/08/78-10-	19-	15.0-	-	-	-	8.5-	900-	16-1-6-6-8-2-2-2-1-4-3-4-3-	-3-	-	-	-	-	2.42											
30-45.7719-109.5469-2-12-						0-M38911-07/08/78-10-	19-	18.0-	-	-	-	7.9-	800-	17-1-6-3-6-3-3-3-2-4-3-4-3-	-3-	-	-	-	-	2.36											
30-45.7589-109.5214-2-12-						0-M38914-07/08/78-12-	19-	18.0-	C-	-10.0-	-	1900-	9-1-6-5-8-2-2-5-1-4-3-2-3-	-3-	-	-	-	-	2.31											
30-45.7694-109.5403-2-15-						0-M38916-07/08/78-12-	19-		-C-	-	-	-	-	10-1-6-4-6-	- - -1-4-3-3-3-	-3-	-	-	-	-	2.15											
30-45.7911-109.6322-2-15-						0-M38918-08/07/78-13-	25-		- - -	-	-	-	-	13-1-6-5-6-	- - -1-4-3-3-2-	-1-	-	-	-	-	2.54											
30-45.7939-109.5672-2-15-						0-M38919-07/08/78-14-	27-		-C-	-	-	-	-	13-1-6-7-6-	- - -1-4-3-2-2-	-1-	-	-	-	-	2.30											
30-45.8178-109.5689-2-12-						0-M38921-08/07/78-14-	25-	16.5-	-	-	-	8.3-	700-	13-1-6-3-6-3-2-2-2-4-4-3-2-	-3-	-	-	-	-	2.47											
30-45.7931-109.5728-2-12-						0-M38922-08/07/78-15-	24-	18.0-	C-	-	-	8.7-	750-	8-1-6-4-6-3-2-2-2-4-3-2-2-	-3-	-	-	-	-	2.30											
30-45.7544-109.4486-2-12-						0-M38923-07/12/78-10-	20-	16.0-	-	-	-	8.8-	800-	15-1-6-4-8-3-3-4-2-4-3-3-1-	-3-	-	-	-	-	2.44											
30-45.7683-109.4636-2-15-						0-M38924-07/12/78-10-	19-		- - -	-	-	-	-	8-1-6-5-6-	- - -1-4-3-3-1-	-3-	-	-	-	-	2.32											
30-45.7686-109.4744-2-12-						0-M38925-07/12/78-10-	21-	16.0-	-	-	-	8.8-	1700-	-1-6-5-6-2-3-5-1-4-3-2-1-	-3-	-	-	-	-	2.88											
30-45.7919-109.4836-2-15-						0-M38926-07/12/78-11-	27-		-C-	-	-	-	-	10-1-6-7-6-	- - -2-4-3-2-1-	-3-	-	-	-	-	2.36											
30-45.7933-109.4831-2-15-						0-M38927-07/12/78-11-	21-		-C-	-	-	-	-	11-1-6-5-6-	- - -2-4-3-2-1-	-3-	-	-	-	-	2.57											
30-45.7994-109.4661-2-12-						0-M38928-07/12/78-11-	22-	15.0-	C-	-	-	8.6-	1050-	9-1-6-3-6-3-3-5-2-4-3-2-1-	-3-	-	-	-	-	2.48											
30-45.8153-109.4700-2-12-						0-M38930-07/12/78-11-	21-	19.0-	-	-	-	8.4-	900-	12-1-6-4-7-3-3-1-2-4-2-4-1-	-3-	-	-	-	-	2.32											
30-45.8178-109.4414-2-12-						0-M38931-07/12/78-12-	28-	21.0-	-	-	-	8.2-	1700-	12-1-6-5-7-2-2-2-1-4-3-2-1-	-3-	-	-	-	-	2.57											
30-45.8394-109.4417-2-15-						0-M38932-07/12/78-12-	27-		- - -	-	-	-	-	10-1-6-4-6-	- - -1-4-3-2-1-	-3-	-	-	-	-	2.62											
30-45.8564-109.4419-2-12-						0-M38933-07/12/78-12-	22-	17.0-	-	-	-	8.0-	600-	9-1-6-5-8-2-2-2-1-6-3-3-1-	-3-	-	-	-	-	2.69											

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
30-45.5629-108.9519-2-12-						0-M38843	-5	-5	-5	22	-20	-15	6	-10	-15	2	59
30-45.5678-108.9972-2-12-						0-M38845	-5	-5	-5	18	-20	-15	5	-10	-15	2	55
30-45.6247-108.9492-2-12-						0-M38850	-5	-5	-5	18	-20	-15	8	-10	-15	3	60
30-45.6167-109.0069-2-12-						0-M38854	-5	-5	-5	18	-20	-15	-5	-10	-15	2	30
30-45.6014-109.0603-2-12-						0-M38856	-5	-5	-5	15	-20	-15	7	-10	-15	1	24
30-45.8569-109.8489-2-15-						0-M38860	-5	-5	-5	31	-20	52	5	-10	-15	2	28
30-45.8528-109.8344-2-12-						0-M38861	-5	-5	-5	37	-20	51	11	-10	-15	2	46
30-45.8297-109.8406-2-15-						0-M38862	-5	-5	-5	39	-20	79	13	-10	-15	1	35
30-45.8564-109.8017-2-15-						0-M38863	-5	-5	-5	43	-20	39	10	-10	-15	2	48
30-45.9564-109.7972-2-15-						0-M38864	-5	-5	-5	33	-20	49	10	-10	-15	2	18
30-45.8697-109.7547-2-15-						0-M38865	-5	-5	-5	53	-20	76	7	-10	-15	2	20
30-45.8656-109.7306-2-12-						0-M38869	-5	-5	-5	37	-20	54	11	-10	-15	2	47
30-45.8539-109.7517-2-15-						0-M38870	-5	5	-5	35	-20	61	12	-10	-15	2	21
30-45.8433-109.7342-2-15-						0-M38871	-5	-5	-5	24	-20	28	18	-10	-15	2	27
30-45.9139-109.7342-2-12-						0-M38873	-5	-5	-5	26	-20	29	9	-10	-15	2	26
30-45.7972-109.7103-2-12-						0-M38874	-5	-5	-5	26	-20	22	5	-10	-15	2	23
30-45.7728-109.8036-2-12-						0-M38878	-5	-5	-5	22	-20	-15	6	-10	-15	1	28
30-45.7900-109.8639-2-12-						0-M38882	-5	-5	-5	41	-20	69	17	-10	-15	2	14
30-45.7972-109.8917-2-12-						0-M38884	-5	5	-5	31	-20	67	12	-10	-15	2	29
30-45.9172-109.8133-2-12-						0-M38890	-5	-5	-5	31	-20	52	6	-10	-15	2	25
30-45.9378-109.7889-2-15-						0-M38891	-5	-5	-5	42	-20	43	14	-10	-15	2	36
30-45.9611-109.7678-2-15-						0-M38892	-5	-5	-5	32	-20	50	6	-10	-15	2	14
30-45.9728-109.7453-2-12-						0-M38893	-5	-5	-5	27	-20	16	9	-10	-15	2	38
30-45.9350-109.8028-2-15-						0-M38894	-5	-5	-5	42	-20	42	9	-10	-15	1	18
30-45.9067-109.7778-2-15-						0-M38895	-5	-5	-5	45	-20	60	11	-10	-15	2	29
30-45.9150-109.7678-2-15-						0-M38896	-5	-5	-5	31	-20	36	12	-10	-15	2	42
30-45.9133-109.7131-2-12-						0-M38898	-5	-5	-5	30	-20	25	8	-10	-15	2	35
30-45.8981-109.7164-2-12-						0-M38899	-5	-5	-5	17	-20	18	5	-10	-15	2	40
30-45.8981-109.6722-2-15-						0-M38901	-5	-5	-5	29	-20	25	9	-10	-15	3	62
30-45.9008-109.6106-2-12-						0-M38903	-5	-5	-5	26	-20	-15	9	-10	-15	2	50
30-45.9089-109.6475-2-11-						0-M38906	-5	-5	-5	29	-20	-15	9	-10	-15	2	70
30-45.8906-109.7336-2-15-						0-M38908	-5	-5	-5	28	-20	40	7	-10	-15	1	28
30-45.5094-109.0797-2-12-						0-M38909	-5	-5	-5	25	-20	-15	6	-10	-15	2	40
30-45.7619-109.5458-2-12-						0-M38910	-5	-5	-5	29	-20	35	12	-10	-15	2	46
30-45.7719-109.5469-2-12-						0-M38911	-5	-5	-5	17	-20	22	-5	-10	-15	1	46
30-45.7589-109.5214-2-12-						0-M38914	-5	-5	-5	30	-20	35	9	-10	-15	2	30
30-45.7694-109.5403-2-15-						0-M38916	-5	-5	-5	30	-20	21	6	-10	-15	1	27
30-45.7911-109.6322-2-15-						0-M38918	-5	-5	-5	38	-20	22	13	-10	-15	2	28
30-45.7939-109.5672-2-15-						0-M38919	-5	-5	-5	18	-20	39	11	-10	-15	1	32
30-45.8178-109.5689-2-12-						0-M38921	-5	-5	-5	29	-20	23	7	-10	-15	2	44
30-45.7831-109.5728-2-12-						0-M38922	-5	-5	-5	26	-20	24	6	-10	-15	2	38
30-45.7644-109.4486-2-12-						0-M38923	-5	-5	-5	17	-20	19	-5	-10	-15	2	40
30-45.7683-109.4636-2-15-						0-M38924	-5	-5	-5	30	-20	39	-5	-10	-15	2	50
30-45.7686-109.4744-2-12-						0-M38925	-5	-5	-5	25	-20	21	8	-10	-15	1	53
30-45.7919-109.4836-2-15-						0-M38926	-5	-5	-5	31	-20	27	13	-10	-15	2	49
30-45.7933-109.4831-2-15-						0-M38927	-5	-5	-5	27	-20	27	13	-10	-15	1	30
30-45.7994-109.4661-2-12-						0-M38928	-5	-5	-5	27	-20	-15	6	-10	-15	2	36
30-45.8153-109.4700-2-12-						0-M38930	-5	-5	-5	25	-20	-15	7	-10	-15	1	37
30-45.8178-109.4414-2-12-						0-M38931	-5	-5	-5	20	-20	29	11	-10	-15	1	46
30-45.8394-109.4417-2-15-						0-M38932	-5	-5	-5	20	-20	-15	6	-10	-15	1	56
30-45.8564-109.4419-2-12-						0-M38933	-5	-5	-5	29	-20	32	10	-10	-15	2	47

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
30-45.5528-108.9519-2-12-						0-M38943	51430	-0.06	481	31800	49	-88	7.9	39	2.9	2	0.8	13740	4.9	13120	30	0.3
30-45.5678-108.9972-2-12-						0-M38945	47170	-0.05	538	46310	50	-67	5.6	41	2.7	3	0.7	10450	5.5	12420	29	0.2
30-45.6247-108.9492-2-12-						0-M38950	54440	-0.06	527	32380	65	-74	7.2	55	3.4	3	1.0	12740	6.6	13340	30	0.4
30-45.6167-109.0069-2-12-						0-M38954	48070	-0.06	594	23680	52	80	5.6	52	3.0	3	0.9	11410	11.0	12850	29	0.4
30-45.6014-109.0603-2-12-						0-M38956	51350	-0.04	484	20480	56	-85	5.5	54	2.2	2	0.8	10140	11.3	12740	30	0.4
30-45.8569-109.8489-2-15-						0-M38959	65340	-0.07	788	34210	82	-97	13.1	255	2.4	3	1.0	29810	6.1	11010	39	0.3
30-45.8528-109.8344-2-12-						0-M38961	66040	-0.09	645	38650	71	-99	12.7	151	3.2	3	0.9	25350	4.7	12460	35	0.4
30-45.8297-109.8406-2-15-						0-M38962	66980	-0.07	621	45890	50	129	15.7	222	3.3	3	1.1	27420	4.2	15230	30	0.3
30-45.8564-109.8017-2-15-						0-M38963	69320	-0.07	657	29510	66	-89	12.5	135	3.8	3	1.0	24240	4.5	15490	35	0.3
30-45.8564-109.7972-2-15-						0-M38964	62160	-0.07	689	39800	70	-81	13.5	159	2.6	3	1.0	24460	5.2	15280	35	0.4
30-45.8697-109.7547-2-15-						0-M38965	67860	-0.09	854	25900	63	-91	14.9	192	4.4	3	1.0	30360	4.7	13590	31	0.3
30-45.8656-109.7306-2-12-						0-M38969	55890	-0.05	624	55730	52	-100	11.9	170	1.7	-1	1.1	21640	5.5	10720	31	0.3
30-45.8539-109.7517-2-15-						0-M38970	68720	-0.07	731	41800	52	130	14.7	159	3.3	3	0.9	27230	4.5	17330	38	0.2
30-45.8433-109.7342-2-15-						0-M38971	62800	-0.07	798	29080	85	-90	12.5	166	2.5	4	1.1	25640	7.2	13890	38	0.4
30-45.8139-109.7342-2-12-						0-M38973	57660	-0.08	563	33370	62	-94	10.5	160	2.4	3	1.1	22010	7.2	10370	31	0.3
30-45.7972-109.7103-2-12-						0-M38974	57990	-0.05	664	34070	55	-88	9.4	109	2.5	3	0.9	18080	6.1	13060	30	0.3
30-45.7729-109.8036-2-12-						0-M38978	81480	-0.06	872	40380	48	-110	13.1	61	-1.4	2	1.0	29450	3.5	13730	32	0.2
30-45.7900-109.8639-2-12-						0-M38982	74200	-0.09	779	24540	82	-97	18.7	180	3.5	4	1.1	29540	4.4	16230	38	0.4
30-45.7972-109.8917-2-12-						0-M38984	69360	-0.09	884	26000	68	-105	12.9	238	1.9	3	0.9	26060	4.9	15420	32	0.3
30-45.9172-109.8133-2-12-						0-M38990	55790	-0.06	594	41550	49	-100	11.5	97	2.7	3	0.8	18810	4.5	8722	31	0.3
30-45.9378-109.7889-2-15-						0-M38991	66270	-0.06	577	35130	63	-80	12.4	121	3.2	3	0.9	23090	4.5	13230	35	0.3
30-45.9411-109.7678-2-15-						0-M38992	71570	-0.07	825	19640	87	-88	14.6	212	3.2	3	1.3	29810	5.3	17210	37	0.4
30-45.9728-109.7453-2-12-						0-M38993	46200	-0.07	429	42890	45	-77	6.9	53	-1.4	3	0.9	14280	5.7	11890	26	0.2
30-45.9350-109.8028-2-15-						0-M38994	64420	-0.07	787	33290	48	-104	12.9	133	3.0	3	1.1	22020	4.2	13710	30	0.3
30-45.9067-109.7778-2-15-						0-M38995	67040	-0.06	674	25470	54	-71	13.0	107	3.9	3	0.9	23160	5.2	15050	31	0.3
30-45.9150-109.7678-2-15-						0-M38996	60630	-0.05	404	37700	56	-69	10.0	79	3.4	3	1.0	19680	5.5	13530	28	0.4
30-45.9133-109.7131-2-12-						0-M38998	54340	-0.07	447	42770	51	-79	7.5	73	3.3	3	0.7	15110	5.7	12780	33	0.3
30-45.8981-109.7164-2-12-						0-M38999	51060	-0.05	520	43790	60	-81	9.0	79	2.8	3	0.8	14700	7.1	10910	31	0.3
30-45.8981-109.6722-2-15-						0-M39001	58480	-0.06	641	40070	53	-70	10.1	103	3.4	3	0.9	19380	6.0	14350	30	0.3
30-45.9008-109.6106-2-12-						0-M39003	60450	-0.08	586	39150	56	-79	8.4	70	3.8	3	0.9	17940	4.3	15950	31	0.3
30-45.9089-109.6475-2-11-						0-M39006	51450	-0.06	391	55010	52	-86	8.3	65	3.1	3	0.9	14720	6.1	11510	27	0.3
30-45.8906-109.7336-2-15-						0-M39008	61980	-0.06	617	32550	61	-63	10.8	131	3.3	3	1.0	21140	6.4	13070	32	0.3
30-45.5094-109.0797-2-12-						0-M39009	68190	-0.06	588	24470	85	-72	8.6	70	3.6	4	1.0	17520	7.2	14910	36	0.4
30-45.7619-109.5458-2-12-						0-M39010	64240	-0.08	616	29220	59	-82	11.0	116	3.0	4	1.1	20170	5.2	15550	30	0.3
30-45.7719-109.5469-2-12-						0-M39011	50520	-0.05	580	40910	51	153	7.9	74	1.9	3	0.8	13990	5.1	12140	25	0.3
30-45.7589-109.5214-2-12-						0-M39014	60490	-0.07	655	38460	63	-78	12.1	142	4.1	4	0.9	20820	6.5	14600	39	0.3
30-45.7594-109.5403-2-15-						0-M39016	57260	-0.07	581	32870	46	-84	8.3	96	2.1	3	0.9	15730	4.2	15660	26	0.3
30-45.7911-109.6327-2-15-						0-M39019	63510	-0.06	447	10050	65	-98	9.9	84	3.1	3	0.9	19550	5.6	15610	34	0.3
30-45.7939-109.5672-2-15-						0-M39019	57530	-0.05	612	29230	55	-75	9.8	129	2.6	3	0.9	19430	5.7	16120	31	0.3
30-45.8178-109.5689-2-12-						0-M39021	66150	-0.08	677	41410	67	-79	13.0	139	2.9	4	1.0	23460	6.0	15200	41	0.4
30-45.7831-109.5728-2-12-						0-M39022	53610	-0.07	563	33300	57	-82	7.7	92	2.3	3	0.9	16410	5.4	11660	29	0.3
30-45.7644-109.4486-2-12-						0-M39023	47600	-0.04	411	40640	54	-85	6.8	66	2.2	3	0.8	11300	7.4	12970	30	0.4
30-45.7683-109.4636-2-15-						0-M39024	59470	-0.06	612	45360	55	-78	8.6	86	2.9	3	0.9	17770	4.7	15780	30	0.3
30-45.7686-109.4744-2-12-						0-M39025	55320	-0.08	562	60040	59	132	10.4	102	3.2	3	1.3	18020	5.8	16660	26	0.4
30-45.7919-109.4836-2-15-						0-M39026	59960	-0.07	537	38510	47	-82	9.4	92	2.8	3	0.8	18930	4.8	14790	28	0.3
30-45.7933-109.4831-2-15-						0-M39027	57910	-0.05	658	39450	61	-79	9.7	105	2.9	3	1.0	18640	6.1	13230	30	0.4
30-45.7994-109.4661-2-12-						0-M39028	52500	-0.05	573	41640	55	-71	7.8	87	2.9	3	0.8	15000	6.9	14920	33	0.3
30-45.8153-109.4700-2-12-						0-M39030	46680	-0.06	596	39030	71	-68	8.2	96	1.9	3	1.0	13840	9.1	9429	35	0.3
30-45.8178-109.4414-2-12-						0-M39031	55460	-0.07	532	41860	53	130	6.8	70	2.7	4	1.1	14840	5.8	16260	29	0.4
30-45.8394-109.4417-2-15-						0-M39032	54690	-0.05	669	43840	53	-84	8.6	67	2.9	3	0.7	14500	6.0	13970	32	0.3
30-45.8564-109.4419-2-12-						0-M38933	62240	-0.06	551	44850	64	-75	8.9	64	3.8	4	0.9	17050	5.3	18630	33	0.3

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)														U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
30-45.5628-108.9519-2-12-						0-438843	19560	392	8493	34	-2	5.6	3.5	-330	-1	-1	7.2	2364	80	-1.1	-64	0.317
30-45.5678-108.9972-2-12-						0-438845	24190	361	8462	30	-2	5.2	3.4	-248	-1	-1	7.8	2231	57	1.9	-32	0.328
30-45.6247-108.9492-2-12-						0-438850	22990	302	11810	41	-2	5.8	4.6	361	-1	-1	7.5	2516	58	2.3	-68	0.312
30-45.6167-109.0069-2-12-						0-438854	19570	340	11210	-20	-2	5.3	3.0	-260	-1	-1	6.9	2304	52	3.0	-32	0.394
30-45.6014-109.0603-2-12-						0-438856	7953	272	15170	24	-1	4.4	3.4	-260		-1	7.3	1987	41	2.7	48	0.353
30-45.8569-109.8489-2-15-						0-438859	26720	815	16970	-21	-2	11.8	4.7	854	-1	-1	8.7	3629	125	2.7	76	0.243
30-45.8528-109.8344-2-12-						0-438861	26130	626	11670	-30	-3	10.9	3.2	737	-1	-1	6.5	3315	95	-1.8	-47	0.334
30-45.8297-109.8406-2-15-						0-438862	30250	745	13310	33	-2	12.3	3.6	-419	-1	-1	6.1	3216	114	2.4	94	0.313
30-45.8564-109.8017-2-15-						0-438863	28740	796	9414	37	-2	11.5	4.0	604	-1	-1	7.7	3518	101	2.2	131	0.319
30-45.8564-109.7972-2-15-						0-438864	27440	737	11150	-21	-2	10.3	4.5	369	-1	-1	8.0	3085	96	2.9	-28	0.263
30-45.8697-109.7547-2-15-						0-438865	31530	675	11110	-31	-3	11.8	2.1	509	-1	-1	7.4	3609	127	4.2	-45	0.281
30-45.8656-109.7306-2-12-						0-438868	24440	547	11880	-19	-2	8.6	3.8	776	-1	-1	7.7	3687	97	-1.3	-30	0.409
30-45.8539-109.7517-2-15-						0-438870	27500	792	11980	-22	-2	12.0	3.8	-352	-1	-1	7.6	3960	116	2.9	72	0.293
30-45.8433-109.7342-2-15-						0-438871	20580	782	11670	46	-2	10.6	5.5	-352	-1	-1	9.9	4512	108	3.6	89	0.230
30-45.8139-109.7342-2-12-						0-438873	24360	589	11950	-28	-2	8.6	3.2	-354	-1	-1	7.5	3408	97	2.8	-42	0.313
30-45.7972-109.7103-2-12-						0-438874	22320	460	9851	32	-2	7.7	3.9	-325	-1	-1	7.2	3318	74	3.0	77	0.343
30-45.7728-109.8036-2-12-						0-438878	20450	666	20350	-22	-2	8.9	3.6	1075	-1	-1	5.2	3261	108	2.0	116	0.252
30-45.7900-109.8639-2-12-						0-438882	29070	755	11180	-30	-3	13.5	5.3	-387	-1	-1	9.2	3205	108	2.7	-45	0.227
30-45.7972-109.8917-2-12-						0-438884	27130	629	15750	-31	-3	11.1	2.8	-379	-1	-1	7.0	3659	107	-2.0	76	0.306
30-45.9172-109.8133-2-12-						0-438890	19640	601	10690	45	-2	7.9	3.3	-383	-1	-1	6.2	2665	76	2.0	-54	0.374
30-45.9378-109.7883-2-15-						0-438891	27390	768	8544	-21	-2	10.8	4.2	-333	-1	-1	7.4	3450	101	3.0	55	0.304
30-45.9611-109.7678-2-15-						0-438892	24620	771	11830	-23	-2	12.0	4.9	-333	-1	-1	8.7	3923	118	2.3	66	0.267
30-45.9728-109.7453-2-12-						0-438893	25530	416	8076	-23	-2	5.9	2.5	-288	-1	-1	5.5	2386	54	2.4	-33	0.420
30-45.9350-109.8028-2-15-						0-438894	23500	565	11410	-21	-2	9.9	3.8	727	-1	-1	7.7	3422	99	3.0	-52	0.344
30-45.9067-109.7778-2-15-						0-438895	27260	666	7047	35	-2	10.0	4.4	-309	-1	-1	7.8	3745	100	2.4	83	0.306
30-45.9150-109.7678-2-15-						0-438896	24540	615	7499	33	-2	8.5	4.7	-277	-1	-1	8.6	2541	69	2.7	-81	0.301
30-45.9133-109.7131-2-12-						0-438898	28960	415	8568	-26	-2	7.2	2.2	-296	-1	-1	7.2	2959	63	2.4	-41	0.358
30-45.8981-109.7164-2-12-						0-438900	29850	429	8850	31	-2	6.6	4.1	-318	-1	-1	7.1	2259	58	3.2	62	0.362
30-45.8981-109.6722-2-15-						0-438901	31960	478	8460	34	-2	9.0	3.9	-268	-1	-1	7.7	2810	80	3.5	82	0.343
30-45.9008-109.6106-2-12-						0-438903	33940	400	8606	66	-2	8.1	3.1	-292	-1	-1	7.7	2677	73	2.6	-39	0.378
30-45.9089-109.6475-2-11-						0-438906	38220	441	7671	23	-2	6.8	4.3	-325	-1	-1	7.8	2652	66	2.3	-31	0.373
30-45.8906-109.7336-2-15-						0-438908	33210	494	8235	39	-2	9.3	3.8	-264	-1	-1	7.5	3398	92	3.4	102	0.337
30-45.5094-109.0797-2-12-						0-438909	18810	330	11600	51	-2	8.0	4.6	-242	-1	-1	10.1	3035	81	3.8	96	0.282
30-45.7619-109.5458-2-12-						0-438910	27870	505	8594	-29	-3	9.3	2.4	-317	-1	-1	7.5	3200	82	-1.7	-44	0.323
30-45.7719-109.5469-2-12-						0-438911	26400	420	11960	29	-2	6.0	3.4	-331	-1	-1	6.3	2449	67	2.5	44	0.375
30-45.7589-109.5214-2-12-						0-438914	28290	493	9967	36	-2	8.8	5.7	-284	-1	-1	8.9	2937	80	3.6	105	0.260
30-45.7694-109.5403-2-15-						0-438916	25730	492	10950	-24	-2	7.3	2.4	-307	-1	-1	6.0	2607	72	-1.7	-44	0.358
30-45.7911-109.6322-2-15-						0-438918	20670	950	8395	57	-1	9.0	4.1	-439	-1	-1	8.7	2893	80	2.2	76	0.292
30-45.7939-109.5672-2-15-						0-438919	24540	585	10870	31	-2	7.9	3.7	-284	-1	-1	7.1	3382	83	2.8	89	0.324
30-45.8178-109.5689-2-12-						0-438921	28570	590	8655	48	-2	10.3	5.9	-313	-1	-1	9.5	3145	89	3.5	96	0.260
30-45.7831-109.5728-2-12-						0-438922	25120	458	9226	37	-2	6.7	3.3	-305	-1	-1	6.7	2667	69	-2.0	-44	0.343
30-45.7644-109.4486-2-12-						0-438923	25380	299	10950	33	-1	5.1	3.4	-271	1	1	7.4	2153	46	2.6	58	0.330
30-45.7583-109.4636-2-15-						0-438924	29620	538	9660	35	-2	8.2	4.1	-294	-1	-1	7.6	3140	69	2.8	82	0.305
30-45.7686-109.4744-2-12-						0-438925	29440	441	9417	-23	-2	8.0	4.8	573	-1	-1	7.7	2995	66	4.0	90	0.374
30-45.7919-109.4836-2-15-						0-438926	27700	550	8725	-26	-2	8.5	2.9	-317	-1	-1	7.4	2903	75	3.3	-38	0.319
30-45.7933-109.4831-2-15-						0-438927	30880	465	8712	42	-2	7.9	4.2	-304	-1	-1	7.5	3451	66	3.4	-56	0.343
30-45.7994-109.4661-2-12-						0-438928	26530	435	9774	37	-2	7.0	3.7	-257	-1	-1	7.1	2712	59	2.3	-48	0.349
30-45.8153-109.4700-2-12-						0-438930	27870	355	9736	-17	-2	5.9	4.9	-236	-1	-1	8.2	2515	55	3.9	-49	0.283
30-45.8178-109.4414-2-12-						0-438931	30920	314	9092	-26	-2	6.8	3.1	-280	-1	-1	6.0	2741	62	2.9	-53	0.428
30-45.8394-109.4417-2-15-						0-438932	27140	404	9504	39	-2	6.6	3.8	-307	-1	-1	8.4	2651	58	2.4	46	0.312
30-45.8564-109.4419-2-12-						0-438933	34370	403	8009	32	-2	8.2	4.7	-280	-1	-1	9.4	2818	75	3.1	73	0.286

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
30-	45.8694-	109.4414-	2-	12-		0-M38934-	07/12/78-	12-	27-	18.0-	-	-	7.7-	650-	16-1-6-4-6-2-2-2-1-4-4-2-1-	-3-	-	-	-	-	2.53
30-	45.8881-	109.4625-	2-	15-		0-M38935-	07/12/78-	13-	27-	-	-	-	-	-	12-1-6-5-6-	-	-	-1-4-4-2-1-	-3-	-	-	-	3.03
30-	45.8917-	109.4653-	2-	12-		0-M38936-	07/12/78-	13-	25-	17.0-	-	-	8.4-	600-	12-1-6-5-8-3-2-1-2-4-3-3-1-	-3-	-	-	-	-	2.67
30-	45.8953-	109.4653-	2-	12-		0-M38937-	07/12/78-	13-	29-	20.0-	-	-	8.2-	500-	11-1-6-3-6-2-2-2-2-2-4-3-2-1-	-3-	-	-	-	-	2.52
30-	45.9139-	109.4647-	2-	12-		0-M38938-	07/12/78-	13-	26-	16.0-	-	-	8.2-	500-	9-1-6-3-6-3-2-2-1-4-3-2-1-	-3-	-	-	-	-	2.43
30-	45.9275-	109.4625-	2-	15-		0-M38939-	07/12/78-	14-	25-	-	-	-	-	-	15-1-6-5-6-	-	-	-1-4-3-2-1-	-3-	-	-	-	2.64
30-	45.9356-	109.4658-	2-	12-		0-M38940-	07/12/78-	14-	25-	23.0-	-	-	7.9-	600-	15-1-6-5-7-2-2-2-1-4-2-3-1-	-3-	-	-	-	-	2.58
30-	45.9408-	109.4689-	2-	12-		0-M38941-	07/12/78-	14-	27-	22.0-	-	-	7.8-	600-	12-1-6-5-6-2-2-2-1-4-2-3-1-	-3-	-	-	-	-	3.00
30-	45.9878-	109.4728-	2-	12-		0-M38944-	07/12/78-	15-	28-	20.0-	C-	-	8.3-	550-	11-1-6-6-6-2-2-1-1-4-3-2-1-	-3-	-	-	-	-	2.35
30-	45.9858-	109.4428-	2-	12-		0-M38945-	07/12/78-	16-	26-	21.0-	-	-	8.1-	950-	12-1-6-3-8-3-3-1-1-4-3-2-1-	-3-	-	-	-	-	2.34
30-	45.9742-	109.3767-	2-	12-		0-M38946-	07/12/78-	15-	29-	22.0-	-	-	8.0-	1850-	11-1-6-6-8-2-3-5-1-6-3-2-1-	-3-	-	-	-	-	2.31
30-	45.9161-	109.4525-	2-	12-		0-M38947-	07/12/78-	16-	25-	20.0-	-	-	7.9-	800-	10-1-6-5-6-2-3-2-1-6-4-2-1-	-3-	-	-	-	-	2.47
30-	45.9161-	109.4467-	2-	12-		0-M38948-	07/12/78-	16-	27-	22.0-	-	-	8.0-	600-	16-1-6-3-6-2-3-3-1-6-3-2-1-	-3-	-	-	-	-	2.59
30-	45.8386-	109.3944-	2-	12-		0-M38950-	07/12/78-	18-	27-	21.0-	C-	-	8.2-	650-	13-1-6-3-7-3-3-1-1-4-3-2-1-	-3-	-	-	-	-	2.51
30-	45.8425-	109.3844-	2-	15-		0-M38951-	07/12/78-	19-	25-	-	-	-	-	-	10-1-6-5-6-	-	-	-1-4-3-3-1-	-3-	-	-	-	2.21
30-	45.8258-	109.4217-	2-	15-		0-M38952-	07/12/78-	19-	25-	-	-	-	-	-	8-1-6-7-6-	-	-	-1-4-3-3-1-	-3-	-	-	-	2.62
30-	45.8025-	109.4222-	2-	12-		0-M38954-	07/12/78-	19-	25-	22.0-	C-	-	8.5-	1500-	9-1-6-6-8-2-3-2-1-3-3-2-1-	-3-	-	-	-	-	4.90
30-	45.7853-	109.4375-	2-	12-		0-M38955-	07/12/78-	19-	21-	20.0-	-	-	8.0-	1950-	5-1-6-5-8-2-3-4-1-4-3-3-1-	-3-	-	-	-	-	2.14
30-	45.9092-	109.5478-	2-	15-		0-M38957-	07/15/78-	10-	32-	-	C-	-	-	-	16-1-6-7-6-	-	-	-1-4-3-4-2-	-1-	-	-	-	2.36
30-	45.9231-	109.5483-	2-	12-		0-M38958-	07/15/78-	11-	33-	16.0-	C-	-	8.4-	550-	10-1-6-5-6-3-3-2-2-4-4-3-2-	-1-	-	-	-	-	2.50
30-	45.9597-	109.5281-	2-	15-		0-M38960-	07/15/78-	11-	30-	-	C-	-	-	-	6-1-6-7-6-	-	-	-1-4-3-2-2-	-1-	-	-	-	2.49
30-	45.9731-	109.5814-	2-	12-		0-M38963-	07/15/78-	12-	26-	20.0-	-	-	8.4-	600-	9-1-6-5-7-3-3-2-1-4-3-2-2-	-3-	-	-	-	-	2.40
30-	45.9728-	109.5881-	2-	15-		0-M38964-	07/15/78-	12-	31-	-	C-	-	-	-	12-1-6-4-6-	-	-	-1-4-3-2-2-	-3-	-	-	-	2.05
30-	45.9728-	109.5989-	2-	15-		0-M38965-	07/15/78-	12-	29-	-	C-	-	-	-	10-1-6-7-6-	-	-	-1-4-3-2-2-	-3-	-	-	-	2.53
30-	45.9883-	109.5986-	2-	15-		0-M38966-	07/15/78-	12-	29-	-	C-	-	-	-	9-1-6-	-	-	-1-4-3-3-2-	-3-	-	-	-	2.66
30-	45.9733-	109.5314-	2-	12-		0-M38967-	07/12/78-	13-	26-	16.0-	-	-	7.5-	620-	9-1-6-5-6-2-2-1-1-4-4-2-2-	-3-	-	-	-	-	2.52
30-	45.9708-	109.4761-	2-	12-		0-M38969-	07/15/78-	13-	27-	16.0-	-	-	8.1-	460-	9-1-6-6-6-3-3-1-1-4-4-3-2-	-3-	-	-	-	-	2.57
30-	45.5228-	109.0256-	2-	12-		0-M38971-	08/02/78-	11-	17-	12.0-	C-	-	7.8-	1000-	8-1-6-4-6-3-3-1-2-4-3-4-3-	-3-	-	-	-	-	2.49
30-	45.5397-	109.0192-	2-	12-		0-M38973-	08/02/78-	13-	22-	13.0-	C-	-	8.5-	1000-	16-1-6-5-6-3-3-1-1-3-3-3-3-	-3-	-	-	-	-	2.98
30-	45.5669-	109.0467-	2-	11-		0-M38974-	08/02/78-	13-	23-	9.0-	-	-	7.5-	1100-	12-1-6-	-	-	-3- -1-2-2-4-3-3-	-3-	-	-	-	3.88
30-	45.5614-	109.0600-	2-	12-		0-M38975-	08/02/78-	15-	14-	11.0-	-	-	8.5-	1900-	16-1-6-5-8-2-2-2-2-4-3-4-3-	-3-	-	-	-	-	2.51
30-	45.5447-	109.1153-	2-	12-		0-M38979-	08/02/78-	16-	18-	11.0-	C-	-	7.7-	1150-	9-1-6-	-	-2-2-	-1-2-5-3-3-	-3-	-	-	-	2.88
30-	45.5567-	109.1014-	2-	12-		0-M38980-	08/02/78-	17-	16-	12.5-	-	-	8.3-	1050-	11-1-6-4-6-4-3-2-2-1-3-4-3-	-3-	-	-	-	-	2.82
30-	45.6917-	109.0017-	2-	12-		0-M38982-	08/04/78-	10-	20-	15.5-	-	-	8.3-	1400-	15-1-6-4-6-3-3-1-2-3-2-4-1-	-1-	-	-	-	-	2.12
30-	45.9850-	108.5275-	2-	15-		0-M38983-	07/28/78-	11-	24-	-	-	-	-	-	12-1-6-5-6-	-	-	-1-4-3-2-2-	-1-	-	-	-	2.77
30-	45.9867-	108.5386-	2-	15-		0-M38984-	07/28/78-	11-	24-	-	-	-	-	-	11-1-6-5-6-	-	-	-1-4-3-2-2-	-1-	-	-	-	2.83
30-	45.9867-	108.5511-	2-	15-		0-M38985-	07/28/78-	12-	25-	-	C-	-	-	-	10-1-6-4-6-	-	-	-1-4-4-2-2-	-1-	-	-	-	2.70
30-	45.9861-	108.5764-	2-	15-		0-M38986-	07/28/78-	12-	25-	-	-	-	-	-	17-1-6-4-6-	-	-	-1-4-3-2-2-	-1-	-	-	-	3.02
30-	45.9561-	108.3628-	2-	15-		0-M38987-	07/28/78-	12-	26-	-	C-	-	-	-	16-1-6-5-8-	-	-	-1-4-2-1-2-	-3-	-	-	-	3.32
30-	45.9656-	108.3622-	2-	12-		0-M38989-	07/28/78-	13-	26-	21.5-	-	-	8.2-	3100-	9-1-6-5-6-2-3-2-1-4-3-2-2-	-3-	-	-	-	-	3.04
30-	45.6892-	109.0183-	2-	12-		0-M38992-	08/04/78-	10-	22-	16.0-	-	-	8.3-	1150-	6-1-6-3-6-2-2-2-2-4-2-3-1-	-3-	-	-	-	-	3.18
30-	45.7183-	109.0025-	2-	12-		0-M38993-	08/04/78-	11-	28-	19.0-	-	-	8.2-	1900-	6-1-6-3-6-2-2-2-2-4-2-3-1-	-3-	-	-	-	-	2.47
30-	45.7167-	109.0014-	2-	11-		0-M38994-	08/04/78-	11-	28-	10.0-	-	-	7.2-	1700-	5-1-6-4-6-3-	-1-	-4-2-3-1-	-1-	-	-	-	2.38
30-	45.7289-	109.0042-	2-	15-		0-M38995-	08/04/78-	12-	28-	-	C-	-	-	-	10-1-6-7-7-	-	-	-2-4-2-3-1-	-3-	-	-	-	2.59
30-	45.7364-	109.0042-	2-	12-		0-M38996-	08/04/78-	12-	24-	19.0-	-	-	8.2-	1300-	13-1-6-2-6-3-3-1-1-4-3-2-1-	-3-	-	-	-	-	2.55
30-	45.7200-	109.0172-	2-	12-		0-M38998-	08/04/78-	13-	25-	13.0-	-	-	8.3-	2700-	11-1-6-3-6-3-3-1-2-4-3-3-1-	-3-	-	-	-	-	2.60
30-	45.9417-	109.0653-	2-	12-		0-M39001-	06/15/78-	9-	22-	14.0-	C-	-	6.9-	2000-	9-1-6-4-6-3-3-1-1-4-3-2-3-	-1-	-	-	-	-	3.11
30-	45.8522-	109.1108-	2-	11-		0-M39003-	06/15/78-	10-	17-	8.9-	C-	-	7.2-	1100-	4-1-6-4-6-3-3-1-	-4-3-2-3-	-1-	-	-	-	2.39
30-	45.8592-	109.0889-	2-	12-		0-M39004-	06/15/78-	10-	17-	11.5-	-	-	7.3-	3025-	9-1-6-4-6-3-3-1-1-4-3-2-3-	-3-	-	-	-	-	3.05
30-	45.9725-	109.1728-	2-	12-		0-M39007-	06/15/78-	12-	19-	17.3-	-	-	7.9-	9200-	9-1-7-6-8-2-3-5-1-4-4-1-3-	-1-	-	-	-	-	2.89
30-	45.9908-	109.1725-	2-	11-		0-M39009-	06/15/78-	13-	22-	8.5-	-	-	7.8-	2300-	10-1-7-4-7-2-3-1-	-4-2-2-2-	-1-	-	-	-	2.02

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
30-45.8694-109.4414-2-12-						0-M38934	-5	-5	-5	21	-20	-15	5	-10	-15	2	48
30-45.8891-109.4625-2-15-						0-M38935	-5	-5	-5	30	-20	-15	6	-10	-15	2	50
30-45.8917-109.4653-2-12-						0-M38936	-5	-5	-5	22	-20	-15	5	-10	-15	2	40
30-45.8953-109.4653-2-12-						0-M38937	-5	-5	-5	18	-20	-15	-5	-10	-15	2	32
30-45.9139-109.4647-2-12-						0-M38938	-5	-5	-5	22	-20	26	9	-10	-15	1	48
30-45.9275-109.4625-2-15-						0-M38939	-5	-5	-5	28	-20	-15	16	-10	-15	2	62
30-45.9356-109.4658-2-12-						0-M38940	-5	-5	-5	25	-20	-15	-5	-10	-15	2	43
30-45.9408-109.4689-2-12-						0-M38941	-5	-5	-5	29	-20	19	5	-10	-15	2	43
30-45.9878-109.4728-2-12-						0-M38944	-5	-5	-5	24	-20	17	9	-10	-15	2	57
30-45.9858-109.4428-2-12-						0-M38945	-5	-5	-5	26	-20	-15	17	-10	-15	2	54
30-45.9742-109.3767-2-12-						0-M38946	-5	-5	-5	21	-20	21	12	-10	-15	2	53
30-45.9161-109.4525-2-12-						0-M38947	-5	-5	-5	20	-20	17	13	-10	-15	2	35
30-45.9161-109.4467-2-12-						0-M38948	-5	-5	-5	23	-20	-15	9	-10	-15	2	44
30-45.8386-109.3944-2-12-						0-M38950	-5	-5	-5	18	-20	18	14	-10	-15	2	57
30-45.8425-109.3844-2-15-						0-M38951	-5	-5	-5	24	-20	-15	7	-10	-15	2	47
30-45.8258-109.4217-2-15-						0-M38952	-5	-5	-5	23	-20	19	10	-10	-15	2	49
30-45.8025-109.4222-2-12-						0-M38954	-5	-5	-5	27	-20	41	5	-10	-15	1	49
30-45.7853-109.4375-2-12-						0-M38955	-5	-5	-5	30	-20	42	8	-10	-15	2	46
30-45.9092-109.5478-2-15-						0-M38957	-5	-5	-5	24	-20	23	5	-10	17	2	42
30-45.9231-109.5483-2-12-						0-M38958	-5	-5	-5	23	-20	31	8	-10	-15	2	44
30-45.9597-109.5281-2-15-						0-M38960	-5	-5	-5	24	-20	25	10	-10	-15	2	35
30-45.9731-109.5814-2-12-						0-M38963	-5	-5	-5	23	-20	25	8	-10	-15	2	49
30-45.9728-109.5881-2-15-						0-M38964	-5	-5	-5	12	-20	-15	8	-10	-15	2	37
30-45.9728-109.5989-2-15-						0-M38965	-5	-5	-5	21	-20	-15	9	-10	-15	1	35
30-45.9883-109.5986-2-15-						0-M38966	-5	-5	-5	31	-20	-15	13	-10	-15	2	27
30-45.9733-109.5314-2-12-						0-M38967	-5	-5	-5	20	-20	-15	9	-10	-15	2	33
30-45.9708-109.4761-2-12-						0-M38969	-5	-5	-5	36	-20	34	11	-10	-15	2	28
30-45.5228-109.0256-2-12-						0-M38971	-5	-5	-5	15	-20	-15	6	-10	-15	2	31
30-45.5397-109.0192-2-12-						0-M38973	-5	-5	-5	20	-20	21	15	-10	-15	2	44
30-45.5649-109.0467-2-11-						0-M38974	-5	-5	-5	19	-20	24	23	-10	-15	3	26
30-45.5614-109.0600-2-12-						0-M38975	-5	-5	-5	22	-20	-15	28	-10	-15	2	25
30-45.5447-109.1153-2-12-						0-M38979	-5	-5	-5	28	-20	15	16	-10	-15	2	32
30-45.5567-109.1014-2-12-						0-M38980	-5	-5	-5	14	-20	-15	12	-10	-15	2	36
30-45.6917-109.0017-2-12-						0-M38982	-5	-5	-5	21	-20	-15	7	-10	-15	2	40
30-45.9850-108.5275-2-15-						0-M38983	-5	-5	-5	27	-20	25	11	-10	-15	1	22
30-45.9867-108.5386-2-15-						0-M38984	-5	-5	-5	11	-20	-15	5	-10	-15	2	44
30-45.9867-108.5511-2-15-						0-M38985	-5	-5	-5	24	-20	-15	11	-10	-15	2	46
30-45.9861-108.5764-2-15-						0-M38986	-5	-5	-5	27	-20	-15	16	-10	-15	2	74
30-45.9561-108.3628-2-15-						0-M38987	-5	-5	-5	20	-20	25	9	-10	-15	2	77
30-45.9656-108.3622-2-12-						0-M38989	-5	-5	-5	19	-20	-15	8	-10	-15	2	49
30-45.6992-109.0183-2-12-						0-M38992	-5	-5	-5	-10	-20	-15	9	-10	-15	2	30
30-45.7183-109.0025-2-12-						0-M38993	-5	-5	-5	17	-20	16	11	-10	-15	1	50
30-45.7167-109.0014-2-11-						0-M38994	-5	-5	-5	-10	-20	-15	7	-10	-15	2	39
30-45.7289-109.0042-2-15-						0-M38995	-5	-5	-5	29	-20	-15	16	-10	-15	1	35
30-45.7364-109.0042-2-12-						0-M38996	-5	-5	-5	12	-20	-15	11	-10	-15	1	31
30-45.7200-109.0172-2-12-						0-M38998	-5	-5	-5	16	-20	-15	5	-10	-15	-1	45
30-45.8417-109.0653-2-12-						0-M39001	-5	6	-5	20	-20	-15	6	-10	-15	2	17
30-45.8522-109.1108-2-11-						0-M39003	-5	-5	-5	18	-20	-15	7	-10	-15	2	28
30-45.8592-109.0889-2-12-						0-M39004	-5	-5	-5	34	-20	-15	9	-10	-15	2	43
30-45.9725-109.1728-2-12-						0-M39007	-5	-5	-5	21	-20	-15	9	-10	-15	3	45
30-45.9908-109.1725-2-11-						0-M39008	-5	-5	-5	17	-20	-15	-5	-10	-15	2	27

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS															
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per million (ppm)															
							Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
30-45.8694-109.4414-2-12-			0	M	4	M38934	56650	-0.06	586	40270	71	-72	8.1	68	3.2	4	1.0	15430	7.0	12960	37	0.4
30-45.8881-109.4625-2-15-			0	M	5	M38935	65320	-0.09	717	32720	59	-81	9.4	58	4.7	4	1.2	17720	6.3	15530	29	0.3
30-45.8917-109.4653-2-12-			0	M	6	M38936	51290	-0.05	509	38660	57	-85	7.5	57	2.8	3	0.8	12980	6.5	14410	29	0.3
30-45.8953-109.4653-2-12-			0	M	7	M38937	55430	-0.05	598	34810	56	-71	8.0	89	2.7	3	0.9	15140	7.0	14880	30	0.3
30-45.9139-109.4647-2-12-			0	M	8	M38938	52230	-0.06	640	53400	68	-73	7.9	60	2.6	4	0.9	14930	7.1	12780	35	0.4
30-45.9275-109.4625-2-15-			0	M	9	M38939	58670	-0.08	507	46970	53	-76	7.4	48	3.8	4	0.8	15950	4.0	17450	26	0.4
30-45.9356-109.4658-2-12-			0	M	10	M38940	61450	-0.06	583	44460	54	-84	9.0	62	4.3	4	0.9	17010	4.6	16330	28	0.3
30-45.9408-109.4689-2-12-			0	M	11	M38941	59630	-0.07	574	33750	59	-74	8.5	66	3.5	4	0.9	15720	6.5	15360	33	0.3
30-45.9878-109.4728-2-12-			0	M	12	M38944	55340	-0.08	612	53070	58	-86	7.8	84	-1.5	3	0.9	13230	5.8	14210	26	0.4
30-45.9858-109.4428-2-12-			0	M	13	M38945	60710	-0.06	660	40500	53	-108	9.7	101	2.6	2	0.9	16200	5.6	14740	34	0.3
30-45.9742-109.3767-2-12-			0	M	14	M38946	66230	-0.06	800	28760	59	-81	8.8	92	2.7	3	0.9	17750	4.8	15820	33	0.3
30-45.9161-109.4525-2-12-			0	M	15	M38947	59420	-0.07	608	29430	69	-73	9.6	70	3.4	3	1.0	18190	6.3	15890	33	0.4
30-45.9161-109.4467-2-12-			0	M	16	M38948	57220	-0.07	636	30560	55	-89	9.0	70	3.5	3	0.8	15610	6.3	17090	32	0.3
30-45.8386-109.3944-2-12-			0	M	17	M38950	57430	-0.09	541	49770	70	-72	8.2	64	4.3	4	1.0	16350	5.6	16580	36	0.4
30-45.8425-109.3844-2-15-			0	M	18	M38951	52710	-0.08	573	49580	49	-73	6.5	54	3.0	3	0.8	13240	5.6	13260	30	0.2
30-45.8258-109.4217-2-15-			0	M	19	M38952	59970	-0.07	605	50260	53	-81	8.9	49	3.5	4	0.7	15510	4.9	13360	22	0.3
30-45.8025-109.4222-2-12-			0	M	20	M38954	55210	-0.09	521	53750	52	204	9.8	69	4.2	3	0.9	17670	4.0	16380	30	0.3
30-45.7853-109.4375-2-12-			0	M	21	M38955	57320	-0.08	710	41560	68	-76	10.9	126	3.5	3	1.0	18890	6.0	17670	31	0.3
30-45.9092-109.5478-2-15-			0	M	22	M38957	56360	-0.09	485	37140	56	-68	7.4	55	3.1	4	0.9	14930	5.1	15320	30	0.3
30-45.9231-109.5483-2-12-			0	M	23	M38958	51780	-0.07	476	39070	56	-82	8.6	59	3.3	4	0.8	13560	5.6	12140	33	0.3
30-45.9597-109.5281-2-15-			0	M	24	M38960	60680	-0.08	481	22550	62	-85	9.2	74	3.9	3	0.8	18260	5.7	17400	32	0.3
30-45.9731-109.5814-2-12-			0	M	25	M38963	53710	-0.08	526	41530	71	-77	8.6	99	2.8	3	1.0	16610	6.9	15590	33	0.4
30-45.9728-109.5881-2-15-			0	M	26	M38964	44630	-0.07	444	53240	39	-67	5.6	43	1.6	3	0.8	10870	5.2	11080	23	0.2
30-45.9728-109.5989-2-15-			0	M	27	M38965	52560	-0.07	478	59170	49	-81	8.5	56	2.6	4	0.8	14300	6.0	13280	27	0.3
30-45.9883-109.5986-2-15-			0	M	28	M38966	62400	-0.07	413	32540	60	-85	9.4	89	3.3	4	1.0	18860	6.6	14590	34	0.3
30-45.9733-109.5314-2-12-			0	M	29	M38967	52600	-0.08	517	37570	71	-72	8.4	73	2.8	3	1.0	14780	8.2	13030	36	0.4
30-45.9708-109.4761-2-12-			0	M	30	M38969	69120	-0.11	865	27050	62	-82	10.6	170	3.6	4	0.9	20360	6.0	13430	35	0.3
30-45.5228-109.0256-2-12-			0	M	31	M38971	51830	-0.06	561	19470	51	-74	7.1	43	2.8	3	0.9	10980	7.0	16150	30	0.3
30-45.5397-109.0192-2-12-			0	M	32	M38973	48660	-0.06	471	21210	60	-76	7.1	51	3.2	3	0.9	11430	8.8	15930	34	0.4
30-45.5669-109.0467-2-11-			0	M	33	M38974	72370	-0.09	774	10330	92	-71	10.1	81	5.7	5	1.5	20320	9.3	20050	41	0.5
30-45.5614-109.0600-2-12-			0	M	34	M38976	62930	-0.10	631	29230	60	151	6.5	65	-1.6	3	1.1	11760	6.7	12610	32	0.3
30-45.5447-109.1153-2-12-			0	M	35	M38979	69390	-0.07	694	24660	56	-88	9.9	58	3.5	4	0.8	15540	5.0	18120	32	0.3
30-45.5567-109.1014-2-12-			0	M	36	M38980	51580	-0.06	491	35700	60	-83	6.5	61	1.9	2	1.0	11140	12.0	12220	31	0.3
30-45.6917-109.0017-2-12-			0	M	37	M38982	48570	-0.06	537	38460	61	-71	6.3	34	1.7	3	1.0	11210	6.6	11800	34	0.3
30-45.9850-108.5275-2-15-			0	M	38	M38983	71960	-0.10	704	10630	55	-72	7.9	57	4.3	4	0.9	17710	3.4	16740	33	0.4
30-45.9867-108.5386-2-15-			0	M	39	M38984	65150	-0.07	718	18610	58	-77	7.9	56	3.4	3	0.8	15340	5.6	15160	33	0.3
30-45.9867-108.5511-2-15-			0	M	40	M38985	65210	-0.08	614	18690	55	-90	8.7	60	3.7	3	0.9	18130	5.4	17110	36	0.3
30-45.9861-108.5764-2-15-			0	M	41	M38986	68030	-0.09	689	19790	61	-69	8.1	68	3.8	3	0.9	18440	5.2	19370	36	0.3
30-45.9561-108.3628-2-15-			0	M	42	M38987	64880	-0.11	498	24360	50	181	8.8	65	3.6	3	0.7	17890	4.2	16690	34	0.4
30-45.9656-108.3622-2-12-			0	M	43	M38989	58710	-0.07	743	29610	54	-82	8.1	48	3.1	4	0.9	14740	7.1	15690	32	0.3
30-45.6992-109.0183-2-12-			0	M	44	M38992	49040	-0.06	763	28680	66	-85	5.4	54	1.7	4	1.0	11930	17.3	10230	38	0.5
30-45.7183-109.0025-2-12-			0	M	45	M38993	46340	-0.07	460	64750	53	-67	7.3	54	2.9	3	0.9	14400	7.4	11490	30	0.4
30-45.7167-109.0014-2-11-			0	M	46	M38994	39500	-0.07	425	43110	37	-56	4.2	30	2.3	3	0.7	8326	7.5	15240	27	0.2
30-45.7289-109.0042-2-15-			0	M	47	M38995	56920	-0.06	550	35600	47	-68	8.5	53	3.3	3	0.8	16110	5.7	14970	26	0.3
30-45.7364-109.0042-2-12-			0	M	48	M38996	57710	-0.06	563	37930	57	-88	6.4	54	2.8	2	0.9	12930	6.2	13490	37	0.3
30-45.7200-109.0172-2-12-			0	M	49	M38998	51640	-0.08	539	57980	65	118	7.9	62	2.6	3	1.1	13910	7.2	15030	36	0.4
30-45.8417-109.0653-2-12-			0	M	50	M39001	55010	-0.10	601	24980	78	-92	8.6	55	-1.6	3	1.1	24050	10.7	12010	57	0.3
30-45.8522-109.1108-2-11-			0	M	51	M39002	48360	-0.06	773	32880	58	-105	6.2	57	1.4	3	0.9	10430	9.7	12170	32	0.3
30-45.8592-109.0889-2-12-			0	M	52	M39004	65400	-0.09	643	29810	57	-93	9.4	66	3.9	3	1.0	19140	3.8	15650	33	-0.1
30-45.9725-109.1728-2-12-			0	M	53	M39007	59400	-0.08	622	23220	73	120	8.0	44	2.8	3	1.0	16400	7.6	15270	40	0.3
30-45.9908-109.1725-2-11-			0	M	54	M39008	53920	-0.07	565	12900	48	-75	5.6	33	2.3	3	0.9	10500	4.6	13810	24	0.2

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
30-45.8694-109.4414-2-12-						0-M38934	26230	442	9286	41	-2	7.3	6.3	-264	-1	-1	9.3	2448	60	3.1	-50	0.272
30-45.8881-109.4625-2-15-						0-M38935	26790	428	7761	58	-3	8.6	3.9	-310	-1	-1	9.2	2732	68	3.6	-40	0.329
30-45.8917-109.4653-2-12-						0-M38936	28690	284	8883	46	-2	6.2	3.8	-290	-1	-1	7.6	2742	58	2.8	-23	0.351
30-45.8953-109.4653-2-12-						0-M38937	28260	357	9497	51	-2	7.0	4.6	355	-1	-1	8.5	2779	63	3.5	88	0.296
30-45.9139-109.4647-2-12-						0-M38938	32200	412	9166	49	-2	6.9	5.2	-255	-1	-1	9.2	2810	53	3.3	48	0.264
30-45.9275-109.4625-2-15-						0-M38939	38390	327	8106	-27	-2	7.3	4.4	-283	-1	-1	8.7	2724	67	2.3	322	0.303
30-45.9356-109.4658-2-12-						0-M38940	31140	404	7484	61	-2	8.2	4.0	-328	-1	-1	8.5	2541	79	2.8	85	0.304
30-45.9408-109.4689-2-12-						0-M38941	29450	342	8739	59	-2	7.9	4.6	-270	-1	-1	7.7	3250	63	3.2	94	0.390
30-45.9878-109.4728-2-12-						0-M38944	23240	299	10920	-25	-2	6.4	2.9	-291	-1	-1	7.8	3334	56	-1.6	-40	0.301
30-45.9858-109.4428-2-12-						0-M38945	18850	664	12690	32	-2	7.1	4.4	-398	-1	-1	7.1	2280	69	2.7	70	0.330
30-45.9742-109.3767-2-12-						0-M38946	15000	326	14250	45	-2	6.8	3.7	504	-1	-1	7.1	2856	77	2.1	101	0.325
30-45.9161-109.4525-2-12-						0-M38947	22840	513	8530	36	-2	8.2	4.6	-283	-1	-1	10.0	2967	67	3.4	-59	0.247
30-45.9161-109.4467-2-12-						0-M38948	19580	440	10220	38	-2	7.5	4.7	-317	-1	-1	8.3	2569	67	3.0	-46	0.312
30-45.8386-109.3944-2-12-						0-M38950	31740	442	8683	53	-3	7.9	4.3	-274	-1	-1	9.3	2751	66	3.2	80	0.270
30-45.8425-109.3844-2-15-						0-M38951	23040	396	11120	-22	-3	6.2	2.8	-248	-1	-1	7.3	2653	56	3.3	-39	0.303
30-45.8258-109.4217-2-15-						0-M38952	30730	399	8106	40	3	7.2	3.5	-302	-1	-1	7.5	2628	66	2.9	117	0.349
30-45.8025-109.4222-2-12-						0-M38954	30510	425	8246	-25	-3	7.9	4.7	-389	-1	-1	7.1	2729	66	2.6	97	0.690
30-45.7953-109.4375-2-12-						0-M38955	27370	433	10690	40	-3	8.4	4.7	-273	-1	-1	7.7	3012	79	2.4	-25	0.278
30-45.9092-109.5478-2-15-						0-M38957	27880	464	8020	-25	-3	7.0	3.8	-259	-1	-1	7.3	2409	66	2.1	-73	0.323
30-45.9231-109.5483-2-12-						0-M38958	26920	363	8858	42	-2	6.2	3.4	-294	-1	-1	7.1	2356	59	2.6	-69	0.352
30-45.9597-109.5281-2-15-						0-M38960	19710	528	8209	38	-2	8.7	4.1	-337	-1	-1	8.8	2764	86	3.0	101	0.283
30-45.9731-109.5814-2-12-						0-M38963	27240	442	10710	50	-2	7.1	5.3	-271	-1	-1	7.9	2916	65	3.4	94	0.304
30-45.9728-109.5881-2-15-						0-M38964	26620	364	9904	32	-2	4.9	2.2	-223	-1	-1	5.7	2466	48	-1.6	-43	0.360
30-45.9728-109.5989-2-15-						0-M38965	34070	498	8417	40	-2	6.7	4.1	-311	-1	-1	7.4	2653	65	2.5	-57	0.342
30-45.9883-109.5986-2-15-						0-M38966	29920	537	8835	45	-2	8.8	4.2	-337	-1	-1	9.1	3438	74	2.7	-63	0.292
30-45.9733-109.5314-2-12-						0-M38967	21690	547	8932	41	-2	7.0	4.2	-284	-1	-1	9.3	2726	53	3.3	67	0.271
30-45.9708-109.4761-2-12-						0-M38969	16040	537	11250	-29	-3	9.2	3.1	416	-1	-1	7.3	3359	92	3.2	-44	0.352
30-45.5228-109.0256-2-12-						0-M38971	13840	241	10050	39	-2	5.3	3.7	-244	-1	-1	7.0	2072	49	2.3	63	0.356
30-45.5397-109.0192-2-12-						0-M38973	12540	388	8071	39	-2	6.0	4.2	-284	-1	-1	9.1	2633	52	3.1	-47	0.327
30-45.5669-109.0467-2-11-						0-M38974	14100	115	11900	63	-3	10.0	6.1	296	-1	-1	11.2	4158	100	5.7	-43	0.346
30-45.5614-109.0600-2-12-						0-M38975	13500	328	16710	-26	-3	5.8	3.0	620	-1	-1	6.1	2602	51	3.6	-40	0.411
30-45.5447-109.1153-2-12-						0-M38979	19330	364	11250	42	-2	7.3	4.3	-305	-1	-1	9.3	3408	77	2.6	58	0.310
30-45.5567-109.1014-2-12-						0-M38980	14120	273	12860	-15	-2	5.0	3.8	-256	-1	-1	8.3	2375	44	3.0	57	0.340
30-45.6917-109.0017-2-12-						0-M38982	17600	276	12150	27	-2	4.5	4.2	350	-1	-1	7.0	2062	43	2.6	-60	0.303
30-45.9950-108.5275-2-15-						0-M38983	18320	235	11350	-30	-3	8.5	3.3	-232	-1	-1	6.9	3243	100	-2.0	71	0.401
30-45.9867-108.5386-2-15-						0-M38984	18270	256	10870	56	-2	7.2	3.8	-255	-1	-1	7.6	3295	92	2.8	67	0.372
30-45.9867-108.5511-2-15-						0-M38985	24060	343	9490	57	-3	8.6	3.9	-317	-1	-1	8.7	3088	88	2.5	121	0.310
30-45.9861-108.5764-2-15-						0-M38986	24600	260	9968	-22	-3	9.0	4.8	-226	-1	-1	10.2	3273	102	3.1	113	0.296
30-45.9561-108.3628-2-15-						0-M38987	38500	334	21760	-29	-3	8.5	3.2	-302	-1	-1	7.1	3207	110	-2.1	109	0.468
30-45.9656-108.3622-2-12-						0-M38989	27150	371	10860	31	-2	6.6	4.0	410	-1	-1	8.1	2693	76	3.2	63	0.375
30-45.6892-109.0183-2-12-						0-M38992	15840	340	12920	22	-2	5.1	4.2	-274	-1	-1	9.0	2322	45	3.1	60	0.353
30-45.7183-109.0025-2-12-						0-M38993	29210	373	7774	43	-2	5.6	4.1	434	-1	-1	7.7	2388	61	3.1	63	0.321
30-45.7167-109.0014-2-11-						0-M38994	28780	155	8040	-19	-2	4.1	2.7	-177	-1	-1	5.8	2078	45	2.8	-31	0.410
30-45.7289-109.0042-2-15-						0-M38995	32040	296	8492	46	-2	6.5	4.0	-247	-1	-1	7.6	2584	66	2.2	80	0.341
30-45.7364-109.0042-2-12-						0-M38996	16980	311	12200	35	-2	5.6	3.6	-282	-1	-1	7.7	3013	50	2.7	54	0.331
30-45.7200-109.0172-2-12-						0-M38998	23020	416	10310	52	-2	6.0	4.5	715	-1	-1	8.6	2269	59	-2.0	-46	0.302
30-45.8417-109.0653-2-12-						0-M39001	11430	799	13900	-29	-3	7.1	4.2	-345	-1	-1	11.9	5288	102	-2.2	-101	0.264
30-45.8522-109.1108-2-11-						0-M39003	9533	927	13300	40	-2	3.8	3.4	-402		-1	6.9	1562	39	2.2	44	0.346
30-45.8592-109.0889-2-12-						0-M39004	30710	461	8640	51	-3	9.3	3.6	-372	-1	-1	8.6	3180	99	-1.8	80	0.355
30-45.9725-109.1728-2-12-						0-M39007	19840	378	13150	-19	-2	6.6	4.7	-267	-1	-1	9.1	3088	85	2.7	-76	0.318
30-45.9908-109.1725-2-11-						0-M39008	16750	344	13590	-20	-2	4.3	2.9	-243	-1	-1	6.1	2023	45	-1.6	44	0.331

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples ①

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
							TIME SAMPLED																										
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
30-45.9092-109.1722-2-12-						0-M39010-06/15/78-14-	22-20.0-		-	-			8.6-	1200-	12-1-7-6-8-2-4-5-1-4-3-1-3-																		2.81
30-45.8861-109.1553-2-12-						0-M39011-06/16/78- 9-	20-13.5-		-	-			6.9-	1280-	16-1-6-5-7-3-3-1-3-4-3-2-2-																		3.11
30-45.9072-109.2339-2-12-						0-M39012-06/16/78- 9-	20-10.5-		-	-			6.8-	4550-	11-1-6-5-7-2-3-1-1-4-3-2-2-																		2.79
30-45.8822-109.2186-2-11-						0-M39014-06/16/78-10-	17- 9.2-		-	-			7.5-	550-	13-1-6-4-6-2-3-1- -4-3-3-2-																		3.97
30-45.8706-109.1747-2-12-						0-M39015-06/16/78-11-	21-18.0-		-	-			7.8-	300-	12-1-7-6-8-3-4-1-1-4-3-2-2-																		3.22
30-45.8431-109.1317-2-12-						0-M39017-06/16/78-11-	18-15.0-		-	-			7.6-	2400-	15-1-6-5-6-3-3-1-1-4-4-2-2-																		2.87
30-45.8556-109.1819-2-12-						0-M39018-06/16/78-12-	20-14.9-		-	-			8.0-	800-	6-1-6-5-7-3-4-2-1-4-3-2-2-																		2.48
30-45.8425-109.1897-2-11-						0-M39019-06/16/78-13-	21-11.0-0-		-	-			7.8-	1900-	13-1-1-5-7- -4-1- -4-2-3-2-																		4.70
30-45.8347-109.1719-2-12-						0-M39021-06/16/78-13-	27-15.2-		-	-			7.8-	850-	12-1-6-5-7-3-3-1-3-4-3-2-2-																		2.77
30-45.8292-109.2111-2-11-						0-M39022-06/16/78-14-	20- 9.2-0-		-	-			7.7-	550-	13-1-1-5-7-3-3-1- -4-3-2-2-																		2.68
30-45.7708-109.2444-2-12-						0-M39023-06/16/78-15-	26-13.5-		-	-			7.1-	550-	6-1-6-4-6-3-3-1-1-4-3-2-2-																		2.62
30-45.7547-109.2428-2-12-						0-M39024-06/16/78-15-	26-14.0-		-	-			7.7-	600-	9-1-1-4-7-3-4-3-3-4-3-2-2-																		2.31
30-45.7822-109.1311-2-12-						0-M39026-06/16/78-16-	21-17.0-		-	-			7.4-	1400-	9-1-6-5-7-3-3-1-1-4-3-2-2-																		2.84
30-45.7556-109.1333-2-12-						0-M39027-06/16/78-16-	19-19.0-		-	-			7.8-	1550-	9-1-6-5-7-3-3-1-1-4-4-2-3-																		2.63
30-45.9308-109.2142-2-12-						0-M39031-06/17/78-11-	22-17.5-		-	-			7.2-	4300-	8-1-7-5-7-2-4-5-1-4-3-1-2-																		2.71
30-45.9425-109.2136-2-12-						0-M39032-06/17/78-11-	19-14.0-		-	-			7.4-	2650-	12-1-7-5-7-3-4-1-1-4-3-1-2-																		2.51
30-45.9461-109.2156-2-12-						0-M39034-06/17/78-11-	24-14.9-		-	-			7.6-	2350-	9-1-7-5-7-3-3-1-3-4-3-2-2-																		2.64
30-45.9756-109.2122-2-12-						0-M39035-06/17/78-12-	20-16.5-		-	-			7.8-	4150-	12-1-7-5-7-2-4-1-1-4-3-1-2-																		2.48
30-45.9675-109.2550-2-12-						0-M39038-06/17/78-14-	28-23.2-		-	-			7.9-	2320-	20-1-6-4-6-2-3-1-1-4-3-2-2-																		2.69
30-45.9567-109.2553-2-12-						0-M39039-06/17/78-15-	30-18.7-0-		-	-			8.0-	2200-	9-1-6-5-6-3-4-2-1-4-3-2-2-																		2.49
30-45.9497-109.2553-2-12-						0-M39040-06/17/78-15-	28-24.0-		-	-			8.2-	1925-	5-1-6-5-7-2-3-1-1-4-3-1-2-																		2.63
30-45.9814-109.3594-2-12-						0-M39043-06/19/78-10-	17-13.2-		-	-			7.5-	1360-	13-1-6-5-6-3-3-1-1-4-3-2-2-																		2.46
30-45.9769-109.3597-2-12-						0-M39044-06/19/78-11-	15-14.2-		-	-			7.6-	2200-	15-1-6-5-7-2-3-1-1-4-3-2-2-																		2.74
30-45.9736-109.3000-2-12-						0-M39045-06/19/78-11-	18-15.0-		-	-			7.6-	3520-	11-1-6-5-7-2-4-1-1-4-3-2-2-																		2.42
30-45.9511-109.3164-2-12-						0-M39047-06/19/78-12-	18-15.0-		-	-			8.2-	1300-	9-1-6-5-7-3-3-1-1-4-3-2-2-																		2.56
30-45.9211-109.3164-2-12-						0-M39050-06/19/78-13-	17-16.5-		-	-			8.1-	7250-	8-1-6-5-7-2-3-5-1-4-3-2-2-																		2.46
30-45.9131-109.3172-2-12-						0-M39051-06/17/78-13-	18-17.0-		-	-			8.3-	1200-	9-1-7-5-6-2-3-5-1-4-3-2-2-																		2.87
30-45.8872-109.3239-2-11-						0-M39053-06/19/78-14-	21-13.0-0-		-	-			7.7-	650-	15-1-6-4-6-2-3-1-1-4-3-3-2-																		2.37
30-45.8658-109.2964-2-11-						0-M39054-06/19/78-15-	17- 9.0-		-	-			8.3-	500-	13-1-7-4-6-3-3-1-1-4-3-3-3-																		2.86
30-45.8714-109.3256-2-11-						0-M39055-06/19/78-15-	16-14.5-		-	-			7.6-	975-	9-1-1-5-6-2-3-1-1-4-2-2-2-																		2.82
30-45.8911-109.2547-2-12-						0-M39058-06/19/78-17-	18-15.2-		-	-			7.3-	4610-	18-1-7-5-6-2-2-1-3-4-4-2-2-																		2.71
30-45.8703-109.2242-2-11-						0-M39059-06/20/78- 9-	19- 9.8-0-		-	-			6.7-	500-	10-1-6-5-6-3-3-1-2-4-3-3-1-																		4.69
30-45.8614-109.2553-2-12-						0-M39060-06/20/78-10-	21-10.5-		-	-			7.5-	625-	15-1-6- - -3-3-1-2-4-3-3-1-																		2.60
30-45.8339-109.2675-2-11-						0-M39061-06/20/78-10-	21- 8.7-		-	-			7.4-	525-	18-1-7-5-7-3-3-1-1-4-3-3-1-																		2.60
30-45.8156-109.2753-2-12-						0-M39062-06/20/78-10-	21-11.0-		-	-			7.8-	550-	6-1-7-5-6-3-3-1-1-4-3-3-1-																		2.61
30-45.7742-109.2528-2-12-						0-M39063-06/20/78-11-	23-11.1-		-	-			7.8-	550-	9-1-7-5-7-3-3-2-1-4-3-3-1-																		2.73
30-45.7697-109.2222-2-11-						0-M39065-06/20/78-12-	27-12.6-		-	-			7.6-	720-	16-1-7-5-7-2-3-1- -4-3-3-1-																		2.54
30-45.8081-109.1656-2-12-						0-M39068-06/20/78-13-	32-20.0-		-	-			7.8-	1200-	9-1-7-5-6-3-3-1-1-4-3-2-1-																		2.71
30-45.7703-109.3086-2-11-						0-M39069-06/20/78-13-	28-10.5-0-		-	-			7.5-	875-	15-1-7-5-7-3-4-1-1-4-3-2-1-																		3.46
30-45.7703-109.3114-2-12-						0-M39070-06/20/78-14-	29-19.2-0-		-	-			7.9-	650-	13-1-7-5-7-2-3-5-1-4-3-2-1-																		2.78
30-45.7697-109.3386-2-12-						0-M39071-06/20/78-14-	31-19.7-		-	-			8.0-	650-	8-1-7-3-6-3-3-3-1-1-4-3-3-1-																		2.45
30-45.7614-109.2744-2-12-						0-M39072-06/20/78-14-	26-22.0-		-	-			8.2-	625-	8-1-7-5-6-3-3-2-1-4-3-2-1-																		2.54
30-45.8431-109.3722-2-12-						0-M39074-06/20/78-16-	30-18.0-		-	-			8.1-	600-	9-1-7-3-7-3-3-3-3-4-3-2-1-																		2.50
30-45.7869-109.2828-2-12-						0-M39076-06/20/78-18-	28-17.2-		-	-			7.8-	525-	12-1-6-5-6-3-3-1-1-4-3-2-1-																		2.55
30-45.0044-109.5150-2-12-						0-M39080-06/22/78-13-	21- 4.2-0-		-	-			6.8-	18-	12-2-9-7-9-4-4-1-2-4-2-5-2-																		13.23
30-45.0028-109.5150-2-12-						0-M39081-06/22/78-13-	21- 3.5-0-		-	-			6.7-	12-	12-2-9-7-9-4-4-1-2-4-2-5-2-																		8.47
30-45.0025-109.4792-2-12-						0-M39082-06/22/78-14-	27- 6.5-0-		-	-			7.3-	20-	9-2-9-7-9-4-4-1-2-4-2-5-2-																		7.06
30-45.0094-109.4647-2-12-						0-M39083-06/22/78-14-	26- 9.7-0-		-	-			7.1-	21-	13-2-9-4-9-4-4-1-2-4-2-5-2-																		17.15
30-45.0211-109.4522-2-12-						0-M39084-06/22/78-15-	27- 6.5-0-		-	-			7.2-	36-	8-2-9-7-9-4-4-1-2-4-3-5-2-																		28.00
30-45.0283-109.4378-2-12-						0-M39085-06/22/78-15-	29- 8.9-0-		-	-			7.2-	27-	15-2-9-7-9-4-4-1-2-4-3-5-2-																		19.34
30-45.0411-109.4250-2-12-						0-M39086-06/22/78-16-	26- 8.7-0-		-	-			6.1-	37-	9-2-9-4-9-4-3-1-2-4-3-5-2-																		5.63

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

(2)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
30-45.9092-109.1722-2-12-						0-M39010	-5	-5	-5	18	-20	-15	8	-10	-15	2	35
30-45.8961-109.1553-2-12-						0-M39011	-5	-5	-5	23	-20	24	6	-10	-15	2	40
30-45.9072-109.2339-2-12-						0-M39012	-5	-5	-5	30	-20	-15	9	-10	-15	2	34
30-45.8822-109.2186-2-11-						0-M39014	-5	5	-5	27	-20	21	16	-10	-15	2	30
30-45.8706-109.1747-2-12-						0-M39015	-5	-5	-5	26	-20	-15	13	-10	-15	2	52
30-45.8431-109.1317-2-12-						0-M39017	-5	-5	-5	27	-20	20	6	-10	-15	2	40
30-45.8556-109.1819-2-12-						0-M39018	-5	-5	-5	25	-20	-15	-5	-10	-15	2	71
30-45.8425-109.1897-2-11-						0-M39019	-5	7	-5	13	-20	-15	11	-10	-15	2	40
30-45.8342-109.1719-2-12-						0-M39021	-5	-5	-5	26	-20	-15	9	-10	-15	2	46
30-45.8292-109.2111-2-11-						0-M39022	-5	-5	-5	23	-20	44	11	-10	-15	2	26
30-45.7708-109.2444-2-12-						0-M39023	-5	5	-5	24	-20	-15	8	-10	-15	2	36
30-45.7547-109.2428-2-12-						0-M39024	-5	6	-5	23	-20	-15	-5	-10	-15	2	35
30-45.7822-109.1311-2-12-						0-M39026	-5	-5	-5	32	-20	-15	12	-10	-15	2	41
30-45.7556-109.1333-2-12-						0-M39027	-5	-5	-5	32	-20	31	7	-10	-15	2	32
30-45.9308-109.2142-2-12-						0-M39031	-5	-5	-5	42	-20	34	14	-10	-15	2	27
30-45.9425-109.2136-2-12-						0-M39032	-5	5	-5	31	-20	21	9	-10	-15	2	31
30-45.9461-109.2156-2-12-						0-M39034	-5	-5	-5	23	-20	-15	-5	-10	-15	2	33
30-45.9756-109.2122-2-12-						0-M39035	-5	-5	-5	15	-20	-15	8	-10	-15	2	33
30-45.9675-109.2550-2-12-						0-M39038	-5	-5	-5	27	-20	-15	10	-10	-15	2	39
30-45.9567-109.2553-2-12-						0-M39039	-5	-5	-5	26	-20	23	-5	-10	-15	2	32
30-45.9497-109.2553-2-12-						0-M39040	-5	-5	-5	25	-20	19	5	-10	-15	2	34
30-45.9814-109.3594-2-12-						0-M39043	-5	5	-5	29	-20	22	10	-10	-15	2	51
30-45.9769-109.3597-2-12-						0-M39044	-5	-5	-5	36	-20	-15	9	-10	-15	2	33
30-45.9736-109.3000-2-12-						0-M39046	-5	6	-5	16	-20	22	32	-10	-15	2	61
30-45.9511-109.3164-2-12-						0-M39047	-5	-5	-5	26	-20	18	8	-10	-15	2	42
30-45.9211-109.3164-2-12-						0-M39050	-5	7	-5	40	-20	32	15	-10	-15	2	27
30-45.9131-109.3172-2-12-						0-M39051	-5	-5	5	35	-20	35	-5	-10	-15	2	39
30-45.8872-109.3239-2-11-						0-M39053	-5	-5	-5	31	-20	-15	9	-10	-15	2	13
30-45.8658-109.2964-2-11-						0-M39054	-5	-5	-5	27	-20	15	-5	-10	-15	2	14
30-45.8714-109.3256-2-11-						0-M39055	-5	-5	-5	48	-20	22	15	-10	-15	2	40
30-45.8911-109.2547-2-12-						0-M39058	-5	-5	-5	32	-20	33	9	-10	-15	2	38
30-45.8703-109.2242-2-11-						0-M39059	-5	-5	-5	24	-20	-15	11	-10	-15	2	29
30-45.8614-109.2553-2-12-						0-M39060	-5	-5	-5	22	-20	32	10	-10	-15	2	32
30-45.8339-109.2675-2-11-						0-M39061	-5	5	-5	26	-20	-15	5	-10	-15	2	36
30-45.8156-109.2753-2-12-						0-M39062	-5	-5	-5	27	-20	-15	-5	-10	-15	2	42
30-45.7742-109.2528-2-12-						0-M39063	-5	-5	-5	16	-20	21	-5	-10	-15	2	35
30-45.7697-109.2222-2-11-						0-M39065	-5	5	-5	22	-20	-15	-5	-10	-15	2	45
30-45.8081-109.1656-2-12-						0-M39068	-5	-5	-5	28	-20	-15	-5	-10	-15	2	26
30-45.7703-109.3086-2-11-						0-M39069	-5	-5	-5	45	-20	25	10	-10	-15	3	38
30-45.7703-109.3114-2-12-						0-M39070	-5	-5	-5	28	-20	-15	8	-10	-15	2	49
30-45.7692-109.3386-2-12-						0-M39071	-5	-5	-5	29	-20	-15	-5	-10	-15	2	43
30-45.7614-109.2744-2-12-						0-M39072	-5	-5	-5	16	-20	21	8	-10	-15	2	38
30-45.8431-109.3722-2-12-						0-M39074	-5	-5	-5	20	-20	-15	-5	-10	-15	2	37
30-45.7869-109.2828-2-12-						0-M39076	-5	-5	-5	21	-20	-15	7	-10	-15	2	34
30-45.0044-109.5150-2-12-						0-M39080	-5	-5	-5	38	-20	37	18	-10	-15	1	24
30-45.0028-109.5150-2-12-						0-M39081	-5	5	-5	34	-20	74	-5	-10	-15	2	30
30-45.0025-109.4792-2-12-						0-M39082	-5	11	-5	23	-20	18	14	-10	-15	2	21
30-45.0094-109.4647-2-12-						0-M39083	-5	6	-5	44	-20	238	10	-10	-15	2	32
30-45.0211-109.4522-2-12-						0-M39084	-5	-5	-5	43	-20	89	9	-10	-15	2	34
30-45.0283-109.4378-2-12-						0-M39085	-5	-5	-5	31	-20	57	13	-10	-15	1	44
30-45.0411-109.4250-2-12-						0-M39086	-5	-5	-5	41	-20	143	5	-10	-15	2	41

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
30-45.9092-109.1722-2-12-						0-M39010	62080	-0.07	485	24180	66	-89	8.1	55	2.7	3	0.9	14940	6.4	14980	32	0.3
30-45.8861-109.1553-2-12-						0-M39011	62940	-0.08	605	24980	67	91	8.7	70	3.4	3	1.0	16980	6.8	16230	36	0.3
30-45.9072-109.2339-2-12-						0-M39012	59650	-0.09	627	22200	72	-98	10.9	82	3.3	3	1.2	19390	5.8	17610	37	0.3
30-45.8822-109.2186-2-11-						0-M39014	68190	-0.09	797	13840	63	-79	6.9	41	4.0	4	1.2	13880	5.5	14180	37	0.3
30-45.8706-109.1747-2-12-						0-M39015	54460	-0.08	562	53880	46	-97	9.0	61	-1.3	3	0.8	12720	3.9	12390	25	0.2
30-45.8431-109.1317-2-12-						0-M39017	68030	-0.08	617	28500	56	-90	8.9	59	3.6	3	1.0	18550	5.9	18130	34	0.3
30-45.8556-109.1819-2-12-						0-M39018	52410	-0.09	577	82080	59	-86	9.2	68	2.3	3	1.0	14490	4.9	12490	33	0.3
30-45.8425-109.1897-2-11-						0-M39019	54160	-0.08	1663	23950	65	-78	4.2	-10	-1.3	5	0.8	7261	3.9	10910	48	0.3
30-45.8342-109.1719-2-12-						0-M39021	60610	-0.07	732	37480	64	127	9.0	53	3.5	4	0.9	15560	5.5	15620	35	0.3
30-45.8292-109.2111-2-11-						0-M39022	61710	-0.07	587	15150	59	-95	8.2	109	3.4	4	1.0	15760	7.1	15520	33	0.3
30-45.7708-109.2444-2-12-						0-M39023	54180	-0.08	551	33630	65	-74	7.9	52	2.7	3	0.9	13180	8.0	14200	37	0.4
30-45.7547-109.2428-2-12-						0-M39024	50380	-0.06	490	35430	49	-75	6.3	54	2.0	3	0.7	10890	6.3	12610	27	0.3
30-45.7822-109.1311-2-12-						0-M39025	60310	-0.10	522	30210	56	-101	7.8	49	3.0	3	0.9	19810	6.0	14830	34	0.3
30-45.7556-109.1333-2-12-						0-M39027	66070	-0.08	712	20810	62	-76	9.1	58	3.5	3	1.0	18020	5.8	15230	35	0.3
30-45.9308-109.2142-2-12-						0-M39031	75830	-0.11	709	12790	86	-87	13.7	108	4.8	3	1.1	25240	4.6	15570	44	0.4
30-45.9425-109.2136-2-12-						0-M39032	64660	-0.10	625	24980	60	-95	8.2	80	3.5	2	0.9	17150	4.7	14390	30	0.2
30-45.9461-109.2156-2-12-						0-M39034	57160	-0.06	629	26360	49	-79	7.9	74	2.1	3	0.9	12080	5.7	13600	34	0.2
30-45.9756-109.2122-2-12-						0-M39035	62700	-0.07	598	21790	60	146	7.0	51	2.9	3	1.0	14180	6.5	14850	35	0.3
30-45.9675-109.2550-2-12-						0-M39038	57290	-0.08	449	36110	62	-104	7.6	59	3.1	3	1.0	13600	6.2	12800	34	0.3
30-45.9567-109.2553-2-12-						0-M39039	60060	-0.09	623	23110	41	-95	6.8	67	2.9	3	1.0	13500	7.1	14650	36	0.3
30-45.9497-109.2553-2-12-						0-M39040	65400	-0.07	604	27870	51	-77	8.2	78	2.7	3	0.9	15390	5.4	16700	30	0.3
30-45.9814-109.3594-2-12-						0-M39043	58090	-0.06	379	46650	38	-91	7.0	41	-1.5	3	0.7	11590	3.2	14520	23	0.2
30-45.9769-109.3597-2-12-						0-M39044	70040	-0.09	641	18030	72	-89	10.2	106	3.8	4	1.2	20010	5.8	18800	35	0.3
30-45.9736-109.3000-2-12-						0-M39046	62510	-0.11	632	56300	47	103	8.5	57	3.2	3	0.7	17930	3.9	12040	32	0.3
30-45.9511-109.3164-2-12-						0-M39047	62920	-0.08	711	45440	55	-85	10.9	82	2.6	4	0.8	16170	4.6	15390	32	0.3
30-45.9211-109.3164-2-12-						0-M39050	74130	-0.09	917	15440	58	-82	11.9	124	3.9	3	1.1	21600	5.6	17160	39	0.3
30-45.9131-109.3172-2-12-						0-M39051	74800	-0.10	773	25950	73	-79	12.9	124	5.3	3	1.2	23580	5.1	20000	43	0.4
30-45.8872-109.3239-2-11-						0-M39053	79500	-0.11	832	16990	68	-93	9.9	96	2.7	3	1.0	20060	3.9	13810	28	0.3
30-45.8658-109.2964-2-11-						0-M39054	83910	-0.07	835	16760	62	-88	9.5	61	2.8	3	0.9	16340	5.8	12720	32	0.2
30-45.8714-109.3256-2-11-						0-M39055	66610	-0.08	581	40010	60	-76	9.8	49	3.7	4	1.0	17340	5.7	18860	37	0.3
30-45.8911-109.2547-2-12-						0-M39058	59850	-0.10	579	30030	76	-165	15.6	102	3.3	2	1.1	20070	6.2	14020	40	0.3
30-45.8703-109.2242-2-11-						0-M39059	65420	-0.11	598	10200	55	-102	7.6	77	-1.7	3	0.9	16650	5.3	13980	35	-0.2
30-45.8614-109.2553-2-12-						0-M39060	62760	-0.07	571	35330	54	-75	9.6	86	2.8	4	0.8	16530	5.5	15400	31	0.3
30-45.8339-109.2675-2-11-						0-M39061	51580	-0.06	580	37480	46	-67	6.0	37	2.8	3	0.8	11910	6.0	14120	29	0.3
30-45.8156-109.2753-2-12-						0-M39062	54560	-0.09	465	50690	49	-80	8.9	55	2.5	3	1.0	14650	6.0	13800	30	0.4
30-45.7742-109.2528-2-12-						0-M39063	57630	-0.10	521	44000	60	-90	7.5	40	2.7	3	0.9	14090	3.7	15820	26	0.3
30-45.7697-109.2222-2-11-						0-M39065	56760	-0.07	598	47300	46	-64	7.8	40	3.4	4	0.7	14040	4.8	16370	31	0.3
30-45.8081-109.1656-2-12-						0-M39068	61550	-0.09	539	23670	61	-76	8.5	56	2.7	4	0.9	15680	4.8	14100	34	0.3
30-45.7703-109.3086-2-11-						0-M39069	77170	-0.12	757	29380	83	-75	14.8	120	6.2	4	1.3	21430	4.9	16580	44	0.4
30-45.7703-109.3114-2-12-						0-M39070	59870	-0.11	528	49390	57	-88	8.3	51	4.0	3	0.8	15730	5.4	15700	31	0.3
30-45.7692-109.3386-2-12-						0-M39071	52090	-0.07	499	50290	48	-71	7.6	59	2.3	4	0.7	13400	5.8	12500	26	0.3
30-45.7614-109.2744-2-12-						0-M39072	56690	-0.07	527	38790	59	-70	7.2	43	3.2	4	0.8	13240	6.6	15780	29	0.3
30-45.8431-109.3722-2-12-						0-M39074	50910	-0.08	472	42030	67	-82	8.6	70	2.8	4	0.9	13870	8.6	12560	37	0.4
30-45.7869-109.2828-2-12-						0-M39076	52540	-0.09	460	35100	45	-85	6.2	48	3.4	3	0.9	12090	5.2	15590	35	0.4
30-45.0044-109.5150-2-12-						0-M39080	61130	-0.11	643	21220	74	256	12.7	99	2.7	4	1.6	21640	7.0	12620	124	0.3
30-45.0028-109.5150-2-12-						0-M39081	65420	-0.12	716	27400	117	302	17.4	148	2.6	5	1.9	30260	12.5	14240	84	0.3
30-45.0025-109.4792-2-12-						0-M39082	67410	-0.10	577	27310	105	235	12.6	118	-1.6	4	1.5	28900	12.6	14800	104	0.4
30-45.0094-109.4647-2-12-						0-M39083	56190	-0.15	-257	24240	80	-136	24.0	898	-2.4	4	0.8	28350	6.6	9572	46	-0.2
30-45.0211-109.4522-2-12-						0-M39084	65120	-0.11	685	19760	59	129	16.1	549	3.2	4	1.1	23200	6.2	10180	68	0.3
30-45.0283-109.4378-2-12-						0-M39085	69960	-0.10	527	25460	93	-121	13.5	209	-1.6	3	1.3	23960	7.3	13710	66	0.3
30-45.0411-109.4250-2-12-						0-M39086	65140	-0.11	345	24160	53	178	23.7	646	3.9	2	0.8	32650	5.6	9639	34	0.5

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)														U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
30-45.9092-109.1722-2-12-						0-M39010	11510	494	11730	-15	-2	6.6	4.5	-317	-1	-1	8.2	2867	66	2.8	63	0.343
30-45.8861-109.1553-2-12-						0-M39011	20010	279	10920	38	-2	7.7	4.2	-300	-1	-1	9.2	2786	86	3.2	83	0.338
30-45.9072-109.2339-2-12-						0-M39012	14350	876	12230	47	-3	7.6	4.6	-384	-1	-1	9.6	3282	73	2.8	-40	0.291
30-45.8922-109.2186-2-11-						0-M39014	19660	521	10680	-25	-3	6.1	2.6	-295	-1	-1	9.1	2729	53	3.0	-43	0.436
30-45.9706-109.1747-2-12-						0-M39015	18710	473	9642	45	-2	6.0	3.3	732	-1	-1	7.5	1973	61	-1.5	-54	0.429
30-45.8431-109.1317-2-12-						0-M39017	14880	487	9508	50	-2	8.5	4.6	-338	-1	-1	8.7	2941	95	3.2	64	0.330
30-45.8556-109.1819-2-12-						0-M39018	22070	480	9329	-23	-3	6.7	4.1	671	-1	-1	8.1	2512	54	2.5	93	0.306
30-45.8425-109.1897-2-11-						0-M39019	11400	281	11690	-21	-2	3.9	3.8	1334	-1	-1	12.9	1395	29	2.5	132	0.364
30-45.8342-109.1719-2-12-						0-M39021	24340	377	9437	46	-2	7.2	4.2	-304	-1	-1	8.4	2936	69	2.8	-56	0.330
30-45.8292-109.2111-2-11-						0-M39022	19970	282	13130	-20	-2	7.2	4.3	344	-1	-1	7.6	2578	65	2.1	-74	0.353
30-45.7709-109.2444-2-12-						0-M39023	24710	360	11130	40	-2	6.3	5.8	-259	-1	-1	8.1	2471	61	2.9	-63	0.323
30-45.7547-109.2428-2-12-						0-M39024	22130	315	11230	29	-2	5.2	4.2	-257		1	7.2	2026	43	2.2	39	0.321
30-45.7822-109.1311-2-12-						0-M39026	17740	668	10830	-23	-3	7.5	3.3	-385	-1	-1	8.6	3305	76	-2.1	-45	0.330
30-45.7556-109.1333-2-12-						0-M39027	18920	420	10890	58	-2	8.2	3.9	-271	-1	-1	9.6	2862	78	3.0	60	0.274
30-45.9308-109.2142-2-12-						0-M39031	24260	565	8794	-27	-3	12.1	6.6	-366	-1	-1	11.0	3645	102	3.6	108	0.246
30-45.9425-109.2136-2-12-						0-M39032	21190	414	12110	-29	-3	7.7	3.2	466	-1	-1	8.1	2378	79	-2.2	130	0.310
30-45.9461-109.2156-2-12-						0-M39034	15700	294	14770	-16	-2	5.0	3.6	397	-1	-1	6.4	2190	55	-1.2	36	0.413
30-45.9756-109.2122-2-12-						0-M39035	16610	279	12870	45	-2	6.4	3.5	334	-1	-1	8.3	2585	59	2.5	101	0.299
30-45.9675-109.2550-2-12-						0-M39038	14070	776	13800	43	-2	6.0	4.2	-339	-1	-1	8.4	1780	54	2.0	86	0.320
30-45.9567-109.2553-2-12-						0-M39039	13550	355	14120	-24	-3	5.9	3.5	-304	-1	-1	7.2	2389	57	2.4	-40	0.346
30-45.9497-109.2553-2-12-						0-M39040	19510	339	12910	-18	-2	6.9	4.0	445	-1	-1	7.6	3101	70	3.2	78	0.346
30-45.9814-109.3594-2-12-						0-M39043	21340	447	9028	-23	-2	5.8	1.4	-337	-1	-1	5.3	2660	72	-1.4	-40	0.464
30-45.9769-109.3597-2-12-						0-M39044	17850	302	11540	44	-3	8.7	5.1	511	-1	-1	9.7	3092	87	3.0	102	0.282
30-45.9736-109.3000-2-12-						0-M39046	23750	1108	9031	-29	-3	8.5	3.5	-479	-1	-1	7.3	2940	71	-2.6	101	0.332
30-45.9511-109.3164-2-12-						0-M39047	21410	447	11690	41	-2	7.2	3.9	566	-1	-1	7.7	2942	67	3.5	58	0.332
30-45.9211-109.3164-2-12-						0-M39050	20750	471	13160	39	-3	10.0	4.4	-285	-1	-1	9.3	3709	96	3.6	99	0.265
30-45.9131-109.3172-2-12-						0-M39051	19760	441	7672	54	-3	11.1	5.0	335	-1	-1	11.0	3516	111	-2.3	-64	0.261
30-45.8972-109.3239-2-11-						0-M39053	12810	331	13330	41	-3	8.9	2.5	-306	-1	-1	7.6	2874	85	-2.2	-44	0.312
30-45.8658-109.2964-2-11-						0-M39054	18560	311	14910	24	-2	6.3	4.1	664	-1	-1	8.9	3267	51	2.7	93	0.321
30-45.8714-109.3256-2-11-						0-M39055	22060	521	8408	50	-3	8.6	4.2	-291	-1	-1	9.4	2880	75	3.5	95	0.300
30-45.8911-109.2547-2-12-						0-M39058	15810	2566	10780	-24	-3	8.5	4.9	-735	-1	-1	9.7	2439	68	2.9	91	0.279
30-45.8703-109.2242-2-11-						0-M39059	12830	361	13460	-29	-3	7.2	3.3	-339	-1	-1	7.0	2904	75	2.4	-40	0.670
30-45.8614-109.2553-2-12-						0-M39060	21140	423	9675	31	-2	7.7	4.2	-280	1	-1	8.0	3310	73	2.6	72	0.325
30-45.8339-109.2675-2-11-						0-M39061	27060	249	9848	42	-2	5.8	3.8	-208	-1	-1	7.9	2384	50	2.6	-56	0.329
30-45.8156-109.2753-2-12-						0-M39062	27450	339	9155	44	-3	6.9	4.9	-295	-1	-1	9.4	2525	59	2.4	109	0.278
30-45.7742-109.2528-2-12-						0-M39063	29070	379	9331	-28	-3	7.0	3.7	-320	-1	-1	6.8	2488	60	3.0	-44	0.401
30-45.7697-109.2222-2-11-						0-M39066	38410	261	7617	33	-2	7.0	3.8	-235	-1	-1	8.6	2562	66	2.8	-45	0.295
30-45.8081-109.1656-2-12-						0-M39068	16190	354	9961	36	-3	7.9	3.6	352	-1	-1	8.8	2555	71	2.8	78	0.308
30-45.7703-109.3086-2-11-						0-M39069	39150	213	6211	61	-4	12.3	6.7	-278	-1	-1	11.6	3367	105	3.4	-4	0.298
30-45.7703-109.3114-2-12-						0-M39070	32660	385	8718	-28	-3	8.2	3.6	-322	-1	-1	6.9	2446	69	-2.6	-39	0.403
30-45.7692-109.3386-2-12-						0-M39071	32900	372	9777	41	-2	6.0	3.7	-247	-1	-1	8.6	2726	61	2.1	60	0.285
30-45.7614-109.2744-2-12-						0-M39072	27460	332	10120	41	-2	6.7	3.9	-238	-1	-1	8.3	2951	55	3.5	-57	0.306
30-45.8431-109.3722-2-12-						0-M39074	27260	365	10360	58	-2	6.3	4.9	-290	-1	-1	8.3	2299	53	3.3	42	0.301
30-45.7969-109.2829-2-12-						0-M39076	32310	258	10250	-24	-3	6.1	2.4	-279	-1	-1	7.2	2269	52	-1.7	-36	0.354
30-45.0044-109.5150-2-12-						0-M39080	27600	747	17010	63	-3	9.8	12.3	-416	-1	-1	17.6	4148	81	-2.0	89	0.752
30-45.0028-109.5150-2-12-						0-M39081	39580	1027	16250	-29	-4	14.3	9.6	-452	-1	-1	19.8	5394	111	2.4	110	0.428
30-45.0025-109.4792-2-12-						0-M39082	21480	591	22660	45	-3	11.3	13.9	-380	-1	-1	56.0	3046	99	7.3	103	0.126
30-45.0094-109.4647-2-12-						0-M39083	61000	1057	14120	-43	-5	11.5	3.6	-560	-2	-2	18.3	2702	65	-3.1	77	0.937
30-45.0211-109.4522-2-12-						0-M39084	29660	711	19300	-26	-3	9.6	7.6	-430	-1	-1	17.2	2616	84	-2.2	-40	1.628
30-45.0283-109.4378-2-12-						0-M39085	27590	668	22350	35	-3	10.4	9.4	-393	-1	-1	17.0	3141	92	3.8	120	1.138
30-45.0411-109.4250-2-12-						0-M39086	59790	960	16900	47	-3	14.5	4.5	-451	-1	-1	16.0	2785	86	-2.1	100	0.352

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
30-	45.0458-	109.4247-	2-	12-		0-M39097-	06/22/78-	16-	22-	9.0-	C-	-	6.7-	20-	10-2-9-4-9-4-4-1-2-1-3-5-2-				-1-	-	-	-	-	-							16.42
30-	45.0539-	109.4153-	2-	12-		0-M39098-	06/22/78-	17-	25-	9.0-	C-	-	6.3-	62-	11-2-9-7-9-4-3-1-2-4-3-5-2-				-1-	-	-	-	-	-							27.38
30-	45.0586-	109.4078-	2-	12-		0-M39099-	06/22/78-	17-	26-	7.5-	C-	-	6.6-	31-	8-2-9-7-9-4-4-1-2-7-3-5-2-				-1-	-	-	-	-	-							7.17
30-	45.1697-	109.4933-	2-	12-		0-M39090-	06/23/78-	10-	11-	2.5-	C-	-	7.2-	13-	13-2-9-4-9-4-4-1-2-1-4-5-1-				-1-	-	-	-	-	-							2.75
30-	45.1731-	109.4761-	2-	12-		0-M39091-	06/23/78-	10-	21-	4.5-	C-	-	7.2-	22-	11-2-9-4-4-4-3-1-2-1-4-4-1-				-1-	-	-	-	-	-							1.70
30-	45.1714-	109.4575-	2-	12-		0-M39092-	06/23/78-	11-	19-	4.2-	C-	-	7.1-	21-	15-2-9-4-2-5-4-1-2-1-4-4-1-				-1-	-	-	-	-	-							6.13
30-	45.1747-	109.4467-	2-	12-		0-M39093-	06/23/78-	11-	27-	4.0-	C-	-	7.7-	17-	13-1-9-7-9-4-4-1-2-1-4-4-1-				-1-	-	-	-	-	-							2.56
30-	45.1717-	109.4358-	2-	12-		0-M39094-	06/23/78-	11-	20-	4.1-	C-	-	7.2-	24-	13-2-9-4-2-4-4-1-2-1-4-4-1-				-1-	-	-	-	-	-							3.28
30-	45.1689-	109.4167-	2-	12-		0-M39095-	06/23/78-	12-	27-	4.0-	C-	-	7.3-	23-	10-2-9-4-9-4-4-1-2-1-4-4-1-				-1-	-	-	-	-	-							4.46
30-	45.1633-	109.3981-	2-	12-		0-M39096-	06/23/78-	13-	28-	4.7-	C-	-	7.2-	49-	6-1-1- - -4-3-1-2-1-4-4-2-				-1-	-	-	-	-	-							8.02
30-	45.1586-	109.3856-	2-	12-		0-M39098-	06/23/78-	13-	29-	8.0-	-	-	7.1-	31-	11-2-1-4-4-4-4-4-1-2-1-4-4-2-				-1-	-	-	-	-	-							8.08
30-	45.1564-	109.3628-	2-	12-		0-M39099-	06/23/78-	14-	31-	9.1-	C-	-	6.7-	60-	12-2-9-5-8-2-4-1-1-1-3-4-1-				-1-	-	-	-	-	-							98.09
30-	45.1586-	109.3511-	2-	12-		0-M39101-	06/26/78-	12-	21-	6.7-	C-	-	6.7-	42-	8-2-9-4-9-4-4-1-2-1-3-4-2-				-1-	-	-	-	-	-							30.99
30-	45.1533-	109.3456-	2-	12-		0-M39102-	06/26/78-	13-	20-	4.0-	C-	-	6.9-	50-	9-2-9-4-4-5-4-1-2-1-4-4-2-				-1-	-	-	-	-	-							10.80
30-	45.1481-	109.3367-	2-	12-		0-M39103-	06/26/78-	14-	20-	5.1-	C-	-	6.9-	80-	15-2-9-4-6-4-4-4-1-2-2-3-4-3-				-1-	-	-	-	-	-							14.15
30-	45.1558-	109.3139-	2-	12-		0-M39104-	06/26/78-	14-	18-	8.3-	-	-	7.0-	58-	13-2-7-4-3-4-3-1-2-1-3-4-3-				-1-	-	-	-	-	-							21.42
30-	45.1717-	109.2997-	2-	12-		0-M39105-	06/26/78-	15-	21-	6.9-	C-	-	7.1-	72-	15-2-2-4-3-4-4-2-2-2-4-5-2-				-1-	-	-	-	-	-							6.02
30-	45.0911-	109.3836-	2-	12-		0-M39107-	06/26/78-	16-	16-	6.5-	C-	-	7.3-	29-	12-2-9-6-4-4-4-1-2-1-3-5-3-				-1-	-	-	-	-	-							8.78
30-	45.0869-	109.3719-	2-	12-		0-M39108-	06/26/78-	17-	18-	4.6-	C-	-	7.2-	21-	6-2-9-4-7-5-3-1-2-1-3-4-4-				-1-	-	-	-	-	-							6.57
30-	45.0886-	109.3675-	2-	12-		0-M39109-	06/26/78-	17-	15-	4.5-	C-	-	7.1-	21-	12-2-9-4-7-4-4-1-2-7-3-5-4-				-1-	-	-	-	-	-							6.01
30-	45.0881-	109.3636-	2-	12-		0-M39111-	06/26/78-	17-	15-	5.2-	C-	-	7.1-	56-	9-2-9-4-9-4-3-1-2-7-4-4-4-				-1-	-	-	-	-	-							13.16
30-	45.0847-	109.3364-	2-	12-		0-M39112-	06/27/78-	9-	18-	4.3-	-	-	6.9-	47-	16-2-1-4-6-4-4-4-1-2-1-3-5-1-				-1-	-	-	-	-	-							11.37
30-	45.0856-	109.3267-	2-	12-		0-M39113-	06/27/78-	10-	19-	4.0-	C-	-	7.4-	64-	16-2-1-4-6-5-4-1-2-7-4-5-1-				-1-	-	-	-	-	-							6.84
30-	45.0864-	109.3228-	2-	12-		0-M39114-	06/27/78-	10-	21-	4.5-	C-	-	7.7-	91-	9-2-9-7-9-4-4-1-2-7-3-5-1-				-1-	-	-	-	-	-							26.89
30-	45.0950-	109.3119-	2-	12-		0-M39116-	06/27/78-	11-	19-	6.9-	C-	-	7.4-	81-	15-2-1-4-9-4-4-1-2-1-3-4-1-				-8-	-	-	-	-	-							4.00
30-	45.1031-	109.3019-	2-	12-		0-M39118-	06/27/78-	12-	19-	5.5-	C-	-	7.5-	80-	11-2-9-4-9-5-5-1-2-1-4-5-1-				-1-	-	-	-	-	-							16.84
30-	45.1167-	109.2967-	2-	12-		0-M39119-	06/27/78-	12-	19-	8.3-	C-	-	7.6-	42-	13-2-1-4-9-2-2-1-2-7-4-4-1-				-1-	-	-	-	-	-							12.44
30-	45.1042-	109.3083-	2-	12-		0-M39120-	06/27/78-	13-	22-	8.5-	C-	-	7.4-	65-	9-2-9-5-8-4-3-1-2-2-4-4-1-				-1-	-	-	-	-	-							32.30
30-	45.1144-	109.3008-	2-	12-		0-M39121-	06/27/78-	13-	27-	9.8-	C-	-	7.2-	102-	9-2-9-5-8-4-4-1-2-2-4-5-2-				-1-	-	-	-	-	-							25.40
30-	45.1200-	109.2750-	2-	12-		0-M39122-	06/27/78-	14-	26-	8.8-	C-	-	7.3-	41-	10-2-4-4-9-4-3-1-2-1-3-4-1-				-1-	-	-	-	-	-							15.19
30-	45.2250-	109.2572-	2-	12-		0-M39124-	06/27/78-	16-	29-	12.0-	-	-	7.1-	44-	11-2-4-4-4-4-4-1-3-4-4-2-2-				-3-	-	-	-	-	-							3.23
30-	45.2142-	109.2786-	2-	12-		0-M39125-	06/27/78-	17-	27-	15.1-	-	-	7.0-	285-	13-2-1-4-6-3-3-1-3-4-4-2-2-				-1-	-	-	-	-	-							2.84
30-	45.1622-	109.2092-	2-	12-		0-M39126-	06/28/78-	9-	17-	13.5-	C-	-	7.7-	1690-	10-1-9-5-7-3-3-1-2-3-3-3-2-				-3-	-	-	-	-	-							3.46
30-	45.1617-	109.2106-	2-	12-		0-M39127-	06/28/78-	9-	18-	8.8-	-	-	8.2-	71-	13-1-4-5-6-4-3-4-1-3-3-4-2-				-3-	-	-	-	-	-							3.27
30-	45.1572-	109.1825-	2-	12-		0-M39128-	06/28/78-	9-	21-	11.8-	C-	-	7.7-	500-	9-1-9-5-6-3-3-2-1-3-3-3-2-				-2-	-	-	-	-	-							3.47
30-	45.1533-	109.2153-	2-	12-		0-M39129-	06/28/78-	10-	23-	12.2-	C-	-	7.4-	361-	16-1-6-5-8-3-3-2-1-2-4-3-1-				-3-	-	-	-	-	-							4.47
30-	45.1525-	109.2156-	2-	12-		0-M39130-	06/28/78-	10-	23-	11.0-	C-	-	7.4-	290-	16-1-6-5-8-3-3-2-1-2-4-3-1-				-3-	-	-	-	-	-							4.37
30-	45.1547-	109.2069-	2-	11-		0-M39131-	06/28/78-	10-	25-	11.2-	-	-	7.0-	1050-	10-1-6-5-6-3-3-1-1-4-3-3-1-				-1-	-	-	-	-	-							2.69
30-	45.1631-	109.1731-	2-	12-		0-M39132-	06/28/78-	11-	26-	24.7-	C-	-	8.0-	1850-	13-1-4-5-6-2-2-1-1-3-3-3-1-				-3-	-	-	-	-	-							3.80
30-	45.1586-	109.1550-	2-	15-		0-M39133-	06/28/78-	12-	31-	-C-	-	-	-	-	6-1-9-4-7- - - - -4-3-3-1-				-1-	-	-	-	-	-							2.88
30-	45.2142-	109.1864-	2-	11-		0-M39137-	06/28/78-	14-	28-	24.0-	-	-	7.9-	452-	9-1-2- - -2-2-1-3-4-4-4-2-				-3-	-	-	-	-	-							3.12
30-	45.2131-	109.1372-	2-	12-		0-M39138-	06/28/78-	15-	35-	17.0-	-	-	8.0-	100-	6-1-4-5-6-4-4-4-2-3-3-4-2-				-1-	-	-	-	-	-							3.60
30-	45.2353-	109.1367-	2-	12-		0-M39140-	06/28/78-	15-	34-	24.1-	-	-	8.0-	190-	9-1-6-5-6-3-3-4-1-4-4-2-2-				-1-	-	-	-	-	-							3.43
30-	45.2293-	109.2211-	2-	11-		0-M39143-	06/30/78-	12-	28-	7.0-	C-	-	6.7-	103-	5-2-1-4-6-3-3-1- -4-4-2-2-				-3-	-	-	-	-	-							2.22
30-	45.2428-	109.1975-	2-	11-		0-M39144-	06/30/78-	12-	27-	10.2-	-	-	6.7-	280-	10-1-1-5-9- - -1- -4-4-3-2-				-1-	-	-	-	-	-							2.89
30-	45.2414-	109.1956-	2-	12-		0-M39145-	06/30/78-	12-	29-	19.2-	C-	-	7.0-	76-	4-2-1-5-6-4-4-1-3-4-4-2-2-				-3-	-	-	-	-	-							2.30
30-	45.2081-	109.3153-	2-	11-		0-M39147-	06/30/78-	13-	27-	8.0-	C-	-	7.5-	492-	8-1-9-4-6-3-3-1- -2-3-3-2-				-3-	-	-	-	-	-							2.12
30-	45.2353-	109.2711-	2-	11-		0-M39148-	06/30/78-	14-	30-	8.7-	C-	-	7.1-	142-	4-2-4-5-8-3-3-1- -4-4-2-2-				-3-	-	-	-	-	-							2.60
30-	45.2481-	109.2822-	2-	12-		0-M39149-	06/30/78-	14-	27-	17.4-	C-	-	8.1-	297-	9-1-1-3-1-4-3-2-3-4-4-3-2-				-3-	-	-	-	-	-							2.67
30-	45.2475-	109.2792-	2-	12-		0-M39151-	06/30/78-	15-	28-	14.5-	-	-	7.5-	182-	8-1-1-4-6-3-3-1-1-4-4-2-2-				-1-	-	-	-	-	-							3.07

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

(2)

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAB. SAMPLE LOCATION NUMBER	Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
30-45.0458-109.4247-2-12-						0-M39087	-5	-5	-5	35	-20	185	9	-10	-15	2	21
30-45.0539-109.4153-2-12-						0-M39088	-5	-5	-5	49	-20	78	7	-10	-15	2	24
30-45.0586-109.4078-2-12-						0-M39089	-5	-5	-5	32	-20	169	-5	-10	-15	2	26
30-45.1697-109.4933-2-12-						0-M39090	-5	10	-5	32	-20	35	7	-10	-15	1	11
30-45.1731-109.4761-2-12-						0-M39091	-5	13	-5	13	-20	15	-5	-10	-15	1	29
30-45.1714-109.4575-2-12-						0-M39092	-5	9	-5	16	-20	22	8	-10	-15	1	6
30-45.1747-109.4467-2-12-						0-M39093	-5	8	-5	21	-20	23	10	-10	-15	-1	6
30-45.1717-109.4358-2-12-						0-M39094	-5	10	-5	28	-20	46	7	-10	-15	2	14
30-45.1689-109.4167-2-12-						0-M39095	-5	9	-5	17	-20	24	10	-10	-15	1	11
30-45.1633-109.3981-2-12-						0-M39096	-5	7	-5	22	-20	26	10	-10	-15	1	15
30-45.1586-109.3856-2-12-						0-M39098	-5	9	-5	18	-20	-15	9	-10	-15	1	9
30-45.1564-109.3628-2-12-						0-M39099	-5	5	-5	29	-20	22	10	-10	-15	-1	10
30-45.1586-109.3511-2-12-						0-M39101	-5	-5	-5	16	-20	16	5	-10	-15	2	20
30-45.1533-109.3656-2-12-						0-M39102	-5	-5	-5	25	-20	-15	-5	-10	-15	1	2
30-45.1481-109.3367-2-12-						0-M39103	-5	-5	-5	17	-20	40	11	-10	-15	1	16
30-45.1558-109.3139-2-12-						0-M39104	-5	-5	-5	13	-20	15	20	-10	-15	2	29
30-45.1717-109.2997-2-12-						0-M39105	-5	-5	-5	29	-20	20	20	-10	-15	3	46
30-45.0811-109.3936-2-12-						0-M39107	-5	-5	-5	23	-20	40	18	-10	-15	2	19
30-45.0869-109.3719-2-12-						0-M39108	-5	-5	-5	30	-20	58	17	-10	-15	2	19
30-45.0886-109.3575-2-12-						0-M39109	-5	-5	-5	30	-20	63	20	-10	-15	2	20
30-45.0881-109.3636-2-12-						0-M39111	-5	-5	-5	46	-20	92	9	-10	-15	2	16
30-45.0847-109.3364-2-12-						0-M39112	-5	-5	-5	34	-20	47	18	-10	-15	2	22
30-45.0856-109.3267-2-12-						0-M39113	-5	-5	-5	31	-20	39	11	-10	-15	2	25
30-45.0864-109.3228-2-12-						0-M39114	-5	-5	-5	51	-20	44	10	-10	-15	1	29
30-45.0950-109.3119-2-12-						0-M39116	-5	-5	-5	29	-20	22	16	-10	-15	2	19
30-45.1031-109.3019-2-12-						0-M39118	-5	-5	-5	38	-20	42	10	-10	-15	2	39
30-45.1167-109.2967-2-12-						0-M39119	-5	-5	-5	28	-20	-15	18	-10	-15	2	53
30-45.1042-109.3083-2-12-						0-M39120	-5	-5	-5	54	-20	53	16	-10	-15	1	31
30-45.1144-109.3008-2-12-						0-M39121	-5	5	-5	26	-20	54	14	-10	-15	2	29
30-45.1200-109.2750-2-12-						0-M39122	-5	-5	-5	17	-20	16	20	-10	-15	2	61
30-45.2250-109.2572-2-12-						0-M39124	-5	7	-5	14	-20	-15	10	-10	-15	2	19
30-45.2142-109.2786-2-12-						0-M39125	-5	-5	-5	21	-20	-15	-5	-10	-15	2	38
30-45.1622-109.2092-2-12-						0-M39126	-5	-5	-5	24	27	25	6	-10	-15	3	38
30-45.1617-109.2106-2-12-						0-M39127	-5	-5	-5	26	-20	17	7	-10	-15	3	35
30-45.1572-109.1925-2-12-						0-M39128	-5	-5	-5	25	-20	-15	5	-10	-15	2	30
30-45.1533-109.2153-2-12-						0-M39129	-5	6	-5	22	-20	16	7	-10	-15	3	29
30-45.1525-109.2156-2-12-						0-M39130	-5	-5	-5	28	-20	-15	8	-10	-15	2	29
30-45.1547-109.2069-2-11-						0-M39131	-5	-5	-5	19	-20	-15	-5	-10	-15	2	42
30-45.1631-109.1731-2-12-						0-M39132	-5	5	-5	33	-20	-15	6	-10	-15	2	37
30-45.1586-109.1550-2-15-						0-M39133	-5	-5	-5	20	-20	-15	-5	-10	-15	2	25
30-45.2142-109.1864-2-11-						0-M39137	-5	-5	-5	29	-20	17	-5	-10	-15	3	41
30-45.2131-109.1372-2-12-						0-M39139	-5	-5	-5	23	-20	16	-5	-10	-15	2	30
30-45.2353-109.1367-2-12-						0-M39140	-5	5	-5	21	-20	-15	6	-10	-15	2	8
30-45.2283-109.2211-2-11-						0-M39143	-5	-5	-5	25	-20	-15	-5	-10	-15	2	22
30-45.2428-109.1975-2-11-						0-M39144	-5	-5	-5	24	-20	23	7	-10	-15	2	27
30-45.2414-109.1956-2-12-						0-M39145	-5	-5	-5	25	-20	15	8	-10	-15	2	31
30-45.2081-109.3153-2-11-						0-M39147	-5	-5	-5	21	-20	-15	-5	-10	-15	2	26
30-45.2353-109.2711-2-11-						0-M39148	-5	-5	-5	25	-20	-15	6	-10	-15	2	22
30-45.2481-109.2922-2-12-						0-M39149	-5	-5	-5	14	-20	-15	-5	-10	-15	2	28
30-45.2475-109.2792-2-12-						0-M39151	-5	-5	-5	23	-20	-15	5	-10	-15	2	28

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
30-45.0458-109.4247-2-12-						0-M39087	56040	-0.14	-238	18720	127	-137	19.9	643	-2.2	3	0.7	27860	6.8	9876	86	-0.2
30-45.0539-109.4153-2-12-						0-M39088	62910	-0.09	446	18560	59	-110	12.8	231	1.7	2	0.7	17250	4.0	12210	46	0.2
30-45.0586-109.4078-2-12-						0-M39089	63870	-0.10	298	26950	102	-114	19.1	418	1.7	4	1.0	36170	7.0	12600	59	0.4
30-45.1697-109.4333-2-12-						0-M39090	72490	-0.10	562	19620	158	-122	12.8	144	-1.5	3	1.3	23190	15.4	13220	89	0.3
30-45.1731-109.4761-2-12-						0-M39091	94160	-0.09	-197	10640	91	-165	8.6	63	3.1	-1	0.7	13830	7.4	9105	66	0.7
30-45.1714-109.4575-2-12-						0-M39092	66990	-0.09	703	18820	176	-126	10.2	71	-1.4	3	1.1	18670	11.7	11870	114	0.2
30-45.1747-109.4467-2-12-						0-M39093	71370	-0.08	732	17050	127	159	9.0	65	-1.3	3	1.2	20080	13.4	8927	85	0.2
30-45.1717-109.4358-2-12-						0-M39094	70730	-0.09	468	22400	107	197	12.2	129	-1.4	3	1.1	21680	9.5	9793	78	0.2
30-45.1689-109.4167-2-12-						0-M39095	72990	-0.10	688	15710	167	-128	8.0	69	-1.6	3	1.3	20900	11.4	14660	117	-0.2
30-45.1633-109.3981-2-12-						0-M39096	71960	-0.08	677	17690	142	-105	7.2	64	2.2	3	1.2	18140	9.8	12180	107	-0.1
30-45.1586-109.3856-2-12-						0-M39098	68630	-0.07	671	18990	93	-116	7.7	52	-1.1	3	1.1	12110	5.6	12840	66	0.2
30-45.1564-109.3628-2-12-						0-M39099	48020	-0.17	508	18530	117	-140	12.8	86	-2.6	3	1.7	16560	4.4	8599	150	0.4
30-45.1586-109.3511-2-12-						0-M39101	76190	-0.07	466	13930	71	-113	6.1	41	-1.1	3	0.7	10920	5.5	14120	56	0.3
30-45.1533-109.3656-2-12-						0-M39102	59530	-0.12	430	28950	104	250	16.5	46	-2.1	6	1.8	56350	12.0	10510	71	0.5
30-45.1481-109.3367-2-12-						0-M39103	57170	-0.11	389	20660	99	-134	13.6	224	-1.8	4	1.0	28720	7.5	12330	59	0.4
30-45.1558-109.3139-2-12-						0-M39104	57950	-0.10	488	11940	81	-130	6.4	58	-1.6	3	0.9	12040	6.5	17100	69	0.4
30-45.1717-109.2997-2-12-						0-M39105	72200	-0.07	642	15180	66	-94	8.1	63	2.7	3	0.9	15070	6.1	28690	43	0.3
30-45.0811-109.3836-2-12-						0-M39107	69140	-0.08	548	22260	227	131	10.5	349	-1.4	5	1.4	26640	21.0	12270	150	0.5
30-45.0869-109.3719-2-12-						0-M39108	63050	-0.05	368	18510	54	-126	9.6	311	-1.4	3	0.7	17380	5.2	13260	34	-0.1
30-45.0886-109.3675-2-12-						0-M39109	66210	-0.04	536	21690	78	116	10.3	524	1.6	3	0.8	19560	8.8	9233	48	0.2
30-45.0881-109.3536-2-12-						0-M39111	64640	-0.05	-173	20440	45	-126	9.7	454	-1.5	2	0.6	15660	4.2	10960	29	0.2
30-45.0847-109.3364-2-12-						0-M39112	65740	-0.04	505	21140	53	-107	9.8	165	-1.2	3	0.8	17750	7.1	13370	34	0.2
30-45.0856-109.3267-2-12-						0-M39113	70130	-0.04	650	24190	82	-104	11.8	128	2.3	3	1.2	23530	10.8	14190	54	0.4
30-45.0864-109.3228-2-12-						0-M39114	56970	-0.06	569	29400	61	-121	9.7	97	-1.5	3	1.1	15960	7.1	9420	41	0.3
30-45.0950-109.3119-2-12-						0-M39116	71590	-0.05	665	20220	51	-125	6.6	56	-1.3	3	0.8	12990	5.1	10730	28	0.2
30-45.1031-109.3019-2-12-						0-M39118	66150	-0.05	638	20200	61	186	8.9	97	2.8	4	1.0	18100	7.2	12940	47	0.4
30-45.1167-109.2967-2-12-						0-M39119	69560	-0.04	832	16280	53	-97	6.8	74	2.7	2	0.9	13480	4.6	18460	37	0.2
30-45.1042-109.3083-2-12-						0-M39120	56290	-0.05	515	22720	57	160	10.2	104	-1.5	3	1.0	15190	3.9	10800	42	0.4
30-45.1144-109.3008-2-12-						0-M39121	61600	-0.06	-199	16370	52	-128	8.3	132	-1.5	-1	-0.2	15960	3.9	10810	33	-0.1
30-45.1200-109.2750-2-12-						0-M39122	56980	-0.04	410	54830	65	157	6.4	62	1.9	3	0.7	11640	4.4	15150	44	0.2
30-45.2250-109.2572-2-12-						0-M39124	65620	-0.03	587	12600	67	108	6.5	50	1.2	3	0.8	12070	9.3	15940	38	0.2
30-45.2142-109.2786-2-12-						0-M39125	49390	-0.04	476	11840	44	-76	7.4	44	1.9	3	0.6	9946	8.2	12600	23	0.3
30-45.1622-109.2092-2-12-						0-M39126	63080	-0.12	648	19460	64	-60	8.5	72	3.8	5	1.0	17890	5.7	15820	41	0.4
30-45.1617-109.2106-2-12-						0-M39127	55790	-0.05	548	17140	41	-66	7.2	44	-1.4	3	0.8	11780	4.4	15460	27	0.2
30-45.1572-109.1825-2-12-						0-M39128	43240	-0.06	710	17570	64	-64	6.5	57	2.4	4	0.9	12850	13.3	15100	38	0.4
30-45.1533-109.2153-2-12-						0-M39129	55000	-0.08	626	10920	63	-94	7.4	53	2.3	3	0.8	12910	8.2	16090	37	0.3
30-45.1525-109.2156-2-12-						0-M39130	54740	-0.09	598	11910	72	-72	9.7	57	2.6	3	1.2	14710	7.8	16680	38	0.3
30-45.1547-109.2069-2-11-						0-M39131	43530	-0.09	592	39180	44	-56	6.2	42	2.3	3	0.9	11530	6.9	13560	31	0.2
30-45.1631-109.1731-2-12-						0-M39132	52390	-0.09	1097	41550	52	-71	9.3	46	3.1	4	1.0	16210	5.3	13400	30	0.3
30-45.1586-109.1550-2-15-						0-M39133	37560	-0.06	601	12050	46	-52	6.4	40	2.3	2	0.9	14490	8.0	13130	26	0.3
30-45.2142-109.1864-2-11-						0-M39137	65580	-0.12	527	11740	78	-89	12.3	70	4.7	3	1.1	24170	6.5	21130	43	0.4
30-45.2131-109.1372-2-12-						0-M39139	40090	-0.08	619	37710	47	-53	6.6	42	2.3	4	1.1	11310	16.2	13250	35	0.3
30-45.2353-109.1367-2-12-						0-M39140	51690	-0.06	860	7603	75	-62	7.0	46	2.2	4	1.0	11770	17.5	12210	40	0.4
30-45.2293-109.2211-2-11-						0-M39143	47730	-0.06	395	5869	53	-84	6.6	59	2.1	3	0.9	12260	9.2	13430	39	0.3
30-45.2428-109.1975-2-11-						0-M39144	63260	-0.10	704	8890	82	-82	10.9	83	3.4	4	1.2	18940	8.6	16250	50	0.4
30-45.2414-109.1956-2-12-						0-M39145	55870	-0.10	514	16390	60	-102	7.7	57	-1.6	2	0.9	16160	7.2	14360	34	0.3
30-45.2081-109.3153-2-11-						0-M39147	30940	-0.05	375	31320	36	-62	4.6	37	-0.9	2	0.6	6872	10.7	8313	24	0.2
30-45.2353-109.2711-2-11-						0-M39148	51630	-0.07	470	7183	48	-87	6.5	52	2.4	2	0.9	11120	8.5	16540	31	0.3
30-45.2481-109.2822-2-12-						0-M39149	45570	-0.07	594	21300	59	-64	7.2	68	1.8	4	0.8	11250	14.7	16080	33	0.4
30-45.2475-109.2792-2-12-						0-M39151	55000	-0.07	514	10300	43	-82	6.1	37	1.5	3	0.8	10110	8.9	16220	-9	0.3

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)														U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAB SAMPLE LOCATION NUMBER	Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
30-45.0458-109.4247-2-12-						0-M39097	52390	954	16410	-37	-4	10.5	4.3	-516	-2	-2	35.9	3460	95	-2.9	-60	0.457
30-45.0539-109.4153-2-12-						0-M39098	24720	528	18950	50	-3	7.5	6.3	-355	-1	-1	11.8	2322	68	-1.8	114	2.320
30-45.0586-109.4078-2-12-						0-M39099	51330	1020	18980	33	-3	15.2	5.8	-394	-1	-1	25.3	2805	109	3.2	98	0.283
30-45.1697-109.4933-2-12-						0-M39000	23700	449	23740	-23	-3	9.6	8.6	-369	-1	-1	48.1	2110	54	4.8	-54	0.057
30-45.1731-109.4761-2-12-						0-M39001	17610	247	47040	-24	-3	5.4	4.7	-414	-1	-1	39.4	2181	37	-1.7	62	0.043
30-45.1714-109.4575-2-12-						0-M39002	15030	420	25960	-22	-3	6.2	9.1	-379	-1	-1	60.7	2682	65	4.6	74	0.101
30-45.1747-109.4467-2-12-						0-M39003	15020	333	27990	-20	-3	7.0	7.3	-324	-1	-1	43.9	2360	59	5.5	100	0.058
30-45.1717-109.4358-2-12-						0-M39004	22290	436	26690	30	-3	9.4	7.9	-368	-1	-1	29.2	2714	67	5.4	-55	0.112
30-45.1689-109.4167-2-12-						0-M39005	14790	354	27330	-27	-3	7.0	8.4	-369	-1	-1	54.9	3420	76	4.1	130	0.081
30-45.1633-109.3981-2-12-						0-M39006	13520	295	28980	-22	-2	5.4	8.2	-283	-1	-1	45.8	2477	49	-1.7	60	0.175
30-45.1586-109.3956-2-12-						0-M39008	15600	318	28680	-17	-2	4.6	7.3	-326	-1	-1	27.3	2399	35	2.7	31	0.296
30-45.1564-109.3628-2-12-						0-M39009	14280	269	16650	-47	-5	4.4	19.6	-468	4	-2	21.4	-1145	45	6.0	80	4.584
30-45.1586-109.3511-2-12-						0-M39101	13140	271	31830	37	-2	5.3	6.9	-300	-1	-1	16.1	2030	40	2.3	59	1.925
30-45.1533-109.3656-2-12-						0-M39102	16070	947	20530	-35	-4	14.4	8.0	-433	-1	-1	20.7	10140	286	4.5	62	0.522
30-45.1481-109.3367-2-12-						0-M39103	21120	566	27370	-30	-3	9.6	7.5	-416	-1	-1	28.4	4727	135	4.2	50	0.498
30-45.1558-109.3139-2-12-						0-M39104	10890	492	26580	-27	-3	5.8	7.8	-373	-1	-1	27.9	2572	39	3.4	49	0.768
30-45.1717-109.2997-2-12-						0-M39105	16930	448	19160	58	-2	6.8	4.0	-294	1	-1	15.7	2432	48	3.0	70	0.383
30-45.0811-109.3836-2-12-						0-M39107	20510	559	25870	-23	-3	10.2	12.4	383	-1	-1	83.7	3107	76	6.7	92	0.105
30-45.0869-109.3719-2-12-						0-M39108	25020	640	24400	-23	-2	7.8	2.9	-398	-1	-1	15.1	3278	80	-1.4	-44	0.435
30-45.0986-109.3675-2-12-						0-M39109	25720	572	24830	25	-1	8.7	4.4	-318	-1	-1	26.1	3164	78	2.9	73	0.230
30-45.0981-109.3636-2-12-						0-M39111	29080	568	24980	-23	-2	7.5	3.9	-384	-1	-1	15.6	2462	68	-1.4	-36	0.844
30-45.0847-109.3364-2-12-						0-M39112	19020	569	23060	-16	-1	8.1	4.4	-334	-1	-1	13.2	2977	70	2.3	57	0.861
30-45.0956-109.3267-2-12-						0-M39113	21050	594	24020	34	-1	10.2	6.6	469	-1	1	20.1	3138	80	3.5	75	0.340
30-45.0864-109.3228-2-12-						0-M39114	20180	504	17590	-21	-2	7.9	6.9	-402	-1	-1	8.5	3133	72	2.5	92	3.164
30-45.0950-109.3119-2-12-						0-M39116	16710	429	27640	-19	-1	6.4	2.5	-356	-1	-1	10.5	2259	69	2.0	-37	0.381
30-45.1031-109.3019-2-12-						0-M39118	13230	663	21490	35	-2	8.6	6.1	517	-1	-1	13.0	2795	85	2.7	-30	1.295
30-45.1167-109.2967-2-12-						0-M39119	17110	438	21290	57	-1	5.7	4.7	-294	-1	-1	15.2	2528	46	1.9	57	0.818
30-45.1042-109.3083-2-12-						0-M39120	20860	549	13840	-21	-2	5.9	6.5	-413	1	-1	10.1	2423	60	2.1	-31	3.198
30-45.1144-109.3003-2-12-						0-M39121	26120	830	20150	-24	-2	7.3	4.7	-448	-1	-1	11.1	-1051	59	-1.4	-39	2.288
30-45.1200-109.2750-2-12-						0-M39122	49550	356	15920	37	-1	5.5	4.8	-279	-1	-1	21.2	2239	44	2.3	68	0.717
30-45.2250-109.2572-2-12-						0-M39124	9818	266	23300	41	-1	6.0	3.7	-237	-1	-1	19.1	2972	45	2.2	67	0.169
30-45.2142-109.2786-2-12-						0-M39125	8935	600	8455	33	-1	4.5	3.0	-324	-1	-1	7.8	2589	46	2.6	-18	0.364
30-45.1622-109.2092-2-12-						0-M39126	22120	374	5089	-31	-4	7.7	4.1	-262	-2	-1	9.6	3713	87	4.3	-100	0.360
30-45.1617-109.2106-2-12-						0-M39127	15460	340	4962	-22	-2	5.5	-2.8	-278	-1	-1	7.7	2847	86	3.2	97	0.425
30-45.1572-109.1825-2-12-						0-M39128	14590	376	6540	31	-2	5.4	4.7	-255	-1	-1	14.6	3405	57	3.6	-34	0.238
30-45.1533-109.2153-2-12-						0-M39129	10860	319	12480	32	-2	5.8	4.1	-312	-1	-1	13.4	2253	51	3.0	-37	0.334
30-45.1525-109.2156-2-12-						0-M39130	11970	317	9049	31	-3	6.7	4.8	-251	-1	-1	12.4	3131	67	3.1	-62	0.352
30-45.1547-109.2069-2-11-						0-M39131	16690	314	4566	-24	-3	4.6	2.2	391	-1	-1	7.7	2565	57	-1.9	-35	0.349
30-45.1631-109.1731-2-12-						0-M39132	17470	339	4133	-22	-3	6.6	3.9	-304	-1	-1	8.1	2512	71	-1.7	-33	0.469
30-45.1586-109.1550-2-15-						0-M39133	10640	250	4200	33	-2	5.0	3.4	-219	-1	-1	6.8	2429	59	2.1	69	0.424
30-45.2142-109.1864-2-11-						0-M39137	17620	1133	6006	63	-3	9.5	5.7	-448	-1	-1	11.7	3524	73	4.0	99	0.267
30-45.2131-109.1372-2-12-						0-M39138	22220	367	5157	-23	-2	5.0	2.8	-220	-1	-1	7.4	3014	49	4.3	-38	0.486
30-45.2353-109.1367-2-12-						0-M39140	6662	317	6442	40	-2	4.9	4.3	-240	-1	-1	9.7	4515	54	2.9	46	0.354
30-45.2283-109.2211-2-11-						0-M39143	7494	197	12730	34	-2	5.5	3.7	-254	-1	-1	11.5	2774	41	3.6	44	0.193
30-45.2428-109.1975-2-11-						0-M39144	13070	431	12190	63	-3	8.6	5.3	-290	-1	-1	13.2	3247	79	2.6	-74	0.219
30-45.2414-109.1956-2-12-						0-M39145	10660	350	14730	-28	-3	5.8	2.6	-376	-1	-1	12.9	2533	59	4.4	-41	0.178
30-45.2081-109.3153-2-11-						0-M39147	21310	157	7072	-14	-2	3.0	2.5	-206	-1	-1	6.4	2115	30	1.6	50	0.331
30-45.2353-109.2711-2-11-						0-M39148	7930	188	12460	48	-2	5.5	3.1	-267	-1	-1	9.6	2181	42	-1.4	-43	0.271
30-45.2481-109.2822-2-12-						0-M39149	16240	315	9095	29	-2	5.0	4.7	-219	-1	-1	8.9	2972	45	2.9	-49	0.300
30-45.2475-109.2792-2-12-						0-M39151	9403	269	13940	-24	-3	4.9	3.1	-250	-1	-1	9.3	2239	40	-2.3	-33	0.330

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																											U CONCENTRATION
							TIME SAMPLED																											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
30-45.2489-	109.3086-	2-12-	0-	M39153-	06/30/78-	16-	33-	16.9-	-	-	-	8.2-	489-	8-1-1-4-7-3-3-1-1-4-4-2-2-	-1-	-	-	-	-	2.27
30-45.2347-	109.4703-	2-12-	0-	M39154-	06/30/78-	17-	31-	6.2-	C-	-	-	7.8-	96-	4-2-4-4-6-4-4-1-2-7-4-3-2-	-1-	-	-	-	-	2.79
30-45.2450-	109.4522-	2-12-	0-	M39155-	06/30/78-	19-	28-	12.5-	C-	-	-	7.7-	310-	6-1-9-4-6-3-3-1-2-4-4-3-2-	-1-	-	-	-	-	1.85
30-45.0106-	109.1764-	2-12-	0-	M39156-	07/05/78-	14-	28-	25.3-	C-	-	-	7.7-	147-	13-2-6-5-6-2-2-1-3-3-3-1-2-	-1-	-	-	-	-	3.00
30-45.0128-	109.2394-	2-11-	0-	M39157-	07/05/78-	14-	26-	24.0-	C-	-	-	7.3-	450-	12-2-9-3-9-3-4-1-2-3-3-3-2-	-1-	-	-	-	-	2.87
30-45.0156-	109.2539-	2-12-	0-	M39158-	07/05/78-	15-	29-	11.0-	C-	-	-	8.0-	157-	13-2-9-7-6-4-3-1-2-1-3-4-2-	-1-	-	-	-	-	3.23
30-45.0067-	109.2617-	2-12-	0-	M39159-	07/05/78-	15-	25-	10.8-	C-	-	-	7.9-	150-	5-2-9-3-9-4-4-2-2-3-3-4-2-	-1-	-	-	-	-	3.36
30-45.0014-	109.2808-	2-12-	0-	M39160-	07/05/78-	16-	23-	7.9-	C-	-	-	7.7-	82-	10-2-9-4-6-5-4-1-2-2-3-4-3-	-1-	-	-	-	-	5.03
30-45.0019-	109.2781-	2-11-	0-	M39161-	07/05/78-	16-	20-	12.9-	C-	-	-	7.1-	1000-	16-2-9-4-6-2-3-1-2-4-3-4-2-	-1-	-	-	-	-	3.98
30-45.0164-	109.1367-	2-15-	0-	M39162-	07/05/78-	18-	24-		-C-	-	-		-	17-2-4-4-4-	-1-	-1-3-3-4-2-	-3-	-	-	-	-	4.62
30-45.0081-	109.1294-	2-15-	0-	M39163-	07/05/78-	18-	24-		-	-	-		-	9-2-4-4-6-	-1-	-1-3-3-2-2-	-1-	-	-	-	-	2.36
30-45.0275-	109.2283-	2-12-	0-	M39164-	07/05/78-	19-	20-	15.8-	C-	-	-	7.6-	485-	9-2-9-4-6-3-3-1-2-3-3-4-2-	-1-	-	-	-	-	4.16
30-45.0922-	109.1486-	2-12-	0-	M39165-	07/06/78-	11-	19-	12.2-	C-	-	-	7.4-	600-	16-2-7-4-6-3-3-1-1-2-4-4-4-	-3-	-	-	-	-	6.73
30-45.0975-	109.1775-	2-15-	0-	M39166-	07/06/78-	12-	13-		-C-	-	-		-	11-2-9-5-6-	-1-	- -3-3-1-4-	-1-	-	-	-	-	2.76
30-45.0956-	109.1775-	2-15-	0-	M39167-	07/06/78-	13-	13-		-C-	-	-		-	26-2-9-4-6-	-1-	-3-3-3-1-4-	-1-	-	-	-	-	4.79
30-45.0989-	109.1931-	2-15-	0-	M39168-	07/07/78-	9-	18-		-C-	-	-		-	18-2-9-4-6-	-1-	-3-3-2-2-1-	-1-	-	-	-	-	3.73
30-45.0908-	109.2206-	2-12-	0-	M39169-	07/07/78-	10-	17-	7.8-	C-	-	-	7.5-	148-	9-2-9-3-6-5-4-1-2-7-4-5-1-	-1-	-	-	-	-	5.00
30-45.0672-	109.2289-	2-12-	0-	M39170-	07/07/78-	11-	18-	7.6-	C-	-	-	7.4-	99-	28-2-9-4-6-4-4-1-2-7-3-4-2-	-1-	-	-	-	-	53.95
30-45.0544-	109.2181-	2-15-	0-	M39171-	07/07/78-	11-	22-		-C-	-	-		-	10-2-4-4-6-	-1-	-2-7-3-4-2-	-1-	-	-	-	-	6.05
30-45.0678-	109.1772-	2-11-	0-	M39174-	07/07/78-	12-	37-	12.8-	C-	-	-	7.8-	285-	13-2-7-3-6-4-4-1-2-3-3-3-2-	-1-	-	-	-	-	5.83
30-45.0650-	109.1692-	2-15-	0-	M39175-	07/07/78-	13-	31-		-C-	-	-		-	17-2-4-4-6-	-1-	-1-3-3-3-2-	-1-	-	-	-	-	3.98
30-45.0600-	109.1550-	2-12-	0-	M39177-	07/07/78-	14-	28-	17.1-	-	-	-	8.1-	650-	10-1-6-4-7-3-3-1-1-3-4-3-2-	-1-	-	-	-	-	3.44
30-45.0553-	109.1491-	2-12-	0-	M39178-	07/07/78-	14-	30-	24.0-	C-	-	-	8.4-	255-	9-2-4-4-6-3-3-1-2-3-3-3-2-	-3-	-	-	-	-	3.72
30-45.0428-	109.1297-	2-15-	0-	M39179-	07/07/78-	14-	32-		-C-	-	-		-	6-1-6-5-7-	-1-	-1-4-4-2-2-	-3-	-	-	-	-	2.67
30-45.0042-	109.9978-	2-12-	0-	M39180-	07/10/78-	17-	27-	7.1-	C-	-	-	7.2-	58-	9-2-9-4-6-5-4-3-2-1-4-3-2-	-1-	-	-	-	-	0.97
30-45.0008-	109.9964-	2-12-	0-	M39181-	07/10/78-	17-	26-	4.5-	-	-	-	7.9-	24-	9-2-7-4-6-5-4-4-2-1-4-5-4-	-1-	-	-	-	-	0.71
30-45.0033-	109.9856-	2-11-	0-	M39182-	07/10/78-	18-	27-	5.5-	-	-	-	7.2-	240-	8-2-6-5-7-3-3-1-2-4-4-4-2-	-1-	-	-	-	-	1.16
30-45.0089-	109.9717-	2-12-	0-	M39183-	07/10/78-	18-	24-	5.0-	-	-	-	7.5-	31-	4-2-7-4-6-4-4-4-2-1-4-5-2-	-1-	-	-	-	-	0.74
30-45.0147-	109.9489-	2-12-	0-	M39184-	07/10/78-	18-	23-	5.0-	C-	-	-	7.2-	55-	9-2-6-3-6-4-4-1-2-1-4-5-2-	-1-	-	-	-	-	1.21
30-45.0150-	109.9319-	2-12-	0-	M39185-	07/10/78-	19-	21-	5.0-	-	-	-	7.3-	41-	11-2-7-4-6-5-4-4-2-1-4-5-2-	-1-	-	-	-	-	0.54
30-45.0086-	109.9861-	2-11-	0-	M39186-	07/11/78-	9-	17-	4.4-	C-	-	-	7.0-	270-	6-2-7-4-6-2-3-1- -2-4-5-2-	-1-	-	-	-	-	1.58
30-45.0189-	109.9597-	2-12-	0-	M39187-	07/11/78-	9-	15-	3.8-	C-	-	-	7.4-	95-	8-2-9-4-6-5-4-1-2-1-4-3-2-	-1-	-	-	-	-	1.44
30-45.0219-	109.9389-	2-11-	0-	M39188-	07/11/78-	9-	19-	9.0-	C-	-	-	6.9-	340-	11-2-9-5-6-2-3-1- -1-4-5-2-	-1-	-	-	-	-	2.60
30-45.0272-	109.9283-	2-12-	0-	M39189-	07/11/78-	10-	20-	4.1-	C-	-	-	7.4-	102-	15-2-9-3-9-5-5-1-2-1-4-5-2-	-1-	-	-	-	-	3.00
30-45.0222-	109.9178-	2-12-	0-	M39190-	07/11/78-	10-	17-	5.8-	C-	-	-	7.6-	180-	11-2-9-4-6-4-4-1-2-1-4-5-1-	-1-	-	-	-	-	2.39
30-45.0228-	109.9203-	2-11-	0-	M39191-	07/11/78-	10-	18-	6.1-	C-	-	-	7.5-	172-	18-2-9-3-9-4-4-1-2-1-3-3-2-	-1-	-	-	-	-	2.07
30-45.0233-	109.8997-	2-12-	0-	M39192-	07/11/78-	11-	18-	6.0-	C-	-	-	7.6-	120-	15-2-9-4-6-4-4-1-2-1-4-5-1-	-1-	-	-	-	-	1.82
30-45.0297-	109.8828-	2-12-	0-	M39193-	07/11/78-	11-	19-	7.5-	-	-	-	7.1-	44-	12-2-7-3-6-4-4-1-2-1-4-3-2-	-1-	-	-	-	-	3.86
30-45.0222-	109.8778-	2-12-	0-	M39194-	07/11/78-	12-	26-	8.0-	C-	-	-	7.4-	155-	12-2-9-4-6-4-3-1-2-1-4-5-2-	-1-	-	-	-	-	1.65
30-45.0297-	109.8972-	2-11-	0-	M39195-	07/11/78-	12-	24-	7.1-	-	-	-	7.2-	132-	13-2-4-5-8-4-3-1-2-1-4-5-2-	-1-	-	-	-	-	15.25
30-45.2469-	109.7197-	2-11-	0-	M39196-	07/12/78-	7-	11-	5.7-	C-	-	-	6.4-	58-	13-2-7-4-6-4-4-1- -1-4-5-1-	-8-	-	-	-	-	5.99
30-45.2222-	109.8039-	2-12-	0-	M39197-	07/12/78-	12-	19-	10.0-	-	-	-	7.0-	21-	11-2-7-5-8-4-4-1-2-1-3-5-2-	-1-	-	-	-	-	23.86
30-45.2203-	109.7994-	2-12-	0-	M39198-	07/12/78-	12-	16-	8.1-	C-	-	-	6.9-	22-	18-2-9-3-9-5-4-1-2-1-4-5-2-	-1-	-	-	-	-	21.69
30-45.2200-	109.7931-	2-11-	0-	M39199-	07/12/78-	13-	17-	2.2-	C-	-	-	6.7-	45-	15-2-9-4-6-3-3-1-2-1-4-5-2-	-1-	-	-	-	-	3.84
30-45.2175-	109.7747-	2-12-	0-	M39200-	07/12/78-	14-	20-	4.8-	C-	-	-	6.8-	19-	15-2-7-3-9-4-4-1-2-3-4-5-2-	-1-	-	-	-	-	12.27
30-45.5372-	109.5844-	2-12-	0-	M39201-	07/10/78-	9-	30-	12.0-	C-	-	-	7.2-	490-	11-2-6-4-6-3-3-1-2-2-3-2-1-	-3-	-	-	-	-	1.83
30-45.5575-	109.6000-	2-12-	0-	M39202-	07/10/78-	9-	30-	14.0-	-	-	-	7.8-	383-	6-2-6-5-6-3-3-1-3-4-3-2-1-	-	-	-	-	-	2.16
30-45.5472-	109.5136-	2-12-	0-	M39204-	07/10/78-	10-	30-	14.0-	-	-	-	6.8-	520-	16-2-6-4-6-3-3-1-2-2-3-2-1-	-	-	-	-	-	2.42
30-45.5508-	109.5261-	2-15-	0-	M39205-	07/10/78-	10-	31-		-C-	-	-		-	13-2-6-5-6-	-1-	-3-2-2-2-1-	-	-	-	-	-	3.00
30-45.5775-	109.5883-	2-11-	0-	M39206-	07/10/78-	11-	31-	15.0-	C-	-	-	7.1-	72-	13-2-6-5-8-3-3-1-2-4-3-2-1-	-9-	-	-	-	-	2.40
30-45.6092-	109.6150-	2-11-	0-	M39207-	07/10/78-	12-	31-	18.5-	C-	-	-	9.4-	900-	11-2-6-5-6-2-3-1-2-4-3-2-1-	-3-	-	-	-	-	2.46

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

(2)

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB.	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
30-45.2489-	109.3086-	2-12-	0-	M39153			-5	-5	-5	20	-20	-15	9	-10	-15	2	29
30-45.2347-	109.4703-	2-12-	0-	M39154			-5	-5	-5	14	-20	-15	7	-10	-15	2	28
30-45.2450-	109.4522-	2-12-	0-	M39155			-5	-5	-5	-10	-20	-15	-5	-10	-15	2	18
30-45.0106-	109.1764-	2-12-	0-	M39156			-5	-5	-5	26	-20	-15	5	-10	-15	2	27
30-45.0128-	109.2394-	2-11-	0-	M39157			-5	-5	-5	33	-20	-15	5	-10	-15	3	35
30-45.0156-	109.2539-	2-12-	0-	M39158			-5	-5	-5	13	-20	-15	-5	-10	-15	2	24
30-45.0067-	109.2617-	2-12-	0-	M39159			-5	-5	-5	11	-20	-15	-5	-10	-15	2	40
30-45.0014-	109.2808-	2-12-	0-	M39160			-5	-5	-5	32	-20	46	-5	-10	-15	2	35
30-45.0019-	109.2781-	2-11-	0-	M39161			-5	-5	-5	22	-20	15	-5	-10	-15	2	50
30-45.0164-	109.1367-	2-15-	0-	M39162			-5	11	-5	24	-20	21	-5	-10	-15	2	21
30-45.0281-	109.1294-	2-15-	0-	M39163			-5	9	-5	13	-20	-15	6	-10	-15	2	25
30-45.0275-	109.2283-	2-12-	0-	M39164			-5	-5	-5	37	-20	-15	14	-10	-15	2	20
30-45.0922-	109.1486-	2-12-	0-	M39165			-5	-5	-5	14	-20	-15	-5	-10	-15	2	44
30-45.0975-	109.1775-	2-15-	0-	M39166			-5	-5	-5	31	-20	-15	18	-10	-15	2	32
30-45.0956-	109.1775-	2-15-	0-	M39167			-5	6	-5	34	-20	18	7	-10	-15	2	49
30-45.0980-	109.1931-	2-15-	0-	M39168			-5	-5	-5	33	-20	18	21	-10	-15	2	47
30-45.0909-	109.2206-	2-12-	0-	M39169			-5	-5	-5	35	-20	-15	-5	-10	-15	2	80
30-45.0672-	109.2289-	2-12-	0-	M39170			-5	-5	-5	29	-20	19	16	-10	-15	2	30
30-45.0644-	109.2181-	2-15-	0-	M39171			-5	7	-5	25	-20	18	16	-10	-15	2	27
30-45.0678-	109.1772-	2-11-	0-	M39174			-5	-5	-5	28	-20	25	-5	-10	-15	2	13
30-45.0650-	109.1692-	2-15-	0-	M39175			-5	-5	-5	26	-20	-15	7	-10	-15	2	16
30-45.0600-	109.1550-	2-12-	0-	M39177			-5	-5	-5	14	-20	-15	20	-10	-15	2	25
30-45.0653-	109.1481-	2-12-	0-	M39178			-5	5	-5	16	-20	-15	8	-10	-15	1	21
30-45.0828-	109.1297-	2-15-	0-	M39179			-5	-5	-5	28	-20	15	5	-10	-15	1	51
30-45.0042-	109.9978-	2-12-	0-	M39180			-5	-5	-5	40	-20	38	8	-10	-15	-1	59
30-45.0008-	109.9964-	2-12-	0-	M39181			-5	-5	-5	38	-20	39	11	-10	15	-1	39
30-45.0033-	109.9856-	2-11-	0-	M39182			-5	-5	-5	42	-20	32	15	-10	-15	-1	41
30-45.0089-	109.9717-	2-12-	0-	M39183			-5	-5	5	33	-20	38	5	-10	-15	-1	41
30-45.0147-	109.9489-	2-12-	0-	M39184			-5	-5	-5	40	-20	79	8	-10	-15	-1	50
30-45.0150-	109.9319-	2-12-	0-	M39185			8	-5	-5	43	-20	39	376	-10	-15	-1	36
30-45.0086-	109.9861-	2-11-	0-	M39186			-5	6	-5	40	-20	43	7	-10	-15	2	64
30-45.0189-	109.9597-	2-12-	0-	M39187			-5	-5	-5	57	-20	75	28	-10	-15	1	51
30-45.0219-	109.9389-	2-11-	0-	M39188			-5	-5	-5	60	-20	28	97	-10	-15	1	69
30-45.0272-	109.9283-	2-12-	0-	M39189			-5	-5	6	673	-20	41	161	-10	-15	2	20
30-45.0222-	109.9178-	2-12-	0-	M39190			-5	10	6	353	-20	44	83	-10	34	2	33
30-45.0228-	109.9203-	2-11-	0-	M39191			-5	-5	-5	154	-20	44	78	-10	-15	1	34
30-45.0233-	109.8997-	2-12-	0-	M39192			-5	6	-5	64	-20	78	29	-10	-15	-1	46
30-45.0297-	109.8829-	2-12-	0-	M39193			-5	8	-5	949	-20	21	64	-10	-15	1	16
30-45.0222-	109.8778-	2-12-	0-	M39194			-5	-5	-5	67	-20	82	-5	-10	-15	1	54
30-45.0297-	109.8972-	2-11-	0-	M39195			-5	-5	-5	39	-20	65	23	-10	-15	1	42
30-45.2469-	109.7197-	2-11-	0-	M39196			-5	-5	-5	66	-20	60	6	-10	-15	1	21
30-45.2222-	109.8039-	2-12-	0-	M39197			-5	-5	5	68	-20	23	18	-10	-15	-1	81
30-45.2203-	109.7994-	2-12-	0-	M39198			-5	6	-5	54	-20	-15	12	-10	-15	-1	39
30-45.2200-	109.7931-	2-11-	0-	M39199			-5	-5	-5	28	-20	45	10	-10	-15	1	49
30-45.2175-	109.7747-	2-12-	0-	M39200			-5	-5	-5	28	-20	64	6	-10	-15	1	46
30-45.5372-	109.5844-	2-12-	0-	M39201			-5	-5	-5	47	-20	23	10	-10	-15	1	23
30-45.5575-	109.6000-	2-12-	0-	M39202			-5	-5	-5	43	-20	51	7	-10	-15	2	34
30-45.5472-	109.5136-	2-12-	0-	M39204			-5	-5	-5	35	-20	15	9	-10	-15	1	29
30-45.5508-	109.5261-	2-15-	0-	M39205			-5	-5	-5	32	-20	19	13	-10	-15	2	41
30-45.5775-	109.5883-	2-11-	0-	M39206			-5	-5	-5	19	-20	-15	5	-10	-15	1	49
30-45.6092-	109.6150-	2-11-	0-	M39207			-5	-5	-5	44	-20	29	7	-10	-15	2	51

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS													
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per million (ppm)													
							Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
30-45.2499-109.3086-2-12-			0-	M	39153		46940	0.10	648	23820	41	-77	6.4	46	1.4	3	0.8	9664	9.6	13970	29	0.3
30-45.2347-109.4703-2-12-			0-	M	39154		54060	-0.07	477	12560	61	-96	6.9	47	1.7	2	0.9	14980	7.5	15230	35	0.2
30-45.2450-109.4522-2-12-			0-	M	39155		45210	-0.07	648	9424	63	-73	6.4	42	1.9	2	0.9	9866	8.4	12670	33	0.3
30-45.0106-109.1764-2-12-			0-	M	39156		66510	-0.03	636	17950	66	-87	6.2	54	-1.4	4	0.7	14630	8.0	20540	40	0.3
30-45.0128-109.2394-2-11-			0-	M	39157		70050	-0.07	748	10150	62	-107	9.4	71	2.8	4	0.9	17190	7.1	23150	41	0.3
30-45.0156-109.2539-2-12-			0-	M	39158		47200	-0.07	477	19940	50	55	6.0	40	2.3	3	0.7	10770	6.8	15900	29	0.3
30-45.0067-109.2617-2-12-			0-	M	39159		38140	-0.07	720	36950	61	76	7.4	67	2.2	4	1.1	12710	18.3	13550	30	0.4
30-45.0014-109.2808-2-12-			0-	M	39160		56500	-0.11	494	44180	77	177	10.0	124	-1.8	4	0.8	19520	10.9	13920	39	0.4
30-45.0019-109.2781-2-11-			0-	M	39161		46260	-0.07	527	57450	49	-76	8.3	59	2.5	3	0.7	13630	6.6	11660	29	0.3
30-45.0164-109.1367-2-15-			0-	M	39162		61650	-0.06	524	11170	143	-106	7.1	89	1.3	4	1.1	18360	17.5	15750	92	0.4
30-45.0081-109.1294-2-15-			0-	M	39163		67170	-0.07	697	13310	71	-84	7.3	59	2.2	3	1.0	14430	7.8	18380	38	0.3
30-45.0275-109.2283-2-12-			0-	M	39164		62220		438	16560		-123		42		2		15210		12160		
30-45.0922-109.1486-2-12-			0-	M	39165		46450	-0.06	369	93550	45	-99	7.6	37	-1.0	2	0.6	9494	4.9	15250	29	0.3
30-45.0975-109.1775-2-15-			0-	M	39166		57060	-0.08	448	17630	59	-83	8.8	60	3.0	3	1.1	16120	6.0	20410	45	0.3
30-45.0956-109.1775-2-15-			0-	M	39167		41530	-0.08	372	117100	74	104	8.2	42	2.5	3	0.9	15120	6.1	20760	40	0.3
30-45.0989-109.1931-2-15-			0-	M	39168		49500	-0.09	494	64820	59	101	7.1	50	-1.6	4	1.0	15700	6.3	22080	35	0.3
30-45.0908-109.2206-2-12-			0-	M	39169		38920	-0.07	323	130900	47	126	7.4	37	1.6	3	0.7	12910	3.6	21010	30	0.2
30-45.0672-109.2289-2-12-			0-	M	39170		58110	-0.10	539	22480	68	-128	9.8	66	2.6	2	1.0	16610	6.8	11770	76	0.5
30-45.0644-109.2181-2-15-			0-	M	39171		71840	-0.08	644	11770	107	-107	10.1	66	2.3	3	1.2	16160	10.1	18280	58	0.5
30-45.0678-109.1772-2-11-			0-	M	39174		51330	-0.09	650	14020	115	-85	5.1	76	-1.5	6	1.1	14170	33.2	15040	67	0.6
30-45.0650-109.1692-2-15-			0-	M	39175		79660	-0.05	699	6150	60	-115	5.7	42	1.4	2	0.7	8013	6.2	20060	37	0.4
30-45.0600-109.1550-2-12-			0-	M	39177		67000	-0.05	698	18050	44	-116	5.3	34	1.7	2	0.7	9544	4.1	18920	30	0.2
30-45.0653-109.1481-2-12-			0-	M	39178		72160	-0.06	790	8366	77	-97	5.6	35	-1.0	2	0.8	7819	10.1	21850	41	0.3
30-45.0828-109.1297-2-15-			0-	M	39179		53420	-0.09	584	22440	48	-81	6.3	40	1.9	3	0.8	11320	5.2	16650	26	0.2
30-45.0042-109.9978-2-12-			0-	M	39180		72940	-0.09	624	72970	39	-108	16.9	175	1.9	2	0.9	28650	2.2	17120	23	0.2
30-45.0008-109.9964-2-12-			0-	M	39181		84880	-0.09	825	50180	44	-133	19.0	176	-1.6	-1	1.1	35320	2.2	6119	25	-0.1
30-45.0033-109.9856-2-11-			0-	M	39182		78740	-0.11	1076	47520	51	-108	17.5	255	-2.0	2	1.0	29040	2.7	15070	21	-0.2
30-45.0089-109.9717-2-12-			0-	M	39183		85910	-0.12	1083	56500	53	-113	18.3	262	-2.2	2	0.8	31220	3.0	10040	23	-0.2
30-45.0147-109.9489-2-12-			0-	M	39184		62250	-0.09	635	74700	39	-95	17.6	363	-1.5	2	0.8	25490	2.6	14780	23	0.2
30-45.0150-109.9319-2-12-			0-	M	39185		48960	-0.11	538	65590	37	-125	32.0	891	-2.1	-1	1.0	68780	2.5	-4773	27	-0.1
30-45.0086-109.9861-2-11-			0-	M	39186		76920	-0.11	584	64730	79	-79	15.0	140	4.5	3	1.0	24980	2.5	30640	36	0.2
30-45.0189-109.9597-2-12-			0-	M	39187		69070	-0.11	789	58180	55	-93	16.6	356	-2.0	3	0.9	27960	3.5	14550	30	0.2
30-45.0219-109.9389-2-11-			0-	M	39188		60690	-0.09	693	64590	66	-91	12.2	78	2.9	4	1.2	17710	4.1	17970	33	0.3
30-45.0272-109.9283-2-12-			0-	M	39189		72270	0.17	925	17570	77	-113	16.5	81	3.1	2	1.1	32690	8.5	19320	51	0.2
30-45.0222-109.9178-2-12-			0-	M	39190		56680	-0.10	786	28720	66	-97	11.5	154	4.7	3	1.1	55520	7.8	19290	41	0.4
30-45.0228-109.9203-2-11-			0-	M	39191		65310	-0.13	995	26810	66	-101	12.0	118	3.6	3	1.0	26720	4.4	15510	31	-0.2
30-45.0233-109.8997-2-12-			0-	M	39192		66920	-0.11	918	35600	52	-125	19.3	274	3.3	3	0.9	29880	3.2	13010	32	-0.2
30-45.0297-109.8828-2-12-			0-	M	39193		70430	1.13	685	17810	74	-119	13.9	90	4.0	2	1.2	35350	9.1	14470	45	0.2
30-45.0222-109.8778-2-12-			0-	M	39194		73180	-0.11	992	45300	91	-101	21.3	569	-2.0	3	1.3	35450	4.8	16970	35	0.4
30-45.0297-109.8972-2-11-			0-	M	39195		55110	-0.14	781	25350	54	-124	12.5	83	20.5	3	0.8	20650	5.1	-5331	45	-0.2
30-45.2469-109.7197-2-11-			0-	M	39196		61780	-0.07	440	18350	51	-125	9.7	229	-1.2	2	0.6	14550	5.4	8111	45	0.5
30-45.2222-109.8039-2-12-			0-	M	39197		70040	-0.12	620	14230	69	-152	19.6	86	5.8	3	1.2	29200	3.9	-6592	64	0.3
30-45.2203-109.7994-2-12-			0-	M	39198		65710	-0.12	483	17660	142	220	14.6	90	2.5	3	1.3	25450	7.6	14730	102	0.9
30-45.2200-109.7931-2-11-			0-	M	39199		73190	-0.11	583	17870	57	261	9.7	132	-1.9	3	1.2	20410	4.9	15520	71	-0.2
30-45.2175-109.7747-2-12-			0-	M	39200		72480	-0.09	452	23510	61	240	15.1	170	-1.5	2	0.8	27250	4.9	7733	45	0.2
30-45.5372-109.5844-2-12-			0-	M	39201		75830	-0.07	774	26210	62	-100	13.6	158	3.4	3	1.1	35490	3.9	13430	33	0.3
30-45.5575-109.6000-2-12-			0-	M	39202		72060	-0.08	882	14220	59	-103	12.3	236	3.3	3	0.9	24250	4.4	16480	34	0.3
30-45.5472-109.5136-2-12-			0-	M	39204		61300	-0.05	818	14880	57	-72	9.8	183	2.2	3	1.0	19920	7.5	14570	32	0.3
30-45.5508-109.5261-2-15-			0-	M	39205		61350	-0.06	572	32190	56	-65	8.9	101	3.7	4	0.8	17220	5.7	16120	31	0.3
30-45.5775-109.5883-2-11-			0-	M	39206		39120	-0.05	357	37530	54	71	6.5	71	-1.0	3	0.8	10070	7.8	12220	22	0.3
30-45.6092-109.6150-2-11-			0-	M	39207		61670	-0.08	428	32360	42	-79	10.0	74	3.3	2	0.8	18940	3.7	16010	31	0.3

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)												U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
30-45.2489-	109.3086-	2-12-	0-	M39153			12820	293	10080	27	-2	4.3	2.9	-260	-1	-1	7.0	2168	36	3.0	52	0.324
30-45.2347-	109.4703-	2-12-	0-	M39154			14130	326	14320	40	-2	5.8	3.6	-305	-1	-1	12.6	1725	52	2.3	93	0.221
30-45.2450-	109.4522-	2-12-	0-	M39155			7377	363	10270	35	-2	4.1	3.6	334	-1	-1	11.4	2114	42	2.0	-54	0.162
30-45.0106-	109.1764-	2-12-	0-	M39156			14140	334	19510	-24	-3	6.0	3.8	545	-1	-1	20.5	2877	57	2.5	-32	0.146
30-45.0128-	109.2394-	2-11-	0-	M39157			13550	508	16120	42	-2	7.0	4.0	-360	-1	-1	16.7	2799	68	3.0	74	0.172
30-45.0156-	109.2539-	2-12-	0-	M39158			18410	201	9056	34	-2	5.0	3.4	-251	-1	-1	9.1	2601	55	2.8	75	0.355
30-45.0067-	109.2617-	2-12-	0-	M39159			26980	278	6008	33	-2	5.3	4.9	-218	-1	-1	10.4	3054	66	4.6	51	0.323
30-45.0014-	109.2808-	2-12-	0-	M39160			39070	551	15460	-31	-3	10.0	4.6	-304	-1	-1	16.2	3280	89	-2.7	-47	0.310
30-45.0019-	109.2781-	2-11-	0-	M39161			30250	377	6072	31	-2	6.1	3.5	-303	-1	-1	9.6	2411	70	-1.6	50	0.415
30-45.0164-	109.1367-	2-15-	0-	M39162			-4298	401	20470	44	-2	5.6	8.8	-322	-1	-1	49.0	2388	59	7.2	77	0.094
30-45.0091-	109.1294-	2-15-	0-	M39163			15100	311	19050	41	-2	5.7	4.3	378	-1	-1	15.4	2491	51	3.0	84	0.153
30-45.0275-	109.2283-	2-12-	0-	M39164			13410	737	17070	-36	-4			-443	-2	-1		1695	46		-65	
30-45.0922-	109.1486-	2-12-	0-	M39165			23000	453	13230	37	-2	4.2	2.7	-338	-1	-1	10.8	1804	30	-1.2	-38	0.623
30-45.0975-	109.1775-	2-15-	0-	M39166			23590	460	7975	45	-2	7.3	4.2	-329	-1	-1	11.0	2952	57	2.7	102	0.251
30-45.0956-	109.1775-	2-15-	0-	M39167			44220	455	5316	54	-3	6.5	4.9	-273	-1	-1	14.3	1958	42	2.6	-52	0.335
30-45.0989-	109.1931-	2-15-	0-	M39168			41390	521	8017	-27	-3	7.0	4.2	-277	-1	-1	12.5	2616	49	-2.3	-40	0.298
30-45.0908-	109.2206-	2-12-	0-	M39169			62070	387	2441	40	-2	6.0	3.3	-293	-1	-1	10.0	1854	34	2.7	60	0.500
30-45.0672-	109.2289-	2-12-	0-	M39170			17670	529	16720	-27	-3	7.2	10.8	-439	-1	-1	14.5	1252	60	-2.3	99	3.721
30-45.0544-	109.2181-	2-15-	0-	M39171			12120	365	23230	66	-3	6.5	5.8	469	-1	-1	31.2	2539	51	2.9	-32	0.194
30-45.0678-	109.1772-	2-11-	0-	M39174			7056	563	12840	-26	-3	6.1	5.2	-297	-1	-1	20.5	4973	54	6.3	-42	0.284
30-45.0650-	109.1692-	2-15-	0-	M39175			-4730	129	31460	56	-2	3.3	3.7	-303	-1	-1	16.9	1877	36	-1.0	52	0.236
30-45.0600-	109.1550-	2-12-	0-	M39177			6650	158	24910	51	-2	3.5	2.8	604	-1	-1	7.5	1433	28	1.9	73	0.459
30-45.0653-	109.1481-	2-12-	0-	M39178			5628	147	28430	52	-2	3.5	4.5	549	-1	-1	20.6	2003	33	3.2	47	0.181
30-45.0828-	109.1297-	2-15-	0-	M39179			13870	435	11910	-25	-3	5.2	3.4	-278	-1	-1	8.3	2267	48	-1.9	50	0.322
30-45.0042-	109.9978-	2-12-	0-	M39180			56030	672	14550	-23	-3	15.5	3.2	988	-1	-1	5.0	3072	126	-2.2	48	0.194
30-45.0008-	109.9964-	2-12-	0-	M39181			44710	874	21580	-23	-3	19.3	2.8	1055	-1	-1	1.8	3273	173	-1.9	49	0.394
30-45.0033-	109.9856-	2-11-	0-	M39182			46980	617	18630	-28	-4	16.8	3.1	826	-1	-1	3.7	3747	132	-2.4	109	0.314
30-45.0089-	109.9717-	2-12-	0-	M39183			48000	806	22150	-35	-4	17.5	1.7	1129	-1	-1	3.7	3612	154	-2.6	-53	0.200
30-45.0147-	109.9489-	2-12-	0-	M39184			74950	541	12890	-21	-3	15.8	3.1	-362	-1	-1	4.8	3719	112	-1.6	104	0.252
30-45.0150-	109.9319-	2-12-	0-	M39185			61760	1420	12590	-23	-4	42.8	3.0	-490	-1	-1	2.0	7691	464	-7.3	-41	0.270
30-45.0086-	109.9861-	2-11-	0-	M39186			30150	440	9063	59	-3	13.5	4.5	553	-1	-1	9.4	3950	88	3.3	-36	0.168
30-45.0189-	109.9597-	2-12-	0-	M39187			51400	705	14950	-32	-4	15.7	2.4	-317	-1	-1	6.8	3333	115	-2.5	-45	0.212
30-45.0219-	109.9389-	2-11-	0-	M39188			28230	276	8707	-25	-3	8.7	4.4	-327	-1	-1	10.2	3194	63	2.6	191	0.255
30-45.0272-	109.9283-	2-12-	0-	M39189			10520	812	14320	51	-2	8.0	4.6	-415	-1	-1	8.8	2536	59	2.7	165	0.341
30-45.0222-	109.9178-	2-12-	0-	M39190			25540	1204	10410	-31	-3	10.6	4.8	-424	-1	-1	9.3	3062	82	2.6	164	0.257
30-45.0228-	109.9203-	2-11-	0-	M39191			27760	780	13150	-37	-4	10.6	3.1	-379	-1	-1	7.0	3445	95	-2.8	207	0.296
30-45.0233-	109.8997-	2-12-	0-	M39192			37140	1021	13900	-28	-3	14.3	2.7	-514	-1	-1	5.3	3890	126	-2.3	142	0.343
30-45.0297-	109.8828-	2-12-	0-	M39193			13330	786	16370	-23	-3	8.8	5.1	-423	-1	-1	9.8	3281	87	2.5	152	0.394
30-45.0222-	109.8778-	2-12-	0-	M39194			53150	813	16020	-28	-4	21.4	5.4	671	-1	-1	8.7	5099	154	-2.1	-41	0.190
30-45.0297-	109.8972-	2-11-	0-	M39195			17740	1604	10720	-36	-4	8.9	3.1	-544	-1	-1	9.5	2572	64	-3.1	130	1.605
30-45.2469-	109.7197-	2-11-	0-	M39196			25280	360	27570	-18	-2	6.5	3.4	-359	-1	-1	18.5	1922	49	-1.3	31	0.324
30-45.2222-	109.8039-	2-12-	0-	M39197			20490	1434	12520	57	-4	10.6	8.8	-691	-1	-1	11.9	2813	109	3.2	190	2.005
30-45.2203-	109.7994-	2-12-	0-	M39198			15670	554	20460	68	-4	7.4	10.7	-428	-2	-1	40.9	2452	72	-2.7	-115	0.530
30-45.2200-	109.7931-	2-11-	0-	M39199			25460	426	22850	-33	-3	9.2	5.6	-326	-1	-1	13.9	2853	74	-2.4	104	0.276
30-45.2175-	109.7747-	2-12-	0-	M39200			33700	636	22220	-24	-3	11.9	7.0	-421	-1	-1	11.5	3279	88	-2.0	94	1.067
30-45.5372-	109.5844-	2-12-	0-	M39201			24890	765	14540	35	-2	10.9	5.0	-362	-1	-1	6.8	4102	121	2.1	149	0.269
30-45.5575-	109.6000-	2-12-	0-	M39202			18210	660	13900	-29	-3	10.4	3.2	-379	-1	-1	6.0	3689	106	-1.9	-99	0.360
30-45.5472-	109.5136-	2-12-	0-	M39204			14480	407	11410	-17	-2	7.1	3.7	420	-1	-1	7.2	3776	93	2.5	67	0.336
30-45.5508-	109.5261-	2-15-	0-	M39205			21030	498	7059	29	-2	8.0	3.8	-252	-1	-1	7.9	2697	77	2.6	77	0.380
30-45.5775-	109.5883-	2-11-	0-	M39206			24520	243	8321	33	-1	4.2	3.8	-223	-1	-1	6.3	1628	37	3.9	90	0.381
30-45.6092-	109.6150-	2-11-	0-	M39207			18070	437	7558	-27	-2	8.6	2.9	531	-1	-1	6.8	2816	82	2.0	83	0.362

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																											U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (umho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
30-45.5867-109.6083-2-12-						0-439208-07/10/78-12-	31-20.0-C-		-	9.0-		75-	13-2-6-5-6-3-3-1-2-4-3-2-1-	-1-	-	-	-	-	2.63
30-45.5133-109.5708-2-12-						0-439209-07/10/78-13-	31-22.0-C-		-	8.8-		70-	4-2-6-5-6-2-3-1-3-4-3-2-1-	-	-	-	-	-	2.21
30-45.5944-109.5936-2-12-						0-439210-07/10/78-13-	31-14.0-C-		-	8.8-		71-	11-2-6-3-6-3-3-1-2-4-3-2-1-	-3-	-	-	-	-	3.06
30-45.6781-109.6064-2-11-						0-439211-07/11/78-10-	31-12.0-C-		-	8.9-		500-	9-2-6-5-6-2-3-1-3-7-3-3-1-	-3-	-	-	-	-	2.09
30-45.6956-109.5828-2-12-						0-439212-07/10/78-11-	31-10.5-C-		-	8.9-		620-	10-2-6-3-6-3-3-3-2-7-3-2-2-	-3-	-	-	-	-	2.27
30-45.7056-109.6219-2-12-						0-439214-07/11/78-12-	31-12.0-C-		-	6.4-		510-	5-2-6-4-6-3-3-	-2-2-2-2-2-	-9-	-	-	-	2.03
30-45.7217-109.5069-2-12-						0-439216-07/11/78-13-	31-20.5-C-		-	8.1-		800-	4-2-6-5-9-3-3-3-3-2-3-2-2-	-3-	-	-	-	-	2.28
30-45.7292-109.5558-2-12-						0-439217-07/11/78-13-	31-20.1-C-		-	8.2-		710-	9-2-6-4-6-2-2-1-2-1-2-2-2-	-1-	-	-	-	-	2.26
30-45.7044-109.5067-2-12-						0-439219-07/11/78-15-	31-26.0-C-		-	8.4-		700-	9-2-7-5-6-3-3-1-2-4-3-2-3-	-7-	-	-	-	-	2.31
30-45.6356-109.5344-2-12-						0-439220-07/11/78-16-	31-18.0-C-		-	8.4-		600-	4-2-6-3-6-3-3-1-2-4-3-2-2-	-3-	-	-	-	-	2.61
30-45.6314-109.5417-2-12-						0-439221-07/11/78-16-	31-18.5-C-		-	7.8-		625-	6-2-6-	- -3-3-1-2-2-3-2-2-	-	-	-	-	-	2.47
30-45.6917-109.4147-2-12-						0-439222-07/12/78- 9-	29-18.0-C-		-	8.6-		880-	9-2-6-4-6-3-2-1-2-4-3-2-2-	-7-	-	-	-	-	2.34
30-45.7008-109.3933-2-12-						0-439223-07/12/78-10-	30-20.0-C-		-	8.5-		750-	9-2-6-4-6-3-2-1-3-4-3-2-1-	-9-	-	-	-	-	2.33
30-45.6981-109.4058-2-15-						0-439224-07/12/78-10-	30-	- - -	-	-		-	11-2-6-4-6-	-1- -1-4-3-2-1-	-9-	-	-	-	2.45
30-45.7433-109.4003-2-11-						0-439225-07/12/78-11-	31-18.5-C-		-	8.5-		1520-	11-1-7-5-7-2-3-1-1-4-3-2-1-	-3-	-	-	-	-	2.60
30-45.7293-109.4008-2-12-						0-439226-07/12/78-11-	31-20.5-C-		-	8.5-		1150-	10-2-6-	- -2-2-1-1-1-2-2-1-	-1-	-	-	-	2.32
30-45.7222-109.4086-2-11-						0-439227-07/12/78-	-		31-25.5-C-	-	8.6-		900-	9-2-7-	- -2-2-1-1-3-3-2-1-	-1-	-	-	-	2.58
30-45.6906-109.4389-2-12-						0-439228-07/12/78-13-	31-20.5-C-		-	8.7-		1125-	6-2-6-4-6-3-3-1-2-4-3-2-1-	-	-	-	-	-	2.59
30-45.6833-109.4514-2-11-						0-439229-07/12/78-13-	31-20.0-C-		-	8.2-		990-	9-2-6-5-6-1-2-4-1-4-3-2-1-	-3-	-	-	-	-	2.20
30-45.6914-109.4136-2-12-						0-439231-07/12/78-14-	31-25.0-C-		-	8.0-		1050-	13-2-6-5-6-3-3-1-2-7-3-3-1-	-1-	-	-	-	-	2.40
30-45.6825-109.4453-2-15-						0-439232-07/12/78-15-	31-	-C- -	-	-		-	10-2-6-5-6-	-1- -2-4-3-2-1-	-1-	-	-	-	2.39
30-45.6808-109.4694-2-12-						0-439233-07/12/78-15-	31-26.5-C-		-	8.8-		800-	5-2-6-5-9-3-3-1-3-4-3-2-1-	-1-	-	-	-	-	2.61
30-45.6369-109.4097-2-12-						0-439234-07/12/78-16-	31-20.0-	- -	-	8.5-		820-	9-2-6-5-7-3-3-	-3-4-3-2-1-	-1-	-	-	-	2.52
30-45.6275-109.3119-2-12-						0-439236-07/13/78-10-	31-15.0-C-		-	9.1-		900-	6-2-1-4-6-3-3-1-2-4-3-2-1-	-1-	-	-	-	-	2.23
30-45.6244-109.3400-2-12-						0-439237-07/13/78-10-	31-15.0-C-		-	8.5-		725-	12-2-1-5-8-2-2-1-3-1-3-3-1-	-1-	-	-	-	-	2.39
30-45.6403-109.3864-2-12-						0-439238-07/13/78-11-	32-17.0-C-		-	8.7-		875-	9-2-6-4-7-3-3-1-	-2-3-3-1-	-7-	-	-	-	2.48
30-45.5422-109.3264-2-12-						0-439239-07/17/78- 9-	30-14.0-C-		-	8.9-		780-	11-2-6-4-7-3-3-1-2-4-3-2-2-	-1-	-	-	-	-	3.21
30-45.5444-109.3222-2-15-						0-439240-07/17/78- 9-	29-	-C- -	-	-		-	16-2-6-7-6-	-1- -2-2-3-3-2-	-1-	-	-	-	2.75
30-45.5317-109.3267-2-12-						0-439241-07/17/78- 9-	29-16.0-C-		-	8.5-		725-	11-2-6-4-6-3-3-1-2-2-3-2-2-	-1-	-	-	-	-	2.34
30-45.5106-109.3233-2-12-						0-439242-07/17/78-10-	30-15.0-C-		-	8.6-		730-	13-2-6-4-7-3-3-1-3-4-3-2-2-	-1-	-	-	-	-	2.33
30-45.5181-109.3258-2-12-						0-439243-07/17/78-10-	30-15.0-C-		-	8.5-		600-	9-2-6-5-6-3-3-1-1-4-3-2-2-	-3-	-	-	-	-	2.60
30-45.5697-109.3028-2-12-						0-439244-07/17/78-10-	29-16.0-C-		-	8.6-		760-	16-2-1-4-6-3-3-1-1-2-3-2-2-	-1-	-	-	-	-	1.96
30-45.5142-109.2697-2-15-						0-439246-07/17/78-12-	29-	-C- -	-	-		-	11-2-6-4-6-	-1- - -6-3-2-2-	-1-	-	-	-	1.69
30-45.5342-109.2653-2-11-						0-439247-07/17/78-13-	30-17.0-C-		-	8.8-		600-	13-2-1-	- -3-3-1-1-6-3-2-2-	-1-	-	-	-	2.74
30-45.5850-109.2811-2-12-						0-439248-07/17/78-13-	29-25.0-	- -	-	8.2-		720-	11-2-1-5-6-2-2-1-3-1-3-3-2-	-	-	-	-	-	2.46
30-45.5864-109.2561-2-12-						0-439249-07/17/78-15-	29-15.0-C-		-	8.9-		600-	9-2-7-4-6-3-3-1-3-7-3-2-2-	-1-	-	-	-	-	2.49
30-45.6000-109.2664-2-11-						0-439250-07/17/78-15-	30-10.0-C-		-	8.5-		780-	13-2-1-4-6-4-3-1-1-3-3-2-2-	-9-	-	-	-	-	2.19
30-45.5597-109.6433-2-15-						0-439251-06/28/78-11-	27-	-C- -	-	-		-	11-2-4-	- - -1-6-3-4-2-2-2-	-3-	-	-	-	2.53
30-45.5978-109.7192-2-11-						0-439252-06/29/78-12-	27-12.0-C-		-	8.2-		350-	12-2-6-5-6-3-3-1-3-4-4-3-2-	-3-	-	-	-	-	1.79
30-45.5942-109.6519-2-11-						0-439255-06/29/78-15-	28-	-C- -	-	-		-	4-2-6-5-6-	-1- -3-4-3-2-2-	-3-	-	-	-	2.83
30-45.5883-109.6769-2-11-						0-439257-06/29/78-15-	28-14.5-C-		-	8.1-21500-			3-2-6-5-6-2-3-1-2-4-3-3-2-	-3-	-	-	-	-	2.23
30-45.5722-109.6478-2-12-						0-439258-06/29/78-16-	28-18.0-C-		-	8.5-		365-	9-2-6-5-6-3-3-1-2-4-3-3-2-	-3-	-	-	-	-	2.00
30-45.5108-109.6614-2-12-						0-439259-07/10/78- 8-	29-12.0-C-		-	8.2-		210-	6-2-6-4-6-3-3-1-3-2-3-2-1-	-	-	-	-	-	0.96
30-45.5189-109.5108-2-12-						0-439260-07/10/78-14-	29-18.0-C-		-	9.3-		35-	11-2-6-	- -3-3-1-2-4-4-2-4-	-3-	-	-	-	2.24
30-45.6147-109.3397-2-12-						0-439261-07/10/78- 9-	27-13.0-C-		-	8.4-		795-	11-2-6-5-6-3-2-1-2-2-2-2-2-	-1-	-	-	-	-	2.53
30-45.5419-109.2481-2-15-						0-439262-07/18/78-10-	29-	-C- -	-	-		-	11-2-6-4-6-	-1- -2-7-3-2-3-	-9-	-	-	-	2.06
30-45.5811-109.6958-2-11-						0-439264-06/29/78-16-	26-14.5-C-		-	6.5-		382-	11-2-6-5-6-3-3-1-2-4-3-2-6-	-3-	-	-	-	-	1.90
30-45.5369-109.2331-2-15-						0-439265-07/18/78-10-	29-	-C- -	-	-		-	13-2-6-5-6-	-1- -1-2-3-2-2-	-1-	-	-	-	2.57
30-45.5250-109.2125-2-12-						0-439266-07/18/78-11-	30-15.0-C-		-	8.2-		650-	13-2-1-3-6-2-2-5-3-2-2-2-2-	-3-	-	-	-	-	2.64
30-45.5347-109.2272-2-12-						0-439267-07/18/78-11-	30-15.0-C-		-	8.0-		520-	8-2-1-3-6-3-3-1-2-2-3-2-2-	-3-	-	-	-	-	3.00
30-45.5242-109.2308-2-12-						0-439268-07/18/78-12-	30-17.0-	- -	-	8.4-		610-	4-2-7-4-6-3-2-1-2-3-3-2-2-	-3-	-	-	-	-	2.72

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
30-45.5957-109.6083-2-12-						0-M39208	-5	-5	-5	33	-20	21	14	-10	-15	2	61
30-45.5133-109.5709-2-12-						0-M39209	-5	-5	-5	29	-20	32	13	-10	-15	2	28
30-45.5844-109.5936-2-12-						0-M39210	-5	-5	-5	38	-20	36	5	-10	-15	1	66
30-45.6791-109.6064-2-11-						0-M39211	-5	-5	-5	36	-20	44	14	-10	-15	2	36
30-45.6956-109.5828-2-12-						0-M39212	-5	-5	-5	36	-20	36	7	-10	-15	2	42
30-45.7056-109.6219-2-12-						0-M39214	-5	5	-5	48	-20	64	10	-10	-15	2	36
30-45.7217-109.5069-2-12-						0-M39216	-5	6	-5	20	-20	-15	-5	-10	-15	2	37
30-45.7292-109.5558-2-12-						0-M39217	-5	-5	-5	28	-20	29	10	-10	-15	2	40
30-45.7044-109.5067-2-12-						0-M39219	-5	-5	-5	33	-20	28	6	-10	-15	2	46
30-45.6356-109.5344-2-12-						0-M39220	-5	-5	-5	32	-20	45	14	-10	-15	2	56
30-45.6314-109.5417-2-12-						0-M39221	-5	6	-5	29	-20	22	12	-10	-15	1	50
30-45.6917-109.4147-2-12-						0-M39222	-5	-5	-5	38	-20	37	5	-10	-15	1	30
30-45.7008-109.3933-2-12-						0-M39223	-5	-5	-5	27	-20	27	-5	-10	-15	2	54
30-45.6981-109.4058-2-15-						0-M39224	-5	-5	-5	28	-20	19	-5	-10	-15	2	37
30-45.7433-109.4003-2-11-						0-M39225	-5	-5	-5	24	-20	19	-5	-10	-15	2	44
30-45.7283-109.4009-2-12-						0-M39226	-5	-5	-5	33	-20	29	12	-10	-15	2	45
30-45.7222-109.4086-2-11-						0-M39227	-5	-5	-5	31	-20	36	-5	-10	-15	2	40
30-45.6906-109.4389-2-12-						0-M39228	-5	-5	-5	33	-20	22	7	-10	-15	2	45
30-45.6833-109.4514-2-11-						0-M39229	-5	-5	-5	18	-20	26	13	-10	-15	2	27
30-45.6914-109.4136-2-12-						0-M39231	-5	-5	5	30	-20	28	6	-10	-15	2	46
30-45.6825-109.4453-2-15-						0-M39232	-5	5	-5	24	-20	22	15	-10	-15	2	50
30-45.6908-109.4694-2-12-						0-M39233	-5	-5	-5	27	-20	-15	14	-10	-15	2	51
30-45.6369-109.4097-2-12-						0-M39234	-5	6	-5	31	-20	19	8	-10	-15	2	53
30-45.6275-109.3119-2-12-						0-M39236	-5	-5	-5	29	-20	28	5	-10	-15	2	31
30-45.6244-109.3400-2-12-						0-M39237	-5	5	-5	37	-20	27	13	-10	-15	2	32
30-45.6403-109.3864-2-12-						0-M39238	-5	-5	-5	20	-20	24	8	-10	-15	2	38
30-45.5522-109.3264-2-12-						0-M39239	-5	5	-5	18	-20	15	6	-10	-15	2	34
30-45.5444-109.3222-2-15-						0-M39240	-5	-5	-5	24	-20	-15	11	-10	-15	2	45
30-45.5317-109.3267-2-12-						0-M39241	-5	-5	-5	25	-20	16	-5	-10	-15	2	19
30-45.5106-109.3233-2-12-						0-M39242	-5	-5	-5	25	-20	15	8	-10	-15	2	14
30-45.5131-109.3258-2-12-						0-M39243	-5	-5	-5	24	-20	-15	11	-10	-15	2	22
30-45.5697-109.3028-2-12-						0-M39244	-5	-5	-5	20	-20	-15	-5	-10	-15	2	25
30-45.5142-109.2697-2-15-						0-M39245	-5	-5	-5	24	-20	-15	5	-10	-15	1	15
30-45.5342-109.2653-2-11-						0-M39247	-5	-5	-5	22	-20	-15	-5	-10	-15	2	21
30-45.5850-109.2811-2-12-						0-M39248	-5	5	-5	28	-20	33	-5	-10	-15	2	41
30-45.5964-109.2561-2-12-						0-M39249	-5	5	-5	25	-20	-15	-5	-10	-15	2	31
30-45.6000-109.2664-2-11-						0-M39250	-5	-5	-5	16	-20	-15	-5	-10	-15	2	40
30-45.5597-109.6433-2-15-						0-M39251	-5	5	-5	50	-20	42	9	-10	-15	2	47
30-45.5978-109.7192-2-11-						0-M39252	-5	-5	-5	40	-20	40	10	-10	-15	1	79
30-45.5942-109.6519-2-11-						0-M39255	-5	-5	-5	42	-20	31	15	-10	-15	2	45
30-45.5983-109.6769-2-11-						0-M39257	-5	-5	-5	36	-20	58	6	-10	-15	1	39
30-45.5722-109.6478-2-12-						0-M39258	-5	-5	-5	31	-20	69	6	-10	-15	2	55
30-45.5108-109.6614-2-12-						0-M39259	-5	-5	-5	19	-20	-15	-5	-10	-15	1	19
30-45.5189-109.5108-2-12-						0-M39260	-5	-5	-5	27	-20	-15	-5	-10	-15	2	34
30-45.6147-109.3397-2-12-						0-M39261	-5	-5	-5	42	-20	27	7	-10	-15	2	34
30-45.5619-109.2481-2-15-						0-M39262	-5	-5	-5	13	-20	16	10	-10	-15	1	20
30-45.5811-109.6958-2-11-						0-M39264	-5	-5	-5	26	-20	36	7	-10	-15	2	56
30-45.5369-109.2331-2-15-						0-M39265	-5	-5	-5	21	-20	-15	7	-10	-15	2	25
30-45.5250-109.2125-2-12-						0-M39266	-5	-5	-5	27	-20	15	7	-10	-15	2	31
30-45.5347-109.2272-2-12-						0-M39267	-5	7	-5	33	-20	-15	7	-10	-15	2	18
30-45.5242-109.2308-2-12-						0-M39268	-5	-5	-5	14	-20	22	11	-10	-15	2	22

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per million (ppm)														
							Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
30-45.5867-109.6083-2-12-						0-M39208	56590	-0.05	522	24340	58	-61	8.9	83	2.8	3	0.8	15920	6.0	14140	29	0.3
30-45.5133-109.5708-2-12-						0-M39209	66810	-0.05	893	25520	56	-84	10.8	257	2.2	3	0.9	23120	5.2	13930	29	0.2
30-45.5844-109.5936-2-12-						0-M39210	63860	-0.07	448	25190	70	-74	9.9	95	3.7	4	1.1	19790	5.7	15810	37	0.4
30-45.6781-109.6064-2-11-						0-M39211	63400	-0.09	618	17790	57	-100	12.1	162	2.2	2	0.9	21640	3.8	16520	33	0.3
30-45.6956-109.5828-2-12-						0-M39212	92640	-0.06	700	30070	52	-77	11.5	147	2.8	3	0.9	21110	5.6	14410	30	0.3
30-45.7056-109.6219-2-12-						0-M39214	68430	-0.05	1141	19350	64	-93	13.1	243	2.8	3	1.1	29370	5.8	14510	35	0.3
30-45.7217-109.5069-2-12-						0-M39216	47610	-0.05	573	38030	63	-78	7.5	112	2.2	2	1.0	14460	8.4	12350	32	0.3
30-45.7292-109.5558-2-12-						0-M39217	57610	-0.08	816	34870	57	-80	9.6	139	-1.6	3	0.8	20240	5.8	13500	32	0.3
30-45.7044-109.5067-2-12-						0-M39219	64280	-0.06	749	37050	58	-74	11.3	110	3.1	3	0.9	19820	5.3	16020	32	0.2
30-45.6356-109.5344-2-12-						0-M39220	62720	-0.05	525	17330	58	-73	9.8	79	3.0	4	0.9	18950	5.7	16110	32	0.3
30-45.6314-109.5417-2-12-						0-M39221	63230	-0.07	702	15730	80	-84	11.6	154	3.1	3	0.9	23870	6.4	14890	37	0.4
30-45.6917-109.4147-2-12-						0-M39222	55780	-0.07	580	34830	59	-71	8.4	117	2.1	3	1.0	18690	6.6	13220	29	0.4
30-45.7008-109.3933-2-12-						0-M39223	53090	-0.04	545	36170	59	-69	7.3	66	2.6	4	0.7	14020	5.6	13940	30	0.3
30-45.6981-109.4058-2-15-						0-M39224	58460	-0.05	587	34670	57	-77	8.1	109	2.5	4	0.9	16210	6.6	15680	28	0.3
30-45.7433-109.4003-2-11-						0-M39225	56770	-0.06	532	37240	60	131	8.6	88	2.6	3	1.0	16790	6.1	15690	31	0.4
30-45.7283-109.4008-2-12-						0-M39226	57800	-0.07	573	32530	53	-68	8.1	86	3.4	4	0.8	16680	4.5	14400	29	0.3
30-45.7222-109.4086-2-11-						0-M39227	63910	-0.05	477	16660	57	-74	9.7	67	3.6	4	0.9	16890	5.3	17410	28	0.4
30-45.6906-109.4389-2-12-						0-M39228	61090	-0.05	585	35160	60	-76	9.3	108	3.4	3	0.9	20190	5.9	13830	35	0.3
30-45.6933-109.4514-2-11-						0-M39229	52290	-0.07	527	21530	55	-88	7.5	133	-1.4	2	0.8	16770	9.0	11100	36	0.3
30-45.6814-109.4136-2-12-						0-M39231	57160	-0.05	588	34320	52	-72	8.7	117	2.5	3	0.9	17020	5.3	14560	32	0.3
30-45.6825-109.4453-2-15-						0-M39232	61190	-0.05	548	35000	51	-68	8.4	101	2.9	3	0.9	17290	5.4	14540	31	0.3
30-45.6808-109.4694-2-12-						0-M39233	56230	-0.06	488	25320	75	-70	8.3	90	2.2	4	1.0	16480	7.5	15380	32	0.3
30-45.6369-109.4097-2-12-						0-M39234	56410	-0.07	433	30300	55	-73	7.4	65	2.8	3	0.8	16160	5.1	13320	30	0.3
30-45.6275-109.3119-2-12-						0-M39236	50030	-0.05	556	29640	51	-65	7.8	79	1.5	3	0.8	13070	5.4	13160	27	0.3
30-45.6244-109.3400-2-12-						0-M39237	62020	-0.06	584	26300	52	-69	9.6	139	2.2	4	0.9	18510	6.0	16140	28	0.3
30-45.6403-109.3864-2-12-						0-M39238	51070	-0.06	592	21950	71	-74	7.7	131	2.9	4	0.9	16610	9.7	13740	36	0.3
30-45.5622-109.3264-2-12-						0-M39239	48880	-0.06	546	18230	70	-62	7.0	111	2.0	3	0.8	15450	16.1	9616	39	0.4
30-45.5444-109.3222-2-15-						0-M39240	61720	-0.05	604	14740	57	88	9.0	78	3.5	3	0.8	17800	5.4	16700	30	0.3
30-45.5317-109.3267-2-12-						0-M39241	46810	-0.05	679	11000	56	-52	6.8	89	2.0	4	0.8	14550	9.1	13080	33	0.2
30-45.5106-109.3233-2-12-						0-M39242	42990	-0.05	618	9158	61	-52	6.9	58	2.3	3	0.8	11210	9.9	11180	31	0.3
30-45.5181-109.3258-2-12-						0-M39243	62540	-0.07	642	6760	59	-59	10.2	61	2.4	3	1.0	17020	7.5	15940	32	0.3
30-45.5697-109.3028-2-12-						0-M39244	43660	-0.03	599	12080	38	-55	5.2	43	1.5	3	0.6	10010	4.4	12350	20	0.2
30-45.5142-109.2697-2-15-						0-M39245	38850	-0.04	579	6026	48	-45	6.2	58	1.5	2	0.7	11460	4.8	9977	28	0.2
30-45.5342-109.2653-2-11-						0-M39247	45820	-0.06	335	9662	52	-64	6.1	75	-1.3	3	0.9	14760	8.5	12490	28	0.4
30-45.5850-109.2811-2-12-						0-M39248	63570	-0.05	606	31270	53	-67	9.2	92	3.1	4	0.8	17830	4.6	16480	33	0.2
30-45.5864-109.2561-2-12-						0-M39249	47310	-0.04	612	21580	50	-58	6.5	76	2.0	3	0.9	13420	9.3	11660	31	0.3
30-45.6000-109.2664-2-11-						0-M39250	54070	-0.05	431	23250	54	-91	6.1	56	2.1	3	0.8	12690	5.2	13380	26	0.3
30-45.5597-109.6433-2-15-						0-M39251	75360	-0.08	760	11920	55	-84	10.2	127	3.9	3	1.0	23670	3.6	19070	37	0.3
30-45.5978-109.7192-2-11-						0-M39252	73990	-0.06	910	15600	53	-86	13.2	221	3.1	3	1.0	24900	4.8	21600	30	0.3
30-45.5942-109.6519-2-11-						0-M39255	65440	-0.06	549	9574	67	-71	13.9	134	3.1	3	0.9	22380	5.0	14610	33	0.3
30-45.5883-109.6769-2-11-						0-M39257	70700	-0.07	741	15540	66	-84	13.9	189	3.1	3	1.0	26230	4.9	17700	33	0.3
30-45.5722-109.6478-2-12-						0-M39258	73260	-0.08	852	15810	58	-104	12.9	215	2.8	3	0.9	23690	4.1	19100	26	0.2
30-45.5109-109.6614-2-12-						0-M39259	81180	-0.05	944	43770	53	-106	12.6	30	-1.2	3	1.1	37750	2.8	14180	30	0.2
30-45.5189-109.5108-2-12-						0-M39260	63050	-0.05	805	22890	57	-76	9.6	109	2.3	3	1.0	19960	6.5	15320	32	0.3
30-45.6147-109.3397-2-12-						0-M39261	63630	-0.07	554	23810	63	-76	9.6	127	4.2	4	1.0	19440	5.1	16110	32	0.3
30-45.5619-109.2481-2-15-						0-M39262	40250	-0.05	355	22900	43	-71	4.9	53	-1.0	2	0.8	10300	7.6	11070	29	0.2
30-45.5811-109.6958-2-11-						0-M39264	73650	-0.05	867	16660	52	-86	13.9	360	1.9	3	1.0	26470	5.5	16860	32	0.3
30-45.5369-109.2331-2-15-						0-M39265	48410	-0.05	531	13330	51	-55	6.9	53	2.9	4	0.9	13370	6.6	15130	27	0.3
30-45.5250-109.2125-2-12-						0-M39266	46970	-0.06	522	8960	55	-63	7.7	55	2.5	4	0.8	12450	7.8	12170	29	0.4
30-45.5347-109.2272-2-12-						0-M39267	48500	-0.06	528	10510	56	-64	6.0	58	2.3	3	0.8	13540	11.1	13410	34	0.3
30-45.5242-109.2308-2-12-						0-M39268	50030	-0.04	611	11160	64	-57	7.2	114	2.5	3	0.8	16630	10.3	12010	34	0.3

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAB. SAMPLE LOCATION NUMBER	Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
30-45.5867-109.6083-2-12-						0-439208	18870	290	7636	41	-2	6.9	3.6	-221	-1	-1	7.6	2805	72	2.1	60	0.346
30-45.5133-109.5708-2-12-						0-439209	16830	577	14900	-18	-2	8.0	3.5	758	-1	-1	6.7	3983	107	2.8	79	0.330
30-45.5944-109.5936-2-12-						0-439210	22940	575	7062	62	-2	9.0	5.4	-318	-1	-1	9.7	3350	84	2.8	-87	0.315
30-45.6781-109.6064-2-11-						0-439211	20360	536	11860	-29	-3	9.2	3.8	546	-1	-1	5.6	3145	101	-2.0	161	0.373
30-45.6956-109.5828-2-12-						0-439212	22630	552	10690	-18	-2	8.9	3.8	-291	-1	-1	7.3	3533	97	2.6	-59	0.311
30-45.7056-109.6219-2-12-						0-439214	23000	751	13450	31	-2	10.6	3.9	517	-1	-1	7.1	4339	113	1.9	57	0.286
30-45.7217-109.5069-2-12-						0-439215	26730	374	10710	-16	-2	5.9	4.6	-264	-1	-1	6.7	2319	57	2.8	-34	0.340
30-45.7292-109.5558-2-12-						0-439217	26450	624	12050	-27	-2	9.1	3.2	-298	-1	-1	6.2	3451	87	2.3	-42	0.365
30-45.7044-109.5067-2-12-						0-439218	24760	485	11090	36	-2	9.1	4.1	-263	-1	-1	8.0	2928	87	2.0	60	0.289
30-45.6356-109.5344-2-12-						0-439220	21420	502	7974	51	-2	9.7	3.8	-283	-1	-1	7.8	3102	83	2.0	35	0.335
30-45.6314-109.5417-2-12-						0-439221	18250	531	8981	52	-2	9.3	4.4	-325	-1	-1	9.6	2777	101	2.7	68	0.257
30-45.6917-109.4147-2-12-						0-439222	29360	486	11500	-23	-2	7.9	3.4	498	-1	-1	7.5	2735	72	2.0	-35	0.312
30-45.7008-109.3933-2-12-						0-439223	27840	419	10900	32	-1	6.2	3.5	-234		-1	6.6	2678	54	2.7	55	0.353
30-45.6981-109.4058-2-15-						0-439224	28430	376	11800	36	-1	7.2	3.9	-259	-1	-1	8.1	2750	73	2.4	99	0.302
30-45.7433-109.4003-2-11-						0-439225	31650	431	10680	42	-2	7.8	4.0	-309	-1	-1	8.5	2265	69	3.4	57	0.306
30-45.7283-109.4008-2-12-						0-439226	26980	445	10220	-24	-2	8.2	2.8	298	-1	-1	7.7	2673	72	-1.6	-68	0.301
30-45.7222-109.4086-2-11-						0-439227	25630	626	10340	44	-2	8.0	4.2	-278	-1	-1	8.3	3164	67	2.5	99	0.311
30-45.6906-109.4389-2-12-						0-439228	28840	495	9912	47	-2	8.8	4.9	-280	-1	-1	8.2	2456	84	2.4	79	0.316
30-45.6833-109.4514-2-11-						0-439229	15910	322	14770	-23	-2	6.7	3.1	552	-1	-1	8.0	2870	77	2.2	55	0.275
30-45.6814-109.4136-2-12-						0-439231	24790	373	11890	35	-2	7.6	4.0	441	-1	-1	7.7	3264	74	3.0	71	0.312
30-45.6825-109.4453-2-15-						0-439232	29430	412	10090	39	-2	8.4	3.9	-233	-1	-1	8.5	2938	76	2.1	-24	0.281
30-45.6808-109.4694-2-12-						0-439233	20560	354	8983	52	-2	7.4	4.6	-248	-1	-1	8.7	2879	68	3.0	66	0.300
30-45.6369-109.4097-2-12-						0-439234	25120	332	7754	-24	-2	7.5	3.9	-272	-1	-1	6.9	2490	67	3.8	-38	0.365
30-45.6275-109.3119-2-12-						0-439236	21500	341	10020	39	-1	5.6	3.5	-222		-1	6.6	2627	57	2.0	-34	0.338
30-45.6244-109.3400-2-12-						0-439237	26940	327	10890	27	-2	8.4	4.3	426	-1	-1	6.9	3096	82	2.9	89	0.346
30-45.6403-109.3864-2-12-						0-439238	18150	346	10020	-17	-2	6.3	4.5	232	-1	-1	8.3	2874	67	2.9	-56	0.299
30-45.5622-109.3264-2-12-						0-439239	11860	258	6560	-21	-2	6.4	3.2	-230	-1	-1	9.5	3082	71	3.2	74	0.338
30-45.5444-109.3222-2-15-						0-439240	17940	457	6608	42	-2	8.2	4.2	-241	-1	-1	9.2	3059	81	4.1	61	0.299
30-45.5317-109.3267-2-12-						0-439241	9184	318	6424	-15	-1	5.9	3.6	-192	-1	-1	7.3	3028	78	3.5	57	0.321
30-45.5106-109.3233-2-12-						0-439242	7233	212	5206	22	-2	4.9	4.2	-192	-1	-1	7.0	2669	60	3.0	76	0.333
30-45.5181-109.3258-2-12-						0-439243	11540	297	5035	-25	-2	4.0	3.4	-242	-1	-1	8.8	3354	98	2.7	-39	0.295
30-45.5697-109.3028-2-12-						0-439244	10710	242	7993	21	-1	4.0	2.3	201			5.5	2038	54	1.6	42	0.356
30-45.5142-109.2697-2-15-						0-439246	5268	249	6735	19	-1	4.0	3.0	-160			4.6	2016	50	2.1	-38	0.367
30-45.5342-109.2653-2-11-						0-439247	11100	337	7387	36	-2	5.7	2.8	-237	-1	-1	7.5	3001	57	2.1	-32	0.365
30-45.5850-109.2811-2-12-						0-439248	27660	312	9828	53	-2	8.1	3.7	312	-1	-1	9.3	3301	77	2.7	66	0.265
30-45.5864-109.2561-2-12-						0-439249	16900	309	9050	41	-1	5.5	3.7	-196	-1	-1	7.1	2688	56	2.9	71	0.351
30-45.6000-109.2644-2-11-						0-439250	20240	286	15020	32	-1	5.3	3.7	-248	-1	-1	8.0	2131	39	2.4	-66	0.274
30-45.5597-109.6433-2-15-						0-439251	14670	407	11470	44	-2	11.2	4.2	-291	-1	-1	8.7	3633	109	-1.8	-41	0.291
30-45.5978-109.7192-2-11-						0-439252	23060	533	14800	31	-2	9.7	3.6	572	-1	-1	5.6	3435	112	2.7	109	0.320
30-45.5942-109.6519-2-11-						0-439255	14880	577	8642	35	-2	9.0	3.9	-273	-1	-1	8.4	3046	88	2.7	161	0.337
30-45.5883-109.6769-2-11-						0-439257	18350	508	10920	44	-2	10.7	3.8	699	-1	-1	8.2	3173	98	2.6	-41	0.272
30-45.5722-109.6478-2-12-						0-439258	15310	662	14420	-28	-2	9.7	2.8	-371	-1	-1	7.1	3550	103	-1.9	53	0.282
30-45.5108-109.6614-2-12-						0-439259	22840	915	20540	36	-2	9.2	3.4	881	-1	-1	4.2	3082	143	2.0	75	0.229
30-45.5189-109.5108-2-12-						0-439260	16000	508	12410	25	-2	7.3	4.0	546	-1	-1	6.7	3305	80	3.1	69	0.334
30-45.6147-109.3397-2-12-						0-439261	20220	402	7918	-21	-2	8.8	4.5	-289	-1	-1	10.2	3079	76	4.0	110	0.248
30-45.5619-109.2481-2-15-						0-439262	13560	361	9062	26	-2	4.5	2.8	-243	-1	-1	7.8	1595	43	-1.1	-24	0.264
30-45.5911-109.6958-2-11-						0-439264	22560	589	16080	-18	-2	8.9	3.4	382	-1	-1	5.8	3847	116	2.3	-59	0.328
30-45.5369-109.2331-2-15-						0-439265	14580	244	6931	37	-1	5.8	3.6	-196	-1	-1	7.7	2362	51	2.1	-47	0.334
30-45.5250-109.2125-2-12-						0-439266	11410	238	6986	37	-2	5.4	4.5	-224	-1	-1	7.9	2601	51	3.1	65	0.334
30-45.5347-109.2272-2-12-						0-439267	13270	298	6710	53	-2	5.8	3.1	-248	-1	-1	7.5	2899	60	3.6	-31	0.400
30-45.5242-109.2308-2-12-						0-439268	11360	390	7210	37	-1	6.0	4.0	-214		-1	8.5	3293	72	3.1	59	0.320

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																								U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmhos/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
30-45.5961-109.2100-2-12-			0-	M39269-	07/19/78-13-	31-20.0-	C-	-	8.5-	790-																									2.55
30-45.5397-109.1269-2-12-			0-	M39272-	07/18/78-14-	30-15.0-	C-	-	8.2-	1100-																									2.86
30-45.5614-109.1472-2-12-			0-	M39273-	07/18/78-15-	30-16.0-	C-	-	7.7-	1620-																									2.65
30-45.5975-109.1986-2-12-			0-	M39274-	07/22/78-10-	30-15.0-	C-	-	8.9-	1490-																									2.79
30-45.5811-109.1850-2-12-			0-	M39276-	07/22/78-10-	30-14.0-	C-	-	7.9-	3350-																									3.18
30-45.5483-109.1761-2-11-			0-	M39277-	07/22/78-11-	30-12.0-	C-	-	7.6-	825-																									2.53
30-45.5469-109.1778-2-12-			0-	M39279-	07/22/78-11-	31-12.0-	C-	-	8.5-	800-																									2.68
30-45.5733-109.1681-2-12-			0-	M39281-	07/22/78-12-	31-15.0-	C-	-	8.0-	1600-																									2.40
30-45.6447-109.1806-2-12-			0-	M39283-	07/22/78-13-	31-22.0-	C-	-	8.0-	4000-																									3.88
30-45.6850-109.1578-2-12-			0-	M39284-	07/22/78-14-	31-19.0-	C-	-	7.5-	1950-																									2.55
30-45.7303-109.1333-2-12-			0-	M39285-	07/22/78-14-	31-20.0-	C-	-	7.7-	3000-																									2.71
30-45.7422-109.1339-2-12-			0-	M39286-	07/22/78-15-	31- 2.0-	C-	-	8.2-	3200-																									2.16
30-45.7122-109.1728-2-12-			0-	M39287-	07/22/78-15-	31-18.5-	C-	-	8.7-	1360-																									2.58
30-45.7039-109.1853-2-12-			0-	M39289-	07/22/78-16-	30-21.0-	C-	-	8.3-	750-																									2.35
30-45.5481-109.3678-2-12-			0-	M39290-	07/23/78- 8-	30-13.5-	C-	-	9.4-	155-																									2.37
30-45.6725-109.2800-2-12-			0-	M39291-	07/23/78- 9-	30-14.0-	C-	-	7.8-	70-																									2.30
30-45.6964-109.1906-2-12-			0-	M39292-	07/22/78-16-	30-25.5-	C-	-	8.3-	890-																									2.67
30-45.6881-109.2958-2-12-			0-	M39293-	07/23/78- 9-	30-15.0-	C-	-	8.4-	70-																									2.59
30-45.6942-109.2953-2-11-			0-	M39294-	07/23/78- 9-	30-	-C-	-	-	-																									4.05
30-45.7044-109.2933-2-15-			0-	M39295-	07/23/78-10-	30-	-C-	-	-	-																									2.62
30-45.7364-109.2578-2-12-			0-	M39296-	07/23/78-10-	30-17.5-	C-	-	8.5-	90-																									2.77
30-45.7372-109.2333-2-12-			0-	M39298-	07/22/78-11-	30-16.5-	C-	-	8.7-	79-																									2.45
30-45.6869-109.1353-2-12-			0-	M39300-	07/23/78-12-	30-21.5-	C-	-	8.9-	39-																									1.97
30-45.6725-109.1525-2-12-			0-	M39301-	07/23/78-13-	30-12.0-	C-	-	8.6-	60-																									1.99
30-45.6778-109.1678-2-12-			0-	M39302-	07/23/78-13-	31-24.0-	C-	-	8.2-	195-																									2.60
30-45.6097-109.1492-2-12-			0-	M39303-	07/23/78-14-	31-18.0-	C-	-	8.9-	160-																									2.69
30-45.6092-109.1678-2-12-			0-	M39304-	07/23/78-16-	31-23.5-	C-	-	8.7-	250-																									3.43
30-45.6136-109.1803-2-11-			0-	M39305-	07/23/78-15-	31-24.0-	-	-	8.5-	155-																									3.83
30-45.6175-109.1861-2-12-			0-	M39306-	07/23/78-15-	31-21.5-	C-	-	8.4-	275-																									3.26
30-45.6511-109.3483-2-12-			0-	M39307-	07/24/78- 9-	28-18.0-	C-	-	9.2-	80-																									2.38
30-45.6517-109.3142-2-11-			0-	M39309-	07/24/78-12-	30-20.0-	C-	-	9.0-	90-																									2.71
30-45.7242-109.3736-2-12-			0-	M39310-	07/24/78-12-	30-22.0-	C-	-	9.3-	70-																									3.97
30-45.4472-109.2453-2-12-			0-	M39311-	07/25/78- 9-	31-15.5-	C-	-	9.2-	110-																									2.90
30-45.4547-109.2017-2-12-			0-	M39312-	07/25/78-10-	30-14.5-	C-	-	9.0-	70-																									2.76
30-45.4739-109.1714-2-12-			0-	M39313-	07/25/78-10-	31-15.0-	C-	-	9.1-	50-																									2.87
30-45.4703-109.1725-2-11-			0-	M39314-	07/25/78-11-	31-13.0-	C-	-	9.0-	66-																									2.63
30-45.4703-109.1819-2-12-			0-	M39315-	07/25/78-11-	31-16.5-	C-	-	8.9-	50-																									2.46
30-45.4700-109.1853-2-11-			0-	M39316-	07/25/78-11-	30-13.0-	-	-	8.6-	68-																									2.34
30-45.4278-109.2447-2-11-			0-	M39317-	07/25/78-13-	30-	-C-	-	-	-																									2.78
30-45.4369-109.2486-2-12-			0-	M39318-	07/25/78-14-	31-14.5-	C-	-	8.8-	24-																									3.07
30-45.4247-109.2306-2-12-			0-	M39319-	07/25/78-14-	31-16.5-	C-	-	8.7-	21-																									3.11
30-45.3906-109.1889-2-12-			0-	M39321-	07/25/78-15-	31-21.0-	C-	-	9.3-	210-																									3.47
30-45.3939-109.2422-2-12-			0-	M39322-	07/25/78-15-	30-19.5-	C-	-	9.3-	210-																									2.55
30-45.3897-109.2164-2-12-			0-	M39323-	07/25/78-16-	31-19.5-	C-	-	8.3-	1100-																									3.81
30-45.3786-109.1686-2-12-			0-	M39325-	07/26/78-10-	31-16.0-	C-	-	9.3-	155-																									2.06
30-45.4061-109.1411-2-12-			0-	M39327-	07/26/78-11-	31-14.5-	C-	-	7.2-	465-																									2.44
30-45.4078-109.1400-2-12-			0-	M39328-	07/26/78-11-	31-19.5-	C-	-	7.7-	410-																									2.69
30-45.3714-109.1472-2-12-			0-	M39330-	07/26/78-13-	31-16.0-	C-	-	8.5-	240-																									2.29
30-45.3408-109.1361-2-12-			0-	M39331-	07/26/78-13-	31-22.5-	-	-	7.9-	810-																									2.15
30-45.3339-109.1419-2-12-			0-	M39332-	07/26/78-13-	31-20.0-	C-	-	7.9-	175-																									2.71
30-45.2781-109.1889-2-12-			0-	M39335-	07/26/78-14-	31-18.5-	C-	-	9.0-	190-																									2.38

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

(2)

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per million (ppm)									Concentrations in weight ppm	
							Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
30-45.5861-109.2100-2-12-						0-M39269	-5	-5	-5	30	-20	-15	7	-10	-15	2	41
30-45.5397-109.1769-2-12-						0-M39272	-5	7	-5	33	-20	-15	-5	-10	-15	2	48
30-45.5614-109.1472-2-12-						0-M39273	-5	-5	-5	27	-20	-15	11	-10	-15	2	35
30-45.5975-109.1986-2-12-						0-M39274	-5	-5	-5	29	-20	26	14	-10	-15	2	31
30-45.5811-109.1850-2-12-						0-M39276	-5	-5	-5	30	-20	-15	5	-10	-15	2	30
30-45.5483-109.1761-2-11-						0-M39277	-5	-5	-5	25	-20	-15	9	-10	-15	2	37
30-45.5469-109.1778-2-12-						0-M39279	-5	-5	-5	28	-20	24	10	-10	-15	3	48
30-45.5733-109.1681-2-12-						0-M39281	-5	5	-5	16	-20	16	5	-10	-15	2	39
30-45.6447-109.1806-2-12-						0-M39283	-5	-5	-5	25	-20	25	10	-10	-15	2	48
30-45.6850-109.1578-2-12-						0-M39284	-5	-5	-5	20	-20	17	-5	-10	-15	2	35
30-45.7303-109.1333-2-12-						0-M39285	-5	-5	-5	14	-20	18	8	-10	-15	2	46
30-45.7422-109.1339-2-12-						0-M39286	-5	5	-5	13	-20	-15	6	-10	-15	2	30
30-45.7122-109.1728-2-12-						0-M39287	-5	5	-5	26	-20	-15	5	-10	-15	2	34
30-45.7039-109.1853-2-12-						0-M39288	-5	6	-5	25	-20	23	-5	-10	-15	2	35
30-45.5481-109.3678-2-12-						0-M39290	-5	-5	-5	24	-20	-15	-5	-10	-15	2	25
30-45.6725-109.2800-2-12-						0-M39291	-5	5	-5	24	-20	24	-5	-10	-15	2	39
30-45.6364-109.1906-2-12-						0-M39292	-5	6	-5	23	-20	16	10	-10	-15	2	50
30-45.6981-109.2958-2-12-						0-M39293	-5	-5	-5	24	-20	27	-5	-10	-15	2	38
30-45.6942-109.2953-2-11-						0-M39294	-5	-5	-5	14	-20	-15	7	-10	-15	2	37
30-45.7044-109.2933-2-15-						0-M39295	-5	-5	-5	24	-20	25	6	-10	-15	2	26
30-45.7364-109.2578-2-12-						0-M39296	-5	6	-5	43	-20	35	-5	-10	-15	2	21
30-45.7372-109.2333-2-12-						0-M39298	-5	-5	-5	31	-20	17	15	-10	-15	2	39
30-45.6969-109.1353-2-12-						0-M39300	-5	-5	-5	18	-20	-15	-5	-10	-15	2	27
30-45.6725-109.1525-2-12-						0-M39301	-5	-5	-5	13	-20	-15	-5	-10	-15	1	39
30-45.6778-109.1678-2-12-						0-M39302	-5	-5	-5	26	-20	-15	6	-10	-15	1	55
30-45.6097-109.1492-2-12-						0-M39303	-5	-5	-5	16	-20	-15	11	-10	-15	1	23
30-45.6092-109.1678-2-12-						0-M39304	-5	5	-5	19	-20	16	12	-10	-15	3	13
30-45.6136-109.1803-2-11-						0-M39305	-5	-5	-5	41	-20	-15	15	-10	21	3	21
30-45.6175-109.1861-2-12-						0-M39306	-5	5	-5	23	-20	23	13	-10	-15	2	18
30-45.6511-109.3483-2-12-						0-M39307	-5	-5	-5	25	-20	21	-5	-10	-15	1	33
30-45.6517-109.3142-2-11-						0-M39309	-5	5	-5	24	-20	17	8	-10	-15	2	42
30-45.7242-109.3736-2-12-						0-M39310	-5	-5	-5	40	-20	-15	-5	-10	-15	3	31
30-45.4472-109.2453-2-12-						0-M39311	-5	-5	-5	17	-20	18	7	-10	-15	2	12
30-45.4547-109.2017-2-12-						0-M39312	-5	6	-5	22	-20	19	5	-10	-15	2	15
30-45.4739-109.1714-2-12-						0-M39313	-5	-5	-5	25	-20	15	7	-10	-15	2	20
30-45.4703-109.1725-2-11-						0-M39314	-5	6	-5	38	-20	-15	-5	-10	-15	2	20
30-45.4703-109.1819-2-12-						0-M39315	-5	-5	-5	27	-20	24	-5	-10	-15	2	18
30-45.4700-109.1853-2-11-						0-M39316	-5	-5	-5	34	-20	-15	11	-10	-15	1	20
30-45.4278-109.2447-2-11-						0-M39317	-5	8	-5	24	-20	-15	-5	-10	-15	2	20
30-45.4369-109.2486-2-12-						0-M39318	-5	-5	-5	24	-20	-15	-5	-10	-15	2	24
30-45.4247-109.2306-2-12-						0-M39319	-5	-5	-5	18	-20	15	10	-10	-15	2	20
30-45.3906-109.1889-2-12-						0-M39321	-5	7	-5	27	-20	17	10	-10	-15	2	22
30-45.3839-109.2422-2-12-						0-M39322	-5	5	-5	26	-20	16	-5	-10	-15	2	15
30-45.3897-109.2164-2-12-						0-M39323	-5	-5	-5	25	-20	-15	16	-10	-15	2	14
30-45.3786-109.1686-2-12-						0-M39325	-5	-5	-5	17	-20	17	-5	-10	17	1	17
30-45.4061-109.1411-2-12-						0-M39327	-5	-5	-5	18	-20	-15	8	-10	-15	1	17
30-45.4078-109.1400-2-12-						0-M39328	-5	-5	-5	21	-20	15	18	10	-15	2	18
30-45.3714-109.1472-2-12-						0-M39330	-5	6	-5	19	-20	15	-5	-10	-15	1	19
30-45.3408-109.1361-2-12-						0-M39331	-5	8	-5	21	-20	-15	6	-10	-15	1	16
30-45.3339-109.1419-2-12-						0-M39332	-5	-5	-5	31	-20	21	5	-10	-15	2	36
30-45.2791-109.1889-2-12-						0-M39335	-5	-5	-5	24	-20	-15	9	-10	-15	2	17

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)																
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
30-45.5961-109.2100-2-12-					0-	439269	58570	-0.05	616	33020	56	-74	7.4	89	2.6	4	1.1	15130	6.9	13270	34	0.3
30-45.5397-109.1269-2-12-					0-	439272	60790	-0.04	572	20950	52	-84	6.7	57	2.7	3	0.9	12070	5.9	15970	26	0.3
30-45.5614-109.1472-2-12-					0-	439273	60110	-0.03	622	12300	55	-74	6.5	66	2.4	3	1.0	14270	7.4	16290	33	0.3
30-45.5975-109.1986-2-12-					0-	439274	66150	-0.04	655	20570	56	-77	7.4	81	2.2	4	0.8	14050	5.8	14010	27	0.3
30-45.5811-109.1850-2-12-					0-	439276	64190	-0.05	733	19210	53	-88	5.8	55	2.9	3	0.7	11300	5.2	13310	26	0.3
30-45.5483-109.1761-2-11-					0-	439277	50020	-0.03	562	36650	48	-84	5.6	57	1.9	3	0.7	11660	5.9	14440	27	0.3
30-45.5469-109.1778-2-12-					0-	439279	53680	-0.04	519	30800	48	-70	7.6	63	3.0	4	0.9	14040	6.4	13980	30	0.3
30-45.5733-109.1681-2-12-					0-	439281	58240	-0.03	552	13160	42	-73	5.5	54	1.6	3	0.8	8529	5.2	15080	22	0.2
30-45.6447-109.1806-2-12-					0-	439283	67780	-0.06	739	46550	46	-95	6.4	49	-1.7	4	0.8	13950	2.3	16590	26	0.3
30-45.6850-109.1578-2-12-					0-	439284	61210	-0.03	500	31010	49	-96	7.4	59	2.2	3	0.8	16100	6.4	16660	27	0.3
30-45.7303-109.1333-2-12-					0-	439285	59810	-0.04	575	31330	49	139	9.0	51	2.7	3	0.9	15630	5.5	15270	29	0.3
30-45.7422-109.1339-2-12-					0-	439286	60510	-0.06	744	24490	48	-79	6.9	43	2.0	3	1.0	13260	5.8	16670	29	0.3
30-45.7122-109.1728-2-12-					0-	439287	61180	-0.09	585	16760	70	-88	9.3	88	3.2	3	1.0	15800	7.5	15950	32	0.4
30-45.7039-109.1853-2-12-					0-	439289	58300	-0.08	624	16090	59	-84	6.1	72	3.0	3	0.7	12540	6.2	15190	33	0.3
30-45.5491-109.3678-2-12-					0-	439290	58480	-0.06	694	14040	60	-69	9.0	120	2.4	3	0.8	15700	6.4	14890	31	0.3
30-45.6725-109.2800-2-12-					0-	439291	56130	-0.06	555	32950	52	-74	7.3	79	2.1	3	0.9	14060	5.8	14710	34	0.3
30-45.6864-109.1906-2-12-					0-	439292	58380	-0.09	499	38520	70	-93	8.0	67	2.5	4	1.0	15330	7.7	13680	34	0.4
30-45.6881-109.2958-2-12-					0-	439293	53790	-0.08	606	31470	59	-83	6.0	110	2.3	3	0.9	14070	9.3	15200	39	0.2
30-45.6942-109.2953-2-11-					0-	439294	78810	-0.07	3772	10350	42	-58	8.9	117	5.0	3	1.0	21830	8.6	9856	30	0.2
30-45.7044-109.2933-2-15-					0-	439295	70370	-0.08	666	22730	61	-77	10.6	107	2.8	4	1.0	20190	6.1	16610	39	0.3
30-45.7364-109.2578-2-12-					0-	439296	77580	-0.09	788	15350	75	-75	11.6	141	3.5	3	1.3	23390	5.8	20620	37	0.3
30-45.7372-109.2333-2-12-					0-	439298	58900	-0.09	475	42030	52	-94	7.6	77	2.3	3	0.8	14190	6.5	11240	37	0.2
30-45.6969-109.1353-2-12-					0-	439300	78450	-0.06	961	21770	60	-100	8.9	40	1.4	2	0.9	21370	7.1	14350	36	0.3
30-45.6725-109.1525-2-12-					0-	439301	67070	-0.07	699	19990	67	-104	6.9	31	1.4	3	1.0	18010	7.8	10230	37	0.3
30-45.6778-109.1678-2-12-					0-	439302	55610	-0.11	741	84300	47	-105	8.7	73	2.9	3	0.6	16090	3.5	12360	25	0.2
30-45.6097-109.1492-2-12-					0-	439303	63840	-0.06	706	23020	65	-84	7.7	59	2.2	3	0.9	16260	9.2	12570	34	0.3
30-45.6092-109.1678-2-12-					0-	439304	75040	-0.08	601	18040	64	-74	8.0	49	6.7	4	0.8	14930	6.1	17910	35	0.3
30-45.6136-109.1803-2-11-					0-	439305	73150	-0.09	803	18340	84	-65	8.4	45	8.2	4	1.1	15480	6.6	15380	50	0.5
30-45.6175-109.1861-2-12-					0-	439306	62430	-0.11	748	30850	77	-107	7.8	109	2.3	3	1.2	17920	11.8	12790	50	0.3
30-45.6511-109.3483-2-12-					0-	439307	52770	-0.06	652	23300	51	-70	8.8	102	1.9	3	0.8	15020	7.6	11880	26	0.3
30-45.6517-109.3142-2-11-					0-	439309	59830	-0.08	607	48030	64	-78	8.9	73	3.9	4	0.9	16450	6.1	14690	32	0.3
30-45.7242-109.3736-2-12-					0-	439310	66050	-0.09	640	10210	79	-68	8.2	72	4.6	4	1.0	14420	6.7	19750	39	0.3
30-45.4472-109.2453-2-12-					0-	439311	65200	-0.10	599	6555	66	-61	6.8	34	2.9	3	0.8	13600	7.5	13420	35	0.3
30-45.4547-109.2017-2-12-					0-	439312	55060	-0.07	750	9681	70	-68	9.3	118	2.7	3	0.9	17810	12.9	12340	41	0.4
30-45.4739-109.1714-2-12-					0-	439313	65230	-0.09	723	9583	60	-75	9.1	74	3.1	4	1.0	18110	6.2	16470	38	0.4
30-45.4703-109.1725-2-11-					0-	439314	58320	-0.08	736	5944	82	-87	9.7	66	3.2	4	1.2	15350	7.0	16200	39	0.4
30-45.4703-109.1819-2-12-					0-	439315	57460	-0.10	654	10140	54	-96	8.6	97	2.2	3	1.0	15970	5.4	14970	28	0.3
30-45.4700-109.1853-2-11-					0-	439316	58470	-0.08	685	8365	64	-69	9.8	102	2.6	3	0.9	15020	6.7	11830	31	0.3
30-45.4278-109.2447-2-11-					0-	439317	54850	-0.07	525	11390	55	53	6.4	46	3.6	4	0.9	13000	6.9	14820	35	0.3
30-45.4369-109.2486-2-12-					0-	439318	51430	-0.08	615	8496	75	-60	7.8	61	3.8	4	1.0	13850	9.8	13040	33	0.4
30-45.4247-109.2306-2-12-					0-	439319	47060	-0.09	636	7500	59	-55	6.9	49	2.4	3	0.8	14260	12.3	12720	36	0.4
30-45.3906-109.1889-2-12-					0-	439321	51420	-0.07	652	4615	61	-42	8.1	46	3.4	4	0.9	14760	7.5	14660	31	0.4
30-45.3939-109.2422-2-12-					0-	439322	35420	-0.05	472	12590	51	-46	6.1	45	1.8	3	0.7	10220	11.2	11610	30	0.3
30-45.3897-109.2164-2-12-					0-	439323	38810	-0.08	867	7166	67	-108	13.7	59	2.9	3	1.2	40450	9.7	-5332	35	0.4
30-45.3786-109.1686-2-12-					0-	439325	43910	-0.08	521	9573	40	-87	6.2	51	-1.1	2	0.8	10170	7.2	12540	24	0.2
30-45.4061-109.1411-2-12-					0-	439327	38710	-0.04	490	12790	48	-67	6.4	47	1.6	3	0.8	10370	8.8	12850	28	0.3
30-45.4078-109.1400-2-12-					0-	439328	55850	-0.07	581	13640	61	93	6.7	61	2.0	3	0.9	13610	7.9	11920	31	0.3
30-45.3714-109.1472-2-12-					0-	439329	47780	-0.07	573	17290	75	-91	7.1	74	-1.0	3	0.8	12760	12.2	11600	41	0.3
30-45.3408-109.1361-2-12-					0-	439331	33360	-0.07	525	14770	43	-63	3.9	29	-1.0	2	0.6	6923	7.5	11420	29	0.2
30-45.3339-109.1419-2-12-					0-	439332	49810	-0.07	588	24930	48	99	8.0	49	2.1	3	0.8	13340	6.0	13470	33	0.3
30-45.2781-109.1889-2-12-					0-	439335	52970	-0.04	585	13250	55	-80	6.6	83	1.5	3	0.8	14320	10.4	12350	43	0.2

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER: STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued). Concentrations reported in weight parts per million (ppm): Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	U/Th RATIO
30-45.5861-109.2100-2-12-						0-M39260	21020	381	11570	32	-2	6.9	4.1	394	-1	-1	8.1	2589	60	3.0	-49	0.315
30-45.5397-109.1269-2-12-						0-M39272	14550	277	11510	50	-1	5.6	3.3	-274	-1	-1	7.3	2921	63	2.7	41	0.392
30-45.5614-109.1472-2-12-						0-M39273	11800	345	12920	46	-1	6.1	4.1	356	-1	-1	8.8	2530	64	2.6	-70	0.301
30-45.5975-109.1986-2-12-						0-M39274	18890	426	12650	28	-1	5.9	4.0	366	-1	-1	7.1	3112	81	1.4	-51	0.393
30-45.5811-109.1850-2-12-						0-M39276	12440	645	10470	-20	-1	5.2	2.7	-342	-1	-1	7.1	2886	68	1.2	-36	0.448
30-45.5483-109.1761-2-11-						0-M39277	21380	457	9694	38	-1	5.1	3.1	-308		-1	7.1	1870	54	2.1	48	0.356
30-45.5469-109.1778-2-12-						0-M39278	21750	410	9703	37	-1	6.1	3.9	-256	-1	-1	8.0	2678	57	2.5	79	0.335
30-45.5733-109.1681-2-12-						0-M39281	13030	241	13210	27	-1	4.0	3.1	-222		-1	5.5	2546	60	1.7	-21	0.436
30-45.6447-109.1806-2-12-						0-M39283	22460	313	8890	-24	-2	6.8	2.3	996	-1	-1	5.8	3350	90	-1.6	131	0.669
30-45.6850-109.1578-2-12-						0-M39284	18090	470	13580	37	-1	6.0	3.4	-334		-1	6.7	3359	82	2.8	57	0.381
30-45.7303-109.1333-2-12-						0-M39285	16350	967	10610	34	-1	6.5	3.7	743	-1	-1	7.7	3071	61	1.9	98	0.352
30-45.7422-109.1339-2-12-						0-M39286	13340	423	13600	44	-2	5.3	3.8	399	-1	-1	6.4	2130	55	2.4	59	0.337
30-45.7122-109.1728-2-12-						0-M39287	14030	492	11830	60	-2	7.5	4.5	-314	-1	-1	9.3	2535	69	3.1	-58	0.277
30-45.7039-109.1853-2-12-						0-M39288	16090	191	14260	-22	-2	5.9	2.9	-250	-1	-1	6.4	2299	55	-1.9	-35	0.367
30-45.5481-109.3678-2-12-						0-M39290	13900	338	10730	43	-2	6.5	3.6	533	-1	-1	7.9	2910	72	3.1	66	0.300
30-45.6725-109.2800-2-12-						0-M39291	20160	387	13150	45	-2	6.5	3.8	-242	-1	-1	8.0	2220	65	2.5	41	0.288
30-45.6864-109.1906-2-12-						0-M39292	28620	540	12410	41	-2	7.3	4.5	-334	-1	-1	9.9	2870	60	3.8	85	0.270
30-45.6881-109.2958-2-12-						0-M39293	20020	364	13030	-21	-2	6.0	3.5	-275	-1	-1	9.1	2443	57	2.7	-29	0.285
30-45.6942-109.2953-2-11-						0-M39294	15310	195	7155	34	-2	6.9	2.7	621	-1	-1	19.0	4136	67	3.3	49	0.213
30-45.7044-109.2933-2-15-						0-M39295	20190	484	11530	49	-2	9.3	5.4	428	-1	-1	8.7	3077	82	2.8	98	0.301
30-45.7364-109.2579-2-12-						0-M39296	19140	290	10010	49	-3	10.4	5.0	349	-1	-1	9.5	3591	89	2.6	-23	0.292
30-45.7372-109.2333-2-12-						0-M39298	19510	575	11840	-23	-3	6.6	4.0	-344	-1	-1	7.6	2549	70	-2.1	64	0.322
30-45.6869-109.1353-2-12-						0-M39300	15700	490	23240	31	-2	5.9	3.9	-296	-1	-1	7.9	3675	81	2.6	70	0.249
30-45.6725-109.1525-2-12-						0-M39301	8662	467	20400	-17	-2	5.8	4.7	-321	-1	-1	6.8	3329	69	2.7	-37	0.293
30-45.6778-109.1678-2-12-						0-M39302	19810	756	9262	-29	-4	7.1	2.0	1049	-1	-1	7.6	2714	70	-2.3	-56	0.342
30-45.6097-109.1492-2-12-						0-M39303	14320	400	16710	24	-2	6.0	4.2	363		-1	8.9	3150	70	2.5	-37	0.302
30-45.6092-109.1678-2-12-						0-M39304	12900	175	11920	49	-2	8.0	4.5	379	-1	-1	9.7	3176	68	2.8	117	0.354
30-45.6136-109.1803-2-11-						0-M39305	11550	96	7109	65	-3	8.5	5.9	373	-1	-1	12.3	3151	77	4.4	-85	0.311
30-45.6175-109.1861-2-12-						0-M39306	17350	478	15170	-28	-3	7.7	4.7	521	-1	-1	10.3	3409	79	3.5	-98	0.317
30-45.6511-109.3483-2-12-						0-M39307	18610	350	10590	30	-2	5.8	3.6	-240	-1	-1	7.3	2583	67	2.1	60	0.326
30-45.6517-109.3142-2-11-						0-M39309	34650	478	10540	41	-2	7.5	4.5	412	-1	-1	8.5	2552	60	3.8	-54	0.319
30-45.7242-109.3736-2-12-						0-M39310	19410	141	9069	73	-3	8.7	5.8	174	-1	-1	10.5	3397	72	3.9	91	0.378
30-45.4472-109.2453-2-12-						0-M39311	9387	332	4297	-25	-3	7.0	2.3	-278	-1	-1	7.7	3348	75	-2.2	-39	0.377
30-45.4547-109.2017-2-12-						0-M39312	10590	607	6772	36	-2	7.2	3.9	-285	-1	-1	8.1	3383	89	2.2	70	0.341
30-45.4739-109.1714-2-12-						0-M39313	14370	506	8721	44	-3	8.2	4.3	-291	-1	-1	8.9	3184	81	2.2	-39	0.322
30-45.4703-109.1725-2-11-						0-M39314	9114	549	9867	49	-3	7.1	5.1	-342	-1	-1	9.8	3184	72	2.9	98	0.268
30-45.4703-109.1819-2-12-						0-M39315	10890	606	8680	-26	-3	7.3	3.4	-351	-1	-1	6.8	3381	78	-2.2	-52	0.362
30-45.4700-109.1853-2-11-						0-M39316	10430	443	7668	25	-2	6.7	4.1	-274	-1	-1	7.5	3428	79	-1.5	74	0.312
30-45.4278-109.2447-2-11-						0-M39317	15400	242	3028	-16	-2	6.1	4.0	-188	-1	-1	7.9	2862	93	3.6	68	0.352
30-45.4369-109.2486-2-12-						0-M39318	9815	332	4368	52	-3	6.8	5.7	-254	-1	-1	11.4	2885	81	4.7	-78	0.269
30-45.4247-109.2306-2-12-						0-M39319	9189	350	3996	-23	-3	5.8	3.0	-254	-1	-1	8.5	3606	82	3.5	-64	0.366
30-45.3906-109.1889-2-12-						0-M39321	8933	385	2726	37	-2	6.5	4.3	-210		-1	9.6	2914	94	3.0	89	0.361
30-45.3839-109.2422-2-12-						0-M39322	12490	234	5107	36	-2	4.4	3.4	-171		-1	8.0	2278	50	2.8	67	0.319
30-45.3897-109.2164-2-12-						0-M39323	8480	2116	2173	-22	-2	6.0	6.2	-560	-1	-1	8.8	1650	88	4.9	131	0.433
30-45.3786-109.1686-2-12-						0-M39325	6647	346	12320	-20	-2	4.2	1.9	-282	-1	-1	8.1	2070	40	-1.6	-25	0.254
30-45.4061-109.1411-2-12-						0-M39327	9035	595	7055	27	-2	4.3	3.6	-279		-1	8.6	2388	48	2.2	53	0.284
30-45.4078-109.1400-2-12-						0-M39328	10630	472	8929	33	-2	6.4	4.1	-268	-1	-1	11.4	2990	66	3.1	131	0.236
30-45.3714-109.1472-2-12-						0-M39330	11810	332	13890	28	-2	5.5	4.4	-270	-1	-1	14.9	2560	46	3.1	-54	0.154
30-45.3408-109.1361-2-12-						0-M39331	4800	208	6565	-18	-2	3.3	2.7	-219	-1	-1	6.3	1690	33	-1.4	-25	0.341
30-45.3339-109.1419-2-12-						0-M39332	13070	390	6527	42	-2	5.9	3.3	-251	-1	-1	8.0	2785	66	2.1	72	0.339
30-45.2781-109.1889-2-12-						0-M39335	12410	525	15960	26	-1	6.4	4.0	-256	-1	-1	18.7	2803	56	2.4	45	0.127

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																									U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (umho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
30-45.2950-109.1483-2-12-						0-439338-07/26/78-15-	32-22.0-C-		-	8.4-				310-																			2.74
30-45.4942-109.2264-2-12-						0-439339-07/26/78-16-	32-20.5-C-		-	8.1-				770-																			2.60
30-45.3622-109.1867-2-12-						0-439340-07/29/78- 9-	30-15.0-C-		-	8.8-				130-																			2.33
30-45.3647-109.2258-2-12-						0-439341-07/29/78-10-	31-18.0-C-		-	8.0-				1125-																			2.89
30-45.3611-109.2428-2-12-						0-439342-07/29/78-10-	30-20.5-C-		-	8.1-				1500-																			3.13
30-45.3644-109.2286-2-12-						0-439343-07/29/78-10-	30-21.5-C-		-	8.2-				700-																			3.85
30-45.3267-109.1619-2-12-						0-439347-07/29/78-12-	31-19.0-C-		-	8.1-				380-																			2.90
30-45.3275-109.1667-2-12-						0-439348-07/29/78-12-	31-13.5-C-		-	8.3-				245-																			2.87
30-45.3608-109.1578-2-12-						0-439349-07/29/78-13-	31-16.5-C-		-	8.9-				65-																			4.14
30-45.3283-109.2108-2-12-						0-439350-07/29/78-14-	30-20.5-C-		-	8.8-				97-																			3.27
30-45.2578-109.3144-2-12-						0-439351-07/30/78-10-	30-12.5-C-		-	8.9-				185-																			2.75
30-45.2619-109.3319-2-12-						0-439353-07/30/78-10-	30-14.5-C-		-	8.1-				352-																			2.37
30-45.2806-109.3450-2-12-						0-439354-07/30/78-11-	30-16.0-C-		-	8.3-				445-																			2.05
30-45.3058-109.3489-2-12-						0-439355-07/30/78-11-	30-20.0-C-		-	8.0-				525-																			3.09
30-45.3144-109.3367-2-12-						0-439356-07/30/78-11-	30-14.5-C-		-	8.4-				270-																			2.17
30-45.3211-109.3131-2-12-						0-439358-07/30/78-12-	30-12.0-C-		-	7.8-				385-																			2.45
30-45.2925-109.3017-2-12-						0-439361-07/30/78-13-	30-16.5-C-		-	7.7-				355-																			2.50
30-45.2914-109.3047-2-12-						0-439362-07/30/78-13-	30- -C-		-	7.8-				420-																			2.18
30-45.2658-109.2733-2-12-						0-439363-07/30/78-13-	30-10.5-C-		-	8.1-				230-																			2.23
30-45.2581-109.2514-2-12-						0-439364-07/30/78-14-	30-12.5-C-		-	8.0-				700-																			2.67
30-45.2725-109.2697-2-12-						0-439366-07/30/78-15-	30-19.5-C-		-	8.0-				130-																			2.07
30-45.2925-109.2617-2-12-						0-439367-07/30/78-15-	30-18.5-C-		-	7.7-				160-																			2.34
30-45.3328-109.2592-2-12-						0-439369-07/30/78-16-	30-20.5-C-		-	8.3-				255-																			2.16
30-45.4800-109.4533-2-12-						0-439371-07/31/78- 8-	25-13.0-C-		-	8.7-				73-																			6.50
30-45.4803-109.4475-2-12-						0-439372-07/31/78- 8-	25-14.5-C-		-	7.9-				240-																			2.55
30-45.4425-109.4450-2-12-						0-439373-07/31/78- 8-	25-14.5-C-		-	7.5-				320-																			2.24
30-45.4358-109.4592-2-12-						0-439374-07/31/78- 9-	25-14.5-C-		-	7.6-				270-																			2.99
30-45.4122-109.4722-2-12-						0-439375-07/31/78- 9-	27-11.5-C-		-	8.0-				60-																			2.54
30-45.4089-109.4917-2-12-						0-439376-07/31/78-10-	28-14.5-C-		-	8.1-				263-																			2.55
30-45.3489-109.4947-2-12-						0-439377-07/31/78-10-	28-12.0-C-		-	8.3-				60-																			1.88
30-45.3192-109.4706-2-12-						0-439378-07/31/78-10-	29-13.5-C-		-	8.4-				300-																			2.04
30-45.3067-109.4653-2-12-						0-439379-07/31/78-11-	29-16.0-C-		-	7.2-				350-																			2.33
30-45.2897-109.4794-2-12-						0-439380-07/31/78-11-	29-12.0-C-		-	7.6-				445-																			2.20
30-45.2889-109.4775-2-12-						0-439381-07/31/78-11-	29-13.5-C-		-	8.1-				200-																			2.62
30-45.3208-109.4547-2-12-						0-439384-08/03/78- 8-	30- 9.0-C-		-	6.5-				301-																			3.38
30-45.3061-109.3883-2-12-						0-439385-08/03/78- 8-	30- 9.5-C-		-	7.7-				215-																			2.39
30-45.3053-109.3761-2-12-						0-439386-08/03/78- 9-	30- 9.5-C-		-	8.1-				360-																			2.14
30-45.3219-109.3853-2-12-						0-439387-08/03/78- 9-	30-11.5-C-		-	8.7-				180-																			2.09
30-45.3414-109.3828-2-12-						0-439388-08/03/78-10-	30-11.5-C-		-	8.7-				90-																			2.83
30-45.3511-109.3836-2-15-						0-439391-08/03/78-10-	30- -C-		-	-				-																			2.36
30-45.3803-109.3647-2-12-						0-439392-08/03/78-10-	30-12.5-C-		-	7.0-				490-																			3.03
30-45.4042-109.3433-2-12-						0-439395-08/03/78-11-	30-15.0-C-		-	7.3-				395-																			2.94
30-45.3911-109.3203-2-12-						0-439396-08/03/78-12-	30-14.5-C-		-	7.9-				308-																			3.00
30-45.3842-109.2869-2-15-						0-439397-08/03/78-12-	30- -C-		-	-				-																			3.43
30-45.2839-109.4283-2-12-						0-439399-08/03/78-13-	26-13.0-C-		-	8.5-				157-																			2.14
30-45.2531-109.4531-2-12-						0-439400-08/03/78-14-	30-11.5-C-		-	8.6-				90-																			3.77
30-45.2583-109.4472-2-12-						0-439401-08/03/78-15-	31-12.0-C-		-	8.2-				240-																			2.58
30-45.2886-109.4475-2-12-						0-439405-08/03/78-16-	31-11.5-C-		-	8.5-				280-																			2.72
30-45.3664-109.5242-2-12-						0-439409-08/04/78- 9-	31-11.0-C-		-	8.6-				570-																			2.36
30-45.3450-109.5042-2-12-						0-439410-08/04/78-10-	31-13.0-C-		-	8.4-				480-																			2.14

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

(2)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
30-45.2850-109.1483-2-12-						0-M39338	-5	-5	-5	20	-20	20	8	-10	-15	1	16
30-45.4942-109.2264-2-12-						0-M39339	-5	-5	-5	26	-20	22	-5	-10	-15	1	14
30-45.3622-109.1867-2-12-						0-M39340	-5	9	-5	22	-20	27	7	-10	-15	-1	18
30-45.3647-109.2253-2-12-						0-M39341	-5	5	-5	19	-20	-15	-5	-10	-15	2	27
30-45.3611-109.2428-2-12-						0-M39342	-5	-5	6	30	-20	-15	19	-10	-15	2	33
30-45.3644-109.2286-2-12-						0-M39343	-5	-5	-5	30	-20	-15	9	-10	-15	2	29
30-45.3267-109.1519-2-12-						0-M39347	-5	-5	-5	37	-20	-15	5	-10	-15	1	36
30-45.3275-109.1667-2-12-						0-M39348	-5	-5	-5	21	-20	-15	10	-10	-15	1	17
30-45.3608-109.1578-2-12-						0-M39349	-5	6	-5	26	-20	27	17	-10	-15	1	14
30-45.3283-109.2108-2-12-						0-M39350	-5	6	-5	13	-20	-15	11	-10	-15	1	20
30-45.2578-109.3144-2-12-						0-M39351	-5	-5	-5	-10	-20	-15	7	-10	-15	2	26
30-45.2619-109.3319-2-12-						0-M39353	-5	-5	-5	25	-20	15	-5	-10	-15	1	18
30-45.2806-109.3450-2-12-						0-M39354	-5	-5	-5	13	-20	-15	7	-10	-15	1	23
30-45.3058-109.3489-2-12-						0-M39355	-5	-5	-5	19	-20	-15	12	-10	-15	1	23
30-45.3144-109.3367-2-12-						0-M39356	-5	6	-5	14	-20	-15	11	-10	-15	1	20
30-45.3211-109.3131-2-12-						0-M39358	-5	-5	-5	24	-20	17	-5	-10	-15	1	25
30-45.2925-109.3017-2-12-						0-M39361	-5	-5	-5	19	-20	-15	8	-10	-15	1	25
30-45.2914-109.3047-2-12-						0-M39362	-5	-5	-5	15	-20	21	-5	-10	-15	2	18
30-45.2658-109.2733-2-12-						0-M39363	-5	-5	-5	23	-20	-15	8	-10	-15	2	17
30-45.2581-109.2514-2-12-						0-M39364	-5	-5	-5	25	-20	-15	10	-10	-15	2	15
30-45.2725-109.2697-2-12-						0-M39366	-5	6	-5	22	-20	38	9	-10	15	2	19
30-45.2925-109.2617-2-12-						0-M39367	-5	6	-5	23	-20	-15	8	-10	-15	2	21
30-45.3328-109.2592-2-12-						0-M39369	-5	-5	-5	19	-20	-15	7	-10	-15	2	19
30-45.4800-109.4533-2-12-						0-M39371	-5	9	-5	-10	-20	27	-5	-10	-15	2	8
30-45.4803-109.4475-2-12-						0-M39372	-5	-5	-5	22	-20	16	7	-10	-15	2	14
30-45.4425-109.4450-2-12-						0-M39373	-5	6	-5	13	-20	20	-5	-10	-15	2	12
30-45.4358-109.4592-2-12-						0-M39374	-5	5	-5	17	-20	-15	-5	-10	-15	1	14
30-45.4122-109.4722-2-12-						0-M39375	-5	-5	-5	23	-20	38	-5	-10	-15	2	16
30-45.4089-109.4917-2-12-						0-M39376	-5	-5	-5	-10	-20	-15	-5	-10	-15	2	16
30-45.3499-109.4947-2-12-						0-M39377	-5	6	-5	21	-20	36	-5	-10	-15	1	12
30-45.3192-109.4706-2-12-						0-M39378	-5	-5	-5	16	-20	-15	-5	-10	-15	2	12
30-45.3067-109.4653-2-12-						0-M39379	-5	-5	-5	18	-20	-15	-5	-10	-15	1	16
30-45.2897-109.4794-2-12-						0-M39380	-5	7	-5	16	-20	-15	-5	-10	-15	2	25
30-45.2889-109.4775-2-12-						0-M39381	-5	6	-5	12	-20	-15	-5	-10	-15	1	12
30-45.3209-109.4547-2-12-						0-M39384	-5	-5	-5	15	-20	-15	-5	-10	-15	1	16
30-45.3061-109.3983-2-12-						0-M39385	-5	5	-5	16	-20	22	-5	-10	-15	2	21
30-45.3053-109.3761-2-12-						0-M39386	-5	7	-5	17	-20	-15	9	-10	-15	2	14
30-45.3219-109.3853-2-12-						0-M39387	-5	-5	-5	22	-20	-15	-5	-10	-15	2	13
30-45.3414-109.3828-2-12-						0-M39390	-5	6	-5	24	-20	-15	11	-10	-15	2	25
30-45.3511-109.3836-2-15-						0-M39391	-5	5	-5	24	-20	-15	7	-10	-15	2	16
30-45.3803-109.3647-2-12-						0-M39392	-5	-5	-5	28	-20	-15	-5	-10	-15	2	28
30-45.4042-109.3433-2-12-						0-M39395	-5	-5	-5	22	-20	-15	-5	-10	-15	2	18
30-45.3911-109.3203-2-12-						0-M39396	-5	-5	-5	-10	-20	-15	-5	-10	-15	2	22
30-45.3842-109.2869-2-15-						0-M39397	-5	-5	-5	20	-20	17	-5	-10	-15	2	26
30-45.2839-109.4283-2-12-						0-M39399	-5	6	-5	14	-20	34	-5	-10	-15	2	21
30-45.2531-109.4531-2-12-						0-M39400	-5	12	-5	12	-20	26	-5	-10	-15	-1	11
30-45.2583-109.4472-2-12-						0-M39401	-5	-5	-5	13	-20	-15	-5	-10	-15	1	12
30-45.2886-109.4475-2-12-						0-M39405	-5	-5	-5	25	-20	-15	-5	-10	-15	2	11
30-45.3664-109.5242-2-12-						0-M39409	-5	5	-5	24	-20	17	-5	-10	-15	1	12
30-45.3450-109.5042-2-12-						0-M39410	-5	-5	-5	26	-20	16	7	-10	-15	1	25

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
30-45.2850-109.1483-2-12-					0-	M39338	45130	-0.05	532	8567	65	-53	7.5	54	2.3	3	0.8	12360	8.2	12380	33	0.3
30-45.4942-109.2264-2-12-					0-	M39339	56070	-0.07	694	12700	72	-79	7.5	139	2.1	3	1.0	21260	11.9	12430	37	0.3
30-45.3622-109.1867-2-12-					0-	M39340	51050	-0.05	646	11410	50	-76	7.4	60	1.4	3	0.7	11830	8.2	15030	27	0.3
30-45.3647-109.2258-2-12-					0-	M39341	42920	-0.05	545	14170	49	-41	6.2	38	3.2	3	0.9	12480	7.6	11670	28	0.3
30-45.3611-109.2428-2-12-					0-	M39342	54370	-0.06	511	15680	81	-80	10.0	71	2.9	4	1.1	17240	6.8	12480	38	0.4
30-45.3644-109.2286-2-12-					0-	M39343	54520	-0.08	569	7834	69	-52	7.8	45	4.6	3	1.1	16580	6.4	13750	32	0.3
30-45.3267-109.1619-2-12-					0-	M39347	49200	-0.05	500	38820	60	-65	8.0	60	2.2	4	0.8	14070	9.2	12960	34	0.3
30-45.3275-109.1667-2-12-					0-	M39348	53420	-0.05	472	15980	105	-80	6.6	92	1.3	4	1.0	16000	13.8	11650	65	0.3
30-45.3608-109.1578-2-12-					0-	M39349	59850	0.12	455	15510	101	-93	8.3	136	1.9	3	0.9	16480	10.0	13280	56	0.3
30-45.3283-109.2108-2-12-					0-	M39350	51340	-0.07	501	8979	72	-81	6.2	57	1.8	3	0.8	12800	11.8	13430	38	0.4
30-45.2578-109.3144-2-12-					0-	M39351	54650	-0.04	647	12940	36	-79	6.3	46	1.4	2	0.7	10130	7.3	16420	25	0.3
30-45.2619-109.3319-2-12-					0-	M39353	53940	-0.04	722	12940	36	-77	5.7	35	1.5	2	0.7	8218	9.4	14560	23	0.2
30-45.2806-109.3450-2-12-					0-	M39354	44060	-0.05	546	17670	47	-66	6.3	49	1.6	2	0.9	9848	7.4	13630	23	0.3
30-45.3058-109.3489-2-12-					0-	M39355	45940	-0.06	549	10180	43	-66	6.9	40	2.4	3	1.0	10620	8.4	12540	30	0.2
30-45.3144-109.3367-2-12-					0-	M39356	47110	-0.04	517	13990	48	-67	4.8	35	-0.8	2	0.8	7948	9.7	12210	30	0.3
30-45.3211-109.3131-2-12-					0-	M39358	49340	-0.04	482	15420	44	-59	5.6	39	1.6	3	0.8	9029	11.2	14130	25	0.3
30-45.2925-109.3017-2-12-					0-	M39361	38220	-0.05	431	14800	49	-58	5.9	49	1.8	3	0.9	8983	12.6	11430	31	0.3
30-45.2914-109.3047-2-12-					0-	M39362	42670	0.13	524	14350	43	-71	5.0	32	-1.1	2	0.7	8086	8.5	13940	25	0.3
30-45.2658-109.2733-2-12-					0-	M39363	47560	-0.04	570	18870	48	-67	6.5	49	1.6	3	0.7	9640	7.5	15330	28	0.3
30-45.2581-109.2614-2-12-					0-	M39364	59480	-0.05	629	10310	60	-86	7.2	60	1.3	3	0.7	12860	9.1	14360	40	0.2
30-45.2725-109.2697-2-12-					0-	M39366	70450	-0.05	640	14970	75	-108	8.6	74	-1.1	2	0.9	14980	8.0	14790	41	0.2
30-45.2925-109.2617-2-12-					0-	M39367	48110	-0.06	571	15620	42	-73	6.4	39	2.5	3	0.7	9983	7.0	14720	27	0.2
30-45.3328-109.2592-2-12-					0-	M39369	38600	-0.04	503	12390	44	-55	5.4	38	1.6	2	0.6	8912	8.3	12230	25	0.3
30-45.4800-109.4533-2-12-					0-	M39371	60340	0.19	428	23090	241	190	11.0	252	-1.3	6	2.1	30870	37.8	8948	150	0.6
30-45.4803-109.4475-2-12-					0-	M39372	47460	-0.05	628	10620	71	-63	6.3	80	1.9	3	1.0	12420	11.9	12420	36	0.4
30-45.4425-109.4450-2-12-					0-	M39373	48540	-0.05	661	9319	45	-64	5.4	56	2.8	3	0.8	10900	8.6	13710	31	0.3
30-45.4358-109.4592-2-12-					0-	M39374	45470	-0.04	588	11760	82	-66	6.3	102	1.3	4	0.7	12300	17.4	12980	50	0.4
30-45.4122-109.4722-2-12-					0-	M39375	47350	-0.05	454	19730	59	153	8.5	119	-1.1	2	0.8	16010	9.3	12070	32	0.2
30-45.4089-109.4917-2-12-					0-	M39376	56200	-0.05	669	15510	88	-82	8.1	140	1.6	3	1.0	15990	14.6	15420	37	0.4
30-45.3489-109.4947-2-12-					0-	M39377	58960	-0.05	484	17800	54	-113	7.5	105	-1.2	1	0.7	15000	6.6	11390	33	0.2
30-45.3192-109.4706-2-12-					0-	M39378	43760	-0.04	610	7641	49	-60	6.5	55	1.7	3	0.6	10240	6.5	12150	25	0.2
30-45.3067-109.4653-2-12-					0-	M39379	38840	-0.04	600	10910	56	-54	5.2	39	2.2	3	0.8	9007	12.2	11790	31	0.4
30-45.2897-109.4794-2-12-					0-	M39380	48640	-0.05	612	20440	59	-65	7.1	51	3.0	3	1.0	12160	7.9	13170	31	0.3
30-45.2889-109.4775-2-12-					0-	M39381	39200	-0.06	492	8028	73	-69	5.0	52	-1.1	2	0.7	9785	17.5	10440	51	0.3
30-45.3208-109.4547-2-12-					0-	M39384	47600	-0.05	635	13080	100	-67	8.6	295	1.4	4	1.0	25480	24.3	12410	59	0.4
30-45.3061-109.3883-2-12-					0-	M39385	40980	-0.05	496	9947	62	-59	6.3	41	2.0	3	0.9	9785	10.1	12810	32	0.3
30-45.3053-109.3761-2-12-					0-	M39386	52500	-0.05	549	17130	64	-93	3.9	43	-1.0	2	0.9	8364	12.7	11040	35	0.2
30-45.3219-109.3853-2-12-					0-	M39387	30090	-0.03	444	9098	38	62	5.0	34	1.4	3	0.6	6661	9.7	11740	24	0.3
30-45.3414-109.3828-2-12-					0-	M39390	54200	-0.05	430	7681	53	66	7.6	45	3.4	4	0.9	12150	6.3	14010	31	0.3
30-45.3511-109.3836-2-15-					0-	M39391	53270	-0.05	850	8651	65	-63	6.9	32	2.4	3	0.9	11840	6.2	11880	35	0.3
30-45.3803-109.3647-2-12-					0-	M39392	57010	-0.07	663	8938	61	-63	7.6	49	3.6	3	1.2	15050	8.9	14310	33	0.4
30-45.4042-109.3433-2-12-					0-	M39395	49130	-0.05	610	6379	57	-51	8.1	52	2.9	4	0.8	12040	10.3	14670	33	0.3
30-45.3911-109.3203-2-12-					0-	M39396	46020	-0.05	586	14300	67	-60	6.7	41	1.7	4	0.9	14320	14.3	13560	36	0.4
30-45.3842-109.2869-2-15-					0-	M39397	50830	-0.06	623	5568	74	-44	9.0	58	4.1	4	1.1	16290	8.3	14560	36	0.4
30-45.2839-109.4283-2-12-					0-	M39399	56030	-0.04	533	18270	64	-78	5.6	45	1.5	2	0.8	12440	8.9	13880	43	0.2
30-45.2531-109.4531-2-12-					0-	M39400	56280	-0.08	574	17970	160	-107	8.7	70	-1.5	3	1.0	25220	20.5	8491	111	0.3
30-45.2583-109.4472-2-12-					0-	M39401	58930	-0.04	580	13720	89	-88	5.7	52	-0.9	2	1.0	10480	10.9	11530	55	0.2
30-45.2886-109.4475-2-12-					0-	M39405	41580	-0.05	524	7463	56	-59	5.6	48	2.3	3	0.7	9131	15.9	14130	32	0.3
30-45.3664-109.5242-2-12-					0-	M39409	51140	-0.05	684	19200	72	-78	7.1	62	1.8	3	1.0	13110	10.9	11810	41	0.3
30-45.3450-109.5042-2-12-					0-	M39410	51420	-0.07	602	21240	56	-88	6.3	56	-1.4	2	1.2	12110	6.1	10750	33	0.3

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
30-45.2850-109.1483-2-12-						0-M39338	9387	358	4541	50	-2	5.4	4.5	-231	-1	-1	8.7	2856	65	2.3	-54	0.315
30-45.4942-109.2264-2-12-						0-M39339	10110	604	8756	-24	-2	7.1	3.4	-312	-1	-1	7.2	3175	98	2.1	-36	0.361
30-45.3622-109.1867-2-12-						0-M39340	10500	342	13980	38	-1	5.4	3.3	-243	-1	-1	12.0	2698	53	2.2	48	0.194
30-45.3647-109.2258-2-12-						0-M39341	8483	230	3231	23	-1	5.3	3.6	254	-1	-1	6.9	2636	65	2.9	90	0.419
30-45.3611-109.2428-2-12-						0-M39342	12410	911	6775	38	-2	7.3	5.4	-355	-1	-1	15.1	3296	74	3.0	101	0.207
30-45.3644-109.2286-2-12-						0-M39343	10490	342	2852	-26	-2	8.5	3.9	-257	-1	-1	9.4	3045	99	4.2	-60	0.410
30-45.3267-109.1619-2-12-						0-M39347	15570	515	6563	37	-2	6.0	4.1	335	-1	-1	10.4	2930	64	2.7	68	0.279
30-45.3275-109.1567-2-12-						0-M39348	10420	427	16340	30	-1	6.3	6.0	-246	1	-1	31.5	2270	67	4.6	42	0.091
30-45.3608-109.1578-2-12-						0-M39349	15200	398	19510	26	-2	7.3	5.6	-284	-1	-1	28.3	2937	60	3.7	63	0.146
30-45.3283-109.2108-2-12-						0-M39350	8523	227	12350	34	-2	6.4	3.4	-254	-1	-1	16.1	3311	57	3.0	-30	0.203
30-45.2578-109.3144-2-12-						0-M39351	10090	209	17320	34	-1	5.4	2.8	-236		-1	7.4	2430	41	2.4	-17	0.372
30-45.2619-109.3319-2-12-						0-M39353	8999	249	16520	30	-1	4.8	2.6	406	-1	-1	8.1	1877	33	2.0	67	0.293
30-45.2806-109.3450-2-12-						0-M39354	13330	319	9085	33	-1	4.2	2.9	-231	-1	-1	7.0	1830	37	1.7	-50	0.293
30-45.3058-109.3489-2-12-						0-M39355	12340	298	6954	42	-2	5.2	3.0	-244	-1	-1	9.4	2594	52	2.6	110	0.329
30-45.3144-109.3367-2-12-						0-M39356	10150	207	14800	16	-1	3.8	3.4	-198	-1		14.0	1790	36	1.6	25	0.155
30-45.3211-109.3131-2-12-						0-M39358	12300	235	8571	27	-1	4.5	3.0	-187	-1	-1	8.1	2536	40	2.6	-21	0.302
30-45.2925-109.3017-2-12-						0-M39361	13000	235	7113	39	-1	4.4	3.5	-203	-1	-1	8.5	2478	39	2.4	74	0.294
30-45.2914-109.3047-2-12-						0-M39362	12770	248	9565	-17	-2	3.9	2.1	-235	-1	-1	6.4	2285	37	2.2	-25	0.341
30-45.2658-109.2733-2-12-						0-M39363	12210	298	10420	38	-1	4.5	2.7	330		-1	6.9	2377	42	2.3	43	0.323
30-45.2581-109.2514-2-12-						0-M39364	9536	277	18900	45	-2	5.6	3.8	-246	-1	-1	15.9	2393	44	1.9	65	0.168
30-45.2725-109.2697-2-12-						0-M39365	12140	438	24810	46	-2	6.3	4.2	-312	-1	-1	21.0	2441	50	3.6	42	0.099
30-45.2925-109.2617-2-12-						0-M39367	16160	296	8554	43	-2	5.3	2.9	-256	-1	-1	6.9	2312	48	-1.3	-17	0.339
30-45.3328-109.2592-2-12-						0-M39369	9597	248	7562	35	-1	4.0	3.2	-193		-1	8.4	2052	40	2.0	45	0.257
30-45.4800-109.4533-2-12-						0-M39371	20760	705	21110	-19	-2	11.6	12.5	-302	-1	-1	81.2	4828	113	8.6	-27	0.080
30-45.4803-109.4475-2-12-						0-M39372	6953	319	8322	32	-1	5.0	4.3	-225	-1	-1	9.2	2825	61	2.9	51	0.277
30-45.4425-109.4450-2-12-						0-M39373	7453	260	8253	-18	-2	4.9	3.3	-219	-1	-1	6.9	2601	57	1.6	-26	0.325
30-45.4358-109.4592-2-12-						0-M39374	7142	338	12310	32	-1	4.9	4.8	-215	-1	-1	16.8	3809	62	3.1	39	0.178
30-45.4122-109.4722-2-12-						0-M39375	18620	385	24910	38	-2	8.4	3.2	357	-1	-1	12.6	2485	57	2.5	82	0.202
30-45.4389-109.4917-2-12-						0-M39376	8196	376	13370	30	-2	5.8	4.4	-270	-1	-1	10.8	3727	67	2.7	63	0.236
30-45.3489-109.4947-2-12-						0-M39377	21760	356	29070	-20	-2	7.2	2.6	-310	-1	-1	15.4	1671	48	1.4	48	0.122
30-45.3192-109.4705-2-12-						0-M39378	7447	362	8201	33	-1	4.4	2.7	-217		-1	6.6	2652	55	1.8	43	0.309
30-45.3057-109.4653-2-12-						0-M39379	7769	277	6781	-13	-1	4.0	3.6	-196	-1	-1	8.9	2616	49	2.3	-16	0.262
30-45.2897-109.4794-2-12-						0-M39380	13900	298	6989	39	-2	5.3	4.3	-240	-1	-1	8.2	2605	63	2.7	84	0.268
30-45.2889-109.4775-2-12-						0-M39381	6202	292	8577	-19	-2	4.5	4.4	-234	-1	-1	18.2	3213	53	2.1	42	0.144
30-45.3208-109.4547-2-12-						0-M39384	10330	507	10060	28	-2	7.1	5.4	-244	-1	-1	18.8	5938	118	3.6	75	0.180
30-45.3061-109.3883-2-12-						0-M39385	10620	208	7482	22	-1	4.6	4.1	-202	-1	-1	11.6	2245	52	2.6	65	0.206
30-45.3053-109.3761-2-12-						0-M39386	8306	207	21130	-16	-2	4.4	2.5	-256	-1	-1	14.3	1811	32	-1.5	30	0.150
30-45.3219-109.3953-2-12-						0-M39387	9695	130	4641	18	-1	3.0	3.2	-151			5.2	2359	43	2.3	28	0.402
30-45.3414-109.3828-2-12-						0-M39390	10040	271	3316	49	-2	6.6	4.1	-201	-1	-1	8.0	3128	92	3.1	111	0.354
30-45.3511-109.3836-2-15-						0-M39391	6335	347	7073	30	-1	5.0	3.8	-232	-1	-1	7.2	2334	59	2.5	60	0.328
30-45.3803-109.3647-2-12-						0-M39392	13060	416	4601	41	-2	7.1	4.5	-276	-1	-1	10.3	3088	98	-1.5	-40	0.294
30-45.4042-109.3433-2-12-						0-M39395	7531	416	4579	40	-1	5.6	3.9	-223		-1	9.4	3256	68	2.6	56	0.313
30-45.3911-109.3203-2-12-						0-M39396	11440	284	8546	38	-2	5.1	4.2	-210	-1	-1	13.8	2921	61	2.8	63	0.217
30-45.3842-109.2969-2-15-						0-M39397	9735	218	2765	43	-2	7.9	5.3	-204	-1	-1	10.5	3178	88	2.9	98	0.327
30-45.2939-109.4283-2-12-						0-M39399	15630	264	18660	39	-1	5.3	3.7	-227	-1	-1	18.7	2051	51	3.1	38	0.114
30-45.2531-109.4531-2-12-						0-M39400	13500	344	20450	-27	-2	6.6	8.0	-318	-1	-1	58.4	2383	80	6.4	-75	0.065
30-45.2583-109.4472-2-12-						0-M39401	9121	170	23560	23	-1	4.5	5.8	362	-1	-1	29.4	1828	41	4.0	-41	0.088
30-45.2886-109.4475-2-12-						0-M39405	6358	316	8101	35	-1	4.4	4.0	-214	-1	-1	10.6	3204	45	3.0	61	0.257
30-45.3664-109.5242-2-12-						0-M39409	7334	322	10810	41	-2	5.2	4.2	-260	-1	-1	8.5	2926	53	2.9	78	0.278
30-45.3450-109.5042-2-12-						0-M39410	12900	279	11620	-22	-2	5.3	2.9	556	-1	-1	6.3	2438	64	3.2	-35	0.340

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples ①

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
							DATE	HOUR																									
30-45.3047-109.3642-2-12-						0-M39411-08/04/78-10-			31-14.0-C-		-		8.6-	445-		11-2-7-4-6-3-3-1-1-3-3-3-1-		-3-	-	-	-	-	2.33
30-45.3056-109.3739-2-12-						0-M39412-08/04/78-10-			31-14.0-C-		-		8.8-	350-		11-2-7-4-6-3-3-1-1-3-3-3-1-		-3-	-	-	-	-	2.01
30-45.2992-109.3725-2-12-						0-M39413-08/04/78-11-			31-13.5-C-		-		8.6-	410-		9-1-	-4-6-3-3-5-1-4-3-3-1-	-3-	-	-	-	-	4.36
30-45.2686-109.4117-2-15-						0-M39414-08/04/78-11-			31-	-C-	-		-	-		11-1-1-3-6-	-1-	-1-3-3-3-1-	-1-	-	-	-	-	2.16
30-45.2811-109.4103-2-12-						0-M39415-08/04/78-12-			27-12.0-C-		-		9.0-	400-		11-1-1-4-6-3-3-1-1-3-4-3-1-		-3-	-	-	-	-	2.06
30-45.3736-109.4558-2-12-						0-M39417-08/04/78-12-			27-17.5-C-		-		8.6-	312-		11-1-1-4-6-3-3-3-3-3-3-3-1-		-3-	-	-	-	-	2.36
30-45.4081-109.4261-2-12-						0-M39419-08/04/78-13-			27-25.0-C-		-		8.3-	480-		11-1-1-3-6-2-3-1-1-4-3-3-1-		-3-	-	-	-	-	2.32
30-45.4208-109.4336-2-12-						0-M39421-08/04/78-14-			31-18.0-C-		-		8.5-	293-		11-1-1-4-6-3-4-4-2-3-4-3-1-		-3-	-	-	-	-	2.59
30-45.3431-109.6000-2-12-						0-M39422-08/08/78- 9-			31- 8.5-C-		-		6.7-	44-		11-2-6-4-6-5-3-1-1-2-3-5-1-		-8-	-	-	-	-	4.58
30-45.4700-109.4758-2-12-						0-M39423-08/05/78- 9-			30-13.5-C-		-		8.4-	70-		11-1-6-4-6-4-3-1-1-2-3-2-2-		-3-	-	-	-	-	4.17
30-45.4922-109.4903-2-11-						0-M39424-08/05/78-10-			30-	-C-	-		-	-		10-1-6-	-6-1-3-2-1-6-3-2-1-	-3-	-	-	-	-	2.97
30-45.4856-109.4697-2-12-						0-M39425-08/05/78-10-			30-14.5-C-		-		8.0-	120-		10-1-6-4-6-3-3-1-1-2-2-3-2-		-3-	-	-	-	-	2.17
30-45.4714-109.3869-2-12-						0-M39426-08/05/78-10-			30-18.0-C-		-		9.1-	600-		12-1-1-7-6-3-3-3-2-3-1-3-1-		-3-	-	-	-	-	2.76
30-45.4822-109.4008-2-12-						0-M39427-08/05/78-11-			31-22.5-C-		-		8.7-	525-		10-1-1-5-6-2-3-1-1-3-3-3-2-		-3-	-	-	-	-	2.55
30-45.4969-109.4097-2-12-						0-M39428-08/05/78-11-			31-18.5-C-		-		8.1-	500-		10-1-1-5-6-3-3-1-1-4-3-3-2-		-3-	-	-	-	-	2.60
30-45.2836-109.6342-2-12-						0-M39429-08/08/78- 9-			32-11.0-C-		-		6.8-	60-		11-2-6-3-6-4-3-1-1-2-4-5-1-		-8-	-	-	-	-	26.34
30-45.2503-109.7158-2-12-						0-M39432-08/08/78-10-			31-14.0-C-		-		7.7-	28-		11-2-6-4-6-3-3-1-1-1-3-5-1-		-6-	-	-	-	-	6.20
30-45.2531-109.7092-2-12-						0-M39433-08/08/78-10-			31-12.0-C-		-		7.5-	60-		11-2-6-4-7-2-3-1-1-3-3-5-1-		-8-	-	-	-	-	5.70
30-45.2519-109.7017-2-12-						0-M39435-08/08/78-11-			31- 8.7-C-		-		8.6-	100-		11-2-6-3-6-3-3-1-1-7-4-5-1-		-1-	-	-	-	-	24.00
30-45.2572-109.6992-2-15-						0-M39436-08/08/78-11-			31-	-C-	-		-	-		11-2-6-7-6-	-1-	-3-3-2-5-1-	-	-	-	-	-	2.82
30-45.2611-109.6775-2-12-						0-M39437-08/08/78-11-			31-10.5-C-		-		8.6-	26-		11-2-6-3-6-4-3-1-1-7-3-5-1-		-8-	-	-	-	-	6.74
30-45.2731-109.6547-2-12-						0-M39438-08/08/78-12-			31-15.0-C-		-		8.3-	50-		9-2-6-3-6-3-3-1-1-7-3-5-1-		-8-	-	-	-	-	46.95
30-45.2625-109.6739-2-12-						0-M39439-08/08/78-12-			31-13.5-C-		-		8.2-	80-		11-2-6-3-6-3-3-1-1-3-4-5-1-		-8-	-	-	-	-	5.61
30-45.2803-109.6317-2-12-						0-M39440-08/08/78-10-			31-14.0-C-		-		8.9-	37-		11-2-6-4-6-2-3-1-1-6-4-5-1-		-8-	-	-	-	-	5.55
30-45.2975-109.6236-2-15-						0-M39441-08/08/78-13-			31-	-C-	-		-	-		11-2-6-5-6-	-1-	-2-4-3-4-1-	-1-	-	-	-	-	2.43
30-45.2583-109.5644-2-12-						0-M39442-08/08/78-15-			31-11.0-C-		-		8.5-	70-		11-2-7-4-7-3-3-1-2-2-4-5-2-		-3-	-	-	-	-	5.18
30-45.3091-109.5158-2-12-						0-M39444-08/08/78-16-			31-21.5-C-		-		7.8-	140-		11-1-1-3-6-3-3-1-2-3-3-3-2-		-3-	-	-	-	-	1.97
30-45.3081-109.5253-2-12-						0-M39445-08/08/78-16-			31-18.5-C-		-		8.9-	29-		9-1-1-4-6-2-3-1-1-4-3-3-2-		-3-	-	-	-	-	2.48
30-45.3194-109.5228-2-15-						0-M39446-08/08/78-10-			31-	-C-	-		-	-		11-1-1-4-6-	-1-	-1-4-3-3-2-		-3-	-	-	-	2.07
30-45.3557-109.5194-2-12-						0-M39447-08/08/78-16-			31-18.5-C-		-		8.1-	450-		9-1-1-4-6-3-3-4-1-3-4-3-2-		-3-	-	-	-	-	1.85
30-45.2775-109.2083-2-12-						0-M39452-08/09/78-11-			31-13.5-C-		-		8.1-	130-		11-1-1-4-6-4-3-1-1-2-3-2-1-		-8-	-	-	-	-	4.75
30-45.3194-109.2689-2-12-						0-M39455-08/09/78-12-			31-16.0-C-		-		8.5-	180-		11-1-1-4-6-4-4-4-2-3-4-3-1-		-3-	-	-	-	-	3.28
30-45.3594-109.6442-2-12-						0-M39458-08/09/78-14-			31-22.0-C-		-		9.7-	55-		11-1-1-3-6-3-3-1-1-4-3-3-1-		-3-	-	-	-	-	3.55
30-45.3553-109.6342-2-12-						0-M39459-08/09/78-15-			31-15.0-C-		-		9.1-	51-		11-1-1-3-6-3-3-1-1-2-3-3-2-		-1-	-	-	-	-	3.79
30-45.3719-109.6525-2-12-						0-M39460-08/09/78-15-			31-18.5-C-		-		8.6-	200-		11-1-1-4-6-3-3-1-2-3-3-3-2-		-3-	-	-	-	-	4.34
30-45.3633-109.6606-2-12-						0-M39462-08/09/78-15-			31-17.0-C-		-		8.7-	193-		11-1-1-3-6-2-3-2-2-4-4-4-2-		-3-	-	-	-	-	3.55
30-45.3689-109.6622-2-12-						0-M39463-08/09/78-16-			31-18.0-C-		-		9.1-	100-		11-1-1-4-6-2-3-1-1-3-2-4-2-		-3-	-	-	-	-	2.38
30-45.3683-109.6611-2-15-						0-M39464-08/09/78-16-			31-	-C-	-		-	-		11-1-1-7-6-	-1-	-1-4-4-4-2-		-3-	-	-	-	2.55
30-45.3657-109.6589-2-12-						0-M39465-08/09/78-17-			31-18.0-C-		-		8.3-	165-		11-1-1-3-6-3-1-2-1-4-3-3-2-		-3-	-	-	-	-	5.48
30-45.6989-109.6303-2-15-						0-M39466-08/10/78-10-			30-	-C-	-		-	-		9-1-6-7-9-	-1-	-3-3-2-3-2-		-1-	-	-	-	2.09
30-45.7014-109.6261-2-15-						0-M39467-08/10/78-10-			30-	-C-	-		-	-		9-1-6-3-7-	-1-	-3-3-2-3-2-		-1-	-	-	-	1.95
30-45.6578-109.6461-2-11-						0-M39468-08/10/78-10-			30- 8.5-C-		-		9.1-	510-		11-1-6-4-6-3-3-1-1-2-3-3-2-		-1-	-	-	-	-	2.34
30-45.6483-109.6714-2-15-						0-M39469-08/10/78-11-			30-	-C-	-		-	-		9-1-6-4-6-	-1-	-1-2-2-4-2-		-1-	-	-	-	1.94
30-45.6467-109.6708-2-12-						0-M39470-08/10/78-11-			30-12.5-C-		-		8.9-	400-		9-1-6-3-7-2-3-1-3-2-3-4-2-		-	-	-	-	-	1.95
30-45.6464-109.6681-2-12-						0-M39471-08/10/78-12-			30-17.0-C-		-		9.2-	470-		9-1-6-5-6-2-3-3-1-3-4-4-2-		-1-	-	-	-	-	1.96
30-45.6497-109.6550-2-12-						0-M39472-08/10/78-12-			30-18.0-C-		-		8.8-	650-		11-1-6-3-6-2-3-1-1-7-3-4-2-		-3-	-	-	-	-	2.20
30-45.6625-109.6506-2-15-						0-M39473-08/10/78-12-			30-	-C-	-		-	-		11-1-6-7-6-	-1-	-3-3-2-	-2-	-	-	-	-	1.88
30-45.6675-109.6506-2-15-						0-M39474-08/10/78-13-			30-	-C-	-		-	-		9-1-6-3-6-	-1-	-3-3-2-4-2-		-1-	-	-	-	2.02
30-45.6744-109.6394-2-15-						0-M39475-08/10/78-13-			30-	-C-	-		-	-		11-1-6-3-7-	-1-	-2-1-2-4-2-		-1-	-	-	-	2.00
30-45.6972-109.6367-2-15-						0-M39476-08/10/78-13-			30-	-C-	-		-	-		9-1-6-3-6-	-1-	-3-3-3-4-2-		-1-	-	-	-	1.96
30-45.7250-109.6892-2-15-						0-M39477-08/10/78-13-			31-	-C-	-		-	-		9-1-6-4-7-	-1-	-3-2-3-3-2-		-3-	-	-	-	1.25

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

(2)

DOE SAMPLE NUMBER						LAB SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
30-45.3047-109.3642-2-12-						0-439411	-5	-5	-5	18	-20	-15	-5	-10	-15	2	23
30-45.3056-109.3739-2-12-						0-439412	-5	6	-5	21	-20	-15	-5	-10	-15	2	17
30-45.2992-109.3725-2-12-						0-439413	-5	7	-5	-10	-20	-15	6	-10	-15	1	29
30-45.2686-109.4117-2-15-						0-439414	-5	-5	-5	15	-20	-15	6	-10	-15	2	31
30-45.2811-109.4103-2-12-						0-439415	-5	-5	-5	20	-20	-15	7	-10	-15	2	21
30-45.3736-109.4558-2-12-						0-439417	-5	5	-5	16	-20	-15	-5	-10	-15	2	11
30-45.4081-109.4261-2-12-						0-439419	-5	5	-5	14	-20	-15	7	-10	-15	2	13
30-45.4208-109.4336-2-12-						0-439421	-5	6	-5	15	-20	-15	-5	-10	-15	2	14
30-45.3431-109.6000-2-12-						0-439422	-5	5	-5	25	-20	22	6	-10	-15	1	17
30-45.4700-109.4758-2-12-						0-439423	-5	7	-5	24	-20	19	-5	-10	-15	1	14
30-45.4922-109.4903-2-11-						0-439424	-5	-5	-5	26	-20	-15	-5	-10	-15	-1	10
30-45.4856-109.4697-2-12-						0-439425	-5	-5	-5	26	-20	25	5	-10	-15	2	19
30-45.4714-109.3869-2-12-						0-439426	-5	5	-5	19	-20	-15	6	-10	-15	1	19
30-45.4822-109.4008-2-12-						0-439427	-5	-5	-5	17	-20	15	9	-10	-15	2	26
30-45.4969-109.4097-2-12-						0-439428	-5	-5	-5	25	-20	-15	-5	-10	-15	2	11
30-45.2836-109.6342-2-12-						0-439429	-5	8	-5	21	-20	-15	5	-10	-15	1	23
30-45.2503-109.7158-2-12-						0-439432	-5	-5	-5	22	-20	32	-5	-10	-15	2	12
30-45.2531-109.7092-2-12-						0-439433	-5	10	-5	20	-20	-15	-5	-10	-15	1	20
30-45.2519-109.7017-2-12-						0-439435	-5	-5	-5	26	-20	26	5	-10	-15	-1	11
30-45.2572-109.6992-2-15-						0-439436	-5	-5	-5	27	-20	35	13	-10	-15	1	29
30-45.2611-109.6775-2-12-						0-439437	-5	8	-5	26	-20	25	12	-10	-15	2	10
30-45.2731-109.6547-2-12-						0-439438	-5	-5	-5	44	-20	29	10	-10	-15	1	14
30-45.2625-109.6739-2-12-						0-439439	-5	6	-5	17	-20	22	7	-10	-15	1	12
30-45.2803-109.6317-2-12-						0-439440	-5	-5	-5	17	-20	35	-5	-10	-15	1	12
30-45.2975-109.6236-2-15-						0-439441	-5	-5	-5	32	-20	33	10	-10	-15	2	22
30-45.2583-109.5644-2-12-						0-439442	-5	6	-5	19	-20	-15	7	-10	-15	1	19
30-45.3081-109.5158-2-12-						0-439444	-5	5	-5	16	-20	15	-5	-10	-15	1	18
30-45.3081-109.5253-2-12-						0-439445	-5	5	-5	24	-20	25	8	-10	-15	1	25
30-45.3194-109.5228-2-15-						0-439446	-5	-5	-5	28	-20	35	9	-10	-15	1	15
30-45.3667-109.5194-2-12-						0-439447	-5	5	-5	20	-20	22	-5	-10	-15	1	14
30-45.2775-109.2083-2-12-						0-439452	-5	6	-5	27	-20	31	10	-10	-15	2	18
30-45.3194-109.2689-2-12-						0-439455	-5	-5	-5	16	-20	-15	-5	-10	-15	1	13
30-45.3594-109.6442-2-12-						0-439458	-5	-5	-5	29	-20	-15	6	-10	-15	3	39
30-45.3553-109.6342-2-12-						0-439459	-5	10	-5	-10	-20	16	6	-10	-15	2	11
30-45.3719-109.6525-2-12-						0-439460	-5	-5	-5	16	-20	-15	-5	-10	-15	2	14
30-45.3633-109.6606-2-12-						0-439462	-5	-5	-5	-10	-20	-15	-5	-10	-15	1	9
30-45.3689-109.6622-2-12-						0-439463	-5	5	-5	13	-20	-15	-5	-10	-15	2	13
30-45.3683-109.6611-2-15-						0-439464	-5	-5	-5	28	-20	26	-5	-10	-15	2	21
30-45.3667-109.6589-2-12-						0-439465	-5	11	-5	15	-20	29	5	-10	-15	1	10
30-45.6989-109.6303-2-15-						0-439466	-5	-5	-5	43	-20	67	8	-10	-15	2	46
30-45.7014-109.6261-2-15-						0-439467	-5	-5	-5	49	-20	65	16	-10	-15	2	25
30-45.6578-109.6461-2-11-						0-439468	-5	-5	-5	41	-20	52	6	-10	-15	2	50
30-45.6483-109.6714-2-15-						0-439469	-5	-5	-5	47	-20	73	8	-10	-15	2	37
30-45.6467-109.6708-2-12-						0-439470	-5	-5	-5	45	-20	86	8	-10	-15	2	45
30-45.6464-109.6681-2-12-						0-439471	-5	5	-5	46	-20	55	-5	-10	-15	2	43
30-45.6497-109.6550-2-12-						0-439472	-5	-5	-5	35	-20	62	-5	-10	-15	2	39
30-45.6625-109.6506-2-15-						0-439473	-5	-5	-5	36	-20	45	11	-10	-15	2	33
30-45.6675-109.6506-2-15-						0-439474	-5	-5	-5	43	-20	66	6	-10	-15	2	45
30-45.6744-109.6394-2-15-						0-439475	-5	-5	-5	39	-20	63	10	-10	-15	2	27
30-45.6972-109.6367-2-15-						0-439476	-5	5	-5	39	-20	53	8	-10	-15	1	34
30-45.7250-109.6892-2-15-						0-439477	-5	-5	-5	21	-20	-15	-5	-10	-15	2	23

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
30-45.3047-109.3642-2-12-						0-M39411	44450	-0.04	566	18250	38	-67	5.6	32	1.4	3	0.6	7431	10.5	13980	26	0.3
30-45.3056-109.3739-2-12-						0-M39412	57140	-0.04	605	16640	57	-83	5.2	41	1.3	2	0.9	8447	10.5	12840	33	0.2
30-45.2992-109.3725-2-12-						0-M39413	42270	-0.05	511	25710	87	-73	5.6	53	1.5	4	1.2	9284	36.0	13830	49	0.6
30-45.2686-109.4117-2-15-						0-M39414	64970	-0.06	627	18950	42	-105	5.5	30	2.8	2	0.8	9531	6.1	15810	28	0.2
30-45.2811-109.4103-2-12-						0-M39415	61340	-0.04	678	14330	37	-83	5.0	26	1.8	2	0.8	7156	6.6	16450	20	0.2
30-45.3736-109.4558-2-12-						0-M39417	59030	-0.05	709	13400	59	-69	7.6	76	1.8	3	0.9	15760	9.2	13630	39	0.3
30-45.4081-109.4261-2-12-						0-M39419	37900	-0.05	557	5794	63	-57	7.9	44	2.0	3	1.0	13530	10.3	12130	34	0.4
30-45.4208-109.4336-2-12-						0-M39421	54650	-0.07	681	10450	61	-78	6.9	63	-1.4	3	1.0	13100	11.9	13710	35	0.2
30-45.3431-109.6000-2-12-						0-M39422	61450	-0.06	461	17230	106	-90	8.0	81	-1.2	4	1.0	16640	16.4	9601	59	0.4
30-45.4700-109.4758-2-12-						0-M39423	57630	-0.06	582	18050	92	-83	8.0	182	-1.2	4	1.2	20160	21.6	11020	59	0.4
30-45.4922-109.4903-2-11-						0-M39424	50680	-0.09	705	9419	50	-92	9.7	459	3.3	2	1.0	21850	3.9	8867	27	-0.2
30-45.4856-109.4697-2-12-						0-M39425	61800	-0.08	903	14410	61	-105	9.3	155	-1.6	3	1.1	18600	6.5	17410	35	0.1
30-45.4714-109.3869-2-12-						0-M39426	48990	-0.05	646	8394	50	-48	7.6	44	2.5	3	0.8	13240	8.0	13100	27	0.3
30-45.4822-109.4008-2-12-						0-M39427	55300	-0.05	649	8121	62	-50	7.0	56	2.9	4	0.9	13510	6.5	13170	37	0.3
30-45.4969-109.4097-2-12-						0-M39428	61160	-0.07	682	6659	74	-70	9.1	61	2.7	4	1.1	16380	8.2	11950	40	0.4
30-45.2936-109.6342-2-12-						0-M39429	67840	-0.08	380	18990	81	164	10.5	91	-1.7	3	0.9	22940	10.1	7232	55	0.3
30-45.2503-109.7158-2-12-						0-M39432	70900	-0.06	489	16910	51	221	10.7	100	-1.2	2	0.8	16880	5.3	13720	40	0.1
30-45.2531-109.7092-2-12-						0-M39433	67460	-0.06	527	19130	74	-106	6.7	75	-1.2	4	0.9	12470	13.8	10550	51	0.4
30-45.2519-109.7017-2-12-						0-M39435	61300	-0.06	384	19730	67	-113	8.8	120	-1.3	1	0.7	14720	6.2	9673	52	0.3
30-45.2572-109.6992-2-15-						0-M39436	68520	-0.08	583	16300	59	191	9.6	84	-1.6	2	0.9	18300	5.3	11120	36	0.4
30-45.2611-109.6775-2-12-						0-M39437	66720	-0.06	380	16770	54	152	9.9	70	-1.2	3	0.8	14750	6.1	9162	37	0.2
30-45.2731-109.6547-2-12-						0-M39438	66850	-0.09	483	24370	69	212	11.8	123	-1.8	4	1.2	22210	7.1	10110	76	0.3
30-45.2625-109.6739-2-12-						0-M39439	65900	-0.06	320	19630	36	-115	7.6	96	-1.3	3	1.0	12940	13.8	6733	45	0.3
30-45.2803-109.6317-2-12-						0-M39440	65200	-0.08	310	18690	69	152	9.4	99	-1.6	3	0.7	17960	9.3	8443	51	0.3
30-45.2975-109.6236-2-15-						0-M39441	85950	-0.07	890	14320	66	-84	13.1	107	3.1	3	1.1	26840	5.9	13810	45	0.3
30-45.2583-109.5644-2-12-						0-M39442	64980	-0.05	492	19240	51	-100	5.4	66	-1.1	2	0.7	9983	9.0	10950	31	0.2
30-45.3081-109.5158-2-12-						0-M39444	62860	-0.06	525	18970	71	162	7.6	97	-1.1	2	1.0	13590	12.8	9776	37	0.3
30-45.3081-109.5253-2-12-						0-M39445	71710	-0.08	590	18170	51	-126	9.4	101	-1.5	2	0.7	16200	7.4	11040	32	-0.1
30-45.3194-109.5228-2-15-						0-M39446	73170	-0.06	785	16590	69	-99	13.2	136	2.2	3	1.0	22200	6.8	12740	42	0.3
30-45.3667-109.5194-2-12-						0-M39447	67070	-0.05	736	24750	50	-92	8.9	61	-1.2	3	1.0	14290	5.8	10440	33	0.3
30-45.2775-109.2083-2-12-						0-M39452	67680	-0.06	478	17180	102	-111	9.3	164	-1.3	2	1.0	17250	12.0	14720	52	0.3
30-45.3194-109.2689-2-12-						0-M39455	39210	-0.06	423	12150	64	-68	5.8	45	-1.2	3	0.8	9846	18.0	11750	46	0.4
30-45.3594-109.6442-2-12-						0-M39458	56420	-0.05	660	8513	62	-69	6.9	51	2.2	3	1.0	11980	7.1	14130	29	0.3
30-45.3553-109.6342-2-12-						0-M39459	58320	-0.05	537	12780	86	-80	6.4	39	-1.1	4	1.0	13060	12.0	14850	47	0.4
30-45.3719-109.6525-2-12-						0-M39460	43710	-0.06	490	10870	114	-76	8.1	872	-1.2	4	0.9	13010	26.5	12410	59	0.5
30-45.3633-109.6606-2-12-						0-M39462	36350	-0.06	410	5033	71	-62	4.4	75	-1.2	3	0.9	8761	22.8	11640	43	0.4
30-45.3689-109.6622-2-12-						0-M39463	47010	-0.04	513	13440	50	-68	5.4	42	1.2	2	0.7	7961	6.8	9885	27	0.2
30-45.3683-109.6611-2-15-						0-M39464	47170	-0.06	510	9874	57	-74	7.8	295	1.9	3	0.8	11390	7.4	11440	30	0.3
30-45.3667-109.6589-2-12-						0-M39465	38600	-0.06	388	9140	157	-73	9.3	1893	-1.2	6	1.1	16080	34.5	10480	83	0.8
30-45.6989-109.6303-2-15-						0-M39466	74830	-0.09	690	19410	59	-110	11.8	185	3.3	3	1.0	25540	4.2	18880	25	0.3
30-45.7014-109.6261-2-15-						0-M39467	70530	-0.07	779	16400	54	-96	12.8	183	3.3	3	0.9	24390	4.4	16650	35	0.2
30-45.6578-109.6461-2-11-						0-M39468	74120	-0.07	872	20310	66	-89	12.8	243	2.5	4	1.1	27820	5.0	20930	33	0.3
30-45.6483-109.6714-2-15-						0-M39469	72490	-0.07	808	12350	77	-102	15.5	186	3.7	3	1.1	26050	4.3	15120	35	0.3
30-45.6457-109.6708-2-12-						0-M39470	78260	-0.07	880	16140	55	-92	14.9	219	3.8	3	1.1	28310	4.2	20520	31	0.3
30-45.6454-109.6681-2-12-						0-M39471	70540	-0.08	792	35310	74	-95	15.1	232	3.5	3	1.1	25160	5.0	17270	28	0.3
30-45.6497-109.6550-2-12-						0-M39472	69910	-0.06	888	24190	51	-85	12.0	251	2.4	3	1.0	25070	6.8	15360	36	0.3
30-45.6625-109.6506-2-15-						0-M39473	70120	-0.08	830	28240	63	-101	12.1	140	2.5	3	1.2	25180	5.0	18520	33	0.3
30-45.6675-109.6506-2-15-						0-M39474	73490	-0.06	862	13480	54	-91	13.2	190	2.9	3	1.0	24280	4.1	17270	33	0.2
30-45.6744-109.6394-2-15-						0-M39475	74710	-0.07	885	17190	57	-104	14.5	250	2.9	3	1.1	29840	4.9	14540	38	0.3
30-45.6872-109.6367-2-15-						0-M39476	73230	-0.08	910	15880	72	-101	14.0	224	3.2	3	1.0	27110	5.5	15710	38	0.3
30-45.7250-109.6892-2-15-						0-M39477	73550	-0.09	749	32940	88	-133	16.5	54	-1.8	2	1.1	73040	3.8	12020	38	0.3

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
30-45.3047-109.3642-2-12-						0-M39411	11600	238	12360	31	-1	3.5	3.2	-208		-1	8.5	2287	36	2.5	40	0.274
30-45.3056-109.3739-2-12-						0-M39412	10510	218	20780	23	-1	4.6	3.3	231	-1	-1	12.7	1926	35	2.3	-19	0.158
30-45.2992-109.3725-2-12-						0-M39413	15640	263	11120	36	-2	3.9	6.6	-238	-1	-1	23.6	3029	36	4.2	80	0.185
30-45.2586-109.4117-2-15-						0-M39414	8424	255	17230	38	-2	4.1	2.4	-313	-1	-1	9.2	2249	40	-1.6	56	0.235
30-45.2811-109.4103-2-12-						0-M39415	8276	204	19210	39	-1	3.1	2.4	685	-1	-1	8.3	1545	31	2.2	45	0.248
30-45.3736-109.4558-2-12-						0-M39417	8889	434	10250	24	-2	6.3	3.8	357	-1	-1	8.1	3265	75	2.8	59	0.291
30-45.4081-109.4261-2-12-						0-M39419	6397	452	4161	34	-2	4.3	4.9	-264	-1	-1	8.9	2616	64	2.7	68	0.261
30-45.4208-109.4336-2-12-						0-M39421	7976	331	8908	36	-2	5.5	2.8	-279	-1	-1	6.0	3149	66	3.2	-36	0.432
30-45.3431-109.6000-2-12-						0-M39422	13280	411	18450	-16	-2	7.7	7.0	-280	-1	-1	25.3	4062	79	4.1	55	0.181
30-45.4700-109.4758-2-12-						0-M39423	13150	439	15710	31	-2	7.8	5.8	401	-1	-1	21.1	4737	95	4.0	77	0.198
30-45.4922-109.4903-2-11-						0-M39424	10760	452	6457	47	-3	6.9	2.9	-402	-1	-1	5.8	2493	70	-2.2	105	0.512
30-45.4856-109.4697-2-12-						0-M39425	11570	633	13720	-24	-2	7.0	2.8	445	-1	-1	5.6	2922	81	1.6	112	0.388
30-45.4714-109.3869-2-12-						0-M39426	9291	346	3717	37	-2	5.3	3.9	-222	-1	-1	7.7	2922	76	2.4	73	0.358
30-45.4822-109.4008-2-12-						0-M39427	9490	230	4529	35	-2	6.4	3.8	-207	-1	-1	7.6	3051	79	2.6	67	0.336
30-45.4969-109.4097-2-12-						0-M39428	10360	544	6031	38	-2	7.3	4.6	-314	-1	-1	9.1	2835	84	3.0	74	0.286
30-45.2836-109.6342-2-12-						0-M39429	18710	516	28830	-28	-3	8.7	5.7	-403	-1	-1	25.6	2785	82	-1.9	67	1.029
30-45.2503-109.7158-2-12-						0-M39432	20360	392	26720	40	-2	7.5	3.1	-330	-1	-1	13.2	2606	56	1.7	-32	0.470
30-45.2531-109.7092-2-12-						0-M39433	13160	333	29750	-16	-2	8.9	5.1	500	-1	-1	25.1	2728	56	4.2	63	0.227
30-45.2519-109.7017-2-12-						0-M39435	13860	329	25570	-19	-2	6.8	6.1	-334	-1	-1	18.5	2699	53	-1.4	-55	1.297
30-45.2572-109.6992-2-15-						0-M39436	15470	587	22490	-25	-2	7.9	2.5	-396	-1	-1	13.3	3043	71	-1.6	-70	0.212
30-45.2611-109.6775-2-12-						0-M39437	17400	367	28310	-17	-2	7.5	5.0	-324	-1	-1	12.6	1815	52	2.4	47	0.535
30-45.2731-109.6547-2-12-						0-M39438	22200	449	21470	-26	-3	9.9	11.5	-372	-1	-1	16.3	2443	73	-2.0	85	2.880
30-45.2625-109.6739-2-12-						0-M39439	17580	316	28890	-17	-2	8.7	6.7	-322	-1	-1	23.6	2663	38	3.5	-14	0.238
30-45.2803-109.6317-2-12-						0-M39440	15540	424	28090	-26	-2	9.5	3.8	-362	-1	-1	22.2	2314	64	-1.9	42	0.250
30-45.2975-109.6236-2-15-						0-M39441	10580	567	10570	-21	-2	9.3	4.9	428	-1	-1	9.0	4877	102	2.4	53	0.270
30-45.2593-109.5644-2-12-						0-M39442	11150	239	26330	-16	-2	6.2	4.0	366	-1	-1	12.7	1585	31	2.3	65	0.408
30-45.3081-109.5158-2-12-						0-M39444	11790	294	23670	-17	-2	7.0	4.5	-293	-1	-1	16.4	2251	51	3.3	60	0.120
30-45.3081-109.5253-2-12-						0-M39445	20920	369	27550	-24	-2	8.0	2.8	-360	-1	-1	11.5	2579	52	-1.7	-44	0.216
30-45.3194-109.5228-2-15-						0-M39446	14590	780	16340	33	-2	7.8	4.0	721	-1	-1	11.3	3941	85	2.8	-42	0.183
30-45.3667-109.5194-2-12-						0-M39447	12460	560	16270	36	-2	6.7	3.6	-304	-1	-1	7.2	2521	60	1.9	110	0.257
30-45.2775-109.2083-2-12-						0-M39452	16880	382	24450	38	-2	8.0	5.5	-333	-1	-1	26.6	2785	54	4.7	97	0.179
30-45.3194-109.2689-2-12-						0-M39455	10200	255	7549	-20	-2	4.7	4.2	-237	-1	-1	16.1	2586	51	3.7	-31	0.204
30-45.3594-109.6442-2-12-						0-M39458	9152	229	9763	50	-2	6.0	4.8	-228	-1	-1	12.0	2947	97	2.8	68	0.296
30-45.3553-109.6342-2-12-						0-M39459	8527	265	16610	38	-2	6.0	5.2	-238	-1	-1	21.4	2686	54	4.0	66	0.177
30-45.3719-109.6525-2-12-						0-M39460	9992	415	9679	31	-2	6.2	7.2	-277	-1	-1	26.0	4352	57	5.6		0.167
30-45.3533-109.6606-2-12-						0-M39462	4436	199	6650	-19	-2	4.1	4.7	-214	-1	-1	13.5	3768	46	4.2	74	0.263
30-45.3689-109.6622-2-12-						0-M39463	6147	279	12350	31	-1	4.8	2.8	295		-1	8.0	2270	41	2.0	46	0.298
30-45.3683-109.6611-2-15-						0-M39464	11070	292	10410	-17	-2	5.9	3.7	-246	-1	-1	9.2	2521	58	2.1	86	0.277
30-45.3667-109.6589-2-12-						0-M39465	11050	477	9257	33	-2	7.4	9.7	-281	-1	-1	39.3	5727	73	6.1	64	0.139
30-45.6989-109.6303-2-15-						0-M39466	22200	591	14100	-31	-3	10.7	3.4	-406	-1	-1	7.1	3409	100	3.3	128	0.294
30-45.7014-109.6261-2-15-						0-M39467	24040	596	14890	-21	-2	10.2	4.3	-346	-1	-1	7.2	3355	109	2.7	101	0.271
30-45.6578-109.6461-2-11-						0-M39468	23470	589	13040	-21	-2	10.7	4.0	425	-1	-1	7.5	4177	119	2.6	91	0.312
30-45.6483-109.6714-2-15-						0-M39469	17690	634	15140	34	-2	10.7	4.7	-369	-1	-1	7.3	2596	95	2.8	65	0.266
30-45.6467-109.6708-2-12-						0-M39470	22470	655	14360	39	-2	11.7	4.4	393	-1	-1	7.6	3603	116	2.9	97	0.257
30-45.6464-109.6681-2-12-						0-M39471	22110	506	11170	50	-3	10.8	4.7	517	-1	-1	7.1	3717	104	2.9	145	0.276
30-45.6497-109.6550-2-12-						0-M39472	23160	555	12730	38	-2	8.9	3.6	-306	-1	-1	6.3	4425	105	3.2	71	0.349
30-45.6625-109.6506-2-15-						0-M39473	23450	691	12470	-28	-3	10.1	2.7	-378	-1	-1	6.0	3219	105	2.0	105	0.313
30-45.6675-109.6506-2-15-						0-M39474	22530	632	14790	-18	-2	10.0	3.7	-329	-1	-1	6.8	4238	108	2.8	59	0.297
30-45.6744-109.6394-2-15-						0-M39475	21780	914	17980	40	-2	11.4	4.3	529	-1	-1	6.5	3914	116	2.3	-89	0.308
30-45.6872-109.6367-2-15-						0-M39476	18910	623	15440	-23	-2	10.8	5.0	495	-1	-1	7.9	4221	101	2.8	70	0.248
30-45.7250-109.6892-2-15-						0-M39477	15740	1147	20200	-35	-3	8.7	3.4	691	-1	-1	5.4	6436	248	2.9	133	0.231

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
							TIME SAMPLED																										
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
30-45.7003-109.6956-2-15-						0-M39478-08/10/78-13-	31-	-C-	-	-			-	-	-	9-1-6-7-9-	-1-	-3-2-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	2.05
30-45.6911-109.7125-2-11-						0-M39479-08/10/78-14-	30-16.5	C-	-	9.9-			310-		11-1-6-4-7-2-3-1-1-3-3-3-2-	-3-	-	-	-	-	-										1.38
30-45.6911-109.7158-2-12-						0-M39480-08/10/78-14-	30-19.0	C-	-	9.0-			300-		11-1-6-7-6-4-3-1-1-2-2-3-2-	-3-	-	-	-	-	-										1.19
30-45.6854-109.7225-2-15-						0-M39481-08/10/78-14-	31-	-C-	-	-			-		11-1-6-4-7-	-1-	-	-	-	-3-2-	-3-	-	-	-	-						1.28
30-45.6831-109.7306-2-15-						0-M39482-08/10/78-10-	30-	-C-	-	-			-		11-1-6-3-6-	-1-	-2-3-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	1.58
30-45.6758-109.7469-2-11-						0-M39483-08/10/78-14-	30- 8.0	C-	-	8.9-			340-		11-1-6-3-7-3-3-1-1-5-3-4-2-	-1-	-	-	-	-	-										1.37
30-45.6742-109.7444-2-12-						0-M39485-08/10/78-15-	30-12.5	C-	-	8.5-			320-		11-1-6-3-7-3-3-1-1-2-3-4-2-	-1-	-	-	-	-	-										1.31
30-45.6700-109.7531-2-12-						0-M39486-08/10/78-15-	30-17.5	C-	-	8.4-			280-		11-1-6-4-6-3-3-1-1-7-3-4-2-	-3-	-	-	-	-	-										1.24
30-45.6519-109.7733-2-15-						0-M39487-08/10/78-15-	30-	-C-	-	-			-		11-1-7-3-7-	-1-1-3-2-3-4-2-		-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.04
30-45.6275-109.8389-2-12-						0-M39488-08/10/78-15-	30- 9.5	C-	-	8.8-			260-		11-1-7-3-7-3-3-1-1-2-3-4-2-	-1-	-	-	-	-	-										1.04
30-45.6272-109.8272-2-12-						0-M39489-08/10/78-16-	30-12.0	C-	-	8.7-			325-		9-1-7-3-6-3-2-1-1-2-3-4-2-	-1-	-	-	-	-	-										0.94
30-45.6294-109.8144-2-12-						0-M39490-08/10/78-16-	30- 9.0	C-	-	9.1-			270-		11-1-7-3-6-3-2-1-1-2-2-3-4-3-	-1-	-	-	-	-	-										1.00
30-45.6436-109.7772-2-12-						0-M39491-08/10/78-16-	30-14.5	C-	-	8.5-			260-		11-1-7-4-6-6-3-2-1-1-2-3-4-2-	-3-	-	-	-	-	-										1.48
30-45.6253-109.7586-2-15-						0-M39492-08/10/78-17-	30-	-C-	-	-			-		11-1-7-3-6-	-1-	-1-7-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	1.63
30-45.7197-109.9950-2-12-						0-M39493-08/12/78-10-	30-14.5	C-	-	8.8-			165-		9-1-6-2-2-3-3-1-3-2-2-3-2-	-3-	-	-	-	-	-										2.62
30-45.7225-109.9969-2-11-						0-M39494-08/12/78-11-	30-	-C-	-	-			-		6-1-6-4-6-2-2-6-1-2-3-3-2-	-1-	-	-	-	-	-										3.77
30-45.7233-109.9967-2-12-						0-M39495-08/12/78-11-	30-15.0	C-	-	8.6-			165-		6-1-6-4-6-4-3-1-3-2-3-3-2-	-3-	-	-	-	-	-										2.75
30-45.7256-109.9889-2-12-						0-M39496-08/12/78-11-	30-11.5	C-	-	9.1-			170-		6-1-6-3-6-4-3-1-1-2-3-3-2-	-3-	-	-	-	-	-										3.77
30-45.7369-109.9900-2-15-						0-M39497-08/12/78-11-	30-	-C-	-	-			-		18-1-6-6-4-1-1-	-3-3-3-4-2-		-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40
30-45.7453-109.9961-2-15-						0-M39498-08/12/78-12-	30-	-C-	-	-			-		16-1-6-4-6-	-1-	-1-3-2-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.59
30-45.7483-109.9208-2-12-						0-M39499-08/12/78-13-	30-18.0	C-	-	8.3-			400-		13-1-6-3-6-2-2-1-2-3-3-3-2-	-3-	-	-	-	-	-										1.89
30-45.1789-108.2697-2-11-						0-M39500-07/05/78-17-	21- 8.5	C-	-	7.4-			850-		9-1-1-4-7-2-3-1-	-2-3-3-2-		-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.12
30-45.1800-108.2894-2-11-						0-M39501-07/05/78-18-	19- 9.0	-	-	7.4-			650-		11-1-1-4-7-3-3-1-	-2-4-4-2-		-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.58
30-45.1897-108.2864-2-11-						0-M39502-07/05/78-19-	13- 7.0	-	-	7.7-			650-		12-1-4-4-7-2-3-1-	-2-3-3-2-		-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.92
30-45.0806-108.2589-2-12-						0-M39503-07/06/78- 9-	16- 8.5	C-	-	7.8-			-		6-1-1-5-4-4-3-1-2-2-3-2-3-			-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.88
30-45.0664-108.2556-2-15-						0-M39504-07/06/78- 9-	16-	-	-	-			-		4-1-1-5-4-	-	- - - -1-2-4-3-		-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.58
30-45.0506-108.2550-2-15-						0-M39505-07/06/78- 9-	16-	-	-	-			-		6-1-1-3-6-	-	- - - -3-1-4-3-		-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.23
30-45.0419-108.2525-2-15-						0-M39506-07/06/78- 9-	-	-	-	-			-		13-1-4-5-4-	-	- - - -3-1-4-3-		-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.06
30-45.0111-108.2778-2-15-						0-M39507-07/06/78-10-	17-	-	-	-			-		9-1-1-4-6-	-	- - - -1-2-4-3-		-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.37
30-45.0122-108.2756-2-15-						0-M39508-07/06/78-10-	17-	-	-	-			-		9-1-1-4-6-	-	- - - -1-2-4-3-		-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.52
30-45.1939-108.4600-2-12-						0-M39509-07/09/78-17-	16- 7.5	-	-	7.4-			440-		4-1-1-4-6-3-3-1-	-4-4-5-2-		-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.17
30-45.1794-108.4575-2-11-						0-M39510-07/09/78-18-	15-11.0	-	-	7.6-			335-		8-1-1-4-7-3-3-1-	-4-4-5-2-		-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.83
30-45.3269-109.0078-2-12-						0-M39511-07/10/78-11-	27-21.0	-	-	8.2-			2150-		10-1-2-4-7-2-3-1-1-4-4-2-1-			-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.32
30-45.3511-109.1022-2-11-						0-M39512-07/10/78-11-	24-12.5	C-	-	7.2-			1050-		4-1-2-6-8-2-3-1-	-4-4-2-1-		-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.53
30-45.3703-109.0281-2-12-						0-M39513-07/10/78-12-	21-16.0	C-	-	7.5-			380-		10-1-1-4-7-3-3-4-2-4-4-2-2-			-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.79
30-45.3542-109.0556-2-12-						0-M39514-07/10/78-13-	30-17.0	C-	-	7.8-			370-		6-1-1-4-6-3-3-4-2-4-4-2-1-			-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.96
30-45.3419-109.0628-2-12-						0-M39515-07/10/78-13-	31-17.0	C-	-	7.9-			360-		8-1-1-6-6-2-3-4-2-4-4-2-1-			-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.79
30-45.3272-109.0742-2-12-						0-M39516-07/10/78-14-	27-16.0	C-	-	7.7-			345-		8-1-1-5-7-4-3-4-2-4-4-3-1-			-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.66
30-45.3011-109.1028-2-12-						0-M39517-07/10/78-15-	28-15.0	C-	-	7.8-			305-		6-1-1-4-7-3-3-4-2-4-4-2-1-			-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.56
30-45.2742-109.0397-2-11-						0-M39518-07/10/78-16-	25-11.5	C-	-	7.3-			1650-		9-1-1-6-8-	-	- - - -4-3-2-3-		-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.14
30-45.2711-109.0442-2-15-						0-M39519-07/10/78-16-	24-	-	-	-			-		5-1-1-4-7-	-	- - - -4-3-2-3-		-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.16
30-45.2597-109.0294-2-12-						0-M39520-07/10/78-16-	27-22.5	C-	-	8.4-			4350-		12-1-1-3-7-1-2-1-2-4-3-2-3-			-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.99
30-45.2722-109.0253-2-12-						0-M39521-07/10/78-16-	24-19.0	-	-	8.3-			2850-		13-1-1-4-6-2-3-1-2-4-3-2-3-			-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60
30-45.3594-109.0522-2-12-						0-M39522-07/10/78-17-	27-18.0	C-	-	8.4-			1000-		6-1-2-5-7-2-3-1-2-4-4-3-3-			-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.54
30-45.3186-108.9694-2-15-						0-M39524-07/10/78-18-	25-	-	-	-			-		9-1-1-5-7-	-	- - - -4-4-3-2-		-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.94
30-45.3097-108.9756-2-12-						0-M39529-07/10/78-20-	22-12.0	-	-	8.2-			3400-		4-1-1-3-7-2-3-1-2-4-3-4-2-			-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.78
30-45.3381-108.9336-2-12-						0-M39532-07/11/78-12-	26-15.0	-	-	7.5-			325-		8-1-1-4-7-2-2-3-2-4-4-1-1-			-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.47
30-45.3292-108.9444-2-12-						0-M39533-07/11/78-12-	28-16.0	C-	-	8.2-			270-		13-1-1-5-6-2-3-2-2-4-4-2-2-			-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.53
30-45.3508-108.9511-2-15-						0-M39535-07/11/78-13-	27-	-	-	-			-		9-1-4-4-7-	-	- - - -3-4-2-2-		-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.45
30-45.3611-108.9503-2-15-						0-M39536-07/11/78-13-	27-	-	-	-			-		3-1-4-4-7-	-	- - - -3-4-2-2-		-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.36
30-45.3681-108.8506-2-11-						0-M39541-07/11/78-16-	31-22.0	-	-	8.0-			3300-		11-1-1-6-8-2-3-2-	-4-4-2-2-		-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.02

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

(2)

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per million (ppm)									Concentrations in weight ppm	
							Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
30-45.7003-109.6956-2-15-						0-M39478	-5	-5	-5	31	-20	35	16	-10	-15	2	36
30-45.6911-109.7125-2-11-						0-M39479	-5	-5	-5	32	-20	-15	-5	-10	-15	1	29
30-45.6911-109.7158-2-12-						0-M39480	-5	5	-5	22	-20	-15	-5	-10	-15	1	27
30-45.6864-109.7225-2-15-						0-M39481	-5	-5	-5	36	-20	-15	-5	-10	-15	1	29
30-45.6831-109.7306-2-15-						0-M39482	-5	-5	-5	44	-20	-15	-5	-10	-15	2	32
30-45.6758-109.7469-2-11-						0-M39483	-5	-5	-5	36	-20	-15	-5	-10	-15	1	19
30-45.6742-109.7444-2-12-						0-M39485	-5	-5	8	32	-20	-15	5	-10	-15	2	17
30-45.6700-109.7531-2-12-						0-M39486	-5	-5	-5	17	-20	-15	5	-10	-15	1	27
30-45.6519-109.7733-2-15-						0-M39487	-5	-5	-5	21	-20	-15	-5	-10	-15	1	27
30-45.6275-109.8389-2-12-						0-M39488	-5	-5	5	29	-20	-15	-5	-10	-15	2	27
30-45.6272-109.8272-2-12-						0-M39489	-5	-5	5	30	-20	-15	-5	-10	-15	1	15
30-45.6294-109.8144-2-12-						0-M39490	-5	-5	-5	30	-20	-15	-5	-10	-15	1	22
30-45.6436-109.7772-2-12-						0-M39491	-5	-5	-5	36	-20	-15	-5	-10	-15	2	42
30-45.6253-109.7586-2-15-						0-M39492	-5	-5	-5	50	-20	35	13	-10	-15	1	49
30-45.7197-109.9950-2-12-						0-M39493	-5	-5	-5	28	-20	28	9	-10	-15	2	19
30-45.7225-109.9969-2-11-						0-M39494	-5	-5	-5	28	-20	31	-5	-10	-15	1	15
30-45.7233-109.9967-2-12-						0-M39495	-5	-5	-5	28	-20	47	7	-10	-15	1	21
30-45.7256-109.9889-2-12-						0-M39496	-5	-5	-5	25	-20	-15	-5	-10	-15	1	15
30-45.7269-109.9900-2-15-						0-M39497	-5	-5	-5	21	-20	-15	-5	-10	-15	1	12
30-45.7453-109.9961-2-15-						0-M39498	-5	-5	-5	25	-20	42	21	-10	-15	2	17
30-45.7483-109.9208-2-12-						0-M39499	-5	-5	-5	34	-20	98	-5	-10	-15	1	17
30-45.1799-108.2697-2-11-						0-M39500	-5	5	-5	17	-20	-15	5	-10	-15	1	96
30-45.1800-108.2894-2-11-						0-M39501	-5	-5	-5	15	-20	-15	9	-10	-15	2	25
30-45.1897-108.2864-2-11-						0-M39502	-5	-5	-5	14	-20	25	5	-10	-15	2	31
30-45.0806-108.2589-2-12-						0-M39503	-5	-5	-5	22	-20	-15	5	-10	-15	1	73
30-45.0664-108.2556-2-15-						0-M39504	-5	-5	-5	23	-20	15	-5	-10	-15	1	89
30-45.0506-108.2550-2-15-						0-M39505	-5	-5	-5	26	-20	26	-5	-10	-15	-1	71
30-45.0419-108.2525-2-15-						0-M39506	-5	-5	-5	11	-20	31	6	-10	-15	-1	88
30-45.0111-108.2778-2-15-						0-M39507	-5	-5	-5	-10	-20	-15	-5	-10	-15	1	51
30-45.0122-108.2756-2-15-						0-M39508	-5	-5	-5	15	-20	-15	-5	-10	-15	1	32
30-45.1939-108.4600-2-12-						0-M39509	-5	-5	-5	13	-20	-15	-5	-10	-15	1	25
30-45.1794-108.4575-2-11-						0-M39510	-5	-5	-5	-10	-20	-15	5	-10	-15	-1	6
30-45.3269-109.0078-2-12-						0-M39511	-5	-5	-5	21	-20	-15	5	-10	-15	2	26
30-45.3511-109.1022-2-11-						0-M39512	-5	-5	-5	-10	-20	-15	-5	-10	-15	2	34
30-45.3703-109.0281-2-12-						0-M39513	-5	-5	-5	14	-20	-15	-5	-10	-15	2	35
30-45.3542-109.0556-2-12-						0-M39514	-5	-5	-5	20	-20	-15	5	-10	-15	2	30
30-45.3419-109.0628-2-12-						0-M39515	-5	-5	-5	27	-20	-15	-5	-10	-15	2	41
30-45.3272-109.0742-2-12-						0-M39516	-5	-5	-5	17	-20	-15	6	-10	-15	2	35
30-45.3011-109.1028-2-12-						0-M39517	-5	-5	-5	15	-20	-15	-5	-10	-15	2	44
30-45.2742-109.0397-2-11-						0-M39518	-5	-5	-5	16	-20	-15	-5	-10	-15	2	25
30-45.2711-109.0442-2-15-						0-M39519	-5	-5	-5	19	-20	16	-5	-10	-15	2	27
30-45.2497-109.0294-2-12-						0-M39520	-5	-5	-5	10	-20	-15	5	-10	-15	1	38
30-45.2722-109.0253-2-12-						0-M39521	-5	-5	-5	15	-20	-15	-5	-10	-15	1	40
30-45.3594-109.0522-2-12-						0-M39522	-5	6	-5	21	-20	-15	7	-10	-15	2	21
30-45.3186-108.9694-2-15-						0-M39524	-5	-5	-5	34	-20	23	7	-10	-15	2	63
30-45.3097-108.9756-2-12-						0-M39528	-5	5	-5	11	-20	-15	7	-10	-15	1	23
30-45.3381-108.9336-2-12-						0-M39532	-5	-5	-5	18	-20	-15	-5	-10	-15	2	37
30-45.3292-108.9444-2-12-						0-M39533	-5	-5	-5	21	-20	19	-5	-10	-15	2	36
30-45.3608-108.9511-2-15-						0-M39535	-5	-5	-5	16	-20	-15	-5	-10	-15	2	33
30-45.3611-108.9503-2-15-						0-M39536	-5	-5	-5	-10	-20	-15	-5	-10	-15	2	33
30-45.3681-108.8506-2-11-						0-M39541	-5	-5	-5	28	-20	-15	5	-10	-15	2	56

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)													
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
30-45.	7003-	109.6956-	2-	15-	0-	M39478	82760	-0.07	867	19140	58	-100	13.9	145	2.0	3	1.0	27910	3.9	14950	37	0.3
30-45.	6911-	109.7125-	2-	11-	0-	M39479	87190	-0.07	874	36790	62	-107	12.1	53	2.0	3	1.1	30880	3.1	16920	32	0.3
30-45.	6911-	109.7158-	2-	12-	0-	M39480	79550	-0.07	711	37650	52	-129	15.6	53	1.8	3	1.2	57820	4.0	14060	37	0.4
30-45.	6864-	109.7225-	2-	15-	0-	M39481	88890	-0.07	782	44390	63	-116	12.0	-10	-1.5	2	1.0	38400	2.8	13130	34	0.2
30-45.	6831-	109.7306-	2-	15-	0-	M39482	83480	-0.06	907	26460	53	-111	13.1	76	1.7	2	1.0	34180	2.9	16980	36	0.3
30-45.	6758-	109.7469-	2-	11-	0-	M39483	83650	-0.06	889	31720	60	-117	12.3	25	-1.4	3	1.1	53520	3.7	13490	39	0.2
30-45.	6742-	109.7444-	2-	12-	0-	M39485	78690	-0.07	697	34220	70	-131	15.8	18	-1.5	3	1.4	79970	5.1	13880	42	0.4
30-45.	6700-	109.7531-	2-	12-	0-	M39486	80340	-0.08	723	34460	74	-135	14.1	41	-1.8	2	1.0	57710	3.5	11020	36	0.3
30-45.	6519-	109.7733-	2-	15-	0-	M39487	88310	-0.06	1013	34600	64	-121	11.1	13	1.9	3	1.1	32040	3.1	13540	35	0.3
30-45.	6275-	109.8389-	2-	12-	0-	M39488	79350	-0.07	625	38290	65	-111	17.1	24	2.3	3	1.0	69320	2.8	9551	38	0.3
30-45.	6272-	109.8272-	2-	12-	0-	M39489	76350	-0.08	465	49630	37	-121	20.7	44	2.5	2	1.2	73280	3.0	8495	32	0.3
30-45.	6294-	109.8144-	2-	12-	0-	M39490	81000	-0.08	790	37810	67	-129	13.3	37	-1.6	2	1.2	33840	3.5	15740	34	0.2
30-45.	6436-	109.7772-	2-	12-	0-	M39491	73470	-0.06	855	32680	58	-113	15.8	100	-1.3	3	1.1	58480	3.7	13230	36	0.2
30-45.	6253-	109.7586-	2-	15-	0-	M39492	79600	-0.06	851	24300	69	-103	15.2	160	1.9	3	1.2	35010	4.2	18290	36	0.3
30-45.	7197-	109.9950-	2-	12-	0-	M39493	71640	-0.07	708	27740	84	-105	12.9	129	2.0	3	1.1	26700	6.8	13120	41	0.4
30-45.	7225-	109.9969-	2-	11-	0-	M39494	63400	0.94	635	29460	99	-110	13.5	251	-1.9	3	1.1	30300	16.7	10970	46	0.3
30-45.	7233-	109.9967-	2-	12-	0-	M39495	69880	-0.06	755	31850	68	-96	14.2	218	-1.4	3	0.9	31170	5.8	12200	41	0.3
30-45.	7256-	109.9889-	2-	12-	0-	M39496	73760	-0.07	801	46640	79	-114	14.0	43	-1.5	3	1.0	49150	4.1	12350	48	0.3
30-45.	7369-	109.9900-	2-	15-	0-	M39497	71280	-0.07	674	31450	101	-113	11.6	98	1.8	4	1.3	28930	9.2	12550	51	0.4
30-45.	7453-	109.9961-	2-	15-	0-	M39498	72610	-0.09	752	26250	58	-118	12.5	218	-1.7	3	1.1	25730	6.4	17180	40	0.3
30-45.	7483-	109.9208-	2-	12-	0-	M39499	69650	-0.07	791	27070	60	-109	14.9	329	2.2	3	1.0	35550	4.7	12130	33	0.3
30-45.	1789-	108.2697-	2-	11-	0-	M39500	26800	-0.05	550	139000	29	-71	4.8	27	1.3	2	0.7	7996	7.1	8981	19	0.2
30-45.	1900-	108.2894-	2-	11-	0-	M39501	32220	-0.06	311	15970	57	-37	6.1	35	1.4	4	0.9	7511	15.8	11070	30	0.5
30-45.	1897-	108.2864-	2-	11-	0-	M39502	35570	-0.07	360	12750	42	-48	4.1	32	1.7	3	0.9	8586	8.2	13590	24	0.2
30-45.	0806-	108.2589-	2-	12-	0-	M39503	31370	-0.05	377	100300	35	102	5.6	39	1.3	2	0.5	8005	6.5	12770	23	0.2
30-45.	0564-	108.2556-	2-	15-	0-	M39504	32250	-0.05	266	67350	40	-57	5.5	47	2.0	2	0.6	9858	10.7	12230	22	0.3
30-45.	0506-	108.2550-	2-	15-	0-	M39505	24980	-0.06	213	61200	29	74	5.4	46	2.0	2	0.4	7639	10.2	12170	19	0.2
30-45.	0419-	108.2525-	2-	15-	0-	M39506	35240	-0.07	369	94270	31	88	5.5	51	-1.2	3	0.6	10430	8.0	8578	25	0.2
30-45.	0111-	108.2778-	2-	15-	0-	M39507	22570	-0.04	302	63040	25	80	4.2	37	0.9	2	0.4	6007	10.4	12170	18	0.2
30-45.	0122-	108.2756-	2-	15-	0-	M39508	20830	-0.04	323	48110	30	-45	4.2	44	1.2	2	0.7	6705	13.9	10580	16	0.2
30-45.	1939-	108.4600-	2-	12-	0-	M39509	22100	-0.06	339	13990	23	-38	4.2	35	1.2	2	0.4	5386	15.3	9934	-6	0.3
30-45.	1794-	108.4575-	2-	11-	0-	M39510	13920		221	4742		-24		19		2		1852		8169		
30-45.	3269-	109.0078-	2-	12-	0-	M39511	39960	-0.05	1084	14230	55	-63	6.2	51	1.8	3	0.7	11070	9.0	9928	32	0.3
30-45.	3511-	109.1022-	2-	11-	0-	M39512	33900	-0.06	538	24250	53	-63	4.8	43	1.4	2	0.8	7244	11.8	10120	34	0.4
30-45.	3703-	109.0281-	2-	12-	0-	M39513	38430	-0.06	640	15450	63	-50	6.5	51	2.3	3	1.0	11240	13.6	13040	36	0.4
30-45.	3542-	109.0556-	2-	12-	0-	M39514	42820	-0.08	726	11090	53	-50	6.7	57	2.2	4	0.8	13760	13.2	13620	34	0.3
30-45.	3419-	109.0628-	2-	12-	0-	M39515	43950	-0.06	602	20080	48	-57	7.3	49	1.8	4	0.9	11930	9.0	12900	29	0.3
30-45.	3272-	109.0742-	2-	12-	0-	M39516	40820	-0.06	590	22480	53	-62	6.9	53	2.1	3	0.8	12180	10.2	13670	29	0.3
30-45.	3011-	109.1028-	2-	12-	0-	M39517	44100	-0.07	629	24040	56	-51	7.9	56	2.3	3	1.1	12160	9.2	15320	39	0.4
30-45.	2742-	109.0397-	2-	11-	0-	M39518	35330	-0.06	618	9718	49	-52	2.5	24	-1.0	3	0.8	5841	10.1	12630	28	0.3
30-45.	2711-	109.0442-	2-	15-	0-	M39519	42920	-0.05	715	15170	45	104	5.6	42	1.8	3	0.8	9340	6.0	11900	26	0.2
30-45.	2697-	109.0294-	2-	12-	0-	M39520	36470	-0.06	839	28080	57	-61	6.3	44	2.2	4	0.9	11910	12.2	9781	29	0.3
30-45.	2722-	109.0253-	2-	12-	0-	M39521	36200	-0.07	723	35890	54	-55	6.4	36	2.4	3	1.0	11160	9.8	9951	28	0.4
30-45.	3594-	109.0522-	2-	12-	0-	M39522	50960	-0.08	650	14950	52	-57	6.0	42	2.6	4	0.8	11810	7.6	13000	33	0.3
30-45.	3186-	108.9694-	2-	15-	0-	M39524	62670	-0.07	590	31630	63	-94	9.4	62	3.3	4	0.9	15380	5.4	14560	37	0.3
30-45.	3097-	108.9756-	2-	12-	0-	M39528	29720	-0.06	844	12980	73	-58	5.6	57	1.3	3	1.1	11910	25.4	10230	43	0.5
30-45.	3381-	108.9336-	2-	12-	0-	M39532	55950	-0.07	786	24040	68	-75	6.3	54	1.9	3	1.0	11090	10.5	12570	39	0.4
30-45.	3292-	108.9444-	2-	12-	0-	M39533	48670	-0.08	643	25310	53	-62	6.8	40	2.2	3	0.9	12050	7.5	13020	28	0.3
30-45.	3608-	108.9511-	2-	15-	0-	M39535	54050	-0.06	971	21650	91	-88	6.1	87	1.5	4	1.4	11090	20.7	11290	49	0.5
30-45.	3611-	108.9503-	2-	15-	0-	M39536	53240	-0.05	992	22020	72	-92	5.0	52	2.0	3	1.1	8257	21.1	13730	48	0.5
30-45.	3681-	108.8506-	2-	11-	0-	M39541	56250	-0.08	556	41210	74	-71	7.9	74	2.7	4	0.8	14800	8.2	15390	37	0.4

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
30-45.	7003-	109.6956-	2-15-	0-	M39478		17500	905	15640	47	--	9.5	4.3	-368	-1	-1	7.3	4333	106	2.9	-48	0.263
30-45.	6911-	109.7125-	2-11-	0-	M39479		21190	515	22510	44	-2	7.6	3.7	916	-1	-1	5.4	3735	107	2.7	106	0.256
30-45.	6911-	109.7158-	2-12-	0-	M39480		20400	1039	20230	-25	-2	9.0	5.4	-451	-1	-1	5.9	5017	186	3.5	-36	0.202
30-45.	6864-	109.7225-	2-15-	0-	M39481		14200	724	18350	-28	-2	6.0	2.3	-401	-1	-1	4.9	3842	137	-2.0	-45	0.261
30-45.	6831-	109.7306-	2-15-	0-	M39482		19030	915	20870	30	-2	7.5	3.7	683	-1	-1	6.2	3890	121	2.3	113	0.255
30-45.	6758-	109.7469-	2-11-	0-	M39483		17230	864	22400	-24	-2	6.5	3.4	710	-1	-1	5.0	5506	192	1.9	144	0.274
30-45.	6742-	109.7444-	2-12-	0-	M39485		13570	1126	20720	-27	-2	7.0	5.3	578	-1	-1	6.4	7260	233	3.1	149	0.205
30-45.	6700-	109.7531-	2-12-	0-	M39486		19000	1036	19830	-32	-3	8.9	3.4	-468	-1	-1	5.0	5218	207	-1.8	-50	0.248
30-45.	6519-	109.7733-	2-15-	0-	M39487		17530	1004	21620	-20	-2	5.7	4.2	665	1	1	5.3	3417	113	2.7	105	0.196
30-45.	6275-	109.8389-	2-12-	0-	M39488		22530	1251	16820	-26	-2	9.3	4.2	689	-1	-1	4.4	6364	237	1.7	115	0.236
30-45.	6272-	109.8272-	2-12-	0-	M39489		26490	1071	16880	-29	-3	12.2	4.0	527	-1	-1	4.4	6299	259	2.9	171	0.214
30-45.	6294-	109.8144-	2-12-	0-	M39490		18260	859	21360	-28	-2	8.4	2.3	767	-1	-1	4.8	3030	132	-1.8	-41	0.208
30-45.	6436-	109.7772-	2-12-	0-	M39491		23660	1234	18460	-21	-2	9.5	3.8	576	-1	-1	5.2	5854	230	2.2	137	0.285
30-45.	6253-	109.7586-	2-15-	0-	M39492		20000	942	16540	42	-2	9.9	4.5	551	-1	-1	6.0	4009	130	2.3	66	0.272
30-45.	7197-	109.9950-	2-12-	0-	M39493		20980	569	16320	40	-2	10.2	4.6	624	-1	-1	9.9	2843	99	2.1	95	0.265
30-45.	7225-	109.9969-	2-11-	0-	M39494		26460	607	15520	-30	-3	11.7	5.2	-381	-1	-1	18.1	4539	133	3.4	-46	0.208
30-45.	7233-	109.9967-	2-12-	0-	M39495		34360	743	16270	-20	-2	12.7	4.1	-335	-1	-1	15.1	3471	118	3.1	49	0.182
30-45.	7256-	109.9889-	2-12-	0-	M39496		23230	1359	15880	-24	-2	10.8	4.4	754	-1	1	6.1	4822	171	3.6	175	0.618
30-45.	7359-	109.9900-	2-15-	0-	M39497		17440	753	17110	38	-2	10.2	6.1	540	-1	-1	17.1	3449	102	4.5	94	0.140
30-45.	7453-	109.9961-	2-15-	0-	M39498		19640	550	18660	-28	-3	10.1	3.5	-395	-1	-1	7.3	3259	115	-1.9	-49	0.355
30-45.	7483-	109.9208-	2-12-	0-	M39499		27440	1038	17330	-21	-2	12.5	4.0	731	-1	-1	7.6	4786	156	-1.4	70	0.249
30-45.	1789-	108.2697-	2-11-	0-	M39500		9759	351	4639	-14	-2	3.3	2.4	-255	-1	-1	4.5	1366	29	2.0	45	0.471
30-45.	1900-	108.2894-	2-11-	0-	M39501		7176	180	2449	-15	-2	4.4	5.9	-159	-1	-1	8.5	2774	41	3.5	53	0.304
30-45.	1897-	108.2864-	2-11-	0-	M39502		8123	153	6282	36	-2	4.1	2.1	-158	-1	-1	4.9	2321	49	2.2	-26	0.392
30-45.	0906-	108.2589-	2-12-	0-	M39503		51760	288	5579	20	-2	4.0	2.5	-234		-1	5.1	2278	37	2.0	-32	0.369
30-45.	0664-	108.2556-	2-15-	0-	M39504		53510	269	3633	31	-2	4.9	2.9	-224	-1	-1	5.3	2100	48	2.2	-41	0.487
30-45.	0506-	108.2550-	2-15-	0-	M39505		61290	144	1784	27	-2	4.0	1.5	-149			4.1	1641	37	-1.1	-14	0.544
30-45.	0419-	108.2525-	2-15-	0-	M39506		49390	262	4834	-19	-2	5.2	2.3	237	-1	-1	5.2	2381	61	-1.8	77	0.396
30-45.	0111-	108.2778-	2-15-	0-	M39507		47930	138	2315	29	-1	2.9	1.7	-177			5.1	1544	31	-1.0	-21	0.465
30-45.	0122-	108.2756-	2-15-	0-	M39508		42890	194	2646	22	-1	3.5	2.4	-180			5.9	1569	40	2.7	29	0.427
30-45.	1939-	108.4600-	2-12-	0-	M39509		13100	145	3052	24	-2	2.9	1.9	-146		-1	4.7	1588	26	1.6	-42	0.462
30-45.	1794-	108.4575-	2-11-	0-	M39510		4379	32	1429	-13	-2			-92	-1			1257	12		36	
30-45.	3269-	109.0078-	2-12-	0-	M39511		7012	389	7067	17	-1	3.8	3.0	-242		-1	6.2	2283	49	1.9	45	0.374
30-45.	3511-	109.1022-	2-11-	0-	M39512		-2566	243	5070	-15	-2	3.2	4.3	-236	-1	-1	6.7	1914	35	2.6	43	0.676
30-45.	3703-	109.0281-	2-12-	0-	M39513		13150	299	5588	-16	-2	4.7	4.1	-192	-1	-1	9.5	2959	52	3.9	85	0.294
30-45.	3542-	109.0556-	2-12-	0-	M39514		9666	358	4903	34	-2	5.2	2.6	-208	-1	-1	7.6	2756	64	-1.7	-31	0.389
30-45.	3419-	109.0628-	2-12-	0-	M39515		13850	322	4720	31	-2	5.2	3.5	467		-1	7.2	2639	65	2.9	79	0.388
30-45.	3272-	109.0742-	2-12-	0-	M39516		13780	353	5771	39	-2	5.4	3.6	-253	-1		7.5	2587	55	3.0	69	0.355
30-45.	3011-	109.1028-	2-12-	0-	M39517		17760	317	5353	37	-2	5.4	3.9	-203	-1	-1	7.5	2755	58	4.2	78	0.341
30-45.	2742-	109.0397-	2-11-	0-	M39518		5638	204	7870	-16	-2	3.1	2.0	218	-1	-1	5.6	2304	33	2.1	63	0.382
30-45.	2711-	109.0442-	2-15-	0-	M39519		9178	283	11370	26	-2	4.0	2.7	-235		-1	5.7	2246	44	2.1	36	0.379
30-45.	2697-	109.0294-	2-12-	0-	M39520		9404	387	4210	-16	-2	4.6	4.0	-266	-1	-1	7.2	2995	54	2.3	-57	0.415
30-45.	2722-	109.0253-	2-12-	0-	M39521		8727	558	3965	-17	-2	4.4	3.9	-257	-1	-1	8.4	2437	55	3.4	-32	0.310
30-45.	3594-	109.0522-	2-12-	0-	M39522		11490	284	6310	-22	-3	5.4	2.5	-203	-1	-1	7.8	2669	61	2.7	-38	0.326
30-45.	3186-	108.9694-	2-15-	0-	M39524		22520	441	11810	52	-2	7.4	4.4	-332	-1	-1	9.1	3366	67	3.8	77	0.323
30-45.	3097-	108.9756-	2-12-	0-	M39528		7343	428	4584	28	-2	4.2	4.0	-255	1	-1	9.5	4473	46	4.8	45	0.398
30-45.	3381-	108.9336-	2-12-	0-	M39532		18070	328	13820	-16	-2	5.0	4.6	540	-1	-1	8.2	2896	46	3.4	63	0.301
30-45.	3292-	108.9444-	2-12-	0-	M39533		19310	317	9442	-20	-2	5.5	3.2	409	-1	-1	6.7	2772	64	2.7	-71	0.378
30-45.	3608-	108.9511-	2-15-	0-	M39535		9421	380	15310	30	-2	4.3	5.1	-279	-1	-1	10.5	4151	50	3.1	59	0.329
30-45.	3611-	108.9503-	2-15-	0-	M39536		7533	316	16110	29	-2	3.9	4.5	-274	-1	-1	9.4	2547	32	3.9	51	0.357
30-45.	3681-	108.8506-	2-11-	0-	M39541		16050	499	8206	46	-3	7.8	4.7	585	-1	-1	11.9	2871	75	2.8	-77	0.338

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																											U CONCENTRATION
							TIME SAMPLED																											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
30-45.3675-108.8261-2-11-						0-M39542-07/11/78-16-	28-	9.0-0-	-	7.3-	2450-																						4.86
30-45.2900-108.8339-2-12-						0-M39545-07/11/78-17-	27-	18.0-	-	8.9-	4350-																						3.98
30-45.2589-108.8147-2-12-						0-M39546-07/11/78-18-	27-	19.0-	-	8.5-	800-																						3.40
30-45.2631-108.7889-2-11-						0-M39547-07/11/78-19-	26-	13.5-	-	8.2-	650-																						2.63
30-45.2459-108.7944-2-12-						0-M39548-07/11/78-19-	25-	16.5-	-	8.5-	900-																						2.34
30-45.2422-108.7661-2-11-						0-M39549-07/11/78-20-	20-	11.5-	-	8.1-	600-																						2.53
30-45.2886-108.7514-2-11-						0-M39550-07/12/78- 9-	24-	11.0-0-	-	7.1-	900-																						2.09
30-45.2811-108.7461-2-15-						0-M39551-07/12/78- 9-	24-	- - -		-	-																						2.02
30-45.3122-108.7681-2-11-						0-M39552-07/12/78-10-	21-	12.5-0-	-	7.1-	900-																						3.56
30-45.3122-108.7617-2-12-						0-M39553-07/12/78-11-	21-	13.5-	-	7.4-	900-																						1.82
30-45.3289-108.7828-2-11-						0-M39554-07/12/78-11-	24-	11.0-0-	-	7.0-	1150-																						1.92
30-45.3264-108.8281-2-12-						0-M39555-07/12/78-11-	22-	17.0-	-	8.2-	1700-																						3.16
30-45.3228-108.8147-2-11-						0-M39556-07/12/78-12-	20-	17.0-	-	7.7-	2200-																						2.66
30-45.3208-108.8136-2-12-						0-M39557-07/12/78-12-	20-	18.5-	-	7.9-	2100-																						2.44
30-45.3322-108.8022-2-12-						0-M39559-07/12/78-13-	24-	14.0-0-	-	8.3-	1550-																						1.89
30-45.3306-108.7958-2-11-						0-M39560-07/12/78-13-	22-	20.0-	-	7.4-	2500-																						3.39
30-45.3364-108.7775-2-11-						0-M39562-07/12/78-14-	29-	15.0-	-	8.2-	1700-																						1.88
30-45.3675-108.7417-2-15-						0-M39563-07/12/78-16-	29-	- - -		-	-																						1.85
30-45.3653-108.8669-2-12-						0-M39564-07/12/78-17-	30-	19.0-0-	-	8.5-	1600-																						2.63
30-45.1922-108.3078-2-11-						0-M39565-07/14/78-11-	27-	9.5-0-	-	7.4-	-																						2.03
30-45.1933-108.3094-2-12-						0-M39566-07/14/78-12-	28-	12.0-0-	-	7.5-	-																						2.40
30-45.2044-108.3247-2-12-						0-M39567-07/14/78-13-	28-	16.0-0-	-	7.4-	-																						1.95
30-45.2189-108.3439-2-12-						0-M39568-07/14/78-14-	31-	13.0-0-	-	7.4-	-																						1.21
30-45.2150-108.2869-2-11-						0-M39569-07/14/78-15-	31-	9.0-0-	-	7.6-	-																						1.81
30-45.2164-108.2889-2-12-						0-M39570-07/14/78-15-	32-	17.0-0-	-	8.0-	-																						2.45
30-45.2181-108.2856-2-11-						0-M39571-07/14/78-15-	28-	15.0-0-	-	7.8-	-																						2.16
30-45.0400-108.3867-2-12-						0-M39572-07/15/78-11-	31-	9.0-0-	-	7.0-	350-																						1.82
30-45.0417-108.3828-2-15-						0-M39573-07/15/78-11-	32-	- - -		-	-																						1.76
30-45.1639-108.3803-2-11-						0-M39574-07/15/78- -	33-	20.0-0-	-	7.0-	13-																						2.97
30-45.1486-108.3189-2-11-						0-M39575-07/15/78-15-	31-	10.0-0-	-	6.9-	63-																						2.38
30-45.1586-108.3306-2-12-						0-M39576-07/15/78-15-	20-	13.0-0-	-	7.0-	10-																						3.40
30-45.0150-108.3439-2-15-						0-M39577-07/15/78-17-	30-	-0-	-	-	-																						2.52
30-45.1147-108.4483-2-11-						0-M39578-07/16/78-15-	24-	10.5-0-	-	7.0-	370-																						2.55
30-45.1719-108.5781-2-11-						0-M39579-07/16/78-16-	26-	5.0-0-	-	7.2-	350-																						1.93
30-45.1758-108.5964-2-11-						0-M39580-07/16/78-17-	19-	5.0-0-	-	7.1-	460-																						1.86
30-45.1642-108.5714-2-11-						0-M39581-07/16/78-17-	13-	11.5-0-	-	7.0-	310-																						3.03
30-45.1500-108.5186-2-15-						0-M39582-07/16/78-18-	17-	- - -		-	-																						2.63
30-45.1514-108.5144-2-11-						0-M39583-07/16/78-19-	13-	6.0-0-	-	7.1-	150-																						2.18
30-45.1144-108.5369-2-11-						0-M39584-07/16/78-19-	15-	7.5-0-	-	7.2-	550-																						2.47
30-45.7794-108.5483-2-12-						0-M39596-07/28/78-14-	27-	19.5-	-	7.4-	700-																						3.27
30-45.8711-108.5128-2-12-						0-M39597-07/28/78-10-	22-	21.0-0-	-	7.9-	50000-																						2.68
30-45.9817-108.5319-2-15-						0-M39598-07/28/78-11-	23-	- - -		-	-																						2.80
30-45.9953-108.5258-2-15-						0-M39599-07/28/78-11-	24-	- - -		-	-																						2.75
30-45.9117-108.2883-2-15-						0-M39600-07/03/78-15-	30-	-0-	-	-	-																						2.59
30-45.8192-108.2767-2-12-						0-M39602-07/03/78-15-	30-	20.0-0-	-	8.1-	1125-																						2.89
30-45.8542-108.2728-2-15-						0-M39603-07/03/78-18-	28-	-0-	-	-	-																						2.30
30-45.8703-108.2706-2-12-						0-M39604-07/03/78-18-	30-	22.0-0-	-	7.8-	1100-																						2.33
30-45.8706-108.2969-2-12-						0-M39605-07/03/78-18-	29-	24.5-0-	-	8.3-	900-																						3.07
30-45.8725-108.3314-2-12-						0-M39606-07/03/78-19-	26-	18.0-0-	-	7.5-	2175-																						2.60
30-45.7892-108.3442-2-12-						0-M39607-07/05/78-10-	24-	18.0-0-	-	8.1-	1550-																						2.09
30-45.7989-108.3122-2-12-						0-M39608-07/05/78-11-	24-	16.0-0-	-	7.9-	2600-																						2.59

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE (Concentrations reported in weight parts per million (ppm))									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY (Concentrations in weight ppm)	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
30-45.3675-108.8261-2-11-						0-M39542	-5	-5	-5	18	-20	-15	-5	-10	-15	3	25
30-45.2900-108.8339-2-12-						0-M39545	-5	-5	-5	28	-20	-15	8	-10	-15	2	61
30-45.2589-108.8147-2-12-						0-M39546	-5	-5	-5	32	-20	-15	6	-10	-15	2	52
30-45.2631-108.7889-2-11-						0-M39547	-5	-5	-5	18	-20	17	6	-10	-15	2	25
30-45.2458-108.7944-2-12-						0-M39548	-5	-5	-5	23	-20	-15	-5	-10	-15	2	32
30-45.2422-108.7661-2-11-						0-M39549	-5	-5	-5	31	-20	-15	-5	-10	-15	3	44
30-45.2886-108.7514-2-11-						0-M39550	-5	-5	-5	20	-20	-15	-5	-10	-15	2	78
30-45.2811-108.7461-2-15-						0-M39551	-5	5	-5	21	-20	-15	-5	-10	-15	2	79
30-45.3122-108.7681-2-11-						0-M39552	-5	5	-5	14	-20	18	6	-10	-15	2	65
30-45.3122-108.7617-2-12-						0-M39553	-5	-5	-5	13	-20	-15	-5	-10	-15	1	56
30-45.3289-108.7828-2-11-						0-M39554	-5	-5	-5	13	-20	-15	7	-10	-15	2	50
30-45.3264-108.8281-2-12-						0-M39555	-5	-5	-5	-10	-20	15	-5	-10	-15	2	35
30-45.3228-108.8147-2-11-						0-M39556	-5	-5	-5	40	-20	-15	-5	-10	-15	2	48
30-45.3208-108.8136-2-12-						0-M39557	-5	8	-5	30	-20	-15	10	-10	-15	2	36
30-45.3322-108.8022-2-12-						0-M39559	-5	-5	-5	25	-20	17	-5	-10	-15	1	59
30-45.3306-108.7958-2-11-						0-M39560	-5	-5	-5	29	-20	-15	-5	-10	-15	1	128
30-45.3364-108.7775-2-11-						0-M39562	-5	-5	-5	31	-20	-15	-5	-10	-15	2	84
30-45.3675-108.7417-2-15-						0-M39563	-5	-5	-5	40	-20	-15	10	-10	-15	1	118
30-45.3653-108.8669-2-12-						0-M39564	-5	-5	-5	19	-20	17	-5	-10	-15	2	56
30-45.1922-108.3078-2-11-						0-M39565	-5	-5	-5	14	-20	-15	-5	-10	-15	1	42
30-45.1933-108.3094-2-12-						0-M39566	-5	5	-5	26	-20	-15	5	-10	-15	2	87
30-45.2044-108.3247-2-12-						0-M39567	-5	-5	-5	22	-20	-15	-5	-10	-15	2	45
30-45.2139-108.3439-2-12-						0-M39568	-5	-5	-5	11	-20	-15	-5	-10	-15	1	109
30-45.2150-108.2869-2-11-						0-M39569	-5	5	-5	30	-20	-15	-5	-10	-15	1	115
30-45.2164-108.2889-2-12-						0-M39570	-5	-5	-5	24	-20	24	-5	-10	-15	2	106
30-45.2181-108.2856-2-11-						0-M39571	-5	-5	-5	22	-20	-15	-5	-10	-15	2	87
30-45.0400-108.3867-2-12-						0-M39572	-5	-5	-5	10	-20	-15	-5	-10	-15	1	71
30-45.0417-108.3828-2-15-						0-M39573	-5	-5	-5	18	-20	-15	-5	-10	-15	1	71
30-45.1639-108.3803-2-11-						0-M39574	-5	6	-5	22	-20	22	8	-10	-15	2	46
30-45.1486-108.3189-2-11-						0-M39575	-5	-5	-5	23	-20	27	7	-10	-15	2	54
30-45.1586-108.3306-2-12-						0-M39576	-5	-5	-5	28	-20	24	12	-10	-15	2	45
30-45.0150-108.3439-2-15-						0-M39577	-5	-5	5	23	-20	-15	-5	-10	-15	2	94
30-45.1147-108.4483-2-11-						0-M39578	-5	-5	-5	31	-20	-15	5	-10	-15	2	89
30-45.1719-108.5781-2-11-						0-M39579	-5	-5	-5	16	-20	-15	-5	-10	-15	-1	54
30-45.1758-108.5964-2-11-						0-M39580	-5	-5	-5	19	-20	-15	-5	-10	-15	-1	87
30-45.1642-108.5714-2-11-						0-M39581	-5	-5	-5	29	-20	-15	-5	-10	-15	2	43
30-45.1600-108.5186-2-15-						0-M39582	-5	-5	-5	36	-20	29	17	-10	-15	2	44
30-45.1514-108.5144-2-11-						0-M39583	-5	-5	-5	15	-20	-15	-5	-10	-15	-1	7
30-45.1144-108.5369-2-11-						0-M39584	-5	-5	-5	16	-20	-15	-5	-10	-15	2	64
30-45.7794-108.5483-2-12-						0-M39586	-5	-5	-5	28	-20	-15	67	-10	-15	2	58
30-45.8711-108.5128-2-12-						0-M39587	-5	-5	-5	16	-20	-15	7	-10	-15	2	62
30-45.9817-108.5319-2-15-						0-M39588	-5	-5	-5	23	-20	-15	6	-10	-15	2	56
30-45.9853-108.5258-2-15-						0-M39589	-5	-5	-5	35	-20	21	5	-10	-15	2	53
30-45.9117-108.2883-2-15-						0-M39600	-5	8	-5	32	-20	18	7	-10	-15	2	41
30-45.8192-108.2767-2-12-						0-M39602	-5	-5	-5	23	-20	29	-5	-10	-15	3	34
30-45.8542-108.2728-2-15-						0-M39603	-5	-5	-5	34	-20	27	7	-10	-15	2	21
30-45.8703-108.2706-2-12-						0-M39604	-5	-5	-5	19	-20	-15	-5	-10	-15	2	38
30-45.8706-108.2969-2-12-						0-M39605	-5	-5	-5	25	-20	17	7	-10	-15	2	35
30-45.8725-108.3314-2-12-						0-M39606	-5	-5	-5	23	-20	-15	5	-10	-15	2	32
30-45.7892-108.3442-2-12-						0-M39607	-5	7	-5	20	-20	-15	9	-10	-15	2	38
30-45.7989-108.3122-2-12-						0-M39608	-5	-5	-5	28	-20	-15	10	-10	-15	2	38

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)															
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
30-45.3675-108.8261-2-11-						0-439542	52940	-0.07	627	12210	58	-56	3.5	29	-1.2	4	1.1	6797	8.5	20400	29	0.3
30-45.2900-108.8339-2-12-						0-439545	55240	-0.07	686	16280	48	-85	8.5	39	2.2	4	0.9	14110	4.7	16600	24	0.3
30-45.2589-108.8147-2-12-						0-439546	51440	-0.09	594	30820	83	-56	9.8	66	2.8	5	1.2	17970	7.4	10090	36	0.5
30-45.2631-108.7889-2-11-						0-439547	34460	-0.08	479	11460	36	-53	5.4	53	-1.3	3	0.7	7430	13.1	8599	21	0.3
30-45.2458-108.7944-2-12-						0-439548	32920	-0.05	920	24360	37	-49	5.6	42	1.3	3	0.5	9746	10.3	8807	24	0.3
30-45.2422-108.7661-2-11-						0-439549	66220	-0.07	387	30770	43	-63	7.8	41	3.0	4	0.8	17080	5.9	21630	26	0.3
30-45.2996-108.7514-2-11-						0-439550	41760	-0.07	343	61590	51	-60	7.2	58	2.6	3	0.8	13890	8.4	18760	27	0.4
30-45.2811-108.7461-2-15-						0-439551	41620	-0.08	361	56490	33	-57	6.1	46	2.2	3	0.8	13290	6.0	17550	21	0.3
30-45.3122-108.7681-2-11-						0-439552	43360	-0.06	375	54440	40	-71	6.3	41	2.7	3	0.6	11490	7.5	18050	19	0.3
30-45.3122-108.7617-2-12-						0-439553	28800	-0.05	200	67380	23	-53	4.0	25	1.2	3	0.6	6470	7.1	13050	15	0.2
30-45.3289-108.7828-2-11-						0-439554	39130	-0.07	373	43110	48	-67	6.1	42	2.2	3	0.7	9478	9.2	15050	22	0.4
30-45.3264-108.8281-2-12-						0-439555	45560	-0.08	719	14210	48	-62	6.5	44	2.5	4	0.8	13980	6.1	11610	26	0.3
30-45.3228-108.8147-2-11-						0-439556	58630	-0.08	424	34850	60	-113	10.9	54	3.1	4	0.9	18560	3.7	11280	29	0.4
30-45.3208-108.8136-2-12-						0-439557	54240	-0.07	537	28810	41	-81	6.4	33	2.2	3	0.8	12400	5.4	10210	25	0.2
30-45.3322-108.8022-2-12-						0-439559	31800	-0.06	329	62810	44	-56	5.5	41	1.3	3	0.8	8687	9.5	12390	23	0.4
30-45.3306-108.7958-2-11-						0-439560	44590	-0.10	407	141600	33	-72	6.1	27	-1.7	3	0.8	13010	3.3	14730	28	-0.2
30-45.3364-108.7775-2-11-						0-439562	40060	-0.06	290	78580	41	-72	6.9	40	2.4	3	0.7	10370	6.0	14040	21	0.3
30-45.3675-108.7417-2-15-						0-439563	36000	-0.06	331	150600	36	-69	6.2	29	1.5	3	0.7	9682	4.1	11610	25	0.1
30-45.3653-108.8669-2-12-						0-439564	40130	-0.07	520	43790	40	-58	5.3	42	1.8	3	0.9	10220	6.5	13060	25	0.3
30-45.1922-108.3078-2-11-						0-439565	29400	-0.05	548	43720	39	-56	5.3	39	1.1	3	0.6	7175	11.5	11150	26	0.4
30-45.1933-108.3094-2-12-						0-439566	52510	-0.07	472	67010	40	-62	7.3	34	2.6	4	0.8	12280	4.2	25120	27	0.3
30-45.2044-108.3247-2-12-						0-439567	47660	-0.07	493	35620	51	-63	9.2	43	2.8	4	0.9	14130	7.7	14660	25	0.4
30-45.2189-108.3439-2-12-						0-439568	17420	-0.05	259	196700	15	154	4.1	18	-0.8	1	0.3	4757	2.8	7411	11	-0.1
30-45.2150-108.2869-2-11-						0-439569	32530	-0.05	234	143500	38	-66	6.0	35	1.7	2	0.6	9315	5.2	11130	26	0.3
30-45.2164-108.2889-2-12-						0-439570	50000	-0.07	279	103200	45	-76	7.5	35	2.1	3	0.7	12130	5.5	15460	24	0.2
30-45.2181-108.2856-2-11-						0-439571	52870	-0.08	340	77840	57	-64	9.6	52	2.9	3	0.8	16350	5.1	19890	25	0.4
30-45.0400-108.3867-2-12-						0-439572	21340	-0.06	224	92550	24	67	3.2	32	-1.0	2	0.5	6893	10.1	7807	-5	0.2
30-45.0417-108.3828-2-15-						0-439573	22440	-0.04	202	78040	22	81	4.4	35	0.8	2	0.4	6136	6.4	7904	16	0.1
30-45.1639-108.3803-2-11-						0-439574	59510	-0.07	531	11580	57	-83	7.7	64	2.1	3	0.7	14090	7.0	13770	31	0.3
30-45.1486-108.3189-2-11-						0-439575	44630	-0.07	511	51830	54	-62	7.7	73	2.2	3	0.9	12370	9.5	11090	29	0.3
30-45.1586-108.3306-2-12-						0-439576	59050	-0.10	630	25250	72	-72	10.4	100	2.1	5	0.9	19550	13.7	13710	47	0.4
30-45.0150-108.3439-2-15-						0-439577	43950	-0.06	305	77650	51	-71	7.2	47	2.8	4	0.8	14430	10.2	15580	27	0.4
30-45.1147-108.4483-2-11-						0-439578	47570	-0.06	377	58840	40	-64	5.9	59	2.5	3	0.6	12190	5.3	13330	20	0.2
30-45.1719-108.5781-2-11-						0-439579	15720	-0.06	260	113200	23	-42	4.1	27	-0.9	2	0.4	5542	9.3	6658	-6	0.2
30-45.1758-108.5964-2-11-						0-439580	26870	-0.07	397	44470	26	-53	4.6	29	-1.1	2	0.4	6051	6.5	8359	19	-0.1
30-45.1642-108.5714-2-11-						0-439581	39490	-0.06	493	8755	38	-53	5.4	56	2.2	3	0.6	9964	8.9	13180	26	0.3
30-45.1600-108.5186-2-15-						0-439582	58730	-0.07	440	11310	47	-83	7.7	61	2.8	4	0.8	12270	5.4	13170	26	0.3
30-45.1514-108.5144-2-11-						0-439583	13740	-0.05	190	-363	15	-25	3.3	24	-0.7	1	0.4	3332	18.6	6742	-5	0.2
30-45.1144-108.5369-2-11-						0-439584	35110	-0.08	473	54530	42	-56	5.1	61	-1.2	3	0.6	9527	9.7	11830	21	0.3
30-45.7794-108.5483-2-12-						0-439585	56230	-0.08	579	25810	60	-80	8.7	64	5.2	4	0.8	16880	4.2	14610	31	0.3
30-45.8711-108.5123-2-12-						0-439587	54830	-0.06	746	24070	41	-96	5.8	53	2.2	3	0.8	10880	6.8	15360	28	0.3
30-45.9817-108.5319-2-15-						0-439588	74500	-0.09	709	8498	67	-71	9.9	83	4.8	4	1.0	20260	5.2	16300	31	0.4
30-45.9853-108.5258-2-15-						0-439589	70190	-0.09	642	11580	54	-76	7.3	53	3.0	4	0.8	17000	4.6	17660	30	0.2
30-45.8117-108.2883-2-15-						0-439600	65110	-0.07	533	15650	52	-67	8.0	62	3.5	4	0.8	17250	5.0	16790	31	0.3
30-45.8192-108.2767-2-12-						0-439602	71600	-0.07	615	11150	44	-79	7.3	69	3.0	3	0.8	15240	5.9	14600	33	0.2
30-45.8542-108.2728-2-15-						0-439603	64350	-0.08	688	13750	56	-78	9.4	110	2.8	4	0.9	18120	6.4	14920	38	0.4
30-45.8703-108.2706-2-12-						0-439604	62820	-0.09	691	35060	53	-78	8.1	107	2.6	3	0.9	15580	4.9	15490	26	0.3
30-45.8706-108.2969-2-12-						0-439605	50940	-0.06	573	21370	56	-75	7.1	60	2.5	4	0.9	13900	7.0	14440	35	0.3
30-45.8725-108.3314-2-12-						0-439606	56880	-0.06	690	30950	47	-101	7.2	77	2.1	3	0.8	13840	8.2	15200	36	0.2
30-45.7992-108.3442-2-12-						0-439607	60100	-0.08	618	43170	58	-93	8.9	131	1.8	3	1.0	17090	5.2	11600	30	0.4
30-45.7989-108.3122-2-12-						0-439608	63190	-0.09	675	26840	55	-72	8.2	96	2.4	4	0.9	16020	5.9	14360	30	0.2

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)														U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAB SAMPLE LOCATION NUMBER	Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
30-45.	3675-	108.8261-	2-	11-	0-	M39542	7277	123	7321	51	-2	3.6	3.1	253	-1	-1	12.8	2081	45	2.7	-29	0.380
30-45.	2900-	108.8339-	2-	12-	0-	M39545	14050	950	6568	31	-2	6.0	4.1	-408	-1	-1	7.2	2789	74	3.0	77	0.553
30-45.	2589-	108.8147-	2-	12-	0-	M39546	10350	551	3400	48	-3	9.8	7.0	-281	-1	-1	10.8	4338	82	5.1	-68	0.315
30-45.	2631-	108.7989-	2-	11-	0-	M39547	8011	170	6924	-20	-2	4.3	1.7	-185	-1	-1	5.5	2605	47	2.2	56	0.478
30-45.	2458-	108.7944-	2-	12-	0-	M39548	8150	241	3701	19	-2	4.4	2.8	-206			5.3	2398	42	2.4	25	0.442
30-45.	2422-	108.7661-	2-	11-	0-	M39549	18030	323	4133	44	-2	8.5	3.1	-273	-1	-1	7.1	3526	88	-1.7	69	0.356
30-45.	2886-	108.7514-	2-	11-	0-	M39550	53610	479	5899	31	-2	7.0	4.3	-246	-1	-1	8.3	3000	50	3.2	28	0.252
30-45.	2911-	108.7461-	2-	15-	0-	M39551	50330	433	5501	-23	-3	6.2	1.7	-238	-1	-1	7.6	3035	56	1.6	-38	0.266
30-45.	3122-	108.7681-	2-	11-	0-	M39552	17980	226	8554	32	-2	5.6	2.7	-233	-1	-1	6.9	3193	41	2.4	17	0.516
30-45.	3122-	108.7617-	2-	12-	0-	M39553	27120	297	6248	22	-1	3.5	2.3	-227	-1		4.1	2111	38	2.1	26	0.444
30-45.	3289-	108.7828-	2-	11-	0-	M39554	24130	259	9991	31	-2	4.8	3.9	-216	-1	-1	6.2	3191	38	2.9	-60	0.310
30-45.	3264-	108.8281-	2-	12-	0-	M39555	11630	572	7477	-22	-3	6.3	2.3	-259	-1	-1	6.8	2616	60	2.3	72	0.465
30-45.	3228-	108.8147-	2-	11-	0-	M39556	19000	1737	5182	42	-3	8.8	3.9	-598	-1	-1	7.9	2668	78	2.8	80	0.337
30-45.	3208-	108.8136-	2-	12-	0-	M39557	14350	593	6455	-19	-2	6.7	3.1	-349	-1	-1	5.9	3742	86	-1.5	78	0.414
30-45.	3322-	108.8022-	2-	12-	0-	M39559	20930	254	6466	26	-2	4.5	3.2	-191	-1	-1	5.5	2481	38	2.3	40	0.344
30-45.	3306-	108.7958-	2-	11-	0-	M39560	33800	355	4829	-28	-3	5.7	2.3	-268	-1	-1	6.1	2293	73	-2.2	106	0.556
30-45.	3364-	108.7775-	2-	11-	0-	M39562	20770	270	7990	35	-2	5.2	3.0	1041	-1	-1	6.3	2654	47	2.6	47	0.298
30-45.	3675-	108.7417-	2-	15-	0-	M39563	28870	412	4223	-15	-2	4.7	2.4	1381	-1		4.4	2312	53	1.5	27	0.420
30-45.	3653-	108.8669-	2-	12-	0-	M39564	15830	332	7339	-20	-2	5.0	3.2	-204	-1	-1	6.4	2461	49	2.5	-45	0.411
30-45.	1922-	108.3078-	2-	11-	0-	M39565	8099	216	6021	37	-1	3.2	2.9	-193			6.9	2191	32	2.5	-35	0.294
30-45.	1933-	108.3094-	2-	12-	0-	M39566	29790	362	2306	33	-2	5.8	3.8	-286	-1	-1	8.0	3006	43	3.7	-57	0.300
30-45.	2044-	108.3247-	2-	12-	0-	M39567	14120	532	5577	-19	-2	7.1	4.4	327	-1	-1	8.6	2758	58	2.3	-74	0.227
30-45.	2189-	108.3439-	2-	12-	0-	M39568	121100	127	1591	-14	-2	2.1	1.1	-193	-1		2.3	1109	26	-1.2	58	0.526
30-45.	2150-	108.2869-	2-	11-	0-	M39569	36100	327	3979	-14	-2	4.4	3.0	453	-1		5.9	1717	39	1.8	-26	0.307
30-45.	2164-	108.2889-	2-	12-	0-	M39570	30500	444	4084	-20	-2	5.9	3.1	-314	-1	-1	7.8	2617	57	-1.8	-51	0.314
30-45.	2191-	108.2856-	2-	11-	0-	M39571	39260	501	5065	39	-2	7.7	4.7	-267	-1	-1	8.4	3135	66	3.1	-52	0.257
30-45.	0400-	108.3867-	2-	12-	0-	M39572	63430	164	3274	-17	-2	3.2	1.1	-162	-1	-1	3.8	1596	31	-1.2	-25	0.479
30-45.	0417-	108.3828-	2-	15-	0-	M39573	43710	155	2158	-10	-1	3.2	1.8	-166			4.3	1435	34	-0.8	-16	0.409
30-45.	1639-	108.3803-	2-	11-	0-	M39574	15750	548	8654	37	-2	6.6	3.9	-334	-1	-1	8.2	3709	99	2.5	75	0.362
30-45.	1486-	108.3189-	2-	11-	0-	M39575	52110	202	8014	43	-2	5.8	3.2	-214	-1	-1	8.7	3136	62	3.2	-37	0.274
30-45.	1586-	108.3306-	2-	12-	0-	M39576	28060	536	9428	-27	-3	8.6	3.9	-278	-1	-1	10.5	3947	91	3.8	-47	0.324
30-45.	0150-	108.3439-	2-	15-	0-	M39577	30890	463	7149	47	-2	6.9	3.6	-266		-1	7.7	3047	53	2.9	57	0.327
30-45.	1147-	108.4483-	2-	11-	0-	M39578	33920	374	3459	32	-2	5.9	2.9	-280	-1	-1	5.7	2586	138	-1.4	70	0.447
30-45.	1719-	108.5781-	2-	11-	0-	M39579	50980	63	1681	-16	-2	2.4	1.6	-143	-1	-1	3.4	1275	22	-1.1	243	0.568
30-45.	1758-	108.5964-	2-	11-	0-	M39580	26390	180	5099	-18	-2	8.0	1.6	-186	-1	-1	5.3	1685	36	-1.5	-34	0.351
30-45.	1642-	108.5714-	2-	11-	0-	M39581	11070	162	4643	38	-2	4.9	3.1	-198	-1	-1	6.1	2787	63	2.4	55	0.497
30-45.	1400-	108.5196-	2-	15-	0-	M39582	10000	500	7190	-20	-2	6.4	3.0	-347	-1	-1	6.5	3380	78	3.1	79	0.405
30-45.	1514-	108.5144-	2-	11-	0-	M39583	3121	80	1422	-12	-1	1.7	1.1	-109	-1		3.2	1107	19	2.3	62	0.681
30-45.	1144-	108.5369-	2-	11-	0-	M39584	40810	267	6014	-20	-2	4.7	2.6	-205	-1	-1	6.5	2110	54	-1.6	-33	0.380
30-45.	7734-	108.5483-	2-	12-	0-	M39586	20960	317	8921	53	-2	7.9	4.4	290	-1	-1	8.3	2972	104	2.7	101	0.394
30-45.	8711-	108.5128-	2-	12-	0-	M39597	19150	462	13710	-15	-2	4.7	3.1	-328	-1	-1	5.8	2656	63	2.4	75	0.462
30-45.	9817-	108.5319-	2-	15-	0-	M39598	17410	276	10680	-23	-3	9.9	4.8	278	-1	-1	10.9	3550	107	3.2	103	0.257
30-45.	9853-	108.5258-	2-	15-	0-	M39599	19710	326	12040	-27	-3	8.3	3.8	-244	-1	-1	8.2	3158	90	-2.4	-38	0.335
30-45.	8117-	108.2883-	2-	15-	0-	M39600	22160	288	8261	37	-2	8.7	4.2	-246	-1	-1	8.1	3438	103	1.8	65	0.320
30-45.	8192-	108.2767-	2-	12-	0-	M39602	19910	413	8270	30	-2	7.9	3.9	-302	-1	-1	7.1	3452	112	1.9	-58	0.407
30-45.	9542-	108.2728-	2-	15-	0-	M39603	14790	471	12350	39	-2	8.7	4.5	563	-1	-1	8.6	3046	83	2.8	76	0.267
30-45.	8703-	108.2706-	2-	12-	0-	M39604	16350	425	12690	-25	-3	7.6	1.8	-261	-1	-1	6.1	3118	82	-1.9	-38	0.382
30-45.	8706-	108.2969-	2-	12-	0-	M39605	15780	511	7754	49	-2	6.0	4.5	-297	-1	-1	8.5	3209	68	3.6	64	0.361
30-45.	8725-	108.3314-	2-	12-	0-	M39606	17690	536	13900	-17	-2	5.9	3.2	-362	-1	-1	7.0	3007	82	2.1	104	0.371
30-45.	7892-	108.3442-	2-	12-	0-	M39607	22620	488	13500	-20	-2	8.0	4.4	739	-1	-1	7.2	2463	72	2.4	70	0.290
30-45.	7989-	108.3122-	2-	12-	0-	M39608	24100	364	11740	-25	-3	8.3	3.2	307	-1	-1	8.8	3205	90	-2.1	-36	0.294

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
							TIME SAMPLED																										
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
30-45.8250-108.3847-2-12-						0-M39610-07/05/78-11-	25-21.0-C-		-	8.4-	2300-		13-1-6-4-6-3-4-1-2-2-2-3-2-	-7-	-	-	-	-	2.35
30-45.8353-108.3797-2-12-						0-M39611-07/05/78-12-	22-19.5-C-		-	8.2-	2375-		6-1-6-4-6-3-4-1-1-4-3-3-2-	-3-	-	-	-	-	2.00
30-45.8122-108.3992-2-15-						0-M39613-07/05/78-14-	26-	-C-	-	-	-		10-1-6-5-6- - - - -4-3-2-3-	-3-	-	-	-	-	2.70
30-45.8011-108.3992-2-15-						0-M39614-07/05/78-14-	25-	-C-	-	-	-		6-1-6-4-6- - - - -4-3-2-3-	-3-	-	-	-	-	2.56
30-45.7708-108.3906-2-15-						0-M39615-07/05/78-14-	23-	-C-	-	-	-		10-1-6-4-6- - - - -4-3-3-3-	-3-	-	-	-	-	2.30
30-45.7958-108.4250-2-15-						0-M39617-07/05/78-15-	24-	-C-	-	-	-		9-1-6-4-6- - - - -4-3-2-3-	-3-	-	-	-	-	2.49
30-45.7983-108.4417-2-15-						0-M39618-07/05/78-15-	23-	-C-	-	-	-		8-1-6-4-6- - - - -4-3-2-3-	-3-	-	-	-	-	2.01
30-45.7506-108.4347-2-12-						0-M39619-07/05/78-15-	22-22.5-C-		-	8.4-	2875-		8-1-6-6-8-3-4-1-1-1-3-3-3-	-3-	-	-	-	-	2.38
30-45.8478-108.4656-2-12-						0-M39621-07/05/78-17-	24-20.0-C-		-	8.5-	26250-		12-1-6-4-6-3-4-1-2-4-3-2-3-	-3-	-	-	-	-	2.50
30-45.8703-108.4142-2-12-						0-M39624-07/05/78-18-	21-19.0-C-		-	8.5-	550-		9-1-6-4-6- - - - -4-3-1-3-	-3-	-	-	-	-	2.29
30-45.9147-108.4097-2-12-						0-M39629-07/06/78-10-	19-17.2-C-		-	9.3-	33000-		11-1-6-6-8-3-4-5-1-4-3-1-4-	-3-	-	-	-	-	3.08
30-45.9464-108.4283-2-15-						0-M39631-07/06/78-11-	19-	-C-	-	-	-		12-1-6-5-6- - - - -4-3-1-4-	-3-	-	-	-	-	3.02
30-45.9572-108.3839-2-15-						0-M39632-07/06/78-11-	18-	-C-	-	-	-		13-1-6-6-6- - - - -4-3-1-4-	-3-	-	-	-	-	3.41
30-45.9875-108.4133-2-11-						0-M39634-07/06/78-12-	18-12.0-C-		-	7.0-	29000-		16-1-6-4-6- - - - -2-3-2-3-	-3-	-	-	-	-	2.87
30-45.9803-108.4094-2-12-						0-M39635-07/06/78-12-	19-17.3-C-		-	8.5-	2925-		17-1-6-6-7-1-4-2-1-6-4-2-3-	-3-	-	-	-	-	3.44
30-45.9758-108.4269-2-15-						0-M39636-07/06/78-13-	19-	-C-	-	-	-		15-1-6-5-6- - - - -4-3-2-3-	-3-	-	-	-	-	3.09
30-45.9875-108.4381-2-15-						0-M39637-07/06/78-14-	21-	-C-	-	-	-		13-1-6-4-6- - - - -4-2-2-3-	-3-	-	-	-	-	2.35
30-45.9750-108.4678-2-15-						0-M39638-07/06/78-14-	20-	-C-	-	-	-		19-1-6-4-6- - - - -4-3-2-3-	-3-	-	-	-	-	2.72
30-45.9328-108.4647-2-15-						0-M39639-07/06/78-14-	20-	-C-	-	-	-		13-1-6-4-6- - - - -4-2-2-3-	-3-	-	-	-	-	2.61
30-45.9281-108.4636-2-15-						0-M39641-07/06/78-15-	21-	-C-	-	-	-		6-1-6-6-8- - - - -4-3-2-3-	-3-	-	-	-	-	3.53
30-45.9211-108.4628-2-12-						0-M39642-07/06/78-15-	20-21.0-C-		-	8.8-	50000-		6-1-6-4-6-2-4-1-1-4-3-2-3-	-3-	-	-	-	-	2.23
30-45.9028-108.6581-2-12-						0-M39645-07/07/78- 9-	18-16.8-C-		-	7.9-	50000-		12-1-6-4-6-3-4-1-1-4-3-2-1-	-3-	-	-	-	-	3.04
30-45.8936-108.6433-2-12-						0-M39646-07/07/78- 9-	18-16.0-C-		-	8.5-	50000-		8-1-6-4-6-3-4-1-2-4-3-3-1-	-3-	-	-	-	-	2.78
30-45.9431-108.6336-2-12-						0-M39647-07/07/78-10-	19-20.0-C-		-	8.8-	50000-		13-1-6-6-6-3-4-2-2-4-3-3-1-	-3-	-	-	-	-	3.01
30-45.9586-108.7131-2-15-						0-M39649-07/07/78-11-	21-	-C-	-	-	-		16-1-6-4-6- - - - -4-3-1-1-	-3-	-	-	-	-	2.51
30-45.9736-108.7139-2-12-						0-M39650-07/07/78-12-	20-16.5-C-		-	7.3-	975-		5-1-6-6-6-3-4-1-1-4-3-1-1-	-3-	-	-	-	-	2.70
30-45.9883-108.7139-2-15-						0-M39651-07/07/78-12-	20-	-C-	-	-	-		6-1-6-4-6- - - - -4-2-2-1-	-3-	-	-	-	-	2.58
30-45.9003-108.7458-2-12-						0-M39653-07/07/78-13-	26-24.0-C-		-	7.2-	27000-		6-1-6-4-6-4-4-1-2-4-3-2-1-	-3-	-	-	-	-	2.16
30-45.9056-108.7142-2-12-						0-M39655-07/07/78-14-	26-25.0-C-		-	8.9-	50000-		12-1-6-6-8-2-4-2-2-4-4-2-1-	-3-	-	-	-	-	3.02
30-45.8786-108.6717-2-12-						0-M39657-07/07/78-15-	26-29.0-C-		-	8.6-	31000-		13-1-6-4-6-2-4-4-1-4-3-3-1-	-3-	-	-	-	-	3.17
30-45.8685-108.6606-2-15-						0-M39659-07/07/78-15-	26-	-C-	-	-	-		13-1-6-4-6- - - - -4-4-3-1-	-3-	-	-	-	-	2.72
30-45.8567-108.5069-2-15-						0-M39660-07/10/78-10-	27-	-C-	-	-	-		18-1-6-4-6- - - - -4-4-2-1-	-3-	-	-	-	-	2.08
30-45.8836-108.5447-2-11-						0-M39661-07/10/78-10-	24-13.0-C-		-	6.5-	24250-		6-1-6-6-6- - - - -6-4-2-1-	-3-	-	-	-	-	1.77
30-45.8708-108.5292-2-12-						0-M39662-07/10/78-10-	22-19.8-C-		-	7.4-	34250-		10-1-6-4-6-2-4-1-1-4-3-2-1-	-3-	-	-	-	-	2.37
30-45.8792-108.5286-2-12-						0-M39663-07/10/78-11-	24-22.0-C-		-	7.9-	50000-		12-1-6-4-6-2-4-5-2-4-3-2-1-	-3-	-	-	-	-	2.74
30-45.9008-108.6158-2-15-						0-M39664-07/10/78-14-	27-	-C-	-	-	-		6-1-6-4-6- - - - -4-3-3-1-	-3-	-	-	-	-	2.36
30-45.9217-108.6017-2-12-						0-M39667-07/10/78-15-	28-32.0-C-		-	8.1-	38000-		12-1-6-6-8-2-4-1-1-4-3-2-1-	-3-	-	-	-	-	3.33
30-45.9247-108.6011-2-12-						0-M39668-07/10/78-15-	29-29.5-C-		-	7.8-	50000-		6-1-6-4-6-3-4-1-2-4-3-2-1-	-3-	-	-	-	-	2.87
30-45.9256-108.5617-2-12-						0-M39669-07/10/78-16-	31-25.0-C-		-	7.9-	32250-		4-1-6-6-6-2-4-1-1-6-3-2-2-	-3-	-	-	-	-	3.13
30-45.9297-108.5283-2-15-						0-M39671-07/10/78-16-	29-	-C-	-	-	-		12-1-6-4-6- - - - -4-3-3-2-	-3-	-	-	-	-	2.72
30-45.9364-108.5289-2-15-						0-M39672-07/10/78-17-	29-	-C-	-	-	-		6-1-6-4-6- - - - -4-3-3-3-	-3-	-	-	-	-	2.96
30-45.8256-108.5347-2-12-						0-M39674-07/11/78-10-	21-18.0-C-		-	7.5-	32000-		22-1-6-4-6-2-4-1-1-4-3-3-2-	-3-	-	-	-	-	1.67
30-45.8442-108.5808-2-11-						0-M39675-07/11/78-10-	21-13.5-C-		-	6.6-	28500-		13-1-6-4-6- - - - -4-3-3-1-	-3-	-	-	-	-	1.96
30-45.8442-108.5814-2-12-						0-M39677-07/11/78-11-	23-17.5-C-		-	7.7-	27500-		6-1-6-4-6-2-4-1-1-4-3-3-1-	-3-	-	-	-	-	2.15
30-45.8433-108.5803-2-12-						0-M39678-07/11/78-11-	23-17.8-C-		-	7.4-	3625-		6-1-6-6-8-2-4-1-1-6-3-3-1-	-3-	-	-	-	-	2.37
30-45.8364-108.6100-2-15-						0-M39679-07/11/78-12-	25-	-C-	-	-	-		6-1-6-4-6- - - - -4-3-3-1-	-3-	-	-	-	-	1.69
30-45.8581-108.5681-2-12-						0-M39680-07/11/78-13-	27-23.0-C-		-	6.9-	4250-		10-1-6-6-8-2-4-1-1-4-3-2-1-	-3-	-	-	-	-	2.17
30-45.8389-108.5439-2-11-						0-M39682-07/11/78-14-	22-15.0-C-		-	6.8-	1750-		4-1-6-4-6-3-3-1- -4-3-3-2-	-3-	-	-	-	-	1.71
30-45.8194-108.5261-2-12-						0-M39683-07/11/78-14-	19-25.3-C-		-	8.3-	24000-		10-1-6-6-6-3-4-1-1-4-3-3-2-	-3-	-	-	-	-	2.07
30-45.8531-108.6475-2-12-						0-M39685-07/11/78-16-	23-26.5-C-		-	8.2-	4400-		13-1-6-4-6-2-4-1-1-4-3-2-3-	-3-	-	-	-	-	2.82
30-45.8403-108.6397-2-15-						0-M39686-07/11/78-16-	23-	-C-	-	-	-		16-1-6- - - - - - -4-3-3-4-	-3-	-	-	-	-	2.44

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY	
							Concentrations reported in weight parts per million (ppm)									Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAB. SAMPLE LOCATION NUMBER	Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
30-45.8250-108.3847-2-12-						0-M39610	-5	-5	-5	19	-20	-15	15	-10	-15	2	33
30-45.8353-108.3797-2-12-						0-M39611	-5	-5	-5	30	-20	-15	6	-10	-15	2	34
30-45.8122-108.3992-2-15-						0-M39613	-5	-5	-5	31	-20	27	12	-10	-15	2	30
30-45.8011-108.3992-2-15-						0-M39614	-5	8	-5	27	-20	27	9	-10	-15	2	25
30-45.7708-108.3906-2-15-						0-M39615	-5	-5	-5	23	-20	-15	6	-10	-15	2	36
30-45.7958-108.4250-2-15-						0-M39617	-5	5	-5	33	-20	-15	9	-10	-15	2	30
30-45.7983-108.4417-2-15-						0-M39618	-5	-5	-5	22	-20	19	16	-10	-15	2	23
30-45.7506-108.4347-2-12-						0-M39619	-5	-5	-5	18	-20	-15	6	-10	-15	2	28
30-45.8478-108.4656-2-12-						0-M39621	-5	5	-5	16	-20	22	7	-10	-15	2	43
30-45.8703-108.4142-2-12-						0-M39624	-5	-5	-5	21	-20	-15	14	-10	-15	2	28
30-45.9147-108.4097-2-12-						0-M39629	-5	-5	-5	14	-20	19	5	-10	-15	2	35
30-45.9464-108.4283-2-15-						0-M39631	-5	-5	-5	32	-20	20	-5	-10	-15	2	73
30-45.9572-108.3839-2-15-						0-M39632	-5	6	5	46	-20	22	11	-10	-15	2	54
30-45.9975-108.4133-2-11-						0-M39634	-5	9	-5	32	-20	-15	7	-10	-15	2	43
30-45.9803-108.4094-2-12-						0-M39635	-5	-5	-5	39	-20	16	7	-10	-15	2	52
30-45.9758-108.4269-2-15-						0-M39636	-5	-5	-5	22	-20	21	11	-10	-15	2	44
30-45.9875-108.4381-2-15-						0-M39637	-5	5	-5	25	-20	17	6	-10	-15	2	26
30-45.9750-108.4678-2-15-						0-M39638	-5	-5	-5	32	-20	30	12	-10	-15	2	34
30-45.9328-108.4647-2-15-						0-M39639	-5	-5	-5	28	-20	15	6	-10	-15	2	32
30-45.9281-108.4636-2-15-						0-M39641	-5	-5	-5	32	-20	-15	7	-10	-15	2	32
30-45.9211-108.4628-2-12-						0-M39642	-5	-5	-5	22	-20	-15	-5	-10	-15	2	30
30-45.9028-108.6581-2-12-						0-M39645	-5	-5	-5	18	-20	-15	10	-10	-15	2	19
30-45.8936-108.6433-2-12-						0-M39646	-5	-5	-5	32	-20	-15	13	-10	-15	2	25
30-45.9431-108.6336-2-12-						0-M39647	-5	5	-5	18	-20	-15	7	-10	-15	2	33
30-45.9586-108.7131-2-15-						0-M39649	-5	-5	5	19	-20	-15	6	-10	-15	2	23
30-45.9736-108.7139-2-12-						0-M39650	-5	-5	-5	19	-20	25	12	-10	-15	2	32
30-45.9883-108.7139-2-15-						0-M39651	-5	-5	-5	29	-20	14	7	-10	-15	2	39
30-45.9003-108.7458-2-12-						0-M39653	-5	5	-5	20	-20	-15	10	-10	-15	2	25
30-45.9056-108.7142-2-12-						0-M39655	-5	5	-5	23	-20	20	13	-10	-15	2	44
30-45.8786-108.6717-2-12-						0-M39657	-5	-5	-5	31	-20	17	14	-10	-15	2	43
30-45.8586-108.6606-2-15-						0-M39658	-5	-5	-5	32	-20	-15	47	-10	-15	2	36
30-45.8567-108.5069-2-15-						0-M39660	-5	6	-5	17	-20	-15	7	-10	-15	2	21
30-45.8836-108.5447-2-11-						0-M39661	-5	-5	-5	16	-20	-15	5	-10	-15	2	26
30-45.8708-108.5292-2-12-						0-M39662	-5	-5	-5	23	-20	17	5	-10	-15	2	30
30-45.8792-108.5286-2-12-						0-M39663	-5	10	-5	30	-20	-15	7	-10	-15	2	37
30-45.9008-108.6158-2-15-						0-M39666	-5	-5	-5	25	-20	-15	-5	-10	-15	2	28
30-45.9217-108.6017-2-12-						0-M39667	-5	-5	-5	25	-20	17	13	-10	-15	2	32
30-45.9247-108.6011-2-12-						0-M39668	-5	-5	-5	31	-20	-15	16	-10	-15	2	50
30-45.9256-108.5617-2-12-						0-M39669	-5	-5	-5	18	-20	-15	8	-10	-15	2	36
30-45.9297-108.5283-2-15-						0-M39671	-5	-5	-5	22	-20	-15	5	-10	-15	2	35
30-45.9364-108.5289-2-15-						0-M39672	-5	-5	-5	23	-20	-15	16	-10	-15	2	31
30-45.8256-108.5347-2-12-						0-M39674	-5	5	-5	22	-20	-15	9	-10	-15	2	26
30-45.8442-108.5808-2-11-						0-M39675	-5	-5	-5	24	-20	-15	8	-10	-15	2	38
30-45.8442-108.5814-2-12-						0-M39677	-5	-5	-5	22	-20	-15	6	-10	-15	2	41
30-45.8433-108.5803-2-12-						0-M39678	-5	-5	-5	18	-20	-15	-5	-10	-15	1	31
30-45.8364-108.6100-2-15-						0-M39679	-5	-5	-5	17	-20	-15	-5	-10	-15	2	28
30-45.8581-108.5681-2-12-						0-M39680	-5	-5	-5	14	-20	-15	-5	-10	-15	2	26
30-45.8389-108.5439-2-11-						0-M39682	-5	-5	-5	13	-20	-15	7	-10	-15	2	21
30-45.8194-108.5261-2-12-						0-M39683	-5	-5	-5	15	-20	-15	5	-10	-15	2	42
30-45.8531-108.6475-2-12-						0-M39685	-5	-5	-5	25	-20	-15	379	-10	-15	2	38
30-45.8408-108.6397-2-15-						0-M39686	-5	-5	-5	27	-20	-15	12	-10	-15	2	27

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
30-45.8250-108.3847-2-12-				0		0-M39610	62360	-0.06	872	22950	52	-90	8.7	92	2.1	3	1.1	14660	5.5	14790	33	0.2
30-45.8353-108.3797-2-12-				0		0-M39611	62850	-0.06	539	30670	38	-101	7.4	71	1.5	3	0.7	12410	3.3	14170	24	0.3
30-45.8122-108.3992-2-15-				0		0-M39613	68110	-0.09	632	22550	74	108	10.6	83	4.0	4	1.1	19360	5.7	17400	34	0.5
30-45.8011-108.3992-2-15-				0		0-M39614	66230	-0.09	757	20590	53	-78	8.2	99	3.8	4	0.9	16930	6.4	16600	26	0.3
30-45.7708-108.3906-2-15-				0		0-M39615	62380	-0.06	741	22460	53	-89	8.3	122	2.5	3	0.9	16940	6.2	14020	33	0.3
30-45.7958-108.4250-2-15-				0		0-M39617	59750	-0.06	595	22830	45	-80	6.4	58	2.5	3	0.8	12360	4.7	14380	22	0.3
30-45.7983-108.4417-2-15-				0		0-M39618	49670	-0.06	517	21460	59	-60	6.4	56	2.1	3	0.8	12920	5.1	13050	35	0.2
30-45.7506-108.4347-2-12-				0		0-M39619	49190	-0.08	473	35650	48	-58	5.4	46	2.0	4	0.9	12290	6.5	11420	26	-0.1
30-45.8478-108.4656-2-12-				0		0-M39621	56040	-0.06	703	23790	48	-82	7.3	60	2.7	3	0.8	13770	6.4	14600	30	0.3
30-45.8703-108.4142-2-12-				0		0-M39624	62400	-0.08	668	20440	66	-80	9.1	73	3.2	3	1.1	14330	5.4	16730	31	0.3
30-45.9147-108.4097-2-12-				0		0-M39628	59670	-0.09	710	34050	45	-82	6.2	38	3.1	4	1.0	14120	6.3	14000	35	0.3
30-45.9464-108.4283-2-15-				0		0-M39631	65030	-0.07	773	27650	58	-96	9.5	65	4.1	4	0.9	19020	4.8	14990	31	0.3
30-45.9572-108.3839-2-15-				0		0-M39632	70610	-0.09	651	16250	39	236	7.5	49	4.3	3	0.7	16870	2.7	15850	19	0.2
30-45.9875-108.4133-2-11-				0		0-M39634	66500	-0.09	565	36220	69	214	9.5	55	4.0	4	1.0	17060	4.7	20340	32	0.4
30-45.9803-108.4094-2-12-				0		0-M39635	80380	-0.12	556	31810	59	-80	9.7	45	5.4	4	0.8	20950	3.8	18520	37	0.4
30-45.9758-108.4269-2-15-				0		0-M39636	67280	-0.07	685	15630	64	-73	9.1	60	4.4	4	1.0	17830	5.7	18760	34	0.4
30-45.9875-108.4381-2-15-				0		0-M39637	58450	-0.05	641	18270	40	-77	5.7	28	2.0	3	0.7	10680	4.2	14780	25	0.2
30-45.9750-108.4678-2-15-				0		0-M39638	68160	-0.08	597	16150	62	-66	8.8	61	4.0	4	1.0	17930	5.4	19350	31	0.3
30-45.9328-108.4647-2-15-				0		0-M39639	66160	-0.09	829	19390	56	86	7.9	45	2.9	3	0.8	15930	3.8	14590	23	0.3
30-45.9281-108.4636-2-15-				0		0-M39641	66480	-0.07	608	28450	56	184	8.1	44	3.0	3	0.8	16380	3.6	11270	31	0.3
30-45.9211-108.4628-2-12-				0		0-M39642	54040	-0.05	528	26090	37	-91	4.9	30	1.4	3	0.7	8519	4.8	15660	21	0.3
30-45.9028-108.6581-2-12-				0		0-M39645	61730	-0.07	823	18860	78	-75	7.2	77	2.9	4	1.2	13180	12.9	13560	35	0.5
30-45.8936-108.6433-2-12-				0		0-M39646	64820	-0.08	648	19730	52	-70	7.3	45	3.9	4	1.1	15110	4.7	12730	32	0.3
30-45.9431-108.6336-2-12-				0		0-M39647	64400	-0.07	737	32260	50	-87	8.9	64	3.1	3	0.9	18360	4.6	15750	33	0.3
30-45.9586-108.7131-2-15-				0		0-M39649	58340	-0.06	584	8888	45	-87	6.0	42	2.1	3	0.7	11190	4.8	18650	26	0.2
30-45.9736-108.7139-2-12-				0		0-M39650	55050	-0.07	687	33230	55	97	8.9	49	2.9	3	0.9	18290	5.8	15610	34	0.4
30-45.9883-108.7139-2-15-				0		0-M39651	55900	-0.09	901	26300	53	-98	6.6	54	2.8	4	1.0	15150	5.0	12830	36	0.4
30-45.9003-108.7458-2-12-				0		0-M39653	62070	-0.06	665	16360	51	-82	6.4	48	2.7	3	0.8	12050	4.7	14020	33	0.2
30-45.9056-108.7142-2-12-				0		0-M39655	55760	-0.07	570	36750	38	599	6.7	49	2.2	3	0.6	11110	3.8	13660	22	0.2
30-45.8786-108.6717-2-12-				0		0-M39657	73320	-0.11	593	22910	70	-76	10.7	75	5.8	4	1.0	22350	4.2	16210	34	0.5
30-45.8686-108.6606-2-15-				0		0-M39658	61660	-0.10	467	30750	50	-68	7.7	59	4.5	4	0.7	16630	4.5	17160	31	0.2
30-45.8567-108.5069-2-15-				0		0-M39659	51400	-0.06	723	11100	53	-70	5.8	40	2.1	3	0.7	12970	5.3	12180	27	0.2
30-45.8836-108.5447-2-11-				0		0-M39661	47960	-0.05	508	9645	41	-77	4.2	24	1.4	2	0.7	9503	4.4	13640	22	0.2
30-45.8708-108.5292-2-12-				0		0-M39662	57840	-0.07	641	27970	59	86	6.3	47	3.7	4	0.9	15140	4.7	13750	26	0.3
30-45.8792-108.5286-2-12-				0		0-M39663	62520	-0.09	760	25500	53	-75	8.1	57	3.3	4	0.9	16410	7.2	13680	33	0.2
30-45.9008-108.6158-2-15-				0		0-M39665	55470	-0.05	697	23830	44	-83	7.2	66	1.9	3	0.8	11150	5.3	14830	27	0.3
30-45.9217-108.6017-2-12-				0		0-M39667	69410	-0.08	593	22140	49	-93	7.3	45	3.6	3	0.8	15830	3.3	14560	31	0.3
30-45.9247-108.6011-2-12-				0		0-M39668	66690	-0.08	640	21900	75	106	10.7	63	4.1	3	0.9	20740	5.8	15870	37	0.3
30-45.9256-108.5617-2-12-				0		0-M39669	63400	-0.09	706	21890	55	-85	7.3	48	3.2	4	0.9	15640	8.2	15400	37	0.3
30-45.9297-108.5283-2-15-				0		0-M39671	67680	-0.08	980	15370	58	-95	8.9	59	3.2	4	0.9	18270	5.6	18160	37	0.3
30-45.9364-108.5289-2-15-				0		0-M39672	65410	-0.06	786	27680	41	166	6.7	40	3.1	3	0.7	11950	4.5	16800	24	0.2
30-45.8256-108.5347-2-12-				0		0-M39674	45770	-0.06	543	21730	50	-68	6.0	47	1.8	2	1.0	11090	5.6	12860	29	0.2
30-45.8442-108.5808-2-11-				0		0-M39675	41970	-0.07	484	33420	35	-72	5.5	45	-1.4	3	0.8	11250	4.5	11910	31	0.2
30-45.8443-108.5814-2-12-				0		0-M39677	43180	-0.06	517	37450	42	-73	6.2	36	2.1	3	0.7	11590	5.0	11140	27	0.2
30-45.8433-108.5803-2-12-				0		0-M39678	34970	-0.05	360	37030	36	-84	5.3	26	1.7	2	0.6	24790	5.9	8094	18	0.2
30-45.8364-108.6100-2-15-				0		0-M39679	42300	-0.06	501	13480	51	-52	5.3	33	2.1	3	0.8	9889	3.9	12490	25	0.2
30-45.8581-108.5681-2-12-				0		0-M39680	48130	-0.08	514	14230	46	-58	5.6	35	2.8	3	1.0	12270	6.9	12810	32	0.3
30-45.8389-108.5439-2-11-				0		0-M39682	39310	-0.05	500	20090	38	-70	4.4	28	1.3	2	0.8	7272	5.1	11300	23	0.2
30-45.8194-108.5261-2-12-				0		0-M39683	56970	-0.09	447	23460	56	-86	5.4	41	2.1	3	1.0	14680	2.6	15180	36	-0.1
30-45.8531-108.6475-2-12-				0		0-M39685	54020	-0.07	521	31210	80	199	7.8	57	2.9	4	1.0	17730	7.7	13000	39	0.3
30-45.8408-108.6397-2-15-				0		0-M39686	50460	-0.06	491	27720	35	-60	5.7	30	2.3	3	0.8	10170	4.9	12230	21	0.3

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAS. SAMPLE LOCATION NUMBER	Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
30-45.	8250-108.	3847-2-12-	0-			M33610	17680	387	14490	40	-2	7.3	3.8	-301	-1	-1	7.4	2302	66	-1.4	99	0.318
30-45.	8353-108.	3797-2-12-	0-			M33611	23470	445	15910	-17	-2	5.9	2.6	-330	-1	-1	4.9	2054	69	1.2	63	0.408
30-45.	8122-108.	3992-2-15-	0-			M33613	26290	375	12190	49	-3	9.2	5.2	-287	-1	-1	10.8	3143	85	4.1	89	0.250
30-45.	8011-108.	3992-2-15-	0-			M33614	18980	377	13030	-26	-3	8.0	3.4	373	-1	-1	7.5	3114	83	-2.0	54	0.341
30-45.	7708-108.	3906-2-15-	0-			M33615	18660	440	13960	37	-2	7.6	3.7	-305	-1	-1	6.9	2726	81	2.5	66	0.333
30-45.	7958-108.	4250-2-15-	0-			M33617	26450	303	10900	40	-2	6.0	2.8	-279	-1	-1	5.5	2271	81	1.8	83	0.453
30-45.	7983-108.	4417-2-15-	0-			M33618	19130	223	9253	47	-2	5.9	3.8	-199	-1	-1	7.0	2072	75	3.6	-66	0.287
30-45.	7506-108.	4347-2-12-	0-			M33619	21740	181	8024	-22	-2	5.5	2.5	406	-1	-1	6.3	2599	81	-1.6	35	0.378
30-45.	8478-108.	4656-2-12-	0-			M33621	20440	374	12260	45	-2	5.7	3.5	-273		-1	7.3	2799	67	3.5	51	0.342
30-45.	8703-108.	4142-2-12-	0-			M33624	14930	308	14850	-19	-2	6.6	3.6	596	-1	-1	7.6	2557	63	2.4	88	0.301
30-45.	9147-108.	4097-2-12-	0-			M33628	19540	368	15620	-24	-3	6.4	3.4	-258	-1	-1	7.3	2898	69	2.3	-34	0.422
30-45.	9464-108.	4283-2-15-	0-			M33631	25990	422	15340	59	-2	8.4	3.8	-322	-1	-1	8.4	3074	117	3.3	-68	0.360
30-45.	9572-108.	3839-2-15-	0-			M33632	43060	346	27760	43	-2	8.5	3.1	-376	-1	-1	7.4	3828	127	-1.7	86	0.461
30-45.	9875-108.	4133-2-11-	0-			M33634	34350	422	8950	50	-3	8.6	4.8	-289	-1	-1	10.5	3356	78	3.2	-19	0.273
30-45.	9803-108.	4094-2-12-	0-			M33635	30460	417	9699	-32	-4	10.6	4.4	-292	-1	-1	9.9	3432	102	-2.4	149	0.347
30-45.	9758-108.	4269-2-15-	0-			M33636	23930	284	9798	43	-2	8.1	4.2	-251	-1	-1	9.6	2996	104	2.5	80	0.322
30-45.	9875-108.	4381-2-15-	0-			M33637	22590	230	11660	33	-2	4.6	3.5	-235	-1		4.7	1997	66	2.7	44	0.500
30-45.	9750-108.	4679-2-15-	0-			M33638	20400	261	10300	43	-2	8.3	4.5	-217	-1	-1	8.9	3214	102	2.4	-67	0.306
30-45.	9328-108.	4647-2-15-	0-			M33639	17120	373	11960	-24	-3	7.3	2.7	-234	-1	-1	8.4	2846	84	-1.8	65	0.311
30-45.	9291-108.	4636-2-15-	0-			M33641	26100	558	11110	39	-2	7.2	3.7	731	-1	-1	10.3	2279	73	3.1	86	0.343
30-45.	9211-108.	4628-2-12-	0-			M33642	16890	289	16250	-14	-2	3.8	2.5	-276	-1		4.7	2348	50	1.3	46	0.474
30-45.	9028-108.	6581-2-12-	0-			M33645	13130	330	14180	-18	-2	6.2	5.2	-239	-1	-1	10.0	2854	54	4.7		0.304
30-45.	8936-108.	6433-2-12-	0-			M33646	20370	325	12280	-23	-3	6.8	3.0	-231	-1	-1	7.9	2867	70	2.9	-34	0.352
30-45.	9431-108.	6336-2-12-	0-			M33647	22860	547	11400	38	-2	8.3	4.2	-319	-1	-1	8.2	2599	86	-1.6	84	0.367
30-45.	9586-108.	7131-2-15-	0-			M33649	11460	410	11570	-16	-2	5.1	3.8	-300	-1	-1	6.6	2559	74	1.7	85	0.380
30-45.	9736-108.	7139-2-12-	0-			M33650	18120	762	10340	41	-2	6.8	4.6	-316	-1	-1	8.7	2873	60	2.8	-47	0.310
30-45.	9993-108.	7139-2-15-	0-			M33651	19310	609	19830	-24	-3	6.7	2.7	-311	-1	-1	6.5	2684	58	-1.8	77	0.397
30-45.	9003-108.	7458-2-12-	0-			M33653	12500	256	13510	46	-2	5.6	3.3	-261		-1	6.4	2239	59	1.9	86	0.337
30-45.	9056-108.	7142-2-12-	0-			M33655	20650	380	10100	23	-2	5.6	3.6	-309	-1	-1	5.3	1815	76	1.9	83	0.570
30-45.	8786-108.	6717-2-12-	0-			M33657	25520	268	8919	52	-3	11.1	5.1	-262	-1	-1	11.1	3996	111	3.6	-49	0.286
30-45.	8686-108.	6606-2-15-	0-			M33658	25530	367	7932	-26	-3	8.3	3.6	-247	-1	-1	7.1	3356	89	-2.1	106	0.383
30-45.	8567-108.	5069-2-15-	0-			M33660	11690	258	8020	40	-2	5.0	3.7	-253	-1	-1	6.3	2215	68	1.9	116	0.330
30-45.	8936-108.	5447-2-11-	0-			M33661	9198	235	10330	-14	-2	3.5	3.1	-253	-1		4.1	1990	66	2.1	-41	0.432
30-45.	8709-108.	5292-2-12-	0-			M33662	23130	152	8786	45	-2	7.0	3.8	-183	-1	-1	7.6	2713	89	2.5	67	0.312
30-45.	8792-108.	5286-2-12-	0-			M33663	22250	369	12320	-26	-3	7.5	3.6	-255	-1	-1	7.9	3065	79	-2.3	-49	0.347
30-45.	9008-108.	6158-2-15-	0-			M33666	18740	327	13940	31	-2	4.9	3.4	503		-1	7.0	2224	48	2.4	34	0.337
30-45.	9217-108.	6017-2-12-	0-			M33667	23630	272	11060	39	-2	6.9	3.5	-311	-1	-1	7.6	2945	96	-1.5	84	0.438
30-45.	9247-108.	6011-2-12-	0-			M33668	20230	517	12320	38	-3	8.4	4.5	-283	-1	-1	9.5	3167	94	2.9	102	0.302
30-45.	9256-108.	5617-2-12-	0-			M33669	20230	365	16840	-26	-3	6.6	4.4	402	-1	-1	8.2	3199	72	-2.2	-76	0.382
30-45.	9297-108.	5283-2-15-	0-			M33671	17780	531	12080	47	-2	7.6	4.3	-345	-1	-1	8.7	3362	92	2.8	64	0.313
30-45.	9364-108.	5289-2-15-	0-			M33672	18090	293	14740	-16	-2	5.9	3.5	-294	-1	-1	7.0	2579	75	-1.3	75	0.423
30-45.	8256-108.	5347-2-12-	0-			M33674	15730	251	12170	26	-2	4.7	3.3	-217	-1	-1	6.4	1905	61	2.1	86	0.261
30-45.	8442-108.	5808-2-11-	0-			M33675	19380	294	9692	-24	-3	4.3	2.1	497	-1	-1	5.8	2259	58	-1.9	195	0.338
30-45.	8442-108.	5814-2-12-	0-			M33677	18950	316	8861	45	-2	4.4	3.2	-259		-1	5.5	1981	61	2.3	66	0.391
30-45.	8433-108.	5803-2-12-	0-			M33678	16880	597	7827	-18	-2	3.2	2.4	-344	-1	-1	4.1	1780	55	-1.4	39	0.578
30-45.	8364-108.	6100-2-15-	0-			M33679	13150	152	8062	31	-2	4.4	3.2	207		-1	5.7	1693	64	2.1	-35	0.296
30-45.	8581-108.	5681-2-12-	0-			M33680	11980	259	8272	58	-2	5.0	3.0	-199	-1	-1	6.4	2450	78	2.5	-33	0.339
30-45.	8389-108.	5439-2-11-	0-			M33682	14280	337	10190	-12	-1	3.2	3.0	-229			4.7	1716	50	-0.9	47	0.364
30-45.	8194-108.	5261-2-12-	0-			M33683	18480	255	13230	-23	-3	5.4	3.3	-273	-1	-1	6.9	2208	91	2.5	-59	0.300
30-45.	8531-108.	6475-2-12-	0-			M33685	20960	520	10430	35	-2	6.9	4.5	-289	-1	-1	10.0	3481	92	3.4	130	0.282
30-45.	8408-108.	6397-2-15-	0-			M33686	25310	290	7911	26	-2	5.0	3.1	-218	-1	-1	5.1	2445	75	2.5	62	0.478

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																											U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
30-45.8114-108.6728-2-12-						0-M39688-07/12/78-10-	19	-17.5-C-	-	-	8.1-	3675-	12-1-6-4-6-2-4-1-1-4-3-3-1-	-3-	-	-	-	-	2.40
30-45.8303-108.7219-2-12-						0-M39690-07/12/78-10-	21	-19.5-C-	-	-	7.2-	4300-	15-1-5-6-6-3-4-1-2-4-3-3-1-	-3-	-	-	-	-	2.21
30-45.8456-108.7142-2-12-						0-M39691-07/12/78-10-	19	-19.0-C-	-	-	7.2-	3950-	8-1-6-4-6-2-4-1-1-4-3-2-1-	-3-	-	-	-	-	2.81
30-45.8678-108.6983-2-12-						0-M39693-07/12/78-11-	18	-19.0-C-	-	-	7.5-	33000-	6-1-6-6-8-2-4-5-1-4-3-3-1-	-3-	-	-	-	-	2.37
30-45.7992-108.7103-2-15-						0-M39695-07/12/78-12-	20	-C-	-	-	-	-	9-1-6-4-6- - - - -4-3-3-1-	-3-	-	-	-	-	2.13
30-45.7994-108.7094-2-15-						0-M39696-07/12/78-12-	20	-C-	-	-	-	-	6-1-6-4-6- - - - -4-3-3-1-	-3-	-	-	-	-	2.57
30-45.7514-108.7406-2-12-						0-M39697-07/12/78-12-	19	-18.8-C-	-	-	6.9-	1125-	10-1-6-4-6-3-4-2-2-4-3-2-1-	-3-	-	-	-	-	2.68
30-45.2194-109.7694-2-12-						0-M39700-07/12/78-14-	24	6.8- -	-	-	6.9-	26-	15-2-1-4-6-3-4-1-2-1-4-5-2-	-1-	-	-	-	-	7.45
30-45.2233-109.7608-2-12-						0-M39701-07/12/78-14-	17	-11.0-C-	-	-	6.6-	43-	13-2-9-3-9-3-4-1-2-1-4-5-2-	-1-	-	-	-	-	3.08
30-45.2408-109.7350-2-12-						0-M39702-07/12/78-16-	24	7.8-C-	-	-	7.0-	37-	17-2-9-3-9-4-4-1-2-2-3-4-2-	-1-	-	-	-	-	5.68
30-45.2433-109.7336-2-12-						0-M39703-07/12/78-16-	19	-14.0-C-	-	-	7.0-	52-	9-2-7-4-9-3-4-1-2-2-3-4-2-	-1-	-	-	-	-	7.54
30-45.2441-109.7278-2-12-						0-M39704-07/12/78-17-	22	9.0-C-	-	-	7.0-	36-	16-2-7-4-6-4-3-1-2-7-3-5-2-	-1-	-	-	-	-	13.18
30-45.2481-109.7219-2-12-						0-M39705-07/12/78-17-	24	-10.1-C-	-	-	6.6-	17-	15-2-9-2-9-5-5-1-2-3-4-4-2-	-1-	-	-	-	-	59.63
30-45.0793-109.4064-2-15-						0-M39706-07/15/78-13-	28	-C-	-	-	-	-	13-2-9-3-9- - - - -1-4-4-2-	-1-	-	-	-	-	7.65
30-45.0775-109.4283-2-12-						0-M39707-07/15/78-14-	29	-12.8-C-	-	-	7.1-	21-	9-2-9-3-9-3-3-1-2-1-3-4-2-	-1-	-	-	-	-	3.05
30-45.0792-109.4483-2-12-						0-M39708-07/15/78-14-	30	8.0-C-	-	-	6.8-	80-	10-2-9-3-9-3-3-1-2-1-4-5-2-	-1-	-	-	-	-	64.39
30-45.0811-109.4744-2-12-						0-M39709-07/15/78-15-	28	7.2-C-	-	-	7.1-	75-	11-2-9-3-9-3-3-1-2-3-4-4-2-	-1-	-	-	-	-	80.03
30-45.0811-109.4794-2-12-						0-M39710-07/15/78-15-	24	4.6-C-	-	-	7.2-	48-	11-2-9-3-9-3-3-1-2-1-3-4-4-	-1-	-	-	-	-	84.27
30-45.0803-109.4850-2-12-						0-M39711-07/15/78-16-	23	3.7-C-	-	-	7.0-	48-	13-2-9-4-9-3-3-1-2-4-5-4-3-	-1-	-	-	-	-	22.16
30-45.0817-109.4944-2-12-						0-M39712-07/15/78-16-	22	7.5-C-	-	-	6.9-	25-	16-2-9-4-9-4-3-1-2-4-3-4-3-	-1-	-	-	-	-	8.26
30-45.0822-109.5006-2-15-						0-M39713-07/15/78-17-	22	-C-	-	-	-	-	13-2-9-4-9- - - - -1-4-4-2-	-1-	-	-	-	-	2.88
30-45.0853-109.5144-2-12-						0-M39714-07/15/78-18-	21	7.0-C-	-	-	6.7-	33-	12-2-9-4-6-4-3-1-2-3-4-5-2-	-1-	-	-	-	-	3.82
30-45.0833-109.5139-2-12-						0-M39715-07/15/78-18-	21	6.3-C-	-	-	6.8-	34-	10-2-9-4-9-3-3-1-2-1-3-5-2-	-1-	-	-	-	-	3.91
30-45.0847-109.5122-2-12-						0-M39716-07/15/78-18-	20	7.2-C-	-	-	6.9-	23-	4-2-9-3-9-4-3-1-2-1-3-5-2-	-1-	-	-	-	-	7.31
30-45.0906-109.5256-2-11-						0-M39717-07/16/78-14-	29	4.6-C-	-	-	6.7-	46-	2-2-9-5-8-2-3-1-2-7-3-5-2-	-1-	-	-	-	-	6.93
30-45.0936-109.5344-2-12-						0-M39718-07/16/78-15-	22	8.3-C-	-	-	7.0-	31-	19-2-9-3-9-4-3-1-2-1-4-5-2-	-1-	-	-	-	-	5.78
30-45.1253-109.7244-2-12-						0-M39719-07/18/78- 9-	17	4.3- -	-	-	6.9-	22-	8-2-7-5-8-3-4-1-2-1-3-5-1-	-1-	-	-	-	-	16.27
30-45.1264-109.7189-2-11-						0-M39720-07/18/78-10-	20	-13.9-C-	-	-	6.6-	42-	9-2-3-4-3-2-3-1-2-4-3-5-1-	-1-	-	-	-	-	5.58
30-45.1253-109.7133-2-11-						0-M39721-07/18/78-10-	20	-10.4-C-	-	-	6.4-	28-	16-2-3-5-8-2-3-1-1-7-4-5-2-	-1-	-	-	-	-	6.78
30-45.1225-109.7156-2-12-						0-M39722-07/18/78-10-	25	8.8-C-	-	-	7.1-	23-	11-2-3-4-6-4-3-1-2-1-4-5-2-	-1-	-	-	-	-	5.17
30-45.1311-109.7008-2-11-						0-M39723-07/18/78-11-	21	5.7-C-	-	-	6.7-	27-	4-2-6-5-8-2-3-1-2-1-4-5-2-	-1-	-	-	-	-	24.97
30-45.1311-109.6967-2-12-						0-M39724-07/18/78-12-	20	6.7- -	-	-	6.9-	13-	10-2-3-3-3-5-4-1-2-1-4-5-2-	-1-	-	-	-	-	8.93
30-45.1322-109.6972-2-12-						0-M39725-07/18/78-12-	21	7.0- -	-	-	6.8-	29-	16-2-3-3-3-3-3-1-2-1-4-5-2-	-1-	-	-	-	-	6.56
30-45.1381-109.6928-2-11-						0-M39726-07/18/78-12-	22	8.9-C-	-	-	6.8-	85-	4-2-3-5-8-4-4-1-2-1-4-5-2-	-1-	-	-	-	-	26.67
30-45.1386-109.6906-2-15-						0-M39727-07/18/78-13-	21	-C-	-	-	-	-	6-2-7-4-6- -1- -2-1-4-5-2-	-1-	-	-	-	-	4.56
30-45.1436-109.6894-2-12-						0-M39728-07/18/78-13-	22	5.5-C-	-	-	7.1-	19-	10-2-7-3-3-4-3-1-2-1-4-5-2-	-1-	-	-	-	-	3.14
30-45.1461-109.6872-2-12-						0-M39729-07/18/78-14-	19	9.7-C-	-	-	6.9-	25-	18-2-9-3-9-3-3-1-2-7-4-5-2-	-1-	-	-	-	-	2.33
30-45.1492-109.6817-2-11-						0-M39730-07/18/78-14-	19	9.8-C-	-	-	7.1-	72-	30-2-7-5-8-2-3-1-2-3-1-5-2-	-1-	-	-	-	-	12.68
30-45.1589-109.6703-2-15-						0-M39731-07/18/78-15-	26	-C-	-	-	-	-	9-2-3-4-6- -1- -2-1-3-5-2-	-1-	-	-	-	-	1.67
30-45.1597-109.6681-2-12-						0-M39732-07/18/78-15-	26	7.0-C-	-	-	7.2-	22-	16-2-9-4-6-4-3-1-2-1-4-5-2-	-1-	-	-	-	-	1.69
30-45.1706-109.6486-2-12-						0-M39733-07/18/78-16-	25	-10.0-C-	-	-	7.2-	17-	4-2-9-3-9-4-3-1-2-1-4-5-2-	-1-	-	-	-	-	4.03
30-45.1761-109.6439-2-12-						0-M39734-07/18/78-16-	25	9.7-C-	-	-	6.9-	18-	16-2-9-3-9-5-3-1-2-1-4-5-2-	-1-	-	-	-	-	4.61
30-45.1794-109.6428-2-12-						0-M39735-07/18/78-16-	22	-11.7-C-	-	-	6.6-	22-	9-2-9-3-9-4-4-1-2-1-4-5-2-	-1-	-	-	-	-	1.21
30-45.1950-109.6447-2-12-						0-M39736-07/18/78-17-	20	4.2-C-	-	-	7.2-	97-	16-2-9-4-6-4-4-1-2-1-4-5-3-	-1-	-	-	-	-	5.93
30-45.1983-109.6453-2-12-						0-M39737-07/21/78-10-	15	7.4-C-	-	-	7.2-	22-	5-2-7-4-6-3-3-1-2-7-4-5-3-	-1-	-	-	-	-	3.21
30-45.1908-109.6417-2-12-						0-M39738-07/21/78-10-	14	7.4-C-	-	-	7.3-	100-	11-2-9-4-6-3-3-1-2-2-7-3-5-3-	-1-	-	-	-	-	5.81
30-45.1958-109.6350-2-12-						0-M39739-07/21/78-11-	14	4.5-C-	-	-	7.2-	82-	15-2-9-5-8-3-4-1-2-1-4-5-3-	-1-	-	-	-	-	52.22
30-45.2017-109.6339-2-12-						0-M39740-07/21/78-11-	14	4.8-C-	-	-	7.8-	56-	10-2-9-7-9-4-3-1-2-2-4-5-3-	-1-	-	-	-	-	9.77
30-45.2003-109.6461-2-12-						0-M39742-07/21/78-12-	13	6.8-C-	-	-	7.3-	25-	13-2-9-4-6-5-4-1-2-1-3-5-3-	-1-	-	-	-	-	2.77
30-45.2072-109.6406-2-15-						0-M39743-07/21/78-12-	16	-C-	-	-	-	-	12-2-9-4-7- - - - -4-3-5-3-	-1-	-	-	-	-	1.35
30-45.2131-109.6356-2-12-						0-M39744-07/21/78-12-	20	6.7-C-	-	-	7.1-	44-	9-2-9-4-2-5-4-1-2-7-4-5-3-	-1-	-	-	-	-	14.45

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

(2)

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per million (ppm)									Concentrations in weight ppm	
							Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
30-45.	9114-108.	6729-2-12-				0-M39688	-5	-5	-5	16	-20	-15	9	-10	-15	2	34
30-45.	8303-108.	7219-2-12-				0-M39690	-5	-5	-5	21	-20	-15	-5	-10	-15	2	29
30-45.	8456-108.	7142-2-12-				0-M39691	-5	-5	-5	28	-20	-15	6	-10	-15	2	42
30-45.	8678-108.	6983-2-12-				0-M39693	-5	5	-5	23	-20	17	11	-10	-15	2	33
30-45.	7992-108.	7103-2-15-				0-M39695	-5	-5	-5	19	-20	-15	12	-10	-15	2	27
30-45.	7994-108.	7094-2-15-				0-M39696	-5	7	-5	32	-20	18	12	-10	-15	2	42
30-45.	7614-108.	7406-2-12-				0-M39697	-5	-5	-5	11	-20	-15	-5	-10	-15	2	31
30-45.	2194-109.	7694-2-12-				0-M39700	-5	6	-5	30	-20	55	6	-10	-15	3	43
30-45.	2233-109.	7608-2-12-				0-M39701	-5	5	-5	42	-20	87	16	-10	-15	1	49
30-45.	2408-109.	7350-2-12-				0-M39702	-5	-5	-5	39	-20	195	7	-10	-15	-1	39
30-45.	2433-109.	7336-2-12-				0-M39703	-5	-5	-5	49	-20	110	6	-10	-15	1	27
30-45.	2461-109.	7278-2-12-				0-M39704	-5	-5	-5	29	-20	29	11	-10	-15	1	40
30-45.	2491-109.	7219-2-12-				0-M39705	-5	-5	-5	38	-20	27	23	-10	-15	1	36
30-45.	0783-109.	4064-2-15-				0-M39706	-5	6	-5	35	-20	45	20	-10	-15	1	47
30-45.	0775-109.	4283-2-12-				0-M39707	-5	-5	-5	30	-20	26	16	-10	-15	1	31
30-45.	0792-109.	4483-2-12-				0-M39708	-5	-5	-5	41	-20	50	10	-10	-15	-1	45
30-45.	0811-109.	4744-2-12-				0-M39709	-5	5	-5	37	-20	-15	-5	-10	-15	-1	38
30-45.	0811-109.	4794-2-12-				0-M39710	-5	5	-5	35	-20	32	13	-10	-15	-1	52
30-45.	0803-109.	4850-2-12-				0-M39711	-5	5	-5	33	-20	31	12	-10	-15	-1	32
30-45.	0817-109.	4944-2-12-				0-M39712	-5	-5	-5	25	-20	30	10	-10	-15	1	44
30-45.	0822-109.	5006-2-15-				0-M39713	-5	-5	-5	14	-20	18	13	-10	-15	1	53
30-45.	0853-109.	5144-2-12-				0-M39714	-5	-5	-5	16	-20	18	-5	-10	-15	1	39
30-45.	0833-109.	5139-2-12-				0-M39715	-5	-5	-5	14	-20	-15	11	-10	-15	-1	33
30-45.	0847-109.	5122-2-12-				0-M39716	-5	10	5	26	-20	24	9	-10	-15	1	37
30-45.	0906-109.	5256-2-11-				0-M39717	-5	-5	-5	31	-20	-15	10	-10	-15	-1	29
30-45.	0936-109.	5344-2-12-				0-M39718	-5	-5	-5	32	-20	26	7	-10	-15	1	41
30-45.	1253-109.	7244-2-12-				0-M39719	-5	-5	-5	26	-20	31	10	-10	-15	1	45
30-45.	1264-109.	7189-2-11-				0-M39720	-5	-5	5	36	-20	21	25	-10	-15	2	64
30-45.	1253-109.	7133-2-11-				0-M39721	-5	-5	-5	32	-20	-15	25	-10	-15	1	9
30-45.	1225-109.	7156-2-12-				0-M39722	-5	-5	-5	29	-20	17	21	-10	-15	1	75
30-45.	1311-109.	7008-2-11-				0-M39723	-5	-5	-5	42	-20	29	17	-10	-15	1	35
30-45.	1311-109.	6967-2-12-				0-M39724	-5	-5	6	40	-20	107	12	-10	-15	1	37
30-45.	1322-109.	6972-2-12-				0-M39725	-5	-5	-5	57	-20	61	14	-10	-15	1	55
30-45.	1381-109.	6928-2-11-				0-M39726	-5	-5	-5	65	-20	33	14	-10	-15	1	63
30-45.	1386-109.	6906-2-15-				0-M39727	-5	7	-5	46	-20	47	9	-10	-15	2	41
30-45.	1436-109.	6894-2-12-				0-M39728	-5	-5	-5	33	-20	97	6	-10	-15	1	27
30-45.	1461-109.	6872-2-12-				0-M39729	-5	7	-5	39	-20	30	12	-10	-15	1	22
30-45.	1492-109.	6817-2-11-				0-M39730	-5	9	-5	41	-20	57	15	-10	-15	2	43
30-45.	1589-109.	6703-2-15-				0-M39731	-5	5	-5	48	-20	245	10	-10	-15	1	29
30-45.	1597-109.	6681-2-12-				0-M39732	-5	-5	-5	55	-20	215	10	-10	-15	1	28
30-45.	1706-109.	6486-2-12-				0-M39733	-5	6	-5	64	-20	65	20	-10	16	1	39
30-45.	1761-109.	6439-2-12-				0-M39734	-5	-5	-5	46	-20	68	10	-10	-15	-1	34
30-45.	1794-109.	6428-2-12-				0-M39735	-5	-5	-5	50	-20	59	10	-10	-15	1	42
30-45.	1850-109.	6447-2-12-				0-M39736	-5	-5	-5	28	-20	38	7	-10	-15	1	8
30-45.	1883-109.	6453-2-12-				0-M39737	-5	6	-5	22	-20	59	-5	-10	-15	1	12
30-45.	1908-109.	6417-2-12-				0-M39738	-5	6	-5	48	-20	87	-5	-10	-15	2	18
30-45.	1958-109.	6350-2-12-				0-M39739	-5	-5	-5	27	-20	44	8	-10	-15	1	27
30-45.	2017-109.	6339-2-12-				0-M39740	-5	-5	-5	36	-20	56	5	-10	-15	2	21
30-45.	2003-109.	6461-2-12-				0-M39742	-5	5	-5	37	-20	68	-5	-10	-15	1	12
30-45.	2072-109.	6406-2-15-				0-M39743	-5	-5	-5	23	-20	55	-5	-10	-15	2	1
30-45.	2131-109.	6356-2-12-				0-M39744	-5	-5	-5	30	-20	42	-5	-10	-15	1	16

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS													
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per million (ppm)													
							Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
30-45.8114-108.6728-2-12-			0	M	9	M39688	49430	-0.07	414	38040	57	-66	6.8	46	2.5	3	0.9	13160	5.2	13230	32	0.3
30-45.8303-108.7219-2-12-			0	M	9	M39690	47520	-0.09	422	25430	44	-58	5.8	32	2.9	3	0.9	11700	4.9	11600	20	0.3
30-45.8456-108.7142-2-12-			0	M	9	M39691	53440	-0.07	569	36720	49	-60	7.0	53	3.0	4	0.8	14420	7.7	13660	28	0.4
30-45.8678-108.6983-2-12-			0	M	9	M39693	51720	-0.06	560	33730	37	205	5.4	39	2.4	3	0.6	10190	3.6	14350	20	0.2
30-45.7992-108.7103-2-15-			0	M	9	M39695	47700	-0.07	521	26010	62	-65	6.6	44	2.2	3	0.9	12480	7.0	14010	31	0.3
30-45.7994-108.7094-2-15-			0	M	9	M39696	56960	-0.09	541	31930	49	-72	7.5	41	3.4	3	0.8	15290	4.1	16600	31	0.3
30-45.7614-108.7406-2-12-			0	M	9	M39697	45920	-0.05	546	34610	54	-60	5.1	45	2.9	3	0.8	10110	9.7	13380	32	0.3
30-45.2194-109.7694-2-12-			0	M	9	M39700	79570	-0.09	541	19590	47	227	10.1	103	2.2	3	0.7	18540	3.3	14960	27	0.2
30-45.2233-109.7608-2-12-			0	M	9	M39701	65020	-0.12	388	22930	97	212	18.6	375	-1.9	3	1.0	30930	6.8	13780	65	0.2
30-45.2408-109.7350-2-12-			0	M	9	M39702	59130	-0.13	-187	29620	57	226	20.1	729	-2.0	2	0.9	29660	6.1	8965	42	0.4
30-45.2433-109.7336-2-12-			0	M	9	M39703	59700	-0.11	321	24740	59	284	18.7	277	-1.7	3	1.0	24730	5.3	9721	64	0.3
30-45.2461-109.7278-2-12-			0	M	9	M39704	68370	-0.07	414	19520	60	259	8.7	75	-1.2	3	0.5	14350	5.8	11780	44	0.2
30-45.2481-109.7219-2-12-			0	M	9	M39705	61180	-0.12	485	20580	93	197	13.2	84	-1.8	3	0.9	17910	4.2	9952	86	0.2
30-45.0793-109.4064-2-15-			0	M	9	M39706	66530	-0.09	535	16360	68	-120	9.4	88	2.2	2	0.8	16690	5.9	11920	48	0.4
30-45.0775-109.4283-2-12-			0	M	9	M39707	72880	-0.06	532	17010	59	126	8.2	90	0.9	2	0.7	13030	5.9	15720	41	0.2
30-45.0792-109.4483-2-12-			0	M	9	M39708	67120	-0.08	756	18750	71	154	9.3	94	2.1	4	0.7	15030	4.2	15050	70	0.2
30-45.0811-109.4744-2-12-			0	M	9	M39709	48870	-0.13	346	13780	99	-161	14.9	89	2.9	2	0.9	35750	3.8	-6570	98	0.4
30-45.0811-109.4794-2-12-			0	M	9	M39710	68320	-0.10	468	19160	94	-122	8.2	79	2.0	2	0.9	15160	9.8	13210	118	0.3
30-45.0803-109.4850-2-12-			0	M	9	M39711	49660	-0.09	546	16950	71	-118	12.8	83	-1.5	3	0.9	17110	5.3	9590	83	0.2
30-45.0817-109.4944-2-12-			0	M	9	M39712	69440	-0.08	651	19130	43	143	8.0	65	1.5	3	0.8	12500	5.2	14230	37	0.3
30-45.0822-109.5006-2-15-			0	M	9	M39713	67100	-0.08	547	16810	61	-105	9.0	88	2.6	2	0.9	16750	7.9	13090	40	0.2
30-45.0853-109.5144-2-12-			0	M	9	M39714	71230	-0.09	624	24900	64	166	6.2	53	-1.4	2	0.7	14130	4.1	8470	40	-0.1
30-45.0833-109.5139-2-12-			0	M	9	M39715	69970	-0.10	706	15010	135	-112	12.8	98	-1.6	2	1.4	23210	22.8	14420	96	0.5
30-45.0947-109.5122-2-12-			0	M	9	M39716	73080	-0.05	620	21520	20	-106	4.2	24	1.0	3	0.3	3902	1.7	11180	21	-0.1
30-45.0906-109.5256-2-11-			0	M	9	M39717	48810	-0.18	569	18180	116	150	20.7	123	3.3	3	2.0	38220	15.4	8636	63	0.4
30-45.0936-109.5344-2-12-			0	M	9	M39718	71660	-0.11	1018	34720	65	-195	8.9	78	-1.8	5	1.3	18270	9.6	21580	56	0.3
30-45.1253-109.7244-2-12-			0	M	9	M39719	58770	-0.11	438	14970	52	140	15.0	153	5.5	3	0.9	22180	4.7	12500	53	0.4
30-45.1264-109.7189-2-11-			0	M	9	M39720	75920	-0.08	684	15110	62	124	10.4	87	4.7	4	0.9	15950	4.5	13060	59	0.2
30-45.1253-109.7133-2-11-			0	M	9	M39721	25880	-0.18	475	-1690	117	191	14.2	63	-2.5	8	2.6	8079	-1.9	-3457	201	0.4
30-45.1225-109.7156-2-12-			0	M	9	M39722	65130	-0.15	685	15930	122	329	13.3	86	5.0	4	1.2	29770	7.9	14100	65	0.4
30-45.1311-109.7008-2-11-			0	M	9	M39723	49500	-0.14	474	15500	59	-103	13.6	64	5.4	8	1.9	11030	3.7	7967	167	-0.2
30-45.1311-109.6967-2-12-			0	M	9	M39724	51960	-0.13	-216	38060	166	362	29.7	639	-2.2	5	1.6	58390	13.6	6928	76	0.7
30-45.1322-109.6972-2-12-			0	M	9	M39725	67920	-0.13	448	17460	90	171	11.9	165	4.7	4	1.1	26220	9.0	11300	71	0.6
30-45.1381-109.6928-2-11-			0	M	9	M39726	72640	-0.10	579	19140	94	170	13.8	100	3.8	6	1.9	24420	4.6	9274	130	0.5
30-45.1386-109.6906-2-15-			0	M	9	M39727	74210	-0.07	672	17160	49	146	9.9	86	2.6	2	0.7	16100	4.4	12910	31	-0.1
30-45.1436-109.6894-2-12-			0	M	9	M39728	67910	-0.11	324	36090	46	277	20.7	317	-1.8	2	0.7	29640	4.0	7687	37	0.2
30-45.1461-109.6872-2-12-			0	M	9	M39729	62890	-0.14	-218	28900	62	323	13.9	114	-2.2	3	0.8	27910	4.9	10600	45	-0.2
30-45.1492-109.6817-2-11-			0	M	9	M39730	67810	-0.09	737	21180	97	227	11.2	126	3.4	4	1.0	24580	8.8	17380	70	0.4
30-45.1589-109.6703-2-15-			0	M	9	M39731	64960	-0.07	539	25580	45	340	14.3	379	-1.1	2	0.6	18970	3.4	10130	33	-0.1
30-45.1597-109.6681-2-12-			0	M	9	M39732	65580	-0.09	495	23240	74	369	18.4	544	-1.5	2	0.9	23990	4.1	7643	39	-0.1
30-45.1706-109.6486-2-12-			0	M	9	M39733	65870	-0.15	-236	18410	90	223	16.8	183	3.6	3	1.1	32390	5.7	9169	55	-0.2
30-45.1761-109.6439-2-12-			0	M	9	M39734	63160	-0.12	387	21920	89	332	17.5	188	-1.9	3	1.1	29990	7.1	8468	56	0.2
30-45.1794-109.6428-2-12-			0	M	9	M39735	75400	-0.07	531	25600	40	311	11.3	89	1.2	2	0.6	16740	1.7	9578	22	-0.1
30-45.1850-109.6447-2-12-			0	M	9	M39736	64000	-0.08	318	19010	93	246	10.2	133	-1.2	2	0.9	19980	6.9	11330	56	0.2
30-45.1883-109.6453-2-12-			0	M	9	M39737	66240	-0.11	418	28620	99	231	13.2	192	-1.8	3	0.9	31620	12.6	7806	60	0.3
30-45.1908-109.6417-2-12-			0	M	9	M39738	73150	-0.10	605	24970	76	278	19.2	184	2.5	3	1.1	28570	2.7	9436	51	-0.1
30-45.1958-109.6350-2-12-			0	M	9	M39739	64800	-0.10	516	27990	78	285	10.7	96	2.3	3	1.1	21730	3.8	12030	100	0.2
30-45.2017-109.6339-2-12-			0	M	9	M39740	69830	-0.09	332	22030	70	265	11.5	97	-1.4	2	0.8	20890	6.2	9413	47	0.3
30-45.2003-109.6461-2-12-			0	M	9	M39742	66240	-0.09	281	23580	70	236	15.0	221	-1.6	2	0.9	26740	5.7	10340	39	0.3
30-45.2072-109.6406-2-15-			0	M	9	M39743	69850	-0.05	453	24130	48	140	10.3	141	-1.0	2	0.6	18040	6.3	10170	30	0.1
30-45.2131-109.6356-2-12-			0	M	9	M39744	69500	-0.07	440	23240	52	217	9.8	163	-1.3	2	0.8	18470	5.1	9176	38	0.3

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)												U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
30-45.8114-108.6728-2-12-						0-M33688	27050	242	7405	40	-2	5.2	4.5	516	-1	1	7.1	2168	75	2.9	105	0.338
30-45.8303-108.7219-2-12-						0-M33689	19540	170	7786	-21	-2	5.5	2.7	-224	-1	-1	5.3	1831	64	2.5	-32	0.417
30-45.8456-108.7142-2-12-						0-M33691	27000	290	7087	43	-2	6.5	3.9	-219	-1	-1	7.0	2960	77	3.9	79	0.401
30-45.8678-108.6983-2-12-						0-M33693	24380	270	10030	32	-2	4.8	2.7	332			4.8	2692	64	1.5	75	0.494
30-45.7992-108.7103-2-15-						0-M33695	20840	215	9369	36	-2	5.3	4.2	-218	-1	-1	7.3	2282	65	3.2	64	0.292
30-45.7994-108.7094-2-15-						0-M33696	30610	312	8128	44	-3	7.2	3.3	-257	-1	-1	6.8	2437	82	3.3	102	0.378
30-45.7614-108.7406-2-12-						0-M33697	27950	230	9394	23	-2	4.6	3.4	-195		-1	7.5	2159	59	2.8	23	0.357
30-45.2194-109.7694-2-12-						0-M33700	21160	501	25850	34	-2	8.9	2.8	-327	-1	-1	9.5	3571	92	-1.6	89	0.784
30-45.2233-109.7608-2-12-						0-M33701	43530	636	20890	-30	-4	11.5	5.7	-441	-1	-1	24.0	3374	89	6.3	-100	0.128
30-45.2408-109.7350-2-12-						0-M33702	52560	705	18120	-34	-4	14.2	3.7	-414	-1	-1	14.0	2641	103	-2.4	-56	0.406
30-45.2433-109.7336-2-12-						0-M33703	29590	1079	14190	-26	-3	11.2	6.3	-460	-1	-1	12.6	2861	86	-2.1	-60	0.598
30-45.2461-109.7278-2-12-						0-M33704	19870	471	25300	-19	-2	6.3	4.9	-330	-1	-1	17.1	2554	68	3.4	46	0.771
30-45.2481-109.7219-2-12-						0-M33705	19880	561	17090	-27	-4	7.0	11.6	-442	-1	-1	12.8	2219	59	-2.4	-72	4.659
30-45.0783-109.4064-2-15-						0-M33706	14550	576	21620	-24	-3	6.5	2.4	-379	-1	-1	16.6	2480	50	-1.7	-44	0.461
30-45.0775-109.4283-2-12-						0-M33707	16840	393	26580	38	-2	5.7	4.9	-295	-1	-1	17.6	2113	45	3.2	48	0.173
30-45.0792-109.4483-2-12-						0-M33708	20160	798	18670	33	-2	6.0	8.6	-375	1	-1	10.9	2983	74	2.2	-62	5.907
30-45.0811-109.4744-2-12-						0-M33709	10730	1903	13760	-33	-4	5.5	9.9	-718	-1	-1	11.8	-1685	91	-2.7	-54	6.782
30-45.0911-109.4794-2-12-						0-M33710	15080	427	23630	-27	-3	7.5	15.4	-379	-1	-1	25.1	3196	59	3.6	51	3.357
30-45.0903-109.4850-2-12-						0-M33711	12300	506	16360	-24	-3	5.1	7.4	-396	-1	-1	18.3	2075	58	-1.9	72	1.211
30-45.0817-109.4944-2-12-						0-M33712	16570	306	20650	-20	-3	5.8	4.5	-321	-1	-1	7.9	3071	60	-1.5	86	1.046
30-45.0822-109.5006-2-15-						0-M33713	14810	424	20040	46	-3	7.4	3.4	-330	-1	-1	10.7	3284	60	2.3	96	0.269
30-45.0953-109.5144-2-12-						0-M33714	20860	468	24460	-24	-3	5.1	2.2	-376	-1	-1	14.0	2653	65	-1.8	43	0.273
30-45.0833-109.5139-2-12-						0-M33715	16100	301	24130	-24	-3	12.3	9.8	-322	-1	-1	36.8	2411	49	3.9	90	0.106
30-45.0847-109.5122-2-12-						0-M33716	18430	303	27460	-11	-1	2.4	1.4	-296	-1		3.1	3381	68	-1.0	-29	2.358
30-45.0906-109.5256-2-11-						0-M33717	15270	202	12660	61	-6	20.3	8.3	-375	-1	-2	15.1	1954	47	-3.7	135	0.459
30-45.0936-109.5344-2-12-						0-M33718	21700	882	46240	-30	-4	10.2	4.2	886	-1	-1	12.2	4448	76	-2.7	-42	0.474
30-45.1253-109.7244-2-12-						0-M33719	19510	494	14810	-28	-4	10.0	6.4	-396	-1	-1	8.2	2558	89	-2.4	81	1.984
30-45.1264-109.7189-2-11-						0-M33720	20280	665	18020	46	-2	8.0	4.3	-333	-1	-1	10.6	3086	78	-1.4	53	0.526
30-45.1253-109.7133-2-11-						0-M33721	-4341	198	3194	-44	-5	5.9	21.0	-428	-2	-2	8.1	1109	26	-3.9	149	0.837
30-45.1225-109.7156-2-12-						0-M33722	19000	955	13210	-38	-5	13.3	4.6	-501	-2	-1	9.4	4946	112	-3.0	-58	0.550
30-45.1311-109.7008-2-11-						0-M33723	16530	652	7006	-32	-4	7.4	14.2	-456	-2	-1	8.8	3490	72	-2.8	-47	2.837
30-45.1311-109.6967-2-12-						0-M33724	64380	1530	12070	36	-4	26.2	11.3	-513	-1	-1	22.6	5768	187	5.1	-43	0.395
30-45.1322-109.6972-2-12-						0-M33725	23380	749	16590	-35	-4	10.9	6.5	-452	-1	-1	22.2	2916	106	-2.5	-110	0.295
30-45.1391-109.6928-2-11-						0-M33726	20490	764	10760	59	-3	12.6	13.1	-376	-1	-1	16.8	2630	95	4.4	147	1.588
30-45.1396-109.6906-2-15-						0-M33727	22270	511	17580	43	-2	7.5	3.3	-306	-1	-1	9.8	3176	78	-1.6	48	0.465
30-45.1436-109.6894-2-12-						0-M33728	58170	740	17590	-25	-4	17.5	3.9	-399	-1	-1	9.7	2451	93	3.6	99	0.324
30-45.1461-109.6872-2-12-						0-M33729	30890	707	19170	-37	-4	11.8	4.2	-471	-2	-1	14.8	2468	108	-2.9	-55	0.157
30-45.1492-109.6817-2-11-						0-M33730	23400	567	19470	52	-3	10.3	7.1	-334	-1	-1	18.4	3590	91	4.2	102	0.689
30-45.1589-109.6703-2-15-						0-M33731	59610	633	21260	-17	-2	8.9	2.9	-314	-1	-1	7.9	2141	64	-1.4	-38	0.211
30-45.1597-109.6681-2-12-						0-M33732	53750	591	21010	-21	-3	11.1	3.5	-364	-1	-1	10.7	2336	57	-1.8	103	0.158
30-45.1706-109.6486-2-12-						0-M33733	33320	892	15780	-41	-5	12.5	4.1	-511	-1	-2	16.8	3678	106	-3.0	-53	0.240
30-45.1761-109.6439-2-12-						0-M33734	33620	947	15380	-29	-4	11.9	5.6	-484	-1	-1	16.9	3585	105	-2.5	112	0.273
30-45.1794-109.6428-2-12-						0-M33735	28910	522	26300	-16	-2	7.7	2.5	-313	-1	-1	4.5	2857	72	-1.4	42	0.269
30-45.1850-109.6447-2-12-						0-M33736	20100	393	26120	-18	-2	7.2	7.0	-336	-1	-1	26.1	1724	67	4.3	-24	0.227
30-45.1883-109.6453-2-12-						0-M33737	35770	625	24370	-31	-3	12.5	5.6	-384	-1	-1	25.2	3353	111	6.1	-46	0.127
30-45.1908-109.6417-2-12-						0-M33738	42770	668	20440	-26	-3	13.2	4.1	-395	-1	-1	10.5	4057	105	-2.1	117	0.553
30-45.1958-109.6350-2-12-						0-M33739	24310	457	17280	33	-3	8.9	9.0	-333	2		8.0	2861	71	-2.1	140	6.527
30-45.2017-109.6339-2-12-						0-M33740	23430	423	28260	-22	-3	8.7	5.2	-356	-1		14.0	1943	61	-1.6	88	0.698
30-45.2003-109.6461-2-12-						0-M33742	26400	550	23930	-27	-3	9.9	2.9	-363	-1	-1	14.7	2559	87	-1.8	112	0.188
30-45.2072-109.6406-2-15-						0-M33743	24340	424	27120	-15	-2	7.6	3.0	-272			9.7	2039	70	2.5	53	0.139
30-45.2131-109.6356-2-12-						0-M33744	23080	368	25940	-20	-2	7.8	5.4	-296	-1		12.8	1945	52	-1.5	-68	1.129

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
30-45.2169-109.6272-2-12-						0-M39745-07/21/78-13-	15-	7.2-	-	-	7.0-	67-	13-2-7-4-6-4-4-1-2-4-4-5-3-	-1-	-	-	-	-	25.55
30-45.2211-109.6197-2-15-						0-M39746-07/21/78-13-	14-	-C-	-	-	-	-	18-2-9-4-6-	-1-	-3-1-3-5-3-	-1-	-	-	-	-	2.53
30-45.2269-109.6053-2-12-						0-M39747-07/21/78-13-	16-	6.9-C-	-	6.8-	55-	12-2-7-5-8-3-3-1-2-7-4-5-2-	-1-	-	-	-	7.76
30-45.2328-109.6017-2-12-						0-M39748-07/21/78-14-	15-	6.8-C-	-	6.8-	41-	13-2-9-5-6-3-4-1-1-2-4-5-2-	-1-	-	-	-	6.07
30-45.2472-109.5853-2-12-						0-M39749-07/21/78-14-	16-	8.1-C-	-	7.2-	19-	9-2-9-4-2-4-4-1-2-7-4-5-2-	-1-	-	-	-	3.34
30-45.2494-109.5831-2-12-						0-M39750-07/21/78-14-	17-	8.5-C-	-	7.1-	21-	11-2-9-3-9-3-3-1-2-2-4-5-2-	-1-	-	-	-	1.78
30-45.0264-109.8303-2-12-						0-M39751-08/29/78-13-	21-	14.7-C-	-	6.9-	54-	13-2-3-5-8-2-3-1-2-1-4-3-2-	-1-	-	-	-	101.70
30-45.0286-109.8194-2-15-						0-M39752-08/29/78-14-	20-	-C-	-	-	-	15-2-7-5-8-	-1-	-2-1-3-3-2-	-1-	-	-	-	-	30.77
30-45.0378-109.8103-2-12-						0-M39753-08/29/78-15-	19-	9.6-C-	-	7.6-	24-	9-2-3-4-6-3-3-1-2-1-3-3-2-	-1-	-	-	-	8.07
30-45.0342-109.8050-2-12-						0-M39754-08/29/78-15-	23-	12.1-C-	-	7.3-	8-	13-2-7-4-6-3-3-1-2-1-3-3-2-	-1-	-	-	-	6.23
30-45.0344-109.8022-2-12-						0-M39755-08/29/78-16-	14-	12.8-	-	7.1-	7-	17-2-7-4-6-3-3-1-2-1-3-3-3-	-1-	-	-	-	16.61
30-45.0408-109.8039-2-12-						0-M39756-08/29/78-17-	13-	7.8-C-	-	7.0-	19-	26-2-9-4-9-3-3-1-2-1-3-3-3-	-1-	-	-	-	8.17
30-45.0469-109.7961-2-12-						0-M39757-08/30/78- 9-	5-	7.5-C-	-	7.0-	15-	28-2-7-5-6-3-3-1-2-7-2-4-2-	-1-	-	-	-	12.69
30-45.0569-109.7889-2-11-						0-M39758-08/30/78- 9-	12-	6.9-C-	-	6.8-	16-	9-2-7-4-7-3-3-1-2-4-3-4-2-	-1-	-	-	-	14.30
30-45.0622-109.7856-2-12-						0-M39759-08/30/78-10-	11-	8.9-C-	-	7.3-	7-	15-2-7-3-7-4-3-1-2-1-4-4-1-	-1-	-	-	-	7.53
30-45.0672-109.7864-2-12-						0-M39760-08/30/78-11-	15-	9.7-	-	7.0-	8-	15-2-7-4-7-3-3-1-2-1-2-4-1-	-1-	-	-	-	7.34
30-45.0714-109.7875-2-15-						0-M39761-08/30/78-11-	17-	-C-	-	-	-	28-2-3-5-8-	-1-	-2-4-3-4-1-	-1-	-	-	-	-	6.07
30-45.0769-109.7931-2-11-						0-M39762-08/30/78-12-	16-	10.4-C-	-	6.2-	13-	13-2-7-4-6-2-3-1-2-4-4-4-2-	-1-	-	-	-	11.52
30-45.0806-109.7972-2-12-						0-M39763-08/30/78-13-	25-	12.2-	-	6.8-	16-	15-2-3-3-3-4-3-1-2-5-4-4-2-	-1-	-	-	-	4.78
30-45.0992-109.7753-2-12-						0-M39764-08/30/78-14-	14-	9.0-	-	7.0-	8-	15-2-3-3-3-4-3-1-2-4-4-4-2-	-1-	-	-	-	4.24
30-45.1069-109.7567-2-12-						0-M39765-08/31/78- 8-	11-	6.9-	-	7.5-	12-	16-2-7-4-6-3-3-1-2-1-3-4-2-	-1-	-	-	-	7.30
30-45.1144-109.7544-2-12-						0-M39766-08/31/78- 9-	16-	8.5-	-	7.1-	19-	15-2-7-4-6-4-3-1-2-3-3-4-2-	-1-	-	-	-	8.75
30-45.1157-109.7475-2-12-						0-M39767-08/31/78-10-	14-	6.7-	-	6.5-	17-	10-2-7-4-6-2-3-1-2-1-3-4-2-	-1-	-	-	-	8.75
30-45.5942-109.7550-2-12-						0-M39768-09/27/78-10-	14-	8.9-	-	7.8-	243-	9-1-7-5-7-3-3-1-2-4-3-3-2-	-1-	-	-	-	2.15
30-45.5961-109.7764-2-11-						0-M39769-09/27/78-10-	16-	7.9-	-	6.8-	200-	10-2-7-5-6-3-3-1-2-4-3-3-2-	-1-	-	-	-	1.98
30-45.5947-109.7764-2-15-						0-M39770-09/27/78-10-	16-	-	-	-	-	-	16-2-7-4-6-	-1-	-2-4-3-3-2-	-1-	-	-	-	-	1.71
30-45.5956-109.7775-2-15-						0-M39771-09/27/78-10-	16-	-	-	-	-	-	11-2-7-4-6-	-1-	-2-4-3-3-2-	-1-	-	-	-	-	1.47
30-45.6192-109.7744-2-12-						0-M39772-09/27/78-11-	19-	10.2-	-	7.2-	192-	10-2-7-3-7-3-3-1-2-2-2-3-2-	-1-	-	-	-	1.42
30-45.6328-109.7628-2-15-						0-M39773-09/27/78-11-	21-	-	-	-	-	-	12-2-7-3-7-	-1-	-2-1-3-3-2-	-1-	-	-	-	-	1.36
30-45.6119-109.8275-2-12-						0-M39774-09/27/78-12-	24-	10.5-	-	7.4-	215-	15-2-7-4-7-3-3-1-2-3-3-3-2-	-1-	-	-	-	1.22
30-45.6111-109.8269-2-12-						0-M39775-09/27/78-12-	24-	8.7-	-	7.5-	210-	15-2-7-3-7-4-3-1-2-3-3-3-2-	-1-	-	-	-	2.16
30-45.6225-109.8606-2-12-						0-M39776-09/27/78-13-	22-	9.7-	-	7.5-	190-	10-2-6-4-6-4-3-1-2-1-3-3-2-	-1-	-	-	-	0.99
30-45.6214-109.8586-2-12-						0-M39777-09/27/78-13-	23-	10.7-	-	7.8-	325-	8-2-7-4-6-3-3-1-2-1-3-3-2-	-1-	-	-	-	1.16
30-45.5458-109.8233-2-15-						0-M39778-09/28/78-11-	16-	-C-	-	-	-	8-2-9-4-6-	-1-	-2-4-3-3-2-	-1-	-	-	-	-	1.44
30-45.5464-109.8239-2-12-						0-M39779-09/28/78-11-	17-	8.7-C-	-	7.4-	147-	9-2-9-4-6-4-3-1-2-3-3-3-2-	-1-	-	-	-	1.77
30-45.5461-109.8222-2-11-						0-M39780-09/28/78-11-	17-	7.9-C-	-	7.7-	190-	12-2-9-4-6-3-3-1-2-2-2-3-3-	-1-	-	-	-	1.80
30-45.5478-109.8228-2-15-						0-M39781-09/28/78-11-	17-	-	-	-	-	-	12-2-7-4-7-	-1-	-2-2-3-3-3-	-1-	-	-	-	-	1.67
30-45.5508-109.7700-2-15-						0-M39782-09/28/78-12-	17-	-	-	-	-	-	9-2-6-4-6-	-1-	-2-4-3-3-3-	-1-	-	-	-	-	1.44
30-45.7381-109.8586-2-15-						0-M39783-10/03/78-11-	11-	-	-	-	-	-	4-1-7-5-7-	-1-	-2-3-3-3-2-	-1-	-	-	-	-	1.73
30-45.7269-109.8714-2-15-						0-M39784-10/03/78-11-	18-	-	-	-	-	-	11-1-7-5-7-	-1-	-2-3-3-3-2-	-1-	-	-	-	-	2.00
30-45.6714-109.8800-2-11-						0-M39785-10/03/78-12-	15-	8.9-	-	6.9-	210-	9-3-7-4-7-3-3-1-2-4-3-3-2-	-1-	-	-	-	1.48
30-45.6719-109.8811-2-12-						0-M39786-10/03/78-12-	16-	6.3-	-	7.4-	195-	12-3-7-3-7-4-3-1-2-3-3-3-2-	-1-	-	-	-	1.36
30-45.6719-109.8792-2-15-						0-M39787-10/03/78-12-	18-	-	-	-	-	-	9-3-7-4-7-	-1-	-2-1-2-3-2-	-1-	-	-	-	-	1.15
30-45.6739-109.8814-2-15-						0-M39788-10/03/78-12-	21-	-	-	-	-	-	15-3-7-3-7-	-1-	-2-4-3-3-2-	-1-	-	-	-	-	1.18
30-45.6753-109.8800-2-11-						0-M39789-10/03/78-12-	20-	7.9-	-	7.2-	238-	6-1-7-4-7-3-3-1-2-4-4-3-2-	-1-	-	-	-	1.33
30-45.6844-109.8814-2-15-						0-M39790-10/03/78-13-	19-	-C-	-	-	-	11-3-9-4-7-	-1-	-2-4-2-3-2-	-1-	-	-	-	-	1.12
30-45.6931-109.9356-2-15-						0-M39791-10/03/78-15-	22-	-	-	-	-	-	12-2-7-4-7-	-1-	-2-1-3-3-2-	-1-	-	-	-	-	1.26
30-45.7014-109.9325-2-15-						0-M39792-10/03/78-15-	23-	-C-	-	-	-	15-2-9-4-7-	-1-	-2-1-3-3-2-	-1-	-	-	-	-	1.42
30-45.7033-109.9319-2-15-						0-M39793-10/03/78-15-	23-	-C-	-	-	-	6-2-9-4-7-	-1-	-2-1-3-3-2-	-1-	-	-	-	-	1.66
30-45.7067-109.9292-2-11-						0-M39794-10/03/78-15-	24-	12.7-C-	-	7.5-	220-	12-2-9-5-8-3-3-1-2-4-3-3-2-	-1-	-	-	-	1.62
30-45.7083-109.9286-2-12-						0-M39795-10/03/78-16-	21-	10.4-C-	-	7.7-	225-	8-2-9-4-6-3-3-1-2-3-4-3-2-	-1-	-	-	-	1.14

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

(2)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
30-45.2159-109.6272-2-12-						0-M39745	-5	-5	-5	35	-20	51	7	-10	-15	1	12
30-45.2211-109.6197-2-15-						0-M39746	-5	-5	-5	40	-20	53	10	-10	-15	2	16
30-45.2269-109.6053-2-12-						0-M39747	-5	-5	-5	28	-20	38	-5	-10	-15	1	17
30-45.2328-109.6017-2-12-						0-M39748	-5	-5	-5	36	-20	21	6	-10	-15	2	13
30-45.2472-109.5853-2-12-						0-M39749	-5	-5	-5	25	-20	50	6	-10	-15	1	13
30-45.2494-109.5831-2-12-						0-M39750	-5	6	-5	25	-20	30	10	-10	-15	1	13
30-45.0264-109.8303-2-12-						0-M39751	-5	-5	-5	50	-20	24	13	-10	-15	2	24
30-45.0286-109.8194-2-15-						0-M39752	-5	-5	-5	38	-20	20	23	-10	-15	2	31
30-45.0378-109.8103-2-12-						0-M39753	-5	-5	-5	25	-20	18	19	-10	-15	2	16
30-45.0342-109.8050-2-12-						0-M39754	-5	-5	-5	26	-20	38	24	-10	-15	2	18
30-45.0344-109.8022-2-12-						0-M39755	-5	-5	-5	38	-20	27	28	-10	-15	3	22
30-45.0408-109.8039-2-12-						0-M39756	-5	-5	-5	23	-20	17	16	-10	-15	2	26
30-45.0469-109.7961-2-12-						0-M39757	-5	-5	-5	31	-20	27	26	-10	-15	2	48
30-45.0569-109.7889-2-11-						0-M39758	-5	-5	-5	65	-20	129	20	-10	-15	2	36
30-45.0622-109.7856-2-12-						0-M39759	-5	-5	-5	47	-20	17	37	-10	-15	1	22
30-45.0672-109.7864-2-12-						0-M39760	-5	5	-5	30	-20	26	37	-10	-15	2	11
30-45.0714-109.7875-2-15-						0-M39761	-5	-5	-5	41	-20	21	28	-10	-15	2	27
30-45.0769-109.7931-2-11-						0-M39762	-5	-5	-5	36	-20	21	31	-10	-15	2	39
30-45.0806-109.7972-2-12-						0-M39763	-5	-5	-5	27	-20	43	12	-10	-15	2	32
30-45.0992-109.7753-2-12-						0-M39764	-5	-5	-5	31	-20	15	29	-10	-15	2	34
30-45.1069-109.7567-2-12-						0-M39765	-5	-5	-5	23	-20	17	26	-10	-15	2	32
30-45.1144-109.7544-2-12-						0-M39766	-5	-5	-5	23	-20	24	26	-10	-15	2	31
30-45.1167-109.7475-2-12-						0-M39767	-5	-5	-5	30	-20	17	16	-10	-15	2	46
30-45.5942-109.7550-2-12-						0-M39768	-5	-5	-5	36	-20	-15	-5	-10	-15	1	34
30-45.5951-109.7764-2-11-						0-M39769	-5	-5	-5	34	-20	-15	-5	10	-15	1	16
30-45.5947-109.7764-2-15-						0-M39770	-5	-5	6	47	-20	-15	7	-10	20	1	23
30-45.5956-109.7775-2-15-						0-M39771	-5	-5	-5	33	-20	-15	11	-10	-15	1	12
30-45.6192-109.7744-2-12-						0-M39772	-5	-5	6	25	-20	22	-5	-10	-15	1	24
30-45.6329-109.7628-2-15-						0-M39773	-5	-5	-5	29	-20	-15	5	-10	-15	1	30
30-45.6119-109.8275-2-12-						0-M39774	-5	-5	-5	29	-20	49	12	-10	-15	1	29
30-45.6111-109.8269-2-12-						0-M39775	-5	5	-5	31	-20	-15	-5	-10	-15	1	15
30-45.6225-109.8606-2-12-						0-M39776	-5	-5	-5	61	-20	20	-5	-10	15	-1	22
30-45.6214-109.8586-2-12-						0-M39777	-5	-5	-5	34	-20	-15	7	-10	-15	1	41
30-45.5458-109.8233-2-15-						0-M39778	-5	5	-5	44	-20	-15	-5	-10	-15	1	29
30-45.5464-109.8239-2-12-						0-M39779	-5	-5	6	25	-20	-15	-5	-10	-15	-1	15
30-45.5461-109.8222-2-11-						0-M39780	-5	7	-5	21	-20	-15	-5	-10	-15	1	34
30-45.5478-109.8228-2-15-						0-M39781	-5	-5	-5	31	-20	-15	8	-10	-15	1	30
30-45.5509-109.7700-2-15-						0-M39782	-5	-5	-5	43	-20	-15	-5	-10	-15	2	28
30-45.7381-109.8586-2-15-						0-M39783	-5	-5	-5	46	-20	85	9	-10	-15	2	29
30-45.7269-109.8714-2-15-						0-M39784	-5	-5	-5	30	-20	19	8	-10	-15	2	26
30-45.6714-109.8800-2-11-						0-M39785	-5	-5	-5	33	-20	16	-5	-10	-15	1	24
30-45.6719-109.8811-2-12-						0-M39786	-5	-5	-5	43	-20	-15	-5	-10	-15	1	13
30-45.6719-109.8792-2-15-						0-M39787	-5	-5	-5	45	-20	-15	-5	-10	18	-1	9
30-45.6739-109.8814-2-15-						0-M39788	-5	-5	-5	36	-20	-15	-5	-10	-15	1	21
30-45.6753-109.8800-2-11-						0-M39789	-5	-5	-5	32	-20	-15	-5	-10	-15	1	23
30-45.6844-109.8814-2-15-						0-M39790	-5	-5	-5	41	-20	-15	-5	-10	-15	1	14
30-45.6931-109.9356-2-15-						0-M39791	-5	6	-5	24	-20	-15	10	-10	-15	1	30
30-45.7014-109.9375-2-15-						0-M39792	-5	-5	-5	20	-20	-15	-5	-10	20	1	4
30-45.7033-109.9319-2-15-						0-M39793	-5	-5	-5	32	-20	25	-5	-10	-15	2	12
30-45.7067-109.9292-2-11-						0-M39794	-5	-5	-5	43	26	-15	-5	-10	-15	-1	14
30-45.7083-109.9286-2-12-						0-M39795	8	-5	-5	40	-20	38	-5	-10	-15	-1	13

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
30-45.2169-	109.6272-2-12-		0-			M39745	60690	-0.11	468	23950	78	589	14.8	172	-2.0	3	1.5	24080	7.7	9685	87	0.3
30-45.2211-	109.6197-2-15-		0-			M39746	64620	-0.10	450	18930	88	217	13.6	157	-1.8	2	0.7	27160	8.3	9039	59	0.2
30-45.2269-	109.6053-2-12-		0-			M39747	72810	-0.07	428	22070	59	209	10.5	118	-1.2	2	0.7	17430	5.8	10320	35	0.2
30-45.2328-	109.6017-2-12-		0-			M39748	68090	-0.08	377	23770	54	153	8.4	84	-1.4	3	1.1	17110	8.6	11850	64	0.3
30-45.2472-	109.5853-2-12-		0-			M39749	63510	-0.09	374	21610	98	-122	12.1	194	-1.6	2	1.1	27000	21.4	9988	49	0.3
30-45.2494-	109.5831-2-12-		0-			M39750	67170	-0.09	440	21340	54	-130	10.3	115	-1.6	-1	0.8	19220	6.9	10260	28	0.4
30-45.0264-	109.8303-2-12-		0-			M39751	58500	-0.13	743	10690	78	-107	11.9	79	5.8	5	1.3	14470	3.9	9954	97	0.5
30-45.0286-	109.8194-2-15-		0-			M39752	67070	0.15	771	14060	96	160	14.0	102	8.6	11	3.4	21650	4.5	12950	230	0.5
30-45.0378-	109.8103-2-12-		0-			M39753	68310	-0.10	827	18260	59	-112	11.1	73	3.3	3	1.3	17730	10.5	13400	59	0.3
30-45.0342-	109.8050-2-12-		0-			M39754	62060	-0.15	583	19580	88	-129	12.9	91	4.3	4	1.4	22300	9.6	12110	65	0.3
30-45.0344-	109.8022-2-12-		0-			M39755	76590	-0.10	851	14350	102	-101	12.7	84	4.1	6	1.5	22220	9.7	16600	94	0.4
30-45.0408-	109.8039-2-12-		0-			M39756	62970	-0.10	835	15640	68	-106	12.2	85	5.6	4	1.1	19660	6.2	11330	55	0.3
30-45.0469-	109.7961-2-12-		0-			M39757	49070	-0.15	491	13300	87	338	17.4	93	3.5	5	1.6	23630	7.3	6517	69	0.4
30-45.0549-	109.7889-2-11-		0-			M39758	65150	-0.14	541	14350	109	-130	20.2	120	4.1	3	1.5	30210	5.4	13790	80	0.5
30-45.0622-	109.7856-2-12-		0-			M39759	58810	-0.12	600	13860	73	211	12.2	70	3.5	5	1.1	18930	6.4	14870	65	0.3
30-45.0672-	109.7864-2-12-		0-			M39760	57540	-0.12	595	19700	75	-127	14.6	101	3.6	5	1.5	28740	8.9	17430	43	0.4
30-45.0714-	109.7875-2-15-		0-			M39761	65410	-0.12	680	18160	96	190	15.4	87	5.6	4	1.5	27490	7.2	10810	61	0.4
30-45.0769-	109.7931-2-11-		0-			M39762	64550	-0.15	496	10940	76	-112	15.1	52	6.6	2	1.1	22140	3.7	12410	45	-0.3
30-45.0836-	109.7972-2-12-		0-			M39763	71050	-0.10	647	14860	63	203	12.7	155	7.8	4	1.0	21970	6.0	14140	46	0.3
30-45.0992-	109.7753-2-12-		0-			M39764	74610	-0.10	726	9766	78	174	11.0	82	6.8	4	1.0	23650	6.4	18110	54	-0.1
30-45.1069-	109.7567-2-12-		0-			M39765	66340	-0.13	554	16160	74	168	12.6	84	4.8	3	1.4	28300	7.1	12690	52	0.5
30-45.1144-	109.7544-2-12-		0-			M39766	64430	-0.14	589	24900	91	350	12.4	83	3.8	4	1.7	28990	14.4	11660	83	0.5
30-45.1167-	109.7475-2-12-		0-			M39767	67900	-0.11	695	17210	94	258	12.5	94	4.7	7	1.5	23740	6.7	10220	91	0.5
30-45.5942-	109.7550-2-12-		0-			M39768	77540	-0.09	817	28120	58	-116	14.4	54	2.0	4	1.3	34970	3.9	12650	41	0.3
30-45.5961-	109.7764-2-11-		0-			M39769	80470	-0.10	1008	38640	93	-135	16.9	23	-1.8	3	1.2	45000	3.9	10790	36	0.4
30-45.5947-	109.7764-2-15-		0-			M39770	71400	-0.11	815	36730	82	-140	16.1	54	-1.9	3	1.2	49810	4.3	11680	40	-0.2
30-45.5956-	109.7775-2-15-		0-			M39771	74150	-0.09	829	38090	48	-133	18.9	28	-1.5	3	1.2	66030	4.4	15860	40	0.3
30-45.6192-	109.7744-2-12-		0-			M39772	74870	-0.08	818	43540	67	-143	16.4	18	-1.5	3	1.3	56830	3.0	13860	47	0.2
30-45.6328-	109.7628-2-15-		0-			M39773	83790	-0.09	799	26340	72	-119	13.1	28	-1.4	3	1.2	48810	3.9	12330	40	0.3
30-45.6119-	109.8275-2-12-		0-			M39774	76810	-0.13	561	42270	66	-138	16.4	55	-2.2	3	1.0	45900	3.5	11520	36	-0.2
30-45.6111-	109.8269-2-12-		0-			M39775	79640	-0.08	881	32100	54	-111	13.1	63	2.0	3	1.0	33030	5.2	13880	36	0.3
30-45.6225-	109.8606-2-12-		0-			M39776	78490	-0.09	546	51430	49	-108	21.0	20	1.3	2	1.0	63910	2.1	10590	27	0.2
30-45.6214-	109.8586-2-12-		0-			M39777	76440	-0.11	686	28690	54	-121	15.3	68	6.0	2	1.2	39440	4.2	17620	32	0.3
30-45.5458-	109.8233-2-15-		0-			M39778	75040	-0.11	640	40590	68	-130	16.8	17	-2.0	3	1.0	57020	3.1	-5141	37	0.2
30-45.5464-	109.8239-2-12-		0-			M39779	76670	-0.09	990	44710	56	-121	17.3	22	-1.5	3	1.1	54460	3.6	10500	38	0.3
30-45.5461-	109.8222-2-11-		0-			M39780	81700	-0.09	798	44540	60	-116	14.4	20	-1.5	3	1.1	38530	3.0	15660	32	0.3
30-45.5478-	109.8228-2-15-		0-			M39781	75940	-0.09	910	32030	60	-125	14.7	33	1.6	3	1.3	44580	4.6	10910	36	0.4
30-45.5508-	109.7700-2-15-		0-			M39782	72910	-0.12	904	29620	71	-138	14.6	48	-2.0	-1	1.2	43590	4.2	20470	35	0.3
30-45.7381-	109.8586-2-15-		0-			M39783	78450	-0.07	1113	19530	52	-98	14.0	222	3.2	3	1.0	26550	4.1	17390	34	0.2
30-45.7269-	109.8714-2-15-		0-			M39784	89430	-0.09	948	18560	61	-92	13.7	86	3.4	4	1.1	29220	3.6	18140	43	0.3
30-45.6714-	109.8800-2-11-		0-			M39785	79800	-0.09	862	41980	49	-114	14.5	34	-1.6	3	1.1	37390	3.4	12900	25	0.2
30-45.6719-	109.8811-2-12-		0-			M39786	68010	-0.12	624	40990	76	-128	16.2	42	-2.1	3	1.1	62960	4.1	10520	34	-0.2
30-45.6719-	109.8792-2-15-		0-			M39787	71430	-0.08	694	45620	63	-123	19.3	23	-1.4	3	1.1	73890	3.2	7774	34	0.3
30-45.6739-	109.8814-2-15-		0-			M39788	79480	-0.09	790	43960	66	-109	15.7	30	-1.6	3	1.3	45720	3.9	12240	29	0.3
30-45.6753-	109.8800-2-11-		0-			M39789	74160	-0.11	589	40840	60	-125	12.5	29	-1.9	2	1.0	38180	3.3	10990	29	0.4
30-45.6944-	109.8814-2-15-		0-			M39790	84560	-0.07	848	51010	55	-111	15.1	14	-1.3	3	1.0	37230	3.0	14780	38	0.2
30-45.6931-	109.9356-2-15-		0-			M39791	84890	-0.15	764	43520	62	-108	11.9	16	1.8	3	1.0	33940	3.3	17040	-25	0.3
30-45.7014-	109.9325-2-15-		0-			M39792	71050	-0.08	733	37750	90	-128	12.4	18	-1.4	4	1.2	35170	3.6	10070	40	0.3
30-45.7033-	109.9319-2-15-		0-			M39793	72480	-0.11	625	37050	85	-120	12.6	32	-1.9	3	1.1	49590	4.4	14570	39	0.3
30-45.7067-	109.9292-2-11-		0-			M39794	70200	-0.10	623	44400	78	-117	17.0	203	2.8	3	1.4	42680	5.7	12620	50	0.4
30-45.7083-	109.9286-2-12-		0-			M39795	69110	-0.07	633	45530	46	-107	12.5	39	-1.2	3	0.8	41290	3.5	9575	29	0.2

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAB. SAMPLE LOCATION NUMBER	Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
30-45.2169-109.6272-2-12-			0-			M33745	29660	483	17930	-31	-4	9.8	9.3	-410	-1		19.0	2496	68	-2.5	-61	1.345
30-45.2211-109.6197-2-15-			0-			M33746	28950	634	22690	-29	-3	9.3	3.6	-407	-1		23.1	2083	84	4.2	-47	0.110
30-45.2269-109.6053-2-12-			0-			M33747	26280	404	27280	-20	-2	7.9	3.0	-326	-1		11.8	3004	67	2.3	75	0.658
30-45.2328-109.6017-2-12-			0-			M33748	17050	335	25290	-22	-2	7.7	6.1	-300	-1	-1	13.7	2370	50	3.2	80	0.443
30-45.2472-109.5853-2-12-			0-			M33749	23230	391	26360	-26	-3	9.7	6.3	-365	-1		30.7	2765	76	4.3	-38	0.109
30-45.2494-109.5831-2-12-			0-			M33750	20870	351	29560	-27	-3	8.4	2.0	-360	-1		16.3	1841	62	-1.8	-41	0.109
30-45.0264-109.8303-2-12-			0-			M33751	11340	237	9942	-32	-4	8.3	14.5	370	3	-1	9.1	2952	73	-2.9	82	11.176
30-45.0286-109.8194-2-15-			0-			M33752	15470	802	12130	-32	-4	10.4	26.0	-423	-2	2	10.3	2916	80	5.6	105	2.987
30-45.0378-109.8103-2-12-			0-			M33753	11620	400	17960	-27	-3	9.4	6.3	-366	-1	-1	10.4	3647	70	3.8	151	0.776
30-45.0342-109.8050-2-12-			0-			M33754	21470	520	15300	-41	-5	11.4	4.5	-453	-2	-1	13.6	4715	86	-3.2	166	0.458
30-45.0344-109.8022-2-12-			0-			M33755	19920	659	12810	59	-3	10.9	7.6	-396	-1	-1	17.7	5081	106	3.0	89	0.938
30-45.0408-109.8039-2-12-			0-			M33756	15640	595	12650	47	-3	8.4	5.4	-379	-2	-1	10.9	4381	76	-2.2	-68	0.750
30-45.0469-109.7961-2-12-			0-			M33757	13640	930	9481	-42	-5	9.8	11.0	-574	-2	-1	12.2	3167	65	-3.2	-119	1.040
30-45.0569-109.7889-2-11-			0-			M33758	25730	925	14030	-41	-4	10.3	5.6	-512	-2		17.2	4632	92	-2.9	-58	0.831
30-45.0622-109.7856-2-12-			0-			M33759	16760	713	11540	-30	-4	8.6	5.9	-465	-1	-1	8.3	4429	76	-2.6	117	0.907
30-45.0672-109.7864-2-12-			0-			M33760	19460	1339	13410	-33	-4	12.9	8.2	-538	-2		8.4	4392	86	-2.8	158	0.874
30-45.0714-109.7875-2-15-			0-			M33761	23640	664	12310	-33	-4	11.1	9.4	-449	-1	-1	12.1	5019	95	3.3	114	0.502
30-45.0769-109.7931-2-11-			0-			M33762	19780	337	9522	-45	-5	9.0	3.5	-409	-2	-1	7.8	4012	95	-3.3	81	1.477
30-45.0806-109.7972-2-12-			0-			M33763	28590	547	12630	46	-3	10.2	4.7	-365	-1	-1	12.7	4791	97	3.7	88	0.376
30-45.0992-109.7753-2-12-			0-			M33764	18000	542	13760	65	-3	9.3	5.0	-352	-1	-1	16.3	4544	79	-2.0	110	0.260
30-45.1069-109.7567-2-12-			0-			M33765	21290	524	12650	57	-4	11.5	6.1	-418	-1	-1	9.9	3679	86	3.1	112	0.737
30-45.1144-109.7544-2-12-			0-			M33766	22710	852	16150	-38	-5	15.9	6.2	-475	-1	-1	8.6	4575	109	-3.0	110	1.017
30-45.1157-109.7475-2-12-			0-			M33767	26090	579	11810	66	-3	12.0	8.8	-374	-1	-2	11.9	6304	112	3.2	130	0.735
30-45.5942-109.7550-2-12-			0-			M33768	20120	870	18430	-27	-3	9.2	4.3	-407	-1	-1	6.4	4798	117	-2.3	121	0.336
30-45.5961-109.7764-2-11-			0-			M33769	23540	1044	18980	-30	-3	10.6	4.8	716	-1	-1	6.1	4909	137	-2.0	59	0.325
30-45.5947-109.7764-2-15-			0-			M33770	29100	1150	19340	-36	-4	10.1	3.7	-500	-1	-1	4.3	3768	164	-2.3	95	0.398
30-45.5956-109.7775-2-15-			0-			M33771	23440	1580	18450	49	-3	10.1	3.7	-503	-1	-1	5.0	7234	250	3.5	198	0.294
30-45.6132-109.7744-2-12-			0-			M33772	19260	2167	17170	-25	-3	9.5	4.4	-553	-1	-1	5.4	5835	182	-1.8	129	0.263
30-45.6328-109.7628-2-15-			0-			M33773	15270	954	19840	26	-2	7.5	5.1	734	-1		6.3	5103	140	3.2	127	0.216
30-45.6119-109.8275-2-12-			0-			M33774	30400	1004	17120	-40	-4	11.5	3.2	-508	-2	-1	3.7	3862	180	-2.7	127	0.330
30-45.6111-109.8269-2-12-			0-			M33775	22830	785	19890	-23	-2	8.7	3.5	949	-1	-1	5.4	4570	145	2.0	105	0.400
30-45.6225-109.8606-2-12-			0-			M33776	34300	1351	13750	-27	-3	12.1	3.5	703	-1	-1	4.1	5192	255	1.9	126	0.241
30-45.6214-109.8586-2-12-			0-			M33777	23670	745	15590	41	-3	10.3	2.9	518	-1	-1	4.2	3836	135	-2.2	-105	0.276
30-45.5458-109.8233-2-15-			0-			M33778	24170	1335	14300	-37	-4	10.1	3.8	-514	-1	-1	4.9	5190	198	-2.4	-47	0.294
30-45.5464-109.8239-2-12-			0-			M33779	25140	1341	16870	-26	-3	9.8	4.2	849	-1	-1	5.8	6394	226	-1.9	105	0.305
30-45.5461-109.8222-2-11-			0-			M33780	24430	1161	15690	-26	-3	8.7	3.7	-440	-1		5.3	4015	133	2.2	162	0.340
30-45.5478-109.8228-2-15-			0-			M33781	24720	1161	17540	-25	-3	9.7	5.0	-476	-1	-1	6.2	3732	124	2.1	125	0.269
30-45.5508-109.7700-2-15-			0-			M33782	21600	1105	18950	-36	-4	10.5	3.1	-507	-2	-1	5.6	3754	136	-2.5	-46	0.257
30-45.7381-109.8586-2-15-			0-			M33783	22340	764	16660	46	-2	11.0	3.4	552	-1		7.5	3669	119	2.3	-78	0.231
30-45.7269-109.8714-2-15-			0-			M33784	16280	533	13860	44	-3	10.7	4.5	642	-1	-1	6.3	4083	120	3.0	88	0.317
30-45.6714-109.8800-2-11-			0-			M33785	23410	749	16820	-26	-3	10.0	3.9	725	-1	-1	4.5	3349	132	3.3	-53	0.329
30-45.6719-109.8811-2-12-			0-			M33786	27980	1179	14610	-39	-4	11.1	2.2	-494	-1	-1	3.8	5300	244	-2.5	-54	0.358
30-45.6719-109.8792-2-15-			0-			M33787	27890	1580	15990	-25	-3	10.2	4.6	757	-1	-1	4.5	6888	289	-1.6	155	0.256
30-45.6739-109.8814-2-15-			0-			M33788	22370	1174	16130	-25	-3	12.0	4.2	605	-1	-1	4.8	4793	185	-1.7	157	0.246
30-45.6753-109.8800-2-11-			0-			M33789	27560	852	17830	-34	-3	9.7	2.7	-447	-1	-1	4.2	4074	139	-2.1	-54	0.317
30-45.6944-109.8814-2-15-			0-			M33790	29780	1125	17440	-21	-2	9.5	3.7	891	-1	-1	4.7	3514	139	2.0	87	0.238
30-45.6931-109.9356-2-15-			0-			M33791	22150	1094	17750	-24	-5	7.0	3.9	538	-1	-1	5.0	3108	100	3.1	128	0.210
30-45.7014-109.9325-2-15-			0-			M33792	16720	1400	15640	29	-2	6.9	4.6	795	-1	-1	6.5	4690	150	-1.9	93	0.218
30-45.7033-109.9319-2-15-			0-			M33793	14600	996	16100	-34	-3	9.0	3.4	-436	-1	-1	4.9	3625	126	2.7	87	0.339
30-45.7067-109.9292-2-11-			0-			M33794	33620	1334	15270	48	-3	12.9	5.1	692	-1	-1	8.4	6560	238	-1.8	118	0.193
30-45.7083-109.9284-2-12-			0-			M33795	31540	1372	15240	-20	-2	8.7	2.9	868	-1		3.2	5523	209	2.1	84	0.356

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples ①

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																											U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
30-45.7109-109.9256-2-12-						0-M39796-10/03/78-16-	21-	9.9-	-	-			7.7-	243-	10-2-7-5-8-3-3-1-2-4-3-3-2-	-1-	-	-	-	-													1.92
30-45.7133-109.9250-2-15-						0-M39797-10/03/78-16-	20-	-	-	-			-	-	10-2-7-4-6-	-1-	-2-	4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.90
30-45.7183-109.9133-2-12-						0-M39798-10/03/78-16-	20-	11.9-	-	-			7.5-	232-	15-2-6-4-6-3-3-1-2-4-4-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.20
30-45.7206-109.9067-2-11-						0-M39799-10/03/78-17-	19-	12.4-	-	-			7.4-	230-	6-2-6-5-8-2-3-1-1-4-4-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.22
30-45.8358-108.5342-2-12-						0-M39804-07/12/78-16-	29-	25.0-	C-	-			8.8-	34500-	20-1-6-6-8-2-4-1-1-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.45
30-45.8861-108.5331-2-12-						0-M39805-07/12/78-16-	30-	31.2-	C-	-			8.6-	42500-	8-1-6-6-6-1-4-1-1-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.69
30-45.7406-109.9283-2-11-						0-M39806-08/12/78-13-	30-	20.0-	C-	-			8.9-	410-	11-1-6-4-6-2-3-3-1-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.29
30-45.7333-109.8575-2-11-						0-M39807-08/12/78-15-	30-	13.0-	C-	-			9.9-	220-	16-1-6-4-6-3-3-1-1-4-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.37
30-45.7342-109.8561-2-11-						0-M39808-08/12/78-15-	30-	14.0-	C-	-			8.7-	230-	9-1-6-4-7-3-3-1-1-4-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.32
30-45.7128-109.8669-2-11-						0-M39809-08/12/78-15-	27-	14.0-	C-	-			9.0-	210-	6-1-7-4-6-2-3-1-3-3-3-4-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.08
30-45.7158-109.8672-2-15-						0-M39810-08/12/78-	-	29-	C-	-			-	-	11-1-7-4-7-	-1-	-1-	2-3-4-4-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.06
30-45.7200-109.8678-2-12-						0-M39811-08/12/78-17-	29-	11.5-	C-	-			8.6-	220-	11-1-7-7-9-3-3-1-3-3-3-4-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.26
30-45.4108-109.7594-2-11-						0-M39812-08/13/78-14-	22-	2.0-	C-	-10.0-				250-	11-1-6-	-	-4-	3-1-1-3-4-4-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.72
30-45.9953-108.4669-2-15-						0-M39813-08/13/78-11-	23-		C-	-			-	-	11-1-6-7-6-	-	-	-	-4-	2-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.92
30-45.3161-109.9375-2-11-						0-M39814-09/01/78-12-	26-	7.5-	C-	-			5.9-	36-	11-2-7-3-6-3-3-1-3-3-4-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26.06
30-45.3183-109.9375-2-12-						0-M39815-09/01/78-12-	26-	8.0-	C-	-			5.1-	21-	16-2-7-3-6-3-3-3-3-2-4-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.95
30-45.3231-109.9403-2-12-						0-M39816-09/01/78-13-	25-	8.5-	C-	-			4.9-	16-	12-2-7-3-6-4-3-1-3-3-4-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39.58
30-45.3292-109.9358-2-12-						0-M39817-09/01/78-13-	24-	9.5-	C-	-			5.0-	26-	9-2-7-	-	-3-	3-1-3-2-4-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39.43
30-45.3325-109.9347-2-12-						0-M39818-09/01/78-13-	26-	7.0-	C-	-			4.8-	31-	8-2-7-4-1-4-3-1-3-2-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.55
30-45.3342-109.9306-2-12-						0-M39819-09/01/78-14-	26-	11.0-	C-	-			6.0-	38-	17-2-7-4-6-3-3-1-3-2-4-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.39
30-45.3367-109.9300-2-12-						0-M39820-09/01/78-14-	26-	11.0-	C-	-			6.2-	100-	12-2-7-4-6-3-3-1-3-2-4-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.13
30-45.6072-108.4042-2-15-						0-M39821-09/07/78-12-	27-		-	-			-	-	13-1-7-5-6-	-1-	-2-	3-2-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.21
30-45.5917-108.4108-2-12-						0-M39823-09/07/78-13-	34-	21.9-	C-	-			8.5-	630-	9-1-7-5-6-4-4-3-2-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.47
30-45.4536-108.5300-2-12-						0-M39824-09/08/78-16-	29-	18.2-	C-	-			7.9-	950-	11-1-7-3-6-3-3-1-2-4-4-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.96
30-45.4356-109.2581-2-12-						0-M39826-08/14/78-11-	30-	14.0-	C-	-			8.4-	720-	11-1-1-6-6-2-3-1-1-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.77
30-45.4853-109.3050-2-12-						0-M39827-08/14/78-12-	29-	15.0-	C-	-			8.9-	700-	9-1-1-4-6-2-3-1-3-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.72
30-45.4794-109.3250-2-12-						0-M39829-08/16/78-10-	25-	13.0-	-	-			9.2-	900-	11-1-1-6-4-2-3-4-1-4-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.67
30-45.4842-109.3069-2-11-						0-M39830-08/16/78-10-	25-	15.5-	C-	-			8.7-	800-	15-1-1-5-6-2-3-1-3-3-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.84
30-45.4708-109.3150-2-15-						0-M39832-08/16/78-10-	25-		C-	-			-	-	8-1-1-2-6-	-1-	-3-	4-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.74
30-45.4647-109.3144-2-12-						0-M39833-08/16/78-10-	25-	9.5-	C-	-			8.9-	900-	11-1-1-4-6-2-2-1-2-2-2-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.83
30-45.4661-109.3175-2-12-						0-M39834-08/16/78-11-	25-	13.5-	C-	-			8.6-	800-	11-1-1-5-6-2-3-1-2-3-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.22
30-45.4939-109.3628-2-11-						0-M39835-08/16/78-11-	25-		C-	-			-	-	15-1-1-4-6-1-2-	-1-	-4-	2-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.18
30-45.4144-109.3514-2-15-						0-M39836-08/16/78-12-	25-		C-	-			-	-	8-1-1-4-6-	-1-	-2-	4-3-4-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10
30-45.4050-109.3283-2-15-						0-M39837-08/16/78-12-	25-		C-	-			-	-	11-1-1-3-6-	-1-	-2-	4-3-4-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.23
30-45.4311-109.2558-2-12-						0-M39838-08/16/78-12-	25-	14.0-	C-	-			9.2-	990-	8-1-1-5-6-2-2-1-3-3-3-4-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.96
30-45.4203-109.2911-2-12-						0-M39841-08/16/78-13-	25-	11.5-	C-	-			9.1-	385-	8-1-1-5-6-3-3-3-3-2-3-3-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.16
30-45.4228-109.2900-2-15-						0-M39842-08/16/78-13-	25-		C-	-			-	-	11-1-1-3-6-	-1-	-3-	3-3-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.79
30-45.4628-109.9422-2-12-						0-M39844-08/19/78-11-	27-	8.5-	C-	-			6.3-	370-	5-1-1-3-6-3-3-1-3-3-2-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.12
30-45.4589-109.9403-2-15-						0-M39845-08/19/78-12-	27-		C-	-			-	-	11-1-1-3-7-	-1-	-3-	7-4-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.87
30-45.4600-109.9361-2-11-						0-M39846-08/19/78-12-	29-	8.5-	C-	-			6.4-	330-	11-1-1-3-4-2-3-1-1-3-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	135.40
30-45.4558-109.9378-2-11-						0-M39847-08/19/78-12-	29-	7.0-	C-	-			6.4-	300-	11-1-1-4-6-3-3-1-1-3-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.95
30-45.4633-109.3664-2-15-						0-M39848-08/16/78-	9-	25-	C-	-			-	-	5-1-1-3-6-	-1-	-3-	4-3-4-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.65
30-45.4444-109.9472-2-12-						0-M39849-08/19/78-13-	29-	6.5-	C-	-			6.7-	150-	11-2-7-4-6-3-3-1-1-2-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.64
30-45.4328-109.9322-2-15-						0-M39851-08/19/78-15-	30-		C-	-			-	-	9-1-7-3-7-	-1-	-1-	4-2-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.91
30-45.3772-109.9992-2-12-						0-M39852-08/23/78-10-	22-	7.0-	C-	-			6.9-	48-	11-2-7-4-6-4-3-1-1-1-4-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.86
30-45.3786-109.9919-2-12-						0-M39853-08/23/78-11-	27-	5.5-	C-	-			7.0-	15-	17-2-7-4-6-4-3-1-1-1-4-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.12
30-45.3883-109.9833-2-11-						0-M39854-08/23/78-11-	25-	10.0-	C-	-			6.7-	151-	5-2-7-3-6-3-3-1-1-2-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.84
30-45.3956-109.9750-2-11-						0-M39855-08/23/78-12-	27-	6.5-	C-	-			7.2-	123-	6-2-7-3-7-2-3-1-1-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.04
30-45.3978-109.9631-2-11-						0-M39856-08/23/78-12-	27-	2.0-	C-	-			7.0-	55-	11-2-7-7-6-3-3-1-3-1-4-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.18
30-45.3975-109.9569-2-12-						0-M39857-08/23/78-13-	27-	6.0-	C-	-			6.9-	45-	6-2-7-3-6-4-3-1-3-2-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.00
30-45.2497-109.9747-2-12-						0-M39858-08/25/78-14-	25-	9.0-	C-	-			8.9-	85-	9-2-7-7-6-3-3-1-3-3-3-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	364.70

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						USGS SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE (Concentrations reported in weight parts per million (ppm))									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY (Concentrations in weight ppm)	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
30-45.7108-109.9256-2-12-						0-M39796	-5	-5	-5	25	-20	31	-5	-10	-15	1	14
30-45.7133-109.9250-2-15-						0-M39797	-5	-5	-5	39	-20	61	10	-10	-15	1	17
30-45.7183-109.9133-2-12-						0-M39798	-5	-5	5	38	-20	16	9	-10	-15	1	11
30-45.7206-109.9067-2-11-						0-M39799	-5	-5	6	31	-20	-15	-5	-10	-15	1	17
30-45.8858-108.5342-2-12-						0-M39804	-5	-5	-5	15	-20	-15	7	-10	-15	2	31
30-45.8861-108.5331-2-12-						0-M39805	-5	5	-5	28	-20	22	6	-10	-15	2	30
30-45.7406-109.9283-2-11-						0-M39806	-5	-5	-5	46	-20	51	-5	-10	-15	-1	16
30-45.7333-109.8575-2-11-						0-M39807	-5	-5	-5	43	-20	-15	-5	13	-15	2	18
30-45.7342-109.8561-2-11-						0-M39808	-5	-5	-5	23	-20	-15	-5	-10	-15	1	15
30-45.7128-109.8669-2-11-						0-M39809	-5	-5	8	53	-20	-15	-5	-10	-15	2	16
30-45.7158-109.8672-2-15-						0-M39810	-5	-5	5	36	-20	-15	-5	-10	-15	2	21
30-45.7200-109.8678-2-12-						0-M39811	-5	-5	-5	14	-20	-15	-5	-10	-15	1	12
30-45.4108-109.7594-2-11-						0-M39812	-5	6	-5	25	-20	-15	6	-10	-15	1	9
30-45.9953-108.4669-2-15-						0-M39813	-5	-5	-5	33	-20	-15	15	-10	-15	2	28
30-45.3161-109.9375-2-11-						0-M39814	-5	6	-5	22	-20	28	13	-10	-15	2	22
30-45.3183-109.9375-2-12-						0-M39815	-5	-5	-5	22	-20	15	10	-10	-15	2	15
30-45.3231-109.9403-2-12-						0-M39816	-5	-5	-5	28	-20	29	9	-10	-15	2	25
30-45.3292-109.9358-2-12-						0-M39817	-5	7	-5	26	-20	-15	8	-10	-15	2	26
30-45.3325-109.9347-2-12-						0-M39818	-5	-5	-5	17	-20	-15	-5	-10	-15	2	15
30-45.3342-109.9306-2-12-						0-M39819	-5	6	-5	15	-20	-15	-5	-10	-15	2	11
30-45.3367-109.9300-2-12-						0-M39820	-5	-5	-5	18	-20	-15	6	-10	-15	2	14
30-45.6072-108.4042-2-15-						0-M39821	-5	7	-5	27	-20	22	11	-10	-15	2	14
30-45.5917-108.4108-2-12-						0-M39823	-5	5	-5	17	-20	-15	8	-10	-15	3	19
30-45.4636-108.5300-2-12-						0-M39824	-5	-5	-5	18	-20	24	5	-10	-15	2	24
30-45.4856-109.2581-2-12-						0-M39826	-5	-5	-5	22	-20	30	11	-10	-15	2	27
30-45.4853-109.3050-2-12-						0-M39827	-5	-5	-5	23	-20	-15	6	-10	-15	2	20
30-45.4794-109.3250-2-12-						0-M39829	-5	6	-5	21	-20	16	15	-10	-15	2	24
30-45.4842-109.3069-2-11-						0-M39830	-5	7	-5	21	-20	17	-5	-10	-15	2	12
30-45.4708-109.3150-2-15-						0-M39832	-5	-5	-5	16	-20	-15	10	-10	-15	2	19
30-45.4647-109.3144-2-12-						0-M39833	-5	-5	-5	24	-20	23	-5	-10	-15	2	21
30-45.4661-109.3175-2-12-						0-M39834	-5	-5	-5	27	-20	19	13	-10	-15	2	23
30-45.4939-109.3629-2-11-						0-M39835	-5	5	-5	27	-20	-15	14	-10	-15	2	13
30-45.4144-109.3514-2-15-						0-M39836	-5	8	-5	26	-20	21	10	-10	-15	2	17
30-45.4050-109.3283-2-15-						0-M39837	-5	-5	-5	16	-20	18	5	-10	-15	2	24
30-45.4311-109.2558-2-12-						0-M39838	-5	6	-5	27	-20	15	8	-10	-15	2	15
30-45.4203-109.2911-2-12-						0-M39841	-5	5	-5	28	-20	24	11	-10	-15	2	14
30-45.4228-109.2900-2-15-						0-M39842	-5	9	-5	23	-20	31	8	-10	-15	2	25
30-45.4628-109.9422-2-12-						0-M39844	-5	7	-5	15	-20	-15	5	-10	-15	1	35
30-45.4589-109.9483-2-15-						0-M39845	-5	5	-5	24	-20	19	-5	-10	-15	2	66
30-45.4600-109.9361-2-11-						0-M39846	-5	-5	-5	81	-20	256	12	-10	-15	2	17
30-45.4558-109.9378-2-11-						0-M39847	-5	-5	-5	19	-20	-15	-5	-10	-15	1	41
30-45.4633-109.3664-2-15-						0-M39848	-5	-5	-5	22	-20	-15	-5	-10	-15	2	12
30-45.4444-109.9472-2-12-						0-M39849	-5	-5	-5	41	-20	42	-5	-10	-15	1	27
30-45.4328-109.9322-2-15-						0-M39851	-5	6	-5	56	-20	67	8	-10	-15	2	35
30-45.3772-109.9992-2-12-						0-M39852	-5	8	5	74	-20	75	-5	-10	-15	2	24
30-45.3786-109.9919-2-12-						0-M39853	-5	-5	-5	65	-20	139	10	-10	-15	2	59
30-45.3883-109.9833-2-11-						0-M39854	-5	-5	-5	21	-20	229	-5	-10	-15	2	7
30-45.3956-109.9750-2-11-						0-M39855	-5	-5	-5	40	-20	152	-5	-10	-15	-1	12
30-45.3978-109.9631-2-11-						0-M39856	-5	8	-5	63	-20	27	6	-10	-15	2	55
30-45.3975-109.9569-2-12-						0-M39857	-5	-5	-5	83	-20	195	9	-10	-15	1	11
30-45.2497-109.9747-2-12-						0-M39858	-5	-5	-5	50	-20	20	33	-10	-15	-1	15

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAB. SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per million (ppm)														
							Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
30-45.7109-109.9256-2-12-						0-M39796	71750	-0.17	714	38440	104	-127	33.2	100	-2.9	3	2.1	113600	7.7	13190	78	0.6
30-45.7133-109.9250-2-15-						0-M39797	68250	-0.08	909	22010	43	-114	8.7	32	-1.4	3	0.8	22950	2.2	14130	21	-0.1
30-45.7183-109.9133-2-12-						0-M39798	72500	-0.13	873	37510	77	-117	24.2	544	5.2	3	1.6	49800	6.8	9196	58	0.4
30-45.7206-109.9067-2-11-						0-M39799	70130	-0.09	700	41340	45	147	13.0	62	-1.5	3	1.0	31410	2.8	10200	32	0.3
30-45.8858-108.5342-2-12-						0-M39804	59660	-0.07	564	23890	54	64	10.9	96	-1.3	3	0.9	25910	2.9	14930	25	-0.1
30-45.8861-108.5331-2-12-						0-M39805	57510	-0.09	521	33160	62	91	7.4	70	3.6	3	1.2	15560	6.1	17290	35	0.4
30-45.7406-109.9283-2-11-						0-M39806	65940	-0.06	864	25920	41	-105	6.9	52	2.7	3	0.6	12450	4.6	10580	25	0.2
30-45.7333-109.8575-2-11-						0-M39807	69690	-0.07	643	47050	70	-112	12.4	386	-1.3	2	0.9	34550	7.3	9174	43	0.2
30-45.7342-109.8561-2-11-						0-M39808	63850	-0.09	646	43030	56	-122	16.8	60	-1.5	2	1.1	67910	3.2	10450	37	0.2
30-45.7128-109.8669-2-11-						0-M39809	87550	-0.13	649	50000	63	-128	20.6	71	-2.3	2	1.2	85630	4.5	14890	43	0.3
30-45.7158-109.8672-2-15-						0-M39810	74970	-0.06	638	51160	47	-115	11.1	13	-1.0	3	0.7	32090	2.1	12240	29	0.2
30-45.7290-109.8678-2-12-						0-M39811	69820	-0.08	568	44970	71	-114	19.1	14	-1.5	3	1.2	69490	3.0	8760	44	0.3
30-45.4108-109.7594-2-11-						0-M39812	38500	-0.10	393	6198	69	-44	19.8	42	-1.7	3	1.2	81670	4.3	12040	44	0.3
30-45.9953-108.4669-2-15-						0-M39813	73750	-0.09	579	10990	59	-83	5.1	51	2.4	3	1.1	10320	12.5	20960	44	0.5
30-45.3141-109.9375-2-11-						0-M39814	70690	-0.05	517	22010	30	131	3.4	-6	1.5	4	0.4	3236	3.2	12700	38	0.2
30-45.3183-109.9375-2-12-						0-M39815	69180	-0.08	452	20280	37	-121	8.3	79	-1.4	4	0.9	14220	10.3	11110	64	0.4
30-45.3231-109.9403-2-12-						0-M39816	71470	-0.12	326	23940	93	-141	8.8	72	-2.1	3	0.9	19020	11.2	12910	64	0.5
30-45.3292-109.9358-2-12-						0-M39817	75310	-0.09	414	25010	65	-126	12.1	85	-1.6	4	0.8	21170	4.6	11010	61	0.4
30-45.3325-109.9347-2-12-						0-M39818	72850	-0.06	405	24770	34	-101	6.4	39	1.6	3	0.5	11940	3.9	12120	36	0.2
30-45.3342-109.9306-2-12-						0-M39819	67550	-0.08	418	23990	56	95	7.8	66	-1.3	3	0.8	16020	7.4	7519	34	0.3
30-45.3367-109.9300-2-12-						0-M39820	67680	-0.10	299	20450	74	-128	8.6	84	-1.8	2	0.7	19020	8.2	10200	54	0.3
30-45.6072-108.4042-2-15-						0-M39821	60760	-0.09	720	12090	57	-81	12.2	110	-1.6	4	1.0	23680	8.7	19610	50	0.5
30-45.5917-108.4108-2-12-						0-M39823	49190	-0.07	573	18380	60	-81	7.7	65	2.8	4	0.8	13690	6.5	15150	32	0.3
30-45.4636-108.5300-2-12-						0-M39824	56760	-0.09	780	23030	78	-90	9.9	59	2.6	4	1.1	17210	10.2	12850	45	0.5
30-45.4856-109.2581-2-12-						0-M39826	54710	-0.11	570	9191	73	-68	9.1	68	-1.9	3	1.3	18440	9.7	13310	60	0.4
30-45.4853-109.3050-2-12-						0-M39827	54270	-0.06	618	6458	51	-52	7.8	39	3.0	4	0.8	11760	6.2	12560	27	0.3
30-45.4794-109.3250-2-12-						0-M39829	60410	-0.08	675	16530	66	-61	7.6	57	3.1	4	1.1	14030	10.3	14950	38	0.3
30-45.4842-109.3069-2-11-						0-M39830	52380	-0.08	582	7102	58	-55	8.5	73	3.9	4	1.0	14280	5.7	12970	34	0.3
30-45.4708-109.3150-2-15-						0-M39832	61420	-0.09	754	9835	51	-70	6.8	42	3.1	3	1.0	12660	7.3	14960	34	0.3
30-45.4647-109.3144-2-12-						0-M39833	57750	-0.07	846	6395	50	-50	8.8	70	2.9	4	0.8	14810	4.9	13800	35	0.3
30-45.4661-109.3175-2-12-						0-M39834	67980	-0.09	674	9063	80	-52	10.3	73	4.9	4	1.3	25020	9.8	14000	45	0.4
30-45.4939-109.3628-2-11-						0-M39835	57510	-0.10	733	5547	79	77	9.4	80	5.2	4	1.2	19990	7.4	14500	44	0.4
30-45.4144-109.3514-2-15-						0-M39836	57810	-0.09	624	4409	37	-47	5.1	47	2.1	3	0.8	9790	5.3	14870	26	0.3
30-45.4050-109.3283-2-15-						0-M39837	66260	-0.08	666	7241	79	-61	11.0	71	3.8	4	1.1	17180	8.4	14660	40	0.4
30-45.4311-109.2558-2-12-						0-M39838	50080	-0.08	690	8322	60	-48	7.9	51	3.2	4	1.0	16380	7.3	14100	46	0.3
30-45.4203-109.2911-2-12-						0-M39841	61530	-0.07	524	18290	60	-102	6.7	44	3.4	3	0.9	11570	7.5	13770	30	0.3
30-45.4228-109.2900-2-15-						0-M39842	39490	-0.08	617	4361	67	-44	8.3	74	-1.4	3	0.8	18080	7.8	10820	34	0.2
30-45.4628-109.9422-2-12-						0-M39844	32640	-0.07	368	49890	63	-56	8.0	53	3.4	2	0.9	18900	11.7	10450	37	0.4
30-45.4589-109.9483-2-15-						0-M39845	43960	-0.06	321	87580	35	105	5.9	46	1.7	3	0.5	8570	10.1	18040	18	0.2
30-45.4600-109.9361-2-11-						0-M39846	42920	-0.17	406	23620	133	328	19.5	177	3.9	5	1.8	31470	11.4	-4781	77	0.6
30-45.4558-109.9378-2-11-						0-M39847	32770	-0.08	286	64100	51	-63	9.9	284	-1.3	2	0.5	9049	-1.0	12000	64	-0.1
30-45.4633-109.3664-2-15-						0-M39848	52110	-0.05	639	3508	28	-47	6.3	76	1.9	4	0.6	7734	4.3	13170	17	0.2
30-45.4444-109.9472-2-12-						0-M39849	41580	-0.08	245	26380	21	-57	9.7	98	-1.3	2	0.4	11050	9.7	8270	18	0.2
30-45.4328-109.9322-2-15-						0-M39851	76580	-0.12	401	33830	54	-100	13.9	137	-2.0	4	0.6	21150	3.7	14070	-10	-0.2
30-45.3772-109.9992-2-12-						0-M39852	68580	-0.09	312	19670	63	-102	17.2	298	-1.5	5	0.7	35250	9.6	9315	45	0.5
30-45.3786-109.9919-2-12-						0-M39853	85740	-0.11	-171	13780	58	-102	22.8	330	4.0	4	0.8	40270	3.4	9483	43	0.3
30-45.3883-109.9833-2-11-						0-M39854	48510	-0.09	-167	18440	50	130	23.6	1994	-1.6	3	0.5	29460	7.3	6650	27	0.4
30-45.3956-109.9750-2-11-						0-M39855	96970		-199	24280		-124				-1				-4388		
30-45.3978-109.9631-2-11-						0-M39856	42450	-0.07	394	76990	41	153	8.6	67	-1.2	3	0.6	9691	4.2	17150	24	0.3
30-45.3975-109.9569-2-12-						0-M39857	62950	-0.22	355	25880	47	-106	22.3	1161	-1.8	2	0.6	31970	3.0	11510	49	0.7
30-45.2497-109.9747-2-12-						0-M39858	39670	-0.15	612	25220	136	131	11.4	77	2.4	3	1.9	14200	-1.7	6877	343	1.2

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)														U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAB. SAMPLE LOCATION NUMBER	Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
30-45.7108-109.9256-2-12-			0-	M	39794		21300	933	14900	-48	-5	23.3	10.7	-490	-1	-1	9.3	3959	141	4.9	281	0.206
30-45.7133-109.9250-2-15-			0-	M	39797		22220	754	17730	-25	-3	6.9	1.7	603	-1	-1	3.2	3280	127	-1.7	-43	0.594
30-45.7183-109.9133-2-12-			0-	M	39798		27210	980	15980	-33	-4	18.6	5.8	937	-1	-1	11.3	4414	154	-2.6	137	0.195
30-45.7206-109.9067-2-11-			0-	M	39799		23870	797	17000	-23	-3	8.1	2.7	531	-1	-1	3.4	4492	141	-1.6	134	0.653
30-45.8858-108.5342-2-12-			0-	M	39804		22060	293	13040	-20	-2	7.3	3.4	-271	-1	-1	3.5	2776	74	-1.5	-32	0.700
30-45.8861-108.5331-2-12-			0-	M	39805		29850	765	10610	-26	-3	7.2	3.4	-287	-1	-1	7.0	2873	81	4.0	-39	0.384
30-45.7406-109.9283-2-11-			0-	M	39806		26300	828	20970	31	-2	6.1	2.9	574			6.1	5534	171	1.8	57	0.375
30-45.7333-109.8575-2-11-			0-	M	39807		23490	1431	15970	-19	-2	10.8	3.6	-421	-1		7.5	7100	279	3.1	-72	0.183
30-45.7342-109.8561-2-11-			0-	M	39808		22180	1279	16080	-25	-3	11.2	4.2	869	-1	-1	4.8	6584	246	-1.7	-55	0.275
30-45.7128-109.8669-2-11-			0-	M	39809		24930	963	18620	-44	-4	15.1	3.6	671	-2	-1	5.3	3479	137	-2.7	114	0.204
30-45.7158-109.8672-2-15-			0-	M	39810		32320	1544	15110	-17	-2	6.9	3.2	-442	-1	-1	3.8	6962	232	1.7	101	0.279
30-45.7200-109.8678-2-12-			0-	M	39811		27900	1488	15160	-25	-3	12.7	5.3	649	-1	-1	4.7	6013	274	2.3	139	0.268
30-45.4108-109.7594-2-11-			0-	M	39812		10030	170	3804	-30	-3	11.5	4.7	-184	-1	-1	6.2	2405	44	3.0	119	0.439
30-45.9953-108.4669-2-15-			0-	M	39813		22960	352	8703	-24	-3	5.5	3.1	-308	-1	-1	8.6	3089	108	3.0	-53	0.340
30-45.3161-109.9375-2-11-			0-	M	39814		14660	378	25830	18	-1	1.4	5.4	492	1		5.8	3109	67	2.1	27	4.493
30-45.3183-109.9375-2-12-			0-	M	39815		9261	392	28540	-19	-3	10.2	7.2	-345	-1	-1	17.8	2085	52	3.0	-48	0.615
30-45.3231-109.9403-2-12-			0-	M	39816		25190	496	25490	-34	-4	12.0	3.2	-424	-1	-1	28.0	2985	69	-2.6	79	1.414
30-45.3292-109.9358-2-12-			0-	M	39817		17760	482	27740	-23	-3	10.9	9.7	-373	-1	-1	16.9	4379	91	-2.0	-42	2.347
30-45.3325-109.9347-2-12-			0-	M	39818		12250	351	29320	-15	-2	6.8	5.3	524	-1		9.0	2545	60	-1.3	33	0.839
30-45.3342-109.9306-2-12-			0-	M	39819		11400	395	26780	29	-3	10.8	5.6	447	-1	-1	13.2	2776	61	2.1	91	1.242
30-45.3367-109.9300-2-12-			0-	M	39820		16140	386	28280	-28	-3	12.0	4.4	-359	-1		25.1	2061	57	3.9	-45	0.762
30-45.6072-108.4042-2-15-			0-	M	39821		14230	637	9473	41	-3	12.9	6.4	421	-1		18.0	3831	79	3.5	76	0.178
30-45.5917-108.4108-2-12-			0-	M	39823		10320	1049	7039	41	-2	6.6	3.8	-368	-1	-1	8.8	2931	62	3.2	-38	0.394
30-45.4636-108.5300-2-12-			0-	M	39824		13510	508	10430	38	-3	6.6	6.0	-334	-1	-1	11.2	3390	73	4.3	93	0.264
30-45.4856-109.2581-2-12-			0-	M	39826		8038	610	3803	-31	-3	8.3	4.4	-364	-1	-1	9.7	2765	88	3.5	-64	0.286
30-45.4853-109.3050-2-12-			0-	M	39827		8410	301	4319	40	-2	5.5	3.1	-220	-1	-1	7.0	3192	81	2.4	71	0.389
30-45.4794-109.3250-2-12-			0-	M	39829		10590	555	3623	32	-3	6.9	4.3	-293	-1		10.2	3417	93	2.6	52	0.262
30-45.4842-109.3069-2-11-			0-	M	39830		9111	280	4102	39	-3	7.0	4.7	-250	-1	-1	9.5	3095	81	3.5	85	0.299
30-45.4708-109.3150-2-15-			0-	M	39832		12290	327	5947	-24	-3	5.8	2.5	-279	-1	-1	7.0	2945	115	-1.8	76	0.391
30-45.4647-109.3144-2-12-			0-	M	39833		11350	575	3091	32	-2	7.7	3.8	-261	-1		7.0	3062	108	2.6	111	0.404
30-45.4661-109.3175-2-12-			0-	M	39834		10420	462	3108	73	-3	9.1	5.7	-269	-1		10.3	3703	121	4.3	87	0.313
30-45.4939-109.3628-2-11-			0-	M	39835		10400	289	3867	65	-3	9.4	5.3	-269	-1	-1	14.0	3163	98	3.8	124	0.227
30-45.4144-109.3514-2-15-			0-	M	39836		10780	208	3047	34	-2	4.8	2.4	-207	-1	-1	5.5	3034	85	-1.6	45	0.564
30-45.4050-109.3283-2-15-			0-	M	39837		12080	534	5096	49	-3	8.9	5.1	-291	-1		12.6	3681	109	3.7	65	0.256
30-45.4311-109.2558-2-12-			0-	M	39838		8969	258	3404	47	-2	7.5	4.5	-213	-1	-1	9.7	3450	90	3.3	91	0.305
30-45.4203-109.2911-2-12-			0-	M	39841		17140	487	17610	34	-2	5.3	3.9	-327	-1		7.7	3021	66	2.8	79	0.281
30-45.4228-109.2900-2-15-			0-	M	39842		6616	160	2684	-25	-3	7.0	3.2	-230	-1		16.1	2029	86	2.6	-34	0.173
30-45.4629-109.9422-2-12-			0-	M	39844		25970	208	6077	-17	-2	5.7	4.7	245	-1		12.8	2452	39	3.5	61	0.166
30-45.4589-109.9483-2-15-			0-	M	39845		52210	347	3155	36	-2	3.9	3.0	-226	-1		5.2	1984	50	2.0	39	0.360
30-45.4600-109.9361-2-11-			0-	M	39846		33110	828	6193	102	-5	15.3	9.0	-560	-2	-1	18.6	-1358	57	7.1	-137	7.280
30-45.4558-109.9378-2-11-			0-	M	39847		57490	177	4376	-23	-3	3.9	12.9	-235	-1	-1	5.8	1612	36	-1.8	-39	0.336
30-45.4633-109.3664-2-15-			0-	M	39848		8361	421	4186	26	-2	4.6	2.4	-226	-1		4.8	3409	84	-1.0	-27	0.552
30-45.4444-109.9472-2-12-			0-	M	39849		21780	303	5221	-18	-2	8.2	1.6	-224	-1	-1	3.6	2443	60	-1.4	66	1.011
30-45.4328-109.9322-2-15-			0-	M	39851		35600	849	8455	-34	-4	13.5	2.3	-439	-1	-1	5.9	2617	74	-2.5	-52	0.324
30-45.3772-109.9992-2-12-			0-	M	39852		32310	964	16470	29	-3	14.4	4.0	-379	-1	-1	21.0	3674	107	3.3	-18	0.470
30-45.3786-109.9919-2-12-			0-	M	39853		38360	829	14090	-29	-3	17.5	6.3	-384	-1		13.5	3936	132	3.6	113	0.972
30-45.3883-109.9833-2-11-			0-	M	39854		90140	914	14370	-23	-3	15.7	3.7	-386	-1	-1	15.8	2796	88	3.4	126	0.180
30-45.3956-109.9750-2-11-			0-	M	39855		82860	640	15420					-430				-1019	55			
30-45.3978-109.9631-2-11-			0-	M	39856		84860	183	4137	32	-2	6.0	3.0	-226	-1	-1	5.7	2225	47	1.1	67	0.382
30-45.3975-109.9569-2-12-			0-	M	39857		60480	688	15620	-32	-7	13.0	7.5	-389	-1	-1	11.8	2209	88	-3.6	117	1.780
30-45.2497-109.9747-2-12-			0-	M	39858		11300	295	6085	-34	-4	5.1	51.2	-419	4	-1	15.1	905	64	6.2	74	24.152

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
							TIME SAMPLED																										
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (umho/cm)	SCINTILLOMETER (eU ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
30-	45.2539-	109.9744-2-12-				0-M39859-	08/26/78-	14-	25-	11.5-	0-	-	4.8-	14-	9-	2-	7-	3-	1-	3-	3-	1-	3-	1-	3-	5-	3-	-1-	-	-	-	-	19.49
30-	45.2559-	109.9703-2-12-				0-M39860-	08/26/78-	14-	22-	1.0-	0-	-	5.5-	43-	4-	2-	7-	4-	6-	3-	3-	1-	1-	7-	4-	5-	3-	-1-	-	-	-	-	76.42
30-	45.2569-	109.9631-2-12-				0-M39861-	08/26/78-	15-	22-	11.0-	0-	-	5.5-	41-	11-	1-	7-	4-	6-	3-	3-	1-	1-	1-	4-	5-	3-	-1-	-	-	-	-	8.45
30-	45.2636-	109.9614-2-12-				0-M39862-	08/26/78-	15-	22-	0.5-	0-	-	6.0-	42-	10-	2-	7-	-	-	3-	3-	1-	3-	1-	4-	5-	3-	-1-	-	-	-	-	106.70
30-	45.2656-	109.9528-2-12-				0-M39863-	08/26/78-	16-	22-	8.5-	0-	-	5.0-	32-	10-	2-	7-	4-	6-	4-	3-	1-	2-	7-	3-	5-	2-	-1-	-	-	-	-	11.05
30-	45.2750-	109.9500-2-12-				0-M39864-	08/26/78-	16-	21-	9.0-	0-	-	5.5-	40-	13-	2-	7-	3-	6-	3-	3-	1-	3-	1-	3-	5-	3-	-1-	-	-	-	-	22.55
30-	45.3008-	109.9386-2-12-				0-M39865-	08/26/78-	17-	22-	11.0-	0-	-	7.0-	16-	10-	2-	7-	3-	6-	4-	3-	1-	3-	7-	-5-	3-	-1-	-	-	-	-	4.04
30-	45.5839-	108.4167-2-15-				0-M39866-	09/07/78-	13-	36-		0-	-	-	-	16-	1-	7-	5-	6-	-1-	-2-	4-	3-	3-	1-	-3-	-	-	-	-	4.94
30-	45.5419-	108.4239-2-12-				0-M39868-	09/07/78-	14-	31-	20.2-	0-	-	8.2-	1100-	6-	1-	6-	5-	6-	3-	3-	1-	2-	4-	3-	3-	1-	-3-	-	-	-	-	3.91
30-	45.4056-	109.9528-2-12-				0-M39870-	08/23/78-	13-	27-	2.5-	0-	-	7.2-	250-	6-	2-	7-	3-	6-	3-	3-	1-	3-	2-	3-	5-	1-	-1-	-	-	-	-	1.04
30-	45.4103-	109.9547-2-15-				0-M39871-	08/23/78-	14-	27-		0-	-	-	-	13-	2-	7-	3-	7-	-1-	-3-	2-	3-	5-	2-	-1-	-	-	-	-	4.38
30-	45.4075-	109.9517-2-12-				0-M39872-	08/23/78-	15-	27-	10.5-	0-	-	7.6-	60-	3-	2-	7-	4-	6-	4-	3-	1-	1-	2-	3-	5-	2-	-2-	-	-	-	-	6.64
30-	45.4167-	109.9167-2-11-				0-M39873-	08/23/78-	-	27-	8.5-	0-	-	7.3-	285-	6-	2-	1-	3-	1-	3-	3-	1-	3-	2-	4-	5-	2-	-3-	-	-	-	-	1.72
30-	45.5011-	108.4611-2-15-				0-M39874-	09/07/78-	15-	36-		0-	-	-	-	16-	1-	7-	5-	6-	-1-	-2-	4-	3-	3-	1-	-3-	-	-	-	-	3.76
30-	45.5133-	108.4464-2-15-				0-M39875-	09/07/78-	16-	35-		0-	-	-	-	11-	1-	7-	5-	6-	-1-	-2-	4-	3-	3-	1-	-3-	-	-	-	-	4.64
30-	45.5300-	108.4511-2-15-				0-M39876-	09/07/78-	16-	35-		0-	-	-	-	13-	1-	7-	5-	6-	-1-	-2-	4-	3-	3-	1-	-3-	-	-	-	-	3.99
30-	45.5267-	108.4678-2-11-				0-M39877-	09/07/78-	16-	34-		0-	-	-	-	9-	1-	7-	5-	6-	-1-	-2-	4-	3-	3-	1-	-3-	-	-	-	-	4.71
30-	45.5311-	108.4517-2-15-				0-M39878-	09/07/78-	16-	34-		0-	-	-	-	16-	1-	7-	5-	6-	-1-	-2-	4-	3-	3-	1-	-3-	-	-	-	-	3.78
30-	45.5494-	108.4297-2-15-				0-M39880-	09/07/78-	17-	33-		-	-	-	-	11-	1-	7-	5-	6-	-1-	-2-	4-	3-	3-	1-	-3-	-	-	-	-	3.73
30-	45.5636-	108.4258-2-12-				0-M39881-	09/07/78-	17-	34-	20.4-	0-	-	8.4-	1250-	16-	1-	7-	5-	6-	3-	3-	2-	2-	4-	3-	3-	1-	-3-	-	-	-	-	3.38
30-	45.5756-	108.4253-2-12-				0-M39882-	09/08/78-	18-	33-	20.0-	0-	-	8.2-	1200-	11-	1-	7-	5-	6-	3-	3-	2-	2-	4-	3-	3-	1-	-3-	-	-	-	-	3.92
30-	45.3092-	109.9319-2-12-				0-M39883-	09/01/78-	11-	25-	10.0-	0-	-	7.0-	37-	11-	2-	7-	4-	1-	4-	3-	1-	3-	7-	4-	5-	2-	-1-	-	-	-	-	4.45
30-	45.4337-	108.4642-2-15-				0-M39885-	09/08/78-	11-	24-		0-	-	-	-	18-	1-	7-	4-	6-	-1-	-2-	4-	3-	3-	2-	-3-	-	-	-	-	4.21
30-	45.4992-	108.4658-2-11-				0-M39886-	09/08/78-	12-	24-	19.2-	0-	-	7.6-	2000-	13-	1-	7-	5-	6-	-3-	-4-	2-	4-	3-	2-	-3-	-	-	-	-	-	4.63
30-	45.4972-	108.4675-2-12-				0-M39887-	09/08/78-	12-	25-	16.1-	0-	-	7.4-	1810-	6-	1-	6-	5-	6-	3-	3-	2-	2-	4-	3-	3-	2-	-3-	-	-	-	-	3.77
30-	45.4800-	108.4733-2-12-				0-M39892-	09/08/78-	14-	21-	17.1-	0-	-	7.9-	550-	4-	1-	7-	5-	6-	3-	3-	3-	2-	4-	3-	3-	2-	-3-	-	-	-	-	3.40
30-	45.4764-	108.4881-2-15-				0-M39894-	09/08/78-	15-	29-		-	-	-	-	4-	1-	7-	4-	6-	-1-	-2-	4-	3-	3-	2-	-3-	-	-	-	-	1.61
30-	45.4539-	108.5586-2-12-				0-M39897-	09/08/78-	16-	26-	16.4-	0-	-	7.8-	780-	9-	1-	7-	5-	6-	3-	3-	2-	2-	4-	3-	3-	1-	-3-	-	-	-	-	2.59
30-	45.4483-	108.5147-2-15-				0-M39898-	09/08/78-	17-	23-		0-	-	-	-	4-	1-	7-	5-	6-	-1-	-2-	4-	3-	3-	2-	-3-	-	-	-	-	2.74
30-	45.6275-	108.4447-2-12-				0-M39899-	06/29/78-	10-	21-	15.2-	-	-	7.8-	1300-	18-	1-	6-	3-	6-	3-	4-	1-	2-	4-	3-	3-	3-	-3-	-	-	-	-	3.74
30-	45.6458-	108.3867-2-12-				0-M39902-	06/29/78-	11-	24-	19.0-	-	-	5.6-	850-	11-	1-	6-	5-	6-	2-	4-	2-	2-	4-	2-	3-	2-	-3-	-	-	-	-	3.88
30-	45.6467-	108.3858-2-12-				0-M39903-	06/29/78-	11-	28-	15.0-	-	-	5.5-	200-	13-	1-	1-	3-	6-	3-	3-	1-	1-	4-	3-	3-	2-	-3-	-	-	-	-	3.83
30-	45.6511-	108.3967-2-12-				0-M39904-	06/29/78-	11-	33-	17.0-	-	-	6.1-	1700-	11-	1-	6-	5-	6-	2-	3-	1-	1-	4-	3-	3-	2-	-3-	-	-	-	-	3.53
30-	45.6781-	108.3683-2-11-				0-M39906-	06/29/78-	13-	34-	22.0-	0-	-	7.5-	880-	9-	1-	6-	4-	6-	3-	4-	2-	2-	4-	3-	2-	2-	-3-	-	-	-	-	3.66
30-	45.6800-	108.3667-2-12-				0-M39907-	06/29/78-	14-	33-	24.0-	-	-	7.7-	2800-	13-	1-	6-	4-	6-	2-	2-	1-	1-	4-	3-	4-	2-	-3-	-	-	-	-	2.58
30-	45.6953-	108.3617-2-12-				0-M39908-	06/30/78-	11-	24-	17.0-	0-	-	7.7-	900-	11-	1-	6-	3-	6-	3-	3-	2-	2-	4-	3-	2-	2-	-3-	-	-	-	-	3.78
30-	45.7197-	108.3200-2-12-				0-M39909-	06/30/78-	12-	30-	13.0-	-	-	7.0-	950-	11-	1-	1-	3-	1-	3-	3-	1-	2-	4-	3-	3-	1-	-3-	-	-	-	-	3.97
30-	45.6553-	108.4975-2-12-				0-M39911-	09/14/78-	11-	20-	13.5-	0-	-	7.8-	1100-	18-	1-	6-	4-	6-	3-	4-	1-	2-	4-	4-	3-	2-	-3-	-	-	-	-	3.48
30-	45.5819-	108.4508-2-11-				0-M39914-	09/14/78-	13-	21-	13.4-	0-	-	7.3-	850-	13-	1-	6-	5-	6-	3-	3-	1-	1-	3-	3-	3-	2-	-3-	-	-	-	-	3.54
30-	45.5800-	108.4369-2-12-				0-M39915-	09/14/78-	13-	21-	13.9-	0-	-	7.9-	1050-	18-	1-	6-	4-	6-	3-	3-	1-	2-	3-	4-	3-	2-	-3-	-	-	-	-	3.28
30-	45.6019-	108.4050-2-15-				0-M39916-	09/14/78-	14-	22-		0-	-	-	-	13-	1-	6-	5-	6-	-1-	-2-	4-	3-	3-	2-	-3-	-	-	-	-	3.73
30-	45.6453-	108.3008-2-12-				0-M39918-	09/14/78-	15-	23-	18.2-	0-	-	7.6-	2720-	18-	1-	6-	6-	6-	3-	3-	1-	1-	4-	3-	3-	2-	-3-	-	-	-	-	3.83
30-	45.6747-	108.3678-2-15-				0-M39920-	09/14/78-	16-	22-		0-	-	-	-	9-	1-	6-	5-	6-	-1-	-2-	3-	4-	3-	2-	-3-	-	-	-	-	3.96
30-	45.6992-	108.3503-2-15-				0-M39921-	09/14/78-	17-	22-		-	-	-	-	11-	1-	6-	-	-	-1-	-2-	3-	4-	3-	2-	-3-	-	-	-	-	4.01
30-	45.6986-	108.3372-2-15-				0-M39922-	09/14/78-	17-	24-		-	-	-	-	11-	1-	6-	4-	6-	-1-	-2-	3-	3-	3-	2-	-3-	-	-	-	-	2.88
30-	45.4450-	108.6492-2-12-				0-M39926-	09/15/78-	13-	22-	12.1-	0-	-	7.7-	300-	11-	1-	6-	5-	6-	3-	3-	1-	2-	3-	4-	3-	1-	-3-	-	-	-	-	2.44
30-	45.4297-	108.6736-2-15-				0-M39927-	09/15/78-	13-	22-		0-	-	-	-	4-	1-	6-	4-	6-	-1-	-2-	4-	3-	3-	1-	-3-	-	-	-	-	1.43
30-	45.4197-	108.6611-2-15-				0-M39928-	09/15/78-	14-	24-		0-	-	-	-	6-	1-	6-	4-	6-	-1-	-2-	4-	3-	3-	1-	-3-	-	-	-	-	1.41
30-	45.4211-	108.6581-2-15-				0-M39929-	09/15/78-	14-	23-		0-	-	-	-	6-	1-	6-	4-	6-	-1-	-2-	4-	3-	3-	1-	-3-	-	-	-	-	2.81
30-	45.4119-	108.6331-2-11-				0-M39930-	09/15/78-	14-	23-		0-	-	-	-	11-	1-	6-	5-	6-	-1-	-1-	4-	3-	3-	1-	-3-	-	-	-	-	2.49
30-	45.4094-	108.6319-2-12-				0-M39931-	09/15/78-	15-	24-	12.9-	0-	-	7.9-	1100-	13-	1-	6-	5-	6-	3-	3-	3-	2-	4-	4-	3-	2-	-3-	-	-	-	-	2.55

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
30-45.	2539-	109.9744-	2-	12-		0-M39859	-5	-5	-5	39	-20	23	19	-10	-15	1	18
30-45.	2558-	109.9703-	2-	12-		0-M39860	-5	-5	-5	28	-20	33	15	-10	-15	1	15
30-45.	2569-	109.9631-	2-	12-		0-M39861	-5	-5	-5	118	-20	28	19	-10	-15	2	25
30-45.	2636-	109.9614-	2-	12-		0-M39862	-5	-5	-5	30	-20	49	8	-10	-15	2	23
30-45.	2656-	109.9528-	2-	12-		0-M39863	-5	10	-5	20	-20	36	8	-10	-15	2	27
30-45.	2750-	109.9500-	2-	12-		0-M39864	-5	7	-5	30	-20	37	6	-10	-15	2	33
30-45.	3008-	109.9396-	2-	12-		0-M39865	-5	-5	-5	19	-20	27	10	-10	-15	2	20
30-45.	5839-	108.4167-	2-	15-		0-M39866	-5	-5	-5	33	-20	15	19	-10	-15	2	19
30-45.	5419-	108.4239-	2-	12-		0-M39868	-5	-5	-5	31	-20	32	12	-10	-15	2	40
30-45.	4056-	109.9528-	2-	12-		0-M39870	-5	-5	-5	459	-20	545	-5	-10	-15	-1	19
30-45.	4103-	109.9547-	2-	15-		0-M39871	-5	-5	-5	66	-20	231	-5	-10	-15	2	26
30-45.	4075-	109.9517-	2-	12-		0-M39872	-5	5	-5	34	-20	147	-5	-10	-15	2	17
30-45.	4167-	109.9167-	2-	11-		0-M39873	-5	6	-5	32	-20	-15	8	-10	-15	-1	89
30-45.	5011-	108.4611-	2-	15-		0-M39874	-5	-5	-5	29	-20	-15	19	-10	-15	2	23
30-45.	5133-	108.4464-	2-	15-		0-M39875	-5	-5	-5	29	-20	28	6	-10	-15	2	32
30-45.	5300-	108.4511-	2-	15-		0-M39876	-5	-5	-5	42	-20	18	25	-10	-15	2	29
30-45.	5267-	108.4678-	2-	11-		0-M39877	-5	5	-5	43	-20	26	17	-10	-15	2	21
30-45.	5311-	108.4517-	2-	15-		0-M39878	-5	-5	-5	31	-20	19	19	-10	-15	2	21
30-45.	5494-	108.4297-	2-	15-		0-M39880	-5	-5	-5	31	-20	27	19	-10	-15	3	17
30-45.	5636-	108.4258-	2-	12-		0-M39881	-5	-5	-5	15	-20	15	-5	-10	-15	2	12
30-45.	5756-	108.4253-	2-	12-		0-M39882	-5	-5	-5	35	-20	22	9	-10	-15	2	28
30-45.	3092-	109.9319-	2-	12-		0-M39883	-5	-5	-5	109	-20	20	17	-10	-15	2	11
30-45.	4997-	108.4642-	2-	15-		0-M39885	-5	-5	-5	32	-20	23	14	-10	-15	2	28
30-45.	4992-	108.4658-	2-	11-		0-M39886	-5	-5	-5	39	-20	15	13	-10	-15	2	31
30-45.	4972-	108.4675-	2-	12-		0-M39887	-5	-5	-5	33	-20	17	12	-10	-15	2	19
30-45.	4800-	108.4733-	2-	12-		0-M39892	-5	8	-5	26	-20	19	15	-10	-15	2	21
30-45.	4764-	108.4881-	2-	15-		0-M39894	-5	-5	-5	21	-20	-15	-5	-10	-15	-1	4
30-45.	4539-	108.5586-	2-	12-		0-M39897	-5	-5	-5	23	-20	18	-5	-10	-15	1	12
30-45.	4483-	108.5147-	2-	15-		0-M39898	-5	-5	-5	32	-20	20	13	-10	-15	2	20
30-45.	6275-	108.4447-	2-	12-		0-M39899	-5	-5	-5	20	-20	-15	7	-10	-15	2	33
30-45.	6458-	108.3867-	2-	12-		0-M39902	-5	-5	-5	25	-20	30	12	-10	-15	2	38
30-45.	6447-	108.3858-	2-	12-		0-M39903	-5	5	-5	20	-20	-15	6	-10	-15	2	35
30-45.	6511-	108.3967-	2-	12-		0-M39904	-5	-5	-5	19	-20	-15	-5	-10	-15	2	30
30-45.	6791-	108.3683-	2-	11-		0-M39906	-5	6	-5	15	-20	27	6	-10	-15	2	27
30-45.	6830-	108.3667-	2-	12-		0-M39907	-5	-5	-5	15	-20	-15	-5	-10	-15	2	42
30-45.	6853-	108.3617-	2-	12-		0-M39908	-5	-5	-5	36	-20	-15	7	-10	-15	2	29
30-45.	7197-	108.3200-	2-	12-		0-M39909	-5	7	-5	20	-20	-15	9	-10	-15	3	29
30-45.	6553-	108.4975-	2-	12-		0-M39911	-5	6	-5	23	-20	-15	10	-10	-15	2	28
30-45.	5919-	108.4508-	2-	11-		0-M39914	-5	-5	-5	25	-20	25	15	-10	-15	2	32
30-45.	5900-	108.4369-	2-	12-		0-M39915	-5	-5	5	22	-20	25	6	-10	-15	2	24
30-45.	6019-	108.4050-	2-	15-		0-M39916	-5	-5	-5	24	-20	-15	-5	-10	-15	2	30
30-45.	6453-	108.3008-	2-	12-		0-M39918	-5	7	-5	36	-20	39	7	-10	-15	2	73
30-45.	6747-	108.3678-	2-	15-		0-M39920	-5	6	-5	21	-20	22	8	-10	-15	2	31
30-45.	6992-	108.3503-	2-	15-		0-M39921	-5	-5	-5	26	-20	16	-5	-10	-15	2	60
30-45.	6986-	108.3372-	2-	15-		0-M39922	-5	-5	-5	27	-20	18	8	-10	-15	2	47
30-45.	4450-	108.6492-	2-	12-		0-M39926	-5	6	-5	21	-20	14	5	-10	-15	1	10
30-45.	4297-	108.6736-	2-	15-		0-M39927	-5	-5	-5	15	-20	-15	-5	-10	-15	-1	7
30-45.	4197-	108.6611-	2-	15-		0-M39928	-5	-5	-5	15	-20	-15	-5	-10	-15	-1	8
30-45.	4211-	108.6581-	2-	15-		0-M39929	-5	5	-5	31	-20	-15	6	-10	-15	1	15
30-45.	4119-	108.6331-	2-	11-		0-M39930	-5	6	-5	29	-20	-15	5	-10	-15	1	16
30-45.	4094-	108.6319-	2-	12-		0-M39931	-5	-5	-5	21	-20	19	-5	-10	-15	2	33

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
30-45.2539-109.9744-2-12-						0-M39859	69660	-0.11	-213	11320	70	-152	8.8	75	-1.8	2	1.0	15600	4.2	10080	50	-0.2
30-45.2558-109.9703-2-12-						0-M39860	66730	-0.08	450	17860	72	-113	7.7	69	1.2	4	1.1	10720	5.6	8592	105	0.5
30-45.2569-109.9631-2-12-						0-M39861	74430	-0.08	705	17720	61	143	10.3	84	2.6	3	1.0	19760	7.9	12380	50	0.2
30-45.2636-109.9614-2-12-						0-M39862	69950	-0.11	403	27590	120	-132	12.2	140	-1.8	4	1.3	23390	7.5	10480	115	0.7
30-45.2656-109.9528-2-12-						0-M39863	72310	-0.11	607	25380	62	-130	11.1	111	-1.8	2	0.9	24220	9.4	12620	48	0.4
30-45.2750-109.9500-2-12-						0-M39864	69040	-0.10	356	33180	64	242	16.4	146	1.8	4	0.9	33720	12.0	8940	52	0.4
30-45.3008-109.9386-2-12-						0-M39865	78200	-0.07	580	23650	34	-115	7.8	51	-1.1	2	0.6	14440	3.6	12540	19	0.2
30-45.5839-108.4167-2-15-						0-M39866	62670	-0.11	528	26890	82	150	11.0	70	3.6	4	1.0	16880	5.1	11510	43	0.5
30-45.5419-108.4239-2-12-						0-M39868	63470	-0.11	476	20520	68	-100	9.6	66	3.2	4	1.2	18360	6.4	11300	33	0.4
30-45.4056-109.9528-2-12-						0-M39870	59390	-0.12	292	34030	23	266	54.3	1471	-2.2	2	0.3	51090	-1.3	7107	15	-0.2
30-45.4103-109.9547-2-15-						0-M39871	72760	-0.11	333	38150	53	-83	24.4	1003	2.9	4	0.7	28730	3.1	15710	27	0.3
30-45.4075-109.9517-2-12-						0-M39872	56540	-0.10	216	22270	59	-103	23.2	1839	-1.7	4	0.7	39520	10.7	7963	39	0.6
30-45.4167-109.9167-2-11-						0-M39873	33310	-0.10	-165	228500	33	-82	7.5	251	-1.6	2	0.3	10720	2.2	10360	22	-0.2
30-45.5011-108.4611-2-15-						0-M39874	59310	-0.07	663	22340	71	-68	9.8	55	2.6	5	1.0	16380	6.5	14670	38	0.4
30-45.5133-108.4464-2-15-						0-M39875	71610	-0.11	560	17400	81	-73	10.9	67	3.9	6	1.2	19520	4.1	15890	45	0.4
30-45.5300-108.4511-2-15-						0-M39876	55880	-0.10	500	14960	100	-96	12.9	78	3.4	5	1.5	21740	9.0	11420	51	0.5
30-45.5247-108.4678-2-11-						0-M39877	60460	-0.12	479	15660	72	-114	10.8	61	-2.0	4	1.3	15650	6.7	13220	41	0.5
30-45.5311-108.4517-2-15-						0-M39878	57830	-0.08	649	22310	69	-92	11.9	59	2.7	5	1.0	14740	6.2	14300	33	0.4
30-45.5494-108.4297-2-15-						0-M39880	73050	-0.09	502	9512	70	-69	8.6	71	4.8	4	0.9	19170	5.0	16170	38	0.4
30-45.5636-108.4258-2-12-						0-M39881	51410	-0.07	608	14050	64	-73	6.6	75	2.4	4	0.9	10350	9.7	14050	36	0.4
30-45.5756-108.4253-2-12-						0-M39882	68960	-0.12	727	17400	63	-93	9.2	74	3.7	3	0.7	18480	6.0	15880	38	0.4
30-45.3092-109.9319-2-12-						0-M39883	80450	-0.06	1083	14190	43	-111	8.6	58	1.1	2	0.5	13700	4.1	20070	35	0.1
30-45.4997-108.4642-2-15-						0-M39885	66810	-0.10	547	11260	77	169	12.2	73	2.8	6	1.4	20530	6.7	16600	44	0.4
30-45.4992-108.4658-2-11-						0-M39886	67850	-0.13	549	16700	121	133	14.7	86	3.9	6	1.6	23280	7.6	15890	46	0.7
30-45.4972-108.4675-2-12-						0-M39887	56400	-0.12	464	15520	67	133	13.4	78	3.8	3	1.0	19340	7.8	13560	40	0.3
30-45.4800-108.4733-2-12-						0-M39892	57910	-0.08	893	22560	54	-80	9.9	72	2.7	5	1.2	17760	7.6	12490	34	0.4
30-45.4754-108.4881-2-15-						0-M39894	27270	-0.05	451	59620	31	-55	4.5	40	1.1	2	0.6	6576	7.9	8291	17	0.2
30-45.4539-108.5586-2-12-						0-M39897	39980	-0.07	601	19640	57	-71	7.0	59	2.1	3	1.0	10300	13.4	11190	28	0.4
30-45.4483-108.5147-2-15-						0-M39898	59370	-0.10	623	20220	64	-88	9.4	73	2.0	3	1.0	17740	8.0	14510	32	0.4
30-45.6275-108.4447-2-12-						0-M39899	47410	-0.06	683	31320	49	-58	5.8	41	2.3	4	0.7	9209	6.9	15970	30	0.3
30-45.6458-108.3867-2-12-						0-M39902	54580	-0.07	532	13040	66	-78	9.0	52	3.3	4	1.0	15200	7.5	16210	38	0.4
30-45.6467-108.3858-2-12-						0-M39903	52330	-0.08	552	12090	72	-86	9.5	54	3.4	4	0.9	15630	8.4	14840	42	0.4
30-45.6511-108.3967-2-12-						0-M39904	49300	-0.08	500	14270	49	-67	6.0	52	2.6	3	0.8	11610	6.6	15560	32	0.3
30-45.6781-108.3683-2-11-						0-M39905	48230	-0.06	1101	21280	60	-60	8.9	93	2.5	4	0.9	20610	10.3	12380	39	0.3
30-45.6800-108.3667-2-12-						0-M39907	46580	-0.06	605	36660	52	-58	5.7	48	2.5	4	0.9	11080	7.9	13690	30	0.3
30-45.6853-108.3617-2-12-						0-M39908	51120	-0.07	554	11810	69	-72	9.4	55	2.5	4	1.0	14960	9.1	13200	32	0.4
30-45.7197-108.3200-2-12-						0-M39909	50290	-0.08	520	12110	54	-54	4.9	42	3.0	4	0.9	9471	6.2	18630	32	0.3
30-45.6553-108.4975-2-12-						0-M39911	45220	-0.05	657	12110	45	-49	4.3	35	1.8	4	0.6	7219	6.6	16690	28	0.3
30-45.5319-108.4508-2-11-						0-M39914	52300	-0.06	656	24240	55	91	7.4	70	2.6	3	0.9	13190	8.9	15400	40	0.3
30-45.5800-108.4369-2-12-						0-M39915	47510	-0.08	620	16190	54	-60	6.0	72	2.2	3	0.8	12360	9.5	14130	37	0.3
30-45.6019-108.4050-2-15-						0-M39916	58420	-0.04	726	13660	58	-77	8.9	75	3.2	4	1.0	16330	6.2	14130	39	0.4
30-45.6453-108.3008-2-12-						0-M39918	66590	-0.14	941	14340	59	-70	9.1	62	3.3	3	1.1	17950	5.2	16340	40	-0.2
30-45.6747-108.3678-2-15-						0-M39920	53640	-0.08	611	12050	53	-76	8.8	46	2.9	4	0.7	14730	5.5	15720	29	0.3
30-45.6992-108.3503-2-15-						0-M39921	67860	-0.10	782	15950	60	-51	6.9	54	4.6	5	1.0	16420	5.6	19220	42	0.3
30-45.6986-108.3372-2-15-						0-M39922	59000	-0.09	882	33570	64	-72	7.3	60	3.3	3	1.3	15930	6.4	14960	36	0.2
30-45.4450-108.6492-2-12-						0-M39926	40230	-0.10	824	9507	49	-68	5.8	34	-1.3	3	0.9	10820	11.6	9377	30	0.3
30-45.4297-108.6736-2-15-						0-M39927	25110	-0.05	832	5509	24	32	4.5	30	1.1	2	0.4	6120	7.1	5089	16	0.3
30-45.4197-108.6611-2-15-						0-M39928	23490	-0.06	544	14320	24	-40	5.4	23	1.0	2	0.5	6308	5.5	5287	16	0.2
30-45.4211-108.6581-2-15-						0-M39929	49770	-0.10	5856	16740	73	-65	8.8	55	1.8	4	1.6	15800	11.3	9271	48	0.4
30-45.4119-108.6331-2-11-						0-M39930	46400	-0.10	480	7919	56	-71	6.9	47	2.8	3	0.9	14240	6.5	13800	-11	0.2
30-45.4094-108.6319-2-12-						0-M39931	41030	-0.07	764	33710	44	-61	8.4	42	2.1	3	0.8	11650	12.5	10710	32	0.3

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued)														U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAB. SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per million (ppm)														
							Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
30-45.2539-109.9744-2-12-						0-M39853	14190	506	27750	-31	-3	7.1	6.6	-450	-1		17.8	2304	43	-2.4	-45	1.095
30-45.2558-109.9703-2-12-						0-M39860	13880	272	26120	-19	-2	6.6	13.1	-320	-1	-1	16.0	2897	59	3.6	-31	4.776
30-45.2559-109.9631-2-12-						0-M39861	19370	469	21840	32	-2	9.9	3.8	-297	-1	-1	13.9	3083	76	2.5	88	0.608
30-45.2636-109.9614-2-12-						0-M39862	28410	579	24570	27	-3	12.8	20.0	-420	-1	-1	18.5	1898	84	3.6	106	5.768
30-45.2656-109.9528-2-12-						0-M39863	17830	491	26090	-30	-3	10.2	5.7	-393	-1		18.9	2858	75	-2.1	104	0.585
30-45.2750-109.9500-2-12-						0-M39864	28360	1029	20520	-24	-3	15.3	7.0	-420	-1	-1	19.3	6497	151	4.2	76	1.168
30-45.3008-109.9386-2-12-						0-M39865	13660	431	31680	-16	-2	6.9	2.3	-323	-1		10.6	1970	53	2.2	-36	0.381
30-45.5839-108.4167-2-15-						0-M39866	20840	565	5598	36	-3	7.7	6.5	-393	-1	-1	14.8	2375	61	3.1	69	0.334
30-45.5419-108.4239-2-12-						0-M39868	14950	1202	5845	-29	-3	9.1	4.2	-482	-1	-1	11.9	4221	84	3.9	-47	0.329
30-45.4056-109.9528-2-12-						0-M39870	112300	1286	6525	-33	-4	23.3	1.3	-459	-1	-1	4.7	3029	173	-2.5	166	0.221
30-45.4103-109.9547-2-15-						0-M39871	71530	1076	6965	-26	-3	19.6	3.4	-397	-1	-1	9.2	1796	91	-2.3	-40	0.476
30-45.4075-109.9517-2-12-						0-M39872	58030	980	13530	-24	-3	18.2	4.4	-402	-1		22.5	2758	99	4.4	-34	0.295
30-45.4157-109.9167-2-11-						0-M39873	17770	521	1690	-27	-3	5.2	1.6	-345	-1	-1	4.1	1580	54	-2.0	376	0.420
30-45.5011-108.4611-2-15-						0-M39874	14640	594	7397	41	-2	7.4	5.6	-275	-1	-1	10.1	3623	83	3.3	+64	0.372
30-45.5133-108.4464-2-15-						0-M39875	17650	539	4930	-28	-3	10.7	7.2	-332	-1	-1	11.9	5032	104	4.4	107	0.390
30-45.5300-108.4511-2-15-						0-M39876	10030	1155	7113	42	-3	8.8	7.4	-460	-1	-1	12.3	3872	77	4.1	99	0.324
30-45.5267-108.4678-2-11-						0-M39877	10330	1415	7124	-33	-4	9.2	4.2	-588	-1	-1	10.8	3747	82	4.3	167	0.436
30-45.5311-108.4517-2-15-						0-M39878	12670	1246	7852	40	-2	7.3	5.4	-438	-1	-1	9.2	3929	75	3.3	75	0.411
30-45.5494-108.4297-2-15-						0-M39880	14440	623	5527	56	-3	10.3	5.0	-320	-1		12.0	3515	103	3.5	108	0.311
30-45.5636-108.4258-2-12-						0-M39881	11670	187	10030	39	-2	5.3	4.8	328	-1	-1	10.9	2427	61	4.0	77	0.310
30-45.5756-108.4253-2-12-						0-M39882	16920	713	7468	74	-4	9.3	3.5	-404	-1	-1	11.6	3060	92	3.1	-44	0.338
30-45.3092-109.9319-2-12-						0-M39883	11290	447	27540	35	-2	5.2	2.7	-322	-1		10.8	2181	50	2.6	59	0.412
30-45.4997-108.4642-2-15-						0-M39885	14930	877	5702	53	-3	10.1	6.6	-378	-1	-1	12.2	4560	92	3.0	-72	0.345
30-45.4992-108.4658-2-11-						0-M39886	15640	607	5065	67	-4	11.8	9.3	-401	-1	-1	13.6	5219	100	4.2	110	0.340
30-45.4972-108.4675-2-12-						0-M39887	8658	1326	7306	-32	-4	8.1	5.0	-539	-1	-1	10.9	3484	79	3.3	-46	0.346
30-45.4800-108.4733-2-12-						0-M39892	12450	753	8140	39	-2	7.3	4.1	-333	-1	-1	9.6	3619	93	3.5	-50	0.354
30-45.4764-108.4881-2-15-						0-M39894	26750	237	6982	-13	-2	3.3	2.6	-185	-1		4.0	1727	36	-0.9	-41	0.403
30-45.4539-108.5586-2-12-						0-M39897	8178	302	9166	-17	-2	5.1	4.0	-251	-1	-1	7.6	2974	52	3.0	126	0.341
30-45.4483-108.5147-2-15-						0-M39898	20930	544	8857	-27	-3	8.5	4.7	-347	-1		9.2	3734	82	3.2	102	0.298
30-45.6275-108.4447-2-12-						0-M39899	11610	246	6516	36	-2	4.4	3.8	418			9.0	2093	63	3.0	48	0.416
30-45.6458-108.3867-2-12-						0-M39902	13560	1094	6907	50	-2	6.9	4.4	-356	-1	-1	10.7	3125	68	3.3	-51	0.363
30-45.6467-108.3858-2-12-						0-M39903	11150	1014	6479	50	-2	6.5	5.6	-398	-1	-1	11.9	3017	71	5.0	81	0.322
30-45.6511-108.3967-2-12-						0-M39904	9971	274	6798	42	-2	5.5	4.0	-240	-1		8.7	2300	68	-1.7	73	0.406
30-45.6781-108.3683-2-11-						0-M39906	9406	513	6495	33	-2	5.7	4.1	293	-1	1	12.2	4250	124	2.4	71	0.300
30-45.6800-108.3667-2-12-						0-M39907	28360	240	7377	33	-2	5.9	4.4	289			7.0	2718	71	2.2	49	0.369
30-45.6853-108.3617-2-12-						0-M39908	8280	709	6544	45	-2	6.2	5.2	-327	-1		11.0	2756	63	3.3	-78	0.344
30-45.7197-108.3200-2-12-						0-M39909	9649	214	6510	42	-2	5.1	3.2	-228	-1		10.8	2306	62	-1.8	-30	0.368
30-45.6553-108.4975-2-12-						0-M39911	9608	164	6437	35	-1	3.6	3.3	270			8.7	2198	55	2.5	45	0.400
30-45.5819-108.4508-2-11-						0-M39914	14180	410	10040	42	-2	6.3	4.0	-243	-1		9.2	2775	68	2.6	65	0.385
30-45.5800-108.4369-2-12-						0-M39915	9499	300	9036	34	-2	5.7	4.4	342	-1	-1	9.3	2893	73	3.2	54	0.353
30-45.6019-108.4050-2-15-						0-M39916	13200	535	7498	50	-1	7.6	5.1	-321	-1	-1	11.7	3266	92	3.2	-74	0.319
30-45.6453-108.3008-2-12-						0-M39918	21130	284	6067	-32	-4	9.3	3.8	-270	-1	-1	8.3	3458	180	-2.8	-50	0.461
30-45.6747-108.3678-2-15-						0-M39920	9164	1115	6230	41	-2	6.0	4.6	-360	-1	-1	10.9	2965	70	2.7	79	0.363
30-45.6992-108.3503-2-15-						0-M39921	16350	201	5378	54	-3	9.1	4.6	330	-1	-1	10.1	3469	137	2.6	125	0.397
30-45.6986-108.3372-2-15-						0-M39922	21710	310	10450	29	-3	6.7	4.5	-243	-1	-1	8.4	2747	101	3.0	65	0.343
30-45.4450-108.6492-2-12-						0-M39926	9557	377	7040	-22	-3	4.8	2.8	-263	-1	-1	5.0	2711	52	3.6	51	0.488
30-45.4297-108.6736-2-15-						0-M39927	5137	232	4373	-10	-1	2.8	1.8	-157	-1		4.2	1763	36	1.3	-14	0.340
30-45.4197-108.6611-2-15-						0-M39928	2948	325	3934	-12	-2	2.8	1.5	-169			3.7	1650	34	1.8	-19	0.381
30-45.4211-108.6591-2-15-						0-M39929	12710	660	5103	-20	-3	7.3	5.1	-301	-1	-1	9.7	3205	68	2.9	72	0.290
30-45.4119-108.6331-2-11-						0-M39930	11580	411	7765	-22	-3	6.1	3.5	-268	-1	-1	6.3	3277	60	-2.0	-35	0.395
30-45.4094-108.6319-2-12-						0-M39931	12910	598	6032	37	-2	5.1	4.0	-254		-1	6.8	3223	55	2.9	-38	0.375

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																											U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (umho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
30-45.4178-108.6294-2-12-						0-M39932-09/15/78-15-	25	-20.0	-C-	-	-	8.4-	750-	18-1-6-5-6-3-3-1-2-4-3-2-1-	-3-	-	-	-	-												2.04
30-45.4367-108.6217-2-12-						0-M39933-09/15/78-16-	25	-14.9	-C-	-	-	7.7-	420-	11-1-6-4-6-3-3-1-1-3-3-3-2-	-3-	-	-	-	-												2.62
30-45.4375-108.6194-2-12-						0-M39934-09/15/78-16-	25	-14.9	-C-	-	-	7.6-	500-	9-1-6-5-6-2-3-3-2-3-4-3-2-	-3-	-	-	-	-												2.86
30-45.4294-108.6108-2-12-						0-M39936-09/15/78-16-	25	-15.5	-	-	-	8.3-	550-	2-1-6-5-6-3-3-1-2-4-3-3-2-	-3-	-	-	-	-												2.64
30-45.4236-108.5794-2-12-						0-M39938-09/15/78-17-	24	-14.0	-C-	-	-	7.9-	1400-	9-1-6-4-6-3-3-2-2-3-4-3-2-	-3-	-	-	-	-												2.47
30-45.4272-108.5608-2-12-						0-M39939-09/15/78-17-	21	-13.8	-C-	-	-	7.8-	1050-	6-1-6-5-6-3-3-2-1-3-4-3-2-	-3-	-	-	-	-												2.29
30-45.5153-108.3906-2-12-						0-M39940-09/24/78-12-	23	-11.5	-	-	-	8.0-	900-	16-1-7-5-7-3-2-4-1-2-3-2-1-	-3-	-	-	-	-												4.41
30-45.4842-108.4003-2-12-						0-M39942-09/24/78-12-	21	-12.0	-C-	-	-	8.2-	700-	10-1-6-5-6-3-3-3-1-3-3-2-1-	-3-	-	-	-	-												4.26
30-45.4553-108.4017-2-12-						0-M39944-09/24/78-15-	21	-13.0	-	-	-	7.9-	1675-	13-1-1-5-6-2-3-1-2-2-2-2-1-	-3-	-	-	-	-												3.81
30-45.4269-108.3822-2-12-						0-M39945-09/24/78-16-	25	-14.0	-	-	-	7.9-	500-	11-1-6-5-6-3-3-2-2-3-3-2-1-	-3-	-	-	-	-												3.13
30-45.4219-108.4183-2-12-						0-M39947-09/24/78-16-	23	-14.0	-	-	-	8.3-	725-	13-1-6-3-6-2-3-1-2-4-3-2-1-	-3-	-	-	-	-												3.84
30-45.4208-108.4494-2-12-						0-M39948-09/24/78-16-	24	-16.0	-	-	-	8.2-	500-	6-1-6-6-6-2-3-1-2-4-3-2-1-	-3-	-	-	-	-												2.81
30-45.4278-108.4839-2-12-						0-M39950-09/24/78-17-	27	-14.0	-	-	-	8.0-	700-	9-1-6-5-7-3-3-2-2-4-4-2-1-	-3-	-	-	-	-												2.83
30-45.5108-108.4442-2-12-						0-M39952-09/26/78-15-	26	-14.5	-C-	-	-	7.9-	700-	8-1-6-4-6-3-3-4-1-2-3-2-1-	-3-	-	-	-	-												3.03
30-45.4008-108.5622-2-12-						0-M39957-09/26/78-17-	27	-14.5	-C-	-	-	7.9-	498-	11-1-6-5-6-4-3-1-2-2-3-2-1-	-3-	-	-	-	-												2.00
30-45.3978-108.5558-2-12-						0-M39959-09/26/78-17-	26	-14.0	-	-	-	7.0-	500-	4-1-6-5-6-3-3-1-1-4-2-2-1-	-1-	-	-	-	-												2.32
30-45.3964-108.5375-2-12-						0-M39960-09/26/78-17-	27	-15.3	-C-	-	-	7.6-	300-	9-1-6-5-6-2-2-1-1-4-2-2-1-	-3-	-	-	-	-												2.40
30-45.3917-108.5200-2-15-						0-M39961-09/26/78-18-	27	-C-	-	-	-	-	-	4-1-6-3-1- - - - -4-2-2-1-	-3-	-	-	-	-												2.42
30-45.3569-108.4947-2-12-						0-M39962-09/26/78-18-	26	-12.0	-C-	-	-	7.9-	350-	8-1-6-2-1-3-2-1-2-4-2-3-1-	-3-	-	-	-	-												2.28
30-45.3683-108.4989-2-12-						0-M39963-09/26/78-18-	20	-12.5	-C-	-	-	7.8-	498-	8-1-6-5-6-2-2-1-2-3-3-3-1-	-3-	-	-	-	-												2.82
30-45.3608-108.4700-2-12-						0-M39964-09/26/78-18-	20	-8.0	-	-	-	7.5-	350-	13-1-6-5-6-2-3-1-2-2-4-5-1-	-3-	-	-	-	-												2.14
30-45.4242-108.5192-2-15-						0-M39965-10/01/78-13-	19	-C-	-	-	-	-	-	8-1-6-5-6- - - - -4-2-2-1-	-3-	-	-	-	-												2.83
30-45.4206-108.4819-2-12-						0-M39969-10/01/78-14-	30	-12.0	-	-	-	7.7-	700-	10-1-6-5-7-2-2-1-1-2-2-2-1-	-3-	-	-	-	-												3.20
30-45.4194-108.4994-2-15-						0-M39969-10/01/78-17-	28	-	-	-	-	-	-	13-1-6-5-7- - - - -4-2-2-1-	-3-	-	-	-	-												4.11
30-45.4103-108.4694-2-12-						0-M39970-10/01/78-15-	28	-14.0	-C-	-	-	7.5-	675-	10-1-6-5-7-2-2-1-1-4-2-2-1-	-3-	-	-	-	-												3.03
30-45.4006-108.4714-2-11-						0-M39971-10/01/78-15-	20	-9.5	-C-	-	-	7.0-	490-	6-1-6-5-1-3-3-1- -2-3-3-1-	-3-	-	-	-	-												2.36
30-45.3675-108.5989-2-12-						0-M39972-10/13/78-14-	16	-11.0	-	-	-	7.9-	775-	6-1-6-5-7-2-2-2-1-4-2-2-1-	-3-	-	-	-	-												2.69
30-45.3386-108.5694-2-12-						0-M39974-10/13/78-15-	24	-7.5	-C-	-	-	7.2-	440-	9-1-6-1-1-3-2-1-2-2-3-3-1-	-3-	-	-	-	-												2.07
30-45.3283-108.5650-2-15-						0-M39977-10/13/78-16-	22	-	-	-	-	-	-	6-1-6-3-6- - - - -2-3-5-1-	-3-	-	-	-	-												1.93
30-45.3300-108.5647-2-12-						0-M39978-10/13/78-16-	21	-9.0	-	-	-	7.1-	400-	9-1-6-4-6-3-3-1-1-2-3-5-1-	-3-	-	-	-	-												1.95
30-45.3192-108.5403-2-12-						0-M39979-10/13/78-15-	20	-8.0	-	-	-	7.0-	420-	4-1-6-5-8-3-3-1-2-2-3-5-1-	-3-	-	-	-	-												2.50
30-45.3150-108.5675-2-15-						0-M39980-10/13/78-17-	19	-	-	-	-	-	-	12-1-6-5-8- - - - -3-3-5-1-	-3-	-	-	-	-												2.51
30-45.3181-108.5792-2-15-						0-M39981-10/13/78-17-	18	-	-	-	-	-	-	5-1-6-3-6- - - - -2-3-5-1-	-3-	-	-	-	-												2.31
30-45.2989-108.5933-2-12-						0-M39982-10/13/78-17-	15	-8.0	-C-	-	-	7.9-	550-	15-1-6-5-6-2-2-2-1-4-2-5-1-	-3-	-	-	-	-												2.59
30-45.2867-108.6175-2-15-						0-M39983-10/13/78-17-	15	-	-	-	-	-	-	6-1-6-5-6- - - - -4-2-4-1-	-3-	-	-	-	-												1.98
30-45.2759-108.6244-2-15-						0-M39984-10/13/78-18-	14	-	-	-	-	-	-	9-1-6-5-6- - - - -4-2-4-1-	-3-	-	-	-	-												2.44
30-45.3425-108.5361-2-15-						0-M39985-10/14/78-14-	19	-	-	-	-	-	-	6-1-6-3-6- - - - -2-3-5-1-	-3-	-	-	-	-												2.24
30-45.3708-108.5294-2-12-						0-M39986-10/14/78-14-	26	-12.5	-C-	-	-	7.9-	340-	15-1-1-3-1-3-3-4-2-4-2-3-1-	-3-	-	-	-	-												3.73
30-45.2186-108.6706-2-15-						0-M39987-10/14/78-15-	25	-	-	-	-	-	-	9-1-6-4-6- - - - -4-2-2-1-	-3-	-	-	-	-												2.35
30-45.2144-108.6653-2-15-						0-M39988-10/14/78-15-	25	-	-	-	-	-	-	9-1-6-5-1- - - - -4-2-2-1-	-3-	-	-	-	-												2.07
30-45.2419-108.6356-2-15-						0-M39989-10/14/78-15-	26	-C-	-	-	-	-	-	8-1-7-4-6- - - - -3-3-4-1-	-3-	-	-	-	-												2.44
30-45.2217-108.5794-2-11-						0-M39990-10/14/78-16-	24	-7.0	-	-	-	7.1-	415-	12-1-7-4-4-3-3-1-2-2-3-4-1-	-3-	-	-	-	-												2.20
30-45.2242-108.5794-2-15-						0-M39991-10/14/78-16-	24	-	-	-	-	-	-	5-1-6-4-1- - - - -3-3-4-1-	-3-	-	-	-	-												1.96
30-45.2125-108.5400-2-11-						0-M39992-10/14/78-16-	26	-13.0	-C-	-	-	7.8-	770-	9-1-6-5-6-2-2-1-2-3-3-4-1-	-1-	-	-	-	-												2.14
30-45.2083-108.5206-2-11-						0-M39993-10/14/78-17-	21	-10.0	-C-	-	-	7.2-	360-	10-1-6-5-6-3-3-1-2-3-3-4-1-	-3-	-	-	-	-												2.79
30-45.2444-108.5428-2-11-						0-M39994-10/14/78-18-	17	-8.0	-C-	-	-	7.3-	490-	5-1-6-5-8-2-3-1-2-1-3-5-1-	-3-	-	-	-	-												1.92
30-45.2689-108.5514-2-11-						0-M39995-10/14/78-19-	10	-C-	-	-	-	-	-	10-1-6-5-8- - - - -1-3-5-1-	-3-	-	-	-	-												2.70
30-45.2228-108.5783-2-12-						0-M39996-10/14/78-19-	8	-7.0	-C-	-	-	7.4-	500-	12-1-7-5-6-3-3-1-1-2-3-4-1-	-3-	-	-	-	-												2.14
30-45.6939-108.2778-2-15-						0-M39999-10/22/78-9-	6	-	-C-	-	-	-	-	13-1-6-4-6- - - - -4-2-2-1-	-3-	-	-	-	-												2.62

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

(2)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
30-45.4178-108.6294-2-12-						0-M39933	-5	-5	-5	21	-20	-15	-5	-10	-15	2	14
30-45.4367-108.6217-2-12-						0-M39933	-5	-5	-5	23	-20	35	6	-10	-15	2	23
30-45.4375-108.6194-2-12-						0-M39934	-5	5	-5	34	-20	19	7	-10	-15	1	23
30-45.4294-108.6108-2-12-						0-M39936	-5	5	-5	21	-20	-15	6	-10	-15	2	21
30-45.4236-108.5794-2-12-						0-M39938	-5	-5	-5	32	-20	16	6	-10	-15	2	43
30-45.4272-108.5608-2-12-						0-M39939	-5	-5	-5	25	-20	15	5	-10	-15	1	40
30-45.5153-108.3906-2-12-						0-M39940	-5	-5	-5	23	-20	24	5	-10	-15	2	31
30-45.4942-108.4003-2-12-						0-M39943	-5	-5	-5	29	-20	-15	6	-10	-15	2	43
30-45.4553-108.4017-2-12-						0-M39944	-5	5	-5	25	-20	17	12	-10	-15	1	42
30-45.4269-108.3822-2-12-						0-M39946	-5	7	-5	28	-20	-15	7	-10	18	2	37
30-45.4219-108.4183-2-12-						0-M39947	-5	-5	-5	28	-20	33	6	-10	-15	2	45
30-45.4208-108.4494-2-12-						0-M39948	-5	-5	-5	38	-20	18	-5	-10	-15	2	41
30-45.4278-108.4839-2-12-						0-M39950	-5	-5	-5	21	-20	26	-5	-10	-15	2	36
30-45.5108-108.4442-2-12-						0-M39952	-5	6	-5	30	-20	-15	-5	-10	-15	1	30
30-45.4009-108.5622-2-12-						0-M39957	-5	-5	-5	12	-20	-15	-5	-10	-15	1	48
30-45.3978-108.5558-2-12-						0-M39959	-5	6	-5	26	-20	-15	6	-10	-15	1	39
30-45.3964-108.5375-2-12-						0-M39960	-5	9	-5	27	-20	17	12	-10	-15	1	45
30-45.3917-108.5200-2-15-						0-M39961	-5	8	-5	28	-20	-15	-5	-10	-15	-1	60
30-45.3569-108.4947-2-12-						0-M39962	-5	-5	-5	30	-20	30	7	-10	-15	1	29
30-45.3683-108.4989-2-12-						0-M39963	-5	-5	-5	26	-20	-15	10	-10	-15	2	30
30-45.3608-108.4700-2-12-						0-M39964	-5	-5	-5	28	-20	-15	-5	-10	-15	1	77
30-45.4242-108.5192-2-15-						0-M39966	-5	5	-5	27	-20	-15	11	-10	-15	2	28
30-45.4206-108.4819-2-12-						0-M39968	-5	6	-5	33	-20	18	6	-10	-15	2	32
30-45.4194-108.4994-2-15-						0-M39969	-5	5	-5	31	-20	32	12	-10	-15	2	42
30-45.4103-108.4694-2-12-						0-M39970	-5	5	-5	28	-20	25	14	-10	-15	2	45
30-45.4006-108.4714-2-11-						0-M39971	-5	-5	-5	36	-20	-15	11	-10	-15	2	41
30-45.3675-108.5989-2-12-						0-M39972	-5	5	-5	23	-20	-15	-5	-10	-15	2	25
30-45.3396-108.5694-2-12-						0-M39974	-5	-5	-5	27	-20	17	7	-10	-15	-1	45
30-45.3283-108.5650-2-15-						0-M39977	-5	6	-5	22	-20	-15	8	-10	-15	1	45
30-45.3300-108.5647-2-12-						0-M39978	-5	5	-5	17	-20	-15	-5	-10	-15	-1	60
30-45.3192-108.5403-2-12-						0-M39979	-5	-5	-5	26	-20	20	-5	-10	-15	2	36
30-45.3150-108.5675-2-15-						0-M39980	-5	-5	-5	27	-20	17	15	-10	-15	2	29
30-45.3191-108.5792-2-15-						0-M39981	-5	-5	-5	25	-20	30	10	-10	-15	1	41
30-45.2989-108.5933-2-12-						0-M39982	-5	6	-5	30	-20	20	7	-10	-15	1	34
30-45.2957-108.6175-2-15-						0-M39983	-5	-5	-5	-10	-20	-15	6	-10	-15	1	27
30-45.2758-108.6244-2-15-						0-M39984	-5	6	-5	29	-20	24	7	-10	-15	1	42
30-45.3425-108.5361-2-15-						0-M39985	-5	7	-5	26	-20	-15	17	-10	-15	-1	30
30-45.3708-108.5294-2-12-						0-M39986	-5	-5	-5	28	-20	22	-5	-10	-15	1	40
30-45.2186-108.6706-2-15-						0-M39987	-5	-5	-5	22	-20	-15	-5	-10	-15	1	37
30-45.2144-108.6653-2-15-						0-M39988	-5	-5	-5	18	-20	20	-5	-10	-15	1	70
30-45.2419-108.6356-2-15-						0-M39989	-5	-5	-5	29	-20	15	34	22	-15	1	50
30-45.2217-108.5794-2-11-						0-M39990	-5	-5	-5	24	-20	24	-5	-10	-15	1	44
30-45.2242-108.5794-2-15-						0-M39991	-5	6	-5	-10	-20	-15	-5	-10	-15	-1	24
30-45.2125-108.5400-2-11-						0-M39992	-5	-5	-5	25	-20	27	7	-10	-15	1	88
30-45.2083-108.5206-2-11-						0-M39993	-5	-5	-5	26	-20	-15	-5	-10	-15	-1	36
30-45.2444-108.5428-2-11-						0-M39994	-5	-5	-5	11	-20	-15	5	-10	-15	-1	6
30-45.2689-108.5514-2-11-						0-M39995	-5	-5	-5	28	-20	26	17	-10	-15	1	26
30-45.2228-108.5783-2-12-						0-M39996	-5	-5	-5	17	-20	-15	-5	-10	-15	-1	43
30-45.6939-108.2778-2-15-						0-M39998	-5	-5	-5	33	-20	-15	21	-10	-15	2	42

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)															
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
30-45.4178-108.6294-2-12-			0-M39932				46530	-0.08	722	11070	49	-58	6.3	45	1.8	3	1.0	11970	6.4	14010	26	0.3
30-45.4367-108.6217-2-12-			0-M39933				51190	-0.10	534	9016	72	-69	9.1	74	2.0	4	1.0	13910	12.2	14400	32	0.4
30-45.4375-108.6194-2-12-			0-M39934				50120	-0.11	738	12380	55	-70	7.4	50	-1.4	3	0.9	14260	9.2	10910	26	0.3
30-45.4294-108.6108-2-12-			0-M39936				47280	-0.07	779	13570	49	-71	7.9	49	1.9	3	0.9	13960	8.3	11020	34	0.3
30-45.4236-108.5794-2-12-			0-M39938				47390	-0.08	607	36550	56	-61	8.5	42	2.4	4	0.9	15840	8.5	11630	27	0.3
30-45.4272-108.5608-2-12-			0-M39939				40860	-0.09	649	41360	54	-67	6.9	47	1.7	3	0.9	12150	9.2	11160	24	0.3
30-45.5153-108.3906-2-12-			0-M39940				53730	-0.12	479	10330	60	-92	10.3	50	3.8	3	1.1	16870	6.1	12510	40	0.3
30-45.4842-108.4003-2-12-			0-M39942				71440	-0.10	444	11450	72	-67	9.7	64	3.7	5	1.0	18160	5.7	17250	49	0.4
30-45.4553-108.4017-2-12-			0-M39944				66220	-0.11	597	14140	72	-71	10.9	66	4.3	5	1.1	21420	5.8	13600	41	0.3
30-45.4269-108.3822-2-12-			0-M39946				52120	-0.12	494	27750	54	-80	7.1	37	3.2	3	0.8	13040	4.8	17890	26	0.2
30-45.4219-108.4183-2-12-			0-M39947				60490	-0.09	471	27120	68	-73	10.0	61	3.0	5	0.9	18070	6.7	13070	35	0.4
30-45.4208-108.4494-2-12-			0-M39948				52820	-0.10	527	47980	51	-64	8.8	71	2.8	4	0.9	15290	7.5	11960	45	0.4
30-45.4278-108.4839-2-12-			0-M39950				58120	-0.11	671	18170	72	-80	10.3	82	2.7	4	1.0	18130	7.8	14270	45	0.3
30-45.5108-108.4442-2-12-			0-M39952				42980	-0.11	598	40260	46	-77	6.7	57	-1.3	3	0.8	12940	9.6	10370	28	0.4
30-45.4008-108.5622-2-12-			0-M39957				39060	-0.07	426	83970	37	110	7.6	50	1.8	3	0.7	10700	7.1	11860	27	0.3
30-45.3978-108.5558-2-12-			0-M39958				42250	-0.08	462	58450	44	-66	6.7	67	1.6	3	0.7	11430	9.3	10910	30	0.3
30-45.3964-108.5375-2-12-			0-M39960				54880	-0.12	557	59460	66	-79	9.8	76	2.9	3	1.0	16020	6.1	12570	32	0.4
30-45.3917-108.5200-2-15-			0-M39961				53470	-0.13	508	59210	59	-82	7.7	67	3.2	3	0.8	14340	5.5	12200	37	-0.2
30-45.3569-108.4947-2-12-			0-M39963				31300	-0.07	342	122500	43	95	6.0	56	1.4	2	0.6	10290	8.6	8573	22	0.3
30-45.3683-108.4989-2-12-			0-M39965				53370	-0.10	496	33590	59	-72	8.0	60	3.1	4	0.9	15970	7.2	12500	42	0.3
30-45.3608-108.4700-2-12-			0-M39964				37110	-0.12	336	92230	55	153	8.1	61	2.5	3	0.9	12610	8.6	11800	30	0.3
30-45.4242-108.5192-2-15-			0-M39966				56240	-0.12	518	12710	64	-85	9.3	76	3.1	4	1.2	16990	8.5	13380	33	0.3
30-45.4206-108.4819-2-12-			0-M39968				59470	-0.10	616	15620	65	-75	9.9	68	2.7	5	1.1	17230	7.7	16090	45	0.3
30-45.4194-108.4994-2-15-			0-M39969				61860	-0.11	485	8559	71	-65	12.5	62	2.6	6	1.3	20390	7.2	12230	43	0.4
30-45.4103-108.4694-2-12-			0-M39970				59730	-0.12	525	34640	84	-88	11.8	76	3.4	4	1.0	19080	7.8	13690	49	0.5
30-45.4006-108.4714-2-11-			0-M39971				86270	-0.17	467	17280	67	-54	9.1	59	5.8	3	0.8	20550	4.6	19680	43	0.5
30-45.3675-108.5989-2-12-			0-M39972				41700	-0.08	525	39330	50	-59	6.1	53	1.9	3	0.8	10810	11.3	10810	33	0.3
30-45.3386-108.5694-2-12-			0-M39974				35180	-0.08	381	93230	40	-58	5.6	45	1.7	2	0.8	10140	7.3	9549	24	0.3
30-45.3283-108.5650-2-15-			0-M39977				38810	-0.09	423	83290	56	135	7.7	78	1.1	3	0.8	13910	8.0	10030	28	0.3
30-45.3300-108.5647-2-12-			0-M39978				21500	-0.08	226	126000	21	147	3.9	43	-1.0	2	0.4	6404	9.8	7685	-11	0.3
30-45.3192-108.5403-2-12-			0-M39979				53150	-0.09	567	40560	54	68	8.2	61	2.9	3	0.8	13520	7.3	13560	40	0.4
30-45.3150-108.5675-2-15-			0-M39980				55990	-0.11	460	23090	54	-94	7.7	70	3.3	3	0.9	15990	6.6	17570	37	0.3
30-45.3181-108.5792-2-15-			0-M39981				46120	-0.10	508	55470	54	114	9.7	73	2.7	3	0.9	14630	8.6	12140	27	0.3
30-45.2989-108.5933-2-12-			0-M39982				50410	-0.12	558	42890	48	-72	6.2	57	-1.5	4	0.5	13190	6.8	12880	25	0.3
30-45.2867-108.6175-2-15-			0-M39983				51640	-0.07	677	13810	40	-75	6.0	50	1.7	3	0.7	9840	4.5	15230	23	0.3
30-45.2758-108.6244-2-15-			0-M39984				50160	-0.08	564	18360	41	-80	7.6	53	1.8	3	0.6	10230	5.1	13170	18	0.2
30-45.3425-108.5361-2-15-			0-M39985				45590	-0.11	450	45810	56	-76	8.3	63	2.8	3	0.9	13950	8.2	13810	31	0.4
30-45.3708-108.5294-2-12-			0-M39986				47080	-0.14	434	53400	71	-89	8.4	60	-1.8	4	1.3	20440	7.7	9606	39	0.5
30-45.2196-108.6706-2-15-			0-M39987				37390	-0.07	350	53730	45	-53	5.8	65	1.3	3	0.7	11150	13.4	9927	22	0.3
30-45.2144-108.6653-2-15-			0-M39988				42710	-0.08	377	98410	40	-65	6.9	53	2.5	2	0.6	12580	6.3	10260	24	-0.1
30-45.2419-108.6356-2-15-			0-M39989				53110	-0.11	493	25430	67	-63	8.2	78	2.6	4	1.0	16930	9.3	11070	38	0.4
30-45.2217-108.5794-2-11-			0-M39990				49080	-0.14	340	39650	70	-43	6.6	60	4.1	5	0.8	16750	7.3	11480	36	0.5
30-45.2242-108.5794-2-15-			0-M39991				27030	-0.06	367	38070	28	-50	4.6	36	1.4	2	0.4	6445	8.9	10300	15	0.2
30-45.2125-108.5400-2-11-			0-M39992				53770	-0.10	253	107900	51	-63	7.9	63	2.9	3	0.7	16690	4.9	12470	30	0.3
30-45.2083-108.5206-2-11-			0-M39993				28600	-0.08	369	35400	48	71	4.7	45	1.5	4	0.9	7435	15.6	13170	27	0.4
30-45.2444-108.5428-2-11-			0-M39994				14840	-0.02	277	9909	19	-37	2.5	15	1.0	1	0.3	2075	8.9	5998	3	0.1
30-45.2689-108.5514-2-11-			0-M39995				40580	-0.07	335	6265	39	-53	6.4	58	2.3	3	0.6	9822	8.9	14440	23	0.3
30-45.2228-108.5783-2-12-			0-M39996				33330	-0.07	343	47180	33	-60	5.5	37	1.8	3	0.7	8789	7.9	13490	20	0.3
30-45.6939-108.2778-2-15-			0-M39998				56560	-0.09	636	23640	55	-58	6.2	58	3.4	3	0.9	12740	7.1	16730	31	0.2

APPENDIX I-B. (continued). Elemental Concentrations for Sediment Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)												U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
30-45.4178-108.6294-2-12-						0-M39032	9072	341	8180	33	-2	5.7	3.8	-204	-1	-1	6.0	2381	59	3.2	70	0.340
30-45.4367-108.6217-2-12-						0-M39033	10170	390	8800	38	-3	6.4	4.7	-254	-1	-1	10.0	2982	73	3.0	64	0.262
30-45.4375-108.6194-2-12-						0-M39034	11010	514	6730	-24	-3	6.9	-1.2	-232	-1	-1	7.9	3760	80	3.2	-39	0.362
30-45.4294-108.6108-2-12-						0-M39036	13040	874	7765	40	-2	6.1	4.1	-310		-1	6.6	3386	61	2.8	-40	0.400
30-45.4236-108.5794-2-12-						0-M39038	17550	539	6876	46	-3	6.9	4.0	-245	-1	-1	7.4	3255	61	3.0	58	0.334
30-45.4272-108.5608-2-12-						0-M39039	15100	415	7107	31	-3	5.4	3.8	-253	-1	-1	6.7	2763	52	3.2	47	0.342
30-45.5153-108.3906-2-12-						0-M39040	7160	1385	5402	-28	-4	7.1	5.0	-481	-1	-1	12.6	3302	66	3.1	-45	0.350
30-45.4842-108.4003-2-12-						0-M39042	12980	770	4781	36	-3	8.8	5.8	-322	-1	-1	11.9	3548	95	3.2	58	0.358
30-45.4553-108.4017-2-12-						0-M39044	15310	1003	5601	54	-3	10.3	5.1	-351	-1	-1	10.4	4043	92	3.6	118	0.366
30-45.4269-108.3822-2-12-						0-M39046	17310	555	6711	-28	-4	6.1	-1.4	-343	-1	-1	9.0	2732	56	3.2	56	0.348
30-45.4219-108.4183-2-12-						0-M39047	12730	982	5293	40	-3	7.5	5.2	-351	-1	-1	11.3	3593	79	3.5	75	0.340
30-45.4208-108.4494-2-12-						0-M39048	25200	430	6742	-21	-3	7.1	4.4	-246	-1	-1	9.3	3037	69	2.8	69	0.302
30-45.4278-108.4839-2-12-						0-M39050	14210	612	8657	39	-3	8.0	5.4	-317	-1	-1	9.8	3420	76	3.8	74	0.289
30-45.5108-108.4442-2-12-						0-M39052	18740	415	8565	-24	-3	5.8	2.9	-285	-1	-1	8.6	2744	62	3.1	58	0.352
30-45.4008-108.5622-2-12-						0-M39057	47620	300	6934	21	-2	4.7	3.0	258	-1	-1	6.4	2551	54	2.1	46	0.313
30-45.3978-108.5553-2-12-						0-M39059	30810	259	9694	37	-3	5.7	3.3	-205	-1	-1	7.3	2537	59	2.7	77	0.318
30-45.3964-108.5375-2-12-						0-M39060	21060	317	8392	39	-4	7.7	4.7	-275	-1	-1	10.1	3651	67	3.2	-5	0.238
30-45.3917-108.5200-2-15-						0-M39061	22500	317	8650	51	-4	6.9	3.9	-287	-1	-1	7.9	2846	67	-2.5	-44	0.306
30-45.3569-108.4947-2-12-						0-M39062	100900	348	5227	-14	-2	4.3	2.6	-228		-1	6.7	1922	55	2.4	44	0.340
30-45.3683-108.4989-2-12-						0-M39063	22100	627	7030	-22	-3	7.1	4.7	-301	-1	-1	8.9	2974	69	3.0	87	0.317
30-45.3608-108.4700-2-12-						0-M39064	21830	225	5052	-25	-4	5.6	3.7	-256	-1	-1	8.0	2063	59	3.3	-53	0.268
30-45.4242-108.5192-2-15-						0-M39066	12230	576	8951	-27	-4	7.5	2.4	-325	-1	-1	9.3	3357	77	4.7	-62	0.304
30-45.4206-108.4819-2-12-						0-M39068	13650	677	8196	43	-3	7.8	5.3	-313	-1	-1	10.9	3981	81	3.0	99	0.294
30-45.4194-108.4994-2-15-						0-M39069	12760	685	5466	-23	-3	9.9	6.1	-296	-1	-1	10.9	3975	98	4.1	-68	0.377
30-45.4103-108.4694-2-12-						0-M39070	24000	837	7233	42	-4	8.4	5.0	-403	-1	-1	9.6	3808	77	4.3	-68	0.316
30-45.4006-108.4714-2-11-						0-M39071	19450	231	2362	89	-5	11.3	3.8	-267	-2	-1	10.5	3607	137	-3.0	-52	0.225
30-45.3675-108.5989-2-12-						0-M39072	20920	233	6044	30	-2	5.0	3.8	-209	-1	-1	7.5	3120	53	-1.5	56	0.359
30-45.3286-108.5694-2-12-						0-M39074	67180	228	6011	-17	-2	4.9	2.9	-203	-1	-1	5.8	2130	49	2.2	68	0.357
30-45.3283-108.5650-2-15-						0-M39077	56340	396	7705	-19	-3	5.9	4.2	-269	-1	-1	6.8	2539	57	2.7	-63	0.284
30-45.3300-108.5647-2-12-						0-M39078	68550	150	3827	-18	-2	2.9	-1.0	-198	-1	-1	4.7	1434	30	-1.6	-27	0.415
30-45.3192-108.5403-2-12-						0-M39079	36130	399	7693	35	-3	6.4	3.6	-265	-1	-1	7.7	3042	69	2.3	78	0.325
30-45.3150-108.5675-2-15-						0-M39080	19050	373	7984	-24	-3	7.6	3.5	542	-1	-1	8.5	2905	70	2.7	81	0.295
30-45.3181-108.5792-2-15-						0-M39081	51010	506	6820	-22	-3	6.4	4.3	-273	-1	-1	8.4	2949	61	-2.0	70	0.275
30-45.2989-108.5933-2-12-						0-M39082	21680	488	8095	33	-4	6.2	-1.3	-268	-1	-1	6.6	3058	71	-2.5	80	0.392
30-45.2867-108.6175-2-15-						0-M39083	13270	366	11180	37	-2	4.8	2.7	-264		-1	5.3	2300	51	2.5	28	0.374
30-45.2758-108.6244-2-15-						0-M39084	17910	366	6492	-19	-2	5.2	2.9	-332	-1	-1	5.7	2921	61	-1.7	70	0.428
30-45.3425-108.5361-2-15-						0-M39085	39690	502	6688	-22	-3	6.2	3.4	-326	-1	-1	7.5	2962	62	4.0	-59	0.299
30-45.3708-108.5294-2-12-						0-M39086	20570	704	5916	-32	-4	7.6	4.4	-400	-1	-1	7.8	4730	86	3.6	-56	0.478
30-45.2186-108.6706-2-15-						0-M39087	29160	211	5357	31	-2	5.5	3.3	312		-1	7.3	2586	58	2.6	-25	0.322
30-45.2144-108.6653-2-15-						0-M39089	30040	269	4791	27	-3	6.0	3.3	330	-1	-1	7.5	2096	62	-1.5	71	0.276
30-45.2419-108.6356-2-15-						0-M39089	19140	433	7316	-22	-3	7.7	4.3	-246	-1	-1	9.0	3205	70	-2.5	83	0.271
30-45.2217-108.5794-2-11-						0-M39090	16330	167	2462	-28	-4	12.4	2.4	-175	-1	-1	8.6	4814	75	-2.8	54	0.256
30-45.2242-108.5794-2-15-						0-M39091	21560	157	4414	21	-2	3.3	1.7	-181			4.6	1734	31	1.6	49	0.426
30-45.2125-108.5400-2-11-						0-M39092	24750	280	2924	-20	-3	8.3	3.6	303	-1	-1	8.9	3172	73	-1.7	-31	0.240
30-45.2083-108.5206-2-11-						0-M39093	23640	196	4458	26	-2	4.0	3.9	188	-1	-1	7.3	2889	29	3.8	26	0.382
30-45.2444-108.5428-2-11-						0-M39094	6340	57	1809	-9	-1	1.2	0.7	279	-1		1.7	937	13	1.1	20	1.129
30-45.2689-108.5514-2-11-						0-M39095	10020	342	3961	26	-2	5.1	2.7	-242		-1	6.4	2534	47	2.6	61	0.422
30-45.2228-108.5783-2-12-						0-M39096	27020	195	5097	39	-2	4.5	3.0	254	-1	-1	5.6	2154	40	2.4	-46	0.382
30-45.6939-108.2778-2-15-						0-M39098	25810	190	7757	44	-3	6.4	4.0	316	-1	-1	8.7	3136	94	3.3	-72	0.301

APPENDIX II

SUMMARY OF STANDARD LASL HSSR PROCEDURES AND CODES

APPENDIX II-A

Summary of Standard LASL HSSR Field and Analytical Procedures

APPENDIX II-B

Explanation of Codes Used in Appendix I

APPENDIX II-C

Key to Sample Types Listed in Appendix I

APPENDIX II-A

SUMMARY OF STANDARD LASL HSSR FIELD AND ANALYTICAL PROCEDURES

I. FIELD PROCEDURES

Water Sampling

Water samples are collected first, directly from the source wherever possible, filtered through a 0.45-μ membrane filter (except in Alaska where this step is omitted) directly into one each, prewashed and sealed, 41-ml reactor "rabbit" and 25-ml vial (both polyethylene). Water samples in both the rabbit and vial are then acidified to a pH <1 with 8N reagent-grade HNO_3. All sample containers are doubly labeled with preprinted adhesive labels carrying the same sample location number as that preprinted on the field data form. Springs are sampled as near to their point of emergence as possible; stream waters are taken from the fast-flowing current away from the bank; ponds (including small lakes and reservoirs) are sampled from just below the surface, near their center; and well waters are taken near the wellhead if the well is pumping or from a holding tank if not.

Sediment Sampling (Wet or Dry)

Following the collection of the water sample (if any), enough fine-grained, organic-rich, water-transported sediment to yield a composite sample of 25 g after processing (as indicated below) is taken from beneath the water level (where water exists) at three adjacent spots at each spring or stream location. The sediment is put into a new, clean, and originally sealed, rip-top polyethylene bag which is then properly double-labeled for delivery (with the field data form) to the contractor's drying facility. After drying at <100°C, each sample is sieved through a 100-mesh stainless steel sieve. The minus 100-mesh fraction is put into a prewashed, 25-ml polyethylene vial which is then appropriately double-labeled (using labels from the data form) and sealed for shipment to the LASL. In the case of lakes sampled in Alaska, the sediment is taken from as near the center of each lake as possible by dropping a tethered, stainless steel bottom sampler overboard from a pontoon-equipped helicopter. Here, only a bottom sample from a single location is taken (i.e., it is not a composite) and sampling is limited to lakes less than 10 m deep and about 0.3 to 2.0 km in least horizontal dimension. The sampler is rinsed before each use and the raw sample is put into a clean polyethylene bag, labeled, and treated as above.

Field Measurements

The air temperature, read in the shade at the time of sampling, is recorded to the nearest whole degree Celsius. The water temperature is measured in the source water and recorded to the nearest one-half degree Celsius. The pH of the source water is measured with a calibrated, portable pH meter and recorded to the nearest one-tenth of a pH unit. The conductivity (in μmho/cm) of the source water is measured with a calibrated, temperature-compensated (25°C), portable meter. A conductivity of 50 000 μmho/cm was assigned to any water sample for which the actual conductivity exceeded that value, the maximum measurable value on the instrument used. Two readings are recorded, the first with a radiation shield in place (blocking out ground radiation) and the second with the shield removed. The readings (in counts/s) are converted by

computer, using measured calibration factors, to the equivalent uranium (eU) value in the data listings. Special measurements such as dissolved oxygen are made with a calibrated, commercially available, portable meter and probe. In lakes, the water temperature, pH, conductivity, and (special) dissolved oxygen are usually all measured with a single, digital-readout unit, utilizing a parameter selector switch and a composite probe that is lowered from the sampling helicopter to just below the water's surface. Care is taken to see that these measurements are made before the bottom sediment is disturbed.

Field Observations

These represent the best judgment of the field sampler at a location and include general descriptions of the local bedrock, sediment, water, vegetation, terrain, weather, possible contaminants, and well configuration, if applicable. Because these observations are subjective and made quickly in the field, they should be held subordinate to formally documented information such as that provided by published topographic or geologic maps, etc.

Sample Location Verification

Each contractor is supplied field maps with the desired sample types and general locations symbolically premarked at the LASL. In the lower states, the field maps are generally 1:24 000-scale or 1:62 500-scale USGS topographic maps; in Alaska, they are normally 1:250 000-scale NTMS quadrangle maps, also available from the USGS. As each location is sampled, a unique sample location number, preprinted on transparent adhesive labels (also used for labeling the samples) that are provided with each identically numbered field data form, is placed on top of the precisely marked point representing the sample site on the field map. When a desired sample as specified cannot be obtained, an identical or alternate sample type (as near as possible to the original one) is picked, and the new sample type and/or location is/are marked on the field map and properly labeled as above. The latitude and longitude of each location is then computed by the sampling contractor within 48 h of taking each sample. Every location is later checked (and corrected if necessary) at the LASL by digitizing the sample locations on each map and comparing them to those computed in the field. The latitudes and/or longitudes are corrected if the field-computed locations are displaced by more than 300 m from the locations marked on the field maps. A final visual check of sample locations is made by overlaying computer-produced location plots on the field maps used. The computer program for generating the Universal Transverse Mercator map projection overlays is described by Cheadle (1977).

II. ANALYTICAL PROCEDURES

Uranium Determination in Water Samples by Fluorometry

Under normal procedures, the 25-ml water vial is vigorously shaken and duplicate 0.20-ml aliquots of water are transferred to platinum dishes. The aliquots are evaporated under heat lamps and a 0.4-g pellet of 2% LiF-98% NaF flux is added to each dish. The pellets are first preheated under lamps, then fused over special propane burners. After each pellet/sample cools, it is excited with ultraviolet radiation in the fluorometer and the fluorescence is read and recorded. The uranium concentrations are determined by using a computer routine which compares the fluorescence from each pellet with those from other pellets, run at the same time, containing uranium-standard solutions and

blanks. The uranium concentration of the sample, as given in the appropriate data listings, is then the average obtained from the duplicate aliquots. The lower limit of detection for each aliquot by the normal procedure is 0.2 ppb; however, in some areas many samples have uranium concentrations below this. Consequently, when a sample run by the normal procedure is determined to have <0.2 ppb uranium, it is routinely reanalyzed using new duplicate aliquots that have been put through an additional evaporative concentration step that provides a 10X concentration factor. This additional procedure, using the same basic fluorometric method, reduces the lower limit of detection of uranium in natural waters to 0.02 ppb. When a uranium concentration lower than 0.02 ppb is found in an aliquot, it is arbitrarily assigned a value of 0.01 ppb. If the uranium value given in the data listings is 0.01 ppb, both aliquots had uranium concentrations below the detection limit. Whether concentrated or not (which can be determined from the uranium level in the listing), the fluorometric analytical precision is ~30% at the lower detection limit, ~20% at one order of magnitude above this, and ~10% at two or more orders of magnitude above the lower detection limit. The basic fluorometric method used is described in detail by Hues et al (1977).

Uranium Determination in Water Samples by Delayed-Neutron Counting (DNC)

Only waters with >40 ppb uranium (as determined by fluorometry at the LASL, where this is the upper limit of detection without recalibration) or those with impurities that cause interference with uranium-induced fluorescence are analyzed using DNC. Samples are received in 41-ml or 25-ml vials (used exclusively in some of the early work) and are transferred to clean, labeled, 41-ml rabbits before being analyzed. Each water sample is weighed, and its weight (less that of the rabbit) and location number are recorded. The rabbits are then loaded into a 25-sample transfer clip. The reactor pneumatic transfer system and background radiation levels are checked and four standards are run for calibration. The transfer clip is installed on the pneumatic feed line and the samples are cycled through the system (typically, a 60-s irradiation, 30-s delay, and 60-s count cycle is used). The uranium concentration is automatically measured, converted to ppb, and entered into a computer data base. The lower detection limit for uranium in water by DNC as used at the LASL is 0.5 ppb. The statistical error of this method is ~20% at a uranium concentration of 1 ppb, ~6% at 10 ppb, and <4% at 40 ppb or greater. Statistical treatments of uranium concentrations obtained from the same suites of samples analyzed both by fluorometry and DNC have shown that there is no significant difference between the results of the two analytical methods as used at the LASL. This analytical comparability is rechecked periodically.

Elemental Determinations in Water Samples by Plasma-Source Emission Spectrography

The concentrations of Ca, Co, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Ti, and Zn in water samples are determined at the LASL by inductively coupled plasma-source emission spectrography. To allow complete system equilibration, the inductively coupled plasma and photomultiplier tubes are powered for at least 1 h prior to making any analyses. Argon coolant and sample carrier gas lines are adjusted and calibrated using a zinc standard. The sample solution is taken up from its container, nebulized, and injected into the plasma source at a rate of 9.2×10^{-9} m^3/s. After the computer determines that the photomultiplier tubes have stabilized, a 15-s exposure of the resultant spectrum is made on a direct-reading spectrograph. The resulting signals are read directly

into a computer and converted automatically to give the elemental concentrations. Corrections for interfering elements are made simultaneously by computer. When high (off-scale) results are obtained, the computer calls for the insertion of a filter between the plasma source and the spectrograph, repeats the readings, and then converts and stores the corrected elemental concentrations. The lower analytical detection limits generally achieved are (in ppb): Ca (20), Co (55), Cr (25), Cu (4), Fe (25), Mg (2), Mn (3), Mo (25), Ni (25), Pb (200), Ti (4), and Zn (50). When an analysis results in an elemental concentration that is below the detection limit, a minus sign preceding the value of the detection limit for that element is inserted in the data listings. Analytical precision for the elements as determined in water by this method is ~50% at the lower detection limit, improving to ~10% one order of magnitude above the lower detection limit and to ~5% two orders of magnitude above the detection limit. Analyses for Pb and Mo are subject to interference from Ca such that apparent concentrations of about 10 ppb Pb and 4.5 ppb Mo are produced for each 1000 ppb Ca. The measured Ca concentrations are used to correct for these interferences; however, the corrections are generally large and subject to some temporal variation. Therefore, the precisions for Pb and Mo are much lower for those water samples containing large concentrations of Ca than those given above.

Uranium Determination in Sediment Samples by DNC

All sediment samples are analyzed for total uranium by DNC. A split of each sample (dried and sieved as described) is transferred to a clean 4-ml rabbit, weighed, and its weight (less that of the rabbit) recorded along with the appropriate location number. These rabbits are then loaded into a 50-sample transfer clip. The reactor pneumatic transfer system and background radiation levels are checked, and standards are run for calibration. The transfer clip is installed and the samples are cycled through the system (typically, a 20-s irradiation, 10-s delay, and 30-s count cycle is used). The uranium concentration is automatically measured, converted to ppm, and entered into the data base. The lower limit of detection of this method is 0.01 ppm uranium, far below the range of uranium concentrations in natural sediment samples. Above the 1 ppm level, the uranium values in sediment measured by DNC at the LASL have a one-sigma error of less than 4%. The specially designed delayed-neutron detectors, built by the LASL and used for these analyses, are described by Balestrini et al (1976).

Elemental Determinations in Sediment Samples by Energy Dispersive X-Ray Fluorescence

A computer-controlled, energy-dispersive x-ray fluorescence system is used to determine Ag, Bi, Cd, Cu, Nb, Ni, Pb, Sn, and W in sediments. The system consists of an automatic 20-position sample changer, a lithium-drifted silicon detector, a pulsed molybdenum transmission-target x-ray tube, a multichannel analyzer, and a minicomputer. The sediment samples are prepared for analysis by grinding 6 g of each minus 100-mesh sample to a minus 325-mesh powder. A computer program positions the 6-g samples in the x-ray beam, unfolds overlapping peaks, determines peak intensities for each element, and calculates the ratio of the intensity of each peak to that of the molybdenum K_α Compton peak. Concentrations of each element are then calculated using equations obtained by analyzing prepared standards. Detection limits are: 5 ppm for Ag, Bi, Cd, and Pb; 10 ppm for Cu and Sn; 15 ppm for Ni and W; and 20 ppm for Nb. When an analysis results in an elemental concentration that is below the

detection limit, a minus sign preceding the value of the detection limit for that element is inserted in the data listings. The relative standard deviation is 10% or less at the 100-ppm level and 20% or less at the 20-ppm level. Details of the method and equipment used are described by Hansel and Martell (1977).

Beryllium and Lithium Determinations in Sediment Samples by Arc-Source Emission Spectrography

A 5-mg portion of the -325-mesh sample that has already been analyzed by x-ray fluorescence is mixed with 10 mg of a buffer consisting of one part graphite and one part SiO_2. The sample/buffer mixture is placed into a graphite electrode that is used as the anode of a dc arc having a short circuit current of 6A for 10 s, then 17A for 50 s. Photomultiplier tubes in a direct-reading spectrograph are used to measure the second order 313.0-nm line of Be, the first order 670.7- and 610.3-nm lines of Li, the background spectra near these lines, and the 327.6-nm line of V. The 670.7-nm Li line is used for Li concentrations up to 10 ppm and the 610.3-nm line of Li is used for concentrations above 10 ppm. The V line is used to correct the Be value when V is present. The signals from the photomultiplier tubes are read by a digital voltmeter and are processed by a desk-top calculator. The results are simultaneously printed on paper and written on cassette tape for later transmission to a computer data file. The elemental concentrations of Be and Li are determined from the spectra, based on the results of previously run calibration standards. The lower detection limit for both elements is 1 ppm. When an analysis results in an elemental concentration that is below the detection limit, a minus sign preceding the value of the detection limit for that element is inserted in the data listings. Precision at the lower detection limit is ~50% for both elements and improves to ~25% at one order of magnitude above the lower limit.

Elemental Determinations in Sediment Samples by Neutron Activation Analysis (NAA)

Immediately upon completion of the uranium analysis of sediment samples by DNC, the same 4-ml sediment splits are entered into the NAA sequence. The concentrations of 31 additional elements are determined by this procedure. The full DNC/NAA timing sequence used at the LASL for each sediment sample is: 20-s irradiation, 10-s delay, 30-s DNC analysis, 20-min delay, 500-s γ-ray count for short-lived radionuclides, 96-s re-irradiation, 14-day delay, and finally a 1000-s γ-ray count for long-lived radionuclides. The γ-ray counting is done by lead-shielded Ge(Li) detectors; the 4096-channel γ-ray data are recorded and subsequently analyzed for each individual element by computer. The analytical data for each sample are automatically printed out along with the associated statistical errors. The lower detection limits for the various elements as reflected by the "less than" values (denoted by a minus sign in front of a concentration) in the data listings are the values for the individual elements at which the statistical counting error approaches 50%. Current "typical" lower detection limits for the elements determined by NAA are reported in Nunes and Weaver (1978); however, the actual detection limit for an element depends upon the composition of the sample, and this limit may be higher or lower than the typical value. At concentration values one order of magnitude above the lower detection limits, the relative errors are generally less than 10%.

APPENDIX II-B

EXPLANATION OF CODES USED

DOE SAMPLE NUMBER

STATE: A two-digit Federal Information Processing Standards (FIPS) code that designates the state from which each sample came. For the states being sampled by the LASL, the code numbers are:

Alaska = 02	Montana = 30	South Dakota = 46
Arizona = 04	Nebraska = 31	Texas = 48
Colorado = 08	New Mexico = 35	Utah = 49
Idaho = 16	North Dakota = 38	Wyoming = 56
Kansas = 20	Oklahoma = 40	

LATITUDE AND LONGITUDE: Sample location, in degrees and decimal degrees to four places. Although generally much better, locational accuracy cannot be guaranteed closer than about 300 m (1000 ft).

DOE LAB: A Department of Energy (DOE) one-digit identifier designating the DOE laboratory responsible for taking the samples and data shown in the listings, as well as providing the analyses of the uranium and other elemental concentrations, if any. The LASL is designated by the numeral 2.

SAMPLE TYPE: A two-digit identifier which specifically designates the pertinent properties defining the sample type to which the listed data relate. For explanation of the code used, refer to the attached "Key to Sample Types," in section C of this appendix.

REPLICATE: A three-digit sequential number assigned to indicate a multiple sample of a single sample type from a single location. The largest number in use indicates the most recent sample taken and there will always be all smaller sequential numbers representing earlier samples back to 0, which is the initial sample from any given location. Except in the case of special studies, there will be no replicate samples and this entry will therefore be a single zero.

LASL SAMPLE LOCATION NUMBER AND FIELD DATA

LASL SAMPLE LOCATION NUMBER: A unique six-place alphanumeric designator permanently assigned by the LASL to every location sampled. For internal use, these numbers are assigned in blocks to the various areas individually treated and reported upon, and therefore serve to generally locate the samples within various areas for which the LASL is responsible as follows.

Location Numbers		State
N00 001 through N99 999	=	Principally New Mexico
C00 001 through C99 999	=	Principally Colorado
W00 001 through W99 999	=	Principally Wyoming
M00 001 through M99 999	=	Principally Montana
A00 001 and above	=	Alaska only
L00 001 and above	=	Areas beyond the western boundary of LASL's region as established by DOE in 1977.
Ø00 001 and above	=	Areas beyond the eastern boundary of LASL's region as established by DOE in 1977.

TIME SAMPLED: The DATE the sample was taken, in terms of the number of the MONTH, followed by the DAY and finally the YEAR, separated by slashes, and then the TIME it was taken on that date to the nearest whole HOUR on a 24-hour clock.

AIR TEMPERATURE: The temperature measured in the shade at the time of sampling, to the nearest whole degree Celsius (°C).

WATER TEMPERATURE: The temperature measured in the sample water (in situ whenever possible) at the time of sampling, to the nearest one-half of one degree Celsius (0.5°C).

COMMENTS: A "C" in this column indicates that some secondary comment not included in the listing was recorded at the sample location. This information will be used by the LASL in evaluating the data, and if appropriate, it will be mentioned in the final report.

SPECIAL MEASUREMENTS: An "S" in this column indicates that one or more field measurements in addition to those listed were made at the sample location. A description of any special parameters measured and the measured value at each sample location will be included in the final HSSR survey report on the area.

pH: The pH, to the nearest one-tenth (0.1) of a pH unit, measured in the water at the sample location at the time of sampling.

CONDUCTIVITY: The conductivity, in μmho/cm, measured in the water at the sample location at the time of sampling.

SCINTILLOMETER: The equivalent uranium (eU), in ppm, as measured on a flat ground surface within 10 m of the sample location using a scintillometer fitted with a differential gamma sampler (DGS). The effect of the DGS is to introduce a fixed geometry into the measurement and remove the background.

ROCK TYPE: The single digit in this column provides a general description of the dominant lithologic regime at or near the sample location, as given below.

1 = Sedimentary	3 = Igneous
2 = Metamorphic	4 = Unknown

ROCK COLOR: The single digit in this column provides an indication of the observed dominant color of local bedrock exposures at or near the sample location, as given below.

1 = White/Buff	4 = Pink/Red	7 = Gray
2 = Yellow	5 = Green	8 = Black
3 = Orange	6 = Brown	9 = Other

SEDIMENT TYPE: The single digit in this column provides a subjective evaluation of the dominant sediment type at the sample location, as given below.

1 = Boulders	4 = Sand	7 = Other
2 = Cobbles	5 = Mud	
3 = Gravel	6 = Muck	

SEDIMENT COLOR: The single digit in this column indicates the observed dominant color of the bottom sediment (stream channel, lake bed, etc.) at the sample location at the time of sampling, as given below.

1 = White/Buff	4 = Pink/Red	7 = Gray
2 = Yellow	5 = Green	8 = Black
3 = Orange	6 = Brown	9 = Other

WATER FLOW: The single digit in this column provides a subjective evaluation of the water movement at the sample location at the time of sampling, as given below.

1 = Stagnant	3 = Moderate	5 = Torrent
2 = Slow	4 = Fast	

WATER LEVEL: The single digit in this column provides a subjective estimate of water quantity at the time of sampling, relative to its usual condition at the sample location, as given below.

1 = Dry	3 = Normal	5 = Flood
2 = Low	4 = High	

WATER COLOR: The single digit in this column provides a subjective evaluation of suspended load in the sample water, as given below.

1 = Clear	3 = Cloudy	5 = Algal
2 = Murky	4 = Muddy	6 = Other

STREAM CHANNEL: The single digit here gives a subjective evaluation of stream channel character at the sample location at the time of sampling, as given below.

1 = Depositing	2 = Eroding	3 = Unknown

VEGETATION TYPE: The single digit in this column provides a subjective evaluation of the dominant plant type in the vicinity of the sample location, as given below.

1 = Conifers	4 = Grass	7 = Other
2 = Deciduous	5 = Moss	
3 = Brush	6 = Marsh	

VEGETATION DENSITY: The single digit in this column provides a subjective estimate of the amount of plant cover in the vicinity of the sample location, as given below.

1 = Barren	3 = Moderate	5 = Very Dense
2 = Sparse	4 = Dense	

RELIEF: The single digit in this column provides a subjective evaluation of the topography within a few hundred meters of the sample location, as given below.

1 = Flat	3 = Gentle (15-60 m)	5 = High (>300 m)
2 = Low (<15 m)	4 = Moderate (60-300 m)	6 = Other

WEATHER: The single digit in this column gives the observed climatic condition at the sample location at the time of sampling, as given below.

1 = Clear	3 = Overcast	5 = Snowy
2 = Partly cloudy	4 = Rainy	6 = Other

OWNERSHIP: Not used.

CONTAMINANTS: The single digit here indicates known or suspected local factors likely to influence analytical results, as given below.

1 = None	4 = Industry	7 = Urban
2 = Mining	5 = Sewage	8 = Recreation
3 = Agriculture	6 = Power generation	9 = Other

WELL TYPE: If a well water sample, the single digit in this column provides a general description of the type of well from which the sample was taken, as given below.

1 = Windmill-stock	4 = Suction pump	7 = Hand bail
2 = Windmill-domestic	5 = Jet pump	8 = Unknown
3 = Submersible pump	6 = Large turbine	9 = Other

WELL DIAMETER: When shown, the one or two digits in this column give the measured or estimated inside diameter, in inches, of the well casing from which the water sample came.

WELL DEPTH: When shown, the one, two, or three digits in this column give the total drilled depth from the surface, in feet, of the well from which the sample came. Three 9s in this column indicates a well depth greater than 1000 ft.

WATER DEPTH: When shown, the one, two, or three digits in this column give the known depth, in feet, from the surface to the standing water in the well. A -1 in this column indicates a flowing artesian well.

URANIUM CONCENTRATION: The value given in this column is the analytically derived value of the total uranium concentration found in the water sample (in ppb) or in the sediment sample (in ppm). Those uranium concentrations <u>in water</u> that are shown with an asterisk were measured using the delayed-neutron counting method, while those without an asterisk were determined fluorometrically. The uranium analyses in water samples as determined by both of these methods at the LASL are directly comparable, as noted in section A of this appendix.

REMAINING ENTRIES: The data presented in the remaining entries of the listings utilize no codes as such and are described in the respective column headings. However, there are four conventions used throughout the listings of elemental concentrations: a) all concentrations in waters are reported in ppb; b) all concentrations in sediments are reported in ppm; c) concentrations "less than" the lower detection limit are denoted by a minus sign before this limit for the specific sample (except for fluorometrically determined uranium in waters, the convention for which is described in section A of this appendix); and d) a blank space in the data listings for any elemental concentration signifies that no analytical result was obtained for that element.

APPENDIX II-C

KEY TO SAMPLE TYPES

This numerical key provides the necessary tie between the specific type or form of each sample taken and each individual suite of field and laboratory data to which the sample relates. It defines the various sample types collected by the LASL in the DOE HSSR for uranium.

The two-digit key number assigned to each sample type designates three distinct properties of the samples taken. These properties are: (a) The general sample source (spring, stream, dry stream, etc.); (b) The sample medium (water or sediment); and (c) The treatment given the sample in the field or laboratory prior to its analysis by the LASL.

The key numbers are inserted in the sample type columns of the specially formatted DOE sample numbering system to positively identify the sample type for all LASL sample data submitted.

KEY NO. — SOURCE / MEDIUM / TREATMENT

06 - Spring water sample filtered through a 0.45-μ membrane filter and acidified to a pH of ≤1 with reagent-grade nitric acid (HNO_3).

07 - Stream water sample filtered through a 0.45-μ membrane filter and acidified to a pH of ≤1 with reagent-grade nitric acid (HNO_3).

08 - Well water sample filtered through a 0.45-μ membrane filter and acidified to a pH of ≤1 with reagent-grade nitric acid (HNO_3).

11 - Wet spring sediment sample dried at ≤100°C and sieved to -100 mesh through stainless steel sieves.

12 - Wet stream sediment sample dried at ≤100°C and sieved to -100 mesh through stainless steel sieves.

15 - Dry stream sediment sample dried at ≤100°C (if necessary) and sieved to -100 mesh through stainless steel sieves.

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☆U.S. Government Printing Office: 1979 — 677—013/163

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PLATE I



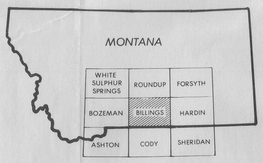
After IntraSearch, 1979

SCALE 1:250 000

5 0 5 10 15 20 25 MILES

5 0 5 10 15 20 25 KILOMETERS

GEOLOGIC MAP OF THE BILLINGS NTMS QUADRANGLE, MONTANA



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EXPLANATION

SEDIMENTARY

Qal | Q — Surficial deposits, Includes: alluvium, Qal; colluvium, fan, landslide, slump, terrace, dune, glacial, pediment and alluvial deposits undivided, Q.

Tw — WASATCH FORMATION — Light colored sandstone, drab shale, some coal and clay.

Tfu — FORT UNION FORMATION — Clay shale, siltstone and sandstone, local lignite. Includes the Tongue River, Lebo Shale and Tullock Members.

Khc — HELL CREEK FORMATION — Drab gray sandstone, greenish shale and mudstone with local coal and lignite

Ki — LENNEP SANDSTONE — Dark brown sandstone and shale. Partly equivalent to the Fox Hills Sandstone and Horsethief Sandstone.

Kb — BEARPAW SHALE — Dark gray and brown clay shale, bentonitic shale; local thick bentonite beds.

Kjr — JUDITH RIVER FORMATION — Light colored sandstone at top, lower part contains siltstone, sandy shale, clay and local lignite.

Kcl — CLAGGETT FORMATION — Dark gray shale with local sandstone and bentonite.

Ka — EAGLE SANDSTONE — Light colored sandstone, shaly sandstone and local lignite. Includes the Virgelle Sandstone at base.

Ktc — TELEGRAPH CREEK FORMATION — Buff sandy shale with concretionary sandstone.

Kmc — NIOBRARA FORMATION and CARLILE SHALE, Undivided — Niobrara formation: calcareous shale with limestone concretions and bentonite. Carlile Shale: dark gray shale, sandy in middle part, with calcareous and ferruginous concretions.

K f — FRONTIER FORMATION — Gray sandy shale with local thick bentonite. Includes marl and shale of the Greenhorn Formation and bentonitic shale of the Belle Fourche Shale.

Km — MOWRY SHALE — Light gray siliceous shale and claystone with minor sandstone and sandy shale, local thick bentonite

Kt — THERMOPOLIS SHALE — Dark gray shale with some sandstone, includes the Muddy Sandstone.

Kcv — CLOVERLY GROUP — Dakota Sandstone: light gray, yellowish sandstone, shale and lignite. Fuson Shale and Lakota Sandstone are equivalent to Kootenai Formation

Kk — KOOTENAI FORMATION — Varicolored sandstone, sandy shale, shale and mudstone. Pryor conglomerate at base probably equivalent to Lakota Sandstone.

Jm — MORRISON FORMATION — Varicolored siltstone, shale and sandstone, local marl and coal.

Js — ELLIS GROUP — Swift formation: thin-bedded, glauconitic sandstone and black shale. Rierdon formation: gray calcareous shale. Piper formation: varicolored shale and siltstone, local thin limestone and gypsum.

TrPc — CHUGWATER FORMATION — Red to brown sandstone, shale and siltstone. May include shale and limestone of the Dinwoody Formation and Phosphoria Formation

IPTo — TENSLEEP SANDSTONE and AMSDEN FORMATION, Undivided — Tensleep Sandstone: white, cross-bedded sandstone and quartzite, equivalent to the Quadrant Quartzite. Amsden Formation: red shale, white, sandy and cherty limestone.

Mm — MADISON GROUP — Limestone, dolomite, some shale and sandstone; includes the Mission Canyon Formation and Lodgepole Limestone. May include part of the Big Snowy formation.

DOu — DEVONIAN-ORDOVICIAN, Undifferentiated — Includes carbonaceous and calcareous shale, limestone and sandstone of the Three Forks formation, plus limestone and dolomite of the Jefferson formation and Big Horn Dolomite

Cu — CAMBRIAN, Undifferentiated — Includes limestone, pebble conglomerate, thin shale and siltstone of the Snowy Range formation and Pilgrim Limestone; varicolored shale and thin limestone of the Park Shale; gray limestone and dolomite of the Meagher Limestone; green to brown shale, sandstone, siltstone and limestone of the Wolsey Shale, and brown to white, crossbedded sandstone and quartzite of the Flathead Quartzite

IGNEOUS

Tv — VOLCANIC ROCKS — Includes flows and associated pyroclastic deposits

Ti — INTRUSIVE ROCKS

TKl — LIVINGSTON FORMATION — Water-laid volcanic material; includes agglomerate, conglomerate, sandstone and shale.

METAMORPHIC

pCx — PRECAMBRIAN, Undifferentiated — Includes mostly gneiss and schists that are older than the Belt Series. May include local igneous rocks

CENOZOIC — QUATERNARY — TERTIARY — TERTIARY
MESOZOIC — CRETACEOUS — JURASSIC — TRIASSIC/PERMIAN — PENNSYLVANIAN
PALEOZOIC — MISSISSIPPIAN — DEVONIAN/ORDOVICIAN — CAMBRIAN
PRECAMBRIAN

STRATIGRAPHIC LEGEND

QUATERNARY	Qal	Alluvium	Q	Unconsolidated Und		
TERTIARY	Tv	Volcanics				
	Ti	Intrusives				
	Tw	Wasatch Fm				
	Tfu	Fort Union Fm			TKl	Livingston Fm
	Khc	Hell Creek Fm	Kb	Und		
	Ki	Lennep Ss	Kcl	Und		
	Kb	Bearpaw Sh	Kjr	Und		
	Kjr	Judith River Fm	Kcl	Und		
	Kcl	Claggett Fm	Kca	Und		
	Ka	Eagle Ss				
	Ktc	Telegraph Creek Fm	Kmc	Und	Ku	Und
CRETACEOUS	Kmc	Niobrara Fm				
	Kc	Carlile Sh	Kf	Frontier Fm	Kc	Colorado Sh
	Kgm	Greenhorn Fm				
	Kbf	Belle Fourche Sh				
	Km	Mowry Sh				
	Kt	Thermopolis Sh				
	Kfa	Dakota Ss	Kcv	Cloverly Gp		
	Kfu	Fuson Sh				
	Kla	Lakota Ss				
	Kk	Kootenai Fm				
JURASSIC	Jm	Morrison Fm				
	Js	Swift Fm	Js	Ellis Gp	Js	Und
	Jr	Rierdon Fm				
	Jp	Piper Fm			Trb	Und
TRIASSIC	Trd	Dinwoody Fm				
PERMIAN	Pp	Phosphoria Fm	TrPc	Chugwater Fm		
PENNSYLVANIAN	IPa	Tensleep Ss	IPTa	Und	PPb	Und
	IPm	Amsden Fm				
MISSISSIPPIAN	Mbs	Big Snowy Fm			IPPb	Und
	Mm	Mission Canyon Fm	Mm	Madison Gp		
	Ml	Lodgepole Ls				
DEVONIAN	DOf	Three forks Fm	DOu	Und		
	DOj	Jefferson Fm			Pz	Und
ORDOVICIAN	Obh	Big Horn Dol			MCu	Und
CAMBRIAN	Cz	Snowy Range Fm				
	Cpl	Pilgrim Ls	Cu	Und		
	Cpk	Park Sh				
	Cm	Meagher Ls				
	Cw	Wolsey Sh				
	Cf	Flathead Qtzt				
PRECAMBRIAN	pCgn	Gneiss	pCx	Und		
	pCs	Schist				
	pCg	Granite				

GEOLOGIC SYMBOLS

- Contact
- D — Fault, dashed where approximate, D on downthrown side
- Fault, dotted through alluvium
- Alignment
- Thrust fault
- Anticline
- Anticline, overturned
- Syncline
- Syncline, overturned
- Cinder cone
- Monocline

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PLATE II



SCALE 1:250 000

5 0 5 10 15 20 25 MILES

5 0 5 10 15 20 25 KILOMETERS

The LASL sample location numbers above are the same as those used in APPENDIX I except the prefix M3 has been deleted.

SAMPLE LOCATION OVERLAY FOR THE BILLINGS NTMS QUADRANGLE, MONTANA

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PLATE III

110° 00′ W 109°45 W 109°30 W 109°15 W 109° 00′ W 108°45 W 108°30 W 108°15 W 108° 00′ W

46° 00′ N

45°45 N

45°30 N

45°15 N

45° 00′ N

LEGEND

SYMBOLS	CONCENTRATIONS (ppb)
◇ SPRING	0.00– .50
□ STREAM	.51– 1.00
○ WELL	1.01– 2.00
	2.01– 5.00
	5.01– 10.00
	10.01– 20.00
	20.01– 50.00
	> 50.00

SCALE 1:250 000

5 0 5 10 15 20 25 MILES

5 0 5 10 15 20 25 KILOMETERS

URANIUM CONCENTRATIONS (ppb) IN WATERS

OVERLAY TO THE

BILLINGS NTMS QUADRANGLE, MONTANA

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PLATE IV



LEGEND

SYMBOLS	CONDUCTIVITIES (µmho/cm)	
◇ SPRING	0 – 50	
	51 – 100	
	101 – 200	
	201 – 500	
□ STREAM	501 – 1000	
	1001 – 2000	
	2001 – 5000	
○ WELL	> 5000	

SCALE 1:250 000

5 0 5 10 15 20 25 MILES

5 0 5 10 15 20 25 KILOMETERS

CONDUCTIVITIES (µmho/cm) IN WATERS

OVERLAY TO THE

BILLINGS NTMS QUADRANGLE, MONTANA

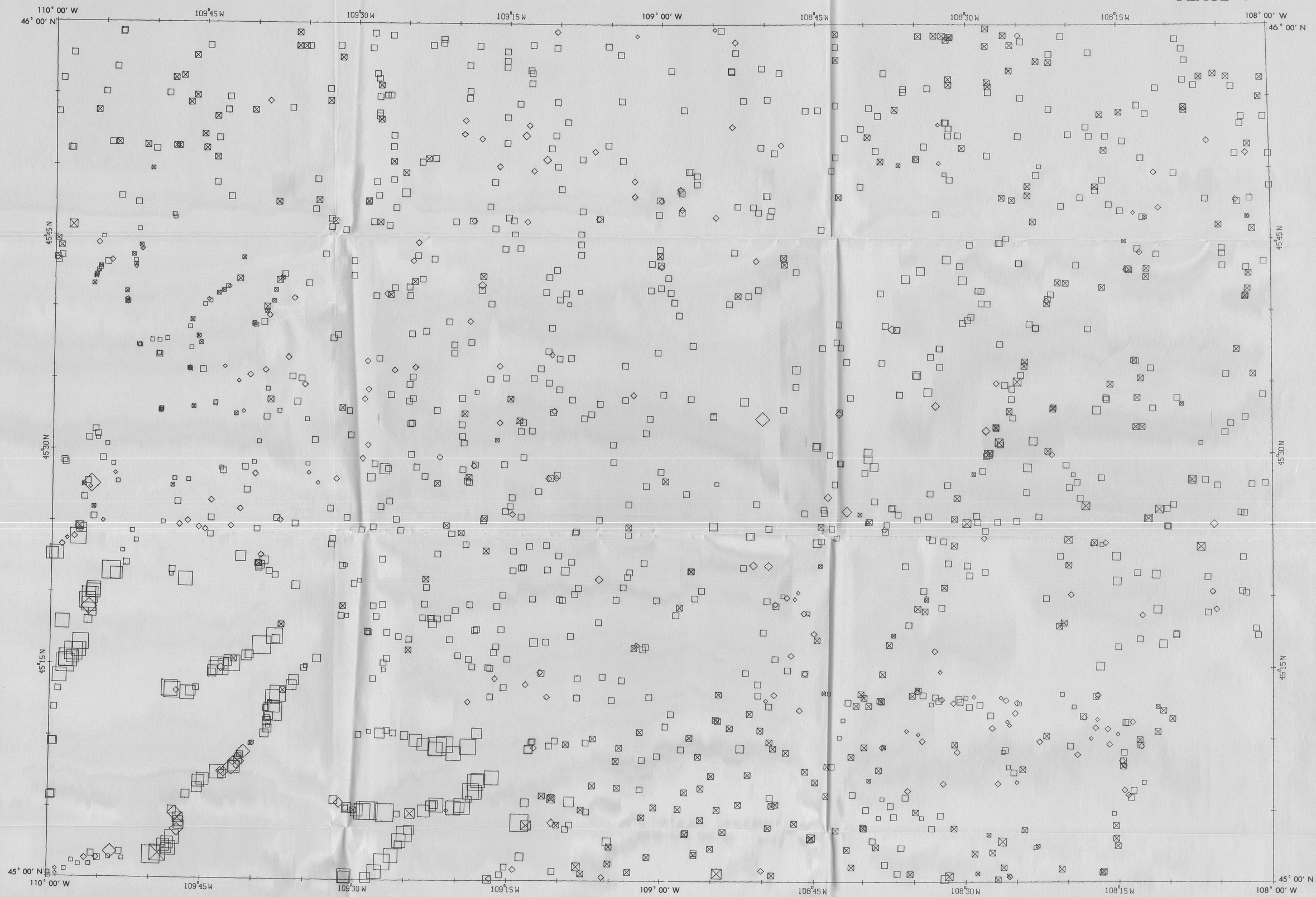
N

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PLATE V



LEGEND

SYMBOLS	CONCENTRATIONS (ppm)	
◇ WET SPRING	◇	0.0– 2.0
□ WET STREAM	◇	2.1– 4.0
⊠ DRY STREAM	◇	4.1– 6.0
+ DRY SPRING	◇	6.1– 8.0
	◇	8.1– 10.0
	◇	10.1– 20.0
	◇	20.1– 40.0
	◇	> 40.0

SCALE 1:250 000

5 0 5 10 15 20 25 MILES

5 0 5 10 15 20 25 KILOMETERS

URANIUM CONCENTRATIONS (ppm) IN SEDIMENTS

OVERLAY TO THE

BILLINGS NTMS QUADRANGLE, MONTANA

N

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PLATE VI

110° 00′ W 109°45 W 109°30 W 109°15 W 109° 00′ W 108°45 W 108°30 W 108°15 W 108° 00′ W

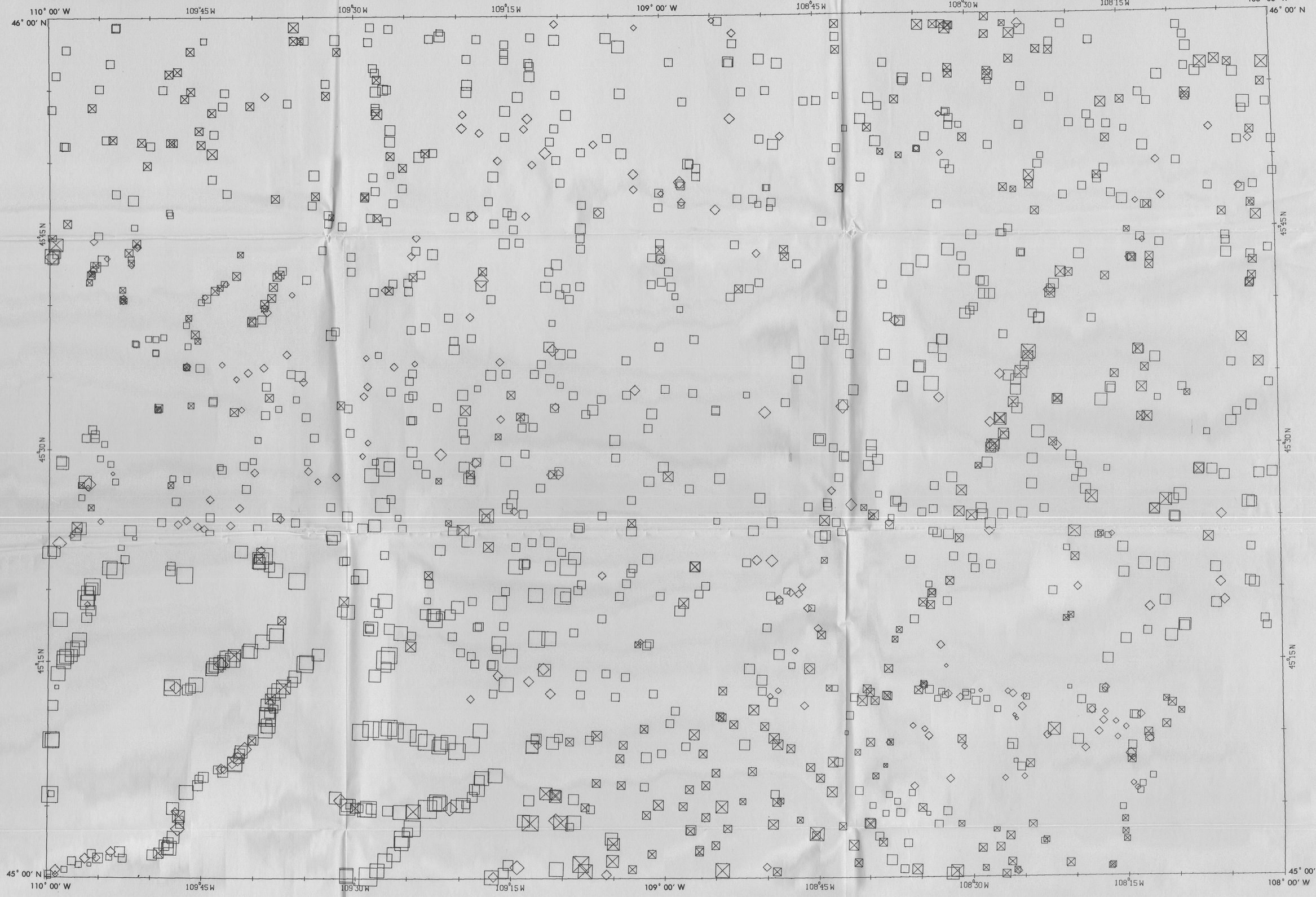
46° 00′ N

45°45 N

45°30 N

45°15 N

45° 00′ N



LEGEND

SYMBOLS	CONCENTRATIONS (ppm)
◇ WET SPRING	0.0– 3.0
□ WET STREAM	3.1– 6.0
⊠ DRY STREAM	6.1– 9.0
+ DRY SPRING	9.1– 12.0
	12.1– 15.0
	15.1– 25.0
	25.1– 50.0
	> 50.0

SCALE 1:250 000

5 0 5 10 15 20 25 MILES

5 0 5 10 15 20 25 KILOMETERS

THORIUM CONCENTRATIONS (ppm) IN SEDIMENTS

OVERLAY TO THE

BILLINGS NTMS QUADRANGLE, MONTANA

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