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**Uranium Hydrogeochemical and
Stream Sediment Reconnaissance
of the Dillon NTMS Quadrangle, Montana/Idaho,
Including Concentrations of
Forty-Three Additional Elements**

GEOLOGICAL SURVEY OF WYOMING

University of California

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**Uranium Hydrogeochemical and Stream Sediment
Reconnaissance of the
Dillon NTMS Quadrangle, Montana/Idaho,
Including Concentrations of
Forty-Three Additional Elements**

by

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URANIUM HYDROGEOCHEMICAL AND STREAM SEDIMENT RECONNAISSANCE
OF THE DILLON NTMS QUADRANGLE, MONTANA/IDAHO,
INCLUDING CONCENTRATIONS OF FORTY-THREE ADDITIONAL ELEMENTS

by

David E. Broxton

ABSTRACT

The Los Alamos Scientific Laboratory supervised the collection of 1148 water and 1721 sediment samples from 1796 locations in the Dillon quadrangle, Montana/Idaho, for the US Department of Energy's National Uranium Resource Evaluation program. Samples were collected at a nominal density of one per 10 km² except in the Boulder batholith area where the density is approximately one sample per 2 km². Surface waters were taken from flowing streams; ground waters were taken from springs and wells. All water samples were analyzed for uranium and 12 other elements. Sediment samples, collected from streams and springs, were analyzed for uranium, thorium, and 41 additional elements.

The uranium contents of water samples range from below the detection limit of 0.02 parts per billion (ppb) to 79.31 ppb. Most water samples having anomalously high uranium contents were collected in areas underlain by felsic rocks of the Boulder, Pioneer, and Idaho batholiths. Other groups of anomalous waters are associated with Belt metasediments in the Beaverhead and Salmon River Mountains and with Tertiary strata in intermontane basins.

The uranium contents of sediment samples range between 0.95 and 130.50 parts per million (ppm). Anomalous uranium values are associated with felsic rocks of Cretaceous batholiths and Belt quartzites near the Montana-Idaho border. Samples having uranium contents significantly above local background levels also occur in Tertiary strata adjacent to the anomalous areas in the crystalline terranes.

Thorium concentrations in sediment samples range from 3.40 to 351.00 ppm. The average uranium/thorium (U/Th) ratio of samples with <20 ppm uranium is 0.37, whereas samples with uranium concentrations >20 ppm have an average ratio of 1.85. The association of high uranium values with relatively high U/Th ratios may be a useful tool for identifying uranium-enriched terranes.

I. INTRODUCTION

This report describes work done in the Dillon National Topographic Map Series (NTMS) quadrangle, Montana/Idaho, by the Los Alamos Scientific Laboratory (LASL) as part of the nationwide Hydrogeochemical and Stream Sediment Reconnaissance (HSSR). The HSSR, a part of the National Uranium Resource Evaluation (NURE) sponsored by the US Department of Energy (DOE), is designed to identify areas having higher than normal concentrations of uranium in ground waters, surface waters, and water-transported sediments. The HSSR data will ultimately be combined with data from other NURE programs (e.g., from airborne radiometric surveys and geological investigations) to prepare an improved assessment of the potential uranium resources in the United States and to indicate areas favorable for uranium exploration by the private sector. 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 Dillon quadrangle encompasses a 17 400-km² area in southwestern Montana and east-central Idaho bounded by 45° and 46°N latitudes and 112° and 114°W longitudes (Fig. 1). The area is part of the Northern Rocky Mountain physiographic province and is characterized by linear northwest- and northeast-trending mountain ranges separated by broad intermontane basins (Fenneman, 1931). The main mountain ridges are 2400 to 3000 m in elevation while the basins range between 1500 and 1800 m.

Totals of 1148 water and 1721 sediment samples were collected from 1796 locations in the quadrangle. Water samples were taken at streams, wells, and springs. Sediment samples were collected from streams and springs. All samples in the Boulder batholith area (Fig. 1) were collected by investigators from the University of Montana in the spring and autumn of 1976 as part of a pilot study designed to test LASL HSSR sampling methodology (Aamodt, 1978a). The remaining samples in the Montana portion of the quadrangle were collected by a commercial contractor from August to October 1976. A second commercial contractor collected all samples in the Idaho portion of the quadrangle in June 1978. Samples were collected at a nominal density of one location per 10 km² except in the Boulder batholith area where the average sampling density was one per 2 km². Standardized field, analytical, and data base management procedures were used in all three sampling programs.

All water samples were analyzed for uranium and 12 other elements of economic or geologic interest. Sediment samples were analyzed for 42 elements in addition to uranium. Uranium data for the Idaho portion of the quadrangle as well as multielement data for the entire quadrangle are open filed in this report for the first time. Uranium data for the Montana portion of the quadrangle were previously open filed in earlier reports by Broxton (1978) and Aamodt (1978a). Additional HSSR uranium data have been open filed for the adjacent Bozeman NTMS quadrangle (Bolivar, 1978) and the Montana portion of the Hamilton NTMS quadrangle (Aamodt, 1978b). This report is intended to make the new data available to the DOE and the public as quickly as possible; therefore, only a short discussion of the geology, mineral occurrences, and uranium and thorium data are included.

II. GEOLOGY

A geologic map of the Dillon quadrangle compiled by Fugro (1978) is provided in the rear pocket of this report (Plate I). Since the geology of the region has been described in detail by many investigators, only a brief

Fig. 1. Location map of the Dillon NTMS quadrangle, Montana/Idaho.

summary is given here. In addition to a list of the references cited, a bibliography is provided in the back of this report for those interested in more detailed descriptions of bedrock units, structure, and mineral occurrences.

Stratigraphy

The oldest rocks exposed in the quadrangle are highly deformed gneisses, schists, and calc-silicates of the Precambrian basement complex. The basement complex is overlain by thick sequences of slightly metamorphosed sediments of the late Precambrian Belt supergroup. Belt strata, consisting of argillites, micaceous sandstones, and carbonates, were deposited only in the northern and western parts of the quadrangle. Lower Paleozoic rocks, deposited unconformably over Belt strata, are made up of clastic marine sediments. Middle and upper Paleozoic rocks consist of thick-bedded limestones and dolomites. Triassic and Jurassic rocks, deposited under fluctuating marine and continental conditions, are made up of alternating carbonate and clastic sequences. Late Cretaceous and Tertiary sediments are mainly continental orogenic deposits consisting of conglomerates, sandstones, shales, fresh water limestones, and interbedded volcanics. Quaternary surficial deposits cover the older rock units in many places, especially in the intermontane basins.

Igneous Rocks

The oldest igneous rocks in the quadrangle are Precambrian granitic gneisses, hornblende gneisses, ultramafic bodies, amphibolites, and pegmatites. Some of these igneous rocks intrude metasediments of the basement complex; however, the temporal and genetic relations between the many Precambrian igneous bodies are poorly understood and undoubtedly complex.

The next major magmatic episode in the Dillon quadrangle was the emplacement of the Cretaceous Boulder, Pioneer, and Idaho batholiths. These batholiths and their associated satellite plutons are composite bodies made up mainly of quartz monzonite and granodiorite, though rocks ranging from gabbro to alaskite are also present. Calc-alkaline andesitic volcanic rocks (Elkhorn volcanics) exposed as roof pendants and along the periphery of the Boulder batholith are remnants of a once more-extensive volcanic field that was emplaced slightly earlier than the intrusion of the batholith.

Volcanic activity also occurred episodically at widely scattered volcanic centers in the region during the Tertiary. Eocene and younger volcanic rocks, erupted contemporaneously with block fault deformation, are interbedded with Tertiary sediments in many of the intermontane basins. The Tertiary volcanic rocks consist mainly of felsic flows and tuffs but also include lesser amounts of mafic and intermediate lavas.

Structure

The basement complex has undergone one or more major periods of Precambrian deformation. Rocks originally deposited as clastic and carbonate sediments have been intruded by magmas, isoclinally folded, and regionally metamorphosed. The regional foliation and major fold axes of the basement complex trend predominantly northeast and north.

The next major episode of deformation occurred during the late Cretaceous-early Tertiary Laramide orogeny. Folds and thrust faults formed at this time trend north and northeast. The thrust faults are both range-marginal faults that border basement uplifts having large vertical displacements and low-angle decollements on which late Precambrian through Eocene sediments have been transported laterally to the east and northeast.

The present system of basins and ranges in southwestern Montana was outlined during a period of Eocene-Oligocene block faulting. During the early stages of deformation, linear ranges bounded by normal faults were uplifted while sediments were shed in adjacent intermontane basins. A period of mid-Tertiary erosion followed the early stages of block faulting, resulting in development of an extensive erosion surface over the area. Faults bounding the major structural elements were reactivated in the late Tertiary, resulting in further uplift of the ranges and renewed deposition in the basins.

Uranium Occurrences

There are no active uranium mines in the Dillon quadrangle. However, uranium occurrences of various sizes and types are known in the area; most are low grade and have had no past production. These occurrences are briefly described in Table I and their locations are shown on Fig. 2.

Rock units known to host uranium mineralization in or adjacent to the Dillon quadrangle include the Precambrian Belt supergroup (Trites and Tooker, 1953; Anderson, 1958; Della Valle, 1975), Mississippian Madison limestone (Jarrard, 1957), Permian Phosphoria formation (Heinrich, 1958; Swanson, 1970), late Cretaceous-early Tertiary plutonic rocks of the Boulder and Idaho batholiths (Roberts and Gude, 1953; Cook, 1955; Sahinen, 1955; Jarrard, 1957; Castor and Robbins, 1978), mid-Tertiary Challis volcanics (Cook, 1955; Kern,

TABLE I

REPORTED URANIUM OCCURRENCES IN THE DILLON QUADRANGLE, MONTANA/IDAHO

Occurrence Number*	District or Claim	Location		Type of Deposit
		Latitude	Longitude	
1.	Rye Creek	Ravalli Co., MT T3N, R18W, Sec. 18 45°59'N 113°53'W		Samaraskite is accessory mineral in quartzofeldspathic pegmatite cutting granite of the Idaho (?) batholith. Property also contains horizontal veins of high-grade fluor spar (Sahinen, 1957).
2.	Gibbonsville Group (Surprise, Dot, and Moon Claims; Garm-Lamoreaux mine)	Lemhi Co., ID T26N, R21E, Secs. 17, 18, 19, and 27 45°33'N 113°57'W		Autunite and tobernite occur in gold-lead-quartz veins filling fractures and shear zones cutting phyllites, micaceous quartzites, and argillites of the Belt series. Grade of deposits range from 0.1-0.4% U ₃ O ₈ . Minor past production at Surprise claim and Garm-Lamoreaux mine. (Trites and Tooker, 1953; Anderson, 1958; Della Valle, 1975; and Elevatorski, 1977)
3.	Wilcox and Kriley Gulches	Lemhi Co., ID T23N, R21E, Sec. 1 45°21'N 113°49'W		Secondary uranium minerals occur in iron-stained Challis volcanics (Elevatorski, 1977).
4.	E-Dah-How, Donna Lou Group, Mother Lode, Ruth Group, Lemhi Group, McConnell-Sargent Claims, Williams Creek, Mulkey Creek	Lemhi Co., ID T20N, R22E, Secs. 2 and 18; T20N, R21E, Sec. 12 45°05'N 113°49'W		Uranophane and autunite occur in shear zones cutting rhyolites (Challis volcanics) and quartz latite welded tuff (Elevatorski, 1977). Minor production reported.
5.	Unnamed	Lemhi Co., ID T20N, R24E 45°03'N 113°33'W		Uranium occurs in fractures cutting Tertiary sedimentary and volcanic rocks; 100 ppm U ₃ O ₈ reported for some rock samples (Anderson, 1957).
6.	Molda Claims	Beaverhead Co., MT T10S, R14W, Sec. 2 45°00'N 113°17'W		Autunite occurs in Tertiary tuffaceous sandstone containing abundant carbonized plant remains (Pruitt, 1955; Elevatorski, 1977).
7.	Mooney Claims	Silver Bow Co., MT T3N, R9W, Sec. 32 45°58'N 112°45'W		Chalcedony veins cutting Butte quartz monzonite of the Boulder batholith contain autunite and possible pitchblende (Sahinen, 1955; Jarrard and Mead, 1955; Moen, 1955). Uranium minerals are also reported in nearby sandstone (Elevatorski, 1977).
8.	Melrose District	Silver Bow and Madison Counties, MT, T2S, R8W, Secs. 18, 23, and 29; T3S, R8W, Sec. 4 45°38'N 112°36'W		Uranium mineralization occurs in breccia-filled chimneys along fractures cutting Paleozoic limestones and shales. Uranium content of these breccias ranges between 150 and 300 ppm (Trites and Tooker, 1953).
9.	Golden Sunlight District	Jefferson Co., MT T2N, R3W, Secs. 19, 20, and 30 45°54'N 112°11'W		Uraniferous veins reported in area (Elevatorski, 1977). Host rock unknown.
10.	Braunzell and Eby Prospect	Jefferson Co., MT T7S, R4W, Sec. 26 45°11'N 112°31'W		Uranium minerals reported in sandstone (Elevatorski, 1977).

* As shown on Fig. 2.

METAL MINING DISTRICTS (⚒)

1. Elkhorn (Au, Ag, Cu, Pb)
2. Lost Creek (W)
3. Wise River (W)
4. Carter Creek (Fe)
5. Hecla (Au, Ag, Pb, Cu)
6. Argenta (Au, Ag, Cu, Pb, Zn)
7. Bannack (Au, Ag, Cu, Pb)
8. Vipond Park (Au, Ag, Cu)
9. Birch Creek (Au, Ag, Pb, Cu)
10. Quartz Hill (Au, Ag, Cu)
11. Blue Wing (Ag, Cu, Pb, Zn)
12. Polaris (Ag, Cu, Pb, Zn)
13. Virginia City (Au, Ag)
14. Sheridan (Au, Ag)
15. Rabbit (Fe)
16. Silver Star (Au)
17. Tidal Wave (Au, Ag, Pb)
18. Johnny Gulch (Fe)
19. Mill Creek (Au, Ag)

20. Rochester (Au, Ag, Pb, Zn, Cu)
21. Whitehall (Au, Ag, Cu)
22. Butte (Au, Ag, Cu, Pb, Zn, Mn)
23. Highland (Au, Ag)
24. Eureka (Au)
25. Geertson Creek (Cu)

KNOWN URANIUM OCCURRENCES (U)

1. Rye Creek
2. Gibbonsville Group
3. Wilcox-Kriley Gulch
4. Lemhi Group
5. Unnamed
6. Moida Claim
7. Mooney Claims
8. Melrose District
9. Golden Sunlight District
10. Braunzell and Ely Prospect

Fig. 2. Mineral occurrences in the Dillon quadrangle, Montana/Idaho.

1959; Choate, 1962), and Tertiary sedimentary basin fill (Wopat et al, 1977). Most occurrences are vein deposits localized by joints, fractures, and shear zones. Few stratabound uranium occurrences have been reported in the quadrangle, though Eocene and Oligocene basin fill in the Jefferson, Beaverhead, and lower Ruby River basins, as well as Miocene and Pliocene sediments in the upper Ruby River basin, are considered moderately favorable uranium host rocks (Wopat et al, 1977). Undivided Tertiary sediments of the Big Hole River basin have also been described as moderately favorable uranium host rocks. In addition to vein and stratabound uranium occurrences, large tonnages of low-grade uranium are disseminated in black shales and phosphorites of the Phosphoria formation (Swanson, 1970).

Other Mineral Occurrences

The Dillon quadrangle has been the focus of intense mineral exploration since the mid-1800's. Many major metallic mineral deposits are concentrated in this area, especially in the vicinity of the Boulder and Pioneer batholiths and their related satellite plutons. The principal ores mined include copper, zinc, manganese, silver, lead, gold, arsenic, cadmium, and bismuth. Most ore deposits occur along east-, northeast-, and northwest-trending fractures and shear zones cutting altered quartz monzonites. Skarn deposits and gold placers are also common. Locations of the principal mineral occurrences are shown in Fig. 2.

Of particular interest to the NURE are the thorium deposits occurring in a northwest-trending belt along the Idaho-Montana border (shown on Fig. 2). The principal ore bodies associated with this belt occur just south of the Dillon quadrangle in the Lemhi Pass district. Thorium and rare-earth deposits there occur in tabular veins occupying northwest-trending fractures and shear zones cutting quartzites and phyllites of the Belt supergroup (Trites and Tooker, 1953; Jarrard, 1957; Anderson, 1961; Sharp and Cavender, 1962; Geach, 1966; and Sharp and Hetland, 1968). The principal ore minerals in the mineralized veins are thorite, monazite, brockite, and allanite. The average thorium content of these veins commonly exceeds 0.25%, and the overall rare-earth content is roughly equal to the thorium content (Staatz, 1972).

III. PRESENTATION OF ANALYTICAL DATA

Elemental concentration, uranium/thorium (U/Th) ratio, 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 histograms for water and uranium and thorium histograms for sediment are provided in Appendix II. Appendix III describes standard LASL HSSR field and analytical procedures and explains the codes used in Appendixes I-A and I-B. The field and analytical data presented in Appendixes I-A and I-B are also available on computer tape from the Union Carbide Corporation National Depository (UCC-ND), Computer Applications Department, Oak Ridge National Laboratory, Post Office Box X, Oak Ridge, Tennessee 37830. The rear pocket of this report contains: a geologic map of the quadrangle (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 Dillon NTMS quadrangle published by the US Geological Survey (1962).

In addition to uranium, waters were analyzed for calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, molybdenum, nickel, titanium, and zinc. 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. All elemental analyses are presented in Appendix I.

Uranium Concentrations in Water Samples

A total of 1148 water samples was collected from 1018 surface water (streams) and 130 ground water (springs and wells) sites during this study. Surface water sample locations are well distributed over most of the quadrangle because of the abundance of perennial streams. Groundwater coverage is less complete due to the uneven distribution of springs and wells.

The basic statistical data for uranium in waters are summarized by sample type in Table II and in the histograms of Appendix II-A. Uranium concentrations for waters of all types range from below the detection limit of 0.02 parts per billion (ppb) to 79.31 ppb. Since a few very high uranium concentrations significantly skew the statistical data, the means and standard deviations in Table II were also calculated omitting the 23 samples having >15 ppb uranium. The mean uranium content for all waters with <15 ppb uranium is 1.21 ppb.

Ground waters are somewhat more uraniferous than surface waters; the mean uranium content of waters from springs, the predominant ground water sample type, is about twice that of streams. The differences between ground water and surface water as sample types are also reflected in conductivity

TABLE II
SUMMARY OF URANIUM DATA FOR WATER SAMPLES,
DILLON QUADRANGLE, MONTANA/IDAHO

Sample Type	Sample Size	Range (ppm)		Mean (ppm)	Standard Deviation
		Min.	Max.		
All Waters	1148	0.01	79.31	1.73	4.56
All Waters*	1125	0.01	15.00	1.21	1.91
Stream Waters	1018	0.01	79.31	1.52	4.27
Stream Waters*	1003	.01	14.20	1.10	1.78
Well Waters	12	0.05	26.20	3.31	7.34
Well Waters*	11	0.05	4.45	1.22	1.43
Spring Waters	118	0.01	45.30	3.37	6.11
Spring Waters*	111	0.01	15.00	2.12	2.70

* Means and standard deviations recalculated after omitting samples with uranium values ≥ 15 ppb.

measurements. Ground waters have a mean conductivity of 330 $\mu\text{mho/cm}$ whereas surface waters have a mean value of 140 $\mu\text{mho/cm}$. Ground waters probably have higher mean uranium contents and conductivities than surface waters because of their longer and more intimate contact with surrounding rocks. Differences in the uranium background levels between ground waters and surface waters are also significant, and these sample types should be considered as separate and distinct populations when interpreting the data.

Because of the geologic and physiographic complexity of the Dillon quadrangle, there are numerous overlapping uranium backgrounds which, in most cases, differ significantly from each other. Therefore, rather than assigning an arbitrary anomaly threshold to the entire quadrangle, anomalous samples are defined as those having uranium contents significantly higher than the local background levels for their immediate geologic and physiographic setting. For example, the uranium background for the Ruby Range is notably higher than adjacent terranes, yet no samples stand out as being "anomalous." However, in the Boulder batholith, which also has a high background, one can easily pick several areas where groups or clusters of samples have uranium contents significantly higher than background levels for the batholith in general. Since the importance of a single, isolated sample with a high uranium content is difficult to evaluate, only clusters of samples having relatively high uranium values with respect to local background levels are discussed. The eleven anomaly clusters of water samples discussed are briefly described in Table III and their locations are shown in Fig. 3.

Most anomaly clusters listed in Table III are associated with felsic plutonic rocks of the large Cretaceous batholiths. Four clusters (W1-W4) occur within the Boulder batholith, two (W5 and W6) are associated with the Pioneer batholith, and one (W7) is in the Idaho batholith. Uranium concentrations of samples within these clusters are among the highest measured in this study. Even though most of these terranes are mountainous and drained by swift-moving streams, uranium background levels in the batholiths are generally higher than surrounding areas, particularly in the Boulder batholith and in parts of the Idaho batholith. Uranium veins are known in both of these areas (Castor and Robbins, 1978; Cook, 1955). No reported uranium occurrences could be found in the literature for the Pioneer batholith, but the age, chemistry, and petrography of rocks in this intrusive body are similar to those in the Boulder batholith (Zen et al, 1975). By analogy, the Pioneer batholith might host uranium deposits similar to those in the Boulder batholith.

Two clusters of anomalous water samples are associated, at least in part, with quartzites of the Belt supergroup in the Beaverhead and Salmon River Mountains of Idaho. Cluster W8 on the southwest flank of the Bitterroot Range occurs in a highly faulted area underlain by late Precambrian Swauger quartzite and small outcrops of Tertiary Challis volcanics. This cluster is associated with the Gibbonsville and Wilcox-Kriley Gulch uranium occurrences. Cluster W9, located just west of Salmon, Idaho, consists of stream waters draining Belt quartzites on the eastern flank of the Salmon River Mountains. A quartz monzonite pluton containing minor gold, copper, and iron mineralization is located just north of this cluster (Anderson, 1956).

Several anomaly clusters (W3, W5, W10, and W11) are associated with various Tertiary sedimentary and volcanic rocks. In some Tertiary basins the anomalous values appear to be extensions of anomaly clusters in topographically and structurally higher batholithic or basement rocks exposed in the adjacent uplifts (e.g., W3 and W5). The anomalous values in these Tertiary basins may simply reflect geochemical dispersion trains originating in the

TABLE III

CLUSTERS OF ANOMALOUS WATER SAMPLES FROM THE DILLON QUADRANGLE, MONTANA/IDAHO

Water Cluster*	Sample Location	Sample Source	pH	Uranium (ppb)	Conductivity (μ mho/cm)	Geology/Remarks
W1	M34018	Stream	6.0	32.60	700	West side of Boulder batholith. Bedrock consists of felsic plutonic rocks. Most waters with highest uranium concentrations sampled where streams cross north-trending fault bringing Cretaceous plutonic rocks up against Tertiary valley fill. Mooney uranium claim located at north end of cluster.
	M34020	Stream	7.0	8.26	210	
	M34021	Stream	6.0	20.30	490	
	M34022	Stream	7.3	44.20	500	
	M34023	Stream	7.2	21.30	500	
	M34026	Stream	7.9	9.06	330	
W2	M34056	Stream	6.5	7.04	330	Plutonic rocks of Boulder batholith. Large north-trending faults in vicinity of high samples.
	M34049	Stream	6.5	8.08	250	
	M34050	Stream	6.5	33.40	265	
W3	M34151	Stream	6.5	17.30	220	East side of Boulder batholith, northwest margin of Jefferson River basin. Bedrock consists predominantly of Cretaceous plutonic rocks and Tertiary basin fill. Outcrops of Elkhorn volcanics also present.
	M34162	Spring	7.2	22.80	710	
	M34163	Spring	6.8	17.30	345	
	M34167	Spring	6.7	15.20	285	
	M34241	Stream	7.1	22.40	420	
	M34244	Stream	7.4	35.00	550	
	M34254	Stream	6.8	12.90	350	
	M34255	Spring	7.2	10.80	360	
	M35313	Stream	5.7	24.60	600	
	M35379	Stream	5.7	23.40	600	
	M35383	Spring	5.7	16.00	290	
W4	M35389	Stream	5.7	9.61	380	Hell Canyon, on the southeast margin of Boulder batholith. Bedrock consists of felsic plutonic rocks. Lies between the Rochester and Silver Star mining districts.
	M35398	Stream	5.9	12.10	420	
	M35399	Stream	5.9	8.89	440	
	M35433	Stream	5.7	6.83	160	
	M35434	Stream	5.7	6.83	380	
W5	M35436	Stream	5.7	7.80	180	Eastern margin of Pioneer batholith. Bedrock includes Paleozoic through Tertiary sediments as well as Cretaceous plutonic rocks. This cluster partially overlaps the Birch Creek mining district, a producer of copper, lead, silver, and gold.
	M34811	Stream	6.3	8.02	650	
	M34880	Stream	6.9	16.40	485	
	M34881	Stream	6.9	15.40	480	
	M35040	Spring	6.0	6.01	2500	
	M35409	Stream	6.1	8.83	370	
W6	M35411	Spring	6.1	20.50	400	Western margin of Pioneer batholith and eastern side of Big Hole River basin. Associate with other water samples having moderately high (2-5 ppb) uranium contents.
	M35422	Spring	5.9	45.30	400	
	M34379	Stream	6.4	6.20	160	
W7	M34425	Stream	5.6	9.47	53	Felsic plutonic rocks of the Idaho batholith. Associated with many samples having moderately high (2-5 ppb) uranium values. Cluster located south of Rye Creek uranium occurrence.
	M34331	Stream	6.5	14.20	352	
W8	M34408	Stream	5.9	5.53	108	Area underlain by Swauger quartzite of Belt series and small outcrops of Challis volcanics. Numerous northwest-trending faults in this area. Gibbonsville and Wilcox-Kriley Gulch groups of uranium claims are contained in this cluster. Precious metal mineralization in vicinity.
	M35616	Stream	7.6	7.62	336	
	M35617	Stream	7.7	8.89	155	
	M35687	Spring	6.9	12.32	360	
	M35766	Stream	8.5	5.22	490	
W9	M35786	Stream	7.5	7.82	23	Samples from streams draining outcrops of Belt quartzites and the Tertiary Carmen formation. Other waters with moderately high uranium values (2-5 ppb) are associated with these samples.
	M35789	Stream	7.4	6.92	25	
W10	M35641	Stream	7.4	6.63	500	Area underlain by sediments of the Tertiary Kenney and Geertson formations, and Challis volcanics. Reported uranium occurrences are located both east and west of this cluster.
	M35644	Stream	7.7	79.31	2440	
	M35650	Stream	8.2	5.70	404	
	M35732	Stream	8.1	7.62	425	
W11	M35424	Stream	6.5	14.20	700	Tertiary sedimentary strata in the Beaverhead River basin. The significance of these samples is unknown since only two water samples were collected in this area.
	M35426	Stream	5.9	26.70	800	

* Location shown in Fig. 3.

Fig. 3. Principal uranium anomaly clusters for water and sediment samples in the Dillon quadrangle, Montana/Idaho.

anomalous areas of the adjacent highlands. On the other hand, these anomalous water samples may be detecting uranium from the enriched areas of the uplifts that has been mobilized and redeposited by ground waters in strata of the adjacent Tertiary basins.

Uranium Concentrations in Sediment Samples

Stream and spring sediments were collected from 1721 sample sites in the quadrangle. The basic statistical data for sediments are summarized in Table IV and in the histograms of Appendix II-B. Uranium contents in sediments range from 0.95 to 130.50 parts per million (ppm). The mean uranium content of sediments with <20 ppm is 5.58 ppm.

In general, uranium levels in sediments from areas underlain by felsic plutonic rocks of the Boulder, Pioneer, and Idaho batholiths are significantly higher than those from other parts of the quadrangle. Belt quartzites and flanking Tertiary sediments in the Beaverhead Mountains also have elevated uranium background levels compared to adjacent areas. Therefore, for the purposes of discussion, only groups of sediments having uranium contents significantly above the local background levels for their immediate geologic and physiographic setting are considered anomalous. Sediment anomaly clusters are briefly described in Table V and their locations are shown in Fig. 3.

TABLE IV
SUMMARY OF URANIUM DATA FOR SEDIMENT SAMPLES,
DILLON QUADRANGLE, MONTANA/IDAHO

Sample Type	Sample Size	Range (ppm)		Mean (ppm)	Standard Deviation
		Min.	Max.		
All Sediments	1721	0.95	130.50	7.73	10.65
All Sediments*	1608	0.95	20.00	5.58	3.74
Wet Streams	983	0.95	130.50	10.18	13.15
Wet Streams*	878	0.95	20.00	6.77	4.21
Dry Stream	615	1.20	37.10	4.19	3.01
Dry Streams*	613	1.20	19.10	4.09	2.38
Wet Springs	116	1.80	44.00	6.00	6.95
Wet Springs*	110	1.80	15.30	4.56	2.65
Dry Springs	7	2.10	5.10	3.64	1.13

* Means and standard deviations recalculated after omitting samples with uranium values >20 ppm.

Sediment cluster S1, which is associated with rocks of the Boulder batholith, has many of the highest uranium values measured in the quadrangle. Eighteen samples have uranium contents between 40.30 and 120.40 ppm while 41 more samples contain between 20 and 40 ppm uranium. When plotted on a more detailed map of the batholith (Tilling et al, 1968), most anomalous sediments appear to be associated with areas underlain by Butte quartz monzonite, alkali bodies, and leucocratic rocks of the Donald and Climax Gulch plutons.

Sediment clusters S2 and S3 are associated with rocks of the Pioneer batholith. As stated previously, rocks of the Pioneer batholith appear to be similar both chemically and petrographically to those in the southern part of the Boulder batholith (Zen et al, 1975) and might host similar types of uranium deposits. Cluster S3, which overlaps the eastern margin of the Pioneer batholith and Paleozoic through Tertiary sedimentary rocks in the Beaverhead River basin, is especially interesting because it partially coincides with both the Birch Creek mining district and water-anomaly cluster W5.

Two anomaly clusters occur in areas underlain by rocks of the Idaho batholith. Cluster S4, located on the southeast flank of the Anaconda Range, contains four samples with uranium contents over 80 ppm as well as 13 samples over 20 ppm. The samples with highest uranium contents were collected along the West Fork of La Marche Creek near Longs Peak. These samples appear to be localized near the contact between rocks of the batholith and Belt metasediments. Anomalous samples within this cluster are also associated with Tertiary strata adjacent to these batholithic rocks in the Big Hole River basin. Cluster S5 consists of anomalous stream sediment samples collected from tributaries along the East Fork of the Bitterroot River. This area is underlain predominantly by rocks of the Idaho batholith, but includes small isolated outcrops

TABLE V

CLUSTERS OF ANOMALOUS SEDIMENT SAMPLES FROM THE DILLON QUADRANGLE,
MONTANA/IDAHO

Sediment Cluster*	Sample Location	Sample Source	Uranium (ppm)	Thorium (ppm)	U/Th Ratio	Geology/Remarks
S1	M34016	Wet Stream	90.10	11.8	7.64	Boulder batholith. Area underlain by felsic plutonic rocks, principally of the Butte quartz monzonite, but also includes bodies of alaskite and leucocratic rocks of the Donald and Climax Gulch plutons. A large number of sediment samples with uranium concentrations ranging from 20 to 40 ppm are associated with this cluster.
	M34077	Wet Stream	47.10	31.1	1.51	
	M34082	Wet Stream	96.30	17.3	1.51	
	M34097	Wet Stream	59.70	69.5	0.86	
	M34098	Wet Stream	40.30	146.6	0.27	
	M34100	Wet Stream	42.90	33.5	1.28	
	M34103	Wet Stream	50.70	25.3	2.00	
	M34105	Wet Stream	49.80	23.8	2.09	
	M34113	Wet Stream	63.60	33.2	1.92	
	M34118	Wet Stream	108.60	104.3	1.04	
	M34137	Wet Stream	120.40	7.5	16.05	
	M34246	Wet Stream	71.40	28.9	2.47	
	M34250	Wet Stream	40.90	70.8	0.58	
	M34255	Wet Spring	44.00	14.2	3.10	
	M34275	Wet Stream	40.40	22.4	1.80	
	M34280	Wet Spring	41.70	16.6	2.51	
	M34287	Wet Stream	110.70	10.0	11.07	
	M35385	Wet Stream	45.80	110.0	0.42	
S2	M34348	Wet Stream	27.00	299.3	0.09	Pioneer batholith. Bedrock consists of felsic plutonic rocks.
	M34427	Wet Stream	21.20	15.2	1.39	
	M34467	Wet Stream	34.80	38.1	0.91	
	M34468	Wet Stream	35.00	16.1	2.17	
	M34470	Wet Stream	38.00	10.4	3.65	
	M34471	Wet Stream	38.60	17.1	2.26	
	M34472	Wet Stream	40.90	23.4	1.75	
S3	M35029	Dry Stream	36.00	102.3	0.35	Eastern Pioneer Mountains and western Beaverhead River basin. Bedrock consists of Cretaceous plutonic rocks and Paleozoic through Tertiary sediments. This cluster partially overlaps water cluster W6 and the Birch Creek mining district. Though higher than the average for the quadrangle, U/Th ratios for most samples in this cluster are moderately low compared to samples in the other anomaly clusters.
	M34691	Wet Stream	16.50	26.4	0.63	
	M34811	Wet Stream	41.00	13.6	3.01	
	M34882	Wet Stream	11.40	34.2	0.33	
	M34883	Wet Stream	10.20	33.7	0.30	
	M35040	Wet Stream	10.70	27.3	0.39	
	M35041	Wet Stream	17.60	27.2	0.65	
	M35042	Wet Stream	19.40	29.4	0.66	
	M35043	Wet Stream	17.90	20.5	0.87	
	M35044	Wet Stream	18.90	16.5	1.15	
S4	M35056	Wet Stream	17.00	22.5	0.76	Southeast flank of Anaconda Range and northern Big Hole River basin. These anomalous sediments were collected in an area underlain by felsic plutonic rocks of the Idaho batholith, metasediments of the Belt supergroup, and Tertiary sedimentary rocks.
	M35058	Wet Stream	13.60	21.6	0.63	
	M35292	Wet Stream	20.70	50.1	0.41	
	M34394	Wet Stream	26.60	15.8	1.68	
	M34395	Wet Stream	33.30	29.9	1.11	
	M34396	Wet Stream	23.00	19.3	1.19	
	M34397	Wet Stream	27.80	11.9	2.34	
	M34399	Wet Stream	24.40	14.1	1.73	
	M34400	Wet Stream	37.20	200.0	0.19	
	M34502	Wet Stream	84.40	10.1	8.36	
	M34505	Wet Stream	130.50	31.9	4.09	
	M34506	Wet Stream	108.50	27.9	3.89	
	M34507	Wet Stream	26.30	14.9	1.77	
	M34508	Wet Stream	98.00	37.8	2.59	
S5	M34509	Wet Stream	32.30	139.4	0.23	These samples were collected from tributaries along the East Fork of the Bitterroot River. Bedrock consists of felsic plutonic rocks of the Idaho batholith. Many sediments containing 10-18 ppm uranium are associated with this cluster.
	M34510	Wet Stream	37.00	30.7	1.21	
	M34512	Wet Stream	39.00	19.0	2.05	
	M34551	Wet Stream	35.10	26.3	1.33	
	M34574	Wet Stream	25.60	60.6	0.42	
	M35016	Wet Stream	21.90	27.8	0.79	
	M34305	Wet Stream	26.20	20.0	1.31	
	M34313	Wet Stream	29.80	18.0	1.66	
	M34321	Wet Stream	58.30	92.0	0.63	
	M34322	Wet Stream	21.10	18.2	1.16	
S6	M34332	Wet Stream	26.40	23.6	1.12	Southwest flank of the Beaverhead Range. This area is underlain by Belt quartzites and Tertiary sedimentary strata.
	M34406	Wet Stream	38.90	36.2	1.07	
	M34997	Wet Stream	20.80	18.7	1.11	
	M35639	Wet Stream	83.90	12.8	6.55	
	M35640	Wet Stream	25.60	12.9	1.98	
S7	M35646	Wet Stream	39.30	15.2	2.59	Bitterroot Range. This broad, diffuse cluster of anomalous sediments occurs in a highly faulted terrane of Belt metasediments, plutonic rocks of the Idaho batholith, and small outcrops of Tertiary Challis volcanics. Many other sediments with uranium concentrations ranging between 10 and 20 ppm are associated with these samples. The Gibbonsville and Wilcox-Kriley Gulch uranium occurrences are within this cluster.
	M35653	Wet Stream	23.00	13.4	1.72	
	M34351	Wet Stream	20.60	23.5	0.88	
	M34360	Wet Stream	21.10	51.3	0.41	
	M34459	Wet Stream	20.60	30.8	0.67	
	M35614	Wet Stream	22.50	8.9	2.53	
	M35625	Wet Stream	26.50	7.5	3.53	
	M35626	Wet Stream	29.10	16.5	1.76	
	M35629	Wet Stream	21.70	12.7	1.71	
	M35684	Wet Stream	30.80	6.3	4.89	
	M35687	Wet Stream	34.70	7.9	4.39	
	M35709	Wet Stream	51.90	7.3	7.11	
	M35737	Wet Stream	41.00	11.3	3.63	
	M35763	Wet Stream	41.10	11.8	3.48	

* Location shown on Fig. 3.

of Belt and Cambrian strata. The regional background uranium level in this area is high compared to surrounding terranes.

Two anomaly clusters are associated with Belt metasediments and flanking Tertiary rocks near the Montana-Idaho border. Cluster S6, on the southwestern flank of the Beaverhead Mountains, partially overlaps some anomalous stream waters in cluster W10. Cluster S7, a large, diffuse group of anomalous samples in the Bitterroot Range, contains samples collected in an area underlain by complexly faulted metasediments of the Belt supergroup and small outcrops of Challis volcanics. Known uranium occurrences are associated with both of these clusters.

Thorium Concentrations and U/Th Ratios in Sediment Samples

Thorium concentrations were obtained for 1717 of the 1721 sediment samples collected in the quadrangle. The basic statistical data for thorium in sediments are summarized in Table VI. Histograms for the thorium data are presented in Appendix II-C. Thorium contents in sediments range from 3.40 to 351.00 ppm and have a mean of 14.48 ppm.

The average U/Th ratio for samples containing <20 ppm uranium is 0.37, whereas sediments with >20 ppm uranium have an average ratio of 1.85 (Table VII). Most of the anomalous samples in Table V are characterized by relatively high U/Th ratios. In trying to determine what, if any, significance should be attached to the association of high uranium with high U/Th ratios, it is interesting to compare the HSSR sediment data with detailed studies of uranium, thorium, and U/Th ratios in bedrock units of the Boulder batholith

TABLE VI
SUMMARY OF THORIUM DATA FOR SEDIMENT SAMPLES,
DILLON QUADRANGLE, MONTANA/IDAHO

<u>Sample Type</u>	<u>Sample Size</u>	<u>Range (ppm)</u>		<u>Mean (ppm)</u>	<u>Standard Deviation</u>
		<u>Min.</u>	<u>Max.</u>		
All Sediments	1717	3.40	351.00	20.33	24.85
All Sediments*	1552	3.40	39.90	14.48	7.31
Wet Streams	981	3.40	329.00	23.05	28.50
Wet Streams*	856	3.40	39.90	15.13	8.12
Dry Streams	614	3.80	351.00	16.95	19.07
Dry Streams*	581	3.80	39.40	13.91	6.10
Wet Springs	115	4.20	88.40	15.76	14.41
Wet Springs*	108	4.20	37.80	12.57	6.10
Dry Spring	7	8.50	17.20	12.27	3.10

* Means and standard deviations recalculated after omitting samples with thorium values >60 ppm.

TABLE VII

SUMMARY OF URANIUM/THORIUM RATIOS FOR SEDIMENT SAMPLES,
DILLON QUADRANGLE, MONTANA/IDAHO

<u>Sample Population</u>	<u>Sample Size</u>	<u>Range</u>		<u>U/Th Mean</u>	<u>Standard Deviation</u>
		<u>Min.</u>	<u>Max.</u>		
All Sediments	1717	0.05	16.05	0.47	0.72
Sediments with <20 ppm uranium	1604	0.05	2.82	0.37	0.26
Sediments with >20 ppm uranium	113	0.09	16.05	1.85	2.24

(Tilling and Gottfried, 1969; Castor and Robbins, 1978). Unaltered rocks making up the main body of the batholith have mean uranium contents of 1.5 ppm for mafic rocks, 4.0 ppm in Butte quartz monzonite, and 9.2 ppm for alaskites (Table 2, in Tilling and Gottfried, 1969). The average U/Th ratios for these rocks, 0.25, is typical for unaltered igneous rocks. In contrast, analyses by Castor and Robbins (1978, Appendix A) show that silicic veins and hydrothermally altered quartz monzonites in the batholith are generally enriched in uranium (containing up to 0.39% U_3O_8) and have U/Th ratios commonly much greater than one. Since most known uranium occurrences in the Boulder batholith are associated with veins in hydrothermally altered terranes, high uranium contents coupled with high U/Th ratios appear to be good signatures for these types of deposits. If so, the anomalous sediments listed in Table V for the Boulder batholith (cluster S1) may be indicating areas of uranium-enriched veins and/or hydrothermally altered batholithic rock.

Unfortunately, uranium, thorium, and U/Th data for bedrock units in the rest of the quadrangle are not available for comparisons with the HSSR data. However, the association of high uranium contents with relatively high U/Th ratios in sediments elsewhere in the quadrangle may also be a useful guide to uranium-enriched areas.

IV. SUMMARY AND CONCLUSIONS

Water and sediment samples were collected from 1796 locations in the Dillon quadrangle. Samples were collected at a nominal density of one location per 10 km² except in the Boulder batholith area where the density was increased to one per 2 km². Water samples, collected from 1148 sites including streams, springs, and wells, were analyzed for uranium and 12 other elements. Sediment samples, taken from 1721 streams and springs, were analyzed for uranium, thorium, and 41 additional elements.

Uranium contents in water samples range from below the detection limit of 0.02 ppb to 79.31 ppb. Waters collected in areas underlain by the Boulder, Pioneer, and Idaho batholiths are notably enriched in uranium when compared to waters from surrounding areas. Uranium-enriched waters are also associated with Belt metasediments in the Beaverhead and Salmon River Mountains and with Tertiary sedimentary and volcanic rocks in intermontane basins. Two areas containing uranium-rich waters in the Tertiary basins may be extensions of anomalous uranium clusters associated with crystalline rock in the adjacent uplifts.

Uranium contents of sediment samples range from 0.95 to 130.50 ppm. The average uranium concentration in sediments collected from areas underlain by Cretaceous batholiths is significantly greater than background uranium levels in other parts of the quadrangle. Moderately high uranium backgrounds are also associated with areas underlain by Belt quartzites along the Montana-Idaho border. Several clusters of sediment samples have uranium contents significantly above local background levels in these terranes and in Tertiary strata adjacent to them.

Thorium contents, determined for 1717 of the 1721 sediment samples collected, range from 3.40 to 351.00 ppm. The average U/Th ratio for samples with <20 ppm uranium is 0.37, whereas most of the samples with very high uranium contents have U/Th ratios >1. Comparison of HSSR data with uranium, thorium, and U/Th ratios measured in rocks of the Boulder batholith by other investigators suggests that high uranium values coupled with high U/Th ratios is a good indicator of uranium-enriched terranes.

The relative importance of the anomaly clusters listed in Tables III and V is difficult to assess on the basis of HSSR uranium data alone. Detailed comparisons of the uranium data with the other elemental analyses and U/Th ratios in Appendix I can probably aid appreciably in the interpretation of the geological and geochemical settings from which these samples were taken. Clusters of anomalous samples overlapping known uranium occurrences, base and precious metal mining districts, or geologic settings favorable for uranium deposition define the most logical areas for detailed follow-up investigations.

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APPENDIX I

LISTINGS OF FIELD DATA AND ELEMENTAL CONCENTRATIONS FOR SAMPLES FROM THE DILLON NTMS QUADRANGLE, MONTANA/IDAHO

APPENDIX I-A

Listings of Field Data and Elemental Concentrations
for Water Samples from the Dillon Quadrangle, Montana/Idaho
(Pages 18 through 63)

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.
- ② - Lists concentrations of 12 additional elements determined by plasma-source emission spectrography.

(See Appendix III for Code to Listings)

APPENDIX I-A. Elemental Concentrations for Water Samples

①

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																		U CONCENTRATION											
STATE	LATITUDE	LONGITUDE	DOE LAS	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SOLILOMETER (eU ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	DRAINAGE	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (N)	UNITS IN PPB
							DATE	HOUR																											
30-45.8031-112.7464-2-07-						0-M34001-05/30/76-14-			13-	5.2-C-	-	5.3-	54-			8-3-7-5-8-4-4-1-2-1-3-4-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.24	
30-45.8072-112.7431-2-07-						0-M34002-05/30/76-15-			13-	5.6-C-	-	5.2-	49-			13-3-7-5-8-3-4-1-2-1-3-4-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.52	
30-45.8197-112.7378-2-07-						0-M34003-05/30/76-16-			14-	8.1-C-	-	5.2-	53-			13-3-7-5-8-3-4-2-1-1-2-3-3-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.35	
30-45.8089-112.5933-2-07-						0-M34004-05/30/76-18-			15-	13.3-C-	-	5.3-	71-			16-3-7-6-8-2-4-5-1-4-4-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.7967-112.5681-2-07-						0-M34005-05/30/76-19-			14-	13.2-C-	-	6.0-	104-			16-3-7-6-8-2-3-3-	-1-2-3-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.50	
30-45.7558-112.6025-2-07-						0-M34006-05/30/76-18-			12-	5.2-C-	-	5.4-	76-			27-3-7-4-7-4-4-2-2-1-3-4-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.7544-112.5967-2-07-						0-M34007-05/30/76-20-			11-	10.8-C-	-	5.6-	142-			16-3-7-3-7-4-4-2-2-3-3-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.49	
30-45.7697-112.5244-2-07-						0-M34008-05/31/76-12-			8-	2.3-C-	-	5.3-	47-			33-2-6-3-6-4-4-1-2-1-4-4-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.7661-112.5278-2-07-						0-M34009-05/31/76-13-			8-	3.4-C-	-	5.3-	62-			11-2-7-5-7-2-4-3-2-1-4-4-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.7650-112.5922-2-07-						0-M34010-05/31/76-13-			13-	8.4-C-	-	5.5-	83-			11-2-1-4-8-3-4-1-2-3-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.7694-112.5753-2-07-						0-M34012-05/31/76-14-			15-	9.8-C-	-	5.2-	61-			16-2-1-4-6-3-3-3-1-2-3-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.36	
30-45.7756-112.5636-2-07-						0-M34013-05/31/76-14-			14-	10.2-C-	-	5.7-	115-			5-2-1-3-7-3-3-3-2-3-3-3-3-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.18	
30-45.7961-112.5164-2-07-						0-M34014-05/31/76-15-			14-	9.4-C-	-	5.6-	94-			11-3-7-4-7-2-4-2-2-2-4-3-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.15	
30-45.7925-112.5547-2-07-						0-M34015-05/31/76-16-			13-	9.1-C-	-	6.1-	362-			2-2-1-4-7-3-3-3-2-2-1-3-4-2-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.71	
30-45.8206-112.5206-2-07-						0-M34016-05/31/76-17-			14-	8.9-C-	-	5.5-	122-			19-3-7-5-8-3-3-1-2-1-4-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.14	
30-45.9528-112.7056-2-07-						0-M34017-04/14/76- 9-			2-	1.0-C-	-	6.6-	230-			22-3-1-4-2-4-4-2-2-4-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.27	
30-45.9444-112.7028-2-07-						0-M34018-04/14/76- 9-			9-	6.0-C-	-	6.0-	700-			22-4- -7- -2-4-1- -4-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32.60*	
30-45.9217-112.7233-2-07-						0-M34019-04/14/76-11-			11-	1.0-C-	-	6.3-	210-			27-3-9-4-9-3-3-1-1-1-4-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.48	
30-45.9111-112.7244-2-07-						0-M34020-04/14/76-11-			7-	1.0-C-	-	7.0-	210-			16-3-1-7-6-4-4-1-1-1-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.26	
30-45.9128-112.7197-2-07-						0-M34021-04/14/76-12-			8-	4.0-C-	-	6.0-	490-			27-3-1-4-1-2-3-1-1-2-3-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20.30*	
30-45.9117-112.7097-2-07-						0-M34022-04/14/76-13-			12-	4.0-C-	-	7.3-	500-			11-3-1-7-6-2-3-1-1-3-4-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44.20*	
30-45.9033-112.7111-2-07-						0-M34023-04/14/76-14-			10-	11.0-C-	-	7.2-	500-			19-3-1-7-6-2-4-1-1-4-3-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.30*	
30-45.8939-112.7108-2-07-						0-M34024-04/14/76-14-			11-	9.0-C-	-	7.4-	360-			13-4- - - -2-4-1-3-4-4-	-5-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.55	
30-45.8794-112.7167-2-07-						0-M34025-04/14/76-14-			10-	9.0-C-	-	7.3-	310-			8-3-1-4-7-3-3-1-1-3-3-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.72	
30-45.8744-112.7389-2-07-						0-M34026-04/14/76-16-			8-	5.0-C-	-	7.9-	330-			27-3-1-4-7-3-4-1-1-3-3-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.06	
30-45.8522-112.7383-2-07-						0-M34027-04/14/76-18-			2-	1.0-C-	-	7.0-	230-			27-3-1-5-6-3-4-1-1-2-3-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.19	
30-45.8469-112.6939-2-07-						0-M34028-04/15/76- 9-			2-	5.0-C-	-	6.7-	150-			22-4- -4-6-1-2-1-3-4-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.8353-112.7075-2-07-						0-M34029-04/15/76-10-			8-	3.0-C-	-	6.1-	220-			11-4- -4-6-3-3-1-1-4-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.8094-112.7019-2-07-						0-M34032-04/15/76-11-			6-	5.0-C-	-	6.6-	300-			16-4- - - -2-2-1-3-4-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.92	
30-45.7975-112.6833-2-07-						0-M34033-04/15/76-12-			4-	4.0-C-	-	6.8-	220-			16-4- -4-6-3-4-2-1-4-3-	-5-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.28	
30-45.9775-112.6522-2-07-						0-M34036-04/21/76-14-			8-	15.0-C-	-	6.6-	240-			25-1-6-4-6-2-3-1-1-3-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.22	
30-45.9311-112.6672-2-07-						0-M34040-04/21/76-16-			11-	8.5-C-	-	6.8-	500-			16-4- -4-6-2-3-1-1-4-3-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80	
30-45.7753-112.7153-2-07-						0-M34045-04/21/76-18-			9-	5.0-C-	-	6.6-	420-			11-4- -4-6-2-3-1-1-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28.50*	
30-45.9556-112.5597-2-07-						0-M34046-04/22/76-11-			7-	2.5-C-	-	6.6-	198-			19-3-6-4-6-3-3-1-1-2-4-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.75	
30-45.9564-112.5608-2-07-						0-M34047-04/22/76-11-			9-	11.0-C-	-	6.7-	300-			25-3-6-4-6-2-3-1-1-4-3-	-5-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.60	
30-45.9292-112.5656-2-07-						0-M34048-04/22/76-12-			9-	10.0-C-	-	6.7-	220-			5-3-6-4-6-3-3-1-1-4-3-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.18	
30-45.9200-112.5744-2-07-						0-M34049-04/22/76-12-			7-	4.0-C-	-	6.5-	250-			27-3-6-4-6-3-3-1-1-2-3-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.08	
30-45.9167-112.5756-2-07-						0-M34050-04/22/76-12-			7-	3.5-C-	-	6.5-	255-			19-3-6-4-6-3-3-1-1-2-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33.40*	
30-45.9111-112.5722-2-07-						0-M34051-04/22/76-13-			5-	4.5-C-	-	6.5-	220-			27-3-6-4-6-3-3-1-1-2-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17.30*	
30-45.9108-112.5200-2-07-						0-M34052-04/22/76-15-			3-	3.0-C-	-	6.4-	230-			25-4- -4-6-3-3-1-1-4-3-	-5-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.40	
30-45.8819-112.5306-2-07-						0-M34053-04/22/76-16-			1-	0.2-C-	-	6.4-	225-			11-4- -4-6-3-3-1-1-2-3-	-5-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.74	
30-45.8806-112.5081-2-07-						0-M34054-04/22/76-16-			2-	0.2-C-	-	6.4-	185-			11-3-6-4-6-3-3-1-1-3-5-	-5-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.77	
30-45.8831-112.5175-2-07-						0-M34055-04/22/76-17-			3-	0.1-C-	-	6.1-	185-			19-3-6- - -3-4-1-3-3-5-	-5-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.9708-112.7281-2-07-						0-M34056-05/15/76-10-			3-	4.0-C-	-	6.5-																							

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

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DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY													
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAS SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per billion (ppb)												
							Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn	
30-45.8031-112.7464-2-07-			0-M34001				12979	-55	-25	10	909	3062	53	-25	-25	-200	44	1227	
30-45.8072-112.7431-2-07-			0-M34002				10659	-55	-25	-4	423	2280	32	-25	-25	-200	17	258	
30-45.8197-112.7378-2-07-			0-M34003				10746	-55	-25	-4	763	2190	34	-25	-25	-200	35	1329	
30-45.8089-112.5933-2-07-			0-M34004				14294	-55	-25	-4	1485	3621	149	-25	-25	-200	19	423	
30-45.7967-112.5681-2-07-			0-M34005				17521	56	-25	-4	778	5652	54	-25	-25	-200	14	180	
30-45.7558-112.6025-2-07-			0-M34006				12146	-55	-25	-4	437	4581	29	-25	-25	-200	24	171	
30-45.7644-112.5967-2-07-			0-M34007				30964	-55	-25	-4	877	9333	66	-25	-25	-200	30	389	
30-45.7697-112.5244-2-07-			0-M34008				6816	-55	-25	-4	310	2797	31	-25	-25	-200	14	1103	
30-45.7661-112.5278-2-07-			0-M34009				12337	-55	-25	-4	255	1916	32	-25	-25	-200	12	151	
30-45.7650-112.5922-2-07-			0-M34010				18241	-55	-25	-4	589	5301	37	-25	-25	-200	38	493	
30-45.7694-112.5753-2-07-			0-M34012				11961	-55	-25	-4	786	3167	29	-25	55	-200	41	240	
30-45.7756-112.5636-2-07-			0-M34013				25775	-55	-25	-4	376	9146	47	-25	-25	-200	15	252	
30-45.7961-112.5164-2-07-			0-M34014				16136	77	59	-4	521	4454	40	54	140	-200	25	230	
30-45.7925-112.5547-2-07-			0-M34015				68575	121	43	-4	307	39029	24	-25	293	-200	47	355	
30-45.8206-112.5206-2-07-			0-M34016				33282	-55	90	-4	194	8176	12	38	274	-200	38	414	
30-45.9528-112.7056-2-07-			0-M34017				43888	64	52	-4	123	14177	27	-25	187	-200	26	333	
30-45.9444-112.7028-2-07-			0-M34018																
30-45.9217-112.7233-2-07-			0-M34019				36360	-55	-25	-4	-25	11307	24	-25	-25	-200	-4	-50	
30-45.9111-112.7244-2-07-			0-M34020				37278	-55	-25	-4	-25	10682	28	-25	-25	-200	-4	-50	
30-45.9128-112.7197-2-07-			0-M34021																
30-45.9117-112.7097-2-07-			0-M34022																
30-45.9033-112.7111-2-07-			0-M34023																
30-45.8939-112.7108-2-07-			0-M34024				67661	59	-25	-4	76	10030	113	-25	-25	-200	7	-50	
30-45.8794-112.7167-2-07-			0-M34025				65490	127	91	-4	159	11379	55	-25	252	-200	34	163	
30-45.8744-112.7389-2-07-			0-M34026				81612	159	106	-4	86	13090	21	-25	319	-200	37	246	
30-45.8522-112.7383-2-07-			0-M34027				44519	137	102	-4	83	12307	11	39	300	-200	39	231	
30-45.8469-112.6939-2-07-			0-M34028				26363	100	124	-4	72	5744	61	108	320	-200	39	163	
30-45.8353-112.7075-2-07-			0-M34029				45484	143	128	-4	138	8283	56	63	358	-200	43	254	
30-45.8094-112.7019-2-07-			0-M34032				64706	95	81	-4	50	10041	8	-25	242	-200	33	324	
30-45.7975-112.6833-2-07-			0-M34033				45523	100	73	-4	171	10306	17	-25	223	-200	23	207	
30-45.9775-112.6522-2-07-			0-M34036				45704	114	-25	-4	128	9535	29	-25	86	-200	7	182	
30-45.9311-112.6672-2-07-			0-M34040				70208	123	-25	-4	275	9441	152	-25	49	-200	-4	168	
30-45.7753-112.7153-2-07-			0-M34045																
30-45.9556-112.5597-2-07-			0-M34046				32153	83	-25	-4	737	7856	95	-25	-25	-200	-4	98	
30-45.9564-112.5608-2-07-			0-M34047				46262	86	-25	-4	445	12273	736	-25	-25	-200	-4	87	
30-45.9292-112.5656-2-07-			0-M34048				37160	100	-25	-4	615	8891	102	-25	34	-200	-4	218	
30-45.9200-112.5744-2-07-			0-M34049				44574	92	-25	-4	820	9967	102	-25	-25	-200	-4	297	
30-45.9167-112.5756-2-07-			0-M34050																
30-45.9111-112.5722-2-07-			0-M34051																
30-45.9108-112.5200-2-07-			0-M34052				33787	-55	-25	-4	158	9255	30	-25	-25	-200	-4	116	
30-45.8819-112.5306-2-07-			0-M34053				36098	-55	-25	-4	49	9370	8	-25	-25	-200	-4	-50	
30-45.8806-112.5081-2-07-			0-M34054				26230	-55	-25	-4	35	7271	-3	-25	-25	-200	-4	-50	
30-45.8931-112.5175-2-07-			0-M34055				24124	90	-25	-4	114	8398	-3	-25	140	-200	-4	301	
30-45.9708-112.7281-2-07-			0-M34056				68589	118	-25	-4	114	16208	-3	-25	190	-200	12	380	
30-45.9897-112.7189-2-07-			0-M34057				67672	140	104	-4	153	15585	-3	32	468	-200	35	565	
30-45.9892-112.7331-2-07-			0-M34058				74130	155	111	-4	164	16098	-3	-25	503	-200	39	470	
30-45.9883-112.7461-2-06-			0-M34059				31969	116	128	-4	137	3218	-3	163	489	-200	31	437	
30-45.8167-112.4022-2-07-			0-M34060				8118	-55	-25	-4	61	3499	-3	-25	-25	-200	-4	-50	
30-45.8153-112.3956-2-06-			0-M34061				13946	56	-25	-4	82	4830	-3	-25	-25	-200	-4	-50	
30-45.7806-112.3983-2-07-			0-M34066				19282	136	73	-4	90	5093	-3	83	224	-200	19	181	
30-45.8411-112.4225-2-07-			0-M34067				8119	-55	-25	-4	-25	1866	17	-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		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SOLITOMETER (µL 20m)	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
							DATE	HOUR																										
30-45	8450	-112.4311	-2-07-	0-M34058-05/26/76-18-	18-	7.5-C-	-	5.6-	165-	10-3-7-4-2-2-3-1-2-2-3-3-2-	-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45	8422	-112.4883	-2-07-	0-M34069-05/26/76-20-	20-	10-13-0-C-	-	6.0-	100-	8-3-1-6-8-2-5-2-1-3-4-3-2-	-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45	8044	-112.4019	-2-07-	0-M34074-05/26/76-14-	14-	17-8.5-C-	-	5.1-	125-	10-3-1-3-2-4-4-1-2-1-4-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45	8753	-112.4583	-2-07-	0-M34076-04/23/76-13-	13-	3-0.5-C-	-	6.6-	230-	11-3-7-3-1-3-3-1-2-1-3-4-2-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.98	
30-45	8800	-112.4597	-2-07-	0-M34077-04/23/76-15-	15-	5-2.0-C-	-	7.0-	200-	10-3-7-3-1-2-4-1-1-1-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.11	
30-45	8769	-112.4564	-2-07-	0-M34079-04/23/76-16-	16-	7-2.0-C-	-	6.6-	140-	15-3-7-3-1-4-3-1-2-1-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.94	
30-45	8811	-112.4578	-2-07-	0-M34079-04/23/76-16-	16-	8-1.0-	-	6.6-	170-	10-3-1-3-1-3-3-1-3-1-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.24	
30-45	8847	-112.4575	-2-07-	0-M34080-04/23/76-17-	17-	5-1.5-C-	-	6.8-	200-	13-3-1-4-1-3-3-1-2-1-4-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.60	
30-45	8831	-112.4631	-2-07-	0-M34081-04/23/76-17-	17-	6-	-	6.4-	170-	11-3-1-3-1-3-3-1-2-1-4-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.18	
30-45	8881	-112.4756	-2-07-	0-M34082-04/24/76-9-	9-	3-2.0-C-	-	6.7-	178-	17-3-1-4-6-3-3-1-3-2-4-4-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.68	
30-45	8950	-112.4589	-2-07-	0-M34094-04/24/76-10-	10-	5-3.0-C-	-	6.6-	250-	9-3-1-4-1-3-3-1-2-2-4-4-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.11	
30-45	9061	-112.4678	-2-07-	0-M34085-04/24/76-11-	11-	10-1.5-C-	-	6.4-	240-	9-3-1-4-1-2-3-1-1-2-4-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45	9306	-112.4958	-2-07-	0-M34089-04/24/76-12-	12-	13-4.8-	-	6.4-	250-	10-4-3-1-3-3-2-2-4-3-1-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.07	
30-45	9000	-112.4828	-2-06-	0-M34092-04/24/76-15-	15-	14-2.0-	-	6.6-	300-	11-3-1-6-8-2-4-1-3-2-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45	8956	-112.4811	-2-07-	0-M34093-04/24/76-16-	16-	10-1.0-	-	7.3-	200-	10-3-1-3-1-3-4-1-3-1-4-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.15	
30-45	8831	-112.4706	-2-07-	0-M34095-04/23/76-18-	18-	1-1.0-	-	6.5-	165-	15-3-7-3-1-3-3-1-3-3-4-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.75	
30-45	8944	-112.4250	-2-07-	0-M34096-04/24/76-18-	18-	5-1.5-	-	6.3-	110-	11-3-1-3-1-3-3-1-2-1-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.38	
30-45	8978	-112.4206	-2-07-	0-M34097-04/24/76-17-	17-	6-1.2-	-	6.7-	110-	11-3-1-3-1-3-4-1-2-1-4-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.63	
30-45	8989	-112.4203	-2-07-	0-M34098-04/24/76-13-	13-	4-4.0-	-	7.0-	155-	14-3-1-3-1-3-3-1-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.34	
30-45	9044	-112.4467	-2-07-	0-M34099-04/29/76-10-	10-	1-1.0-C-	-	6.4-	165-	11-3-7-4-6-3-3-1-1-1-4-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.81	
30-45	9078	-112.4453	-2-07-	0-M34100-04/29/76-11-	11-	4-2.0-C-	-	6.2-	280-	8-3-7-4-2-3-3-1-2-2-4-4-2-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.52	
30-45	9167	-112.4419	-2-07-	0-M34101-04/29/76-12-	12-	3-2.0-C-	-	6.3-	310-	3-3-1-4-2-2-2-3-1-1-4-3-2-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.50	
30-45	9122	-112.4328	-2-07-	0-M34103-04/29/76-13-	13-	6-5.5-C-	-	6.3-	160-	11-3-1-6-8-2-3-1-1-3-4-3-2-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.35	
30-45	9889	-112.4556	-2-07-	0-M34104-04/29/76-18-	18-	6-1.0-	-	6.4-	105-	12-3-1-3-2-4-3-1-2-2-4-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.74	
30-45	9894	-112.4556	-2-07-	0-M34105-04/29/76-18-	18-	7-1.5-	-	6.3-	145-	16-3-1-6-8-3-4-2-1-2-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.59	
30-45	9900	-112.4561	-2-07-	0-M34106-04/29/76-19-	19-	6-2.0-	-	6.1-	145-	12-3-1-3-3-4-3-1-2-2-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.92	
30-45	9789	-112.4608	-2-07-	0-M34108-04/30/76-10-	10-	7-1.7-	-	6.4-	155-	16-3-1-3-2-4-3-1-2-2-2-5-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.39	
30-45	9956	-112.4658	-2-07-	0-M34110-04/30/76-11-	11-	6-3.5-	-	6.6-	242-	13-3-1-3-3-4-3-1-2-2-4-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.95	
30-45	8661	-112.4569	-2-07-	0-M34111-04/30/76-15-	15-	11-0.5-C-	-	6.7-	150-	7-3-7-4-2-4-4-1-2-1-4-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45	8639	-112.4592	-2-07-	0-M34112-04/30/76-16-	16-	10-0.5-C-	-	6.2-	100-	7-3-1-6-8-4-4-1-1-1-4-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45	8611	-112.4583	-2-07-	0-M34113-04/30/76-15-	15-	10-4.5-C-	-	6.7-	65-	13-3-1-2-2-4-3-1-2-1-4-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.84	
30-45	8539	-112.4806	-2-07-	0-M34114-04/30/76-17-	17-	12-1.0-C-	-	6.5-	100-	6-3-1-6-8-3-4-1-1-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45	8536	-112.4803	-2-07-	0-M34115-04/30/76-17-	17-	12-	-	7.2-	135-	6-3-1-3-3-4-4-1-1-7-4-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45	8575	-112.4817	-2-07-	0-M34116-04/30/76-18-	18-	8-	-	6.8-	120-	7-3-1-5-8-4-4-1-1-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45	8358	-112.4564	-2-07-	0-M34117-05/01/76-11-	11-	10-3.0-C-	-	6.3-	130-	15-3-1-3-1-4-4-1-2-2-2-3-1-	-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.88	
30-45	9686	-112.4553	-2-07-	0-M34118-05/01/76-11-	11-	10-3.3-C-	-	6.5-	100-	28-3-1-3-1-3-4-1-2-2-3-3-1-	-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.82	
30-45	9575	-112.4606	-2-07-	0-M34119-05/01/76-12-	12-	19-2.0-	-	6.5-	95-	9-3-1-4-7-3-4-1-1-2-4-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.78	
30-45	9428	-112.4514	-2-07-	0-M34120-05/01/76-12-	12-	19-1.9-	-	6.4-	75-	8-3-1-3-1-5-4-1-2-2-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	
30-45	9386	-112.4497	-2-07-	0-M34121-05/01/76-13-	13-	13-1.1-	-	6.5-	105-	8-3-7-2-6-3-4-1-2-1-2-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45	9289	-112.4403	-2-07-	0-M34123-05/01/76-14-	14-	18-3.5-	-	6.6-	150-	14-3-7-4-1-2-4-1-2-1-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.95	
30-45	9186	-112.4278	-2-07-	0-M34124-05/01/76-16-	16-	19-7.0-C-	-	6.9-	270-	11-3-1-3-1-3-4-2-2-2-3-4-1-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.16	
30-45	8703	-112.4458	-2-07-	0-M34125-05/01/76-18-	18-	12-1.8-C-	-	6.5-	120-	7-3-1-4-1-2-4-1-3-1-3-3-1-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45	8653	-112.4425	-2-07-	0-M34126-05/01/76-19-	19-	10-0.3-C-	-	6.6-	110-	9-3-1-3-1-3-4-1-3-1-3-3																								

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

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DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY												
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASER SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per billion (ppb)												
							Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn	
30-45.8450-112.4311-2-07-			0-M34068				5690	-55	-25	-4	-25	1597	20	-25	-25	-200	-4	-50	
30-45.8422-112.4883-2-07-			0-M34069				10460	-55	-25	-4	725	2915	52	-25	-25	-200	-4	-50	
30-45.8044-112.4019-2-07-			0-M34074				10723	-55	-25	-4	50	4811	13	-25	-25	-200	-4	-50	
30-45.8753-112.4583-2-07-			0-M34076				24212	157	98	-4	163	6231	-3	149	312	-200	30	313	
30-45.8800-112.4597-2-07-			0-M34077				33227	124	58	-4	78	8721	-3	-25	232	-200	24	255	
30-45.8769-112.4564-2-07-			0-M34078				19920	107	40	-4	58	5018	4	-25	160	-200	16	217	
30-45.8811-112.4578-2-07-			0-M34079				26162	152	105	-4	80	6865	-3	83	312	-200	30	215	
30-45.8847-112.4575-2-07-			0-M34080				30881	153	73	-4	84	6858	-3	40	259	-200	25	217	
30-45.8831-112.4631-2-07-			0-M34091				24329	136	103	-4	103	5950	-3	111	306	-200	34	196	
30-45.8881-112.4756-2-07-			0-M34082				25223	145	123	-4	127	6371	-3	129	369	323	38	249	
30-45.8950-112.4589-2-07-			0-M34084				32798	131	91	-4	97	8548	-3	55	313	-200	29	402	
30-45.9061-112.4678-2-07-			0-M34085				26285	56	-25	-4	-25	7654	-3	-25	-25	-200	-4	-50	
30-45.9306-112.4958-2-07-			0-M34098				27335	58	-25	-4	404	7279	39	-25	-25	-200	-4	-50	
30-45.9000-112.4828-2-06-			0-M34092				33839	-55	-25	-4	-25	9331	5	-25	-25	-200	-4	-50	
30-45.8956-112.4811-2-07-			0-M34093				21630	63	-25	-4	31	6164	-3	-25	-25	-200	-4	-50	
30-45.8831-112.4706-2-07-			0-M34095				18359	70	-25	-4	56	5011	-3	-25	-25	-200	-4	-50	
30-45.8944-112.4250-2-07-			0-M34096				12728	85	38	-4	70	3389	-3	28	105	-200	16	55	
30-45.8978-112.4206-2-07-			0-M34097				12131	64	63	-4	48	2996	-3	57	145	-200	20	81	
30-45.8989-112.4203-2-07-			0-M34098				18091	85	69	-4	54	4265	-3	60	169	237	31	-50	
30-45.9044-112.4467-2-07-			0-M34099				21426	116	86	-4	71	6380	-3	74	222	295	34	82	
30-45.9078-112.4453-2-07-			0-M34100				34094	108	114	-4	112	8804	8	84	274	-200	43	80	
30-45.9167-112.4419-2-07-			0-M34101				55843	157	103	-4	200	15002	79	28	344	-200	41	224	
30-45.9122-112.4328-2-07-			0-M34103				28701	142	115	-4	206	5581	-3	100	358	-200	36	220	
30-45.9889-112.4556-2-07-			0-M34104				29173	112	-25	-4	499	8991	-3	-25	-25	-200	-4	170	
30-45.9894-112.4556-2-07-			0-M34105				24370	93	-25	38	4390	6988	192	-25	36	-200	315	246	
30-45.9900-112.4561-2-07-			0-M34106				17762	57	-25	-4	105	5321	-3	-25	62	-200	-4	229	
30-45.9789-112.4608-2-07-			0-M34108				22948	96	-25	-4	188	7155	-3	-25	77	-200	-4	196	
30-45.9956-112.4658-2-07-			0-M34110				43607	91	-25	-4	102	10796	-3	-25	49	-200	-4	174	
30-45.8661-112.4569-2-07-			0-M34111				22239	-55	-25	-4	43	6944	-3	-25	-25	-200	-4	-50	
30-45.8639-112.4592-2-07-			0-M34112				13376	-55	-25	-4	95	4538	-3	-25	-25	-200	-4	119	
30-45.8611-112.4583-2-07-			0-M34113				6589	-55	-25	-4	78	2192	-3	-25	-25	-200	-4	-50	
30-45.8539-112.4806-2-07-			0-M34114				13173	-55	-25	-4	1189	4616	54	-25	-25	-200	-4	144	
30-45.8536-112.4803-2-07-			0-M34115				25663	64	-25	-4	318	7963	19	-25	-25	-200	-4	124	
30-45.8575-112.4817-2-07-			0-M34116				19811	-55	-25	-4	530	5835	186	-25	-25	-200	-4	153	
30-45.8358-112.4564-2-07-			0-M34117				20970	75	-25	-4	184	5724	-3	-25	50	-200	-4	267	
30-45.9686-112.4553-2-07-			0-M34118				15536	119	-25	-4	183	4031	-3	-25	45	-200	-4	277	
30-45.9575-112.4606-2-07-			0-M34119				14787	137	-25	-4	136	3739	-3	-25	78	-200	-4	319	
30-45.9428-112.4514-2-07-			0-M34120				12916	138	-25	-4	178	3944	-3	-25	29	-200	-4	249	
30-45.9386-112.4497-2-07-			0-M34121				17389	65	-25	-4	73	5358	-3	-25	-25	-200	-4	169	
30-45.9289-112.4403-2-07-			0-M34123				19040	70	-25	-4	54	5630	-3	-25	-25	-200	-4	158	
30-45.9186-112.4278-2-07-			0-M34124				38953	101	-25	14	202	9202	456	-25	33	550	6	334	
30-45.8708-112.4458-2-07-			0-M34125				19013	64	-25	-4	257	5166	24	-25	-25	-200	-4	264	
30-45.8653-112.4425-2-07-			0-M34126				15888	115	-25	-4	125	4340	-3	32	100	-200	-4	238	
30-45.8569-112.4856-2-07-			0-M34127				9926	109	-25	-4	998	3154	355	33	103	-200	-4	314	
30-45.8569-112.4856-2-07-			0-M34128				13329	71	-25	-4	526	3515	19	-25	53	-200	-4	327	
30-45.8617-112.4911-2-07-			0-M34129				15743	74	-25	-4	983	4887	270	-25	49	-200	-4	350	
30-45.8642-112.4900-2-07-			0-M34130				14669	65	-25	-4	946	4888	423	-25	41	-200	-4	278	
30-45.8431-112.4261-2-07-			0-M34131				7422	-55	-25	-4	147	2292	-3	45	58	-200	-4	273	
30-45.8419-112.4175-2-07-			0-M34132				20260	-55	-25	-4	59	5019	-3	-25	-25	-200	-4	-50	
30-45.8486-112.4028-2-07-			0-M34133				18998	-55	-25	-4	298	5769	9	-25	-25	-200	-4	96	
30-45.8375-112.4147-2-07-			0-M34134				21509	-55	-25	-4	226	5535	-3	-25	-25	-200	-4	87	

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

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DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																						U CONCENTRATION							
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REF. DATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (umho/cm)	SOLITOMETER (uJ ppm)	ROCK TYPE	ROCK COLOR	SEGMENT 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	
							DATE	HOUR																											
30-45.8361-112.4044-2-07-						0-M34135-05/02/76-13-	10-	3.5-C-	-	-	-	-	210-	8-3-2-3-1-3-4-2-2-2-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.44		
30-45.8308-112.4075-2-07-						0-M34135-05/02/76-13-	10-	2.0-C-	-	6.5-	-	-	95-	4-3-1-3-1-3-4-2-2-1-3-3-1-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.75		
30-45.8306-112.4075-2-07-						0-M34137-05/02/76-14-	9-	2.2-C-	-	6.8-	-	-	155-	5-3-1-6-8-2-3-1-3-2-3-4-1-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.36		
30-45.8283-112.3786-2-07-						0-M34140-05/02/76-16-	16-	5.0-C-	-	6.6-	-	-	170-	7-3-7-4-6-3-4-2-1-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.25		
30-45.8314-112.3639-2-07-						0-M34143-05/02/76-17-	17-	5.8-C-	-	6.6-	-	-	190-	9-3-1-4-6-3-3-2-2-4-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45.8544-112.3708-2-07-						0-M34145-05/03/76-11-	12-	2.0-	-	6.5-	-	-	120-	7-3-7-4-2-3-4-1-2-1-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.46		
30-45.8547-112.3706-2-07-						0-M34146-05/03/76-12-	15-	4.0-	-	6.4-	-	-	173-	10-3-7-4-6-3-4-1-2-2-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.11		
30-45.8681-112.3408-2-07-						0-M34148-05/03/76-13-	14-	5.0-	-	6.7-	-	-	294-	8-3-7-4-6-3-4-1-2-1-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.30		
30-45.8364-112.3494-2-07-						0-M34151-05/03/76-14-	20-	1.0-	-	6.8-	-	-	312-	9-3-7-4-6-2-4-1-2-1-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.52		
30-45.8353-112.3158-2-07-						0-M34152-05/03/76-15-	15-	7.0-	-	6.7-	-	-	385-	7-3-7-4-6-2-4-1-2-1-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.81		
30-45.8344-112.3556-2-07-						0-M34156-05/03/76-17-	17-	7.0-	-	6.4-	-	-	165-	7-3-7-4-6-3-4-3-2-3-2-2-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.03		
30-45.8558-112.2811-2-06-						0-M34161-05/04/76-11-	12-	-C-	-	6.7-	-	-	362-	3-3-6-4-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.98	
30-45.8556-112.2694-2-06-						0-M34162-05/04/76-11-	14-	-	-	7.2-	-	-	710-	5-3-6-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.80*	
30-45.8458-112.2939-2-06-						0-M34163-05/04/76-12-	10-	6.0-C-	-	6.8-	-	-	345-	3-3-1-4-1-2-3-1-2-1-3-3-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17.30*		
30-45.8728-112.3044-2-06-						0-M34167-05/04/76-13-	11-	7.0-C-	-	6.7-	-	-	285-	6-3-7-3-1-3-3-1-2-1-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.20*		
30-45.8042-112.3339-2-07-						0-M34174-05/05/76-10-	11-	3.0-C-	-	6.4-	-	-	164-	9-3-7-4-6-4-4-2-2-1-3-4-2-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.91		
30-45.8069-112.2833-2-06-						0-M34175-05/05/76-11-	12-	8.0-C-	-	6.8-	-	-	350-	3-3-1-3-1-2-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.31	
30-45.8083-112.2706-2-06-						0-M34178-05/05/76-13-	14-	10.1-	-	7.1-	-	-	520-	5-3-7-5-8-1-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.66	
30-45.7808-112.2778-2-07-						0-M34180-05/05/76-14-	10-	7.0-C-	-	6.6-	-	-	140-	3-3-6-4-6-3-4-3-2-2-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.95		
30-45.7528-112.3253-2-07-						0-M34189-05/06/76-14-	13-	11.5-C-	-	7.0-	-	-	280-	7-3-1-4-2-3-4-1-1-4-4-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.25		
30-45.7744-112.3625-2-07-						0-M34191-05/06/76-15-	9-	3.7-	-	6.7-	-	-	115-	7-3-1-4-2-4-3-1-2-2-4-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45.7722-112.3633-2-07-						0-M34192-05/06/76-16-	9-	3.8-C-	-	6.5-	-	-	85-	5-2-3-2-3-4-4-1-2-2-4-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45.7633-112.3639-2-07-						0-M34193-05/06/76-16-	7-	3.0-	-	6.4-	-	-	65-	7-3-1-4-2-4-4-1-2-2-4-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45.7847-112.3556-2-07-						0-M34194-05/06/76-17-	8-	4.2-C-	-	6.9-	-	-	170-	7-3-1-4-6-3-4-2-2-2-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.21		
30-45.7903-112.3472-2-07-						0-M34195-05/06/76-18-	9-	5.8-	-	6.9-	-	-	220-	7-3-1-4-2-4-3-1-2-1-4-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.10		
30-45.7894-112.3472-2-07-						0-M34196-05/06/76-18-	9-	4.5-C-	-	6.8-	-	-	180-	7-3-1-4-6-4-3-2-2-1-4-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.01		
30-45.7942-112.3628-2-07-						0-M34197-05/06/76-18-	8-	1.5-	-	6.6-	-	-	140-	11-3-1-4-6-4-3-2-2-1-4-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.50		
30-45.8000-112.3353-2-07-						0-M34198-05/06/76-19-	9-	0.5-	-	6.6-	-	-	180-	7-3-1-4-6-5-3-2-2-1-4-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.17		
30-45.8828-112.2125-2-07-						0-M34207-05/19/76-15-	21-	21.0-C-	-	6.7-	-	-	215-	12-4-	-4-6-4-4-2-2-4-3-1-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
30-45.9703-112.1944-2-06-						0-M34229-05/20/76-10-	18-	-C-	-	7.0-	-	-	490-	5-3-5-4-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.74
30-45.9833-112.1769-2-07-						0-M34232-05/20/76-12-	20-	11.0-C-	-	7.0-	-	-	45-	7-3-9-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.38
30-45.9856-112.1794-2-07-						0-M34233-05/20/76-13-	20-	11.0-C-	-	6.3-	-	-	55-	9-3-5-3-2-4-5-3-2-2-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16		
30-45.9519-112.2417-2-07-						0-M34241-05/20/76-16-	25-	13.0-	-	7.1-	-	-	420-	13-3-7-4-1-2-2-1-2-1-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.40*		
30-45.9200-112.2644-2-07-						0-M34244-05/20/76-18-	21-	7.0-C-	-	7.4-	-	-	550-	11-3-5-4-7-3-4-1-2-2-4-3-1-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35.00*		
30-45.9533-112.2806-2-07-						0-M34245-05/21/76-11-	21-	5.8-C-	-	6.7-	-	-	280-	11-3-1-4-6-3-4-1-2-1-3-3-1-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.00		
30-45.9772-112.2722-2-07-						0-M34246-05/21/76-12-	16-	12.0-	-	6.5-	-	-	215-	5-3-1-4-1-3-4-1-2-2-3-3-1-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.71		
30-45.9781-112.2608-2-06-						0-M34248-05/21/76-13-	13-	12.0-C-	-	6.9-	-	-	220-	15-3-1-6-8-2-4-4-3-1-4-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.14		
30-45.9725-112.2319-2-07-						0-M34250-05/21/76-14-	15-	7.0-C-	-	6.1-	-	-	90-	9-3-1-4-6-4-4-2-2-2-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.05		
30-45.9739-112.2958-2-07-						0-M34254-05/21/76-18-	22-	8.2-	-	6.8-	-	-	350-	6-3-1-4-1-3-3-1-2-1-3-3-2-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.90*		
30-45.9803-112.3031-2-06-						0-M34255-05/21/76-18-	15-	12.0-C-	-	7.2-	-	-	360-	9-3-1-4-1-2-4-1-3-1-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.80*		
30-45.9839-112.3031-2-07-						0-M34256-05/21/76-19-	14-	5.2-C-	-	6.3-	-	-	125-	11-3-1-4-1-3-4-1-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45.9856-112.3050-2-07-						0-M34257-05/21/76-19-	13-	11.0-C-	-	6.1-	-	-	60-	15-3-1-4-1-4-4-3-2-1-3-3-2-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.60		
30-45.9650-112.3014-2-07-						0-M34260-05/22/76-11-	16-	6.0-C-	-	5.3-	-	-	65-	9-3-1-4-6-5-4-3-2-2-3-3-3-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.52		
30-45.9678-112.3192-2-07-						0-M34261-05/22/76-12-	15-	8.0-C-	-	6.6-	-</																								

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	LAS. SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per billion (ppb)											
							Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.8361-112.4044-2-07-	0-M34135	38089	-55	-25	-4	244	11760	-3	-25	-25	-200	-4	178					
30-45.8308-112.4075-2-07-	0-M34136	13458	-55	-25	-4	184	4653	-3	-25	-25	-200	-4	74					
30-45.8306-112.4075-2-07-	0-M34137	23842	-55	-25	-4	30	10626	-3	-25	-25	-200	-4	-50					
30-45.8283-112.3786-2-07-	0-M34140	23234	-55	-25	-4	53	7024	-3	-25	-25	-200	-4	85					
30-45.8314-112.3639-2-07-	0-M34143	25144	-55	-25	-4	130	6019	-3	-25	-25	-200	-4	186					
30-45.8544-112.3708-2-07-	0-M34145	18606	-55	-25	-4	773	5425	29	-25	-25	-200	-4	307					
30-45.8547-112.3706-2-07-	0-M34146	28305	59	-25	-4	128	7279	-3	-25	-25	-200	-4	234					
30-45.8681-112.3408-2-07-	0-M34148	33345	-55	-25	-4	119	8449	4	-25	-25	-200	-4	207					
30-45.8364-112.3494-2-07-	0-M34151	49371	65	-25	-4	146	11596	-3	-25	-25	-200	-4	675					
30-45.8353-112.3158-2-07-	0-M34152	50562	72	-25	-4	242	13935	-3	-25	-25	-200	-4	552					
30-45.8344-112.3556-2-07-	0-M34156	24755	90	-25	-4	178	6864	-3	-25	-25	-200	-4	174					
30-45.8558-112.2811-2-06-	0-M34161	47676	-55	-25	-4	-25	10499	7	-25	-25	-200	-4	208					
30-45.8556-112.2694-2-06-	0-M34162																	
30-45.8458-112.2939-2-06-	0-M34163																	
30-45.8728-112.3044-2-06-	0-M34167																	
30-45.8042-112.3339-2-07-	0-M34174	20609	-55	-25	-4	48	8455	-3	-25	-25	-200	-4	-50					
30-45.8069-112.2833-2-06-	0-M34175	21834	-55	-25	-4	26	4656	10	-25	-25	-200	-4	-50					
30-45.8083-112.2706-2-06-	0-M34178	73071	-55	-25	-4	130	16780	22	-25	-25	-200	-4	-50					
30-45.7809-112.2778-2-07-	0-M34180	20244	-55	-25	-4	309	4711	48	-25	-25	-200	-4	310					
30-45.7528-112.3253-2-07-	0-M34189	34540	-55	-25	-4	33	7252	16	-25	-25	-200	-4	-50					
30-45.7744-112.3625-2-07-	0-M34191	17039	-55	-25	-4	149	3558	12	-25	-25	-200	13	331					
30-45.7722-112.3633-2-07-	0-M34192	11202	-55	-25	-4	193	2769	14	-25	-25	-200	5	-50					
30-45.7633-112.3639-2-07-	0-M34193	6677	-55	-25	-4	36	2820	15	-25	-25	-200	-4	-50					
30-45.7847-112.3556-2-07-	0-M34194	24242	-55	-25	-4	206	4860	37	-25	-25	-200	-4	74					
30-45.7903-112.3472-2-07-	0-M34195	34134	-55	-25	-4	61	7104	18	-25	-25	-200	10	-50					
30-45.7894-112.3472-2-07-	0-M34196	32403	-55	-25	-4	220	6413	37	-25	-25	-200	6	-50					
30-45.7942-112.3628-2-07-	0-M34197	22548	-55	-25	-4	356	5033	33	-25	-25	-200	12	-50					
30-45.8000-112.3353-2-07-	0-M34198	24967	-55	-25	-4	227	5672	17	-25	-25	-200	-4	110					
30-45.8828-112.2125-2-07-	0-M34207	28074	-55	-25	-4	293	7086	29	-25	-25	-200	6	379					
30-45.9703-112.1944-2-06-	0-M34228	67612	-55	-25	-4	-25	14630	34	-25	38	-200	17	-50					
30-45.9833-112.1769-2-07-	0-M34232	61273	-55	-25	-4	33	10300	21	-25	-25	-200	9	109					
30-45.9856-112.1794-2-07-	0-M34233	6490	-55	-25	-4	536	1574	31	-25	-25	-200	-4	-50					
30-45.9519-112.2417-2-07-	0-M34241																	
30-45.9200-112.2644-2-07-	0-M34244																	
30-45.9533-112.2806-2-07-	0-M34245	34374	79	-25	-4	26	7827	14	-25	-25	-200	-4	61					
30-45.9772-112.2722-2-07-	0-M34246	27053	-55	-25	-4	64	6964	23	-25	-25	-200	-4	-50					
30-45.9781-112.2608-2-06-	0-M34248	23083	-55	-25	-4	153	5370	27	-25	-25	-200	-4	-50					
30-45.9725-112.2319-2-07-	0-M34250	9154	-55	-25	-4	168	2435	20	-25	-25	-200	12	83					
30-45.9739-112.2958-2-07-	0-M34254																	
30-45.9803-112.3031-2-06-	0-M34255																	
30-45.9839-112.3031-2-07-	0-M34256	12326	-55	-25	-4	33	3606	11	-25	-25	-200	-4	70					
30-45.9856-112.3050-2-07-	0-M34257	6560	-55	-25	-4	270	1535	15	-25	-25	-200	-4	62					
30-45.9650-112.3014-2-07-	0-M34260	7660	-55	-25	-4	920	1812	34	-25	-25	-200	33	88					
30-45.9679-112.3192-2-07-	0-M34261	8633	-55	-25	-4	273	1931	15	-25	-25	-200	-4	111					
30-45.9867-112.3328-2-07-	0-M34263	26647	-55	-25	-4	49	6317	10	-25	-25	-200	-4	78					
30-45.9958-112.3361-2-07-	0-M34264	6768	-55	-25	-4	128	1400	8	-25	-25	-200	-4	66					
30-45.9961-112.3639-2-07-	0-M34265	6237	-55	-25	-4	122	1354	20	-25	-25	-200	5	-50					
30-45.9823-112.3389-2-07-	0-M34267	8525	-55	-25	-4	245	1945	5	-25	-25	-200	-4	-50					
30-45.9708-112.3589-2-07-	0-M34270	12140	-55	-25	-4	406	2723	57	-25	-25	-200	-4	125					
30-45.9522-112.3589-2-07-	0-M34271	14324	-55	-25	-4	128	3297	120	-25	-25	-200	9	-50					
30-45.9267-112.4033-2-07-	0-M34274	18253	-55	27	-4	-25	4480	58	-25	-25	-200	24	-50					

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

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DOE SAMPLE NUMBER					LASI SAMPLE LOCATION NUMBER AND FIELD DATA																	U CONCENTRATION												
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASI SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (umho/cm)	SCINTILLOMETER (uL 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
							DATE	HOUR																										
30-45.9283-112.3944-2-07-						0-M34275-05/23/76-	9-	13-	9.0-C-				6.4-	100-		4-3-1-5-8-3-4-4-1-2-4-3-2-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.35
30-45.9283-112.3922-2-07-						0-M34276-05/23/76-	10-	14-	8.2-C-				6.4-	90-		4-3-1-5-3-3-4-	-	-2-5-3-2-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.20
30-45.9250-112.3394-2-06-						0-M34280-05/23/76-	11-	20-	5.8-C-				6.9-	290-		7-3-1-6-8-2-3-2-	-2-3-3-2-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.35
30-45.9367-112.3625-2-07-						0-M34281-05/23/76-	11-	13-	8.0-C-				6.6-	160-		18-3-1-4-1-2-4-2-2-2-2-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.76
30-45.9392-112.3425-2-07-						0-M34282-05/23/76-	12-	13-	7.5-C-				-	155-		9-3-1-4-1-3-4-1-2-2-3-3-2-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.68
30-45.9572-112.3311-2-07-						0-M34285-05/23/76-	13-	13-	7.0-				6.8-	325-		8-3-1-4-1-3-4-1-2-1-4-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.39
30-45.9000-112.3833-2-07-						0-M34236-05/23/76-	14-	14-	14.0-C-				6.6-	110-		9-3-1-5-8-3-4-1-1-2-4-3-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10
30-45.8744-112.3500-2-07-						0-M34287-05/23/76-	15-	13-	10.2-C-				6.8-	220-		11-3-1-6-8-3-4-2-1-2-4-4-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.89
30-45.9122-112.2764-2-07-						0-M34294-05/23/76-	17-	23-	9.5-C-				6.4-	90-		6-3-1-4-1-4-4-4-2-2-5-3-2-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.86
30-45.6808-113.9061-2-07-						0-M34295-08/06/76-	9-	11-	7.8-				5.7-	48-		16-2-1-4-6-3-3-1-2-2-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19
30-45.6756-113.8822-2-07-						0-M34296-08/05/76-	9-	12-	8.5-				5.5-	48-		11-2-1-4-6-3-3-1-2-2-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.70
30-45.6736-113.8850-2-07-						0-M34297-08/05/76-	10-	14-	8.5-				5.5-	48-		16-2-1-4-6-3-3-1-2-2-4-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.15
30-45.7306-113.9233-2-07-						0-M34298-08/05/76-	10-	15-	9.0-				5.7-	70-		16-2-1-3-6-4-3-1-2-2-4-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10
30-45.7444-113.9536-2-07-						0-M34299-08/05/76-	10-	15-	8.5-				5.9-	75-		11-2-1-4-6-4-3-1-2-2-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.14
30-45.7389-113.9033-2-07-						0-M34300-08/05/76-	12-	17-	10.1-				5.9-	20-		11-2-1-4-6-2-3-1-3-2-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.20
30-45.7183-113.8825-2-07-						0-M34301-08/05/76-	12-	19-	10.1-				5.5-	40-		11-2-1-4-6-3-3-1-2-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10
30-45.7142-113.8778-2-07-						0-M34302-08/05/76-	12-	19-	10.2-				5.9-	50-		5-2-7-4-6-3-3-1-2-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.36
30-45.7529-113.9461-2-07-						0-M34303-08/05/76-	13-	19-	10.2-				6.5-	60-		5-2-1-4-6-3-3-1-2-4-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.27
30-45.7836-113.9511-2-07-						0-M34304-08/05/76-	13-	18-	10.2-				5.5-	40-		11-2-1-4-6-3-3-1-2-2-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.21
30-45.8075-113.9544-2-07-						0-M34305-08/05/76-	14-	18-	10.1-				5.5-	60-		11-2-1-4-6-3-3-1-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.74
30-45.6111-113.6703-2-07-						0-M34306-08/10/76-	12-	19-	9.8-				5.5-	45-		9-2-1-4-6-3-3-1-3-4-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10
30-45.6111-113.6692-2-07-						0-M34307-08/10/76-	12-	19-	9.8-				5.5-	45-		11-2-1-4-6-2-3-1-3-4-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10
30-45.5797-113.6858-2-07-						0-M34308-08/10/76-	13-	19-	10.2-C-				5.7-	60-		11-2-1-4-6-2-3-1-3-6-4-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10
30-45.6556-113.7628-2-07-						0-M34309-08/10/76-	13-	16-	7.5-				5.5-	40-		9-2-1-4-6-4-3-1-2-2-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.15
30-45.6556-113.7789-2-07-						0-M34310-08/10/76-	13-	15-	10.5-				5.5-	46-		11-2-1-4-6-3-3-1-2-2-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10
30-45.6500-113.7839-2-07-						0-M34311-08/10/76-	13-	18-	9.5-				5.5-	35-		5-2-1-4-6-3-3-1-2-2-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19
30-45.9072-113.7794-2-07-						0-M34312-08/06/76-	8-	18-	7.5-				5.5-	80-		5-3-4-4-4-4-4-1-1-1-4-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.55
30-45.8908-113.7756-2-07-						0-M34313-08/06/76-	8-	18-	6.5-C-				5.5-	70-		16-3-4-4-4-4-4-1-1-1-4-3-1-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.90
30-45.8903-113.7764-2-07-						0-M34314-08/06/76-	9-	18-	8.5-				5.5-	80-		11-3-4-4-4-4-4-1-1-1-4-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.72
30-45.8667-113.8014-2-07-						0-M34315-08/06/76-	9-	18-	8.0-				5.5-	110-		16-3-4-4-4-3-3-1-1-1-4-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.36
30-45.8436-113.8175-2-07-						0-M34316-08/06/76-	9-	18-	5.5-				5.5-	50-		22-3-4-4-4-3-3-1-1-1-4-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.32
30-45.8433-113.8208-2-07-						0-M34317-08/06/76-	9-	19-	13.0-C-				5.9-	120-		11-3-4-4-4-2-3-2-1-1-4-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.63
30-45.8297-113.8006-2-07-						0-M34318-08/06/76-	10-	19-	6.5-C-				5.5-	55-		5-3-4-4-4-3-3-1-1-1-3-3-1-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.30
30-45.8644-113.7831-2-07-						0-M34319-08/06/76-	11-	19-	5.0-C-				5.7-	170-		5-3-1-4-1-3-2-2-1-3-4-4-1-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.84
30-45.9128-113.7847-2-07-						0-M34320-08/06/76-	11-	20-	9.5-				5.7-	110-		11-3-7-4-7-3-3-1-1-1-4-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.90
30-45.9072-113.8489-2-07-						0-M34321-08/06/76-	12-	20-	9.0-				5.7-	190-		16-3-7-4-7-3-3-1-1-3-4-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.67
30-45.8733-113.8617-2-07-						0-M34322-08/06/76-	13-	20-	10.0-				5.7-	120-		16-3-6-4-6-3-3-1-1-3-4-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.54
30-45.9603-113.7644-2-07-						0-M34323-08/10/76-	11-	9-	5.4-				5.7-	122-		7-3-1-3-1-3-3-1-2-1-4-5-2-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.41
30-45.9699-113.8261-2-06-						0-M34324-08/10/76-	12-	9-	7.0-				5.7-	42-		9-3-1-4-6-2-2-2-1-	-1-2-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10
30-45.9706-113.7100-2-07-						0-M34325-08/06/76-	8-	7-	7.0-C-				5.8-	75-		7-1-1-1-4-3-1-1-1-4-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.23
30-45.9494-113.7153-2-07-						0-M34326-08/06/76-	9-	9-	7.5-C-				5.7-	30-		13-1-1-2-1-4-3-1-1-1-4-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10
30-45.9400-113.7069-2-07-						0-M34327-08/06/76-	9-	10-	8.5-C-				6.0-	85-		5-1-1-3-6-3-3-1-1-1-4-4-1-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10
30-45.9542-113.7292-2-07-						0-M34328-08/06/76-	10-	12-	8.5-				6.3-	112-		9-3-1-2-1-3-3-1-1-1-4-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10
30-45.9447-113.7336-2-07-						0-M34329-08/06/76-	10-	15-	10.0-C-				6.3-	105-		8																		

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	REFUGATE	LAB. SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per billion (ppb)											
							Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.9283-112.3944-2-07-			0-M34275				11528	-55	26	-4	370	2737	100	-25	-25	-200	17	-50
30-45.9293-112.3922-2-07-			0-M34276				10666	-55	30	-4	351	2291	93	-25	-25	-200	21	88
30-45.9250-112.3394-2-06-			0-M34280				36340	-55	-25	-4	4301	9711	416	-25	-25	-200	24	-50
30-45.9367-112.3625-2-07-			0-M34281				21489	-55	34	-4	378	4744	79	-25	-25	-200	30	-50
30-45.9392-112.3425-2-07-			0-M34282				17965	-55	-25	-4	-25	3973	42	-25	-25	-200	-4	-50
30-45.9572-112.3311-2-07-			0-M34285				48883	-55	52	-4	-25	11388	76	-25	-25	-200	37	-50
30-45.9000-112.3833-2-07-			0-M34286				12841	-55	54	-4	651	2939	145	-25	-25	-200	32	-50
30-45.8744-112.3500-2-07-			0-M34287				30759	-55	41	-4	29	6987	87	-25	-25	-200	25	-50
30-45.9122-112.2764-2-07-			0-M34294				11094	-55	41	-4	297	2619	68	-25	-25	-200	24	-50
30-45.6808-113.9061-2-07-			0-M34295				5778	-55	-25	-4	105	1206	15	-25	-25	-200	-4	-50
30-45.6756-113.8822-2-07-			0-M34296				6615	-55	-25	-4	143	1789	21	-25	33	-200	8	61
30-45.6736-113.8850-2-07-			0-M34297				6857	-55	-25	-4	167	1409	20	-25	-25	-200	6	119
30-45.7306-113.9233-2-07-			0-M34298				9524	-55	-25	-4	37	1419	9	-25	-25	-200	14	139
30-45.7444-113.9536-2-07-			0-M34299				13831	-55	-25	-4	32	1345	9	-25	-25	-200	8	-50
30-45.7399-113.9033-2-07-			0-M34300				11489	-55	-25	-4	223	1568	15	-25	-25	-200	12	-50
30-45.7183-113.8825-2-07-			0-M34301				6826	-55	-25	-4	95	1311	23	-25	-25	-200	-4	-50
30-45.7142-113.8778-2-07-			0-M34302				12732	-55	-25	-4	194	1866	15	-25	-25	-200	-4	-50
30-45.7629-113.9461-2-07-			0-M34303				28028	-55	-25	-4	85	6312	13	-25	-25	-200	16	-50
30-45.7836-113.9511-2-07-			0-M34304				15344	-55	-25	-4	96	2538	20	-25	33	-200	15	-50
30-45.8075-113.9544-2-07-			0-M34305				17828	-55	-25	-4	80	2950	18	-25	-25	-200	13	-50
30-45.6111-113.6703-2-07-			0-M34306				7920	-55	-25	-4	697	2275	5	-25	-25	-200	-4	-50
30-45.6111-113.6692-2-07-			0-M34307				7076	-55	-25	-4	455	1856	-3	-25	-25	-200	-4	105
30-45.5797-113.6858-2-07-			0-M34308				7801	-55	-25	-4	813	2056	13	-25	-25	-200	20	-50
30-45.6556-113.7628-2-07-			0-M34309				5256	-55	-25	-4	83	855	10	-25	-25	-200	6	-50
30-45.6556-113.7789-2-07-			0-M34310				7510	-55	-25	-4	118	1009	6	-25	70	-200	23	-50
30-45.6500-113.7839-2-07-			0-M34311				5664	-55	-25	-4	70	719	16	-25	37	-200	16	-50
30-45.9072-113.7794-2-07-			0-M34312				9908	-55	-25	-4	266	2615	38	-25	-25	-200	8	-50
30-45.8908-113.7756-2-07-			0-M34313				16239	-55	-25	-4	150	2870	12	-25	73	-200	22	-50
30-45.8903-113.7764-2-07-			0-M34314				18474	-55	28	-4	185	2915	35	-25	159	-200	39	-50
30-45.8657-113.8014-2-07-			0-M34315				27579	59	-25	-4	102	6739	33	-25	86	-200	18	-50
30-45.8436-113.8175-2-07-			0-M34316				13886	-55	35	-4	69	1429	33	-25	127	-200	38	-50
30-45.8433-113.8208-2-07-			0-M34317				22074	-55	32	-4	684	5905	105	-25	192	-200	53	-50
30-45.8297-113.8006-2-07-			0-M34318				13992	-55	-25	-4	84	1326	27	-25	82	-200	36	-50
30-45.8644-113.7831-2-07-			0-M34319				41847	-55	-25	-4	101	9342	23	-25	70	-200	19	-50
30-45.9128-113.7847-2-07-			0-M34320				22573	68	-25	-4	73	5342	29	-25	93	-200	17	-50
30-45.9072-113.8489-2-07-			0-M34321				43920	-55	-25	-4	99	12407	42	-25	86	-200	27	-50
30-45.8733-113.8617-2-07-			0-M34322				29356	-55	-25	-4	490	6355	54	-25	110	-200	41	-50
30-45.9603-113.7644-2-07-			0-M34323				27351	91	-25	-4	33	4207	35	-25	139	-200	25	-50
30-45.9689-113.8261-2-06-			0-M34324				4765	59	-25	-4	222	1342	104	77	72	-200	28	-50
30-45.9706-113.7100-2-07-			0-M34325				13057	-55	-25	-4	36	2636	24	-25	-25	-200	-4	-50
30-45.9494-113.7153-2-07-			0-M34326				4169	-55	-25	-4	37	1214	23	-25	-25	-200	-4	-50
30-45.9400-113.7069-2-07-			0-M34327				11164	-55	-25	-4	65	3010	33	-25	-25	-200	16	-50
30-45.9542-113.7292-2-07-			0-M34328				21378	70	-25	-4	32	3433	28	-25	89	-200	22	-50
30-45.9447-113.7336-2-07-			0-M34329				18272	-55	-25	-4	101	3052	37	-25	82	-200	14	-50
30-45.9222-113.7275-2-07-			0-M34330				9566	-55	-25	-4	42	1547	30	31	76	-200	30	-50
30-45.8581-113.9100-2-07-			0-M34331				66618	56	-25	-4	76	12660	16	-25	-25	-200	-4	64
30-45.8494-113.9106-2-07-			0-M34332				18316	-55	-25	-4	93	3204	23	-25	50	-200	33	-50
30-45.8742-113.9525-2-07-			0-M34333				30561	-55	-25	-4	1115	6493	136	-25	62	-200	31	-50
30-45.8483-113.9772-2-07-			0-M34334				30983	-55	-25	-4	602	6124	83	-25	36	-200	22	-50
30-45.8394-113.9492-2-07-			0-M34335				26530	-55	-25	-4	34	6387	10	-25	29	-200	5	76
30-45.6533-113.7081-2-07-			0-M34337				20453	-55	-25	-4	222	7354	58	-25	-25	-200	6	137

[illegible]

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	LAS. SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per billion (ppb)											
							Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.6506-113.7064-2-07-			0-M34339				6996	-55	-25	-4	107	1012	11	-25	-25	-200	6	-50
30-45.6575-113.7383-2-07-			0-M34339				5805	-55	-25	-4	895	1048	30	-25	-25	-200	-4	-50
30-45.6575-113.7411-2-07-			0-M34340				6641	-55	-25	-4	91	864	-3	-25	-25	-200	-4	67
30-45.6999-113.7000-2-07-			0-M34341				4925	-55	-25	-4	92	654	16	-25	-25	-200	-4	-50
30-45.7422-113.6800-2-07-			0-M34342				5395	-55	30	-4	100	546	10	42	85	-200	14	123
30-45.7567-113.7058-2-07-			0-M34343				5398	-55	-25	-4	37	524	9	27	52	-200	9	97
30-45.7744-113.7339-2-07-			0-M34344				5875	-55	40	-4	131	637	30	56	101	-200	16	59
30-45.7758-113.7317-2-07-			0-M34345				6814	-55	-25	-4	-25	568	10	-25	-25	-200	-4	-50
30-45.7639-113.7319-2-07-			0-M34346				4791	-55	-25	-4	101	704	9	-25	-25	-200	8	206
30-45.6264-113.4917-2-07-			0-M34347				9393	-55	-25	-4	357	3404	9	-25	-25	-200	-4	100
30-45.6286-113.3850-2-07-			0-M34348				14189	-55	-25	-4	222	2241	27	-25	-25	-200	-4	107
30-45.6500-113.7833-2-07-			0-M34351				5379	-55	-25	-4	46	625	-3	-25	-25	-200	-4	176
30-45.6564-113.7897-2-07-			0-M34352				5666	-55	-25	-4	72	727	11	-25	-25	-200	7	114
30-45.6667-113.8169-7-07-			0-M34353				6623	-55	-25	-4	122	919	-3	-25	-25	-200	-4	110
30-45.6792-113.8311-2-07-			0-M34354				5733	-55	-25	-4	113	616	-3	-25	-25	-200	-4	135
30-45.6772-113.8328-2-07-			0-M34355				5511	-55	-25	-4	110	622	-3	-25	-25	-200	7	139
30-45.7028-113.8617-2-07-			0-M34356				6462	-55	-25	-4	35	1048	-3	-25	-25	-200	15	-50
30-45.7039-113.8661-2-07-			0-M34357				8374	-55	27	-4	87	1252	-3	-25	-25	-200	15	-50
30-45.6633-113.8225-2-07-			0-M34358				6705	-55	27	-4	82	1017	-3	26	-25	-200	12	-50
30-45.6750-113.8700-2-07-			0-M34359				5798	-55	-25	-4	26	687	-3	-25	-25	-200	10	76
30-45.6717-113.8672-2-07-			0-M34360				5593	-55	-25	-4	-25	653	-3	-25	-25	-200	7	82
30-45.6311-113.5008-2-07-			0-M34361				10171	-55	-25	-4	810	3505	-3	-25	-25	-200	15	110
30-45.6589-113.5194-2-07-			0-M34362				10816	-55	-25	-4	995	3974	-3	-25	-25	-200	14	55
30-45.6669-113.5294-2-06-			0-M34363				10193	-55	-25	-4	784	3709	4	-25	-25	-200	12	118
30-45.6961-113.5608-2-07-			0-M34366				14618	-55	-25	-4	1082	4096	103	-25	-25	-200	34	145
30-45.7008-113.5611-2-07-			0-M34367				8263	-55	34	-4	656	1414	34	33	45	293	17	73
30-45.7017-113.5593-2-07-			0-M34369				7305	-55	37	-4	572	1249	31	30	-25	249	15	72
30-45.7061-113.5992-2-07-			0-M34369				7240	-55	-25	-4	549	1208	14	-25	-25	-200	-4	-50
30-45.6831-113.6178-2-07-			0-M34370				4268	-55	-25	-4	610	1473	13	-25	-25	-200	12	-50
30-45.7217-113.6261-2-07-			0-M34371				4565	-55	-25	-4	778	1594	23	-25	-25	-200	-4	69
30-45.7514-113.6400-2-07-			0-M34372				4581	-55	-25	-4	742	1614	21	-25	-25	-200	10	73
30-45.7508-113.6408-2-07-			0-M34373				4591	-55	-25	-4	723	1658	14	-25	-25	-200	-4	269
30-45.5439-113.6472-2-07-			0-M34374				6964	-55	-25	-4	-25	762	-3	-25	-25	-200	-4	-50
30-45.5175-113.6811-2-07-			0-M34375				6210	-55	-25	-4	-25	689	-3	-25	-25	-200	-4	-50
30-45.7000-113.4228-2-07-			0-M34377				15047	-55	-25	-4	213	1807	71	-25	-25	-200	-4	144
30-45.7214-113.3964-2-07-			0-M34379				25148	-55	-25	-4	81	3505	-3	-25	-25	-200	-4	72
30-45.7357-113.3786-2-07-			0-M34380				6748	-55	-25	-4	94	1186	-3	-25	-25	-200	-4	68
30-45.6356-113.4419-2-07-			0-M34381				9558	-55	-25	-4	184	2086	9	-25	-25	-200	7	104
30-45.6594-113.4694-2-07-			0-M34382				12433	-55	-25	-4	599	3925	49	-25	-25	-200	9	130
30-45.7178-113.4892-2-07-			0-M34383				14816	-55	-25	-4	380	3745	37	-25	-25	-200	-4	144
30-45.7361-113.4394-2-07-			0-M34384				6694	-55	-25	-4	317	1319	-3	-25	-25	-200	10	71
30-45.8511-113.2525-2-07-			0-M34385				18182	-55	-25	-4	73	5909	8	-25	-25	-200	11	101
30-45.8225-113.2697-2-07-			0-M34386				23919	-55	-25	-4	303	6260	9	-25	-25	-200	12	72
30-45.8111-113.3200-2-07-			0-M34387				13391	-55	-25	-4	183	4230	-3	-25	-25	-200	10	84
30-45.7800-113.3525-2-07-			0-M34389				78587	-55	-25	-4	285	16250	199	-25	-25	-200	26	58
30-45.8142-113.3306-2-07-			0-M34390				25162	-55	-25	-4	284	6719	67	-25	-25	-200	10	-50
30-45.7947-113.3675-2-07-			0-M34392				12640	-55	-25	-4	227	3575	28	-25	-25	283	26	-50
30-45.8803-113.3158-2-07-			0-M34393				25993	-55	48	-4	-25	1922	-3	-25	28	-200	22	62
30-45.8853-113.3675-2-07-			0-M34394				14735	-55	-25	-4	62	3788	-3	-25	-25	-200	11	-50
30-45.9055-113.3528-2-07-			0-M34395				1873	-55	-25	-4	47	420	-3	-25	-25	-200	13	-50
30-45.9106-113.3286-2-07-			0-M34396				4370	-55	-25	-4	75	832	-3	-25	-25	-200	5	144

[illegible]

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	REF. DATE	LAS. SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per billion (ppb)												
							Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn	
30-45.9133-113.2883-2-07-			0-M34397				9459	-55	-25	-4	56	1650	-3	-25	-25	-200	15	64	
30-45.9067-113.2661-2-07-			0-M34398				10872	-55	26	-4	127	2549	-3	-25	-25	-200	19	64	
30-45.9417-113.2897-2-07-			0-M34399				5273	-55	42	-4	325	792	7	52	-25	371	24	-50	
30-45.9014-113.2083-2-07-			0-M34400				6629	-55	53	-4	108	1334	25	60	-25	548	26	225	
30-45.9883-113.8617-2-06-			0-M34401				7039	-55	-25	-4	96	1489	6	-25	-25	-200	-4	276	
30-45.9322-113.9706-2-07-			0-M34403				8317	-55	148	-4	416	1059	203	227	279	1736	66	63	
30-45.9044-113.9633-2-07-			0-M34404				16879	-55	52	-4	551	2982	29	49	61	517	43	104	
30-45.8875-113.9511-2-07-			0-M34405				16317	69	-25	-4	1220	3136	79	-25	148	-200	62	603	
30-45.9297-113.8903-2-07-			0-M34406				18582	97	-25	-4	142	2796	35	-25	111	-200	15	368	
30-45.9383-113.9269-2-07-			0-M34407				6940	88	-25	-4	189	1346	33	-25	86	-200	10	178	
30-45.9386-113.9278-2-07-			0-M34408				18808	84	-25	-4	192	3504	39	-25	62	-200	7	212	
30-45.9500-113.9356-2-07-			0-M34409				25908	97	-25	-4	206	3839	63	-25	162	-200	23	251	
30-45.9636-113.9894-2-07-			0-M34410				39747	107	-25	-4	313	7544	88	-25	186	-200	20	360	
30-45.9642-113.9892-2-07-			0-M34411				6250	90	29	-4	105	1195	37	44	181	-200	16	139	
30-45.9931-113.9425-2-07-			0-M34412				5541	105	26	-4	180	921	42	51	173	-200	23	196	
30-45.8586-113.4428-2-07-			0-M34413				7185	111	50	-4	177	641	43	72	188	-200	19	169	
30-45.8222-113.4275-2-07-			0-M34414				8440	86	40	-4	200	827	48	66	184	-200	18	84	
30-45.8069-113.4172-2-07-			0-M34415				3657	62	29	-4	77	793	36	40	115	-200	10	104	
30-45.7811-113.4078-2-07-			0-M34416				8445	82	71	-4	198	1329	53	89	209	388	32	106	
30-45.7906-113.4417-2-07-			0-M34417				6392	77	46	7	586	1449	75	53	154	224	31	192	
30-45.7750-113.4511-2-07-			0-M34418				2372	56	70	9	179	493	38	105	197	616	27	158	
30-45.7569-113.4583-2-07-			0-M34419				14734	78	68	-4	251	3810	80	91	246	331	35	117	
30-45.7661-113.5861-2-07-			0-M34420				4827	74	86	5	214	530	44	134	249	715	37	198	
30-45.7883-113.6069-2-07-			0-M34421				4916	77	95	7	236	514	59	133	262	598	41	163	
30-45.7742-113.5650-2-07-			0-M34422				7258	74	60	-4	259	1915	56	104	206	403	30	154	
30-45.7200-113.3208-2-07-			0-M34423				10814	-55	-25	-4	137	2239	26	-25	88	-200	16	89	
30-45.7158-113.3117-2-07-			0-M34424				6417	57	-25	-4	71	1364	23	-25	81	-200	9	153	
30-45.7044-113.3261-2-07-			0-M34425				6552	-55	40	-4	143	971	29	-25	145	-200	24	149	
30-45.7011-113.3125-2-07-			0-M34426				2996	-55	-25	-4	114	843	29	32	82	-200	15	96	
30-45.6578-113.3589-2-07-			0-M34427				8548	61	-25	-4	272	1210	60	-25	74	-200	7	68	
30-45.5336-113.0789-2-07-			0-M34428				5480	71	36	-4	58	787	32	44	140	-200	12	135	
30-45.5333-113.0817-2-07-			0-M34429				3780	-55	-25	-4	292	907	29	33	125	-200	12	-50	
30-45.5144-113.5922-2-07-			0-M34430				719	-55	39	-4	116	475	34	43	147	346	18	-50	
30-45.5194-113.5750-2-07-			0-M34431				2005	-55	28	-4	97	613	30	41	113	-200	13	-50	
30-45.3628-113.6028-2-07-			0-M34432				2636	56	44	-4	67	452	35	45	142	248	18	74	
30-45.3378-113.6292-2-07-			0-M34433				2652	59	-25	-4	120	502	30	-25	62	-200	10	94	
30-45.3600-113.5583-2-07-			0-M34434				1500	68	-25	-4	64	637	29	-25	47	-200	-4	102	
30-45.3633-113.5244-2-07-			0-M34435				2196	64	-25	-4	72	709	24	-25	67	-200	-4	174	
30-45.3122-113.5272-2-07-			0-M34436				1149	-55	26	-4	165	744	24	28	110	-200	12	102	
30-45.2942-113.5633-2-07-			0-M34437				1784	-55	-25	7	730	1160	81	-25	74	-200	20	190	
30-45.2661-113.5919-2-07-			0-M34438				1063	61	-25	-4	163	355	21	-25	-25	-200	-4	91	
30-45.2972-113.5175-2-07-			0-M34439				1171	-55	-25	-4	158	475	39	-25	-25	-200	-4	-50	
30-45.2542-113.5042-2-07-			0-M34440				1415	-55	-25	-4	54	639	20	-25	51	-200	6	59	
30-45.3953-113.2531-2-07-			0-M34442				2087	-55	-25	-4	58	629	23	-25	69	-200	-4	73	
30-45.3956-113.2519-2-07-			0-M34443				3582	-55	-25	-4	121	1316	23	-25	-25	-200	-4	118	
30-45.3808-113.2522-2-07-			0-M34444																
30-45.3756-113.2536-2-07-			0-M34445																
30-45.2356-112.7822-2-07-			0-M34450				8839	64	39	-4	-25	4201	19	75	196	286	25	87	
30-45.5039-113.6994-2-07-			0-M34451				5843	-55	57	-4	-25	667	21	70	180	298	21	159	
30-45.5697-113.7047-2-07-			0-M34452				5282	-55	55	-4	-25	590	24	84	202	460	26	125	
30-45.5644-113.7044-2-07-			0-M34453				5198	-55	61	-4	-25	592	19	84	205	448	25	92	

[illegible]

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	DOE SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per billion (ppb)											
							Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.5528-113.7222-2-07-	0-M34454	5491	-55	61	-4	-25	599	25	101	224	557	25	128					
30-45.5456-113.7406-2-07-	0-M34455	5497	-55	65	-4	-25	585	25	92	222	564	26	98					
30-45.5423-113.7456-2-07-	0-M34456	5811	-55	60	-4	-25	622	28	83	204	438	23	147					
30-45.5614-113.7675-2-07-	0-M34457	5131	-55	70	-4	-25	574	24	95	218	522	25	193					
30-45.5608-113.7669-2-07-	0-M34458	7004	57	65	-4	-25	899	23	90	195	487	28	150					
30-45.5542-113.7694-2-07-	0-M34459	5389	-55	69	-4	-25	572	24	79	190	519	26	193					
30-45.5508-113.7700-2-07-	0-M34460	6733	60	39	-4	-25	747	27	33	148	-200	16	114					
30-45.5456-113.7631-2-07-	0-M34461	6080	-55	26	-4	-25	665	20	-25	97	-200	12	155					
30-45.5422-113.8108-2-07-	0-M34462	7064	56	40	-4	-25	755	25	45	155	-200	16	106					
30-45.5558-113.0889-2-07-	0-M34463	3308	-55	-25	-4	115	941	30	-25	108	-200	13	224					
30-45.5731-113.1139-2-07-	0-M34464	6467	-55	-25	-4	714	1647	46	-25	33	-200	18	321					
30-45.5958-113.1042-2-07-	0-M34465	1896	-55	-25	-4	139	812	20	-25	77	-200	7	194					
30-45.6158-113.0831-2-07-	0-M34466	9216	-55	43	-4	98	4664	25	41	171	-200	23	274					
30-45.5297-113.0614-2-07-	0-M34467	6200	-55	43	12	180	839	62	42	172	-200	22	253					
30-45.5311-113.0478-2-07-	0-M34468	6066	58	54	11	560	1145	71	39	172	285	35	292					
30-45.5187-113.0547-2-07-	0-M34469	6782	65	85	19	346	816	77	86	205	459	35	244					
30-45.5017-113.0433-2-07-	0-M34470	6664	56	27	16	148	901	79	-25	46	-200	13	232					
30-45.4958-113.2903-2-07-	0-M34471	5445	-55	37	12	84	627	60	37	119	-200	20	307					
30-45.4897-113.2783-2-07-	0-M34472	4453	-55	46	-4	57	517	15	48	109	-200	20	527					
30-45.6364-112.7531-2-07-	0-M34473	18558	69	36	-4	-25	10621	24	95	187	-200	25	129					
30-45.6714-112.8203-2-07-	0-M34474	30348	68	-25	-4	-25	9152	19	-25	140	-200	18	109					
30-45.6733-112.8903-2-07-	0-M34475	22780	67	30	-4	-25	6788	20	36	150	-200	19	69					
30-45.6439-112.8078-2-07-	0-M34479	45140	82	35	-4	77	11547	42	-25	193	-200	24	386					
30-45.6450-112.8594-2-07-	0-M34481	26126	60	46	-4	40	5528	34	-25	193	-200	24	144					
30-45.5567-113.1447-2-07-	0-M34482	2797	-55	46	-4	597	1013	73	70	164	369	42	152					
30-45.7886-113.0253-2-07-	0-M34488	10559	60	53	-4	215	2042	33	46	182	-200	27	297					
30-45.7964-113.0306-2-07-	0-M34489	3994	69	62	-4	199	961	29	69	176	409	30	128					
30-45.8172-113.0417-2-07-	0-M34490	8052	75	85	14	130	2136	57	30	204	-200	17	155					
30-45.8456-113.0644-2-07-	0-M34491	9508	62	73	-4	155	2367	30	75	212	390	37	120					
30-45.8661-113.0922-2-07-	0-M34492	13429	-55	74	-4	293	2745	48	49	202	209	37	69					
30-45.8517-113.1269-2-07-	0-M34493	12346	90	146	-4	229	2863	48	173	403	1088	54	-50					
30-45.8394-113.1375-2-07-	0-M34494	30437	-55	38	-4	98	4597	24	-25	182	-200	24	141					
30-45.8250-113.1456-2-07-	0-M34495	8961	-55	56	-4	113	1946	21	53	152	-200	28	94					
30-45.8225-113.1489-2-07-	0-M34496	7460	56	-25	-4	262	1745	31	-25	-25	-200	-4	-50					
30-45.8508-113.2414-2-07-	0-M34497	27239	-55	-25	-4	217	5815	35	-25	45	-200	8	123					
30-45.8669-113.2253-2-07-	0-M34498	36921	60	-25	-4	175	4591	47	-25	43	-200	11	163					
30-45.8300-113.0147-2-07-	0-M34499	13382	-55	-25	-4	116	2534	24	-25	30	-200	6	96					
30-45.8522-113.0036-2-07-	0-M34500	39711	76	-25	-4	27	7802	23	-25	29	-200	6	53					
30-45.9500-113.4208-2-07-	0-M34501	9531	-55	-25	-4	-25	980	16	-25	55	-200	-4	-50					
30-45.9500-113.4200-2-07-	0-M34502	2656	-55	-25	-4	27	643	13	-25	-25	-200	8	-50					
30-45.9269-113.4064-2-07-	0-M34503	4563	-55	-25	-4	40	815	14	-25	72	-200	-4	-50					
30-45.9261-113.4081-2-07-	0-M34504	8189	-55	-25	-4	-25	812	16	-25	83	-200	12	-50					
30-45.9792-113.3417-2-07-	0-M34505	4241	-55	-25	-4	45	532	17	-25	107	-200	9	-50					
30-45.9753-113.3306-2-07-	0-M34506	4120	-55	-25	-4	-25	467	14	-25	76	-200	-4	-50					
30-45.9717-113.3117-2-07-	0-M34507	3185	-55	-25	-4	-25	509	14	-25	71	-200	-4	-50					
30-45.9708-113.3125-2-07-	0-M34508	4216	-55	-25	-4	-25	499	14	-25	100	-200	-4	-50					
30-45.9539-113.2511-2-07-	0-M34509	3816	-55	-25	-4	79	638	25	-25	50	-200	-4	91					
30-45.9494-113.2533-2-07-	0-M34510	4387	-55	-25	-4	-25	585	19	-25	87	-200	10	-50					
30-45.9394-113.2403-2-07-	0-M34511	8307	-55	51	-4	768	1954	135	41	207	-200	26	120					
30-45.9403-113.2392-2-07-	0-M34512	4864	-55	66	-4	83	693	29	72	205	331	25	54					
30-45.8475-112.8486-2-07-	0-M34513	54675	88	55	-4	34	4610	28	-25	195	-200	25	60					

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

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DOE SAMPLE NUMBER						LAS. SAMPLE LOCATION NUMBER AND FIELD DATA																		U CONCENTRATION											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAS. SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SOLUBLE SOLIDS (mg/l)	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
							DATE	HOUR																											
30-45.7819-112.8558-2-07-						0-M34514-08/23/76-16-	14-10.0	-	5.7-	115-						4-3-7-4-7-4-4-4-2-1-3-5-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.47	
30-45.9553-112.7903-2-07-						0-M34515-08/24/76-14-	20-12.8	-	5.9-	140-						0-3-7-3-7-3-4-2-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.81	
30-45.9531-112.7847-2-07-						0-M34516-08/24/76-14-	20-13.7	-	6.5-	335-						0-3-7- - -3-4-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.27	
30-45.9097-112.7792-2-07-						0-M34517-08/24/76-15-	23-11.6	-	5.8-	150-						2-3-7-3-7-4-4-2-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.40	
30-45.9078-112.7819-2-07-						0-M34518-08/24/76-15-	22-13.2	-	5.8-	170-						3-3-7-3-7-4-4-1-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.9056-112.7903-2-07-						0-M34519-08/24/76-16-	22-13.2	-	5.9-	150-						1-3-7-5-6-3-4-4-2-1-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.30	
30-45.9069-112.8550-2-07-						0-M34520-08/24/76-16-	21-11.4	-	6.1-	240-						4-3-7-3-7-4-4-1-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.75	
30-45.9056-112.8556-2-07-						0-M34521-08/24/76-17-	21-12.8	-	5.7-	150-						2-3-7-4-7-4-4-1-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.56	
30-45.9125-112.9222-2-07-						0-M34522-08/24/76-17-	19-11.7	-	5.9-	245-						7-3-7-6-6-3-4-1-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.07	
30-45.9097-112.9236-2-07-						0-M34523-08/24/76-18-	19-12.3	-	5.8-	130-						2-3-7-4-7-3-3-1-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.18	
30-45.8111-112.9333-2-07-						0-M34524-08/25/76-9-	21-11.6	-	6.0-	200-						3-3-7-2-7-4-4-1-2-1-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.44	
30-45.8106-112.9347-2-07-						0-M34525-08/25/76-9-	21-11.8	-	6.1-	215-						3-3-7-3-7-3-3-1-2-1-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.24	
30-45.8478-112.9928-2-07-						0-M34526-08/25/76-11-	23-13.1	-	5.7-	165-						2-3-7-3-7-4-3-1-2-1-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.71	
30-45.8583-112.8667-2-07-						0-M34527-08/25/76-12-	24-14.1	-	6.3-	285-						0-3-7-3-7-2-3-1-1-1-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.95	
30-45.8583-112.8661-2-07-						0-M34528-08/25/76-12-	24-11.8	-	5.8-	180-						3-3-7-3-7-4-3-1-2-1-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.57	
30-45.7819-112.7867-2-07-						0-M34531-08/25/76-13-	23-13.7	-	6.6-	550-						1-4- -5-6-2-3-1-1-4-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.51	
30-45.8569-112.7528-2-07-						0-M34533-08/25/76-14-	24-9.9	-	5.7-	115-						4-3-7-1-7-4-3-1-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.83	
30-45.7700-112.9556-2-07-						0-M34534-08/25/76-14-	23-12.2	-	6.8-	430-						2-3-7-4-6-4-3-1-2-4-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.17	
30-45.6022-113.3867-2-07-						0-M34536-08/26/76-11-	16-9.5	-	5.7-	50-						9-2-3-4-6-3-3-1-2-4-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.28	
30-45.6011-113.3289-2-07-						0-M34537-08/26/76-12-	16-9.5	-	5.5-	40-						14-2-1-4-6-3-3-1-2-2-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.22	
30-45.6003-113.3292-2-07-						0-M34538-08/26/76-12-	17-9.5	-	5.5-	37-						14-2-1-4-6-3-3-1-2-2-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.00	
30-45.6008-113.3356-2-07-						0-M34539-08/26/76-12-	16-10.0	-	5.7-	45-						14-2-1-4-6-3-3-1-2-2-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19	
30-45.5994-113.3622-2-07-						0-M34541-08/26/76-13-	17-9.5	-	5.7-	40-						18-2-7-4-6-3-3-1-2-1-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19	
30-45.6025-113.4381-2-07-						0-M34544-08/26/76-15-	17-9.5	-	5.2-	24-						9-2-3-4-6-3-3-2-2-3-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.6019-113.4400-2-07-						0-M34545-08/26/76-15-	17-9.5	-	5.7-	40-						18-2-3-4-6-3-3-2-2-3-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.22	
30-45.5781-113.4486-2-07-						0-M34546-08/26/76-15-	17-10.5	-	5.7-	75-						14-2-1-4-6-3-3-1-2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.21	
30-45.5639-113.4181-2-07-						0-M34548-08/26/76-16-	17-9.5	-	5.2-	45-						18-2-7-4-6-3-3-2-2-4-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.5631-113.4175-2-07-						0-M34549-08/26/76-16-	17-9.5	-	5.2-	40-						14-2-7-4-6-3-3-1-2-3-2-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.9228-113.2192-2-07-						0-M34550-08/17/76-18-	14-12.1	-	5.9-	43-						0-3-7-3-7-4-3-1-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.9222-113.2256-2-07-						0-M34551-08/17/76-18-	14-12.3	-	5.6-	46-						2-3-7-3-7-3-3-1-2-1-3-4-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.30	
30-45.8794-113.1989-2-07-						0-M34552-08/17/76-19-	16-14.0	-	5.9-	50-						2-3-7-2-7-4-3-1-2-3-3-3-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.56	
30-45.8769-113.2197-2-07-						0-M34553-08/17/76-19-	16-12.7	-	6.1-	225-						0-3-7-1-7-2-3-1-1-3-2-4-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.05	
30-45.8767-113.2444-2-07-						0-M34554-08/17/76-19-	16-13.9	-	5.9-	265-						0-4- -4-7-2-3-1-1-4-4-4-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.62	
30-45.8775-113.2444-2-07-						0-M34555-08/17/76-19-	14-14.1	-	5.7-	72-						0-3-7-1-7-4-3-1-1-4-3-4-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.52	
30-45.8839-113.1431-2-07-						0-M34556-08/18/76-13-	12-10.6	-	5.6-	71-						0-4- -4-7-3-3-1-2-3-3-3-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.8997-113.2900-2-07-						0-M34557-08/18/76-15-	14-13.8	-	5.7-	68-						1-4- -3-7-4-3-1-2-1-3-4-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.8922-113.2811-2-07-						0-M34558-08/18/76-15-	20-11.9	-	5.8-	108-						0-4- -4-7-3-3-1-2-1-3-4-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.8869-113.1161-2-07-						0-M34559-08/18/76-16-	20-11.8	-	5.8-	160-						1-2-7-4-6-4-3-1-2-3-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.8967-113.1064-2-07-						0-M34560-08/18/76-16-	20-14.6	-	6.0-	120-						0-1-7-3-7-3-3-1-2-3-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.27	
30-45.9386-113.0947-2-07-						0-M34561-08/18/76-17-	20-11.9	-	5.7-	80-						2-2-7-4-6-4-3-1-2-3-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.06	
30-45.9322-113.1014-2-07-						0-M34562-08/18/76-17-	19-14.2	-	5.6-	73-						0-4-3-2-7-4-4-4-2-3-3-4-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.9517-113.1050-2-07-						0-M34563-08/18/76-17-	19-12.8	-	5.7-	73-						0-3-7-3-7-4-4-1-2-4-4-2-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.9367-113.1172-2-07-						0-M34565-08/18/76-18-	16-11.5	-	5.7-	70-						0-2-7-5-7-2-2-1-1-4-3-3-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.21	
30-45.9456-113.0542-2-07-																																			

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

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DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY												
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	DOE SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per billion (ppb)											
							Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.7819-112.8558-2-07-			0-M34514				12788	59	84	-4	-25	2579	31	90	269	317	30	82
30-45.9653-112.7903-2-07-			0-M34515				18245	57	37	-4	137	3652	44	-25	191	-200	17	84
30-45.9631-112.7847-2-07-			0-M34516				41684	104	-25	-4	187	11507	91	-25	149	-200	24	697
30-45.9097-112.7792-2-07-			0-M34517				22268	66	42	-4	396	4486	66	-25	149	-200	24	186
30-45.9078-112.7819-2-07-			0-M34518				23303	74	50	-4	31	3677	28	54	175	-200	20	89
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30-45.9125-112.9222-2-07-			0-M34522				30587	78	-25	-4	-25	6245	20	-25	123	-200	12	108
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30-45.8869-113.1161-2-07-			0-M34559				28581	-55	-25	-4	-25	6779	6	-25	-25	-200	5	-50
30-45.8967-113.1064-2-07-			0-M34560				18442	-55	-25	-4	-25	4540	-3	-25	-25	-200	-4	-50
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30-45.9353-113.0292-2-07-			0-M34567				7915	-55	-25	-4	-25	1516	-3	-25	-25	-200	-4	-50
30-45.9519-113.0250-2-07-			0-M34568				13074	-55	-25	-4	-25	2944	6	-25	55	-200	8	-50
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30-45.9736-113.0083-2-07-			0-M34570				21524	-55	-25	-4	-25	6730	4	-25	131	-200	13	-50
30-45.9839-113.0272-2-07-			0-M34571				41259	58	-25	-4	26	5381	9	-25	118	-200	11	60
30-45.9681-113.0819-2-07-			0-M34572				5295	58	47	-4	-25	915	13	79	176	677	20	-50
30-45.9661-113.0783-2-07-			0-M34573				35405	80	40	-4	-25	8072	27	233	205	-200	20	-50

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																								U CONCENTRATION				
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	RIP RATE	LAS SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (umho/cm)	SOLLTOMETER (eu ppm)	ROCK TYPE	ROCK COLOR	SEGMENT TYPE	SEGMENT 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
							DATE	HOUR																										
30-45.9806-113.0136-2-07-	0-M34574-08/19/76-13-	19-13.9-	-	6.1-	189-	4-2-1-3-7-4-3-1-2-3-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.15		
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30-45.3192-113.4594-2-07-	0-M34611-08/25/76-11-	14-12.0-	-	5.5-	48-	5-2-7-4-6-2-3-1-3-3-4-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.3425-113.4581-2-07-	0-M34612-08/26/76-12-	14-11.5-	-	5.2-	46-	22-2-6-3-6-3-3-1-3-4-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	
30-45.2769-113.4592-2-07-	0-M34613-08/26/76-13-	18-13.0-	-	5.2-	17-	0-2-6-3-3-3-1-3-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.2747-113.4333-2-07-	0-M34614-08/26/76-14-	19-11.0-C-	-	5.2-	50-	16-2-7-5-6-3-3-1-3-3-4-4-1-	-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.18	
30-45.3839-113.3469-2-07-	0-M34615-09/01/76-17-	15-15.0-	-	5.5-	37-	7-2-4-2-6-4-4-1-2-3-4-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.3758-113.3481-2-06-	0-M34616-09/01/76-17-	21-19.0-	-	5.7-	83-	0-2-1-3-6-4- -1- -3-2-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.4608-113.6542-2-07-	0-M34619-08/31/76-11-	15- 9.8-	-	5.2-	22-	11-4- -2-6-3-3-1-2-1-4-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.15	
30-45.4947-113.6050-2-07-	0-M34620-08/31/76-13-	19-14.2-	-	5.5-	50-	16-4- -5-6-3-3-1-2-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.13	
30-45.4786-113.6017-2-07-	0-M34621-08/31/76-13-	19-11.2-	-	5.2-	22-	11-4-2-2-1-4-3-1-2-1-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.31	
30-45.4542-113.6214-2-07-	0-M34622-08/31/76-13-	22-14.2-	-	5.2-	20-	11-4- -3-6-3-3-1-2-1-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.45	
30-45.4128-113.7000-2-07-	0-M34623-08/31/76-14-	23-13.8-	-	5.2-	28-	0-3-7-5-6-2-3-1-2-4-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.30	
30-45.4044-113.6750-2-07-	0-M34624-08/31/76-15-	23-13.5-	-	5.2-	19-	16-4- -2-1-4-3-1-2-1-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-</				

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

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DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY												
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	DOE SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per billion (ppb)											
							Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.9806-113.0136-2-07-			0-M34574				26424	62	37	-4	-25	6414	10	224	232	-200	26	-50
30-45.9872-113.0047-2-07-			0-M34575				13783	-55	50	-4	59	2928	29	181	214	233	23	73
30-45.9756-112.9850-2-07-			0-M34576				13468	-55	62	-4	-25	4285	14	253	255	462	29	-50
30-45.9919-112.9811-2-07-			0-M34577				13537	-55	64	-4	-25	4147	11	262	298	433	30	-50
30-45.9833-112.8139-2-07-			0-M34578				32809	74	37	-4	-25	7042	11	165	250	-200	25	-50
30-45.9811-112.8089-2-07-			0-M34579				14724	77	54	-4	-25	2048	9	201	249	254	21	-50
30-45.9814-112.8036-2-07-			0-M34580				14906	-55	67	-4	-25	3335	9	268	288	669	35	-50
30-45.9569-112.8764-2-06-			0-M34581				40744	70	-25	-4	-25	8154	14	167	237	-200	25	-50
30-45.9656-112.8394-2-07-			0-M34582				14573	68	58	-4	-25	2013	10	249	251	276	27	-50
30-45.9653-112.8392-2-07-			0-M34583				12514	-55	73	-4	-25	1752	13	279	272	569	29	-50
30-45.9864-112.8733-2-07-			0-M34584				36212	82	-25	-4	-25	8182	16	210	191	-200	12	-50
30-45.9861-112.8736-2-07-			0-M34585				13667	-55	-25	-4	-25	2627	-3	126	126	-200	6	-50
30-45.9183-112.9000-2-06-			0-M34586				27438	92	-25	-4	-25	6023	4	107	158	-200	10	-50
30-45.8764-112.8553-2-07-			0-M34587				29001	60	-25	-4	-25	5642	8	117	133	-200	11	-50
30-45.8761-112.8547-2-07-			0-M34588				54514	-55	-25	-4	-25	4761	7	56	192	-200	16	-50
30-45.8875-112.7733-2-07-			0-M34592				36510	93	76	-4	-25	5369	16	282	334	-200	38	-50
30-45.8844-112.7917-2-07-			0-M34593				22648	-55	-25	-4	-25	3701	6	-25	36	-200	-4	78
30-45.8847-112.7917-2-07-			0-M34594				22547	68	-25	-4	-25	4114	6	33	39	-200	-4	-50
30-45.7933-112.9028-2-07-			0-M34595				34659	57	-25	-4	160	5846	17	-25	-25	-200	-4	131
30-45.8264-112.8836-2-07-			0-M34596				24623	-55	-25	-4	-25	2958	4	30	28	-200	-4	-50
30-45.8233-112.8819-2-07-			0-M34597				30655	-55	-25	-4	-25	5672	-3	84	-25	-200	-4	-50
30-45.8361-112.8733-2-07-			0-M34598				17039	-55	132	-4	-25	3542	19	515	385	1383	56	-50
30-45.8481-112.8500-2-07-			0-M34599				46476	-55	-25	-4	-25	4245	-3	-25	-25	-200	-4	-50
30-45.8658-113.0083-2-07-			0-M34600				52582	-55	-25	-4	39	9916	-3	-25	-25	-200	-4	-50
30-45.8719-113.0839-2-07-			0-M34601				17326	-55	-25	-4	116	3101	-3	-25	-25	-200	-4	-50
30-45.3475-113.3778-2-07-			0-M34602				10264	-55	-25	-4	803	2685	32	-25	-25	-200	-4	-50
30-45.3206-113.3308-2-07-			0-M34603				13657	-55	-25	-4	1387	3850	144	105	56	-200	24	87
30-45.3158-113.3033-2-07-			0-M34604				10287	-55	69	-4	619	2808	48	222	150	734	35	83
30-45.3153-113.3028-2-07-			0-M34605				142	-55	206	22	34	15	28	617	487	2603	69	-50
30-45.3314-113.2692-2-07-			0-M34606				7352	-55	49	-4	615	2157	49	205	101	646	26	76
30-45.3544-113.4158-2-07-			0-M34607				11614	-55	-25	-4	581	3340	36	28	55	-200	18	-50
30-45.3553-113.4147-2-07-			0-M34608				7437	-55	-25	-4	365	2482	6	-25	-25	-200	-4	-50
30-45.3611-113.4472-2-07-			0-M34609				6912	-55	-25	-4	413	2330	-3	-25	-25	-200	-4	-50
30-45.3128-113.3967-2-07-			0-M34610				6298	-55	-25	-4	225	2176	-3	-25	-25	-200	-4	52
30-45.3192-113.4594-2-07-			0-M34611				5008	-55	-25	-4	199	1740	-3	-25	-25	-200	-4	-50
30-45.3425-113.4581-2-07-			0-M34612				7809	-55	-25	-4	382	2736	20	-25	-25	-200	-4	-50
30-45.2769-113.4592-2-07-			0-M34613				2872	-55	-25	-4	69	1159	-3	-25	-25	-200	-4	-50
30-45.2747-113.4353-2-07-			0-M34614				8026	-55	-25	-4	150	2528	-3	-25	-25	-200	-4	-50
30-45.3939-113.3469-2-07-			0-M34615				5903	-55	-25	-4	293	1555	-3	-25	-25	-200	-4	-50
30-45.3758-113.3481-2-06-			0-M34616				13984	-55	-25	-4	119	3928	-3	-25	-25	-200	-4	-50
30-45.4608-113.6542-2-07-			0-M34619				3126	-55	-25	-4	72	726	-3	-25	-25	-200	-4	-50
30-45.4947-113.6050-2-07-			0-M34620				6662	-55	-25	-4	453	2432	9	-25	-25	-200	-4	505
30-45.4786-113.6017-2-07-			0-M34621				3512	-55	-25	-4	253	967	-3	-25	-25	-200	-4	88
30-45.4542-113.6214-2-07-			0-M34622				2105	-55	-25	-4	236	1318	4	-25	-25	-200	-4	-50
30-45.4128-113.7000-2-07-			0-M34623				4391	-55	-25	-4	501	1003	-3	-25	-25	-200	-4	-50
30-45.4044-113.6750-2-07-			0-M34624				2677	-55	-25	-4	77	565	-3	-25	-25	-200	-4	-50
30-45.4181-113.6400-2-07-			0-M34625				4884	-55	-25	-4	402	2197	-3	-25	-25	-200	-4	-50
30-45.4467-113.5950-2-07-			0-M34626				3505	-55	-25	-4	358	853	-3	-25	-25	-200	-4	-50
30-45.4069-113.6136-2-07-			0-M34627				5610	-55	-25	-4	56	1467	-3	-25	-25	-200	-4	-50
30-45.3461-113.7069-2-07-			0-M34628				3692	-55	-25	-4	61	698	-3	-25	-25	-200	-4	-50
30-45.3664-113.6422-2-07-			0-M34629				4255	-55	-25	-4	62	533	-3	-25	-25	-200	-4	-50

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

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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 (umho/cm)	SCINTILLATOR (uL 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 (66) UNITS IN ppb
							DATE	HOUR																										
30-45.4797-113.5117-2-07-						0-M34630-09/01/76-10-			16-12.0-	-	-	6.2-	250-	2-4-	4-6-3-3-1-2-4-4-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.79	
30-45.4772-113.5108-2-07-						0-M34631-09/01/76-11-			20-13.5-	-	-	5.2-	40-	4-4-	2-7-3-3-1-2-4-4-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.78	
30-45.3939-113.5303-2-07-						0-M34632-09/01/76-12-			21-11.5-	-	-	5.2-	24-	2-4-	3-3-3-3-1-2-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.78	
30-45.3714-113.6619-2-07-						0-M34633-09/01/76-15-			21-11.5-C-	-	-	5.2-	36-	2-3-7-2-7-4-3-1-2-1-2-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.47		
30-45.3928-113.6036-2-07-						0-M34634-09/01/76-16-			22-12.0-	-	-	5.2-	30-	2-4-	5-6-3-3-1-2-3-4-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.24	
30-45.3919-113.6028-2-07-						0-M34635-09/01/76-16-			22-11.5-	-	-	5.2-	34-	4-4-	3-6-3-3-1-2-1-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.37	
30-45.4261-113.5369-2-07-						0-M34636-09/01/76-17-			21-13.0-	-	-	5.5-	50-	4-4-	3-6-3-3-1-2-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.2533-113.5753-2-07-						0-M34637-09/02/76-11-			18-10.5-C-	-	-	5.2-	15-	4-3-7-3-6-4-3-1-2-3-4-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.17		
30-45.2478-113.5514-2-07-						0-M34638-09/02/76-11-			19-12.0-C-	-	-	5.2-	15-	4-4-	3-6-3-3-1-2-3-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.2436-113.5033-2-07-						0-M34639-02/09/76-12-			18-10.5-C-	-	-	5.2-	18-	4-4-	3-1-3-3-1-2-1-4-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.49	
30-45.2350-113.5083-2-07-						0-M34640-09/02/76-13-			18-11.0-C-	-	-	5.2-	18-	8-4-	2-3-3-3-1-2-3-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.1769-113.5158-2-07-						0-M34641-09/02/76-13-			16-11.5-C-	-	-	5.5-	55-	6-4-	3-6-3-3-1-2-3-2-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.2003-113.5067-2-07-						0-M34642-09/02/76-14-			18-11.0-C-	-	-	5.5-	50-	4-4-	3-7-3-3-1-2-3-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.21	
30-45.2403-113.4361-2-06-						0-M34643-09/02/76-15-			19-14.0-	-	-	5.5-	40-	4-4-	5-6-2-3-1-2-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.2139-113.4444-2-06-						0-M34644-09/02/76-15-			19-14.0-	-	-	5.7-	120-	2-4-	6-8-1-2-2-3-4-4-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.46	
30-45.2417-113.4583-2-07-						0-M34645-09/02/76-16-			19-11.0-	-	-	5.5-	42-	4-4-	3-6-3-3-1-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.2458-113.3569-2-07-						0-M34646-09/02/76-17-			19-14.0-	-	-	5.2-	55-	6-4-	3-6-3-3-1-2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.31	
30-45.1372-112.9506-2-07-						0-M34648-09/03/76-10-			16-10.5-C-	-	-	5.9-	220-	4-2-7-2-7-4-3-1-2-3-4-4-1-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.87		
30-45.1378-112.9408-2-07-						0-M34649-09/03/76-11-			17-10.0-C-	-	-	6.5-	550-	8-3-6-3-6-4-3-1-2-3-3-5-1-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.46		
30-45.5775-113.6244-2-07-						0-M34653-08/27/76-11-			17- 9.5-	-	-	5.7-	40-	14-4-	4-6-3-3-2-3-2-4-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.26	
30-45.5375-113.5394-2-07-						0-M34654-08/27/76-12-			17- 9.5-	-	-	5.2-	35-	9-2-1-4-6-3-3-2-2-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.63		
30-45.5294-113.5242-2-07-						0-M34655-08/27/76-12-			17- 8.5-	-	-	5.7-	40-	18-2-1-4-6-3-3-2-2-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.30		
30-45.5300-113.5078-2-07-						0-M34656-08/27/76-12-			17- 9.5-	-	-	5.2-	70-	9-2-7-4-6-3-3-2-2-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45.5269-113.5411-2-07-						0-M34657-08/27/76-13-			17-10.5-	-	-	5.2-	45-	14-2-7-4-6-3-3-1-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.20		
30-45.5158-113.5856-2-07-						0-M34658-08/27/76-13-			18-10.5-	-	-	5.2-	20-	14-2-1-3-6-3-3-2-2-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.67		
30-45.5819-113.4894-2-07-						0-M34659-08/27/76-14-			18- 9.5-	-	-	5.2-	40-	14-2-1-4-6-3-3-3-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45.5150-113.4389-2-07-						0-M34660-08/27/76-14-			18-10.0-	-	-	5.7-	50-	14-2-1-4-6-3-3-1-2-3-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.17		
30-45.5289-113.4275-2-07-						0-M34661-08/27/76-14-			17- 9.0-	-	-	5.7-	65-	4-2-7-4-6-3-3-1-2-2-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.88		
30-45.5275-113.4089-2-07-						0-M34662-08/27/76-15-			17-10.5-	-	-	5.5-	25-	18-4-	5-6-3-3-2-2-3-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.23	
30-45.5314-113.3950-2-07-						0-M34663-08/27/76-15-			17- 8.5-	-	-	5.7-	55-	18-2-7-4-6-3-3-1-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45.4575-113.2978-2-07-						0-M34664-09/01/76-13-			17-10.5-	-	-	5.2-	190-	7-2-4-2-6-4-3-1-3-6-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.42		
30-45.4022-113.4533-2-07-						0-M34665-08/31/76-15-			15-14.5-	-	-	5.5-	35-	0-4-	4-6-4-3-1-2-3-4-1-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.4050-113.4400-2-07-						0-M34666-08/31/76-15-			16-17.0-	-	-	5.5-	62-	2-4-	3-6-4-3-2-3-3-3-1-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.25	
30-45.4611-113.2800-2-07-						0-M34667-09/01/76-12-			18-10.5-	-	-	5.7-	70-	9-4-	6-8-2-3-1-3-4-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.4533-113.2819-2-07-						0-M34668-09/01/76-12-			19-10.5-	-	-	5.2-	32-	0-4-	2-6-3-3-1-2-6-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.56	
30-45.4403-113.3219-2-07-						0-M34669-09/01/76-13-			17-11.0-	-	-	5.2-	24-	4-4-	2-7-3-3-1-2-6-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.26	
30-45.4347-113.3192-2-07-						0-M34670-09/01/76-14-			23-12.5-	-	-	5.2-	32-	4-2-4-2-6-4-3-1-2-4-4-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.43		
30-45.4178-113.3017-2-07-						0-M34671-09/01/76-14-			26-11.0-	-	-	5.5-	40-	7-2-4-4-6-3-3-1-3-4-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45.3986-113.3056-2-07-						0-M34672-09/01/76-15-			17-22.0-	-	-	5.2-	30-	2-2-4-4-6-3-2-1-2-4-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.36		
30-45.3936-113.3056-2-07-						0-M34673-09/01/76-16-			17-18.0-	-	-	5.5-	58-	14-4-	3-6-3-3-1-2-4-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.21	
30-45.3917-113.3397-2-07-						0-M34674-09/01/76-16-			16-13.0-	-	-	5.7-	90-	2-4-	3-6-3-3-1-2-6-5-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.2389-113.4778-2-07-						0-M34675-08/30/76-17-			25-14.5-C-	-	-	5.2-	41-	0-2-1-6-6-2-3-1-2-4-4-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.35		
30-45.2431-113.4694-2-06-						0-M34676-08/30/76-18-			15- 7.0-C-	-	-	5.2-	50-	9-2-1-3-6-3-3-1-1-3-1-2-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.31		
30-45.4772-113.4853-2-07-						0-M34679-08/31/76-11-			14-13.0-C-	-	-	5.5-	60-	2-4-	3-6-3-3-1-2-4-3-1-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.31	
30-45.4486-113.4542-2-07-																																		

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	L.A.S. SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per billion (ppb)											
							Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.4797-113.5117-2-07-						0-M34630	53208	-55	-25	-4	293	15326	49	-25	-25	-200	-4	-50
30-45.4272-113.5108-2-07-						0-M34631	6844	-55	-25	-4	380	1779	-3	-25	-25	-200	-4	-50
30-45.3939-113.5303-2-07-						0-M34632	4093	-55	-25	-4	100	809	5	-25	-25	-200	-4	-50
30-45.3714-113.6619-2-07-						0-M34633	6119	-55	-25	-4	80	937	-3	-25	-25	-200	-4	-50
30-45.3928-113.6036-2-07-						0-M34634	5735	-55	-25	-4	123	1026	6	-25	-25	-200	-4	96
30-45.3919-113.6028-2-07-						0-M34635	4844	-55	-25	-4	84	840	-3	-25	-25	-200	-4	-50
30-45.4261-113.5369-2-07-						0-M34636	7535	-55	-25	-4	319	1763	6	-25	-25	-200	-4	-50
30-45.2533-113.5753-2-07-						0-M34637	2454	-55	-25	-4	603	913	80	-25	-25	-200	-4	-50
30-45.2478-113.5514-2-07-						0-M34638	2905	-55	-25	-4	1580	1335	142	-25	-25	-200	16	89
30-45.2436-113.5033-2-07-						0-M34639	2727	-55	-25	-4	511	1289	80	-25	-25	-200	-4	132
30-45.2350-113.5083-2-07-						0-M34640	2581	-55	-25	-4	499	1154	62	-25	-25	-200	-4	113
30-45.1769-113.5158-2-07-						0-M34641	12238	-55	-25	-4	444	1993	32	-25	-25	-200	-4	143
30-45.2003-113.5067-2-07-						0-M34642	8746	-55	-25	-4	158	1856	11	-25	-25	-200	-4	93
30-45.2403-113.4361-2-06-						0-M34643	2835	-55	-25	-4	165	1174	15	-25	-25	-200	-4	-50
30-45.2139-113.4444-2-06-						0-M34644	11975	-55	-25	-4	580	3450	20	-25	-25	-200	-4	226
30-45.2417-113.4583-2-07-						0-M34645	5234	-55	-25	-4	163	1955	5	-25	-25	-200	-4	181
30-45.2458-113.3569-2-07-						0-M34646	6162	-55	-25	-4	526	3068	28	-25	-25	-200	-4	63
30-45.1372-112.9506-2-07-						0-M34648	37933	-55	-25	-4	419	9252	46	-25	-25	259	-4	149
30-45.1378-112.9408-2-07-						0-M34649	93927	63	-25	-4	127	24660	8	-25	-25	2165	-4	182
30-45.5775-113.6244-2-07-						0-M34653	12469	-55	-25	-4	-25	2602	-3	-25	-25	-200	-4	-50
30-45.5375-113.5394-2-07-						0-M34654	15681	-55	-25	-4	34	3663	-3	-25	-25	332	-4	109
30-45.5294-113.5242-2-07-						0-M34655	12141	-55	-25	-4	-25	2680	-3	-25	-25	-200	-4	-50
30-45.5300-113.5078-2-07-						0-M34656	12254	-55	-25	-4	-25	2803	-3	-25	-25	-200	-4	58
30-45.5269-113.5411-2-07-						0-M34657	11617	-55	-25	-4	-25	2711	-3	-25	-25	-200	-4	70
30-45.5158-113.5856-2-07-						0-M34658	12705	-55	-25	-4	-25	2970	-3	-25	-25	-200	-4	-50
30-45.5819-113.4894-2-07-						0-M34659	4269	-55	-25	-4	211	1573	27	-25	-25	-200	-4	85
30-45.5150-113.4389-2-07-						0-M34660	4247	-55	-25	-4	-25	1678	-3	-25	-25	-200	-4	112
30-45.5299-113.4275-2-07-						0-M34661	12141	-55	-25	-4	-25	2809	-3	-25	-25	-200	-4	183
30-45.5275-113.4089-2-07-						0-M34662	15407	-55	-25	-4	-25	3619	-3	-25	29	394	-4	75
30-45.5314-113.3950-2-07-						0-M34663	11290	-55	-25	-4	-25	2618	-3	-25	-25	234	-4	-50
30-45.4575-113.2978-2-07-						0-M34664	12928	-55	-25	9	2493	3745	185	-25	-25	-200	-4	936
30-45.4022-113.4533-2-07-						0-M34665	5591	-55	-25	-4	260	1723	19	-25	-25	-200	-4	137
30-45.4050-113.4400-2-07-						0-M34666	5289	-55	-25	-4	246	2004	14	-25	-25	-200	-4	-50
30-45.4611-113.2800-2-07-						0-M34667	22943	-55	-25	8	879	3121	34	-25	-25	-200	-4	177
30-45.4533-113.2819-2-07-						0-M34669	17399	-55	-25	17	510	5030	38	-25	-25	-200	-4	247
30-45.4403-113.3219-2-07-						0-M34669	5360	-55	-25	-4	536	2174	12	-25	-25	-200	-4	203
30-45.4347-113.3192-2-07-						0-M34670	6014	-55	-25	-4	297	1618	8	-25	-25	-200	-4	107
30-45.4178-113.3017-2-07-						0-M34671	10375	-55	-25	7	612	2771	38	-25	-25	-200	6	159
30-45.3986-113.3056-2-07-						0-M34672	4545	-55	-25	-4	421	1330	17	-25	-25	-200	-4	208
30-45.3936-113.3056-2-07-						0-M34673												
30-45.3817-113.3397-2-07-						0-M34674	14936	-55	-25	-4	132	4136	8	-25	-25	279	-4	91
30-45.2389-113.4778-2-07-						0-M34675	7769	-55	-25	8	1002	3431	36	-25	-25	-200	-4	169
30-45.2431-113.4694-2-06-						0-M34676	8029	-55	-25	-4	184	4107	-3	-25	-25	-200	-4	118
30-45.4772-113.4853-2-07-						0-M34678	21165	-55	-25	27	2103	6373	405	-25	-25	-200	-4	160
30-45.4486-113.4542-2-07-						0-M34679												
30-45.4358-113.4594-2-07-						0-M34680	7314	-55	-25	-4	476	1468	73	-25	-25	-200	-4	88
30-45.4114-113.4306-2-07-						0-M34681	17774	-55	-25	-4	777	5921	33	-25	-25	-200	-4	105
30-45.3717-112.9633-2-07-						0-M34683	5700	-55	-25	-4	232	1397	8	-25	-25	-200	-4	-50
30-45.3717-112.9650-2-07-						0-M34684	10667	-55	-25	-4	93	1996	-3	-25	-25	-200	-4	-50
30-45.3461-112.9461-2-07-						0-M34685	8939	-55	-25	6	61	2950	-3	-25	30	406	-4	76
30-45.4122-113.4039-2-07-						0-M34686	12588	-55	-25	-4	96	4258	-3	-25	-25	248	-4	242

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

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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 (umho/cm)	SCINTILOMETER (nL/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
							DATE	HOUR																										
30-45.4047-113.4019-2-07-						0-M34687-09/14/76-12-	20-7.5-C-	5.9-	38-							8-3-1-3-6-3-2-1-2-1-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.3936-113.3919-2-06-						0-M34688-09/14/76-13-	20-14.0-C-	5.9-	1700-							8-3-1-4-1-2-2-1-3-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	
30-45.3794-113.3742-2-07-						0-M34689-09/14/76-13-	20-9.0-C-	5.9-	40-							8-3-1-4-1-4-2-1-2-1-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.20	
30-45.4939-112.9081-2-07-						0-M34690-09/14/76-11-	13-6.0-C-	5.9-	32-							12-3-6-4-6-4-2-1-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.67	
30-45.4928-112.8900-2-07-						0-M34691-09/14/76-12-	13-9.0-C-	5.9-	40-							10-3-1-4-6-4-2-1-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.49	
30-45.1742-112.9264-2-06-						0-M34692-09/03/76-11-	18-9.8-C-	6.3-	465-							2-3-7-5-6-3-3-1-2-4-4-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.55	
30-45.2025-112.8944-2-06-						0-M34694-09/03/76-13-	19-11.0-C-	6.3-	320-							2-3-4-5-6-3-3-1-2-3-3-5-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.02	
30-45.2167-112.8833-2-06-						0-M34695-09/03/76-13-	20-15.0-C-	6.8-	700-							2-3-7-5-6-2-3-1-2-4-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.2125-113.5000-2-07-						0-M34700-08/31/76-8-	16-7.5-	5.5-	40-							4-2-1-3-6-3-3-1-2-3-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.1861-113.5181-2-07-						0-M34701-08/31/76-9-	16-9.0-	5.5-	450-							2-2-1-3-6-3-3-1-2-1-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.1611-113.5000-2-07-						0-M34702-08/31/76-9-	17-9.5-	5.7-	50-							6-2-1-4-6-3-3-1-2-2-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.1542-113.4958-2-07-						0-M34703-08/31/76-9-	16-9.5-	5.5-	50-							8-2-1-5-6-3-3-1-2-1-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.1236-113.4583-2-07-						0-M34704-08/31/76-10-	17-9.5-	5.7-	45-							4-2-1-4-6-4-3-1-2-1-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.1222-113.4611-2-07-						0-M34705-08/31/76-10-	16-9.5-	5.5-	30-							8-2-1-4-6-3-3-1-2-1-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.1111-113.4514-2-07-						0-M34706-08/31/76-10-	17-10.5-	5.7-	40-							6-2-1-4-6-2-3-1-2-2-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.0917-113.4167-2-07-						0-M34707-08/31/76-11-	17-9.5-	5.7-	45-							4-2-1-4-6-4-3-1-2-2-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.0889-113.4167-2-07-						0-M34708-08/31/76-11-	17-9.5-	5.7-	30-							6-2-1-4-6-3-3-1-2-2-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.0722-113.4181-2-07-						0-M34711-08/31/76-12-	18-9.5-	5.7-	40-							2-2-1-4-6-3-3-1-2-3-2-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.0750-113.4250-2-07-						0-M34712-08/31/76-12-	18-9.5-	5.7-	40-							2-2-1-4-6-3-3-1-2-3-2-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.0514-113.4139-2-07-						0-M34713-08/31/76-12-	18-10.0-	5.7-	55-							4-2-7-4-6-3-3-1-2-2-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.0486-113.4167-2-07-						0-M34714-08/31/76-12-	18-10.5-	5.7-	55-							2-2-7-4-6-3-3-1-2-2-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.23	
30-45.0417-113.4122-2-07-						0-M34715-08/31/76-12-	19-10.5-	5.7-	35-							6-2-6-4-6-3-3-1-2-2-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.42	
30-45.0278-113.4042-2-07-						0-M34717-08/31/76-13-	19-10.5-	5.7-	45-							4-2-1-4-6-3-3-1-2-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.0111-113.3889-2-07-						0-M34718-08/31/76-13-	20-10.5-	5.9-	-							4-1-6-4-6-3-3-1-2-3-2-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.02	
30-45.0097-113.3639-2-07-						0-M34719-08/31/76-13-	19-9.5-	5.9-	65-							4-2-7-4-6-3-3-1-2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.52	
30-45.0250-113.2597-2-07-						0-M34720-09/01/76-9-	16-9.5-	5.2-	30-							18-2-1-4-6-3-3-1-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.0278-113.2903-2-07-						0-M34721-09/01/76-9-	16-9.0-	5.2-	50-							18-2-1-5-6-3-3-1-2-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.25	
30-45.0361-113.2944-2-07-						0-M34722-09/01/76-9-	16-9.5-	5.7-	55-							14-2-7-3-6-3-3-1-2-3-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.0639-113.2806-2-07-						0-M34723-09/01/76-10-	17-9.5-	5.2-	41-							18-2-1-3-6-3-3-1-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.0722-113.3000-2-07-						0-M34724-09/01/76-10-	17-10.0-	5.2-	33-							18-2-1-4-6-3-3-1-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.44	
30-45.0875-113.3167-2-07-						0-M34725-09/01/76-10-	17-9.5-	5.7-	22-							14-2-1-4-6-3-3-1-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.0944-113.3111-2-07-						0-M34726-09/01/76-10-	17-10.0-	5.2-	55-							18-2-1-4-6-3-3-1-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.1194-113.2611-2-07-						0-M34727-09/01/76-11-	17-10.0-	5.7-	44-							14-2-1-4-6-3-3-1-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.17	
30-45.1333-113.2847-2-07-						0-M34728-09/01/76-11-	18-10.5-	5.5-	37-							9-2-1-4-6-3-3-1-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.1125-113.4222-2-07-						0-M34729-09/01/76-11-	18-9.5-	5.5-	60-							14-2-1- - -3-3-1-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.1375-113.3944-2-07-						0-M34730-09/01/76-12-	19-10.0-	5.7-	55-							23-2-1-4-6-3-3-2-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.1292-113.3639-2-07-						0-M34731-09/01/76-12-	18-9.5-	5.2-	37-							9-2-5-3-6-3-3-1-2-3-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.07	
30-45.1389-113.4083-2-07-						0-M34732-09/01/76-12-	18-9.5-	5.5-	19-							18-2-1-4-6-3-3-1-2-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.1583-113.3875-2-07-						0-M34733-09/01/76-13-	18-9.5-C-	5.2-	39-							14-2-4-4-6-3-3-1-2-1-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.1639-113.4069-2-07-						0-M34734-09/01/76-13-	18-8.5-	5.5-	18-							23-2-6-4-6-3-3-1-7-1-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.1778-113.3986-2-07-						0-M34735-09/01/76-14-	18-9.5-	5.5-	33-							18-2-4-4-6-3-3-1-2-1-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.18	
30-45.2417-113.2556-2-07-						0-M34736-09/01/76-15-	19-9.5-	5.5-	65-							18-2-4-4-3-3-3-1-2-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.2403-113.2569-2-07-						0-M34737-09/01/76-15-	19-9.0-	5.5-	65-							18-2-4-4-6-3-3-1-2-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.25	
30-45.2083-113.2764-2-07-						0-M34738-09/01/76-16-	19-10.0-C-	5.2-	44-							18-2-4-3-6-3-3-1-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.2069-113.2778-2-07-						0-M34739-09/01/76-																												

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	LAS. SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per billion (ppb)											
							Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.4047-113.4019-2-07-			0-M34597				6171	-55	-25	-4	151	995	6	-25	-25	-200	-4	51
30-45.3936-113.3919-2-06-			0-M34688				30679	-55	-25	-4	111	5438	6	-25	-25	-200	-4	135
30-45.3794-113.3742-2-07-			0-M34689				5297	-55	-25	-4	37	802	-3	-25	-25	-200	-4	147
30-45.4939-112.9081-2-07-			0-M34690															
30-45.4928-112.8900-2-07-			0-M34691				6819	-55	-25	-4	199	1137	6	-25	-25	-200	-4	171
30-45.1742-112.9264-2-06-			0-M34692				68393	-55	-25	-4	1292	17904	14	-25	-25	1612	-4	484
30-45.2025-112.8944-2-06-			0-M34694				48337	81	-25	-4	506	12604	53	-25	-25	1352	-4	116
30-45.2167-112.8833-2-06-			0-M34695				89169	85	-25	-4	145	27744	73	-25	-25	2005	-4	174
30-45.2125-113.5000-2-07-			0-M34700				3396	-55	-25	-4	27	1677	-3	-25	-25	-200	-4	70
30-45.1861-113.5181-2-07-			0-M34701				2586	-55	-25	-4	-25	1673	-3	-25	-25	-200	-4	-50
30-45.1611-113.5000-2-07-			0-M34702				6272	-55	-25	-4	32	649	4	-25	-25	-200	-4	-50
30-45.1542-113.4958-2-07-			0-M34703				2732	-55	-25	-4	-25	540	-3	-25	-25	-200	-4	-50
30-45.1236-113.4583-2-07-			0-M34704				5849	-55	-25	-4	39	753	8	-25	-25	-200	-4	136
30-45.1222-113.4611-2-07-			0-M34705				1725	-55	-25	-4	57	735	-3	-25	-25	-200	-4	106
30-45.1111-113.4514-2-07-			0-M34706				4099	-55	-25	-4	96	751	-3	-25	-25	-200	-4	96
30-45.0917-113.4167-2-07-			0-M34707				4830	69	-25	-4	197	969	7	-25	-25	-200	-4	193
30-45.0889-113.4167-2-07-			0-M34708				4662	59	-25	-4	281	1124	7	-25	-25	-200	-4	241
30-45.0722-113.4181-2-07-			0-M34711				7056	87	33	7	1409	2324	-3	-25	-25	-200	81	495
30-45.0750-113.4250-2-07-			0-M34712				7757	-55	-25	-4	1553	2547	-3	-25	-25	-200	84	339
30-45.0514-113.4139-2-07-			0-M34713				4541	-55	-25	-4	82	1184	-3	-25	-25	-200	-4	185
30-45.0496-113.4167-2-07-			0-M34714				4318	-55	-25	-4	183	1025	6	-25	-25	-200	-4	309
30-45.0417-113.4122-2-07-			0-M34715				4009	-55	-25	-4	42	965	-3	-25	-25	-200	-4	75
30-45.0278-113.4042-2-07-			0-M34717				4606	-55	-25	-4	144	1123	-3	-25	-25	-200	-4	169
30-45.0111-113.3889-2-07-			0-M34718				23220	99	-25	6	112	9248	-3	-25	-25	-200	-4	227
30-45.0097-113.3639-2-07-			0-M34719				15637	72	-25	5	53	6352	-3	-25	30	-200	-4	147
30-45.0250-113.2597-2-07-			0-M34720				20750	114	-25	5	375	3434	10	-25	-25	-200	-4	111
30-45.0278-113.2903-2-07-			0-M34721				3183	-55	-25	-4	534	1218	17	-25	-25	-200	-4	150
30-45.0361-113.2944-2-07-			0-M34722				3754	-55	-25	-4	201	1392	20	-25	-25	-200	-4	119
30-45.0639-113.2806-2-07-			0-M34723				4431	-55	-25	-4	296	1624	-3	-25	-25	-200	-4	120
30-45.0722-113.3000-2-07-			0-M34724				2523	-55	-25	-4	209	913	12	-25	-25	-200	-4	460
30-45.0875-113.3167-2-07-			0-M34725				2002	-55	46	11	212	935	-3	-25	41	-200	9	340
30-45.0944-113.3111-2-07-			0-M34726				10220	64	30	12	816	2255	23	-25	-25	-200	29	507
30-45.1194-113.2611-2-07-			0-M34727				7220	57	-25	5	621	3276	5	-25	-25	-200	8	328
30-45.1333-113.2847-2-07-			0-M34728				6839	-55	-25	-4	672	1612	19	-25	-25	-200	15	240
30-45.1125-113.4222-2-07-			0-M34729				7620	60	-25	6	904	1722	24	-25	-25	-200	47	218
30-45.1375-113.3944-2-07-			0-M34730				5846	75	-25	-4	666	1194	13	-25	-25	-200	12	158
30-45.1292-113.3639-2-07-			0-M34731				13996	106	38	13	2033	3500	58	-25	-25	-200	39	32696
30-45.1389-113.4083-2-07-			0-M34732				2321	-55	-25	6	182	981	-3	-25	-25	-200	-4	267
30-45.1583-113.3875-2-07-			0-M34733				1889	-55	-25	5	193	569	11	-25	-25	-200	-4	223
30-45.1639-113.4069-2-07-			0-M34734				1945	85	-25	-4	108	608	-3	-25	-25	-200	-4	195
30-45.1778-113.3986-2-07-			0-M34735				3374	-55	-25	-4	79	1199	-3	-25	26	-200	-4	-50
30-45.2417-113.2556-2-07-			0-M34736				3577	-55	-25	-4	804	1371	25	-25	-25	-200	-4	-50
30-45.2403-113.2569-2-07-			0-M34737				2945	-55	-25	-4	122	1165	11	-25	-25	-200	-4	-50
30-45.2083-113.2764-2-07-			0-M34738				3341	-55	-25	-4	95	1181	-3	-25	-25	-200	-4	-50
30-45.2069-113.2778-2-07-			0-M34739				3188	-55	-25	-4	126	1105	4	-25	-25	-200	-4	-50
30-45.6386-113.0725-2-07-			0-M34740				8151	-55	-25	-4	892	1884	47	-25	-25	-200	-4	-50
30-45.7197-113.0244-2-07-			0-M34741				4382	-55	-25	-4	1320	735	11	-25	-25	-200	-4	-50
30-45.6928-113.0369-2-07-			0-M34742				59395	-55	-25	-4	105	25525	-3	-25	-25	490	-4	73
30-45.6853-113.0736-2-07-			0-M34743				2195	-55	-25	-4	210	699	12	-25	-25	-200	-4	131
30-45.6433-113.0642-2-07-			0-M34744				7299	-55	-25	-4	730	1263	33	-25	-25	-200	-4	-50
30-45.6794-113.0656-2-07-			0-M34745				8628	-55	-25	6	731	2295	40	-25	-25	-200	-4	265

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

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DOE SAMPLE NUMBER						LASI SAMPLE LOCATION NUMBER AND FIELD DATA																		U CONCENTRATION										
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASI SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (umho/cm)	SCINTILOMETER (uL 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
							DATE	HOUR																										
30-45.7433-113.0158-2-07-						0-M34746-08/24/76-16-	19-10.5-C-	5.7-							27-2-3-3-3-3-1-3-3-3-4-1-	-3-																	0.10	
30-45.7086-113.1786-2-07-						0-M34747-08/25/76-12-	18-9.5-C-	5.5-						50-	22-2-7-3-6-3-3-1-2-3-3-4-1-	-3-																	0.10	
30-45.6992-113.1850-2-07-						0-M34748-08/25/76-12-	18-10.5-C-	5.2-						30-	11-2-1-4-6-3-3-2-2-2-3-3-1-	-3-																	0.44	
30-45.6878-113.1844-2-07-						0-M34749-08/25/76-13-	17-10.0-C-	5.2-						25-	11-2-1-4-6-3-3-1-2-1-3-4-1-	-3-																	0.44	
30-45.6772-113.1944-2-07-						0-M34750-08/25/76-13-	17-9.5-C-	5.2-						30-	11-2-7-4-6-2-3-1-3-1-3-4-1-	-1-																	0.10	
30-45.6781-113.1817-2-07-						0-M34751-08/25/76-13-	17-9.5-C-	5.5-						24-	11-2-1-4-6-3-3-1-2-1-3-4-2-	-3-																	0.10	
30-45.6764-113.1767-2-07-						0-M34752-08/25/76-13-	17-9.5-C-	5.2-						21-	27-2-1-4-6-3-3-1-2-1-3-4-2-	-3-																	0.78	
30-45.6519-113.1392-2-07-						0-M34753-08/25/76-13-	16-10.5-C-	5.5-						36-	16-1-6-5-6-2-3-2-2-3-2-3-2-	-3-																	1.09	
30-45.6611-113.1339-2-07-						0-M34754-08/25/76-14-	17-9.5-C-	5.5-						34-	16-2-7-6-6-2-3-1-2-2-3-4-2-	-3-																	0.10	
30-45.6558-113.1292-2-07-						0-M34755-08/25/76-14-	18-10.0-C-	5.2-						18-	11-2-1-4-6-3-3-1-2-1-3-4-2-	-3-																	0.23	
30-45.6711-113.1128-2-07-						0-M34756-08/25/76-14-	19-9.5-C-	5.2-						29-	11-2-3-4-6-3-3-1-2-1-3-4-2-	-3-																	0.32	
30-45.2834-113.6367-2-07-						0-M34757-08/25/76-12-	11-10.8-	5.2-						17-	4-3-7-1-7-5-4-1-2-1-4-5-3-	-1-																	0.20	
30-45.2897-113.6372-2-07-						0-M34758-08/25/76-12-	12-9.8-	5.2-						23-	2-3-7-2-7-4-3-1-2-1-4-5-2-	-1-																	0.24	
30-45.2328-112.9897-2-07-						0-M34759-09/03/76-15-	22-12.5-C-	6.3-						180-	2-4-3-4-3-3-1-2-3-3-3-1-	-3-																	0.10	
30-45.2078-112.9983-2-07-						0-M34751-09/03/76-16-	24-13.5-C-	6.5-						240-	0-4-5-6-3-3-3-2-4-4-3-1-	-3-																	0.51	
30-45.1994-112.7514-2-07-						0-M34753-09/04/76-12-	20-13.0-C-	6.5-						280-	2-4-5-6-3-3-1-2-3-3-3-1-	-3-																	1.33	
30-45.3089-112.9264-2-07-						0-M34755-09/04/76-16-	24-10.5-C-	5.9-						240-	2-3-1-2-3-3-3-1-2-2-3-4-1-	-1-																	0.47	
30-45.3058-112.9275-2-07-						0-M34756-09/04/76-17-	23-9.8-C-	5.9-						175-	4-4-3-3-4-3-1-2-3-3-5-1-	-3-																	1.17	
30-45.3061-112.9272-2-07-						0-M34757-09/04/76-17-	23-12.5-C-	5.5-						80-	4-4-2-1-4-3-3-1-2-3-4-4-1-	-3-																	0.31	
30-45.2892-112.8844-2-07-						0-M34758-09/04/76-17-	23-12.5-C-	5.7-						115-	2-3-1-3-3-3-3-1-2-3-3-3-1-	-3-																	1.13	
30-45.3531-112.9014-2-07-						0-M34759-09/05/76-10-	14-6.5-	5.7-						170-	18-4-3-6-3-3-1-2-3-3-4-1-	-3-																	0.46	
30-45.3536-112.9033-2-07-						0-M34770-09/05/76-11-	15-8.0-C-	5.7-						130-	18-4-2-6-4-3-1-2-3-3-4-1-	-3-																	1.33	
30-45.3381-112.8989-2-07-						0-M34771-09/05/76-11-	16-7.0-C-	5.7-						230-	18-4-4-6-3-3-1-2-3-3-4-1-	-3-																	1.03	
30-45.2953-112.9828-2-07-						0-M34772-09/05/76-12-	23-10.0-C-	5.5-						47-	32-4-3-6-3-3-2-2-3-3-4-1-	-3-																	0.94	
30-45.2606-112.9858-2-07-						0-M34773-09/05/76-13-	23-11.5-C-	5.5-						80-	28-4-3-3-3-3-1-2-3-3-4-1-	-3-																	0.72	
30-45.3172-112.8750-2-07-						0-M34775-09/05/76-15-	26-13.5-C-	6.3-						265-	32-4-6-6-2-3-1-2-3-3-4-2-	-3-																	1.61	
30-45.3486-112.8522-2-06-						0-M34777-09/05/76-15-	26-17.0-C-	5.2-						45-	28-4-1-6-3-3-1-2-1-3-5-2-	-3-																	0.81	
30-45.2986-112.8200-2-06-						0-M34778-09/05/76-16-	27-12.2-C-	6.3-						400-	18-4-3-1-3-3-1-2-3-3-4-2-	-3-																	2.72	
30-45.2661-112.8078-2-07-						0-M34780-09/05/76-16-	27-14.0-C-	5.7-						120-	9-4-3-3-4-3-1-2-4-3-2-2-	-3-																	0.60	
30-45.2389-113.0403-2-07-						0-M34781-09/07/76-10-	7-5.0-C-	6.1-						250-	4-4-3-6-3-3-1-2-4-4-3-2-	-3-																	0.47	
30-45.2350-113.0878-2-07-						0-M34782-09/07/76-11-	7-6.5-C-	5.2-						33-	8-4-3-6-3-3-1-2-4-3-3-2-	-3-																	0.10	
30-45.2356-113.1694-2-07-						0-M34783-09/07/76-12-	5-4.5-C-	5.2-						16-	3-4-3-6-3-3-1-2-1-3-4-2-	-3-																	0.10	
30-45.2372-113.1708-2-07-						0-M34784-09/07/76-12-	8-6.0-C-	5.2-						15-	6-4-3-1-4-3-1-2-1-3-4-2-	-3-																	0.35	
30-45.2222-113.1714-2-07-						0-M34785-09/07/76-13-	5-6.2-C-	5.2-						24-	8-4-3-4-3-3-1-2-1-3-4-2-	-3-																	0.72	
30-45.2125-113.1444-2-07-						0-M34786-09/07/76-13-	7-12.0-C-	5.2-						31-	6-4-3-6-3-3-1-2-3-3-3-2-	-3-																	0.10	
30-45.1944-113.0917-2-07-						0-M34787-09/07/76-15-	11-7.5-C-	5.7-						170-	4-4-3-4-3-3-1-2-3-3-3-2-	-3-																	1.38	
30-45.1806-113.1375-2-07-						0-M34788-09/07/76-16-	11-9.5-	5.5-						43-	6-4-3-4-3-3-1-2-3-3-3-2-	-3-																	0.10	
30-45.1681-113.2000-2-07-						0-M34789-09/07/76-17-	10-11.0-C-	5.2-						40-	8-2-4-3-4-3-3-1-2-1-3-5-2-	-3-																	0.50	
30-45.1675-113.2014-2-07-						0-M34790-09/07/76-17-	11-7.5-C-	5.2-						25-	6-2-4-3-4-3-3-1-2-1-3-4-2-	-3-																	1.85	
30-45.1681-113.2069-2-07-						0-M34791-09/07/76-17-	11-6.0-C-	5.2-						34-	6-2-4-3-4-3-3-1-2-1-3-4-2-	-3-																	0.17	
30-45.1583-113.1986-2-07-						0-M34792-09/07/76-18-	11-7.0-C-	5.2-						31-	6-2-4-3-4-3-3-1-2-1-3-4-2-	-3-																	0.33	
30-45.2167-113.0375-2-07-						0-M34793-09/08/76-9-	4-6.5-C-	5.7-						200-	12-4-3-6-4-3-1-2-3-3-3-1-	-3-																	0.10	
30-45.2208-113.0583-2-07-						0-M34794-09/08/76-10-	5-10.0-C-	5.9-						270-	8-4-5-6-3-3-1-2-3-3-3-1-	-3-																	0.10	
30-45.1597-113.1611-2-07-						0-M34795-09/08/76-11-	7-5.5-C-	5.2-						46-	2-4-2-6-4-3-1-2-4-4-4-1-	-3-																	0.26	
30-45.2008-113.1903-2-07-						0-M34796-09/08/76-12-	5-3.5-C-	5.2-						30-	6-2-4-2-4-4-3-1-2-1-3-5-1-	-1-																	0.39	
30-45.1472-113.0361-2-07-						0-M34799-09/13/76-13-	27-13.8-C-	6.1-						2700-	3-4-3-6-3-3-2-2-3-2-4-1-	-3-																	8.50*	
30-45.4489-112.6514-2-07-						0-M34811-09/13/76-16-	23-9.5-C-	6.3-						650-	9-4-6-7-3-2-1-2-4-3-2-1-	-3-																	8.02	
30-45.1900-113.0222-2-07-																																		

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	LAS. SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per billion (ppb)											
							Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.7433-113.0158-2-07-	0-M34745	15582	-55	-25	-4	177	6793	-3	-25	-25	-200	-4	123					
30-45.7086-113.1786-2-07-	0-M34747	8778	-55	-25	-4	352	2027	-3	-25	-25	-200	-4	458					
30-45.6992-113.1850-2-07-	0-M34748	5466	-55	-25	-4	133	1022	-3	-25	-25	-200	-4	83					
30-45.6878-113.1844-2-07-	0-M34749	5465	-55	-25	-4	125	1226	-3	-25	-25	-200	-4	59					
30-45.6772-113.1944-2-07-	0-M34750	3765	-55	-25	-4	303	1146	-3	-25	-25	-200	-4	150					
30-45.6781-113.1817-2-07-	0-M34751	4084	-55	-25	-4	647	1279	4	-25	-25	-200	-4	377					
30-45.6764-113.1767-2-07-	0-M34752	2532	-55	35	-4	194	744	14	52	61	-200	21	-50					
30-45.6519-113.1392-2-07-	0-M34753	13793	-55	35	-4	1454	2678	208	-25	88	-200	42	-50					
30-45.6611-113.1339-2-07-	0-M34754	3560	-55	43	-4	224	1087	20	53	47	253	16	-50					
30-45.6658-113.1292-2-07-	0-M34755	2206	-55	35	9	393	821	19	59	48	270	25	-50					
30-45.6711-113.1128-2-07-	0-M34756	3543	-55	-25	-4	1157	1516	26	-25	-25	-200	37	-50					
30-45.2894-113.6367-2-07-	0-M34757	1961	-55	35	-4	81	675	4	43	62	-200	17	-50					
30-45.2897-113.6372-2-07-	0-M34758	3627	-55	44	-4	235	282	37	47	55	308	19	-50					
30-45.2328-112.9897-2-07-	0-M34759	28392	-55	-25	-4	157	10255	18	-25	66	-200	20	-50					
30-45.2078-112.9983-2-07-	0-M34761	45595	75	-25	-4	149	12105	33	-25	76	-200	26	-50					
30-45.1994-112.7514-2-07-	0-M34763	49160	-55	-25	-4	131	14230	25	-25	131	-200	26	-50					
30-45.3089-112.9264-2-07-	0-M34765	46079	-55	-25	-4	121	16078	18	-25	72	-200	22	-50					
30-45.3058-112.9275-2-07-	0-M34766	31708	-55	-25	-4	165	10062	22	-25	50	-200	19	-50					
30-45.3061-112.9272-2-07-	0-M34767	15652	-55	-25	-4	379	4818	28	-25	-25	-200	9	-50					
30-45.2892-112.8844-2-07-	0-M34768	17757	-55	-25	-4	132	5400	14	-25	44	-200	16	61					
30-45.3531-112.9014-2-07-	0-M34769	36628	67	-25	-4	1775	5897	47	-25	54	-200	42	-50					
30-45.3536-112.9033-2-07-	0-M34770	21275	-55	-25	-4	116	5377	12	-25	41	-200	12	-50					
30-45.3381-112.8989-2-07-	0-M34771	41705	-55	-25	-4	169	15438	16	-25	81	-200	22	-50					
30-45.2953-112.9828-2-07-	0-M34772	6095	-55	-25	-4	501	2433	26	-25	41	-200	20	-50					
30-45.2606-112.9858-2-07-	0-M34773	11567	-55	-25	-4	570	4166	28	-25	56	-200	22	-50					
30-45.3172-112.8750-2-07-	0-M34776	32352	64	-25	-4	122	20142	22	-25	-25	-200	17	-50					
30-45.3486-112.8522-2-06-	0-M34777	6145	-55	-25	-4	307	2671	24	-25	56	-200	18	-50					
30-45.2986-112.8200-2-06-	0-M34778	77215	86	-25	-4	113	22513	30	-25	97	-200	22	-50					
30-45.2661-112.8078-2-07-	0-M34790	22940	-55	27	-4	176	6509	27	-25	83	-200	19	-50					
30-45.2389-113.0403-2-07-	0-M34781	45261	-55	-25	-4	1084	18371	387	-25	101	-200	34	-50					
30-45.2350-113.0878-2-07-	0-M34782	5060	-55	31	-4	551	1619	54	49	84	215	23	-50					
30-45.2356-113.1694-2-07-	0-M34783	2058	-55	36	7	609	655	79	27	43	216	15	-50					
30-45.2372-113.1708-2-07-	0-M34784	1631	-55	48	9	134	744	16	64	58	338	18	-50					
30-45.2222-113.1714-2-07-	0-M34785	2855	-55	40	9	879	955	166	60	88	1701	23	54					
30-45.2125-113.1444-2-07-	0-M34786	3615	-55	42	6	994	1203	50	73	73	285	76	-50					
30-45.1944-113.0917-2-07-	0-M34787	22313	-55	-25	-4	330	8438	50	-25	56	-200	22	116					
30-45.1806-113.1375-2-07-	0-M34788	3841	-55	67	9	227	1941	26	109	116	598	29	-50					
30-45.1681-113.2000-2-07-	0-M34789	2772	-55	-25	8	265	898	23	-25	-25	-200	18	-50					
30-45.1675-113.2014-2-07-	0-M34790	5542	-55	32	-4	6440	2532	776	-25	58	-200	187	170					
30-45.1681-113.2069-2-07-	0-M34791	2006	-55	-25	-4	314	1111	36	-25	-25	-200	22	-50					
30-45.1583-113.1986-2-07-	0-M34792	2379	-55	-25	-4	73	892	6	31	-25	-200	9	-50					
30-45.2167-113.0375-2-07-	0-M34793	24943	-55	-25	-4	291	6872	86	-25	30	-200	14	-50					
30-45.2208-113.0583-2-07-	0-M34794	29463	-55	-25	-4	134	11494	36	-25	-25	-200	16	-50					
30-45.1597-113.1611-2-07-	0-M34795	3501	-55	31	-4	52	1716	11	40	-25	-200	16	-50					
30-45.2008-113.1903-2-07-	0-M34796	1791	-55	46	5	71	749	16	77	47	487	16	-50					
30-45.1472-113.0361-2-07-	0-M34799	149000	106	-25	-4	89	40167	45	-25	-25	-200	8	64					
30-45.4489-112.6514-2-07-	0-M34811	95424	106	-25	-4	358	26637	95	-25	-25	-200	10	480					
30-45.1900-113.0222-2-07-	0-M34812	42943	66	-25	-4	35	10938	12	-25	-25	-200	5	78					
30-45.1050-113.0194-2-08-	0-M34826	87129	-55	-25	-4	640	18305	71	-25	-25	-200	8	196					
30-45.1383-113.0814-2-07-	0-M34828	33685	56	-25	-4	1608	15185	66	-25	-25	-200	-4	254					
30-45.1469-113.1233-2-07-	0-M34829	8936	71	-25	-4	181	2526	23	-25	-25	-200	-4	156					

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

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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 (umho/cm)	SOLUBLE SOLIDS (mg/l)	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
							DATE	HOUR																											
30-45.1403-113.1897-2-07-	0-M34831-09/13/76-16-	20-11.4-C-	5.2-	29-	5-4-	-2-4-4-3-1-2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.1667-113.0111-2-07-	0-M34834-09/13/76-17-	20-11.6-C-	5.7-	2200-	7-4-	-4-1-3-3-2-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.35	
30-45.0844-113.0597-2-08-	0-M34835-09/14/76-10-	8-9.3-C-	6.1-	2300-	-4-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26.20*	
30-45.0917-113.1000-2-08-	0-M34835-09/14/76-10-	10-8.8-C-	6.1-	1100-	-4-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.45	
30-45.2273-113.3056-2-07-	0-M34837-09/01/76-16-	19-9.5-C-	5.5-	63-	14-2-1-6-6-3-3-1-3-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45.2014-113.2847-2-07-	0-M34838-09/01/76-16-	19-10.0-C-	5.2-	53-	23-3-1-3-6-3-3-1-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19		
30-45.2047-113.2917-2-07-	0-M34839-09/01/76-16-	19-10.5-C-	5.5-	29-	18-3-1-3-6-3-3-1-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45.2000-113.3139-2-07-	0-M34840-09/01/76-16-	19-10.5-C-	5.5-	55-	18-3-1-5-6-3-3-1-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45.1999-113.3333-2-07-	0-M34841-09/01/76-16-	19-10.5-C-	5.5-	39-	14-2-4-3-4-3-3-1-2-1-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45.4931-113.1072-2-07-	0-M34842-09/03/76-11-	13-8.5-C-	5.5-	60-	14-2-7-4-6-3-3-1-2-4-3-2-1-	-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19		
30-45.4831-113.0697-2-07-	0-M34843-09/03/76-11-	15-8.5-C-	5.5-	42-	9-3-1-5-6-2-3-1-2-1-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45.4805-113.0689-2-07-	0-M34844-09/03/76-12-	16-8.5-C-	5.2-	90-	14-3-1-4-6-3-3-1-2-1-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.79		
30-45.4728-113.0825-2-07-	0-M34845-09/03/76-12-	16-9.5-C-	5.7-	50-	18-3-6-4-6-3-3-1-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45.4589-113.1044-2-07-	0-M34846-09/03/76-12-	17-20.5-C-	5.9-	130-	18-3-4-4-6-3-3-1-2-4-3-3-1-	-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45.4569-113.1069-2-06-	0-M34847-09/03/76-12-	17-C-	6.8-	220-	14-3-4-6-5-5-3-1-4-3-1-	-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45.4506-113.1192-2-07-	0-M34848-09/03/76-13-	17-9.5-C-	5.7-	50-	9-3-1-4-6-4-3-1-2-2-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.65		
30-45.4478-113.1222-2-07-	0-M34849-09/03/76-13-	18-9.5-C-	5.7-	38-	4-3-1-4-6-3-3-1-2-1-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.29		
30-45.4369-113.1206-2-07-	0-M34850-09/03/76-13-	18-10.0-C-	5.7-	55-	18-3-1-4-6-3-3-1-2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45.4286-113.1092-2-07-	0-M34851-09/03/76-13-	18-9.5-C-	5.5-	50-	14-3-1-4-6-3-3-1-2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45.4236-113.1181-2-07-	0-M34852-09/03/76-14-	18-9.5-C-	5.7-	45-	23-3-1-4-6-3-3-1-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45.4194-113.1083-2-07-	0-M34853-09/03/76-14-	19-10.5-C-	5.7-	47-	18-3-1-4-6-3-3-1-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10		
30-45.4135-113.1042-2-07-	0-M34855-09/03/76-15-	18-10.0-C-	5.7-	43-	14-2-1-4-6-3-3-1-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.27		
30-45.4100-113.1100-2-07-	0-M34856-09/03/76-15-	18-10.5-C-	5.2-	37-	18-3-1-4-6-3-3-1-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.71		
30-45.4044-113.1028-2-07-	0-M34857-09/03/76-15-	18-10.5-C-	5.5-	43-	18-3-1-4-6-3-3-1-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.55		
30-45.3947-113.0972-2-07-	0-M34858-09/03/76-16-	18-10.0-C-	5.7-	50-	9-3-1-4-6-3-3-1-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.44		
30-45.3889-113.0764-2-07-	0-M34859-09/03/76-16-	18-10.5-C-	5.2-	57-	4-3-1-4-6-3-3-1-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.71		
30-45.3972-113.1464-2-07-	0-M34860-09/03/76-16-	19-9.5-C-	5.5-	50-	9-3-1-4-6-3-3-1-2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.89		
30-45.3739-113.1194-2-07-	0-M34861-09/03/76-17-	19-10.5-C-	5.5-	47-	18-3-1-4-6-3-3-1-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.78		
30-45.3703-113.0858-2-07-	0-M34862-09/04/76-11-	16-9.5-C-	5.7-	85-	14-2-1-4-6-3-3-1-2-2-3-4-1-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.21		
30-45.3436-113.1014-2-07-	0-M34863-09/04/76-11-	17-9.5-C-	5.9-	100-	18-2-4-4-6-3-3-1-2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.10		
30-45.3033-113.1150-2-07-	0-M34864-09/04/76-11-	17-9.5-C-	5.2-	47-	14-2-1-4-6-3-3-1-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.43		
30-45.3069-113.0958-2-07-	0-M34865-09/04/76-11-	18-10.5-C-	5.5-	60-	9-2-1-4-6-3-3-1-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.45		
30-45.2847-113.1208-2-07-	0-M34866-09/04/76-12-	18-10.0-C-	5.7-	120-	9-2-1-4-6-3-3-1-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.70		
30-45.2761-113.1542-2-07-	0-M34867-09/04/76-12-	18-10.5-C-	5.5-	36-	14-2-1-4-6-3-3-1-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.42		
30-45.3197-113.1806-2-07-	0-M34868-09/04/76-12-	18-10.5-C-	5.5-	50-	14-2-1-4-6-3-3-1-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.66		
30-45.3267-113.1858-2-07-	0-M34869-09/04/76-12-	19-9.5-C-	5.5-	100-	18-2-1-4-6-3-3-1-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.07		
30-45.3281-113.1858-2-07-	0-M34870-09/04/76-13-	19-10.5-C-	5.5-	46-	18-2-1-4-6-3-3-1-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.46		
30-45.3467-113.1633-2-07-	0-M34871-09/04/76-13-	19-9.5-C-	5.5-	35-	9-2-1-4-6-3-3-1-2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.85		
30-45.3617-113.1442-2-07-	0-M34872-09/04/76-14-	19-10.0-C-	5.7-	120-	23-2-1-4-6-3-3-1-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.36		
30-45.3625-113.1911-2-07-	0-M34873-09/04/76-14-	19-10.5-C-	5.2-	37-	14-2-1-4-6-3-3-1-2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.60		
30-45.2581-113.1106-2-07-	0-M34874-09/04/76-15-	19-10.5-C-	5.5-	120-	18-2-1-4-6-3-3-1-2-3-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.40		
30-45.2811-113.0306-2-07-	0-M34875-09/04/76-15-	19-10.5-C-	5.5-	90-	14-2-4-4-6-3-3-1-2-3-3-4-1-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.42		
30-45.2808-113.0350-2-07-	0-M34876-09/04/76-15-	19-10.5-C-	5.5-																																

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

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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
30-45.1403-113.1897-2-07-			0-M34931				2318	65	-25	-4	112	738	7	-25	-25	-200	-4	199
30-45.1667-113.0111-2-07-			0-M34934				24035	-55	-25	-4	218	6281	23	-25	-25	-200	-4	76
30-45.0844-113.0597-2-08-			0-M34935				305000	159	-25	-4	333	78254	2672	-25	-25	-200	23	148
30-45.0917-113.1000-2-08-			0-M34936				25741	-55	-25	-4	652	6210	32	-25	-25	-200	-4	3425
30-45.2278-113.3056-2-07-			0-M34937				2285	59	-25	-4	76	829	8	-25	-25	-200	-4	119
30-45.2014-113.2847-2-07-			0-M34939				2468	82	-25	-4	81	881	-3	-25	-25	-200	-4	-50
30-45.2042-113.2917-2-07-			0-M34939				2373	83	-25	-4	107	825	-3	-25	-25	-200	6	54
30-45.2000-113.3139-2-07-			0-M34940				8610	-55	-25	-4	351	1498	-3	-25	-25	-200	11	395
30-45.1889-113.3333-2-07-			0-M34941				3780	62	-25	-4	109	1078	-3	-25	-25	-200	-4	210
30-45.4931-113.1072-2-07-			0-M34942				6919	62	-25	-4	170	922	11	-25	-25	-200	10	161
30-45.4831-113.0697-2-07-			0-M34943				3970	73	-25	17	321	506	55	-25	-25	-200	-4	299
30-45.4806-113.0689-2-07-			0-M34944				5275	66	-25	128	343	1063	622	-25	-25	-200	7	537
30-45.4728-113.0825-2-07-			0-M34945				6576	89	-25	-4	274	772	29	-25	-25	-200	8	107
30-45.4589-113.1044-2-07-			0-M34946				5621	61	-25	-4	126	1009	9	-25	-25	-200	7	112
30-45.4569-113.1069-2-06-			0-M34947				1965	70	-25	-4	43	37	-3	-25	-25	-200	7	-50
30-45.4506-113.1192-2-07-			0-M34948				6140	102	-25	-4	190	939	8	-25	32	-200	8	-50
30-45.4478-113.1222-2-07-			0-M34949				3684	71	-25	-4	89	889	7	-25	-25	-200	6	254
30-45.4369-113.1206-2-07-			0-M34950				3558	86	-25	-4	-25	960	-3	41	-25	-200	7	245
30-45.4286-113.1092-2-07-			0-M34951				4586	69	37	-4	-25	1331	7	78	103	490	17	359
30-45.4236-113.1181-2-07-			0-M34952				3572	64	-25	-4	-25	975	-3	29	77	-200	8	177
30-45.4194-113.1083-2-07-			0-M34953				3022	57	-25	-4	28	841	-3	78	59	373	11	161
30-45.4136-113.1042-2-07-			0-M34955				58677	-55	-25	-4	354	19154	35	-25	41	-200	21	195
30-45.4100-113.1100-2-07-			0-M34956				66278	-55	-25	-4	232	20877	15	-25	65	-200	20	414
30-45.4044-113.1028-2-07-			0-M34957				50541	-55	-25	-4	222	16679	18	-25	98	-200	20	246
30-45.3847-113.0972-2-07-			0-M34958				80690	-55	-25	-4	2887	21547	94	-25	63	-200	77	445
30-45.3889-113.0764-2-07-			0-M34959				66501	-55	-25	-4	417	21145	20	-25	-25	-200	21	272
30-45.3972-113.1464-2-07-			0-M34960				55322	-55	-25	-4	374	20776	22	-25	-25	-200	24	268
30-45.3739-113.1194-2-07-			0-M34961				52893	-55	-25	-4	459	17495	35	-25	-25	-200	27	68
30-45.3703-113.0858-2-07-			0-M34962				11030	-55	-25	-4	47	2350	-3	-25	31	-200	10	138
30-45.3436-113.1014-2-07-			0-M34963				13408	-55	-25	-4	50	2585	7	-25	-25	-200	12	74
30-45.3033-113.1150-2-07-			0-M34964				27840	-55	-25	-4	243	6841	41	-25	-25	-200	-4	215
30-45.3069-113.0958-2-07-			0-M34965				26905	-55	-25	-4	205	6859	46	-25	-25	-200	7	233
30-45.2847-113.1208-2-07-			0-M34966				25384	-55	-25	-4	196	6240	37	-25	-25	-200	-4	318
30-45.2761-113.1542-2-07-			0-M34967				28526	-55	-25	-4	242	7380	35	-25	-25	-200	6	237
30-45.3197-113.1806-2-07-			0-M34968				28204	-55	-25	-4	179	7272	18	-25	-25	-200	7	281
30-45.3267-113.1858-2-07-			0-M34969				28670	-55	-25	-4	243	7067	38	-25	-25	-200	-4	299
30-45.3281-113.1858-2-07-			0-M34970				29365	-55	-25	-4	250	7453	36	-25	-25	-200	-4	277
30-45.3467-113.1633-2-07-			0-M34971				29695	-55	-25	-4	232	7353	37	-25	-25	-200	-4	326
30-45.3617-113.1442-2-07-			0-M34972				29301	-55	-25	-4	234	7573	42	-25	-25	-200	-4	210
30-45.3625-113.1911-2-07-			0-M34973				26636	-55	-25	-4	338	7155	49	-25	-25	-200	-4	195
30-45.2581-113.1106-2-07-			0-M34974				26321	-55	-25	-4	223	6832	48	-25	-25	-200	-4	119
30-45.2811-113.0306-2-07-			0-M34975				26174	-55	-25	-4	207	6871	40	-25	-25	-200	5	77
30-45.2808-113.0350-2-07-			0-M34976				25826	-55	-25	-4	371	6796	45	-25	-25	-200	7	131
30-45.3072-113.0308-2-07-			0-M34977				28445	-55	-25	-4	213	7123	46	-25	-25	-200	6	166
30-45.2928-113.0081-2-06-			0-M34978				33264	-55	-25	-4	251	8136	49	-25	28	-200	7	189
30-45.4214-112.6967-2-07-			0-M34990				73521	-55	-25	-4	282	14471	61	-25	-25	-200	9	-50
30-45.4111-112.7131-2-07-			0-M34981				70961	-55	-25	-4	150	13852	45	-25	-25	-200	-4	-50
30-45.4386-112.7406-2-07-			0-M34982				8933	-55	-25	-4	37	1435	16	-25	34	-200	6	-50
30-45.4547-112.7003-2-07-			0-M34983				8681	-55	-25	-4	34	1348	6	-25	-25	-200	-4	-50
30-45.4933-112.7161-2-07-			0-M34984				13049	-55	-25	-4	54	1933	-3	-25	-25	-200	-4	285
30-45.1892-112.8553-2-06-			0-M34997				55587	67	-25	-4	-25	9533	10	-25	-25	510	-4	389

DOE SAMPLE NUMBER						LASI SAMPLE LOCATION NUMBER AND FIELD DATA																			U CONCENTRATION					
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASI SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (umho/cm)	SCINTILLOMETER (uL ppm)	FIELD DATA														WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (X) UNITS IN ppb
							DATE	HOUR								ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	
30-45.1814-112.7403-2-07-	0-M34888-09/15/76-10-	15- 8.8-C-	- 6.1-	330-	3-4-	-5-6-3-3-1-2-4-3-3-2-	-3-	-	-	-	-	-	-	-	-	1.04														
30-45.1797-112.7111-2-07-	0-M34891-09/15/76-12-	19-12.0-C-	- 6.3-	500-	5-4-	-5-6-3-3-1-2-4-3-3-2-	-3-	-	-	-	-	-	-	-	-	4.79														
30-45.0250-113.2236-2-07-	0-M34892-09/16/76-9-	13- 9.2-	- 5.7-	180-	7-4-	-2-4-3-3-1-2-3-3-4-2-	-3-	-	-	-	-	-	-	-	-	0.63														
30-45.0333-113.2111-2-07-	0-M34893-09/16/76-10-	13- 9.0-C-	- 5.7-	500-	11-4-	-6-6-2-3-2-2-4-4-3-2-	-3-	-	-	-	-	-	-	-	-	0.22														
30-45.0500-113.1847-2-07-	0-M34894-09/16/76-11-	14-11.8-C-	- 5.5-	70-	5-4-	-6-6-2-3-2-2-4-3-3-2-	-3-	-	-	-	-	-	-	-	-	0.36														
30-45.0925-113.2417-2-07-	0-M34896-09/16/76-11-	16- 8.8-C-	- 5.2-	50-	5-4-	-2-4-3-3-1-2-2-3-4-1-	-3-	-	-	-	-	-	-	-	-	0.17														
30-45.1228-113.2383-2-07-	0-M34897-09/16/76-12-	18- 8.0-C-	- 5.2-	42-	5-4-	-2-4-4-3-1-2-1-3-5-1-	-3-	-	-	-	-	-	-	-	-	0.10														
30-45.0972-113.1608-2-07-	0-M34901-09/17/76-10-	15- 9.4-C-	- 5.5-	110-	7-4-	-6-6-3-3-4-2-4-4-4-2-	-3-	-	-	-	-	-	-	-	-	0.98														
30-45.0764-113.1958-2-07-	0-M34902-09/17/76-11-	15- 9.6-C-	- 5.7-	240-	7-4-	-2-6-3-3-1-2-3-3-4-2-	-3-	-	-	-	-	-	-	-	-	0.10														
30-45.0056-112.8522-2-06-	0-M34904-09/18/76-13-	15-11.5-C-	- 5.9-	600-	4-1-1-3-7-4-3-1-	-6-4-4-3-	-3-	-	-	-	-	-	-	-	-	4.23														
30-45.0014-112.7858-2-07-	0-M34905-09/18/76-15-	15-10.5-C-	- 5.9-	500-	6-4-	-3-6-3-3-2-2-2-3-4-3-	-3-	-	-	-	-	-	-	-	-	1.99														
30-45.4597-112.5803-2-06-	0-M34914-09/05/76-15-	19- 9.5-C-	- 5.2-	47-	14-2-7-4-6-3-3-1-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	1.03														
30-45.4825-112.5742-2-06-	0-M34916-09/05/76-15-	20-10.0-C-	- 5.7-	120-	18-2-6-4-6-3-3-1-2-3-2-3-1-	-3-	-	-	-	-	-	-	-	-	-	1.67														
30-45.4608-112.5553-2-06-	0-M34917-09/05/76-16-	20-10.0-C-	- 5.7-	140-	14-2-6-4-6-3-3-1-2-3-2-4-1-	-3-	-	-	-	-	-	-	-	-	-	3.49														
30-45.3556-112.7822-2-06-	0-M34924-09/06/76-11-	16- 9.5-C-	- 6.8-	410-	14-2-6-5-6-3-3-1-2-4-3-2-4-	-3-	-	-	-	-	-	-	-	-	-	0.65														
30-45.0397-113.0583-2-07-	0-M34947-09/14/76-13-	20-11.8-C-	- 6.1-	440-	9-4-	-5-6-3-3-1-2-4-4-2-2-	-3-	-	-	-	-	-	-	-	-	3.26														
30-45.0319-113.0569-2-07-	0-M34948-09/14/76-14-	20-15.2-C-	- 5.7-	200-	13-4-	-3-6-3-3-2-2-4-4-2-2-	-3-	-	-	-	-	-	-	-	-	0.10														
30-45.0142-113.2264-2-07-	0-M34951-09/14/76-15-	20-13.0-C-	- 5.7-	180-	5-2-4-4-6-3-3-1-2-3-4-3-2-	-3-	-	-	-	-	-	-	-	-	-	0.38														
30-45.0678-112.9056-2-07-	0-M34959-09/16/76-13-	22-11.5-C-	- 6.0-	450-	3-4-	-3-4-3-2-1-2-4-3-4-2-	-3-	-	-	-	-	-	-	-	-	6.57														
30-45.0094-112.8975-2-07-	0-M34962-09/16/76-15-	23-18.0-C-	- 6.1-	600-	8-4-	-5-8-2-2-1-2-3-3-4-2-	-3-	-	-	-	-	-	-	-	-	6.03														
30-45.1206-112.8753-2-05-	0-M34963-09/17/76-11-	18-12.0-C-	- 5.7-																											

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	LAS. SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per billion (ppb)											
							Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.1814-112.7403-2-07-						0-M34888	41797	-55	-25	-4	-25	15005	-3	-25	-25	432	-4	288
30-45.1797-112.7111-2-07-						0-M34891	42656	-55	-25	-4	-25	14142	-3	-25	-25	889	5	211
30-45.0250-113.2236-2-07-						0-M34922	25851	-55	-25	-4	425	4911	12	-25	-25	-200	9	192
30-45.0333-113.2111-2-07-						0-M34893	60647	62	-25	-4	144	12385	256	-25	-25	847	-4	133
30-45.0500-113.1847-2-07-						0-M34894	7769	-55	-25	-4	229	3525	7	-25	-25	-200	-4	148
30-45.0925-113.2417-2-07-						0-M34896	5008	-55	-25	-4	67	2515	-3	-25	-25	-200	-4	210
30-45.1228-113.2383-2-07-						0-M34897	3969	-55	43	-4	63	2469	-3	-25	65	414	9	250
30-45.0972-113.1608-2-07-						0-M34901	11087	-55	-25	-4	2153	3035	-3	-25	101	634	140	-50
30-45.0764-113.1958-2-07-						0-M34922	26343	-55	207	35	120	7481	20	-25	562	3038	84	-50
30-45.0056-112.8522-2-06-						0-M34904	63312	125	288	50	93	21325	11	-25	721	4646	112	-50
30-45.0014-112.7858-2-07-						0-M34905	16502	86	277	45	68	6436	8	119	730	3755	107	-50
30-45.4597-112.5803-2-06-						0-M34914	19143	64	291	49	115	5647	11	101	775	3833	113	-50
30-45.4825-112.5742-2-06-						0-M34916	25873	102	281	47	131	6204	13	-25	747	3839	116	-50
30-45.4608-112.5553-2-06-						0-M34917	26371	93	279	47	119	6271	14	-25	720	3827	112	-50
30-45.3556-112.7822-2-06-						0-M34924	31673	107	337	56	135	12939	175	-25	833	4737	127	-50
30-45.0397-113.0583-2-07-						0-M34947	24766	129	318	53	134	9161	90	105	819	4345	123	-50
30-45.0319-113.0569-2-07-						0-M34948	20214	86	309	50	138	6093	30	135	806	4002	117	-50
30-45.0142-113.2264-2-07-						0-M34951	11409	99	331	50	163	3211	22	324	873	4243	126	-50
30-45.0678-112.9056-2-07-						0-M34959	49906	-55	-25	8	283	15790	40	-25	-25	757	6	101
30-45.0094-112.8975-2-07-						0-M34962	53536	-55	-25	9	1092	26853	135	-25	-25	1020	47	-50
30-45.1206-112.8753-2-06-						0-M34963	15055	-55	-25	5	134	2886	29	-25	-25	-200	-4	-50
30-45.1108-112.7992-2-07-						0-M34967	30211	-55	-25	-4	141	5622	18	-25	-25	301	-4	-50
30-45.1036-112.7800-2-07-						0-M34968	30809	-55	-25	-4	190	5861	34	-25	-25	-200	-4	85
30-45.1092-112.7578-2-07-						0-M34969	76905	-55	-25	-4	61	24280	8	-25	-25	1085	-4	168
30-45.0544-112.8078-2-07-						0-M34972	31179	-55	-25	-4	48	8420	-3	-25	-25	208	-4	145
30-45.3072-113.4639-2-07-						0-M34973	30136	-55	-25	13	38	6767	-3	-25	426	268	-4	277
30-45.9103-113.5686-2-07-						0-M34975	9682	-55	-25	11	82	1717	-3	-25	501	-200	-4	-50
30-45.9103-113.5708-2-07-						0-M34976	13082	-55	-25	11	107	2718	19	-25	253	-200	-4	63
30-45.9108-113.5686-2-07-						0-M34977	8992	-55	-25	17	89	1596	4	-25	2159	-200	-4	100
30-45.9789-113.5906-2-07-						0-M34979	5331	-55	-25	8	64	875	5	-25	541	-200	-4	81
30-45.9950-113.6028-2-07-						0-M34980	7137	-55	-25	6	68	844	-3	-25	165	-200	-4	76
30-45.9950-113.6036-2-07-						0-M34981	6014	-55	-25	17	86	1092	-3	-25	756	-200	-4	121
30-45.9703-113.5367-2-07-						0-M34982	9411	-55	-25	18	108	944	4	-25	1185	-200	-4	120
30-45.9925-113.5283-2-07-						0-M34983	15729	-55	-25	13	74	2933	12	-25	691	-200	-4	-50
30-45.9903-113.5067-2-07-						0-M34984	15684	-55	-25	7	73	2475	24	-25	351	-200	-4	11919
30-45.9244-113.4067-2-07-						0-M34985	5244	-55	-25	5	105	922	8	-25	553	-200	-4	458
30-45.8958-113.4253-2-07-						0-M34986	15515	-55	-25	12	761	5631	6	-25	326	-200	-4	2143
30-45.9261-113.4897-2-07-						0-M34987	8807	-55	-25	5	76	1757	6	-25	-25	-200	-4	102
30-45.8822-113.4644-2-07-						0-M34988	12841	-55	-25	6	482	3311	-3	-25	334	-200	-4	-50
30-45.8814-113.4689-2-07-						0-M34989	16593	-55	-25	21	84	3369	5	-25	327	-200	-4	1841
30-45.8036-113.5817-2-07-						0-M34990	8144	-55	-25	9	60	1088	4	-25	92	-200	-4	75
30-45.8042-113.5817-2-07-						0-M34991	9969	-55	-25	9	55	1660	-3	-25	113	-200	-4	168
30-45.8019-113.5256-2-07-						0-M34993	9832	-55	-25	13	107	1396	19	-25	413	-200	-4	5346
30-45.8022-113.5139-2-07-						0-M34994	8508	-55	-25	14	257	1848	4	-25	374	-200	-4	-50
30-45.8150-113.5039-2-07-						0-M34995	4563	-55	-25	11	133	873	-3	-25	179	-200	-4	-50
30-45.8478-113.5131-2-07-						0-M34996	16445	-55	-25	23	90	3156	18	-25	2981	-200	-4	119
30-45.9750-113.7106-2-07-						0-M34997	11459	-55	-25	10	97	1594	11	-25	276	-200	-4	-50
30-45.9064-113.6925-2-07-						0-M34998	13556	-55	-25	37	295	3185	7	-25	1552	-200	-4	-50
30-45.9019-113.6739-2-07-						0-M34999	16995	-55	-25	13	96	4047	80	-25	563	-200	-4	21885
30-45.9050-113.6447-2-07-						0-M35000	11878	-55	-25	-4	511	3765	7	-25	-25	-200	-4	-50
30-45.9025-113.6300-2-07-						0-M35001	37758	-55	-25	20	92	5556	7	-25	2215	501	-4	135

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

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DOE SAMPLE NUMBER						LASI SAMPLE LOCATION NUMBER AND FIELD DATA																		U CONCENTRATION										
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASI SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SOLITOMETER (µL 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
							DATE	HOUR																										
30-45.9031-113.6292-2-07-						0-M35002-08/30/76-12-			27-11.1-				6.0-	70-		11-3-7-7-7-4-3-2-1-2-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.7967-113.8417-2-07-						0-M35003-09/05/76-13-			27-9.8-				5.5-	90-		5-3-7-3-7-4-3-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.15	
30-45.8381-113.2494-2-07-						0-M35006-09/06/76-8-			17-10.3-				6.0-	90-		5-1-7-3-7-4-3-1-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.8183-113.2200-2-07-						0-M35007-09/06/76-9-			19-10.1-				5.8-	100-		5-1-7-3-7-3-3-1-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.7894-113.2328-2-07-						0-M35008-09/06/76-10-			20-10.3-				5.9-	90-		3-1-7-3-6-4-3-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.70	
30-45.7508-113.2283-2-07-						0-M35009-09/06/76-12-			26-9.2-C-				6.0-	30-		5-1-7-1-7-4-3-1-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.7514-113.2281-2-07-						0-M35010-09/06/76-12-			26-10.0-C-				6.0-	35-		2-1-7-1-7-4-3-1-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.7892-113.1767-2-07-						0-M35011-09/06/76-14-			28-13.2-				5.5-	45-		5-1-7-5-7-3-3-1-1-4-4-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	
30-45.8803-113.1819-2-07-						0-M35012-09/06/76-16-			26-11.2-				5.8-	90-		5-1-7-3-7-3-3-1-2-3-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.9422-113.1736-2-07-						0-M35013-09/06/76-16-			25-13.3-				5.9-	60-		5-4-5-6-3-3-1-1-4-4-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.9425-113.1722-2-07-						0-M35014-09/06/76-17-			24-12.6-				5.9-	70-		5-4-3-7-4-3-1-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.9472-113.2075-2-07-						0-M35015-09/06/76-21-			19-10.4-C-				6.0-	50-		5-4-7-7-3-3-1-3-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.60	
30-45.9828-113.1258-2-07-						0-M35016-09/07/76-8-			17-10.3-				5.3-	80-		8-3-7-6-6-3-3-1-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.41	
30-45.9881-113.1842-2-07-						0-M35018-09/07/76-10-			21-13.1-				6.0-	90-		5-3-7-3-7-4-3-1-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.13	
30-45.8872-113.0294-2-07-						0-M35019-09/07/76-12-			22-12.6-				6.0-	100-		5-3-7-6-7-4-3-1-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.7808-113.1194-2-07-						0-M35020-09/07/76-15-			19-10.7-				5.8-	90-		11-3-7-4-6-4-3-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.7811-113.1203-2-07-						0-M35021-09/07/76-15-			19-11.7-				5.6-	100-		5-3-7-4-6-4-3-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.44	
30-45.7381-113.0011-2-07-						0-M35022-09/07/76-14-			23-13.4-				5.2-	35-		11-1-7-3-6-4-3-1-2-3-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.15	
30-45.5958-113.0492-2-07-						0-M35023-09/07/76-16-			21-12.2-				5.4-	42-		8-1-6-3-6-4-3-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.5958-113.0497-2-07-						0-M35024-09/07/76-16-			21-12.8-				5.9-	40-		5-1-6-3-6-4-3-1-2-1-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.5550-113.0036-2-07-						0-M35025-09/07/76-18-			19-9.7-				5.1-	30-		5-1-7-3-6-4-3-1-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.5544-113.0042-2-07-						0-M35026-09/07/76-18-			19-11.6-				4.9-	18-		5-1-7-3-6-4-3-1-2-1-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.15	
30-45.5175-113.0014-2-07-						0-M35027-09/07/76-21-			17-11.4-				5.0-	21-		8-1-7-3-6-4-3-1-2-1-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.5175-113.0022-2-07-						0-M35028-09/07/76-21-			17-12.2-				4.8-	30-		8-1-7-3-6-4-3-1-2-1-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.5261-113.1783-2-07-						0-M35030-09/08/76-9-			17-10.1-				5.4-	20-		8-1-7-6-6-4-3-1-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.5372-113.2922-2-07-						0-M35032-09/08/76-12-			24-14.4-				5.4-	28-		5-1-7-3-6-3-3-1-2-4-4-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.5367-113.2906-2-07-						0-M35033-09/08/76-12-			24-10.1-				5.4-	29-		5-1-7-4-6-4-3-1-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.49	
30-45.5322-113.2722-2-07-						0-M35034-09/08/76-13-			25-16.3-				5.8-	20-		5-4-6-6-2-3-1-1-4-4-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.5325-113.2736-2-07-						0-M35035-09/08/76-13-			25-15.9-				5.2-	20-		5-4-5-6-2-3-1-1-4-4-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.34	
30-45.6383-113.2533-2-07-						0-M35036-09/08/76-17-			22-10.4-				5.4-	18-		5-1-7-3-6-4-3-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.26	
30-45.6289-113.2608-2-07-						0-M35037-09/08/76-18-			20-10.1-				5.9-	18-		5-1-7-3-6-4-3-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19	
30-45.6292-113.2619-2-07-						0-M35038-09/08/76-18-			20-11.1-				5.0-	19-		5-1-7-3-6-4-3-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.7319-113.9511-2-07-						0-M35039-09/09/76-8-			16-9.2-				5.6-	25-		8-3-7-3-7-4-3-1-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19	
30-45.4511-112.8358-2-06-						0-M35040-09/14/76-14-			22-12.0-C-				6.0-	2500-		8-4-4-7-2-2-1-4-3-5-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.01	
30-45.4489-112.8403-2-07-						0-M35041-09/14/76-14-			14-9.0-C-				6.0-	40-		4-4-4-6-4-2-1-2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19	
30-45.4478-112.8389-2-07-						0-M35042-09/14/76-14-			18-11.5-C-				5.9-	65-		10-4-4-6-3-2-1-2-3-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.21	
30-45.4381-112.9622-2-07-						0-M35043-09/14/76-16-			16-9.0-C-				5.9-	60-		4-4-1-2-2-1-2-3-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.58	
30-45.4281-112.9028-2-07-						0-M35045-09/14/76-17-			14-10.5-C-				5.9-	45-		12-4-4-6-6-4-2-1-2-1-3-5-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.57	
30-45.1111-112.8811-2-07-						0-M35047-09/17/76-11-			15-12.5-C-				5.7-	230-		6-4-4-8-3-2-1-2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.06	
30-45.1100-112.8478-2-07-						0-M35048-09/17/76-12-			22-10.5-C-				6.8-	1200-		8-4-4-4-2-2-2-2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.05	
30-45.1322-112.6681-2-08-						0-M35052-09/14/76-14-			21-9.9-				5.9-	550-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.10	
30-45.4447-112.8889-2-07-						0-M35056-09/20/76-12-			9-5.2-				5.5-	34-		9-3-1-4-6-3-3-1-2-1-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.41	
30-45.4158-112.8558-2-07-						0-M35057-09/20/76-12-			9-5.6-				5.7-	90-		3-2-7-4-6-3-3-1-2-2-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.31	
30-45.4161-112.8536-2-07-						0-M35058-09/20/76-12-			8-5.6-				5.2-	45-		15-3-1-6-6-4-3-1-2-1-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.56	
30-45.4042-112.8406-2-07-						0-M35059-09/20/76-13-			9-5.9-				5.7-																					

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
30-45.9031-113.6292-2-07-			0-M35007				11090	-55	-25	20	36	1731	7	-25	1251	-200	-4	-20
30-45.7969-113.8417-2-07-			0-M35003				12878	-55	-25	9	357	3116	5	-25	204	-200	-4	-50
30-45.8381-113.2494-2-07-			0-M35006				9468	-55	-25	12	61	1262	16	-25	429	-200	-4	2388
30-45.8183-113.2200-2-07-			0-M35007				22336	-55	-25	15	77	3563	7	-25	660	216	-4	-50
30-45.7894-113.2328-2-07-			0-M35008				12006	-55	-25	10	72	2940	8	-25	186	-200	-4	-50
30-45.7508-113.2283-2-07-			0-M35009				13410	-55	-25	29	195	4100	14	-25	2037	-200	-4	-50
30-45.7514-113.2281-2-07-			0-M35010				11042	-55	-25	6	62	2600	8	-25	80	-200	-4	-50
30-45.7892-113.1767-2-07-			0-M35011				14332	-55	-25	13	43	3696	15	-25	321	-200	-4	-50
30-45.8803-113.1819-2-07-			0-M35012															
30-45.9422-113.1736-2-07-			0-M35013				26669	-55	-25	16	35	8635	8	-25	259	-200	-4	-50
30-45.9425-113.1722-2-07-			0-M35014				8370	-55	-25	15	43	888	8	-25	309	-200	-4	-50
30-45.9472-113.2075-2-07-			0-M35015				21989	-55	-25	8	52	4202	7	-25	172	-200	-4	-50
30-45.9828-113.1258-2-07-			0-M35016				8394	-55	-25	16	117	1322	6	-25	128	-200	-4	-50
30-45.9881-113.1842-2-07-			0-M35018				10541	-55	-25	7	37	1312	14	-25	-25	-200	-4	3121
30-45.8872-113.0294-2-07-			0-M35019				11080	-55	-25	8	56	2706	7	-25	160	-200	-4	-50
30-45.7808-113.1194-2-07-			0-M35020				4630	-55	-25	7	62	1796	9	-25	-25	-200	-4	-50
30-45.7811-113.1203-2-07-			0-M35021				22446	-55	-25	-4	30	4166	9	-25	39	-200	-4	-50
30-45.7381-113.0011-2-07-			0-M35022				5867	-55	-25	6	67	1006	8	-25	598	-200	-4	-50
30-45.5958-113.0492-2-07-			0-M35023				11917	-55	-25	7	89	4152	8	-25	223	-200	-4	-50
30-45.5958-113.0497-2-07-			0-M35024				14056	-55	-25	7	68	4555	8	-25	246	-200	-4	-50
30-45.5550-113.0036-2-07-			0-M35025				2960	-55	-25	13	-25	990	6	-25	193	-200	-4	-50
30-45.5544-113.0042-2-07-			0-M35026				8550	-55	-25	6	48	1220	14	-25	199	-200	-4	-50
30-45.5175-113.0014-2-07-			0-M35027				12922	-55	-25	-4	-25	5868	8	-25	49	-200	-4	-50
30-45.5175-113.0022-2-07-			0-M35028				11456	-55	-25	17	45	3793	7	-25	1041	-200	-4	-50
30-45.5261-113.1783-2-07-			0-M35030				3116	-55	-25	9	81	1013	9	-25	-25	-200	-4	-50
30-45.5372-113.2922-2-07-			0-M35032				8166	-55	-25	14	32	1173	16	-25	115	-200	7	-50
30-45.5367-113.2906-2-07-			0-M35033				10788	-55	-25	21	31	4473	9	-25	947	-200	-4	-50
30-45.5322-113.2722-2-07-			0-M35034				5982	-55	-25	23	59	974	11	-25	714	-200	-4	-50
30-45.5325-113.2736-2-07-			0-M35035				10531	-55	-25	11	45	3517	8	-25	106	-200	7	-50
30-45.6383-113.2533-2-07-			0-M35036				8809	-55	-25	21	30	1196	18	-25	32	-200	5	-50
30-45.6289-113.2608-2-07-			0-M35037				6959	-55	-25	20	106	1199	13	-25	166	-200	6	-50
30-45.6292-113.2619-2-07-			0-M35038				10538	-55	-25	18	41	3187	10	-25	112	-200	7	181
30-45.7319-113.9511-2-07-			0-M35039															
30-45.4511-112.8358-2-06-			0-M35040				40267	-55	34	8	1067	9539	137	-25	-25	877	75	94
30-45.4489-112.8403-2-07-			0-M35041				6045	-55	29	5	40	788	9	-25	-25	-200	10	93
30-45.4478-112.8389-2-07-			0-M35042				12857	-55	-25	7	378	1812	35	-25	-25	211	19	151
30-45.4381-112.9622-2-07-			0-M35043				10854	-55	-25	7	193	1414	12	-25	-25	-200	7	-50
30-45.4281-112.9028-2-07-			0-M35045				7156	-55	27	5	-25	993	8	-25	-25	-200	8	-50
30-45.1111-112.8811-2-07-			0-M35047				36247	-55	26	9	333	7714	38	-25	-25	719	19	-50
30-45.1100-112.8478-2-07-			0-M35048				13989	-55	-25	-4	-25	21962	8	-25	-25	-200	-4	-50
30-45.1322-112.6681-2-08-			0-M35052				77736	-55	-25	450	510	24018	18	-25	-25	1312	19	3505
30-45.4447-112.8889-2-07-			0-M35056				4836	-55	-25	6	84	627	11	-25	-25	-200	6	-50
30-45.4158-112.8558-2-07-			0-M35057				23874	-55	31	8	65	3941	12	-25	-25	489	14	-50
30-45.4161-112.8536-2-07-			0-M35058				7044	-55	-25	7	177	1050	13	-25	-25	-200	10	-50
30-45.4042-112.8406-2-07-			0-M35059				27247	-55	28	7	41	7627	10	-25	-25	560	9	-50
30-45.0322-112.5056-2-06-			0-M35061				41136	59	-25	7	-25	3668	-3	-25	26	555	-4	220
30-45.0461-112.5467-2-07-			0-M35065				31684	-55	35	-4	-25	3188	20	31	89	-200	15	-50
30-45.0336-112.5786-2-06-			0-M35068				28995	-55	-25	-4	-25	2943	8	-25	-25	-200	-4	-50
30-45.0822-112.6075-2-06-			0-M35071				34010	60	36	-4	-25	3334	15	26	133	-200	20	-50
30-45.0906-112.5917-2-07-			0-M35072				26564	-55	107	-4	-25	3092	28	170	274	483	40	-50
30-45.1058-112.5667-2-06-			0-M35075				19324	107	238	-4	51	2316	55	416	611	2292	82	-50

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

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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)	SOLUBLE SOLIDS (mg/l)	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
							DATE	HOUR																											
30-45.1158-112.6033-2-07-	0-M35076-10/01/76-12-	14-	9.6-C-	-	5.7-	85-	18-2-6-5-6-3-3-2-2-2-3-2-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.63		
30-45.0228-112.7172-2-06-	0-M35081-10/01/76-13-	14-	8.4-	-	5.2-	34-	18-2-6-4-6-3-3-1-3-3-3-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.83		
30-45.0542-112.6819-2-06-	0-M35093-10/01/76-13-	14-	8.2-	-	5.2-	22-	14-2-6-4-6-3-3-1-2-3-3-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.19		
30-45.0986-112.7086-2-06-	0-M35086-10/01/76-15-	15-	7.9-	-	5.7-	75-	9-2-6-4-6-3-3-1-2-3-3-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.37		
30-45.0533-112.6383-2-07-	0-M35087-10/01/76-15-	15-	9.6-	-	6.3-	240-	14-2-6-4-6-3-3-2-2-2-3-3-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.10		
30-45.0206-112.4542-2-07-	0-M35093-10/03/76-10-	10-	8.2-	-	5.5-	75-	14-2-6-4-6-3-3-2-2-2-3-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.13		
30-45.0186-112.4122-2-07-	0-M35094-10/03/76-10-	10-	8.6-	-	5.7-	120-	18-2-6-4-6-3-3-2-2-2-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.16		
30-45.0228-112.3653-2-07-	0-M35097-10/03/76-11-	10-	8.4-	-	5.2-	37-	18-2-6-4-6-3-3-2-2-2-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.61		
30-45.0550-112.2386-2-07-	0-M35100-10/03/76-12-	11-	9.4-C-	-	5.7-	135-	23-2-6-4-6-3-3-2-2-2-3-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80		
30-45.0256-112.2278-2-07-	0-M35101-10/03/76-12-	11-	9.4-C-	-	5.5-	95-	18-2-6-4-6-3-3-2-2-2-3-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20		
30-45.0314-112.1333-2-07-	0-M35104-10/03/76-12-	11-	9.2-C-	-	5.7-	85-	13-2-6-4-6-3-3-2-2-2-3-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.93		
30-45.0592-112.1639-2-08-	0-M35107-10/03/76-13-	11-	7.4-C-	-	5.7-	135-	9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.15		
30-45.0681-112.2647-2-07-	0-M35112-10/03/76-15-	12-	9.4-C-	-	5.7-	165-	18-2-6-4-6-3-3-2-2-2-3-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80		
30-45.0922-112.2922-2-07-	0-M35115-10/03/76-16-	12-	9.2-C-	-	5.2-	75-	28-2-6-4-6-3-3-2-2-2-3-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.24		
30-45.1183-112.3383-2-07-	0-M35118-10/03/76-17-	12-	9.4-C-	-	5.7-	220-	18-2-6-4-6-3-3-2-2-2-3-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.08		
30-45.1200-112.3356-2-07-	0-M35119-10/03/76-17-	12-	9.2-C-	-	5.5-	175-	23-2-6-4-6-3-3-2-2-2-3-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.20		
30-45.0653-112.3439-2-06-	0-M35121-10/03/76-18-	12-	7.8-C-	-	5.2-	46-	18-2-6-4-6-3-3-1-2-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.60		
30-45.0981-112.3789-2-06-	0-M35122-10/03/76-18-	12-	8.2-C-	-	5.5-	50-	18-2-6-4-6-3-3-1-2-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.36		
30-45.0875-112.4264-2-06-	0-M35124-10/03/76-19-	12-	7.8-C-	-	5.5-	45-	23-2-6-4-6-3-3-1-2-2-3-3-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.26		
30-45.0131-112.0997-2-07-	0-M35148-10/04/76-15-	9-	7.4-C-	-	5.5-	48-	18-2-6-4-6-3-1-2-2-3-2-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.92		
30-45.0494-112.1050-2-07-	0-M35149-10/04/76-16-	9-	7.8-C-	-	5.7-	120-	18-2-6-4-6-3-3-1-2-2-3-2-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.03		
30-45.0639-112.0269-2-07-	0-M35154-10/04/76-17-	9-	9.8-	-	5.7-	220-	28-2-6-4-6-3-3-2-2-2-3-2-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.88		
30-45.0972-112.1003-2-07-	0-M35157-10/04/76-19-	9-	9.6-	-	5.7-	80-	18-2-6-4-6-3-3-2-2-2-3-2-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.96		
30-45.2203-112.4283-2-06-	0-M35158-10/05/76-9-	5-	7.4-	-	5.2-	38-	-2-6-5-6-3-3-1-2-3-2-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.70		
30-45.1728-112.4194-2-05-	0-M35162-10/05/76-10-	6-	6.4-	-	5.5-	65-	-2-6-5-6-3-3-1-2-3-2-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.11		
30-45.1264-112.4100-2-07-	0-M35167-10/05/76-12-	7-	7.8-C-	-	5.7-	135-	-2-6-4-6-3-3-1-2-4-3-2-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.10		
30-45.1553-112.3814-2-06-	0-M35169-10/05/76-12-	7-	6.6-	-	5.5-	75-	-2-6-6-6-3-3-1-2-2-3-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.79		
30-45.1856-112.3686-2-06-	0-M35171-10/05/76-13-	7-	5.6-	-	5.2-	22-	-2-6-4-6-3-3-1-3-2-3-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.00*		
30-45.1539-112.3531-2-05-	0-M35172-10/05/76-13-	7-	6.2-C-	-	5.7-	110-	-2-6-5-6-3-3-1-4-2-2-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.46		
30-45.1636-112.3267-2-07-	0-M35173-10/05/76-14-	8-	7.8-	-	5.7-	140-	-2-6-4-6-3-3-1-2-4-3-2-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50		
30-45.1567-112.3267-2-07-	0-M35174-10/05/76-14-	8-	6.4-C-	-	5.5-	160-	-2-6-4-6-3-3-1-2-2-3-2-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.61		
30-45.1264-112.3400-2-07-	0-M35175-10/05/76-15-	8-	6.4-	-	5.5-	180-	-2-6-4-6-3-3-1-2-2-2-2-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50		
30-45.1625-112.2883-2-06-	0-M35176-10/05/76-15-	8-	6.8-	-	5.2-	55-	-2-6-4-6-3-3-1-3-3-3-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.08		
30-45.1869-112.3064-2-05-	0-M35177-10/05/76-16-	8-	7.4-	-	5.2-	47-	-2-6-4-6-3-3-1-4-3-2-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.92		
30-45.1378-112.3175-2-06-	0-M35178-10/05/76-16-	8-	6.6-	-	5.5-	75-	-2-6-4-6-3-3-1-2-2-3-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50		
30-45.7144-112.7031-2-07-	0-M35181-10/05/76-11-	13-	5.8-	-	5.7-	240-	3-4-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.20		
30-45.7428-112.6700-2-07-	0-M35184-10/05/76-12-	13-	4.8-	-	5.7-	330-	11-3-6-4-6-4-3-1-2-1-3-5-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.16		
30-45.7436-112.6700-2-07-	0-M35185-10/05/76-12-	13-	5.8-	-	5.7-	210-	11-3-6-4-6-3-3-1-2-3-3-4-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.45		
30-45.6675-112.6767-2-07-	0-M35187-10/05/76-13-	18-10.8-	-	-	5.9-	470-	5-4-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.14		
30-45.6825-112.6567-2-07-	0-M35188-10/05/76-14-	18-	9.6-	-	5.9-	400-	5-4-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.07		
30-45.7017-112.6294-2-07-	0-M35189-10/05/76-14-	16-	7.4-	-	5.7-	340-	7-4-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.47		
30-45.7014-112.6286-2-07-	0-M35190-10/05/76-14-	16-	6.8-C-	-	5.9-	340-	11-4-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.46		
30-45.6219-112.7006-2-07-	0-M35192-10/05/76-15-	17-	8.2-	-	5.9-	300-	7-4-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.11		
30-45.6250-112.7194-2-07-	0-M35193-10/05/76-15-	17-	8.2-	-	5.7-	300-	7-3-5-5-6-3-3-1-2-3-3-3-2-	-</																											

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

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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
30-45.1158-112.6033-2-07-			0-M35076			20202	81	220	-4	31	2258	49	392	615	2110	80	-50	
30-45.0228-112.7172-2-05-			0-M35091			18074	84	249	-4	33	1725	48	458	651	2436	89	-50	
30-45.0542-112.6819-2-05-			0-M35083			26559	102	217	-4	40	2493	46	354	582	1673	77	-50	
30-45.0986-112.7086-2-05-			0-M35086			24431	112	196	-4	-25	2756	51	314	536	1461	69	-50	
30-45.0533-112.6383-2-07-			0-M35087			33738	109	207	-4	38	2790	53	319	581	1280	75	251	
30-45.0206-112.4542-2-07-			0-M35093			27552	148	-25	-4	-25	22417	33	55	82	-200	6	131	
30-45.0186-112.4122-2-07-			0-M35094			65398	146	-25	-4	157	33323	36	-25	51	-200	11	-50	
30-45.0228-112.3653-2-07-			0-M35097			29751	128	-25	-4	-25	21208	17	74	74	-200	6	-50	
30-45.0550-112.2386-2-07-			0-M35100			27439	127	-25	-4	-25	21125	19	28	63	-200	5	-50	
30-45.0256-112.2278-2-07-			0-M35101			53500	101	-25	-4	-25	21656	16	-25	42	-200	8	-50	
30-45.0314-112.1333-2-07-			0-M35104			25651	90	-25	-4	-25	20819	16	-25	46	-200	7	-50	
30-45.0592-112.1639-2-08-			0-M35107			30112	87	-25	-4	-25	3960	14	-25	78	-200	7	-50	
30-45.0691-112.2647-2-07-			0-M35112			24591	63	-25	-4	-25	21009	17	-25	75	-200	7	-50	
30-45.0922-112.2922-2-07-			0-M35115			25592	90	-25	-4	-25	22853	17	-25	83	-200	7	-50	
30-45.1183-112.3383-2-07-			0-M35118			48521	89	-25	-4	-25	20848	14	-25	74	-200	10	-50	
30-45.1200-112.3356-2-07-			0-M35119			48233	89	-25	-4	27	21057	19	-25	75	-200	11	-50	
30-45.0653-112.3439-2-06-			0-M35121			22650	81	-25	-4	-25	22490	26	58	80	-200	7	-50	
30-45.0981-112.3789-2-06-			0-M35122			20413	106	-25	-4	-25	23529	22	53	131	-200	10	-50	
30-45.0875-112.4264-2-06-			0-M35124			36753	120	-25	-4	-25	21272	23	-25	118	-200	14	-50	
30-45.0131-112.0997-2-07-			0-M35148			33542	95	-25	-4	87	26430	31	-25	56	-200	13	-50	
30-45.0494-112.1050-2-07-			0-M35149			34400	95	-25	-4	-25	28658	28	-25	83	-200	10	-50	
30-45.0639-112.0269-2-07-			0-M35154			34178	85	-25	-4	41	28068	30	-25	102	-200	13	-50	
30-45.0972-112.1003-2-07-			0-M35157			33973	86	-25	-4	-25	27096	20	-25	81	-200	6	-50	
30-45.2203-112.4283-2-06-			0-M35159			46926	91	-25	-4	38	17104	22	-25	45	-200	9	66	
30-45.1728-112.4194-2-06-			0-M35162			59011	126	-25	-4	129	21572	32	-25	45	-200	12	-50	
30-45.1264-112.4100-2-07-			0-M35167			40679	138	-25	-4	55	15667	18	-25	-25	-200	-4	-50	
30-45.1553-112.3814-2-06-			0-M35169			48699	111	-25	-4	43	18099	16	-25	-25	-200	-4	-50	
30-45.1356-112.3686-2-06-			0-M35171			45180	140	-25	-4	30	17216	22	-25	59	-200	-4	-50	
30-45.1539-112.3531-2-06-			0-M35172			40208	113	-25	-4	45	15412	22	-25	-25	-200	-4	-50	
30-45.1636-112.3267-2-07-			0-M35173			43643	105	-25	-4	39	16747	22	-25	-25	-200	-4	145	
30-45.1567-112.3267-2-07-			0-M35174			42213	98	-25	-4	-25	16270	10	-25	68	-200	6	-50	
30-45.1264-112.3400-2-07-			0-M35175			48514	81	-25	-4	193	17962	24	-25	-25	-200	10	-50	
30-45.1625-112.2883-2-06-			0-M35176			49987	-55	-25	-4	108	18567	28	-25	87	-200	12	-50	
30-45.1869-112.3064-2-06-			0-M35177			46411	-55	-25	-4	77	16454	28	-25	135	-200	14	-50	
30-45.1878-112.3175-2-06-			0-M35178			53022	-55	-25	-4	49	19661	20	-25	53	-200	8	-50	
30-45.7144-112.7031-2-07-			0-M35181			42941	56	-25	-4	1442	14179	61	-25	140	-200	14	-50	
30-45.7428-112.6700-2-07-			0-M35184			45865	61	-25	-4	152	18524	33	-25	85	-200	13	-50	
30-45.7436-112.6700-2-07-			0-M35185			36552	62	-25	-4	435	11570	54	-25	91	-200	13	-50	
30-45.6675-112.6767-2-07-			0-M35187			68487	71	-25	-4	442	32927	45	-25	132	-200	18	-50	
30-45.6825-112.6567-2-07-			0-M35189			71106	84	-25	-4	103	33029	38	-25	115	-200	17	-50	
30-45.7017-112.6294-2-07-			0-M35189			68749	74	-25	-4	60	32158	34	-25	119	-200	22	-50	
30-45.7014-112.6286-2-07-			0-M35190			62520	64	-25	-4	70	29383	39	-25	134	-200	22	-50	
30-45.6219-112.7006-2-07-			0-M35192			56451	-55	-25	-4	66	14874	39	-25	112	-200	17	65	
30-45.6250-112.7194-2-07-			0-M35193			54727	-55	-25	-4	71	13777	55	-25	123	-200	18	-50	
30-45.6431-112.7189-2-06-			0-M35195			58218	101	-25	13	120	46038	19	-25	-25	1444	10	346	
30-45.5917-112.7403-2-07-			0-M35197			46276	-55	33	-4	51	5967	30	-25	170	-200	20	-50	
30-45.5947-112.7908-2-07-			0-M35199			34161	-55	-25	-4	212	10233	58	-25	136	-200	25	-50	
30-45.5889-112.8575-2-07-			0-M35200			35196	-55	48	-4	110	4849	39	-25	170	-200	23	-50	
30-45.5919-112.8089-2-07-			0-M35201			43991	57	50	-4	200	5800	36	-25	175	-200	27	-50	
30-45.5761-112.8028-2-06-			0-M35202			60455	108	67	-4	214	10356	88	-25	234	-200	37	-50	
30-45.6311-112.6739-2-07-			0-M35203			60569	100	45	-4	113	19313	58	-25	247	-200	41	-50	

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)	SCINTILLATOR (eV, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER ROW	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
							DATE	HOUR																										
30-45.6478-112.6347-2-07-	0-M35205-10/06/76-15-	14-	9.0-	-	5.7-	220-	-4-	-4-6-3-3-1-2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.07			
30-45.6597-112.6033-2-07-	0-M35208-10/06/76-16-	18-	9.0-	-	5.5-	150-	-3-7-3-6-3-3-1-2-3-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.34			
30-45.6797-112.5706-2-07-	0-M35210-10/06/76-16-	18-	8.4-	-	5.7-	250-	-4-	-3-6-4-3-1-2-2-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.37			
30-45.6803-112.5636-2-07-	0-M35211-10/06/76-16-	18-	9.0-	-	5.5-	260-	-4-	-3-6-4-3-1-2-2-2-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.92			
30-45.5639-112.7556-2-07-	0-M35212-10/07/76-10-	14-	5.0-	-	5.5-	120-	-4-	-3-6-4-3-1-2-1-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.37			
30-45.6011-112.6942-2-07-	0-M35214-10/07/76-12-	16-	8.4-C-	-	6.1-	250-	-4-	-4-6-3-3-1-2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.39			
30-45.5436-112.7086-2-07-	0-M35216-10/07/76-13-	18-	9.0-C-	-	5.9-	600-	-4-	-5-6-3-3-2-2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.02			
30-45.2317-112.2997-2-06-	0-M35220-10/05/76-17-	8-	6.6-C-	-	5.2-	90-	-2-6-4-6-3-3-1-	-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.22			
30-45.2389-112.3917-2-07-	0-M35223-10/05/76-19-	7-	7.6-C-	-	5.7-	145-	-2-6-4-6-3-3-1-2-2-2-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.84			
30-45.2222-112.1872-2-07-	0-M35226-10/06/76-10-	10-	8.4-C-	-	6.3-	330-	-2-6-3-6-3-3-1-2-2-2-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.38			
30-45.2039-112.1508-2-07-	0-M35230-10/05/76-10-	10-	8.4-C-	-	6.3-	330-	-2-6-3-6-3-3-1-2-2-2-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.06			
30-45.2259-112.1456-2-07-	0-M35233-10/06/76-12-	10-	4.6-C-	-	5.9-	260-	-2-6-4-6-3-3-1-2-3-2-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.57			
30-45.2375-112.1931-2-07-	0-M35234-10/06/76-12-	10-	4.4-	-	5.9-	230-	-2-6-4-6-3-3-1-2-3-2-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.64			
30-45.1906-112.1717-2-07-	0-M35235-10/06/76-12-	10-	4.4-C-	-	5.9-	280-	-4-	-4-6-3-3-1-2-4-2-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.65			
30-45.1750-112.2128-2-07-	0-M35238-10/06/76-14-	12-	4.8-C-	-	5.7-	250-	-1-6-4-6-3-3-1-2-2																											

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

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DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY													
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAS. SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per billion (ppb)												
							Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn	
30-45.6478-112.6347-2-07-	0-M35205	31311	97	53	-4	91	13154	40	58	209	-200	33	-50						
30-45.6597-112.6033-2-07-	0-M35208	20818	150	76	-4	243	7527	43	105	227	483	32	-50						
30-45.6797-112.5706-2-07-	0-M35210	46784	80	-25	-4	273	23158	32	-25	109	-200	23	-50						
30-45.6803-112.5636-2-07-	0-M35211	47609	70	-25	-4	159	19773	32	-25	62	-200	18	-50						
30-45.5639-112.7556-2-07-	0-M35212	26675	-55	44	-4	491	2366	49	-25	107	-200	20	101						
30-45.6011-112.6942-2-07-	0-M35214	46920	66	60	-4	77	6893	32	-25	192	-200	33	116						
30-45.5436-112.7086-2-07-	0-M35216	88541	79	29	-4	72	11631	28	-25	150	-200	26	78						
30-45.2317-112.2997-2-06-	0-M35220	39350	-55	53	-4	64	14507	38	59	227	-200	34	-50						
30-45.2389-112.3917-2-07-	0-M35223	41466	72	-25	-4	56	16375	39	-25	151	-200	28	249						
30-45.2222-112.1872-2-07-	0-M35226	37913	74	113	-4	96	25889	63	233	436	670	66	-50						
30-45.2039-112.1508-2-07-	0-M35230	36690	-55	101	-4	83	28026	46	220	400	714	61	-50						
30-45.2269-112.1456-2-07-	0-M35233	47921	-55	37	-4	72	22788	36	37	257	-200	43	119						
30-45.2375-112.1931-2-07-	0-M35234	39507	-55	62	-4	553	20458	54	110	271	-200	61	-50						
30-45.1906-112.1717-2-07-	0-M35235	42541	-55	39	-4	89	20749	31	33	220	-200	39	-50						
30-45.1750-112.2128-2-07-	0-M35238	41919	-55	-25	-4	152	20180	33	-25	-25	-200	-4	96						
30-45.1686-112.2514-2-07-	0-M35242	44023	-55	-25	-4	118	22043	24	-25	-25	-200	-4	-50						
30-45.1372-112.1536-2-07-	0-M35249	38686	-55	-25	-4	154	20113	18	-25	-25	-200	-4	-50						
30-45.1769-112.1606-2-07-	0-M35253	43972	-55	-25	-4	82	21807	17	-25	-25	-200	-4	-50						
30-45.1711-112.1533-2-06-	0-M35254	101000	-55	-25	-4	159	44932	33	-25	69	-200	23	-50						
30-45.2578-112.1503-2-07-	0-M35263	86450	-55	-25	-4	351	24208	68	-25	106	-200	27	55						
30-45.2503-112.1961-2-06-	0-M35264	65574	-55	-25	-4	145	21917	49	-25	74	-200	16	85						
30-45.5689-112.7389-2-06-	0-M35269	61168	-55	-25	-4	60	6449	12	-25	80	-200	13	-50						
30-45.5875-112.6478-2-06-	0-M35272	78526	86	-25	-4	652	21839	34	-25	81	-200	22	-50						
30-45.5183-112.5600-2-07-	0-M35276	69451	59	-25	-4	131	15792	29	-25	83	-200	17	88						
30-45.5233-112.6028-2-06-	0-M35277	38089	78	-25	-4	214	7433	26	-25	87	-200	20	-50						
30-45.6047-112.5397-2-06-	0-M35286	71534	-55	-25	-4	70	51007	40	-25	130	-200	19	136						
30-45.5842-112.5261-2-06-	0-M35288	91879	82	-25	-4	131	62708	39	-25	119	-200	26	119						
30-45.5311-112.7428-2-07-	0-M35299	28830	-55	51	-4	175	3775	44	-25	100	-200	21	-50						
30-45.5436-112.7903-2-07-	0-M35290	23567	-55	-25	-4	165	2657	6	-25	-25	-200	-4	-50						
30-45.5442-112.7919-2-07-	0-M35291	50270	101	-25	-4	120	2568	4	-25	-25	-200	-4	-50						
30-45.5244-112.8472-2-07-	0-M35292	12703	-55	-25	-4	411	1304	14	-25	-25	-200	-4	-50						
30-45.5197-112.8339-2-07-	0-M35293	16348	-55	-25	-4	63	2811	11	-25	-25	-200	-4	-50						
30-45.5306-112.8619-2-07-	0-M35294	20771	-55	-25	-4	67	2715	-3	-25	-25	-200	-4	-50						
30-45.5333-112.6683-2-06-	0-M35296	78818	-55	-25	-4	114	12591	12	-25	-25	-200	8	-50						
30-45.7714-112.2494-2-07-	0-M35299	29166	-55	-25	-4	283	9141	43	-25	-25	-200	5	-50						
30-45.7667-112.1811-2-07-	0-M35307	41261	-55	-25	-4	827	12917	62	-25	-25	-200	21	87						
30-45.7925-112.1567-2-07-	0-M35308	77866	106	-25	8	350	28670	47	-25	-25	999	-25	90						
30-45.8103-112.1233-2-07-	0-M35309	61568	-55	-25	-4	91	18578	62	-25	-25	-200	5	-50						
30-45.8100-112.1225-2-07-	0-M35310	66764	-55	-25	-4	115	18431	39	-25	-25	-200	7	-50						
30-45.8706-112.1139-2-07-	0-M35313	55609	-55	-25	-4	-25	11378	7	94	-25	-200	-4	-50						
30-45.7928-112.0022-2-07-	0-M35314	24141	-55	96	-4	-25	12852	13	257	248	692	31	-50						
30-45.7953-112.0300-2-06-	0-M35315	23996	-55	109	-4	28	13084	19	293	295	882	38	-50						
30-45.8131-112.0122-2-06-	0-M35316	32739	-55	-25	-4	-25	60849	4	96	-25	-200	-4	97						
30-45.3083-112.2831-2-06-	0-M35317	14257	-55	-25	-4	-25	3908	-3	-25	-25	-200	-4	123						
30-45.2689-112.2519-2-06-	0-M35319	12756	-55	-25	-4	-25	3351	-3	-25	-25	-200	-4	88						
30-45.3508-112.2700-2-06-	0-M35321	13027	-55	-25	-4	-25	3594	-3	-25	-25	-200	-4	106						
30-45.3639-112.2636-2-06-	0-M35322	16659	-55	-25	-4	-25	4605	-3	-25	-25	-200	-4	117						
30-45.2992-112.3875-2-06-	0-M35324	13245	-55	-25	-4	-25	3676	-3	-25	-25	-200	-4	97						
30-45.4786-112.1328-2-06-	0-M35325	14588	-55	-25	-4	-25	4008	-3	-25	-25	-200	-4	81						
30-45.4681-112.1278-2-07-	0-M35326	15029	-55	-25	-4	-25	4140	-3	-25	-25	-200	-4	108						
30-45.4539-112.1106-2-06-	0-M35327	11941	69	-25	-4	-25	3186	-3	-25	-25	-200	-4	156						

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																				U CONCENTRATION								
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAS SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	PH	CONDUCTIVITY (µmho/cm)	SCINTILOMETER (eLU ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNER/SHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (96) UNITS IN ppb
							DATE	HOUR																										
30-45.4611-112.0667-2-06-						0-M35330-10/10/76-	9-		1-	2.2-C-	-	5.5-	90-		-2-6-4-6-3-3-1-	-1-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.4019-112.1314-2-07-						0-M35331-10/10/76-	9-		1-	3.4-C-	-	5.7-	245-		-2-6-4-6-3-3-1-	-2-4-3-2-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.4311-112.0736-2-07-						0-M35332-10/10/76-10-			2-	3.2-C-	-	5.5-	220-		-2-6-4-6-3-3-1-	-2-1-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.4333-112.0631-2-07-						0-M35333-10/10/76-10-			2-	3.4-C-	-	5.2-	65-		-2-6-4-6-3-3-1-	-2-1-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.18	
30-45.3850-112.1139-2-07-						0-M35336-10/10/76-11-			2-	3.8-C-	-	5.2-	47-		-2-6-4-6-3-3-1-	-2-4-3-2-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.4208-112.0022-2-06-						0-M35340-10/10/76-12-			2-	2.2-C-	-	5.7-	220-		-2-6-4-6-3-3-1-	-1-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.3939-112.1928-2-06-						0-M35342-10/10/76-13-			2-	2.2-C-	-	5.5-	220-		-2-6-4-6-3-3-1-	-4-3-2-5-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.4111-112.2047-2-07-						0-M35345-10/10/76-13-			2-	4.6-C-	-	6.1-	330-		-2-6-5-6-3-3-1-	-2-4-3-2-5-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.18	
30-45.4339-112.2558-2-07-						0-M35349-10/10/76-14-			2-	4.4-C-	-	5.7-	360-		-2-6-5-6-3-3-1-	-2-4-2-2-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.60	
30-45.4408-112.2508-2-07-						0-M35350-10/10/76-14-			2-	4.6-C-	-	6.5-	750-		-5-6-3-3-1-2-2-2-2-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.18	
30-45.4614-112.2611-2-07-						0-M35351-10/10/76-15-			2-	4.2-C-	-	6.8-	800-		-4-5-6-3-3-1-2-2-3-2-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.4953-112.3147-2-07-						0-M35354-10/10/76-16-			2-	4.4-C-	-	6.3-	220-		-4-5-6-3-3-1-2-2-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.4689-112.3003-2-07-						0-M35355-10/10/76-16-			2-	4.2-C-	-	6.3-	345-		-4-5-6-3-3-1-2-2-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.7086-112.0864-2-07-						0-M35351-10/11/76-11-			-1-	1.6-C-	-	5.5-	280-		-7-7-4-6-4-2-1-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.07	
30-45.6978-112.1347-2-07-						0-M35352-10/11/76-11-			-																									

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	
30-45.4611-112.0667-2-06-	0-M35330	13118	-55	-25	-4	-25	3540	-3	-25	-25	-200	-4	73						
30-45.4019-112.1314-2-07-	0-M35331	9895	-55	-25	-4	-25	2681	-3	-25	-25	-200	-4	68						
30-45.4311-112.0736-2-07-	0-M35332	13226	-55	-25	-4	-25	3484	-3	-25	-25	-200	-4	-50						
30-45.4333-112.0631-2-07-	0-M35333	16407	-55	-25	-4	-25	4596	-3	-25	-25	-200	-4	225						
30-45.3850-112.1139-2-07-	0-M35336	12934	-55	-25	-4	-25	3749	-3	-25	-25	-200	-4	83						
30-45.4208-112.0022-2-06-	0-M35340	12882	-55	-25	-4	-25	3619	-3	-25	-25	-200	-4	109						
30-45.3939-112.1928-2-06-	0-M35342	14542	-55	-25	-4	-25	4065	-3	-25	-25	-200	-4	196						
30-45.4111-112.2047-2-07-	0-M35345	14745	-55	-25	-4	-25	3994	-3	-25	-25	-200	-4	67						
30-45.4339-112.2558-2-07-	0-M35349	14635	-55	-25	-4	-25	3902	-3	-25	-25	-200	-4	134						
30-45.4408-112.2508-2-07-	0-M35350	15236	-55	-25	-4	-25	4203	-3	-25	-25	-200	-4	201						
30-45.4614-112.2611-2-07-	0-M35351	6723	-55	-25	-4	-25	743	-3	-25	-25	-200	-4	240						
30-45.4953-112.3147-2-07-	0-M35354	11061	-55	-25	-4	-25	3080	-3	-25	-25	-200	-4	190						
30-45.4689-112.3003-2-07-	0-M35355	15849	-55	-25	-4	-25	4342	-3	-25	-25	-200	-4	56						
30-45.7086-112.0864-2-07-	0-M35361	33968	-55	-25	-4	-25	13376	-3	-25	-25	-200	-4	142						
30-45.6978-112.1347-2-07-	0-M35362	28378	-55	-25	-4	-25	10739	-3	74	-25	-200	-4	-50						
30-45.6944-112.1367-2-07-	0-M35363	13124	-55	-25	-4	-25	4558	-3	-25	-25	-200	-4	69						
30-45.7944-112.0658-2-06-	0-M35370	18247	-55	-25	-4	-25	13395	-3	-25	-25	-200	-4	153						
30-45.7817-112.0653-2-07-	0-M35371	22347	-55	-25	-4	-25	14031	-3	-25	-25	-200	-4	86						
30-45.8064-112.0850-2-07-	0-M35372	12226	-55	-25	-4	-25	23507	4	-25	-25	-200	-4	112						
30-45.7631-112.0744-2-06-	0-M35373	22576	-55	-25	-4	-25	11268	-3	-25	-25	-200	-4	97						
30-45.7531-112.0383-2-06-	0-M35374	19257	64	-25	-4	-25	32834	-3	-25	-25	-200	-4	84						
30-45.8681-112.1978-2-07-	0-M35378	33004	100	-25	-4	-25	7703	-3	-25	-25	-200	-4	84						
30-45.8775-112.1878-2-07-	0-M35379	24118	89	-25	-4	-25	10995	-3	-25	-25	-200	-4	102						
30-45.8961-112.2325-2-06-	0-M35381	3063	95	-25	-4	-25	120	-3	-25	-25	-200	-4	54						
30-45.9672-112.2386-2-06-	0-M35383	39578	73	-25	-4	-25	10659	4	136	35	-200	-4	117						
30-45.9944-112.2414-2-07-	0-M35384	30060	102	-25	-4	-25	6939	-3	56	35	-200	-4	54						
30-45.9983-112.2425-2-07-	0-M35385	68823	-55	-25	-4	-25	19200	12	-25	-25	-200	-4	-50						
30-45.9647-112.1628-2-07-	0-M35387	18435	114	-25	-4	-25	4126	-3	-25	-25	-200	-4	67						
30-45.9467-112.1303-2-07-	0-M35389	20678	141	-25	-4	-25	4531	-3	41	83	-200	-4	125						
30-45.9408-112.1125-2-07-	0-M35389	55139	164	-25	-4	-25	10821	5	-25	53	-200	-4	100						
30-45.9778-112.1189-2-07-	0-M35390	36473	146	-25	-4	-25	7831	5	-25	89	-200	-4	97						
30-45.9817-112.0819-2-07-	0-M35391	22658	169	-25	-4	-25	8810	13	40	80	-200	-4	-50						
30-45.9583-112.0458-2-06-	0-M35395	30971	151	-25	-4	-25	12890	6	-25	61	-200	-4	78						
30-45.9231-112.1183-2-07-	0-M35398	53109	177	-25	-4	-25	10748	-3	-25	85	-200	6	-50						
30-45.8936-112.1069-2-07-	0-M35399	51460	105	-25	-4	-25	10596	8	136	93	-200	5	129						
30-45.4075-112.8381-2-07-	0-M35409	70776	124	-25	-4	27	14161	11	-25	-25	-200	-4	235						
30-45.4042-112.8186-2-06-	0-M35411	69257	76	-25	-4	26	13176	16	-25	-25	-200	6	160						
30-45.3794-112.7972-2-07-	0-M35415	13573	108	-25	-4	105	2306	8	32	56	-200	6	51						
30-45.4231-112.7542-2-06-	0-M35420	96734	155	-25	-4	-25	16705	20	-25	51	-200	8	153						
30-45.4289-112.7986-2-06-	0-M35422	71367	132	-25	-4	-25	13535	6	-25	-25	-200	7	132						
30-45.2992-112.6006-2-07-	0-M35424	106000	91	-25	-4	42	29792	38	-25	76	-200	14	106						
30-45.3294-112.5950-2-07-	0-M35426	98456	98	-25	-4	51	23319	85	-25	-25	-200	6	874						
30-45.0156-112.8364-2-07-	0-M35427	67533	107	-25	-4	42	7161	44	-25	68	-200	12	158						
30-45.7019-112.3333-2-06-	0-M35431	65314	117	-25	-4	313	17101	26	-25	85	-200	29	197						
30-45.6242-112.3333-2-07-	0-M35433	25287	112	-25	-4	251	5290	29	28	87	-200	18	359						
30-45.6533-112.3614-2-07-	0-M35434	48748	153	-25	-4	354	11552	32	-25	38	-200	24	254						
30-45.6797-112.3783-2-07-	0-M35435	41193	133	31	-4	691	9920	53	-25	121	-200	57	318						
30-45.6797-112.3903-2-07-	0-M35436	37728	89	-25	-4	482	5911	43	-25	115	-200	35	249						
30-45.6706-112.4083-2-07-	0-M35437	14832	68	-25	-4	376	2991	45	-25	76	-200	15	243						
30-45.6925-112.40125-2-07-	0-M35438	35096	82	-25	-4	-25	19764	9	166	68	-200	8	-50						
30-45.6831-112.0139-2-07-	0-M35440	70823	125	-25	-4	218	11829	25	-25	77	-200	15	558						

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

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DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																		U CONCENTRATION											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAS SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (umho/cm)	SCINTILLATOR (mU/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
							DATE	HOUR																											
30-45.6653-112.0172-2-07-						0-M35441-10/05/76-11-	5-	1.5-	-	5.5-				50-		-2-7-3-7-3-2-1-2-1-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.35	
30-45.6583-112.0211-2-07-						0-M35442-10/05/76-12-	6-	1.0-	-	5.2-				50-		-2-7-3-7-3-2-1-2-1-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.05	
30-45.6514-112.0236-2-07-						0-M35443-10/05/76-13-	5-	1.5-	-	5.3-				40-		-2-7-3-1-3-2-1-2-1-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.66	
30-45.6378-112.0325-2-07-						0-M35444-10/05/76-13-	7-	1.5-	-	5.1-				40-		-2-7-2-1-3-2-1-2-1-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.25	
30-45.6264-112.0339-2-07-						0-M35445-10/05/76-13-	7-	1.5-	-	5.2-				50-		-2-7-2-7-3-2-1-2-1-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.22	
30-45.7314-112.2392-2-07-						0-M35446-10/06/76-10-	12-	8.0-C-	-	5.5-				240-		8-4-	-4-6-3-2-1-2-2-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.81	
30-45.7417-112.2847-2-07-						0-M35447-10/06/76-10-	12-	8.0-C-	-	5.5-				260-		6-4-	-4-6-3-2-1-2-4-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.11	
30-45.7433-112.2850-2-07-						0-M35448-10/06/76-10-	12-	8.0-C-	-	5.6-				230-		6-4-	-4-6-3-2-1-2-4-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.90	
30-45.7289-112.3589-2-07-						0-M35453-10/06/76-12-	14-	8.0-C-	-	5.2-				120-		10-2-6-4-6-3-2-1-2-3-4-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.53	
30-45.7128-112.2978-2-07-						0-M35454-10/06/76-12-	13-	8.0-	-	5.2-				140-		12-4-	-4-6-3-2-1-2-3-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.11	
30-45.6931-112.2794-2-07-						0-M35455-10/06/76-12-	14-	7.0-C-	-	5.5-				180-		6-4-	-4-6-3-2-1-2-4-4-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.71	
30-45.5914-112.4822-2-07-						0-M35456-10/07/76-15-	17-	7.0-C-	-	5.9-				550-		-1-6-4-6-3-2-1-2-4-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.04	
30-45.6142-112.5061-2-07-						0-M35457-10/07/76-15-	17-	7.0-C-	-	5.9-				600-		-1-6-4-6-3-2-1-2-2-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.42	
30-45.6019-112.4467-2-06-						0-M35461-10/07/76-16-	17-	7.0-C-	-	6.0-				600-		-4-	-6-6-2-3-1-	-4-4-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90	
30-45.6181-112.1931-2-07-						0-M35458-10/09/76-16-	13-	7.5-C-	-	5.5-				140-		-4-	-3-7-4-2-1-2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.67	
30-45.6250-112.1867-2-07-						0-M35469-10/09/76-16-	13-	7.0-C-	-	5.2-				120-		-2-7-3-6-4-2-1-2-1-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.18	
30-45.5936-112.1833-2-07-						0-M35473-10/09/76-15-	13-	7.5-C-	-	5.7-				350-		-2-1-3-1-3-2-1-2-2-3-5-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.86	
30-45.6142-112.1939-2-06-						0-M35474-10/09/76-16-	14-	7.0-C-	-	5.5-				200-		-4-	-6-6-2-3-1-	-2-3-5-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.14
30-45.7006-112.4322-2-07-						0-M35475-10/07/76-9-	12-	7.0-C-	-	5.2-				80-		-3-1-4-6-4-2-1-2-1-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.42	
30-45.7054-112.4444-2-07-						0-M35476-10/07/76-9-	12-	7.0-C-	-	5.2-				60-		-3-1-4-6-4-2-1-2-3-4-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.97	
30-45.6978-112.4217-2-07-						0-M35477-10/07/76-10-	13-	8.0-C-	-	5.2-				80-		-3-1-4-6-4-2-1-2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.95	
30-45.7292-112.3917-2-06-						0-M35478-10/07/76-11-	14-	7.0-C-	-	5.2-				120-		-2-7-5-6-2-3-1-	-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.32	
30-45.6719-112.3397-2-06-						0-M35479-10/07/76-11-	14-	7.5-C-	-	5.4-				160-		-1-1-5-6-2-3-1-	-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.76	
30-45.6414-112.3472-2-06-						0-M35480-10/07/76-12-	15-	7.5-C-	-	5.7-				450-		-3-1-3-1-2-2-1-	-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.95	
30-45.5636-112.4078-2-07-						0-M35487-10/07/76-15-	17-	7.5-C-	-	5.8-				600-		-4-	-4-6-2-2-1-2-3-2-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.31	
30-45.5228-112.2283-2-07-						0-M35489-10/08/76-16-	15-	7.0-C-	-	5.7-				450-		-4-	-6-6-2-2-1-2-2-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.21	
30-45.5278-112.2411-2-06-						0-M35491-10/08/76-15-	15-	8.0-C-	-	5.9-				500-		-4-	-5-6-2-2-1-	-3-4-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.85	
30-45.5556-112.2361-2-06-						0-M35492-10/08/76-17-	14-	7.0-C-	-	5.7-				400-		-4-	-6-6-2-2-1-	-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.39	
30-45.5078-112.3314-2-07-						0-M35494-10/09/76-14-	14-	9.0-C-	-	5.7-				600-		-4-	-6-6-3-3-3-1-3-4-1-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
30-45.5736-112.2183-2-06-						0-M35495-10/09/76-15-	14-	7.5-C-	-	5.7-				300-		-1-7-6-6-2-3-1-	-4-3-5-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.81	
30-45.5228-112.0722-2-07-						0-M35496-10/08/76-11-	13-	7.0-C-	-	5.2-				80-		-2-7-4-6-4-3-1-2-1-4-5-1-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.31	
30-45.5278-112.0703-2-07-						0-M35497-10/08/76-11-	13-	7.0-C-	-	5.2-				50-		-2-7-4-6-4-3-1-2-1-4-5-1-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.25	
30-45.4769-112.1625-2-07-						0-M35498-10/08/76-12-	15-	7.5-C-	-	5.2-				80-		-2-7-4-6-3-2-1-2-2-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.85	
30-45.5181-112.1408-2-07-						0-M35500-10/08/76-13-	16-	7.5-C-	-	5.5-				170-		-2-7-3-6-5-3-1-2-2-4-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.20	
30-45.4992-112.1822-2-07-						0-M35501-10/08/76-14-	15-	7.5-C-	-	5.2-				120-		-2-7-4-6-3-2-1-2-2-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.69	
30-45.5197-112.1425-2-07-						0-M35502-10/08/76-14-	14-	7.5-C-	-	5.2-				120-		-2-7-3-6-4-2-1-2-2-3-5-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.70	
30-45.5078-112.1589-2-07-						0-M35503-10/08/76-14-	16-	7.5-C-	-	5.2-				100-		-2-7-4-6-3-2-1-2-2-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.48	
30-45.5625-112.1192-2-07-						0-M35504-10/08/76-15-	14-	7.0-C-	-	5.2-				100-		-2-7-3-6-4-2-1-2-1-4-5-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.38	
30-45.5247-112.1761-2-07-						0-M35505-10/08/76-15-	14-	7.0-C-	-	5.2-				80-		-2-7-6-4-4-2-1-2-2-4-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.40	
30-45.4931-112.2228-2-07-						0-M35506-10/08/76-15-	15-	8.0-C-	-	5.4-				200-		-4-	-3-8-3-2-1-2-2-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.17	
30-45.4794-112.0589-2-07-						0-M35507-10/10/76-16-	8-	7.5-C-	-	5.2-				100-		-2-7-3-7-4-2-1-2-1-4-5-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.21	
30-45.6578-112.5039-2-06-						0-M35515-10/11/76-14-	3-	4.5-C-	-	5.7-				330-		-1-6-	-	-2-3-4-	-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.74
30-45.6944-112.5339-2-07-						0-M35516-10/11/76-15-	1-	2.4-C-	-	5.5-				260-		-1-6-3-3-6-3-3-1-2-3-2-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.87	
30-45.6978-112.5336-2-07-						0-M35517-10/11/76-16-	1-	2.4-C-	-	5.5-				260-		-1-6-4-6-3-3-1-2-2-3-3-1-	-3-	-																	

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

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DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY													
STATE	LATITUDE	LONGITUDE	DOE LAS	SAMPLE TYPE	REPLICATE	LAS SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per billion (ppb)												
							Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn	
30-45.6553-112.0172-2-07-	0-M35441	63138	112	-25	-4	592	15553	40	-25	-25	-200	-4	279						
30-45.6583-112.0211-2-07-	0-M35442	21136	92	-25	-4	-25	8995	-3	140	-25	-200	-4	79						
30-45.6514-112.0236-2-07-	0-M35443	27517	94	-25	-4	71	6921	23	-25	-25	-200	-4	224						
30-45.6379-112.0325-2-07-	0-M35444	52950	67	-25	-4	195	16241	128	-25	34	-200	6	196						
30-45.6264-112.0339-2-07-	0-M35445	29915	78	-25	-4	-25	8920	8	102	-25	-200	-4	54						
30-45.7314-112.2392-2-07-	0-M35446	32780	-55	-25	-4	1284	7806	77	-25	76	-200	31	156						
30-45.7417-112.2847-2-07-	0-M35447	32303	-55	-25	-4	676	7685	57	-25	77	-200	25	334						
30-45.7433-112.2850-2-07-	0-M35448	30176	-55	-25	-4	669	7445	61	-25	155	-200	35	261						
30-45.7289-112.3589-2-07-	0-M35453	17632	-55	48	-4	310	4258	35	55	179	-200	15	158						
30-45.7128-112.2978-2-07-	0-M35454	17737	-55	35	-4	277	4440	39	62	153	-200	16	238						
30-45.6931-112.2794-2-07-	0-M35455	23201	-55	-25	-4	342	5312	22	-25	-25	-200	12	232						
30-45.5914-112.4822-2-07-	0-M35456	70817	-55	-25	-4	126	21087	25	-25	81	-200	9	239						
30-45.6142-112.5061-2-07-	0-M35457	93168	-55	-25	-4	605	27043	89	-25	99	-200	21	274						
30-45.6019-112.4467-2-06-	0-M35461	97390	-55	-25	-4	97	28394	20	-25	-25	-200	11	160						
30-45.6181-112.1931-2-07-	0-M35468	19325	-55	-25	-4	-25	3931	-3	44	-25	-200	-4	71						
30-45.6250-112.1867-2-07-	0-M35469	16177	-55	-25	-4	-25	4967	-3	64	105	-200	6	114						
30-45.5936-112.1833-2-07-	0-M35473	30344	-55	-25	-4	-25	12406	-3	35	109	-200	-4	109						
30-45.6142-112.1939-2-06-	0-M35474	33958	92	-25	-4	-25	9752	5	31	125	-200	8	318						
30-45.7006-112.4322-2-07-	0-M35475	9681	-55	-25	-4	261	1952	14	48	95	-200	6	364						
30-45.7064-112.4444-2-07-	0-M35476	10379	-55	-25	-4	243	2003	18	34	82	-200	6	239						
30-45.6978-112.4217-2-07-	0-M35477	10379	-55	-25	-4	297	2131	15	-25	-25	-200	-4	282						
30-45.7292-112.3917-2-06-	0-M35478	18379	60	-25	-4	910	7534	63	-25	60	-200	32	447						
30-45.6719-112.3397-2-06-	0-M35479	14250	-55	39	-4	396	6109	38	81	163	-200	23	199						
30-45.6414-112.3472-2-06-	0-M35480	93110	110	-25	-4	261	16172	29	-25	80	-200	19	320						
30-45.5636-112.4078-2-07-	0-M35487	78327	104	-25	-4	117	22756	20	-25	48	-200	11	149						
30-45.5228-112.2283-2-07-	0-M35489	50195	78	-25	-4	192	27086	23	-25	154	-200	25	276						
30-45.5278-112.2411-2-06-	0-M35491	63772	87	92	-4	833	29238	83	145	386	-200	88	469						
30-45.5556-112.2361-2-06-	0-M35492	51353	-55	-25	-4	831	33214	60	-25	-25	-200	39	115						
30-45.5078-112.3314-2-07-	0-M35494	95070	-55	-25	-4	223	30917	132	-25	-25	-200	11	172						
30-45.5736-112.2183-2-06-	0-M35495	27885	-55	-25	-4	-25	16401	-3	135	-25	-200	-4	135						
30-45.5228-112.0722-2-07-	0-M35496	12147	-55	-25	-4	387	3137	27	-25	-25	-200	12	57						
30-45.5278-112.0703-2-07-	0-M35497	8771	-55	-25	-4	119	1832	7	-25	-25	-200	-4	56						
30-45.4769-112.1625-2-07-	0-M35498	13987	-55	-25	-4	154	3057	23	-25	-25	-200	6	67						
30-45.5181-112.1408-2-07-	0-M35500	25098	-55	-25	-4	264	5401	25	-25	-25	-200	-4	-50						
30-45.4992-112.1822-2-07-	0-M35501	17153	-55	-25	-4	427	4031	17	-25	-25	-200	10	72						
30-45.5197-112.1425-2-07-	0-M35502	16028	-55	-25	-4	102	3721	8	-25	-25	-200	-4	113						
30-45.5078-112.1589-2-07-	0-M35503	13515	-55	-25	-4	228	2866	13	-25	-25	-200	-4	112						
30-45.5625-112.1192-2-07-	0-M35504	15790	-55	-25	-4	203	3269	7	-25	-25	-200	-4	-50						
30-45.5247-112.1761-2-07-	0-M35505	32037	-55	-25	-4	1022	8318	33	-25	-25	-200	8	107						
30-45.4931-112.2228-2-07-	0-M35506	25827	-55	-25	-4	162	6590	7	-25	-25	-200	-4	101						
30-45.4794-112.0589-2-07-	0-M35507	13139	-55	-25	-4	-25	3517	7	-25	-25	-200	-4	-50						
30-45.6578-112.5039-2-06-	0-M35515	47961	-55	-25	-4	-25	8208	4	101	-25	-200	9	-50						
30-45.6944-112.5339-2-07-	0-M35516	31269	-55	-25	-4	-25	8812	-3	65	-25	-200	-4	-50						
30-45.6978-112.5336-2-07-	0-M35517	32996	-55	-25	-4	-25	12356	-3	251	-25	-200	-4	57						
30-45.5783-112.3036-2-06-	0-M35519	30519	-55	-25	-4	313	16826	19	42	-25	-200	19	140						
30-45.4861-112.0022-2-07-	0-M35524	7904	-55	-25	-4	128	2328	10	-25	-25	-200	6	109						
30-45.4878-112.0025-2-07-	0-M35525	7699	-55	-25	-4	84	2226	11	-25	-25	-200	5	92						
30-45.4811-112.0483-2-07-	0-M35526	25505	-55	-25	-4	236	7567	27	48	-25	-200	18	184						
30-45.3917-112.4514-2-06-	0-M35530	25883	61	-25	-4	131	7782	7	48	-25	-200	12	117						
30-45.3911-112.4189-2-06-	0-M35533	38148	-55	-25	-4	105	9840	11	-25	-25	-200	10	-50						
30-45.2883-112.0983-2-07-	0-M35539	102000	85	-25	-4	529	58202	2180	31	-25	-200	25	109						

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		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (umho/cm)	SCINTILLATOR (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
							DATE	HOUR																											
30-45.2828-112.0672-2-07-						0-M35541-10/08/76-9-			3-	5.2-	-		5.9-	750-		-4-	-3-6-	-2-2-1-2-2-2-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.50	
30-45.2681-112.0372-2-07-						0-M35542-10/08/76-10-			3-	2.4-C-	-		5.7-	270-		-2-6-	-3-4-3-3-1-2-2-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.28	
30-45.3200-112.0583-2-07-						0-M35547-10/08/76-11-			4-	5.2-C-	-		5.7-	270-		-2-6-	-4-6-3-3-1-2-2-2-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.37	
30-45.3244-112.0019-2-06-						0-M35549-10/08/76-11-			4-	5.2-C-	-		5.5-	125-		-2-6-	-4-6-3-3-1-2-2-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.38	
30-45.3625-112.0208-2-06-						0-M35552-10/08/76-12-			4-	5.6-C-	-		5.7-	210-		-2-6-	-4-6-3-3-1-2-2-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.07	
30-45.3539-112.0650-2-05-						0-M35554-10/08/76-13-			4-	3.6-C-	-		5.5-	175-		-2-6-	-4-6-3-3-1-2-2-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.22	
30-45.3464-112.1092-2-07-						0-M35555-10/08/76-13-			4-	5.4-C-	-		5.9-	340-		-2-6-	-4-6-3-3-2-2-2-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.57	
30-45.3528-112.1208-2-07-						0-M35556-10/08/76-14-			5-	4.8-C-	-		6.1-	475-		-2-6-	-4-6-3-3-2-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.53	
30-45.3686-112.0939-2-07-						0-M35558-10/08/76-15-			4-	5.2-C-	-		6.1-	220-		-2-6-	-4-6-3-3-2-2-2-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.77	
30-45.3589-112.4000-2-06-						0-M35575-10/09/76-13-			10-	4.0-C-	-		5.5-	210-		-2-6-	-4-6-3-3-1-2-2-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.41	
30-45.2900-112.3381-2-06-						0-M35579-10/09/76-14-			9-	3.2-C-	-		5.5-	175-		-2-6-	-4-6-3-3-1-2-2-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.2544-112.3208-2-06-						0-M35581-10/09/76-14-			9-	1.8-	-		5.2-	47-		-2-6-	-4-6-3-3-1-2-2-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
30-45.3286-112.2922-2-06-						0-M35585-10/09/76-16-			9-	2.4-	-		5.7-	310-		-2-6-	-4-6-3-3-1-2-2-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	
16-45.0105-113.8837-2-07-						0-M35586-06/01/78-10-			13-	8.5-	-		8.3-	51-	12-4-6-2-6-3-4-1-3-4-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.40	
16-45.0068-113.8860-2-07-						0-M35587-06/01/78-11-			13-	6.5-	-		7.7-	62-	6-4-7-2-7-4-4-2-2-2-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.71	
16-45.0410-113.9139-2-07-						0-M35588-06/01/78-11-			13-	7.5-	-		7.9-	49-	13-4-6-3-1-4-4-1-2-2-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.31	
16-45.0788-113.8990-2-07-						0-M35589-06/01/78-12-			14-12.0-	-			7.8-	580-	38-4-1-3-1-3-4-2-2-4-2-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.69	
16-45.0154-113.9961-2-07-						0-M35592-06/01/78-15-			21-	8.5-	-		8.2-	83-	13-4-1-2-6-4-4-1-2-2-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.71	
16-45.0086-113.9387-2-07-						0-M35596-06/01/78-16-			21-13.5-	-			7.3-	126-	4-7-3-6-3-3-1-3-2-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.31	
16-45.1156-113.9680-2-07-						0-M35597-06/01/78-17-			21-12.0-	-			7.7-	42-	13-3-6-2-6-4-4-3-2-4-3-5-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01	
16-45.1034-113.9217-2-07-						0-M35598-06/01/78-18-			21-23.0-	-			8.3-	790-	6-4-1-4-1-2-4-2-2-4-3-5-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.09	
16-45.0378-113.9203-2-07-						0-M35599-06/02/78-9-			15-	8.0-	-		7.3-	155-	13-4-1-2-1-3-4-1-2-4-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.44	
16-45.0816-113.9520-2-07-						0-M35601-06/02/78-10-			16-	7.5-	-		6.6-	67-	24-3-1-2-1-4-4-3-2-2-3-5-1-	-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.14	
16-45.1005-113.9636-2-07-						0-M35602-06/02/78-11-			16-15.5-	-			7.4-	90-	27-3-4-3-4-3-4-1-2-2-2-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01	
16-45.0969-113.9313-2-07-						0-M35604-06/02/78-11-			16-	7.0-	-		7.1-	47-	10-3-1-2-1-4-4-1-2-2-3-5-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.05	
16-45.0838-113.8752-2-07-						0-M35605-06/02/78-13-			18-12.0-	-			7.0-	361-	12-4-1-3-1-3-4-3-2-2-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03	
16-45.0832-113.8781-2-07-						0-M35606-06/02/78-13-			18-11.0-	-			7.6-	194-	10-4-1-3-1-3-4-2-2-4-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.20	
16-45.1072-113.8499-2-07-						0-M35608-06/02/78-14-			22-22.0-	-			8.8-	580-	12-4-1-4-1-3-4-2-2-4-2-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19	
16-45.1124-113.8643-2-07-						0-M35609-06/02/78-14-			23-24.5-	-			9.5-	500-	19-4-1-2-1-3-4-1-2-4-2-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.52	
16-45.1721-113.8379-2-07-						0-M35611-06/02/78-17-			24-17.5-	-			7.6-	310-	12-4-1-3-1-4-4-1-2-4-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.33	
16-45.5225-113.9302-2-07-						0-M35612-06/03/78-9-			14-	7.0-	-		7.6-	222-	15-4-1-2-6-3-4-1-2-2-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.92	
16-45.5388-113.9491-2-07-						0-M35613-06/03/78-9-			14-	7.0-	-		7.2-	252-	17-4-1-3-6-3-3-1-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.52	
16-45.5569-113.9251-2-07-						0-M35614-06/03/78-10-			15-	7.0-C-	-		7.7-	58-	15-4-1-2-1-3-4-1-2-1-3-5-1-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.27	
16-45.5586-113.8939-2-07-						0-M35615-06/03/78-10-			14-	5.5-	-		7.5-	62-	9-4-7-2-7-4-4-1-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.48	
16-45.5611-113.9093-2-07-						0-M35616-06/03/78-10-			14-	8.5-C-	-		7.6-	336-	15-4-1-3-1-2-4-1-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.62	
16-45.5819-113.9191-2-07-						0-M35617-06/03/78-11-			16-	7.5-	-		7.7-	155-	6-4-1-2-1-3-4-1-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.89	
16-45.5809-113.9170-2-07-						0-M35618-06/03/78-12-			16-	7.5-	-		7.6-	45-	9-4-1-2-1-3-4-1-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.44	
16-45.6031-113.9625-2-07-						0-M35619-06/03/78-12-			18-	7.5-	-		7.5-	55-	11-4-1-2-1-4-4-1-2-1-4-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.21	
16-45.6085-113.9641-2-07-						0-M35620-06/03/78-13-			18-	7.0-	-		7.4-	36-	12-4-1-2-1-4-4-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01	
16-45.6078-113.9654-2-07-						0-M35621-06/03/78-13-			19-	7.0-	-		7.5-	47-	15-4-1-2-1-4-4-1-2-1-4-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.32	
16-45.6120-113.9683-2-07-						0-M35622-06/03/78-13-			18-	7.5-	-		7.6-	43-	12-4-1-2-1-4-4-1-2-1-4-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.52	
16-45.6121-113.9661-2-07-						0-M35623-06/03/78-13-			19-	7.0-	-		7.1-	47-	10-4-1-2-1-4-4-1-2-1-4-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.37	
16-45.6699-113.9514-2-07-						0-M35624-06/03/78-17-			18-	4.0-	-		7.1-	74-	15-4-1-3-1-3-4-1-2-1-3-5-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.45	
16-45.6732-113.9521-2-07-						0																													

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	DOE SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per billion (ppb)											
							Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
30-45.2828-112.0672-2-07-	0-M35541	81528	95	-25	-4	499	45298	1574	-25	-25	-200	21	124					
30-45.2681-112.0372-2-07-	0-M35542	33517	-55	-25	-4	138	18596	74	54	-25	-200	8	148					
30-45.3200-112.0583-2-07-	0-M35547	38804	-55	-25	-4	201	14790	34	89	40	-200	17	103					
30-45.3244-112.0019-2-06-	0-M35549	35038	65	-25	-4	322	13923	36	65	-25	-200	20	88					
30-45.3625-112.0208-2-06-	0-M35552	35673	-55	-25	-4	82	13021	16	58	-25	-200	12	-50					
30-45.3539-112.0650-2-06-	0-M35554	36056	-55	-25	-4	125	13677	17	75	51	-200	15	104					
30-45.3464-112.1092-2-07-	0-M35555	36544	-55	-25	-4	127	13400	19	54	-25	-200	16	103					
30-45.3528-112.1208-2-07-	0-M35556	37045	-55	-25	-4	204	13826	22	102	-25	-200	28	127					
30-45.3686-112.0939-2-07-	0-M35559	42683	-55	-25	-4	259	15809	28	74	-25	-200	28	227					
30-45.3589-112.4000-2-06-	0-M35575	2011	-55	-25	-4	-25	490	-3	36	-25	-200	-4	-50					
30-45.2900-112.3381-2-06-	0-M35579	4882	-55	-25	-4	-25	422	-3	-25	-25	-200	-4	-50					
30-45.2544-112.3208-2-06-	0-M35581	12143	-55	-25	-4	-25	3659	4	54	-25	-200	-4	-50					
30-45.3286-112.2922-2-06-	0-M35585	12180	-55	-25	-4	-25	3691	-3	53	-25	-200	-4	-50					
16-45.0105-113.8837-2-07-	0-M35586	3819	-55	28	8	50	1885	21	-25	53	-200	-4	61					
16-45.0068-113.8860-2-07-	0-M35587	5656	-55	35	-4	211	2277	23	-25	82	336	16	-50					
16-45.0410-113.9139-2-07-	0-M35588	3966	-55	33	-4	146	1509	17	-25	67	263	12	-50					
16-45.0788-113.8990-2-07-	0-M35589	31839	-55	34	-4	126	4867	29	-25	95	-200	19	-50					
16-45.0154-113.9961-2-07-	0-M35592	8161	-55	44	-4	84	3009	19	-25	135	409	20	-50					
16-45.0086-113.9387-2-07-	0-M35596	11583	-55	-25	-4	31	4082	19	-25	34	-200	-4	-50					
16-45.1156-113.9680-2-07-	0-M35597	3442	-55	-25	-4	389	1322	14	-25	29	-200	9	-50					
16-45.1034-113.9217-2-07-	0-M35598	26053	-55	26	-4	36	3102	17	-25	86	-200	10	-50					
16-45.0378-113.9203-2-07-	0-M35599	13715	-55	29	-4	66	2101	17	-25	100	-200	11	-50					
16-45.0816-113.9520-2-07-	0-M35601	6076	-55	29	-4	172	2036	22	-25	80	-200	11	-50					
16-45.1005-113.9636-2-07-	0-M35602	6766	-55	-25	-4	274	2347	19	-25	34	-200	9	-50					
16-45.0969-113.9313-2-07-	0-M35604	3941	-55	39	7	124	1349	13	-25	78	388	13	-50					
16-45.0838-113.8752-2-07-	0-M35605	30970	-55	-25	-4	86	9981	21	-25	110	-200	16	-50					
16-45.0832-113.8781-2-07-	0-M35606	14378	-55	-25	-4	192	4033	18	-25	98	-200	15	-50					
16-45.1072-113.8489-2-07-	0-M35608	17908	-55	-25	-4	125	7592	17	-25	108	-200	16	-50					
16-45.1124-113.8643-2-07-	0-M35609	15594	-55	30	6	42	2766	19	-25	81	-200	10	-50					
16-45.1721-113.8379-2-07-	0-M35611	29188	-55	37	-4	87	7600	24	-25	150	-200	18	-50					
16-45.5225-113.9302-2-07-	0-M35612	24150	-55	35	-4	44	8570	17	-25	143	-200	14	-50					
16-45.5388-113.9491-2-07-	0-M35613	20801	-55	-25	-4	43	12406	20	-25	122	-200	14	-50					
16-45.5569-113.9251-2-07-	0-M35614	4998	-55	38	-4	49	2443	20	-25	134	387	12	-50					
16-45.5586-113.8939-2-07-	0-M35615	6577	-55	24	-4	33	1672	14	-25	75	-200	5	-50					
16-45.5611-113.9093-2-07-	0-M35616	48054	-55	29	-4	33	10894	21	-25	127	-200	14	-50					
16-45.5819-113.9191-2-07-	0-M35617	7123	-55	-25	-4	53	15742	21	-25	87	426	8	-50					
16-45.5809-113.9170-2-07-	0-M35618	4448	-55	41	-4	49	1873	11	-25	121	312	12	-50					
16-45.6031-113.9625-2-07-	0-M35619	4082	-55	-25	-4	67	2090	14	-25	104	209	8	-50					
16-45.6085-113.9641-2-07-	0-M35620	2720	-55	40	-4	88	1233	15	-25	111	395	10	-50					
16-45.6078-113.9664-2-07-	0-M35621	4821	-55	26	-4	37	2150	13	-25	69	-200	-4	-50					
16-45.6120-113.9683-2-07-	0-M35622	3989	-55	36	-4	56	1482	19	-25	91	288	8	-50					
16-45.6121-113.9661-2-07-	0-M35623	5925	-55	44	-4	51	936	26	-25	121	-200	10	-50					
16-45.6699-113.9514-2-07-	0-M35624	8997	-55	40	-4	50	2316	18	-25	88	-200	8	-50					
16-45.6732-113.9521-2-07-	0-M35625	3620	-55	52	7	94	721	19	-25	127	406	13	-50					
16-45.6613-113.9772-2-07-	0-M35626	5173	66	102	47	91	408	68	-25	185	457	14	-50					
16-45.6547-113.9727-2-07-	0-M35627	5489	-55	52	-4	43	628	27	-25	150	449	13	-50					
16-45.6337-113.9690-2-07-	0-M35628	6892	-55	61	-4	58	2653	16	-25	142	549	18	-50					
16-45.6345-113.9662-2-07-	0-M35629	5409	-55	70	14	51	982	30	49	173	524	18	-50					
16-45.0467-113.8352-2-07-	0-M35630	3471	-55	70	7	108	911	21	40	178	609	21	-50					
16-45.0432-113.8349-2-07-	0-M35631	3172	-55	58	7	59	748	24	39	162	536	17	-50					
16-45.0411-113.8314-2-07-	0-M35632	1543	-55	69	10	63	502	27	40	182	589	19	-50					

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

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DOE SAMPLE NUMBER						LASI SAMPLE LOCATION NUMBER AND FIELD DATA																			U CONCENTRATION									
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASI SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	PH	CONDUCTIVITY (µmho/cm)	SONTOWER DEPTH (ft)	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 FLUORIMETRY OR DNC (H) UNITS IN PPB
							DATE	HOUR																										
16-45.0398-113.8189-2-07-	0-M35633-06/05/78-13-	23-	5.5-C	-	7.5-	27-	13-4-1-3-1-3-4-1-2-1-3-5-1-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.21			
16-45.0392-113.7965-2-07-	0-M35634-06/05/78-14-	23-	9.0-	-	7.7-	38-	12-4-1-2-1-4-4-3-2-2-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.47			
16-45.0410-113.7852-2-07-	0-M35635-06/05/78-14-	25-	7.0-	-	7.3-	74-	13-3-1-2-1-3-4-2-2-2-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.21			
16-45.0498-113.7518-2-07-	0-M35635-06/05/78-15-	23-12.0-	-	-	7.3-	125-	13-4-1-4-1-3-3-1-3-2-4-5-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.28			
16-45.0635-113.7422-2-07-	0-M35637-06/05/78-15-	24-11.0-	-	-	7.5-	66-	10-4-1-3-1-4-4-3-2-2-3-5-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01			
16-45.0241-113.5850-2-06-	0-M35638-06/05/78-17-	26-	9.0-	-	7.6-	290-	18-4-1-5-6-2-3-1-4-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.36			
16-45.0349-113.5425-2-07-	0-M35639-06/05/78-18-	24-	6.0-	-	7.4-	83-	13-4-7-3-7-3-4-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.56			
16-45.0373-113.5447-2-07-	0-M35640-06/05/78-18-	24-	8.0-	-	7.8-	28-	12-4-7-1-1-5-5-2-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.17			
16-45.0130-113.6055-2-07-	0-M35641-06/05/78-19-	24-16.0-	-	-	7.4-	500-	31-4-1-4-6-3-3-1-2-2-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.63			
16-45.0750-113.6232-2-07-	0-M35642-06/05/78-20-	22-10.0-	-	-	7.9-	65-	16-4-7-2-7-3-4-1-2-2-3-5-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01			
16-45.0757-113.6278-2-07-	0-M35643-06/05/78-20-	22-10.0-	-	-	7.6-	105-	13-4-1-2-1-3-4-1-2-2-3-5-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.57			
16-45.0671-113.6810-2-07-	0-M35644-06/05/78-20-	22-14.0-	-	-	7.7-	2440-	11-4-1-3-1-3-4-1-2-2-3-5-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	79.31*			
16-45.0985-113.7178-2-07-	0-M35645-06/05/78-21-	22-10.0-	-	-	8.1-	128-	17-4-1-2-1-4-4-2-2-2-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.07			
16-45.0099-113.5612-2-06-	0-M35645-06/05/78-11-	25-	6.5-	-	8.3-	60-	17-4-1-3-1-3-3-1-2-3-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.25			
16-45.0068-113.5603-2-07-																																		

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

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DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY												
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAE SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per billion (ppb)											
							Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
16-45.0398-113.8189-2-07-	0-M355633	2218	-55	64	7	44	797	19	28	199	624	19	-50					
16-45.0392-113.7965-2-07-	0-M355634	3305	-55	77	64	98	846	19	70	222	762	25	-50					
16-45.0410-113.7852-2-07-	0-M355635	7453	-55	68	-4	175	740	22	54	189	604	24	-50					
16-45.0499-113.7518-2-07-	0-M355636	9640	-55	-25	-4	190	2337	28	-25	68	-200	10	-50					
16-45.0635-113.7422-2-07-	0-M355637	5454	-55	62	50	110	1662	41	-25	121	-200	6	-50					
16-45.0241-113.5850-2-06-	0-M355638	21566	-58	47	-4	57	5165	19	-25	121	-200	13	-50					
16-45.0349-113.5425-2-07-	0-M355639	7704	-55	63	-4	71	2370	11	53	167	559	19	-50					
16-45.0373-113.5447-2-07-	0-M355640	2046	-55	56	9	49	558	11	30	150	470	13	-50					
16-45.0130-113.6055-2-07-	0-M355641	33792	-55	53	-4	23	7972	10	-25	168	-200	24	-50					
16-45.0750-113.6232-2-07-	0-M355642	6834	-55	86	31	61	1824	44	53	219	572	18	-50					
16-45.0757-113.6278-2-07-	0-M355643	9789	-55	80	-4	45	2829	14	98	203	703	27	-50					
16-45.0671-113.6810-2-07-	0-M355644	195000	128	27	-4	60	52339	73	-25	288	-200	55	109					
16-45.0985-113.7178-2-07-	0-M355645	11163	-55	79	-4	37	3428	17	114	222	701	27	-50					
16-45.0099-113.5612-2-06-	0-M355646	2781	-55	48	24	62	2158	31	-25	70	-200	-4	-50					
16-45.0068-113.5608-2-07-	0-M355647	11194	-55	57	-4	30	5355	14	47	167	425	15	-50					
16-45.0082-113.5690-2-07-	0-M355648	37901	-55	39	-4	37	10012	20	-25	155	-200	18	-50					
16-45.0160-113.6889-2-07-	0-M355649	3868	111	321	57	203	1887	66	555	774	3653	99	-50					
16-45.0351-113.6848-2-07-	0-M355650	12747	-55	81	-4	245	3040	38	86	223	516	27	-50					
16-45.1166-113.6813-2-07-	0-M355651	6728	-55	67	15	74	1490	26	37	147	291	15	-50					
16-45.0862-113.6820-2-07-	0-M355652	5925	-55	87	12	53	1247	19	68	227	662	23	-50					
16-45.0123-113.5604-2-07-	0-M355653	4028	-55	89	9	67	1537	10	93	238	888	28	-50					
16-45.0116-113.5545-2-07-	0-M355654	4693	-55	91	12	107	1473	20	121	262	889	30	-50					
16-45.2315-113.9079-2-07-	0-M355655	4630	-55	65	7	142	1385	13	50	175	633	27	-50					
16-45.2351-113.9086-2-07-	0-M355656	46287	-55	-25	-4	-25	10748	-3	-25	-25	-200	7	-50					
16-45.2647-113.9036-2-07-	0-M355658	2750	-55	-25	-4	140	704	-3	-25	-25	-200	6	-50					
16-45.2658-113.9031-2-08-	0-M355659	8221	-55	-25	90	102	1881	-3	-25	-25	-200	6	664					
16-45.2758-113.9036-2-07-	0-M355661	21194	-55	-25	-4	47	5192	14	-25	-25	-200	11	-50					
16-45.2950-113.9083-2-07-	0-M355662	2919	-55	-25	-4	169	848	-3	-25	-25	-200	10	-50					
16-45.2972-113.9292-2-06-	0-M355663	27787	-55	-25	-4	47	10104	58	-25	-25	-200	13	-50					
16-45.2867-113.9089-2-07-	0-M355664	3307	-55	-25	-4	-25	640	-3	-25	-25	-200	9	-50					
16-45.2602-113.7595-2-07-	0-M355665	13198	-55	-25	-4	-25	10857	-3	-25	-25	-200	9	-50					
16-45.2708-113.7702-2-07-	0-M355666	2677	-55	260	37	75	596	30	464	533	3080	77	-50					
16-45.2700-113.7698-2-07-	0-M355667	3765	-55	-25	-4	30	921	-3	-25	-25	-200	14	-50					
16-45.2774-113.7829-2-07-	0-M355668	2536	-55	-25	10	41	601	-3	-25	-25	-200	-4	-50					
16-45.2875-113.7882-2-07-	0-M355669	16914	-55	-25	-4	56	4915	-3	-25	-25	-200	11	-50					
16-45.2920-113.7919-2-07-	0-M355670	9725	-55	-25	-4	42	3911	-3	-25	-25	-200	5	-50					
16-45.3061-113.8012-2-07-	0-M355672	4727	-55	-25	-4	78	1312	-3	-25	-25	-200	10	-50					
16-45.3110-113.8020-2-07-	0-M355673	5479	-55	-25	-4	92	1715	-3	-25	-25	-200	15	-50					
16-45.3143-113.8018-2-07-	0-M355674	2456	-55	-25	-4	-25	437	-3	-25	-25	-200	8	-50					
16-45.3165-113.8087-2-07-	0-M355675	22443	-55	-25	-4	30	17674	-3	-25	-25	-200	13	-50					
16-45.3184-113.8314-2-07-	0-M355676	28336	-55	-25	-4	62	17809	64	-25	-25	-200	8	-50					
16-45.2328-113.8920-2-08-	0-M355677	38432	-55	-25	-4	3486	11106	742	-25	-25	-200	19	-50					
16-45.3650-113.9406-2-07-	0-M355678	8560	-55	-25	-4	377	2008	55	-25	-25	-200	13	-50					
16-45.3553-113.9236-2-07-	0-M355679	35347	-55	-25	-4	52	18158	-3	-25	-25	-200	14	-50					
16-45.5940-113.9639-2-07-	0-M355682	1495	-55	-25	-4	53	1088	-3	-25	-25	-200	12	-50					
16-45.5613-113.9497-2-07-	0-M355683	12019	-55	-25	-4	74	7282	-3	-25	-25	-200	16	-50					
16-45.5052-113.8817-2-07-	0-M355684	7430	-55	-25	-4	32	3261	-3	-25	-25	-200	11	107					
16-45.5010-113.8891-2-07-	0-M355685	3541	-55	-25	-4	31	937	-3	-25	-25	-200	11	-50					
16-45.4984-113.9280-2-07-	0-M355686	10296	-55	-25	-4	46	982	5	-25	-25	-200	11	-50					
16-45.5044-113.9794-2-06-	0-M355687	34793	-55	-25	-4	33	11434	-3	-25	-25	-200	15	-50					
16-45.5263-113.9953-2-07-	0-M355688	1547	-55	-25	-4	-25	778	-3	-25	-25	-200	8	-50					

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

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DOE SAMPLE NUMBER						LASI SAMPLE LOCATION NUMBER AND FIELD DATA																		U CONCENTRATION											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASI SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (microhm/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
							DATE	HOUR																											
16-45.5260-113.9938-2-07-						0-M35699-06/09/78-16-	27-	9.0	-	-	7.0	-	26-	16-4-1-2-1-4-4-1-2-1-3-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.31	
16-45.5044-113.9971-2-07-						0-M35699-06/09/78-16-	27-	11.0	-	-	7.2	-	288-	12-4-1-3-1-3-4-1-2-1-3-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.03	
16-45.4962-113.9724-2-07-						0-M35692-06/09/78-17-	27-	15.0	-	-	7.3	-	285-	6-4-1-3-1-2-3-1-2-1-3-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.03	
16-45.3897-113.9648-2-06-						0-M35694-06/09/78-18-	26-	8.0	-	-	7.3	-	183-	10-4-1-3-1-3-3-1-3-2-3-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.38	
16-45.0483-113.5984-2-07-						0-M35696-06/12/78-11-	26-	8.5	-	-	7.8	-	235-	13-4-7-2-7-4-4-1-2-3-4-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.15	
16-45.0382-113.6216-2-07-						0-M35697-06/12/78-12-	27-	14.5	-	-	8.4	-	510-	13-4-7-3-7-3-4-1-2-3-3-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.71	
16-45.2304-113.7430-2-07-						0-M35698-06/12/78-16-	26-	9.0	-	-	8.2	-	36-	13-4-7-2-7-4-4-1-2-2-3-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.04	
16-45.2334-113.7445-2-07-						0-M35699-06/12/78-16-	26-	9.0	-	-	7.2	-	40-	16-4-7-2-7-4-4-1-2-3-4-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.11	
16-45.2267-113.7533-2-07-						0-M35700-06/12/78-17-	26-	17.5	-	-	7.3	-	80-	9-4-1-2-1-3-4-2-2-2-2-4-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.15	
16-45.5843-113.9687-2-07-						0-M35704-06/13/78-10-	21-	6.0	-	-	7.2	-	19-	10-4-7-2-7-4-4-1-2-1-3-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.14	
16-45.5727-113.9555-2-07-						0-M35705-06/13/78-10-	21-	7.0	-	-	7.4	-	13-	13-4-7-2-7-4-4-1-2-1-3-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.44	
16-45.5686-113.9511-2-07-						0-M35706-06/13/78-10-	21-	8.5	-	-	7.3	-	41-	10-4-1-2-7-3-4-1-2-1-3-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.27	
16-45.4119-113.9518-2-07-						0-M35707-06/13/78-12-	24-	13.0	-	-	8.1	-	410-	12-4-1-3-1-3-4-1-2-4-2-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.67	
16-45.4301-113.8404-2-07-						0-M35708-06/13/78-14-	19-	4.0	-	-	8.1	-	37-	8-4-1-2-1-4-4-1-2-1-3-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.43	
16-45.4311-113.8413-2-07-						0-M35709-06/13/78-14-	20-	5.0	-	-	7.5	-	27-	10-4-1-2-1-4-4-1-2-1-4-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02	
16-45.4075-113.8858-2-07-						0-M35710-06/13/78-15-	25-	13.0	-	-	7.2	-	190-	9-4-7-3-7-3-4-1-2-1-3-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.21	
16-45.4003-113.8654-2-07-						0-M35711-06/13/78-16-	20-	-	-	-	7.3	-	26-	9-4-7-2-7-4-4-1-2-2-3-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02	
16-45.3871-113.9130-2-08-						0-M35712-06/13/78-17-	24-	12.0	-	-	7.0	-	230-	11-4-1-1-1-1-1-1-2-3-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.05	
16-45.4139-113.8976-2-07-						0-M35713-06/13/78-18-	25-	12.5	-	-	7.3	-	80-	10-4-7-2-7-4-4-1-2-2-3-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.85	
16-45.3783-113.9165-2-07-						0-M35714-06/13/78-18-	23-	13.0	-	-	7.2	-	190-	10-4-7-2-7-3-4-1-2-2-3-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.37	
16-45.4397-113.9463-2-07-						0-M35725-06/14/78-18-	22-	7.5	-	-	7.4	-	132-	10-4-1-3-1-3-3-1-2-1-3-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02	
16-45.4407-113.9467-2-07-						0-M35726-06/14/78-18-	22-	8.5	-	-	7.5	-	134-	12-4-1-3-1-3-3-1-2-1-3-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01	
16-45.4575-113.9419-2-07-						0-M35727-06/14/78-19-	20-	9.5	-	-	7.3	-	61-	9-4-1-3-1-3-3-1-2-1-3-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01	
16-45.4695-113.9603-2-06-						0-M35728-06/14/78-19-	19-	6.5	-	-	6.8	-	213-	8-4-1-5-6-2-3-1-3-1-3-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01	
16-45.4879-113.9312-2-07-						0-M35729-06/14/78-20-	20-	7.5	-	-	7.4	-	52-	5-4-1-3-1-3-3-1-2-1-3-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01	
16-45.0865-113.7674-2-07-						0-M35731-06/15/78-11-	22-	16.5	-	-	8.0	-	600-	12-3-4-3-4-3-4-1-2-4-2-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.26	
16-45.0586-113.7127-2-07-						0-M35732-06/15/78-12-	24-	21.0	-	-	8.1	-	425-	12-4-7-3-7-2-3-1-2-4-3-4-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.62	
16-45.0631-113.7742-2-07-						0-M35733-06/15/78-13-	20-	19.5	-	-	8.2	-	195-	15-4-1-3-1-2-2-2-2-4-2-4-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.43	
16-45.1155-113.7910-2-07-						0-M35734-06/15/78-14-	19-	14.0	-	-	8.2	-	66-	13-4-1-3-1-4-4-1-2-3-3-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.09	
16-45.1009-113.7809-2-07-						0-M35735-06/15/78-14-	20-	24.0	-	-	8.3	-	484-	11-4-1-3-1-3-3-1-2-4-3-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.40	
16-45.3616-113.8328-2-07-						0-M35736-06/14/78-12-	24-	6.0	-	-	7.7	-	23-	11-4-1-2-1-3-3-1-2-1-3-5-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.36	
16-45.3624-113.8330-2-07-						0-M35737-06/14/78-12-	24-	7.0	-	-	7.1	-	42-	11-4-1-2-1-3-3-1-2-1-3-5-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.53	
16-45.3368-113.8320-2-07-						0-M35738-06/14/78-13-	24-	9.0	-	-	6.9	-	110-	11-4-3-2-3-3-3-1-2-4-3-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.93	
16-45.3388-113.8479-2-07-						0-M35739-06/14/78-13-	26-	10.0	-	-	6.7	-	125-	8-4-6-2-6-3-3-1-2-2-4-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.53	
16-45.3400-113.8476-2-07-						0-M35740-06/14/78-13-	30-	9.0	-	-	6.7	-	59-	11-4-1-2-1-3-3-1-2-2-4-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.62	
16-45.3602-113.8601-2-07-						0-M35742-06/14/78-16-	26-	13.0	-	-	7.3	-	24-	12-4-1-2-1-3-3-1-2-1-3-5-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.53	
16-45.2653-113.9480-2-07-						0-M35744-06/14/78-19-	23-	7.0	-	-	6.5	-	46-	17-4-1-3-1-3-3-1-2-1-4-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02	
16-45.2600-113.9551-2-07-						0-M35745-06/14/78-19-	19-	7.0	-	-	6.6	-	23-	11-4-1-2-1-4-4-1-2-1-4-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01	
16-45.2561-113.9556-2-07-						0-M35746-06/14/78-19-	17-	5.0	-	-	6.1	-	35-	18-4-3-3-3-3-3-1-2-1-4-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.20	
16-45.4181-113.9781-2-07-						0-M35747-06/16/78-11-	22-	6.0	-	-	7.0	-	270-	9-4-1-2-1-3-3-1-2-3-5-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.28	
16-45.5694-113.8466-2-07-						0-M35749-06/16/78-12-	24-	8.5	-	-	6.9	-	41-	7-4-1-2-1-3-3-1-2-1-4-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.52	
16-45.5714-113.8483-2-07-						0-M35750-06/16/78-12-	24-	7.0	-	-	7.0	-	27-	6-4-1-2-1-3-3-1-2-1-4-5-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.04	
16-45.5629-113.8513-2-07-						0-M35751-06/16/78-13-	25-	9.0	-	-	6.8	-	90-	9-4-1-2-1-3-3-1-2-1-3-5-2-	-	-																			

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

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DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY												
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAS. SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per billion (ppb)											
							Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
16-45.5260-113.9938-2-07-	0-M35699	2218	-55	-25	-4	70	1071	-3	-25	-25	-200	5	-50					
16-45.5044-113.9971-2-07-	0-M35690	20116	-55	-25	-4	98	6493	-3	-25	-25	-200	35	-50					
16-45.4862-113.9724-2-07-	0-M35692	20622	-55	-25	-4	-25	17686	-3	-25	-25	-200	14	-50					
16-45.3897-113.9648-2-06-	0-M35694	19003	-55	-25	-4	-25	6427	-3	-25	-25	-200	19	-50					
16-45.0483-113.5984-2-07-	0-M35696	16109	-55	36	30	70	12320	48	-25	-25	-200	10	-50					
16-45.0382-113.6216-2-07-	0-M35697	40502	-55	-25	-4	-25	18333	-3	-25	-25	-200	17	-50					
16-45.2304-113.7430-2-07-	0-M35698	4017	-55	-25	-4	-25	1643	-3	-25	-25	-200	10	-50					
16-45.2334-113.7445-2-07-	0-M35699	4067	-55	-25	-4	-25	1508	-3	-25	-25	-200	8	-50					
16-45.2267-113.7533-2-07-	0-M35700	7809	-55	-25	-4	74	2279	-3	-25	-25	-200	17	-50					
16-45.5843-113.9687-2-07-	0-M35704	1816	-55	26	-4	35	855	-3	59	-25	236	20	-50					
16-45.5727-113.9555-2-07-	0-M35705	1050	-55	-25	-4	-25	409	-3	-25	-25	-200	14	-50					
16-45.5586-113.9511-2-07-	0-M35706	3263	-55	40	37	95	1624	41	-25	-25	-200	7	-50					
16-45.4119-113.9518-2-07-	0-M35707	29666	-55	-25	-4	-25	18766	-3	-25	-25	-200	15	-50					
16-45.4301-113.8404-2-07-	0-M35708	4657	-55	-25	-4	-25	1022	-3	32	-25	-200	14	-50					
16-45.4311-113.8413-2-07-	0-M35709	3843	-55	-25	-4	-25	559	-3	-25	-25	-200	9	-50					
16-45.4075-113.8858-2-07-	0-M35710	20047	-55	-25	-4	26	4703	-3	-25	41	-200	22	-50					
16-45.4003-113.8654-2-07-	0-M35711	3939	-55	-25	-4	-25	535	-3	-25	64	-200	16	-50					
16-45.3871-113.9130-2-08-	0-M35712	23400	-55	-25	-4	-25	8499	-3	38	40	-200	20	-50					
16-45.4139-113.8976-2-07-	0-M35713	10374	-55	-25	-4	-25	1831	-3	-25	-25	-200	15	-50					
16-45.3793-113.9155-2-07-	0-M35714	20250	-55	-25	-4	35	6174	-3	34	53	-200	21	-50					
16-45.4397-113.9463-2-07-	0-M35725	10161	-55	-25	-4	340	3500	4	32	61	-200	55	-50					
16-45.4407-113.9467-2-07-	0-M35726	9146	-55	46	32	404	2782	103	27	48	-200	29	-50					
16-45.4575-113.9419-2-07-	0-M35727	4386	-55	-25	-4	176	1545	-3	43	27	-200	28	-50					
16-45.4685-113.9603-2-06-	0-M35728	18814	-55	-25	-4	42	8266	-3	-25	-25	-200	18	-50					
16-45.4879-113.9312-2-07-	0-M35729	5904	-55	-25	-4	37	1749	-3	-25	-25	-200	16	-50					
16-45.0865-113.7674-2-07-	0-M35731	34132	-55	-25	-4	141	12230	10	-25	69	-200	26	-50					
16-45.0586-113.7127-2-07-	0-M35732	27551	-55	27	-4	42	5819	-3	-25	77	-200	26	-50					
16-45.0631-113.7742-2-07-	0-M35733	16923	-55	42	-4	187	3465	11	59	96	-200	37	-50					
16-45.1155-113.7910-2-07-	0-M35734	11298	-55	53	-4	57	2600	-3	96	113	349	36	-50					
16-45.1009-113.7809-2-07-	0-M35735	27681	-55	-25	-4	31	18733	4	56	120	-200	32	-50					
16-45.3616-113.8323-2-07-	0-M35736	2101	-55	-25	-4	31	593	17	-25	50	-200	-4	-50					
16-45.3624-113.8330-2-07-	0-M35737	4042	-55	-25	-4	39	1293	19	-25	89	-200	-4	-50					
16-45.3368-113.8320-2-07-	0-M35738	11658	-55	-25	-4	31	3937	20	-25	43	-200	-4	-50					
16-45.3388-113.8479-2-07-	0-M35739	11144	-55	-25	-4	28	5804	13	-25	-25	-200	-4	-50					
16-45.3400-113.8476-2-07-	0-M35740	6460	-55	-25	-4	-25	2251	-3	-25	-25	-200	-4	-50					
16-45.3602-113.8601-2-07-	0-M35742	3402	-55	-25	-4	-25	603	-3	-25	-25	-200	-4	-50					
16-45.2653-113.9480-2-07-	0-M35744	3670	-55	-25	-4	378	1203	10	-25	-25	-200	-4	-50					
16-45.2600-113.9551-2-07-	0-M35745	2311	-55	-25	-4	55	540	-3	-25	-25	-200	-4	-50					
16-45.2561-113.9556-2-07-	0-M35746	3064	57	33	40	780	884	49	-25	29	-200	5	-50					
16-45.4181-113.9781-2-07-	0-M35747	24121	61	-25	-4	27	17028	9	-25	-25	-200	-4	-50					
16-45.5694-113.8466-2-07-	0-M35749	4512	-55	-25	-4	-25	2779	-3	-25	-25	-200	-4	-50					
16-45.5714-113.8483-2-07-	0-M35750	2134	-55	-25	-4	32	2044	5	-25	-25	-200	-4	-50					
16-45.5629-113.8513-2-07-	0-M35751	11088	-55	-25	-4	-25	4910	5	-25	-25	-200	-4	-50					
16-45.5634-113.8674-2-07-	0-M35752	5120	-55	-25	-4	-25	2125	-3	-25	-25	-200	-4	-50					
16-45.5595-113.8687-2-07-	0-M35753	5477	-55	-25	19	72	2935	38	-25	-25	-200	-4	-50					
16-45.4121-113.9265-2-07-	0-M35754	11349	-55	-25	-4	-25	1747	-3	-25	-25	-200	-4	-50					
16-45.0503-113.9206-2-07-	0-M35755	23216	-55	-25	-4	-25	5313	4	-25	-25	-200	-4	-50					
16-45.2903-113.9486-2-07-	0-M35756	2818	-55	-25	-4	98	732	7	-25	-25	-200	-4	-50					
16-45.2920-113.9458-2-07-	0-M35757	11621	-55	-25	-4	282	2979	9	-25	-25	-200	-4	-50					
16-45.3878-113.9783-2-08-	0-M35760	16617	-55	-25	39	58	8786	16	-25	-25	-200	-4	2431					
16-45.3875-113.9791-2-07-	0-M35761	11320	-55	-25	-4	50	6198	13	-25	47	-200	-4	-50					

[illegible]

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

2

DOE SAMPLE NUMBER						DOE SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY PLASMA-SOURCE EMISSION SPECTROGRAPHY											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Concentrations reported in weight parts per billion (ppb)											
							Ca	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Pb	Ti	Zn
16-45.3974-113.9766-2-07-			0-M35752				16265	73	-25	-4	-25	6441	8	-25	41	-200	-4	-50
16-45.3924-113.9829-2-07-			0-M35753				13832	71	-25	-4	34	7921	26	-25	-25	-200	-4	92
16-45.4065-113.9944-2-08-			0-M35754				34189	82	-25	-4	51	13112	29	-25	-25	-200	-4	-50
16-45.4028-113.9375-2-07-			0-M35755				68747	94	-25	-4	-25	29198	18	-25	-25	-200	-4	-50
16-45.1665-113.7087-2-07-			0-M35771				9351	-55	-25	-4	-25	2978	-3	-25	-25	-200	-4	-50
16-45.1640-113.6824-2-07-			0-M35772				6485	-55	-25	-4	-25	2130	4	-25	-25	-200	-4	-50
16-45.1510-113.6808-2-06-			0-M35773				42899	-55	-25	-4	-25	12292	17	-25	-25	-200	-4	-50
16-45.1574-113.6757-2-06-			0-M35774				28908	-55	-25	-4	-25	6116	8	-25	-25	-200	-4	-50
16-45.1511-113.6568-2-07-			0-M35775				4535	-55	-25	-4	64	1191	7	-25	40	-200	-4	-50
16-45.1354-113.6641-2-07-			0-M35776				9233	-55	-25	-4	669	2822	8	-25	-25	-200	12	-50
16-45.1536-113.6607-2-07-			0-M35777				5871	-55	-25	-4	67	1892	8	-25	29	-200	-4	-50
16-45.1453-113.6962-2-06-			0-M35778				29685	-55	-25	-4	54	15746	43	-25	42	-200	-4	-50
16-45.1277-113.7074-2-06-			0-M35779				35718	68	-25	-4	55	7847	145	-25	56	-200	-4	57
16-45.1196-113.7369-2-07-			0-M35780				15814	57	-25	-4	50	3908	37	-25	-25	-200	-4	-50
16-45.2112-113.9243-2-07-			0-M35781				28822	61	-25	-4	115	6768	9	-25	35	-200	-4	-50
16-45.2104-113.9344-2-07-			0-M35782				4815	-55	-25	-4	64	738	7	-25	50	-200	-4	-50
16-45.1981-113.9330-2-07-			0-M35783				27959	-55	-25	-4	32	7079	22	-25	-25	-200	-4	-50
16-45.0630-113.5519-2-07-			0-M35784				2798	64	-25	-4	-25	714	10	-25	70	-200	-4	-50
16-45.0472-113.5700-2-07-			0-M35785				7116	-55	-25	-4	50	2714	9	26	60	-200	-4	-50
16-45.1834-113.9265-2-07-			0-M35786				2492	-55	-25	-4	62	563	7	-25	38	-200	-4	-50
16-45.1758-113.9310-2-08-			0-M35787				57777	65	-25	-4	28	23210	16	-25	50	-200	-4	-50
16-45.1714-113.9538-2-07-			0-M35788				2758	-55	-25	-4	39	799	8	-25	83	-200	-4	-50
16-45.1690-113.9518-2-07-			0-M35789				2531	80	-25	44	76	750	57	-25	50	-200	-4	90
16-45.2156-113.7173-2-07-			0-M35792				3253	73	-25	-4	32	1416	15	44	103	-200	-4	58
16-45.1896-113.7250-2-07-			0-M35793				16378	83	-25	-4	121	3013	24	33	145	-200	-4	-50
16-45.1461-113.7569-2-08-			0-M35794				67923	104	-25	-4	59	7816	44	-25	101	-200	-4	2383

APPENDIX I-B

Listings of Field Data and Elemental Concentrations for Sediment Samples from the Dillon Quadrangle, Montana/Idaho (Pages 66 through 201)

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 III for Code to Listings)

DOE SAMPLE NUMBER						LAST SAMPLE LOCATION NUMBER AND FIELD DATA																							U CONCENTRATION					
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REFRACTIVE	LAST SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SODIUM NITRATE (µL 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																										
30-45.8031	-112.7464	-2-12-	0-M34001	-05/30/76-14-	13-	5.2-C-	-	5.3-	54-	8-3-7-5-8-4-4-1-2-1-3-4-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90		
30-45.8072	-112.7431	-2-12-	0-M34002	-05/30/76-15-	13-	5.6-C-	-	5.2-	49-	13-3-7-5-8-3-4-1-2-1-3-4-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.10		
30-45.8197	-112.7378	-2-12-	0-M34003	-05/30/76-16-	14-	8.1-C-	-	5.2-	53-	13-3-7-5-8-3-4-2-1-1-2-3-3-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.20		
30-45.8089	-112.5933	-2-12-	0-M34004	-05/30/76-1A-	15-13.3-	C-5.3-	-	5.3-	71-	16-3-7-6-9-2-4-5-1-4-4-7-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20		
30-45.7967	-112.5681	-2-12-	0-M34005	-05/30/76-19-	14-13.2-C-	-	6.0-	104-	16-3-7-6-8-2-3-3-	-1-2-3-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.40		
30-45.7558	-112.6025	-2-12-	0-M34006	-05/30/76-18-	12-	5.2-C-	-	5.4-	76-	27-3-7-4-7-4-4-2-2-1-3-4-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.10		
30-45.7644	-112.5967	-2-12-	0-M34007	-05/30/76-20-	11-10.8-C-	-	5.6-	142-	16-3-7-3-7-4-4-2-2-3-3-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.10		
30-45.7697	-112.5244	-2-12-	0-M34008	-05/31/76-12-	8-	2.3-C-	-	5.3-	47-	33-2-6-3-6-4-4-1-2-1-4-4-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.20		
30-45.7661	-112.5278	-2-12-	0-M34009	-05/31/76-13-	8-	3.4-C-	-	5.3-	62-	11-2-7-5-7-2-4-3-2-1-4-4-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27.10		
30-45.7650	-112.5922	-2-12-	0-M34010	-05/31/76-13-	13-	8.4-C-	-	5.5-	83-	11-2-1-4-8-3-4-1-2-3-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.20		
30-45.7689	-112.5806	-2-15-	0-M34011	-05/31/76-13-	14-	-C-	-	-	-	11-2-1-4-6-6-1-	-1-3-2-3-2-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.20		
30-45.7644	-112.5753	-2-12-	0-M34012	-05/31/76-14-	15-	9.8-C-	-	5.2-	61-	16-2-1-4-6-3-3-1-2-3-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.60		
30-45.7756	-112.5636	-2-12-	0-M34013	-05/31/76-14-	14-10.2-C-	-	5.7-	115-	5-2-1-3-7-3-3-3-2-3-3-3-3-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.50		
30-45.7961	-112.5164	-2-12-	0-M34014	-05/31/76-15-	14-	9.4-C-	-	5.6-	94-	11-3-7-4-7-2-4-2-2-2-4-3-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.90		
30-45.7925	-112.5547	-2-12-	0-M34015	-05/31/76-15-	13-	9.1-C-	-	6.1-	362-	2-2-1-4-7-3-3-2-2-1-3-4-2-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90		
30-45.8205	-112.5206	-2-12-	0-M34016	-05/31/76-17-	14-	8.9-C-	-	5.5-	122-	19-3-7-5-8-3-3-1-2-1-4-6-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	90.10		
30-45.9528	-112.7056	-2-12-	0-M34017	-04/14/76-8-	2-	1.0-C-	-	6.6-	230-	22-3-1-4-2-4-4-2-2-4-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.70		
30-45.9217	-112.7233	-2-12-	0-M34019	-04/14/76-11-	11-	1.0-C-	-	6.3-	210-	27-3-9-4-9-3-3-1-1-1-4-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.70		
30-45.9111	-112.7244	-2-12-	0-M34020	-04/14/76-11-	7-	1.0-C-	-	7.0-	210-	16-3-1-7-6-4-4-1-1-1-3-	-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.00		
30-45.9128	-112.7197	-2-12-	0-M34021	-04/14/76-12-	8-	4.0-C-	-	6.0-	490-	27-3-1-4-1-2-3-1-1-2-3-	-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.60		
30-45.9117	-112.7097	-2-12-	0-M34022	-04/14/76-13-	12-	4.0-C-	-	7.3-	500-	11-3-1-7-6-2-3-1-1-3-4-	-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.30		
30-45.9033	-112.7111	-2-12-	0-M34023	-04/14/76-14-	10-11.0-C-	-	7.2-	500-	19-3-1-7-6-2-4-1-1-4-3-	-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.10		
30-45.8794	-112.7167	-2-12-	0-M34025	-04/14/76-14-	10-	9.0-C-	-	7.3-	310-	8-3-1-4-7-3-3-1-1-3-3-	-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.70		
30-45.8744	-112.7389	-2-12-	0-M34026	-04/14/76-16-	8-	5.0-C-	-	7.9-	330-	27-3-1-4-7-3-4-1-1-3-3-	-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.70		
30-45.8522	-112.7383	-2-12-	0-M34027	-04/14/76-18-	2-	1.0-C-	-	7.0-	230-	27-3-1-5-6-3-4-1-1-2-3-	-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.80		
30-45.8469	-112.6939	-2-12-	0-M34028	-04/15/76-9-	2-	5.0-C-	-	6.7-	150-	22-4-4-6-1-2-1-3-4-3-	-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.90		
30-45.8353	-112.7075	-2-12-	0-M34029	-04/15/76-10-	8-	3.0-C-	-	6.1-	220-	11-4-4-6-3-3-1-1-4-3-	-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80		
30-45.8381	-112.7014	-2-15-	0-M34030	-04/15/76-10-	8-	-C-	-	-	-	36-4-4-6-1-	-3-4-3-	-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.70		
30-45.8225	-112.6917	-2-15-	0-M34031	-04/15/76-11-	7-	-C-	-	-	-	13-4-4-6-1-	-3-4-3-	-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.40		
30-45.7975	-112.6833	-2-12-	0-M34033	-04/15/76-12-	4-	4.0-C-	-	6.8-	220-	16-4-4-6-3-4-2-1-4-3-	-5-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.50		
30-45.7953	-112.6842	-2-15-	0-M34034	-04/15/76-12-	4-	-C-	-	-	-	11-4-4-6-1-	-3-4-3-	-5-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-								

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
30-45.8031-112.7464-2-12-						0-M34001	-5	-5	-5	214	-20	23	42	-10	-15		2	49
30-45.8072-112.7431-2-12-						0-M34002	-5	-5	-5	48	-20	-15	32	-10	-15		2	15
30-45.8197-112.7378-2-12-						0-M34003	-5	-5	-5	39	-20	21	23	-10	-15		2	18
30-45.8089-112.5933-2-12-						0-M34004	-5	-5	-5	74	-20	15	24	-10	-15		-1	11
30-45.7967-112.5681-2-12-						0-M34005	-5	5	-5	75	-20	-15	20	-10	-15		-1	18
30-45.7558-112.6025-2-12-						0-M34006	-5	-5	-5	43	-20	25	14	-10	-15		2	49
30-45.7644-112.5967-2-12-						0-M34007	-5	-5	-5	23	-20	73	5	-10	-15		1	42
30-45.7697-112.5244-2-12-						0-M34008	-5	-5	-5	41	-20	32	26	-10	-15		3	46
30-45.7661-112.5278-2-12-						0-M34009	-5	-5	-5	29	-20	-15	34	-10	-15		2	34
30-45.7650-112.5922-2-12-						0-M34010	-5	-5	-5	58	-20	27	20	-10	-15		1	30
30-45.7689-112.5805-2-15-						0-M34011	-5	-5	-5	34	-20	-15	15	-10	-15		-1	38
30-45.7694-112.5753-2-12-						0-M34012	-5	-5	-5	81	-20	17	23	-10	-15		2	47
30-45.7756-112.5636-2-12-						0-M34013	-5	-5	-5	51	-20	-15	20	-10	-15		1	33
30-45.7961-112.5164-2-12-						0-M34014	-5	-5	-5	35	-20	-15	16	-10	-15		1	23
30-45.7925-112.5547-2-12-						0-M34015	-5	-5	-5	173	-20	-15	27	11	21		1	51
30-45.8206-112.5206-2-12-						0-M34016	-5	-5	-5	106	-20	19	26	-10	-15		-1	25
30-45.9528-112.7056-2-12-						0-M34017	-5	-5	-5	48	-20	16	15	16	-15		2	29
30-45.9217-112.7233-2-12-						0-M34019	5	5	-5	47	-20	36	15	-10	-15		2	47
30-45.9111-112.7244-2-12-						0-M34020	-5	-5	-5	92	-20	-15	12	-10	-15		2	37
30-45.9128-112.7197-2-12-						0-M34021	-5	-5	-5	42	-20	26	32	17	-15		3	38
30-45.9117-112.7097-2-12-						0-M34022	-5	-5	-5	135	-20	23	40	-10	-15		-1	35
30-45.9033-112.7111-2-12-						0-M34023	-5	-5	-5	89	-20	24	15	12	-15		2	36
30-45.8794-112.7167-2-12-						0-M34025	-5	-5	-5	117	-20	-15	-5	36	-15		2	42
30-45.8744-112.7389-2-12-						0-M34026	-5	-5	-5	43	-20	55	8	-10	-15		2	35
30-45.8522-112.7383-2-12-						0-M34027	-5	-5	-5	74	-20	-15	31	13	-15		2	25
30-45.8469-112.6939-2-12-						0-M34028	-5	7	-5	49	-20	-15	30	-10	-15		2	21
30-45.8353-112.7075-2-12-						0-M34029	-5	-5	-5	53	-20	16	20	-10	-15		2	28
30-45.8381-112.7014-2-15-						0-M34030	6	-5	-5	27	-20	-15	-5	-10	21		2	20
30-45.8225-112.6917-2-15-						0-M34031	-5	-5	-5	43	-20	33	19	-10	-15		2	18
30-45.7975-112.6833-2-12-						0-M34033	-5	-5	-5	43	-20	-15	24	-10	-15		1	38
30-45.7953-112.6842-2-15-						0-M34034	-5	-5	-5	33	-20	23	22	-10	-15		2	39
30-45.7556-112.7406-2-15-						0-M34035	-5	-5	-5	27	-20	-15	14	-10	-15		3	31
30-45.9775-112.6522-2-12-						0-M34036	-5	-5	-5	86	-20	-15	39	11	-15		2	27
30-45.9689-112.6478-2-15-						0-M34037	-5	6	-5	132	-20	25	42	-10	-15		2	33
30-45.9536-112.6628-2-15-						0-M34038	7	-5	-5	150	-20	-15	13	20	-15		2	8
30-45.9389-112.6644-2-15-						0-M34039	-5	-5	6	88	-20	-15	48	-10	-15		2	29
30-45.9311-112.6672-2-12-						0-M34040	-5	-5	-5	80	-20	36	29	-10	38		1	17
30-45.7894-112.7122-2-15-						0-M34041	-5	-5	-5	38	-20	-15	23	-10	29		3	34
30-45.7889-112.7139-2-15-						0-M34042	-5	-5	-5	18	-20	-15	27	-10	18		2	32
30-45.7708-112.7258-2-15-						0-M34043	-5	-5	-5	28	-20	-15	13	-10	-15		3	33
30-45.7650-112.7278-2-15-						0-M34044	-5	-5	-5	12	-20	-15	14	-10	-15		3	45
30-45.7753-112.7153-2-12-						0-M34045	-5	-5	-5	13	-20	-15	13	-10	-15		3	36
30-45.9556-112.5597-2-12-						0-M34046	-5	6	-5	84	-20	-15	16	-10	-15		2	31
30-45.9564-112.5608-2-12-						0-M34047	-5	-5	-5	43	-20	-15	16	-10	-15		3	54
30-45.9292-112.5656-2-12-						0-M34048	-5	9	-5	72	-20	-15	32	-10	-15		1	20
30-45.9200-112.5744-2-12-						0-M34049	-5	-5	-5	68	-20	-15	24	-10	-15		2	47
30-45.9167-112.5756-2-12-						0-M34050	-5	-5	-5	26	-20	-15	15	-10	-15		2	39
30-45.9111-112.5722-2-12-						0-M34051	-5	-5	-5	49	-20	-15	13	-10	-15		1	30
30-45.9108-112.5200-2-12-						0-M34052	-5	-5	-5	76	-20	-15	29	-10	-15		2	41
30-45.8819-112.5306-2-12-						0-M34053	-5	-5	-5	53	-20	-15	8	-10	-15		1	20
30-45.8806-112.5081-2-12-						0-M34054	-5	-5	-5	57	-20	-15	26	-10	-15		2	52

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

③

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
30-45.8031-112.7464-2-12-						0-M34001	56722	-0.12	602	40790	100	259	19.2	29	3.3	6	1.8	41850	7.8	14280	49	0.6
30-45.8072-112.7431-2-12-						0-M34002	66560	-0.09	503	13960	72	-79	8.1	38	4.6	5	1.6	14410	6.0	11600	38	0.4
30-45.8197-112.7378-2-12-						0-M34003	67330	-0.10	642	8924	88	-70	11.4	56	6.0	5	1.6	15520	9.8	13600	49	0.5
30-45.8089-112.5933-2-12-						0-M34004	71730	-0.15	585	19770	82	284	18.1	43	6.0	4	1.1	37550	6.0	14260	45	0.3
30-45.7967-112.5681-2-12-						0-M34005	60847	-0.12	554	25770	63	347	18.9	41	6.7	4	1.2	32180	6.5	13710	41	0.4
30-45.7558-112.6025-2-12-						0-M34006	65730	-0.08	370	38450	101	-89	11.5	44	5.0	9	1.7	20030	7.4	14120	51	0.7
30-45.7644-112.5967-2-12-						0-M34007	61410	-0.08	264	96220	76	153	13.6	161	2.6	3	1.1	19210	8.6	9012	46	0.4
30-45.7697-112.5244-2-12-						0-M34008	73560	-0.14	419	7160	86	-73	13.2	57	8.3	7	1.4	24870	6.6	20250	40	0.6
30-45.7661-112.5278-2-12-						0-M34009	82670	-0.08	764	18520	91	-131	9.5	37	5.7	4	1.3	14180	11.2	14890	65	0.4
30-45.7650-112.5922-2-12-						0-M34010	70920	-0.10	456	22260	93	-102	14.3	83	6.2	8	1.9	24200	7.0	13330	64	0.6
30-45.7689-112.5806-2-15-						0-M34011	72250	-0.07	325	140100	45	207	7.4	20	2.5	2	0.7	11420	3.6	5955	28	0.1
30-45.7694-112.5753-2-12-						0-M34012	71040	-0.13	523	9151	110	-71	13.2	43	5.0	10	2.2	24140	8.7	18170	58	0.8
30-45.7756-112.5636-2-12-						0-M34013	66920	-0.08	497	15440	76	-96	11.1	32	7.1	6	1.5	19710	7.8	15290	47	0.5
30-45.7961-112.5164-2-12-						0-M34014	58720	-0.11	-265	26850	87	-154	18.4	64	10.7	4	1.3	46250	25.3	-6147	44	0.5
30-45.7925-112.5547-2-12-						0-M34015	56790	1.28	386	72050	78	210	14.1	44	12.9	3	0.9	32580	11.8	8859	36	0.3
30-45.8206-112.5206-2-12-						0-M34016	55930	-0.17	408	39270	81	177	13.9	51	5.5	4	1.2	23740	7.1	15890	98	0.6
30-45.9528-112.7056-2-12-						0-M34017	79220	-0.10	375	35200	124	-126	14.5	54	23.5	6	1.5	33500	30.4	13530	72	0.7
30-45.9217-112.7233-2-12-						0-M34019	70220	-0.11	-237	72220	133	-145	16.1	50	23.0	6	1.4	58070	27.5	13100	77	0.8
30-45.9111-112.7244-2-12-						0-M34020	73260	-0.14	-215	32810	110	173	19.1	50	16.0	6	1.6	48960	19.0	15650	64	0.8
30-45.9128-112.7197-2-12-						0-M34021	79360	-0.14	283	37730	122	-126	17.9	36	6.0	7	1.8	33890	10.2	15400	62	0.8
30-45.9117-112.7097-2-12-						0-M34022	70350	-0.12	529	30540	74	229	19.6	32	11.9	5	1.2	27650	8.1	17300	48	0.4
30-45.9033-112.7111-2-12-						0-M34023	75240	-0.12	567	29590	90	160	16.0	58	8.9	5	1.3	31200	10.1	12980	60	0.6
30-45.8794-112.7167-2-12-						0-M34025	73770	-0.11	570	30570	150	-107	13.5	39	5.3	7	1.6	42380	30.7	14680	83	0.8
30-45.8744-112.7389-2-12-						0-M34026	68900	-0.15	-195	44140	148	-132	18.5	54	7.7	7	1.6	39360	12.3	10960	72	0.8
30-45.8522-112.7383-2-12-						0-M34027	65250	-0.12	417	33530	82	211	17.2	44	4.6	5	1.1	26270	17.5	11280	48	0.6
30-45.8469-112.6939-2-12-						0-M34028	84840	-0.07	697	24600	114	-134	7.9	19	3.1	5	1.4	24250	9.1	18430	63	0.5
30-45.8353-112.7075-2-12-						0-M34029	65400	-0.11	598	21520	82	171	11.0	58	4.5	4	1.3	20260	10.9	12970	39	0.4
30-45.8381-112.7014-2-15-						0-M34030	71910	-0.12	411	34330	124	-97	13.9	50	3.1	5	1.5	59980	33.1	11940	67	0.7
30-45.8225-112.6917-2-15-						0-M34031	64530	-0.08	497	33350	75	121	13.7	77	3.0	4	1.2	37160	14.0	11410	42	0.5
30-45.7975-112.6833-2-12-						0-M34033	59900	-0.08	697	32300	105	-127	9.9	38	6.2	4	1.2	23640	7.9	17580	61	0.4
30-45.7953-112.6842-2-15-						0-M34034	62150	-0.09	543	24210	103	-101	10.3	26	3.4	5	1.3	20040	9.8	15060	55	0.5
30-45.7556-112.7406-2-15-						0-M34035	65310	-0.10	451	22180	132	-92	9.6	36	3.7	5	1.6	27670	13.5	15900	73	0.6
30-45.9775-112.6522-2-12-						0-M34036	82590	-0.11	584	23070	86	217	14.8	23	6.4	5	1.3	29370	11.1	15800	54	0.6
30-45.9689-112.6478-2-15-						0-M34037	80190	-0.11	437	15720	74	-113	12.3	19	7.9	5	1.3	25370	6.3	18370	49	0.5
30-45.9536-112.6628-2-15-						0-M34038	67710	-0.10	355	25020	233	-101	14.7	69	5.1	7	1.9	80270	47.0	13310	107	1.0
30-45.9389-112.6644-2-15-						0-M34039	78590	-0.09	551	23810	93	-104	7.3	22	3.2	5	1.2	23690	11.0	21100	56	0.6
30-45.9311-112.6672-2-12-						0-M34040	73050	-0.10	504	21860	130	-121	9.5	34	4.7	6	1.2	48960	22.9	19180	66	0.6
30-45.7894-112.7122-2-15-						0-M34041	66210	-0.07	-205	70830	139	-130	7.9	31	3.2	4	1.3	26970	10.3	10930	93	0.5
30-45.7889-112.7139-2-15-						0-M34042	62260	-0.09	366	36980	275	-141	8.5	39	3.3	7	1.3	43210	16.6	12860	144	0.9
30-45.7708-112.7258-2-15-						0-M34043	70180	-0.09	467	49740	115	-105	5.5	18	3.0	5	1.2	20330	8.0	15010	66	0.6
30-45.7650-112.7278-2-15-						0-M34044	67730	-0.07	513	24050	352	-148	7.3	26	3.1	12	1.6	33690	19.1	14230	210	1.4
30-45.7753-112.7153-2-12-						0-M34045	62970	-0.08	-241	40190	315	-151	5.5	29	2.3	10	1.5	13370	15.1	13550	188	0.9
30-45.9556-112.5597-2-12-						0-M34046	62910	-0.14	-287	25410	140	-165	20.3	57	9.1	6	1.6	36590	22.4	16420	69	0.8
30-45.9564-112.5608-2-12-						0-M34047	76090	-0.14	491	28300	93	-118	17.5	-16	8.3	5	1.5	29850	7.9	17520	56	0.6
30-45.9292-112.5656-2-12-						0-M34048	69760	-0.11	-343	27070	89	-199	16.6	28	5.0	4	1.4	39040	16.7	16320	53	0.6
30-45.9200-112.5744-2-12-						0-M34049	77940	-0.10	485	25730	110	-134	11.9	27	5.8	5	1.5	24830	15.6	21580	67	0.7
30-45.9167-112.5756-2-12-						0-M34050	73430	-0.12	-177	32930	143	-118	13.0	-13	4.3	6	1.7	23310	15.0	18970	71	0.8
30-45.9111-112.5722-2-12-						0-M34051	73820	-0.15	-191	33090	111	-122	14.9	-17	5.9	6	1.4	28250	14.9	16070	77	0.7
30-45.9108-112.5200-2-12-						0-M34052	75070	-0.09	325	25460	81	-132	14.9	24	5.6	4	1.2	24400	13.8	18550	52	0.5
30-45.8819-112.5306-2-12-						0-M34053	68950	-0.12	-296	31640	97	-165	13.2	33	6.3	4	1.4	23710	9.4	11940	56	0.7
30-45.8806-112.5081-2-12-						0-M34054	68320	-0.13	-251	32750	100	-145	15.7	32	4.3	5	1.3	27160	12.5	14690	64	0.7

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

④

DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued)												U/Th RATIO	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REF. DATE	LAST SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per million (ppm)												
							Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	
30-45.8031-112.7464-2-12-	0-M34001	26620	1173	11970	-32	-4	16.3	7.7	621	-1	-1	9.5	7841	213	3.7	107	0.305		
30-45.8072-112.7431-2-12-	0-M34002	2592	416	5537	40	-3	8.0	6.5	-333	-1	-1	10.5	2098	58	4.4	113	0.486		
30-45.8197-112.7378-2-12-	0-M34003	8024	950	5841	-24	-3	8.1	6.9	-349	-1	-1	13.0	3642	60	4.6	114	0.323		
30-45.8089-112.5933-2-12-	0-M34004	22000	1145	10850	82	-5	16.4	3.5	660	-1	-2	11.9	4742	141	-4.0	-108	0.269		
30-45.7967-112.5681-2-12-	0-M34005	27000	741	11080	-29	-4	15.4	4.6	-456	-1	-1	13.4	5178	136	4.4	150	0.328		
30-45.7558-112.6025-2-12-	0-M34006	46100	682	8296	41	-3	10.2	8.4	-374	1	1	14.0	3418	54	5.1	84	0.293		
30-45.7644-112.5967-2-12-	0-M34007	104500	650	8570	-20	-2	8.5	4.8	-305	-1	-1	11.3	3010	59	3.9	60	0.186		
30-45.7697-112.5244-2-12-	0-M34008	18790	488	7572	-36	-4	10.7	5.9	-305	-2	-1	11.5	3002	62	4.4	-49	0.365		
30-45.7651-112.5278-2-12-	0-M34009	9381	645	22450	48	-3	6.9	8.1	-425	-1	-1	19.2	3473	39	3.7	114	1.411		
30-45.7650-112.5922-2-12-	0-M34010	29370	849	9227	-26	-3	13.3	8.8	-441	-1	1	11.2	4192	81	4.5	150	0.375		
30-45.7689-112.5806-2-15-	0-M34011	37070	915	3903	25	3	4.2	2.7	-317	-1	-1	5.5	1802	29	-1.6	-31	0.218		
30-45.7694-112.5753-2-12-	0-M34012	21670	881	5985	79	-4	12.0	8.7	-343	-1	-1	13.6	3076	67	7.3	-189	0.338		
30-45.7756-112.5636-2-12-	0-M34013	16770	738	11050	46	-2	8.1	6.0	-379	-1	1	12.2	3222	52	3.3	101	0.451		
30-45.7961-112.5164-2-12-	0-M34014	22870	1030	13960	42	-3	19.1	5.7	-624	-1	-1	21.4	4515	228	4.9	131	0.369		
30-45.7925-112.5547-2-12-	0-M34015	69200	885	11120	43	-4	10.3	3.7	-362	-1	-1	11.7	3564	103	3.7	-60	0.248		
30-45.8206-112.5206-2-12-	0-M34016	18170	737	11620	-44	-5	11.5	8.3	-436	-2	-2	11.8	3152	86	-3.6	-63	7.636		
30-45.9528-112.7056-2-12-	0-M34017	20100	900	21900	52	-2	17.5	7.8	-425	1	1	43.5	4155	138	6.4	67	0.200		
30-45.9217-112.7233-2-12-	0-M34019	19010	1376	18880	59		20.9	7.8	-545	2	-1	58.0	3522	208	8.2	-25	0.202		
30-45.9111-112.7244-2-12-	0-M34020	27870	1424	17470	74	-5	20.7	7.5	-514	-1	-2	60.0	4573	191	10.9	133	0.200		
30-45.9128-112.7197-2-12-	0-M34021	30200	1401	22410	55	-5	27.2	8.8	-433	-1	-2	40.8	4291	120	8.3	-308	0.162		
30-45.9117-112.7097-2-12-	0-M34022	26050	921	14160	86	-4	15.9	6.3	-484	-1	-1	16.8	4507	116	4.1	-57	0.673		
30-45.9033-112.7111-2-12-	0-M34023	31680	886	16630	76	-4	18.9	6.7	-485	-1	-1	36.1	4232	120	6.1	143	0.197		
30-45.8794-112.7167-2-12-	0-M34025	16260	654	19170	55	-3	12.4	14.1	585	2	-1	82.7	3854	181	10.1	128	0.178		
30-45.8744-112.7389-2-12-	0-M34026	35790	1702	18950	-41	-5	33.0	9.8	557	-1	-2	40.9	4163	123	7.6	-488	0.237		
30-45.8522-112.7383-2-12-	0-M34027	20670	1037	13940	54	-4	17.1	6.4	790	-1	-1	30.1	4213	97	4.8	105	0.326		
30-45.8469-112.6939-2-12-	0-M34028	-5458	792	25280	47	-2	6.7	6.8	-429	2	-1	20.8	3672	80	3.8	68	0.236		
30-45.8353-112.7075-2-12-	0-M34029	16830	1338	9301	58	-3	10.3	5.3	-466	-1	-1	19.0	3811	64	3.2	161	0.200		
30-45.8381-112.7014-2-15-	0-M34030	16890	843	18650	-33	-4	15.4	7.3	-327	2	-1	40.5	4037	258	8.1	-99	0.165		
30-45.8225-112.6917-2-15-	0-M34031	24320	990	12940	-20	-3	16.8	5.8	-362	1	-1	22.3	3591	181	4.6	53	0.197		
30-45.7975-112.6833-2-12-	0-M34033	16090	1341	14480	34	-3	8.8	6.1	-517	-1	-1	17.7	3242	94	4.3	-88	0.254		
30-45.7953-112.6842-2-15-	0-M34034	15930	775	17840	-21	-3	10.3	6.8	-344	-1	-1	15.3	3319	64	3.7	81	0.359		
30-45.7556-112.7406-2-15-	0-M34035	12440	713	17150	-27	-3	9.5	7.6	-307	-1	-1	25.8	3308	85	3.5	-81	0.167		
30-45.9775-112.6522-2-12-	0-M34036	22390	1089	12920	64	6	16.2	6.3	-491	-1	-1	27.1	4414	91	5.1	114	0.229		
30-45.9689-112.6478-2-15-	0-M34037	13070	935	12140	69	5	13.9	5.5	-460	-1	-1	18.1	4109	75	4.3	130	0.337		
30-45.9536-112.6628-2-15-	0-M34038	11510	860	18790	-28	5	9.6	12.2	488	2	-1	122.6	4654	359	9.3	-8	0.116		
30-45.9389-112.6644-2-15-	0-M34039	12290	934	17240	60	-3	9.8	6.3	-373	-1	-1	21.2	3966	72	5.7	112	0.231		
30-45.9311-112.6672-2-12-	0-M34040	12580	1142	13790	-36	-3	9.6	7.4	-489	-1	-2	42.4	3912	200	7.0	-51	0.160		
30-45.7894-112.7122-2-15-	0-M34041	13960	1096	17950	31	-2	7.3	8.6	-462	1	-1	25.2	2279	70	5.2	70	0.139		
30-45.7889-112.7139-2-15-	0-M34042	7997	1627	23320	-24	-3	6.4	13.6	-493	1	1	51.5	1837	106	7.4	108	0.101		
30-45.7708-112.7258-2-15-	0-M34043	12060	669	23410	-24	-3	5.5	5.9	-327	-1	-1	25.2	2285	53	4.1	-75	0.123		
30-45.7650-112.7278-2-15-	0-M34044	8562	1453	23040	32	-2	6.5	18.2	-523	2	2	73.9	3319	72	11.2	80	0.107		
30-45.7753-112.7153-2-12-	0-M34045	14060	1167	23140	40	-2	5.5	16.8	-539	-1	2	68.5	1996	33	9.2	125	0.149		
30-45.9556-112.5597-2-12-	0-M34046	19810	2711	15570	64	-4	19.7	10.5	-718	2	-1	43.3	4344	107	6.6	236	0.263		
30-45.9564-112.5608-2-12-	0-M34047	25360	1295	18580	71	-4	18.9	4.9	-437	-2	-2	20.5	4076	88	6.5	-46	0.239		
30-45.9292-112.5656-2-12-	0-M34048	10850	3011	15820	-26	-3	13.7	8.2	-840	-1	-1	36.5	-1948	90	6.1	138	0.436		
30-45.9200-112.5744-2-12-	0-M34049	14810	713	20170	69	-2	14.0	6.6	-456	2	-1	42.1	3446	95	7.3	115	0.242		
30-45.9167-112.5756-2-12-	0-M34050	25450	1003	19300	56	-4	19.6	12.9	-414	-1	-1	37.2	4635	84	7.3	135	0.583		
30-45.9111-112.5722-2-12-	0-M34051	21220	1180	18400	-40	-5	19.1	7.5	-443	-9	-2	43.2	3759	95	7.4	-359	0.833		
30-45.9108-112.5200-2-12-	0-M34052	10700	1197	18130	41	4	14.7	6.0	-481	-1	-1	29.0	2926	91	5.5	113	0.224		
30-45.8819-112.5306-2-12-	0-M34053	25570	1680	18180	64	-4	16.6	7.8	-667	-1	-1	24.6	3332	101	4.8	150	1.000		
30-45.8806-112.5081-2-12-	0-M34054	20270	1881	17900	-31	-5	17.5	10.8	-610	-1	-2	29.4	3897	90	6.3	154	0.925		

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

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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 (umho/cm)	SCINTILLATOR (µCi/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																											
30-45.9708	-112.7281	-2-12-	0-M34056	-05/15/75	-10-	3-	4.0	-C-	6.5-	330-	32-3-6-4-6-3-3-1-2-2-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.40		
30-45.9917	-112.7356	-2-15-	0-M34060	-05/15/75	-12-	15-	-	-C-	-	-	16-3-1-4-6-	-1-	-3-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45.8117	-112.3917	-2-15-	0-M34061	-05/26/75	-15-	18-	-	-C-	-	-	10-3-1-4-2-	-1-	-2-1-4-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.90	
30-45.8167	-112.4022	-2-12-	0-M34062	-05/26/75	-15-	17-	5.5	-C-	5.4-	90-	9-3-2-2-2-5-4-1-2-1-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.40		
30-45.8153	-112.3956	-2-11-	0-M34063	-05/26/75	-16-	18-10.0	-C-	5.0-	140-	8-4-	-5-8-2-4-1-1-1-4-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.40		
30-45.8217	-112.3944	-2-15-	0-M34064	-05/26/75	-16-	15-	-	-C-	-	-	11-4-	-4-6-	-1-	-2-1-2-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
30-45.8286	-112.3872	-2-15-	0-M34065	-05/26/75	-17-	17-	-	-C-	-	-	8-3-1-4-6-	-1-	-2-1-2-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
30-45.7806	-112.3983	-2-12-	0-M34066	-05/26/75	-17-	16-	5.5	-C-	6.2-	170-	5-3-1-5-8-3-4-1-2-1-4-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.20		
30-45.8450	-112.4311	-2-12-	0-M34068	-05/26/75	-14-	18-	7.5	-C-	5.6-	165-	10-3-7-4-2-2-3-1-2-2-3-3-2-	-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.00		
30-45.8422	-112.4883	-2-12-	0-M34069	-05/26/75	-20-	10-13.0	-C-	6.0-	100-	8-3-1-6-8-2-5-2-1-3-4-3-2-	-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.10		
30-45.9806	-112.1411	-2-15-	0-M34070	-05/27/75	-12-	24-	-	-C-	-	-	6-3-6-3-6-	-1-	-2-4-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45.9683	-112.1544	-2-15-	0-M34071	-05/27/75	-14-	25-	-	-C-	-	-	11-3-6-4-6-	-1-	-2-3-2-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
30-45.9650	-112.1611	-2-15-	0-M34072	-05/27/75	-14-	25-	-	-C-	-	-	9-3-2-4-6-	-1-	-2-3-4-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30	
30-45.9844	-112.1456	-2-15-	0-M34073	-05/27/75	-15-	24-	-	-C-	-	-	6-3-6-4-6-	-1-	-2-4-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45.8044	-112.4019	-2-12-	0-M34074	-05/26/75	-14-	17-	8.5	-C-	5.1-	125-	10-3-1-3-2-4-4-1-2-1-4-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.80		
30-45.8361	-112.2714	-2-15-	0-M34075	-05/26/75	-17-	22-	-	-C-	-	-	8-3-1-4-2-	-1-	-2-1-2-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45.8753	-112.4583	-2-12-	0-M34076	-04/23/75	-13-	3-	0.5	-C-	6.6-	230-	11-3-7-3-1-3-3-1-2-1-3-4-2-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.30		
30-45.8800	-112.4597	-2-12-	0-M34077	-04/23/75	-15-	5-	2.0	-C-	7.0-	200-	10-3-7-3-1-2-4-1-1-1-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	47.10		
30-45.8769	-112.4564	-2-12-	0-M34078	-04/23/75	-16-	7-	2.0	-C-	6.6-	140-	15-3-7-3-1-4-3-1-2-1-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20.50		
30-45.8811	-112.4578	-2-12-	0-M34079	-04/23/75	-16-	8-	1.0	-C-	6.6-	170-	10-3-1-3-1-3-3-1-3-1-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.10		
30-45.8847	-112.4575	-2-12-	0-M34080	-04/23/75	-17-	5-	1.5	-C-	6.8-	200-	13-3-1-4-1-3-3-1-2-1-4-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27.30		
30-45.8831	-112.4631	-2-12-	0-M34081	-04/23/75	-17-	6-	-	-C-	6.4-	170-	11-3-1-3-1-3-3-1-2-1-4-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36.70		
30-45.8881	-112.4756	-2-12-	0-M34082	-04/24/75	-7-	3-	2.0	-C-	6.7-	178-	17-3-1-4-6-3-3-1-3-2-4-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	96.30		
30-45.8917	-112.4628	-2-15-	0-M34083	-04/24/75	-10-	7-	-	-	-	-	8-3-1-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.30	
30-45.8950	-112.4589	-2-12-	0-M34084	-04/24/75	-10-	5-	3.0	-C-	6.6-	250-	9-3-1-4-1-3-3-1-2-2-4-4-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39.50		
30-45.9061	-112.4678	-2-12-	0-M34085	-04/24/75	-11-	10-	1.5	-C-	6.4-	240-	9-3-1-4-1-2-3-1-1-2-4-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.20		
30-45.9069	-112.4750	-2-11-	0-M34086	-04/24/75	-11-	10-	-	-	-	-	7-3-1-6-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.80	
30-45.9250	-112.4883	-2-15-	0-M34087	-04/24/75	-12-	16-	-	-	-	-	32-4-	-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	37.10	
30-45.9306	-112.4958	-2-12-	0-M34088	-04/24/75	-17-	13-	4.8	-	6.4-	250-	10-4-	-3-1-3-3-2-2-4-3-1-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.10		
30-45.9222	-112.4833	-2-15-	0-M34089	-04/24/75	-14-	12-	-	-	-	-	11-4-	-4-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.40	
30-45.9083	-112.4958	-2-12-	0-M34090	-04/24/75	-15-	16-	-	-	-	-	7-3-1-4-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.30	
30-45.9047	-112.4894	-2-15-	0-M34091	-04/24/75	-15-	14-	-	-C-	-	-	9-3-1-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.20	
30-45.8956	-112.4811	-2-12-	0-M34093	-04/24/75	-16-	10-	1.0	-	7.3-	200-	10-3-1-3-1-3-4-1-3-1-4-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33.90		
30-45.8997	-112.4258	-2-15-	0-M34094	-04/24/75	-18-	4-	-	-	-	-	11-3-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.60	
30-45.8831	-112.4706	-2-12-	0-M34095	-04/23/75	-18-	1-	1.0	-	6.5-	165-	15-3-7-3-1-3-3-1-3-3-4-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.70		
30-45.8944	-112.4250	-2-12-	0-M34096	-04/24/75	-18-	5-	1.5	-	6.3-	110-	11-3-1-3-1-3-3-1-2-1-3-2-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.80		
30-45.8978	-112.4206	-2-12-	0-M34097	-04/24/75	-17-	6-	1.2	-	6.7-	110-	11-3-1-3-1-3-4-1-2-1-4-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	59.70		
30-45.8989	-112.4203	-2-12-	0-M34098	-04/24/75	-19-	4-	4.0	-	7.0-	155-	14-3-1-3-1-3-3-1-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40.30		
30-45.9044	-112.4467	-2-12-	0-M34099	-04/29/75	-10-	1-	1.0	-C-	6.4-	165-	11-3-7-4-6-3-3-1-1-1-4-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31.30		
30-45.9078	-112.4453	-2-12-	0-M34100	-04/29/75	-11-	4-	2.0	-C-	6.2-	280-	8-3-7-4-2-3-3-1-2-2-4-4-2-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	42.90		
30-45.9167	-112.4419	-2-12-	0-M34101	-04/29/75	-12-	3-	2.0	-C-	6.3-	310-	3-3-1-4-2-2-3-1-1-4-3-2-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.20		
30-45.9083	-112.4256	-2-15-	0-M34102	-04/29/75	-12-	4-	-	-C-	-	-	11-3-1-5-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.80	
30-45.9122	-112.4328	-2-12-	0-M34103	-04/29/75	-13-	6-	5.5	-C-	6.3-	160-	11-3-1-6-8-2-3-1-1-3-4-3-2-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50.70		
30-45.9889	-112.4556	-2-12-	0-M34104	-04/29/75	-18-	6-	1.0	-	6.4-	105-	12-3-1-3-2-4-3-1-2-2-4-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24.60		
30-45.9894	-112.4556</																																		

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	DOE 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	
30-45.9708-112.7281-2-12-			0-M34055				-5	-5	-5	59	-20	-15	18	-10	20	2	18	
30-45.9917-112.7356-2-15-			0-M34060				-5	5	-5	106	-20	23	49	-10	-15	3	40	
30-45.8117-112.3917-2-15-			0-M34061				-5	5	-5	59	-20	-15	34	-10	-15	3	44	
30-45.8167-112.4022-2-12-			0-M34062				-5	-5	-5	34	-20	-15	19	10	-15	3	61	
30-45.8153-112.3956-2-11-			0-M34063				-5	-5	-5	263	-20	-15	23	-10	-15	2	51	
30-45.8217-112.3944-2-15-			0-M34064				-5	-5	-5	119	-20	-15	24	-10	-15	1	28	
30-45.8286-112.3872-2-15-			0-M34065				-5	-5	-5	80	-20	-15	14	-10	-15	2	29	
30-45.7806-112.3983-2-12-			0-M34066				-5	-5	-5	163	-20	-15	24	-10	-15	1	39	
30-45.8450-112.4311-2-12-			0-M34068				-5	-5	-5	32	22	-15	25	-10	-15	3	40	
30-45.8422-112.4883-2-12-			0-M34069				-5	-5	-5	40	-20	-15	-5	-10	-15	1	15	
30-45.9806-112.1411-2-15-			0-M34070				-5	-5	-5	87	-20	22	26	-10	-15	2	36	
30-45.9683-112.1544-2-15-			0-M34071				-5	-5	-5	72	-20	-15	30	-10	-15	2	45	
30-45.9650-112.1611-2-15-			0-M34072				-5	-5	-5	56	-20	-15	25	-10	-15	2	29	
30-45.9844-112.1456-2-15-			0-M34073				-5	-5	5	77	-20	28	24	-10	-15	2	39	
30-45.8044-112.4019-2-12-			0-M34074				-5	-5	-5	84	25	-15	19	-10	-15	3	43	
30-45.8361-112.2714-2-15-			0-M34075				-5	-5	-5	99	-20	26	26	-10	-15	2	40	
30-45.8753-112.4583-2-12-			0-M34076				-5	-5	-5	55	-20	-15	17	-10	-15	2	34	
30-45.8800-112.4597-2-12-			0-M34077				-5	-5	-5	82	-20	-15	24	-10	-15	1	42	
30-45.8769-112.4564-2-12-			0-M34078				-5	-5	-5	58	-20	-15	90	-10	-15	2	44	
30-45.8811-112.4578-2-12-			0-M34079				-5	-5	-5	62	-20	-15	32	-10	-15	-1	34	
30-45.8847-112.4575-2-12-			0-M34080				-5	-5	-5	91	-20	-15	43	-10	-15	-1	25	
30-45.8831-112.4631-2-12-			0-M34081				-5	-5	-5	73	-20	-15	26	-10	-15	-1	52	
30-45.8881-112.4756-2-12-			0-M34082				-5	9	6	110	-20	-15	30	-10	-15	-1	15	
30-45.8917-112.4628-2-15-			0-M34083				-5	-5	-5	62	-20	-15	27	-10	-15	1	59	
30-45.8950-112.4589-2-12-			0-M34084				-5	-5	-5	51	21	-15	15	-10	-15	3	57	
30-45.9061-112.4678-2-12-			0-M34085				-5	-5	-5	53	-20	-15	18	-10	-15	1	33	
30-45.9069-112.4750-2-11-			0-M34086				-5	-5	-5	101	-20	-15	38	-10	-15	1	43	
30-45.9250-112.4383-2-15-			0-M34087				135	-5	-5	-10	37	-15	-5	-10	85	-1	-1	
30-45.9306-112.4958-2-12-			0-M34088				-5	-5	-5	63	-20	-15	17	12	-15	2	36	
30-45.9222-112.4333-2-15-			0-M34089				-5	10	5	178	-20	-15	88	-10	-15	2	27	
30-45.9083-112.4958-2-12-			0-M34090				-5	6	-5	133	-20	-15	66	-10	-15	2	36	
30-45.9047-112.4894-2-15-			0-M34091				-5	-5	-5	168	-20	-15	50	-10	-15	1	48	
30-45.8956-112.4811-2-12-			0-M34093				-5	5	-5	44	-20	-15	15	-10	-15	2	40	
30-45.8997-112.4258-2-15-			0-M34094				-5	10	-5	167	-20	-15	132	-10	-15	-1	17	
30-45.8831-112.4706-2-12-			0-M34095				5	-5	-5	59	-20	-15	-5	-10	-15	1	54	
30-45.8944-112.4250-2-12-			0-M34096				-5	-5	-5	57	-20	-15	21	-10	-15	2	32	
30-45.8978-112.4206-2-12-			0-M34097				-5	-5	-5	57	-20	-15	19	-10	-15	2	53	
30-45.8989-112.4203-2-12-			0-M34098				6	-5	-5	32	-20	-15	-5	-10	-15	2	28	
30-45.9044-112.4467-2-12-			0-M34099				-5	-5	-5	63	-20	-15	17	-10	-15	2	8	
30-45.9278-112.4453-2-12-			0-M34100				-5	-5	-5	86	-20	-15	28	-10	-15	-1	18	
30-45.9167-112.4419-2-12-			0-M34101				-5	-5	-5	65	-20	-15	23	-10	-15	2	48	
30-45.9083-112.4256-2-15-			0-M34102				-5	-5	-5	134	-20	15	40	-10	-15	2	46	
30-45.9122-112.4328-2-12-			0-M34103				-5	-5	-5	57	-20	-15	23	-10	-15	2	31	
30-45.9889-112.4556-2-12-			0-M34104				-5	-5	-5	90	-20	19	31	-10	-15	2	41	
30-45.9894-112.4556-2-12-			0-M34105				-5	8	-5	247	-20	-15	73	-10	-15	1	23	
30-45.9900-112.4561-2-12-			0-M34106				-5	-5	-5	71	32	-15	19	-10	-15	2	28	
30-45.9806-112.4694-2-15-			0-M34107				-5	-5	-5	133	29	-15	47	-10	-15	3	14	
30-45.9789-112.4608-2-12-			0-M34108				-5	-5	-5	60	-20	-15	20	-10	-15	2	29	
30-45.9917-112.4706-2-15-			0-M34109															
30-45.9956-112.4658-2-12-			0-M34110				-5	-5	-5	100	-20	-15	35	-10	-15	2	41	
30-45.8661-112.4569-2-12-			0-M34111				-5	-5	-5	48	-20	-15	18	-10	-15	1	27	

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

③

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
30-45.9708-112.7281-2-12-	0-M34056	80070	-0.11	364	30990	124	-128	12.9	38	57.1	5	1.4	34150	20.2	16670	93	0.6					
30-45.9917-112.7356-2-15-	0-M34060	79690	-0.08	782	25260	60	-111	13.2	100	12.7	3	1.2	19200	7.2	16140	31	0.2					
30-45.8117-112.3917-2-15-	0-M34061	83690	-0.09	590	20530	151	-126	10.7	31	4.9	4	1.8	35690	11.2	12280	79	0.6					
30-45.8167-112.4022-2-12-	0-M34062	75700	-0.11	598	15070	94	-89	9.0	31	14.4	4	1.4	19180	9.1	20140	54	0.5					
30-45.8153-112.3956-2-11-	0-M34063	75610	-0.09	589	22230	65	-126	12.9	38	4.8	4	1.4	23890	7.9	15640	45	0.4					
30-45.8217-112.3944-2-15-	0-M34064	75350	-0.10	568	27270	53	-138	8.4	33	4.5	3	1.4	18160	6.0	13030	36	0.3					
30-45.8286-112.3872-2-15-	0-M34065	76210	-0.10	682	21980	75	101	12.3	51	4.0	4	1.6	25210	7.7	14470	41	0.4					
30-45.7806-112.3983-2-12-	0-M34066	73270	-0.14	578	27430	70	209	10.6	52	4.7	3	1.2	26230	7.8	13680	44	0.4					
30-45.8450-112.4311-2-12-	0-M34068	80550	-0.07	613	18250	139	-181	7.8	14	4.4	5	1.3	15170	15.9	16410	102	0.9					
30-45.8422-112.4883-2-12-	0-M34069	64020	-0.12	-211	26400	70	162	15.7	41	4.4	4	1.3	56870	16.1	7123	52	0.5					
30-45.9906-112.1411-2-15-	0-M34070	71430	-0.09	812	22650	96	-90	16.6	186	3.3	4	1.6	38210	9.0	15330	46	0.4					
30-45.9583-112.1544-2-15-	0-M34071	69300	-0.12	771	26450	81	-93	14.4	99	4.6	4	1.5	32900	8.5	14120	43	0.5					
30-45.9650-112.1611-2-15-	0-M34072	71800	-0.08	675	21510	62	-96	13.9	70	3.3	4	1.2	24660	7.5	14990	36	0.3					
30-45.9844-112.1456-2-15-	0-M34073	72230	-0.09	512	24270	77	-112	16.3	199	4.5	3	1.2	27580	6.6	14260	35	0.4					
30-45.8044-112.4019-2-12-	0-M34074	82900	-0.09	434	18240	139	-119	8.7	32	5.3	6	1.6	19810	7.5	16660	100	0.8					
30-45.8361-112.2714-2-15-	0-M34075	60730	-0.15	442	34170	96	161	20.9	136	4.0	5	1.4	47990	16.5	14760	44	0.6					
30-45.8753-112.4583-2-12-	0-M34076	67390	-0.11	256	33660	121	-132	15.9	50	3.9	6	1.4	48510	17.6	10540	62	0.7					
30-45.8900-112.4597-2-12-	0-M34077	63920	-0.13	401	35690	107	191	15.4	35	5.1	5	1.2	40390	26.4	11960	76	0.6					
30-45.8769-112.4564-2-12-	0-M34078	72660	-0.12	365	36500	125	-116	13.2	35	5.2	5	1.3	36050	24.1	15720	55	0.9					
30-45.8811-112.4578-2-12-	0-M34079	69720	-0.18	441	39520	91	147	16.8	33	5.9	4	1.2	37840	17.6	12320	60	0.6					
30-45.8847-112.4575-2-12-	0-M34080	65590	-0.13	-271	30170	84	-152	16.6	27	5.5	4	1.2	26880	12.8	16340	60	0.6					
30-45.8831-112.4631-2-12-	0-M34081	65420	-0.12	533	27380	103	-165	16.5	34	7.3	4	1.4	40340	20.1	-7084	76	0.7					
30-45.8881-112.4756-2-12-	0-M34082	38830	-0.17	-477	24080	87	186	27.7	-19	8.9	-2	1.4	58480	10.2	-11560	129	0.6					
30-45.8917-112.4628-2-15-	0-M34083	72050	-0.16	535	28270	92	-148	17.7	36	9.4	4	1.3	32730	10.3	20430	43	0.5					
30-45.8950-112.4589-2-12-	0-M34084	64790	-0.12	509	34670	76	-172	18.9	35	4.7	5	1.1	33370	16.7	15580	65	0.6					
30-45.9061-112.4678-2-12-	0-M34085	68270	-0.12	318	34740	82	-141	16.0	27	5.5	4	1.2	27740	15.8	15920	47	0.5					
30-45.9069-112.4750-2-11-	0-M34086	69630	-0.13	733	30370	73	-121	16.4	27	7.3	3	1.1	24920	8.1	11220	37	0.4					
30-45.9250-112.4883-2-15-	0-M34087	14220	1.31	-121	11920	133	-65	32.0	336	-2.3	6	2.0	357800	134.9	-2808	103	1.4					
30-45.9306-112.4958-2-12-	0-M34088	71570	-0.11	-224	32580	106	-138	15.8	38	6.7	5	1.5	38980	26.7	13840	62	0.8					
30-45.9222-112.4833-2-15-	0-M34089	68730	-0.11	-272	21390	88	-144	14.7	54	6.7	5	1.5	31950	13.5	12330	51	0.5					
30-45.9083-112.4958-2-12-	0-M34090	72060	-0.13	577	24690	68	185	16.3	41	7.4	4	1.2	26840	8.3	14630	40	0.4					
30-45.9047-112.4894-2-15-	0-M34091	70330	-0.11	718	21070	66	-146	15.1	37	7.7	3	1.2	26870	8.8	19730	32	0.4					
30-45.8956-112.4811-2-12-	0-M34093	66500	-0.17	-249	33030	109	-143	16.9	33	4.5	5	1.2	36880	15.6	12380	83	0.7					
30-45.8997-112.4258-2-15-	0-M34094	57540	-0.15	-342	30490	70	-156	16.0	49	6.0	3	1.0	28820	13.3	12480	47	0.5					
30-45.8831-112.4706-2-12-	0-M34095	67990	0.40	393	23710	118	-110	17.6	69	8.2	5	1.5	69400	20.7	14000	65	0.7					
30-45.8944-112.4250-2-12-	0-M34096	74210	-0.15	434	30740	137	-122	13.2	44	3.8	6	1.6	38180	31.9	19910	78	1.0					
30-45.8978-112.4206-2-12-	0-M34097	69510	-0.12	364	31870	114	-139	16.0	43	5.5	6	1.6	43840	24.1	14680	97	1.1					
30-45.8989-112.4203-2-12-	0-M34098	63120	-0.11	-217	34570	137	-132	13.9	46	3.9	7	2.6	58410	45.6	14370	93	1.2					
30-45.9044-112.4467-2-12-	0-M34099	69170	-0.14	-198	36420	139	-123	15.8	37	5.5	7	1.4	39400	39.0	15950	70	1.2					
30-45.9078-112.4453-2-12-	0-M34100	56140	-0.20	631	32970	73	-148	18.5	-23	6.4	5	1.4	28390	19.0	11140	78	0.5					
30-45.9167-112.4419-2-12-	0-M34101	71680	-0.11	411	28810	89	-134	16.0	25	4.9	5	1.4	23350	10.2	13410	52	0.7					
30-45.9083-112.4256-2-15-	0-M34102	72640	-0.11	643	18330	99	-136	13.1	46	7.6	4	1.5	26910	13.0	16480	51	0.5					
30-45.9122-112.4328-2-12-	0-M34103	64690	-0.15	-268	31890	103	-155	16.7	-16	6.2	5	1.2	35070	6.9	14400	79	0.7					
30-45.9889-112.4556-2-12-	0-M34104	74350	-0.16	369	31240	88	-117	14.1	33	6.8	5	1.2	31990	19.6	17780	70	0.8					
30-45.9894-112.4555-2-12-	0-M34105	67060	-0.13	500	28700	76	-138	17.6	29	8.4	3	1.2	26300	7.5	16580	72	0.8					
30-45.9900-112.4561-2-12-	0-M34106	70510	-0.11	-206	32140	128	-130	13.5	43	4.6	6	2.2	37740	47.4	14590	78	1.0					
30-45.9806-112.4694-2-15-	0-M34107	71380	-0.10	-149	19630	136	-103	11.0	53	5.4	7	1.2	51490	54.4	17540	75	1.5					
30-45.9789-112.4608-2-12-	0-M34108	73770	-0.10	302	34310	103	-113	13.3	31	4.7	7	1.3	33290	34.0	19650	57	0.9					
30-45.9917-112.4706-2-15-	0-M34109	65330	-0.13	317	30400	152	-125	20.0	50	8.4	7	1.4	58140	50.5	16690	58	1.2					
30-45.9956-112.4658-2-12-	0-M34110	76880	-0.15	471	37480	113	168	18.0	33	6.2	6	1.6	41430	33.2	14200	55	0.9					
30-45.8661-112.4569-2-12-	0-M34111	70510	-0.11	-250	35130	92	-146	18.2	38	5.6	5	1.2	30570	11.8	12360	74	0.7					

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

④

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		
30-45.9709-112.7281-2-12-			0-M34056			15000	993	18360	67	-4	11.4	9.2	-464	2	-1	48.4	3582	133	6.8	97	0.256		
30-45.9917-112.7356-2-15-			0-M34060			24600	588	17810	64	-4	11.0	4.6	-372	-1	-1	9.7	3379	67	2.6	-63	0.278		
30-45.8117-112.3917-2-15-			0-M34061			11600	1179	24170	55	-3	9.2	9.9	-436	2	-1	28.2	4164	93	5.9	-26	0.174		
30-45.8167-112.4022-2-12-			0-M34062			9051	489	16330	85	-4	9.6	4.8	-289	-1	-1	17.1	4219	56	5.2	88	0.316		
30-45.8153-112.3956-2-11-			0-M34063			15560	1127	16040	39	-3	10.7	5.0	-479	-1	-1	10.7	4504	80	-2.1	114	0.411		
30-45.8217-112.3944-2-15-			0-M34064			15650	662	20040	61	-3	9.2	4.5	-465	-1	-1	9.1	2943	58	2.5	157	0.363		
30-45.8286-112.3872-2-15-			0-M34065			17120	988	16470	58	-3	11.0	5.4	564	-1	-1	12.0	3933	76	3.9	-89	0.283		
30-45.7806-112.3983-2-12-			0-M34066			19860	879	16650	-37	-4	11.7	2.5	-415	-1	-2	11.5	3700	63	3.5	173	0.539		
30-45.8450-112.4311-2-12-			0-M34068			-6959	1594	31770	49	-2	5.3	9.3	-609	2	1	45.3	-1416	29	7.2	95	0.508		
30-45.8422-112.4883-2-12-			0-M34069			24480	894	11970	-31	-4	18.7	7.4	-461	-1	-1	20.8	4845	178	6.1	141	0.726		
30-45.9806-112.1411-2-15-			0-M34070			21580	1040	12670	60	-3	13.9	5.2	-356	-1	-1	10.6	5736	124	3.0	131	0.245		
30-45.9683-112.1544-2-15-			0-M34071			16970	956	13060	61	-4	12.4	4.3	-351	-12	-1	13.3	4084	108	-2.4	-451	0.248		
30-45.9650-112.1611-2-15-			0-M34072			19480	980	9968	40	-3	11.6	4.7	-402	-1	-1	11.3	4160	96	4.0	88	0.204		
30-45.9844-112.1456-2-15-			0-M34073			27190	1010	13400	37	-3	12.6	4.5	-437	-1	-1	9.8	3504	102	2.9	83	0.265		
30-45.8044-112.4019-2-12-			0-M34074			9263	753	23720	50	-3	7.0	12.9	607	2	-1	35.7	3239	43	6.7	100	0.667		
30-45.8361-112.2714-2-15-			0-M34075			31960	1268	15390	-42	-5	17.1	6.0	-438	-1	-1	13.6	4944	172	-2.8	153	0.199		
30-45.8753-112.4583-2-12-			0-M34076			21320	1260	18460	56	-3	20.3	11.4	-492	2	-1	58.2	3593	176	6.4	155	0.280		
30-45.8800-112.4597-2-12-			0-M34077			30100	1270	15250	-30	-4	20.9	10.4	-569	-1	-1	31.1	2848	169	4.6	151	1.514		
30-45.8769-112.4564-2-12-			0-M34078			20670	1054	20420	49	10	18.2	14.2	-415	-1	-1	77.9	4550	142	7.1		0.263		
30-45.8811-112.4578-2-12-			0-M34079			29070	1245	15840	-47	-6	19.7	8.7	-497	-2	-2	40.0	4239	134	6.9	205	0.328		
30-45.8847-112.4575-2-12-			0-M34080			20290	1387	15600	58	4	14.7	7.8	-622	-1	-1	29.8	4299	107	4.2	104	0.916		
30-45.8831-112.4631-2-12-			0-M34081			22520	2203	13140	-29	-4	19.6	10.5	-721	-1	-1	31.0	4073	138	6.2	127	1.184		
30-45.8881-112.4756-2-12-			0-M34082			-11130	5009	7064	-44	15	9.6	15.5		-2	-2	17.3	-2755	148	-4.0	204	5.566		
30-45.8917-112.4628-2-15-			0-M34083			27200	2382	15620	75	-5	18.6	5.4	-616	-1	-2	34.2	4333	104	4.7	-60	0.184		
30-45.8950-112.4589-2-12-			0-M34084			36870	2242	16940	59	-4	21.1	8.3	-708	-1	-1	31.9	3025	129	5.0	123	1.238		
30-45.9061-112.4678-2-12-			0-M34085			27490	1144	18080	44	-4	20.4	6.1	-542	-1	-1	22.7	4085	114	6.2	139	0.405		
30-45.9069-112.4750-2-11-			0-M34086			24590	1451	14280	57	4	15.6	4.1	-503	-1	-1	25.8	4580	109	4.9	123	0.264		
30-45.9250-112.4883-2-15-			0-M34087			4900	1076	3483	-52	-4	8.9	10.7	-287	3	-2	351.1	6004	1420	28.0	-228	0.106		
30-45.9306-112.4958-2-12-			0-M34088			20560	1433	17510	39	-3	17.7	7.4	-530	1	-1	43.0	4212	138	6.2	69	0.281		
30-45.9222-112.4833-2-15-			0-M34089			13720	1797	12370	55	6	14.2	5.9	-628	-1	-1	32.2	3382	99	4.9	248	0.261		
30-45.9083-112.4958-2-12-			0-M34090			23580	1261	14470	60	-4	14.3	5.0	-496	-1	-1	22.7	4326	80	4.2	226	0.366		
30-45.9047-112.4894-2-15-			0-M34091			20420	2047	12120	50	-4	12.9	4.0	-667	-1	-1	22.5	2898	81	2.8	110	0.231		
30-45.8956-112.4811-2-12-			0-M34093			24250	2143	15550	48	-5	21.1	6.0	-601	-1	-2	27.8	5132	106	5.4	-97	1.219		
30-45.8997-112.4258-2-15-			0-M34094			24480	1528	11950	-35	7	15.6	4.8	-744	-2	-2	34.2	-1757	137	4.4	256	0.339		
30-45.8831-112.4706-2-12-			0-M34095			22990	1126	14610	57	-4	16.5	10.1	-432	-1	-1	41.6	4420	255	9.1	160	0.377		
30-45.8944-112.4250-2-12-			0-M34096			23240	1149	21170	78	-5	19.4	7.2	-432	2	-2	52.3	3131	135	7.2	-22	0.379		
30-45.8978-112.4206-2-12-			0-M34097			21200	1351	17930	73	-4	18.8	17.4	-541	-1	-1	69.5	4128	173	6.6	145	0.859		
30-45.8989-112.4203-2-12-			0-M34098			21930	1172	18930	73	-4	22.9	15.8	-493	3	-1	146.6	4807	213	6.2	136	0.275		
30-45.9044-112.4467-2-12-			0-M34099			23100	1218	17550	59	-5	22.9	7.8	-473	-1	-1	73.4	4292	164	12.0	154	0.426		
30-45.9078-112.4453-2-12-			0-M34100			25070	2039	12790	-50	-6	17.5	4.0	-676	-1	-2	33.5	3537	117	5.8	-443	1.281		
30-45.9167-112.4419-2-12-			0-M34101			29010	1129	17980	62	-4	19.1	7.1	-497	-1	-1	23.5	3775	97	4.7	156	0.519		
30-45.9083-112.4756-2-15-			0-M34102			19980	1471	13370	69	6	13.1	5.1	-585	-1	-1	32.3	4144	95	6.4	166	0.272		
30-45.9122-112.4328-2-12-			0-M34103			23140	2191	16510	73	-5	21.1	15.4	-659	-1	-2	25.3	3436	94	5.7	158	2.004		
30-45.9389-112.4556-2-12-			0-M34104			20900	1070	19000	-39	-5	19.6	10.6	-425	-2	-2	43.6	3655	111	9.2	-164	0.564		
30-45.9894-112.4556-2-12-			0-M34105			23760	1057	12810	49	5	12.5	13.2	-587	-1	-1	23.8	3518	93	4.9	155	2.092		
30-45.9900-112.4561-2-12-			0-M34106			23820	1079	19390	53	-4	24.9	13.2	-465	2	1	81.6	3490	167	9.3	105	0.320		
30-45.9806-112.4694-2-15-			0-M34107			11960	841	19990	61	-3	12.5	15.8	-350	3	-1	115.4	3209	194	12.0	97	0.166		
30-45.9789-112.4608-2-12-			0-M34108			27380	1034	20610	56	-3	21.8	7.0	665	-1	-1	56.0	3560	135	10.0	-84	0.236		
30-45.9917-112.4706-2-15-			0-M34109			28760	1413	14040	63	9	25.2	15.0	-510	-1	-2	88.3	5251	218	8.8		0.176		
30-45.9956-112.4658-2-12-			0-M34110			28830	1216	19300	82	-5	26.7	6.9	-527	-2	-2	50.7	4115	143	7.8	-250	0.274		
30-45.8661-112.4569-2-12-			0-M34111			28490	1934	17450	43	-3	20.0	9.8	-608	1	-1	28.9	4058	97	5.5	140	1.218		

[illegible]

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

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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	DOE 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
30-45.8539-112.4592-2-12-						0-M34112	-5	7	-5	956	-20	-15	48	-10	-15		-1	20
30-45.8611-112.4583-2-12-						0-M34113	-5	-5	7	511	32	-15	46	-10	-15		2	20
30-45.8539-112.4806-2-12-						0-M34114	-5	-5	-5	59	-20	24	-5	75	-15		-1	12
30-45.8536-112.4803-2-12-						0-M34115	-5	-5	-5	75	-20	19	17	-10	-15		-1	22
30-45.8575-112.4817-2-12-						0-M34116	-5	11	-5	337	-20	-15	41	-10	-15		-1	14
30-45.8358-112.4564-2-12-						0-M34117	-5	-5	-5	69	-20	-15	24	-10	-15		1	26
30-45.9686-112.4553-2-12-						0-M34118	11	8	-5	50	-20	-15	25	-10	16		-1	13
30-45.9428-112.4514-2-12-						0-M34120	-5	5	-5	181	-20	17	54	-10	-15		-1	35
30-45.9386-112.4497-2-12-						0-M34121	6	-5	-5	101	-20	-15	39	-10	-15		-1	35
30-45.9333-112.4453-2-15-						0-M34122	-5	18	-5	301	-20	-15	144	-10	-15		1	51
30-45.9186-112.4278-2-12-						0-M34124	-5	-5	-5	60	-20	20	52	-10	-15		-1	38
30-45.8708-112.4458-2-12-						0-M34125	-5	-5	-5	65	-20	-15	27	-10	-15		-1	21
30-45.8653-112.4425-2-12-						0-M34126	-5	-5	-5	98	-20	-15	36	-10	-15		1	47
30-45.8431-112.4261-2-12-						0-M34131	-5	-5	-5	48	-20	-15	34	-10	-15		3	37
30-45.8361-112.4044-2-12-						0-M34135	-5	-5	-5	92	-20	-15	22	-10	-15		-1	23
30-45.8308-112.4075-2-12-						0-M34136	-5	-5	-5	57	-20	25	19	-10	-15		-1	36
30-45.8306-112.4075-2-12-						0-M34137	-5	-5	-5	138	-20	-15	19	-10	-15		-1	7
30-45.8319-112.3911-2-15-						0-M34138	-5	-5	-5	141	-20	-15	75	-10	-15		-1	29
30-45.8317-112.3836-2-15-						0-M34139	-5	6	-5	187	-20	-15	73	-10	-15		-1	30
30-45.8283-112.3786-2-12-						0-M34140	-5	-5	-5	117	-20	-15	14	-10	-15		-1	21
30-45.8325-112.3675-2-15-						0-M34141	-5	-5	-5	127	-20	23	31	-10	-15		1	17
30-45.8306-112.3658-2-15-						0-M34142	-5	-5	-5	469	-20	-15	14	-10	-15		-1	24
30-45.8314-112.3639-2-12-						0-M34143	-5	-5	-5	1006	-20	-15	23	-10	16		-1	42
30-45.8511-112.3611-2-15-						0-M34144	19	-5	-5	131	36	70	5	-10	-15		-1	12
30-45.8544-112.3708-2-12-						0-M34145	-5	7	-5	64	-20	33	14	-10	-15		2	29
30-45.8611-112.3597-2-15-						0-M34147	-5	6	-5	80	-20	31	21	-10	-15		-1	42
30-45.8681-112.3408-2-12-						0-M34148	-5	-5	-5	50	-20	-15	12	-10	-15		-1	50
30-45.8678-112.3406-2-15-						0-M34149	-5	-5	5	139	-20	-15	56	-10	-15		-1	35
30-45.8692-112.3367-2-15-						0-M34150	-5	5	-5	222	-20	71	67	-10	-15		-1	32
30-45.8353-112.3158-2-12-						0-M34152	-5	-5	-5	58	22	-15	-5	16	-15		-1	7
30-45.8381-112.3122-2-15-						0-M34153	-5	-5	-5	105	-20	23	16	-10	25		-1	16
30-45.8403-112.2953-2-15-						0-M34154	-5	-5	-5	89	-20	-15	31	-10	-15		-1	20
30-45.8367-112.3328-2-15-						0-M34155	-5	-5	-5	57	-20	15	-5	-10	-15		1	24
30-45.8344-112.3556-2-12-						0-M34156	-5	-5	-5	86	-20	21	20	-10	-15		-1	27
30-45.8444-112.4056-2-15-						0-M34157	-5	-5	-5	83	-20	-15	30	-10	-15		-1	22
30-45.8517-112.2867-2-15-						0-M34158	-5	-5	-5	86	-20	-15	39	-10	-15		-1	18
30-45.8453-112.2961-2-15-						0-M34159	24	-5	-5	134	21	29	-5	24	-15		-1	-1
30-45.8531-112.2656-2-15-						0-M34160	-5	-5	-5	54	-20	-15	10	-10	-15		-1	16
30-45.8558-112.2811-2-11-						0-M34161	-5	-5	-5	87	-20	20	57	21	85		-1	27
30-45.8556-112.2694-2-11-						0-M34162	-5	-5	-5	52	-20	-15	9	-10	-15		-1	13
30-45.8458-112.2939-2-12-						0-M34163	-5	-5	-5	91	-20	17	8	-10	-15		-1	31
30-45.8611-112.2922-2-15-						0-M34164	-5	6	-5	125	-20	21	53	-10	-15		-1	23
30-45.8625-112.2836-2-15-						0-M34165	-5	-5	-5	63	-20	31	18	-10	-15		-1	24
30-45.8708-112.2958-2-15-						0-M34166	-5	7	-5	117	-20	-15	58	-10	-15		-1	25
30-45.8728-112.3044-2-11-						0-M34167	-5	-5	-5	54	-20	30	13	-10	-15		-1	23
30-45.8708-112.2861-2-15-						0-M34168	-5	-5	-5	113	-20	37	38	10	-15		-1	55
30-45.8664-112.2611-2-15-						0-M34169	-5	-5	-5	128	-20	28	39	14	-15		2	39
30-45.8375-112.2886-2-15-						0-M34170	-5	-5	-5	90	-20	20	15	-10	-15		-1	28
30-45.8322-112.2922-2-15-						0-M34171	-5	-5	-5	105	-20	-15	38	-10	15		-1	34
30-45.8197-112.3469-2-15-						0-M34172	-5	-5	-5	43	-20	17	13	-10	-15		-1	15
30-45.8161-112.3392-2-15-						0-M34173	-5	9	-5	132	-20	26	21	-10	-15		-1	19

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

③

DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS																
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAS 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
30-45.8639-112.4592-2-12-						0-M34112	54770	-0.11	-413	16300	93	-236	22.9	35	7.0	4	1.4	40410	4.1	-10640	48	0.9
30-45.8611-112.4583-2-12-						0-M34113	82950	-0.09	482	11280	155	-138	7.4	19	3.3	8	1.1	9975	11.4	24640	104	1.2
30-45.8539-112.4806-2-12-						0-M34114	65610	-0.15	391	14130	87	71	14.2	75	6.7	3	0.7	55160	3.9	9254	43	0.7
30-45.8536-112.4803-2-12-						0-M34115	66320	-0.10	522	37100	78	245	17.1	83	3.4	5	1.3	29590	14.1	12440	40	0.5
30-45.8575-112.4817-2-12-						0-M34116	63010	-0.12	454	17400	61	-115	12.9	26	6.6	5	1.0	34010	7.2	7963	41	0.6
30-45.8358-112.4564-2-12-						0-M34117	75090	-0.10	367	28590	88	-123	11.8	19	4.9	6	1.1	29460	32.2	20910	57	0.9
30-45.9686-112.4553-2-12-						0-M34118	67720	-0.16	265	30570	125	-134	13.8	64	4.9	7	1.0	69820	65.6	18510	136	1.8
30-45.9428-112.4514-2-12-						0-M34120	64320	-0.13	-223	31570	113	-127	20.2	66	7.3	8	1.5	61290	40.3	15230	73	1.1
30-45.9386-112.4497-2-12-						0-M34121	72030	-0.12	557	37650	89	-119	16.2	45	5.1	6	1.2	46270	30.8	15400	55	0.7
30-45.9333-112.4458-2-15-						0-M34122	73410	-0.13	837	27780	100	-147	17.2	30	8.0	5	1.6	39010	22.4	16600	54	1.1
30-45.9186-112.4278-2-12-						0-M34124	69320	-0.14	432	27890	144	-165	18.9	64	6.0	5	1.5	58340	27.8	13380	75	0.9
30-45.8708-112.4458-2-12-						0-M34125	57460	-0.12	732	23740	60	-122	17.7	25	5.5	3	0.9	42380	6.4	9555	48	0.5
30-45.8653-112.4425-2-12-						0-M34126	67040	-0.11	377	40060	136	-129	15.5	35	4.9	6	1.5	35080	13.3	13650	81	0.8
30-45.8431-112.4261-2-12-						0-M34131	85940	-0.22	512	13290	162	-150	8.6	-12	3.9	8	1.3	13760	13.4	13720	111	1.2
30-45.8361-112.4044-2-12-						0-M34135	61620	-0.16	-381	27580	87	-187	19.0	58	6.4	-2	1.1	38160	6.5	20260	43	0.3
30-45.8308-112.4075-2-12-						0-M34136	69230	-0.09	744	24980	104	-153	13.3	24	5.2	4	1.4	32480	13.0	12310	64	0.6
30-45.8306-112.4075-2-12-						0-M34137	33410	-0.14	891	24080	68	-263	23.4	-17	6.4	-3	1.0	77150	2.8	-12660	104	0.5
30-45.8319-112.3911-2-15-						0-M34138	72470	-0.12	610	26110	95	-145	15.6	58	4.7	4	1.4	36070	8.6	13720	47	0.5
30-45.8317-112.3836-2-15-						0-M34139	71670	-0.13	728	28230	96	191	13.9	44	5.9	3	1.4	33510	9.3	14760	45	0.4
30-45.8283-112.3786-2-12-						0-M34140	82740	-0.07	908	24930	63	129	8.9	26	3.9	4	1.2	17540	6.2	17830	33	0.4
30-45.8325-112.3675-2-15-						0-M34141	73510	-0.08	561	29220	85	-114	12.0	74	3.0	4	1.4	40160	12.5	16070	53	0.5
30-45.8306-112.3658-2-15-						0-M34142	81160	-0.09	638	24510	104	177	10.8	60	4.5	4	1.4	24990	12.7	14720	56	0.6
30-45.8314-112.3639-2-12-						0-M34143	79430	-0.12	485	26560	98	-134	18.1	45	6.8	5	1.6	33600	11.4	14960	61	0.6
30-45.8511-112.3611-2-15-						0-M34144	51660	1.29	347	42610	90	225	25.4	582	3.8	5	2.6	91420	45.6	6075	49	0.9
30-45.8544-112.3708-2-12-						0-M34145	67720	0.26	527	36870	88	-103	20.4	37	5.2	6	1.4	25640	7.8	13540	43	0.4
30-45.8611-112.3597-2-15-						0-M34147	55520	-0.10	333	87710	95	-92	14.8	100	4.2	5	1.4	50440	34.3	9233	38	0.6
30-45.8681-112.3408-2-12-						0-M34148	66020	-0.18	577	30180	102	-168	21.8	53	5.8	3	1.2	41900	22.8	17460	55	0.7
30-45.8678-112.3406-2-15-						0-M34149	69600	-0.12	723	20340	65	-139	22.4	35	8.9	3	1.2	30850	7.1	18920	39	0.4
30-45.8692-112.3367-2-15-						0-M34150	61940	-0.11	427	33760	90	312	27.1	279	5.4	5	1.6	51590	18.8	17570	41	0.6
30-45.8353-112.3158-2-12-						0-M34152	53690	-0.12	530	28410	110	-124	19.3	189	7.0	6	1.7	92010	21.9	12850	56	0.7
30-45.8381-112.3122-2-15-						0-M34153	59390	-0.15	-254	34180	136	202	22.1	74	2.6	4	1.7	85220	25.7	12050	58	1.0
30-45.8403-112.2953-2-15-						0-M34154	68900	-0.09	530	25340	84	184	14.6	41	6.2	4	1.3	28460	8.5	15910	50	0.4
30-45.8367-112.3328-2-15-						0-M34155	63140	-0.09	350	42720	68	304	17.9	47	2.3	6	1.3	30690	4.6	7991	43	0.5
30-45.8344-112.3555-2-12-						0-M34156	57800	-0.12	419	33840	100	271	20.2	88	4.0	5	1.2	39840	14.1	11760	56	0.6
30-45.8444-112.4056-2-15-						0-M34157	78070	-0.12	477	22100	106	-100	13.6	55	9.2	4	1.5	37140	15.8	14230	53	0.5
30-45.8517-112.2867-2-15-						0-M34158	67920	-0.08	527	22460	61	184	15.2	57	4.0	4	1.2	23970	7.9	12340	35	0.5
30-45.8453-112.2961-2-15-						0-M34159	34070	-0.10	247	29050	73	139	28.7	367	1.8	4	2.2	178500	55.6	-4455	48	0.8
30-45.8531-112.2656-2-15-						0-M34160	79960	-0.10	617	26840	137	-90	13.2	48	4.9	6	1.6	33830	16.3	16820	73	0.6
30-45.8558-112.2811-2-11-						0-M34161	64640	-0.14	-227	26390	111	209	19.1	58	-2.6	5	1.6	45920	11.9	14800	48	0.6
30-45.8556-112.2694-2-11-						0-M34162	69340	-0.10	853	25730	80	143	15.8	117	4.1	5	1.5	48610	19.8	13620	48	0.6
30-45.8458-112.2939-2-12-						0-M34163	67660	-0.10	571	36270	92	147	16.3	88	4.3	6	1.6	39680	17.4	14880	45	0.6
30-45.8611-112.2922-2-15-						0-M34164	60170	-0.12	432	28690	105	178	19.5	94	3.6	4	1.4	45400	13.1	16910	40	0.7
30-45.8625-112.2836-2-15-						0-M34165	67330	-0.13	469	40910	81	-109	14.7	72	5.0	4	1.3	36760	12.0	11750	35	0.5
30-45.8708-112.2958-2-15-						0-M34166	63390	-0.10	500	28340	71	259	20.0	71	4.4	4	1.3	30420	9.6	15580	46	0.4
30-45.8728-112.3044-2-11-						0-M34167	61490	-0.11	369	38240	91	270	16.1	79	3.8	5	1.4	29270	21.4	17460	59	0.6
30-45.8708-112.2861-2-15-						0-M34168	67720	-0.11	320	26210	101	296	21.6	141	6.4	4	1.4	45570	15.6	17400	47	0.8
30-45.8664-112.2611-2-15-						0-M34169	69100	-0.15	260	21400	98	-115	19.2	75	7.1	4	1.4	35560	7.8	19290	43	0.6
30-45.8375-112.2886-2-15-						0-M34170	59520	-0.10	-195	34230	82	121	21.7	105	3.1	5	1.3	57370	20.5	12520	53	0.7
30-45.8322-112.2922-2-15-						0-M34171	65850	-0.10	529	27390	67	187	18.4	60	3.5	4	1.3	35910	10.9	12890	48	0.4
30-45.8197-112.3469-2-15-						0-M34172	72160	-0.12	673	30460	104	-141	14.3	37	3.0	5	1.6	29820	10.9	11910	56	0.6
30-45.8161-112.3392-2-15-						0-M34173	70390	-0.15	576	21820	106	-108	17.7	200	8.3	4	1.4	59320	16.1	17270	54	0.6

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

④

DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued)														U/Th RATIO	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	DOE 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
30-45.8639-112.4592-2-12-	0-M34112	-10560	5022	7585	48	5	11.2	8.3	-1	-1	19.6	-2376	82	6.5	277	0.929					
30-45.8611-112.4583-2-12-	0-M34113	-5540	411	31230	63	3	6.1	22.6	-405	3	-1	33.2	2434	22	8.3	98	1.916				
30-45.8539-112.4806-2-12-	0-M34114	15190	471	6251	-46	-5	12.2	4.3	-386	-1	-2	22.3	3085	145	-2.9	-356	0.426				
30-45.8536-112.4803-2-12-	0-M34115	12150	1319	16030	40	-3	17.7	6.3	-467	-1	-1	13.8	4198	109	5.0	99	0.522				
30-45.8575-112.4817-2-12-	0-M34116	8996	1295	9825	-37	4	9.4	3.5	-546	-2	-1	21.4	2946	98	-2.3	261	0.350				
30-45.8358-112.4564-2-12-	0-M34117	15360	318	21090	69	3	15.8	6.2	-417	-1	-1	58.5	3334	118	10.4	0.321					
30-45.9686-112.4553-2-12-	0-M34118	15380	800	18760	-45	-5	17.2	25.5	-472	-2	-2	104.3	2960	271	13.6	-64	1.041				
30-45.9428-112.4514-2-12-	0-M34120	27540	1561	14560	61	7	23.5	12.8	-534	-1	-2	100.4	3882	277	12.7	127	0.247				
30-45.9386-112.4497-2-12-	0-M34121	28750	1257	17450	59	-4	24.8	9.6	-467	-1	-1	45.5	4065	203	6.3	0.477					
30-45.9333-112.4458-2-15-	0-M34122	24260	1597	15780	55	17	19.6	9.2	-608	-1	-1	55.0	4419	128	8.3	131	0.195				
30-45.9186-112.4278-2-12-	0-M34124	20720	1941	18330	-44	-5	19.0	7.6	-658	-11	-2	67.5	2566	188	9.9	-437	0.225				
30-45.8708-112.4458-2-12-	0-M34125	19110	1651	9999	58	6	11.6	7.7	-616	-1	-2	21.5	3297	126	3.5	197	1.233				
30-45.8653-112.4425-2-12-	0-M34126	28090	1480	17230	49	-4	21.4	10.8	-500	-1	-1	30.4	4324	114	4.6	118	1.283				
30-45.8431-112.4261-2-12-	0-M34131	-5845	635	30270	45	-3	6.3	13.4	-459	-1	-1	47.2	2781	44	10.2	150	0.843				
30-45.8361-112.4044-2-12-	0-M34135	22100	2717	12330	-48	-5	13.1	3.3	-885	-11	-1	15.0	3389	87	5.6	-426	0.367				
30-45.8308-112.4075-2-12-	0-M34136	12940	2062	19210	55	-3	10.6	8.1	-611	-1	-1	32.2	3120	80	4.9	104	0.562				
30-45.8306-112.4075-2-12-	0-M34137	-12110	5941	5841	-44	9	5.6	11.9	5	-1	7.5	-2898	112	-3.0	182	16.053					
30-45.8319-112.3911-2-15-	0-M34138	20380	1382	17130	70	-4	13.4	5.4	-574	-1	-1	17.5	4426	108	4.5	223	0.446				
30-45.8317-112.3836-2-15-	0-M34139	22260	1305	18520	-36	-4	14.4	4.9	-552	-1	-1	13.5	3582	86	4.0	124	0.304				
30-45.8283-112.3786-2-12-	0-M34140	14030	550	23090	47	-2	7.9	4.5	667	-1	-1	7.7	2913	45	2.8	89	0.532				
30-45.8325-112.3675-2-15-	0-M34141	22450	1053	21970	48	3	13.8	5.6	597	-1	-1	20.0	3518	127	4.9	111	0.215				
30-45.8306-112.3658-2-15-	0-M34142	19690	530	21700	49	-3	9.9	6.3	719	-1	-1	18.6	3562	80	6.5	118	0.220				
30-45.8314-112.3639-2-12-	0-M34143	23230	887	20470	72	-4	14.2	6.0	-470	-9	-2	18.3	2811	91	-3.0	-364	0.350				
30-45.8511-112.3611-2-15-	0-M34144	44320	1451	11490	-29	-3	18.3	6.5	-445	-1	-1	16.0	5088	419	5.7	217	0.269				
30-45.8544-112.3708-2-12-	0-M34145	39700	954	13700	66	-3	10.5	6.0	-405	-1	-1	14.2	3415	76	5.6	135	0.317				
30-45.8611-112.3597-2-15-	0-M34147	54420	974	8034	-26	4	15.7	6.5	-387	1	-1	22.8	4218	241	6.0	-91	0.250				
30-45.8681-112.3408-2-12-	0-M34148	29250	2091	14440	-50	-6	23.5	4.6	-749	-2	-2	33.2	5114	163	7.9	176	0.611				
30-45.8678-112.3406-2-15-	0-M34149	32970	2217	11130	87	7	14.9	5.6	-582	-1	-1	16.2	5818	110	4.2	267	0.222				
30-45.8692-112.3367-2-15-	0-M34150	56200	1626	12550	38	4	20.0	7.4	-512	-1	-1	12.5	6259	203	5.1	232	0.272				
30-45.8353-112.3153-2-12-	0-M34152	23430	1433	12960	-34	-4	15.5	8.5	-510	-1	-1	19.5	4976	303	6.0	114	0.231				
30-45.8381-112.3122-2-15-	0-M34153	30190	1631	14760	-46	-5	19.6	7.3	-534	-1	-2	15.0	5491	285	6.0	-59	0.247				
30-45.8403-112.2953-2-15-	0-M34154	26450	947	12640	54	-3	12.8	5.6	375	-1	-1	11.2	4203	109	3.8	141	0.250				
30-45.8367-112.3328-2-15-	0-M34155	41700	1459	20090	28	-3	23.4	6.9	675	-1	1	7.2	4540	88	4.8	153	0.278				
30-45.8344-112.3556-2-12-	0-M34156	31230	1081	15740	-30	-4	16.7	8.3	-489	-1	-1	12.3	5235	158	4.7	-69	1.569				
30-45.8444-112.4056-2-15-	0-M34157	23060	312	11310	56	-4	14.6	6.1	-399	-1	-1	13.3	4127	134	5.6	-230	0.248				
30-45.8517-112.2867-2-15-	0-M34158	24290	969	14580	-21	3	12.2	4.9	625	-1	-1	9.8	4233	88	3.5	147	0.204				
30-45.8375-112.2861-2-15-	0-M34159	23410	1722	9741	-33	-3	16.7	6.4	-427	2	-1	23.6	7045	723	8.4	0.250					
30-45.8531-112.2656-2-15-	0-M34160	20940	770	8836	55	-3	11.9	8.1	-376	2	-1	18.9	5642	128	5.0	65	0.206				
30-45.8558-112.2811-2-11-	0-M34161	28230	1056	16490	-42	-4	17.3	5.9	-504	-2	-2	15.2	5001	192	4.3	189	0.382				
30-45.8556-112.2694-2-11-	0-M34162	22630	1063	10100	51	-3	12.6	5.7	-413	-1	-1	13.3	5748	206	4.8	103	0.293				
30-45.8458-112.2939-2-12-	0-M34163	34530	1322	17850	55	-3	19.2	7.3	-439	-1	-1	23.4	4797	135	4.1	139	0.235				
30-45.8611-112.2922-2-15-	0-M34164	32240	1493	14200	59	-4	17.2	7.2	-559	-1	-1	11.4	4795	163	3.5	-103	0.307				
30-45.8625-112.2836-2-15-	0-M34165	28340	963	10950	-37	-4	14.5	4.6	-453	-9	-1	10.9	4318	111	4.7	-328	0.248				
30-45.8708-112.2953-2-15-	0-M34166	21350	1639	16190	37	-3	15.0	5.2	-527	-1	-1	13.9	4132	105	4.8	160	0.180				
30-45.8728-112.3044-2-11-	0-M34167	36710	966	17410	-30	-4	16.5	9.4	-443	-1	-1	9.8	5936	141	5.1	101	3.071				
30-45.8708-112.2861-2-15-	0-M34168	35500	1276	14290	82	-3	15.9	6.6	-505	-1	-1	17.6	5155	177	6.3	116	0.193				
30-45.8664-112.2611-2-15-	0-M34169	33240	984	10870	-37	-5	16.5	6.1	-473	-1	-2	14.6	4375	117	4.0	-215	0.425				
30-45.8375-112.2886-2-15-	0-M34170	35650	1622	15260	-26	-3	18.7	6.7	-477	1	-1	15.4	5506	220	4.0	121	0.201				
30-45.8322-112.2922-2-15-	0-M34171	31720	1500	15790	-24	4	15.9	5.4	-478	-1	-1	10.1	4792	123	2.8	146	0.257				
30-45.8197-112.3469-2-15-	0-M34172	25490	1299	18930	53	-4	14.9	7.0	-533	1	-1	13.2	4093	95	4.7	102	0.417				
30-45.8161-112.3392-2-15-	0-M34173	29990	1945	10430	84	-3	15.4	5.7	-485	-1	-2	15.5	4559	189	4.9	-74	0.213				

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

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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 (umho/cm)	SCINTILLATOR (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																										
30-45.8042-112.3339-2-12-						0-M34174-05/05/75-10-	11-	3.0-C-	-	6.4-	164-				9-3-7-4-6-4-4-2-2-1-3-4-2-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.70	
30-45.8069-112.2833-2-11-						0-M34175-05/05/75-11-	12-	8.0-C-	-	6.8-	350-				3-3-1-3-1-2-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.70	
30-45.8069-112.2833-2-15-						0-M34176-05/05/75-12-	12-	-C-	-	-	-				9-3-1-4-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45.8028-112.2769-2-15-						0-M34177-05/05/75-12-	13-	-C-	-	-	-				3-3-1-4-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50	
30-45.8083-112.2706-2-11-						0-M34178-05/05/75-13-	14-	10.1-	-	7.1-	520-				5-3-7-5-8-1-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.00	
30-45.8111-112.2533-2-15-						0-M34179-05/05/75-13-	11-	-C-	-	-	-				4-3-6-4-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40	
30-45.7808-112.2778-2-12-						0-M34180-05/05/75-14-	10-	7.0-C-	-	6.6-	140-				3-3-6-4-6-3-4-3-2-2-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.30	
30-45.7667-112.2711-2-15-						0-M34181-05/05/75-15-	15-	-C-	-	-	-				7-4-	-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.60	
30-45.7592-112.2639-2-15-						0-M34182-05/05/75-15-	15-	-C-	-	-	-				10-4-	-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.50	
30-45.7569-112.2625-2-15-						0-M34183-05/05/75-15-	17-	-C-	-	-	-				6-4-	-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45.7544-112.2589-2-15-						0-M34184-05/05/75-15-	17-	-C-	-	-	-				6-4-	-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.00	
30-45.7611-112.2922-2-15-						0-M34185-05/05/75-15-	20-	-C-	-	-	-				2-4-	-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45.7647-112.2875-2-15-						0-M34186-05/05/75-15-	19-	-C-	-	-	-				2-4-	-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80	
30-45.7711-112.3303-2-15-						0-M34187-05/05/75-14-	16-	-C-	-	-	-				7-3-1-4-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.40	
30-45.7667-112.3306-2-15-						0-M34188-05/05/75-14-	12-	-C-	-	-	-				11-3-1-4-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.10	
30-45.7528-112.3253-2-12-						0-M34189-05/06/75-14-	13-	11.5-C-	-	7.0-	280-				7-3-1-4-2-3-4-1-1-4-4-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80	
30-45.7594-112.3278-2-11-						0-M34190-05/06/75-15-	11-	-C-	-	-	-				5-3-1-5-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
30-45.7744-112.3625-2-12-						0-M34191-05/06/75-15-	9-	3.7-	-	6.7-	115-				7-3-1-4-2-4-3-1-2-2-4-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26.40	
30-45.7722-112.3633-2-12-						0-M34192-05/06/75-16-	9-	3.8-C-	-	6.5-	85-				5-2-3-2-3-4-4-1-2-2-4-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.50	
30-45.7633-112.3639-2-12-						0-M34193-05/06/75-16-	7-	3.0-	-	6.4-	65-				7-3-1-4-2-4-4-1-2-2-4-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00	
30-45.7847-112.3556-2-12-						0-M34194-05/06/75-17-	8-	4.2-C-	-	6.9-	170-				7-3-1-4-6-3-4-7-2-2-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24.10	
30-45.7903-112.3472-2-12-						0-M34195-05/06/75-18-	9-	5.8-	-	6.9-	220-				7-3-1-4-2-4-3-1-2-1-4-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.90	
30-45.7894-112.3472-2-12-						0-M34196-05/06/75-18-	9-	4.5-C-	-	6.8-	180-				7-3-1-4-6-4-3-2-2-1-4-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.70	
30-45.7942-112.3528-2-12-						0-M34197-05/06/75-18-	8-	1.5-	-	6.6-	140-				11-3-1-4-6-4-3-2-2-1-4-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27.20	
30-45.8000-112.3353-2-12-						0-M34198-05/06/75-19-	9-	0.5-	-	6.6-	180-				7-3-1-4-6-5-3-2-2-1-4-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.50	
30-45.7797-112.3208-2-15-						0-M34199-05/06/75-19-	9-	-	-	-	-				8-3-6-4-7-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.00
30-45.7756-112.3306-2-15-						0-M34200-05/06/75-19-	9-	-	-	-	-				7-4-	-4-	-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60
30-45.8983-112.1989-2-15-						0-M34201-05/10/76-13-	26-	-C-	-	-	-				9-4-	-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.40
30-45.8983-112.1986-2-15-						0-M34202-05/10/76-13-	26-	-C-	-	-	-				6-4-	-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90
30-45.9069-112.2458-2-15-						0-M34203-05/10/76-13-	27-	-C-	-	-	-				10-3-1-4-5-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.30
30-45.8989-112.2319-2-15-						0-M34204-05/10/76-14-	27-	-C-	-	-	-				14-4-	-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30
30-45.8986-112.2314-2-15-						0-M34205-05/10/76-14-	27-	-C-	-	-	-				9-4-	-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.20
30-45.8892-112.2436-2-15-						0-M34206-05/10/76-14-	26-	-C-	-	-	-				8-3-5-4-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00
30-45.8906-112.2089-2-15-						0-M34208-05/10/76-15-	25-	-C-	-	-	-				4-4-	-7-	-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30
30-45.9036-112.1797-2-15-						0-M34209-05/10/76-15-	26-	-	-	-	-				6-4-	-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.30
30-45.9125-112.1817-2-15-						0-M34210-05/10/76-16-	24-	-C-	-	-	-				9-4-	-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.60
30-45.8911-112.1639-2-15-						0-M34211-05/10/76-16-	23-	-	-	-	-				9-4-	-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00
30-45.8897-112.1583-2-15-						0-M34212-05/10/76-16-	22-	-C-	-	-	-				10-4-	-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.50
30-45.8889-112.1547-2-15-						0-M34213-05/10/76-16-	22-	-C-	-	-	-				7-4-	-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.30
30-45.8806-112.1472-2-15-						0-M34214-05/10/76-17-	24-	-C-	-	-	-				3-4-	-3-	-6-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.20
30-45.8931-112.1750-2-15-						0-M34215-05/10/76-16-	23-	-C-	-	-	-				4-4-	-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.10
30-45.8794-112.1417-2-15-						0-M34216-05/10/76-17-	23-	-C-	-	-	-				8-4-	-4-	-7-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00
30-45.9217-112.1844-2-15-						0-M34217-05/10/76-18-	13-	-C-	-	-	-				11-4-	-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30
30-45.9264-112.1833-2-15-						0-M34218-05/10/76-18-	16-	-C-	-	-	-				7-4-	-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00
30-45.9319-112.1764-2-15-						0-M34219-05/10/76-19-	12-	-C-	-	-	-				6-4-	-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20
30-45.9344-112.1764-2-15-						0-M34220-05/10/76-19-	17-	-C-	-	-	-				9-4-	-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50
30-45.9428-112.1764-2-15-						0-M34221-05/10/76-19-	14-	-C-	-	-	-				10-4-	-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10
30-45.9472-112.1764-2-15-						0-M34222-05/10/76-19-	15-	-C-	-	-</																								

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	DOE 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	
30-45.8042-112.3339-2-12-			0-M34174				-5	-5	-5	92	-20	-15	23	-10	-15	1	29	
30-45.8069-112.2833-2-11-			0-M34175				-5	-5	-5	66	-20	30	13	-10	-15	1	22	
30-45.8069-112.2833-2-15-			0-M34176				-5	-5	-5	100	-20	-15	21	-10	-15	-1	13	
30-45.8028-112.2769-2-15-			0-M34177				-5	-5	-5	78	-20	34	17	-10	-15	1	19	
30-45.8083-112.2706-2-11-			0-M34178				-5	-5	-5	77	-20	-15	22	-10	-15	-1	13	
30-45.8111-112.2533-2-15-			0-M34179				-5	-5	-5	64	-20	21	19	-10	-15	1	20	
30-45.7308-112.2778-2-12-			0-M34180				-5	-5	-5	42	-20	-15	9	-10	-15	-1	31	
30-45.7667-112.2711-2-15-			0-M34181				13	-5	-5	38	-20	-15	-5	22	24	-1	8	
30-45.7592-112.2639-2-15-			0-M34182				-5	-5	6	29	-20	52	-5	-10	-15	-1	8	
30-45.7569-112.2625-2-15-			0-M34183				-5	-5	-5	40	-20	15	35	33	-15	2	23	
30-45.7544-112.2589-2-15-			0-M34184				11	-5	-5	36	41	-15	-5	-10	-15	-1	-1	
30-45.7611-112.2922-2-15-			0-M34185				-5	-5	-5	92	-20	20	28	-10	-15	1	24	
30-45.7647-112.2875-2-15-			0-M34186				-5	-5	-5	71	-20	29	23	13	-15	1	24	
30-45.7711-112.3303-2-15-			0-M34187				-5	-5	-5	54	-20	-15	16	-10	-15	1	25	
30-45.7667-112.3306-2-15-			0-M34188				-5	-5	-5	162	-20	-15	17	-10	-15	2	42	
30-45.7528-112.3253-2-12-			0-M34189				-5	-5	-5	27	-20	-15	12	-10	-15	1	24	
30-45.7594-112.3278-2-11-			0-M34190				-5	-5	-5	47	-20	-15	12	-10	-15	2	40	
30-45.7744-112.3625-2-12-			0-M34191				-5	-5	-5	28	-20	-15	15	-10	-15	2	37	
30-45.7722-112.3633-2-12-			0-M34192				-5	-5	-5	44	-20	-15	11	-10	-15	1	24	
30-45.7633-112.3639-2-12-			0-M34193				-5	-5	-5	60	-20	35	13	-10	-15	2	40	
30-45.7847-112.3556-2-12-			0-M34194				-5	-5	-5	25	-20	23	15	-10	-15	1	33	
30-45.7903-112.3472-2-12-			0-M34195				-5	-5	-5	44	-20	-15	5	-10	-15	2	32	
30-45.7894-112.3472-2-12-			0-M34196				-5	-5	-5	30	-20	-15	14	-10	-15	1	19	
30-45.7942-112.3628-2-12-			0-M34197				-5	-5	-5	108	-20	-15	24	-10	-15	2	24	
30-45.8000-112.3353-2-12-			0-M34198				-5	-5	-5	52	32	-15	5	-10	23	1	39	
30-45.7797-112.3208-2-15-			0-M34199				12	-5	-5	44	-20	58	-5	-10	-15	-1	12	
30-45.7756-112.3306-2-15-			0-M34200				-5	6	-5	80	-20	-15	26	-10	-15	2	35	
30-45.8983-112.1989-2-15-			0-M34201				-5	7	-5	77	-20	-15	12	-10	-15	1	14	
30-45.8983-112.1986-2-15-			0-M34202				-5	-5	-5	75	-20	-15	29	-10	-15	2	20	
30-45.9069-112.2458-2-15-			0-M34203				-5	6	-5	130	-20	-15	70	-10	-15	-1	16	
30-45.8989-112.2319-2-15-			0-M34204				-5	-5	-5	46	-20	-15	23	-10	-15	1	19	
30-45.8986-112.2314-2-15-			0-M34205				-5	-5	-5	52	-20	29	20	-10	-15	1	18	
30-45.8892-112.2436-2-15-			0-M34206				-5	-5	-5	80	-20	-15	33	-10	-15	2	22	
30-45.8906-112.2089-2-15-			0-M34208				-5	-5	-5	46	-20	16	7	-10	-15	2	32	
30-45.9036-112.1797-2-15-			0-M34209				-5	-5	-5	45	-20	-15	17	-10	-15	2	19	
30-45.9125-112.1817-2-15-			0-M34210				-5	-5	-5	50	-20	-15	16	-10	-15	1	19	
30-45.8911-112.1639-2-15-			0-M34211				-5	-5	-5	67	-20	24	37	-10	16	-1	25	
30-45.8897-112.1583-2-15-			0-M34212				-5	-5	-5	111	-20	-15	64	-10	-15	1	23	
30-45.8889-112.1547-2-15-			0-M34213				-5	6	-5	118	-20	-15	51	-10	-15	1	24	
30-45.8806-112.1472-2-15-			0-M34214				-5	-5	-5	35	-20	15	22	-10	-15	1	18	
30-45.8931-112.1750-2-15-			0-M34215				-5	-5	-5	86	-20	-15	33	-10	-15	2	25	
30-45.8794-112.1417-2-15-			0-M34216				-5	-5	-5	48	-20	15	18	-10	-15	2	24	
30-45.9217-112.1844-2-15-			0-M34217				-5	-5	-5	53	-20	-15	16	-10	-15	2	28	
30-45.9264-112.1833-2-15-			0-M34218				-5	-5	-5	60	-20	-15	26	-10	-15	-1	13	
30-45.9319-112.1764-2-15-			0-M34219				-5	-5	-5	89	-20	-15	41	-10	-15	-1	21	
30-45.9344-112.1764-2-15-			0-M34220				-5	-5	-5	89	-20	-15	41	-10	-15	-1	29	
30-45.9428-112.1764-2-15-			0-M34221				-5	-5	-5	95	-20	-15	39	-10	-15	-1	15	
30-45.9472-112.1764-2-15-			0-M34222				-5	-5	-5	100	-20	-15	31	-10	-15	2	17	
30-45.9478-112.1764-2-15-			0-M34223				-5	-5	-5	77	-20	-15	32	-10	-15	3	20	
30-45.9572-112.1686-2-15-			0-M34224				-5	-5	-5	75	-20	-15	22	-10	-15	2	34	
30-45.9592-112.1675-2-15-			0-M34225				-5	-5	-5	108	-20	-15	35	-10	-15	2	30	

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

③

DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS																
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	DOE 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
30-45.8042-112.3339-2-12-			0-M34174			74390	-0.12	416	29930	101	197	18.1	41	9.5	5	1.2	29800	13.9	18660	61	0.7	
30-45.8069-112.2833-2-11-			0-M34175			64930	-0.10	452	30350	80	170	14.4	65	3.0	5	1.3	30460	14.0	14980	43	0.6	
30-45.8069-112.2833-2-15-			0-M34176			62370	-0.11	478	27580	126	212	18.5	93	3.9	4	1.5	53100	12.9	18330	62	0.7	
30-45.8028-112.2769-2-15-			0-M34177			54810	-0.14	521	30160	91	-127	23.6	115	-2.3	4	1.6	79850	19.1	12770	61	0.9	
30-45.8083-112.2706-2-11-			0-M34178			51850	-0.12	458	23370	64	203	17.5	36	3.4	5	1.3	23220	6.0	11040	39	0.4	
30-45.8111-112.2533-2-15-			0-M34179			65690	-0.09	435	30540	79	-107	16.2	86	2.2	4	1.3	51510	15.8	11160	51	0.6	
30-45.7808-112.2778-2-12-			0-M34180			62350	-0.15	-296	36260	131	225	20.5	59	4.8	6	1.9	48960	41.2	11270	61	0.9	
30-45.7667-112.2711-2-15-			0-M34181			47900	-0.13	411	18940	120	-109	21.5	237	-2.1	4	1.7	177700	32.5	8533	75	0.7	
30-45.7592-112.2639-2-15-			0-M34182			47900	-0.09	658	16920	101	-95	20.5	220	-1.5	4	1.4	185200	19.6	4410	68	0.7	
30-45.7569-112.2625-2-15-			0-M34183			80180	-0.09	685	22270	91	-104	12.6	41	4.6	5	1.3	25040	7.1	15410	48	0.5	
30-45.7544-112.2589-2-15-			0-M34184			44070	-0.11	311	20560	104	-107	22.4	227	-1.7	5	1.7	174600	26.1	7506	77	0.7	
30-45.7611-112.2922-2-15-			0-M34185			60270	-0.16	479	18810	80	-121	16.9	60	4.5	4	1.5	31890	7.6	20590	43	0.4	
30-45.7647-112.2875-2-15-			0-M34186			66800	-0.11	594	31400	91	-123	19.3	171	3.7	6	1.5	42190	9.2	13350	51	0.6	
30-45.7711-112.3303-2-15-			0-M34187			73640	-0.09	669	17120	84	-100	11.9	48	4.9	5	1.3	23300	9.5	20210	47	0.5	
30-45.7667-112.3306-2-15-			0-M34188			80650	-0.13	359	26090	177	-134	18.8	38	15.9	6	1.6	42780	22.5	22210	90	0.9	
30-45.7528-112.3253-2-12-			0-M34189			71850	-0.13	668	26700	81	190	11.3	-14	3.8	3	1.4	19020	6.6	11620	43	0.5	
30-45.7594-112.3278-2-11-			0-M34190			69590	-0.10	630	22450	78	186	18.1	34	3.4	5	1.4	27590	8.3	19200	46	0.5	
30-45.7744-112.3625-2-12-			0-M34191			73390	-0.10	871	30090	150	-123	11.4	28	3.1	5	1.5	23140	9.2	12050	117	0.5	
30-45.7722-112.3633-2-12-			0-M34192			75970	-0.10	808	24650	124	-124	11.6	36	2.9	5	1.7	18900	10.2	15680	70	0.5	
30-45.7633-112.3639-2-12-			0-M34193			63660	-0.14	512	20450	99	-106	22.0	52	5.3	6	1.7	27210	11.3	14200	40	0.6	
30-45.7847-112.3556-2-12-			0-M34194			75710	-0.10	893	26140	88	-125	12.2	23	3.9	4	1.3	21880	8.6	14150	70	0.4	
30-45.7903-112.3472-2-12-			0-M34195			75520	-0.10	866	31990	110	-126	11.8	31	3.5	4	1.6	26650	13.7	12030	63	0.7	
30-45.7894-112.3472-2-12-			0-M34196			76200	-0.11	713	29370	108	-140	12.2	30	2.9	5	1.6	22120	10.6	14820	67	0.6	
30-45.7942-112.3628-2-12-			0-M34197			88070	-0.12	830	23420	176	-145	8.3	26	7.3	5	1.8	19450	8.7	16120	135	0.6	
30-45.8000-112.3353-2-12-			0-M34198			72130	-0.11	725	28690	117	-128	16.3	69	3.2	6	1.7	47290	20.9	18790	73	0.8	
30-45.7797-112.3208-2-15-			0-M34199			47860	-0.13	297	32400	107	-110	22.2	258	2.9	7	1.8	107100	28.7	10080	59	1.0	
30-45.7756-112.3306-2-15-			0-M34200			71470	-0.11	560	18180	82	-119	11.6	53	5.4	4	1.4	28900	8.5	19530	42	0.5	
30-45.8983-112.1989-2-15-			0-M34201			66200	-0.12	465	21940	93	-102	14.1	96	3.6	5	1.4	55730	26.6	14320	50	0.6	
30-45.8983-112.1986-2-15-			0-M34202			73750	-0.15	519	25570	117	-97	12.8	55	4.3	5	1.5	34610	15.4	14790	64	0.6	
30-45.9069-112.2458-2-15-			0-M34203			68210	-0.10	617	27380	77	-91	14.1	64	4.3	5	1.2	26870	9.4	15190	36	0.5	
30-45.8989-112.2319-2-15-			0-M34204			70210	-0.09	614	28100	80	173	12.1	50	3.7	4	1.2	25070	8.3	15410	43	0.4	
30-45.8986-112.2314-2-15-			0-M34205			68370	-0.12	637	25970	117	196	14.8	92	4.2	4	1.5	45280	18.8	13170	46	0.7	
30-45.8892-112.2436-2-15-			0-M34206			67770	-0.14	494	19710	95	128	13.7	89	6.4	5	1.2	30660	12.4	16070	45	0.6	
30-45.8906-112.2089-2-15-			0-M34208			75450	-0.11	634	31840	72	428	13.0	29	5.1	5	1.4	24860	8.2	16460	41	0.5	
30-45.9036-112.1797-2-15-			0-M34209			82510	-0.11	526	22310	122	148	12.9	50	5.9	7	1.6	42310	28.5	10880	76	0.7	
30-45.9125-112.1817-2-15-			0-M34210			75210	-0.12	547	22100	99	143	14.1	79	4.8	4	1.4	48350	29.4	11420	59	0.7	
30-45.8911-112.1639-2-15-			0-M34211			68930	-0.16	375	23310	150	185	14.5	72	5.2	6	1.7	58940	40.6	17640	86	1.1	
30-45.8897-112.1583-2-15-			0-M34212			67190	-0.12	453	17700	76	126	13.3	43	4.9	6	1.1	23110	8.5	15320	47	0.5	
30-45.8889-112.1547-2-15-			0-M34213			72890	-0.10	453	21600	91	-103	10.5	43	6.2	5	1.3	24240	11.6	15450	57	0.4	
30-45.8806-112.1472-2-15-			0-M34214			77330	-0.12	487	27440	116	-116	12.9	37	4.4	4	1.4	26660	16.7	18330	62	0.7	
30-45.8931-112.1750-2-15-			0-M34215			77900	-0.16	547	18260	88	123	13.8	45	6.9	5	1.4	31800	7.1	15140	35	0.7	
30-45.8794-112.1417-2-15-			0-M34216			70500	-0.10	540	21630	81	-112	12.3	45	4.8	5	1.3	24540	12.8	20050	52	0.5	
30-45.9217-112.1844-2-15-			0-M34217			97970	-0.11	641	25620	101	-115	13.2	60	5.4	5	1.6	32480	14.5	17190	60	0.6	
30-45.9264-112.1833-2-15-			0-M34218			74950	-0.15	557	24030	116	-93	13.8	71	4.4	5	1.5	39190	16.5	17080	61	0.4	
30-45.9319-112.1764-2-15-			0-M34219			72020	-0.10	694	18060	72	-88	11.9	57	5.0	5	1.1	25350	8.5	16000	41	0.4	
30-45.9344-112.1764-2-15-			0-M34220			72320	-0.10	513	27270	67	-94	12.0	51	4.1	4	1.2	25770	6.7	13990	48	0.4	
30-45.9428-112.1764-2-15-			0-M34221			69700	-0.11	609	21760	100	-105	13.6	76	3.5	3	1.5	35060	11.6	15680	46	0.4	
30-45.9472-112.1764-2-15-			0-M34222			76410	-0.14	604	19100	92	-92	13.6	68	4.3	4	1.4	32380	9.5	16850	50	0.4	
30-45.9478-112.1764-2-15-			0-M34223			77050	-0.09	613	18220	66	-86	12.2	67	3.9	4	1.4	29940	10.1	16460	49	0.3	
30-45.9572-112.1686-2-15-			0-M34224			72390	-0.11	557	43950	72	-94	12.5	52	3.4	4	1.2	24390	6.3	13810	32	0.5	
30-45.9592-112.1675-2-15-			0-M34225			79930	-0.16	567	17050	82	-116	16.1	76	5.0	4	1.6	30940	7.1	20590	42	0.4	

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

④

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	
30-45.8042-112.3339-2-12-						0-M34174	26210	1051	15820	72	-2	19.0	8.9	-450	-1	-1	29.0	4848	137	5.4	-41	0.576
30-45.8069-112.2833-2-11-						0-M34175	37200	971	16230	-24	-3	14.9	6.1	-370	-1	-1	11.9	4533	126	4.2	121	0.395
30-45.8069-112.2833-2-15-						0-M34176	19220	1414	14670	42	-3	14.3	8.6	-506	-1	-1	17.1	5958	212	6.4	142	0.170
30-45.8028-112.2769-2-15-						0-M34177	27810	1498	13590	-41	-4	19.0	6.9	-515	-1	-2	18.8	5058	276	5.0	-172	0.133
30-45.8083-112.2706-2-11-						0-M34178	22690	553	11390	-28	-4	11.0	7.2	-406	-1	-1	10.6	3840	515	3.4	148	1.038
30-45.8111-112.2533-2-15-						0-M34179	29620	1237	17590	-23	-3	15.4	6.0	-391	-1	-1	10.7	4953	178	5.0	-58	0.224
30-45.7808-112.2778-2-12-						0-M34180	27840	2193	14460	56	-5	26.0	8.4	-707	-1	-2	36.5	5764	201	6.7	-73	0.337
30-45.7667-112.2711-2-15-						0-M34181	8586	1105	13410	-48	-4	6.9	6.1	-429	-1	-2	27.4	4666	673	6.5	-114	0.168
30-45.7592-112.2639-2-15-						0-M34182	9718	1105	13940	-32	-3	5.8	6.4	-362	1	-1	40.5	5136	717	5.6		0.136
30-45.7569-112.2625-2-15-						0-M34183	26810	907	16050	40	-3	10.9	5.9	-380	-1	-1	14.1	3584	91	4.1	98	0.191
30-45.7544-112.2589-2-15-						0-M34184	11430	1204	11950	-36	-3	7.9	8.1	-420	2	1	31.8	6249	667	7.9	126	0.157
30-45.7611-112.2922-2-15-						0-M34185	29370	1146	10170	-42	-5	16.2	5.2	-544	-1	-2	16.1	4872	96	4.5	-96	0.168
30-45.7647-112.2875-2-15-						0-M34186	34420	1473	15650	-27	-3	16.5	7.1	-489	-1	-1	14.8	4085	135	6.8	131	0.189
30-45.7711-112.3303-2-15-						0-M34187	16930	899	14470	59	-3	10.5	5.5	-375	-1	-1	13.6	4064	80	4.2	108	0.324
30-45.7667-112.3306-2-15-						0-M34188	26370	1482	15880	71	-3	20.3	13.6	-540	-1	-1	74.0	4692	144	8.8	146	0.218
30-45.7528-112.3253-2-12-						0-M34189	19470	671	22350	81	-4	10.7	5.8	-452	-1	-1	16.1	3110	48	4.6	79	0.236
30-45.7594-112.3278-2-11-						0-M34190	27240	1340	15620	51	-3	12.7	5.2	-486	-1	-1	12.8	5653	98	4.1	168	0.258
30-45.7744-112.3625-2-12-						0-M34191	14790	1233	17680	31	-3	10.9	9.1	597	-1	-1	19.5	3103	56	3.9	44	1.354
30-45.7722-112.3633-2-12-						0-M34192	27630	845	19750	36	-3	11.4	7.6	617	-1	-1	14.5	3401	62	4.5	118	0.379
30-45.7633-112.3639-2-12-						0-M34193	20340	770	11650	48	-4	13.2	7.3	-427	-1	-1	9.8	3794	86	4.4	-92	0.408
30-45.7847-112.3556-2-12-						0-M34194	17710	1040	20900	30	-3	10.3	7.8	527	1	-1	15.8	3391	55	2.9	72	1.525
30-45.7903-112.3472-2-12-						0-M34195	21460	1250	21290	40	-3	13.8	6.5	-451	1	-1	19.3	4312	80	6.0	121	0.513
30-45.7894-112.3472-2-12-						0-M34196	14950	1027	21970	45	-3	12.1	10.1	-497	-1	-1	18.8	3765	62	5.4		0.835
30-45.7942-112.3628-2-12-						0-M34197	-5976	736	27870	52	-4	9.0	12.8	-456	3	-1	36.4	3637	44	8.7	118	0.747
30-45.8000-112.3353-2-12-						0-M34198	25960	1463	17870	86	-4	15.4	7.5	-504	2	-1	25.4	4923	152	6.2	87	0.295
30-45.7797-112.3208-2-15-						0-M34199	32180	1697	11970	-29	-4	20.9	9.6	-429	-1	-1	59.5	4768	353	8.6	70	0.185
30-45.7756-112.3306-2-15-						0-M34200	18370	1050	15930	-23	-3	11.7	5.1	-456	-1	-1	17.4	3884	92	5.5	132	0.207
30-45.8983-112.1989-2-15-						0-M34201	14570	922	13370	41	-4	14.2	7.5	-398	1	-1	20.3	5099	335	5.9	96	0.217
30-45.8983-112.1986-2-15-						0-M34202	18350	832	16750	-33	-5	17.3	8.3	387	-1	-1	19.6	4675	136	4.0	-93	0.199
30-45.9069-112.2458-2-15-						0-M34203	20410	909	13060	47	4	12.5	6.1	-342	-1	-1	14.8	3680	105	4.0	148	0.291
30-45.8989-112.2319-2-15-						0-M34204	18200	882	14180	-19	4	12.3	4.9	790	-1	-1	11.4	4128	95	4.3	97	0.289
30-45.8986-112.2314-2-15-						0-M34205	16620	1003	12220	39	-4	12.5	6.5	-414	-1	1	14.0	4493	223	3.8	111	0.300
30-45.8892-112.2436-2-15-						0-M34206	27170	973	13700	-32	-4	14.3	5.2	-358	-1	-1	13.7	3642	107	4.3	-175	0.219
30-45.8906-112.2089-2-15-						0-M34208	21400	915	15730	55	-3	14.1	5.7	-348	-1	1	13.2	3730	70	4.9	79	0.250
30-45.9036-112.1797-2-15-						0-M34209	16930	795	13840	47	-4	15.3	8.0	-377	2	1	21.2	6190	199	6.6	116	0.297
30-45.9125-112.1817-2-15-						0-M34210	18420	1076	12370	44	-4	14.7	7.3	-428	2	-1	19.3	6976	252	7.6	80	0.238
30-45.8911-112.1639-2-15-						0-M34211	19240	975	15520	49	-5	18.7	8.1	-361	2	-2	26.1	5042	282	7.5	223	0.268
30-45.8897-112.1583-2-15-						0-M34212	14270	852	11760	70	-4	11.5	5.6	460	-1	1	16.8	3720	88	4.7	148	0.268
30-45.8889-112.1547-2-15-						0-M34213	16890	646	15780	54	5	14.1	6.1	-363	-1	-1	18.8	3971	90	5.1	123	0.229
30-45.8806-112.1472-2-15-						0-M34214	19150	797	18310	60	-4	15.7	7.9	-401	1	-1	21.5	3666	103	6.1	71	0.195
30-45.8931-112.1750-2-15-						0-M34215	22860	789	10180	77	-5	16.7	6.8	-340	-1	-1	16.1	5087	93	5.0	-183	0.255
30-45.8794-112.1417-2-15-						0-M34216	18390	826	15650	53	-3	12.6	5.5	-404	-1	-1	16.6	4079	96	3.9	73	0.241
30-45.9217-112.1844-2-15-						0-M34217	17090	848	17760	65	-4	15.6	7.3	-408	1	-1	19.9	5726	128	6.1	112	0.166
30-45.9264-112.1833-2-15-						0-M34218	18650	941	13540	67	-5	15.7	6.0	-356	-1	-1	17.1	4789	176	3.6	-116	0.234
30-45.9319-112.1764-2-15-						0-M34219	15360	939	12970	48	-3	11.7	4.8	-329	-1	-1	12.2	4038	101	2.6	141	0.262
30-45.9344-112.1764-2-15-						0-M34220	23340	824	10980	45	-3	12.2	5.3	-378	-1	-1	11.2	3902	104	2.9	133	0.223
30-45.9428-112.1764-2-15-						0-M34221	19760	826	13330	43	-4	12.4	5.2	-394	-1	-1	13.3	5011	154	3.4	118	0.233
30-45.9472-112.1764-2-15-						0-M34222	14000	846	13370	74	-5	14.8	3.5	-345	-1	-1	13.5	4375	129	-3.1	-54	0.215
30-45.9478-112.1764-2-15-						0-M34223	17340	822	13010	47	-3	13.2	5.1	339	-1	-1	11.9	4791	124	4.2	93	0.235
30-45.9572-112.1686-2-15-						0-M34224	19530	549	9863	64	-3	12.7	5.0	-366	-1	-1	10.5	3916	106	3.1	86	0.257
30-45.9592-112.1675-2-15-						0-M34225	19710	706	14610	-37	-5	15.7	4.8	-421	-1	-2	11.8	3934	115	-3.8	132	0.203

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)	SCINTILLATOR (e.u./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																											
30-45.9606	-112.1667	-2-15-	0-M34226	-05/20/76-10-	19-	-C-	-	-	-	-	-	-	-	-	5-4-	-4-1-	-	-	-2-3-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	2.60		
30-45.9656	-112.1706	-2-15-	0-M34227	-05/20/76-10-	18-	-	-	-	-	-	-	-	-	-	7-3-	7-6-6-	-	-	-2-1-5-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	2.90		
30-45.9703	-112.1944	-2-11-	0-M34228	-05/20/76-10-	18-	-C-	-	7.0-	490-	-	-	-	-	5-3-5-4-8-	-	-	-	-4-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	3.00			
30-45.9722	-112.1786	-2-15-	0-M34229	-05/20/76-11-	20-	-	-	-	-	-	-	-	-	9-3-7-4-6-	-	-	-	-2-1-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	3.10			
30-45.9797	-112.1772	-2-15-	0-M34230	-05/20/76-11-	20-	-C-	-	-	-	-	-	-	-	4-3-5-4-6-	-	-	-	-2-1-4-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	2.70			
30-45.9861	-112.1764	-2-15-	0-M34231	-05/20/76-12-	20-	-C-	-	-	-	-	-	-	-	11-3-5-4-6-	-	-	-	-2-2-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	2.50			
30-45.9856	-112.1794	-2-12-	0-M34233	-05/20/76-13-	20-11.0	-C-	-	6.3-	55-	-	-	-	-	9-3-5-3-2-4-5-3-2-2-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.60			
30-45.8786	-112.2456	-2-15-	0-M34234	-05/20/76-14-	22-	-	-	-	-	-	-	-	-	6-4-	-4-1-	-	-	-2-4-4-1-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	2.80			
30-45.9194	-112.2156	-2-15-	0-M34235	-05/20/76-14-	25-	-C-	-	-	-	-	-	-	-	9-4-	-4-1-	-	-	-2-3-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	6.30			
30-45.9153	-112.2306	-2-15-	0-M34236	-05/20/76-14-	26-	-C-	-	-	-	-	-	-	-	9-4-	-4-1-	-	-	-2-3-3-3-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.30			
30-45.9167	-112.2292	-2-15-	0-M34237	-05/20/76-15-	-	-	-	-	-	-	-	-	-	4-4-1-4-1-	-	-	-	-2-3-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	4.00			
30-45.9208	-112.2303	-2-15-	0-M34238	-05/20/76-15-	26-	-	-	-	-	-	-	-	-	5-4-1-4-6-	-	-	-	-2-3-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	3.90			
30-45.9186	-112.2319	-2-15-	0-M34239	-05/20/76-15-	26-	-C-	-	-	-	-	-	-	-	9-4-1-4-6-	-	-	-	-2-3-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	4.80			
30-45.9497	-112.2397	-2-15-	0-M34240	-05/20/76-16-	27-	-	-	-	-	-	-	-	-	6-3-7-4-7-	-	-	-	-2-1-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	2.30			
30-45.9519	-112.2417	-2-12-	0-M34241	-05/20/76-16-	25-13.0	-	-	7.1-	420-	-	-	-	-	13-3-7-4-1-7-2-1-2-1-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.40			
30-45.9622	-112.2611	-2-15-	0-M34242	-05/20/76-17-	25-	-	-	-	-	-	-	-	-	13-3-1-4-1-	-	-	-	-2-1-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	6.30			
30-45.9278	-112.2694	-2-15-	0-M34243	-05/20/76-17-	25-	-C-	-	-	-	-	-	-	-	7-3-7-4-1-	-	-	-	-2-1-3-3-1-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	10.50			
30-45.9200	-112.2644	-2-12-	0-M34244	-05/20/76-18-	21-7.0	-C-	-	7.4-	550-	-	-	-	-	11-3-5-4-7-3-4-1-2-2-4-3-1-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.40				
30-45.9533	-112.2806	-2-12-	0-M34245	-05/21/76-11-	21-5.8	-C-	-	6.7-	280-	-	-	-	-	11-3-1-4-6-3-4-1-2-1-3-3-1-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.10				
30-45.9772	-112.2722	-2-12-	0-M34246	-05/21/76-12-	16-12.0	-	-	6.5-	215-	-	-	-	-	5-3-1-4-1-3-4-1-2-2-3-3-1-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	71.40				
30-45.9822	-112.2550	-2-15-	0-M34247	-05/21/76-13-	16-	-	-	-	-	-	-	-	-	17-3-1-4-8-	-	-	-	-3-3-2-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	8.50			
30-45.9781	-112.2608	-2-11-	0-M34248	-05/21/76-13-	13-12.0	-C-	-	6.9-	220-	-	-	-	-	15-3-1-6-8-2-4-4-3-1-4-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33.00				
30-45.9911	-112.2369	-2-15-	0-M34249	-05/21/76-14-	22-	-C-	-	-	-	-	-	-	-	9-3-1-4-8-	-	-	-	-2-1-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	11.80			
30-45.9725	-112.2319	-2-12-	0-M34250	-05/21/76-14-	15-7.0	-C-	-	6.1-	90-	-	-	-	-	9-3-1-4-6-4-4-2-2-2-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40.90				
30-45.9750	-112.2486	-2-15-	0-M34251	-05/21/76-16-	26-	-	-	-	-	-	-	-	-	9-3-1-4-1-	-	-	-	-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	5.50			
30-45.9639	-112.2892	-2-15-	0-M34252	-05/21/76-17-	26-	-	-	-	-	-	-	-	-	4-3-1-4-1-	-	-	-	-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	8.20			
30-45.9689	-112.2931	-2-15-	0-M34253	-05/21/76-17-	26-	-C-	-	-	-	-	-	-	-	11-3-1-4-1-	-	-	-	-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	6.40			
30-45.9803	-112.3031	-2-11-	0-M34255	-05/21/76-19-	15-12.0	-C-	-	7.2-	360-	-	-	-	-	9-3-1-4-1-2-4-1-3-1-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44.00				
30-45.9856	-112.3050	-2-12-	0-M34257	-05/21/76-19-	13-11.0	-C-	-	6.1-	60-	-	-	-	-	15-3-1-4-1-4-4-3-2-1-3-3-2-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28.00				
30-45.9803	-112.3136	-2-15-	0-M34258	-05/21/76-20-	16-	-	-	-	-	-	-	-	-	3-3-7-4-8-	-	-	-	-3-2-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	14.60			
30-45.9581	-112.2964	-2-15-	0-M34259	-05/21/76-20-	14-	-C-	-	-	-	-	-	-	-	9-3-1-4-1-	-	-	-	-2-1-3-3-2-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	9.00			
30-45.9650	-112.3014	-2-12-	0-M34260	-05/22/76-11-	16-6.0	-C-	-	5.3-	55-	-	-	-	-	9-3-1-4-6-5-4-3-2-2-3-3-3-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20.80				
30-45.9678	-112.3192	-2-17-	0-M34261	-05/22/76-12-	15-8.0	-C-	-	6.6-	75-	-	-	-	-	7-3-1-4-1-4-4-3-2-1-3-4-3-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.50				
30-45.9811	-112.3231	-2-15-	0-M34262	-05/22/76-13-	15-	-C-	-	-	-	-	-	-	-	7-3-1-4-8-	-	-	-	-2-1-3-3-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	3.90			
30-45.9867	-112.3328	-2-12-	0-M34263	-05/22/76-14-	11-7.0	-	-	6.8-	220-	-	-	-	-	9-3-1-4-1-2-4-1-2-2-3-4-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33.80				
30-45.9958	-112.3361	-2-12-	0-M34264	-05/22/76-13-	10-3.0	-	-	6.5-	50-	-	-	-	-	9-3-1-4-1-5-5-2-2-1-3-4-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.30				
30-45.9961	-112.3369	-2-12-	0-M34265	-05/22/76-15-	10-4.0	-C-	-	6.2-	55-	-	-	-	-	4-3-1-4-1-4-4-3-2-1-3-4-3-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20.40				
30-45.9950	-112.3544	-2-15-	0-M34266	-05/22/76-15-	10-	-	-	-	-	-	-	-	-	8-3-1-3-6-	-	-	-	-2-2-3-4-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	6.40			
30-45.9828	-112.3389	-2-12-	0-M34267	-05/22/76-15-	13-7.0	-C-	-	6.3-	80-	-	-	-	-	12-3-1-4-1-3-4-2-3-1-3-4-4-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.50				
30-45.9819	-112.3389	-2-15-	0-M34268	-05/22/76-15-	13-	-C-	-	-	-	-	-	-	-	14-3-1-4-1-	-	-	-	-2-1-3-4-4-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	15.60			
30-45.9844	-112.3528	-2-15-	0-M34269	-05/22/76-16-	8-	-C-	-	-	-	-	-	-	-	4-3-1-7-8-	-	-	-	-3-1-5-4-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	6.00			
30-45.9244	-112.4097	-2-12-	0-M34273	-05/23/76-2-	12-7.5-	-	-	6.4-	130-	-	-	-	-	7-3-1-4-1-2-4-2-2-2-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.40				
30-45.9283	-112.3944	-2-12-	0-M34275	-05/23/76-2-	13-9.0	-C-	-	6.4-	100-	-	-	-	-	4-3-1-5-8-3-4-4-1-2-4-3-2-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40.40				
30-45.9283	-112.3922	-2-12-	0-M34276	-05/23/76-10-	14-8.2	-C-	-	6.4-	90-	-	-	-	-	4-3-1-5-3-3-4-	-	-	-	-2-5-3-2-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	37.70			
30-45.9217	-112.3767	-2-15-	0-M34277	-05/23/76-10-	12-	-C-	-	-	-	-	-	-	-	6-3-1-6-8-	-1-	-	-	-1-2-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	17.10			
30-45.9253	-112.3711	-2-15-	0-M34278	-05/23/76-10-	20-	-	-	-	-	-	-	-	-	9-3-1-4-6-	-	-	-	-3-2-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	9.50			
30-45.9250	-112.3586	-2-15-	0-M34279	-05/23/76-11-	18-	-C-	-	-	-	-	-	-	-	9-3-1-4-8-	-	-	-	-2-1-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	3.20			
30-45.9250	-112.3394	-2-11-	0-M34280	-05/23/76-11-	20-5.9	-C-	-	6.9-	290-	-	-	-	-	7-3-1-6-8-2-3-2-	-2-3-3-2-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	41.70				
30-45.9367	-112.3625	-2-12-	0-M34281	-05/23/76-11-	13-8.0	-C-	-	6.6-	160-	-	-	-	-	18-3-1-4-1-2-4-2-2-2-2-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.30				
30-45.9392	-112.3425	-2-12-	0-M34282	-05/23/76-12-	13-7.5	-C-	-	-	155-	-	-	-																							

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

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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	LAS. 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
30-45.9506-112.1667-2-15-						0-M34226	-5	7	-5	69	-20	-15	11	-10	-15		2	17
30-45.9656-112.1706-2-15-						0-M34227	-5	-5	-5	44	-20	-15	15	-10	-15		2	30
30-45.9703-112.1944-2-11-						0-M34228	-5	-5	-5	37	-20	-15	18	-10	-15		2	44
30-45.9722-112.1786-2-15-						0-M34229	-5	6	-5	93	-20	-15	48	-10	-15		2	39
30-45.9797-112.1772-2-15-						0-M34230	-5	-5	-5	55	-20	-15	18	-10	-15		-1	30
30-45.9861-112.1764-2-15-						0-M34231	-5	-5	-5	67	-20	-15	26	-10	-15		1	13
30-45.9856-112.1794-2-12-						0-M34233	-5	-5	-5	13	-20	-15	22	-10	34		2	21
30-45.8786-112.2456-2-15-						0-M34234	-5	-5	-5	82	-20	23	38	-10	-15		2	16
30-45.9194-112.2156-2-15-						0-M34235	5	5	-5	30	-20	-15	12	-10	-15		-1	10
30-45.9153-112.2306-2-15-						0-M34236	-5	-5	-5	56	-20	-15	26	-10	-15		1	9
30-45.9167-112.2292-2-15-						0-M34237	-5	-5	-5	66	-20	-15	19	-10	-15		2	9
30-45.9208-112.2303-2-15-						0-M34238	-5	-5	-5	67	-20	-15	30	-10	-15		2	32
30-45.9186-112.2319-2-15-						0-M34239	9	-5	-5	98	-20	-15	-5	-10	-15		-1	-1
30-45.9497-112.2397-2-15-						0-M34240	5	-5	-5	108	-20	222	12	-10	-15		2	20
30-45.9519-112.2417-2-12-						0-M34241	-5	6	-5	62	-20	22	9	-10	-15		1	53
30-45.9622-112.2611-2-15-						0-M34242	-5	-5	-5	68	-20	-15	28	-10	-15		3	66
30-45.9278-112.2694-2-15-						0-M34243	-5	-5	-5	59	-20	-15	10	-10	-15		-1	54
30-45.9200-112.2644-2-12-						0-M34244	-5	-5	-5	100	-20	24	13	-10	32		1	14
30-45.9533-112.2806-2-12-						0-M34245	-5	-5	-5	46	-20	-15	16	-10	-15		2	28
30-45.9772-112.2722-2-12-						0-M34246	-5	-5	-5	75	-20	-15	30	-10	-15		2	38
30-45.9822-112.2550-2-15-						0-M34247	-5	6	-5	151	-20	-15	77	-10	-15		1	8
30-45.9781-112.2608-2-11-						0-M34248	-5	-5	-5	90	-20	-15	43	-10	-15		2	14
30-45.9911-112.2369-2-15-						0-M34249	-5	7	-5	179	-20	-15	105	-10	-15		-1	16
30-45.9725-112.2319-2-12-						0-M34250	-5	-5	-5	36	-20	-15	15	-10	-15		5	43
30-45.9750-112.2486-2-15-						0-M34251	-5	-5	-5	136	-20	-15	45	-10	-15		1	18
30-45.9639-112.2892-2-15-						0-M34252	-5	-5	-5	53	-20	-15	24	-10	-15		2	51
30-45.9689-112.2931-2-15-						0-M34253	-5	10	-5	198	-20	18	79	-10	-15		2	59
30-45.9803-112.3031-2-11-						0-M34255	-5	6	-5	103	-20	-15	52	-10	-15		-1	14
30-45.9856-112.3050-2-12-						0-M34257	-5	-5	-5	81	-20	-15	-5	-10	-15		1	26
30-45.9303-112.3136-2-15-						0-M34258	-5	-5	-5	184	-20	-15	83	-10	-15		-1	6
30-45.9581-112.2964-2-15-						0-M34259	-5	-5	-5	120	-20	-15	48	-10	-15		2	47
30-45.9650-112.3014-2-12-						0-M34260	-5	-5	-5	36	-20	-15	14	-10	22		2	39
30-45.9678-112.3192-2-12-						0-M34261	-5	-5	-5	41	-20	-15	-5	-10	-15		2	24
30-45.9811-112.3231-2-15-						0-M34262	-5	6	-5	217	-20	-15	67	-10	-15		-1	6
30-45.9867-112.3328-2-12-						0-M34263	-5	-5	-5	70	-20	-15	20	-10	-15		1	55
30-45.9958-112.3361-2-12-						0-M34264	-5	5	-5	28	-20	19	-5	-10	32		2	12
30-45.9961-112.3639-2-12-						0-M34265	-5	-5	-5	41	-20	-15	15	-10	-15		3	40
30-45.9950-112.3544-2-15-						0-M34266	-5	-5	-5	88	-20	-15	33	-10	-15		1	63
30-45.9828-112.3389-2-12-						0-M34267	-5	-5	-5	48	-20	-15	25	-10	-15		2	47
30-45.9819-112.3389-2-15-						0-M34268	-5	-5	-5	39	-20	-15	10	-10	-15		2	92
30-45.9844-112.3528-2-15-						0-M34269	-5	-5	-5	144	-20	16	38	-10	-15		2	86
30-45.9244-112.4097-2-12-						0-M34273	-5	-5	-5	40	-20	-15	17	-10	-15		2	38
30-45.9283-112.3944-2-12-						0-M34275	-5	-5	-5	81	-20	17	26	-10	-15		-1	69
30-45.9283-112.3922-2-12-						0-M34276	-5	14	8	109	-20	-15	79	-10	26		-1	15
30-45.9217-112.3767-2-15-						0-M34277	-5	-5	-5	83	-20	-15	33	-10	-15		-1	25
30-45.9253-112.3711-2-15-						0-M34278	-5	-5	-5	54	-20	-15	36	-10	-15		2	78
30-45.9250-112.3586-2-15-						0-M34279	-5	12	-5	273	-20	-15	82	-10	-15		-1	41
30-45.9250-112.3394-2-11-						0-M34280	-5	-5	-5	57	-20	-15	15	-10	-15		-1	36
30-45.9367-112.3625-2-12-						0-M34281	-5	-5	-5	51	-20	-15	33	-10	-15		1	52
30-45.9392-112.3425-2-12-						0-M34282	11	-5	5	55	-20	-15	7	-10	15		-1	30
30-45.9444-112.3278-2-15-						0-M34283	-5	-5	-5	131	-20	22	41	-10	-15		2	64

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

③

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
30-45.9606-112.1667-2-15-			0-M34226			79900	-0.10	718	15010	57	-77	15.0	87	3.2	4	1.2	30220	6.3	20510	31	0.4	
30-45.9656-112.1706-2-15-			0-M34227			72600	-0.09	683	33460	68	-85	11.7	56	5.0	4	1.3	23330	6.9	16410	43	0.4	
30-45.9703-112.1944-2-11-			0-M34228			65050	-0.10	684	47900	75	145	11.9	54	4.0	4	1.2	18980	8.3	17500	43	0.4	
30-45.9722-112.1786-2-15-			0-M34229			71610	-0.13	627	17660	93	-104	14.5	79	6.7	3	1.3	29650	9.2	14540	37	0.3	
30-45.9797-112.1772-2-15-			0-M34230			63230	-0.10	654	49740	61	-89	13.5	70	3.7	4	1.1	23280	7.4	13470	35	0.4	
30-45.9861-112.1764-2-15-			0-M34231			74240	-0.10	488	20800	52	-83	12.0	54	4.7	4	1.4	26770	6.7	14040	43	0.3	
30-45.9856-112.1794-2-12-			0-M34233			63400	-0.14	395	34310	128	160	15.5	99	5.4	6	1.5	53680	36.8	12520	68	0.9	
30-45.8786-112.2456-2-15-			0-M34234			62610	-0.13	-191	23350	87	131	15.5	107	4.8	3	1.3	28090	8.6	19010	46	0.5	
30-45.9194-112.2156-2-15-			0-M34235			59530	-0.11	1014	21950	108	162	15.6	141	4.3	5	2.2	78980	42.4	11140	63	0.8	
30-45.9153-112.2306-2-15-			0-M34236			78600	-0.10	857	26410	60	157	11.9	42	5.1	5	1.3	28640	9.4	14980	47	0.5	
30-45.9167-112.2292-2-15-			0-M34237			72560	-0.11	893	24370	105	-105	15.4	91	3.7	5	1.5	38020	13.2	13260	49	0.6	
30-45.9208-112.2303-2-15-			0-M34238			75960	-0.15	609	22870	77	197	14.7	43	6.6	5	1.6	30170	7.3	16430	31	0.4	
30-45.9186-112.2319-2-15-			0-M34239			51600	-0.12	3075	25150	140	-112	24.7	264	2.5	4	0.9	114900	28.3	9248	90	0.6	
30-45.9497-112.2397-2-15-			0-M34240			50420	-0.11	-170	37000	63	178	35.0	1137	3.9	3	1.0	59430	7.9	11770	40	0.3	
30-45.9519-112.2417-2-12-			0-M34241			61170	-0.14	-204	30640	136	192	21.8	121	5.0	5	1.3	66420	32.0	16220	62	0.9	
30-45.9522-112.2611-2-15-			0-M34242			78990	-0.19	362	29410	114	-130	18.1	31	8.7	5	1.2	32460	18.8	17200	52	0.7	
30-45.9278-112.2694-2-15-			0-M34243			65370	-0.13	418	46280	103	214	20.1	61	6.8	7	1.3	45720	24.0	15610	60	0.7	
30-45.9200-112.2644-2-12-			0-M34244			40390	-0.12	416	35090	95	185	19.9	173	3.7	6	1.5	74750	38.0	12140	66	0.7	
30-45.9533-112.2806-2-12-			0-M34245			60990	-0.14	536	26370	79	207	15.8	31	8.2	5	1.3	24160	9.1	13480	55	0.6	
30-45.9772-112.2722-2-12-			0-M34246			69050	-0.17	-259	27500	102	-142	14.6	23	10.3	4	1.0	26750	7.8	14260	107	0.7	
30-45.9822-112.2550-2-15-			0-M34247			64310	-0.12	710	23980	80	-154	18.4	29	9.7	4	1.2	24320	11.2	18860	39	0.5	
30-45.9781-112.2608-2-11-			0-M34248			79360	-0.13	468	27370	99	263	14.7	19	11.0	6	1.3	23050	13.6	21470	70	0.7	
30-45.9911-112.2369-2-15-			0-M34249			64060	-0.14	384	21350	107	-132	17.4	42	9.4	5	1.0	28680	16.0	17390	56	0.7	
30-45.9725-112.2319-2-12-			0-M34250			76510	-0.11	296	22390	125	208	9.5	26	7.1	9	0.8	17740	21.2	18930	97	1.2	
30-45.9750-112.2486-2-15-			0-M34251			65530	-0.15	406	28240	98	183	21.5	69	6.5	5	1.7	42320	16.8	12970	57	0.7	
30-45.9639-112.2492-2-15-			0-M34252			77110	-0.19	467	27510	107	-136	17.8	45	7.6	5	1.1	33290	15.6	17600	58	0.6	
30-45.9689-112.2931-2-15-			0-M34253			72450	-0.13	571	22810	81	-124	19.1	46	11.2	4	1.3	30160	11.5	19970	46	0.6	
30-45.9803-112.3031-2-11-			0-M34255			45540	-0.16	608	35980	69	226	14.7	25	5.4	4	0.8	19430	7.8	10250	67	-0.2	
30-45.9856-112.3050-2-12-			0-M34257			60950	-0.16	393	31590	138	179	20.3	111	6.2	7	1.4	81200	57.4	11840	77	1.2	
30-45.9803-112.3136-2-15-			0-M34258			49030	-0.18	508	26350	61	173	15.3	25	7.1	3	1.2	24840	6.2	15050	43	-0.2	
30-45.9581-112.2964-2-15-			0-M34259			73010	-0.12	566	25710	97	197	19.1	26	9.8	6	1.2	28890	12.0	19220	52	0.7	
30-45.9650-112.3014-2-12-			0-M34260			64920	-0.13	-180	37480	162	113	17.5	56	5.3	8	2.2	60220	47.4	16020	91	1.1	
30-45.9678-112.3192-2-12-			0-M34261			74880	-0.15	-223	37620	146	-145	17.9	41	6.5	7	1.5	47880	47.1	18660	68	1.1	
30-45.9811-112.3231-2-15-			0-M34262			55160	-0.18	-377	18610	68	-176	17.0	28	10.0	3	1.2	26290	6.5	15810	-12	0.3	
30-45.9867-112.3328-2-12-			0-M34263			63410	-0.14	504	37000	75	156	17.9	30	7.8	4	1.1	27290	10.0	17270	55	0.6	
30-45.9958-112.3361-2-12-			0-M34264			55740	-0.12	-175	33630	131	213	17.2	94	3.1	8	2.3	84360	46.6	9788	95	1.2	
30-45.9961-112.3639-2-12-			0-M34265			74520	-0.14	442	35790	143	192	15.0	39	6.5	7	1.6	34990	34.9	14500	77	1.2	
30-45.9950-112.3544-2-15-			0-M34266			90740	-0.18	602	22440	90	219	19.5	30	9.1	4	1.4	32320	8.7	15540	52	0.5	
30-45.9828-112.3389-2-12-			0-M34267			90310	-0.13	411	33000	106	182	18.8	45	7.0	6	1.3	34900	14.3	16550	67	0.8	
30-45.9819-112.3389-2-15-			0-M34268			73650	-0.12	583	27740	92	-108	16.7	39	10.0	5	1.2	38960	30.2	17500	54	0.6	
30-45.9844-112.3528-2-15-			0-M34269			75710	-0.13	745	18650	78	-163	14.7	41	9.9	3	1.1	23610	6.4	17200	50	0.4	
30-45.9244-112.4097-2-12-			0-M34273			73760	-0.19	-230	34020	127	-136	24.0	45	6.2	7	1.8	44640	21.2	15130	65	0.8	
30-45.9283-112.3944-2-12-			0-M34275			72520	-0.15	510	26670	94	171	18.2	36	7.6	5	1.3	29080	12.8	15430	70	0.5	
30-45.9283-112.3922-2-12-			0-M34276			42810	-0.17	-576	10420	68	-368	42.9	27	7.9	-3	1.0	90320	6.8	-15410	60	0.5	
30-45.9217-112.3767-2-15-			0-M34277			65350	-0.14	552	20410	87	160	16.7	35	7.2	3	1.1	29830	6.8	10770	45	0.4	
30-45.9253-112.3711-2-15-			0-M34278			77520	-0.19	413	33780	107	-149	24.3	-19	8.8	4	1.4	43810	14.7	19820	64	0.7	
30-45.9250-112.3586-2-15-			0-M34279			64950	-0.14	1392	15460	57	-198	18.6	44	9.7	3	0.7	25790	6.1	15830	28	0.3	
30-45.9250-112.3394-2-11-			0-M34280			69740	-0.19	728	25260	82	-101	11.2	44	5.4	4	1.0	20180	11.1	15690	62	0.4	
30-45.9367-112.3625-2-12-			0-M34281			78070	-0.09	513	28590	84	-124	10.5	25	4.4	6	1.0	22600	13.0	17120	44	0.5	
30-45.9392-112.3425-2-12-			0-M34282			57550	-0.21	-228	36460	136	-132	20.0	67	5.5	7	1.4	79680	87.1	12550	70	1.3	
30-45.9444-112.3278-2-15-			0-M34283			57100	-0.12	974	17950	58	-148	17.2	30	8.4	2	0.9	22530	5.8	18480	34	0.4	

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

④

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	
30-45.9606-112.1667-2-15-						0-M34226	17370	676	11290	42	-3	14.2	4.2	477	1	-1	8.5	4813	131	3.0	101	0.306
30-45.9656-112.1706-2-15-						0-M34227	22320	700	11280	25	-3	12.5	5.0	-328	-1	-1	9.8	4016	85	3.9	83	0.296
30-45.9703-112.1944-2-11-						0-M34228	18670	529	11890	50	-3	9.7	5.3	464	-1	-1	10.7	3413	91	3.5	69	0.280
30-45.9722-112.1786-2-15-						0-M34229	11870	891	12730	48	-4	13.5	4.9	-399	-1	-1	12.5	3473	114	4.5	-265	0.248
30-45.9797-112.1772-2-15-						0-M34230	19750	699	10420	32	-3	10.8	4.3	542	-1	-1	10.3	4070	113	3.2	97	0.262
30-45.9861-112.1764-2-15-						0-M34231	20940	971	9958	35	-3	13.4	4.4	-343	-1	-1	9.6	4751	96	3.2	118	0.260
30-45.9856-112.1794-2-12-						0-M34233	24710	1298	16360	-29	-4	23.1	7.8	-474	2	-1	48.7	5378	253	8.0		0.300
30-45.8786-112.2456-2-15-						0-M34234	27940	1014	12010	-30	-4	13.1	5.7	-431	-1	1	12.4	3528	96	-3.2	173	0.226
30-45.9194-112.2156-2-15-						0-M34235	15160	1253	10990	-25	-3	12.3	6.1	-392	1	-1	19.9	8232	506	5.4	117	0.317
30-45.9153-112.2306-2-15-						0-M34236	20910	729	11570	41	4	12.3	4.6	331	-1	-1	10.8	5098	111	4.7	125	0.583
30-45.9167-112.2292-2-15-						0-M34237	20630	980	12580	36	-4	13.0	6.0	615	-1	-1	12.0	5584	179	4.3	101	0.333
30-45.9208-112.2303-2-15-						0-M34238	20100	759	12740	-33	7	14.4	4.2	-403	-1	-1	9.3	4581	115	3.3		0.419
30-45.9186-112.2319-2-15-						0-M34239	17200	1706	10100	-31	-4	13.7	7.0	-472	-1	-1	20.5	13030	661	6.5	144	0.234
30-45.9497-112.2397-2-15-						0-M34240	84550	1387	13200	50	-4	18.1	4.0	-417	-1	-1	10.5	3873	270	3.8	109	0.219
30-45.9519-112.2417-2-12-						0-M34241	34130	1275	15080	40	-5	22.4	10.0	-483	-1	-1	43.8	5157	324	6.5		0.192
30-45.9622-112.2611-2-15-						0-M34242	30440	1069	16520	69	-6	22.3	6.7	-492	-1	-2	35.5	4925	115	6.2	-86	0.177
30-45.9278-112.2694-2-15-						0-M34243	41180	1149	14310	56	-4	22.6	9.5	-420	1	-1	55.4	6591	216	9.4	36	0.190
30-45.9200-112.2644-2-12-						0-M34244	30730	1266	15780	-26	-4	23.4	7.9	378	-1	1	45.4	5122	414	6.4	124	0.229
30-45.9533-112.2806-2-12-						0-M34245	27730	947	17620	54	-5	15.2	9.7	-486	-1	-1	24.9	4352	77	5.6		0.928
30-45.9772-112.2722-2-12-						0-M34246	17090	1361	14720	57	-6	14.8	8.3	-583	-2	-2	28.9	3524	66	6.9	-74	2.471
30-45.9822-112.2550-2-15-						0-M34247	18020	2368	15010	71	-4	14.6	5.5	-661	1	-1	46.4	3870	78	6.4	201	0.176
30-45.9781-112.2608-2-11-						0-M34248	22050	666	19910	57	-4	15.9	9.6	-408	2	-1	47.8	5012	91	9.2	117	0.690
30-45.9911-112.2369-2-15-						0-M34249	21170	1854	12230	69	-4	14.6	5.8	-598	-1	-1	40.2	4342	110	6.0	162	0.294
30-45.9725-112.2319-2-12-						0-M34250	14030	978	22700	69	-3	12.9	14.2	-425	3	1	70.8	3249	67	10.2	112	0.578
30-45.9750-112.2486-2-15-						0-M34251	31010	1310	12600	-31	-5	21.9	7.8	-521	-1	-2	33.7	5816	173	5.5	-49	0.163
30-45.9639-112.2892-2-15-						0-M34252	31610	774	18740	-43	-6	20.8	4.7	-475	-2	-2	38.4	5003	123	5.7	-310	0.214
30-45.9689-112.2931-2-15-						0-M34253	28490	1415	15380	91	11	16.7	5.1	-509	-1	-1	32.5	5101	114	5.3	215	0.197
30-45.9803-112.3031-2-11-						0-M34255	20390	859	8500	-35	-5	11.2	10.1	-519	-1	-2	14.2	4309	67	-3.2	206	3.099
30-45.9856-112.3050-2-12-						0-M34257	27800	1683	14510	62	-5	22.4	10.3	-570	2	-2	87.3	7172	442	10.5	135	0.321
30-45.9803-112.3136-2-15-						0-M34258	19300	992	8693	-44	-6	11.5	3.3	-556	-1	-1	13.4	3410	69	-3.6	239	1.090
30-45.9581-112.2964-2-15-						0-M34259	32000	1513	16330	80	-2	19.4	6.6	-497	2	-1	44.4	5626	98	7.4	145	0.203
30-45.9650-112.3014-2-12-						0-M34260	27070	1366	17560	43	-4	26.8	10.8	-430	2	2	82.6	5941	310	8.2	118	0.252
30-45.9678-112.3192-2-12-						0-M34261	22440	1408	19720	-30	-5	26.5	9.5	-526	-1	-1	67.4	3815	199	8.9		0.215
30-45.9811-112.3231-2-15-						0-M34262	24720	2862	9300	78	-6	13.3	2.1	-873	-2	-1	13.3	4607	71	-3.7	278	0.293
30-45.9867-112.3328-2-12-						0-M34263	27050	1498	15570	56	-4	18.9	9.0	-537	-1	-1	28.6	4715	99	5.1	143	1.182
30-45.9958-112.3361-2-12-						0-M34264	26400	1551	16200	-28	-4	27.7	11.1	-424	2	1	99.8	7691	461	11.9		0.213
30-45.9961-112.3639-2-12-						0-M34265	28340	1175	19890	62	-4	24.9	15.0	-473	2	-1	67.7	4446	146	9.0		0.301
30-45.9950-112.3544-2-15-						0-M34266	27000	1272	15590	-42	-6	18.4	6.8	-569	-1	-2	27.7	4401	98	5.5	223	0.231
30-45.9828-112.3389-2-12-						0-M34267	26190	941	19550	70	-4	19.3	9.8	-410	-1	-1	33.5	5222	179	5.2	86	0.701
30-45.9819-112.3389-2-15-						0-M34268	23550	1178	14560	64	-4	18.8	6.1	-427	-1	-1	44.1	4721	148	6.9	141	0.354
30-45.9844-112.3523-2-15-						0-M34269	18430	2110	15340	109	-4	11.9	5.7	-705	-1	-1	28.3	4302	67	6.1	169	0.212
30-45.9244-112.4097-2-12-						0-M34273	37320	1397	16090	-44	-6	28.8	10.7	-526	-2	-2	62.2	4227	151	8.8		0.135
30-45.9283-112.3944-2-12-						0-M34275	22650	639	14440	58	-5	16.4	9.2	-428	-1	-1	22.4	4674	159	4.9	131	1.804
30-45.9283-112.3922-2-12-						0-M34276	-15790	7443	7571	-43	13	11.3	8.2		-1	-2	24.9	-3347	82	4.8	346	1.514
30-45.9217-112.3767-2-15-						0-M34277	17520	725	10130	-30	5	11.3	6.4	-445	-1	-1	15.6	4165	96	-2.6	-72	1.096
30-45.9253-112.3711-2-15-						0-M34278	33910	1423	18320	102	-6	28.1	6.3	-563	-2	-2	52.1	4634	157	6.5	-353	0.182
30-45.9250-112.3586-2-15-						0-M34279	16420	3763	11380	70	9	12.8	3.5	-932	-1	-1	14.3	4957	78	-2.5	332	0.224
30-45.9250-112.3394-2-11-						0-M34280	24790	609	12570	66	-3	15.1	9.0	-372	-1	-1	16.6	4182	109	4.5		2.512
30-45.9367-112.3625-2-12-						0-M34281	24590	764	19070	52	-3	14.7	5.7	-436	-1	-1	32.1	4511	121	6.1	106	0.259
30-45.9392-112.3425-2-12-						0-M34282	29690	1438	15570	-47	-6	30.6	13.9	-523	-2	-2	215.8	5303	320	21.5		0.153
30-45.9444-112.3278-2-15-						0-M34283	17240	2740	8653	77	-3	11.1	3.4	-732	-1	-1	17.0	4011	70	3.7	225	0.353

[illegible]

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

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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
30-45.9533-112.3794-2-15-						0-M34284	-5	5	-5	142	-20	-15	45	-10	-15		1	36
30-45.9000-112.3833-2-12-						0-M34286	-5	-5	-5	56	-20	-15	17	-10	-15		-1	26
30-45.8744-112.3500-2-12-						0-M34287	-5	-5	-5	66	-20	-15	21	-10	-15		-1	30
30-45.8864-112.3217-2-15-						0-M34288	-5	-5	-5	76	-20	-15	24	-10	-15		-1	26
30-45.8944-112.3331-2-15-						0-M34289	-5	12	-5	342	-20	-15	147	-10	-15		-1	16
30-45.8972-112.3397-2-15-						0-M34290	-5	6	-5	251	-20	-15	107	-10	-15		-1	23
30-45.8917-112.3244-2-15-						0-M34291	-5	-5	-5	146	-20	-15	47	-10	-15		-1	27
30-45.9033-112.2814-2-15-						0-M34292	-5	6	-5	216	-20	44	60	-10	-15		2	23
30-45.9111-112.2761-2-15-						0-M34293	-5	-5	-5	77	-20	21	14	-10	-15		-1	41
30-45.9122-112.2764-2-12-						0-M34294	-5	-5	-5	85	-20	19	44	-10	-15		-1	50
30-45.6808-113.9061-2-12-						0-M34295	-5	-5	-5	28	-20	22	22	22	-15		2	45
30-45.6756-113.8822-2-12-						0-M34296	-5	-5	-5	13	-20	-15	13	-10	-15		3	23
30-45.6736-113.8850-2-12-						0-M34297	-5	-5	-5	28	-20	18	21	-10	-15		4	35
30-45.7306-113.9233-2-12-						0-M34298											3	87
30-45.7444-113.9536-2-12-						0-M34299	-5	-5	-5	-10	26	-15	15	-10	-15		4	69
30-45.7389-113.9033-2-12-						0-M34300	-5	-5	-5	25	-20	-15	17	-10	-15		2	44
30-45.7183-113.8825-2-12-						0-M34301	-5	5	-5	17	-20	19	17	-10	-15		1	71
30-45.7142-113.8778-2-12-						0-M34302	-5	-5	-5	13	-20	27	13	51	-15		2	30
30-45.7628-113.9461-2-12-						0-M34303	-5	-5	-5	28	-20	-15	58	11	-15		3	59
30-45.7836-113.9511-2-12-						0-M34304	-5	-5	-5	18	-20	-15	19	-10	-15		3	147
30-45.8075-113.9544-2-12-						0-M34305	-5	-5	-5	24	-20	-15	28	-10	-15		4	76
30-45.6111-113.6703-2-12-						0-M34306	-5	-5	-5	14	-20	-15	11	-10	-15		2	30
30-45.6111-113.6692-2-12-						0-M34307	-5	-5	-5	23	-20	-15	11	-10	-15		2	45
30-45.5797-113.6858-2-12-						0-M34308	-5	-5	-5	17	-20	19	6	-10	-15		1	34
30-45.6556-113.7628-2-12-						0-M34309	-5	-5	-5	-10	-20	-15	26	-10	-15		2	19
30-45.6556-113.7789-2-12-						0-M34310	-5	5	-5	11	-20	-15	14	14	-15		2	26
30-45.6500-113.7839-2-12-						0-M34311	-5	-5	-5	10	-20	20	16	-10	-15		1	34
30-45.9072-113.7794-2-12-						0-M34312	-5	-5	-5	10	-20	-15	5	-10	-15		2	52
30-45.8908-113.7756-2-12-						0-M34313	-5	-5	-5	18	-20	-15	14	10	-15		2	53
30-45.8903-113.7764-2-12-						0-M34314	-5	7	-5	16	-20	-15	20	-10	-15		2	92
30-45.8667-113.8014-2-12-						0-M34315	-5	-5	-5	-10	-20	18	12	-10	-15		2	84
30-45.8436-113.8175-2-12-						0-M34316	-5	-5	-5	10	-20	19	10	15	-15		4	45
30-45.8433-113.8208-2-12-						0-M34317	-5	-5	-5	15	-20	-15	12	-10	-15		1	74
30-45.8297-113.8006-2-12-						0-M34318	-5	-5	-5	-10	-20	-15	17	-10	-15		2	57
30-45.8644-113.7831-2-12-						0-M34319	-5	-5	8	32	26	-15	-5	-10	-15		2	28
30-45.9128-113.7847-2-12-						0-M34320	-5	-5	-5	12	-20	-15	-5	-10	-15		2	22
30-45.9072-113.8489-2-12-						0-M34321	-5	-5	-5	-10	44	-15	27	10	-15		9	59
30-45.8733-113.8617-2-12-						0-M34322	-5	-5	-5	26	-20	-15	29	-10	-15		2	110
30-45.9603-113.7644-2-12-						0-M34323	-5	-5	-5	10	-20	-15	14	-10	-15		1	83
30-45.9689-113.8261-2-11-						0-M34324	-5	-5	-5	11	-20	-15	-5	-10	-15		2	28
30-45.9400-113.7069-2-12-						0-M34327	-5	-5	-5	10	-20	19	-5	-10	-15		2	21
30-45.9542-113.7292-2-12-						0-M34328	-5	-5	-5	-10	-20	-15	-5	-10	-15		1	45
30-45.9222-113.7275-2-12-						0-M34330	-5	-5	-5	11	-20	17	10	-10	-15		2	24
30-45.8581-113.9100-2-12-						0-M34331	-5	-5	-5	12	-20	-15	13	-10	-15		2	35
30-45.8494-113.9106-2-12-						0-M34332	-5	-5	-5	19	22	-15	12	19	-15		3	38
30-45.8483-113.9772-2-12-						0-M34334	-5	5	-5	-10	-20	-15	9	-10	-15		2	15
30-45.6533-113.7081-2-12-						0-M34337	-5	-5	-5	16	-20	-15	10	-10	-15		2	58
30-45.6506-113.7064-2-12-						0-M34338	-5	-5	-5	12	-20	-15	10	-10	-15		1	33
30-45.6575-113.7383-2-12-						0-M34339	-5	5	-5	26	20	-15	11	21	-15		3	30
30-45.6989-113.7000-2-12-						0-M34341											3	33
30-45.7422-113.6800-2-12-						0-M34342	-5	-5	-5	20	-20	-15	10	-10	-15		2	65

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

③

DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS																
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAS. 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
30-45.9533-112.3294-2-15-						0-M34284	67570	-0.15	835	19840	66	-131	19.4	32	11.3	3	1.1	31470	8.9	17040	35	0.3
30-45.9000-112.3833-2-12-						0-M34286	65470	-0.15	538	21720	96	-136	14.5	33	5.3	3	1.1	37850	13.2	11340	55	0.6
30-45.8744-112.3500-2-12-						0-M34287	53737	-0.22	1060	21990	91	-189	21.0	-23	7.9	3	1.0	30210	4.9	-9427	123	-0.3
30-45.8864-112.3217-2-15-						0-M34288	69740	-0.13	456	39140	79	191	19.1	67	5.4	5	1.5	35460	16.1	13180	51	0.5
30-45.8944-112.3331-2-15-						0-M34289	55410	-0.13	959	21540	54	267	13.7	-13	6.7	3	1.1	22110	5.1	14850	21	0.2
30-45.8972-112.3397-2-15-						0-M34290	54540	-0.15	709	19220	59	200	16.8	26	7.7	3	1.1	23770	6.1	16600	-12	0.3
30-45.8917-112.3244-2-15-						0-M34291	63000	-0.20	743	23060	82	-136	20.8	39	8.0	4	1.4	32080	8.2	14700	46	0.4
30-45.9083-112.2814-2-15-						0-M34292	64340	-0.12	582	21700	94	314	20.0	134	8.9	5	1.4	35720	12.5	16990	55	0.5
30-45.9111-112.2761-2-15-						0-M34293	69290	-0.12	407	41540	121	219	18.2	88	7.7	6	1.6	41040	18.5	16850	70	0.6
30-45.9122-112.2764-2-12-						0-M34294	69120	-0.13	509	39360	93	141	18.9	68	7.5	4	1.4	31680	9.5	13800	49	0.6
30-45.6808-113.9061-2-12-						0-M34295	83870	-0.08	696	18690	87	-134	9.2	32	4.7	4	1.5	16320	9.7	13330	46	0.3
30-45.6756-113.8822-2-12-						0-M34296	86360	-0.05	1108	15430	157	-104	9.7	21	3.1	7	2.0	22130	14.7	17590	85	0.6
30-45.6736-113.8850-2-12-						0-M34297	93070	-0.07	912	10360	122	-98	10.1	53	4.6	7	1.8	23690	11.4	21180	77	0.5
30-45.7306-113.9233-2-12-						0-M34298	87440	-0.13	931	7917	84	-162	14.3	71	25.7	2	1.3	12630	7.6	23240	55	-0.2
30-45.7444-113.9536-2-12-						0-M34299	77000	-0.06	682	9816	118	-85	6.8	21	14.1	5	1.8	9937	66.4	26150	78	0.9
30-45.7389-113.9033-2-12-						0-M34300	92350	-0.07	957	15080	152	-122	8.3	45	3.2	6	1.8	16390	7.1	17430	92	0.4
30-45.7183-113.8825-2-12-						0-M34301	94800	-0.11	907	13060	830	-156	11.9	62	3.1	15	2.8	23430	22.2	12160	452	0.9
30-45.7142-113.8779-2-12-						0-M34302	94650	-0.06	968	7624	217	-116	7.8	45	5.0	6	1.6	11300	8.1	18650	135	0.4
30-45.7628-113.9461-2-12-						0-M34303	77630	-0.08	771	12200	81	-111	8.3	40	34.1	3	1.3	11100	5.0	20980	45	0.2
30-45.7836-113.9511-2-12-						0-M34304	80800	-0.09	774	8956	135	-117	4.9	28	16.0	3	1.1	9727	13.0	25400	83	0.3
30-45.8075-113.9544-2-12-						0-M34305	78820	-0.09	763	9935	94	-119	8.5	30	21.3	4	1.3	10160	7.3	23240	62	0.2
30-45.6111-113.6703-2-12-						0-M34306	75690	-0.07	812	8956	85	142	10.1	26	3.1	6	1.1	15580	9.5	15650	46	0.6
30-45.6111-113.6692-2-12-						0-M34307	79500	-0.08	1038	9707	76	217	8.7	26	4.0	5	1.1	16300	6.7	14870	38	0.4
30-45.5797-113.6858-2-12-						0-M34308	77070	-0.09	698	9861	109	146	10.6	25	3.7	6	1.3	16180	10.0	14860	46	0.7
30-45.6556-113.7628-2-12-						0-M34309	96080	-0.05	920	16810	331	-122	7.8	21	1.5	7	1.7	17590	8.1	17500	197	0.5
30-45.6556-113.7789-2-12-						0-M34310	79000	1.35	802	12290	1409	-141	6.4	64	-2.4	36	5.0	18050	22.2	13520	857	1.9
30-45.6500-113.7839-2-12-						0-M34311	74130	-0.06	844	12360	371	-106	8.6	39	2.1	19	2.2	12760	11.5	20160	201	1.3
30-45.9072-113.7794-2-12-						0-M34312	88510	-0.08	855	22410	208	-117	8.2	34	8.0	8	2.0	26330	33.2	14300	125	0.8
30-45.8908-113.7756-2-12-						0-M34313	83800	-0.10	811	29280	122	-147	10.8	34	15.1	6	1.8	25810	16.4	14860	85	0.7
30-45.8903-113.7764-2-12-						0-M34314	87860	-0.10	919	18640	182	-145	8.0	-16	9.4	6	2.3	26840	16.5	21600	113	0.7
30-45.8667-113.8014-2-12-						0-M34315	90260	-0.08	839	20850	200	114	11.2	36	12.4	11	2.4	24270	28.9	16330	114	1.1
30-45.8436-113.8175-2-12-						0-M34316	92070	-0.05	1032	20590	167	-119	7.1	23	9.7	5	2.0	19130	14.4	17640	116	0.5
30-45.8433-113.8208-2-12-						0-M34317	98650	-0.08	988	18910	169	-125	8.5	29	5.9	7	1.9	14610	13.1	16660	106	0.6
30-45.8297-113.8006-2-12-						0-M34318	92600	-0.08	1171	17810	250	-145	7.4	33	9.8	6	2.0	22750	14.7	17370	138	0.6
30-45.8644-113.7831-2-12-						0-M34319	77790	-0.13	597	27900	171	-136	10.7	33	-2.8	6	2.1	82950	62.6	16040	84	1.0
30-45.9128-113.7847-2-12-						0-M34320	81100	-0.10	641	34650	250	216	14.2	72	2.6	16	3.1	49140	60.9	17860	141	1.5
30-45.9072-113.8489-2-12-						0-M34321	74900	-0.09	-196	12200	816	-131	8.6	49	8.4	15	2.2	23620	92.4	19440	491	2.0
30-45.8733-113.8617-2-12-						0-M34322	87800	-0.08	953	18580	115	-116	8.2	37	23.6	7	1.9	19370	9.5	16240	81	0.6
30-45.9603-113.7644-2-12-						0-M34323	58280	-0.10	564	38920	87	-110	9.0	46	3.9	5	1.3	19150	14.2	16250	51	0.8
30-45.9689-113.8261-2-11-						0-M34324	88720	-0.09	762	30110	108	310	15.4	42	2.4	7	1.8	30200	24.5	16010	53	0.6
30-45.9400-113.7069-2-12-						0-M34327	75990	-0.09	573	29580	193	-110	11.2	40	-2.0	14	2.6	37230	54.8	13020	93	1.5
30-45.9542-113.7292-2-12-						0-M34328	54130	-0.08	510	45850	135	144	10.3	37	3.9	8	1.8	23180	19.0	12890	67	0.7
30-45.9222-113.7275-2-12-						0-M34330	58350	-0.09	538	24630	160	-104	6.2	32	-1.9	8	2.0	17670	20.5	11220	93	1.0
30-45.8581-113.9100-2-12-						0-M34331	94190	-0.07	759	22360	179	-116	9.7	29	5.5	8	1.8	17920	19.8	19540	109	0.7
30-45.8494-113.9106-2-12-						0-M34332	89070	-0.13	1115	10790	139	-189	7.1	36	16.5	8	1.4	11060	6.7	20530	97	0.6
30-45.8483-113.9772-2-12-						0-M34334	83170	-0.08	640	28570	633	-122	8.5	36	-1.7	27	3.9	23810	50.6	12230	390	2.1
30-45.6533-113.7081-2-12-						0-M34337	80030	-0.06	1100	6622	127	-107	6.6	30	4.3	5	1.3	9123	8.3	21450	68	0.5
30-45.6506-113.7064-2-12-						0-M34338	82540	-0.09	871	14290	452	-134	6.2	32	-1.8	12	2.3	12870	15.0	16480	266	1.0
30-45.6575-113.7383-2-12-						0-M34339	88940	-0.05	923	15200	210	-134	9.9	25	4.3	8	2.2	15530	9.1	16420	131	0.6
30-45.6989-113.7000-2-12-						0-M34341	98000	-0.18	993	18240	340	-248	16.1	59	-3.5	14	2.9	15630	10.7	18980	218	0.6
30-45.7422-113.6800-2-12-						0-M34342	90130	-0.07	916	16790	113	-134	10.3	33	2.9	6	1.4	11090	6.7	16380	73	0.4

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

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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	
30-45.9533-112.3294-2-15-	0-M34284	23840	1910	11510	89	-5	17.4	4.4	-620	-1	-1	19.9	6514	96	6.0	205	0.191					
30-45.9000-112.3833-2-12-	0-M34286	12120	1254	13440	-32	-5	13.6	4.6	-562	-1	-1	31.2	3196	78	5.1	135	0.772					
30-45.8744-112.3500-2-12-	0-M34287	23280	2735	9229	-53	-7	10.6	10.7		-2	-2	10.0	4460	133	-4.4	240	11.070					
30-45.8864-112.3217-2-15-	0-M34288	34790	1158	14220	-26	-4	20.2	7.4	-434	-1	-1	19.1	5305	165	4.0	197	0.461					
30-45.8944-112.3331-2-15-	0-M34289	14760	2120	10110	42	9	11.0	3.0	-645	-1	-1	8.5	3845	79	-2.3	332	0.329					
30-45.8972-112.3397-2-15-	0-M34290	18790	2078	10090	-30	6	11.2	3.2	-714	-1	-1	10.9	4509	61	-3.0	153	0.275					
30-45.8917-112.3244-2-15-	0-M34291	28080	1517	11120	-45	-6	17.5	5.9	-643	-1	-2	18.5	4877	115	5.8	-96	0.205					
30-45.9083-112.2814-2-15-	0-M34292	35040	1274	11450	69	5	15.0	6.7	-453	-1	-1	19.6	5359	133	3.8	242	0.199					
30-45.9111-112.2761-2-15-	0-M34293	35060	1128	14280	56	-4	21.1	7.0	445	-1	-1	25.3	5522	169	7.3	104	0.213					
30-45.9122-112.2764-2-12-	0-M34294	32530	1032	14370	53	-4	15.9	5.9	-453	-1	-1	17.8	4928	121	5.6	141	0.287					
30-45.6808-113.9061-2-12-	0-M34295	14310	897	22170	-26	-2	7.5	6.2	-452	-1	-1	11.7	3707	48	3.4	83	0.444					
30-45.6756-113.8822-2-12-	0-M34296	9222	561	24510	49	-2	5.5	10.5	406	-1	1	20.7	3920	53	4.8	86	0.198					
30-45.6736-113.8850-2-12-	0-M34297	17790	401	20000	66	-2	9.7	9.3	270	-1	-1	17.4	5394	77	3.2	134	0.431					
30-45.7306-113.9233-2-12-	0-M34298	11880	484	19140	63	-2	5.7	8.9	-538	-1	-1	15.4	3566	40	-3.0	165	1.136					
30-45.7444-113.9536-2-12-	0-M34299	7751	221	18860	75	-1	5.1	9.1	306	1	-1	29.7	2779	23	6.0	-55	0.670					
30-45.7389-113.9033-2-12-	0-M34300	5978	479	25100	58	-2	6.8	11.5	603	-1	1	21.5	2816	35	3.7	126	0.637					
30-45.7183-113.8825-2-12-	0-M34301	10220	1006	24160	-35	-3	7.5	48.4	-541	-2	3	129.3	5342	72	12.6	88	0.064					
30-45.7142-113.8778-2-12-	0-M34302	10570	697	26040	48	-2	5.2	13.5	865	-1	-1	39.2	2485	39	3.7	90	0.222					
30-45.7628-113.9461-2-12-	0-M34303	8717	549	19670	59		5.5	7.2	-368	-1	-1	14.3	2706	37	1.9	110	1.091					
30-45.7836-113.9511-2-12-	0-M34304	-4955	226	22540	75	-2	5.1	7.6	-327	-1	-1	26.0	2306	32	4.0	-91	0.658					
30-45.8075-113.9544-2-12-	0-M34305	9507	438	20200	67	-2	5.3	6.9	-364	-4	-1	20.0	2511	27	-2.0	-147	1.310					
30-45.6111-113.6703-2-12-	0-M34306	7237	661	16910	40	-2	7.3	6.0	-370	-1	-1	13.1	4025	43	4.4	82	0.267					
30-45.6111-113.6692-2-12-	0-M34307	-4799	744	15740	56	-3	8.3	5.4	-414	-1	-1	10.7	3480	46	4.0	-96	0.327					
30-45.5797-113.6858-2-12-	0-M34308	-5350	943	14750	68	-3	7.5	8.4	-514	-1	-1	15.9	3983	46	4.6	91	0.233					
30-45.6556-113.7628-2-12-	0-M34309	7937	452	34670	34	-2	4.3	19.7	692	-1	2	52.0	2850	45	4.6	76	0.073					
30-45.6556-113.7789-2-12-	0-M34310	-5756	431	28020	-42	-3	5.5	95.9	-416	-3	6	252.0	4498	43	16.2	-64	0.063					
30-45.6500-113.7839-2-12-	0-M34311	10030	370	25750	48	-2	5.3	31.4	355	-1	3	69.7	4146	41	11.6	40	0.126					
30-45.9072-113.7794-2-12-	0-M34312	10820	527	24220	-27	-2	9.4	13.9	-345	-1	-1	28.5	4359	75	5.9	99	0.547					
30-45.8908-113.7756-2-12-	0-M34313	14520	1015	22230	43	-3	11.8	13.7	-515	-1	-1	18.0	4160	79	6.1		1.656					
30-45.8903-113.7764-2-12-	0-M34314	-6050	554	24290	-37	-3	7.6	11.0	-474	-2	-2	23.7	3846	82	4.3	133	0.515					
30-45.8667-113.8014-2-12-	0-M34315	12590	989	18640	56	-2	9.1	15.0	-420	-1	2	31.3	4194	75	9.2	46	0.332					
30-45.8436-113.8175-2-12-	0-M34316	8355	732	28350	46	-1	5.7	10.9	524	-1	-1	23.2	3438	54	4.8	91	0.509					
30-45.8433-113.8208-2-12-	0-M34317	10640	405	26830	53	-2	7.4	13.5	-359	-1	-1	25.2	3571	45	4.8	121	0.413					
30-45.8297-113.8006-2-12-	0-M34318	7693	622	28170	36	-2	4.8	17.9	-457	-2	-1	31.0	2964	52	6.8	139	0.513					
30-45.8544-113.7831-2-12-	0-M34319	17510	864	20660	-48	-4	17.1	8.2	-480	-2	-2	21.8	6741	236	6.2		0.422					
30-45.9128-113.7847-2-12-	0-M34320	26850	857	20200	40	-3	22.3	20.3	-414	-1	2	42.9	7439	155	11.8	96	0.303					
30-45.9072-113.8489-2-12-	0-M34321	17530	799	25060	76	-3	9.6	46.2	-441	4	3	92.0	5486	44	15.6	-45	0.634					
30-45.8733-113.8617-2-12-	0-M34322	10720	665	19480	-25		8.7	10.6	-382	-1	-1	18.2	3356	45	4.2	143	1.159					
30-45.9603-113.7644-2-12-	0-M34323	40620	548	12360	-35	-3	12.3	7.0	-399	-1	-1	14.0	3466	63	5.6	-144	0.557					
30-45.9689-113.8261-2-11-	0-M34324	27760	547	23720	55	-3	18.8	8.4	-410	-1	-1	15.8	8264	132	6.4	153	0.304					
30-45.9400-113.7069-2-12-	0-M34327	24540	727	19400	50	-3	19.1	19.7	-366	2	2	33.4	8181	132	11.1	126	0.353					
30-45.9542-113.7292-2-12-	0-M34328	40490	711	10770	-24	-3	14.9	10.9	-370	-1	-1	14.2	5215	90	5.9	168	0.528					
30-45.9222-113.7275-2-12-	0-M34330	15650	512	17140	-31	-3	11.9	14.9	-352	-1	-1	24.6	4161	60	8.6	-71	0.512					
30-45.8581-113.9100-2-12-	0-M34331	2444	350	26620	65	-2	6.6	11.2	644	-1	-1	27.1	3943	52	5.8	94	0.185					
30-45.8494-113.9106-2-12-	0-M34332	-7890	528	26560	-42	-4	5.1	7.6	-595	-2	-2	23.6	3026	33	-3.1	-154	1.119					
30-45.8483-113.9772-2-12-	0-M34334	20010	450	27060	45	-3	9.9	43.1	-371	3	4	104.5	6481	72	17.7	96	0.149					
30-45.6533-113.7081-2-12-	0-M34337	-4217	393	19560	53	-2	3.9	8.1	410	-1	-1	19.8	2206	28	3.7	64	0.222					
30-45.6506-113.7064-2-12-	0-M34338	-5632	319	29810	-30	-2	5.0	32.1	-371	-2	2	80.0	3212	36	8.3		0.100					
30-45.6575-113.7383-2-12-	0-M34339	9205	828	27170	42	-2	5.6	15.0	-424	-1	2	35.1	2885	34	6.6	125	0.205					
30-45.6989-113.7000-2-12-	0-M34341	-10320	612	34450	-56	-5	6.0	22.4	-757	-4	-2	60.5	3158	44	6.9	241	0.147					
30-45.7422-113.5800-2-12-	0-M34342	10470	316	29820	49	-2	5.7	9.5	454	-1	1	17.6	3268	33	3.6	55	0.949					

[illegible]

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

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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	
30-45.7567-113.7058-2-12-			0-M34343				-5	5	-5	23	-20	-15	-5	-10	-15	2	45	
30-45.7758-113.7317-2-12-			0-M34345				-5	-5	-5	15	-20	-15	15	-10	-15	2	76	
30-45.7639-113.7319-2-12-			0-M34346				-5	-5	-5	26	-20	-15	27	19	-15	2	11	
30-45.6286-113.3850-2-12-			0-M34348				13	5	11	22	-20	-15	-5	20	25	2	8	
30-45.6417-113.4303-2-15-			0-M34349				-5	-5	-5	19	-20	-15	-5	-10	-15	2	24	
30-45.6792-113.4353-2-15-			0-M34350				-5	-5	-5	40	-20	-15	22	-10	-15	1	24	
30-45.6500-113.7833-2-12-			0-M34351				-5	-5	-5	-10	-20	-15	22	-10	-15	2	79	
30-45.6564-113.7897-2-12-			0-M34352				-5	-5	-5	11	-20	-15	13	34	-15	2	23	
30-45.6667-113.8169-2-12-			0-M34353				-5	-5	-5	-10	-20	-15	21	12	-15	1	40	
30-45.6792-113.8311-2-12-			0-M34354				-5	-5	-5	-10	-20	-15	15	-10	-15	1	28	
30-45.6772-113.8328-2-12-			0-M34355				-5	6	-5	13	-20	-15	12	-10	-15	1	39	
30-45.7028-113.8617-2-12-			0-M34356				-5	-5	-5	21	27	-15	16	29	-15	2	45	
30-45.7039-113.8661-2-12-			0-M34357				-5	-5	-5	15	-20	-15	17	11	-15	3	44	
30-45.6633-113.8225-2-12-			0-M34358				-5	-5	-5	-10	-20	-15	16	13	-15	3	25	
30-45.6750-113.8700-2-12-			0-M34359				-5	-5	-5	11	-20	-15	11	-10	-15	2	30	
30-45.6717-113.8672-2-12-			0-M34360				-5	-5	-5	18	-20	-15	7	20	-15	3	39	
30-45.6311-113.5008-2-12-			0-M34361				-5	-5	-5	16	-20	-15	8	-10	-15	1	33	
30-45.6989-113.5194-2-12-			0-M34362				-5	-5	-5	-10	-20	16	15	-10	-15	2	30	
30-45.6669-113.5294-2-11-			0-M34363				-5	-5	-5	18	-20	-15	13	14	-15	2	32	
30-45.6928-113.5331-2-15-			0-M34364				-5	-5	-5	20	-20	-15	8	19	-15	2	17	
30-45.6675-113.5633-2-15-			0-M34365				-5	-5	-5	11	-20	-15	15	13	-15	1	23	
30-45.6961-113.5608-2-12-			0-M34366				-5	-5	-5	13	-20	-15	5	17	-15	2	16	
30-45.7008-113.5611-2-12-			0-M34367				-5	-5	-5	-10	-20	-15	6	-10	-15	1	29	
30-45.7017-113.5583-2-12-			0-M34368				-5	6	-5	18	-20	-15	9	10	-15	2	27	
30-45.7061-113.5992-2-12-			0-M34369				-5	-5	-5	-10	-20	-15	14	11	-15	2	26	
30-45.6831-113.6178-2-12-			0-M34370				-5	-5	-5	14	-20	-15	-5	29	-15	2	11	
30-45.7217-113.6261-2-12-			0-M34371				-5	6	-5	12	-20	-15	-5	-10	-15	2	28	
30-45.7514-113.6400-2-12-			0-M34372				-5	-5	-5	10	-20	-15	-5	-10	-15	1	29	
30-45.7508-113.6408-2-12-			0-M34373				-5	-5	-5	14	-20	-15	6	-10	-15	2	33	
30-45.5439-113.6472-2-12-			0-M34374				-5	-5	-5	-10	-20	-15	-5	-10	-15	2	28	
30-45.5175-113.6811-2-12-			0-M34375				-5	6	-5	17	-20	17	6	-10	-15	2	35	
30-45.6911-113.4294-2-15-			0-M34376				-5	6	-5	36	-20	-15	23	10	-15	2	24	
30-45.7100-113.4094-2-15-			0-M34378				-5	-5	-5	13	24	-15	-5	21	-15	3	10	
30-45.7214-113.3964-2-12-			0-M34379				-5	-5	-5	16	-20	-15	9	-10	-15	-1	11	
30-45.7367-113.3786-2-12-			0-M34380				-5	-5	-5	11	-20	-15	15	-10	-15	2	24	
30-45.6356-113.4419-2-12-			0-M34381				-5	5	-5	13	-20	-15	8	13	-15	-1	11	
30-45.6594-113.4694-2-12-			0-M34382				-5	-5	-5	-10	-20	-15	-5	25	-15	2	15	
30-45.7178-113.4892-2-12-			0-M34383				-5	-5	-5	-10	-20	-15	14	-10	-15	2	20	
30-45.7361-113.4394-2-12-			0-M34384				-5	-5	-5	12	-20	-15	17	-10	-15	2	25	
30-45.8511-113.2525-2-12-			0-M34385				-5	-5	-5	14	-20	20	8	-10	-15	3	23	
30-45.8111-113.3200-2-12-			0-M34387															
30-45.7614-113.3583-2-15-			0-M34388				-5	-5	-5	32	-20	-15	21	-10	-15	2	24	
30-45.8142-113.3306-2-12-			0-M34390				-5	-5	-5	27	-20	-15	18	-10	-15	2	22	
30-45.8031-113.3911-2-15-			0-M34391				-5	7	-5	20	-20	-15	11	-10	-15	1	19	
30-45.7947-113.3675-2-12-			0-M34392				-5	-5	-5	23	-20	-15	10	-10	-15	2	19	
30-45.8803-113.3158-2-12-			0-M34393				-5	5	-5	21	-20	-15	-5	-10	-15	3	39	
30-45.8853-113.3675-2-12-			0-M34394				-5	-5	-5	23	-20	-15	19	-10	-15	2	59	
30-45.9056-113.3528-2-12-			0-M34395															
30-45.9106-113.3286-2-12-			0-M34396				-5	-5	-5	18	-20	-15	10	-10	-15	1	96	
30-45.9133-113.2883-2-12-			0-M34397				-5	-5	-5	24	-20	-15	7	-10	-15	2	101	
30-45.9067-113.2661-2-12-			0-M34398				-5	-5	-5	30	-20	-15	10	-10	-15	2	36	

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

③

DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS																
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	DOE 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
30-45.7567-113.7058-2-12-	0-M34343	84277	-0.07	720	19350	521	-124	6.2	53	1.7	28	2.8	12780	18.1	13680	304	2.0					
30-45.7758-113.7317-2-12-	0-M34345	85290	-0.08	842	18400	188	-138	8.1	45	2.7	9	1.7	12790	12.3	16920	112	0.9					
30-45.7639-113.7319-2-12-	0-M34346	84340	-0.07	875	15800	166	-138	8.9	32	3.3	8	1.7	11160	6.6	20570	103	0.7					
30-45.6286-113.3850-2-12-	0-M34348	72357	1.06	-225	25310	1392	-151	6.8	30	-2.4	22	4.2	85210	59.7	8138	813	1.6					
30-45.6417-113.4303-2-15-	0-M34349	65967	-0.06	485	12600	163	-94	8.8	32	2.7	7	1.5	14070	19.0	15390	85	0.7					
30-45.6792-113.4358-2-15-	0-M34350	65647	-0.08	510	7819	88	-100	7.7	24	4.0	5	1.1	17540	8.3	13800	45	0.4					
30-45.6500-113.7833-2-12-	0-M34351	95880	-0.08	889	12310	150	-156	9.2	26	-1.7	8	1.5	15810	8.7	24570	81	0.8					
30-45.6564-113.7897-2-12-	0-M34352	97077	-0.12	827	14260	1058	-174	6.7	46	-2.3	26	4.1	26010	15.3	15200	660	1.3					
30-45.6667-113.8169-2-12-	0-M34353	79530	-0.07	1427	5310	137	-149	5.3	-12	-1.6	3	1.3	15530	5.0	27350	71	0.3					
30-45.6792-113.8311-2-12-	0-M34354	94120	-0.06	975	16550	278	-134	9.6	30	1.6	8	1.7	11100	9.7	17610	158	0.6					
30-45.6772-113.8328-2-12-	0-M34355	101007	-0.08	1093	10070	309	-139	7.1	53	2.5	8	1.8	15750	11.1	18650	186	0.5					
30-45.7028-113.8617-2-12-	0-M34356	86582	0.29	663	12490	397	-142	12.3	63	3.4	9	2.3	17900	8.3	13440	231	0.6					
30-45.7039-113.8661-2-12-	0-M34357	86850	-0.05	1032	7680	178	-104	7.5	46	4.2	5	1.4	11070	6.7	20260	117	0.3					
30-45.6633-113.8225-2-12-	0-M34358	84930	-0.06	1022	14390	112	-121	7.5	33	2.4	5	1.5	10960	8.7	17120	62	0.4					
30-45.6750-113.8700-2-12-	0-M34359	92200	-0.08	1221	12420	329	-135	8.4	44	-1.7	15	2.2	18670	14.6	23700	163	1.1					
30-45.6717-113.8672-2-12-	0-M34360	84000	-0.09	746	17230	272	-159	9.5	26	2.2	10	2.6	18960	9.8	21270	163	1.0					
30-45.6311-113.5008-2-12-	0-M34361	79547	-0.10	763	8366	143	-126	7.8	-16	2.8	6	1.3	15940	9.8	15410	86	0.6					
30-45.6589-113.5194-2-12-	0-M34362	81920	-0.07	733	9752	105	111	11.5	28	3.3	5	1.1	15520	9.1	18980	54	0.4					
30-45.6669-113.5294-2-11-	0-M34363	79767	-0.07	781	9257	128	152	7.8	22	3.4	6	1.3	15850	10.2	17410	75	0.5					
30-45.6928-113.5331-2-15-	0-M34364	63930	-0.06	840	11200	95	220	10.8	30	2.1	5	1.1	11980	8.1	17190	49	0.5					
30-45.6675-113.5633-2-15-	0-M34365	68730	-0.06	861	10460	104	-107	7.4	25	-1.2	5	1.2	9724	7.9	18330	58	0.4					
30-45.6961-113.5608-2-12-	0-M34366	65390	-0.05	948	10830	63	124	7.0	15	3.3	4	1.0	10150	5.9	15820	37	0.4					
30-45.7008-113.5611-2-12-	0-M34367	63360	-0.07	831	8494	151	-108	4.9	24	-1.5	6	1.4	10780	9.6	14400	92	0.6					
30-45.7017-113.5583-2-12-	0-M34368	64297	-0.06	814	8174	341	-96	5.2	29	2.2	14	2.0	15390	18.6	14300	209	1.1					
30-45.7061-113.5992-2-12-	0-M34369	64710	-0.07	795	8322	494	-107	6.2	62	2.5	17	2.4	14420	20.2	15720	264	1.2					
30-45.6831-113.6178-2-12-	0-M34370	47420	-0.05	583	3597	136	-74	5.2	44	2.6	7	1.4	9113	20.6	14250	73	0.6					
30-45.7217-113.6261-2-12-	0-M34371	51407	-0.08	551	4199	65	-94	5.8	36	3.3	4	1.2	8457	12.1	13910	36	0.5					
30-45.7514-113.6400-2-12-	0-M34372	55750	0.15	674	4836	89	-83	9.1	31	3.5	6	1.1	10200	15.8	17120	48	0.5					
30-45.7508-113.6408-2-12-	0-M34373	55670	-0.06	639	5986	74	-84	7.0	26	3.7	6	1.2	10540	15.3	16660	50	0.5					
30-45.5439-113.6472-2-12-	0-M34374	51670	-0.05	625	6273	47	-85	5.7	31	3.3	3	0.8	8874	6.0	14040	26	0.3					
30-45.5175-113.6811-2-12-	0-M34375	65730	-0.07	617	7695	50	-91	5.9	33	5.3	5	1.1	8977	6.3	15660	32	0.4					
30-45.6911-113.4294-2-15-	0-M34376	71330	-0.07	679	10890	255	-105	10.0	23	3.0	7	1.3	22400	14.7	15480	143	0.5					
30-45.7100-113.4094-2-15-	0-M34378	44730	-0.08	280	7229	378	-75	6.2	69	-1.5	13	2.2	60400	56.2	8808	204	1.3					
30-45.7214-113.3964-2-12-	0-M34379	72320	-0.07	587	14600	320	-117	5.2	31	2.6	12	1.9	14260	24.2	14530	200	1.0					
30-45.7367-113.3786-2-12-	0-M34380	90560	-0.08	549	19550	336	-127	7.8	26	2.2	11	2.0	16300	51.4	13080	180	1.2					
30-45.6356-113.4419-2-12-	0-M34381	62330	-0.07	627	14660	227	-102	4.4	26	-1.5	6	1.6	9510	33.0	12830	131	0.9					
30-45.6594-113.4694-2-12-	0-M34382	33007	0.10	430	3275	101	-55	5.9	31	1.1	7	1.7	8811	35.6	8967	54	0.8					
30-45.7178-113.4892-2-12-	0-M34383	93750	-0.07	849	15270	446	-121	8.3	25	1.5	17	2.3	10770	18.2	17000	250	1.3					
30-45.7361-113.4394-2-12-	0-M34384	95130	-0.07	772	16170	489	-127	6.4	30	-1.5	22	2.7	9985	19.5	18460	300	1.6					
30-45.8511-113.2525-2-12-	0-M34385	62170	-0.08	872	14050	213	97	9.1	61	3.1	9	2.1	14180	29.0	18030	116	0.9					
30-45.8111-113.3200-2-12-	0-M34387	64830	-0.09	691	14210	109	-118	5.7	31	3.4	5	1.4	11270	13.0	17120	74	0.4					
30-45.7614-113.3563-2-15-	0-M34388	70747	-0.07	510	14430	76	-93	10.5	43	2.7	6	1.2	21180	15.5	14230	45	0.7					
30-45.8142-113.3306-2-12-	0-M34390	71190	-0.08	814	12360	153	-105	11.0	-12	4.0	7	1.3	13560	15.7	18620	88	0.6					
30-45.8031-113.3511-2-15-	0-M34391	74820	-0.09	827	11160	131	233	8.9	25	6.0	6	1.7	14080	9.6	19760	65	0.8					
30-45.7947-113.3675-2-12-	0-M34392	66030	-0.12	684	11990	96	211	8.1	-18	4.7	6	1.2	11240	8.7	15820	51	0.4					
30-45.8803-113.3158-2-12-	0-M34393	65960	-0.06	722	11770	117	-104	9.7	20	3.5	6	1.2	10430	11.4	17900	64	0.5					
30-45.8853-113.3675-2-12-	0-M34394	93440	-0.07	731	15200	119	-102	5.8	32	4.3	8	1.4	12360	6.7	19160	77	0.5					
30-45.9056-113.3528-2-12-	0-M34395	77160	-0.07	469	13680	204	146	7.4	24	7.9	7	1.5	12280	7.0	12180	135	0.6					
30-45.9106-113.3286-2-12-	0-M34396	72647	-0.08	617	11240	138	-117	8.6	33	4.7	6	1.4	10770	7.3	18490	83	0.7					
30-45.9133-113.2883-2-12-	0-M34397	73400	-0.09	634	15260	103	-124	9.6	38	4.2	4	1.3	15050	7.0	15240	45	0.4					
30-45.9067-113.2661-2-12-	0-M34398	70920	-0.05	652	14090	139	-100	9.7	46	3.5	5	1.2	10950	10.7	17720	58	0.4					

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

(4)

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued)													U/Th RATIO		
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAST 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	
30-45.7567-113.7058-2-12-			0-M34343				0792	499	30740	-23	-2	5.3	36.6	478	-1	4	79.4	3935	32	17.6	96	0.159
30-45.7758-113.7317-2-12-			0-M34345				11990	424	27960	50	-2	5.3	16.9	519	-1	-1	27.9	3093	38	7.6	105	0.470
30-45.7639-113.7319-2-12-			0-M34345				8146	461	29380	-21	-2	4.6	13.6	-406	-1	-1	27.6	2719	26	6.8	117	0.554
30-45.6286-113.3850-2-12-			0-M34348				-6152	1093	27540	-47	-3	6.0	80.1	-502	4	4	299.3	6576	158	17.1	-258	0.090
30-45.6417-113.4303-2-15-			0-M34349				7234	408	16220	41	-2	6.0	10.1	-299	-1	-1	24.6	3785	36	4.5	66	0.240
30-45.6792-113.4358-2-15-			0-M34350				8215	732	12110	-27	-2	7.7	5.5	-386	-1	-1	12.2	3343	40	3.6	127	0.270
30-45.6500-113.7833-2-12-			0-M34351				-6110	875	25510	66	-2	5.4	14.7	-517	-1	-1	23.5	2340	30	7.3	95	0.877
30-45.6564-113.7897-2-12-			0-M34352				-7211	548	35740	-44	-3	3.9	64.6	-509	-3	5	178.7	4106	45	19.7	97	0.058
30-45.6667-113.8169-2-12-			0-M34353				-6126	493	32020	68	-2	3.3	7.4	-427	-1	-1	18.2	1735	26	3.5	147	0.137
30-45.6792-113.8311-2-12-			0-M34354				8941	392	35710	39	-2	5.3	17.6	720	-1	2	45.2	3467	31	4.6	73	0.237
30-45.6772-113.8328-2-12-			0-M34355				-5751	298	33660	48	-2	5.9	22.5	569	-2	-1	50.2	4185	49	7.3	129	0.211
30-45.7028-113.8617-2-12-			0-M34356				10730	1447	22500	48	-2	7.2	22.9	-520	-1	2	59.1	3720	47	7.0	126	0.311
30-45.7039-113.8661-2-12-			0-M34357				10960	324	27190	47	-2	5.5	11.2	-286	-1	1	31.5	2690	38	4.9	67	0.257
30-45.6633-113.8225-2-12-			0-M34358				9033	341	27050	41	-2	5.5	7.4	504	-1	-1	14.2	3413	38	4.0	100	0.408
30-45.6750-113.8700-2-12-			0-M34359				9917	437	27960	56	-2	6.3	29.0	-395	-1	2	61.2	3706	51	9.8	78	0.160
30-45.6717-113.8672-2-12-			0-M34360				13130	1411	23190	-32	-3	6.8	22.9	-579	-1	-1	51.3	2623	57	7.9		0.411
30-45.6311-113.5003-2-12-			0-M34361				11760	511	16380	50	-3	6.3	9.0	-423	-1	-1	21.3	3062	38	3.8	142	0.188
30-45.6589-113.5194-2-12-			0-M34362				8120	473	15920	65	-2	7.1	6.1	-344	-1	-1	14.7	3907	40	3.7	99	0.252
30-45.6669-113.5294-2-11-			0-M34363				7446	493	16660	36	-2	6.6	8.3	-346	-1	-1	19.7	3136	36	5.6	135	0.198
30-45.6928-113.5331-2-15-			0-M34364				-4785	1146	16370	39	3	4.5	6.9	539	-1	-1	15.2	1756	19	3.5	102	0.197
30-45.6675-113.5633-2-15-			0-M34365				-4220	439	19160	42	-2	3.6	7.1	-336	-1	1	15.5	2877	30	4.2	79	0.187
30-45.6961-113.5608-2-12-			0-M34366				-4153	749	17030	44	-2	4.6	4.7	-345	-1	-1	10.8	2071	26	2.9	59	0.324
30-45.7008-113.5611-2-12-			0-M34367				-4529	267	20770	-24	-2	4.1	11.5	-309	-1	-1	25.9	2690	28	5.7	82	0.197
30-45.7017-113.5583-2-12-			0-M34368				7986	426	20270	35	-2	4.6	22.0	469	-1	2	56.9	3250	33	9.0	86	0.134
30-45.7061-113.5992-2-12-			0-M34369				-4304	465	20400	42	-2	4.2	32.5	-340	-1	2	82.2	3934	34	9.5	-79	0.094
30-45.6831-113.6178-2-12-			0-M34370				-3033	288	11310	30	-2	4.1	10.8	-243	-1	-1	19.6	2756	23	5.9	69	0.265
30-45.7217-113.6261-2-12-			0-M34371				-3935	295	12720	-26	-2	5.2	5.1	-301	-1	-1	10.2	2222	34	4.2	-53	0.480
30-45.7514-113.6400-2-12-			0-M34372				7812	368	12840	43	-2	5.5	7.0	-280	-1	-1	14.3	2727	31	4.7	78	0.357
30-45.7508-113.6408-2-12-			0-M34373				6763	386	12670	45	-2	5.8	6.7	-285	-1	-1	12.5	2593	30	4.4	75	0.432
30-45.5439-113.6472-2-12-			0-M34374				8366	380	10490	38	-1	4.6	3.6	-299		-1	7.6	2676	30	2.7	40	0.487
30-45.5175-113.6811-2-12-			0-M34375				12000	292	10940	-17	-2	5.5	4.9	-307	-1	-1	7.5	2913	43	3.8	46	0.773
30-45.6911-113.4294-2-15-			0-M34376				7927	832	16280	48	-2	7.1	13.6	-375	-1	-1	41.0	5415	54	6.0	116	0.139
30-45.7100-113.4094-2-15-			0-M34378				5840	498	9943	-31	5	5.7	24.1	-274	-1	-1	65.3	9261	116	10.3		0.217
30-45.7214-113.3964-2-12-			0-M34379				-4711	493	25570	-22	-2	4.4	22.7	-347	-1	1	50.8	3187	33	8.9	96	0.248
30-45.7367-113.3786-2-12-			0-M34380				8505	420	26390	-25	-2	7.3	26.9	-378	-1	-1	61.9	4608	46	9.2	94	0.221
30-45.6356-113.4419-2-12-			0-M34381				7782	316	19270	-24	-2	5.0	12.8	-303	1	-1	39.0	4082	27	7.4	100	0.149
30-45.6594-113.4694-2-12-			0-M34382				2718	212	9116	24	-1	3.0	7.4	-177	1	1	15.0	2079	19	6.1	41	0.360
30-45.7178-113.4892-2-12-			0-M34383				-4953	434	28120	-22	-2	5.6	35.2	648	-1	3	70.4	3196	30	12.6	83	0.092
30-45.7361-113.4394-2-12-			0-M34384				-5205	398	30730	63	-2	4.8	35.1	422	-1	3	81.6	2483	28	13.5	74	0.154
30-45.8511-113.2525-2-12-			0-M34385				10010	591	14320	48	-2	7.0	15.4	-378	2	-1	33.0	4571	44	8.0	127	0.173
30-45.8111-113.3200-2-12-			0-M34387				9613	466	15990	-32	-3	6.4	5.9	-391	-5	-1	14.7	2578	38	5.0	-198	0.721
30-45.7614-113.3583-2-15-			0-M34386				17470	535	13650	56	-2	9.3	7.8	-328	1	-1	14.0	3726	63	5.1	107	0.636
30-45.8142-113.3306-2-12-			0-M34390				9494	495	14320	56	-2	8.1	9.5	-346	-1	-1	20.3	3437	41	3.7	106	0.227
30-45.8031-113.3511-2-15-			0-M34391				7620	602	13350	87	-3	7.1	11.7	-419	-1	-1	17.8	3286	39	5.5	97	0.275
30-45.7947-113.3675-2-12-			0-M34392				-6306	620	16790	-41	-4	6.4	5.7	-524	-2	-1	12.8	2425	32	-2.9	119	0.297
30-45.8803-113.3158-2-12-			0-M34393				11120	693	15190	55	-2	5.2	8.0	-377	-1	-1	16.8	2136	31	3.9	56	0.232
30-45.8853-113.3675-2-12-			0-M34394				16090	283	18800	64	-2	7.0	11.8	474	-1	-1	15.8	2460	38	5.0	88	1.684
30-45.9056-113.3529-2-12-			0-M34395				13680	810	20190	46	-2	7.2	14.7	-393	3	1	29.9	3080	32	5.0	120	1.114
30-45.9106-113.3286-2-12-			0-M34396				8972	369	16890	51	-3	6.0	12.8	-376	-1	-1	19.3	2758	37	4.4	112	1.192
30-45.9133-113.2883-2-12-			0-M34397				18630	595	14940	-35	-3	7.7	6.7	-453	-10	-1	11.9	3582	43	3.0	-400	2.336
30-45.9067-113.2661-2-12-			0-M34398				9972	479	17210	41	-1	6.4	6.8	446	-1	-1	15.8	3449	37	3.6	80	0.956

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

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DOE SAMPLE NUMBER						LAST SAMPLE LOCATION NUMBER AND FIELD DATA																								U CONCENTRATION					
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAST SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (umho/cm)	SCINTILLATOR (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	9417-113.2897	-2-12-	0-M34399	-09/17/76-19-		14-11.5-	-	5.6-	59-	4-3-7-3-7-4-3-1-2-3-2-3-4-	-1-	-	-	-	4-3-7-3-7-4-3-1-2-1-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24.40		
30-45	9014-113.2083	-2-12-	0-M34400	-09/17/76-20-		15-13.1-	-	5.8-	47-	4-3-7-3-7-4-3-1-2-1-3-3-2-	-1-	-	-	-	4-3-7-3-7-4-3-1-2-1-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	37.20		
30-45	9883-113.8617	-2-11-	0-M34401	-09/10/76-13-		9-6.0-	-	5.7-	60-	9-3-1-4-6-2-3-1-	-1-2-4-2-	-8-	-	-	9-3-1-4-6-2-3-1-	-1-2-4-2-	-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.80	
30-45	9136-113.9406	-2-15-	0-M34402	-09/10/76-15-		9-	-	-	-	11-4-	-5-6-	-1-	-2-1-2-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.90	
30-45	9322-113.9705	-2-12-	0-M34403	-09/10/76-15-		9-12.0-	-	6.2-	162-	9-3-7-4-6-3-3-1-3-4-3-2-2-	-3-	-	-	-	9-3-7-4-6-3-3-1-3-4-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.40		
30-45	9044-113.9633	-2-12-	0-M34404	-09/10/76-16-		10-12.3-	-	6.0-	132-	11-3-7-4-6-2-3-1-2-1-3-2-2-	-3-	-	-	-	11-3-7-4-6-2-3-1-2-1-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.60		
30-45	8875-113.9511	-2-12-	0-M34405	-09/10/76-16-		10-13.0-	-	6.3-	132-	14-3-7-5-6-2-3-1-	-1-3-2-2-	-3-	-	-	14-3-7-5-6-2-3-1-	-1-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.30		
30-45	9297-113.8903	-2-12-	0-M34406	-09/11/76-9-		12-7.4-C-	-	6.3-	127-	18-3-1-4-6-3-3-1-3-1-3-4-1-	-9-	-	-	-	18-3-1-4-6-3-3-1-3-1-3-4-1-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38.90		
30-45	9383-113.9269	-2-12-	0-M34407	-09/11/76-9-		12-8.0-C-	-	6.1-	72-	18-3-1-4-6-4-3-1-2-1-4-4-1-	-9-	-	-	-	18-3-1-4-6-4-3-1-2-1-4-4-1-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.40		
30-45	9386-113.9278	-2-12-	0-M34408	-09/11/76-9-		12-7.7-	-	5.9-	108-	14-3-1-4-6-3-3-1-2-1-4-4-1-	-9-	-	-	-	14-3-1-4-6-3-3-1-2-1-4-4-1-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.40		
30-45	9500-113.9356	-2-12-	0-M34409	-09/11/76-10-		13-10.0-C-	-	6.4-	200-	21-3-1-4-6-2-2-1-3-1-3-3-1-	-9-	-	-	-	21-3-1-4-6-2-2-1-3-1-3-3-1-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.60		
30-45	9636-113.9894	-2-12-	0-M34410	-09/11/76-10-		13-9.8-	-	6.7-	236-	14-3-1-4-6-2-2-1-2-1-4-5-1-	-8-	-	-	-	14-3-1-4-6-2-2-1-2-1-4-5-1-	-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.50		
30-45	9642-113.9892	-2-12-	0-M34411	-09/11/76-10-		13-10.0-C-	-	5.7-	78-	-3-1-4-6-3-2-1-2-1-4-5-1-	-8-	-	-	-	-3-1-4-6-3-2-1-2-1-4-5-1-	-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.60		
30-45	9931-113.9425	-2-12-	0-M34412	-09/11/76-11-		13-8.3-	-	5.7-	50-	11-3-1-4-6-3-2-1-2-1-4-4-1-	-8-	-	-	-	11-3-1-4-6-3-2-1-2-1-4-4-1-	-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.70		
30-45	8586-113.4428	-2-12-	0-M34413	-09/12/76-8-		7-9.6-C-	-	5.6-	63-	11-3-6-4-6-4-3-1-2-1-4-2-1-	-8-	-	-	-	11-3-6-4-6-4-3-1-2-1-4-2-1-	-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.60		
30-45	8222-113.4275	-2-12-	0-M34414	-09/12/76-9-		9-10.0-	-	5.7-	98-	14-3-1-4-6-4-3-1-2-1-4-2-1-	-8-	-	-	-	14-3-1-4-6-4-3-1-2-1-4-2-1-	-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30		
30-45	8069-113.4172	-2-12-	0-M34415	-09/12/76-9-		10-8.8-	-	5.5-	49-	14-4-	-5-6-2-3-1-3-4-4-2-1-	-3-	-	-	14-4-	-5-6-2-3-1-3-4-4-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.10		
30-45	7811-113.4078	-2-12-	0-M34416	-09/12/76-10-		10-10.7-	-	6.0-	91-	14-4-	-4-6-2-3-1-1-3-4-1-1-	-3-	-	-	14-4-	-4-6-2-3-1-1-3-4-1-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.60		
30-45	7906-113.4417	-2-12-	0-M34417	-09/12/76-10-		11-12.3-	-	5.6-	42-	14-4-	-5-6-2-2-1-3-4-4-1-1-	-3-	-	-	14-4-	-5-6-2-2-1-3-4-4-1-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.90		
30-45	7750-113.4511	-2-12-	0-M34418	-09/12/76-11-		11-12.0-	-	5.6-	39-	9-4-	-4-6-2-2-1-2-3-3-1-1-	-3-	-	-	9-4-	-4-6-2-2-1-2-3-3-1-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.40		
30-45	7569-113.4583	-2-12-	0-M34419	-09/12/76-11-		11-12.3-	-	6.8-	194-	7-4-	-5-6-2-2-1-1-4-3-1-1-	-3-	-	-	7-4-	-5-6-2-2-1-1-4-3-1-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.20		
30-45	7661-113.5861	-2-12-	0-M34420	-09/17/76-10-		12-9.8-	-	5.6-	42-	4-3-1-4-6-3-3-1-2-1-4-2-1-	-3-	-	-	-	4-3-1-4-6-3-3-1-2-1-4-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00		
30-45	7883-113.6069	-2-12-	0-M34421	-09/17/76-11-		12-10.0-	-	5.4-	34-	4-3-1-3-6-3-3-1-2-1-3-2-1-	-8-	-	-	-	4-3-1-3-6-3-3-1-2-1-3-2-1-	-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.80		
30-45	7742-113.5650	-2-12-	0-M34422	-09/17/76-11-		14-11.0-	-	5.8-	74-	5-3-1-4-6-2-3-1-3-3-3-2-1-	-3-	-	-	-	5-3-1-4-6-2-3-1-3-3-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.80		
30-45	7200-113.3208	-2-12-	0-M34423	-09/17/76-13-		14-6.8-	-	5.7-	104-	6-3-1-3-6-4-3-1-2-1-3-3-2-	-3-	-	-	-	6-3-1-3-6-4-3-1-2-1-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.80		
30-45	7158-113.3117	-2-12-	0-M34424	-09/17/76-13-		14-6.3-	-	5.5-	63-	6-3-1-4-6-4-3-1-2-1-3-3-2-	-1-	-	-	-	6-3-1-4-6-4-3-1-2-1-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.90		
30-45	7044-113.3261	-2-12-	0-M34425	-09/17/76-14-		14-9.2-	-	5.6-	53-	5-3-1-4-6-3-3-1-2-1-4-4-3-	-3-	-	-	-	5-3-1-4-6-3-3-1-2-1-4-4-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.90		
30-45	7011-113.3125	-2-12-	0-M34426	-09/17/76-14-		14-10.0-	-	5.6-	32-	5-3-1-4-6-3-3-1-2-1-4-4-3-	-3-	-	-	-	5-3-1-4-6-3-3-1-2-1-4-4-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.90		
30-45	6578-113.3589	-2-12-	0-M34427	-09/17/76-15-		14-13.0-	-	5.8-	82-	4-3-1-4-6-3-3-1-2-1-4-3-3-	-3-	-	-	-	4-3-1-4-6-3-3-1-2-1-4-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.20		
30-45	5336-113.0789	-2-12-	0-M34428	-09/18/76-12-		9-10.4-	-	5.6-	53-	3-3-1-4-6-3-2-1-2-4-3-3-4-	-8-	-	-	-	3-3-1-4-6-3-2-1-2-4-3-3-4-	-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.40		
30-45	5333-113.0817	-2-12-	0-M34429	-09/18/76-12-		9-7.0-C-	-	5.6-	42-	5-3-7-4-6-4-3-1-2-1-4-3-2-	-8-	-	-	-	5-3-7-4-6-4-3-1-2-1-4-3-2-	-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.90		
30-45	3144-113.5922	-2-12-	0-M34430	-09/25/76-14-		15-10.2-	-	5.2-	12-	4-4-	-2-7-4-3-1-2-1-4-5-2-	-1-	-	-	4-4-	-2-7-4-3-1-2-1-4-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20		
30-45	3194-113.5750	-2-12-	0-M34431	-09/25/76-14-		16-11.2-	-	5.2-	20-	2-4-	-5-6-2-3-1-2-4-5-2-2-	-1-	-	-	2-4-	-5-6-2-3-1-2-4-5-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60		
30-45	3628-113.6028	-2-12-	0-M34432	-09/25/76-16-		18-10.2-	-	5.2-	23-	2-2-	-2-7-4-3-1-2-1-4-4-2-	-1-	-	-	2-2-	-2-7-4-3-1-2-1-4-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.80		
30-45	3378-113.6292	-2-12-	0-M34433	-09/25/76-17-		16-10.8-	-	5.2-	24-	4-4-	-2-6-4-3-1-2-1-4-4-2-	-1-	-	-	4-4-	-2-6-4-3-1-2-1-4-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.60		
30-45	3600-113.5583	-2-12-	0-M34434	-09/25/76-19-		15-11.2-	-	5.2-	24-	4-4-	-4-7-3-3-1-2-1-3-3-2-	-3-	-	-	4-4-	-4-7-3-3-1-2-1-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3		

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

2

DOE SAMPLE NUMBER						DOE SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE										ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Concentrations reported in weight parts per million (ppm)										Concentrations in weight ppm	
							Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li	
30-45.9417-113.2897-2-12-						0-M34399	-5	-5	-5	18	-20	27	5	-10	-15		2	84
30-45.9014-113.2083-2-12-						0-M34400	-5	6	-5	14	68	-15	13	-10	24		3	101
30-45.9883-113.8617-2-11-						0-M34401	-5	-5	-5	13	-20	-15	5	-10	-15		2	54
30-45.9136-113.9406-2-15-						0-M34402	-5	-5	-5	29	28	-15	-5	11	-15		-1	8
30-45.9322-113.9706-2-12-						0-M34403	-5	-5	-5	19	-20	-15	-5	-10	-15		-1	20
30-45.9044-113.9633-2-12-						0-M34404	-5	-5	-5	18	21	-15	9	-10	-15		2	27
30-45.8875-113.9511-2-12-						0-M34405	-5	-5	-5	13	-20	-15	7	-10	-15		2	49
30-45.9297-113.8903-2-12-						0-M34406	-5	-5	-5	13	-20	17	9	-10	-15		2	53
30-45.9383-113.9269-2-12-						0-M34407	-5	-5	-5	13	-20	-15	-5	-10	-15		2	14
30-45.9386-113.9278-2-12-						0-M34408	-5	-5	-5	-10	-20	-15	-5	-10	-15		2	24
30-45.9500-113.9356-2-12-						0-M34409	-5	-5	-5	17	-20	16	14	-10	-15		2	56
30-45.9636-113.9894-2-12-						0-M34410	-5	-5	6	11	-20	-15	-5	-10	16		2	25
30-45.9642-113.9892-2-12-						0-M34411	-5	-5	-5	15	20	-15	23	-10	-15		1	18
30-45.9931-113.9425-2-12-						0-M34412	-5	-5	-5	-10	-20	-15	-5	-10	-15		2	45
30-45.8586-113.4428-2-12-						0-M34413	-5	-5	-5	10	-20	-15	6	-10	-15		2	58
30-45.8222-113.4275-2-12-						0-M34414	-5	-5	-5	11	-20	-15	17	-10	-15		2	27
30-45.8069-113.4172-2-12-						0-M34415	-5	-5	-5	27	-20	-15	27	-10	-15		-1	28
30-45.7811-113.4078-2-12-						0-M34416	-5	-5	-5	25	-20	-15	20	-10	-15		2	63
30-45.7906-113.4417-2-12-						0-M34417	-5	-5	-5	-10	33	-15	18	-10	-15		2	40
30-45.7750-113.4511-2-12-						0-M34418	-5	-5	-5	13	-20	-15	16	-10	-15		2	32
30-45.7569-113.4583-2-12-						0-M34419	-5	-5	-5	37	45	-15	12	-10	-15		2	29
30-45.7661-113.5861-2-12-						0-M34420												
30-45.7883-113.6069-2-12-						0-M34421											1	37
30-45.7742-113.5650-2-12-						0-M34422	-5	-5	-5	16	-20	-15	10	-10	-15		2	38
30-45.7200-113.3208-2-12-						0-M34423	-5	-5	-5	-10	-20	-15	-5	-10	-15		2	35
30-45.7158-113.3117-2-12-						0-M34424	-5	-5	-5	-10	-20	-15	-5	-10	-15		2	23
30-45.7044-113.3261-2-12-						0-M34425	-5	-5	-5	21	-20	-15	9	-10	-15		2	27
30-45.7011-113.3125-2-12-						0-M34426	-5	-5	-5	18	-20	-15	-5	-10	-15		2	30
30-45.6578-113.3589-2-12-						0-M34427	-5	-5	-5	25	-20	-15	12	-10	-15		2	60
30-45.5336-113.0789-2-12-						0-M34428	-5	-5	-5	111	-20	-15	97	-10	25		2	30
30-45.5333-113.0817-2-12-						0-M34429	-5	-5	5	14	-20	-15	11	14	-15		2	13
30-45.3144-113.5922-2-12-						0-M34430	-5	-5	-5	15	29	-15	17	-10	-15		1	15
30-45.3194-113.5750-2-12-						0-M34431	-5	-5	-5	-10	27	-15	-5	-10	-15		-1	6
30-45.3628-113.6028-2-12-						0-M34432	-5	-5	-5	-10	25	-15	11	-10	-15		-1	14
30-45.3378-113.6292-2-12-						0-M34433	-5	-5	-5	10	-20	-15	6	-10	-15		1	17
30-45.3600-113.5583-2-12-						0-M34434	-5	6	-5	18	-20	-15	-5	-10	-15		1	15
30-45.3533-113.5244-2-12-						0-M34435	-5	-5	-5	13	-20	-15	-5	-10	-15		-1	9
30-45.3122-113.5272-2-12-						0-M34436	-5	-5	-5	12	-20	-15	-5	-10	-15		-1	9
30-45.2942-113.5633-2-12-						0-M34437	-5	-5	-5	-10	25	-15	-5	-10	-15		1	13
30-45.2651-113.5919-2-12-						0-M34438	-5	-5	-5	25	26	-15	7	-10	-15		1	12
30-45.2972-113.5175-2-12-						0-M34439	-5	-5	-5	16	-20	-15	15	-10	-15		-1	12
30-45.2542-113.5042-2-12-						0-M34440	-5	-5	-5	-10	-20	-15	5	-10	-15		-1	8
30-45.2628-113.3344-2-12-						0-M34441	-5	6	-5	-10	-20	-15	7	-10	-15		1	13
30-45.3958-113.2531-2-12-						0-M34442	-5	-5	-5	22	-20	-15	14	-10	-15		1	18
30-45.3956-113.2519-2-12-						0-M34443	-5	-5	-5	31	-20	-15	20	-10	-15		1	27
30-45.3808-113.2522-2-12-						0-M34444	-5	-5	-5	52	-20	16	36	-10	-15		2	28
30-45.3756-113.2536-2-12-						0-M34445	-5	-5	-5	-10	-20	17	12	-10	-15		2	25
30-45.3617-113.2583-2-12-						0-M34446	-5	-5	-5	15	-20	19	5	-10	15		2	24
30-45.3494-113.2533-2-12-						0-M34447	-5	-5	-5	-10	-20	-15	-5	-10	-15		1	32
30-45.2119-112.8036-2-15-						0-M34448	-5	-5	-5	29	-20	42	13	-10	-15		1	21
30-45.2100-112.7942-2-15-						0-M34449	-5	-5	-5	19	21	-15	13	-10	-15		2	10

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

③

DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS												
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	DOE SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per million (ppm)											
							Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe
30-45.9417-113.2897-2-12-			0-M34399	72727	-0.07		619	15880	115	-103	7.8	85	3.9	5	1.4	13650	7.2	15420
30-45.9014-113.2083-2-12-			0-M34400	66370	-0.10		482	10690	929	-158	8.0	49	6.4	13	2.5	19320	46.0	19750
30-45.9883-113.3617-2-11-			0-M34401	75190	-0.06		839	13250	237	-127	6.1	23	1.8	8	2.0	8037	8.7	17130
30-45.9136-113.9406-2-15-			0-M34402	91300	-0.13		544	15630	80	-112	11.8	-18	3.8	8	1.7	27860	6.4	8165
30-45.9322-113.9706-2-12-			0-M34403	83520	-0.13		722	21840	167	201	7.8	-10	3.4	8	1.9	17380	13.7	14820
30-45.9044-113.9633-2-12-			0-M34404	81300	-0.08		575	24850	172	173	10.5	29	2.4	9	2.1	20160	16.3	14140
30-45.8875-113.9511-2-12-			0-M34405	99380	-0.08		509	23210	140	-127	7.5	19	2.4	6	1.6	17560	16.6	16230
30-45.9297-113.8903-2-12-			0-M34406	92780	-0.07		615	28910	252	-119	12.4	52	3.1	12	3.5	26930	22.1	10760
30-45.9383-113.9269-2-12-			0-M34407	83450	-0.31		690	27740	595	-133	7.7	42	-1.8	20	3.5	31450	37.5	12870
30-45.9386-113.9273-2-12-			0-M34408	85080	-0.09		642	20910	263	-147	6.4	-15	-1.8	8	2.1	15660	19.0	16210
30-45.9500-113.9356-2-12-			0-M34409	78480	-0.06		693	10230	153	-102	8.9	32	4.3	9	1.4	17030	26.1	26030
30-45.9636-113.9894-2-12-			0-M34410	91830	-0.06		713	26400	158	-124	7.4	31	1.8	8	1.7	16560	20.0	13660
30-45.9642-113.9892-2-12-			0-M34411	91630	-0.05		645	29910	825	-139	8.8	30	-1.8	23	4.5	20280	57.0	12770
30-45.9931-113.9425-2-12-			0-M34412	95800	-0.07		1171	22370	223	-163	7.2	-16	-2.4	7	2.5	14260	18.4	14660
30-45.9586-113.4428-2-12-			0-M34413	72330	-0.04		677	16340	316	-106	7.0	25	2.1	9	1.6	8038	14.9	17690
30-45.9222-113.4275-2-12-			0-M34414	72080	-0.03		888	9458	84	-103	3.5	-6	1.7	4	0.8	3363	5.2	21120
30-45.8069-113.4172-2-12-			0-M34415	78610	-0.09		836	11340	98	258	12.0	31	-2.2	5	1.6	14980	6.9	19020
30-45.7811-113.4078-2-12-			0-M34416	86770	-0.08		793	11900	97	-149	9.3	32	3.5	4	1.4	14520	6.6	22740
30-45.7906-113.4417-2-12-			0-M34417	101300	-0.06		1210	12490	357	-139	12.7	71	1.7	10	1.7	19530	13.0	19240
30-45.7750-113.4511-2-12-			0-M34418	81360	-0.05		926	12270	155	-138	5.4	-9	-1.2	7	1.2	7327	6.2	18280
30-45.7569-113.4583-2-12-			0-M34419	72040	-0.08		690	15460	113	-116	12.7	33	4.2	6	1.4	17100	7.5	14850
30-45.7661-113.5861-2-12-			0-M34420	79520	-0.10		571	33220	105	347	20.6	31	4.4	8	2.4	36990	28.7	15310
30-45.7883-113.6069-2-12-			0-M34421	82930	-0.06		911	15460	165	-144	5.0	-12	-1.6	5	1.3	8566	7.6	18990
30-45.7742-113.5650-2-12-			0-M34422	82850	-0.05		966	11400	198	-150	13.2	33	2.0	8	1.5	15680	8.0	18150
30-45.7200-113.3208-2-12-			0-M34423	89160	-0.05		597	29250	72	-119	7.2	20	2.4	5	1.3	17870	9.9	14820
30-45.7158-113.3117-2-12-			0-M34424	91870	-0.06		567	30980	118	-127	7.9	28	-1.7	8	2.1	24570	22.2	11820
30-45.7044-113.3261-2-12-			0-M34425	84910	-0.06		605	23270	162	-145	5.5	21	-1.5	5	1.6	17410	18.1	14740
30-45.7011-113.3125-2-12-			0-M34426	62470	-0.04		318	12880	59	-93	8.4	21	1.9	5	1.1	10600	11.6	8750
30-45.6578-113.3589-2-12-			0-M34427	89810	-0.05		787	17540	103	232	9.3	15	2.9	6	1.5	15470	8.0	12940
30-45.5336-113.0789-2-12-			0-M34428	73380	-0.06		464	20340	99	-110	7.7	14	3.4	3	1.5	14240	8.0	17970
30-45.5333-113.0817-2-12-			0-M34429	65720	-0.07		486	18570	174	-132	9.3	33	-1.7	7	1.8	61050	30.6	13450
30-45.3144-113.5922-2-12-			0-M34430	44320	-0.08		803	4008	52	-114	14.4	36	-2.0	3	1.0	17870	8.4	11520
30-45.3194-113.5750-2-12-			0-M34431	32580	-0.07		368	-642	39	-64	5.1	-11	-1.4	3	1.0	5960	13.5	14490
30-45.3628-113.6028-2-12-			0-M34432	42340	-0.06		-156	14030	78	-83	10.3	60	-1.6	5	1.8	31810	33.9	10940
30-45.3378-113.6292-2-12-			0-M34433	18070	-0.05		409	8855	53	-72	7.8	39	-1.4	4	1.0	13750	15.2	10830
30-45.3600-113.5583-2-12-			0-M34434	45660	-0.05		431	4301	65	-78	8.2	39	2.6	5	1.2	17480	16.9	11820
30-45.3533-113.5244-2-12-			0-M34435	35030	-0.06		381	3178	46	-81	4.4	19	-1.5	4	1.2	7295	21.3	13370
30-45.3122-113.5272-2-12-			0-M34436	36760	-0.05		504	3925	42	-66	8.5	23	2.4	4	0.9	10330	18.2	10940
30-45.2942-113.5633-2-12-			0-M34437	37930	-0.06		558	-1241	46	-94	13.6	24	1.8	3	0.9	18430	8.4	13010
30-45.2661-113.5919-2-12-			0-M34438	33970	-0.05		-258	-1617	57	-123	9.3	24	1.8	3	1.0	10210	13.1	15450
30-45.2972-113.5175-2-12-			0-M34439	33060	-0.06		658	4035	35	-92	6.5	-12	2.8	3	1.0	10800	27.0	14990
30-45.2542-113.5042-2-12-			0-M34440	28420	-0.03		396	1798	35	89	5.7	23	1.6	3	1.0	6000	13.9	12690
30-45.2628-113.3344-2-12-			0-M34441	41560	-0.04		417	4231	56	101	5.9	28	3.0	5	1.0	6810	13.0	16840
30-45.3958-113.2531-2-12-			0-M34442	49940	-0.05		790	4903	97	-89	8.8	23	3.5	8	1.7	11030	16.7	18280
30-45.3956-113.2519-2-12-			0-M34443	67400	-0.08		653	5764	73	-91	7.4	40	4.9	7	1.6	12060	12.5	20580
30-45.3808-113.2522-2-12-			0-M34444	45330	-0.06		687	7395	117	172	11.0	43	3.9	12	2.4	14020	22.1	17450
30-45.3756-113.2536-2-12-			0-M34445	50050	-0.05		500	-773	168	-76	6.8	49	4.0	11	2.0	20560	56.5	20110
30-45.3617-113.2583-2-12-			0-M34446	61940	-0.06		587	6958	177	-89	7.9	36	5.2	14	2.8	12220	53.6	17620
30-45.3494-113.2533-2-12-			0-M34447	50070	-0.07		474	-630	169	-73	5.1	28	3.1	9	2.0	16470	64.1	21180
30-45.2119-112.8036-2-15-			0-M34448	77200	-0.05		1091	32710	67	-106	15.0	98	-1.5	3	1.2	23860	4.9	13370
30-45.2100-112.7942-2-15-			0-M34449	59020	-0.05		799	29220	74	-96	14.9	45	3.3	4	1.1	59520	10.7	15890

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

4

DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued)																U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	DOE 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	
30-45.9417-113.2897-2-12-			0-M34399			14410	336	18530	39	-2	7.6	10.0	437	-1	-1	14.1	2430	40	3.8	98	1.730	
30-45.9014-113.2083-2-12-			0-M34400			6357	1724	20300	75	-3	6.0	57.5	-614	11	2	200.0	6748	46	12.6	104	0.186	
30-45.9883-113.3617-2-11-			0-M34401			-4974	408	28880	29	-2	2.8	17.2	510	-1	1	37.8	1503	17	5.9	71	0.365	
30-45.9136-113.9406-2-15-			0-M34402			11930	987	8109	-41	-4	15.6	5.2	-479	-10	-1	10.5	5118	62	4.6	-368	0.657	
30-45.9322-113.9706-2-12-			0-M34403			12040	462	23390	37	-2	7.8	10.8	363	-1	1	25.6	3353	45	5.5	123	0.289	
30-45.9044-113.9633-2-12-			0-M34404			10650	760	22230	37	-2	9.2	15.5	-421	-1	2	25.9	3784	56	7.3	133	0.602	
30-45.8875-113.9511-2-12-			0-M34405			11670	383	25210	-30	-3	7.8	8.0	-371	-1	-1	19.5	3543	50	5.9	-98	0.579	
30-45.9297-113.8903-2-12-			0-M34406			10700	904	22780	51	-2	8.4	22.9	-396	-1	2	36.2	5778	82	7.6	115	1.075	
30-45.9383-113.9269-2-12-			0-M34407			13640	661	27490	-27	-3	11.0	40.9	-410	2	3	92.7	7393	97	15.5	98	0.166	
30-45.9386-113.9278-2-12-			0-M34408			-5995	543	29450	-31	-3	7.3	11.2	-435	-1	-1	33.0	3264	38	5.6	125	0.406	
30-45.9500-113.9356-2-12-			0-M34409			12230	365	23600	94	-2	7.8	13.6	-304	2	-1	27.9	4718	39	5.6	110	0.380	
30-45.9636-113.9894-2-12-			0-M34410			15230	503	31090	52	-2	7.0	9.9	480	2	1	25.7	3847	47	6.0	89	0.214	
30-45.9642-113.9892-2-12-			0-M34411			9417	492	31950	-24	-2	8.3	28.1	-401	-2	3	106.3	4481	60	11.3	-67	0.147	
30-45.9931-113.9425-2-12-			0-M34412			9702	554	32680	-33	-2	14.4	6.2	-476	-1	-2	23.2	3135	42	5.3	-113	0.461	
30-45.8586-113.4428-2-12-			0-M34413			12590	402	25110	46	-1	4.6	15.4	469	-1	1	45.7	2637	27	4.7	68	0.210	
30-45.8222-113.4275-2-12-			0-M34414			-4247	229	30010	40	-1	1.7	3.2	687	-1	-1	11.6	-660	-7	2.2	-55	0.284	
30-45.8069-113.4172-2-12-			0-M34415			9245	522	16340	56	-3	7.2	5.0	-494	-1	-1	16.1	2910	32	3.8	152	0.317	
30-45.7811-113.4078-2-12-			0-M34416			10540	577	22660	-33	-2	6.7	4.0	-480	-1	-1	14.0	3387	31	-2.2	75	0.543	
30-45.7906-113.4417-2-12-			0-M34417			15320	340	33290	-26	-2	7.2	15.6	630	-1	1	57.8	4550	55	5.0	77	0.189	
30-45.7750-113.4511-2-12-			0-M34418			-5601	603	32220	42	-1	2.7	7.3	523	-1	-1	24.4	-963	-10	4.1	69	0.426	
30-45.7569-113.4583-2-12-			0-M34419			12470	408	12480	57	-2	9.9	5.2	-418	-1	-1	14.7	3250	61	5.3	134	0.354	
30-45.7661-113.5861-2-12-			0-M34420			25280	2125	19720	51	-3	19.2	8.4	-628	-2	-2	13.7	6453	133	6.2		0.511	
30-45.7883-113.6069-2-12-			0-M34421			-6081	195	31500	-26	-2	3.4	6.9	781	-1	-1	28.3	1885	19	3.9	-38	0.240	
30-45.7742-113.5550-2-12-			0-M34422			-6320	1912	20700	51	-2	6.2	9.3	-603	-1	1	30.6	3451	33	5.5	88	0.157	
30-45.7200-113.3208-2-12-			0-M34423			13910	756	25350	37	-2	10.5	4.9	360	-1	-1	10.1	2845	53	3.8	88	1.366	
30-45.7158-113.3117-2-12-			0-M34424			11820	657	25800	-22	-2	13.8	7.1	-393	2	-1	19.6	5447	70	4.9	89	0.607	
30-45.7044-113.3261-2-12-			0-M34425			-5779	550	31040	-26	-2	5.0	7.7	608	-1	-1	28.5	4520	36	3.7		0.347	
30-45.7011-113.3125-2-12-			0-M34426			8822	256	20800	32	1	6.2	3.8	-267	-1	-1	8.6	2805	35	3.1		0.802	
30-45.6578-113.3589-2-12-			0-M34427			6836	1041	24450	55	-2	6.6	7.6	-515	-1	-1	15.2	2988	36	4.0	89	1.395	
30-45.5336-113.0789-2-12-			0-M34428			5922	565	19600	-21	7	6.4	7.9	-348	2	-1	15.7	3000	44	4.4	292	0.662	
30-45.5333-113.0817-2-12-			0-M34429			-5176	926	20360	-29	-2	6.4	8.0	-459	2	-1	30.9	3894	173	6.4	127	0.288	
30-45.3144-113.5922-2-12-			0-M34430			-5400	1198	6898	-33	-2	4.5	2.0	-581	-2	-1	7.1	-1379	38	-1.9	-97	0.451	
30-45.3194-113.5750-2-12-			0-M34431			5370	98	6978	26	-2	3.2	2.5	-201	-1	-1	6.8	1804	21	2.8		0.529	
30-45.3628-113.6028-2-12-			0-M34432			12680	746	8274	-23	-2	8.4	5.1	-350	-1	-1	10.7	4932	79	5.0	84	0.636	
30-45.3378-113.6292-2-12-			0-M34433			8970	567	7120	-19	-2	6.1	3.5	-305	-1	-1	6.5	1896	45	2.8	-54	0.708	
30-45.3600-113.5583-2-12-			0-M34434			9419	407	7244	-22	2	4.8	3.3	-309	-1	1	8.2	3033	40	3.2	-44	0.476	
30-45.3633-113.5244-2-12-			0-M34435			-3453	167	8533	42	-2	3.2	2.4	-265	-1	-1	6.1	2165	26	2.9	-119	0.492	
30-45.3122-113.5272-2-12-			0-M34436			6138	388	6456	41	-1	3.9	2.4	-272	-1	-1	5.5	2452	25	2.5	61	0.564	
30-45.2942-113.5633-2-12-			0-M34437			9141	1289	6869	-24	-2	4.2	2.5	-492	-1	-1	6.0	2025	41	2.9	-71	0.383	
30-45.2661-113.5919-2-12-			0-M34438			-5372	1765	7478	-20	-2	3.4	2.6	-601	-1	-1	6.3	2932	24	2.1	91	0.444	
30-45.2972-113.5175-2-12-			0-M34439			-4187	921	6842	-25	-2	3.6	1.9	-427	-1	-1	6.2	1886	19	3.6	75	0.710	
30-45.2542-113.5042-2-12-			0-M34440			4928	84	5297	29	1	2.6	2.2	-139	-1	-1	5.2	1650	14	2.2	14	0.519	
30-45.2629-113.3344-2-12-			0-M34441			7094	339	4904	28	2	4.8	3.5	-235	-1	-1	8.3	3231	32	3.7	69	0.410	
30-45.3958-113.2531-2-12-			0-M34442			7304	921	7479	39	-2	5.9	8.1	-412	-1	1	13.0	3107	33	5.6	86	0.346	
30-45.3956-113.2519-2-12-			0-M34443			9631	389	8295	64	-2	7.8	5.2	-350	-1	-1	12.4	3336	47	4.3	-95	0.387	
30-45.3808-113.2522-2-12-			0-M34444			9260	647	10680	49	-2	8.3	10.0	-365	-1	-1	15.2	3959	46	7.8	149	0.454	
30-45.3756-113.2536-2-12-			0-M34445			11260	547	10250	39	2	6.2	10.4	-286	-1	2	29.8	5393	50	7.6	74	0.322	
30-45.3617-113.2583-2-12-			0-M34446			11770	485	10470	53	-2	8.0	12.3	-337	-1	-1	29.6	4055	40	10.1	111	0.324	
30-45.3494-113.2533-2-12-			0-M34447			14190	171	8187	-26	-2	5.5	9.0	-249	-1	-1	27.0	5145	46	8.1		0.363	
30-45.2119-112.8036-2-15-			0-M34448			17920	767	17610	32	-2	10.1	3.2	623	-1	-1	8.1	4734	91	3.1	98	0.222	
30-45.2100-112.7942-2-15-			0-M34449			11190	1094	14320	-23	4	10.8	3.4	341	-1	-1	9.5	8954	255	2.9	126	0.274	

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

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DOE SAMPLE NUMBER						LAST SAMPLE LOCATION NUMBER AND FIELD DATA																							U CONCENTRATION					
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAST SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (umho/cm)	SONTLOMETER (eJ 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																										
30-45.2356-112.7822-2-12-	0-M34450-09/04/75-11-	23-12.0-C-	5.7-	130-	2-4-	-2-6-4-3-1-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60		
30-45.5039-113.6994-2-12-	0-M34451-09/12/75-16-	17-10.5-	5.5-	40-	16-4-	-4-6-3-3-4-2-3-3-2-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.20	
30-45.5697-113.7047-2-12-	0-M34452-09/12/75-16-	17-10.8-	5.5-	70-	22-2-1-4-6-4-3-1-2-1-4-4-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
30-45.5644-113.7044-2-12-	0-M34453-09/12/75-16-	17-10.5-	5.5-	120-	15-2-1-5-6-4-3-1-2-3-3-3-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.30	
30-45.5528-113.7222-2-12-	0-M34454-09/12/75-17-	16-9.5-	5.2-	20-	16-2-1-5-6-3-3-1-2-1-3-3-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.40	
30-45.5456-113.7406-2-12-	0-M34455-09/12/75-17-	17-10.5-	5.2-	55-	11-2-1-5-6-3-3-1-2-1-2-2-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90	
30-45.5428-113.7456-2-12-	0-M34456-09/12/75-17-	17-10.5-	5.2-	250-	16-2-1-5-6-3-3-1-2-1-3-3-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.30	
30-45.5614-113.7675-2-12-	0-M34457-09/12/75-18-	17-10.5-	5.7-	140-	22-2-1-5-6-4-3-1-2-1-3-3-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.20	
30-45.5608-113.7669-2-12-	0-M34458-09/12/75-18-	17-10.5-	5.5-	35-	16-2-1-5-6-3-3-1-2-1-3-3-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.50	
30-45.5542-113.7694-2-12-	0-M34459-09/12/75-19-	16-9.5-	5.2-	80-	22-2-1-4-6-3-3-1-2-1-3-3-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20.60	
30-45.5508-113.7700-2-12-	0-M34460-09/12/75-18-	17-9.5-	5.2-	95-	27-2-1-4-6-3-3-1-2-1-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.10	
30-45.5456-113.7631-2-12-	0-M34461-09/12/75-19-	17-9.5-	5.7-	320-	16-2-1-5-6-3-3-1-2-1-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.30	
30-45.5422-113.8108-2-12-	0-M34462-09/12/75-19-	17-10.5-	5.2-	75-	5-2-1-5-6-3-3-1-2-1-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.60	
30-45.5558-113.0889-2-12-	0-M34463-09/19/75-9-	10-5.8-	5.6-	35-	4-3-1-4-6-3-3-1-2-1-3-3-2-	-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.70	
30-45.5731-113.1139-2-12-	0-M34464-09/19/75-10-	10-6.4-	5.5-	43-	4-3-7-4-6-3-3-1-2-1-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.30	
30-45.5958-113.1042-2-12-	0-M34465-09/19/75-10-	11-7.0-	5.6-	28-	1-3-7-3-6-3-3-1-2-4-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80	
30-45.6158-113.0831-2-12-	0-M34466-09/19/75-10-	11-5.8-	6.0-	87-	4-3-7-3-6-4-3-1-2-1-4-3-2-	-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60	
30-45.5297-113.0614-2-12-	0-M34467-09/19/75-11-	11-8.7-	5.5-	52-	1-3-1-4-6-2-3-1-2-4-4-1-2-	-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34.80	
30-45.5311-113.0478-2-12-	0-M34468-09/19/75-11-	11-9.0-	5.6-	45-	6-3-1- - -2-3-1-1-4-4-1-2-	-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35.00	
30-45.5147-113.0547-2-12-	0-M34469-09/19/75-12-	12-8.8-	5.6-	55-	1-3-6-3-5-3-2-1-2-1-3-2-2-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.60	
30-45.5017-113.0433-2-12-	0-M34470-09/19/75-13-	12-8.0-C-	5.4-	53-	6-3-1-4-5-3-2-1-2-1-3-3-2-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38.00	
30-45.4958-113.2903-2-12-	0-M34471-09/19/75-13-	12-8.8-	5.2-	48-	2-3-1-4-6-4-3-1-2-1-3-3-2-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38.60	
30-45.4897-113.2783-2-12-	0-M34472-09/19/75-14-	12-8.7-C-	5.2-	37-	3-3-1-4-6-3-2-1-2-1-3-2-2-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40.90	
30-45.6364-112.7531-2-12-	0-M34473-09/20/75-12-	15-9.8-	6.3-	22-	6-1-7-4-6-4-3-1-2-3-3-2-2-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60	
30-45.6714-112.8203-2-12-	0-M34474-09/20/75-12-	15-8.3-	6.4-	205-	4-3-7-4-6-3-2-1-2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.00	
30-45.6781-112.8514-2-15-	0-M34475-09/20/75-13-	15- - -	-	-	3-1-7-3-6- - -1- -1-2-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45.6733-112.8903-2-12-	0-M34476-09/20/75-13-	15-9.0-	6.3-	168-	6-1-7-4-6-3-2-1-2-1-2-3-2-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.40	
30-45.6847-112.8944-2-15-	0-M34477-09/20/75-14-	15- - -	-	-	6-2-7-3-6- -1- - -4-3-2-2-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60	
30-45.6653-112.9161-2-15-	0-M34478-09/20/75-14-	15- - -	-	-	6-4- -5-6- -1- - -1-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
30-45.6439-112.8078-2-12-	0-M34479-09/20/75-15-	15-9.5-	6.7-	160-	6-1-7-4-6-3-2-1-2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80	
30-45.6431-112.8078-2-15-	0-M34480-09/20/75-15-	15- - -	-	-	4-1-7-5-6- -1- - -3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
30-45.6450-112.8594-2-12-	0-M34481-09/22/75-15-	15-8.2-	6.0-	175-	1-3-7-4-6-4-3-1-2-1-4-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50	
30-45.5567-113.1447-2-12-	0-M34482-09/22/75-12-	17-8.5-	5.2-	45-	4-2-7-5-6-3-3-2-1-4-3-4-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.10	
30-45.5467-113.1725-2-12-	0-M34483-09/22/75-13-	18-9.5-C-	5.2-	24-	6-2-7-4-6-4-4-4-2-1-3-4-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
30-45.6103-113.1542-2-12-	0-M34484-09/22/75-14-	18-12.0-C-	5.2-	30-	3-2-6-3-6-4-4-4-2-2-3-5-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
30-45.6056-113.1706-2-12-	0-M34485-09/22/75-14-	14-9.0-C-	5.2-	19-	9-2-7-3-6-4-4-4-2-2-4-3-4-	-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
30-45.6019-113.1719-2-12-	0-M34486-09/22/75-15-	14-10.0-C-	5.2-	22-	4-2-6-5-6-4-4-4-2-2-4-3-4-	-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.10	
30-45.6028-113.1725-2-12-	0-M34487-09/22/75-14-	14-11.0-C-	5.2-	24-	3-2-6-6-6-4-4-4-2-2-4-5-4-	-8-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.30	
30-45.7386-113.0253-2-12-	0-M34488-09/24/75-11-	11-9.8-	5.7-	80-	6-4- -4-6-3-4-2-2-1-4-4-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.10	
30-45.7964-113.0306-2-12-	0-M34489-09/24/75-12-	12-8.2-	5.2-	40-	6-4- -3-6-4-4-2-2-1-4-5-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.50	
30-45.8172-113.0417-2-12-	0-M34490-09/24/75-13-	15-9.8-	5.5-	75-	2-3-6-3-6-4-3-2-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.50	
30-45																																		

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

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DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE										ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAB SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per million (ppm)										Be	Li
							Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W			
30-45.2356-112.7822-2-12-						0-M34450	-5	-5	-5	39	-20	21	111	-10	-15		2	28
30-45.5039-113.6994-2-12-						0-M34451	-5	-5	-5	13	-20	-15	5	-10	-15		2	33
30-45.5697-113.7047-2-12-						0-M34452	-5	-5	-5	-10	-20	-15	-5	-10	-15		1	27
30-45.5644-113.7044-2-12-						0-M34453	-5	-5	-5	-10	-20	-15	5	-10	-15		2	34
30-45.5528-113.7222-2-12-						0-M34454	-5	-5	-5	11	-20	-15	-5	-10	-15		1	21
30-45.5456-113.7406-2-12-						0-M34455	-5	-5	-5	13	-20	-15	-5	-10	-15		2	23
30-45.5428-113.7456-2-12-						0-M34456	-5	-5	-5	11	-20	-15	-5	-10	-15		1	41
30-45.5614-113.7675-2-12-						0-M34457	-5	5	-5	12	-20	-15	14	-10	-15		2	36
30-45.5608-113.7669-2-12-						0-M34458	-5	-5	-5	13	-20	-15	11	-10	-15		1	44
30-45.5542-113.7694-2-12-						0-M34459	-5	-5	-5	11	-20	15	16	-10	-15		1	46
30-45.5508-113.7700-2-12-						0-M34460	-5	-5	-5	-10	29	22	9	-10	-15		-1	39
30-45.5456-113.7631-2-12-						0-M34461	-5	-5	-5	20	45	-15	9	-10	-15		2	33
30-45.5422-113.8108-2-12-						0-M34462	-5	-5	-5	-10	35	-15	7	-10	-15		-1	34
30-45.5558-113.0889-2-12-						0-M34463	-5	-5	-5	32	38	-15	10	-10	-15		1	24
30-45.5731-113.1139-2-12-						0-M34464	-5	6	-5	11	-20	-15	-5	-10	-15		-1	11
30-45.5958-113.1042-2-12-						0-M34465	-5	5	-5	22	-20	-15	5	-10	-15		1	30
30-45.6158-113.0831-2-12-						0-M34466	-5	-5	-5	20	-20	-15	14	-10	-15		-1	10
30-45.5297-113.0614-2-12-						0-M34467	18	6	11	382	35	-15	101	10	16		2	9
30-45.5311-113.0478-2-12-						0-M34468	-5	-5	-5	59	-20	-15	119	-10	-15		1	52
30-45.5187-113.0547-2-12-						0-M34469	-5	9	-5	226	-20	-15	148	-10	63		1	30
30-45.5017-113.0433-2-12-						0-M34470	-5	5	-5	556	-20	-15	212	-10	42		2	39
30-45.4958-113.2903-2-12-						0-M34471	-5	-5	6	366	34	-15	59	-10	-15		2	88
30-45.4897-113.2783-2-12-						0-M34472	-5	-5	5	303	37	-15	9	-10	62		2	47
30-45.6364-112.7531-2-12-						0-M34473	14	12	18	362	43	-15	1716	-10	-15		2	19
30-45.6714-112.8203-2-12-						0-M34474	-5	-5	-5	23	-20	-15	13	-10	-15		-1	6
30-45.6781-112.8514-2-15-						0-M34475	-5	-5	-5	49	-20	26	24	-10	-15		2	41
30-45.6733-112.8903-2-12-						0-M34476	-5	-5	-5	20	-20	15	13	-10	-15		-1	7
30-45.6847-112.8944-2-15-						0-M34477	-5	-5	-5	57	-20	30	78	-10	-15		2	40
30-45.6653-112.9161-2-15-						0-M34478	-5	-5	-5	89	-20	21	80	-10	-15		2	45
30-45.6439-112.8078-2-12-						0-M34479	24	16	22	456	-20	18	2209	-10	-15		1	26
30-45.6431-112.8078-2-15-						0-M34480	-5	7	-5	41	22	22	75	-10	-15		2	28
30-45.6450-112.8594-2-12-						0-M34481	30	37	27	728	-20	-15	3187	-10	-15		1	29
30-45.5567-113.1447-2-12-						0-M34482	-5	-5	-5	21	-20	-15	5	-10	-15		2	46
30-45.5467-113.1725-2-12-						0-M34483	-5	-5	-5	22	-20	-15	9	-10	-15		1	25
30-45.6103-113.1542-2-12-						0-M34484	-5	-5	-5	27	35	-15	23	-10	-15		1	21
30-45.6056-113.1706-2-12-						0-M34485	-5	-5	-5	20	-20	-15	7	-10	-15		1	31
30-45.6019-113.1719-2-12-						0-M34486	-5	-5	-5	36	-20	-15	-5	-10	-15		1	21
30-45.6028-113.1725-2-12-						0-M34487	-5	-5	-5	33	-20	18	22	-10	-15		2	33
30-45.7886-113.0253-2-12-						0-M34488	-5	-5	-5	25	-20	-15	6	-10	-15		2	16
30-45.7964-113.0306-2-12-						0-M34489	-5	-5	-5	12	-20	-15	12	-10	-15		1	37
30-45.8172-113.0417-2-12-						0-M34490	-5	5	-5	-10	-20	-15	14	-10	-15		2	34
30-45.8456-113.0644-2-12-						0-M34491	-5	-5	6	22	-20	-15	14	-10	-15		-1	27
30-45.8661-113.0922-2-12-						0-M34492	-5	-5	-5	26	-20	-15	12	-10	-15		1	42
30-45.8517-113.1269-2-12-						0-M34493	-5	-5	-5	25	-20	16	11	-10	-15		1	43
30-45.8394-113.1375-2-12-						0-M34494	-5	-5	-5	16	-20	-15	21	-10	-15		3	37
30-45.8250-113.1456-2-12-						0-M34495	-5	-5	-5	19	-20	-15	11	-10	-15		3	78
30-45.8225-113.1489-2-12-						0-M34496	-5	-5	5	-10	29	-15	10	-10	-15		1	39
30-45.8508-113.2414-2-12-						0-M34497	-5	-5	-5	26	-20	-15	-5	-10	-15		1	32
30-45.8669-113.2253-2-12-						0-M34498	-5	-5	-5	17	-20	-15	8	-10	-15		-1	34
30-45.8300-113.0147-2-12-						0-M34499	-5	-5	-5	13	-20	-15	11	-10	-15		1	27
30-45.8522-113.0036-2-12-						0-M34500	-5	-5	-5	24	-20	-15	-5	-10	-15		2	52

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

③

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
30-45.2356-112.7822-2-12-						0-M34450	69370	-0.05	770	24610	91	-102	11.0	69	3.4	5	1.3	19300	10.9	17470	29	0.6
30-45.5039-113.6994-2-12-						0-M34451	64590	-0.07	623	5428	59	-89	5.6	23	5.5	4	1.3	10240	7.2	16560	24	0.3
30-45.5697-113.7047-2-12-						0-M34452	50040	-0.04	657	4850	59	-79	9.2	24	3.6	4	0.9	10290	10.6	15360	19	0.4
30-45.5644-113.7044-2-12-						0-M34453	64490	-0.05	627	6433	67	-73	6.1	29	4.9	5	1.0	11670	10.6	16390	23	0.4
30-45.5528-113.7222-2-12-						0-M34454	39450	-0.05	400	5611	68	-59	6.3	25	2.9	5	1.3	10910	23.6	11390	40	0.5
30-45.5456-113.7405-2-12-						0-M34455	42260	-0.05	394	5481	60	-61	5.2	22	3.9	4	1.1	10010	15.3	12290	34	0.5
30-45.5428-113.7455-2-12-						0-M34456	94510	-0.06	863	17730	353	-154	8.0	35	-1.6	9	2.0	12610	10.4	14880	133	0.6
30-45.5614-113.7675-2-12-						0-M34457	92180	-0.07	822	17090	330	-157	6.0	31	-1.9	8	1.8	12320	11.1	15960	139	0.6
30-45.5608-113.7669-2-12-						0-M34458	96500	-0.05	867	17310	290	-137	10.1	33	-1.4	8	1.6	13240	9.6	19710	114	0.5
30-45.5542-113.7694-2-12-						0-M34459	97120	0.12	769	15850	193	-121	7.2	34	3.4	6	1.6	15740	7.5	12930	81	0.4
30-45.5508-113.7700-2-12-						0-M34460	99970	-0.07	898	15780	632	-162	9.0	42	-1.8	14	2.5	13040	13.9	18400	234	0.9
30-45.5456-113.7631-2-12-						0-M34461	75490	-0.07	574	14500	194	-123	6.3	28	2.8	7	1.2	19030	40.9	27310	84	0.7
30-45.5422-113.8108-2-12-						0-M34462	104500	-0.06	1061	13640	109	-136	11.2	41	3.4	4	1.2	17490	7.0	19070	44	0.3
30-45.5558-113.0889-2-12-						0-M34463	74240	-0.07	623	16020	111	-135	12.2	38	3.8	8	1.7	28590	14.2	14040	39	0.8
30-45.5731-113.1139-2-12-						0-M34464	46050	-0.05	406	8487	89	-90	5.7	20	1.4	6	1.1	9522	25.5	9612	33	0.6
30-45.5958-113.1042-2-12-						0-M34465	43250	-0.06	439	3664	51	-95	7.5	24	2.4	3	0.8	12870	12.1	11400	19	0.4
30-45.6158-113.0831-2-12-						0-M34466	34250	-0.04	370	83550	49	130	8.2	18	1.8	4	1.1	15870	20.7	11370	23	0.4
30-45.5297-113.0614-2-12-						0-M34467	62930	-0.07	-221	18280	218	-131	19.6	38	4.6	7	2.4	110300	43.5	8087	92	0.9
30-45.5311-113.0478-2-12-						0-M34468	89110	-0.08	745	25830	130	-145	11.0	32	4.1	6	1.5	20370	13.3	16480	51	0.7
30-45.5187-113.0547-2-12-						0-M34469	68570	-0.06	386	15010	102	-116	5.4	-12	7.4	3	1.4	16640	12.9	16520	47	0.5
30-45.5017-113.0433-2-12-						0-M34470	68310	-0.05	593	16080	79	-119	8.9	-10	5.3	4	1.0	16550	7.8	17370	38	0.3
30-45.4958-113.2903-2-12-						0-M34471	92630	-0.06	642	25520	123	-130	6.7	-10	3.6	5	1.4	22000	10.8	19710	55	0.5
30-45.4897-113.2783-2-12-						0-M34472	101500	-0.06	484	23570	194	-137	8.5	40	3.9	6	1.8	29190	21.1	18490	75	0.9
30-45.6364-112.7531-2-12-						0-M34473	52640	-0.11	483	30920	77	-69	7.3	42	8.3	5	1.3	22170	14.6	12170	54	0.5
30-45.6714-112.8203-2-12-						0-M34474	16390	-0.06	-108	198600	40	-60	5.6	27	-1.2	2	0.4	11150	6.6	5255	25	0.2
30-45.6781-112.8514-2-15-						0-M34475	68820	-0.12	407	26190	70	-98	9.5	74	4.6	5	1.6	23360	6.9	19520	42	0.6
30-45.6733-112.8903-2-12-						0-M34476	13910	-0.05	-94	212100	34	-53	7.0	23	-1.0	2	0.5	9477	3.8	4590	20	0.2
30-45.6847-112.8944-2-15-						0-M34477	71800	-0.08	507	12110	85	-87	10.8	49	4.9	6	1.3	27660	9.1	13540	46	0.6
30-45.6653-112.9161-2-15-						0-M34478	78980	-0.12	744	13910	89	197	14.7	67	7.4	5	1.5	27660	5.9	16560	45	0.5
30-45.6439-112.8078-2-12-						0-M34479	50920	-0.13	444	31810	76	164	9.7	34	185.9	3	1.4	19530	13.0	10440	42	0.5
30-45.6431-112.8078-2-15-						0-M34480	60750	-0.11	803	13540	58	-75	9.7	68	7.3	3	1.2	18410	7.1	16110	34	0.4
30-45.6450-112.8594-2-12-						0-M34481	60960	-0.15	530	39440	84	179	13.1	31	11.8	5	1.3	27270	9.8	12800	49	0.4
30-45.5567-113.1447-2-12-						0-M34482	70720	-0.08	595	7198	80	190	7.9	34	4.3	8	1.7	16660	9.2	14000	48	0.6
30-45.5467-113.1725-2-12-						0-M34483	59080	-0.08	602	8460	101	-105	9.0	33	3.2	5	1.4	12480	11.3	15770	56	0.5
30-45.6103-113.1542-2-12-						0-M34484	41820	-0.11	467	-1851	57	-141	14.9	-17	4.2	3	1.0	22520	9.1	-6943	30	0.6
30-45.6056-113.1706-2-12-						0-M34485	58240	-0.07	545	3423	61	149	11.5	36	3.2	5	1.0	16350	9.1	15830	28	0.5
30-45.6019-113.1719-2-12-						0-M34486	57690	-0.10	552	6907	66	111	12.4	25	4.4	5	1.2	19780	7.5	14110	37	0.5
30-45.6028-113.1725-2-12-						0-M34487	58190	-0.10	436	6274	93	133	11.3	33	3.9	7	1.8	16110	10.0	13810	44	0.5
30-45.7886-113.0253-2-12-						0-M34488	63890	-0.13	666	27530	77	-122	13.2	-19	-2.8	6	1.5	27060	21.7	12760	39	0.6
30-45.7964-113.0306-2-12-						0-M34489	67830	-0.09	1015	18870	99	252	12.4	33	3.7	9	1.3	24820	31.8	16310	48	1.0
30-45.8172-113.0417-2-12-						0-M34490	74450	-0.07	685	23930	91	-103	8.8	16	-1.7	5	1.4	25650	20.3	15730	52	0.5
30-45.8456-113.0644-2-12-						0-M34491	64430	-0.09	591	17630	117	-106	10.5	27	3.5	8	1.7	18650	18.1	15430	57	0.8
30-45.8661-113.0922-2-12-						0-M34492	76050	-0.11	762	19690	133	-125	10.5	33	3.7	8	1.7	22510	12.0	17590	71	0.8
30-45.8517-113.1269-2-12-						0-M34493	75480	-0.09	848	17880	133	-127	14.6	47	3.9	9	1.9	27720	17.4	19560	75	0.9
30-45.8394-113.1375-2-12-						0-M34494	80170	-0.07	727	9943	117	-130	4.3	19	2.1	4	1.3	6392	9.6	20470	73	0.5
30-45.8250-113.1456-2-12-						0-M34495	72720	-0.09	441	20550	145	258	10.6	47	5.0	9	1.1	21860	19.3	13500	100	0.9
30-45.8225-113.1489-2-12-						0-M34496	83460	-0.09	567	28390	254	-149	11.6	34	2.7	11	2.5	32230	22.8	15210	122	1.3
30-45.8508-113.2414-2-12-						0-M34497	76590	-0.13	-285	19450	93	-155	11.0	33	-2.8	5	1.5	26480	11.4	11740	53	0.5
30-45.8669-113.2253-2-12-						0-M34498	59510	-0.05	678	9644	66	-78	8.2	36	3.3	5	1.1	14610	10.2	17210	33	0.5
30-45.8300-113.0147-2-12-						0-M34499	68160	-0.08	623	16240	86	174	10.0	34	3.9	5	1.5	15720	11.2	16190	54	0.6
30-45.8522-113.0036-2-12-						0-M34500	64590	-0.09	642	8866	80	131	8.6	59	5.7	4	1.2	17880	9.1	15210	53	0.5

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

④

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	
30-45.2356-112.7822-2-12-	0-M34450	15920	502	12910	44	-2	8.3	4.6	-369	-1	-1	11.9	3728	67	4.6	187	0.303					
30-45.5039-113.6994-2-12-	0-M34451	6822	252	10570	-24	-2	6.8	2.7	-291	-1	-1	8.2	2737	34	2.9	-62	0.634					
30-45.5697-113.7047-2-12-	0-M34452	7718	562	9896	46	-1	5.1	3.1	-323	-1	-1	6.9	2104	31	2.8		0.464					
30-45.5644-113.7044-2-12-	0-M34453	9647	215	11310	51	1	6.6	3.0	-228	-1	-1	8.2	2649	38	2.7	-66	0.524					
30-45.5528-113.7222-2-12-	0-M34454	6217	250	8338	34	-1	4.7	5.6	-199	-1	1	9.1	2549	31	4.5	56	0.484					
30-45.5456-113.7406-2-12-	0-M34455	6269	227	8512	-18	-2	4.8	4.7	-198	-1	-1	8.7	2435	27	3.2	37	0.448					
30-45.5428-113.7456-2-12-	0-M34456	-6175	425	34410	-22	-2	5.3	17.3	803	-1	1	54.8	3502	33	7.2	108	0.224					
30-45.5614-113.7675-2-12-	0-M34457	-6420	358	33310	-29	-2	6.2	15.5	578	-2	-1	55.2	3340	35	5.8	-71	0.275					
30-45.5608-113.7669-2-12-	0-M34458	9752	424	34050	43	-2	5.5	12.8	600	-1	1	44.1	3361	32	6.4	98	0.329					
30-45.5542-113.7694-2-12-	0-M34459	10240	502	25520	48	-2	6.9	10.2	440	-1	-1	30.5	3868	46	5.9	112	0.675					
30-45.5508-113.7700-2-12-	0-M34460	-6392	497	33380	48	-2	5.6	32.6	1076	-2	3	98.4	5071	40	8.6	128	0.153					
30-45.5456-113.7631-2-12-	0-M34461	11010	454	24930	70	-2	8.2	8.6	-367	-1	-1	31.8	5423	36	5.7	-91	0.324					
30-45.5422-113.8108-2-12-	0-M34462	12540	221	30450	-23	-2	6.7	5.3	467	-1	-1	18.0	4081	53	2.9	77	0.533					
30-45.5558-113.0889-2-12-	0-M34463	13850	1914	12280	-28	-2	14.5	6.0	-603	-1	-1	19.2	4525	80	6.0	178	0.401					
30-45.5731-113.1139-2-12-	0-M34464	4488	344	14140	28	-1	4.0	5.4	-293	-1	-1	12.9	2885	24	4.4	-43	0.333					
30-45.5958-113.1042-2-12-	0-M34465	4422	488	10290	-26	-2	5.2	2.6	-356	-1	1	7.9	2097	28	3.5	121	0.481					
30-45.6158-113.0831-2-12-	0-M34466	126400	250	3350	25	1	5.1	3.0	-231	-1	-1	9.0	2665	49	3.6	62	0.400					
30-45.5297-113.0614-2-12-	0-M34467	-5644	1988	14960	57	6	7.7	9.5	-536	3	-1	38.1	5279	296	6.6	696	0.913					
30-45.5311-113.0478-2-12-	0-M34468	11170	554	21770	53	6	10.5	10.3	-487	-2	-1	16.1	3463	64	5.3	209	2.174					
30-45.5187-113.0547-2-12-	0-M34469	-4853	721	16320	-25	8	4.8	4.7	-418	-1	-1	16.1	2880	48	3.8	504	1.031					
30-45.5017-113.0433-2-12-	0-M34470	7416	1123	16020	47	12	5.4	4.4	-459	-1	-1	10.4	2532	40	2.7	571	3.654					
30-45.4958-113.2903-2-12-	0-M34471	9652	891	24930	73	2	6.3	7.8	-429	-1	-1	17.1	3364	55	2.8	343	2.257					
30-45.4897-113.2783-2-12-	0-M34472	10910	596	25050	-26	-2	7.0	12.0	-443	-1	-1	23.4	4151	82	6.3	313	1.748					
30-45.6364-112.7531-2-12-	0-M34473	25280	583	7327	-28	308	10.1	5.4	-282	-2	2	11.1	3479	92	2.6	4055	0.324					
30-45.6714-112.8203-2-12-	0-M34474	197400	172	2595	-21	-2	3.7	2.9	-230	-1	-1	6.5	1598	42	2.1	66	0.146					
30-45.6781-112.8514-2-15-	0-M34475	26620	1070	6515	-45	-4	10.2	6.9	-503	-2	-2	11.2	3553	65	5.0	-322	0.232					
30-45.6733-112.8903-2-12-	0-M34476	206600	172	1786	-16	2	3.8	2.1	302	-1	-1	4.2	1097	34	1.4	68	0.333					
30-45.6847-112.8944-2-15-	0-M34477	18020	1286	6098	-27	4	11.1	6.4	-430	-1	-1	12.7	4305	77	5.5	249	0.283					
30-45.6653-112.9161-2-15-	0-M34478	40460	1585	7433	81	13	12.0	6.4	-662	-2	-2	13.4	5180	86	5.5	409	0.231					
30-45.6439-112.8078-2-12-	0-M34479	29420	623	7665	-30	342	9.7	5.8	-354	-1	4	11.2	3461	89	-3.3	4786	0.339					
30-45.6431-112.8078-2-15-	0-M34480	23470	521	4001	-41	7	9.4	4.9	-371	-2	-1	8.1	3682	141	-2.9	219	0.407					
30-45.6450-112.8594-2-12-	0-M34481	41320	950	10780	-36	570	13.1	5.6	-425	-2	3	9.7	4091	128	4.8	5275	0.361					
30-45.5567-113.1447-2-12-	0-M34482	12390	320	14340	42	-3	9.0	8.2	-314	-2	-1	13.0	3753	48	5.3	106	0.469					
30-45.5467-113.1725-2-12-	0-M34483	5922	462	13770	55	-2	5.9	7.4	-366	-1	-1	16.0	3007	32	4.2	-80	0.194					
30-45.6103-113.1542-2-12-	0-M34484	-6696	1941	8809	-46	-3	5.7	3.5	-734	-3	-1	7.4	2754	38	4.7	144	0.459					
30-45.6056-113.1706-2-12-	0-M34485	13320	275	12390	46	-2	7.1	4.8	-295	-1	-1	8.8	3484	41	-1.8	-48	0.364					
30-45.6019-113.1719-2-12-	0-M34486	4798	799	10640	-36	-3	7.1	5.2	-469	-2	-1	9.0	2704	46	3.8	-80	0.567					
30-45.6028-113.1725-2-12-	0-M34487	8950	374	10890	49	-3	6.5	8.1	-371	-1	-1	11.6	3275	41	4.2	-80	0.457					
30-45.7986-113.0253-2-12-	0-M34488	17690	779	12940	-44	-4	17.3	5.3	-470	-2	-1	7.8	4848	91	5.0	206	0.782					
30-45.7964-113.0306-2-12-	0-M34489	18820	541	13130	-28	-3	13.2	7.9	-353	-1	-1	13.5	5016	78	5.9	116	0.630					
30-45.8172-113.0417-2-12-	0-M34490	12920	562	18710	-23	-2	10.9	7.1	-332	-1	-1	14.1	4993	82	3.7	62	0.603					
30-45.8456-113.0644-2-12-	0-M34491	9867	569	13300	43	-3	10.0	9.2	-376	-1	-1	17.8	4176	55	6.8	103	0.640					
30-45.8661-113.0922-2-12-	0-M34492	26610	494	14860	-40	-3	9.2	9.4	-467	-2	-2	19.1	3698	58	6.3	-153	0.581					
30-45.8517-113.1269-2-12-	0-M34493	16070	1672	13150	47	-3	11.0	12.6	-576	-1	-1	25.5	4574	74	5.4	143	0.502					
30-45.8394-113.1375-2-12-	0-M34494	-5369	218	31090	56	-2	3.0	6.7	-335	-1	-1	16.8	1517	24	4.0	-1	0.280					
30-45.8250-113.1456-2-12-	0-M34495	21900	591	19140	64	-3	12.7	12.4	-367	-1	1	30.8	5259	71	7.8	109	0.782					
30-45.8225-113.1489-2-12-	0-M34496	21120	1079	23150	-32	-3	10.7	21.6	-518	-2	2	36.1	5133	90	10.6	129	0.371					
30-45.8508-113.2414-2-12-	0-M34497	15520	1244	16270	-50	-4	10.8	4.6	-625	-3	-1	14.3	4543	77	-3.0	-151	0.524					
30-45.8669-113.2253-2-12-	0-M34498	13280	344	14160	48	-2	5.4	5.6	-255	-1	-1	12.2	3046	41	4.4	63	0.320					
30-45.8300-113.0147-2-12-	0-M34499	13020	552	12320	-28	-3	8.3	7.8	-392	-1	-1	11.4	3102	57	3.9	127	0.474					
30-45.8522-113.0036-2-12-	0-M34500	16920	602	6422	62	-3	9.0	4.8	-358	-2	-1	10.3	3296	86	2.9	122	0.359					

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

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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 (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
							DATE	HOUR																										
30-45.9500-113.4208-2-12-						0-M34501-03/19/75-17-			15	9.0	-	-	5.2	700	-	2-3-1-1-3-6-3-3-1-2-1-4-4-3-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17.00	
30-45.9500-113.4200-2-12-						0-M34502-03/19/75-17-			18	10.1	-	-	5.5	37	-	4-3-1-1-5-8-3-2-2-2-1-3-4-3-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	84.40
30-45.9269-113.4064-2-12-						0-M34503-03/19/75-19-			16	12.0	-	-	5.2	52	-	7-3-1-1-6-8-3-3-1-2-1-4-4-3-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.10
30-45.9261-113.4081-2-12-						0-M34504-03/19/75-19-			14	10.9	-	-	5.2	55	-	4-3-1-1-3-6-4-3-1-2-1-4-4-3-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18.20
30-45.9792-113.3417-2-12-						0-M34505-03/19/75-17-			12	9.5	-	-	5.2	32	-	3-3-1-1-4-6-3-2-1-2-1-3-4-2-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	130.50
30-45.9758-113.3306-2-12-						0-M34506-03/19/75-17-			14	9.5	-	-	5.2	32	-	3-3-1-1-5-8-3-2-1-2-1-3-4-2-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	108.50
30-45.9717-113.3117-2-12-						0-M34507-03/19/75-18-			15	9.0	-	-	5.2	31	-	6-3-1-1-4-6-3-2-1-2-1-3-4-2-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26.30
30-45.9708-113.3125-2-12-						0-M34508-03/19/75-18-			12	9.0	-	-	5.2	35	-	1-3-1-1-4-6-3-2-1-2-1-3-4-2-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	98.00
30-45.9539-113.2511-2-12-						0-M34509-03/20/75-10-			16	8.2	-	-	5.2	32	-	1-3-1-1-4-6-3-2-1-2-1-3-4-3-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32.30
30-45.9494-113.2533-2-12-						0-M34510-03/20/75-11-			13	9.1	-	-	5.2	38	-	3-4-1-1-4-6-3-2-1-2-3-4-4-3-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	37.00
30-45.9394-113.2403-2-12-						0-M34511-03/20/75-13-			20	18.0	-	-	5.2	57	-	1-4-9-6-8-2-2-2-4-3-4-3-1-2-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.50
30-45.9403-113.2392-2-12-						0-M34512-03/20/75-13-			18	11.4	-	-	5.2	41	-	3-4-1-1-4-6-3-3-1-2-3-4-2-3-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39.00
30-45.8475-112.8486-2-12-						0-M34513-03/23/75-14-			12	13.5	-	-	6.1	340	-	0-4-5-8-4-4-4-4-2-1-4-5-4-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.30
30-45.7819-112.8558-2-12-						0-M34514-03/23/75-16-			14	10.0	-	-	5.7	115	-	4-3-7-4-7-4-4-4-2-1-3-5-4-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.70
30-45.9653-112.7903-2-12-						0-M34515-03/24/75-14-			20	12.8	-	-	5.9	140	-	0-3-7-3-7-3-4-2-2-1-3-5-2-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.40
30-45.9097-112.7792-2-12-						0-M34517-03/24/75-15-			23	11.6	-	-	5.8	150	-	2-3-7-3-7-4-4-2-2-1-3-4-2-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.50
30-45.9078-112.7819-2-12-						0-M34518-03/24/75-15-			22	13.2	-	-	5.8	170	-	3-3-7-3-7-4-4-1-2-1-3-4-2-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.30
30-45.9056-112.7903-2-12-						0-M34519-03/24/75-16-			22	13.2	-	-	5.9	150	-	1-3-7-5-6-3-4-4-2-1-3-3-2-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.00
30-45.9069-112.8550-2-12-						0-M34520-03/24/75-16-			21	11.4	-	-	6.1	240	-	4-3-7-3-7-4-4-1-2-1-3-4-2-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.70
30-45.9056-112.8556-2-12-						0-M34521-03/24/75-17-			21	12.8	-	-	5.7	150	-	2-3-7-4-7-4-4-1-2-1-3-4-2-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.80
30-45.9125-112.9222-2-12-						0-M34522-03/24/75-17-			19	11.7	-	-	5.9	245	-	7-3-7-6-6-3-4-1-2-1-3-4-2-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00
30-45.9097-112.9236-2-12-						0-M34523-03/24/75-18-			19	12.3	-	-	5.8	130	-	2-3-7-4-7-3-3-1-2-1-3-4-2-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.50
30-45.8111-112.9333-2-12-						0-M34524-03/25/75-9-			21	11.6	-	-	6.0	200	-	3-3-7-2-7-4-4-1-2-1-3-4-1-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20
30-45.8106-112.9347-2-12-						0-M34525-03/25/75-9-			21	11.8	-	-	6.1	215	-	3-3-7-3-7-3-3-1-2-1-3-4-1-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.20
30-45.8478-112.9928-2-12-						0-M34526-03/25/75-11-			23	13.1	-	-	5.7	165	-	2-3-7-3-7-4-3-1-2-1-3-4-1-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.00
30-45.8583-112.8667-2-12-						0-M34527-03/25/75-12-			24	14.1	-	-	6.3	285	-	0-3-7-3-7-2-3-1-1-1-3-4-1-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.10
30-45.8583-112.8661-2-12-						0-M34528-03/25/75-12-			24	11.8	-	-	5.8	180	-	3-3-7-3-7-4-3-1-2-1-3-4-1-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30
30-45.7764-112.8922-2-15-						0-M34529-03/25/75-13-			23	-	-	-	-	-	-	0-3-7-3-6-1-1-3-3-4-2-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00
30-45.7750-112.8611-2-15-						0-M34530-03/25/75-13-			23	-	-	-	-	-	-	1-3-7-3-7-1-1-3-3-4-2-2-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.50
30-45.7819-112.7867-2-12-						0-M34531-03/25/75-13-			23	13.7	-	-	6.6	550	-	1-4-5-6-2-3-1-1-4-3-3-2-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70
30-45.7819-112.7861-2-15-						0-M34532-03/25/75-13-			23	-	-	-	-	-	-	4-4-4-7-1-1-4-3-4-2-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50
30-45.7700-112.9556-2-12-						0-M34534-03/25/75-14-			23	12.2	-	-	6.8	430	-	2-3-7-4-6-4-3-1-2-4-3-4-2-1-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80
30-45.6158-113.4292-2-15-						0-M34535-03/26/75-11-			15	-	-	-	-	-	-	9-4-3-6-1-1-2-3-2-3-2-3-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.60
30-45.6022-113.3867-2-12-						0-M34536-03/26/75-11-			16	9.5	-	-	5.7	50	-	9-2-3-4-6-3-3-1-2-4-3-3-2-3-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.50
30-45.6011-113.3289-2-12-						0-M34537-03/26/75-12-			16	9.5	-	-	5.5	40	-	14-2-1-4-6-3-3-1-2-2-3-4-2-3-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.40
30-45.6003-113.3292-2-12-						0-M34538-03/26/75-12-			17	9.5	-	-	5.5	37	-	14-2-1-4-6-3-3-1-2-2-3-3-2-3-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.70
30-45.6008-113.3356-2-12-						0-M34539-03/26/75-12-			16	10.0	-	-	5.7	45	-	14-2-1-4-6-3-3-1-2-2-3-3-2-3-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.90
30-45.5992-113.3417-2-15-						0-M34540-03/26/75-12-			17	-	-	-	-	-	-	28-2-7-4-6-1-1-2-4-4-3-2-8-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.10
30-45.5994-113.3622-2-12-						0-M34541-03/26/75-13-			17	9.5	-	-	5.7	40	-	18-2-7-4-6-3-3-1-2-1-3-3-2-8-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.70
30-45.5622-113.3917-2-15-						0-M34542-03/26/75-13-			18	-	-	-	-	-	-	14-2-7-4-6-1-1-2-3-2-3-2-3-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40
30-45.5981-113.4183-2-15-						0-M34543-03/26/75-14-			18	-	-	-	-	-	-	14-2-1-4-6-1-1-2-3-3-3-2-3-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60
30-45																																		

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

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DOE SAMPLE NUMBER						DOE SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE										ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Concentrations reported in weight parts per million (ppm)										Concentrations in weight ppm	
							Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li	
30-45.9500-113.4208-2-12-						0-M34501	-5	-5	-5	21	-20	16	16	-10	-15		2	112
30-45.9500-113.4200-2-12-						0-M34502	-5	5	-5	29	-20	-15	17	-10	-15		2	147
30-45.9269-113.4064-2-12-						0-M34503	-5	-5	-5	19	-20	-15	-5	-10	-15		2	106
30-45.9261-113.4081-2-12-						0-M34504	-5	-5	-5	14	-20	-15	5	-10	-15		2	95
30-45.9792-113.3417-2-12-						0-M34505	-5	-5	-5	32	-20	-15	20	-10	-15		4	102
30-45.9758-113.3306-2-12-						0-M34506	-5	-5	-5	33	-20	-15	26	-10	-15		3	103
30-45.9717-113.3117-2-12-						0-M34507	-5	-5	-5	38	31	-15	17	-10	-15		7	79
30-45.9708-113.3125-2-12-						0-M34508	-5	-5	-5	27	-20	-15	23	-10	-15		6	93
30-45.9539-113.2511-2-12-						0-M34509	-5	-5	-5	-10	39	-15	22	-10	-15		5	71
30-45.9494-113.2533-2-12-						0-M34510	-5	-5	-5	21	42	-15	18	-10	-15		5	106
30-45.9394-113.2403-2-12-						0-M34511	-5	5	-5	44	32	-15	13	-10	-15		1	5
30-45.9403-113.2392-2-12-						0-M34512											6	78
30-45.8475-112.8486-2-12-						0-M34513	-5	-5	-5	52	-20	20	5	-10	-15		2	15
30-45.7819-112.8558-2-12-						0-M34514	-5	-5	-5	16	4	-15	-5	-10	-15		2	15
30-45.9653-112.7903-2-12-						0-M34515	-5	-5	-5	29	36	-15	16	-10	-15		2	23
30-45.9097-112.7792-2-12-						0-M34517	-5	5	-5	79	-20	-15	29	-10	-15		3	102
30-45.9078-112.7819-2-12-						0-M34518	-5	-5	-5	47	-20	-15	-5	-10	-15		2	21
30-45.9056-112.7903-2-12-						0-M34519	-5	5	-5	27	31	-15	5	-10	-15		2	25
30-45.9069-112.8550-2-12-						0-M34520	8	-5	6	16	38	-15	-5	-10	-15		2	27
30-45.9056-112.8556-2-12-						0-M34521	-5	6	-5	21	40	-15	15	-10	-15		1	30
30-45.9125-112.9222-2-12-						0-M34522	-5	-5	-5	39	-20	-15	10	-10	-15		2	27
30-45.9097-112.9236-2-12-						0-M34523	-5	-5	-5	30	20	-15	5	-10	-15		2	20
30-45.8111-112.9333-2-12-						0-M34524	-5	-5	-5	26	-20	26	12	-10	-15		2	18
30-45.8106-112.9347-2-12-						0-M34525	-5	-5	-5	36	37	-15	19	-10	-15		2	45
30-45.8478-112.9928-2-12-						0-M34526	-5	-5	-5	16	-20	-15	15	-10	-15		2	28
30-45.3583-112.8667-2-12-						0-M34527	-5	-5	-5	17	-20	-15	5	-10	-15		3	24
30-45.8583-112.8661-2-12-						0-M34528	-5	-5	-5	20	-20	-15	12	-10	-15		2	20
30-45.7764-112.8922-2-15-						0-M34529	-5	-5	-5	17	-20	-15	27	-10	-15		2	38
30-45.7750-112.8611-2-15-						0-M34530	-5	-5	-5	19	-20	-15	24	-10	-15		1	12
30-45.7819-112.7867-2-12-						0-M34531	-5	-5	-5	33	-20	-15	10	-10	-15		1	21
30-45.7819-112.7861-2-15-						0-M34532	-5	-5	-5	21	-20	-15	10	-10	-15		2	11
30-45.7700-112.9556-2-12-						0-M34534	-5	-5	-5	23	20	28	5	-10	-15		3	12
30-45.6158-113.4292-2-15-						0-M34535	-5	-5	-5	25	-20	-15	11	-10	-15		2	18
30-45.6022-113.3867-2-12-						0-M34536	-5	-5	-5	25	-20	-15	-5	-10	-15		2	15
30-45.6011-113.3289-2-12-						0-M34537	-5	5	-5	16	-20	-15	14	-10	-15		3	27
30-45.6003-113.3292-2-12-						0-M34538	-5	-5	-5	-10	-20	-15	15	-10	-15		2	16
30-45.6008-113.3356-2-12-						0-M34539	-5	-5	-5	13	-20	-15	13	-10	-15		2	14
30-45.5992-113.3417-2-15-						0-M34540	-5	-5	-5	12	-20	-15	10	-10	-15		2	29
30-45.5994-113.3622-2-12-						0-M34541	-5	-5	-5	10	-20	-15	11	-10	-15		1	24
30-45.5622-113.3917-2-15-						0-M34542	-5	-5	-5	16	-20	-15	10	-10	-15		1	19
30-45.5981-113.4183-2-15-						0-M34543	-5	-5	-5	16	-20	-15	14	-10	-15		1	14
30-45.6025-113.4381-2-12-						0-M34544	-5	-5	-5	20	-20	-15	7	-10	-15		-1	16
30-45.6019-113.4400-2-12-						0-M34545	-5	-5	-5	19	-20	-15	8	-10	-15		-1	15
30-45.5781-113.4486-2-12-						0-M34546	-5	-5	-5	18	-20	21	14	-10	-15		1	18
30-45.5778-113.4494-2-15-						0-M34547	-5	-5	-5	11	-20	-15	13	-10	-15		-1	20
30-45.5639-113.4181-2-12-						0-M34548	-5	-5	-5	14	-20	15	5	-10	-15		1	18
30-45.5631-113.4175-2-12-						0-M34549	-5	-5	-5	17	-20	-15	14	-10	-15		1	16
30-45.9228-113.2192-2-12-						0-M34550	-5	-5	-5	27	-20	-15	15	-10	19		3	40
30-45.9222-113.2256-2-12-						0-M34551	-5	-5	-5	29	-20	-15	11	-10	-15		3	87
30-45.8794-113.1989-2-12-						0-M34552	-5	-5	-5	27	-20	-15	25	-10	-15		3	34
30-45.8767-113.2444-2-12-						0-M34554	-5	-5	-5	21	-20	-15	11	-10	-15		5	20

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

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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
30-45.9500-113.4208-2-12-						0-M34501	53610	-0.07	510	20300	84	-78	10.3	32	5.7	5	1.0	14250	7.5	13330	52	0.5
30-45.9500-113.4200-2-12-						0-M34502	71690	-0.10	504	13240	80	201	9.3	29	4.7	5	1.4	14410	4.7	12230	78	0.4
30-45.9269-113.4064-2-12-						0-M34503	45160	-0.06	455	18750	117	-72	8.3	24	5.8	5	1.1	11580	10.5	10390	63	0.5
30-45.9261-113.4081-2-12-						0-M34504	46620	-0.08	480	18270	135	-90	7.9	33	5.5	6	1.4	11630	13.6	10910	67	0.7
30-45.9792-113.3417-2-12-						0-M34505	30050	-0.10	630	15310	123	-140	5.9	30	8.8	2	1.4	9914	8.4	20550	135	0.6
30-45.9758-113.3306-2-12-						0-M34506	70800	-0.08	763	15410	120	-134	10.5	28	10.4	3	1.3	12380	6.9	19600	125	0.6
30-45.9717-113.3117-2-12-						0-M34507	67460	-0.10	467	9730	118	-103	10.2	31	11.6	6	1.2	20290	9.5	14130	72	0.5
30-45.9708-113.3125-2-12-						0-M34508	84700	-0.09	657	13400	163	-127	7.7	26	11.8	4	1.4	12600	7.5	19330	140	1.0
30-45.9539-113.2511-2-12-						0-M34509	85550	-0.07	460	14160	244	-147	3.5	26	6.8	3	0.8	12590	9.9	16450	156	0.2
30-45.9494-113.2533-2-12-						0-M34510	84190	-0.07	497	11830	126	-112	8.7	34	8.1	4	0.8	13370	8.4	25170	80	0.4
30-45.9394-113.2403-2-12-						0-M34511	40220	-0.13	471	12090	50	-112	10.0	-20	2.7	4	0.8	8608	2.9	-3641	34	-0.2
30-45.9403-113.2392-2-12-						0-M34512	81940	-0.10	515	12600	83	-141	11.0	31	10.7	4	1.2	14180	7.5	22330	61	0.4
30-45.8475-112.8486-2-12-						0-M34513	62120	-0.12	508	27710	48	177	10.9	54	3.9	4	1.0	20030	5.0	6341	32	-0.2
30-45.7819-112.8558-2-12-						0-M34514	69870	-0.08	510	36890	95	309	15.5	42	-1.8	5	1.3	45810	14.9	14220	50	0.5
30-45.9653-112.7903-2-12-						0-M34515	81070	-0.08	763	24520	61	-127	9.9	53	7.1	4	1.1	16770	6.4	17830	35	0.5
30-45.9097-112.7792-2-12-						0-M34517	75830	-0.06	799	7162	77	-98	6.3	31	9.7	2	0.9	11460	8.0	25590	48	0.2
30-45.9078-112.7819-2-12-						0-M34518	73490	-0.14	350	33650	95	-142	14.0	-21	-3.1	5	1.5	31810	16.7	12800	46	0.5
30-45.9056-112.7903-2-12-						0-M34519	79920	-0.10	520	31900	92	208	15.3	40	8.7	6	1.1	28400	13.5	10620	49	0.6
30-45.9069-112.8550-2-12-						0-M34520	70600	-0.10	-194	39630	113	-120	14.3	42	5.5	7	2.4	48310	47.0	11590	65	1.0
30-45.9056-112.8556-2-12-						0-M34521	76090	-0.12	448	36290	137	194	15.1	-18	6.1	8	1.5	33470	42.2	10070	67	0.9
30-45.9125-112.9222-2-12-						0-M34522	69020	-0.11	525	11820	129	-103	11.8	59	5.5	4	1.4	21840	8.5	10540	68	0.4
30-45.9097-112.9236-2-12-						0-M34523	75740	-0.09	609	26260	97	167	15.1	45	4.8	7	1.3	31910	28.8	15750	60	0.8
30-45.8111-112.9333-2-12-						0-M34524	68700	-0.07	611	33690	77	-94	10.0	48	5.1	4	1.1	21750	8.8	9669	42	0.4
30-45.8106-112.9347-2-12-						0-M34525	71400	-0.09	732	10530	120	-80	8.5	48	8.3	10	1.8	15030	9.4	14570	67	0.8
30-45.8478-112.9928-2-12-						0-M34526	53220	-0.09	402	9186	75	-73	6.9	37	4.7	5	1.0	12820	13.6	13160	56	0.5
30-45.8583-112.8667-2-12-						0-M34527	79410	-0.11	321	37320	114	-129	19.1	46	4.9	7	1.6	58180	26.4	10140	69	0.7
30-45.8583-112.8661-2-12-						0-M34528	71150	-0.07	516	31310	84	-92	7.9	45	3.5	4	1.1	20910	9.0	11010	48	0.3
30-45.7764-112.8922-2-15-						0-M34529	61230	-0.08	734	53650	81	-89	8.1	57	11.0	4	1.3	15970	10.0	12620	46	0.3
30-45.7750-112.8611-2-15-						0-M34530	44410	-0.09	598	167400	38	138	6.8	35	6.0	3	0.9	15210	2.6	10610	20	0.2
30-45.7819-112.7867-2-12-						0-M34531	67820	-0.08	705	34030	75	160	13.5	40	3.3	4	1.2	28440	9.1	14540	37	0.4
30-45.7819-112.7861-2-15-						0-M34532	68980	-0.07	450	35350	85	93	10.1	25	2.8	4	1.1	29540	9.0	11480	44	0.3
30-45.7700-112.9556-2-12-						0-M34534	59320	-0.08	497	16390	119	-126	17.2	77	2.6	4	1.5	41350	14.1	12280	63	0.5
30-45.6158-113.4292-2-15-						0-M34535	78440	-0.09	373	15560	185	-129	7.6	24	-1.8	6	1.3	20960	13.3	16520	106	0.4
30-45.6022-113.3867-2-12-						0-M34536	73870	-0.08	675	17400	114	-122	11.7	30	3.0	5	1.2	21110	10.2	14580	63	0.5
30-45.6011-113.3289-2-12-						0-M34537	85790	0.09	386	25590	364	-117	7.0	15	1.2	8	2.2	17760	15.4	14780	215	0.7
30-45.6003-113.3292-2-12-						0-M34538	91390	-0.06	523	29180	170	-120	4.2	-8	-1.2	6	1.4	12360	12.8	15650	97	0.5
30-45.6008-113.3356-2-12-						0-M34539	92080	-0.07	454	29990	191	-139	6.2	-11	-1.3	6	1.4	11470	17.4	14170	99	0.5
30-45.5992-113.3417-2-15-						0-M34540	91000	-0.10	406	24710	145	-175	8.1	-16	-2.1	5	1.5	17070	11.7	12120	91	0.4
30-45.5994-113.3622-2-12-						0-M34541	93960	-0.06	583	27330	223	-130	7.9	19	1.4	7	1.4	14750	15.5	14320	134	0.5
30-45.5622-113.3917-2-15-						0-M34542	70470	-0.05	576	15060	82	-96	5.8	16	-1.0	4	0.9	11830	8.1	18010	48	0.3
30-45.5981-113.4183-2-15-						0-M34543	68220	-0.06	577	14010	98	-109	7.2	24	-1.2	4	1.1	12340	10.1	15700	53	0.4
30-45.6025-113.4381-2-12-						0-M34544	55240	-0.11	641	6554	57	-126	9.4	43	-2.4	5	1.2	14420	6.0	13570	29	0.5
30-45.6019-113.4403-2-12-						0-M34545	57820	-0.08	688	6733	68	165	11.9	35	2.8	6	1.2	15770	10.1	13100	37	0.5
30-45.5781-113.4486-2-12-						0-M34546	55970	-0.08	592	5207	64	181	7.4	32	2.6	6	1.2	16620	10.3	10760	35	0.5
30-45.5778-113.4494-2-15-						0-M34547	55630	-0.09	687	6204	76	-108	10.5	48	3.3	5	1.4	18850	15.1	17960	43	0.6
30-45.5639-113.4181-2-12-						0-M34548	51710	-0.10	607	5566	62	-108	8.1	35	-2.1	5	1.4	17250	11.3	13290	34	0.7
30-45.5631-113.4175-2-12-						0-M34549	56500	-0.08	763	5671	60	-103	12.7	33	3.3	5	1.2	13350	8.5	15640	33	0.5
30-45.9228-113.2192-2-12-						0-M34550	79720	-0.07	680	9149	178	-103	6.9	23	5.7	6	1.5	10830	12.1	14080	112	0.4
30-45.9222-113.2255-2-12-						0-M34551	74830	-0.08	791	9799	126	-121	7.2	26	8.6	5	1.2	11210	11.1	17900	83	0.5
30-45.8794-113.1989-2-12-						0-M34552	60120	-0.08	510	16660	188	-117	6.5	29	3.5	6	1.4	19550	22.0	15430	117	0.6
30-45.8767-113.2444-2-12-						0-M34554	48350	-0.05	586	11150	157	-82	6.5	26	5.0	6	1.1	10790	16.9	13700	92	0.6

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

4

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	
30-45.9500-113.4208-2-12-			0-M34501			34117	490	8798	60	2	7.0	7.6	-308	-1	-1	10.9	2499	30	3.6	138	1.560
30-45.9500-113.4200-2-12-			0-M34502			13417	345	12450	68	-3	6.6	14.3	-373	4	-1	10.1	2697	34	-2.4		8.356
30-45.9269-113.4064-2-12-			0-M34503			20417	551	8354	43	-2	6.0	9.4	-290	-1	-1	15.8	1934	27	2.8	93	1.209
30-45.9261-113.4081-2-12-			0-M34504			20767	564	8777	36	-2	5.8	12.2	-351	-1	-1	13.9	2103	29	3.7	91	1.309
30-45.9792-113.3417-2-12-			0-M34505			-6025	201	27810	86	-3	4.6	15.6	-395	-2	-1	31.9	1734	31	-2.4	-104	4.091
30-45.9758-113.3306-2-12-			0-M34506			7054	393	25430	65	-2	5.4	22.8	-396	-2	-1	27.9	2433	38	3.6	166	3.889
30-45.9717-113.3117-2-12-			0-M34507			14940	721	11130	55	-3	7.5	10.8	-408	-2	-1	14.9	3382	40	4.8	161	1.765
30-45.9708-113.3125-2-12-			0-M34508			11460	259	26410	49	-3	5.4	31.4	-358	-1	-1	37.8	2585	36	3.0	120	2.593
30-45.9539-113.2511-2-12-			0-M34509			-5095	430	38060	81	-2	3.7	10.3	-398	3	-1	139.4	4141	29	6.2	106	0.232
30-45.9494-113.2533-2-12-			0-M34510			9939	389	25340	69	-2	6.7	11.2	-328	2	-1	30.7	3293	38	3.3	97	1.205
30-45.9394-113.2403-2-12-			0-M34511			12877	203	9023	-50	-4	4.8	3.5	-361	-3	-1	6.7	1199		-3.2	-82	1.119
30-45.9403-113.2392-2-12-			0-M34512			12610	493	23150	75	-3	6.5	8.4	-438	-2	-1	19.0	3154	39	3.7	154	2.053
30-45.8475-112.8486-2-12-			0-M34513			24622	1092	6503	-43	-4	8.9	3.4	-571	-9	-2	7.4	4227	81	-3.0	-347	0.851
30-45.7819-112.8558-2-12-			0-M34514			30719	1147	18940	27	-3	16.9	8.1	602	1	-1	21.2	5217	172	4.3	123	0.316
30-45.9653-112.7903-2-12-			0-M34515			10890	920	21280	60	-3	9.9	5.0	623	-2	-1	11.9	2998	49	3.2	100	0.958
30-45.9097-112.7792-2-12-			0-M34517			8237	278	20240	95	-2	4.2	5.3	-284	-1	-1	20.1	2203	33	2.5	94	0.423
30-45.9078-112.7819-2-12-			0-M34518			32260	998	16810	-46	-5	23.1	5.2	-531	-1	-2	24.1	3933	142	5.6	-583	0.427
30-45.9056-112.7903-2-12-			0-M34519			28252	1195	18150	36	-3	19.2	7.6	-485	-1	-1	21.7	4772	120	4.9	86	0.599
30-45.9059-112.8550-2-12-			0-M34520			28040	1409	17190	-31	-3	27.4	8.8	-465	-1	1	62.7	4877	171	8.7		0.187
30-45.9056-112.8556-2-12-			0-M34521			31150	1076	17940	-33	-4	24.5	9.3	-499	-2	-2	45.3	4995	108	7.3	146	0.327
30-45.9125-112.9222-2-12-			0-M34522			15840	824	7986	-38	-3	9.7	5.9	-457	-7	-1	8.8	4462	97	3.5	-266	0.455
30-45.9097-112.9236-2-12-			0-M34523			29500	870	14470	72	-3	20.0	9.6	-391	-1	-1	26.5	6049	137	5.4	92	0.434
30-45.8111-112.9333-2-12-			0-M34524			20540	626	14120	58	3	9.3	5.3	410	-1	-1	9.3	3267	78	2.8	-82	0.344
30-45.8106-112.9347-2-12-			0-M34525			10972	501	6376	57	-3	8.1	11.7	-331	-1	1	17.0	3441	55	7.0	-128	0.424
30-45.8478-112.9928-2-12-			0-M34526			9972	429	5114	-28	-3	6.5	4.6	-315	-1	-1	11.7	3585	50	4.0	-44	0.427
30-45.8583-112.8667-2-12-			0-M34527			29572	1193	20180	-35	-3	25.5	10.1	494	-1	-2	45.9	5357	220	9.5	-112	0.198
30-45.8583-112.8661-2-12-			0-M34528			24920	644	13870	-23	-2	9.2	5.5	-330	-1	-1	9.0	3651	79	2.7	89	0.367
30-45.7764-112.8922-2-15-			0-M34529			21430	455	10570	58	16	6.2	5.1	-319	-1	-1	11.4	3218	61	3.0	113	0.263
30-45.7750-112.8611-2-15-			0-M34530			18740	560	7769	-27	9	6.5	2.5	-372	-1	-1	5.3	2212	50	-2.2	-52	0.283
30-45.7819-112.7867-2-12-			0-M34531			20407	706	13690	-27	-2	9.2	4.9	-379	-1	-1	11.0	4342	102	4.4	-75	0.336
30-45.7819-112.7861-2-15-			0-M34532			19017	652	16350	-21	-2	8.5	5.0	671	-1	-1	10.3	3250	105	3.1	-88	0.243
30-45.7700-112.9556-2-12-			0-M34534			15700	1377	13970	-33	-3	7.5	5.6	-502	-1	-1	16.1	4527	114	2.7	103	0.236
30-45.6158-113.4292-2-15-			0-M34535			7478	635	20100	-31	-3	6.2	10.6	-428	-1	-1	40.1	3172	61	6.0	-126	0.140
30-45.6022-113.3867-2-12-			0-M34536			11157	674	18090	46	-2	7.5	7.8	-429	-1	-1	16.0	3832	55	3.7	107	0.469
30-45.6011-113.3289-2-12-			0-M34537			-4705	532	29490	37	-2	5.0	25.5	-346	2	1	74.3	4125	48	5.5	47	0.140
30-45.6003-113.3292-2-12-			0-M34538			-4840	377	31660	42	-2	4.3	10.6	714	-1	-1	30.5	2412	39	5.3	59	0.220
30-45.6008-113.3356-2-12-			0-M34539			-5451	335	31770	-21	-2	4.6	12.8	-379	-1	-1	33.0	3175	30	5.9	60	0.209
30-45.5992-113.3417-2-15-			0-M34540			-7174	732	28030	-37	-3	5.7	9.8	-551	-2	-1	29.2	3135	39	3.5	-97	0.483
30-45.5994-113.3622-2-12-			0-M34541			-5195	436	31850	24	-2	5.3	16.3	464	1	1	47.5	3114	39	5.1		0.183
30-45.5622-113.3917-2-15-			0-M34542			3858	477	20380	37	-1	4.3	5.4	500	1	-1	11.8	2475	41	3.1	76	0.288
30-45.5981-113.4183-2-15-			0-M34543			-4314	495	19740	37	-2	4.3	6.3	-347	-1	-1	12.4	2699	42	4.1	63	0.290
30-45.6025-113.4381-2-12-			0-M34544			-5496	775	10710	-40	-3	7.0	3.1	-518	-2	-1	11.3	3119	36	3.5	154	0.504
30-45.6019-113.4400-2-12-			0-M34545			9943	758	10730	-25	-2	6.9	6.2	-413	-1	-1	10.6	3172	39	3.8	82	0.538
30-45.5781-113.4486-2-12-			0-M34546			2054	733	10240	-26	-2	6.6	5.1	-383	-1	-1	10.7	4033	36	5.6	62	0.579
30-45.5778-113.4494-2-15-			0-M34547			8787	744	10020	-31	-3	6.3	6.4	-448	-1	-1	13.4	4504	40	5.0	-38	0.515
30-45.5639-113.4181-2-12-			0-M34548			-4774	644	10670	-33	-3	6.5	4.6	-435	-2	-1	10.3	3683	33	3.7	75	0.631
30-45.5631-113.4175-2-12-			0-M34549			12490	604	11440	29	-2	6.6	6.1	-381	-1	-1	10.4	3601	32	4.4	-74	0.500
30-45.9228-113.2192-2-12-			0-M34550			10227	473	17410	58	-2	6.1	11.6	-334	2	-1	18.4	2660	26	4.7	-121	0.614
30-45.9222-113.2256-2-12-			0-M34551			-4074	353	22860	57	-2	5.3	13.0	-365	1	-1	26.3	3071	34	4.7	76	1.335
30-45.8794-113.1989-2-12-			0-M34552			7092	565	20970	-26	-2	6.9	14.2	-378	3	-1	35.9	3745	59	5.8	-61	0.454
30-45.8767-113.2444-2-12-			0-M34554			10680	367	15870	28	-1	3.7	9.1	324	1	1	21.0	2800	27	4.1	60	0.224

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

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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 (umho/cm)	SCINTILAMETER (uL/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	8839-113.1431	-2-12-	0-M34555	-09/18/75-13-					12-10.6-	-	-	5.6-	71-	0-4-	-4-7-3-3-1-2-3-3-3-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.30	
30-45	8997-113.2900	-2-12-	0-M34557	-09/18/75-15-					14-13.8-	-	-	5.7-	68-	1-4-	-3-7-4-3-1-2-1-3-4-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.80
30-45	8922-113.2811	-2-12-	0-M34558	-09/18/75-15-					20-11.9-	-	-	5.8-	108-	0-4-	-4-7-3-3-1-2-1-3-4-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.10
30-45	8869-113.1161	-2-12-	0-M34559	-09/18/75-16-					20-11.8-	-	-	5.8-	150-	1-2-7-4-6-4-3-1-2-3-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70	
30-45	8967-113.1064	-2-12-	0-M34560	-09/18/75-16-					20-14.6-	-	-	6.0-	120-	0-1-7-3-7-3-3-1-2-3-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.60	
30-45	9386-113.0947	-2-12-	0-M34561	-09/18/75-17-					20-11.9-	-	-	5.7-	80-	2-2-7-4-6-4-3-1-2-3-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.00	
30-45	9322-113.1014	-2-12-	0-M34562	-09/18/75-17-					19-14.2-	-	-	5.6-	73-	0-4-3-2-7-4-4-4-3-3-4-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50	
30-45	9517-113.1050	-2-12-	0-M34563	-09/18/75-17-					18-12.8-	-	-	5.7-	73-	0-3-7-3-7-4-4-1-2-4-4-2-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.10	
30-45	9536-113.1119	-2-15-	0-M34564	-09/18/75-18-					18-	-	-	-	-	0-2-7-3-7-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.80
30-45	9867-113.1172	-2-12-	0-M34565	-09/18/75-18-					16-11.5-	-	-	5.7-	70-	0-2-7-5-7-2-2-1-1-4-3-3-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90
30-45	9456-113.0542	-2-12-	0-M34566	-09/18/75-19-					16-14.0-	-	-	5.7-	60-	0-1-7-4-6-4-3-1-2-3-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60	
30-45	9353-113.0292	-2-12-	0-M34567	-09/19/75-11-					13- 8.2-C-	-	-	5.6-	51-	-3-7-4-7-4-4-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
30-45	9519-113.0250	-2-12-	0-M34568	-09/19/75-11-					15-14.9-C-	-	-	5.8-	99-	-2-7-3-7-4-4-1-2-3-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45	9733-113.0094	-2-12-	0-M34569	-09/19/75-12-					18-12.1-C-	-	-	5.8-	117-	-2-7-4-7-4-3-1-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.20	
30-45	9736-113.0083	-2-12-	0-M34570	-09/19/75-12-					18-14.1-	-	-	5.9-	120-	-2-7-4-7-4-3-1-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.40	
30-45	9839-113.0272	-2-12-	0-M34571	-09/19/75-13-					18-15.1-C-	-	-	6.2-	208-	-2-7-3-7-4-3-1-2-4-3-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45	9681-113.0819	-2-12-	0-M34572	-09/19/75-13-					21- 9.0-C-	-	-	5.5-	37-	-3-1-3-1-4-3-1-2-1-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.70	
30-45	9661-113.0783	-2-12-	0-M34573	-09/19/75-13-					21-15.0-C-	-	-	6.4-	250-	-1-7-3-7-4-3-1-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80	
30-45	9806-113.0136	-2-12-	0-M34574	-09/19/75-13-					19-13.9-	-	-	6.1-	189-	4-2-1-3-7-4-3-1-2-3-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25.60	
30-45	9872-113.0047	-2-12-	0-M34575	-09/19/75-14-					19-14.1-	-	-	5.7-	95-	5-1-7-3-7-3-3-1-1-3-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00	
30-45	9756-112.9850	-2-12-	0-M34576	-09/19/75-15-					19-17.9-	-	-	5.9-	110-	5-2-4-3-6-3-3-1-2-3-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70	
30-45	9919-112.9811	-2-12-	0-M34577	-09/19/75-15-					20-12.0-	-	-	5.8-	103-	4-2-1-3-6-4-3-1-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80	
30-45	9833-112.8139	-2-12-	0-M34578	-09/19/75-17-					24-11.5-	-	-	6.1-	245-	5-3-7-2-7-4-3-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.00	
30-45	9911-112.8089	-2-12-	0-M34579	-09/19/75-19-					21-13.1-	-	-	5.7-	115-	4-3-7-3-7-4-3-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.30	
30-45	9814-112.8036	-2-12-	0-M34580	-09/19/75-19-					20-13.9-	-	-	5.9-	160-	4-3-7-3-7-3-3-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.10	
30-45	9656-112.8394	-2-12-	0-M34582	-09/19/75-19-					18-10.0-C-	-	-	5.8-	120-	4-3-7-3-6-4-3-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.70	
30-45	9653-112.8392	-2-12-	0-M34583	-09/19/75-19-					18-11.9-	-	-	5.7-	118-	4-1-7-4-6-3-3-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.40	
30-45	9864-112.8733	-2-12-	0-M34584	-09/19/75-19-					15- 3.5-	-	-	6.1-	250-	3-1-7-3-7-4-3-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.20	
30-45	9861-112.8736	-2-12-	0-M34585	-09/19/75-19-					16-12.2-	-	-	5.9-	148-	4-1-7-3-7-3-3-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45	8764-112.8553	-2-12-	0-M34587	-09/20/75-12-					19-10.3-	-	-	5.9-	190-	4-3-7-2-7-4-3-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60	
30-45	8761-112.8547	-2-12-	0-M34588	-09/20/75-12-					19-11.4-	-	-	6.3-	320-	4-3-7-2-7-4-3-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80	
30-45	8500-112.6917	-2-12-	0-M34589	-09/20/75-13-					21- -C-	-	-	-	-	-1-7-4-7-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.10
30-45	8289-112.7053	-2-15-	0-M34590	-09/20/75-14-					23- -C-	-	-	-	-	-1-7-4-7-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40
30-45	8028-112.7458	-2-15-	0-M34591	-09/20/75-14-					23-	-	-	-	-	-1-7-4-7-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.30
30-45	8875-112.7733	-2-12-	0-M34592	-09/20/75-15-					24-14.0-	-	-	6.5-	335-	2-3-7-3-7-2-3-1-1-1-3-5-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.20	
30-45	8844-112.7917	-2-12-	0-M34593	-09/20/75-15-					20- 9.9-	-	-	5.9-	135-	4-3-7-3-7-4-3-1-2-1-3-5-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.10	
30-45	8847-112.7917	-2-12-	0-M34594	-09/20/75-15-					19-10.3-	-	-	5.9-	152-	4-3-7-3-7-3-3-1-2-1-3-5-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.90	
30-45	7933-112.9028	-2-12-	0-M34595	-09/23/75-13-					12- 8.8-	-	-	5.9-	200-	2-4- -4-6-4-4-1-2-3-3-4-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50	
30-45	8264-112.8836	-2-12-	0-M34596	-09/23/75-13-					12-10.8-	-	-	5.9-	140-	7-1-7-3-6-4-4-4-2-1-3-5-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.10	
30-45	8361-112.8733	-2-12-	0-M34598	-09/23/75-14-					12- 8.9-	-	-	6.1-	170-	5-3-7-4-6-4-4-4-2-1-3-5-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
30-45	8481-112.8500	-2-12-	0-M34599	-09/23/75-15-																														

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	LAS 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	
30-45.8839-113.1431-2-12-			0-M34556				-5	-5	-5	32	-20	-15	16	-10	-15		3	38
30-45.8997-113.2900-2-12-			0-M34557				-5	-5	-5	10	-20	-15	7	-10	-15		2	22
30-45.8922-113.2811-2-12-			0-M34558				-5	-5	-5	22	27	22	14	-10	-15		2	19
30-45.8869-113.1161-2-12-			0-M34559				-5	-5	-5	-10	-20	-15	7	-10	-15		2	18
30-45.8967-113.1064-2-12-			0-M34560				-5	-5	-5	24	-20	-15	13	-10	-15		3	39
30-45.9386-113.0947-2-12-			0-M34561				-5	-5	-5	31	-20	-15	15	-10	-15		3	35
30-45.9322-113.1014-2-12-			0-M34562				-5	-5	-5	44	22	-15	21	-10	-15		3	29
30-45.9517-113.1050-2-12-			0-M34563				-5	-5	-5	45	23	30	15	-10	-15		5	47
30-45.9536-113.1119-2-15-			0-M34564				-5	-5	-5	34	-20	-15	19	-10	-15		3	58
30-45.9867-113.1172-2-12-			0-M34565				-5	6	-5	40	-20	-15	25	-10	-15		3	37
30-45.9456-113.0542-2-12-			0-M34566				-5	5	-5	44	-20	-15	24	-10	-15		2	22
30-45.9353-113.0292-2-12-			0-M34567				-5	-5	-5	18	-20	-15	11	-10	-15		1	28
30-45.9519-113.0250-2-12-			0-M34568				-5	-5	-5	37	-20	-15	13	-10	-15		1	15
30-45.9733-113.0094-2-12-			0-M34569				-5	-5	-5	41	-20	19	15	-10	-15		1	26
30-45.9736-113.0083-2-12-			0-M34570				-5	-5	-5	53	-20	-15	23	-10	-15		1	20
30-45.9839-113.0272-2-12-			0-M34571				-5	-5	-5	57	-20	22	25	-10	15		2	47
30-45.9681-113.0819-2-12-			0-M34572				-5	-5	-5	43	-20	-15	26	-10	-15		4	61
30-45.9661-113.0783-2-12-			0-M34573				-5	-5	-5	31	-20	-15	14	-10	-15		1	29
30-45.9806-113.0136-2-12-			0-M34574															
30-45.9372-113.0047-2-12-			0-M34575				-5	-5	5	89	-20	-15	44	-10	-15		2	30
30-45.9756-112.9850-2-12-			0-M34576				-5	-5	-5	40	-20	-15	22	-10	-15		2	24
30-45.9919-112.9811-2-12-			0-M34577				-5	-5	-5	52	-20	-15	38	-10	-15		-1	36
30-45.9833-112.8139-2-12-			0-M34578				-5	-5	-5	34	-20	29	11	-10	-15		3	24
30-45.9811-112.8089-2-12-			0-M34579				-5	10	-5	96	-20	-15	12	-10	-15		2	26
30-45.9814-112.8036-2-12-			0-M34580				-5	-5	-5	27	-20	-15	18	-10	-15		2	30
30-45.9656-112.8394-2-12-			0-M34582				-5	10	-5	79	-20	22	19	-10	-15		2	24
30-45.9653-112.8392-2-12-			0-M34583				-5	6	-5	112	-20	-15	16	-10	-15		2	29
30-45.9864-112.8733-2-12-			0-M34584				-5	7	-5	29	-20	15	14	-10	-15		3	25
30-45.9861-112.8736-2-12-			0-M34585				-5	-5	-5	42	-20	-15	23	-10	-15		2	37
30-45.8764-112.8553-2-12-			0-M34587				-5	-5	-5	33	-20	-15	7	-10	-15		2	31
30-45.8761-112.8547-2-12-			0-M34588				-5	5	-5	42	-20	19	12	-10	-15		2	38
30-45.8500-112.6917-2-12-			0-M34589				-5	-5	-5	35	-20	15	22	19	-15		3	14
30-45.8289-112.7053-2-15-			0-M34590				-5	-5	-5	34	-20	-15	25	-10	-15		2	12
30-45.8028-112.7458-2-15-			0-M34591				-5	5	-5	36	-20	-15	11	-10	-15		-1	28
30-45.8875-112.7733-2-12-			0-M34592				7	-5	-5	18	-20	-15	-5	-10	-15		3	27
30-45.8844-112.7917-2-12-			0-M34593				-5	-5	-5	33	-20	16	10	-10	-15		2	21
30-45.8847-112.7917-2-12-			0-M34594														2	15
30-45.7933-112.9028-2-12-			0-M34595				-5	-5	-5	21	-20	16	22	-10	-15		2	24
30-45.8264-112.8836-2-12-			0-M34596				-5	-5	-5	33	-20	-15	21	-10	-15		2	27
30-45.8361-112.8733-2-12-			0-M34598				-5	-5	5	24	-20	15	10	-10	-15		2	29
30-45.8481-112.8500-2-12-			0-M34599				-5	-5	-5	31	-20	20	10	-10	-15		2	36
30-45.8658-113.0083-2-12-			0-M34600				-5	-5	-5	28	-20	-15	8	-10	-15		1	53
30-45.8719-113.0839-2-12-			0-M34601				-5	-5	-5	19	-20	-15	7	-10	-15		2	11
30-45.3475-113.3778-2-12-			0-M34602				-5	-5	-5	27	38	19	5	-10	-15		2	10
30-45.3206-113.3308-2-12-			0-M34603				-5	5	-5	15	-20	-15	26	-10	-15		2	29
30-45.3153-113.3033-2-12-			0-M34604				-5	-5	-5	16	-20	15	7	-10	-15		2	9
30-45.3153-113.3028-2-12-			0-M34605				-5	-5	-5	-10	-20	-15	10	-10	-15		2	32
30-45.3314-113.2692-2-12-			0-M34606				-5	7	-5	11	-20	-15	21	-10	-15		2	21
30-45.3544-113.4158-2-12-			0-M34607				-5	-5	-5	-10	-20	-15	-5	-10	-15		1	9
30-45.3553-113.4147-2-12-			0-M34608				-5	-5	-5	23	-20	-15	-5	-10	-15		1	7
30-45.3611-113.4472-2-12-			0-M34609				-5	-5	-5	16	-20	-15	7	-10	-15		1	12

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

③

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	
30-45.8839-113.1431-2-12-			0-M345556			64110	-0.06	827	12300	99	-92	4.8	29	5.2	5	1.2	12170	8.9	18500	62	0.4		
30-45.8997-113.2900-2-12-			0-M345557			64170	-0.07	706	10760	144	-95	6.4	37	3.1	7	1.5	15110	18.3	16330	70	0.7		
30-45.8922-113.2811-2-12-			0-M345558			72030	-0.10	875	20400	166	-131	11.9	47	3.5	6	1.6	31170	23.5	21020	87	0.5		
30-45.8869-113.1161-2-12-			0-M345559			71010	-0.06	759	23200	117	-96	10.8	45	3.3	5	1.4	20880	11.6	21650	71	0.4		
30-45.8967-113.1054-2-12-			0-M345560			60180	-0.07	802	8826	78	-83	7.2	27	4.0	7	1.4	12870	12.0	18220	43	0.5		
30-45.9386-113.0947-2-12-			0-M345561			69460	-0.10	668	11980	99	-113	8.9	32	4.7	6	1.0	18290	9.0	15900	64	0.6		
30-45.9322-113.1014-2-12-			0-M345562			58050	-0.06	841	9150	96	-98	11.1	24	3.0	5	0.9	12810	9.2	17300	49	0.5		
30-45.9517-113.1050-2-12-			0-M345563			70570	-0.08	537	11230	82	-105	17.7	40	5.6	6	1.1	24850	7.2	11590	50	0.5		
30-45.9536-113.1119-2-15-			0-M345564			67190	-0.08	858	7264	146	-97	9.7	27	3.9	6	1.3	14030	11.6	16140	68	0.7		
30-45.9867-113.1172-2-12-			0-M345565			68420	-0.09	693	9239	90	-100	7.6	25	3.5	5	1.0	15040	8.1	14530	47	0.4		
30-45.9456-113.0542-2-12-			0-M345566			80310	-0.06	748	18080	86	-120	10.3	32	2.5	4	1.3	11820	10.2	15190	47	0.4		
30-45.9353-113.0292-2-12-			0-M345567			71780	-0.07	881	18130	68	-101	8.2	38	2.4	4	0.9	17480	9.1	17170	38	0.4		
30-45.9519-113.0250-2-12-			0-M345568			77610	-0.09	730	25110	134	-131	12.8	80	-1.9	4	1.3	43820	16.6	15740	75	0.5		
30-45.9733-113.0094-2-12-			0-M345569			57920	-0.07	647	14310	88	78	5.4	28	3.6	3	1.2	11600	9.4	14170	55	0.4		
30-45.9736-113.0083-2-12-			0-M345570			66300	-0.07	911	15860	67	-90	11.4	39	6.2	4	1.1	15720	7.2	15060	41	0.4		
30-45.9839-113.0272-2-12-			0-M345571			77170	-0.08	976	24750	61	-104	10.7	90	4.0	3	1.2	18520	8.6	16570	34	0.3		
30-45.9681-113.0819-2-12-			0-M345572			75430	-0.07	680	12300	247	-133	7.5	25	4.8	6	1.4	12650	6.6	20220	140	0.6		
30-45.9661-113.0783-2-12-			0-M345573			46740	-0.09	455	35410	66	-83	8.0	34	3.3	3	1.1	13990	9.6	17280	29	0.4		
30-45.9805-113.0136-2-12-			0-M345574			70280	-0.10	451	28680	110	-115	17.4	51	5.8	8	2.7	44030	60.4	13200	60	1.0		
30-45.9872-113.0047-2-12-			0-M345575			77160	-0.07	1224	16420	72	-107	13.1	48	5.3	4	1.3	13080	7.1	23250	44	0.3		
30-45.9756-112.9850-2-12-			0-M345576			57650	-0.06	741	8576	53	109	7.3	37	4.7	5	1.1	10920	10.1	20340	37	0.5		
30-45.9919-112.9811-2-12-			0-M345577			60780	-0.07	871	7983	74	-79	8.9	48	5.2	6	1.4	12530	12.6	18730	47	0.6		
30-45.9833-112.8139-2-12-			0-M345578			64900	-0.10	721	27410	73	-111	8.8	79	5.1	4	1.4	22780	24.3	13160	51	0.5		
30-45.9811-112.8089-2-12-			0-M345579			68840	-0.08	630	28610	110	222	14.0	59	3.1	6	1.2	31500	17.5	17010	63	0.6		
30-45.9814-112.8036-2-12-			0-M345580			88570	-0.07	960	27930	129	-128	8.4	81	8.2	3	1.3	15570	10.1	18190	89	0.3		
30-45.9656-112.8394-2-12-			0-M345582			74270	-0.09	930	31110	111	188	14.0	81	3.0	5	1.4	31830	17.7	14440	45	0.6		
30-45.9653-112.8392-2-12-			0-M345583			61820	-0.09	534	20500	74	352	11.3	36	5.1	4	1.1	23060	7.3	14850	43	0.3		
30-45.9864-112.8733-2-12-			0-M345584			67160	-0.07	678	23660	85	-94	11.0	65	4.0	5	1.2	23950	20.6	12550	47	0.5		
30-45.9861-112.8736-2-12-			0-M345585			86160	-0.07	805	27610	86	105	8.4	66	2.4	3	1.2	14660	9.5	17610	50	0.3		
30-45.8764-112.8553-2-12-			0-M345587			78090	-0.10	617	31050	103	-125	14.2	51	4.6	5	1.4	25930	11.0	15820	51	0.5		
30-45.8761-112.8547-2-12-			0-M345588			66190	-0.08	543	22960	88	121	13.3	49	5.1	5	1.4	21360	10.5	11560	50	0.5		
30-45.8500-112.6917-2-12-			0-M345589			81370	-0.06	724	22700	153	135	9.9	26	4.0	6	1.8	30060	11.9	17310	74	0.6		
30-45.8289-112.7053-2-15-			0-M345590			61900	-0.08	506	18030	84	169	8.0	30	3.6	4	1.4	15400	14.2	15920	46	0.3		
30-45.8028-112.7458-2-15-			0-M345591			65930	-0.07	640	48120	70	267	9.9	53	3.9	5	1.0	21810	7.5	15720	39	0.4		
30-45.8875-112.7733-2-12-			0-M345592			64050	-0.12	-226	38190	137	-135	17.8	68	5.3	7	1.3	86090	52.4	15460	71	1.0		
30-45.8844-112.7917-2-12-			0-M345593			67690	-0.12	530	25490	120	-124	12.4	43	-2.7	6	1.0	37480	47.2	9488	41	1.0		
30-45.8847-112.7917-2-12-			0-M345594			42220	-0.09	599	5835	45	-107	13.4	31	3.2	4	1.3	14660	9.2	16310	34	0.3		
30-45.7933-112.9028-2-12-			0-M345595			75260	-0.06	575	28540	77	-94	10.3	35	3.5	4	1.2	18310	8.2	13300	50	0.3		
30-45.8264-112.8836-2-12-			0-M345596			80620	-0.07	575	14900	110	-73	9.0	45	5.9	8	1.6	20760	9.1	12860	64	0.6		
30-45.8361-112.8733-2-12-			0-M345598			73800	-0.07	577	33400	76	-104	9.4	37	3.0	4	1.2	15620	6.4	12510	47	0.3		
30-45.8481-112.8500-2-12-			0-M345599			60310	-0.09	578	16260	104	-79	9.0	60	3.7	6	1.6	18120	9.7	9251	67	0.5		
30-45.8658-113.0083-2-12-			0-M34600			57630	-0.06	644	8460	82	88	9.7	37	5.6	4	1.1	15580	9.8	17480	47	0.4		
30-45.8719-113.0839-2-12-			0-M34601			57540	-0.06	671	8355	72	114	7.6	21	5.3	5	1.5	14210	11.3	18490	40	0.5		
30-45.3475-113.3774-2-12-			0-M34602			52250	-0.07	715	10590	113	115	9.6	22	2.6	6	1.8	13390	28.0	10990	56	0.7		
30-45.3206-113.3308-2-12-			0-M34603			51970	-0.07	582	2955	90	-59	5.7	30	4.5	6	1.3	10460	22.2	18140	52	0.7		
30-45.3158-113.3033-2-12-			0-M34604			41710	-0.06	642	4543	87	-74	6.6	26	4.0	6	1.7	10690	30.9	15390	47	0.8		
30-45.3153-113.3028-2-12-			0-M34605			61040	-0.08	599	4338	98	-78	8.8	58	7.4	6	1.4	17610	18.2	24160	52	0.7		
30-45.3314-113.2692-2-12-			0-M34606			52400	-0.06	734	4051	86	-65	5.6	26	4.1	7	1.4	8519	23.6	21390	52	0.6		
30-45.3544-113.4158-2-12-			0-M34607			43640	-0.06	560	5729	80	-87	6.9	23	2.5	5	1.3	8209	22.5	16260	42	0.7		
30-45.3553-113.4147-2-12-			0-M34608			35940	-0.06	412	2531	51	-80	5.6		-1.2	4	1.1	7432	17.8	13720	30	0.5		
30-45.3611-113.4472-2-12-			0-M34609			43490	-0.07	440	3999	60	-84	5.4	19	1.7	4	1.0	7941	14.0	14280	31	0.6		

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

④

DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued)												U/Th RATIO			
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REFRIGERATE	DOE 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
30-45.8839-113.1431-2-12-			0-M34555			11220	237	16500	44	-2	5.3	7.3	346	-1	-1	11.3	2855	26	3.1	85	0.912
30-45.8997-113.2900-2-12-			0-M34557			9345	304	15590	37	-2	5.3	11.2	-301	-1	-1	22.3	4174	36	4.8	81	0.260
30-45.8922-113.2811-2-12-			0-M34558			17700	1054	16130	-34	-3	10.4	8.1	-494	-1	-1	22.9	6971	138	4.8	194	0.266
30-45.8869-113.1161-2-12-			0-M34559			14680	428	18460	44	-2	9.8	7.3	548	1	-1	14.9	5455	86	4.7	-60	0.248
30-45.8967-113.1064-2-12-			0-M34560			10840	742	8438	43	-2	6.8	6.6	-352	-1	-1	10.7	2727	31	5.4	103	0.430
30-45.9386-113.0947-2-12-			0-M34561			12600	830	12120	-32	-3	8.3	6.8	-455	-1	-1	17.2	3376	59	3.8	-83	0.872
30-45.9322-113.1014-2-12-			0-M34562			6953	740	13410	52	-2	5.6	7.0	-374	2	-1	13.7	2491	29	3.5	100	0.255
30-45.9517-113.1050-2-12-			0-M34563			11190	1262	11400	53	-2	9.1	6.0	-448	-1	-1	11.9	3491	61	3.0	227	0.849
30-45.9536-113.1119-2-15-			0-M34564			11470	821	9382	82	-2	7.0	11.6	-410	-1	-1	18.9	3123	40	5.7	91	0.254
30-45.9867-113.1172-2-12-			0-M34565			11970	439	12400	-30	-3	7.6	4.7	-351	-1	-1	12.2	3268	47	3.2	116	0.320
30-45.9456-113.0542-2-12-			0-M34566			7588	1055	19320	44	-2	6.4	5.8	818	-1	-1	11.2	2847	41	4.0	101	0.321
30-45.9353-113.0292-2-12-			0-M34567			11070	563	18010	54	-2	8.7	4.3	476	-1	-1	8.9	3576	52	-1.4	-61	0.337
30-45.9519-113.0250-2-12-			0-M34568			16480	802	21710	-28	-3	10.4	7.4	877	-1	-1	12.7	8043	199	3.5	84	0.213
30-45.9733-113.0094-2-12-			0-M34569			12950	472	10240	-25	-2	5.7	4.5	-328	-1	-1	9.6	2459	42	3.8	-85	0.438
30-45.9736-113.0083-2-12-			0-M34570			17240	782	10030	52	-2	7.4	5.9	-377	-1	-1	9.8	3518	47	3.8	155	0.653
30-45.9839-113.0272-2-12-			0-M34571			20150	626	15410	-25	-2	10.1	4.4	567	-1	-1	9.1	3342	66	2.4	109	0.297
30-45.9681-113.0819-2-12-			0-M34572			-5313	682	25420	96	-2	4.7	16.5	-425	2	-1	60.0	4230	29	7.1	119	0.278
30-45.9661-113.0783-2-12-			0-M34573			23650	909	3769	54	-3	7.6	3.4	-425	-1	-1	7.0	2639	57	3.5	-94	0.400
30-45.9806-113.0136-2-12-			0-M34574			28040	1487	11540	50	-3	20.6	11.2	-503	-1	-2	60.6	4543	180	7.2		0.422
30-45.9872-113.0047-2-12-			0-M34575			14090	729	14470	67	3	6.6	4.3	-402	-1	-1	10.7	2727	42	2.3	110	0.374
30-45.9756-112.9850-2-12-			0-M34576			13420	353	7379	65	-2	6.0	5.0	-245	-1	-1	8.5	2526	32	3.5	83	0.435
30-45.9919-112.9811-2-12-			0-M34577			8986	579	6432	52	-2	6.8	7.0	-347	-1	-1	10.8	2881	39	4.3	135	0.352
30-45.9333-112.8139-2-12-			0-M34578			24880	642	13800	-34	-3	11.2	4.8	-410	-1	-2	17.6	4341	119	4.7	98	0.284
30-45.9811-112.8089-2-12-			0-M34579			24590	782	15170	38	-2	16.0	6.9	-348	-1	2	23.1	5432	143	4.6	86	0.273
30-45.9814-112.8336-2-12-			0-M34580			17440	527	27890	42	-2	8.2	5.8	805	-1	-1	16.0	2574	40	2.0	104	0.319
30-45.9656-112.8394-2-12-			0-M34582			22050	767	18910	53	-3	15.3	8.0	904	-1	-1	19.7	4438	145	4.5		0.239
30-45.9653-112.8392-2-12-			0-M34583			19340	470	8520	43	-3	10.0	5.0	-326	-1	-1	9.0	4010	95	3.5	-92	0.489
30-45.9864-112.8733-2-12-			0-M34584			20450	662	14300	29	-2	11.6	6.8	468	-1	-1	22.2	3740	120	4.4	105	0.189
30-45.9861-112.8736-2-12-			0-M34585			19190	474	25810	-21	-2	8.9	4.6	841	-1	-1	11.0	3047	45	2.1	109	0.264
30-45.8764-112.8553-2-12-			0-M34587			27640	900	13420	-31	-3	10.6	6.6	-500	-1	-1	10.5	3850	95	3.9	131	0.343
30-45.8761-112.8547-2-12-			0-M34588			24640	865	8612	43	3	10.3	6.3	-393	-1	-1	10.1	3999	99	4.2	137	0.376
30-45.8500-112.6917-2-12-			0-M34589			8281	959	22120	-22	-2	7.6	11.1	-420	2	-1	25.6	3718	89	5.9	87	0.238
30-45.8289-112.7053-2-15-			0-M34590			11730	811	10950	41	-2	7.7	5.1	-394	-1	-1	13.8	3712	60	3.9		0.246
30-45.8028-112.7458-2-15-			0-M34591			25250	960	13060	27	2	9.8	4.8	-363	-1	-1	10.4	3533	79	3.5	110	0.606
30-45.8875-112.7733-2-12-			0-M34592			27690	1278	16350	-39	-4	24.7	9.9	-526	-2	-2	83.7	5566	316	12.7	169	0.158
30-45.8844-112.7917-2-12-			0-M34593			28990	1164	12510	-40	-4	21.9	8.7	-507	-1	-2	39.2	5676	170	10.2	-199	0.283
30-45.8847-112.7917-2-12-			0-M34594			8501	1292	7294	-28	-2	5.4	3.9	-557	-1	-1	6.2	2407	27	3.4	104	1.274
30-45.7933-112.9028-2-12-			0-M34595			26080	545	17660	42	-2	9.5	5.0	594	-1	-1	8.3	4016	81	2.9	111	0.301
30-45.8264-112.8836-2-12-			0-M34596			14900	601	7221	-23	-2	10.3	10.1	-311	-1	-1	13.9	4081	68	5.0	150	0.511
30-45.8361-112.8733-2-12-			0-M34598			26820	525	16410	41	-2	8.4	5.3	-344	-1	-1	9.1	3032	58	2.5	109	0.341
30-45.8481-112.8500-2-12-			0-M34599			20170	594	5833	-31	-3	10.6	6.7	-357	-1	-1	11.4	3871	95	3.7	-167	0.351
30-45.8658-113.0083-2-12-			0-M34600			17350	485	7010	41	2	7.3	5.6	-275	-1	-1	9.8	3505	75	3.0	90	0.316
30-45.8719-113.0839-2-12-			0-M34601			8077	845	7391	43	-2	6.4	6.1	-327	-1	-1	9.1	3364	40	3.2	93	0.538
30-45.3475-113.3778-2-12-			0-M34602			-4574	1248	10090	31	-2	5.4	8.3	-476	-1	-1	15.9	2999	36	6.5	113	0.346
30-45.3206-113.3308-2-12-			0-M34603			11480	90	7183	51	3	5.8	7.9	-189	-1	-1	14.1	4141	40	6.6	73	0.589
30-45.3158-113.3033-2-12-			0-M34604			6614	662	6329	45	-2	4.4	6.3	-324	-1	-1	14.3	3386	23	6.5	122	0.336
30-45.3153-113.3028-2-12-			0-M34605			12560	251	8559	73	4	7.0	8.0	-278	-1	-1	14.4	4079	47	5.6	100	0.285
30-45.3314-113.2692-2-12-			0-M34606			9070	198	8769	48	-2	5.1	7.7	-214	-1	-1	13.2	3645	30	4.9	49	0.303
30-45.3544-113.4158-2-12-			0-M34607			-3621	721	9414	37	-2	4.1	7.8	-351	-1	1	12.5	2526	25	4.9	67	0.352
30-45.3553-113.4147-2-12-			0-M34608			5265	461	9646	-19	-2	3.8	3.3	-289	-1	-1	7.6	3060	24	3.8	69	0.474
30-45.3611-113.4472-2-12-			0-M34609			7054	198	11360	-23	-2	4.6	4.1	-267	-1	-1	7.7	2098	28	4.1	45	0.532

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

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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 (umho/cm)	SCINTILLATOR (dL 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																										
30-45.3128-113.3967-2-12-						0-M34610-09/26/75-9-	11-7.5-		5.2-	42-				22-2-7-4-6-2-3-1-3-4-3-2-1-	-3-																		3.70	
30-45.3192-113.4594-2-12-						0-M34611-09/25/75-11-	14-12.0-		5.5-	48-				5-2-7-4-6-2-3-1-3-3-4-3-1-	-3-																		4.80	
30-45.3425-113.4581-2-12-						0-M34612-09/26/75-12-	14-11.5-		5.2-	46-				22-2-6-3-6-3-3-1-3-4-3-4-1-	-3-																		4.90	
30-45.2769-113.4592-2-12-						0-M34613-09/26/75-13-	18-13.0-		5.2-	17-				0-2-6-3-3-3-3-1-3-3-3-4-1-	-3-																		3.90	
30-45.2747-113.4353-2-12-						0-M34614-09/26/75-14-	19-11.0-C		5.2-	50-				16-2-7-5-6-3-3-1-3-3-4-4-1-	-8-																		4.30	
30-45.3839-113.3469-2-12-						0-M34615-09/01/75-17-	15-15.0-		5.5-	37-				7-2-4-2-5-4-3-1-2-3-4-4-1-	-3-																		10.50	
30-45.3758-113.3481-2-11-						0-M34616-09/01/75-17-	21-19.0-		5.7-	83-				0-2-1-3-6-4-1-	-3-																			3.00
30-45.3417-113.3500-2-15-						0-M34617-09/01/75-18-	23-							4-4-5-7-1-	-2-																			3.70
30-45.2617-113.3417-2-15-						0-M34618-09/02/75-11-	12-14.0-		5.7-	109-				7-4-3-6-1-1-1-2-4-2-2-2-	-3-																		4.30	
30-45.4508-113.6542-2-12-						0-M34619-09/31/75-11-	15-9.8-		5.2-	22-				11-4-2-6-3-3-1-2-1-4-3-1-	-1-																			5.00
30-45.4947-113.6050-2-12-						0-M34620-09/31/75-13-	19-14.2-		5.5-	50-				16-4-5-6-3-3-1-2-4-3-3-1-	-3-																		2.90	
30-45.4786-113.6017-2-12-						0-M34621-09/31/75-13-	19-11.2-		5.2-	22-				11-4-2-2-1-4-3-1-2-1-3-3-1-	-3-																		4.90	
30-45.4542-113.6214-2-12-						0-M34622-09/31/75-13-	22-14.2-		5.2-	20-				11-4-3-6-3-3-1-2-1-3-2-1-	-3-																		4.20	
30-45.4128-113.7000-2-12-						0-M34623-09/31/75-14-	23-13.8-		5.2-	28-				0-3-7-5-6-2-3-1-2-4-3-3-1-	-1-																		12.70	
30-45.4044-113.6750-2-12-						0-M34624-09/31/75-15-	23-13.5-		5.2-	19-				16-4-2-1-4-3-1-2-1-3-4-1-	-1-																		4.70	
30-45.4181-113.6400-2-12-						0-M34625-09/31/75-13-	23-14.0-C		5.5-	46-				16-4-3-7-3-3-2-2-1-3-3-1-	-1-																		4.10	
30-45.4467-113.5950-2-12-						0-M34626-09/31/75-15-	23-11.5-		5.2-	21-				22-4-2-3-4-3-1-2-1-2-4-1-	-1-																		6.00	
30-45.4069-113.6136-2-12-						0-M34627-09/31/75-16-	24-14.0-		5.2-	38-				5-4-3-7-3-3-1-2-3-3-2-1-	-1-																		3.20	
30-45.3461-113.7069-2-12-						0-M34628-09/31/75-17-	20-10.5-		5.2-	22-				5-4-3-7-4-3-1-2-1-4-5-1-	-1-																		2.30	
30-45.3664-113.6422-2-12-						0-M34629-09/31/75-17-	19-11.0-		5.5-	26-				11-4-3-7-4-3-1-2-1-3-4-1-	-1-																		11.10	
30-45.4797-113.5117-2-12-						0-M34630-09/01/75-10-	16-12.0-		6.2-	260-				2-4-4-6-3-3-1-2-4-4-2-1-	-3-																		3.10	
30-45.4272-113.5108-2-12-						0-M34631-09/01/75-11-	20-13.5-		5.2-	40-				4-4-2-7-3-3-1-2-4-4-3-1-	-3-																		4.00	
30-45.3939-113.5303-2-12-						0-M34632-09/01/75-12-	21-11.5-		5.2-	24-				2-4-3-3-3-3-1-2-4-3-3-1-	-3-																		3.90	
30-45.3714-113.6619-2-12-						0-M34633-09/01/75-15-	21-11.5-C		5.2-	36-				2-3-7-2-7-4-3-1-2-1-2-5-1-	-1-																		3.50	
30-45.3928-113.6036-2-12-						0-M34634-09/01/75-16-	22-12.0-		5.2-	30-				2-4-5-6-3-3-1-2-3-4-3-1-	-3-																		4.70	
30-45.3919-113.6028-2-12-						0-M34635-09/01/75-16-	22-11.5-		5.2-	34-				4-4-3-6-3-3-1-2-1-3-3-1-	-3-																		8.10	
30-45.4261-113.5369-2-12-						0-M34636-09/01/75-17-	21-13.0-		5.5-	50-				4-4-3-6-3-3-1-2-4-3-3-1-	-3-																		5.70	
30-45.2533-113.5753-2-12-						0-M34637-09/02/75-11-	18-10.5-C		5.2-	15-				4-3-7-3-6-4-3-1-2-3-4-4-2-	-1-																		4.50	
30-45.2478-113.5514-2-12-						0-M34638-09/02/75-11-	19-12.0-C		5.2-	15-				4-4-3-6-3-3-1-2-3-3-3-1-	-1-																		9.20	
30-45.2436-113.5033-2-12-						0-M34639-09/02/75-12-	18-10.5-C		5.2-	18-				4-4-3-1-3-3-1-2-1-4-4-2-	-1-																		2.00	
30-45.2350-113.5083-2-12-						0-M34640-09/02/75-13-	18-11.0-C		5.2-	18-				8-4-2-3-3-3-1-2-3-3-4-2-	-1-																		2.90	
30-45.1769-113.5158-2-12-						0-M34641-09/02/75-13-	16-11.5-C		5.5-	55-				6-4-3-6-3-3-1-2-3-2-3-2-	-1-																		11.80	
30-45.2003-113.5067-2-12-						0-M34642-09/02/75-14-	18-11.0-C		5.5-	50-				4-4-3-7-3-3-1-2-3-3-3-2-	-1-																		6.00	
30-45.2403-113.4361-2-11-						0-M34643-09/02/75-15-	19-14.0-		5.5-	40-				4-4-5-6-2-3-1-2-4-3-3-1-	-3-																		6.50	
30-45.2139-113.4444-2-11-						0-M34644-09/02/75-15-	19-14.0-		5.7-	120-				2-4-6-8-1-2-2-3-4-4-3-1-	-3-																		2.70	
30-45.2417-113.4583-2-12-						0-M34645-09/02/75-16-	19-11.0-		5.5-	47-				4-4-3-6-3-3-1-2-3-3-3-1-	-3-																		4.40	
30-45.2458-113.3567-2-12-						0-M34646-09/02/75-17-	19-14.0-		5.2-	55-				6-4-3-6-3-3-1-2-3-3-4-1-	-3-																		5.20	
30-45.1367-112.9508-2-15-						0-M34647-09/03/75-10-	15-							12-2-7-3-6-1-	-2-																			2.10
30-45.1372-112.9506-2-12-						0-M34648-09/03/75-10-	16-10.5-C		5.9-	220-				4-2-7-2-7-4-3-1-2-3-4-4-1-	-2-																		2.90	
30-45.1378-112.9403-2-12-						0-M34649-09/03/75-11-	17-10.0-C		6.5-	550-				8-3-6-3-5-4-3-1-2-3-3-5-1-	-2-																		2.50	
30-45.6225-113.5292-2-15-						0-M34650-09/27/75-10-	16-							9-4-5-6-1-	-3-																			3.60
30-45.6019-113.5600-2-12-						0-M34651-09/27/75-11-	18-9.5-C		5.9-	120-				9-4-5-6-3-3-3-2-2-3-3-1-	-3-																		3.70	
30-45.6017-113.5581-2-12-						0-M34652-09/27/75-11-	17-9.5-C		6.1-	120-				14-4-4-6-3-3-3-2-4-3-3-1-	-3-																		3.40	
30-45.5775-113.6244-2-12-						0-M34653-09/27/75-11-	17-9.5-		5.7-	40-				14-4-4-6-3-3-3-2-2-4-3-1-	-3-																		3.20	
30-45.5375-113.5394-2-12-						0-M34654-09/27/75-12-	17-9.5-		5.2-	35-				9-2-1-4-6-3-3-2-2-4-3-3-1-	-3-																		6.50	
30-45.5294-113.5242-2-12-						0-M34655-09/27/75-12-	17-8.5-		5.7-	40-				18-2-1-4-6-3-3-2-2-4-3-3-1-	-3-																		8.40	
30-45.5300-113.5078-2-12-						0-M34656-09/27/75-12-	17-9.5-		5.2-	70-				9-2-7-4-6-3-3-2-2-4-3-3-1-	-3-																		5.30	
30-45.5269-113.5411-2-12-						0-M34657-09/27/75-13-	17-10.5-		5.2-	45-																								

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

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DOE SAMPLE NUMBER						DOE SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE										ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Concentrations reported in weight parts per million (ppm)										Concentrations in weight ppm	
							Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li	
30-45.3129-113.3957-2-12-						0-M34610	-5	-5	-5	18	-20	-15	11	-10	-15	2	19	
30-45.3192-113.4594-2-12-						0-M34611	-5	-5	-5	14	-20	-15	9	-10	-15	1	7	
30-45.3425-113.4581-2-12-						0-M34612	-5	-5	-5	17	-20	-15	12	-10	-15	1	14	
30-45.2769-113.4592-2-12-						0-M34613	-5	-5	-5	19	-20	-15	6	-10	-15	1	16	
30-45.2747-113.4393-2-12-						0-M34614	-5	-5	-5	-10	-20	-15	15	-10	-15	2	28	
30-45.3839-113.3469-2-12-						0-M34615	-5	-5	-5	-10	-20	-15	10	-10	-15	2	23	
30-45.3758-113.3481-2-11-						0-M34616	-5	-5	-5	16	-20	-15	9	-10	-15	-1	28	
30-45.3417-113.3500-2-15-						0-M34617	-5	-5	-5	18	-20	18	14	-10	-15	2	35	
30-45.2617-113.3417-2-15-						0-M34618	-5	-5	-5	15	-20	-15	-5	-10	-15	2	21	
30-45.4608-113.6542-2-12-						0-M34619	-5	5	-5	15	-20	-15	5	-10	-15	-1	8	
30-45.4947-113.6050-2-12-						0-M34620	-5	-5	-5	11	-20	-15	-5	-10	-15	1	21	
30-45.4786-113.6017-2-12-						0-M34621	-5	-5	-5	13	-20	-15	-5	-10	-15	1	17	
30-45.4542-113.6214-2-12-						0-M34622	-5	5	-5	-10	-20	-15	-5	-10	-15	2	26	
30-45.4128-113.7000-2-12-						0-M34623	-5	-5	-5	-10	-20	-15	5	-10	-15	1	13	
30-45.4044-113.6750-2-12-						0-M34624	-5	-5	-5	15	-20	-15	5	-10	-15	2	24	
30-45.4181-113.6400-2-12-						0-M34625	-5	-5	-5	13	-20	16	-5	-10	-15	2	24	
30-45.4467-113.5950-2-12-						0-M34626	-5	-5	-5	-10	-20	-15	10	-10	-15	2	24	
30-45.4069-113.6136-2-12-						0-M34627	-5	-5	-5	12	-20	-15	-5	-10	-15	2	30	
30-45.3461-113.7069-2-12-						0-M34628	-5	-5	-5	44	-20	228	85	-10	-15	2	15	
30-45.3664-113.6422-2-12-						0-M34629	-5	-5	-5	47	-20	42	199	-10	-15	2	23	
30-45.4797-113.5117-2-12-						0-M34630	-5	-5	-5	12	-20	-15	-5	-10	-15	1	10	
30-45.4272-113.5108-2-12-						0-M34631	-5	-5	-5	19	-20	-15	8	-10	-15	2	17	
30-45.3939-113.5303-2-12-						0-M34632	-5	-5	-5	28	-20	-15	8	-10	-15	2	15	
30-45.3714-113.6619-2-12-						0-M34633	-5	-5	-5	17	-20	21	7	-10	-15	2	12	
30-45.3928-113.6036-2-12-						0-M34634	-5	-5	-5	-10	-20	19	35	-10	-15	1	17	
30-45.3919-113.6028-2-12-						0-M34635	-5	-5	-5	14	-20	34	23	-10	-15	1	20	
30-45.4261-113.5369-2-12-						0-M34636	-5	-5	-5	13	49	18	6	-10	-15	2	17	
30-45.2533-113.5753-2-12-						0-M34637	-5	-5	-5	-10	45	-15	12	-10	-15	2	16	
30-45.2478-113.5514-2-12-						0-M34638	-5	-5	-5	12	62	-15	21	-10	-15	2	20	
30-45.2436-113.5033-2-12-						0-M34639	-5	-5	-5	-10	-20	-15	-5	-10	-15	-1	5	
30-45.2350-113.5083-2-12-						0-M34640	-5	-5	-5	-10	-20	-15	17	-10	-15	-1	8	
30-45.1769-113.5158-2-12-						0-M34641	-5	-5	-5	23	38	-15	26	-10	-15	2	28	
30-45.2003-113.5067-2-12-						0-M34642	-5	-5	-5	-10	43	-15	6	-10	-15	2	16	
30-45.2403-113.4361-2-11-						0-M34643	-5	-5	-5	33	-20	87	32	-10	-15	3	12	
30-45.2139-113.4444-2-11-						0-M34644	-5	-5	-5	28	81	-15	5	-10	-15	1	8	
30-45.2417-113.4583-2-12-						0-M34645	-5	-5	-5	-10	57	-15	5	-10	-15	1	16	
30-45.2458-113.3569-2-12-						0-M34646	-5	-5	-5	16	50	16	5	-10	-15	2	22	
30-45.1367-112.9508-2-15-						0-M34647	-5	-5	-5	-10	22	-15	12	-10	-15	1	13	
30-45.1372-112.9506-2-12-						0-M34648	-5	-5	-5	51	27	-15	20	-10	-15	1	15	
30-45.1378-112.9408-2-12-						0-M34649	-5	-5	7	21	37	-15	-5	-10	-15	2	11	
30-45.6225-113.5292-2-15-						0-M34650	-5	-5	-5	10	-20	-15	-5	-10	-15	2	28	
30-45.6019-113.5600-2-12-						0-M34651	-5	5	-5	14	-20	-15	10	-10	-15	2	18	
30-45.6017-113.5561-2-12-						0-M34652	-5	-5	-5	22	-20	-15	12	-10	-15	2	20	
30-45.5775-113.6244-2-12-						0-M34653	-5	-5	-5	-10	-20	-15	10	-10	-15	2	11	
30-45.5375-113.5394-2-12-						0-M34654										2	14	
30-45.5294-113.5242-2-12-						0-M34655	-5	-5	-5	-10	-20	-15	12	-10	-15	2	11	
30-45.5300-113.5078-2-12-						0-M34656	-5	-5	-5	11	-20	-15	17	-10	-15	2	13	
30-45.5269-113.5411-2-12-						0-M34657	-5	-5	-5	12	39	-15	8	-10	-15	2	15	
30-45.5158-113.5856-2-12-						0-M34658	-5	-5	-5	16	-20	-15	5	-10	-15	2	12	
30-45.5819-113.4894-2-12-						0-M34659	-5	-5	-5	13	23	-15	5	-10	-15	2	21	
30-45.5150-113.4389-2-12-						0-M34660	-5	-5	-5	18	-20	-15	-5	-10	-15	2	17	

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

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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
30-45.3123-113.3967-2-12-			0-M34610				63750	-0.06	695	8352	78	155	8.9	33	3.0	5	1.1	12000	11.5	16420	36	0.4
30-45.3192-113.4594-2-12-			0-M34611				45060	-0.07	475	7026	60	-99	13.2	31	3.3	5	1.2	14610	11.6	11220	31	0.5
30-45.3425-113.4581-2-12-			0-M34612				43700	-0.06	524	4106	54	-93	9.6	31	2.5	6	1.3	14930	17.3	13870	33	0.6
30-45.2769-113.4592-2-12-			0-M34613				49970	-0.07	527	6094	48	-78	8.9	35	3.4	4	1.2	13620	11.9	12670	30	0.4
30-45.2747-113.4353-2-12-			0-M34614				46730	-0.08	454	6706	61	159	5.6	18	2.8	5	1.2	9596	17.0	12900	36	0.6
30-45.3839-113.3469-2-12-			0-M34615				43340	-0.06	561	4142	160	-57	5.8	21	3.3	10	3.2	8281	75.0	17140	86	1.3
30-45.3758-113.3481-2-11-			0-M34616				57790	-0.07	1136	10500	60	191	10.6	36	5.3	4	1.4	15090	9.9	10510	32	0.4
30-45.3417-113.3500-2-15-			0-M34617				75560	-0.09	831	11490	75	220	10.8	63	12.7	6	1.8	19500	8.3	23740	40	0.6
30-45.2617-113.3417-2-15-			0-M34618				49270	-0.07	483	4103	71	-73	8.6	43	2.8	5	1.3	12700	16.3	17140	38	0.6
30-45.4608-113.6542-2-12-			0-M34619				29930	-0.06	360	4394	39	-66	11.4	22	2.4	3	1.0	9135	12.1	7029	25	0.4
30-45.4947-113.6050-2-12-			0-M34620				50570	-0.07	486	7034	65	-76	8.7	28	3.3	5	1.2	13380	9.7	11790	32	0.4
30-45.4786-113.6017-2-12-			0-M34621				36390	-0.06	366	3895	50	-74	8.0	19	2.7	4	1.2	13210	14.4	9074	22	0.4
30-45.4542-113.6214-2-12-			0-M34622				47220	-0.07	402	2897	53	-95	7.1	23	2.5	5	1.2	8768	11.0	12520	31	0.4
30-45.4128-113.7000-2-12-			0-M34623				34950	-0.09	413	3459	34	140	12.3	24	2.7	3	0.9	7874	5.2	11720	30	0.3
30-45.4044-113.6750-2-12-			0-M34624				53260	-0.06	481	4258	56	-98	9.7	45	2.5	4	1.1	13490	11.1	14760	30	0.4
30-45.4181-113.6407-2-12-			0-M34625				64340	-0.08	648	4749	79	-108	14.1	30	2.6	5	1.4	20700	8.6	13220	30	0.5
30-45.4467-113.5950-2-12-			0-M34626				43970	-0.06	369	-887	54	-94	7.0	25	-1.6	4	1.4	12330	22.9	16040	26	0.5
30-45.4069-113.6136-2-12-			0-M34627				63670	-0.06	511	9048	64	-79	11.3	59	3.6	4	1.1	19980	13.0	13930	35	0.4
30-45.3461-113.7069-2-12-			0-M34628				39230	-0.03	-179	34220	33	232	38.6	939	1.7	2	0.8	35230	5.2	-4003	20	0.2
30-45.3664-113.6422-2-12-			0-M34629				41070	-0.08	452	12600	33	-94	13.4	229	2.7	2	1.0	15230	6.1	14600	29	-0.2
30-45.4797-113.5117-2-12-			0-M34630				33820	-0.04	393	6019	46	86	6.1	22	1.7	3	0.9	9677	16.1	11860	26	0.4
30-45.4272-113.5108-2-12-			0-M34631				49940	-0.06	550	10280	75	-84	8.9	58	-1.2	4	1.3	15870	14.2	17890	37	0.4
30-45.3939-113.5303-2-12-			0-M34632				52670	-0.06	479	13980	73	-92	9.2	35	2.6	4	1.4	14760	13.2	14010	36	0.3
30-45.3714-113.6619-2-12-			0-M34633				46310	-0.07	340	16260	70	-94	12.6	124	-1.6	3	1.1	18470	11.1	11270	45	0.2
30-45.3928-113.6036-2-12-			0-M34634				33110	0.40	415	8835	48	-61	9.9	140	1.9	3	0.9	9780	12.2	11590	23	0.3
30-45.3919-113.6028-2-12-			0-M34635				48330	1.49	574	10650	48	-74	8.3	132	2.7	3	1.1	10590	11.9	13320	31	0.3
30-45.4261-113.5369-2-12-			0-M34636				41890	-0.06	410	9462	53	97	8.6	81	-1.3	3	1.2	9838	12.5	11300	38	0.3
30-45.2533-113.5753-2-12-			0-M34637				39930	-0.06	414	4715	42	136	5.5	24	2.8	3	1.1	10870	8.0	15420	25	0.3
30-45.2478-113.5514-2-12-			0-M34638				22840	-0.05	581	27210	158	-109	8.1		1.7	6	1.6	28250	9.8	17840	87	0.7
30-45.2436-113.5033-2-12-			0-M34639				25940	-0.03	342	1591	26	76	3.6	19	2.0	3	0.7	5794	9.1	13850	17	0.2
30-45.2350-113.5083-2-12-			0-M34640				31850	-0.05	411	-585	34	81	5.1	22	1.8	3	0.9	6638	11.6	12040	20	0.3
30-45.1769-113.5158-2-12-			0-M34641				64320	-0.09	838	7422	77	-117	10.3	33	4.8	5	1.7	19010	10.5	16400	45	0.6
30-45.2003-113.5067-2-12-			0-M34642				48690	-0.05	618	3804	58	-71	7.4	34	3.1	6	1.3	7971	15.7	15040	38	0.6
30-45.2403-113.4361-2-11-			0-M34643				84210	-0.11	725	8464	73	199	17.2	144	6.4	10	2.3	19900	6.2	14860	49	0.8
30-45.2139-113.4444-2-11-			0-M34644				48830	-0.13	437	7043	46	215	13.9	40	-2.8	3	0.8	11850	3.5	-3928	-13	-0.2
30-45.2417-113.4583-2-12-			0-M34645				46890	-0.07	371	4241	53	91	5.8	27	-1.5	4	1.2	11780	14.3	13140	34	0.5
30-45.2458-113.3569-2-12-			0-M34646				58160	-0.06	455	4118	84	-68	10.8	35	3.7	7	1.5	13780	10.5	19300	41	0.6
30-45.1367-112.9508-2-15-			0-M34647				75020	-0.06	733	41220	60	-95	13.1	29	1.3	4	1.3	33590	8.2	9419	35	0.4
30-45.1372-112.9506-2-12-			0-M34648				52570	-0.07	636	67530	73	-95	9.7	27	2.8	4	1.3	20610	9.4	12720	38	0.5
30-45.1378-112.9408-2-12-			0-M34649				76310	-0.10	774	33330	91	-132	16.3	29	-2.2	4	1.6	60110	8.0	14820	44	0.4
30-45.6225-113.5292-2-15-			0-M34650				67830	-0.05	585	7024	69	-73	8.3	39	2.6	4	1.2	12100	8.0	13700	38	0.4
30-45.6019-113.5600-2-12-			0-M34651				71320	-0.05	860	7991	133	-106	9.1	22	3.3	7	1.4	13400	11.3	17460	75	0.4
30-45.6017-113.5591-2-12-			0-M34652				66010	-0.06	853	8057	122	-122	10.0	25	3.0	4	1.2	11980	9.2	16930	65	0.5
30-45.5775-113.6244-2-12-			0-M34653				63600	-0.04	479	15480	75	-97	4.8	16	1.7	4	1.2	7075	12.1	11900	45	0.3
30-45.5375-113.5394-2-12-			0-M34654				62840	-0.06	580	14810	191	-90	4.8	23	2.0	6	1.6	8654	25.8	13910	106	0.5
30-45.5294-113.5242-2-12-			0-M34655				61190	0.13	430	14140	258	-105	4.5	-12	-1.4	9	2.0	9612	39.8	16640	156	0.8
30-45.5300-113.5078-2-12-			0-M34656				63070	0.40	490	14590	149	-83	6.1	16	1.9	6	1.5	8740	20.1	13940	83	0.6
30-45.5269-113.5411-2-12-			0-M34657				65890	0.70	482	14270	146	-86	5.4	22	2.4	7	1.5	10770	21.5	15430	90	0.6
30-45.5158-113.5856-2-12-			0-M34658				62140	-0.06	541	14200	244	-96	5.8	25	2.3	7	1.8	9276	34.3	14060	136	0.8
30-45.5819-113.4894-2-12-			0-M34659				58190	-0.07	610	5806	62	-81	6.1	31	3.4	4	1.2	11820	11.3	16800	38	0.4
30-45.5150-113.4389-2-12-			0-M34660				48460	-0.05	586	5369	55	-57	8.6	25	2.5	4	0.9	10710	9.2	11270	31	0.4

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

④

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		
30-45.3128-113.3967-2-12-			0-M34610			9129	724	13020	52	-2	6.4	5.3	-257	-1	-1	11.6	3432	37	3.6	-35	0.319		
30-45.3192-113.4594-2-12-			0-M34611			-4439	1177	9494	37	-2	5.8	5.5	-461	-1	-1	10.5	2233	30	3.8	132	0.457		
30-45.3425-113.4581-2-12-			0-M34612			6759	804	9497	40	-2	5.4	4.8	-389	-1	-1	8.9	3108	33	4.8	80	0.551		
30-45.2769-113.4592-2-12-			0-M34613			7171	784	7764	-23	-2	4.9	3.5	-282	-1	-1	8.3	3418	36	3.4	-45	0.470		
30-45.2747-113.4353-2-12-			0-M34614			5560	728	12300	-25	-2	4.9	5.1	-283	-1	-1	8.4	2878	30	3.5		0.512		
30-45.3839-113.3469-2-12-			0-M34615			6729	156	8433	46	2	5.3	15.1	-183	1	1	31.1	3617	28	9.9	36	0.338		
30-45.3758-113.3481-2-11-			0-M34616			10030	703	9289	42	4	7.4	4.2	-368	-1	-1	8.2	3346	50	3.5	-73	0.366		
30-45.3417-113.3500-2-15-			0-M34617			13300	568	7631	56	-1	10.3	7.0	-361	-1	-1	12.7	4107	49	4.7	118	0.291		
30-45.2617-113.3417-2-15-			0-M34618			6498	470	7013	55	-2	6.3	5.0	-298	-1	-1	9.9	3297	44	6.4	-89	0.434		
30-45.4608-113.6542-2-12-			0-M34619			5974	347	5582	-20	-2	4.0	4.4	-281	-1	-1	5.8	2157	23	2.3	76	0.862		
30-45.4947-113.6050-2-12-			0-M34620			7951	424	9299	-23	-2	5.8	4.5	-283	-1	-1	8.7	2406	37	2.6	95	0.333		
30-45.4786-113.6017-2-12-			0-M34621			5213	443	6197	-21	-2	4.0	3.5	-306	-1	-1	6.5	2073	25	3.0	-76	0.754		
30-45.4542-113.6214-2-12-			0-M34622			8138	330	11560	-25	-2	4.8	3.6	-310	-1	-1	7.0	2408	31	4.2	-77	0.600		
30-45.4128-113.7000-2-12-			0-M34623			6423	205	6443	-26	-2	4.8	4.4	-305	-1	-1	4.5	1585	23	2.1	99	2.822		
30-45.4044-113.6750-2-12-			0-M34624			11980	871	12070	63	-2	5.8	5.0	-389	-1	-1	7.1	2547	29	3.6	73	0.662		
30-45.4181-113.6400-2-12-			0-M34625			5792	1224	7338	48	-2	6.7	6.5	-520	-1	-1	9.2	2199	44	3.9	-107	0.446		
30-45.4467-113.5950-2-12-			0-M34626			9298	290	11190	42	-2	4.8	3.6	-311	-1	-1	6.9	2600	30	2.9	79	0.870		
30-45.4069-113.6136-2-12-			0-M34627			15620	421	11250	30	-2	7.2	4.1	-280	1	-1	10.1	3765	55	2.4	88	0.317		
30-45.3461-113.7069-2-12-			0-M34628			127800	1151	8500	-29	-3	23.2	2.6	-425	-1	-1	4.3	2324	115	-1.8		0.535		
30-45.3664-113.6422-2-12-			0-M34629			30900	616	9459	-28	-3	7.9	3.8	-374	-1	-1	5.0	1824	45	2.0	-48	2.220		
30-45.4797-113.5117-2-12-			0-M34630			5911	292	8238	27	-1	3.3	3.9	-207	-1	-1	5.9	2079	23	2.5	31	0.525		
30-45.4272-113.5108-2-12-			0-M34631			13410	551	13150	39	-2	6.7	4.5	-292	-1	-1	9.3	2815	40	2.8	111	0.430		
30-45.3939-113.5303-2-12-			0-M34632			14440	544	12390	-21	-2	8.5	5.8	-328	-1	-1	8.4	3007	52	3.5	125	0.464		
30-45.3714-113.6619-2-12-			0-M34633			23420	544	13380	-26	-2	8.8	3.7	-325	-1	-1	9.4	2708	71	-1.7	-71	0.372		
30-45.3928-113.6036-2-12-			0-M34634			19500	245	8343	27	-1	5.9	3.0	-204	-1	-1	5.0	1501	30	2.4	63	0.940		
30-45.3919-113.6028-2-12-			0-M34635			23060	258	11230	46	-2	6.8	4.2	-235	-1	-1	6.6	2248	34	2.1	76	1.227		
30-45.4261-113.5369-2-12-			0-M34636			16580	335	10750	-18	-2	6.1	5.1	-282	-1	-1	7.1	2502	37	3.8		0.803		
30-45.2533-113.5753-2-12-			0-M34637			8074	240	6392	-21	-2	4.2	3.2	-226	-4	-1	8.3	1936	25	2.2	-135	0.542		
30-45.2478-113.5514-2-12-			0-M34638			9603	404	26870	49	-2	8.0	9.4	465	2	-1	24.2	2543	76	5.1	65	0.380		
30-45.2436-113.5033-2-12-			0-M34639			4734	84	4684	23	1	2.4	2.1	-126	-1	-1	3.8	1271	14	2.2	31	0.526		
30-45.2350-113.5083-2-12-			0-M34640			6431	134	5726	-14	-1	2.7	3.0	-181	-1	-1	5.4	2010	20	2.5	51	0.537		
30-45.1769-113.5158-2-12-			0-M34641			9319	1428	9786	-30	-3	8.2	7.8	-538	-1	-1	12.5	2977	51	4.9	-56	0.944		
30-45.2033-113.5067-2-12-			0-M34642			7947	156	11930	36	2	5.4	6.1	-205	-1	1	9.5	3601	30	5.7	51	0.632		
30-45.2403-113.4361-2-11-			0-M34643			10890	874	6506	72	-3	12.4	9.4	-481	-1	-1	13.5	4033	58	7.2	178	0.481		
30-45.2139-113.4444-2-11-			0-M34644			-4449	277	3780	-39	-4	6.9	2.9	-425	-2	-2	8.3	2057	23	-3.1	214	0.325		
30-45.2417-113.4583-2-12-			0-M34645			6747	258	11520	-24	-2	4.7	2.9	-275	-1	-1	7.5	4125	34	4.0	103	0.587		
30-45.2458-113.3569-2-12-			0-M34646			10510	923	4943	54	-2	7.1	8.1	-359	-1	1	11.2	2852	40	5.3	83	0.464		
30-45.1367-112.9508-2-15-			0-M34647			16260	937	16570	-20	-2	10.1	4.4	497	-1	-1	8.2	5670	135	2.7	128	0.256		
30-45.1372-112.9505-2-12-			0-M34648			20790	683	11070	35	6	6.7	5.5	-360	-1	-1	8.4	3148	60	3.7	83	0.345		
30-45.1378-112.9403-2-12-			0-M34649			19170	1141	16900	-38	-3	12.3	5.8	-484	-1	-1	8.1	7262	193	4.3	132	0.309		
30-45.6225-113.5292-2-15-			0-M34650			7920	221	12870	44	-2	5.9	4.9	-229	-1	-1	10.7	2430	36	2.6	54	0.336		
30-45.6019-113.5600-2-12-			0-M34651			-4338	875	19460	50	-2	4.7	8.1	-363	-1	-1	21.5	3003	34	4.1	85	0.172		
30-45.6017-113.5581-2-12-			0-M34652			6985	925	18560	31	2	4.0	7.4	-434	-1	-1	18.6	2957	35	3.5	62	0.183		
30-45.5775-113.6244-2-12-			0-M34653			-3904	222	19120	29	-1	3.9	5.4	-324	-1	-1	11.3	1906	20	2.7	52	0.283		
30-45.5375-113.5394-2-12-			0-M34654			5890	218	18460	23	-2	4.2	12.4	-255	-1	1	30.5	3145	29	5.4	84	0.213		
30-45.5294-113.5242-2-12-			0-M34655			-4261	483	18450	-21	-2	4.4	15.1	-327	-1	1	49.8	3848	30	8.8	67	0.169		
30-45.5300-113.5078-2-12-			0-M34656			7467	292	18370	45	-1	4.8	10.1	-245	1	1	25.4	3324	24	4.1	48	0.209		
30-45.5269-113.5411-2-12-			0-M34657			5388	491	17920	37	-2	5.4	10.7	397	1	-1	27.0	3427	33	4.9	97	0.219		
30-45.5158-113.5856-2-12-			0-M34658			4879	482	17400	26	-2	4.2	19.3	-306	-1	1	43.1	3874	27	6.5	61	0.160		
30-45.5819-113.4894-2-12-			0-M34659			6353	218	12240	49	-2	6.2	5.7	-246	-1	-1	9.7	3467	44	3.9	-45	0.340		
30-45.5150-113.4389-2-12-			0-M34660			5260	346	11150	38	-1	4.9	4.1	-229	-1	-1	9.0	2838	35	2.9	-42	0.278		

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	COMBUST	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLATOR (eL/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																											
30-45.5289-113.4275-2-12-	0-M34661-09/27/75-14-	17- 9.0-	-	5.7-	65-	4-2-7-4-6-3-3-1-2-2-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.10				
30-45.5275-113.4089-2-12-	0-M34662-09/27/75-15-	17-10.5-	-	5.5-	25-	18-4-	-5-6-3-3-2-2-3-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.80				
30-45.5314-113.3950-2-12-	0-M34663-09/27/75-15-	17- 8.5-	-	5.7-	55-	18-2-7-4-6-3-3-1-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90					
30-45.4575-113.2978-2-12-	0-M34664-09/31/75-13-	17-10.5-	-	5.2-	190-	7-2-4-2-6-4-3-1-3-6-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.20					
30-45.4022-113.4533-2-12-	0-M34665-09/31/75-15-	15-14.5-	-	5.5-	35-	0-4-	-4-6-4-3-1-2-3-4-1-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30					
30-45.4050-113.4400-2-12-	0-M34666-09/31/75-15-	16-17.0-	-	5.5-	62-	2-4-	-3-6-4-3-2-3-3-3-1-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30					
30-45.4611-113.2800-2-12-	0-M34667-09/01/75-12-	18-10.5-	-	5.7-	70-	9-4-	-6-8-2-3-1-2-3-4-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.60					
30-45.4533-113.2819-2-12-	0-M34668-09/01/75-12-	19-10.5-	-	5.2-	32-	0-4-	-2-6-3-3-1-2-6-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20					
30-45.4403-113.3219-2-12-	0-M34669-09/01/75-13-	17-11.0-	-	5.2-	24-	4-4-	-2-7-3-3-1-2-6-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.90					
30-45.4347-113.3192-2-12-	0-M34670-09/01/75-14-	23-12.5-	-	5.2-	32-	4-2-4-2-6-4-3-1-2-4-4-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00					
30-45.4178-113.3017-2-12-	0-M34671-09/01/75-14-	26-11.0-	-	5.5-	40-	7-2-4-4-6-3-3-1-3-4-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.70					
30-45.3986-113.3056-2-12-	0-M34672-09/01/75-15-	17-22.0-	-	5.2-	30-	2-2-4-4-6-3-3-1-2-4-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60					
30-45.3936-113.3056-2-12-	0-M34673-09/01/75-15-	17-18.0-	-	5.5-	58-	14-4-	-3-6-3-3-1-2-4-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.40					
30-45.3817-113.3397-2-12-	0-M34674-09/01/75-15-	16-13.0-	-	5.7-	90-	2-4-	-3-6-3-3-1-2-6-5-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.70					
30-45.2389-113.4773-2-12-	0-M34675-09/30/75-17-	25-14.5-C-	-	5.2-	41-	0-2-1-6-6-2-3-1-2-4-4-2-2																													

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	LAST 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	
30-45.5289-113.4275-2-12-						0-M34661	-5	-5	-5	-10	-20	-15	7	-10	-15		2	10
30-45.5275-113.4089-2-12-						0-M34662	-5	-5	-5	-10	29	-15	-5	-10	-15		2	10
30-45.5314-113.3950-2-12-						0-M34663	-5	-5	-5	13	30	-15	6	-10	-15		2	12
30-45.4575-113.2978-2-12-						0-M34664	-5	-5	-5	-10	27	-15	6	-10	-15		1	12
30-45.4022-113.4533-2-12-						0-M34665	-5	-5	-5	15	-20	-15	-5	-10	-15		1	6
30-45.4050-113.4400-2-12-						0-M34666	-5	-5	-5	14	-20	-15	-5	-10	-15		2	15
30-45.4611-113.2800-2-12-						0-M34667	-5	5	-5	22	25	-15	-5	-10	-15		1	5
30-45.4533-113.2819-2-12-						0-M34668	-5	-5	-5	-10	-20	-15	-5	-10	-15		1	10
30-45.4403-113.3219-2-12-						0-M34669	-5	-5	-5	19	-20	-15	5	-10	-15		2	27
30-45.4347-113.3192-2-12-						0-M34670	-5	-5	-5	10	24	-15	6	-10	-15		2	21
30-45.4178-113.3017-2-12-						0-M34671	-5	-5	-5	-10	37	-15	5	12	-15		2	13
30-45.3986-113.3056-2-12-						0-M34672	-5	-5	-5	15	28	-15	-5	-10	-15		2	16
30-45.3936-113.3056-2-12-						0-M34673	-5	-5	-5	15	44	-15	-5	-10	-15		2	21
30-45.3817-113.3397-2-12-						0-M34674	-5	-5	-5	24	35	-15	-5	-10	-15		2	28
30-45.2389-113.4778-2-12-						0-M34675	-5	-5	-5	22	46	-15	7	-10	-15	-1		3
30-45.2431-113.4694-2-11-						0-M34676	-5	-5	-5	29	53	-15	-5	-10	-15	-1		6
30-45.4964-113.4564-2-15-						0-M34677	-5	-5	-5	15	55	-15	-5	-10	-15		2	14
30-45.4772-113.4853-2-12-						0-M34678	-5	-5	-5	32	-20	-15	10	-10	-15		3	26
30-45.4486-113.4542-2-12-						0-M34679	-5	-5	-5	16	-20	-15	-5	-10	-15		2	26
30-45.4358-113.4594-2-11-						0-M34680	-5	-5	-5	11	-20	-15	-5	-10	-15		2	13
30-45.4114-113.4306-2-12-						0-M34681	-5	-5	-5	23	-20	17	5	-10	-15	-2		17
30-45.4408-113.4219-2-15-						0-M34682	-5	-5	-5	26	-20	32	9	10	-15		2	19
30-45.3717-112.9633-2-12-						0-M34683	6	-5	-5	22	52	-15	-5	-10	18		2	9
30-45.3717-112.9650-2-12-						0-M34684	-5	-5	-5	14	-20	-15	5	-10	-15		2	12
30-45.3461-112.9461-2-12-						0-M34685	-5	-5	-5	-10	-20	-15	27	-10	-15		2	26
30-45.4122-113.4039-2-12-						0-M34686	-5	6	-5	20	-20	18	24	-10	-15		1	14
30-45.4047-113.4019-2-12-						0-M34687	-5	-5	-5	-10	-20	-15	26	-10	-15		2	71
30-45.3936-113.3919-2-11-						0-M34688	-5	-5	-5	19	43	-15	19	-10	-15		1	6
30-45.3794-113.3742-2-12-						0-M34689	-5	8	-5	-10	43	-15	8	-10	-15		2	20
30-45.4939-112.9081-2-12-						0-M34690	-5	-5	-5	27	31	-15	11	-10	-15		3	18
30-45.4928-112.8900-2-12-						0-M34691	-5	-5	-5	18	33	-15	7	-10	-15		2	21
30-45.1742-112.9264-2-11-						0-M34692	-5	-5	-5	20	-20	-15	6	-10	-15		1	14
30-45.1900-112.9472-2-15-						0-M34693	-5	-5	-5	24	-20	-15	16	-10	25		3	29
30-45.2025-112.8944-2-11-						0-M34694	-5	-5	-5	11	-20	-15	8	-10	-15		2	12
30-45.2167-112.8833-2-11-						0-M34695	-5	-5	-5	23	-20	-15	7	-10	-15		2	17
30-45.2247-112.8328-2-15-						0-M34696	-5	-5	9	26	52	-15	-5	-10	-15		3	5
30-45.2242-112.8261-2-15-						0-M34697	9	-5	6	37	20	-15	-5	-10	-15		3	9
30-45.2378-112.8553-2-15-						0-M34698	-5	-5	-5	17	24	-15	13	-10	-15		2	13
30-45.2408-112.9011-2-15-						0-M34699	-5	6	-5	23	-20	19	18	-10	-15		2	14
30-45.2125-113.5000-2-12-						0-M34700	-5	-5	-5	15	-20	-15	17	-10	-15		2	13
30-45.1861-113.5181-2-12-						0-M34701	-5	-5	-5	16	-20	23	19	-10	-15		2	25
30-45.1611-113.5000-2-12-						0-M34702	-5	-5	-5	18	-20	-15	16	-10	-15		2	29
30-45.1542-113.4958-2-12-						0-M34703	-5	-5	-5	27	-20	-15	14	-10	-15		2	25
30-45.1236-113.4583-2-12-						0-M34704	-5	-5	-5	19	-20	-15	7	-10	-15		2	30
30-45.1222-113.4611-2-12-						0-M34705	-5	-5	-5	20	-20	37	13	-10	-15		3	22
30-45.1111-113.4514-2-12-						0-M34706	-5	-5	-5	21	-20	-15	11	-10	-15		2	21
30-45.0917-113.4167-2-12-						0-M34707	-5	-5	-5	19	-20	-15	5	-10	-15		2	13
30-45.0889-113.4167-2-12-						0-M34708	-5	-5	-5	15	-20	-15	5	-10	-15		2	11
30-45.0806-113.4222-2-15-						0-M34709	-5	-5	-5	27	21	-15	18	-10	-15		2	17
30-45.0847-113.4167-2-12-						0-M34710	-5	-5	-5	21	-20	-15	18	-10	-15		2	24
30-45.0722-113.4181-2-12-						0-M34711	-5	-5	-5	-10	-20	15	-5	-10	-15		1	8

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

③

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS															
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	U.S. 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
30-45.5289-113.4275-2-12-			0-M34661			60100	-0.04	475	14280	177	-80	4.6	34	1.7	8	1.7	7807	28.5	11980	108	0.7	
30-45.5275-113.4089-2-12-			0-M34662			53590	-0.05	403	14120	206	-87	4.2	20	1.4	7	1.7	7345	29.7	14430	113	0.7	
30-45.5314-113.3950-2-12-			0-M34663			62530	-0.06	580	15680	99	-95	3.6	19	-1.1	4	1.3	7012	15.5	14610	62	0.5	
30-45.4575-113.2978-2-12-			0-M34664			53010	-0.05	595	11790	80	-67	6.0	24	2.4	5	1.4	8520	24.7	15440	45	0.6	
30-45.4022-113.4533-2-12-			0-M34665			26520	0.17	379	2558	28	85	3.6	10	1.8	3	0.7	4452	12.7	9402	19	0.3	
30-45.4050-113.4400-2-12-			0-M34666			40110	-0.05	423	4049	58	60	4.7	22	3.9	4	1.0	5923	14.1	13610	32	0.5	
30-45.4611-113.2800-2-12-			0-M34667			43640	-0.14	702	7814	39	-92	10.9	-23	4.0	2	1.3	15680	3.6	-4338	-14	-0.3	
30-45.4533-113.2819-2-12-			0-M34668			30290	-0.04	742	5772	74	-55	5.7	16	2.0	5	1.2	5433	13.1	13190	39	0.5	
30-45.4403-113.3219-2-12-			0-M34669			61030	-0.06	679	6311	77	121	9.1	26	5.8	7	1.6	13430	10.9	17790	43	0.5	
30-45.4347-113.3192-2-12-			0-M34670			52260	-0.06	611	5602	79	109	7.3	26	5.7	6	1.4	9609	13.0	16610	38	0.6	
30-45.4178-113.3017-2-12-			0-M34671			49990	-0.09	545	4342	100	116	7.7	31	4.8	11	2.8	13580	15.4	18200	60	1.1	
30-45.3986-113.3056-2-12-			0-M34672			40480	-0.05	443	4544	60	77	7.2	24	3.5	5	1.3	6381	17.1	19030	33	0.7	
30-45.3936-113.3056-2-12-			0-M34673			61180	-0.05	561	7307	70	128	9.4	32	5.8	9	2.1	15730	10.2	15060	35	0.6	
30-45.3817-113.3397-2-12-			0-M34674			55160	-0.05	727	8269	78	-72	7.7	33	12.3	6	1.7	10870	14.7	15620	26	0.7	
30-45.2389-113.4778-2-12-			0-M34675			32280		670	10040		-105				-2			6559				
30-45.2431-113.4694-2-11-			0-M34676			31830	-0.05	342	3043	54	58	6.6	45	2.1	5	1.1	17630	19.4	11260	29	0.5	
30-45.4964-113.4564-2-15-			0-M34677			42310	-0.05	505	4530	53	135	5.4	27	2.2	4	1.1	6892	12.6	13570	26	0.4	
30-45.4772-113.4853-2-12-			0-M34678			57060	-0.08	455	4964	51	-76	8.6	37	4.5	4	1.3	13630	19.0	19240	34	0.5	
30-45.4486-113.4542-2-12-			0-M34679			55620	-0.05	509	5971	63	104	6.9	39	4.0	6	1.2	9902	12.9	13030	39	0.5	
30-45.4358-113.4594-2-11-			0-M34680			42470	0.22	478	6769	53	-64	8.1	24	1.9	4	1.0	14170	12.9	13580	31	0.3	
30-45.4114-113.4306-2-12-			0-M34681			64100	-0.07	699	8330	83	-83	9.3	35	6.3	8	2.0	14110	11.0	16200	41	0.7	
30-45.4408-113.4219-2-15-			0-M34682			61820	-0.09	641	8240	57	142	10.7	47	7.4	5	1.4	15510	7.0	18870	32	0.4	
30-45.3717-112.9633-2-12-			0-M34683			72020	-0.08	516	26710	147	-111	13.3	40	2.3	9	2.5	84720	39.1	13910	85	1.3	
30-45.3717-112.9650-2-12-			0-M34684			81580	-0.07	894	35880	61	-106	16.0	18	-1.5	4	1.5	39640	6.0	15250	42	0.4	
30-45.3461-112.9461-2-12-			0-M34685			79490	-0.08	455	29570	156	-124	11.0	25	3.7	7	1.8	26170	24.3	13180	77	1.0	
30-45.4122-113.4039-2-12-			0-M34686			54400	-0.07	445	9379	62	-88	8.0	41	4.0	4	1.4	15460	15.5	15840	40	0.7	
30-45.4047-113.4019-2-12-			0-M34687			85600	-0.06	697	23450	91	-130	10.0	19	3.9	4	1.5	20600	7.5	17520	72	0.6	
30-45.3936-113.3919-2-11-			0-M34688			69750	-0.09	615	29540	114	-133	8.5	-13	3.3	6	1.4	14200	10.8	12750	77	0.6	
30-45.3794-113.3742-2-12-			0-M34689			72690	-0.08	533	32200	230	-131	11.5	27	-1.8	7	2.3	59480	32.7	11330	123	1.1	
30-45.4939-112.9081-2-12-			0-M34690			97380	-0.08	583	25080	136	-139	7.7	24	2.6	5	1.6	34980	13.6	15110	80	0.7	
30-45.4928-112.8900-2-12-			0-M34691			71730	-0.06	689	19690	167	-107	9.0	16	1.6	7	1.8	67640	22.8	18020	95	0.9	
30-45.1742-112.9264-2-11-			0-M34692			79290	-0.07	915	32850	63	-117	11.6	33	1.8	4	1.4	22570	4.8	15060	37	0.3	
30-45.1900-112.9472-2-15-			0-M34693			64650	-0.06	529	26700	101	123	8.8	33	3.3	5	1.5	16520	12.6	14540	51	0.5	
30-45.2025-112.8944-2-11-			0-M34694			47030	-0.07	441	2126	76	-61	7.2	-11	3.5	7	1.7	13310	28.6	18740	45	0.7	
30-45.2167-112.8833-2-11-			0-M34695			72210	-0.07	785	41280	65	175	13.3	16	1.5	5	1.4	21730	5.5	17870	41	0.4	
30-45.2247-112.8328-2-15-			0-M34696			44150	-0.07	530	15810	71	-124	37.5	63	-1.6	3	1.2	144700	23.0	-4998	43	0.4	
30-45.2242-112.8261-2-15-			0-M34697			55470	-0.08	623	27300	62	-112	24.3	75	2.8	3	1.3	88860	16.6	9909	42	0.5	
30-45.2378-112.8553-2-15-			0-M34698			59480	-0.09	530	31970	78	-94	15.1	58	2.1	3	1.3	47800	9.6	13510	40	0.4	
30-45.2408-112.9011-2-15-			0-M34699			59110	-0.05	594	15830	56	-68	10.3	33	3.8	4	1.0	16090	6.9	15110	32	0.4	
30-45.2125-113.5000-2-12-			0-M34700			71440	-0.07	608	5370	72	120	8.5	43	3.9	5	1.3	21820	12.9	13130	31	0.4	
30-45.1861-113.5181-2-12-			0-M34701			60940	-0.09	926	6480	59	-108	9.4	46	3.7	5	1.5	14270	11.6	14750	36	0.5	
30-45.1611-113.5000-2-12-			0-M34702			67840	-0.07	633	5181	89	-86	11.9	57	4.4	7	1.7	15430	12.2	17820	48	0.7	
30-45.1542-113.4958-2-12-			0-M34703			72330	-0.07	645	5203	71	-88	8.6	36	5.1	7	1.3	14170	9.2	20630	45	0.5	
30-45.1236-113.4583-2-12-			0-M34704			61470	-0.07	610	5568	93	-88	9.6	42	4.1	8	1.5	15570	19.0	16880	43	0.8	
30-45.1222-113.4611-2-12-			0-M34705			63740	-0.10	601	4206	71	134	9.7	33	6.6	8	2.0	13520	8.4	16700	40	0.7	
30-45.1111-113.4514-2-12-			0-M34706			62840	-0.07	519	3630	84	-77	10.7	46	4.8	7	1.4	13170	12.9	20570	45	0.6	
30-45.0917-113.4167-2-12-			0-M34707			52290	-0.05	457	3058	54	67	4.6	27	2.5	6	1.1	7521	10.3	15710	36	0.5	
30-45.0889-113.4167-2-12-			0-M34708			46430	-0.05	413	3875	67	-64	6.5	30	2.4	5	1.3	8042	12.7	14270	32	0.6	
30-45.0806-113.4222-2-15-			0-M34709			57650	-0.08	468	4848	76	-68	6.6	43	5.4	6	1.5	16680	19.7	16890	38	0.8	
30-45.0847-113.4167-2-12-			0-M34710			66240	-0.07	579	7433	79	163	14.4	39	3.4	4	1.2	17030	7.9	15600	35	0.4	
30-45.0722-113.4181-2-12-			0-M34711			38860	-0.05	315	4205	52	-59	6.3	20	1.9	7	1.6	10730	36.7	10000	28	0.8	

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

④

DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued)																	U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	DOE 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		
30-45.5289-113.4275-2-12-	0-M34661	5174	325	18580	29	-1	4.5	10.3	288	1	1	29.6	3647	24	5.3	45	0.206						
30-45.5275-113.4089-2-12-	0-M34662	4153	308	18280	29	-1	4.1	13.4	-258	1	1	33.6	3500	25	5.6	58	0.173						
30-45.5314-113.3950-2-12-	0-M34663	4590	227	19800	-17	-2	3.9	5.5	-262	-1	-1	15.3	2631	22	3.7	93	0.255						
30-45.4575-113.2978-2-12-	0-M34664	6274	229	12740	31	-1	5.3	6.3	-206	1	1	11.3	2679	25	4.2	32	0.372						
30-45.4022-113.4533-2-12-	0-M34665	3636	104	6311	26	-1	2.3	2.4	-139	-1	-1	4.7	1357	12	2.4	23	0.489						
30-45.4050-113.4400-2-12-	0-M34666	4755	219	9537	38	3	3.3	4.4	-205	-1	-1	8.2	2387	19	3.3	65	0.402						
30-45.4611-113.2800-2-12-	0-M34667	7447	335	3859	-46	-4	5.6	2.9	-445	-3	-2	4.6	1924	36	-3.4	176	1.000						
30-45.4533-113.2819-2-12-	0-M34668	2820	197	8603	31	-1	3.9	5.5	-174	1	1	9.7	2692	19	3.8	51	0.330						
30-45.4403-113.3219-2-12-	0-M34669	9136	730	8873	57	-2	7.7	6.9	-315	-1	-1	11.3	2954	43	4.1	87	0.434						
30-45.4347-113.3192-2-12-	0-M34670	6227	577	6996	49	-2	5.8	6.7	-305	-1	-1	9.5	3166	29	4.8	50	0.421						
30-45.4178-113.3017-2-12-	0-M34671	5164	656	3768	44	-3	6.7	11.3	-357	-1	-1	9.1	3255	36	7.1	77	0.626						
30-45.3986-113.3056-2-12-	0-M34672	5389	94	5617	45	3	4.6	5.3	-158	-1	-1	8.0	2838	23	4.2	37	0.450						
30-45.3935-113.3056-2-12-	0-M34673	9498	525	6426	36	-2	8.2	6.5	-275	-1	1	9.2	3474	46	4.3	94	0.478						
30-45.3917-113.3397-2-12-	0-M34674	9929	635	6434	58	-2	6.5	4.5	-317	-1	-1	10.9	3468	39	4.5	86	0.431						
30-45.2389-113.4778-2-12-	0-M34675	-4661	253	4392					-445				-1103	21									
30-45.2431-113.4694-2-11-	0-M34676	5913	88	7836	31	2	3.5	4.9	-154	1	1	11.0	5175	26	4.6	54	0.573						
30-45.4964-113.4564-2-15-	0-M34677	6190	209	10930	33	-1	3.4	4.6	-213	-1	-1	7.2	2282	23	3.6	59	0.444						
30-45.4772-113.4853-2-12-	0-M34678	11030	726	5339	64	-2	7.5	5.0	-358	-1	-1	9.8	3296	44	4.5	-109	0.490						
30-45.4486-113.4542-2-12-	0-M34679	9533	149	12740	46	-1	5.8	5.8	-201	-1	-1	10.4	3174	31	4.3	71	0.385						
30-45.4358-113.4594-2-11-	0-M34680	5937	433	9209	-16	-1	4.6	3.8	-230	-1	-1	7.4	1549	37	3.2	46	0.608						
30-45.4114-113.4306-2-12-	0-M34681	9238	431	9523	44	-2	7.6	8.7	-310	-1	1	12.0	3337	40	6.0	-78	0.425						
30-45.4408-113.4219-2-15-	0-M34682	10100	404	8395	-28	-3	7.7	4.9	-316	-1	-1	9.5	2873	49	-2.3	-18	0.516						
30-45.3717-112.9633-2-12-	0-M34683	9478	972	21540	32	-2	13.0	12.8	-364	3	-1	44.9	4844	291	9.5	79	0.321						
30-45.3717-112.9650-2-12-	0-M34684	27670	921	19740	-21	-2	14.1	4.4	551	-1	-1	7.7	7195	161	3.4	94	0.273						
30-45.3461-112.9461-2-12-	0-M34685	17520	798	21730	53	-2	13.9	13.9	-403	2	-1	36.9	4461	101	7.9	74	0.279						
30-45.4122-113.4039-2-12-	0-M34686	8624	783	9144	-23	-2	7.2	5.1	-360	-1	1	11.8	3357	53	4.9	-84	0.398						
30-45.4047-113.4019-2-12-	0-M34687	9779	959	24950	51	-2	8.0	14.4	-428	-1	-1	16.1	2621	57	4.5	94	2.727						
30-45.3936-113.3919-2-11-	0-M34688	-5474	547	20100	-28	-3	8.1	6.5	491	-1	-1	18.5	2618	37	3.6	-127	0.286						
30-45.3794-113.3742-2-12-	0-M34689	13310	1108	21260	-27	-3	15.1	15.3	-453	2	-1	39.3	3559	192	8.1		0.410						
30-45.4939-112.9081-2-12-	0-M34690	10300	775	27960	-29	-3	9.6	7.4	-426	2	-1	25.7	3040	104	6.2	-209	0.296						
30-45.4928-112.8900-2-12-	0-M34691	-4344	737	22350	44	-2	5.6	11.3	495	3	1	26.4	3587	160	6.3	76	0.625						
30-45.1742-112.9264-2-11-	0-M34692	21030	1020	18590	-24	-2	10.3	4.7	-427	-1	-1	7.2	2934	72	3.4	114	0.389						
30-45.1900-112.9472-2-15-	0-M34693	15020	948	14340	-18	-2	7.9	7.3	-377	-1	-1	15.9	2645	57	4.2	-57	0.327						
30-45.2025-112.8944-2-11-	0-M34694	9035	657	3012	51	-2	5.3	7.5	-322	-1	1	9.7	3316	38	6.2		0.464						
30-45.2167-112.8833-2-11-	0-M34695	17470	1165	16570	42	-2	10.2	4.5	603	-1	1	7.1	3635	65	2.7	120	0.254						
30-45.2247-112.8328-2-15-	0-M34696	10340	2112	9599	-29	-2	14.6	4.2	-479	-1	-1	13.3	16260	583	3.6	201	0.286						
30-45.2242-112.8261-2-15-	0-M34697	13910	1532	9267	-28	-2	12.1	5.3	-473	-1	-1	10.7	12680	418	4.2	94	0.290						
30-45.2378-112.8553-2-15-	0-M34698	16390	1063	9494	-30	-3	12.2	4.2	-393	-1	-1	8.6	7032	233	3.4	126	0.314						
30-45.2408-112.9011-2-15-	0-M34699	10310	735	7577	38	2	7.0	3.9	-295	-1	1	8.4	3096	63	2.7	107	0.274						
30-45.2125-113.5000-2-12-	0-M34700	12910	618	9369	51	-2	9.4	5.5	-300	-1	-1	14.0	4738	53	4.3	121	0.364						
30-45.1861-113.5181-2-12-	0-M34701	12440	575	11750	-32	-3	6.9	5.6	-401	-1	-1	10.4	3719	48	5.1	-101	0.567						
30-45.1611-113.5000-2-12-	0-M34702	14180	421	11840	47	-2	9.0	8.5	-309	-1	-1	13.1	4481	47	5.3	70	0.611						
30-45.1542-113.4958-2-12-	0-M34703	10570	393	13080	47	-2	8.6	6.4	-297	-1	-1	12.0	3570	43	4.9	109	0.467						
30-45.1235-113.4583-2-12-	0-M34704	10670	493	11320	54	-2	7.9	8.9	-318	1	-1	13.0	4844	48	6.0	94	0.500						
30-45.1222-113.4611-2-12-	0-M34705	10270	710	6738	-33	-3	8.1	7.6	-434	-1	-2	11.3	2933	47	4.6	-127	0.416						
30-45.1111-113.4514-2-12-	0-M34706	7964	419	9867	69	-2	8.0	7.6	-291	-1	1	13.4	3605	44	4.4	87	0.433						
30-45.0917-113.4167-2-12-	0-M34707	5591	93	11610	36	-2	5.8	4.9	-178	1	-1	8.8	3382	28	3.4	62	0.409						
30-45.0889-113.4167-2-12-	0-M34708	6551	215	8048	40	-2	5.1	6.2	-218	-1	-1	8.3	3446	34	4.4	30	0.458						
30-45.0806-113.4222-2-15-	0-M34709	7091	914	3846	56	-2	7.9	5.7	-357	-1	-1	14.8	3939	49	6.6	-45	0.372						
30-45.0847-113.4167-2-12-	0-M34710	8343	923	9983	47	-2	7.7	4.9	-392	-1	-1	11.5	3454	47	3.5	100	0.435						
30-45.0722-113.4181-2-12-	0-M34711	4995	276	8453	-15	-1	4.4	4.9	-204	-1	1	8.5	2599	22	5.5	51	0.659						

DOE SAMPLE NUMBER						LASI SAMPLE LOCATION NUMBER AND FIELD DATA																	U CONCENTRATION												
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASI SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (umho/cm)	SCINTILLATION (cpm)	ROCK TYPE	ROCK COLOR	SEGMENT TYPE	SEGMENT 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																											
30-45.0750-113.4250-2-12-	0-M34712-03/31/75-12-	18-9.5-	-	5.7-	40-	2-2-1-4-6-3-3-1-2-3-2-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90				
30-45.0514-113.4139-2-12-	0-M34713-03/31/75-12-	18-10.0-	-	5.7-	55-	4-2-7-4-6-3-3-1-2-2-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10				
30-45.0486-113.4167-2-12-	0-M34714-03/31/75-12-	18-10.5-	-	5.7-	55-	2-2-7-4-6-3-3-1-2-2-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80				
30-45.0417-113.4122-2-12-	0-M34715-03/31/75-12-	19-10.5-	-	5.7-	35-	6-2-6-4-6-3-3-1-2-2-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.00				
30-45.0306-113.3972-2-12-	0-M34716-03/31/75-13-	19-9.5-C-	-	5.9-	75-	2-2-4-4-6-3-3-4-2-7-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00				
30-45.0278-113.4042-2-12-	0-M34717-03/31/75-13-	19-10.5-	-	5.7-	45-	4-2-1-4-6-3-3-1-2-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.20				
30-45.0111-113.3889-2-12-	0-M34718-03/31/75-13-	20-10.5-	-	5.9-	-	4-1-6-4-6-3-3-1-2-3-2-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.40				
30-45.0097-113.3639-2-12-	0-M34719-03/31/75-13-	19-9.5-	-	5.9-	65-	4-2-7-4-6-3-3-1-2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.70				
30-45.0250-113.2597-2-12-	0-M34720-03/01/75-0-	16-9.5-	-	5.2-	30-	18-2-1-4-6-3-3-1-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50				
30-45.0278-113.2903-2-12-	0-M34721-03/01/75-0-	16-9.0-	-	5.2-	50-	18-2-1-5-6-3-3-1-2-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.50				
30-45.0361-113.2944-2-12-	0-M34722-03/01/75-0-	16-9.5-	-	5.7-	55-	14-2-7-3-6-3-3-1-2-3-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.70				
30-45.0639-113.2806-2-12-	0-M34723-03/01/75-10-	17-9.5-	-	5.2-	41-	18-2-1-3-6-3-3-1-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80				
30-45.0722-113.3000-2-12-	0-M34724-03/01/75-10-	17-10.0-	-	5.2-	33-	18-2-1-4-6-3-3-1-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60				
30-45.0875-113.3167-2-12-	0-M34725-03/01/75-10-	17-9.5-	-	5.7-	22-	14-2-1-4-6-3-3-1-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10				
30-45.0944-113.3111-2-12-	0-M34726-03/01/75																																		

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

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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	
30-45.0750-113.4250-2-12-						0-M34712	-5	-5	-5	12	-20	-15	-5	-10	-15		2	9
30-45.0514-113.4139-2-12-						0-M34713	-5	-5	-5	-10	-20	-15	-5	-10	-15		1	6
30-45.0486-113.4167-2-12-						0-M34714	-5	-5	-5	11	-20	-15	-5	-10	-15		2	7
30-45.0417-113.4122-2-12-						0-M34715	-5	-5	-5	10	-20	-15	8	-10	-15		1	11
30-45.0306-113.3972-2-12-						0-M34716	-5	-5	-5	11	-20	-15	-5	-10	-15		-1	12
30-45.0278-113.4042-2-12-						0-M34717	-5	-5	-5	-10	-20	-15	7	-10	-15		1	14
30-45.0111-113.3889-2-12-						0-M34718	-5	-5	-5	14	-20	-15	10	-10	-15		1	26
30-45.0097-113.3639-2-12-						0-M34719	-5	-5	-5	12	-20	-15	11	-10	-15		-1	10
30-45.0250-113.2597-2-12-						0-M34720	-5	-5	-5	18	-20	-15	16	-10	-15		2	17
30-45.0278-113.2903-2-12-						0-M34721	-5	-5	-5	85	-20	37	22	-10	-15		2	28
30-45.0361-113.2944-2-12-						0-M34722	-5	-5	6	72	-20	-15	21	-10	-15		2	23
30-45.0639-113.2806-2-12-						0-M34723	-5	-5	-5	10	-20	15	-5	-10	-15		2	20
30-45.0722-113.3000-2-12-						0-M34724	-5	8	-5	-10	-20	-15	-5	-10	-15		2	11
30-45.0875-113.3167-2-12-						0-M34725	-5	-5	-5	10	-20	-15	-5	-10	-15		1	12
30-45.0944-113.3111-2-12-						0-M34726	-5	-5	-5	21	-20	-15	11	-10	-15		2	11
30-45.1194-113.2611-2-12-						0-M34727	-5	-5	-5	11	-20	17	-5	-10	-15		1	21
30-45.1333-113.2847-2-12-						0-M34728	-5	-5	-5	17	-20	-15	-5	-10	-15		1	11
30-45.1125-113.4222-2-12-						0-M34729	-5	6	-5	-10	-20	-15	-5	-10	-15		-1	12
30-45.1375-113.3944-2-12-						0-M34730	-5	6	-5	27	-20	-15	6	-10	-15		1	20
30-45.1292-113.3639-2-12-						0-M34731	-5	-5	-5	21	-20	-15	10	-10	-15		2	20
30-45.1389-113.4083-2-12-						0-M34732	-5	-5	-5	11	-20	-15	9	-10	-15		-1	5
30-45.1583-113.3875-2-12-						0-M34733	-5	6	-5	16	-20	-15	-5	-10	-15		2	11
30-45.1639-113.4069-2-12-						0-M34734	-5	-5	-5	35	-20	27	14	-10	-15		1	16
30-45.1778-113.3986-2-12-						0-M34735	-5	6	-5	-10	-20	-15	7	-10	-15		2	22
30-45.2417-113.2556-2-12-						0-M34736	-5	5	7	46	-20	-15	28	-10	-15		2	17
30-45.2403-113.2569-2-12-						0-M34737	-5	-5	-5	90	-20	-15	30	-10	-15		2	30
30-45.2083-113.2764-2-12-						0-M34738	-5	-5	-5	48	-20	-15	20	-10	-15		3	12
30-45.2069-113.2778-2-12-						0-M34739	-5	-5	-5	37	-20	-15	25	-10	-15		3	13
30-45.6386-113.0725-2-12-						0-M34740	-5	-5	-5	19	30	-15	19	-10	-15		2	15
30-45.6928-113.0369-2-12-						0-M34742	-5	-5	-5	13	-20	-15	14	-10	-15		-1	8
30-45.6853-113.0736-2-12-						0-M34743	-5	-5	-5	11	-20	-15	11	-10	-15		1	17
30-45.6433-113.0642-2-12-						0-M34744	-5	-5	5	15	-20	-15	19	-10	-15		2	9
30-45.6794-113.0656-2-12-						0-M34745	-5	-5	-5	30	-20	-15	10	-10	-15		-1	8
30-45.7433-113.0158-2-12-						0-M34746	-5	-5	-5	21	-20	-15	15	-10	-15		1	14
30-45.7086-113.1786-2-12-						0-M34747	-5	-5	-5	18	-20	-15	7	-10	-15		2	18
30-45.6992-113.1850-2-12-						0-M34748	-5	-5	-5	10	30	-15	-5	-10	-15		2	15
30-45.6878-113.1844-2-12-						0-M34749	-5	-5	-5	83	-20	-15	18	-10	29		2	18
30-45.6772-113.1944-2-12-						0-M34750	-5	-5	-5	36	-20	-15	46	21	16		2	25
30-45.6781-113.1817-2-12-						0-M34751	-5	-5	-5	-10	-20	-15	-5	-10	-15		2	24
30-45.6764-113.1767-2-12-						0-M34752	-5	-5	-5	-10	-20	-15	-5	-10	-15		1	11
30-45.6519-113.1392-2-12-						0-M34753	-5	-5	-5	50	-20	-15	-5	-10	-15		3	32
30-45.6611-113.1339-2-12-						0-M34754	-5	-5	-5	-10	-20	-15	-5	-10	-15		1	10
30-45.6658-113.1292-2-12-						0-M34755	-5	-5	-5	23	-20	-15	19	-10	-15		2	9
30-45.6711-113.1128-2-12-						0-M34756	-5	-5	-5	20	-20	-15	5	-10	-15		1	12
30-45.2894-113.6367-2-12-						0-M34757	-5	-5	-5	13	-20	-15	8	-10	-15		1	7
30-45.2897-113.6372-2-12-						0-M34758	5	6	-5	28	-20	-15	5	-10	35		2	23
30-45.2328-112.9897-2-12-						0-M34759	-5	5	-5	14	-20	-15	6	-10	-15		1	20
30-45.2069-112.9981-2-15-						0-M34760	-5	5	-5	17	-20	-15	18	-10	-15		2	19
30-45.2078-112.9983-2-12-						0-M34761	-5	-5	-5	14	-20	15	-5	-10	-15		1	13
30-45.1672-112.9944-2-15-						0-M34762	-5	-5	-5	24	-20	-15	16	-10	-15		1	11
30-45.1994-112.7514-2-12-						0-M34763	-5	-5	-5	27	-20	-15	47	-10	-15		1	16

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

③

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
30-45.0750-113.4250-2-12-	0-M34712	42220	-0.06	358	4833	60	-72	6.8	18	2.3	6	1.5	9002	19.3	9068	34	0.7					
30-45.0514-113.4139-2-12-	0-M34713	33020	-0.05	247	1533	41	-59	4.7	19	1.4	3	0.8	10800	10.2	11070	21	0.4					
30-45.0486-113.4167-2-12-	0-M34714	50060	-0.05	417	3175	59	-60	6.8	31	2.9	5	1.1	8379	11.9	16370	35	0.5					
30-45.0417-113.4122-2-12-	0-M34715	44870	-0.05	400	3937	66	-58	4.6	20	2.6	7	1.2	7527	27.5	12110	35	0.7					
30-45.0306-113.3972-2-12-	0-M34716	44430	-0.06	531	6095	42	146	6.1	22	1.9	3	1.0	7440	10.1	13970	20	0.4					
30-45.0278-113.4042-2-12-	0-M34717	46190	-0.06	328	4353	57	-69	4.7	24	2.6	5	1.1	6675	14.3	13090	30	0.6					
30-45.0111-113.3889-2-12-	0-M34718	37090	-0.05	360	5270	45	94	7.5	51	3.5	4	1.2	8677	17.1	15290	24	0.5					
30-45.0097-113.3639-2-12-	0-M34719	33500	-0.06	403	5077	48	104	7.0	48	2.8	6	1.7	38100	38.1	13590	30	0.7					
30-45.0250-113.2597-2-12-	0-M34720	59030	-0.07	534	13750	75	-92	7.4	20	-1.4	5	1.5	14760	12.2	14310	37	0.5					
30-45.0278-113.2903-2-12-	0-M34721	73010	-0.02	755	8448	78	211	10.6	50	4.6	9	2.3	13180	9.3	15870	46	0.8					
30-45.0361-113.2944-2-12-	0-M34722	62700	-0.07	602	5270	67	-86	13.5	30	6.2	7	1.8	15550	10.1	16930	33	0.8					
30-45.0639-113.2806-2-12-	0-M34723	75000	-0.06	499	3693	81	95	7.7	28	3.0	7	1.4	11040	10.2	13530	43	0.6					
30-45.0722-113.3000-2-12-	0-M34724	75060	-0.06	456	-664	69	104	7.0	24	2.8	6	1.5	12420	21.9	19400	34	0.7					
30-45.0875-113.3167-2-12-	0-M34725	54920	-0.06	444	5652	56	140	10.4	27	3.1	5	1.4	8971	12.3	11630	34	0.5					
30-45.0944-113.3111-2-12-	0-M34726	77280	-0.06	564	8369	66	135	8.8	34	4.2	6	1.5	15760	10.9	14170	40	0.5					
30-45.1194-113.2611-2-12-	0-M34727	71090	-0.07	466	4792	77	-92	10.4	43	3.5	5	1.6	16990	13.9	18680	38	0.6					
30-45.1333-113.2847-2-12-	0-M34728	63600	-0.10	657	7908	62	173	8.6	-15	-2.1	6	1.5	11710	7.2	13900	30	0.5					
30-45.1125-113.4222-2-12-	0-M34729	41310	-0.05	413	4475	51	116	7.6	24	2.1	4	1.1	7404	11.1	15430	26	0.4					
30-45.1375-113.3944-2-12-	0-M34730	65490	-0.07	567	6854	66	146	9.6	26	3.6	6	1.4	15570	11.1	15500	38	0.5					
30-45.1292-113.3639-2-12-	0-M34731	71710	-0.08	633	8382	83	-101	12.2	51	5.4	6	1.9	17010	10.1	14090	40	0.6					
30-45.1389-113.4083-2-12-	0-M34732	29000	-0.06	351	2130	31	73	4.4	-9	1.9	3	0.8	5901	11.7	14900	17	0.2					
30-45.1583-113.3875-2-12-	0-M34733	44280	-0.06	423	2599	79	99	9.9	37	3.6	6	1.4	13060	19.2	14140	42	0.7					
30-45.1639-113.4069-2-12-	0-M34734	66210	-0.07	661	21020	95	-92	13.1	85	5.1	6	1.5	23740	10.8	16170	50	0.6					
30-45.1778-113.3986-2-12-	0-M34735	64550	-0.07	519	-1219	109	-100	11.3	41	3.4	9	1.8	15630	13.5	19710	50	0.7					
30-45.2417-113.2556-2-12-	0-M34736	51700	-0.09	875	4360	55	-112	13.8	28	5.4	5	1.7	14280	8.8	15610	29	0.6					
30-45.2403-113.2569-2-12-	0-M34737	75720	-0.09	663	9152	85	238	19.7	29	6.3	9	2.0	16960	7.8	13310	45	0.7					
30-45.2083-113.2764-2-12-	0-M34738	72480	-0.09	557	7107	71	-90	11.1	38	7.8	7	1.4	18820	8.5	16140	31	0.7					
30-45.2069-113.2778-2-12-	0-M34739	69940	-0.09	537	7199	70	-102	13.3	54	8.5	6	1.5	17370	8.2	15040	33	0.6					
30-45.6386-113.0725-2-12-	0-M34740	61240	-0.07	544	17060	128	-102	5.5	14	2.4	6	1.9	10650	19.5	13880	77	0.7					
30-45.6928-113.0369-2-12-	0-M34742	26560	-0.04	-106	147200	61	-67	6.8	12	1.8	2	0.6	6846	5.4	7047	34	0.2					
30-45.6853-113.0736-2-12-	0-M34743	42010	-0.06	681	4698	47	95	5.7	25	3.1	6	1.2	8671	21.5	17320	30	0.6					
30-45.6433-113.0642-2-12-	0-M34744	58000	-0.05	501	15330	119	-91	5.4	-9	-1.1	6	1.5	13630	20.8	14410	62	0.7					
30-45.6794-113.0656-2-12-	0-M34745	37550	-0.07	298	77400	49	-64	6.0	-10	2.6	3	1.1	17220	15.4	10750	30	0.4					
30-45.7433-113.0158-2-12-	0-M34746	59350	-0.05	538	19930	184	-85	7.6	-9	1.4	8	2.1	11580	25.0	12890	104	0.9					
30-45.7086-113.1785-2-12-	0-M34747	71070	-0.07	433	30650	89	-96	12.5	38	2.4	6	1.9	40790	25.9	12290	52	0.6					
30-45.6992-113.1850-2-12-	0-M34748	54770	-0.06	521	17860	75	-83	9.1	23	1.6	5	1.2	18190	16.0	13820	35	0.5					
30-45.6878-113.1844-2-12-	0-M34749	86390	-0.09	680	29280	155	-147	9.8	23	3.9	6	2.3	37580	32.0	13250	87	1.0					
30-45.6772-113.1944-2-12-	0-M34750	85520	-0.05	609	26810	118	-116	9.4	-10	6.2	6	1.8	21780	20.2	16420	45	0.6					
30-45.6781-113.1817-2-12-	0-M34751	49080	-0.06	1095	6878	50	67	6.0	28	3.9	6	1.3	12960	15.8	20180	28	0.5					
30-45.6764-113.1767-2-12-	0-M34752	36720	-0.05	551	6888	60	-59	5.4	11	1.7	5	1.0	7667	17.4	14250	31	0.5					
30-45.6519-113.1392-2-12-	0-M34753	73450	-0.09	681	6220	79	-79	10.3	64	5.0	7	1.8	14160	8.4	16320	42	0.6					
30-45.6611-113.1339-2-12-	0-M34754	32550	-0.04	402	5707	64	-52	5.2	14	1.9	5	1.1	9934	19.2	10070	35	0.5					
30-45.6658-113.1292-2-12-	0-M34755	43960	-0.05	549	6908	42	-53	5.1	19	2.9	4	1.2	6766	9.0	13950	24	0.4					
30-45.6711-113.1128-2-12-	0-M34756	34960	-0.05	432	5584	55	-53	4.5	18	2.3	4	1.0	7607	21.5	14100	30	0.6					
30-45.2894-113.6367-2-12-	0-M34757	40020	-0.04	663	3113	37	-78	6.6	27	-1.2	2	1.1	7778	9.5	23380	24	0.3					
30-45.2897-113.6372-2-12-	0-M34758	55330	-0.09	455	58500	138	118	13.9	44	2.4	9	1.9	68650	29.0	15140	78	0.9					
30-45.2328-112.9897-2-12-	0-M34759	58610	-0.06	678	22120	61	148	8.1	53	3.9	5	1.2	15230	10.8	17570	34	0.4					
30-45.2069-112.9981-2-15-	0-M34760	59700	-0.06	551	27230	84	-84	8.3	32	2.7	4	1.2	20480	11.5	15190	37	0.5					
30-45.2078-112.9983-2-12-	0-M34761	49700	-0.07	643	31090	58	96	7.3	39	-1.4	4	1.1	14260	16.0	12130	34	0.4					
30-45.1672-112.9944-2-15-	0-M34762	57000	-0.05	650	68560	57	-73	9.5	28	3.5	4	1.0	17100	6.9	11560	31	0.4					
30-45.1994-112.7514-2-12-	0-M34763	71390	-0.07	695	24830	79	-87	12.3	68	5.1	5	1.4	21930	8.3	18520	40	0.4					

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

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DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued)														U/Th RATIO		
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	DOE 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	
30-45.0750-113.4250-2-12-	0-M34712	6654	263	9130	23	-2	4.1	5.7	-242	-1	-1	10.9	1748	21	4.5	59	0.358					
30-45.0514-113.4139-2-12-	0-M34713	4703	131	8548	-17	-1	3.1	3.0	-178	-1	-1	6.5	3109	21	2.7	24	0.477					
30-45.0466-113.4167-2-12-	0-M34714	6793	214	8816	53	-2	5.8	4.9	-199	-1	1	9.4	3013	31	4.0	66	0.404					
30-45.0417-113.4122-2-12-	0-M34715	6253	173	8704	43	-2	5.0	5.0	-194	-1	-1	9.2	4148	24	5.9	52	0.543					
30-45.0306-113.3972-2-12-	0-M34716	4926	155	12760	-18	-2	3.5	3.3	-252	-1	-1	5.9	2033	20	2.8	-34	0.508					
30-45.0278-113.4042-2-12-	0-M34717	5585	135	9550	-20	-2	5.1	4.7	-215	-1	-1	8.8	3517	27	4.5	-38	0.477					
30-45.0111-113.3889-2-12-	0-M34718	8130	97	5098	41	-2	4.5	4.1	-163	-1	-1	7.2	3032	40	3.5	71	0.611					
30-45.0097-113.3639-2-12-	0-M34719	8192	381	8627	-21	4	5.3	4.0	-232	-1	-1	8.5	3605	36	5.4	53	0.788					
30-45.0250-113.2597-2-12-	0-M34720	10360	333	14390	51	-2	7.2	5.3	-290	-1	-1	8.4	3014	50	4.4	128	0.417					
30-45.0278-113.2903-2-12-	0-M34721	12090	413	11710	43	-3	8.1	9.0	-359	-1	-1	11.7	3748	42	6.2	137	0.556					
30-45.0361-113.2944-2-12-	0-M34722	9625	1106	6566	57	3	7.5	7.2	-425	-1	-1	11.5	3117	36	5.9	155	0.496					
30-45.0639-113.2806-2-12-	0-M34723	7292	541	11600	45	-2	6.7	6.7	-292	-1	1	10.6	3485	42	4.6	56	0.358					
30-45.0722-113.3000-2-12-	0-M34724	8915	438	2559	42	-2	4.7	6.1	-278	-1	1	7.9	2671	44	5.5	51	0.456					
30-45.0875-113.3167-2-12-	0-M34725	6365	279	6301	39	-2	5.7	5.5	-249	-1	-1	9.4	2630	32	3.9	80	0.330					
30-45.0944-113.3111-2-12-	0-M34726	12120	729	8599	48	-2	8.1	5.0	-335	-1	-1	8.7	3484	49	4.4	98	0.552					
30-45.1194-113.2611-2-12-	0-M34727	11440	272	13250	56	3	7.1	6.4	-292	-1	-1	11.9	3417	48	5.0	75	0.378					
30-45.1333-113.2847-2-12-	0-M34728	-4442	260	10300	-33	-3	6.9	5.5	-356	-5	-1	7.4	2651	39	4.1	-211	0.527					
30-45.1125-113.4222-2-12-	0-M34729	6888	358	7944	33	-1	4.0	4.6	-243	-1	-1	7.3	2559	24	3.5	54	0.370					
30-45.1375-113.3944-2-12-	0-M34730	6606	768	8444	40	-2	8.1	5.6	-343	-1	-1	9.5	2865	41	5.2	88	0.516					
30-45.1292-113.3639-2-12-	0-M34731	8935	905	8272	49	-3	8.9	7.2	-458	-1	-1	12.3	3193	51	3.9	172	0.407					
30-45.1389-113.4083-2-12-	0-M34732	6097	84	4540	-17	-2	2.8	2.9	-173	-1	-1	4.6	1575	16	2.4	45	0.522					
30-45.1583-113.3875-2-12-	0-M34733	7452	728	3056	50	-2	5.5	6.8	-320	-1	-1	11.0	2525	38	4.7	63	0.318					
30-45.1639-113.4069-2-12-	0-M34734	23930	965	11650	42	-2	11.3	6.5	-359	-1	-1	12.1	4356	72	4.2	153	0.231					
30-45.1778-113.3986-2-12-	0-M34735	7526	820	11440	50	-2	7.9	10.4	-400	-1	-1	13.6	3264	57	5.2	83	0.346					
30-45.2417-113.2556-2-12-	0-M34736	6611	1729	5614	-31	-2	6.2	6.2	-602	-1	-1	8.9	2185	28	4.2	143	0.596					
30-45.2403-113.2569-2-12-	0-M34737	10850	786	12640	-24	-2	9.1	8.4	-411	-1	-1	12.5	3559	46	5.5	168	0.472					
30-45.2083-113.2764-2-12-	0-M34738	14370	786	8839	-27	-2	9.0	5.8	-386	-1	-1	11.7	3024	54	4.7	175	0.675					
30-45.2069-113.2778-2-12-	0-M34739	12890	828	8276	48	-3	8.3	6.9	-454	-1	-1	12.5	3290	53	4.5	157	0.640					
30-45.6336-113.0725-2-12-	0-M34740	9171	480	17160	36	-2	5.5	8.3	-328	-1	-1	15.5	3209	37	5.1	107	0.426					
30-45.6928-113.0363-2-12-	0-M34742	133300	189	7564	18	-1	2.4	3.4	-231	-1	-1	10.1	1853	19	1.8	66	0.168					
30-45.6353-113.0736-2-12-	0-M34743	6015	212	5570	38	-2	4.7	4.3	-204	-1	-1	8.3	2498	24	4.7	56	0.506					
30-45.6433-113.0642-2-12-	0-M34744	5487	241	18110	-17	-2	4.5	7.1	641	1	-1	14.9	3165	45	5.1	83	0.362					
30-45.6794-113.0656-2-12-	0-M34745	79440	308	3724	-24	-2	5.4	3.1	-250	-1	-1	11.7	2661	58	3.3	-44	0.359					
30-45.7433-113.0158-2-12-	0-M34746	5560	476	16190	31	-2	6.4	11.7	-281	3	1	25.2	4963	37	7.5	89	0.341					
30-45.7086-113.1786-2-12-	0-M34747	24950	754	14250	-25	-2	15.1	6.5	501	-1	-1	11.1	6469	157	5.8	80	0.333					
30-45.6992-113.1850-2-12-	0-M34748	11530	453	12120	-19	-2	7.9	5.1	-291	-1	-1	8.3	3951	61	3.5	104	0.349					
30-45.6878-113.1844-2-12-	0-M34749	-5960	1078	23810	-33	-3	9.5	10.4	-499	2	-1	25.9	4770	106	7.0	184	0.297					
30-45.6772-113.1944-2-12-	0-M34750	7581	407	26250	54	-2	7.6	5.9	661	2	-1	17.8	3446	54	4.3	191	0.281					
30-45.6781-113.1817-2-12-	0-M34751	10530	265	5575	37	-2	6.3	4.2	-198	-1	-1	7.1	2571	37	3.7	56	0.577					
30-45.6764-113.1767-2-12-	0-M34752	6733	159	7927	-14	-1	4.2	4.7	-188	-1	-1	8.0	2532	24	3.9	47	0.425					
30-45.6519-113.1392-2-12-	0-M34753	12950	174	8899	-29	-3	9.2	5.4	-252	-1	-1	12.5	2944	63	3.7	168	0.728					
30-45.6611-113.1339-2-12-	0-M34754	4352	142	8098	-13	2	4.0	4.8	-159	1	-1	8.4	2576	27	3.7	47	0.393					
30-45.6658-113.1292-2-12-	0-M34755	6541	136	6554	-15	-2	5.6	3.9	-167	-1	-1	6.4	2337	26	3.5	55	0.516					
30-45.6711-113.1128-2-12-	0-M34756	4863	122	6834	27	2	3.8	4.6	-170	-1	-1	8.6	2534	26	4.0	46	0.430					
30-45.2894-113.6367-2-12-	0-M34757	-3301	394	8584	45	-2	3.6	2.7	-282	-1	-1	4.7	2424	29	2.5	-65	0.596					
30-45.2897-113.6372-2-12-	0-M34758	53300	874	14010	39	-2	16.4	10.2	-351	2	-1	44.8	3948	255	8.0	98	0.324					
30-45.2328-112.9897-2-12-	0-M34759	11500	615	9272	42	-2	7.5	4.4	-313	-1	-1	9.0	3435	53	3.4	-83	0.300					
30-45.2069-112.9981-2-15-	0-M34760	14050	684	11380	-16	-2	7.0	5.2	-315	-1	-1	12.7	3473	77	3.5	84	0.252					
30-45.2078-112.9983-2-12-	0-M34761	14200	842	10240	-22	-2	6.2	3.8	-380	-1	-1	7.2	4038	44	3.7	-57	0.417					
30-45.1672-112.9944-2-15-	0-M34762	19710	731	7635	32	2	7.4	4.4	-299	-1	-1	7.8	3444	57	2.5	78	0.269					
30-45.1994-112.7514-2-12-	0-M34763	19200	556	13240	61	-2	9.4	4.8	-304	-1	-1	11.4	4446	73	3.5	193	0.289					

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 (umho/cm)	SCHLUMMER (AU/ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	BIRCH 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																										
30-45.1783-112.7533-2-15-						0-M34764-09/04/75-12-	23-									4-4-	-3-6-	-	-	-2-4-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	3.70	
30-45.3089-112.9264-2-12-						0-M34765-09/04/75-15-	24-	10.5-C-		5.9-			240-			2-3-1-	-2-3-3-3-1-	-2-2-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45.3059-112.9275-2-12-						0-M34766-09/04/75-17-	23-	9.8-C-		5.9-			175-			4-4-	-3-3-4-3-1-	-2-3-3-5-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.70	
30-45.3061-112.9272-2-12-						0-M34767-09/04/75-17-	23-	12.5-C-		5.5-			80-			4-4-	-2-1-4-3-1-	-2-3-4-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.80	
30-45.2892-112.8844-2-12-						0-M34768-09/04/75-17-	23-	12.5-C-		5.7-			115-			2-3-1-	-3-3-3-3-1-	-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.30	
30-45.3531-112.9014-2-12-						0-M34769-09/05/75-10-	14-	6.5-		5.7-			170-			18-4-	-3-6-3-3-1-	-2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.10	
30-45.3536-112.9033-2-12-						0-M34770-09/05/75-11-	15-	8.0-C-		5.7-			130-			18-4-	-2-6-4-3-1-	-2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.60	
30-45.3381-112.8989-2-12-						0-M34771-09/05/75-11-	16-	7.0-C-		5.7-			230-			18-4-	-4-6-3-3-1-	-2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.70	
30-45.2953-112.9828-2-12-						0-M34772-09/05/75-12-	23-	10.0-C-		5.5-			47-			32-4-	-3-6-3-3-2-	-2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45.2605-112.9858-2-12-						0-M34773-09/05/75-13-	23-	11.5-C-		5.5-			80-			28-4-	-3-3-3-3-1-	-2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50	
30-45.2506-112.9661-2-15-						0-M34774-09/05/75-13-	26-									14-4-	-3-6-	-	-	-2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	3.10	
30-45.2544-112.8767-2-15-						0-M34775-09/05/75-14-	28-									9-4-	-3-7-	-	-	-2-3-3-4-1-	-2-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45.3172-112.8750-2-12-						0-M34776-09/05/75-15-	26-	13.5-C-		6.3-			265-			32-4-	-6-6-2-3-1-	-2-3-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45.3486-112.8522-2-11-						0-M34777-09/05/75-15-	26-	17.0-C-		5.2-			45-			28-4-	-1-6-3-3-1-	-2-1-3-5-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.40	
30-45.2986-112.8200-2-11-						0-M34778-09/05/75-16-	27-	12.2-C-		6.3-			400-			18-4-	-3-1-3-3-1-	-2-3-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
30-45.2875-112.8139-2-15-						0-M34779-09/05/75-16-	27-									14-4-	-4-6-	-	-	-2-3-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	2.30	
30-45.2661-112.8078-2-12-						0-M34780-09/05/75-16-	27-	14.0-C-		5.7-			120-			9-4-	-3-3-4-3-1-	-2-4-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
30-45.2389-113.0403-2-12-						0-M34781-09/07/75-10-	7-	5.0-C-		6.1-			250-			4-4-	-3-6-3-3-1-	-2-4-4-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60	
30-45.2350-113.0878-2-12-						0-M34782-09/07/75-11-	7-	6.5-C-		5.2-			33-			8-4-	-3-6-3-3-1-	-2-4-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.30	
30-45.2356-113.1694-2-12-						0-M34783-09/07/75-12-	5-	4.5-C-		5.2-			16-			8-4-	-3-6-3-3-1-	-2-1-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.50	
30-45.2372-113.1708-2-12-						0-M34784-09/07/75-12-	8-	6.0-C-		5.2-			15-			6-4-	-3-1-4-3-1-	-2-1-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.40	
30-45.2222-113.1714-2-12-						0-M34785-09/07/75-13-	5-	6.2-C-		5.2-			24-			8-4-	-3-4-4-3-1-	-2-1-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45.2125-113.1444-2-12-						0-M34786-09/07/75-13-	7-	12.0-C-		5.2-			31-			6-4-	-3-6-3-3-1-	-2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.70	
30-45.1944-113.0917-2-12-						0-M34787-09/07/75-15-	11-	7.5-C-		5.7-			170-			-4-	-3-4-3-3-1-	-2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.10	
30-45.1806-113.1375-2-12-						0-M34788-09/07/75-16-	11-	9.5-		5.5-			43-			6-4-	-3-4-3-3-1-	-2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.60	
30-45.1681-113.2000-2-12-						0-M34789-09/07/75-17-	10-	11.0-C-		5.2-			40-			8-2-4-	-3-4-3-3-1-	-2-1-3-5-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.10	
30-45.1675-113.2014-2-12-						0-M34790-09/07/75-17-	11-	7.5-C-		5.2-			25-			6-2-4-	-3-4-3-3-1-	-2-1-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60	
30-45.1681-113.2069-2-12-						0-M34791-09/07/75-17-	11-	6.0-C-		5.2-			34-			6-2-4-	-3-4-3-3-1-	-2-1-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.30	
30-45.1583-113.1986-2-12-						0-M34792-09/07/75-19-	11-	7.0-C-		5.2-			31-			6-2-4-	-3-4-3-3-1-	-2-1-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.60	
30-45.2167-113.0375-2-12-						0-M34793-09/08/75-09-	4-	6.5-C-		5.7-			200-			12-4-	-3-6-4-3-1-	-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.30	
30-45.2208-113.0583-2-12-						0-M34794-09/08/75-10-	5-	10.0-C-		5.9-			270-			8-4-	-5-6-3-3-1-	-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
30-45.1597-113.1611-2-12-						0-M34795-09/08/75-11-	7-	5.5-C-		5.2-			46-			2-4-	-2-5-4-3-1-	-2-4-4-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.60	
30-45.2008-113.1903-2-12-						0-M34796-09/08/75-12-	5-	3.5-C-		5.2-			30-			6-2-4-	-2-4-4-3-1-	-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00	
30-45.1944-113.1542-2-15-						0-M34797-09/08/75-12-	10-									10-4-	-3-4-	-	-	-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	4.50
30-45.1500-113.0333-2-15-						0-M34798-09/13/75-12-	27-									3-4-	-3-6-	-	-	-2-3-2-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	2.20
30-45.1472-113.0361-2-12-						0-M34799-09/13/75-13-	27-	13.8-C-		6.1-			2700-			3-4-	-3-6-3-3-2-	-2-3-2-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.10	
30-45.2972-112.6417-2-15-						0-M34800-09/11/75-13-	21-									14-4-	-4-6-	-1-	-	-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	4.20
30-45.3192-112.6417-2-12-						0-M34801-09/13/75-13-	21-	13.4-C-		6.0-			2800-			2-4-6-	-5-6-1-	-2-5-3-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.20	
30-45.3319-112.6361-2-15-						0-M34802-09/13/75-14-	21-									9-4-	-4-6-	-1-	-	-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	2.80
30-45.3500-112.6667-2-15-						0-M34803-09/13/75-14-	21-									4-4-	-4-6-	-1-	-	-2-4-2-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	14.50
30-45.3597-112.6542-2-15-						0-M34804-09/13/75-14-	21-									9-4-	-3-6-	-1-	-	-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	6.30
30-45.4278-112.6003-2-15-						0-M34805-09/13/75-14-	21-									4-1-6-	-4-6-	-1-	-	-2-3-2-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	4.10
30-45.4269-112.6036-2-15-						0-M34806-09/13/75-15-	21-									0-1-6-	-4-6-	-1-	-	-2-3-2-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	3.10
30-45.4319-112.6150-2-15-						0-M34807-09/13/75-15-	22-									9-1-6-	-4-6-	-1-	-	-2-3-2-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	1.70
30-45.4325-112.5408-2-15-						0-M34809-09/13/75-16-	22-									14-4-	-4-6-	-1-	-	-2-3-2-1-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	3.10
30-45.4278-112.6417-2-15-						0-M34810-09/13/75-16-	23-									18-4-	-4-6-	-1-	-	-2-3-														

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	
30-45.1783-112.7533-2-15-			0-M34764				-5	-5	-5	34	-20	32	49	-10	-15	2	14	
30-45.3089-112.9264-2-12-			0-M34765				-5	-5	-5	19	-20	38	27	-10	-15	1	13	
30-45.3058-112.9275-2-12-			0-M34766				-5	-5	-5	15	-20	15	9	-10	-15	1	25	
30-45.3061-112.9272-2-12-			0-M34767				-5	8	-5	-10	-20	-15	15	-10	-15	2	16	
30-45.2892-112.8844-2-12-			0-M34768				-5	-5	-5	16	-20	19	30	-10	-15	1	26	
30-45.3531-112.9014-2-12-			0-M34769				-5	6	5	24	-20	28	19	-10	-15	3	30	
30-45.3536-112.9033-2-12-			0-M34770				-5	-5	-5	15	-20	-15	21	-10	-15	2	22	
30-45.3381-112.8989-2-12-			0-M34771				-5	-5	-5	-10	-20	-15	19	-10	-15	-1	7	
30-45.2953-112.9828-2-12-			0-M34772				-5	-5	-5	28	-20	23	35	-10	-15	2	23	
30-45.2606-112.9858-2-12-			0-M34773				-5	-5	-5	-10	-20	-15	-5	-10	-15	1	18	
30-45.2505-112.9661-2-15-			0-M34774				-5	-5	-5	37	-20	-15	18	-10	-15	2	23	
30-45.2544-112.8757-2-15-			0-M34775				-5	-5	-5	17	-20	16	20	-10	-15	2	15	
30-45.3172-112.8750-2-12-			0-M34776				-5	-5	-5	34	-20	-15	96	-10	-15	-1	9	
30-45.3486-112.8522-2-11-			0-M34777				-5	-5	-5	22	-20	-15	14	-10	-15	2	23	
30-45.2986-112.8200-2-11-			0-M34778				-5	-5	-5	32	-20	-15	184	-10	-15	2	6	
30-45.2875-112.8139-2-15-			0-M34779				-5	-5	-5	46	-20	15	52	-10	-15	1	9	
30-45.2651-112.8078-2-12-			0-M34780				-5	8	-5	87	-20	-15	418	-10	-15	2	18	
30-45.2389-113.0403-2-12-			0-M34781				-5	-5	-5	-10	-20	-15	-5	-10	-15	2	22	
30-45.2350-113.0878-2-12-			0-M34782				-5	-5	-5	-10	-20	-15	11	-10	-15	2	21	
30-45.2356-113.1694-2-12-			0-M34783				-5	-5	-5	18	-20	-15	12	-10	-15	3	26	
30-45.2372-113.1708-2-12-			0-M34784				-5	5	-5	24	-20	15	12	-10	-15	3	28	
30-45.2222-113.1714-2-12-			0-M34785				-5	-5	-5	15	-20	-15	-5	-10	-15	2	11	
30-45.2125-113.1444-2-12-			0-M34786				-5	-5	-5	15	-20	-15	-5	-10	-15	1	14	
30-45.1944-113.0917-2-12-			0-M34787				-5	-5	-5	16	-20	-15	-5	-10	-15	2	22	
30-45.1806-113.1375-2-12-			0-M34788				-5	-5	-5	11	-20	-15	8	-10	-15	2	11	
30-45.1681-113.2000-2-12-			0-M34789				-5	-5	-5	18	28	-15	17	-10	-15	2	19	
30-45.1675-113.2014-2-12-			0-M34790				-5	-5	-5	11	-20	-15	-5	-10	-15	2	15	
30-45.1681-113.2069-2-12-			0-M34791				-5	-5	-5	11	-20	-15	-5	-10	-15	1	17	
30-45.1583-113.1986-2-12-			0-M34792				-5	-5	-5	14	34	-15	-5	-10	-15	2	7	
30-45.2167-113.0375-2-12-			0-M34793				-5	-5	-5	10	-20	-15	10	-10	-15	1	15	
30-45.2208-113.0583-2-12-			0-M34794				-5	-5	-5	-10	-20	-15	-5	-10	-15	1	10	
30-45.1597-113.1611-2-12-			0-M34795				-5	-5	-5	12	-20	19	18	-10	-15	2	22	
30-45.2008-113.1903-2-12-			0-M34796													3	16	
30-45.1944-113.1542-2-15-			0-M34797				-5	-5	-5	18	-20	-15	17	-10	-15	2	13	
30-45.1500-113.0333-2-15-			0-M34798				-5	-5	-5	14	-20	-15	12	-10	-15	1	15	
30-45.1472-113.0361-2-12-			0-M34799				-5	-5	-5	21	-20	-15	14	-10	-15	1	19	
30-45.2972-112.6417-2-15-			0-M34800				-5	-5	-5	25	-20	-15	6	-10	-15	2	21	
30-45.3192-112.6417-2-12-			0-M34801				-5	-5	-5	25	-20	21	14	-10	-15	2	22	
30-45.3319-112.6361-2-15-			0-M34802				-5	-5	-5	31	-20	23	18	-10	-15	2	21	
30-45.3500-112.6667-2-15-			0-M34803				32	-5	8	26	-20	-15	-5	-10	27	3	4	
30-45.3597-112.6542-2-15-			0-M34804				-5	7	6	21	23	15	7	-10	-15	1	18	
30-45.4278-112.6003-2-15-			0-M34805				-5	-5	-5	27	-20	38	5	-10	-15	2	58	
30-45.4269-112.6036-2-15-			0-M34806				-5	7	-5	31	-20	-15	21	-10	-15	2	20	
30-45.4319-112.6150-2-15-			0-M34807				-5	-5	-5	16	-20	-15	10	-10	-15	2	25	
30-45.4325-112.5408-2-15-			0-M34809				-5	6	5	10	-20	-15	9	-10	-15	2	20	
30-45.4278-112.6417-2-15-			0-M34810				-5	-5	-5	36	-20	-15	19	-10	-15	2	22	
30-45.4489-112.6514-2-12-			0-M34811				-5	-5	-5	31	29	19	21	15	19	2	9	
30-45.1900-113.0222-2-12-			0-M34812				-5	-5	-5	27	-20	23	9	-10	-15	-1	17	
30-45.2183-112.5642-2-15-			0-M34813				-5	-5	-5	25	-20	42	41	-10	-15	1	21	
30-45.2369-112.5417-2-15-			0-M34814				-5	-5	-5	28	-20	-15	14	-10	-15	2	17	
30-45.3772-112.5181-2-15-			0-M34815				-5	-5	-5	37	-20	34	22	-10	-15	2	31	

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

③

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
30-45.1783-112.7533-2-15-			0-M34764				65620	-0.07	614	44340	104	101	15.7	75	3.5	4	1.2	37320	10.9	15450	52	0.4
30-45.3089-112.9264-2-12-			0-M34765				37190	-0.07	362	78050	52	136	7.7	50	5.6	3	0.8	12420	7.5	11790	30	0.3
30-45.3058-112.9275-2-12-			0-M34766				46680	-0.06	381	43120	73	99	9.1	38	4.5	5	1.3	23570	19.9	16210	43	0.6
30-45.3061-112.9272-2-12-			0-M34767				76640	-0.06	528	28770	116	-98	7.7	26	2.2	7	1.8	25220	14.9	14080	64	0.7
30-45.2892-112.8844-2-12-			0-M34768				50660	-0.06	408	38220	85	-88	8.0	37	3.5	5	1.3	15900	11.6	14740	43	0.5
30-45.3531-112.9014-2-12-			0-M34769				57100	-0.08	487	9506	76	-69	9.1	70	6.0	5	1.6	16330	20.7	20280	41	0.8
30-45.3536-112.9033-2-12-			0-M34770				51980	-0.05	553	8505	67	101	9.7	44	4.2	5	1.4	14020	14.7	15130	40	0.6
30-45.3381-112.8989-2-12-			0-M34771				25230	-0.04	266	155800	29	211	5.1	21	5.2	2	0.5	7062	3.4	9177	16	0.1
30-45.2953-112.9828-2-12-			0-M34772				53390	-0.06	426	44030	56	-62	9.1	55	6.0	4	1.1	14580	5.3	13740	27	0.5
30-45.2606-112.9858-2-12-			0-M34773				42310	-0.06	502	5467	58	114	6.5	47	2.1	5	1.1	9234	16.9	20400	28	0.5
30-45.2506-112.9661-2-15-			0-M34774				65210	-0.06	599	12670	66	95	11.3	56	4.1	4	1.2	18600	9.2	14470	38	0.4
30-45.2544-112.8767-2-15-			0-M34775				64210	-0.11	890	28400	82	-76	13.4	50	9.6	5	1.3	29270	6.6	14190	46	0.4
30-45.3172-112.8750-2-12-			0-M34776				44270	-0.09	-310	16560	44	123	17.0	65	9.1	3	0.8	26030	4.7	12700	24	0.2
30-45.3486-112.8522-2-11-			0-M34777				53360	-0.07	532	9006	61	-89	8.3	44	4.3	4	1.5	13730	12.1	15700	28	0.6
30-45.2986-112.8200-2-11-			0-M34778				31940	-0.07	-213	124100	58	172	18.8	86	3.0	4	1.1	68270	11.6	5644	48	0.4
30-45.2875-112.8139-2-15-			0-M34779				64770	-0.06	578	46510	57	-74	11.9	49	3.9	5	1.2	27230	8.5	10840	36	0.4
30-45.2661-112.8078-2-12-			0-M34780				65260	-0.06	668	30780	85	-96	8.1	42	3.7	4	1.4	18060	8.6	15780	51	0.4
30-45.2389-113.0403-2-12-			0-M34781				49740	-0.07	643	11530	64	-71	7.1	22	3.1	6	1.6	14580	14.8	17300	39	0.5
30-45.2350-113.0878-2-12-			0-M34782				47390	-0.05	493	5691	78	107	6.4	18	3.4	5	1.2	7869	18.7	17370	43	0.5
30-45.2356-113.1694-2-12-			0-M34783				57790	-0.06	638	4526	71	-67	9.0	23	5.9	6	1.7	14140	11.1	20720	41	0.6
30-45.2372-113.1708-2-12-			0-M34784				50040	-0.06	741	4076	81	-88	8.1	28	5.5	6	1.7	11190	11.5	14970	47	0.7
30-45.2222-113.1714-2-12-			0-M34785				47420	-0.07	437	13460	61	-70	6.9	26	2.1	4	1.2	18660	15.4	13680	29	0.4
30-45.2125-113.1444-2-12-			0-M34786				45710	-0.05	-110	6785	64	119	8.7	27	4.2	8	1.8	9808	21.4	13540	49	0.7
30-45.1944-113.0917-2-12-			0-M34787				47200	-0.05	727	7492	57	-69	7.8	37	3.8	5	1.1	9178	9.1	16140	29	0.5
30-45.1806-113.1375-2-12-			0-M34788				44640	-0.05	722	4235	64	123	6.7	28	3.4	5	1.2	7686	15.6	15800	33	0.6
30-45.1681-113.2000-2-12-			0-M34789				74160	-0.10	825	9193	88	334	10.0	64	6.4	6	1.8	16390	10.1	16170	38	0.8
30-45.1675-113.2014-2-12-			0-M34790				38010	-0.04	636	2256	48	95	4.0	23	3.5	5	1.0	6789	11.2	17490	28	0.4
30-45.1681-113.2069-2-12-			0-M34791				47430	-0.05	811	3362	57	115	6.1	22	4.4	5	1.1	6526	10.1	18140	32	0.5
30-45.1583-113.1986-2-12-			0-M34792				43870	-0.06	888	-672	65	-66	4.6	22	3.9	5	1.4	8946	12.4	19020	31	0.5
30-45.2167-113.0375-2-12-			0-M34793				58190	-0.06	626	18660	126	129	7.9	24	3.5	7	1.8	15950	29.2	15670	72	0.7
30-45.2208-113.0583-2-12-			0-M34794				37230	-0.04	458	3961	55	75	3.1	15	1.3	5	1.0	3554	14.2	15610	32	0.4
30-45.1597-113.1611-2-12-			0-M34795				53070	-0.06	636	9047	60	-79	8.9	50	3.9	5	1.4	13190	12.2	16990	31	0.5
30-45.2008-113.1903-2-12-			0-M34796				52450	-0.10	617	4216	51	144	15.5	26	4.8	6	1.3	14870	8.6	15910	17	0.5
30-45.1944-113.1542-2-15-			0-M34797				60290	-0.04	642	10070	67	-91	10.6	39	4.7	5	1.3	14020	9.4	15540	22	0.4
30-45.1500-113.0333-2-15-			0-M34798				43910	-0.06	600	79680	56	-103	8.4	30	3.1	3	1.2	20060	6.5	13240	37	0.4
30-45.1472-113.0361-2-12-			0-M34799				72850	-0.07	650	37910	68	172	11.5	31	3.1	4	1.3	20180	6.7	13160	36	0.4
30-45.2972-112.6417-2-15-			0-M34800				49730	-0.06	552	58190	65	-70	7.8	36	2.7	4	1.2	14530	9.0	11880	41	0.4
30-45.3192-112.6417-2-12-			0-M34801				64140	-0.06	682	44250	61	175	11.6	42	5.0	4	1.1	16560	7.6	14830	35	0.4
30-45.3319-112.6361-2-15-			0-M34802				52950	-0.05	584	47410	56	-91	7.8	39	4.1	3	1.0	13360	6.3	18930	34	0.3
30-45.3500-112.6667-2-15-			0-M34803				26590	-0.09	257	16850	296	-71	15.2	113	-1.6	9	1.7	132400	105.8	6344	138	1.7
30-45.3597-112.6542-2-15-			0-M34804				52110	-0.03	598	27750	124	-90	9.9	39	4.4	5	1.3	53940	19.6	13540	59	0.6
30-45.4278-112.6003-2-15-			0-M34805				50720	-0.05	950	53480	80	-63	9.7	54	5.3	4	1.3	19700	8.6	14160	43	0.4
30-45.4269-112.6036-2-15-			0-M34806				58790	-0.05	645	24410	77	-95	6.7	24	3.0	4	1.2	16380	7.7	17960	46	0.4
30-45.4319-112.6150-2-15-			0-M34807				64640	-0.05	598	22120	60	-85	6.1	17	1.8	3	0.9	9422	4.4	16550	29	0.3
30-45.4325-112.5408-2-15-			0-M34809				53540	-0.06	617	14320	68	-74	5.4	33	2.7	4	1.1	14160	10.4	15440	43	0.4
30-45.4278-112.6417-2-15-			0-M34810				70160	-0.06	587	33760	69	122	10.1	35	3.8	4	1.1	19260	5.9	16460	37	0.4
30-45.4489-112.6514-2-12-			0-M34811				55590	-0.07	664	24470	104	-124	7.4	18	4.7	4	1.4	19330	13.0	12430	73	0.6
30-45.1900-113.0222-2-12-			0-M34812				55140	-0.07	635	44640	50	235	10.8	91	3.3	4	1.1	14280	8.3	13700	32	0.4
30-45.2183-112.5642-2-15-			0-M34813				52340	-0.08	555	96600	56	885	9.6	105	4.2	4	1.0	15360	5.8	13500	31	0.4
30-45.2369-112.5417-2-15-			0-M34814				60470	-0.06	750	44010	56	-94	13.5	48	4.0	4	1.2	30600	9.1	11980	36	0.4
30-45.3772-112.5181-2-15-			0-M34815				54450	-0.07	697	43300	63	-107	14.8	70	4.4	4	1.2	26190	5.8	14760	42	0.3

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

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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	
30-45.1783-112.7533-2-15-	0-M34764	21860	944	10280	50	-2	9.4	5.7	-391	-1	-1	14.8	7527	154	2.8	152	0.250				
30-45.3089-112.9264-2-12-	0-M34765	74080	891	4497	-22	5	5.9	2.5	-393	-1	-1	5.3	2527	45	-2.3	-67	0.509				
30-45.3058-112.9275-2-12-	0-M34766	34580	396	5914	40	2	7.0	6.2	-233	-1	-1	15.7	3338	82	4.3	103	0.299				
30-45.3061-112.9272-2-12-	0-M34767	11050	495	22150	39	-2	11.0	8.8	405	2	-1	21.4	4007	87	5.6	53	0.271				
30-45.2892-112.8844-2-12-	0-M34768	31340	529	12800	47	-2	7.7	7.2	-310	1	-1	14.0	2804	59	4.3	83	0.307				
30-45.3531-112.9014-2-12-	0-M34769	17550	827	3645	44	-3	8.5	6.2	-371	-1	-1	9.7	3977	64	4.9	123	0.526				
30-45.3536-112.9033-2-12-	0-M34770	10640	767	8462	46	-2	6.6	5.6	-306	-1	-1	11.2	3761	47	3.8	74	0.411				
30-45.3381-112.8989-2-12-	0-M34771	187700	243	3172	-14	3	3.4	1.9	-227	-1	-1	3.4	1434	28	1.0	78	0.500				
30-45.2953-112.9829-2-12-	0-M34772	16110	938	2524	51	2	8.0	4.9	-333	-1	-1	7.8	2790	85	3.0	-31	0.333				
30-45.2606-112.9858-2-12-	0-M34773	8022	343	3978	55	-2	4.7	3.4	-230	-1	-1	10.3	3102	28	3.8	-65	0.340				
30-45.2506-112.9661-2-15-	0-M34774	12950	789	9137	47	-2	8.6	4.5	-318	-1	-1	11.2	3993	62	3.5	117	0.277				
30-45.2544-112.8767-2-15-	0-M34775	19880	1021	7893	42	72	13.8	4.5	-318	-1	-1	9.6	4911	149	3.0	75	0.271				
30-45.3172-112.8750-2-12-	0-M34776	16630	2716	3321	60	-3	7.0	3.4	-758	-1	-1	7.8	-1759	50	2.8	143	0.372				
30-45.3486-112.8522-2-11-	0-M34777	8336	841	8761	42	-2	5.8	4.2	-381	-1	-1	9.2	3275	48	4.4	100	0.478				
30-45.2986-112.8200-2-11-	0-M34778	25000	2198	4610	-25	3	9.0	5.1	-536	1	-1	9.3	5973	381	4.4	174	0.333				
30-45.2875-112.8139-2-15-	0-M34779	19130	867	7757	38	2	11.5	4.4	-316	-1	-1	8.2	6435	107	2.7	117	0.280				
30-45.2661-112.8078-2-12-	0-M34780	19520	660	13970	33	3	7.7	5.7	-342	2	-1	12.0	3872	71	4.7	517	0.283				
30-45.2389-113.0403-2-12-	0-M34781	12180	344	7511	-25	-2	7.7	6.5	-260	-1	-1	9.1	3697	43	4.8	-99	0.396				
30-45.2350-113.0878-2-12-	0-M34782	7202	155	5878	43	-1	4.9	5.7	-170	-1	1	11.4	3182	26	4.7	53	0.377				
30-45.2356-113.1694-2-12-	0-M34783	5929	1155	3388	72	-2	7.4	6.9	-369	-1	-1	9.7	2853	48	4.9	105	0.464				
30-45.2372-113.1708-2-12-	0-M34784	-4277	1507	3730	56	-2	6.0	8.3	-484	-1	-1	10.8	2484	39	5.1	89	0.407				
30-45.2222-113.1714-2-12-	0-M34785	10820	348	8884	-23	-2	7.7	3.5	-248	-1	-1	7.5	3284	69	3.6	-79	0.360				
30-45.2125-113.1444-2-12-	0-M34786	7596	416	5615	34	-2	6.4	8.3	-242	-1	-1	9.6	3190	35	5.9	67	0.490				
30-45.1944-113.0917-2-12-	0-M34787	6344	659	7634	46	-2	5.3	4.5	-291	-1	-1	7.3	2773	35	3.4	94	0.699				
30-45.1806-113.1375-2-12-	0-M34788	5199	490	7914	36	2	4.4	5.7	-275	-1	-1	8.8	2447	27	4.1		0.523				
30-45.1681-113.2000-2-12-	0-M34789	-5357	1184	11070	60	-3	10.5	7.4	-515	-1	-1	10.3	4268	50	6.7	111	0.495				
30-45.1675-113.2014-2-12-	0-M34790	4830	139	5867	37	3	3.9	4.3	-156	-1	-1	7.8	2756	27	3.5	53	0.462				
30-45.1681-113.2069-2-12-	0-M34791	6264	291	6492	36	-2	3.6	6.1	-235	-1	-1	8.2	2452	23	3.8	56	0.524				
30-45.1583-113.1986-2-12-	0-M34792	5252	188	8074	32	-2	4.4	5.4	-217	-1	1	10.1	2558	29	4.9		0.455				
30-45.2167-113.0375-2-12-	0-M34793	11980	660	13450	39	-2	7.9	7.8	-313	2	1	27.8	4186	51	6.4	73	0.263				
30-45.2208-113.0583-2-12-	0-M34794	3988	52	8361	35	2	3.2	3.8	-131	-1	-1	7.2	2529	18	3.5	35	0.444				
30-45.1597-113.1611-2-12-	0-M34795	8922	937	8604	52	-2	6.0	5.4	-321	-1	1	10.5	2834	53	4.7	73	0.438				
30-45.2008-113.1903-2-12-	0-M34796	-7987	1047	6772	-40	-3	6.7	2.7	-676	-2	-1	8.2	5527	59	3.2	-79	0.488				
30-45.1944-113.1542-2-15-	0-M34797	9832	1008	8156	43	2	6.4	3.6	-387	-1	-1	9.5	4056	47	3.4	53	0.474				
30-45.1500-113.0333-2-15-	0-M34798	17410	447	11640	35	-2	7.9	4.0	-347	-1	-1	8.4	3757	62	3.2	88	0.262				
30-45.1472-113.0361-2-12-	0-M34799	21130	1047	11340	-22	-2	9.3	5.2	660	-1	-1	7.0	3659	55	2.6	96	0.300				
30-45.2972-112.6417-2-15-	0-M34800	14970	516	8509	-21	-2	6.0	3.7	-241	-1	-1	9.2	2733	75	2.8	-62	0.457				
30-45.3192-112.6417-2-12-	0-M34801	18270	824	6948	57	-2	7.6	4.4	-379	-1	-1	11.0	3862	86	2.3	96	0.473				
30-45.3319-112.6361-2-15-	0-M34802	14750	546	9800	39	-2	6.7	3.7	-319	-1	-1	8.5	2570	61	2.6	86	0.329				
30-45.3500-112.6667-2-15-	0-M34803	10720	1004	5713	-30	-2	7.5	15.0	-306	2	2	39.4	8156	431	12.1	92	0.368				
30-45.3597-112.6542-2-15-	0-M34804	10020	875	12130	-31	-2	6.6	6.6	-310	-1	-1	18.4	2828	178	5.2	132	0.342				
30-45.4278-112.6003-2-15-	0-M34805	22130	471	4870	33	2	7.2	5.0	-255	1	-1	11.3	2960	132	3.5	122	0.363				
30-45.4269-112.6036-2-15-	0-M34806	11030	512	12980	37	-2	5.5	4.3	-304	-1	-1	9.1	3280	49	2.9	80	0.341				
30-45.4319-112.6150-2-15-	0-M34807	8902	350	17270	41	-1	3.7	4.2	324	-1	-1	6.6	1832	28	2.2	48	0.258				
30-45.4325-112.5408-2-15-	0-M34809	10630	376	13280	-19	-2	4.9	4.0	-222	-1	-1	9.9	1950	42	2.7		0.313				
30-45.4278-112.6417-2-15-	0-M34810	18700	584	9575	32	-2	8.5	4.9	-319	-1	-1	12.0	3177	64	3.8	95	0.275				
30-45.4489-112.6514-2-12-	0-M34811	-6480	748	14950	33	-2	6.8	8.2	-427	-1	-1	13.6	2643	71	5.3	121	3.015				
30-45.1900-113.0222-2-12-	0-M34812	17190	753	9249	42	-2	7.1	4.6	-338	-1	-1	9.8	2910	49	4.2	87	0.255				
30-45.2183-112.5642-2-15-	0-M34813	30580	595	8441	-28	-3	6.8	3.4	344	-1	-1	8.2	2459	73	3.5	175	0.378				
30-45.2369-112.5417-2-15-	0-M34814	20790	815	10100	44	2	9.8	4.2	-349	-1	-1	8.5	5659	122	2.8	129	0.318				
30-45.3772-112.5181-2-15-	0-M34815	34800	1098	9419	60	-2	11.3	4.9	-447	-1	-1	10.8	3006	85	3.4	-70	0.250				

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																	U CONCENTRATION												
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REFLECT	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (umho/cm)	SOLUBLE SOLIDS (mg/l)	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																											
30-45.2183-112.5111-2-15-	0-M34816-09/14/76-12-	21-	-	-	-	-	-	-	-	-	-	-	-	-	18-2-6-4-6-	-1-	-2-4-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20			
30-45.2183-112.5092-2-15-	0-M34817-09/14/76-12-	21-	-	-	-	-	-	-	-	-	-	-	-	-	9-2-6-4-6-	-1-	-2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10			
30-45.2183-112.5081-2-15-	0-M34818-09/14/76-12-	21-	-	-	-	-	-	-	-	-	-	-	-	-	14-2-6-4-6-	-1-	-2-3-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50			
30-45.2092-112.5436-2-15-	0-M34819-09/14/76-12-	21-	-	-	-	-	-	-	-	-	-	-	-	-	14-2-6-4-6-	-1-	-2-3-2-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40			
30-45.1992-112.5425-2-15-	0-M34820-09/14/76-12-	21-	-	-	-	-	-	-	-	-	-	-	-	-	18-4-4-6-6-	-1-	-2-4-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.00			
30-45.1639-112.5014-2-99-	0-M34821-09/14/76-13-	21-	-	-	-	-	-	-	-	-	-	-	-	-	23-4-4-6-6-	-1-	-3-2-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.30			
30-45.1897-112.5528-2-15-	0-M34822-09/14/76-13-	21-	-	-	-	-	-	-	-	-	-	-	-	-	14-4-4-6-6-	-1-	-2-3-2-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.10			
30-45.1567-112.5558-2-15-	0-M34823-09/14/76-13-	21-	-	-	-	-	-	-	-	-	-	-	-	-	13-4-4-6-6-	-1-	-2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.20			
30-45.1422-113.0361-2-15-	0-M34824-09/13/76-13-	27-	-	-	-	-	-	-	-	-	-	-	-	-	3-4-3-6-	-	-2-3-2-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60			
30-45.1417-113.0444-2-15-	0-M34825-09/13/76-13-	20-	-	-	-	-	-	-	-	-	-	-	-	-	9-4-3-6-	-	-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70			
30-45.1375-113.0728-2-15-	0-M34827-09/13/76-14-	22-	-	-	-	-	-	-	-	-	-	-	-	-	13-4-4-6-6-	-	-2-3-2-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70			
30-45.1383-113.0814-2-12-	0-M34828-09/13/76-14-	22-17.0-	-	-	-	-	-	-	-	-	-	-	5.9-	500-	7-4-3-4-3-4-2-	-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90				
30-45.1469-113.1233-2-12-	0-M34829-09/13/76-15-	22-15.0-	-	-	-	-	-	-	-	-	-	-	5.7-	100-	7-4-2-4-3-3-1-	-2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.90				
30-45.1194-113.1708-2-15-	0-M34830-09/13/76-15-	20-	-	-	-	-	-	-	-	-	-	-	-	-	15-4-3-4-	-	-2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00			
30-45.1403-113.1897-2-12-	0-M34831-09/13/76-15-	20-11.4-C-	-	-	-	-	-	-	-	-	-	-	5.2-	29-	5-4-2-4-4-3-1-	-2-3-3-4-1-	-3-	-	-</																

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

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DOE SAMPLE NUMBER						DOE SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE										ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Concentrations reported in weight parts per million (ppm)										Concentrations in weight ppm	
							Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li	
30-45.2183-112.5111-2-15-						0-M34816	-5	5	-5	15	-20	33	11	-10	-15	2	22	
30-45.2183-112.5092-2-15-						0-M34817	-5	5	-5	23	-20	25	9	-10	-15	2	22	
30-45.2183-112.5081-2-15-						0-M34818	-5	-5	-5	26	-20	26	11	-10	-15	2	20	
30-45.2092-112.5436-2-15-						0-M34819	-5	-5	-5	12	-20	25	8	-10	-15	2	22	
30-45.1992-112.5425-2-15-						0-M34820	-5	-5	-5	31	-20	22	5	-10	-15	2	25	
30-45.1639-112.5014-2-99-						0-M34821	-5	-5	-5	30	-20	17	12	-10	-15	2	36	
30-45.1897-112.5528-2-15-						0-M34822	-5	-5	-5	23	-20	-15	10	-10	-15	2	27	
30-45.1567-112.5558-2-15-						0-M34823	-5	-5	-5	15	-20	24	-5	-10	-15	2	25	
30-45.1422-113.0361-2-15-						0-M34824	-5	-5	-5	43	-20	36	14	-10	-15	2	25	
30-45.1417-113.0444-2-15-						0-M34825	-5	-5	-5	18	-20	-15	10	-10	-15	2	17	
30-45.1375-113.0728-2-15-						0-M34827	-5	-5	-5	26	-20	-15	14	-10	-15	2	25	
30-45.1383-113.0814-2-12-						0-M34828	-5	-5	-5	19	-20	35	7	-10	-15	2	62	
30-45.1469-113.1233-2-12-						0-M34829	-5	-5	-5	13	-20	-15	-5	-10	-15	2	25	
30-45.1194-113.1708-2-15-						0-M34830	-5	-5	-5	22	-20	-15	14	-10	-15	2	22	
30-45.1403-113.1897-2-12-						0-M34831	-5	-5	-5	-10	-20	15	8	-10	-15	2	22	
30-45.1292-113.1417-2-15-						0-M34832	-5	-5	-5	22	-20	-15	-5	-10	-15	2	21	
30-45.1631-113.0153-2-15-						0-M34833	-5	-5	-5	20	-20	-15	12	-10	-15	2	16	
30-45.1567-113.0111-2-12-						0-M34834	-5	5	-5	25	-20	18	12	-10	-15	2	15	
30-45.2278-113.3056-2-12-						0-M34837	-5	-5	-5	40	-20	-15	25	-10	-15	1	9	
30-45.2014-113.2847-2-12-						0-M34838	-5	5	-5	10	-20	-15	-5	-10	-15	2	19	
30-45.2042-113.2917-2-12-						0-M34839	-5	-5	-5	10	-20	-15	-5	-10	-15	2	19	
30-45.2000-113.3139-2-12-						0-M34840	-5	-5	-5	19	-20	-15	6	-10	-15	1	14	
30-45.1889-113.3333-2-12-						0-M34841	-5	-5	-5	-10	-20	-15	-5	-10	-15	2	19	
30-45.4931-113.1072-2-12-						0-M34842	-5	-5	-5	87	-20	-15	98	-10	21	2	41	
30-45.4831-113.0697-2-12-						0-M34843	-5	-5	-5	286	-20	-15	332	-10	-15	2	29	
30-45.4806-113.0689-2-12-						0-M34844	-5	7	-5	176	-20	-15	74	-10	24	2	32	
30-45.4728-113.0825-2-12-						0-M34845	-5	-5	-5	24	-20	-15	26	-10	16	2	6	
30-45.4589-113.1044-2-12-						0-M34846	-5	-5	-5	23	-20	-15	12	-10	-15	3	41	
30-45.4569-113.1069-2-11-						0-M34847	-5	5	5	17	-20	-15	5	-10	-15	2	14	
30-45.4506-113.1192-2-12-						0-M34848	-5	-5	-5	45	-20	-15	18	-10	15	2	21	
30-45.4478-113.1222-2-12-						0-M34849	-5	-5	-5	26	21	-15	12	-10	-15	2	12	
30-45.4369-113.1206-2-12-						0-M34850	-5	-5	-5	26	-20	-15	12	-10	16	2	19	
30-45.4286-113.1092-2-12-						0-M34851	-5	-5	-5	24	-20	-15	14	-10	-15	2	18	
30-45.4236-113.1181-2-12-						0-M34852	-5	-5	-5	55	-20	-15	7	-10	-15	1	14	
30-45.4194-113.1083-2-12-						0-M34853	-5	-5	-5	12	-20	-15	15	-10	-15	2	20	
30-45.4133-113.1194-2-15-						0-M34854	-5	5	-5	15	-20	-15	8	-10	-15	2	19	
30-45.4136-113.1042-2-12-						0-M34855	-5	-5	-5	15	-20	-15	-5	-10	-15	2	21	
30-45.4100-113.1100-2-12-						0-M34856	-5	-5	-5	22	-20	-15	9	-10	-15	2	23	
30-45.4044-113.1028-2-12-						0-M34857	5	-5	6	-10	-20	-15	-5	-10	-15	2	33	
30-45.3847-113.0972-2-12-						0-M34858										2	24	
30-45.3889-113.0764-2-12-						0-M34859	-5	-5	-5	-10	-20	-15	6	-10	-15	2	16	
30-45.3972-113.1464-2-12-						0-M34860	-5	-5	-5	16	-20	20	7	-10	-15	2	25	
30-45.3739-113.1194-2-12-						0-M34861	-5	-5	-5	24	-20	-15	8	-10	-15	2	29	
30-45.3703-113.0858-2-12-						0-M34862	9	-5	-5	22	46	-15	-5	-10	-15	2	18	
30-45.3436-113.1014-2-12-						0-M34863	-5	-5	-5	-10	28	-15	-5	-10	-15	3	17	
30-45.3033-113.1150-2-12-						0-M34864	-5	-5	-5	25	-20	-15	-5	-10	-15	2	16	
30-45.3069-113.0958-2-12-						0-M34865	-5	-5	-5	28	-20	18	8	-10	-15	2	16	
30-45.2847-113.1208-2-12-						0-M34866	-5	5	-5	20	-20	-15	9	-10	-15	2	20	
30-45.2761-113.1542-2-12-						0-M34867	-5	-5	-5	21	-20	28	5	-10	-15	1	18	
30-45.3197-113.1806-2-12-						0-M34868	-5	-5	-5	18	-20	-15	14	-10	-15	2	18	
30-45.3267-113.1858-2-12-						0-M34869	-5	-5	-5	20	-20	-15	6	-10	-15	2	21	

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

③

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
30-45.2183-112.5111-2-15-			0-M34816			56570	-0.06	532	27960	86	135	11.3	70	2.8	4	1.1	23930	8.3	17810	43	0.4	
30-45.2183-112.5092-2-15-			0-M34817			60490	-0.07	619	30410	73	-86	11.9	63	3.1	5	1.2	24480	7.3	14530	47	0.4	
30-45.2183-112.5081-2-15-			0-M34818			55940	-0.06	521	31700	79	-102	13.4	81	3.2	5	1.3	29300	8.0	13950	49	0.4	
30-45.2092-112.5436-2-15-			0-M34819			62800	-0.06	615	28240	80	-110	10.8	56	3.8	5	1.3	20060	9.5	18520	46	0.4	
30-45.1992-112.5425-2-15-			0-M34820			62410	-0.06	539	21090	118	124	11.7	84	3.0	6	1.5	23690	16.0	17530	63	0.7	
30-45.1639-112.5014-2-99-			0-M34821			65870	-0.08	602	29760	106	255	11.7	67	4.6	7	1.2	22960	9.1	23600	57	0.6	
30-45.1897-112.5528-2-15-			0-M34822			68250	-0.06	427	19830	95	175	12.4	64	3.6	5	1.3	22010	12.3	19410	53	0.5	
30-45.1567-112.5558-2-15-			0-M34823			67510	-0.06	462	21700	111	164	11.7	74	3.0	6	1.5	24870	16.1	20810	60	0.6	
30-45.1422-113.0361-2-15-			0-M34824			59410	-0.09	570	39680	83	121	13.8	72	4.4	4	1.3	21460	5.7	13880	39	0.4	
30-45.1417-113.0444-2-15-			0-M34825			59640	-0.09	674	76270	71	-90	10.6	26	2.3	5	1.3	16590	8.5	18350	39	0.6	
30-45.1375-113.0728-2-15-			0-M34827			64110	-0.05	685	9588	70	165	7.5	25	3.1	4	1.1	8815	8.7	17280	36	0.4	
30-45.1383-113.0814-2-12-			0-M34828			60470	-0.06	774	31310	66	-123	8.6	87	4.2	4	1.2	11730	9.1	20300	42	0.4	
30-45.1469-113.1233-2-12-			0-M34829			51630	-0.06	596	6513	87	123	7.9	30	2.5	6	1.5	10820	20.6	16130	43	0.7	
30-45.1194-113.1708-2-15-			0-M34830			61290	-0.07	882	8079	60	-85	7.5	26	4.1	4	1.0	12030	7.3	18630	32	0.4	
30-45.1403-113.1897-2-12-			0-M34831			66340	-0.06	674	7012	65	105	10.1	47	2.6	6	1.5	10650	13.7	14710	35	0.6	
30-45.1292-113.1417-2-15-			0-M34832			57720	-0.06	506	4535	59	-70	8.4	32	5.4	4	1.2	13140	8.0	14740	32	0.4	
30-45.1631-113.0153-2-15-			0-M34833			59930	-0.07	801	52870	63	-96	10.9	34	2.8	4	1.2	23700	9.0	14380	37	0.3	
30-45.1667-113.0111-2-12-			0-M34834			65180	-0.09	721	43330	70	-95	11.1	36	2.4	4	1.3	23840	10.3	15760	39	0.4	
30-45.2278-113.3056-2-12-			0-M34837			68930	-0.11	697	11800	56	-132	21.5	31	5.1	6	1.4	33110	5.2	14370	31	0.4	
30-45.2014-113.2847-2-12-			0-M34838			37740	-0.05	430	2976	50	-68	5.0	20	2.4	4	0.9	5990	12.1	14630	28	0.5	
30-45.2042-113.2917-2-12-			0-M34839			40210	-0.05	506	3249	52	-61	5.5	25	2.1	4	1.1	5653	13.3	13790	28	0.5	
30-45.2000-113.3139-2-12-			0-M34840			77360	-0.11	724	20450	118	-115	6.8	41	-2.3	9	2.1	11810	11.2	11090	67	0.8	
30-45.1889-113.3333-2-12-			0-M34841			58430	-0.07	606	8908	94	-114	11.7	34	3.1	7	1.7	31740	11.1	12370	50	0.7	
30-45.4931-113.1072-2-12-			0-M34842			92540	-0.07	646	19800	82	-158	9.4	27	8.0	3	1.4	23790	8.5	18490	53	0.4	
30-45.4831-113.0697-2-12-			0-M34843			100900	-0.12	567	23360	88	-130	10.3	-16	10.1	5	1.6	20650	13.7	18630	56	0.6	
30-45.4806-113.0689-2-12-			0-M34844			114400	-0.08	646	24600	83	-149	11.7	-11	7.4	4	1.6	24110	10.1	19540	42	0.5	
30-45.4728-113.0825-2-12-			0-M34845			85720	-0.05	587	26480	176	-132	7.2	-9	1.9	8	2.3	36490	18.9	23690	93	0.8	
30-45.4589-113.1044-2-12-			0-M34846			88590	-0.07	821	8821	107	-132	9.8	26	3.5	4	1.5	13980	7.1	18410	58	0.5	
30-45.4569-113.1069-2-11-			0-M34847			51400	-0.09	455	52260	125	149	12.4	90	-1.9	7	1.2	34220	21.4	12930	69	0.7	
30-45.4506-113.1192-2-12-			0-M34848			75830	-0.07	491	29230	144	-161	11.5	22	3.1	6	2.1	38600	14.6	13490	69	0.7	
30-45.4478-113.1222-2-12-			0-M34849			73640	-0.11	431	6523	70	-108	9.7	42	6.6	6	1.6	14250	3.5	10430	39	0.4	
30-45.4369-113.1206-2-12-			0-M34850			59650	-0.07	1215	7062	76	-79	8.3	36	3.6	6	1.5	13200	13.4	18760	38	0.6	
30-45.4286-113.1092-2-12-			0-M34851			67440	-0.08	868	12840	90	-76	7.7	23	3.1	6	1.6	10500	13.3	21480	47	0.5	
30-45.4236-113.1181-2-12-			0-M34852			51220	-0.05	396	31690	63	142	10.3	52	2.9	4	1.2	17430	17.3	17300	35	0.6	
30-45.4194-113.1083-2-12-			0-M34853			77090	-0.06	812	10780	125	84	6.7	24	4.0	6	1.9	13730	23.2	19760	74	0.7	
30-45.4133-113.1194-2-15-			0-M34854			62560	-0.06	805	10860	151	-71	6.3	29	3.0	8	2.0	11480	35.7	19540	79	0.9	
30-45.4136-113.1042-2-12-			0-M34855			62020	-0.11	363	63870	138	-99	12.2	43	-2.2	9	1.8	58310	35.3	13210	70	1.2	
30-45.4100-113.1100-2-12-			0-M34856			74240	-0.06	517	23530	94	-137	9.9	20	2.2	5	1.5	19460	10.1	14420	48	0.5	
30-45.4044-113.1028-2-12-			0-M34857			57840	-0.08	352	59190	127	-124	12.4	34	3.5	7	1.9	47340	21.8	12870	67	0.9	
30-45.3847-113.0972-2-12-			0-M34858			44220	-0.06	549	47440	80	-95	9.6	79	3.4	4	1.2	15350	16.1	17900	44	0.6	
30-45.3889-113.0764-2-12-			0-M34859			47840	-0.07	557	42530	68	98	6.4	62	2.8	5	1.1	14560	20.1	15330	37	0.5	
30-45.3972-113.1464-2-12-			0-M34860			45310	-0.05	419	68170	64	-95	8.9	66	2.6	4	1.1	14230	11.9	14160	35	0.5	
30-45.3739-113.1194-2-12-			0-M34861			42750	-0.05	370	69590	68	-95	8.9	59	3.1	4	1.2	14930	14.8	11290	36	0.5	
30-45.3703-113.0858-2-12-			0-M34862			40500	-0.09	427	54630	188	-100	12.8	56	1.9	10	1.9	72010	32.5	12990	87	1.3	
30-45.3436-113.1014-2-12-			0-M34863			64130	-0.10	605	26690	203	-96	11.6	50	-2.1	12	2.3	50430	38.1	14820	113	1.3	
30-45.3033-113.1150-2-12-			0-M34864			67670	-0.05	768	44530	74	-104	9.7	28	2.1	4	1.3	19310	7.7	14950	46	0.5	
30-45.3069-113.0958-2-12-			0-M34865			59510	-0.05	531	46360	78	-111	8.6	27	2.6	5	1.4	19290	8.8	14800	44	0.5	
30-45.2847-113.1208-2-12-			0-M34866			51140	-0.07	676	105200	74	132	9.9	23	2.0	4	1.3	22310	7.2	15170	37	0.4	
30-45.2761-113.1542-2-12-			0-M34867			57130	-0.08	655	114200	68	143	10.5	22	3.1	4	1.4	24300	7.1	13300	43	0.4	
30-45.3197-113.1806-2-12-			0-M34868			63760	-0.06	659	29970	67	-112	9.7	26	3.4	4	1.1	16820	9.6	16810	35	0.4	
30-45.3267-113.1858-2-12-			0-M34869			63580	-0.06	730	29410	63	-119	8.3	23	3.8	4	1.4	15720	8.8	15510	35	0.4	

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

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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		
30-45.2183-112.5111-2-15-						0-M34816	24860	891	11300	35	-2	8.9	6.4	-324	-1	-1	14.1	4264	66	3.8	94	0.227	
30-45.2183-112.5092-2-15-						0-M34817	24610	857	11850	-24	-2	8.9	5.2	-307	-1	-1	11.6	4862	76	5.0	63	0.267	
30-45.2183-112.5081-2-15-						0-M34818	26060	979	11020	-18	-2	10.4	6.2	-383	1	-1	15.6	4903	71	4.1	61	0.224	
30-45.2092-112.5436-2-15-						0-M34819	18050	713	13690	47	-2	8.6	5.4	-375	-1	-1	13.0	3857	56	3.7	90	0.262	
30-45.1992-112.5425-2-15-						0-M34820	23340	877	13310	34	-2	10.1	8.1	-331	1	1	18.1	4564	83	5.7	84	0.276	
30-45.1639-112.5014-2-99-						0-M34821	24970	1046	11300	46	-3	9.5	6.1	-360	-1	-1	17.2	3090	69	4.1		0.250	
30-45.1897-112.5528-2-15-						0-M34822	20860	813	13490	39	-2	9.1	5.9	-368	-1	1	15.6	4081	77	5.3	75	0.263	
30-45.1567-112.5558-2-15-						0-M34823	20770	872	13390	57	-2	10.1	6.9	-381	-1	-1	17.0	5857	77	5.9	127	0.306	
30-45.1422-113.0361-2-15-						0-M34824	22930	1052	8940	51	-2	9.5	5.5	-391	-1	-1	12.3	2815	67	3.8	-33	0.211	
30-45.1417-113.0444-2-15-						0-M34825	14410	758	9738	-27	-2	7.9	4.2	291	-1	-1	11.5	3069	77	3.6	-99	0.235	
30-45.1375-113.0723-2-15-						0-M34827	7266	353	18180	47	-1	4.6	4.8	-308	-1	-1	9.6	2539	39	3.9	64	0.281	
30-45.1383-113.0814-2-12-						0-M34828	8618	848	13570	48	-2	5.9	4.8	-442	-1	-1	10.3	2819	33	2.8	96	0.379	
30-45.1469-113.1233-2-12-						0-M34829	7902	345	8359	40	-2	5.3	6.2	-238	-1	-1	11.5	3792	41	4.4	83	0.426	
30-45.1194-113.1708-2-15-						0-M34830	9901	569	11920	46	-2	6.0	3.8	-283	-1	-1	8.4	2294	37	3.3	-67	0.357	
30-45.1403-113.1897-2-12-						0-M34831	-4371	562	7936	37	-2	5.3	5.8	-326	-1	-1	9.7	6135	41	5.0	52	0.443	
30-45.1292-113.1417-2-15-						0-M34832	7001	435	4176	39	-2	7.6	4.5	-305	-1	-1	9.3	2368	50	3.1	113	0.366	
30-45.1631-113.0153-2-15-						0-M34833	14560	967	10740	-20	-2	7.6	4.4	476	-1	-1	7.7	4311	93	3.7	-85	0.312	
30-45.1667-113.0111-2-12-						0-M34834	13700	752	11770	-29	-3	9.1	3.3	282	-1	-1	9.6	3269	95	3.0	-98	0.292	
30-45.2278-113.3056-2-12-						0-M34837	14650	815	8084	68	-3	8.7	5.3	-566	-1	-1	10.2	-2219	62	3.3	185	0.422	
30-45.2014-113.2647-2-12-						0-M34838	9757	156	7626	29	-1	4.1	4.0	-210	-1	-1	7.1	2346	18	3.1	26	0.577	
30-45.2042-113.2917-2-12-						0-M34839	5551	160	7890	47	-2	3.5	4.7	-182	-1	-1	7.1	2161	21	3.8	74	0.549	
30-45.2000-113.3139-2-12-						0-M34840	-5856	502	15300	-34	-3	10.0	9.4	-355	-1	2	13.0	4170	53	7.0	-109	1.469	
30-45.1889-113.3333-2-12-						0-M34841	12220	1013	11450	34	-2	8.7	7.1	-454	1	-1	12.4	2587	78	5.6	81	0.694	
30-45.4931-113.1072-2-12-						0-M34842	-8243	1226	19670	50	10	6.9	4.9	-556	-1	-1	13.1	-2105	49	4.2	435	0.550	
30-45.4831-113.0697-2-12-						0-M34843	10550	650	21240	-36	12	10.7	5.5	488	-1	-2	17.9	3832	72	4.0	449	0.441	
30-45.4806-113.0689-2-12-						0-M34844	12120	711	23960	72	5	10.2	5.7	-460	-1	-1	15.2	2893	68	5.0	335	0.349	
30-45.4728-113.0825-2-12-						0-M34845	-6805	517	26960	60	-2	5.7	10.2	425	2	1	19.3	3897	133	7.1	79	0.311	
30-45.4589-113.1044-2-12-						0-M34846	-6671	945	23310	68	-2	5.6	8.4	561	-1	-1	14.4	2387	48	3.5	128	0.438	
30-45.4569-113.1069-2-11-						0-M34847	30890	1082	9902	-30	-3	11.5	7.7	-354	-1	-1	20.9	6073	123	5.3	110	0.244	
30-45.4506-113.1192-2-12-						0-M34848	-7804	1305	24630	52	-2	10.6	10.3	-531	2	-1	24.5	5635	127	5.7	207	0.265	
30-45.4478-113.1222-2-12-						0-M34849	-5806	332	5639	78	-3	10.1	5.9	-415	-1	1	10.2	3267	55	-2.7	-145	0.500	
30-45.4369-113.1206-2-12-						0-M34850	8952	457	9282	40	-2	7.0	6.1	-283	-1	-1	10.2	2699	49	4.3	100	0.441	
30-45.4286-113.1092-2-12-						0-M34851	9658	306	10460	-25	-2	6.5	5.1	-242	-1	-1	9.8	2973	52	4.6	89	0.418	
30-45.4236-113.1181-2-12-						0-M34852	36830	495	6990	32	-2	8.4	4.4	-310	1	-1	10.5	4608	62	3.8	104	0.286	
30-45.4194-113.1083-2-12-						0-M34853	-4959	310	11690	60	-2	7.6	8.0	-295	-1	-1	14.8	3145	56	5.0	87	0.392	
30-45.4133-113.1194-2-15-						0-M34854	8570	261	10770	46	-2	6.5	10.1	-221	1	-1	22.0	3272	51	6.5	87	0.300	
30-45.4136-113.1042-2-12-						0-M34855	58840	892	14780	-36	-3	16.9	9.0	-342	3	-2	38.6	3837	216	7.5	-289	0.355	
30-45.4100-113.1100-2-12-						0-M34856	11000	1108	18830	40	-2	9.0	6.4	-458	1	-1	15.6	-1761	65	4.3	94	0.359	
30-45.4044-113.1028-2-12-						0-M34857	58120	977	15830	31	-2	17.6	10.7	-419	2	2	32.7	3671	161	7.2	67	0.364	
30-45.3847-113.0972-2-12-						0-M34858	23040	1361	8210	35	-2	6.9	5.6	-394	-1	-1	12.0	3730	54	5.1	-13	0.325	
30-45.3889-113.0764-2-12-						0-M34859	15450	418	9361	-22	-2	5.6	3.9	-225	-1	-1	10.5	4124	44	3.8	56	0.371	
30-45.3972-113.1464-2-12-						0-M34860	18810	1101	7844	33	-1	6.5	4.7	-384	1	-1	10.3	2909	49	4.1	67	0.330	
30-45.3739-113.1194-2-12-						0-M34861	20690	902	8438	36	-2	6.6	4.8	-369	-1	-1	9.9	2840	66	3.4	75	0.374	
30-45.3703-113.0858-2-12-						0-M34862	52300	962	14300	-28	-3	17.8	15.9	-357	3	-1	52.4	4217	273	11.5	-35	0.269	
30-45.3436-113.1014-2-12-						0-M34863	20840	746	17690	-34	-3	18.8	16.5	-312	3	-2	51.9	5396	181	10.3	-51	0.229	
30-45.3033-113.1150-2-12-						0-M34864	10420	602	15660	55	-2	7.3	5.2	-329	-1	-1	11.8	2935	66	3.4	76	0.237	
30-45.3069-113.0958-2-12-						0-M34865	12000	732	14990	34	-2	7.8	5.5	-360	-1	-1	14.1	2176	75	3.9	68	0.241	
30-45.2847-113.1208-2-12-						0-M34866	16750	647	11300	-19	2	6.9	4.7	443	-1	-1	9.7	4103	89	3.6	73	0.268	
30-45.2761-113.1542-2-12-						0-M34867	23980	648	10620	-25	-2	7.8	4.4	402	-1	-1	10.5	3501	100	3.2	106	0.248	
30-45.3197-113.1806-2-12-						0-M34868	14240	947	12740	36	-2	6.9	4.4	-413	-1	-1	9.3	2833	45	3.7	80	0.312	
30-45.3267-113.1858-2-12-						0-M34869	11970	1047	12730	35	-2	7.4	4.3	-460	-1	1	9.1	2699	61	3.7	98	0.352	

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

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DOE SAMPLE NUMBER						LAST SAMPLE LOCATION NUMBER AND FIELD DATA																				U CONCENTRATION								
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REFCATE	LAST SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (umho/cm)	SCINTILLOMETER (tL/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	3281-113.1858	-2-12-				0-M34870-09/04/75-13-			19-10.5-C-	-	5.5-			46-	18-2-1-4-6-3-3-1-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
30-45	3467-113.1633	-2-12-				0-M34871-09/04/75-13-			19-9.5-C-	-	5.5-			35-	9-2-1-4-6-3-3-1-2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40
30-45	3617-113.1442	-2-12-				0-M34872-09/04/75-14-			19-10.0-C-	-	5.7-			120-	23-2-1-4-6-3-3-1-2-3-3-1-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60
30-45	3625-113.1911	-2-12-				0-M34873-09/04/75-14-			19-10.5-C-	-	5.2-			37-	14-2-1-4-6-3-3-1-2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60
30-45	2581-113.1106	-2-12-				0-M34874-09/04/75-15-			19-10.5-C-	-	5.5-			120-	18-2-1-4-6-3-3-1-2-3-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90
30-45	2811-113.0306	-2-12-				0-M34875-09/04/75-15-			19-10.5-C-	-	5.5-			90-	14-2-4-4-6-3-3-1-2-3-3-4-1-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90
30-45	2808-113.0350	-2-12-				0-M34876-09/04/75-15-			19-10.5-C-	-	5.5-			60-	14-2-4-4-6-3-3-1-2-3-3-4-1-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.00
30-45	3072-113.0308	-2-12-				0-M34877-09/04/75-15-			19-10.5-C-	-	5.7-			65-	18-2-1-4-6-3-3-1-2-3-3-4-1-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60
30-45	4200-112.6911	-2-99-				0-M34879-09/05/75-11-			17-	-	-C-			-	9-2-1-4-6-6-1-1-3-3-3-1-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.10
30-45	4214-112.6967	-2-12-				0-M34880-09/05/75-11-			17-10.0-C-	-	6.9-			485-	14-2-6-4-6-3-3-1-2-2-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.40
30-45	4111-112.7131	-2-12-				0-M34881-09/05/75-11-			17-10.0-C-	-	6.9-			480-	14-2-6-4-6-3-3-1-2-2-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.50
30-45	4386-112.7406	-2-12-				0-M34882-09/05/75-12-			18-9.5-C-	-	5.9-			65-	18-2-6-4-6-3-3-1-2-2-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.40
30-45	4547-112.7003	-2-12-				0-M34883-09/05/75-12-			18-9.5-C-	-	5.9-			60-	18-2-6-4-6-3-3-1-2-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.20
30-45	4933-112.7161	-2-12-				0-M34884-09/05/75-12-			18-10.5-C-	-	5.9-			70-	14-2-6-4-6-3-3-1-2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50
30-45	4883-112.6844	-2-15-				0-M34885-09/05/75-13-			19-	-	-			-	18-3-1-4-6-6-1-1-2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.90
30-45	4944-112.6556	-2-15-				0-M34886-09/05/75-13-			18-	-	-			-	9-3-1-4-6-6-1-1-4-2-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70
30-45	1892-112.8553	-2-11-				0-M34887-09/15/75-9-			16-6.4-C-	-	5.7-			300-	11-4-5-6-3-3-1-2-3-3-5-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60
30-45	1814-112.7403	-2-12-				0-M34888-09/15/75-10-			15-8.8-C-	-	6.1-			330-	3-4-5-6-3-3-1-2-4-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30
30-45	1708-112.7439	-2-15-				0-M34889-09/15/75-11-			15-	-	-			-	11-4-3-7-6-3-3-1-2-4-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10
30-45	1472-112.7569	-2-15-				0-M34890-09/15/75-11-			15-	-	-			-	11-4-3-7-6-3-3-1-2-3-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40
30-45	1797-112.7111	-2-12-				0-M34891-09/15/75-12-			19-12.0-C-	-	6.3-			500-	5-4-5-6-3-3-1-2-4-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90
30-45	0333-113.2111	-2-12-				0-M34893-09/15/75-10-			13-9.0-C-	-	5.7-			500-	11-4-6-6-2-3-2-2-4-4-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90
30-45	0500-113.1847	-2-12-				0-M34894-09/15/75-11-			14-11.8-C-	-	5.5-			70-	5-4-6-6-2-3-2-2-4-4-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.20
30-45	0722-113.2486	-2-15-				0-M34895-09/15/75-11-			18-	-	-			-	7-4-3-7-6-3-3-1-2-4-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.80
30-45	0925-113.2417	-2-12-				0-M34896-09/15/75-11-			16-8.8-C-	-	5.2-			50-	5-4-2-4-3-3-1-2-2-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.90
30-45	1228-113.2383	-2-12-				0-M34897-09/15/75-12-			18-8.0-C-	-	5.2-			42-	5-4-2-4-4-3-1-2-1-3-5-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.70
30-45	1111-113.2111	-2-15-				0-M34898-09/16/75-13-			18-	-	-			-	7-4-3-6-6-3-1-2-4-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80
30-45	0644-113.1722	-2-15-				0-M34899-09/17/75-9-			13-	-	-			-	11-1-6-3-1-1-1-2-3-2-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20
30-45	0858-113.1669	-2-15-				0-M34900-09/17/75-10-			14-	-	-			-	18-4-3-4-6-3-1-2-3-3-5-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30
30-45	0972-113.1608	-2-12-				0-M34901-09/17/75-10-			15-9.4-C-	-	5.5-			110-	7-4-6-6-3-3-4-2-4-4-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40
30-45	0764-113.1958	-2-12-				0-M34902-09/17/75-11-			15-9.6-C-	-	5.7-			240-	7-4-2-6-3-3-1-2-3-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70
30-45	0486-113.1269	-2-15-				0-M34903-09/17/75-11-			16-	-	-			-	11-4-4-6-6-3-1-2-3-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20
30-45	0056-112.8522	-2-11-				0-M34904-09/18/75-13-			15-11.5-C-	-	5.9-			600-	4-1-1-3-7-4-3-1-6-4-4-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80
30-45	0014-112.7858	-2-12-				0-M34905-09/18/75-15-			15-10.5-C-	-	5.9-			500-	6-4-3-6-3-3-2-2-2-3-4-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.80
30-45	4922-112.6522	-2-15-				0-M34906-09/05/75-13-			19-	-	-			-	14-3-1-4-6-6-3-1-2-4-2-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.40
30-45	4892-112.6500	-2-15-				0-M34907-09/05/75-13-			19-	-	-			-	14-3-1-4-6-6-3-1-2-4-2-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.40
30-45	4850-112.6508	-2-15-				0-M34908-09/05/75-13-			19-	-	-			-	18-3-1-4-6-6-3-1-2-4-2-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00
30-45	4819-112.6486	-2-15-				0-M34909-09/05/75-13-			19-	-	-			-	28-2-6-4-6-6-3-1-2-4-2-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.70
30-45	4792-112.6472	-2-15-				0-M34910-09/05/75-13-			19-	-	-			-	18-2-7-4-6-6-3-1-2-4-2-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.00
30-45	4686-112.6111	-2-11-				0-M34911-09/05/75-14-			19-10.0-C-	-	6.3-			47-	14-2-4-5-6-2-2-1-3-3-2-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.90
30-45	4581-112.61																																	

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

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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	DOE 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
30-45.3281-113.1858-2-12-						0-M34870	-5	-5	-5	21	-20	-15	18	-10	-15		2	16
30-45.3467-113.1633-2-12-						0-M34871	-5	-5	-5	23	-20	-15	14	-10	-15		2	18
30-45.3617-113.1442-2-12-						0-M34872	-5	-5	-5	23	-20	-15	9	-10	-15		2	18
30-45.3625-113.1911-2-12-						0-M34873	-5	-5	-5	33	-20	-15	13	-10	-15		2	17
30-45.2581-113.1106-2-12-						0-M34874	-5	-5	6	23	34	-15	19	-10	-15		2	46
30-45.2811-113.0306-2-12-						0-M34875	-5	-5	-5	22	50	-15	30	-10	-15		2	33
30-45.2808-113.0350-2-12-						0-M34876	-5	-5	-5	32	-20	-15	91	-10	-15		2	13
30-45.3072-113.0308-2-12-						0-M34877	-5	-5	-5	20	-20	-15	17	-10	-15		2	16
30-45.4200-112.6911-2-99-						0-M34879	-5	-5	-5	20	-20	-15	40	-10	-15		2	22
30-45.4214-112.6967-2-12-						0-M34880	-5	-5	-5	29	-20	-15	7	-10	21		2	20
30-45.4111-112.7131-2-12-						0-M34881	-5	5	5	38	-20	-15	9	-10	15		2	20
30-45.4386-112.7406-2-12-						0-M34882	-5	-5	-5	18	28	-15	-5	-10	-15		2	7
30-45.4547-112.7003-2-12-						0-M34883	7	-5	-5	-10	-20	-15	-5	-10	-15		2	11
30-45.4933-112.7161-2-12-						0-M34884	-5	-5	-5	21	-20	-15	-5	-10	-15		2	17
30-45.4883-112.6844-2-15-						0-M34885	-5	-5	-5	38	-20	-15	47	-10	-15		2	22
30-45.4944-112.6556-2-15-						0-M34886	-5	-5	-5	26	-20	18	17	-10	19		2	16
30-45.1892-112.8553-2-11-						0-M34887	-5	5	5	29	-20	21	6	-10	-15		2	16
30-45.1814-112.7403-2-12-						0-M34888	-5	-5	-5	36	28	17	52	-10	-15		2	23
30-45.1708-112.7439-2-15-						0-M34889	-5	-5	-5	24	28	-15	13	-10	-15		2	20
30-45.1472-112.7569-2-15-						0-M34890	-5	-5	-5	23	-20	-15	17	-10	-15		2	15
30-45.1797-112.7111-2-12-						0-M34891	-5	-5	-5	39	-20	-15	21	-10	-15		2	22
30-45.0333-113.2111-2-12-						0-M34893	-5	-5	-5	22	-20	-15	-5	-10	-15		2	27
30-45.0500-113.1847-2-12-						0-M34894	-5	-5	-5	16	-20	-15	9	-10	-15		2	15
30-45.0722-113.2486-2-15-						0-M34895	-5	-5	-5	20	28	-15	10	-10	-15		2	20
30-45.0925-113.2417-2-12-						0-M34896	-5	-5	-5	-10	-20	-15	5	-10	-15		2	17
30-45.1228-113.2383-2-12-						0-M34897	-5	-5	-5	10	-20	-15	-5	-10	-15		2	16
30-45.1111-113.2111-2-15-						0-M34898	-5	-5	-5	16	-20	-15	7	-10	-15		2	24
30-45.0644-113.1722-2-15-						0-M34899	-5	6	-5	26	-20	-15	10	-10	-15		2	26
30-45.0858-113.1669-2-15-						0-M34900	-5	-5	-5	23	-20	-15	7	-10	-15		2	20
30-45.0972-113.1608-2-12-						0-M34901	-5	-5	-5	31	26	15	11	-10	-15		2	25
30-45.0764-113.1958-2-12-						0-M34902	-5	5	-5	10	-20	-15	-5	-10	-15		2	21
30-45.0486-113.1269-2-15-						0-M34903	-5	-5	-5	23	-20	-15	13	-10	-15		2	25
30-45.0056-112.8522-2-11-						0-M34904	-5	-5	-5	16	-20	-15	10	-10	-15		-1	8
30-45.0014-112.7858-2-12-						0-M34905	-5	-5	6	-10	28	21	-5	-10	-15		2	9
30-45.4922-112.6522-2-15-						0-M34906	-5	9	-5	33	-20	-15	19	-10	-15		2	22
30-45.4892-112.6500-2-15-						0-M34907	-5	-5	-5	28	-20	24	9	-10	-15		2	28
30-45.4850-112.6508-2-15-						0-M34908	-5	7	-5	14	-20	-15	14	-10	-15		2	25
30-45.4819-112.6486-2-15-						0-M34909	-5	10	-5	22	27	-15	18	-10	-15		2	20
30-45.4792-112.6472-2-15-						0-M34910	-5	-5	-5	17	-20	-15	22	-10	-15		2	27
30-45.4686-112.6111-2-11-						0-M34911	-5	5	-5	26	-20	45	5	-10	-15		1	12
30-45.4581-112.6133-2-15-						0-M34912	-5	-5	5	35	-20	-15	20	-10	-15		2	27
30-45.4486-112.5939-2-15-						0-M34913	-5	5	-5	30	-20	15	5	-10	-15		1	29
30-45.4597-112.5803-2-11-						0-M34914	-5	-5	-5	31	-20	18	16	-10	-15		2	38
30-45.4436-112.5597-2-15-						0-M34915	-5	-5	-5	39	-20	18	10	-10	-15		2	28
30-45.4825-112.5742-2-11-						0-M34916	-5	-5	-5	25	-20	16	11	-10	-15		2	26
30-45.4608-112.5553-2-11-						0-M34917	-5	-5	-5	33	-20	23	11	-10	-15		2	25
30-45.4528-112.5069-2-15-						0-M34918	-5	-5	-5	28	-20	-15	19	-10	-15		2	24
30-45.4454-112.5197-2-15-						0-M34919	-5	-5	-5	28	-20	32	14	-10	-15		1	55
30-45.4378-112.5717-2-15-						0-M34920	-5	-5	-5	35	-20	-15	15	-10	-15		2	49
30-45.2744-112.7694-2-15-						0-M34921	-5	-5	-5	37	-20	21	10	-10	-15		2	35
30-45.2836-112.7781-2-15-						0-M34922	-5	-5	-5	31	-20	15	15	-10	-15		2	24

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

③

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	
30-45.3281-113.1858-2-12-			0-M34870			55910	-0.06	754	25690	68	-103	8.7	25	4.1	4	1.2	15520	8.6	17560	29	0.4		
30-45.3467-113.1633-2-12-			0-M34871			51350	-0.07	777	54240	68	71	10.2	31	2.8	4	1.2	22680	6.6	16240	31	0.4		
30-45.3617-113.1442-2-12-			0-M34872			57200	-0.06	461	88520	65	-101	9.7	27	2.4	4	1.2	21190	7.0	13520	46	0.4		
30-45.3625-113.1911-2-12-			0-M34873			61560	-0.06	796	56310	67	-85	9.8	31	2.9	4	1.2	21480	7.8	15800	30	0.4		
30-45.2581-113.1106-2-12-			0-M34874			53580	0.63	720	56660	88	-93	11.5	54	4.3	5	1.5	36740	18.5	13360	51	0.6		
30-45.2811-113.0306-2-12-			0-M34875			51070	-0.06	712	47820	84	-99	11.7	44	4.7	4	1.3	33120	17.5	13370	45	0.5		
30-45.2808-113.0350-2-12-			0-M34876			50850	-0.07	359	48840	56	-125	13.7	36	5.1	4	1.3	24030	4.5	14190	34	0.4		
30-45.3072-113.0308-2-12-			0-M34877			60810	-0.06	731	56530	60	-89	10.6	29	2.5	4	1.2	22780	8.2	13630	38	0.4		
30-45.4200-112.6911-2-99-			0-M34879			60730	-0.09	458	7926	76	-58	9.6	37	17.5	6	1.4	13870	7.4	13660	38	0.4		
30-45.4214-112.6967-2-12-			0-M34880			60520	-0.06	569	24200	128	-108	7.5	25	2.7	6	1.5	16500	18.7	15220	74	0.7		
30-45.4111-112.7131-2-12-			0-M34881			68670	-0.06	675	27030	96	-116	6.7	20	3.1	4	1.5	16840	15.5	16860	63	0.6		
30-45.4386-112.7406-2-12-			0-M34882			58470	-0.07	502	15530	218	-83	9.9	36	2.2	8	1.7	74630	30.6	14090	113	0.9		
30-45.4547-112.7003-2-12-			0-M34883			60770	-0.08	525	18480	208	-88	9.7	32	2.0	8	2.0	67610	27.5	14200	108	1.0		
30-45.4933-112.7161-2-12-			0-M34884			54310	-0.06	470	36260	81	-72	9.2	30	4.0	4	1.2	16950	8.6	15440	49	0.5		
30-45.4983-112.6844-2-15-			0-M34885			60610	-0.06	532	27890	102	-131	12.2	22	3.3	3	1.5	28510	12.0	16510	64	0.5		
30-45.4944-112.6556-2-15-			0-M34886			58400	-0.05	602	21190	105	-83	8.3	27	2.3	4	1.2	21920	12.6	15490	55	0.4		
30-45.1892-112.8553-2-11-			0-M34887			79090	-0.10	999	30450	74	-113	16.6	132	-2.0	4	1.4	37070	9.1	16360	43	0.3		
30-45.1814-112.7403-2-12-			0-M34888			70350	-0.07	613	22940	72	-106	13.7	64	4.0	4	1.3	26220	10.2	17810	42	0.4		
30-45.1708-112.7439-2-15-			0-M34889			59270	-0.06	603	44510	74	-104	10.7	46	2.9	3	1.2	23470	8.9	17020	39	0.4		
30-45.1472-112.7569-2-15-			0-M34890			67150	-0.06	605	24440	96	-82	11.0	50	2.6	5	1.3	21530	11.5	13670	44	0.5		
30-45.1797-112.7111-2-12-			0-M34891			74400	-0.09	825	29700	65	94	11.5	62	2.7	4	1.2	19770	7.5	14170	42	0.4		
30-45.0333-113.2111-2-12-			0-M34893			61950	-0.07	-416	-5489	65	-263	12.2	30	3.1	-2	1.2	15070	9.1	-10130	29	0.5		
30-45.0500-113.1847-2-12-			0-M34894			53960	-0.06	497	5037	51	-101	7.5	30	3.4	4	1.2	10830	7.1	17040	25	0.4		
30-45.0722-113.2486-2-15-			0-M34895			56110	-0.06	619	6596	77	-82	8.0	39	2.4	5	1.3	13960	16.1	15770	37	0.6		
30-45.0925-113.2417-2-12-			0-M34896			49390	-0.07	514	5213	53	89	6.1	31	3.4	5	1.2	8923	20.6	17000	32	0.6		
30-45.1228-113.2383-2-12-			0-M34897			37340	-0.05	655	3652	59	70	5.3	26	2.6	6	1.2	7405	19.9	17020	30	0.7		
30-45.1111-113.2111-2-15-			0-M34898			57090	-0.06	520	5012	64	-88	7.4	25	3.7	6	1.5	10970	8.9	18540	39	0.5		
30-45.0644-113.1722-2-15-			0-M34899			63170	-0.07	645	9571	65	158	9.5	36	5.3	4	1.1	13930	7.0	16000	36	0.4		
30-45.0858-113.1669-2-15-			0-M34900			65470	-0.08	820	11250	69	124	8.7	32	6.1	5	1.1	16720	8.3	16510	34	0.4		
30-45.0972-113.1608-2-12-			0-M34901			58140	-0.07	730	5754	69	172	11.1	45	6.0	4	1.1	11820	7.3	19070	32	0.4		
30-45.0764-113.1958-2-12-			0-M34902			55600	-0.06	729	9607	65	243	8.1	39	4.5	5	1.3	11340	11.3	15510	35	0.5		
30-45.0486-113.1269-2-15-			0-M34903			59310	-0.06	621	7910	67	-75	7.7	42	3.0	5	1.1	12690	9.8	18480	32	0.4		
30-45.0056-112.8522-2-11-			0-M34904			23550		362	153000		-68				3			8556					
30-45.0014-112.7858-2-12-			0-M34905			70090		1026	56510		-144				3			7962					
30-45.4922-112.6522-2-15-			0-M34906			60370		673	42260		-92				5			15700					
30-45.4392-112.6500-2-15-			0-M34907			59800	-0.06	608	37890	100	82	10.7	31	2.8	4	1.3	31800	13.2	17030	63	0.4		
30-45.4850-112.6508-2-15-			0-M34908			52510	-0.06	669	18270	94	102	10.6	23	3.5	5	1.3	24380	12.6	17330	58	0.5		
30-45.4819-112.6486-2-15-			0-M34909			59170	-0.06	593	24850	127	-83	8.6	27	2.7	5	1.4	24950	15.3	16170	68	0.5		
30-45.4792-112.6472-2-15-			0-M34910			56630	-0.07	495	20570	116	171	9.9	34	2.5	5	1.4	27220	15.5	11090	69	0.6		
30-45.4686-112.6111-2-11-			0-M34911			59640	-0.07	513	85650	58	5130	17.6	96	1.9	3	1.1	20750	5.2	12640	33	0.3		
30-45.4581-112.6133-2-15-			0-M34912			67620	-0.06	654	20880	75	-66	9.9	47	5.2	4	1.3	26000	9.9	15330	54	0.4		
30-45.4486-112.5939-2-15-			0-M34913			48790	-0.06	593	66510	59	-51	9.9	45	6.1	3	0.9	15100	6.5	14140	31	0.4		
30-45.4597-112.5803-2-11-			0-M34914			49800	-0.06	536	47470	47	-59	7.8	43	3.6	3	0.9	14140	5.8	15440	27	0.3		
30-45.4436-112.5597-2-15-			0-M34915			48930	-0.05	605	48620	57	-57	9.5	49	4.1	3	1.0	17960	8.4	10320	37	0.3		
30-45.4325-112.5742-2-11-			0-M34916			48610	-0.05	543	43040	50	-52	8.2	43	3.6	3	0.9	13480	6.6	13570	27	0.3		
30-45.4608-112.5553-2-11-			0-M34917			49950	-0.05	614	51530	62	-52	8.3	49	3.5	3	1.1	16000	8.5	13350	32	0.4		
30-45.4528-112.5069-2-15-			0-M34918			48390	-0.06	607	50550	58	-58	7.9	41	3.6	3	1.1	17320	8.8	13970	32	0.3		
30-45.4464-112.5197-2-15-			0-M34919			47670	-0.05	619	49910	52	-59	8.8	46	3.5	3	1.0	17340	8.2	14220	33	0.4		
30-45.4378-112.5717-2-15-			0-M34920			46790	-0.05	620	49290	54	-50	8.1	45	3.9	3	1.0	17690	8.8	13600	35	0.3		
30-45.2744-112.7694-2-15-			0-M34921			54030	-0.06	-199	54140	66	-106	11.0	51	4.4	3	1.2	19240	7.7	15150	29	0.4		
30-45.2836-112.7781-2-15-			0-M34922			52000	-0.07	663	51920	48	122	7.4	36	3.6	4	1.0	13950	6.2	9797	31	0.4		

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

④

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		
30-45.3281-113.1858-2-12-			0-M34870			12400	1068	12550	37	-2	6.5	4.9	-390	-1	-1	8.4	3321	53	2.9	-76	0.357		
30-45.3467-113.1633-2-12-			0-M34871			17377	806	12840	-24	-2	8.2	4.3	-303	-1	-1	6.7	2893	70	3.2		0.358		
30-45.3617-113.1442-2-12-			0-M34872			15950	648	11760	32	-2	7.7	4.6	-342	-1	-1	8.7	3497	108	3.2	106	0.299		
30-45.3625-113.1911-2-12-			0-M34873			15127	788	11690	-18	3	7.5	4.2	335	-1	-1	7.5	3529	86	3.1	68	0.347		
30-45.2581-113.1106-2-12-			0-M34874			14077	1104	10620	-29	6	7.6	5.3	-358	-1	-1	10.3	6191	152	3.8	85	0.379		
30-45.2811-113.0306-2-12-			0-M34875			9975	989	10950	-18	5	7.3	6.2	-370	1	-1	14.8	4662	139	4.1	92	0.264		
30-45.2808-113.0350-2-12-			0-M34876			18330	1184	11430	-22	5	12.1	4.2	-487	-1	-1	7.8	3951	89	3.2	288	0.256		
30-45.3072-113.0308-2-12-			0-M34877			19137	793	11790	40	-2	7.6	4.6	-313	-1	-1	7.9	3911	92	3.0		0.329		
30-45.4200-112.6911-2-99-			0-M34879			12090	502	3591	-28	-4	8.8	6.1	-265	-1	-1	8.5	2617	74	4.2	123	0.600		
30-45.4214-112.6967-2-12-			0-M34880			15620	632	17850	34	-2	8.7	7.8	-343	2	1	18.1	3661	54	5.6	94	0.409		
30-45.4111-112.7131-2-12-			0-M34881			16530	668	17380	46	-2	8.7	6.2	-363	-1	-1	13.2	3264	58	4.8	96	0.492		
30-45.4386-112.7406-2-12-			0-M34882			13930	782	12000	-25	-2	7.8	13.3	-293	2	2	34.2	3707	236	7.3	118	0.333		
30-45.4547-112.7003-2-12-			0-M34883			10940	711	14940	-32	-3	8.3	13.8	-280	2	-1	33.7	4113	198	6.2	-153	0.303		
30-45.4933-112.7161-2-12-			0-M34884			19110	607	5393	35	-2	7.0	5.5	-301	-1	-1	10.4	3494	66	3.0	-89	0.337		
30-45.4883-112.6844-2-15-			0-M34885			15567	1197	15110	37	-2	8.5	5.6	-469	-1	-1	16.2	3035	81	3.1	131	0.426		
30-45.4944-112.6556-2-15-			0-M34886			16770	546	15440	37	-2	5.9	7.3	-264	-1	-1	13.7	3246	81	3.5	97	0.270		
30-45.1892-112.8553-2-11-			0-M34887			19340	806	19890	-34	-3	11.5	4.0	614	-1	-1	7.1	7081	168	-2.1	146	0.366		
30-45.1814-112.7403-2-12-			0-M34888			14490	638	13750	44	3	8.8	5.0	-362	-1	-1	12.4	5237	99	3.6	198	0.266		
30-45.1708-112.7439-2-15-			0-M34889			17730	599	12680	48	-2	8.5	4.5	-340	-1	-1	10.4	3526	94	2.7	81	0.298		
30-45.1472-112.7569-2-15-			0-M34890			16510	636	11670	41	-2	7.9	5.4	357	-1	-1	13.9	4720	79	4.3		0.245		
30-45.1797-112.7111-2-12-			0-M34891			17920	670	13430	-29	-3	8.8	4.5	-322	-1	-1	10.8	2955	65	3.9	135	0.269		
30-45.0333-113.2111-2-12-			0-M34893			-13660	4356	9445	39	-2	6.9	4.7		-1	-1	8.5	-3864	-51	3.8	79	0.341		
30-45.0500-113.1847-2-12-			0-M34894			-5158	496	9517	-19	-2	6.3	4.6	-347	-1	-1	7.2	2103	33	3.8	76	0.583		
30-45.0722-113.2486-2-15-			0-M34895			8257	732	10920	34	-2	5.6	5.5	-295	-1	-1	9.6	4007	43	4.6	66	0.500		
30-45.0925-113.2417-2-12-			0-M34896			7647	295	10520	38	-2	5.1	3.9	-213	-1	-1	8.5	3716	34	4.3	55	0.576		
30-45.1228-113.2383-2-12-			0-M34897			7844	153	7263	41	-1	4.0	5.0	-193	-1	-1	10.2	2784	31	5.3	50	0.559		
30-45.1111-113.2111-2-15-			0-M34898			7076	497	8728	58	3	5.9	5.7	-325	-1	1	8.3	3416	31	4.5	49	0.458		
30-45.0644-113.1722-2-15-			0-M34899			10280	1201	8021	42	-2	6.9	4.5	-410	-1	-1	8.9	3558	56	3.4	-87	0.360		
30-45.0858-113.1649-2-15-			0-M34900			10540	646	9884	-27	-3	8.0	3.7	-302	-1	-1	9.0	3564	54	3.1	78	0.367		
30-45.0972-113.1608-2-12-			0-M34901			-5431	348	8485	48	-2	5.8	5.1	-302	-1	-1	9.6	3288	47	4.3	91	0.354		
30-45.0764-113.1958-2-12-			0-M34902			10187	487	10670	40	-2	6.3	6.1	-291	-1	-1	10.7	3346	44	4.0	62	0.346		
30-45.0486-113.1269-2-15-			0-M34903			10310	511	10020	45	2	6.1	4.8	-247	-1	-1	10.1	2485	42	3.1	93	0.317		
30-45.0056-112.8522-2-11-			0-M34904			16497	336	4045					-249				2033	35					
30-45.0014-112.7858-2-12-			0-M34905			11070	1413	16660					-554				8389	201					
30-45.4922-112.6522-2-15-			0-M34906			20130	702	15150					-321				3521	91					
30-45.4892-112.6500-2-15-			0-M34907			16507	731	14030	42	-2	8.1	7.4	-350	2	-1	16.0	4016	108	3.9	92	0.275		
30-45.4850-112.6508-2-15-			0-M34908			18207	827	14990	46	-2	8.6	5.9	-323	-1	1	14.8	3994	70	3.2	74	0.270		
30-45.4819-112.6486-2-15-			0-M34909			16970	650	15800	29	-2	7.2	7.0	334	1	-1	18.7	3790	80	3.7	110	0.251		
30-45.4792-112.6472-2-15-			0-M34910			14947	676	14580	-25	-2	7.8	7.4	-325	1	-1	19.7	4001	89	4.5	71	0.254		
30-45.4686-112.6111-2-11-			0-M34911			29377	624	12830	-21	-2	10.0	4.3	-394	-1	-1	8.6	2732	59	2.3	79	0.802		
30-45.4581-112.6133-2-15-			0-M34912			15447	615	8282	56	2	8.6	5.6	322	1	-1	15.2	3855	101	3.4	93	0.289		
30-45.4486-112.5939-2-15-			0-M34913			30147	474	3373	40	-2	6.8	4.0	-225	-1	-1	7.8	3254	117	2.6	131	0.462		
30-45.4597-112.5803-2-11-			0-M34914			12100	635	3465	39	-2	7.0	3.3	-281	-1	-1	7.4	2991	84	-1.5	-70	0.405		
30-45.4436-112.5597-2-15-			0-M34915			20570	674	3118	38	2	7.0	4.7	-289	-1	-1	9.7	3776	106	2.5	94	0.371		
30-45.4825-112.5742-2-11-			0-M34916			18230	613	3619	36	-2	6.9	3.5	-247	-1	-1	7.7	2777	84	2.4	85	0.390		
30-45.4608-112.5553-2-11-			0-M34917			19147	683	3111	37	-1	6.9	4.3	-242	1	-1	9.5	3033	100	2.9	82	0.368		
30-45.4528-112.5069-2-15-			0-M34918			16737	679	2998	34	-2	6.9	3.6	-278	-1	-1	8.5	3312	95	2.8	-155	0.424		
30-45.4464-112.5197-2-15-			0-M34919			17697	675	3071	36	2	7.0	3.9	-291	-1	-1	8.8	2902	97	2.7	89	0.398		
30-45.4378-112.5717-2-15-			0-M34920			18860	673	3044	49	-2	7.2	4.2	-245		-1	9.2	2979	92	2.8	78	0.391		
30-45.2744-112.7694-2-15-			0-M34921			25047	2219	3828	47	-2	8.4	5.3	-488	-1	-1	8.6	3266	80	2.8	115	0.337		
30-45.2836-112.7781-2-15-			0-M34922			17840	554	5283	39	-2	6.9	3.3	-279	-1	-1	7.1	2992	80	2.4	-45	0.408		

DOE SAMPLE NUMBER						LASI SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION			
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASI SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (umho/cm)	SCINTILLATOR (eU/gpm)	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																											
30-45.2978	-112.8014	-2-15-	0-M34923	-09/06/76	-11-	17-	-	-	-	-	-	-	-	-	9-2-6-4-6-	-1-	-2-3-3-4-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60		
30-45.3556	-112.7822	-2-11-	0-M34924	-09/06/76	-11-	16-	9.5	-C-	-	6.8-	410-	-	-	-	14-2-6-5-6-3-	-3-1-	-2-4-3-2-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40	
30-45.3561	-112.7842	-2-15-	0-M34925	-09/06/76	-11-	17-	-	-	-	-	-	-	-	-	9-2-6-4-6-	-1-	-2-3-3-3-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.90	
30-45.3450	-112.8031	-2-15-	0-M34926	-09/06/76	-12-	17-	-	-	-	-	-	-	-	-	21-2-6-4-6-	-1-	-2-3-3-4-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40	
30-45.3514	-112.7431	-2-15-	0-M34927	-09/06/76	-12-	17-	-	-	-	-	-	-	-	-	9-2-6-4-6-	-1-	-2-3-2-4-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80	
30-45.3486	-112.7278	-2-15-	0-M34928	-09/06/76	-12-	17-	-	-	-	-	-	-	-	-	18-2-6-4-6-	-1-	-2-3-3-3-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
30-45.3386	-112.7192	-2-15-	0-M34929	-09/06/76	-12-	17-	-	-	-	-	-	-	-	-	23-2-6-4-6-	-1-	-2-3-2-3-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
30-45.3350	-112.7197	-2-15-	0-M34930	-09/06/76	-12-	17-	-	-	-	-	-	-	-	-	14-2-6-4-6-	-1-	-2-3-2-3-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.10	
30-45.3222	-112.7322	-2-15-	0-M34931	-09/06/76	-12-	17-	-	-	-	-	-	-	-	-	23-2-6-4-6-	-1-	-2-3-3-4-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90	
30-45.3222	-112.7361	-2-15-	0-M34932	-09/06/76	-12-	17-	-	-	-	-	-	-	-	-	9-2-6-4-6-	-1-	-2-3-2-4-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.80	
30-45.3272	-112.7303	-2-15-	0-M34933	-09/06/76	-12-	17-	-	-	-	-	-	-	-	-	9-2-6-4-6-	-1-	-2-3-2-3-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
30-45.3111	-112.7031	-2-15-	0-M34934	-09/06/76	-13-	17-	-	-	-	-	-	-	-	-	18-2-6-4-6-	-1-	-2-4-3-3-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.10	
30-45.2953	-112.7344	-2-15-	0-M34935	-09/06/76	-13-	17-	-	-	-	-	-	-	-	-	23-2-6-4-6-	-1-	-2-3-2-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70	
30-45.2819	-112.7497	-2-15-	0-M34936	-09/06/76	-13-	17-	-	-	-	-	-	-	-	-	9-2-6-4-6-	-1-	-2-3-2-3-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
30-45.2903	-112.7097	-2-15-	0-M34937	-09/06/76	-14-	17-	-	-	-	-	-	-	-	-	18-4-4-6-	-1-	-2-3-2-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45.2800	-112.7272	-2-15-	0-M34938	-09/06/76	-14-	17-	-	-	-	-	-	-	-	-	4-2-1-4-6-	-1-	-2-3-2-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
30-45.2844	-112.7028	-2-15-	0-M34939	-09/06/76	-14-	17-	-	-	-	-	-	-	-	-	18-2-1-4-6-	-1-	-2-3-2-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.10	
30-45.0906	-113.1031	-2-15-	0-M34940	-09/14/76	-11-	14-	-	-	-	-	-	-	-	-	9-4-4-6-	-	-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45.0658	-113.1056	-2-15-	0-M34941	-09/14/76	-11-	18-	-	-	-	-	-	-	-	-	15-4-4-6-	-	-2-3-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
30-45.0619	-113.0778	-2-15-	0-M34942	-09/14/76	-12-	13-	-	-	-	-	-	-	-	-	7-4-4-6-	-	-2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45.0619	-113.0800	-2-15-	0-M34943	-09/14/76	-12-	18-	-	-	-	-	-	-	-	-	9-4-4-6-	-	-2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
30-45.0597	-113.0603	-2-15-	0-M34944	-09/14/76	-12-	19-	-	-	-	-	-	-	-	-	0-4-4-6-	-	-2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
30-45.0486	-113.0458	-2-15-	0-M34945	-09/14/76	-13-	20-	-	-	-	-	-	-	-	-	3-4-4-6-	-	-2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
30-45.0319	-113.0042	-2-15-	0-M34946	-09/14/76	-13-	20-	-	-	-	-	-	-	-	-	7-4-4-6-	-	-2-3-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50	
30-45.0397	-113.0583	-2-12-	0-M34947	-09/14/76	-13-	20-11.8	-C-	-	6.1-	440-	-	-	-	-	9-4-4-6-	-5-6-3-3-1-	-2-4-4-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45.0319	-113.0569	-2-12-	0-M34948	-09/14/76	-14-	20-15.2	-C-	-	5.7-	200-	-	-	-	-	13-4-4-6-	-3-6-3-3-2-	-2-4-4-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.90	
30-45.0061	-113.1217	-2-15-	0-M34949	-09/14/76	-14-	20-	-	-	-	-	-	-	-	-	16-4-4-6-	-3-6-	-2-3-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
30-45.0028	-113.1447	-2-15-	0-M34950	-09/14/76	-14-	22-	-	-	-	-	-	-	-	-	7-4-4-6-	-3-6-	-2-3-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
30-45.0142	-113.2264	-2-12-	0-M34951	-09/14/76	-15-	20-13.0	-C-	-	5.7-	180-	-	-	-	-	5-2-4-4-6-3-3-1-	-2-3-4-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70	
30-45.0172	-113.2400	-2-15-	0-M34952	-09/14/76	-15-	20-	-	-	-	-	-	-	-	-	1-4-4-6-	-3-6-	-2-4-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50	
30-45.1797	-113.0444	-2-15-	0-M34953	-09/14/76	-16-	18-	-	-	-	-	-	-	-	-	13-4-4-6-	-4-6-	-2-3-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45.1639	-113.0292	-2-15-	0-M34954	-09/14/76	-17-	17-	-	-	-	-	-	-	-	-	7-4-4-6-	-3-6-	-2-3-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30	
30-45.0278	-112.9947	-2-15-	0-M34955	-09/16/76	-10-	13-	-	-	-	-	-	-	-	-	10-4-4-6-	-4-6-	-2-3-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45.0147	-112.9561	-2-15-	0-M34956	-09/16/76	-11-	16-	-	-	-	-	-	-	-	-	10-4-4-6-	-4-6-	-2-3-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
30-45.0397	-112.9161	-2-11-	0-M34957	-09/16/76	-13-	21-	-C-	-	-	-	-	-	-	-	10-4-4-6-	-5-6-	-4-4-5-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
30-45.0739	-112.9325	-2-11-	0-M34958	-09/16/76	-13-	21-	-	-C-	-	-	-	-	-	-	8-4-4-6-	-4-6-	-3-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70	
30-45.0678	-112.9056	-2-12-	0-M34959	-09/16/76	-13-	22-11.5	-C-	-	6.0-	450-	-	-	-	-	8-4-4-6-	-3-4-3-2-1-	-2-4-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.70	
30-45.0092	-112.8994	-2-15-	0-M34960	-09/16/76	-15-	23-	-	-	-	-	-	-	-	-	10-4-4-6-	-6-6-1-	-2-3-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
30-45.0094	-112.8967	-2-15-	0-M34961	-09/16/76	-15-	23-	-	-	-	-	-	-	-	-	8-4-4-6-	-3-4-	-2-3-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
30-45.0094	-112.8975	-2-12-	0-M34962	-09/16/76	-15-	23-18.0	-C-	-	6.1-	600-	-	-	-	-	8-4-4-6-	-5-3-2-2-1-	-2-3-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00	
30-45.1206	-112.8753	-2-11-	0-M34963	-09/17/76	-11-	18-12.0	-C-	-	5.7-	320-	-	-	-	-	6-4-4-6-	-6-6-2-2-1-	-2-4-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.20	
30-45.0553	-112.8222	-2-15-	0-M34964	-09/17/76	-15-	21-	-	-	-	-	-	-	-	-	2-4-4-4-	-4-	-2-4-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45.0367	-112.8406	-2-15-	0-M34965	-09/17/76	-16-	20-	-	-	-	-	-	-	-	-	4-4-4-4-	-3-1-	-2-4-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45.1131	-112.8179	-2-15-	0-M34966	-09/17/76	-12-	25-	-	-	-	-	-	-	-	-	4-4-4-4-	-4-4-	-2-4-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17.80	
30-45.1108	-112.7992	-2-12-	0-M34967	-09/17/76	-13-	25-14.0	-C-	-	5.9-	250-	-	-	-	-	4-4-4-6-	-4-6-4-2-1-	-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
30-45.1036	-112.7800	-2-12-	0-M34968	-09/17/76	-13-	25-14.0	-C-	-	5.7-	220-	-	-	-	-	6-4-4-6-	-5-6-2-2-1-	-2-3-4-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45.1092	-112.7578	-2-12-	0-M34969	-09/17/76	-13-	24-21.0	-C-	-	6.1-	500-	-	-	-	-	6-4-4-6-	-4-6-4-3-1-	-2-4-4-4-2-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45.0386	-112.7735	-2-15-	0-M34970	-09/17/76	-14-	20-	-	-	-	-	-	-	-	-	10-4-4-6-	-4-6-	-2-4-3-4-2-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.70	
30-45.071																																			

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	DOE 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	
30-45.2978-112.8014-2-15-			0-M34923				-5	-5	-5	28	21	-15	28	-10	-15	2	27	
30-45.3556-112.7822-2-11-			0-M34924				-5	-5	-5	28	-20	-15	6	-10	-15	1	13	
30-45.3561-112.7842-2-15-			0-M34925				-5	-5	-5	57	-20	-15	23	-10	-15	3	43	
30-45.3450-112.8031-2-15-			0-M34926				-5	-5	-5	18	-20	22	17	-10	-15	2	22	
30-45.3914-112.7431-2-15-			0-M34927				-5	-5	-5	27	-20	15	19	-10	-15	2	35	
30-45.3486-112.7278-2-15-			0-M34928				-5	-5	-5	35	-20	-15	16	-10	-15	2	36	
30-45.3386-112.7192-2-15-			0-M34929				-5	-5	-5	30	-20	-15	22	-10	-15	2	20	
30-45.3350-112.7197-2-15-			0-M34930				-5	-5	-5	22	-20	-15	8	-10	-15	2	25	
30-45.3222-112.7322-2-15-			0-M34931				-5	-5	-5	14	-20	-15	21	-10	-15	2	33	
30-45.3222-112.7361-2-15-			0-M34932				-5	-5	-5	17	-20	-15	14	-10	-15	2	28	
30-45.3272-112.7303-2-15-			0-M34933				-5	-5	-5	34	-20	27	9	-10	-15	1	46	
30-45.3111-112.7031-2-15-			0-M34934				-5	-5	-5	22	-20	-15	6	-10	-15	2	20	
30-45.2953-112.7344-2-15-			0-M34935				-5	-5	-5	21	-20	-15	7	-10	-15	2	24	
30-45.2819-112.7497-2-15-			0-M34936				-5	-5	-5	32	-20	-15	7	-10	-15	2	23	
30-45.2903-112.7097-2-15-			0-M34937				-5	7	-5	25	-20	-15	19	-10	-15	1	23	
30-45.2800-112.7272-2-15-			0-M34938				-5	5	-5	21	-20	-15	13	-10	-15	1	28	
30-45.2844-112.7028-2-15-			0-M34939				-5	-5	-5	31	-20	-15	19	-10	-15	2	26	
30-45.0906-113.1031-2-15-			0-M34940				-5	-5	-5	22	-20	-15	6	-10	-15	1	29	
30-45.0658-113.1056-2-15-			0-M34941				-5	-5	-5	30	-20	17	9	-10	-15	1	23	
30-45.0619-113.0778-2-15-			0-M34942				-5	-5	-5	15	33	-15	9	-10	-15	2	30	
30-45.0619-113.0800-2-15-			0-M34943				-5	-5	-5	18	-20	-15	-5	-10	-15	2	30	
30-45.0597-113.0603-2-15-			0-M34944				-5	-5	-5	20	-20	-15	15	-10	-15	1	28	
30-45.0486-113.0458-2-15-			0-M34945				-5	-5	-5	10	-20	-15	7	-10	-15	1	27	
30-45.0319-113.0042-2-15-			0-M34946				-5	-5	-5	17	-20	-15	11	-10	-15	2	28	
30-45.0397-113.0583-2-12-			0-M34947				-5	-5	-5	15	-20	-15	8	-10	-15	2	29	
30-45.0319-113.0569-2-12-			0-M34948				-5	-5	-5	12	-20	16	19	-10	-15	1	22	
30-45.0061-113.1217-2-15-			0-M34949				-5	-5	-5	27	-20	-15	14	-10	-15	2	27	
30-45.0028-113.1447-2-15-			0-M34950				-5	-5	-5	28	-20	36	11	-10	-15	2	24	
30-45.0142-113.2264-2-12-			0-M34951				-5	-5	-5	-10	-20	-15	18	-10	-15	2	13	
30-45.0172-113.2400-2-15-			0-M34952				-5	-5	-5	24	-20	-15	10	-10	-15	2	22	
30-45.1797-113.0444-2-15-			0-M34953				-5	-5	-5	13	-20	-15	12	-10	-15	2	22	
30-45.1639-113.0292-2-15-			0-M34954				-5	-5	-5	25	-20	-15	13	-10	-15	-1	9	
30-45.0278-112.9947-2-15-			0-M34955				-5	-5	-5	29	-20	19	15	-10	-15	2	26	
30-45.0147-112.9561-2-15-			0-M34956				-5	-5	-5	18	-20	-15	20	-10	-15	1	25	
30-45.0397-112.9161-2-11-			0-M34957				-5	-5	-5	19	-20	-15	10	-10	-15	2	22	
30-45.0739-112.9325-2-11-			0-M34958				-5	-5	-5	18	-20	24	15	-10	-15	2	28	
30-45.0678-112.9056-2-12-			0-M34959				6	-5	-5	29	66	57	14	11	22	4	23	
30-45.0092-112.8994-2-15-			0-M34960				-5	-5	-5	32	-20	-15	7	-10	-15	2	21	
30-45.0094-112.8967-2-15-			0-M34961				-5	-5	-5	33	-20	25	10	-10	-15	2	20	
30-45.0094-112.8975-2-12-			0-M34962				-5	-5	-5	50	-20	59	9	-10	15	2	24	
30-45.1206-112.8753-2-11-			0-M34963				-5	-5	-5	18	-20	37	10	-10	-15	-1	6	
30-45.0553-112.8222-2-15-			0-M34964				-5	-5	-5	16	-20	-15	8	-10	-15	1	14	
30-45.0367-112.8406-2-15-			0-M34965				-5	-5	-5	20	-20	-15	-5	-10	-15	1	14	
30-45.1131-112.8178-2-15-			0-M34966				-5	-5	-5	13	-20	42	9	-10	-15	2	47	
30-45.1108-112.7992-2-12-			0-M34967				-5	-5	-5	-10	-20	22	-5	-10	-15	2	13	
30-45.1036-112.7800-2-12-			0-M34968				-5	-5	-5	21	-20	-15	18	-10	-15	1	22	
30-45.1092-112.7578-2-12-			0-M34969				-5	-5	-5	16	-20	16	5	-10	-15	-1	8	
30-45.0886-112.7736-2-15-			0-M34970				-5	-5	-5	10	-20	35	10	-10	-15	2	18	
30-45.0719-112.7903-2-15-			0-M34971				-5	7	-5	31	-20	31	20	-10	-15	2	21	
30-45.0544-112.8078-2-12-			0-M34972				-5	-5	-5	14	-20	-15	-5	-10	-15	-1	18	
30-45.3072-113.4639-2-12-			0-M34973				-5	-5	-5	17	-20	-15	6	-10	-15	1	24	

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

③

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
30-45.2978-112.8014-2-15-			0-M34923			50620	-0.05	554	60830	56	97	10.6	45	4.0	3	1.0	18960	8.5	14330	33	0.3	
30-45.3556-112.7822-2-11-			0-M34924			36370	-0.05	351	17070	47	-58	8.1	34	2.5	3	1.1	11430	9.2	9271	31	0.3	
30-45.3561-112.7842-2-15-			0-M34925			78000	-0.09	1448	8257	101	114	9.7	37	4.4	7	1.6	19010	8.9	16310	35	0.8	
30-45.3450-112.8031-2-15-			0-M34926			44980	-0.07	372	60860	51	-77	8.7	48	3.7	3	0.9	14880	6.6	15230	31	0.4	
30-45.3514-112.7431-2-15-			0-M34927			60310	-0.05	532	20280	63	-84	9.5	46	3.8	4	1.0	15280	7.2	17590	39	0.4	
30-45.3486-112.7278-2-15-			0-M34928			58000	-0.05	657	24360	59	-71	8.2	44	3.9	3	1.0	14730	5.9	15720	36	0.3	
30-45.3386-112.7192-2-15-			0-M34929			61520	-0.07	733	22230	81	-87	10.4	56	4.2	4	1.1	16130	8.1	16680	45	0.4	
30-45.3350-112.7197-2-15-			0-M34930			47770	-0.05	633	36260	46	-82	5.8	26	1.6	3	0.9	9129	3.6	16580	31	0.3	
30-45.3222-112.7322-2-15-			0-M34931			69940	-0.06	811	22250	87	149	8.8	38	3.9	3	1.1	14790	8.4	21180	48	0.3	
30-45.3222-112.7361-2-15-			0-M34932			77190	-0.06	1357	18090	67	168	7.9	29	5.1	3	1.2	15180	7.6	19900	42	0.4	
30-45.3272-112.7303-2-15-			0-M34933			47790	-0.06	516	38160	61	-70	9.6	41	4.2	3	1.1	14480	5.7	11570	33	0.4	
30-45.3111-112.7031-2-15-			0-M34934			49930	-0.05	427	30770	97	-86	6.8	39	2.0	4	1.3	19400	16.3	13300	58	0.4	
30-45.2953-112.7344-2-15-			0-M34935			54840	-0.05	946	44560	58	-59	7.5	36	3.1	3	1.1	12750	6.6	12880	37	0.3	
30-45.2819-112.7497-2-15-			0-M34936			50770	-0.06	766	53200	59	-54	7.5	35	3.7	3	0.9	14230	6.5	10740	33	0.3	
30-45.2903-112.7097-2-15-			0-M34937			64440	-0.06	508	25430	74	100	10.8	33	3.2	5	1.1	21610	10.2	13260	44	0.5	
30-45.2800-112.7272-2-15-			0-M34938			52090	-0.05	593	48060	53	88	7.9	37	3.9	3	1.1	13710	6.8	15300	31	0.3	
30-45.2844-112.7028-2-15-			0-M34939			76070	-0.06	847	20800	87	170	9.6	43	3.6	4	1.3	17580	6.8	19600	50	0.4	
30-45.0906-113.1031-2-15-			0-M34940			53490	-0.06	591	8390	55	88	7.7	37	4.1	5	1.1	12570	7.9	15080	31	0.4	
30-45.0658-113.1056-2-15-			0-M34941			60180	-0.06	596	9867	69	107	11.6	48	4.0	4	1.3	16090	9.5	16490	36	0.4	
30-45.0619-113.0778-2-15-			0-M34942			67110	-0.05	647	11880	77	-92	8.8	33	4.0	3	1.2	15130	9.4	15200	43	0.4	
30-45.0619-113.0800-2-15-			0-M34943			63640	-0.06	665	11430	76	-75	9.0	36	4.9	5	1.3	14460	10.6	17340	39	0.5	
30-45.0597-113.0603-2-15-			0-M34944			50450	-0.07	714	42940	93	-80	9.8	33	3.9	5	1.4	18110	12.9	12360	45	0.5	
30-45.0486-113.0458-2-15-			0-M34945			45760	-0.05	405	49250	67	-77	9.6	45	2.7	4	1.1	14630	13.7	12830	42	0.5	
30-45.0319-113.0042-2-15-			0-M34946			51990	-0.05	492	26210	72	-88	8.4	48	3.2	4	1.2	15360	14.4	13840	46	0.5	
30-45.0397-113.0583-2-12-			0-M34947			53540	-0.06	627	18200	66	98	8.9	32	3.9	4	1.3	11340	9.0	16300	31	0.4	
30-45.0319-113.0569-2-12-			0-M34948			48360	-0.07	647	9882	80	111	6.5	70	2.3	7	1.5	15270	35.2	15550	45	0.9	
30-45.0061-113.1217-2-15-			0-M34949			66580	-0.06	624	10880	64	-92	12.6	61	6.6	5	1.3	17960	6.7	18290	38	0.5	
30-45.0028-113.1447-2-15-			0-M34950			68770	-0.06	693	20360	74	-87	13.0	81	6.2	4	1.2	19890	8.8	18300	39	0.5	
30-45.0142-113.2264-2-12-			0-M34951			50330	-0.06	597	9813	77	-77	7.2	51	3.4	6	1.4	11040	17.0	15390	41	0.6	
30-45.0172-113.2400-2-15-			0-M34952			62440	-0.09	671	12030	59	126	7.8	35	3.8	5	1.3	14400	8.5	18190	36	0.5	
30-45.1797-113.0444-2-15-			0-M34953			57570	-0.05	563	19350	54	-150	17.6	30	3.6	3	1.0	14790	5.2	17070	28	0.4	
30-45.1639-113.0292-2-15-			0-M34954			57250	-0.05	799	36690	57	146	9.5	24	2.6	3	1.3	16070	6.8	11840	35	0.4	
30-45.0278-112.9947-2-15-			0-M34955			52010	-0.07	591	20280	70	-88	9.4	49	4.0	4	1.2	15040	9.2	21330	38	0.6	
30-45.0147-112.9561-2-15-			0-M34956			62580	-0.09	581	10540	64	160	9.2	43	4.3	5	1.2	15770	9.7	15160	39	0.5	
30-45.0397-112.9161-2-11-			0-M34957			51040	-0.06	699	44950	54	433	10.2	23	3.7	4	1.0	15610	5.7	13680	30	0.5	
30-45.0739-112.9325-2-11-			0-M34958			63730	-0.06	482	14540	89	-84	11.3	61	3.6	8	1.5	18690	11.9	16200	52	0.7	
30-45.0678-112.9056-2-12-			0-M34959			61940	-0.10	563	30560	303	-125	23.4	171	3.0	31	2.1	54120	68.7	13460	142	4.1	
30-45.0092-112.8994-2-15-			0-M34960			56340	-0.09	731	28780	71	-88	10.0	77	3.4	5	1.4	19500	11.2	17160	43	0.5	
30-45.0094-112.8967-2-15-			0-M34961			50360	-0.06	470	55670	71	-91	13.1	73	3.9	5	1.1	19710	9.5	15780	40	0.6	
30-45.0094-112.8975-2-12-			0-M34962			53910	-0.08	489	44370	64	174	18.6	136	4.5	6	1.3	40460	10.5	13160	42	0.5	
30-45.1206-112.8753-2-11-			0-M34963			40680	-0.09	-206	15890	55	-106	10.8	74	2.7	4	1.3	14120	7.6	16460	38	0.4	
30-45.0553-112.8222-2-15-			0-M34964			42290	-0.06	403	29170	49	122	6.0	40	2.8	3	0.9	13080	11.6	16040	27	0.4	
30-45.0367-112.8405-2-15-			0-M34965			39860	-0.05	364	106400	42	-74	8.0	41	5.2	3	0.8	10020	7.1	11210	27	0.3	
30-45.1131-112.8178-2-15-			0-M34966			71740	-0.12	599	5295	91	-83	8.8	62	5.1	9	1.6	19790	11.3	22800	55	0.6	
30-45.1108-112.7992-2-12-			0-M34967			52320	-0.07	492	37090	73	-97	13.3	40	1.9	4	1.4	39010	17.8	10020	42	0.6	
30-45.1036-112.7800-2-12-			0-M34968			60500	-0.08	606	42050	55	173	9.3	38	3.4	3	1.4	19160	7.6	14470	33	0.4	
30-45.1092-112.7578-2-12-			0-M34969			32640	-0.06	461	169900	56	-73	11.9	77	6.4	3	1.0	14030	10.7	10770	37	0.3	
30-45.0886-112.7736-2-15-			0-M34970			47500	-0.06	575	50140	74	-71	10.9	100	4.6	5	1.2	18370	21.2	12410	48	0.6	
30-45.0719-112.7903-2-15-			0-M34971			58420	-0.07	703	34770	82	-88	11.9	144	3.3	3	1.3	23050	10.9	14660	45	0.5	
30-45.0544-112.8078-2-12-			0-M34972			30470	-0.06	456	90700	37	57	6.3	17	1.5	3	0.9	8244	8.3	11800	30	0.3	
30-45.3072-113.4639-2-12-			0-M34973			57490	-0.06	622	13980	61	326	10.3	22	4.0	4	1.1	14290	10.2	19050	36	0.4	

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

④

DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued)																U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	DOE 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	
30-45.2973-112.8014-2-15-			0-M34923			23410	747	7724	38	2	7.3	4.2	-344	1	-1	8.4	3477	96	2.9	97	0.310	
30-45.3556-112.7822-2-11-			0-M34924			11040	732	3513	28	-2	5.5	3.7	-304	-1	1	6.2	2393	42	2.3	89	0.387	
30-45.3561-112.7842-2-15-			0-M34925			14400	589	8560	60	-3	10.4	9.4	-340	-1	-1	14.3	3550	55	4.9	167	0.483	
30-45.3450-112.8031-2-15-			0-M34926			14150	1038	3446	-23	-2	6.9	3.9	-380	-1	-1	6.7	2276	70	2.2	84	0.358	
30-45.3514-112.7431-2-15-			0-M34927			12420	582	9409	42	-2	6.7	4.6	-320	-1	-1	9.8	2481	65	3.1	78	0.286	
30-45.3486-112.7278-2-15-			0-M34928			15470	678	8403	41	-2	6.8	4.3	-284	-1	-1	9.9	2446	68	2.7	97	0.333	
30-45.3386-112.7192-2-15-			0-M34929			16170	800	11650	53	-2	6.4	4.8	-340	-1	-1	13.0	2952	61	3.4	-39	0.231	
30-45.3350-112.7197-2-15-			0-M34930			8740	611	10370	-18	-2	4.2	2.8	-297	-1	-1	7.0	1870	40	2.0	-42	0.300	
30-45.3222-112.7322-2-15-			0-M34931			14680	358	13740	62	-2	6.4	5.0	-298	1	-1	17.2	2704	44	4.2	85	0.227	
30-45.3222-112.7361-2-15-			0-M34932			13520	303	15560	66	-2	6.8	3.9	350	-1	1	13.0	3626	48	2.2	85	0.369	
30-45.3272-112.7303-2-15-			0-M34933			21060	1243	3610	35	-2	7.0	4.9	-343	-1	-1	8.6	2979	70	3.7	84	0.360	
30-45.3111-112.7031-2-15-			0-M34934			9180	478	12470	30	-2	5.9	5.6	-296	-1	-1	12.6	3495	82	3.6	70	0.325	
30-45.2953-112.7344-2-15-			0-M34935			17170	356	7261	36	-2	5.8	4.5	222	-1	-1	9.7	2762	66	2.9	89	0.381	
30-45.2819-112.7497-2-15-			0-M34936			19220	552	4076	-21	-2	6.3	3.2	-242	-1	-1	8.5	2760	86	1.6	-65	0.376	
30-45.2903-112.7097-2-15-			0-M34937			14880	681	9912	42	1	8.6	5.2	-339	-1	-1	10.7	4097	68	4.3	102	0.271	
30-45.2300-112.7272-2-15-			0-M34938			15970	678	7868	35	-2	6.7	3.6	-337	-1	-1	9.4	2494	73	2.2	107	0.319	
30-45.2344-112.7028-2-15-			0-M34939			14990	416	12080	56	-2	7.6	5.1	431	-1	-1	13.8	3162	62	3.6	134	0.297	
30-45.0906-113.1031-2-15-			0-M34940			8655	545	6571	-22	-2	6.4	4.9	-245	-1	-1	7.4	2354	46	2.9	67	0.351	
30-45.0658-113.1056-2-15-			0-M34941			10760	803	10300	34	-2	7.6	4.6	-374	-1	-1	10.1	3913	53	4.2	130	0.297	
30-45.0619-113.0778-2-15-			0-M34942			12800	592	11930	66	-2	7.4	4.8	-333	-1	-1	10.6	2820	53	3.4	114	0.274	
30-45.0519-113.0800-2-15-			0-M34943			12710	510	11580	40	-2	6.7	5.7	246	-1	1	11.9	3110	48	4.4	137	0.261	
30-45.0597-113.0603-2-15-			0-M34944			14720	691	10220	-25	-2	7.5	5.1	-298	2	-1	12.6	4021	59	3.9	-76	0.262	
30-45.0486-113.0458-2-15-			0-M34945			13610	520	9264	26	-1	6.0	4.8	-281	1	-1	11.7	3353	42	4.2	78	0.282	
30-45.0319-113.0042-2-15-			0-M34946			12090	642	10350	49	-2	6.8	4.9	-334	-1	-1	10.1	3532	48	4.6	77	0.347	
30-45.0397-113.0583-2-12-			0-M34947			10710	546	9984	-19	-2	5.7	4.5	-297	-1	-1	8.0	2678	38	2.9	92	0.338	
30-45.0319-113.0569-2-12-			0-M34948			9750	631	12880	-23	-2	5.7	4.5	-297	-1	-1	11.7	4480	42	5.5	89	0.504	
30-45.0061-113.1217-2-15-			0-M34949			14400	1023	8288	42	-2	9.2	4.9	-411	-1	-1	9.4	2837	64	2.4	92	0.330	
30-45.0028-113.1447-2-15-			0-M34950			15240	695	8597	58	-2	10.2	5.3	-362	-1	-1	11.4	2942	72	3.3	89	0.298	
30-45.0142-113.2264-2-12-			0-M34951			9300	492	12450	40	-2	6.0	7.0	-265	-1	-1	10.7	3826	36	4.5	-42	0.346	
30-45.0172-113.2400-2-15-			0-M34952			17710	764	13150	-24	-2	7.1	4.1	-335	-1	-1	9.0	2713	48	3.2	-149	0.389	
30-45.1797-113.0444-2-15-			0-M34953			6140	2288	10270	45	2	5.7	4.0	-624	-1	-1	7.0	-1442	40	2.6	79	0.386	
30-45.1639-113.0292-2-15-			0-M34954			9935	955	12120	29	-2	7.2	4.1	-420	-1	-1	6.7	2556	58	2.8	105	0.343	
30-45.0278-112.9947-2-15-			0-M34955			14880	794	11580	47	-2	7.1	5.4	-324	-1	-1	10.9	3614	54	3.8	77	0.266	
30-45.0147-112.9561-2-15-			0-M34956			11950	828	11440	60	-2	7.4	4.1	-390	-1	-1	10.4	2980	48	3.9	-90	0.308	
30-45.0397-112.9161-2-11-			0-M34957			30880	659	8124	31	-2	7.7	3.9	-390	-1	-1	8.6	2121	35	3.8	100	0.384	
30-45.0739-112.9325-2-11-			0-M34958			13440	670	11820	40	-2	9.3	6.6	-309	-1	1	13.9	3756	63	5.9	83	0.266	
30-45.0678-112.9056-2-12-			0-M34959			26780	1310	12980	38	-3	25.8	23.1	-491	3	5	51.1	13580	142	31.8		0.268	
30-45.0092-112.8994-2-15-			0-M34960			18640	773	9273	-26	-2	9.0	4.8	-354	-1	-1	10.7	3929	67	4.7	-81	0.308	
30-45.0094-112.8967-2-15-			0-M34961			34870	749	8911	33	-2	9.0	5.6	-348	-1	-1	11.3	3652	66	3.6	87	0.292	
30-45.0094-112.8975-2-12-			0-M34962			35330	1287	7808	-26	-2	12.7	5.8	-442	-1	-1	13.4	4076	83	4.3	125	0.299	
30-45.1206-112.8753-2-11-			0-M34963			13730	664	10600	-27	-3	5.3	4.0	-399	-1	-1	6.0	1754	43	1.6	126	2.033	
30-45.0553-112.8222-2-15-			0-M34964			10440	375	5868	38	-2	4.8	3.2	-235	-1	-1	6.4	2465	39	3.4	-71	0.422	
30-45.0367-112.8406-2-15-			0-M34965			26020	429	4776	47	-1	5.1	3.4	-285	-1	-1	6.7	2541	40	2.2	62	0.388	
30-45.1131-112.8173-2-15-			0-M34966			18600	200	14980	-40	-4	9.3	7.5	-254	-1	-1	12.9	4181	66	7.2	77	1.380	
30-45.1108-112.7992-2-12-			0-M34967			16490	833	12960	27	2	9.4	6.1	-355	-1	1	8.5	6506	145	3.4	-21	0.376	
30-45.1036-112.7800-2-12-			0-M34968			17730	718	13010	60	2	7.8	4.2	-390	-1	-1	8.1	3245	54	3.9		0.333	
30-45.1092-112.7578-2-12-			0-M34969			13030	320	6350	23	-2	5.6	3.5	636	-1	-1	9.5	3704	51	3.0	110	0.284	
30-45.0886-112.7735-2-15-			0-M34970			19780	544	9253	33	-2	7.3	5.5	-260	-1	-1	11.9	4665	76	4.7	72	0.395	
30-45.0719-112.7903-2-15-			0-M34971			13960	715	10640	41	-2	3.0	4.6	-337	-1	-1	10.1	4072	90	2.9	115	0.267	
30-45.0544-112.8073-2-12-			0-M34972			10050	221	2161	-19	-2	3.4	2.3	-214	-1	-1	5.5	2155	32	1.8	62	0.345	
30-45.3072-113.4639-2-12-			0-M34973			8650	733	12650	43	-2	6.8	5.2	-347	1	-1	10.0	2975	44	3.1	72	0.390	

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

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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 (umho/cm)	SCINTILLATOR (uL/gpm)	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																										
30-45.8964	-113.6019	-2-15-	0-M34974	-09/01/74	-12-	28-										5-3-7-4-7-	-1-	-	-1-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
30-45.9103	-113.5686	-2-12-	0-M34975	-09/01/74	-19-	28-10.7-							5.6-	40-		16-3-7-3-7-3-3-1-2-4-4-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.70	
30-45.9731	-113.5844	-2-15-	0-M34978	-09/02/74	-10-	23-										11-3-7-3-7-	-1-	-	-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	6.10	
30-45.9789	-113.5906	-2-12-	0-M34979	-09/02/74	-11-	26-9.3-							5.8-	20-		8-3-7-3-7-4-3-1-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.10	
30-45.9950	-113.6028	-2-12-	0-M34980	-09/02/74	-13-	27-11.2-							5.9-	18-		5-3-7-3-7-4-3-1-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17.50	
30-45.9703	-113.5367	-2-12-	0-M34982	-09/02/74	-17-	23-9.2-							6.0-	25-		5-3-7-3-7-4-3-1-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.90	
30-45.9925	-113.5283	-2-12-	0-M34983	-09/02/74	-19-	20-9.4-							6.0-	25-		5-3-7-3-7-4-3-1-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.40	
30-45.9903	-113.5067	-2-12-	0-M34984	-09/03/74	-7-	16-9.7-							6.0-	22-		5-3-7-3-7-4-3-1-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.90	
30-45.9244	-113.4067	-2-12-	0-M34985	-09/03/74	-14-	29-10.7-							6.0-	100-		5-4-3-7-4-3-1-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.50	
30-45.8958	-113.4253	-2-12-	0-M34986	-09/03/74	-20-	17-9.6-							5.2-	15-		11-3-7-3-7-4-3-1-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.10	
30-45.9261	-113.4897	-2-12-	0-M34987	-09/04/74	-12-	26-11.2-							5.4-	60-		16-3-7-3-7-4-3-1-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.50	
30-45.8822	-113.4644	-2-12-	0-M34988	-09/04/74	-14-	29-12.3-							5.8-	30-		8-3-7-3-7-4-3-1-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	
30-45.8814	-113.4639	-2-12-	0-M34989	-09/04/74	-14-	29-12.9-							5.8-	40-		5-3-7-3-7-4-3-1-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.10	
30-45.8036	-113.5817	-2-12-	0-M34990	-09/11/74	-10-	22-9.8-							6.0-	120-		11-3-7-3-7-4-3-1-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.40	
30-45.8042	-113.5817	-2-12-	0-M34991	-09/11/74	-10-	22-10.1-							5.2-	90-		11-3-7-3-7-4-3-1-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17.10	
30-45.7758	-113.5314	-2-15-	0-M34992	-09/11/74	-12-	28-										5-3-7-3-7-	-1-	-	-1-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	4.20	
30-45.8019	-113.5256	-2-12-	0-M34993	-09/11/74	-14-	28-							5.4-	80-		5-3-7-3-7-4-3-1-2-1-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
30-45.8150	-113.5039	-2-12-	0-M34995	-09/11/74	-15-	29-10.9-							6.0-	110-		13-3-7-3-7-4-3-1-2-1-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.70	
30-45.9750	-113.7106	-2-12-	0-M34997	-09/10/74	-9-	19-10.2-							5.9-	90-		5-3-7-7-7-4-3-1-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20.80	
30-45.9064	-113.6925	-2-12-	0-M34998	-09/10/74	-9-	19-10.3-							6.0-	60-		5-3-7-7-7-4-3-1-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.40	
30-45.9019	-113.6739	-2-12-	0-M34999	-09/10/74	-10-	21-11.2-							5.2-	70-		5-3-7-7-7-4-3-1-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.80	
30-45.9050	-113.6447	-2-12-	0-M35000	-09/10/74	-11-	23-10.7-							5.6-	60-		5-3-7-7-7-4-3-1-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80	
30-45.9025	-113.6300	-2-12-	0-M35001	-09/10/74	-12-	27-10.6-							5.8-	90-		5-3-7-7-7-4-3-1-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.10	
30-45.9031	-113.6292	-2-12-	0-M35002	-09/10/74	-12-	27-11.1-							6.0-	70-		11-3-7-7-7-4-3-2-1-2-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.90	
30-45.7969	-113.8417	-2-12-	0-M35003	-09/05/74	-13-	27-9.8-							5.5-	90-		5-3-7-3-7-4-3-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.60	
30-45.8719	-113.7528	-2-15-	0-M35004	-09/05/74	-18-	19-										5-3-7-3-6-	-1-	-	-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	15.90	
30-45.8725	-113.7514	-2-15-	0-M35005	-09/05/74	-19-	19-										5-3-7-3-7-	-1-	-	-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	11.50	
30-45.8381	-113.2494	-2-12-	0-M35006	-09/06/74	-8-	17-10.3-							6.0-	90-		5-1-7-3-7-4-3-1-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.00	
30-45.8183	-113.2200	-2-12-	0-M35007	-09/06/74	-9-	19-10.1-							5.8-	100-		5-1-7-3-7-3-3-1-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.40	
30-45.7894	-113.2328	-2-12-	0-M35008	-09/06/74	-10-	20-10.3-							5.9-	90-		8-1-7-3-6-4-3-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.00	
30-45.7892	-113.1767	-2-12-	0-M35011	-09/06/74	-14-	28-13.2-							5.5-	45-		5-1-7-5-7-3-3-1-1-4-4-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.40	
30-45.8803	-113.1819	-2-12-	0-M35012	-09/06/74	-15-	26-11.2-							5.8-	90-		5-1-7-3-7-3-3-1-2-3-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.30	
30-45.9422	-113.1736	-2-12-	0-M35013	-09/06/74	-16-	25-13.3-							5.9-	60-		5-4-5-6-3-3-1-1-4-4-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.60	
30-45.9425	-113.1722	-2-12-	0-M35014	-09/06/74	-17-	24-12.6-							5.9-	70-		5-4-3-7-4-3-1-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.80	
30-45.9828	-113.1258	-2-12-	0-M35016	-09/07/74	-8-	17-10.3-							5.3-	80-		8-3-7-4-6-3-3-1-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.90	
30-45.9872	-113.1850	-2-15-	0-M35017	-09/07/74	-10-	21-										5-3-7-3-7-	-1-	-	-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	6.30	
30-45.9881	-113.1842	-2-12-	0-M35018	-09/07/74	-10-	21-13.1-							6.0-	90-		5-3-7-3-7-4-3-1-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.90	
30-45.8872	-113.0294	-2-12-	0-M35019	-09/07/74	-12-	22-12.6-							6.0-	100-		5-3-7-4-7-4-3-1-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.80	
30-45.7808	-113.1194	-2-12-	0-M35020	-09/07/74	-15-	19-10.7-							5.9-	90-		11-3-7-4-6-4-3-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.10	
30-45.7811	-113.1203	-2-12-	0-M35021	-09/07/74	-15-	19-11.7-							5.6-	100-		5-3-7-4-6-4-3-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.90	
30-45.7381	-113.0011	-2-12-	0-M35022	-09/07/74	-14-	23-13.4-							5.2-	35-		11-1-7-3-6-4-3-1-2-3-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.60	
30-45.5958	-113.0492	-2-12-	0-M35023	-09/07/74	-16-	21-12.2-							5.4-	42-		8-1-6-3-6-4-3-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.40	
30-45.5958	-113.0497	-2-12-	0-M35024	-09/07/74	-16-	21-12.8-							5.9-	40-		5-1-6-3-6-4-3-1-2-1-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90	
30-45.5550	-113.0036																																	

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	
30-45.8964-113.6019-2-15-			0-M34974				-5	-5	-5	11	-20	-15	12	-10	-15	2	47	
30-45.9103-113.5686-2-12-			0-M34975													2	38	
30-45.9731-113.5844-2-15-			0-M34978				-5	5	-5	29	-20	-15	19	-10	-15	2	66	
30-45.9789-113.5906-2-12-			0-M34979				-5	-5	-5	25	-20	-15	10	-10	-15	2	16	
30-45.9950-113.6028-2-12-			0-M34980				-5	-5	-5	-10	-20	20	15	-10	-15	2	34	
30-45.9703-113.5367-2-12-			0-M34982				-5	-5	-5	12	35	24	19	-10	-15	3	32	
30-45.9925-113.5283-2-12-			0-M34983				-5	-5	-5	23	-20	-15	19	-10	-15	3	31	
30-45.9903-113.5067-2-12-			0-M34984				-5	-5	-5	-10	-20	-15	18	-10	-15	3	24	
30-45.9244-113.4067-2-12-			0-M34985				-5	-5	-5	-10	-20	-15	13	-10	-15	3	36	
30-45.8958-113.4253-2-12-			0-M34986				-5	-5	-5	13	-20	-15	-5	-10	-15	-1	6	
30-45.9261-113.4997-2-12-			0-M34987				-5	-5	-5	14	-20	-15	14	-10	-15	2	28	
30-45.8822-113.4644-2-12-			0-M34988				-5	-5	-5	10	-20	-15	12	-10	-15	2	9	
30-45.8814-113.4689-2-12-			0-M34989				-5	-5	-5	-10	-20	26	18	-10	-15	2	90	
30-45.8036-113.5817-2-12-			0-M34990				-5	6	-5	14	-20	-15	19	-10	-15	1	59	
30-45.8042-113.5817-2-12-			0-M34991				-5	-5	-5	12	-20	19	23	-10	15	2	48	
30-45.7758-113.5314-2-15-			0-M34992				-5	6	-5	26	-20	24	16	-10	-15	2	73	
30-45.8019-113.5256-2-12-			0-M34993				-5	6	-5	14	-20	-15	31	-10	-15	3	28	
30-45.8150-113.5039-2-12-			0-M34995				-5	-5	-5	21	-20	-15	21	-10	-15	2	31	
30-45.9750-113.7106-2-12-			0-M34997				-5	-5	-5	15	-20	-15	12	-10	-15	3	79	
30-45.9064-113.6925-2-12-			0-M34998				-5	-5	-5	-10	30	-15	7	-10	-15	2	22	
30-45.9019-113.6739-2-12-			0-M34999				-5	10	-5	20	-20	-15	20	-10	16	2	28	
30-45.9050-113.6447-2-12-			0-M35000				-5	-5	-5	-10	-20	-15	-5	-10	-15	-1	7	
30-45.9025-113.6300-2-12-			0-M35001				-5	-5	-5	25	-20	15	23	17	-15	1	47	
30-45.9031-113.6292-2-12-			0-M35002				-5	-5	-5	-10	-20	16	23	-10	-15	1	94	
30-45.7969-113.8417-2-12-			0-M35003				-5	-5	-5	13	-20	-15	-5	-10	-15	2	16	
30-45.8719-113.7523-2-15-			0-M35004				-5	6	-5	-10	-20	-15	18	-10	-15	2	18	
30-45.8725-113.7514-2-15-			0-M35005				-5	-5	-5	14	-20	-15	15	-10	-15	4	94	
30-45.8381-113.2494-2-12-			0-M35006				-5	-5	-5	13	-20	-15	-5	-10	-15	2	28	
30-45.8183-113.2200-2-12-			0-M35007				-5	-5	-5	21	-20	-15	12	-10	-15	2	37	
30-45.7894-113.2328-2-12-			0-M35008				-5	-5	-5	22	-20	-15	15	-10	-15	2	18	
30-45.7892-113.1767-2-12-			0-M35011				-5	-5	-5	43	-20	-15	18	-10	-15	3	42	
30-45.8803-113.1819-2-12-			0-M35012				-5	-5	-5	29	-20	-15	14	-10	-15	2	46	
30-45.9422-113.1736-2-12-			0-M35013				-5	-5	-5	25	-20	-15	10	-10	-15	2	26	
30-45.9425-113.1722-2-12-			0-M35014				-5	7	6	29	-20	-15	9	-10	-15	3	108	
30-45.9828-113.1258-2-12-			0-M35016				-5	-5	-5	13	-20	-15	18	-10	-15	4	103	
30-45.9872-113.1850-2-15-			0-M35017				-5	-5	-5	39	-20	-15	18	-10	-15	2	32	
30-45.9881-113.1847-2-12-			0-M35018				-5	-5	-5	24	-20	-15	16	-10	-15	5	111	
30-45.8872-113.0294-2-12-			0-M35019				-5	-5	-5	20	-20	-15	14	-10	-15	2	28	
30-45.7808-113.1194-2-12-			0-M35020				-5	-5	-5	20	-20	-15	15	-10	-15	2	35	
30-45.7811-113.1203-2-12-			0-M35021				-5	7	-5	21	-20	-15	11	-10	-15	1	24	
30-45.7381-113.0011-2-12-			0-M35022				-5	-5	-5	43	-20	-15	36	-10	-15	2	16	
30-45.5958-113.0492-2-12-			0-M35023				9	-5	-5	22	-20	-15	13	-10	-15	1	9	
30-45.5958-113.0497-2-12-			0-M35024				-5	-5	-5	26	-20	-15	15	-10	-15	2	41	
30-45.5550-113.0036-2-12-			0-M35025				-5	-5	-5	13	-20	-15	-5	-10	-15	2	29	
30-45.5544-113.0042-2-12-			0-M35026				-5	7	-5	41	-20	-15	46	-10	-15	2	18	
30-45.5175-113.0014-2-12-			0-M35027				-5	6	-5	20	-20	-15	13	-10	-15	-1	13	
30-45.5175-113.0022-2-12-			0-M35028				-5	-5	-5	21	-20	-15	22	-10	-15	1	17	
30-45.5269-113.1692-2-15-			0-M35029				-5	6	-5	12	-20	-15	21	-10	16	3	67	
30-45.5261-113.1783-2-12-			0-M35030				-5	-5	-5	21	-20	15	-5	-10	-15	2	17	
30-45.5156-113.1997-2-15-			0-M35031				-5	5	-5	14	-20	-15	8	-10	-15	2	27	
30-45.5372-113.2922-2-12-			0-M35032				-5	-5	-5	67	-20	-15	71	-10	44	2	22	

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

③

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
30-45	8964-113.6019	-2-15-	0-M34974			34727	-0.05	655	20810	97	-124	7.6	22	1.8	4	1.3	12120	5.3	16060	64	0.3
30-45	9103-113.5636	-2-12-	0-M34975			85820	-0.26	1106	14820	1312	-307	30.0	60	-4.8	24	5.8	19990	21.0	13050	684	1.7
30-45	9731-113.5844	-2-15-	0-M34978			88030	0.84	756	10620	336	-130	10.0	64	3.9	7	2.3	19180	10.4	14720	197	0.5
30-45	9789-113.5906	-2-12-	0-M34979			88830	-0.07	561	17480	194	-149	10.6	28	2.4	7	1.7	17340	5.8	14900	108	0.5
30-45	9950-113.6029	-2-12-	0-M34980			88320	-0.09	865	14310	968	-134	7.4	38	-1.6	24	4.1	14870	13.8	16170	594	1.2
30-45	9703-113.5367	-2-12-	0-M34982			83030	-0.05	844	11600	126	-120	5.6	25	2.4	5	1.2	5015	9.5	22200	71	0.5
30-45	9925-113.5283	-2-12-	0-M34983			76790	-0.08	696	10400	105	-154	8.5	27	3.7	4	1.4	14680	7.5	19380	63	0.4
30-45	9903-113.5067	-2-12-	0-M34984			75020	-0.05	741	10830	255	-120	7.3	18	2.4	8	1.5	8693	7.5	21850	149	0.5
30-45	9244-113.4067	-2-12-	0-M34985			79150	0.04	765	15840	281	-123	4.2	15	1.4	12	1.7	7245	7.2	17570	174	0.8
30-45	8958-113.4253	-2-12-	0-M34986			76700	-0.04	268	2577	42	-53	4.1	18	1.2	4	0.7	4480	13.2	8455	23	0.4
30-45	9261-113.4897	-2-12-	0-M34987			65120	-0.08	897	10170	372	-124	6.3	26	-1.5	14	2.3	13850	16.9	13860	202	1.2
30-45	8822-113.4644	-2-12-	0-M34988			60570	0.25	890	8883	452	-89	6.3	27	1.8	19	2.5	14670	14.8	14430	258	1.3
30-45	8814-113.4689	-2-12-	0-M34989			97840	-0.06	1160	7815	172	-102	5.6	35	6.1	5	1.6	8432	6.9	22440	115	0.3
30-45	8036-113.5817	-2-12-	0-M34990			91380	-0.07	924	17430	361	-141	8.7	33	2.3	9	2.2	12860	9.5	17770	203	0.8
30-45	8042-113.5817	-2-12-	0-M34991			77020	1.64	704	10770	2044	-130	5.8	47	3.6	37	6.5	10670	31.6	18210	1130	1.6
30-45	7758-113.5314	-2-15-	0-M34992			87170	-0.07	843	13530	259	-119	11.6	38	5.4	8	2.0	17110	8.8	14940	141	0.6
30-45	8019-113.5256	-2-12-	0-M34993			78890	-0.04	839	9687	59	-100	3.4	9	1.7	3	0.9	3679	4.7	19050	46	0.3
30-45	8150-113.5039	-2-12-	0-M34995			71740	-0.07	653	11480	604	-147	5.8	26	1.5	18	2.3	10880	13.4	17280	329	1.5
30-45	9750-113.7106	-2-12-	0-M34997			76460	-0.07	711	10880	129	-121	5.6	18	3.7	5	1.3	9509	5.6	18620	76	0.4
30-45	9064-113.6925	-2-12-	0-M34998			62520	-0.07	797	9653	532	-114	8.6	29	2.7	24	3.1	15650	19.8	14150	297	1.7
30-45	9019-113.6739	-2-12-	0-M34999			73570	-0.07	597	13180	517	-101	6.8	29	2.8	24	3.2	12450	16.4	18000	315	1.6
30-45	9050-113.6447	-2-12-	0-M35000			31240	-0.05	396	3269	73	-66	5.4	14	-0.9	5	1.0	6667	26.2	11840	39	0.7
30-45	9025-113.6300	-2-12-	0-M35001			95370	-0.08	1788	8794	63	-139	6.0	-11	2.2	3	1.7	12940	3.3	24310	43	0.3
30-45	9031-113.6292	-2-12-	0-M35002			83260	-0.07	1027	7706	204	-115	9.5	48	5.3	6	1.7	10950	7.9	18600	123	0.4
30-45	7969-113.8417	-2-12-	0-M35003			63520	-0.06	867	8247	566	-107	5.2	28	2.1	25	3.3	13310	16.5	15470	347	1.5
30-45	8719-113.7528	-2-15-	0-M35004			76010	-0.07	774	16650	938	-134	5.3	34	-1.3	35	4.7	6869	29.6	13140	500	3.2
30-45	8725-113.7514	-2-15-	0-M35005			59620	-0.07	573	13280	94	-106	5.6	29	5.7	4	1.3	8833	9.7	15710	62	0.5
30-45	8381-113.2494	-2-12-	0-M35006			42190	-0.05	399	6333	50	111	7.7	60	3.3	4	1.0	10420	23.1	16120	29	0.5
30-45	8183-113.2200	-2-12-	0-M35007			62840	-0.07	707	10560	58	-80	7.0	22	4.8	5	1.2	12610	8.8	21880	36	0.4
30-45	7894-113.2328	-2-12-	0-M35008			61480	-0.08	590	16010	175	-94	9.9	32	3.5	10	2.6	18320	33.4	15240	90	1.0
30-45	7892-113.1767	-2-12-	0-M35011			76120	-0.11	646	9225	81	-92	9.6	40	5.2	8	1.7	20280	8.0	14160	51	0.6
30-45	8803-113.1819	-2-12-	0-M35012			78120	-0.07	699	13330	98	-110	13.8	40	7.4	7	1.6	18140	12.1	21360	55	0.6
30-45	9422-113.1736	-2-12-	0-M35013			72220	-0.07	486	21020	91	-116	11.8	40	4.0	4	1.5	30660	20.2	16020	58	0.5
30-45	9425-113.1722	-2-12-	0-M35014			63440	-0.06	740	14590	129	-92	7.4	29	6.9	5	1.3	10970	8.8	19900	75	0.4
30-45	9828-113.1258	-2-12-	0-M35016			69700	-0.07	615	10280	122	-93	5.5	16	6.1	4	1.1	7427	9.6	20910	85	0.3
30-45	9872-113.1850	-2-15-	0-M35017			69450	-0.07	705	11210	125	82	9.1	31	4.6	7	1.7	15730	10.8	13150	70	0.7
30-45	9881-113.1842	-2-12-	0-M35018			61750	-0.05	672	13680	122	-100	6.5	26	6.7	4	1.3	11060	11.8	19870	78	0.4
30-45	8872-113.0294	-2-12-	0-M35019			61330	-0.07	734	14610	104	-82	7.6	32	3.2	7	1.9	14250	21.3	16740	54	0.8
30-45	7808-113.1194	-2-12-	0-M35020			67720	-0.08	873	11660	91	-86	8.9	42	4.7	7	1.8	15550	15.4	18340	53	0.7
30-45	7811-113.1203	-2-12-	0-M35021			67620	-0.05	620	24870	169	-100	8.7	34	2.5	10	2.2	16270	19.4	15380	67	0.8
30-45	7381-113.0011	-2-12-	0-M35022			74070	-0.03	687	19840	49	-127	7.0	14	1.5	3	1.0	11420	5.7	20640	20	0.2
30-45	5958-113.0492	-2-12-	0-M35023			30220	-0.06	374	22380	217	-64	6.2	38	2.9	10	2.2	28170	64.4	11900	111	1.3
30-45	5958-113.0497	-2-12-	0-M35024			70030	-0.09	718	10690	78	130	7.8	25	4.3	4	1.2	15520	9.5	17600	39	0.4
30-45	5550-113.0036	-2-12-	0-M35025			46000	-0.06	430	4212	47	-91	12.0	29	3.5	5	1.0	15660	9.7	9722	28	0.4
30-45	5544-113.0042	-2-12-	0-M35026			69380	-0.07	538	19010	157	-124	9.1	24	4.2	6	1.8	37930	34.2	12740	93	0.9
30-45	5175-113.0014	-2-12-	0-M35027			32080	-0.05	362	85410	40	90	5.8	-8	2.3	3	0.9	9457	10.1	9833	23	0.3
30-45	5175-113.0022	-2-12-	0-M35028			60490	-0.05	549	50740	49	-76	4.8	-8	1.8	2	0.9	9103	4.3	17570	31	0.1
30-45	5269-113.1692	-2-15-	0-M35029			71930	-0.06	529	15350	423	-113	7.4	49	10.6	9	2.2	14600	52.4	18330	278	1.2
30-45	5261-113.1783	-2-12-	0-M35030			42770	-0.06	378	3533	46	-84	8.6	19	2.9	4	0.9	10040	9.8	10690	29	0.4
30-45	5156-113.1997	-2-15-	0-M35031			65280	0.09	560	22220	416	-93	9.6	42	3.1	18	3.6	24010	38.9	15370	230	1.7
30-45	5372-113.2922	-2-12-	0-M35032			71540	-0.09	522	18950	133	-95	7.3	-12	3.8	6	1.7	24090	32.3	18090	69	0.8

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

④

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		
30-45.8964-113.5019-2-15-						0-M34974	10190	568	35980	44	-2	5.2	6.0	529	-1	1	14.9	2093	30	3.4	98	0.221	
30-45.9103-113.5686-2-12-						0-M34975	12422	1570	23580	-81	-8	7.1	88.4		-4	4	225.8	-3014	40	16.5	-131	0.061	
30-45.9731-113.5844-2-15-						0-M34978	2192	709	20610	-30	-3	6.8	18.5	-433	-1	-1	55.0	3403	54	9.7	-31	0.111	
30-45.9789-113.5906-2-12-						0-M34979	8342	1275	27820	34	-2	4.9	12.9	-510	-1	1	30.0	2020	31	5.1	115	0.203	
30-45.9950-113.6028-2-12-						0-M34980	2830	768	29430	-25	-2	5.5	57.6	512	-2	4	157.5	4142	34	10.8	80	0.111	
30-45.9703-113.5367-2-12-						0-M34982	6167	211	30480	53	-2	3.0	8.5	561	1	-1	18.8	1741	13	4.2	60	0.261	
30-45.9925-113.5283-2-12-						0-M34983	-6283	1388	23360	68	-2	5.6	6.8	-558	-1	-1	14.6	2230	41	4.1	-97	0.438	
30-45.9903-113.5067-2-12-						0-M34984	-4850	597	28150	58	-2	3.4	15.2	570	1	1	37.7	1970	20	5.3	50	0.210	
30-45.9244-113.4067-2-12-						0-M34985	-4913	686	31790	42	-1	2.5	17.6	483	-1	2	43.2	-832	-9	7.7	68	0.243	
30-45.8958-113.4253-2-12-						0-M34986	-2252	66	7924	-12	2	1.9	3.0	-159			5.8	1514	12	3.3	41	0.362	
30-45.9261-113.4897-2-12-						0-M34987	-5034	716	21000	-25	-2	4.2	20.9	-413	-1	3	54.0	2983	31	10.7	76	0.139	
30-45.8822-113.4644-2-12-						0-M34988	5832	201	21160	33	-2	3.4	33.2	395	-1	3	73.6	2910	30	13.0	60	0.095	
30-45.8814-113.4689-2-12-						0-M34989	12340	181	26570	65	-2	5.0	10.6	424	-1	-1	32.5	2481	24	3.2	86	0.218	
30-45.8036-113.5817-2-12-						0-M34990	17460	499	30830	35	-2	5.6	23.6	-403	-1	-1	54.0	3483	34	5.0	115	0.359	
30-45.8042-113.5817-2-12-						0-M34991	-5301	481	27210	-36	-3	5.2	118.3	-389	-2	7	329.0	4115	39	20.0	-240	0.052	
30-45.7758-113.5314-2-15-						0-M34992	13840	819	21560	49	-2	7.8	15.2	438	-1	1	40.0	3908	50	4.5	90	0.105	
30-45.8019-113.5256-2-12-						0-M34993	-4142	120	32110	38	-1	2.1	3.7	548	-1		9.7	1041	11	2.5	28	0.320	
30-45.8150-113.5039-2-12-						0-M34995	-5644	1063	28990	39	-2	2.8	40.1	-463	2	3	90.6	-1102	20	15.1	66	0.162	
30-45.9750-113.7106-2-12-						0-M34997	-5053	332	24100	49	-2	4.7	6.7	-350	-1	-1	18.7	2597	24	3.6	111	1.112	
30-45.9064-113.6925-2-12-						0-M34998	7205	1070	19490	-20	-2	4.7	39.0	-415	-1	3	85.8	4060	38	15.9	64	0.110	
30-45.9019-113.6739-2-12-						0-M34999	7301	568	21600	52	-2	5.4	34.4	-316	-1	4	80.1	2783	37	13.9	63	0.147	
30-45.9050-113.6447-2-12-						0-M35000	2705	203	8930	28	-1	2.4	5.6	-229	-1	-1	10.2	1463	17	5.4	55	0.373	
30-45.9025-113.6300-2-12-						0-M35001	-5754	231	28630	55	-2	4.1	3.6	861	-1	-1	9.5	1926	28	-1.9	-131	1.379	
30-45.9031-113.6292-2-12-						0-M35002	11680	438	24440	41	-2	5.4	13.4	-347	-1	-1	38.2	2971	37	4.9	124	0.259	
30-45.7969-113.8417-2-12-						0-M35003	5691	801	21850	44	-2	3.6	38.0	-350	-1	4	94.6	3271	30	15.6	55	0.091	
30-45.8719-113.7528-2-15-						0-M35004	-5189	701	29690	-20	-2	3.7	67.3	686	-1	6	139.1	2808	18	27.4	70	0.114	
30-45.8725-113.7514-2-15-						0-M35005	12250	407	17530	-22	-2	4.5	6.0	-336	-1	-1	11.8	-811	21	3.0	155	0.975	
30-45.8381-113.2494-2-12-						0-M35006	7600	139	5367	42	-2	4.6	4.4	-172	-1	-1	8.9	3660	45	3.6	65	0.562	
30-45.8183-113.2200-2-12-						0-M35007	8203	473	10040	52	-2	6.7	4.4	-293	-1	-1	8.7	3286	42	3.3	97	0.506	
30-45.7894-113.2328-2-12-						0-M35008	11620	611	12350	46	-2	10.4	13.7	-349	-1	-1	28.3	4537	57	8.1	93	0.424	
30-45.7892-113.1767-2-12-						0-M35011	10530	560	11140	59	-3	10.4	6.4	-344	-1	-1	14.8	4036	50	5.8	-166	0.432	
30-45.8803-113.1819-2-12-						0-M35012	17280	867	13540	66	-2	9.2	8.3	-420	-1	-1	16.7	4303	60	5.7	73	0.377	
30-45.9422-113.1736-2-12-						0-M35013	15220	665	18090	55	-2	10.0	6.3	-387	-1	-1	17.5	3330	106	3.6	92	0.263	
30-45.9425-113.1722-2-12-						0-M35014	17160	468	16280	55	-2	5.0	9.5	-293	-1	-1	13.1	2442	30	3.8	116	1.511	
30-45.9828-113.1258-2-12-						0-M35016	8262	341	22470	54	-2	4.3	7.0	-264	-1	-1	27.8	2411	28	3.5	-88	0.788	
30-45.9872-113.1850-2-15-						0-M35017	9273	728	13200	-20	-2	9.2	9.2	-379	2	-1	16.7	3761	43	5.3	98	0.377	
30-45.9881-113.1842-2-12-						0-M35018	20260	500	16170	47	-2	5.3	8.5	-329	-1	1	13.3	2207	29	3.3	112	1.195	
30-45.8872-113.0294-2-12-						0-M35019	10760	445	14050	-20	-2	8.7	8.0	-267	-1	1	15.1	3517	50	5.0	90	0.583	
30-45.7808-113.1194-2-12-						0-M35020	11530	550	12590	59	-3	6.8	7.0	-299	-1	-1	13.8	3402	44	4.7	-74	0.370	
30-45.7811-113.1203-2-12-						0-M35021	12000	500	17740	40	-1	3.4	9.4	-322	1	1	28.5	3475	48	6.6	90	0.312	
30-45.7381-113.0011-2-12-						0-M35022	6737	801	23780	39	1	4.6	2.2	-402	-1	-1	7.4	-945	25	2.0	157	0.622	
30-45.5958-113.0492-2-12-						0-M35023	16520	515	9181	-18	-2	6.2	16.7	-238	3	1	28.9	6605	91	9.3	120	0.360	
30-45.5958-113.0497-2-12-						0-M35024	13740	565	10260	55	-2	6.9	5.5	-284	-1	-1	9.6	4161	49	4.2		0.406	
30-45.5550-113.0036-2-12-						0-M35025	10230	668	10460	39	-2	5.9	4.1	-354	-1	-1	8.7	2163	30	3.0	70	0.414	
30-45.5544-113.0042-2-12-						0-M35026	-5163	1088	17230	45	2	8.8	8.7	-453	2	-1	30.3	3407	111	7.2	243	0.432	
30-45.5175-113.0014-2-12-						0-M35027	124900	194	3004	-15	-2	4.0	3.7	-193	-1	-1	6.6	1950	32	3.1	89	0.424	
30-45.5175-113.0022-2-12-						0-M35028	11810	237	16350	26	-2	2.9	3.3	348	-1	-1	8.1	1860	28	1.8	-73	0.247	
30-45.5269-113.1692-2-15-						0-M35029	8559	432	25200	71	-2	6.3	23.5	-324	3	1	102.3	3817	34	9.8	96	0.352	
30-45.5261-113.1783-2-12-						0-M35030	6811	363	10190	22	-2	4.9	3.6	-297	-1	-1	6.4	2071	26	3.1	63	0.547	
30-45.5156-113.1997-2-15-						0-M35031	14410	766	15410	-24	-2	9.5	34.2	487	2	3	72.3	5864	70	13.3	99	0.217	
30-45.5372-113.2922-2-12-						0-M35032	6454	624	18290	-27	5	7.8	6.2	524	-1	-1	21.2	3547	91	6.1	278	0.533	

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

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DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																				U CONCENTRATION									
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAS SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (umho/cm)	SOUTHLONGITUDE (N/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																											
30-45.5367-113.2906-2-12-						0-M35033-09/09/76-12-			24-10.1-	-	-	5.4-	29-	5-1-7-4-6-4-3-1-2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60		
30-45.5322-113.2722-2-12-						0-M35034-09/09/76-13-			25-16.3-	-	-	5.8-	27-	5-4-6-6-2-3-1-1-4-4-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.10	
30-45.5325-113.2736-2-12-						0-M35035-09/09/76-13-			25-15.9-	-	-	5.2-	20-	5-4-6-6-2-3-1-1-4-4-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.50	
30-45.6383-113.2533-2-12-						0-M35036-09/09/76-17-			22-10.4-	-	-	5.4-	18-	5-1-7-3-6-4-3-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.00	
30-45.6289-113.2608-2-12-						0-M35037-09/09/76-18-			20-10.1-	-	-	5.9-	18-	5-1-7-3-6-4-3-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.20	
30-45.6292-113.2619-2-12-						0-M35038-09/09/76-18-			20-11.1-	-	-	5.0-	19-	5-1-7-3-6-4-3-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.50	
30-45.7319-113.9511-2-12-						0-M35039-09/09/76-18-			16-9.2-	-	-	5.6-	25-	8-3-7-3-7-4-3-1-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20.00	
30-45.4511-112.8358-2-11-						0-M35040-09/14/76-14-			22-12.0-C-	-	-	6.0-	2500-	8-4-4-7-2-2-1-4-3-5-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.70	
30-45.4489-112.8403-2-12-						0-M35041-09/14/76-14-			14-9.0-C-	-	-	6.0-	40-	4-4-4-6-4-2-1-2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17.60	
30-45.4478-112.8389-2-12-						0-M35042-09/14/76-14-			18-11.5-C-	-	-	5.9-	65-	10-4-4-6-3-2-1-2-3-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.40	
30-45.4381-112.9622-2-12-						0-M35043-09/14/76-16-			16-9.0-C-	-	-	5.9-	60-	4-4-4-1-2-2-1-2-3-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17.90	
30-45.4272-112.9308-2-12-						0-M35044-09/14/76-16-			16-11.5-C-	-	-	5.9-	45-	2-4-4-6-3-4-1-2-1-3-4-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18.90	
30-45.4281-112.9028-2-12-						0-M35045-09/14/76-17-			14-10.5-C-	-	-	5.9-	45-	12-4-4-6-4-2-1-2-1-3-5-4-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.30	
30-45.1103-112.8819-2-15-						0-M35046-09/17/76-11-			15-	-	-	-	-	8-4-3-7-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.80
30-45.1111-112.8811-2-12-						0-M35047-09/17/76-11-			15-12.5-C-	-	-	5.7-	230-	6-4-4-8-3-2-1-2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45.1100-112.8478-2-12-						0-M35048-09/17/76-12-			22-10.5-C-	-	-	6.8-	1200-	8-4-4-4-2-2-2-2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.00	
30-45.1089-112.8575-2-15-						0-M35049-09/17/76-12-			22-	-	-	-	-	4-4-3-4-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.80	
30-45.1592-112.6178-2-15-						0-M35050-09/14/76-13-			21-	-	-	-	-	18-4-4-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50
30-45.1481-112.6194-2-15-						0-M35051-09/14/76-14-			21-	-	-	-	-	18-4-4-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80
30-45.2167-112.6733-2-15-						0-M35053-09/14/76-15-			21-	-	-	-	-	28-2-6-5-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10
30-45.2028-112.6917-2-15-						0-M35054-09/14/76-15-			22-	-	-	-	-	18-2-6-5-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00
30-45.2328-112.7111-2-15-						0-M35055-09/14/76-16-			22-	-	-	-	-	28-2-6-5-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00
30-45.4447-112.8889-2-12-						0-M35056-09/20/76-12-			9-5.2-	-	-	5.5-	34-	9-3-1-4-6-3-3-1-2-1-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17.00	
30-45.4158-112.8558-2-12-						0-M35057-09/20/76-12-			9-5.6-	-	-	5.7-	90-	3-2-7-4-6-3-3-1-2-2-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	
30-45.4161-112.8536-2-12-						0-M35058-09/20/76-12-			8-5.6-	-	-	5.2-	45-	15-3-1-4-6-4-3-1-2-1-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.60	
30-45.4042-112.8406-2-12-						0-M35059-09/20/76-13-			9-5.8-	-	-	5.7-	140-	1-2-7-4-6-3-3-1-2-2-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.10	
30-45.4006-112.8378-2-99-						0-M35060-09/20/76-13-			8-	-	-	-	-	9-3-7-4-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.80
30-45.0322-112.5056-2-11-						0-M35061-10/01/76-13-			13-8.4-C-	-	-	5.5-	75-	14-2-6-5-6-3-3-1-3-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.40	
30-45.0031-112.5156-2-15-						0-M35062-10/01/76-13-			13-	-	-	-	-	4-2-6-4-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.20
30-45.0294-112.5372-2-15-						0-M35063-10/01/76-13-			13-	-	-	-	-	14-2-6-4-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.00
30-45.0319-112.5444-2-15-						0-M35064-10/01/76-13-			13-	-	-	-	-	14-2-6-4-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60
30-45.0461-112.5467-2-12-						0-M35065-10/01/76-13-			13-9.4-C-	-	-	5.7-	120-	14-2-6-5-6-3-3-2-2-2-3-2-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.80	
30-45.0561-112.5417-2-15-						0-M35066-10/01/76-13-			13-	-	-	-	-	18-2-6-4-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.10
30-45.0742-112.5306-2-15-						0-M35067-10/01/76-10-			14-	-	-	-	-	14-2-6-4-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00
30-45.0336-112.5786-2-11-						0-M35068-10/01/76-10-			14-8.8-C-	-	-	5.2-	65-	18-2-6-4-6-3-3-1-2-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30	
30-45.0375-112.5917-2-15-						0-M35069-10/01/76-10-			14-	-	-	-	-	18-2-6-4-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00
30-45.0567-112.5847-2-15-						0-M35070-10/01/76-11-			14-	-	-	-	-	9-2-6-4-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70
30-45.0322-112.6075-2-11-						0-M35071-10/01/76-11-			14-8.4-C-	-	-	5.7-	125-	18-2-6-4-6-3-3-1-2-3-2-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.00	
30-45.0906-112.5917-2-12-						0-M35072-10/01/76-11-			14-9.6-C-	-	-	5.7-	90-	9-2-6-4-6-3-3-2-2-2-3-2-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.90	
30-45.0778-112.5686-2-15-						0-M35073-10/01/76-11-			14-	-	-	-	-	18-2-6-4-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90
30-45.0981-112.5764-2-15-						0-M35074-10/01/76-11-			14-	-	-	-	-	14-2-6-4-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50
30-45.1058-112.5567-2-11-						0-M35075-10/01/76-12-			14-8.6-C-	-	-	5.5-	47-	18-2-6-4-6-3-3-1-2-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
30-45.1158-112.6033-2-12-						0-M35076-10/01/76-12-			14-9.6-C-	-	-	5.7-	95-	18-2-6-5-6-3-3-2-2-2-3-2-3-	-3-	-	-	-	-	-	-	-	-</												

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	
30-45.5367-113.2906-2-12-						0-M35033	-5	-5	-5	25	-20	-15	10	-10	-15	2	28	
30-45.5322-113.2722-2-12-						0-M35034	-5	-5	-5	51	-20	-15	36	-10	-15	2	24	
30-45.5325-113.2736-2-12-						0-M35035	-5	-5	-5	32	-20	-15	19	-10	-15	2	17	
30-45.6383-113.2533-2-12-						0-M35036	-5	-5	5	41	-20	18	28	-10	-15	2	24	
30-45.6289-113.2608-2-12-						0-M35037	-5	-5	-5	58	-20	-15	29	-10	-15	2	17	
30-45.6292-113.2619-2-12-						0-M35038	-5	-5	-5	33	-20	17	16	-10	-15	2	26	
30-45.7319-113.9511-2-12-						0-M35039	5	7	-5	15	-20	30	19	-10	-15	3	29	
30-45.4511-112.8358-2-11-						0-M35040	-5	-5	-5	20	-20	-15	23	-10	-15	2	23	
30-45.4489-112.8403-2-12-						0-M35041	-5	-5	-5	22	23	-15	11	-10	19	2	46	
30-45.4478-112.8389-2-12-						0-M35042	-5	8	-5	10	-20	-15	12	-10	-15	2	27	
30-45.4381-112.9622-2-12-						0-M35043	-5	-5	-5	43	-20	-15	-5	-10	44	2	15	
30-45.4272-112.9308-2-12-						0-M35044	-5	-5	-5	23	-20	-15	17	-10	20	3	28	
30-45.4281-112.9028-2-12-						0-M35045	-5	-5	-5	15	24	-15	11	-10	-15	2	12	
30-45.1103-112.8319-2-15-						0-M35046	-5	-5	-5	23	-20	-15	-5	-10	-15	2	13	
30-45.1111-112.8811-2-12-						0-M35047	-5	5	-5	32	-20	-15	18	-10	-15	2	20	
30-45.1100-112.8478-2-12-						0-M35048	-5	-5	-5	14	-20	-15	8	-10	-15	1	21	
30-45.1089-112.8575-2-15-						0-M35049	-5	-5	5	15	-20	-15	15	-10	-15	1	10	
30-45.1692-112.6178-2-15-						0-M35050	-5	-5	-5	23	-20	20	12	-10	-15	2	24	
30-45.1481-112.6194-2-15-						0-M35051	-5	-5	-5	30	-20	15	21	-10	-15	3	28	
30-45.2167-112.6733-2-15-						0-M35053	-5	-5	-5	75	-20	-15	12	-10	-15	2	29	
30-45.2028-112.6917-2-15-						0-M35054	-5	-5	-5	19	-20	28	21	-10	-15	2	22	
30-45.2328-112.7111-2-15-						0-M35055	-5	-5	-5	25	-20	-15	23	-10	-15	2	20	
30-45.4447-112.8389-2-12-						0-M35056	7	6	-5	-10	-20	22	-5	-10	-15	2	14	
30-45.4158-112.8558-2-12-						0-M35057	-5	-5	-5	10	-20	-15	8	-10	-15	-1	12	
30-45.4161-112.8536-2-12-						0-M35058	-5	-5	-5	13	-20	-15	8	-10	15	2	17	
30-45.4042-112.8406-2-12-						0-M35059	-5	-5	-5	26	-20	-15	14	-10	-15	2	35	
30-45.4006-112.8378-2-99-						0-M35060	-5	-5	-5	20	-20	-15	-5	-10	20	2	27	
30-45.0322-112.5056-2-11-						0-M35061	-5	-5	-5	21	-20	43	20	-10	-15	3	23	
30-45.0031-112.5156-2-15-						0-M35062	-5	5	-5	-10	-20	-15	9	-10	-15	2	18	
30-45.0294-112.5372-2-15-						0-M35063	-5	-5	-5	11	-20	-15	8	-10	-15	1	20	
30-45.0319-112.5444-2-15-						0-M35064	-5	-5	-5	32	-20	50	8	-10	-15	2	67	
30-45.0461-112.5467-2-12-						0-M35065	-5	5	-5	10	-20	-15	16	-10	-15	2	19	
30-45.0561-112.5417-2-15-						0-M35066	-5	-5	-5	50	-20	26	11	-10	-15	2	33	
30-45.0742-112.5306-2-15-						0-M35067	-5	5	-5	19	-20	15	10	-10	-15	1	11	
30-45.0336-112.5786-2-11-						0-M35068	-5	-5	-5	22	-20	-15	5	-10	-15	-1	6	
30-45.0375-112.5817-2-15-						0-M35069	-5	6	-5	-10	-20	-15	9	-10	-15	1	12	
30-45.0667-112.5347-2-15-						0-M35070	-5	-5	-5	19	-20	-15	14	-10	-15	2	15	
30-45.0822-112.6075-2-11-						0-M35071	-5	-5	-5	-10	-20	-15	-5	-10	-15	-1	7	
30-45.0906-112.5917-2-12-						0-M35072	-5	-5	-5	12	-20	-15	10	-10	-15	1	14	
30-45.0778-112.5686-2-15-						0-M35073	-5	-5	-5	-10	-20	16	7	-10	-15	2	20	
30-45.0981-112.5764-2-15-						0-M35074	-5	-5	-5	16	-20	19	8	-10	-15	2	14	
30-45.1058-112.5667-2-11-						0-M35075	-5	-5	-5	11	-20	-15	9	-10	-15	1	12	
30-45.1158-112.6033-2-12-						0-M35076	-5	-5	-5	12	-20	-15	13	-10	-15	2	12	
30-45.1175-112.5247-2-15-						0-M35077	-5	-5	-5	27	-20	-15	17	-10	-15	3	17	
30-45.1169-112.5258-2-15-						0-M35078	-5	-5	-5	19	-20	20	11	-10	-15	2	15	
30-45.1114-112.7108-2-15-						0-M35079	-5	5	-5	32	-20	-15	6	-10	-15	2	15	
30-45.0797-112.7264-2-15-						0-M35080	-5	-5	-5	23	-20	-15	9	-10	-15	2	23	
30-45.0228-112.7172-2-11-						0-M35081	-5	-5	-5	17	-20	-15	12	-10	-15	2	11	
30-45.0189-112.6914-2-15-						0-M35082	-5	-5	-5	14	-20	-15	11	-10	-15	2	18	
30-45.0542-112.6819-2-11-						0-M35083	-5	-5	-5	11	-20	-15	-5	-10	-15	-1	7	
30-45.0761-112.6567-2-15-						0-M35084	-5	-5	-5	16	30	-15	10	-10	-15	2	17	

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

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DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS																	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAS 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	
30-45.5367-113.2906-2-12-			0-M35033			66777	-0.06	650	9559	50	249	9.2	32	3.6	5	1.2	18550	9.5	16470	30	0.4		
30-45.5322-113.2722-2-12-			0-M35034			64670	-0.05	460	15590	84	-108	6.5	14	-1.0	4	1.2	11430	9.4	17850	56	0.4		
30-45.5325-113.2736-2-12-			0-M35035			44770	-0.06	446	28580	95	-84	8.0	20	2.7	5	1.4	13130	18.0	13400	51	0.6		
30-45.6383-113.2533-2-12-			0-M35036			72570	-0.08	545	17960	115	-107	7.8	-12	3.2	6	1.6	23000	20.5	15420	57	0.7		
30-45.6289-113.2608-2-12-			0-M35037			65110	-0.05	571	15670	82	-122	11.0	18	2.5	4	1.4	17740	8.8	13820	49	0.4		
30-45.6292-113.2619-2-12-			0-M35038			53700	-0.06	482	11210	68	-69	6.3	26	2.8	4	1.2	12960	12.0	17810	30	0.5		
30-45.7319-113.9511-2-12-			0-M35039			81890	0.58	861	25720	1299	-108	8.0	36	-2.2	39	6.8	25220	66.0	19380	755	2.2		
30-45.4511-112.8358-2-11-			0-M35040			78830	-0.06	474	26840	171	-120	7.8	18	1.7	7	1.9	36910	14.4	17070	100	0.9		
30-45.4489-112.8403-2-12-			0-M35041			75830	-0.08	631	30100	115	-142	12.8	-12	3.5	5	1.7	46120	14.2	13810	79	0.6		
30-45.4478-112.8389-2-12-			0-M35042			78130	-0.07	569	29970	192	-120	9.6	-12	2.5	7	2.0	36740	16.8	16060	98	0.9		
30-45.4381-112.9622-2-12-			0-M35043			68960	-0.10	473	25000	159	-122	13.7	23	-2.3	6	1.7	89400	15.9	13380	77	0.6		
30-45.4272-112.9308-2-12-			0-M35044			76220	-0.06	548	23020	108	-113	8.8	-9	2.9	4	1.4	25790	13.8	20490	67	0.6		
30-45.4281-112.9028-2-12-			0-M35045			74460	-0.05	675	22410	107	-120	5.8	11	1.8	4	1.4	27510	9.5	17010	55	0.4		
30-45.1103-112.8819-2-15-			0-M35046			70840	-0.07	858	29590	60	-121	20.1	27	-1.6	4	1.5	58830	8.3	12830	37	0.4		
30-45.1111-112.8811-2-12-			0-M35047			67440	-0.08	681	48740	59	114	10.6	31	3.0	4	1.1	23080	7.5	15120	34	0.4		
30-45.1100-112.8478-2-12-			0-M35048			40990	-0.05	562	65300	50	-89	10.8	28	1.9	3	1.1	18380	8.0	14250	25	0.4		
30-45.1089-112.8575-2-15-			0-M35049			28530	-0.04	287	98670	34	80	8.9	20	-1.0	3	0.8	20400	6.4	9148	18	0.2		
30-45.1692-112.6178-2-15-			0-M35050			66580	-0.07	572	19050	86	141	9.7	50	4.1	5	1.2	18290	8.0	23100	48	0.4		
30-45.1481-112.6194-2-15-			0-M35051			65070	-0.07	620	20000	86	125	9.2	63	3.8	5	1.2	21550	10.9	16500	51	0.5		
30-45.2167-112.6733-2-15-			0-M35053			55210	-0.05	593	49450	70	-88	10.1	58	3.8	4	1.1	16250	10.7	15090	42	0.5		
30-45.2028-112.6917-2-15-			0-M35054			58370	-0.06	540	49530	68	-88	8.9	51	3.4	4	1.2	18870	9.7	13520	39	0.4		
30-45.2328-112.7111-2-15-			0-M35055			55630	-0.06	584	47930	70	-78	9.8	51	3.0	4	1.3	17570	8.6	15480	36	0.5		
30-45.4447-112.8889-2-12-			0-M35056			70100	-0.08	630	18950	154	-106	7.9	30	-1.7	6	1.7	92200	31.6	15120	86	0.9		
30-45.4158-112.8558-2-12-			0-M35057			58350	-0.06	441	19720	84	-99	8.7	42	4.9	5	1.3	13780	16.3	17070	52	0.6		
30-45.4161-112.8536-2-12-			0-M35058			74380	-0.06	643	23910	123	-127	8.4	-10	1.9	5	1.6	54750	17.2	15880	80	0.7		
30-45.4042-112.8406-2-12-			0-M35059			60880	-0.08	494	21370	84	-90	9.8	31	4.6	5	1.5	19970	11.1	16270	40	0.5		
30-45.4006-112.8378-2-99-			0-M35060			39890	-0.10	565	33940	93	-120	13.8	-15	3.5	5	1.4	31790	9.9	16580	41	0.7		
30-45.0322-112.5056-2-11-			0-M35061			63180	-0.06	474	27340	116	-105	17.8	110	3.2	11	1.8	30400	19.7	19280	69	1.2		
30-45.0031-112.5156-2-15-			0-M35062			50860	-0.05	542	31320	100	-71	6.0	26	3.0	3	1.1	11390	13.7	12600	64	0.3		
30-45.0294-112.5372-2-15-			0-M35063			33870	-0.05	462	79220	48	-56	5.6	21	6.3	3	0.9	8585	4.9	9761	26	0.3		
30-45.0319-112.5444-2-15-			0-M35064			64090	-0.09	452	20690	70	-85	21.6	126	5.6	4	1.2	32200	9.1	13050	35	0.5		
30-45.0461-112.5467-2-12-			0-M35065			53370	-0.05	513	35990	90	-70	7.4	28	2.8	4	1.1	13230	21.4	13730	62	0.3		
30-45.0561-112.5417-2-15-			0-M35066			72830	-0.06	445	11770	79	-96	14.9	90	4.3	4	1.3	22850	8.5	16830	40	0.4		
30-45.0742-112.5306-2-15-			0-M35067			37680	-0.06	517	91290	49	116	6.7	34	4.4	4	0.9	10560	8.4	11450	31	0.4		
30-45.0336-112.5786-2-11-			0-M35068			21570	-0.06	406	156700	30	-63	4.9	30	5.3	3	0.7	7639	9.8	6546	26	0.3		
30-45.0375-112.5817-2-15-			0-M35069			33340	-0.05	412	82280	86	130	8.1	49	3.6	5	1.0	14380	23.8	9775	48	0.7		
30-45.0667-112.5847-2-15-			0-M35070			46660	-0.05	509	36730	64	113	8.2	62	4.0	4	1.1	15340	9.7	15450	34	0.3		
30-45.0822-112.6075-2-11-			0-M35071			22330	-0.06	466	158700	42	-61	6.2	27	6.8	2	0.8	6056	7.6	6591	24	0.3		
30-45.0906-112.5917-2-12-			0-M35072			33340	-0.05	498	81950	43	124	5.1	27	4.5	3	0.8	8278	4.5	10680	25	0.3		
30-45.0778-112.5885-2-15-			0-M35073			54630	-0.04	591	28570	74	-70	7.9	23	2.5	3	1.1	10770	14.2	15600	49	0.3		
30-45.0981-112.5764-2-15-			0-M35074			45830	-0.08	613	65610	58	-69	5.7	39	2.8	4	1.1	11600	8.9	14190	33	0.4		
30-45.1058-112.5667-2-11-			0-M35075			31620	-0.05	303	86220	61	-75	5.5	58	3.9	4	1.2	13010	20.1	12020	44	0.5		
30-45.1158-112.6033-2-12-			0-M35076			38800	-0.06	505	99600	59	-69	7.8	41	4.5	4	1.0	11950	10.2	13360	36	0.4		
30-45.1175-112.5247-2-15-			0-M35077			58070	-0.08	576	29040	58	-72	8.3	25	4.6	4	1.0	14580	7.2	15330	33	0.3		
30-45.1169-112.5258-2-15-			0-M35078			50780	-0.06	643	30380	67	-77	9.7	42	4.3	5	1.0	14150	10.9	15310	34	0.4		
30-45.1114-112.7108-2-15-			0-M35079			53210	-0.06	568	53950	61	-77	8.2	32	6.4	4	1.1	15180	6.8	15800	34	0.4		
30-45.0797-112.7264-2-15-			0-M35080			47500	-0.06	521	59510	66	-64	7.9	40	5.1	4	1.0	12910	8.1	13870	33	0.4		
30-45.0228-112.7172-2-11-			0-M35081			37050	-0.08	539	121000	41	104	7.1	39	10.7	4	0.7	9876	5.9	9572	20	0.2		
30-45.0189-112.6914-2-15-			0-M35082			54370	-0.06	580	48910	58	-74	9.9	33	5.6	4	1.1	15280	7.9	15590	34	0.4		
30-45.0542-112.6819-2-11-			0-M35083			22750	-0.05	385	167700	34	-77	5.4	32	7.0	2	0.7	6955	8.0	8029	21	0.2		
30-45.0761-112.6567-2-15-			0-M35084			52590	-0.06	546	53070	63	-66	9.3	34	5.7	4	1.0	14460	7.0	16820	32	0.4		

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

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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
30-45.5367-113.2906-2-12-	0-M35033	4934	446	11600	46	-2	9.0	5.2	-287	-1	-1	8.9	3795	47	3.5	88	0.404				
30-45.5322-113.2722-2-12-	0-M35034	5886	575	19220	27	-2	5.5	5.0	-339	-1	-1	11.2	1918	38	4.5	164	0.634				
30-45.5325-113.2736-2-12-	0-M35035	23360	777	10440	23	-2	4.8	7.9	-322	1	-1	13.7	3244	35	4.4	139	0.474				
30-45.6383-113.2533-2-12-	0-M35036	4052	1095	17430	43	-3	8.6	6.3	-374	-1	-1	18.0	3740	74	4.9	151	0.500				
30-45.6289-113.2608-2-12-	0-M35037	-4991	1047	18780	34	-2	6.0	5.0	-428	1	-1	10.8	2790	41	3.4	185	0.667				
30-45.6292-113.2619-2-12-	0-M35038	12020	293	10030	42	-2	4.7	4.1	-229	-1	-1	9.1	2679	33	3.6	134	0.495				
30-45.7319-113.9511-2-12-	0-M35039	16420	467	27410	72	-3	8.3	80.8	-318	-2	5	228.2	5731	80	23.5	-111	0.088				
30-45.4511-112.8358-2-11-	0-M35040	5411	638	25670	41	-2	8.9	10.8	-363	3	-1	27.3	2863	90	5.6	81	0.392				
30-45.4489-112.8403-2-12-	0-M35041	20760	1178	20710	43	-3	17.4	9.4	-510	-1	-1	27.2	5159	151	5.0	101	0.647				
30-45.4478-112.8389-2-12-	0-M35042	16530	988	23250	-28	-2	12.1	12.6	-397	2	-1	29.4	4059	99	6.5	121	0.660				
30-45.4381-112.9622-2-12-	0-M35043	7260	1125	20110	-44	-3	8.1	8.6	-428	-1	-2	20.5	2768	229	4.7	-118	0.873				
30-45.4272-112.9308-2-12-	0-M35044	9056	529	22010	40	-2	7.1	8.4	-348	-1	-1	16.5	2599	77	4.4	79	1.145				
30-45.4281-112.9028-2-12-	0-M35045	-4777	582	23660	40	-2	6.0	5.0	-364	1	-1	11.8	1903	73	4.2	59	0.703				
30-45.1103-112.8819-2-15-	0-M35046	17680	1348	20760	-26	-2	13.3	5.8	736	-1	-1	7.2	7971	205	3.6	-57	0.250				
30-45.1111-112.8811-2-12-	0-M35047	19890	748	14320	-29	-3	8.6	4.0	-332	-1	-1	7.9	3274	72	-2.0	93	0.329				
30-45.1100-112.8479-2-12-	0-M35048	16670	524	9847	30	-2	6.3	3.4	-322	-1	-1	6.6	3633	70	2.3	81	0.303				
30-45.1089-112.8575-2-15-	0-M35049	20780	422	2258	22	-1	4.5	2.7	-242	-1	-1	5.2	3426	88	2.3	66	0.346				
30-45.1692-112.6178-2-15-	0-M35050	16270	725	12900	67	-2	7.7	6.0	-328	-1	-1	14.1	3060	64	4.9		0.248				
30-45.1481-112.6194-2-15-	0-M35051	18650	910	13440	40	-2	8.7	5.7	-307	-1	-1	16.2	4247	72	4.4	105	0.235				
30-45.2167-112.6733-2-15-	0-M35053	22370	504	11740	34	-2	6.7	5.4	-307	-1	-1	11.0	3306	59	3.5	93	0.282				
30-45.2028-112.6917-2-15-	0-M35054	16260	552	10020	46	3	7.3	4.7	-325	-1	-1	9.8	3209	73	3.2	118	0.306				
30-45.2328-112.7111-2-15-	0-M35055	16730	566	10070	37	-2	6.7	4.8	465	-1	-1	10.5	3126	61	3.2	100	0.286				
30-45.4447-112.8889-2-12-	0-M35056	-4253	806	22730	-35	-2	3.7	8.6	-334	3	-1	22.5	2858	225	5.9	76	0.756				
30-45.4158-112.8558-2-12-	0-M35057	14230	522	12640	28	-2	6.9	5.6	-354	-1	-1	13.5	3277	48	4.5	75	0.519				
30-45.4161-112.8536-2-12-	0-M35058	7302	755	22560	44	-2	7.0	7.3	-408	2	-1	21.6	2684	154	4.4	98	0.630				
30-45.4042-112.8406-2-12-	0-M35059	14890	656	12240	55	-2	8.9	5.6	-333	-1	-1	10.5	3379	64	2.6	-69	0.486				
30-45.4006-112.8378-2-99-	0-M35060	24560	1155	21660	-33	-3	17.9	5.5	-408	-1	-2	15.5	4096	113	3.9	-309	0.310				
30-45.0322-112.5056-2-11-	0-M35061	21630	936	16590	55	-2	14.2	9.9	-368	2	2	22.2	7422	101	8.8	132	0.198				
30-45.0031-112.5156-2-15-	0-M35062	10500	131	8075	40	-1	4.8	4.7	-248	1	-1	13.4	3477	59	2.7	69	0.313				
30-45.0294-112.5372-2-15-	0-M35063	9001	341	5246	22	-1	3.8	4.1	-206	-1	-1	6.7	1874	33	2.6	-48	0.299				
30-45.0319-112.5444-2-15-	0-M35064	44650	805	13880	-31	-3	14.7	4.0	-312	-8	-1	8.6	4477	115	2.9	-315	0.302				
30-45.0461-112.5467-2-12-	0-M35065	12330	374	8119	40	-1	5.0	4.3	-249	1	-1	14.1	4284	69	3.6	91	0.340				
30-45.0561-112.5417-2-15-	0-M35066	26200	722	9698	47	-2	10.3	5.1	-385	-1	-1	12.6	3837	81	3.0	81	0.325				
30-45.0742-112.5306-2-15-	0-M35067	11640	446	5856	31	-2	4.3	4.0	-255	-1	-1	8.1	2632	37	2.4	87	0.370				
30-45.0336-112.5786-2-11-	0-M35068	8384	273	4047	-22	-2	3.0	2.4	-206	-1	-1	6.3	2601	27	2.0	-73	0.365				
30-45.0375-112.5817-2-15-	0-M35069	8225	543	5478	26	-1	4.9	5.4	-285	-1	1	16.9	4606	49	4.9	57	0.237				
30-45.0657-112.5847-2-15-	0-M35070	17550	673	7690	41	-2	7.0	4.2	-334	-1	-1	10.8	3618	55	2.9		0.250				
30-45.0822-112.6075-2-11-	0-M35071	7398	224	4075	-17	-2	2.8	3.0	223	-1	-1	5.9	1970	25	1.9	-36	0.339				
30-45.0906-112.5917-2-12-	0-M35072	7973	323	5197	-18	-2	3.5	4.0	-206	-1	-1	5.9	1974	28	3.5		0.322				
30-45.0778-112.5685-2-15-	0-M35073	7828	131	8691	44	-1	4.4	4.6	-241	-1	-1	11.9	3275	63	2.7	66	0.328				
30-45.0981-112.5764-2-15-	0-M35074	10410	660	5503	44	-2	6.1	3.3	-292	-1	-1	9.4	2842	42	3.3	128	0.266				
30-45.1058-112.5667-2-11-	0-M35075	9804	492	5419	31	-2	4.8	5.0	-296	-1	1	13.7	4415	44	4.4	58	0.241				
30-45.1158-112.6033-2-12-	0-M35076	13220	457	5757	38	-2	4.8	4.2	-271	-1	-1	9.4	2534	44	2.7	82	0.245				
30-45.1175-112.5247-2-15-	0-M35077	14240	938	5545	56	-3	7.4	3.3	-331	-1	-1	9.5	2796	57	4.2	185	0.284				
30-45.1169-112.5258-2-15-	0-M35078	12160	698	6158	-18	-2	6.8	4.7	-333	-1	1	10.2	3193	46	3.0	76	0.275				
30-45.1114-112.7108-2-15-	0-M35079	16330	637	4999	49	-2	7.5	4.2	-351	-1	-1	8.3	3000	45	2.8	-60	0.325				
30-45.0797-112.7264-2-15-	0-M35080	13380	575	5177	-19	-2	6.1	4.3	-274	-1	-1	9.6	2956	49	4.2	94	0.271				
30-45.0228-112.7172-2-11-	0-M35081	8593	332	4790	37	-2	4.4	2.5	-253	-1	-1	6.1	1922	35	2.4	103	0.361				
30-45.0189-112.6914-2-15-	0-M35082	13710	647	4864	46	-2	7.4	4.1	-334	-1	-1	8.9	2647	52	2.9	103	0.303				
30-45.0542-112.6819-2-11-	0-M35083	7022	230	4127	-17	-2	3.3	2.7	-252	-1	-1	5.2	2092	21	1.9	83	0.365				
30-45.0761-112.6567-2-15-	0-M35084	13980	626	4891	40	-2	6.6	4.4	-298	-1	-1	9.2	3307	52	3.6	117	0.293				

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

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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 (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
							DATE	HOUR																										
30-45	0997-112.6828-2-15-	0-M35085-10/01/75-14-	15-													18-2-6-4-6-	-1-	-2-3-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	2.00		
30-45	0986-112.7086-2-11-	0-M35086-10/01/75-15-	15-					7.8				5.7-	75-			9-2-6-4-6-3-3-1-	-2-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.00	
30-45	0533-112.6383-2-12-	0-M35087-10/01/75-15-	15-					9.6-				6.3-	240-			14-2-6-4-6-3-3-2-	-2-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70	
30-45	0922-112.4900-2-15-	0-M35088-10/03/75-9-	10-													18-4-4-6-	-1-	-2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
30-45	0461-112.4972-2-15-	0-M35089-10/03/75-9-	10-													18-2-6-4-6-	-1-	-2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.20	
30-45	0372-112.4750-2-15-	0-M35090-10/03/75-9-	10-													18-2-6-4-6-	-1-	-2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45	0492-112.4483-2-15-	0-M35091-10/03/75-10-	10-													14-2-6-4-6-	-1-	-2-4-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45	0492-112.4472-2-15-	0-M35092-10/03/75-9-	10-													18-2-6-4-6-	-1-	-2-4-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45	0206-112.4542-2-12-	0-M35093-10/03/75-10-	10-					8.2-				5.5-	75-			14-2-6-4-6-3-3-2-	-2-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.80	
30-45	0186-112.4122-2-12-	0-M35094-10/03/75-10-	10-					8.6-				5.7-	120-			18-2-6-4-6-3-3-2-	-2-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.70	
30-45	0378-112.4039-2-15-	0-M35095-10/03/75-10-	10-													9-2-6-4-6-	-1-	-2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
30-45	0375-112.4031-2-15-	0-M35096-10/03/75-10-	10-													18-2-6-4-6-	-1-	-2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
30-45	0228-112.3653-2-12-	0-M35097-10/03/75-11-	10-					8.4-				5.2-	37-			18-2-6-4-6-3-3-2-	-2-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.80	
30-45	0306-112.2903-2-15-	0-M35098-10/03/75-11-	10-													18-2-6-4-6-	-1-	-2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30	
30-45	0522-112.2572-2-15-	0-M35099-10/03/75-11-	11-													18-2-6-5-6-	-1-	-2-3-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45	0550-112.2386-2-12-	0-M35100-10/03/75-12-	11-					9.4-C				5.7-	135-			23-2-6-4-6-3-3-2-	-2-2-2-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.20	
30-45	0256-112.2278-2-12-	0-M35101-10/03/75-12-	11-					9.4-C				5.5-	95-			18-2-6-4-6-3-3-2-	-2-2-2-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
30-45	0281-112.1767-2-15-	0-M35102-10/03/75-12-	11-													23-2-6-4-6-	-1-	-2-3-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50	
30-45	0367-112.1653-2-15-	0-M35103-10/03/75-12-	11-													9-2-6-4-6-	-1-	-2-3-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
30-45	0314-112.1333-2-12-	0-M35104-10/03/75-12-	11-					9.2-C				5.7-	85-			18-2-6-4-6-3-3-2-	-2-2-2-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.90	
30-45	0597-112.1444-2-15-	0-M35105-10/03/75-13-	11-													18-2-6-4-6-	-1-	-2-4-4-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
30-45	0600-112.1547-2-15-	0-M35106-10/03/75-13-	11-													18-2-6-4-6-	-1-	-2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80	
30-45	1031-112.1903-2-15-	0-M35108-10/03/75-13-	12-													14-2-6-4-6-	-1-	-2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
30-45	1167-112.1969-2-15-	0-M35109-10/03/75-14-	12-													18-2-6-4-6-	-1-	-2-3-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60	
30-45	0975-112.2031-2-15-	0-M35110-10/03/75-14-	12-													18-2-6-4-6-	-1-	-2-4-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40	
30-45	0789-112.2175-2-15-	0-M35111-10/03/75-14-	12-													23-2-6-4-6-	-1-	-2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45	0681-112.2647-2-12-	0-M35112-10/03/75-15-	12-					9.4-C				5.7-	165-			18-2-6-4-6-3-3-2-	-2-2-2-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.40	
30-45	0731-112.2669-2-15-	0-M35113-10/03/75-15-	12-													18-2-6-4-6-	-1-	-2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.20	
30-45	0739-112.2939-2-15-	0-M35114-10/03/75-15-	12-													18-2-6-4-6-	-1-	-2-4-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30	
30-45	0922-112.2922-2-12-	0-M35115-10/03/75-16-	12-					9.2-C				5.2-	75-			28-2-6-4-6-3-3-2-	-2-2-2-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.40	
30-45	0917-112.2931-2-15-	0-M35116-10/03/75-16-	12-													18-2-6-4-6-	-1-	-2-3-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45	0950-112.3308-2-15-	0-M35117-10/03/75-16-	12-													14-2-6-4-6-	-1-	-2-4-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80	
30-45	1183-112.3383-2-12-	0-M35118-10/03/75-17-	12-					9.4-C				5.7-	220-			18-2-6-4-6-3-3-2-	-2-2-2-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.90	
30-45	1200-112.3356-2-12-	0-M35119-10/03/75-17-	12-					9.2-C				5.5-	175-			23-2-6-4-6-3-3-2-	-2-2-2-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.70	
30-45	1125-112.3528-2-15-	0-M35120-10/03/75-17-	12-													18-2-6-4-6-	-1-	-2-4-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40	
30-45	0653-112.3439-2-11-	0-M35121-10/03/75-18-	12-					7.8-C				5.2-	46-			18-2-6-4-6-3-3-1-	-2-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.80	
30-45	0981-112.3789-2-11-	0-M35122-10/03/75-18-	12-					8.2-C				5.5-	50-			18-2-6-4-6-3-3-1-	-2-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.20	
30-45	1219-112.3792-2-15-	0-M35123-10/03/75-18-	12-													18-2-6-4-6-	-1-	-2-3-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30	
30-45	0875-112.4264-2-11-	0-M35124-10/03/75-19-	12-					7.8-C				5.5-	45-			23-2-6-4-6-3-3-1-	-2-2-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.10	
30-45	2356-112.0264-2-15-	0-M35125-10/04/75-9-	1-													18-1-6-4-6-	-1-	-2-3-2-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
30-45	2400-112.0944-2-15-	0-M35126-10/04/75-9-	1-													18-1-6-4-6-	-1-	-2-3-2-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50	
30-45	2197-112.1159-2-15-	0-M35127-10/04/75-9-	2-													28-2-6-4-6-	-1-	-2-3-2-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70	
30-45	2175-112.0942-2-15-	0-M35128-10/04/75-9-	2-													18-2-6-4-6-	-1-	-2-3-2-2-2-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50	
30-45	2150-112.0642-2-15-	0-M35129-10/04/75-9-	3-													18-2-6-4-6-	-1-	-2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50	
30-45	2161-112.0133-2-15-	0-M35130-10/04/75-10-	5-													14-2-6-4-6-	-1-	-2-3-3-3-2-	-3-	-	-	-	-	-</										

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

2

DOE SAMPLE NUMBER						DOE SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE										ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Concentrations reported in weight parts per million (ppm)										Concentrations in weight ppm	
							Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li	
30-45.0997-112.6423-2-15-						0-M35085	-5	-5	-5	-10	-20	-15	7	-10	-15	2	16	
30-45.0986-112.7086-2-11-						0-M35086	-5	-5	-5	-10	-20	-15	6	-10	-15	1	12	
30-45.0533-112.6383-2-12-						0-M35087	-5	-5	-5	18	-20	-15	11	-10	-15	2	22	
30-45.0922-112.4900-2-15-						0-M35088	-5	-5	-5	23	-20	-15	10	-10	-15	2	26	
30-45.0461-112.4972-2-15-						0-M35089	-5	-5	-5	37	-20	22	6	-10	-15	2	21	
30-45.0372-112.4750-2-15-						0-M35090	-5	-5	-5	21	-20	-15	5	-10	-15	2	28	
30-45.0492-112.4483-2-15-						0-M35091	-5	-5	-5	21	39	16	9	-10	-15	2	23	
30-45.0492-112.4472-2-15-						0-M35092	-5	-5	-5	11	-20	-15	14	-10	-15	2	32	
30-45.0206-112.4542-2-12-						0-M35093	12	-5	-5	25	45	22	-5	10	-15	2	11	
30-45.0186-112.4122-2-12-						0-M35094	-5	8	-5	16	-20	36	-5	-10	-15	3	16	
30-45.0378-112.4039-2-15-						0-M35095	-5	-5	-5	21	27	43	13	-10	-15	2	37	
30-45.0375-112.4031-2-15-						0-M35096	-5	-5	-5	19	-20	-15	13	-10	-15	2	34	
30-45.0228-112.3653-2-12-						0-M35097	5	-5	-5	10	-20	27	10	-10	-15	3	27	
30-45.0306-112.2803-2-15-						0-M35098	-5	8	-5	34	-20	25	8	-10	-15	3	40	
30-45.0522-112.2572-2-15-						0-M35099	-5	-5	-5	44	-20	67	14	-10	-15	2	17	
30-45.0550-112.2396-2-12-						0-M35100	-5	6	-5	21	23	37	18	-10	15	2	24	
30-45.0256-112.2279-2-12-						0-M35101	-5	-5	-5	22	-20	15	18	-10	-15	2	15	
30-45.0281-112.1767-2-15-						0-M35102	-5	-5	-5	-10	26	-15	14	-10	-15	3	39	
30-45.0367-112.1653-2-15-						0-M35103	-5	-5	-5	28	-20	-15	13	-10	-15	3	46	
30-45.0314-112.1333-2-12-						0-M35104	-5	-5	-5	-10	-20	44	16	12	-15	2	24	
30-45.0597-112.1444-2-15-						0-M35105	-5	7	-5	26	-20	21	12	-10	-15	2	75	
30-45.0600-112.1547-2-15-						0-M35106	-5	-5	-5	19	-20	60	-5	-10	-15	2	22	
30-45.1031-112.1903-2-15-						0-M35108	-5	-5	-5	38	-20	49	9	-10	-15	3	22	
30-45.1167-112.1969-2-15-						0-M35109	-5	-5	-5	27	-20	48	16	-10	-15	3	23	
30-45.0975-112.2031-2-15-						0-M35110	-5	-5	-5	25	-20	40	9	-10	-15	3	39	
30-45.0789-112.2175-2-15-						0-M35111	-5	-5	-5	38	-20	51	16	-10	-15	3	39	
30-45.0681-112.2647-2-12-						0-M35112	5	-5	-5	13	-20	47	-5	-10	-15	2	11	
30-45.0731-112.2669-2-15-						0-M35113	-5	-5	-5	25	-20	43	10	-10	-15	3	23	
30-45.0739-112.2939-2-15-						0-M35114	-5	-5	-5	31	-20	37	11	-10	-15	3	29	
30-45.0922-112.2922-2-12-						0-M35115	14	-5	-5	-10	-20	50	13	10	-15	1	9	
30-45.0917-112.2931-2-15-						0-M35116	-5	5	-5	27	-20	28	7	-10	-15	2	30	
30-45.0950-112.3308-2-15-						0-M35117	-5	5	-5	27	-20	-15	14	-10	-15	2	40	
30-45.1183-112.3383-2-12-						0-M35118	-5	-5	-5	36	-20	40	12	-10	-15	2	26	
30-45.1200-112.3356-2-12-						0-M35119	-5	-5	-5	38	-20	27	7	-10	-15	2	29	
30-45.1125-112.3528-2-15-						0-M35120	-5	10	-5	31	-20	43	14	-10	-15	3	27	
30-45.0653-112.3439-2-11-						0-M35121	-5	-5	-5	-10	-20	50	17	-10	-15	3	16	
30-45.0981-112.3789-2-11-						0-M35122	4	12	-5	12	-20	46	12	-10	25	2	13	
30-45.1219-112.3792-2-15-						0-M35123	-5	-5	6	37	-20	24	11	-10	-15	2	30	
30-45.0875-112.4264-2-11-						0-M35124	14	7	-5	25	22	55	-5	-10	-15	2	9	
30-45.2356-112.0264-2-15-						0-M35125	-5	-5	-5	33	-20	28	5	-10	-15	3	22	
30-45.2400-112.0944-2-15-						0-M35126	-5	-5	-5	24	-20	26	16	-10	-15	3	61	
30-45.2197-112.1158-2-15-						0-M35127	-5	5	-5	22	-20	19	17	-10	-15	2	18	
30-45.2175-112.0942-2-15-						0-M35128	-5	-5	-5	13	-20	-15	18	-10	-15	1	29	
30-45.2150-112.0642-2-15-						0-M35129	-5	-5	-5	17	-20	-15	20	-10	-15	1	30	
30-45.2161-112.0133-2-15-						0-M35130	-5	-5	-5	28	-20	29	8	-10	-15	2	20	
30-45.1819-112.0636-2-15-						0-M35131	-5	-5	-5	24	-20	33	12	-10	-15	1	19	
30-45.1925-112.0106-2-15-						0-M35132	-5	-5	-5	33	-20	31	16	-10	-15	2	22	
30-45.1611-112.0803-2-15-						0-M35133	-5	6	-5	16	-20	25	19	-10	17	1	23	
30-45.1375-112.1244-2-15-						0-M35134	-5	-5	-5	30	-20	39	10	-10	17	2	23	
30-45.1197-112.1108-2-15-						0-M35135	-5	-5	-5	-10	-20	-15	17	-10	-15	1	22	
30-45.1111-112.0500-2-15-						0-M35136	-5	-5	-5	29	-20	38	10	-10	-15	2	21	

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

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DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS																
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAS 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
30-45.0997-112.6928-2-15-					0-M35085	37720	-0.76	490	87710	46	76	5.1	-8	6.0	4	0.8	9082	4.6	11370	29	0.4	
30-45.0986-112.7086-2-11-					0-M35086	34950	-0.75	452	106400	49	-72	8.0	36	4.6	3	0.9	10140	6.7	10730	28	0.3	
30-45.0533-112.6383-2-12-					0-M35087	55700	-0.75	757	25160	70	-75	5.0	27	2.9	3	0.9	10260	11.0	16930	46	0.3	
30-45.0922-112.4900-2-15-					0-M35088	61840	-0.76	748	66130	91	-84	12.9	63	3.9	6	1.4	19930	8.9	14630	45	0.6	
30-45.0461-112.4972-2-15-					0-M35089	52590	-0.76	493	55890	55	-104	14.8	89	-1.8	4	1.0	27590	5.2	16720	31	0.4	
30-45.0372-112.4750-2-15-					0-M35090	67440	-0.76	688	69050	71	-94	12.8	41	4.1	5	1.2	19760	6.7	13870	43	0.5	
30-45.0492-112.4483-2-15-					0-M35091	57570	-0.76	710	76660	65	-80	11.3	51	3.9	5	1.3	17800	5.7	15510	44	0.4	
30-45.0492-112.4472-2-15-					0-M35092	57250	-0.77	823	82190	79	-83	11.1	50	3.7	5	1.3	17270	6.7	16570	50	0.5	
30-45.0206-112.4542-2-12-					0-M35093	51690	-0.77	514	24530	285	-125	22.5	277	-2.3	14	1.9	52000	50.1	6600	154	1.7	
30-45.0186-112.4122-2-12-					0-M35094	56120	-0.76	788	30470	205	-119	19.2	247	2.9	11	1.9	43340	35.2	9513	119	1.3	
30-45.0378-112.4039-2-15-					0-M35095	64500	-0.76	696	33910	81	-89	13.7	104	2.9	6	1.5	22780	8.5	18570	47	0.6	
30-45.0375-112.4031-2-15-					0-M35096	56340	-0.77	1173	78640	110	-86	12.1	77	2.7	7	1.5	20110	10.7	14360	58	0.6	
30-45.0228-112.3653-2-12-					0-M35097	58260	-0.77	639	28860	181	-116	18.5	220	2.8	10	1.9	37760	31.3	10770	110	1.1	
30-45.0306-112.2803-2-15-					0-M35098	53950	-0.76	474	49120	53	-107	15.4	85	2.3	3	1.1	25530	5.3	13310	27	0.4	
30-45.0522-112.2572-2-15-					0-M35099	53530	-0.77	798	92070	59	-85	15.8	124	4.0	4	1.3	20850	4.4	13050	43	0.3	
30-45.0550-112.2386-2-12-					0-M35100	57550	-0.76	586	27220	259	-101	19.1	239	2.7	13	1.9	41250	40.4	14070	131	1.4	
30-45.0256-112.2278-2-12-					0-M35101	62560	-0.76	958	19580	82	-97	12.5	79	3.7	6	1.4	19480	9.6	21110	48	0.6	
30-45.0281-112.1767-2-15-					0-M35102	69980	-0.77	654	37730	101	-110	14.8	100	3.3	7	1.6	23270	9.3	18580	51	0.7	
30-45.0367-112.1653-2-15-					0-M35103	67650	-0.76	649	31620	84	112	12.5	86	3.6	7	1.4	20520	8.0	20250	51	0.6	
30-45.0314-112.1333-2-12-					0-M35104	49810	-0.76	368	42400	206	-108	18.6	206	-1.7	12	1.7	45590	55.8	6914	115	1.8	
30-45.0597-112.1444-2-15-					0-M35105	67720	-0.76	606	33040	97	163	10.7	60	4.2	6	1.3	17340	6.5	22760	48	0.7	
30-45.0600-112.1547-2-15-					0-M35106	67060	-0.77	471	32680	84	-113	21.2	234	3.3	7	1.5	31490	10.8	15340	50	0.8	
30-45.1031-112.1903-2-15-					0-M35108	67000	-0.76	518	40150	88	-100	21.8	222	2.6	9	1.6	33580	13.1	15090	55	0.9	
30-45.1167-112.1969-2-15-					0-M35109	67730	-0.76	484	32130	118	75	20.3	251	3.3	9	1.5	33610	17.4	17280	54	1.1	
30-45.0975-112.2031-2-15-					0-M35110	69310	-0.76	420	32620	85	-106	16.6	91	5.7	5	1.3	22200	6.8	14350	46	0.5	
30-45.0789-112.2175-2-15-					0-M35111	66850	-0.76	495	34030	83	-88	16.1	121	5.5	7	1.3	23540	10.3	12800	46	0.6	
30-45.0681-112.2647-2-12-					0-M35112	48150	0.83	330	39610	223	-115	17.9	201	1.7	10	2.4	46650	54.7	11470	128	1.6	
30-45.0731-112.2660-2-15-					0-M35113	66670	-0.76	499	28810	72	-104	15.0	103	4.6	5	1.3	22020	7.2	13970	35	0.5	
30-45.0739-112.2939-2-15-					0-M35114	67960	-0.77	515	28320	85	-91	17.1	118	5.6	5	1.4	22670	7.4	17130	39	0.6	
30-45.0922-112.2922-2-12-					0-M35115	46170	0.87	-184	38990	303	-115	18.5	242	-2.2	14	2.2	58250	85.9	9072	179	2.2	
30-45.0917-112.2931-2-15-					0-M35116	54170	-0.76	462	52470	60	-97	15.0	70	2.5	4	1.1	25890	5.8	13170	32	0.4	
30-45.0950-112.3308-2-15-					0-M35117	54970	-0.76	410	53420	55	-106	12.5	68	2.9	4	1.1	23770	4.5	14960	39	0.4	
30-45.1183-112.3383-2-12-					0-M35118	68470	-0.76	571	12950	147	-78	15.4	118	3.9	6	1.7	23320	13.6	13910	67	0.5	
30-45.1200-112.3355-2-12-					0-M35119	68720	-0.76	542	13460	118	119	14.6	105	3.7	6	1.7	22690	11.3	14180	65	0.5	
30-45.1125-112.3528-2-15-					0-M35120	67230	-0.77	553	32110	82	-101	17.2	110	5.4	6	1.3	22480	7.8	14090	40	0.5	
30-45.0653-112.3439-2-11-					0-M35121	58130	-0.76	499	26990	187	-113	17.4	200	3.2	9	1.8	37370	28.9	13820	100	1.1	
30-45.0981-112.3789-2-11-					0-M35122	53050	-0.76	397	26940	326	-111	23.7	325	2.8	17	2.2	58170	54.4	15330	162	2.1	
30-45.1219-112.3792-2-15-					0-M35123	54670	-0.76	442	53720	54	-87	13.8	75	2.0	4	1.2	25940	4.6	10910	31	0.4	
30-45.0875-112.4264-2-11-					0-M35124	52360	-0.76	413	28770	260	-126	24.6	308	3.0	15	1.8	58750	50.9	10360	149	2.2	
30-45.2356-112.0264-2-15-					0-M35125	63430	-0.76	763	57250	79	-98	10.3	55	3.5	5	1.4	19890	8.4	18380	47	0.5	
30-45.2400-112.0944-2-15-					0-M35126	61840	-0.77	586	45590	88	-86	13.4	110	2.6	6	1.4	22270	8.1	16380	45	0.6	
30-45.2197-112.1158-2-15-					0-M35127	63760	-0.76	926	54350	91	124	11.2	68	3.4	6	1.5	20980	8.7	17240	50	0.7	
30-45.2175-112.0942-2-15-					0-M35128	54470	-0.76	676	28130	69	133	11.5	50	3.8	4	1.1	17020	8.8	15800	36	0.4	
30-45.2150-112.0642-2-15-					0-M35129	60410	-0.75	807	33290	65	209	7.6	44	2.7	4	1.3	13350	9.7	20910	38	0.5	
30-45.2161-112.0133-2-15-					0-M35130	63000	-0.77	598	43350	106	-87	15.3	139	3.0	7	1.6	26230	12.1	16260	49	0.7	
30-45.1819-112.0636-2-15-					0-M35131	64590	-0.76	754	53710	65	-77	11.7	45	3.8	6	1.3	19640	6.8	19910	41	0.4	
30-45.1925-112.0106-2-15-					0-M35132	62620	-0.76	560	50900	84	-97	16.3	135	2.4	7	1.3	25590	9.7	14060	47	0.7	
30-45.1611-112.0803-2-15-					0-M35133	66730	-0.76	669	28940	67	192	7.1	42	2.5	4	1.2	12740	9.6	17220	37	0.5	
30-45.1375-112.1244-2-15-					0-M35134	64610	-0.77	512	50980	76	-87	13.8	96	2.9	5	1.4	20310	6.8	15710	42	0.6	
30-45.1197-112.1108-2-15-					0-M35135	54860	-0.76	624	34820	99	123	9.2	63	3.6	6	1.4	18440	14.2	17110	53	0.8	
30-45.1111-112.0500-2-15-					0-M35136	66190	-0.76	564	46370	74	-90	15.9	120	2.7	7	1.4	24370	8.5	15650	46	0.6	

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

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DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued)															U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	DOE 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	
30-45.0997-112.6828-2-15-			0-M35085			8569	365	5711	-19	-2	4.1	4.0	-208	-1	-1	7.5	1851	35	2.7	28	0.267	
30-45.0986-112.7086-2-11-			0-M35086			8409	466	5271	21	-2	4.5	4.0	-284	-1	-1	7.3	2533	34	2.9	79	0.274	
30-45.0533-112.6383-2-12-			0-M35087			6735	315	9089	32	-2	4.2	4.1	-268	-1	-1	11.2	3033	53	2.4	-61	0.330	
30-45.0922-112.4900-2-15-			0-M35088			19599	604	8889	-23	-2	9.1	6.5	-305	-1	-1	13.2	5343	67	3.6	130	0.227	
30-45.0461-112.4972-2-15-			0-M35089			42637	1110	11010	-28	-3	13.0	3.4	-415	-1	-1	8.3	2682	82	3.1	-264	0.265	
30-45.0372-112.4750-2-15-			0-M35090			16190	521	8815	54	-2	9.1	4.9	-348	-1	-1	10.4	4383	74	3.5	102	0.250	
30-45.0492-112.4483-2-15-			0-M35091			16190	520	9625	48	-2	8.7	4.9	-292	-1	-1	9.4	3844	62	3.6	111	0.277	
30-45.0492-112.4472-2-15-			0-M35092			16837	584	10990	48	-2	7.9	5.9	-291	-1	-1	10.9	4232	64	3.7	120	0.239	
30-45.0206-112.4542-2-12-			0-M35093			25440	1683	11580	-36	-3	21.5	18.1	-504	3	-2	52.6	17470	147	13.9	-359	0.186	
30-45.0186-112.4122-2-12-			0-M35094			22710	1315	12730	47	-3	19.0	14.8	-481	2	2	38.3	13220	132	10.1	152	0.201	
30-45.0378-112.4039-2-15-			0-M35095			26240	597	14880	44	-2	11.4	7.0	-304	-1	-1	13.8	4177	73	5.4	73	0.232	
30-45.0375-112.4031-2-15-			0-M35096			13340	762	10930	49	-2	9.0	6.6	337	-1	-1	14.6	5623	76	5.0	86	0.212	
30-45.0228-112.3653-2-12-			0-M35097			26720	1247	13370	-34	-3	16.5	13.2	-449	-1	2	36.3	12570	122	9.8	96	0.187	
30-45.0305-112.2803-2-15-			0-M35098			48730	995	11780	39	-2	11.8	4.2	-417	-1	1	8.8	2544	75	3.0	73	0.261	
30-45.0522-112.2572-2-15-			0-M35099			42970	623	8319	37	-2	10.3	4.4	-327	-1	-1	8.5	3628	91	2.1	95	0.306	
30-45.0550-112.2386-2-12-			0-M35100			25400	1296	13210	36	-3	16.9	20.6	-398	-1	2	44.8	14410	144	12.7	131	0.183	
30-45.0256-112.2278-2-12-			0-M35101			11340	742	12720	48	-2	8.8	5.8	-355	-1	-1	12.0	4574	64	4.2	122	0.267	
30-45.0281-112.1767-2-15-			0-M35102			22200	642	13730	43	-2	11.1	7.3	-391	2	-1	17.1	4223	71	4.8	99	0.205	
30-45.0367-112.1653-2-15-			0-M35103			21540	575	14330	60	-2	10.3	5.8	-305	-1	1	12.5	3412	63	5.3	102	0.248	
30-45.0314-112.1333-2-12-			0-M35104			32730	1757	10360	32	-3	19.0	18.9	-436	-1	2	41.6	8601	92	14.3		0.262	
30-45.0597-112.1444-2-15-			0-M35105			23140	549	13200	-28	-3	8.2	5.7	-356	-1	-1	12.7	3317	53	3.6	-103	0.268	
30-45.0600-112.1547-2-15-			0-M35106			32280	988	14870	37	-2	17.2	6.7	-422	-1	-1	13.5	5652	132	7.1	94	0.207	
30-45.1031-112.1903-2-15-			0-M35108			35922	1071	12940	35	-3	18.6	7.9	-397	-1	2	15.7	6740	129	6.8	122	0.204	
30-45.1167-112.1969-2-15-			0-M35109			29107	1156	14030	37	-3	17.5	10.2	-370	2	-1	16.5	7870	121	8.6	98	0.218	
30-45.0975-112.2031-2-15-			0-M35110			29157	714	14510	46	-3	11.4	5.3	-380	-1	-1	10.4	3942	84	5.5	-74	0.231	
30-45.0789-112.2175-2-15-			0-M35111			22010	745	14080	35	-3	12.1	5.6	-315	-1	-1	14.0	4268	94	5.9	161	0.193	
30-45.0681-112.2647-2-12-			0-M35112			27527	1605	10270	-22	-2	19.5	15.6	-456	1	2	43.6	8145	92	13.3	121	0.261	
30-45.0731-112.2669-2-15-			0-M35113			25430	666	16600	42	-2	11.5	5.0	-351	-1	-1	9.3	3835	94	4.0	120	0.237	
30-45.0739-112.2939-2-15-			0-M35114			19820	704	14130	67	-2	10.9	6.4	-322	-1	-1	11.1	3968	85	4.2	-97	0.207	
30-45.0922-112.2922-2-12-			0-M35115			30917	1966	9017	-35	-3	23.1	25.3	-449	2	3	62.5	11030	114	16.9	-283	0.262	
30-45.0917-112.2931-2-15-			0-M35116			44750	969	10780	38	-2	10.5	5.0	-383	-1	-1	10.6	3004	74	3.2	-43	0.245	
30-45.0950-112.3308-2-15-			0-M35117			44227	953	11080	46	-2	10.7	4.2	-422	-1	-1	10.1	3405	68	3.4	89	0.277	
30-45.1183-112.3383-2-12-			0-M35118			27560	772	9513	48	-2	10.6	10.5	-328	-1	-1	23.4	4512	82	4.9	-97	0.295	
30-45.1200-112.3356-2-12-			0-M35119			20690	801	9820	-30	-3	10.0	8.3	-324	-1	-1	20.9	4312	90	3.4	-51	0.321	
30-45.1125-112.3528-2-15-			0-M35120			29490	691	14420	46	-2	11.3	5.5	-354	-1	-1	12.2	3790	78	3.7	124	0.197	
30-45.0653-112.3439-2-11-			0-M35121			25407	1135	12590	-22	-2	17.0	12.2	-442	-1	2	32.3	12090	122	9.1	74	0.211	
30-45.0981-112.3789-2-11-			0-M35122			28277	1699	10540	-29	-3	24.9	23.2	-454	3	2	54.8	20370	167	16.7	130	0.186	
30-45.1219-112.3792-2-15-			0-M35123			48030	1048	11490	-26	-2	11.3	3.7	-340	-1	-1	8.8	2854	82	1.9	-199	0.261	
30-45.0875-112.4264-2-11-			0-M35124			10760	1747	10400	29	-3	25.0	25.3	-513	3	3	49.1	21310	165	15.8		0.206	
30-45.2356-112.0264-2-15-			0-M35125			11110	528	11990	-20	-2	9.4	6.0	-333	-1	-1	11.7	3457	66	4.4	-48	0.282	
30-45.2400-112.0944-2-15-			0-M35126			23077	632	13760	44	-2	10.8	7.3	-297	-1	-1	11.9	4598	73	4.7	71	0.210	
30-45.2197-112.1158-2-15-			0-M35127			14430	576	11550	-27	-3	9.4	5.7	-284	-1	-1	14.7	5642	76	5.0	103	0.252	
30-45.2175-112.0942-2-15-			0-M35128			18930	631	10450	38	-2	7.6	4.5	-348	-1	-1	10.2	3816	48	4.1	107	0.343	
30-45.2150-112.0642-2-15-			0-M35129			9022	511	18790	44	-2	6.5	4.4	-331	-1	-1	10.8	3746	40	3.8	76	0.324	
30-45.2161-112.0133-2-15-			0-M35130			24267	782	13510	51	-2	12.4	6.9	-322	-1	-1	14.9	5680	90	6.0	106	0.215	
30-45.1819-112.0636-2-15-			0-M35131			16790	480	9813	-29	-3	9.5	4.8	269	-1	-1	11.9	5288	71	4.8	103	0.277	
30-45.1925-112.0106-2-15-			0-M35132			22440	750	13450	42	-2	12.9	6.5	-351	-1	1	13.1	4749	84	5.7	101	0.214	
30-45.1611-112.0803-2-15-			0-M35133			7541	516	19430	35	-2	6.4	4.7	-331	-1	1	9.7	3788	40	4.4	64	0.340	
30-45.1375-112.1244-2-15-			0-M35134			23220	557	14750	39	-2	10.2	5.7	-290	-1	-1	10.8	3520	69	4.4	98	0.204	
30-45.1197-112.1108-2-15-			0-M35135			28818	572	10850	50	-2	8.2	5.0	-290	-1	-1	13.9	4841	65	4.0	87	0.281	
30-45.1111-112.0500-2-15-			0-M35136			25950	740	14360	47	-2	12.5	6.1	-316	1	-1	14.0	4580	74	5.9	120	0.186	

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

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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 (umho/cm)	SCINTILLOMETER (cld 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																										
30-45.1133-112.0475-2-15-						0-M35137-10/04/75-12-			9-							18-2-6-4-6-	-1-	-2-3-2-2-2-	-3-														6.10	
30-45.1281-112.0344-2-15-						0-M35133-10/04/75-12-			9-							18-2-6-4-6-	-1-	-2-3-2-3-2-	-3-															4.20
30-45.1439-112.0100-2-15-						0-M35139-10/04/75-13-			9-							18-2-6-4-6-	-1-	-2-3-3-3-2-	-3-															3.00
30-45.0953-112.1053-2-15-						0-M35140-10/04/75-13-			9-							9-2-6-4-6-	-1-	-2-4-3-2-2-	-3-															4.10
30-45.0711-112.1208-2-15-						0-M35141-10/04/75-13-			9-							18-2-6-4-6-	-1-	-2-4-3-2-2-	-3-															3.20
30-45.0864-112.0711-2-15-						0-M35142-10/04/75-13-			9-							9-2-6-4-6-	-1-	-2-4-3-2-2-	-3-															4.00
30-45.0683-112.0508-2-15-						0-M35143-10/04/75-14-			9-							14-2-6-4-6-	-1-	-2-4-3-2-2-	-3-															3.50
30-45.0222-112.0633-2-15-						0-M35144-10/04/75-14-			9-							18-2-6-4-6-	-1-	-2-3-3-3-2-	-3-															3.20
30-45.0244-112.0517-2-15-						0-M35145-10/04/75-14-			9-							18-2-6-4-6-	-1-	-2-3-3-3-2-	-3-															4.80
30-45.0014-112.0717-2-15-						0-M35146-10/04/75-14-			9-							14-2-6-4-6-	-1-	-2-3-3-3-2-	-3-															5.10
30-45.0400-112.0994-2-15-						0-M35147-10/04/75-15-			9-							18-2-6-4-6-	-1-	-2-3-2-2-3-	-3-															3.50
30-45.0131-112.0997-2-12-						0-M35148-10/04/75-15-			9-	7.4-C-		5.5-	43-			18-2-6-4-6-	-1-	-2-2-3-2-3-	-3-															3.20
30-45.0494-112.1050-2-12-						0-M35149-10/04/75-15-			9-	7.8-C-		5.7-	120-			18-2-6-4-6-3-3-1-	-2-2-3-2-3-	-3-																5.10
30-45.0986-112.0247-2-15-						0-M35150-10/04/75-17-			9-							14-2-6-4-6-	-1-	-2-3-3-3-3-	-3-															2.80
30-45.0733-112.0883-2-15-						0-M35151-10/04/75-16-			9-							14-2-6-4-6-	-1-	-2-3-2-2-3-	-3-															5.00
30-45.0806-112.0458-2-15-						0-M35152-10/04/75-16-			9-							18-2-6-4-6-	-1-	-2-3-2-3-3-	-3-															6.40
30-45.0753-112.0264-2-15-						0-M35153-10/04/75-16-			9-							14-2-6-4-6-	-1-	-2-3-2-3-3-	-3-															3.10
30-45.0639-112.0269-2-12-						0-M35154-10/04/75-17-			9-	9.8-		5.7-	220-			28-2-6-4-6-3-3-2-	-2-2-3-2-3-	-3-																2.80
30-45.0492-112.0003-2-15-						0-M35155-10/04/75-18-			9-							18-2-6-4-6-	-1-	-2-4-3-2-3-	-8-															12.20
30-45.1022-112.1189-2-15-						0-M35156-10/04/75-19-			9-							18-2-6-4-6-	-1-	-2-3-2-3-3-	-3-															2.30
30-45.0972-112.1003-2-12-						0-M35157-10/04/75-19-			9-	9.6-		5.7-	80-			18-2-6-4-6-3-3-2-	-2-2-3-2-3-	-3-																12.80
30-45.2203-112.4283-2-11-						0-M35158-10/05/75- 2-			5-	7.4-		5.2-	38-			-2-6-5-6-3-3-1-	-2-3-2-1-	-3-																5.70
30-45.2106-112.4069-2-15-						0-M35159-10/05/75- 9-			5-							-2-6-4-6-	-1-	-2-3-2-3-1-	-3-															3.70
30-45.2200-112.3914-2-15-						0-M35160-10/05/75- 9-			5-							-2-6-4-6-	-1-	-2-3-3-3-1-	-3-															4.10
30-45.1836-112.4225-2-15-						0-M35161-10/05/75-10-			6-							-2-6-4-6-	-1-	-2-3-3-3-1-	-3-															3.10
30-45.1728-112.4194-2-11-						0-M35162-10/05/75-10-			6-	6.4-		5.5-	65-			-2-6-5-6-3-3-1-	-2-3-2-1-	-3-																4.30
30-45.1844-112.4572-2-15-						0-M35163-10/05/75-10-			6-							-2-6-4-6-	-1-	-2-3-3-3-1-	-3-															6.60
30-45.1686-112.4628-2-15-						0-M35164-10/05/75-11-			7-							-2-6-4-6-	-1-	-2-3-3-2-1-	-3-															4.70
30-45.1597-112.4844-2-15-						0-M35165-10/05/75-11-			7-							-2-6-3-6-	-1-	-2-3-2-3-1-	-3-															2.80
30-45.1617-112.4372-2-15-						0-M35166-10/05/75-11-			7-							-2-6-4-6-	-1-	-2-3-3-3-1-	-3-															2.70
30-45.1264-112.4100-2-12-						0-M35167-10/05/75-12-			7-	7.8-C-		5.7-	135-			-2-6-4-6-3-3-1-	-2-4-3-2-1-	-3-																5.10
30-45.1306-112.3767-2-15-						0-M35168-10/05/75-12-			7-							-2-6-3-6-	-1-	-2-4-3-2-1-	-3-															5.20
30-45.1553-112.3814-2-11-						0-M35169-10/05/75-12-			7-	6.6-		5.5-	75-			-2-6-6-6-3-3-1-	-2-2-3-1-	-3-																4.90
30-45.1653-112.3867-2-15-						0-M35170-10/05/75-13-			7-							-2-6-4-6-	-1-	-2-3-2-2-1-	-3-															5.30
30-45.1856-112.3686-2-11-						0-M35171-10/05/75-13-			7-	5.6-		5.2-	22-			-2-6-4-6-3-3-1-	-3-2-3-1-	-3-																3.00
30-45.1539-112.3531-2-11-						0-M35172-10/05/75-13-			7-	6.2-C-		5.7-	110-			-2-6-5-6-3-3-1-	-4-2-2-1-	-3-																2.90
30-45.1636-112.3267-2-12-						0-M35173-10/05/75-14-			8-	7.8-		5.7-	140-			-2-6-4-6-3-3-1-	-2-4-3-2-1-	-3-																3.50
30-45.1567-112.3267-2-12-						0-M35174-10/05/75-14-			8-	6.4-C-		5.5-	150-			-2-6-4-6-3-3-1-	-2-2-3-2-1-	-3-																3.80
30-45.1264-112.3400-2-12-						0-M35175-10/05/75-15-			8-	6.4-		5.5-	180-			-2-6-4-6-3-3-1-	-2-2-2-2-1-	-3-																2.60
30-45.1625-112.2883-2-11-						0-M35176-10/05/75-15-			8-	6.8-		5.2-	55-			-2-6-4-6-3-3-1-	-3-3-3-1-	-3-																4.10
30-45.1869-112.3064-2-11-						0-M35177-10/05/75-16-			8-	7.4-		5.2-	47-			-2-6-4-6-3-3-1-	-4-3-2-1-	-3-																6.20
30-45.1878-112.3175-2-11-						0-M35178-10/05/75-16-			8-	6.6-		5.5-	75-			-2-6-4-6-3-3-1-	-2-2-3-1-	-3-																5.30
30-45.7333-112.7372-2-15-						0-M35179-10/05/75-10-			12-							7-4-	-4-5-	-1-	-2-3-3-4-2-	-1-														3.90
30-45.7256-112.7353-2-15-						0-M35180-10/05/75-10-			12-							9-1-1-4-1-	-1-	-2-3-3-5-2-	-1-															4.60
30-45.7144-112.7031-2-12-						0-M35181-10/05/75-11-			13-	5.8-		5.7-	240-			3-4-	-4-6-3-3-1-	-2-3-3-4-1-	-1-															3.40
30-45.7300-112.6744-2-15-						0-M35182-10/05/75-11-			13-							9-1-6-4-6-	-1-	-2-2-3-5-1-	-1-															5.00
30-45.7386-112.6753-2-15-						0-M35183-10/05/75-12-			13-							9-3-7-4-6-	-1-	-2-1-3-5-1-	-1-															7.70
30-45.7428-11																																		

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

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DOE SAMPLE NUMBER						DOE SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY		
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Concentrations reported in weight parts per million (ppm)									Concentrations in weight ppm		
							Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li	
30-45.1133-112.0475-2-15-						0-M35137	-5	-5	-5	21	46	19	12	-10	-15		3	24
30-45.1281-112.0344-2-15-						0-M35138	-5	5	-5	22	-20	-15	13	-10	-15		2	24
30-45.1439-112.0100-2-15-						0-M35139	-5	-5	-5	12	-20	15	18	-10	-15		1	37
30-45.0953-112.1053-2-15-						0-M35140	-5	-5	-5	14	-20	-15	17	-10	-15		2	28
30-45.0711-112.1208-2-15-						0-M35141	-5	-5	-5	20	-20	57	-5	-10	-15		-1	43
30-45.0864-112.0711-2-15-						0-M35142	-5	-5	-5	19	-20	-15	20	-10	-15		1	30
30-45.0683-112.0508-2-15-						0-M35143	-5	-5	-5	17	-20	-15	17	-10	-15		1	34
30-45.0222-112.0633-2-15-						0-M35144	-5	-5	-5	18	-20	-15	14	-10	-15		1	20
30-45.0244-112.0517-2-15-						0-M35145	-5	-5	-5	18	-20	21	11	-10	-15		-1	16
30-45.0014-112.0717-2-15-						0-M35146	-5	5	-5	-10	-20	19	18	-10	-15		-1	17
30-45.0400-112.0994-2-15-						0-M35147	-5	-5	-5	15	-20	-15	9	-10	-15		1	21
30-45.0131-112.0997-2-12-						0-M35148	-5	-5	-5	11	-20	-15	16	-10	-15		1	22
30-45.0494-112.1050-2-12-						0-M35149	-5	-5	-5	23	-20	22	9	-10	21		2	19
30-45.0986-112.0247-2-15-						0-M35150	-5	-5	-5	19	-20	24	13	-10	-15		-1	21
30-45.0733-112.0883-2-15-						0-M35151	-5	5	-5	24	-20	23	5	-10	-15		1	18
30-45.0806-112.0458-2-15-						0-M35152	-5	11	-5	10	-20	-15	14	-10	-15		-1	12
30-45.0753-112.0264-2-15-						0-M35153	-5	-5	-5	13	-20	-15	17	-10	-15		-1	17
30-45.0639-112.0269-2-12-						0-M35154	-5	-5	-5	22	-20	21	10	-10	-15		1	29
30-45.0492-112.0003-2-15-						0-M35155	12	-5	5	-10	-20	20	-5	-10	-15		-1	12
30-45.1022-112.1189-2-15-						0-M35156	-5	-5	-5	14	-20	17	-5	-10	-15		1	19
30-45.0972-112.1003-2-12-						0-M35157	9	-5	-5	24	-20	40	-5	-10	-15		1	13
30-45.2203-112.4283-2-11-						0-M35158	-5	5	-5	20	-20	42	10	-10	-15		2	16
30-45.2106-112.4069-2-15-						0-M35159	-5	-5	-5	25	-20	17	12	-10	-15		1	21
30-45.2200-112.3914-2-15-						0-M35160	-5	8	-5	14	-20	26	10	-10	-15		-1	21
30-45.1835-112.4225-2-15-						0-M35161	-5	5	-5	23	-20	29	13	-10	-15		2	48
30-45.1728-112.4194-2-11-						0-M35162	-5	6	-5	14	-20	26	12	-10	-15		1	21
30-45.1844-112.4572-2-15-						0-M35163	-5	6	-5	18	-20	54	11	-10	-15		1	14
30-45.1686-112.4628-2-15-						0-M35164	-5	-5	-5	20	-20	15	16	-10	-15		1	26
30-45.1597-112.4844-2-15-						0-M35165	-5	5	-5	30	-20	55	10	-10	-15		2	29
30-45.1617-112.4372-2-15-						0-M35166	-5	-5	-5	27	-20	27	-5	-10	-15		2	22
30-45.1264-112.4100-2-12-						0-M35167	-5	-5	6	27	-20	50	7	-10	-15		1	20
30-45.1306-112.3767-2-15-						0-M35168	-5	6	-5	24	-20	21	14	-10	25		1	21
30-45.1553-112.3814-2-11-						0-M35169	-5	-5	-5	15	-20	26	8	-10	-15		2	22
30-45.1653-112.3867-2-15-						0-M35170	-5	-5	-5	27	-20	51	-5	-10	-15		2	19
30-45.1856-112.3686-2-11-						0-M35171	-5	-5	-5	15	-20	-15	19	-10	-15		1	32
30-45.1539-112.3531-2-11-						0-M35172	-5	-5	-5	36	-20	64	12	-10	-15		1	24
30-45.1636-112.3267-2-12-						0-M35173	-5	-5	-5	18	-20	-15	10	-10	-15		2	24
30-45.1567-112.3267-2-12-						0-M35174											2	20
30-45.1264-112.3400-2-12-						0-M35175	-5	-5	-5	35	-20	36	9	-10	-15		2	22
30-45.1625-112.2883-2-11-						0-M35176	-5	-5	-5	18	-20	32	7	-10	-15		1	11
30-45.1869-112.3064-2-11-						0-M35177	-5	-5	-5	30	-20	29	8	-10	-15		2	17
30-45.1878-112.3175-2-11-						0-M35178	-5	7	-5	-10	-20	23	11	-10	-15		2	20
30-45.7333-112.7372-2-15-						0-M35179	-5	-5	-5	26	-20	21	13	-10	-15		1	29
30-45.7256-112.7353-2-15-						0-M35180	-5	8	-5	32	-20	-15	7	-10	-15		2	17
30-45.7144-112.7031-2-12-						0-M35181	-5	-5	-5	25	-20	-15	9	-10	-15		1	27
30-45.7300-112.6744-2-15-						0-M35182	-5	-5	-5	22	-20	-15	11	-10	-15		2	27
30-45.7386-112.6753-2-15-						0-M35183	-5	-5	-5	16	-20	-15	21	-10	-15		2	44
30-45.7428-112.6700-2-12-						0-M35184	-5	-5	-5	11	-20	-15	13	-10	-15		2	45
30-45.7436-112.6700-2-12-						0-M35185	-5	-5	-5	22	-20	-15	16	-10	-15		2	39
30-45.6747-112.6928-2-15-						0-M35186	-5	-5	-5	27	-20	-15	16	-10	-15		2	19
30-45.6675-112.6767-2-12-						0-M35187	-5	-5	-5	31	-20	-15	40	-10	-15		1	42

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

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DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS																
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAS. 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
30-45.1133-112.0475-2-15-						0-M35137	59400	-0.05	1410	56970	144	154	11.8	92	3.4	8	1.5	27130	23.1	15200	82	0.8
30-45.1281-112.0344-2-15-						0-M35138	67780	-0.07	819	35220	91	304	9.0	40	3.7	6	1.2	14500	8.2	28100	52	0.7
30-45.1439-112.0100-2-15-						0-M35139	67530	-0.07	744	30850	63	226	7.7	57	3.5	5	1.2	16560	7.1	19150	42	0.4
30-45.0953-112.1053-2-15-						0-M35140	71830	-0.06	726	34250	87	372	10.6	25	3.1	7	1.1	15870	7.5	27800	48	0.6
30-45.0711-112.1208-2-15-						0-M35141	62260	-0.07	754	69430	65	-102	15.2	124	3.6	4	1.4	22970	6.6	14750	46	0.3
30-45.0864-112.0711-2-15-						0-M35142	69260	-0.06	672	37400	91	542	8.0	32	2.8	5	1.3	14040	8.0	29570	47	0.6
30-45.0683-112.0508-2-15-						0-M35143	68810	-0.07	784	29360	69	197	7.5	45	2.6	5	1.3	13970	10.1	19010	36	0.6
30-45.0222-112.0633-2-15-						0-M35144	66240	-0.06	837	56610	77	184	12.9	57	3.9	6	1.3	20270	8.0	17720	43	0.5
30-45.0244-112.0517-2-15-						0-M35145	54030	-0.06	674	38350	131	-92	11.1	81	3.0	7	1.4	23860	17.9	15510	83	0.6
30-45.0014-112.0717-2-15-						0-M35146	55860	-0.07	561	41670	153	143	11.5	99	3.6	6	1.4	23990	22.2	16040	80	0.9
30-45.0400-112.0994-2-15-						0-M35147	62270	-0.08	601	21570	68	-107	7.2	22	3.7	3	1.1	13760	10.4	16000	43	0.3
30-45.0131-112.0997-2-12-						0-M35148	70990	-0.05	839	28150	61	181	8.5	51	2.9	5	1.2	13800	10.1	19920	39	0.6
30-45.0494-112.1050-2-12-						0-M35149	68100	-0.06	815	37400	109	264	11.3	73	1.8	11	1.6	22970	16.8	19040	65	1.2
30-45.0986-112.0247-2-15-						0-M35150	59290	-0.08	331	81280	63	-72	10.4	73	4.9	3	1.0	15850	4.6	12040	28	0.3
30-45.0733-112.0883-2-15-						0-M35151	53780	-0.08	706	36360	137	122	9.6	84	2.6	7	1.5	24160	22.4	17460	71	0.7
30-45.0806-112.0458-2-15-						0-M35152	51300	-0.06	618	32750	237	140	14.1	116	2.1	9	1.5	34410	27.9	13250	138	1.0
30-45.0753-112.0264-2-15-						0-M35153	62500	-0.05	704	31820	60	159	8.4	58	2.7	5	1.2	14970	9.5	17820	39	0.4
30-45.0639-112.0269-2-12-						0-M35154	55280	-0.06	636	29880	63	193	8.0	55	2.8	3	1.1	13870	5.7	19820	34	0.4
30-45.0492-112.0003-2-15-						0-M35155	50650	-0.10	413	33400	228	-112	18.5	232	-2.2	11	2.1	51540	64.6	8478	132	1.9
30-45.1022-112.1189-2-15-						0-M35156	30430	-0.05	464	66910	48	-66	9.2	46	4.4	3	0.9	10750	6.5	12900	29	0.3
30-45.0972-112.1003-2-12-						0-M35157	47490	-0.02	-203	36350	198	-120	18.2	207	-1.6	11	2.8	47540	59.5	-4793	118	1.7
30-45.2203-112.4283-2-11-						0-M35158	62280	-0.09	501	19820	129	-120	17.0	113	-2.0	9	1.7	21530	18.9	16430	59	1.0
30-45.2106-112.4069-2-15-						0-M35159	65800	-0.02	581	34780	85	202	12.8	65	5.4	6	1.2	22400	10.1	21100	54	0.8
30-45.2200-112.3914-2-15-						0-M35160	70060	-0.06	878	28270	83	203	9.6	66	2.6	7	1.2	16770	13.4	18400	46	0.9
30-45.1836-112.4225-2-15-						0-M35161	61500	-0.06	619	40600	86	-104	12.8	103	3.3	6	1.3	22460	9.8	17600	50	0.6
30-45.1728-112.4194-2-11-						0-M35162	55500	-0.08	499	19310	110	-112	15.3	115	2.5	8	1.5	21590	20.0	13360	47	1.0
30-45.1844-112.4572-2-15-						0-M35163	59990	-0.10	560	27570	177	-102	17.7	195	3.5	11	2.0	36810	27.8	11820	100	1.1
30-45.1686-112.4628-2-15-						0-M35164	60440	-0.07	1290	52450	87	-90	14.2	80	6.2	5	1.5	21850	12.4	15830	52	0.5
30-45.1597-112.4844-2-15-						0-M35165	58370	-0.09	470	37930	103	-108	15.4	214	2.4	6	1.4	28050	10.4	15700	55	0.7
30-45.1617-112.4372-2-15-						0-M35166	67750	-0.09	538	32210	91	-96	17.2	130	6.0	7	1.5	24510	10.5	14740	51	0.6
30-45.1264-112.4100-2-12-						0-M35167	68320	-0.07	448	30020	129	-101	21.7	230	3.3	11	1.7	34360	22.7	15710	72	1.2
30-45.1306-112.3767-2-15-						0-M35168	61490	-0.07	1222	51450	95	-91	11.2	79	5.0	6	1.2	23540	12.9	17210	52	0.5
30-45.1553-112.3814-2-11-						0-M35169	61890	-0.09	582	24190	109	-122	18.6	150	-1.9	9	1.6	26170	24.4	13700	48	1.3
30-45.1653-112.3867-2-15-						0-M35170	65220	-0.10	485	27770	141	-101	19.8	231	3.4	10	1.7	36500	22.8	13220	70	1.3
30-45.1856-112.3686-2-11-						0-M35171	71050	-0.05	781	26960	63	179	8.8	45	2.3	5	1.2	14250	8.7	21770	33	0.6
30-45.1539-112.3531-2-11-						0-M35172	67970	-0.07	426	39920	86	-105	19.2	181	3.6	7	1.3	29410	11.3	14440	50	0.6
30-45.1636-112.3267-2-12-						0-M35173	64650	-0.06	782	27440	86	193	7.7	53	2.7	5	1.2	15250	11.8	21870	43	0.8
30-45.1567-112.3267-2-12-						0-M35174	67940	-0.10	635	32780	79	264	13.2	64	4.3	6	1.1	22110	8.8	23060	48	0.6
30-45.1264-112.3400-2-12-						0-M35175	71990	-0.07	532	36020	81	-96	18.2	115	6.1	6	1.3	24720	8.9	13770	43	0.5
30-45.1625-112.2883-2-11-						0-M35176	59030	-0.09	415	19250	96	-108	15.5	104	3.4	7	1.2	21320	13.6	16170	53	0.8
30-45.1869-112.3064-2-11-						0-M35177	68890	-0.09	426	19050	144	-115	16.7	119	3.5	9	1.8	21850	20.1	14980	63	1.3
30-45.1878-112.3175-2-11-						0-M35178	60480	-0.11	586	22180	110	-104	17.8	128	-2.3	11	1.4	25920	21.9	16430	42	1.2
30-45.7333-112.7372-2-15-						0-M35179	67360	-0.06	466	26260	135	-99	8.7	29	2.8	7	1.3	21800	11.3	15800	84	0.5
30-45.7256-112.7353-2-15-						0-M35180	68480	-0.06	526	17480	84	-84	8.3	36	4.0	4	1.0	23240	11.5	15690	51	0.4
30-45.7144-112.7031-2-12-						0-M35181	62760	-0.07	445	20380	131	-105	9.2	41	3.9	5	1.3	18040	12.8	15900	69	0.4
30-45.7300-112.6744-2-15-						0-M35182	70280	-0.08	382	31040	269	-126	6.7	43	2.9	7	1.5	20420	14.8	11480	167	0.8
30-45.7386-112.6753-2-15-						0-M35183	81430	-0.06	458	19270	231	-131	6.4	18	4.0	11	1.3	14190	11.5	9502	133	1.1
30-45.7428-112.6700-2-12-						0-M35184	76010	-0.14	423	18780	270	-146	6.1	29	3.8	8	1.5	20670	12.0	17910	170	0.6
30-45.7436-112.6700-2-12-						0-M35185	74240	-0.07	342	31750	229	-142	7.5	36	4.1	5	1.3	15010	12.4	14360	128	0.6
30-45.6747-112.6928-2-15-						0-M35186	62590	-0.07	650	13350	68	-68	8.5	32	5.8	4	1.2	18020	7.4	22110	40	0.4
30-45.6675-112.6767-2-12-						0-M35187	59920	-0.08	489	31840	174	-77	14.8	71	5.3	6	1.7	26660	19.1	19370	93	0.6

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

④

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	
30-45.1133-112.0475-2-15-	0-M35137	10937	776	12020	58	-2	10.3	9.3	-353	2	-1	27.6	8250	92	7.2	97	0.221				
30-45.1281-112.0344-2-15-	0-M35138	7331	498	15060	53	-2	6.4	7.6	-363	-1	-1	15.0	3334	38	5.5		0.280				
30-45.1439-112.0100-2-15-	0-M35139	14410	529	17050	60	-2	7.6	4.1	293	-1	-1	10.7	3488	55	3.3	-59	0.280				
30-45.0953-112.1053-2-15-	0-M35140	12497	494	13780	78	-2	6.7	6.3	-310	-1	1	14.5	2909	34	4.9	90	0.283				
30-45.0711-112.1208-2-15-	0-M35141	32410	693	11800	50	-2	10.2	4.8	-381	-1	-1	9.8	4944	85	2.3	118	0.327				
30-45.0864-112.0711-2-15-	0-M35142	9837	463	15550	74	-2	6.3	8.0	-348	2	1	14.9	2772	34	4.4	107	0.268				
30-45.0683-112.0508-2-15-	0-M35143	9029	572	19050	43	-2	6.7	5.2	-315	-1	-1	11.0	3720	45	5.6	-77	0.318				
30-45.0222-112.0633-2-15-	0-M35144	14327	544	12130	51	-2	9.1	5.9	-292	-1	1	12.2	4571	66	4.2	94	0.262				
30-45.0244-112.0517-2-15-	0-M35145	10520	751	11090	43	-2	9.7	8.1	-354	-1	-1	19.9	7142	79	6.5	109	0.241				
30-45.0014-112.0717-2-15-	0-M35146	11490	729	10760	46	-2	9.6	9.0	-385	-1	-1	20.3	6964	82	5.7	119	0.251				
30-45.0400-112.0994-2-15-	0-M35147	10930	1717	8852	62	-2	5.6	3.6	-508	-1	-1	11.0	2858	59	-1.7	120	0.318				
30-45.0131-112.0997-2-12-	0-M35148	8402	622	19950	35	-2	6.9	4.5	388	1	-1	10.7	4046	41	4.1	78	0.299				
30-45.0494-112.1050-2-12-	0-M35149	11097	903	17470	56	-2	11.5	8.4	-397	2	2	17.6	7140	64	8.5	129	0.290				
30-45.0986-112.0247-2-15-	0-M35150	17197	277	3441	-24	-2	8.1	4.7	-286	-1	-1	7.9	2892	70	4.2	125	0.354				
30-45.0733-112.0883-2-15-	0-M35151	14277	685	10440	-26	-2	9.3	8.2	-291	-1	-1	17.9	7990	80	6.6	110	0.279				
30-45.0806-112.0458-2-15-	0-M35152	12230	951	10470	28	-2	12.4	12.9	-322	2	1	33.1	12120	121	7.6	116	0.193				
30-45.0753-112.0264-2-15-	0-M35153	9143	519	18080	46	-2	6.8	4.7	-327	-1	1	10.0	3059	48	3.7	90	0.310				
30-45.0639-112.0269-2-12-	0-M35154	11647	459	18560	38	-2	6.2	4.2	-335	-1	-1	12.3	2767	39	3.5	57	0.228				
30-45.0492-112.0003-2-15-	0-M35155	28767	1747	10300	-34	-3	21.5	17.3	-458	-1	2	45.8	9357	102	14.7		0.266				
30-45.1022-112.1189-2-15-	0-M35156	14310	636	5573	-14	-2	5.2	3.4	-272		-1	7.5	2096	43	2.2	73	0.307				
30-45.0972-112.1003-2-12-	0-M35157	28100	1675	10140	-22	-2	20.4	16.6	-492	-1	2	41.7	8494	105	13.8	102	0.307				
30-45.2203-112.4283-2-11-	0-M35158	19740	540	14830	-29	-3	11.9	8.8	-421	-1	-1	14.0	5372	99	8.2	127	0.407				
30-45.2106-112.4069-2-15-	0-M35159	21187	730	11980	-33	-3	10.7	6.1	453	-1	-1	17.1	4894	69	5.2	-222	0.216				
30-45.2200-112.3914-2-15-	0-M35160	8917	718	18910	44	-2	8.8	5.8	-327	1	1	15.1	5080	56	7.6	86	0.272				
30-45.1836-112.4225-2-15-	0-M35161	21290	647	14190	50	-2	11.2	6.2	-366	2	1	13.0	4065	64	5.0	101	0.238				
30-45.1729-112.4194-2-11-	0-M35162	27409	531	15140	-25	-3	11.2	8.7	-387	2	-1	13.6	6079	80	8.9	106	0.316				
30-45.1844-112.4572-2-15-	0-M35163	25477	1169	13350	-36	-3	15.9	13.2	-413	2	-2	32.0	12180	125	8.4	-132	0.206				
30-45.1686-112.4628-2-15-	0-M35164	15577	812	8036	-21	-2	9.7	6.2	-391	-1	-1	14.4	6419	83	4.4	88	0.326				
30-45.1597-112.4844-2-15-	0-M35165	21577	975	13410	-24	-2	15.1	8.4	-422	-1	-1	13.0	5721	121	6.7		0.215				
30-45.1617-112.4372-2-15-	0-M35166	22197	773	13900	-31	-3	12.7	5.7	-356	-1	-1	13.0	5602	92	4.9	-162	0.208				
30-45.1264-112.4100-2-12-	0-M35167	26550	1983	15150	39	-2	17.6	9.3	-374	2	-1	20.7	7399	124	9.4	107	0.246				
30-45.1306-112.3767-2-15-	0-M35168	15117	818	7896	43	-2	10.2	5.7	-390	-1	-1	15.0	5958	79	4.7	114	0.347				
30-45.1553-112.3814-2-11-	0-M35169	25257	705	17230	-27	-3	14.1	8.9	-431	2	1	14.4	6585	98	9.2	93	0.340				
30-45.1653-112.3867-2-15-	0-M35170	23847	1148	14280	-33	-3	18.3	10.6	-395	2	-1	22.6	9285	139	9.4	-148	0.235				
30-45.1856-112.3686-2-11-	0-M35171	9999	566	19340	53	-2	7.2	4.4	500	-1	-1	9.5	3194	42	4.3	67	0.316				
30-45.1539-112.3531-2-11-	0-M35172	27817	989	12850	-22	-2	15.6	6.8	-404	-1	-1	13.4	5892	105	6.4	70	0.216				
30-45.1636-112.3267-2-12-	0-M35173	8621	643	19070	44	-2	7.5	5.8	-373	-1	-1	12.9	4355	47	5.9	64	0.271				
30-45.1567-112.3267-2-12-	0-M35174	20430	726	12300	70	-3	10.5	6.4	-373	-1	-1	14.1	4832	73	5.2	127	0.270				
30-45.1264-112.3400-2-12-	0-M35175	22617	731	14170	62	-2	12.2	6.5	-337	1	-1	14.1	4427	99	4.7	99	0.184				
30-45.1625-112.2883-2-11-	0-M35176	14397	442	13310	-25	-2	10.5	6.1	-369	-1	-1	10.9	4611	83	5.2	132	0.376				
30-45.1869-112.3064-2-11-	0-M35177	20727	496	14400	-29	-3	12.4	10.4	-404	2	-1	16.0	5677	102	8.7	140	0.388				
30-45.1978-112.3175-2-11-	0-M35178	24409	712	16730	59	-3	14.3	6.9	-376	-1	2	11.3	7574	117	9.1	162	0.469				
30-45.7333-112.7372-2-15-	0-M35179	15260	640	19400	25	-2	6.4	7.9	-322	-1	-1	26.1	2604	60	4.4	84	0.149				
30-45.7256-112.7353-2-15-	0-M35180	16340	484	11270	29	2	8.2	5.1	-302	-1	-1	18.7	2936	96	3.6	114	0.246				
30-45.7144-112.7031-2-12-	0-M35181	19477	633	14770	44	-2	6.8	8.0	-371	-1	-1	20.7	2532	50	3.6	104	0.164				
30-45.7300-112.6744-2-15-	0-M35182	19667	960	26410	-27	-2	7.2	13.2	-405	-1	1	52.8	2581	47	7.4	-65	0.095				
30-45.7386-112.6753-2-15-	0-M35183	11620	980	32990	52	-1	4.8	13.5	-405	2	1	48.7	1726	30	9.0	69	0.158				
30-45.7429-112.6700-2-12-	0-M35184	9032	973	28830	52	-2	5.7	15.6	-472	-1	1	51.5	2460	38	7.2	90	0.107				
30-45.7436-112.6700-2-12-	0-M35185	22567	920	24450	-20	-2	6.7	12.3	-471	-1	1	42.4	-1116	43	6.4	82	0.134				
30-45.6747-112.6928-2-15-	0-M35186	12997	407	9780	-23	-2	7.2	5.3	-247	-1	-1	9.8	2677	63	3.1	96	0.337				
30-45.6675-112.6767-2-12-	0-M35187	41367	750	7195	49	6	12.0	11.1	-335	-1	-1	30.1	4759	96	5.9	136	0.140				

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

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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 (umho/cm)	SCINTILLOMETER (eU/gpm)	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	6325	-112.6567	-2-12-	0-M35188	-17/05/75	-14-	18-	9.6-	-	5.9-	400-	5-4-	-3-6-3-3-1-	2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.30		
30-45	7017	-112.6294	-2-12-	0-M35189	-17/05/75	-14-	16-	7.4-	-	5.7-	340-	7-4-	-3-6-3-3-1-	2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90	
30-45	7014	-112.6286	-2-12-	0-M35190	-17/05/75	-14-	16-	5.8-C	-	5.9-	340-	11-4-	-3-6-3-3-1-	2-1-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.50	
30-45	6594	-112.6764	-2-15-	0-M35191	-17/05/75	-13-	18-	-	-	-	-	3-4-	-3-6-	-1-	2-3-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60	
30-45	6219	-112.7306	-2-12-	0-M35192	-17/05/75	-15-	17-	8.2-	-	5.9-	300-	7-4-	-3-6-3-3-1-	2-3-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.60	
30-45	6250	-112.7194	-2-12-	0-M35193	-17/05/75	-15-	17-	8.2-	-	5.7-	300-	7-3-6-5-6-3-3-1-	2-3-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70	
30-45	6408	-112.7264	-2-15-	0-M35194	-17/05/75	-13-	18-	-	-	-	-	11-3-6-3-6-	-1-	2-3-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45	6431	-112.7189	-2-11-	0-M35195	-17/05/75	-16-	17-	10.2-C	-	5.9-	600-	7-4-	-6-6-2-3-1-	2-3-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.40	
30-45	6425	-112.7194	-2-15-	0-M35196	-17/05/75	-16-	18-	-	-	-	-	7-4-	-3-6-	-1-	2-3-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50	
30-45	5917	-112.7403	-2-12-	0-M35197	-17/05/75	-16-	15-	6.0-	-	5.5-	210-	7-4-	-3-6-4-3-1-	2-3-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70	
30-45	6164	-112.7525	-2-15-	0-M35198	-17/05/75	-16-	17-	-	-	-	-	9-4-	-4-6-	-1-	2-3-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50	
30-45	5947	-112.7908	-2-12-	0-M35199	-17/05/75	-16-	19-	8.0-	-	5.7-	210-	5-4-	-4-6-3-3-1-	2-2-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50	
30-45	5889	-112.8575	-2-12-	0-M35200	-17/05/75	-17-	15-	4.2-	-	5.5-	160-	1-4-	-3-6-4-3-1-	2-1-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70	
30-45	5919	-112.8089	-2-12-	0-M35201	-17/05/75	-17-	15-	4.4-	-	5.5-	180-	9-4-	-4-6-4-3-1-	2-2-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60	
30-45	5761	-112.8028	-2-11-	0-M35202	-17/05/75	-17-	10-	7.2-	-	5.7-	310-	5-4-	-5-6-2-3-1-	2-3-3-5-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45	6311	-112.6739	-2-12-	0-M35203	-17/06/75	-17-	20-	8.2-	-	5.7-	330-	-4-	-4-6-3-3-1-	2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.90	
30-45	6289	-112.6717	-2-15-	0-M35204	-17/06/75	-14-	20-	-	-	-	-	-4-	-4-6-	-1-	2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45	6478	-112.6347	-2-12-	0-M35205	-17/06/75	-15-	14-	9.0-	-	5.7-	220-	-4-	-4-6-3-3-1-	2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80	
30-45	6503	-112.6292	-2-15-	0-M35206	-17/06/75	-15-	18-	-	-	-	-	-4-	-3-6-	-1-	2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45	6608	-112.6042	-2-15-	0-M35207	-17/06/75	-16-	19-	-	-	-	-	-1-6-3-6-	-1-	2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45	6597	-112.6033	-2-12-	0-M35208	-17/06/75	-16-	18-	9.0-	-	5.5-	150-	-3-7-3-6-3-3-1-	2-3-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.30	
30-45	6739	-112.5867	-2-15-	0-M35209	-17/06/75	-16-	18-	-	-	-	-	-3-6-4-6-	-1-	2-3-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.50	
30-45	6797	-112.5706	-2-12-	0-M35210	-17/06/75	-16-	18-	8.4-	-	5.7-	250-	-4-	-3-6-4-3-1-	2-2-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.50	
30-45	6803	-112.5636	-2-12-	0-M35211	-17/06/75	-16-	18-	9.0-	-	5.5-	260-	-4-	-3-6-4-3-1-	2-2-2-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.10	
30-45	5639	-112.7556	-2-12-	0-M35212	-17/07/75	-10-	14-	5.0-	-	5.5-	120-	-4-	-3-6-4-3-1-	2-1-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.70	
30-45	6175	-112.6942	-2-15-	0-M35213	-17/07/75	-12-	16-	-	-	-	-	-4-	-3-6-	-1-	2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
30-45	6011	-112.6942	-2-12-	0-M35214	-17/07/75	-12-	16-	8.4-C	-	6.1-	250-	-4-	-4-6-3-3-1-	2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45	5392	-112.7133	-2-15-	0-M35215	-17/07/75	-13-	18-	-	-	-	-	-4-	-4-6-	-1-	2-3-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.20	
30-45	5436	-112.7086	-2-12-	0-M35216	-17/07/75	-13-	18-	9.0-C	-	5.9-	600-	-4-	-5-6-3-3-2-	2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.10	
30-45	5467	-112.7056	-2-15-	0-M35217	-17/07/75	-14-	18-	-	-	-	-	-4-	-4-6-	-1-	2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.40	
30-45	1978	-112.3203	-2-15-	0-M35218	-17/05/75	-16-	8-	-	-	-	-	-2-6-4-6-	-1-	2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50	
30-45	2108	-112.3436	-2-15-	0-M35219	-17/05/75	-17-	8-	-	-	-	-	-2-6-4-6-	-1-	2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80	
30-45	2317	-112.2997	-2-11-	0-M35220	-17/05/75	-17-	8-	6.6-C	-	5.2-	90-	-2-6-4-6-3-3-1-	-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.90		
30-45	2033	-112.2531	-2-15-	0-M35221	-17/05/75	-18-	7-	-	-	-	-	-2-6-4-6-	-1-	2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.40	
30-45	2369	-112.3908	-2-15-	0-M35222	-17/05/75	-18-	7-	-	-	-	-	-2-6-4-6-	-1-	2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.10	
30-45	2389	-112.3917	-2-12-	0-M35223	-17/05/75	-19-	7-	7.6-C	-	5.7-	145-	-2-6-4-6-3-3-1-	2-2-2-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10		
30-45	2486	-112.3786	-2-15-	0-M35224	-17/05/75	-12-	7-	-	-	-	-	-2-6-4-6-	-1-	2-3-2-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.50	
30-45	1978	-112.1386	-2-15-	0-M35225	-17/06/75	-2-	12-	-	-	-	-	-2-1-4-6-	-1-	2-3-2-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45	2222	-112.1472	-2-12-	0-M35226	-17/06/75	-10-	10-	8.4-C	-	6.3-	330-	-2-6-3-6-3-3-1-	2-2-2-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.10		
30-45	2147	-112.1756	-2-15-	0-M35227	-17/06/75	-10-	10-	-	-	-	-	-2-6-4-6-	-1-	2-3-2-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.50	
30-45	2131	-112.1686	-2-15-	0-M35228	-17/06/75	-11-	10-	-	-	-	-	-2-6-4-6-	-1-	2-3-2-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.40	
30-45	2064	-112.1561	-2-15-	0-M35229	-17/06/75	-10-	10-	-	-	-	-	-2-6-4-6-	-1-	2-3-2-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.70	
30-45	2039	-112.1508	-2-12-	0-M35230	-17/06/75	-10-	10-	8.4-C	-	6.3-	330-	-2-6-3-6-3-3-1-	2-2-2-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.90		
30-45	2153	-112.1367	-2-15-	0-M35231	-17/06/75	-11-	10-	-	-	-	-	-2-6-4-6-	-1-	2-4-2-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				

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

2

DOE SAMPLE NUMBER						DOE SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE										ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Concentrations reported in weight parts per million (ppm)										Concentrations in weight ppm	
							Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li	
30-45.6825-112.6567-2-12-						0-M35183	-5	-5	-5	32	-20	26	50	-10	-15	-1	41	
30-45.7017-112.6294-2-12-						0-M35189	-5	-5	-5	31	-20	18	43	-10	-15	2	38	
30-45.7014-112.6286-2-12-						0-M35190	-5	-5	5	31	-20	-15	46	-10	-15	1	33	
30-45.6594-112.6764-2-15-						0-M35191	-5	-5	-5	31	-20	34	44	-10	-15	1	42	
30-45.6219-112.7006-2-12-						0-M35192	-5	-5	5	50	-20	20	210	-10	17	2	22	
30-45.6250-112.7194-2-12-						0-M35193	-5	-5	6	77	-20	20	281	-10	17	2	27	
30-45.6408-112.7264-2-15-						0-M35194	-5	-5	-5	38	-20	26	31	-10	-15	1	40	
30-45.6431-112.7189-2-11-						0-M35195	-5	-5	6	35	-20	21	9	-10	-15	-1	16	
30-45.6425-112.7194-2-15-						0-M35196	-5	-5	-5	37	-20	-15	24	-10	-15	2	29	
30-45.5917-112.7403-2-12-						0-M35197	-5	-5	-5	19	-20	-15	10	-10	-15	2	15	
30-45.6164-112.7525-2-15-						0-M35198	-5	-5	-5	23	-20	-15	23	-10	-15	2	26	
30-45.5947-112.7908-2-12-						0-M35199	-5	-5	-5	22	-20	-15	7	-10	-15	1	33	
30-45.5889-112.8575-2-12-						0-M35200	-5	-5	5	22	-20	22	17	-10	-15	1	23	
30-45.5919-112.8089-2-12-						0-M35201	-5	-5	-5	19	-20	-15	14	-10	-15	3	18	
30-45.5761-112.8028-2-11-						0-M35202	-5	-5	-5	19	-20	25	18	-10	-15	1	20	
30-45.6311-112.6739-2-12-						0-M35203	-5	8	-5	18	-20	27	23	-10	-15	1	19	
30-45.6289-112.6717-2-15-						0-M35204	-5	-5	-5	39	-20	-15	30	-10	-15	1	22	
30-45.6478-112.6347-2-12-						0-M35205	-5	-5	-5	25	-20	19	29	-10	-15	-1	17	
30-45.5503-112.6292-2-15-						0-M35206	-5	-5	-5	25	-20	23	9	-10	-15	-1	6	
30-45.6608-112.6042-2-15-						0-M35207	-5	-5	-5	61	-20	39	40	-10	-15	3	43	
30-45.6597-112.6033-2-12-						0-M35208	11	12	-5	26	-20	33	31	-10	-15	1	21	
30-45.6739-112.5867-2-15-						0-M35209	-5	-5	-5	78	-20	37	24	-10	-15	2	30	
30-45.6797-112.5706-2-12-						0-M35210	-5	-5	-5	22	-20	20	21	-10	-15	2	38	
30-45.6803-112.5636-2-12-						0-M35211	-5	-5	-5	37	-20	23	-5	-10	-15	2	28	
30-45.5639-112.7556-2-12-						0-M35212	-5	-5	-5	28	-20	25	13	-10	-15	2	29	
30-45.6175-112.6942-2-15-						0-M35213	-5	-5	-5	42	-20	42	22	-10	-15	3	21	
30-45.6011-112.6942-2-12-						0-M35214	-5	-5	-5	27	-20	42	5	-10	-15	2	13	
30-45.5392-112.7133-2-15-						0-M35215	-5	-5	-5	25	-20	30	13	-10	-15	2	22	
30-45.5436-112.7086-2-12-						0-M35216	-5	-5	-5	24	-20	21	14	-10	-15	1	13	
30-45.5467-112.7056-2-15-						0-M35217	-5	-5	-5	22	-20	-15	-5	-10	-15	2	22	
30-45.1978-112.3203-2-15-						0-M35218	-5	-5	-5	19	-20	-15	11	-10	-15	2	20	
30-45.2108-112.3436-2-15-						0-M35219	-5	-5	-5	39	-20	56	10	-10	16	2	20	
30-45.2317-112.2997-2-11-						0-M35220	-5	-5	-5	22	-20	-15	13	-10	-15	2	18	
30-45.2033-112.2531-2-15-						0-M35221	-5	-5	-5	37	-20	40	-5	-10	-15	3	14	
30-45.2369-112.3908-2-15-						0-M35222	-5	-5	-5	24	-20	46	10	-10	-15	2	10	
30-45.2389-112.3917-2-12-						0-M35223	-5	-5	-5	27	-20	27	11	-10	-15	2	27	
30-45.2486-112.3786-2-15-						0-M35224	8	11	8	-10	31	30	21	11	-15	2	14	
30-45.1978-112.1386-2-15-						0-M35225	-5	-5	-5	26	-20	19	8	-10	-15	2	24	
30-45.2222-112.1872-2-12-						0-M35226	-5	-5	-5	36	36	97	-5	-10	-15	2	24	
30-45.2147-112.1756-2-15-						0-M35227	-5	-5	-5	99	-20	95	-5	-10	-15	2	18	
30-45.2131-112.1686-2-15-						0-M35228	8	-5	9	51	28	74	-5	-10	-15	2	10	
30-45.2064-112.1561-2-15-						0-M35229	-5	-5	-5	47	-20	87	-5	-10	-15	2	9	
30-45.2039-112.1508-2-12-						0-M35230	5	-5	-5	28	-20	81	-5	-10	16	2	12	
30-45.2153-112.1367-2-15-						0-M35231	5	-5	-5	20	-20	26	15	-10	-15	2	15	
30-45.2208-112.1333-2-15-						0-M35232	-5	-5	-5	29	-20	69	-5	-10	-15	2	18	
30-45.2269-112.1456-2-12-						0-M35233	-5	-5	7	14	-20	70	-5	15	-15	2	13	
30-45.2375-112.1931-2-12-						0-M35234	-5	-5	-5	26	-20	86	9	-10	-15	2	19	
30-45.1906-112.1717-2-12-						0-M35235	-5	-5	7	28	-20	77	22	-10	-15	2	14	
30-45.1867-112.1769-2-15-						0-M35236	-5	-5	-5	31	-20	83	17	-10	-15	1	14	
30-45.1772-112.1953-2-15-						0-M35237	-5	-5	-5	37	-20	40	13	-10	-15	1	22	
30-45.1750-112.2128-2-12-						0-M35238	-5	-5	-5	54	-20	95	15	-10	-15	2	16	

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

③

DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS																	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAS 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	
30-45.6925-112.6567-2-12-					0-M35189	61322	-0.07	517	32490	163	-84	12.7	59	5.6	7	1.6	25110	18.2	18690	93	0.6		
30-45.7017-112.6294-2-12-					0-M35189	62892	-0.08	517	30590	175	-86	13.2	75	5.2	5	1.7	24800	19.6	19600	86	0.6		
30-45.7014-112.6286-2-12-					0-M35190	60010	-0.09	528	31850	191	111	11.4	59	5.8	7	1.8	26680	22.8	19930	96	0.6		
30-45.6594-112.6764-2-15-					0-M35191	59960	-0.07	487	50360	154	106	15.6	77	4.3	7	1.5	29500	14.4	16550	87	0.6		
30-45.6219-112.7006-2-12-					0-M35192	52990	-0.06	527	20820	80	-73	9.1	85	11.0	5	1.4	19670	21.2	11360	54	0.5		
30-45.6250-112.7194-2-12-					0-M35193	55380	-0.07	520	21270	79	-78	8.9	60	10.5	4	1.2	15160	13.6	13530	38	0.5		
30-45.6408-112.7264-2-15-					0-M35194	56890	-0.08	592	33070	57	-88	10.2	74	5.1	4	1.2	18650	7.1	16660	34	0.2		
30-45.6431-112.7189-2-11-					0-M35195	49960	-0.06	686	51860	58	-64	7.7	40	5.7	3	1.1	13600	5.9	11460	37	0.3		
30-45.6425-112.7194-2-15-					0-M35196	56440	-0.06	572	40430	79	-73	10.2	48	4.9	3	1.2	18590	7.3	14110	37	0.4		
30-45.5917-112.7403-2-12-					0-M35197	54920	-0.07	511	17880	86	-65	9.3	79	3.7	5	1.3	15870	15.7	13610	53	0.4		
30-45.6164-112.7525-2-15-					0-M35198	84220	-0.06	491	28260	55	-78	11.4	37	8.0	3	1.0	16040	4.3	12990	36	0.3		
30-45.5947-112.7908-2-12-					0-M35199	48440	-0.05	483	6745	63	-47	6.3	30	3.5	4	1.1	10440	10.4	13270	42	0.4		
30-45.5889-112.8575-2-12-					0-M35200	58150	-0.07	510	30700	98	-98	12.3	47	2.9	4	1.3	25970	14.4	13640	49	0.6		
30-45.5919-112.9089-2-12-					0-M35201	61200	-0.08	376	27600	70	140	11.3	44	3.4	4	1.2	19930	8.9	10100	35	0.4		
30-45.5761-112.8028-2-11-					0-M35202	49840	-0.05	450	18920	65	-64	8.9	53	2.9	4	1.1	14050	9.3	15850	35	0.4		
30-45.6311-112.6739-2-12-					0-M35203	52110	-0.06	284	44890	188	-90	9.8	51	2.8	7	1.6	25090	18.2	12580	111	0.6		
30-45.6289-112.6717-2-15-					0-M35204	54490	-0.06	552	21010	65	98	8.4	37	3.4	3	1.0	13590	7.4	16120	32	0.3		
30-45.6478-112.6347-2-12-					0-M35205	39760	-0.77	307	117300	109	151	8.6	47	2.9	4	1.0	17820	10.9	11460	62	0.4		
30-45.6503-112.6292-2-15-					0-M35206	39900	-0.04	293	185000	44	-60	8.5	38	3.0	3	0.7	12330	6.7	10840	29	0.3		
30-45.6608-112.6042-2-15-					0-M35207	82040	-0.10	753	17320	119	232	20.1	105	7.8	6	1.4	39020	10.1	24160	67	0.5		
30-45.6597-112.6033-2-12-					0-M35208	63840	-0.29	-228	14990	733	-123	15.7	121	3.7	11	3.3	43690	77.7	12320	390	1.5		
30-45.6739-112.5867-2-15-					0-M35209	75150	-0.11	605	12590	234	133	21.1	79	4.9	8	2.2	39820	16.7	19290	114	0.6		
30-45.6797-112.5706-2-12-					0-M35210	70970	-0.09	550	9236	329	168	15.5	90	4.7	11	2.4	26720	28.8	25130	171	0.9		
30-45.6803-112.5636-2-12-					0-M35211	76050	-0.09	450	9920	178	-92	17.1	90	5.0	7	2.0	37330	23.2	19690	98	0.8		
30-45.5639-112.7556-2-12-					0-M35212	52310	-0.07	527	9249	79	-76	9.1	37	5.0	4	1.1	13120	8.6	14500	40	0.4		
30-45.6175-112.6942-2-15-					0-M35213	61750	-0.09	695	35450	88	-89	13.7	162	3.8	4	1.2	21690	8.6	13930	45	0.4		
30-45.6011-112.6942-2-12-					0-M35214	57570	-0.08	681	26770	80	-71	14.1	241	-1.7	4	1.2	21220	10.3	12890	46	0.4		
30-45.5392-112.7133-2-15-					0-M35215	60250	-0.06	553	28480	84	-74	11.5	36	3.5	5	1.2	25420	10.5	14800	50	0.5		
30-45.5436-112.7086-2-12-					0-M35216	42570	-0.06	496	74400	64	100	8.9	37	3.0	3	1.0	17570	9.9	10830	39	0.3		
30-45.5467-112.7056-2-15-					0-M35217	55630	-0.06	477	11830	111	-69	11.4	71	3.6	4	1.4	20040	20.7	12230	62	0.6		
30-45.1978-112.3203-2-15-					0-M35218	68440	-0.07	896	29510	62	218	7.8	49	2.8	6	1.2	14280	9.8	19990	39	0.8		
30-45.2109-112.3436-2-15-					0-M35219	66900	-0.06	578	37190	86	-87	19.5	187	3.4	7	1.3	28250	10.0	17220	45	0.7		
30-45.2317-112.2997-2-11-					0-M35220	60990	-0.06	1063	47190	82	-86	12.7	83	6.2	5	1.4	22560	12.0	13860	55	0.5		
30-45.2033-112.2531-2-15-					0-M35221	65350	-0.08	-187	27940	127	-112	19.6	225	3.6	8	1.6	32760	20.1	9976	59	1.2		
30-45.2369-112.3908-2-15-					0-M35222	57760	-0.11	508	29060	248	-104	17.8	241	2.8	14	1.6	45920	42.1	10520	123	1.5		
30-45.2389-112.3917-2-12-					0-M35223	65010	-0.06	607	46440	90	115	14.4	107	3.2	7	1.4	23110	9.7	18700	52	0.7		
30-45.2486-112.3786-2-15-					0-M35224	54630	-0.07	517	28790	232	-118	18.5	240	3.3	14	1.8	43380	41.7	13170	136	1.4		
30-45.1978-112.1386-2-15-					0-M35225	50960	-0.06	679	61760	73	-91	10.5	54	4.2	4	1.1	15300	7.7	13600	33	0.4		
30-45.2222-112.1872-2-12-					0-M35226	61740	-0.12	313	42630	128	-110	27.8	233	3.8	10	1.5	49560	17.3	13080	69	1.4		
30-45.2147-112.1756-2-15-					0-M35227	74950	-0.09	431	34020	139	-105	41.1	253	-2.1	9	1.7	51840	10.5	9288	80	0.9		
30-45.2131-112.1686-2-15-					0-M35228	59190	-0.08	383	31940	140	-132	29.8	239	2.8	11	1.9	61020	21.1	9971	70	1.5		
30-45.2064-112.1561-2-15-					0-M35229	58900	-0.09	-237	32740	178	-140	30.9	273	3.4	10	2.1	64200	24.5	-5565	76	1.6		
30-45.2039-112.1508-2-12-					0-M35230	59050	-0.11	-186	43960	186	-115	23.1	247	-2.3	13	1.6	56800	33.9	8279	106	1.9		
30-45.2153-112.1367-2-15-					0-M35231	66690	-0.06	1105	55160	63	-115	7.7	103	2.1	4	1.1	17200	9.0	15880	34	0.5		
30-45.2208-112.1333-2-15-					0-M35232	57460	-0.06	531	49910	123	-96	22.3	154	2.8	9	1.5	41610	15.2	10310	57	1.0		
30-45.2269-112.1456-2-12-					0-M35233	64160	-0.09	458	30780	193	-112	23.9	268	2.6	10	1.9	40010	19.8	13480	96	1.1		
30-45.2375-112.1931-2-12-					0-M35234	63650	-0.10	529	30500	141	128	22.5	216	3.3	7	1.7	40400	15.2	19690	83	0.9		
30-45.1906-112.1717-2-12-					0-M35235	64890	-0.07	608	29870	130	90	23.1	229	3.2	8	1.6	37940	12.2	15330	67	0.9		
30-45.1867-112.1769-2-15-					0-M35236	54920	-0.06	486	33580	160	127	20.3	203	3.8	11	1.9	41630	37.2	13670	86	1.2		
30-45.1772-112.1953-2-15-					0-M35237	63210	-0.09	723	27090	133	-100	19.1	143	2.8	8	1.5	31740	15.2	16640	61	1.0		
30-45.1750-112.2128-2-12-					0-M35238	62150	-0.12	566	27090	123	281	18.6	139	-2.4	9	1.1	27730	12.5	14930	68	0.6		

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

④

DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued)																U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAS 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	
30-45.6825-112.6567-2-12-			0-M35188			42550	732	6991	50	-2	11.9	10.1	-379	-1	-1	26.9	5108	85	4.9	100	0.160	
30-45.7017-112.6294-2-12-			0-M35189			32650	694	7473	67	3	11.7	11.0	-391	-1	-1	27.2	4667	84	5.6	96	0.143	
30-45.7014-112.6286-2-12-			0-M35190			44510	733	6973	-32	4	11.9	10.5	-328	-1	-1	34.8	5039	95	5.1	187	0.129	
30-45.6594-112.6764-2-15-			0-M35191			60020	814	6868	52	3	14.3	10.1	-324	-1	-1	28.4	5648	90	4.8	110	0.127	
30-45.6219-112.7006-2-12-			0-M35192			19090	491	7606	32	32	9.2	6.5	-294	-1	-1	13.4	5371	94	4.7	536	0.343	
30-45.6250-112.7194-2-12-			0-M35193			19610	504	7598	-19	44	7.7	5.7	-320	-1	-1	10.4	4178	74	3.6	597	0.356	
30-45.6408-112.7264-2-15-			0-M35194			22340	1499	5860	40	-2	9.4	4.2	-435	-1	-1	10.3	2858	69	3.6	-199	0.269	
30-45.6431-112.7189-2-11-			0-M35195			19140	269	4514	27	-2	6.9	4.7	-253	-1	-1	8.0	2975	100	2.7	149	0.550	
30-45.6425-112.7194-2-15-			0-M35196			16150	906	4895	33	2	7.5	5.1	-345	-1	-1	9.7	3173	113	3.4	92	0.361	
30-45.5917-112.7403-2-12-			0-M35197			19990	486	8333	36	-2	8.6	4.5	-253	-1	-1	13.6	5096	72	3.8	74	0.272	
30-45.6164-112.7525-2-15-			0-M35198			28400	417	10530	49	-2	7.3	3.6	466	-1	-1	13.0	3396	43	2.3	102	0.192	
30-45.5947-112.7908-2-12-			0-M35199			14060	302	3438	38	-1	5.4	4.3	-215	-1	-1	10.2	3627	53	2.5	79	0.343	
30-45.5889-112.8575-2-12-			0-M35200			26370	852	11380	61	-2	12.6	6.3	-390	-1	-1	14.1	6030	119	4.8	95	0.262	
30-45.5919-112.8089-2-12-			0-M35201			27740	737	11100	-26	-3	11.2	4.6	-314	-1	-1	9.5	4842	96	3.0	-45	0.379	
30-45.5761-112.8028-2-11-			0-M35202			12050	530	8292	27	-1	6.1	4.6	-252	-1	-1	10.2	3452	57	2.9	100	0.255	
30-45.6311-112.6739-2-12-			0-M35203			43450	833	9624	40	-2	11.9	10.9	-360	-1	-1	33.4	4620	79	5.3	66	0.147	
30-45.6289-112.6717-2-15-			0-M35204			26400	472	12290	33	-2	6.0	4.3	-318	-1	-1	10.4	2192	52	2.6	82	0.279	
30-45.6478-112.6347-2-12-			0-M35205			91140	593	5620	-24	-2	8.1	7.3	-274	-1	-1	19.4	3529	66	2.7	87	0.196	
30-45.6503-112.6292-2-15-			0-M35206			47610	379	4581	30	2	4.7	3.5	430			7.6	2030	55	2.1	75	0.342	
30-45.6608-112.6042-2-15-			0-M35207			38310	869	9381	89	-3	19.8	7.8	-464	-1	-1	20.7	6521	142	4.7	168	0.140	
30-45.6597-112.6033-2-12-			0-M35208			20560	1717	9394	40	-3	24.5	52.2	-531	-1	3	153.4	9890	101	14.3		0.093	
30-45.6739-112.5867-2-15-			0-M35209			28540	1140	8972	55	-4	20.5	12.4	-393	-1	-2	39.1	6325	121	6.3	-260	0.115	
30-45.6797-112.5706-2-12-			0-M35210			27700	596	6500	49	-2	15.7	23.0	-273	-1	1	61.2	6946	99	7.7	72	0.090	
30-45.6803-112.5636-2-12-			0-M35211			27680	875	10660	38	-3	21.1	10.8	-381	-1	-1	30.2	8324	121	5.6	103	0.136	
30-45.5639-112.7556-2-12-			0-M35212			10440	633	5633	51	-2	6.9	5.1	-353	-1	-1	10.7	3072	67	3.6	105	0.439	
30-45.6175-112.6942-2-15-			0-M35213			22650	638	9055	58	-3	9.8	6.3	-360	-1	-1	12.0	3379	97	3.9	116	0.267	
30-45.6011-112.6942-2-12-			0-M35214			24520	500	10810	-25	-2	11.0	4.6	-258	-1	-1	10.1	4492	94	-1.9	130	0.287	
30-45.5392-112.7133-2-15-			0-M35215			14540	738	8658	36	-2	7.1	5.3	-304	-1	-1	14.8	2943	110	3.6	114	0.284	
30-45.5436-112.7086-2-12-			0-M35216			10740	466	6111	28	-2	5.8	4.1	-310	-1	-1	8.5	2904	81	2.2	84	0.600	
30-45.5467-112.7056-2-15-			0-M35217			14420	502	6450	29	-2	7.1	7.5	-300	-1	-1	13.5	4136	105	4.1	98	0.326	
30-45.1978-112.3203-2-15-			0-M35218			7640	609	18740	47	-2	7.7	4.6	-318	-1	-1	10.2	4405	42	4.9	-90	0.343	
30-45.2108-112.3436-2-15-			0-M35219			29440	849	12800	48	-2	14.9	6.5	-321	1	1	14.4	5797	103	4.9	82	0.194	
30-45.2317-112.2997-2-11-			0-M35220			17420	764	7851	47	-2	9.8	6.2	-360	-1	-1	14.3	6212	82	4.5	116	0.343	
30-45.2033-112.2931-2-15-			0-M35221			23710	1072	14730	42	-2	17.1	10.2	-422	2	1	18.3	6857	117	8.8	96	0.240	
30-45.2369-112.3908-2-15-			0-M35222			25770	1353	12780	-37	-3	20.3	17.1	-430	2	-2	47.0	15180	150	11.1	-399	0.172	
30-45.2389-112.3917-2-12-			0-M35223			24610	674	13940	49	-2	11.0	7.2	-319	-1	-1	14.5	4641	71	5.7	72	0.214	
30-45.2486-112.3786-2-15-			0-M35224			22610	1389	12370	-23	-2	18.7	18.8	-477	3	2	45.5	15970	140	12.1	100	0.209	
30-45.1978-112.1336-2-15-			0-M35225			24890	523	10120	38	-2	6.9	4.6	-337	-1	-1	10.9	2768	56	3.3	105	0.266	
30-45.2222-112.1872-2-12-			0-M35226			53300	1416	12810	-40	-4	29.0	9.8	-448	-1	-2	21.3	8629	163	10.3	-176	0.239	
30-45.2147-112.1756-2-15-			0-M35227			23850	1265	13090	51	-3	30.2	10.2	-425	2	2	30.8	9232	219	8.5	120	0.146	
30-45.2131-112.1686-2-15-			0-M35228			22910	1594	14890	42	4	23.0	9.5	-502	2	2	19.4	9333	128	12.0	157	0.227	
30-45.2064-112.1561-2-15-			0-M35229			23250	1708	14550	-29	-3	24.7	14.1	-547	1	3	24.5	9069	126	14.6	191	0.192	
30-45.2039-112.1508-2-12-			0-M35230			48870	1679	11300	-30	-3	34.6	14.4	-460	2	2	33.2	10870	142	14.4	92	0.238	
30-45.2153-112.1367-2-15-			0-M35231			16780	701	19900	32	-2	7.1	3.8	-373	-1	1	9.4	3847	39	4.9	-40	0.309	
30-45.2208-112.1333-2-15-			0-M35232			32770	1160	14440	47	-2	19.3	8.5	-350	-1	2	17.6	7157	106	8.6		0.227	
30-45.2269-112.1456-2-12-			0-M35233			36970	1085	14830	-27	-3	21.6	14.3	-422	-1	2	27.3	10740	151	7.8		0.234	
30-45.2375-112.1931-2-12-			0-M35234			34960	974	15570	-33	-3	21.8	9.1	-418	2	2	20.5	9222	131	6.4	-181	0.244	
30-45.1906-112.1717-2-12-			0-M35235			37870	1007	15080	-22	-2	21.0	8.7	-362	1	1	19.1	9272	145	6.4	170	0.246	
30-45.1867-112.1769-2-15-			0-M35236			30190	1063	11380	31	-2	18.0	11.9	-340	3	2	26.7	13870	140	10.1	-86	0.255	
30-45.1772-112.1953-2-15-			0-M35237			19390	950	12340	45	-2	15.8	9.9	-391	-1	1	21.7	7723	119	8.2		0.217	
30-45.1750-112.2128-2-12-			0-M35238			33260	1050	12310	-34	-4	15.3	7.5	-445	-1	-2	18.3	9449	171	6.7	-57	0.284	

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

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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 (umho/cm)	SCINTILLATOR (cc/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	1669	-112.2169	-2-15-	0-M35239	10/06/75	15-	12-	-	-	-	-	-	-	-	-	-1-6-4-6-	-1-	-2-3-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
30-45	1636	-112.2411	-2-15-	0-M35240	10/06/75	15-	12-	-	-	-	-	-	-	-	-	-1-6-4-6-	-1-	-2-3-2-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
30-45	1658	-112.2486	-2-15-	0-M35241	10/06/75	15-	12-	-	-	-	-	-	-	-	-	-1-6-4-6-	-1-	-2-3-2-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.80	
30-45	1686	-112.2514	-2-12-	0-M35242	10/06/75	16-	12-	5.4-C	-	5.5-	210-	-	-	-	-	-1-6-4-6-3-3-1	-2-2-2-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.50	
30-45	1464	-112.2417	-2-15-	0-M35243	10/06/75	16-	12-	-	-	-	-	-	-	-	-	-2-6-4-6-	-1-	-2-3-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50	
30-45	1458	-112.2258	-2-15-	0-M35244	10/06/75	16-	12-	-	-	-	-	-	-	-	-	-2-6-4-6-	-1-	-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.90	
30-45	1419	-112.2183	-2-15-	0-M35245	10/06/75	17-	12-	-	-	-	-	-	-	-	-	-2-6-4-6-	-1-	-2-3-2-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.50	
30-45	1367	-112.2056	-2-15-	0-M35246	10/06/75	17-	12-	-	-	-	-	-	-	-	-	-2-6-4-6-	-1-	-2-3-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
30-45	1356	-112.1772	-2-15-	0-M35247	10/06/75	17-	12-	-	-	-	-	-	-	-	-	-2-6-4-6-	-1-	-2-3-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.30	
30-45	1342	-112.1461	-2-15-	0-M35248	10/07/75	9-	7-	-	-	-	-	-	-	-	-	-2-6-4-6-	-1-	-2-3-2-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.10	
30-45	1372	-112.1536	-2-12-	0-M35249	10/07/75	9-	7-	4.4-C	-	5.7-	195-	-	-	-	-	-2-6-4-6-3-3-1	-2-2-2-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.60		
30-45	1556	-112.1331	-2-15-	0-M35250	10/07/75	9-	7-	-	-	-	-	-	-	-	-	-2-6-4-6-	-1-	-2-3-2-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45	1458	-112.1297	-2-15-	0-M35251	10/07/75	9-	7-	-	-	-	-	-	-	-	-	-2-6-4-6-	-1-	-2-3-2-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
30-45	1728	-112.1356	-2-15-	0-M35252	10/07/75	10-	7-	-	-	-	-	-	-	-	-	-2-6-4-6-	-1-	-2-4-2-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
30-45	1769	-112.1606	-2-12-	0-M35253	10/07/75	10-	8-	6.2-C	-	5.5-	220-	-	-	-	-	-2-6-4-6-3-3-1	-2-2-2-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.80		
30-45	3711	-112.1961	-2-15-	0-M35255	10/07/75	12-	12-	-	-	-	-	-	-	-	-	-2-6-4-6-	-1-	-2-3-2-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70	
30-45	3564	-112.1656	-2-15-	0-M35256	10/07/75	12-	12-	-	-	-	-	-	-	-	-	-2-6-4-6-	-1-	-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
30-45	3542	-112.1656	-2-15-	0-M35257	10/07/75	12-	12-	-	-	-	-	-	-	-	-	-2-6-4-6-	-1-	-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.50	
30-45	3258	-112.1625	-2-15-	0-M35258	10/07/75	13-	12-	-	-	-	-	-	-	-	-	-2-6-4-6-	-1-	-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.80	
30-45	3186	-112.1486	-2-15-	0-M35259	10/07/75	13-	12-	-	-	-	-	-	-	-	-	-2-6-4-6-	-1-	-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00	
30-45	3142	-112.1375	-2-15-	0-M35260	10/07/75	13-	12-	-	-	-	-	-	-	-	-	-2-6-4-6-	-1-	-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
30-45	3119	-112.1333	-2-15-	0-M35261	10/07/75	13-	12-	-	-	-	-	-	-	-	-	-2-6-4-6-	-1-	-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.20	
30-45	2925	-112.1397	-2-15-	0-M35262	10/07/75	14-	12-	-	-	-	-	-	-	-	-	-2-6-4-6-	-1-	-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.20	
30-45	2578	-112.1503	-2-12-	0-M35263	10/07/75	14-	12-	5.2-C	-	5.7-	220-	-	-	-	-	-2-6-4-6-3-3-1	-2-2-2-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.90		
30-45	2503	-112.1961	-2-11-	0-M35264	10/07/75	15-	12-	6.2-	-	5.9-	190-	-	-	-	-	-2-6-4-6-3-3-1	-2-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.10		
30-45	2536	-112.2328	-2-15-	0-M35265	10/07/75	16-	12-	-	-	-	-	-	-	-	-	-2-6-4-6-	-1-	-2-3-2-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
30-45	2961	-112.0708	-2-15-	0-M35266	10/08/75	9-	1-	-C-	-	-	-	-	-	-	-	-4-4-6-	-1-	-2-7-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
30-45	5458	-112.6972	-2-15-	0-M35267	10/07/75	14-	18-	-	-	-	-	-	-	-	-	-4-5-6-	-1-	-2-3-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45	5714	-112.7008	-2-15-	0-M35268	10/07/75	15-	19-	-	-	-	-	-	-	-	-	-3-4-4-4-	-1-	-2-3-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
30-45	5689	-112.7389	-2-11-	0-M35269	10/07/75	16-	17-	8.2-C	-	5.7-	280-	-	-	-	-	-3-4-5-6-3-3-1	-2-2-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30		
30-45	5903	-112.6708	-2-15-	0-M35270	10/07/75	16-	17-	-	-	-	-	-	-	-	-	-4-3-6-	-1-	-2-3-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
30-45	6075	-112.6597	-2-15-	0-M35271	10/07/75	14-	16-	-	-	-	-	-	-	-	-	-4-4-6-	-1-	-2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
30-45	5875	-112.6478	-2-11-	0-M35272	10/07/75	17-	16-	9.2-C	-	5.7-	430-	-	-	-	-	-4-3-6-2-3-1	-2-4-4-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70		
30-45	5450	-112.5308	-2-15-	0-M35273	10/08/75	11-	15-	-	-	-	-	-	-	-	-	-4-4-6-	-1-	-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45	5375	-112.5542	-2-15-	0-M35274	10/08/75	12-	10-	-	-	-	-	-	-	-	-	-4-4-6-	-1-	-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45	5317	-112.5475	-2-15-	0-M35275	10/08/75	12-	11-	-	-	-	-	-	-	-	-	-4-4-6-	-1-	-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80	
30-45	5183	-112.5600	-2-12-	0-M35276	10/08/75	13-	12-	7.4-C	-	5.7-	370-	-	-	-	-	-4-5-6-2-3-1	-2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70		
30-45	5233	-112.6028	-2-11-	0-M35277	10/08/75	14-	4-	1.2-C	-	5.5-	210-	-	-	-	-	-3-7-5-6-2-3-1	-2-1-3-5-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.40		
30-45	5686	-112.5989	-2-15-	0-M35278	10/08/75	15-	15-	-	-	-	-	-	-	-	-	-3-7-4-6-	-1-	-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40	
30-45	5758	-112.6078	-2-15-	0-M35279	10/08/75	15-	15-	-	-	-	-	-	-	-	-	-3-7-4-6-	-1-	-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.20	
30-45	5711	-112.5800	-2-15-	0-M35280	10/08/75	15-	16-	-	-	-	-	-	-	-	-	-3-7-4-6-	-1-	-2-4-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50	
30-45	6056	-112.6019	-2-15-	0-M35281	10/08/75	15-	16-	-	-	-	-	-	-	-	-	-3-7-4-6-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50	
30-45	6086	-112.6031	-2-15-	0-M35282	10/08/75	15-	16-	-	-	-	-	-	-	-	-	-3-7-4-6-																		

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	
30-45.1669-112.2169-2-15-						0-M35239	-5	-5	-5	38	-20	35	14	-10	-15	2	25	
30-45.1636-112.2411-2-15-						0-M35240	-5	-5	-5	37	-20	38	13	-10	-15	2	21	
30-45.1658-112.2486-2-15-						0-M35241	-5	-5	-5	26	-20	58	12	-10	-15	2	23	
30-45.1686-112.2514-2-12-						0-M35242	-5	-5	6	61	-20	98	-5	-10	-15	2	17	
30-45.1464-112.2417-2-15-						0-M35243	-5	7	-5	52	-20	84	8	-10	-15	1	30	
30-45.1458-112.2259-2-15-						0-M35244	-5	-5	-5	34	-20	33	18	-10	-15	2	19	
30-45.1419-112.2183-2-15-						0-M35245	-5	-5	-5	30	-20	44	12	-10	-15	2	16	
30-45.1367-112.2056-2-15-						0-M35246	-5	-5	-5	52	-20	82	21	-10	-15	2	20	
30-45.1356-112.1772-2-15-						0-M35247	-5	-5	-5	56	-20	96	9	-10	-15	2	18	
30-45.1342-112.1461-2-15-						0-M35248	-5	-5	-5	36	-20	64	12	-10	-15	2	22	
30-45.1372-112.1536-2-12-						0-M35249	-5	-5	-5	58	-20	86	15	-10	-15	2	15	
30-45.1556-112.1331-2-15-						0-M35250	-5	7	-5	32	-20	34	12	-10	-15	2	19	
30-45.1458-112.1297-2-15-						0-M35251	-5	-5	-5	37	-20	95	8	-10	-15	2	19	
30-45.1728-112.1356-2-15-						0-M35252	-5	5	-5	56	-20	42	6	-10	-15	2	20	
30-45.1769-112.1606-2-12-						0-M35253	-5	6	6	65	-20	93	-5	11	16	2	22	
30-45.3711-112.1961-2-15-						0-M35255	-5	-5	-5	34	-20	54	17	-10	-15	2	17	
30-45.3564-112.1656-2-15-						0-M35256	-5	-5	-5	50	-20	53	5	-10	-15	2	29	
30-45.3542-112.1656-2-15-						0-M35257	-5	-5	-5	30	-20	47	14	-10	-15	2	32	
30-45.3258-112.1625-2-15-						0-M35258	-5	-5	-5	23	-20	44	12	-10	-15	2	21	
30-45.3186-112.1486-2-15-						0-M35259	-5	-5	-5	31	-20	56	15	-10	-15	2	20	
30-45.3142-112.1375-2-15-						0-M35260	-5	5	-5	53	-20	45	5	-10	-15	2	42	
30-45.3119-112.1333-2-15-						0-M35261	-5	-5	-5	46	-20	49	14	-10	-15	2	18	
30-45.2925-112.1397-2-15-						0-M35262	-5	-5	-5	32	-20	51	13	-10	-15	2	21	
30-45.2578-112.1503-2-12-						0-M35263	-5	-5	-5	14	-20	-15	11	-10	-15	2	8	
30-45.2503-112.1961-2-11-						0-M35264	7	-5	-5	-10	63	18	8	-10	19	2	8	
30-45.2536-112.2328-2-15-						0-M35265	-5	-5	-5	55	-20	44	12	-10	-15	1	25	
30-45.2961-112.0708-2-15-						0-M35266	-5	-5	-5	29	-20	30	10	-10	-15	2	27	
30-45.5458-112.6972-2-15-						0-M35267	-5	-5	-5	21	-20	15	10	-10	-15	1	16	
30-45.5714-112.7008-2-15-						0-M35268	-5	-5	6	40	-20	49	17	-10	-15	2	11	
30-45.5689-112.7389-2-11-						0-M35269	-5	5	-5	18	-20	17	8	-10	-15	2	18	
30-45.5903-112.6708-2-15-						0-M35270	-5	-5	-5	21	-20	30	16	-10	-15	-1	13	
30-45.6075-112.6597-2-15-						0-M35271	-5	-5	-5	22	-20	-15	19	-10	-15	2	24	
30-45.5875-112.6478-2-11-						0-M35272	-5	-5	5	11	-20	-15	10	-10	-15	2	12	
30-45.5450-112.5308-2-15-						0-M35273	-5	-5	-5	16	-20	22	19	-10	-15	1	21	
30-45.5375-112.5542-2-15-						0-M35274	-5	-5	-5	34	-20	15	13	-10	-15	1	30	
30-45.5317-112.5475-2-15-						0-M35275	-5	-5	-5	25	-20	21	13	-10	-15	2	28	
30-45.5183-112.5600-2-12-						0-M35276	-5	-5	-5	11	-20	22	18	-10	-15	2	23	
30-45.5233-112.6028-2-11-						0-M35277	-5	-5	-5	28	-20	17	5	-10	-15	1	13	
30-45.5686-112.5989-2-15-						0-M35278	-5	-5	-5	29	-20	-15	14	-10	-15	1	28	
30-45.5758-112.6078-2-15-						0-M35279	-5	-5	-5	22	-20	-15	9	-10	-15	-1	8	
30-45.5711-112.5800-2-15-						0-M35280	-5	-5	-5	28	-20	-15	26	-10	-15	1	20	
30-45.6056-112.6019-2-15-						0-M35281	-5	5	-5	23	-20	-15	12	-10	-15	2	54	
30-45.6086-112.6031-2-15-						0-M35282	-5	-5	-5	25	-20	-15	14	-10	-15	2	24	
30-45.6222-112.6097-2-15-						0-M35283	-5	-5	-5	16	-20	-15	8	-10	-15	2	18	
30-45.6322-112.6153-2-15-						0-M35284	-5	-5	-5	32	-20	-15	88	-10	-15	1	13	
30-45.6258-112.5208-2-15-						0-M35285	5	-5	5	53	-20	45	5	-10	22	2	15	
30-45.6047-112.5397-2-11-						0-M35286	-5	5	-5	42	-20	20	18	-10	-15	4	9	
30-45.5931-112.5300-2-15-						0-M35287	-5	-5	5	76	-20	35	26	-10	-15	2	20	
30-45.5842-112.5261-2-11-						0-M35288	-5	-5	-5	28	-20	-15	7	-10	-15	2	18	
30-45.5311-112.7428-2-12-						0-M35289	-5	6	-5	22	-20	-15	13	-10	-15	3	17	
30-45.5436-112.7903-2-12-						0-M35290	-5	-5	-5	46	-20	-15	20	-10	19	3	21	

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

③

DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS																
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAS. 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
30-45.1669-112.2169-2-15-						0-M35239	66780	-0.08	584	24460	167	-85	30.1	196	2.7	5	1.9	41070	18.8	19770	96	1.0
30-45.1636-112.2411-2-15-						0-M35240	55010	-0.06	616	25530	83	-82	22.1	116	5.5	5	1.5	33410	7.6	21140	59	0.5
30-45.1658-112.2486-2-15-						0-M35241	57420	-0.07	508	32480	132	156	17.3	145	2.8	8	1.7	28110	23.4	14270	67	0.8
30-45.1686-112.2514-2-12-						0-M35242	69410	-0.11	410	25820	171	200	29.4	177	3.3	7	1.9	43450	16.6	16340	84	1.1
30-45.1464-112.2417-2-15-						0-M35243	64720	-0.07	599	37030	102	136	25.8	198	3.0	6	1.5	38000	13.0	15530	61	0.6
30-45.1458-112.2258-2-15-						0-M35244	57500	-0.06	543	33470	144	-87	18.4	156	3.2	10	1.7	31640	23.0	13480	76	1.0
30-45.1419-112.2183-2-15-						0-M35245	55530	-0.07	457	33060	121	101	16.8	148	2.9	8	1.6	28380	19.8	14790	62	0.8
30-45.1367-112.2056-2-15-						0-M35246	62220	-0.07	462	36560	96	-108	24.5	206	2.3	5	1.7	36590	9.9	15210	59	0.5
30-45.1356-112.1772-2-15-						0-M35247	59320	-0.07	550	37100	130	-96	26.0	217	1.6	7	1.6	43110	17.3	14060	63	0.7
30-45.1342-112.1461-2-15-						0-M35248	59450	-0.06	591	30400	106	-82	16.1	124	3.2	8	1.5	26320	17.1	14070	59	0.6
30-45.1372-112.1536-2-12-						0-M35249	66020	-0.09	541	25030	175	169	29.0	187	3.3	10	1.8	40530	15.7	14670	84	1.0
30-45.1556-112.1331-2-15-						0-M35250	65910	-0.08	596	23810	78	-99	19.0	104	3.5	5	1.3	27160	6.6	15670	41	0.4
30-45.1458-112.1297-2-15-						0-M35251	64960	-0.07	575	37410	108	155	25.9	200	2.6	6	1.7	38500	12.1	17300	59	0.5
30-45.1728-112.1356-2-15-						0-M35252	66120	-0.06	730	23680	70	-80	18.5	98	4.8	5	1.2	26700	5.7	18040	40	0.5
30-45.1769-112.1606-2-12-						0-M35253	68250	-0.10	554	26090	195	182	28.7	213	2.7	11	2.1	41320	19.5	22690	97	1.0
30-45.3711-112.1961-2-15-						0-M35255	63500	-0.08	411	26100	87	-95	15.1	107	7.3	5	1.2	26540	9.3	14220	48	0.7
30-45.3564-112.1656-2-15-						0-M35256	52150	-0.06	309	60680	62	-106	21.6	143	7.2	4	0.9	29180	8.1	13030	37	0.4
30-45.3542-112.1656-2-15-						0-M35257	61920	-0.06	471	28980	91	-83	14.9	116	5.9	7	1.3	27270	12.4	17470	57	0.7
30-45.3258-112.1629-2-15-						0-M35258	58250	-0.07	541	26950	105	-89	15.6	138	4.7	7	1.3	26320	14.9	13600	57	0.9
30-45.3186-112.1486-2-15-						0-M35259	64700	-0.08	532	23590	91	-89	17.6	115	9.2	5	1.2	27870	10.1	14460	52	0.6
30-45.3142-112.1375-2-15-						0-M35260	51180	-0.07	-186	63050	63	-110	22.5	153	6.7	4	1.0	29770	8.5	11110	34	0.5
30-45.3119-112.1333-2-15-						0-M35261	65580	-0.07	565	26230	87	-86	17.8	115	9.9	7	1.4	26570	11.1	16290	53	0.6
30-45.2925-112.1397-2-15-						0-M35262	62080	-0.08	582	23540	144	139	18.3	147	8.0	8	1.5	32150	17.4	14930	70	1.0
30-45.2578-112.1503-2-12-						0-M35263	41410	-0.09	-205	23530	252	-117	12.2	115	-1.9	8	2.2	43480	31.6	6992	143	1.3
30-45.2503-112.1961-2-11-						0-M35264	40850	-0.07	-202	23300	371	-130	16.8	181	-1.6	12	2.5	61380	53.5	-5272	224	1.9
30-45.2536-112.2328-2-15-						0-M35265	51000	-0.06	-168	63320	65	-101	20.9	140	7.3	4	1.0	29420	8.5	10140	38	0.5
30-45.2961-112.0708-2-15-						0-M35266	50790	-0.06	494	42680	79	-81	11.0	84	2.7	4	1.2	17400	11.5	14460	40	0.5
30-45.5458-112.6972-2-15-						0-M35267	67330	-0.07	582	28400	62	258	10.0	48	4.2	4	1.4	20410	7.0	16030	38	0.4
30-45.5714-112.7008-2-15-						0-M35268	64350	-0.06	624	24670	93	80	17.8	135	2.4	5	1.4	29760	12.1	12980	56	0.4
30-45.5689-112.7389-2-11-						0-M35269	53280	-0.05	474	8636	78	104	7.6	49	3.7	5	1.2	12360	10.0	13060	48	0.3
30-45.5903-112.6708-2-15-						0-M35270	48080	-0.06	485	79250	92	94	8.7	51	3.3	4	1.2	21880	12.2	12160	47	0.3
30-45.6075-112.5597-2-15-						0-M35271	49960	-0.06	401	57570	76	315	8.6	45	3.8	3	1.0	16590	10.8	18470	41	0.4
30-45.5975-112.6478-2-11-						0-M35272	44600	-0.05	451	78430	92	-75	9.5	47	2.8	4	1.3	24290	14.5	10190	52	0.4
30-45.5450-112.5308-2-15-						0-M35273	57870	-0.05	537	32630	69	127	8.0	34	2.8	4	1.1	17610	9.0	13760	40	0.3
30-45.5375-112.5542-2-15-						0-M35274	65540	-0.07	601	16290	74	161	10.3	44	3.6	4	1.4	18920	8.2	13550	41	0.4
30-45.5317-112.5475-2-15-						0-M35275	61530	-0.07	498	24930	61	249	9.0	33	4.0	4	1.2	17150	9.0	16290	39	0.4
30-45.5183-112.5600-2-12-						0-M35276	63810	-0.06	801	18890	76	131	12.2	45	4.8	4	1.3	18760	9.0	13730	46	0.3
30-45.5233-112.6028-2-11-						0-M35277	68870	-0.08	818	26760	72	312	18.3	25	3.4	4	1.6	29070	7.7	13820	39	0.3
30-45.5686-112.5989-2-15-						0-M35278	51580	-0.06	427	81270	61	-81	8.8	32	3.3	3	0.9	14560	5.7	11960	28	0.3
30-45.5758-112.6078-2-15-						0-M35279	48830	-0.06	482	87700	58	-87	7.8	45	3.5	3	0.9	15450	7.1	12270	33	0.3
30-45.5711-112.5800-2-15-						0-M35280	46380	-0.05	476	86780	62	-69	9.5	45	4.4	3	0.9	16130	8.1	14250	37	0.4
30-45.6056-112.6019-2-15-						0-M35281	46140	-0.06	412	65610	81	-67	8.0	47	2.9	4	1.0	18000	12.9	12880	46	0.4
30-45.6086-112.6031-2-15-						0-M35282	44750	-0.05	349	94210	71	123	8.1	42	4.8	3	0.9	13860	8.4	14270	35	0.3
30-45.6222-112.6097-2-15-						0-M35283	36200	-0.06	304	95770	81	118	6.0	28	3.0	3	0.7	14780	11.1	12170	45	0.3
30-45.6322-112.6153-2-15-						0-M35284	41080	-0.05	399	88190	81	161	10.4	44	4.7	4	0.9	17650	8.4	12050	44	0.4
30-45.6258-112.5208-2-15-						0-M35285	71230	-0.09	-206	19540	335	-123	21.4	120	3.2	10	2.1	54600	27.5	9501	183	0.9
30-45.6047-112.5397-2-11-						0-M35286	54790	-0.09	484	24390	116	177	14.8	74	3.6	5	1.4	27050	12.8	13020	57	0.6
30-45.5931-112.5300-2-15-						0-M35287	68280	-0.12	479	13460	243	160	24.2	111	4.4	7	1.7	48050	21.0	12950	126	0.8
30-45.5842-112.5261-2-11-						0-M35288	57250	-0.07	432	21260	105	-92	12.8	57	2.9	6	1.3	23590	14.3	14680	61	0.5
30-45.5311-112.7428-2-12-						0-M35289	50710	-0.06	489	12350	107	-67	9.3	37	3.7	4	1.4	24950	13.3	14110	62	0.5
30-45.5436-112.7903-2-12-						0-M35290	44620	-0.08	445	24370	138	-121	12.4	43	3.5	4	1.6	48770	14.9	10630	70	0.6

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

④

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		
30-45.1669-112.2147-2-15-			0-M35239			21290	775	11530	56	-3	22.7	11.9	-336	2	2	30.4	4075	98	9.8	123	0.102		
30-45.1636-112.2411-2-15-			0-M35240			22360	792	12390	73	-2	16.0	6.2	-308	-1	-1	15.5	4413	97	3.8	133	0.194		
30-45.1658-112.2486-2-15-			0-M35241			25630	901	11830	60	-2	13.1	9.8	-362	-1	-1	19.8	7858	105	7.1		0.242		
30-45.1686-112.2514-2-12-			0-M35242			32620	1076	12140	90	-3	23.3	11.9	-442	-2	-2	27.2	9077	164	9.8	-207	0.165		
30-45.1464-112.2417-2-15-			0-M35243			35280	936	14610	53	-2	16.9	7.6	-368	1	2	18.7	8081	131	5.5	128	0.187		
30-45.1458-112.2258-2-15-			0-M35244			29610	870	12410	-21	-2	15.5	9.2	-325	1	2	21.2	9613	115	7.9	90	0.231		
30-45.1419-112.2183-2-15-			0-M35245			26680	814	12180	30	-2	13.6	9.2	-343	1	1	20.3	8480	102	8.2		0.222		
30-45.1367-112.2056-2-15-			0-M35246			35850	999	14650	-32	-3	17.0	6.8	-397	-1	-1	17.7	6391	129	4.5	-216	0.175		
30-45.1356-112.1772-2-15-			0-M35247			39490	1081	14000	39	-2	18.6	8.7	-362	2	1	21.9	10640	150	6.4	71	0.196		
30-45.1342-112.1461-2-15-			0-M35248			29370	747	12270	54	-2	12.6	7.4	-303	-1	1	17.2	6529	100	5.2	76	0.238		
30-45.1372-112.1536-2-12-			0-M35249			32330	1080	11530	31	-3	21.3	12.6	-431	-1	2	26.0	9137	165	8.4	119	0.177		
30-45.1556-112.1331-2-15-			0-M35250			19760	784	12200	58	-3	12.6	5.9	-372	-1	-1	12.1	3937	104	4.6	-145	0.240		
30-45.1458-112.1297-2-15-			0-M35251			36110	944	14650	66	-2	16.8	7.7	-374	-1	-1	21.2	7670	140	5.0	-111	0.151		
30-45.1728-112.1356-2-15-			0-M35252			21530	794	11570	70	-2	12.2	5.2	-305	-1	1	13.2	4360	100	3.7	110	0.235		
30-45.1769-112.1605-2-12-			0-M35253			36940	1078	11420	-32	-3	22.2	14.1	-460	3	-1	28.5	8597	157	8.6	-42	0.168		
30-45.3711-112.1961-2-15-			0-M35255			23160	609	13240	-28	-2	12.8	5.5	-333	-1	-1	13.7	4366	87	4.6	-45	0.270		
30-45.3564-112.1656-2-15-			0-M35256			39850	1579	10140	45	-2	15.1	4.6	-436	1	-1	12.4	3851	108	3.0	123	0.250		
30-45.3542-112.1656-2-15-			0-M35257			27510	699	13100	49	-2	13.9	7.2	-297	1	-1	18.4	5326	91	5.2	153	0.245		
30-45.3258-112.1625-2-15-			0-M35258			21940	704	12850	-21	-2	13.5	8.3	-326	1	-1	20.1	5436	86	4.9	43	0.239		
30-45.3186-112.1486-2-15-			0-M35259			23140	633	12430	83	-2	12.9	6.1	-328	-1	-1	16.6	5162	91	4.7		0.241		
30-45.3142-112.1375-2-15-			0-M35260			39500	1610	10420	48	-2	15.3	5.0	-459	-1	-1	13.5	4906	110	2.8	156	0.237		
30-45.3119-112.1333-2-15-			0-M35261			25180	666	12550	74	-2	13.0	6.6	-313	-1	-1	16.4	5188	95	5.4	101	0.256		
30-45.2925-112.1397-2-15-			0-M35262			19010	968	12420	66	-2	15.2	9.5	-387	-1	-1	25.7	6656	86	7.8	89	0.202		
30-45.2578-112.1503-2-12-			0-M35263			9132	1597	9428	-31	-3	18.0	14.5	-480	2	2	37.9	6393	100	10.8	-184	0.208		
30-45.2503-112.1961-2-11-			0-M35264			11960	2249	7311	-24	-2	22.9	29.6	-515	3	3	60.7	12050	140	15.7	-45	0.183		
30-45.2536-112.2328-2-15-			0-M35265			37860	1539	10280	45	-2	15.8	4.8	-409	-1	-1	12.0	3607	106	4.0		0.275		
30-45.2961-112.0708-2-15-			0-M35266			21440	695	8585	38	-2	8.0	5.7	-324	-1	-1	12.8	3753	61	3.5	74	0.234		
30-45.5458-112.6972-2-15-			0-M35267			16730	554	15210	-26	-2	9.8	3.6	-340	-1	-1	8.7	3233	58	4.0	121	0.310		
30-45.5714-112.7008-2-15-			0-M35268			22770	826	10180	33	-2	11.3	6.2	-331	-1	-1	14.3	4291	92	3.6	95	0.224		
30-45.5689-112.7389-2-11-			0-M35269			15160	165	5770	41	-2	6.5	5.0	237	-1	-1	9.8	3269	64	2.5	92	0.337		
30-45.5903-112.6708-2-15-			0-M35270			19460	450	10240	-19	-2	6.0	7.0	483	-1	-1	12.7	3167	81	3.8	-46	0.268		
30-45.6075-112.6597-2-15-			0-M35271			41460	564	10080	31	-2	6.9	5.0	-305	-3	-1	13.4	2241	54	3.5	-132	0.224		
30-45.5875-112.6478-2-11-			0-M35272			19420	394	10700	37	-2	5.8	5.4	286	-1	-1	13.9	3305	93	3.3	133	0.266		
30-45.5450-112.5308-2-15-			0-M35273			16020	499	12570	42	-1	6.8	4.5	-252	-1	-1	9.2	3057	63	2.9	83	0.283		
30-45.5375-112.5542-2-15-			0-M35274			13920	605	13550	36	-2	7.6	5.8	-347	-1	-1	10.6	3693	68	3.8		0.255		
30-45.5317-112.5475-2-15-			0-M35275			14120	515	13270	-23	-2	7.3	4.4	-317	-1	-1	9.7	2628	66	2.8	111	0.289		
30-45.5183-112.5600-2-12-			0-M35276			14920	498	11350	48	-2	7.1	4.7	-293	-1	-1	9.8	4288	77	2.1	136	0.276		
30-45.5233-112.6028-2-11-			0-M35277			14930	1706	17440	-25	-2	8.4	4.8	-568	-1	-1	9.8	3464	93	2.7	152	0.449		
30-45.5686-112.5989-2-15-			0-M35278			31230	452	9520	33	-2	5.9	4.1	-287	-1	-1	8.4	2739	60	2.2	-76	0.286		
30-45.5758-112.6078-2-15-			0-M35279			32220	496	10340	50	-2	6.1	4.2	-309	-1	-1	7.2	2031	54	2.1		0.306		
30-45.5711-112.5800-2-15-			0-M35280			28110	500	8306	31	-2	6.5	4.2	-257	1	-1	10.4	2732	62	2.2	86	0.240		
30-45.6056-112.6019-2-15-			0-M35281			37810	460	10500	36	2	6.3	5.0	-231	-1	-1	12.6	2914	63	2.8	72	0.278		
30-45.6086-112.6031-2-15-			0-M35282			64940	497	6806	36	3	6.0	5.2	-284	-1	-1	11.1	2357	61	3.1	84	0.252		
30-45.6222-112.6097-2-15-			0-M35283			73350	397	8228	-20	-2	4.9	4.7	-275	-1	-1	11.2	2008	49	2.9	-32	0.295		
30-45.6322-112.6153-2-15-			0-M35284			90100	950	6072	37	2	8.1	5.2	-317	-1	-1	13.0	2419	55	3.1	131	0.185		
30-45.6298-112.5208-2-15-			0-M35285			32610	2114	9693	-26	-3	31.9	21.2	-506	1	2	63.8	9122	128	11.3		0.097		
30-45.6047-112.5397-2-11-			0-M35286			22480	970	10410	58	-3	13.9	7.2	-447	-1	-1	17.9	4199	96	7.3		0.168		
30-45.5931-112.5300-2-15-			0-M35287			29830	2202	8696	66	-4	24.9	17.1	-673	-2	-2	45.9	5843	142	9.1	254	0.105		
30-45.5842-112.5261-2-11-			0-M35288			18180	666	12890	53	-2	11.8	7.5	-345	-1	-1	19.2	4091	80	4.7	112	0.266		
30-45.5311-112.7428-2-12-			0-M35289			16040	779	5794	35	-2	7.2	5.9	-317	-1	-1	14.2	2640	119	3.1	103	0.472		
30-45.5435-112.7903-2-12-			0-M35290			19520	2028	6741	-26	-2	3.9	7.5	-596	-1	-1	26.2	2568	160	5.3	88	0.401		

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

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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 (umho/cm)	SCINTILLOMETER (cpm)	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																										
30-45.5442-112.7919-2-12-						0-M35291-10/09/76-11-			6-	2.8-C-	-	5.5-	200-		-3-6-5-6-4-3-1-2-1-3-5-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60	
30-45.5244-112.8472-2-12-						0-M35292-10/09/76-12-			7-	1.4-C-	-	5.2-	55-		-3-7-3-6-4-3-1-2-1-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20.70
30-45.5197-112.8339-2-12-						0-M35293-10/09/76-12-			5-	4.0-C-	-	5.5-	100-		-1-1-3-6-4-3-1-2-1-3-5-2-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.20
30-45.5306-112.8619-2-12-						0-M35294-10/09/76-13-			10-	4.8-C-	-	5.5-	110-		-4-3-6-4-3-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.90
30-45.5108-112.7522-2-15-						0-M35295-10/09/76-14-			14-	-	-	-	-		-1-6-4-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50
30-45.5333-112.6683-2-11-						0-M35296-10/09/76-14-			15-	11.2-C-	-	5.7-	420-		-3-6-5-6-2-3-1-2-2-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.30
30-45.5681-112.6814-2-15-						0-M35297-10/09/76-15-			16-	-	-	-	-		-4-4-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80
30-45.5686-112.6319-2-15-						0-M35298-10/09/76-15-			16-	-	-	-	-		-4-4-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70
30-45.7714-112.2494-2-12-						0-M35299-10/10/76-10-			4-	2.5-C-	-	5.5-	170-		-4-5-6-3-2-1-2-3-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.40
30-45.7811-112.2328-2-15-						0-M35300-10/10/76-10-			-1-	-	-	-	-		-4-4-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10
30-45.7939-112.2364-2-15-						0-M35301-10/10/76-10-			-1-	-	-	-	-		-4-4-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20
30-45.8353-112.2156-2-15-						0-M35302-10/10/76-11-			-1-	-	-	-	-		-4-4-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60
30-45.8342-112.2008-2-15-						0-M35303-10/10/76-11-			-1-	-	-	-	-		-4-4-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40
30-45.8278-112.1750-2-15-						0-M35304-10/10/76-11-			-	-	-	-	-		-4-4-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30
30-45.8147-112.1675-2-15-						0-M35305-10/10/76-11-			-	-	-	-	-		-4-4-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.50
30-45.8006-112.1806-2-15-						0-M35306-10/10/76-11-			-	-	-	-	-		-4-4-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00
30-45.7667-112.1811-2-12-						0-M35307-10/10/76-11-			1-	4.2-C-	-	5.5-	170-		-4-4-6-3-3-1-2-4-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.90
30-45.7925-112.1567-2-12-						0-M35308-10/10/76-11-			1-	4.0-C-	-	5.7-	410-		-4-5-6-2-3-1-2-2-2-2-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80
30-45.8103-112.1233-2-12-						0-M35309-10/10/76-12-			2-	4.2-	-	5.7-	420-		-4-4-6-2-3-1-2-2-3-2-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50
30-45.8100-112.1225-2-12-						0-M35310-10/10/76-12-			2-	4.0-C-	-	5.7-	420-		-4-4-6-2-3-1-2-2-3-2-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10
30-45.8367-112.1456-2-15-						0-M35311-10/10/76-12-			2-	-	-	-	-		-4-4-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40
30-45.8517-112.1400-2-15-						0-M35312-10/10/76-12-			4-	-	-	-	-		-4-4-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.30
30-45.8706-112.1139-2-12-						0-M35313-10/10/76-12-			4-	4.0-C-	-	5.7-	600-		-4-4-6-2-3-1-2-2-2-2-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30
30-45.7928-112.0022-2-12-						0-M35314-10/10/76-13-			4-	5.2-C-	-	5.7-	320-		-1-7-4-6-3-3-1-2-1-3-5-3-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.20
30-45.7953-112.0300-2-11-						0-M35315-10/10/76-13-			4-	1.8-C-	-	5.7-	390-		-4-4-6-2-3-1-2-2-3-5-3-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70
30-45.8131-112.0122-2-11-						0-M35316-10/10/76-13-			4-	5.2-C-	-	5.9-	800-		-4-5-6-2-3-1-2-1-3-4-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.10
30-45.3083-112.2831-2-11-						0-M35317-10/09/76-14-			9-	3.4-C-	-	5.9-	220-		-2-6-4-6-3-3-1-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70
30-45.2992-112.2778-2-15-						0-M35318-10/09/76-16-			9-	-	-	-	-		-2-6-4-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60
30-45.2689-112.2519-2-11-						0-M35319-10/09/76-16-			9-	3.2-C-	-	5.5-	145-		-2-6-5-6-3-3-1-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60
30-45.3606-112.3094-2-15-						0-M35320-10/09/76-17-			9-	-	-	-	-		-2-6-4-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.80
30-45.3508-112.2700-2-11-						0-M35321-10/09/76-17-			9-	3.6-C-	-	5.2-	80-		-2-6-4-6-3-3-1-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.10
30-45.3639-112.2635-2-11-						0-M35322-10/09/76-18-			8-	2.8-C-	-	5.7-	210-		-2-6-4-6-3-3-1-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20
30-45.3606-112.2494-2-15-						0-M35323-10/09/76-18-			8-	-	-	-	-		-2-6-4-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50
30-45.2992-112.3875-2-11-						0-M35324-10/09/76-10-			8-	3.6-C-	-	5.7-	180-		-2-6-4-6-3-3-1-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.20
30-45.4786-112.1328-2-11-						0-M35325-10/10/76-9-			4-	2.2-C-	-	5.5-	110-		-2-6-4-6-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30
30-45.4681-112.1278-2-12-						0-M35326-10/10/76-9-			4-	3.4-C-	-	5.7-	210-		-7-6-4-6-3-3-1-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40
30-45.4639-112.1106-2-11-						0-M35327-10/10/76-9-			4-	3.6-C-	-	5.2-	75-		-2-6-4-6-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80
30-45.4275-112.1717-2-15-						0-M35328-10/10/76-8-			4-	-	-	-	-		-2-6-4-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80
30-45.4206-112.1439-2-15-						0-M35329-10/10/76-7-			1-	-	-	-	-		-2-6-4-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30
30-45.4611-112.0667-2-11-						0-M35330-10/10/76-7-			1-	2.2-C-	-	5.5-	90-		-2-6-4-6-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20
30-45.4019-112.1314-2-12-						0-M35331-10/10/76-7-			1-	3.4-C-	-	5.7-	245-		-2-6-4-6-3-3-1-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70
30-45.4311-112.0736-2-12-						0-M35332-10/10/76-10-			2-	3.2-C-	-	5.5-	220-		-2-6-4-6-3-3-1-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40
30-45.4333-112.0631-2-12-						0-M35333-10/10/76-10-			2-	3.4-C-	-	5.2-	65-		-2-6-4-6-3-3-1-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30
30-45.4311-112.0283-2-15-						0-M35334-10/10/76-10-			2-	-	-	-	-		-2-6-4-6-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30
30-45.4575-112.0103-2-15-						0-M35335-10/10/76-10-			2-	-	-	-</																						

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	
30-45.5442-112.7919-2-12-			0-M35291				-5	-5	-5	47	-20	-15	10	-10	-15	2	29	
30-45.5244-112.8472-2-12-			0-M35292				-5	-5	-5	46	-20	-15	-5	-10	-15	3	23	
30-45.5197-112.8339-2-12-			0-M35293				-5	-5	-5	24	-20	-15	-5	-10	108	2	14	
30-45.5306-112.8619-2-12-			0-M35294				-5	-5	-5	24	-20	-15	-5	-10	-15	3	10	
30-45.5108-112.7522-2-15-			0-M35295				-5	-5	-5	18	-20	62	7	-10	27	2	24	
30-45.5333-112.6683-2-11-			0-M35296				-5	-5	-5	19	-20	-15	12	-10	-15	2	20	
30-45.5681-112.6814-2-15-			0-M35297				-5	-5	-5	29	-20	-15	79	-10	-15	2	20	
30-45.5686-112.6319-2-15-			0-M35298				-5	-5	-5	27	-20	15	8	-10	-15	2	21	
30-45.7714-112.2494-2-12-			0-M35299				-5	-5	-5	54	-20	24	-5	-10	-15	2	29	
30-45.7811-112.2328-2-15-			0-M35300				-5	-5	-5	47	-20	19	17	-10	-15	2	21	
30-45.7939-112.2364-2-15-			0-M35301				-5	-5	-5	59	-20	22	45	-10	-15	2	22	
30-45.8353-112.2156-2-15-			0-M35302				-5	-5	-5	45	-20	26	7	-10	-15	2	13	
30-45.8342-112.2008-2-15-			0-M35303				-5	-5	-5	67	-20	21	30	-10	-15	2	25	
30-45.8278-112.1750-2-15-			0-M35304				-5	-5	-5	57	-20	-15	44	-10	-15	2	23	
30-45.8147-112.1675-2-15-			0-M35305				-5	-5	-5	49	-20	-15	-5	-10	-15	4	11	
30-45.8006-112.1806-2-15-			0-M35306				-5	-5	-5	19	-20	42	-5	-10	-15	2	25	
30-45.7667-112.1811-2-12-			0-M35307				-5	5	-5	33	-20	-15	-5	-10	-15	2	17	
30-45.7925-112.1567-2-12-			0-M35308				-5	-5	-5	42	-20	15	20	-10	-15	2	24	
30-45.8103-112.1233-2-12-			0-M35309				-5	-5	-5	29	-20	18	37	-10	-15	1	16	
30-45.8100-112.1225-2-12-			0-M35310				-5	7	-5	-10	-20	-15	17	-10	-15	1	12	
30-45.8367-112.1456-2-15-			0-M35311				-5	-5	-5	22	-20	-15	25	-10	-15	2	17	
30-45.8517-112.1400-2-15-			0-M35312				-5	-5	-5	33	-20	-15	20	-10	-15	2	18	
30-45.8706-112.1139-2-12-			0-M35313				-5	-5	-5	37	-20	-15	17	-10	-15	2	19	
30-45.7928-112.0022-2-12-			0-M35314				-5	-5	-5	36	-20	35	27	-10	-15	2	25	
30-45.7953-112.0300-2-11-			0-M35315				-5	-5	-5	33	21	27	13	-10	-15	2	16	
30-45.8131-112.0122-2-11-			0-M35316				-5	-5	-5	52	-20	33	112	-10	-15	2	23	
30-45.3083-112.2831-2-11-			0-M35317				-5	-5	-5	37	-20	30	-5	-10	-15	2	12	
30-45.2992-112.2778-2-15-			0-M35318				-5	-5	-5	55	-20	35	5	-10	-15	2	12	
30-45.2689-112.2519-2-11-			0-M35319				-5	-5	-5	42	-20	45	8	-10	-15	2	29	
30-45.3606-112.3094-2-15-			0-M35320				-5	-5	-5	31	-20	68	17	-10	-15	2	20	
30-45.3508-112.2700-2-11-			0-M35321				-5	-5	-5	35	-20	58	11	-10	-15	2	20	
30-45.3639-112.2636-2-11-			0-M35322				-5	-5	-5	31	-20	63	14	-10	-15	2	15	
30-45.3606-112.2494-2-15-			0-M35323				-5	-5	-5	44	-20	35	12	-10	-15	2	24	
30-45.2992-112.3875-2-11-			0-M35324				-5	7	-5	35	-20	53	7	-10	-15	2	13	
30-45.4786-112.1328-2-11-			0-M35325				-5	-5	-5	53	-20	32	21	-10	-15	2	25	
30-45.4681-112.1278-2-12-			0-M35326				-5	-5	-5	52	-20	17	26	-10	-15	2	19	
30-45.4639-112.1106-2-11-			0-M35327				-5	-5	-5	18	-20	20	10	-10	-15	2	29	
30-45.4275-112.1717-2-15-			0-M35328				-5	-5	-5	20	-20	26	8	-10	-15	2	30	
30-45.4206-112.1439-2-15-			0-M35329				-5	-5	-5	52	-20	35	26	-10	-15	2	22	
30-45.4611-112.0667-2-11-			0-M35330				-5	7	-5	47	-20	25	20	-10	-15	2	28	
30-45.4019-112.1314-2-12-			0-M35331				-5	7	-5	23	-20	19	14	-10	-15	2	28	
30-45.4311-112.0736-2-12-			0-M35332				-5	-5	-5	44	-20	37	24	-10	-15	2	19	
30-45.4333-112.0631-2-12-			0-M35333				-5	-5	-5	28	-20	80	9	-10	-15	2	25	
30-45.4311-112.0283-2-15-			0-M35334				-5	-5	5	48	-20	62	11	-10	-15	2	20	
30-45.4575-112.0103-2-15-			0-M35335				-5	-5	-5	25	-20	-15	13	-10	-15	2	33	
30-45.3850-112.1139-2-12-			0-M35336				-5	-5	-5	28	-20	21	12	-10	-15	2	33	
30-45.3908-112.1314-2-15-			0-M35337				-5	-5	-5	43	-20	64	5	-10	-15	2	15	
30-45.3769-112.0656-2-15-			0-M35338				-5	-5	-5	43	-20	77	13	-10	-15	2	18	
30-45.3894-112.0519-2-15-			0-M35339				-5	-5	-5	23	-20	18	7	-10	-15	2	25	
30-45.4208-112.0022-2-11-			0-M35340				-5	-5	-5	13	-20	16	12	-10	-15	2	32	
30-45.3761-112.1500-2-15-			0-M35341				-5	-5	-5	35	-20	46	11	-10	-15	2	33	

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

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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
30-45.5442-112.7919-2-12-						0-M35291	54022	-0.08	567	19580	66	-81	8.3	42	3.8	4	1.2	14200	7.7	10380	48	0.3
30-45.5244-112.8472-2-12-						0-M35292	60310	-0.08	423	33920	190	-109	15.4	55	2.8	9	2.2	89450	35.1	12680	114	1.2
30-45.5197-112.8339-2-12-						0-M35293	57370	-0.07	801	31210	127	-163	12.0	31	1.5	5	1.8	85810	16.1	14910	70	0.6
30-45.5306-112.8619-2-12-						0-M35294	67860	-0.08	573	27380	174	-125	12.1	26	-1.7	6	1.9	57560	25.7	17330	82	0.8
30-45.5109-112.7522-2-15-						0-M35295	56110	-0.10	802	82710	80	-105	13.9	136	3.3	3	1.4	19840	6.8	15930	43	0.3
30-45.5333-112.6683-2-11-						0-M35296	58880	-0.06	622	28510	82	132	10.2	30	4.2	5	1.2	17370	10.6	14830	46	0.4
30-45.5681-112.6814-2-15-						0-M35297	56180	-0.05	611	35610	73	-73	7.3	40	3.5	4	1.2	15380	10.8	14950	47	0.3
30-45.5686-112.6319-2-15-						0-M35298	68190	-0.06	512	21440	76	-79	10.1	59	3.0	4	1.1	20120	7.8	13530	43	0.4
30-45.7714-112.2494-2-12-						0-M35299	66150	0.18	332	35120	99	-107	13.4	75	4.1	5	1.5	21480	9.9	13350	54	0.6
30-45.7811-112.2328-2-15-						0-M35300	62120	-0.05	580	34560	75	85	10.6	66	4.0	5	1.2	21810	9.8	16830	42	0.5
30-45.7939-112.2364-2-15-						0-M35301	67950	-0.05	630	14610	83	-82	12.3	75	5.1	5	1.4	23510	9.4	16850	42	0.4
30-45.8353-112.2156-2-15-						0-M35302	69320	-0.07	435	32280	92	196	12.4	85	2.5	4	1.3	31400	12.2	14660	43	0.5
30-45.8342-112.2008-2-15-						0-M35303	69050	-0.09	580	34980	71	-106	13.4	44	5.6	3	1.4	23570	5.3	17510	39	0.4
30-45.8278-112.1750-2-15-						0-M35304	66160	-0.05	565	19250	81	-80	11.0	51	3.6	4	1.2	22610	9.8	15130	46	0.4
30-45.8147-112.1675-2-15-						0-M35305	62880	-0.07	410	28270	106	-97	16.1	170	2.2	5	1.4	77260	24.6	13080	55	0.6
30-45.8006-112.1806-2-15-						0-M35306	59200	-0.07	625	73830	81	-104	15.3	148	3.3	4	1.5	18210	7.6	15220	49	0.3
30-45.7667-112.1811-2-12-						0-M35307	65890	-0.06	503	30090	139	-100	13.9	113	2.9	7	1.6	30560	22.2	15110	72	0.7
30-45.7925-112.1567-2-12-						0-M35308	61020	-0.09	680	22590	78	-98	14.6	60	5.5	4	1.5	18970	7.9	16440	35	0.5
30-45.8103-112.1233-2-12-						0-M35309	55500	-0.07	562	20520	78	92	8.7	65	2.9	4	1.3	18040	8.6	14030	43	0.4
30-45.8100-112.1225-2-12-						0-M35310	49700	-0.05	519	26760	92	-77	9.6	57	2.1	4	1.0	15950	12.2	12320	51	0.5
30-45.8367-112.1456-2-15-						0-M35311	77740	-0.06	519	32440	83	-109	8.7	33	3.8	5	1.3	19610	12.2	16940	41	0.5
30-45.8517-112.1400-2-15-						0-M35312	75790	-0.07	384	27020	134	-111	11.9	56	4.1	6	1.4	30170	29.9	15320	65	0.8
30-45.8706-112.1139-2-12-						0-M35313	57180	-0.07	497	23200	70	-63	8.7	28	5.4	3	1.2	15080	5.3	17660	37	0.4
30-45.7928-112.0022-2-12-						0-M35314	70340	0.17	792	22700	53	-109	17.6	116	2.0	3	1.2	32780	7.1	14880	31	0.4
30-45.7953-112.0300-2-11-						0-M35315	74700	-0.07	910	18420	67	-97	14.9	128	2.4	4	1.5	23810	6.5	23350	39	0.4
30-45.8131-112.0122-2-11-						0-M35316	61480	-0.09	509	26520	57	-119	19.6	118	4.1	3	1.1	30780	8.0	16910	25	0.4
30-45.3083-112.2831-2-11-						0-M35317	47510	-0.09	-270	35480	91	-160	18.6	101	-2.0	3	1.4	43410	11.1	-6602	39	0.6
30-45.2992-112.2778-2-15-						0-M35318	53720	-0.07	311	41000	72	-122	19.2	93	2.1	4	1.4	37830	10.4	13160	40	0.5
30-45.2689-112.2519-2-11-						0-M35319	65190	-0.06	496	21110	51	-87	23.0	134	6.4	4	1.3	32510	8.6	15370	35	0.4
30-45.3606-112.3094-2-15-						0-M35320	61800	-0.08	365	24840	208	-102	21.7	158	2.1	7	2.0	34800	15.4	9530	100	0.7
30-45.3508-112.2700-2-11-						0-M35321	58540	-0.10	-206	22730	204	-111	24.1	162	2.1	7	2.0	38090	14.4	9863	109	0.8
30-45.3639-112.2636-2-11-						0-M35322	67300	-0.07	487	37250	109	-92	20.5	224	3.1	9	1.6	33250	13.1	15290	51	0.9
30-45.3606-112.2494-2-15-						0-M35323	64780	-0.07	567	32130	83	-93	15.8	106	6.3	6	1.4	21230	7.8	15790	41	0.6
30-45.2992-112.3875-2-11-						0-M35324	65440	-0.09	489	28990	117	-112	21.1	215	4.2	9	1.7	34170	18.4	17900	63	1.2
30-45.4786-112.1328-2-11-						0-M35325	54010	-0.07	-264	7317	58	-143	18.4	72	3.9	3	1.2	23070	6.2	12030	38	0.3
30-45.4681-112.1278-2-12-						0-M35326	57160	-0.07	494	8005	60	-140	16.0	68	4.0	4	1.1	23160	7.1	14610	37	0.4
30-45.4639-112.1106-2-11-						0-M35327	53070	-0.06	539	11850	69	-75	9.8	75	2.7	4	1.1	13560	13.9	13100	40	0.5
30-45.4275-112.1717-2-15-						0-M35328	54590	-0.05	613	10640	64	-79	9.5	76	2.9	3	1.1	14160	13.3	14100	26	0.4
30-45.4206-112.1439-2-15-						0-M35329	53470	-0.05	708	7697	67	-142	18.4	66	4.7	3	1.1	22590	6.2	14260	27	0.3
30-45.4611-112.0657-2-11-						0-M35330	55450	-0.07	641	8640	64	-141	15.9	68	4.3	3	1.0	22550	6.4	14630	37	0.4
30-45.4019-112.1314-2-12-						0-M35331	54890	-0.06	616	10690	66	-75	10.0	83	2.6	4	1.3	13800	13.1	11680	36	0.4
30-45.4311-112.0736-2-12-						0-M35332	55810	-0.09	-323	7427	65	-159	15.8	58	5.4	-2	1.3	22990	7.3	13950	33	0.4
30-45.4333-112.0631-2-12-						0-M35333	61980	-0.07	1053	32180	49	-117	21.3	472	2.7	2	1.3	31760	4.3	14880	33	0.3
30-45.4311-112.0283-2-15-						0-M35334	64500	-0.07	1002	34430	49	-117	19.3	499	2.8	2	1.3	32560	4.8	15150	32	0.2
30-45.4575-112.0103-2-15-						0-M35335	55560	-0.08	635	11860	82	-85	10.4	85	2.7	4	1.2	14290	15.4	12410	40	0.6
30-45.3850-112.1139-2-12-						0-M35336	55060	-0.07	500	11720	65	-78	9.2	73	3.0	4	1.2	14540	12.9	13610	32	0.4
30-45.3908-112.1314-2-15-						0-M35337	64700	-0.07	1162	31930	52	-117	20.7	531	3.1	2	1.3	33460	4.9	14410	30	0.3
30-45.3769-112.0656-2-15-						0-M35338	64540	-0.08	1089	34380	51	-122	17.0	478	2.9	3	1.1	34080	4.0	16420	29	0.2
30-45.3894-112.0519-2-15-						0-M35339	55900	-0.08	590	10570	76	-86	10.6	89	2.5	4	1.6	15380	13.8	14340	42	0.5
30-45.4208-112.0022-2-11-						0-M35340	54520	-0.07	470	11220	56	-80	8.6	90	2.9	3	1.3	15640	12.3	13220	38	0.4
30-45.3761-112.1500-2-15-						0-M35341	75230	-0.09	589	13130	68	-95	16.3	113	4.9	4	1.1	24120	7.8	20820	39	0.4

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

④

DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued)																U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAS. 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	
30-45.5442-112.7919-2-12-			0-M35291			22170	513	5929	-27	-2	7.6	4.1	-363	-1	-1	9.2	2700	83	2.6	139	0.391	
30-45.5244-112.8472-2-12-			0-M35292			27430	1163	15940	33	-3	16.0	14.1	-414	2	1	50.1	4572	326	9.3	84	0.413	
30-45.5197-112.8339-2-12-			0-M35293			13110	2650	16940	34	-2	10.5	7.7	-640	-1	-1	18.8	2772	224	4.8	121	0.330	
30-45.5306-112.8619-2-12-			0-M35294			16460	1048	20190	-25	-2	15.3	9.7	-434	1	-1	34.7	2871	222	7.0		0.228	
30-45.5108-112.7522-2-15-			0-M35295			33470	400	11220	-35	-3	9.5	3.5	-379	1	-1	7.8	4519	70	-2.4	-78	0.449	
30-45.5333-112.6683-2-11-			0-M35296			14450	481	12520	40	-2	7.0	5.5	-307	-1	-1	12.3	3107	58	3.8	107	0.431	
30-45.5681-112.6814-2-15-			0-M35297			17420	635	10300	33	-1	6.1	4.8	-270	1	-1	12.9	2975	57	3.0	91	0.295	
30-45.5686-112.6319-2-15-			0-M35298			19760	571	8944	31	-2	8.4	5.1	-312	-1	-1	12.0	3671	74	3.5	136	0.225	
30-45.7714-112.2494-2-12-			0-M35299			31520	702	16180	-28	-3	11.6	5.2	-388	-1	-1	16.8	3615	80	4.1	-45	0.262	
30-45.7811-112.2328-2-15-			0-M35300			19880	598	11280	41	-1	8.9	5.5	-279	-1	1	13.3	3750	79	3.1	100	0.233	
30-45.7939-112.2364-2-15-			0-M35301			18960	860	11810	47	-2	10.6	5.4	-316	-1	-1	13.2	3814	82	4.4	100	0.242	
30-45.8353-112.2156-2-15-			0-M35302			19580	943	15680	30	-2	11.2	6.4	-400	-1	-1	11.7	3794	135	4.5		0.222	
30-45.8342-112.2008-2-15-			0-M35303			23890	848	10570	58	-3	11.3	5.8	-432	-1	-1	11.6	3273	82	-2.7	127	0.207	
30-45.8278-112.1750-2-15-			0-M35304			16800	562	14750	49	2	9.5	5.5	-272	1	-1	14.3	3691	85	3.7	117	0.231	
30-45.8147-112.1675-2-15-			0-M35305			21560	1033	14800	-24	-2	11.5	6.6	-356	1	-1	24.5	4283	353	6.3	108	0.184	
30-45.8006-112.1806-2-15-			0-M35306			35440	592	14030	-22	-2	8.9	5.8	-361	1	-1	11.0	4420	75	2.7	-81	0.273	
30-45.7667-112.1811-2-12-			0-M35307			26190	953	17090	43	-2	11.9	7.8	-358	1	-1	21.4	4307	111	5.9	121	0.229	
30-45.7925-112.1567-2-12-			0-M35308			19260	548	11010	49	-3	8.6	5.5	-383	-1	-1	10.6	3879	60	3.5		0.358	
30-45.8103-112.1233-2-12-			0-M35309			17680	465	13300	36	-2	8.2	4.9	-313	-1	-1	11.3	3292	68	4.4	112	0.310	
30-45.8100-112.1225-2-12-			0-M35310			14820	618	12890	29	-1	7.1	5.5	-280	-1	1	13.8	3412	49	3.5	69	0.225	
30-45.8367-112.1456-2-15-			0-M35311			17030	556	22480	48	-2	10.4	5.7	665	-1	-1	15.2	2892	76	3.6	97	0.224	
30-45.8517-112.1400-2-15-			0-M35312			16410	840	19450	57	-2	13.3	9.1	-377	-1	-1	27.7	3998	127	6.0		0.227	
30-45.8706-112.1139-2-12-			0-M35313			17470	749	2999	38	-2	7.4	4.6	-357	-1	-1	9.8	2667	74	3.0	135	0.337	
30-45.7928-112.0022-2-12-			0-M35314			25720	749	21060	-22	-2	12.9	3.8	497	-1	-1	6.7	5371	139	2.6	175	0.328	
30-45.7953-112.0300-2-11-			0-M35315			15170	545	18580	38	-2	10.8	4.6	441	-1	-1	8.1	5009	98	2.3	106	0.333	
30-45.8131-112.0122-2-11-			0-M35316			24020	1122	13010	33	-3	16.5	4.5	-476	-1	-1	6.5	4358	120	3.9	-62	0.323	
30-45.3083-112.2831-2-11-			0-M35317			21110	2495	7548	-31	-3	18.9	5.4	-651	-7	-1	12.0	3693	90	5.1	-284	0.308	
30-45.2992-112.2778-2-15-			0-M35318			30710	2098	8698	37	-2	16.5	6.0	-524	-1	-1	12.2	5141	105	4.3	80	0.295	
30-45.2689-112.2519-2-11-			0-M35319			45410	816	13780	46	-2	15.7	4.1	-319	-1	-1	9.6	4641	119	3.7	74	0.271	
30-45.3606-112.3094-2-15-			0-M35320			39700	1406	8250	-22	-2	18.7	17.7	-437	-1	-1	35.1	5535	129	5.8		0.279	
30-45.3508-112.2700-2-11-			0-M35321			44030	1491	8296	-34	-3	21.8	12.8	-483	-1	2	35.2	5657	124	5.8		0.287	
30-45.3639-112.2636-2-11-			0-M35322			31810	1047	13250	55	-2	19.1	7.1	-346	1	2	15.5	7332	129	6.8	-25	0.206	
30-45.3606-112.2494-2-15-			0-M35323			21180	681	13030	-20	-2	10.7	5.9	-339	-1	-1	11.5	4206	79	3.9	69	0.217	
30-45.2992-112.3875-2-11-			0-M35324			24760	924	15110	-32	-3	17.8	7.2	-419	-1	1	16.4	6657	137	8.2	-142	0.256	
30-45.4786-112.1328-2-11-			0-M35325			12460	2816	7297	41	-2	10.6	4.2	-670	1	-1	12.8	3838	77	3.4	159	0.258	
30-45.4681-112.1278-2-12-			0-M35326			15290	2845	7472	65	-2	10.6	4.2	-644	-1	-1	10.3	3109	66	3.5	139	0.330	
30-45.4639-112.1106-2-11-			0-M35327			15350	418	8867	34	-2	6.7	4.8	-280	-1	-1	8.7	3260	63	3.5	91	0.437	
30-45.4275-112.1717-2-15-			0-M35328			13300	456	8903	38	-2	7.3	2.4	-297	-1	-1	8.7	2984	70	3.4	-58	0.437	
30-45.4206-112.1439-2-15-			0-M35329			13500	2837	7213	35	-2	10.5	3.4	-679	-1	-1	10.1	3683	67	2.8	145	0.327	
30-45.4611-112.0667-2-11-			0-M35330			15990	2890	7457	52	-2	10.7	4.1	-650	-1	-1	10.9	3266	78	2.8	162	0.294	
30-45.4019-112.1314-2-12-			0-M35331			13860	462	8926	39	-2	6.5	5.1	-293	-1	-1	9.8	4079	60	3.2	-61	0.378	
30-45.4311-112.0736-2-12-			0-M35332			9783	2787	7115	-30	-3	10.5	4.2	-765	-1	-1	10.8	-1795	70	3.3	193	0.315	
30-45.4333-112.0631-2-12-			0-M35333			29190	1510	14550	34	-2	13.7	3.4	904	-1	-1	5.8	3737	139	2.4	126	0.397	
30-45.4311-112.0283-2-15-			0-M35334			29810	1535	14980	-22	-2	14.4	3.3	1008	-1	-1	5.7	4221	147	1.7	109	0.404	
30-45.4575-112.0103-2-15-			0-M35335			15320	442	8887	-23	-2	7.1	5.6	-329	-1	-1	9.0	3658	66	3.4	98	0.422	
30-45.3850-112.1139-2-12-			0-M35336			17960	439	9095	-23	-2	7.2	4.2	-295	-1	-1	8.6	3237	72	3.6	122	0.430	
30-45.3908-112.1314-2-15-			0-M35337			24900	1509	14770	-22	-2	14.1	3.3	904	-1	-1	5.7	3896	148	1.9	116	0.386	
30-45.3769-112.0656-2-15-			0-M35338			28470	1585	15030	77	-3	14.8	3.4	923	-1	-1	6.5	4192	136	2.0	111	0.369	
30-45.3894-112.0519-2-15-			0-M35339			15170	445	8975	-23	-2	7.3	6.0	-339	-1	-1	9.8	3622	62	3.7	-4	0.347	
30-45.4208-112.0022-2-11-			0-M35340			16760	440	8926	56	-2	7.3	3.3	-296	-1	-1	9.0	3157	75	3.7	113	0.411	
30-45.3761-112.1500-2-15-			0-M35341			23400	790	9823	53	-2	10.8	4.9	-391	-1	-1	13.1	4002	90	3.6	119	0.252	

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	CONDUCTIVITY (umho/cm)	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (umho/cm)	SCINTILLATOR (eU/pum)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	SEDIMENT 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																											
30-45.3939-112.1928-2-11-						0-M35342-10/10/76-13-			2-	2.2-C-	-	5.5-	220-		-2-6-4-6-3-3-1-	-	-4-3-2-5-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20		
30-45.4009-112.2000-2-15-						0-M35343-10/10/76-13-			2-	-	-	-	-	-	-2-6-4-6-	-1-	-2-4-3-3-5-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70	
30-45.4044-112.2058-2-15-						0-M35344-10/10/76-13-			2-	-	-	-	-	-	-2-6-4-6-	-1-	-2-3-2-3-5-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30	
30-45.4111-112.2047-2-12-						0-M35345-10/10/76-13-			2-	4.6-C-	-	6.1-	330-		-2-6-5-6-3-3-1-	-2-4-3-2-5-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50	
30-45.4158-112.2244-2-15-						0-M35346-10/10/76-13-			2-	-	-	-	-	-	-2-6-4-6-	-1-	-2-3-2-3-5-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45.4206-112.2406-2-15-						0-M35347-10/10/76-13-			2-	-	-	-	-	-	-2-6-4-6-	-1-	-2-3-3-2-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
30-45.4286-112.2611-2-15-						0-M35348-10/10/76-14-			2-	-	-	-	-	-	-2-6-4-6-	-1-	-2-4-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45.4339-112.2558-2-12-						0-M35349-10/10/76-14-			2-	4.4-C-	-	5.7-	360-		-2-6-5-6-3-3-1-	-2-4-2-2-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.30	
30-45.4408-112.2508-2-12-						0-M35350-10/10/76-14-			2-	4.6-C-	-	6.5-	750-		-4-5-6-3-3-1-	-2-2-2-2-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.50	
30-45.4614-112.2611-2-12-						0-M35351-10/10/76-15-			2-	4.2-C-	-	6.8-	800-		-4-5-6-3-3-1-	-2-2-3-2-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.10	
30-45.4747-112.2722-2-15-						0-M35352-10/10/76-15-			2-	-	-	-	-	-	-4-4-6-	-1-	-2-4-3-2-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.30	
30-45.4858-112.2761-2-15-						0-M35353-10/10/76-15-			2-	-	-	-	-	-	-4-4-6-	-1-	-2-4-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80	
30-45.4953-112.3147-2-12-						0-M35354-10/10/76-15-			2-	4.4-C-	-	6.3-	220-		-4-5-6-3-3-1-	-2-2-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.80	
30-45.4689-112.3003-2-12-						0-M35355-10/10/76-16-			2-	4.2-C-	-	6.3-	345-		-4-5-6-3-3-1-	-2-2-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.10	
30-45.4519-112.3653-2-15-						0-M35356-10/10/76-17-			2-	-	-	-	-	-	-4-4-6-	-1-	-2-4-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45.4344-112.3442-2-15-						0-M35357-10/10/76-17-			2-	-	-	-	-	-	-4-4-6-	-1-	-2-4-3-2-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
30-45.4264-112.3581-2-15-						0-M35358-10/10/76-18-			2-	-	-	-	-	-	-4-4-6-	-1-	-2-4-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
30-45.4431-112.3297-2-15-						0-M35359-10/10/76-18-			1-	-	-	-	-	-	-4-4-6-	-1-	-2-4-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
30-45.4219-112.2858-2-15-						0-M35360-10/10/76-18-			1-	-	-	-	-	-	-4-4-6-	-1-	-2-3-2-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50	
30-45.7086-112.0864-2-12-						0-M35361-10/11/76-11-			-1-	1.6-C-	-	5.5-	280-		-2-7-4-6-4-2-1-	-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.80	
30-45.6978-112.1347-2-12-						0-M35362-10/11/76-11-			-	2.2-C-	-	5.5-	190-		-1-7-4-6-4-2-1-	-2-2-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.80	
30-45.6944-112.1367-2-12-						0-M35363-10/11/76-12-			2-	2.8-	-	5.2-	80-		-1-7-4-6-3-2-1-	-2-2-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45.7094-112.1286-2-15-						0-M35364-10/11/76-12-			1-	-	-	-	-	-	-1-7-4-6-	-1-	-2-1-3-5-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.40	
30-45.6808-112.1472-2-15-						0-M35365-10/11/76-12-			2-	-	-	-	-	-	-4-4-6-	-1-	-2-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80	
30-45.8383-112.0078-2-15-						0-M35366-10/10/76-13-			4-	-	-	-	-	-	-4-4-6-	-1-	-2-4-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.40	
30-45.8347-112.0222-2-15-						0-M35367-10/10/76-13-			6-	-	-	-	-	-	-4-4-6-	-1-	-2-4-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
30-45.8300-112.0314-2-15-						0-M35368-10/10/76-13-			6-	-	-	-	-	-	-4-4-6-	-1-	-2-4-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80	
30-45.8228-112.0572-2-15-						0-M35369-10/10/76-14-			6-	-	-	-	-	-	-4-4-6-	-1-	-2-4-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80	
30-45.7944-112.0658-2-11-						0-M35370-10/10/76-14-			6-	4.2-C-	-	5.7-	360-		-4-3-6-3-3-1-2-3-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45.7817-112.0653-2-12-						0-M35371-10/10/76-14-			6-	4.2-C-	-	5.5-	370-		-4-4-6-3-3-1-2-3-3-4-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45.8064-112.0850-2-12-						0-M35372-10/10/76-14-			6-	4.4-C-	-	5.9-	550-		-4-4-6-3-3-1-2-3-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45.7631-112.0744-2-11-						0-M35373-10/10/76-15-			2-	4.4-C-	-	5.7-	430-		-4-3-7-3-3-1-2-4-4-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.90	
30-45.7531-112.0383-2-11-						0-M35374-10/10/76-16-			2-	0.4-C-	-	5.9-	420-		-4-4-6-2-3-1-2-1-4-5-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
30-45.7442-112.0739-2-15-						0-M35375-10/10/76-16-			2-	-	-	-	-	-	-4-4-6-	-1-	-2-1-4-5-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
30-45.7956-112.1161-2-15-						0-M35376-10/10/76-17-			6-	-	-	-	-	-	-4-4-6-	-1-	-2-3-3-4-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45.7531-112.1286-2-15-						0-M35377-10/10/76-17-			-	-	-	-	-	-	-3-7-4-6-	-1-	-2-1-3-4-5-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50	
30-45.8581-112.1973-2-12-						0-M35378-10/11/76-10-			1-	2.2-C-	-	5.5-	240-		-4-4-6-3-3-1-2-3-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45.8775-112.1878-2-12-						0-M35379-10/11/76-10-			2-	4.8-C-	-	5.7-	600-		-4-4-6-3-3-1-2-2-2-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.50	
30-45.8923-112.2186-2-15-						0-M35380-10/11/76-10-			3-	-	-	-	-	-	-4-4-6-	-1-	-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80	
30-45.8961-112.2325-2-11-						0-M35381-10/11/76-11-			5-	-C-	-	6.5-	440-		-4-5-6-3-3-1-2-2-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.90	
30-45.9125-112.2236-2-15-						0-M35382-10/11/76-11-			9-	-	-	-	-	-	-4-4-6-	-1-	-2-3-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.70	
30-45.9672-112.2386-2-11-						0-M35383-10/11/76-12-			10-	6.8-C-	-	5.7-	290-		-3-6-4-6-2-3-1-2-1-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.80	
30-45.9944-112.2414-2-12-						0-M35384-10/11/76-12-			6-	1.2-C-	-	5.2-	230-		-4-4-6-2-3-1-2-1-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35.70	
30-45.9983-112.2425-2-12-						0-M35385-10/11/76-12-			6-	1.8-C-	-	5.5-	80-		-4-4-6-3-3-1-2-1-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45.80	
30-45.9264-112.1828-2-15-						0-M35386-10/11/76-13-			10-	-	-	-	-	-	-4-4-6-	-1-	-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70	
30-45.9647-112.1628-2-12-						0-M35387-10/11/76-13-			12-	2.4-C-	-	5.2-	130-		-4-4-6-3-3-1-2-2-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.60	
30-45.9467-112.1303-2-12-						0-M35388-10/11/76-14-			12-	4.4-C-	-	5.5-	230-		-4-4-6-3-3-1-2-2-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.00	
30-45.9408-112.1125-2-12-						0-M35389-10/11/76-15-			12-	5.0-C-	-	5.7-	380-		-4-3-6-3-3-2-2-3-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.60	
30-45.9778-112.1189-2-12-						0-M35390-10/11/76-15-			10-	5.0-C-	-	5.7-	260-		-4-4-7-3-3-1-2-3-3-2-1-	-3-	-	-	-	-	-														

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	LAS 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
30-45.3939-112.1928-2-11-						0-M35342	-5	-5	-5	55	-20	16	44	-10	20		3	33
30-45.4008-112.2000-2-15-						0-M35343	-5	-5	6	57	-20	32	23	-10	-15		2	13
30-45.4044-112.2058-2-15-						0-M35344	-5	-5	-5	46	-20	37	-5	-10	-15		2	43
30-45.4111-112.2047-2-12-						0-M35345	-5	-5	-5	32	-20	51	15	-10	-15		2	17
30-45.4158-112.2244-2-15-						0-M35346												
30-45.4205-112.2406-2-15-						0-M35347	-5	-5	-5	22	-20	27	14	-10	-15		2	22
30-45.4286-112.2611-2-15-						0-M35348	-5	-5	-5	26	-20	19	10	-10	-15		2	19
30-45.4339-112.2558-2-12-						0-M35349	9	-5	9	39	-20	24	9	-10	28		3	18
30-45.4408-112.2508-2-12-						0-M35350	-5	-5	-5	30	-20	15	10	-10	-15		1	17
30-45.4614-112.2611-2-12-						0-M35351	-5	-5	-5	33	-20	50	12	-10	-15		2	53
30-45.4747-112.2722-2-15-						0-M35352	-5	-5	-5	-10	-20	21	9	-10	-15		3	17
30-45.4858-112.2761-2-15-						0-M35353	-5	-5	-5	13	-20	-15	14	-10	-15		3	25
30-45.4953-112.3147-2-12-						0-M35354	-5	-5	-5	52	-20	-15	9	-10	-15		4	34
30-45.4689-112.3003-2-12-						0-M35355	-5	5	-5	26	-20	-15	17	-10	29		2	41
30-45.4519-112.3653-2-15-						0-M35356	-5	-5	-5	48	-20	20	24	-10	-15		2	16
30-45.4344-112.3442-2-15-						0-M35357	-5	-5	-5	30	-20	52	14	-10	-15		2	23
30-45.4264-112.3581-2-15-						0-M35358	-5	-5	-5	36	-20	56	15	-10	-15		3	17
30-45.4431-112.3297-2-15-						0-M35359	-5	-5	-5	35	-20	61	12	-10	-15		3	15
30-45.4219-112.2853-2-15-						0-M35360	-5	-5	-5	35	-20	50	15	-10	-15		2	15
30-45.7086-112.0864-2-12-						0-M35361	-5	-5	-5	76	-20	78	-5	-10	18		2	18
30-45.6978-112.1347-2-12-						0-M35362	5	-5	-5	40	-20	105	-5	-10	-15		2	14
30-45.6944-112.1367-2-12-						0-M35363	-5	-5	-5	28	-20	65	13	-10	-15		2	26
30-45.7094-112.1286-2-15-						0-M35364	-5	-5	-5	79	-20	98	23	-10	-15		2	34
30-45.6808-112.1472-2-15-						0-M35365	-5	-5	-5	37	-20	39	16	-10	-15		2	18
30-45.8383-112.0078-2-15-						0-M35366	-5	-5	-5	32	-20	23	11	-10	-15		2	66
30-45.8347-112.0222-2-15-						0-M35367	-5	-5	-5	30	-20	15	21	-10	-15		2	25
30-45.8300-112.0314-2-15-						0-M35368	-5	-5	-5	15	-20	20	19	-10	-15		3	34
30-45.8228-112.0572-2-15-						0-M35369	-5	-5	-5	33	-20	16	16	-10	-15		3	27
30-45.7944-112.0658-2-11-						0-M35370	-5	-5	-5	29	-20	29	15	-10	-15		2	27
30-45.7817-112.0653-2-12-						0-M35371	-5	-5	-5	38	-20	49	-5	-10	-15		3	7
30-45.8064-112.0850-2-12-						0-M35372	-5	-5	-5	28	-20	22	13	-10	-15		1	18
30-45.7631-112.0744-2-11-						0-M35373	-5	-5	-5	31	-20	-15	-5	-10	-15		2	10
30-45.7531-112.0383-2-11-						0-M35374	-5	6	-5	26	-20	37	24	-10	-15		2	35
30-45.7442-112.0739-2-15-						0-M35375	-5	-5	-5	15	-20	21	-5	-10	-15		2	16
30-45.7956-112.1161-2-15-						0-M35376	-5	6	-5	65	-20	63	23	-10	-15		2	63
30-45.7531-112.1286-2-15-						0-M35377	-5	5	-5	37	-20	-15	32	-10	-15		1	21
30-45.8681-112.1978-2-12-						0-M35378	-5	-5	-5	36	-20	-15	6	-10	-15		2	23
30-45.8775-112.1878-2-12-						0-M35379	16	6	-5	35	34	25	-5	-10	34		3	12
30-45.8928-112.2186-2-15-						0-M35380	-5	-5	6	49	-20	-15	27	-10	15		2	28
30-45.8961-112.2325-2-11-						0-M35381	-5	5	7	42	-20	15	25	-10	18		2	31
30-45.9125-112.2236-2-15-						0-M35382	-5	-5	-5	48	-20	-15	13	-10	-15		5	11
30-45.9672-112.2386-2-11-						0-M35383	-5	-5	-5	47	-20	-15	8	-10	-15		3	20
30-45.9944-112.2414-2-12-						0-M35384	-5	-5	-5	59	-20	15	28	-10	-15		3	37
30-45.9983-112.2425-2-12-						0-M35385	-5	5	-5	31	-20	-15	22	-10	-15		5	56
30-45.9264-112.1828-2-15-						0-M35386	-5	-5	5	51	-20	-15	24	-10	-15		3	20
30-45.9647-112.1628-2-12-						0-M35387	-5	-5	-5	44	-20	-15	15	-10	-15		4	14
30-45.9467-112.1303-2-12-						0-M35388	-5	5	6	25	-20	43	-5	-10	-15		3	11
30-45.9408-112.1125-2-12-						0-M35389	-5	-5	-5	64	-20	31	82	-10	-15		2	12
30-45.9778-112.1189-2-12-						0-M35390	-5	6	-5	28	-20	22	11	-10	-15		2	21
30-45.9817-112.0819-2-12-						0-M35391	-5	-5	-5	53	-20	18	9	-10	-15		3	16
30-45.9622-112.1078-2-15-						0-M35392	-5	-5	-5	50	-20	18	7	-10	-15		2	24

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

③

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	
30-45.3939-112.1928-2-11-			0-M35342			66890	-0.06	501	13330	80	-84	13.1	83	5.5	5	1.4	24100	9.6	20360	46	0.5		
30-45.4008-112.2000-2-15-			0-M35343			62200	-0.10	527	29970	123	-169	25.0	259	-2.3	6	1.6	58920	13.0	11580	48	0.8		
30-45.4044-112.2058-2-15-			0-M35344			64930	-0.11	411	20190	60	-111	20.8	133	4.8	3	1.2	34070	8.4	13340	28	0.4		
30-45.4111-112.2047-2-12-			0-M35345			66800	-0.06	846	21730	58	-87	13.0	237	2.2	3	0.9	23310	6.7	19010	37	0.3		
30-45.4158-112.2244-2-15-			0-M35346			66340	-0.06	978	23240	67	-82	12.7	245	2.3	3	1.1	23220	7.9	18900	37	0.3		
30-45.4206-112.2406-2-15-			0-M35347			62580	-0.09	916	27910	73	-114	12.3	97	2.3	4	1.2	17440	10.8	17460	41	0.5		
30-45.4286-112.2611-2-15-			0-M35348			59700	-0.09	703	25830	63	-115	9.3	83	-1.9	3	1.4	16910	8.7	13690	34	0.4		
30-45.4339-112.2558-2-12-			0-M35349			64310	-0.08	484	31040	106	204	17.9	122	5.3	7	2.2	61330	54.7	15460	66	0.9		
30-45.4408-112.2508-2-12-			0-M35350			66540	-0.07	372	77720	87	108	10.2	108	2.7	5	1.0	27170	17.1	9437	46	0.5		
30-45.4614-112.2611-2-12-			0-M35351			62850	-0.10	-202	26760	154	-104	18.2	151	-2.1	5	1.4	33430	11.9	11940	77	0.6		
30-45.4747-112.2722-2-15-			0-M35352			68430	-0.08	-204	28030	112	-133	16.7	83	1.8	5	1.3	78110	29.7	9533	67	0.8		
30-45.4858-112.2761-2-15-			0-M35353			60900	-0.05	747	39900	86	-85	7.9	45	2.5	6	1.1	19600	14.3	18580	50	0.5		
30-45.4953-112.3147-2-12-			0-M35354			76960	-0.07	1445	8671	74	-69	9.3	36	5.4	7	1.7	17830	8.4	17010	38	0.6		
30-45.4689-112.3003-2-12-			0-M35355			58250	-0.08	1169	47720	105	-83	12.4	93	5.6	5	1.2	22550	16.5	15760	59	0.6		
30-45.4519-112.3553-2-15-			0-M35356			56000	-0.09	375	20620	65	-108	12.0	112	-2.0	3	1.1	26070	11.0	14530	35	0.5		
30-45.4344-112.3442-2-15-			0-M35357			54840	-0.06	505	31470	94	-117	20.4	123	2.5	7	1.6	33600	12.8	12620	53	0.8		
30-45.4264-112.3581-2-15-			0-M35358			56920	-0.06	362	35760	102	-117	20.0	118	3.4	7	1.7	35870	13.6	10610	47	0.9		
30-45.4431-112.3297-2-15-			0-M35359			57570	-0.08	-222	36440	129	-140	17.5	125	-1.7	8	1.6	37920	17.6	9503	57	1.2		
30-45.4219-112.2858-2-15-			0-M35360			53900	-0.10	-236	32420	112	-137	21.2	130	-2.1	5	1.8	38620	16.8	9112	56	1.0		
30-45.7086-112.0864-2-12-			0-M35361			65950	-0.09	-183	34050	47	132	25.9	263	2.7	4	1.2	42030	7.8	13210	21	0.4		
30-45.6978-112.1347-2-12-			0-M35362			67330	-0.09	-187	43130	50	-119	28.7	281	-2.0	4	1.3	52110	10.2	6589	29	0.5		
30-45.6944-112.1367-2-12-			0-M35363			58970	-0.08	541	38380	72	-97	17.6	188	5.7	3	1.1	25110	9.3	16160	32	0.4		
30-45.7094-112.1286-2-15-			0-M35364			67620	-0.10	367	36570	61	-121	20.5	205	-2.3	3	1.0	34300	4.3	14200	27	0.3		
30-45.6808-112.1472-2-15-			0-M35365			57100	-0.06	394	19360	54	-84	15.6	102	2.8	4	1.1	26100	11.1	14700	35	0.4		
30-45.8383-112.0078-2-15-			0-M35366			69820	-0.06	654	29190	56	-96	13.9	96	2.2	3	1.2	26570	7.9	21890	35	0.3		
30-45.8347-112.0222-2-15-			0-M35367			58680	-0.07	663	23170	99	-95	11.5	89	3.5	4	1.4	21370	11.6	16670	46	0.5		
30-45.8300-112.0314-2-15-			0-M35368			62780	-0.07	600	20110	62	-95	8.1	50	3.2	3	0.9	15440	5.9	18500	39	0.5		
30-45.8228-112.0572-2-15-			0-M35369			66180	-0.06	548	14940	69	-86	11.1	46	4.2	5	1.1	17770	8.0	20010	39	0.5		
30-45.7944-112.0658-2-11-			0-M35370			63240	-0.07	701	31340	75	-102	13.0	104	4.1	3	1.4	24950	8.9	14360	36	0.4		
30-45.7817-112.0653-2-12-			0-M35371			52560	-0.08	730	30250	107	-109	16.2	350	-1.6	4	1.4	52740	10.5	11300	46	0.5		
30-45.8064-112.0850-2-12-			0-M35372			53130	-0.10	540	99290	64	-113	10.8	88	7.3	3	1.3	21590	6.4	12990	42	0.5		
30-45.7631-112.0744-2-11-			0-M35373			66790	-0.07	838	17820	55	-101	19.7	110	1.9	3	1.3	41750	6.9	15070	33	0.3		
30-45.7531-112.0383-2-11-			0-M35374			67150	-0.07	518	21710	73	-88	13.3	112	5.6	5	1.2	22270	9.3	19600	33	0.4		
30-45.7442-112.0739-2-15-			0-M35375			67490	-0.08	470	27100	97	-90	11.9	86	3.1	5	1.4	19940	16.3	13950	49	0.7		
30-45.7956-112.1161-2-15-			0-M35376			71120	-0.10	588	10550	55	-111	15.6	140	14.3	4	0.9	29230	9.9	18380	38	0.4		
30-45.7531-112.1286-2-15-			0-M35377			41480	-0.06	432	91610	50	107	10.0	65	3.4	3	0.8	15830	7.1	13950	28	0.3		
30-45.8681-112.1978-2-12-			0-M35378			73680	-0.07	454	35810	68	-104	11.5	54	3.5	5	1.3	21400	8.9	15470	41	0.5		
30-45.8775-112.1878-2-12-			0-M35379			61090	-0.12	470	28730	162	-124	15.4	187	3.8	7	2.3	80270	90.0	14270	71	1.4		
30-45.8928-112.2186-2-15-			0-M35380			74860	-0.09	610	28910	89	219	10.2	45	4.6	4	1.1	26070	11.3	19890	44	0.5		
30-45.8961-112.2325-2-11-			0-M35381			70610	-0.08	536	31500	88	203	18.3	53	6.5	5	1.4	30470	14.3	20490	53	0.6		
30-45.9125-112.2236-2-15-			0-M35382			64960	-0.08	1129	25000	78	182	17.8	167	3.6	5	1.4	68720	15.0	12790	46	0.4		
30-45.9672-112.2386-2-11-			0-M35383			65850	-0.12	-213	38150	162	223	21.0	87	6.4	8	1.7	52620	48.0	15670	77	1.2		
30-45.9944-112.2414-2-12-			0-M35384			72310	-0.13	315	27400	105	128	12.1	-18	8.3	8	1.1	23680	22.4	16790	76	1.1		
30-45.9783-112.2425-2-12-			0-M35385			78530	-0.09	-201	22610	154	-137	12.4	38	7.2	11	1.4	21180	36.6	17970	97	1.9		
30-45.9264-112.1828-2-15-			0-M35386			79280	-0.07	597	27330	102	-96	13.2	63	4.2	5	1.4	38960	16.4	15810	55	0.5		
30-45.9647-112.1628-2-12-			0-M35387			66820	-0.09	460	27960	118	120	16.8	134	4.3	6	2.1	57940	33.4	10950	67	0.8		
30-45.9467-112.1303-2-12-			0-M35388			62840	-0.07	457	29710	158	-121	15.5	158	3.3	5	1.7	62150	44.0	11670	47	0.8		
30-45.9408-112.1125-2-12-			0-M35389			66350	-0.51	-188	33540	51	-122	18.1	473	2.7	4	1.3	52230	9.0	9136	31	0.4		
30-45.9778-112.1189-2-12-			0-M35390			72620	-0.07	609	27060	102	-98	14.5	126	3.6	5	1.5	21930	15.6	17550	47	0.5		
30-45.9817-112.0819-2-12-			0-M35391			74870	-0.08	698	24450	88	-100	16.1	145	3.0	5	1.7	30410	9.7	18510	48	0.5		
30-45.9622-112.1078-2-15-			0-M35392			71730	-0.09	667	56560	88	-105	12.4	121	2.4	4	1.3	25790	9.7	18750	43	0.4		

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

④

DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued)																U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	DOE 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	
30-45.3939-112.1928-2-11-			0-M35342			15120	880	11480	62	-2	10.5	5.9	-316	-1	-1	13.2	3836	82	3.4	134	0.242	
30-45.4008-112.2000-2-15-			0-M35343			32910	2525	13020	-32	-3	27.3	8.5	-698	-1	-2	22.1	7075	141	7.2		0.167	
30-45.4044-112.2058-2-15-			0-M35344			43670	804	14460	-36	-3	15.8	3.8	-423	-1	-1	7.0	4861	115	3.6	-100	0.329	
30-45.4111-112.2047-2-12-			0-M35345			20750	562	13840	39	-2	10.3	3.7	545	-1	-1	7.6	4203	111	2.7	76	0.329	
30-45.4158-112.2244-2-15-			0-M35346			20500	578	14220	36	-2	10.3	3.7	617	-1	-1	7.6	3931	109	2.3	91	0.342	
30-45.4206-112.2406-2-15-			0-M35347			16920	569	14470	37	-3	8.1	5.0	-402	-1	-1	9.4	4076	74	3.0	85	0.319	
30-45.4286-112.2611-2-15-			0-M35348			15130	557	14320	-30	-3	8.2	3.5	-408	-1	-1	8.7	4296	71	4.3	108	0.333	
30-45.4339-112.2558-2-12-			0-M35349			28350	1003	16410	56	-3	18.5	9.4	-389	2	-1	52.6	5363	295	6.4	105	0.215	
30-45.4408-112.2508-2-12-			0-M35350			51730	731	9573	-22	-2	9.1	5.7	-342	-1	-1	11.9	3883	93	4.2	69	0.378	
30-45.4614-112.2611-2-12-			0-M35351			41410	1271	8916	-33	-3	17.5	8.6	-461	-9	-2	23.8	4520	128	3.5	-344	0.298	
30-45.4747-112.2722-2-15-			0-M35352			17670	1548	19630	36	-3	13.3	9.0	-494	-1	-1	59.2	4258	232	6.5	142	0.225	
30-45.4858-112.2761-2-15-			0-M35353			12200	611	13570	39	-2	7.8	7.1	-296	-1	-1	14.1	4077	80	4.6	79	0.270	
30-45.4953-112.3147-2-12-			0-M35354			12040	585	8216	49	-2	10.4	6.9	-279	-1	1	10.8	2876	52	4.6	99	0.630	
30-45.4689-112.3003-2-12-			0-M35355			17450	773	7806	48	-2	9.3	7.6	-348	-1	-1	19.1	6004	84	5.7	112	0.267	
30-45.4519-112.3653-2-15-			0-M35356			23560	776	13470	-30	-3	12.4	4.1	-396	-1	-1	8.8	5382	99	-2.0	-131	0.307	
30-45.4344-112.3442-2-15-			0-M35357			36740	1682	12800	48	-2	16.0	6.9	-452	1	1	11.8	6367	109	6.4	88	0.254	
30-45.4264-112.3581-2-15-			0-M35358			39790	1806	12960	54	-2	17.3	7.7	-450	2	-1	12.6	6828	106	7.0	109	0.238	
30-45.4431-112.3297-2-15-			0-M35359			34860	1878	12670	-24	-3	18.2	10.9	-544	1	2	15.1	7637	118	9.0	161	0.205	
30-45.4219-112.2858-2-15-			0-M35360			28620	1804	11930	-32	-3	17.5	8.0	-554	-1	-1	13.1	8223	126	9.0	-239	0.267	
30-45.7086-112.0864-2-12-			0-M35361			45300	1230	16450	-26	-3	20.7	4.4	-444	-1	-1	5.4	5045	154	3.3	103	0.333	
30-45.6978-112.1347-2-12-			0-M35362			41740	1448	17860	-27	-3	26.6	5.0	-453	-1	-1	5.6	7437	190	4.5	112	0.321	
30-45.6944-112.1367-2-12-			0-M35363			43060	976	9821	57	-3	11.7	5.0	-414	-1	-1	9.4	3091	100	3.1	42	0.277	
30-45.7094-112.1286-2-15-			0-M35364			39460	884	16570	-34	-3	18.1	3.6	-433	-1	1	5.6	4269	130	3.7	-179	0.250	
30-45.6808-112.1472-2-15-			0-M35365			22080	779	13340	32	-2	11.6	4.5	-312	-1	-1	8.0	4697	93	3.2	128	0.350	
30-45.8383-112.0078-2-15-			0-M35366			21040	697	19850	56	-2	11.9	4.6	438	-1	-1	8.1	4893	114	3.8	141	0.296	
30-45.8347-112.0222-2-15-			0-M35367			17900	644	14190	54	-2	9.1	5.9	-339	-1	-1	12.3	3995	78	4.0	100	0.244	
30-45.8300-112.0314-2-15-			0-M35368			13060	476	14720	49	-2	7.8	4.1	-323	-1	-1	11.6	2966	59	3.4	-68	0.241	
30-45.8228-112.0572-2-15-			0-M35369			15700	594	13940	47	-1	9.5	5.8	-298	1	-1	12.1	3379	66	4.0	97	0.314	
30-45.7944-112.0658-2-11-			0-M35370			19500	895	15400	34	-2	10.4	4.5	552	-1	-1	8.5	4151	104	2.6	103	0.306	
30-45.7817-112.0653-2-12-			0-M35371			19630	982	16210	-25	-2	13.4	6.1	-395	1	-1	9.0	8552	235	3.0	128	0.300	
30-45.8064-112.0850-2-12-			0-M35372			22620	586	12270	-33	-3	10.2	4.5	-402	-1	-1	7.2	4168	86	-2.7	-85	0.403	
30-45.7631-112.0744-2-11-			0-M35373			20050	711	19370	-23	-2	12.1	3.4	645	-1	-1	5.0	6233	198	2.7	104	0.380	
30-45.7531-112.0383-2-11-			0-M35374			21220	788	10620	49	-2	10.6	4.4	-344	-1	-1	9.3	4387	79	3.5	133	0.344	
30-45.7442-112.0739-2-15-			0-M35375			14510	1044	7695	48	-2	8.3	7.1	-419	-1	-1	15.1	4332	60	5.6	111	0.219	
30-45.7956-112.1161-2-15-			0-M35376			22970	691	18540	66	-3	14.3	3.9	-388	-1	-1	8.4	3718	110	3.0	97	0.310	
30-45.7531-112.1286-2-15-			0-M35377			65330	627	6108	25	2	7.2	2.9	-317	-1	-1	7.7	2756	56	2.2	87	0.325	
30-45.8681-112.1978-2-12-			0-M35378			25100	814	19820	37	-2	13.3	5.6	-347	-1	-1	10.8	3789	83	3.3	105	0.269	
30-45.8775-112.1878-2-12-			0-M35379			23390	1057	15550	-35	-3	17.5	14.6	-480	-1	-2	86.4	5834	366	9.6		0.179	
30-45.8928-112.2186-2-15-			0-M35380			19050	781	15700	49	-3	11.8	5.7	635	-1	-1	13.1	3311	108	4.2	184	0.290	
30-45.8961-112.2325-2-11-			0-M35381			31070	992	18460	51	-3	19.5	6.6	599	-1	-1	24.5	4561	128	4.4	137	0.322	
30-45.9125-112.2236-2-15-			0-M35382			17200	1221	11590	-27	-3	12.7	5.6	-413	-1	-1	11.8	7241	393	3.5	127	0.398	
30-45.9672-112.2386-2-11-			0-M35383			36730	1267	16690	60	-4	28.6	16.4	-505	-1	-2	88.4	6208	241	9.8		0.258	
30-45.9944-112.2414-2-12-			0-M35384			17430	912	22130	53	-4	17.3	6.5	-521	-2	-2	95.8	3422	82	6.3	-83	0.373	
30-45.9983-112.2425-2-12-			0-M35385			13660	1091	23530	83	-3	14.7	17.4	-478	5	-1	110.0	4588	67	14.0	-71	0.416	
30-45.9264-112.1828-2-15-			0-M35386			17060	936	16310	50	-2	13.6	6.1	-343	-1	-1	18.5	4624	207	4.9	57	0.200	
30-45.9647-112.1628-2-12-			0-M35387			22970	1295	14890	53	-3	19.5	9.9	-449	-1	-1	39.9	6978	279	6.0	123	0.416	
30-45.9467-112.1303-2-12-			0-M35388			20330	1358	14850	45	-2	20.2	9.1	-467	1	-1	47.2	8768	316	7.0		0.339	
30-45.9408-112.1125-2-12-			0-M35389			20700	998	19170	-32	-3	12.3	5.0	-426	-1	-1	9.1	6410	154	3.6	-40	0.176	
30-45.9778-112.1189-2-12-			0-M35390			20720	621	18570	50	-2	15.9	7.4	527	1	1	19.2	4569	87	4.0	66	0.245	
30-45.9817-112.0819-2-12-			0-M35391			19010	691	15970	-24	-3	15.5	6.5	651	-1	-1	11.7	6192	152	3.4	111	0.274	
30-45.9622-112.1078-2-15-			0-M35392			28720	648	13100	46	-3	12.6	5.9	660	-1	-1	13.0	4083	119	3.3	100	0.285	

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

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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 (cpd/gpm)	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																											
30-45.9558-112.1081-2-15-						0-M35393-10/11/76-15-			10-							-4-	-4-6-	-1-	-2-3-	3-3-1-	-3-													2.90	
30-45.9392-112.1014-2-15-						0-M35394-10/11/76-16-			10-							-4-	-4-6-	-1-	-2-3-	2-2-1-	-3-														3.00
30-45.9583-112.0458-2-11-						0-M35395-10/11/76-16-			8-	7.8-C-			5.7-	410-		-3-6-	-5-6-3-	3-1-	2-1-	2-5-1-	-3-														2.10
30-45.9333-112.0575-2-15-						0-M35396-10/11/76-16-			8-							-4-	-4-6-	-1-	-2-1-	3-5-1-	-3-														2.20
30-45.9197-112.0944-2-15-						0-M35397-10/11/76-16-			8-							-4-	-4-6-	-1-	-2-4-	3-3-1-	-3-														3.60
30-45.9231-112.1183-2-12-						0-M35398-10/11/76-16-			8-	5.4-C-			5.9-	420-		-4-	-5-6-3-	3-1-	2-2-	3-2-1-	-3-														6.80
30-45.8936-112.1069-2-12-						0-M35399-10/11/76-17-			8-	5.6-C-			5.9-	440-		-4-	-4-6-3-	3-1-	2-3-	3-2-1-	-3-														14.30
30-45.8808-112.0606-2-15-						0-M35400-10/11/76-17-			8-							-1-6-	-4-6-	-1-	-2-3-	2-3-1-	-3-														3.50
30-45.9975-112.2014-2-15-						0-M35401-10/12/76-9-			9-							-4-7-	3-1-	-1-	-2-3-	2-3-1-	-3-														3.80
30-45.9897-112.1900-2-15-						0-M35402-10/12/76-10-			9-							-2-6-	-4-7-	-1-	-2-4-	3-3-1-	-3-														2.90
30-45.8908-112.0839-2-15-						0-M35403-10/12/76-10-			10-							-1-6-	-4-6-	-1-	-2-3-	3-2-1-	-3-														3.10
30-45.9072-112.0656-2-15-						0-M35404-10/12/76-11-			10-							-4-7-	3-7-	-1-	-2-4-	3-2-1-	-3-														6.80
30-45.9181-112.0447-2-15-						0-M35405-10/12/76-11-			10-							-4-7-	3-7-	-1-	-2-3-	3-3-1-	-3-														5.20
30-45.9233-112.0486-2-15-						0-M35406-10/12/76-12-			10-							-1-7-	-2-6-	-1-	-2-4-	3-3-1-	-3-														2.50
30-45.9256-112.0492-2-15-						0-M35407-10/12/76-12-			11-							-1-6-	3-6-	-1-	-2-3-	3-3-1-	-3-														3.30
30-45.3817-112.8039-2-15-						0-M35408-09/20/76-12-			8-							-1-1-	-4-6-	-1-	-2-1-	2-3-1-	-3-														2.60
30-45.4075-112.8381-2-12-						0-M35409-09/20/76-13-			9-	6.0-			6.1-	370-		9-3-	7-4-6-3-	3-1-	2-1-	3-3-1-	-3-														9.30
30-45.4125-112.8175-2-99-						0-M35410-09/20/76-13-			8-		-C-					9-3-	7-4-6-	-1-	-2-1-	3-4-1-	-3-														3.30
30-45.4042-112.8186-2-11-						0-M35411-09/20/76-14-			9-	6.0-			6.1-	400-		5-3-	7-4-6-6-3-	3-1-	-1-	3-3-1-	-3-														7.40
30-45.4019-112.8181-2-15-						0-M35412-09/20/76-14-			9-							11-3-	7-4-6-	-1-	-2-1-	3-3-1-	-3-														5.50
30-45.3950-112.8139-2-15-						0-M35413-09/20/76-14-			9-							5-1-	1-4-6-	-1-	-2-3-	2-3-1-	-3-														2.10
30-45.3931-112.8181-2-15-						0-M35414-09/20/76-14-			9-							5-1-	1-4-6-	-1-	-2-1-	2-3-1-	-3-														4.90
30-45.3794-112.7972-2-12-						0-M35415-09/20/76-14-			9-	6.2-			5.7-	80-		5-2-	6-4-6-4-6-4-	3-1-	2-1-	3-3-1-	-3-														2.60
30-45.3881-112.7767-2-15-						0-M35416-09/20/76-14-			15-							7-1-	1-4-6-	-1-	-2-3-	3-3-1-	-3-														3.20
30-45.3972-112.7708-2-15-						0-M35417-09/20/76-14-			15-							3-1-	1-4-6-	-1-	-2-3-	3-3-1-	-3-														3.00
30-45.4039-112.7647-2-15-						0-M35418-09/20/76-14-			15-							9-1-	6-4-6-	-1-	-2-3-	3-3-1-	-3-														2.70
30-45.4083-112.7578-2-15-						0-M35419-09/20/76-14-			15-							5-1-	6-4-6-	-1-	-2-3-	3-3-1-	-3-														2.90
30-45.4231-112.7542-2-11-						0-M35420-09/20/76-14-			16-	6.8-			6.8-	550-		15-1-	6-6-8-2-3-1-	-3-	2-3-1-	-3-															4.50
30-45.4139-112.7689-2-15-						0-M35421-09/20/76-15-			16-							5-1-	7-4-6-	-1-	-2-3-	3-3-1-	-3-														3.10
30-45.4289-112.7986-2-11-						0-M35422-09/20/76-15-			15-	5.8-C-			5.9-	400-		5-1-	6-4-6-5-2-3-1-	-1-	2-3-1-	-3-															4.00
30-45.2958-112.5367-2-15-						0-M35423-09/21/76-10-			10-							11-4-	-4-6-	-1-	-2-3-	3-2-1-	-3-														3.30
30-45.2992-112.6006-2-12-						0-M35424-09/21/76-10-			11-	9.8-C-			6.5-	700-		5-4-	-6-6-2-3-1-	2-4-	3-2-1-	-3-															3.40
30-45.3167-112.6006-2-15-						0-M35425-09/21/76-11-			11-							5-4-	-5-6-	-1-	-1-4-	3-2-1-	-3-														3.40
30-45.3294-112.5950-2-12-						0-M35426-09/21/76-11-			12-	8.6-C-			5.9-	800-		3-4-	-4-6-3-3-2-	4-3-2-	2-1-	-3-															4.40
30-45.0156-112.8364-2-12-						0-M35427-09/20/76-12-			18-	11.5-C-			5.7-	400-		6-4-	-3-6-3-2-1-	2-4-	4-4-1-	-3-															2.50
30-45.2494-112.4839-2-15-						0-M35428-10/05/76-9-			4-							-1-6-	-4-6-	-1-	-2-3-	3-2-3-	-3-														5.70
30-45.2414-112.4803-2-15-						0-M35429-10/05/76-8-			4-							-1-6-	-4-6-	-1-	-2-3-	3-2-3-	-3-														2.90
30-45.2231-112.4481-2-15-						0-M35430-10/05/76-9-			5-							-2-6-	-4-6-	-1-	-2-3-	3-3-3-	-3-														3.00
30-45.7019-112.3333-2-11-						0-M35431-10/06/76-13-			14-	10.0-C-			5.7-	460-		4-4-	-4-2-2-3-1-	-4-	3-4-1-	-9-															2.30
30-45.6706-112.2989-2-15-						0-M35432-10/06/76-14-			15-							4-2-	7-3-7-	-1-	-2-4-	2-4-1-	-3-														2.30
30-45.6242-112.3333-2-11-						0-M35433-10/06/76-14-			15-	9.0-C-			5.7-	160-		10-4-	-4-6-4-2-1-	2-2-	3-3-1-	-3-															15.30
30-45.6533-112.3614-2-12-						0-M35434-10/06/76-15-			15-	9.0-C-			5.7-	380-		10-3-	1-3-1-3-2-1-	2-2-	4-4-1-	-3-															5.90
30-45.6797-112.3783-2-12-						0-M35435-10/06/76-15-			15-	8.0-C-			5.8-	280-		8-3-	1-4-6-3-2-1-	2-2-	3-3-1-	-3-															19.50
30-45.6797-112.3903-2-12-						0-M35436-10/06/76-17-			15-	9.0-C-			5.7-	190-		14-3-	1-4-1-3-2-1-	2-1-	3-4-1-	-3-															22.50
30-45.6706-112.4083-2-12-						0-M35437-10/06/76-15-			14-	9.0-C-			5.7-	110-		8-3-	1-3-6-3-2-1-	2-3-	3-4-1-	-3-															4.60
30-45.6925-112.0125-2-12-						0-M35438-10/05/76-10-			3-	1.0-			5.2-	70-		-2-7-	3-7-3-2-1-	2-1-	3-4-1-	-1-															

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

2

DOE SAMPLE NUMBER						LAS SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE										ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Concentrations reported in weight parts per million (ppm)										Concentrations in weight ppm	
							Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li	
30-45.9558-112.1081-2-15-						0-M35393	-5	-5	-5	64	-20	21	13	-10	-15		2	25
30-45.9392-112.1014-2-15-						0-M35394	-5	-5	-5	27	-20	-15	6	-10	-15		2	24
30-45.9583-112.0458-2-11-						0-M35395	-5	-5	-5	35	-20	15	9	-10	-15		2	23
30-45.9333-112.0575-2-15-						0-M35396	-5	-5	-5	25	-20	17	16	-10	-15		1	7
30-45.9197-112.0944-2-15-						0-M35397	-5	5	-5	48	-20	-15	74	-10	-15		2	18
30-45.9231-112.1183-2-12-						0-M35398	-5	-5	-5	26	-20	21	26	-10	23		3	18
30-45.8936-112.1069-2-12-						0-M35399	14	-5	-5	17	21	23	-5	-10	15		3	11
30-45.8808-112.0606-2-15-						0-M35400	-5	-5	-5	73	-20	35	77	-10	-15		2	83
30-45.9975-112.2014-2-15-						0-M35401	-5	-5	-5	28	-20	-15	15	-10	-15		2	20
30-45.9897-112.1900-2-15-						0-M35402	-5	-5	-5	12	-20	-15	15	-10	-15		2	24
30-45.8908-112.0839-2-15-						0-M35403	-5	-5	-5	43	-20	40	19	-10	-15		2	27
30-45.9072-112.0656-2-15-						0-M35404	-5	-5	-5	38	-20	-15	12	-10	-15		2	10
30-45.9181-112.0447-2-15-						0-M35405	-5	-5	-5	25	-20	29	11	-10	-15		2	28
30-45.9233-112.0486-2-15-						0-M35406	9	-5	6	42	-20	40	-5	-10	-15		2	7
30-45.9256-112.0492-2-15-						0-M35407	-5	-5	-5	33	-20	29	8	-10	-15		3	27
30-45.3817-112.8039-2-15-						0-M35408	-5	9	-5	25	-20	18	23	-10	-15		2	18
30-45.4075-112.8381-2-12-						0-M35409	23	-5	9	-10	106	29	-5	-10	-15		3	5
30-45.4125-112.8175-2-99-						0-M35410	-5	-5	-5	18	-20	-15	10	-10	-15		2	27
30-45.4042-112.8186-2-11-						0-M35411	10	-5	11	24	-20	-15	-5	16	-15		3	9
30-45.4019-112.8181-2-15-						0-M35412	7	-5	11	42	22	-15	-5	-10	35		3	10
30-45.3950-112.8139-2-15-						0-M35413	-5	-5	-5	19	-20	-15	-5	-10	-15		-1	5
30-45.3931-112.8181-2-15-						0-M35414	-5	-5	7	31	-20	17	-5	-10	27		3	9
30-45.3794-112.7972-2-12-						0-M35415	-5	-5	-5	-10	-20	-15	5	-10	-15		-1	15
30-45.3881-112.7767-2-15-						0-M35416	-5	-5	-5	27	-20	-15	15	-10	-15		2	25
30-45.3972-112.7708-2-15-						0-M35417	-5	-5	-5	20	-20	-15	18	-10	-15		2	43
30-45.4039-112.7647-2-15-						0-M35418	-5	7	-5	27	-20	-15	12	-10	-15		2	26
30-45.4083-112.7578-2-15-						0-M35419	-5	-5	-5	35	-20	17	15	-10	-15		-1	29
30-45.4231-112.7542-2-11-						0-M35420	-5	-5	-5	19	-20	17	14	-10	-15		2	24
30-45.4139-112.7689-2-15-						0-M35421	-5	-5	-5	35	-20	22	16	-10	-15		2	24
30-45.4289-112.7986-2-11-						0-M35422	-5	-5	-5	25	-20	-15	16	-10	-15		2	15
30-45.2958-112.5367-2-15-						0-M35423	-5	-5	-5	32	-20	37	11	-10	-15		2	30
30-45.2992-112.6006-2-12-						0-M35424	-5	-5	-5	27	-20	22	15	-10	-15		2	16
30-45.3167-112.6006-2-15-						0-M35425	-5	-5	-5	35	-20	38	9	-10	-15		3	33
30-45.3294-112.5950-2-12-						0-M35426	-5	8	-5	22	-20	17	5	-10	-15		2	25
30-45.0156-112.8364-2-12-						0-M35427	5	-5	9	14	-20	-15	-5	-10	36		2	6
30-45.2494-112.4839-2-15-						0-M35428	-5	-5	-5	30	-20	22	12	-10	-15		3	24
30-45.2414-112.4803-2-15-						0-M35429	-5	-5	-5	34	-20	58	11	-10	-15		2	22
30-45.2231-112.4481-2-15-						0-M35430	-5	-5	-5	21	-20	80	-5	-10	-15		2	22
30-45.7019-112.3333-2-11-						0-M35431	-5	19	5	534	-20	90	245	-10	130		5	21
30-45.6706-112.2989-2-15-						0-M35432	-5	-5	-5	23	-20	17	7	-10	-15		2	19
30-45.6242-112.3333-2-11-						0-M35433	14	-5	6	16	-20	-15	-5	-10	22		2	10
30-45.6533-112.3614-2-12-						0-M35434	5	-5	-5	26	-20	15	18	-10	-15		2	19
30-45.6797-112.3783-2-12-						0-M35435	-5	-5	-5	20	-20	-15	-5	-10	-15		3	18
30-45.6797-112.3903-2-12-						0-M35436	-5	-5	-5	-10	-20	-15	-5	-10	-15		3	14
30-45.6706-112.4083-2-12-						0-M35437	-5	-5	-5	30	-20	17	15	-10	-15		3	19
30-45.6925-112.0125-2-12-						0-M35438	-5	-5	-5	14	-20	-15	20	-10	-15		3	19
30-45.6842-112.0164-2-15-						0-M35439	-5	-5	-5	14	-20	22	12	-10	-15		2	40
30-45.6831-112.0139-2-12-						0-M35440	-5	-5	-5	48	-20	36	-5	-10	-15		2	16
30-45.6653-112.0172-2-12-						0-M35441	-5	-5	-5	24	-20	-15	-5	-10	-15		2	24
30-45.6583-112.0211-2-12-						0-M35442	-5	-5	5	25	-20	32	22	-10	-15		2	16
30-45.6514-112.0236-2-12-						0-M35443	-5	-5	-5	31	-20	-15	16	-10	-15		2	21

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

③

DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS																
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAS. 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
30-45.9558-112.1081-2-15-					0-M35393	71750	-0.10	558	35940	74	-107	11.6	99	3.3	3	1.2	28660	9.7	16550	44	0.4	
30-45.9392-112.1014-2-15-					0-M35394	56940	-0.07	462	48290	63	13060	13.9	62	4.0	4	1.2	20620	9.4	13900	39	0.3	
30-45.9583-112.0458-2-11-					0-M35395	75820	-0.07	752	20990	62	-87	11.0	62	2.4	4	1.1	26490	7.5	16900	38	0.3	
30-45.9333-112.0575-2-15-					0-M35396	35350	-0.07	260	128200	55	169	7.5	46	2.2	3	0.8	12100	7.8	12620	29	0.3	
30-45.9197-112.0944-2-15-					0-M35397	62940	-0.09	500	36870	77	-84	10.1	65	7.4	4	1.1	21790	11.2	22780	42	0.5	
30-45.9231-112.1183-2-12-					0-M35398	67460	-0.07	593	32950	101	-97	12.8	91	4.5	6	1.4	28610	33.2	18770	59	0.7	
30-45.8936-112.1069-2-12-					0-M35399	64750	-0.08	472	26010	133	-106	12.4	156	3.5	7	2.7	53350	89.2	15340	91	1.1	
30-45.8808-112.0606-2-15-					0-M35400	79430	-0.11	530	10560	95	175	13.0	99	16.4	5	1.2	25500	8.5	23720	43	0.6	
30-45.9975-112.2014-2-15-					0-M35401	56420	-0.06	620	15900	67	141	11.2	49	4.2	5	1.2	18350	8.0	19220	39	0.5	
30-45.9897-112.1900-2-15-					0-M35402	59860	-0.06	690	26800	56	262	7.8	28	3.7	4	1.1	11410	6.0	21260	35	0.3	
30-45.8908-112.0839-2-15-					0-M35403	65960	-0.06	785	31950	66	-85	15.2	105	3.2	4	1.1	21940	8.5	15970	39	0.4	
30-45.9072-112.0656-2-15-					0-M35404	49700	-0.06	377	35650	148	-90	12.6	109	2.4	7	1.5	50560	30.6	9649	85	0.7	
30-45.9181-112.0447-2-15-					0-M35405	61590	-0.07	641	33360	91	-94	12.3	89	3.4	4	1.3	21020	13.2	16900	47	0.4	
30-45.9233-112.0485-2-15-					0-M35406	53250	-0.13	-237	46490	54	-144	33.3	228	-2.7	5	1.8	66860	24.8	-5569	30	0.7	
30-45.9256-112.0492-2-15-					0-M35407	72850	-0.07	500	11250	59	-84	17.3	87	4.2	4	1.2	22200	6.6	18490	35	0.4	
30-45.3817-112.8039-2-15-					0-M35408	56250	-0.06	609	62880	63	-79	11.5	77	5.0	4	1.2	18210	8.2	17900	42	0.4	
30-45.4075-112.8381-2-12-					0-M35409	45170	-0.09	420	23090	184	-107	17.2	35	-1.9	5	1.5	184000	36.0	6543	100	1.0	
30-45.4125-112.8175-2-99-					0-M35410	95650	-0.10	507	34870	89	-150	11.2	-14	-2.1	4	1.6	21350	6.0	11690	50	0.5	
30-45.4042-112.8186-2-11-					0-M35411	62760	-0.08	486	33450	154	-119	18.5	32	-1.8	8	2.0	95740	23.3	8527	89	0.9	
30-45.4019-112.8181-2-15-					0-M35412	54830	-0.08	-171	39720	162	-115	18.3	28	2.4	8	2.0	85820	20.2	12710	82	0.8	
30-45.3950-112.8139-2-15-					0-M35413	28470	-0.06	202	204100	48	-81	6.5	13	2.1	2	0.6	16830	4.9	6608	26	0.3	
30-45.3931-112.8181-2-15-					0-M35414	48190	-0.11	213	80100	115	-112	16.3	44	3.9	5	1.6	104200	20.3	10280	72	0.6	
30-45.3794-112.7972-2-12-					0-M35415	28460	-0.05	392	48110	44	90	6.8	40	2.1	3	0.8	9913	12.3	12170	24	0.4	
30-45.3881-112.7767-2-15-					0-M35416	47310	-0.06	-214	46130	73	-123	11.0	58	4.6	3	1.2	22740	8.8	11540	41	0.4	
30-45.3972-112.7708-2-15-					0-M35417	46730	-0.08	320	37860	70	-132	9.8	60	3.0	3	1.2	19700	7.8	13190	43	0.4	
30-45.4039-112.7647-2-15-					0-M35418	51770	-0.05	573	35710	58	-79	9.8	44	3.2	4	1.0	16950	7.0	11320	35	0.4	
30-45.4083-112.7578-2-15-					0-M35419	60070	-0.07	600	59020	65	-89	10.6	48	5.5	4	1.2	18640	4.9	12910	32	0.3	
30-45.4231-112.7542-2-11-					0-M35420	50930	-0.09	666	96050	65	-83	10.5	31	5.2	4	1.2	14140	7.3	13070	33	0.3	
30-45.4139-112.7689-2-15-					0-M35421	44320	-0.09	-355	48760	71	-196	10.5	47	2.8	-2	0.9	24470	8.3	-8552	40	0.5	
30-45.4289-112.7986-2-11-					0-M35422	83140	-0.07	649	33220	72	-117	11.0	15	2.0	4	1.3	23490	6.3	15820	44	0.4	
30-45.2958-112.5367-2-15-					0-M35423	73280	-0.07	658	13090	62	-84	14.5	101	5.3	5	1.3	22520	7.2	19990	42	0.4	
30-45.2992-112.6006-2-12-					0-M35424	50180	-0.10	497	90330	62	-95	10.4	54	3.9	3	1.1	14210	5.2	12190	30	0.3	
30-45.3157-112.6006-2-15-					0-M35425	73770	-0.10	484	12320	73	-101	15.4	102	5.1	4	1.1	22790	8.2	17420	43	0.4	
30-45.3294-112.5950-2-12-					0-M35426	50690	-0.06	494	51410	78	127	9.9	47	3.1	5	1.3	20480	14.3	13180	48	0.5	
30-45.0156-112.8364-2-12-					0-M35427	60760	-0.08	1342	42420	96	-131	30.7	109	-1.7	3	1.7	96710	21.3	-5226	61	0.4	
30-45.2494-112.4839-2-15-					0-M35428	63490	-0.08	616	29760	151	-101	17.0	170	3.9	9	1.7	32470	23.3	15510	88	0.9	
30-45.2414-112.4803-2-15-					0-M35429	50240	-0.08	712	95070	85	-91	16.1	154	3.0	3	1.3	19640	6.9	15200	46	0.4	
30-45.2231-112.4481-2-15-					0-M35430	65190	-0.10	900	53520	100	-117	18.4	149	3.0	5	1.8	20680	5.7	13380	50	0.4	
30-45.7019-112.3333-2-11-					0-M35431	49120	2.96	-188	35560	56	-80	31.0	429	5.5	3	1.0	45290	4.2	9346	27	0.5	
30-45.6706-112.2989-2-15-					0-M35432	48400	-0.06	517	66690	50	118	10.9	60	2.9	3	1.0	14170	7.0	12990	30	0.3	
30-45.6242-112.3333-2-11-					0-M35433	62430	0.08	-156	31520	133	-110	15.3	145	1.9	6	1.6	100200	32.7	9231	82	0.8	
30-45.6533-112.3614-2-12-					0-M35434	52000	-0.11	473	39830	223	1112	28.2	102	-2.2	11	2.6	60960	39.2	13020	102	1.6	
30-45.6797-112.3783-2-12-					0-M35435	65920	-0.13	-260	27950	195	-153	16.5	61	-2.6	5	1.9	71130	31.1	12540	99	0.9	
30-45.6797-112.3903-2-12-					0-M35436	61520	-0.09	390	26700	189	-120	16.2	52	2.5	8	2.3	111400	44.5	12230	111	1.3	
30-45.6706-112.4083-2-12-					0-M35437	60330	-0.08	781	21800	139	418	13.1	59	5.0	9	1.7	26790	12.8	15360	78	0.7	
30-45.6925-112.0125-2-12-					0-M35438	73020	-0.10	411	24780	114	-152	18.5	66	2.1	5	1.6	66870	22.6	8784	61	0.7	
30-45.6842-112.0164-2-15-					0-M35439	57520	-0.08	508	31410	61	-78	8.4	42	4.0	3	1.1	15150	5.7	15800	35	0.3	
30-45.6831-112.0139-2-17-					0-M35440	40240	-0.09	-210	47540	73	-120	21.6	100	2.4	5	1.4	42030	11.5	11150	43	0.5	
30-45.6653-112.0172-2-12-					0-M35441	49980	-0.08	712	59940	62	-90	9.0	51	4.0	4	0.9	15930	7.3	14960	34	0.4	
30-45.6583-112.0211-2-12-					0-M35442	53520	0.22	508	62050	61	-83	13.1	86	2.9	4	1.0	23720	9.9	14260	37	0.4	
30-45.6514-112.0236-2-12-					0-M35443	52890	-0.07	449	42030	67	-83	9.5	68	4.3	4	1.2	15920	10.7	13610	35	0.4	

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

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DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued)																	U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAST 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		
30-45.9558-112.1081-2-15-			0-M35393			21750	780	13910	-30	-3	13.8	4.8	-405	-1	-1	12.9	4620	123	3.6			0.225	
30-45.9392-112.1014-2-15-			0-M35394			25497	707	28430	-19	2	9.9	4.3	-414	-1	-1	9.9	3405	86	3.1	107		0.303	
30-45.9583-112.0458-2-11-			0-M35395			19120	383	15880	52	-2	13.5	4.3	462	-1	-1	7.6	5843	114	2.8	83		0.276	
30-45.9333-112.0575-2-15-			0-M35396			96350	559	5305	-19	3	5.7	3.3	-322	-1	-1	7.2	2117	48	2.4	69		0.306	
30-45.9197-112.0944-2-15-			0-M35397			28680	774	8480	64	-2	10.7	5.0	-355	-1	-1	11.6	3260	74	4.7	200		0.310	
30-45.9231-112.1183-2-12-			0-M35398			19830	759	16460	-21	-2	14.8	6.9	565	1	-1	24.4	5536	129	5.7	89		0.279	
30-45.8936-112.1069-2-12-			0-M35399			18630	1322	15790	-23	-2	17.6	10.1	-398	2	-1	54.9	10980	281	8.1	57		0.260	
30-45.8808-112.0606-2-15-			0-M35400			15970	907	8740	75	-3	13.6	6.5	-429	-1	-1	13.9	4933	99	4.6	266		0.252	
30-45.9975-112.2014-2-15-			0-M35401			14440	601	14090	38	-2	9.5	5.6	-307	1	-1	11.4	3663	65	3.5	90		0.333	
30-45.9897-112.1900-2-15-			0-M35402			9233	401	13100	52	-2	6.2	4.1	-289	-1	-1	9.0	2274	40	2.8	77		0.322	
30-45.8908-112.0839-2-15-			0-M35403			23690	595	13190	42	-2	9.7	4.6	390	-1	-1	9.9	3876	87	3.6	99		0.313	
30-45.9072-112.0656-2-15-			0-M35404			24150	1043	12130	-21	-2	9.5	9.3	-350	2	1	29.1	5989	158	5.1	112		0.234	
30-45.9181-112.0447-2-15-			0-M35405			22620	596	13280	59	-2	8.8	6.4	-338	-1	-1	15.3	3885	80	4.3	117		0.340	
30-45.9233-112.0486-2-15-			0-M35406			42490	1704	14780	-41	-4	32.6	4.6	-551	-11	1	5.8	14590	236	3.2	-440		0.431	
30-45.9256-112.0492-2-15-			0-M35407			26530	784	9587	54	-2	10.1	4.4	-355	2	-1	10.8	3617	87	3.1	-72		0.306	
30-45.3817-112.8039-2-15-			0-M35408			32790	698	9104	-19	-2	9.2	4.7	-315	-1	-1	9.8	3175	66	3.6	62		0.265	
30-45.4075-112.8381-2-12-			0-M35409			10977	1227	12830	-36	-3	12.0	10.4	-418	1	-1	35.5	3178	545	6.1			0.262	
30-45.4125-112.8175-2-99-			0-M35410			20070	1176	24750	62	-3	17.5	5.9	-509	-1	-1	10.1	3789	54	4.4	-213		0.327	
30-45.4042-112.8186-2-11-			0-M35411			19440	1352	18420	-29	-3	19.0	14.6	-441	2	-1	22.8	5094	333	7.3	110		0.325	
30-45.4019-112.8181-2-15-			0-M35412			18690	1400	18560	31	-3	19.0	10.6	-413	2	1	17.5	4479	262	6.5	118		0.314	
30-45.3950-112.8139-2-15-			0-M35413			85877	542	6058	-18	-2	5.2	3.5	-313	-1	-1	5.6	1341	53	1.8	-47		0.375	
30-45.3931-112.8181-2-15-			0-M35414			32017	1077	11420	-44	-3	11.5	6.9	-447	-1	-2	16.3	3954	361	4.5	137		0.301	
30-45.3794-112.7972-2-12-			0-M35415			11160	230	5221	24	-1	4.2	3.0	-187	-1	-1	6.6	2740	37	2.8	70		0.394	
30-45.3881-112.7767-2-15-			0-M35416			21120	2405	5473	47	-2	8.2	4.4	-537	-1	-1	8.7	3575	72	3.1	125		0.368	
30-45.3972-112.7708-2-15-			0-M35417			22360	2013	8078	-26	-2	8.1	5.7	-592	-1	-1	10.4	2330	57	3.6	84		0.288	
30-45.4039-112.7647-2-15-			0-M35418			17710	1104	6977	39	2	7.5	4.1	-358	-1	-1	8.5	2536	77	2.9	78		0.318	
30-45.4083-112.7578-2-15-			0-M35419			21110	1193	6774	-19	-2	8.5	5.1	-400	-1	-1	8.7	2964	87	3.0	113		0.333	
30-45.4231-112.7542-2-11-			0-M35420			16000	583	4669	53	-2	6.4	5.5	-357	-1	-1	9.2	2841	67	2.9	-78		0.489	
30-45.4139-112.7689-2-15-			0-M35421			22517	3341	8071	41	-3	8.9	3.6	-856	-6	-1	9.5	-1962	56	4.5	-236		0.326	
30-45.4289-112.7986-2-11-			0-M35422			13560	760	24790	26	-2	11.5	5.2	-381	-1	-1	10.0	2516	66	3.4	76		0.400	
30-45.2958-112.5367-2-15-			0-M35423			27980	797	9761	59	-2	10.4	4.8	-347	-1	-1	10.6	4099	83	3.5	-74		0.311	
30-45.2992-112.6006-2-12-			0-M35424			18550	721	5735	-26	-3	6.6	4.1	-420	-1	-1	9.6	3126	61	3.2	155		0.354	
30-45.3167-112.6006-2-15-			0-M35425			22577	788	9933	54	-3	10.5	4.6	-426	-1	-1	10.7	3790	93	-2.3	131		0.318	
30-45.3294-112.5950-2-12-			0-M35426			15417	585	10570	33	-2	6.4	5.3	-304	-1	-1	13.0	3213	75	3.7	74		0.338	
30-45.0156-112.8364-2-12-			0-M35427			7219	1988	15180	-29	-2	11.0	5.2	-518	-1	-1	8.9	12720	343	3.5	223		0.281	
30-45.2494-112.4839-2-15-			0-M35428			22520	1087	14250	48	-3	15.2	11.1	-390	2	-1	27.0	9206	110	7.7	91		0.211	
30-45.2414-112.4803-2-15-			0-M35429			47680	591	9359	-23	-2	9.5	6.3	-346	-1	-1	9.0	4475	92	3.0			0.322	
30-45.2231-112.4481-2-15-			0-M35430			39290	880	13870	-27	-3	9.5	5.3	-462	-1	-1	11.1	4812	85	3.1	113		0.270	
30-45.7019-112.3333-2-11-			0-M35431			41260	920	4672	-36	9	14.2	3.7	-416	-1	-1	4.2	4490	432	-2.6	112		0.548	
30-45.6706-112.2989-2-15-			0-M35432			15130	550	9233	39	-2	6.5	3.9	-309	-1	-1	9.3	3017	44	2.4	75		0.247	
30-45.6242-112.3333-2-11-			0-M35433			15650	1263	21010	55	-2	9.8	12.3	-374	2	-1	84.4	4001	281	5.1	105		0.181	
30-45.6533-112.3614-2-12-			0-M35434			26700	1622	14690	44	-3	22.5	16.9	-544	3	1	29.1	18990	193	12.2	-34		0.203	
30-45.6797-112.3783-2-12-			0-M35435			18700	1358	19160	-47	-4	14.0	8.6	-580	-2	-2	84.6	4149	200	10.1	-109		0.230	
30-45.6797-112.3903-2-12-			0-M35436			17040	1335	18020	55	-3	10.9	15.4	-452	4	2	94.5	5458	273	10.2	90		0.238	
30-45.6706-112.4083-2-12-			0-M35437			17540	1948	11090	61	-3	11.3	9.6	-564	-1	-1	21.2	4788	69	7.1	115		0.217	
30-45.6925-112.0125-2-12-			0-M35438			18790	1640	21180	-31	-3	12.5	9.4	-577	-1	-1	60.8	4717	203	7.7			0.183	
30-45.6842-112.0164-2-15-			0-M35439			28840	327	8833	43	-2	7.3	3.6	-273	-1	-1	8.9	2593	112	2.6	-36		0.371	
30-45.6831-112.0139-2-12-			0-M35440			33140	2080	8365	34	-2	19.0	7.1	-522	-1	-1	12.4	7139	154	4.2	110		0.298	
30-45.6653-112.0172-2-12-			0-M35441			25470	518	9971	-24	-2	6.8	4.3	-324	-1	-1	9.6	2279	51	2.4	-74		0.313	
30-45.6583-112.0211-2-12-			0-M35442			36430	660	11520	46	-2	9.0	5.0	376	-1	-1	11.2	3762	81	3.8	108		0.241	
30-45.6514-112.0236-2-12-			0-M35443			23960	427	10900	41	-1	7.9	4.0	-290	-1	-1	8.7	3650	64	2.9	-83		0.391	

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

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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 (umho/cm)	SOLTECHMETER (uS/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)	
							DATE	HOUR																											
30-45.6378-112.0325-2-12-						0-M35444-10/05/76-13-			7-	1.5-	-	-	5.1-	40-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45.6264-112.0339-2-12-						0-M35445-10/05/76-13-			7-	1.5-	-	-	5.2-	50-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.40
30-45.7314-112.2392-2-12-						0-M35446-10/06/76-10-			12-	8.0-C-	-	-	5.5-	240-	8-4-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.40	
30-45.7417-112.2847-2-12-						0-M35447-10/06/76-10-			12-	8.0-C-	-	-	5.5-	260-	6-4-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80	
30-45.7433-112.2850-2-12-						0-M35448-10/06/76-10-			12-	8.0-C-	-	-	5.6-	230-	6-4-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.90	
30-45.7189-112.2589-2-15-						0-M35449-10/06/76-10-			13-	-	-	-	-	-	10-4-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50	
30-45.7081-112.2675-2-15-						0-M35450-10/06/76-11-			13-	-	-	-	-	-	6-4-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.10	
30-45.7256-112.2503-2-15-						0-M35451-10/06/76-11-			13-	-	-	-	-	-	4-4-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45.7386-112.3517-2-99-						0-M35452-10/06/76-11-			13-	-	-	-	-	-	6-4-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.10	
30-45.7289-112.3589-2-11-						0-M35453-10/06/76-12-			14-	8.0-C-	-	-	5.2-	120-	10-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.60	
30-45.7128-112.2978-2-11-						0-M35454-10/06/76-12-			13-	8.0-	-	-	5.2-	140-	12-4-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.10	
30-45.6931-112.2794-2-11-						0-M35455-10/06/76-12-			14-	7.0-C-	-	-	5.5-	130-	6-4-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30	
30-45.5914-112.4922-2-12-						0-M35456-10/07/76-15-			17-	7.0-C-	-	-	5.9-	550-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.50	
30-45.6142-112.5061-2-12-						0-M35457-10/07/76-15-			17-	7.0-C-	-	-	5.9-	600-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.40	
30-45.6289-112.4967-2-15-						0-M35458-10/07/76-15-			17-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.20	
30-45.6267-112.4886-2-15-						0-M35459-10/07/76-16-			17-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
30-45.5822-112.4653-2-15-						0-M35460-10/07/76-16-			17-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.00	
30-45.6019-112.4467-2-11-						0-M35461-10/07/76-16-			17-	7.0-C-	-	-	6.0-	600-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.10	
30-45.5758-112.4414-2-15-						0-M35462-10/07/76-17-			17-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30	
30-45.6186-112.4047-2-15-						0-M35463-10/07/76-17-			17-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.20	
30-45.5553-112.4561-2-15-						0-M35464-10/07/76-17-			17-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
30-45.5525-112.4844-2-15-						0-M35465-10/07/76-17-			18-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.60	
30-45.5292-112.4261-2-15-						0-M35466-10/07/76-18-			17-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.20	
30-45.5003-112.4519-2-15-						0-M35467-10/07/76-18-			17-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90	
30-45.6181-112.1931-2-12-						0-M35468-10/07/76-16-			13-	7.5-C-	-	-	5.5-	140-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.20	
30-45.6250-112.1867-2-12-						0-M35469-10/07/76-16-			13-	7.0-C-	-	-	5.2-	120-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30	
30-45.6069-112.0553-2-15-						0-M35470-10/07/76-16-			13-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
30-45.5694-112.2361-2-15-						0-M35471-10/07/76-15-			14-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80	
30-45.5853-112.2294-2-15-						0-M35472-10/07/76-15-			14-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45.5936-112.1833-2-12-						0-M35473-10/07/76-15-			13-	7.5-C-	-	-	5.7-	350-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80	
30-45.6142-112.1939-2-11-						0-M35474-10/07/76-16-			14-	7.0-C-	-	-	5.5-	200-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.10	
30-45.7006-112.4322-2-12-						0-M35475-10/07/76-9-			12-	7.0-C-	-	-	5.2-	80-	-	-	-	-	-	-	-	-	-	-	-	-	-								

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

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DOE SAMPLE NUMBER						DOE SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE										ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Concentrations reported in weight parts per million (ppm)										Concentrations in weight ppm	
							Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li	
30-45.6378-112.0325-2-12-						0-M35444	-5	-5	-5	35	-20	-15	11	-10	-15		2	26
30-45.6264-112.0339-2-12-						0-M35445	-5	-5	-5	36	-20	43	8	-10	-15		3	21
30-45.7314-112.2392-2-12-						0-M35446	15	-5	11	22	47	57	-5	38	-15		4	4
30-45.7417-112.2847-2-12-						0-M35447	-5	-5	-5	-10	-20	32	7	-10	-15		2	22
30-45.7433-112.2850-2-12-						0-M35448	-5	-5	-5	33	-20	20	-5	-10	-15		3	17
30-45.7189-112.2589-2-15-						0-M35449	-5	6	-5	43	-20	-15	8	-10	-15		2	17
30-45.7081-112.2675-2-15-						0-M35450	-5	-5	-5	91	22	-15	-5	-10	-15		3	9
30-45.7256-112.2503-2-15-						0-M35451	-5	-5	-5	58	-20	-15	-5	-10	-15		2	16
30-45.7386-112.3517-2-99-						0-M35452	-5	-5	-5	86	-20	-15	6	-10	-15		2	25
30-45.7289-112.3589-2-11-						0-M35453	7	-5	5	214	21	27	150	-10	-15		2	10
30-45.7128-112.2978-2-11-						0-M35454	35	-5	-5	142	125	-15	-5	10	25		4	4
30-45.6931-112.2794-2-11-						0-M35455	-5	6	-5	180	-20	25	93	-10	-15		2	19
30-45.5914-112.4822-2-12-						0-M35456	15	32	9	195	-20	53	2020	-10	-15		1	4
30-45.6142-112.5061-2-12-						0-M35457	14	33	6	237	-20	16	1245	-10	-15		1	4
30-45.6289-112.4967-2-15-						0-M35458	-5	-5	-5	120	-20	22	27	-10	-15		2	23
30-45.6267-112.4886-2-15-						0-M35459	-5	-5	5	95	-20	62	12	-10	-15		2	16
30-45.5822-112.4653-2-15-						0-M35460	-5	-5	-5	75	-20	51	-5	-10	-15		2	12
30-45.6019-112.4467-2-11-						0-M35461	-5	5	-5	54	-20	36	18	-10	-15		2	14
30-45.5758-112.4414-2-15-						0-M35462	-5	-5	-5	40	-20	32	16	-10	-15		2	21
30-45.6186-112.4047-2-15-						0-M35463	-5	-5	-5	42	-20	35	8	-10	-15		1	32
30-45.5553-112.4561-2-15-						0-M35464	-5	-5	-5	47	-20	30	8	-10	-15		2	20
30-45.5525-112.4844-2-15-						0-M35465	-5	-5	-5	68	-20	38	84	-10	16		2	19
30-45.5292-112.4261-2-15-						0-M35466	-5	-5	-5	58	-20	28	50	-10	16		2	21
30-45.5003-112.4519-2-15-						0-M35467	-5	-5	-5	57	-20	30	54	-10	15		2	28
30-45.6181-112.1931-2-12-						0-M35468	-5	6	-5	23	-20	27	9	-10	18		1	15
30-45.6250-112.1867-2-12-						0-M35469	-5	-5	-5	29	-20	67	13	-10	-15		2	36
30-45.6069-112.0553-2-15-						0-M35470	-5	-5	-5	33	-20	15	7	-10	-15		2	24
30-45.5694-112.2361-2-15-						0-M35471	-5	-5	-5	23	-20	40	34	-10	-15		2	27
30-45.5853-112.2294-2-15-						0-M35472	-5	-5	-5	16	-20	22	21	-10	-15		2	26
30-45.5936-112.1833-2-12-						0-M35473	-5	5	-5	58	-20	24	27	-10	-15		2	16
30-45.6142-112.1939-2-11-						0-M35474	-5	5	-5	14	-20	38	10	-10	-15		1	45
30-45.7006-112.4322-2-12-						0-M35475	-5	-5	-5	22	-20	-15	8	-10	28		3	21
30-45.7064-112.4444-2-12-						0-M35476	-5	-5	-5	31	-20	-15	9	-10	-15		2	23
30-45.6978-112.4217-2-12-						0-M35477	-5	9	-5	22	-20	33	10	-10	-15		2	27
30-45.7292-112.3917-2-11-						0-M35478	-5	-5	-5	41	-20	28	14	-10	-15		2	28
30-45.6719-112.3397-2-11-						0-M35479	-5	-5	-5	46	-20	26	11	-10	-15		1	19
30-45.6414-112.3472-2-11-						0-M35480	-5	-5	-5	28	-20	-15	7	-10	18		2	29
30-45.6061-112.3369-2-15-						0-M35481	-5	-5	-5	35	-20	16	10	-10	-15		2	16
30-45.5903-112.3467-2-15-						0-M35482	-5	-5	-5	44	-20	19	31	-10	-15		2	17
30-45.5522-112.4247-2-15-						0-M35483	-5	5	-5	51	-20	24	34	-10	-15		2	23
30-45.5692-112.3578-2-15-						0-M35484	-5	-5	-5	40	-20	24	29	-10	-15		2	11
30-45.5758-112.3831-2-15-						0-M35485	-5	-5	-5	32	-20	22	32	-10	-15		2	19
30-45.5411-112.3706-2-15-						0-M35486	-5	-5	-5	10	-20	-15	6	-10	-15		2	18
30-45.5636-112.4078-2-12-						0-M35487	-5	18	-5	230	-20	-15	638	-10	-15		2	16
30-45.5006-112.2200-2-15-						0-M35488	-5	-5	9	36	-20	80	6	-10	-15		2	13
30-45.5228-112.2283-2-12-						0-M35489	8	-5	-5	44	-20	84	17	-10	-15		2	19
30-45.5378-112.2492-2-15-						0-M35490	-5	-5	-5	32	-20	20	22	-10	-15		2	24
30-45.5278-112.2411-2-11-						0-M35491	-5	-5	-5	26	-20	-15	13	-10	-15		2	31
30-45.5556-112.2361-2-11-						0-M35492	-5	-5	-5	35	-20	30	14	-10	-15		1	24
30-45.5617-112.2006-2-15-						0-M35493	-5	-5	-5	93	-20	35	1137	-10	-15		2	20
30-45.5078-112.3314-2-12-						0-M35494	-5	-5	-5	19	-20	19	16	-10	-15		2	27

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

③

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
30-45.5378-112.0325-2-12-			0-M35444			53510	-0.78	535	27770	80	198	10.2	49	3.9	4	1.3	16460	9.3	16670	39	0.6	
30-45.6264-112.0339-2-12-			0-M35445			61660	-0.10	549	27280	143	-116	17.6	105	3.5	12	2.3	31970	20.9	14240	79	1.4	
30-45.7314-112.2392-2-12-			0-M35446			47750	-0.08	403	21400	102	-102	21.9	319	-1.7	4	1.3	156300	33.8	7157	59	0.6	
30-45.7417-112.2847-2-12-			0-M35447			44370	-0.08	495	62310	56	-84	6.7	91	-1.5	3	0.8	12960	7.3	12930	39	0.2	
30-45.7433-112.2850-2-12-			0-M35448			56520	-0.11	536	39800	105	-120	13.9	104	2.8	4	1.5	39860	17.3	16950	58	0.6	
30-45.7189-112.2589-2-15-			0-M35449			75430	-0.07	564	29570	80	-104	11.3	83	1.6	4	1.4	36670	10.4	14810	44	0.5	
30-45.7081-112.2675-2-15-			0-M35450			77540	-0.07	649	30050	88	125	13.1	129	2.0	4	1.4	48350	11.6	13800	41	0.5	
30-45.7256-112.2503-2-15-			0-M35451			58030	-0.08	545	28250	105	-115	14.9	201	2.9	4	1.5	50050	15.4	13900	46	0.5	
30-45.7386-112.3517-2-99-			0-M35452			76050	-0.10	635	28270	74	-107	11.6	70	4.5	4	1.5	30960	9.4	13720	47	0.6	
30-45.7289-112.3589-2-11-			0-M35453			62240	0.51	850	27360	99	-110	18.0	145	3.0	5	1.8	93700	37.5	10530	61	0.7	
30-45.7128-112.2978-2-11-			0-M35454			49360	0.72	526	27570	125	-106	20.7	210	3.0	6	2.8	147900	63.2	8916	66	1.1	
30-45.6931-112.2794-2-11-			0-M35455			76210	0.25	674	27370	63	-127	12.9	44	3.9	3	1.3	22920	4.9	11900	29	0.4	
30-45.5914-112.4822-2-12-			0-M35456			35290	1.48	-328	12550	422	-231	25.3	167	13.0	-2	2.0	94060	34.0	-8803	239	1.7	
30-45.6142-112.5061-2-12-			0-M35457			52300	1.00	-344	19550	339	-248	27.4	167	13.1	8	2.2	95710	29.9	-9586	182	1.9	
30-45.6289-112.4967-2-15-			0-M35458			82520	-0.07	683	18470	121	-113	13.4	107	4.3	5	1.7	28460	10.0	17860	75	0.5	
30-45.6267-112.4886-2-15-			0-M35459			68940	-0.09	323	29750	103	119	21.6	216	4.1	5	1.5	47370	15.4	12340	47	0.6	
30-45.5822-112.4653-2-15-			0-M35460			70350	0.22	394	33270	47	-123	22.9	149	-2.2	4	1.4	49050	9.0	7260	32	0.5	
30-45.6019-112.4467-2-11-			0-M35461			53260	0.20	358	33750	45	175	21.2	104	3.8	4	1.0	28500	5.7	13170	21	0.4	
30-45.5758-112.4414-2-15-			0-M35462			70610	-0.06	391	25300	72	-108	14.0	66	4.6	4	1.2	25190	11.0	12340	37	0.4	
30-45.6186-112.4047-2-15-			0-M35463			59740	0.18	435	77280	168	-114	11.9	77	7.3	6	1.3	30100	15.9	10750	97	0.6	
30-45.5553-112.4561-2-15-			0-M35464			61380	-0.11	538	44510	112	-121	17.0	106	6.3	5	1.3	32490	10.5	14410	59	0.6	
30-45.5525-112.4844-2-15-			0-M35465			62850	-0.09	369	24140	181	-116	22.8	107	4.0	8	1.6	48360	13.7	13750	96	0.8	
30-45.5292-112.4261-2-15-			0-M35466			59070	-0.08	528	30250	165	-110	18.1	99	4.4	8	1.6	41530	19.3	9086	93	0.8	
30-45.5003-112.4519-2-15-			0-M35467			61660	-0.08	621	34250	115	-108	13.4	84	5.0	6	1.2	30520	11.0	18960	58	0.5	
30-45.6181-112.1931-2-12-			0-M35468			47100	-0.09	431	70580	78	156	10.5	87	2.5	4	1.2	23550	15.0	11290	45	0.6	
30-45.6250-112.1867-2-12-			0-M35469			62660	-0.09	426	60650	42	113	31.6	183	4.8	3	1.7	39390	6.8	13960	25	0.3	
30-45.6069-112.0553-2-15-			0-M35470			52220	-0.10	498	42840	65	-84	25.9	231	4.6	4	1.6	46200	11.2	16900	44	0.5	
30-45.5694-112.2361-2-15-			0-M35471			56970	-0.09	599	22210	74	-92	7.2	62	3.4	4	1.0	16680	8.8	17270	33	0.4	
30-45.5853-112.2294-2-15-			0-M35472			51830	-0.09	-169	75120	67	-90	10.6	75	5.5	3	1.1	17940	8.0	16980	34	0.3	
30-45.5936-112.1833-2-12-			0-M35473			50690	-0.07	467	123400	79	120	14.1	51	3.0	4	1.2	25480	7.2	12780	48	0.4	
30-45.6142-112.1939-2-11-			0-M35474			49750	-0.07	360	103800	44	-61	11.8	75	4.4	3	0.9	13890	5.3	20980	28	0.2	
30-45.7006-112.4322-2-12-			0-M35475			76220	-0.09	-214	28630	185	-148	10.8	28	2.5	6	1.9	32540	23.7	12910	95	0.8	
30-45.7064-112.4444-2-12-			0-M35476			84860	-0.11	-251	28960	111	-163	9.8	-16	3.5	5	1.3	24690	15.9	15890	73	0.7	
30-45.6978-112.4217-2-12-			0-M35477			55910	-0.07	775	50460	90	98	15.9	127	3.1	5	1.4	21620	11.4	14680	47	0.4	
30-45.7292-112.3917-2-11-			0-M35478			60090	-0.10	511	21400	87	157	16.4	113	3.3	4	1.4	27040	9.2	14640	43	0.3	
30-45.6719-112.3397-2-11-			0-M35479			70240	-0.10	539	21490	54	-129	12.7	89	-2.0	5	0.7	20800	5.7	17130	36	0.3	
30-45.6414-112.3472-2-11-			0-M35480			69530	-0.12	-239	33400	156	-151	14.2	44	-2.3	5	1.8	55430	24.5	12740	87	0.6	
30-45.6061-112.3369-2-15-			0-M35481			77450	-0.07	452	23680	113	-112	12.7	72	-1.4	4	1.3	35050	11.5	13660	59	0.5	
30-45.5903-112.3467-2-15-			0-M35482			73900	-0.06	335	25930	68	-105	13.0	74	2.1	4	1.3	29180	9.7	12760	39	0.4	
30-45.5522-112.4247-2-15-			0-M35483			71180	-0.08	467	25250	78	-117	12.9	69	2.7	4	1.2	23150	8.4	14750	43	0.4	
30-45.5692-112.3578-2-15-			0-M35484			75290	-0.08	301	27180	97	-132	12.7	73	2.1	4	1.3	35250	10.1	13780	49	0.4	
30-45.5758-112.3831-2-15-			0-M35485			74020	-0.06	425	28260	67	-107	12.4	58	1.9	4	1.1	22060	8.4	13290	42	0.4	
30-45.5411-112.3706-2-15-			0-M35486			55440	-0.06	610	28110	95	-82	8.4	51	2.2	5	1.3	16930	12.0	11670	56	0.5	
30-45.5636-112.4078-2-12-			0-M35487			62610	1.01	-294	30680	173	-168	22.4	112	13.2	6	1.4	60050	12.0	-7001	88	1.2	
30-45.5006-112.2200-2-15-			0-M35488			58020	-0.10	346	49790	66	-123	21.8	173	-2.1	4	1.3	38180	6.0	10460	25	0.5	
30-45.5228-112.2283-2-12-			0-M35489			63100	0.41	-186	32000	116	141	27.2	469	2.8	9	1.9	61680	24.5	12300	68	1.1	
30-45.5378-112.2492-2-15-			0-M35490			57070	-0.07	666	62230	63	-81	11.4	81	4.6	4	1.2	18430	7.7	14920	41	0.4	
30-45.5278-112.2411-2-11-			0-M35491			55980	-0.09	573	41900	56	-110	12.0	90	3.5	4	1.4	16060	11.1	15730	40	0.5	
30-45.5556-112.2361-2-11-			0-M35492			54530	-0.11	429	51090	62	-111	13.2	91	6.0	3	1.0	21090	9.9	14560	30	0.3	
30-45.5617-112.2006-2-15-			0-M35493			53910	0.20	441	65140	63	-79	16.2	226	5.8	5	1.2	30470	11.5	19390	36	0.5	
30-45.5078-112.3314-2-12-			0-M35494			52300	-0.09	571	57400	63	-101	11.2	95	2.7	4	1.3	17160	8.4	13570	43	0.5	

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

④

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	
30-45.6378-112.0325-2-12-			0-M35444			13930	577	13450	45	-2	7.4	5.3	-347	-1	-1	11.4	3505	68	3.3	92	0.254	
30-45.6264-112.0339-2-12-			0-M35445			23310	877	17240	46	-3	15.4	10.3	-413	2	-2	21.9	8201	112	10.9	-296	0.202	
30-45.7314-112.2392-2-12-			0-M35446			13280	1233	14730	-31	-2	9.4	6.1	-383	1	-1	21.1	6330	605	5.6	99	0.209	
30-45.7417-112.2847-2-12-			0-M35447			24960	483	9597	-23	-2	5.9	3.2	-316	-1	-1	6.3	3103	50	-1.7	-55	0.444	
30-45.7433-112.2850-2-12-			0-M35448			20740	782	17090	-36	-3	15.1	6.2	788	-1	-2	21.8	4565	208	3.5	-222	0.271	
30-45.7189-112.2589-2-15-			0-M35449			18620	680	21720	-20	-2	10.0	5.7	607	-1	-1	10.2	3354	141	3.5	51	0.245	
30-45.7081-112.2675-2-15-			0-M35450			19610	842	24090	42	-2	9.8	5.4	752	-1	-1	8.1	3775	195	3.5	106	0.259	
30-45.7256-112.2503-2-15-			0-M35451			21990	862	17960	-25	-3	11.3	7.4	-406	-1	-1	11.5	4546	193	4.2	-98	0.226	
30-45.7386-112.3517-2-99-			0-M35452			20480	895	12170	-31	-3	11.4	4.9	-424	-1	-1	10.3	3775	92	4.5	109	0.204	
30-45.7289-112.3589-2-11-			0-M35453			17160	1043	16620	-30	-3	11.5	7.1	698	2	-1	13.8	5620	320	5.1	-78	0.333	
30-45.7128-112.2978-2-11-			0-M35454			17650	1375	14040	-33	-3	12.0	8.9	-407	2	-1	20.9	6718	500	7.7		0.292	
30-45.6931-112.2794-2-11-			0-M35455			19130	909	20320	43	-2	9.4	4.2	723	-1	-1	6.2	3268	67	2.6	134	0.371	
30-45.5914-112.4822-2-12-			0-M35456			29587	3020	4370	-48	23	49.0	25.8	-813	-2	-2	83.1	-1893	88	14.7	-376	0.090	
30-45.6142-112.5061-2-12-			0-M35457			24980	4070	5119	-34	20	49.1	23.4	-895	-1	3	70.7	7748	143	15.0	-78	0.105	
30-45.6289-112.4967-2-15-			0-M35458			24560	914	19940	67	-2	11.5	6.6	-380	1	-1	22.1	5051	96	4.5	100	0.190	
30-45.6267-112.4886-2-15-			0-M35459			34530	1056	17370	43	-3	15.2	6.0	-439	-1	-1	14.1	6229	175	3.8	104	0.227	
30-45.5822-112.4653-2-15-			0-M35460			34500	1141	15870	-35	-3	20.0	4.4	-460	-1	-1	7.2	5984	199	4.2	-35	0.278	
30-45.6019-112.4467-2-11-			0-M35461			32270	1026	14610	-27	-3	14.2	4.4	-471	-1	-1	7.5	4689	108	3.0	122	0.280	
30-45.5758-112.4414-2-15-			0-M35462			23590	860	20550	35	-2	10.7	5.1	-359	-1	-1	10.5	4516	87	2.9	-91	0.219	
30-45.6186-112.4047-2-15-			0-M35463			22180	1399	9188	50	-3	15.8	11.9	-491	1	-1	32.3	6207	114	5.2	89	0.130	
30-45.5553-112.4561-2-15-			0-M35464			27260	1175	13320	-32	-3	16.4	6.8	-474	-1	-2	20.9	3841	114	4.7	-423	0.148	
30-45.5525-112.4844-2-15-			0-M35465			28610	1875	9994	43	-3	24.1	11.7	-504	-1	2	33.3	7203	145	7.1	161	0.168	
30-45.5292-112.4261-2-15-			0-M35466			19770	1788	10590	-23	-3	21.4	11.2	-459	-1	2	27.4	7785	130	7.0	130	0.190	
30-45.5003-112.4519-2-15-			0-M35467			25380	1161	10390	61	-3	14.7	7.8	-457	1	-1	19.1	5934	111	4.8	112	0.204	
30-45.6181-112.1931-2-12-			0-M35468			48670	688	10240	-30	-3	8.9	4.4	-396	-1	-1	10.6	4168	82	4.9	146	0.396	
30-45.6250-112.1867-2-12-			0-M35469			45160	969	15870	-28	-3	19.6	3.3	-399	-1	-1	5.9	3408	109	2.5	132	0.390	
30-45.6069-112.0553-2-15-			0-M35470			23440	440	10930	80	-3	20.0	5.0	-299	-1	-1	11.9	3348	64	4.1	-92	0.286	
30-45.5694-112.2361-2-15-			0-M35471			19130	633	10910	-28	-3	7.7	3.7	-356	-1	-1	12.1	2745	57	4.1	-49	0.231	
30-45.5853-112.2294-2-15-			0-M35472			38110	685	7690	-27	-3	7.9	3.3	-368	-6	-1	8.5	2677	58	-2.1	-215	0.306	
30-45.5936-112.1833-2-12-			0-M35473			26770	1020	10640	36	-2	9.2	5.2	609	-1	-1	10.5	4102	106	3.5	150	0.362	
30-45.6142-112.1939-2-11-			0-M35474			39300	439	2650	44	-2	8.3	3.3	-269	-1	-1	7.1	2884	81	2.5	87	0.296	
30-45.7006-112.4322-2-12-			0-M35475			12360	1192	25340	-25	-3	9.6	10.8	-505	2	-1	61.8	3706	91	8.6	93	0.251	
30-45.7064-112.4444-2-12-			0-M35476			14680	1094	26580	-35	-3	9.5	7.6	-560	-1	-1	32.3	3038	83	6.3		0.406	
30-45.6978-112.4217-2-12-			0-M35477			25540	756	12140	40	-2	9.4	5.4	-356	-1	-1	10.1	4898	75	2.9	114	0.317	
30-45.7292-112.3917-2-11-			0-M35478			24630	926	12860	68	-3	14.7	4.9	-437	-1	-1	13.5	4180	99	3.7	119	0.274	
30-45.6719-112.3397-2-11-			0-M35479			24020	942	12780	-28	-3	10.4	3.7	-509	-1	-1	12.2	4366	87	-2.3	122	0.320	
30-45.6414-112.3472-2-11-			0-M35480			21530	1175	21830	-40	-4	11.3	7.3	-533	-2	-2	69.7	4258	170	9.8	313	0.174	
30-45.6061-112.3369-2-15-			0-M35481			16240	694	22540	45	-2	8.8	7.3	-356	1	-1	23.4	4025	117	5.0	57	0.162	
30-45.5903-112.3467-2-15-			0-M35482			17450	694	23580	39	-2	10.0	5.0	-330	-1	-1	13.1	3815	90	2.8	87	0.206	
30-45.5522-112.4247-2-15-			0-M35483			16510	642	22310	37	-2	9.4	5.3	-377	-1	-1	11.8	3434	80	3.4	138	0.195	
30-45.5692-112.3578-2-15-			0-M35484			17790	722	26680	-28	-3	10.1	4.9	-402	-1	-1	14.9	4053	116	5.4	133	0.188	
30-45.5758-112.3831-2-15-			0-M35485			16810	608	23950	38	-2	9.1	4.7	613	1	-1	11.8	3214	78	3.8	66	0.220	
30-45.5411-112.3706-2-15-			0-M35486			17310	640	14030	34	-2	8.6	6.1	337	1	-1	14.4	3453	56	4.3	67	0.229	
30-45.5636-112.4078-2-12-			0-M35487			16150	2799	8678	-33	23	31.4	11.7	-719	-1	-2	29.4	6430	113	9.0		0.129	
30-45.5006-112.2200-2-15-			0-M35488			38100	1360	13230	-32	-3	18.1	4.0	-479	-7	-1	7.3	5037	123	2.9	-287	0.274	
30-45.5228-112.2283-2-12-			0-M35489			32270	1522	12650	42	-3	24.8	8.9	-452	-1	2	22.7	8633	187	8.3	-90	0.216	
30-45.5378-112.2492-2-15-			0-M35490			34400	706	9244	36	-2	9.1	4.7	-319	-1	-1	9.4	3653	61	4.1	136	0.266	
30-45.5278-112.2411-2-11-			0-M35491			23440	834	12250	-24	-3	7.7	5.2	-443	-1	-1	11.7	3121	60	3.1	94	0.248	
30-45.5556-112.2361-2-11-			0-M35492			46080	511	12540	-32	-3	10.4	3.8	-393	-2	-1	8.9	3700	88	-2.7	103	0.315	
30-45.5617-112.2006-2-15-			0-M35493			42580	988	7170	54	2	10.0	4.3	-356	1	-1	11.4	4308	87	5.1	397	0.298	
30-45.5078-112.3314-2-12-			0-M35494			21960	641	10150	-30	-3	8.3	4.4	-402	-1	-1	11.2	3288	59	4.1	-52	0.268	

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 (umho/cm)	SCHLUMETER (uL/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	5.736	-112.2183	-2-11-	0-M35495-10/09/76-15-	14-	7.5-C-	5.7-	300-	-1-7-6-5-2-3-1-	-4-3-5-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.90	
30-45	5.5228	-112.0722	-2-12-	0-M35496-10/09/76-11-	13-	7.0-C-	5.2-	80-	-2-7-4-6-4-3-1-	-2-1-4-5-1-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
30-45	5.5278	-112.0703	-2-12-	0-M35497-10/09/76-11-	13-	7.0-C-	5.2-	50-	-2-7-4-6-4-3-1-	-2-1-4-5-1-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45	4.769	-112.1625	-2-12-	0-M35498-10/09/76-12-	15-	7.5-C-	5.2-	80-	-2-7-4-6-3-2-1-	-2-2-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.50	
30-45	5.125	-112.1033	-2-12-	0-M35499-10/09/76-12-	15-	7.5-C-	5.2-	80-	-2-7-3-6-4-2-1-	-2-1-3-5-1-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.70	
30-45	5.181	-112.1408	-2-12-	0-M35500-10/09/76-13-	16-	7.5-C-	5.5-	170-	-2-7-3-6-5-3-1-	-2-2-4-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45	4.992	-112.1822	-2-12-	0-M35501-10/09/76-14-	15-	7.5-C-	5.2-	120-	-2-7-4-6-3-2-1-	-2-2-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90	
30-45	5.197	-112.1425	-2-12-	0-M35502-10/09/76-14-	14-	7.5-C-	5.2-	120-	-2-7-3-6-4-2-1-	-2-2-3-5-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45	5.078	-112.1589	-2-12-	0-M35503-10/09/76-14-	16-	7.5-C-	5.2-	100-	-2-7-4-6-3-2-1-	-2-2-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	
30-45	5.625	-112.1192	-2-12-	0-M35504-10/09/76-15-	14-	7.0-C-	5.2-	100-	-2-7-3-6-4-2-1-	-2-1-4-5-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.70	
30-45	5.247	-112.1761	-2-12-	0-M35505-10/09/76-15-	14-	7.0-C-	5.2-	80-	-2-7-6-4-4-2-1-	-2-2-4-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
30-45	4.931	-112.2228	-2-12-	0-M35506-10/09/76-15-	15-	9.0-C-	5.4-	200-	-4-3-8-3-2-1-	-2-2-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
30-45	4.794	-112.0589	-2-12-	0-M35507-10/10/76-16-	8-	7.5-C-	5.2-	100-	-2-7-3-7-4-2-1-	-2-1-4-5-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50	
30-45	4.714	-112.1164	-2-15-	0-M35508-10/10/76-17-	10-	-	-	-	-1-6-4-6-	-1-	-2-1-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.20	
30-45	6.556	-112.1583	-2-99-	0-M35509-10/11/76-13-	2-	-C-	-	-	-1-7-5-6-	-1-	-1-3-5-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30	
30-45	6.500	-112.1764	-2-15-	0-M35510-10/11/76-13-	3-	-	-	-	-1-7-5-6-	-1-	-2-1-2-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
30-45	6.611	-112.1961	-2-15-	0-M35511-10/11/76-13-	3-	-	-	-	-4-5-6-	-1-	-2-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.80	
30-45	6.661	-112.2111	-2-15-	0-M35512-10/11/76-13-	3-	-	-	-	-4-5-6-	-1-	-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50	
30-45	6.825	-112.5122	-2-15-	0-M35513-10/11/76-14-	2-	-	-	-	-1-6-4-6-	-1-	-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.40	
30-45	6.406	-112.5092	-2-15-	0-M35514-10/11/76-14-	2-	-	-	-	-1-6-4-6-	-1-	-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.60	
30-45	6.944	-112.5339	-2-12-	0-M35516-10/11/76-15-	1-	2.4-C-	5.5-	260-	-1-6-3-6-3-3-1-	-2-3-2-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.20	
30-45	6.978	-112.5336	-2-12-	0-M35517-10/11/76-16-	1-	2.4-C-	5.5-	260-	-1-6-4-6-3-3-1-	-2-2-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45	6.025	-112.0311	-2-15-	0-M35518-09/20/76-12-	13-	-	-	-	-1-6-3-7-	-1-	-2-1-2-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.70	
30-45	5.783	-112.3036	-2-11-	0-M35519-10/10/76-12-	9-	7.5-C-	5.7-	300-	-4-6-6-2-3-1-	-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
30-45	5.583	-112.3139	-2-15-	0-M35520-10/10/76-13-	9-	-	-	-	-4-3-6-	-1-	-2-3-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.10	
30-45	5.997	-112.3044	-2-15-	0-M35521-10/10/76-12-	9-	-	-	-	-4-3-6-	-1-	-2-4-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45	6.275	-112.2947	-2-15-	0-M35522-10/10/76-13-	10-	-	-	-	-4-3-6-	-1-	-2-3-2-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.90	
30-45	6.633	-112.2697	-2-15-	0-M35523-10/10/76-14-	10-	-	-	-	-4-4-6-	-1-	-2-2-2-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80	
30-45	4.861	-112.0022	-2-12-	0-M35524-10/10/76-16-	7-	7.0-C-	5.2-	70-	-2-7-3-6-4-2-1-	-2-1-4-5-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70	
30-45	4.878	-112.0025	-2-12-	0-M35525-10/10/76-16-	7-	7.0-C-	5.2-	80-	-2-7-3-6-5-2-1-	-2-1-4-5-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
30-45	4.811	-112.0483	-2-12-	0-M35526-10/10/76-16-	8-	7.5-C-	5.2-	150-	-2-7-3-6-4-2-1-	-2-1-3-4-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50	
30-45	4.628	-112.4969	-2-15-	0-M35527-10/12/76-	0-	-	-	-	-2-6-4-6-	-1-	-2-3-3-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
30-45	4.228	-112.4458	-2-15-	0-M35528-10/12/76-	0-	-	-	-	-2-6-4-6-	-1-	-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
30-45	4.022	-112.4550	-2-15-	0-M35529-10/12/76-	0-	-	-	-	-2-6-4-6-	-1-	-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.10	
30-45	3.917	-112.4514	-2-11-	0-M35530-10/12/76-	0-	1.2-C-	5.7-	375-	-2-6-4-6-3-3-1-	-2-2-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.70	
30-45	3.789	-112.4458	-2-15-	0-M35531-10/12/76-10-	1-	-	-	-	-2-6-4-6-	-1-	-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70	
30-45	3.875	-112.4328	-2-15-	0-M35532-10/12/76-10-	1-	-	-	-	-2-6-4-6-	-1-	-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
30-45	3.911	-112.4189	-2-11-	0-M35533-10/12/76-10-	1-	2.2-	5.5-	120-	-2-6-4-6-3-3-1-	-2-2-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
30-45	3.914	-112.4161	-2-15-	0-M35534-10/12/76-11-	2-	-	-	-	-2-5-4-6-	-1-	-2-4-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
30-45	4.353	-112.3856	-2-15-	0-M35535-09/10/76-13-	14-	-	-	-	-2-6-4-6-	-1-	-2-1-2-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90	
30-45	3.058	-112.0767	-2-15-	0-M35536-10/09/76-	8-	1-	-	-	-4-4-6-	-1-	-2-3-3-2-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
30-45	2.789	-112.0733	-2-15-	0-M35537-10/09/76-	8-	1-	-	-	-4-2-6-	-1-	-2-3-3-3-1-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.80	
30-45	2.661	-112.0894	-2-15-	0-M35538-10/09/76-	9-	2-	-	-	-4-4-6-	-1-	-2-3-2-3-1-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60	
30-45	2.883	-112.0983	-2-12-	0-M35539-10/09/76-10-	3-	4.8-C-	5.9-																											

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	LAS 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
30-45.5736-112.2183-2-11-			0-M35495				-5	-5	-5	24	-20	22	24	-10	-15		1	6
30-45.5223-112.0722-2-12-			0-M35496				-5	-5	-5	53	24	69	9	-10	-15		2	39
30-45.5278-112.0703-2-12-			0-M35497				-5	-5	-5	22	-20	-15	20	-10	-15		2	15
30-45.4769-112.1625-2-12-			0-M35498				-5	6	5	66	-20	63	-5	-10	-15		2	16
30-45.5125-112.1033-2-12-			0-M35499				-5	-5	-5	45	-20	104	-5	-10	-15		1	7
30-45.5181-112.1408-2-12-			0-M35500				-5	-5	-5	37	-20	-15	13	-10	-15		2	15
30-45.4992-112.1822-2-12-			0-M35501				-5	-5	-5	82	-20	92	102	-10	-15		2	23
30-45.5197-112.1425-2-12-			0-M35502				-5	14	-5	90	-20	133	10	-10	-15		2	18
30-45.5078-112.1589-2-12-			0-M35503				-5	-5	-5	35	-20	87	7	-10	-15		2	21
30-45.5625-112.1192-2-12-			0-M35504				-5	10	-5	103	-20	65	79	-10	-15		2	13
30-45.5247-112.1761-2-12-			0-M35505				-5	-5	5	56	-20	69	22	-10	-15		2	15
30-45.4931-112.2228-2-12-			0-M35506				-5	-5	-5	70	-20	93	25	-10	-15		2	22
30-45.4794-112.0589-2-12-			0-M35507				-5	-5	-5	35	-20	62	10	-10	-15		2	20
30-45.4714-112.1164-2-15-			0-M35508				-5	-5	5	63	-20	64	-5	-10	-15		4	22
30-45.6556-112.1583-2-99-			0-M35509				-5	-5	-5	31	-20	32	14	-10	-15		2	39
30-45.6500-112.1764-2-15-			0-M35510				-5	-5	-5	23	-20	40	10	-10	-15		2	26
30-45.6611-112.1961-2-15-			0-M35511				-5	-5	-5	34	-20	42	11	-10	26		3	26
30-45.6661-112.2111-2-15-			0-M35512				-5	-5	-5	45	-20	26	32	-10	-15		2	28
30-45.6825-112.5122-2-15-			0-M35513				-5	-5	7	29	-20	20	24	-10	-15		2	18
30-45.6406-112.5092-2-15-			0-M35514				-5	-5	6	46	-20	36	10	-10	-15		2	28
30-45.6944-112.5339-2-12-			0-M35516				-5	-5	-5	39	-20	33	10	-10	-15		2	22
30-45.6978-112.5336-2-12-			0-M35517				-5	-5	-5	45	-20	34	9	-10	-15		2	21
30-45.6025-112.0311-2-15-			0-M35518				-5	-5	-5	21	-20	28	19	-10	-15		2	25
30-45.5783-112.3036-2-11-			0-M35519				-5	-5	-5	21	-20	20	17	-10	-15		2	16
30-45.5983-112.3139-2-15-			0-M35520				-5	-5	-5	23	-20	-15	14	-10	-15		3	25
30-45.5997-112.3044-2-15-			0-M35521				-5	-5	-5	31	-20	24	21	-10	-15		1	17
30-45.6275-112.2947-2-15-			0-M35522				-5	-5	-5	27	21	21	5	11	-15		2	10
30-45.6633-112.2697-2-15-			0-M35523				-5	-5	-5	29	-20	31	9	-10	-15		2	17
30-45.4861-112.0022-2-12-			0-M35524				-5	-5	-5	35	-20	35	5	-10	26		2	21
30-45.4878-112.0025-2-12-			0-M35525				-5	-5	-5	38	-20	-15	10	-10	-15		2	20
30-45.4811-112.0483-2-12-			0-M35526				-5	-5	-5	64	-20	30	65	-10	-15		2	34
30-45.4628-112.4969-2-15-			0-M35527				-5	-5	-5	32	-20	25	10	-10	-15		2	25
30-45.4228-112.4458-2-15-			0-M35528				-5	-5	-5	19	-20	-15	11	-10	-15		2	22
30-45.4022-112.4550-2-15-			0-M35529				-5	-5	-5	37	-20	-15	7	-10	-15		2	29
30-45.3917-112.4514-2-11-			0-M35530				-5	-5	5	33	-20	68	6	-10	-15		2	30
30-45.3789-112.4458-2-15-			0-M35531				-5	-5	-5	17	-20	15	12	-10	-15		2	15
30-45.3875-112.4328-2-15-			0-M35532				-5	-5	-5	19	-20	-15	12	-10	-15		2	21
30-45.3911-112.4189-2-11-			0-M35533				-5	-5	-5	34	-20	64	12	-10	-15		2	27
30-45.3914-112.4161-2-15-			0-M35534				-5	-5	-5	17	-20	-15	16	-10	-15		2	21
30-45.4353-112.3856-2-15-			0-M35535				-5	-5	-5	43	-20	36	15	-10	-15		2	26
30-45.3058-112.0767-2-15-			0-M35536				-5	-5	-5	41	-20	84	-5	-10	-15		2	12
30-45.2789-112.0733-2-15-			0-M35537				-5	-5	-5	30	-20	55	-5	-10	-15		2	21
30-45.2661-112.0894-2-15-			0-M35538				-5	-5	-5	70	-20	90	14	-10	-15		2	12
30-45.2883-112.0983-2-12-			0-M35539				-5	-5	-5	25	-20	49	20	-10	-15		1	11
30-45.2692-112.1003-2-15-			0-M35540				-5	-5	5	71	-20	74	11	-10	-15		2	14
30-45.2828-112.0672-2-12-			0-M35541				-5	-5	-5	43	-20	36	5	-10	-15		2	13
30-45.2681-112.0372-2-12-			0-M35542				-5	-5	6	32	-20	87	39	-10	-15		2	12
30-45.2786-112.0367-2-15-			0-M35543				-5	-5	-5	89	-20	76	10	-10	-15		2	20
30-45.2978-112.0492-2-99-			0-M35544				-5	-5	-5	35	-20	22	18	-10	-15		1	22
30-45.3067-112.0556-2-15-			0-M35545				-5	-5	-5	55	-20	95	7	10	-15		2	16
30-45.3158-112.0636-2-15-			0-M35546				-5	-5	6	72	-20	78	-5	-10	-15		2	15

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

③

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
30-45.5736	-112.2183	-2-11-	0-M35495			31560	-0.06	247	125200	37	233	9.9	71	7.1	2	0.6	11830	4.5	12080	20	0.3	
30-45.5228	-112.0722	-2-12-	0-M35496			55140	-0.07	-177	62970	75	-105	22.0	150	7.8	4	1.1	30470	9.3	8279	39	0.5	
30-45.5278	-112.0703	-2-12-	0-M35497			66180	-0.07	928	52260	65	-114	9.0	101	3.1	5	1.2	17810	11.1	14710	40	0.6	
30-45.4769	-112.1625	-2-12-	0-M35498			55280	-0.13	-295	29200	130	-173	31.6	325	-2.8	6	1.7	63850	15.7	-7035	51	1.0	
30-45.5125	-112.1033	-2-12-	0-M35499			55650	-0.10	-276	33560	111	-179	34.7	382	-2.1	6	1.8	75680	22.4	-7179	63	1.0	
30-45.5181	-112.1408	-2-12-	0-M35500			70260	-0.08	606	35610	50	300	9.5	31	4.1	4	1.1	19390	4.5	16110	32	0.4	
30-45.4992	-112.1822	-2-12-	0-M35501			61550	0.02	-216	32310	75	-126	27.2	220	5.9	4	1.4	48970	8.5	9860	30	0.6	
30-45.5197	-112.1425	-2-12-	0-M35502			43720	0.19	-336	27580	95	-214	33.7	462	3.3	-2	1.2	62980	10.1	-8576	41	0.7	
30-45.5078	-112.1589	-2-12-	0-M35503			64720	-0.08	-180	25540	52	-117	24.4	207	2.9	4	1.1	39620	9.1	9970	31	0.5	
30-45.5625	-112.1192	-2-12-	0-M35504			69000	1.70	-210	30390	73	152	28.4	216	6.9	5	1.3	52970	11.5	11080	36	0.6	
30-45.5247	-112.1761	-2-12-	0-M35505			60590	0.18	-256	32390	114	-146	29.8	256	-2.2	6	1.5	59120	13.9	-6031	47	0.8	
30-45.4931	-112.2228	-2-12-	0-M35506			64700	0.26	403	31300	69	-126	25.9	213	-2.5	5	1.2	42390	8.3	-5016	32	0.5	
30-45.4794	-112.0589	-2-12-	0-M35507			58100	-0.07	412	36230	57	71	16.8	187	4.9	3	1.1	25140	8.4	18530	34	0.3	
30-45.4714	-112.1164	-2-15-	0-M35508			64790	-0.09	412	33400	146	-121	27.3	87	6.1	10	1.8	51570	20.5	13860	66	1.4	
30-45.6556	-112.1583	-2-99-	0-M35509			72260	-0.10	583	12540	80	-102	13.3	111	4.8	5	1.2	22040	8.2	18070	50	0.5	
30-45.6500	-112.1764	-2-15-	0-M35510			55630	-0.09	360	77330	62	-88	13.6	153	5.3	3	1.1	25450	7.8	18790	35	0.4	
30-45.6611	-112.1961	-2-15-	0-M35511			69500	-0.07	463	31600	79	-93	18.3	130	5.4	6	1.4	24220	9.5	16180	45	0.6	
30-45.6561	-112.2111	-2-15-	0-M35512			55760	-0.07	453	36750	57	-81	15.6	102	4.3	4	1.1	23360	7.8	15590	37	0.4	
30-45.6825	-112.5122	-2-15-	0-M35513			71830	-0.09	452	18240	277	172	18.5	92	3.5	7	1.9	39450	20.9	13060	135	0.8	
30-45.6406	-112.5092	-2-15-	0-M35514			71910	-0.12	507	20100	185	-121	20.5	87	4.8	7	1.9	41470	21.7	14570	101	0.7	
30-45.6944	-112.5339	-2-12-	0-M35516			58870	-0.09	-211	20250	200	-120	18.5	246	3.1	6	2.1	43220	35.1	11350	99	0.8	
30-45.6978	-112.5336	-2-12-	0-M35517			69070	-0.08	473	20870	95	-97	16.0	142	3.7	5	1.4	30740	11.3	12960	56	0.5	
30-45.6025	-112.0311	-2-15-	0-M35518			53970	-0.08	460	65830	82	-95	12.5	80	3.7	4	1.1	22620	10.3	16420	38	0.5	
30-45.5783	-112.3036	-2-11-	0-M35519			54750	-0.06	625	18250	64	106	9.3	63	2.7	4	1.1	14660	9.4	16800	31	0.3	
30-45.5583	-112.3139	-2-15-	0-M35520			62690	-0.07	438	22070	127	-106	6.5	23	2.9	5	1.3	22890	11.6	16270	72	0.5	
30-45.5997	-112.3044	-2-15-	0-M35521			52130	-0.06	387	75810	71	114	11.7	98	3.0	3	1.0	27340	10.1	12080	36	0.4	
30-45.6275	-112.2947	-2-15-	0-M35522			49460	0.12	333	33880	146	-88	11.3	125	2.3	7	1.9	61390	35.3	14780	93	0.8	
30-45.6633	-112.2697	-2-15-	0-M35523			52510	-0.06	413	39240	118	-93	11.1	122	2.5	4	1.1	35520	20.8	11570	53	0.6	
30-45.4861	-112.0022	-2-12-	0-M35524			61440	-0.08	450	27900	87	-92	14.5	113	4.9	5	1.2	24920	8.9	14720	46	0.6	
30-45.4878	-112.0025	-2-12-	0-M35525			60190	-0.05	591	35000	71	-77	10.9	56	3.8	5	1.2	20390	9.7	14190	40	0.4	
30-45.4811	-112.0483	-2-12-	0-M35526			78770	-0.08	575	11700	84	198	11.9	96	16.7	5	1.1	25490	6.6	22060	46	0.5	
30-45.4628	-112.4969	-2-15-	0-M35527			67610	-0.07	576	12350	70	92	13.0	95	4.3	4	1.3	21070	7.7	15980	40	0.3	
30-45.4228	-112.4458	-2-15-	0-M35528			60740	-0.09	560	39350	73	-101	7.1	42	1.9	4	1.1	16440	11.5	14700	44	0.5	
30-45.4022	-112.4550	-2-15-	0-M35529			63540	-0.08	568	12170	86	-100	12.6	90	4.2	4	1.4	22640	8.4	18540	45	0.4	
30-45.3917	-112.4514	-2-11-	0-M35530			61790	-0.07	350	24610	118	-89	22.3	155	2.8	6	1.6	31500	11.1	12020	69	0.6	
30-45.3789	-112.4458	-2-15-	0-M35531			62260	-0.05	663	40750	78	-78	7.8	39	3.2	5	1.2	18510	12.2	13350	45	0.4	
30-45.3875	-112.4328	-2-15-	0-M35532			60660	-0.06	619	37220	85	-92	7.5	36	2.6	5	1.1	16780	10.1	16460	44	0.5	
30-45.3911	-112.4189	-2-11-	0-M35533			60230	-0.08	681	62400	73	-98	13.0	122	2.7	3	1.3	23000	7.3	12770	46	0.3	
30-45.3914	-112.4161	-2-15-	0-M35534			60030	-0.06	685	36230	70	-81	8.9	37	2.6	5	1.1	17180	9.3	15140	43	0.5	
30-45.4353	-112.3856	-2-15-	0-M35535			74000	-0.06	533	12920	84	-78	14.6	93	4.4	4	1.2	23600	8.0	16540	48	0.4	
30-45.3058	-112.0767	-2-15-	0-M35536			59730	-0.09	-192	33790	117	-110	24.9	237	2.1	6	1.3	48100	14.4	6960	53	0.8	
30-45.2789	-112.0733	-2-15-	0-M35537			57110	-0.09	337	37380	110	-108	18.8	148	-2.0	5	1.5	33100	17.5	10840	65	0.7	
30-45.2661	-112.0894	-2-15-	0-M35538			61090	-0.08	353	33020	73	-134	31.6	208	2.8	5	1.4	52730	6.9	13610	39	0.6	
30-45.2883	-112.0983	-2-12-	0-M35539			64540	-0.09	608	38540	73	129	22.0	193	-1.7	6	1.6	47910	13.0	8548	49	0.8	
30-45.2692	-112.1003	-2-15-	0-M35540			62700	-0.07	451	36490	101	-134	30.8	195	3.3	4	1.3	48850	7.3	15670	40	0.6	
30-45.2828	-112.0672	-2-12-	0-M35541			58490	-0.09	400	33440	77	-158	20.6	169	-2.2	4	1.4	42850	9.9	9888	42	0.8	
30-45.2681	-112.0372	-2-12-	0-M35542			60530	-0.08	304	27060	95	-164	30.2	246	2.6	6	1.5	59470	14.2	9723	53	0.9	
30-45.2786	-112.0367	-2-15-	0-M35543			63350	-0.07	403	40030	71	-89	23.7	163	4.6	6	1.2	38050	10.1	16170	45	0.5	
30-45.2978	-112.0492	-2-99-	0-M35544			62290	-0.07	575	19470	92	98	11.8	80	3.4	5	1.3	22210	10.4	14800	43	0.6	
30-45.3067	-112.0556	-2-15-	0-M35545			63600	-0.10	287	26840	99	-110	30.5	223	2.5	5	1.3	46940	10.9	9323	44	0.6	
30-45.3158	-112.0636	-2-15-	0-M35546			65100	-0.08	-174	35750	96	-104	33.0	234	2.1	5	1.2	53070	9.2	6444	39	0.7	

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

④

DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued)																	U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	DOE 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		
30-45.5736-112.2183-2-11-	0-M35495	159507	350	3948	40	-2	5.8	2.2	-279	-1	-1	5.2	1901	42	1.9	92	0.365						
30-45.5228-112.0722-2-12-	0-M35496	44970	1579	10590	41	-2	16.5	5.8	-431	1	-1	12.8	3759	110	4.1	69	0.258						
30-45.5278-112.0703-2-12-	0-M35497	13317	693	19870	-19	-2	7.3	4.6	-371	-1	-1	11.5	3458	44	5.2	71	0.235						
30-45.4769-112.1625-2-12-	0-M35498	42590	2499	11630	-43	-4	29.8	6.9	-701	-1	-2	13.8	7181	158	6.2	-80	0.326						
30-45.5125-112.1033-2-12-	0-M35499	45547	3768	10340	-30	-3	33.9	9.0	-699	2	-1	21.7	9703	190	9.2	-182	0.217						
30-45.5181-112.1408-2-12-	0-M35500	16160	565	11820	44	-2	10.3	4.6	-333	-1	-1	8.1	3444	49	2.7	133	0.321						
30-45.4992-112.1822-2-12-	0-M35501	33970	1478	13690	-29	13	23.4	5.6	-510	-1	-1	8.8	6557	142	4.9	-63	0.443						
30-45.5197-112.1425-2-12-	0-M35502	37320	3228	8552	-42	-4	30.9	5.0	-822	-1	-2	8.2	2642	104	4.5	-263	0.329						
30-45.5078-112.1589-2-12-	0-M35503	35120	1390	16510	44	-3	20.6	4.5	-441	-1	-1	7.4	5434	127	4.9	101	0.405						
30-45.5625-112.1192-2-12-	0-M35504	35340	1736	13600	43	12	25.2	5.2	-503	-1	-1	10.1	8024	160	5.3	112	0.465						
30-45.5247-112.1761-2-12-	0-M35505	37370	2145	11990	-32	-3	27.6	7.9	-617	1	-1	16.8	8379	171	8.4		0.196						
30-45.4931-112.2228-2-12-	0-M35506	38730	1216	14380	-40	-4	20.6	4.5	-512	-1	-2	10.4	5226	153	5.2	-209	0.308						
30-45.4794-112.0589-2-12-	0-M35507	42820	996	10020	52	-2	12.1	4.0	-364	-1	-1	9.0	4752	97	3.4	100	0.278						
30-45.4714-112.1164-2-15-	0-M35508	25770	1710	15270	55	-3	22.9	9.2	-452	2	1	15.2	9111	177	11.9	125	0.276						
30-45.6556-112.1583-2-99-	0-M35509	25620	939	9986	58	-3	10.2	5.8	-430	-1	-1	12.4	4243	85	4.2	103	0.266						
30-45.6500-112.1764-2-15-	0-M35510	35070	783	7508	-28	-3	11.2	3.6	-371	-1	-1	8.9	4009	110	3.9	-78	0.382						
30-45.6611-112.1961-2-15-	0-M35511	22350	760	15190	51	-2	12.1	5.9	-330	-1	1	12.6	4576	102	5.2	94	0.222						
30-45.6661-112.2111-2-15-	0-M35512	33510	893	9454	40	-2	12.5	4.3	-332	-1	-1	8.8	4033	85	2.9	94	0.284						
30-45.6825-112.5122-2-15-	0-M35513	23640	1093	11060	-25	-3	21.2	20.0	-393	-1	2	44.6	7319	129	7.1	59	0.099						
30-45.6406-112.5092-2-15-	0-M35514	30250	1416	11900	-35	-4	20.5	11.2	-500	-1	-2	32.0	5937	121	6.1	-30	0.144						
30-45.6944-112.5339-2-12-	0-M35516	27660	1936	10360	-25	-3	20.0	11.3	-521	1	-1	38.0	9568	174	7.3	-24	0.137						
30-45.6978-112.5336-2-12-	0-M35517	39940	1259	11030	55	-3	18.3	7.3	-414	-1	-1	17.8	4482	122	4.5	63	0.152						
30-45.6025-112.0311-2-15-	0-M35518	36630	656	11890	-21	-2	9.0	5.3	-348	-1	-1	11.2	3311	83	4.9	115	0.241						
30-45.5783-112.3036-2-11-	0-M35519	20280	390	11710	37	-2	6.7	3.9	-243	-1	-1	8.3	3172	49	3.5	-76	0.386						
30-45.5583-112.3139-2-15-	0-M35520	13670	501	18580	-25	-2	6.2	6.5	-340	-1	-1	26.5	2584	57	4.9	90	0.155						
30-45.5997-112.3044-2-15-	0-M35521	48460	719	10180	40	-2	9.8	4.6	-308	-1	-1	13.3	4685	104	4.4	89	0.218						
30-45.6275-112.2947-2-15-	0-M35522	26650	1109	11610	-23	-2	9.6	9.7	-349	1	-1	35.2	6762	180	6.8	-33	0.196						
30-45.6633-112.2697-2-15-	0-M35523	29620	785	12800	-22	-2	9.7	7.0	-344	-1	-1	17.2	4076	102	4.9		0.221						
30-45.4861-112.0022-2-12-	0-M35524	24420	612	13150	52	-2	12.5	4.9	-324	-1	-1	12.8	3864	84	4.7	-158	0.289						
30-45.4878-112.0025-2-12-	0-M35525	19030	582	11390	37	-2	8.5	5.1	-288	1	-1	12.3	3175	73	3.5	114	0.236						
30-45.4811-112.0483-2-12-	0-M35526	15670	321	8862	87	-3	14.1	5.9	-352	-1	-1	11.6	5164	99	5.2	141	0.302						
30-45.4628-112.4969-2-15-	0-M35527	23940	788	9335	58	-2	9.1	4.7	-361	-1	-1	10.7	3886	79	3.5		0.318						
30-45.4228-112.4458-2-15-	0-M35528	15050	558	13620	39	-3	7.0	4.8	-351	-1	-1	11.6	3173	53	4.2	78	0.293						
30-45.4022-112.4550-2-15-	0-M35529	21340	1021	9239	-29	-3	9.5	5.7	-447	-1	-1	13.5	4366	73	2.4	117	0.304						
30-45.3917-112.4514-2-11-	0-M35530	39910	1259	8757	-22	-2	16.4	8.5	-385	-1	-1	20.7	4574	120	3.2	63	0.324						
30-45.3789-112.4453-2-15-	0-M35531	13650	597	13360	40	-2	7.4	5.1	-270	-1	-1	13.2	3246	66	3.8	76	0.280						
30-45.3875-112.4329-2-15-	0-M35532	16160	550	12950	36	-2	6.7	6.3	-320	-1	-1	11.8	3127	53	3.9	-35	0.288						
30-45.3911-112.4189-2-11-	0-M35533	35330	647	11570	-27	-2	9.6	4.0	-361	-1	-1	11.0	4722	85	3.8	-70	0.282						
30-45.3914-112.4161-2-15-	0-M35534	12610	563	13050	37	-1	7.1	5.2	-281	1	-1	11.7	3672	57	4.3	85	0.291						
30-45.4353-112.3856-2-15-	0-M35535	28390	919	9787	54	-2	10.3	5.0	-323	-1	-1	12.4	4021	88	3.5	105	0.315						
30-45.3058-112.0767-2-15-	0-M35536	34680	1448	10450	-26	-3	22.5	8.5	-462	-1	-1	17.5	6872	127	6.5		0.194						
30-45.2789-112.0733-2-15-	0-M35537	26470	1218	10530	54	-3	15.8	7.3	-448	-1	-1	18.4	4423	104	5.6	-118	0.261						
30-45.2661-112.0894-2-15-	0-M35538	38960	2220	11540	40	-2	23.1	5.7	-550	-1	1	13.3	5250	136	4.7	91	0.195						
30-45.2883-112.0983-2-12-	0-M35539	35630	2203	14400	-25	-2	23.3	7.2	-530	-1	1	13.6	4723	100	6.9		0.250						
30-45.2692-112.1003-2-15-	0-M35540	31850	1878	11060	53	-3	21.3	6.1	-561	-1	-1	11.5	4704	128	4.0		0.217						
30-45.2828-112.0672-2-12-	0-M35541	22220	2155	13700	-33	-3	20.0	5.8	-619	-1	-1	11.0	5271	107	6.3	-395	0.273						
30-45.2681-112.0372-2-12-	0-M35542	31790	2719	11680	44	-3	26.5	7.8	-635	-1	1	21.3	6429	135	5.9	113	0.192						
30-45.2786-112.0367-2-15-	0-M35543	32220	1288	8792	-23	-2	18.2	6.0	-376	-1	-1	11.5	6337	137	4.6	87	0.252						
30-45.2978-112.0492-2-99-	0-M35544	15090	788	10540	-21	-2	10.2	7.3	-354	-1	-1	11.9	4150	67	4.6	105	0.218						
30-45.3067-112.0556-2-15-	0-M35545	37510	1270	12040	-34	-3	22.2	6.5	-448	-1	-2	13.4	6528	160	4.8	-176	0.209						
30-45.3158-112.0636-2-15-	0-M35546	44400	1541	10570	-24	-2	26.7	7.0	-430	-1	1	12.7	6285	165	6.0	77	0.220						

[illegible]

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

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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	DOE 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	3200-112.0583	2-12	0-M35547	-5	-5	-5	33	-20	72	-5	-10	-15	3	30				
30-45	3275-112.0192	2-15	0-M35548	-5	-5	-5	34	-20	61	10	-10	23	3	26				
30-45	3244-112.0019	2-11	0-M35549	-5	-5	-5	37	-20	54	9	-10	-15	2	16				
30-45	3522-112.0233	2-15	0-M35550	-5	-5	-5	22	-20	34	21	-10	-15	2	19				
30-45	3569-112.0250	2-15	0-M35551	-5	-5	-5	32	-20	29	9	-10	-15	2	21				
30-45	3625-112.0208	2-11	0-M35552	-5	-5	-5	29	26	66	5	-10	28	2	11				
30-45	3539-112.0439	2-15	0-M35553	-5	-5	-5	13	53	53	6	-10	-15	2	17				
30-45	3539-112.0650	2-11	0-M35554	-5	-5	-5	22	24	46	-5	-10	-15	2	16				
30-45	3464-112.1092	2-12	0-M35555	-5	-5	-5	33	26	50	5	-10	-15	2	13				
30-45	3528-112.1208	2-12	0-M35556	-5	-5	-5	31	-20	25	12	-10	-15	2	23				
30-45	3664-112.0900	2-15	0-M35557	-5	-5	-5	29	-20	45	9	-10	-15	2	23				
30-45	3686-112.0939	2-12	0-M35558	-5	-5	-5	25	-20	48	13	-10	-15	2	20				
30-45	3269-112.0636	2-15	0-M35559	-5	-5	-5	24	-20	37	13	-10	-15	2	20				
30-45	2514-112.5169	2-15	0-M35560	-5	-5	-5	26	-20	38	7	-10	-15	3	26				
30-45	3572-112.6222	2-15	0-M35561	-5	-5	-5	18	-20	30	10	-10	-15	1	21				
30-45	3522-112.5689	2-15	0-M35562	-5	-5	-5	28	-20	37	5	-10	-15	2	32				
30-45	3225-112.5253	2-15	0-M35563	-5	-5	-5	42	-20	33	10	-10	-15	3	25				
30-45	3042-112.4775	2-15	0-M35564	-5	-5	-5	39	-20	47	-5	-10	-15	2	13				
30-45	2686-112.4411	2-15	0-M35565	-5	-5	-5	6	28	91	8	-10	-15	2	34				
30-45	2733-112.4122	2-15	0-M35566	-5	-5	-5	9	27	72	-5	-10	-15	2	38				
30-45	2889-112.4050	2-15	0-M35567	-5	-5	-5	6	36	-20	44	-5	-10	-15	2	52			
30-45	2914-112.4028	2-15	0-M35568	-5	-5	-5	38	-20	138	-5	11	-15	2	38				
30-45	3169-112.4411	2-15	0-M35569	-5	-5	-5	37	39	36	5	-10	-15	2	34				
30-45	3242-112.4408	2-15	0-M35570	-5	-5	-5	25	-20	51	7	-10	-15	2	42				
30-45	3347-112.4486	2-15	0-M35571	-5	-5	-5	46	-20	20	-5	-10	-15	2	19				
30-45	3447-112.4358	2-15	0-M35572	-5	-5	-5	11	63	51	-5	-10	-15	1	5				
30-45	3628-112.4350	2-15	0-M35573	-5	-5	-5	33	-20	-15	-5	-10	-15	2	22				
30-45	3706-112.4364	2-15	0-M35574	-5	-5	-5	51	-20	54	-5	-10	-15	1	14				
30-45	3589-112.4000	2-11	0-M35575	-5	-5	-5	46	-20	23	-5	-10	-15	2	18				
30-45	3717-112.3981	2-15	0-M35576	-5	-5	-5	29	-20	35	17	-10	-15	3	23				
30-45	3408-112.3514	2-15	0-M35577	-5	-5	-5	34	-20	40	-5	-10	-15	3	16				
30-45	3103-112.3533	2-15	0-M35578	-5	-5	-5	34	-20	74	-5	-10	-15	2	21				
30-45	2900-112.3381	2-11	0-M35579	-5	-5	-5	37	-20	41	12	-10	-15	3	31				
30-45	2586-112.3525	2-15	0-M35580	-5	-5	-5	34	-20	50	9	-10	-15	2	30				
30-45	2544-112.3208	2-11	0-M35581	-5	-5	-5	40	-20	34	11	-10	-15	2	41				
30-45	2931-112.3086	2-15	0-M35582	-5	-5	-5	40	-20	18	12	-10	-15	2	36				
30-45	3494-112.3217	2-15	0-M35583	-5	-5	-5	38	-20	27	13	-10	-15	2	25				
30-45	3403-112.3181	2-15	0-M35584	-5	-5	-5	47	-20	50	10	-10	-15	2	40				
30-45	3286-112.2922	2-11	0-M35585	-5	-5	-5	52	-20	21	7	-10	-15	2	18				
16-45	0105-113.8837	2-12	0-M35586	-5	-5	-5	66	-20	-15	10	-10	-15	1	19				
16-45	0068-113.8860	2-12	0-M35587	-5	-5	-5	20	-20	15	24	-10	-15	3	17				
16-45	0410-113.9139	2-12	0-M35588	-5	-5	-5	14	-20	-15	8	-10	-15	3	30				
16-45	0788-113.8990	2-12	0-M35589	-5	-5	-5	23	-20	-15	5	-10	-15	2	17				
16-45	0286-113.9095	2-15	0-M35590	-5	-5	-5	42	-20	-15	17	-10	-15	2	66				
16-45	0695-113.9043	2-15	0-M35591	-5	-5	-5	20	-20	-15	20	-10	-15	3	24				
16-45	0154-113.9961	2-12	0-M35592	-5	-5	-5	24	-20	135	-5	-10	-15	1	9				
16-45	0186-113.9825	2-15	0-M35593	-5	-5	-5	63	-20	55	6	-10	-15	2	22				
16-45	0180-113.9548	2-15	0-M35594	-5	-5	-5	27	-20	-15	14	-10	-15	2	16				
16-45	0103-113.9675	2-15	0-M35595	-5	-5	-5	23	-20	21	13	-10	-15	1	18				
16-45	0086-113.9387	2-12	0-M35596	-5	-5	-5	16	-20	22	8	-10	-15	2	13				
16-45	1156-113.9680	2-12	0-M35597	-5	-5	-5	47	-20	-15	6	-10	-15	1	11				

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

③

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	
30-45.3200-112.0583-2-12-			0-M35547			54140	-7.09	422	36240	107	-101	19.7	237	3.1	9	1.5	32260	13.1	12050	51	0.9		
30-45.3275-112.0192-2-15-			0-M35548			54750	-7.09	480	34530	107	-104	20.5	233	3.9	7	1.7	33940	11.9	11450	48	0.9		
30-45.3244-112.0019-2-11-			0-M35549			44370	-7.07	427	36470	103	-91	18.9	253	2.6	9	1.3	35200	14.1	13780	57	0.9		
30-45.3522-112.0233-2-15-			0-M35550			67770	-7.07	579	23990	107	-93	16.6	179	4.0	7	1.6	30560	16.6	17890	56	0.7		
30-45.3569-112.0250-2-15-			0-M35551			62310	-7.07	514	21180	110	-97	15.1	189	3.3	8	1.7	29820	17.4	17250	55	0.8		
30-45.3625-112.0208-2-11-			0-M35552			58130	-7.08	384	20300	123	-108	19.3	391	4.4	7	1.7	41240	29.6	15690	67	1.1		
30-45.3539-112.0439-2-15-			0-M35553			60530	-7.06	625	19440	101	87	17.7	271	3.1	8	1.6	33060	19.2	14890	59	0.8		
30-45.3539-112.0650-2-11-			0-M35554			68560	-7.10	642	22140	111	-91	13.0	228	2.2	8	1.4	32650	20.8	16430	62	0.9		
30-45.3464-112.1092-2-12-			0-M35555			60130	-7.07	504	21160	127	-99	17.4	290	2.7	7	1.8	33520	21.4	13910	56	0.9		
30-45.3528-112.1208-2-12-			0-M35556			63130	-7.08	675	19340	101	-105	14.8	174	2.6	6	1.8	27760	13.3	14840	53	0.7		
30-45.3564-112.0900-2-15-			0-M35557			65160	-7.06	670	21310	94	-97	15.3	195	3.2	8	1.5	31440	15.4	16090	56	0.8		
30-45.3686-112.0939-2-12-			0-M35558			67300	-7.06	672	21540	107	-90	16.1	192	3.2	8	1.6	30580	15.2	13480	54	0.8		
30-45.3269-112.0636-2-15-			0-M35559			62370	-7.07	722	18970	97	-100	14.9	161	3.2	7	1.7	26920	12.6	16580	49	0.8		
30-45.2514-112.5169-2-15-			0-M35560			64190	-7.08	413	29050	86	-98	14.7	110	5.9	4	1.3	23320	8.0	15330	36	0.6		
30-45.3572-112.6222-2-15-			0-M35561			54750	-7.06	547	38050	60	-79	13.3	95	3.4	4	1.1	21030	11.0	14480	33	0.5		
30-45.3522-112.5689-2-15-			0-M35562			50620	-7.06	609	31810	78	-84	14.9	95	5.5	6	1.2	22880	8.3	13560	41	0.5		
30-45.3225-112.5253-2-15-			0-M35563			64900	-7.06	521	29840	88	-92	14.7	105	5.3	5	1.3	21370	8.8	16990	42	0.5		
30-45.3042-112.4775-2-15-			0-M35564			37000	-7.09	-271	31070	91	-172	19.5	110	-2.0	-2	1.3	47900	12.3	-6912	43	0.5		
30-45.2686-112.4411-2-15-			0-M35565			63060	-7.07	362	22490	54	-92	29.1	389	4.5	4	1.1	44410	6.8	9840	32	0.4		
30-45.2733-112.4122-2-15-			0-M35566			61720	-7.08	292	24830	48	122	31.9	395	4.6	5	1.1	45630	6.1	9245	27	0.5		
30-45.2889-112.4050-2-15-			0-M35567			61800	-7.08	474	18120	64	-99	21.4	122	5.9	3	1.1	31960	7.7	15440	32	0.4		
30-45.2914-112.4028-2-15-			0-M35568			60480	-7.07	288	25530	54	-96	32.5	417	4.4	4	1.2	46140	6.4	8999	27	0.4		
30-45.3169-112.4411-2-15-			0-M35569			64350	-7.07	597	18560	56	87	21.7	129	6.5	4	1.2	33400	8.1	13810	31	0.4		
30-45.3242-112.4408-2-15-			0-M35570			62140	-7.07	391	18870	69	-94	22.9	150	6.5	4	1.1	32670	7.5	15840	29	0.4		
30-45.3347-112.4486-2-15-			0-M35571			52670	-7.08	317	41330	62	-107	18.4	99	2.3	3	1.1	34900	7.0	10120	29	0.4		
30-45.3447-112.4358-2-15-			0-M35572				-7.07			123		25.6	121	-1.7		1.6	85780	14.5		69	0.8		
30-45.3628-112.4350-2-15-			0-M35573			48630	-7.06	432	107500	64	-76	11.8	67	2.8	4	1.0	22530	5.7	14480	34	0.4		
30-45.3706-112.4364-2-15-			0-M35574			44370	-7.07	-272	32440	104	-178	20.0	102	2.1	4	1.5	49160	13.5	-6943	45	0.7		
30-45.3589-112.4000-2-11-			0-M35575			47110	-7.09	-241	45870	78	-127	17.6	102	-2.1	3	1.1	42830	11.2	-5735	46	0.6		
30-45.3717-112.3981-2-15-			0-M35576			58060	-7.06	553	31400	75	-91	16.5	110	5.2	6	1.3	22820	8.1	13890	42	0.5		
30-45.3408-112.3514-2-15-			0-M35577			55990	-7.08	353	32010	126	-95	16.5	232	2.9	10	1.3	33620	20.5	14540	60	1.2		
30-45.3103-112.3533-2-15-			0-M35578			62470	-7.07	403	35900	110	-99	16.2	239	4.2	7	1.4	30710	14.1	10920	56	0.9		
30-45.2900-112.3381-2-11-			0-M35579			70480	-7.09	530	13010	85	-95	11.6	93	3.2	5	1.1	23110	8.5	14970	47	0.4		
30-45.2586-112.3525-2-15-			0-M35580			68820	-7.06	447	13490	110	-75	14.8	101	3.1	6	1.5	22230	12.9	14600	61	0.5		
30-45.2544-112.3208-2-11-			0-M35581			71410	-7.06	498	13960	82	-77	14.3	90	4.2	5	1.3	21780	9.5	17240	45	0.4		
30-45.2931-112.3086-2-15-			0-M35582			65840	-7.07	458	13980	119	-87	15.2	100	3.2	5	1.7	21570	13.6	14160	63	0.6		
30-45.3494-112.3217-2-15-			0-M35583			48830	-7.08	495	13030	100	-92	14.7	90	5.0	5	1.3	23010	10.1	15940	56	0.4		
30-45.3403-112.3181-2-15-			0-M35584			69140	-7.06	561	12880	86	-77	14.7	90	3.6	5	1.3	21380	10.5	15620	51	0.4		
30-45.3286-112.2922-2-11-			0-M35585			47300	-7.07	-239	35420	76	-165	18.9	104	2.3	4	1.4	46950	12.0	-6473	47	0.6		
16-45.0105-113.8837-2-12-			0-M35586			63260	-7.19	395	9110	106	134	14.4	67	4.6	6	1.5	23880	10.7	18550	52	0.7		
16-45.0068-113.8860-2-12-			0-M35587			63870	-7.15	807	15340	97	-115	8.4	95	6.5	4	1.2	15110	10.3	27370	60	0.4		
16-45.0410-113.9139-2-12-			0-M35588			71410	-7.11	939	18700	111	126	11.4	54	6.1	4	1.2	16990	11.4	21960	62	0.3		
16-45.0788-113.8990-2-12-			0-M35589			77070	-7.11	1046	15030	100	-90	9.5	61	4.4	6	1.2	19840	10.2	22710	52	0.4		
16-45.0286-113.9095-2-15-			0-M35590			77750	-7.14	779	36210	94	954	12.2	73	5.8	4	1.3	19390	5.8	19680	49	0.3		
16-45.0695-113.9043-2-15-			0-M35591			73270	-7.14	968	17070	96	-111	8.7	56	4.3	3	1.1	19580	9.4	19110	52	0.4		
16-45.0154-113.9961-2-12-			0-M35592			64050	-7.13	904	30390	68	-96	24.1	714	2.4	4	1.2	30570	7.3	16420	35	0.3		
16-45.0186-113.9825-2-15-			0-M35593			63690	-7.14	867	45790	73	-87	19.4	254	4.1	4	1.1	29940	4.4	13250	33	-0.4		
16-45.0180-113.9548-2-15-			0-M35594			67290	-7.14	694	22460	143	-115	15.1	97	4.2	4	1.2	26200	7.2	22040	78	0.3		
16-45.0103-113.9675-2-15-			0-M35595			71570	-7.17	990	27130	98	-125	14.1	130	3.3	4	1.3	27870	7.9	18250	44	0.6		
16-45.0086-113.9387-2-12-			0-M35596			68530	-7.14	980	28280	60	-89	16.6	176	3.2	3	1.3	28400	6.2	22310	36	0.3		
16-45.1156-113.9680-2-12-			0-M35597			67090	-7.12	709	11050	94	151	10.6	69	5.2	6	1.4	25630	9.8	23730	54	0.5		

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

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DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued)															U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	DOE 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	3200-112.0583	-2-12-	0-M35547	30577	1705	12400	42	-2	17.1	3.3	-390	1	-1	14.9	6994	127	7.6	-37	0.221			
30-45	3275-112.0192	-2-15-	0-M35548	31227	1007	12540	-32	-3	17.9	7.4	-410	-1	-1	16.3	6296	126	6.7	-372	0.209			
30-45	3244-112.0019	-2-11-	0-M35549	34797	1047	12400	32	-2	18.2	7.8	-364	1	1	16.6	8229	133	7.8	73	0.205			
30-45	3522-112.0233	-2-15-	0-M35550	19800	928	14290	39	-2	13.5	7.6	-347	1	-1	14.6	7115	96	5.3	118	0.226			
30-45	3567-112.0250	-2-15-	0-M35551	16497	956	14250	41	-2	13.1	9.3	-355	-1	1	12.1	7211	90	6.6	-16	0.281			
30-45	3625-112.0208	-2-11-	0-M35552	22527	1073	14010	-29	-3	16.2	8.2	-400	2	1	18.3	11320	124	7.8	-214	0.240			
30-45	3539-112.0439	-2-15-	0-M35553	22877	918	14610	49	-2	14.3	8.4	-324	1	1	14.9	9691	110	6.9	75	0.248			
30-45	3539-112.0650	-2-11-	0-M35554	22877	948	14720	-34	-3	13.9	8.6	-328	-1	-2	18.9	7981	109	7.0	110	0.185			
30-45	3464-112.1092	-2-12-	0-M35555	24187	944	14030	37	-2	14.6	9.7	-365	1	-1	16.1	9009	112	7.8	-45	0.248			
30-45	3528-112.1208	-2-12-	0-M35556	21030	808	15510	-28	-2	12.8	6.4	-371	-1	-1	11.3	5880	91	7.2	106	0.239			
30-45	3664-112.0900	-2-15-	0-M35557	20520	855	15910	34	-2	13.5	8.2	-351	-1	1	13.6	7129	105	6.3	99	0.213			
30-45	3686-112.0939	-2-12-	0-M35558	21847	921	14910	44	-2	13.9	7.5	-332	1	-1	13.0	7994	110	6.1	78	0.246			
30-45	3269-112.0636	-2-15-	0-M35559	15790	763	15790	36	-2	12.4	8.2	-353	-1	1	10.6	6025	79	6.0	-50	0.255			
30-45	2514-112.5169	-2-15-	0-M35560	16277	687	14010	-25	-2	11.2	5.1	-348	-1	-1	13.2	3566	88	3.9	-249	0.197			
30-45	3572-112.6222	-2-15-	0-M35561	20457	546	10790	36	-2	9.8	4.3	-296	1	-1	9.2	3411	85	3.1	117	0.359			
30-45	3522-112.5689	-2-15-	0-M35562	23077	714	14150	46	-2	11.4	5.4	-297	-1	-1	10.3	4197	85	4.4	107	0.243			
30-45	3225-112.5253	-2-15-	0-M35563	19750	677	13190	44	-2	10.8	6.3	-329	-1	-1	11.2	4082	75	4.4	-32	0.232			
30-45	3042-112.4775	-2-15-	0-M35564	22440	2582	6126	-30	-3	19.5	6.2	-665	-1	-1	13.6	4236	101	5.1	-161	0.279			
30-45	2686-112.4411	-2-15-	0-M35565	68567	1106	12680	35	-2	21.0	4.7	-363	1	-1	9.3	4978	139	4.5	65	0.237			
30-45	2733-112.4122	-2-15-	0-M35566	80397	1137	13470	60	-2	22.1	4.3	-375	-1	-1	7.0	5636	140	3.0	133	0.300			
30-45	2889-112.4050	-2-15-	0-M35567	43677	741	13600	48	-3	14.0	3.8	-362	-1	-1	7.6	3505	100	2.0	-210	0.316			
30-45	2914-112.4028	-2-15-	0-M35568	71767	1116	12830	-24	-2	22.1	4.5	-381	1	-1	9.6	4699	143	3.7	97	0.229			
30-45	3169-112.4411	-2-15-	0-M35569	43497	835	12980	50	-2	15.6	4.8	-317	-1	-1	9.3	5198	118	3.2		0.280			
30-45	3242-112.4408	-2-15-	0-M35570	45320	781	13440	53	-2	14.8	4.2	-357	-1	-1	8.2	4323	114	3.7		0.280			
30-45	3347-112.4486	-2-15-	0-M35571	41607	1371	9577	-29	-3	15.9	3.6	-451	-7	-1	8.5	4596	120	3.6	-256	0.329			
30-45	3447-112.4358	-2-15-	0-M35572				-24	-2	28.4	9.5		2	1	23.5			6.4	-145	0.238			
30-45	3628-112.4350	-2-15-	0-M35573	44027	814	7652	34	-2	9.0	4.4	467	-1	-1	9.3	3966	75	3.1	-69	0.258			
30-45	3706-112.4364	-2-15-	0-M35574	23667	2795	6411	-24	-2	19.5	7.2	-687	1	-1	14.7	8130	107	5.3	89	0.293			
30-45	3589-112.4000	-2-11-	0-M35575	32810	2007	8063	-32	-3	18.9	5.0	-570	-7	-1	11.9	6804	127	4.3	-270	0.311			
30-45	3717-112.3981	-2-15-	0-M35576	23640	715	13970	55	-2	11.8	5.6	-332	1	-1	11.5	4293	88	4.0	113	0.209			
30-45	3408-112.3514	-2-15-	0-M35577	29240	1143	14930	-22	-2	17.4	9.0	-357	2	2	18.9	8548	137	10.6	65	0.265			
30-45	3103-112.3533	-2-15-	0-M35578	29887	948	12390	35	-2	16.8	8.9	-376	-1	2	16.2	6945	117	7.0		0.210			
30-45	2900-112.3381	-2-11-	0-M35579	23817	826	9698	40	-3	10.3	5.4	-402	-1	-1	14.5	3449	93	4.4	128	0.324			
30-45	2586-112.3525	-2-15-	0-M35580	25610	783	9542	43	-2	10.4	8.5	-306	1	-1	20.7	4260	91	4.6	39	0.329			
30-45	2544-112.3208	-2-11-	0-M35581	25490	751	10120	52	-2	10.0	5.6	-302	-1	-1	13.8	4247	88	3.5	89	0.319			
30-45	2931-112.3086	-2-15-	0-M35582	24767	744	9642	45	-2	10.1	10.1	-351	-1	-1	21.6	3573	90	5.9	133	0.306			
30-45	3494-112.3217	-2-15-	0-M35583	20677	766	9708	-29	-3	10.7	6.0	-373	-1	-1	17.2	5081	99	4.4	96	0.343			
30-45	3403-112.3181	-2-15-	0-M35584	24460	726	9704	49	-2	9.9	6.4	-310	1	-1	16.4	3772	82	3.7	83	0.311			
30-45	3286-112.2922	-2-11-	0-M35585	22147	2919	7528	39	-2	19.6	6.5	-608	-1	2	13.0	5359	101	4.9		0.315			
16-45	0105-113.8837	-2-12-	0-M35586	8910	328	5095	80	-6	8.7	8.2	-414	-1	-1	11.9	4364	52	5.1	-134	0.387			
16-45	0068-113.8860	-2-12-	0-M35587	10700	659	12460	-33	-5	6.6	5.5	-450	-1	-1	14.0	2949	38	3.3	-80	0.514			
16-45	0410-113.9139	-2-12-	0-M35588	13020	459	14410	66	-4	7.6	5.8	527	-1	-1	17.0	4169	54	2.9	100	0.312			
16-45	0788-113.8990	-2-12-	0-M35589	9882	589	11850	44	-4	9.0	6.0	-333	1	-1	17.2	4270	62	2.8	83	0.273			
16-45	0286-113.9095	-2-15-	0-M35590	22050	639	20200	56	-4	8.8	8.0	-465	-1	-1	11.7	3266	62	4.9	120	0.410			
16-45	0695-113.9043	-2-15-	0-M35591	16390	792	12340	-30	-4	7.9	5.5	-439	-1	-1	20.4	3276	47	-3.2	-72	0.284			
16-45	0194-113.9961	-2-12-	0-M35592	51060	738	13120	64	-4	14.4	5.6	514	-1	-1	9.7	4523	93	4.2	124	0.381			
16-45	0186-113.9825	-2-15-	0-M35593	55640	942	7517	-27	-5	14.2	6.3	-396	-1	-1	12.0	4207	107	-7.1	2876	0.258			
16-45	0180-113.9548	-2-15-	0-M35594	25107	878	12530	63	-4	11.3	6.1	-464	-1	-1	25.3	4212	78	5.1	108	0.186			
16-45	0103-113.9675	-2-15-	0-M35595	30140	709	15270	-38	-5	12.2	5.3	-448	-1	-2	12.5	5649	100	-3.3	-37	0.224			
16-45	0086-113.9387	-2-12-	0-M35596	38630	567	8952	49	-4	13.2	3.7	-358	-1	-1	11.8	4522	111	3.0	154	0.331			
16-45	1156-113.9680	-2-12-	0-M35597	14040	536	8636	58	-4	10.3	6.3	-329	-1	-1	12.4	4212	73	5.7	105	0.387			

[illegible]

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

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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	DOE 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	
16-45	1034	-113.9217	-2-12	0-M35598	-5	-5	-5	22	-20	-15	8	-10	-15	1	18			
16-45	0378	-113.9203	-2-12	0-M35599	-5	-5	-5	17	28	-15	6	-10	-15	3	34			
16-45	0620	-113.9265	-2-15	0-M35600	-5	-5	-5	24	-20	-15	19	-10	-15	3	25			
16-45	0816	-113.9520	-2-12	0-M35601	-5	-5	-5	18	-20	-15	14	-10	-15	2	10			
16-45	1005	-113.9636	-2-12	0-M35602	-5	-5	-5	117	-20	20	7	-10	-15	2	20			
16-45	0946	-113.9357	-2-15	0-M35603	-5	-5	-5	25	-20	-15	12	-10	-15	3	19			
16-45	0969	-113.9313	-2-12	0-M35604	-5	-5	-5	148	-20	-15	9	-10	-15	1	10			
16-45	0838	-113.8752	-2-12	0-M35605	-5	-5	-5	42	-20	-15	14	-10	-15	-1	17			
16-45	0832	-113.8781	-2-12	0-M35606	-5	-5	-5	27	-20	-15	8	-10	-15	2	14			
16-45	1096	-113.8463	-2-15	0-M35607	-5	-5	-5	29	-20	-15	12	-10	-15	2	32			
16-45	1072	-113.8489	-2-12	0-M35608	-5	-5	-5	14	-20	-15	10	-10	-15	2	40			
16-45	1124	-113.8643	-2-12	0-M35609	-5	-5	-5	44	-20	-15	12	-10	-15	2	24			
16-45	1070	-113.7831	-2-15	0-M35610	-5	-5	-5	28	-20	-15	13	-10	-15	2	19			
16-45	1721	-113.8379	-2-12	0-M35611	-5	-5	-5	24	-20	-15	12	-10	-15	2	13			
16-45	5225	-113.9302	-2-12	0-M35612	-5	-5	-5	32	-20	-15	-5	-10	-15	2	36			
16-45	5388	-113.9491	-2-12	0-M35613	-5	-5	-5	38	-20	18	-5	-10	-15	3	35			
16-45	5569	-113.9251	-2-12	0-M35614	-5	-5	-5	36	-20	26	6	-10	-15	2	17			
16-45	5586	-113.8939	-2-12	0-M35615	-5	-5	-5	38	-20	35	-5	-10	-15	2	16			
16-45	5611	-113.9093	-2-12	0-M35616	-5	-5	-5	27	-20	-15	-5	-10	-15	2	25			
16-45	5819	-113.9191	-2-12	0-M35617	-5	-5	-5	31	-20	27	-5	-10	-15	2	22			
16-45	5809	-113.9170	-2-12	0-M35618	-5	-5	-5	29	-20	44	-5	-10	-15	2	17			
16-45	6031	-113.9625	-2-12	0-M35619	-5	-5	-5	17	-20	-15	-5	-10	-15	2	19			
16-45	6085	-113.9641	-2-12	0-M35620	-5	-5	-5	12	-20	-15	-5	-10	-15	1	13			
16-45	6078	-113.9664	-2-12	0-M35621	-5	-5	-5	14	-20	-15	-5	-10	-15	1	10			
16-45	6120	-113.9683	-2-12	0-M35622	-5	-5	-5	17	-20	-15	-5	-10	-15	2	26			
16-45	6121	-113.9661	-2-12	0-M35623	-5	-5	-5	25	-20	-15	5	-10	-15	3	31			
16-45	6699	-113.9514	-2-12	0-M35624	-5	-5	-5	41	-20	-15	17	-10	-15	1	54			
16-45	6732	-113.9521	-2-12	0-M35625	-5	-5	-5	158	-20	39	60	-10	-15	1	25			
16-45	6613	-113.9772	-2-12	0-M35626	-5	-5	-5	39	-20	-15	45	-10	-15	3	19			
16-45	6547	-113.9727	-2-12	0-M35627	-5	-5	-5	29	-20	21	27	-10	-15	3	89			
16-45	6337	-113.9690	-2-12	0-M35628	-5	-5	-5	-10	-20	-15	8	-10	-15	2	16			
16-45	6345	-113.9662	-2-12	0-M35629	-5	-5	-5	24	-20	-15	6	-10	-15	2	21			
16-45	0467	-113.8352	-2-12	0-M35630	-5	-5	-5	25	-20	-15	36	-10	-15	2	13			
16-45	0432	-113.8349	-2-12	0-M35631	-5	-5	-5	28	-20	16	35	-10	-15	1	18			
16-45	0411	-113.8314	-2-12	0-M35632	-5	-5	-5	30	-20	-15	10	-10	-15	1	25			
16-45	0398	-113.8189	-2-12	0-M35633	-5	-5	-5	32	-20	-15	17	-10	-15	1	7			
16-45	0392	-113.7965	-2-12	0-M35634	-5	-5	-5	2325	-20	-15	13	-10	-15	1	1			
16-45	0410	-113.7852	-2-12	0-M35635	-5	-5	-5	21	-20	-15	19	-10	-15	3	9			
16-45	0498	-113.7518	-2-12	0-M35636	-5	-5	-5	21	-20	28	18	-10	-15	2	16			
16-45	0635	-113.7422	-2-12	0-M35637	-5	-5	-5	1011	-20	-15	14	-10	-15	2	11			
16-45	0241	-113.5850	-2-12	0-M35638	-5	-5	-5	25	-20	-15	14	-10	-15	1	13			
16-45	0349	-113.5425	-2-12	0-M35639	-5	-5	-5	39	-20	-15	20	-10	-15	1	16			
16-45	0373	-113.5447	-2-12	0-M35640	-5	-5	-5	19	-20	-15	13	-10	-15	2	24			
16-45	0130	-113.6055	-2-12	0-M35641	-5	-5	-5	34	-20	61	9	-10	-15	2	18			
16-45	0750	-113.6232	-2-12	0-M35642	-5	-5	-5	55	-20	-15	99	-10	-15	2	22			
16-45	0757	-113.6278	-2-12	0-M35643	-5	-5	-5	42	-20	-15	82	-10	-15	2	9			
16-45	0671	-113.6810	-2-12	0-M35644	-5	-5	-5	18	-20	-15	6	-10	-15	-1	38			
16-45	0985	-113.7178	-2-12	0-M35645	-5	-5	-5	42	-20	-15	15	-10	-15	2	13			
16-45	0099	-113.5612	-2-12	0-M35646	-5	-5	-5	25	-20	17	10	-10	-15	2	14			
16-45	0068	-113.5608	-2-12	0-M35647	-5	-5	-5	32	-20	17	16	-10	-15	2	36			
16-45	0082	-113.5690	-2-12	0-M35648	-5	-5	-5	23	-20	-15	7	-10	-15	2	27			

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

③

DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS																
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	DOE 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
16-45.1034-113.9217-2-12-	0-M35593	57970	-0.11	655	9794	57	-83	9.1	48	2.5	4	0.9	13680	5.7	16690	34	0.5					
16-45.0378-113.9203-2-12-	0-M35599	73780	-0.15	590	17630	115	-113	9.2	75	5.6	4	1.3	17860	10.1	20760	79	0.3					
16-45.0620-113.9265-2-15-	0-M35600	69620	-0.11	854	15390	96	138	11.4	44	5.1	4	1.3	17430	9.8	26310	58	0.5					
16-45.0816-113.9520-2-12-	0-M35601	75290	-0.11	985	19900	85	-90	10.1	75	5.8	4	1.4	18050	10.3	24920	46	0.4					
16-45.1005-113.9636-2-12-	0-M35602	72790	-0.14	791	13940	111	146	13.7	54	9.2	6	1.7	23870	7.7	20660	59	0.6					
16-45.0946-113.9357-2-15-	0-M35603	79100	-0.14	820	17500	84	-114	8.7	30	5.3	4	1.2	16700	9.7	24750	60	0.3					
16-45.0369-113.9313-2-12-	0-M35604	56280	-0.11	802	14670	84	139	10.6	83	5.5	5	1.1	16500	11.9	18080	51	0.5					
16-45.0838-113.8752-2-12-	0-M35605	64290	-0.11	1217	13210	73	-85	9.2	54	6.7	4	1.4	17350	8.4	17460	42	0.4					
16-45.0832-113.8781-2-12-	0-M35606	65460	-0.12	1344	11330	83	-102	8.5	47	4.6	4	1.2	13480	9.8	17590	45	0.5					
16-45.1096-113.8463-2-15-	0-M35607	65750	-0.16	902	15790	68	220	10.6	42	5.8	4	1.2	21210	8.7	18840	46	0.4					
16-45.1072-113.8489-2-12-	0-M35608	67000	-0.12	1332	24110	76	155	10.3	53	28.0	3	1.2	13690	8.7	26250	43	0.3					
16-45.1124-113.8643-2-12-	0-M35609	70710	-0.11	973	18040	72	-95	10.6	33	4.1	5	1.3	16600	6.5	19730	39	0.4					
16-45.1070-113.7831-2-15-	0-M35610	71240	-0.16	1424	20430	95	-122	18.3	156	6.8	6	1.5	29370	8.6	17110	49	0.5					
16-45.1721-113.8379-2-12-	0-M35611	58660	-0.14	531	9208	81	-99	8.0	62	3.5	6	1.2	16190	11.8	16900	53	0.6					
16-45.5225-113.9302-2-12-	0-M35612	48240	-0.11	819	8207	49	383	9.4	40	6.0	4	0.9	13150	7.0	16670	35	0.5					
16-45.5388-113.9491-2-12-	0-M35613	73370	-0.12	1081	11090	71	-89	11.1	65	9.6	5	1.2	19380	7.9	19960	37	0.4					
16-45.5569-113.9251-2-12-	0-M35614	57410	-0.18	730	11700	93	-115	15.4	88	7.1	6	1.6	21890	9.4	12840	52	0.6					
16-45.5586-113.8939-2-12-	0-M35615	56440	-0.17	324	17050	66	148	12.0	81	6.1	5	1.4	23800	6.8	11530	59	0.6					
16-45.5611-113.9093-2-12-	0-M35616	60210	-0.12	657	12290	69	143	11.1	41	5.5	5	1.1	16800	7.3	18320	42	0.5					
16-45.5819-113.9191-2-12-	0-M35617	53020	-0.12	643	9589	50	148	11.3	90	4.0	5	0.9	20730	9.7	14380	37	0.4					
16-45.5809-113.9170-2-12-	0-M35618	38000	-0.10	442	8957	47	97	10.2	89	5.1	4	0.9	17020	9.3	9797	15	0.3					
16-45.6031-113.9525-2-12-	0-M35619	48560	-0.17	1061	9577	55	-96	6.6	30	7.4	6	1.6	12880	7.8	12230	68	0.6					
16-45.6085-113.9641-2-12-	0-M35620	42210	-0.10	1092	5569	44	113	8.2	22	5.8	4	1.2	11590	7.4	10360	36	0.5					
16-45.6078-113.9664-2-12-	0-M35621	44250	-0.09	931	5104	43	-63	5.1	27	8.5	4	1.0	10190	12.6	16720	36	0.3					
16-45.6120-113.9683-2-12-	0-M35622	55600	-0.13	516	7649	60	-85	8.2	38	10.0	5	1.4	13340	15.0	16870	53	0.5					
16-45.6121-113.9661-2-12-	0-M35623	52230	-0.12	580	8033	65	-83	6.1	26	6.9	4	1.0	11940	8.3	17830	43	0.5					
16-45.6699-113.9514-2-12-	0-M35624	69630	-0.17	681	11150	84	-102	16.3	76	14.8	5	1.3	18810	4.8	18670	52	0.4					
16-45.6732-113.9521-2-12-	0-M35625	71270	-0.15	492	15590	54	-122	9.3	39	13.5	4	1.2	11870	5.8	20210	60	0.4					
16-45.6613-113.9772-2-12-	0-M35626	72300	-0.16	593	9586	90	-131	11.4	28	19.6	3	1.3	10830	5.7	23180	69	0.3					
16-45.6547-113.9727-2-12-	0-M35627	86600	-0.18	803	10050	77	-124	8.3	51	11.4	3	1.2	17180	7.4	23320	48	0.5					
16-45.6337-113.9690-2-12-	0-M35628	49300	-0.13	457	7950	68	-71	9.6	32	14.7	7	1.6	16850	18.3	15320	46	0.6					
16-45.6345-113.9662-2-12-	0-M35629	63820	-0.12	637	10590	70	-88	7.3	35	15.5	6	1.4	13940	9.2	17860	65	0.5					
16-45.0467-113.8352-2-12-	0-M35630	88810	-0.14	1236	16260	114	-133	10.5	37	15.9	4	1.6	17740	10.8	14610	69	0.3					
16-45.0432-113.8349-2-12-	0-M35631	82160	-0.17	1139	11570	97	-122	9.2	43	4.3	3	1.3	19950	5.5	17070	51	-0.2					
16-45.0411-113.8314-2-12-	0-M35632	71660	-0.15	975	10340	83	257	14.0	51	9.4	4	1.2	18910	7.6	21860	44	0.4					
16-45.0398-113.8189-2-12-	0-M35633	76500	-0.17	794	11390	104	-134	12.5	46	11.9	5	1.6	21710	7.3	21280	60	0.4					
16-45.0392-113.7965-2-12-	0-M35634	51490	-0.13	332	4222	90	-65	28.3	31	8.3	6	1.3	33820	10.2	15180	41	0.5					
16-45.0410-113.7852-2-12-	0-M35635	76770	-0.16	1287	15810	65	-126	5.6	21	13.5	4	1.5	11500	5.6	17830	61	0.4					
16-45.0498-113.7518-2-12-	0-M35636	77370	-0.11	1350	23580	75	127	12.3	85	8.5	3	1.3	17640	7.1	17620	48	0.2					
16-45.0635-113.7422-2-12-	0-M35637	59410	-0.09	748	10930	82	-73	19.5	85	5.5	5	1.1	21730	12.1	16370	52	0.4					
16-45.0241-113.5850-2-12-	0-M35638	60070	-0.14	839	12050	69	-100	8.9	59	5.2	5	1.0	13380	6.3	20600	-12	0.4					
16-45.0349-113.5425-2-12-	0-M35639	62900	-0.22	825	18040	103	-123	8.2	36	8.7	10	1.6	13580	7.8	14280	147	1.0					
16-45.0373-113.5447-2-12-	0-M35640	64460	-0.14	760	9003	108	146	13.0	62	4.4	7	1.5	16560	12.9	16750	72	0.7					
16-45.0130-113.6055-2-12-	0-M35641	75440	-0.14	732	25930	58	124	18.2	339	6.5	5	1.2	28020	6.7	20150	38	0.4					
16-45.0750-113.6232-2-12-	0-M35642	62470	-0.13	731	7550	97	-113	9.3	57	3.1	6	1.5	13990	12.7	15840	51	0.6					
16-45.0757-113.6278-2-12-	0-M35643	64440	-0.16	549	8043	84	-130	8.6	39	3.3	7	1.3	14360	10.8	16540	31	0.6					
16-45.0671-113.6810-2-12-	0-M35644	62340	-0.13	541	157900	42	-99	13.2	34	3.1	4	0.8	14720	5.7	13950	28	0.4					
16-45.0985-113.7178-2-12-	0-M35645	63960	-0.13	750	19840	74	-103	10.3	30	4.4	6	1.4	17170	11.2	19110	57	0.6					
16-45.0099-113.5612-2-12-	0-M35646	68190	-0.17	697	7688	108	-122	11.3	73	5.1	7	1.6	16240	15.4	15080	82	0.9					
16-45.0068-113.5608-2-12-	0-M35647	71690	-0.18	971	10260	81	-109	9.6	87	6.0	5	1.5	17880	9.9	22780	68	0.4					
16-45.0082-113.5690-2-12-	0-M35648	64560	-0.11	839	11150	55	-96	10.5	114	7.4	4	1.0	15420	11.1	22780	36	0.4					

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

④

DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued)																U/Th RATIO	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	DOE 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		
16-45.1034-113.9217-2-12-	0-M35598	11767	459	9388	-20	-3	7.4	3.7	-316	-1	-1	9.3	2932	77	-1.8	95	0.237						
16-45.0378-113.9203-2-12-	0-M35599	20450	574	14500	79	-5	7.7	8.1	-414	2	-1	25.3	3432	50	6.7	-155	0.320						
16-45.0620-113.9265-2-15-	0-M35600	9354	567	15330	105	-4	7.5	5.9	-362	2	-1	21.5	3635	41	7.0	156	0.284						
16-45.0816-113.9520-2-12-	0-M35601	16160	494	13060	70	-3	9.4	5.4	691	-1	-1	13.0	4895	70	3.0	96	0.477						
16-45.1005-113.9636-2-12-	0-M35602	11560	1277	8642	81	-4	9.4	8.8	-550	-1	-1	15.3	4402	47	6.5	-57	0.320						
16-45.0946-113.9357-2-15-	0-M35603	5977	591	14290	68	-4	7.3	4.3	-401	-1	-1	13.7	2723	70	5.1	138	0.365						
16-45.0969-113.9313-2-12-	0-M35604	12060	578	8967	65	-3	7.3	4.8	-327	-1	-1	13.7	3233	40	3.8	93	0.438						
16-45.0838-113.8752-2-12-	0-M35605	12610	533	10400	57	-4	8.0	4.9	-326	-1	-1	10.3	3398	56	3.1	108	0.301						
16-45.0832-113.8781-2-12-	0-M35606	9245	597	12040	66	7	6.4	5.1	-388	-1	-1	12.3	3597	46	4.0	-55	0.439						
16-45.1096-113.8463-2-15-	0-M35607	9508	551	8205	51	-5	10.6	3.8	-363	-1	-1	8.2	3755	68	4.1	96	0.427						
16-45.1072-113.8489-2-12-	0-M35608	12600	303	14340	72	-4	6.5	5.3	558	-1	1	11.4	3137	42	3.7	88	0.263						
16-45.1124-113.8543-2-12-	0-M35609	8459	700	11850	45	-4	8.2	6.0	-363	-1	-1	10.7	2845	48	4.0	105	0.318						
16-45.1070-113.7831-2-15-	0-M35610	11400	1420	9277	55	-5	12.1	7.7	-587	-1	-1	12.6	4190	80	4.9	103	0.302						
16-45.1721-113.8379-2-12-	0-M35611	14040	313	13450	-31	-4	7.8	6.2	-323	-1	-1	13.3	3755	52	4.5	-51	0.346						
16-45.5225-113.9302-2-12-	0-M35612	18830	449	9492	43	-4	7.1	3.8	-299	-1	-1	7.7	2338	33	3.8	75	1.182						
16-45.5388-113.9491-2-12-	0-M35613	14240	682	10010	48	6	10.5	5.7	-353	-1	-1	13.4	3210	57	4.9	98	0.425						
16-45.5569-113.9251-2-12-	0-M35614	21010	469	11240	-32	-5	10.4	9.9	-427	-1	-1	8.9	4665	77	3.1	-86	2.528						
16-45.5586-113.8939-2-12-	0-M35615	27430	485	13880	-35	-5	11.6	4.4	-380	-7	-1	8.1	6652	94	-2.8	-283	2.333						
16-45.5611-113.9093-2-12-	0-M35616	20560	532	13230	54	-4	9.5	5.9	-343	-1	-1	10.2	3468	55	4.4	67	0.471						
16-45.5819-113.9191-2-12-	0-M35617	21240	455	12300	45	-4	9.9	5.5	-307	-1	-1	7.2	5042	78	-2.1	70	1.319						
16-45.5809-113.9170-2-12-	0-M35618	16910	360	7236	26	-3	7.4	5.3	-260	-1	-1	5.4	4728	65	4.0	82	1.648						
16-45.6031-113.9625-2-12-	0-M35619	9531	233	8174	-35	-5	6.1	8.0	-342	-1	-1	12.1	2075	34	5.7	-134	1.612						
16-45.6085-113.9641-2-12-	0-M35620	9455	259	4947	46	-3	5.5	6.5	-236	-1	-1	6.6	1520	26	3.2	64	1.212						
16-45.6078-113.9664-2-12-	0-M35621	7611	207	7381	38	-1	4.7	3.1	-215	1	-1	6.4	2043	27	3.2	61	1.375						
16-45.6120-113.9683-2-12-	0-M35622	11420	242	8605	52	-4	6.4	4.8	-306	-1	-1	8.2	3452	41	4.5	-76	2.122						
16-45.6121-113.9661-2-12-	0-M35623	12430	315	9659	47	-4	6.1	6.3	-291	-1	-1	9.4	2141	37	-2.2	-83	1.202						
16-45.6699-113.9514-2-12-	0-M35624	17030	1245	6280	73	-5	9.8	8.8	-560	-1	-1	9.8	3045	51	-3.0	164	2.031						
16-45.6732-113.9521-2-12-	0-M35625	11120	550	14690	-27	-5	7.3	8.5	-437	-1	-1	7.5	2674	36	-2.5	152	3.533						
16-45.6613-113.9772-2-12-	0-M35626	9643	608	13740	100	-2	5.4	10.3	-482	-1	-1	16.5	2689	36	-3.1	179	1.764						
16-45.6547-113.9727-2-12-	0-M35627	11150	800	12270	91	-6	8.8	3.8	-499	-1	-1	13.7	3658	63	-3.0	127	0.577						
16-45.6337-113.9690-2-12-	0-M35628	10420	343	5586	41		6.5	9.6	-295	-1	-1	9.7	3001	35	5.5	70	1.691						
16-45.6345-113.9662-2-12-	0-M35629	12680	394	10210	71	-4	7.2	9.9	-310	-1	-1	12.7	3101	49	5.6	95	1.709						
16-45.0467-113.8352-2-12-	0-M35630	9910	700	18610	44	-1	6.4	6.7	802	-1	-1	12.4	2725	38	4.7	199	0.427						
16-45.0432-113.8349-2-12-	0-M35631	10920	760	12520	-35	-5	7.6	2.7	-482	-1	-1	11.1	3285	54	-3.1	141	0.261						
16-45.0411-113.8314-2-12-	0-M35632	10590	1107	12490	-26	-5	8.3	5.7	-552	-1	-1	11.2	3954	46	4.5	167	0.330						
16-45.0398-113.8189-2-12-	0-M35633	10480	1230	12970	-33	-5	8.6	6.4	-560	-1	-1	11.7	3926	53	3.5	186	0.385						
16-45.0392-113.7965-2-12-	0-M35634	11400	306	4451	-28	5	5.7	6.3	-282	-1	-1	12.2	2734	39	5.2	-53	0.574						
16-45.0410-113.7852-2-12-	0-M35635	-5745	485	14570	61	-5	4.4	4.8	-436	-5	-1	14.8	1508	22	-3.0	-181	1.216						
16-45.0498-113.7518-2-12-	0-M35636	14800	532	16100	83	-3	7.6	4.8	618	-1	-1	10.4	3633	54	2.7	87	0.317						
16-45.0635-113.7422-2-12-	0-M35637	11380	352	10730	40	4	5.7	4.8	322	-1	-1	11.6	3714	36	3.7	81	0.388						
16-45.0241-113.5850-2-12-	0-M35638	12300	287	10260	64	-4	7.9	7.0	-340	-1	-1	10.5	3421	44	3.8	121	0.829						
16-45.0349-113.5425-2-12-	0-M35639	13620	286	11630	-39	-7	8.2	22.7	-440	-1	2	12.8	2178	43	-4.3	237	6.555						
16-45.0373-113.5447-2-12-	0-M35640	13200	790	14950	38	-4	9.1	10.8	-456	-1	-1	12.9	3365	45	6.2	107	1.984						
16-45.0130-113.6055-2-12-	0-M35641	27600	882	11810	-26	-4	15.0	4.7	585	-1	-1	10.4	4895	108	3.6	101	0.356						
16-45.0750-113.6232-2-12-	0-M35642	11240	472	16340	-23	-4	7.7	11.6	-391	-1	-1	12.2	3246	43	7.1	112	0.648						
16-45.0757-113.6278-2-12-	0-M35643	11320	352	15340	52	-5	7.9	4.6	-500	-1	-1	12.2	2525	39	7.0	107	0.795						
16-45.0671-113.6810-2-12-	0-M35644	12500	645	6540	-27	-4	7.0	5.6	-417	-1	-1	7.0	2075	42	-3.0	104	1.686						
16-45.0985-113.7178-2-12-	0-M35645	12290	972	12090	70	-4	9.2	5.8	-449	-1	-1	11.3	3064	49	5.4	-72	0.655						
16-45.0099-113.5612-2-12-	0-M35646	11060	369	14550	51	-5	9.3	14.1	-418	-1	-1	15.2	4318	55	6.0		2.586						
16-45.0068-113.5603-2-12-	0-M35647	15740	429	13360	-36	-5	10.3	5.0	-396	-1	-1	13.8	3790	59	-3.3	-126	0.978						
16-45.0082-113.5690-2-12-	0-M35648	11590	399	16170	50	-3	7.9	4.4	-308	-1	-1	9.0	3705	49	4.5	96	0.488						

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

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DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																				U CONCENTRATION								
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REFUGATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (umho/cm)	SCINTILLATOR (uL/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																										
16-45	0160	-113.6889	-2-12-	0-M35649	-06/06/79	-14-	26-13.0	-	7.4	62	12-4-1-2-1-4-4-2-2-3-5-2	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50		
16-45	0351	-113.6848	-2-12-	0-M35650	-06/06/79	-14-	28-22.5	-	8.2	404	12-4-1-2-1-3-4-2-2-4-3-5-2	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70	
16-45	1166	-113.6813	-2-12-	0-M35651	-06/06/79	-15-	28-7.5	-	8.1	69	9-4-1-2-1-4-4-2-2-2-3-5-2	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.30	
16-45	0862	-113.6820	-2-12-	0-M35652	-06/06/79	-16-	28-11.0	-	7.5	56	13-4-1-3-1-4-4-2-2-2-3-5-2	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.40	
16-45	0123	-113.5604	-2-12-	0-M35653	-06/07/79	-11-	21-7.5	-	8.2	55	9-4-1-2-1-4-4-1-2-2-2-5-1	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.00	
16-45	0116	-113.5545	-2-12-	0-M35654	-06/07/79	-11-	22-8.0	-	7.7	70	8-4-1-2-1-4-4-1-2-2-2-5-1	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.90	
16-45	2315	-113.9079	-2-12-	0-M35655	-06/07/79	-14-	26-15.5	-	7.7	78	11-4-1-3-1-3-4-1-2-4-2-5-1	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.70	
16-45	2351	-113.9086	-2-12-	0-M35656	-06/07/79	-15-	27-	-	8.6	570	10-4-1-4-1-2-4-1-2-4-2-5-1	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.90	
16-45	2421	-113.9071	-2-15-	0-M35657	-06/07/79	-15-	27-	-	-	-	10-4-1-3-1-1-1-2-4-2-4-1	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.90	
16-45	2647	-113.9036	-2-12-	0-M35658	-06/07/79	-15-	27-8.5	-	8.8	31	20-4-1-2-1-5-4-3-2-2-3-5-1	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.50	
16-45	2717	-113.9044	-2-15-	0-M35660	-06/07/79	-16-	28-	-	-	-	13-4-1-4-1-1-1-2-3-5-1	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.90	
16-45	2758	-113.9036	-2-12-	0-M35661	-06/07/79	-16-	28-18.0	-	7.7	243	24-4-1-2-1-3-4-1-2-2-2-5-1	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.20	
16-45	2950	-113.9083	-2-12-	0-M35662	-06/07/79	-17-	28-9.5	-	7.6	39	13-4-4-2-1-4-4-2-2-2-3-5-1	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.40	
16-45	2972	-113.9292	-2-11-	0-M35663	-06/07/79	-19-	28-10.0	-	7.2	380	9-4-1-5-7-2-3-4-3-3-3-5-1	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90	
16-45	2867	-113.9089	-2-12-	0-M35664	-06/08/79	-9-	10-4.5	-	7.5	24	22-1-7-2-7-5-4-1-2-1-3-5-1	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.40	
16-45	2602	-113.7595	-2-12-	0-M35665	-06/08/79	-9-	12-8.0	-	7.1	185	9-4-1-5-7-2-3-1-3-1-2-5-1	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16.00	
16-45	2708	-113.7702	-2-12-	0-M35666	-06/08/79	-10-	12-5.0	-	7.5	22	11-4-1-2-1-4-4-1-2-2-3-5-1	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.60	
16-45	2700	-113.7698	-2-12-	0-M35667	-06/08/79	-10-	12-7.0	-	7.3	35	12-4-1-2-1-5-4-1-2-2-3-5-1	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.60	
16-45	2774	-113.7829	-2-12-	0-M35668	-06/08/79	-11-	15-6.5	-	7.1	28	19-4-1-2-1-5-4-1-2-2-3-5-1	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.40	
16-45	2875	-113.7882	-2-12-	0-M35669	-06/08/79	-11-	13-14.5	-	7.1	157	8-4-1-2-2-4-4-1-2-4-3-5-1	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90	
16-45	2920	-113.7919	-2-12-	0-M35670	-06/08/79	-11-	21-14.0	-	7.8	125	12-4-1-3-1-4-4-2-2-4-2-5-1	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60	
16-45	2602	-113.8322	-2-15-	0-M35671	-06/08/79	-14-	26-	-	-	-	13-4-1-4-1-1-1-4-2-5-1	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00	
16-45	3061	-113.8012	-2-12-	0-M35672	-06/08/79	-14-	27-8.5	-	7.5	55	9-4-1-2-1-4-4-2-2-2-3-5-1	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.80	
16-45	3110	-113.8020	-2-12-	0-M35673	-06/08/79	-15-	27-8.5	-	7.1	68	10-4-1-3-1-4-4-1-2-1-3-5-1	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.50	
16-45	3143	-113.8018	-2-12-	0-M35674	-06/08/79	-15-	27-7.5	-	7.5	21	16-4-1-2-1-5-4-2-2-2-3-5-1	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.00	
16-45	3165	-113.8087	-2-12-	0-M35675	-06/08/79	-15-	28-22.0	-	7.6	320	9-4-7-4-6-3-4-1-2-4-3-4-1	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40	
16-45	3184	-113.8314	-2-12-	0-M35676	-06/08/79	-16-	28-22.0	-	7.3	363	10-4-1-5-6-2-4-1-2-4-3-5-1	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
16-45	3650	-113.9406	-2-12-	0-M35678	-06/08/79	-17-	28-10.5	-	7.1	43	13-3-1-2-1-4-4-2-2-2-3-5-1	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.20	
16-45	3553	-113.9236	-2-12-	0-M35679	-06/08/79	-18-	28-18.0	-	8.0	550	11-4-1-3-1-3-4-1-2-4-3-5-1	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50	
16-45	3508	-113.9116	-2-15-	0-M35680	-06/08/79	-18-	28-	-	-	-	20-4-1-3-1-1-1-3-3-5-1	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.00	
16-45	3318	-113.9055	-2-15-	0-M35681	-06/08/79	-18-	28-	-	-	-	8-4-1-3-1-1-1-4-3-4-1	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
16-45	5940	-113.9639	-2-12-	0-M35682	-06/09/79	-10-	17-6.0	-	7.9	18	8-4-1-2-1-5-4-2-2-1-3-5-2	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.30	
16-45	5613	-113.9497	-2-12-	0-M35683	-06/09/79	-10-	20-8.5	-	7.2	145	6-4-1-2-1-3-4-1-2-1-3-5-2	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.00	
16-45	5052	-113.8817	-2-12-	0-M35684	-06/09/79	-11-	21-7.0	-	7.2	78	10-4-1-2-1-4-4-1-2-1-3-5-1	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30.80	
16-45	5010	-113.8891	-2-12-	0-M35685	-06/09/79	-11-	21-6.5	-	7.5	37	10-4-1-2-1-5-4-2-2-1-3-5-1	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10	
16-45	4984	-113.9280	-2-12-	0-M35686	-06/09/79	-12-	22-9.0	C	6.8	75	10-4-1-2-1-4-4-1-2-1-3-5-1	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.70	
16-45	5044	-113.9794	-2-12-	0-M35687	-06/09/79	-14-	26-9.0	-	6.9	360	10-4-1-5-6-3-3-1-1-3-5-2	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34.70	
16-45	5263	-113.9953	-2-12-	0-M35688	-06/09/79	-16-	27-7.5	C	6.9	14	19-4-1-2-1-4-4-1-2-1-3-5-2	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.20	
16-45	5260	-113.9933	-2-12-	0-M35689	-06/09/79	-16-	27-9.0	C	7.0	26	16-4-1-2-1-4-4-1-2-1-3-5-2	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.60	
16-45	5044	-113.9971	-2-12-	0-M35690	-06/09/79	-16-	27-11.0	C	7.2	288	12-4-1-3-1-3-4-1-2-1-3-5-2	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.60	
16-45	4974	-113.9588	-2-15-	0-M35691	-06/09/79	-17-	27-	-	-	-	12-4-1-5-6-1-1-2-3-5-2	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.50	
16-45	4862	-113.9724	-2-12-	0-M35692	-06/09/79	-17-	27-15.0	-	7.3	285	6-4-1-3-1-2-3-1-2-1-3-5-2	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80	
16-45																																		

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

2

DOE SAMPLE NUMBER						DOE SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE										ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Concentrations reported in weight parts per million (ppm)										Concentrations in weight ppm	
							Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li	
16-45.0160-113.6889-2-12-						0-M35649	-5	-5	-5	20	-20	-15	10	-10	-15	2	18	
16-45.0351-113.6848-2-12-						0-M35650	-5	-5	-5	27	-20	28	8	-10	-15	1	14	
16-45.1166-113.6813-2-12-						0-M35651	-5	-5	-5	15	-20	-15	16	-10	-15	1	31	
16-45.0862-113.6820-2-12-						0-M35652	-5	-5	-5	31	-20	17	125	-10	-15	2	39	
16-45.0123-113.5604-2-12-						0-M35653	-5	-5	-5	27	-20	-15	11	-10	-15	1	25	
16-45.0116-113.5545-2-12-						0-M35654	-5	-5	-5	55	-20	17	9	-10	-15	1	24	
16-45.2315-113.9079-2-12-						0-M35655	-5	5	-5	14	-20	-15	6	-10	-15	2	17	
16-45.2351-113.9086-2-12-						0-M35656	-5	-5	-5	20	-20	16	9	-10	-15	3	34	
16-45.2421-113.9071-2-15-						0-M35657	-5	7	-5	18	-20	17	326	-10	-15	3	29	
16-45.2647-113.9036-2-12-						0-M35658	-5	-5	-5	-10	-20	15	-5	-10	-15	3	10	
16-45.2717-113.9044-2-15-						0-M35660	-5	-5	-5	17	-20	-15	8	-10	-15	3	30	
16-45.2758-113.9036-2-12-						0-M35661	-5	-5	-5	26	-20	-15	6	-10	-15	2	17	
16-45.2950-113.9083-2-12-						0-M35662	-5	-5	-5	12	-20	-15	-5	-10	-15	2	10	
16-45.2972-113.9292-2-11-						0-M35663	-5	-5	-5	21	-20	18	-5	-10	-15	3	13	
16-45.2867-113.9089-2-12-						0-M35664	-5	-5	-5	36	-20	-15	161	-10	-15	1	10	
16-45.2602-113.7595-2-12-						0-M35665	-5	-5	-5	59	-20	17	83	-10	-15	1	21	
16-45.2708-113.7702-2-12-						0-M35666	-5	-5	-5	12	-20	-15	-5	-10	-15	2	10	
16-45.2700-113.7693-2-12-						0-M35667	-5	-5	-5	49	-20	-15	140	-10	-15	1	11	
16-45.2774-113.7829-2-12-						0-M35668	-5	-5	-5	15	-20	-15	6	-10	-15	1	11	
16-45.2875-113.7882-2-12-						0-M35669	-5	-5	-5	13	-20	-15	8	-10	-15	2	12	
16-45.2920-113.7919-2-12-						0-M35670	-5	-5	-5	10	-20	-15	-5	-10	-15	2	11	
16-45.2602-113.8322-2-15-						0-M35671	-5	-5	-5	13	-20	-15	-5	-10	-15	1	10	
16-45.3061-113.8012-2-12-						0-M35672	-5	-5	-5	17	-20	16	-5	-10	-15	2	18	
16-45.3110-113.8020-2-12-						0-M35673	-5	-5	-5	31	-20	16	-5	-10	-15	1	33	
16-45.3143-113.8018-2-12-						0-M35674	-5	-5	-5	27	-20	-15	44	-10	-15	2	16	
16-45.3165-113.8087-2-12-						0-M35675	-5	-5	-5	16	-20	-15	11	-10	-15	2	7	
16-45.3184-113.8314-2-12-						0-M35676	-5	-5	-5	22	-20	-15	12	-10	-15	2	7	
16-45.3650-113.9406-2-12-						0-M35678	-5	-5	-5	10	-20	18	5	-10	-15	2	7	
16-45.3553-113.9236-2-12-						0-M35679	-5	-5	-5	22	-20	40	10	-10	-15	1	15	
16-45.3508-113.9116-2-15-						0-M35680	-5	-5	-5	21	-20	-15	30	-10	-15	4	12	
16-45.3318-113.9055-2-15-						0-M35681	-5	-5	-5	12	-20	-15	15	-10	-15	2	6	
16-45.5940-113.9639-2-12-						0-M35682	-5	-5	-5	18	-20	-15	-5	-10	-15	2	16	
16-45.5613-113.9497-2-12-						0-M35683	-5	-5	-5	18	-20	-15	-5	-10	-15	2	21	
16-45.5052-113.9817-2-12-						0-M35684	-5	-5	-5	19	-20	-15	-5	-10	-15	1	13	
16-45.5010-113.8891-2-12-						0-M35685	-5	-5	-5	11	-20	-15	7	-10	-15	1	3	
16-45.4984-113.9280-2-12-						0-M35686	-5	-5	-5	43	-20	-15	5	-10	-15	3	13	
16-45.5044-113.9794-2-12-						0-M35687	-5	-5	-5	21	-20	-15	13	-10	-15	-1	6	
16-45.5263-113.9953-2-12-						0-M35688	-5	-5	-5	13	-20	-15	-5	-10	-15	1	13	
16-45.5260-113.9938-2-12-						0-M35689	-5	-5	-5	11	-20	-15	15	-10	-15	3	23	
16-45.5044-113.9971-2-12-						0-M35690	-5	-5	-5	24	-20	25	19	-10	-15	2	23	
16-45.4974-113.9588-2-15-						0-M35691	-5	-5	-5	14	-20	16	11	-10	-15	2	13	
16-45.4862-113.9724-2-12-						0-M35692	-5	-5	-5	23	-20	-15	13	-10	-15	2	17	
16-45.4681-113.9866-2-15-						0-M35693	-5	-5	-5	109	-20	-15	18	-10	-15	-1	14	
16-45.3897-113.9648-2-12-						0-M35694	-5	-5	-5	23	-20	15	28	-10	-15	2	19	
16-45.0534-113.6068-2-15-						0-M35695	-5	-5	-5	35	-20	15	55	-10	-15	2	29	
16-45.0483-113.5984-2-12-						0-M35696	-5	-5	-5	30	-20	-15	60	-10	-15	2	13	
16-45.0382-113.6216-2-12-						0-M35697	-5	-5	-5	37	-20	70	13	-10	-15	2	16	
16-45.2304-113.7430-2-12-						0-M35698	-5	9	-5	142	-20	18	28	-10	-15	2	10	
16-45.2334-113.7445-2-12-						0-M35699	-5	-5	-5	113	-20	22	6	-10	-15	1	5	
16-45.2267-113.7533-2-12-						0-M35700	-5	-5	-5	40	-20	-15	13	-10	23	2	14	
16-45.2176-113.7664-2-15-						0-M35701	-5	-5	-5	21	-20	15	15	-10	-15	2	7	

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

③

DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS																
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	DOE 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
16-45.0160-113.6889-2-12-			0-M35649			75410	-0.13	1113	28320	91	-98	15.4	190	5.5	4	1.4	29030	9.0	19420	59	0.4	
16-45.0351-113.6848-2-12-			0-M35650			74490	-0.14	1106	25570	101	-113	13.5	262	4.7	4	1.5	21590	11.4	18970	47	0.5	
16-45.1166-113.6813-2-12-			0-M35651			64060	-0.15	538	7732	86	-113	5.9	33	5.4	6	1.3	12970	13.2	18400	64	0.7	
16-45.0862-113.6820-2-12-			0-M35652			68880	-0.12	923	10450	70	-100	10.2	37	3.9	5	1.1	16770	10.6	18520	47	0.6	
16-45.0123-113.5604-2-12-			0-M35653			65420	-0.13	789	12340	90	-98	9.8	57	5.3	7	1.2	17920	12.2	18830	68	0.6	
16-45.0116-113.5545-2-12-			0-M35654			68830	-0.15	637	9857	109	153	10.6	66	5.6	8	1.8	20200	12.3	16690	57	1.0	
16-45.2315-113.9079-2-12-			0-M35655			66590	-0.15	461	18150	93	-110	7.2	57	4.1	6	1.2	18590	15.1	13230	57	0.7	
16-45.2351-113.9086-2-12-			0-M35656			78730	-0.13	470	17810	93	171	11.4	51	5.3	7	1.3	21910	16.5	13710	56	0.6	
16-45.2421-113.9071-2-15-			0-M35657			71310	-0.11	623	15420	105	304	8.6	41	4.8	11	1.5	21340	21.4	21830	60	1.1	
16-45.2647-113.9036-2-12-			0-M35658			62260	-0.13	638	11000	99	235	7.8	43	3.1	9	1.3	14960	46.5	15830	58	1.5	
16-45.2717-113.9044-2-15-			0-M35660			83380	-0.19	831	9741	101	186	9.7	38	5.5	7	1.5	21240	6.2	19370	82	0.6	
16-45.2758-113.9036-2-12-			0-M35661			67510	-0.13	736	8835	94	141	10.9	55	2.7	6	1.4	19700	11.6	17000	47	0.5	
16-45.2950-113.9083-2-12-			0-M35662			61900	-0.11	677	7640	107	-97	6.7	33	3.3	9	1.7	13920	15.6	18040	67	0.8	
16-45.2972-113.9292-2-11-			0-M35663			65000	-0.14	799	7985	145	202	8.5	52	3.0	8	2.3	14880	9.8	17460	68	0.7	
16-45.2867-113.9089-2-12-			0-M35664			49600	-0.15	468	4193	68	-107	4.9	35	2.5	6	1.3	15940	13.1	16520	47	0.5	
16-45.2602-113.7595-2-12-			0-M35665			64320	-0.14	549	7694	84	-89	11.8	45	4.3	6	1.0	15120	8.9	21330	48	0.6	
16-45.2708-113.7702-2-12-			0-M35666			51900	-0.09	512	7153	81	-82	6.3	38	2.3	7	1.2	15730	15.9	13940	42	0.6	
16-45.2700-113.7698-2-12-			0-M35667			52050	-0.11	785	5279	81	-88	8.2	33	2.9	6	1.1	15780	15.6	15880	50	0.7	
16-45.2774-113.7829-2-12-			0-M35668			47700	-0.14	466	7451	75	-101	5.4	43	-1.6	5	1.2	17910	18.4	15470	44	0.7	
16-45.2875-113.7982-2-12-			0-M35669			57700	-0.08	647	8332	78	-79	6.8	41	2.0	6	1.2	13740	15.5	19090	53	0.5	
16-45.2920-113.7919-2-12-			0-M35670			46370	-0.08	499	6540	64	-69	5.7	41	2.0	5	1.0	15130	15.1	14870	40	0.5	
16-45.2602-113.8322-2-15-			0-M35671			41570	-0.03	381	6604	70	-43	5.4	37	2.8	6	1.0	13430	15.9	14850	40	0.5	
16-45.3061-113.8012-2-12-			0-M35672			58160	-0.13	638	12060	102	-105	10.4	64	2.8	5	1.4	18500	13.3	19690	54	0.5	
16-45.3110-113.8020-2-12-			0-M35673			73120	-0.20	751	21540	79	-131	12.5	85	-2.4	5	1.6	23140	11.8	19020	39	0.4	
16-45.3143-113.8018-2-12-			0-M35674			56160	-0.13	539	18520	62	-97	12.3	101	3.4	4	1.1	19510	12.7	16930	55	0.4	
16-45.3165-113.8087-2-12-			0-M35675			53300	-0.10	843	6216	61	85	6.3	43	3.2	5	1.0	13660	11.9	18580	39	0.4	
16-45.3184-113.8314-2-12-			0-M35676			54720	-0.13	672	6723	61	-92	8.7	37	3.2	4	1.2	13390	9.8	17270	38	0.6	
16-45.3650-113.9406-2-12-			0-M35678			44040	-0.11	535	2815	52	-67	4.8	22	3.5	4	0.8	11110	12.8	16510	-9	0.4	
16-45.3553-113.9236-2-12-			0-M35679			76670	-0.14	733	25720	69	-73	16.3	177	13.3	3	1.1	22560	7.4	20390	46	0.4	
16-45.3508-113.9116-2-15-			0-M35680			79220	-0.13	400	16000	63	-82	9.4	34	44.8	4	0.8	15480	6.5	22230	38	0.3	
16-45.3318-113.9055-2-15-			0-M35681			55100	-0.11	638	5567	78	-68	8.2	47	3.4	4	1.2	14070	11.2	17030	39	0.5	
16-45.5940-113.9639-2-12-			0-M35682			43320	-0.14	512	5496	58	-86	6.1	22	3.8	4	1.1	9676	13.8	11600	41	0.6	
16-45.5613-113.9497-2-12-			0-M35683			64450	-0.12	980	7420	72	-99	11.4	37	5.3	6	1.3	14390	8.9	17030	40	0.5	
16-45.5052-113.8817-2-12-			0-M35684			39250	-0.12	414	5417	45	120	5.5	25	3.7	4	0.8	11150	7.3	13490	47	0.4	
16-45.5010-113.8891-2-12-			0-M35685			34170	-0.06	389	2183	42	-46	5.6	31	1.8	3	0.7	11310	5.3	15900	21	0.3	
16-45.4984-113.9280-2-12-			0-M35686			49050	-0.09	385	9365	42	-61	6.2	22	3.9	5	1.1	10280	6.3	17260	32	0.4	
16-45.5044-113.9794-2-12-			0-M35687			53910	-0.16	612	24280	62	-120	11.9	58	6.1	3	0.9	13770	5.4	10890	56	-0.7	
16-45.5263-113.9953-2-12-			0-M35688			45480	-0.14	984	6553	37	-85	6.6	19	3.2	3	1.2	8634	8.2	17560	-10	0.3	
16-45.5260-113.9938-2-12-			0-M35689			47990	-0.09	876	12220	68	-91	7.8	38	3.9	4	1.0	11210	11.0	17650	46	0.5	
16-45.5044-113.9971-2-12-			0-M35690			73210	-0.12	883	12030	82	148	9.7	68	9.0	6	1.1	18090	10.1	18840	58	0.5	
16-45.4974-113.9588-2-15-			0-M35691			52160	-0.12	662	7651	64	-82	7.8	28	2.9	3	0.9	10600	4.4	20160	35	0.3	
16-45.4862-113.9724-2-12-			0-M35692			63330	-0.14	585	11830	58	169	6.3	40	7.9	3	1.0	12770	7.1	20010	33	0.3	
16-45.4681-113.9866-2-15-			0-M35693			59490	-0.14	1056	13820	74	141	13.4	54	17.9	5	1.3	17420	6.8	15990	52	0.4	
16-45.3897-113.9648-2-12-			0-M35694			58120	-0.11	712	12630	62	-83	7.6	64	7.3	4	1.0	12270	8.3	21620	43	0.4	
16-45.0534-113.6068-2-15-			0-M35695			69150	-0.17	970	10570	94	192	17.2	72	8.6	5	1.4	20810	8.2	20160	54	0.6	
16-45.0483-113.5984-2-12-			0-M35696			64030	-0.14	589	8612	76	128	8.8	63	6.5	5	1.2	17750	14.3	18940	46	0.5	
16-45.0382-113.6216-2-12-			0-M35697			70960	-0.14	865	27240	60	-90	21.4	298	9.5	3	1.1	29880	5.3	24260	37	0.3	
16-45.2304-113.7430-2-12-			0-M35698			59050	-0.08	752	8393	80	-109	9.4	36	3.2	6	1.2	14740	12.3	13380	49	0.5	
16-45.2334-113.7445-2-12-			0-M35699			57360	-0.12	392	5562	93	-112	8.9	46	2.9	7	1.5	17080	15.4	12360	58	0.8	
16-45.2267-113.7533-2-12-			0-M35700			57630	-0.13	506	6363	86	-104	6.3	40	3.1	5	1.2	15290	11.8	14750	45	0.5	
16-45.2176-113.7664-2-15-			0-M35701			54040	-0.09	585	4179	69	111	8.7	43	2.9	5	1.1	13820	10.2	17540	47	0.5	

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

④

DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued)																	U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAST 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		
16-45.0160-113.6883-2-12-	0-M35549	24410	678	14930	46	-4	13.8	5.8	446	-1	-1	10.7	5159	90	4.5							0.327	
16-45.0351-113.6848-2-12-	0-M35550	14590	661	15210	-24	-4	10.6	6.1	832	-1	-1	13.0	4202	73	4.2	61						0.285	
16-45.1166-113.6813-2-12-	0-M35551	-4751	289	16810	-29	-5	7.5	4.9	-347	-1	-1	13.3	3361	39	6.1	-82						1.000	
16-45.0862-113.6820-2-12-	0-M35552	12150	570	15160	55	-4	8.8	5.8	-362	-1	1	10.4	4045	48	4.7	92						0.615	
16-45.0123-113.5604-2-12-	0-M35553	9522	600	13520	67	-4	9.4	9.0	-361	-1	-1	13.4	4232	58	5.3	108						1.716	
16-45.0116-113.5545-2-12-	0-M35554	13940	537	12330	52	-5	9.7	11.7	-392	-1	1	17.3	3355	50	7.5	-114						0.341	
16-45.2315-113.9079-2-12-	0-M35555	13180	404	16580	-31	-5	9.8	6.8	-361	-1	-1	11.9	4753	70	6.1	-106						0.395	
16-45.2351-113.9086-2-12-	0-M35556	12400	297	14830	75	-4	12.1	7.3	-296	1	-1	15.7	5254	80	5.4	71						0.312	
16-45.2421-113.9071-2-15-	0-M35557	7856	344	14770	85	-3	11.0	8.9	-271	1	1	16.5	5449	66	7.9	87						0.418	
16-45.2647-113.9036-2-12-	0-M35558	7085	275	15990	60	-4	9.9	8.4	-308	-1	-1	16.3	4845	48	10.0	79						0.460	
16-45.2717-113.9044-2-15-	0-M35560	11050	266	10660	77	-6	12.8	7.8	-339	-1	-2	14.7	5033	79	-3.3	104						0.333	
16-45.2758-113.9036-2-12-	0-M35561	10320	257	14920	66	-4	10.2	7.3	-303	1	-1	12.8	4346	66	5.1	52						0.406	
16-45.2950-113.9083-2-12-	0-M35562	8899	216	19740	51	-4	8.5	9.9	-281	-1	1	11.9	3141	37	5.6	71						0.454	
16-45.2972-113.9292-2-11-	0-M35563	9568	247	21760	52	-4	9.7	13.0	-352	-1	-1	14.3	3161	66	4.0	109						0.273	
16-45.2867-113.9089-2-12-	0-M35564	9887	274	14140	44	-4	6.0	6.3	-343	-1	-1	9.7	4064	40	-3.0	104						1.381	
16-45.2602-113.7595-2-12-	0-M35565	10110	330	8751	73	-4	8.6	8.5	-316	-1	-1	12.7	3494	41	4.1	143						1.260	
16-45.2708-113.7702-2-12-	0-M35566	13300	265	16010	34	-3	6.4	6.3	-248	-1	1	10.1	3550	40	4.7	42						0.554	
16-45.2700-113.7698-2-12-	0-M35567	9564	340	12250	45	-3	6.4	8.5	-300	-1	-1	11.2	3879	42	5.1	106						0.679	
16-45.2774-113.7829-2-12-	0-M35568	8611	388	14030	-29	-4	5.9	6.6	-345	-1	-1	11.4	4207	47	4.8	111						1.000	
16-45.2875-113.7882-2-12-	0-M35569	8332	236	16980	40	-3	6.2	5.9	200	-1	1	11.0	3851	42	4.3	63						0.355	
16-45.2920-113.7919-2-12-	0-M35570	7888	299	10500	46	-3	5.5	4.6	-233		-1	9.7	3066	44	3.2	39						0.371	
16-45.2602-113.8322-2-15-	0-M35571	8045	197	3971	35	3	5.8	5.0	-168	-1	-1	11.8	4729	49	3.3	47						0.339	
16-45.3061-113.8012-2-12-	0-M35572	15190	405	16140	52	-4	10.8	5.8	-353	-1	-1	15.7	4414	62	5.1							0.624	
16-45.3110-113.8020-2-12-	0-M35573	21430	576	16420	70	-6	13.0	3.2	-460	-2	-1	13.6	5135	68	-3.7	114						0.699	
16-45.3143-113.8018-2-12-	0-M35574	23020	537	13210	55	-4	11.2	5.2	-353	-1	-1	11.6	3975	68	2.6	159						0.776	
16-45.3165-113.8087-2-12-	0-M35575	2682	295	10960	51	-3	6.8	5.5	-257	-1	-1	9.3	4334	48	3.0	62						0.366	
16-45.3184-113.8314-2-12-	0-M35576	9064	263	10040	52	-4	6.9	5.2	-320	-1	-1	9.3	2946	45	-2.4							0.333	
16-45.3650-113.9406-2-12-	0-M35578	5695	158	8789	46	-3	4.9	3.1	-218	-1	-1	8.4	2068	31	2.3	-50						0.381	
16-45.3553-113.9236-2-12-	0-M35579	27310	624	5647	77	-4	12.1	5.9	-345	-1	-1	14.9	3632	77	4.0	140						0.235	
16-45.3508-113.9116-2-15-	0-M35580	12860	457	10290	101	-2	7.8	4.3	-299	-1	-1	18.4	2404	39	4.6	97						0.326	
16-45.3318-113.9055-2-15-	0-M35581	7409	266	6888	47	-3	6.7	4.9	-256	-1	-1	11.5	3329	46	5.1	74						0.252	
16-45.5940-113.9639-2-12-	0-M35582	9970	281	7804	46	-4	4.4	3.8	-315	-1	1	7.6	2026	27	-2.4	80						0.566	
16-45.5613-113.9497-2-12-	0-M35583	11920	430	13180	65	-4	7.6	6.2	-341	-1	1	11.8	3521	40	4.4	59						0.763	
16-45.5052-113.8817-2-12-	0-M35584	8508	156	7814	-25	-4	4.1	8.4	-253	-1	-1	6.3	1490	29	-2.3	-42						4.889	
16-45.5010-113.8891-2-12-	0-M35585	6538	80	6448	38	-2	3.8	2.9	-146			4.8	1605	25	2.4	40						0.646	
16-45.4984-113.9280-2-12-	0-M35586	8004	392	4890	55	-3	5.3	4.3	-257	-1	-1	7.3	1950	25	3.6	58						0.781	
16-45.5044-113.9794-2-12-	0-M35587	8345	427	9660	-30	-5	6.8	8.4	-453	-2	-1	7.9	3481	70	-13.0	-97						4.392	
16-45.5263-113.9953-2-12-	0-M35588	-3843	239	6039	-30	-4	4.1	2.5	-328	-1	-1	6.6	2307	29	-2.8	-52						0.788	
16-45.5260-113.9938-2-12-	0-M35589	5615	327	16490	59	-3	5.4	4.8	-281	-1	1	12.6	2831	28	3.8	80						0.524	
16-45.5044-113.9971-2-12-	0-M35590	13460	546	9440	69	-4	9.1	6.6	-347	-1	-1	14.2	3766	50	4.6	117						0.606	
16-45.4974-113.9588-2-15-	0-M35591	11200	291	7195	71	-3	5.2	7.3	-311	-1	-1	6.9	2398	30	-2.3	81						1.522	
16-45.4862-113.9724-2-12-	0-M35592	11020	269	13340	63	-4	7.1	2.6	-318	-1	-1	7.9	3266	38	-2.6	137						0.481	
16-45.4681-113.9866-2-15-	0-M35593	10270	985	7251	59	-6	10.1	6.1	-456	-1	-1	11.5	2471	47	3.9	171						0.322	
16-45.3897-113.9648-2-12-	0-M35594	10360	215	12390	54	-3	7.8	4.5	-254	-1	-1	9.8	3459	44	-1.8	-75						0.459	
16-45.0534-113.6068-2-15-	0-M35595	13490	2605	8316	80	-5	9.9	7.8	-892	-1	-1	15.9	4156	64	6.4	170						0.296	
16-45.0483-113.5984-2-12-	0-M35596	12470	527	11410	74	-5	8.6	5.4	-373	-1	-1	14.5	4212	59	5.5	-49						0.428	
16-45.0382-113.6216-2-12-	0-M35597	34190	760	9337	45	-4	15.0	4.3	659	-1	-1	9.2	4736	94	-2.5	101						0.228	
16-45.2304-113.7430-2-12-	0-M35598	11320	531	16450	63	-4	7.1	7.3	-367	-1	-1	11.2	3158	39	4.3	70						1.295	
16-45.2334-113.7445-2-12-	0-M35599	11130	686	14580	47	-4	6.5	11.2	-414	-1	-1	13.9	3285	38	6.0	124						0.993	
16-45.2267-113.7533-2-12-	0-M35700	8572	506	12250	-27	-4	7.1	6.0	-370	-1	-1	11.1	4362	42	5.1	-66						0.640	
16-45.2176-113.7664-2-15-	0-M35701	8609	343	12240	52	4	6.4	5.7	-255	-1	1	11.1	3367	42	4.5	73						0.315	

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

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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 (umho/cm)	SOLUBLE SOLIDS (mg/l)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RILUP	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																										
16-45.2205-113.8065-2-15-						0-M35702-06/12/78-17-			24-	-	-	-	-	-	-	11-4-1-4-1-	-1-	-4-2-4-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	
16-45.2232-113.8087-2-15-						0-M35703-06/12/78-17-			24-	-	-	-	-	-	-	16-4-1-4-1-	-1-	-4-2-4-3-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80
16-45.5843-113.9687-2-12-						0-M35704-06/13/78-10-			21-	6.0-	-	-	7.2-	19-	-	10-4-7-2-7-4-4-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.80
16-45.5727-113.9555-2-12-						0-M35705-06/13/78-10-			21-	7.0-	-	-	7.4-	13-	-	13-4-7-2-7-4-4-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.00
16-45.5686-113.9511-2-12-						0-M35706-06/13/78-10-			21-	8.5-C-	-	-	7.3-	41-	-	10-4-1-2-7-3-4-1-2-1-3-5-2-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.60
16-45.4119-113.9518-2-12-						0-M35707-06/13/78-12-			24-	13.0-	-	-	8.1-	410-	-	12-4-1-3-1-3-4-1-2-4-2-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80
16-45.4301-113.8404-2-12-						0-M35708-06/13/78-14-			19-	4.0-	-	-	8.1-	37-	-	8-4-1-2-1-4-4-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.20
16-45.4311-113.8413-2-12-						0-M35709-06/13/78-14-			20-	5.0-	-	-	7.5-	27-	-	10-4-1-2-1-4-4-1-2-1-4-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	51.90
16-45.4075-113.8858-2-12-						0-M35710-06/13/78-15-			25-	13.0-	-	-	7.2-	190-	-	9-4-7-3-7-3-4-1-2-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.20
16-45.4003-113.8654-2-12-						0-M35711-06/13/78-16-			20-	-	-	-	7.3-	26-	-	9-4-7-2-7-4-4-1-2-2-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.60
16-45.4139-113.8976-2-12-						0-M35713-06/13/78-18-			25-	12.5-	-	-	7.3-	80-	-	10-4-7-2-7-4-4-1-2-2-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.80
16-45.3783-113.9165-2-12-						0-M35714-06/13/78-19-			23-	13.0-	-	-	7.2-	190-	-	10-4-7-2-7-3-4-1-2-2-3-5-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.40
16-45.1898-113.8459-2-15-						0-M35715-06/14/78-11-			20-	-	-	-	-	-	-	10-4-1-4-1-	-1-	-4-2-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.60
16-45.1796-113.8431-2-15-						0-M35716-06/14/78-11-			20-	-	-	-	-	-	-	6-4-1-3-1-	-1-	-4-2-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.30
16-45.2043-113.8704-2-15-						0-M35717-06/14/78-11-			21-	-	-	-	-	-	-	11-4-1-3-1-	-1-	-4-2-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.20
16-45.2195-113.8544-2-15-						0-M35718-06/14/78-12-			21-	-	-	-	-	-	-	4-4-1-3-1-	-1-	-4-2-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.50
16-45.2225-113.8558-2-15-						0-M35719-06/14/78-12-			21-	-	-	-	-	-	-	6-4-1-4-1-	-1-	-4-2-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00
16-45.2378-113.8486-2-15-						0-M35720-06/14/78-12-			22-	-	-	-	-	-	-	12-4-1-3-1-	-1-	-4-2-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.70
16-45.2348-113.8532-2-15-						0-M35721-06/14/78-13-			22-	-	-	-	-	-	-	9-4-1-3-1-	-1-	-4-2-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.40
16-45.1287-113.8638-2-15-						0-M35722-06/14/78-15-			24-	-	-	-	-	-	-	8-4-1-4-1-	-1-	-4-2-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.30
16-45.1232-113.8587-2-15-						0-M35723-06/14/78-15-			24-	-	-	-	-	-	-	15-4-1-4-1-	-1-	-4-2-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90
16-45.1227-113.8245-2-15-						0-M35724-06/14/78-15-			24-	-	-	-	-	-	-	16-4-1-3-1-	-1-	-4-2-5-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.90
16-45.4397-113.9463-2-12-						0-M35725-06/14/78-18-			22-	7.5-C-	-	-	7.4-	132-	-	10-4-1-3-1-3-3-1-2-1-3-5-2-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60
16-45.4407-113.9467-2-12-						0-M35726-06/14/78-18-			22-	8.5-C-	-	-	7.5-	134-	-	12-4-1-3-1-3-3-1-2-1-3-5-2-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.10
16-45.4575-113.9419-2-12-						0-M35727-06/14/78-19-			20-	9.5-C-	-	-	7.3-	61-	-	9-4-1-3-1-3-3-1-2-1-3-5-2-	-9-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.40
16-45.4685-113.9603-2-11-						0-M35728-06/14/78-19-			19-	6.5-	-	-	6.8-	213-	-	8-4-1-5-6-2-3-1-3-1-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.30
16-45.4879-113.9312-2-12-						0-M35729-06/14/78-20-			20-	7.5-C-	-	-	7.4-	52-	-	5-4-1-3-1-3-3-1-2-1-3-5-2-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.40
16-45.0899-113.7687-2-15-						0-M35730-06/16/78-11-			22-	-	-	-	-	-	-	12-3-4-3-6-	-1-	-2-4-2-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00
16-45.0865-113.7674-2-12-						0-M35731-06/15/78-11-			22-	16.5-	-	-	8.0-	600-	-	12-3-4-3-4-3-4-1-2-4-2-5-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10
16-45.0586-113.7127-2-12-						0-M35732-06/15/78-12-			24-	21.0-	-	-	8.1-	425-	-	12-4-7-3-7-2-3-1-2-4-3-4-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70
16-45.0631-113.7742-2-12-						0-M35733-06/15/78-13-			20-	19.5-	-	-	8.2-	195-	-	15-4-1-3-1-2-2-2-2-4-2-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90
16-45.1155-113.7910-2-12-						0-M35734-06/15/78-14-			19-	14.0-	-	-	8.2-	66-	-	13-4-1-3-1-4-4-1-2-3-3-5-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.20
16-45.1009-113.7809-2-12-						0-M35735-06/15/78-14-			20-	24.0-	-	-	8.3-	484-	-	11-4-1-3-1-3-3-1-2-4-3-5-2-	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90
16-45.3616-113.8328-2-12-						0-M35736-06/14/78-12-			24-	6.0-	-	-	7.7-	23-	-	11-4-1-2-1-3-3-1-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.60
16-45.3624-113.8330-2-12-						0-M35737-06/14/78-12-			24-	7.0-	-	-	7.1-	42-	-	11-4-1-2-1-3-3-1-2-1-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	41.00
16-45.3368-113.8320-2-12-						0-M35738-06/14/78-13-			24-	9.0-	-	-	6.9-	110-	-	11-4-3-2-3-3-3-1-2-4-3-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24.60
16-45.3388-113.8479-2-12-						0-M35739-06/14/78-13-			26-	10.0-	-	-	6.7-	125-	-	8-4-6-2-6-3-3-1-2-2-4-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.20
16-45.3400-113.8476-2-12-						0-M35740-06/14/78-13-			30-	9.0-	-	-	6.7-	59-	-	11-4-1-2-1-3-3-1-2-2-4-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.40
16-45.3549-113.8647-2-15-						0-M35741-06/14/78-16-			26-	-	-C-	-	-	-	-	13-4-1-3-1-	-1-	-3-1-2-5-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.30
16-45.3602-113.8601-2-12-						0-M35742-06/14/78-16-			26-	13.0-	-	-	7.3-	24-	-	12-4-1-2-1-3-3-1-2-1-3-5-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.30
16-45.3053-113.8906-2-15-						0-M35743-06/14/78-17-			26-	-	-	-	-	-	-	6-4-3-3-3-	-1-	-2-4-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.50
16-45.2653-113.9480-2-12-						0-M35744-06/14/78-19-			23-	7.0-	-	-	6.5-	46-	-	17-4-1-3-1-3-3-1-2-1-4-5-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.50
16-45.2600-113.9551-2-12-																																		

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

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DOE SAMPLE NUMBER						DOE SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE										ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Concentrations reported in weight parts per million (ppm)										Concentrations in weight ppm	
							Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li	
16-45.2205-113.8065-2-15-						0-M35702	-5	-5	-5	28	-20	19	12	-10	-15	2	21	
16-45.2232-113.8087-2-15-						0-M35703	-5	-5	-5	25	-20	-15	9	-10	-15	2	15	
16-45.5843-113.9687-2-12-						0-M35704	-5	-5	-5	16	-20	16	-5	-10	-15	1	21	
16-45.5727-113.9555-2-12-						0-M35705	-5	-5	-5	21	-20	-15	13	-10	-15	1	7	
16-45.5686-113.9511-2-12-						0-M35706	-5	-5	-5	36	-20	16	-5	-10	-15	2	11	
16-45.4119-113.9519-2-12-						0-M35707	-5	-5	-5	12	-20	-15	35	-10	-15	2	37	
16-45.4301-113.8404-2-12-						0-M35708	-5	-5	-5	16	-20	-15	20	-10	-15	-1	9	
16-45.4311-113.8413-2-12-						0-M35709	-5	-5	-5	25	-20	-15	20	-10	-15	-1	9	
16-45.4075-113.8858-2-12-						0-M35710	-5	-5	-5	18	-20	-15	5	-10	-15	1	13	
16-45.4003-113.8654-2-12-						0-M35711	-5	-5	-5	14	-20	-15	6	-10	-15	-1	8	
16-45.4139-113.8976-2-12-						0-M35713	-5	-5	-5	10	-20	-15	10	-10	-15	1	10	
16-45.3783-113.9165-2-12-						0-M35714	-5	-5	-5	15	-20	-15	8	-10	-15	1	16	
16-45.1898-113.8459-2-15-						0-M35715	-5	-5	-5	16	-20	-15	14	-10	-15	2	14	
16-45.1796-113.8431-2-15-						0-M35716	-5	-5	-5	21	-20	-15	5	-10	-15	2	17	
16-45.2043-113.8704-2-15-						0-M35717	-5	-5	-5	20	-20	-15	9	-10	-15	2	16	
16-45.2195-113.8544-2-15-						0-M35718	-5	-5	-5	24	-20	21	14	-10	-15	2	14	
16-45.2225-113.8559-2-15-						0-M35719	-5	-5	-5	27	-20	23	6	-10	-15	2	17	
16-45.2378-113.8486-2-15-						0-M35720	-5	-5	-5	13	-20	-15	12	-10	-15	2	14	
16-45.2348-113.8532-2-15-						0-M35721	-5	-5	-5	17	-20	-15	16	-10	-15	2	9	
16-45.1287-113.8633-2-15-						0-M35722	-5	-5	-5	14	-20	-15	9	-10	-15	2	9	
16-45.1232-113.8587-2-15-						0-M35723	-5	-5	-5	27	-20	16	17	-10	-15	2	41	
16-45.1227-113.8245-2-15-						0-M35724	-5	-5	-5	16	-20	-15	13	-10	-15	1	12	
16-45.4397-113.9463-2-12-						0-M35725	-5	-5	-5	20	-20	-15	8	-10	-15	2	14	
16-45.4407-113.9467-2-12-						0-M35726	-5	-5	-5	-10	-20	-15	-5	-10	-15	3	35	
16-45.4575-113.9419-2-12-						0-M35727	-5	-5	-5	34	-20	15	16	-10	-15	2	23	
16-45.4685-113.9603-2-11-						0-M35728	-5	-5	-5	28	-20	20	13	-10	-15	2	15	
16-45.4879-113.9312-2-12-						0-M35729	-5	-5	-5	14	-20	-15	6	-10	-15	3	11	
16-45.0899-113.7687-2-15-						0-M35730	-5	-5	-5	21	-20	35	10	-10	-15	2	49	
16-45.0865-113.7674-2-12-						0-M35731	-5	-5	-5	26	-20	30	6	-10	-15	1	27	
16-45.0586-113.7127-2-12-						0-M35732	-5	-5	-5	29	-20	34	12	-10	-15	2	20	
16-45.0631-113.7742-2-12-						0-M35733	-5	-5	-5	28	-20	-15	12	-10	-15	-1	10	
16-45.1155-113.7910-2-12-						0-M35734	-5	-5	-5	28	-20	-15	12	-10	-15	2	12	
16-45.1009-113.7809-2-12-						0-M35735	-5	-5	-5	30	-20	23	11	-10	-15	2	14	
16-45.3616-113.8328-2-12-						0-M35736	-5	-5	-5	14	-20	-15	-5	-10	-15	2	16	
16-45.3624-113.8330-2-12-						0-M35737	-5	-5	-5	30	-20	-15	6	-10	-15	2	12	
16-45.3368-113.8320-2-12-						0-M35738	-5	-5	-5	29	-20	24	23	-10	-15	2	21	
16-45.3388-113.8479-2-12-						0-M35739	-5	6	-5	57	-20	-15	264	-10	-15	2	13	
16-45.3400-113.8476-2-12-						0-M35740	-5	-5	-5	-10	-20	-15	-5	-10	-15	2	7	
16-45.3549-113.8647-2-15-						0-M35741	-5	-5	-5	23	-20	-15	11	-10	-15	-1	18	
16-45.3602-113.8601-2-12-						0-M35742	-5	-5	-5	15	-20	-15	-5	-10	-15	1	15	
16-45.3053-113.8906-2-15-						0-M35743	-5	6	-5	16	-20	-15	-5	-10	-15	-1	6	
16-45.2653-113.9480-2-12-						0-M35744	-5	-5	-5	14	-20	16	-5	-10	-15	2	17	
16-45.2600-113.9551-2-12-						0-M35745	-5	-5	-5	14	-20	17	6	-10	-15	3	12	
16-45.2561-113.9556-2-12-						0-M35746	-5	5	-5	21	-20	-15	-5	11	16	4	17	
16-45.4181-113.9781-2-12-						0-M35747	-5	-5	-5	17	-20	-15	-5	-10	-15	1	31	
16-45.4190-113.9800-2-15-						0-M35748	-5	-5	-5	22	-20	15	-5	-10	-15	1	30	
16-45.5694-113.8466-2-12-						0-M35749	-5	-5	-5	-10	-20	-15	-5	-10	-15	1	9	
16-45.5714-113.8483-2-12-						0-M35750	-5	-5	-5	10	-20	-15	-5	-10	-15	1	4	
16-45.5629-113.8513-2-12-						0-M35751	-5	-5	-5	39	-20	-15	12	-10	-15	3	37	
16-45.5634-113.8674-2-12-						0-M35752	-5	-5	-5	18	-20	-15	6	-10	-15	2	16	
16-45.5595-113.8687-2-12-						0-M35753	-5	-5	-5	20	-20	-15	-5	-10	-15	1	20	

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

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DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS															
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAS 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
16-45.2205-113.8065-2-15-						0-M35702	65400	-0.10	659	10160	68	149	8.9	50	3.4	5	1.1	15920	7.6	18160	41	0.4
16-45.2232-113.8087-2-15-						0-M35703	77240	-0.14	573	9345	100	-98	11.3	54	3.8	5	1.3	19980	12.3	17040	56	0.7
16-45.5843-113.9687-2-12-						0-M35704	59800	-0.18	802	6720	47	-92	8.2	42	6.0	4	1.3	13310	8.7	22600	-16	-0.2
16-45.5727-113.9555-2-12-						0-M35705	49180	-0.11	736	6386	54	112	10.1	32	3.1	5	1.1	16360	19.1	18530	42	0.7
16-45.5686-113.9511-2-12-						0-M35706	57430	-0.11	1094	7563	60	-93	9.0	44	5.9	6	1.4	14180	8.8	16570	39	0.5
16-45.4119-113.9518-2-12-						0-M35707	74220	-0.12	790	7574	94	-97	9.7	69	16.5	3	1.2	18140	11.0	21510	45	0.5
16-45.4301-113.8404-2-12-						0-M35708	39720	-0.17	-248	13760	45	-104	7.6	37	-2.2	2	0.8	8808	4.6	9537	-17	-0.2
16-45.4311-113.8413-2-12-						0-M35709	41980	-0.17	-246	12880	45	248	16.0	37	4.9	4	1.2	12020	3.3	9945	64	0.5
16-45.4075-113.8858-2-12-						0-M35710	50050	-0.10	578	10530	48	-73	6.9	30	3.2	3	0.9	11130	7.0	17040	34	0.4
16-45.4003-113.8654-2-12-						0-M35711	35220	-0.09	539	6971	45	-65	6.4	21	1.7	3	1.0	8444	11.0	14560	34	0.5
16-45.4139-113.8976-2-12-						0-M35713	42770	-0.10	408	6157	44	150	4.8	19	1.9	3	0.9	7442	6.4	16780	35	0.3
16-45.3783-113.9165-2-12-						0-M35714	58960	-0.11	722	10300	63	-78	10.7	49	10.5	4	1.0	14080	12.8	20960	44	0.4
16-45.1898-113.8459-2-15-						0-M35715	54080	-0.09	1086	14480	91	-80	6.6	56	3.1	7	1.2	14420	19.1	17220	56	0.7
16-45.1795-113.8431-2-15-						0-M35716	60550	-0.10	827	7741	99	-91	7.7	39	2.3	7	1.5	13440	15.8	16040	49	0.7
16-45.2043-113.8704-2-15-						0-M35717	62410	-0.13	732	11790	82	-98	7.6	54	2.2	5	1.2	15720	13.2	16020	48	0.7
16-45.2195-113.8544-2-15-						0-M35718	60590	-0.10	580	16250	83	-82	8.6	54	3.0	6	1.1	17900	13.2	18000	53	0.6
16-45.2225-113.8558-2-15-						0-M35719	61710	-0.09	625	17720	85	-81	7.9	61	2.6	6	1.3	18450	13.2	14940	53	0.5
16-45.2378-113.8486-2-15-						0-M35720	57670	-0.10	1410	13130	97	-88	8.5	49	3.2	7	1.5	17720	22.0	15560	54	0.8
16-45.2348-113.8532-2-15-						0-M35721	55970	-0.12	602	9275	75	-88	6.3	40	2.6	5	1.1	14980	10.0	17920	48	0.5
16-45.1287-113.8638-2-15-						0-M35722	55580	-0.09	994	15300	60	-81	8.7	35	2.4	5	1.1	14320	11.5	15900	32	0.5
16-45.1232-113.8587-2-15-						0-M35723	73020	-0.14	905	16950	69	-105	11.2	46	4.9	5	1.3	19840	5.7	18370	-12	0.4
16-45.1227-113.8245-2-15-						0-M35724	85230	-0.15	1001	10150	118	142	10.2	22	4.9	7	1.4	17570	7.7	23340	55	0.7
16-45.4397-113.9463-2-12-						0-M35725	49270	-0.13	596	6121	55	-100	5.7	25	3.8	6	1.8	10040	5.4	16330	35	0.5
16-45.4407-113.9467-2-12-						0-M35726	87720	-0.12	901	-638	54	-58	12.2	54	4.5	4	0.9	14480	4.2	35150	30	0.3
16-45.4575-113.9419-2-12-						0-M35727	71130	-0.09	820	9739	59	156	9.5	48	5.3	13	2.7	14190	4.4	17230	54	0.8
16-45.4685-113.9603-2-11-						0-M35728	55670	-0.07	514	7986	48	-84	7.4	43	4.4	7	1.0	10390	7.3	18690	30	0.4
16-45.4879-113.9312-2-12-						0-M35729	42480	-0.12	397	5624	41	-55	5.2	-11	3.8	5	1.3	7685	5.5	18360	30	0.6
16-45.0899-113.7687-2-15-						0-M35730	65730	-0.13	823	39380	68	-105	16.9	321	5.1	4	1.4	25520	7.6	18310	46	0.5
16-45.0865-113.7674-2-12-						0-M35731	64590	-0.11	779	37850	83	-96	12.8	216	3.5	4	1.2	22070	9.8	21480	44	0.4
16-45.0586-113.7127-2-12-						0-M35732	72540	-0.12	1054	18120	92	-99	11.6	80	4.6	4	1.3	19030	9.2	17640	49	0.4
16-45.0631-113.7742-2-12-						0-M35733	76870	-0.16	1243	20000	73	-123	10.7	70	4.0	4	1.3	16010	6.4	22190	41	0.3
16-45.1155-113.7910-2-12-						0-M35734	78900	-0.13	958	17220	89	109	14.0	73	6.6	5	1.2	21210	9.8	15220	49	0.5
16-45.1009-113.7809-2-12-						0-M35735	56900	-0.12	804	18700	68	-95	13.9	123	5.2	5	1.1	22950	5.5	19170	22	0.3
16-45.3616-113.8328-2-12-						0-M35736	47520	-0.06	781	4455	52	-62	5.6	34	4.3	5	1.2	12900	11.4	19230	38	0.5
16-45.3624-113.8330-2-12-						0-M35737	55580	-0.10	927	12510	72	187	9.0	41	4.7	7	1.8	12290	7.2	14330	69	0.7
16-45.3368-113.8320-2-12-						0-M35738	62330	-0.11	557	15230	76	-102	8.3	86	4.3	5	1.3	16540	10.2	14400	59	0.6
16-45.3388-113.8479-2-12-						0-M35739	42530	0.30	432	5718	59	-54	7.3	45	4.8	4	0.9	13880	12.9	16110	36	0.4
16-45.3400-113.8476-2-12-						0-M35740	40570	-0.05	643	3471	49	-58	4.5	33	2.1	4	0.8	10700	11.0	18810	28	0.4
16-45.3549-113.8547-2-15-						0-M35741	46950	-0.08	802	7664	48	-87	6.6	34	3.6	3	0.9	9966	6.0	19180	29	0.3
16-45.3602-113.8601-2-12-						0-M35742	46130	-0.08	1014	4584	54	-78	4.9	25	3.5	3	1.2	12540	13.5	19280	30	0.4
16-45.3053-113.8906-2-15-						0-M35743	32920	-0.04	373	-328	24	32	4.7	14	1.3	3	0.5	4117	2.3	12150	13	0.2
16-45.2653-113.9480-2-12-						0-M35744	75220	-0.10	591	9561	123	412	8.7	43	5.8	13	2.2	20730	14.0	20210	74	1.0
16-45.2600-113.9551-2-12-						0-M35745	58410	-0.07	446	15950	69	109	5.9	38	2.4	6	1.2	10240	12.7	12670	34	0.7
16-45.2561-113.9556-2-12-						0-M35746	58210	-0.10	391	13750	127	231	6.2	24	4.8	15	1.5	15970	18.5	15020	67	1.5
16-45.4181-113.9781-2-12-						0-M35747	61840	-0.09	640	10930	59	203	11.1	40	10.4	4	1.0	15320	7.2	19030	37	0.4
16-45.4190-113.9800-2-15-						0-M35748	59130	-0.09	679	10970	52	369	8.6	36	11.4	4	0.9	14250	6.6	21850	39	0.3
16-45.5694-113.8466-2-12-						0-M35749	42470	-0.07	312	-692	127	-67	5.6	40	3.9	8	1.6	18740	18.6	13740	69	0.9
16-45.5714-113.8483-2-12-						0-M35750	47350	-0.09	-116	2078	152	-80	4.3	47	2.6	9	1.8	25390	24.4	10140	69	1.0
16-45.5629-113.8513-2-12-						0-M35751	66030	-0.10	812	7872	77	-85	11.3	41	6.1	7	1.4	18980	8.1	23530	60	0.5
16-45.5634-113.8674-2-12-						0-M35752	67600	-0.08	419	5402	96	-85	7.0	40	3.9	8	1.2	17280	11.2	15710	47	0.7
16-45.5595-113.8687-2-12-						0-M35753	54350	-0.10	396	5589	113	-86	6.2	36	3.5	8	1.3	19140	14.0	15350	65	0.7

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

④

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	
16-45.2205-113.8065-2-15-						0-M35702	7848	528	14130	42	-3	8.2	4.8	-317	-1	-1	10.0	3266	56	1.8	106	0.290
16-45.2232-113.8087-2-15-						0-M35703	9631	583	11510	-25	-4	10.1	7.8	-389	-1	-1	14.2	4449	58	4.0	111	0.268
16-45.5843-113.9687-2-12-						0-M35704	11580	187	6187	-37	-5	5.9	-2.1	-337	-2	-1	7.3	3342	41	-3.4	-55	0.658
16-45.5727-113.9555-2-12-						0-M35705	9278	410	8641	48	-3	6.1	4.9	-313	-1	-1	8.4	3443	34	3.0	61	0.714
16-45.5686-113.9511-2-12-						0-M35706	10980	227	9620	48	-3	6.7	7.2	-403	-1	-1	9.4	3149	43	3.5	87	0.915
16-45.4119-113.9518-2-12-						0-M35707	11370	537	12500	84	-3	8.0	5.3	-354	-1	-1	14.9	3317	47	5.2		0.255
16-45.4301-113.8404-2-12-						0-M35708	-4922	563	6699	-37	-5	4.8	-2.1	-486	-2	-1	6.4	-1178	33	-3.4	-110	2.219
16-45.4311-113.8413-2-12-						0-M35709	6317	558	5193	-35	-5	6.7	7.4	-511	-1	-1	7.3	2154	30	-3.3	136	7.110
16-45.4075-113.8858-2-12-						0-M35710	8412	298	7816	52	-3	5.2	3.9	-261	-1	-1	7.4	2437	27	-1.7	-76	1.243
16-45.4003-113.8654-2-12-						0-M35711	5090	216	5750	-18	-3	3.3	5.5	-242	-1	-1	5.4	1531	22	3.9	-43	2.519
16-45.4139-113.8976-2-12-						0-M35713	-3347	218	8555	-21	-3	3.5	2.8	-261	-3	-1	5.6	1476	25	-2.0	-107	2.107
16-45.3783-113.9165-2-12-						0-M35714	9879	302	9961	61	-4	7.0	3.8	-273	1	-1	12.2	2889	52	3.4	-47	0.361
16-45.1898-113.8459-2-15-						0-M35715	9258	527	12720	40	-3	6.9	6.3	-278	-1	-1	12.3	3985	49	5.3	54	0.374
16-45.1796-113.8431-2-15-						0-M35716	11090	346	15430	-18	-3	6.8	7.1	-296	-1	-1	12.0	4213	40	6.0	70	0.358
16-45.2043-113.8704-2-15-						0-M35717	8886	425	13330	32	-4	8.0	5.7	-337	-1	-1	12.3	3598	53	6.3	-92	0.341
16-45.2195-113.8544-2-15-						0-M35718	11740	466	12710	43	-3	7.5	6.3	-291	1	-1	14.4	4145	54	5.4	73	0.313
16-45.2225-113.8558-2-15-						0-M35719	12690	473	13390	38	-3	8.2	6.0	-279	1	1	13.0	3854	59	5.3	78	0.308
16-45.2378-113.8486-2-15-						0-M35720	8720	569	11400	44	-3	7.9	9.1	-325	-1	-1	14.1	4969	58	6.3	-72	0.333
16-45.2348-113.8532-2-15-						0-M35721	8737	372	11520	56	-4	7.2	5.1	-301	-1	-1	10.9	3297	48	4.8	-79	0.312
16-45.1287-113.8638-2-15-						0-M35722	6849	579	12030	33	-3	6.9	4.7	-299	-1	-1	8.7	3580	39	3.9	69	0.379
16-45.1232-113.8587-2-15-						0-M35723	15160	655	11080	55	-4	10.4	5.2	-409	-1	-1	10.1	3453	58	3.6	157	0.287
16-45.1227-113.8245-2-15-						0-M35724	8180	270	10330	70	-5	10.1	8.7	-340	-1	-1	17.0	3673	47	5.5	94	0.288
16-45.4397-113.9463-2-12-						0-M35725	6219	863	8557	-24	-4	5.3	6.1	-455	-1	-1	8.1	2946	29	4.0	90	0.444
16-45.4407-113.9467-2-12-						0-M35726	9149	192	4626	98	-4	9.1	5.8	-245	-1	-1	8.9	3382	52	3.5	55	0.236
16-45.4575-113.9419-2-12-						0-M35727	8599	566	6670	59	-3	8.0	15.8	-417	-1	2	16.1	2467	37	7.7	78	0.522
16-45.4685-113.9603-2-11-						0-M35728	9496	279	7947	44	-2	4.6	4.8	-314	-1	-1	7.1	2478	41	3.8	-30	0.746
16-45.4879-113.9312-2-12-						0-M35729	8437	205	3212	-26	-4	4.6	4.7	-251	-1	-1	8.1	1124	19	4.2	-85	1.037
16-45.0899-113.7687-2-15-						0-M35730	22550	797	14360	67	-4	12.8	5.3	-394	1	-1	9.3	5806	89	4.1	124	0.323
16-45.0865-113.7674-2-12-						0-M35731	22510	625	14730	56	-4	11.3	6.0	476	-1	-1	9.0	5385	88	2.5	106	0.344
16-45.0586-113.7127-2-12-						0-M35732	12920	466	13650	51	-4	8.6	7.2	526	-1	-1	14.1	3683	67	4.1	132	0.262
16-45.0631-113.7742-2-12-						0-M35733	12620	501	14940	-32	-5	7.7	4.0	-427	-5	-1	11.8	3269	51	-3.0	-202	0.331
16-45.1155-113.7910-2-12-						0-M35734	11420	499	8584	56	-4	9.6	5.4	-340	-1	-1	15.8	4395	63	3.3	108	0.329
16-45.1009-113.7809-2-12-						0-M35735	15340	1203	8270	50	-4	11.2	5.1	-432	-1	-1	9.3	5036	71	3.9	114	0.312
16-45.3616-113.8328-2-12-						0-M35736	8840	325	9100	38	-2	4.9	6.1	-219	-1	-1	8.6	2019	34	3.5	49	1.116
16-45.3624-113.8330-2-12-						0-M35737	7413	576	9755	52	-3	6.0	17.2	-420	-1	-1	11.3	2770	37	5.1	79	3.628
16-45.3368-113.8320-2-12-						0-M35738	21770	364	14510	56	-3	10.1	5.9	-332	-1	-1	13.0	3779	57	3.6	-363	1.892
16-45.3388-113.8479-2-12-						0-M35739	9082	256	6287	42	16	5.4	4.8	-203	-1	-1	9.0	2244	34	4.0	66	1.244
16-45.3400-113.8476-2-12-						0-M35740	4958	146	10240	36	2	3.8	3.5	-173	-1	-1	6.4	2250	30	3.5	42	0.687
16-45.3549-113.8647-2-15-						0-M35741	9522	376	8888	58	-2	4.4	4.1	-317	-1	-1	8.0	1581	31	3.0	78	0.288
16-45.3602-113.8601-2-12-						0-M35742	8669	292	10120	-22	-2	4.6	4.0	-266	-1	-1	6.9	1693	33	2.5	-148	1.348
16-45.3053-113.8906-2-15-						0-M35743	2117	81	504	-12	2	2.9	2.2	-107	-1	-1	3.8	2089	23	1.6	27	0.395
16-45.2653-113.9480-2-12-						0-M35744	11930	314	14250	80	-3	12.6	12.1	-298	-1	2	17.3	4270	53	8.0	91	0.434
16-45.2600-113.9551-2-12-						0-M35745	8604	247	16020	-16	-2	9.1	6.0	-267	-1	-1	10.0	3739	40	4.4		0.370
16-45.2561-113.9556-2-12-						0-M35746	4759	340	18610	93	-3	10.4	9.4	-315	2	2	21.8	4179	43	12.4	-106	0.454
16-45.4181-113.9781-2-12-						0-M35747	14230	291	9552	73	-3	7.4	5.2	-273	-1	-1	9.5	2526	42	3.4	56	0.695
16-45.4190-113.9800-2-15-						0-M35748	11130	369	10950	83	-3	7.4	5.1	-314	-1	-1	11.2	2784	36	3.6	-58	0.723
16-45.5694-113.8466-2-12-						0-M35749	5695	112	9274	49	3	5.8	14.0	-209	1	-1	19.9	4846	47	7.1	57	0.704
16-45.5714-113.8483-2-12-						0-M35750	5806	105	13750	28	-3	5.1	11.0	-226	-1	-1	24.4	5892	60	8.0	-29	0.250
16-45.5629-113.8513-2-12-						0-M35751	14770	456	9414	75	-3	10.6	9.7	-324	-1	-1	13.7	3471	53	4.6	91	1.066
16-45.5634-113.8674-2-12-						0-M35752	14130	277	16670	63	-2	8.5	8.7	-255	-1	1	12.3	4337	54	6.0	62	0.813
16-45.5595-113.8687-2-12-						0-M35753	10760	237	12980	60	-3	7.6	6.8	-266	-5	-1	16.5	4426	49	5.3	-177	0.673

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 (umho/cm)	SCINTILLOMETER (eU/gpm)	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)
							DATE	HOUR																										UNITS IN ppm
16-45	4121-113	9265-2-12	0-M35754-06/22/78-13						22-10.5	-	-	7.2	70-	6-4-1-2-1-3-3-1-2-2-3-5-1	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.50	
16-45	0503-113	9206-2-12	0-M35755-06/16/78-10						18-8.5	-	-	7.7	173-	20-3-4-2-4-3-4-1-2-3-2-5-1	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.30	
16-45	2903-113	9486-2-12	0-M35756-06/16/78-14						13-6.0	-	-	8.4	27-	64-4-7-2-7-4-4-1-2-1-3-5-2	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.50	
16-45	2920-113	9458-2-12	0-M35757-06/16/78-15						13-12.5	-	-	7.8	106-	4-4-7-2-7-2-3-1-2-2-3-5-2	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.50	
16-45	2936-113	8651-2-15	0-M35758-06/16/78-17						20-	-	-	-	-	10-4-1-2-1-1-1-3-2-4-2	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50	
16-45	2826-113	8702-2-15	0-M35759-06/16/78-18						20-	-	-	-	-	15-4-1-4-1-1-1-3-2-5-2	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.80	
16-45	3875-113	9791-2-12	0-M35761-06/22/78-10						20-10.0	-	-	7.5	134-	11-4-1-3-1-3-3-1-3-2-2-5-1	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.90	
16-45	3874-113	9766-2-12	0-M35762-06/22/78-11						21-13.0	-	-	7.4	153-	10-4-1-5-1-2-3-1-3-2-3-5-1	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.10	
16-45	3924-113	9829-2-12	0-M35763-06/22/78-11						21-6.5	-	-	7.0	189-	12-4-7-5-6-2-4-1-3-2-3-5-1	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	41.10	
16-45	4138-113	9265-2-15	0-M35765-06/22/78-14						22-	-	-	-	-	10-4-1-2-1-1-1-3-2-5-1	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.60	
16-45	4028-113	9375-2-12	0-M35766-06/22/78-14						22-	-	-	8.5	490-	13-4-1-2-1-2-3-1-2-1-2-5-2	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.40	
16-45	1919-113	7847-2-15	0-M35767-06/22/78-17						23-	-	-	-	-	20-4-1-4-1-1-1-3-2-4-2	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.70	
16-45	1887-113	7837-2-15	0-M35768-06/22/78-17						23-	-	-	-	-	16-4-1-3-1-1-1-3-2-4-2	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.70	
16-45	1861-113	7949-2-15	0-M35769-06/22/78-17						23-	-	-	-	-	10-4-1-2-1-1-1-3-2-4-2	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.70	
16-45	1737-113	7868-2-15	0-M35770-06/22/78-18						24-	-	-	-	-	13-4-1-4-1-1-1-3-2-4-2	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.10	
16-45	1665-113	7087-2-12	0-M35771-06/23/78-9						15-7.0	-	-	7.3	55-	17-4-1-2-1-4-4-1-2-2-3-4-2	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.30	
16-45	1540-113	6924-2-12	0-M35772-06/23/78-9						15-7.5	-	-	7.2	49-	16-4-1-2-1-4-4-1-2-2-3-4-2	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.00	
16-45	1510-113	6808-2-11	0-M35773-06/23/78-10						17-10.5	-	-	7.8	319-	17-4-1-4-1-2-3-1-3-3-3-4-2	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90	
16-45	1574-113	6757-2-11	0-M35774-06/23/78-10						16-10.0	-	-	7.4	200-	17-4-1-4-1-3-3-1-3-3-2-5-2	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.90	
16-45	1511-113	6568-2-12	0-M35775-06/23/78-11						15-7.0	-	-	7.7	35-	10-4-7-2-7-3-4-1-2-1-3-5-2	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.40	
16-45	1536-113	6607-2-12	0-M35777-06/23/78-11						16-6.5	-	-	7.7	42-	15-4-7-2-7-4-4-1-2-1-3-5-2	-1-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.40	
16-45	1453-113	6962-2-11	0-M35778-06/23/78-12						20-14.5	-	-	7.2	300-	13-4-7-5-6-2-3-1-3-3-2-5-2	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.00	
16-45	1277-113	7074-2-11	0-M35779-06/23/78-12						22-19.0	-	-	7.7	232-	8-4-1-3-1-2-3-1-2-3-3-5-2	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.50	
16-45	1196-113	7369-2-12	0-M35780-06/23/78-15						27-13.0	-	-	7.9	112-	23-4-7-2-7-4-4-2-2-2-3-4-2	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.20	
16-45	2112-113	9243-2-12	0-M35781-06/23/78-16						28-16.0	-	-	7.8	239-	17-3-1-3-1-3-4-1-2-2-3-5-2	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.40	
16-45	2104-113	9344-2-12	0-M35782-06/23/78-17						28-10.5	-	-	7.8	36-	17-3-1-2-1-4-4-1-2-2-3-5-2	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.50	
16-45	1981-113	9330-2-12	0-M35783-06/23/78-17						28-17.5	-	-	7.9	250-	9-4-1-5-6-3-4-1-2-2-3-5-2	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.80	
16-45	0630-113	5519-2-12	0-M35784-06/24/78-14						20-5.5	-	-	7.7	23-	25-4-7-2-7-4-4-1-2-1-3-5-2	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.70	
16-45	0472-113	5700-2-12	0-M35785-06/24/78-16						21-9.5	-	-	7.6	65-	12-4-1-2-1-3-4-1-2-1-3-5-2	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.30	
16-45	1834-113	9265-2-12	0-M35786-06/25/78-13						13-7.0	-	-	7.5	23-	18-4-7-2-7-4-4-1-2-2-3-5-3	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.80	
16-45	1714-113	9538-2-12	0-M35788-06/25/78-14						13-6.0	-	-	7.6	20-	17-4-7-2-7-4-4-1-2-2-3-5-3	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50	
16-45	1690-113	9513-2-12	0-M35789-06/25/78-15						13-7.0	-	-	7.4	25-	13-4-7-2-7-3-3-1-2-2-3-5-3	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.90	
16-45	1798-113	9346-2-15	0-M35790-06/25/78-15						20-	-	-	-	-	20-4-7-3-1-1-1-3-2-5-3	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.80	
16-45	1721-113	9134-2-15	0-M35791-06/25/78-15						19-	-	-	-	-	9-4-1-5-1-1-1-2-3-3-5-3	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.90	
16-45	2156-113	7173-2-12	0-M35792-06/25/78-17						14-5.5	-	-	6.7	27-	10-4-7-2-7-4-4-1-2-2-3-5-3	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.80	
16-45	1896-113	7250-2-12	0-M35793-06/25/78-18						13-11.0	-	-	6.5	125-	4-7-2-7-3-4-1-2-2-3-4-3	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.60	
16-45	1628-113	7844-2-15	0-M35795-06/25/78-19						13-	-	-	-	-	13-4-1-3-1-1-1-3-2-3-3	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.90	
16-45	1565-113	7684-2-15	0-M35795-06/25/78-20						13-	-	-	-	-	10-4-1-2-1-1-1-3-2-4-3	-3-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.10	

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

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DOE SAMPLE NUMBER						DOE LAB LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE										ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Concentrations reported in weight parts per million (ppm)										Concentrations in weight ppm	
							Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li	
16-45	4121-113	9265-2-12-	0-M35754	-5	-5	-5	20	-20	-15	-5	-10	-15	2	8				
16-45	0503-113	9206-2-12-	0-M35755	-5	-5	-5	-10	-20	-15	25	-10	-15	3	36				
16-45	2903-113	9486-2-12-	0-M35756	-5	-5	-5	-10	21	17	10	-10	-15	2	15				
16-45	2920-113	9458-2-12-	0-M35757	-5	-5	-5	16	-20	-15	-5	-10	-15	2	16				
16-45	2936-113	8651-2-15-	0-M35758	-5	-5	-5	14	-20	-15	9	-10	-15	2	7				
16-45	2826-113	3702-2-15-	0-M35759	-5	-5	-5	-10	-20	-15	9	-10	-15	-1	10				
16-45	3875-113	9791-2-12-	0-M35761	-5	-5	-5	31	-20	-15	63	-10	-15	2	32				
16-45	3874-113	9766-2-12-	0-M35762	-5	-5	-5	14	-20	29	27	-10	-15	1	26				
16-45	3924-113	9829-2-12-	0-M35763	13	-5	23	975	-20	592	114	-10	91	5	93				
16-45	4138-113	9265-2-15-	0-M35765	-5	-5	-5	36	-20	-15	10	-10	-15	2	49				
16-45	4028-113	9375-2-12-	0-M35766	-5	-5	-5	24	-20	-15	16	-10	-15	2	31				
16-45	1919-113	7847-2-15-	0-M35767	-5	-5	-5	25	-20	-15	14	-10	-15	2	28				
16-45	1887-113	7837-2-15-	0-M35768	-5	-5	-5	23	-20	-15	11	-10	-15	2	16				
16-45	1861-113	7949-2-15-	0-M35769	-5	-5	-5	18	-20	-15	13	-10	-15	1	23				
16-45	1737-113	7868-2-15-	0-M35770	-5	-5	-5	15	-20	17	9	-10	-15	2	23				
16-45	1665-113	7087-2-12-	0-M35771	-5	-5	-5	27	-20	-15	12	-10	-15	2	12				
16-45	1640-113	6824-2-12-	0-M35772	-5	-5	-5	30	-20	-15	8	-10	-15	2	22				
16-45	1510-113	6808-2-11-	0-M35773	-5	-5	-5	39	-20	-15	10	-10	-15	2	32				
16-45	1574-113	6757-2-11-	0-M35774	-5	-5	-5	24	-20	-15	14	-10	-15	2	21				
16-45	1511-113	6568-2-12-	0-M35775	-5	-5	-5	66	-20	-15	38	-10	-15	2	53				
16-45	1536-113	6607-2-12-	0-M35777	-5	-5	-5	33	-20	-15	20	-10	-15	1	21				
16-45	1453-113	6962-2-11-	0-M35773	-5	-5	-5	23	-20	-15	8	-10	-15	1	22				
16-45	1277-113	7074-2-11-	0-M35779	-5	-5	-5	38	-20	-15	24	-10	-15	1	12				
16-45	1196-113	7369-2-12-	0-M35780	-5	-5	-5	18	-20	-15	9	-10	-15	3	18				
16-45	2112-113	9243-2-12-	0-M35781	-5	-5	-5	18	-20	-15	133	-10	-15	4	41				
16-45	2104-113	9344-2-12-	0-M35782	-5	-5	-5	15	-20	-15	-5	12	-15	4	20				
16-45	1981-113	9330-2-12-	0-M35783	-5	-5	-5	18	-20	-15	9	-10	-15	3	28				
16-45	0630-113	5519-2-12-	0-M35784	-5	-5	-5	31	-20	-15	12	-10	-15	-1	14				
16-45	0472-113	5700-2-12-	0-M35785	-5	-5	-5	32	-20	22	16	-10	-15	2	17				
16-45	1834-113	9265-2-12-	0-M35786	-5	-5	-5	18	-20	-15	-5	-10	-15	3	19				
16-45	1714-113	9538-2-12-	0-M35788	-5	-5	-5	31	-20	-15	10	-10	-15	2	27				
16-45	1690-113	9518-2-12-	0-M35789	-5	-5	-5	38	-20	-15	12	-10	-15	3	15				
16-45	1798-113	9346-2-15-	0-M35790	-5	-5	-5	17	20	-15	8	-10	-15	4	26				
16-45	1721-113	9134-2-15-	0-M35791	-5	-5	-5	21	-20	-15	-5	-10	-15	2	36				
16-45	2156-113	7173-2-12-	0-M35792	-5	23	-5	348	-20	22	100	-10	124	1	21				
16-45	1896-113	7250-2-12-	0-M35793	-5	-5	-5	51	-20	20	12	-10	-15	3	42				
16-45	1628-113	7844-2-15-	0-M35795	-5	-5	-5	37	-20	-15	8	-10	-15	2	23				
16-45	1555-113	7684-2-15-	0-M35796	-5	-5	-5	28	27	-15	18	-10	20	2	21				

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

③

DOE SAMPLE NUMBER						ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS																
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	DOE 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
16-45.4121-113.9265-2-12-						0-M35754	36440	-0.05	447	5475	40	117	5.8	20	2.0	3	0.7	8332	9.5	14920	23	0.3
16-45.0503-113.9206-2-12-						0-M35755	73480	-0.07	871	17780	128	-88	6.1	41	5.4	5	1.1	13360	14.5	27030	80	0.5
16-45.2903-113.9486-2-12-						0-M35756	62580	0.12	665	11600	195	325	8.3	40	3.8	19	2.6	18210	66.4	18990	91	2.1
16-45.2920-113.9458-2-12-						0-M35757	58130	-0.11	806	5607	109	215	6.5	36	2.8	9	1.9	15780	16.4	19600	53	0.7
16-45.2936-113.8651-2-15-						0-M35758	52310	-0.06	418	4250	48	-56	7.1	27	2.6	4	0.8	13820	8.5	12610	34	0.4
16-45.2826-113.8702-2-15-						0-M35759	36330	-0.05	551	3582	92	-36	5.1	31	1.5	6	1.3	9232	26.8	12440	51	0.6
16-45.3875-113.9791-2-12-						0-M35761	61450	-0.08	666	8864	74	109	6.8	51	8.9	4	1.2	13980	8.6	20710	37	0.4
16-45.3874-113.9766-2-12-						0-M35762	58330	-0.10	693	12390	69	-94	6.6	50	4.7	5	1.2	14500	9.9	18930	39	0.5
16-45.3924-113.9829-2-12-						0-M35763	71730	-0.14	-1870	-13110	191	-883	243.5	56	23.2	17	4.3	23880	4.3	-44000	121	1.7
16-45.4138-113.9265-2-15-						0-M35765	83830	-0.08	857	4006	88	-77	8.5	45	16.0	8	1.3	18800	8.1	31840	51	0.6
16-45.4028-113.9375-2-12-						0-M35766	77630	-0.11	683	19870	84	-83	12.7	59	32.3	4	1.1	16090	7.2	25080	37	0.4
16-45.1919-113.7847-2-15-						0-M35767	66450	-0.09	595	11070	77	-83	7.0	35	3.1	6	1.0	17590	10.2	15710	41	0.7
16-45.1887-113.7837-2-15-						0-M35768	73640	-0.07	448	5074	94	-78	8.8	54	3.1	7	1.2	19260	12.9	17760	48	0.7
16-45.1861-113.7949-2-15-						0-M35769	61250	-0.07	695	5714	89	-72	7.3	39	3.0	8	1.2	18570	16.6	16350	51	0.7
16-45.1737-113.7868-2-15-						0-M35770	62700	-0.07	1241	14170	92	-81	6.7	36	3.2	7	1.4	13840	13.2	17350	50	0.7
16-45.1665-113.7087-2-12-						0-M35771	57590	-0.07	561	7398	76	-109	7.0	37	2.9	6	1.2	13310	11.8	14080	51	0.6
16-45.1640-113.6824-2-12-						0-M35772	70540	-0.10	825	6898	92	-93	9.7	43	4.7	5	1.3	15940	7.9	20260	41	0.6
16-45.1510-113.6808-2-11-						0-M35773	66000	-0.13	758	8772	71	143	10.0	33	5.1	5	1.0	17030	7.4	16380	48	0.5
16-45.1574-113.6757-2-11-						0-M35774	60270	-0.09	611	12510	68	112	9.7	41	3.9	6	0.9	13390	8.5	18620	53	0.6
16-45.1511-113.6568-2-12-						0-M35775	67450	1.31	579	9991	97	135	7.2	35	4.2	11	1.8	16350	8.4	14880	73	1.0
16-45.1535-113.6607-2-12-						0-M35777	61750	-0.09	548	7895	107	-105	8.3	44	3.1	7	1.2	14790	18.6	15280	50	0.9
16-45.1453-113.6962-2-11-						0-M35778	64110	-0.12	751	7904	70	-75	9.0	49	3.6	5	1.0	14620	9.5	19540	37	0.5
16-45.1277-113.7074-2-11-						0-M35779	70830	-0.11	659	10140	75	-93	14.5	51	5.5	6	1.1	23470	7.2	19040	42	0.6
16-45.1196-113.7369-2-12-						0-M35780	67170	0.75	774	8853	119	-83	8.8	64	3.8	9	1.6	22580	26.2	14890	79	0.9
16-45.2112-113.9243-2-12-						0-M35781	69570	0.24	661	-1007	139	-81	7.6	45	4.4	15	1.7	19800	31.8	-2758	71	1.4
16-45.2104-113.9344-2-12-						0-M35782	61170	-0.09	442	-1087	93	-90	5.1	37	3.2	10	1.2	11030	28.8	-2585	36	1.3
16-45.1981-113.9330-2-12-						0-M35783	72940	-0.15	671	14670	106	368	6.7	60	4.4	6	1.7	18200	11.2	12160	59	0.6
16-45.0630-113.5519-2-12-						0-M35784	48980	-0.14	608	10990	122	154	13.6	40	4.0	8	1.7	12880	6.5	10960	54	0.9
16-45.0472-113.5700-2-12-						0-M35785	59540	-0.11	704	14250	72	-96	9.5	34	3.6	11	1.7	15750	6.7	13950	47	1.0
16-45.1834-113.9265-2-12-						0-M35786	62710	-0.10	1003	8226	87	190	6.2	43	2.9	6	1.5	13160	15.8	21470	51	0.6
16-45.1714-113.9538-2-12-						0-M35788	66300	-0.15	514	23850	60	-106	10.5	35	14.4	3	1.1	24380	4.9	11220	-11	0.3
16-45.1690-113.9518-2-12-						0-M35789	80170	-0.11	1170	9984	109	211	10.4	54	3.7	8	1.4	19510	9.6	22750	57	0.5
16-45.1798-113.9346-2-15-						0-M35790	76400	-0.08	804	11510	106	-77	5.6	21	3.2	7	0.9	9576	13.8	20340	57	0.5
16-45.1721-113.9134-2-15-						0-M35791	78000	-0.11	1066	11080	85	144	8.3	43	7.2	5	1.5	16710	13.4	20120	41	0.6
16-45.2156-113.7173-2-12-						0-M35792	53890	0.51	635	3855	78	-99	5.6	30	13.7	6	1.3	14450	16.2	13350	48	0.8
16-45.1896-113.7250-2-12-						0-M35793	62570	-0.09	566	8305	74	128	9.3	38	3.6	6	1.0	13910	10.6	17480	48	0.5
16-45.1628-113.7844-2-15-						0-M35795	70140	-0.09	1043	13970	77	161	7.4	27	3.1	6	1.2	16630	10.4	18410	45	0.5
16-45.1565-113.7684-2-15-						0-M35796	63080	-0.09	1002	12190	94	-81	7.3	35	2.6	7	1.2	13130	12.7	17540	49	0.7

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

4

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		
16-45.4121-113.9265-2-12-			0-M35754			6538	140	7602	38	-2	3.3	2.5	-205	-1		5.6	1917	21	2.3	33	0.982		
16-45.0503-113.9206-2-12-			0-M35755			12550	384	14880	83	-2	6.0	7.6	445	1	1	27.0	3336	35	5.7	69	0.307		
16-45.2903-113.9486-2-12-			0-M35756			9047	463	15110	68	-3	12.0	23.5	-310	-1	2	23.6	5529	50	16.6		0.445		
16-45.2920-113.9458-2-12-			0-M35757			7890	303	16460	55	-3	3.4	9.7	-320	-1	-1	13.1	3657	39	6.4	-72	0.420		
16-45.2936-113.8651-2-15-			0-M35758			4604	205	5133	40	-2	7.0	3.8	-212		-1	7.8	3357	45	2.8	54	0.321		
16-45.2826-113.8702-2-15-			0-M35759			4827	151	3227	31	-2	4.9	6.4	-146	1	1	11.6	3147	37	5.1	38	0.328		
16-45.3875-113.9791-2-12-			0-M35761			9987	318	12860	70	-2	6.6	4.8	-252	1	-1	10.1	2859	47	3.7	97	0.683		
16-45.3874-113.9766-2-12-			0-M35762			12190	341	13920	65	-3	7.2	5.0	-315	-1	-1	11.4	3315	44	3.6	116	0.360		
16-45.3924-113.9829-2-12-			0-M35763			-43110	18150	6275	-49	-4	9.5	29.2		-2	3	11.8		-105	12.5	2039	3.483		
16-45.4139-113.9265-2-15-			0-M35765			14020	609	8159	87	5	11.2	7.5	-317	-1	1	15.2	3712	55	6.5	69	0.237		
16-45.4028-113.9375-2-12-			0-M35766			12660	570	8627	86	-4	7.8	4.5	-340	-1	-1	14.7	3530	47	3.4	-41	0.299		
16-45.1919-113.7847-2-15-			0-M35767			8600	498	12470	52	-3	9.2	5.2	-294	-1	-1	12.5	3882	48	5.5	101	0.296		
16-45.1887-113.7837-2-15-			0-M35768			11700	357	10780	49	-2	9.3	8.1	-273	2	1	14.1	3998	67	5.6	98	0.333		
16-45.1861-113.7949-2-15-			0-M35769			7093	406	13210	52	-2	8.0	7.6	-243	-1	1	11.5	4426	54	5.3	76	0.409		
16-45.1737-113.7868-2-15-			0-M35770			9987	491	13980	37	-2	6.2	7.9	326	-1	-1	11.5	3686	40	5.5	45	0.357		
16-45.1665-113.7087-2-12-			0-M35771			6287	782	17450	48	-2	7.2	7.5	-390	-1	-1	10.4	3037	36	4.7	66	1.471		
16-45.1640-113.6824-2-12-			0-M35772			7078	702	7842	65	-3	8.3	7.4	-397	-1	-1	13.3	3669	60	5.5	98	0.376		
16-45.1510-113.6808-2-11-			0-M35773			6009	658	7362	-33	-4	8.4	6.4	-362	-1	-1	12.0	3510	42	3.5	-86	0.325		
16-45.1574-113.6757-2-11-			0-M35774			9856	210	12170	57	-3	7.4	7.0	-248	-1	-1	10.0	2729	45	3.5	69	2.190		
16-45.1511-113.6568-2-12-			0-M35775			12200	661	13950	52	-3	9.7	11.7	-410	-1	1	15.3	3870	44	7.3	124	0.484		
16-45.1536-113.6607-2-12-			0-M35777			11290	546	15440	50	-3	7.1	10.9	-358	-1	-1	11.9	4050	48	5.2	75	1.294		
16-45.1453-113.6962-2-11-			0-M35778			10590	437	8632	57	-4	8.3	6.5	-289	-1	-1	14.3	3755	44	-2.7	120	0.280		
16-45.1277-113.7074-2-11-			0-M35779			13960	349	9025	62	-3	11.0	6.6	-399	-1	-1	12.0	3791	61	4.6	135	0.292		
16-45.1196-113.7369-2-12-			0-M35780			9359	366	11580	73	-3	9.6	9.6	-285	1	1	16.7	5426	65	7.0	84	0.431		
16-45.2112-113.9243-2-12-			0-M35781			-3304	438	14080	96	-3	10.6	10.8	-261	2	2	23.3	5188		13.1	83	0.489		
16-45.2104-113.9344-2-12-			0-M35782			10240	232		54	-3	8.9	9.2	-256	1	2	17.4	5565		10.3		0.489		
16-45.1981-113.9330-2-12-			0-M35783			11470	317	21990	70	-5	12.5	6.4	-345	-1	-1	14.1	4559	78	5.1	-59	0.411		
16-45.0630-113.5519-2-12-			0-M35784			-4533	722	9117	-26	-4	8.2	8.4	-445	-1	2	10.2	4296	29	5.9	108	0.559		
16-45.0472-113.5700-2-12-			0-M35785			12320	939	10670	48	-4	8.4	9.0	-406	-1	2	11.4	3245	43	7.0	116	0.377		
16-45.1834-113.9265-2-12-			0-M35786			8901	309	12700	76	-3	8.6	6.8	-273	-1	-1	11.7	3546	52	5.3	107	0.581		
16-45.1714-113.9538-2-12-			0-M35788			9199	1730	3944	64	-5	12.2	2.7	-568	-1	-1	6.4	2905	63	-2.9	-36	0.391		
16-45.1690-113.9518-2-12-			0-M35789			10500	588	7453	59	-3	9.5	8.2	-313	2	1	16.5	3939	52	5.3	94	0.358		
16-45.1798-113.9346-2-15-			0-M35790			-3245	329	12830	68	-2	5.2	6.5	-251	1	-1	19.5	2437	32	4.5	-62	0.349		
16-45.1721-113.9134-2-15-			0-M35791			10300	331	5766	97	-4	11.8	6.5	-245	-1	-1	11.0	5164	84	4.7		0.445		
16-45.2156-113.7173-2-12-			0-M35792			6933	302	18600	-24	23	5.8	8.0	-301	-1	-1	11.0	3560	34	6.3	62	0.982		
16-45.1896-113.7250-2-12-			0-M35793			9734	505	14890	54	-3	7.7	5.8	-293	1	-1	11.7	3621	42	5.1	74	0.479		
16-45.1628-113.7844-2-15-			0-M35795			7351	502	13770	53	-3	8.3	5.8	-274	-1	-1	11.0	3926	41	5.1	90	0.355		
16-45.1565-113.7684-2-15-			0-M35796			8984	221	13970	41	-3	7.2	6.4	-245	-1	-1	11.3	3908	45	5.6		0.363		

APPENDIX II

HISTOGRAMS OF URANIUM CONCENTRATIONS IN WATER AND SEDIMENT SAMPLES
AND THORIUM CONCENTRATIONS IN SEDIMENT SAMPLES
FROM THE DILLON NTMS QUADRANGLE, MONTANA/IDAHO

APPENDIX II-A

Histograms of Uranium Concentrations in Water Samples
from the Dillon Quadrangle, Montana/Idaho

APPENDIX II-A HISTOGRAMS OF URANIUM CONCENTRATIONS IN WATER SAMPLES FROM THE DILLON QUADRANGLE, MONTANA/IDAHO ^a

a. All waters ^b

^b The 12 well waters are included in this histogram only.

b. Stream waters

c. Spring waters

^a Note that waters collected in the Montana portion of the quadrangle were analyzed to a lower detection limit of 0.2 ppb. Waters collected in the Idaho portion of the quadrangle and having uranium concentrations below 0.2 ppb were concentrated by a factor of 10 X and rerun to a lower detection limit of 0.02 ppb. Therefore, the interval between 0.05 and 0.10 principally represents samples below the detection limit in the Montana portion of the quadrangle, whereas the interval <0.01 represents concentrated samples below the detection limit in the Idaho portion of the quadrangle.

APPENDIX II-B

Histograms of Uranium Concentrations in Sediment Samples
from the Dillon Quadrangle, Montana/Idaho

APPENDIX II-B

HISTOGRAMS OF URANIUM CONCENTRATIONS IN SEDIMENT SAMPLES FROM THE DILLON QUADRANGLE, MONTANA/IDAHO

a. All sediments *

* The 7 dry spring sediments are included in this histogram only.

b. Wet stream sediments

c. Wet spring sediments

d. Dry stream sediments

APPENDIX II-C

Histograms of Thorium Concentrations in Sediment Samples
from the Dillon Quadrangle, Montana/Idaho

APPENDIX II-C

HISTOGRAMS OF THORIUM CONCENTRATIONS IN SEDIMENT SAMPLES FROM THE DILLON QUADRANGLE, MONTANA/IDAHO

a. All sediments

b. Wet stream sediments

c. Wet spring sediments

d. Dry stream sediments

APPENDIX III

STANDARD LASL HSSR PROCEDURES AND CODES

APPENDIX III-A

Summary of Standard LASL HSSR Field and Analytical Procedures

APPENDIX III-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-tenth 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 $\mu\text{mho/cm}$) of the source water is measured with a calibrated, temperature-compensated (25°C), portable meter. The scintillometer readings are measured with a portable scintillometer on a flat, dry spot within a few meters of the sample location at spring or stream sites. 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. Note that waters from both sampling contracts in the Montana portion of the quadrangle were run for uranium before the LASL began concentrating samples with uranium contents <0.2 ppb. Therefore, the lower detection in these samples is 0.2 ppb. Only samples in the Idaho portion of the quadrangle having uranium concentrations below 0.2 ppb were concentrated and rerun to a lower detection limit of 0.02 ppb. Whether concentrated or not (which can be determined from the uranium level in the listing), the fluorometric analytical precision is $\sqrt{30\%}$ at the lower detection limit, $\sqrt{20\%}$ at one order of magnitude above this, and $\sqrt{10\%}$ 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 >10 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 0.2 ppb. The statistical error of this method is $\sqrt{20\%}$ at a uranium concentration of 1 ppb, $\sqrt{6\%}$ 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 $9.2 \times 10^{-9} \text{ m}^3/\text{s}$. 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 $\sim 50\%$ at the lower detection limit, improving to $\sim 10\%$ one order of magnitude above the lower detection limit and to $\sim 5\%$ two orders of magnitude above the detection limit.

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 (less the tare), and its weight 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 20 ppb (not ppm) uranium, 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 multi-channel 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 7.5-mg portion of the minus 325-mesh sample that has already been analyzed by x-ray fluorescence is mixed with 7.5 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 17A. A 60-s exposure of the resulting spectrum is made on a direct-reading spectrograph. Photomultiplier tubes 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 30 ppm and the 610.3-nm line of Li is used for concentrations above 30 ppm. The V line is used to correct the Be value when V is above 1000 ppm. The signals from the photomultiplier tubes are read by a digital voltmeter and are processed by a desktop 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 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 III-B

Explanation of Codes Used in Appendix I

APPENDIX III-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," Appendix D-II.

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.

<u>Location Numbers</u>	<u>State</u>
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 that 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 that was measured in the shade at the time of sampling, to the nearest whole degree Celsius (°C).

WATER TEMPERATURE: The temperature that was measured in the sample water (in situ whenever possible) at the time of sampling, to the nearest one-tenth of a degree Celsius (0.1°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, that was measured in the water at the sample location at the time of sampling.

CONDUCTIVITY: The conductivity, in $\mu\text{mho/cm}$, that was 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
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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 in water 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 Appendix A.

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 Appendix A-II); and d) a blank space in the data listings for any elemental concentration signifies that no analytical result was obtained for that element.

APPENDIX III-C

Key to Sample Types Listed in Appendix I

APPENDIX III-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.

<u>KEY NO.</u>	<u>SOURCE / MEDIUM / TREATMENT</u>
06	- <u>Spring water</u> sample <u>filtered</u> through a 0.45- μ membrane filter <u>and acidified</u> to a pH of ≤ 1 with reagent-grade nitric acid (HNO_3).
07	- <u>Stream water</u> sample <u>filtered</u> through a 0.45- μ membrane filter <u>and acidified</u> to a pH of ≤ 1 with reagent-grade nitric acid (HNO_3).
08	- <u>Well water</u> sample <u>filtered</u> through a 0.45- μ membrane filter <u>and acidified</u> to a pH of ≤ 1 with reagent-grade nitric acid (HNO_3).
11	- <u>Wet spring sediment</u> sample <u>dried</u> at $\leq 100^\circ\text{C}$ and <u>sieved to -100 mesh</u> through stainless steel sieves.
12	- <u>Wet stream sediment</u> sample <u>dried</u> at $\leq 100^\circ\text{C}$ <u>and sieved to -100 mesh</u> through stainless steel sieves.
15	- <u>Dry stream sediment</u> sample <u>dried</u> at $\leq 100^\circ\text{C}$ (if necessary) <u>and sieved to -100 mesh</u> through stainless steel sieves.
99	- <u>Dry spring sediment</u> sample <u>dried</u> at $\leq 100^\circ\text{C}$ (if necessary) <u>and sieved to -100 mesh</u> through stainless steel sieves.

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LA-7347-MS

PLATE I

EXPLANATION

Modified from Fugro, 1978.

GEOLOGIC MAP OF THE
DILLON NTMS QUADRANGLE, MONTANA/IDAHO UNIVERSITY OF CALIFORNIA
LOS ALAMOS SCIENTIFIC LABORATORY
Post Office Box 1663, Los Alamos, New Mexico 87545
An affirmative action/equal opportunity employer

SHOON	VALLEY	CLARK	SHERY	HARRIS	GLASS	WOLF
SPokane	Wallace	Chertau	Great	Lowdown	Jordan	Quinn
Hamilton	Butte	Wells	Kearney	Forster	Wells	City
Beaumont	Bellevue	Robison	Blundell	Harris	Blundell	Blundell
Murphy	Ashton

GEOLOGIC SYMBOLS

- Formation contact. Dashed where approximately located, queried where location uncertain.
- Fault showing relative vertical movement. U, up and D, down. Dashed where approximately located, dotted where concealed, and queried where location uncertain. Barbs indicate thrust or low-angle reverse fault.
- Syncline, showing axial trace.

DILTON NTMS QUADRANGLE, MONTANA/IDAHO

SAMPLE LOCATION OVERLAY FOR THE

U.S. GEOLOGICAL SURVEY
BULLETIN 1465
1972

The LAZ sample location numbers above are the same as those used in APPENDIX 1A and 1B, except the leading two alphanumeric characters have been dropped.

LEGEND

SYMBOLS	CONCENTRATIONS (ppb)
◇ SPRING	0.00 - 0.20
□ SURFACE STREAM	0.21 - 0.50
○ WELL	0.51 - 1.00
	1.01 - 2.00
	2.01 - 5.00
	5.01 - 10.00
	10.01 - 20.00
	> 20.00

URANIUM CONCENTRATIONS (ppb) IN WATERS
OVERLAY TO THE
DILLON NTMS QUADRANGLE, MONTANA/IDAHO

 University of California
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LEGEND

SYMBOLS	CONCENTRATIONS ($\mu\text{mho/cm}$)
◇ SPRING	0 - 50
□ SURFACE STREAM	51 - 100
○ WELL	101 - 200
	201 - 500
	501 - 1000
	1001 - 2000
	2001 - 5000
	> 5000

SCALE 1:250 000
 5 10 15 20 25 30 Miles
 5 10 15 20 25 30 Kilometers

CONDUCTIVITIES ($\mu\text{mho/cm}$) IN WATERS
 OVERLAY TO THE
 DILLON NTMS QUADRANGLE, MONTANA/IDAHO

University of California
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DILON NTMS QUADRANGLE, MONTANA/IDAHO OVERLAY TO THE CONDUCTIVITIES (umho/cm) IN WATERS

UNIVERSITY OF CALIFORNIA
 DAVIS
 POST OFFICE BOX 245000
 DAVIS, CALIFORNIA 95624-5000

LEGEND

SYMBOLS	CONCENTRATIONS (umho/cm)
◇ SPRING	0 - 50
□ SURFACE STREAM	51 - 100
○ WELL	101 - 500
	501 - 1000
	1001 - 5000
	5001 - 20000
	> 20000

LEGEND

SYMBOLS	CONCENTRATIONS (ppm)				
◇ WET SPRING	◇	◇	◇	+	0.00 - 2.00
□ WET STREAM	◇	◇	◇	+	2.01 - 4.00
⊠ DRY STREAM	◇	◇	◇	+	4.01 - 6.00
+	◇	◇	◇	+	6.01 - 8.00
	◇	◇	◇	+	8.01 - 10.00
	◇	◇	◇	+	10.01 - 20.00
	◇	◇	◇	+	20.01 - 40.00
	◇	◇	◇	+	> 40.00

URANIUM CONCENTRATIONS (ppm) IN SEDIMENTS
OVERLAY TO THE
DILLON NTMS QUADRANGLE, MONTANA/IDAHO

University of California
LOS ALAMOS SCIENTIFIC LABORATORY
Post Office Box 1663 Los Alamos, New Mexico 87545
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DILLON NTMS QUADRANGLE, MONTANA/IDAHO
OVERLAY TO THE
URANIUM CONCENTRATIONS (ppm) IN SEDIMENTS

LEGEND

SYMBOLS	CONCENTRATIONS (ppm)
◇ WET SPRING	0.00 - 5.00
◇ WET SPRING	5.01 - 10.00
◇ WET SPRING	10.01 - 20.00
◇ WET SPRING	20.01 - 40.00
◇ WET SPRING	> 40.00
□ WET STREAM	0.00 - 5.00
□ WET STREAM	5.01 - 10.00
□ WET STREAM	10.01 - 20.00
□ WET STREAM	20.01 - 40.00
□ WET STREAM	> 40.00
⊠ DRY STREAM	0.00 - 5.00
⊠ DRY STREAM	5.01 - 10.00
⊠ DRY STREAM	10.01 - 20.00
⊠ DRY STREAM	20.01 - 40.00
⊠ DRY STREAM	> 40.00
+ DRY SPRING	0.00 - 5.00
+ DRY SPRING	5.01 - 10.00
+ DRY SPRING	10.01 - 20.00
+ DRY SPRING	20.01 - 40.00
+ DRY SPRING	> 40.00

LA-7347-M2

PLATE VI

LEGEND

SYMBOLS	CONCENTRATIONS (ppm)
◇ WET SPRING	0.00 - 5.00
◇ WET SPRING	5.01 - 10.00
◇ WET SPRING	10.01 - 15.00
◇ WET SPRING	15.01 - 20.00
◇ WET SPRING	20.01 - 30.00
◇ WET SPRING	30.01 - 40.00
◇ WET SPRING	40.01 - 60.00
◇ WET SPRING	60.01 - 80.00
◇ WET SPRING	> 80.00
□ WET STREAM	0.00 - 5.00
□ WET STREAM	5.01 - 10.00
□ WET STREAM	10.01 - 15.00
□ WET STREAM	15.01 - 20.00
□ WET STREAM	20.01 - 30.00
□ WET STREAM	30.01 - 40.00
□ WET STREAM	40.01 - 60.00
□ WET STREAM	60.01 - 80.00
□ WET STREAM	> 80.00
⊠ DRY STREAM	0.00 - 5.00
⊠ DRY STREAM	5.01 - 10.00
⊠ DRY STREAM	10.01 - 15.00
⊠ DRY STREAM	15.01 - 20.00
⊠ DRY STREAM	20.01 - 30.00
⊠ DRY STREAM	30.01 - 40.00
⊠ DRY STREAM	40.01 - 60.00
⊠ DRY STREAM	60.01 - 80.00
⊠ DRY STREAM	> 80.00
+ DRY SPRING	0.00 - 5.00
+ DRY SPRING	5.01 - 10.00
+ DRY SPRING	10.01 - 15.00
+ DRY SPRING	15.01 - 20.00
+ DRY SPRING	20.01 - 30.00
+ DRY SPRING	30.01 - 40.00
+ DRY SPRING	40.01 - 60.00
+ DRY SPRING	60.01 - 80.00
+ DRY SPRING	> 80.00

DILON NTMS QUADRANGLE, MONTANA/IDAHO
OVERLAY TO THE
THORIUM CONCENTRATIONS (ppm) IN SEDIMENTS

U.S. GEOLOGICAL SURVEY
BULLETIN 1452
1972