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Informal Report

Uranium Hydrogeochemical and Stream Sediment Reconnaissance of the Casper NTMS Quadrangle, Wyoming, Including Concentrations of Forty-Two Additional Elements

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by

Carol M. LaDelfe

ABSTRACT

As part of the National Uranium Resource Evaluation, the Los Alamos Scientific Laboratory conducted a Hydrogeochemical and Stream Sediment Reconnaissance in the Casper National Topographic Map Series quadrangle, Wyoming. Samples were collected in the fall of 1977 from 1553 locations within an area of 18 400 km^2 and included 536 water samples and 1370 sediment samples. Water samples were analyzed for uranium elements by delayed neutron counting and fluorometry. Sediment samples were analyzed for uranium, thorium, and 41 additional elements by neutron activation analysis, x-ray fluorescence, and arc-source emission spectroscopy. All field and analytical data are listed in the appendixes but only uranium and thorium are discussed in any detail in this report.

In general, the data show a close correlation with the numerous occurrences of uranium in the Casper quadrangle. The quadrangle contains three major uranium mining areas--the Gas Hills, Crooks Gap, and Shirley Basin areas. High uranium values in water and sediment samples correlate strongly with the Gas Hills area and to a lesser degree with the other areas of uranium occurrence. Our data show high concentrations on the south flank of Crooks Mountain and in areas around the Precambrian crests of the Pedro, Shirley, and Laramie Mountains, most of which are also associated with known occurrences, but which may deserve another look.

Thorium concentrations tend to be highest in sediments from the southwest corner of the quadrangle. The median concentration of thorium in this area is twice that of the whole Casper quadrangle. A strong correlation between thorium and cerium suggests monazite or other resistate minerals in that region. The high thorium values and correlating low uranium-to-thorium (U/Th) ratios within this area may provide new evidence for predominating southwestward drainage patterns from the uplifted Granite Mountains of earliest Eocene time. This observation may be of significant consequence to uranium exploration in the Great Divide Basin. High thorium and related low U/Th ratios were not observed in samples from the Wind River Basin north of the Granite Mountains.

The Casper quadrangle contains many documented subeconomic uranium occurrences in addition to active mining areas. The data from this study correlate well with known uranium occurrences and perhaps may lead to reevaluation of some undeveloped areas.

I. INTRODUCTION

Uranium and other elemental data resulting from the Hydrogeochemical and Stream Sediment Reconnaissance (HSSR) of the Casper National Topographic Map Series (NTMS) quadrangle, Wyoming, by the Los Alamos Scientific Laboratory (LASL) are reported herein. The LASL is responsible for conducting the HSSR primarily in the Rocky Mountain states of New Mexico, Colorado, Wyoming, and Montana and in Alaska (Sharp, 1977). This study was conducted as part of the United States Department of Energy's National Uranium Resource Evaluation (NURE), which is designed to provide an improved estimate for the availability and economics of nuclear fuel resources and made available to industry information for use in the development and production of uranium resources. The HSSR data will ultimately be integrated with data from other NURE programs (e.g., airborne radiometric surveys and geological investigations) to complete the entire NURE program by 1985.

Field samples were collected by a private contractor for the LASL between August 14 and November 25, 1977. Totals of 536 water and 1370 sediment samples were collected from 1553 locations for an average areal density of one location per 11.8 km^2. All field and analytical data are presented in Appendix I, and these data are available on magnetic tape from: GJOIS Project, Union Carbide Corporation National Depository (UCC-ND), Computer Applications Department, 4500 North Building, Oak Ridge National Laboratory, P. O. Box X, Oak Ridge, Tennessee 37830. Standardized field and analytical procedures (Appendix IV-A) were used to facilitate data comparison within the quadrangle as well as future comparison with data from surrounding areas.

II. DESCRIPTION OF STUDY AREA

Location and Geographic Setting

The Casper NTMS quadrangle covers approximately 18 400 km^2 in central Wyoming and is bounded by latitudes 42° and 43°N and longitudes 106° and 108°W (Fig. 1). The quadrangle includes portions of Albany, Carbon, Converse, Natrona, Fremont, and Sweetwater Counties (USGS, 1955).

Nearly all of the Casper quadrangle lies within the Wyoming Basin physiographic province with the major exception of the Laramie Mountains (Fenneman, 1931). The Laramie Mountains represent the northernmost extension of the Southern Rocky Mountain physiographic province and form the eastern boundary of the Wyoming Basin region. The Middle Rocky Mountain province bounds the basin region on the southwest, west, and north so that the basin region forms a gap in the rugged Rocky Mountain chain.

Climate

In general, the climate of the study area is semi-arid, cool, and windy. Elevations range from 1560 to 3060 m so that micro-climates and their associated vegetation vary from the sparse grass of the arid Great Divide Basin, where precipitation averages 180 mm per year, to the alpine forests that cap some of the mountain ranges, where precipitation averages 300 mm per year. The average annual temperature of the National Oceanic Atmospheric Administration (NOAA) reporting stations within the quadrangle is 7°-8°C. Temperature extremes reported at the Casper airport in 1977, the year that the samples were collected for this study, were from -31° to 36°C (NOAA, 1977).

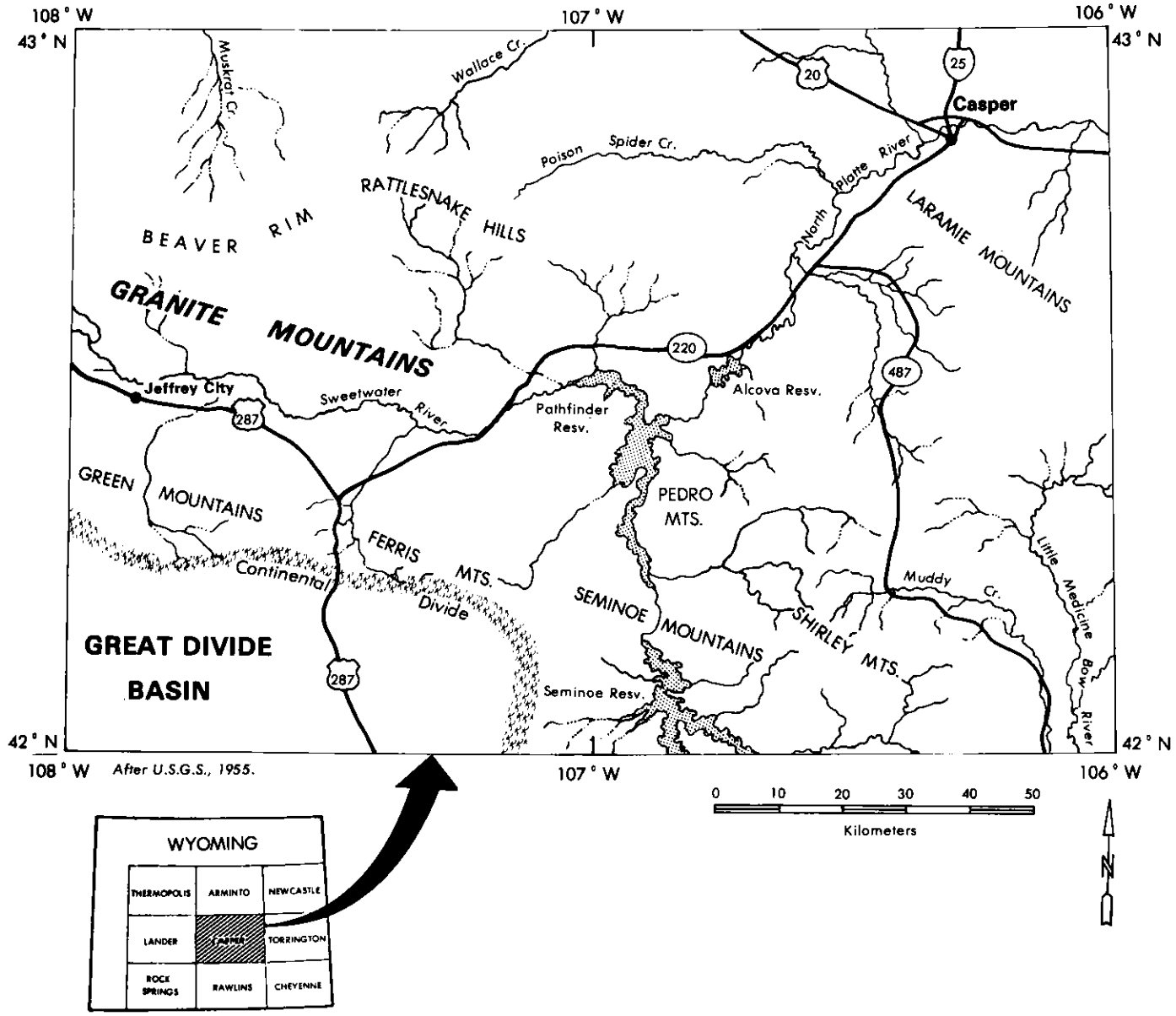


Fig. 1. Location map of the Casper NTMS quadrangle, Wyoming.

Specific weather conditions were noted for each sample location at the time of sampling and are included with the data listings in Appendixes I-A and I-B.

Hydrology

The Casper quadrangle includes portions of the North Platte, Big Horn, and Powder River drainages plus the Great Divide Basin. The Great Divide Basin in the southwest corner of the quadrangle is surrounded by the Continental Divide with resultant internal drainage. The Big Horn drainage extends north from the Beaver Rim in the northwest corner of the quadrangle, and the Powder River drainage northeast from the Rattlesnake Hills (Fig. 1). The remainder of the quadrangle is drained by the North Platte River and its tributaries--the Sweetwater River and the Little Medicine Bow River.

Because of the ephemeral character of most streams in the quadrangle, ground water is of primary importance for domestic, livestock, and industrial

purposes. Ground water has been produced from nearly all the geologic formations that outcrop in the Casper quadrangle, from Precambrian granites to Quaternary alluvium.

The late Paleozoic Madison limestone, Tensleep sandstone, and Casper formation have potentially a great groundwater yield to wells in the area, although depths to these aquifers make them uneconomical except near outcrops. A petroleum company reported artesian flow from a 2300-m-deep well in Madison limestone southeast of Casper (Crist and Lowry, 1972). There are also flowing wells reported from the Tensleep sandstone in the Rattlesnake Hills. Stock wells in the northeast and southeast portions of the quadrangle are commonly in Cretaceous rock of predominantly marine origin; conductivities of the waters from these aquifers tend to be >1000 micromhos per centimeter (μmho/cm), and in some areas they are >5000 μmho/cm (Christ and Lowry, 1972). The Eocene Wind River formation is the source for large supplies of water in the Gas Hills area and for domestic and stock use in much of the quadrangle (Whitcomb and Lowry, 1968). Quality of water from Tertiary rocks, including the Wind River formation, varies widely over the area. Municipal supplies from the Wind River formation for the city of Riverton, west of the study area, contain approximately 350-500 parts per million (ppm) total dissolved solids, have an average pH of greater than 8.0, and are of a sodium bicarbonate type (Whitcomb and Lowry, 1968). Water from the Wind River formation in the Gas Hills tends to be a very hard calcium sulfate type, with over 1100 ppm total dissolved solids, pH of 7.5, and, from uraniferous zones, radioactivity levels too high for use as a domestic or stock water supply. The Wind River formation in the Shirley Basin provides mostly calcium bicarbonate waters with total dissolved solids in the 100-750 ppm range. Radium concentrations in Shirley Basin groundwater range up to 1700 pCi/ℓ, far exceeding the 3.0 pCi/ℓ limit recomended by the US Public Health Service for potable water (Lowry et al, 1973).

Quaternary alluvium is the most promising aquifer in much of the quadrangle. In Natrona County, wells have been developed in this aquifer for the city of Casper and for irrigation, stock, and domestic use in other parts of the county with discharges of up to 82 ℓ/s (Crist and Lowry, 1972).

III. GEOLOGY

Stratigraphy

The Casper quadrangle is underlain by early Precambrian basement rocks known as the Wyoming Province (Houston, 1971). These rocks are approximately equivalent in age (>2.5 b.y.) to the Superior Province of the Canadian Shield. The oldest exposed rocks within the study area are an iron formation-graywacke suite of early Precambrian age. These rocks have been intruded by granite and pegmatite dated at 2.5 b.y. Outcrops of Precambrian rock in the Wyoming Province include remnants of hornblende gneisses, probable metavolcanics, and metasediments (Houston, 1971).

Paleozoic and Mesozoic sediments (summarized in Table I) consist chiefly of marine deposits with greater thicknesses of Mesozoic rocks reflecting orogeny in geosynclines west of Wyoming (Houston, 1969).

Cenozoic sediments within the study area (Table I) are primarily continental clastics shed by uplift produced during the Laramide orogeny. Thick Paleocene coal beds are present in the Hanna, Shirley, and Great Divide Basins. Lower Eocene rocks are claystones at the bottom, grading into arkosic

TABLE I

STRATIGRAPHIC UNITS OF THE CASPER QUADRANGLE, WYOMING

	Wind River Basin/Shirley Basin	Great Divide Basin
Tertiary		
Pliocene	Moonstone fm	
Miocene	Split Rock fm	Browns Park fm
Oligocene	White River fm	White River fm
Eocene	Wagon Bed fm	Bridger fm
	Wind River fm	Crooks Gap conglomerate
		Wasatch & Battle Spgs. fm
Paleocene	Fort Union fm/Hanna fm	Fort Union fm
Cretaceous	Lance fm	Lance fm
Upper	Meeteetse fm	Fox Hills sandstone
	Lewis shale	Lewis shale
	Mesaverde fm (group)	Mesaverde group
	Teapot sandstone	Almond fm
	Middle member	Ericson fm
	Lower member	Rock Springs fm
		Blair fm
	Cody shale/Steele shale	
		Niobrara fm
		Carlile shale
	Frontier fm	Frontier fm
Lower	Mowry shale	Mowry shale
	Muddy sandstone	Muddy sandstone
	Thermopolis shale	Thermopolis shale
	Cloverly fm	Cloverly fm
		"Rusty Beds"
Jurassic	Morrison fm	
Upper	Sundance fm	Sundance fm
Middle	Gypsum Springs fm	
Lower	Nugget sandstone	Nugget sandstone
Triassic		
	Chugwater group	Chugwater group
	Popo Agie fm	Popo Agie fm
	Jelm fm	Jelm fm
	Alcova limestone	Alcova limestone
	Red Peak fm	Red Peak fm
Permian	Goose Egg fm	
Pennsylvanian	Tensleep sandstone/Casper fm	Tensleep sandstone
Mississippian	Madison limestone	Madison limestone
Cambrian	Gallatin group	
	Gros Ventre fm	Buck Spring fm
	Flathead sandstone	Flathead sandstone
Precambrian	Complex metamorphics and intrusives	

Adapted from Love et al, 1979, and Wyoming Geological Association, 1969.

conglomerates. The coarsest deposit at the top of this sequence is the Crooks Gap conglomerate, composed of "giant granite boulders in a coarse arkosic sandstone matrix," (Love et al, 1979). Middle and Upper Eocene sediments through the Pliocene or Pleistocene sediments are chiefly tuffaceous sandstones to claystones with interbedded pumicites, tuff, arkosic conglomerates, and other clastics. Quaternary sediments include landslide and playa deposits, terrace and pediment gravels, windblown sand, alluvium, and colluvium.

Igneous History

Igneous rocks of early Precambrian age crop out on the crests of all major mountain ranges in the quadrangle (Fig. 2). Granites are the most common of these and uranium concentrations vary from an average of 4 ppm in granites of the Shirley and Pedro Mountains to 20-30 ppm in granites of the Granite Mountains (Houston, 1969).

Cenozoic Igneous activity within the quadrangle occurred in the Rattlesnake Hills with middle Eocene felsic eruptions from 36 vents in an area of 324 km^2. The influence on subsequent sediments appears to have been confined to an area within 50 km of the vents (Love, 1970). The Oligocene to Pliocene eruption of the Absaroka-Yellowstone centers in northwest Wyoming, well outside this study area, resulted in thick deposits of tuffaceous

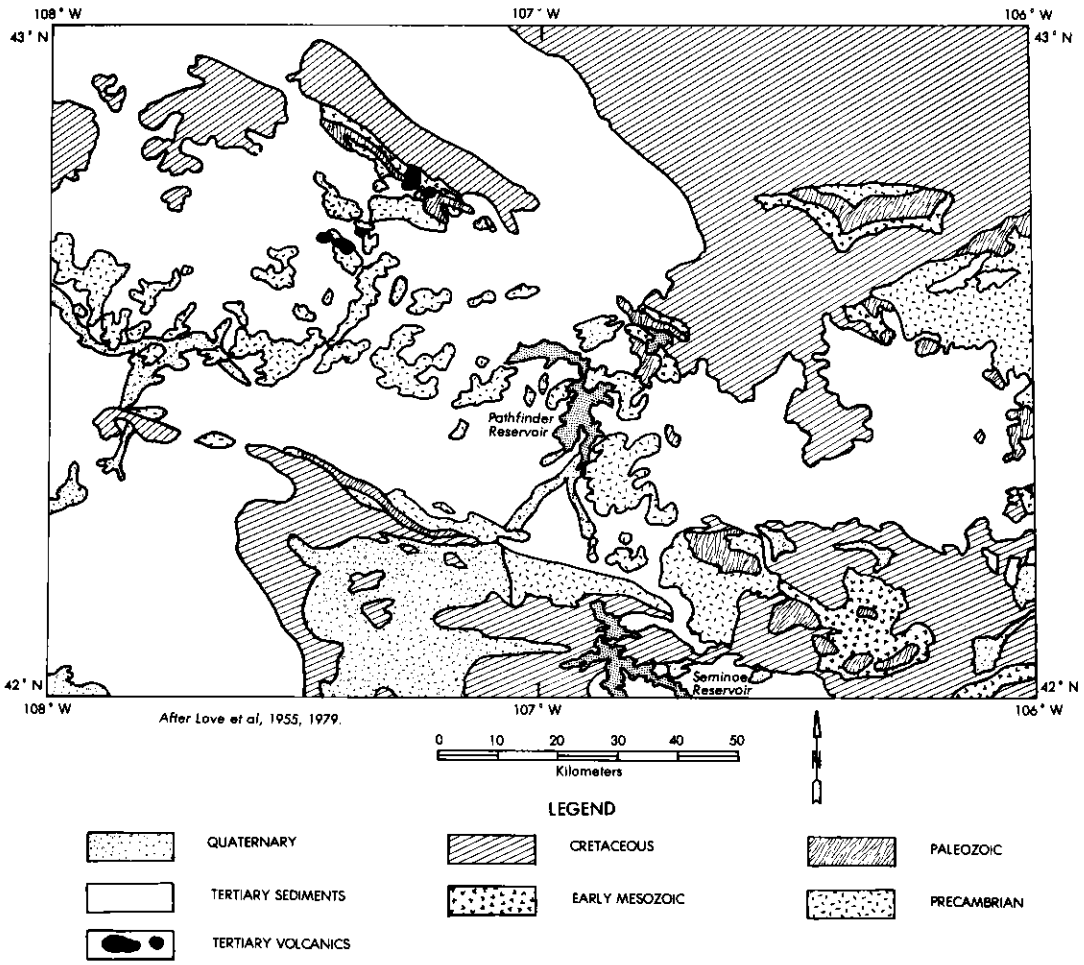


Fig. 2. General geologic map of the Casper quadrangle, Wyoming.

sediment in the Shirley and Powder River basins and probably had a significant impact on uranium deposits now found in those areas (Houston, 1969; McGrew, 1971).

Structure

The Granite and Laramie Mountains, the Shirley, Wind River, and Great Divide Basins, and the Casper arch are the major structural units within the Casper quadrangle (Fig. 3).

Development of the basins and mountain ranges began with the onset of the Laramide orogeny in the latest Cretaceous. By earliest Eocene time, compressional forces had resulted in southward thrust faulting of the Granite Mountain block along the South Granite Mountains fault system. Maximum

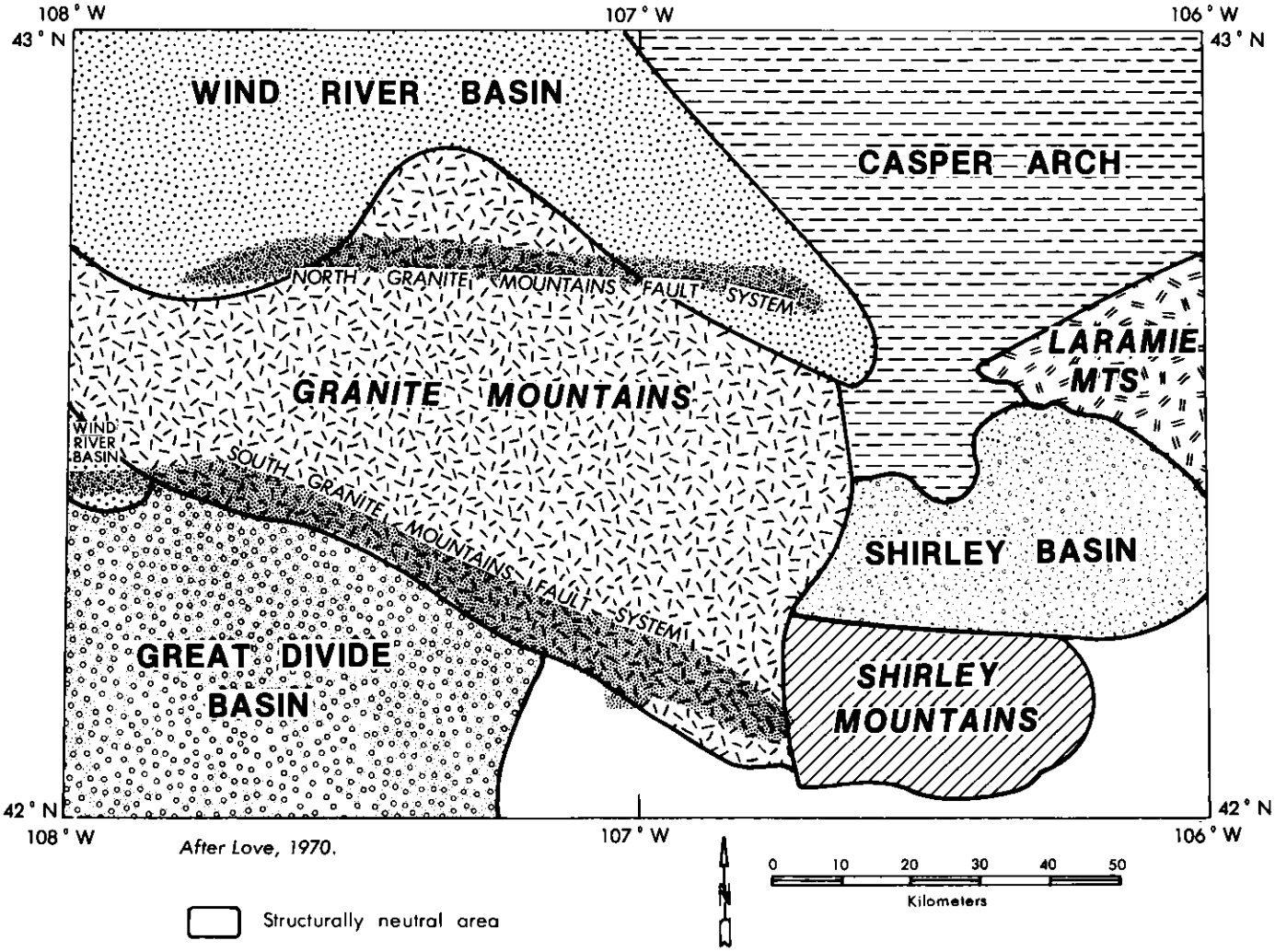


Fig. 3. Major structural element map of the Casper quadrangle, Wyoming.

structural relief on the Precambrian basement with respect to the Great Divide Basin probably exceeded 11 000 m by middle Eocene and perhaps 13 500 m with respect to the Wind River Basin (Love, 1970). In the Pliocene and Pleistocene the Granite Mountains subsided along normal faults in the North and South Granite Mountains fault systems with the axis of subsidence along the Split Rock syncline (Love, 1970). The present (net) structural relief is uncertain, but maximum stratigraphic displacement exceeds 6000 m along the Emigrant Trail thrust fault on the southwest boundary of the Granite Mountains, and Precambrian basement relief is probably over 9000 m with respect to the Great Divide Basin (Keefer, 1970; Love, 1970).

The Green, Ferris, and Seminoe Mountains are remnants of the overturned sheared-off limb of the South Granite Mountains fold-thrust structure that remained after the collapse of the Granite Mountain block (Sales, 1971).

IV. ECONOMIC RESOURCES

Uranium

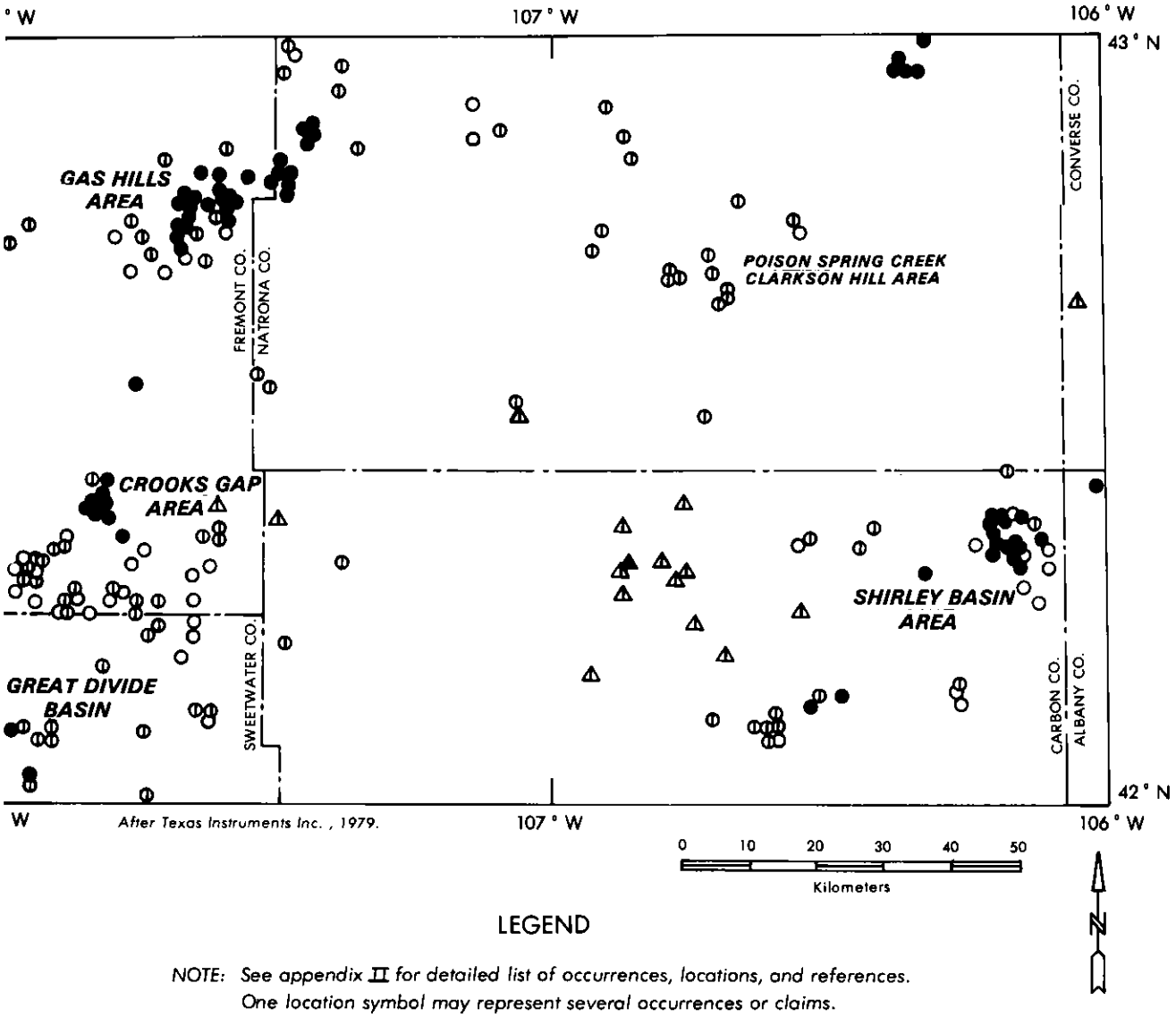
Significant quantities of uranium have been found within the Casper quadrangle since the first mining began in the early 1950s (Fig. 4 and Appendix II). Mines and mills at Crooks Gap, Gas Hills, and Shirley Basin have produced the majority of uranium from Wyoming sources. Exploration is continuing at a rapid rate. In 1977, for example, 4.7 million meters of exploration drilling was completed in Wyoming as compared to 2.8 million meters in New Mexico. Land holdings for uranium exploration and mining increased by 38% to about 48 000 km^2 during that same year. The greatest new production potential is most likely in the Powder River Basin, just northeast of the Casper quadrangle, and in the Red Desert district, in and adjacent to the southwestern corner of the quadrangle, but important new discoveries are said to be probable in the areas of the Gas Hills, Crooks Gap, and Shirley Basin (Nuclear Fuel, 1979).

Production of uranium from the Gas Hills district in Fremont and Natrona Counties (northwest corner of Casper quadrangle) began in 1954 and had resulted in a cumulative total of more than $100 million worth of uranium by 1975 (Mardirosian, 1976). Mineralization is in the Puddle Springs arkose member of the early Eocene Wind River formation, with some uranium occurrences reported in the Triassic Chugwater formation. Principle uranium production minerals include coffinite and uraninite, with associated enrichment in molybdenum, arsenic, and selenium (Anderson, 1969).

The value of production from the Shirley Basin has also exceeded $100 million (Mardirosian, 1976). Economic mineralization is in arkosic sandstone beds of the Wind River formation with sub-economic mineralization reported in the Oligocene White River formation. Some claims just to the northeast of Shirley Basin are reported to be in the Permo Pennsylvanian Casper formation (Elevatorski, 1976). The uranium produced in the Shirley Basin occurs as uraninite and occurs with pyrite, ferroselite ($FeSe_2$), selenium, hematite, and calcite (Harshman, 1972).

Production has been in the 10- to 100-million-dollar range from the Crooks Gap area on the north edge of the Great Divide Basin (Mardirosian, 1976). Mineralization is primarily in the lower member of the lower Eocene Battle Springs formation with no apparent accessory elements (Stephens, 1964).

Other uranium occurrences are found in numerous areas of the quadrangle (Fig. 4 and Appendix II) and development is continuing in such areas as Nine



LEGEND

NOTE: See appendix II for detailed list of occurrences, locations, and references. One location symbol may represent several occurrences or claims.

- ● Proven production from phanerozic sedimentary deposits.
- ◍ Proven occurrence in sedimentary rock.
- ○ Radioactive anomaly in sedimentary rock.
- ▲ Proven production from Precambrian rock.
- ⚠ Proven occurrence in Precambrian rock.

1. Location map of uranium occurrences in the Casper quadrangle, Wyoming.

le Lake, north of Casper, where an in situ acid-leach test facility was cated in 1976 to attempt uranium recovery from the Teapot sandstone member the Mesaverde formation. Here, concentration of U_3O_8 averaged 100 ppm the produced leachate solution and plans have been completed for a com-rcial facility (Phillips, 1978).

Non-uranium Minerals and Other Commodities

A wide variety of non-uranium minerals, industrial materials, and fossil fuels occur in the Casper quadrangle. The Mines and Minerals map of Wyoming (Geological Survey of Wyoming, 1970) shows occurrences of gold, silver, copper, lead, titanium, iron, chromium, manganese, lithium, arsenic, graphite, and thorium at various locations as well as deposits of industrial commodities such as sand, gravel, pumice, gypsum, and others. Several of Wyoming's vast coal fields extend into the Casper quadrangle and include the Great Divide Basin, Glenrock, Powder River, and Hanna fields (Elevatorski, 1975). Small oil and natural gas fields are located in each of the major basins within the quadrangle (Glass et al, 1975).

V. PRESENTATION OF ANALYTICAL AND STATISTICAL DATA

Water and water-borne sediment samples were collected from a total of 1553 locations as shown on Plate I (in pocket). Field measurements, weather, geologic, and geographic data for each sample location are listed for waters in Appendix I-A and for sediments in Appendix I-B. Waters were analyzed for uranium. 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. Results of these analyses are also listed in Appendix I-A for waters and I-B for sediments.

Samples were analyzed for all above elements at the LASL. Water samples were analyzed for total uranium by fluorometry and, in general, those samples containing more than 40 parts per billion (ppb) uranium were reanalyzed by delayed neutron counting (DNC). All sediments were analyzed for uranium by DNC and by x-ray fluorescence for nine elements, by arc-source emission spectrography for two elements, and by neutron activation analysis for the remaining thirty-one elements (see Appendix IV-A, "Procedures," for details).

The following sections are primarily discussions of clusters of samples that exhibited uranium concentrations above arbitrary thresholds of 20 ppb in waters and 14 ppm in sediments, and an area where many of the sediment samples exhibited thorium values well above the quadrangle median. The choice of these thresholds is not meant to imply that all samples with thus-defined concentrations of uranium are significant, but to facilitate the comparison of clusters of such samples with background and each other.

Uranium Concentrations in Water Samples

Plate II (in pocket) shows locations and relative uranium concentrations of the 536 water samples collected in the Casper quadrangle. Thirty-one percent or 165 of the water samples were taken from streams and the rest from groundwater sources (wells or springs). Uranium concentrations range from below the detection limit of 0.02 ppb to 1353.52 ppb. Statistics for uranium in all waters and in each sample type are shown with the semilogarithmic histograms in Appendix III-A. The histograms display an approximately log normal distribution of uranium in all waters and in each sample type, with the median uranium concentration in the 2-5 ppb range in all cases.

There are ten distinct clusters of water sample locations where the uranium concentration of each included sample is greater than 20 ppb uranium (Fig. 5). Twenty of the samples with >50 ppb uranium are from within these clusters, as indicated in Table II. Five percent or 25 of the water samples from the entire quadrangle contain more than 50 ppb uranium.

Cluster W1 is in and downstream from the Gas Hills uranium district. Uranium concentrations from the six locations included in the cluster range from 27.26 to 1353.52 ppb. Conductivities of the waters are moderately high (950 to 3500 µmho/cm), but there is little correlation between conductivity and uranium concentration among these samples. The mining district is along the Beaver Rim at the head of the Muskrat Creek drainage and ore bodies are in the early Eocene Wind River formation. The Muskrat Creek drainage cuts into Cretaceous rocks and the conductivities of the well and spring waters collected here may reflected the predominantly marine origin of local aquifers. Mining activity or tailings piles were visible from the stream and spring sample locations, so contamination is a likely contributor to the high uranium values from these samples. The wells are not as close to the mining area, and the one that yielded the 170.10-ppb value had been found to have a 120 ppb uranium concentration in 1954 (Soister, 1967). This may indicate aquifer contamination or a difference in handling and analysis of the samples.

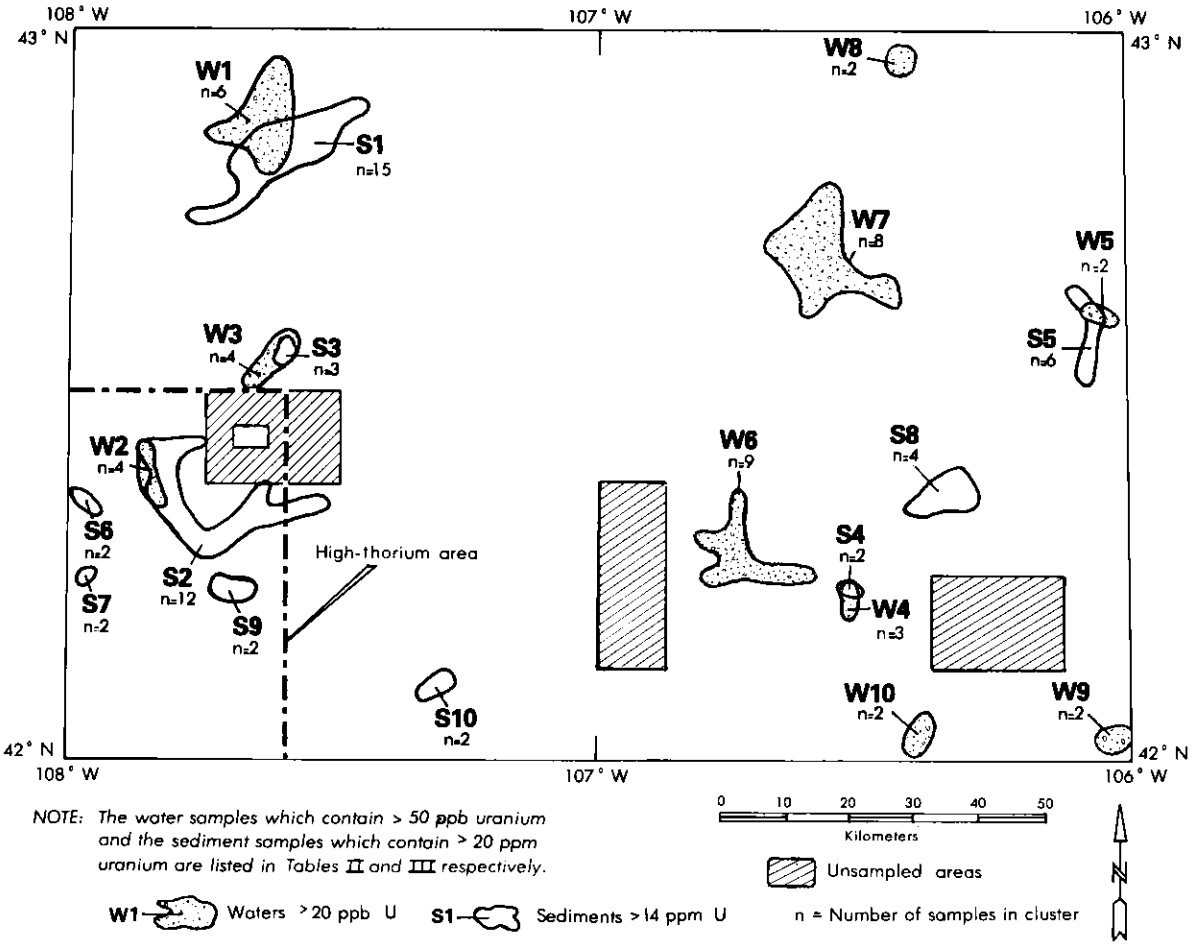


Fig. 5. Schematic diagram showing clusters of samples having high uranium and thorium concentrations from the Casper quadrangle, Wyoming.

TABLE II

WATER SAMPLES WITH URANIUM CONCENTRATIONS >50 PPB
FROM THE CASPER QUADRANGLE, WYOMING

Water Cluster	Sample Number	Sample Type	Uranium (ppb)	Conductivity (μmho/cm)	Location
W1	W14094	Well	51.48	1000	In Gas Hills; Muskrat
	W14605	Well	170.10	3500	Creek drainage basin
	W14657	Spring	297.99	1700	
	W14658	Stream	1327.32	950	
	W14659	Stream	1353.52	1000	
W2	W15010	Stream	58.99	800	Crooks Gap
W3	W15377	Spring	56.38	285	Sage Hen Creek
	W15378	Spring	66.01	90	
W5	W14165	Well	52.07	280	Deer Creek drainage in Laramie Mountains
W6	W15343	Stream	59.49	350	Pedro Mountains
	W15357	Spring	53.61	130	
	W15370	Spring	129.87	1500	
W7	W14789	Well	60.29	1680	Near North Platte River
	W14773	Stream	98.01	4700	and in Poison Spring
	W14860	Spring	78.79	1100	Creek drainage basin
W8	W14723	Well	108.66	310	In Cody fm north and west of Casper
W9	W15070	Well	63.26	1200	E. Medicine Bow River
	W15154	Well	130.09	600	drainage basin
W10	W15189	Spring	54.46	1200	W. Medicine Bow River
	W15410	Spring	59.16	1500	drainage basin
Isolated Samples					
	W14735	Well	161.29	2850	In Cody fm north and
	W14778	Well	98.01	650	west of Casper
	W14551	Well	108.92	1800	East Wind River Basin
	W15245	Stream	82.98	155	NE side of Green Mtns.
	W15316	Spring	265.32	2400	West of Tin Cup Mtn.

Cluster W2 includes waters from the Crooks Creek drainage. The Crooks Gap uranium mining area is adjacent to this cluster. Uranium concentrations from the four locations range from 22.47 to 58.99 ppb. Three of the four waters came from alluvium near Crooks Creek, while the spring sample (W15099) apparently flows from the Tertiary Wasatch and Battle Springs formations. The Crooks Gap ore bodies are primarily in these same formations (Appendix II). Mining activity was visible from sample locations W15008 and W15099, which produced uranium values of 22.47 ppb and 34.40 ppb, respectively. The only possible source of contamination mentioned by sample collectors for the other locations in the cluster was agricultural.

Cluster W3 is in the Sage Hen Creek drainage. Uranium concentrations range from 21.97 to 66.01 ppb in the four groundwater samples in this cluster. Conductivities are relatively low (90-430 µmho/cm). The three springs that have the higher uranium concentrations lie at or near the interface between Precambrian biotite granite and the Miocene Split Rock formation (Peterman and Hildreth, 1978) and near the western edge of the uraniferous Pliocene Moonstone formation (Love, 1970). Subeconomic uranium mineralization has been identified in a recent spring deposit along Sage Hen Creek (Appendix II).

Clusters W4, W5, and W6 are located on or adjacent to Precambrian rocks of the Shirley, Laramie, and Pedro Mountains. Cluster W4 is in the Shirley Mountains and consists of three water samples with uranium concentrations of from 20.76 to 34.44 ppb. The samples are from near the exposed interface of Precambrian rock with steeply tilted Mesozoic sediments (Love et al, 1979). Water samples from the entire Shirley Mountains area tend to have relatively high uranium concentrations, as can be seen on Plate II, and subeconomic uranium occurrences have been identified in both Precambrian rock and Phanerozoic sediments in the area (Fig. 4). Cluster W5 is in the Deer Creek drainage of the Laramie Mountains near a subeconomic occurrence of uranium in quartz monzonite (Appendix II). Cluster W6 is in the Pedro Mountains and consists of samples from nine locations with a uranium concentration range of from 23.21 to 129.87 ppb. The Little Man mine produced uranium from Precambrian rock in this area in 1954 and 1955. The mine is located approximately at the end of the west arm of the cluster near location W15357 (Plate I).

Cluster W7 consists of five well waters, two streams, and a spring. The wells are all located in Quaternary alluvium over upper Cretaceous sediments and have uranium levels of from 28.79 to 60.29 ppb. Conductivities range from 1400 to 1680 µmho/cm, and pH ranges from 6.1 to 7.6. The three other sample locations are in the Poison Spring Creek drainage basin and appear to be from a Cretaceous-rock environment. They have uranium concentrations ranging from 24.94 ppb to 98.01 ppb, and conductivities from 1100 to 4700 µmho/cm.

Several groundwater samples from Mesozoic rocks in the eastern half of the quadrangle contain relatively high uranium contents. Five wells in upper Cretaceous rock generally north of the city of Casper have uranium concentrations of from 21.94 to 161.29 ppb. Conductivities measured by sample collectors ranged from 228 to 2850 µmho/cm and pH measurements ranged from 6.6 to 7.5. Two of these wells constitute cluster W8. These wells are very close to the in situ acid-leach facility at Nine-Mile Lake (Phillips, 1978). Cluster W9 consists of two wells in the southeastern corner of the quadrangle. They are in Cretaceous rock near the Medicine Bow River. Two nearby springs, also in Cretaceous rock, form cluster W10. These springs are not far from a group of uraniferious springs reported by J. D. Love (1963).

Uranium Concentrations in Sediment Samples

Plate IV (in pocket) shows locations and relative uranium concentrations in the 1370 sediment samples collected in the Casper quadrangle. Seventy-two percent of the samples came from dry stream beds, reflecting the generally dry climate of the area. The statistical summary of uranium in Casper sediments is shown with the histograms for uranium in all sediments and individual sediment types in Appendix III-B. Uranium occurs in concentrations of >14 parts per million (ppm) in 5% or 68 of the sediment samples. The top 2.5% contain >20 ppm, up to as much as 163.20 ppm. Sediment samples with >20 ppm uranium are listed in Table III, along with their uranium/thorium (U/Th) ratios and location by cluster (Fig. 5) or note on general area.

Many of the sediment samples with uranium concentrations greater than the arbitrary threshold of 14 ppm were from locations clustered around known occurrences of uranium. The largest of these clusters (S1, Fig. 5) is located in the Gas Hills area with uranium concentrations of from 14.89 ppm to 163.20 ppm in samples from 14 locations. Sample collectors noted that most of these samples were collected within sight of uranium mine dumps, thus they are possibly contaminated. The very high uranium levels in waters of two streams and a spring (cluster W1) within the boundaries of the sediment cluster area support this suspicion.

The second major cluster (S2) is located in the Crooks Gap uranium area and on the western and southern flank of Green Mountain. The samples were collected from locations underlain by Tertiary Crooks Gap conglomerate, Wasatch formation, and Battle Springs formation (Love et al, 1979). These are all composed of granitic conglomerate and coarse arkosic sandstones. The southern-most locations in the S2 cluster are near surface radioactive anomalies in the Wasatch formation and an occurrence known as Big Bertha in the Battle Springs formation (Appendix II). Water cluster W2 corresponds generally to the northwestern side of cluster S2 along Crooks Creek.

A smaller cluster (S3) lies between the Gas Hills and Crooks Gap areas along Sage Hen Creek. Uranium concentrations in the sediment samples range from 32.84 to 106.80 ppm and may be related to the Sage Hen Creek uranium occurrence in recent calcareous tufa (Appendix II). Cluster S4 lies on the east side of the Shirley Mountains in an area of pronounced tectonic activity where steeply tilted Mesozoic rocks lie against the Precambrian and Paleozoic core of the Shirley Mountains. Like the nearby Pedro Mountains, the Shirley Mountains contain numerous documented occurrences (Fig. 4) and at least one is near this cluster. Another cluster (S5) occurs in the Deer Creek drainage of the Laramie Mountains. Six sediments and two waters yielded relatively high uranium levels. Sample collectors noted that two of the samples were from an igneous environment and uranium has been reported in nearby quartz monzonites (Appendix II).

Two small clusters lie within the closed drainage system of the Great Divide Basin south of Crooks Mountain. Cluster S6 is on the south slope of Crooks Mountain. One of the two samples exhibited >20 ppm uranium and the U/Th ratio was >1 in both. Cluster S7 is a few kilometers south of S6. Both samples have >20 ppm uranium and the U/Th ratios are 1.7 and 7.1.

Cluster S8 is a small cluster along the south edge of Bates Hole adjoining the Shirley Basin. Two of the three sediment samples have uranium contents of >20 ppm, but the U/Th ratio is only >1 in the southwesternmost sample.

TABLE III

SEDIMENT SAMPLES CONTAINING >20 PPM URANIUM FROM THE CASPER QUADRANGLE, WYOMING

Sediment Cluster	Sample Number	Sample Type	Uranium (ppm)	Thorium (ppm)	U/Th	Location/Geology
S1	W14104	Wet Spring	22.04	18.1	1.22	Gas Hills
	W14602	Dry Stream	159.60	34.8	4.59	
	W14603	Dry Stream	76.72	15.1	5.08	
	W14651	Dry Stream	82.74	56.6	1.46	
	W14652	Dry Stream	163.20	22.0	7.42	
	W14654	Dry Stream	35.40	33.8	1.05	
	W14656	Dry Spring	71.71	18.9	3.79	
	W14658	Wet Stream	24.98	38.5	0.65	
	W14659	Wet Stream	24.47	25.3	0.97	
	W14661	Dry Stream	25.85	18.1	1.43	
	W14672	Dry Stream	63.82	29.3	2.18	
	W15500	Wet Stream	22.08	249.0	0.09	
S2	W15023	Dry Stream	28.56	10.8	2.64	Crooks Gap/Green
	W15099	Wet Spring	90.41	35.3	2.56	Mountain
	W15100	Wet Stream	35.69	239.4	0.15	
	W15010	Wet Stream	22.29	273.7	0.08	
	W15120	Wet Stream	22.78	38.0	0.60	
	W15127	Wet Stream	25.08	136.2	0.18	
S3	W15377	Wet Spring	38.83	13.6	2.86	Sage Hen Creek
	W15378	Wet Spring	32.84	17.8	1.84	
	W15379	Dry Stream	106.80	58.4	1.83	
S4	W15448	Dry Stream	50.43	28.0	1.80	Shirley Mountains
	W15450	Wet Spring	90.76	16.7	5.44	
S5	W14755	Dry Stream	20.07	58.3	0.34	Deer Creek drainage of Laramie Mountains
S6	W14428	Wet Stream	22.15	20.8	1.06	South side of Crooks Mountain
S7	W14486	Dry Stream	74.31	10.4	7.15	N. Great Divide
	W14487	Wet Spring	46.02	27.7	1.66	Basin
S8	W15267	Wet Spring	111.90	16.4	6.82	S. Bates Hole
	W15282	Wet Stream	20.21	169.2	0.12	
S10	W15055	Wet Stream	26.10	229.9	0.11	NE Great Divide Basin
Isolated Samples						
	W14401	Dry Stream	96.55	319.8	0.30	Red Desert of
	W14422	Dry Spring	20.87	31.2	0.67	Great Divide Basin
	W14828	Wet Spring	27.11	11.1	2.44	N of Pathfinder Reservoir
	W15357	Wet Spring	35.86	11.8	3.04	Pedro Mountains
	W14283	Wet Spring	23.36	6.8	3.44	Rattlesnake Hills

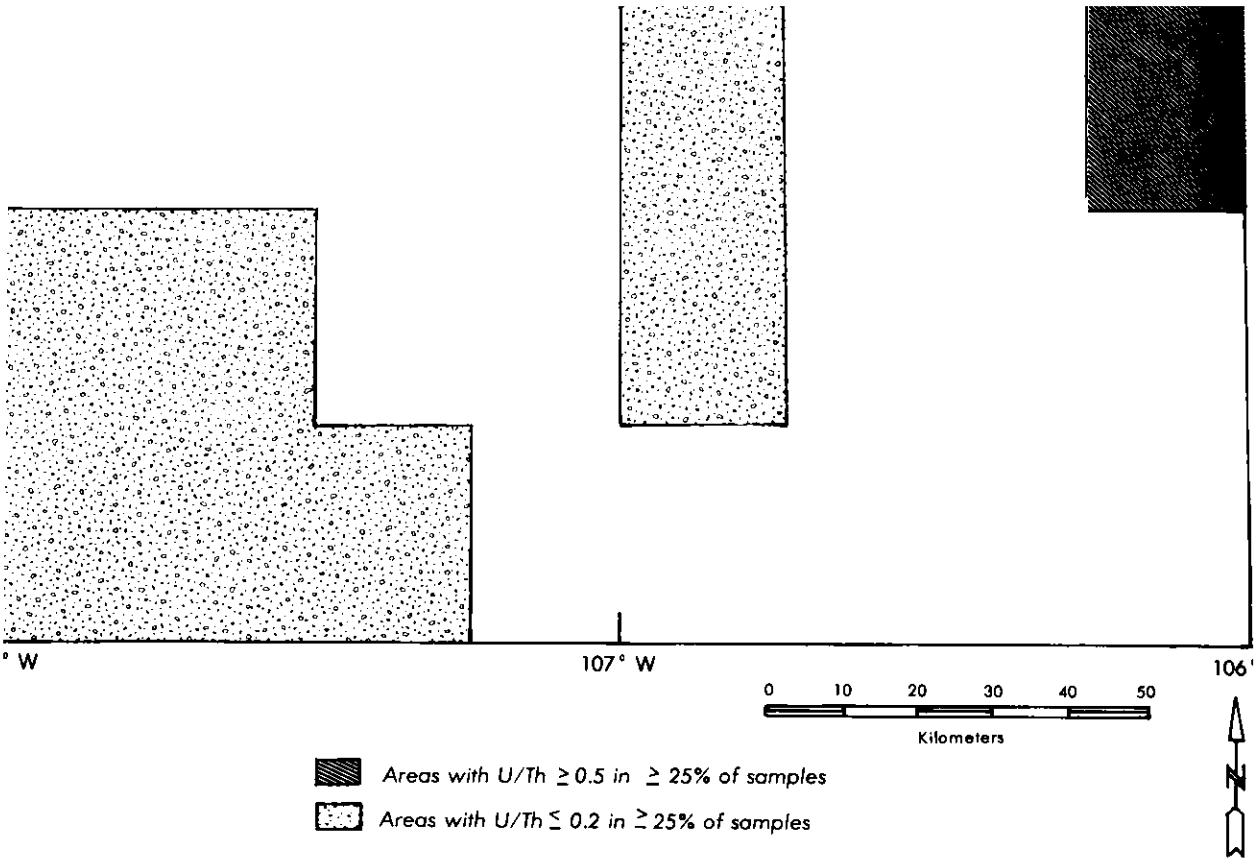
Thorium Concentrations in Sediment Samples

Thorium concentration was measured in 1363 sediment samples from the Casper quadrangle and is discussed here because of its possible use in estimating uranium mobility (Rogers et al, 1978). The range of measured thorium concentrations is from 1.7 ppm to 2800 ppm (because of computer restraints, the maximum reported value is 999.8 ppm thorium, but actual measure for that sample was 2800 ppm.) A statistical summary of thorium data is shown with the histogram in Appendix III-C. Relative thorium concentrations in sediment samples are shown on Plate V. Approximately 2100 km^2 of the southwestern corner of the Casper quadrangle (Fig. 5) contains the majority of high-thorium samples. The 161 sediment samples from this area have an average thorium concentration of 62.4 ppm with a median value of 26.0 ppm as compared to the quadrangle median of 13.0 ppm. Twenty-one samples or 13.3% have concentrations of more than 80 ppm. This area includes Crooks Gap and that part of the Great Divide Basin that lies in the Casper quadrangle. It also includes the 2800-ppm sample in which associated elements are gold, cerium, hafnium, lanthanum, and samarium, suggesting a heavy minerals placer deposit. The thorium/cerium correlation coefficient is 0.99 for the 42 samples showing highest thorium concentration in this portion of the quadrangle. This suggests a general presence of resistate minerals in many of the dry stream beds of the area.

The general trend of sample locations with low U/Th ratios includes the southern two-thirds of the quadrangle. The northern limit of this trend coincides with the North Granite Mountains fault system and the northern extent of exposed Precambrian rock in the Pedro, Shirley, and Laramie Mountains (Fig. 6). Studies by J. S. Stuckless (1979) disclose anomalously high ratios of thorium to uranium in granites in the Granite and Laramie Mountains. The high Th/U ratios coupled with more normal ratios of their daughter isotopes, $^{208}Pb/^{206}Pb$, indicate that the granites were, until relatively recently, also anomalously high in uranium. Therefore, Stuckless suggests that the Th/U ratios of ≥ 5 (U/Th ≤ 0.2) in granites be used as criteria for mapping uranium provinces.

Our data from sediments indicate that the U/Th ratio here parallels that of the granite source rock. The high U/Th ratios that dominate the northern one-third of the quadrangle suggest enrichment by soluble uranium while the areas of low U/Th ratios in the remaining portions of the quadrangle indicate transport and deposition of insoluble minerals in sediments that moved south from the Granite Mountains. This favored direction of sediment movement must have occurred during the period of maximum uplift of the Granite Mountains block as indicated by low U/Th ratios in the northeastern Great Divide Basin. Possible causes of the differential sedimentation that would concentrate thorium-rich resistate minerals on the south flank of the Eocene Granite Mountains, and not on the north, could probably be explained by a number of scenarios, including an asymmetric drainage divide, differential stream gradients, and vegetative density differences between south-facing and north-facing slopes, any or all of which would favor sedimentation toward the south, but not preclude movement of soluble uranium in ground waters toward both north and south sides of the Granite Mountains.

The areas of low U/Th ratios, and probable high occurrence of resistate minerals, may mask the probable concentration of soluble uranium that would complete the halo around the Granite Mountains block. Therefore, economic deposits of uranium may be yet found in areas that appear to be dominated by thorium-rich, heavy-mineral placers.



6. Uranium/thorium ratio relationships for the Casper quadrangle, Wyomi

I. SUMMARY AND CONCLUSIONS

The HSSR data for the Casper quadrangle came from 536 water samples and 370 sediment samples collected from 1553 locations. The water samples, 69% f which were ground water samples, were analyzed for uranium. Sediment amples, 75% from dry stream beds, were analyzed for uranium, thorium, and 41 ther elements. The dominance of ground waters and dry stream sediments orrelates with the semi-arid climate of most of the quadrangle.

Discussion of element concentrations is limited to uranium in waters and ranium and thorium in sediments with particular emphasis on clusters of two r more samples in close proximity that exhibit uranium values above an rbitrary threshold of 20 ppb in waters and 14 ppm in sediments. Thorium is iscussed with reference to an area of elevated thorium concentrations and the elationship of U/Th ratios to modes of mobility of the two elements.

Uranium concentrations in water samples range from below the detection imit of 0.02 to 1353.52 ppb, with a median of 3.54 ppb and a mean of 5.46 ppb uranium. Uranium concentrations in sediment samples range from .30 ppm to 163.20 ppm, with a median of 3.97 ppm and a mean of 6.09 ppm.

Clusters of water and sediment samples having uranium concentrations above 20 ppb and 14 ppm, respectively, generally coincide with each other and with areas of known uranium occurrence. The strongest correlation of high uranium values in both sediments and waters with a major uranium production area occurs in the Gas Hills uranium district. Here uranium concentrations in a cluster of water samples ranged from 27.26 to 1353.52 ppb and in a sediment cluster from 14.89 to 163.20 ppm. Notable concentrations of uranium were found in samples from clustered locations in the Pedro, Shirley, and Laramie Mountains, as well as the Sage Hen Creek area and on the south slope of Crooks Mountain. The majority of sediment samples from these areas have U/Th ratios of greater than 1.0, ratios that are similar to those for samples associated with the Gas Hills district.

Thorium concentrations in sediment samples from the Casper quadrangle have a median value of 13 ppm, ranging from 1.7 to 2800 ppm. Samples from a 2100-km^2 area in the southwestern corner of the quadrangle have a median value of 26.0 ppm, twice the median for the whole quadrangle. The highest thorium values exhibited a strong correlation with high cerium values in those samples, suggesting the widespread occurrence of a resistate mineral such as monazite. Generally, the low U/Th ratios in this area result from the high thorium values; these ratios approximate U/Th ratios for Precambrian granites of the nearby Granite Mountains (Stuckless, 1979). This relative concentration of thorium as compared to sediments north of the Granite Mountains suggests differential sedimentation that could have been due to an asymmetric drainage divide on the Granite Mountains, or changes in microclimatic influence on vegetative distribution during a general climate change in late Eocene-early Oligocene. Soluble uranium was mobilized during this same period, but was able to move down either flank with ground waters and thus accumulated both to the north and south of the Precambrian granite source (Ludwig, 1979). Therefore, the presence of high thorium values and resistate minerals should not preclude discovery of new economic uranium deposits in this area.

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APPENDIX I

LISTINGS OF FIELD DATA AND ELEMENTAL CONCENTRATIONS FOR SAMPLES FROM THE CASPER NTMS QUADRANGLE, WYOMING

APPENDIX I-A

Listings of Field Data and Uranium Concentrations
for Water Samples from the Casper Quadrangle, Wyoming
(Pages 20 through 30)

(See Appendix IV-B for Code to Listings)

APPENDIX I-A. Uranium Concentrations for Water Samples

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																									U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (*) UNITS IN ppb
56-42.9739-107.7853-2-08-						0-W14096-10/03/77-15-			15-	9.0-	-	-	7.2-	3200-		16-1-7-	-	-3-3-1-	-3-3-3-1-	-1-9-	-	-	-	0.93
56-42.9747-107.2858-2-08-						0-W14093-10/04/77-19-			10-	9.0-	-	-	6.7-	2000-		11-1-7-	-	-3-3-1-	-4-3-3-3-	-1-3-	-	-	-	0.62
56-42.9972-107.3047-2-08-						0-W14084-10/04/77-19-			10-	8.0-	-	-	6.6-	2400-		13-1-7-	-	-3-3-2-	-4-3-3-3-	-1-3-	-	-	-	0.61
56-42.9894-107.5314-2-08-						0-W14086-10/05/77-10-			9-	9.0-	-	-	6.4-	500-		16-1-7-	-	-3-3-1-	-3-3-3-3-	-1-3-	-	-	-	0.51
56-42.9694-107.5350-2-08-						0-W14087-10/05/77-10-			9-	8.0-	-	-	6.5-	600-		16-1-7-	-	-3-3-1-	-4-3-3-3-	-1-3-	-	-	-	0.85
56-42.9906-107.6150-2-08-						0-W14092-10/05/77-12-			10-	9.0-	-	-	6.5-	600-		33-1-7-	-	-3-3-1-	-3-3-3-3-	-1-3-	-	-	-	0.99
56-42.9525-107.6056-2-08-						0-W14094-10/05/77-12-			10-	8.0-C-	-	-	6.6-	1000-		16-1-7-	-	-3-3-1-	-3-3-3-3-	-1-4-	-	-	-	51.48*
56-42.9342-107.5914-2-08-						0-W14095-10/05/77-13-			10-	8.0-C-	-	-	6.7-	1000-		16-1-7-	-	-3-3-3-1-	3-3-3-3-3-	-1-4-	-	-	-	27.26*
56-42.9044-107.3786-2-08-						0-W14102-10/05/77-17-			12-	9.0-	-	-	7.2-	2000-		16-1-7-	-	-3-3-1-	-4-3-3-3-	-1-8-	-	-	-	1.09
56-42.8808-107.4097-2-08-						0-W14103-10/05/77-17-			12-	8.0-	-	-	6.9-	2400-		25-1-7-	-	-3-3-1-	-4-3-3-3-	-1-	-	-	-	1.11
56-42.8978-107.4594-2-06-						0-W14104-10/05/77-18-			12-	6.0-	-	-	6.2-	400-		16-1-7-5-6-3-3-1-		-3-3-3-3-	-1-	-	-	-	1.78
56-42.8783-107.8611-2-08-						0-W14110-10/06/77-10-			8-		-	-	-	6.8-10000-		10-1-7-	-	-3-3-1-	-3-3-3-4-	-1-9-	-	-	-	0.15
56-42.8453-107.8753-2-06-						0-W14111-10/06/77-11-			9-	6.0-	-	-	6.8-	2000-		8-1-7-	-	-3-3-1-	-3-3-3-3-	-1-	-	-	-	1.17
56-42.8156-107.9472-2-07-						0-W14120-10/06/77-14-			14-	9.0-	-	-	6.8-	2200-		3-1-7-4-6-3-3-1-		-3-3-3-3-	-1-	-	-	-	8.71
56-42.7867-107.9700-2-07-						0-W14123-10/06/77-14-			14-		-	-	6.8-	1600-		8-1-7-4-6-3-3-1-		-3-3-3-3-	-1-	-	-	-	14.06
56-42.6481-106.3622-2-07-						0-W14128-11/01/77-15-			10-	6.0-	-	-	5.9-	190-		13-1-7-5-6-3-3-1-		-3-3-3-3-	-1-	-	-	-	0.60
56-42.6642-106.3386-2-06-						0-W14129-11/01/77-16-			9-	4.0-	-	-	5.9-	100-		13-1-7-5-6-3-3-1-		-3-3-3-3-	-1-	-	-	-	0.26
56-42.8353-107.4006-2-06-						0-W14134-11/02/77-10-			13-	8.0-	-	-	6.8-	330-		16-1-7-5-6-3-3-1-		-3-3-3-1-	-1-	-	-	-	1.08
56-42.8358-107.4100-2-07-						0-W14135-11/02/77-10-			13-	8.0-	-	-	6.8-	350-		16-1-7-5-6-3-3-1-		-3-3-3-1-	-1-	-	-	-	0.77
56-42.8453-107.4361-2-06-						0-W14136-11/02/77-10-			13-	7.0-	-	-	6.8-	600-		11-1-7-5-6-3-3-1-		-3-3-3-1-	-1-	-	-	-	10.83
56-42.8122-107.4347-2-06-						0-W14138-11/02/77-11-			13-	3.0-	-	-	6.8-	230-		16-1-7-5-6-3-3-1-		-3-3-3-1-	-1-	-	-	-	0.36
56-42.7892-107.4272-2-06-						0-W14139-11/02/77-11-			13-	4.0-	-	-	6.2-	190-		16-1-7-5-6-3-3-1-		-3-3-3-1-	-1-	-	-	-	4.15
56-42.7519-107.4339-2-06-						0-W14141-11/02/77-11-			13-	3.0-	-	-	6.5-	220-		15-1-7-5-6-3-3-1-		-3-3-3-1-	-1-	-	-	-	2.16
56-42.7839-107.4472-2-06-						0-W14142-11/02/77-12-			14-	3.0-	-	-	6.3-	200-		15-1-7-5-6-3-3-1-		-3-3-3-1-	-1-	-	-	-	1.84
56-42.8506-107.4239-2-06-						0-W14148-11/02/77-14-			14-	3.0-	-	-	6.5-	400-		16-1-7-5-6-3-3-1-		-3-3-3-1-	-1-	-	-	-	5.69
56-42.8583-107.4403-2-06-						0-W14149-11/02/77-14-			14-	4.0-	-	-	6.8-	600-		16-1-7-5-6-3-3-1-		-3-3-3-1-	-1-	-	-	-	6.29
56-42.8672-107.3944-2-06-						0-W14151-11/02/77-15-			14-	5.0-	-	-	6.6-	800-		8-1-7-5-4-3-3-1-		-3-3-3-1-	-1-	-	-	-	5.81
56-42.8361-106.4742-2-08-						0-W14153-11/25/77-10-			5-	4.0-C-	-	-	6.8-	3300-		10-1-6-4-6-	-	-1-	-3-2-2-2-	-1-8-	6-110-	-	-	2.17
56-42.8403-106.4819-2-08-						0-W14154-11/25/77-10-			5-	9.0-	-	-	7.3-	4400-		10-1-6-5-6-	-	-1-	-3-3-2-2-	-1-1-	6-160-	-	-	5.59
56-42.7769-106.4392-2-06-						0-W14155-11/25/77-11-			5-	2.0-C-	-	-	7.5-	800-		16-1-6-5-6-	-	-1-	-3-2-3-2-	-1-	-	-	-	37.95*
56-42.7894-106.3439-2-07-						0-W14157-11/25/77-12-			6-	2.5-C-	-	-	7.6-	450-		8-1-6-4-6-	-2-1-2-2-3-3-2-		-7-	-	-	-	7.31
56-42.7769-106.3569-2-06-						0-W14159-11/25/77-13-			6-	4.0-C-	-	-	7.2-	2700-		25-1-6-4-6-	-	-1-	-4-3-3-2-	-1-	-	-	-	2.85
56-42.5647-106.0189-2-07-						0-W14160-10/31/77-		9-	7-	5.0-	-	-	6.1-	380-		16-1-7-4-6-3-3-1-		-4-3-3-3-	-1-	-	-	-	4.73
56-42.6058-106.0292-2-06-						0-W14162-10/31/77-10-			6-	5.0-	-	-	6.5-	330-		13-1-7-5-6-3-3-1-		-4-3-3-3-	-1-	-	-	-	36.30
56-42.6186-106.0764-2-08-						0-W14165-10/31/77-10-			7-	9.0-	-	-	6.3-	280-		16-1-7-	-	-3-3-1-	-4-3-3-3-	-1-7-	-	-	-	52.07*
56-42.6183-106.1075-2-06-						0-W14166-10/31/77-11-			7-	6.0-	-	-	6.5-	260-		16-1-7-5-6-	-2-	-2-4-3-3-3-		-1-	-	-	-	6.72
56-42.6231-106.1381-2-07-						0-W14167-10/31/77-11-			7-	7.0-	-	-	6.1-	370-		13-1-7-5-6-3-3-1-		-4-3-3-3-	-1-	-	-	-	9.42
56-42.6178-106.1353-2-06-						0-W14168-10/31/77-11-			7-	5.0-	-	-	6.5-	260-		16-1-7-5-6-3-3-1-		-4-3-3-3-	-1-	-	-	-	7.92
56-42.6069-106.1631-2-06-						0-W14169-10/31/77-11-			7-	6.0-	-	-	6.5-	250-		16-1-7-5-6-3-3-1-		-4-3-3-3-	-1-	-	-	-	9.10
56-42.6325-106.2086-2-07-						0-W14171-10/31/77-12-			8-	7.0-	-	-	6.3-	200-		33-1-7-4-6-3-3-1-		-4-3-3-3-	-1-	-	-	-	6.96
56-42.6553-106.1758-2-07-						0-W14173-10/31/77-12-			8-	7.0-	-	-	6.5-	900-		8-1-7-4-6-3-3-1-		-4-3-3-3-	-1-	-	-	-	2.11
56-42.6892-106.1419-2-08-						0-W14177-10/31/77-13-			9-	10.0-	-	-	6.5-	480-		8-1-7-	-	-3-3-1-	-4-3-3-3-	-1-	-	-	-	2.69
56-42.7083-106.1617-2-07-						0-W14179-10/31/77-14-			10-	7.0-	-	-	6.3-	380-		8-1-7-5-6-3-3-1-		-3-3-3-3-	-1-	-	-	-	0.41
56-42.7122-106.1856-2-07-						0-W14180-10/31/77-15-			10-	6.0-	-	-	6.3-	400-		11-1-7-5-6-3-3-1-		-3-3-3-3-	-1-	-	-	-	0.51
56-42.7139-106.1856-2-07-						0-W14181-10/31/77-15-			10-	7.0-	-	-	6.5-	500-		11-1-7-5-6-3-3-1-		-3-3-3-3-	-1-	-	-	-	4.16
56-42.7286-106.1761-2-08-						0-W14182-10/31/77-15-			10-	8.0-	-	-	6.5-	520-		10-1-7-	-	-3-3-1-	-3-3-3-3-	-1-8-	-	-	-	3.80
56-42.7297-106.1778-2-07-						0-W14183-10/31/77-15-			10-	8.0-	-	-	6.5-	600-		11-1-7-4-6-3-3-1-		-3-3-3-3-	-1-	-	-	-	1.96
56-42.7222-106.1325-2-08-						0-W14186-10/31/77-17-			10-	10.0-	-	-	6.5-	600-		10-1-7-	-	-3-3-1-	-4-3-3-3-	-1-3-	-	-	-	1.16
56-42.7308-106.3508-2-06-						0-W14187-11/01/77-13-			10-	5.0-C-	-	-	5.9-	250-		16-1-7-	-	-3-3-1-	-1-3-3-3-	-1-	-	-	-	0.63
56-42.7258-106.2964-2-08-						0-W14188-11/01/77-14-			10-	6.0-	-	-	5.8-	330-		25-1-7-	-	-3-3-1-	-1-3-3-3-	-1-8-	-	-	-	1.10
56-42.6628-106.2547-2-06-						0-W14189-11/01/77-14-			10-	3.0-	-	-	5.2-	80-		30-1-7-5-6-3-3-1-		-1-3-3-3-		-1-	-	-	-	0.33

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
							TIME SAMPLED																										
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (ppb) UNITS IN ppb
56-42.6417-106.2561-2-06-						0-W14190-11/01/77-14-		10-	5.0-	-	-		5.5-	100-		30-1-7-5-6-3-3-1-	-1-3-3-3-	-1-	-	-	-	-										0.02
56-42.6406-106.2739-2-07-						0-W14191-11/01/77-14-		10-	8.0-	-	-		5.6-	200-		16-1-7-5-6-3-3-1-	-3-3-3-3-	-1-	-	-	-	-										0.21
56-42.8447-106.6992-2-08-						0-W14193-09/29/77-10-		25-	16.0-	C-	-		6.5-	1050-		16-1-6-	- - - - - -	-4-3-3-1-	-1-4-	-	-	-										0.72
56-42.3694-106.7142-2-07-						0-W14200-10/01/77-		-	7-10.0-	-	-		7.4-	230-		46-1-1-6-8-2-2-1-2-3-3-4-1-		-1-	-	-	-	-										3.65
56-42.2908-106.7097-2-07-						0-W14209-10/01/77-		-	9-13.0-	-	-		8.2-	190-		32-1-1-5-6-2-2-5-2-3-3-3-2-		-1-	-	-	-	-										4.07
56-42.2894-106.7131-2-06-						0-W14210-10/01/77-		-	9- 9.0-	-	-		7.2-	230-		9-1-1-4-6-3-2-1-	-3-3-3-2-	-1-	-	-	-	-										5.67
56-42.2739-106.7372-2-08-						0-W14212-10/01/77-		-	10-12.0-	-	-		6.9-	550-		9-1-1-	- - - - - -	-4-3-2-	-1-5-	-	-	-										39.08*
56-42.2503-106.7164-2-06-						0-W14214-10/01/77-		-	10-11.0-	C-	-		7.4-	260-		18-1-4-	- - - - -1-	-4-3-3-2-	-1-	-	-	-										23.21*
56-42.2522-106.6533-2-06-						0-W14218-10/01/77-		-	10- 8.5-	-	-		7.0-	310-		10-1-1-5-6-3-3-1-	-3-3-4-2-	-1-	-	-	-	-										24.45*
56-42.3711-106.5078-2-06-						0-W14219-10/02/77-		-	13- 8.0-	-	-		6.6-	130-		37-1-6-5-6-3-3-1-	-3-3-4-2-	-1-	-	-	-	-										0.37
56-42.3539-106.5083-2-06-						0-W14220-10/02/77-		-	13- 7.5-	-	-		6.4-	180-		18-1-1-6-6-1-3-4-	-4-3-4-2-	-1-	-	-	-	-										0.99
56-42.3742-106.6217-2-07-						0-W14222-10/02/77-		-	13- 9.0-	-	-		6.8-	110-		15-1-6-4-6-3-2-1-2-4-3-3-2-		-1-	-	-	-	-										0.71
56-42.3481-106.6117-2-06-						0-W14223-10/02/77-		-	14-16.0-	-	-		8.4-	175-		6-1-1-5-5-2-3-1-	-3-3-3-2-	-1-	-	-	-	-										13.44
56-42.3386-106.5964-2-06-						0-W14224-10/02/77-		-	18-12.5-	-	-		8.0-	260-		5-1-6-6-8-2-3-1-	-3-3-3-2-	-1-	-	-	-	-										0.06
56-42.3375-106.5964-2-07-						0-W14225-10/02/77-		-	18-10.0-	-	-		7.8-	240-		74-1-6-5-6-3-2-2-2-3-3-3-2-		-1-	-	-	-	-										3.19
56-42.3344-106.6022-2-07-						0-W14226-10/02/77-		-	16-14.0-	-	-		8.1-	330-		41-1-6-5-6-2-3-3-2-3-3-3-2-		-1-	-	-	-	-										1.82
56-42.3186-106.6025-2-06-						0-W14227-10/02/77-		-	16-19.0-	-	-		8.3-	600-		13-1-1-6-6-1-2-4-	-3-3-3-2-	-1-	-	-	-	-										0.22
56-42.3053-106.5897-2-06-						0-W14228-10/02/77-		-	18-17.0-	-	-		8.4-	310-		18-1-1-5-6-2-2-1-	-3-3-3-2-	-1-	-	-	-	-										1.53
56-42.3192-106.5678-2-06-						0-W14229-10/02/77-		-	17-11.0-	-	-		8.1-	240-		11-1-1-6-8-2-2-1-	-3-3-3-2-	-1-	-	-	-	-										21.77
56-42.3539-106.5636-2-06-						0-W14230-10/02/77-		-	18-12.0-	-	-		7.9-	230-		11-1-6-	- -3-2-1-	-3-3-3-2-	-1-	-	-	-										8.48
56-42.3522-106.5753-2-06-						0-W14231-10/02/77-		-	17-14.0-	-	-		8.2-	200-		11-1-7-5-6-3-3-1-	-3-3-3-2-	-1-	-	-	-	-										6.74
56-42.3394-106.5639-2-08-						0-W14232-10/02/77-		-	17- 9.0-	-	-		8.0-	210-		27-1-7-	- - - - - -	-4-3-3-2-	-1-4-	-	-	-										0.18
56-42.2558-106.6214-2-07-						0-W14233-10/02/77-		-	17-11.0-	-	-		7.6-	900-		23-1-6-5-6-2-2-1-2-3-3-3-2-		-1-	-	-	-	-										34.76*
56-42.2308-106.0186-2-08-						0-W14238-10/03/77-11-		20-	11.5-	-	-		6.9-	1000-		11-1-1-	- - - - -1-	-4-3-2-2-	-1-1-	6-100-		-										3.86
56-42.2342-106.0103-2-06-						0-W14239-10/03/77-11-		20-	15.0-	C-	-		9.1-	1050-		14-1-7-5-6-1-2-1-	-3-2-2-2-	-1-	-	-	-	-										1.77
56-42.2108-106.0964-2-06-						0-W14243-10/03/77-12-		20-	18.0-	-	-		7.1-	2900-		9-1-1-6-8-1-2-5-	-4-3-2-1-	-1-	-	-	-	-										1.68
56-42.7022-107.2206-2-06-						0-W14268-10/13/77-13-		25-	10.0-	-	-		7.7-	170-		7-1-6-	- - - -1-	-3-4-4-1-	-1-	-	-	-										1.48
56-42.6669-107.2586-2-08-						0-W14271-10/13/77-14-		25-	14.0-	-	-		6.5-	-		9-1-1-	- - - -1-	-4-4-3-1-	-1-3-	-	-	-										4.43
56-42.6394-107.1542-2-08-						0-W14276-10/13/77-17-		25-	12.0-	-	-		6.5-	195-		18-1-1-	- - - -1-	-3-3-3-1-	-1-4-	6-		-										5.00
56-42.6775-107.2842-2-08-						0-W14278-10/13/77-17-		25-	10.5-	-	-		6.6-	225-		7-1-1-	- - - -1-	-4-3-3-1-	-1-3-	6-		-										18.88*
56-42.7397-107.2342-2-06-						0-W14279-10/14/77-12-		20-	15.0-	-	-		7.2-	275-		14-1-7-6-8-2-2-1-	-1-2-4-1-	-1-	-	-	-	-										1.52
56-42.7150-107.1706-2-07-						0-W14280-10/14/77-13-		20-	15.0-	-	-		7.3-	180-		9-3-7-6-6-2-2-1-2-3-3-4-1-		-1-	-	-	-	-										0.49
56-42.7333-107.1981-2-07-						0-W14282-10/14/77-14-		20-	16.0-	-	-		8.0-	225-		7-1-2-5-6-2-2-1-2-1-3-4-1-		-1-	-	-	-	-										1.48
56-42.7572-107.1931-2-06-						0-W14283-10/14/77-14-		20-	17.5-	-	-		7.1-	225-		7-1-4-6-6-2-2-1-	-4-3-4-1-	-1-	-	-	-	-										11.70
56-42.7717-107.1458-2-07-						0-W14284-10/14/77-15-		20-	13.5-	-	-		7.4-	700-		5-4-	-5-6-3-2-4-2-4-3-4-1-	-1-	-	-	-	-										6.76
56-42.7156-107.4736-2-06-						0-W14285-10/15/77-15-		20-	12.0-	-	-		7.1-	200-		9-1-1-4-6-4-3-1-	-4-3-2-1-	-1-	-	-	-	-										3.10
56-42.6964-107.4492-2-07-						0-W14288-10/15/77-15-		20-	14.5-	-	-		7.2-	210-		3-1-1-4-6-4-3-3-2-4-4-2-1-		-1-	-	-	-	-										3.55
56-42.2322-107.6036-2-07-						0-W14310-10/18/77-16-		21-	11.0-	-	-		-	-		37-1-1-4-7-	- - - - -4-3-3-2-	-1-	-	-	-	-										3.29
56-42.3022-107.5472-2-06-						0-W14315-10/20/77-16-		15-	10.5-	C-	-		6.4-	145-		8-1-6-4-7-2-3-1-2-3-3-4-3-		-1-	-	-	-	-										0.17
56-42.2692-107.4489-2-08-						0-W14317-10/20/77-17-		15-	13.0-	C-	-		7.4-	1800-		13-1-6-	- - - -1-	-3-3-4-2-	-1-	-	6-	65-										2.52
56-42.4181-106.5503-2-07-						0-W14320-10/25/77-11-		16-	6.0-	-	-		6.8-	240-		38-1-6-5-6-2-2-2-2-3-3-4-1-		-1-	-	-	-	-										2.58
56-42.4056-106.5047-2-07-						0-W14322-10/25/77-12-		16-	9.5-	-	-		6.5-	330-		20-1-1-5-6-2-3-1-2-4-2-3-1-		-1-	-	-	-	-										1.51
56-42.4344-106.6231-2-07-						0-W14326-10/25/77-		-	19- 8.0-	-	-		6.8-	265-		11-1-6-3-6-2-2-1-2-3-3-4-1-		-1-	-	-	-	-										3.16
56-42.2281-106.7881-2-07-						0-W14329-10/26/77-10-		16-	9.0-	-	-		6.6-	575-		11-3-6-3-7-3-3-1-	-2-3-3-1-	-1-	-	-	-	-										7.36
56-42.2469-106.7219-2-07-						0-W14331-10/26/77-11-		16-	10.5-	-	-		6.8-	337-		37-3-6-4-6-2-2-1-2-3-3-4-1-		-1-	-	-	-	-										2.88
56-42.2103-106.7953-2-06-						0-W14332-10/26/77-11-		16-	9.5-	C-	-		6.9-	-		13-3-6-	- - - - -1-	-3-3-4-1-	-1-	-	-	-										22.25*
56-42.1972-106.8097-2-06-						0-W14333-10/26/77-12-		16-	11.0-	-	-		6.8-	368-		27-3-6-4-7-3-3-1-	-4-3-4-1-	-1-	-	-	-	-										4.89
56-42.1883-106.7714-2-08-						0-W14334-10/26/77-12-		19-	12.0-	-	-		7.3-	675-		13-1-1-	- - - -1-	-4-3-4-1-	-1-5-	6-	15-	-										4.25
56-42.1947-106.7686-2-06-						0-W14335-10/26/77-13-		19-	13.5-	-	-		7.2-	630-		27-1-4-5-6-2-2-1-	-3-3-4-1-	-1-	-	-	-	-										16.67
56-42.1828-106.7817-2-07-						0-W14337-10/26/77-13-		19-	-	-	-		7.1-	625-		9-3-6-	- -3-3-1-2-4-4-3-1-	-1-	-	-	-	-										4.63
56-42.1639-106.7419-2-07-						0-W14338-10/26/77-14-		19-	12.0-	-	-		6.8-	248-		15-1-1-	- - - - - -2-3-3-4-1-		-1-	-	-	-	-										2.04

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (#) UNITS IN ppb
56-42.1400-	106.7181-	2-07-	0-	W14339-	10/26/77-	15-	20-	13.5-	-	-	7.1-	700-	18-3-6-5-8-2-3-2-2-4-3-3-1-	-1-	-	-	-	-	1.69
56-42.1383-	106.7031-	2-07-	0-	W14340-	10/26/77-	15-	20-	11.5-	-	-	6.5-	243-	27-1-1-5-6-2-3-2-2-4-3-4-1-	-1-	-	-	-	-	1.46
56-42.2347-	106.6406-	2-06-	0-	W14343-	10/28/77-	12-	18-	7.5-	-	-	7.2-	295-	13-3-6-5-6-	-	-	-	-4-3-4-1-	-1-	-	-	-	-	2.71
56-42.1719-	106.6697-	2-06-	0-	W14344-	10/28/77-	13-	15-	10.0-	-	-	6.3-	83-	37-3-1-3-7-	-	-	-	-1-3-5-2-	-1-	-	-	-	-	0.06
56-42.1461-	106.6767-	2-07-	0-	W14345-	10/28/77-	14-	17-	11.5-	-	-	6.5-	123-	55-3-6-3-6-3-2-1-2-4-3-5-2-	-1-	-	-	-	-	0.15
56-42.1347-	106.6847-	2-07-	0-	W14346-	10/28/77-	14-	18-	11.5-	-	-	6.3-	88-	23-3-6-3-6-2-3-1-2-2-3-5-2-	-1-	-	-	-	-	0.02
56-42.1583-	106.7122-	2-06-	0-	W14347-	10/28/77-	16-	18-	10.5-	-	-	6.6-	130-	18-3-1-3-7-	-	-	-	-4-3-4-2-	-1-	-	-	-	-	0.83
56-42.0631-	106.9981-	2-06-	0-	W14354-	10/29/77-	10-	12-	-	-	-	7.1-	875-	11-1-4-4-7-	-	-	-	-4-3-3-3-	-1-	-	-	-	-	32.84
56-42.0156-	107.0642-	2-08-	0-	W14360-	10/29/77-	10-	18-	9.5-	-	-	7.2-	3200-	11-1-	-	-	-	-	-	-	-3-2-2-2-	-1-1-	8-	-	-	2.00
56-42.0750-	107.0881-	2-08-	0-	W14363-	10/29/77-	15-	19-	9.5-	C-	-	7.1-	2000-	13-1-	-	-	-	-	-	-	-4-2-4-2-	-1-7-	36-	18-	15-	18.38
56-42.9039-	106.8297-	2-08-	0-	W14373-	10/26/77-	12-	20-	13.0-	-	-	7.1-	2000-	7-1-1-	-	-4-3-1-	-1-3-3-1-	-1-1-	2-	66-	66-	1.16
56-42.9028-	106.8300-	2-08-	0-	W14374-	10/26/77-	12-	20-	14.0-	-	-	7.0-	300-	13-1-1-	-	-	-	-	-	-	-4-3-3-1-	-1-1-	2-	56-	-	0.08
56-42.9017-	106.8322-	2-08-	0-	W14375-	10/26/77-	13-	20-	18.0-	C-	-	9.0-	1200-	8-1-1-	-	-4-3-1-	-4-3-3-1-	-1-3-	6-	200-	180-	0.26
56-42.8972-	106.8811-	2-07-	0-	W14379-	10/26/77-	14-	22-	14.0-	-	-	8.4-	2190-	9-1-2-6-1-2-2-1-2-4-3-2-1-	-1-	-	-	-	-	2.69
56-42.9572-	106.8972-	2-06-	0-	W14384-	10/26/77-	17-	20-	13.0-	-	-	7.2-	590-	13-1-8-6-6-2-2-1-2-4-2-3-1-	-1-	-	-	-	-	0.81
56-42.9281-	106.8036-	2-08-	0-	W14390-	10/27/77-	11-	12-	16.5-	-	-	6.2-	630-	5-1-1-	-	-	-	-	-	-	-4-2-3-1-	-1-3-	-	50-	-	1.67
56-42.3103-	107.8928-	2-06-	0-	W14424-	10/16/77-	9-	13-	3.5-	-	-	7.1-	875-	27-4-	-6-8-	-	-	-	-4-2-2-1-	-1-	-	-	-	-	0.77
56-42.3122-	107.8928-	2-07-	0-	W14425-	10/16/77-	9-	9-	2.0-	-	-	6.9-	525-	27-4-	-5-7-	-	-	-	-4-2-2-1-	-1-	-	-	-	-	10.24
56-42.3508-	107.9189-	2-06-	0-	W14427-	10/16/77-	10-	12-	5.5-	-	-	6.7-	260-	18-4-	-5-6-	-	-	-	-4-3-3-1-	-1-	-	-	-	-	0.49
56-42.3639-	107.9750-	2-07-	0-	W14428-	10/16/77-	10-	13-	3.5-	-	-	6.6-	175-	37-4-	-5-6-	-	-	-	-3-2-4-1-	-1-	-	-	-	-	4.76
56-42.3725-	107.9781-	2-06-	0-	W14429-	10/16/77-	11-	13-	4.5-	-	-	6.5-	160-	18-4-	-5-6-	-	-	-	-4-2-4-1-	-1-	-	-	-	-	0.60
56-42.1069-	107.6075-	2-07-	0-	W14467-	10/14/77-	11-	16-	9.5-	-	-	7.4-	340-	22-4-	-5-6-2-3-1-2-4-2-2-2-	-1-	-	-	-	-	11.54
56-42.1367-	107.6100-	2-06-	0-	W14469-	10/14/77-	12-	16-	11.5-	-	-	7.6-	600-	27-4-	-4-7-	-	-	-	-4-3-2-2-	-1-	-	-	-	-	0.67
56-42.0733-	107.5231-	2-06-	0-	W14481-	10/14/77-	17-	18-	12.0-	-	-	7.3-	430-	20-4-	-6-8-	-	-	-	-4-3-3-2-	-1-	-	-	-	-	8.04
56-42.2808-	107.9369-	2-06-	0-	W14484-	10/15/77-	10-	9-	8.5-	C-	-	7.4-	460-	27-4-	-4-7-	-	-	-	-4-2-2-2-	-2-	-	-	-	-	0.67
56-42.2653-	107.9397-	2-06-	0-	W14485-	10/15/77-	11-	14-	6.0-	-	-	8.0-	420-	27-4-	-4-7-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	1.04
56-42.2508-	107.9561-	2-06-	0-	W14487-	10/15/77-	11-	14-	11.5-	-	-	6.5-	1275-	22-4-	-6-8-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	31.31
56-42.4231-	107.9742-	2-07-	0-	W14492-	10/06/77-	12-	16-	8.5-	-	-	6.5-	190-	27-3-1-3-6-	-	-	-	-4-2-4-1-	-1-	-	-	-	-	2.49
56-42.7408-	107.3681-	2-07-	0-	W14493-	10/14/77-	12-	20-	9.0-	-	-	6.3-	350-	13-1-6-6-6-2-2-1-2-4-3-3-1-	-1-	-	-	-	-	0.94
56-42.7289-	107.3453-	2-08-	0-	W14495-	10/14/77-	-	20-	13.0-	-	-	6.3-	500-	22-1-6-	-	-	-	-	-	-	-3-3-4-1-	-1-3-	-100-	-	-	45.21*
56-42.6750-	107.2533-	2-08-	0-	W14496-	10/14/77-	13-	20-	15.0-	-	-	6.6-	430-	9-1-6-	-	-	-	-1-	-4-3-4-1-	-1-3-	-100-	-	4.64
56-42.6722-	107.5411-	2-06-	0-	W14501-	10/07/77-	-	11-	9.0-	-	-	7.9-	185-	2-1-7-6-5-2-2-1-	-3-3-3-2-	-1-	-	-	-	2.99
56-42.7250-	107.5219-	2-06-	0-	W14504-	10/07/77-	-	12-	10.0-	-	-	7.1-	200-	13-1-6-4-6-4-3-1-	-3-3-3-2-	-1-	-	-	-	5.44
56-42.7161-	107.5553-	2-06-	0-	W14505-	10/07/77-	-	11-	13.0-	-	-	7.9-	185-	3-1-6-5-6-3-3-1-	-3-3-3-2-	-1-	-	-	-	6.14
56-42.7161-	107.5597-	2-07-	0-	W14506-	10/07/77-	-	11-	14.0-	-	-	7.8-	215-	3-1-6-5-6-2-2-1-2-3-3-3-2-	-1-	-	-	-	-	8.08
56-42.7231-	107.5925-	2-06-	0-	W14509-	10/07/77-	-	11-	10.0-	-	-	7.5-	265-	5-1-1-6-8-2-2-1-	-3-3-3-2-	-1-	-	-	-	17.54
56-42.7172-	107.6194-	2-06-	0-	W14510-	10/07/77-	-	11-	10.0-	-	-	7.2-	225-	9-1-6-5-7-3-3-2-	-3-3-3-3-	-1-	-	-	-	8.50
56-42.6542-	107.5525-	2-06-	0-	W14513-	10/07/77-	16-	12-	9.0-	-	-	7.8-	255-	5-1-6-4-6-2-2-1-	-4-3-3-2-	-1-	-	-	-	6.05
56-42.5881-	107.6708-	2-08-	0-	W14516-	10/07/77-	16-	11-	11.0-	-	-	7.5-	210-	8-1-6-	-	-	-	-1-	-3-2-3-2-	-1-3-	-	-	-	8.21
56-42.6161-	107.7464-	2-06-	0-	W14519-	10/07/77-	17-	11-	9.0-	-	-	7.5-	300-	5-3-4-4-9-4-2-1-	-3-3-4-2-	-1-	-	-	-	5.29
56-42.5208-	107.6444-	2-08-	0-	W14520-	10/08/77-	10-	11-	14.0-	-	-	6.6-	430-	5-3-7-	-	-	-	-1-	-4-3-4-1-	-1-3-	-	-	-	21.97*
56-42.5461-	107.7467-	2-06-	0-	W14526-	10/08/77-	12-	11-	10.0-	-	-	6.2-	80-	7-3-7-6-6-1-2-5-	-3-3-4-1-	-1-	-	-	-	4.57
56-42.6269-	107.6689-	2-08-	0-	W14536-	10/08/77-	16-	11-	9.0-	-	-	6.2-	210-	5-1-7-	-	-	-	-1-	-3-3-4-1-	-1-3-	-	-	-	10.73
56-42.5983-	107.6803-	2-08-	0-	W14538-	10/08/77-	16-	12-	10.5-	-	-	6.8-	165-	49-1-6-	-	-	-	-1-	-3-2-3-1-	-1-3-	-	-	-	3.40
56-42.6792-	107.2528-	2-08-	0-	W14540-	10/14/77-	13-	20-	19.0-	-	-	6.6-	442-	9-1-6-	-	-	-	-1-	-4-3-4-1-	-1-3-	-100-	-	5.46
56-42.8106-	106.9847-	2-07-	0-	W14544-	10/11/77-	14-	9-	9.0-	-	-	7.6-	2850-	3-1-6-4-6-2-2-1-2-4-3-4-1-	-1-	-	-	-	-	44.95*
56-42.8042-	106.9211-	2-08-	0-	W14551-	10/11/77-	17-	5-	10.0-	-	-	7.2-	1800-	20-1-1-	-	-	-	-1-	-4-3-2-1-	-1-3-	6-	100-	45-	108.92*
56-42.8256-	106.9311-	2-08-	0-	W14552-	10/11/77-	17-	10-	10.0-	-	-	7.8-	850-	20-1-6-	-	-	-	-1-	-3-3-3-1-	-1-1-	10-	-	-	0.05
56-42.8914-	107.4511-	2-06-	0-	W14553-	10/12/77-	12-	11-	10.4-	-	-	6.6-	1200-	13-1-3-6-8-1-2-4-	-3-3-4-1-	-1-	-	-	-	2.60
56-42.8969-	107.4764-	2-06-	0-	W14554-	10/12/77-	13-	11-	9.0-	-	-	6.6-	750-	13-1-3-6-8-2-3-5-	-3-3-4-1-	-1-	-	-	-	8.28
56-42.9017-	107.4944-	2-07-	0-	W14555-	10/12/77-	13-	11-	9.0-	-	-	6.0-	1100-	33-1-3-6-8-2-2-5-2-3-3-4-1-	-1-	-	-	-	-	1.02

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																								U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (alt, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (θ) UNITS IN ppb
56	-42.8828	-107.4150	-2	-08	-	0-W14556	-10/12/77	-13	12	-14.0	-	-	6.6	-1800	-	27	-1	-2	-	-	-	-	-4	-3	-4	-1	-	-	-8	-	-200	-	-	0.50
56	-42.8853	-107.4036	-2	-06	-	0-W14557	-10/12/77	-13	11	-8.0	-	-	7.1	-2800	-	9	-1	-3	-6	-3	-3	-2	-1	-	-4	-3	-4	-1	-	-1	-	-	-	-	3.79
56	-42.8881	-107.3794	-2	-08	-	0-W14564	-10/12/77	-14	11	-11.0	-	-	8.8	-3300	-	22	-1	-6	-	-	-	-	-1	-	-3	-3	-4	-1	-	-1	-8	-	-	-	1.13
56	-42.9658	-107.4586	-2	-08	-	0-W14567	-10/12/77	-17	10	-9.5	-	-	6.9	-3400	-	24	-1	-3	-	-	-	-	-1	-	-3	-3	-4	-1	-	-1	-8	2	-	-	0.22
56	-42.8531	-107.3617	-2	-08	-	0-W14569	-10/13/77	-	14	-20.0	-C	-	6.1	-500	-	22	-1	-4	-	-	-	-	-1	-	-4	-3	-4	-1	-	-1	-9	-	-	-	0.53
56	-42.8514	-107.3633	-2	-06	-	0-W14570	-10/13/77	-	14	-11.0	-	-	5.9	-800	-	9	-1	-4	-6	-6	-2	-3	-1	-	-4	-3	-4	-1	-	-1	-	-	-	-	2.03
56	-42.8008	-106.9322	-2	-08	-	0-W14571	-10/11/77	-11	-	-10.0	-	-	7.6	-1300	-	13	-1	-6	-	-	-	-	-1	-	-4	-3	-3	-1	-	-1	-3	6	-100	-	34	16.49*
56	-42.8422	-107.3714	-2	-06	-	0-W14572	-10/13/77	-	14	-11.0	-C	-	5.9	-225	-	9	-1	-4	-6	-6	-3	-3	-4	-	-4	-3	-4	-1	-	-1	-	-	-	-	-	0.33
56	-42.8589	-107.3550	-2	-06	-	0-W14573	-10/13/77	-13	14	-12.0	-	-	7.2	-1100	-	27	-1	-4	-6	-8	-3	-2	-1	-	-3	-3	-4	-1	-	-1	-	-	-	-	-	0.85
56	-42.8003	-107.2822	-2	-07	-	0-W14579	-10/13/77	-16	22	-9.0	-	-	6.9	-950	-	6	-1	-1	-6	-6	-3	-2	-1	-2	-3	-3	-5	-1	-	-1	-	-	-	-	-	2.52
56	-42.8250	-107.2500	-2	-07	-	0-W14580	-10/13/77	-17	19	-10.0	-	-	7.2	-3850	-	13	-1	-6	-6	-6	-2	-2	-5	-1	-4	-3	-2	-1	-	-1	-	-	-	-	-	11.76
56	-42.6736	-107.3575	-2	-06	-	0-W14581	-10/14/77	-14	20	-13.0	-	-	6.9	-340	-	11	-3	-7	-6	-8	-3	-2	-1	-2	-4	-3	-4	-1	-	-1	-	-	-	-	-	10.63
56	-42.6856	-107.2786	-2	-08	-	0-W14583	-10/14/77	-15	20	-13.5	-	-	6.7	-345	-	11	-1	-6	-	-	-	-	-1	-2	-4	-3	-4	-1	-	-1	-8	-	-	-	-	3.15
56	-42.6869	-107.2806	-2	-07	-	0-W14584	-10/14/77	-	20	-12.5	-	-	6.5	-455	-	11	-1	-6	-4	-6	-4	-3	-1	-2	-4	-3	-4	-1	-	-1	-	-	-	-	-	4.97
56	-42.6972	-107.2931	-2	-07	-	0-W14588	-10/14/77	-17	17	-9.0	-	-	6.2	-465	-	29	-1	-6	-5	-6	-3	-3	-1	-2	-4	-3	-4	-1	-	-1	-	-	-	-	-	5.69
56	-42.7817	-107.3442	-2	-06	-	0-W14590	-10/15/77	-12	13	-8.0	-	-	6.4	-111	-	9	-3	-1	-4	-6	-3	-2	-1	-2	-4	-3	-4	-2	-	-1	-	-	-	-	-	0.15
56	-42.7719	-107.3364	-2	-06	-	0-W14591	-10/15/77	-13	14	-7.5	-	-	6.9	-165	-	13	-1	-6	-5	-8	-2	-2	-1	-	-1	-3	-4	-2	-	-1	-	-	-	-	-	1.17
56	-42.7636	-107.2864	-2	-06	-	0-W14592	-10/15/77	-14	14	-7.0	-	-	7.0	-183	-	15	-2	-5	-5	-6	-2	-2	-2	-	-4	-3	-3	-2	-	-1	-	-	-	-	-	2.45
56	-42.7658	-107.3122	-2	-06	-	0-W14594	-10/15/77	-17	14	-12.0	-	-	6.7	-211	-	6	-3	-6	-4	-6	-2	-2	-2	-	-4	-4	-3	-2	-	-1	-	-	-	-	-	4.39
56	-42.7961	-107.2597	-2	-06	-	0-W14595	-10/16/77	-12	15	-9.0	-	-	6.6	-272	-	8	-3	-6	-6	-8	-2	-3	-1	-	-4	-3	-4	-1	-	-1	-	-	-	-	-	3.13
56	-42.8603	-107.7214	-2	-08	-	0-W14605	-10/17/77	-10	20	-12.0	-	-	6.8	-3500	-	7	-1	-1	-	-	-	-	-1	-	-3	-3	-2	-1	-	-1	-1	6	-	-	-	170.10*
56	-42.6861	-107.9192	-2	-07	-	0-W14609	-10/08/77	-11	5	-2.0	-	-	6.6	-388	-	11	-3	-6	-3	-6	-2	-2	-1	-2	-4	-3	-2	-1	-	-1	-	-	-	-	-	47.86
56	-42.7289	-107.9978	-2	-06	-	0-W14613	-10/08/77	-13	12	-8.0	-C	-	6.8	-600	-	9	-1	-1	-5	-8	-3	-2	-1	-	-4	-3	-3	-1	-	-1	-	-	-	-	-	11.73
56	-42.7383	-107.9497	-2	-06	-	0-W14614	-10/08/77	-14	11	-7.5	-	-	6.6	-240	-	12	-1	-1	-3	-2	-3	-2	-1	-	-4	-3	-3	-1	-	-1	-	-	-	-	-	2.11
56	-42.6689	-107.8422	-2	-07	-	0-W14617	-10/08/77	-17	12	-10.0	-	-	6.3	-190	-	23	-1	-1	-4	-6	-3	-2	-1	-2	-3	-2	-2	-2	-	-1	-	-	-	-	-	1.20
56	-42.7925	-107.2436	-2	-06	-	0-W14621	-10/18/77	-11	22	-11.5	-C	-	6.4	-	-	10	-1	-1	-5	-4	-2	-2	-1	-	-4	-3	-4	-1	-	-1	-	-	-	-	-	4.69
56	-42.7553	-107.0672	-2	-07	-	0-W14629	-10/18/77	-15	22	-12.5	-C	-	6.9	-750	-	11	-1	-6	-6	-6	-2	-2	-5	-2	-4	-3	-3	-1	-	-1	-	-	-	-	-	1.62
56	-42.7414	-107.0533	-2	-06	-	0-W14629	-10/18/77	-16	23	-9.5	-C	-	6.4	-510	-	9	-1	-6	-6	-6	-5	-2	-2	-1	-	-4	-4	-2	-1	-	-1	-	-	-	-	-	1.10
56	-42.8119	-107.6814	-2	-08	-	0-W14655	-10/18/77	-10	20	-12.5	-	-	7.0	-900	-	8	-1	-1	-	-	-	-	-1	-	-3	-3	-2	-1	-	-1	-	-	-	-	-	5.98
56	-42.8094	-107.6275	-2	-06	-	0-W14657	-10/18/77	-11	20	-15.5	-C	-	7.2	-1700	-	23	-1	-1	-4	-6	-3	-2	-1	-2	-3	-3	-2	-1	-	-2	-	-	-	-	-	297.99*
56	-42.8228	-107.6022	-2	-07	-	0-W14658	-10/18/77	-13	20	-16.5	-C	-	7.7	-950	-	46	-1	-1	-4	-6	-4	-3	-4	-2	-3	-3	-2	-1	-	-2	-	-	-	-	-	1327.32*
56	-42.8425	-107.6072	-2	-07	-	0-W14659	-10/18/77	-13	20	-18.5	-C	-	7.5	-1000	-	20	-1	-1	-4	-1	-4	-3	-4	-2	-3	-3	-2	-1	-	-2	-	-	-	-	-	1353.52*
56	-42.6250	-107.4697	-2	-06	-	0-W14662	-10/19/77	-12	19	-12.5	-	-	6.3	-350	-	5	-1	-6	-5	-8	-2	-2	-2	-	-4	-3	-2	-1	-	-1	-	-	-	-	-	8.50
56	-42.6233	-107.4650	-2	-06	-	0-W14664	-10/19/77	-13	19	-12.0	-	-	6.5	-315	-	34	-3	-6	-5	-6	-3	-3	-1	-	-3	-3	-4	-1	-	-1	-	-	-	-	-	9.25
56	-42.8164	-107.5822	-2	-08	-	0-W14673	-10/18/77	-16	20	-19.0	-C	-	8.2	-1250	-	14	-1	-1	-	-	-	-	-1	-	-4	-3	-2	-1	-	-1	-3	-	-	-	-	1.36
56	-42.6225	-107.2475	-2	-08	-	0-W14674	-10/20/77	-11	20	-15.0	-	-	6.6	-310	-	13	-3	-7	-	-	-	-	-1	-	-3	-3	-3	-3	-	-1	-3	6	-	-	-	5.48
56	-42.5353	-107.3622	-2	-06	-	0-W14682	-10/20/77	-16	20	-10.0	-	-	6.7	-	-	11	-3	-7	-4	-1	-2	-3	-1	-	-4	-4	-3	-2	-	-1	-	-	-	-	-	12.92
56	-42.9658	-106.8297	-2	-06	-	0-W14696	-10/27/77	-12	14	-12.0	-	-	7.8	-3000	-	9	-1	-2	-5	-6	-2	-2	-1	-	-4	-2	-1	-	-	-1	-	-	-	-	-	5.15
56	-42.9575	-106.5144	-2	-08	-	0-W14698	-10/27/77	-14	16	-16.0	-C	-	8.2	-1400	-	13	-4	-1	-	-	-	-	-1	-	-4	-3	-2	-1	-	-9	-3	-	-300	-	-	0.92
56	-42.7628	-106.4861	-2	-08	-	0-W14690	-08/12/77	-15	32	-24.0	-C	-	7.6	-1100	-	12	-1	-7	-	-	-	-	-	-	-4	-3	-2	-1	-	-1	-3	5	-	-	-	19.54
56	-42.9394	-106.1217	-2	-08	-	0-W14694	-08/13/77	-11	25	-19.0	-	-	7.3	-2750	-	15	-1	-6	-	-	-	-	-	-	-4	-3	-3	-1	-	-	-1	8	-	-	-	6.58
56	-42.9861	-106.1217	-2	-08	-	0-W14695	-08/13/77	-12	28	-20.4	-C	-	7.1	-1900	-	9	-1	-6	-	-	-	-	-	-	-4	-3	-2	-2	-	-1	-1	3	-300	-	-	1.27
56	-42.9639	-106.0825	-2	-08	-	0-W14696	-08/13/77	-14	31	-19.5	-	-	7.1	-1200	-	14	-	-	-	-	-	-	-	-	-4	-2	-	-2	-	-1	-1	8	-	-	-	0.21
56	-42.9711	-106.0333	-2	-08	-	0-W14697	-08/13/77	-15	35	-14.0	-C	-	7.6	-1100	-	12	-	-	-	-	-	-	-	-	-3	-1	-1	-2	-	-1	-1	6	-	-	-	0.40
56	-42.9533	-106.0008	-2	-08	-	0-W14698	-08/13/77	-16	31	-16.0	-C	-	7.4	-1000	-	9	-	-	-	-	-	-	-	-	-4	-2	-2	-2	-	-1	-	8	-	-	-	0.11
56	-42.8803	-106.2011	-2	-08	-	0-W14700	-08/14/77	-	9	-17.9	-C	-	8.1	-1600	-	11	-	-	-	-	-	-	-	-	-4	-2	-1	-1	-	-3	-6	5	-500	-	-	0.90
56	-42.9297	-106.1697	-2	-08	-	0-W14701	-08/14/77	-10	20	-16.5	-C	-	6.9	-3740	-	9	-1	-1	-	-	-	-	-	-	-4	-2	-3	-1	-	-9	-1	8	-	-	-	0.63
56	-42.9875	-106.2331	-2	-08	-	0-W14704	-08/14/77	-12	28	-16.2	-	-	7.0	-2550	-	7	-	-	-	-	-	-	-	-	-3	-3	-3	-1	-	-1	-1	-	-	-	-	1.56
56	-42.9411	-106.0378	-2	-08	-	0-W14709	-08/14/77	-14	35	-22.5	-	-	6.8	-1250	-	7	-1	-	-	-	-	-	-	-	-4	-2	-3	-1	-	-	-1	-	-	-	-	1.06
56	-42.9075	-106.1400	-2	-08	-	0-W14709	-08/14/77	-15	34	-15.5	-	-	6.4	-2950	-	9	-	-	-	-	-	-	-	-	-4	-2	-3	-2	-	-	-1	-	-	-	-	1.00
56	-42.7506	-106.1606	-2	-07	-	0-W14710	-08/13/77	-10	25	-16.0	-C	-	-	-455	-	5	-1	-4	-5	-8	-3	-3	-1	-2	-2	-2	-4	-2	-	-1	-	-	-	-	-	2.07

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (#) UNITS IN ppb
56-42.7939-106.1483-2-07-	0-W14712-08/13/77-11-	32-21.0-	-	-	8.2-	392-	10-1-6-5-6-2-2-2-1-4-3-2-2-	-1-	-	-	-	-	6.04
56-42.8550-106.1350-2-07-	0-W14716-08/14/77-11-	26-22.4-	-	-	7.4-	366-	10-1-7-1-7-1-2-3-2-2-3-3-2-	-7-	-	-	-	-	14.74
56-42.7683-106.0833-2-08-	0-W14717-08/14/77-15-	34-17.4-	-	-	6.6-	2100-	13-1-6-	-	-	-	-	-	-	-	-	-4-3-2-2-	-3-3-	8-	-	-	0.28
56-42.7508-106.0906-2-08-	0-W14719-08/14/77-17-	38-18.0-	-	-	6.8-	186-	10-1-6-	-	-	-	-	-	-	-	-	-2-3-2-2-	-3-5-	6-	61-	17-	8.63
56-42.8231-106.0828-2-07-	0-W14720-08/14/77-17-	38-26.2-	-	-	8.2-	112-	13-1-7-5-7-3-2-3-3-4-2-2-2-	-3-	-	-	-	-	7.17
56-42.9578-106.4725-2-08-	0-W14722-08/15/77-11-	25-15.0-	-	-	7.2-	228-	10-1-7-	-	-	-	-	-	-	-	-	-4-4-2-2-	-3-3-	-200-	-	-	33.73
56-42.9611-106.4825-2-08-	0-W14723-08/15/77-13-	27-16.0-	-	-	7.1-	310-	16-1-7-	-	-	-	-	-	-	-	-	-4-4-1-2-	-3-3-	6-	18-	-	108.66*
56-42.9750-106.4892-2-07-	0-W14724-08/15/77-13-	25-27.2-	-	-	8.1-	250-	10-1-7-5-8-3-2-3-2-4-3-2-2-	-3-	-	-	-	-	16.29
56-42.9353-106.5139-2-08-	0-W14725-08/15/77-12-	28-17.6-C-	-	-	8.9-	224-	11-	-	-	-	-	-	-	-	-	-4-3-1-2-	-3-3-	5-	-	-	0.30
56-42.8786-106.4692-2-08-	0-W14726-08/15/77-17-	28-24.2-	-	-	8.3-	3450-	13-1-7-	-	-	-	-	-	-	-	-	-4-3-2-2-	-7-2-	-	-	-	0.17
56-42.8617-106.5172-2-08-	0-W14727-08/16/77- 9-	23-16.5-	-	-	7.8-	6000-	18-1-7-	-	-	-	-	-	-	-	-	-4-2-2-2-	-1-3-	6-	350-	-	1.28
56-42.8600-106.5336-2-07-	0-W14728-08/16/77-10-	26-15.8-C-	-	-	6.7-	3950-	16-1-7-6-8-2-2-2-2-4-2-2-2-	-1-	-	-	-	-	6.70
56-42.8339-106.5678-2-08-	0-W14730-08/16/77-10-	-15.5-C-	-	-	6.9-	1650-	11-	-	-	-	-	-	-	-	-	-4-2-2-2-	-	-4-	8-	10-	-	1.92
56-42.8411-106.6031-2-08-	0-W14731-08/16/77-10-	-11.5-	-	-	6.6-	2125-	9-1-1-	-	-	-	-	-	-	-	-	-4-3-2-1-	-	-8-	-	-	-	21.94*
56-42.9064-106.0206-2-08-	0-W14732-08/15/77-11-	21-20.5-C-	-	-	8.3-	1150-	15-1-6-	-	-	-	-	-	-	-	-	-4-3-2-2-	-	-8-	-300-	-	0.74
56-42.8792-106.0444-2-08-	0-W14733-08/15/77-12-	29-15.5-	-	-	8.2-	900-	12-1-1-	-	-	-	-	-	-	-	-	-4-3-3-2-	-	-3-	6-	-	-	0.29
56-42.8994-106.3431-2-08-	0-W14735-08/15/77-16-	26-20.5-	-	-	7.3-	2850-	10-1-3-	-	-	-	-	-	-	-	-	-4-3-1-2-	-	-5-	36-	17-	15-	161.29*
56-42.9817-106.3350-2-08-	0-W14736-08/15/77-17-	25-20.5-	-	-	6.3-	2025-	10-1-4-	-	-	-	-	-	-	-	-	-4-3-2-2-	-	-8-	-	-	-	3.93
56-42.6600-106.3956-2-07-	0-W14747-08/17/77-12-	29-15.5-	-	-	7.8-	625-	7-1-1-4-6-3-3-1-2-4-3-4-2-	-	-	-	-	-	2.69
56-42.6556-106.4722-2-08-	0-W14749-08/17/77-13-	-21.0-	-	-	7.2-	1600-	11-1-1-	-	-	-	-	-	-	-	-	-4-2-2-2-	-	-4-	6-	-	-	34.47*
56-42.6797-106.4250-2-07-	0-W14750-08/17/77-14-	30-24.0-	-	-	7.8-	1450-	5-1-1-3-6-2-3-1-2-3-2-4-2-	-	-	-	-	-	3.52
56-42.7017-106.4653-2-06-	0-W14752-08/17/77-15-	29-	-	-	7.8-	240-	5-1-3-4-6-3-3-1-2-2-3-4-2-	-	-	-	-	-	0.87
56-42.6353-106.4656-2-08-	0-W14754-08/17/77-16-	-10.5-	-	-	7.6-	1400-	13-1-1-	-	-	-	-	-	-	-	-	-4-3-3-2-	-	-4-	6-	65-	32-	28.79*
56-42.8106-106.5919-2-06-	0-W14758-08/16/77-11-	-16.5-	-	-	7.1-	925-	13-	-	-	-	-	-	-	-	-	-4-3-2-2-	-1-	-	-	-	-	4.99
56-42.7994-106.5694-2-06-	0-W14760-08/16/77-11-	24-18.5-	-	-	6.6-	650-	8-1-7-4-6-3-3-1-2-4-3-3-1-	-	-	-	-	-	3.22
56-42.7769-106.5883-2-07-	0-W14763-08/16/77-14-	29-24.6-	-	-	7.6-	3500-	8-1-7-6-8-3-3-2-2-4-3-2-3-	-3-	-	-	-	-	24.94
56-42.8667-106.4711-2-08-	0-W14765-08/16/77-12-	31-25.5-C-	-	-	8.2-	2750-	13-1-1-	-	-	-	-	-	-	-	-	-4-3-2-2-	-	-3-	8-	735-	720-	0.06*
56-42.8528-106.3903-2-08-	0-W14766-08/16/77-16-	-26.5-	-	-	6.7-	600-	11-1-1-	-	-	-	-	-	-	-	-	-4-2-2-2-	-	-	-	-	-	5.31
56-42.6606-106.5606-2-08-	0-W14768-08/17/77-12-	28-17.2-C-	-	-	6.4-	1600-	18-1-7-	-	-	-	-	-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	47.99*
56-42.6828-106.5458-2-08-	0-W14769-08/17/77-12-	-12.4-	-	-	6.8-	800-	30-1-7-	-	-	-	-	-	-	-	-	-4-2-1-2-	-1-	3-	8-	-	-	8.62
56-42.7256-106.6019-2-07-	0-W14773-08/17/77-17-	35-21.6-	-	-	7.7-	4700-	13-1-7-5-7-	-	-	-	-	-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	98.01*
56-42.6761-106.5889-2-08-	0-W14774-08/17/77-16-	-15.6-C-	-	-	6.1-	1500-	63-1-7-	-	-	-	-	-	-	-	-	-4-2-1-2-	-1-	4-	8-	35-	21-	49.40*
56-42.9625-106.6928-2-08-	0-W14776-08/18/77-14-	26-15.2-C-	-	-	6.5-	1520-	6-1-6-	-	-	-	-	-	-	-	-	-4-2-3-3-	-1-	3-	4-	60-	40-	2.07
56-42.9611-106.6908-2-06-	0-W14777-08/18/77-14-	27-14.2-C-	-	-	9.2-	1640-	15-1-7-6-8-2-3-1-	-4-2-3-3-	-2-	-	-	-	1.43
56-42.9222-106.6803-2-08-	0-W14778-08/18/77-16-	24-11.2-C-	-	-	7.0-	650-	10-1-7-	-	-	-	-	-	-	-	-	-4-2-3-3-	-2-1-	8-	-	-	-	98.01*
56-42.9550-106.6783-2-08-	0-W14779-08/18/77-17-	24-11.2-	-	-	6.9-	3150-	16-1-6-	-	-	-	-	-	-	-	-	-4-2-3-3-	-1-3-	8-	-	-	-	6.41
56-42.7239-106.7075-2-06-	0-W14780-08/29/77-11-	24-15.2-	-	-	7.9-	1180-	25-1-6-6-6-2-3-1-	-4-2-2-2-	-1-	-	-	-	-	10.22*
56-42.6658-106.5111-2-08-	0-W14781-08/19/77- 8-	23-16.2-	-	-	7.4-	1520-	50-1-7-	-	-	-	-	-	-	-	-	-4-3-2-1-	-1-3-	6-	55-	40-	-	11.91
56-42.7122-106.4014-2-07-	0-W14783-08/19/77-10-	26-18.2-	-	-	8.2-	330-	10-1-4-5-4-2-2-1-2-4-2-3-1-	-1-	-	-	-	-	0.19
56-42.5886-106.5461-2-08-	0-W14785-08/19/77-13-	30-18.2-C-	-	-	8.4-	2100-	25-1-7-	-	-	-	-	-	-	-	-	-4-2-2-2-	-1-9-	8-	-	-	-	1.60
56-42.6158-106.6192-2-08-	0-W14789-08/22/77-17-	26-22.0-C-	-	-	6.9-	1680-	13-1-7-	-	-	-	-	-	-	-	-	-2-3-2-3-	-1-3-	4-	30-	20-	-	60.29*
56-42.5489-106.7169-2-08-	0-W14791-08/23/77-13-	28-39.2-C-	-	-	6.8-	1650-	16-1-6-	-	-	-	-	-	-	-	-	-2-4-3-2-	-6-	-	-	-	-	1.45
56-42.6958-106.0761-2-06-	0-W14794-08/19/77- 8-	18-11.5-	-	-	6.1-	355-	13-1-4-4-4-3-3-1-2-2-3-4-1-	-	-	-	-	-	4.36
56-42.6486-106.0244-2-07-	0-W14795-08/19/77- 8-	21-15.5-	-	-	6.7-	215-	5-1-4-4-6-2-3-1-2-4-3-3-1-	-3-	-	-	-	-	6.01
56-42.6622-106.0175-2-07-	0-W14796-08/19/77- 9-	22-15.5-	-	-	6.4-	250-	44-1-1-3-4-2-3-1-2-4-2-4-1-	-3-	-	-	-	-	2.14
56-42.6411-106.0153-2-07-	0-W14797-08/19/77- 9-	25-19.0-	-	-	6.4-	155-	55-1-4-4-4-2-3-1-2-4-2-3-1-	-3-	-	-	-	-	1.70
56-42.7478-106.0122-2-08-	0-W14798-08/19/77-12-	29-19.5-C-	-	-	6.4-	410-	13-1-4-	-	-	-	-	-	-	-	-	-4-2-3-1-	-	-1-	6-	16-	10-	3.85
56-42.6972-106.1172-2-06-	0-W14800-08/19/77-13-	30-23.5-	-	-	6.8-	550-	8-1-1-6-6-	-	-	-	-	-	-	-	-	-4-3-3-1-	-	-	-	-	-	11.14
56-42.7303-106.0892-2-07-	0-W14801-08/19/77-14-	30-17.0-	-	-	6.7-	1800-	7-1-1-5-6-2-3-1-2-4-3-3-1-	-3-	-	-	-	-	18.90
56-42.5706-106.7667-2-08-	0-W14803-08/21/77-10-	25-12.0-	-	-	6.9-	395-	9-1-4-	-	-	-	-	-	-	-	-	-4-3-3-1-	-	-3-	-	-	-	8.19
56-42.5606-106.7231-2-08-	0-W14807-08/21/77-12-	-16.0-C-	-	-	7.3-	1050-	5-1-4-	-	-	-	-	-	-	-	-	-4-2-3-2-	-1-4-	6-	55-	20-	-	6.05

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																									U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (ff) UNITS IN ppb
56	42.5506	106.7994	2	08	0	W14809	08/21/77	17	28	15.0			7.3	700	9	1	1																	29.06
56	42.7100	106.7589	2	08	0	W14812	08/22/77	16	32	12.0			7.7	700	12	1	3															6			3.80
56	42.7289	106.8067	2	08	0	W14815	08/22/77	17	31	15.5			7.6	350	13	1	3															6			0.44
56	42.7275	106.8739	2	06	0	W14817	08/22/77	18	29	21.5			8.1	385	13	1	1	6	8																1.14
56	42.6747	106.7931	2	06	0	W14818	08/23/77	8	21	13.5			7.6	420	7	1	1	4	8																1.48
56	42.6942	106.8289	2	06	0	W14819	08/23/77	9	23	15.5			7.2	175	20	1	1	6	6																0.22
56	42.5125	106.8772	2	06	0	W14828	08/23/77	16	33	20.5			7.8	650	11	1	6	6	8																12.39
56	42.5861	106.6744	2	07	0	W14830	08/23/77	14	32	25.0	C		7.8	800	11	1	1	4	7	2	2	1	2	4	2	2	2	9						17.93
56	42.5825	106.3972	2	08	0	W14842	08/25/77	12	20	14.2	C		6.6	800	13	1	4															1	5	6	45	20	3.40
56	42.3908	106.8361	2	08	0	W14850	08/24/77	15	28	14.5			7.7	140	18	3	7															9					1.41
56	42.4069	106.7922	2	06	0	W14852	08/24/77	16	27				8.2	380	11	1	1	6	8																4.58
56	42.4267	106.8406	2	07	0	W14853	08/24/77	10	23	16.5			8.3	390	13	1	1	3	3	2	3	1	2	3	3	2									7.16
56	42.4103	106.6814	2	07	0	W14854	08/24/77	11	21	15.5			8.1	285	13	4	4	3	4	3	3	1	2	4	2	3	4								3.61
56	42.3981	106.6808	2	06	0	W14855	08/24/77	12	21	11.0			8.0	290	18	1	1	5	6																2.50
56	42.6967	106.6889	2	06	0	W14860	08/29/77	14	28	20.0			7.6	1100	25	1	1	6	7	2	2	2	2	4	2	2	2	1							78.79*
56	42.4317	106.6958	2	06	0	W14869	08/24/77	13	21	17.5			7.6	350	14	1	1	5	6																3.06
56	42.4517	106.6694	2	06	0	W14869	08/24/77	13	22	12.5			7.8	260	13	1	1	5	6																0.65
56	42.4328	106.6547	2	06	0	W14870	08/24/77	14	26	23.0				345	14	1	1	5	6																0.45
56	42.4269	106.6367	2	07	0	W14871	08/24/77	14	25	19.0			8.1	225	13	1	6	3	6	2	3	1	2	4	2	3	2								2.38
56	42.4036	106.6542	2	07	0	W14872	08/24/77	16	23	17.5			7.6	305	14	1	1	4	6	3	3	1	2	3	2	3	2								4.11
56	42.8233	106.8050	2	07	0	W14878	08/29/77	10	21	15.5			6.7	2650	14	1	1	5	2	2	3	3	2	4	3	3	2								5.03
56	42.8256	106.8617	2	08	0	W14879	08/29/77	11	21	10.5			7.2	850	16	1	1															1	3	6			0.60
56	42.6953	106.8467	2	06	0	W14890	08/30/77	10	24	14.5			7.7	120	14	1	1	5	6																0.44
56	42.6853	106.8544	2	06	0	W14891	08/30/77	11	24	10.5			7.6	175	13																						0.27
56	42.4975	106.4092	2	06	0	W14892	08/30/77	12	27	15.0			6.8	475	41	1	1															1					37.40*
56	42.4431	107.2183	2	08	0	W14897	09/02/77	16	28	15.2			6.8	380	11	2	6															1	4	6			3.68
56	42.4772	107.2256	2	07	0	W14898	09/02/77	16	30	19.0			7.0	380	16	2	6	6	8	2	3	2	1	4	2	2	2	3							6.85
56	42.4894	107.1319	2	07	0	W14902	08/31/77	10	15	11.5			7.1	550	12	3	6	4	6	2	3	1	2	4	2	2	2	8							10.78
56	42.4558	107.2006	2	08	0	W14905	08/31/77	11	19	12.0			6.8	410	7	3	6															1					8.30
56	42.3658	107.4481	2	08	0	W14906	08/31/77	14	22	20.5	C		6.7	2850	4																	1	8	6	60	45	25.65*
56	42.3508	107.4533	2	06	0	W14907	08/31/77		28	16.5	C		7.1	470	20	4																1					3.80
56	42.3483	107.4558	2	06	0	W14908	08/31/77	17	28	12.5	C		7.3	500	9	4																1					3.58
56	42.3486	107.4503	2	06	0	W14909	08/31/77	18	25	16.0	C		7.6	440	13	1	1															1					7.53
56	42.3625	107.3103	2	08	0	W14910	09/01/77	10	21	13.0			7.1	550	7	4																1	3	6			3.51
56	42.3358	107.3200	2	07	0	W14912	09/01/77	13	23	19.5			6.6	250	18	4		5	6	2	3	1	2	4	2	3	2										0.87
56	42.3119	107.3050	2	07	0	W14913	09/01/77	12	23	15.5			7.1	275	9	4		4	6	2	3	1	2	3	2	3	2										0.74
56	42.4439	107.1367	2	06	0	W14920	09/05/77	17	30	22.0	C		9.2	1720	16	2	6															1					0.11
56	42.5458	107.0028	2	08	0	W14921	09/06/77	11	30	21.5	C		6.6	1050	11	2	6															1	1	6			0.46
56	42.6036	107.1264	2	06	0	W14926	09/06/77	14	31	26.2			7.7	490	15	2	6	6	8	2	3	3	2	4	2	3	2	1								0.93
56	42.4700	107.0372	2	08	0	W14933	09/06/77	17	28	12.2	C		6.4	370	15	2	6															1	3	6			4.26
56	42.4283	107.0497	2	08	0	W14936	09/06/77	18	28	14.5			6.1	265	10	2	6															1	2	6			2.84
56	42.3344	107.4097	2	06	0	W14939	09/01/77	15	24	18.0			6.8	500	11	1	3	6	8																0.18
56	42.3308	107.4131	2	06	0	W14940	09/01/77	16	23	15.0			6.7	525	7	1	1	6	6																3.69
56	42.3289	107.4164	2	06	0	W14941	09/01/77	16	23	15.5			6.5	390	2	1	1	4	1																2.52
56	42.3125	107.3797	2	06	0	W14942	09/01/77	17	23	14.5			6.6	550	12	1	1	5	6																0.83
56	42.3131	107.3917	2	06	0	W14943	09/01/77	16	22	14.0			6.7	390	14	1	1	5	6																3.27
56	42.3181	107.4342	2	08	0	W14945	09/02/77	9	16	13.0			7.3	875	10	1	3															1	3	6			1.89
56	42.3700	107.2558	2	08	0	W14961	09/02/77	11		13.5			6.8	195	17	1	1															1		4	6		17.06
56	42.3594	107.2522	2	07	0	W14962	09/02/77	11	24	13.5			6.7	230	7	1	1	4	6	2	3	1	2	4	2	3	1	3							2.40
56	42.3531	107.2064	2	06	0	W14965	09/02/77	13	28	25.0			6.9	170	8	1	1	4	6																0.41
56	42.2839	107.2403	2	06	0	W14967	09/02/77	16	27	18.5			6.7	110	9	4		4	6																2.90

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																									U CONCENTRATION
							TIME SAMPLED																								
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEE	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (#) UNITS IN ppb
56-42.3006-107.2211-2-06-						0-W14968-09/02/77-16-	29-13.0-	-	-	6.8-	150-																						2.72
56-42.3411-107.4606-2-07-						0-W14972-09/02/77-18-	28-21.0-	-	-	7.2-	1550-																						4.28
56-42.2864-107.1994-2-06-						0-W14973-09/03/77-11-	26-13.5-	-	-	6.4-	115-																						2.66
56-42.3014-107.1794-2-07-						0-W14974-09/03/77-12-	30-19.5-	-	-	6.5-	135-																						2.91
56-42.2711-107.1283-2-06-						0-W14976-09/03/77-13-	28-10.5-C-	-	-	6.1-	215-																						1.66
56-42.3039-107.2311-2-06-						0-W14978-09/03/77-14-	26-14.5-	-	-	5.9-	80-																						0.01
56-42.2461-107.3769-2-08-						0-W14981-09/03/77-10-	-11.5-	-	-	6.6-	600-																						1.41
56-42.2431-107.3636-2-07-						0-W14982-09/05/77- 9-	21-10.5-	-	-	6.7-	390-																						3.10
56-42.2408-107.3517-2-07-						0-W14983-09/05/77- 9-	21-10.0-	-	-	6.8-	1050-																						2.33
56-42.2272-107.3192-2-06-						0-W14984-09/05/77-10-	23- 9.5-C-	-	-	6.5-	355-																						1.60
56-42.2444-107.3017-2-07-						0-W14985-09/05/77-10-	23-15.0-	-	-	6.9-	440-																						0.91
56-42.2197-107.2522-2-07-						0-W14988-09/05/77-11-	23-16.0-	-	-	7.4-	370-																						1.35
56-42.2383-107.2431-2-06-						0-W14989-09/05/77-11-	24-18.5-	-	-	7.3-	390-																						0.69
56-42.2200-107.2203-2-06-						0-W14990-09/05/77-12-	24-17.5-	-	-	7.4-	310-																						0.81
56-42.2092-107.2278-2-06-						0-W14991-09/05/77-12-	29-18.5-	-	-	7.5-	320-																						0.87
56-42.2208-107.1919-2-06-						0-W14993-09/05/77-13-	30-19.5-C-	-	-	7.5-	490-																						1.57
56-42.2272-107.1328-2-07-						0-W14994-09/05/77-15-	32-21.0-	-	-	7.4-	290-																						1.52
56-42.2353-107.3675-2-06-						0-W14995-09/05/77-16-	29-15.0-	-	-	6.9-	365-																						1.00
56-42.2328-107.3489-2-06-						0-W14999-09/06/77-10-	25-16.0-	-	-	7.6-	370-																						0.54
56-42.2372-107.2269-2-06-						0-W15000-09/06/77-11-	26- 7.5-	-	-	7.3-	340-																						0.85
56-42.2464-107.1147-2-07-						0-W15002-09/06/77-14-	33-16.0-	-	-	7.3-	290-																						3.69
56-42.1983-107.0528-2-07-						0-W15005-09/07/77-11-	28-15.0-	-	-	7.4-	525-																						0.94
56-42.4189-107.8525-2-08-						0-W15006-09/07/77-16-	-17.5-	-	-	6.8-	95-																						34.17*
56-42.3789-107.8461-2-07-						0-W15008-09/07/77-17-	19-16.0-C-	-	-	6.9-	300-																						22.47*
56-42.4253-107.8500-2-07-						0-W15010-09/09/77- 9-	10- 8.5-	-	-	6.8-	800-																						58.99*
56-42.5792-107.8344-2-08-						0-W15017-09/10/77-13-	28- 9.0-	-	-	7.2-	330-																						5.45
56-42.5139-107.8639-2-08-						0-W15027-09/09/77-14-	24-13.5-	-	-	7.2-	1700-																						18.45
56-42.5256-107.7983-2-08-						0-W15028-09/09/77-16-	27-15.5-	-	-	7.2-	550-																						11.34
56-42.2644-107.1181-2-07-						0-W15034-09/07/77-11-	29-17.2-	-	-	7.1-	270-																						10.91
56-42.2956-107.0858-2-08-						0-W15037-09/07/77-13-	31-15.2-	-	-	7.8-	225-																						4.88
56-42.3053-107.0892-2-06-						0-W15038-09/07/77-14-	30-14.2-	-	-	7.7-	220-																						1.61
56-42.3389-107.0281-2-07-						0-W15041-09/07/77-15-	33-27.5-	-	-	7.6-	415-																						2.97
56-42.3767-107.2094-2-07-						0-W15043-09/08/77-10-	28-15.2-	-	-	6.2-	340-																						2.19
56-42.3914-107.2583-2-07-						0-W15049-09/08/77-13-	31-20.5-	-	-	7.8-	330-																						4.32
56-42.4122-107.3861-2-08-						0-W15054-09/08/77-16-	30-12.0-C-	-	-	6.1-	1150-																						9.08
56-42.1153-107.2414-2-07-						0-W15055-09/14/77-11-	17-15.0-	-	-	7.1-	600-																						1.98
56-42.1242-107.2281-2-08-						0-W15056-09/14/77-12-	17-20.0-C-	-	-	6.8-	325-																						1.53
56-42.1236-107.2253-2-06-						0-W15057-09/14/77-12-	17-10.0-	-	-	7.0-	600-																						1.93
56-42.1242-107.1583-2-06-						0-W15060-09/14/77-14-	25-15.0-	-	-	6.5-	900-																						1.83
56-42.1219-107.1408-2-06-						0-W15063-09/14/77-16-	24- 8.5-	-	-	6.8-	491-																						0.66
56-42.0919-106.1839-2-06-						0-W15064-09/16/77-10-	20-11.0-C-	-	-	6.2-	250-																						0.83
56-42.0797-106.2283-2-08-						0-W15066-09/16/77-11-	21-11.5-C-	-	-	6.4-	975-																						5.00
56-42.0764-106.1992-2-06-						0-W15069-09/16/77-12-	19-11.0-C-	-	-	6.7-	300-																						1.75
56-42.0275-106.0478-2-08-						0-W15070-09/24/77-13-	20-15.0-	-	-	7.8-	1200-																						63.26*
56-42.0189-107.2936-2-07-						0-W15074-09/17/77-15-	15-11.2-	-	-	7.8-	1250-																						5.12
56-42.7692-106.3150-2-06-						0-W15082-08/14/77-15-	32- 9.1-	-	-	5.6-	345-																						4.98
56-42.7508-106.3328-2-06-						0-W15083-08/14/77-15-	27-16.0-	-	-	6.5-	50-																						0.07
56-42.0936-107.2906-2-06-						0-W15089-09/09/77-13-	23- 2.3-	-	-	7.3-	340-																						3.65
56-42.0881-107.2725-2-06-						0-W15091-09/09/77-14-	23- 2.0-	-	-	7.9-	370-																						10.63
56-42.2336-107.6575-2-08-						0-W15092-09/13/77-16-	18-10.0-	-	-	6.6-	190-																						0.89
56-42.2458-107.6725-2-06-						0-W15094-09/12/77-17-	18-16.5-	-	-	6.9-	280-																						0.28

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																								U CONCENTRATION
							TIME SAMPLED																							
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEE	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (θ) UNITS IN ppb
56-	42.3722-	107.6908-	2-	07-	0-	W15096-	09/14/77-	9-	15-	1.0-	-	-	6.8-	80-	27-3-	-4-	3-	3-	3-	1-	2-	1-	3-	5-	1-	-1-	-	-	-	-	0.36
56-	42.3547-	107.8172-	2-	06-	0-	W15099-	09/13/77-	10-	15-	8.0-	-	-	7.2-	495-	13-4-	-6-	8-	-	-	-	-4-	3-	4-	1-	-2-	-	-	-	-	-	34.40
56-	42.3025-	107.7353-	2-	07-	0-	W15100-	09/13/77-	13-	18-	11.5-	-	-	6.8-	95-	14-1-	1-	4-	1-	3-	3-	1-	2-	2-	3-	3-	1-	-1-	-	-	-	-	1.42
56-	42.3478-	107.8614-	2-	07-	0-	W15101-	09/12/77-	12-	16-	13.5-	-	-	6.9-	245-	12-4-	-4-	1-	3-	3-	1-	2-	2-	3-	3-	2-	-1-	-	-	-	-	6.60
56-	42.3322-	107.8661-	2-	07-	0-	W15102-	09/12/77-	13-	16-	17.5-	-	-	7.2-	310-	22-4-	-4-	7-	2-	3-	2-	2-	4-	2-	3-	2-	-1-	-	-	-	-	15.35
56-	42.3342-	107.8700-	2-	06-	0-	W15103-	09/12/77-	13-	16-	15.5-	-	-	6.9-	320-	18-4-	-4-	7-	-	-	-	-4-	2-	3-	2-	-1-	-	-	-	-	-	0.28
56-	42.3167-	107.8408-	2-	07-	0-	W15105-	09/12/77-	14-	19-	13.5-	-	-	6.9-	160-	9-4-	-4-	1-	3-	3-	1-	2-	4-	2-	3-	2-	-1-	-	-	-	-	9.29
56-	42.2853-	107.7325-	2-	07-	0-	W15120-	09/13/77-	14-	18-	12.5-	-	-	7.3-	400-	13-1-	1-	4-	7-	2-	3-	1-	2-	4-	3-	4-	1-	-1-	-	-	-	-	2.28
56-	42.2836-	107.7344-	2-	07-	0-	W15121-	09/13/77-	14-	18-	15.0-	-	-	6.6-	150-	18-1-	1-	4-	6-	2-	3-	1-	2-	4-	3-	3-	1-	-1-	-	-	-	-	1.03
56-	42.2719-	107.7061-	2-	07-	0-	W15123-	09/12/77-	15-	18-	16.5-	-	-	6.8-	110-	18-4-	-4-	6-	3-	3-	1-	2-	4-	3-	2-	1-	-1-	-	-	-	-	2.86
56-	42.4397-	107.6836-	2-	08-	0-	W15124-	09/14/77-	13-	25-	12.0-	-	-	6.3-	400-	12-1-	1-	-	-	-	-	-	-4-	3-	2-	2-	-1-	8-	8-	-	-	-	16.37
56-	42.4267-	107.6483-	2-	08-	0-	W15125-	09/14/77-	13-	24-	11.0-	C-	-	6.2-	-	10-1-	6-	4-	6-	-	-	-	-2-	4-	2-	3-	2-	-1-	8-	-	-	-	15.51*
56-	42.2906-	107.6825-	2-	07-	0-	W15126-	09/14/77-	10-	19-	11.0-	-	-	6.3-	115-	18-1-	1-	4-	6-	3-	3-	1-	2-	4-	3-	4-	1-	-1-	-	-	-	-	3.78
56-	42.3292-	107.6397-	2-	07-	0-	W15127-	09/14/77-	12-	18-	8.5-	-	-	6.7-	-	18-	-	-	-	-	-	-	-	-	-	-	-	-1-	-	-	-	-	6.94
56-	42.1606-	107.0769-	2-	06-	0-	W15132-	09/15/77-	12-	17-	9.0-	-	-	7.4-	700-	1-1-	2-	6-	8-	1-	2-	2-	3-	4-	-3-	2-	-1-	-	-	-	-	-	0.29
56-	42.1572-	107.0356-	2-	06-	0-	W15134-	09/15/77-	14-	17-	9.0-	-	-	6.8-	330-	7-1-	6-	5-	6-	-	-	-	-4-	2-	5-	2-	-1-	-	-	-	-	-	0.30
56-	42.1578-	107.0514-	2-	06-	0-	W15135-	09/15/77-	15-	19-	11.0-	-	-	6.9-	349-	9-1-	6-	5-	8-	-	-	-	-4-	3-	5-	2-	-1-	-	-	-	-	-	0.54
56-	42.1678-	107.0378-	2-	06-	0-	W15136-	09/15/77-	18-	20-	10.5-	-	-	6.7-	250-	2-2-	5-	5-	6-	3-	2-	-	-	4-	-4-	4-	2-	-2-	-	-	-	-	0.31
56-	42.1881-	107.0094-	2-	06-	0-	W15137-	09/15/77-	14-	17-	8.0-	-	-	6.4-	90-	7-1-	1-	5-	8-	-	-	-	-4-	3-	5-	3-	-1-	-	-	-	-	-	0.56
56-	42.1928-	107.0811-	2-	07-	0-	W15141-	09/15/77-	18-	19-	9.0-	-	-	6.9-	470-	13-3-	3-	5-	6-	2-	2-	1-	-4-	3-	3-	2-	-1-	-	-	-	-	-	0.33
56-	42.1878-	107.3764-	2-	06-	0-	W15144-	09/16/77-	-	20-	12.0-	C-	-	7.1-	390-	6-1-	1-	-	-	-	-	-	-4-	3-	2-	2-	-9-	-	-	-	-	-	1.28
56-	42.0350-	106.0161-	2-	08-	0-	W15154-	09/22/77-	13-	19-	9.0-	-	-	7.2-	600-	13-1-	6-	-	-	-	-	-1-	-	4-	2-	1-	3-	-1-	1-	-	-	-	130.09*
56-	42.0758-	106.5667-	2-	06-	0-	W15159-	09/21/77-	-	12-	18.0-	C-	-	6.1-	1000-	9-1-	6-	-	-	-	-	-	-4-	3-	3-	1-	-1-	-	-	-	-	-	9.96
56-	42.0781-	106.5928-	2-	07-	0-	W15160-	09/21/77-	17-	12-	14.0-	-	-	6.1-	300-	22-1-	6-	3-	6-	4-	3-	1-	1-	4-	3-	4-	2-	-1-	-	-	-	-	7.09
56-	42.2197-	107.4764-	2-	08-	0-	W15165-	09/16/77-	17-	19-	12.0-	-	-	6.9-	1300-	10-4-	-	-	-	-	-	-	-4-	2-	2-	3-	-1-	4-	6-	70-	-	-	8.15
56-	42.0442-	106.2686-	2-	06-	0-	W15172-	09/21/77-	16-	15-	9.5-	C-	-	6.6-	725-	12-1-	7-	-	-	-	-	-	-3-	2-	4-	2-	-1-	-	-	-	-	-	9.54
56-	42.4678-	106.4517-	2-	08-	0-	W15176-	09/22/77-	14-	20-	12.5-	-	-	6.9-	1000-	13-1-	1-	-	-	-	-	-	-4-	2-	-	-	-1-	4-	4-	38-	15-	-	6.44
56-	42.0689-	106.0175-	2-	08-	0-	W15178-	09/22/77-	14-	18-	13.0-	C-	-	7.5-	1950-	20-	-	-	-	-	-	-	-	-	-	-	-	-1-	1-	-	-	-	-	1.82
56-	42.1064-	106.0394-	2-	07-	0-	W15179-	09/22/77-	15-	18-	12.5-	-	-	7.8-	800-	11-1-	6-	4-	6-	2-	2-	1-	2-	4-	2-	2-	3-	-1-	-	-	-	-	11.88
56-	42.0647-	106.4622-	2-	07-	0-	W15187-	09/22/77-	13-	18-	1.4-	-	-	6.9-	1400-	18-1-	6-	1-	7-	2-	2-	3-	1-	3-	2-	4-	3-	-1-	-	-	-	-	3.83
56-	42.0372-	106.4431-	2-	06-	0-	W15188-	09/22/77-	14-	18-	13.0-	-	-	7.4-	1400-	-1-	6-	6-	8-	1-	2-	2-	1-	3-	2-	4-	3-	-1-	-	-	-	-	4.63
56-	42.0614-	106.4042-	2-	06-	0-	W15189-	09/22/77-	15-	18-	12.0-	-	-	6.9-	1200-	11-1-	6-	-	-4-	3-	1-	1-	4-	3-	-3-	-1-	-	-	-	-	-	-	54.46*
56-	42.0975-	106.3939-	2-	07-	0-	W15191-	09/22/77-	16-	18-	12.0-	-	-	7.2-	2000-	9-1-	6-	6-	8-	2-	2-	1-	1-	3-	2-	3-	3-	-1-	-	-	-	-	-	5.98
56-	42.0975-	106.3983-	2-	07-	0-	W15192-	09/22/77-	16-	18-	12.0-	-	-	8.0-	1700-	13-1-	6-	5-	6-	3-	2-	1-	1-	4-	3-	2-	3-	-1-	-	-	-	-	-	3.68
56-	42.4189-	106.3989-	2-	07-	0-	W15197-	09/22/77-	17-	17-	-	-	-	6.9-	2400-	18-1-	1-	4-	6-	2-	3-	1-	2-	3-	2-	2-	2-	-1-	-	-	-	-	-	47.17*
56-	42.4483-	106.3569-	2-	08-	0-	W15198-	09/23/77-	11-	5-	8.5-	-	-	6.8-	480-	13-1-	1-	-	-	-	-	-	-4-	3-	4-	5-	-1-	1-	8-	-	-	-	0.20
56-	42.4347-	106.3375-	2-	07-	0-	W15200-	09/23/77-	13-	9-	7.0-	-	-	6.7-	385-	27-1-	1-	4-	1-	3-	4-	1-	2-	4-	2-	4-	3-	-1-	-	-	-	-	-	4.98
56-	42.4744-	106.3219-	2-	06-	0-	W15202-	09/24/77-	10-	10-	4.5-	-	-	6.7-	590-	13-4-	-	6-	6-	-	-	-	-4-	3-	3-	2-	-1-	-	-	-	-	-	3.81
56-	42.4958-	106.2897-	2-	07-	0-	W15203-	09/24/77-	12-	15-	9.5-	-	-	6.6-	280-	27-1-	1-	4-	6-	2-	3-	1-	2-	4-	2-	3-	2-	-1-	-	-	-	-	-	3.19
56-	42.4744-	106.1828-	2-	07-	0-	W15208-	10/24/77-	16-	17-	6.5-	-	-	7.1-	320-	18-4-	-6-	6-	2-	3-	2-	2-	4-	3-	2-	2-	-1-	-	-	-	-	-	5.39
56-	42.3878-	106.2033-	2-	06-	0-	W15212-	09/25/77-	10-	17-	6.0-	-	-	6.8-	310-	18-4-	-4-	1-	-	-	-	-	-4-	3-	2-	2-	-1-	-	-	-	-	-	15.73
56-	42.4983-	106.1517-	2-	06-	0-	W15213-	09/25/77-	12-	15-	5.5-	-	-	6.9-	225-	27-4-	-6-	8-	-	-	-	-	-4-	3-	2-	2-	-1-	-	-	-	-	-	2.66
56-	42.4703-	106.1272-	2-	06-	0-	W15214-	09/25/77-	13-	15-	6.5-	-	-	7.2-	440-	27-4-	-6-	4-	-	-	-	-	-4-	3-	3-	2-	-1-	-	-	-	-	-	0.23
56-	42.4636-	106.1386-	2-	06-	0-	W15216-	09/25/77-	13-	16-	5.5-	-	-	7.1-	360-	18-4-	-6-	4-	-	-	-	-	-4-	3-	2-	2-	-1-	-	-	-	-	-	1.14
56-	42.3844-	106.1636-	2-	06-	0-	W15217-	09/25/77-	15-	18-	9.0-	-	-	7.2-	350-	18-4-	-6-	8-	-	-	-	-	-4-	3-	2-	2-	-1-	-	-	-	-	-	18.63
56-	42.3842-	106.1603-	2-	07-	0-	W15218-	09/25/77-	16-	21-	10.5-	-	-	7.5-	480-	27-1-	6-	3-	7-	2-	3-	1-	2-	4-	3-	2-	2-	-1-	-	-	-	-	-	11.99
56-	42.4989-	106.0839-	2-	06-	0-	W15219-	09/26/77-	10-	19-	8.5-	-	-	6.6-	190-	11-3-	6-	3-	4-	-	-	-	-4-	3-	4-	2-	-1-	-	-	-	-	-	1.11
56-	42.4628-	106.0803-	2-	06-	0-	W15220-	09/26/77-	11-	20-	8.0-	-	-	6.7-	310-	26-4-	-6-	8-	-	-	-	-	-4-	3-	2-	2-	-1-	-	-	-	-	-	0.22
56-	42.4678-	106.0433-	2-	06-	0-	W15221-	09/26/77-	12-	19-	9.0-	-	-	6.7-	130-	27-1-	4-	6-	8-	-	-	-	-4-	3-	2-	2-	-1-	-	-	-	-	-	0.40
56-	42.5442-	107.1633-	2-	08-	0-	W15236-	10/20/77-	16-	16-	9.0-	C-	-	6.7-	500-	9-4-	-	-	-	-	-	-	-	-	-	-	-8-	-	-	-	-	-	14.77
56-	42.7014-	107.1056-	2-	06-	0-	W15241-	10/20/77-	18-	11-	22.0-	-	-	6.4-	800-	17-1-	6-	3-	6-	4-	3-	5-	-4-	4-	4-	3-	-1-	-	-	-	-	-	2.91

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																								U CONCENTRATION
							TIME SAMPLED																							
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEE	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (ℍ) UNITS IN ppb
56-	42.3497-	107.6097-	2-07-	0-	W15245-	10/21/77-	12-	17-	6.5-	-	-	7.0-	155-	27-	3-	7-	4-	6-	3-	3-	1-	2-	1-	2-	3-	4-	-1-	-	-	-	-	82.98*
56-	42.2844-	107.5983-	2-06-	0-	W15250-	10/21/77-	11-	16-	6.5-	-	-	6.9-	155-	27-	3-	7-	4-	7-	2-	3-	1-	-	3-	3-	3-	4-	-1-	-	-	-	-	3.79
56-	42.9747-	106.6928-	2-08-	0-	W15254-	10/25/77-	-	23-	14.0-	C-	-	6.9-	2490-	11-	1-	1-	-	-	2-	2-	1-	-	4-	2-	2-	1-	-1-	1-	6-	-	-	3.41
56-	42.3733-	107.6175-	2-07-	0-	W15255-	10/21/77-	13-	17-	7.0-	-	-	7.7-	150-	37-	3-	7-	4-	6-	4-	3-	1-	2-	4-	4-	3-	4-	-1-	-	-	-	-	8.57
56-	42.3633-	107.5689-	2-07-	0-	W15256-	10/21/77-	14-	16-	6.5-	-	-	7.1-	185-	26-	1-	6-	4-	6-	-	2-	-	2-	3-	3-	4-	4-	-1-	-	-	-	-	3.90
56-	42.3489-	107.5289-	2-07-	0-	W15258-	10/21/77-	15-	16-	6.0-	-	-	7.6-	215-	23-	1-	6-	4-	6-	4-	3-	3-	1-	2-	3-	3-	4-	-1-	-	-	-	-	11.61
56-	42.9667-	106.6436-	2-08-	0-	W15260-	10/25/77-	13-	20-	12.5-	C-	-	6.9-	1050-	13-	4-	-	-	-	3-	3-	1-	-	4-	2-	1-	1-	-1-	3-	6-	-	-	5.64
56-	42.4114-	106.0203-	2-06-	0-	W15262-	09/27/77-	16-	22-	7.5-	-	-	6.7-	320-	23-	1-	6-	5-	6-	-	-	-	1-	4-	3-	3-	1-	-1-	-	-	-	-	12.71
56-	42.4139-	106.0272-	2-06-	0-	W15263-	09/27/77-	16-	22-	14.5-	-	-	7.4-	390-	23-	1-	6-	5-	6-	-	-	-	1-	4-	3-	3-	1-	-1-	-	-	-	-	9.68
56-	42.3975-	106.0511-	2-07-	0-	W15264-	09/27/77-	16-	22-	13.5-	-	-	7.3-	180-	18-	1-	4-	3-	4-	2-	3-	1-	2-	4-	2-	3-	2-	-1-	-	-	-	-	3.16
56-	42.3483-	106.4278-	2-06-	0-	W15267-	09/28/77-	11-	16-	10.0-	-	-	7.4-	600-	27-	1-	1-	6-	6-	-	-	-	-	4-	3-	3-	1-	-1-	-	-	-	-	1.00
56-	42.3192-	106.4992-	2-06-	0-	W15276-	09/28/77-	16-	24-	14.5-	-	-	7.4-	310-	27-	1-	6-	5-	6-	-	-	-	1-	4-	3-	3-	1-	-1-	-	-	-	-	1.45
56-	42.3350-	106.5378-	2-07-	0-	W15279-	09/28/77-	16-	19-	15.0-	-	-	7.4-	345-	37-	1-	6-	3-	6-	2-	2-	1-	1-	4-	3-	3-	1-	-1-	-	-	-	-	9.93
56-	42.3450-	106.5217-	2-06-	0-	W15280-	09/28/77-	17-	19-	13.5-	-	-	7.2-	305-	27-	1-	6-	3-	6-	2-	2-	1-	-	3-	3-	3-	1-	-1-	-	-	-	-	1.45
56-	42.3953-	106.3442-	2-07-	0-	W15282-	09/28/77-	19-	17-	12.0-	-	-	7.4-	1550-	27-	1-	1-	4-	6-	2-	2-	1-	1-	3-	3-	4-	2-	-1-	-	-	-	-	3.47
56-	42.2608-	106.2608-	2-06-	0-	W15301-	10/02/77-	14-	16-	14.5-	C-	-	8.2-	1100-	27-	4-	-5-	7-	-	-	-	-	4-	2-	2-	2-	-1-	-	-	-	-	-	4.29
56-	42.3028-	106.2775-	2-08-	0-	W15303-	10/02/77-	15-	18-	12.5-	-	-	6.3-	975-	32-	4-	-	-	-	-	-	-	-	4-	2-	2-	2-	-1-	1-	-	-	-	-	0.27
56-	42.5592-	107.9558-	2-08-	0-	W15308-	10/06/77-	12-	16-	10.5-	-	-	6.9-	420-	14-	-	-	-	-	-	-	-	-	-	-	-	-	-1-	3-	6-	-	-	3.61
56-	42.6011-	107.9681-	2-07-	0-	W15312-	10/06/77-	13-	16-	11.0-	-	-	6.6-	431-	15-	3-	1-	4-	6-	3-	2-	1-	2-	3-	3-	3-	3-	-1-	-	-	-	-	10.13
56-	42.6383-	107.9092-	2-06-	0-	W15315-	10/06/77-	14-	16-	11.0-	-	-	6.7-	210-	13-	3-	6-	5-	6-	-	-	-	-	4-	3-	3-	3-	-1-	-	-	-	-	2.60
56-	42.6264-	107.9400-	2-06-	0-	W15316-	10/06/77-	15-	16-	9.0-	-	-	7.3-	2400-	11-	3-	6-	5-	6-	-	-	-	-	4-	2-	3-	3-	-1-	-	-	-	-	265.32*
56-	42.6625-	107.9881-	2-06-	0-	W15325-	10/07/77-	11-	-	8.0-	-	-	5.9-	120-	12-	3-	6-	5-	6-	-	-	-	-	4-	2-	4-	2-	-1-	-	-	-	-	0.91
56-	42.6756-	107.9558-	2-06-	0-	W15326-	10/07/77-	-	10-	7.0-	-	-	6.4-	290-	11-	3-	6-	-	-	-	-	-	-	4-	2-	3-	2-	-1-	-	-	-	-	3.51
56-	42.1428-	106.6147-	2-07-	0-	W15327-	09/29/77-	-	15-	7.0-	-	-	9.0-	100-	20-	1-	4-	3-	4-	2-	2-	1-	1-	1-	3-	2-	2-	-1-	-	-	-	-	0.01
56-	42.5939-	107.6047-	2-08-	0-	W15335-	10/06/77-	-	16-	10.5-	-	-	6.9-	265-	18-	3-	7-	-	-	-	-	1-	-	3-	3-	4-	3-	-1-	3-	-	-	-	-	11.60
56-	42.1611-	106.0636-	2-07-	0-	W15337-	09/28/77-	13-	25-	17.0-	-	-	7.3-	1800-	7-	1-	1-	4-	6-	1-	2-	1-	2-	4-	3-	2-	1-	-1-	-	-	-	-	21.73
56-	42.1300-	106.0036-	2-07-	0-	W15341-	09/28/77-	15-	24-	20.0-	-	-	6.8-	800-	13-	1-	6-	5-	6-	2-	2-	1-	2-	3-	3-	3-	2-	-1-	-	-	-	-	15.81
56-	42.3650-	106.7442-	2-07-	0-	W15343-	10/01/77-	-	7-	4.5-	-	-	7.5-	350-	13-	3-	4-	6-	6-	1-	2-	1-	2-	4-	3-	4-	2-	-1-	-	-	-	-	59.49*
56-	42.2508-	106.8011-	2-07-	0-	W15346-	09/29/77-	-	24-	16.5-	-	-	7.5-	500-	13-	1-	1-	5-	6-	3-	2-	1-	2-	3-	3-	4-	2-	-1-	-	-	-	-	31.51*
56-	42.2731-	106.8506-	2-07-	0-	W15347-	09/29/77-	-	24-	19.0-	-	-	7.4-	150-	9-	3-	7-	5-	6-	1-	2-	1-	2-	3-	3-	4-	2-	-1-	-	-	-	-	1.41
56-	42.2797-	106.7772-	2-07-	0-	W15351-	09/29/77-	-	24-	17.0-	-	-	6.8-	550-	11-	3-	7-	5-	6-	2-	2-	1-	2-	3-	3-	4-	2-	-1-	-	-	-	-	19.92*
56-	42.3219-	106.7761-	2-08-	0-	W15352-	09/29/77-	-	24-	25.5-	-	-	6.8-	370-	5-	3-	7-	-	-	-	-	1-	-	4-	4-	4-	2-	-1-	3-	-	-	-	-	6.79
56-	42.3169-	106.7969-	2-06-	0-	W15354-	09/29/77-	-	24-	15.0-	-	-	7.4-	150-	13-	1-	1-	5-	6-	4-	3-	1-	-	3-	3-	4-	2-	-1-	-	-	-	-	1.03
56-	42.3089-	106.8206-	2-06-	0-	W15357-	09/29/77-	-	23-	15.0-	-	-	7.1-	130-	13-	3-	7-	6-	8-	3-	2-	-	-	3-	3-	4-	2-	-1-	-	-	-	-	53.61*
56-	42.3172-	106.8417-	2-06-	0-	W15358-	09/29/77-	-	25-	14.0-	-	-	6.5-	70-	11-	3-	7-	5-	6-	2-	2-	2-	5-	-	4-	3-	4-	2-	-1-	-	-	-	-	0.64
56-	42.3347-	106.8481-	2-06-	0-	W15359-	09/29/77-	-	24-	14.0-	-	-	6.1-	100-	7-	3-	7-	6-	8-	2-	3-	1-	-	-	3-	4-	2-	-1-	-	-	-	-	0.91
56-	42.3486-	106.8447-	2-06-	0-	W15360-	09/29/77-	-	24-	16.5-	-	-	7.0-	180-	14-	3-	7-	4-	9-	3-	3-	1-	-	4-	3-	4-	2-	-1-	-	-	-	-	0.52
56-	42.3611-	106.8186-	2-06-	0-	W15363-	09/29/77-	-	23-	15.0-	-	-	7.5-	115-	46-	3-	7-	5-	6-	3-	3-	1-	-	4-	3-	4-	3-	-1-	-	-	-	-	0.38
56-	42.3672-	106.8297-	2-07-	0-	W15364-	09/29/77-	-	23-	14.0-	-	-	7.1-	170-	23-	3-	7-	4-	6-	3-	2-	1-	2-	4-	3-	4-	3-	-1-	-	-	-	-	6.23
56-	42.3658-	106.8267-	2-07-	0-	W15365-	09/29/77-	-	23-	12.0-	-	-	7.0-	200-	18-	3-	7-	-	-	2-	3-	1-	2-	4-	3-	4-	3-	-1-	-	-	-	-	4.80
56-	42.3136-	106.7697-	2-07-	0-	W15366-	09/30/77-	-	12-	10.0-	-	-	7.1-	360-	11-	1-	6-	5-	6-	3-	3-	1-	2-	4-	3-	4-	3-	-1-	-	-	-	-	26.88
56-	42.3603-	106.7842-	2-06-	0-	W15367-	09/30/77-	-	12-	11.0-	-	-	7.5-	95-	41-	3-	4-	6-	6-	2-	3-	1-	-	3-	3-	4-	2-	-1-	-	-	-	-	4.63
56-	42.3694-	106.7744-	2-06-	0-	W15368-	09/30/77-	-	12-	9.0-	-	-	6.9-	250-	18-	3-	4-	6-	6-	2-	3-	5-	-	4-	3-	4-	2-	-1-	-	-	-	-	12.26
56-	42.3497-	106.7761-	2-06-	0-	W15369-	09/30/77-	-	12-	10.0-	-	-	6.9-	700-	3-	1-	7-	6-	8-	2-	3-	5-	-	4-	3-	4-	2-	-1-	-	-	-	-	4.93
56-	42.3647-	106.7528-	2-06-	0-	W15370-	09/30/77-	-	12-	9.0-	-	-	7.2-	1500-	11-	3-	4-	6-	8-	1-	3-	4-	-	4-	3-	4-	2-	-1-	-	-	-	-	129.87*
56-	42.5722-	107.6031-	2-06-	0-	W15376-	10/06/77-	-	16-	12.0-	-	-	6.9-	275-	7-	3-	7-	5-	6-	2-	2-	1-	-	3-	3-	4-	3-	-1-	-	-	-	-	30.14
56-	42.5717-	107.5939-	2-06-	0-	W15377-	10/06/77-	-	16-	10.0-	-	-	7.2-	285-	8-	3-	7-	6-	8-	2-	3-	1-	-	3-	3-	4-	3-	-1-	-	-	-	-	56.38*
56-	42.5556-	107.5978-	2-06-	0-	W15378-	10/06/77-	-	16-	14.0-	-	-	7.4-	90-	13-	3-	4-	4-	6-	2-	3-	1-	-	4-	3-	4-	3-	-1-	-	-	-	-	66.01*
56-	42.0658-	106.7092-	2-08-	0-	W15393-	09/19/77-	17-	23-	21.0-	C-	-	6.5-	700-	2-	1-	6-	-	-	-	-	-	-	4-	3-	4-	2-	-1-	4-	30-	-	-	6.34
56-	42.1081-	106.7072-	2-08-	0-	W15395-	09/20/77-	12-	21-	1.5-	C-	-	6.3-	300-	18-	1-	6-	-	-	-	-	1-	-	4-	3-	3-	2-	-1-	5-	24-	140-	6-	1.12
56-	42.1044-	106.6878-	2-06-	0-	W15396-	09/20/77-	13-	22-	14.0-	C-	-	5.9-	100-	18-	1-	4-	3-	4-	3-	2-	1-	1-	4-	3-	5-	2-	-1-	-	-	-	-	0.33

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
							TIME SAMPLED																										
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEE	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (#) UNITS IN ppb
56-	42.0981-	106.5994-	2-	06-		0-W15397-	09/20/77-	15-	22-	16.0-	-	-	6.1-	200-		9-	1-	6-	4-	6-	2-	2-	1-	1-	3-	3-	5-	2-	-1-	-	-	-	-	6.56
56-	42.0833-	106.7222-	2-	06-		0-W15398-	09/20/77-	14-	23-	14.0-	C-	-	6.1-	200-		22-	1-	6-	4-	6-	3-	2-	1-	1-	3-	3-	2-	2-	-1-	-	-	-	-	3.55
56-	42.0806-	106.6772-	2-	06-		0-W15399-	09/20/77-	15-	23-	12.0-	-	-	5.7-	1500-		13-	1-	6-	4-	6-	2-	2-	1-	1-	4-	3-	1-	2-	-1-	-	-	-	-	1.13
56-	42.0869-	106.6364-	2-	06-		0-W15401-	09/20/77-	15-	23-	14.0-	-	-	5.9-	1900-		13-	1-	6-	4-	6-	2-	2-	1-	1-	4-	3-	1-	2-	-1-	-	-	-	-	6.50
56-	42.0958-	106.7692-	2-	07-		0-W15408-	09/20/77-	17-	22-	14.0-	-	-	6.3-	700-		18-	1-	6-	-6-	3-	2-	1-	1-	4-	4-	2-	2-	-1-	-	-	-	-	-	8.02
56-	42.0275-	106.4278-	2-	06-		0-W15410-	09/20/77-	19-	12-	12.0-	-	-	6.3-	1500-		15-	1-	6-	3-	6-	3-	2-	1-	1-	4-	4-	1-	2-	-1-	-	-	-	-	59.16*
56-	42.0422-	106.5186-	2-	08-		0-W15411-	09/21/77-	11-	14-	14.0-	-	-	6.8-	2500-		31-	1-	6-	4-	6-	-	-	-	-	4-	3-	2-	2-	-1-	8-	30-	15-	10-	44.62*
56-	42.0667-	106.5056-	2-	07-		0-W15412-	09/21/77-	11-	14-	9.0-	C-	-	6.2-	700-		9-	1-	6-	6-	8-	2-	2-	3-	1-	3-	4-	1-	2-	-9-	-	-	-	-	11.54
56-	42.0917-	106.5300-	2-	06-		0-W15414-	09/21/77-	12-	20-	18.8-	-	-	6.5-	3500-		13-	1-	6-	6-	8-	1-	2-	2-	1-	3-	3-	3-	2-	-1-	-	-	-	-	5.51
56-	42.1211-	106.5703-	2-	07-		0-W15417-	09/21/77-	16-	23-	12.0-	-	-	5.9-	500-		6-	2-	1-	4-	4-	3-	2-	1-	1-	1-	4-	5-	1-	-1-	-	-	-	-	9.38
56-	42.1047-	106.4167-	2-	06-		0-W15420-	09/22/77-	17-	14-	7.0-	C-	-	8.4-	2300-		13-	1-	6-	5-	8-	2-	2-	1-	1-	4-	3-	2-	3-	-1-	-	-	-	-	6.38
56-	42.1314-	106.4114-	2-	06-		0-W15421-	09/23/77-	10-	5-	5.0-	-	-	7.7-	600-		13-	1-	6-	4-	6-	2-	2-	1-	1-	3-	2-	3-	3-	-	-	-	-	-	4.76
56-	42.1286-	106.4289-	2-	07-		0-W15422-	09/23/77-	11-	5-	10.0-	C-	-	6.9-	2200-		15-	1-	6-	6-	8-	2-	2-	1-	1-	3-	3-	3-	6-	-1-	-	-	-	-	18.13
56-	42.1550-	106.4658-	2-	07-		0-W15425-	09/23/77-	12-	-	-	C-	-	7.0-	600-		18-	1-	1-	3-	9-	2-	2-	1-	1-	4-	3-	3-	5-	-1-	-	-	-	-	5.76
56-	42.1492-	106.4522-	2-	06-		0-W15426-	09/23/77-	14-	8-	7.0-	C-	-	6.5-	500-		18-	1-	1-	6-	8-	2-	2-	2-	3-	1-	4-	2-	2-	3-	-9-	-	-	-	-	2.53
56-	42.1628-	106.4933-	2-	06-		0-W15427-	09/23/77-	14-	8-	7.0-	-	-	7.4-	300-		27-	1-	4-	3-	3-	3-	2-	1-	1-	1-	4-	5-	3-	-1-	-	-	-	-	6.74
56-	42.1578-	106.4119-	2-	07-		0-W15429-	09/23/77-	15-	8-	6.0-	-	-	7.8-	100-		22-	1-	1-	3-	6-	2-	2-	1-	1-	1-	3-	4-	2-	-1-	-	-	-	-	1.45
56-	42.2531-	106.3911-	2-	06-		0-W15432-	09/26/77-	14-	18-	15.0-	-	-	6.9-	4200-		9-	1-	7-	6-	8-	1-	2-	1-	2-	4-	3-	2-	3-	-1-	-	-	-	-	2.62
56-	42.2183-	106.4389-	2-	08-		0-W15441-	09/27/77-	-	15-	16.0-	C-	-	8.8-	500-		13-	1-	6-	-	-3-	-1-	-	4-	2-	1-	1-	-1-	9-	6-	-	-	-	0.22
56-	42.2144-	106.4072-	2-	08-		0-W15442-	09/27/77-	-	18-	14.0-	-	-	8.2-	500-		18-	1-	6-	-	-	-	-1-	-	4-	3-	2-	1-	-1-	8-	6-	-	-	-	0.03
56-	42.1783-	106.4361-	2-	07-		0-W15443-	09/27/77-	-	20-	18.0-	-	-	8.2-	400-		9-	1-	6-	4-	6-	2-	2-	1-	1-	3-	3-	3-	1-	-1-	-	-	-	-	1.90
56-	42.1875-	106.4828-	2-	07-		0-W15445-	09/27/77-	-	20-	12.0-	-	-	8.0-	700-		22-	1-	6-	6-	8-	2-	2-	1-	1-	2-	3-	2-	1-	-1-	-	-	-	-	16.58
56-	42.2100-	106.5208-	2-	08-		0-W15447-	09/27/77-	-	23-	18.0-	-	-	9.0-	300-		27-	1-	6-	4-	6-	2-	2-	1-	1-	4-	3-	2-	2-	-1-	-72-	15-	100-		7.60
56-	42.2256-	106.5358-	2-	06-		0-W15449-	09/27/77-	-	21-	14.0-	-	-	8.6-	2900-		27-	1-	6-	5-	8-	2-	2-	2-	1-	4-	2-	2-	2-	-1-	-	-	-	-	34.44*
56-	42.2389-	106.5481-	2-	06-		0-W15450-	09/27/77-	-	15-	10.0-	-	-	9.1-	200-		27-	1-	6-	4-	6-	3-	3-	1-	1-	4-	4-	4-	2-	-	-	-	-	-	20.76
56-	42.4281-	106.2506-	2-	06-		0-W15454-	09/23/77-	15-	6-	7.5-	-	-	6.6-	280-		27-	1-	-3-	6-	-	-	-	-	-4-	3-	3-	3-	-1-	-	-	-	-	-	5.45
56-	42.3944-	106.2856-	2-	08-		0-W15456-	09/23/77-	15-	8-	2.0-	-	-	6.4-	500-		46-	4-	-	-	-	-	-	-	-	3-	2-	2-	2-	-1-	1-	8-	-	-	0.36
56-	42.4694-	106.3697-	2-	06-		0-W15457-	09/23/77-	16-	10-	2.5-	-	-	6.8-	550-		13-	1-	1-	5-	7-	-	-	-	-	4-	3-	4-	2-	-1-	-	-	-	-	2.97
56-	42.4019-	106.0761-	2-	06-		0-W15459-	09/26/77-	15-	17-	10.5-	-	-	7.2-	625-		18-	4-	-5-	7-	-	-	-	-	-4-	3-	2-	2-	-1-	-	-	-	-	-	1.67
56-	42.4064-	106.0633-	2-	06-		0-W15460-	09/26/77-	16-	18-	9.5-	-	-	7.3-	650-		8-	4-	-6-	7-	-	-	-	-	-4-	3-	2-	2-	-1-	-	-	-	-	-	4.64
56-	42.4444-	106.2981-	2-	06-		0-W15461-	09/27/77-	10-	16-	6.0-	-	-	7.2-	275-		18-	1-	1-	5-	6-	-	-	-	-	3-	2-	4-	1-	-1-	-	-	-	-	5.95
56-	42.4667-	106.0247-	2-	06-		0-W15462-	09/27/77-	11-	19-	9.5-	-	-	6.6-	150-		41-	4-	-5-	6-	-	-	-	-	-4-	3-	2-	1-	-1-	-	-	-	-	-	0.17
56-	42.4608-	106.0258-	2-	06-		0-W15463-	09/27/77-	12-	19-	9.5-	-	-	6.7-	205-		23-	1-	6-	5-	6-	-	-	-	-1-	4-	3-	3-	1-	-1-	-	-	-	-	0.61
56-	42.4842-	106.0125-	2-	06-		0-W15464-	09/27/77-	13-	19-	9.0-	-	-	5.7-	44-		41-	3-	6-	6-	6-	-	-	-	-1-	4-	3-	4-	1-	-1-	-	-	-	-	0.98
56-	42.4722-	106.0003-	2-	06-		0-W15465-	09/27/77-	-	19-	10.0-	-	-	6.5-	74-		32-	1-	6-	5-	6-	-	-	-	-1-	4-	3-	3-	1-	-1-	-	-	-	-	0.04
56-	42.4297-	106.0225-	2-	07-		0-W15466-	09/27/77-	-	20-	14.5-	-	-	7.4-	415-		4-	1-	6-	5-	6-	-	-	-	-1-	4-	3-	3-	1-	-1-	-	-	-	-	12.68
56-	42.2069-	106.5436-	2-	07-		0-W15470-	09/28/77-	-	20-	9.0-	-	-	8.8-	500-		27-	1-	6-	6-	6-	3-	3-	1-	1-	4-	3-	2-	1-	-1-	-	-	-	-	25.69*
56-	42.1936-	106.5706-	2-	07-		0-W15471-	09/28/77-	-	20-	6.0-	-	-	8.6-	100-		13-	1-	6-	4-	6-	3-	2-	1-	1-	1-	3-	2-	1-	-1-	-	-	-	-	0.61
56-	42.2278-	106.6103-	2-	07-		0-W15473-	09/28/77-	-	26-	7.0-	-	-	8.9-	-		-2-	6-	4-	6-	3-	3-	1-	1-	3-	3-	4-	1-	-1-	-	-	-	-	-	1.50
56-	42.2472-	106.6014-	2-	07-		0-W15474-	09/28/77-	-	21-	14.0-	C-	-	8.3-	300-		22-	1-	6-	6-	8-	2-	2-	1-	1-	4-	3-	2-	1-	-1-	-	-	-	-	2.60
56-	42.1983-	106.6289-	2-	07-		0-W15475-	09/28/77-	-	20-	12.0-	-	-	8.8-	300-		22-	1-	6-	4-	6-	3-	3-	1-	1-	4-	3-	2-	1-	-1-	-	-	-	-	0.68
56-	42.2253-	106.6689-	2-	07-		0-W15478-	09/28/77-	-	20-	15.0-	-	-	8.4-	150-		27-	1-	6-	6-	6-	2-	2-	2-	1-	3-	2-	2-	1-	-1-	-	-	-	-	0.24
56-	42.1425-	106.6178-	2-	07-		0-W15479-	09/29/77-	-	15-	7.0-	-	-	8.6-	50-		13-	1-	4-	3-	4-	2-	2-	1-	1-	1-	3-	2-	2-	-	-	-	-	-	0.38
56-	42.6481-	106.8875-	2-	07-		0-W15482-	10/28/77-	12-	17-	11.0-	-	-	6.6-	202-		14-	1-	1-	6-	8-	1-	2-	5-	2-	3-	3-	3-	1-	-1-	-	-	-	-	5.35
56-	42.6272-	106.8900-	2-	08-		0-W15485-	10/28/77-	12-	17-	18.0-	-	-	6.6-	470-		13-	1-	1-	-	-	-	-	-	-	4-	3-	2-	1-	-1-	8-	-	-	-	17.37*
56-	42.6917-	106.8878-	2-	06-		0-W15486-	10/28/77-	13-	18-	13.5-	-	-	7.8-	100-		6-	1-	1-	-	-	-	-	-	-	3-	3-	3-	1-	-1-	-	-	-	-	1.05
56-	42.7067-	106.9444-	2-	06-		0-W15488-	10/28/77-	15-	18-	10.5-	-	-	7.7-	300-		3-	1-	1-	5-	8-	2-	2-	5-	-3-	3-	4-	1-	-1-	-	-	-	-	-	0.69
56-	42.6611-	106.9719-	2-	07-		0-W15490-	10/28/77-	16-	17-	13.0-	-	-	8.1-	222-		22-	1-	1-	5-	1-	2-	2-	1-	2-	3-	2-	3-	1-	-1-	-	-	-	-	5.35
56-	42.6336-	106.9808-	2-	08-		0-W15491-	10/28/77-	16-	16-	14.0-	-	-	7.6-	390-		6-	1-	1-	-	-	-	-	-	-	4-	3-	3-	2-	-1-	3-	-	-	-	8.84
56-	42.5453-	107.2706-	2-	06-		0-W15495-	10/28/77-	18-	14-	10.0-	-	-	7.3-	145-		18-	3-	6-	6-	5-	1-	2-	5-	-4-	3-	3-	2-	-1-	-	-	-	-	-	3.38
56-	42.7433-	107.7589-	2-	07-		0-W15500-	10/29/77-	12-	16-	13.0-	-	-	7.7-	980-		32-	1-	1-	4-	1-	1-	2-	1-	-3-	4-	3-	2-	-1-	-	-	-	-	-	11.40

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
							TIME SAMPLED																										
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEE	WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (ϕ) UNITS IN ppb
56-	42.6514-	107.8450-	2-	07-		0-W15503-	10/29/77-	13-	17-	12.5-	-	-	8.3-	182-		13-	1-	1-	5-	1-	2-	2-	1-	-4-	3-	3-	2-	-1-	-	-	-	-	4.54
56-	42.6289-	107.8656-	2-	06-		0-W15505-	10/29/77-	14-	16-	11.0-	-	-	8.2-	271-		15-	3-	1-	5-	6-	3-	3-	1-	-3-	3-	3-	2-	-1-	-	-	-	-	11.07
56-	42.4794-	107.3972-	2-	08-		0-W15510-	10/29/77-	17-	14-	15.0-	-	-	7.5-	345-		14-	3-	6-	-	-	-	-	-	-4-	2-	1-	3-	-1-	3-	-	80-	25-	5.73
56-	42.4858-	107.3919-	2-	08-		0-W15511-	10/29/77-	18-	14-	11.5-	C-	-	7.5-	242-		15-	3-	6-	-	-	-	-	-	-4-	2-	2-	3-	-1-	4-	6-	16-	6-	7.33
56-	42.4803-	107.4878-	2-	08-		0-W15512-	10/29/77-	18-	12-	11.5-	-	-	7.2-	300-		12-	3-	6-	-	-	-	-	-	-4-	2-	2-	5-	-1-	8-	6-	60-	-	19.20
56-	42.5447-	106.3342-	2-	08-		0-W15517-	10/30/77-	13-	12-	13.0-	C-	-	7.1-	210-		14-	1-	6-	-	-	-	-1-	-3-	-3-	4-	2-	-1-	8-	48-	10-	-	4.80
56-	42.5400-	106.2967-	2-	07-		0-W15518-	10/30/77-	13-	12-	6.0-	-	-	8.2-	171-		18-	1-	1-	6-	4-	3-	3-	1-	2-	1-	2-	4-	2-	-1-	-	-	-	-	7.81
56-	42.5200-	106.3036-	2-	06-		0-W15521-	10/30/77-	14-	11-	8.0-	-	-	7.9-	205-		6-	1-	1-	4-	4-	4-	3-	1-	2-	2-	2-	3-	2-	-1-	-	-	-	-	20.61
56-	42.5161-	106.2611-	2-	06-		0-W15523-	10/30/77-	15-	11-	6.5-	-	-	7.6-	220-		23-	1-	1-	3-	4-	2-	2-	1-	2-	4-	3-	3-	2-	-1-	-	-	-	-	6.83
56-	42.6083-	106.3378-	2-	08-		0-W15525-	10/30/77-	16-	10-	9.5-	-	-	7.3-	690-		9-	-	-	-	-	-	-	-	-4-	2-	4-	2-	-1-	3-	-	-	-	15.73
56-	42.6092-	106.3306-	2-	07-		0-W15526-	10/30/77-	17-	10-	5.0-	-	-	8.2-	210-		8-	1-	4-	5-	4-	2-	2-	1-	2-	4-	2-	4-	2-	-1-	-	-	-	-	2.57
56-	42.6225-	106.3589-	2-	07-		0-W15531-	11/12/77-	10-	13-	1.0-	-	-	6.4-	439-		14-	4-	5-	5-	6-	2-	2-	1-	2-	4-	3-	3-	1-	-1-	-	-	-	-	1.71
56-	42.5403-	106.3333-	2-	07-		0-W15533-	10/12/77-	10-	13-	4.0-	-	-	6.2-	283-		34-	1-	2-	4-	1-	3-	2-	1-	2-	3-	1-	3-	1-	-1-	-	-	-	-	8.59
56-	42.5136-	106.1428-	2-	06-		0-W15539-	11/12/77-	12-	15-	8.0-	-	-	6.3-	312-		5-	1-	1-	5-	8-	2-	2-	1-	2-	4-	3-	3-	1-	-1-	-	-	-	-	3.75
56-	42.5017-	106.1594-	2-	07-		0-W15539-	11/12/77-	12-	14-	5.0-	-	-	7.5-	165-		74-	1-	6-	-	-	2-	2-	1-	2-	4-	3-	2-	1-	-1-	-	-	-	-	3.75
56-	42.5014-	106.1731-	2-	06-		0-W15540-	11/12/77-	13-	13-	7.0-	-	-	7.3-	165-		14-	1-	6-	-	-	2-	2-	1-	-3-	3-	2-	1-	-1-	-	-	-	-	-	2.19
56-	42.5117-	106.1925-	2-	07-		0-W15542-	11/12/77-	14-	13-	1.5-	-	-	7.7-	312-		18-	1-	1-	-	-	2-	2-	1-	2-	4-	3-	3-	1-	-1-	-	-	-	-	4.85
56-	42.2628-	106.0944-	2-	06-		0-W15552-	11/15/77-	13-	4-	2.0-	-	-	6.9-	1000-		18-	1-	6-	5-	6-	2-	2-	1-	-4-	3-	2-	2-	-1-	-	-	-	-	-	5.47
56-	42.3567-	106.0181-	2-	07-		0-W15557-	11/15/77-	14-	3-	2.0-	-	-	7.2-	600-		9-	1-	4-	5-	6-	2-	2-	1-	-4-	4-	3-	3-	-1-	-	-	-	-	-	14.74
56-	42.5286-	106.1181-	2-	06-		0-W15563-	11/01/77-	12-	2-	4.0-	-	-	7.2-	65-		13-	3-	6-	5-	6-	2-	3-	1-	-4-	2-	2-	1-	-1-	-	-	-	-	-	1.15
56-	42.5372-	106.1003-	2-	07-		0-W15564-	11/01/77-	13-	3-		-	-	7.6-	36-		27-	3-	6-	4-	3-	3-	2-	1-	2-	4-	3-	2-	1-	-1-	-	-	-	-	0.24
56-	42.5486-	106.0708-	2-	06-		0-W15566-	11/01/77-	13-	3-	2.5-	-	-	6.9-	45-		32-	3-	6-	5-	6-	2-	2-	1-	-4-	3-	2-	1-	-1-	-	-	-	-	-	0.51
56-	42.5319-	106.0911-	2-	06-		0-W15567-	11/01/77-	13-	4-	6.0-	C-	-	7.0-	55-		18-	3-	4-	5-	6-	2-	2-	1-	-4-	3-	3-	1-	-1-	-	-	-	-	-	0.64
56-	42.5208-	106.1086-	2-	06-		0-W15568-	11/01/77-	14-	5-	6.0-	-	-	6.9-	-		30-	3-	4-	5-	6-	2-	2-	5-	-4-	3-	3-	1-	-1-	-	-	-	-	-	0.90
56-	42.5169-	106.0944-	2-	06-		0-W15569-	11/01/77-	14-	6-	4.0-	-	-	7.2-	-		74-	3-	4-	5-	6-	3-	3-	1-	2-	4-	3-	2-	1-	-1-	-	-	-	-	0.76
56-	42.5164-	106.0692-	2-	07-		0-W15570-	11/01/77-	14-	6-	1.5-	-	-	7.7-	-		-3-	4-	4-	4-	4-	2-	1-	2-	3-	3-	3-	1-	-1-	-	-	-	-	-	0.43

APPENDIX I-B

Listings of Field Data and Elemental Concentrations
for Sediment Samples from the Casper Quadrangle, Wyoming
(Pages 32 through 139)

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 IV-B for Code to Listings)

APPENDIX I-B. Elemental Concentrations for Sediment Samples

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
56-	42.9872-	107.7342-	2-	15-	0-	W14001-	09/29/77-	12-	15-	-	-	-	-	-	-	11-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	4.94
56-	42.9894-	107.6889-	2-	15-	0-	W14002-	09/29/77-	12-	16-	-	-	-	-	-	-	11-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	6.53
56-	42.9844-	107.6875-	2-	15-	0-	W14003-	09/29/77-	12-	16-	-	-	-	-	-	-	11-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	8.41
56-	42.9761-	107.6547-	2-	15-	0-	W14004-	09/29/77-	13-	16-	-	-	-	-	-	-	10-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	4.26
56-	42.9667-	107.6747-	2-	15-	0-	W14005-	09/29/77-	13-	16-	-	-	-	-	-	-	10-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	3.64
56-	42.9675-	107.7319-	2-	15-	0-	W14006-	09/29/77-	13-	16-	-	-	-	-	-	-	15-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	3.22
56-	42.9639-	107.7175-	2-	15-	0-	W14007-	09/29/77-	13-	16-	-	-	-	-	-	-	16-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	4.40
56-	42.9486-	107.6844-	2-	15-	0-	W14008-	09/29/77-	14-	16-	-	-	-	-	-	-	11-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	3.71
56-	42.9333-	107.6853-	2-	15-	0-	W14009-	09/29/77-	14-	16-	-	-	-	-	-	-	11-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	3.84
56-	42.9172-	107.6289-	2-	15-	0-	W14010-	09/29/77-	14-	16-	-	-	-	-	-	-	18-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	2.64
56-	42.9211-	107.7111-	2-	15-	0-	W14011-	09/29/77-	15-	15-	-	-	-	-	-	-	10-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	3.80
56-	42.9242-	107.7361-	2-	15-	0-	W14012-	09/29/77-	15-	15-	-	-	-	-	-	-	15-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	3.36
56-	42.9006-	107.7042-	2-	15-	0-	W14013-	09/29/77-	15-	15-	-	-	-	-	-	-	16-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	3.47
56-	42.9142-	107.6872-	2-	15-	0-	W14014-	09/29/77-	15-	15-	-	-	-	-	-	-	16-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	4.92
56-	42.9244-	107.6967-	2-	15-	0-	W14015-	09/29/77-	15-	15-	-	-	-	-	-	-	16-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	4.64
56-	42.9967-	107.9853-	2-	15-	0-	W14016-	10/23/77-	9-	13-	-	-	-	-	-	-	11-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	3.50
56-	42.9856-	107.9461-	2-	15-	0-	W14017-	10/03/77-	9-	13-	-	-	-	-	-	-	16-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	3.28
56-	42.9844-	107.9333-	2-	15-	0-	W14018-	10/03/77-	9-	12-	-	-	-	-	-	-	16-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	4.31
56-	42.9922-	107.8828-	2-	15-	0-	W14019-	10/03/77-	10-	13-	-	-	-	-	-	-	15-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	3.14
56-	42.9061-	107.9872-	2-	15-	0-	W14020-	10/03/77-	10-	14-	-	-	-	-	-	-	16-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	3.50
56-	42.9058-	107.9808-	2-	15-	0-	W14021-	10/03/77-	10-	14-	-	-	-	-	-	-	15-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	5.31
56-	42.9114-	107.9800-	2-	15-	0-	W14022-	10/03/77-	11-	14-	-	-	-	-	-	-	16-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	3.03
56-	42.8983-	107.9478-	2-	15-	0-	W14023-	10/03/77-	11-	14-	-	-	-	-	-	-	16-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	3.70
56-	42.8978-	107.9381-	2-	15-	0-	W14024-	10/03/77-	11-	14-	-	-	-	-	-	-	16-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	3.04
56-	42.9261-	107.9133-	2-	15-	0-	W14025-	10/03/77-	11-	14-	-	-	-	-	-	-	18-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	3.15
56-	42.9542-	107.9225-	2-	15-	0-	W14026-	10/03/77-	12-	15-	-	-	-	-	-	-	16-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	3.19
56-	42.9458-	107.9514-	2-	15-	0-	W14027-	10/03/77-	12-	15-	-	-	-	-	-	-	-1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	-	4.91
56-	42.9872-	107.8611-	2-	15-	0-	W14028-	10/03/77-	12-	15-	-	-	-	-	-	-	16-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	3-	-3-	-	-	-	-	4.05
56-	42.9614-	107.8356-	2-	15-	0-	W14029-	10/03/77-	12-	15-	-	-	-	-	-	-	18-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	4.04
56-	42.9494-	107.8306-	2-	15-	0-	W14030-	10/03/77-	13-	15-	-	-	-	-	-	-	16-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	5.04
56-	42.9467-	107.8183-	2-	15-	0-	W14031-	10/03/77-	13-	15-	-	-	-	-	-	-	18-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	5.55
56-	42.9500-	107.8586-	2-	15-	0-	W14032-	10/03/77-	13-	15-	-	-	-	-	-	-	16-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	3.04
56-	42.9369-	107.8578-	2-	15-	0-	W14033-	10/03/77-	13-	15-	-	-	-	-	-	-	6-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	4.54
56-	42.9372-	107.8558-	2-	15-	0-	W14034-	10/03/77-	14-	15-	-	-	-	-	-	-	16-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	5.34
56-	42.9439-	107.8119-	2-	15-	0-	W14035-	10/03/77-	14-	15-	-	-	-	-	-	-	20-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	7.65
56-	42.9819-	107.7708-	2-	15-	0-	W14037-	10/03/77-	15-	15-	-	-	-	-	-	-	-1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	-	2.78
56-	42.9833-	107.7878-	2-	15-	0-	W14038-	10/03/77-	15-	15-	-	-	-	-	-	-	16-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	1-	-1-	-	-	-	-	3.95
56-	42.9842-	107.2358-	2-	15-	0-	W14039-	10/04/77-	7-	7-	-	-	-	-	-	-	20-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	3-	-1-	-	-	-	-	4.73
56-	42.9764-	107.1864-	2-	15-	0-	W14040-	10/04/77-	7-	7-	-	-	-	-	-	-	33-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	3-	-1-	-	-	-	-	7.58
56-	42.9442-	107.1992-	2-	15-	0-	W14041-	10/04/77-	7-	7-	-	-	-	-	-	-	25-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	3-	-1-	-	-	-	-	7.45
56-	42.9336-	107.2306-	2-	15-	0-	W14042-	10/04/77-	7-	7-	-	-	-	-	-	-	10-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	3-	-1-	-	-	-	-	3.20
56-	42.9361-	107.2039-	2-	15-	0-	W14043-	10/04/77-	8-	8-	-	-	-	-	-	-	10-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	3-	-1-	-	-	-	-	3.16
56-	42.9153-	107.1836-	2-	15-	0-	W14044-	10/04/77-	8-	8-	-	-	-	-	-	-	8-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	3-	-1-	-	-	-	-	1.98
56-	42.9147-	107.1803-	2-	15-	0-	W14045-	10/04/77-	8-	8-	-	-	-	-	-	-	8-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	3-	-1-	-	-	-	-	2.89
56-	42.9353-	107.1592-	2-	15-	0-	W14046-	10/04/77-	8-	8-	-	-	-	-	-	-	11-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	3-	-1-	-	-	-	-	2.38
56-	42.9514-	107.1392-	2-	15-	0-	W14047-	10/04/77-	9-	8-	-	-	-	-	-	-	11-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	3-	-1-	-	-	-	-	3.54
56-	42.9792-	107.1278-	2-	15-	0-	W14048-	10/04/77-	9-	8-	-	-	-	-	-	-	11-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	3-	-1-	-	-	-	-	3.75
56-	42.9808-	107.1286-	2-	15-	0-	W14049-	10/04/77-	9-	8-	-	-	-	-	-	-	33-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	3-	-1-	-	-	-	-	8.30
56-	42.9825-	107.1100-	2-	15-	0-	W14050-	10/04/77-	10-	8-	-	-	-	-	-	-	16-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	3-	-1-	-	-	-	-	3.48
56-	42.9944-	107.0853-	2-	15-	0-	W14051-	10/04/77-	10-	8-	-	-	-	-	-	-	8-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	3-	-1-	-	-	-	-	3.78
56-	42.9664-	107.0325-	2-	15-	0-	W14052-	10/04/77-	10-	8-	-	-	-	-	-	-	8-	1-	7-	4-	6-	-1-	-2-	3-	3-	3-	3-	-1-	-	-	-	-	4.17

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

(2)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
56-42.9872-107.7342-2-15-						0-W14001	-5	-5	-5	30	-20	-15	8	-10	-15	2	29
56-42.9894-107.6889-2-15-						0-W14002	-5	-5	-5	16	-20	30	15	-10	-15	2	34
56-42.9844-107.6875-2-15-						0-W14003	-5	-5	-5	-10	-20	23	16	-10	-15	2	38
56-42.9761-107.6547-2-15-						0-W14004	-5	-5	-5	15	-20	15	15	-10	-15	2	33
56-42.9667-107.6747-2-15-						0-W14005	-5	-5	-5	14	-20	-15	9	-10	-15	2	20
56-42.9675-107.7319-2-15-						0-W14006	-5	-5	-5	11	-20	-15	-5	-10	-15	1	12
56-42.9639-107.7175-2-15-						0-W14007	-5	-5	-5	10	-20	-15	9	-10	-15	1	15
56-42.9486-107.6844-2-15-						0-W14008	-5	-5	-5	19	-20	-15	9	-10	-15	1	16
56-42.9333-107.6853-2-15-						0-W14009	-5	-5	-5	15	-20	-15	13	-10	-15	2	20
56-42.9172-107.6289-2-15-						0-W14010	-5	-5	-5	22	-20	-15	8	-10	-15	2	20
56-42.9211-107.7111-2-15-						0-W14011	-5	-5	-5	13	-20	-15	18	-10	-15	2	31
56-42.9242-107.7361-2-15-						0-W14012	-5	-5	-5	18	-20	15	-5	-10	-15	2	33
56-42.9006-107.7042-2-15-						0-W14013	-5	-5	-5	30	-20	-15	6	-10	-15	2	29
56-42.9142-107.6872-2-15-						0-W14014	-5	-5	-5	17	-20	-15	13	-10	-15	2	28
56-42.9244-107.6967-2-15-						0-W14015	-5	-5	-5	24	-20	-15	7	-10	-15	2	33
56-42.9967-107.9853-2-15-						0-W14016	-5	-5	-5	26	-20	18	13	-10	-15	2	31
56-42.9856-107.9461-2-15-						0-W14017	-5	-5	-5	32	-20	-15	9	-10	-15	2	38
56-42.9844-107.9333-2-15-						0-W14018	-5	-5	-5	22	-20	-15	12	-10	-15	2	38
56-42.9922-107.8828-2-15-						0-W14019	-5	-5	-5	13	-20	35	9	-10	-15	2	32
56-42.9061-107.9872-2-15-						0-W14020	-5	-5	-5	14	-20	-15	8	-10	-15	2	29
56-42.9058-107.9808-2-15-						0-W14021	-5	7	-5	15	-20	-15	18	-10	-15	2	25
56-42.9114-107.9800-2-15-						0-W14022	-5	-5	-5	26	-20	20	24	-10	-15	2	35
56-42.8983-107.9478-2-15-						0-W14023	-5	-5	-5	17	-20	15	19	-10	-15	2	56
56-42.8978-107.9381-2-15-						0-W14024	-5	-5	-5	27	-20	-15	18	-10	-15	2	29
56-42.9261-107.9133-2-15-						0-W14025	-5	10	-5	21	-20	31	14	-10	-15	2	38
56-42.9542-107.9225-2-15-						0-W14026	-5	-5	-5	22	-20	-15	7	-10	-15	2	38
56-42.9458-107.9514-2-15-						0-W14027	-5	-5	-5	27	-20	-15	-5	-10	-15	2	21
56-42.9872-107.8611-2-15-						0-W14028	-5	-5	-5	21	-20	-15	5	-10	-15	2	24
56-42.9614-107.8356-2-15-						0-W14029	-5	-5	-5	29	-20	18	8	-10	-15	2	26
56-42.9494-107.8306-2-15-						0-W14030	-5	-5	-5	31	-20	-15	9	-10	-15	2	25
56-42.9467-107.8183-2-15-						0-W14031	-5	-5	-5	21	-20	-15	12	-10	-15	2	24
56-42.9500-107.8586-2-15-						0-W14032	-5	-5	-5	33	-20	20	-5	-10	-15	2	20
56-42.9369-107.8578-2-15-						0-W14033	-5	-5	-5	19	-20	19	20	-10	-15	2	26
56-42.9372-107.8558-2-15-						0-W14034	-5	-5	-5	26	-20	17	18	-10	-15	2	31
56-42.9439-107.8119-2-15-						0-W14035	-5	-5	-5	28	-20	41	7	-10	-15	2	26
56-42.9819-107.7708-2-15-						0-W14037	-5	-5	-5	24	-20	21	13	-10	15	2	25
56-42.9833-107.7878-2-15-						0-W14038	-5	6	-5	31	-20	-15	7	-10	-15	2	34
56-42.9842-107.2358-2-15-						0-W14039	-5	-5	-5	38	-20	-15	11	-10	-15	2	28
56-42.9764-107.1864-2-15-						0-W14040	-5	-5	-5	26	-20	-15	20	-10	-15	2	43
56-42.9442-107.1992-2-15-						0-W14041	-5	-5	-5	30	-20	-15	14	-10	-15	2	24
56-42.9336-107.2306-2-15-						0-W14042	-5	-5	-5	-10	-20	-15	-5	-10	-15	1	7
56-42.9361-107.2039-2-15-						0-W14043	-5	-5	-5	16	-20	-15	11	-10	-15	2	18
56-42.9153-107.1836-2-15-						0-W14044	-5	-5	-5	21	-20	-15	15	-10	-15	1	7
56-42.9147-107.1803-2-15-						0-W14045	-5	8	-5	18	-20	-15	-5	-10	-15	1	13
56-42.9353-107.1592-2-15-						0-W14046	-5	-5	-5	25	-20	-15	5	-10	-15	2	17
56-42.9514-107.1392-2-15-						0-W14047	-5	-5	-5	38	-20	-15	9	-10	20	2	19
56-42.9792-107.1278-2-15-						0-W14048	-5	-5	-5	19	-20	-15	9	-10	-15	2	8
56-42.9808-107.1286-2-15-						0-W14049	-5	-5	-5	20	-20	29	24	-10	-15	2	36
56-42.9825-107.1100-2-15-						0-W14050	-5	-5	-5	37	-20	-15	18	-10	-15	2	33
56-42.9944-107.0853-2-15-						0-W14051	-5	-5	-5	37	-20	35	12	-10	-15	2	32
56-42.9664-107.0325-2-15-						0-W14052	-5	-5	-5	31	-20	26	24	-10	-15	2	41

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
56-42.9872-107.7342-2-15-					0	W14001	38110	-0.03	422	6110	33	-52	3.5	18	-0.9	2	0.4	5882	7.9	15470	16	0.2
56-42.9894-107.6889-2-15-					0	W14002	49170	-0.03	479	9177	51	-48	4.2	36	2.1	4	0.7	9716	7.9	15950	28	0.4
56-42.9844-107.6875-2-15-					0	W14003	67640	-0.03	569	6926	57	-66	5.6	45	2.3	4	0.9	11440	6.8	19190	38	0.3
56-42.9761-107.6547-2-15-					0	W14004	42980	-0.03	427	6175	44	-46	4.2	25	1.4	4	0.5	5389	9.3	19210	24	0.4
56-42.9667-107.6747-2-15-					0	W14005	39490	-0.03	388	4311	33	-49	3.3	21	1.8	3	0.6	5252	6.8	12890	20	0.3
56-42.9675-107.7319-2-15-					0	W14006	27070	-0.02	352	1542	29	-29	2.4	12	1.1	2	0.5	3228	6.6	14110	15	0.2
56-42.9639-107.7175-2-15-					0	W14007	30260	-0.02	413	1722	33	-31	3.4	18	1.4	3	0.5	4182	7.4	15330	19	0.3
56-42.9486-107.6844-2-15-					0	W14008	34500	-0.02	422	4911	36	-44	3.5	20	1.4	2	0.6	4958	7.2	14500	21	0.2
56-42.9333-107.6853-2-15-					0	W14009	39610	-0.03	482	5419	40	-48	3.7	25	1.7	2	0.6	5736	7.7	12440	26	0.2
56-42.9172-107.6289-2-15-					0	W14010	34430	-0.02	402	2307	35	-30	3.2	24	1.7	3	0.6	4542	5.9	11010	20	0.3
56-42.9211-107.7111-2-15-					0	W14011	49490	-0.03	533	14470	49	-49	5.0	30	2.9	4	0.7	9307	6.0	14900	30	0.3
56-42.9242-107.7361-2-15-					0	W14012	49700	-0.03	559	11750	47	118	5.3	34	2.3	4	0.8	8452	7.1	16520	24	0.3
56-42.9006-107.7042-2-15-					0	W14013	47090	-0.03	474	9272	41	-60	3.4	28	2.1	3	0.7	7814	7.7	15040	24	0.2
56-42.9142-107.6872-2-15-					0	W14014	42900	-0.03	579	15360	49	-44	3.8	25	1.9	3	0.6	7512	8.4	15130	29	0.2
56-42.9244-107.6967-2-15-					0	W14015	49240	-0.03	618	12900	48	-53	4.5	33	2.4	3	0.7	8706	6.9	14320	30	0.3
56-42.9967-107.9853-2-15-					0	W14016	50750	-0.03	762	25140	53	-66	5.2	29	1.5	3	0.7	8080	9.0	15360	28	0.3
56-42.9856-107.9461-2-15-					0	W14017	59450	-0.03	1001	15450	41	-79	4.9	24	1.8	2	0.7	8298	6.0	13950	24	0.2
56-42.9844-107.9333-2-15-					0	W14018	45910	-0.03	573	22830	54	-49	5.2	40	1.8	3	0.7	9942	8.2	13690	29	0.3
56-42.9922-107.8828-2-15-					0	W14019	52750	-0.03	602	11580	56	-49	5.9	47	2.5	4	0.9	12920	9.9	15260	34	0.3
56-42.9061-107.9872-2-15-					0	W14020	54960	-0.03	631	22460	49	-66	5.8	33	2.0	4	0.7	8613	7.1	14270	27	0.2
56-42.9058-107.9808-2-15-					0	W14021	55090	-0.04	2146	15770	85	-85	3.7	25	1.1	4	1.3	7498	21.5	13500	53	0.4
56-42.9114-107.9800-2-15-					0	W14022	47700	-0.03	612	22620	52	-54	4.5	39	2.1	3	0.7	8849	7.1	13030	30	0.3
56-42.8983-107.9478-2-15-					0	W14023	53640	-0.03	596	21300	54	68	6.8	51	2.7	4	0.9	13480	7.4	15510	32	0.3
56-42.8978-107.9381-2-15-					0	W14024	48900	-0.03	531	14430	45	127	6.1	32	1.6	3	0.7	8482	6.9	16270	23	0.3
56-42.9261-107.9133-2-15-					0	W14025	48890	-0.04	528	11360	38	-63	5.0	38	1.8	2	0.7	9155	6.0	16150	25	0.2
56-42.9542-107.9225-2-15-					0	W14026	39110	-0.03	626	20940	37	4270	4.0	26	1.2	3	0.8	6743	6.2	13390	22	0.2
56-42.9458-107.9514-2-15-					0	W14027	55970	-0.03	2392	17400	113	-72	4.9	32	1.3	5	1.1	9221	23.4	12920	67	0.5
56-42.9872-107.8611-2-15-					0	W14028	42790	-0.03	640	9352	65	-57	5.1	31	1.2	4	0.7	7454	9.8	14010	36	0.3
56-42.9614-107.8356-2-15-					0	W14029	50360	-0.03	605	7893	56	-53	5.7	52	1.9	4	0.7	11800	11.1	16150	33	0.3
56-42.9494-107.8306-2-15-					0	W14030	48460	-0.03	550	7701	74	-53	6.7	56	1.7	5	0.9	12690	18.0	17800	45	0.5
56-42.9467-107.8183-2-15-					0	W14031	47530	-0.03	528	6559	58	-61	6.1	40	1.0	5	0.7	9331	15.0	15490	32	0.5
56-42.9500-107.8586-2-15-					0	W14032	50450	-0.04	425	13360	37	-59	5.1	36	2.3	2	0.8	10160	6.0	13930	22	0.2
56-42.9369-107.8578-2-15-					0	W14033	44650	-0.03	626	12330	71	-48	4.9	36	1.3	4	0.7	9567	14.3	14900	42	0.4
56-42.9372-107.8558-2-15-					0	W14034	52920	-0.03	537	9393	80	-59	8.2	55	1.5	6	0.9	14710	15.2	18110	44	0.5
56-42.9439-107.8119-2-15-					0	W14035	46840	-0.03	466	10260	74	-66	5.9	41	-0.9	7	0.7	9378	24.5	14170	41	0.7
56-42.9819-107.7708-2-15-					0	W14037	41090	-0.04	384	5087	29	-50	4.1	31	-1.0	2	0.5	7951	6.0	12200	18	0.2
56-42.9833-107.7878-2-15-					0	W14038	46300	-0.03	442	5829	56	-52	5.8	40	1.9	4	0.7	10900	11.5	15360	28	0.4
56-42.9842-107.2358-2-15-					0	W14039	44160	-0.03	541	6182	62	-50	4.8	36	1.9	4	0.8	8785	10.9	14040	38	0.4
56-42.9764-107.1864-2-15-					0	W14040	59610	-0.03	534	22080	61	-77	6.3	33	1.6	4	0.7	9614	8.1	16640	35	0.4
56-42.9442-107.1992-2-15-					0	W14041	51440	0.22	500	10080	77	-77	4.5	29	-1.0	5	0.8	7024	14.1	16780	50	0.5
56-42.9336-107.2306-2-15-					0	W14042	17370	-0.02	512	-289	39	43	2.5	18	1.0	3	0.5	4112	12.9	8548	24	0.3
56-42.9361-107.2039-2-15-					0	W14043	32400	-0.03	525	2540	41	-31	5.0	28	2.0	3	0.8	7340	6.1	12460	22	0.3
56-42.9153-107.1836-2-15-					0	W14044	18720	-0.02	452	2752	23	-35	2.8	13	-0.5	2	0.4	2699	6.2	8534	14	0.2
56-42.9147-107.1803-2-15-					0	W14045	26650	-0.03	474	6224	26	-47	2.8	17	-0.8	2	0.6	4073	7.1	10410	16	0.3
56-42.9353-107.1592-2-15-					0	W14046	33590	-0.02	613	7288	26	53	2.7	12	0.8	2	0.3	3301	4.1	15030	15	0.2
56-42.9514-107.1392-2-15-					0	W14047	44290	-0.03	525	4683	46	-42	5.6	36	2.2	3	0.7	9440	7.1	16140	26	0.3
56-42.9792-107.1278-2-15-					0	W14048	18180	-0.02	483	1161	48	-30	3.3	19	-0.6	4	0.6	3888	14.4	9162	26	0.4
56-42.9808-107.1286-2-15-					0	W14049	60850	-0.04	494	24570	41	-83	5.0	30	-1.1	2	0.6	9790	4.5	16250	28	0.3
56-42.9825-107.1100-2-15-					0	W14050	46970	-0.03	969	19680	48	69	4.9	36	1.9	3	0.5	9584	6.0	16390	27	0.3
56-42.9944-107.0853-2-15-					0	W14051	56350	-0.03	676	8702	67	-59	6.2	48	3.0	4	0.9	12420	8.6	20250	38	0.4
56-42.9664-107.0325-2-15-					0	W14052	55240	-0.03	540	7827	55	95	6.3	40	2.3	4	0.7	9673	5.5	20400	27	0.3

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

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
56-42.9872-107.7342-2-15-						0-W14001	8344	182	5980	-13	-1	3.2	2.1	-184		-1	5.9	1812	33	2.2	-21	0.837
56-42.9894-107.6889-2-15-						0-W14002	10930	280	5486	48	-1	4.9	3.4	-182		-1	10.5	2011	48	2.5		0.622
56-42.9844-107.6875-2-15-						0-W14003	7384	203	13810	44	-1	6.2	5.2	-191	-1	-1	15.2	2653	48	2.8	70	0.553
56-42.9761-107.6547-2-15-						0-W14004	10210	133	4836	27	-1	3.3	2.9	-160	-1	-1	10.3	1926	38	2.8	39	0.414
56-42.9667-107.6747-2-15-						0-W14005	6656	177	5004	-13	-1	3.2	1.7	-174	-1	-1	5.1	1910	38	1.7	38	0.714
56-42.9675-107.7319-2-15-						0-W14006	2511	62	2925	-7	-1	2.1	1.8	-99			6.1	1240	19	2.2	38	0.528
56-42.9639-107.7175-2-15-						0-W14007	3334	62	3202	30	-1	2.7	2.7	-100			6.7	1431	24	2.0	32	0.657
56-42.9486-107.6844-2-15-						0-W14008	6054	169	4986	22	-1	2.5	2.8	-157			6.7	2120	36	1.5	30	0.554
56-42.9333-107.6853-2-15-						0-W14009	7221	188	4675	-14	-1	3.5	2.2	-178		-1	7.0	1896	46	2.2	-24	0.549
56-42.9172-107.6289-2-15-						0-W14010	4708	122	2628	30	-1	3.2	2.6	-120			5.5	2191	39	2.0	-24	0.480
56-42.9211-107.7111-2-15-						0-W14011	11700	228	6657	41	-1	4.9	3.7	-170	-1	-1	10.1	2243	51	2.4	52	0.376
56-42.9242-107.7361-2-15-						0-W14012	11930	330	8024	36	-1	4.3	3.5	-221	-1	-1	7.5	3134	55	2.0	41	0.448
56-42.9006-107.7042-2-15-						0-W14013	14350	257	8000	26	-1	4.1	2.6	-208		-1	7.6	2765	47	2.4	-24	0.457
56-42.9142-107.6872-2-15-						0-W14014	15980	170	6041	23	-1	3.7	3.9	-151			9.1	2459	47	2.1	37	0.541
56-42.9244-107.6967-2-15-						0-W14015	9536	234	8713	44	-1	4.0	3.3	-174	-1		9.5	2081	41	2.6	46	0.488
56-42.9967-107.9853-2-15-						0-W14016	16550	338	9179	-11	-1	3.9	4.0	307		-1	8.2	2882	48	2.1	36	0.427
56-42.9856-107.9461-2-15-						0-W14017	14320	272	13470	32	-1	4.0	2.8	-242	-1	-1	6.8	2440	35	1.6	-23	0.482
56-42.9844-107.9333-2-15-						0-W14018	14440	271	5876	31	-1	4.8	3.8	357	-1	-1	9.1	2452	56	2.4	39	0.474
56-42.9922-107.8828-2-15-						0-W14019	15220	276	6417	34	-1	6.6	4.0	-182	-1	-1	11.5	2973	56	3.1	51	0.273
56-42.9061-107.9872-2-15-						0-W14020	18640	306	8790	23	-1	4.3	3.1	-226		-1	7.5	2681	52	1.5	64	0.467
56-42.9058-107.9808-2-15-						0-W14021	7113	357	15160	-15	-1	3.8	4.4	-270	-1	-1	16.2	3732	34	4.3	-26	0.328
56-42.9114-107.9800-2-15-						0-W14022	16510	256	8455	25	-1	4.1	3.6	-184			7.7	2257	48	2.4	68	0.394
56-42.8983-107.9478-2-15-						0-W14023	16110	297	6706	47	-1	6.6	3.9	-192		-1	10.5	2688	61	2.4	67	0.352
56-42.8978-107.9381-2-15-						0-W14024	15100	276	8468	25	-1	4.0	3.2	-224			7.2	2740	52	2.3	-29	0.422
56-42.9261-107.9133-2-15-						0-W14025	15490	265	7544	42	-1	4.7	2.1	-229	-1	-1	6.2	2726	52	-1.0	-27	0.508
56-42.9542-107.9225-2-15-						0-W14026	10670	241	18020	24	-1	3.1	2.5	-230			6.3	2320	35	1.8	19	0.506
56-42.9458-107.9514-2-15-						0-W14027	8088	372	15990	26	-1	4.3	7.1	424	-1	1	18.2	3230	29	4.4	36	0.270
56-42.9872-107.8611-2-15-						0-W14028	7902	244	8115	35	-1	3.3	4.1	-193	-1		16.4	2072	43	3.1	-12	0.247
56-42.9614-107.8356-2-15-						0-W14029	10070	285	8579	31	-1	5.7	3.5	-187	-1	-1	13.4	3374	49	2.9	50	0.301
56-42.9494-107.8306-2-15-						0-W14030	9578	304	8472	32	-1	6.7	4.6	-181	-1	-1	18.5	3614	45	4.2	17	0.272
56-42.9467-107.8183-2-15-						0-W14031	10240	315	9228	30	-1	5.1	3.5	-212	-1	-1	14.0	3527	41	4.1	36	0.396
56-42.9500-107.8586-2-15-						0-W14032	12160	261	6276	-16	-1	5.0	2.3	-218	-1	-1	7.6	2471	55	2.3	-26	0.400
56-42.9369-107.8578-2-15-						0-W14033	11100	237	6894	33	-1	4.9	5.0	-170	-1	-1	16.0	2893	50	3.3	54	0.284
56-42.9372-107.8558-2-15-						0-W14034	10380	364	9614	39	-1	7.5	4.6	-207	-1	1	20.8	3416	50	4.6	55	0.257
56-42.9439-107.8119-2-15-						0-W14035	8499	429	9350	23	-1	5.6	6.2	-238	-1	1	23.2	3651	46	5.1	40	0.330
56-42.9819-107.7708-2-15-						0-W14037	7959	193	5218	-15	-1	3.9	1.7	-185	-1	-1	6.3	2303	41	2.3	-25	0.441
56-42.9833-107.7878-2-15-						0-W14038	9338	276	7160	34	-1	5.6	3.2	-186		-1	11.5	2973	46	3.2	56	0.343
56-42.9847-107.2358-2-15-						0-W14039	6152	195	7915	36	-1	4.4	4.0	-165	-1	-1	13.2	2515	46	3.7	27	0.358
56-42.9764-107.1864-2-15-						0-W14040	12860	458	11450	26	-1	4.1	4.9	-268	-1	1	10.9	2563	39	2.6	-24	0.695
56-42.9442-107.1992-2-15-						0-W14041	5898	350	12100	-15	-1	4.0	4.0	-255	-1	-1	16.6	2219	31	4.3	-24	0.449
56-42.9336-107.2306-2-15-						0-W14042	2363	81	1900	25	-1	2.0	2.6	-100		1	6.8	2033	31	2.3	-18	0.471
56-42.9361-107.2039-2-15-						0-W14043	4383	80	2821	27	-1	3.8	2.9	-110			6.8	2283	51	2.1	44	0.465
56-42.9153-107.1836-2-15-						0-W14044	-1428	103	3149	-8	-1	1.3	1.9	-126			3.3	1467	19	1.4	-11	0.600
56-42.9147-107.1803-2-15-						0-W14045	5158	150	4913	-12	-1	2.0	1.5	-166			4.7	1732	29	1.9	23	0.615
56-42.9353-107.1592-2-15-						0-W14046	3038	135	8946	30	-1	1.7	2.0	-149			4.3	1409	24	1.7	-8	0.553
56-42.9514-107.1392-2-15-						0-W14047	9220	192	4994	35	-1	4.7	2.9	-158		-1	8.7	2313	43	2.1	53	0.407
56-42.9792-107.1278-2-15-						0-W14048	2449	100	2058	-9	-1	1.9	3.6	-125	-1		8.1	2097	32	2.9	24	0.463
56-42.9808-107.1286-2-15-						0-W14049	11980	394	11420	35	-1	4.3	2.4	-278	-1	-1	8.5	2166	37	-1.0	-27	0.976
56-42.9825-107.1100-2-15-						0-W14050	12050	321	7807	34	-1	4.3	3.4	-198			9.1	2467	42	2.5	18	0.382
56-42.9944-107.0853-2-15-						0-W14051	11030	352	8157	43	-1	5.9	4.3	-210	-1	1	12.1	3051	53	3.2	58	0.312
56-42.9664-107.0325-2-15-						0-W14052	10720	250	5793	39	-1	4.8	3.4	-212	1	-1	9.0	2836	50	2.3	52	0.463

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (umho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
56	42.9644	107.0017	2	15	0	W14053	10/04/77	10	8	-	-	-	-	-	8	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	3.97
56	42.9444	107.0775	2	15	0	W14054	10/04/77	11	8	-	-	-	-	-	16	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	9.03
56	42.9375	107.0181	2	15	0	W14055	10/04/77	11	8	-	-	-	-	-	16	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	4.19
56	42.9339	107.0283	2	15	0	W14056	10/04/77	11	8	-	-	-	-	-	8	1	7	4	6	-	1	-	2	3	3	3	1	-	1	-	-	-	-	4.67
56	42.9300	107.0342	2	15	0	W14057	10/04/77	11	8	-	-	-	-	-	16	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	5.97
56	42.9292	107.0419	2	15	0	W14058	10/04/77	12	8	-	-	-	-	-	25	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	3.19
56	42.8900	107.0772	2	15	0	W14059	10/04/77	12	8	-	-	-	-	-	16	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	5.90
56	42.8917	107.0692	2	15	0	W14060	10/04/77	12	8	-	-	-	-	-	25	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	7.95
56	42.8889	107.0128	2	15	0	W14061	10/04/77	12	8	-	-	-	-	-	15	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	5.57
56	42.9117	107.0917	2	15	0	W14062	10/04/77	13	10	-	-	-	-	-	16	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	3.80
56	42.9244	107.1044	2	15	0	W14063	10/04/77	13	10	-	-	-	-	-	21	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	4.74
56	42.9214	107.1253	2	15	0	W14064	10/04/77	13	10	-	-	-	-	-	16	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	4.88
56	42.8856	107.1297	2	15	0	W14065	10/04/77	14	10	-	-	-	-	-	16	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	3.44
56	42.9036	107.2067	2	15	0	W14066	10/04/77	14	10	-	-	-	-	-	11	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	2.63
56	42.9136	107.2244	2	15	0	W14067	10/04/77	14	10	-	-	-	-	-	11	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	2.41
56	42.9153	107.2272	2	15	0	W14068	10/04/77	15	10	-	-	-	-	-	13	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	2.28
56	42.9239	107.2297	2	15	0	W14069	10/04/77	15	10	-	-	-	-	-	15	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	3.74
56	42.8917	107.2603	2	15	0	W14070	10/04/77	15	10	-	-	-	-	-	25	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	3.72
56	42.8975	107.3442	2	15	0	W14071	10/04/77	16	10	-	-	-	-	-	8	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	2.68
56	42.9178	107.2525	2	15	0	W14072	10/04/77	16	10	-	-	-	-	-	25	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	3.01
56	42.9197	107.2597	2	15	0	W14073	10/04/77	16	13	-	-	-	-	-	13	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	2.89
56	42.9331	107.2739	2	15	0	W14074	10/04/77	17	13	-	-	-	-	-	18	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	2.64
56	42.9403	107.2892	2	15	0	W14075	10/04/77	17	13	-	-	-	-	-	16	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	2.53
56	42.9500	107.3072	2	15	0	W14076	10/04/77	17	13	-	-	-	-	-	13	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	2.30
56	42.9319	107.3692	2	15	0	W14077	10/04/77	17	13	-	-	-	-	-	16	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	4.76
56	42.9658	107.3353	2	15	0	W14078	10/04/77	18	12	-	-	-	-	-	18	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	2.56
56	42.9633	107.3414	2	15	0	W14079	10/04/77	18	12	-	-	-	-	-	13	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	3.43
56	42.9703	107.3383	2	15	0	W14080	10/04/77	18	12	-	-	-	-	-	16	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	3.47
56	42.9822	107.3342	2	15	0	W14081	10/04/77	18	12	-	-	-	-	-	16	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	4.00
56	42.9831	107.2519	2	15	0	W14082	10/04/77	19	10	-	-	-	-	-	21	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	3.18
56	42.9881	107.5044	2	15	0	W14085	10/05/77	10	9	-	-	-	-	-	16	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	5.42
56	42.9381	107.5192	2	15	0	W14088	10/05/77	10	9	-	-	-	-	-	16	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	7.12
56	42.9014	107.5003	2	15	0	W14089	10/05/77	11	10	-	-	-	-	-	10	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	9.44
56	42.8997	107.5519	2	15	0	W14090	10/05/77	11	10	-	-	-	-	-	16	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	5.64
56	42.9842	107.5828	2	15	0	W14091	10/05/77	11	10	-	-	-	-	-	33	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	7.38
56	42.9772	107.6094	2	15	0	W14093	10/05/77	12	10	-	-	-	-	-	33	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	9.84
56	42.9383	107.5850	2	15	0	W14096	10/05/77	13	10	-	-	-	-	-	25	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	4.69
56	42.9214	107.5747	2	15	0	W14097	10/05/77	13	11	-	-	-	-	-	16	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	4.07
56	42.8928	107.5947	2	15	0	W14098	10/05/77	14	12	-	-	-	-	-	8	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	3.52
56	42.9697	107.4167	2	15	0	W14099	10/05/77	15	12	-	-	-	-	-	8	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	6.09
56	42.9669	107.4622	2	15	0	W14100	10/05/77	16	12	-	-	-	-	-	8	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	4.23
56	42.9872	107.4083	2	15	0	W14101	10/05/77	16	12	-	-	-	-	-	16	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	3.93
56	42.8978	107.4594	2	11	0	W14104	10/05/77	18	12	6.0	-	-	6.2	400	16	1	7	5	6	3	3	1	-	3	3	3	3	-	1	-	-	-	-	22.04
56	42.8328	107.7753	2	15	0	W14105	10/06/77	9	8	-	-	-	-	-	16	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	5.99
56	42.8839	107.7567	2	15	0	W14106	10/06/77	9	8	-	-	-	-	-	16	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	2.81
56	42.9283	107.7572	2	15	0	W14107	10/06/77	10	8	-	-	-	-	-	16	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	3.56
56	42.9089	107.8497	2	15	0	W14108	10/06/77	10	8	-	-	-	-	-	13	1	7	4	6	-	1	-	2	3	3	3	4	-	1	-	-	-	-	6.85
56	42.9011	107.8453	2	15	0	W14109	10/06/77	10	8	-	-	-	-	-	11	1	7	4	6	-	1	-	2	3	3	3	4	-	1	-	-	-	-	4.07
56	42.8439	107.9053	2	15	0	W14112	10/06/77	12	10	-	-	-	-	-	8	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	4.58
56	42.7997	107.9083	2	15	0	W14113	10/06/77	12	10	-	-	-	-	-	10	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	4.21
56	42.7958	107.9136	2	15	0	W14114	10/06/77	12	10	-	-	-	-	-	8	1	7	4	6	-	1	-	2	3	3	3	3	-	1	-	-	-	-	4.68

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE (Concentrations reported in weight parts per million (ppm))									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY (Concentrations in weight ppm)	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
56-42.9644-107.0017-2-15-						0-W14053	-5	-5	6	29	-20	-15	21	-10	-15	2	37
56-42.9444-107.0775-2-15-						0-W14054	-5	-5	-5	30	-20	22	22	-10	-15	2	59
56-42.9375-107.0181-2-15-						0-W14055	-5	-5	-5	32	-20	32	10	-10	-15	2	29
56-42.9339-107.0283-2-15-						0-W14056	-5	5	-5	33	-20	-15	8	-10	-15	2	39
56-42.9300-107.0342-2-15-						0-W14057	-5	-5	6	24	-20	-15	13	-10	-15	2	35
56-42.9292-107.0419-2-15-						0-W14058	-5	-5	-5	26	-20	41	-5	-10	-15	2	21
56-42.8900-107.0772-2-15-						0-W14059	-5	5	-5	25	-20	40	18	-10	-15	2	17
56-42.8917-107.0692-2-15-						0-W14060	-5	-5	-5	33	-20	45	12	-10	-15	2	59
56-42.8889-107.0128-2-15-						0-W14061	-5	-5	-5	13	-20	33	9	-10	16	2	23
56-42.9117-107.0917-2-15-						0-W14062	-5	-5	-5	22	-20	30	18	-10	-15	3	31
56-42.9244-107.1044-2-15-						0-W14063	-5	-5	-5	32	-20	29	17	-10	17	2	31
56-42.9214-107.1253-2-15-						0-W14064	-5	-5	-5	23	-20	24	6	-10	-15	2	36
56-42.8856-107.1297-2-15-						0-W14065	-5	-5	-5	33	-20	19	18	-10	-15	2	35
56-42.9036-107.2067-2-15-						0-W14066	-5	-5	-5	15	-20	-15	-5	-10	-15	1	14
56-42.9136-107.2244-2-15-						0-W14067	-5	-5	-5	-10	-20	-15	-5	-10	-15	2	14
56-42.9153-107.2272-2-15-						0-W14068	-5	-5	-5	-10	-20	-15	12	-10	-15	2	13
56-42.9239-107.2297-2-15-						0-W14069	-5	-5	-5	28	-20	-15	14	-10	-15	2	24
56-42.8917-107.2603-2-15-						0-W14070	-5	7	-5	22	-20	22	20	-10	-15	2	45
56-42.8975-107.3442-2-15-						0-W14071	-5	6	-5	30	-20	-15	10	-10	-15	2	26
56-42.9178-107.2525-2-15-						0-W14072	-5	-5	-5	10	-20	-15	5	-10	-15	2	28
56-42.9197-107.2597-2-15-						0-W14073	-5	-5	-5	33	-20	-15	5	10	-15	2	19
56-42.9331-107.2739-2-15-						0-W14074	-5	-5	-5	19	-20	-15	9	-10	-15	2	24
56-42.9403-107.2892-2-15-						0-W14075	-5	-5	-5	27	-20	40	13	-10	-15	2	20
56-42.9500-107.3072-2-15-						0-W14076	-5	-5	-5	17	-20	-15	12	-10	19	1	13
56-42.9319-107.3692-2-15-						0-W14077	-5	6	-5	33	-20	24	23	-10	-15	2	31
56-42.9658-107.3353-2-15-						0-W14078	-5	-5	5	21	-20	17	9	-10	-15	2	14
56-42.9633-107.3414-2-15-						0-W14079	-5	-5	-5	21	-20	-15	15	-10	-15	2	17
56-42.9703-107.3383-2-15-						0-W14080	-5	-5	-5	28	-20	17	17	-10	-15	2	17
56-42.9822-107.3342-2-15-						0-W14081	-5	-5	-5	32	-20	-15	9	-10	-15	2	19
56-42.9831-107.2519-2-15-						0-W14082	-5	-5	-5	10	-20	-15	7	-10	-15	1	11
56-42.9881-107.5044-2-15-						0-W14085	-5	-5	-5	35	-20	-15	12	-10	-15	2	27
56-42.9381-107.5192-2-15-						0-W14088	-5	-5	-5	11	-20	28	12	-10	-15	2	28
56-42.9014-107.5003-2-15-						0-W14089	-5	-5	-5	29	-20	44	24	-10	-15	2	32
56-42.8997-107.5519-2-15-						0-W14090	-5	-5	-5	32	-20	25	26	-10	-15	2	48
56-42.9842-107.5828-2-15-						0-W14091	-5	-5	-5	34	-20	19	19	-10	-15	2	26
56-42.9772-107.6094-2-15-						0-W14093	-5	6	-5	27	-20	27	27	-10	-15	3	51
56-42.9383-107.5850-2-15-						0-W14096	6	17	-5	60	-20	-15	10	11	66	2	39
56-42.9214-107.5747-2-15-						0-W14097	-5	-5	-5	33	-20	-15	16	-10	-15	2	40
56-42.8928-107.5947-2-15-						0-W14098	-5	-5	-5	38	-20	31	21	-10	-15	2	42
56-42.9697-107.4167-2-15-						0-W14099	-5	-5	-5	19	-20	16	16	-10	-15	2	29
56-42.9669-107.4622-2-15-						0-W14100	-5	-5	-5	22	-20	17	17	-10	-15	2	29
56-42.9872-107.4083-2-15-						0-W14101	-5	-5	-5	11	-20	-15	6	-10	-15	2	33
56-42.8978-107.4594-2-11-						0-W14104	-5	6	-5	31	-20	36	8	-10	-15	3	33
56-42.8328-107.7753-2-15-						0-W14105	-5	6	-5	10	-20	-15	5	-10	-15	2	26
56-42.8839-107.7567-2-15-						0-W14106	-5	-5	-5	13	-20	-15	-5	-10	-15	2	26
56-42.9283-107.7572-2-15-						0-W14107	-5	-5	-5	21	-20	21	-5	-10	-15	2	24
56-42.9089-107.8497-2-15-						0-W14108	-5	-5	-5	18	-20	-15	7	-10	-15	2	33
56-42.9011-107.8453-2-15-						0-W14109	-5	-5	-5	19	-20	-15	-5	-10	-15	2	30
56-42.8439-107.9053-2-15-						0-W14112	-5	-5	-5	22	-20	-15	10	-10	-15	4	31
56-42.7997-107.9083-2-15-						0-W14113	-5	-5	-5	15	-20	-15	5	-10	-15	2	20
56-42.7958-107.9136-2-15-						0-W14114	-5	-5	-5	17	-20	-15	14	-10	-15	2	31

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
56-42.9644-107.0017-2-15-						0-W14053	50520	-0.04	516	10460	49	-60	5.0	33	1.7	3	0.8	8566	7.6	16580	26	0.2
56-42.9444-107.0775-2-15-						0-W14054	49100	-0.04	500	25450	56	543	5.4	49	2.7	4	0.7	11640	6.5	14510	34	0.4
56-42.9375-107.0181-2-15-						0-W14055	43170	-0.03	667	16050	60	-64	6.4	38	2.0	4	0.8	9062	8.5	16760	32	0.3
56-42.9339-107.0283-2-15-						0-W14056	56190	-0.04	631	17810	57	300	6.4	45	2.5	4	0.7	10750	5.7	19520	27	0.3
56-42.9300-107.0342-2-15-						0-W14057	47090	-0.04	622	13990	47	-75	5.3	44	1.5	3	0.9	8521	9.2	18380	29	0.4
56-42.9292-107.0419-2-15-						0-W14058	41690	-0.03	513	7008	42	-57	4.4	40	1.5	3	0.7	7098	9.3	15330	25	0.3
56-42.8900-107.0772-2-15-						0-W14059	38110	-0.03	954	11760	86	-52	5.3	29	1.2	6	0.9	7997	18.3	15140	54	0.6
56-42.8917-107.0692-2-15-						0-W14060	65550	-0.05	672	15600	75	246	10.5	49	2.9	5	1.0	15070	5.0	21040	41	0.4
56-42.8889-107.0128-2-15-						0-W14061	39160	-0.04	435	18700	64	-63	3.8	31	-1.0	4	0.7	7385	16.2	13380	37	0.5
56-42.9117-107.0917-2-15-						0-W14062	58880	-0.03	716	10540	60	-46	6.7	43	2.8	4	0.8	12260	6.2	13620	33	0.3
56-42.9244-107.1044-2-15-						0-W14063	49950	-0.03	651	24950	68	120	6.2	45	2.4	4	1.0	12370	11.6	14910	39	0.4
56-42.9214-107.1253-2-15-						0-W14064	51790	-0.03	664	26740	53	183	5.8	41	1.9	4	0.7	9425	8.4	15000	31	0.3
56-42.8856-107.1297-2-15-						0-W14065	49770	-0.04	537	9699	48	187	5.5	29	2.5	3	0.6	8231	6.0	13950	23	0.2
56-42.9036-107.2067-2-15-						0-W14066	23410	-0.02	406	-237	30	-18	2.8	27	1.3	3	0.6	4326	14.4	10770	16	0.3
56-42.9136-107.2244-2-15-						0-W14067	28600	-0.02	353	-343	35	-20	3.6	25	1.4	3	0.5	4758	10.2	12740	18	0.3
56-42.9153-107.2272-2-15-						0-W14068	29900	-0.02	413	3055	28	-25	4.0	24	1.1	3	0.4	3788	7.6	12600	15	0.2
56-42.9239-107.2297-2-15-						0-W14069	54880	-0.04	398	3859	36	113	4.5	32	2.5	3	0.7	7031	5.2	14500	24	0.2
56-42.8917-107.2603-2-15-						0-W14070	54170	-0.03	526	4638	45	54	5.7	42	3.3	4	0.7	8726	6.6	16980	30	0.3
56-42.8975-107.3442-2-15-						0-W14071	43320	-0.03	456	8087	46	-31	5.0	35	3.0	3	0.8	8580	6.3	14370	24	0.3
56-42.9178-107.2525-2-15-						0-W14072	41410	-0.03	466	6190	39	-31	4.9	31	1.8	4	0.6	7210	9.7	15450	20	0.3
56-42.9197-107.2597-2-15-						0-W14073	38040	-0.03	425	6736	27	91	3.3	22	1.8	3	0.4	5630	4.8	12540	19	0.2
56-42.9331-107.2739-2-15-						0-W14074	45760	-0.03	467	6243	48	43	3.3	35	2.5	3	0.7	6165	6.0	12280	25	0.3
56-42.9403-107.2892-2-15-						0-W14075	39260	-0.03	419	2501	48	-26	4.5	33	2.2	3	0.7	5722	8.3	10860	25	0.3
56-42.9500-107.3072-2-15-						0-W14076	26830	-0.02	436	-366	30	38	3.6	19	1.2	3	0.5	3270	7.1	10600	17	0.2
56-42.9319-107.3692-2-15-						0-W14077	48850	-0.04	445	20770	42	-53	4.3	22	2.7	4	0.8	7995	5.2	14060	26	0.2
56-42.9658-107.3353-2-15-						0-W14078	32740	-0.03	408	2915	34	49	3.3	25	1.8	3	0.6	5301	7.9	10700	24	0.2
56-42.9633-107.3414-2-15-						0-W14079	40500		508	4015		-31				4				11480		
56-42.9703-107.3383-2-15-						0-W14080	35770	-0.03	472	3123	41	-35	4.0	25	1.4	3	0.6	5351	8.2	10430	22	0.3
56-42.9822-107.3342-2-15-						0-W14081	38700	-0.03	452	3531	33	-42	3.3	16	1.7	3	0.7	5095	8.0	14210	21	0.3
56-42.9831-107.2519-2-15-						0-W14082	23030	-0.02	396	1099	39	26	2.4	17	1.2	4	0.6	3377	12.2	11100	23	0.3
56-42.9881-107.5044-2-15-						0-W14085	57280	-0.03	585	6235	62	-78	6.1	32	2.0	4	0.8	7543	7.9	18530	32	0.3
56-42.9381-107.5192-2-15-						0-W14088	47820	-0.04	519	8133	65	-70	3.8	23	1.9	4	0.9	7199	13.1	15810	39	0.4
56-42.9014-107.5003-2-15-						0-W14089	63600	-0.03	631	7449	80	-68	4.8	37	1.1	5	0.7	8897	10.6	17000	48	0.5
56-42.8997-107.5519-2-15-						0-W14090	60630		510	13210		-50				4				17730		
56-42.9842-107.5828-2-15-						0-W14091	54180	-0.03	642	4864	112	-75	5.3	37	1.1	6	0.8	7343	13.7	17030	62	0.6
56-42.9772-107.6094-2-15-						0-W14093	68850	-0.05	504	10780	47	-69	6.2	36	4.0	3	0.7	12280	3.8	15410	35	0.3
56-42.9383-107.5850-2-15-						0-W14096	55120	-0.03	545	21870	54	-50	4.9	36	2.6	3	0.7	12030	5.9	16950	31	0.3
56-42.9214-107.5747-2-15-						0-W14097	52580	-0.03	484	18100	65	-48	5.5	37	3.5	4	0.9	12990	7.7	15460	38	0.3
56-42.8928-107.5947-2-15-						0-W14098	46710	-0.03	580	35440	38	61	4.7	32	2.5	3	0.7	7849	3.4	16750	21	0.2
56-42.9697-107.4167-2-15-						0-W14099	49520	-0.03	511	5851	68	-49	4.0	43	2.0	5	0.7	8509	15.5	17500	40	0.5
56-42.9669-107.4622-2-15-						0-W14100	54870	-0.03	630	5187	59	-55	4.9	43	2.0	4	0.8	9226	8.1	16630	34	0.3
56-42.9872-107.4083-2-15-						0-W14101	46880	-0.03	547	4526	54	-44	4.3	39	2.0	4	0.7	8284	10.6	14590	30	0.4
56-42.8978-107.4594-2-11-						0-W14104	74170	-0.07	494	8355	72	-100	11.9	53	6.4	5	0.5	13680	5.4	14090	45	0.3
56-42.8328-107.7753-2-15-						0-W14105	48560	-0.03	809	23010	79	196	4.2	29	1.7	4	0.7	8581	14.0	15070	49	0.5
56-42.8839-107.7567-2-15-						0-W14106	39210	-0.03	482	10520	31	-52	3.8	20	-0.9	3	0.5	6322	7.3	11860	21	0.3
56-42.9283-107.7572-2-15-						0-W14107	51110	-0.03	604	8011	51	-60	5.2	44	1.7	4	0.7	10440	9.6	15910	30	0.4
56-42.9089-107.8497-2-15-						0-W14108	55480	-0.03	708	10840	105	-64	6.0	49	1.3	6	0.9	12200	15.1	18370	67	0.5
56-42.9011-107.8453-2-15-						0-W14109	58720	-0.03	597	12280	54	61	6.2	46	1.6	4	0.7	10340	8.1	19290	30	0.4
56-42.8439-107.9053-2-15-						0-W14112	53730	-0.05	782	11140	72	-62	6.8	49	2.3	4	0.9	12910	12.8	16260	44	0.4
56-42.7997-107.9083-2-15-						0-W14113	49610	-0.04	759	11170	53	-63	5.3	31	1.6	3	0.7	8611	11.4	17520	28	0.4
56-42.7958-107.9136-2-15-						0-W14114	54950	-0.05	779	9255	44	-56	4.3	31	1.8	4	0.5	8779	10.9	19960	26	0.4

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)												U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
56-42.9644-107.0017-2-15-						0-W14053	11440	262	6170	28	-1	4.5	2.9	-220	-1	-1	8.4	2470	52	3.3	-19	0.473
56-42.9444-107.0775-2-15-						0-W14054	14270	333	28060	45	-1	5.3	4.2	-296	-1	-1	12.0	2393	48	2.4	70	0.752
56-42.9375-107.0181-2-15-						0-W14055	8826	344	10770	45	-1	4.5	3.7	-211	-1	-1	10.2	2086	33	2.8	-17	0.411
56-42.9339-107.0283-2-15-						0-W14056	16070	371	5652	41	-1	5.1	3.4	-252	-1	-1	9.6	3102	56	3.0	39	0.486
56-42.9300-107.0342-2-15-						0-W14057	10730	337	10130	-17	-1	4.1	3.5	-257	-1	-1	10.7	2414	37	3.0	-26	0.558
56-42.9292-107.0419-2-15-						0-W14058	7955	254	9688	32	-1	3.6	3.3	-188	-1		9.4	2451	35	2.5	43	0.339
56-42.8900-107.0772-2-15-						0-W14059	3140	333	7667	33	-1	4.3	5.1	-190	-1	-1	16.6	2492	25	5.2	33	0.355
56-42.8917-107.0692-2-15-						0-W14060	16820	431	19370	43	-1	6.7	5.8	-355	-1	-1	14.8	3513	66	3.1	-39	0.537
56-42.8889-107.0128-2-15-						0-W14061	11540	422	6946	-14	-1	3.9	3.7	-242	-1	-1	11.7	2623	38	3.3	-25	0.476
56-42.9117-107.0917-2-15-						0-W14062	11720	394	3646	39	-1	6.1	4.2	-220	-1	-1	9.2	3155	76	2.5	75	0.413
56-42.9244-107.1044-2-15-						0-W14063	14380	344	7799	37	-1	5.9	4.2	-209	-1	-1	13.0	2719	51	3.1	56	0.365
56-42.9214-107.1253-2-15-						0-W14064	11430	363	7683	35	-1	4.4	3.9	-247	-1	-1	10.2	2609	46	2.3	-37	0.478
56-42.8856-107.1297-2-15-						0-W14065	10540	254	3605	-16	-1	4.7	2.4	-211	-1	-1	6.6	2674	67	1.8	70	0.521
56-42.9036-107.2067-2-15-						0-W14066	4192	71	642	25	-1	2.5	1.9	-92	1		4.9	2021	35	2.1	28	0.537
56-42.9136-107.2244-2-15-						0-W14067	4819	66	903	33	-1	3.2	2.2	-93			5.2	2436	38	2.7	-13	0.463
56-42.9153-107.2272-2-15-						0-W14068	4465	77	1146	32	-1	2.5	2.1	-114			4.5	2551	42	1.6	25	0.507
56-42.9239-107.2297-2-15-						0-W14069	9742	95	1366	34	-1	5.2	2.4	-157	-1	-1	6.3	3355	88	2.0	-30	0.594
56-42.8917-107.2603-2-15-						0-W14070	9929	115	1348	38	-1	6.1	4.0	-142		-1	8.2	3843	92	2.3	63	0.454
56-42.8975-107.3442-2-15-						0-W14071	9362	260	1681	36	-1	5.2	3.2	-165		-1	7.2	2406	66	2.2	34	0.372
56-42.9178-107.2525-2-15-						0-W14072	8793	156	1608	20	-1	3.8	2.8	-154			5.6	3012	61	2.0	51	0.538
56-42.9197-107.2597-2-15-						0-W14073	7080	164	1728	29	-1	3.5	2.0	-168	-1	-1	4.6	2654	63	2.0	-29	0.628
56-42.9331-107.2739-2-15-						0-W14074	6801	67	1349	39	1	4.7	3.4	-112	1	-1	6.9	2909	65	2.5	54	0.383
56-42.9403-107.2892-2-15-						0-W14075	5159	91	1446	32	-1	4.4	2.9	-113			6.2	2790	58	2.7	47	0.408
56-42.9500-107.3072-2-15-						0-W14076	3166	71	961	25	-1	2.4	2.1	-112			4.7	2083	41	1.8	38	0.489
56-42.9319-107.3692-2-15-						0-W14077	13780	244	4769	21	-1	4.3	2.4	-212	-1	-1	7.5	2957	48	2.0	91	0.635
56-42.9658-107.3353-2-15-						0-W14078	5885	98	1897	26	1	3.2	2.3	-119			6.1	2364	51	1.9	39	0.420
56-42.9633-107.3414-2-15-						0-W14079	6486	97	2912					-115				2716	54			
56-42.9703-107.3383-2-15-						0-W14080	4685	107	2901	31	-1	3.2	2.5	-132			6.5	2643	47	2.1	-31	0.534
56-42.9822-107.3342-2-15-						0-W14081	3941	101	3868	-14	-1	3.5	2.2	-145	-1	-1	7.2	2384	38	2.2	-28	0.556
56-42.9831-107.2519-2-15-						0-W14082	2127	58	1623	20	-1	2.4	2.7	-93			7.3	2074	25	2.6	26	0.436
56-42.9881-107.5044-2-15-						0-W14085	6739	315	12280	30	-1	4.2	3.6	-252	-1	-1	12.6	2655	42	3.3	-23	0.430
56-42.9381-107.5192-2-15-						0-W14088	-2893	233	10660	33	-1	4.3	2.5	-221	-1	-1	14.9	2086	45	3.6	-24	0.478
56-42.9014-107.5003-2-15-						0-W14089	5417	184	15280	37	-1	5.4	5.4	-190	1	-1	19.8	2900	49	3.6	34	0.477
56-42.8997-107.5519-2-15-						0-W14090	17950	334	5437					-196				2974	79			
56-42.9842-107.5828-2-15-						0-W14091	4037	299	13160	27	-1	3.9	6.3	-238	-1	-1	28.7	3172	38	3.9	29	0.257
56-42.9772-107.6094-2-15-						0-W14093	13900	376	7073	47	-1	6.3	3.8	-266	-1	-1	11.0	2757	75	2.2	-31	0.895
56-42.9383-107.5850-2-15-						0-W14096	18310	287	5687	40	-1	5.6	3.7	-188	-1	-1	10.2	2793	65	2.4	44	0.460
56-42.9214-107.5747-2-15-						0-W14097	16630	290	5456	46	-1	6.2	4.3	-183	-1	-1	11.5	3033	73	3.1	51	0.354
56-42.8928-107.5947-2-15-						0-W14098	17980	220	3761	20	-1	3.9	2.7	-185		-1	6.1	2482	97	2.1	43	0.577
56-42.9697-107.4167-2-15-						0-W14099	7746	176	7600	35	-1	4.9	4.9	171	-1	1	15.7	2582	46	3.9	33	0.388
56-42.9669-107.4622-2-15-						0-W14100	6822	202	9350	45	-1	5.3	3.5	-171	-1	-1	11.3	2542	47	2.8	35	0.374
56-42.9872-107.4083-2-15-						0-W14101	8462	188	6117	35	-1	4.6	3.6	-157	-1		9.9	2899	50	2.6	31	0.397
56-42.8978-107.4594-2-11-						0-W14104	8071	228	12450	-27	-2	9.2	3.9	-313	-1	-1	18.1	2680	95	3.7	-45	1.218
56-42.8328-107.7753-2-15-						0-W14105	9939	291	15770	32	-1	4.2	4.3	249	-1		19.9	2515	34	3.6	35	0.301
56-42.8839-107.7567-2-15-						0-W14106	12290	193	5435	-14	-1	3.5	2.1	-183	-1	-1	5.9	1922	46	2.4	-27	0.476
56-42.9283-107.7572-2-15-						0-W14107	9991	304	10250	24	-1	5.2	4.0	-202	-1	-1	10.1	3231	52	2.9	-21	0.352
56-42.9089-107.8497-2-15-						0-W14108	8365	306	11750	42	-1	6.3	6.1	-202	-1	1	24.4	2792	51	4.3	34	0.281
56-42.9011-107.8453-2-15-						0-W14109	10460	290	11110	35	-1	5.1	3.4	-240	-1	-1	10.5	3113	56	2.1	-33	0.388
56-42.8439-107.9053-2-15-						0-W14112	8914	233	8419	44	-1	6.1	4.2	-210	-1	1	15.6	2696	48	3.7	50	0.294
56-42.7997-107.9083-2-15-						0-W14113	10770	217	8803	36	-1	4.1	3.1	-212	-1	-1	11.1	2549	45	3.1	47	0.379
56-42.7958-107.9136-2-15-						0-W14114	8340	220	9597	45	-2	4.5	2.8	-179	-1	-1	11.4	2922	44	3.4	71	0.411

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
							TIME SAMPLED																										
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
56-42.8700-107.9539-2-15-						0-W14115-10/06/77-12-			11-	-	-	-	-	-		8-1-7-4-6-	-1-	-2-3-3-3-3-	-1-	-	-	-	-	-								2.48
56-42.8358-107.9747-2-15-						0-W14116-10/06/77-13-			12-	-	-	-	-	-		8-1-7-4-6-	-1-	-2-3-3-3-3-	-1-	-	-	-	-	-								2.18
56-42.8383-107.9633-2-15-						0-W14117-10/06/77-13-			12-	-	-	-	-	-		8-1-7-4-6-	-1-	-2-3-3-3-3-	-1-	-	-	-	-	-								2.38
56-42.8478-107.9525-2-15-						0-W14118-10/06/77-13-			12-	-	-	-	-	-		8-1-7-4-6-	-1-	-2-3-3-3-3-	-1-	-	-	-	-	-								2.31
56-42.8322-107.9439-2-15-						0-W14119-10/06/77-13-			12-	-	-	-	-	-		8-1-7-4-6-	-1-	-2-3-3-3-3-	-1-	-	-	-	-	-								4.11
56-42.8156-107.9472-2-12-						0-W14120-10/06/77-14-			14-	9.0-	-	-	6.8-	2200-		3-1-7-4-6-3-3-1-		-3-3-3-3-3-	-1-	-	-	-	-	-								5.62
56-42.8117-107.9492-2-15-						0-W14121-10/06/77-14-			14-	-	-	-	-	-		8-1-7-4-6-	-1-	-2-3-3-3-3-	-1-	-	-	-	-	-								3.81
56-42.7844-107.9622-2-15-						0-W14122-10/06/77-14-			14-	-	-	-	-	-		8-1-7-4-6-	-1-	-2-3-3-3-3-	-1-	-	-	-	-	-								3.51
56-42.7867-107.9700-2-12-						0-W14123-10/06/77-14-			14-	-	-	-	6.8-	1600-		8-1-7-4-6-3-3-1-		-3-3-3-3-3-	-1-	-	-	-	-	-								4.59
56-42.7839-107.9828-2-15-						0-W14124-10/06/77-15-			14-	-	-	-	-	-		8-1-7-4-6-	-1-	-2-3-3-3-3-	-1-	-	-	-	-	-								2.49
56-42.7944-107.8758-2-15-						0-W14125-10/06/77-16-			14-	-	-	-	-	-		8-1-7-4-6-	-1-	-2-3-3-3-3-	-1-	-	-	-	-	-								4.62
56-42.8367-107.8225-2-15-						0-W14126-10/06/77-17-			14-	-	-	-	-	-		16-1-7-4-6-	-1-	-2-3-3-3-3-	-1-	-	-	-	-	-								5.32
56-42.8353-107.8244-2-15-						0-W14127-10/06/77-17-			14-	-	-	-	-	-		28-1-7-4-6-	-1-	-2-3-3-3-3-	-1-	-	-	-	-	-								3.03
56-42.6481-106.3622-2-12-						0-W14128-11/01/77-15-			10-	6.0-	-	-	5.9-	190-		13-1-7-5-6-3-3-1-		-3-3-3-3-3-	-1-	-	-	-	-	-								3.26
56-42.6642-106.3386-2-11-						0-W14129-11/01/77-16-			9-	4.0-	-	-	5.9-	100-		13-1-7-5-6-3-3-1-		-3-3-3-3-3-	-1-	-	-	-	-	-								2.85
56-42.6606-106.3633-2-15-						0-W14130-11/01/77-16-			9-	-	-	-	-	-		10-1-7-5-6-	-1-	-2-3-3-3-3-	-1-	-	-	-	-	-								2.46
56-42.7719-107.3903-2-15-						0-W14131-11/02/77- 9-			13-	-	-	-	-	-		33-1-7-5-6-	-1-	-2-3-3-3-1-	-1-	-	-	-	-	-								4.47
56-42.7919-107.3786-2-15-						0-W14132-11/02/77- 9-			13-	-	-	-	-	-		16-1-7-4-6-	-1-	-2-3-3-3-1-	-1-	-	-	-	-	-								4.81
56-42.8542-107.3961-2-15-						0-W14133-11/02/77-10-			13-	-	-	-	-	-		16-1-7-5-4-	-1-	-2-3-3-3-1-	-1-	-	-	-	-	-								2.30
56-42.8353-107.4006-2-11-						0-W14134-11/02/77-10-			13-	8.0-	-	-	6.8-	330-		16-1-7-5-6-3-3-1-		-3-3-3-1-	-1-	-	-	-	-	-								5.06
56-42.8358-107.4100-2-12-						0-W14135-11/02/77-10-			13-	8.0-	-	-	6.8-	350-		16-1-7-5-6-3-3-1-		-3-3-3-1-	-1-	-	-	-	-	-								4.98
56-42.8453-107.4361-2-11-						0-W14136-11/02/77-10-			13-	7.0-	-	-	6.8-	600-		11-1-7-5-6-3-3-1-		-3-3-3-1-	-1-	-	-	-	-	-								6.75
56-42.8403-107.4344-2-15-						0-W14137-11/02/77-10-			13-	-	-	-	-	-		16-1-7-4-6-	-	- - -3-3-3-1-	-1-	-	-	-	-	-								6.28
56-42.8122-107.4347-2-11-						0-W14138-11/02/77-11-			13-	3.0-	-	-	6.8-	230-		16-1-7-5-6-3-3-1-		-3-3-3-1-	-1-	-	-	-	-	-								6.86
56-42.7892-107.4272-2-11-						0-W14139-11/02/77-11-			13-	4.0-	-	-	6.2-	190-		16-1-7-5-6-3-3-1-		-3-3-3-1-	-1-	-	-	-	-	-								5.63
56-42.7586-107.4142-2-15-						0-W14140-11/02/77-11-			13-	-	-	-	-	-		-1-7-4-6-	-1-	-2-3-3-3-1-	-1-	-	-	-	-	-								4.81
56-42.7519-107.4339-2-11-						0-W14141-11/02/77-11-			13-	3.0-	-	-	6.5-	220-		15-1-7-5-6-3-3-1-		-3-3-3-1-	-1-	-	-	-	-	-								4.37
56-42.7839-107.4472-2-11-						0-W14142-11/02/77-12-			14-	3.0-	-	-	6.3-	200-		15-1-7-5-6-3-3-1-		-3-3-3-1-	-1-	-	-	-	-	-								4.49
56-42.7786-107.4589-2-15-						0-W14143-11/02/77-12-			14-	-	-	-	-	-		16-1-7-4-6-	-1-	-2-3-3-3-1-	-1-	-	-	-	-	-								4.67
56-42.7561-107.4722-2-15-						0-W14144-11/02/77-12-			14-	-	-	-	-	-		16-1-7-5-6-	-1-	-2-3-3-3-1-	-1-	-	-	-	-	-								4.07
56-42.7653-107.4767-2-15-						0-W14145-11/02/77-13-			14-	-	-	-	-	-		16-1-7-5-6-	-1-	-2-3-3-3-1-	-1-	-	-	-	-	-								3.66
56-42.7642-107.4786-2-15-						0-W14146-11/02/77-13-			14-	-	-	-	-	-		13-1-7-4-6-	-1-	-2-3-3-3-1-	-1-	-	-	-	-	-								4.62
56-42.7997-107.4617-2-15-						0-W14147-11/02/77-13-			14-	-	-	-	-	-		25-1-7-5-6-	-1-	-2-3-3-3-1-	-1-	-	-	-	-	-								3.95
56-42.8506-107.4239-2-11-						0-W14148-11/02/77-14-			14-	3.0-	-	-	6.5-	400-		16-1-7-5-6-3-3-1-		-3-3-3-1-	-1-	-	-	-	-	-								7.16
56-42.8583-107.4403-2-11-						0-W14149-11/02/77-14-			14-	4.0-	-	-	6.8-	600-		16-1-7-5-6-3-3-1-		-3-3-3-1-	-1-	-	-	-	-	-								5.94
56-42.8706-107.4675-2-15-						0-W14150-11/02/77-15-			14-	-	-	-	-	-		10-1-7-4-6-	-1-	-2-3-3-3-1-	-1-	-	-	-	-	-								8.00
56-42.8672-107.3944-2-11-						0-W14151-11/02/77-15-			14-	6.0-	-	-	6.6-	800-		8-1-7-5-4-3-3-1-		-3-3-3-1-	-1-	-	-	-	-	-								2.16
56-42.8506-106.4761-2-15-						0-W14152-11/25/77-10-			4-		-C-	-	-	-		4-1-6-5-6-	-1-	-2-3-2-2-2-	-9-	-	-	-	-	-								3.02
56-42.8150-106.3783-2-99-						0-W14156-11/25/77-11-			5-		-C-	-	-	-		13-1-6-5-6-	-1-	- -4-3-3-2-	-9-	-	-	-	-	-								2.27
56-42.7894-106.3439-2-12-						0-W14157-11/25/77-12-			6-	2.5-	C-	-	7.6-	450-		8-1-6-4-6-	-2-1-2-2-3-3-2-		-7-	-	-	-	-	-								4.14
56-42.8336-106.2889-2-15-						0-W14159-11/25/77-14-			7-		-C-	-	-	-		20-1-6-5-6-	-1-	-2-3-3-2-2-	-9-	-	-	-	-	-								3.01
56-42.5647-106.0189-2-12-						0-W14160-10/31/77- 9-			7-	5.0-	-	-	6.1-	380-		16-1-7-4-6-3-3-1-		-4-3-3-3-3-	-1-	-	-	-	-	-								8.08
56-42.5706-106.0392-2-15-						0-W14161-10/31/77- 9-			7-	-	-	-	-	-		13-1-7-5-6-	-1-	-2-4-3-3-3-	-1-	-	-	-	-	-								2.82
56-42.6058-106.0292-2-11-						0-W14162-10/31/77-10-			6-	5.0-	-	-	6.5-	330-		13-1-7-5-6-3-3-1-		-4-3-3-3-	-1-	-	-	-	-	-								7.10
56-42.6092-106.0500-2-99-						0-W14163-10/31/77-10-			7-		-C-	-	-	-		16-1-7-5-6-	-1-	-2-4-3-3-3-	-1-	-	-	-	-	-								15.94
56-42.6217-106.0433-2-99-						0-W14164-10/31/77-10-			7-		-C-	-	-	-		16-1-7-5-6-	-1-	-2-4-3-3-3-	-1-	-	-	-	-	-								10.71
56-42.6183-106.1075-2-11-						0-W14166-10/31/77-11-			7-	6.0-	-	-	6.5-	260-		16-1-7-5-6-	-2-	-2-4-3-3-3-	-1-	-	-	-	-	-								7.42
56-42.6231-106.1381-2-12-						0-W14167-10/31/77-11-			7-	7.0-	-	-	6.1-	370-		13-1-7-5-6-3-3-1-		-4-3-3-3-	-1-	-	-	-	-	-								7.32
56-42.6178-106.1353-2-11-						0-W14168-10/31/77-11-			7-	6.0-	-	-	6.5-	260-		16-1-7-5-6-3-3-1-		-4-3-3-3-	-1-	-	-	-	-	-								8.42
56-42.6069-106.1631-2-11-						0-W14169-10/31/77-11-			7-	6.0-	-	-	6.5-	250-		16-1-7-5-6-3-3-1-		-4-3-3-3-	-1-	-	-	-	-	-								10.73
56-42.6056-106.1833-2-99-						0-W14170-10/31/77-12-			7-	-	-	-	-	-		16-1-7-5-6-	-1-	- -4-3-3-3-	-1-	-	-	-	-	-								3.81

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

(2)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
56-42.8700-107.9539-2-15-						0-W14115	-5	-5	-5	10	-20	18	14	-10	-15	2	41
56-42.8358-107.9747-2-15-						0-W14116	-5	-5	-5	15	-20	-15	-5	-10	-15	2	26
56-42.8383-107.9633-2-15-						0-W14117	-5	-5	-5	12	-20	16	9	-10	-15	2	30
56-42.8478-107.9525-2-15-						0-W14118	-5	-5	-5	-10	-20	-15	10	-10	-15	2	28
56-42.8322-107.9439-2-15-						0-W14119	-5	-5	-5	20	-20	16	9	-10	-15	3	34
56-42.8156-107.9472-2-12-						0-W14120	-5	-5	-5	25	-20	-15	13	-10	-15	2	24
56-42.8117-107.9492-2-15-						0-W14121	-5	-5	-5	19	-20	-15	13	-10	-15	2	35
56-42.7844-107.9622-2-15-						0-W14122	-5	-5	-5	12	-20	15	11	-10	-15	2	39
56-42.7867-107.9700-2-12-						0-W14123	-5	-5	-5	18	-20	-15	17	-10	-15	2	37
56-42.7839-107.9828-2-15-						0-W14124	-5	-5	-5	13	-20	-15	-5	-10	-15	2	35
56-42.7944-107.8758-2-15-						0-W14125	-5	-5	-5	24	-20	19	8	-10	-15	2	36
56-42.8367-107.8225-2-15-						0-W14126	-5	-5	-5	14	-20	-15	6	-10	-15	2	25
56-42.8353-107.8244-2-15-						0-W14127	-5	-5	-5	11	-20	21	7	-10	-15	2	33
56-42.6481-106.3622-2-12-						0-W14128	-5	-5	-5	16	-20	-15	11	-10	-15	2	27
56-42.6642-106.3386-2-11-						0-W14129	-5	-5	-5	30	-20	-15	9	-10	-15	2	28
56-42.6606-106.3633-2-15-						0-W14130	-5	-5	-5	21	-20	-15	7	-10	-15	2	26
56-42.7719-107.3903-2-15-						0-W14131	-5	-5	-5	37	-20	37	12	-10	-15	3	36
56-42.7919-107.3786-2-15-						0-W14132	-5	-5	-5	27	-20	15	21	-10	-15	2	36
56-42.8542-107.3961-2-15-						0-W14133	-5	-5	-5	13	-20	16	-5	-10	-15	2	74
56-42.8353-107.4006-2-11-						0-W14134	-5	5	-5	21	-20	-15	14	-10	-15	2	38
56-42.8358-107.4100-2-12-						0-W14135	-5	-5	-5	-10	-20	-15	10	-10	-15	2	32
56-42.8453-107.4361-2-11-						0-W14136	-5	-5	-5	18	-20	-15	17	-10	-15	2	43
56-42.8403-107.4344-2-15-						0-W14137	-5	-5	-5	34	-20	-15	13	-10	-15	3	53
56-42.8122-107.4347-2-11-						0-W14138	-5	-5	-5	14	-20	15	16	-10	-15	3	31
56-42.7892-107.4272-2-11-						0-W14139	-5	-5	-5	-10	-20	-15	8	-10	-15	2	22
56-42.7586-107.4142-2-15-						0-W14140	-5	-5	-5	21	-20	29	8	-10	-15	2	31
56-42.7519-107.4339-2-11-						0-W14141	-5	-5	-5	26	-20	29	7	-10	-15	3	44
56-42.7839-107.4472-2-11-						0-W14142	-5	-5	-5	27	-20	-15	12	-10	15	2	37
56-42.7786-107.4589-2-15-						0-W14143	-5	-5	-5	28	-20	-15	13	-10	-15	3	41
56-42.7561-107.4722-2-15-						0-W14144	-5	-5	-5	20	-20	-15	13	-10	-15	2	33
56-42.7653-107.4767-2-15-						0-W14145	-5	-5	-5	15	-20	-15	20	-10	-15	3	40
56-42.7642-107.4786-2-15-						0-W14146	-5	-5	-5	19	-20	-15	20	-10	-15	2	31
56-42.7997-107.4617-2-15-						0-W14147	-5	-5	-5	27	-20	-15	14	-10	17	2	24
56-42.8506-107.4239-2-11-						0-W14148	-5	-5	-5	24	-20	-15	8	-10	16	3	43
56-42.8583-107.4403-2-11-						0-W14149	-5	-5	-5	-10	-20	27	13	-10	-15	2	47
56-42.8706-107.4675-2-15-						0-W14150	-5	-5	-5	27	-20	18	14	-10	-15	3	44
56-42.8672-107.3944-2-11-						0-W14151	-5	-5	-5	15	-20	-15	-5	-10	-15	2	28
56-42.8506-106.4761-2-15-						0-W14152	-5	-5	-5	15	-20	-15	14	-10	-15	2	39
56-42.8150-106.3783-2-99-						0-W14156	-5	-5	-5	21	-20	-15	12	-10	-15	2	45
56-42.7894-106.3439-2-12-						0-W14157	-5	-5	-5	25	-20	48	12	-10	-15	2	50
56-42.8336-106.2889-2-15-						0-W14159	-5	-5	-5	22	-20	-15	11	-10	-15	2	60
56-42.5647-106.0189-2-12-						0-W14160	-5	-5	-5	22	-20	-15	13	-10	-15	2	29
56-42.5706-106.0392-2-15-						0-W14161	-5	-5	-5	12	-20	-15	8	-10	-15	-1	45
56-42.6058-106.0292-2-11-						0-W14162	-5	-5	-5	17	-20	18	12	-10	-15	2	32
56-42.6092-106.0500-2-99-						0-W14163	-5	-5	-5	16	-20	-15	16	-10	-15	2	25
56-42.6217-106.0433-2-99-						0-W14164	-5	-5	-5	21	-20	-15	15	-10	-15	2	29
56-42.6183-106.1075-2-11-						0-W14166	-5	-5	-5	15	-20	18	12	-10	-15	2	21
56-42.6231-106.1381-2-12-						0-W14167	-5	-5	-5	14	-20	16	10	-10	-15	2	17
56-42.6178-106.1353-2-11-						0-W14168	-5	-5	-5	15	-20	-15	16	-10	-15	2	35
56-42.6069-106.1631-2-11-						0-W14169	-5	-5	-5	24	-20	-15	10	-10	-15	2	34
56-42.6056-106.1833-2-99-						0-W14170	-5	-5	-5	20	-20	-15	15	-10	-15	2	29

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)															
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
56-42.8700-107.9539-2-15-			0-	W	14115		45750	-0.04	546	30440	44	68	4.3	34	2.6	3	0.6	9291	5.0	16430	25	0.3
56-42.8358-107.9747-2-15-			0-	W	14116		32750	-0.03	574	22040	42	-43	4.2	29	1.8	2	0.8	7926	6.7	14660	25	0.2
56-42.8383-107.9633-2-15-			0-	W	14117		35570	-0.04	418	24720	34	-48	4.5	23	1.5	2	0.6	6342	5.1	11700	19	0.2
56-42.8478-107.9525-2-15-			0-	W	14118		40250	-0.05	513	28120	30	59	3.6	23	1.6	3	0.5	6963	3.8	16010	19	0.2
56-42.8322-107.9439-2-15-			0-	W	14119		48260	-0.04	778	9764	56	-52	5.0	36	2.3	4	0.7	10480	11.4	18870	33	0.4
56-42.8156-107.9472-2-12-			0-	W	14120		44750	-0.05	1089	24100	101	57	6.4	39	3.3	5	1.0	11030	16.1	17220	57	0.5
56-42.8117-107.9492-2-15-			0-	W	14121		47440	-0.04	655	8641	44	-63	5.3	34	2.4	3	0.6	8214	8.7	18670	25	0.4
56-42.7844-107.9622-2-15-			0-	W	14122		46810	-0.05	610	17830	39	63	4.3	26	1.8	4	0.9	8476	7.5	19870	23	0.3
56-42.7867-107.9706-2-12-			0-	W	14123		60450	-0.04	1143	31090	61	-74	5.2	33	1.4	4	0.6	9408	9.5	18560	36	0.3
56-42.7839-107.9828-2-15-			0-	W	14124		34980	-0.04	517	27350	48	59	4.2	35	2.2	3	0.8	8129	7.9	13330	24	0.3
56-42.7944-107.8758-2-15-			0-	W	14125		53060	-0.05	555	15920	83	-72	6.8	58	2.0	4	1.0	13250	16.5	18010	50	0.6
56-42.8367-107.8225-2-15-			0-	W	14126		64560	-0.05	720	10640	80	-74	6.1	53	1.7	5	0.8	12090	14.3	16130	49	0.5
56-42.8353-107.8244-2-15-			0-	W	14127		56550	-0.05	637	22280	60	-69	6.6	44	2.3	3	0.8	12800	8.0	17520	35	0.3
56-42.6481-106.3622-2-12-			0-	W	14128		43530	-0.05	572	12330	45	-70	5.5	28	1.9	3	0.7	6200	9.3	15420	23	0.3
56-42.6642-106.3386-2-11-			0-	W	14129		52020	-0.06	575	19070	43	-60	4.9	31	-1.3	4	0.7	9496	5.6	16700	27	0.2
56-42.6606-106.3633-2-15-			0-	W	14130		48240	-0.04	542	37790	40	-60	5.5	29	2.1	4	0.7	11380	5.9	18420	26	0.3
56-42.7719-107.3903-2-15-			0-	W	14131		88440	-0.07	533	11510	98	-87	13.0	88	2.9	5	1.1	21620	6.3	17630	63	0.4
56-42.7919-107.3786-2-15-			0-	W	14132		76900	-0.06	612	9664	77	-91	8.8	45	2.1	3	0.8	13250	7.2	18430	41	0.3
56-42.8542-107.3961-2-15-			0-	W	14133		47050	-0.06	375	54760	31	-58	5.4	31	1.9	4	0.5	10060	5.2	18640	19	0.2
56-42.8353-107.4006-2-11-			0-	W	14134		57510	-0.05	770	11660	92	-65	6.7	42	2.2	7	1.0	13510	15.5	23650	41	0.6
56-42.8358-107.4100-2-12-			0-	W	14135		53860	-0.05	647	11440	97	-61	6.9	40	2.1	7	1.3	14260	20.5	26030	56	0.7
56-42.8453-107.4361-2-11-			0-	W	14136		60270	-0.06	672	22700	77	-102	8.1	41	1.9	4	1.0	11930	8.8	14530	45	0.4
56-42.8403-107.4344-2-15-			0-	W	14137		67250	-0.06	676	17260	62	-73	6.8	41	1.8	4	0.8	12610	4.9	20800	41	0.3
56-42.8122-107.4347-2-11-			0-	W	14138		62390	-0.07	723	16560	61	120	6.5	42	2.4	4	0.8	11360	5.8	17460	48	0.4
56-42.7892-107.4272-2-11-			0-	W	14139		65480	-0.05	623	21820	103	-113	7.6	35	1.8	4	1.6	19160	12.3	14490	57	0.4
56-42.7586-107.4142-2-15-			0-	W	14140		62640	-0.05	474	21970	82	-116	7.5	64	1.6	3	1.3	14730	8.2	11880	44	0.3
56-42.7519-107.4339-2-11-			0-	W	14141		66770	-0.07	763	22060	61	567	6.5	38	3.0	4	0.9	14590	4.6	17960	32	0.3
56-42.7839-107.4472-2-11-			0-	W	14142		70380	-0.06	665	23210	80	-91	7.4	51	2.9	4	1.2	16570	6.7	18600	45	0.4
56-42.7786-107.4589-2-15-			0-	W	14143		63740	-0.05	608	17830	107	-107	7.9	48	2.3	5	1.5	24560	12.7	16290	58	0.5
56-42.7561-107.4722-2-15-			0-	W	14144		64360	-0.05	641	14490	73	-102	6.3	42	2.5	3	1.0	14080	8.4	14320	40	0.3
56-42.7653-107.4767-2-15-			0-	W	14145		69210	-0.06	713	25560	72	-113	6.9	16	1.0	4	1.2	16800	5.2	14300	42	0.3
56-42.7642-107.4786-2-15-			0-	W	14146		68180	-0.05	690	25010	98	-113	8.2	43	2.1	5	1.5	27280	9.9	10160	60	0.4
56-42.7997-107.4617-2-15-			0-	W	14147		65170	-0.05	672	15820	89	-102	6.6	36	2.0	5	1.3	16900	10.4	18820	48	0.4
56-42.8506-107.4239-2-11-			0-	W	14148		59200	-0.06	618	29730	69	-97	8.2	49	3.8	4	0.8	12380	8.0	21720	43	0.4
56-42.8583-107.4403-2-11-			0-	W	14149		58870	-0.07	706	26330	55	-75	5.5	39	2.4	5	0.8	10700	9.7	19670	37	0.4
56-42.8706-107.4675-2-15-			0-	W	14150		65970	-0.05	667	15480	79	-71	6.1	57	4.4	5	0.9	13340	9.9	18910	48	0.4
56-42.8672-107.3944-2-11-			0-	W	14151		42150	-0.04	359	51250	37	-61	4.9	28	2.1	3	0.6	8649	5.2	17540	20	0.3
56-42.8506-106.4761-2-15-			0-	W	14152		48490	-0.05	555	17010	43	-65	5.0	24	1.9	3	0.7	7783	6.6	14900	25	0.2
56-42.8150-106.3783-2-99-			0-	W	14156		42740	-0.06	729	12270	34	62	5.0	33	2.0	3	0.6	9175	3.6	14790	20	0.2
56-42.7894-106.3439-2-12-			0-	W	14157		48320	-0.04	573	21370	51	113	6.2	107	2.3	4	0.8	11340	7.6	15390	30	0.3
56-42.8336-106.2889-2-15-			0-	W	14159		53310	-0.05	587	27130	55	-62	6.4	51	4.3	4	0.9	14040	5.5	15600	31	0.3
56-42.5647-106.0189-2-12-			0-	W	14160		48680	-0.06	520	11890	85	-89	6.5	38	-1.1	4	1.0	9909	13.7	18440	51	0.5
56-42.5706-106.0392-2-15-			0-	W	14161		39970	-0.06	456	44900	28	144	4.2	29	1.7	3	0.6	7485	5.4	15730	19	0.2
56-42.6058-106.0292-2-11-			0-	W	14162		51520	-0.05	682	11780	64	-68	5.5	76	1.6	5	0.8	9935	12.6	16990	40	0.4
56-42.6092-106.0500-2-99-			0-	W	14163		56540	-0.05	696	10350	77	-72	6.9	57	2.8	4	0.9	11760	9.4	19500	50	0.4
56-42.6217-106.0433-2-99-			0-	W	14164		49500	-0.05	505	10420	64	-79	5.8	33	1.8	3	0.7	8863	10.9	13690	37	0.4
56-42.6183-106.1075-2-11-			0-	W	14166		49300	-0.06	622	15110	67	-69	4.8	64	-1.2	5	0.8	8819	16.5	15560	40	0.4
56-42.6231-106.1381-2-12-			0-	W	14167		48250	-0.04	631	14080	82	-73	5.0	64	-0.8	5	0.8	10190	13.5	17340	52	0.4
56-42.6178-106.1353-2-11-			0-	W	14168		52840	-0.05	602	12220	129	-85	6.9	36	-1.0	7	1.1	15040	16.5	17650	81	0.6
56-42.6069-106.1631-2-11-			0-	W	14169		53320	-0.06	705	11140	90	-82	6.0	35	1.8	6	1.1	9204	10.2	14080	63	0.5
56-42.6056-106.1833-2-99-			0-	W	14170		56250	-0.06	758	6584	49	-61	4.2	31	1.9	4	0.7	9959	7.7	17390	35	0.3

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

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
56-42.8700-107.9539-2-15-			0-W14115				24990	253	3686	27	-1	4.6	3.2	-171		-1	6.9	2469	68	2.2	-47	0.359
56-42.8358-107.9747-2-15-			0-W14116				16620	207	3755	23	-1	3.6	3.1	-170			5.8	2105	58	1.9	-41	0.376
56-42.8383-107.9633-2-15-			0-W14117				19510	222	4043	19	-1	3.0	2.4	-189			4.4	1973	63	1.1	-23	0.541
56-42.8478-107.9525-2-15-			0-W14118				24310	221	4103	-15	-2	3.5	2.0	-166	-1	-1	4.9	2436	56	-1.1	-26	0.471
56-42.8322-107.9439-2-15-			0-W14119				9744	266	7779	30	-1	5.0	4.3	-178	1	1	12.4	2705	60	3.2	46	0.331
56-42.8156-107.9472-2-12-			0-W14120				10520	288	7282	41	-1	5.5	5.5	-226	1	-1	24.2	2917	51	3.9		0.232
56-42.8117-107.9492-2-15-			0-W14121				11030	254	7886	26	-1	4.0	3.7	-216	-1	-1	8.8	2550	59	2.9	33	0.433
56-42.7844-107.9622-2-15-			0-W14122				14830	306	7136	36	-2	4.2	2.5	-195	-1	-1	8.3	2927	58	3.3	-26	0.423
56-42.7867-107.9700-2-12-			0-W14123				13540	392	14500	37	-1	4.2	3.5	509	1	-1	13.8	2779	44	2.5	33	0.333
56-42.7839-107.9828-2-15-			0-W14124				19120	230	4029	30	-1	4.2	3.4	-182			6.6	2354	66	2.2	58	0.377
56-42.7944-107.8758-2-15-			0-W14125				11700	329	11130	35	-1	6.6	5.0	-240	-1	1	18.3	3176	51	4.5	54	0.252
56-42.8367-107.8225-2-15-			0-W14126				9651	253	15950	38	-1	5.9	4.3	-216	-1	-1	21.7	3341	50	4.1	46	0.245
56-42.8353-107.8244-2-15-			0-W14127				12300	308	9899	40	-1	6.3	3.7	-236	-1	-1	10.2	2708	60	2.2	82	0.297
56-42.6481-106.3622-2-12-			0-W14128				11280	282	8313	32	-1	3.6	3.3	-244		-1	6.7	2645	44	2.2	51	0.487
56-42.6642-106.3386-2-11-			0-W14129				15410	411	6820	-20	-2	5.0	2.1	-241	-1	-1	7.1	3248	63	-1.5	-31	0.401
56-42.6606-106.3633-2-15-			0-W14130				12190	658	5571	36	-1	5.3	3.2	-261		-1	7.2	2314	55	2.1	53	0.342
56-42.7719-107.3903-2-15-			0-W14131				13490	346	11620	67	-2	11.9	5.9	-304	-1	-1	32.3	4303	94	4.5	121	0.138
56-42.7919-107.3786-2-15-			0-W14132				10860	322	12900	32	-2	6.4	4.6	-288	-1	-1	20.8	2810	64	3.0	63	0.231
56-42.8542-107.3961-2-15-			0-W14133				27930	399	6884	32	-2	5.4	2.5	-223	-1	-1	5.7	3485	51	2.5	-29	0.404
56-42.8353-107.4006-2-11-			0-W14134				9514	501	8821	49	-1	5.9	5.7	-249	-1	-1	15.8	4352	51	4.2	49	0.320
56-42.8358-107.4100-2-12-			0-W14135				8107	293	7652	57	-2	6.3	6.7	-226	-1	-1	20.8	3245	42	5.1	49	0.239
56-42.8453-107.4361-2-11-			0-W14136				12790	444	12900	30	-2	4.7	5.9	-350	-1	-1	17.5	2992	60	4.4	43	0.386
56-42.8403-107.4344-2-15-			0-W14137				11580	330	12150	39	-2	5.4	3.5	408	-1	-1	12.6	3305	60	3.1	-31	0.498
56-42.8122-107.4347-2-11-			0-W14138				12220	280	14860	-20	-2	5.5	3.8	347	-1	-1	20.0	2495	50	4.3	-32	0.343
56-42.7892-107.4272-2-11-			0-W14139				11550	729	21190	38	-2	6.3	7.5	1042	-1	1	13.2	3693	85	3.8	73	0.427
56-42.7586-107.4142-2-15-			0-W14140				14440	717	20900	24	-2	5.8	6.0	725	-1	-1	11.5	3456	81	2.8	44	0.418
56-42.7519-107.4339-2-11-			0-W14141				17540	612	15620	-23	-2	5.8	3.7	447	-1	-1	11.1	3594	78	-1.6	75	0.394
56-42.7839-107.4472-2-11-			0-W14142				21010	595	15490	49	-2	6.7	5.1	595	-1	-1	12.8	3703	84	2.7	-48	0.351
56-42.7786-107.4589-2-15-			0-W14143				13420	790	18500	44	-2	6.6	6.8	644	1	-1	15.6	4079	108	4.0	89	0.299
56-42.7561-107.4722-2-15-			0-W14144				16290	608	15710	-17	-2	5.1	4.7	630	-1	-1	11.3	3401	77	2.8	80	0.360
56-42.7653-107.4767-2-15-			0-W14145				14860	1076	21450	-21	-2	5.3	3.7	1095	-1	-1	8.8	4035	104	2.5	-48	0.416
56-42.7642-107.4786-2-15-			0-W14146				13340	1233	18730	-17	-2	6.1	7.4	773	-1	-1	14.3	5571	154	3.6	106	0.323
56-42.7997-107.4617-2-15-			0-W14147				10230	623	19200	42	-1	5.8	5.3	906	-1	-1	12.1	3108	66	2.6	73	0.326
56-42.8506-107.4239-2-11-			0-W14148				9905	774	10430	46	-2	5.7	5.3	-401	-1	-1	17.4	3063	64	2.7	-36	0.411
56-42.8583-107.4403-2-11-			0-W14149				11060	499	11050	-21	-2	5.0	3.3	-270	-1	-1	14.2	3364	60	2.5	-33	0.418
56-42.8706-107.4675-2-15-			0-W14150				11230	375	12220	42	-2	6.4	5.9	-236	-1	-1	18.6	3085	73	4.1	-14	0.430
56-42.8672-107.3944-2-11-			0-W14151				19500	265	5755	-14	-1	4.9	3.0	-224	-1	-1	5.0	2665	36	2.0	42	0.432
56-42.8506-106.4761-2-15-			0-W14152				14380	202	7630	36	-1	3.9	3.2	-224	-1	-1	7.1	2787	60	2.0	60	0.425
56-42.8150-106.3783-2-99-			0-W14156				16110	177	4845	28	-2	4.5	2.6	-163	-1	-1	4.9	2553	107	-1.2	34	0.463
56-42.7894-106.3439-2-12-			0-W14157				22360	302	7853	30	-1	5.4	3.7	-202		-1	10.1	3010	83	2.5	57	0.410
56-42.8336-106.2889-2-15-			0-W14159				29170	240	6857	49	-2	6.9	3.9	-222	-1	-1	8.0	3376	98	2.7	94	0.376
56-42.5647-106.0189-2-12-			0-W14160				8795	346	13080	22	-2	4.7	5.8	-290	-1	-1	31.9	3830	64	2.9	-28	0.253
56-42.5706-106.0392-2-15-			0-W14161				19250	319	5453	-17	-2	3.8	1.7	-208	-1	-1	5.2	2611	48	2.0	60	0.542
56-42.6058-106.0292-2-11-			0-W14162				9299	295	11800	36	-1	4.9	5.2	323	-1	-1	14.3	3446	57	2.8	32	0.497
56-42.6092-106.0500-2-99-			0-W14163				10560	233	10210	56	-2	6.4	6.3	-238	-1	-1	15.0	3178	67	3.3	53	1.063
56-42.6217-106.0433-2-99-			0-W14164				11780	334	10720	31	-1	4.2	6.2	-269	-1	-1	13.8	2827	62	2.9	-45	0.776
56-42.6183-106.1075-2-11-			0-W14166				9569	298	11540	29	-2	4.4	3.9	-222	-1	-1	15.9	4145	54	4.2	-32	0.467
56-42.6231-106.1381-2-12-			0-W14167				8727	396	14060	31	-1	5.0	6.4	251	-1	-1	32.3	3829	56	3.9	48	0.227
56-42.6178-106.1353-2-11-			0-W14168				7483	480	13880	36	-2	6.6	9.2	-297	-1	1	47.5	4271	63	5.0	65	0.177
56-42.6069-106.1631-2-11-			0-W14169				13040	297	10990	42	-2	5.4	9.8	-276	1	-1	19.1	3454	66	5.1	79	0.562
56-42.6056-106.1833-2-99-			0-W14170				8602	274	9409	60	-2	5.0	3.0	-201	-1	-1	10.7	3434	68	2.7	-30	0.356

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
							TIME SAMPLED																										
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU-ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
56-42.6325-106.2086-2-12-						0-W14171-10/31/77-12-			8-	7.0-	-	-	6.3-	200-		33-1-7-4-6-3-3-1-		-4-3-3-3-		-1-	-	-	-	-								8.79
56-42.6325-106.2061-2-15-						0-W14172-10/31/77-12-			8-		-	-				33-1-7-4-6-	-1-	-2-4-3-3-3-		-1-	-	-	-	-								6.23
56-42.6567-106.2117-2-15-						0-W14174-10/31/77-12-			8-		-	-				8-1-7-4-6-	-1-	-2-3-3-3-3-		-1-	-	-	-	-								1.92
56-42.6547-106.2300-2-99-						0-W14175-10/31/77-12-			8-		-	-				6-1-7-4-6-	-1-	-2-3-3-3-3-		-1-	-	-	-	-								2.48
56-42.6775-106.1489-2-15-						0-W14176-10/31/77-13-			8-		-	-				8-1-7-4-6-	-1-	-2-3-3-3-3-		-1-	-	-	-	-								4.27
56-42.7008-106.1478-2-15-						0-W14178-10/31/77-14-			10-		-	-				8-1-7-5-6-	-1-	-2-3-3-3-3-		-1-	-	-	-	-								4.95
56-42.7083-106.1617-2-12-						0-W14179-10/31/77-14-			10-	7.0-	-	-	6.3-	380-		8-1-7-5-6-3-3-1-		-3-3-3-3-		-1-	-	-	-	-								3.02
56-42.7122-106.1856-2-12-						0-W14180-10/31/77-15-			10-	6.0-	-	-	6.3-	400-		11-1-7-5-6-3-3-1-		-3-3-3-3-		-1-	-	-	-	-								3.33
56-42.7139-106.1856-2-12-						0-W14181-10/31/77-15-			10-	7.0-	-	-	6.5-	500-		11-1-7-5-6-3-3-1-		-3-3-3-3-		-1-	-	-	-	-								2.64
56-42.7342-106.1961-2-15-						0-W14184-10/31/77-16-			10-		-	-				10-1-7-4-6-	-1-	-2-3-3-3-3-		-1-	-	-	-	-								3.02
56-42.7433-106.1478-2-15-						0-W14185-10/31/77-16-			10-		-	-				10-1-7-5-6-	-1-	-2-3-3-3-3-		-1-	-	-	-	-								3.18
56-42.6628-106.2547-2-11-						0-W14189-11/01/77-14-			10-	3.0-	-	-	5.2-	80-		30-1-7-5-6-3-3-1-		-1-3-3-3-		-1-	-	-	-	-								2.93
56-42.6417-106.2561-2-11-						0-W14190-11/01/77-14-			10-	5.0-	-	-	5.5-	100-		30-1-7-5-6-3-3-1-		-1-3-3-3-		-1-	-	-	-	-								3.00
56-42.6406-106.2739-2-12-						0-W14191-11/01/77-14-			10-	8.0-	-	-	5.6-	200-		16-1-7-5-6-3-3-1-		-3-3-3-3-		-1-	-	-	-	-								3.57
56-42.6294-106.2669-2-15-						0-W14192-11/01/77-15-			10-		-	-				13-1-7-5-6-	-1-	-2-3-3-3-3-		-1-	-	-	-	-								2.42
56-42.8500-106.6700-2-15-						0-W14194-09/29/77-14-			25-		-	-				11-1-7-5-7-	-1-	-2-4-2-1-2-		-1-	-	-	-	-								3.36
56-42.8508-106.6539-2-15-						0-W14195-09/29/77-15-			24-		-	-				11-1-7-5-7-	-1-	-2-4-3-1-2-		-1-	-	-	-	-								3.66
56-42.8639-106.7092-2-15-						0-W14196-09/29/77-15-			23-		-	-				11-1-7-5-7-	-1-	-2-4-2-1-3-		-1-	-	-	-	-								3.41
56-42.9097-106.7189-2-15-						0-W14197-09/29/77-16-			22-		-	-				11-1-7-5-7-	-1-	-2-4-2-2-3-		-1-	-	-	-	-								3.22
56-42.9153-106.7278-2-15-						0-W14198-09/29/77-16-			22-		-	-				11-1-7-5-7-	-1-	-2-4-2-2-3-		-1-	-	-	-	-								3.02
56-42.9889-106.6858-2-15-						0-W14199-09/29/77-16-			21-		-	-				9-1-7-5-7-	-1-	-2-4-2-2-3-		-1-	-	-	-	-								3.41
56-42.3694-106.7142-2-12-						0-W14200-10/01/77-	-		7-	10.0-	-	-	7.4-	230-		46-1-1-6-8-2-2-1-		2-3-3-4-1-		-1-	-	-	-	-								6.22
56-42.3589-106.7067-2-15-						0-W14201-10/01/77-	-		8-		-	-				27-1-1-4-6-	-1-	-2-3-3-3-1-		-1-	-	-	-	-								3.57
56-42.3353-106.6761-2-15-						0-W14202-10/01/77-	-		8-		-	-				46-1-6-5-6-	-1-	-2-3-3-2-2-		-1-	-	-	-	-								3.42
56-42.3367-106.6578-2-15-						0-W14203-10/01/77-	-		8-		-	-				41-1-6-5-2-	-1-	-2-3-3-3-1-		-1-	-	-	-	-								3.97
56-42.3372-106.6272-2-15-						0-W14204-10/01/77-	-		8-		-	-				18-1-6-4-6-	-1-	-2-3-3-3-2-		-1-	-	-	-	-								4.85
56-42.3383-106.7472-2-15-						0-W14205-10/01/77-	-		9-		-	-				32-1-1-4-6-	-1-	-2-3-3-3-2-		-1-	-	-	-	-								3.71
56-42.3169-106.6256-2-99-						0-W14206-10/01/77-	-		9-	-C-	-	-				13-1-6-5-6-	-1-	- -3-3-3-2-		-1-	-	-	-	-								3.76
56-42.3281-106.6861-2-15-						0-W14207-10/01/77-	-		9-		-	-				120-1-6-5-6-	-1-	-2-3-3-3-2-		-1-	-	-	-	-								5.44
56-42.3192-106.7333-2-15-						0-W14208-10/01/77-	-		8-		-	-				18-1-1-4-1-	-1-	-2-3-2-3-2-		-1-	-	-	-	-								3.45
56-42.2908-106.7097-2-12-						0-W14209-10/01/77-	-		9-	13.0-	-	-	8.2-	190-		32-1-1-5-6-2-2-5-		2-3-3-3-2-		-1-	-	-	-	-								4.81
56-42.2894-106.7131-2-11-						0-W14210-10/01/77-	-		9-	9.0-	-	-	7.2-	230-		9-1-1-4-6-3-2-1-		-3-3-3-2-		-1-	-	-	-	-								3.61
56-42.2886-106.7206-2-15-						0-W14211-10/01/77-	-		9-		-	-				134-1-4-5-6-	-1-	-2-3-3-3-2-		-1-	-	-	-	-								3.61
56-42.2531-106.7372-2-15-						0-W14213-10/01/77-	-		10-		-	-				18-1-1-4-1-	-1-	-2-3-3-3-2-		-1-	-	-	-	-								2.80
56-42.2647-106.6717-2-15-						0-W14215-10/01/77-	-		10-		-	-				13-1-4-4-6-	-1-	-2-3-3-4-2-		-1-	-	-	-	-								3.73
56-42.2639-106.6553-2-15-						0-W14216-10/01/77-	-		10-		-	-				13-1-1-4-6-	-1-	-2-3-3-4-2-		-1-	-	-	-	-								2.54
56-42.2617-106.6539-2-15-						0-W14217-10/01/77-	-		10-		-	-				5-1-1-4-6-	-1-	-2-3-3-4-2-		-1-	-	-	-	-								4.84
56-42.2522-106.6533-2-11-						0-W14218-10/01/77-	-		10-	8.5-	-	-	7.0-	310-		10-1-1-5-6-3-3-1-		-3-3-4-2-		-1-	-	-	-	-								3.95
56-42.3711-106.5078-2-11-						0-W14219-10/02/77-	-		13-	8.0-	-	-	6.6-	130-		37-1-6-5-6-3-3-1-		-3-3-4-2-		-1-	-	-	-	-								3.57
56-42.3539-106.5083-2-11-						0-W14220-10/02/77-	-		13-	7.5-	-	-	6.4-	180-		18-1-1-6-6-1-3-4-		-4-3-4-2-		-1-	-	-	-	-								3.92
56-42.3600-106.5903-2-99-						0-W14221-10/02/77-	-		13-	-C-	-	-				18-1-1-5-6-	-1-	- -3-3-3-2-		-1-	-	-	-	-								2.95
56-42.3742-106.6217-2-12-						0-W14222-10/02/77-	-		13-	9.0-	-	-	6.8-	110-		15-1-6-4-6-3-2-1-		2-4-3-3-2-		-1-	-	-	-	-								4.65
56-42.3481-106.6117-2-11-						0-W14223-10/02/77-	-		14-	16.0-	-	-	8.4-	175-		6-1-1-5-5-2-3-1-		-3-3-3-2-		-1-	-	-	-	-								4.72
56-42.3386-106.5964-2-11-						0-W14224-10/02/77-	-		18-	12.5-	-	-	8.0-	260-		5-1-6-6-8-2-3-1-		-3-3-3-2-		-1-	-	-	-	-								3.81
56-42.3375-106.5964-2-12-						0-W14225-10/02/77-	-		18-	10.0-	-	-	7.8-	240-		74-1-6-5-6-3-2-2-2-		3-3-3-2-		-1-	-	-	-	-								6.81
56-42.3344-106.6022-2-12-						0-W14226-10/02/77-	-		16-	14.0-	-	-	8.1-	330-		41-1-6-5-6-2-3-3-		2-3-3-3-2-		-1-	-	-	-	-								5.09
56-42.3186-106.6025-2-11-						0-W14227-10/02/77-	-		16-	19.0-	-	-	8.3-	600-		13-1-1-6-6-1-2-4-		-3-3-3-2-		-1-	-	-	-	-								3.23
56-42.3053-106.5897-2-11-						0-W14228-10/02/77-	-		18-	17.0-	-	-	8.4-	310-		18-1-1-5-6-2-2-1-		-3-3-3-2-		-1-	-	-	-	-								5.18
56-42.3192-106.5678-2-11-						0-W14229-10/02/77-	-		17-	11.0-	-	-	8.1-	240-		11-1-1-6-8-2-2-1-		-3-3-3-2-		-1-	-	-	-	-								13.99
56-42.3539-106.5636-2-11-						0-W14230-10/02/77-	-		18-	12.0-	-	-	7.9-	230-		11-1-6-	-	-3-2-1-	-3-3-3-2-		-1-	-	-	-	-								7.33
56-42.3522-106.5753-2-11-						0-W14231-10/02/77-	-		17-	14.0-	-	-	8.2-	200-		11-1-7-5-6-3-3-1-		-3-3-3-2-		-1-	-	-	-	-								5.08

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

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE (Concentrations reported in weight parts per million (ppm))									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY (Concentrations in weight ppm)	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
56-42.6325-106.2086-2-12-						0-W14171	-5	-5	-5	23	-20	-15	11	-10	-15	2	31
56-42.6325-106.2061-2-15-						0-W14172	-5	-5	-5	25	-20	41	12	-10	-15	2	40
56-42.6567-106.2117-2-15-						0-W14174	-5	-5	-5	20	-20	-15	8	-10	-15	2	29
56-42.6547-106.2300-2-99-						0-W14175	-5	-5	-5	32	-20	16	11	-10	15	2	27
56-42.6775-106.1489-2-15-						0-W14176	-5	-5	-5	20	-20	-15	14	-10	-15	3	40
56-42.7008-106.1478-2-15-						0-W14178	-5	-5	-5	28	-20	-15	11	-10	-15	2	22
56-42.7083-106.1617-2-12-						0-W14179	-5	-5	-5	24	-20	16	7	-10	-15	2	34
56-42.7122-106.1856-2-12-						0-W14180	-5	-5	-5	24	-20	-15	8	-10	-15	2	32
56-42.7139-106.1856-2-12-						0-W14181	-5	-5	-5	24	-20	-15	7	-10	-15	2	33
56-42.7342-106.1961-2-15-						0-W14184	-5	-5	-5	23	-20	20	11	-10	-15	3	52
56-42.7433-106.1478-2-15-						0-W14185	-5	-5	-5	23	-20	-15	6	-10	-15	2	54
56-42.6628-106.2547-2-11-						0-W14189	-5	-5	-5	23	-20	-15	9	-10	-15	2	41
56-42.6417-106.2561-2-11-						0-W14190	-5	-5	-5	20	-20	-15	6	-10	-15	2	25
56-42.6406-106.2739-2-12-						0-W14191	-5	-5	-5	17	-20	-15	-5	-10	-15	2	19
56-42.6294-106.2669-2-15-						0-W14192	-5	-5	-5	22	-20	-15	11	-10	-15	2	30
56-42.8500-106.6700-2-15-						0-W14194	-5	-5	-5	20	-20	25	7	-10	-15	3	42
56-42.8508-106.6539-2-15-						0-W14195	-5	-5	-5	30	-20	24	18	-10	-15	3	33
56-42.8639-106.7092-2-15-						0-W14196	-5	-5	-5	28	-20	23	16	-10	-15	3	34
56-42.9097-106.7189-2-15-						0-W14197	-5	-5	-5	13	-20	22	9	-10	-15	3	46
56-42.9153-106.7278-2-15-						0-W14198	-5	-5	-5	22	-20	18	10	-10	-15	2	37
56-42.9889-106.6858-2-15-						0-W14199	-5	-5	-5	36	-20	22	13	-10	-15	3	53
56-42.3694-106.7142-2-12-						0-W14200	-5	-5	-5	11	-20	-15	17	-10	-15	2	22
56-42.3589-106.7067-2-15-						0-W14201	-5	-5	-5	17	-20	-15	20	-10	-15	2	38
56-42.3353-106.6761-2-15-						0-W14202	-5	-5	-5	23	-20	-15	11	-10	-15	2	31
56-42.3367-106.6578-2-15-						0-W14203	-5	-5	-5	-10	-20	-15	17	-10	-15	2	26
56-42.3372-106.6272-2-15-						0-W14204	-5	-5	-5	19	-20	-15	15	-10	-15	1	31
56-42.3383-106.7472-2-15-						0-W14205	-5	-5	-5	19	-20	-15	10	-10	-15	2	24
56-42.3169-106.6256-2-99-						0-W14206	-5	-5	-5	20	-20	-15	16	-10	-15	2	25
56-42.3281-106.6861-2-15-						0-W14207	-5	-5	-5	-10	-20	22	6	-10	-15	2	28
56-42.3192-106.7333-2-15-						0-W14208	-5	-5	-5	16	-20	-15	12	-10	-15	2	40
56-42.2908-106.7097-2-12-						0-W14209	-5	-5	-5	13	-20	-15	12	-10	-15	2	42
56-42.2894-106.7131-2-11-						0-W14210	-5	-5	-5	-10	-20	-15	7	-10	-15	2	16
56-42.2886-106.7206-2-15-						0-W14211	-5	-5	-5	17	-20	18	16	-10	-15	2	28
56-42.2531-106.7372-2-15-						0-W14213	-5	-5	-5	12	-20	-15	9	-10	-15	2	24
56-42.2647-106.6717-2-15-						0-W14215	-5	-5	-5	12	-20	-15	-5	-10	-15	-1	39
56-42.2639-106.6553-2-15-						0-W14216	-5	-5	-5	16	-20	-15	11	-10	-15	2	39
56-42.2617-106.6539-2-15-						0-W14217	-5	-5	-5	15	-20	-15	18	-10	-15	2	40
56-42.2522-106.6533-2-11-						0-W14218	-5	-5	-5	14	-20	-15	-5	-10	-15	2	21
56-42.3711-106.5078-2-11-						0-W14219	-5	-5	-5	13	-20	-15	9	-10	15	2	24
56-42.3539-106.5083-2-11-						0-W14220	-5	-5	-5	24	-20	-15	17	-10	-15	2	44
56-42.3600-106.5903-2-99-						0-W14221	-5	-5	-5	18	-20	294	15	-10	-15	2	34
56-42.3742-106.6217-2-12-						0-W14222	-5	-5	-5	-10	-20	-15	10	-10	-15	2	22
56-42.3481-106.6117-2-11-						0-W14223	-5	-5	-5	-10	-20	-15	10	-10	-15	2	28
56-42.3386-106.5964-2-11-						0-W14224	-5	-5	-5	11	-20	-15	11	-10	-15	2	19
56-42.3375-106.5964-2-12-						0-W14225	-5	-5	-5	22	-20	-15	14	-10	-15	2	28
56-42.3344-106.6022-2-12-						0-W14226	-5	-5	-5	14	-20	-15	19	-10	-15	1	28
56-42.3186-106.6025-2-11-						0-W14227	-5	-5	-5	20	-20	-15	17	-10	-15	2	31
56-42.3053-106.5897-2-11-						0-W14228	-5	-5	-5	13	-20	-15	10	-10	-15	2	20
56-42.3192-106.5678-2-11-						0-W14229	-5	-5	-5	14	-20	-15	13	-10	-15	2	20
56-42.3539-106.5636-2-11-						0-W14230	-5	-5	-5	13	-20	-15	15	-10	-15	2	20
56-42.3522-106.5753-2-11-						0-W14231	-5	-5	-5	-10	-20	-15	8	-10	-15	2	18

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

DOE SAMPLE NUMBER						LAS SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)															
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
56-42.6325-106.2086-2-12-			0-	W	14171		52030	-0.05	585	12640	72	-78	6.9	70	1.4	6	0.9	13450	19.0	17420	45	0.6
56-42.6325-106.2061-2-15-			0-	W	14172		56040	-0.06	581	11810	78	121	8.7	68	2.1	5	1.1	16690	12.3	17500	47	0.5
56-42.6567-106.2117-2-15-			0-	W	14174		35810	-0.04	377	40630	31	-61	4.1	24	1.0	2	0.6	6013	7.0	14020	18	0.3
56-42.6547-106.2300-2-99-			0-	W	14175		47850	-0.05	490	9235	37	59	5.1	25	1.8	3	0.7	8429	6.7	16900	21	0.2
56-42.6775-106.1489-2-15-			0-	W	14176		58530	-0.05	560	4550	53	-49	6.4	38	3.1	4	0.7	13760	6.3	13270	29	0.3
56-42.7008-106.1478-2-15-			0-	W	14178		43950	-0.04	473	5697	53	-56	7.1	28	2.2	3	0.7	10490	7.9	11860	31	0.3
56-42.7083-106.1617-2-12-			0-	W	14179		43920	-0.04	506	13660	43	-61	5.7	27	1.9	3	0.7	7644	7.1	13840	20	0.3
56-42.7122-106.1856-2-12-			0-	W	14180		54160	-0.06	486	10830	39	-48	4.6	36	2.4	4	0.7	9381	4.7	17500	23	0.3
56-42.7139-106.1856-2-12-			0-	W	14181		37930	-0.04	421	58960	37	69	4.6	35	2.0	4	0.6	8510	6.7	17540	20	0.3
56-42.7342-106.1961-2-15-			0-	W	14184		54660	-0.04	613	24610	53	-48	4.4	44	4.0	3	0.8	10760	6.7	16920	30	0.3
56-42.7433-106.1478-2-15-			0-	W	14185		51800	-0.05	412	36640	43	-73	7.3	40	2.5	3	0.7	11000	3.8	19440	21	0.3
56-42.6628-106.2547-2-11-			0-	W	14189		51740	-0.06	525	17610	49	-62	4.7	33	2.6	4	0.7	9278	6.2	19470	23	0.3
56-42.6417-106.2561-2-11-			0-	W	14190		54900	-0.05	556	21020	57	-65	5.4	42	2.4	4	0.8	10910	7.6	17680	28	0.3
56-42.6406-106.2739-2-12-			0-	W	14191		43060	-0.05	572	8324	58	-63	5.2	35	2.1	4	0.9	9083	15.8	14170	31	0.4
56-42.6294-106.2669-2-15-			0-	W	14192		46840	-0.05	332	17420	42	-68	5.2	25	2.3	2	0.6	8689	6.4	19370	21	0.3
56-42.8500-106.6700-2-15-			0-	W	14194		57320	-0.06	707	9865	41	-53	5.0	41	2.9	4	0.6	9977	4.7	18140	27	0.2
56-42.8508-106.6539-2-15-			0-	W	14195		60580	-0.05	633	7951	54	-51	5.7	52	3.8	4	0.7	12820	5.0	15850	32	0.3
56-42.8639-106.7092-2-15-			0-	W	14196		71750	-0.06	785	10700	71	-62	8.3	64	4.8	3	0.9	17320	5.0	22610	46	0.3
56-42.9097-106.7189-2-15-			0-	W	14197		55530	-0.05	713	12520	49	-61	6.7	49	2.9	3	0.8	10840	5.3	15730	25	0.3
56-42.9153-106.7278-2-15-			0-	W	14198		50260	-0.06	789	18270	37	159	6.3	34	3.1	4	0.7	10370	4.4	14860	21	0.2
56-42.9889-106.6858-2-15-			0-	W	14199		64410	-0.04	868	22690	53	-47	7.9	59	4.5	4	1.0	17720	5.2	16430	32	0.3
56-42.3694-106.7142-2-12-			0-	W	14200		45890	-0.03	577	11890	117	-76	5.8	39	1.5	6	0.8	12770	17.0	15400	64	0.4
56-42.3589-106.7067-2-15-			0-	W	14201		47710	-0.04	572	21720	89	-69	5.1	19	1.8	3	0.7	13170	10.2	15310	48	0.3
56-42.3353-106.6761-2-15-			0-	W	14202		56580	-0.03	616	17900	55	-65	5.6	37	1.8	3	0.9	10220	6.7	16400	31	0.3
56-42.3367-106.6578-2-15-			0-	W	14203		54360	-0.03	665	8050	75	-73	6.3	34	2.1	4	0.9	11110	10.5	17090	41	0.4
56-42.3372-106.6272-2-15-			0-	W	14204		56970	-0.03	709	8131	69	-69	5.1	25	1.7	4	0.7	7548	10.6	16020	39	0.3
56-42.3383-106.7472-2-15-			0-	W	14205		53180	-0.04	665	8667	56	-74	4.2	26	1.6	3	0.8	507504	9.9	16380	30	0.2
56-42.3169-106.6256-2-99-			0-	W	14206		57080	-0.03	608	8529	70	98	5.0	35	2.8	4	0.8	10330	9.5	16970	36	0.3
56-42.3281-106.6861-2-15-			0-	W	14207		49530	-0.03	657	25680	58	-63	5.8	31	2.0	3	0.8	10030	10.2	16970	35	0.3
56-42.3192-106.7333-2-15-			0-	W	14208		56650	-0.03	688	17020	63	-73	5.6	34	2.1	4	0.7	9054	7.0	18480	32	0.3
56-42.2908-106.7097-2-12-			0-	W	14209		52100	-0.05	528	39870	71	-82	4.4	30	-1.3	3	0.9	10660	11.1	16220	37	0.3
56-42.2894-106.7131-2-11-			0-	W	14210		43280	-0.03	613	9254	69	-61	2.9	22	2.0	3	0.7	7167	14.0	16630	41	0.3
56-42.2886-106.7206-2-15-			0-	W	14211		47630	-0.03	562	8114	60	-56	4.9	36	2.5	4	0.8	10110	11.6	15460	36	0.3
56-42.2531-106.7372-2-15-			0-	W	14213		47410	-0.03	646	31300	46	-68	4.5	20	1.3	3	0.5	6482	6.0	18580	28	0.2
56-42.2647-106.6717-2-15-			0-	W	14215		49340	-0.04	579	13670	48	-88	4.9	25	-1.2	2	0.8	11410	7.1	17060	33	0.2
56-42.2639-106.6553-2-15-			0-	W	14216		46370	-0.02	516	11560	47	-54	3.7	24	1.6	3	0.7	6922	6.4	16610	29	0.3
56-42.2617-106.6539-2-15-			0-	W	14217		54710	-0.03	681	11210	75	-64	5.9	40	2.2	4	0.9	12460	9.8	20940	43	0.3
56-42.2522-106.6533-2-11-			0-	W	14218		43460	-0.03	523	17470	45	-66	4.3	22	1.1	3	0.6	5518	9.3	13690	26	0.3
56-42.3711-106.5078-2-11-			0-	W	14219		45540	-0.04	616	10690	50	-80	3.6	29	-1.0	2	0.7	8733	10.2	13930	34	0.2
56-42.3539-106.5083-2-11-			0-	W	14220		52550	-0.03	544	10510	60	-54	5.0	30	2.1	4	0.9	10300	9.1	14810	33	0.3
56-42.3600-106.5903-2-99-			0-	W	14221		51600	-0.03	560	12160	78	121	6.0	30	2.0	3	0.9	12670	9.0	18440	41	0.3
56-42.3742-106.6217-2-12-			0-	W	14222		49360	-0.03	559	8584	61	82	5.2	26	1.4	3	0.8	7851	10.5	17430	33	0.3
56-42.3481-106.6117-2-11-			0-	W	14223		52570	-0.04	556	20490	63	-87	3.7	23	-1.1	3	1.0	7125	11.2	16150	33	0.3
56-42.3386-106.5964-2-11-			0-	W	14224		42930	-0.03	598	7412	66	-93	3.8	28	1.1	3	0.5	7794	11.9	15660	41	0.3
56-42.3375-106.5964-2-12-			0-	W	14225		52460	-0.04	944	22380	155	-76	5.5	33	1.7	5	1.1	9851	18.7	15400	96	0.5
56-42.3344-106.6022-2-12-			0-	W	14226		59870	-0.03	1494	9740	91	118	5.4	28	2.0	4	0.8	8208	10.9	13690	49	0.4
56-42.3186-106.6025-2-11-			0-	W	14227		54920	-0.04	536	8081	48	-79	4.6	28	-1.2	3	0.7	8377	5.6	17870	27	0.2
56-42.3053-106.5897-2-11-			0-	W	14228		54740	-0.03	1169	10230	86	-73	3.3	24	-0.8	4	0.8	6328	16.5	15520	55	0.4
56-42.3192-106.5678-2-11-			0-	W	14229		51080	-0.03	618	8458	81	-66	4.8	35	1.0	4	0.8	6510	13.1	14890	49	0.4
56-42.3539-106.5636-2-11-			0-	W	14230		51360	-0.03	676	10630	68	-71	4.5	21	-0.9	4	0.6	5985	15.7	14620	41	0.3
56-42.3522-106.5753-2-11-			0-	W	14231		46980	-0.05	800	32390	81	-76	4.3	34	1.3	4	0.8	7639	14.9	12700	48	0.4

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
56-42.6325-106.2086-2-12-					0	W14171	12060	438	12280	37	-2	6.7	6.6	-260	-1	-1	22.8	3870	70	4.8	76	0.386
56-42.6325-106.2061-2-15-					0	W14172	14370	542	11120	54	-2	8.4	5.7	-312	-1	-1	17.0	3766	75	4.8	60	0.366
56-42.6567-106.2117-2-15-					0	W14174	11010	227	6517	-11	-1	3.2	2.4	-207		-1	4.7	2227	32	2.4	37	0.409
56-42.6547-106.2300-2-99-					0	W14175	10560	354	7484	-16	-2	4.5	1.9	-211	-1	-1	5.9	2495	52	1.8	68	0.420
56-42.6775-106.1489-2-15-					0	W14176	9144	559	3367	36	-2	6.1	3.8	-238	-1	-1	9.3	3028	70	2.5	71	0.459
56-42.7008-106.1478-2-15-					0	W14178	7690	400	5028	26	-1	4.5	3.7	-243	-1	-1	8.9	2072	49	2.1	-62	0.556
56-42.7083-106.1617-2-12-					0	W14179	7919	273	6136	27	-1	4.0	3.7	-221	-1	-1	6.8	2657	58	2.4	-19	0.444
56-42.7122-106.1856-2-12-					0	W14180	10490	236	5451	32	-2	5.0	2.5	-185	-1	-1	6.5	3243	66	2.0	-28	0.512
56-42.7139-106.1856-2-12-					0	W14181	21680	293	6226	-11	-1	4.1	3.1	-201		-1	5.6	2787	42	2.4	44	0.471
56-42.7342-106.1961-2-15-					0	W14184	17270	120	5010	49	-1	6.3	3.3	-165		-1	9.3	2818	90	2.7	65	0.325
56-42.7433-106.1478-2-15-					0	W14185	33780	337	8680	25	-2	5.9	3.2	-267	-1	-1	5.9	3276	60	1.8	58	0.539
56-42.6628-106.2547-2-11-					0	W14189	16350	423	7107	-20	-2	4.9	2.7	-248	-1	-1	6.6	3410	59	3.0	-31	0.444
56-42.6417-106.2561-2-11-					0	W14190	15620	439	7235	37	-2	5.8	3.6	-246	-1	-1	9.3	3263	62	2.6	40	0.323
56-42.6406-106.2739-2-12-					0	W14191	8158	310	7513	35	-1	4.8	4.4	-232	-1	-1	10.2	2873	43	3.4	34	0.350
56-42.6294-106.2669-2-15-					0	W14192	10730	546	6187	33	-1	4.6	2.9	-289			6.5	2253	52	1.8	-47	0.372
56-42.8500-106.6700-2-15-					0	W14194	14080	265	6560	41	-2	5.5	2.8	-193	-1	-1	8.1	2990	111	2.5	66	0.415
56-42.8508-106.6539-2-15-					0	W14195	14330	262	5844	47	-1	6.3	3.7	-194	-1	1	9.2	2738	112	2.6	58	0.398
56-42.8639-106.7092-2-15-					0	W14196	16860	291	4997	63	-2	9.8	4.6	-260	-1	-1	10.7	3810	178	2.5	122	0.319
56-42.9097-106.7189-2-15-					0	W14197	17070	259	5864	33	-2	5.7	3.5	-235	-1	-1	6.9	3016	119	3.1	96	0.467
56-42.9153-106.7278-2-15-					0	W14198	19350	385	8198	-20	-2	5.2	1.5	-242	-1	-1	6.6	3013	112	2.4	-71	0.458
56-42.9889-106.6858-2-15-					0	W14199	18690	242	5011	64	1	8.9	4.3	-182	-1	-1	8.8	3283	184	3.1	90	0.388
56-42.3694-106.7142-2-12-					0	W14200	5684	348	12840	22	-1	3.8	7.3	-247	1	-1	50.4	4785	75	4.9	-40	0.123
56-42.3589-106.7067-2-15-					0	W14201	14560	390	8217	32	-1	4.8	5.3	-261	-1	-1	19.8	4132	91	2.7	-34	0.180
56-42.3353-106.6761-2-15-					0	W14202	13010	293	11060	36	-1	4.8	3.9	-208	-1	-1	12.4	2866	62	2.7		0.276
56-42.3367-106.6578-2-15-					0	W14203	9712	647	11840	47	-1	5.5	5.0	-260	-1	-1	14.8	2575	54	2.9	61	0.268
56-42.3372-106.6272-2-15-					0	W14204	7761	182	10910	25	-1	4.2	4.7	-212	-1	-1	15.4	2663	50	2.8	-20	0.315
56-42.3383-106.7472-2-15-					0	W14205	9275	322	11020	47	-1	3.9	1.9	396	-1	-1	11.9	2565	4102	2.3	-32	0.312
56-42.3169-106.6256-2-99-					0	W14206	10750	265	9744	41	-1	5.0	4.6	202	-1	-1	13.2	2879	50	2.6	-18	0.285
56-42.3281-106.6861-2-15-					0	W14207	10070	225	10690	36	-1	4.8	4.9	217	-1	-1	13.5	2405	49	2.4	54	0.403
56-42.3192-106.7333-2-15-					0	W14208	12000	337	10400	28	-1	4.4	4.1	-249	-1	-1	11.8	2705	52	2.2	-31	0.292
56-42.2908-106.7097-2-12-					0	W14209	12190	328	10480	36	-1	4.6	2.5	-281	-1	-1	15.8	3658	65	2.7	-33	0.304
56-42.2894-106.7131-2-11-					0	W14210	5445	190	13280	-9	-1	3.4	4.3	250			14.7	2934	37	2.7	12	0.246
56-42.2886-106.7206-2-15-					0	W14211	7934	295	9251	36	-1	5.0	4.3	-189	-1	-1	15.2	2595	50	2.2	59	0.237
56-42.2531-106.7372-2-15-					0	W14213	9242	271	11840	28	-1	3.2	3.2	-213	-1		11.0	2138	37	2.0	-33	0.255
56-42.2647-106.6717-2-15-					0	W14215	9855	475	11580	-19	-1	4.2	2.0	-309	-1	-1	12.0	3025	68	1.8	79	0.311
56-42.2639-106.6553-2-15-					0	W14216	7193	189	9965	30	-1	3.4	3.0	-167			8.4	2482	33	2.3	-16	0.302
56-42.2617-106.6539-2-15-					0	W14217	9595	371	12240	36	-1	5.3	5.2	265	-1	-1	14.9	3451	59	2.6	77	0.325
56-42.2522-106.6533-2-11-					0	W14218	7457	179	10480	20	-1	3.1	3.0	-201	-1		9.9	2252	39	1.8	-18	0.399
56-42.3711-106.5078-2-11-					0	W14219	8937	287	12280	-15	-1	3.7	3.0	-253	-1	-1	11.9	2698	57	2.0	-28	0.300
56-42.3539-106.5083-2-11-					0	W14220	10370	443	6440	46	-1	5.1	3.7	-220	-1	-1	13.0	2867	53	2.8	-28	0.302
56-42.3600-106.5903-2-99-					0	W14221	10290	333	10300	54	-1	5.5	4.6	362	-1	-1	19.3	2675	63	2.8	78	0.153
56-42.3742-106.6217-2-12-					0	W14222	6416	237	12540	36	-1	3.6	3.5	-222	-1	-1	14.6	2969	54	2.5	-17	0.318
56-42.3481-106.6117-2-11-					0	W14223	8190	244	14110	27	-1	3.9	3.8	291	-1	-1	12.6	2364	40	2.4	-25	0.375
56-42.3386-106.5964-2-11-					0	W14224	6902	1228	11900	43	-1	3.7	3.8	-380	-1	-1	16.6	2397	27	2.5	-16	0.230
56-42.3375-106.5964-2-12-					0	W14225	10400	479	12560	45	-1	5.2	9.2	-257	-1	1	45.9	3066	50	5.0	57	0.148
56-42.3344-106.6022-2-12-					0	W14226	13850	227	10770	41	-1	4.1	5.4	-234	-1	-1	26.0	3281	46	3.7	33	0.196
56-42.3186-106.6025-2-11-					0	W14227	12080	245	11820	29	-1	4.2	2.5	-252	-1	-1	9.7	2360	49	1.4	-30	0.333
56-42.3053-106.5897-2-11-					0	W14228	8411	159	15510	34	-1	3.2	5.3	-204	-1	-1	29.0	3233	29	3.5	-20	0.179
56-42.3192-106.5678-2-11-					0	W14229	6397	131	13310	36	-1	3.9	5.9	-186	-1	-1	20.1	2712	33	2.9	-40	0.696
56-42.3539-106.5636-2-11-					0	W14230	6686	165	12630	35	-1	3.0	5.3	244	-1	-1	18.8	2858	69	3.4	34	0.390
56-42.3522-106.5753-2-11-					0	W14231	6688	390	11670	29	-1	3.5	5.2	397	-1	-1	21.7	3012	42	2.5	-15	0.234

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																							U CONCENTRATION
							TIME SAMPLED																						
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
56-42.2558-106.6214-2-12-						0-W14233-10/02/77-		-	17-11.0-		-	-	7.6-	900-	23-1-6-5-6-2-2-1-2-3-3-3-2-	-1-	-	-	-	-	-	6.63
56-42.1864-106.0558-2-15-						0-W14234-10/03/77-10-			20-		-	-		-	-	20-1-1-4-6-	-1-	-2-4-3-2-2-	-1-	-	-	-	-	-	4.59
56-42.1864-106.0586-2-15-						0-W14235-10/03/77-10-			20-		-	-		-	-	9-1-1-4-6-	-1-	-2-4-3-2-2-	-1-	-	-	-	-	-	4.72
56-42.2136-106.0433-2-15-						0-W14236-10/03/77-10-			20-		-	-		-	-	24-1-1-4-7-	-1-	-2-4-3-2-2-	-1-	-	-	-	-	-	4.48
56-42.2133-106.0211-2-15-						0-W14237-10/03/77-11-			20-		-	-		-	-	20-1-1-4-6-	-1-	-2-4-3-2-2-	-1-	-	-	-	-	-	4.11
56-42.2342-106.0103-2-11-						0-W14239-10/03/77-11-			20-15.0-		C-	-	9.1-	1050-	14-1-7-5-6-1-2-1-	-3-2-2-2-	-1-	-	-	-	-	6.13
56-42.2325-106.0181-2-15-						0-W14240-10/03/77-12-			20-		-	-		-	-	16-1-1-4-6-	-1-	-2-4-3-2-2-	-1-	-	-	-	-	-	4.36
56-42.2331-106.0564-2-15-						0-W14241-10/03/77-12-			20-		-	-		-	-	16-1-1-4-6-	-1-	-3-4-3-2-2-	-1-	-	-	-	-	-	3.49
56-42.2294-106.1092-2-15-						0-W14242-10/03/77-12-			20-		-	-		-	-	9-1-1-4-1-	-1-	-2-4-4-2-1-	-1-	-	-	-	-	-	6.02
56-42.2108-106.0964-2-11-						0-W14243-10/03/77-12-			20-18.0-		-	-	7.1-	2900-	9-1-1-6-8-1-2-5-	-4-3-2-1-	-1-	-	-	-	-	3.15
56-42.2122-106.0911-2-15-						0-W14244-10/03/77-12-			20-		-	-		-	-	-1-1-4-1-	-1-	-3-4-3-2-1-	-1-	-	-	-	-	-	3.95
56-42.1336-106.0828-2-15-						0-W14245-10/03/77-13-			20-		-	-		-	-	-1-1-4-6-	-1-	-3-4-3-2-1-	-1-	-	-	-	-	-	3.34
56-42.1267-106.0725-2-15-						0-W14246-10/03/77-14-			20-		-C-	-		-	-	-1-1-4-6-	-1-	- -4-3-2-1-	-1-	-	-	-	-	-	4.85
56-42.1297-106.0717-2-15-						0-W14247-10/03/77-14-			20-		-	-		-	-	-1-1-4-6-	-1-	- -4-3-2-1-	-1-	-	-	-	-	-	4.24
56-42.9678-106.9800-2-15-						0-W14248-10/12/77-12-			20-		-	-		-	-	23-1-1-4-1-	-1-	-2-3-3-2-1-	-1-	-	-	-	-	-	5.43
56-42.8567-106.9364-2-15-						0-W14249-10/12/77-12-			21-		-	-		-	-	18-1-6-4-6-	-1-	-2-3-3-2-1-	-1-	-	-	-	-	-	5.43
56-42.8336-107.0025-2-15-						0-W14250-10/12/77-13-			24-		-	-		-	-	23-1-6-4-6-	-1-	-2-4-3-2-1-	-1-	-	-	-	-	-	5.55
56-42.8244-107.0358-2-15-						0-W14251-10/12/77-14-			22-		-C-	-		-	-	15-1-4-6-4-1-2-	-2-4-3-2-1-	-1-	-	-	-	-	4.69
56-42.8547-107.0242-2-15-						0-W14252-10/12/77-14-			24-		-	-		-	-	19-1-2-5-6-	-1-	-2-3-3-2-1-	-1-	-	-	-	-	-	8.56
56-42.8622-107.0369-2-15-						0-W14253-10/12/77-15-			24-		-	-		-	-	13-1-4-5-1-	-1-	-2-3-3-2-1-	-1-	-	-	-	-	-	3.68
56-42.8441-107.0706-2-15-						0-W14254-10/12/77-15-			24-		-	-		-	-	13-1-4-5-1-	-1-	-2-3-4-2-1-	-1-	-	-	-	-	-	3.67
56-42.8661-107.1042-2-15-						0-W14255-10/12/77-15-			24-		-	-		-	-	-1-4-4-6-	-1-	-2-3-4-2-1-	-1-	-	-	-	-	-	2.70
56-42.8253-107.1236-2-15-						0-W14256-10/12/77-16-			24-		-	-		-	-	5-1-1-4-6-	-1-	-2-3-4-2-1-	-1-	-	-	-	-	-	2.95
56-42.7889-107.1019-2-15-						0-W14257-10/12/77-17-			24-		-	-		-	-	11-1-1-4-1-	-1-	-2-4-4-2-1-	-1-	-	-	-	-	-	2.91
56-42.7908-107.1306-2-15-						0-W14258-10/12/77-16-			24-		-	-		-	-	5-1-1-4-6-	-1-	-3-4-3-2-1-	-1-	-	-	-	-	-	2.68
56-42.7906-107.1839-2-15-						C-W14259-10/12/77-17-			20-		-	-		-	-	18-1-7-4-6-	-1-	-2-4-3-2-1-	-1-	-	-	-	-	-	4.85
56-42.8011-107.1958-2-15-						0-W14260-10/12/77-17-			20-		-	-		-	-	7-1-1-4-3-	-1-	-2-4-3-2-1-	-1-	-	-	-	-	-	2.82
56-42.8069-107.2156-2-15-						0-W14261-10/12/77-17-			20-		-	-		-	-	9-1-1-4-6-	-1-	-2-4-4-2-1-	-1-	-	-	-	-	-	3.72
56-42.8411-107.2036-2-15-						0-W14262-10/12/77-17-			20-		-	-		-	-	-1-1-2-6-	-1-	-2-3-3-2-1-	-1-	-	-	-	-	-	2.44
56-42.6261-107.2056-2-15-						0-W14263-10/13/77-11-			25-		-	-		-	-	8-1-7-4-6-	-1-	-3-4-3-3-1-	-1-	-	-	-	-	-	2.32
56-42.6739-107.1550-2-15-						0-W14264-10/13/77-12-			25-		-	-		-	-	11-2-2-4-6-	-1-	-2-3-4-3-1-	-1-	-	-	-	-	-	2.93
56-42.6639-107.2150-2-15-						0-W14265-10/13/77-13-			25-		-	-		-	-	16-1-1-4-6-	-1-	-2-3-4-3-1-	-1-	-	-	-	-	-	2.78
56-42.6658-107.2147-2-15-						0-W14266-10/13/77-13-			25-		-	-		-	-	11-1-1-4-6-	-1-	-2-3-4-3-1-	-1-	-	-	-	-	-	2.79
56-42.6636-107.2228-2-15-						0-W14267-10/13/77-13-			25-		-	-		-	-	7-1-1-4-6-	-1-	-2-3-3-3-1-	-1-	-	-	-	-	-	2.75
56-42.6808-107.2403-2-15-						0-W14269-10/13/77-14-			25-		-	-		-	-	7-1-1-4-6-	-1-	-2-3-3-3-1-	-1-	-	-	-	-	-	4.43
56-42.6811-107.2614-2-15-						0-W14270-10/13/77-14-			25-		-	-		-	-	7-1-1-4-1-	-1-	-2-3-3-3-1-	-1-	-	-	-	-	-	2.36
56-42.6450-107.2311-2-15-						0-W14272-10/13/77-15-			25-		-	-		-	-	14-1-1-4-6-	-1-	-2-3-3-3-1-	-1-	-	-	-	-	-	2.95
56-42.6456-107.2344-2-15-						0-W14273-10/13/77-15-			25-		-	-		-	-	5-1-1-4-6-	-1-	-2-3-3-3-1-	-1-	-	-	-	-	-	3.46
56-42.6400-107.1522-2-15-						0-W14274-10/13/77-16-			25-		-	-		-	-	11-1-1-4-6-	-1-	-2-3-3-3-1-	-1-	-	-	-	-	-	2.69
56-42.6403-107.1486-2-15-						0-W14275-10/13/77-16-			25-		-	-		-	-	9-1-1-4-6-	-1-	-2-3-3-3-1-	-1-	-	-	-	-	-	3.65
56-42.6261-107.1911-2-15-						0-W14277-10/13/77-17-			20-		-	-		-	-	5-2-7-4-6-	-1-	-2-3-3-3-1-	-1-	-	-	-	-	-	2.60
56-42.7397-107.2342-2-11-						0-W14279-10/14/77-12-			20-15.0-		-	-	7.2-	275-	14-1-7-6-8-2-2-1-	-1-2-4-1-	-1-	-	-	-	-	4.00
56-42.7150-107.1706-2-12-						0-W14280-10/14/77-13-			20-15.0-		-	-	7.3-	180-	9-3-7-6-6-2-2-1-2-3-3-4-1-	-1-	-	-	-	-	-	5.35
56-42.7244-107.1961-2-15-						0-W14281-10/14/77-13-			20-		-	-		-	-	11-3-7-4-6-	-1-	-2-3-4-4-1-	-1-	-	-	-	-	-	3.45
56-42.7333-107.1981-2-12-						0-W14282-10/14/77-14-			20-16.0-		-	-	8.0-	225-	7-1-2-5-6-2-2-1-2-1-3-4-1-	-1-	-	-	-	-	-	2.83
56-42.7572-107.1931-2-11-						0-W14283-10/14/77-14-			20-17.5-		-	-	7.1-	225-	7-1-4-6-6-2-2-1-	-4-3-4-1-	-1-	-	-	-	-	23.36
56-42.7717-107.1458-2-12-						0-W14284-10/14/77-15-			20-13.5-		-	-	7.4-	700-	5-4-	-5-6-3-2-4-2-4-3-4-1-	-1-	-	-	-	-	3.58
56-42.7156-107.4736-2-11-						0-W14285-10/15/77-15-			20-12.0-		-	-	7.1-	200-	9-1-1-4-6-4-3-1-	-4-3-2-1-	-1-	-	-	-	-	4.24
56-42.7253-107.4778-2-15-						0-W14286-10/15/77-15-			20-		-	-		-	-	5-1-1-4-6-	-1-	-2-3-4-2-1-	-1-	-	-	-	-	-	3.93
56-42.7028-107.4381-2-15-						0-W14287-10/15/77-15-			20-		-	-		-	-	16-1-1-4-1-	-1-	-2-3-3-2-1-	-1-	-	-	-	-	-	4.63
56-42.6964-107.4492-2-12-						0-W14288-10/15/77-15-			20-14.5-		-	-	7.2-	210-	3-1-1-4-6-4-3-3-2-4-4-2-1-	-1-	-	-	-	-	-	4.39

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

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE (Concentrations reported in weight parts per million (ppm))									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY (Concentrations in weight ppm)	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
56	42.2558	106.6214	2	12	-	0-W14233	-5	-5	-5	-10	-20	-15	17	-10	-15	2	20
56	42.1864	106.0558	2	15	-	0-W14234	-5	-5	-5	21	-20	26	13	-10	-15	3	50
56	42.1864	106.0586	2	15	-	0-W14235	-5	-5	-5	22	-20	27	16	-10	-15	3	46
56	42.2136	106.0433	2	15	-	0-W14236	-5	-5	-5	26	-20	-15	14	-10	-15	3	84
56	42.2133	106.0211	2	15	-	0-W14237	-5	-5	-5	15	-20	-15	15	-10	-15	2	28
56	42.2342	106.0103	2	11	-	0-W14239	-5	-5	-5	22	-20	20	13	-10	-15	2	28
56	42.2325	106.0181	2	15	-	0-W14240	-5	-5	-5	24	-20	27	16	-10	-15	2	39
56	42.2331	106.0564	2	15	-	0-W14241	-5	-5	-5	21	-20	-15	16	-10	-15	2	28
56	42.2294	106.1092	2	15	-	0-W14242	-5	-5	-5	26	-20	37	5	-10	-15	2	32
56	42.2108	106.0964	2	11	-	0-W14243	-5	-5	-5	30	-20	21	11	-10	-15	2	33
56	42.2122	106.0911	2	15	-	0-W14244	-5	-5	-5	20	-20	30	14	-10	-15	3	48
56	42.1336	106.0828	2	15	-	0-W14245	-5	-5	-5	28	-20	-15	10	-10	-15	3	44
56	42.1267	106.0725	2	15	-	0-W14246	-5	-5	-5	25	-20	26	16	-10	-15	3	46
56	42.1297	106.0717	2	15	-	0-W14247	-5	-5	-5	22	-20	20	22	-10	-15	3	37
56	42.8678	106.9800	2	15	-	0-W14248	-5	-5	-5	22	-20	-15	13	-10	-15	2	24
56	42.8567	106.9364	2	15	-	0-W14249	-5	-5	-5	27	-20	22	19	-10	-15	3	35
56	42.8336	107.0025	2	15	-	0-W14250	-5	-5	-5	24	-20	20	19	-10	-15	3	44
56	42.8244	107.0358	2	15	-	0-W14251	-5	-5	-5	31	-20	15	16	-10	-15	3	41
56	42.8547	107.0242	2	15	-	0-W14252	-5	-5	-5	24	-20	27	23	-10	-15	3	31
56	42.8622	107.0369	2	15	-	0-W14253	-5	-5	-5	26	-20	20	10	-10	-15	2	34
56	42.8461	107.0706	2	15	-	0-W14254	-5	-5	-5	34	-20	27	15	-10	-15	2	39
56	42.8661	107.1042	2	15	-	0-W14255	-5	-5	-5	22	-20	17	10	-10	-15	2	36
56	42.8253	107.1236	2	15	-	0-W14256	-5	-5	-5	10	-20	20	8	-10	-15	2	41
56	42.7889	107.1019	2	15	-	0-W14257	-5	-5	-5	27	-20	-15	9	-10	-15	3	35
56	42.7908	107.1306	2	15	-	0-W14258	-5	-5	-5	28	-20	-15	10	-10	-15	2	19
56	42.7906	107.1839	2	15	-	0-W14259	-5	-5	-5	26	-20	-15	13	-10	-15	3	45
56	42.8011	107.1958	2	15	-	0-W14260	-5	-5	-5	16	-20	-15	5	-10	-15	2	21
56	42.8069	107.2156	2	15	-	0-W14261	-5	-5	-5	25	-20	23	15	-10	-15	2	55
56	42.8411	107.2036	2	15	-	0-W14262	-5	-5	-5	22	-20	-15	15	-10	15	2	34
56	42.6261	107.2056	2	15	-	0-W14263	-5	-5	-5	18	-20	-15	12	-10	-15	2	28
56	42.6739	107.1550	2	15	-	0-W14264	-5	-5	-5	19	-20	-15	15	-10	-15	2	32
56	42.6639	107.2150	2	15	-	0-W14265	-5	-5	-5	27	-20	-15	18	-10	-15	2	39
56	42.6658	107.2147	2	15	-	0-W14266	-5	-5	-5	15	-20	15	12	-10	-15	2	34
56	42.6636	107.2228	2	15	-	0-W14267	-5	-5	-5	19	-20	-15	10	-10	-15	2	27
56	42.6808	107.2403	2	15	-	0-W14269	-5	-5	-5	-10	-20	-15	9	-10	-15	1	28
56	42.6811	107.2614	2	15	-	0-W14270	-5	-5	-5	16	-20	-15	9	-10	-15	2	24
56	42.6450	107.2311	2	15	-	0-W14272	-5	-5	-5	23	-20	27	16	-10	-15	2	44
56	42.6496	107.2344	2	15	-	0-W14273	-5	5	-5	22	-20	22	17	-10	-15	2	36
56	42.6400	107.1522	2	15	-	0-W14274	-5	-5	-5	18	-20	-15	14	-10	-15	2	23
56	42.6403	107.1486	2	15	-	0-W14275	-5	-5	-5	17	-20	-15	10	-10	-15	2	34
56	42.6261	107.1911	2	15	-	0-W14277	-5	-5	-5	19	-20	-15	13	-10	-15	2	38
56	42.7397	107.2342	2	11	-	0-W14279	-5	5	-5	17	-20	-15	12	-10	-15	2	28
56	42.7150	107.1706	2	12	-	0-W14280	-5	-5	-5	25	-20	27	18	-10	-15	2	30
56	42.7244	107.1961	2	15	-	0-W14281	-5	-5	-5	27	-20	-15	18	-10	-15	2	36
56	42.7333	107.1981	2	12	-	0-W14282	-5	-5	-5	14	-20	-15	9	-10	-15	2	39
56	42.7572	107.1931	2	11	-	0-W14283	-5	-5	-5	19	-20	18	9	-10	-15	2	45
56	42.7717	107.1458	2	12	-	0-W14284	-5	-5	-5	18	-20	21	16	-10	-15	3	64
56	42.7156	107.4736	2	11	-	0-W14285	-5	-5	-5	20	-20	-15	17	-10	15	2	43
56	42.7253	107.4778	2	15	-	0-W14286	-5	-5	-5	18	-20	-15	13	-10	-15	2	33
56	42.7028	107.4381	2	15	-	0-W14287	-5	-5	-5	12	-20	-15	12	-10	-15	5	50
56	42.6964	107.4492	2	12	-	0-W14288	-5	-5	-5	18	-20	-15	12	-10	-15	3	42

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)															
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
56-	42.2558-	106.6214-2-	12-			0-W14233	49550	-0.05	506	11730	83	-88	6.1	31	2.0	4	0.9	10670	13.1	14460	50	0.4
56-	42.1864-	106.0558-2-	15-			0-W14234	51280	-0.05	582	76650	54	-57	6.2	45	2.6	3	0.7	9247	4.9	13940	32	0.3
56-	42.1864-	106.0586-2-	15-			0-W14235	50740	-0.06	534	66400	37	-51	4.7	35	2.6	4	0.6	9321	4.1	15810	12	0.2
56-	42.2136-	106.0433-2-	15-			0-W14236	61320	-0.05	582	49430	52	-50	5.2	49	4.0	4	0.8	12500	4.0	16650	29	0.3
56-	42.2133-	106.0211-2-	15-			0-W14237	53540	-0.04	549	4851	56	-50	6.1	35	3.1	4	0.8	11800	8.0	16250	34	0.4
56-	42.2342-	106.0103-2-	11-			0-W14239	55540	-0.06	455	10580	51	100	7.3	30	2.7	3	0.6	10770	5.8	13520	28	0.2
56-	42.2325-	106.0181-2-	15-			0-W14240	61790	-0.06	568	4985	47	151	-0.8	35	2.8	4	0.6	11190	5.6	18290	8	0.2
56-	42.2331-	106.0564-2-	15-			0-W14241	54640	-0.04	619	5755	51	-55	5.1	43	2.6	4	0.7	11360	7.6	16320	32	0.3
56-	42.2294-	106.1092-2-	15-			0-W14242	53870	-0.05	590	50160	61	-65	6.8	41	3.0	4	0.8	14620	9.5	12640	41	0.4
56-	42.2108-	106.0964-2-	11-			0-W14243	38480	-0.06	350	117100	35	-68	6.6	26	2.5	2	0.4	9451	2.9	10280	17	0.3
56-	42.2122-	106.0911-2-	15-			0-W14244	66240	-0.07	667	33440	49	-49	5.3	42	3.7	4	0.7	11860	4.1	18200	16	0.3
56-	42.1336-	106.0828-2-	15-			0-W14245	60190	-0.05	558	11100	58	-53	6.4	49	3.3	4	0.7	13440	5.4	17720	35	0.3
56-	42.1267-	106.0725-2-	15-			0-W14246	57440	-0.05	893	20340	84	-61	7.3	43	2.8	5	1.0	13860	9.0	17800	47	0.4
56-	42.1297-	106.0717-2-	15-			0-W14247	52210	-0.05	552	10750	50	-65	5.8	28	2.2	3	0.7	9984	5.8	15790	26	0.3
56-	42.8678-	106.9800-2-	15-			0-W14248	47270	-0.04	575	5759	44	-70	2.8	10	-0.9	4	0.5	4964	7.1	18380	32	0.4
56-	42.8567-	106.9364-2-	15-			0-W14249	60020	-0.05	593	5636	57	-67	5.8	48	1.8	4	0.7	12090	6.3	20630	36	0.3
56-	42.8336-	107.0025-2-	15-			0-W14250	62020	-0.05	507	5192	66	-73	8.6	55	2.1	4	0.9	17050	7.2	17760	40	0.4
56-	42.8244-	107.0358-2-	15-			0-W14251	58390	-0.06	393	8779	60	-74	8.5	52	2.4	3	0.8	13770	6.5	15210	34	0.3
56-	42.8547-	107.0242-2-	15-			0-W14252	68270	-0.07	594	8993	57	-73	6.6	52	-1.5	5	0.7	14610	5.0	19520	37	0.3
56-	42.8622-	107.0369-2-	15-			0-W14253	50400	-0.04	592	5624	56	-44	5.6	45	1.9	4	0.7	10730	8.3	16060	32	0.3
56-	42.8461-	107.0706-2-	15-			0-W14254	56260	-0.05	584	4474	65	-61	7.8	47	2.2	4	0.9	14950	7.8	17230	38	0.3
56-	42.8661-	107.1042-2-	15-			0-W14255	54530	-0.05	482	-659	58	-56	7.4	46	1.6	3	0.8	12350	6.5	16660	30	0.3
56-	42.8253-	107.1236-2-	15-			0-W14256	46080	-0.05	457	2564	31	-28	3.8	25	3.0	3	0.5	5641	7.6	13030	24	0.2
56-	42.7889-	107.1019-2-	15-			0-W14257	60190	-0.05	600	15780	51	82	5.8	43	3.4	4	0.8	12020	3.5	14490	29	0.2
56-	42.7908-	107.1306-2-	15-			0-W14258	39930	-0.04	404	41310	46	-46	4.6	31	2.5	3	0.8	9118	7.1	14110	27	0.3
56-	42.7906-	107.1839-2-	15-			0-W14259	77960	-0.06	320	14420	49	-50	6.1	35	4.5	4	0.7	13240	3.6	13810	27	0.3
56-	42.8011-	107.1958-2-	15-			0-W14260	33470	-0.05	561	33220	41	78	3.0	19	-0.9	4	0.6	6184	10.1	14120	14	0.2
56-	42.8069-	107.2156-2-	15-			0-W14261	62080	-0.05	568	33170	51	-55	6.4	47	3.8	4	0.8	13080	4.1	15340	29	0.3
56-	42.8411-	107.2036-2-	15-			0-W14262	53170	-0.05	565	10160	51	-46	5.8	38	3.0	4	0.8	10970	5.7	13110	33	0.3
56-	42.6261-	107.2056-2-	15-			0-W14263	55330	-0.04	706	14420	44	-80	4.8	22	1.6	2	0.7	7792	5.2	16940	27	0.2
56-	42.6739-	107.1550-2-	15-			0-W14264	57710	-0.06	748	12940	42	-73	5.1	30	-1.1	3	0.9	10390	6.4	17240	31	0.2
56-	42.6639-	107.2150-2-	15-			0-W14265	59550	-0.04	643	13730	57	-73	5.3	33	2.0	3	0.8	11500	6.9	15750	30	0.3
56-	42.6658-	107.2147-2-	15-			0-W14266	55840	-0.04	697	15520	60	-77	5.5	41	2.0	3	1.0	11680	9.4	20700	38	0.3
56-	42.6636-	107.2228-2-	15-			0-W14267	55640	-0.04	573	13470	56	-84	5.3	30	1.6	2	0.8	10060	7.3	16290	32	0.2
56-	42.6808-	107.2403-2-	15-			0-W14269	46690	-0.06	423	15000	143	-81	10.9	81	-1.4	4	0.8	46060	21.2	10870	86	0.4
56-	42.6811-	107.2614-2-	15-			0-W14270	57530	-0.04	654	18260	55	-71	4.6	33	1.2	2	0.8	12450	7.9	17520	34	0.2
56-	42.6450-	107.2311-2-	15-			0-W14272	60140	-0.05	759	13910	65	-84	7.2	49	3.3	4	0.9	15610	6.6	17770	39	0.4
56-	42.6456-	107.2344-2-	15-			0-W14273	56320	-0.05	566	14830	80	-86	6.9	46	1.7	3	0.9	15760	10.0	18320	43	0.3
56-	42.6400-	107.1522-2-	15-			0-W14274	53510	-0.05	683	13420	50	78	4.4	29	-1.0	3	0.7	9786	6.9	18150	28	0.2
56-	42.6403-	107.1486-2-	15-			0-W14275	53930	-0.04	598	14910	84	84	6.1	45	1.8	3	0.9	20080	13.8	19210	54	0.3
56-	42.6261-	107.1911-2-	15-			0-W14277	58360	-0.04	741	20150	61	81	5.3	42	1.8	3	1.0	13500	8.8	16740	40	0.3
56-	42.7397-	107.2342-2-	11-			0-W14279	46330	-0.06	612	30880	50	-89	6.6	28	1.9	3	0.8	8164	8.8	14010	23	0.3
56-	42.7150-	107.1706-2-	12-			0-W14280	52840	-0.07	657	11580	66	-63	6.1	28	2.5	7	1.0	11340	14.8	23650	32	0.5
56-	42.7244-	107.1961-2-	15-			0-W14281	62790	-0.05	665	14320	65	-68	5.9	38	1.7	4	0.9	13860	8.9	17580	36	0.4
56-	42.7333-	107.1981-2-	12-			0-W14282	59310	-0.05	604	18540	58	-87	7.0	52	2.5	3	1.0	14340	9.0	14320	30	0.3
56-	42.7572-	107.1931-2-	11-			0-W14283	51330	-0.07	348	12530	52	-89	8.0	30	1.9	3	0.6	10050	5.3	15390	32	0.2
56-	42.7717-	107.1458-2-	12-			0-W14284	58460	1.24	766	53400	45	-58	6.2	29	2.5	3	0.8	12110	4.8	15730	24	0.3
56-	42.7156-	107.4736-2-	11-			0-W14285	60660	-0.05	934	29230	76	-93	5.3	33	1.7	4	1.0	14090	8.0	18130	47	0.3
56-	42.7253-	107.4778-2-	15-			0-W14286	62760	-0.05	825	21830	75	-104	7.1	40	2.2	4	1.1	13520	7.7	16700	46	0.3
56-	42.7028-	107.4381-2-	15-			0-W14287	56590	-0.05	739	19210	89	-100	6.5	31	2.9	4	1.1	15750	12.2	13150	52	0.5
56-	42.6964-	107.4492-2-	12-			0-W14288	54310	-0.08	810	24320	51	-107	6.4	33	2.7	4	0.8	12650	5.7	17160	34	0.3

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

DOE SAMPLE NUMBER						LAS SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)												U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
56-42.2558-106.6214-2-12-						0-W14233	8245	676	11450	39	-1	4.8	6.9	-335	-1	-1	24.3	2730	41	4.2	51	0.273
56-42.1864-106.0558-2-15-						0-W14234	12370	199	3860	31	-2	5.1	4.7	308	-1	-1	11.0	2789	204	2.8	85	0.417
56-42.1864-106.0586-2-15-						0-W14235	13300	302	3977	-20	-2	4.8	2.1	261	-1	-1	8.8	2408	168	-1.4	-38	0.536
56-42.2136-106.0433-2-15-						0-W14236	16830	208	4267	50	-2	6.8	3.5	269	-1	-1	9.8	3225	128	3.1	99	0.457
56-42.2133-106.0211-2-15-						0-W14237	8512	289	5023	50	-1	5.7	4.6	-206	-1	-1	11.0	2210	58	3.2	-40	0.374
56-42.2342-106.0103-2-11-						0-W14239	10040	475	4233	-19	-2	4.9	3.3	-299	-1	-1	9.3	2212	72	2.8	65	0.659
56-42.2325-106.0181-2-15-						0-W14240	10420	552	4916	-20	-2	5.8	2.6	-243	-1	-1	8.2	2866	85	2.3	-50	0.532
56-42.2331-106.0564-2-15-						0-W14241	9320	354	7878	40	-1	5.4	3.6	-206		-1	9.9	3075	102	2.5	67	0.353
56-42.2294-106.1092-2-15-						0-W14242	11480	349	7986	35	2	6.3	5.2	-237	-1	-1	12.5	2782	143	3.5	-51	0.482
56-42.2108-106.0964-2-11-						0-W14243	12580	135	3940	-19	-2	3.9	3.3	719	-1	-1	5.8	1909	135	1.7	-37	0.543
56-42.2122-106.0911-2-15-						0-W14244	17910	249	4452	-22	-2	6.5	2.2	-197	-1	-1	7.9	3540	193	-1.4	-144	0.500
56-42.1336-106.0828-2-15-						0-W14245	14810	357	6095	46	-1	6.6	3.8	-204	-1	-1	12.0	3038	118	2.9	67	0.278
56-42.1267-106.0725-2-15-						0-W14246	13970	290	7172	46	3	6.9	6.9	-224	-1	-1	18.4	3716	128	5.9	58	0.264
56-42.1297-106.0717-2-15-						0-W14247	14160	296	6989	42	-1	4.7	3.4	-234	-1	-1	9.2	2359	105	2.1	86	0.461
56-42.8678-106.9800-2-15-						0-W14248	5009	246	15030	36	-1	2.4	2.3	-207	-1	-1	8.4	2254	24	3.8	-46	0.646
56-42.8567-106.9364-2-15-						0-W14249	9122	376	10500	45	-1	5.7	3.6	-236	-1	-1	13.5	2814	56	2.5	46	0.402
56-42.8336-107.0025-2-15-						0-W14250	9132	390	8649	43	-2	7.4	5.5	-266	-1	-1	14.9	2917	63	3.6	51	0.372
56-42.8244-107.0358-2-15-						0-W14251	12320	536	5832	33	-2	6.3	4.2	-314	-1	-1	10.3	3281	66	2.5	-48	0.455
56-42.8547-107.0242-2-15-						0-W14252	13260	478	10490	-24	-2	6.7	2.9	-272	-1	-1	15.5	2908	66	2.2	-109	0.552
56-42.8622-107.0369-2-15-						0-W14253	11720	271	4584	30	-1	5.5	3.4	-179		-1	10.1	2803	60	2.9	-25	0.364
56-42.8461-107.0706-2-15-						0-W14254	11290	333	6297	43	-2	6.9	4.1	-238	-1	-1	11.3	2701	57	3.1	-58	0.325
56-42.8661-107.1042-2-15-						0-W14255	11350	312	4630	-15	-2	5.8	3.6	-234	-1	-1	8.0	3114	57	2.5	29	0.338
56-42.8253-107.1236-2-15-						0-W14256	6672	87	1578	-16	-2	4.4	1.5	-121	-1	-1	4.8	2990	75	-1.3	-53	0.615
56-42.7889-107.1019-2-15-						0-W14257	17320	296	3448	44	-1	6.2	3.5	-194	-1	-1	8.4	3082	81	1.9	64	0.346
56-42.7908-107.1306-2-15-						0-W14258	14260	195	2998	32	-1	4.6	3.4	399	-1	-1	6.8	2601	58	2.4	39	0.394
56-42.7906-107.1839-2-15-						0-W14259	16790	211	3805	36	-2	6.7	3.6	-223	-1	-1	11.8	2261	89	2.9	72	0.411
56-42.8011-107.1958-2-15-						0-W14260	12670	200	4910	-15	-1	3.0	1.9	285	-1	-1	5.7	2364	50	2.2	-80	0.495
56-42.8069-107.2156-2-15-						0-W14261	22120	386	4251	43	-2	6.8	3.6	246	-1	-1	8.1	2556	114	2.6	56	0.459
56-42.8411-107.2036-2-15-						0-W14262	10680	217	3601	38	-1	6.0	4.4	-189	-1	-1	8.6	2459	70	2.2	82	0.284
56-42.6261-107.2056-2-15-						0-W14263	7683	299	14480	33	-1	3.9	3.2	-243		-1	7.2	1786	46	2.0	-17	0.322
56-42.6739-107.1550-2-15-						0-W14264	9536	452	12850	-19	-2	4.4	2.2	286	-1	-1	8.3	2932	61	-1.2	-188	0.353
56-42.6639-107.2150-2-15-						0-W14265	11230	413	13740	38	-1	5.0	3.4	363		-1	9.5	2833	53	2.1	62	0.293
56-42.6658-107.2147-2-15-						0-W14266	10700	354	14280	44	-1	5.4	4.4	-244	-1	-1	11.1	2853	49	2.7	45	0.251
56-42.6636-107.2228-2-15-						0-W14267	7844	347	14870	29	-1	4.2	3.4	-261		-1	8.7	3019	56	1.9	-19	0.316
56-42.6808-107.2403-2-15-						0-W14269	12440	929	11880	27	-2	7.4	6.5	-306	-1	-1	20.4	10250	312	4.7	-91	0.217
56-42.6811-107.2614-2-15-						0-W14270	9616	355	15790	31	-1	4.6	3.4	455		-1	9.9	2851	65	1.8	44	0.238
56-42.6450-107.2311-2-15-						0-W14272	14800	513	12550	46	-2	6.8	4.4	517	-1	-1	11.7	3001	61	3.4	88	0.252
56-42.6456-107.2344-2-15-						0-W14273	8608	540	12990	-15	-1	5.0	4.8	-300	-1	-1	13.8	3892	88	3.1	52	0.251
56-42.6400-107.1522-2-15-						0-W14274	10120	375	14010	-17	-1	3.9	2.5	380	-1	-1	8.4	3351	63	1.5	-11	0.320
56-42.6403-107.1486-2-15-						0-W14275	10050	505	13560	38	-1	5.5	5.2	411	-1	-1	16.3	4763	117	2.7	53	0.224
56-42.6261-107.1911-2-15-						0-W14277	10890	341	13350	41	-1	5.6	4.2	452	-1	-1	11.4	2704	60	2.2	49	0.228
56-42.7397-107.2342-2-11-						0-W14279	13630	311	10190	-18	-2	3.8	3.1	-304	-1	-1	8.8	2323	44	2.2	59	0.455
56-42.7150-107.1706-2-12-						0-W14280	8202	429	7799	47	-2	5.7	4.4	-246	-1	-1	12.1	3288	54	4.8	-86	0.442
56-42.7244-107.1961-2-15-						0-W14281	12600	401	11080	46	-1	5.7	4.0	-241	-1	-1	12.0	2998	62	3.6	51	0.288
56-42.7333-107.1981-2-12-						0-W14282	10860	405	12510	45	-2	6.1	3.8	-305	-1	-1	9.5	3219	50	2.5	110	0.298
56-42.7572-107.1931-2-11-						0-W14283	18020	240	8484	30	-2	4.6	4.6	-313	-1	-1	6.8	2465	91	2.3	59	3.435
56-42.7717-107.1458-2-12-						0-W14284	21310	331	4792	-25	-2	5.7	2.4	392	-1	-1	6.5	3554	125	-1.7	-38	0.551
56-42.7156-107.4736-2-11-						0-W14285	15420	627	18040	34	-1	5.2	5.8	707	-1	-1	14.2	2889	61	3.0	48	0.299
56-42.7253-107.4778-2-15-						0-W14286	14460	531	19050	37	-2	5.6	5.2	834	-1	-1	11.4	2968	63	3.5	67	0.345
56-42.7028-107.4381-2-15-						0-W14287	11780	665	15750	26	-1	5.5	5.8	-344	-1	-1	16.5	3168	76	3.8	57	0.281
56-42.6964-107.4492-2-12-						0-W14288	12210	1232	11630	-26	-2	4.7	2.4	-453	-1	-1	11.0	3129	63	-1.6	-39	0.399

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																									U CONCENTRATION
							TIME SAMPLED																								
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
56-	42.6944-	107.4114-	2-	15-		0-W14289-	10/15/77-	16-	20-	-	-	-	-	-	-	18-1-1-4-1-	-1-	-2-3-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	3.08
56-	42.6869-	107.3756-	2-	15-		0-W14290-	10/15/77-	16-	20-	-	-	-	-	-	-	13-1-1-4-1-	-1-	-2-3-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	3.02
56-	42.6536-	107.4236-	2-	15-		0-W14291-	10/15/77-	16-	20-	-C-	-	-	-	-	-	9-2-9-4-6-	-1-	-2-3-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	3.34
56-	42.6911-	107.4747-	2-	15-		0-W14292-	10/15/77-	17-	20-	-	-	-	-	-	-	23-1-1-4-6-	-1-	-2-3-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	3.45
56-	42.4447-	107.9797-	2-	15-		0-W14293-	10/16/77-	12-	17-	-	-	-	-	-	-	74-4-	-4-6-	- - -	-4-2-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	3.48
56-	42.4769-	107.9856-	2-	15-		0-W14294-	10/16/77-	12-	18-	-	-	-	-	-	-	18-4-	-4-1-	- - -	-3-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	5.70
56-	42.4853-	107.9942-	2-	15-		0-W14295-	10/16/77-	12-	18-	-	-	-	-	-	-	11-4-	-4-6-	- - -	-4-2-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	2.88
56-	42.4794-	107.9786-	2-	15-		0-W14296-	10/16/77-	12-	18-	-	-	-	-	-	-	11-4-	-4-1-	- - -	-3-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	6.18
56-	42.4617-	107.9633-	2-	15-		0-W14297-	10/16/77-	13-	20-	-	-	-	-	-	-	13-4-	-4-1-	- - -	-3-2-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	4.90
56-	42.4725-	107.9561-	2-	15-		0-W14298-	10/16/77-	13-	21-	-	-	-	-	-	-	11-4-	-4-6-	- - -	-3-2-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	2.50
56-	42.4483-	107.9206-	2-	15-		0-W14299-	10/16/77-	13-	21-	-	-	-	-	-	-	27-4-	-4-6-	- - -	-3-2-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	4.33
56-	42.4481-	107.9231-	2-	15-		0-W14300-	10/16/77-	13-	21-	-	-	-	-	-	-	23-4-	-4-1-	- - -	-3-2-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	4.58
56-	42.4467-	107.9039-	2-	15-		0-W14301-	10/16/77-	14-	21-	-	-	-	-	-	-	23-4-	-4-6-	- - -	-3-2-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	7.31
56-	42.4731-	107.9094-	2-	15-		0-W14302-	10/16/77-	14-	23-	-	-	-	-	-	-	10-4-	-4-1-	- - -	-3-2-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	2.61
56-	42.2433-	107.5403-	2-	15-		0-W14303-	10/18/77-	12-	18-	-C-	-	-	-	-	-	23-3-4-4-6-	- - -	-4-2-4-2-	-2-	-	-	-	-	-	-	-	-	-	-	-	-	2.92
56-	42.2081-	107.5147-	2-	15-		0-W14304-	10/18/77-	13-	20-	-	-	-	-	-	-	27-1-1-4-6-	- - -	-3-2-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	3.73
56-	42.1875-	107.5319-	2-	15-		0-W14305-	10/18/77-	13-	21-	-	-	-	-	-	-	13-1-1-4-6-	- - -	-3-2-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	3.03
56-	42.1967-	107.5514-	2-	15-		0-W14306-	10/18/77-	13-	21-	-	-	-	-	-	-	27-1-1-4-6-	- - -	-3-2-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	3.78
56-	42.1564-	107.5042-	2-	15-		0-W14307-	10/18/77-	14-	21-	-	-	-	-	-	-	13-1-1-4-1-	- - -	-3-2-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	3.24
56-	42.1858-	107.5814-	2-	15-		0-W14308-	10/18/77-	15-	-	-	-	-	-	-	-	23-1-1-4-1-	- - -	-4-2-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	5.29
56-	42.2253-	107.5975-	2-	15-		0-W14309-	10/18/77-	16-	22-	-	-	-	-	-	-	27-1-1-4-6-	- - -	-4-2-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	8.26
56-	42.2322-	107.6036-	2-	12-		0-W14310-	10/18/77-	16-	21-	11.0-	-	-	-	-	-	37-1-1-4-7-	- - -	-4-3-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	9.74
56-	42.2658-	107.5528-	2-	15-		0-W14311-	10/20/77-	16-	13-	-	-	-	-	-	-	15-1-6-4-6-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	2.83
56-	42.2650-	107.5547-	2-	15-		0-W14312-	10/20/77-	12-	13-	-	-	-	-	-	-	23-1-1-4-6-	- - -	-3-2-4-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	3.22
56-	42.2578-	107.5064-	2-	15-		0-W14313-	10/20/77-	13-	13-	-	-	-	-	-	-	19-1-6-4-6-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	3.59
56-	42.2783-	107.5306-	2-	15-		0-W14314-	10/20/77-	15-	18-	-	-	-	-	-	-	27-1-6-4-6-	-1-	-2-3-3-4-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	3.40
56-	42.3022-	107.5472-	2-	11-		0-W14315-	10/20/77-	16-	15-	10.5-	C-	-	6.4-	145-		8-1-6-4-7-2-	3-1-	2-3-3-4-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	6.66
56-	42.2639-	107.4606-	2-	15-		0-W14316-	10/20/77-	16-	17-	-	-	-	-	-	-	18-1-1-4-6-	-1-	-2-3-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	3.19
56-	42.3514-	107.4631-	2-	15-		0-W14318-	10/20/77-	17-	14-	-	-	-	-	-	-	23-1-4-5-4-	-1-	-2-3-3-4-2-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	3.54
56-	42.3681-	107.4325-	2-	15-		0-W14319-	10/20/77-	18-	13-	-	-	-	-	-	-	17-1-6-4-6-	-1-	-2-3-3-3-3-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	3.37
56-	42.4181-	106.5503-	2-	12-		0-W14320-	10/25/77-	11-	16-	6.0-	-	-	6.8-	240-		38-1-6-5-6-2-	2-2-	2-3-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	4.09
56-	42.4050-	106.5028-	2-	15-		0-W14321-	10/25/77-	12-	16-	-	-	-	-	-	-	16-1-1-4-6-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	3.40
56-	42.4056-	106.5047-	2-	12-		0-W14322-	10/25/77-	12-	16-	9.5-	-	-	6.5-	330-		20-1-1-5-6-2-	3-1-	2-4-2-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	3.44
56-	42.4942-	106.5739-	2-	15-		0-W14323-	10/25/77-	14-	20-	-	-	-	-	-	-	65-1-6-5-6-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	3.57
56-	42.4900-	106.5906-	2-	15-		0-W14324-	10/25/77-	14-	21-	-	-	-	-	-	-	9-1-1-5-6-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	5.27
56-	42.4675-	106.5825-	2-	15-		0-W14325-	10/25/77-	15-	19-	-	-	-	-	-	-	65-1-1-4-6-	-1-	-2-3-2-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	3.47
56-	42.4344-	106.6231-	2-	12-		0-W14326-	10/25/77-	-	19-	8.0-	-	-	6.8-	265-		11-1-6-3-6-2-	2-1-	2-3-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	4.93
56-	42.4131-	106.6222-	2-	15-		0-W14327-	10/25/77-	17-	19-	-	-	-	-	-	-	18-1-1-4-6-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	3.54
56-	42.2317-	106.7953-	2-	15-		0-W14328-	10/26/77-	10-	15-	-	-	-	-	-	-	23-3-6-4-6-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	2.74
56-	42.2281-	106.7881-	2-	12-		0-W14329-	10/26/77-	10-	16-	9.0-	-	-	6.6-	575-		11-3-6-3-7-3-	3-1-	-2-3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	4.68
56-	42.2483-	106.7814-	2-	15-		0-W14330-	10/26/77-	11-	15-	-	-	-	-	-	-	5-3-6-3-6-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	3.29
56-	42.2469-	106.7219-	2-	12-		0-W14331-	10/26/77-	11-	16-	10.5-	-	-	6.8-	337-		37-3-6-4-6-2-	2-1-	2-3-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	5.35
56-	42.1972-	106.8097-	2-	11-		0-W14333-	10/26/77-	12-	16-	11.0-	-	-	6.8-	368-		27-3-6-4-7-3-	3-1-	-4-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	2.09
56-	42.1947-	106.7686-	2-	11-		0-W14335-	10/26/77-	13-	19-	13.5-	-	-	7.2-	630-		27-1-4-5-6-2-	2-1-	-3-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	5.15
56-	42.1656-	106.7628-	2-	15-		0-W14336-	10/26/77-	13-	19-	-	-	-	-	-	-	23-1-1-4-1-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	3.16
56-	42.1828-	106.7817-	2-	12-		0-W14337-	10/26/77-	13-	19-	-	-	-	7.1-	625-		9-3-6-	-	-3-3-1-2-4-4-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	3.71
56-	42.1639-	106.7419-	2-	12-		0-W14338-	10/26/77-	14-	19-	12.0-	-	-	6.8-	248-		15-1-1-	-	- - - -	-2-3-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	3.89
56-	42.1400-	106.7181-	2-	12-		0-W14339-	10/26/77-	15-	20-	13.5-	-	-	7.1-	700-		18-3-6-5-8-2-	3-2-2-2-4-3-	3-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	3.83
56-	42.1383-	106.7031-	2-	12-		0-W14340-	10/26/77-	15-	20-	11.5-	-	-	6.5-	243-		27-1-1-5-6-2-	3-2-2-2-4-	3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	7.24
56-	42.8506-	106.0181-	2-	15-		0-W14341-	10/27/77-	12-	19-	-	-	-	-	-	-	11-1-	-4-6-	- - -	-4-2-3-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	2.55
56-	42.2489-	106.6533-	2-	15-		0-W14342-	10/28/77-	11-	19-	-	-	-	-	-	-	13-1-1-4-6-	- - -	-3-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	-	3.77

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

(2)

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
56-42.6944-107.4114-2-15-						0-W14289	-5	-5	-5	24	-20	-15	23	-10	-15	2	43
56-42.6869-107.3756-2-15-						0-W14290	-5	-5	-5	18	-20	16	14	-10	-15	2	41
56-42.6536-107.4236-2-15-						0-W14291	-5	-5	-5	21	-20	-15	19	-10	-15	2	36
56-42.6911-107.4747-2-15-						0-W14292	-5	-5	-5	17	-20	-15	13	-10	-15	2	35
56-42.4447-107.9797-2-15-						0-W14293	-5	-5	-5	21	-20	-15	24	-10	-15	2	25
56-42.4769-107.9856-2-15-						0-W14294	-5	-5	-5	16	-20	15	15	-10	-15	2	22
56-42.4853-107.9942-2-15-						0-W14295	-5	-5	-5	19	-20	-15	17	-10	-15	2	22
56-42.4794-107.9786-2-15-						0-W14296	-5	-5	-5	20	-20	20	15	-10	-15	2	18
56-42.4617-107.9633-2-15-						0-W14297	-5	-5	-5	-10	-20	-15	12	-10	-15	2	22
56-42.4725-107.9561-2-15-						0-W14298	-5	-5	-5	-10	-20	-15	10	-10	-15	2	22
56-42.4483-107.9206-2-15-						0-W14299	-5	-5	-5	14	-20	18	14	-10	-15	2	26
56-42.4481-107.9231-2-15-						0-W14300	-5	-5	-5	14	-20	-15	14	-10	-15	2	16
56-42.4467-107.9039-2-15-						0-W14301	-5	-5	-5	22	-20	-15	14	-10	-15	2	23
56-42.4731-107.9094-2-15-						0-W14302	-5	-5	-5	22	-20	-15	6	-10	-15	2	18
56-42.2433-107.5403-2-15-						0-W14303	-5	-5	-5	18	-20	-15	26	-10	-15	2	62
56-42.2081-107.5147-2-15-						0-W14304	-5	-5	-5	30	-20	20	26	-10	-15	2	37
56-42.1875-107.5319-2-15-						0-W14305	-5	-5	-5	24	-20	-15	14	-10	-15	2	28
56-42.1967-107.5514-2-15-						0-W14306	-5	-5	-5	21	-20	-15	13	-10	-15	2	27
56-42.1564-107.5042-2-15-						0-W14307	-5	-5	-5	14	-20	-15	14	-10	-15	3	35
56-42.1858-107.5814-2-15-						0-W14308	-5	-5	-5	21	-20	-15	15	-10	-15	2	22
56-42.2253-107.5975-2-15-						0-W14309	-5	-5	-5	-10	-20	-15	14	-10	-15	2	18
56-42.2322-107.6036-2-12-						0-W14310	-5	-5	-5	17	-20	17	22	-10	-15	2	34
56-42.2658-107.5528-2-15-						0-W14311	-5	-5	-5	14	-20	-15	11	-10	-15	2	33
56-42.2650-107.5547-2-15-						0-W14312	-5	-5	-5	14	-20	26	16	-10	-15	2	33
56-42.2578-107.5064-2-15-						0-W14313	-5	-5	-5	25	-20	-15	5	-10	-15	2	48
56-42.2783-107.5306-2-15-						0-W14314	-5	-5	-5	13	-20	-15	16	-10	-15	2	40
56-42.3022-107.5472-2-11-						0-W14315	-5	-5	-5	12	-20	-15	13	-10	-15	2	16
56-42.2639-107.4606-2-15-						0-W14316	-5	-5	-5	25	-20	22	20	-10	-15	2	33
56-42.3514-107.4631-2-15-						0-W14318	-5	5	-5	21	-20	-15	11	-10	-15	2	52
56-42.3681-107.4325-2-15-						0-W14319	-5	-5	-5	19	-20	-15	14	-10	-15	2	32
56-42.4181-106.5503-2-12-						0-W14320	-5	-5	-5	25	-20	-15	14	-10	-15	3	34
56-42.4050-106.5028-2-15-						0-W14321	-5	-5	-5	21	-20	15	14	-10	-15	2	33
56-42.4056-106.5047-2-12-						0-W14322	-5	-5	-5	20	-20	-15	11	-10	-15	2	31
56-42.4942-106.5739-2-15-						0-W14323	-5	-5	-5	24	-20	-15	18	-10	-15	2	35
56-42.4900-106.5906-2-15-						0-W14324	-5	-5	-5	31	-20	39	12	-10	-15	2	43
56-42.4675-106.5825-2-15-						0-W14325	-5	-5	-5	20	-20	22	12	-10	-15	3	50
56-42.4344-106.6231-2-12-						0-W14326	-5	-5	-5	12	-20	-15	7	-10	-15	2	23
56-42.4131-106.6222-2-15-						0-W14327	-5	-5	-5	20	-20	-15	13	-10	-15	2	31
56-42.2317-106.7953-2-15-						0-W14328	-5	-5	-5	13	-20	-15	18	-10	-15	2	32
56-42.2281-106.7881-2-12-						0-W14329	-5	-5	-5	15	-20	15	13	-10	-15	2	31
56-42.2483-106.7814-2-15-						0-W14330	-5	-5	-5	14	-20	-15	18	-10	-15	2	26
56-42.2469-106.7219-2-12-						0-W14331	-5	-5	-5	14	-20	-15	5	-10	-15	2	24
56-42.1972-106.8097-2-11-						0-W14333	-5	-5	-5	18	-20	-15	5	-10	-15	1	18
56-42.1947-106.7686-2-11-						0-W14335	-5	-5	-5	13	-20	25	11	-10	-15	2	31
56-42.1656-106.7628-2-15-						0-W14336	-5	-5	-5	18	-20	-15	18	-10	-15	2	34
56-42.1828-106.7817-2-12-						0-W14337	-5	-5	-5	17	-20	-15	-5	-10	-15	2	31
56-42.1639-106.7419-2-12-						0-W14338	-5	-5	-5	17	-20	-15	9	-10	-15	2	25
56-42.1400-106.7181-2-12-						0-W14339	-5	-5	-5	18	-20	-15	14	-10	-15	2	19
56-42.1383-106.7031-2-12-						0-W14340	-5	-5	-5	19	-20	-15	14	-10	-15	2	25
56-42.8506-106.0181-2-15-						0-W14341	-5	-5	-5	27	-20	-15	10	-10	-15	2	36
56-42.2489-106.6533-2-15-						0-W14342	-5	-5	-5	22	-20	-15	8	-10	-15	2	19

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

DOE SAMPLE NUMBER						LAB SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
56-42.6944-107.4114-2-15-						0-W14289	59480	-0.04	701	28930	56	-74	6.0	38	2.6	4	0.8	12220	5.4	16650	34	0.2
56-42.6869-107.3756-2-15-						0-W14290	62220	-0.05	692	20690	68	-79	7.3	48	2.8	3	1.0	13860	5.4	20880	40	0.3
56-42.6536-107.4236-2-15-						0-W14291	55660	-0.05	519	12780	73	-89	6.2	38	2.3	3	0.9	11750	8.1	18890	44	0.3
56-42.6911-107.4747-2-15-						0-W14292	58720	-0.06	806	19960	56	60	5.1	31	1.3	4	0.9	11820	7.7	18340	34	0.2
56-42.4447-107.9797-2-15-						0-W14293	58730	-0.04	750	14720	72	-77	5.9	40	2.3	3	1.0	12590	8.4	15010	45	0.3
56-42.4769-107.9856-2-15-						0-W14294	54030	-0.05	770	17470	172	-86	5.6	38	1.9	4	1.0	14020	19.3	13100	100	0.4
56-42.4853-107.9942-2-15-						0-W14295	50140	-0.05	626	15350	59	-67	4.9	37	-1.0	3	0.7	12990	11.3	15340	40	0.3
56-42.4794-107.9786-2-15-						0-W14296	53430	-0.04	740	20990	170	-77	5.3	54	1.7	5	1.0	15180	24.3	13070	103	0.6
56-42.4617-107.9633-2-15-						0-W14297	53400	-0.04	654	18080	124	-79	6.5	52	1.6	5	1.0	17050	20.1	13830	79	0.5
56-42.4725-107.9561-2-15-						0-W14298	48280	-0.04	665	12620	46	-74	3.8	21	1.2	2	0.7	6514	7.3	17290	28	0.2
56-42.4483-107.9206-2-15-						0-W14299	62780	-0.05	737	13740	59	-75	4.4	18	-1.0	3	0.6	7741	7.9	17500	36	0.3
56-42.4481-107.9231-2-15-						0-W14300	51910	-0.04	666	17920	96	234	4.7	41	1.0	4	0.8	11600	19.1	14430	65	0.4
56-42.4467-107.9039-2-15-						0-W14301	61230	-0.05	523	14550	149	-86	6.2	35	1.4	5	1.0	15200	20.2	15130	95	0.5
56-42.4731-107.9094-2-15-						0-W14302	51230	-0.04	559	17000	39	-78	3.6	22	-0.7	2	0.7	5711	5.2	15160	24	0.2
56-42.2433-107.5403-2-15-						0-W14303	43150	-0.05	550	37310	37	1781	3.2	30	2.9	3	0.6	7559	4.8	15180	21	0.2
56-42.2081-107.5147-2-15-						0-W14304	64710	-0.05	515	5862	59	-49	6.0	53	4.0	4	0.8	10680	5.2	17760	38	0.3
56-42.1875-107.5319-2-15-						0-W14305	54630	-0.04	551	6898	59	-60	5.2	38	3.3	4	0.8	9717	7.9	18450	37	0.3
56-42.1967-107.5514-2-15-						0-W14306	55420	0.10	613	6790	66	-80	6.0	31	1.8	3	0.7	8300	7.8	17850	35	0.3
56-42.1564-107.5042-2-15-						0-W14307	53880	-0.05	474	5703	41	-45	4.5	23	2.2	3	0.7	7648	4.7	16200	23	0.2
56-42.1858-107.5814-2-15-						0-W14308	34910	-0.03	383	2681	144	-40	3.7	17	1.8	5	0.6	5291	10.9	12030	87	0.3
56-42.2253-107.5975-2-15-						0-W14309	33400	-0.04	350	2035	261	-36	3.6	42	2.3	9	1.5	6611	32.2	11550	163	0.7
56-42.2322-107.6036-2-12-						0-W14310	66970	-0.06	393	8968	86	-89	7.0	27	2.3	3	0.8	9257	5.5	18270	49	0.3
56-42.2658-107.5528-2-15-						0-W14311	51610	-0.05	498	10070	39	-50	4.5	23	2.6	3	0.7	7901	5.2	15480	24	0.2
56-42.2650-107.5547-2-15-						0-W14312	57200	-0.04	587	20150	48	-57	5.4	37	3.0	4	0.8	10880	4.5	17310	29	0.3
56-42.2578-107.5064-2-15-						0-W14313	48870	-0.06	508	30830	47	692	6.6	38	3.4	3	0.8	15160	4.3	15170	29	0.3
56-42.2783-107.5306-2-15-						0-W14314	51170	-0.05	412	5023	41	-54	5.8	33	2.4	3	0.6	7365	5.1	18180	23	0.2
56-42.3022-107.5472-2-11-						0-W14315	44530	-0.05	469	6281	56	-54	3.3	22	1.3	5	0.6	4200	11.2	16920	32	0.4
56-42.2639-107.4606-2-15-						0-W14316	57480	-0.05	459	7052	54	-52	5.3	43	3.1	4	0.7	10910	5.3	15230	33	0.3
56-42.3514-107.4631-2-15-						0-W14318	47090	-0.05	385	39090	46	61	5.9	40	2.8	3	0.7	10980	5.5	17410	27	0.3
56-42.3681-107.4325-2-15-						0-W14319	46820	-0.04	564	6333	58	-65	5.0	26	1.6	4	0.7	8658	10.0	14120	31	0.3
56-42.4181-106.5503-2-12-						0-W14320	50610	-0.05	747	5208	39	-51	4.2	27	2.3	4	0.7	10030	5.2	12560	25	0.2
56-42.4050-106.5028-2-15-						0-W14321	55980	-0.04	969	38660	52	-40	5.3	40	3.3	4	0.5	10940	4.6	12090	29	0.2
56-42.4056-106.5047-2-12-						0-W14322	56280	-0.06	852	18700	62	-77	6.3	41	3.3	3	1.0	13200	7.2	13530	37	0.3
56-42.4942-106.5739-2-15-						0-W14323	58820	-0.05	795	18990	52	-61	6.6	41	2.7	3	0.7	11570	4.1	15630	29	0.2
56-42.4900-106.5906-2-15-						0-W14324	56030	-0.06	756	80280	48	180	5.7	41	3.0	3	0.7	10580	4.3	15410	34	0.2
56-42.4675-106.5825-2-15-						0-W14325	56450	-0.05	774	17160	50	-53	6.2	47	2.8	4	0.7	12320	5.8	17610	29	0.3
56-42.4344-106.6231-2-12-						0-W14326	48210	-0.04	608	10910	78	-76	4.6	31	1.2	4	0.8	7482	14.5	19070	47	0.4
56-42.4131-106.6222-2-15-						0-W14327	50920	-0.05	572	9905	54	164	5.5	30	1.6	2	0.7	8223	7.5	17550	30	0.3
56-42.2317-106.7953-2-15-						0-W14328	50550	-0.04	612	13660	37	-63	3.0	14	1.1	2	0.6	5998	3.5	19940	22	0.2
56-42.2281-106.7881-2-12-						0-W14329	49780	-0.04	436	34140	84	-79	6.1	29	2.2	4	0.7	14970	9.5	20320	50	0.3
56-42.2483-106.7814-2-15-						0-W14330	50450	-0.04	520	8580	74	-74	5.6	27	1.5	3	0.9	11760	10.8	16180	43	0.3
56-42.2469-106.7219-2-12-						0-W14331	48940	-0.05	687	14110	85	-84	5.4	29	-0.9	4	0.7	7217	15.1	19310	43	0.4
56-42.1972-106.8097-2-11-						0-W14333	31780	-0.05	449	44580	26	-54	3.1	23	-0.9	3	0.5	5477	8.8	12130	16	0.2
56-42.1947-106.7686-2-11-						0-W14335	45700	-0.04	462	33180	55	-59	3.7	28	2.0	4	0.7	7062	12.0	17540	38	0.3
56-42.1656-106.7628-2-15-						0-W14336	52820	-0.04	587	28410	50	-73	5.3	30	1.9	3	0.8	9678	5.3	15930	34	0.3
56-42.1828-106.7817-2-12-						0-W14337	44440	-0.05	402	24760	46	-73	5.1	22	1.7	3	0.7	6551	7.8	15660	28	0.3
56-42.1639-106.7419-2-12-						0-W14338	47090	-0.05	541	9383	46	-63	3.5	20	-1.0	3	0.6	7084	8.7	18350	33	0.3
56-42.1400-106.7181-2-12-						0-W14339	49090	-0.04	641	13310	51	-68	3.7	21	1.2	3	0.7	6305	7.8	18620	31	0.3
56-42.1383-106.7031-2-12-						0-W14340	49360	-0.05	543	9163	113	-80	6.5	41	1.5	6	1.0	12610	25.4	15490	71	0.7
56-42.8506-106.0181-2-15-						0-W14341	53980	-0.05	458	15160	39	-66	6.1	36	2.7	3	0.7	10300	4.0	14420	24	0.3
56-42.2489-106.6533-2-15-						0-W14342	42890	-0.05	471	7058	43	-59	3.5	24	-1.0	3	0.7	6189	12.1	16300	29	0.3

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

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
56-42.6944-107.4114-2-15-						0-W14289	18010	460	11950	34	-1	5.9	3.7	-248		-1	10.1	2552	57	2.3	46	0.305
56-42.6869-107.3756-2-15-						0-W14290	14810	460	11880	47	-1	6.6	4.0	-277	-1	-1	12.0	3119	52	2.4	54	0.252
56-42.6536-107.4236-2-15-						0-W14291	13890	467	13470	27	-1	5.2	4.2	-300	-1	-1	11.1	2882	64	3.4	-28	0.301
56-42.6911-107.4747-2-15-						0-W14292	16320	420	12250	42	-2	5.4	3.4	456	-1	-1	11.7	3229	65	2.0	-30	0.295
56-42.4447-107.9797-2-15-						0-W14293	10400	405	12720	32	-1	6.0	5.4	-261	-1	-1	15.3	3228	48	3.2	75	0.227
56-42.4769-107.9856-2-15-						0-W14294	8561	474	14730	-14	-1	4.4	8.5	-282	-1	-1	51.7	4203	87	6.3	32	0.110
56-42.4853-107.9942-2-15-						0-W14295	8226	394	13380	-18	-1	4.7	2.8	374	-1	-1	9.2	4188	84	-1.2	-25	0.313
56-42.4794-107.9786-2-15-						0-W14296	8693	620	14890	-13	-1	7.0	9.4	-259	-1	1	43.5	6262	78	4.4	35	0.142
56-42.4617-107.9633-2-15-						0-W14297	9967	442	13620	31	-1	6.1	7.8	-263	-1	-1	31.4	4592	76	4.5	62	0.156
56-42.4725-107.9561-2-15-						0-W14298	6192	241	13210	30	-1	3.2	3.0	-221			7.9	1611	40	1.8	-15	0.316
56-42.4483-107.9206-2-15-						0-W14299	7012	283	17690	-17	-1	3.8	2.6	338	-1	-1	15.8	3067	43	2.4	-24	0.274
56-42.4481-107.9231-2-15-						0-W14300	7396	364	15360	26	-1	5.0	5.4	462	1	-1	27.1	4824	61	3.9	43	0.169
56-42.4467-107.9039-2-15-						0-W14301	7033	436	15370	35	-1	5.5	8.5	-280	-1	-1	51.4	4425	56	4.6	79	0.142
56-42.4731-107.9094-2-15-						0-W14302	7723	203	15880	20	-1	3.4	2.7	783	-1		11.2	2099	35	1.5	27	0.233
56-42.2433-107.5403-2-15-						0-W14303	23660	212	9018	-17	-2	3.8	2.1	387	-1	-1	6.1	2199	78	2.0	48	0.479
56-42.2081-107.5147-2-15-						0-W14304	12600	281	4809	49	-2	6.1	4.1	-201	-1	-1	11.7	3289	78	2.4	67	0.319
56-42.1875-107.5319-2-15-						0-W14305	10030	261	7680	39	-1	5.6	4.0	-208	-1	-1	11.8	3012	50	2.7	46	0.257
56-42.1967-107.5514-2-15-						0-W14306	6892	371	10570	24	-1	4.2	4.0	-273	-1	-1	15.2	2427	44	2.8	49	0.249
56-42.1564-107.5042-2-15-						0-W14307	9892	262	5087	30	-2	4.4	3.1	-178	-1	-1	9.3	2283	62	2.5	-24	0.348
56-42.1858-107.5814-2-15-						0-W14308	3821	156	4905	22	-1	2.8	7.3	-139	-1	1	50.5	2154	35	4.3	36	0.105
56-42.2253-107.5975-2-15-						0-W14309	4404	154	2812	32	-1	3.9	18.8	-151	-1	1	90.3	3103	42	5.2	24	0.091
56-42.2322-107.6036-2-12-						0-W14310	9081	232	11900	38	-2	5.0	5.2	-279	-1	-1	27.4	2446	46	4.0	50	0.355
56-42.2658-107.5528-2-15-						0-W14311	12090	252	6903	32	-2	4.4	2.4	222	-1	-1	6.8	2840	58	1.8	-31	0.416
56-42.2650-107.5547-2-15-						0-W14312	21170	245	7853	40	-1	5.4	3.5	-192		-1	9.0	2678	83	2.0	57	0.358
56-42.2578-107.5064-2-15-						0-W14313	28030	628	19600	-19	-2	5.7	3.6	-392	-1	-1	9.4	1722	53	-1.3	-69	0.382
56-42.2783-107.5306-2-15-						0-W14314	8727	226	4597	40	-1	4.2	3.2	-213	-1	-1	8.0	3176	59	2.4	59	0.425
56-42.3022-107.5472-2-11-						0-W14315	5501	141	8523	41	-1	3.1	2.8	-169	-1	-1	16.7	2771	29	3.8	30	0.399
56-42.2639-107.4606-2-15-						0-W14316	11220	326	4992	38	-1	5.7	3.5	-212		-1	10.6	2983	64	1.8	80	0.301
56-42.3514-107.4631-2-15-						0-W14318	23530	318	6719	51	-1	6.1	3.4	-239	-1	-1	7.6	2581	52	1.7	70	0.466
56-42.3681-107.4325-2-15-						0-W14319	6657	347	8210	39	-1	3.7	4.1	-234	-1	-1	12.8	3016	57	2.8	49	0.263
56-42.4181-106.5503-2-12-						0-W14320	6351	342	5710	-18	-2	4.1	2.8	-202	-1	-1	7.3	2408	67	3.0	-29	0.560
56-42.4050-106.5028-2-15-						0-W14321	11890	210	2658	25	-1	5.8	3.5	230		-1	8.7	2991	150	2.5	69	0.391
56-42.4056-106.5047-2-12-						0-W14322	11670	527	7251	-18	-2	6.2	4.3	-316	-1	-1	11.8	2603	79	2.3	103	0.292
56-42.4942-106.5739-2-15-						0-W14323	21180	229	5548	41	-2	5.8	3.4	-229	-1	-1	9.7	3721	122	2.8	-24	0.368
56-42.4900-106.5906-2-15-						0-W14324	18400	239	6576	-20	3	5.5	2.3	-205	-1	-1	10.1	3060	223	2.2	-31	0.522
56-42.4675-106.5825-2-15-						0-W14325	18710	264	7060	39	-1	6.3	3.5	-196	1	-1	12.8	3312	114	3.0	60	0.271
56-42.4344-106.6231-2-12-						0-W14326	5820	250	12920	46	-1	4.2	4.6	-241	-1	-1	15.7	2715	41	2.9	-32	0.314
56-42.4131-106.6222-2-15-						0-W14327	8039	295	11690	32	-1	3.7	3.3	-273	-1	-1	9.9	3103	51	1.9	36	0.358
56-42.2317-106.7953-2-15-						0-W14328	8570	217	12960	32	-1	3.1	2.0	-189	-1	-1	6.2	1897	37	-1.0	-23	0.442
56-42.2281-106.7881-2-12-						0-W14329	13410	679	12110	52	-1	5.5	4.4	-286	1	-1	14.8	3911	69	3.5	51	0.316
56-42.2483-106.7814-2-15-						0-W14330	6864	324	12750	38	-1	4.6	4.3	-243	-1	-1	15.6	2657	46	3.2	41	0.211
56-42.2469-106.7219-2-12-						0-W14331	10400	212	13210	35	-1	3.9	5.3	-248	-1	-1	21.3	3058	47	4.1	-21	0.251
56-42.1972-106.8097-2-11-						0-W14333	9016	249	6856	-15	-1	2.8	-2.0	-184	-1	-1	5.0	2262	31	-1.0	-24	0.418
56-42.1947-106.7686-2-11-						0-W14335	9920	176	9642	33	-1	4.0	4.0	384	-1	-1	12.6	2777	40	2.8	34	0.409
56-42.1656-106.7628-2-15-						0-W14336	12430	240	11090	35	-1	4.9	3.4	-234	-1	-1	11.0	2252	45	2.2	-24	0.287
56-42.1828-106.7817-2-12-						0-W14337	9183	199	10670	25	-1	3.3	3.3	-229	-1	-1	9.8	2505	39	2.2	-33	0.379
56-42.1639-106.7419-2-12-						0-W14338	7870	249	10460	-16	-2	3.5	2.1	297	-1	-1	12.7	2797	45	2.3	-41	0.306
56-42.1400-106.7181-2-12-						0-W14339	7187	227	13720	33	-1	3.0	4.1	-207	-1		20.1	2077	37	2.7	-10	0.191
56-42.1383-106.7031-2-12-						0-W14340	7945	397	11750	49	-2	6.1	7.7	-274	-1	-1	48.0	3562	58	7.8	-30	0.151
56-42.8506-106.0181-2-15-						0-W14341	18120	244	8073	34	-1	5.1	3.0	-228	-1	-1	6.2	2604	70	1.6	-20	0.411
56-42.2489-106.6533-2-15-						0-W14342	6493	262	9195	-16	-1	3.3	2.9	-197	-1	-1	10.5	2787	37	2.7	-26	0.359

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
							TIME SAMPLED																									
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (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
56-	42.2347-	106.6406-	2-	11-		0-W14343-	10/28/77-	12-	18-	7.5-	-	-	7.2-	295-		13-	3-	6-	5-	6-	-	-	-	-4-	3-	4-	1-	-1-	-	-	-	-	3.64
56-	42.1719-	106.6697-	2-	11-		0-W14344-	10/28/77-	13-	15-	10.0-	-	-	6.3-	83-		37-	3-	1-	3-	7-	-	-	-	-1-	3-	5-	2-	-1-	-	-	-	-	6.01
56-	42.1461-	106.6767-	2-	12-		0-W14345-	10/28/77-	14-	17-	11.5-	-	-	6.5-	123-		55-	3-	6-	3-	6-	3-	2-	1-	2-	4-	3-	5-	2-	-1-	-	-	-	8.70
56-	42.1347-	106.6847-	2-	12-		0-W14346-	10/28/77-	14-	18-	11.5-	-	-	6.3-	88-		23-	3-	6-	3-	6-	2-	3-	1-	2-	2-	3-	5-	2-	-1-	-	-	-	5.12
56-	42.1583-	106.7122-	2-	11-		0-W14347-	10/28/77-	16-	18-	10.5-	-	-	6.6-	130-		18-	3-	1-	3-	7-	-	-	-	-4-	3-	4-	2-	-1-	-	-	-	-	5.38
56-	42.0289-	106.9639-	2-	15-		0-W14348-	10/29/77-	8-	9-	-	-	-	-	-		13-	1-	1-	4-	6-	-	-	-	-3-	3-	3-	2-	-1-	-	-	-	-	2.38
56-	42.0333-	106.9264-	2-	15-		0-W14349-	10/29/77-	8-	9-	-	-	-	-	-		11-	1-	4-	4-	6-	-	-	-	-3-	2-	3-	2-	-1-	-	-	-	-	6.42
56-	42.8772-	106.6550-	2-	15-		0-W14350-	10/25/77-	18-	18-	-	-	-	-	-		12-	1-	2-	-	-	-1-	-	-	-3-	3-	3-	1-	-1-	-	-	-	-	6.52
56-	42.0531-	106.9350-	2-	15-		0-W14351-	10/29/77-	9-	12-	-	-	-	-	-		9-	1-	4-	4-	1-	-	-	-	-3-	2-	3-	3-	-1-	-	-	-	-	3.16
56-	42.0461-	106.9633-	2-	15-		0-W14352-	10/29/77-	9-	12-	-	-	-	-	-		9-	1-	4-	4-	6-	-	-	-	-4-	2-	3-	3-	-1-	-	-	-	-	3.21
56-	42.0569-	106.9714-	2-	15-		0-W14353-	10/29/77-	9-	12-	-	-	-	-	-		14-	1-	1-	4-	6-	-	-	-	-4-	2-	3-	3-	-1-	-	-	-	-	4.84
56-	42.0631-	106.9981-	2-	11-		0-W14354-	10/29/77-	10-	12-	-	-	-	7.1-	875-		11-	1-	4-	4-	7-	-	-	-	-4-	3-	3-	3-	-1-	-	-	-	-	3.68
56-	42.0433-	107.0389-	2-	15-		0-W14355-	10/29/77-	10-	16-	-	-	-	-	-		11-	1-	4-	4-	6-	-	-	-	-4-	2-	3-	2-	-1-	-	-	-	-	3.02
56-	42.0458-	107.0378-	2-	15-		0-W14356-	10/29/77-	10-	16-	-	-	-	-	-		12-	1-	4-	4-	6-	-	-	-	-4-	2-	3-	2-	-1-	-	-	-	-	2.70
56-	42.0422-	107.0706-	2-	15-		0-W14357-	10/29/77-	11-	18-	-	-	-	-	-		13-	1-	1-	4-	1-	-	-	-	-4-	3-	4-	2-	-1-	-	-	-	-	3.17
56-	42.0194-	107.0800-	2-	15-		0-W14358-	10/29/77-	11-	18-	-	-	-	-	-		10-	1-	4-	4-	1-	-	-	-	-3-	3-	4-	2-	-1-	-	-	-	-	4.16
56-	42.0111-	107.0639-	2-	15-		0-W14359-	10/29/77-	12-	18-	-	-	-	-	-		12-	1-	-	4-	6-	-	-	-	-4-	2-	2-	2-	-1-	-	-	-	-	2.96
56-	42.0103-	107.0464-	2-	15-		0-W14361-	10/29/77-	12-	20-	-	-	-	-	-		20-	1-	4-	4-	1-	-	-	-	-3-	3-	2-	2-	-1-	-	-	-	-	2.99
56-	42.0675-	107.0639-	2-	15-		0-W14362-	10/29/77-	15-	18-	-	-	-	-	-		13-	1-	-	4-	7-	-	-	-	-4-	2-	3-	2-	-1-	-	-	-	-	4.00
56-	42.1206-	107.0694-	2-	15-		0-W14364-	10/29/77-	15-	19-	-	-	-	-	-		11-	1-	-	4-	1-	-	-	-	-4-	2-	3-	2-	-1-	-	-	-	-	3.69
56-	42.1078-	107.0261-	2-	15-		0-W14365-	10/29/77-	16-	19-	-	-	-	-	-		9-	1-	-	4-	7-	-	-	-	-4-	2-	3-	2-	-1-	-	-	-	-	3.07
56-	42.2136-	106.8681-	2-	15-		0-W14366-	10/30/77-	12-	12-	-	-	-	-	-		11-	3-	6-	4-	1-	-	-	-	-3-	3-	3-	2-	-1-	-	-	-	-	3.21
56-	42.2303-	106.8706-	2-	15-		0-W14367-	10/30/77-	12-	12-	-	-	-	-	-		32-	3-	6-	4-	7-	-	-	-	-3-	2-	3-	2-	-1-	-	-	-	-	2.68
56-	42.3914-	107.0008-	2-	15-		0-W14368-	10/31/77-	10-	11-	-	-	-	-	-		11-	3-	6-	4-	6-	-1-	-	-	-3-	3-	2-	2-	-1-	-	-	-	-	2.41
56-	42.3839-	106.9700-	2-	15-		0-W14369-	10/31/77-	12-	12-	-	-	-	-	-		9-	3-	6-	4-	6-	-1-	-	-	-3-	2-	3-	2-	-1-	-	-	-	-	3.51
56-	42.4056-	106.9661-	2-	15-		0-W14370-	10/31/77-	11-	14-	-	-	-	-	-		10-	3-	6-	4-	6-	-	-	-	-4-	2-	2-	2-	-1-	-	-	-	-	2.58
56-	42.4189-	106.9622-	2-	15-		0-W14371-	10/31/77-	11-	14-	-	-	-	-	-		11-	3-	6-	7-	6-	-	-	-	-4-	3-	2-	2-	-1-	-	-	-	-	9.32
56-	42.4411-	106.9389-	2-	15-		0-W14372-	10/31/77-	12-	14-	-	-	-	-	-		13-	3-	6-	4-	1-	-	-	-	-3-	2-	3-	2-	-1-	-	-	-	-	3.02
56-	42.9028-	106.8375-	2-	15-		0-W14376-	10/26/77-	13-	20-	-	-	-	-	-		7-	1-	1-	5-	6-	-1-	-	-	-4-	3-	3-	1-	-1-	-	-	-	-	3.52
56-	42.8956-	106.8703-	2-	15-		0-W14377-	10/26/77-	13-	20-	-	-	-	-	-		14-	1-	6-	5-	1-	-1-	-	-	-3-	2-	-1-	1-	-1-	-	-	-	-	2.37
56-	42.9203-	106.8633-	2-	15-		0-W14378-	10/26/77-	14-	22-	-	-	-	-	-		15-	1-	6-	5-	6-	-1-	-	-	-3-	3-	3-	1-	-1-	-	-	-	-	2.69
56-	42.8972-	106.8811-	2-	12-		0-W14379-	10/26/77-	14-	22-	14.0-	-	-	8.4-	2190-		9-	1-	2-	6-	1-	2-	2-	1-	2-	4-	3-	2-	1-	-1-	-	-	-	2.55
56-	42.8922-	106.8814-	2-	15-		0-W14380-	10/26/77-	15-	22-	-	-	-	-	-		5-	1-	1-	5-	6-	-1-	-	-	-4-	2-	2-	1-	-1-	-	-	-	-	3.11
56-	42.9194-	106.8931-	2-	15-		0-W14381-	10/26/77-	15-	22-	-	-	-	-	-		9-	1-	1-	5-	6-	-1-	-	-	-4-	2-	2-	1-	-1-	-	-	-	-	2.21
56-	42.9181-	106.9483-	2-	15-		0-W14382-	10/26/77-	-	22-	-	-	-	-	-		18-	1-	1-	5-	6-	-1-	-	-	-3-	4-	2-	1-	-1-	-	-	-	-	3.63
56-	42.9133-	106.9914-	2-	15-		0-W14383-	10/26/77-	16-	22-	-	-	-	-	-		13-	1-	2-	5-	6-	-1-	-	-	-3-	3-	2-	1-	-1-	-	-	-	-	4.47
56-	42.9572-	106.8972-	2-	11-		0-W14384-	10/26/77-	17-	20-	13.0-	-	-	7.2-	590-		13-	1-	8-	6-	6-	2-	2-	1-	2-	4-	2-	3-	1-	-1-	-	-	-	3.72
56-	42.9900-	106.9308-	2-	15-		0-W14385-	10/26/77-	17-	19-	-	-	-	-	-		5-	4-	1-	5-	6-	-1-	-	-	-3-	2-	2-	1-	-1-	-	-	-	-	4.16
56-	42.9861-	106.9447-	2-	15-		0-W14386-	10/26/77-	18-	19-	-	-	-	-	-		16-	4-	-5-	6-	-1-	-	-	-	-4-	2-	2-	1-	-1-	-	-	-	-	3.11
56-	42.9686-	106.9758-	2-	15-		0-W14387-	10/26/77-	18-	17-	-	-	-	-	-		7-	1-	2-	5-	1-	-1-	-	-	-4-	2-	3-	1-	-1-	-	-	-	-	3.39
56-	42.9667-	106.9767-	2-	15-		0-W14388-	10/26/77-	18-	15-	-	-	-	-	-		9-	1-	1-	4-	6-	-1-	-	-	-3-	3-	2-	1-	-1-	-	-	-	-	3.33
56-	42.9878-	106.9667-	2-	15-		0-W14389-	10/26/77-	18-	16-	-	-	-	-	-		10-	1-	6-	5-	6-	-1-	-	-	-4-	2-	3-	1-	-1-	-	-	-	-	2.77
56-	42.9394-	106.7756-	2-	15-		0-W14391-	10/27/77-	11-	14-	-C-	-	-	-	-		13-	1-	1-	-	-	-1-	-	-	-4-	1-	2-	1-	-1-	-	-	-	-	4.17
56-	42.9533-	106.8089-	2-	15-		0-W14392-	10/27/77-	11-	14-	-	-	-	-	-		20-	1-	1-	5-	7-	-1-	-	-	-4-	2-	3-	1-	-1-	-	-	-	-	4.14
56-	42.1450-	107.6889-	2-	15-		0-W14393-	10/11/77-	12-	8-	-	-	-	-	-		24-	4-	-	4-	6-	-	-	-	-3-	2-	2-	1-	-1-	-	-	-	-	4.62
56-	42.1394-	107.6617-	2-	15-		0-W14394-	10/11/77-	12-	8-	-	-	-	-	-		22-	4-	-	4-	1-	-	-	-	-3-	3-	2-	1-	-1-	-	-	-	-	5.19
56-	42.1528-	107.6403-	2-	15-		0-W14395-	10/11/77-	13-	8-	-	-	-	-	-		18-	4-	-	4-	6-	-	-	-	-3-	2-	2-	1-	-1-	-	-	-	-	5.41
56-	42.1694-	107.6314-	2-	15-		0-W14396-	10/11/77-	13-	8-	-	-	-	-	-		27-	4-	-	4-	6-	-	-	-	-3-	3-	3-	1-	-1-	-	-	-	-	5.17
56-	42.1256-	107.7758-	2-	15-		0-W14397-	10/11/77-	13-	10-	-	-	-	-	-		22-	4-	-	4-	6-	-	-	-	-3-	2-	2-	1-	-1-	-	-	-	-	8.00
56-	42.1342-	107.8072-	2-	15-		0-W14398-	10/11/77-	14-	10-	-	-	-	-	-		27-	4-	-	4-	1-	-	-	-	-3-	2-	2-	1-	-1-	-	-	-	-	17.66
56-	42.1317-	107.8258-	2-	15-		0-W14399-	10/11/77-	14-	10-	-	-	-	-	-		27-	4-	-	4-	1-	-	-	-	-3-	2-	2-	1-	-1-	-	-	-	-	7.71

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE (Concentrations reported in weight parts per million (ppm))									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY (Concentrations in weight ppm)	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
56-42.2347-106.6406-2-11-						0-W14343	-5	-5	-5	14	-20	18	17	-10	-15	2	39
56-42.1719-106.6697-2-11-						0-W14344	-5	-5	-5	-10	-20	-15	18	-10	-15	2	24
56-42.1461-106.6767-2-12-						0-W14345	-5	-5	-5	17	-20	21	11	-10	-15	2	28
56-42.1347-106.6847-2-12-						0-W14346	-5	-5	-5	12	-20	-15	12	-10	-15	2	28
56-42.1583-106.7122-2-11-						0-W14347	-5	-5	-5	10	-20	-15	6	-10	-15	2	20
56-42.0289-106.9639-2-15-						0-W14348	-5	-5	-5	20	-20	-15	5	-10	-15	2	19
56-42.0333-106.9264-2-15-						0-W14349	-5	-5	-5	22	-20	-15	6	-10	-15	2	24
56-42.8772-106.6550-2-15-						0-W14350	-5	6	-5	12	-20	-15	18	-10	-15	2	20
56-42.0531-106.9350-2-15-						0-W14351	-5	-5	-5	13	-20	-15	7	-10	-15	2	19
56-42.0461-106.9633-2-15-						0-W14352	-5	-5	-5	18	-20	-15	9	-10	-15	2	24
56-42.0569-106.9714-2-15-						0-W14353	-5	10	-5	10	-20	-15	6	-10	-15	2	20
56-42.0631-106.9981-2-11-						0-W14354	-5	-5	-5	-10	-20	-15	6	-10	-15	1	10
56-42.0433-107.0389-2-15-						0-W14355	-5	5	-5	20	-20	-15	15	-10	-15	2	31
56-42.0458-107.0378-2-15-						0-W14356	-5	-5	-5	20	-20	-15	12	-10	19	2	21
56-42.0422-107.0706-2-15-						0-W14357	-5	-5	-5	14	-20	-15	5	-10	-15	2	28
56-42.0194-107.0800-2-15-						0-W14358	-5	-5	-5	43	-20	-15	18	-10	-15	2	26
56-42.0111-107.0639-2-15-						0-W14359	-5	-5	-5	15	-20	26	12	-10	-15	2	25
56-42.0103-107.0464-2-15-						0-W14361	-5	-5	-5	26	-20	-15	14	-10	-15	2	28
56-42.0675-107.0639-2-15-						0-W14362	-5	-5	-5	33	-20	26	32	-10	-15	3	30
56-42.1206-107.0694-2-15-						0-W14364	-5	5	-5	29	-20	19	18	-10	-15	2	33
56-42.1078-107.0261-2-15-						0-W14365	-5	-5	-5	28	-20	20	18	-10	-15	2	39
56-42.2136-106.8681-2-15-						0-W14366	-5	-5	-5	10	-20	-15	5	-10	-15	2	25
56-42.2303-106.8706-2-15-						0-W14367	-5	-5	-5	29	-20	-15	12	-10	-15	2	35
56-42.3914-107.0008-2-15-						0-W14368	-5	-5	-5	27	-20	-15	11	-10	-15	2	28
56-42.3839-106.9700-2-15-						0-W14369	-5	-5	-5	28	-20	-15	13	-10	-15	2	19
56-42.4056-106.9661-2-15-						0-W14370	-5	-5	-5	22	-20	-15	11	-10	-15	2	22
56-42.4189-106.9622-2-15-						0-W14371	-5	-5	-5	22	-20	36	22	-10	-15	2	44
56-42.4411-106.9389-2-15-						0-W14372	-5	-5	-5	50	-20	-15	27	-10	-15	2	40
56-42.9028-106.8375-2-15-						0-W14376	-5	-5	-5	-10	-20	-15	9	-10	-15	2	31
56-42.8956-106.8703-2-15-						0-W14377	-5	-5	-5	18	-20	21	-5	-10	-15	2	16
56-42.9203-106.8633-2-15-						0-W14378	-5	-5	-5	25	-20	-15	6	-10	-15	2	22
56-42.8972-106.8811-2-12-						0-W14379	-5	5	-5	18	-20	-15	9	-10	-15	2	28
56-42.8922-106.8814-2-15-						0-W14380	-5	-5	-5	20	-20	16	-5	-10	-15	2	31
56-42.9194-106.8931-2-15-						0-W14381	-5	-5	-5	13	-20	-15	5	-10	-15	2	22
56-42.9181-106.9483-2-15-						0-W14382	-5	-5	-5	25	-20	24	14	-10	-15	2	49
56-42.9133-106.9914-2-15-						0-W14383	-5	-5	-5	25	-20	27	16	-10	-15	3	27
56-42.9572-106.8972-2-11-						0-W14384	-5	-5	-5	23	-20	-15	10	-10	-15	2	39
56-42.9900-106.9308-2-15-						0-W14385	-5	-5	-5	16	-20	-15	10	-10	-15	2	39
56-42.9861-106.9447-2-15-						0-W14386	-5	-5	-5	19	-20	-15	14	-10	-15	2	33
56-42.9686-106.9758-2-15-						0-W14387	-5	-5	-5	15	-20	-15	9	-10	-15	2	36
56-42.9667-106.9767-2-15-						0-W14388	-5	-5	-5	19	-20	-15	6	-10	-15	2	26
56-42.9878-106.9667-2-15-						0-W14389	-5	-5	-5	25	-20	-15	18	-10	-15	2	43
56-42.9394-106.7756-2-15-						0-W14391	-5	-5	-5	24	-20	25	18	-10	-15	2	44
56-42.9533-106.8089-2-15-						0-W14392	-5	-5	-5	15	-20	-15	13	-10	-15	2	28
56-42.1450-107.6889-2-15-						0-W14393	-5	-5	-5	23	-20	-15	24	-10	-15	2	22
56-42.1394-107.6617-2-15-						0-W14394	-5	-5	-5	20	-20	28	29	-10	-15	2	34
56-42.1528-107.6403-2-15-						0-W14395	-5	-5	-5	20	-20	22	20	-10	18	2	38
56-42.1694-107.6314-2-15-						0-W14396	-5	-5	-5	14	-20	-15	26	-10	-15	2	24
56-42.1256-107.7758-2-15-						0-W14397	-5	-5	-5	22	-20	-15	27	-10	-15	2	30
56-42.1342-107.8072-2-15-						0-W14398	-5	-5	-5	-10	-20	-15	59	-10	-15	2	42
56-42.1317-107.8258-2-15-						0-W14399	-5	6	-5	19	-20	-15	28	-10	-15	2	40

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
56-42.2347-106.6406-2-11-						0-W14343	57330	-0.04	628	18150	60	-71	6.0	41	1.9	4	0.8	10930	8.6	17710	39	0.3
56-42.1719-106.6697-2-11-						0-W14344	60300	-0.05	602	8258	82	-81	5.2	32	2.1	4	0.9	11290	12.2	17210	51	0.4
56-42.1461-106.6767-2-12-						0-W14345	47860	-0.05	527	12340	67	-86	6.1	44	-1.0	3	0.8	8814	12.1	15060	40	0.4
56-42.1347-106.6847-2-12-						0-W14346	50820	-0.06	561	9696	57	-76	4.2	30	-1.3	5	0.7	7686	13.0	16190	36	0.3
56-42.1583-106.7122-2-11-						0-W14347	47800	-0.03	588	5888	44	-66	3.0	20	-0.7	3	0.5	4776	9.3	17440	30	0.2
56-42.0289-106.9639-2-15-						0-W14348	37000	-0.04	438	13510	46	-45	4.7	26	2.0	3	0.6	8030	6.3	11270	27	0.2
56-42.0333-106.9264-2-15-						0-W14349	42890	-0.05	570	13140	128	-61	5.3	31	2.1	5	0.8	10430	25.1	12180	72	0.6
56-42.8772-106.6550-2-15-						0-W14350	46540	-0.07	427	12260	66	-117	6.0	21	-1.3	5	0.8	11520	14.3	13500	42	0.4
56-42.0531-106.9350-2-15-						0-W14351	43100	-0.03	452	15570	52	-51	3.8	26	1.8	4	0.6	7334	10.4	14140	27	0.3
56-42.0461-106.9633-2-15-						0-W14352	45560	-0.03	663	17020	48	-58	5.7	38	2.5	4	0.8	10880	7.2	15130	24	0.3
56-42.0569-106.9714-2-15-						0-W14353	44820	-0.04	547	10490	37	-70	4.1	29	2.4	3	0.6	9488	2.2	16140	19	0.2
56-42.0631-106.9981-2-11-						0-W14354	36650	-0.03	542	23470	28	-87	5.8	26	1.7	2	0.5	7826	2.4	15250	20	0.2
56-42.0433-107.0389-2-15-						0-W14355	56640	-0.04	469	11830	73	-54	6.3	45	3.2	4	1.0	12100	11.6	17210	41	0.4
56-42.0458-107.0378-2-15-						0-W14356	44200	0.03	437	9720	131	-55	4.3	32	1.7	3	0.8	8800	21.8	16250	77	0.5
56-42.0422-107.0706-2-15-						0-W14357	43810	-0.05	339	14070	71	713	4.0	-10	-1.3	3	0.8	4200	11.3	14030	48	0.4
56-42.0194-107.0800-2-15-						0-W14358	45080	-0.03	465	13330	51	-49	4.6	32	2.9	4	0.7	9767	5.3	13000	28	0.2
56-42.0111-107.0639-2-15-						0-W14359	52150	-0.03	492	6150	58	-52	5.2	30	2.4	3	0.8	8702	8.6	16790	37	0.3
56-42.0103-107.0464-2-15-						0-W14361	46460	-0.03	508	15320	40	-56	4.0	18	1.7	3	0.5	5383	3.5	14070	17	0.2
56-42.0675-107.0639-2-15-						0-W14362	90780	-0.07	608	4445	89	-73	5.7	40	3.4	4	1.2	10950	22.0	23310	49	0.6
56-42.1206-107.0694-2-15-						0-W14364	52210	-0.04	548	29790	60	-68	5.0	40	3.1	4	0.7	12000	7.2	18000	32	0.2
56-42.1078-107.0261-2-15-						0-W14365	52460	-0.04	503	16520	70	-56	6.3	41	3.4	4	0.9	11590	9.2	16610	38	0.4
56-42.2136-106.8681-2-15-						0-W14366	43090	-0.03	577	10100	54	-65	5.3	37	3.6	3	0.6	8477	2.2	13390	25	0.2
56-42.2303-106.8706-2-15-						0-W14367	50020	-0.04	523	26640	54	-79	4.6	27	2.1	3	0.7	10150	6.1	16680	31	0.3
56-42.3914-107.0008-2-15-						0-W14368	52460	-0.03	702	8920	42	-63	3.9	27	2.1	3	0.5	7133	4.6	19050	22	0.2
56-42.3839-106.9700-2-15-						0-W14369	49530	-0.03	622	8865	79	-65	4.2	29	1.7	4	0.9	10840	14.0	19510	44	0.4
56-42.4056-106.9661-2-15-						0-W14370	51220	-0.03	610	8112	60	-71	5.4	36	1.8	3	0.7	9699	7.4	19960	29	0.3
56-42.4189-106.9622-2-15-						0-W14371	52180	-0.05	568	15930	43	574	4.2	19	-1.2	3	0.9	9131	6.5	16780	30	0.3
56-42.4411-106.9389-2-15-						0-W14372	55590	-0.03	685	11460	79	-69	3.6	24	1.1	3	0.6	6786	10.9	19140	43	0.3
56-42.9028-106.8375-2-15-						0-W14376	49310	-0.03	635	5906	56	-51	4.8	25	1.4	4	0.8	7657	8.7	14230	34	0.3
56-42.8956-106.8703-2-15-						0-W14377	27030	-0.03	540	13950	55	-39	5.5	26	2.0	3	0.7	8611	5.9	10930	31	0.3
56-42.9203-106.8633-2-15-						0-W14378	33180	-0.04	412	4144	47	-55	3.7	26	-1.0	2	0.7	8523	5.5	11140	30	0.3
56-42.8972-106.8811-2-12-						0-W14379	34530	-0.03	724	30110	57	-55	3.3	28	2.1	3	0.7	7849	11.5	13120	32	0.3
56-42.8922-106.8814-2-15-						0-W14380	41450	-0.03	542	9922	37	-42	4.2	25	2.0	4	0.7	6531	6.0	14040	20	0.3
56-42.9194-106.8931-2-15-						0-W14381	35280	-0.03	480	30590	31	-59	2.8	18	-0.8	2	0.6	5054	5.3	13690	16	0.2
56-42.9181-106.9483-2-15-						0-W14382	60420	-0.03	537	10210	56	-58	4.3	35	2.7	4	0.7	9530	8.7	19840	32	0.3
56-42.9133-106.9914-2-15-						0-W14383	62120	-0.03	629	5884	41	-55	7.8	33	2.2	4	0.6	10980	2.9	18090	26	0.3
56-42.9572-106.8972-2-11-						0-W14384	53570	-0.04	434	9834	51	-60	5.6	35	1.8	4	1.1	9342	11.5	12000	24	0.3
56-42.9900-106.9308-2-15-						0-W14385	48930	-0.05	517	16690	50	-62	6.5	34	2.4	3	0.8	11400	5.8	15700	30	0.2
56-42.9861-106.9447-2-15-						0-W14386	48070	-0.04	601	4313	66	42	6.2	41	2.8	3	0.8	12660	7.4	15800	35	0.3
56-42.9686-106.9758-2-15-						0-W14387	44450	-0.04	572	12650	61	345	7.7	42	2.7	4	0.9	13090	8.9	17490	33	0.4
56-42.9667-106.9767-2-15-						0-W14388	39200	-0.04	710	13320	65	183	5.5	43	3.0	3	1.1	10490	10.6	15930	32	0.5
56-42.9878-106.9667-2-15-						0-W14389	59870	-0.04	508	8602	40	-67	4.3	28	1.9	2	0.8	8035	6.7	17280	24	0.2
56-42.9394-106.7756-2-15-						0-W14391	59220	-0.03	570	11800	51	-50	4.4	32	1.9	4	0.6	8171	7.6	18290	27	0.3
56-42.9533-106.8089-2-15-						0-W14392	46170	-0.03	872	6207	53	-49	4.6	34	1.9	4	0.8	8054	8.8	15240	32	0.3
56-42.1450-107.6889-2-15-						0-W14393	66050	-0.04	580	9267	56	-88	6.2	34	3.2	4	0.6	11240	5.8	22140	28	0.3
56-42.1394-107.6617-2-15-						0-W14394	68970	-0.05	458	9073	49	-96	3.7	25	3.2	4	0.7	9278	4.1	21430	27	0.3
56-42.1528-107.6403-2-15-						0-W14395	77450	-0.04	601	9722	62	-83	5.1	35	3.0	4	1.2	11250	9.8	18090	40	0.4
56-42.1694-107.6314-2-15-						0-W14396	68620	-0.04	622	11120	149	-83	5.8	25	-1.0	5	1.0	9582	9.6	18900	87	0.3
56-42.1256-107.7758-2-15-						0-W14397	68200	-0.04	542	8323	127	-92	7.7	44	-1.2	7	1.0	12560	11.1	20040	64	0.3
56-42.1342-107.8072-2-15-						0-W14398	64630	-0.04	447	7303	62	-97	5.5	32	1.1	16	0.6	9997	3.3	21330	38	0.2
56-42.1317-107.8258-2-15-						0-W14399	73650	0.15	587	8411	155	-88	6.5	41	2.1	4	1.0	12070	12.1	24360	91	0.4

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
56-42.2347-106.6406-2-11-				0-	W14343		16160	433	10420	35	-1	5.1	3.8	-245	-1	-1	13.2	2915	56	3.0	68	0.276
56-42.1719-106.6697-2-11-				0-	W14344		9533	204	14390	43	-2	5.6	5.5	-244	-1	-1	22.7	3507	63	3.1	19	0.265
56-42.1461-106.6767-2-12-				0-	W14345		9340	380	11540	34	-2	4.2	4.3	-291	-1	-1	17.4	3182	59	3.4	41	0.500
56-42.1347-106.6847-2-12-				0-	W14346		9433	344	13290	-20	-2	4.7	2.0	-245	-1	-1	20.0	3128	48	4.3	-30	0.256
56-42.1583-106.7122-2-11-				0-	W14347		3474	125	15190	31	-1	2.6	3.0	-181	-1		18.3	2091	25	3.1	-14	0.294
56-42.0289-106.9639-2-15-				0-	W14348		10760	265	4300	29	-1	4.1	3.0	-186			7.1	2012	42	1.7	62	0.335
56-42.0333-106.9264-2-15-				0-	W14349		7612	548	5007	26	-1	4.7	7.8	-273	-1	1	32.3	5175	61	5.4	-36	0.199
56-42.8772-106.6550-2-15-				0-	W14350		6691	1603	14360	-22	-2	5.2	3.3	-476	-1	-1	35.3	3154	46	5.3	-33	0.185
56-42.0531-106.9350-2-15-				0-	W14351		14080	252	7615	25	-1	3.8	3.1	-172			8.4	2607	43	2.7	30	0.376
56-42.0461-106.9633-2-15-				0-	W14352		12800	339	6688	39	-1	5.1	3.4	-220	-1	-1	7.0	2321	47	2.2	57	0.459
56-42.0569-106.9714-2-15-				0-	W14353		7073	299	10980	29	-1	5.1	1.7	-229	-1	-1	4.5	3013	36	-1.1	-29	1.076
56-42.0631-106.9981-2-11-				0-	W14354		-3492	1012	12560	23	1	4.3	2.7	-328			4.1	2024	10	1.1	36	0.898
56-42.0433-107.0389-2-15-				0-	W14355		13780	286	7067	43	-1	5.8	4.4	-192	-1	1	13.0	2487	54	3.0	64	0.232
56-42.0458-107.0378-2-15-				0-	W14356		8837	223	7659	41	-1	4.5	7.6	-190	-1	1	35.9	2238	39	4.4	33	0.075
56-42.0422-107.0706-2-15-				0-	W14357		28140	246	12420	32	-1	3.0	3.5	-304	-1	-1	18.8	2411	46	2.7	-32	0.169
56-42.0194-107.0800-2-15-				0-	W14358		12760	305	5812	47	-1	5.0	3.4	-194		-1	8.9	3106	45	2.3	84	0.467
56-42.0111-107.0639-2-15-				0-	W14359		9358	269	7078	48	-1	5.0	4.0	-182	-1	-1	10.8	2337	62	2.9	66	0.274
56-42.0103-107.0464-2-15-				0-	W14361		13270	242	7032	26	-1	2.9	3.1	-198	-1		5.4	2323	47	1.9	51	0.554
56-42.0675-107.0639-2-15-				0-	W14362		13200	392	4907	-27	-2	6.5	6.4	-322	-1	-1	15.3	2920	92	4.7	-52	0.261
56-42.1206-107.0694-2-15-				0-	W14364		23160	489	8624	50	-1	5.8	3.6	-258	-1	-1	10.8	3100	55	2.7	50	0.342
56-42.1078-107.0261-2-15-				0-	W14365		15390	301	7430	41	-1	6.0	4.2	-204	-1	-1	11.9	2386	69	3.0	62	0.258
56-42.2136-106.8681-2-15-				0-	W14366		7797	271	10580	37	-1	5.6	3.7	-216		-1	9.2	2270	41	1.9	45	0.349
56-42.2303-106.8706-2-15-				0-	W14367		10860	318	10800	-18	-1	4.3	3.0	-260	-1	-1	10.5	2040	46	2.1	-32	0.255
56-42.3914-107.0008-2-15-				0-	W14368		6947	273	11920	34	-1	3.9	2.6	-198			7.0	2551	41	2.0	-27	0.344
56-42.3839-106.9700-2-15-				0-	W14369		5329	255	13540	42	-1	4.8	4.9	-197	-1	-1	17.4	2427	34	3.2	46	0.202
56-42.4056-106.9661-2-15-				0-	W14370		6685	236	13030	39	-1	4.7	3.9	285	-1	-1	10.9	2436	36	2.8	53	0.237
56-42.4189-106.9622-2-15-				0-	W14371		15400	371	21890	50	-1	4.3	2.4	-333	-1	-1	8.3	2042	44	2.0	77	1.123
56-42.4411-106.9389-2-15-				0-	W14372		9394	371	12650	34	-1	3.3	4.9	245	-1		21.3	2598	49	2.7	33	0.142
56-42.9028-106.8375-2-15-				0-	W14376		5972	163	8443	38	-1	3.9	3.2	205	-1	-1	12.1	2710	45	2.3	37	0.291
56-42.8956-106.8703-2-15-				0-	W14377		8737	130	3084	40	-1	4.1	4.4	-152	-1	-1	11.0	2021	54	2.2	50	0.215
56-42.9203-106.8633-2-15-				0-	W14378		5371	346	5384	35	-1	3.9	3.2	-224	-1	-1	9.7	1910	37	1.9	-47	0.277
56-42.8972-106.8811-2-12-				0-	W14379		10060	253	7692	36	-1	3.7	4.0	-185			9.5	2049	42	2.5	32	0.268
56-42.8922-106.8814-2-15-				0-	W14380		8777	200	4583	29	1	3.4	2.7	-159		-1	5.5	2580	82	2.3	31	0.565
56-42.9194-106.8931-2-15-				0-	W14381		10890	226	6861	-14	-1	2.5	1.4	-198	-1		3.7	1929	33	1.5	-25	0.597
56-42.9181-106.9483-2-15-				0-	W14382		15600	357	7681	26	-1	4.6	3.5	-216		-1	10.2	3145	55	2.7	60	0.356
56-42.9133-106.9914-2-15-				0-	W14383		12250	230	7954	41	1	5.7	3.8	-185	-1	-1	5.0	3058	49	1.8	60	0.894
56-42.9572-106.8972-2-11-				0-	W14384		8235	468	4560	45	-1	5.2	2.9	-271	-1	-1	6.5	3600	73	3.0	73	0.572
56-42.9900-106.9308-2-15-				0-	W14385		7041	271	6307	42	-1	5.3	3.2	-228	-1	-1	9.5	3185	86	2.6	-30	0.438
56-42.9861-106.9447-2-15-				0-	W14386		8918	219	5926	45	-1	6.0	4.7	-179	-1	-1	11.8	2612	55	2.9	47	0.264
56-42.9686-106.9758-2-15-				0-	W14387		10710	276	12440	40	-1	6.8	4.1	-217	-1	-1	9.5	2533	49	2.9	79	0.357
56-42.9667-106.9767-2-15-				0-	W14388		7443	232	6194	40	-1	5.0	5.4	-196	-1	-1	11.7	1839	41	3.1	97	0.285
56-42.9878-106.9667-2-15-				0-	W14389		14430	305	6848	-19	-1	4.4	2.4	-248	-1	-1	6.7	2810	64	2.5	-29	0.413
56-42.9394-106.7756-2-15-				0-	W14391		11470	236	6014	37	-1	3.9	3.5	263		-1	7.8	2571	86	2.7	41	0.535
56-42.9533-106.8089-2-15-				0-	W14392		6048	265	6344	28	-1	4.0	3.4	-180	-1	-1	8.6	2043	51	2.4	41	0.481
56-42.1450-107.6889-2-15-				0-	W14393		-3597	218	20820	39	-1	5.9	4.5	-251	-1	-1	8.3	2436	37	2.5	72	0.557
56-42.1394-107.6617-2-15-				0-	W14394		9093	349	17330	34	-1	5.1	2.5	-297	-1	-1	8.6	2845	48	2.9	-31	0.603
56-42.1528-107.6403-2-15-				0-	W14395		14690	267	16990	40	-1	4.6	5.2	-245	-1	-1	11.6	3335	63	3.0	-18	0.466
56-42.1694-107.6314-2-15-				0-	W14396		7046	253	20520	53	-1	5.1	7.8	-231	-1	-1	50.0	2794	47	3.5	-56	0.103
56-42.1256-107.7758-2-15-				0-	W14397		8868	346	18190	41	-1	6.5	7.6	-286	-1	1	29.6	3623	43	3.7	-48	0.270
56-42.1342-107.8072-2-15-				0-	W14398		6912	262	19940	45	-1	5.1	3.6	-280	-1	-1	17.2	2679	31	1.9	-31	1.027
56-42.1317-107.8258-2-15-				0-	W14399		12910	412	15860	59	-1	6.7	8.9	-280	-1	-1	48.6	2776	49	6.0	45	0.159

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																								U CONCENTRATION
							TIME SAMPLED																							
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
56	42.1275	107.8522	2	15	0	W14400	10/11/77	14	10							31	4	4	6				3	2	2	1	1							6.53
56	42.1272	107.8575	2	15	0	W14401	10/11/77	14	10							36	4	4	6				3	2	2	1	1							96.55
56	42.1581	107.8014	2	15	0	W14402	10/11/77	15	12							29	4	4	1				3	2	2	1	1							6.30
56	42.1761	107.8136	2	15	0	W14403	10/11/77	15	13							18	4	4	1				3	2	2	1	1							9.27
56	42.1658	107.8436	2	15	0	W14404	10/11/77	15	13							31	4	4	6				3	2	2	1	1							7.56
56	42.1614	107.8894	2	15	0	W14405	10/11/77	16	14							27	4	4	6				3	2	2	1	1							6.27
56	42.1556	107.8992	2	15	0	W14406	10/11/77	16	14							27	4	4	6				3	3	2	1	1							6.27
56	42.1556	107.9167	2	15	0	W14407	10/11/77	16	14							18	4	4	6				3	2	2	1	1							4.65
56	42.1469	107.9356	2	15	0	W14408	10/11/77	16	13							24	4	4	6				3	2	2	1	1							5.04
56	42.1392	107.9550	2	15	0	W14409	10/11/77	16	13							22	4	4	6				3	2	2	1	1							8.16
56	42.1583	107.9450	2	15	0	W14410	10/11/77	16	13							27	4	4	6				3	2	2	1	1							9.63
56	42.1967	107.9319	2	15	0	W14411	10/11/77	17	13							31	4	4	1				3	3	2	1	1							7.99
56	42.1958	107.9303	2	15	0	W14412	10/11/77	17	13							31	4	4	1				3	3	2	1	1							9.47
56	42.1919	107.9981	2	15	0	W14413	10/12/77	10	9							24	4	4	6				3	2	2	1	1							4.49
56	42.2061	107.9686	2	15	0	W14414	10/12/77	10	10							22	4	4	1				3	3	2	1	1							7.26
56	42.2194	107.9875	2	15	0	W14415	10/12/77	10	10							22	4	4	1				3	3	2	1	1							4.30
56	42.2350	107.9939	2	15	0	W14416	10/12/77	11	12							27	4	4	6				3	3	2	1	1							4.97
56	42.1350	107.9819	2	15	0	W14417	10/12/77	12	13							27	4	4	1				3	2	2	1	1							4.84
56	42.1311	107.9867	2	15	0	W14418	10/12/77	12	13							36	4	4	1				3	3	2	1	1							6.23
56	42.1103	107.9683	2	15	0	W14419	10/12/77	13	13							24	4	4	6				3	2	2	1	1							5.49
56	42.0750	107.9647	2	15	0	W14420	10/12/77	13	13							24	4	4	6				3	2	2	1	1							4.12
56	42.0656	107.9483	2	15	0	W14421	10/12/77	13	14							31	4	4	6				3	2	2	1	1							5.63
56	42.0725	107.9825	2	99	0	W14422	10/12/77	14	14							18	4	4	6				4	3	2	1	1							20.87
56	42.3419	107.9922	2	15	0	W14423	10/15/77	13	19							22	4	4	6				3	2	3	2	1							5.48
56	42.3103	107.8928	2	11	0	W14424	10/16/77	9	13	3.5			7.1	875		27	4	6	8				4	2	2	1	1							10.52
56	42.3122	107.8928	2	12	0	W14425	10/16/77	9	9	2.0			6.9	525		27	4	5	7				4	2	2	1	1							10.93
56	42.3444	107.9400	2	15	0	W14426	10/16/77	10	12							27	4	4	1				3	2	3	1	1							19.68
56	42.3508	107.9189	2	11	0	W14427	10/16/77	10	12	5.5			6.7	260		18	4	5	6				4	3	3	1	1							7.97
56	42.3639	107.9750	2	12	0	W14428	10/16/77	10	13	3.5			6.6	175		37	4	5	6				3	2	4	1	1							22.15
56	42.3725	107.9781	2	11	0	W14429	10/16/77	11	13	4.5			6.5	160		18	4	5	6				4	2	4	1	1							4.61
56	42.0150	107.9778	2	15	0	W14430	10/12/77	14	14							31	4	4	6				3	2	2	1	1							4.46
56	42.0367	107.9572	2	15	0	W14431	10/12/77	14	14							29	4	4	6				3	2	2	1	1							4.70
56	42.0583	107.9369	2	15	0	W14432	10/12/77	15	16							18	4	4	6				3	2	2	1	1							4.24
56	42.0606	107.9033	2	15	0	W14433	10/12/77	15	16							22	4	4	6				3	2	2	1	1							4.92
56	42.0456	107.8861	2	15	0	W14434	10/12/77	15	16							22	4	4	6				3	3	2	1	1							5.28
56	42.0708	107.9106	2	15	0	W14435	10/12/77	15	16							27	4	4	6				3	2	2	1	1							5.35
56	42.0953	107.8825	2	15	0	W14436	10/12/77	15	16							31	4	4	6				3	2	2	1	1							5.52
56	42.1092	107.8964	2	15	0	W14437	10/12/77	16	16							20	4	4	6				3	2	2	1	1							9.40
56	42.2231	107.8728	2	15	0	W14438	10/12/77	17	15							18	4	4	6				3	3	3	1	1							4.33
56	42.2189	107.8697	2	15	0	W14439	10/12/77	17	15							27	4	4	6				3	2	3	1	1							5.31
56	42.2108	107.8611	2	15	0	W14440	10/12/77	17	15							27	4	4	6				3	2	2	1	1							8.64
56	42.2369	107.9200	2	15	0	W14441	10/12/77	18	15							27	4	4	6				3	3	2	1	1							6.95
56	42.2369	107.7844	2	15	0	W14442	10/13/77	9	16							33	4	4	1				3	3	2	1	1							9.33
56	42.2250	107.8250	2	15	0	W14443	10/13/77	9	16							20	4	4	1				3	2	2	1	1							8.01
56	42.1953	107.8258	2	15	0	W14444	10/13/77	10	18							22	4	4	1				3	2	2	1	1							5.64
56	42.1903	107.8156	2	15	0	W14445	10/13/77	10	19							27	4	4	6				3	3	2	1	1							6.88
56	42.2031	107.7953	2	15	0	W14446	10/13/77	10	18							27	4	4	1				3	2	2	1	1							6.50
56	42.1908	107.8625	2	15	0	W14447	10/13/77	10	18							27	4	4	6				3	3	3	1	1							5.68
56	42.1161	107.8133	2	15	0	W14448	10/13/77	11	16							18	4	4	6				3	2	2	1	1							6.71
56	42.1000	107.8700	2	15	0	W14449	10/13/77	11	17							24	4	4	1				3	2	2	1	1							5.38
56	42.0864	107.8303	2	15	0	W14450	10/13/77	12	17							27	4	4	6				4	2	2	1	1							8.82

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

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per million (ppm)									Concentrations in weight ppm	
							Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
56-42.1275-107.8522-2-15-						0-W14400	-5	-5	-5	14	-20	-15	29	-10	-15	2	38
56-42.1272-107.8575-2-15-						0-W14401	6	15	-5	-10	-20	18	279	-10	20	3	47
56-42.1581-107.8014-2-15-						0-W14402	-5	-5	-5	20	-20	16	25	-10	-15	2	30
56-42.1761-107.8136-2-15-						0-W14403	-5	-5	-5	34	-20	-15	38	-10	-15	2	35
56-42.1658-107.8436-2-15-						0-W14404	-5	-5	-5	13	-20	-15	31	-10	-15	2	44
56-42.1614-107.8894-2-15-						0-W14405	-5	-5	-5	18	-20	-15	24	-10	-15	2	47
56-42.1556-107.8992-2-15-						0-W14406	-5	-5	-5	14	-20	-15	40	-10	-15	2	30
56-42.1556-107.9167-2-15-						0-W14407	-5	-5	-5	13	-20	-15	25	-10	-15	2	28
56-42.1469-107.9356-2-15-						0-W14408	-5	-5	-5	20	-20	-15	15	-10	-15	2	30
56-42.1392-107.9550-2-15-						0-W14409	-5	-5	-5	23	-20	-15	25	-10	-15	2	30
56-42.1583-107.9450-2-15-						0-W14410	-5	-5	-5	13	-20	-15	28	-10	-15	2	27
56-42.1967-107.9319-2-15-						0-W14411	-5	-5	-5	16	-20	-15	33	-10	-15	2	33
56-42.1958-107.9303-2-15-						0-W14412	-5	-5	-5	18	-20	-15	38	-10	-15	3	30
56-42.1919-107.9981-2-15-						0-W14413	-5	-5	-5	26	-20	-15	21	-10	-15	2	27
56-42.2061-107.9686-2-15-						0-W14414	-5	5	-5	15	-20	-15	32	-10	-15	2	27
56-42.2194-107.9875-2-15-						0-W14415	-5	-5	-5	26	-20	-15	27	-10	-15	2	33
56-42.2350-107.9939-2-15-						0-W14416	-5	-5	-5	21	-20	-15	34	-10	-15	2	40
56-42.1350-107.9819-2-15-						0-W14417	-5	-5	-5	19	-20	-15	20	-10	-15	2	22
56-42.1311-107.9867-2-15-						0-W14418	-5	-5	-5	16	-20	-15	28	-10	-15	2	25
56-42.1103-107.9683-2-15-						0-W14419	-5	-5	-5	13	-20	-15	18	-10	-15	2	28
56-42.0750-107.9647-2-15-						0-W14420	-5	-5	-5	14	-20	-15	20	-10	-15	2	27
56-42.0656-107.9483-2-15-						0-W14421	-5	-5	-5	29	-20	19	23	-10	-15	2	40
56-42.0225-107.9825-2-99-						0-W14422	-5	-5	-5	18	-20	-15	12	-10	-15	2	36
56-42.3419-107.9922-2-15-						0-W14423	-5	-5	-5	18	-20	-15	23	-10	-15	2	25
56-42.3103-107.8928-2-11-						0-W14424	-5	-5	-5	13	-20	-15	20	-10	-15	2	25
56-42.3122-107.8928-2-12-						0-W14425	-5	-5	-5	17	-20	-15	15	-10	-15	2	31
56-42.3444-107.9400-2-15-						0-W14426	-5	-5	-5	-10	-20	-15	20	20	-15	2	23
56-42.3508-107.9189-2-11-						0-W14427	-5	-5	-5	17	-20	-15	18	-10	-15	2	34
56-42.3639-107.9750-2-12-						0-W14428	-5	-5	-5	22	-20	-15	22	-10	-15	2	40
56-42.3725-107.9781-2-11-						0-W14429	-5	-5	-5	24	-20	21	13	-10	-15	2	31
56-42.0150-107.9778-2-15-						0-W14430	-5	7	-5	14	-20	-15	23	-10	-15	2	39
56-42.0367-107.9572-2-15-						0-W14431	-5	-5	-5	13	-20	-15	22	-10	-15	2	29
56-42.0583-107.9369-2-15-						0-W14432	-5	-5	-5	16	-20	24	20	-10	-15	2	28
56-42.0606-107.9033-2-15-						0-W14433	-5	-5	-5	20	-20	-15	25	-10	-15	2	31
56-42.0456-107.8861-2-15-						0-W14434	-5	-5	-5	17	-20	-15	22	-10	-15	2	35
56-42.0708-107.9106-2-15-						0-W14435	-5	-5	-5	21	-20	-15	23	-10	-15	2	30
56-42.0953-107.8825-2-15-						0-W14436	-5	-5	-5	14	-20	-15	23	-10	-15	2	31
56-42.1092-107.8964-2-15-						0-W14437	-5	-5	-5	26	-20	17	20	-10	-15	2	29
56-42.2231-107.8728-2-15-						0-W14438	-5	-5	-5	28	-20	-15	23	-10	-15	2	38
56-42.2189-107.8697-2-15-						0-W14439	-5	-5	-5	21	-20	-15	18	-10	-15	2	31
56-42.2108-107.8611-2-15-						0-W14440	-5	-5	-5	27	-20	22	26	-10	-15	2	48
56-42.2369-107.9200-2-15-						0-W14441	-5	-5	-5	19	-20	-15	23	-10	-15	2	31
56-42.2369-107.7844-2-15-						0-W14442	-5	-5	-5	18	-20	-15	21	-10	-15	2	29
56-42.2250-107.8250-2-15-						0-W14443	-5	-5	-5	12	-20	-15	25	-10	-15	2	21
56-42.1953-107.8258-2-15-						0-W14444	-5	-5	-5	25	-20	-15	21	-10	-15	2	34
56-42.1903-107.8156-2-15-						0-W14445	-5	-5	-5	25	-20	-15	27	-10	-15	2	29
56-42.2031-107.7953-2-15-						0-W14446	-5	-5	-5	20	-20	16	19	-10	-15	2	36
56-42.1908-107.8625-2-15-						0-W14447	-5	-5	-5	27	-20	-15	18	-10	-15	2	40
56-42.1161-107.8133-2-15-						0-W14448	-5	-5	-5	29	-20	-15	24	-10	-15	2	30
56-42.1000-107.8700-2-15-						0-W14449	-5	-5	-5	-10	-20	-15	19	-10	-15	2	27
56-42.0864-107.8303-2-15-						0-W14450	-5	-5	-5	15	-20	-15	25	-10	-15	2	25

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

DOE SAMPLE NUMBER						LAS SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
56-	42.1275-	107.8522-2-	15-	0-	W14400		75310	-0.04	599	8719	293	146	7.5	39	1.9	5	1.1	12680	11.8	21810	170	0.4
56-	42.1272-	107.8575-2-	15-	0-	W14401		58310	0.78	427	5532	853	-102	5.5	38	1.5	108	1.2	9198	24.2	17090	475	0.9
56-	42.1581-	107.8014-2-	15-	0-	W14402		62360	-0.04	514	5453	51	-93	4.3	27	1.5	4	0.6	7900	3.7	22250	31	0.2
56-	42.1761-	107.8136-2-	15-	0-	W14403		70700	-0.04	564	7080	118	-80	6.2	36	2.5	4	0.9	12430	7.9	21120	64	0.4
56-	42.1658-	107.8436-2-	15-	0-	W14404		71280	6.55	558	7166	6579	170	7.1	85	3.0	6	5.5	15700	186.1	23390	4317	3.5
56-	42.1614-	107.8894-2-	15-	0-	W14405		71860	-0.04	513	7161	135	146	6.9	34	1.8	4	0.9	9903	12.1	23650	73	0.6
56-	42.1556-	107.8992-2-	15-	0-	W14406		69920	-0.05	430	6401	62	-96	4.9	33	2.1	4	0.6	9889	4.7	22710	41	0.3
56-	42.1556-	107.9167-2-	15-	0-	W14407		65370	-0.03	568	7370	85	-79	5.3	25	2.2	4	0.7	10620	8.8	22310	49	0.4
56-	42.1469-	107.9356-2-	15-	0-	W14408		67630	-0.04	613	7759	87	129	6.9	37	3.4	4	0.9	13390	7.3	22020	50	0.4
56-	42.1392-	107.9550-2-	15-	0-	W14409		75530	-0.04	588	7105	110	193	5.9	31	2.2	5	0.9	10380	9.2	23010	59	0.5
56-	42.1583-	107.9450-2-	15-	0-	W14410		66800	-0.04	373	6537	56	-95	4.0	27	-1.1	7	0.6	7693	6.5	20850	32	0.3
56-	42.1967-	107.9319-2-	15-	0-	W14411		71980	-0.03	485	6022	56	-80	3.5	25	1.6	6	0.7	8017	5.7	23980	34	0.3
56-	42.1958-	107.9303-2-	15-	0-	W14412		78400	-0.04	440	6868	130	134	6.1	36	1.7	7	0.9	10520	9.7	22000	70	0.4
56-	42.1919-	107.9981-2-	15-	0-	W14413		65520	-0.04	580	8913	262	-73	5.6	31	2.2	3	0.7	10250	14.7	16330	132	0.8
56-	42.2061-	107.9686-2-	15-	0-	W14414		63400	-0.04	498	6220	91	-95	3.9	15	-1.1	3	0.4	6693	7.3	22860	59	0.4
56-	42.2194-	107.9875-2-	15-	0-	W14415		61350	-0.03	583	6943	99	-77	4.3	23	1.8	3	0.6	8606	5.3	20660	56	0.3
56-	42.2350-	107.9939-2-	15-	0-	W14416		67640	-0.05	627	8772	100	130	9.2	56	3.0	4	1.1	16560	9.2	20540	57	0.4
56-	42.1350-	107.9819-2-	15-	0-	W14417		63720	-0.04	540	6843	110	120	5.4	20	1.6	4	0.7	6868	11.1	23050	57	0.4
56-	42.1311-	107.9867-2-	15-	0-	W14418		67020	-0.04	528	6355	42	-95	3.6	28	-1.0	3	0.6	5931	4.9	22900	25	0.3
56-	42.1103-	107.9683-2-	15-	0-	W14419		65040	-0.03	541	7787	48	-79	5.3	31	1.9	4	0.6	9248	3.9	20120	28	0.2
56-	42.0750-	107.9647-2-	15-	0-	W14420		66110	-0.03	589	8079	94	-79	5.2	25	1.7	3	0.7	6976	8.1	20690	52	0.4
56-	42.0656-	107.9483-2-	15-	0-	W14421		68830	-0.03	534	10560	117	-81	4.6	20	1.0	4	0.7	7400	9.0	18850	60	0.4
56-	42.0225-	107.9825-2-99-		0-	W14422		61170	-0.05	602	20340	101	156	5.4	31	2.2	3	0.7	9614	9.7	16100	60	0.3
56-	42.3419-	107.9922-2-	15-	0-	W14423		69760	-0.03	659	8116	60	-74	4.4	24	1.2	4	0.7	8047	6.1	18760	37	0.3
56-	42.3103-	107.8928-2-11-		0-	W14424		65830	-0.07	458	24530	166	139	12.5	78	5.6	5	1.6	28460	13.1	19780	95	0.6
56-	42.3122-	107.8928-2-12-		0-	W14425		58860	-0.06	434	64680	91	95	7.2	43	2.5	4	0.8	14540	4.9	16130	55	0.4
56-	42.3444-	107.9400-2-15-		0-	W14426		60000	-0.05	360	8503	56	-105	5.2	22	2.3	14	0.7	9567	6.8	16650	38	0.3
56-	42.3508-	107.9189-2-11-		0-	W14427		63500	-0.03	544	12300	64	-79	2.8	-6	-0.8	4	0.4	4586	7.5	17480	40	0.4
56-	42.3639-	107.9750-2-12-		0-	W14428		76060	-0.04	591	10440	66	114	4.5	21	2.0	5	0.6	6449	8.0	18030	39	0.3
56-	42.3725-	107.9781-2-11-		0-	W14429		62160	-0.07	725	10300	600	154	7.0	37	1.2	4	3.0	11630	68.7	13960	346	2.5
56-	42.0150-	107.9778-2-15-		0-	W14430		61390	-0.04	565	18480	44	-83	3.5	13	-0.9	3	0.5	5537	5.1	19930	30	0.1
56-	42.0367-	107.9572-2-15-		0-	W14431		65120	-0.03	568	10260	71	-70	4.3	31	1.4	3	0.6	10380	7.0	19140	37	0.3
56-	42.0583-	107.9369-2-15-		0-	W14432		63290	-0.03	623	10050	49	88	7.0	30	1.8	4	0.7	13050	5.7	20500	28	0.2
56-	42.0606-	107.9033-2-15-		0-	W14433		64280	-0.04	632	7480	87	-83	6.3	35	1.9	3	0.9	12370	8.1	20590	52	0.4
56-	42.0456-	107.8861-2-15-		0-	W14434		62600	-0.05	596	7996	56	-87	3.9	33	1.7	3	0.6	9640	5.4	22440	36	0.4
56-	42.0708-	107.9106-2-15-		0-	W14435		64710	-0.04	596	8654	98	-78	5.9	46	2.3	4	1.0	14370	10.3	20280	54	0.4
56-	42.0953-	107.8825-2-15-		0-	W14436		66930	-0.03	647	8136	76	-78	5.3	36	2.3	4	0.8	11220	6.8	21470	43	0.3
56-	42.1092-	107.8964-2-15-		0-	W14437		74560	-0.04	541	9721	103	-91	6.3	44	1.9	4	1.0	13180	8.1	22550	51	0.4
56-	42.2231-	107.8728-2-15-		0-	W14438		62700	-0.06	486	7486	68	-94	5.9	32	1.9	2	0.8	11220	7.1	18030	44	0.4
56-	42.2189-	107.8697-2-15-		0-	W14439		69460	-0.04	461	7825	93	-78	5.7	34	1.7	4	0.9	10850	9.6	21600	58	0.3
56-	42.2108-	107.8611-2-15-		0-	W14440		77910	-0.04	503	7254	110	102	7.3	38	-1.1	5	0.9	14800	8.2	23120	68	0.3
56-	42.2369-	107.9200-2-15-		0-	W14441		71710	-0.04	689	6959	74	-86	6.8	44	2.6	5	1.0	12070	6.4	19980	39	0.3
56-	42.2369-	107.7844-2-15-		0-	W14442		67120	-0.04	473	5827	50	-94	4.3	22	2.1	3	0.6	8537	4.6	23390	33	0.3
56-	42.2250-	107.8250-2-15-		0-	W14443		66650	-0.03	430	4985	70	-76	5.0	29	2.0	9	0.6	9718	3.9	24300	41	0.3
56-	42.1953-	107.8258-2-15-		0-	W14444		70740	-0.04	545	8344	78	-77	5.9	35	3.5	5	0.8	12760	5.6	20670	44	0.3
56-	42.1903-	107.8156-2-15-		0-	W14445		68950	-0.04	505	7459	128	-90	6.0	35	2.5	5	0.9	10370	11.5	19580	65	0.5
56-	42.2031-	107.7953-2-15-		0-	W14446		65460	-0.05	587	7088	195	-94	4.8	-11	-1.3	4	1.0	7305	10.5	21170	120	0.6
56-	42.1908-	107.8625-2-15-		0-	W14447		66810	-0.04	647	8926	83	-78	6.1	46	3.0	4	0.8	12730	7.9	20460	45	0.3
56-	42.1161-	107.8133-2-15-		0-	W14448		72970	-0.04	524	12590	98	-86	5.9	37	2.4	4	0.9	10590	7.4	19990	56	0.4
56-	42.1000-	107.8700-2-15-		0-	W14449		62740	-0.04	570	9647	74	-88	5.9	41	2.2	4	0.7	10480	6.6	21180	39	0.3
56-	42.0864-	107.8303-2-15-		0-	W14450		75110	-0.05	428	17730	48	-99	5.1	24	2.0	3	0.6	9363	4.4	16550	31	0.2

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

DOE SAMPLE NUMBER						LAS SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
56-42.1275-107.8522-2-15-					0	-W14400	11910	358	18160	53	-1	6.3	18.0	-255	-1	-1	100.5	2974	49	3.2	-39	0.065
56-42.1272-107.8575-2-15-					0	-W14401	-4080	547	16480	48	-1	4.9	53.6	-362	-1	3	319.8	7081	55	10.3	45	0.302
56-42.1581-107.8014-2-15-					0	-W14402	7415	291	18420	-17	-1	4.1	2.0	-274	-1	-1	13.8	2224	29	1.6	182	0.457
56-42.1761-107.8136-2-15-					0	-W14403	11260	322	14600	51	-1	6.3	7.3	-253	-1	-1	35.9	3121	52	3.9	52	0.258
56-42.1658-107.8436-2-15-					0	-W14404	10720	300	16700	-50	-4	8.3	398.3	-233	-4	22	999.8	2560	46	43.8	-81	0.008
56-42.1614-107.8894-2-15-					0	-W14405	12030	305	15460	66	-1	5.2	9.4	-274	-1	-1	41.6	3352	42	5.2	-52	0.151
56-42.1556-107.8992-2-15-					0	-W14406	8549	240	17780	37	-1	5.1	4.3	-281	-1	-1	18.1	2372	36	2.5	-33	0.346
56-42.1556-107.9167-2-15-					0	-W14407	11470	294	16750	55	-1	5.4	6.2	-234	-1	-1	25.4	2502	38	3.4	41	0.183
56-42.1469-107.9356-2-15-					0	-W14408	8746	239	16630	68	-1	6.5	6.7	-232	-1	-1	24.4	2505	38	4.6	-44	0.207
56-42.1392-107.9550-2-15-					0	-W14409	7329	320	18980	50	-1	5.5	8.5	-299	-1	-1	35.5	2443	33	4.8	-38	0.230
56-42.1583-107.9450-2-15-					0	-W14410	10480	294	17630	49	-1	4.3	3.0	-286	-1	-1	15.2	2572	40	2.4	-47	0.634
56-42.1967-107.9319-2-15-					0	-W14411	6664	209	19370	55	-1	4.2	4.1	-227	-1	-1	17.0	1880	30	2.3	44	0.470
56-42.1958-107.9303-2-15-					0	-W14412	7522	214	17950	67	-1	5.8	6.8	-233	-1	-1	39.6	2557	32	3.4	-24	0.239
56-42.1919-107.9981-2-15-					0	-W14413	12970	330	11290	50	-1	5.0	17.0	-252	-1	2	82.1	2894	41	6.0	53	0.055
56-42.2061-107.9686-2-15-					0	-W14414	-3921	246	18580	58	-1	3.7	4.2	-271	-1	-1	32.4	2048	29	3.5	-32	0.224
56-42.2194-107.9875-2-15-					0	-W14415	9020	278	17020	51	-1	4.6	7.1	-229	-1	1	34.6	2497	35	3.5	16	0.124
56-42.2350-107.9939-2-15-					0	-W14416	12250	374	13540	86	-2	8.2	5.7	-264	-1	-1	25.5	3142	53	4.0	71	0.195
56-42.1350-107.9819-2-15-					0	-W14417	6814	302	19730	64	-1	3.9	8.2	-274	-1	1	35.5	1476	30	3.6	58	0.136
56-42.1311-107.9867-2-15-					0	-W14418	-3862	212	20680	43	-1	3.2	2.7	-264	-1	-1	11.9	1592	22	2.3	-26	0.524
56-42.1103-107.9683-2-15-					0	-W14419	7456	331	17200	34	-1	4.4	3.2	-241	-1	-1	11.8	2668	36	1.5	-31	0.465
56-42.0750-107.9647-2-15-					0	-W14420	6244	255	20050	57	-1	4.1	5.2	-224	-1	-1	25.3	1890	28	2.7	19	0.163
56-42.0656-107.9483-2-15-					0	-W14421	14190	422	12730	64	-1	4.0	7.6	-277	-1	-1	37.0	2735	54	3.3	-21	0.152
56-42.0225-107.9825-2-99-					0	-W14422	14390	246	11090	-23	-2	5.2	6.1	-276	-1	-1	31.2	1605	50	4.8	67	0.669
56-42.3419-107.9922-2-15-					0	-W14423	8822	224	16490	48	-1	4.2	4.2	-216	-1	-1	15.7	2646	44	2.8	51	0.349
56-42.3103-107.8928-2-11-					0	-W14424	-4174	111	21640	72	-2	14.3	11.6	-269	2	-1	43.7	1997	23	6.9	148	0.241
56-42.3122-107.8928-2-12-					0	-W14425	9566	238	14500	40	-2	6.9	8.3	743	-1	-1	24.1	2370	28	2.7	92	0.454
56-42.3444-107.9400-2-15-					0	-W14426	-4280	387	19190	-20	-1	4.9	3.4	-321	-1	-1	18.1	3242	32	2.9	-32	1.087
56-42.3508-107.9189-2-11-					0	-W14427	9665	201	15480	36	-1	2.4	4.8	-235	-1	-1	22.5	2559	32	2.0	30	0.354
56-42.3639-107.9750-2-12-					0	-W14428	11310	233	15300	44	-1	4.0	5.1	-235	2	-1	20.8	3647	58	2.3	61	1.065
56-42.3725-107.9781-2-11-					0	-W14429	11610	739	11870	49	-2	6.6	49.3	-392	-2	3	233.4	3582	64	23.0	-39	0.020
56-42.0150-107.9778-2-15-					0	-W14430	15550	319	13410	32	-1	3.0	2.3	-265	-1	-1	16.5	2459	41	1.5	-25	0.270
56-42.0367-107.9572-2-15-					0	-W14431	10370	258	14410	35	-1	4.8	4.8	-214	-1	-1	17.9	2983	41	2.6	48	0.263
56-42.0583-107.9369-2-15-					0	-W14432	10930	389	13050	28	-1	4.3	3.0	-223	-1	-1	10.2	2584	51	2.4	-14	0.416
56-42.0606-107.9033-2-15-					0	-W14433	8550	363	14230	48	-1	6.0	6.6	-271	-1	-1	23.7	2900	40	3.0	62	0.208
56-42.0456-107.8861-2-15-					0	-W14434	10360	258	14720	46	-1	5.1	3.4	-264	-1	-1	18.1	2693	43	2.7	-35	0.292
56-42.0708-107.9106-2-15-					0	-W14435	11440	325	14660	61	-1	7.0	6.3	-242	-1	-1	22.9	3138	50	3.2	52	0.234
56-42.0953-107.8825-2-15-					0	-W14436	7413	374	17080	43	-1	5.8	4.5	-237	-1	-1	20.5	2500	48	2.9	42	0.269
56-42.1092-107.8964-2-15-					0	-W14437	10240	254	17710	50	-1	6.3	6.9	-269	-1	-1	24.8	3184	46	3.8	-21	0.379
56-42.2231-107.8728-2-15-					0	-W14438	10790	403	13190	-23	-2	5.7	4.2	-319	-1	-1	17.2	3571	54	3.0	56	0.252
56-42.2189-107.8697-2-15-					0	-W14439	9493	311	16410	41	-1	6.0	6.1	-240	-1	-1	28.7	2668	42	3.4	-20	0.185
56-42.2108-107.8611-2-15-					0	-W14440	11490	367	15380	61	-1	7.2	7.2	-250	1	-1	32.9	2733	47	2.9	-63	0.263
56-42.2369-107.9200-2-15-					0	-W14441	9743	321	14750	55	-1	6.0	4.4	-276	-1	-1	15.3	2973	42	2.3	88	0.454
56-42.2369-107.7844-2-15-					0	-W14442	8218	261	18320	-18	-1	4.5	3.1	-270	-1	-1	16.2	2060	35	2.5	-64	0.576
56-42.2250-107.8250-2-15-					0	-W14443	7000	201	19440	52	-1	5.3	5.1	-213	1	-1	21.8	1835	25	2.0	56	0.367
56-42.1953-107.8258-2-15-					0	-W14444	13790	323	15030	68	-1	6.5	5.7	-237	-1	-1	21.5	3118	52	3.1	69	0.262
56-42.1903-107.8156-2-15-					0	-W14445	8922	305	17680	62	-1	5.8	9.2	-279	1	-1	35.1	2133	37	5.1	-54	0.196
56-42.2031-107.7953-2-15-					0	-W14446	6553	363	14790	59	-2	4.2	13.3	-306	-1	-1	73.9	3424	52	9.8	-37	0.088
56-42.1908-107.8625-2-15-					0	-W14447	11320	417	13070	57	-1	6.3	5.0	-267	-1	-1	21.0	3138	50	3.3	47	0.270
56-42.1161-107.8133-2-15-					0	-W14448	9322	374	19230	53	-1	5.6	5.6	-258	-1	1	30.3	3146	44	4.3	67	0.221
56-42.1000-107.8700-2-15-					0	-W14449	7892	383	17020	54	-1	5.2	5.8	-274	-1	-1	18.8	3035	43	3.5	72	0.286
56-42.0864-107.8303-2-15-					0	-W14450	8510	361	17180	32	-1	4.7	3.6	-302	-1	-1	13.3	2378	50	3.0	-35	0.663

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

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU/ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
56	42.0675	107.8681	2	15	0	W14451	10/13/77	12	18							29	4	4	1					4	2	2	1	1						5.12
56	42.0653	107.8289	2	15	0	W14452	10/13/77	13	18							31	4	4	1					3	2	3	1	1						4.70
56	42.0047	107.8550	2	15	0	W14453	10/13/77	13	18							22	4	4	1					3	2	1	1	1						5.72
56	42.0028	107.8247	2	15	0	W14454	10/13/77	14	21							24	4	4	1					3	2	2	1	1						4.35
56	42.0061	107.7578	2	15	0	W14455	10/13/77	14	21							27	4	4	1					3	2	1	1	1						5.00
56	42.0578	107.7822	2	15	0	W14456	10/13/77	15	20							27	4	4	1					3	2	2	1	1						5.14
56	42.0597	107.7758	2	15	0	W14457	10/13/77	15	20							22	4	4	1					3	2	2	1	1						5.13
56	42.0642	107.7475	2	15	0	W14458	10/13/77	15	20							27	4	1	4	1				3	2	2	1	1						4.67
56	42.0458	107.7208	2	15	0	W14459	10/13/77	16	20							24	4	4	1					3	2	2	1	1						4.17
56	42.0769	107.6797	2	15	0	W14460	10/13/77	16	20							27	4	4	1					3	2	2	1	1						4.57
56	42.0656	107.6483	2	15	0	W14461	10/13/77	16	20							18	4	4	6					3	2	2	1	1						4.28
56	42.1028	107.7200	2	15	0	W14462	10/13/77	17	20							27	4	4	1					3	3	2	1	1						4.40
56	42.1025	107.7464	2	15	0	W14463	10/13/77	17	19							27	4	4	6					3	2	2	1	1						4.77
56	42.0997	107.7786	2	15	0	W14464	10/13/77	18	18							22	4	4	1					3	2	2	1	1						6.22
56	42.1136	107.6483	2	15	0	W14465	10/14/77	10	14							27	4	4	6					3	3	2	2	1						5.60
56	42.1244	107.6400	2	99	0	W14466	10/14/77	11	15							27	4	4	1					4	2	2	2	1						8.45
56	42.1069	107.6075	2	12	0	W14467	10/14/77	11	16	9.5			7.4	340		22	4	5	6	2	3	1	2	4	2	2	2	1						17.74
56	42.1067	107.6056	2	15	0	W14468	10/14/77	11	16							22	4	4	1					4	2	2	2	1						11.81
56	42.1367	107.6100	2	11	0	W14469	10/14/77	12	16	11.5			7.6	600		27	4	4	7					4	3	2	2	1						4.32
56	42.1400	107.6064	2	15	0	W14470	10/14/77	12	16							24	4	4	1					3	3	2	2	1						4.01
56	42.0756	107.6114	2	15	0	W14471	10/14/77	12	7							22	4	4	1					3	2	2	2	1						5.42
56	42.0611	107.6194	2	15	0	W14472	10/14/77	13	17							27	4	4	1					3	2	2	2	1						6.41
56	42.0311	107.6653	2	15	0	W14473	10/14/77	13	20							24	4	4	6					3	2	2	2	1						4.95
56	42.0022	107.7269	2	15	0	W14474	10/14/77	13	20		C					27	4	4	6					3	2	2	2	2						4.41
56	42.0169	107.6583	2	15	0	W14475	10/14/77	14	21							27	4	4	6					3	2	2	2	1						5.26
56	42.0331	107.6200	2	15	0	W14476	10/14/77	14	21							22	4	4	6					3	2	2	2	1						5.05
56	42.0292	107.6108	2	15	0	W14477	10/14/77	14	21							27	4	4	6					3	2	2	2	1						4.50
56	42.0156	107.5958	2	15	0	W14478	10/14/77	14	21							22	4	4	1					3	2	2	2	1						4.95
56	42.0061	107.5675	2	15	0	W14479	10/14/77	15	21							22	4	4	1					3	2	2	2	1						4.06
56	42.0692	107.5181	2	15	0	W14480	10/14/77	17	19							22	4	4	1					3	2	3	2	1						5.62
56	42.0733	107.5231	2	11	0	W14481	10/14/77	17	18	12.0			7.3	430		20	4	6	8					4	3	3	2	1						13.18
56	42.0889	107.5483	2	15	0	W14482	10/14/77	17	18							24	4	4	1					3	3	3	2	1						5.53
56	42.1167	107.5050	2	15	0	W14483	10/14/77	18	16							22	4	4	6					3	2	2	2	1						3.49
56	42.2808	107.9369	2	11	0	W14484	10/15/77	10	9	8.5	C		7.4	460		27	4	4	7					4	2	2	2	2						6.75
56	42.2653	107.9397	2	11	0	W14485	10/15/77	11	14	6.0			8.0	420		27	4	4	7					4	2	2	2	1						7.38
56	42.2567	107.9514	2	15	0	W14486	10/15/77	11	14							31	4	4	6					4	2	2	2	1						74.31
56	42.2508	107.9561	2	11	0	W14487	10/15/77	11	14	11.5			6.5	1275		22	4	6	8					4	2	2	2	1						46.02
56	42.2703	107.9847	2	15	0	W14488	10/15/77	11	15							22	4	4	1					4	2	2	2	1						8.81
56	42.2919	107.9986	2	15	0	W14489	10/15/77	12	16							22	4	4	1					3	2	2	2	1						7.46
56	42.2947	107.9992	2	15	0	W14490	10/15/77	12	16							27	4	4	1					3	2	2	2	1						6.44
56	42.3289	107.9933	2	15	0	W14491	10/15/77	13	19							22	4	4	6					3	2	2	2	1						6.50
56	42.4231	107.9742	2	12	0	W14492	10/06/77	12	16	8.5			6.5	190		27	3	1	3	6				4	2	4	1	1						7.50
56	42.7408	107.3681	2	12	0	W14493	10/14/77	12	20	9.0			6.3	350		13	1	6	6	6	2	2	1	2	4	3	3	1						4.94
56	42.7186	107.3494	2	15	0	W14494	10/14/77	12	20							15	1	6	4	6		1		2	3	3	4	1						3.72
56	42.6514	107.6139	2	15	0	W14497	10/07/77		11							8	1	6	4	6		1		2	3	3	3	2						4.57
56	42.6375	107.5803	2	15	0	W14498	10/07/77		11							10	1	6	4	1		1		2	3	3	4	2						4.69
56	42.6444	107.5561	2	15	0	W14499	10/07/77		12							1	1	7	4	1		1		2	4	3	4	2						3.53
56	42.6742	107.5469	2	15	0	W14500	10/07/77		11							5	1	6	4	6		1		2	3	3	4	2						4.90
56	42.6722	107.5411	2	11	0	W14501	10/07/77		11	9.0			7.9	185		2	1	7	6	5	2	2	1	3	3	3	2	1						5.57
56	42.6978	107.5158	2	15	0	W14502	10/07/77		11							7	1	6	4	6		1		2	3	3	3	2						5.04
56	42.7019	107.5033	2	15	0	W14503	10/07/77		12							5	1	6	5	6		1		2	3	3	3	2						3.55

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

(2)

DOE SAMPLE NUMBER						LAS SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
56-42.0675-107.8681-2-15-						0-W14451	-5	-5	-5	21	-20	-15	21	-10	-15	2	20
56-42.0653-107.8289-2-15-						0-W14452	-5	-5	-5	12	-20	-15	24	-10	-15	2	24
56-42.0047-107.8550-2-15-						0-W14453	-5	-5	-5	16	-20	-15	14	-10	-15	2	22
56-42.0028-107.8247-2-15-						0-W14454	-5	-5	-5	19	-20	-15	14	-10	-15	2	21
56-42.0061-107.7578-2-15-						0-W14455	-5	-5	-5	20	-20	-15	21	-10	-15	2	29
56-42.0578-107.7822-2-15-						0-W14456	-5	-5	-5	23	-20	-15	24	-10	-15	2	32
56-42.0597-107.7758-2-15-						0-W14457	-5	-5	-5	19	-20	-15	13	-10	-15	2	22
56-42.0642-107.7475-2-15-						0-W14458	-5	-5	-5	24	-20	-15	25	-10	-15	2	31
56-42.0458-107.7208-2-15-						0-W14459	-5	-5	-5	26	-20	-15	20	-10	-15	2	29
56-42.0769-107.6797-2-15-						0-W14460	-5	-5	-5	19	-20	-15	22	-10	-15	2	39
56-42.0656-107.6483-2-15-						0-W14461	-5	-5	-5	23	-20	-15	9	-10	22	2	31
56-42.1028-107.7200-2-15-						0-W14462	-5	6	-5	18	-20	17	13	-10	-15	2	30
56-42.1025-107.7464-2-15-						0-W14463	-5	-5	-5	18	-20	-15	16	-10	-15	2	28
56-42.0997-107.7786-2-15-						0-W14464	-5	-5	-5	19	-20	-15	27	-10	-15	2	31
56-42.1136-107.6483-2-15-						0-W14465	-5	-5	-5	22	-20	30	23	-10	-15	2	41
56-42.1244-107.6400-2-99-						0-W14466	-5	-5	-5	19	-20	21	17	-10	-15	2	35
56-42.1069-107.6075-2-12-						0-W14467	-5	-5	-5	18	-20	-15	21	-10	-15	1	21
56-42.1067-107.6056-2-15-						0-W14468	-5	-5	-5	17	-20	-15	33	-10	-15	2	29
56-42.1367-107.6100-2-11-						0-W14469	-5	-5	-5	21	-20	-15	12	-10	-15	1	23
56-42.1400-107.6064-2-15-						0-W14470	-5	-5	-5	24	-20	19	17	-10	-15	2	32
56-42.0756-107.6114-2-15-						0-W14471	-5	-5	-5	24	-20	29	21	-10	-15	2	29
56-42.0611-107.6194-2-15-						0-W14472	-5	-5	-5	20	-20	-15	23	-10	-15	2	46
56-42.0311-107.6653-2-15-						0-W14473	-5	-5	-5	20	-20	-15	22	-10	-15	2	31
56-42.0022-107.7269-2-15-						0-W14474	-5	-5	-5	19	-20	23	20	-10	-15	2	27
56-42.0169-107.6583-2-15-						0-W14475	-5	-5	-5	16	-20	-15	14	-10	-15	2	32
56-42.0331-107.6200-2-15-						0-W14476	-5	-5	-5	23	-20	24	16	-10	-15	2	30
56-42.0292-107.6108-2-15-						0-W14477	-5	-5	-5	19	-20	19	17	-10	-15	2	31
56-42.0156-107.5958-2-15-						0-W14478	-5	-5	-5	-10	-20	15	16	-10	-15	2	24
56-42.0061-107.5675-2-15-						0-W14479	-5	-5	-5	18	-20	-15	12	-10	-15	2	22
56-42.0692-107.5181-2-15-						0-W14480	-5	6	-5	22	-20	-15	16	-10	-15	2	21
56-42.0733-107.5231-2-11-						0-W14481	-5	-5	-5	23	-20	-15	11	-10	-15	2	24
56-42.0889-107.5483-2-15-						0-W14482	-5	5	-5	15	-20	16	16	-10	-15	2	18
56-42.1167-107.5050-2-15-						0-W14483	-5	-5	-5	21	-20	19	8	-10	-15	2	28
56-42.2808-107.9369-2-11-						0-W14484	-5	-5	-5	10	-20	-15	13	-10	-15	2	10
56-42.2653-107.9397-2-11-						0-W14485	-5	-5	-5	-10	-20	-15	14	-10	-15	1	18
56-42.2567-107.9514-2-15-						0-W14486	-5	-5	-5	18	-20	-15	11	-10	-15	1	68
56-42.2508-107.9561-2-11-						0-W14487	-5	5	-5	19	-20	-15	24	-10	-15	2	27
56-42.2703-107.9847-2-15-						0-W14488	-5	10	-5	-10	-20	-15	10	-10	-15	2	15
56-42.2919-107.9986-2-15-						0-W14489	-5	-5	-5	17	-20	-15	13	-10	15	2	27
56-42.2947-107.9992-2-15-						0-W14490	-5	-5	-5	14	-20	-15	19	-10	-15	2	15
56-42.3289-107.9933-2-15-						0-W14491	-5	-5	-5	23	-20	-15	16	-10	-15	2	35
56-42.4231-107.9742-2-12-						0-W14492	-5	5	-5	24	-20	33	12	-10	-15	2	27
56-42.7408-107.3681-2-12-						0-W14493	-5	-5	-5	17	-20	21	10	-10	-15	2	34
56-42.7186-107.3494-2-15-						0-W14494	-5	-5	-5	20	-20	18	13	-10	-15	3	45
56-42.6514-107.6139-2-15-						0-W14497	-5	-5	-5	15	-20	15	15	-10	20	2	40
56-42.6375-107.5803-2-15-						0-W14498	-5	-5	-5	18	-20	26	20	-10	-15	2	46
56-42.6444-107.5561-2-15-						0-W14499	-5	-5	-5	17	-20	-15	12	-10	-15	2	38
56-42.6742-107.5469-2-15-						0-W14500	-5	-5	-5	13	-20	-15	17	-10	-15	2	45
56-42.6722-107.5411-2-11-						0-W14501	-5	-5	-5	11	-20	22	13	-10	31	2	30
56-42.6978-107.5158-2-15-						0-W14502	-5	5	-5	14	-20	25	19	-10	-15	3	33
56-42.7019-107.5033-2-15-						0-W14503	-5	-5	-5	23	-20	30	-5	-10	16	2	36

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)															
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
56-	42.0675-	107.8681-	2-	15-	0-	W14451	61300	-0.03	604	8020	93	-77	5.3	34	1.4	4	0.7	9772	5.7	18110	54	0.3
56-	42.0653-	107.8289-	2-	15-	0-	W14452	67150	-0.04	591	8370	125	-75	6.6	55	2.2	4	1.4	12500	15.1	21060	73	0.6
56-	42.0047-	107.8550-	2-	15-	0-	W14453	56670	-0.04	601	8143	110	153	6.7	34	1.3	5	0.8	12010	7.5	19190	59	0.4
56-	42.0028-	107.8247-	2-	15-	0-	W14454	57850	-0.03	653	7765	56	-70	3.9	30	1.4	4	0.5	8960	4.8	19240	33	0.2
56-	42.0061-	107.7578-	2-	15-	0-	W14455	63360	-0.04	667	7828	111	-76	5.8	37	1.8	4	1.1	10210	14.2	19690	69	0.4
56-	42.0578-	107.7822-	2-	15-	0-	W14456	69010	-0.04	641	8815	60	-86	8.4	38	2.1	4	0.6	11010	3.7	20030	27	0.4
56-	42.0597-	107.7758-	2-	15-	0-	W14457	63680	-0.04	545	8281	60	-90	3.0	23	-1.0	3	0.8	7106	9.0	18580	37	0.2
56-	42.0642-	107.7475-	2-	15-	0-	W14458	64510	-0.04	612	8163	85	-79	5.3	35	1.5	3	0.9	10270	9.8	18510	50	0.3
56-	42.0458-	107.7208-	2-	15-	0-	W14459	64830	-0.04	637	9725	91	-79	7.5	34	2.5	4	1.0	13820	7.3	20690	55	0.3
56-	42.0769-	107.6797-	2-	15-	0-	W14460	68940	-0.05	627	9682	110	-89	6.6	46	2.5	4	1.0	12100	11.8	19080	58	0.4
56-	42.0656-	107.6483-	2-	15-	0-	W14461	65410	-0.04	542	8844	66	-94	5.4	25	-1.2	3	0.8	9062	5.9	16560	40	0.2
56-	42.1028-	107.7200-	2-	15-	0-	W14462	68170	-0.04	545	9096	76	-77	6.4	36	2.2	4	0.8	11950	7.9	21240	48	0.3
56-	42.1025-	107.7464-	2-	15-	0-	W14463	66090	-0.04	591	9663	84	-81	6.5	38	2.2	4	0.9	13110	6.8	19370	52	0.3
56-	42.0997-	107.7786-	2-	15-	0-	W14464	76600	-0.06	522	11680	110	-87	7.0	43	2.1	4	0.9	15370	6.9	20290	71	0.3
56-	42.1136-	107.6483-	2-	15-	0-	W14465	75250	-0.06	494	8605	90	-95	7.5	38	1.4	3	0.9	12010	5.3	21730	49	0.3
56-	42.1244-	107.6400-	2-	99-	0-	W14466	63060	-0.08	472	43270	66	-80	5.7	21	-1.3	4	0.5	11150	4.4	17770	25	0.3
56-	42.1069-	107.6075-	2-	12-	0-	W14467	55580	-0.06	392	30370	77	-87	6.9	36	-1.3	3	0.7	11900	3.4	12320	25	0.3
56-	42.1067-	107.6056-	2-	15-	0-	W14468	73560	-0.05	412	18610	476	-97	6.5	34	-1.1	8	1.2	12230	19.3	16410	287	0.4
56-	42.1367-	107.6100-	2-	11-	0-	W14469	44270	-0.06	270	94700	54	-101	6.9	27	-1.3	2	0.6	8200	3.2	14680	26	0.4
56-	42.1400-	107.6064-	2-	15-	0-	W14470	81040	-0.06	595	8693	75	-89	7.5	44	2.2	3	0.9	12360	6.8	19590	54	0.3
56-	42.0756-	107.6114-	2-	15-	0-	W14471	72700	-0.07	690	11920	105	-92	9.1	49	2.1	4	1.1	15160	6.4	18040	56	0.3
56-	42.0611-	107.6194-	2-	15-	0-	W14472	73090	-0.09	549	17230	92	-97	8.8	40	2.6	4	0.9	15480	4.4	21480	59	0.3
56-	42.0311-	107.6653-	2-	15-	0-	W14473	57840	-0.06	548	8387	86	-102	10.5	38	2.2	3	0.8	11360	8.0	19380	49	0.3
56-	42.0022-	107.7269-	2-	15-	0-	W14474	68480	-0.06	632	10050	85	-85	6.5	42	2.3	4	0.9	13850	8.4	20780	48	0.3
56-	42.0169-	107.6583-	2-	15-	0-	W14475	68460	-0.07	670	8483	106	-85	7.8	47	1.9	4	1.1	12850	9.1	20170	51	0.4
56-	42.0331-	107.6200-	2-	15-	0-	W14476	65020	-0.09	598	11100	76	-102	7.9	35	1.7	3	0.7	11880	6.3	17920	46	0.3
56-	42.0292-	107.6108-	2-	15-	0-	W14477	68480	-0.06	603	7527	67	-99	10.3	36	1.9	2	0.7	10810	6.0	18130	41	0.3
56-	42.0156-	107.5958-	2-	15-	0-	W14478	59980	-0.05	592	9154	95	-81	4.9	28	1.5	4	0.9	8874	10.0	18570	60	0.3
56-	42.0061-	107.5675-	2-	15-	0-	W14479	63340	-0.05	648	8993	70	133	5.8	26	1.5	3	0.7	8582	5.1	17420	37	0.3
56-	42.0692-	107.5181-	2-	15-	0-	W14480	76980	-0.08	456	11570	90	-102	6.7	12	-1.3	3	0.7	8828	7.8	16830	59	0.3
56-	42.0733-	107.5231-	2-	11-	0-	W14481	66270	-0.07	448	30560	65	-104	14.1	28	1.8	2	0.7	14140	3.3	16090	43	0.2
56-	42.0889-	107.5483-	2-	15-	0-	W14482	63760	-0.06	436	8645	80	-54	5.5	31	1.9	4	0.8	11240	9.2	14990	57	0.3
56-	42.1167-	107.5050-	2-	15-	0-	W14483	72660	-0.07	583	7674	73	-57	8.3	51	4.3	4	0.9	12810	4.8	18620	40	0.3
56-	42.2808-	107.9369-	2-	11-	0-	W14484	65470	-0.07	578	8335	53	-104	4.1	-8	-1.1	4	0.7	3921	7.5	19470	38	0.3
56-	42.2653-	107.9397-	2-	11-	0-	W14485	62150	-0.05	496	5773	64	-93	4.2	14	1.0	4	0.5	3082	11.6	25190	38	0.5
56-	42.2567-	107.9514-	2-	15-	0-	W14486	70270	-0.07	-70	51770	51	1548	12.8	33	1.5	1	0.5	5520	3.6	6493	54	0.3
56-	42.2508-	107.9561-	2-	11-	0-	W14487	67130	-0.09	373	30710	87	-122	6.0	-11	-1.4	3	-0.2	7011	7.9	17660	79	0.3
56-	42.2703-	107.9847-	2-	15-	0-	W14488	60130	-0.06	551	19640	210	290	4.1	22	-0.8	7	0.8	4921	24.5	20870	116	0.7
56-	42.2919-	107.9986-	2-	15-	0-	W14489	61080	-0.05	663	7203	73	-79	5.1	24	1.6	4	0.8	7975	12.5	19220	50	0.4
56-	42.2947-	107.9992-	2-	15-	0-	W14490	48890	-0.04	546	8436	66	-89	7.3	19	0.8	2	0.7	5883	13.8	20670	41	0.4
56-	42.3289-	107.9933-	2-	15-	0-	W14491	60460	-0.07	608	9101	57	-91	5.2	25	-1.2	3	0.8	9325	7.7	19390	40	0.3
56-	42.4231-	107.9742-	2-	12-	0-	W14492	75170	-0.08	647	19390	126	-95	10.4	59	2.0	5	1.2	17370	14.9	15760	63	0.5
56-	42.7408-	107.3681-	2-	12-	0-	W14493	69240	-0.07	797	12010	73	-81	7.8	39	3.2	4	1.0	15770	8.8	16380	47	0.4
56-	42.7186-	107.3494-	2-	15-	0-	W14494	58060	-0.06	746	30800	55	-100	11.6	41	3.0	3	0.9	13380	6.1	16730	38	0.3
56-	42.6514-	107.6139-	2-	15-	0-	W14497	60720	-0.05	735	15340	88	-80	6.1	44	-1.0	3	0.9	16850	10.4	16330	53	0.4
56-	42.6375-	107.5803-	2-	15-	0-	W14498	58830	-0.07	686	26660	187	127	8.9	52	1.4	5	1.2	24430	19.1	17960	99	0.5
56-	42.6444-	107.5561-	2-	15-	0-	W14499	56740	-0.08	750	28060	62	279	6.0	36	-1.2	4	0.8	11640	9.3	17180	34	0.3
56-	42.6742-	107.5469-	2-	15-	0-	W14500	52170	-0.06	516	12800	60	-101	10.6	41	1.8	3	0.8	12060	8.8	15810	40	0.4
56-	42.6722-	107.5411-	2-	11-	0-	W14501	56280	-0.07	650	24060	163	-90	7.7	58	-1.2	6	1.1	19670	20.7	17400	99	0.6
56-	42.6978-	107.5158-	2-	15-	0-	W14502	62770	-0.06	742	14620	106	127	6.8	48	1.9	5	1.0	12950	10.2	17590	60	0.5
56-	42.7019-	107.5033-	2-	15-	0-	W14503	66430	-0.08	801	14980	55	172	7.4	32	2.1	3	0.9	13170	6.5	17560	29	0.3

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

DOE SAMPLE NUMBER						LAS SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
56-42.0675-107.8681-2-15-			0	W	1	4451	10930	373	15520	34	-1	5.2	5.7	-244	-1	-1	29.1	2916	41	3.7	67	0.176
56-42.0653-107.8289-2-15-			0	W	1	4452	10460	232	15630	57	-1	6.6	8.2	-219	-1	-1	32.4	2664	48	4.8	46	0.145
56-42.0047-107.8550-2-15-			0	W	1	4453	6938	301	16810	42	-1	6.1	7.7	-254	-1	-1	30.2	3169	36	4.7	52	0.189
56-42.0028-107.8247-2-15-			0	W	1	4454	7507	215	16480	38	-1	4.4	3.6	-204	-1	-1	16.0	2166	32	1.9	43	0.272
56-42.0061-107.7578-2-15-			0	W	1	4455	10870	344	16640	50	-1	5.4	6.6	-234	-1	-1	29.7	2899	39	3.7	51	0.168
56-42.0578-107.7822-2-15-			0	W	1	4456	10250	369	15190	44	2	5.7	5.4	-277	-1	-1	6.2	2514	43	2.9	57	0.829
56-42.0597-107.7758-2-15-			0	W	1	4457	6544	323	16580	-17	-1	4.0	3.6	-276	-1	-1	17.3	2606	44	1.6	-20	0.297
56-42.0642-107.7475-2-15-			0	W	1	4458	9412	356	16040	45	-1	5.3	5.4	-246	-1	-1	21.7	2854	47	2.6	32	0.215
56-42.0458-107.7208-2-15-			0	W	1	4459	8127	348	16340	58	-1	7.3	5.3	-238	-1	-1	27.4	2705	42	3.7	65	0.152
56-42.0769-107.6797-2-15-			0	W	1	4460	11780	368	15540	61	-1	6.4	6.4	-288	-1	-1	25.9	2821	51	4.3	-25	0.176
56-42.0656-107.6483-2-15-			0	W	1	4461	7920	357	16020	47	-1	4.9	3.1	-292	-1	-1	17.4	2519	43	3.4	-30	0.246
56-42.1028-107.7200-2-15-			0	W	1	4462	15250	294	14690	42	-1	5.7	4.7	-242	-1	1	17.7	2999	52	2.8	61	0.249
56-42.1025-107.7464-2-15-			0	W	1	4463	7838	366	18020	45	-1	6.6	5.1	289	-1	-1	23.4	3009	42	3.3	52	0.204
56-42.0997-107.7786-2-15-			0	W	1	4464	11710	280	15940	50	-2	7.2	8.3	-270	-1	-1	33.8	3022	54	3.8	-42	0.184
56-42.1136-107.6483-2-15-			0	W	1	4465	9264	289	15470	40	-2	5.6	4.9	-287	-1	-1	26.0	3401	49	3.3	77	0.215
56-42.1244-107.6400-2-99-			0	W	1	4466	12550	380	13580	-23	-2	5.1	3.3	522	-1	-1	17.2	3145	43	-1.5		0.491
56-42.1069-107.6075-2-12-			0	W	1	4467	9341	426	11960	-20	-2	4.9	5.4	568	-1	-1	21.8	2012	44	2.1	-57	0.814
56-42.1067-107.6056-2-15-			0	W	1	4468	10110	334	22250	-18	-2	7.2	27.5	-280	-1	2	175.0	3759	48	10.7	-25	0.067
56-42.1367-107.6100-2-11-			0	W	1	4469	9903	490	9646	-20	-2	3.7	2.7	744	-1	-1	15.3	2029	42	3.1	-32	0.282
56-42.1400-107.6064-2-15-			0	W	1	4470	12010	346	16630	64	-2	6.6	5.0	-256	-1	-1	20.0	3707	53	3.6	66	0.200
56-42.0756-107.6114-2-15-			0	W	1	4471	15200	447	16440	51	-2	7.3	5.6	-269	-1	-1	26.4	2444	52	5.8	78	0.205
56-42.0611-107.6194-2-15-			0	W	1	4472	20820	380	14590	-25	-3	8.1	4.0	-290	-1	-1	25.1	4653	76	4.7	-38	0.255
56-42.0311-107.6653-2-15-			0	W	1	4473	7090	392	15580	43	-2	5.6	5.0	-298	-1	1	20.7	2272	46	2.3	52	0.239
56-42.0022-107.7269-2-15-			0	W	1	4474	14230	408	14990	53	-2	6.8	4.8	-254	-1	-1	20.8	2844	57	3.2	57	0.212
56-42.0169-107.6583-2-15-			0	W	1	4475	13360	388	16010	47	-2	6.7	6.0	-242	-1	-1	26.8	3291	50	4.9	67	0.196
56-42.0331-107.6200-2-15-			0	W	1	4476	13910	423	15270	-23	-3	6.1	4.3	-314	-1	-1	21.3	2482	70	2.9	-35	0.237
56-42.0292-107.6108-2-15-			0	W	1	4477	12000	358	14570	41	-2	5.4	4.8	-284	-1	-1	16.3	3042	43	2.4	42	0.276
56-42.0156-107.5958-2-15-			0	W	1	4478	8403	275	17520	41	-2	5.2	5.1	-218	-1	-1	25.6	3022	29	3.8	57	0.193
56-42.0061-107.5675-2-15-			0	W	1	4479	11390	221	18390	43	-2	4.3	5.1	-208	-1	-1	16.6	2266	32	3.5	-19	0.245
56-42.0692-107.5181-2-15-			0	W	1	4480	-5860	252	20400	-21	-2	5.6	3.5	-276	-1	-1	27.7	3608	43	2.8	-30	0.203
56-42.0733-107.5231-2-11-			0	W	1	4481	10760	291	12070	-18	-2	5.2	5.0	-311	-1	-1	17.3	-1539	56	2.8	34	0.762
56-42.0889-107.5483-2-15-			0	W	1	4482	9417	129	7564	39	-2	6.0	5.1	217	-1	-1	26.7	2698	56	4.3	-63	0.207
56-42.1167-107.5050-2-15-			0	W	1	4483	12270	304	5761	54	-2	7.5	5.0	-203	-1	-1	13.9	3264	86	3.0	70	0.251
56-42.2808-107.9369-2-11-			0	W	1	4484	-6235	84	23070	-18	-2	3.0	-0.9	-266	-1	-1	18.0	2471	-17	3.1	-27	0.375
56-42.2653-107.9397-2-11-			0	W	1	4485	-3910	72	23500	59	-1	2.6	5.4	-239	-1	-1	18.0	1824	13	3.5	25	0.410
56-42.2567-107.9514-2-15-			0	W	1	4486	19620	176	21990	-18	-2	2.7	11.2	879	-1	-1	10.4	-473	18	-1.5	-28	7.145
56-42.2508-107.9561-2-11-			0	W	1	4487	-7076	187	23710	42	-3	4.2	9.1	-321	-1	-1	27.7	2122	31	4.1	-36	1.661
56-42.2703-107.9847-2-15-			0	W	1	4488	-5205	213	23920	41	-2	3.1	12.1	-224	-1	1	74.2	-1110	-16	5.9	19	0.119
56-42.2919-107.9986-2-15-			0	W	1	4489	7050	260	16320	50	-2	4.6	4.5	-217	-1	1	21.2	2742	38	4.7	-20	0.352
56-42.2947-107.9992-2-15-			0	W	1	4490	-5281	164	17720	43	-1	3.1	5.5	-226	-1		21.7	2181	-16	4.2	-9	0.297
56-42.3289-107.9933-2-15-			0	W	1	4491	-5174	251	15740	-20	-2	4.6	1.9	321	-1	-1	16.1	2648	36	4.2	-32	0.404
56-42.4231-107.9742-2-12-			0	W	1	4492	14500	524	14420	37	-3	8.2	9.2	-294	-1	-1	31.9	4679	71	7.1	-47	0.235
56-42.7408-107.3681-2-12-			0	W	1	4493	12550	387	11750	49	-2	6.8	4.8	464	-1	-1	16.5	3988	57	4.0	-45	0.299
56-42.7186-107.3494-2-15-			0	W	1	4494	13470	389	13490	49	-2	5.7	4.5	449	-1	-1	11.1	2627	51	3.0	62	0.335
56-42.6514-107.6139-2-15-			0	W	1	4497	12270	428	14830	39	-2	5.8	5.2	403	-1	1	16.6	4241	77	3.3	55	0.275
56-42.6375-107.5803-2-15-			0	W	1	4498	13160	596	14270	43	-2	6.5	12.0	-264	-1	1	41.5	5376	114	4.4	63	0.113
56-42.6444-107.5561-2-15-			0	W	1	4499	17910	383	17130	-21	-2	5.6	2.7	468	-1	-1	12.8	3549	58	-1.6	-31	0.276
56-42.6742-107.5469-2-15-			0	W	1	4500	9841	415	13720	43	-2	5.8	4.7	431	-1	-1	11.9	-1491	57	2.8	45	0.412
56-42.6722-107.5411-2-11-			0	W	1	4501	9197	463	14560	-19	-2	7.7	10.7	-278	-1	1	33.7	4606	90	6.0	85	0.165
56-42.6978-107.5158-2-15-			0	W	1	4502	12370	410	13850	43	-2	5.7	6.2	-240	-1	-1	21.3	2932	64	4.0	84	0.237
56-42.7019-107.5033-2-15-			0	W	1	4503	18440	415	12670	32	-2	6.3	2.5	-272	-1	-1	10.5	3358	72	-1.6	-31	0.338

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

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																								U CONCENTRATION
							TIME SAMPLED																							
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
56-42.7250-107.5219-2-11-						0-W14504-10/07/77-		-	12-10.0-		-	-	7.1-	200-	13-1-6-4-6-4-3-1-		-3-3-3-2-	-1-	-	-	-	-	-	13.02
56-42.7161-107.5553-2-11-						0-W14505-10/07/77-		-	11-13.0-		-	-	7.9-	185-	3-1-6-5-6-3-3-1-		-3-3-3-2-	-1-	-	-	-	-	-	6.57
56-42.7161-107.5597-2-12-						0-W14506-10/07/77-		-	11-14.0-		-	-	7.8-	215-	3-1-6-5-6-2-2-1-2-		-3-3-3-2-	-1-	-	-	-	-	-	4.19
56-42.7164-107.5689-2-15-						0-W14507-10/07/77-		-	12-	-	-	-	-	-	3-1-6-5-6-	-1-	-2-3-3-3-2-	-1-	-	-	-	-	-	3.54
56-42.7244-107.5856-2-11-						0-W14508-10/07/77-		-	11-12.0-	0-	-	-	8.8-	210-	5-1-6-	-	-3-3-4-	-4-3-3-2-	-1-	-	-	-	-	6.32
56-42.7231-107.5925-2-11-						0-W14509-10/07/77-		-	11-10.0-		-	-	7.5-	265-	5-1-1-6-8-2-2-1-		-3-3-3-2-	-1-	-	-	-	-	-	6.31
56-42.7172-107.6194-2-11-						0-W14510-10/07/77-		-	11-10.0-		-	-	7.2-	225-	9-1-6-5-7-3-3-2-		-3-3-3-3-	-1-	-	-	-	-	-	4.66
56-42.6894-107.5922-2-15-						0-W14511-10/07/77-		-	11-	-	-	-	-	-	5-1-6-4-1-	-1-	-2-3-3-3-3-	-1-	-	-	-	-	-	4.41
56-42.6881-107.5881-2-15-						0-W14512-10/07/77-		-	11-	-	-	-	-	-	5-1-6-4-6-	-1-	-2-3-3-3-3-	-1-	-	-	-	-	-	3.83
56-42.6542-107.5525-2-11-						0-W14513-10/07/77-16-			12-	9.0-	-	-	7.8-	255-	5-1-6-4-6-2-2-1-		-4-3-3-2-	-1-	-	-	-	-	-	4.44
56-42.5667-107.6361-2-15-						0-W14514-10/07/77-16-			11-	-	-	-	-	-	7-3-7-4-1-	-1-	-2-3-3-4-3-	-1-	-	-	-	-	-	3.21
56-42.5836-107.6664-2-15-						0-W14515-10/07/77-16-			11-	-	-	-	-	-	9-1-6-5-6-	-1-	-2-3-3-2-2-	-1-	-	-	-	-	-	3.68
56-42.5933-107.6875-2-15-						0-W14517-10/07/77-16-			11-	-	-	-	-	-	1-3-7-5-6-	-1-	-2-3-3-4-2-	-1-	-	-	-	-	-	3.95
56-42.5789-107.6933-2-15-						0-W14518-10/07/77-16-			12-	-	-	-	-	-	5-3-7-4-1-	-1-	-2-3-3-4-2-	-1-	-	-	-	-	-	3.52
56-42.6161-107.7464-2-11-						0-W14519-10/07/77-17-			11-	9.0-	-	-	7.5-	300-	5-3-4-4-9-4-2-1-		-3-3-4-2-	-1-	-	-	-	-	-	4.57
56-42.5283-107.6325-2-15-						0-W14521-10/08/77-10-			11-	-	-	-	-	-	1-3-7-5-6-	-1-	-2-3-2-4-2-	-1-	-	-	-	-	-	3.20
56-42.5581-107.6636-2-15-						0-W14522-10/08/77-		-	11-	-	-	-	-	-	4-1-6-5-6-	-1-	-2-3-2-2-1-	-1-	-	-	-	-	-	4.27
56-42.5511-107.6664-2-15-						0-W14523-10/08/77-11-			11-	-	-	-	-	-	5-1-6-5-6-	-1-	-2-3-3-2-1-	-1-	-	-	-	-	-	3.60
56-42.5344-107.7306-2-15-						0-W14524-10/08/77-12-			11-	-	-	-	-	-	4-3-4-5-6-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	-	4.30
56-42.5578-107.7169-2-15-						0-W14525-10/08/77-12-			11-	-	-	-	-	-	3-3-4-4-6-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	-	3.60
56-42.5461-107.7467-2-11-						0-W14526-10/08/77-12-			11-	10.0-	-	-	6.2-	80-	7-3-7-6-6-1-2-5-		-3-3-4-1-	-1-	-	-	-	-	-	15.21
56-42.5483-107.7483-2-15-						0-W14527-10/08/77-12-			11-	-	-	-	-	-	4-3-7-5-1-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	-	3.97
56-42.7017-107.6828-2-15-						0-W14528-10/08/77-13-			12-	-	-	-	-	-	8-1-6-4-6-	-1-	-2-3-3-3-1-	-1-	-	-	-	-	-	3.41
56-42.7272-107.7244-2-15-						0-W14529-10/08/77-15-			12-	-	-	-	-	-	5-1-7-4-6-	-1-	-2-3-3-2-1-	-1-	-	-	-	-	-	10.22
56-42.7256-107.7253-2-15-						0-W14530-10/08/77-15-			12-	-	-	-	-	-	7-1-7-5-6-	-1-	-2-3-3-2-1-	-1-	-	-	-	-	-	5.14
56-42.7183-107.7436-2-15-						0-W14531-10/08/77-15-			12-	-	-	-	-	-	3-1-7-4-6-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	-	5.38
56-42.6717-107.6439-2-15-						0-W14532-10/08/77-15-			11-	-	-	-	-	-	5-1-6-4-6-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	-	3.86
56-42.6567-107.6389-2-15-						0-W14533-10/08/77-16-			12-	-	-	-	-	-	5-1-6-4-6-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	-	3.64
56-42.6378-107.6672-2-15-						0-W14534-10/08/77-16-			12-	-	-	-	-	-	7-1-6-4-6-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	-	4.06
56-42.6364-107.6633-2-15-						0-W14535-10/08/77-16-			12-	-	-	-	-	-	7-1-6-4-6-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	-	3.52
56-42.6261-107.6814-2-15-						0-W14537-10/08/77-16-			11-	-	-	-	-	-	7-1-1-4-6-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	-	3.92
56-42.6278-107.7481-2-15-						0-W14539-10/08/77-16-			12-	-	-	-	-	-	6-1-6-4-6-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	-	3.73
56-42.6428-107.2967-2-15-						0-W14541-10/14/77-13-			20-	-	-	-	-	-	15-1-6-5-6-	-1-	-2-4-3-4-1-	-1-	-	-	-	-	-	2.99
56-42.6575-107.3411-2-15-						0-W14542-10/14/77-14-			20-	-	-	-	-	-	11-1-6-5-6-	-1-	-2-4-3-4-1-	-1-	-	-	-	-	-	3.39
56-42.8003-106.9794-2-15-						0-W14543-10/11/77-13-			9-	-	-	-	-	-	32-1-6-5-6-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	-	6.80
56-42.8106-106.9847-2-12-						0-W14544-10/11/77-14-			9-	9.0-	-	-	7.6-	2850-	3-1-6-4-6-2-2-1-2-		-4-3-4-1-	-1-	-	-	-	-	-	9.21
56-42.7872-106.9611-2-15-						0-W14545-10/11/77-14-			9-	-	-	-	-	-	16-1-6-4-6-	-1-	-2-4-3-4-1-	-1-	-	-	-	-	-	9.66
56-42.7836-106.9547-2-15-						0-W14546-10/11/77-14-			9-	-	-	-	-	-	32-1-3-4-6-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	-	8.70
56-42.7822-106.9489-2-15-						0-W14547-10/11/77-14-			9-	-	-	-	-	-	18-1-3-4-6-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	-	10.89
56-42.7653-106.9386-2-15-						0-W14548-10/11/77-15-			9-	-	-	-	-	-	37-1-3-5-6-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	-	7.86
56-42.7708-106.9050-2-15-						0-W14549-10/11/77-		-	10-	-	-	-	-	-	18-1-6-5-6-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	-	9.09
56-42.7906-106.9069-2-15-						0-W14550-10/11/77-16-			10-	-	-	-	-	-	32-1-6-5-6-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	-	8.68
56-42.8914-107.4511-2-11-						0-W14553-10/12/77-12-			11-	10.4-	-	-	6.6-	1200-	13-1-3-6-8-1-2-4-		-3-3-4-1-	-1-	-	-	-	-	-	19.05
56-42.8969-107.4764-2-11-						0-W14554-10/12/77-13-			11-	9.0-	-	-	6.6-	750-	13-1-3-6-8-2-3-5-		-3-3-4-1-	-1-	-	-	-	-	-	15.21
56-42.9017-107.4944-2-12-						0-W14555-10/12/77-13-			11-	9.0-	-	-	6.0-	1100-	33-1-3-6-8-2-2-5-2-		-3-3-4-1-	-1-	-	-	-	-	-	8.02
56-42.8853-107.4036-2-11-						0-W14557-10/12/77-13-			11-	8.0-	-	-	7.1-	2800-	9-1-3-6-3-3-2-1-		-4-3-4-1-	-1-	-	-	-	-	-	2.15
56-42.8972-107.3856-2-15-						0-W14558-10/12/77-14-			11-	-	-	-	-	-	13-1-6-5-7-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	-	3.75
56-42.9158-107.4058-2-15-						0-W14559-10/12/77-14-			11-	-	-	-	-	-	6-1-6-5-6-	-1-	-2-4-3-4-1-	-1-	-	-	-	-	-	3.81
56-42.9292-107.4067-2-15-						0-W14560-10/12/77-15-			11-	-	-	-	-	-	15-1-6-5-6-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	-	3.85
56-42.9342-107.4297-2-15-						0-W14561-10/12/77-16-			11-	-	-	-	-	-	27-1-6-5-6-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	-	3.31
56-42.9214-107.4333-2-15-						0-W14562-10/12/77-16-			11-	-	-	-	-	-	9-1-6-5-6-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	-	4.31

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE (Concentrations reported in weight parts per million (ppm))									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY (Concentrations in weight ppm)	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
56-	42.7250-	107.5219-	2-	11-	0-	W14504	-5	-5	-5	12	-20	28	20	-10	-15	2	38
56-	42.7161-	107.5553-	2-	11-	0-	W14505	-5	-5	-5	29	-20	20	11	-10	-15	2	29
56-	42.7161-	107.5597-	2-	12-	0-	W14506	-5	-5	-5	25	-20	15	14	-10	-15	2	36
56-	42.7164-	107.5689-	2-	15-	0-	W14507	-5	-5	-5	21	-20	-15	10	-10	-15	2	45
56-	42.7244-	107.5856-	2-	11-	0-	W14508	-5	-5	-5	15	-20	-15	12	-10	-15	2	48
56-	42.7231-	107.5925-	2-	11-	0-	W14509	-5	5	-5	21	-20	21	17	-10	-15	2	46
56-	42.7172-	107.6194-	2-	11-	0-	W14510	-5	-5	-5	12	-20	-15	16	-10	-15	2	31
56-	42.6894-	107.5922-	2-	15-	0-	W14511	-5	6	-5	16	-20	18	14	-10	-15	2	40
56-	42.6881-	107.5881-	2-	15-	0-	W14512	-5	-5	-5	15	-20	-15	14	-10	-15	2	32
56-	42.6542-	107.5525-	2-	11-	0-	W14513	-5	-5	-5	21	-20	17	22	-10	-15	2	41
56-	42.5667-	107.6361-	2-	15-	0-	W14514	-5	-5	-5	22	-20	-15	18	-10	-15	2	35
56-	42.5836-	107.6664-	2-	15-	0-	W14515	-5	-5	-5	19	-20	-15	14	-10	-15	2	33
56-	42.5933-	107.6875-	2-	15-	0-	W14517	-5	-5	-5	18	-20	18	20	-10	-15	2	37
56-	42.5789-	107.6933-	2-	15-	0-	W14518	-5	-5	-5	16	-20	16	13	-10	-15	2	36
56-	42.6161-	107.7464-	2-	11-	0-	W14519	-5	-5	-5	15	-20	19	7	-10	21	2	29
56-	42.5283-	107.6325-	2-	15-	0-	W14521	-5	-5	-5	21	-20	-15	17	-10	-15	2	25
56-	42.5581-	107.6636-	2-	15-	0-	W14522	-5	5	-5	-10	-20	-15	13	-10	-15	2	21
56-	42.5511-	107.6664-	2-	15-	0-	W14523	-5	-5	-5	21	-20	-15	16	-10	-15	2	36
56-	42.5344-	107.7306-	2-	15-	0-	W14524	-5	-5	-5	18	-20	-15	20	-10	-15	2	23
56-	42.5578-	107.7169-	2-	15-	0-	W14525	-5	5	-5	14	-20	15	11	-10	-15	2	25
56-	42.5461-	107.7467-	2-	11-	0-	W14526	-5	-5	-5	17	-20	21	24	-10	-15	2	26
56-	42.5483-	107.7483-	2-	15-	0-	W14527	-5	-5	-5	29	-20	-15	17	-10	-15	2	46
56-	42.7017-	107.6828-	2-	15-	0-	W14528	-5	-5	-5	19	-20	28	17	-10	-15	2	48
56-	42.7272-	107.7244-	2-	15-	0-	W14529	-5	-5	-5	18	-20	24	25	-10	-15	2	39
56-	42.7256-	107.7253-	2-	15-	0-	W14530	-5	-5	-5	29	-20	26	19	-10	-15	2	36
56-	42.7183-	107.7436-	2-	15-	0-	W14531	-5	-5	-5	20	-20	-15	15	-10	-15	2	40
56-	42.6717-	107.6439-	2-	15-	0-	W14532	-5	-5	-5	19	-20	-15	14	-10	-15	2	29
56-	42.6567-	107.6389-	2-	15-	0-	W14533	-5	-5	-5	23	-20	23	21	-10	-15	2	33
56-	42.6378-	107.6672-	2-	15-	0-	W14534	-5	-5	-5	18	-20	18	17	-10	-15	1	30
56-	42.6364-	107.6633-	2-	15-	0-	W14535	-5	-5	-5	29	-20	20	11	-10	-15	2	36
56-	42.6261-	107.6814-	2-	15-	0-	W14537	-5	-5	-5	17	-20	18	16	-10	-15	2	40
56-	42.6278-	107.7481-	2-	15-	0-	W14539	-5	-5	-5	19	-20	19	16	-10	-15	2	48
56-	42.6428-	107.2967-	2-	15-	0-	W14541	-5	-5	-5	20	-20	-15	13	-10	-15	2	36
56-	42.6575-	107.3411-	2-	15-	0-	W14542	-5	-5	-5	27	-20	-15	17	-10	-15	2	38
56-	42.8003-	106.9794-	2-	15-	0-	W14543	-5	-5	-5	31	-20	25	22	-10	23	2	49
56-	42.8106-	106.9847-	2-	12-	0-	W14544	-5	-5	-5	15	-20	-15	9	-10	20	1	14
56-	42.7872-	106.9611-	2-	15-	0-	W14545	-5	-5	-5	28	-20	19	13	-10	-15	2	50
56-	42.7836-	106.9547-	2-	15-	0-	W14546	-5	-5	5	14	-20	-15	26	-10	-15	2	25
56-	42.7822-	106.9489-	2-	15-	0-	W14547	-5	-5	-5	20	-20	21	27	-10	-15	2	35
56-	42.7653-	106.9386-	2-	15-	0-	W14548	-5	-5	-5	27	-20	32	25	-10	-15	2	33
56-	42.7708-	106.9050-	2-	15-	0-	W14549	-5	-5	-5	13	-20	-15	21	-10	-15	2	25
56-	42.7906-	106.9069-	2-	15-	0-	W14550	-5	-5	-5	17	-20	26	23	-10	15	2	33
56-	42.8914-	107.4511-	2-	11-	0-	W14553	-5	-5	-5	26	-20	23	28	-10	-15	3	33
56-	42.8969-	107.4764-	2-	11-	0-	W14554	-5	-5	-5	23	-20	23	13	-10	15	2	44
56-	42.9017-	107.4944-	2-	12-	0-	W14555	-5	-5	-5	-10	-20	52	10	-10	-15	4	40
56-	42.8853-	107.4036-	2-	11-	0-	W14557	-5	-5	-5	22	-20	-15	-5	-10	-15	2	29
56-	42.8972-	107.3856-	2-	15-	0-	W14558	-5	-5	-5	19	-20	20	18	-10	15	2	28
56-	42.9158-	107.4058-	2-	15-	0-	W14559	-5	-5	-5	19	-20	-15	14	-10	-15	2	40
56-	42.9292-	107.4067-	2-	15-	0-	W14560	-5	-5	-5	18	-20	33	13	-10	-15	2	39
56-	42.9342-	107.4297-	2-	15-	0-	W14561	-5	-5	-5	18	-20	22	6	-10	-15	2	48
56-	42.9214-	107.4333-	2-	15-	0-	W14562	-5	5	-5	21	-20	27	17	-10	-15	3	61

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

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)															
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
56-	42.7250-	107.5219-2-11-				0-W14504	50670	-0.06	578	18580	102	-99	12.0	46	1.7	4	0.8	11990	9.7	15220	59	0.5
56-	42.7161-	107.5553-2-11-				0-W14505	52680	-0.07	601	16290	71	-81	6.2	43	1.5	4	1.0	11180	10.6	17640	45	0.3
56-	42.7161-	107.5597-2-12-				0-W14506	59250	-0.07	649	13830	79	149	7.2	57	2.3	4	0.9	12880	9.2	19950	44	0.3
56-	42.7164-	107.5689-2-15-				0-W14507	64930	-0.09	803	14740	60	162	8.8	41	2.5	4	0.9	14220	6.4	17510	43	0.3
56-	42.7244-	107.5856-2-11-				0-W14508	55800	-0.06	707	29570	60	-96	10.5	33	2.0	3	0.8	9570	8.3	18110	38	0.4
56-	42.7231-	107.5925-2-11-				0-W14509	60820	-0.07	740	17710	63	111	6.3	33	3.0	4	1.0	12080	8.3	18480	37	0.4
56-	42.7172-	107.6194-2-11-				0-W14510	59480	-0.07	1077	15650	116	137	7.4	52	1.3	5	1.1	12160	14.0	14870	61	0.5
56-	42.6894-	107.5922-2-15-				0-W14511	60920	-0.07	757	17390	93	-89	6.2	36	-1.2	4	1.0	13610	14.7	16270	63	0.3
56-	42.6881-	107.5881-2-15-				0-W14512	55990	-0.05	732	14650	90	-94	10.4	43	2.0	3	0.8	14840	10.4	17450	54	0.4
56-	42.6542-	107.5525-2-11-				0-W14513	53270	-0.06	642	29180	160	-82	8.1	47	1.8	5	1.1	21860	15.0	15580	94	0.5
56-	42.5667-	107.6361-2-15-				0-W14514	57640	-0.06	698	18230	74	106	6.5	39	1.8	3	1.0	14230	10.8	17670	43	0.3
56-	42.5836-	107.6664-2-15-				0-W14515	59590	-0.07	632	13010	52	-90	6.1	34	-1.2	3	0.9	11300	8.0	18590	36	0.2
56-	42.5933-	107.6875-2-15-				0-W14517	58740	-0.05	702	13570	59	-94	8.9	35	1.4	3	0.8	11270	9.3	19970	37	0.3
56-	42.5789-	107.6933-2-15-				0-W14518	56990	-0.06	619	15420	66	-80	5.5	37	1.4	3	0.9	13550	9.5	17310	45	0.3
56-	42.6161-	107.7464-2-11-				0-W14519	53600	-0.07	613	38530	119	155	8.1	80	-1.2	5	1.2	16710	19.4	14140	65	0.5
56-	42.5283-	107.6325-2-15-				0-W14521	48940	-0.07	665	12030	70	138	5.5	30	-1.1	3	0.6	11900	10.0	19480	43	0.2
56-	42.5581-	107.6636-2-15-				0-W14522	52840	-0.06	565	15840	137	-76	9.1	66	1.1	5	1.1	32640	18.0	18400	86	0.5
56-	42.5511-	107.6664-2-15-				0-W14523	58600	-0.07	751	14300	73	-80	7.0	39	2.1	3	1.0	14020	8.1	17830	46	0.3
56-	42.5344-	107.7306-2-15-				0-W14524	56090	-0.06	590	10910	83	-85	4.8	27	-1.1	3	0.7	11550	11.6	19310	56	0.4
56-	42.5578-	107.7169-2-15-				0-W14525	57500	-0.05	655	14360	76	-71	8.6	35	1.0	3	0.8	13270	9.7	16290	48	0.3
56-	42.5461-	107.7467-2-11-				0-W14526	23020	-0.06	275	1793	66	-20	5.1	28	1.9	3	0.8	8032	8.3	7217	57	0.4
56-	42.5483-	107.7483-2-15-				0-W14527	56810	-0.06	771	24780	75	130	5.8	35	1.8	4	0.9	11540	8.9	23640	41	0.3
56-	42.7017-	107.6828-2-15-				0-W14528	38340	-0.08	389	10560	66	-48	7.7	30	2.0	3	0.8	15400	8.4	12960	40	0.3
56-	42.7272-	107.7244-2-15-				0-W14529	69330	-0.06	1050	8892	145	-66	9.9	41	2.3	8	0.9	11740	18.4	18920	90	0.7
56-	42.7256-	107.7253-2-15-				0-W14530	67590	-0.07	858	18050	78	-68	7.9	48	3.1	5	1.1	16670	10.2	17680	50	0.4
56-	42.7183-	107.7436-2-15-				0-W14531	59480	-0.07	1119	18610	131	-76	7.0	58	1.7	6	1.2	13690	17.8	15980	79	0.6
56-	42.6717-	107.6439-2-15-				0-W14532	56250	-0.08	645	11130	58	-87	7.0	45	2.4	3	0.9	12780	6.3	16200	34	0.3
56-	42.6567-	107.6389-2-15-				0-W14533	57390	-0.06	719	11900	83	-72	10.9	44	1.9	4	0.8	13830	10.2	17400	45	0.4
56-	42.6378-	107.6672-2-15-				0-W14534	59830	-0.06	689	15220	69	-73	5.7	39	2.3	3	0.9	13460	8.8	17850	39	0.3
56-	42.6364-	107.6633-2-15-				0-W14535	61390	-0.07	660	15580	88	-82	7.5	45	1.8	4	1.1	14770	10.1	16770	45	0.3
56-	42.6261-	107.6814-2-15-				0-W14537	60080	-0.08	647	12840	61	-87	7.0	42	-1.3	3	0.9	12360	8.7	16870	36	0.4
56-	42.6278-	107.7481-2-15-				0-W14539	62550	-0.06	787	17000	67	-79	7.6	53	2.7	4	1.0	16120	8.7	17820	37	0.3
56-	42.6428-	107.2967-2-15-				0-W14541	65000	-0.06	696	16110	86	166	7.5	44	2.1	4	1.0	14900	10.9	18280	48	0.4
56-	42.6575-	107.3411-2-15-				0-W14542	56270	-0.07	631	12880	65	220	6.9	45	-1.2	4	1.0	12440	11.2	17120	47	0.4
56-	42.8003-	106.9794-2-15-				0-W14543	71000	-0.07	503	6097	66	-75	13.2	66	2.4	4	0.8	17490	4.7	16710	42	0.3
56-	42.8106-	106.9847-2-12-				0-W14544	28810	-0.06	449	12240	128	-59	5.1	49	1.3	8	1.7	10690	48.8	11510	78	0.9
56-	42.7872-	106.9611-2-15-				0-W14545	53590	-0.10	557	55250	67	-98	18.1	64	-2.3	4	0.8	28940	5.3	10660	52	0.4
56-	42.7836-	106.9547-2-15-				0-W14546	58040	-0.04	584	7741	64	-93	8.7	32	1.2	5	0.7	8397	8.3	21420	38	0.5
56-	42.7822-	106.9489-2-15-				0-W14547	77020	-0.07	661	6670	92	190	8.2	63	1.7	4	0.7	14310	7.2	22230	55	0.5
56-	42.7653-	106.9386-2-15-				0-W14548	60080	-0.08	493	17230	73	243	8.0	39	-1.3	3	0.8	13910	8.6	14820	57	0.6
56-	42.7708-	106.9050-2-15-				0-W14549	61680	-0.05	523	6328	92	102	9.7	36	1.7	5	0.8	9600	10.8	20860	58	0.5
56-	42.7906-	106.9069-2-15-				0-W14550	66580	-0.06	626	7010	79	-79	6.7	46	2.4	5	0.8	13840	8.6	20230	50	0.4
56-	42.8914-	107.4511-2-11-				0-W14553	71810	-0.09	522	10290	89	-85	8.3	49	6.6	5	0.9	25720	7.0	21620	51	0.5
56-	42.8969-	107.4764-2-11-				0-W14554	50840	-0.09	405	69410	50	-80	7.6	36	3.4	2	0.5	13050	4.7	14970	37	-0.1
56-	42.9017-	107.4944-2-12-				0-W14555	55170	-0.08	502	22450	113	-80	16.1	43	6.2	7	0.8	21320	12.3	18590	69	0.6
56-	42.8853-	107.4036-2-11-				0-W14557	35480	-0.05	410	43920	34	-48	4.5	28	1.6	3	0.7	8361	6.7	15900	23	0.3
56-	42.8972-	107.3856-2-15-				0-W14558	52060	-0.07	695	37180	66	-67	8.3	48	2.6	3	0.9	14530	6.8	16640	34	0.4
56-	42.9158-	107.4058-2-15-				0-W14559	49160	-0.07	648	13670	49	-60	5.0	29	3.0	3	0.9	9939	6.7	15500	29	0.3
56-	42.9292-	107.4067-2-15-				0-W14560	61910	-0.06	621	16810	59	-50	10.0	41	3.8	4	0.7	11940	5.5	14970	34	0.3
56-	42.9342-	107.4297-2-15-				0-W14561	48710	-0.06	500	69860	46	134	5.7	46	3.6	3	0.8	12290	4.7	14750	31	0.3
56-	42.9214-	107.4333-2-15-				0-W14562	67720	-0.07	781	26450	66	-59	7.8	53	4.2	4	0.9	15180	3.7	17240	34	0.3

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

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
56-42.7250-107.5219-2-11-			0-	W	14504		-5715	304	12770	38	-2	5.5	6.9	-288	-1	-1	21.6	1840	73	5.0	-33	0.603
56-42.7161-107.5553-2-11-			0-	W	14505		10940	239	11820	40	-2	5.6	4.5	-241	-1	-1	14.0	2459	49	4.0	-27	0.469
56-42.7161-107.5597-2-12-			0-	W	14506		14660	225	11880	47	-2	6.2	5.1	303	-1	-1	15.9	2946	61	4.4	-48	0.264
56-42.7164-107.5689-2-15-			0-	W	14507		17030	401	10780	51	-3	7.0	3.7	490	-1	-1	13.3	2617	66	-2.3	-38	0.266
56-42.7244-107.5856-2-11-			0-	W	14508		11990	312	12380	42	-2	4.8	4.6	-280	-1	-1	11.8	3140	56	2.7	57	0.536
56-42.7231-107.5925-2-11-			0-	W	14509		18850	307	11920	43	-2	5.9	4.3	-241	-1	-1	11.4	3380	61	-1.6	-72	0.554
56-42.7172-107.6194-2-11-			0-	W	14510		12690	402	13100	43	-2	5.3	7.9	419	-1	-1	22.5	3363	55	4.8	-47	0.207
56-42.6894-107.5922-2-15-			0-	W	14511		11710	424	13960	-20	-2	5.8	5.6	726	-1	-1	18.3	4529	67	3.9	-29	0.241
56-42.6881-107.5881-2-15-			0-	W	14512		13720	459	13250	39	-2	5.7	5.7	-291	-1	-1	17.4	2843	77	3.2	52	0.220
56-42.6542-107.5525-2-11-			0-	W	14513		11900	553	13460	44	-2	7.1	8.3	492	-1	-1	37.4	4819	97	3.4	-50	0.119
56-42.5667-107.6361-2-15-			0-	W	14514		10310	348	15770	50	-2	5.2	4.9	-224	-1	1	14.3	2708	76	3.1	74	0.224
56-42.5836-107.6664-2-15-			0-	W	14515		9296	327	15340	34	-2	5.1	3.7	-263	-1	-1	11.9	3121	45	-1.8	-30	0.309
56-42.5933-107.6875-2-15-			0-	W	14517		10340	366	15050	39	-2	5.2	4.3	-271	-1	-1	12.0	-1354	51	2.4	-35	0.329
56-42.5789-107.6933-2-15-			0-	W	14518		10970	382	14990	51	-2	6.0	5.2	379	-1	-1	14.1	3390	69	1.8	-62	0.250
56-42.6161-107.7464-2-11-			0-	W	14519		16170	479	14920	31	-2	7.5	7.5	-264	-1	-1	21.2	4172	67	4.9	72	0.216
56-42.5283-107.6325-2-15-			0-	W	14521		-4823	323	15380	48	-2	4.3	3.6	349	-1	-1	15.1	2893	58	2.1	-33	0.212
56-42.5581-107.6636-2-15-			0-	W	14522		8802	585	14930	45	-2	7.1	7.2	328	2	-1	28.3	6080	162	5.0	59	0.151
56-42.5511-107.6664-2-15-			0-	W	14523		14960	379	14100	40	-2	5.7	5.1	259	-1	-1	15.5	2417	50	2.6	61	0.232
56-42.5344-107.7306-2-15-			0-	W	14524		-3451	287	16870	-18	-2	4.1	4.4	-246	-1	-1	24.0	2179	55	5.3	-26	0.179
56-42.5578-107.7169-2-15-			0-	W	14525		8355	347	16120	33	-1	4.5	4.0	456	-1	-1	14.4	3066	72	2.4	42	0.250
56-42.5461-107.7467-2-11-			0-	W	14526		3741	104	1994	46	-2	4.3	6.5	-78	-1	-1	18.1	2202	30	3.7	-57	0.840
56-42.5483-107.7483-2-15-			0-	W	14527		13380	310	15790	65	-2	4.9	5.6	320	-1	-1	17.0	2652	43	3.3	59	0.234
56-42.7017-107.6828-2-15-			0-	W	14528		10740	304	8034	-23	-3	5.7	1.5	-134	-1	-1	12.7	2729	47	-1.8	-34	0.269
56-42.7272-107.7244-2-15-			0-	W	14529		6518	218	11890	47	-2	5.2	9.7	-204	-1	1	36.4	3244	42	5.8	-21	0.281
56-42.7256-107.7253-2-15-			0-	W	14530		14780	284	11360	57	-2	7.0	5.0	374	-1	1	15.6	3135	55	4.8	92	0.329
56-42.7183-107.7436-2-15-			0-	W	14531		12840	304	13060	37	-2	5.9	7.3	-248	-1	-1	28.8	3515	48	6.0	-38	0.187
56-42.6717-107.6439-2-15-			0-	W	14532		11930	414	12280	-23	-3	5.6	3.4	-292	-1	-1	12.8	2798	57	3.6	69	0.302
56-42.6567-107.6389-2-15-			0-	W	14533		13280	489	12360	33	-2	5.5	4.4	-252	1	-1	16.5	3426	71	2.9	27	0.221
56-42.6378-107.6672-2-15-			0-	W	14534		7763	377	14580	48	-2	5.7	4.5	-230	-1	-1	14.4	2658	55	3.6	74	0.282
56-42.6364-107.6633-2-15-			0-	W	14535		11720	400	13730	35	-2	6.4	5.3	-274	-1	-1	16.2	2822	54	3.9	-24	0.217
56-42.6261-107.6814-2-15-			0-	W	14537		12700	398	13720	54	-2	5.6	2.7	-285	-1	-1	9.5	2988	58	-1.5	-33	0.413
56-42.6278-107.7481-2-15-			0-	W	14539		17500	457	12210	47	-2	7.3	4.4	-251	-1	-1	13.2	2258	71	2.7	59	0.283
56-42.6428-107.2967-2-15-			0-	W	14541		13240	431	14340	39	-2	6.2	5.8	326	-1	-1	17.3	2940	56	2.8	57	0.173
56-42.6575-107.3411-2-15-			0-	W	14542		9389	425	13660	-19	-2	5.4	3.1	-265	-1	-1	13.7	3590	53	2.6	-28	0.247
56-42.8003-106.9794-2-15-			0-	W	14543		14870	267	7646	56	-2	8.7	4.9	-245	-1	-1	15.5	2798	67	3.6	69	0.439
56-42.8106-106.9847-2-12-			0-	W	14544		6305	606	4961	22	-2	5.2	7.9	-245	-1	1	25.4	4045	56	8.3	37	0.363
56-42.7872-106.9611-2-15-			0-	W	14545		14640	1194	7322	-36	-3	8.2	6.1	-464	-1	-2	17.0	2573	54	3.5	-80	0.568
56-42.7836-106.9547-2-15-			0-	W	14546		-3747	196	18400	39	-1	3.6	4.6	-267	-1	-1	17.2	2518	25	3.8	-19	0.506
56-42.7822-106.9489-2-15-			0-	W	14547		6762	214	18930	58	-2	6.5	4.6	-220	-1	-1	24.6	2724	54	4.4	-47	0.443
56-42.7653-106.9386-2-15-			0-	W	14548		-8202	1696	13840	-23	-2	5.4	4.8	-539	-1	-1	20.1	-2617	-36	4.0	113	0.391
56-42.7708-106.9050-2-15-			0-	W	14549		5500	286	17470	37	-2	4.6	6.9	255	1	-1	24.4	2763	39	3.9	23	0.373
56-42.7906-106.9069-2-15-			0-	W	14550		8647	345	16620	55	-2	6.1	4.8	-240	-1	-1	20.2	2653	40	3.4	44	0.430
56-42.8914-107.4511-2-11-			0-	W	14553		5627	128	12540	63	-3	7.5	8.9	-248	1	-1	27.9	3421	50	4.5	67	0.683
56-42.8969-107.4764-2-11-			0-	W	14554		19380	189	8033	-26	-3	5.2	1.7	-255	-1	-1	11.8	2583	80	-2.0	84	1.289
56-42.9017-107.4944-2-12-			0-	W	14555		7361	235	14020	41	-2	4.5	7.4	-241	-1	-1	29.8	2623	42	5.0	50	0.269
56-42.8853-107.4036-2-11-			0-	W	14557		12050	283	4815	33	-1	3.9	2.9	-177	-1	-1	4.8	2396	38	2.8	-34	0.448
56-42.8972-107.3856-2-15-			0-	W	14558		16220	550	5157	49	-2	6.1	4.0	-290	-1	-1	10.7	2749	102	3.3	49	0.350
56-42.9158-107.4058-2-15-			0-	W	14559		9468	226	6092	-19	-2	4.2	2.0	-213	-1	-1	7.9	2496	57	2.6	72	0.482
56-42.9292-107.4067-2-15-			0-	W	14560		15190	260	5240	42	-2	5.8	4.5	-192	-1	-1	9.9	2519	89	3.1	102	0.389
56-42.9342-107.4297-2-15-			0-	W	14561		24440	311	5588	36	-2	6.1	3.2	568	-1	-1	8.2	2625	86	1.7	86	0.404
56-42.9214-107.4333-2-15-			0-	W	14562		19380	233	5815	70	-2	7.4	5.0	-217	-1	-1	11.6	3051	124	2.3	-32	0.372

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

(2)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
56-42.9658-107.4192-2-15-					0	W14563	-5	-5	-5	21	-20	-15	17	-10	-15	2	45
56-42.9864-107.4100-2-15-					0	W14565	-5	-5	-5	16	-20	-15	12	-10	-15	2	24
56-42.9975-107.4158-2-15-					0	W14566	-5	-5	-5	20	-20	-15	14	-10	-15	2	25
56-42.9914-107.4686-2-15-					0	W14568	-5	-5	-5	-10	-20	-15	-5	-10	-15	2	34
56-42.8514-107.3633-2-11-					0	W14570	-5	-5	-5	23	-20	23	-5	-10	-15	2	39
56-42.8422-107.3714-2-11-					0	W14572	-5	-5	-5	26	-20	26	9	-10	-15	2	46
56-42.8589-107.3550-2-11-					0	W14573	-5	-5	-5	18	-20	18	9	-10	-15	4	49
56-42.8619-107.3328-2-15-					0	W14574	-5	-5	-5	17	-20	16	14	-10	-15	2	45
56-42.8642-107.2944-2-15-					0	W14575	-5	-5	-5	21	-20	-15	10	-10	-15	2	40
56-42.8283-107.3169-2-15-					0	W14576	-5	-5	-5	20	-20	25	9	-10	-15	2	47
56-42.8522-107.2803-2-15-					0	W14577	-5	-5	-5	22	-20	-15	12	-10	-15	2	42
56-42.8278-107.2733-2-15-					0	W14578	-5	-5	-5	26	-20	-15	11	-10	16	2	43
56-42.8003-107.2822-2-12-					0	W14579	-5	-5	-5	22	-20	-15	9	-10	-15	2	39
56-42.8250-107.2500-2-12-					0	W14580	-5	5	-5	13	-20	21	-5	-10	-15	2	48
56-42.6736-107.3575-2-11-					0	W14581	-5	-5	-5	17	-20	-15	9	-10	-15	2	29
56-42.6708-107.2969-2-15-					0	W14582	-5	-5	-5	24	-20	-15	13	-10	-15	2	38
56-42.6869-107.2806-2-12-					0	W14584	-5	-5	-5	27	-20	-15	8	-10	-15	2	50
56-42.7108-107.2633-2-15-					0	W14585	-5	-5	-5	15	-20	-15	14	-10	-15	2	37
56-42.7375-107.2700-2-99-					0	W14586	-5	-5	-5	43	-20	32	9	-10	-15	2	45
56-42.7311-107.2589-2-15-					0	W14587	-5	-5	-5	23	-20	28	16	-10	-15	2	44
56-42.6972-107.2931-2-12-					0	W14588	-5	-5	-5	20	-20	-15	12	-10	-15	2	50
56-42.7689-107.3686-2-15-					0	W14589	-5	-5	-5	19	-20	19	14	-10	-15	2	29
56-42.7817-107.3442-2-11-					0	W14590	-5	-5	-5	-10	-20	-15	7	-10	-15	3	22
56-42.7719-107.3364-2-11-					0	W14591	-5	-5	-5	26	-20	-15	5	-10	-15	3	30
56-42.7636-107.2864-2-11-					0	W14592	-5	-5	-5	27	-20	17	14	-10	-15	2	20
56-42.7442-107.3003-2-99-					0	W14593	-5	-5	-5	33	-20	41	7	-10	-15	2	45
56-42.7658-107.3122-2-11-					0	W14594	-5	-5	-5	18	-20	-15	15	-10	-15	3	25
56-42.7961-107.2597-2-11-					0	W14595	-5	-5	-5	18	-20	-15	17	-10	-15	2	29
56-42.8200-107.2389-2-15-					0	W14596	-5	-5	-5	26	-20	34	11	-10	-15	2	41
56-42.8278-107.2181-2-15-					0	W14597	-5	-5	-5	26	-20	21	10	-10	-15	2	38
56-42.8556-107.2478-2-15-					0	W14598	-5	-5	-5	13	-20	-15	-5	-10	-15	1	8
56-42.8464-107.1892-2-15-					0	W14599	-5	-5	-5	21	-20	-15	9	-10	-15	2	33
56-42.6417-107.4836-2-15-					0	W14600	-5	-5	-5	17	-20	-15	17	-10	-15	2	42
56-42.6253-107.4869-2-15-					0	W14601	-5	-5	-5	22	-20	15	12	-10	-15	2	38
56-42.8583-107.6392-2-15-					0	W14602	-5	-5	-5	30	-20	-15	13	-10	-15	3	37
56-42.8581-107.6367-2-15-					0	W14603	-5	-5	-5	24	-20	20	12	-10	-15	3	34
56-42.8597-107.7050-2-15-					0	W14604	-5	-5	-5	19	-20	-15	13	-10	-15	2	40
56-42.8586-107.7828-2-15-					0	W14606	-5	-5	-5	17	-20	-15	9	-10	-15	2	30
56-42.8386-107.8233-2-15-					0	W14607	-5	-5	-5	10	-20	30	6	-10	-15	3	24
56-42.6839-107.9206-2-15-					0	W14608	-5	7	-5	20	-20	-15	13	-10	-15	2	37
56-42.6861-107.9192-2-12-					0	W14609	-5	-5	-5	12	-20	24	6	-10	-15	2	24
56-42.7000-107.9897-2-15-					0	W14610	-5	-5	-5	29	-20	-15	9	-10	-15	2	37
56-42.6939-107.9500-2-15-					0	W14611	-5	-5	-5	24	-20	18	22	-10	-15	2	36
56-42.7075-107.9078-2-15-					0	W14612	-5	-5	-5	24	-20	20	16	-10	-15	2	46
56-42.7289-107.9978-2-11-					0	W14613	-5	-5	-5	30	-20	-15	17	-10	-15	2	40
56-42.7383-107.9497-2-11-					0	W14614	-5	-5	-5	16	-20	20	24	-10	-15	3	37
56-42.7475-107.8217-2-15-					0	W14615	-5	-5	-5	29	-20	29	18	-10	-15	2	38
56-42.6656-107.8353-2-15-					0	W14616	-5	-5	-5	19	-20	15	7	-10	-15	1	27
56-42.6689-107.8422-2-12-					0	W14617	-5	5	-5	29	-20	30	13	-10	-15	2	32
56-42.8597-107.1800-2-15-					0	W14618	-5	-5	-5	11	-20	-15	6	-10	-15	1	21
56-42.8594-107.1419-2-15-					0	W14619	-5	-5	-5	14	-20	-15	-5	-10	-15	-1	16

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

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS													
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	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
56-	42.9658-	107.4192-	2-	15-		0-W14563	48210	-0.07	494	17340	44	345	6.3	32	2.4	3	0.7	10270	4.7	14990	28	-0.2
56-	42.9864-	107.4100-	2-	15-		0-W14565	37520	-0.05	539	3225	42	-40	7.7	27	2.1	3	0.6	5416	7.0	15600	25	0.2
56-	42.9975-	107.4158-	2-	15-		0-W14566	44110	-0.05	535	3649	48	-44	4.0	29	2.0	4	0.7	6509	13.1	20270	29	0.4
56-	42.9914-	107.4686-	2-	15-		0-W14568	45410	-0.06	467	2728	131	-48	4.3	34	4.2	7	0.8	8274	19.3	18290	73	0.7
56-	42.8514-	107.3633-	2-	11-		0-W14570	42320	-0.07	330	35620	49	-61	5.5	60	2.2	4	0.8	9252	8.7	19080	33	0.3
56-	42.8422-	107.3714-	2-	11-		0-W14572	52440	-0.07	552	26000	57	-59	12.3	64	4.2	4	0.9	12750	5.8	21730	30	0.3
56-	42.8589-	107.3550-	2-	11-		0-W14573	53230	-0.06	449	17620	75	-51	6.3	44	2.5	7	1.2	12810	8.7	19920	41	0.4
56-	42.8619-	107.3328-	2-	15-		0-W14574	59580	-0.07	554	37560	67	-65	7.6	44	3.9	4	1.1	13120	5.0	17230	39	0.4
56-	42.8642-	107.2944-	2-	15-		0-W14575	46810	-0.08	351	19350	54	874	5.9	36	3.3	3	0.9	10790	7.1	15710	31	0.2
56-	42.8283-	107.3169-	2-	15-		0-W14576	48960	-0.06	765	59650	50	72	9.5	40	2.5	4	0.8	10340	11.0	12820	28	0.3
56-	42.8522-	107.2803-	2-	15-		0-W14577	44850	-0.05	684	20670	50	152	5.3	32	2.3	3	0.9	10620	7.8	15350	28	0.3
56-	42.8278-	107.2733-	2-	15-		0-W14578	47790	-0.07	595	58100	51	88	6.1	49	3.0	3	0.8	10830	5.7	14180	29	0.3
56-	42.8003-	107.2822-	2-	12-		0-W14579	57680	-0.09	769	28490	51	-60	7.5	25	2.5	4	0.9	11650	7.3	14470	30	0.4
56-	42.8250-	107.2500-	2-	12-		0-W14580	52900	-0.06	687	27900	57	85	9.5	38	2.6	5	0.7	10700	9.4	16130	26	0.4
56-	42.6736-	107.3575-	2-	11-		0-W14581	55010	-0.07	491	19530	101	-91	6.9	58	1.6	4	1.0	16200	15.4	16800	64	0.4
56-	42.6708-	107.2969-	2-	15-		0-W14582	59210	-0.07	796	23360	81	-77	7.5	44	3.1	3	0.9	14270	6.9	21640	40	0.3
56-	42.6869-	107.2806-	2-	12-		0-W14584	53150	-0.09	531	36120	116	-107	10.1	51	-1.5	4	1.0	24040	15.7	12480	64	0.4
56-	42.7108-	107.2633-	2-	15-		0-W14585	56850	-0.05	746	18830	65	129	9.0	32	1.7	3	0.8	13870	10.7	18160	37	0.3
56-	42.7375-	107.2700-	2-	99-		0-W14586	69880	-0.07	751	14110	71	-86	10.5	95	3.0	3	0.9	20140	6.5	20610	36	0.2
56-	42.7311-	107.2589-	2-	15-		0-W14587	64390	-0.07	597	13480	67	-91	9.4	80	2.1	3	1.0	15880	8.3	14560	31	0.3
56-	42.6972-	107.2931-	2-	12-		0-W14588	60730	-0.09	724	20200	82	-102	7.5	48	2.4	3	1.0	15900	11.4	15730	53	0.4
56-	42.7689-	107.3686-	2-	15-		0-W14589	65700	-0.06	712	16850	62	100	11.1	48	2.3	4	0.9	14390	7.9	15630	39	0.3
56-	42.7817-	107.3442-	2-	11-		0-W14590	66290	-0.07	735	26440	104	-104	5.8	28	1.7	6	1.8	12730	13.7	12800	57	0.5
56-	42.7719-	107.3364-	2-	11-		0-W14591	56160	-0.09	569	16050	68	-92	7.9	43	14.5	4	1.1	11980	6.8	23280	47	0.4
56-	42.7636-	107.2864-	2-	11-		0-W14592	66580	-0.08	747	15210	63	315	10.5	42	3.2	3	0.8	15940	5.0	16010	47	0.3
56-	42.7442-	107.3003-	2-	99-		0-W14593	66160	-0.08	713	10730	80	-84	11.6	79	2.5	3	1.0	17630	9.5	17240	43	0.3
56-	42.7658-	107.3122-	2-	11-		0-W14594	68900	-0.09	765	23720	81	-101	7.2	37	2.1	5	1.3	13550	11.0	16220	57	0.2
56-	42.7961-	107.2597-	2-	11-		0-W14595	51910	-0.08	621	13420	39	-95	13.3	14	2.8	3	0.8	9951	4.9	15880	30	0.2
56-	42.8200-	107.2389-	2-	15-		0-W14596	56220	-0.06	462	20880	49	-56	5.7	46	3.5	3	0.8	13870	4.5	15300	29	0.3
56-	42.8278-	107.2181-	2-	15-		0-W14597	58640	-0.10	569	7940	54	57	7.7	48	3.1	4	0.9	12980	5.2	18320	32	0.3
56-	42.8556-	107.2478-	2-	15-		0-W14598	13220	-0.04	186	-259	30	28	6.9	18	1.0	2	0.5	4704	9.0	5236	21	0.2
56-	42.8464-	107.1892-	2-	15-		0-W14599	47520	-0.06	449	10810	47	73	5.0	36	2.7	3	0.7	8874	5.7	13100	32	0.2
56-	42.6417-	107.4836-	2-	15-		0-W14600	57990	-0.07	621	20970	70	-70	6.5	43	1.8	3	0.9	12600	7.8	18220	41	0.3
56-	42.6253-	107.4869-	2-	15-		0-W14601	57950	-0.09	680	23870	84	125	7.2	44	-1.3	4	1.0	18240	12.0	17900	49	0.3
56-	42.8583-	107.6392-	2-	15-		0-W14602	51940	-0.08	726	3701	84	134	9.0	54	2.8	4	0.7	17270	5.3	16550	134	0.6
56-	42.8581-	107.6367-	2-	15-		0-W14603	46600	-0.06	564	8383	73	-56	5.9	53	3.3	4	0.9	13170	9.1	15370	91	0.5
56-	42.8597-	107.7050-	2-	15-		0-W14604	51890	-0.07	511	13080	64	-50	7.4	49	2.8	3	0.9	13150	6.7	16250	28	0.3
56-	42.8586-	107.7828-	2-	15-		0-W14606	50940	-0.08	604	7676	47	-59	7.3	45	-1.2	4	0.7	12360	8.1	15090	29	0.3
56-	42.8386-	107.8233-	2-	15-		0-W14607	61500	-0.06	610	10830	54	-80	10.0	44	1.7	3	0.6	11030	8.2	15500	38	0.3
56-	42.6839-	107.9206-	2-	15-		0-W14608	58430	-0.07	719	14120	79	-95	8.3	54	3.5	3	1.0	15060	9.2	15630	47	0.3
56+	42.6861-	107.9192-	2-	12-		0-W14609	56690	-0.07	645	18580	75	-78	6.2	43	1.8	3	1.1	8590	14.3	15640	39	0.3
56-	42.7000-	107.9897-	2-	15-		0-W14610	56300	-0.09	690	31720	60	227	8.4	41	2.6	3	0.8	11160	7.1	15480	37	0.2
56-	42.6939-	107.9500-	2-	15-		0-W14611	53510	-0.06	518	22860	72	259	11.0	44	5.1	4	0.9	13330	11.7	13860	44	0.3
56-	42.7075-	107.9078-	2-	15-		0-W14612	58100	-0.07	563	13940	68	267	8.4	53	4.0	3	1.0	15490	8.4	14750	41	0.3
56-	42.7289-	107.9978-	2-	11-		0-W14613	58710	-0.09	794	45160	72	-78	8.0	44	9.5	3	1.0	13460	7.5	14480	40	0.3
56-	42.7383-	107.9497-	2-	11-		0-W14614	67790	-0.06	1816	14650	77	-107	13.3	52	3.9	4	1.2	12530	6.9	12870	47	0.3
56-	42.7475-	107.8217-	2-	15-		0-W14615	72610	-0.06	637	16380	92	-104	8.7	79	2.7	4	1.1	18790	12.4	15140	55	0.5
56-	42.6656-	107.8353-	2-	15-		0-W14616	56220	-0.05	796	14490	68	96	7.3	52	2.2	4	0.9	13120	8.6	15220	32	0.3
56-	42.6689-	107.8422-	2-	12-		0-W14617	55100	-0.10	597	17390	73	-90	14.7	84	3.3	5	1.1	18510	14.5	17190	53	0.4
56-	42.8597-	107.1800-	2-	15-		0-W14618	34380	-0.04	416	1993	35	-30	8.1	35	2.3	3	0.6	5992	9.3	12870	22	0.3
56-	42.8594-	107.1419-	2-	15-		0-W14619	28150	-0.04	406	3617	39	-29	3.1	32	2.2	3	0.5	6205	8.2	12500	21	0.3

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

DOE SAMPLE NUMBER						LAS SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
56-42.9658-107.4192-2-15-						0-W14563	20190	378	8276	-20	-2	4.9	2.1	-270	-1	-1	7.7	2181	54	2.5	-33	0.382
56-42.9864-107.4100-2-15-						0-W14565	4520	154	4098	20	-1	3.5	2.6	-150			6.8	2311	43	2.2	33	0.490
56-42.9975-107.4158-2-15-						0-W14566	4280	114	5753	46	-2	4.4	3.3	-145	-1	-1	11.5	2180	34	4.1	43	0.383
56-42.9914-107.4686-2-15-						0-W14568	3691	107	5774	37	-2	4.9	7.6	-162	-1	-1	32.2	2224	42	5.6	42	0.305
56-42.8514-107.3633-2-11-						0-W14570	31470	261	5124	48	-2	5.0	3.3	-228	-1	-1	7.7	3874	46	3.7	-30	0.392
56-42.8422-107.3714-2-11-						0-W14572	32440	424	4800	45	-2	6.3	3.9	-258	-1	-1	8.5	3564	62	2.4	70	0.414
56-42.8589-107.3550-2-11-						0-W14573	16150	292	5601	39	-2	7.4	6.5	-184	-1	-1	8.0	3436	58	3.0	69	0.314
56-42.8619-107.3328-2-15-						0-W14574	17380	301	5883	50	-2	6.4	4.8	-243	-1	-1	11.0	2670	81	3.5	-46	0.375
56-42.8642-107.2944-2-15-						0-W14575	16430	321	8537	-21	-2	5.5	2.6	-257	-1	-1	7.4	2471	81	-1.5	-33	0.420
56-42.8283-107.3169-2-15-						0-W14576	11140	191	5419	29	-2	5.0	3.3	345		-1	9.0	3527	133	2.7	59	0.579
56-42.8522-107.2803-2-15-						0-W14577	14270	309	7041	35	-2	4.8	3.8	-197	-1	-1	7.9	2410	70	2.5	71	0.381
56-42.8278-107.2733-2-15-						0-W14578	27270	210	5123	41	-2	5.3	3.5	343	-1	-1	8.3	2192	114	2.1	-60	0.442
56-42.8003-107.2822-2-12-						0-W14579	18960	420	3585	-24	-3	6.6	3.3	-281	-1	-1	8.6	2509	48	3.3	-37	0.369
56-42.8250-107.2500-2-12-						0-W14580	16710	244	6812	38	-2	5.0	4.1	271		-1	8.9	3503	79	3.5	58	0.435
56-42.6736-107.3575-2-11-						0-W14581	14110	410	16010	33	-2	7.4	5.8	419	-1	-1	20.0	3389	73	5.6	61	0.264
56-42.6708-107.2969-2-15-						0-W14582	12890	447	11290	48	-2	6.3	4.7	-271	-1	-1	19.9	2713	53	4.3	52	0.141
56-42.6869-107.2806-2-12-						0-W14584	12100	945	13470	-27	-3	7.3	5.3	-411	-1	-1	20.1	4159	108	2.8	-38	0.214
56-42.7108-107.2633-2-15-						0-W14585	12350	441	13510	32	-2	5.4	3.5	398	-1	-1	10.9	3633	77	2.3	54	0.283
56-42.7375-107.2700-2-99-						0-W14586	18530	409	17400	39	-2	9.5	4.3	-267	-1	-1	8.7	3053	74	3.0	88	0.336
56-42.7311-107.2589-2-15-						0-W14587	15240	356	18100	-17	-2	7.4	3.9	409	-1	-1	11.1	2624	65	1.9	66	0.221
56-42.6972-107.2931-2-12-						0-W14588	14460	507	15920	-24	-3	6.7	4.0	-331	-1	-1	15.6	3966	76	-2.0	-36	0.292
56-42.7689-107.3686-2-15-						0-W14589	14400	446	14250	38	-2	6.2	3.9	460	-1	-1	13.4	2855	66	3.5	-35	0.297
56-42.7817-107.3442-2-11-						0-W14590	9371	526	24630	-18	-2	5.8	7.3	1254	-1	-1	15.1	4411	62	4.3	61	0.321
56-42.7719-107.3364-2-11-						0-W14591	8032	266	12970	89	-2	5.6	8.0	-311	-1	-1	8.9	2748	52	3.9	62	2.000
56-42.7636-107.2864-2-11-						0-W14592	13360	323	11670	62	-3	7.0	5.0	-324	-1	-1	15.4	3358	60	2.5	95	0.542
56-42.7442-107.3003-2-99-						0-W14593	15400	575	13710	36	-3	8.4	5.0	279	-1	-1	11.3	3443	92	3.6	-23	0.299
56-42.7658-107.3122-2-11-						0-W14594	14250	533	21640	-23	-3	5.8	4.7	1041	-1	-1	10.5	4109	60	3.7	67	0.395
56-42.7961-107.2597-2-11-						0-W14595	9151	155	12560	-20	-2	3.8	2.7	402	-1	-1	6.0	3106	54	-1.5	125	1.210
56-42.8200-107.2389-2-15-						0-W14596	20260	200	4788	39	2	7.1	3.6	-207	-1	-1	8.1	2474	121	2.6	79	0.331
56-42.8278-107.2181-2-15-						0-W14597	14860	397	4710	72	-3	6.4	3.4	-224	-1	-1	8.8	3460	85	-2.0	-32	0.333
56-42.8556-107.2478-2-15-						0-W14598	1532	66	507	-10	-1	2.0	2.1	-53			3.9	1539	23	-0.7	21	0.503
56-42.8464-107.1892-2-15-						0-W14599	7687	239	4925	32	-2	5.3	3.5	-209		-1	7.3	2171	64	2.8	64	0.304
56-42.6417-107.4836-2-15-						0-W14600	17160	346	13200	46	-2	6.2	4.4	441	-1	-1	12.5	2503	57	4.2	-20	0.246
56-42.6253-107.4869-2-15-						0-W14601	15460	515	13460	47	-3	6.8	3.8	548	-1	-1	18.8	3890	96	3.6	-32	0.182
56-42.8583-107.6392-2-15-						0-W14602	8868	122	5047	40	-2	8.8	22.6	-185	-1	-1	34.8	2941	241	4.3	76	4.586
56-42.8581-107.6367-2-15-						0-W14603	13280	366	4271	48	-2	6.7	10.6	-243	-1	-1	15.1	1995	145	3.6	66	5.081
56-42.8597-107.7050-2-15-						0-W14604	14990	257	5448	34	-2	6.6	3.8	-190	-1	-1	9.6	2765	74	3.0	50	0.415
56-42.8586-107.7828-2-15-						0-W14606	11460	286	8477	-21	-3	5.9	2.2	-194	-1	-1	9.1	2899	59	3.6	-31	0.343
56-42.8386-107.8233-2-15-						0-W14607	7882	201	16700	31	-2	5.1	4.1	-236	-1	-1	13.2	2022	43	2.7	47	0.305
56-42.6839-107.9206-2-15-						0-W14608	11500	607	13420	48	-2	7.3	5.2	-337	-1	-1	12.8	2372	56	3.6	58	0.293
56-42.6861-107.9192-2-12-						0-W14609	8128	262	16060	34	-2	5.5	4.6	454	-1	-1	11.9	3387	53	3.8	-23	0.262
56-42.7000-107.9897-2-15-						0-W14610	10090	638	13110	-23	-3	5.5	2.2	-297	-1	-1	10.6	2763	53	2.8	-37	0.325
56-42.6939-107.9500-2-15-						0-W14611	11300	496	15650	32	-2	5.6	4.7	-297	-1	-1	14.5	3544	63	3.0	-12	0.240
56-42.7075-107.9078-2-15-						0-W14612	14710	467	11870	41	-2	7.5	4.3	-319	-1	-1	11.8	3125	61	2.4	51	0.250
56-42.7289-107.9978-2-11-						0-W14613	15950	270	11890	49	-3	6.2	4.2	-247	-1	-1	13.0	3340	64	2.6	-64	0.465
56-42.7383-107.9497-2-11-						0-W14614	15160	489	14020	48	-2	6.1	4.1	-377	-1	-1	18.2	3535	60	3.4	50	0.287
56-42.7475-107.8217-2-15-						0-W14615	10650	374	17700	38	-2	8.3	5.4	-295	-1	-1	24.0	3093	54	4.6	-49	0.250
56-42.6656-107.8353-2-15-						0-W14616	14800	408	13050	-17	-2	6.1	4.4	-261	-1	-1	11.1	3570	61	1.9	-73	0.291
56-42.6689-107.8422-2-12-						0-W14617	17710	457	11990	-34	-3	8.5	5.3	-318	-1	-1	15.5	3971	69	3.3	58	0.255
56-42.8597-107.1800-2-15-						0-W14618	4902	107	1106	27	-1	3.6	2.4	-152			5.8	3031	49	2.4	57	0.493
56-42.8594-107.1419-2-15-						0-W14619	4521	97	1547	31	-1	3.5	2.7	-124	-1	-1	5.8	2083	45	2.2	-23	0.417

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

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																							U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (umho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
56-42.8692-107.1542-2-15-						0-W14620-10/16/77-17-	23-		-	-	-		-	-	8-1-1-5-4-	-1-	-	-4-2-1-1-	-1-	-	-	-	-	-	-	-	-	-	2.86
56-42.7925-107.2436-2-11-						0-W14621-10/18/77-11-	22-	11.5	C-	-	6.4-		-	-	10-1-1-5-4-2-2-1-	-4-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	3.62
56-42.8042-107.2367-2-99-						0-W14622-10/18/77-12-	22-		-C-	-	-		-	-	10-1-6-5-6-	-1-	-	-3-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	3.52
56-42.7892-107.0114-2-15-						0-W14623-10/18/77-14-	24-		-C-	-	-		-	-	8-1-1-5-6-	-1-	-2-3-3-4-1-		-1-	-	-	-	-	-	-	-	-	-	-	3.58
56-42.7867-107.0350-2-15-						0-W14624-10/18/77-	-		24-		-C-	-	-	-	-	5-1-1-4-6-	-1-	-2-3-3-4-1-		-1-	-	-	-	-	-	-	-	-	-	-	3.86
56-42.7839-107.0489-2-15-						0-W14625-10/18/77-14-	24-		-	-	-		-	-	5-1-1-4-6-	-1-	-2-3-3-4-1-		-1-	-	-	-	-	-	-	-	-	-	-	2.07
56-42.7928-107.0503-2-15-						0-W14626-10/18/77-14-	24-		-C-	-	-		-	-	9-1-6-4-1-	-1-	-2-3-3-4-1-		-4-	-	-	-	-	-	-	-	-	-	-	3.67
56-42.7594-107.0872-2-15-						0-W14627-10/18/77-15-	23-		-	-	-		-	-	3-1-1-5-6-	-1-	-2-3-3-4-1-		-1-	-	-	-	-	-	-	-	-	-	-	2.81
56-42.7553-107.0672-2-12-						0-W14628-10/18/77-15-	22-	12.5	C-	-	6.9-		750-		11-1-6-6-6-2-2-5-2-4-3-3-1-		-1-	-	-	-	-	-	-	-	-	-	-	-	3.00
56-42.7414-107.0533-2-11-						0-W14629-10/18/77-16-	23-	9.5	C-	-	6.4-		510-		9-1-6-6-6-2-2-1-	-4-4-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	2.54
56-42.7411-107.0589-2-15-						0-W14630-10/18/77-17-	22-		-	-	-		-	-	6-1-6-5-6-	-1-	-2-3-3-4-1-		-1-	-	-	-	-	-	-	-	-	-	-	2.87
56-42.7422-107.0606-2-15-						0-W14631-10/18/77-17-	22-		-	-	-		-	-	3-1-6-5-6-	-1-	-2-3-3-4-1-		-1-	-	-	-	-	-	-	-	-	-	-	2.90
56-42.7053-107.0622-2-15-						0-W14632-10/18/77-17-	22-		-	-	-		-	-	2-1-6-4-6-	-1-	-2-3-3-4-1-		-1-	-	-	-	-	-	-	-	-	-	-	3.94
56-42.6861-107.0456-2-15-						0-W14633-10/18/77-17-	22-		-	-	-		-	-	6-1-6-4-6-	-1-	-2-3-3-4-1-		-1-	-	-	-	-	-	-	-	-	-	-	3.11
56-42.6514-107.0142-2-15-						0-W14634-10/18/77-18-	22-		-	-	-		-	-	5-1-6-4-6-	-1-	-2-3-3-4-1-		-1-	-	-	-	-	-	-	-	-	-	-	3.09
56-42.6511-107.0078-2-15-						0-W14635-10/18/77-18-	22-		-	-	-		-	-	15-1-6-5-6-	-1-	-2-3-3-4-1-		-1-	-	-	-	-	-	-	-	-	-	-	2.41
56-42.6072-107.4989-2-15-						0-W14636-10/19/77-12-	19-		-	-	-		-	-	10-1-6-4-1-	-1-	-2-3-3-4-1-		-1-	-	-	-	-	-	-	-	-	-	-	2.95
56-42.8456-107.8747-2-15-						0-W14637-10/17/77-11-	20-		-	-	-		-	-	14-1-1-4-6-	-1-	-2-3-3-2-1-		-1-	-	-	-	-	-	-	-	-	-	-	5.03
56-42.8681-107.8603-2-15-						0-W14638-10/17/77-11-	20-		-	-	-		-	-	8-1-1-4-6-	-1-	-2-3-3-2-1-		-1-	-	-	-	-	-	-	-	-	-	-	3.35
56-42.8664-107.8572-2-15-						0-W14639-10/17/77-11-	20-		-	-	-		-	-	11-1-1-4-6-	-1-	-2-3-3-2-1-		-1-	-	-	-	-	-	-	-	-	-	-	4.58
56-42.8472-107.8592-2-15-						0-W14640-10/17/77-12-	20-		-	-	-		-	-	5-1-1-4-1-	-1-	-2-3-3-2-1-		-1-	-	-	-	-	-	-	-	-	-	-	4.79
56-42.8172-107.8517-2-15-						0-W14641-10/17/77-12-	20-		-	-	-		-	-	11-1-1-4-6-	-1-	-2-3-3-2-1-		-1-	-	-	-	-	-	-	-	-	-	-	4.58
56-42.8011-107.8375-2-15-						0-W14642-10/17/77-13-	20-		-	-	-		-	-	9-1-1-4-1-	-1-	-2-3-3-2-1-		-1-	-	-	-	-	-	-	-	-	-	-	5.02
56-42.8033-107.8350-2-15-						0-W14643-10/17/77-13-	20-		-	-	-		-	-	12-1-1-4-1-	-1-	-2-3-3-2-1-		-1-	-	-	-	-	-	-	-	-	-	-	12.19
56-42.7822-107.8617-2-12-						0-W14644-10/17/77-13-	20-		-C-	-	-		-	-	10-1-1-4-1-1-2-4-2-3-3-2-1-		-1-	-	-	-	-	-	-	-	-	-	-	-	4.54
56-42.7736-107.8203-2-15-						0-W14645-10/17/77-14-	20-		-	-	-		-	-	8-1-1-4-1-	-1-	-2-3-4-2-1-		-1-	-	-	-	-	-	-	-	-	-	-	6.48
56-42.7706-107.7975-2-15-						0-W14646-10/17/77-14-	20-		-	-	-		-	-	5-1-1-4-1-	-1-	-2-3-3-2-1-		-1-	-	-	-	-	-	-	-	-	-	-	7.67
56-42.8378-107.7711-2-15-						0-W14647-10/17/77-14-	20-		-	-	-		-	-	13-1-1-4-6-	-1-	-2-3-3-2-1-		-1-	-	-	-	-	-	-	-	-	-	-	3.93
56-42.8106-107.7697-2-15-						0-W14648-10/17/77-15-	20-		-	-	-		-	-	5-1-1-4-6-	-1-	-3-3-3-2-1-		-1-	-	-	-	-	-	-	-	-	-	-	3.62
56-42.7986-107.7378-2-15-						0-W14649-10/17/77-15-	20-		-	-	-		-	-	11-1-1-4-1-	-1-	-2-3-3-2-1-		-1-	-	-	-	-	-	-	-	-	-	-	3.66
56-42.7750-107.7278-2-15-						0-W14650-10/17/77-16-	20-		-C-	-	-		-	-	16-1-1-4-1-	-1-	-2-3-3-2-1-		-1-	-	-	-	-	-	-	-	-	-	-	6.90
56-42.7608-107.6800-2-15-						0-W14651-10/17/77-	-		20-		-C-	-	-	-	-	18-1-1-4-6-	-1-	-2-3-4-2-1-		-2-	-	-	-	-	-	-	-	-	-	-	82.74
56-42.7789-107.6689-2-15-						0-W14652-10/17/77-17-	20-		-C-	-	-		-	-	325-1-1-4-6-	-1-	-2-3-4-2-1-		-2-	-	-	-	-	-	-	-	-	-	-	163.20
56-42.7858-107.6722-2-15-						0-W14653-10/17/77-17-	20-		-	-	-		-	-	13-1-1-4-1-	-1-	-2-4-3-2-1-		-1-	-	-	-	-	-	-	-	-	-	-	12.74
56-42.7981-107.6489-2-15-						0-W14654-10/17/77-18-	20-		-C-	-	-		-	-	51-1-1-4-1-	-1-	-2-3-3-2-1-		-2-	-	-	-	-	-	-	-	-	-	-	35.40
56-42.8086-107.6828-2-99-						0-W14656-10/18/77-11-	20-		-C-	-	-		-	-	7-1-1-4-6-	-1-	-2-4-3-2-1-		-2-	-	-	-	-	-	-	-	-	-	-	71.71
56-42.8094-107.6275-2-11-						0-W14657-10/18/77-11-	20-	15.5	C-	-	7.2-		1700-		23-1-1-4-6-3-2-1-2-3-3-2-1-		-2-	-	-	-	-	-	-	-	-	-	-	-	14.89
56-42.8228-107.6022-2-12-						0-W14658-10/18/77-13-	20-	16.5	C-	-	7.7-		950-		46-1-1-4-6-4-3-4-2-3-3-2-1-		-2-	-	-	-	-	-	-	-	-	-	-	-	24.98
56-42.8425-107.6072-2-12-						0-W14659-10/18/77-13-	20-	18.5	C-	-	7.5-		1000-		20-1-1-4-1-4-3-4-2-3-3-2-1-		-2-	-	-	-	-	-	-	-	-	-	-	-	24.47
56-42.8436-107.6064-2-15-						0-W14660-10/18/77-13-	20-		-	-	-		-	-	5-1-1-4-6-	-1-	-2-3-3-2-1-		-2-	-	-	-	-	-	-	-	-	-	-	4.09
56-42.8436-107.6200-2-15-						0-W14661-10/18/77-14-	20-		-	-	-		-	-	204-1-1-4-6-	-1-	-2-4-3-2-1-		-2-	-	-	-	-	-	-	-	-	-	-	25.85
56-42.6250-107.4697-2-11-						0-W14662-10/19/77-12-	19-	12.5	-	-	6.3-		350-		5-1-6-5-8-2-2-2-	-4-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	3.69
56-42.6258-107.4689-2-15-						0-W14663-10/19/77-12-	19-		-	-	-		-	-	19-3-6-4-6-	-1-	-2-3-3-4-1-		-1-	-	-	-	-	-	-	-	-	-	-	3.51
56-42.6233-107.4650-2-11-						0-W14664-10/19/77-13-	19-	12.0	-	-	6.5-		315-		34-3-6-5-6-3-3-1-	-3-3-4-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	3.39
56-42.6456-107.4361-2-15-						0-W14665-10/19/77-13-	19-		-C-	-	-		-	-	23-1-6-4-1-	-1-	-2-3-3-4-1-		-1-	-	-	-	-	-	-	-	-	-	-	-	3.20
56-42.6025-107.4792-2-15-						0-W14666-10/19/77-14-	19-		-	-	-		-	-	34-3-7-5-6-	-1-	-2-3-3-4-1-		-1-	-	-	-	-	-	-	-	-	-	-	-	3.00
56-42.5806-107.4772-2-99-						0-W14667-10/19/77-14-	19-		-C-	-	-		-	-	34-3-4-4-4-	-1-	-	-4-3-5-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	18.70
56-42.5917-107.4617-2-15-						0-W14668-10/19/77-14-	19-		-	-	-		-	-	26-3-4-4-6-	-1-	-2-3-3-4-1-		-1-	-	-	-	-	-	-	-	-	-	-	-	3.08
56-42.5469-107.4989-2-15-						0-W14669-10/19/77-15-	19-		-	-	-		-	-	34-3-6-5-1-	-1-	-2-3-3-5-1-		-1-	-	-	-	-	-	-	-	-	-	-	-	6.73
56-42.5689-107.4414-2-15-						0-W14670-10/19/77-15-	21-		-	-	-		-	-	23-3-6-	-	-	-3-3-2-1-	-1-	-	-	-	-	-	-	-	-	-	-	-	4.40
56-42.8156-107.5431-2-15-						0-W14671-10/18/77-15-	20-		-C-	-	-		-	-	12-1-1-4-6-	-1-	-2-3-3-2-1-		-2-	-	-	-	-	-	-	-	-	-	-	-	6.18

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

DOE SAMPLE NUMBER						LAS SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
56-42.8692-107.1542-2-15-						0-W14620	-5	-5	-5	22	-20	-15	11	-10	-15	1	24
56-42.7925-107.2436-2-11-						0-W14621	-5	-5	-5	12	-20	-15	16	-10	-15	2	31
56-42.8042-107.2367-2-99-						0-W14622	-5	5	-5	24	-20	17	14	-10	-15	2	38
56-42.7892-107.0114-2-15-						0-W14623	-5	-5	-5	10	-20	-15	-5	-10	-15	1	19
56-42.7867-107.0350-2-15-						0-W14624	-5	-5	-5	-10	-20	-15	6	-10	-15	1	17
56-42.7839-107.0489-2-15-						0-W14625	-5	5	-5	-10	-20	-15	6	-10	-15	2	16
56-42.7928-107.0503-2-15-						0-W14626	-5	-5	-5	10	-20	-15	8	-10	-15	1	12
56-42.7594-107.0872-2-15-						0-W14627	-5	-5	-5	13	-20	20	11	-10	-15	2	32
56-42.7553-107.0672-2-12-						0-W14628	-5	-5	-5	22	-20	-15	14	-10	-15	2	33
56-42.7414-107.0533-2-11-						0-W14629	-5	-5	-5	23	-20	-15	9	-10	-15	2	36
56-42.7411-107.0589-2-15-						0-W14630	-5	-5	-5	14	-20	28	-5	-10	-15	1	27
56-42.7422-107.0606-2-15-						0-W14631	-5	-5	-5	16	-20	32	14	-10	-15	2	28
56-42.7053-107.0622-2-15-						0-W14632	-5	-5	-5	21	-20	25	17	-10	-15	2	36
56-42.6861-107.0456-2-15-						0-W14633	-5	-5	-5	10	-20	-15	8	-10	-15	2	31
56-42.6514-107.0142-2-15-						0-W14634	-5	-5	-5	28	-20	-15	10	-10	-15	2	33
56-42.6511-107.0078-2-15-						0-W14635	-5	-5	-5	20	-20	-15	13	-10	-15	2	35
56-42.6072-107.4989-2-15-						0-W14636	-5	-5	-5	15	-20	-15	14	-10	-15	2	44
56-42.8456-107.8747-2-15-						0-W14637	-5	-5	-5	16	-20	37	17	-10	-15	2	26
56-42.8681-107.8603-2-15-						0-W14638	-5	-5	-5	21	-20	22	9	-10	-15	2	32
56-42.8664-107.8572-2-15-						0-W14639	-5	-5	-5	14	-20	-15	16	-10	-15	2	20
56-42.8472-107.8592-2-15-						0-W14640	-5	-5	-5	21	-20	22	-5	-10	-15	2	32
56-42.8172-107.8517-2-15-						0-W14641	-5	-5	-5	25	-20	33	15	-10	-15	2	44
56-42.8011-107.8375-2-15-						0-W14642	-5	-5	-5	27	-20	17	14	-10	-15	2	43
56-42.8033-107.8350-2-15-						0-W14643	-5	-5	-5	-10	-20	18	15	-10	-15	2	23
56-42.7822-107.8617-2-12-						0-W14644	-5	-5	-5	12	-20	-15	9	-10	-15	2	33
56-42.7736-107.8203-2-15-						0-W14645	-5	-5	-5	18	-20	-15	19	-10	-15	2	31
56-42.7706-107.7975-2-15-						0-W14646	-5	-5	-5	14	-20	29	12	-10	-15	-1	24
56-42.8378-107.7711-2-15-						0-W14647	-5	-5	-5	13	-20	-15	18	-10	-15	2	23
56-42.8106-107.7697-2-15-						0-W14648	-5	-5	-5	30	-20	24	10	-10	-15	2	40
56-42.7986-107.7378-2-15-						0-W14649	-5	-5	-5	30	-20	23	11	-10	-15	2	43
56-42.7750-107.7278-2-15-						0-W14650	-5	-5	-5	19	-20	17	10	-10	-15	2	31
56-42.7608-107.6800-2-15-						0-W14651	-5	6	-5	11	-20	22	20	-10	-15	2	30
56-42.7789-107.6689-2-15-						0-W14652	-5	-5	-5	15	-20	-15	19	-10	-15	3	35
56-42.7858-107.6722-2-15-						0-W14653	-5	5	-5	15	-20	29	8	-10	-15	2	40
56-42.7981-107.6489-2-15-						0-W14654	-5	-5	-5	23	-20	-15	21	-10	16	2	50
56-42.8086-107.6828-2-99-						0-W14656	-5	6	-5	32	-20	40	19	-10	-15	3	142
56-42.8094-107.6275-2-11-						0-W14657	-5	6	-5	14	-20	25	16	-10	-15	3	43
56-42.8228-107.6022-2-12-						0-W14658	-5	6	-5	-10	-20	19	16	-10	-15	3	36
56-42.8425-107.6072-2-12-						0-W14659	-5	5	-5	14	-20	28	16	-10	-15	3	49
56-42.8436-107.6064-2-15-						0-W14660	-5	5	-5	16	-20	-15	11	-10	-15	2	48
56-42.8436-107.6200-2-15-						0-W14661	-5	-5	-5	30	-20	-15	6	-10	-15	3	35
56-42.6250-107.4697-2-11-						0-W14662	-5	5	-5	10	-20	-15	15	-10	18	2	28
56-42.6258-107.4689-2-15-						0-W14663	-5	-5	-5	20	-20	-15	12	-10	-15	2	38
56-42.6233-107.4650-2-11-						0-W14664	-5	5	-5	-10	-20	-15	13	-10	-15	3	45
56-42.6456-107.4361-2-15-						0-W14665	-5	-5	-5	20	-20	-15	10	-10	-15	2	37
56-42.6025-107.4792-2-15-						0-W14666	-5	-5	-5	18	-20	-15	14	-10	-15	2	36
56-42.5806-107.4772-2-99-						0-W14667	-5	-5	-5	18	-20	-15	21	14	-15	2	34
56-42.5917-107.4617-2-15-						0-W14668	-5	-5	-5	25	-20	-15	10	-10	-15	2	36
56-42.5469-107.4989-2-15-						0-W14669	-5	-5	-5	16	-20	-15	-5	-10	-15	2	32
56-42.5689-107.4414-2-15-						0-W14670	-5	5	-5	12	-20	-15	9	-10	-15	2	42
56-42.8156-107.5431-2-15-						0-W14671	-5	-5	-5	-10	-20	-15	12	-10	-15	2	29

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
56-	42.8692-	107.1542-2-15-				0-W14620	46780	-0.05	479	2522	48	-36	5.7	42	2.5	3	0.8	9321	6.8	12250	23	0.3
56-	42.7925-	107.2436-2-11-				0-W14621	42280	-0.07	429	78020	56	-68	8.3	32	10.1	4	1.1	13260	7.4	27400	31	0.4
56-	42.8042-	107.2367-2-99-				0-W14622	55510	-0.06	574	35120	41	-73	11.4	41	3.4	4	0.8	11290	3.9	16360	26	0.3
56-	42.7892-	107.0114-2-15-				0-W14623	38130	-0.05	371	11020	70	-55	4.5	54	1.7	4	0.8	11610	17.5	13070	36	0.5
56-	42.7867-	107.0350-2-15-				0-W14624	34310	-0.05	496	12940	58	-49	6.7	44	2.4	4	0.9	9129	11.8	12300	30	0.4
56-	42.7839-	107.0489-2-15-				0-W14625	34880	-0.06	503	15950	74	-45	7.6	42	2.6	5	1.0	10640	19.2	12640	52	0.4
56-	42.7928-	107.0503-2-15-				0-W14626	28340	-0.04	495	-482	43	-39	7.9	37	1.3	4	0.6	5929	12.9	10510	26	0.3
56-	42.7594-	107.0872-2-15-				0-W14627	46940	-0.05	398	33170	55	66	5.3	46	4.3	3	0.8	12440	3.9	16660	29	0.3
56-	42.7553-	107.0672-2-12-				0-W14628	47680	-0.06	543	33500	62	-56	6.8	54	3.1	4	0.9	12540	7.1	18790	35	0.4
56-	42.7414-	107.0533-2-11-				0-W14629	54750	-0.06	772	18960	46	-75	7.8	30	2.0	2	0.9	11940	7.3	18130	35	0.3
56-	42.7411-	107.0589-2-15-				0-W14630	36740	-0.04	675	26880	48	80	8.5	35	2.0	3	0.7	7940	8.7	12270	28	0.3
56-	42.7422-	107.0606-2-15-				0-W14631	48180	-0.05	528	11470	62	-60	5.1	55	2.5	3	0.8	13700	7.7	16830	33	0.3
56-	42.7053-	107.0622-2-15-				0-W14632	46010	-0.08	576	37720	61	-70	15.4	44	3.0	4	0.9	12804	10.5	15050	52	0.3
56-	42.6861-	107.0456-2-15-				0-W14633	51760	-0.08	452	16200	78	-78	9.8	38	3.0	3	1.0	15910	12.5	14320	54	0.4
56-	42.6514-	107.0142-2-15-				0-W14634	51870	-0.06	617	15430	76	-69	9.3	42	1.7	4	0.7	18720	12.5	14180	45	0.4
56-	42.6511-	107.0078-2-15-				0-W14635	55620	-0.05	671	17120	64	105	4.8	34	2.2	3	0.9	13780	9.1	18920	40	0.3
56-	42.6072-	107.4989-2-15-				0-W14636	57830	-0.06	634	21300	80	-86	6.0	36	1.1	4	1.0	12200	9.0	18300	45	0.3
56-	42.8456-	107.8747-2-15-				0-W14637	47350	-0.09	569	30280	111	182	10.7	59	-1.4	4	0.9	15120	24.3	11400	75	0.7
56-	42.8681-	107.8603-2-15-				0-W14638	47860	-0.06	597	11900	49	-53	7.9	43	1.8	4	0.7	10070	9.6	16020	32	0.4
56-	42.8664-	107.8572-2-15-				0-W14639	49500	-0.05	667	11370	98	-67	4.3	48	1.2	5	1.3	9870	23.0	15440	67	0.7
56-	42.8472-	107.8592-2-15-				0-W14640	55270	-0.09	486	10190	99	54	10.4	88	3.2	4	1.2	21920	16.8	18280	67	0.6
56-	42.8172-	107.8517-2-15-				0-W14641	73860	-0.08	596	9789	84	-71	9.8	82	3.2	5	1.1	21080	7.8	17730	46	0.5
56-	42.8011-	107.8375-2-15-				0-W14642	71930	-0.08	637	10010	69	-92	8.9	59	2.8	4	0.7	16280	8.6	14340	45	0.3
56-	42.8033-	107.8350-2-15-				0-W14643	63990	-0.06	982	13340	168	-114	9.3	72	1.4	7	1.7	12690	40.3	14770	112	1.4
56-	42.7822-	107.8617-2-12-				0-W14644	62850	-0.06	719	11850	56	132	7.8	50	1.7	4	0.9	14860	9.1	21790	44	0.4
56-	42.7736-	107.8203-2-15-				0-W14645	78660	-0.07	1141	12870	78	-91	7.8	69	1.8	5	1.0	15780	15.8	16540	44	0.7
56-	42.7706-	107.7975-2-15-				0-W14646	60650	-0.07	764	11520	89	-94	7.9	53	-1.2	6	0.8	14390	21.4	16900	62	0.5
56-	42.8378-	107.7711-2-15-				0-W14647	51800	-0.05	535	7790	68	-86	9.1	34	2.1	3	0.7	10660	10.5	17880	43	0.4
56-	42.8106-	107.7697-2-15-				0-W14648	60250	-0.06	566	15530	59	54	7.5	58	3.0	4	1.0	17180	8.3	16870	39	0.4
56-	42.7986-	107.7378-2-15-				0-W14649	57200	-0.06	714	17420	62	-63	7.3	56	2.4	4	0.9	14410	10.3	19830	34	0.5
56-	42.7750-	107.7278-2-15-				0-W14650	54290	-0.07	542	5952	66	-72	6.4	34	-1.2	5	0.9	10820	19.0	15400	46	0.6
56-	42.7608-	107.6800-2-15-				0-W14651	51990	-0.06	2221	22150	245	-99	10.5	47	2.5	8	0.4	12960	26.0	17620	174	1.2
56-	42.7789-	107.6689-2-15-				0-W14652	79050	-0.06	635	5550	93	-87	5.1	40	3.1	4	1.1	11800	6.2	25030	132	0.8
56-	42.7858-	107.6722-2-15-				0-W14653	57130	-0.07	541	2715	67	-64	9.4	55	2.8	4	0.9	15560	8.8	18360	39	0.4
56-	42.7981-	107.6489-2-15-				0-W14654	78930	-0.08	683	9731	117	-92	6.0	35	2.4	6	0.8	11530	13.0	21530	84	0.7
56-	42.8086-	107.6828-2-99-				0-W14656	60170	-0.08	431	36360	80	666	9.7	56	4.0	4	0.8	17240	4.2	20690	81	0.5
56-	42.8094-	107.6275-2-11-				0-W14657	78160	-0.07	1046	22600	129	-133	7.9	30	2.7	4	1.2	11290	10.7	20270	74	0.6
56-	42.8228-	107.6022-2-12-				0-W14658	67550	-0.07	953	6204	135	-100	7.8	18	2.4	9	1.2	7898	16.0	25640	93	0.9
56-	42.8425-	107.6072-2-12-				0-W14659	65650	-0.06	1667	19790	94	-101	14.0	34	3.1	4	0.3	10520	9.8	16660	71	0.5
56-	42.8436-	107.6064-2-15-				0-W14660	42530	-0.05	500	41240	41	86	5.7	27	2.6	3	0.7	11760	4.5	15070	28	0.3
56-	42.8436-	107.6200-2-15-				0-W14661	48590	-0.06	607	11800	77	-53	5.8	44	3.0	6	0.8	12670	19.5	15040	50	0.7
56-	42.6250-	107.4697-2-11-				0-W14662	53410	-0.07	777	14810	70	-87	6.2	22	-1.3	3	0.9	11730	12.0	20170	44	0.3
56-	42.6258-	107.4689-2-15-				0-W14663	52530	-0.05	655	17150	58	69	8.9	31	1.3	3	0.8	11390	8.6	18420	34	0.3
56-	42.6233-	107.4650-2-11-				0-W14664	57860	-0.06	814	26510	60	-78	5.8	27	2.1	3	0.9	13150	8.1	22000	40	0.3
56-	42.6456-	107.4361-2-15-				0-W14665	64600	-0.06	761	16320	81	-79	6.7	40	1.4	4	0.9	14250	9.5	18040	46	0.3
56-	42.6025-	107.4792-2-15-				0-W14666	61140	-0.06	687	16480	49	-83	4.7	19	-1.0	3	0.9	10510	6.8	17940	31	0.3
56-	42.5806-	107.4772-2-99-				0-W14667	58180	-0.06	628	11770	110	-96	11.3	41	2.7	5	0.7	17410	10.6	16230	73	0.6
56-	42.5917-	107.4617-2-15-				0-W14668	46520	-0.06	607	22330	58	291	6.2	44	2.9	4	0.9	12270	7.6	15640	32	0.4
56-	42.5469-	107.4989-2-15-				0-W14669	59630	-0.06	633	18820	62	-64	4.9	27	1.8	3	0.8	11150	5.9	32090	37	0.3
56-	42.5689-	107.4414-2-15-				0-W14670	58550	-0.07	687	10640	66	-80	6.3	28	-1.1	4	0.8	11450	10.6	18790	43	0.3
56-	42.8156-	107.5431-2-15-				0-W14671	61050	-0.05	1559	31470	142	-107	9.5	37	1.2	5	1.0	13870	17.3	14960	90	0.6

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

DOE SAMPLE NUMBER						LAS SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
56-42.8692-107.1542-2-15-						0-W14620	8466	131	2371	24	-2	5.1	3.7	151	-1	-1	8.1	3096	59	3.0	45	0.353
56-42.7925-107.2436-2-11-						0-W14621	46160	422	7020	75	-2	4.1	5.2	358	-1	-1	8.5	1464	29	2.8	88	0.426
56-42.8042-107.2367-2-99-						0-W14622	18070	376	5311	38	-2	5.7	3.6	-302	-1	-1	7.0	2596	96	2.5	76	0.503
56-42.7892-107.0114-2-15-						0-W14623	8390	258	6406	-15	-1	5.7	4.6	-185	-1	-1	11.6	2973	53	3.7	39	0.309
56-42.7867-107.0350-2-15-						0-W14624	11880	276	4458	28	-1	4.3	3.7	-200	-1	1	7.9	2766	50	3.3	68	0.489
56-42.7839-107.0489-2-15-						0-W14625	7930	297	4047	35	-2	5.1	5.2	265	-1	-1	13.0	3674	60	3.2	48	0.159
56-42.7928-107.0503-2-15-						0-W14626	4830	139	2494	24	-1	3.2	2.6	-168		-1	8.1	2717	38	2.4	-12	0.453
56-42.7594-107.0872-2-15-						0-W14627	31750	207	3777	52	-2	6.2	3.9	-186	-1	-1	8.5	2518	71	1.9	75	0.331
56-42.7553-107.0672-2-12-						0-W14628	22240	288	3940	-20	-2	5.6	4.8	-231	-1	-1	9.4	3273	60	3.5	-63	0.319
56-42.7414-107.0533-2-11-						0-W14629	11340	325	14320	50	-2	5.6	4.0	417	-1	-1	8.4	2495	53	1.8	-26	0.302
56-42.7411-107.0589-2-15-						0-W14630	18890	238	6047	19	-1	3.6	3.5	-225		-1	8.4	2707	62	2.1	-20	0.342
56-42.7422-107.0606-2-15-						0-W14631	12610	307	7318	42	-2	6.4	3.9	-209	-1	-1	10.0	2724	71	2.6	-51	0.290
56-42.7053-107.0622-2-15-						0-W14632	11340	365	7746	-25	-2	5.8	4.4	-259	-1	-1	16.5	2650	73	4.5	-37	0.239
56-42.6861-107.0456-2-15-						0-W14633	10270	512	10270	54	-2	7.1	5.7	-284	-1	-1	15.7	3103	73	3.4	88	0.198
56-42.6514-107.0142-2-15-						0-W14634	10480	496	11670	40	-2	5.3	4.8	340	-1	-1	14.9	5148	125	3.9	67	0.207
56-42.6511-107.0078-2-15-						0-W14635	11970	379	14060	44	-2	6.1	4.0	549	-1	-1	12.1	2859	62	3.3	52	0.199
56-42.6072-107.4989-2-15-						0-W14636	14600	494	14640	27	-2	4.8	4.3	586	-1	-1	14.6	3343	73	2.6	67	0.202
56-42.8456-107.8747-2-15-						0-W14637	9606	460	14590	32	-3	7.0	7.7	-307	-1	-1	31.3	3253	46	4.9	-33	0.161
56-42.8681-107.8603-2-15-						0-W14638	10550	289	8027	32	-2	5.0	3.6	-189	-1	-1	11.6	2879	47	3.5	-19	0.289
56-42.8664-107.8572-2-15-						0-W14639	6898	253	14820	34	-2	5.3	5.6	-200	-1	1	26.6	3161	37	5.1	51	0.172
56-42.8472-107.8592-2-15-						0-W14640	9766	312	10360	-26	-3	10.8	6.2	-211	-1	-1	24.6	2646	57	6.0	89	0.195
56-42.8172-107.8517-2-15-						0-W14641	17920	317	9724	50	-2	9.0	5.1	-218	1	-1	16.4	3311	79	3.5	75	0.279
56-42.8011-107.8375-2-15-						0-W14642	13130	263	16330	-24	-3	7.2	3.1	-253	-1	-1	15.8	3702	51	3.0	-37	0.318
56-42.8033-107.8350-2-15-						0-W14643	-6513	417	21260	28	-2	7.7	11.7	-312	1	1	56.1	5693	36	10.5	47	0.217
56-42.7822-107.8617-2-12-						0-W14644	12130	254	23070	38	-2	6.5	3.9	-250	-1	-1	15.1	3011	49	4.1	23	0.301
56-42.7736-107.8203-2-15-						0-W14645	9426	312	21810	38	-2	7.5	4.7	-237	-1	1	21.0	3656	45	4.8	-25	0.309
56-42.7706-107.7975-2-15-						0-W14646	7766	366	18340	25	-2	6.5	1.4	-262	-1	-1	25.8	3464	50	7.2	-28	0.297
56-42.8378-107.7711-2-15-						0-W14647	7679	331	11690	29	-2	4.8	4.9	-249	-1	-1	15.8	2418	46	3.4	49	0.249
56-42.8106-107.7697-2-15-						0-W14648	20490	305	7504	45	2	8.1	5.4	-196	-1	-1	13.2	3216	93	3.9	-65	0.274
56-42.7986-107.7378-2-15-						0-W14649	15460	263	9732	40	-2	6.3	5.3	-189	-1	-1	13.2	2973	71	4.1	73	0.277
56-42.7750-107.7278-2-15-						0-W14650	6252	229	11370	-20	-2	5.5	3.8	-209	-1	-1	19.4	2456	48	4.7	-31	0.356
56-42.7608-107.6800-2-15-						0-W14651	8431	375	16030	41	-2	5.3	23.8	-286	-1	2	56.6	3679	75	7.2	37	1.462
56-42.7789-107.6689-2-15-						0-W14652	-5482	74	21910	61	-2	5.1	35.4	-216	-1	-1	22.0	1685	83	3.0	33	7.418
56-42.7858-107.6722-2-15-						0-W14653	9354	337	8264	59	-2	6.7	6.0	-209	-1	-1	14.2	3525	55	3.6	96	0.897
56-42.7981-107.6489-2-15-						0-W14654	8599	192	18880	-22	-2	5.4	8.7	-238	-1	-1	33.8	2112	61	6.6	-30	1.047
56-42.8086-107.6828-2-99-						0-W14656	24040	238	14840	65	-2	8.1	12.8	593	-1	-1	18.9	2558	87	3.1	56	3.794
56-42.8094-107.6275-2-11-						0-W14657	-7551	1360	19850	65	-2	4.6	7.4	-438	-1	-1	31.3	-2102	-31	5.8	94	0.476
56-42.8228-107.6022-2-12-						0-W14658	-5606	251	20770	57	-2	3.9	10.6	-262	-1	-1	38.5	2025	29	8.0	-35	0.649
56-42.8425-107.6072-2-12-						0-W14659	10810	556	12700	45	-2	4.4	8.9	-335	-1	1	25.3	-1637	41	5.0	39	0.967
56-42.8436-107.6064-2-15-						0-W14660	12100	431	6360	39	-2	4.9	4.0	-217	-1	-1	7.7	2130	43	2.3	57	0.531
56-42.8436-107.6200-2-15-						0-W14661	11500	372	5835	38	-2	5.4	9.6	-194	-1	-1	18.1	2661	130	4.9	34	1.428
56-42.6250-107.4697-2-11-						0-W14662	10050	265	14480	-22	-2	4.5	2.4	626	-1	-1	12.8	3496	58	-1.7	-33	0.288
56-42.6258-107.4689-2-15-						0-W14663	8798	343	13530	31	-2	4.5	3.9	442	-1		12.0	2572	53	2.4	18	0.293
56-42.6233-107.4650-2-11-						0-W14664	16530	274	11690	52	-2	5.3	5.8	882	-1	-1	19.2	4327	58	2.7	50	0.177
56-42.6456-107.4361-2-15-						0-W14665	8191	399	14980	44	-2	5.8	5.4	383	-1	-1	16.7	3076	73	4.9	46	0.192
56-42.6025-107.4792-2-15-						0-W14666	9862	294	15240	-17	-2	4.6	2.4	298	-1	-1	9.5	2089	46	-1.3	-26	0.316
56-42.5806-107.4772-2-99-						0-W14667	-5761	463	13060	40	-2	5.9	9.7	-311	-1	1	35.1	3069	70	4.9	84	0.533
56-42.5917-107.4617-2-15-						0-W14668	23010	269	14820	45	-2	5.8	3.9	316	-1	-1	8.7	3525	56	3.3	71	0.354
56-42.5469-107.4989-2-15-						0-W14669	14260	285	9572	57	-2	4.8	3.7	-195	-1	-1	9.7	2822	66	2.6	85	0.694
56-42.5689-107.4414-2-15-						0-W14670	8280	369	13150	52	-2	5.0	3.6	285	-1	-1	12.8	2328	64	3.1	-29	0.344
56-42.8156-107.5431-2-15-						0-W14671	-5982	597	15580	37	-2	4.5	9.4	517	1	1	29.3	4194	68	5.8	73	0.211

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																							U CONCENTRATION
							TIME SAMPLED																						
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
56-42.8294-107.5258-2-15-						0-W14672-10/18/77-15-			20-		-C-	-	-	-	-	27-1-1-4-1-	-1-	-2-3-3-2-1-	-2-	-	-	-	-	63.82
56-42.6142-107.2594-2-15-						0-W14675-10/20/77-11-			20-		-	-	-	-	-	6-3-7-4-6-	-1-	-3-4-3-3-3-	-1-	-	-	-	-	8.57
56-42.6136-107.3181-2-15-						0-W14676-10/20/77-12-			20-		-	-	-	-	-	13-3-7-4-6-	-1-	-3-3-3-3-3-	-1-	-	-	-	-	3.77
56-42.6200-107.3119-2-15-						0-W14677-10/20/77-12-			20-		-	-	-	-	-	13-3-7-4-6-	-1-	-3-3-3-3-3-	-1-	-	-	-	-	3.41
56-42.6272-107.3994-2-15-						0-W14678-10/20/77-13-			20-		-	-	-	-	-	11-3-7-4-6-	-1-	-3-3-3-3-3-	-1-	-	-	-	-	2.98
56-42.6261-107.4089-2-15-						0-W14679-10/20/77-14-			20-		-	-	-	-	-	11-3-7-4-6-	-1-	-3-3-3-3-3-	-1-	-	-	-	-	3.54
56-42.5889-107.3972-2-15-						0-W14680-10/20/77-14-			20-		-	-	-	-	-	14-3-7-4-6-	-1-	-3-3-4-3-3-	-1-	-	-	-	-	3.62
56-42.5886-107.3975-2-15-						0-W14681-10/20/77-15-			20-		-	-	-	-	-	12-3-7-4-6-	-1-	-3-3-4-3-3-	-1-	-	-	-	-	3.94
56-42.5353-107.3622-2-11-						0-W14682-10/20/77-16-			20-	10.0	-	-	6.7	-	-	11-3-7-4-1-2	-3-1-	-4-4-3-2-	-1-	-	-	-	-	19.25
56-42.5489-107.3456-2-15-						0-W14683-10/20/77-17-			20-		-	-	-	-	-	13-3-7-4-6-	-1-	-3-3-3-3-2-	-1-	-	-	-	-	4.35
56-42.5608-107.3128-2-15-						0-W14684-10/20/77-17-			20-		-	-	-	-	-	-3-7-4-6-	-1-	-3-3-2-3-2-	-1-	-	-	-	-	2.92
56-42.5625-107.3103-2-15-						0-W14685-10/20/77-17-			20-		-	-	-	-	-	7-3-7-4-6-	-1-	-3-3-2-3-2-	-1-	-	-	-	-	3.03
56-42.9658-106.8297-2-11-						0-W14686-10/27/77-12-			14-	12.0	-	-	7.8	3000	-	9-1-2-5-6-2	-2-1-	-4-2-	-1-	-1-	-	-	-	3.59
56-42.9758-106.8122-2-15-						0-W14687-10/27/77-12-			14-		-	-	-	-	-	9-1-2-4-7-	-1-	-3-2-3-1-	-1-	-	-	-	-	3.40
56-42.1683-107.7275-2-15-						0-W14689-10/11/77-12-			7-		-	-	-	-	-	36-4-	-4-6-	- - -	-3-2-2-1-	-1-	-	-	-	6.26
56-42.7608-106.4856-2-15-						0-W14691-08/12/77-15-			32-		-	-	-	-	-	6-1-6-5-6-	- - -	-4-3-4-1-	-1-	-	-	-	-	2.32
56-42.7942-106.4858-2-15-						0-W14692-08/12/77-14-			34-		-	-	-	-	-	17-1-6-4-6-	- - -	-4-3-3-1-	-1-	-	-	-	-	5.14
56-42.9461-106.1317-2-15-						0-W14698-08/13/77-11-			29-		-C-	-	-	-	-	16-1-1-4-6-	- - -	-4-3-2-1-	-1-	-	-	-	-	2.81
56-42.9800-106.0139-2-15-						0-W14699-08/13/77-15-			28-		-C-	-	-	-	-	11-1-6-4-6-	- - -	-4-3-2-2-	-3-	-	-	-	-	4.25
56-42.9422-106.2267-2-15-						0-W14702-08/14/77-10-			23-		-C-	-	-	-	-	12-1-1-4-1-	- - -	-4-2-2-1-	-3-	-	-	-	-	2.79
56-42.9625-106.2294-2-15-						0-W14703-08/14/77-11-			27-		-	-	-	-	-	8-1-1-4-6-	- - -	-4-2-3-1-	-	-	-	-	-	2.44
56-42.9694-106.1739-2-15-						0-W14705-08/14/77-13-			29-		-	-	-	-	-	16-1-1-4-1-	- - -	-4-2-2-1-	-1-	-	-	-	-	2.61
56-42.9839-106.0128-2-15-						0-W14706-08/14/77-12-			30-		-C-	-	-	-	-	13-1-6-4-6-	- - -	-4-2-2-1-	-3-	-	-	-	-	2.76
56-42.9550-106.0283-2-15-						0-W14707-08/14/77-13-			32-		-	-	-	-	-	8-1-1-4-6-	- - -	-4-2-2-1-	-	-	-	-	-	6.22
56-42.8128-106.1639-2-15-						0-W14711-08/13/77-11-			28-		-	-	-	-	-	8-1-6-5-6-	-1-	-2-4-2-2-2-	-1-	-	-	-	-	2.48
56-42.7939-106.1483-2-12-						0-W14712-08/13/77-11-			32-	21.0	-	-	8.2	392	-	10-1-6-5-6-2	-2-2-1-	4-3-2-2-	-1-	-	-	-	-	5.11
56-42.8108-106.1964-2-15-						0-W14713-08/13/77-13-			32-		-	-	-	-	-	9-1-6-4-6-	-1-	-2-4-2-3-2-	-1-	-	-	-	-	2.06
56-42.8211-106.2006-2-15-						0-W14714-08/14/77- 9-			18-		-	-	-	-	-	11-1-7-4-7-	- - -	-4-2-3-1-	-3-	-	-	-	-	6.42
56-42.8294-106.1944-2-15-						0-W14715-08/14/77-10-			19-		-	-	-	-	-	10-1-6-4-7-	- - -	-4-2-2-1-	-1-	-	-	-	-	2.89
56-42.8550-106.1350-2-12-						0-W14716-08/14/77-11-			26-	22.4	-	-	7.4	366	-	10-1-7-1-7-1	-2-3-2-2-3	-3-2-	-7-	-	-	-	-	2.86
56-42.7861-106.0683-2-15-						0-W14718-08/14/77-16-			34-		-	-	-	-	-	11-1-7-5-7-	- - -	-4-2-2-2-	-1-	-	-	-	-	2.83
56-42.8231-106.0828-2-12-						0-W14720-08/14/77-17-			38-	26.2	-	-	8.2	112	-	13-1-7-5-7-3	-2-3-3-4-2	-2-2-2-	-3-	-	-	-	-	3.46
56-42.8508-106.2203-2-15-						0-W14721-08/14/77-17-			37-		-	-	-	-	-	13-1-6-4-7-	- - -	-4-2-2-2-	-1-	-	-	-	-	4.21
56-42.9750-106.4892-2-12-						0-W14724-08/15/77-13-			25-	27.2	-	-	8.1	250	-	10-1-7-5-8-3	-2-3-2-4-3	-2-2-	-3-	-	-	-	-	4.38
56-42.8600-106.5336-2-12-						0-W14728-08/16/77-10-			26-	15.8	-C-	-	6.7	3950	-	16-1-7-6-8-2	-2-2-2-2-4	-2-2-2-2-	-1-	-	-	-	-	2.50
56-42.8403-106.5525-2-15-						0-W14729-08/16/77-10-			-		-	-	-	-	-	18-1-1-4-6-	- - -	-4-2-3-1-	-	-	-	-	-	6.23
56-42.9822-106.3244-2-15-						0-W14737-08/15/77-17-			26-		-C-	-	-	-	-	10-1-1-4-6-	- - -	-4-3-2-2-	-	-	-	-	-	2.85
56-42.9678-106.3242-2-15-						0-W14738-08/15/77-16-			24-		-	-	-	-	-	17-1-1-4-6-	- - -	-4-2-2-2-	-	-	-	-	-	2.91
56-42.9661-106.2994-2-15-						0-W14739-08/15/77-16-			24-		-	-	-	-	-	16-1-1-4-6-	- - -	-4-2-2-2-	-	-	-	-	-	2.39
56-42.9683-106.2589-2-15-						0-W14740-08/15/77-19-			24-		-	-	-	-	-	10-1-1-4-6-	- - -	-4-2-2-2-	-	-	-	-	-	2.79
56-42.9017-106.3011-2-15-						0-W14741-08/16/77-11-			30-		-C-	-	-	-	-	10-1-1-4-1-	- - -	-4-2-2-2-	-3-	-	-	-	-	3.11
56-42.9139-106.5872-2-15-						0-W14742-08/16/77-15-			34-		-C-	-	-	-	-	33-1-6-4-6-	- - -	-4-2-3-2-	-3-	-	-	-	-	3.80
56-42.9206-106.6089-2-15-						0-W14743-08/16/77-15-			31-		-	-	-	-	-	67-1-6-4-6-	- - -	-4-2-4-2-	-1-	-	-	-	-	3.92
56-42.8978-106.5967-2-15-						0-W14744-08/16/77-12-			32-		-	-	-	-	-	-1-6-4-6-	- - -	-3-2-5-2-	-1-	-	-	-	-	3.06
56-42.8958-106.5581-2-15-						0-W14745-08/16/77-17-			28-		-C-	-	-	-	-	201-1-6-4-6-	- - -	-4-2-3-2-	-3-	-	-	-	-	3.68
56-42.8894-106.5400-2-15-						0-W14746-08/16/77-17-			28-		-	-	-	-	-	13-1-6-4-6-	- - -	-2-3-4-1-	-3-	-	-	-	-	3.40
56-42.6600-106.3956-2-12-						0-W14747-08/17/77-12-			29-	15.5	-	-	7.8	625	-	7-1-1-4-6-3	-3-1-2-4-3	-4-3-4-2-	-	-	-	-	-	2.59
56-42.6567-106.4225-2-15-						0-W14748-08/17/77-13-			30-		-	-	-	-	-	6-1-1-4-6-	- - -	-3-2-3-2-	-	-	-	-	-	5.05
56-42.6797-106.4250-2-12-						0-W14750-08/17/77-14-			30-	24.0	-	-	7.8	1450	-	5-1-1-3-6-2	-3-1-2-3-2	-4-2-	-	-	-	-	-	3.33
56-42.6883-106.4439-2-15-						0-W14751-08/17/77-15-			30-		-	-	-	-	-	11-1-1-4-1-	- - -	-3-2-4-2-	-	-	-	-	-	2.29
56-42.7017-106.4653-2-11-						0-W14752-08/17/77-15-			29-		-	-	7.8	240	-	5-1-3-4-6-3	-3-1-2-2-3	-4-2-	-	-	-	-	-	4.13

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE (Concentrations reported in weight parts per million (ppm))									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY (Concentrations in weight ppm)	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
56-42.8294-107.5258-2-15-						0-W14672	-5	6	-5	16	-20	37	13	-10	-15	4	50
56-42.6142-107.2594-2-15-						0-W14675	-5	8	-5	13	-20	17	20	-10	-15	2	48
56-42.6136-107.3181-2-15-						0-W14676	-5	-5	-5	21	-20	-15	12	-10	-15	2	28
56-42.6200-107.3119-2-15-						0-W14677	-5	6	-5	23	-20	-15	13	-10	-15	2	31
56-42.6272-107.3994-2-15-						0-W14678	-5	-5	-5	10	-20	-15	17	-10	-15	2	44
56-42.6261-107.4089-2-15-						0-W14679	-5	5	-5	19	-20	-15	14	-10	-15	2	35
56-42.5889-107.3972-2-15-						0-W14680	-5	-5	-5	10	-20	-15	17	-10	-15	2	31
56-42.5886-107.3975-2-15-						0-W14681	-5	-5	-5	17	-20	-15	13	-10	-15	2	27
56-42.5353-107.3622-2-11-						0-W14682	-5	-5	-5	-10	-20	-15	28	-10	-15	2	17
56-42.5489-107.3456-2-15-						0-W14683	-5	-5	-5	19	-20	-15	14	-10	-15	2	34
56-42.5608-107.3128-2-15-						0-W14684	-5	-5	-5	14	-20	-15	13	-10	-15	2	26
56-42.5625-107.3103-2-15-						0-W14685	-5	-5	-5	15	-20	-15	5	-10	-15	2	26
56-42.9658-106.8297-2-11-						0-W14686	-5	-5	-5	27	-20	23	-5	-10	23	2	45
56-42.9758-106.8122-2-15-						0-W14687	-5	-5	-5	-10	-20	-15	-5	-10	-15	2	25
56-42.1683-107.7275-2-15-						0-W14689	-5	-5	-5	20	-20	-15	25	-10	-15	2	45
56-42.7608-106.4856-2-15-						0-W14691	-5	-5	-5	22	-20	-15	5	-10	-15	2	50
56-42.7942-106.4858-2-15-						0-W14692	-5	-5	-5	20	-20	-15	5	-10	-15	2	28
56-42.9461-106.1317-2-15-						0-W14693	-5	-5	-5	15	-20	-15	21	-10	-15	2	22
56-42.9800-106.0139-2-15-						0-W14699	-5	-5	-5	-10	-20	-15	-5	-10	-15	2	13
56-42.9422-106.2267-2-15-						0-W14702	-5	-5	-5	19	-20	-15	14	-10	-15	2	35
56-42.9625-106.2294-2-15-						0-W14703	-5	-5	-5	13	-20	-15	12	-10	-15	2	27
56-42.9694-106.1739-2-15-						0-W14705	-5	-5	-5	18	-20	-15	9	-10	-15	2	23
56-42.9839-106.0128-2-15-						0-W14706	-5	-5	-5	25	-20	18	14	-10	-15	2	28
56-42.9550-106.0283-2-15-						0-W14707	-5	-5	-5	16	-20	16	13	-10	-15	2	43
56-42.8128-106.1639-2-15-						0-W14711	-5	-5	-5	24	-20	-15	7	-10	-15	2	26
56-42.7939-106.1483-2-12-						0-W14712	-5	-5	-5	24	-20	23	12	-10	-15	2	76
56-42.8108-106.1964-2-15-						0-W14713	-5	-5	-5	19	-20	-15	13	-10	-15	2	27
56-42.8211-106.2006-2-15-						0-W14714	-5	-5	-5	12	-20	-15	9	-10	-15	2	41
56-42.8294-106.1944-2-15-						0-W14715	-5	-5	-5	27	-20	-15	10	-10	-15	2	23
56-42.8550-106.1350-2-12-						0-W14716	-5	-5	-5	25	-20	-15	12	-10	-15	2	38
56-42.7861-106.0683-2-15-						0-W14718	-5	-5	-5	20	-20	-15	11	-10	-15	2	40
56-42.8231-106.0828-2-12-						0-W14720	-5	-5	-5	19	-20	-15	10	-10	-15	2	41
56-42.8508-106.2203-2-15-						0-W14721	-5	-5	-5	10	-20	-15	14	-10	-15	3	29
56-42.9750-106.4892-2-12-						0-W14724	-5	-5	-5	13	-20	-15	14	-10	-15	2	38
56-42.8600-106.5336-2-12-						0-W14728	-5	-5	-5	-10	-20	-15	9	-10	-15	-1	22
56-42.8403-106.5525-2-15-						0-W14729	-5	-5	-5	33	-20	22	18	-10	-15	2	29
56-42.9822-106.3244-2-15-						0-W14737	-5	-5	-5	21	-20	-15	17	-10	-15	2	46
56-42.9678-106.3242-2-15-						0-W14738	-5	-5	-5	21	-20	-15	6	-10	-15	2	48
56-42.9661-106.2994-2-15-						0-W14739	-5	-5	-5	20	-20	-15	9	-10	-15	2	31
56-42.9683-106.2589-2-15-						0-W14740	-5	-5	-5	22	-20	17	6	10	-15	2	34
56-42.9017-106.3011-2-15-						0-W14741	-5	-5	-5	31	-20	29	175	13	-15	2	33
56-42.9139-106.5872-2-15-						0-W14742	-5	-5	-5	17	-20	15	9	-10	-15	3	49
56-42.9206-106.6089-2-15-						0-W14743	-5	-5	-5	-10	-20	-15	12	-10	-15	2	49
56-42.8978-106.5967-2-15-						0-W14744	-5	-5	-5	18	-20	-15	5	-10	-15	2	66
56-42.8958-106.5581-2-15-						0-W14745	-5	-5	-5	15	-20	-15	13	-10	-15	2	60
56-42.8894-106.5400-2-15-						0-W14746	-5	-5	-5	19	-20	-15	10	-10	-15	2	32
56-42.6600-106.3956-2-12-						0-W14747	-5	-5	-5	15	-20	-15	-5	-10	-15	1	23
56-42.6567-106.4225-2-15-						0-W14748	-5	-5	-5	19	-20	21	15	-10	-15	3	38
56-42.6797-106.4250-2-12-						0-W14750	-5	-5	-5	20	-20	-15	10	-10	-15	2	43
56-42.6883-106.4439-2-15-						0-W14751	-5	-5	-5	14	-20	-15	-5	-10	-15	1	16
56-42.7017-106.4653-2-11-						0-W14752	-5	-5	-5	13	-20	-15	-5	-10	-15	2	18

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
56-	42.8294-	107.5258-2-	15-	0-	W14677		71850	-0.06	805	6192	134	-82	8.9	58	7.2	6	1.1	16220	14.3	21850	110	0.8
56-	42.6142-	107.2594-2-	15-	0-	W14675		62660	-0.07	458	25180	218	-86	7.3	31	2.3	7	0.9	12800	11.6	18330	128	0.5
56-	42.6136-	107.3181-2-	15-	0-	W14676		60700	-0.07	733	10930	67	-82	5.7	39	2.1	4	0.8	13110	11.1	17790	45	0.3
56-	42.6200-	107.3119-2-	15-	0-	W14677		56160	-0.05	591	11890	79	-86	9.0	53	1.8	3	0.7	13660	11.7	16330	48	0.3
56-	42.6272-	107.3994-2-	15-	0-	W14678		64060	-0.05	740	10680	58	-74	6.7	45	2.4	3	0.8	13490	5.5	19160	35	0.3
56-	42.6261-	107.4089-2-	15-	0-	W14679		59530	-0.06	716	13250	87	-78	7.9	48	2.2	4	0.9	14220	9.8	17130	42	0.3
56-	42.5889-	107.3972-2-	15-	0-	W14680		58010	-0.07	650	11630	73	-86	7.4	40	-1.2	4	0.8	15290	10.3	18400	38	0.4
56-	42.5886-	107.3975-2-	15-	0-	W14681		54900	-0.05	555	10360	78	-87	8.9	39	1.6	3	0.8	13230	12.8	16180	45	0.4
56-	42.5353-	107.3622-2-	11-	0-	W14682		51950	-0.05	636	16470	104	-78	4.1	25	-0.9	4	1.0	9501	15.3	18140	89	0.4
56-	42.5489-	107.3456-2-	15-	0-	W14683		64830	-0.06	679	10970	76	-76	6.3	36	3.0	4	1.0	12800	6.9	18430	36	0.3
56-	42.5608-	107.3128-2-	15-	0-	W14684		54750	-0.06	655	13120	54	-81	5.6	34	-1.1	3	0.8	12360	8.9	15660	35	0.3
56-	42.5625-	107.3103-2-	15-	0-	W14685		46560	-0.05	669	12630	74	-86	8.6	35	1.3	2	0.7	13270	10.8	15560	43	0.3
56-	42.9658-	106.8297-2-	11-	0-	W14686		62060	-0.06	542	7977	62	-62	8.1	57	3.0	4	0.9	16750	6.5	16760	36	0.4
56-	42.9758-	106.8122-2-	15-	0-	W14687		38710	-0.06	2394	11420	60	-60	7.9	28	2.1	4	1.0	16540	11.0	9969	32	0.5
56-	42.1683-	107.7275-2-	15-	0-	W14689		73160	-0.08	620	7162	90	-95	9.1	41	2.2	4	0.8	13600	5.0	20490	53	0.3
56-	42.7608-	106.4856-2-	15-	0-	W14691		39860	-0.05	428	32970	35	-70	10.2	35	2.4	2	0.5	8966	5.5	16350	21	0.3
56-	42.7942-	106.4858-2-	15-	0-	W14692		51930	-0.05	528	9084	54	-58	6.1	29	3.1	3	0.7	12650	7.3	15310	31	0.3
56-	42.9461-	106.1317-2-	15-	0-	W14693		46270	-0.05	601	5776	59	-63	5.5	37	1.6	3	0.8	8562	9.9	18110	36	0.3
56-	42.9800-	106.0139-2-	15-	0-	W14699		37640	-0.06	622	17040	86	-54	5.1	34	-1.1	6	0.9	11400	22.6	11370	48	0.4
56-	42.9422-	106.2267-2-	15-	0-	W14702		60890	-0.05	480	18600	53	-67	9.8	42	3.0	3	0.7	13050	5.3	17520	30	0.2
56-	42.9625-	106.2294-2-	15-	0-	W14703		52650	-0.05	517	7657	49	-55	4.7	36	2.9	3	0.8	9574	5.6	15580	30	0.3
56-	42.9694-	106.1739-2-	15-	0-	W14705		48220	-0.05	555	4467	51	-55	5.3	32	2.2	3	0.9	8276	9.2	15260	31	0.4
56-	42.9839-	106.0128-2-	15-	0-	W14706		51760	-0.05	426	6738	47	-61	9.4	34	2.4	3	0.6	9726	6.4	17270	29	0.4
56-	42.9550-	106.0283-2-	15-	0-	W14707		55870	-0.08	489	5354	171	-58	6.9	57	2.6	7	1.0	19020	24.8	16050	107	0.7
56-	42.8128-	106.1639-2-	15-	0-	W14711		47000	-0.05	425	12050	42	-61	7.6	24	2.5	3	0.6	7826	4.9	13410	27	0.3
56-	42.7939-	106.1483-2-12-		0-	W14712		62100	-0.08	829	36680	51	-59	8.5	55	4.7	4	0.8	15580	4.4	15480	33	0.3
56-	42.8108-	106.1964-2-	15-	0-	W14713		41820	-0.05	435	21260	44	-49	5.0	28	2.5	3	0.6	8399	3.1	14740	24	0.3
56-	42.8211-	106.2006-2-	15-	0-	W14714		45000	-0.08	750	29730	78	-85	8.0	50	1.7	5	1.1	13970	17.0	14570	53	0.4
56-	42.8294-	106.1944-2-	15-	0-	W14715		51130	-0.05	444	10750	48	-69	9.5	33	2.6	3	0.7	10050	5.6	14600	27	0.3
56-	42.8550-	106.1350-2-12-		0-	W14716		50220	-0.05	550	13000	52	-55	5.3	32	3.2	4	0.8	10350	6.5	16710	32	0.3
56-	42.7861-	106.0683-2-	15-	0-	W14718		66750	-0.08	598	27100	70	-66	7.8	69	4.1	4	1.1	16340	5.6	19690	37	0.3
56-	42.8231-	106.0828-2-12-		0-	W14720		52010	-0.08	585	37260	46	-77	6.8	40	2.1	4	0.8	11360	6.7	15150	27	0.4
56-	42.8508-	106.2203-2-	15-	0-	W14721		51040	-0.05	446	25980	109	-72	9.8	49	2.7	4	0.7	11940	8.6	15890	68	0.3
56-	42.9750-	106.4892-2-12-		0-	W14724		49390	-0.06	684	30320	60	-67	5.8	48	3.2	3	1.0	12160	10.1	15020	37	0.3
56-	42.8600-	106.5336-2-12-		0-	W14728		35420	-0.07	242	212500	29	110	5.5	20	2.2	2	0.5	5699	2.6	8091	-7	-0.1
56-	42.8403-	106.5525-2-15-		0-	W14729		64600	-0.08	566	10460	45	-70	8.4	28	2.7	4	0.6	13340	4.7	13390	32	0.3
56-	42.9822-	106.3244-2-15-		0-	W14737		69870	-0.07	608	9290	52	-72	11.6	42	4.2	2	0.8	13720	4.3	17740	37	0.3
56-	42.9678-	106.3242-2-15-		0-	W14738		68530	-0.06	544	19310	53	-61	7.3	47	4.4	3	0.8	16780	4.2	18100	34	0.3
56-	42.9661-	106.2994-2-15-		0-	W14739		62810	-0.06	624	13680	62	-57	6.7	46	3.5	3	0.8	12770	5.0	17100	26	0.3
56-	42.9683-	106.2589-2-15-		0-	W14740		55560	-0.04	591	14200	36	-68	4.1	27	2.8	3	0.6	9342	5.0	14790	20	0.2
56-	42.9017-	106.3011-2-15-		0-	W14741		50120	-0.03	593	14900	57	124	4.8	46	2.8	3	0.8	10720	8.2	15350	31	0.3
56-	42.9139-	106.5872-2-15-		0-	W14742		56550	-0.03	794	27910	54	-51	6.6	49	3.5	4	0.9	13470	7.5	15050	33	0.3
56-	42.9206-	106.6089-2-15-		0-	W14743		50590	-0.03	672	29020	44	-56	4.6	29	2.0	4	0.7	7809	10.0	13420	26	0.3
56-	42.8978-	106.5967-2-15-		0-	W14744		52760	-0.04	513	58870	38	-50	4.4	33	3.0	3	0.5	9076	3.2	14750	20	0.2
56-	42.8958-	106.5581-2-15-		0-	W14745		57270	-0.03	758	23580	47	-46	5.0	51	2.7	3	0.7	10730	6.1	17760	28	0.3
56-	42.8894-	106.5400-2-15-		0-	W14746		48260	-0.03	568	6408	60	-53	4.4	30	2.5	4	0.8	9037	9.5	18500	36	0.3
56-	42.6600-	106.3956-2-12-		0-	W14747		34700	-0.03	802	50230	34	-62	4.5	22	1.0	3	0.7	4783	10.3	14730	21	0.3
56-	42.6567-	106.4225-2-15-		0-	W14748		58510	-0.05	650	7160	41	-63	6.5	26	2.8	3	0.6	11500	5.7	14250	26	0.3
56-	42.6797-	106.4250-2-12-		0-	W14750		46910	-0.03	463	32040	46	-56	4.9	31	2.1	4	0.7	10930	7.6	14400	26	0.3
56-	42.6883-	106.4439-2-15-		0-	W14751		29510	-0.03	702	30150	42	-42	4.0	28	1.5	3	0.7	7908	13.9	11320	25	0.3
56-	42.7017-	106.4653-2-11-		0-	W14752		38700	-0.03	412	6614	38	-57	5.6	28	1.6	4	0.7	5778	11.6	8767	22	0.4

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

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
56-	42.8294-	107.5258-2-	15-			0-W14672	8051	279	15780	67	-2	7.8	14.0	-223	1	-1	29.3	3124	72	7.4	-31	2.178
56-	42.6142-	107.2594-2-	15-			0-W14675	13580	490	13260	61	-2	5.7	15.7	-271	-1	-1	73.6	2559	54	9.1	-67	0.116
56-	42.6136-	107.3181-2-	15-			0-W14676	11900	432	13070	-19	-2	5.3	4.1	-252	-1	-1	13.9	3424	63	2.7	51	0.271
56-	42.6200-	107.3119-2-	15-			0-W14677	11950	375	13930	32	-1	5.1	4.5	-256	-1	-1	15.3	4016	69	2.2	58	0.223
56-	42.6272-	107.3994-2-	15-			0-W14678	13200	382	12740	51	2	6.4	3.6	249	-1	-1	12.0	2093	54	3.1	-59	0.248
56-	42.6261-	107.4089-2-	15-			0-W14679	8932	473	13380	45	-2	6.0	4.9	319	-1	-1	16.3	3133	67	3.1	34	0.217
56-	42.5889-	107.3972-2-	15-			0-W14680	8117	440	13080	-20	-2	5.5	3.7	-268	-1	-1	15.8	3826	86	2.8	-29	0.229
56-	42.5886-	107.3975-2-	15-			0-W14681	-5000	389	13350	37	-1	5.2	5.3	-258	-1	1	15.8	3779	67	2.8	48	0.249
56-	42.5353-	107.3622-2-	11-			0-W14682	-4470	239	16350	33	-2	4.5	11.6	399	-1	-1	56.6	3493	54	6.0	40	0.340
56-	42.5489-	107.3456-2-	15-			0-W14683	11130	401	12380	41	-2	5.5	5.5	-226	-1	-1	12.9	2214	66	3.2	-38	0.337
56-	42.5608-	107.3128-2-	15-			0-W14684	7643	359	13580	-19	-2	4.9	2.9	376	-1	-1	10.4	3023	64	2.7	-25	0.281
56-	42.5625-	107.3103-2-	15-			0-W14685	7261	345	13700	36	-1	4.7	5.1	-247	-1	-1	12.3	2958	70	2.6	-25	0.246
56-	42.9658-	106.8297-2-	11-			0-W14686	14480	356	8169	42	-2	7.9	4.4	-211	-1	-1	12.4	2687	86	2.4	72	0.290
56-	42.9758-	106.8122-2-	15-			0-W14687	7801	733	4954	26	-2	4.3	4.8	-252	-1	-1	7.8	2490	45	2.8	48	0.436
56-	42.1683-	107.7275-2-	15-			0-W14689	8970	358	15740	43	-3	6.9	4.1	-278	-1	-1	26.5	2391	50	3.9	81	0.236
56-	42.7608-	106.4856-2-	15-			0-W14691	20010	312	5646	28	-2	4.7	2.3	-246		-1	6.2	2451	54	1.6	-50	0.374
56-	42.7942-	106.4858-2-	15-			0-W14692	8563	366	6561	39	-2	5.2	4.1	-206	-1	-1	11.7	2273	60	3.0	89	0.439
56-	42.9461-	106.1317-2-	15-			0-W14693	5549	248	10010	30	-2	4.2	5.1	-183	-1	-1	12.2	2248	48	3.5	65	0.230
56-	42.9800-	106.0139-2-	15-			0-W14699	9415	351	4241	-18	-2	3.7	4.0	-211	-1	-1	12.8	3916	55	3.5	-40	0.332
56-	42.9422-	106.2267-2-	15-			0-W14702	17910	309	6345	37	-2	6.4	3.6	-233		-1	10.9	2621	84	2.0	61	0.256
56-	42.9625-	106.2294-2-	15-			0-W14703	10050	232	7225	27	-2	5.2	3.5	-177		-1	8.9	2583	52	2.6	63	0.274
56-	42.9694-	106.1739-2-	15-			0-W14705	7531	237	7825	36	-2	4.2	4.3	-171		-1	10.0	2268	43	2.2	48	0.261
56-	42.9839-	106.0128-2-	15-			0-W14706	11430	268	4919	42	-2	4.9	3.4	-216		-1	8.1	2270	61	2.4	42	0.341
56-	42.9550-	106.0283-2-	15-			0-W14707	9333	463	4288	-24	-2	6.6	8.5	-243	-1	-1	45.6	5313	113	6.6	-38	0.136
56-	42.8128-	106.1639-2-	15-			0-W14711	12370	216	6440	41	-1	4.1	3.1	-194			6.7	2167	47	2.3	35	0.370
56-	42.7939-	106.1483-2-	12-			0-W14712	18530	358	4499	43	-3	8.3	3.9	-245	-1	-1	8.6	3092	151	-1.5	98	0.594
56-	42.8108-	106.1964-2-	15-			0-W14713	20220	205	6360	28	-2	4.3	3.1	-155		-1	6.3	1891	40	1.9	50	0.327
56-	42.8211-	106.2006-2-	15-			0-W14714	13510	545	8764	-23	-2	5.6	3.7	452	-1	-1	17.2	2433	62	4.7	-35	0.373
56-	42.8294-	106.1944-2-	15-			0-W14715	10860	241	8039	30	-2	5.1	3.5	-219		-1	7.5	2363	55	2.5	-35	0.385
56-	42.8550-	106.1350-2-	12-			0-W14716	12140	253	6652	37	-1	5.4	3.7	-178	-1	-1	8.2	2838	59	2.3	48	0.349
56-	42.7861-	106.0683-2-	15-			0-W14718	32010	319	7365	55	-2	8.1	4.7	-219	-1	-1	9.8	3799	73	3.4	-78	0.289
56-	42.8231-	106.0828-2-	12-			0-W14720	24820	383	6860	-22	-3	5.7	1.5	-267	-1	-1	7.1	-1334	79	-1.6	-33	0.487
56-	42.8508-	106.2203-2-	15-			0-W14721	13380	321	7315	35	-2	5.4	7.0	-242	-1	-1	29.0	2702	64	3.6	73	0.145
56-	42.9750-	106.4892-2-	12-			0-W14724	14550	433	6669	41	-2	6.0	4.0	-245	-1	-1	10.9	2815	95	3.6	69	0.402
56-	42.8600-	106.5336-2-	12-			0-W14728	14450	163	3816	32	-2	3.2	1.4	1273	-1	-1	4.9	1390	44	-1.5	36	0.510
56-	42.8403-	106.5525-2-	15-			0-W14729	11260	491	5408	44	-2	5.8	2.6	-275	-1	-1	11.9	2796	76	-1.7	-38	0.524
56-	42.9822-	106.3244-2-	15-			0-W14737	16510	365	5305	31	-2	7.3	3.7	-271	-1	-1	8.6	2973	71	2.2	122	0.331
56-	42.9678-	106.3242-2-	15-			0-W14738	24080	348	7221	55	-2	8.5	4.1	-212	-1	-1	9.6	3200	103	2.4	88	0.303
56-	42.9661-	106.2994-2-	15-			0-W14739	14370	280	7345	52	-2	6.4	3.5	-182	-1	-1	9.3	2630	59	2.7	59	0.257
56-	42.9683-	106.2589-2-	15-			0-W14740	16220	245	8267	-17	-1	4.9	2.3	-229	-1	-1	5.7	2252	66	1.8	-28	0.489
56-	42.9017-	106.3011-2-	15-			0-W14741	11350	318	7543	33	2	5.3	3.8	-209	-1	-1	10.2	2643	156	2.5	179	0.305
56-	42.9139-	106.5872-2-	15-			0-W14742	18040	212	6440	41	-1	6.7	3.7	251		-1	10.6	2910	111	4.0	77	0.358
56-	42.9206-	106.6089-2-	15-			0-W14743	14170	180	7291	27	-1	3.8	3.6	-188	-1		7.6	2758	78	2.3	40	0.516
56-	42.8978-	106.5967-2-	15-			0-W14744	15230	127	2965	40	-1	5.3	2.3	280	-1	-1	7.0	3013	82	2.4	-24	0.437
56-	42.8958-	106.5581-2-	15-			0-W14745	15780	152	5718	38	-1	6.1	3.9	-160	-1	-1	8.9	2791	111	2.3	-48	0.413
56-	42.8894-	106.5400-2-	15-			0-W14746	8921	202	9203	28	-1	4.6	3.7	-172	-1	1	13.1	2672	50	2.9	61	0.260
56-	42.6600-	106.3956-2-	12-			0-W14747	9266	235	7600	-9	-1	2.7	2.5	288			6.1	2251	29	1.9	-16	0.425
56-	42.6567-	106.4225-2-	15-			0-W14748	7191	463	5149	-19	-1	5.7	2.6	-281	-1	-1	8.3	2954	72	2.4	-34	0.608
56-	42.6797-	106.4250-2-	12-			0-W14750	11730	336	6241	36	-1	5.0	3.7	-211		-1	8.5	2467	48	2.5	-59	0.392
56-	42.6883-	106.4439-2-	15-			0-W14751	10220	264	4128	30	-1	3.7	3.1	-159			7.6	2473	35	2.5	45	0.301
56-	42.7017-	106.4653-2-	11-			0-W14752	5852	216	5948	-12	-1	3.3	3.3	-205		-1	7.0	2379	39	1.7	32	0.590

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																									U CONCENTRATION
							TIME SAMPLED																								
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU,ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
56-	42.7028-	106.4989-	2-	15-		0-W14753-	08/17/77-	14-	34-	-	-	-	-	-		10-	1-	7-	4-	6-	-	-	-	-3-	3-	4-	2-	-	-	-	-	-	-	4.10
56-	42.6381-	106.0967-	2-	15-		0-W14755-	08/18/77-	11-	21-	-	-	-	-	-		18-	3-	7-	3-	3-	-	-	-	-4-	3-	4-	3-	-3-	-	-	-	-	-	20.07
56-	42.6394-	106.0953-	2-	15-		0-W14756-	08/18/77-	12-	21-	-	-	-	-	-		18-	3-	7-	3-	3-	-	-	-	-4-	3-	4-	3-	-3-	-	-	-	-	-	15.64
56-	42.8619-	106.6050-	2-	15-		0-W14757-	08/16/77-	11-	27-	-	-	-	-	-		13-	1-	7-	-	-	-	-	-	-4-	2-	2-	2-	-3-	-	-	-	-	-	3.28
56-	42.8106-	106.5919-	2-	11-		0-W14758-	08/16/77-	11-		-16.5-	-	-	7.1-	925-		13-	-	-	-	-	-	-	-	-4-	3-	2-	2-	-1-	-	-	-	-	-	3.92
56-	42.8036-	106.5733-	2-	12-		0-W14759-	08/16/77-	11-	-	-	-	-	-	-		14-	1-	1-	6-	5-	-	-	-	-4-	2-	3-	1-	-	-	-	-	-	-	2.76
56-	42.7994-	106.5694-	2-	11-		0-W14760-	08/16/77-	11-	24-	18.5-	-	-	6.6-	650-		8-	1-	7-	4-	6-	3-	3-	1-	2-	4-	3-	3-	1-	-	-	-	-	-	3.90
56-	42.8014-	106.5539-	2-	15-		0-W14761-	08/16/77-	12-	-	-	-	-	-	-		11-	1-	6-	4-	6-	-	-	-	-4-	2-	3-	2-	-7-	-	-	-	-	-	7.73
56-	42.7544-	106.5353-	2-	15-		0-W14762-	08/16/77-	12-	27-	-	-	-	-	-		13-	1-	4-	4-	4-	-	-	-	-3-	2-	4-	2-	-	-	-	-	-	-	2.89
56-	42.7769-	106.5883-	2-	12-		0-W14763-	08/16/77-	14-	29-	24.6-	-	-	7.6-	3500-		8-	1-	7-	6-	8-	3-	3-	2-	2-	4-	3-	2-	3-	-	-	-	-	-	4.49
56-	42.8519-	106.5097-	2-	15-		0-W14764-	08/16/77-	15-	31-	-	-	-	-	-		10-	1-	7-	4-	6-	-	-	-	-4-	2-	2-	2-	-1-	-	-	-	-	-	3.41
56-	42.6381-	106.5350-	2-	15-		0-W14767-	08/17/77-	12-	-	-	-	-	-	-		10-	1-	7-	5-	7-	-	-	-	-4-	2-	2-	2-	-1-	-	-	-	-	-	3.46
56-	42.7142-	106.5294-	2-	15-		0-W14770-	08/17/77-	14-	-	-	-	-	-	-		31-	1-	6-	5-	7-	-	-	-	-4-	2-	4-	2-	-8-	-	-	-	-	-	3.26
56-	42.7131-	106.5622-	2-	15-		0-W14771-	08/17/77-	14-	-	-C-	-	-	-	-		13-	1-	7-	5-	7-	-	-	-	-3-	3-	4-	2-	-3-	-	-	-	-	-	3.23
56-	42.7194-	106.5783-	2-	15-		0-W14772-	08/17/77-	15-	-	-	-	-	-	-		13-	1-	7-	4-	6-	-	-	-	-2-	3-	3-	2-	-1-	-	-	-	-	-	5.48
56-	42.7256-	106.6019-	2-	12-		0-W14773-	08/17/77-	17-	35-	21.6-	-	-	7.7-	4700-		13-	1-	7-	5-	7-	-	-	-	-4-	2-	2-	2-	-1-	-	-	-	-	-	6.33
56-	42.9961-	106.7136-	2-	15-		0-W14775-	08/18/77-	13-	24-	-	-	-	-	-		11-	1-	7-	5-	8-	-	-	-	-4-	2-	2-	3-	-1-	-	-	-	-	-	2.38
56-	42.9611-	106.6908-	2-	11-		0-W14777-	08/18/77-	14-	27-	14.2-	C-	-	9.2-	1640-		15-	1-	7-	6-	8-	2-	3-	1-	-4-	2-	3-	3-	-2-	-	-	-	-	-	2.77
56-	42.7239-	106.7075-	2-	11-		0-W14780-	08/29/77-	11-	24-	15.2-	-	-	7.9-	1180-		25-	1-	6-	6-	6-	2-	3-	1-	-4-	2-	2-	2-	-1-	-	-	-	-	-	10.25
56-	42.6839-	106.3883-	2-	15-		0-W14782-	08/19/77-	9-	22-	-	-	-	-	-		8-	1-	4-	4-	7-	-	-	-	-4-	2-	3-	1-	-1-	-	-	-	-	-	2.47
56-	42.7122-	106.4014-	2-	12-		0-W14783-	08/19/77-	10-	26-	18.2-	-	-	8.2-	330-		10-	1-	4-	5-	4-	2-	2-	1-	2-	4-	2-	3-	1-	-	-	-	-	-	2.28
56-	42.6964-	106.6189-	2-	15-		0-W14784-	08/19/77-	12-	28-	-	-	-	-	-		11-	1-	1-	5-	7-	-	-	-	-4-	2-	2-	1-	-1-	-	-	-	-	-	2.65
56-	42.5339-	106.5117-	2-	15-		0-W14786-	08/19/77-	15-	-	-	-	-	-	-		16-	1-	7-	4-	7-	-	-	-	-4-	2-	2-	2-	-1-	-	-	-	-	-	3.11
56-	42.5039-	106.5414-	2-	15-		0-W14787-	08/19/77-	16-	-	-	-	-	-	-		21-	1-	7-	6-	7-	-	-	-	-4-	2-	3-	2-	-2-	-	-	-	-	-	4.12
56-	42.5356-	106.5814-	2-	15-		0-W14788-	08/19/77-	16-	30-	-	-	-	-	-		33-	1-	7-	5-	7-	-	-	-	-4-	2-	3-	3-	-1-	-	-	-	-	-	4.65
56-	42.6006-	106.5803-	2-	15-		0-W14790-	08/22/77-	19-	24-	-	-	-	-	-		15-	1-	7-	4-	7-	-	-	-	-4-	2-	2-	3-	-1-	-	-	-	-	-	2.17
56-	42.6339-	106.0853-	2-	15-		0-W14792-	08/18/77-	12-	20-	-	-	-	-	-		11-	3-	7-	3-	4-	-	-	-	-4-	3-	4-	4-	-3-	-	-	-	-	-	8.03
56-	42.7083-	106.0858-	2-	15-		0-W14793-	08/18/77-	13-	19-	-	-	-	-	-		11-	1-	7-	4-	6-	-	-	-	-2-	4-	4-	4-	-3-	-	-	-	-	-	2.98
56-	42.6958-	106.0761-	2-	11-		0-W14794-	08/19/77-	8-	18-	11.5-	-	-	6.1-	355-		13-	1-	4-	4-	4-	3-	3-	1-	2-	2-	3-	4-	1-	-	-	-	-	-	1.73
56-	42.6486-	106.0244-	2-	12-		0-W14795-	08/19/77-	8-	21-	15.5-	-	-	6.7-	215-		5-	1-	4-	4-	6-	2-	3-	1-	2-	4-	3-	3-	1-	-	-	-	-	-	9.59
56-	42.6411-	106.0153-	2-	12-		0-W14797-	08/19/77-	9-	25-	19.0-	-	-	6.4-	155-		55-	1-	4-	4-	4-	2-	3-	1-	2-	4-	2-	3-	1-	-	3-	-	-	-	7.61
56-	42.7175-	106.0361-	2-	15-		0-W14799-	08/19/77-	13-	29-	-	-	-	-	-			-1-	1-	4-	6-	-	-	-	-4-	2-	3-	1-	-3-	-	-	-	-	-	3.28
56-	42.6972-	106.1172-	2-	11-		0-W14800-	08/19/77-	13-	30-	23.5-	-	-	6.8-	550-		8-	1-	1-	6-	6-	-	-	-	-4-	3-	3-	1-	-	-	-	-	-	-	8.38
56-	42.7303-	106.0892-	2-	12-		0-W14801-	08/19/77-	14-	30-	17.0-	-	-	6.7-	1800-		7-	1-	1-	5-	6-	2-	3-	1-	2-	4-	3-	3-	1-	-	3-	-	-	-	3.69
56-	42.7217-	106.1219-	2-	15-		0-W14802-	08/19/77-	15-	30-	-	-	-	-	-		13-	1-	1-	4-	1-	-	-	-	-4-	2-	3-	2-	-3-	-	-	-	-	-	3.35
56-	42.6028-	106.7606-	2-	15-		0-W14804-	08/21/77-	10-	24-	-	-	-	-	-		37-	1-	1-	4-	1-	-	-	-	-3-	2-	3-	1-	-	-	-	-	-	-	3.89
56-	42.6017-	106.7633-	2-	15-		0-W14805-	08/21/77-	10-	25-	-	-	-	-	-		55-	1-	1-	4-	1-	-	-	-	-3-	2-	3-	2-	-	-	-	-	-	-	3.64
56-	42.5678-	106.7556-	2-	15-		0-W14806-	08/21/77-	12-	34-	-	-	-	-	-		13-	1-	4-	4-	4-	-	-	-	-3-	2-	5-	2-	-	-	-	-	-	-	3.10
56-	42.5369-	106.7806-	2-	15-		0-W14808-	08/21/77-	13-	35-	-	-	-	-	-			-1-	4-	4-	1-	-	-	-	-3-	2-	3-	2-	-7-	-	-	-	-	-	4.89
56-	42.6192-	106.8547-	2-	15-		0-W14810-	08/22/77-	13-	29-	-	-	-	-	-		11-	1-	6-	4-	6-	-	-	-	-3-	2-	2-	2-	-3-	-	-	-	-	-	3.43
56-	42.6489-	106.8339-	2-	15-		0-W14811-	08/22/77-	15-	30-	-	-	-	-	-		13-	1-	1-	4-	6-	-	-	-	-3-	2-	2-	2-	-	-	-	-	-	-	2.72
56-	42.7089-	106.7617-	2-	15-		0-W14813-	08/22/77-	16-	32-	-	-	-	-	-		18-	1-	3-	4-	6-	-	-	-	-3-	2-	2-	2-	-3-	-	-	-	-	-	7.88
56-	42.7128-	106.7603-	2-	15-		0-W14814-	08/22/77-	17-	32-	-	-	-	-	-		13-	1-	6-	4-	6-	-	-	-	-3-	2-	2-	2-	-3-	-	-	-	-	-	5.75
56-	42.7267-	106.7972-	2-	15-		0-W14816-	08/22/77-	17-	31-	-	-	-	-	-		13-	1-	6-	4-	6-	-	-	-	-3-	2-	2-	2-	-3-	-	-	-	-	-	8.86
56-	42.7275-	106.8739-	2-	11-		0-W14817-	08/22/77-	18-	29-	21.5-	-	-	8.1-	385-			-1-	1-	6-	8-	-	-	-	-4-	3-	3-	2-	-3-	-	-	-	-	-	8.76
56-	42.6747-	106.7931-	2-	11-		0-W14818-	08/23/77-	8-	21-	13.5-	-	-	7.6-	420-		7-	1-	1-	4-	8-	-	-	-	-4-	3-	3-	1-	-3-	-	-	-	-	-	4.41
56-	42.6942-	106.8289-	2-	11-		0-W14819-	08/23/77-	9-	23-	15.5-	-	-	7.2-	175-		20-	1-	1-	6-	6-	-	-	-	-4-	3-	3-	1-	-3-	-	-	-	-	-	8.60
56-	42.6136-	106.9094-	2-	15-		0-W14820-	08/23/77-	10-	27-	-	-	-	-	-		13-	1-	1-	4-	6-	-	-	-	-3-	2-	2-	1-	-3-	-	-	-	-	-	3.23
56-	42.6064-	106.9014-	2-	15-		0-W14821-	08/23/77-	10-	27-	-	-	-	-	-		11-	1-	1-	4-	1-	-	-	-	-3-	2-	2-	1-	-3-	-	-	-	-	-	3.01
56-	42.6106-	106.9483-	2-	15-		0-W14822-	08/23/77-	11-	29-	-	-	-	-	-		16-	1-	1-	4-	1-	-	-	-	-3-	3-	2-	1-	-	-	-	-	-	-	3.23
56-	42.5689-	106.9806-	2-	15-		0-W14823-	08/23/77-	12-	28-	-	-	-	-	-		11-	1-	7-	4-	6-	-	-	-	-4-	2-	2-	1-	-	-	-	-	-	-	3.74

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

(2)

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
56-42.7028-106.4989-2-15-						0-W14753	-5	-5	-5	21	-20	-15	12	-10	-15	2	31
56-42.6381-106.0967-2-15-						0-W14755	-5	-5	-5	10	-20	-15	17	-10	-15	2	35
56-42.6394-106.0953-2-15-						0-W14756	-5	-5	-5	14	-20	-15	19	-10	-15	2	40
56-42.8619-106.6050-2-15-						0-W14757	-5	-5	-5	15	-20	18	7	-10	-15	2	37
56-42.8106-106.5919-2-11-						0-W14758	-5	-5	-5	21	-20	-15	11	-10	-15	2	57
56-42.8036-106.5733-2-12-						0-W14759	-5	-5	-5	23	-20	-15	-5	-10	-15	2	71
56-42.7994-106.5694-2-11-						0-W14760	-5	-5	-5	18	-20	-15	14	-10	-15	2	49
56-42.8014-106.5539-2-15-						0-W14761	-5	-5	-5	16	-20	-15	7	-10	-15	1	32
56-42.7544-106.5353-2-15-						0-W14762	-5	-5	-5	13	-20	-15	10	-10	-15	2	43
56-42.7769-106.5883-2-12-						0-W14763	-5	-5	-5	-10	-20	-15	-5	-10	-15	2	22
56-42.8519-106.5097-2-15-						0-W14764	-5	-5	-5	11	-20	-15	-5	-10	-15	2	43
56-42.6381-106.5350-2-15-						0-W14767	-5	-5	-5	30	-20	16	9	-10	-15	2	61
56-42.7142-106.5294-2-15-						0-W14770	-5	-5	-5	15	-20	-15	12	-10	-15	1	25
56-42.7131-106.5622-2-15-						0-W14771	-5	-5	-5	28	-20	-15	16	-10	-15	1	36
56-42.7194-106.5783-2-15-						0-W14772	-5	-5	-5	-10	-20	-15	16	-10	-15	2	19
56-42.7256-106.6019-2-12-						0-W14773	-5	-5	-5	25	-20	-15	6	-10	-15	2	33
56-42.9961-106.7136-2-15-						0-W14775	-5	-5	-5	14	-20	-15	-5	-10	-15	2	49
56-42.9611-106.6908-2-11-						0-W14777	-5	-5	-5	11	-20	-15	15	-10	-15	2	39
56-42.7239-106.7075-2-11-						0-W14780	-5	-5	-5	24	-20	-15	18	-10	-15	2	40
56-42.6839-106.3883-2-15-						0-W14782	-5	-5	-5	18	-20	-15	6	-10	-15	1	39
56-42.7122-106.4014-2-12-						0-W14783	-5	-5	-5	22	-20	-15	-5	-10	-15	2	46
56-42.6964-106.6189-2-15-						0-W14784	-5	-5	-5	19	-20	-15	7	-10	-15	1	15
56-42.5339-106.5117-2-15-						0-W14786	-5	-5	-5	17	-20	-15	7	-10	-15	2	30
56-42.5039-106.5414-2-15-						0-W14787	-5	-5	-5	15	-20	22	10	-10	-15	2	41
56-42.5356-106.5814-2-15-						0-W14788	-5	6	-5	20	-20	26	10	-10	-15	2	49
56-42.6006-106.5803-2-15-						0-W14790	-5	-5	-5	-10	-20	-15	5	-10	-15	2	25
56-42.6339-106.0853-2-15-						0-W14792	-5	-5	-5	16	-20	-15	18	-10	-15	2	16
56-42.7083-106.0858-2-15-						0-W14793	-5	-5	-5	17	-20	-15	11	-10	-15	1	23
56-42.6958-106.0761-2-11-						0-W14794	-5	-5	-5	-10	-20	-15	-5	-10	-15	-1	10
56-42.6486-106.0244-2-12-						0-W14795	-5	-5	-5	-10	-20	-15	10	-10	-15	1	17
56-42.6411-106.0153-2-12-						0-W14797	-5	-5	-5	13	-20	15	10	-10	-15	2	21
56-42.7175-106.0361-2-15-						0-W14799	-5	-5	-5	20	-20	-15	10	-10	-15	2	35
56-42.6972-106.1172-2-11-						0-W14800	-5	-5	-5	16	-20	-15	7	-10	-15	2	32
56-42.7303-106.0892-2-12-						0-W14801	-5	-5	-5	18	-20	15	7	-10	-15	2	32
56-42.7217-106.1219-2-15-						0-W14802	-5	-5	-5	10	-20	-15	5	-10	-15	2	31
56-42.6028-106.7606-2-15-						0-W14804	-5	-5	-5	17	-20	-15	15	-10	-15	2	54
56-42.6017-106.7633-2-15-						0-W14805	-5	-5	-5	15	-20	-15	13	-10	15	2	35
56-42.5678-106.7556-2-15-						0-W14806	-5	-5	-5	17	-20	-15	9	-10	-15	2	24
56-42.5369-106.7806-2-15-						0-W14808	-5	-5	-5	17	-20	-15	12	-10	20	2	29
56-42.6192-106.8547-2-15-						0-W14810	-5	-5	-5	14	-20	-15	8	-10	-15	2	24
56-42.6489-106.8339-2-15-						0-W14811	-5	-5	-5	-10	-20	-15	-5	-10	-15	-1	26
56-42.7089-106.7617-2-15-						0-W14813	-5	-5	-5	-10	-20	-15	15	-10	-15	2	25
56-42.7128-106.7603-2-15-						0-W14814	-5	-5	-5	21	-20	-15	16	-10	-15	2	30
56-42.7267-106.7972-2-15-						0-W14816	-5	-5	-5	24	-20	-15	24	-10	-15	2	34
56-42.7275-106.8739-2-11-						0-W14817	-5	-5	-5	12	-20	-15	8	-10	-15	2	28
56-42.6747-106.7931-2-11-						0-W14818	-5	-5	-5	19	-20	-15	12	-10	-15	2	25
56-42.6942-106.8289-2-11-						0-W14819	-5	-5	-5	15	-20	-15	5	-10	-15	1	6
56-42.6136-106.9094-2-15-						0-W14820	-5	-5	-5	19	-20	16	16	-10	-15	2	32
56-42.6064-106.9014-2-15-						0-W14821	-5	-5	-5	21	-20	-15	18	-10	16	2	36
56-42.6106-106.9483-2-15-						0-W14822	-5	-5	-5	21	-20	-15	11	-10	-15	2	29
56-42.5689-106.9806-2-15-						0-W14823	-5	-5	-5	-10	-20	-15	8	-10	-15	1	23

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
56-	42.7028-	106.4989-	2-	15-	0-	W14753	49670	-0.04	555	6461	39	-65	3.8	20	2.4	3	0.6	8763	4.0	13920	24	0.3
56-	42.6381-	106.0967-	2-	15-	0-	W14755	52400	-0.04	694	12260	115	-78	6.0	39	1.5	15	1.3	12760	22.2	15600	77	1.1
56-	42.6394-	106.0953-	2-	15-	0-	W14756	55550	-0.04	496	11470	124	-78	7.2	39	1.9	12	1.2	14610	19.2	17320	78	1.0
56-	42.8619-	106.6050-	2-	15-	0-	W14757	51400	-0.03	717	8793	45	-58	4.7	27	2.2	3	0.7	6298	7.7	14950	25	0.3
56-	42.8106-	106.5919-	2-	11-	0-	W14758	59010	-0.06	695	13550	45	-68	6.3	48	3.6	3	0.8	12130	4.9	17210	26	0.4
56-	42.8036-	106.5733-	2-	12-	0-	W14759	47250	-0.04	650	43650	35	273	6.2	48	2.8	4	0.7	12240	3.7	13990	21	0.3
56-	42.7994-	106.5694-	2-	11-	0-	W14760	53150	-0.03	763	15930	74	-61	7.9	47	2.7	4	0.8	14210	9.3	17730	44	0.4
56-	42.8014-	106.5539-	2-	15-	0-	W14761	45840	-0.03	527	15140	139	-68	5.1	34	1.7	9	0.8	8398	20.5	13530	80	0.7
56-	42.7544-	106.5353-	2-	15-	0-	W14762	45250	-0.04	499	44590	37	-79	4.6	28	-1.1	3	0.6	10340	8.1	14540	23	0.2
56-	42.7769-	106.5883-	2-	12-	0-	W14763	34020	-0.03	497	18350	54	-47	3.6	28	1.5	3	0.6	6112	11.1	12030	32	0.3
56-	42.8519-	106.5097-	2-	15-	0-	W14764	53550	-0.03	658	12080	59	-50	4.5	33	2.8	4	0.9	11040	9.5	16540	36	0.3
56-	42.6381-	106.5350-	2-	15-	0-	W14767	54500	-0.04	811	42690	42	-58	6.0	41	3.0	4	0.6	9772	4.5	16030	23	0.2
56-	42.7142-	106.5294-	2-	15-	0-	W14770	48580	-0.04	590	7652	42	-72	4.5	29	-1.0	3	0.7	7664	7.1	16000	24	0.3
56-	42.7131-	106.5622-	2-	15-	0-	W14771	49100	-0.03	572	8126	45	-61	4.6	33	2.0	3	0.8	8758	7.3	15190	25	0.3
56-	42.7194-	106.5783-	2-	15-	0-	W14772	46630	-0.03	559	5619	53	-48	6.0	31	2.7	4	0.8	11200	10.1	13340	34	0.4
56-	42.7256-	106.6019-	2-	12-	0-	W14773	53140	-0.05	623	60280	47	201	6.9	29	3.1	4	0.8	9012	5.2	12770	27	0.2
56-	42.9961-	106.7136-	2-	15-	0-	W14775	44100	-0.04	634	14580	41	-49	4.3	44	1.8	3	0.7	10130	5.0	12200	25	0.3
56-	42.9611-	106.6908-	2-	11-	0-	W14777	44750	-0.03	632	16340	39	-56	3.4	27	2.3	2	0.9	7823	7.5	14760	24	0.3
56-	42.7239-	106.7075-	2-	11-	0-	W14780	62220	-0.04	577	32810	66	-78	7.3	38	1.5	4	0.8	12170	7.0	17970	43	0.3
56-	42.6839-	106.3883-	2-	15-	0-	W14782	44420	-0.03	400	52390	44	-70	5.7	33	2.4	5	0.7	9055	9.0	17020	21	0.3
56-	42.7122-	106.4014-	2-	12-	0-	W14783	43270	-0.05	279	70650	30	-78	5.5	43	2.7	3	0.5	9439	4.3	19410	19	0.2
56-	42.6964-	106.6189-	2-	15-	0-	W14784	38200	-0.03	456	17220	46	59	4.3	29	2.0	3	0.6	7451	6.4	11520	28	0.3
56-	42.5339-	106.5117-	2-	15-	0-	W14786	45510	-0.03	804	15690	51	69	5.8	44	2.5	4	0.8	11830	8.7	15770	34	0.3
56-	42.5039-	106.5414-	2-	15-	0-	W14787	57270	-0.03	714	19480	40	-60	6.3	31	2.8	4	0.6	9369	4.1	14660	23	0.3
56-	42.5356-	106.5814-	2-	15-	0-	W14788	53910	-0.05	513	77190	35	-73	5.0	33	3.1	2	0.7	9376	4.7	15230	24	0.2
56-	42.6006-	106.5803-	2-	15-	0-	W14790	37360	-0.02	616	4659	38	87	2.7	17	1.1	2	0.6	5214	4.2	12020	23	0.2
56-	42.6339-	106.0853-	2-	15-	0-	W14792	50690	-0.04	629	13610	115	165	6.3	28	1.5	10	1.2	13110	18.1	16000	70	0.8
56-	42.7083-	106.0858-	2-	15-	0-	W14793	56570	-0.03	789	4538	56	-58	5.2	30	1.8	4	0.7	9219	9.9	20170	35	0.3
56-	42.6958-	106.0761-	2-	11-	0-	W14794	13910	-0.03	247	13930	20	-36	2.8	20	-0.6	2	-0.7	2509	10.1	6652	11	0.2
56-	42.6486-	106.0244-	2-	12-	0-	W14795	42980	-0.04	563	16740	164	-74	5.9	105	1.4	9	1.4	17200	34.0	14230	94	1.1
56-	42.6411-	106.0153-	2-	12-	0-	W14797	65270	-0.04	534	13340	102	-87	7.2	28	1.3	8	1.0	13340	11.5	21770	65	0.6
56-	42.7175-	106.0361-	2-	15-	0-	W14799	61190	-0.04	630	18150	49	-64	6.5	36	2.3	4	0.7	9439	5.2	15630	25	0.3
56-	42.6972-	106.1172-	2-	11-	0-	W14800	45460	-0.04	731	10460	35	-56	4.0	22	2.5	3	0.7	6097	5.2	15940	21	0.2
56-	42.7303-	106.0892-	2-	12-	0-	W14801	49100	-0.04	596	40240	46	-73	5.8	38	2.4	3	0.8	11010	6.5	17730	27	0.3
56-	42.7217-	106.1219-	2-	15-	0-	W14802	50670	-0.03	670	36410	54	-59	5.7	37	2.3	3	0.8	11300	8.4	17090	30	0.3
56-	42.6028-	106.7606-	2-	15-	0-	W14804	64030	-0.04	794	47050	51	170	6.5	27	2.5	4	0.7	9830	4.3	17500	28	0.3
56-	42.6017-	106.7633-	2-	15-	0-	W14805	53450	-0.03	740	27780	54	119	4.5	27	2.4	3	0.6	8805	6.1	18260	30	0.3
56-	42.5678-	106.7556-	2-	15-	0-	W14806	40240	-0.03	629	35340	98	-57	6.4	53	1.1	4	1.0	19480	18.1	14020	55	0.4
56-	42.5369-	106.7806-	2-	15-	0-	W14808	53520	-0.04	2118	34380	93	-75	6.1	49	1.9	5	1.2	12120	15.0	12710	49	0.4
56-	42.6192-	106.8547-	2-	15-	0-	W14810	53900	-0.04	571	9395	52	-76	4.0	32	1.2	3	0.6	9057	8.5	15420	31	0.3
56-	42.6489-	106.8339-	2-	15-	0-	W14811	50150	-0.03	600	14350	54	132	3.8	34	1.9	3	0.8	9098	7.7	13670	32	0.3
56-	42.7089-	106.7617-	2-	15-	0-	W14813	57630	-0.04	821	38370	204	135	7.1	51	2.4	7	1.2	15760	16.8	18280	123	0.6
56-	42.7128-	106.7603-	2-	15-	0-	W14814	62390	-0.04	671	10930	61	-79	5.9	28	1.8	4	0.6	9097	6.4	19980	31	0.3
56-	42.7267-	106.7972-	2-	15-	0-	W14816	66040	-0.05	571	7969	58	-95	5.2	36	-1.3	3	0.6	10320	4.7	20860	40	0.3
56-	42.7275-	106.8739-	2-	11-	0-	W14817	58700	-0.04	590	32050	106	-81	5.5	30	-1.0	5	0.8	9392	10.7	16460	65	0.6
56-	42.6747-	106.7931-	2-	11-	0-	W14818	53020	-0.04	669	20550	79	-77	6.4	35	1.7	4	0.9	12060	11.6	18350	47	0.4
56-	42.6942-	106.8289-	2-	11-	0-	W14819	35250	-0.06	362	14810	61	-89	9.5	19	-1.6	3	0.4	9861	3.2	8844	27	-0.1
56-	42.6136-	106.9094-	2-	15-	0-	W14820	53440	-0.04	634	13410	49	-83	4.5	25	-1.1	3	0.8	10770	8.7	16580	30	0.2
56-	42.6064-	106.9014-	2-	15-	0-	W14821	60370	-0.03	711	13640	58	-70	5.6	26	2.1	3	0.8	11120	6.5	16780	30	0.3
56-	42.6106-	106.9483-	2-	15-	0-	W14822	55390	-0.03	696	21270	97	-70	6.2	35	1.8	4	1.0	17590	13.4	15820	59	0.4
56-	42.5689-	106.9806-	2-	15-	0-	W14823	53540	-0.03	651	14520	91	-78	5.1	35	0.9	4	0.8	15230	14.2	15200	50	0.3

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

DOE SAMPLE NUMBER						LAS SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
56-42.7028-106.4989-2-15-						0-W14753	5203	361	7144	37	-1	3.7	2.6	-247	-1	-1	8.0	1898	50	1.9	-48	0.512
56-42.6381-106.0967-2-15-						0-W14755	8404	596	12300	49	-1	6.8	20.3	-290	2	2	58.3	4961	61	8.9	50	0.344
56-42.6394-106.0953-2-15-						0-W14756	8958	610	12380	55	-1	7.4	13.6	-283	1	1	42.9	4267	62	8.3	65	0.365
56-42.8619-106.6050-2-15-						0-W14757	10330	156	8295	32	-1	3.4	3.6	-189	-1	-1	7.7	2670	58	1.6	-44	0.426
56-42.8106-106.5919-2-11-						0-W14758	15380	439	5079	35	-2	6.4	3.1	-310	-1	-1	8.6	2606	136	1.5	-38	0.456
56-42.8036-106.5733-2-12-						0-W14759	36650	119	7680	27	-1	6.3	3.3	581	-1	-1	5.9	3201	129	-1.3	54	0.468
56-42.7994-106.5694-2-11-						0-W14760	15060	466	8191	47	-1	6.5	4.7	-235	-1	-1	16.9	3194	107	3.7	70	0.231
56-42.8014-106.5539-2-15-						0-W14761	8762	413	9197	25	-1	4.1	10.3	-249	1	1	33.0	4413	58	5.7	-38	0.234
56-42.7544-106.5353-2-15-						0-W14762	24270	460	8817	-17	-1	5.0	2.8	-283	-1	-1	6.4	2920	47	2.4	-26	0.452
56-42.7769-106.5883-2-12-						0-W14763	8096	227	5681	27	-1	3.1	4.2	261	-1		11.9	2210	51	2.6	-46	0.377
56-42.8519-106.5097-2-15-						0-W14764	14780	138	7196	49	-1	5.4	3.8	-160	-1	-1	9.9	2634	68	2.5	80	0.344
56-42.6381-106.5350-2-15-						0-W14767	16740	217	6003	37	-1	5.0	2.9	-206		-1	6.4	3012	175	1.6	82	0.541
56-42.7142-106.5294-2-15-						0-W14770	7030	299	9629	-16	-1	3.9	2.1	-243	-1	-1	7.9	2765	50	1.8	-22	0.413
56-42.7131-106.5622-2-15-						0-W14771	7800	324	8890	33	-1	4.6	3.2	-215	-1	-1	8.6	2663	51	2.4	52	0.376
56-42.7194-106.5783-2-15-						0-W14772	7140	303	4192	31	-1	5.2	3.7	-195	1	-1	11.0	3027	51	3.0	-40	0.498
56-42.7256-106.6019-2-12-						0-W14773	14790	668	8553	25	-1	4.5	2.7	-393	-1	-1	8.8	3464	74	1.9	-23	0.719
56-42.9961-106.7136-2-15-						0-W14775	16380	130	4293	-16	-1	4.8	2.0	-173	-1	-1	5.0	2514	119	1.9	-62	0.476
56-42.9611-106.6908-2-11-						0-W14777	10170	100	9764	38	-1	3.4	2.7	247			8.1	2246	49	2.0	-21	0.342
56-42.7239-106.7075-2-11-						0-W14780	17560	311	14210	45	-1	6.7	5.0	711	-1	-1	19.0	2140	52	3.0	52	0.539
56-42.6839-106.3883-2-15-						0-W14782	38300	440	8614	26	-1	4.8	3.2	-258		-1	6.4	3447	46	2.3	-18	0.386
56-42.7122-106.4014-2-12-						0-W14783	43830	390	6299	-20	-1	5.1	1.8	-294	-1	-1	6.7	2709	50	2.0	-33	0.340
56-42.6964-106.6189-2-15-						0-W14784	15940	248	5663	26	-1	3.9	3.5	-172		1	7.8	2571	40	2.4	42	0.340
56-42.5339-106.5117-2-15-						0-W14786	15060	179	6603	48	-1	5.7	3.8	-161	-1	-1	11.2	2844	101	2.5	-29	0.278
56-42.5039-106.5414-2-15-						0-W14787	17420	281	7130	32	-1	4.7	3.5	-227		-1	7.6	2567	87	1.9	-24	0.542
56-42.5356-106.5814-2-15-						0-W14788	14390	199	5354	-22	-2	5.1	2.1	-252	-1	-1	7.7	2525	142	1.8	-34	0.604
56-42.6006-106.5803-2-15-						0-W14790	4529	141	6993	25	-1	2.4	2.7	231			5.8	1618	38	1.5	-13	0.374
56-42.6339-106.0853-2-15-						0-W14792	9252	545	14410	39	-1	6.7	9.3	-269	1	1	45.3	3864	57	6.8	51	0.177
56-42.7083-106.0858-2-15-						0-W14793	8144	309	6724	39	-1	3.9	4.3	-220	-1	-1	10.0	3036	52	2.7	39	0.298
56-42.6958-106.0761-2-11-						0-W14794	7389	122	2287	-10	-1	1.1	0.8	-146			5.4	1033	18	1.7	-18	0.320
56-42.6486-106.0244-2-12-						0-W14795	8661	610	12100	30	-1	6.7	11.1	-274	2	1	78.2	7626	97	8.0	-21	0.123
56-42.6411-106.0153-2-12-						0-W14797	9975	361	21420	63	-1	7.1	7.8	-257	-1	-1	45.5	3895	54	4.7	49	0.167
56-42.7175-106.0361-2-15-						0-W14799	11550	259	7166	30	-1	5.2	3.8	-233		-1	8.4	3504	74	2.7	53	0.390
56-42.6972-106.1172-2-11-						0-W14800	7913	117	5799	-15	-1	3.7	2.9	-188	-1	-1	6.2	2094	64	-1.0	-31	1.352
56-42.7303-106.0892-2-12-						0-W14801	13430	654	7421	38	-1	5.1	3.4	-301		-1	7.9	2715	96	2.2	79	0.467
56-42.7217-106.1219-2-15-						0-W14802	16400	258	8984	46	-1	5.4	3.5	245	-1	1	9.9	2759	75	2.4	54	0.338
56-42.6028-106.7606-2-15-						0-W14804	16990	440	11600	35	-1	4.8	3.4	-302	-1	-1	9.5	2888	58	2.3	-36	0.409
56-42.6017-106.7633-2-15-						0-W14805	11450	300	10690	41	-1	4.3	4.0	409	-1	-1	10.8	2410	54	1.9	49	0.337
56-42.5678-106.7556-2-15-						0-W14806	12420	449	8450	33	-1	6.0	5.5	-209	-1	-1	18.2	4833	97	3.1	52	0.170
56-42.5369-106.7806-2-15-						0-W14808	13780	462	11180	26	-1	4.8	5.1	-266	-1	-1	16.3	4812	81	3.0	73	0.300
56-42.6192-106.8547-2-15-						0-W14810	5492	311	12220	35	-1	4.3	2.7	-245	-1	-1	9.9	3019	57	2.7	-24	0.346
56-42.6489-106.8339-2-15-						0-W14811	11540	216	11870	37	1	4.2	3.5	-192			8.0	3053	51	1.9	47	0.340
56-42.7089-106.7617-2-15-						0-W14813	11350	483	13800	37	-1	6.4	11.2	462	-1	1	58.8	3837	73	6.0	48	0.134
56-42.7128-106.7603-2-15-						0-W14814	12590	375	11940	33	-1	4.7	4.8	-270	-1	-1	13.8	3125	49	1.9	59	0.417
56-42.7267-106.7972-2-15-						0-W14816	10300	294	15040	38	-2	5.5	2.9	-291	-1	-1	16.9	2895	52	2.5	42	0.524
56-42.7275-106.8739-2-11-						0-W14817	5503	222	16300	41	-1	4.5	7.3	385	-1	-1	30.9	2752	40	2.9	42	0.283
56-42.6747-106.7931-2-11-						0-W14818	9888	408	13410	-14	-1	5.0	4.7	-254	-1	-1	15.7	3089	59	2.5	65	0.281
56-42.6942-106.8289-2-11-						0-W14819	13510	163	6325	-24	-2	4.1	3.2	-328	-1	-1	12.2	1674	56	-1.6	-39	0.705
56-42.6136-106.9094-2-15-						0-W14820	8982	363	13060	39	-1	4.6	2.8	-263	-1	-1	11.3	2643	63	1.8	-51	0.286
56-42.6064-106.9014-2-15-						0-W14821	12940	366	12620	42	-1	5.4	3.8	488	-1	-1	10.0	2807	60	2.3	50	0.301
56-42.6106-106.9483-2-15-						0-W14822	9685	434	14420	38	-1	6.0	5.3	402	-1	-1	18.3	3913	80	3.4	43	0.177
56-42.5689-106.9806-2-15-						0-W14823	9606	450	14560	33	-1	4.0	4.8	735	-1	-1	15.4	5225	102	3.0	-39	0.243

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

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																											U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
							DATE	HOUR																										
56-42.5664-106.9564-2-15-						0-W14824-08/23/77-12-			28-		-	-	-	-	-	13-1-1-4-1-	-	-	-	-4-2-2-1-	-	-	-	-	-	-	-	-	-	-	-	4.37
56-42.5656-106.9356-2-15-						0-W14825-08/23/77-12-			28-		-	-	-	-	-	11-1-1-4-1-	-	-	-	-4-2-2-1-	-	-	-	-	-	-	-	-	-	-	-	3.59
56-42.4778-106.8656-2-99-						0-W14826-08/23/77-14-			31-		-C-	-	-	-	-	11-1-7-4-1-	-	-	-	-3-2-4-2-	-8-	-	-	-	-	-	-	-	-	-	-	3.30
56-42.5097-106.8958-2-15-						0-W14827-08/23/77-15-			33-		-	-	-	-	-	13-1-1-4-1-	-	-	-	-3-2-4-2-	-8-	-	-	-	-	-	-	-	-	-	-	2.83
56-42.5125-106.8772-2-11-						0-W14828-08/23/77-16-			33-20.5-		-	-	7.8-	650-		11-1-6-6-8-	-	-	-	-4-3-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	27.11
56-42.5289-106.9256-2-15-						0-W14829-08/23/77-16-			33-		-	-	-	-	-	14-1-1-4-1-	-	-	-	-4-2-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	3.73
56-42.5861-106.6744-2-12-						0-W14830-08/23/77-14-			32-25.0-		C-	-	7.8-	800-		11-1-1-4-7-2-2-1-2-4-2-2-2-					-9-	-	-	-	-	-	-	-	-	-	-	-	4.49
56-42.6175-106.6794-2-15-						0-W14831-08/23/77-15-			33-		-	-	-	-	-	41-1-6-4-7-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	3.49
56-42.5875-106.7167-2-15-						0-W14832-08/20/77-15-			-		-	-	-	-	-	15-1-7-4-7-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	4.52
56-42.6100-106.5222-2-15-						0-W14833-08/19/77-16-			-		-	-	-	-	-	16-1-7-4-7-	-	-	-	-4-2-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	3.42
56-42.5317-106.6967-2-15-						0-W14834-08/24/77- 8-			25-		-	-	-	-	-	13-1-7-4-4-	-	-	-	-4-2-3-3-	-1-	-	-	-	-	-	-	-	-	-	-	4.06
56-42.5072-106.7322-2-15-						0-W14835-08/24/77- 9-			24-		-	-	-	-	-	13-1-6-4-4-	-	-	-	-4-2-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	2.65
56-42.5061-106.7339-2-15-						0-W14836-08/24/77- 9-			25-		-	-	-	-	-	11-1-4-4-4-	-	-	-	-4-2-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	3.11
56-42.5042-106.4767-2-15-						0-W14837-08/24/77-12-			26-		-	-	-	-	-	25-1-7-4-7-	-	-	-	-4-2-2-3-	-1-	-	-	-	-	-	-	-	-	-	-	2.98
56-42.5194-106.4153-2-15-						0-W14838-08/24/77-13-			27-		-	-	-	-	-	33-1-7-4-4-	-	-	-	-4-2-3-2-	-1-	-	-	-	-	-	-	-	-	-	-	6.98
56-42.5283-106.4433-2-15-						0-W14839-08/24/77-13-			28-		-	-	-	-	-	25-1-7-4-7-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	4.01
56-42.5528-106.4578-2-15-						0-W14840-08/24/77-13-			28-		-	-	-	-	-	38-1-7-4-7-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	6.80
56-42.5889-106.4539-2-15-						0-W14841-08/24/77-14-			29-		-	-	-	-	-	25-1-7-4-7-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	3.94
56-42.6000-106.4050-2-15-						0-W14843-08/25/77- 9-			18-		-	-	-	-	-	16-1-6-4-7-	-	-	-	-4-2-3-3-	-1-	-	-	-	-	-	-	-	-	-	-	3.33
56-42.6167-106.4153-2-15-						0-W14844-08/25/77-10-			18-		-	-	-	-	-	13-1-7-4-7-	-	-	-	-4-2-3-3-	-1-	-	-	-	-	-	-	-	-	-	-	5.15
56-42.2822-106.5378-2-15-						0-W14845-08/24/77-10-			28-		-	-	-	-	-	11-1-1-5-6-	-	-	-	-3-2-3-3-	-	-	-	-	-	-	-	-	-	-	-	3.25
56-42.2831-106.5106-2-15-						0-W14846-08/23/77-10-			27-		-	-	-	-	-	9-1-1-4-6-	-	-	-	-3-2-3-3-	-	-	-	-	-	-	-	-	-	-	-	5.63
56-42.3097-106.5583-2-15-						0-W14847-08/24/77-11-			27-		-	-	-	-	-	11-1-3-4-6-	-	-	-	-4-3-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	5.37
56-42.3114-106.5617-2-15-						0-W14848-08/24/77-11-			27-		-	-	-	-	-	14-1-3-4-6-	-	-	-	-4-2-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	4.81
56-42.4619-106.8458-2-15-						0-W14849-08/24/77-14-			29-		-	-	-	-	-	16-1-1-4-6-	-	-	-	-3-2-3-3-	-3-	-	-	-	-	-	-	-	-	-	-	3.67
56-42.3900-106.8400-2-15-						0-W14851-08/24/77-15-			28-		-	-	-	-	-	18-3-7-4-6-	-	-	-	-3-2-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	3.62
56-42.4069-106.7922-2-11-						0-W14852-08/24/77-16-			27-		-	-	8.2-	380-		11-1-1-6-8-	-	-	-	-4-2-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	7.42
56-42.4267-106.8406-2-12-						0-W14853-08/24/77-10-			23-16.5-		-	-	8.3-	390-		13-1-1-3-3-2-3-1-2-3-3-3-2-					-3-	-	-	-	-	-	-	-	-	-	-	-	3.76
56-42.4103-106.6814-2-12-						0-W14854-08/24/77-11-			21-15.5-		-	-	8.1-	285-		13-4-4-3-4-3-3-1-2-4-2-3-4-					-3-	-	-	-	-	-	-	-	-	-	-	-	3.37
56-42.3981-106.6808-2-11-						0-W14855-08/24/77-12-			21-11.0-		-	-	8.0-	290-		18-1-1-5-6-	-	-	-	-4-2-2-4-	-3-	-	-	-	-	-	-	-	-	-	-	5.16
56-42.7206-106.7067-2-15-						0-W14856-08/29/77-11-			24-		-	-	-	-	-	33-1-6-4-1-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	4.28
56-42.7117-106.7472-2-15-						0-W14857-08/29/77-12-			26-		-	-	-	-	-	26-1-6-4-1-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	3.92
56-42.7194-106.6844-2-15-						0-W14858-08/29/77-13-			27-		-	-	-	-	-	16-1-6-4-1-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	6.29
56-42.6953-106.7042-2-15-						0-W14859-08/29/77-14-			28-		-	-	-	-	-	16-1-1-4-1-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	8.71
56-42.6967-106.6889-2-11-						0-W14860-08/29/77-14-			28-20.0-		-	-	7.6-	1100-		25-1-1-6-7-2-2-2-2-4-2-2-2-					-1-	-	-	-	-	-	-	-	-	-	-	-	5.64
56-42.6731-106.7356-2-15-						0-W14861-08/29/77-15-			30-		-	-	-	-	-	21-1-1-5-1-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	3.37
56-42.6369-106.6678-2-15-						0-W14862-08/29/77-16-			28-		-	-	-	-	-	25-1-7-4-7-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	3.77
56-42.6347-106.6717-2-15-						0-W14863-08/29/77-16-			28-		-	-	-	-	-	15-1-7-4-7-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	3.83
56-42.6592-106.6250-2-15-						0-W14864-08/29/77-17-			28-		-	-	-	-	-	16-1-7-4-7-	-	-	-	-4-2-2-2-	-3-	-	-	-	-	-	-	-	-	-	-	2.86
56-42.6811-106.6458-2-15-						0-W14865-08/29/77-17-			28-		-	-	-	-	-	18-1-7-6-8-	-	-	-	-4-2-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	3.78
56-42.7133-106.6511-2-15-						0-W14866-08/29/77-18-			26-		-	-	-	-	-	11-1-7-4-7-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	2.97
56-42.7236-106.7072-2-15-						0-W14867-08/30/77-11-			24-		-	-	-	-	-	13-1-7-5-7-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	-	-	-	-	-	-	3.04
56-42.4317-106.6958-2-11-						0-W14868-08/24/77-13-			21-17.5-		-	-	7.6-	350-		14-1-1-5-6-	-	-	-	-4-3-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	4.02
56-42.4517-106.6694-2-11-						0-W14869-08/24/77-13-			22-12.5-		-	-	7.8-	260-		13-1-1-5-6-	-	-	-	-4-2-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	3.32
56-42.4328-106.6547-2-11-						0-W14870-08/24/77-14-			26-23.0-		-	-	-	345-		14-1-1-5-6-	-	-	-	-3-2-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	3.90
56-42.4269-106.6367-2-12-						0-W14871-08/24/77-14-			25-19.0-		-	-	8.1-	225-		13-1-6-3-6-2-3-1-2-4-2-3-2-					-3-	-	-	-	-	-	-	-	-	-	-	-	3.17
56-42.4036-106.6542-2-12-						0-W14872-08/24/77-16-			23-17.5-		-	-	7.6-	305-		14-1-1-4-6-3-3-1-2-3-2-3-2-					-3-	-	-	-	-	-	-	-	-	-	-	-	5.40
56-42.3811-106.6439-2-15-						0-W14873-08/24/77-16-			23-		-	-	-	-	-	13-1-1-5-6-	-	-	-	-4-2-2-2-	-	-	-	-	-	-	-	-	-	-	-	3.37
56-42.4206-106.7372-2-15-						0-W14874-08/24/77-17-			23-		-	-	-	-	-	19-1-6-3-6-	-	-	-	-4-2-3-2-	-3-	-	-	-	-	-	-	-	-	-	-	4.69
56-42.4944-106.8931-2-15-						0-W14875-08/25/77- 9-			16-		-	-	-	-	-	18-1-1-4-6-	-	-	-	-4-2-4-3-	-8-	-	-	-	-	-	-	-	-	-	-	5.54
56-42.8517-106.7692-2-15-						0-W14876-08/29/77-10-			20-		-C-	-	-	-	-	14-1-1-4-6-	-	-	-	-4-3-3-2-	-9-	-	-	-	-	-	-	-	-	-	-	4.06

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE (Concentrations reported in weight parts per million (ppm))									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY (Concentrations in weight ppm)	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
56-42.5664-106.9564-2-15-						0-W14824	-5	-5	-5	17	-20	-15	12	-10	-15	2	19
56-42.5656-106.9356-2-15-						0-W14825	-5	-5	-5	19	-20	-15	13	-10	-15	2	24
56-42.4778-106.8656-2-99-						0-W14826	-5	-5	-5	19	-20	-15	8	-10	-15	2	31
56-42.5097-106.8958-2-15-						0-W14827	-5	-5	-5	12	-20	-15	5	-10	-15	2	21
56-42.5125-106.8772-2-11-						0-W14828	-5	-5	-5	16	-20	-15	-5	-10	-15	2	34
56-42.5289-106.9256-2-15-						0-W14829	-5	-5	-5	-10	-20	-15	-5	-10	-15	2	26
56-42.5861-106.6744-2-12-						0-W14830	-5	-5	-5	22	-20	20	-5	-10	-15	1	35
56-42.6175-106.6794-2-15-						0-W14831	-5	-5	-5	26	-20	17	14	-10	-15	3	48
56-42.5875-106.7167-2-15-						0-W14832	-5	-5	-5	30	-20	27	8	-10	-15	2	65
56-42.6100-106.5222-2-15-						0-W14833	-5	-5	-5	21	-20	17	11	-10	-15	2	51
56-42.5317-106.6967-2-15-						0-W14834	-5	-5	-5	21	-20	-15	10	-10	-15	3	41
56-42.5072-106.7322-2-15-						0-W14835	-5	-5	-5	13	-20	-15	-5	-10	-15	2	24
56-42.5061-106.7339-2-15-						0-W14836	-5	-5	-5	26	-20	-15	10	-10	-15	2	34
56-42.5042-106.4767-2-15-						0-W14837	-5	-5	-5	12	-20	-15	-5	-10	-15	2	40
56-42.5194-106.4153-2-15-						0-W14838	-5	5	-5	21	-20	-15	7	-10	-15	2	41
56-42.5283-106.4433-2-15-						0-W14839	-5	-5	-5	17	-20	-15	7	-10	-15	2	47
56-42.5528-106.4578-2-15-						0-W14840	-5	-5	-5	22	-20	20	10	-10	-15	2	44
56-42.5889-106.4539-2-15-						0-W14841	-5	-5	-5	21	-20	21	8	-10	-15	2	38
56-42.6000-106.4050-2-15-						0-W14843	-5	-5	-5	27	-20	16	6	-10	-15	2	31
56-42.6167-106.4153-2-15-						0-W14844	-5	-5	-5	19	-20	-15	8	-10	-15	2	29
56-42.2822-106.5378-2-15-						0-W14845	-5	-5	-5	22	-20	-15	6	-10	-15	2	51
56-42.2831-106.5106-2-15-						0-W14846	-5	-5	-5	13	-20	-15	9	-10	-15	2	40
56-42.3097-106.5583-2-15-						0-W14847	-5	-5	-5	24	-20	27	18	-10	-15	3	56
56-42.3114-106.5617-2-15-						0-W14848	-5	-5	-5	26	-20	18	12	-10	-15	3	47
56-42.4619-106.8458-2-15-						0-W14849	-5	-5	-5	12	-20	-15	10	-10	-15	2	21
56-42.3900-106.8400-2-15-						0-W14851	-5	-5	-5	21	-20	18	20	-10	-15	2	31
56-42.4069-106.7922-2-11-						0-W14852	-5	-5	-5	13	-20	-15	14	-10	-15	2	30
56-42.4267-106.8406-2-12-						0-W14853	-5	-5	-5	16	-20	17	5	-10	-15	2	24
56-42.4103-106.6814-2-12-						0-W14854	-5	-5	-5	16	-20	-15	22	-10	-15	2	20
56-42.3981-106.6808-2-11-						0-W14855	-5	-5	-5	-10	-20	-15	12	-10	-15	-1	27
56-42.7206-106.7067-2-15-						0-W14856	-5	-5	-5	23	-20	-15	11	-10	-15	2	32
56-42.7117-106.7472-2-15-						0-W14857	-5	5	-5	10	-20	-15	14	-10	-15	2	32
56-42.7194-106.6844-2-15-						0-W14858	-5	-5	-5	14	-20	-15	8	-10	-15	2	35
56-42.6953-106.7042-2-15-						0-W14859	-5	-5	-5	13	-20	20	17	-10	-15	2	37
56-42.6967-106.6889-2-11-						0-W14860	-5	-5	-5	15	-20	-15	19	-10	-15	2	50
56-42.6731-106.7356-2-15-						0-W14861	-5	-5	-5	21	-20	-15	12	-10	-15	2	42
56-42.6369-106.6678-2-15-						0-W14862	-5	-5	-5	14	-20	-15	15	-10	-15	2	29
56-42.6347-106.6717-2-15-						0-W14863	-5	-5	-5	16	-20	-15	11	-10	-15	2	41
56-42.6592-106.6250-2-15-						0-W14864	-5	-5	-5	19	-20	-15	14	-10	-15	2	23
56-42.6811-106.6458-2-15-						0-W14865	-5	-5	-5	18	-20	-15	16	-10	-15	-1	30
56-42.7133-106.6511-2-15-						0-W14866	-5	-5	-5	28	-20	-15	17	-10	-15	2	42
56-42.7236-106.7072-2-15-						0-W14867	-5	-5	-5	21	-20	-15	21	-10	-15	3	59
56-42.4317-106.6958-2-11-						0-W14868	-5	-5	-5	10	-20	-15	11	-10	-15	2	36
56-42.4517-106.6694-2-11-						0-W14869	-5	-5	-5	-10	-20	-15	19	46	-15	2	31
56-42.4328-106.6547-2-11-						0-W14870	-5	-5	-5	13	-20	-15	7	-10	-15	2	48
56-42.4269-106.6367-2-12-						0-W14871	-5	-5	-5	13	-20	-15	8	-10	-15	2	25
56-42.4036-106.6542-2-12-						0-W14872	-5	-5	-5	13	-20	-15	8	-10	-15	2	25
56-42.3811-106.6439-2-15-						0-W14873	-5	-5	-5	16	-20	-15	20	-10	-15	2	28
56-42.4206-106.7372-2-15-						0-W14874	-5	-5	-5	16	-20	-15	15	-10	-15	2	46
56-42.4944-106.8931-2-15-						0-W14875	-5	-5	-5	19	-20	-15	12	-10	-15	2	61
56-42.8517-106.7692-2-15-						0-W14876	-5	-5	-5	16	-20	18	9	-10	-15	2	47

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

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAB. SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per million (ppm)														
							Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
56-42.5664-106.9564-2-15-						0-W14824	47710		415	18090		-85				4				16600		
56-42.5656-106.9356-2-15-						0-W14825	55480	-0.03	671	12100	79	-70	5.9	42	2.0	4	0.9	15890	11.9	17260	48	0.4
56-42.4778-106.8656-2-99-						0-W14826	54790	-0.03	530	15680	67	-66	5.4	36	2.1	4	0.8	11960	9.4	17080	39	0.3
56-42.5097-106.8958-2-15-						0-W14827	30060	-0.03	596	5558	41	2983	4.0	18	1.5	3	0.6	6046	7.9	12570	24	0.3
56-42.5125-106.8772-2-11-						0-W14828	41620	-0.06	595	29510	66	-103	4.7	18	-1.4	3	0.6	11070	8.7	12710	33	0.2
56-42.5289-106.9256-2-15-						0-W14829	51070	-0.03	657	16960	85	-67	4.9	40	1.1	4	0.9	14180	15.4	16940	51	0.4
56-42.5861-106.6744-2-12-						0-W14830	39960	-0.04	499	145900	48	-63	6.3	42	2.6	2	0.7	10420	5.5	10300	26	0.2
56-42.6175-106.6794-2-15-						0-W14831	53400	-0.04	1279	24170	56	93	7.2	39	2.2	4	0.7	12350	5.3	13890	30	0.3
56-42.5875-106.7167-2-15-						0-W14832	50990	-0.05	564	37060	48	-56	5.3	40	2.5	2	0.8	11540	5.3	14130	26	0.2
56-42.6100-106.5222-2-15-						0-W14833	44420	-0.03	661	29620	42	-46	4.1	36	2.5	3	0.7	10320	5.0	13460	24	0.3
56-42.5317-106.6967-2-15-						0-W14834	54200	-0.03	572	21430	60	-49	6.0	32	3.2	4	0.9	11900	6.5	15410	34	0.3
56-42.5072-106.7322-2-15-						0-W14835	34490	-0.03	1595	46210	37	-50	4.6	26	1.5	3	0.7	6863	12.9	12610	20	0.3
56-42.5061-106.7339-2-15-						0-W14836	45320	-0.04	473	34900	42	-75	4.2	25	-1.0	3	0.8	7586	8.3	18630	29	0.3
56-42.5042-106.4767-2-15-						0-W14837	45040	-0.03	776	15120	53	-46	5.1	40	2.5	3	0.7	10450	7.0	13690	31	0.3
56-42.5194-106.4153-2-15-						0-W14838	58030	-0.03	681	30920	96	-67	5.6	31	2.2	4	0.9	12810	10.5	18730	58	0.4
56-42.5283-106.4433-2-15-						0-W14839	52970	-0.03	693	27110	44	-63	6.1	30	2.3	3	0.7	9566	4.1	15830	25	0.2
56-42.5528-106.4578-2-15-						0-W14840	47720		1057	60990		-70				5				12280		
56-42.5889-106.4539-2-15-						0-W14841	51850	-0.03	738	44040	51	-61	5.4	37	2.4	4	0.8	10890	7.1	15210	32	0.3
56-42.6000-106.4050-2-15-						0-W14843	43600	-0.03	629	21450	49	-47	6.7	33	2.4	4	0.8	13170	7.4	11260	26	0.3
56-42.6167-106.4153-2-15-						0-W14844	51050	-0.04	718	5091	53	-68	8.6	30	2.5	5	0.8	16430	5.6	10790	28	0.3
56-42.2822-106.5378-2-15-						0-W14845	58050	-0.06	812	15380	40	-58	7.7	49	2.6	3	0.8	13010	3.7	12990	26	0.3
56-42.2831-106.5106-2-15-						0-W14846	52190	-0.04	824	14440	45	-48	5.5	45	3.0	3	0.8	12350	5.8	17560	27	0.3
56-42.3097-106.5583-2-15-						0-W14847	58180	-0.09	742	56950	49	-50	9.1	51	4.6	4	0.8	15790	3.6	15980	31	0.3
56-42.3114-106.5617-2-15-						0-W14848	62190	-0.07	787	13280	62	-58	11.9	51	3.2	4	0.9	14160	4.8	15710	38	0.3
56-42.4619-106.8458-2-15-						0-W14849	45500	-0.06	478	-1048	129	-81	8.3	42	1.0	3	0.9	23530	17.4	16050	78	0.3
56-42.3900-106.8400-2-15-						0-W14851	54960	-0.07	566	10790	76	-64	5.7	32	1.8	3	0.8	10300	8.8	16700	47	0.3
56-42.4069-106.7922-2-11-						0-W14852	53060	-0.08	653	23390	63	-65	5.7	23	-1.2	4	1.0	9607	10.3	17430	49	0.3
56-42.4267-106.8406-2-12-						0-W14853	37910	-0.05	505	78060	61	-80	9.0	23	1.3	3	0.7	7956	9.9	12720	39	0.3
56-42.4103-106.6814-2-12-						0-W14854	44040	-0.05	589	15630	68	-76	3.9	25	1.1	3	0.8	7299	12.5	15520	38	0.3
56-42.3981-106.6808-2-11-						0-W14855	46760	-0.06	577	10170	88	90	5.1	30	1.4	4	0.9	7664	13.1	16250	47	0.4
56-42.7206-106.7067-2-15-						0-W14856	49500	-0.07	665	50610	54	147	6.0	15	1.4	3	0.8	8241	7.0	14490	34	0.3
56-42.7117-106.7472-2-15-						0-W14857	53360	-0.05	885	40840	57	-77	8.5	27	2.2	4	0.8	7945	7.6	16890	33	0.3
56-42.7194-106.6844-2-15-						0-W14858	43820	-0.05	534	22900	72	248	4.2	23	1.2	3	0.7	6537	10.1	15240	51	0.4
56-42.6953-106.7042-2-15-						0-W14859	47910	-0.07	480	14580	335	-68	7.2	50	1.4	9	1.1	18370	29.0	14080	186	0.8
56-42.6967-106.6889-2-11-						0-W14860	61240	-0.10	709	46990	73	136	6.4	40	2.2	5	0.8	11550	7.6	18980	41	0.3
56-42.6731-106.7356-2-15-						0-W14861	59390	-0.06	778	42020	46	117	8.6	28	2.6	3	0.7	8298	4.4	16070	32	0.2
56-42.6369-106.6678-2-15-						0-W14862	47150	-0.05	644	22440	70	-75	4.4	30	2.0	3	0.9	8384	10.1	14710	44	0.4
56-42.6347-106.6717-2-15-						0-W14863	58360	-0.07	759	38870	64	119	5.3	29	2.8	3	0.9	9717	5.2	18910	34	0.4
56-42.6592-106.6250-2-15-						0-W14864	44340	-0.07	545	11740	45	-46	4.5	24	2.0	4	0.8	7532	6.2	16030	26	0.3
56-42.6811-106.6458-2-15-						0-W14865	45260	-0.06	489	14150	52	-51	9.7	30	2.2	4	0.8	7757	8.0	14950	36	0.3
56-42.7133-106.6511-2-15-						0-W14866	59970	-0.07	532	9207	61	-67	7.0	44	3.8	3	0.9	14790	4.9	16700	35	0.3
56-42.7236-106.7072-2-15-						0-W14867	67490	-0.09	815	16910	66	-46	8.8	73	4.6	4	1.0	17490	4.4	18870	39	0.4
56-42.4317-106.6958-2-11-						0-W14868	49070	-0.08	687	22620	54	-66	5.3	28	-1.1	3	0.9	8269	11.5	16690	36	0.3
56-42.4517-106.6694-2-11-						0-W14869	45700	-0.06	575	40670	61	-76	9.8	24	1.1	3	0.7	7492	8.6	18920	38	0.3
56-42.4328-106.6547-2-11-						0-W14870	53060	-0.07	601	18920	80	-82	7.1	38	3.0	3	1.0	12320	10.9	18310	49	0.4
56-42.4269-106.6367-2-12-						0-W14871	45160	-0.06	650	14550	80	-63	4.7	27	1.2	4	1.0	7587	13.4	17240	42	0.3
56-42.4036-106.6542-2-12-						0-W14872	48020	-0.07	623	12880	70	-64	4.9	31	-1.1	5	1.0	7509	15.0	18100	48	0.4
56-42.3811-106.6439-2-15-						0-W14873	51360	-0.06	615	9528	51	-78	10.9	37	1.8	4	0.7	11370	7.8	18550	33	0.3
56-42.4206-106.7372-2-15-						0-W14874	50860	-0.07	421	22580	127	-84	6.2	31	2.9	4	1.0	14780	12.2	20130	67	0.4
56-42.4944-106.8931-2-15-						0-W14875	53980	-0.03	756	28370	72	98	5.1	29	1.2	4	0.9	12500	12.4	15690	42	0.3
56-42.8517-106.7692-2-15-						0-W14876	51010	-0.03	941	19300	74	-72	6.7	44	2.8	4	0.8	13940	10.6	16390	38	0.3

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
56-	42.5664-	106.9564-2-15-				0-W14824	11300	527	13940					-288				5422	127			
56-	42.5656-	106.9356-2-15-				0-W14825	10090	423	13170	44	-1	5.4	4.7	-232	1	-1	15.2	4026	81	2.9	68	0.236
56-	42.4778-	106.8656-2-99-				0-W14826	13000	352	12590	44	-1	5.5	4.3	-213	-1	-1	15.2	2292	56	3.0	-35	0.217
56-	42.5097-	106.8958-2-15-				0-W14827	4156	200	8119	22	-1	2.4	2.7	-196			6.0	2661	53	1.7	26	0.472
56-	42.5125-	106.8772-2-11-				0-W14828	7539	496	10890	-23	-2	3.7	4.3	-380	-1	-1	11.1	2868	92	3.4	-38	2.442
56-	42.5289-	106.9256-2-15-				0-W14829	8943	352	13580	26	-1	4.8	5.2	-215	-1	-1	17.2	3802	85	3.1	37	0.217
56-	42.5861-	106.6744-2-12-				0-W14830	21030	246	4296	-15	-1	5.3	3.5	850	-1	-1	8.0	2213	114	2.2	88	0.561
56-	42.6175-	106.6794-2-15-				0-W14831	21530	271	6967	31	-1	5.4	3.7	-215	-1	-1	11.0	3613	118	2.2	58	0.317
56-	42.5875-	106.7167-2-15-				0-W14832	16090	202	5271	-18	-1	5.5	2.3	-202	-1	-1	8.0	3157	130	1.8	-30	0.565
56-	42.6100-	106.5222-2-15-				0-W14833	14690	181	6097	33	-1	4.4	3.5	-160			7.9	2425	98	2.2	44	0.433
56-	42.5317-	106.6967-2-15-				0-W14834	12770	195	6356	42	1	5.6	4.2	203	-1	-1	10.6	2425	69	2.6	90	0.383
56-	42.5072-	106.7322-2-15-				0-W14835	13180	319	4182	26	-1	3.3	2.7	-207			5.2	2419	42	1.8	-15	0.510
56-	42.5061-	106.7339-2-15-				0-W14836	12490	325	10630	-15	-1	4.0	2.9	-254	-1	-1	9.3	2433	43	2.2	-25	0.334
56-	42.5042-	106.4767-2-15-				0-W14837	15710	197	5759	38	-1	5.1	3.8	-167	-1	1	12.2	3107	109	2.3	64	0.244
56-	42.5194-	106.4153-2-15-				0-W14838	9438	280	12390	42	-1	6.1	6.4	208	-1	-1	27.2	3093	62	3.1	-20	0.257
56-	42.5283-	106.4433-2-15-				0-W14839	22680	268	7604	30	-1	4.8	3.6	-225		-1	8.7	2683	102	2.2	54	0.461
56-	42.5528-	106.4578-2-15-				0-W14840	13160	298	7258					-247				3988	177			
56-	42.5889-	106.4539-2-15-				0-W14841	14360	257	9014	34	-1	5.3	3.3	391	-1	-1	10.2	2734	135	2.0	-47	0.386
56-	42.6000-	106.4050-2-15-				0-W14843	9403	456	4447	31	-1	5.7	3.5	-207	1	1	7.5	2651	50	2.9	85	0.444
56-	42.6167-	106.4153-2-15-				0-W14844	7788	1055	3388	33	-1	5.1	3.9	-357		-1	7.4	3282	65	2.0	73	0.696
56-	42.2822-	106.5378-2-15-				0-W14845	20070	176	4054	-23	-2	6.9	3.0	-236	-1	-1	6.5	3267	159	-1.6	-38	0.500
56-	42.2831-	106.5106-2-15-				0-W14846	14960	165	5148	38	-1	5.9	4.0	-174	-1	-1	9.1	2930	104	2.5	73	0.619
56-	42.3097-	106.5583-2-15-				0-W14847	23110	391	3495	-24	-3	7.2	2.4	-210	-1	-1	9.6	3170	233	-1.9	-52	0.559
56-	42.3114-	106.5617-2-15-				0-W14848	17440	205	5784	57	-2	7.2	4.5	-217	-1	-1	13.2	3420	120	3.5	84	0.364
56-	42.4619-	106.8458-2-15-				0-W14849	9567	499	11820	34	-2	5.9	6.7	-280	-1	-1	25.7	4838	111	3.5	74	0.143
56-	42.3900-	106.8400-2-15-				0-W14851	10920	274	11030	51	-2	5.0	5.2	-206	-1	-1	17.3	2791	44	4.1	79	0.209
56-	42.4069-	106.7922-2-11-				0-W14852	14690	223	11420	-21	-2	4.9	3.4	268	-1	-1	16.0	2969	53	2.3	-33	0.464
56-	42.4267-	106.8406-2-12-				0-W14853	7849	534	9793	25	-2	3.2	3.6	540	-1	-1	15.2	2784	34	2.4	15	0.247
56-	42.4103-	106.6814-2-12-				0-W14854	5144	192	13100	47	-2	3.9	3.8	-229	-1	-1	13.6	2703	37	2.5	61	0.248
56-	42.3981-	106.6808-2-11-				0-W14855	5948	173	12830	45	-2	4.0	5.1	-187	-1	-1	16.6	2739	41	3.5	38	0.311
56-	42.7206-	106.7067-2-15-				0-W14856	12790	789	14050	-20	-2	4.2	3.2	-301	-1	-1	12.1	2454	37	3.2	-27	0.354
56-	42.7117-	106.7472-2-15-				0-W14857	9129	332	12750	32	-2	3.9	4.6	-246	1	-1	13.0	2366	41	3.3	43	0.302
56-	42.7194-	106.6844-2-15-				0-W14858	5873	197	23520	42	-2	3.5	4.6	-269	-1	-1	18.1	1940	30	3.2	32	0.348
56-	42.6953-	106.7042-2-15-				0-W14859	8233	484	12600	31	-2	5.8	23.3	-236	-1	1	103.6	5852	92	7.3	49	0.084
56-	42.6967-	106.6889-2-11-				0-W14860	14770	436	15850	59	-3	5.7	3.3	-271	-1	-1	17.9	2917	53	2.6	-75	0.315
56-	42.6731-	106.7356-2-15-				0-W14861	11910	372	12610	45	-2	4.5	3.5	-268		-1	9.6	2627	46	2.3	38	0.351
56-	42.6369-	106.6678-2-15-				0-W14862	10760	298	10750	33	-2	4.3	4.6	-245	-1	-1	12.5	3056	39	3.5	35	0.302
56-	42.6347-	106.6717-2-15-				0-W14863	14480	356	12840	62	-2	5.0	4.5	386	-1	-1	11.7	2449	47	2.7	50	0.327
56-	42.6592-	106.6250-2-15-				0-W14864	12690	216	5933	-16	-2	4.0	2.8	-161		-1	7.4	2424	41	2.2	-25	0.386
56-	42.6811-	106.6458-2-15-				0-W14865	14070	242	4549	34	-2	4.4	3.5	-206		-1	9.5	2847	52	2.4	34	0.398
56-	42.7133-	106.6511-2-15-				0-W14866	17870	248	6882	58	-2	7.8	4.2	-242	-1	-1	10.9	2782	70	3.1	-65	0.272
56-	42.7236-	106.7072-2-15-				0-W14867	22610	197	4062	53	-3	9.6	6.3	-184	-1	-1	10.7	3885	168	2.4	-73	0.284
56-	42.4317-	106.6958-2-11-				0-W14868	11590	239	12210	-18	-2	4.2	2.4	-202	-1	-1	13.1	3282	49	-1.8	-30	0.307
56-	42.4517-	106.6694-2-11-				0-W14869	10110	178	11570	33	-2	3.4	4.1	-230	-1	-1	13.4	2464	48	2.6	26	0.248
56-	42.4328-	106.6547-2-11-				0-W14870	12270	258	10110	-17	-2	5.7	5.3	441	-1	-1	16.9	2958	58	4.1	-33	0.231
56-	42.4269-	106.6367-2-12-				0-W14871	8252	196	12320	38	-2	4.0	4.8	306	-1	-1	15.8	2773	35	4.3	32	0.201
56-	42.4036-	106.6542-2-12-				0-W14872	9466	184	12860	34	-2	4.2	4.0	-190	-1	-1	18.9	3403	50	3.7	-28	0.286
56-	42.3811-	106.6439-2-15-				0-W14873	7313	228	12070	36	-2	4.2	3.5	-247	-1	-1	10.6	2348	44	1.9	68	0.318
56-	42.4206-	106.7372-2-15-				0-W14874	9829	279	11310	56	-2	5.7	7.1	-270	-1	-1	29.2	3757	61	3.4	73	0.161
56-	42.4944-	106.8931-2-15-				0-W14875	11800	304	14300	33	-1	5.4	4.2	620	-1	-1	15.1	3731	57	2.9	-17	0.367
56-	42.8517-	106.7692-2-15-				0-W14876	15810	691	7549	29	-1	5.6	4.3	-300	-1	-1	14.1	3608	120	2.7	-10	0.288

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

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
							TIME SAMPLED																										
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (umho/cm)	SCINTILLOMETER (eU,ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
56-42.8547-106.7997-2-15-						0-W14877-08/29/77-10-			20-	-C-	-	-	-	-	-	13-1-1-4-6-	-	-	-	-3-2-2-2-	-9-	-	-	-	-	3.33
56-42.8233-106.8050-2-12-						0-W14878-08/29/77-10-			21-15.5-	-	-	-	6.7-	2650-	-	14-1-1-5-2-2-3-3-2-4-3-3-2-													-3-	-	-	-	5.68
56-42.8436-106.8719-2-15-						0-W14880-08/29/77-11-			21-	-	-	-	-	-	-	11-1-3-4-6-	-	-	-	-4-2-3-2-	-3-	-	-	-	-	7.61
56-42.8181-106.7711-2-15-						0-W14881-08/29/77-11-			24-	-	-	-	-	-	-	11-1-1-4-6-	-	-	-	-4-2-3-2-	-3-	-	-	-	-	3.65
56-42.8275-106.7192-2-15-						0-W14882-08/29/77-13-			26-	-	-	-	-	-	-	13-1-6-4-6-	-	-	-	-4-2-3-2-	-	-	-	-	-	3.35
56-42.8147-106.7200-2-15-						0-W14883-08/29/77-13-			27-	-	-	-	-	-	-	5-1-1-4-6-	-	-	-	-4-2-2-2-	-3-	-	-	-	-	3.20
56-42.8011-106.6836-2-15-						0-W14884-08/29/77-14-			28-	-	-	-	-	-	-	10-1-1-4-6-	-	-	-	-3-3-3-2-	-1-	-	-	-	-	2.06
56-42.7997-106.6811-2-15-						0-W14885-08/29/77-14-			28-	-	-	-	-	-	-	11-1-1-4-6-	-	-	-	-3-2-3-2-	-1-	-	-	-	-	3.83
56-42.8147-106.6419-2-15-						0-W14886-08/29/77-15-			28-	-	-	-	-	-	-	9-1-1-4-6-	-	-	-	-4-2-3-2-	-1-	-	-	-	-	4.33
56-42.7603-106.6500-2-15-						0-W14887-08/29/77-17-			29-	-	-	-	-	-	-	7-1-1-4-6-	-	-	-	-3-3-2-2-	-1-	-	-	-	-	3.68
56-42.7617-106.6478-2-15-						0-W14888-08/29/77-17-			29-	-	-	-	-	-	-	3-1-1-4-6-	-	-	-	-3-3-2-2-	-1-	-	-	-	-	3.35
56-42.7529-106.6819-2-15-						0-W14889-08/29/77-17-			28-	-	-	-	-	-	-	8-1-1-4-6-	-	-	-	-4-3-2-2-	-1-	-	-	-	-	2.53
56-42.6953-106.8467-2-11-						0-W14890-08/30/77-10-			24-14.5-	-	-	-	7.7-	120-	-	14-1-1-5-6-	-	-	-	-4-3-3-2-	-3-	-	-	-	-	3.62
56-42.6853-106.8544-2-11-						0-W14891-08/30/77-11-			24-10.5-	-	-	-	7.6-	175-	-	13-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.74
56-42.5656-106.4992-2-15-						0-W14893-08/30/77-13-			28-	-	-	-	-	-	-	11-1-7-5-7-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	3.82
56-42.5803-106.4075-2-15-						0-W14894-08/30/77-14-			30-	-	-	-	-	-	-	21-1-7-4-7-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	4.94
56-42.4778-107.2214-2-15-						0-W14895-09/02/77-15-			37-	-	-	-	-	-	-	18-2-6-4-6-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	4.57
56-42.4889-107.2361-2-15-						0-W14896-09/02/77-15-			38-	-	-	-	-	-	-	-2-6-4-6-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	4.34
56-42.4772-107.2256-2-12-						0-W14898-09/02/77-16-			30-19.0-	-	-	-	7.0-	380-	-	16-2-6-6-8-2-3-2-1-4-2-2-2-													-3-	-	-	-	3.62
56-42.4383-107.2769-2-15-						0-W14899-09/02/77-17-			-	-	-	-	-	-	-	-2-6-4-6-	-	-	-	-4-2-1-2-	-1-	-	-	-	-	2.65
56-42.3997-107.3500-2-15-						0-W14900-09/02/77-17-			-	-	-	-	-	-	-	18-2-6-4-6-	-	-	-	-4-2-2-2-	-2-	-	-	-	-	1.94
56-42.4569-107.2897-2-15-						0-W14901-09/05/77-14-			34-	-	-	-	-	-	-	15-2-6-4-1-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	3.43
56-42.4894-107.1319-2-12-						0-W14902-08/31/77-10-			15-11.5-	-	-	-	7.1-	550-	-	12-3-6-4-6-2-3-1-2-4-2-2-2-													-8-	-	-	-	17.39
56-42.4750-107.1472-2-15-						0-W14903-08/31/77-10-			16-	-	-	-	-	-	-	14-3-6-4-6-	-	-	-	-4-2-2-2-	-	-	-	-	-	2.80
56-42.4606-107.1731-2-15-						0-W14904-08/31/77-10-			14-	-	-	-	-	-	-	14-3-6-4-6-	-	-	-	-4-2-3-2-	-	-	-	-	-	2.71
56-42.3653-107.3339-2-15-						0-W14911-09/01/77-10-			22-	-	-	-	-	-	-	14-4-	-4-6-	-	-	-4-2-2-2-	-3-	-	-	-	-	3.72
56-42.3358-107.3200-2-12-						0-W14912-09/01/77-13-			23-19.5-	-	-	-	6.6-	250-	-	18-4-	-5-6-2-3-1-2-4-2-3-2-													-3-	-	-	-	3.91
56-42.3119-107.3050-2-12-						0-W14913-09/01/77-12-			23-15.5-	-	-	-	7.1-	275-	-	9-4-	-4-6-2-3-1-2-3-2-3-2-													-3-	-	-	-	3.50
56-42.3122-107.3028-2-15-						0-W14914-09/01/77-12-			23-	-	-	-	-	-	-	18-4-	-4-6-	-	-	-3-2-3-2-	-3-	-	-	-	-	7.70
56-42.3308-107.3319-2-15-						0-W14915-09/01/77-14-			23-	-	-	-	-	-	-	9-4-	-4-4-	-	-	-3-2-3-2-	-3-	-	-	-	-	3.14
56-42.4794-107.3300-2-11-						0-W14916-09/05/77-15-			34-	-	-	-	-	-	-	11-2-6-6-8-	-	-	-	-5-3-3-2-	-1-	-	-	-	-	3.60
56-42.4919-107.3494-2-15-						0-W14917-09/05/77-15-			34-	-	-	-	-	-	-	15-2-6-4-7-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	3.59
56-42.4822-107.3400-2-15-						0-W14918-09/05/77-15-			35-	-	-	-	-	-	-	18-2-6-4-7-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	3.00
56-42.4597-107.3108-2-15-						0-W14919-09/05/77-15-			39-	-	-	-	-	-	-	16-2-6-3-1-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	5.19
56-42.5872-107.0369-2-15-						0-W14922-09/06/77-12-			30-	-	-	-	-	-	-	10-2-6-4-6-	-	-	-	-4-2-2-1-	-1-	-	-	-	-	2.12
56-42.6047-107.0775-2-15-						0-W14923-09/06/77-13-			32-	-	-	-	-	-	-	16-2-7-4-7-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	2.74
56-42.6172-107.0822-2-15-						0-W14924-09/06/77-14-			32-	-	-	-	-	-	-	8-1-1-4-1-	-	-	-	-4-2-3-2-	-1-	-	-	-	-	2.68
56-42.6133-107.1242-2-15-						0-W14925-09/06/77-14-			31-	-	-	-	-	-	-	10-2-6-4-1-	-	-	-	-4-2-3-2-	-1-	-	-	-	-	4.42
56-42.6036-107.1264-2-11-						0-W14926-09/06/77-14-			31-26.2-	-	-	-	7.7-	490-	-	15-2-6-6-8-2-3-3-2-4-2-3-2-													-1-	-	-	-	2.52
56-42.5758-107.1311-2-15-						0-W14927-09/06/77-15-			32-	-	-	-	-	-	-	13-2-6-4-6-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	2.10
56-42.5925-107.1914-2-15-						0-W14928-09/06/77-15-			33-	-	-	-	-	-	-	8-2-6-4-6-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	6.86
56-42.5944-107.1789-2-15-						0-W14929-09/06/77-15-			33-	-C-	-	-	-	-	-	11-2-6-4-6-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	2.67
56-42.5778-107.2014-2-15-						0-W14930-09/06/77-16-			32-	-	-	-	-	-	-	15-1-6-4-6-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	2.78
56-42.4986-107.0564-2-15-						0-W14931-09/06/77-16-			30-	-	-	-	-	-	-	21-2-6-4-6-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	3.25
56-42.4992-107.0342-2-15-						0-W14932-09/06/77-17-			28-	-	-	-	-	-	-	23-2-6-4-6-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	2.34
56-42.4586-107.0236-2-15-						0-W14934-09/06/77-17-			26-	-	-	-	-	-	-	13-2-6-4-6-	-	-	-	-4-2-2-2-	-3-	-	-	-	-	3.48
56-42.4458-107.0311-2-15-						0-W14935-09/06/77-17-			27-	-	-	-	-	-	-	15-2-6-4-6-	-	-	-	-4-2-2-2-	-3-	-	-	-	-	2.33
56-42.4636-107.0567-2-15-						0-W14937-09/06/77-18-			27-	-	-	-	-	-	-	18-2-6-4-6-	-	-	-	-4-2-2-2-	-3-	-	-	-	-	2.86
56-42.3667-107.3603-2-15-						0-W14938-09/01/77-14-			24-	-	-	-	-	-	-	9-4-	-4-6-	-	-	-4-2-2-2-	-3-	-	-	-	-	3.84
56-42.3344-107.4097-2-11-						0-W14939-09/01/77-15-			24-18.0-	-	-	-	6.8-	500-	-	11-1-3-6-8-	-	-	-	-4-3-4-2-	-3-	-	-	-	-	8.15
56-42.3308-107.4131-2-11-						0-W14940-09/01/77-16-			23-15.0-	-	-	-	6.7-	525-	-	7-1-1-6-6-	-	-	-	-4-2-4-2-	-3-	-	-	-	-	1.97

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

(2)

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
56-42.8547-106.7997-2-15-						0-W14877	-5	-5	-5	16	-20	-15	12	-10	-15	2	34
56-42.8733-106.8050-2-12-						0-W14878	-5	-5	-5	34	-20	28	9	-10	-15	3	63
56-42.8436-106.8719-2-15-						0-W14880	-5	-5	-5	14	-20	-15	20	-10	-15	2	41
56-42.8181-106.7711-2-15-						0-W14881	-5	-5	-5	22	-20	-15	22	-10	-15	2	48
56-42.8275-106.7192-2-15-						0-W14882	-5	-5	-5	11	-20	-15	-5	-10	-15	2	24
56-42.8147-106.7200-2-15-						0-W14883	-5	-5	-5	19	-20	-15	13	-10	-15	3	48
56-42.8011-106.6836-2-15-						0-W14884	-5	-5	-5	14	-20	-15	-5	-10	-15	2	17
56-42.7997-106.6811-2-15-						0-W14885	-5	-5	-5	19	-20	-15	10	-10	-15	2	25
56-42.8147-106.6419-2-15-						0-W14886	-5	-5	-5	35	-20	32	-5	-10	-15	3	85
56-42.7603-106.6500-2-15-						0-W14887	-5	-5	-5	16	-20	17	9	-10	-15	2	35
56-42.7617-106.6478-2-15-						0-W14888	-5	-5	-5	15	-20	15	11	-10	16	2	36
56-42.7522-106.6819-2-15-						0-W14889	-5	-5	-5	12	-20	-15	12	-10	-15	2	27
56-42.6953-106.8467-2-11-						0-W14890	-5	-5	-5	13	-20	-15	15	-10	-15	2	25
56-42.6853-106.8544-2-11-						0-W14891	-5	-5	-5	-10	-20	-15	8	-10	-15	2	13
56-42.5656-106.4992-2-15-						0-W14893	-5	-5	-5	19	-20	-15	8	-10	-15	2	69
56-42.5803-106.4075-2-15-						0-W14894	-5	-5	-5	15	-20	-15	19	-10	-15	2	42
56-42.4778-107.2214-2-15-						0-W14895	-5	-5	-5	17	-20	-15	12	-10	-15	2	19
56-42.4889-107.2361-2-15-						0-W14896	-5	-5	-5	17	-20	29	18	-10	-15	2	34
56-42.4772-107.2256-2-12-						0-W14898	-5	-5	-5	-10	-20	-15	-5	-10	-15	1	18
56-42.4383-107.2769-2-15-						0-W14899	-5	-5	-5	17	-20	-15	9	-10	-15	2	29
56-42.3997-107.3500-2-15-						0-W14900	-5	-5	-5	21	-20	-15	6	-10	-15	3	32
56-42.4569-107.2897-2-15-						0-W14901	-5	-5	-5	14	-20	-15	8	-10	-15	1	29
56-42.4894-107.1319-2-12-						0-W14902	-5	-5	-5	-10	-20	-15	17	-10	-15	2	18
56-42.4750-107.1472-2-15-						0-W14903	-5	-5	-5	16	-20	-15	12	-10	-15	2	25
56-42.4606-107.1731-2-15-						0-W14904	-5	-5	-5	10	-20	-15	14	-10	-15	2	31
56-42.3653-107.3339-2-15-						0-W14911	-5	-5	-5	17	-20	-15	-5	-10	-15	2	27
56-42.3358-107.3200-2-12-						0-W14912	-5	-5	-5	12	-20	15	9	-10	-15	2	28
56-42.3119-107.3050-2-12-						0-W14913	-5	-5	-5	11	-20	-15	6	-10	-15	2	20
56-42.3122-107.3028-2-15-						0-W14914	-5	-5	-5	12	-20	-15	9	-10	16	2	19
56-42.3308-107.3319-2-15-						0-W14915	-5	-5	-5	20	-20	-15	12	-10	-15	2	49
56-42.4794-107.3300-2-11-						0-W14916	-5	-5	-5	-10	-20	-15	7	-10	-15	1	15
56-42.4919-107.3494-2-15-						0-W14917	-5	-5	-5	18	-20	24	21	-10	-15	3	37
56-42.4822-107.3400-2-15-						0-W14918	-5	-5	-5	18	-20	-15	12	-10	-15	2	47
56-42.4597-107.3108-2-15-						0-W14919	-5	-5	-5	13	-20	-15	18	-10	-15	2	24
56-42.5872-107.0369-2-15-						0-W14922	-5	-5	-5	18	-20	-15	9	-10	-15	2	29
56-42.6047-107.0775-2-15-						0-W14923	-5	-5	-5	22	-20	-15	10	-10	-15	2	34
56-42.6172-107.0822-2-15-						0-W14924	-5	-5	-5	16	-20	-15	5	-10	-15	2	33
56-42.6133-107.1242-2-15-						0-W14925	-5	-5	-5	-10	-20	17	-5	-10	-15	2	39
56-42.6036-107.1264-2-11-						0-W14926	-5	-5	-5	-10	-20	-15	14	-10	-15	2	31
56-42.5758-107.1311-2-15-						0-W14927	-5	-5	-5	12	-20	-15	15	-10	-15	2	40
56-42.5925-107.1914-2-15-						0-W14928	-5	-5	-5	14	-20	-15	11	-10	-15	2	37
56-42.5944-107.1789-2-15-						0-W14929	-5	-5	-5	14	-20	-15	13	-10	-15	2	42
56-42.5778-107.2014-2-15-						0-W14930	-5	-5	-5	17	-20	-15	14	-10	-15	2	25
56-42.4986-107.0564-2-15-						0-W14931	-5	-5	-5	14	-20	-15	17	-10	-15	3	35
56-42.4992-107.0342-2-15-						0-W14932	-5	-5	-5	20	-20	-15	12	-10	-15	2	27
56-42.4586-107.0236-2-15-						0-W14934	-5	-5	-5	12	-20	-15	8	-10	-15	2	21
56-42.4458-107.0311-2-15-						0-W14935	-5	-5	-5	22	-20	-15	14	-10	-15	2	30
56-42.4636-107.0567-2-15-						0-W14937	-5	-5	-5	19	-20	-15	16	-10	-15	1	28
56-42.3667-107.3603-2-15-						0-W14938	-5	-5	-5	14	-20	-15	11	-10	-15	2	27
56-42.3344-107.4097-2-11-						0-W14939	-5	-5	-5	20	-20	-15	9	-10	-15	2	12
56-42.3308-107.4131-2-11-						0-W14940	-5	-5	-5	11	-20	-15	-5	-10	-15	2	14

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

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per million (ppm)														
							Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
56-	42.8547-	106.7997-	2-	15-		0-W14877	49470	-0.04	462	5104	40	-58	4.1	28	2.0	4	0.6	7541	6.0	16160	25	0.2
56-	42.8233-	106.8050-	2-	12-		0-W14878	44800	-0.05	447	30180	68	-53	8.6	71	4.0	4	0.8	22000	2.9	15610	39	0.3
56-	42.8436-	106.8719-	2-	15-		0-W14880	61240	-0.03	2119	4600	106	-72	6.0	51	1.3	6	1.1	12580	12.8	17050	63	0.6
56-	42.8181-	106.7711-	2-	15-		0-W14881	56010	-0.04	474	4787	50	-63	5.8	31	2.6	4	0.7	8014	5.8	18790	28	0.3
56-	42.8275-	106.7192-	2-	15-		0-W14882	41230	-0.03	628	5915	36	-56	2.5	13	1.5	3	0.7	4549	10.3	13400	24	0.2
56-	42.8147-	106.7200-	2-	15-		0-W14883	58920	-0.03	560	5055	50	-54	5.2	43	3.0	3	0.7	10860	5.1	20170	29	0.3
56-	42.8011-	106.6836-	2-	15-		0-W14884	34080	-0.03	411	9869	29	-44	3.8	29	1.8	2	0.5	6199	5.5	12690	18	0.2
56-	42.7997-	106.6811-	2-	15-		0-W14885	48620	-0.03	563	13370	48	-57	5.0	29	2.1	4	0.6	7442	5.8	14100	26	0.2
56-	42.8147-	106.6419-	2-	15-		0-W14886	53370	-0.04	644	71690	26	-64	3.7	38	1.7	2	0.4	6823	2.6	12850	18	-0.1
56-	42.7603-	106.6500-	2-	15-		0-W14887	55390	-0.03	639	11060	55	-49	5.3	39	3.5	4	0.8	11420	6.8	17170	30	0.3
56-	42.7617-	106.6478-	2-	15-		0-W14888	51480	-0.03	542	8100	56	-45	5.1	38	3.2	4	0.7	10270	8.0	14710	31	0.3
56-	42.7522-	106.6819-	2-	15-		0-W14889	49370	-0.03	526	10310	43	68	4.9	25	2.2	3	0.7	6859	4.7	14080	24	0.2
56-	42.6953-	106.8467-	2-	11-		0-W14890	53000	-0.04	590	12970	63	-86	4.5	25	-1.1	4	0.8	9215	10.8	17150	42	0.3
56-	42.6853-	106.8544-	2-	11-		0-W14891	50850	-0.03	620	15130	93	-77	3.3	23	-0.8	4	0.9	6794	13.3	15320	60	0.4
56-	42.5656-	106.4992-	2-	15-		0-W14893	54510	-0.04	782	33150	54	68	8.1	64	3.7	4	0.9	15260	5.7	15030	30	0.3
56-	42.5803-	106.4075-	2-	15-		0-W14894	48720	-0.03	871	14720	52	-51	5.6	32	2.6	4	0.9	10720	7.3	15330	28	0.3
56-	42.4778-	107.2214-	2-	15-		0-W14895	47060	-0.04	570	12420	105	-81	7.0	45	-1.1	3	0.7	22100	17.4	13560	68	0.3
56-	42.4889-	107.2361-	2-	15-		0-W14896	52880	-0.04	586	17520	136	138	8.2	49	1.6	5	1.0	24410	14.6	15640	78	0.4
56-	42.4772-	107.2256-	2-	12-		0-W14898	44940	-0.03	630	11170	62	-61	4.0	25	1.0	4	0.7	7527	14.4	17250	36	0.3
56-	42.4383-	107.2769-	2-	15-		0-W14899	45680	-0.03	611	31680	44	-67	5.1	21	1.6	3	0.6	6827	6.8	15650	24	0.2
56-	42.3997-	107.3500-	2-	15-		0-W14900	45530		547	13920		-66				2				14950		
56-	42.4569-	107.2897-	2-	15-		0-W14901	48740	-0.03	584	10770	72	-63	4.1	27	0.9	4	0.7	8825	10.2	17440	44	0.3
56-	42.4894-	107.1319-	2-	12-		0-W14902	41160	0.07	347	21920	773	-91	13.3	114	-1.4	19	3.2	52250	68.6	9919	478	1.5
56-	42.4750-	107.1472-	2-	15-		0-W14903	48370	-0.03	632	13240	57	-69	5.1	22	1.2	3	0.6	9753	9.1	14960	34	0.2
56-	42.4606-	107.1731-	2-	15-		0-W14904	48960		567	14730		-73				2				16610		
56-	42.3653-	107.3339-	2-	15-		0-W14911	40100	-0.03	443	29570	57	-57	4.0	23	1.5	4	0.6	7949	13.6	15670	31	0.4
56-	42.3358-	107.3200-	2-	12-		0-W14912	48360	-0.03	644	18190	65	-63	5.1	32	1.6	4	0.8	7411	12.8	16460	38	0.3
56-	42.3119-	107.3050-	2-	12-		0-W14913	33990	-0.03	428	8736	39	-55	4.2	18	1.1	4	0.5	5341	13.2	15150	22	0.3
56-	42.3122-	107.3028-	2-	15-		0-W14914	32260	-0.05	346	9208	69	-60	3.7	35	-1.1	6	0.7	8830	32.8	12180	44	0.6
56-	42.3308-	107.3319-	2-	15-		0-W14915	44140	-0.03	497	11690	52	-53	4.3	38	2.7	4	0.7	9930	9.4	18240	30	0.3
56-	42.4794-	107.3300-	2-	11-		0-W14916	51290	-0.03	834	13370	75	-68	4.8	27	-0.8	3	0.7	9387	10.7	17310	42	0.3
56-	42.4919-	107.3494-	2-	15-		0-W14917	57820	-0.04	682	11900	60	-82	5.7	32	2.7	4	0.8	9733	5.9	18780	31	0.2
56-	42.4827-	107.3400-	2-	15-		0-W14918	55130	-0.05	542	25960	50	-78	4.9	20	1.8	3	0.7	9429	5.5	16820	28	0.2
56-	42.4597-	107.3108-	2-	15-		0-W14919	52800	-0.04	551	13510	70	104	6.3	32	1.6	4	0.8	12460	10.5	16600	44	0.4
56-	42.5872-	107.0369-	2-	15-		0-W14922	56990	-0.03	833	17480	45	68	4.1	24	-0.8	2	0.8	8837	6.3	17300	29	0.2
56-	42.6047-	107.0775-	2-	15-		0-W14923	55880	-0.03	637	18630	62	-78	5.4	33	1.6	3	0.9	13200	7.7	16460	35	0.2
56-	42.6172-	107.0822-	2-	15-		0-W14924	50350	-0.04	601	30360	51	-81	4.7	24	-1.0	2	0.6	11550	8.2	15210	32	0.2
56-	42.6133-	107.1242-	2-	15-		0-W14925	50900	-0.04	522	16990	153	-76	9.2	69	1.2	4	1.1	35900	22.2	12880	93	0.6
56-	42.6036-	107.1264-	2-	11-		0-W14926	58560	-0.03	801	22890	59	-74	4.8	26	1.8	3	0.8	10490	7.3	19120	34	0.2
56-	42.5758-	107.1311-	2-	15-		0-W14927	57110	-0.03	685	15400	40	-75	4.4	20	1.6	2	0.7	7131	4.4	17000	25	0.2
56-	42.5925-	107.1914-	2-	15-		0-W14928	53170	-0.04	602	15170	47	-80	3.5	21	-1.0	2	0.7	8903	6.4	19290	31	0.2
56-	42.5944-	107.1789-	2-	15-		0-W14929	56730	-0.03	690	19240	49	107	4.4	22	1.7	3	0.7	9698	6.6	18110	31	0.2
56-	42.5779-	107.2014-	2-	15-		0-W14930	56830	-0.03	802	19050	63	-66	5.3	27	2.0	3	0.9	12180	8.4	19070	38	0.3
56-	42.4986-	107.0564-	2-	15-		0-W14931	57030	-0.03	640	12920	55	-75	5.5	24	2.2	3	0.8	8354	6.7	16570	31	0.2
56-	42.4992-	107.0342-	2-	15-		0-W14932	48440		579	17310		-75				2				17500		
56-	42.4586-	107.0236-	2-	15-		0-W14934	46680	-0.03	601	13980	121	-69	6.5	47	-0.9	3	0.9	23890	16.7	15050	71	0.4
56-	42.4458-	107.0311-	2-	15-		0-W14935	54060	-0.03	802	13190	59	-65	4.8	24	2.1	3	0.8	9869	7.5	19600	35	0.2
56-	42.4636-	107.0567-	2-	15-		0-W14937	55040	-0.03	665	14070	60	-74	5.7	30	1.4	4	0.6	10980	9.1	17380	34	0.2
56-	42.3667-	107.3603-	2-	15-		0-W14938	41550	-0.04	360	45060	73	-70	4.6	32	-1.1	3	0.5	11290	12.0	13200	43	0.2
56-	42.3344-	107.4097-	2-	11-		0-W14939	26070	-0.03	411	91090	31	107	3.4	18	7.0	2	0.4	3889	4.5	12710	16	0.2
56-	42.3308-	107.4131-	2-	11-		0-W14940	31860	-0.02	434	40270	26	-49	2.8	18	1.9	2	0.5	3920	5.2	14210	16	0.2

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

DOE SAMPLE NUMBER						LAB SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
56-42.8547-106.7997-2-15-						0-W14877	7029	122	7285	22	-1	4.1	2.6	-192	-1	-1	6.6	2589	62	1.6	-26	0.505
56-42.8233-106.8050-2-12-						0-W14878	18750	297	3752	46	-2	9.9	4.4	-236	-1	-1	14.5	3710	122	4.1	103	0.392
56-42.8436-106.8719-2-15-						0-W14880	8149	281	15880	49	-1	6.4	6.4	-213	2	-1	26.5	3139	44	5.4	64	0.287
56-42.8181-106.7711-2-15-						0-W14881	9402	328	6923	34	-1	4.9	3.7	-251	-1	-1	8.7	2788	55	2.7	-19	0.420
56-42.8275-106.7192-2-15-						0-W14882	4158	70	8412	22	-1	2.4	2.3	-169	-1	-1	6.7	1870	35	1.4	-20	0.500
56-42.8147-106.7200-2-15-						0-W14883	12510	196	7073	43	-1	5.9	3.8	-190	-1	-1	9.4	2623	89	2.0	79	0.340
56-42.8011-106.6836-2-15-						0-W14884	8970	221	5523	27	-1	3.3	1.8	-161			5.7	1670	29	1.7	32	0.361
56-42.7997-106.6811-2-15-						0-W14885	9682	204	6643	26	-1	3.6	3.3	-208		-1	7.7	2043	62	2.6	44	0.497
56-42.8147-106.6419-2-15-						0-W14886	12690	182	5430	-15	-1	3.9	1.9	420	-1	-1	5.1	2477	180	-1.0	80	0.849
56-42.7603-106.6500-2-15-						0-W14887	14080	315	5621	37	-1	5.9	3.7	-198		-1	9.4	3189	99	2.4	55	0.391
56-42.7617-106.6478-2-15-						0-W14888	12420	208	5203	32	-1	5.6	3.7	-167	-1	-1	9.9	3039	81	2.7	79	0.338
56-42.7522-106.6819-2-15-						0-W14889	9104	282	8130	34	-1	3.3	2.8	-215			5.7	2094	44	1.7	40	0.444
56-42.6953-106.8467-2-11-						0-W14890	7529	290	14470	-17	-1	4.1	3.5	-263	-1	-1	14.8	3172	60	2.9	-26	0.245
56-42.6853-106.8544-2-11-						0-W14891	5144	361	16010	26	-1	3.8	6.1	-239	-1		26.9	3217	41	3.3	-16	0.176
56-42.5656-106.4992-2-15-						0-W14893	24750	172	5199	43	2	7.8	3.8	-193	-1	-1	8.3	3690	170	2.2	125	0.460
56-42.5803-106.4075-2-15-						0-W14894	12440	323	4625	26	-1	4.2	4.4	-220	-1	-1	9.1	2710	73	2.4	57	0.543
56-42.4778-107.2214-2-15-						0-W14895	8649	508	12220	-19	-1	5.1	5.5	-282	-1	-1	25.3	5353	147	4.5	-27	0.181
56-42.4889-107.2361-2-15-						0-W14896	13770	505	12290	39	-1	9.0	7.7	293	-1	-1	30.6	5547	130	3.7	58	0.142
56-42.4772-107.2256-2-12-						0-W14898	5196	205	12050	30	-1	4.0	3.6	338	-1	-1	12.7	3136	37	3.0	31	0.285
56-42.4383-107.2769-2-15-						0-W14899	13760	283	9526	25	-1	3.3	3.0	-224	-1	-1	8.6	1984	41	2.0	-43	0.308
56-42.3997-107.3500-2-15-						0-W14900	8711	168	11000					342				2122	36			
56-42.4569-107.2897-2-15-						0-W14901	6920	277	13150	32	-1	3.9	4.7	324			17.9	2860	44	2.8	37	0.192
56-42.4894-107.1319-2-12-						0-W14902	7823	1259	11530	-22	-2	12.5	47.0	-347	2	4	221.0	13840	247	13.1	93	0.079
56-42.4750-107.1472-2-15-						0-W14903	8079	297	12440	34	-1	3.5	3.9	-222	-1	-1	12.9	3020	58	2.3	-30	0.217
56-42.4606-107.1731-2-15-						0-W14904	7651	274	11540					-231				2253	51			
56-42.3653-107.3339-2-15-						0-W14911	12540	250	8914	30	-1	3.8	4.2	-186	-1	-1	13.8	2833	38	3.2	43	0.270
56-42.3358-107.3200-2-12-						0-W14912	9505	181	10830	30	-1	4.4	4.5	-191	-1	-1	15.6	2904	45	3.3	36	0.251
56-42.3119-107.3050-2-12-						0-W14913	7034	164	7026	-10	-1	3.0	2.8	-183	-1	-1	8.9	1996	28	2.7	30	0.393
56-42.3122-107.3028-2-15-						0-W14914	7775	358	6241	-16	-1	5.2	5.4	-235	-1	-1	29.3	3388	48	5.8	-27	0.263
56-42.3308-107.3319-2-15-						0-W14915	14190	263	6734	39	-1	4.9	3.5	-190		-1	11.1	2802	41	2.9	41	0.283
56-42.4794-107.3300-2-11-						0-W14916	6268	160	14570	42	-1	3.9	4.1	352	-1	-1	18.5	2713	46	2.3	60	0.195
56-42.4919-107.3494-2-15-						0-W14917	14790	523	10260	40	-1	4.7	3.7	-305	-1	-1	10.4	2869	51	1.9	-30	0.345
56-42.4822-107.3400-2-15-						0-W14918	19310	391	9091	-18	-1	4.8	2.5	-281	-1	-1	9.5	2082	50	1.7	-33	0.316
56-42.4597-107.3108-2-15-						0-W14919	11860	478	13440	30	-1	7.0	5.2	-262	1	1	23.3	3516	59	3.7	48	0.223
56-42.5872-107.0369-2-15-						0-W14922	9526	256	15980	33	-1	4.4	3.1	386			7.7	2250	45	1.8	39	0.275
56-42.6047-107.0775-2-15-						0-W14923	11020	420	14180	21	-1	4.7	4.3	456	-1	-1	10.1	3588	89	2.6	-32	0.271
56-42.6172-107.0822-2-15-						0-W14924	13400	345	13330	-16	-1	4.6	2.8	514	-1	-1	7.9	3102	73	2.2	-26	0.339
56-42.6133-107.1242-2-15-						0-W14925	12810	717	12750	21	-1	7.1	7.8	-277	-1	-1	27.6	7634	208	3.4	84	0.160
56-42.6036-107.1264-2-11-						0-W14926	10200	302	15550	45	-1	5.0	3.6	393	-1	-1	9.2	2424	50	2.1	60	0.274
56-42.5758-107.1311-2-15-						0-W14927	13600	302	13870	25	-1	3.7	2.6	459		-1	7.4	2200	41	1.3	32	0.284
56-42.5925-107.1914-2-15-						0-W14928	7860	253	13600	-16	-1	3.7	3.4	-239	-1	-1	9.8	2294	56	2.5	-28	0.700
56-42.5944-107.1789-2-15-						0-W14929	11550	317	13410	37	-1	4.6	3.1	-209			9.4	2764	45	2.0	51	0.284
56-42.5778-107.2014-2-15-						0-W14930	10400	316	13910	40	-1	5.0	3.6	453	-1	-1	10.3	2812	60	2.5	55	0.270
56-42.4986-107.0564-2-15-						0-W14931	12360	341	12490	38	-1	4.0	4.1	-246	-1	-1	13.7	3072	48	2.1	55	0.237
56-42.4992-107.0342-2-15-						0-W14932	6917	266	13010					-235				2582	43			
56-42.4586-107.0236-2-15-						0-W14934	8255	513	12220	38	-1	5.4	6.3	-238	-1	-1	22.1	5606	132	3.7	72	0.157
56-42.4458-107.0311-2-15-						0-W14935	10050	287	13070	39	-1	4.5	3.4	326	-1	-1	11.5	2168	44	2.4	51	0.203
56-42.4636-107.0567-2-15-						0-W14937	9906	343	12540	31	-1	4.2	4.3	-252	-1	-1	11.9	3801	71	2.4	46	0.240
56-42.3667-107.3603-2-15-						0-W14938	19220	376	7432	39	-1	4.2	4.1	-256	-1	-1	18.4	3361	62	3.4	-27	0.209
56-42.3344-107.4097-2-11-						0-W14939	11270	178	4413	24	-1	1.9	2.9	-208	-1	-1	6.5	1235	25	2.0	47	1.254
56-42.3308-107.4131-2-11-						0-W14940	7676	87	7729	27	-1	2.2	2.0	261			4.5	1448	22	1.6	31	0.438

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

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
							TIME SAMPLED																										
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
56-42.3289-107.4164-2-11-						0-W14941-09/01/77-16-	23-15.5-	-	-	6.5-	390-		2-1-1-4-1-	-	-	-	-4-3-4-2-	-3-	-	-	-	-	1.84
56-42.3125-107.3797-2-11-						0-W14942-09/01/77-17-	23-14.5-	-	-	6.6-	550-		12-1-1-5-6-	-	-	-	-4-2-4-2-	-3-	-	-	-	-	3.12
56-42.3131-107.3917-2-11-						0-W14943-09/01/77-16-	22-14.0-	-	-	6.7-	390-		14-1-1-5-6-	-	-	-	-4-2-4-2-	-3-	-	-	-	-	3.84
56-42.3033-107.4042-2-15-						0-W14944-09/01/77-18-	21-	-	-	-	-		5-1-1-4-6-	-	-	-	-1-4-4-2-	-3-	-	-	-	-	2.86
56-42.3069-107.4292-2-15-						0-W14960-09/02/77-10-	21-	-	-	-	-		9-1-1-4-6-	-	-	-	-3-2-3-1-	-3-	-	-	-	-	2.84
56-42.3594-107.2522-2-12-						0-W14962-09/02/77-11-	24-13.5-	-	-	6.7-	230-		7-1-1-4-6-2-3-1-2-4-2-3-1-	-3-	-	-	-	-	4.69
56-42.3133-107.2519-2-15-						0-W14963-09/02/77-12-	28-	-	-	-	-		14-1-1-4-6-	-	-	-	-4-2-2-1-	-3-	-	-	-	-	13.16
56-42.3553-107.2272-2-99-						0-W14964-09/02/77-13-	29-	-C-	-	-	-		13-1-1-4-6-	-	-	-	-4-2-3-1-	-3-	-	-	-	-	3.11
56-42.3531-107.2064-2-11-						0-W14965-09/02/77-13-	28-25.0-	-	-	6.9-	170-		8-1-1-4-6-	-	-	-	-4-2-3-1-	-3-	-	-	-	-	3.34
56-42.3522-107.2083-2-15-						0-W14966-09/02/77-14-	28-	-	-	-	-		10-1-1-4-6-	-	-	-	-4-2-3-1-	-3-	-	-	-	-	2.90
56-42.2839-107.2403-2-11-						0-W14967-09/02/77-16-	27-18.5-	-	-	6.7-	110-		9-4-	-4-6-	-	-	-4-2-4-2-	-3-	-	-	-	-	17.52
56-42.3006-107.2211-2-11-						0-W14968-09/02/77-16-	29-13.0-	-	-	6.8-	150-		8-1-1-5-6-	-	-	-	-4-2-4-2-	-3-	-	-	-	-	10.86
56-42.2833-107.2133-2-15-						0-W14969-09/02/77-17-	28-	-	-	-	-		13-1-5-4-6-	-	-	-	-4-2-3-2-	-3-	-	-	-	-	8.94
56-42.3039-107.2489-2-15-						0-W14970-09/02/77-18-	27-	-	-	-	-		11-4-	-4-6-	-	-	-1-2-3-2-	-3-	-	-	-	-	13.29
56-42.3442-107.4642-2-15-						0-W14971-09/02/77-18-	28-	-	-	-	-		13-1-1-5-6-	-	-	-	-3-3-4-2-	-3-	-	-	-	-	4.65
56-42.3411-107.4606-2-12-						0-W14972-09/02/77-18-	28-21.0-	-	-	7.2-	1550-		10-1-1-5-8-2-3-4-2-3-2-4-2-	-3-	-	-	-	-	3.16
56-42.2864-107.1994-2-11-						0-W14973-09/03/77-11-	26-13.5-	-	-	6.4-	115-		13-1-1-6-6-	-	-	-	-4-2-3-2-	-3-	-	-	-	-	6.93
56-42.3014-107.1794-2-12-						0-W14974-09/03/77-12-	30-19.5-	-	-	6.5-	135-		14-4-	-4-6-2-2-1-2-4-2-3-2-	-3-	-	-	-	9.66
56-42.2944-107.1433-2-15-						0-W14975-09/03/77-12-	30-	-	-	-	-		7-4-	-4-6-	-	-	-4-2-3-2-	-3-	-	-	-	-	14.49
56-42.2606-107.1600-2-99-						0-W14977-09/03/77-14-	28-	-C-	-	-	-		11-1-6-4-6-	-	-	-	-4-2-4-2-	-3-	-	-	-	-	13.93
56-42.3039-107.2311-2-11-						0-W14978-09/03/77-14-	26-14.5-	-	-	5.9-	80-		14-4-	-4-6-	-	-	-4-2-3-2-	-3-	-	-	-	-	5.34
56-42.3136-107.4719-2-15-						0-W14979-09/03/77-17-	29-	-	-	-	-		13-1-3-4-6-	-	-	-	-3-2-3-2-	-3-	-	-	-	-	2.65
56-42.3317-107.4972-2-15-						0-W14980-09/03/77-17-	28-	-	-	-	-		13-1-1-4-6-	-	-	-	-4-2-2-2-	-3-	-	-	-	-	2.99
56-42.2431-107.3636-2-12-						0-W14982-09/05/77- 9-	21-10.5-	-	-	6.7-	390-		12-1-1-5-6-2-3-1-2-2-4-3-1-	-3-	-	-	-	-	3.36
56-42.2408-107.3517-2-12-						0-W14983-09/05/77- 9-	21-10.0-	-	-	6.8-	1050-		10-1-1-5-6-2-2-1-2-4-2-3-1-	-3-	-	-	-	-	2.19
56-42.2272-107.3192-2-11-						0-W14984-09/05/77-10-	23- 9.5-	C-	-	6.5-	355-		11-4-	-4-1-	-	-	-4-3-3-1-	-1-	-	-	-	-	2.59
56-42.2281-107.2914-2-15-						0-W14986-09/05/77-11-	23-	-	-	-	-		13-1-1-4-6-	-	-	-	-4-2-2-1-	-3-	-	-	-	-	3.32
56-42.2189-107.2844-2-99-						0-W14987-09/05/77-11-	24-	-C-	-	-	-		9-4-	-4-6-	-	-	-4-3-2-1-	-3-	-	-	-	-	1.86
56-42.2197-107.2522-2-12-						0-W14988-09/05/77-11-	23-16.0-	-	-	7.4-	370-		9-1-1-4-6-2-3-1-2-4-2-2-1-	-3-	-	-	-	-	2.53
56-42.2383-107.2431-2-11-						0-W14989-09/05/77-11-	24-18.5-	-	-	7.3-	390-		11-1-1-5-6-	-	-	-	-4-2-3-1-	-3-	-	-	-	-	2.84
56-42.2200-107.2203-2-11-						0-W14990-09/05/77-12-	24-17.5-	-	-	7.4-	310-		7-1-1-4-6-	-	-	-	-4-3-3-1-	-3-	-	-	-	-	3.04
56-42.2092-107.2278-2-11-						0-W14991-09/05/77-12-	29-18.5-	-	-	7.5-	320-		7-4-	-4-6-	-	-	-4-2-3-1-	-3-	-	-	-	-	2.88
56-42.2108-107.2172-2-99-						0-W14992-09/05/77-13-	31-	-C-	-	-	-		9-4-	-4-6-	-	-	-4-2-3-1-	-3-	-	-	-	-	1.83
56-42.2208-107.1919-2-11-						0-W14993-09/05/77-13-	30-19.5-	C-	-	7.5-	490-		20-4-	-4-6-	-	-	-4-2-3-1-	-3-	-	-	-	-	2.96
56-42.2272-107.1328-2-12-						0-W14994-09/05/77-15-	32-21.0-	-	-	7.4-	290-		10-1-1-4-6-3-3-1-2-4-2-4-1-	-3-	-	-	-	-	4.08
56-42.2353-107.3675-2-11-						0-W14995-09/05/77-16-	29-15.0-	-	-	6.9-	365-		11-1-1-4-1-	-	-	-	-2-3-4-2-	-3-	-	-	-	-	5.97
56-42.2469-107.3733-2-15-						0-W14996-09/05/77- -	29-	-	-	-	-		11-1-1-4-6-	-	-	-	-4-2-4-2-	-3-	-	-	-	-	4.42
56-42.2267-107.4772-2-15-						0-W14997-09/05/77-17-	28-	-	-	-	-		9-1-1-4-1-	-	-	-	-4-2-2-2-	-7-	-	-	-	-	3.18
56-42.2022-107.4808-2-15-						0-W14998-09/05/77-17-	29-	-	-	-	-		14-4-	-4-1-	-	-	-3-2-1-2-	-3-	-	-	-	-	6.08
56-42.2328-107.3489-2-11-						0-W14999-09/06/77-10-	25-16.0-	-	-	7.6-	370-		11-4-	-4-7-	-	-	-4-2-3-1-	-3-	-	-	-	-	2.47
56-42.2372-107.2269-2-11-						0-W15000-09/06/77-11-	26- 7.5-	-	-	7.3-	340-		11-1-4-7-4-	-	-	-	-4-2-4-1-	-1-	-	-	-	-	3.23
56-42.2328-107.1822-2-99-						0-W15001-09/06/77-13-	28-	-C-	-	-	-		9-1-1-5-6-	-	-	-	-4-2-4-2-	-3-	-	-	-	-	2.54
56-42.2464-107.1147-2-12-						0-W15002-09/06/77-14-	33-16.0-	-	-	7.3-	290-		11-1-7-4-1-3-3-1-1-4-2-4-2-	-1-	-	-	-	-	6.40
56-42.1786-107.3611-2-15-						0-W15003-09/06/77-16-	32-	-	-	-	-		13-4-	-4-1-	-	-	-3-2-2-2-	-3-	-	-	-	-	4.49
56-42.1583-107.3664-2-15-						0-W15004-09/06/77-17-	29-	-	-	-	-		11-4-	-4-6-	-	-	-4-2-2-2-	-3-	-	-	-	-	3.51
56-42.1983-107.0528-2-12-						0-W15005-09/07/77-11-	28-15.0-	-	-	7.4-	525-		9-1-4-5-6-2-3-1-2-4-2-4-2-	-3-	-	-	-	-	2.98
56-42.4183-107.8694-2-15-						0-W15007-09/07/77-17-	22-	-	-	-	-		11-4-	-4-6-	-	-	-4-2-3-1-	-3-	-	-	-	-	3.60
56-42.3789-107.8461-2-12-						0-W15008-09/07/77-17-	19-16.0-	C-	-	6.9-	300-		18-1-1-4-6-2-3-2-2-4-2-3-1-	-2-	-	-	-	-	14.77
56-42.4547-107.8333-2-15-						0-W15009-09/09/77- 9-	9-	-	-	-	-		10-4-	-4-6-	-	-	-4-2-2-1-	-3-	-	-	-	-	9.22
56-42.4253-107.8500-2-12-						0-W15010-09/09/77- 9-	10- 8.5-	-	-	6.8-	800-		37-4-	-4-6-3-3-1-2-4-2-2-1-	-3-	-	-	-	22.29
56-42.3861-107.8453-2-15-						0-W15011-09/09/77-10-	13-	-C-	-	-	-		83-4-	-4-1-	-	-	-3-2-4-1-	-2-	-	-	-	-	4.62

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

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
56-42.3289-107.4164-2-11-					0-	W14941	-5	-5	-5	-10	-20	-15	5	-10	-15	2	12
56-42.3125-107.3797-2-11-					0-	W14942	-5	-5	-5	23	-20	-15	-5	-10	-15	1	24
56-42.3131-107.3917-2-11-					0-	W14943	-5	-5	-5	11	-20	-15	13	-10	-15	3	32
56-42.3033-107.4042-2-15-					0-	W14944	-5	-5	-5	22	-20	-15	21	-10	-15	2	44
56-42.3069-107.4292-2-15-					0-	W14960	-5	-5	-5	13	-20	-15	10	-10	-15	1	26
56-42.3594-107.2522-2-12-					0-	W14962	-5	6	-5	12	-20	-15	16	-10	-15	1	26
56-42.3133-107.2519-2-15-					0-	W14963	-5	-5	-5	30	-20	-15	10	-10	-15	2	28
56-42.3553-107.2272-2-99-					0-	W14964	-5	-5	-5	13	-20	-15	12	-10	-15	1	21
56-42.3531-107.2064-2-11-					0-	W14965	-5	-5	-5	-10	-20	-15	7	-10	16	1	11
56-42.3522-107.2083-2-15-					0-	W14966	-5	-5	-5	23	-20	-15	7	-10	-15	1	30
56-42.2839-107.2403-2-11-					0-	W14967	-5	-5	-5	25	-20	-15	22	-10	-15	2	33
56-42.3006-107.2211-2-11-					0-	W14968	-5	-5	-5	21	-20	-15	8	-10	-15	2	24
56-42.2833-107.2133-2-15-					0-	W14969	-5	-5	-5	41	-20	16	18	-10	-15	1	19
56-42.3039-107.2489-2-15-					0-	W14970	-5	-5	-5	27	-20	-15	13	-10	-15	2	42
56-42.3442-107.4642-2-15-					0-	W14971	-5	-5	-5	11	-20	-15	6	-10	-15	1	23
56-42.3411-107.4606-2-12-					0-	W14972	-5	-5	-5	11	-20	-15	11	-10	-15	1	22
56-42.2864-107.1994-2-11-					0-	W14973	-5	-5	-5	13	-20	-15	-5	-10	-15	2	22
56-42.3014-107.1794-2-12-					0-	W14974	-5	-5	-5	19	-20	-15	10	-10	-15	1	19
56-42.2944-107.1433-2-15-					0-	W14975	-5	-5	-5	24	-20	-15	17	-10	-15	1	28
56-42.2606-107.1600-2-99-					0-	W14977	-5	-5	-5	17	-20	-15	14	-10	-15	1	27
56-42.3039-107.2311-2-11-					0-	W14978	-5	-5	-5	22	-20	16	-5	-10	-15	1	17
56-42.3136-107.4719-2-15-					0-	W14979	-5	-5	-5	-10	-20	-15	12	-10	-15	1	23
56-42.3317-107.4972-2-15-					0-	W14980	-5	-5	-5	12	-20	-15	7	-10	-15	2	21
56-42.2431-107.3636-2-12-					0-	W14982	-5	-5	-5	13	-20	-15	7	-10	-15	2	29
56-42.2408-107.3517-2-12-					0-	W14983	-5	-5	-5	11	-20	17	-5	-10	-15	-1	7
56-42.2272-107.3192-2-11-					0-	W14984	-5	-5	-5	-10	-20	-15	10	-10	-15	2	10
56-42.2281-107.2914-2-15-					0-	W14986	-5	-5	-5	18	-20	18	7	-10	-15	2	24
56-42.2189-107.2844-2-99-					0-	W14987	-5	-5	-5	-10	-20	-15	8	-10	-15	2	28
56-42.2197-107.2522-2-12-					0-	W14988	-5	-5	-5	-10	-20	-15	-5	-10	-15	2	15
56-42.2383-107.2431-2-11-					0-	W14989	-5	-5	-5	18	-20	-15	6	-10	-15	2	40
56-42.2200-107.2203-2-11-					0-	W14990	-5	-5	-5	10	-20	-15	-5	-10	-15	1	13
56-42.2092-107.2278-2-11-					0-	W14991	-5	-5	-5	-10	-20	-15	6	-10	-15	1	16
56-42.2108-107.2172-2-99-					0-	W14992	-5	5	-5	77	-20	-15	211	166	-15	2	14
56-42.2208-107.1919-2-11-					0-	W14993	-5	-5	-5	10	-20	-15	8	-10	-15	2	17
56-42.2272-107.1328-2-12-					0-	W14994	-5	-5	-5	13	-20	-15	-5	-10	-15	2	27
56-42.2353-107.3675-2-11-					0-	W14995	-5	-5	-5	-10	-20	-15	8	-10	-15	2	20
56-42.2469-107.3733-2-15-					0-	W14996	-5	-5	-5	-10	-20	-15	12	-10	-15	2	30
56-42.2267-107.4772-2-15-					0-	W14997	-5	-5	-5	20	-20	-15	11	-10	-15	2	46
56-42.2022-107.4808-2-15-					0-	W14998	-5	-5	-5	-10	-20	-15	15	-10	-15	2	30
56-42.2328-107.3489-2-11-					0-	W14999	-5	-5	-5	18	-20	-15	8	-10	-15	2	28
56-42.2372-107.2269-2-11-					0-	W15000	-5	5	-5	28	-20	-15	12	-10	-15	3	41
56-42.2328-107.1822-2-99-					0-	W15001	-5	-5	-5	14	-20	16	7	-10	-15	2	18
56-42.2464-107.1147-2-12-					0-	W15002	-5	-5	-5	10	-20	-15	6	-10	-15	2	9
56-42.1786-107.3611-2-15-					0-	W15003	-5	-5	-5	27	-20	15	11	-10	-15	3	59
56-42.1583-107.3664-2-15-					0-	W15004	-5	-5	-5	17	-20	19	-5	-10	-15	3	41
56-42.1983-107.0528-2-12-					0-	W15005	-5	-5	-5	25	-20	17	10	-10	-15	2	50
56-42.4183-107.8694-2-15-					0-	W15007	-5	-5	-5	22	-20	-15	16	-10	-15	3	54
56-42.3789-107.8461-2-12-					0-	W15008	-5	-5	-5	12	-20	-15	13	-10	-15	3	40
56-42.4547-107.8333-2-15-					0-	W15009	-5	-5	-5	22	-20	-15	28	-10	-15	3	47
56-42.4253-107.8500-2-12-					0-	W15010	-5	-5	-5	10	-20	-15	33	-10	-15	2	25
56-42.3861-107.8453-2-15-					0-	W15011	-5	-5	-5	29	-20	30	17	-10	-15	2	33

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

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS															
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAB SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per million (ppm)															
							Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
56-42.3289-107.4164-2-11-						0-W14941	29370	-0.02	350	6588	21	-48	3.0	12	1.4	2	0.5	2018	5.8	13850	14	0.2
56-42.3125-107.3797-2-11-						0-W14942	40190	-0.04	385	12360	34	-70	3.6	21	-1.0	3	0.6	5327	9.7	16440	22	0.3
56-42.3131-107.3917-2-11-						0-W14943	41080	-0.03	381	40420	42	-55	4.1	43	8.6	3	0.6	6792	10.5	15930	23	0.3
56-42.3033-107.4042-2-15-						0-W14944	47660	-0.03	522	98630	46	-66	4.7	45	4.2	3	0.5	7075	4.7	14160	26	0.2
56-42.3069-107.4292-2-15-						0-W14960	44600	-0.04	425	13420	33	-68	3.6	20	-1.0	2	0.7	7263	5.8	17080	23	0.2
56-42.3594-107.2522-2-12-						0-W14962	51670	-0.03	624	13990	64	-68	5.0	31	1.2	4	0.7	10510	12.0	16150	37	0.3
56-42.3133-107.2519-2-15-						0-W14963	59850	-0.04	571	15820	79	115	8.2	36	1.9	5	0.8	15790	11.8	15510	46	0.4
56-42.3553-107.2272-2-99-						0-W14964	54160	-0.04	632	15600	51	125	6.5	27	2.0	4	0.6	9188	7.2	16740	29	0.3
56-42.3531-107.2064-2-11-						0-W14965	42010	-0.03	651	9840	50	-71	2.2	14	-0.8	2	0.7	5683	14.3	13660	31	0.3
56-42.3522-107.2083-2-15-						0-W14966	46270	-0.03	699	44400	44	-70	4.8	23	1.7	3	0.6	8610	5.8	13890	26	0.2
56-42.2839-107.2403-2-11-						0-W14967	69430	0.11	468	14050	110	-94	8.8	39	2.4	7	1.0	18760	14.6	16130	62	0.6
56-42.3006-107.2211-2-11-						0-W14968	57570	-0.04	513	19800	54	-82	6.4	41	1.3	5	0.7	13400	8.4	12500	30	0.4
56-42.2833-107.2133-2-15-						0-W14969	58830	-0.04	462	19220	54	90	8.0	36	1.7	4	0.9	16520	11.8	13340	36	0.4
56-42.3039-107.2489-2-15-						0-W14970	56960	-0.04	560	15030	57	-91	7.3	38	1.7	5	0.7	11880	10.4	16150	34	0.4
56-42.3442-107.4642-2-15-						0-W14971	40620	-0.04	547	16580	52	-56	4.4	26	-1.1	3	0.6	7331	12.2	13530	26	0.3
56-42.3411-107.4606-2-12-						0-W14972	39280	-0.03	501	16130	48	-44	4.4	34	2.3	3	0.7	7823	9.2	12650	26	0.3
56-42.2864-107.1994-2-11-						0-W14973	54560	-0.04	631	13630	70	-75	5.2	34	1.6	4	0.9	9694	14.2	15000	43	0.4
56-42.3014-107.1794-2-12-						0-W14974	53070	-0.04	665	13290	84	-85	6.4	28	-1.0	6	0.9	15080	16.1	14960	47	0.4
56-42.2944-107.1433-2-15-						0-W14975	53470	-0.09	568	15650	109	84	11.2	70	2.6	5	1.2	22623	18.0	16130	61	0.6
56-42.2606-107.1600-2-99-						0-W14977	53850	-0.04	558	14580	69	-84	7.9	28	1.5	4	0.7	14640	8.6	11970	42	0.3
56-42.3039-107.2311-2-11-						0-W14978	60310	-0.04	469	23620	61	-83	9.9	52	1.3	6	1.0	20220	13.3	14370	39	0.5
56-42.3136-107.4719-2-15-						0-W14979	38100	-0.03	510	22870	39	92	4.6	22	2.0	4	0.6	6537	5.9	13750	23	0.3
56-42.3317-107.4972-2-15-						0-W14980	37670	-0.04	286	27890	35	-57	3.2	19	2.3	2	0.6	6839	6.4	14810	20	0.2
56-42.2431-107.3636-2-12-						0-W14982	43880	-0.04	493	57840	55	-63	4.9	30	2.5	4	0.9	8983	8.5	21190	29	0.4
56-42.2408-107.3517-2-12-						0-W14983	17470	-0.04	-259	191900	15	-124	6.9	25	-1.2	-1	0.4	28360	2.7	-5917	14	-0.1
56-42.2272-107.3192-2-11-						0-W14984	49990	-0.02	703	10170	53	-72	2.9	10	-0.6	3	0.5	2333	5.9	23460	32	0.2
56-42.2281-107.2914-2-15-						0-W14986	43900	-0.04	428	14530	48	-67	3.6	25	-1.0	3	0.7	6657	9.0	17950	28	0.3
56-42.2189-107.2844-2-99-						0-W14987	48330	-0.02	591	22320	27	106	2.9	13	0.9	2	0.3	4660	2.9	21680	17	0.1
56-42.2197-107.2522-2-12-						0-W14988	28670	-0.02	338	18220	39	-45	3.1	21	1.1	2	0.4	4514	13.9	12230	23	0.3
56-42.2383-107.2431-2-11-						0-W14989	48210	-0.03	551	15900	42	-68	5.6	22	1.6	4	0.6	7283	7.5	15480	22	0.3
56-42.2200-107.2203-2-11-						0-W14990	31140	-0.03	327	21360	41	-60	2.4	11	-0.8	2	0.4	3401	12.2	12760	27	0.2
56-42.2092-107.2278-2-11-						0-W14991	38290	-0.03	559	30010	46	-54	3.2	21	0.9	3	0.5	4980	9.1	15720	27	0.2
56-42.2108-107.2172-2-99-						0-W14992	40450	-0.03	659	34910	31	-102	6.4	42	-0.9	2	0.4	18090	4.3	16460	18	0.1
56-42.2208-107.1919-2-11-						0-W14993	48120	-0.03	656	11070	46	-80	4.4	20	0.8	3	0.6	4864	8.6	18270	25	0.2
56-42.2272-107.1328-2-12-						0-W14994	48930	-0.04	552	12690	52	-76	5.0	23	1.9	3	0.7	7122	10.3	16190	35	0.3
56-42.2353-107.3675-2-11-						0-W14995	40760	-0.03	459	13330	111	-60	3.1	32	1.1	6	1.1	6450	24.9	15570	66	0.6
56-42.2469-107.3733-2-15-						0-W14996	46520	-0.03	518	20420	107	-60	4.7	40	1.9	5	0.8	9349	15.8	16960	63	0.4
56-42.2267-107.4772-2-15-						0-W14997	43730	-0.04	414	75300	78	-66	3.8	60	5.5	3	0.7	11690	8.1	18150	28	0.2
56-42.2022-107.4808-2-15-						0-W14998	39530	-0.02	490	18100	98	804	2.7	31	2.3	5	0.6	7670	19.0	16100	39	0.3
56-42.2328-107.3489-2-11-						0-W14999	37110	-0.02	349	14420	37	-58	2.9	24	2.0	2	0.6	9810	5.1	12090	13	0.2
56-42.2372-107.2269-2-11-						0-W15000	56350	-0.03	1000	7204	54	-80	7.6	49	2.7	5	0.6	19085	10.4	17610	19	0.3
56-42.2328-107.1822-2-99-						0-W15001	42500	-0.04	676	11910	54	-62	3.3	26	1.4	3	0.6	10875	10.9	19070	20	0.2
56-42.2464-107.1147-2-12-						0-W15002	42880	0.05	356	14630	112	-79	2.4	33	-0.5	3	0.8	10025	19.2	16820	39	0.4
56-42.1786-107.3611-2-15-						0-W15003	59200	-0.03	543	51720	41	394	4.4	38	3.2	3	0.4	13725	4.0	18590	16	0.1
56-42.1583-107.3664-2-15-						0-W15004	45220	-0.04	684	58960	48	-56	4.3	49	2.6	3	0.7	12110	5.8	14750	18	0.2
56-42.1983-107.0528-2-12-						0-W15005	55750	-0.03	665	13900	51	-68	5.1	49	2.7	4	0.6	19010	6.9	17340	20	0.2
56-42.4183-107.8694-2-15-						0-W15007	47930	-0.03	436	32000	42	448	7.5	46	4.0	1	0.4	18855	3.5	13440	15	0.1
56-42.3789-107.8461-2-12-						0-W15008	68420	-0.02	532	8003	111	-82	2.4	14	1.1	6	0.5	7910	10.8	21300	38	0.3
56-42.4547-107.8333-2-15-						0-W15009	62960	-0.05	604	8766	86	-68	5.1	47	2.6	4	0.8	15820	8.4	20870	35	0.3
56-42.4253-107.8500-2-12-						0-W15010	47010	0.91	405	11440	701	-80	3.6	35	0.9	25	1.3	12295	42.1	17440	280	0.8
56-42.3861-107.8453-2-15-						0-W15011	58000	-0.03	407	9273	70	-91	11.6	69	4.6	2	1.0	28410	5.9	15370	27	0.3

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

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)														U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
56-42.3289-107.4164-2-11-						0-W14941	4662	58	7385	13	-1	1.4	1.5	-148			4.9	1648	17	1.6	22	0.376
56-42.3125-107.3797-2-11-						0-W14942	7051	181	9433	-15	-1	3.5	1.9	-224	-1	-1	8.3	2481	33	2.5	-25	0.376
56-42.3131-107.3917-2-11-						0-W14943	17200	165	7757	48		4.0	3.0	343	-1	-1	9.1	2731	40	2.5	52	0.422
56-42.3033-107.4042-2-15-						0-W14944	12790	279	7560	33	-1	3.4	2.9	871	-1	-1	12.9	2144	62	2.3	61	0.222
56-42.3069-107.4292-2-15-						0-W14960	8189	283	7498	-16	-1	3.5	2.1	-241	-1	-1	7.3	2019	42	1.7	-23	0.389
56-42.3594-107.2522-2-12-						0-W14962	9922	317	12650	36	-1	5.9	4.6	-215	1	-1	17.2	3210	48	3.1	-33	0.273
56-42.3133-107.2519-2-15-						0-W14963	12820	523	14080	45	-1	9.1	6.7	-264	-1	-1	20.5	3980	67	3.3	26	0.642
56-42.3553-107.2272-2-99-						0-W14964	10270	328	12530	34	-1	4.4	3.2	-266	-1	-1	10.9	2726	47	2.7	40	0.285
56-42.3531-107.2064-2-11-						0-W14965	-2913	210	11990	-13	-1	2.8	2.9	-212		-1	8.6	2872	29	1.8	-23	0.388
56-42.3522-107.2083-2-15-						0-W14966	8456	346	10520	28	-1	4.3	2.8	-231		-1	9.0	2268	43	1.8	-33	0.322
56-42.2839-107.2403-2-11-						0-W14967	15040	404	19890	62	-1	9.6	9.0	-286	1	1	44.5	4163	63	5.5	74	0.394
56-42.3006-107.2211-2-11-						0-W14968	14140	362	14640	-16	-1	9.4	4.1	-261	1	-1	14.1	5024	72	3.1	54	0.770
56-42.2833-107.2133-2-15-						0-W14969	12900	422	16440	35	-1	9.0	4.9	-269	-1	-1	17.0	4145	64	4.6	-64	0.526
56-42.3039-107.2489-2-15-						0-W14970	14130	619	12960	33	-1	6.1	6.1	-334	-1	-1	14.0	3997	64	3.4	49	0.949
56-42.3442-107.4642-2-15-						0-W14971	8908	268	4358	-16	-1	3.7	2.9	-228	-1	-1	9.2	2585	61	2.4	63	0.505
56-42.3411-107.4606-2-12-						0-W14972	14750	222	4335	30	-1	4.0	3.5	-171		-1	8.4	2592	58	1.9	-30	0.376
56-42.2864-107.1994-2-11-						0-W14973	6621	229	15160	48	-1	6.1	5.0	286	1	1	18.5	3314	42	3.8	-49	0.375
56-42.3014-107.1794-2-12-						0-W14974	8702	508	13030	-15	-1	5.2	6.4	-294	-1	-1	15.2	5996	90	3.2	54	0.636
56-42.2944-107.1433-2-15-						0-W14975	11960	546	12680	44	-3	10.5	10.1	-295	-1	-1	29.3	4121	77	4.5	53	0.495
56-42.2606-107.1600-2-99-						0-W14977	9694	762	11930	33	-1	5.9	5.0	-329	-1	-1	17.7	3249	54	2.4	34	0.787
56-42.3039-107.2311-2-11-						0-W14978	13330	484	16320	40	-1	12.1	4.7	-268	1	-1	24.5	4930	89	4.3	-40	0.218
56-42.3136-107.4719-2-15-						0-W14979	16440	303	6619	28	-1	2.9	3.2	-213			5.6	2473	38	1.8	40	0.473
56-42.3317-107.4972-2-15-						0-W14980	17320	241	5108	33	-1	3.5	2.0	-213	-1	-1	5.3	2295	49	1.7	-29	0.564
56-42.2431-107.3636-2-12-						0-W14982	17460	394	6409	47	-1	4.3	3.8	-254	-1	-1	9.8	2518	42	3.2	52	0.343
56-42.2408-107.3517-2-12-						0-W14983	9750	2233	3264	-21	-1	2.1	1.2	-621	-1	-1	4.1	-1439	27	-1.1	72	0.534
56-42.2272-107.3192-2-11-						0-W14984	-2961	105	16330	36	-1	1.5	3.1	-201	-1		17.3	1347	15	1.8	-20	0.150
56-42.2281-107.2914-2-15-						0-W14986	7833	129	9040	-15	-1	3.7	2.9	-203	-1	-1	10.7	2240	37	2.2	-25	0.310
56-42.2189-107.2844-2-99-						0-W14987	8327	192	14510	35	-1	2.3	1.8	-194			6.1	1196	25	1.0	-27	0.305
56-42.2197-107.2522-2-12-						0-W14988	4997	110	6697	26	-1	2.5	2.3	-138			9.0	1441	22	2.0	-24	0.281
56-42.2383-107.2431-2-11-						0-W14989	9059	268	8967	-12	-1	3.8	3.2	-236		-1	7.7	2931	49	2.7	-12	0.369
56-42.2200-107.2203-2-11-						0-W14990	-2577	125	8208	-11	-1	1.9	2.3	-187	-1	-1	13.8	1883	17	2.1	-22	0.220
56-42.2092-107.2278-2-11-						0-W14991	6395	109	9319	27	-1	2.7	2.9	-157	-1		12.1	1655	24	2.0	21	0.238
56-42.2108-107.2172-2-99-						0-W14992	7448	1421	10800	38	3	2.7	2.1	-425	-1	-1	8.3	-985	27	1.2	739	0.220
56-42.2208-107.1919-2-11-						0-W14993	4437	318	13390	26	-1	2.5	3.0	-255	-1		10.2	2187	30	2.1	42	0.290
56-42.2272-107.1328-2-12-						0-W14994	9162	244	9347	-17	-1	4.0	3.1	-252	-1	-1	14.8	2732	73	2.5	54	0.276
56-42.2353-107.3675-2-11-						0-W14995	10640	370	10180	28	-1	3.7	7.0	-207	-1	1	31.0	3568	36	4.9	33	0.193
56-42.2469-107.3733-2-15-						0-W14996	12440	278	10420	44	-1	4.7	6.3	-195	-1	-1	30.0	2948	52	4.1	49	0.147
56-42.2267-107.4772-2-15-						0-W14997	12230	226	8978	79	-1	4.5	6.0	629	-1	-1	24.4	1765	60	3.8	67	0.130
56-42.2022-107.4808-2-15-						0-W14998	7699	183	11400	69	-1	3.2	6.2	-193		1	30.6	2215	33	4.5	37	0.199
56-42.2328-107.3489-2-11-						0-W14999	11730	115	6756	52	-1	3.5	2.8	-165		1	6.4	1759	48	2.2	43	0.386
56-42.2372-107.2269-2-11-						0-W15000	23620	431	11210	63	-1	6.4	4.4	-298		-1	9.3	4823	64	3.5	46	0.347
56-42.2328-107.1822-2-99-						0-W15001	6771	166	11840	65	-1	3.4	3.8	-188	-1	-1	14.6	2023	30	2.2	74	0.174
56-42.2464-107.1147-2-12-						0-W15002	-2987	446	14030	57	-1	7.7	5.9	-228	1	2	32.1	2235	31	5.3	42	0.199
56-42.1786-107.3611-2-15-						0-W15003	28340	237	8693	69	-1	4.7	3.0	415		-1	7.1	2416	161	1.7	75	0.632
56-42.1583-107.3664-2-15-						0-W15004	24700	189	8582	67	-1	4.3	4.2	-179	-1	1	12.6	2199	116	2.3	57	0.279
56-42.1983-107.0528-2-12-						0-W15005	13590	245	8634	72	2	5.8	3.5	-236	-1	-1	11.9	2735	109	2.6	59	0.250
56-42.4183-107.8694-2-15-						0-W15007	18910	304	5202	62	-1	6.7	2.8	-204	1	-1	7.0	2445	135	2.2	92	0.514
56-42.3789-107.8461-2-12-						0-W15008	5612	205	19950	90	-1	3.2	8.2	-230		2	38.1	1906	22	4.0	35	0.388
56-42.4547-107.8333-2-15-						0-W15009	11060	269	11920	109	-1	6.0	7.6	-214	-1	-1	28.6	2476	61	3.6	72	0.322
56-42.4253-107.8500-2-12-						0-W15010	7072	383	12760	82	-1	4.0	46.2	-270	2	8	273.7	3696	45	9.0	56	0.081
56-42.3861-107.8453-2-15-						0-W15011	9479	336	13730	120	-1	10.1	4.1	-264	1	-1	13.5	2340	44	2.4	101	0.342

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																											U CONCENTRATION
							TIME SAMPLED																											
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (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
56	42.5861	107.8269	2	15		0-W15015	09/10/77	11	28							7	1	1	4	6				2	3	3	2	1	3					2.93
56	42.5861	107.8347	2	15		0-W15016	09/10/77	12	28							5	1	1	4	1				4	2	2	1	1						2.93
56	42.3869	107.8014	2	15		0-W15018	09/09/77	10	18		C					9	1	4	4	6				4	2	3	1	2						14.90
56	42.3972	107.7806	2	15		0-W15019	09/09/77	11	15							9	1	3	5	6				4	2	3	1	2						4.36
56	42.4042	107.7728	2	15		0-W15020	09/09/77	11	17							23	1	1	4	4				3	2	3	1	1						3.81
56	42.4533	107.8003	2	15		0-W15021	09/09/77	12	21							18	4		4	6				4	2	2	1	1						6.54
56	42.4542	107.7783	2	15		0-W15022	09/09/77	12	22							9	4		4	1				4	2	2	1	1						3.97
56	42.4317	107.7547	2	15		0-W15023	09/09/77	12	25							13	1	3	4	1				4	2	2	1							28.56
56	42.4633	107.7575	2	15		0-W15024	09/09/77	13	23							13	4		4	1				4	2	2	1							3.65
56	42.4817	107.8467	2	15		0-W15025	09/09/77	13	23							14	4	4	4	1				4	2	2	1	1						3.71
56	42.4994	107.8639	2	15		0-W15026	09/09/77	14	27							14	4		4	1				4	2	2	1	1						3.52
56	42.6150	107.8469	2	15		0-W15029	09/11/77	9	19							7	4		4	1				3	2	2	1	1						4.34
56	42.6139	107.8536	2	15		0-W15030	09/11/77	9	20							7												1						3.63
56	42.5728	107.8525	2	15		0-W15031	09/11/77	10	20							5	1		4	6				3	2	3	2	1						3.10
56	42.5831	107.8644	2	15		0-W15032	09/11/77	10	23							8	4		4	6				3	2	3	2	1						3.05
56	42.6019	107.8653	2	15		0-W15033	09/11/77	10	23							9	4		4	6				3	2	2	3	1						3.26
56	42.2644	107.1181	2	12		0-W15034	09/07/77	11	29	17.2			7.1	270		16	2	6	6	8	3	3	2	2	2	3	2	2						13.71
56	42.2844	107.1108	2	15		0-W15035	09/07/77	12	31							8	2	6	4	6				4	2	2	2	1						3.14
56	42.2650	107.0464	2	15		0-W15036	09/07/77	12	32							11	2	6	5	8				4	2	2	2	1						2.72
56	42.3203	107.0642	2	15		0-W15039	09/07/77	14	33							11	2	6	4	6				4	2	2	2	1						3.25
56	42.3436	107.0364	2	15		0-W15040	09/07/77	15	33							10	2	6	4	6				4	2	2	2	1						2.26
56	42.3389	107.0281	2	12		0-W15041	09/07/77	15	33	27.5			7.6	415		10	1	1	4	1	3	3	3	2	4	2	2	2	1						2.34
56	42.4033	107.1856	2	15		0-W15042	09/08/77	9	28							14	2	6	4	6				4	2	2	1	1						2.96
56	42.4286	107.1006	2	15		0-W15044	09/08/77	10	29							11	2	6	4	6				4	2	2	1	1						2.80
56	42.4047	107.0764	2	15		0-W15045	09/08/77	11	30							9	2	6	4	6				4	2	2	1	1						2.74
56	42.4911	107.0931	2	15		0-W15046	09/08/77	11	30							26	2	6	4	1				4	2	2	2	1						4.01
56	42.4875	107.1231	2	15		0-W15047	09/08/77	11	31							20	2	6	4	6				4	2	2	2	1						2.77
56	42.4083	107.2772	2	15		0-W15048	09/08/77	12	32							13	1	6	4	6				4	2	2	2	1						3.07
56	42.3914	107.2583	2	12		0-W15049	09/08/77	13	31	20.5			7.8	330		26	1	6	6	8	2	3	1	2	4	2	2	2	1						3.99
56	42.3914	107.2739	2	15		0-W15050	09/08/77	13	32		C					13	1	6	4	6				4	2	2	2	1						2.70
56	42.4175	107.3344	2	15		0-W15051	09/08/77	13	32							11	1	6	4	6				4	2	2	2	1						2.97
56	42.4114	107.3589	2	15		0-W15052	09/08/77	14	32							13	1	6	4	6				4	2	2	2	1						2.99
56	42.3911	107.4300	2	15		0-W15053	09/08/77	15	32							11	1	6	5	7				4	2	2	2	1						3.08
56	42.1153	107.2414	2	12		0-W15055	09/14/77	11	17	15.0			7.1	600		13	1	1	4	1	2	2	1	2	4	2	2	1	1						26.10
56	42.1044	107.2139	2	15		0-W15058	09/14/77	13	25							27	1	1	5	6				3	3	2	1	1						3.77
56	42.1019	107.1772	2	15		0-W15059	09/14/77	14	26							11	1	2	1	1	1			3	2	3	1	1						3.62
56	42.1242	107.1583	2	11		0-W15060	09/14/77	14	25	15.0			6.5	900		9	1	2	6	8	1	2	4	4	4	4	2	1						4.09
56	42.1036	107.1458	2	15		0-W15061	09/14/77	15	23							13	1	2	1	6	1			3	5	2	2	1						3.25
56	42.1069	107.1375	2	99		0-W15062	09/14/77	15	24		C					11	1	1	1	6	1			4	4	3	2	1						3.62
56	42.1219	107.1408	2	11		0-W15063	09/14/77	16	24	8.5			6.8	491		9	1	2	5	8	2	2	5	4	4	3	2	1						3.13
56	42.0808	106.2428	2	15		0-W15065	09/16/77	11	21							18	1	4	5	4	1			3	3	2	2	1						2.21
56	42.0772	106.2222	2	15		0-W15067	09/16/77	11	21							15	1	6	4	6	1			4	3	1	2	1						3.78
56	42.0872	106.2281	2	15		0-W15068	09/16/77	11	21							15	1	4	4	6	1		2	4	3	1	2	1						3.52
56	42.0764	106.1992	2	11		0-W15069	09/16/77	12	19	11.0	C		6.7	300		13	1	6	5	8	2		1	4	4	2	3	1						6.15
56	42.0144	107.3267	2	15		0-W15071	09/17/77	14	16							13	1	1	4	6	1			4	2	2	3	1						3.61
56	42.0125	107.3103	2	15		0-W15072	09/17/77	14	16							20	1	6	4	6	1			3	2	2	3	1						4.34
56	42.0089	107.2925	2	15		0-W15073	09/17/77	15	15		C					29	1	6	7	6	1			3	1	2	3	1						3.90
56	42.0189	107.2936	2	12		0-W15074	09/17/77	15	15	11.2			7.8	1250		18	1	1	5	7	2	2	2	2	4	4	2	3	1						4.94
56	42.0339	107.2708	2	99		0-W15075	09/17/77	16	15		C					20	1	6	7	8				3	2	1	2	9						4.47
56	42.0103	107.2108	2	15		0-W15076	09/17/77	16	15							18	1	6	4	6	1			3	2	1	2	1						4.05
56	42.0042	107.1722	2	15		0-W15077	09/17/77	17	14							24	1	6	4	6	1			3	2	2	2	1						3.28

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

DOE SAMPLE NUMBER						LAS SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
56-42.5861-107.8269-2-15-						0-W15015	-5	-5	-5	18	-20	-15	10	-10	-15	2	39
56-42.5861-107.8347-2-15-						0-W15014	-5	-5	-5	19	-20	-15	-5	-10	-15	3	46
56-42.3869-107.8014-2-15-						0-W15018	-5	-5	-5	17	-20	-15	27	-10	-15	3	23
56-42.3972-107.7806-2-15-						0-W15019	-5	-5	-5	26	-20	-15	14	-10	-15	2	34
56-42.4042-107.7728-2-15-						0-W15020	-5	-5	-5	18	-20	-15	10	-10	-15	2	30
56-42.4533-107.8003-2-15-						0-W15021	-5	-5	-5	10	-20	-15	16	-10	-15	3	31
56-42.4542-107.7783-2-15-						0-W15022	-5	-5	-5	10	-20	-15	15	-10	-15	2	27
56-42.4317-107.7547-2-15-						0-W15023	-5	-5	-5	16	-20	-15	11	-10	-15	2	47
56-42.4633-107.7575-2-15-						0-W15024	-5	-5	-5	13	-20	-15	8	-10	-15	2	29
56-42.4817-107.8467-2-15-						0-W15025	-5	-5	-5	12	-20	-15	12	-10	-15	2	27
56-42.4994-107.8639-2-15-						0-W15026	-5	-5	-5	19	-20	-15	9	-10	-15	2	24
56-42.6150-107.8469-2-15-						0-W15029	-5	-5	-5	14	-20	-15	9	-10	-15	2	37
56-42.6139-107.8536-2-15-						0-W15030	-5	-5	-5	27	-20	-15	16	-10	-15	3	39
56-42.5728-107.8525-2-15-						0-W15031	-5	5	-5	14	-20	-15	12	-10	-15	2	35
56-42.5831-107.8644-2-15-						0-W15032	-5	-5	-5	33	-20	19	11	-10	-15	2	31
56-42.6019-107.8653-2-15-						0-W15033	-5	5	-5	24	-20	17	12	-10	-15	2	27
56-42.2644-107.1181-2-12-						0-W15034	-5	-5	-5	34	-20	23	17	-10	-15	2	37
56-42.2844-107.1108-2-15-						0-W15035	-5	-5	-5	19	-20	-15	17	-10	-15	2	16
56-42.2650-107.0464-2-15-						0-W15036	-5	-5	-5	21	-20	-15	11	-10	-15	1	17
56-42.3203-107.0642-2-15-						0-W15039	-5	-5	-5	11	-20	-15	11	-10	-15	2	27
56-42.3436-107.0364-2-15-						0-W15040	-5	-5	-5	-10	-20	-15	5	-10	-15	2	18
56-42.3389-107.0281-2-12-						0-W15041	-5	-5	-5	-10	-20	-15	12	-10	-15	2	9
56-42.4033-107.1856-2-15-						0-W15042	-5	-5	-5	11	-20	-15	14	-10	-15	2	19
56-42.4286-107.1006-2-15-						0-W15044	-5	-5	-5	17	-20	-15	11	-10	-15	2	34
56-42.4047-107.0764-2-15-						0-W15045	-5	-5	-5	11	-20	-15	16	-10	-15	2	22
56-42.4911-107.0931-2-15-						0-W15046	-5	-5	-5	-10	-20	-15	13	-10	-15	2	31
56-42.4875-107.1231-2-15-						0-W15047	-5	-5	-5	17	-20	-15	10	-10	-15	2	31
56-42.4083-107.2772-2-15-						0-W15048	-5	-5	-5	-10	-20	-15	7	-10	-15	2	16
56-42.3914-107.2583-2-12-						0-W15049	-5	-5	-5	23	-20	-15	8	-10	-15	2	25
56-42.3914-107.2739-2-15-						0-W15050	-5	-5	-5	24	-20	-15	17	-10	-15	2	34
56-42.4175-107.3346-2-15-						0-W15051	-5	-5	-5	16	-20	-15	5	-10	-15	2	21
56-42.4114-107.3589-2-15-						0-W15052	-5	-5	-5	20	-20	-15	20	-10	-15	2	43
56-42.3911-107.4300-2-15-						0-W15053	-5	-5	-5	23	-20	-15	17	-10	-15	2	48
56-42.1153-107.2414-2-12-						0-W15055	-5	5	-5	-10	-20	-15	43	-10	-15	1	18
56-42.1044-107.2139-2-15-						0-W15058	-5	-5	-5	20	-20	31	13	-10	-15	3	57
56-42.1019-107.1772-2-15-						0-W15059	-5	-5	-5	22	-20	-15	12	-10	-15	2	44
56-42.1242-107.1583-2-11-						0-W15060	-5	-5	-5	19	-20	-15	8	-10	-15	2	45
56-42.1036-107.1458-2-15-						0-W15061	-5	-5	-5	18	-20	18	13	-10	-15	2	34
56-42.1069-107.1375-2-99-						0-W15062	-5	-5	-5	17	-20	-15	5	-10	-15	2	32
56-42.1219-107.1408-2-11-						0-W15063	-5	-5	-5	-10	-20	15	9	-10	-15	2	17
56-42.0808-106.2428-2-15-						0-W15065	-5	-5	-5	23	-20	-15	7	-10	-15	2	41
56-42.0772-106.2222-2-15-						0-W15067	-5	-5	-5	21	-20	17	12	-10	-15	3	91
56-42.0872-106.2281-2-15-						0-W15068	-5	-5	-5	29	-20	16	16	-10	-15	2	74
56-42.0764-106.1992-2-11-						0-W15069	-5	-5	-5	20	-20	-15	17	11	-15	2	20
56-42.0144-107.3267-2-15-						0-W15071	-5	-5	-5	16	-20	-15	7	-10	-15	2	34
56-42.0125-107.3103-2-15-						0-W15072	-5	-5	-5	16	-20	-15	18	-10	-15	3	43
56-42.0089-107.2925-2-15-						0-W15073	-5	-5	-5	14	-20	-15	5	-10	-15	2	39
56-42.0189-107.2936-2-12-						0-W15074	-5	-5	-5	25	-20	-15	14	-10	-15	2	42
56-42.0339-107.2708-2-99-						0-W15075	-5	-5	-5	32	-20	27	110	-10	-15	2	65
56-42.0103-107.2108-2-15-						0-W15076	-5	-5	-5	22	-20	-15	11	-10	-15	2	38
56-42.0042-107.1722-2-15-						0-W15077	-5	5	-5	14	-20	-15	6	-10	-15	2	38

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
56-42.5861-107.8269-2-15-			0-	W	15015		49680	-0.02	553	19670	58	-78	6.3	44	1.7	2	0.8	17265	9.4	13480	22	0.2
56-42.5861-107.8347-2-15-			0-	W	15016		60270	-0.02	542	21490	59	-78	6.0	41	1.6	3	0.8	17885	9.4	15970	20	0.2
56-42.3869-107.8014-2-15-			0-	W	15018		60270	0.31	555	9835	253	-79	4.6	56	1.8	10	0.8	16355	20.9	19320	98	0.5
56-42.3972-107.7806-2-15-			0-	W	15019		51280	-0.03	593	15170	47	-67	5.2	27	2.2	5	0.6	13500	6.3	17230	18	0.2
56-42.4042-107.7728-2-15-			0-	W	15020		48990	-0.02	561	15670	48	-65	5.0	30	2.6	4	0.6	13230	8.0	14470	17	0.2
56-42.4533-107.8003-2-15-			0-	W	15021		55620	-0.02	514	14540	64	-71	3.2	24	1.4	4	0.4	11190	10.4	20630	22	0.2
56-42.4542-107.7783-2-15-			0-	W	15022		49140	-0.04	662	26930	77	93	5.4	35	1.7	4	0.8	15390	14.4	16240	30	0.3
56-42.4317-107.7547-2-15-			0-	W	15023		44980	-0.02	620	30710	57	1012	3.7	21	1.1	3	0.6	11665	8.8	14190	27	0.2
56-42.4633-107.7575-2-15-			0-	W	15024		49500	-0.02	690	12510	58	-72	3.9	27	1.7	3	0.7	12515	10.4	16010	21	0.2
56-42.4817-107.8467-2-15-			0-	W	15025		51920	-0.02	552	13930	55	-73	3.0	22	0.9	3	0.6	10175	10.9	17870	19	0.2
56-42.4994-107.8639-2-15-			0-	W	15026		49910	-0.04	713	12550	70	-66	4.8	44	1.5	3	0.9	15290	12.8	15350	26	0.2
56-42.6150-107.8469-2-15-			0-	W	15029		54280	-0.03	588	22860	90	-76	8.9	62	1.2	4	0.9	30400	19.2	13590	35	0.2
56-42.6139-107.8536-2-15-			0-	W	15030		54820	-0.03	592	22610	64	-85	6.9	47	1.6	3	0.8	18530	10.0	15040	20	0.2
56-42.5728-107.8525-2-15-			0-	W	15031		59500	-0.02	641	19610	57	102	4.9	34	1.2	3	0.5	16195	9.5	16320	21	0.2
56-42.5831-107.8644-2-15-			0-	W	15032		57030	-0.04	680	14870	73	85	8.1	66	2.3	3	1.0	20500	9.0	18320	29	0.2
56-42.6019-107.8653-2-15-			0-	W	15033		56090	-0.03	645	18860	60	102	7.6	58	1.6	4	0.8	21365	10.7	16530	25	0.2
56-42.2644-107.1181-2-12-			0-	W	15034		58070	-0.03	453	20380	69	-99	9.3	53	1.8	4	0.6	21185	10.5	16170	25	0.3
56-42.2844-107.1108-2-15-			0-	W	15035		41290	-0.02	529	11220	46	-64	3.5	28	1.0	3	0.6	12925	10.7	15980	17	0.2
56-42.2650-107.0464-2-15-			0-	W	15036		44300	-0.03	574	9296	75	-81	2.6	37	1.1	2	0.7	8285	12.4	18030	29	0.2
56-42.3203-107.0642-2-15-			0-	W	15039		47130	-0.02	629	9916	59	-62	3.9	34	1.6	4	0.6	12740	12.8	16110	26	0.2
56-42.3436-107.0364-2-15-			0-	W	15040		44400	-0.02	650	10710	44	-68	2.1	17	1.0	2	0.2	7355	7.2	19320	16	0.2
56-42.3389-107.0281-2-12-			0-	W	15041		50060	-0.02	562	10840	31	-74	1.2	11	-0.3	2	0.2	3862	6.9	20200	12	0.1
56-42.4033-107.1856-2-15-			0-	W	15042		49600	-0.04	674	9772	59	63	4.2	32	1.6	3	0.9	13590	9.8	17510	24	0.2
56-42.4286-107.1006-2-15-			0-	W	15044		52490	-0.03	737	12350	50	-67	4.7	21	1.6	3	0.7	13215	6.9	19150	20	0.2
56-42.4047-107.0764-2-15-			0-	W	15045		39970	-0.02	491	9976	47	-67	2.9	19	1.2	1	0.4	10115	9.5	14470	17	0.2
56-42.4911-107.0931-2-15-			0-	W	15046		45580	-0.02	568	12950	79	-64	5.1	31	1.0	4	0.8	17705	17.7	17810	28	0.2
56-42.4875-107.1231-2-15-			0-	W	15047		50360	-0.04	611	11430	66	-62	5.5	37	1.9	3	0.8	15325	11.5	17950	24	0.3
56-42.4083-107.2772-2-15-			0-	W	15048		40490	-0.02	593	9172	59	-63	3.2	24	1.1	3	0.6	11325	14.8	16360	24	0.2
56-42.3914-107.2583-2-12-			0-	W	15049		41600	-0.02	420	15540	46	-71	4.0	24	1.3	2	0.3	11215	8.4	12690	17	0.2
56-42.3914-107.2739-2-15-			0-	W	15050		51120	-0.02	603	11050	52	-57	4.4	27	1.9	3	0.6	12350	7.7	16590	17	0.2
56-42.4175-107.3344-2-15-			0-	W	15051		42770	-0.03	588	9281	68	-57	4.1	40	1.6	3	0.8	13530	14.4	15440	28	0.2
56-42.4114-107.3589-2-15-			0-	W	15052		52810	-0.03	497	15770	52	-66	5.5	37	2.7	3	0.7	15090	7.3	17140	21	0.2
56-42.3911-107.4300-2-15-			0-	W	15053		50300	-0.02	376	16350	47	-54	5.0	41	3.3	2	0.7	14565	5.3	15970	16	0.2
56-42.1153-107.2414-2-12-			0-	W	15055		40340	-0.04	-147	39000	1059	-87	2.7	47	1.0	25	1.5	15015	64.2	13540	385	0.7
56-42.1044-107.2139-2-15-			0-	W	15058		72470	-0.03	501	11090	58	-52	5.8	51	5.4	4	0.7	19090	4.8	20950	22	0.2
56-42.1019-107.1772-2-15-			0-	W	15059		56580	-0.03	262	8427	53	-54	5.8	48	4.4	2	0.7	17045	4.4	17790	20	0.2
56-42.1242-107.1583-2-11-			0-	W	15060		46890	-0.02	391	21460	35	-49	3.4	29	2.3	3	0.5	10680	5.9	13940	15	0.2
56-42.1036-107.1458-2-15-			0-	W	15061		50950	-0.04	605	6160	66	-58	3.9	39	2.5	4	0.8	12075	10.4	17310	27	0.2
56-42.1069-107.1375-2-99-			0-	W	15062		45860	-0.03	423	17070	43	-56	4.0	35	2.2	3	0.5	11150	6.6	13990	16	0.2
56-42.1219-107.1408-2-11-			0-	W	15063		32440	-0.02	308	9480	42	-53	2.5	18	1.3	2	0.5	11380	9.0	13910	15	0.2
56-42.0808-106.2428-2-15-			0-	W	15065		40920	-0.02	468	32140	29	-54	4.0	23	1.8	3	0.5	9830	5.4	15080	11	0.1
56-42.0772-106.2222-2-15-			0-	W	15067		60580	-0.06	396	64700	68	-57	9.9	63	4.9	4	0.8	25685	3.6	20270	22	0.3
56-42.0872-106.2281-2-15-			0-	W	15068		62110	-0.04	494	25280	43	-71	8.9	45	3.7	4	0.7	22370	3.5	21830	17	0.2
56-42.0764-106.1992-2-11-			0-	W	15069		27940	-0.02	369	5881	27	-49	3.6	17	1.2	2	0.5	9725	6.9	10790	10	0.2
56-42.0144-107.3267-2-15-			0-	W	15071		43500	-0.02	574	24640	47	-55	3.5	26	1.8	3	0.5	10045	7.7	13910	17	0.2
56-42.0125-107.3103-2-15-			0-	W	15072		53980	-0.04	532	8002	70	-54	5.5	46	3.3	4	0.8	18100	11.5	15000	27	0.3
56-42.0089-107.2925-2-15-			0-	W	15073		48910	-0.03	488	15110	43	1736	3.2	27	1.9	3	0.6	11315	5.3	14610	18	0.1
56-42.0189-107.2936-2-12-			0-	W	15074		50600	-0.02	345	20550	59	-64	4.8	32	2.8	2	0.6	13240	6.4	14080	20	0.2
56-42.0339-107.2708-2-99-			0-	W	15075		53130	-0.03	662	58650	39	150	5.0	40	3.0	3	0.4	12915	4.2	17340	15	0.2
56-42.0103-107.2108-2-15-			0-	W	15076		59020	-0.04	593	15200	62	79	5.4	47	3.5	3	0.8	17320	5.6	16060	23	0.2
56-42.0042-107.1722-2-15-			0-	W	15077		49870	-0.03	459	19250	42	73	4.2	32	2.4	3	0.6	13190	5.0	14800	16	0.2

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

DOE SAMPLE NUMBER						LAS SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
56-42.5861-107.8269-2-15-			0-			W15015	12200	346	12600	59	-1	5.8	3.7	-232		-1	11.3	2399	57	2.7	57	0.259
56-42.5861-107.8347-2-15-			0-			W15016	19080	533	13450	53	-1	5.4	3.9	407		-1	10.4	3327	76	2.6	54	0.282
56-42.3869-107.8014-2-15-			0-			W15018	8402	350	14200	102	-1	5.6	22.4	-254	-1	3	107.6	3149	45	9.3	73	0.138
56-42.3972-107.7806-2-15-			0-			W15019	9718	517	7330	62	-1	4.5	3.6	-271		-1	11.7	2513	47	2.2	74	0.373
56-42.4042-107.7728-2-15-			0-			W15020	13750	370	7300	56	-1	4.7	3.4	-254		-1	10.4	2325	67	2.6	68	0.366
56-42.4533-107.8003-2-15-			0-			W15021	9881	255	12580	52	-1	3.5	4.9	235		-1	16.9	2709	49	2.7	43	0.387
56-42.4542-107.7783-2-15-			0-			W15022	9031	333	12190	70	-1	4.5	6.8	335	-1	1	21.8	2959	45	3.6	81	0.182
56-42.4317-107.7547-2-15-			0-			W15023	17190	332	24650	45	-1	3.0	5.0	916		-1	10.8	2445	40	2.0	37	2.644
56-42.4633-107.7575-2-15-			0-			W15024	9188	325	12110	58	-1	4.1	-0.2	323		-1	11.9	2807	48	1.9	-27	0.307
56-42.4817-107.8467-2-15-			0-			W15025	5193	303	14480	47	-1	3.0	3.4	-206		-1	10.3	2498	49	2.0	40	0.360
56-42.4994-107.8639-2-15-			0-			W15026	7899	300	13150	82	-1	4.6	5.4	361	-1	-1	15.0	2939	49	3.1	-14	0.235
56-42.6150-107.8469-2-15-			0-			W15029	13540	603	13650	40	-1	7.0	5.6	320	1	-1	18.8	5559	117	3.2	52	0.231
56-42.6139-107.8536-2-15-			0-			W15030	14530	491	13450	48	-1	6.5	3.7	-290		-1	11.6	3454	63	2.3	51	0.313
56-42.5728-107.8525-2-15-			0-			W15031	10750	465	15950	66	-1	4.7	3.6	-236		-1	9.2	3026	75	2.1	43	0.337
56-42.5831-107.8644-2-15-			0-			W15032	13260	486	13110	85	-1	6.5	6.2	502	-1	-1	16.1	2986	58	3.8	90	0.189
56-42.6019-107.8653-2-15-			0-			W15033	16120	540	13990	59	-1	6.1	4.2	-263		1	12.6	3684	76	2.6	44	0.259
56-42.2644-107.1181-2-12-			0-			W15034	16610	463	15690	69	-1	8.0	5.2	-342	-1	-1	24.0	3567	66	4.0	77	0.571
56-42.2844-107.1108-2-15-			0-			W15035	7414	347	10480	41	-1	3.5	3.0	-199	1	-1	9.5	2771	56	2.0	36	0.331
56-42.2650-107.0464-2-15-			0-			W15036	5438	711	13500	74	-1	2.8	5.7	-298		-1	27.3	1447	23	3.5	42	0.100
56-42.3203-107.0642-2-15-			0-			W15039	8932	319	11420	49	-1	3.8	4.3	374		-1	15.3	3012	51	2.1	39	0.212
56-42.3436-107.0364-2-15-			0-			W15040	6014	190	13400	51	-1	2.6	2.5	-208		-1	9.8	1544	31	1.6	20	0.231
56-42.3389-107.0281-2-12-			0-			W15041	-2846	216	18180	49		2.2	1.9	-191			6.7	902	15	1.8	13	0.349
56-42.4033-107.1856-2-15-			0-			W15042	7236	289	11640	80	-1	4.4	4.7	329	1	-1	13.2	2330	39	3.4	64	0.224
56-42.4286-107.1006-2-15-			0-			W15044	9776	341	11620	73	-1	4.2	3.4	-217		-1	10.5	2203	45	2.0	41	0.267
56-42.4047-107.0764-2-15-			0-			W15045	-2623	240	11270	47	-1	3.2	2.8	-190		1	7.9	1458	33	2.0	26	0.347
56-42.4911-107.0931-2-15-			0-			W15046	9275	387	11690	35	-1	3.7	5.0	-215	1	-1	17.7	4303	85	3.2	48	0.227
56-42.4875-107.1231-2-15-			0-			W15047	8909	323	12710	79	-1	4.6	4.9	365	-1	-1	15.8	2736	49	3.6	53	0.175
56-42.4083-107.2772-2-15-			0-			W15048	5682	266	10320	55	-1	3.2	4.0	251	1	1	11.8	3083	42	2.5	39	0.260
56-42.3914-107.2583-2-12-			0-			W15049	9625	229	10930	60	-1	4.3	3.3	-203		1	10.6	2018	37	2.6	28	0.376
56-42.3914-107.2739-2-15-			0-			W15050	12380	313	8061	68	-1	4.0	3.4	-198		-1	9.3	2675	54	1.9	55	0.290
56-42.4175-107.3344-2-15-			0-			W15051	7225	305	10780	72	-1	4.0	5.9	-189	-1	-1	18.9	2622	44	3.2	45	0.157
56-42.4114-107.3589-2-15-			0-			W15052	15500	437	8118	62	-1	4.9	3.7	-250		-1	12.0	2516	62	2.0	46	0.249
56-42.3911-107.4300-2-15-			0-			W15053	14680	271	5161	71	-1	5.5	3.2	-190		-1	9.0	2370	74	2.1	-45	0.342
56-42.1153-107.2414-2-12-			0-			W15055	8821	123	11570	-20	-1	4.3	51.8	-338	2	7	229.9	8988	55	6.8	-19	0.114
56-42.1044-107.2139-2-15-			0-			W15058	20120	287	4356	91	-1	7.3	4.0	-220	1	2	11.7	3415	96	2.3	89	0.322
56-42.1019-107.1772-2-15-			0-			W15059	15040	264	3937	80	-1	6.8	3.6	-203		2	9.4	2548	78	2.9	90	0.385
56-42.1242-107.1583-2-11-			0-			W15060	10000	166	4987	58	-1	3.4	2.7	-177		-1	7.4	2666	56	1.7	47	0.553
56-42.1036-107.1458-2-15-			0-			W15061	5394	224	10410	98	-1	4.8	4.8	-184		-1	16.9	2237	40	3.4	63	0.192
56-42.1069-107.1375-2-99-			0-			W15062	12300	226	6118	66	-1	4.0	3.1	294		-1	8.3	2615	49	2.1	49	0.436
56-42.1219-107.1408-2-11-			0-			W15063	5928	123	7375	41	-1	2.7	2.7	-151		-1	7.4	1323	22	2.0	33	0.423
56-42.0808-106.2428-2-15-			0-			W15065	18300	407	6592	44	-1	3.5	2.4	-211		-1	4.9	2423	41	1.8	41	0.451
56-42.0772-106.2222-2-15-			0-			W15067	38450	353	4387	90	-2	9.8	4.4	682	-1	-2	11.5	2905	75	2.9	101	0.329
56-42.0872-106.2281-2-15-			0-			W15068	39410	551	6097	84	-1	8.1	3.6	-308		-1	7.8	3622	79	2.8	69	0.451
56-42.0764-106.1992-2-11-			0-			W15069	5869	117	5408	41	-1	2.6	2.7	-148		-1	4.5	1496	20	1.5	60	1.367
56-42.0144-107.3267-2-15-			0-			W15071	12080	239	9145	39	-1	3.2	3.0	-178	1	-1	9.7	1904	76	1.8	60	0.372
56-42.0125-107.3103-2-15-			0-			W15072	9512	282	7974	79	-1	5.9	6.3	-190	-1	-1	17.9	2505	67	3.9	-57	0.242
56-42.0089-107.2925-2-15-			0-			W15073	12240	176	19460	62	1	4.2	3.0	-251		-1	9.6	1649	50	1.5	33	0.406
56-42.0189-107.2936-2-12-			0-			W15074	11820	325	7404	58	-1	5.3	3.5	-217		-1	12.8	1993	58	2.3	50	0.386
56-42.0339-107.2708-2-99-			0-			W15075	23810	207	7261	55	1	4.7	3.3	331		-1	7.9	3131	156	1.8	258	0.566
56-42.0103-107.2108-2-15-			0-			W15076	16240	230	7895	73	-1	6.4	4.3	270	-1	-1	14.6	2176	74	3.1	76	0.277
56-42.0042-107.1722-2-15-			0-			W15077	19450	221	6925	67	-1	4.5	3.1	-200		-1	9.1	2349	67	1.7	54	0.360

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
56	42.0275	107.1664	2	15	0	W15078	09/17/77	17	15							9	1	6	5	6														2.96
56	42.0342	107.2111	2	15	0	W15079	09/17/77	18	15							18	1	6	4	6														5.09
56	42.0703	107.2994	2	15	0	W15080	09/18/77	10	15							20	1	1	5	6														8.95
56	42.0322	107.3408	2	15	0	W15081	09/18/77	11	16							31	1	1	5	6														3.84
56	42.7692	106.3150	2	11	0	W15082	08/14/77	15	32	9.1			5.6	345		17	1	6	4	6	2	3	1	2	5	3	3	1						4.76
56	42.7508	106.3328	2	11	0	W15083	08/14/77	15	27	16.0			6.5	50		20	1	6	5	8	2	2	2		1	3	4	1						6.00
56	42.6989	106.2769	2	15	0	W15084	08/14/77	16	30							10	1	6	4	6		1			4	3	2	2						2.52
56	42.7011	106.3553	2	15	0	W15085	08/14/77	17	29							3	1	6	4	6		1			4	3	3	3						2.60
56	42.0689	107.3947	2	15	0	W15086	09/09/77	9	10							24	1	1	4	1		1			4	3	1	1						3.74
56	42.0258	107.3767	2	15	0	W15087	09/09/77	9	11							29	1	1	4	1		1			3	2	1	1						3.68
56	42.0608	107.3703	2	15	0	W15088	09/09/77	12	20							27	1	1	5	1		1			3	3	1	1						3.37
56	42.0936	107.2906	2	11	0	W15089	09/09/77	13	23	2.3			7.3	340		20	1	1	6	6	1	2	2		4	3	2	1						16.85
56	42.0892	107.2783	2	15	0	W15090	09/09/77	14	25							18	1	1	4	1		1			3	3	2	1						3.39
56	42.0881	107.2725	2	11	0	W15091	09/09/77	14	29	9.0			7.9	370		15	1	1	6	8	1	2	5		4	3	2	1						7.62
56	42.2325	107.6550	2	15	0	W15093	09/12/77	16	18							37	4		4	1		1			3	2	2	1						16.04
56	42.2458	107.6725	2	11	0	W15094	09/12/77	17	18	16.5			6.9	280		8	1	1	6	8		2	2		4	4	2	1						7.09
56	42.2544	107.6919	2	15	0	W15095	09/12/77	17	18							11	1	1	4	1		1			3	3	1	1						5.00
56	42.3722	107.6908	2	12	0	W15096	09/14/77	9	15	1.0			6.8	80		27	3		4	3	3	3	1	2	1	3	5	1						6.38
56	42.2628	107.8014	2	15	0	W15097	09/12/77	17	15							14	4		4	1					3	2	2	2						7.86
56	42.2544	107.8736	2	15	0	W15098	09/12/77	17	16							11	4		4	6					4	2	3	2						7.14
56	42.3547	107.8172	2	11	0	W15099	09/13/77	10	15	9.0			7.2	495		13	4		6	8					4	3	4	1		2				90.41
56	42.3025	107.7353	2	12	0	W15100	09/13/77	13	18	11.5			6.8	95		14	1	1	4	1	3	3	1	2	2	3	3	1						35.69
56	42.3478	107.8614	2	12	0	W15101	09/12/77	12	15	13.5			6.9	245		12	4		4	1	3	3	1	2	2	3	3	2						8.51
56	42.3322	107.8661	2	12	0	W15102	09/12/77	13	16	17.5			7.2	310		22	4		4	7	2	3	2	2	4	2	3	2						14.09
56	42.3342	107.8700	2	11	0	W15103	09/12/77	13	16	15.5			6.9	320		18	4		4	7					4	2	3	2						8.11
56	42.3403	107.8728	2	15	0	W15104	09/12/77	14	17							14	4		4	1					3	2	2	2						9.99
56	42.3167	107.8408	2	12	0	W15105	09/12/77	14	19	18.5			6.9	160		9	4		4	1	3	3	1	2	4	2	3	2						7.71
56	42.3258	107.8431	2	15	0	W15106	09/12/77	15	19							11	4		4	1					4	2	2	2						7.64
56	42.3022	107.8372	2	15	0	W15107	09/12/77	15	17							7	4		4	1					3	2	3	2						7.70
56	42.3033	107.8428	2	15	0	W15108	09/12/77	15	18							11	4		4	1					4	3	2	2						5.93
56	42.2847	107.8519	2	15	0	W15109	09/12/77	16	16							13	4		4	1					4	2	2	2						6.89
56	42.2833	107.8067	2	15	0	W15110	09/12/77	16	16							11	4		4	1					4	3	3	2						7.83
56	42.5558	107.8478	2	15	0	W15111	09/11/77	11	23							9	3	6	4	1					4	2	3	2						8.19
56	42.5231	107.8556	2	15	0	W15112	09/11/77	11	23							7	3	6	4	1					4	2	2	2						3.04
56	42.5286	107.8400	2	15	0	W15113	09/11/77	11	23							5	3	6	4	1					4	2	2	2						2.74
56	42.5769	107.7808	2	15	0	W15114	09/11/77	12	24							9	3	6	4	1					3	2	2	2						4.72
56	42.6186	107.7578	2	15	0	W15115	09/11/77	12	24							10	4		4	6					3	2	2	2						3.82
56	42.5272	107.7683	2	15	0	W15116	09/11/77	13	26							13	3	6	4	1					3	2	3	2						5.74
56	42.3003	107.6769	2	15	0	W15118	09/11/77	15	21							13	4		4	1					4	2	4	3						7.55
56	42.3697	107.7283	2	15	0	W15119	09/11/77	17	20							14	4		4	1					1	3	5	3						8.81
56	42.2853	107.7325	2	12	0	W15120	09/13/77	14	18	12.5			7.3	400		13	1	1	4	7	2	3	1	2	4	3	4	1						22.78
56	42.2836	107.7344	2	12	0	W15121	09/13/77	14	18	15.0			6.6	150		18	1	1	4	6	2	3	1	2	4	3	3	1						17.20
56	42.2744	107.7208	2	15	0	W15122	09/12/77	14	18							18	4		4	6					4	3	3	1						7.83
56	42.2719	107.7061	2	12	0	W15123	09/12/77	15	19	14.5			6.8	110		18	4		4	6	3	3	1	2	4	3	2	1						11.88
56	42.2906	107.6825	2	12	0	W15126	09/14/77	10	19	11.0			6.3	115		18	1	1	4	6	3	3	1	2	4	3	4	1						9.10
56	42.3292	107.6397	2	12	0	W15127	09/14/77	12	18	8.5			6.7			18																		25.08
56	42.2369	107.7069	2	15	0	W15128	09/14/77	14	20							13	4		4	3					4	2	2	2						18.73
56	42.2217	107.7469	2	15	0	W15129	09/14/77	14	20							13	4		4	1					3	2	2	2						4.71
56	42.2072	107.7192	2	15	0	W15130	09/14/77	15	20							13	4		4	1					4	3	2	2						5.33
56	42.1917	107.7103	2	15	0	W15131	09/14/77	15	20							16	4		4	1					4	3	2	2						5.25
56	42.1606	107.0769	2	11	0	W15132	09/15/77	12	17	9.0			7.4	700		1	1	2	6	8	1	2	2	3	4	4	3	2						1.53

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

DOE SAMPLE NUMBER						LAS SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
56-42.0275-107.1664-2-15-						0-W15078	-5	-5	-5	16	-20	-15	11	-10	-15	2	39
56-42.0342-107.2111-2-15-						0-W15079	-5	-5	-5	19	-20	17	7	-10	-15	2	28
56-42.0703-107.2994-2-15-						0-W15080	-5	-5	-5	19	-20	-15	9	-10	-15	2	49
56-42.0322-107.3408-2-15-						0-W15081	-5	-5	-5	25	-20	27	22	-10	-15	3	53
56-42.7692-106.3150-2-11-						0-W15082	-5	-5	-5	-10	-20	-15	10	-10	-15	2	22
56-42.7508-106.3328-2-11-						0-W15083	-5	-5	-5	30	-20	63	17	-10	-15	3	39
56-42.6989-106.2769-2-15-						0-W15084	-5	-5	-5	32	-20	19	-5	-10	-15	2	53
56-42.7011-106.3553-2-15-						0-W15085	-5	-5	-5	-10	-20	-15	-5	-10	-15	2	27
56-42.0689-107.3947-2-15-						0-W15086	-5	5	-5	24	-20	-15	14	-10	-15	2	46
56-42.0258-107.3767-2-15-						0-W15087	-5	-5	-5	22	-20	-15	11	-10	-15	2	44
56-42.0608-107.3703-2-15-						0-W15088	-5	-5	-5	32	-20	-15	20	-10	-15	2	34
56-42.0936-107.2906-2-11-						0-W15089	-5	-5	-5	15	-20	-15	12	-10	-15	1	16
56-42.0892-107.2783-2-15-						0-W15090	-5	-5	-5	10	-20	-15	-5	-10	-15	2	18
56-42.0881-107.2725-2-11-						0-W15091	-5	-5	-5	19	-20	-15	11	-10	-15	1	14
56-42.2325-107.6550-2-15-						0-W15093	-5	-5	-5	-10	-20	-15	29	-10	-15	2	23
56-42.2458-107.6725-2-11-						0-W15094	-5	-5	-5	20	-20	-15	15	-10	-15	1	18
56-42.2544-107.6919-2-15-						0-W15095	-5	-5	-5	21	-20	-15	24	-10	-15	2	37
56-42.3722-107.6908-2-12-						0-W15096	-5	-5	-5	14	-20	-15	21	-10	-15	4	28
56-42.2628-107.8014-2-15-						0-W15097	-5	-5	-5	14	-20	-15	28	-10	-15	3	36
56-42.2544-107.8736-2-15-						0-W15098	-5	-5	-5	15	-20	-15	31	-10	-15	2	45
56-42.3547-107.8172-2-11-						0-W15099	-5	6	-5	17	-20	-15	27	-10	-15	3	44
56-42.3025-107.7353-2-12-						0-W15100	-5	17	-5	10	-20	-15	26	-10	15	2	24
56-42.3478-107.8614-2-12-						0-W15101	-5	7	-5	-10	-20	-15	14	-10	-15	2	15
56-42.3322-107.8661-2-12-						0-W15102	-5	5	-5	13	-20	-15	18	-10	-15	2	29
56-42.3342-107.8700-2-11-						0-W15103	-5	-5	-5	10	-20	-15	15	-10	-15	2	17
56-42.3403-107.8728-2-15-						0-W15104	-5	-5	-5	14	-20	-15	21	-10	-15	3	38
56-42.3167-107.8408-2-12-						0-W15105	-5	7	-5	11	-20	-15	8	-10	-15	2	12
56-42.3258-107.8431-2-15-						0-W15106	-5	12	-5	-10	-20	-15	19	-10	-15	2	23
56-42.3022-107.8372-2-15-						0-W15107	-5	-5	-5	19	-20	-15	19	-10	-15	2	27
56-42.3033-107.8428-2-15-						0-W15108	-5	-5	-5	-10	-20	-15	8	-10	-15	2	31
56-42.2847-107.8519-2-15-						0-W15109	-5	6	-5	12	-20	-15	24	-10	-15	3	34
56-42.2833-107.8067-2-15-						0-W15110	-5	-5	-5	14	-20	-15	23	-10	-15	2	30
56-42.5558-107.8478-2-15-						0-W15111	9	-5	-5	15	-20	28	6	-10	-15	2	24
56-42.5231-107.8556-2-15-						0-W15112	-5	-5	-5	16	-20	-15	8	-10	-15	2	30
56-42.5286-107.8400-2-15-						0-W15113	-5	-5	-5	13	-20	-15	7	-10	-15	2	19
56-42.5769-107.7808-2-15-						0-W15114	-5	-5	-5	15	-20	-15	6	-10	-15	2	32
56-42.6186-107.7578-2-15-						0-W15115	-5	-5	-5	30	-20	-15	6	-10	-15	3	44
56-42.5272-107.7683-2-15-						0-W15116	-5	6	-5	-10	-20	-15	21	-10	-15	2	19
56-42.3003-107.6769-2-15-						0-W15118	-5	10	-5	16	-20	-15	16	-10	-15	2	30
56-42.3697-107.7283-2-15-						0-W15119	-5	-5	-5	20	-20	-15	16	-10	-15	3	39
56-42.2853-107.7325-2-12-						0-W15120	-5	-5	-5	19	-20	-15	20	-10	-15	3	30
56-42.2836-107.7344-2-12-						0-W15121	-5	-5	-5	13	-20	-15	19	-10	-15	3	32
56-42.2744-107.7208-2-15-						0-W15122	-5	-5	-5	-10	-20	-15	21	-10	-15	2	24
56-42.2719-107.7061-2-12-						0-W15123	-5	-5	-5	11	-20	-15	27	-10	-15	2	36
56-42.2906-107.6825-2-12-						0-W15126	-5	-5	-5	-10	-20	-15	19	-10	-15	2	14
56-42.3292-107.6397-2-12-						0-W15127	-5	-5	-5	17	-20	-15	31	-10	-15	2	25
56-42.2369-107.7069-2-15-						0-W15128	-5	-5	-5	-10	-20	-15	33	-10	-15	2	20
56-42.2217-107.7469-2-15-						0-W15129	-5	-5	-5	14	-20	-15	24	-10	-15	2	27
56-42.2072-107.7192-2-15-						0-W15130	-5	-5	-5	17	-20	-15	26	-10	-15	3	32
56-42.1917-107.7103-2-15-						0-W15131	-5	-5	-5	22	-20	-15	24	-10	-15	3	45
56-42.1606-107.0769-2-11-						0-W15132	-5	-5	-5	11	-20	-15	-5	-10	-15	2	10

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
56-	42.0275-	107.1664-	2-	15-	0-	W15078	44440	-0.02	254	16940	46	-55	3.8	30	2.9	2	0.6	12700	5.6	14110	15	0.2
56-	42.0342-	107.2111-	2-	15-	0-	W15079	46510	0.06	484	13480	81	-57	2.8	26	1.5	4	0.7	10780	18.4	14000	28	0.3
56-	42.0703-	107.2994-	2-	15-	0-	W15080	54550	-0.04	567	39660	70	310	4.7	45	2.8	3	0.8	13070	5.9	21900	27	0.3
56-	42.0322-	107.3408-	2-	15-	0-	W15081	82290	-0.04	526	19280	60	-57	8.1	58	5.3	4	0.8	22965	3.5	20210	24	0.2
56-	42.7692-	106.3150-	2-	11-	0-	W15082	33780	-0.02	331	7765	59	-58	2.5	32	1.4	2	0.7	9065	16.3	13570	18	0.3
56-	42.7508-	106.3328-	2-	11-	0-	W15083	53110	-0.03	573	7323	57	108	6.4	98	2.5	7	0.9	15580	10.2	17650	24	0.3
56-	42.6989-	106.2769-	2-	15-	0-	W15084	52190	-0.05	531	31640	56	-65	8.3	58	3.1	4	0.8	20785	9.5	20270	19	0.3
56-	42.7011-	106.3553-	2-	15-	0-	W15085	33930	-0.02	411	23790	38	-51	4.0	36	1.7	3	0.5	9840	11.0	14230	14	0.2
56-	42.0689-	107.3947-	2-	15-	0-	W15086	55040	-0.02	327	11470	58	-58	4.5	39	3.0	3	0.7	14810	5.6	16180	21	0.2
56-	42.0258-	107.3767-	2-	15-	0-	W15087	65120	-0.03	565	18810	52	302	4.9	37	2.9	3	0.7	14770	4.7	18790	19	0.2
56-	42.0608-	107.3703-	2-	15-	0-	W15088	69780	-0.05	561	12470	77	-51	6.8	55	4.4	4	0.9	21455	5.9	24530	25	0.3
56-	42.0936-	107.2906-	2-	11-	0-	W15089	39070	-0.02	545	65830	52	-83	1.4	12	0.7	2	0.2	5960	6.8	13490	23	0.1
56-	42.0892-	107.2783-	2-	15-	0-	W15090	41130	-0.02	412	10870	76	-71	1.6	15	0.8	2	0.3	5590	9.9	14820	28	0.2
56-	42.0881-	107.2725-	2-	11-	0-	W15091	34150	-0.02	553	114400	35	-77	1.5	8	2.1	2	0.2	4127	5.3	13350	13	0.1
56-	42.2325-	107.6550-	2-	15-	0-	W15093	60240	-0.05	510	8825	556	-82	6.2	54	-0.9	16	1.4	18210	57.3	19580	218	1.1
56-	42.2458-	107.6725-	2-	11-	0-	W15094	44010	-0.03	437	13370	62	-85	3.7	25	1.2	3	0.5	6370	6.7	16910	25	0.2
56-	42.2544-	107.6919-	2-	15-	0-	W15095	53680	-0.02	390	7813	67	-80	4.8	30	1.9	2	0.6	12125	7.5	18790	23	0.2
56-	42.3722-	107.6908-	2-	12-	0-	W15096	63100	-0.02	402	5249	75	-82	4.0	16	1.9	5	0.4	9200	9.3	24840	26	0.3
56-	42.2628-	107.8014-	2-	15-	0-	W15097	72750	-0.05	523	6618	141	-78	4.8	28	2.0	6	0.8	15310	11.9	21860	54	0.4
56-	42.2544-	107.8736-	2-	15-	0-	W15098	67300	-0.03	546	6141	85	-83	5.6	32	2.4	5	0.6	15310	7.3	21300	31	0.3
56-	42.3547-	107.8172-	2-	11-	0-	W15099	63260	-0.03	237	13870	105	-100	3.2	27	1.7	3	0.4	10370	5.4	17640	50	0.4
56-	42.3025-	107.7353-	2-	12-	0-	W15100	53850	-0.04	337	7595	1091	-85	3.0	19	-0.6	55	1.4	10030	58.3	23360	361	2.4
56-	42.3478-	107.8614-	2-	12-	0-	W15101	53890	-0.04	532	8752	305	-75	3.4	29	-0.7	9	0.8	8710	25.5	22700	115	0.6
56-	42.3322-	107.8661-	2-	12-	0-	W15102	62670	-0.03	495	15040	115	-84	1.7	11	0.8	7	0.5	6770	13.3	25860	46	0.4
56-	42.3342-	107.8700-	2-	11-	0-	W15103	49890	-0.02	374	4969	84	-82	1.2	13	0.9	2	0.3	4471	13.9	23000	32	0.4
56-	42.3403-	107.8728-	2-	15-	0-	W15104	66840	-0.02	496	6246	64	-76	3.1	16	0.9	4	0.3	9200	5.9	21890	24	0.2
56-	42.3167-	107.8408-	2-	12-	0-	W15105	52610	-0.04	502	14410	197	-76	3.2	40	-0.7	8	0.9	10575	25.4	23500	76	0.7
56-	42.3258-	107.8431-	2-	15-	0-	W15106	50010	-0.03	603	10070	193	-80	4.6	42	1.1	8	0.7	14085	20.7	16660	75	0.4
56-	42.3022-	107.8372-	2-	15-	0-	W15107	57060	-0.02	378	6322	91	-86	3.5	20	1.5	2	0.5	9840	10.5	18500	32	0.3
56-	42.3033-	107.8428-	2-	15-	0-	W15108	49350	-0.02	351	109600	40	-91	2.1	11	1.0	2	0.3	7845	4.3	13760	15	0.1
56-	42.2847-	107.8519-	2-	15-	0-	W15109	64660	-0.04	542	5736	93	-79	5.0	29	1.8	4	0.7	13430	11.0	20870	34	0.3
56-	42.2833-	107.8067-	2-	15-	0-	W15110	74120	-0.03	642	8918	58	-74	4.4	29	2.3	4	0.6	15835	6.6	15880	24	0.2
56-	42.5558-	107.8478-	2-	15-	0-	W15111	37390	-0.03	-124	17210	260	-92	17.5	114	1.1	4	1.3	82550	43.7	8451	100	0.6
56-	42.5231-	107.8556-	2-	15-	0-	W15112	54400	-0.02	591	16370	62	-71	4.6	33	1.3	3	0.7	15510	10.6	16790	22	0.2
56-	42.5286-	107.8400-	2-	15-	0-	W15113	53870	-0.04	650	17860	70	131	5.0	41	1.3	3	1.0	16715	13.3	15980	28	0.2
56-	42.5769-	107.7808-	2-	15-	0-	W15114	49400	-0.03	479	24820	113	-85	10.4	64	1.2	4	0.9	41370	21.7	11470	45	0.3
56-	42.6186-	107.7578-	2-	15-	0-	W15115	58900	-0.03	521	15770	60	-88	6.5	49	2.6	3	0.8	17930	7.6	15580	21	0.2
56-	42.5272-	107.7683-	2-	15-	0-	W15116	53330	-0.02	603	10320	85	-70	3.5	21	0.8	4	0.5	11370	12.2	21570	30	0.3
56-	42.3003-	107.6769-	2-	15-	0-	W15118	67980	-0.05	513	6056	167	-82	5.1	35	2.0	7	0.8	14010	16.4	25730	63	0.4
56-	42.3697-	107.7283-	2-	15-	0-	W15119	64920	0.18	471	11700	164	-86	4.5	30	1.5	10	0.7	13810	15.1	16280	63	0.5
56-	42.2853-	107.7325-	2-	12-	0-	W15120	64550	-0.03	605	9586	116	-100	3.9	20	1.3	4	0.5	9490	8.6	27390	40	0.3
56-	42.2836-	107.7344-	2-	12-	0-	W15121	69660	-0.03	517	7994	96	-77	4.0	19	1.6	5	0.5	11750	6.6	24470	33	0.3
56-	42.2744-	107.7208-	2-	15-	0-	W15122	66150	-0.04	462	5605	89	-83	4.2	20	1.4	4	0.6	10485	8.5	27420	34	0.3
56-	42.2719-	107.7061-	2-	12-	0-	W15123	67620	-0.03	576	8819	117	-96	4.7	24	2.2	5	0.6	11300	9.1	23700	45	0.3
56-	42.2906-	107.6825-	2-	12-	0-	W15126	61450	0.41	413	7613	296	135	3.7	20	-0.9	11	0.8	7413	20.0	26870	181	0.9
56-	42.3292-	107.6397-	2-	12-	0-	W15127	59090	-0.08	591	10170	372	-129	7.4	35	1.6	12	1.4	7814	21.3	17450	228	0.9
56-	42.2369-	107.7069-	2-	15-	0-	W15128	51360	-0.10	367	4773	1134	-82	6.7	34	-1.4	24	1.9	8859	63.5	24650	753	1.8
56-	42.2217-	107.7469-	2-	15-	0-	W15129	60770	-0.06	560	7367	89	-77	8.4	22	1.6	5	0.7	7872	8.7	21940	56	0.4
56-	42.2072-	107.7192-	2-	15-	0-	W15130	64630	-0.06	589	8076	152	-81	6.0	39	2.0	5	0.9	11460	13.9	22510	95	0.4
56-	42.1917-	107.7103-	2-	15-	0-	W15131	65770	-0.07	547	7125	102	-89	6.8	31	2.1	5	0.7	9898	7.0	23550	53	0.4
56-	42.1606-	107.0769-	2-	11-	0-	W15132	35720	-0.11	450	26750	38	-98	11.9	33	-1.7	-1	0.9	28870	4.5	14100	27	0.1

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

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
56-42.0275-107.1664-2-15-						0-W15078	17460	186	6146	57	-1	4.8	3.2	-173		-1	8.1	1815	55	2.0	64	0.365
56-42.0342-107.2111-2-15-						0-W15079	9460	285	9546	49	-1	3.9	5.3	-192	1	1	18.1	3571	54	3.4	45	0.281
56-42.0703-107.2994-2-15-						0-W15080	26320	268	14640	71	-1	5.1	6.3	517	-1	-1	19.8	2187	54	3.4	-49	0.452
56-42.0322-107.3408-2-15-						0-W15081	22300	384	4166	89	-1	8.6	4.4	-255	-1	-1	13.9	3305	140	2.4	88	0.276
56-42.7692-106.3150-2-11-						0-W15082	5701	109	7448	61	-1	3.6	3.6	-164		-1	11.6	1966	54	3.4	23	0.410
56-42.7508-106.3328-2-11-						0-W15083	16320	266	10020	80	-1	5.8	6.0	-219	1	2	11.1	4317	73	3.4	-11	0.541
56-42.6989-106.2769-2-15-						0-W15084	23050	421	9293	85	-1	7.4	4.8	-234		-1	11.0	3508	62	3.4	82	0.229
56-42.7011-106.3553-2-15-						0-W15085	16680	288	5037	47	-1	3.4	2.5	-203		-1	7.8	2574	43	1.9	35	0.333
56-42.0689-107.3947-2-15-						0-W15086	12070	211	6468	94	-1	6.0	3.7	-183		2	14.1	1988	69	2.3	75	0.265
56-42.0258-107.3767-2-15-						0-W15087	18670	312	6504	73	1	5.5	4.2	-216		-1	10.8	3463	89	2.1	55	0.341
56-42.0608-107.3703-2-15-						0-W15088	16300	328	5630	105	-2	8.1	5.8	-204	-1	-1	19.2	3162	89	3.6	121	0.176
56-42.0936-107.2906-2-11-						0-W15089	13060	167	12520	44	-1	2.1	3.9	440		-1	13.7	1525	23	1.4	61	1.230
56-42.0892-107.2783-2-15-						0-W15090	-2754	154	14490	57	-1	2.6	4.0	-181		1	22.3	1409	18	2.2	23	0.152
56-42.0881-107.2725-2-11-						0-W15091	8845	328	11760	-9	3	1.6	2.4	581		-1	7.5	1238	20	1.5	24	1.016
56-42.2325-107.6550-2-15-						0-W15093	7914	480	18560	83	-2	6.3	47.4	-253	-1	5	249.0	5058	53	12.1	56	0.064
56-42.2458-107.6725-2-11-						0-W15094	6618	125	11980	47	-1	2.9	4.3	-256	-1	-1	18.3	2488	34	2.0	29	0.387
56-42.2544-107.6919-2-15-						0-W15095	9038	334	13610	92	-1	4.7	3.6	-231		-1	17.2	1787	32	3.1	50	0.291
56-42.3722-107.6908-2-12-						0-W15096	7744	287	20120	102	-1	2.9	5.7	-236		-1	26.0	1944	27	3.7	36	0.245
56-42.2628-107.8014-2-15-						0-W15097	9034	242	19290	105	-1	5.9	12.1	-223	-1	-1	58.6	1889	35	6.4	-30	0.134
56-42.2544-107.8736-2-15-						0-W15098	10120	322	14290	91	-1	5.4	6.7	-267	-1	1	28.5	2368	45	3.4	49	0.251
56-42.3547-107.8172-2-11-						0-W15099	-3939	343	13930	113	-1	4.4	9.1	-289	1	-1	35.3	-672	27	3.1	-17	2.561
56-42.3025-107.7353-2-12-						0-W15100	-3396	496	18550	76	-1	4.6	66.9	-271	-1	14	239.4	4556	35	24.2	-17	0.149
56-42.3478-107.8614-2-12-						0-W15101	-3000	306	19580	85	-1	3.9	24.0	-216	-1	3	129.6	2225	29	9.7	40	0.066
56-42.3322-107.8661-2-12-						0-W15102	-3428	96	18300	104	-1	2.8	7.9	-228	-1	2	45.2	1078	18	5.2	26	0.312
56-42.3342-107.8700-2-11-						0-W15103	-3241	72	19420	93	-1	2.1	4.9	-191		1	31.1	1047	17	4.2	29	0.261
56-42.3403-107.8728-2-15-						0-W15104	7607	238	17690	84	-1	3.1	5.3	-223		-1	24.6	1956	34	2.7	39	0.406
56-42.3167-107.8408-2-12-						0-W15105	5326	358	19150	94	-1	6.6	16.1	-224	-1	3	81.4	3174	29	9.9	66	0.095
56-42.3258-107.8431-2-15-						0-W15106	5968	395	15220	64	-1	4.4	12.6	-257		2	66.7	3362	45	5.4	40	0.115
56-42.3022-107.8372-2-15-						0-W15107	-3373	236	17220	95	-1	3.9	5.8	-227		-1	28.6	1670	29	3.4	-17	0.269
56-42.3033-107.8428-2-15-						0-W15108	6338	402	12310	49	-1	2.2	2.4	616		-1	12.9	2059	19	1.4	-13	0.460
56-42.2847-107.8519-2-15-						0-W15109	6902	253	19170	117	-1	4.9	7.8	-225	-1	-1	34.5	1998	35	4.2	69	0.200
56-42.2833-107.8067-2-15-						0-W15110	10750	259	10100	86	-1	4.8	4.1	-247	-1	-1	16.9	2571	45	1.8	47	0.463
56-42.5558-107.8478-2-15-						0-W15111	9797	891	10310	-24	-1	10.6	12.2	-312	1	3	58.8	9107	280	6.3	102	0.139
56-42.5231-107.8556-2-15-						0-W15112	7462	408	14870	41	-1	4.3	4.1	-225		-1	12.1	3347	65	2.0	47	0.251
56-42.5286-107.8400-2-15-						0-W15113	7321	324	16170	53	-1	4.9	5.9	301		-1	14.4	2784	55	3.8	73	0.190
56-42.5769-107.7808-2-15-						0-W15114	12710	662	13780	54	-1	7.3	6.4	435	1	2	22.4	6061	170	3.1	72	0.211
56-42.6186-107.7578-2-15-						0-W15115	21200	496	11130	57	-1	6.1	4.1	-318		-1	11.7	3215	65	1.3	-28	0.326
56-42.5272-107.7683-2-15-						0-W15116	6997	294	16490	57	-1	3.1	5.9	-209		2	24.8	2425	49	2.5	23	0.231
56-42.3003-107.6769-2-15-						0-W15118	7551	280	20380	125	-1	5.4	14.0	-240	-1	2	71.9	2462	38	5.1	64	0.105
56-42.3697-107.7283-2-15-						0-W15119	6501	266	15490	83	-1	5.4	12.6	-264	-1	3	60.6	2865	47	6.7	44	0.145
56-42.2853-107.7325-2-12-						0-W15120	-4130	257	16990	109	-1	4.2	7.3	-300	-1	-1	38.0	1693	26	2.6	-36	0.599
56-42.2836-107.7344-2-12-						0-W15121	8654	155	15680	99	-1	4.4	6.1	-220		-1	27.8	2572	42	2.9	40	0.619
56-42.2744-107.7208-2-15-						0-W15122	-3388	277	21880	116	-1	3.6	7.3	-239	-1	1	37.0	1604	24	3.2	-39	0.212
56-42.2719-107.7061-2-12-						0-W15123	7588	264	18850	97	-1	4.5	8.3	-289	-1	-1	38.3	2069	39	2.7	44	0.310
56-42.2906-107.6825-2-12-						0-W15126	5487	297	21750	54	-2	4.4	17.4	-255	1	2	108.0	2481	26	7.3	45	0.084
56-42.3292-107.6397-2-12-						0-W15127	-5022	1089	16700	40	-2	3.7	32.3	-484	-1	1	136.2	-1136	31	6.1	-30	0.184
56-42.2369-107.7069-2-15-						0-W15128	-3408	357	13310	71	-3	5.3	76.0	-273	-1	5	419.8	3596	29	20.6	70	0.045
56-42.2217-107.7469-2-15-						0-W15129	6419	320	17140	40	-2	4.2	6.2	-236	-1	1	27.9	2463	35	4.3	59	0.169
56-42.2072-107.7192-2-15-						0-W15130	8136	323	18620	56	-2	6.1	8.3	-241	-1	-1	50.8	2718	43	4.6	61	0.105
56-42.1917-107.7103-2-15-						0-W15131	9900	363	15840	54	-2	5.1	7.2	-297	-1	-1	29.8	2828	45	5.3	37	0.176
56-42.1606-107.0769-2-11-						0-W15132	10000	651	9239	-31	-3	4.2	2.5	-395	-1	-1	7.1	-928	36	-2.2	-42	0.215

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																									U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED		AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
							DATE	HOUR																									
56-42.1419-107.0244-2-15-						0-W15133-09/15/77-14-			18-	-	-	-	-	-	-	5-1-1-	-	-	-1-	-	-4-4-3-2-	-1-	-	-	-	-	1.91
56-42.1572-107.0356-2-11-						0-W15134-09/15/77-14-			17-	9.0-	-	-	6.8-	330-	-	7-1-6-5-6-	-	-	-4-2-5-2-	-1-	-	-	-	-	-	-	2.09
56-42.1578-107.0514-2-11-						0-W15135-09/15/77-15-			19-	11.0-	-	-	6.9-	349-	-	9-1-6-5-8-	-	-	-4-3-5-2-	-1-	-	-	-	-	-	-	2.82
56-42.1678-107.0378-2-11-						0-W15136-09/15/77-18-			20-	10.5-	-	-	6.7-	250-	-	2-2-5-5-6-3-2-	-	-4-4-4-2-	-2-	-	-	-	-	-	-	-	2.88
56-42.1881-107.0094-2-11-						0-W15137-09/15/77-14-			17-	9.0-	-	-	6.4-	90-	-	7-1-1-5-8-	-	-	-4-3-5-3-	-1-	-	-	-	-	-	-	3.11
56-42.2836-107.8014-2-15-						0-W15138-09/12/77-17-			16-	-	-	-	-	-	-	9-4-	-4-1-	-	-4-2-2-2-	-1-	-	-	-	-	-	-	7.09
56-42.2897-107.7981-2-15-						0-W15139-09/12/77-17-			15-	-	-	-	-	-	-	11-4-	-4-1-	-	-3-2-2-2-	-1-	-	-	-	-	-	-	11.01
56-42.2272-107.0319-2-15-						0-W15140-09/15/77-18-			18-	-	-	-	-	-	-	11-3-6-4-1-	-1-	-	-4-2-3-3-	-1-	-	-	-	-	-	-	2.67
56-42.1928-107.0811-2-12-						0-W15141-09/15/77-18-			19-	9.0-	-	-	6.9-	470-	-	13-3-3-5-6-2-2-1-	-4-3-3-2-	-1-	-	-	-	-	-	-	2.78		
56-42.2189-107.4250-2-15-						0-W15142-09/15/77-10-			19-	-	-	-	-	-	-	11-1-1-4-1-	-	-	-3-2-2-1-	-1-	-	-	-	-	-	-	3.50		
56-42.2025-107.3906-2-15-						0-W15143-09/16/77-10-			20-	-	-	-	-	-	-	9-1-1-4-1-	-	-	-4-2-2-1-	-1-	-	-	-	-	-	-	3.03		
56-42.1636-107.4106-2-15-						0-W15145-09/16/77-12-			21-	-	-	-	-	-	-	7-1-1-4-1-	-	-	-3-2-1-2-	-1-	-	-	-	-	-	-	4.60		
56-42.1672-107.4200-2-15-						0-W15146-09/16/77-12-			19-	-	-	-	-	-	-	7-1-1-4-1-	-1-	-	-3-2-2-	-1-	-	-	-	-	-	-	4.78		
56-42.1569-107.4403-2-15-						0-W15147-09/16/77-12-			20-	-	-	-	-	-	-	6-1-1-4-1-	-1-	-	-4-2-2-2-	-1-	-	-	-	-	-	-	3.66		
56-42.1508-107.4886-2-15-						0-W15148-09/16/77-13-			20-	-	-	-	-	-	-	16-1-2-4-1-	-1-	-	-3-2-1-2-	-1-	-	-	-	-	-	-	3.74		
56-42.1928-107.4339-2-15-						0-W15149-09/16/77-	-		23-	-	-	-	-	-	-	13-4-	-4-1-	-1-	-4-2-1-2-	-1-	-	-	-	-	-	-	6.36		
56-42.2461-107.4417-2-15-						0-W15150-09/16/77-15-			22-	-	-	-	-	-	-	10-1-1-4-1-	-1-	-	-3-	-2-2-	-1-	-	-	-	-	-	-	3.33		
56-42.2917-107.4586-2-15-						0-W15151-09/16/77-15-			22-	-	-	-	-	-	-	11-1-1-4-1-	-1-	-	-4-2-2-2-	-1-	-	-	-	-	-	-	3.08		
56-42.1322-107.7106-2-15-						0-W15152-09/16/77-	-		23-	-	-	-	-	-	-	27-4-	-4-1-	-1-	-4-2-2-2-	-1-	-	-	-	-	-	-	6.18		
56-42.0006-106.0100-2-15-						0-W15153-09/22/77-13-			22-	-	-	-	-	-	-	16-1-6-5-7-	-1-	-	-4-3-2-3-	-1-	-	-	-	-	-	-	3.84		
56-42.0503-106.0181-2-15-						0-W15155-09/22/77-14-			19-	-	-	-	-	-	-	16-1-6-5-7-	-1-	-2-4-2-1-3-	-1-	-	-	-	-	-	-	3.99		
56-42.0194-106.4072-2-15-						0-W15156-09/22/77-11-			21-	-	-	-	-	-	-	13-1-6-4-6-	-	-	-2-3-3-2-2-	-1-	-	-	-	-	-	-	3.92		
56-42.0269-106.3986-2-15-						0-W15157-09/22/77-11-			21-	-	-	-	-	-	-	22-1-6-4-6-	-	-	-2-3-3-2-2-	-1-	-	-	-	-	-	-	4.01		
56-42.0117-106.4392-2-15-						0-W15158-09/22/77-13-			21-	-	-	-	-	-	-	15-1-3-4-6-	-	-	-2-3-3-2-2-	-1-	-	-	-	-	-	-	2.44		
56-42.0781-106.5928-2-12-						0-W15160-09/21/77-17-			12-	14.0-	-	-	6.1-	300-	-	22-1-6-3-6-4-3-1-1-4-3-4-2-	-1-	-	-	-	-	-	-	-	3.28		
56-42.0286-107.3361-2-15-						0-W15161-09/18/77-11-			16-	-	-	-	-	-	-	18-1-1-5-6-	-1-	-	-3-3-1-1-	-1-	-	-	-	-	-	-	3.94		
56-42.1258-107.7400-2-15-						0-W15162-09/16/77-18-			21-	-	-	-	-	-	-	18-4-	-4-1-	-1-	-3-2-1-2-	-1-	-	-	-	-	-	-	9.62		
56-42.1939-107.6469-2-99-						0-W15163-09/16/77-16-			21-	-C-	-	-	-	-	-	11-1-3-4-6-	-	-	-4-2-4-3-	-1-	-	-	-	-	-	-	5.34		
56-42.2233-107.6411-2-15-						0-W15164-09/16/77-17-			19-	-	-	-	-	-	-	18-1-1-4-1-	-	-	-4-2-4-3-	-1-	-	-	-	-	-	-	13.37		
56-42.0544-106.3964-2-15-						0-W15166-09/16/77-	-		15-	-	-	-	-	-	-	12-1-4-4-4-	-	-	-4-2-2-2-	-1-	-	-	-	-	-	-	2.52		
56-42.0097-106.3736-2-15-						0-W15167-09/21/77-11-			17-	-	-	-	-	-	-	11-4-	-4-6-	-	-3-2-3-2-	-1-	-	-	-	-	-	-	3.20		
56-42.0108-106.2842-2-15-						0-W15168-09/21/77-12-			18-	-	-	-	-	-	-	20-4-	-4-6-	-	-3-2-2-2-	-1-	-	-	-	-	-	-	4.79		
56-42.0233-106.2911-2-15-						0-W15169-09/21/77-13-			18-	-	-	-	-	-	-	9-1-1-4-6-	-	-	-3-2-3-2-	-1-	-	-	-	-	-	-	3.23		
56-42.0217-106.2964-2-15-						0-W15170-09/21/77-13-			18-	-	-	-	-	-	-	13-1-1-4-6-	-	-	-3-2-3-2-	-1-	-	-	-	-	-	-	3.69		
56-42.0383-106.2964-2-15-						0-W15171-09/21/77-15-			18-	-	-	-	-	-	-	5-1-1-4-4-	-	-	-4-3-3-2-	-1-	-	-	-	-	-	-	3.38		
56-42.0408-106.3447-2-15-						0-W15173-09/21/77-16-			17-	-	-	-	-	-	-	13-1-4-4-4-	-	-	-4-3-4-2-	-1-	-	-	-	-	-	-	2.58		
56-42.4611-106.4361-2-15-						0-W15174-09/22/77-13-			28-	-	-	-	-	-	-	29-1-1-4-1-	-	-	-3-2-4-2-	-1-	-	-	-	-	-	-	3.61		
56-42.4739-106.4444-2-15-						0-W15175-09/22/77-13-			21-	-	-	-	-	-	-	27-1-1-4-1-	-	-	-3-2-4-2-	-1-	-	-	-	-	-	-	4.37		
56-42.0433-106.0700-2-15-						0-W15177-09/24/77-13-			17-	-	-	-	-	-	-	9-1-6-5-6-	-1-	-2-4-2-2-2-	-1-	-	-	-	-	-	-	3.42		
56-42.1064-106.0394-2-12-						0-W15179-09/22/77-15-			18-	12.5-	-	-	7.8-	800-	-	11-1-6-4-6-2-2-1-2-4-2-2-3-	-1-	-	-	-	-	-	3.73			
56-42.1144-106.0294-2-15-						0-W15180-09/22/77-16-			18-	-	-	-	-	-	-	13-1-6-5-6-	-1-	-2-4-2-2-3-	-1-	-	-	-	-	-	-	3.85		
56-42.0983-106.0522-2-15-						0-W15181-09/22/77-16-			17-	-	-	-	-	-	-	13-1-6-4-6-	-1-	-2-4-3-2-3-	-1-	-	-	-	-	-	-	4.15		
56-42.0978-106.0958-2-15-						0-W15182-09/22/77-17-			17-	-	-	-	-	-	-	13-1-6-5-6-	-1-	-2-4-2-2-3-	-1-	-	-	-	-	-	-	2.44		
56-42.1083-106.0869-2-15-						0-W15183-09/22/77-17-			16-	-	-	-	-	-	-	13-1-6-4-6-	-1-	-2-4-2-2-3-	-1-	-	-	-	-	-	-	5.21		
56-42.0558-106.0656-2-15-						0-W15184-09/24/77-14-			17-	-	-	-	-	-	-	13-1-7-5-7-	-1-	-	-3-3-2-2-	-1-	-	-	-	-	-	-	2.68		
56-42.0711-106.0650-2-15-						0-W15185-09/24/77-14-			17-	-	-	-	-	-	-	18-1-7-4-6-	-1-	-2-4-2-2-2-	-1-	-	-	-	-	-	-	4.87		
56-42.0114-106.4911-2-15-						0-W15186-09/22/77-13-			21-	-	-	-	-	-	-	20-1-6-4-6-	-	-	-2-3-3-4-1-	-1-	-	-	-	-	-	-	3.83		
56-42.0647-106.4622-2-12-						0-W15187-09/22/77-13-			18-	1.4-	-	-	6.9-	1400-	-	18-1-6-1-7-2-2-3-1-3-2-4-3-	-1-	-	-	-	-	3.25				
56-42.0372-106.4431-2-11-						0-W15188-09/22/77-14-			18-	13.0-	-	-	7.4-	1400-	-	-1-6-6-8-1-2-2-1-3-2-4-3-	-1-	-	-	-	-	2.20				
56-42.0614-106.4042-2-11-						0-W15189-09/22/77-15-			18-	12.0-	-	-	6.9-	1200-	-	11-1-6-	-	-4-3-1-1-4-3-	-3-	-1-	-	-	-	-	-	5.03		
56-42.0928-106.3828-2-15-						0-W15190-09/22/77-16-			18-	-	-	-	-	-	-	15-1-6-4-6-	-	-	-2-3-2-2-3-	-1-	-	-	-	-	-	-	2.80		

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

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE (Concentrations reported in weight parts per million (ppm))									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY (Concentrations in weight ppm)	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
56-42.1419-107.0244-2-15-						0-W15133	-5	-5	-5	12	-20	-15	-5	-10	-15	2	20
56-42.1572-107.0356-2-11-						0-W15134	-5	-5	-5	29	-20	-15	7	-10	-15	2	15
56-42.1578-107.0514-2-11-						0-W15135	-5	-5	-5	54	-20	105	20	-10	-15	2	29
56-42.1678-107.0378-2-11-						0-W15136	-5	-5	-5	142	-20	48	18	-10	-15	2	19
56-42.1881-107.0094-2-11-						0-W15137	-5	-5	-5	20	-20	19	10	-10	-15	2	24
56-42.2836-107.8014-2-15-						0-W15138	-5	-5	-5	11	-20	-15	22	-10	-15	3	33
56-42.2897-107.7981-2-15-						0-W15139	-5	-5	-5	15	-20	-15	22	-10	-15	2	33
56-42.2272-107.0319-2-15-						0-W15140	-5	-5	-5	15	-20	-15	15	-10	-15	2	24
56-42.1928-107.0811-2-12-						0-W15141	-5	-5	-5	23	-20	-15	10	-10	-15	2	32
56-42.2189-107.4250-2-15-						0-W15142	-5	-5	-5	30	-20	15	18	-10	-15	3	38
56-42.2025-107.3906-2-15-						0-W15143	-5	-5	-5	15	-20	-15	11	-10	-15	2	61
56-42.1636-107.4106-2-15-						0-W15145	-5	-5	-5	-10	-20	-15	-5	-10	-15	2	38
56-42.1672-107.4200-2-15-						0-W15146	-5	-5	-5	27	-20	-15	9	-10	-15	2	45
56-42.1569-107.4403-2-15-						0-W15147	-5	-5	-5	18	-20	-15	13	-10	-15	2	50
56-42.1508-107.4886-2-15-						0-W15148	-5	-5	-5	19	-20	-15	16	-10	-15	3	34
56-42.1928-107.4339-2-15-						0-W15149	-5	-5	-5	16	-20	-15	17	-10	-15	3	46
56-42.2461-107.4417-2-15-						0-W15150	-5	-5	-5	33	-20	20	11	-10	-15	3	44
56-42.2917-107.4586-2-15-						0-W15151	-5	-5	-5	16	-20	-15	6	-10	-15	2	35
56-42.1322-107.7106-2-15-						0-W15152	-5	-5	-5	21	-20	-15	28	-10	-15	3	34
56-42.0006-106.0100-2-15-						0-W15153	-5	-5	-5	18	-20	-15	11	-10	-15	2	39
56-42.0503-106.0181-2-15-						0-W15155	-5	-5	-5	25	-20	-15	16	-10	-15	2	36
56-42.0194-106.4072-2-15-						0-W15156	-5	-5	-5	19	-20	-15	-5	-10	-15	2	32
56-42.0269-106.3986-2-15-						0-W15157	-5	-5	-5	14	-20	18	12	-10	-15	2	29
56-42.0117-106.4392-2-15-						0-W15158	-5	-5	-5	14	-20	-15	-5	-10	-15	1	6
56-42.0781-106.5928-2-12-						0-W15160	-5	-5	-5	10	-20	-15	-5	-10	-15	1	12
56-42.0286-107.3361-2-15-						0-W15161	-5	-5	-5	28	-20	24	24	-10	-15	2	34
56-42.1258-107.7400-2-15-						0-W15162	-5	-5	-5	18	-20	-15	22	-10	-15	2	36
56-42.1939-107.6469-2-99-						0-W15163	-5	-5	-5	14	-20	-15	27	-10	-15	2	43
56-42.2233-107.6411-2-15-						0-W15164	-5	-5	-5	13	-20	-15	21	-10	-15	2	21
56-42.0544-106.3964-2-15-						0-W15166	-5	-5	-5	28	-20	-15	7	-10	-15	2	45
56-42.0097-106.3736-2-15-						0-W15167	-5	-5	-5	18	-20	15	12	-10	-15	2	44
56-42.0108-106.2842-2-15-						0-W15168	-5	-5	-5	34	-20	50	15	-10	-15	2	50
56-42.0233-106.2911-2-15-						0-W15169	-5	-5	-5	19	-20	-15	-5	-10	-15	2	34
56-42.0217-106.2964-2-15-						0-W15170	-5	-5	-5	18	-20	-15	-5	-10	-15	2	24
56-42.0383-106.2964-2-15-						0-W15171	-5	-5	-5	16	-20	-15	6	-10	-15	2	38
56-42.0408-106.3447-2-15-						0-W15173	-5	-5	-5	26	-20	-15	-5	-10	-15	2	61
56-42.4611-106.4361-2-15-						0-W15174	-5	-5	-5	17	-20	15	9	-10	-15	2	55
56-42.4739-106.4444-2-15-						0-W15175	-5	-5	-5	21	-20	-15	18	-10	-15	2	35
56-42.0433-106.0700-2-15-						0-W15177	-5	-5	-5	22	-20	-15	10	-10	-15	2	67
56-42.1064-106.0394-2-12-						0-W15179	-5	-5	-5	14	-20	16	5	-10	-15	1	23
56-42.1144-106.0294-2-15-						0-W15180	-5	5	-5	15	-20	-15	6	-10	-15	2	45
56-42.0983-106.0522-2-15-						0-W15181	-5	-5	-5	24	-20	16	7	-10	-15	2	64
56-42.0978-106.0958-2-15-						0-W15182	-5	-5	-5	17	-20	22	6	-10	-15	2	32
56-42.1083-106.0869-2-15-						0-W15183	-5	-5	-5	23	-20	24	18	-10	-15	2	36
56-42.0558-106.0656-2-15-						0-W15184	-5	-5	-5	24	-20	18	14	-10	-15	2	41
56-42.0711-106.0650-2-15-						0-W15185	-5	5	-5	16	-20	29	11	-10	-15	1	32
56-42.0114-106.4911-2-15-						0-W15186	-5	-5	-5	25	-20	-15	8	-10	-15	2	32
56-42.0647-106.4622-2-12-						0-W15187	-5	-5	-5	27	-20	-15	9	-10	-15	2	28
56-42.0372-106.4431-2-11-						0-W15188	-5	-5	-5	19	-20	-15	6	-10	-15	1	28
56-42.0614-106.4042-2-11-						0-W15189	-5	-5	-5	15	-20	-15	-5	-10	-15	-1	30
56-42.0928-106.3828-2-15-						0-W15190	-5	-5	-5	24	-20	-15	8	-10	-15	2	67

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
56-42.1419-107.0244-2-15-						0-W15133	40120	-0.05	410	8365	38	-58	7.9	26	1.7	2	0.5	7194	4.3	15440	20	0.2
56-42.1572-107.0356-2-11-						0-W15134	47080	-0.07	465	7273	54	103	6.6	81	3.0	3	0.8	54480	7.8	14090	36	0.4
56-42.1578-107.0514-2-11-						0-W15135	56630	-0.09	507	17860	53	-80	10.4	158	2.2	3	0.8	12630	5.2	15850	31	0.2
56-42.1678-107.0378-2-11-						0-W15136	47060	0.64	321	10520	48	-86	14.2	161	3.0	2	0.8	14450	9.9	14640	40	0.2
56-42.1881-107.0094-2-11-						0-W15137	53170	-0.08	597	17060	41	-83	11.2	42	1.5	4	0.8	11140	7.5	16510	25	0.4
56-42.2836-107.8014-2-15-						0-W15138	73120	-0.06	671	7206	95	125	4.7	24	2.0	5	0.6	10820	7.8	21680	63	0.3
56-42.2897-107.7981-2-15-						0-W15139	60070	-0.07	501	10720	623	-84	10.2	77	4.0	11	2.1	25970	44.7	20730	235	1.0
56-42.2272-107.0319-2-15-						0-W15140	49770	-0.05	570	11580	119	-69	7.9	44	2.0	3	1.5	23430	17.0	16170	41	0.3
56-42.1928-107.0811-2-12-						0-W15141	55120	-0.09	599	22020	102	-61	15.6	73	6.6	4	1.7	25070	12.4	16540	41	0.3
56-42.2189-107.4250-2-15-						0-W15142	59740	-0.06	607	7985	91	-71	12.4	62	5.9	4	1.3	16250	8.3	18900	31	0.3
56-42.2025-107.3906-2-15-						0-W15143	47530	-0.05	491	42730	84	102	7.8	44	4.3	2	1.3	14650	10.6	16660	30	0.3
56-42.1636-107.4106-2-15-						0-W15145	44330	-0.05	580	43160	121	-56	6.6	51	4.2	4	1.0	12410	18.1	16860	42	0.3
56-42.1672-107.4200-2-15-						0-W15146	50420	-0.08	623	56940	96	381	12.6	53	6.7	3	1.4	20710	11.5	19440	39	0.4
56-42.1569-107.4403-2-15-						0-W15147	60110	-0.05	603	22050	68	-72	9.7	45	4.2	3	1.0	13300	5.4	19840	28	0.2
56-42.1508-107.4886-2-15-						0-W15148	65080	-0.06	458	10430	109	-54	10.2	65	9.0	3	1.5	20450	9.8	18430	42	0.4
56-42.1928-107.4339-2-15-						0-W15149	64480	-0.08	465	20170	128	313	13.5	61	7.0	4	1.6	22600	14.0	19820	59	0.5
56-42.2461-107.4417-2-15-						0-W15150	59670	-0.06	512	6502	92	-64	13.1	52	6.6	4	1.3	16060	9.0	19380	33	0.4
56-42.2917-107.4586-2-15-						0-W15151	41390	-0.05	399	34640	80	-51	7.0	49	5.6	3	1.3	15990	13.7	15150	28	0.3
56-42.1322-107.7106-2-15-						0-W15152	69580	0.27	447	10230	229	-83	11.3	58	2.4	4	1.6	18340	13.3	16860	83	0.3
56-42.0006-106.0100-2-15-						0-W15153	57280	-0.08	540	5488	90	-48	12.4	66	7.9	4	1.5	22760	11.0	18160	34	0.4
56-42.0503-106.0181-2-15-						0-W15155	69970	-0.06	661	6970	82	-56	13.1	67	8.0	4	1.3	22130	7.9	20500	27	0.3
56-42.0194-106.4072-2-15-						0-W15156	50280	-0.06	506	18730	89	-50	8.6	65	5.9	3	1.4	19490	17.4	15680	34	0.4
56-42.0269-106.3986-2-15-						0-W15157	45730	-0.06	421	4409	82	-49	8.6	48	4.5	3	1.3	15920	14.1	13840	28	0.3
56-42.0117-106.4392-2-15-						0-W15158	15760	-0.05	327	1254	46	30	6.8	34	1.9	3	0.8	8252	21.6	5437	20	0.4
56-42.0781-106.5928-2-12-						0-W15160	25000	-0.04	322	25310	36	-41	7.3	28	1.7	2	0.9	7204	14.2	9028	15	0.2
56-42.0286-107.3361-2-15-						0-W15161	77850	-0.07	438	17720	116	-57	12.9	97	11.2	3	1.6	29530	8.8	22370	41	0.4
56-42.1258-107.7400-2-15-						0-W15162	71110	-0.07	426	10210	473	-79	12.1	59	2.8	7	1.7	19950	23.5	18890	169	0.5
56-42.1939-107.6469-2-99-						0-W15163	82580	-0.09	579	8685	157	-75	17.8	67	-2.0	4	2.0	28220	10.2	18930	77	0.3
56-42.2233-107.6411-2-15-						0-W15164	61710	-0.05	878	7484	432	-90	9.0	29	1.2	10	2.3	10940	35.8	20780	172	0.8
56-42.0544-106.3964-2-15-						0-W15166	50840	-0.07	383	44080	83	-68	12.6	70	5.8	3	1.4	23810	11.5	17750	31	0.3
56-42.0097-106.3736-2-15-						0-W15167	48710	-0.06	527	12960	87	-52	9.1	58	5.6	3	1.4	17710	11.5	14390	28	0.3
56-42.0108-106.2842-2-15-						0-W15168	59070	-0.11	913	38660	91	-54	19.1	94	9.7	4	1.8	32510	9.5	15080	39	0.4
56-42.0233-106.2911-2-15-						0-W15169	40030	-0.04	448	23600	55	-57	10.0	36	3.3	3	1.0	11540	10.6	10680	21	0.3
56-42.0217-106.2964-2-15-						0-W15170	48330	-0.06	450	22510	85	-51	7.7	56	5.6	3	1.2	17930	15.6	14570	28	0.3
56-42.0383-106.2964-2-15-						0-W15171	34490	-0.08	395	35220	33	232	8.7	29	2.2	2	0.7	10490	5.9	13560	28	0.2
56-42.0408-106.3447-2-15-						0-W15173	40050	-0.07	349	59520	39	231	10.0	37	1.8	4	0.7	9607	6.6	16580	23	0.3
56-42.4611-106.4361-2-15-						0-W15174	54320	-0.06	826	31980	62	79	5.6	48	3.1	4	0.9	15580	7.0	17540	44	0.3
56-42.4739-106.4444-2-15-						0-W15175	49370	-0.06	758	17470	60	-65	5.4	24	1.7	3	0.8	8313	7.1	16980	34	0.2
56-42.0433-106.0700-2-15-						0-W15177	43850	-0.09	967	53260	73	122	11.3	49	3.3	3	1.2	15280	10.3	15160	41	0.4
56-42.1064-106.0394-2-12-						0-W15179	29270	-0.05	872	50990	38	157	7.3	28	1.2	4	0.4	6542	6.7	11170	23	0.2
56-42.1144-106.0294-2-15-						0-W15180	48120	-0.06	553	42920	66	-58	5.5	40	2.5	4	0.9	13210	7.9	17110	32	0.4
56-42.0983-106.0522-2-15-						0-W15181	55520	-0.07	717	31850	50	85	7.3	46	3.5	3	0.8	12490	4.1	17280	30	0.3
56-42.0978-106.0958-2-15-						0-W15182	43680	-0.07	518	4465	53	-62	9.3	50	2.8	3	1.0	12620	7.9	15350	35	0.4
56-42.1083-106.0869-2-15-						0-W15183	45080	-0.06	3656	23960	110	-64	10.3	30	2.1	6	1.0	11040	9.4	16900	64	0.5
56-42.0558-106.0656-2-15-						0-W15184	62060	-0.07	827	10960	62	-50	6.8	71	5.1	4	0.9	18240	4.6	21890	33	0.3
56-42.0711-106.0650-2-15-						0-W15185	32790	-0.06	1527	24200	277	53	12.1	53	4.3	7	1.4	21130	16.0	11170	94	0.6
56-42.0114-106.4911-2-15-						0-W15186	48820	-0.08	607	8572	117	-53	13.4	66	5.6	4	1.8	24840	20.8	15920	48	0.5
56-42.0647-106.4622-2-12-						0-W15187	47240	-0.06	512	24160	73	-58	12.9	45	4.2	4	1.2	15620	12.0	14520	28	0.3
56-42.0372-106.4431-2-11-						0-W15188	43180	-0.06	581	34550	57	73	8.1	44	5.0	3	1.3	17120	9.9	14770	25	0.3
56-42.0614-106.4042-2-11-						0-W15189	30710	-0.05	352	54260	58	-49	6.0	48	3.5	3	1.0	9331	16.1	15250	19	0.3
56-42.0928-106.3828-2-15-						0-W15190	46430	-0.10	485	52480	76	-58	18.1	73	6.3	3	1.4	26270	9.8	22370	28	0.4

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

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)														U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
56-42.1419-107.0244-2-15-			0-	W	15133		12650	541	6751	32	-2	3.4	2.4	-248		-1	6.8	1761	48	2.1	-32	0.281
56-42.1572-107.0356-2-11-			0-	W	15134		15440	250	10170	44	-2	7.0	3.6	-216	-1	-1	12.8	2207	55	2.9	67	0.163
56-42.1578-107.0514-2-11-			0-	W	15135		27660	240	9215	-22	-3	7.0	2.8	-316	-1	-1	8.7	2994	68	3.0	-60	0.324
56-42.1678-107.0378-2-11-			0-	W	15136		16040	231	12980	58	-3	7.8	3.5	-281	-1	-1	11.6	2100	55	2.6	38	0.248
56-42.1881-107.0094-2-11-			0-	W	15137		13130	350	16230	32	-2	6.9	3.6	-269	-1	-1	11.3	2499	65	3.3	-26	0.275
56-42.2836-107.8014-2-15-			0-	W	15138		8987	215	14030	64	-2	6.0	5.5	-222	-1	-1	31.0	2184	33	3.1	38	0.229
56-42.2897-107.7981-2-15-			0-	W	15139		7156	431	16090	75	-2	12.5	28.1	-248	2	4	205.1	3489	65	5.8	100	0.054
56-42.2272-107.0319-2-15-			0-	W	15140		8445	346	14330	35	-2	6.8	4.7	-221	-1	-1	21.4	3306	68	2.9	53	0.125
56-42.1928-107.0811-2-12-			0-	W	15141		13970	221	8015	74	-3	13.9	4.1	-205	-1	-1	17.7	2808	84	4.4	94	0.157
56-42.2189-107.4250-2-15-			0-	W	15142		11640	365	8876	51	-2	9.6	3.8	-262	1	-1	18.5	3101	61	2.9	105	0.189
56-42.2025-107.3906-2-15-			0-	W	15143		24660	400	11570	56	-2	8.2	3.5	399	-1	-1	15.5	1818	35	2.9	96	0.195
56-42.1636-107.4106-2-15-			0-	W	15145		19550	217	9482	44	-2	7.1	4.9	290	-1	1	28.7	2292	86	4.1	67	0.160
56-42.1672-107.4200-2-15-			0-	W	15146		19390	292	14170	76	-2	11.3	4.1	262	-1	-1	22.0	2375	53	3.2	103	0.217
56-42.1569-107.4403-2-15-			0-	W	15147		13780	212	11700	50	-2	8.2	3.5	-226	-1	-1	17.0	2080	81	3.3	48	0.215
56-42.1508-107.4886-2-15-			0-	W	15148		14090	272	6006	77	-2	13.2	4.5	-190	-1	1	18.5	2823	77	3.8	73	0.202
56-42.1928-107.4339-2-15-			0-	W	15149		16450	281	10750	62	-3	15.0	6.2	268	-1	-1	39.4	2585	65	4.5	104	0.161
56-42.2461-107.4417-2-15-			0-	W	15150		8005	386	6338	65	-2	9.8	3.9	-260	-1	-1	13.0	2744	55	2.7	135	0.256
56-42.2917-107.4586-2-15-			0-	W	15151		19450	257	5239	54	-2	8.5	3.9	-172	1	-1	13.7	2022	52	1.8	108	0.225
56-42.1322-107.7106-2-15-			0-	W	15152		10920	265	21990	54	-2	11.0	10.0	-235	-1	-1	67.7	3048	56	6.0	57	0.091
56-42.0006-106.0100-2-15-			0-	W	15153		11280	221	5930	75	-3	14.1	4.2	-173	-1	-1	18.1	2819	71	2.9	115	0.212
56-42.0503-106.0181-2-15-			0-	W	15155		18050	294	5261	51	-2	13.4	3.4	-231	1	-1	18.0	3261	100	2.7	150	0.222
56-42.0194-106.4072-2-15-			0-	W	15156		9995	252	5917	53	-2	11.0	4.1	-171	1	-1	17.4	2526	95	2.3	88	0.225
56-42.0269-106.3986-2-15-			0-	W	15157		8710	289	5256	36	-2	8.8	4.9	272	1	-1	14.1	2769	51	3.6	77	0.284
56-42.0117-106.4392-2-15-			0-	W	15158		3111	79	1961	-15	-2	4.8	2.3	-101		-1	7.1	2115	21	2.5	62	0.344
56-42.0781-106.5928-2-12-			0-	W	15160		6056	148	3082	24	-1	3.8	1.6	-159		-1	6.8	1387	20	1.6	37	0.482
56-42.0286-107.3361-2-15-			0-	W	15161		22100	293	5833	89	-2	17.5	4.9	-207	-1	-1	23.4	2605	144	3.5	177	0.168
56-42.1258-107.7400-2-15-			0-	W	15162		8938	308	17220	51	-2	11.5	19.4	-242	-1	1	162.7	3516	51	9.4	-30	0.059
56-42.1939-107.6469-2-99-			0-	W	15163		8229	218	15980	73	-3	15.5	5.2	212	-1	-1	48.2	3206	50	5.8	87	0.111
56-42.2233-107.6411-2-15-			0-	W	15164		-3536	275	20450	70	-2	7.3	16.1	-257	1	2	152.1	3595	31	3.6	58	0.088
56-42.0544-106.3964-2-15-			0-	W	15166		32960	467	8149	64	-1	13.7	4.3	-238	-1	-1	11.9	2906	55	2.4	88	0.212
56-42.0097-106.3736-2-15-			0-	W	15167		13260	342	6191	54	-2	10.0	4.0	-205	-1	-1	13.4	2865	71	2.4	-93	0.239
56-42.0108-106.2842-2-15-			0-	W	15168		18720	208	4934	62	-4	17.3	5.1	-200	-1	-2	15.4	3412	178	4.0	259	0.311
56-42.0233-106.2911-2-15-			0-	W	15169		6887	237	6913	30	-1	5.9	2.5	327	1	-1	9.3	1739	42	2.0	47	0.347
56-42.0217-106.2964-2-15-			0-	W	15170		10020	284	5387	46	-2	9.8	3.7	262	-1	-1	15.2	2383	54	2.5	92	0.243
56-42.0383-106.2964-2-15-			0-	W	15171		30530	302	10230	-21	-2	5.3	2.3	-254	-1	-1	5.6	2115	43	-2.2	-31	0.604
56-42.0408-106.3447-2-15-			0-	W	15173		42370	415	6983	27	-2	5.0	3.2	287	-1	-1	6.3	2962	47	2.5	47	0.410
56-42.4611-106.4361-2-15-			0-	W	15174		17720	289	7153	46	-2	7.4	5.2	-197	-1	-1	12.8	3219	91	2.8	70	0.282
56-42.4739-106.4444-2-15-			0-	W	15175		11580	238	10050	32	-2	3.9	3.5	-211	-1	-1	12.9	2609	68	2.8	-25	0.339
56-42.0433-106.0700-2-15-			0-	W	15177		12890	277	7552	45	-3	7.5	4.7	-245	-1	-1	13.9	3073	114	3.4	-63	0.246
56-42.1064-106.0396-2-12-			0-	W	15179		9126	311	5450	21	1	2.9	3.2	-188			10.7	1808	71	1.7	-14	0.349
56-42.1144-106.0294-2-15-			0-	W	15180		19150	342	6700	57	-2	5.5	4.3	-217	-1	-1	12.3	3222	77	3.5	48	0.313
56-42.0983-106.0522-2-15-			0-	W	15181		18660	309	7292	51	-2	6.1	3.6	-248	-1	-1	9.8	3268	151	2.7	86	0.423
56-42.0978-106.0958-2-15-			0-	W	15182		8337	259	7558	40	-2	5.7	3.9	-213	-1	-1	11.9	2113	71	3.5	-29	0.205
56-42.1083-106.0869-2-15-			0-	W	15183		9172	436	8769	29	2	4.3	6.2	325	-1	-1	32.7	3686	94	3.1	-17	0.159
56-42.0558-106.0656-2-15-			0-	W	15184		20790	246	4981	55	-2	9.5	4.8	-194	-1	-1	10.4	3828	163	2.6	87	0.258
56-42.0711-106.0650-2-15-			0-	W	15185		20990	269	4040	30	-2	7.9	11.5	-179	-1	2	75.3	2712	96	5.1	112	0.065
56-42.0114-106.4911-2-15-			0-	W	15186		9571	332	7120	57	-2	12.5	5.1	-197	-1	1	23.1	2771	65	4.1	125	0.166
56-42.0647-106.4622-2-12-			0-	W	15187		11300	377	4535	46	-2	9.2	3.5	-249	-1	-1	11.7	2535	52	2.6	99	0.278
56-42.0372-106.4431-2-11-			0-	W	15188		17230	271	5958	51	-2	9.9	3.5	262	-1	-1	9.0	2039	46	2.3	99	0.244
56-42.0614-106.4042-2-11-			0-	W	15189		26830	223	5512	35	-2	5.8	2.6	-175	-1	-1	7.8	2089	29	2.2	55	0.645
56-42.0928-106.3828-2-15-			0-	W	15190		46880	397	5166	65	-3	15.0	3.6	473	-1	-1	12.4	2985	58	-2.4	190	0.226

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

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																								U CONCENTRATION
							TIME SAMPLED																							
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
56-42.0975-106.3939-2-12-			0-	W15191-	09/22/77-	16-	18-	12.0-	-	-	7.2-	2000-	9-1-6-6-8-2-2-1-1-3-2-3-3-	-1-	-	-	-	-	2.38
56-42.0975-106.3983-2-12-			0-	W15192-	09/22/77-	16-	18-	12.0-	-	-	8.0-	1700-	13-1-6-5-6-3-2-1-1-4-3-2-3-	-1-	-	-	-	-	2.09
56-42.4525-106.4561-2-15-			0-	W15193-	09/22/77-	14-	20-		-	-	-	-	27-1-1-4-6-	-	-	-	-4-2-4-2-	-1-	-	-	-	-	2.35
56-42.4517-106.4844-2-15-			0-	W15194-	09/22/77-	16-	18-		-	-	-	-	18-1-1-4-6-	-	-	-	-3-2-4-2-	-1-	-	-	-	-	2.46
56-42.4781-106.4625-2-15-			0-	W15195-	09/22/77-	16-	18-		-	-	-	-	9-1-1-4-6-	-	-	-	-4-2-4-2-	-1-	-	-	-	-	2.90
56-42.4336-106.4100-2-15-			0-	W15196-	09/22/77-	16-	19-		-	-	-	-	37-1-1-4-6-	-	-	-	-3-3-2-2-	-1-	-	-	-	-	2.96
56-42.4189-106.3989-2-12-			0-	W15197-	09/22/77-	17-	17-		-	-	6.9-	2400-	18-1-1-4-6-2-3-1-2-3-2-2-2-	-1-	-	-	-	-	11.60
56-42.4406-106.3683-2-15-			0-	W15199-	09/23/77-	11-	5-		-	-	-	-	37-1-1-4-1-	-	-	-	-4-2-4-5-	-1-	-	-	-	-	3.07
56-42.4347-106.3375-2-12-			0-	W15200-	09/23/77-	13-	9-	7.0-	-	-	6.7-	385-	27-1-1-4-1-3-4-1-2-4-2-4-3-	-1-	-	-	-	-	3.87
56-42.4308-106.2733-2-15-			0-	W15201-	09/23/77-	14-	6-		-	-	-	-	18-1-1-4-6-	-	-	-	-4-2-2-3-	-1-	-	-	-	-	3.37
56-42.4744-106.3219-2-11-			0-	W15202-	09/24/77-	10-	10-	4.5-	-	-	6.7-	590-	13-4- -6-6-	-	-	-	-4-3-3-2-	-1-	-	-	-	-	3.34
56-42.4958-106.2897-2-12-			0-	W15203-	09/24/77-	12-	15-	9.5-	-	-	6.6-	280-	27-1-1-4-6-2-3-1-2-4-2-3-2-	-1-	-	-	-	-	3.24
56-42.4931-106.3064-2-15-			0-	W15204-	09/24/77-	13-	19-		-	-	-	-	27-1-4-4-6-	-	-	-	-4-2-3-2-	-1-	-	-	-	-	2.67
56-42.4600-106.2547-2-15-			0-	W15205-	09/24/77-	13-	20-		-	-	-	-	46-4- -4-6-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	4.14
56-42.4572-106.2072-2-15-			0-	W15206-	09/24/77-	14-	17-		-	-	-	-	46-1-4-4-6-	-	-	-	-4-2-3-2-	-1-	-	-	-	-	3.01
56-42.4722-106.1842-2-15-			0-	W15207-	09/24/77-	15-	17-		-	-	-	-	27-4- -3-2-	-	-	-	-4-3-2-2-	-1-	-	-	-	-	5.85
56-42.4744-106.1828-2-12-			0-	W15208-	10/24/77-	16-	17-	6.5-	-	-	7.1-	320-	18-4- -6-6-2-3-2-2-4-3-2-2-	-1-	-	-	-	-	5.02
56-42.3947-106.2108-2-15-			0-	W15209-	09/24/77-	16-	17-		-	-	-	-	23-1-1-4-1-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	4.78
56-42.3875-106.2278-2-15-			0-	W15210-	09/24/77-	16-	17-		-	-	-	-	18-1-1-3-6-	-	-	-	-4-3-2-2-	-1-	-	-	-	-	8.98
56-42.4042-106.2397-2-15-			0-	W15211-	09/25/77-	10-	16-		-	-	-	-	37-4- -4-6-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	4.88
56-42.3878-106.2033-2-11-			0-	W15212-	09/25/77-	10-	17-	6.0-	-	-	6.8-	310-	18-4- -4-1-	-	-	-	-4-3-2-2-	-1-	-	-	-	-	4.41
56-42.4983-106.1517-2-11-			0-	W15213-	09/25/77-	12-	15-	5.5-	-	-	6.9-	225-	27-4- -6-8-	-	-	-	-4-3-2-2-	-1-	-	-	-	-	4.92
56-42.4703-106.1272-2-11-			0-	W15214-	09/25/77-	13-	15-	6.5-	-	-	7.2-	440-	27-4- -6-4-	-	-	-	-4-3-3-2-	-1-	-	-	-	-	3.12
56-42.4772-106.1469-2-15-			0-	W15215-	09/25/77-	13-	15-		-	-	-	-	46-4- -4-6-	-	-	-	-4-2-2-2-	-1-	-	-	-	-	4.54
56-42.4636-106.1386-2-11-			0-	W15216-	09/25/77-	13-	16-	5.5-	-	-	7.1-	360-	18-4- -6-4-	-	-	-	-4-3-2-2-	-1-	-	-	-	-	3.38
56-42.3844-106.1636-2-11-			0-	W15217-	09/25/77-	15-	19-	9.0-	-	-	7.2-	350-	18-4- -6-8-	-	-	-	-4-3-2-2-	-1-	-	-	-	-	18.16
56-42.3842-106.1603-2-12-			0-	W15218-	09/25/77-	16-	21-	10.5-	-	-	7.5-	480-	27-1-6-3-7-2-3-1-2-4-3-2-2-	-1-	-	-	-	-	6.52
56-42.4989-106.0839-2-11-			0-	W15219-	09/26/77-	10-	19-	8.5-	-	-	6.6-	190-	11-3-6-3-4-	-	-	-	-4-3-4-2-	-1-	-	-	-	-	13.70
56-42.4628-106.0803-2-11-			0-	W15220-	09/26/77-	11-	20-	8.0-	-	-	6.7-	310-	26-4- -6-8-	-	-	-	-4-3-2-2-	-1-	-	-	-	-	6.70
56-42.4678-106.0433-2-11-			0-	W15221-	09/26/77-	12-	19-	9.0-	-	-	6.7-	130-	27-1-4-6-8-	-	-	-	-4-3-2-2-	-1-	-	-	-	-	1.40
56-42.4903-106.0456-2-15-			0-	W15222-	09/26/77-	13-	18-		-	-	-	-	55-3-6-4-6-	-	-	-	-4-2-3-3-	-1-	-	-	-	-	11.06
56-42.4264-106.1189-2-15-			0-	W15223-	09/26/77-	14-	18-		-	-	-	-	18-1-1-4-6-	-	-	-	-3-3-2-3-	-1-	-	-	-	-	3.55
56-42.4150-106.0933-2-15-			0-	W15224-	09/26/77-	14-	16-		-	-	-	-	27-4- -4-6-	-	-	-	-4-2-2-4-	-1-	-	-	-	-	3.79
56-42.0694-106.0878-2-15-			0-	W15225-	09/24/77-	14-	17-		-	-	-	-	9-1-7-5-6-	-1-	-2-4-2-2-2-	-1-	-	-	-	-	2.65
56-42.5428-107.4222-2-15-			0-	W15226-	10/19/77-	16-	19-		-	-	-	-	34-3-4-4-1-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	6.68
56-42.5217-107.4325-2-15-			0-	W15227-	10/19/77-	16-	19-		-	-	-	-	23-3-4-4-1-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	4.43
56-42.5178-107.4319-2-15-			0-	W15228-	10/19/77-	16-	19-		-	-	-	-	28-3-4-4-1-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	3.40
56-42.5217-107.4350-2-15-			0-	W15229-	10/19/77-	16-	19-		-	-	-	-	23-3-4-4-6-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	3.39
56-42.5033-107.4722-2-15-			0-	W15230-	10/19/77-	17-	19-		-	-	-	-	34-3-4-4-6-	-1-	-2-3-3-4-1-	-1-	-	-	-	-	3.33
56-42.5397-107.1900-2-15-			0-	W15231-	10/20/77-	12-	16-		-	-	-	-	10-3-6-5-4-	-1-	- -3-3-3-3-	-1-	-	-	-	-	2.32
56-42.5439-107.2331-2-15-			0-	W15232-	10/20/77-	12-	16-		-	-	-	-	9-3-6-5-1-	-1-	- -3-2-2-3-	-1-	-	-	-	-	2.87
56-42.5753-107.2419-2-15-			0-	W15233-	10/20/77-	13-	16-		-	-	-	-	17-1-3-5-6-	-1-	- -4-4-1-3-	-1-	-	-	-	-	3.66
56-42.5203-107.2378-2-15-			0-	W15234-	10/20/77-	14-	16-		-	-	-	-	12-3-6-4-1-	-1-	- -4-2-2-3-	-1-	-	-	-	-	2.71
56-42.5011-107.2025-2-15-			0-	W15235-	10/20/77-	15-	16-		-C-	-	-	-	4-3-6-5-6-	-1-	- -3-2-2-3-	-1-	-	-	-	-	3.65
56-42.8975-106.6394-2-99-			0-	W15237-	10/25/77-	17-	20-		-C-	-	-	-	4-1-6-5-6-	-1-	- -4-1-4-1-	-1-	-	-	-	-	3.65
56-42.6194-107.2014-2-15-			0-	W15238-	10/20/77-	16-	16-		-	-	-	-	8-3-6-4-1-	-1-	- -3-2-2-3-	-1-	-	-	-	-	2.29
56-42.6275-107.1247-2-15-			0-	W15239-	10/20/77-	17-	16-		-	-	-	-	18-1-1-4-1-	-1-	- -4-2-4-2-	-1-	-	-	-	-	2.45
56-42.6344-107.1194-2-15-			0-	W15240-	10/20/77-	17-	16-		-	-	-	-	16-1-1-4-1-	-1-	- -3-2-4-2-	-1-	-	-	-	-	2.31
56-42.7014-107.1056-2-11-			0-	W15241-	10/20/77-	18-	11-	22.0-	-	-	6.4-	800-	17-1-6-3-6-4-3-5-	-4-4-4-3-	-1-	-	-	-	-	1.86
56-42.6953-107.1050-2-15-			0-	W15242-	10/20/77-	18-	11-		-	-	-	-	10-1-1-5-6-	-1-	- -4-3-3-3-	-1-	-	-	-	-	2.82
56-42.6558-107.0733-2-15-			0-	W15243-	10/20/77-	19-	10-		-	-	-	-	6-1-1-4-1-	-1-	- -3-3-3-3-	-1-	-	-	-	-	1.80

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

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE (Concentrations reported in weight parts per million (ppm))									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY (Concentrations in weight ppm)	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
56-42.0975-106.3939-2-12-						0-W15191	-5	-5	-5	20	-20	-15	7	-10	-15	2	39
56-42.0975-106.3983-2-12-						0-W15192	-5	-5	-5	10	-20	-15	15	-10	-15	1	31
56-42.4525-106.4561-2-15-						0-W15193	-5	-5	-5	31	-20	16	15	-10	-15	2	40
56-42.4517-106.4844-2-15-						0-W15194	-5	-5	-5	25	-20	25	11	-10	-15	2	48
56-42.4781-106.4625-2-15-						0-W15195	-5	-5	-5	19	-20	-15	12	-10	-15	2	42
56-42.4336-106.4100-2-15-						0-W15196	-5	-5	-5	23	-20	19	16	-10	-15	2	50
56-42.4189-106.3989-2-12-						0-W15197	-5	-5	-5	-10	-20	-15	24	-10	-15	1	32
56-42.4406-106.3683-2-15-						0-W15199	-5	-5	-5	20	-20	-15	-5	-10	-15	2	32
56-42.4347-106.3375-2-12-						0-W15200	-5	-5	-5	18	-20	-15	10	-10	-15	1	38
56-42.4308-106.2733-2-15-						0-W15201	-5	-5	-5	14	-20	-15	7	-10	-15	2	45
56-42.4744-106.3219-2-11-						0-W15202	-5	-5	-5	16	-20	-15	10	-10	-15	2	37
56-42.4958-106.2897-2-12-						0-W15203	-5	-5	-5	20	-20	-15	8	-10	-15	1	34
56-42.4931-106.3064-2-15-						0-W15204	-5	-5	-5	17	-20	-15	10	-10	-15	2	42
56-42.4600-106.2547-2-15-						0-W15205	-5	-5	-5	17	-20	-15	14	-10	-15	2	36
56-42.4572-106.2072-2-15-						0-W15206	-5	-5	-5	19	-20	-15	12	-10	-15	2	29
56-42.4722-106.1842-2-15-						0-W15207	-5	-5	-5	21	-20	-15	11	-10	-15	2	39
56-42.4744-106.1828-2-12-						0-W15208	-5	-5	-5	10	-20	-15	8	-10	-15	2	27
56-42.3947-106.2108-2-15-						0-W15209	-5	-5	-5	24	-20	-15	21	-10	-15	-1	50
56-42.3875-106.2278-2-15-						0-W15210	-5	-5	-5	23	-20	-15	9	-10	-15	1	39
56-42.4042-106.2397-2-15-						0-W15211	-5	-5	-5	20	-20	-15	20	-10	-15	2	32
56-42.3878-106.2033-2-11-						0-W15212	-5	-5	-5	18	-20	-15	12	-10	16	1	25
56-42.4983-106.1517-2-11-						0-W15213	-5	-5	-5	24	-20	-15	12	-10	-15	2	22
56-42.4703-106.1272-2-11-						0-W15214	-5	-5	-5	30	-20	-15	7	-10	-15	1	29
56-42.4772-106.1469-2-15-						0-W15215	-5	-5	-5	19	-20	-15	19	-10	-15	2	39
56-42.4636-106.1386-2-11-						0-W15216	-5	-5	-5	23	-20	-15	-5	-10	-15	-1	18
56-42.3844-106.1636-2-11-						0-W15217	-5	-5	-5	14	-20	-15	-5	-10	-15	-1	16
56-42.3842-106.1603-2-12-						0-W15218	-5	-5	-5	16	-20	-15	6	-10	-15	1	45
56-42.4989-106.0839-2-11-						0-W15219	-5	-5	-5	-10	23	-15	20	-10	23	2	12
56-42.4628-106.0803-2-11-						0-W15220	-5	-5	-5	16	-20	-15	11	-10	-15	-1	16
56-42.4678-106.0433-2-11-						0-W15221	-5	-5	-5	17	-20	-15	8	-10	-15	-1	4
56-42.4903-106.0456-2-15-						0-W15222	-5	-5	-5	14	-20	-15	21	-10	-15	3	34
56-42.4264-106.1189-2-15-						0-W15223	-5	-5	-5	31	-20	-15	16	-10	-15	2	37
56-42.4150-106.0933-2-15-						0-W15224	-5	-5	-5	23	-20	-15	17	-10	-15	-1	50
56-42.0694-106.0878-2-15-						0-W15225	-5	-5	-5	21	-20	25	10	-10	-15	1	40
56-42.5428-107.4222-2-15-						0-W15226	-5	-5	-5	20	-20	-15	16	-10	-15	1	33
56-42.5217-107.4325-2-15-						0-W15227	-5	-5	-5	14	-20	-15	9	12	-15	2	26
56-42.5178-107.4319-2-15-						0-W15228	-5	-5	-5	15	-20	-15	18	-10	-15	2	34
56-42.5217-107.4350-2-15-						0-W15229	-5	-5	-5	14	-20	-15	12	-10	-15	2	41
56-42.5033-107.4722-2-15-						0-W15230	-5	-5	-5	15	-20	-15	11	-10	-15	2	30
56-42.5397-107.1900-2-15-						0-W15231	-5	5	-5	13	-20	-15	8	-10	-15	2	30
56-42.5439-107.2331-2-15-						0-W15232	-5	-5	-5	14	-20	-15	11	-10	-15	1	30
56-42.5753-107.2419-2-15-						0-W15233	-5	-5	-5	26	-20	-15	7	-10	-15	2	40
56-42.5203-107.2378-2-15-						0-W15234	-5	-5	-5	24	-20	-15	21	-10	-15	2	32
56-42.5011-107.2025-2-15-						0-W15235	-5	-5	-5	17	-20	-15	13	-10	-15	2	34
56-42.8975-106.6394-2-99-						0-W15237	-5	-5	-5	17	-20	-15	16	-10	-15	2	25
56-42.6194-107.2014-2-15-						0-W15238	-5	-5	-5	18	-20	-15	8	-10	-15	-1	32
56-42.6275-107.1247-2-15-						0-W15239	-5	-5	-5	21	-20	-15	14	-10	-15	1	50
56-42.6344-107.1194-2-15-						0-W15240	-5	-5	-5	15	-20	-15	15	-10	-15	1	41
56-42.7014-107.1056-2-11-						0-W15241	-5	-5	-5	59	-20	-15	-5	-10	-15	1	25
56-42.6953-107.1050-2-15-						0-W15242	-5	-5	-5	17	-20	-15	17	-10	-15	2	26
56-42.6558-107.0733-2-15-						0-W15243	-5	-5	-5	23	-20	-15	13	-10	-15	2	45

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

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DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
56-	42.0975-	106.3939-2-12-				0-W15191	41310	-0.06	421	49150	40	-64	9.1	32	1.5	3	0.6	8658	6.6	15460	22	0.2
56-	42.0975-	106.3983-2-12-				0-W15192	36280	-0.05	403	52570	40	-59	4.1	33	1.7	3	0.6	8211	8.1	14230	27	0.3
56-	42.4525-	106.4561-2-15-				0-W15193	39460	-0.06	1343	14670	36	-41	6.9	38	1.9	3	0.6	13440	4.0	13040	18	0.2
56-	42.4517-	106.4844-2-15-				0-W15194	50250	-0.06	1297	17390	45	84	7.3	43	3.1	3	0.7	12590	4.9	14150	29	0.2
56-	42.4781-	106.4625-2-15-				0-W15195	45550	-0.08	690	15360	66	-52	11.8	56	3.1	2	0.9	16710	7.7	13440	34	0.3
56-	42.4336-	106.4100-2-15-				0-W15196	56270	-0.06	643	26730	45	93	9.1	38	3.1	4	0.6	11390	4.5	16910	30	0.3
56-	42.4189-	106.3989-2-12-				0-W15197	45810	-0.07	1251	29600	359	-68	4.7	48	2.0	8	2.4	15670	42.6	15240	239	0.8
56-	42.4406-	106.3683-2-15-				0-W15199	44740	-0.06	634	26970	48	-63	7.5	30	-1.2	3	0.9	10160	6.6	14940	35	0.3
56-	42.4347-	106.3375-2-12-				0-W15200	45180	-0.08	680	32050	63	-80	8.3	36	2.3	3	1.2	13000	11.9	15320	43	0.4
56-	42.4308-	106.2733-2-15-				0-W15201	49400	-0.07	740	19810	52	-67	9.6	30	1.8	3	0.7	10380	6.6	13850	33	0.3
56-	42.4744-	106.3219-2-11-				0-W15202	51090	-0.07	657	24690	64	-74	5.3	46	2.8	4	0.9	16420	9.0	14480	37	0.4
56-	42.4958-	106.2897-2-12-				0-W15203	49090	-0.07	719	19010	58	-76	6.3	27	1.6	3	0.8	9339	7.2	14710	31	0.3
56-	42.4931-	106.3064-2-15-				0-W15204	49920	-0.08	630	10580	66	-73	9.8	35	2.4	3	1.1	13720	9.4	15870	36	0.5
56-	42.4600-	106.2547-2-15-				0-W15205	56810	-0.07	676	12750	52	92	9.5	32	2.4	4	0.7	10500	7.8	17190	33	0.3
56-	42.4572-	106.2072-2-15-				0-W15206	48510	-0.06	669	16590	48	-69	5.0	23	1.4	4	0.9	7768	6.7	15710	29	0.3
56-	42.4722-	106.1842-2-15-				0-W15207	50920	-0.10	618	27720	93	-74	11.7	34	2.3	3	0.9	14560	10.2	17290	55	0.5
56-	42.4744-	106.1828-2-12-				0-W15208	43530	-0.07	704	23550	79	-67	8.7	25	1.2	5	0.7	6992	9.4	16410	47	0.3
56-	42.3947-	106.2108-2-15-				0-W15209	63400	-0.07	706	11300	83	114	5.4	31	3.1	4	0.9	14690	7.8	18150	54	0.4
56-	42.3875-	106.2278-2-15-				0-W15210	48390	-0.07	523	77980	51	287	7.4	25	2.2	3	0.6	9086	4.1	16690	32	0.2
56-	42.4042-	106.2397-2-15-				0-W15211	57040	-0.08	610	8674	77	-80	8.3	30	2.6	3	1.1	13100	11.8	16400	60	0.4
56-	42.3878-	106.2033-2-11-				0-W15212	52730	-0.06	583	43290	41	112	7.2	24	2.2	3	0.6	6977	5.5	17570	28	0.2
56-	42.4983-	106.1517-2-11-				0-W15213	46260	-0.08	719	9921	63	-72	7.9	39	2.7	4	0.8	22430	8.1	13610	43	0.4
56-	42.4703-	106.1272-2-11-				0-W15214	45930	-0.08	785	12020	52	-77	8.2	28	1.6	3	0.6	29830	6.0	14690	28	0.3
56-	42.4772-	106.1469-2-15-				0-W15215	51740	-0.09	605	13870	96	-85	11.0	44	3.7	4	1.1	16140	14.0	16970	54	0.5
56-	42.4636-	106.1386-2-11-				0-W15216	37260	-0.10	638	12800	46	-96	16.8	21	-1.5	-1	0.4	49460	5.6	11540	29	0.3
56-	42.3844-	106.1636-2-11-				0-W15217	33860	-0.11	449	24850	45	109	4.5	24	-1.7	2	0.7	9163	3.8	11090	-18	0.5
56-	42.3842-	106.1603-2-12-				0-W15218	53820	-0.08	1030	36790	82	-95	7.6	27	2.6	4	1.1	9649	9.7	16130	41	0.4
56-	42.4989-	106.0839-2-11-				0-W15219	41080	-0.12	-165	17430	471	-101	8.9	51	-1.8	19	1.5	12560	61.9	15320	336	2.0
56-	42.4628-	106.0803-2-11-				0-W15220	41020	-0.11	496	14980	46	-82	14.6	26	1.5	3	0.5	5992	5.8	12410	33	0.2
56-	42.4678-	106.0433-2-11-				0-W15221	4007	-0.13	51	5811	15	-20	5.8	-16	-2.0	-0	-0.4	9960	-1.6	1526	-22	-0.2
56-	42.4903-	106.0456-2-15-				0-W15222	56560	-0.08	714	9296	121	-89	7.6	30	2.7	9	1.1	12890	12.4	17400	70	0.6
56-	42.4264-	106.1189-2-15-				0-W15223	61640	-0.11	687	13250	65	-94	12.1	35	4.2	3	1.0	16080	6.5	18000	46	0.5
56-	42.4150-	106.0933-2-15-				0-W15224	58800	-0.07	712	14670	62	-74	10.3	36	2.5	4	0.8	10520	7.9	19010	38	0.4
56-	42.0694-	106.0878-2-15-				0-W15225	49420	-0.07	658	6019	62	-57	4.6	42	2.9	4	0.8	12870	9.0	15410	33	0.3
56-	42.5428-	107.4222-2-15-				0-W15226	45540	-0.07	501	16220	214	-85	10.4	68	-1.2	6	1.0	31200	21.8	16030	114	0.5
56-	42.5217-	107.4325-2-15-				0-W15227	45960	-0.10	524	18080	168	-94	16.1	64	2.5	3	1.0	41740	19.8	15440	106	0.5
56-	42.5178-	107.4319-2-15-				0-W15228	49720	-0.06	577	17920	89	-74	9.6	48	1.3	4	0.7	21640	11.3	15990	65	0.3
56-	42.5217-	107.4350-2-15-				0-W15229	55580	-0.06	694	19240	84	-74	5.7	42	2.0	4	1.0	14970	10.0	18280	50	0.3
56-	42.5033-	107.4722-2-15-				0-W15230	53590	-0.06	607	16000	80	-85	6.0	25	-1.0	4	0.8	11640	8.7	17830	50	0.3
56-	42.5397-	107.1900-2-15-				0-W15231	48670	-0.08	652	10870	60	-87	8.5	31	2.0	2	1.0	11240	8.4	18220	45	0.3
56-	42.5439-	107.2331-2-15-				0-W15232	51180	-0.07	622	12550	57	-74	9.3	32	1.4	3	0.7	11410	7.8	18680	38	0.2
56-	42.5753-	107.2419-2-15-				0-W15233	56490	-0.07	708	27150	61	-84	5.1	45	1.9	4	1.0	12410	9.0	19460	37	0.3
56-	42.5203-	107.2378-2-15-				0-W15234	52220	-0.07	669	9841	59	-85	6.8	20	1.8	4	1.0	9477	8.2	21880	39	0.3
56-	42.5011-	107.2025-2-15-				0-W15235	53350	-0.08	599	13450	67	-84	10.2	34	2.6	3	0.8	15060	8.2	18870	52	0.3
56-	42.8975-	106.6394-2-99-				0-W15237	42730	-0.06	725	5931	51	-66	9.1	23	2.0	4	0.9	11330	4.2	12150	30	0.3
56-	42.6194-	107.2014-2-15-				0-W15238	54390	-0.06	691	18180	88	-76	5.3	45	1.8	4	1.0	16800	13.9	13660	54	0.3
56-	42.6275-	107.1247-2-15-				0-W15239	55840	-0.07	745	25490	68	-87	6.8	37	1.5	3	1.0	13220	10.5	15650	41	0.3
56-	42.6344-	107.1194-2-15-				0-W15240	52580	-0.09	721	17500	71	-89	10.0	45	2.2	2	1.1	19220	11.5	17190	52	0.3
56-	42.7014-	107.1056-2-11-				0-W15241	26020	-0.07	396	71790	38	-58	11.7	26	3.7	3	0.6	6700	8.0	10090	24	0.2
56-	42.6953-	107.1050-2-15-				0-W15242	55800	-0.07	750	16290	103	-86	8.3	43	1.7	4	1.1	24540	13.7	15260	60	0.4
56-	42.6558-	107.0733-2-15-				0-W15243	55780	-0.06	747	17570	40	117	5.1	19	1.2	3	0.6	7016	4.5	18720	25	0.2

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

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
56-42.0975-106.3939-2-12-				0-W15191			22050	328	8853	29	-2	4.5	2.4	-223	-1	-1	5.6	3320	47	2.7	-34	0.425
56-42.0975-106.3983-2-12-				0-W15192			15850	296	8604	28	-2	4.5	4.0	324	-1	-1	6.9	2392	31	2.4	-26	0.303
56-42.4525-106.4561-2-15-				0-W15193			17800	192	3238	-15	-2	4.9	3.1	-172	-1	-1	5.9	2650	121	2.6	-10	0.398
56-42.4517-106.4844-2-15-				0-W15194			20310	388	4256	31	-2	5.7	2.9	-246	-1	-1	8.1	2713	135	2.6	49	0.304
56-42.4781-106.4625-2-15-				0-W15195			16510	707	5028	-22	-3	7.8	4.0	-199	-1	-1	12.2	2178	118	2.6	48	0.238
56-42.4336-106.4100-2-15-				0-W15196			18550	280	7228	43	-2	5.8	3.3	209	-1	-1	8.1	3166	92	2.0	62	0.365
56-42.4189-106.3989-2-12-				0-W15197			14990	482	10200	31	-2	6.6	14.8	-243	-1	1	121.8	4472	70	6.3		0.095
56-42.4406-106.3683-2-15-				0-W15199			12690	265	10130	41	-2	4.7	3.8	-202	-1	-1	9.7	2712	49	2.7	-28	0.316
56-42.4347-106.3375-2-12-				0-W15200			12280	346	10610	-22	-2	6.2	5.7	-263	-1	-1	13.1	3220	53	3.1	-37	0.295
56-42.4308-106.2733-2-15-				0-W15201			13970	359	9064	35	-2	4.7	3.7	340	-1	1	11.1	2841	61	2.3	46	0.304
56-42.4744-106.3219-2-11-				0-W15202			12400	559	8896	42	-2	6.3	4.5	-285	-1	-1	13.7	3220	63	3.1	83	0.244
56-42.4958-106.2897-2-12-				0-W15203			13000	331	9419	29	-2	4.2	3.5	-263	-1	-1	11.3	2740	57	2.5	32	0.287
56-42.4931-106.3064-2-15-				0-W15204			10620	294	10220	46	-2	6.4	4.3	-251	-1	-1	14.3	2238	59	3.0	-59	0.187
56-42.4600-106.2547-2-15-				0-W15205			13600	320	11080	35	-2	5.1	4.6	-230	-1	-1	13.5	2782	65	2.4	-14	0.307
56-42.4572-106.2072-2-15-				0-W15206			11470	310	9482	35	-2	3.7	4.3	-240	-1	-1	11.3	2786	50	2.5	-19	0.266
56-42.4722-106.1842-2-15-				0-W15207			13370	195	9220	47	-3	7.2	6.6	-243	-1	1	19.5	2927	63	3.5	66	0.300
56-42.4744-106.1828-2-12-				0-W15208			9476	216	10640	35	-2	3.5	4.8	-213	-1	-1	22.7	3015	48	4.1	-22	0.221
56-42.3947-106.2108-2-15-				0-W15209			13750	392	11560	47	-2	7.0	4.9	-242	-1	-1	19.1	2629	55	4.2	68	0.250
56-42.3875-106.2278-2-15-				0-W15210			23770	771	7978	36	-2	4.2	5.0	-376	-1	-1	10.5	2517	44	2.6	-42	0.855
56-42.4042-106.2397-2-15-				0-W15211			8009	267	12850	65	-3	6.7	5.1	-252	-1	1	19.1	2500	47	4.7	28	0.255
56-42.3878-106.2033-2-11-				0-W15212			11120	264	12980	36	-2	3.6	2.5	358	-1	-1	9.1	2598	40	2.2	28	0.485
56-42.4983-106.1517-2-11-				0-W15213			8275	292	9627	60	-2	5.5	3.8	373	-1	-1	14.6	3120	71	3.1	63	0.337
56-42.4703-106.1272-2-11-				0-W15214			11620	377	8853	-23	-2	4.0	2.9	-285	-1	-1	11.7	2496	49	-1.9	-29	0.267
56-42.4772-106.1469-2-15-				0-W15215			12620	551	10000	38	-3	7.7	5.7	-328	-1	-1	23.7	3787	67	4.6	45	0.192
56-42.4636-106.1386-2-11-				0-W15216			7670	519	7289	-29	-3	3.5	3.2	-485	-1	-1	10.8	-1103	53	-1.9	-36	0.313
56-42.3844-106.1636-2-11-				0-W15217			11160	284	6123	-32	-3	3.9	5.3	-338	-1	-1	8.3	1930	53	-2.3	-47	2.188
56-42.3842-106.1603-2-12-				0-W15218			17540	516	10160	-23	-3	4.7	5.6	-365	-1	-1	18.4	3195	47	3.4	61	0.354
56-42.4989-106.0839-2-11-				0-W15219			-4099	524	15250	-28	-3	9.7	30.3	-346	3	3	178.8	8586	63	17.4	50	0.077
56-42.4628-106.0803-2-11-				0-W15220			10540	113	9124	-24	-3	3.5	2.8	-264	-1	-1	11.8	2090	64	-2.4	-40	0.568
56-42.4678-106.0433-2-11-				0-W15221			-756	25	668	-42	-4	2.1	-1.2	-57	-2	-1	2.6	-142	11	-2.8	-64	0.538
56-42.4903-106.0456-2-15-				0-W15222			8837	431	11450	34	-3	5.4	11.8	-329	-1	-1	37.0	3372	62	6.0	61	0.299
56-42.4264-106.1189-2-15-				0-W15223			18880	434	10430	63	-3	8.0	4.2	-341	-1	-1	14.4	2762	60	4.2	-44	0.247
56-42.4150-106.0933-2-15-				0-W15224			14330	430	10900	48	-2	5.2	4.4	-268	-1	-1	12.5	3239	66	3.0	-26	0.303
56-42.0694-106.0878-2-15-				0-W15225			11340	256	7479	46	2	6.2	4.1	-208	-1	-1	10.8	2802	86	2.9	51	0.245
56-42.5428-107.4222-2-15-				0-W15226			8109	649	12330	39	-2	5.5	12.1	-319	1	-1	53.3	7656	198	5.7	90	0.125
56-42.5217-107.4325-2-15-				0-W15227			8382	652	12370	-29	-3	7.6	8.1	-347	-1	-1	33.6	7485	201	5.7	102	0.132
56-42.5178-107.4319-2-15-				0-W15228			10560	492	13230	-16	-2	5.0	5.3	-250	-1	-1	23.4	5004	140	2.3	57	0.145
56-42.5217-107.4350-2-15-				0-W15229			12930	348	13610	54	-2	6.1	5.3	375	-1	-1	19.1	3342	63	2.6	58	0.177
56-42.5033-107.4722-2-15-				0-W15230			10660	405	14720	-17	-2	4.5	5.3	-290	-1	-1	18.2	4026	68	2.7	-25	0.183
56-42.5397-107.1900-2-15-				0-W15231			-3560	277	13630	40	-2	4.8	4.1	393	-1	-1	13.0	2814	50	2.6	-31	0.178
56-42.5439-107.2331-2-15-				0-W15232			9491	333	12960	-16	-2	4.1	3.8	-247	-1	-1	10.3	3516	77	2.9	-22	0.279
56-42.5753-107.2419-2-15-				0-W15233			14990	346	15950	54	-2	6.0	3.9	547	-1	-1	12.4	2919	52	2.2	44	0.295
56-42.5203-107.2378-2-15-				0-W15234			10940	369	12500	-19	-2	4.2	4.1	-300	-1	-1	12.9	3342	49	2.6	45	0.210
56-42.5011-107.2025-2-15-				0-W15235			10300	368	11750	57	-3	6.3	4.1	-287	-1	-1	14.0	2742	52	4.0	54	0.261
56-42.8975-106.6394-2-99-				0-W15237			5238	174	6690	21	-2	3.3	3.8	-284		-1	9.8	2138	46	2.8	44	0.372
56-42.6194-107.2014-2-15-				0-W15238			8470	386	14970	46	-2	6.3	5.1	505	-1	-1	15.0	3662	76	3.6	69	0.153
56-42.6275-107.1247-2-15-				0-W15239			13050	418	13930	-17	-2	4.9	5.0	479	-1	-1	10.4	3640	87	2.2	-26	0.236
56-42.6344-107.1194-2-15-				0-W15240			11310	389	14360	-23	-3	7.7	4.8	-295	-1	-1	12.7	3268	76	-1.9	60	0.182
56-42.7014-107.1056-2-11-				0-W15241			15940	269	4587	-17	-2	2.9	2.6	-222	-1	-1	7.8	2386	35	2.7	-57	0.238
56-42.6953-107.1050-2-15-				0-W15242			9326	547	14470	32	-2	6.6	6.4	435	-1	-1	17.9	4708	106	4.8	-31	0.158
56-42.6558-107.0733-2-15-				0-W15243			8659	288	14700	32	-2	3.7	2.6	438	-1	-1	6.4	1689	39	-1.1	38	0.281

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

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																							U CONCENTRATION
							TIME SAMPLED																						
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
56-42.6583-107.0731-2-15-						0-W15244-10/20/77-19-		10-		-	-	-	-	-		8-1-1-4-1-	-1-	-	-3-3-3-3-	-1-	-	-	-	-	-		2.53
56-42.3497-107.6097-2-12-						0-W15245-10/21/77-12-		17-	6.5-	-	-	7.0-	155-		27-3-7-4-6-3-3-1-2-1-2-3-4-		-1-	-	-	-	-		13.13					
56-42.5647-107.3081-2-15-						0-W15246-10/20/77-17-		20-		-	-	-	-		7-3-7-4-6-	-1-	-3-3-2-3-2-	-1-	-	-	-	-		2.87					
56-42.5275-107.3350-2-15-						0-W15247-10/20/77-17-		20-		-	-	-	-		13-3-7-4-6-	-1-	-3-3-4-3-2-	-1-	-	-	-	-		2.99					
56-42.5011-107.3472-2-15-						0-W15248-10/20/77-17-		20-		-	-	-	-		8-3-7-4-1-	-1-	-2-3-3-3-2-	-1-	-	-	-	-		2.58					
56-42.5747-107.2622-2-15-						0-W15249-10/20/77-18-		20-		-	-	-	-		0-3-7-4-1-	-1-	-2-3-3-3-2-	-1-	-	-	-	-		3.07					
56-42.2844-107.5983-2-11-						0-W15250-10/21/77-11-		16-	6.5-	-	-	6.9-	155-		27-3-7-4-7-2-3-1-		-3-3-3-4-	-1-	-	-	-	-		8.44					
56-42.9592-106.7014-2-15-						0-W15251-10/25/77-15-		23-		-	-	-	-		14-1-1-5-6-	-1-	-	-4-1-2-1-	-1-	-	-	-		3.24					
56-42.9825-106.7289-2-15-						0-W15252-10/25/77-15-		23-		-	-	-	-		12-1-1-5-6-	-1-	-	-3-1-1-1-	-1-	-	-	-		2.74					
56-42.9853-106.7281-2-15-						0-W15253-10/25/77-15-		23-		-	-	-	-		17-1-1-5-6-	-1-	-	-4-1-1-1-	-1-	-	-	-		3.07					
56-42.3733-107.6175-2-12-						0-W15255-10/21/77-13-		17-	7.0-	-	-	7.7-	150-		37-3-7-4-6-4-3-1-2-4-4-3-4-			-1-	-	-	-	-		19.60					
56-42.3633-107.5689-2-12-						0-W15256-10/21/77-14-		16-	6.5-	-	-	7.1-	185-		26-1-6-4-6-	-2-	-2-3-3-4-4-	-1-	-	-	-	-		8.30					
56-42.3397-107.5400-2-15-						0-W15257-10/21/77-15-		16-		-	-	-	-		18-1-6-5-8-	-1-	-2-4-3-4-4-	-1-	-	-	-	-		15.72					
56-42.3489-107.5289-2-12-						0-W15258-10/21/77-15-		16-	6.0-	-	-	7.6-	215-		23-1-6-4-6-3-3-1-2-3-3-4-4-			-1-	-	-	-	-		14.15					
56-42.9756-106.6439-2-15-						0-W15259-10/25/77-12-		20-		-	-	-	-		8-4-1-5-6-	-1-	-2-4-2-1-1-	-1-	-	-	-	-		3.52					
56-42.9369-106.6442-2-15-						0-W15261-10/25/77-13-		20-		-	-	-	-		18-1-6-5-6-	-1-	-	-4-2-1-1-	-1-	-	-	-		3.47					
56-42.4114-106.0203-2-11-						0-W15262-09/27/77-16-		22-	7.5-	-	-	6.7-	320-		23-1-6-5-6-	-	-	-1-4-3-3-1-	-1-	-	-	-		5.35					
56-42.4139-106.0272-2-11-						0-W15263-09/27/77-16-		22-	14.5-	-	-	7.4-	390-		23-1-6-5-6-	-	-	-1-4-3-3-1-	-1-	-	-	-		7.73					
56-42.3975-106.0511-2-12-						0-W15264-09/27/77-16-		22-	13.5-	-	-	7.3-	180-		18-1-4-3-4-2-3-1-2-4-2-3-2-			-1-	-	-	-	-		5.25					
56-42.3819-106.0550-2-15-						0-W15265-09/27/77-16-		21-		-	-	-	-		23-4-	-4-1-	-	-	-4-2-2-2-	-1-	-	-	-		4.30					
56-42.3819-106.0228-2-15-						0-W15266-09/27/77-17-		21-		-	-	-	-		46-1-6-4-1-	-	-	-2-4-3-3-1-	-1-	-	-	-		3.71					
56-42.3483-106.4278-2-11-						0-W15267-09/28/77-11-		16-	10.0-	-	-	7.4-	600-		27-1-1-6-6-	-	-	-4-3-3-1-	-1-	-	-	-		111.90					
56-42.3708-106.4022-2-15-						0-W15268-09/28/77-12-		22-		-C-	-	-	-		55-1-6-5-6-	-	-	-2-4-3-3-1-	-1-	-	-	-		18.80					
56-42.3697-106.4111-2-15-						0-W15269-09/28/77-12-		22-		-	-	-	-		37-1-6-4-6-	-	-	-2-4-3-3-1-	-1-	-	-	-		4.58					
56-42.3161-106.3778-2-15-						0-W15270-09/28/77-13-		22-		-	-	-	-		148-1-6-4-6-	-	-	-2-4-3-3-1-	-1-	-	-	-		6.00					
56-42.3028-106.4006-2-15-						0-W15271-09/28/77-14-		24-		-	-	-	-		74-1-6-4-6-	-	-	-2-4-3-3-1-	-1-	-	-	-		5.04					
56-42.3003-106.3772-2-15-						0-W15272-09/28/77-14-		24-		-	-	-	-		27-1-6-4-6-	-	-	-2-4-3-3-1-	-1-	-	-	-		5.33					
56-42.2878-106.4614-2-15-						0-W15273-09/28/77-15-		24-		-	-	-	-		27-1-6-4-1-	-	-	-2-3-3-3-1-	-1-	-	-	-		2.99					
56-42.3031-106.4803-2-15-						0-W15274-09/28/77-15-		24-		-	-	-	-		37-1-6-4-6-	-	-	-2-4-3-3-1-	-1-	-	-	-		3.99					
56-42.3186-106.4950-2-15-						0-W15275-09/28/77-15-		24-		-	-	-	-		27-1-6-4-6-	-	-	-2-4-3-3-1-	-1-	-	-	-		6.20					
56-42.3192-106.4992-2-11-						0-W15276-09/28/77-16-		24-	14.5-	-	-	7.4-	310-		27-1-6-5-6-	-	-	-1-4-3-3-1-	-1-	-	-	-		5.20					
56-42.3231-106.5094-2-15-						0-W15277-09/28/77-16-		-		-	-	-	-		37-1-6-4-6-	-	-	-2-4-3-3-1-	-1-	-	-	-		4.37					
56-42.3350-106.5378-2-12-						0-W15278-09/28/77-16-		19-	15.0-	-	-	7.4-	345-		37-1-6-3-6-2-2-1-1-4-3-3-1-			-1-	-	-	-	-		5.88					
56-42.3372-106.5364-2-15-						0-W15279-09/28/77-17-		19-		-	-	-	-		46-1-6-4-1-	-	-	-2-3-3-3-1-	-1-	-	-	-		4.72					
56-42.3450-106.5217-2-11-						0-W15280-09/28/77-17-		19-	13.5-	-	-	7.2-	305-		27-1-6-3-6-2-2-1-		-3-3-3-1-	-1-	-	-	-	-		3.47					
56-42.2947-106.5311-2-15-						0-W15281-09/28/77-18-		20-		-	-	-	-		97-1-1-4-6-	-	-	-2-4-3-3-1-	-1-	-	-	-		4.77					
56-42.3953-106.3442-2-12-						0-W15282-09/28/77-19-		17-	12.0-	-	-	7.4-	1550-		27-1-1-4-6-2-2-1-1-3-3-4-2-			-1-	-	-	-	-		20.21					
56-42.4069-106.3669-2-15-						0-W15283-09/28/77-19-		17-		-	-	-	-		27-1-1-4-1-	-	-	-2-4-2-3-2-	-1-	-	-	-		4.20					
56-42.2794-106.2214-2-15-						0-W15284-10/01/77-12-		13-		-	-	-	-		18-4-	-4-1-	-	-	-4-2-2-2-	-1-	-	-	-		4.70					
56-42.2811-106.1706-2-15-						0-W15285-10/01/77-12-		13-		-	-	-	-		12-4-	-4-1-	-	-	-4-2-3-2-	-1-	-	-	-		5.41					
56-42.2703-106.1500-2-15-						0-W15286-10/01/77-13-		13-		-	-	-	-		31-1-1-4-1-	-	-	-4-2-3-2-	-1-	-	-	-		7.03					
56-42.2561-106.1350-2-15-						0-W15287-10/01/77-13-		15-		-	-	-	-		33-1-1-4-6-	-	-	-4-2-2-2-	-1-	-	-	-		4.13					
56-42.2831-106.1314-2-15-						0-W15288-10/01/77-14-		15-		-	-	-	-		27-1-1-4-1-	-	-	-4-3-2-2-	-1-	-	-	-		12.07					
56-42.3197-106.1547-2-15-						0-W15289-10/01/77-14-		15-		-	-	-	-		27-1-1-4-1-	-	-	-4-2-3-2-	-1-	-	-	-		20.00					
56-42.3711-106.2978-2-15-						0-W15290-10/02/77-10-		4-		-	-	-	-		32-4-	-4-6-	-	-	-4-2-3-2-	-1-	-	-	-		7.61					
56-42.3697-106.3003-2-15-						0-W15291-10/02/77-10-		4-		-	-	-	-		37-4-	-4-6-	-	-	-4-2-3-2-	-1-	-	-	-		8.43					
56-42.3581-106.3133-2-15-						0-W15292-10/02/77-11-		6-		-	-	-	-		55-4-	-4-1-	-	-	-4-2-2-2-	-1-	-	-	-		10.72					
56-42.3569-106.3153-2-15-						0-W15293-10/02/77-11-		6-		-	-	-	-		41-4-	-4-6-	-	-	-4-2-2-2-	-1-	-	-	-		14.22					
56-42.3397-106.3639-2-15-						0-W15294-10/02/77-12-		11-		-	-	-	-		41-4-	-4-6-	-	-	-4-2-3-2-	-1-	-	-	-		6.73					
56-42.3247-106.3189-2-15-						0-W15295-10/02/77-13-		12-		-	-	-	-		83-4-	-4-6-	-	-	-4-2-2-2-	-1-	-	-	-		6.47					
56-42.3014-106.3406-2-15-						0-W15296-10/02/77-13-		12-		-	-	-	-		23-4-	-4-6-	-	-	-4-2-3-2-	-1-	-	-	-		5.88					

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
56-42.6583-107.0731-2-15-						0-W15244	-5	-5	-5	20	-20	-15	18	-10	-15	2	34
56-42.3497-107.6097-2-12-						0-W15245	-5	-5	-5	-10	-20	-15	30	-10	-15	2	21
56-42.5647-107.3081-2-15-						0-W15246	-5	-5	-5	-10	-20	-15	9	-10	-15	2	24
56-42.5275-107.3350-2-15-						0-W15247	-5	-5	-5	17	-20	-15	14	-10	-15	2	41
56-42.5011-107.3472-2-15-						0-W15248	-5	-5	-5	12	-20	-15	9	-10	-15	2	41
56-42.5747-107.2622-2-15-						0-W15249	-5	-5	-5	16	-20	-15	7	-10	-15	2	48
56-42.2844-107.5983-2-11-						0-W15250	-5	-5	-5	10	-20	-15	16	-10	-15	2	26
56-42.9592-106.7014-2-15-						0-W15251	-5	-5	-5	31	-20	-15	16	-10	-15	3	59
56-42.9825-106.7289-2-15-						0-W15252	-5	-5	-5	23	-20	-15	8	-10	-15	2	59
56-42.9853-106.7281-2-15-						0-W15253	-5	-5	-5	22	-20	24	13	-10	-15	3	64
56-42.3733-107.6175-2-12-						0-W15255	-5	-5	-5	11	-20	-15	22	-10	-15	3	37
56-42.3633-107.5689-2-12-						0-W15256	-5	-5	-5	16	-20	-15	7	-10	-15	2	19
56-42.3397-107.5400-2-15-						0-W15257	-5	-5	-5	73	-20	37	23	-10	-15	2	27
56-42.3489-107.5289-2-12-						0-W15258	-5	-5	-5	14	-20	-15	21	-10	-15	2	32
56-42.9756-106.6439-2-15-						0-W15259	-5	5	-5	20	-20	-15	8	-10	-15	2	56
56-42.9369-106.6442-2-15-						0-W15261	-5	-5	-5	20	-20	16	13	-10	-15	3	57
56-42.4114-106.0203-2-11-						0-W15262	-5	-5	-5	24	-20	-15	20	-10	-15	3	33
56-42.4139-106.0272-2-11-						0-W15263	-5	-5	-5	12	-20	-15	12	-10	-15	2	32
56-42.3975-106.0511-2-12-						0-W15264	-5	-5	-5	11	-20	-15	-5	-10	-15	3	35
56-42.3819-106.0550-2-15-						0-W15265	-5	-5	-5	26	-20	-15	12	-10	-15	2	44
56-42.3819-106.0228-2-15-						0-W15266	-5	-5	-5	25	-20	-15	16	-10	-15	2	43
56-42.3483-106.4278-2-11-						0-W15267	-5	-5	-5	13	-20	-15	-5	-10	-15	2	14
56-42.3708-106.4022-2-15-						0-W15268	-5	-5	-5	14	-20	20	27	-10	-15	3	50
56-42.3697-106.4111-2-15-						0-W15269	-5	-5	-5	20	-20	15	12	-10	-15	3	44
56-42.3161-106.3778-2-15-						0-W15270	-5	-5	-5	14	-20	-15	14	-10	-15	3	32
56-42.3028-106.4006-2-15-						0-W15271	-5	-5	-5	18	-20	17	12	-10	-15	3	36
56-42.3003-106.3772-2-15-						0-W15272	-5	-5	-5	17	-20	17	14	-10	-15	3	44
56-42.2878-106.4614-2-15-						0-W15273	-5	-5	-5	20	-20	-15	20	-10	-15	3	41
56-42.3031-106.4803-2-15-						0-W15274	-5	-5	-5	24	-20	20	19	-10	-15	3	45
56-42.3186-106.4950-2-15-						0-W15275	-5	-5	-5	15	-20	20	14	-10	-15	2	29
56-42.3192-106.4992-2-11-						0-W15276	-5	-5	-5	15	-20	-15	17	-10	-15	2	27
56-42.3231-106.5094-2-15-						0-W15277	-5	-5	-5	20	-20	-15	17	-10	-15	2	28
56-42.3350-106.5378-2-12-						0-W15278	-5	-5	-5	19	-20	-15	-5	-10	-15	2	18
56-42.3372-106.5364-2-15-						0-W15279	-5	-5	-5	22	-20	-15	9	-10	-15	2	27
56-42.3450-106.5217-2-11-						0-W15280	-5	-5	-5	-10	-20	-15	9	-10	-15	2	34
56-42.2947-106.5311-2-15-						0-W15281	-5	-5	-5	18	-20	-15	13	-10	-15	3	31
56-42.3953-106.3442-2-12-						0-W15282	-5	-5	-5	-10	-20	31	26	-10	-15	2	32
56-42.4069-106.3669-2-15-						0-W15283	-5	-5	-5	-10	-20	18	13	-10	-15	3	40
56-42.2794-106.2214-2-15-						0-W15284	-5	-5	-5	28	-20	-15	11	-10	-15	2	24
56-42.2811-106.1706-2-15-						0-W15285	-5	-5	-5	25	-20	20	19	-10	-15	2	20
56-42.2703-106.1500-2-15-						0-W15286	-5	-5	-5	16	-20	-15	9	-10	-15	2	21
56-42.2561-106.1350-2-15-						0-W15287	-5	-5	-5	20	-20	-15	6	-10	-15	3	39
56-42.2831-106.1314-2-15-						0-W15288	-5	-5	-5	14	-20	17	17	-10	-15	3	47
56-42.3197-106.1547-2-15-						0-W15289	-5	-5	5	17	-20	18	6	-10	-15	3	22
56-42.3711-106.2978-2-15-						0-W15290	-5	-5	-5	16	-20	-15	7	-10	-15	2	22
56-42.3697-106.3003-2-15-						0-W15291	-5	5	-5	19	-20	-15	26	-10	-15	2	25
56-42.3581-106.3133-2-15-						0-W15292	-5	-5	-5	17	-20	15	17	-10	-15	3	33
56-42.3569-106.3153-2-15-						0-W15293	-5	-5	-5	15	-20	-15	20	-10	-15	3	25
56-42.3397-106.3639-2-15-						0-W15294	-5	-5	-5	22	-20	-15	13	-10	-15	2	40
56-42.3247-106.3189-2-15-						0-W15295	-5	-5	-5	19	-20	-15	-5	-10	-15	3	24
56-42.3014-106.3406-2-15-						0-W15296	-5	-5	-5	-10	-20	-15	7	-10	-15	3	37

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
56-42.6583-107.0731-2-15-					0-	W15244	56350	-0.10	537	12340	64	-92	12.5	36	2.9	3	1.1	15190	6.0	17540	45	0.4
56-42.3497-107.6097-2-12-					0-	W15245	64530	-0.07	388	7910	321	-98	7.8	28	1.4	15	1.1	5302	23.1	22400	208	1.0
56-42.5647-107.3081-2-15-					0-	W15246	54250	-0.06	655	12020	52	-76	10.3	31	1.2	3	0.8	9812	8.5	18870	34	0.3
56-42.5275-107.3350-2-15-					0-	W15247	54460	-0.07	626	12510	68	-76	6.4	31	1.9	4	1.1	14120	8.7	16650	42	0.3
56-42.5011-107.3472-2-15-					0-	W15248	56690	-0.08	781	12230	75	-90	6.3	38	2.3	4	1.0	11100	9.0	17900	41	0.5
56-42.5747-107.2622-2-15-					0-	W15249	52490	-0.07	655	22080	53	-80	5.6	20	-1.0	2	0.7	10870	7.1	19360	36	0.2
56-42.2844-107.5983-2-11-					0-	W15250	65970	-0.05	476	9589	106	-81	8.8	16	1.5	5	0.6	6761	12.4	20990	65	0.5
56-42.9592-106.7014-2-15-					0-	W15251	57160	-0.07	920	28430	49	-53	8.3	53	4.0	4	0.9	18740	5.2	15920	34	0.3
56-42.9825-106.7289-2-15-					0-	W15252	56260	-0.07	787	16910	62	-50	7.6	67	3.5	4	0.9	14750	5.6	15330	33	0.3
56-42.9853-106.7281-2-15-					0-	W15253	69170	-0.10	781	11140	54	-52	8.6	63	4.1	3	0.9	16230	3.9	17550	31	0.2
56-42.3733-107.6175-2-12-					0-	W15255	63760	-0.07	545	8963	436	-105	10.2	32	2.0	17	0.8	8385	20.9	21580	262	1.2
56-42.3633-107.5689-2-12-					0-	W15256	44300	-0.05	342	5745	191	-64	3.1	23	1.1	10	1.1	4277	20.3	18600	119	0.8
56-42.3397-107.5400-2-15-					0-	W15257	58440	-0.08	361	10550	112	191	9.9	35	-1.2	6	0.6	17520	11.7	18270	61	0.7
56-42.3489-107.5289-2-12-					0-	W15258	49820	-0.09	423	7571	262	-78	5.5	35	-1.3	11	0.8	6370	28.4	18990	161	1.2
56-42.9756-106.6439-2-15-					0-	W15259	52370	-0.06	749	25020	49	75	11.1	41	3.0	3	0.7	13820	6.2	14720	29	0.3
56-42.9369-106.6442-2-15-					0-	W15261	69750	-0.07	713	7781	64	-49	6.8	58	5.1	4	0.8	16090	4.8	21120	39	0.3
56-42.4114-106.0203-2-11-					0-	W15262	59430	-0.08	978	18220	108	-83	8.6	42	2.3	5	1.2	13450	8.2	16160	57	0.5
56-42.4139-106.0272-2-11-					0-	W15263	52220	-0.09	501	12180	44	-83	6.3	34	2.3	3	0.8	8452	5.2	14800	32	0.4
56-42.3975-106.0511-2-12-					0-	W15264	52710	-0.07	718	23780	66	121	12.2	39	2.5	5	0.8	10120	9.0	15800	39	0.3
56-42.3819-106.0550-2-15-					0-	W15265	67750	-0.07	1023	21680	65	121	6.9	39	4.3	4	1.0	15440	7.4	19140	39	0.3
56-42.3819-106.0228-2-15-					0-	W15266	65980	-0.07	923	12200	86	127	7.0	33	2.2	4	1.1	13130	7.2	16700	45	0.4
56-42.3483-106.4278-2-11-					0-	W15267	41830	-0.13	368	11460	60	-95	8.0	-15	-1.9	2	-0.4	7617	3.2	9684	97	-0.2
56-42.3708-106.4022-2-15-					0-	W15268	76480	-0.10	396	15460	132	373	15.9	45	-1.6	4	0.9	34830	2.6	16940	88	0.3
56-42.3697-106.4111-2-15-					0-	W15269	59790	-0.06	611	12990	63	-59	5.7	43	2.3	4	0.8	12110	6.1	17160	41	0.3
56-42.3161-106.3778-2-15-					0-	W15270	59920	-0.06	559	6679	117	-80	6.5	35	1.9	3	0.7	9715	11.1	17430	61	0.4
56-42.3028-106.4006-2-15-					0-	W15271	56270	-0.08	474	8164	84	-74	6.2	31	-1.2	3	0.8	10510	11.5	17570	59	0.4
56-42.3003-106.3772-2-15-					0-	W15272	60530	-0.06	537	5796	70	-74	12.3	37	2.4	4	0.8	11740	7.2	16310	42	0.3
56-42.2878-106.4614-2-15-					0-	W15273	58120	-0.06	663	6430	60	-53	7.3	47	3.2	4	0.8	12570	5.7	17860	38	0.3
56-42.3031-106.4803-2-15-					0-	W15274	61140	-0.08	508	7552	91	-75	8.2	53	2.9	3	0.8	12500	7.7	16480	51	0.4
56-42.3186-106.4950-2-15-					0-	W15275	63970	-0.09	444	6190	93	-89	6.9	37	2.3	3	0.8	12570	7.8	18040	61	0.3
56-42.3192-106.4992-2-11-					0-	W15276	67920	-0.07	657	6083	80	-72	12.0	36	1.8	4	0.9	13160	6.7	18480	52	0.4
56-42.3231-106.5094-2-15-					0-	W15277	59460	-0.06	682	8308	100	-79	7.0	44	1.9	3	1.0	11150	10.7	16320	56	0.4
56-42.3350-106.5378-2-12-					0-	W15278	51280	-0.08	828	10460	124	-95	6.3	24	-1.4	3	1.0	8977	18.5	20450	77	0.5
56-42.3372-106.5364-2-15-					0-	W15279	54280	-0.05	668	8779	95	-69	9.1	29	1.6	4	0.8	9754	13.5	17380	51	0.4
56-42.3450-106.5217-2-11-					0-	W15280	49640	-0.05	674	14650	78	93	4.7	30	1.8	3	1.0	10420	14.4	14090	51	0.3
56-42.2947-106.5311-2-15-					0-	W15281	61500	-0.06	565	7913	93	-80	7.4	43	2.4	4	0.9	12370	13.0	17760	57	0.4
56-42.3953-106.3442-2-12-					0-	W15282	37380	0.55	3184	52960	382	-161	8.1	53	-2.0	8	2.7	14340	95.6	13820	295	1.5
56-42.4069-106.3669-2-15-					0-	W15283	62180	-0.06	626	23830	60	69	10.3	42	3.3	4	0.9	13090	4.9	18360	18	0.3
56-42.2794-106.2214-2-15-					0-	W15284	58460	-0.05	553	8452	81	-62	6.8	36	2.8	4	0.9	12680	9.4	16990	50	0.3
56-42.2811-106.1706-2-15-					0-	W15285	58820	-0.06	606	11570	120	-91	8.4	60	1.8	5	0.9	13440	15.4	14990	65	0.5
56-42.2703-106.1500-2-15-					0-	W15286	54470	-0.09	497	10090	177	-86	8.2	58	-1.6	5	1.0	17650	25.3	15480	128	0.7
56-42.2561-106.1350-2-15-					0-	W15287	61190	-0.05	691	6296	71	-65	10.7	46	2.3	4	0.9	12920	9.0	19310	41	0.3
56-42.2831-106.1314-2-15-					0-	W15288	78420	-0.06	477	6280	102	-47	7.8	40	2.5	6	0.9	13120	8.9	20090	60	0.5
56-42.3197-106.1547-2-15-					0-	W15289	61780	-0.06	557	8276	133	-59	10.2	48	1.9	6	1.0	11740	11.1	16030	64	0.6
56-42.3711-106.2978-2-15-					0-	W15290	62370	-0.08	486	8248	76	-84	7.5	25	-1.4	3	0.7	12470	10.7	17730	60	0.3
56-42.3697-106.3003-2-15-					0-	W15291	66970	-0.06	547	7737	99	129	11.5	33	-1.0	4	0.9	13230	9.4	20310	60	0.3
56-42.3581-106.3133-2-15-					0-	W15292	70860	-0.06	531	6719	116	-72	6.7	39	2.0	4	1.0	15330	9.0	18550	70	0.4
56-42.3569-106.3153-2-15-					0-	W15293	64970	-0.07	502	7728	225	-83	7.8	50	2.1	5	0.9	13850	22.7	15380	139	0.5
56-42.3397-106.3639-2-15-					0-	W15294	63090	-0.08	528	6533	97	-86	8.0	46	-1.5	3	0.8	12500	11.3	20750	65	0.3
56-42.3247-106.3189-2-15-					0-	W15295	62140	-0.04	553	9324	84	-74	7.9	22	1.3	3	0.8	7845	8.9	17220	52	0.3
56-42.3014-106.3406-2-15-					0-	W15296	57770	-0.06	612	7198	86	-73	6.4	36	1.7	4	0.8	10200	9.7	16100	51	0.3

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

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
56-42.6583-107.0731-2-15-						0-W15244	12170	400	11470	-27	-3	7.2	4.1	-318	-1	-1	14.0	3240	58	3.4	-21	0.181
56-42.3497-107.6097-2-12-						0-W15245	-4017	373	22180	36	-2	4.0	23.4	-292	-1	1	122.5	2763	27	9.5	-23	0.107
56-42.5647-107.3081-2-15-						0-W15246	7242	349	13930	38	-2	4.4	3.7	460		-1	10.7	3186	62	1.7	-24	0.268
56-42.5275-107.3350-2-15-						0-W15247	11160	405	12330	36	-2	5.9	5.2	-252	-1	-1	13.5	3475	64	3.8	72	0.221
56-42.5011-107.3472-2-15-						0-W15248	10710	359	13370	55	-2	5.1	4.9	-295	-1	-1	12.0	2345	41	2.5	69	0.215
56-42.5747-107.2622-2-15-						0-W15249	11210	304	13790	30	-2	4.4	2.3	566	-1	-1	8.5	2169	61	2.0	-29	0.361
56-42.2844-107.5983-2-11-						0-W15250	4507	241	19000	52	-2	4.2	8.4	-233	-1	1	36.8	3180	35	4.3	31	0.229
56-42.9592-106.7014-2-15-						0-W15251	17470	393	5584	51	-2	7.6	3.9	274	1	-1	7.9	2947	159	2.7	104	0.410
56-42.9825-106.7289-2-15-						0-W15252	20240	191	4755	45	-2	7.9	4.6	-193	-1	-1	9.2	3397	140	3.0	-23	0.298
56-42.9853-106.7281-2-15-						0-W15253	23280	234	4232	-24	-3	9.2	1.2	-220	-1	-1	7.8	3931	176	-2.0	-39	0.394
56-42.3733-107.6175-2-12-						0-W15255	-4251	928	19330	48	-2	4.4	32.6	-371	-1	2	158.0	2170	27	9.0	74	0.124
56-42.3633-107.5689-2-12-						0-W15256	-2638	186	13370	47	-1	3.0	12.7	-187	-1	1	71.6	2025	17	7.0	-17	0.116
56-42.3397-107.5400-2-15-						0-W15257	7765	206	15450	52	-2	5.0	9.4	-271	-1	-1	47.7	3186	36	6.2	-28	0.330
56-42.3489-107.5289-2-12-						0-W15258	5813	186	11950	43	-3	4.4	21.4	-238	-1	2	90.9	2965	30	10.7	-31	0.156
56-42.9756-106.6439-2-15-						0-W15259	19420	275	6761	43	-2	6.1	3.2	-191		-1	8.6	2873	128	3.2	59	0.409
56-42.9369-106.6442-2-15-						0-W15261	16580	214	5675	49	-2	8.7	4.1	-183	-1	-1	11.1	3567	123	3.6	92	0.313
56-42.4114-106.0203-2-11-						0-W15262	20140	544	9364	46	-2	5.8	6.8	-321	-1	-1	13.7	2835	62	3.9	66	0.391
56-42.4139-106.0272-2-11-						0-W15263	10370	230	9466	-22	-3	4.1	2.3	-283	-1	-1	9.9	2802	43	-1.9	-43	0.781
56-42.3975-106.0511-2-12-						0-W15264	19230	451	8578	48	-2	5.1	5.4	-265	-1	-1	13.9	3213	51	3.4	41	0.378
56-42.3819-106.0550-2-15-						0-W15265	21560	386	8859	46	-2	7.1	4.4	-233	-1	-1	15.4	3633	57	2.6	65	0.279
56-42.3819-106.0228-2-15-						0-W15266	13820	308	9884	45	-2	6.2	5.1	-251	-1	-1	14.1	2596	53	3.5	86	0.263
56-42.3483-106.4278-2-11-						0-W15267	7545	78	8150	-33	-4	3.7	16.6	-303	-1	-1	16.4	-801	48	-2.7	-57	6.823
56-42.3708-106.4022-2-15-						0-W15268	20070	292	6720	48	-3	8.1	6.7	-258	-1	-1	45.0	3589	85	3.7	59	0.418
56-42.3697-106.4111-2-15-						0-W15269	11680	225	10270	32	-2	6.0	4.0	-194	-1	-1	19.0	2675	102	3.3	-52	0.241
56-42.3161-106.3778-2-15-						0-W15270	3795	305	14480	43	-2	4.9	7.6	-254	-1	-1	33.7	2586	49	6.2	63	0.178
56-42.3028-106.4006-2-15-						0-W15271	7622	247	10120	-20	-2	5.7	3.6	-241	-1	-1	26.4	3093	62	3.3	-49	0.191
56-42.3003-106.3772-2-15-						0-W15272	6876	578	10510	47	-2	5.8	4.8	-284	-1	-1	19.2	3381	85	3.7	72	0.278
56-42.2878-106.4614-2-15-						0-W15273	9689	250	6827	50	-2	7.0	4.6	-194	-1	-1	11.1	3460	101	2.7	77	0.269
56-42.3031-106.4803-2-15-						0-W15274	7803	303	10370	-17	-2	6.5	5.2	-256	-1	-1	18.3	3156	90	3.4	70	0.218
56-42.3186-106.4950-2-15-						0-W15275	8085	225	12600	56	-3	6.1	2.4	-279	-1	-1	29.0	2919	86	-2.0	-37	0.214
56-42.3192-106.4992-2-11-						0-W15276	9506	237	12490	50	-2	5.6	4.8	-230	-1	-1	25.9	3269	67	3.4	-23	0.201
56-42.3231-106.5094-2-15-						0-W15277	8079	369	13160	38	-2	5.4	6.4	-259	-1	-1	26.6	2644	57	3.9	-34	0.164
56-42.3350-106.5378-2-12-						0-W15278	7817	459	14800	51	-2	5.0	6.8	-314	-1	-1	43.6	2537	34	5.9	-75	0.135
56-42.3372-106.5364-2-15-						0-W15279	7084	362	12690	40	-1	4.7	6.1	-229	-1	-1	25.3	3319	51	4.8	-28	0.187
56-42.3450-106.5217-2-11-						0-W15280	9124	254	13230	36	-2	4.7	5.0	338	-1	-1	18.7	2816	48	3.3	-44	0.186
56-42.2947-106.5311-2-15-						0-W15281	6831	370	12280	46	-2	6.4	5.7	-268	-1	1	26.6	3313	64	5.6	62	0.179
56-42.3953-106.3442-2-12-						0-W15282	-7031	2346	9934	-33	-4	8.1	20.7	-703	-2	3	169.2	4358	47	20.1	-52	0.119
56-42.4069-106.3669-2-15-						0-W15283	18700	243	6792	45	-2	6.7	4.3	-192	-1	-1	12.5	3324	110	2.4	-11	0.336
56-42.2794-106.2214-2-15-						0-W15284	12460	370	8937	47	-2	6.3	4.5	-219	-1	-1	22.0	3339	62	3.6	52	0.214
56-42.2811-106.1706-2-15-						0-W15285	8393	633	15030	33	-2	6.7	7.1	-321	-1	-1	26.8	4233	47	4.0	-40	0.202
56-42.2703-106.1500-2-15-						0-W15286	11910	611	11810	-25	-3	8.5	11.8	-312	-1	-1	55.5	6337	64	8.3	-38	0.127
56-42.2561-106.1350-2-15-						0-W15287	11000	359	9520	-14	-2	6.1	4.4	-220	-1	-1	14.1	3563	75	3.1		0.293
56-42.2831-106.1314-2-15-						0-W15288	10320	333	4349	56	-2	8.5	6.2	-206	-1	-1	29.3	3622	72	6.1	-58	0.412
56-42.3197-106.1547-2-15-						0-W15289	7196	290	6597	37	-2	6.3	10.6	-217	-1	1	21.5	2947	69	5.2	56	0.930
56-42.3711-106.2978-2-15-						0-W15290	10800	192	14600	74	-3	6.4	4.9	-243	-1	-1	28.5	2371	42	2.8	-35	0.267
56-42.3697-106.3003-2-15-						0-W15291	12420	307	13210	42	-2	5.5	4.4	-244	-1	-1	32.1	2851	55	2.8	56	0.263
56-42.3581-106.3133-2-15-						0-W15292	11680	302	13250	50	-2	6.9	5.5	-229	-1	-1	38.1	2904	61	5.9	67	0.281
56-42.3569-106.3153-2-15-						0-W15293	10230	372	13400	46	-2	6.4	13.6	-270	-1	1	78.4	3353	56	6.6	63	0.181
56-42.3397-106.3639-2-15-						0-W15294	7468	295	13970	47	-3	6.5	3.8	-268	-1	-1	31.9	2728	53	2.6	-35	0.211
56-42.3247-106.3189-2-15-						0-W15295	5269	219	18090	36	-1	4.1	5.4	-209	-1	-1	29.3	2477	46	3.7		0.221
56-42.3014-106.3406-2-15-						0-W15296	7010	319	12920	35	-2	5.3	5.5	-232	-1	-1	21.9	2388	64	3.0	76	0.268

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

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																										U CONCENTRATION
							TIME SAMPLED																									
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
56	42.2517	106.3628	2	15	0	W15297	10/02/77	13	13							18	4	4	6													3.27
56	42.2861	106.2994	2	15	0	W15298	10/02/77		15							32	4	4	1													4.22
56	42.2742	106.2756	2	15	0	W15299	10/02/77	13	15							32	4	4	6													5.78
56	42.2506	106.2597	2	15	0	W15300	10/02/77	14	16							23	4	4	6													3.28
56	42.2608	106.2608	2	11	0	W15301	10/02/77	14	16	14.5	C		8.2	1100		27	4	5	7													5.56
56	42.2925	106.2678	2	15	0	W15302	10/02/77	15	18							18	4	4	6													6.33
56	42.3153	106.2811	2	15	0	W15304	10/02/77	15	18							32	4	4	1													9.13
56	42.3614	106.2611	2	15	0	W15305	10/02/77	16	19							23	4	4	6													5.97
56	42.3292	106.2289	2	15	0	W15306	10/03/77	11	18							32	1	1	4	1												6.37
56	42.5303	107.9397	2	15	0	W15307	10/06/77	12	16							11	1	1	4	1												10.97
56	42.5558	107.9708	2	15	0	W15309	10/06/77	12	16							13	1	1	4	6		1										1.87
56	42.5939	107.9431	2	15	0	W15310	10/06/77	13	16							18	3	6	6	1												3.24
56	42.6025	107.9653	2	15	0	W15311	10/06/77	13	16							11	3	1	3	6		1										3.00
56	42.6011	107.9681	2	12	0	W15312	10/06/77	13	16	11.0			6.6	431		15	3	1	4	6	3	2	1	2	3	3	3	3				3.70
56	42.6058	107.9561	2	15	0	W15313	10/06/77	14	16							11	3	1	4	1		1										3.38
56	42.6508	107.9206	2	15	0	W15314	10/06/77	14	16							16	3	6	4	6		1										3.31
56	42.6383	107.9092	2	11	0	W15315	10/06/77	14	16	11.0			6.7	210		13	3	6	5	6												6.58
56	42.6264	107.9400	2	11	0	W15316	10/06/77	15	16	9.0			7.3	2400		11	3	6	5	6												6.72
56	42.5894	107.8758	2	15	0	W15317	10/06/77	16	16							7	3	6	4	1		1										3.06
56	42.5681	107.8883	2	15	0	W15318	10/06/77	16	16							13	3	6	4	1		1										3.46
56	42.5414	107.9128	2	15	0	W15319	10/06/77	16	16							15	3	6	3	1												2.78
56	42.5319	107.9081	2	15	0	W15320	10/06/77	16	16							6	3	6	4	6												3.11
56	42.5497	107.9325	2	15	0	W15321	10/06/77	16	16							13	3	6	4	6		1										2.53
56	42.5250	107.9783	2	15	0	W15322	10/06/77	17	14		C					20	3	6	4	6		1										2.26
56	42.5167	107.9172	2	15	0	W15323	10/06/77	17	14							13	3	6	4	1		1										2.92
56	42.5144	107.9661	2	15	0	W15324	10/06/77	17	14							20	3	6				1										2.73
56	42.6625	107.9881	2	11	0	W15325	10/07/77	11		8.0			5.9	120		12	3	6	5	6												5.13
56	42.6756	107.9558	2	11	0	W15326	10/07/77		10	7.0			6.4	290		11	3	6														2.99
56	42.1428	106.6147	2	12	0	W15327	09/29/77		15	7.0			9.0	100		20	1	4	3	4	2	2	1	1	1	3	2	2				5.99
56	42.1511	106.5753	2	15	0	W15328	09/29/77		16							40	1	4	4	6				1	2	2	2					5.30
56	42.5108	107.6186	2	15	0	W15329	10/07/77		12							8	3	4	5	6		1		2	3	3	4	2				4.03
56	42.5150	107.5667	2	15	0	W15330	10/06/77		16							9	3	7	5	6		1		2	3	3	4	3				3.13
56	42.5961	107.5058	2	15	0	W15331	10/06/77		16							14	3	7	5	6		1		2	3	3	4	3				4.23
56	42.6033	107.6150	2	15	0	W15332	10/06/77		16							22	1	6	5	6		1		2	3	3	2	3				3.61
56	42.6100	107.5861	2	15	0	W15333	10/06/77		16							4	1	6	4	1		1		2	3	3	3	3				3.48
56	42.6097	107.5450	2	15	0	W15334	10/06/77		16							12	3	7	5	6		1		2	3	3	4	3				3.84
56	42.1683	106.0833	2	15	0	W15336	09/28/77	12	25							11	1	6	5	6		1		2	4	3	2	1				5.27
56	42.1611	106.0636	2	12	0	W15337	09/28/77	13	25	17.0			7.3	1800		7	1	1	4	6	1	2	1	2	4	3	2	1				5.98
56	42.1642	106.0636	2	15	0	W15338	09/28/77		23							13	1	1	5	1		1		2	4	3	2	1				3.53
56	42.1911	106.0806	2	15	0	W15339	09/28/77	13	24							9	1	6	5	6		1		2	4	3	2	1				3.14
56	42.1922	106.0831	2	15	0	W15340	09/28/77	13	24							11	1	6	5	6		1		2	4	3	2	2				2.83
56	42.1300	106.0036	2	12	0	W15341	09/28/77	15	24	20.0			6.8	800		13	1	6	5	6	2	2	1	2	3	3	3	2				2.97
56	42.1631	106.0108	2	15	0	W15342	09/28/77	15	24							13	1	1	5	1		1		2	4	3	1	2				2.92
56	42.3650	106.7442	2	12	0	W15343	10/01/77		7	4.5			7.5	350		13	3	4	6	6	1	2	1	2	4	3	4	2				8.76
56	42.1819	106.0158	2	15	0	W15344	09/28/77	16	23							6	1	1	5	6		1		2	4	3	1	2				3.27
56	42.1903	106.0203	2	15	0	W15345	09/28/77	16	25							26	1	1	5	7		1		2	4	3	1	2				2.69
56	42.2508	106.8011	2	12	0	W15346	09/29/77		24	16.5			7.5	500		13	1	1	5	6	3	2	1	2	3	3	4	2				5.30
56	42.2731	106.8506	2	12	0	W15347	09/29/77		24	19.0			7.4	150		9	3	7	5	6	1	2	1	2	3	3	4	2				5.36
56	42.2742	106.8061	2	15	0	W15348	09/29/77		24							9	1	6	3	6		1		2	3	3	4	2				2.77
56	42.2967	106.7958	2	99	0	W15349	09/29/77		24		C					41	3	7	3	6		1		2	3	3	4	2				4.97
56	42.2533	106.7694	2	15	0	W15350	09/29/77		23							20	1	1	4	6		1		2	3	3	3	2				4.37

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
56-42.2517-106.3628-2-15-						0-W15297	-5	-5	-5	16	-20	-15	8	-10	-15	2	39
56-42.2861-106.2994-2-15-						0-W15298	-5	-5	-5	25	-20	-15	8	-10	-15	2	38
56-42.2742-106.2756-2-15-						0-W15299	-5	-5	-5	22	-20	-15	11	-10	-15	3	50
56-42.2506-106.2597-2-15-						0-W15300	-5	-5	-5	20	-20	-15	9	-10	-15	2	36
56-42.2608-106.2608-2-11-						0-W15301	-5	-5	-5	15	-20	-15	8	-10	-15	3	45
56-42.2925-106.2678-2-15-						0-W15302	-5	-5	-5	23	-20	-15	14	-10	-15	3	39
56-42.3153-106.2811-2-15-						0-W15304	-5	-5	-5	13	-20	-15	17	-10	-15	2	22
56-42.3614-106.2611-2-15-						0-W15305	-5	-5	-5	-10	-20	-15	14	-10	-15	3	34
56-42.3292-106.2289-2-15-						0-W15306	-5	-5	-5	22	-20	-15	12	-10	-15	2	36
56-42.5303-107.9397-2-15-						0-W15307	-5	-5	-5	12	-20	-15	-5	-10	-15	1	37
56-42.5558-107.9708-2-15-						0-W15309	-5	-5	-5	12	-20	-15	13	-10	-15	2	32
56-42.5939-107.9431-2-15-						0-W15310	-5	-5	-5	28	-20	23	8	-10	-15	2	36
56-42.6025-107.9653-2-15-						0-W15311	-5	-5	-5	19	-20	24	12	-10	-15	2	43
56-42.6011-107.9681-2-12-						0-W15312	-5	-5	-5	14	-20	-15	-5	-10	-15	2	55
56-42.6058-107.9561-2-15-						0-W15313	-5	-5	-5	23	-20	-15	14	-10	-15	2	39
56-42.6508-107.9206-2-15-						0-W15314	-5	-5	-5	26	-20	-15	14	-10	-15	2	38
56-42.6383-107.9092-2-11-						0-W15315	-5	-5	-5	14	-20	-15	8	-10	-15	2	28
56-42.6264-107.9400-2-11-						0-W15316	-5	-5	-5	25	-20	15	-5	-10	-15	2	38
56-42.5894-107.8758-2-15-						0-W15317	-5	-5	-5	30	-20	24	6	-10	-15	2	33
56-42.5681-107.8883-2-15-						0-W15318	-5	-5	-5	19	-20	-15	9	-10	-15	2	48
56-42.5414-107.9128-2-15-						0-W15319	-5	-5	-5	19	-20	-15	8	-10	-15	2	37
56-42.5319-107.9081-2-15-						0-W15320	-5	-5	-5	13	-20	-15	16	-10	-15	2	42
56-42.5497-107.9325-2-15-						0-W15321	-5	-5	-5	-10	-20	-15	10	-10	-15	2	37
56-42.5250-107.9783-2-15-						0-W15322	-5	-5	-5	19	-20	-15	12	-10	-15	2	27
56-42.5167-107.9172-2-15-						0-W15323	-5	-5	-5	14	-20	-15	7	-10	-15	2	18
56-42.5144-107.9661-2-15-						0-W15324	-5	-5	-5	10	-20	-15	22	-10	-15	2	34
56-42.6625-107.9881-2-11-						0-W15325	-5	-5	-5	17	-20	-15	8	-10	-15	1	34
56-42.6756-107.9558-2-11-						0-W15326	-5	-5	-5	24	-20	-15	5	-10	-15	2	42
56-42.1428-106.6147-2-12-						0-W15327	-5	-5	-5	13	-20	-15	18	-10	-15	2	30
56-42.1511-106.5753-2-15-						0-W15328	-5	-5	-5	18	-20	20	16	-10	-15	2	45
56-42.5108-107.6186-2-15-						0-W15329	-5	-5	-5	18	-20	15	14	-10	-15	2	47
56-42.5150-107.5667-2-15-						0-W15330	-5	-5	-5	24	-20	-15	9	-10	-15	2	41
56-42.5961-107.5058-2-15-						0-W15331	-5	-5	-5	-10	-20	-15	11	-10	-15	2	47
56-42.6033-107.6150-2-15-						0-W15332	-5	-5	-5	15	-20	-15	14	-10	-15	2	36
56-42.6100-107.5861-2-15-						0-W15333	-5	5	-5	12	-20	-15	12	-10	-15	2	42
56-42.6097-107.5450-2-15-						0-W15334	-5	-5	-5	19	-20	-15	12	-10	-15	2	42
56-42.1683-106.0833-2-15-						0-W15336	-5	-5	-5	23	-20	15	10	-10	-15	3	35
56-42.1611-106.0636-2-12-						0-W15337	-5	-5	-5	31	-20	45	16	-10	-15	3	83
56-42.1642-106.0636-2-15-						0-W15338	-5	-5	-5	21	-20	28	11	-10	-15	2	50
56-42.1911-106.0806-2-15-						0-W15339	-5	-5	-5	16	-20	-15	15	-10	-15	2	33
56-42.1922-106.0831-2-15-						0-W15340	-5	-5	-5	20	-20	-15	17	-10	-15	2	50
56-42.1300-106.0036-2-12-						0-W15341	-5	-5	-5	18	-20	-15	7	-10	-15	2	40
56-42.1631-106.0108-2-15-						0-W15342	-5	-5	-5	18	-20	19	11	-10	-15	3	66
56-42.3650-106.7442-2-12-						0-W15343	-5	-5	-5	12	-20	-15	9	-10	-15	2	45
56-42.1819-106.0158-2-15-						0-W15344	-5	-5	-5	17	-20	24	12	-10	-15	3	64
56-42.1903-106.0203-2-15-						0-W15345	-5	-5	-5	27	-20	16	19	-10	-15	2	43
56-42.2508-106.8011-2-12-						0-W15346	-5	-5	-5	16	-20	-15	11	-10	-15	2	47
56-42.2731-106.8506-2-12-						0-W15347	-5	-5	-5	-10	-20	-15	-5	-10	-15	1	17
56-42.2742-106.8061-2-15-						0-W15348	-5	-5	-5	15	-20	-15	12	-10	-15	2	33
56-42.2967-106.7958-2-99-						0-W15349	-5	-5	-5	17	-20	-15	17	-10	-15	2	33
56-42.2533-106.7694-2-15-						0-W15350	-5	-5	-5	24	-20	-15	17	-10	-15	2	29

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

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS															
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per million (ppm)															
							Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
56-42.2517-106.3628-2-15-						0-W15297	48020	-0.06	493	19120	65	62	6.0	39	3.0	3	0.9	10940	7.3	15110	37	0.3
56-42.2861-106.2994-2-15-						0-W15298	52500	-0.08	542	5827	64	-69	7.4	45	-1.5	3	0.7	12440	9.2	18550	42	0.2
56-42.2742-106.2756-2-15-						0-W15299	67540	-0.06	593	8481	65	-64	11.6	45	3.1	4	0.9	13380	5.6	17760	46	0.3
56-42.2506-106.2597-2-15-						0-W15300	49720	-0.05	516	11900	56	-50	5.3	35	3.0	4	0.8	11340	6.7	17260	30	0.3
56-42.2608-106.2608-2-11-						0-W15301	51580	-0.06	618	17760	76	-72	6.4	40	2.6	4	0.8	10620	8.1	15960	40	0.3
56-42.2925-106.2678-2-15-						0-W15302	61220	-0.09	556	9889	66	-74	9.5	36	2.5	3	0.7	14320	7.2	14320	53	0.3
56-42.3153-106.2811-2-15-						0-W15304	56510	-0.04	523	9068	195	-76	8.1	23	-0.7	6	0.7	6329	18.1	16030	116	0.4
56-42.3614-106.2611-2-15-						0-W15305	63770	-0.06	542	16000	98	-71	6.5	35	2.0	4	1.0	11770	11.6	17210	67	0.3
56-42.3292-106.2289-2-15-						0-W15306	64720	-0.06	614	16930	100	-83	7.1	41	2.0	3	0.8	12680	8.2	17460	59	0.3
56-42.5303-107.9397-2-15-						0-W15307	27360	-0.07	374	120000	27	5384	6.7	22	-1.3	1	0.3	5998	3.5	7828	25	0.2
56-42.5558-107.9708-2-15-						0-W15309	63400	-0.05	714	23150	56	-73	8.0	32	1.5	3	0.7	12210	5.9	14260	38	0.2
56-42.5939-107.9431-2-15-						0-W15310	62990	-0.07	563	19540	77	-82	11.1	100	2.8	4	1.1	20550	9.2	17880	53	0.4
56-42.6025-107.9653-2-15-						0-W15311	58470	-0.07	584	32050	89	-89	9.3	65	2.0	3	1.1	20260	12.2	11500	45	0.4
56-42.6011-107.9681-2-12-						0-W15312	53600	-0.10	467	48520	52	-96	10.0	61	-1.7	3	0.8	14720	6.8	13710	36	0.3
56-42.6058-107.9561-2-15-						0-W15313	62780	-0.06	633	32120	79	105	8.9	53	1.5	4	1.0	18840	10.8	13890	47	0.4
56-42.6508-107.9206-2-15-						0-W15314	58970	-0.06	600	14490	92	-81	8.2	57	2.4	4	1.0	16830	12.7	15930	41	0.5
56-42.6383-107.9092-2-11-						0-W15315	55760	-0.10	507	16850	58	-95	8.6	43	-1.8	3	1.0	12930	11.2	16580	45	0.4
56-42.6264-107.9400-2-11-						0-W15316	59950	-0.06	839	17300	53	94	12.0	56	-1.1	4	0.8	12080	7.2	16190	40	0.3
56-42.5894-107.8758-2-15-						0-W15317	61230	-0.06	662	15840	81	-77	9.1	68	2.5	4	1.0	17750	9.4	15340	51	0.4
56-42.5681-107.8883-2-15-						0-W15318	54670	-0.07	614	27170	145	83	11.0	78	2.0	3	1.1	35550	19.0	14490	77	0.4
56-42.5414-107.9128-2-15-						0-W15319	56390	-0.09	538	30350	77	-91	9.2	53	-1.6	3	1.1	20910	11.0	15880	56	0.3
56-42.5319-107.9081-2-15-						0-W15320	59730	-0.05	684	21340	78	94	11.6	43	1.4	4	0.9	18360	11.8	16310	47	0.3
56-42.5497-107.9325-2-15-						0-W15321	59950	-0.05	692	26400	55	135	5.7	42	1.5	3	1.0	14250	8.2	17760	36	0.4
56-42.5250-107.9783-2-15-						0-W15322	57460	-0.03	688	22130	13	-84	2.7	-3	-0.4	3	0.2	2833	1.5	15660	7	0.0
56-42.5167-107.9172-2-15-						0-W15323	54460	-0.08	487	18520	101	-89	8.4	46	-1.4	2	1.0	25280	14.7	13910	74	0.2
56-42.5144-107.9661-2-15-						0-W15324	57060	-0.05	599	25230	64	-71	10.1	41	2.0	3	0.9	12690	8.3	15570	41	0.3
56-42.6625-107.9881-2-11-						0-W15325	56020	-0.06	599	16140	62	159	6.8	44	3.0	4	1.1	10810	9.5	16770	44	0.4
56-42.6756-107.9558-2-11-						0-W15326	38330	-0.06	383	23300	92	-47	8.2	50	2.5	3	1.0	19890	9.8	9763	51	0.3
56-42.1428-106.6147-2-12-						0-W15327	49240	-0.10	915	40010	89	224	10.1	37	2.9	4	0.9	16870	15.2	25200	61	0.4
56-42.1511-106.5753-2-15-						0-W15328	24260	-0.06	458	5342	87	118	10.8	37	2.1	4	0.9	11380	8.4	13330	54	0.4
56-42.5108-107.6186-2-15-						0-W15329	26350	-0.05	596	5579	69	-65	5.8	33	2.2	4	0.9	11830	7.1	15300	40	0.3
56-42.5150-107.5667-2-15-						0-W15330	30220	-0.06	597	12900	79	-71	7.0	42	2.3	3	1.0	14240	7.9	16300	42	0.4
56-42.5961-107.5058-2-15-						0-W15331	33380	-0.08	665	12990	66	-81	6.3	30	2.0	3	0.9	13750	10.5	16920	38	0.4
56-42.6033-107.6150-2-15-						0-W15332	29630	-0.05	638	12070	65	-70	9.8	37	2.3	4	0.9	13500	8.7	21070	35	0.3
56-42.6100-107.5861-2-15-						0-W15333	31750	-0.05	647	11430	77	-71	6.5	38	1.7	4	1.1	14860	11.1	16870	53	0.4
56-42.6097-107.5450-2-15-						0-W15334	34100	-0.06	749	24950	94	-86	7.5	52	2.6	4	1.0	14450	9.9	17950	45	0.4
56-42.1683-106.0833-2-15-						0-W15336	32170	-0.09	770	10160	65	-90	8.1	31	-1.6	3	0.7	14170	9.8	19160	46	0.4
56-42.1611-106.0636-2-12-						0-W15337	37060	-0.09	401	74740	46	228	17.8	69	6.4	3	0.8	19800	3.6	9608	40	0.3
56-42.1642-106.0636-2-15-						0-W15338	51700	-0.08	530	17130	71	-65	11.6	46	3.5	4	1.0	14710	8.7	19410	45	0.4
56-42.1911-106.0806-2-15-						0-W15339	44640	-0.06	689	5736	62	-56	7.5	29	2.1	4	0.7	8322	9.0	18290	32	0.4
56-42.1922-106.0831-2-15-						0-W15340	49910	-0.06	676	5589	63	-57	4.9	42	2.9	4	0.8	12070	8.8	15180	35	0.3
56-42.1300-106.0036-2-12-						0-W15341	35780	-0.05	540	40660	37	-52	5.2	26	1.8	3	0.6	6423	4.0	12410	23	0.2
56-42.1631-106.0108-2-15-						0-W15342	50080	-0.08	576	31970	51	-61	9.9	49	3.3	2	0.9	13370	7.1	16320	37	0.3
56-42.3650-106.7442-2-12-						0-W15343	49930	-0.06	754	11070	53	-67	8.8	26	1.6	3	0.7	7986	8.0	18440	28	0.3
56-42.1819-106.0158-2-15-						0-W15344	66570	-0.07	564	27350	60	-47	5.7	55	4.2	4	0.7	14590	4.7	17300	40	0.3
56-42.1903-106.0203-2-15-						0-W15345	59120	-0.07	604	8844	46	-54	6.2	41	2.8	4	0.7	9770	5.0	18800	29	0.3
56-42.2508-106.8011-2-12-						0-W15346	44370	-0.11	476	52480	73	-105	12.2	45	2.6	3	0.9	12610	10.7	16920	68	0.5
56-42.2731-106.8506-2-12-						0-W15347	40590	-0.06	507	8953	128	-67	7.9	35	1.1	5	1.2	12880	21.5	16190	75	0.5
56-42.2742-106.8061-2-15-						0-W15348	51490	-0.06	676	10340	77	-68	5.1	39	2.3	4	0.9	12280	10.9	16500	45	0.4
56-42.2967-106.7958-2-99-						0-W15349	51000	-0.06	565	11580	81	-74	5.5	24	1.6	4	1.0	9489	10.5	18250	57	0.3
56-42.2533-106.7694-2-15-						0-W15350	48000	-0.09	785	29290	137	-82	11.3	59	2.0	4	1.3	25600	25.6	14370	87	0.6

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

DOE SAMPLE NUMBER						LAS SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
56-42.2517-106.3628-2-15-				0-	W15297		20450	265	4121	32	-2	5.8	3.8	-211	-1	-1	10.7	2752	66	3.3	-40	0.306
56-42.2861-106.2994-2-15-				0-	W15298		7143	329	8664	35	-3	6.6	2.1	-253	-1	-1	13.3	3297	59	-1.8	-35	0.317
56-42.2742-106.2756-2-15-				0-	W15299		12770	334	8829	-15	-2	6.8	4.0	-229	-1	-1	17.6	3362	91	2.4	76	0.328
56-42.2506-106.2597-2-15-				0-	W15300		16100	266	6292	53	-2	5.7	3.6	-187		-1	9.4	2915	70	2.6	77	0.349
56-42.2608-106.2608-2-11-				0-	W15301		17210	231	9703	24	-2	5.5	4.9	220	-1	-1	14.5	2667	68	4.3	73	0.383
56-42.2925-106.2678-2-15-				0-	W15302		10450	329	9537	-26	-3	7.7	3.4	-267	-1	-1	16.4	2908	65	1.8	-39	0.386
56-42.3153-106.2811-2-15-				0-	W15304		-3142	255	19320	28	-1	3.4	11.7	-217	-1		58.7	2768	34	7.7	-39	0.156
56-42.3614-106.2611-2-15-				0-	W15305		11190	383	12200	42	-2	6.0	5.5	-236	-1	-1	30.0	3200	50	4.1	-37	0.199
56-42.3292-106.2289-2-15-				0-	W15306		8080	418	14290	31	-2	6.2	5.5	-276	-1	-1	28.5	2441	57	4.9	56	0.224
56-42.5303-107.9397-2-15-				0-	W15307		50050	174	10070	-23	-2	3.0	1.2	754	-1	-1	4.7	1250	46	-1.6	-34	2.334
56-42.5558-107.9708-2-15-				0-	W15309		10470	344	17360	26	-1	5.6	3.6	556		-1	7.9	2959	67	1.4	63	0.237
56-42.5939-107.9431-2-15-				0-	W15310		22350	633	13480	55	-2	9.7	5.3	383	-1	-1	18.1	4220	84	4.3	76	0.179
56-42.6025-107.9653-2-15-				0-	W15311		15570	512	15380	44	-2	8.7	5.3	-302	-1	-1	15.0	3758	88	3.1	70	0.200
56-42.6011-107.9681-2-12-				0-	W15312		16570	533	12290	-29	-3	8.2	3.7	-339	-1	-1	11.2	2992	59	-2.2	-44	0.330
56-42.6058-107.9561-2-15-				0-	W15313		17820	487	19880	41	-2	9.1	4.7	-264	1	-1	25.7	3150	80	4.4	41	0.132
56-42.6508-107.9206-2-15-				0-	W15314		9747	479	12940	47	-2	6.8	6.2	-274	-1	-1	15.8	4270	71	3.9		0.209
56-42.6383-107.9092-2-11-				0-	W15315		15220	266	15050	-29	-3	8.5	4.1	-291	-1	-1	15.6	3113	65	3.1	-49	0.422
56-42.6264-107.9400-2-11-				0-	W15316		17900	256	13930	40	-2	7.1	3.5	356		-1	9.8	3521	70	2.7	-32	0.686
56-42.5894-107.8758-2-15-				0-	W15317		14550	572	13010	52	-2	7.7	5.3	399	-1	-1	13.4	4030	72	3.4	74	0.228
56-42.5681-107.8883-2-15-				0-	W15318		15000	666	14290	40	-2	9.1	7.4	-310	-1	-1	22.8	6717	174	4.5	87	0.152
56-42.5414-107.9128-2-15-				0-	W15319		15540	456	15300	-26	-3	9.4	3.5	579	-1	-1	12.3	3231	86	4.0	-39	0.226
56-42.5319-107.9081-2-15-				0-	W15320		16050	486	15330	-15	-2	6.8	4.6	-253	-1	-1	13.4	4274	108	3.4	67	0.232
56-42.5497-107.9325-2-15-				0-	W15321		12390	366	16390	38	-2	6.7	4.6	400	-1	-1	10.5	2500	63	2.4	52	0.241
56-42.5250-107.9783-2-15-				0-	W15322		10040	434	15010	-7	-1	1.0	0.8	-274			1.7	4107	100	-0.6	24	1.329
56-42.5167-107.9172-2-15-				0-	W15323		8985	452	15360	-26	-3	7.6	4.0	451	-1	-1	15.5	5051	121	2.5	-36	0.188
56-42.5144-107.9661-2-15-				0-	W15324		11450	392	13380	-13	-2	5.5	4.1	355	-1	-1	11.0	2978	67	2.6	80	0.248
56-42.6625-107.9881-2-11-				0-	W15325		10390	224	13980	52	-2	5.4	4.8	379	-1	-1	14.6	3455	44	1.8	-24	0.351
56-42.6756-107.9558-2-11-				0-	W15326		8171	294	10870	45	-2	8.2	5.5	230	-1	-1	16.6	2428	57	3.3	78	0.180
56-42.1428-106.6147-2-12-				0-	W15327		16170	710	24850	-29	-3	7.1	5.2	-454	-1	-1	29.9	4813	101	5.4	-49	0.200
56-42.1511-106.5753-2-15-				0-	W15328		8855	639	10240	-15	-2	5.4	5.1	-289	-1	-1	21.9	2241	33	3.9	-49	0.242
56-42.5108-107.6186-2-15-				0-	W15329		7627	509	9470	40	-2	5.8	4.2	-240	-1	-1	14.1	2138	37	2.5	57	0.286
56-42.5150-107.5667-2-15-				0-	W15330		9812	298	12200	38	-2	6.6	5.7	-235	-1	-1	18.1	2377	30	3.7	77	0.173
56-42.5961-107.5058-2-15-				0-	W15331		8683	404	12460	-21	-2	6.0	4.4	-270	-1	-1	15.8	2004	43	3.8	-31	0.268
56-42.6033-107.6150-2-15-				0-	W15332		7346	362	13600	48	-2	5.5	4.6	472	-1	-1	13.5	2508	41	3.0	58	0.267
56-42.6100-107.5861-2-15-				0-	W15333		9527	470	13620	50	-2	6.5	4.7	-233		-1	18.6	2398	40	4.5	-31	0.187
56-42.6097-107.5450-2-15-				0-	W15334		12090	442	15350	53	-2	6.3	6.9	-285	-1	-1	18.9	2856	52	4.4	69	0.203
56-42.1683-106.0833-2-15-				0-	W15336		6317	488	14060	-26	-3	7.4	-0.8	-313	-1	-1	13.0	2472	35	3.8	-37	0.405
56-42.1611-106.0636-2-12-				0-	W15337		16100	108	3341	-20	-3	8.8	3.8	-107	-1	-1	9.3	2050	215	-1.6	113	0.643
56-42.1642-106.0636-2-15-				0-	W15338		11430	328	6802	48	-3	7.5	5.8	-249	-1	-1	16.6	2773	121	5.7	-18	0.213
56-42.1911-106.0806-2-15-				0-	W15339		6945	347	8052	32	-2	4.0	4.5	-207	-1	-1	12.7	2896	62	1.9	36	0.247
56-42.1922-106.0831-2-15-				0-	W15340		9232	345	8128	50	-2	6.0	4.1	-206	-1	-1	12.7	2931	80	3.1	50	0.223
56-42.1300-106.0036-2-12-				0-	W15341		9986	247	3969	21	-2	3.2	2.7	-204	-1	-1	7.8	1841	73	2.1	54	0.381
56-42.1631-106.0108-2-15-				0-	W15342		11930	245	6416	50	-3	7.3	4.4	-223	-1	-1	11.0	2242	132	2.5	-89	0.265
56-42.3650-106.7442-2-12-				0-	W15343		8942	233	11980	43	-2	3.9	4.5	-211	-1	-1	10.5	2730	44	2.1	-36	0.834
56-42.1819-106.0158-2-15-				0-	W15344		16270	273	4014	55	-2	8.6	4.3	-190	-1	-1	12.0	2716	116	3.1	79	0.273
56-42.1903-106.0203-2-15-				0-	W15345		14990	254	4902	38	-2	5.4	3.7	-225	-1	-1	9.3	2967	94	2.2	-25	0.289
56-42.2508-106.8011-2-12-				0-	W15346		10300	751	9535	-29	-3	6.0	4.7	-428	-1	-1	18.3	2351	47	4.1	87	0.290
56-42.2731-106.8506-2-12-				0-	W15347		7152	441	11600	26	-2	4.4	8.7	414	-1	1	33.1	5400	70	5.4	14	0.162
56-42.2742-106.8061-2-15-				0-	W15348		10250	356	12380	49	-2	5.7	5.0	-227	-1	-1	19.8	2858	49	4.1	58	0.140
56-42.2967-106.7958-2-99-				0-	W15349		7183	330	11230	34	-2	4.5	5.5	-262	-1	-1	23.7	3443	51	5.0	46	0.210
56-42.2533-106.7694-2-15-				0-	W15350		10030	555	10150	42	-3	7.8	8.9	-308	-1	-1	32.8	5110	92	5.1	57	0.133

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

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																								U CONCENTRATION
							TIME SAMPLED																							
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
56	42.2797	106.7772	2	12	0	W15351	09/29/77		24	17.0			6.8	550		11	3	7	5	6	2	2	1	2	3	3	4	2	1					2.47
56	42.3192	106.7858	2	15	0	W15353	09/29/77		24							16	3	7	5	6		1		2	3	3	4	2	1					3.58
56	42.3169	106.7969	2	11	0	W15354	09/29/77		24	15.0			7.4	150		13	1	1	5	6	4	3	1		3	3	4	2	1					2.73
56	42.3317	106.6858	2	15	0	W15355	10/01/77		9							27	1	6	5	6		1		2	3	3	3	2	1					2.76
56	42.1594	106.0822	2	15	0	W15356	10/03/77	14	20		C						1	1	4	6		1		3	4	3	2	1		1				2.88
56	42.3089	106.8206	2	11	0	W15357	09/29/77		23	15.0			7.1	130		13	3	7	6	8	3	2			3	3	4	2	1					35.86
56	42.3172	106.8417	2	11	0	W15358	09/29/77		25	14.0			6.5	70		11	3	7	5	6	2	2	5		4	3	4	2	1					4.81
56	42.3347	106.8481	2	11	0	W15359	09/29/77		24	14.0			6.1	100		7	3	7	6	8	2	3	1			3	4	2	1					4.05
56	42.3486	106.8447	2	11	0	W15360	09/29/77		24	16.5			7.0	180		14	3	7	4	9	3	3	1		4	3	4	2	1					4.57
56	42.3583	106.8203	2	15	0	W15361	09/29/77		23							37	3	7	4	1		1			2	4	3	4	2	1					5.75
56	42.3581	106.8222	2	15	0	W15362	09/29/77		23							18	3	7	4	1		1			2	4	3	4	2	1					3.89
56	42.3611	106.8186	2	11	0	W15363	09/29/77		23	15.0			7.5	115		46	3	7	5	6	3	3	1		4	3	4	3	1					4.66
56	42.3672	106.8297	2	12	0	W15364	09/29/77		23	14.0			7.1	170		23	3	7	4	6	3	2	1	2	4	3	4	3	1					9.77
56	42.3658	106.8267	2	12	0	W15365	09/29/77		23	12.0			7.0	200		18	3	7			2	3	1	2	4	3	4	3	1					7.13
56	42.3136	106.7697	2	12	0	W15366	09/30/77		12	10.0			7.1	360		11	1	6	5	6	3	3	1	2	4	3	4	3	1					6.51
56	42.3603	106.7842	2	11	0	W15367	09/30/77		12	11.0			7.5	95		41	3	4	6	6	2	3	1		3	3	4	2	1					10.42
56	42.3694	106.7744	2	11	0	W15368	09/30/77		12	9.0			6.9	250		18	3	4	6	6	2	3	3	5	4	3	4	2	1					7.51
56	42.3497	106.7761	2	11	0	W15369	09/30/77		12	10.0			6.9	700		3	1	7	6	8	2	3	5		4	3	4	2	1					5.24
56	42.3647	106.7528	2	11	0	W15370	09/30/77		12	9.0			7.2	1500		11	3	4	6	8	1	3	4		4	3	4	2	1					4.32
56	42.2294	106.1142	2	15	0	W15371	10/03/77	15	25		C						1	1	4	6		1		2	4	3	2	1		1				3.48
56	42.2144	106.1111	2	15	0	W15372	10/03/77	16	22		C						1	1	4	6		1		2	4	3	2	1		1				3.37
56	42.2000	106.1028	2	15	0	W15373	10/03/77	16	22		C						1	1	4	6		1		2	4	3	2	1		1				3.40
56	42.5956	107.5353	2	15	0	W15374	10/06/77		16							9	1	1	4	1		1		2	3	3	4	3	1					3.30
56	42.5789	107.5622	2	15	0	W15375	10/06/77		16							11	3	7	5	6		1		2	3	3	4	3	1					4.19
56	42.5722	107.6031	2	12	0	W15376	10/06/77		16	12.0			6.9	275		7	3	7	5	6	2	2	1		3	3	4	3	1					6.40
56	42.5717	107.5939	2	11	0	W15377	10/06/77		16	10.0			7.2	285		8	3	7	6	8	2	3	1		3	3	4	3	1					38.83
56	42.5556	107.5978	2	11	0	W15378	10/06/77		16	14.0			7.4	90		13	3	4	4	6	2	3	1		3	3	4	3	1					32.84
56	42.5553	107.5953	2	15	0	W15379	10/06/77		16							4	3	4	4	1		1		2	3	3	4	3	1					106.80
56	42.5411	107.5053	2	15	0	W15380	10/06/77		16							12	3	7	4	6		1		2	3	3	4	4	1					10.73
56	42.5400	107.5181	2	15	0	W15381	10/06/77		16							11	3	7	5	6		1			3	3	4	4	1					6.18
56	42.5289	107.5414	2	99	0	W15382	10/06/77		16		C					8	3	7	5	8		1			3	3	4	4	1					12.61
56	42.5178	107.5561	2	15	0	W15383	10/06/77		16							6	3	7	5	6		1		2	3	3	4	4	1					7.65
56	42.5072	107.5561	2	15	0	W15384	10/06/77		16							3	7				1			3	3	4	4	1					6.27
56	42.5103	107.5900	2	15	0	W15385	10/07/77		11							10	3	4	4	6		1		2	3	3	4	2	1					3.30
56	42.0119	106.5144	2	15	0	W15386	09/19/77	11	23							7	1	6	4	6		1		2	3	3	3	3	1					4.78
56	42.0050	106.6644	2	15	0	W15387	09/19/77	11	26							6	1	6	4	6		1		2	3	4	4	3	1					11.33
56	42.0419	106.6564	2	15	0	W15388	09/19/77	14	23							2	1	6	4	6		1		1	3	4	3	3	1					2.28
56	42.0419	106.6531	2	15	0	W15389	09/19/77	14	23							7	1	6	4	6		1		1	3	4	3	3	1					2.82
56	42.0253	106.7289	2	15	0	W15390	09/19/77	16	24							3	1	6	4	6		1		2	3	2	2	3	1					2.47
56	42.0669	106.7025	2	15	0	W15391	09/19/77	16	24							4	1	6	4	6		1		2	3	3	2	3	1					2.13
56	42.0406	106.7064	2	15	0	W15392	09/19/77	17	24							4	1	6	4	6		1		2	3	3	2	3	1					2.90
56	42.1131	106.7269	2	15	0	W15394	09/20/77	12	29							13	1	4	3	6		1		2	3	2	2	2	1					3.49
56	42.0847	106.6756	2	99	0	W15400	09/20/77	15	23		C					13	1	6	4	6	2	2	1	1	4	3	1	2	1					10.07
56	42.0911	106.6361	2	99	0	W15402	09/20/77	15	23		C					13	1	6	4	6	2	2	1	1	4	3	1	2	1					10.16
56	42.0683	106.6478	2	15	0	W15403	09/20/77	16	21							18	1	6	4	6					3	4	2	2						2.53
56	42.0719	106.6783	2	15	0	W15404	09/20/77	16	21							18	1	6	4	6		1		1	4	3	2	2	1					9.47
56	42.1156	106.7900	2	15	0	W15405	09/20/77	16	24							0	1	6	4	6		1		2	3	3	2	3	1					3.12
56	42.1036	106.8208	2	15	0	W15406	09/20/77	17	19	13.0						11	1	4	5			1		1	4	2	2	2	1					3.34
56	42.1086	106.7647	2	15	0	W15407	09/20/77	17								18	1	6	4	6		1		2	3	2	2	2	1					2.97
56	42.0958	106.7567	2	15	0	W15409	09/20/77	18	24							18	1	6	4	6		1		2	6	4	2	2	1					2.87
56	42.0667	106.5056	2	12	0	W15412	09/21/77	11	14	9.0	C		6.2	700		9	1	6	6	8	2	2	3	1	3	4	1	2	9					2.70

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

(2)

DOE SAMPLE NUMBER						LAS SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
56-42.2797-106.7772-2-12-						0-W15351	-5	-5	-5	16	-20	-15	6	-10	-15	2	33
56-42.3192-106.7858-2-15-						0-W15353	-5	-5	-5	12	-20	-15	15	-10	-15	2	33
56-42.3169-106.7969-2-11-						0-W15354	-5	-5	-5	-10	-20	-15	7	-10	-15	1	23
56-42.3317-106.6858-2-15-						0-W15355	-5	-5	-5	18	-20	16	11	-10	-15	2	49
56-42.1594-106.0822-2-15-						0-W15356	-5	-5	-5	17	-20	-15	10	-10	-15	2	50
56-42.3089-106.8206-2-11-						0-W15357	-5	-5	-5	-10	-20	-15	6	-10	-15	2	24
56-42.3172-106.8417-2-11-						0-W15358	-5	-5	-5	17	-20	27	11	-10	-15	2	30
56-42.3347-106.8481-2-11-						0-W15359	-5	-5	-5	15	-20	-15	6	-10	-15	2	20
56-42.3486-106.8447-2-11-						0-W15360	-5	-5	-5	-10	-20	-15	9	-10	-15	1	18
56-42.3583-106.8203-2-15-						0-W15361	-5	-5	-5	24	-20	-15	20	-10	-15	2	26
56-42.3581-106.8222-2-15-						0-W15362	-5	-5	-5	14	-20	-15	17	-10	-15	2	31
56-42.3611-106.8186-2-11-						0-W15363	-5	-5	-5	11	-20	-15	12	-10	-15	2	23
56-42.3672-106.8297-2-12-						0-W15364	-5	-5	-5	18	-20	-15	10	-10	-15	2	20
56-42.3658-106.8267-2-12-						0-W15365	-5	-5	-5	-10	-20	-15	-5	-10	-15	2	19
56-42.3136-106.7697-2-12-						0-W15366	-5	-5	-5	-10	-20	17	11	-10	-15	2	21
56-42.3603-106.7842-2-11-						0-W15367	-5	-5	-5	16	-20	-15	9	-10	-15	2	19
56-42.3694-106.7744-2-11-						0-W15368	-5	-5	-5	12	-20	-15	10	-10	-15	2	23
56-42.3497-106.7761-2-11-						0-W15369	-5	-5	-5	10	-20	-15	11	-10	-15	2	31
56-42.3647-106.7528-2-11-						0-W15370	-5	-5	-5	19	-20	-15	10	-10	-15	2	29
56-42.2294-106.1142-2-15-						0-W15371	-5	-5	-5	14	-20	-15	12	-10	-15	2	38
56-42.2144-106.1111-2-15-						0-W15372	-5	-5	-5	28	-20	30	14	-10	-15	2	60
56-42.2000-106.1028-2-15-						0-W15373	-5	-5	-5	26	-20	15	14	-10	-15	2	34
56-42.5956-107.5353-2-15-						0-W15374	-5	-5	-5	17	-20	-15	12	-10	-15	2	45
56-42.5789-107.5622-2-15-						0-W15375	-5	-5	-5	15	-20	-15	11	-10	-15	2	40
56-42.5722-107.6031-2-12-						0-W15376	-5	-5	-5	10	-20	-15	9	-10	-15	2	21
56-42.5717-107.5939-2-11-						0-W15377	-5	-5	-5	12	-20	-15	9	-10	-15	2	47
56-42.5556-107.5978-2-11-						0-W15378	-5	-5	-5	19	-20	-15	18	-10	-15	2	36
56-42.5553-107.5953-2-15-						0-W15379	-5	8	-5	13	-20	-15	36	-10	-15	3	52
56-42.5411-107.5053-2-15-						0-W15380	-5	6	-5	17	-20	-15	8	-10	-15	2	42
56-42.5400-107.5181-2-15-						0-W15381	-5	-5	-5	20	-20	-15	11	-10	-15	2	42
56-42.5289-107.5414-2-99-						0-W15382	-5	-5	-5	-10	-20	-15	17	-10	-15	2	40
56-42.5178-107.5561-2-15-						0-W15383	-5	5	-5	12	-20	-15	11	-10	-15	2	29
56-42.5072-107.5561-2-15-						0-W15384	-5	8	-5	10	-20	-15	12	-10	-15	2	29
56-42.5103-107.5900-2-15-						0-W15385	-5	6	-5	10	-20	20	7	-10	-15	2	47
56-42.0119-106.5144-2-15-						0-W15386	-5	5	-5	18	-20	-15	13	-10	-15	2	34
56-42.0050-106.6644-2-15-						0-W15387	-5	6	-5	13	-20	-15	6	-10	-15	2	31
56-42.0419-106.6564-2-15-						0-W15388	-5	-5	-5	15	-20	-15	8	-10	-15	2	21
56-42.0419-106.6531-2-15-						0-W15389	-5	-5	-5	-10	-20	-15	8	-10	-15	2	28
56-42.0253-106.7289-2-15-						0-W15390	-5	-5	-5	17	-20	-15	-5	-10	-15	2	18
56-42.0669-106.7025-2-15-						0-W15391	-5	-5	-5	23	-20	-15	6	-10	-15	2	34
56-42.0406-106.7064-2-15-						0-W15392	-5	-5	-5	16	-20	-15	13	-10	-15	2	24
56-42.1131-106.7269-2-15-						0-W15394	-5	-5	-5	21	-20	20	12	-10	-15	3	46
56-42.0847-106.6756-2-99-						0-W15400	-5	7	-5	11	-20	-15	5	-10	-15	2	38
56-42.0911-106.6361-2-99-						0-W15402	-5	7	-5	16	-20	-15	8	-10	-15	2	33
56-42.0683-106.6478-2-15-						0-W15403	-5	-5	-5	17	-20	-15	7	-10	-15	2	27
56-42.0719-106.6783-2-15-						0-W15404	-5	-5	-5	21	-20	-15	13	-10	-15	2	31
56-42.1156-106.7900-2-15-						0-W15405	-5	-5	-5	10	-20	-15	10	-10	-15	2	46
56-42.1036-106.8208-2-15-						0-W15406	-5	-5	-5	12	-20	-15	-5	-10	-15	2	26
56-42.1086-106.7647-2-15-						0-W15407	-5	-5	-5	-10	-20	-15	5	-10	-15	2	30
56-42.0958-106.7567-2-15-						0-W15409	-5	-5	-5	19	-20	-15	11	-10	-15	2	29
56-42.0667-106.5056-2-12-						0-W15412	-5	-5	-5	19	-20	-15	5	-10	-15	2	32

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

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS												
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAB. SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per million (ppm)												
							Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
56-42.2797-106.7772-2-12-			0	W	1	W15351	49490	-0.06	659	13740	66	-67	8.7	23	1.4	3	0.7	10580	7.7	17170	40	0.3
56-42.3192-106.7858-2-15-			0	W	3	W15353	48800	-0.06	622	9796	69	-64	4.2	34	2.1	4	0.8	10530	12.8	18770	44	0.4
56-42.3169-106.7969-2-11-			0	W	4	W15354	39410	-0.05	683	6639	46	-64	3.2	14	-0.7	3	0.7	3806	12.5	17350	29	0.3
56-42.3317-106.6858-2-15-			0	W	5	W15355	60100	-0.10	734	26590	63	-92	10.7	41	3.7	3	1.0	15220	6.7	14110	35	0.4
56-42.1594-106.0822-2-15-			0	W	6	W15356	46240	-0.06	638	28530	49	-51	8.2	41	2.1	4	0.6	10030	8.7	15770	35	0.3
56-42.3089-106.8206-2-11-			0	W	7	W15357	48470	-0.06	604	9275	72	-69	3.1	32	1.2	3	0.8	6055	10.3	19330	66	0.4
56-42.3172-106.8417-2-11-			0	W	8	W15358	55270	-0.06	746	9341	65	-77	5.6	27	1.3	4	0.8	8897	9.0	17860	35	0.3
56-42.3347-106.8481-2-11-			0	W	9	W15359	44330	-0.08	478	8989	66	-81	8.4	36	-1.3	2	1.0	8370	13.7	17010	48	0.4
56-42.3486-106.8447-2-11-			0	W	10	W15360	40280	-0.06	584	8289	94	-82	8.0	22	-0.8	5	1.1	6997	19.2	16540	62	0.5
56-42.3583-106.8203-2-15-			0	W	11	W15361	52490	-0.05	615	8537	79	108	4.7	34	1.8	4	0.8	10890	10.6	20110	51	0.4
56-42.3581-106.8222-2-15-			0	W	12	W15362	46010	-0.05	610	9073	72	-72	4.9	29	-0.8	4	0.7	8270	12.2	18330	38	0.3
56-42.3611-106.8186-2-11-			0	W	13	W15363	44180	-0.08	482	7477	76	-85	8.7	27	2.3	3	1.1	10290	14.1	15620	53	0.3
56-42.3672-106.8297-2-12-			0	W	14	W15364	42650	0.24	543	10480	178	-70	7.2	37	-0.9	8	1.5	10130	31.9	16090	122	0.7
56-42.3658-106.8267-2-12-			0	W	15	W15365	43920	-0.08	579	9273	139	-73	5.7	33	-1.2	6	1.2	10160	28.7	15650	81	0.6
56-42.3136-106.7697-2-12-			0	W	16	W15366	45490	-0.05	555	13520	94	-79	8.9	33	0.6	5	1.2	9802	22.5	16220	64	0.5
56-42.3603-106.7842-2-11-			0	W	17	W15367	45490	0.13	510	10180	101	-79	3.7	26	-0.8	4	1.2	6004	24.3	17750	67	0.5
56-42.3694-106.7744-2-11-			0	W	18	W15368	49930	-0.07	654	9719	73	96	6.3	34	1.7	3	0.8	8726	12.5	18040	39	0.4
56-42.3497-106.7761-2-11-			0	W	19	W15369	51430	-0.09	825	19270	50	86	7.0	26	1.4	4	0.8	11030	6.9	15810	35	0.3
56-42.3647-106.7528-2-11-			0	W	20	W15370	50630	-0.05	696	15390	56	116	9.5	21	1.8	3	0.8	8105	9.2	17470	34	0.3
56-42.2294-106.1142-2-15-			0	W	21	W15371	56560	-0.06	653	12130	79	-87	6.5	45	2.0	3	0.9	13530	12.2	16630	49	0.4
56-42.2144-106.1111-2-15-			0	W	22	W15372	59300	-0.08	732	15270	72	-54	8.2	57	4.6	4	1.1	15530	6.5	18560	33	0.3
56-42.2000-106.1028-2-15-			0	W	23	W15373	54820	-0.08	668	6677	50	-52	7.8	43	3.1	3	0.8	11710	5.9	19690	32	0.3
56-42.5956-107.5353-2-15-			0	W	24	W15374	56760	-0.05	600	15550	67	-77	9.6	37	1.7	4	0.7	12220	9.5	22070	45	0.3
56-42.5789-107.5622-2-15-			0	W	25	W15375	53480	-0.05	557	16330	64	-82	4.8	27	1.6	3	0.8	10720	9.1	18930	38	0.3
56-42.5722-107.6031-2-12-			0	W	26	W15376	56620	-0.06	667	14240	76	-76	4.6	18	-0.9	3	0.9	5599	11.8	20960	48	0.3
56-42.5717-107.5939-2-11-			0	W	27	W15377	60010	-0.08	764	15020	74	-74	6.6	26	-1.3	4	0.7	9837	10.0	18680	66	0.3
56-42.5556-107.5978-2-11-			0	W	28	W15378	56610	-0.06	579	10960	69	133	9.7	32	2.0	4	0.7	9385	7.5	19360	60	0.4
56-42.5553-107.5953-2-15-			0	W	29	W15379	97470	-0.07	411	3047	148	-100	5.0	26	2.6	7	1.0	9150	5.8	29390	137	0.6
56-42.5411-107.5053-2-15-			0	W	30	W15380	57020	-0.07	527	11090	210	-70	7.1	42	2.5	7	1.1	16440	17.3	18630	116	0.5
56-42.5400-107.5181-2-15-			0	W	31	W15381	51550	-0.07	615	17970	69	-60	5.3	19	1.4	4	0.9	9263	11.0	26160	42	0.3
56-42.5289-107.5414-2-99-			0	W	32	W15382	55420	-0.06	578	12230	83	-80	8.9	28	1.8	5	0.7	9507	10.1	18870	61	0.4
56-42.5178-107.5561-2-15-			0	W	33	W15383	53600	-0.06	536	14270	174	-89	7.3	52	1.4	5	1.1	20260	20.5	11450	113	0.5
56-42.5072-107.5561-2-15-			0	W	34	W15384	45500	-0.06	639	9412	207	-66	7.2	44	1.4	7	1.0	21230	16.6	16170	109	0.6
56-42.5103-107.5900-2-15-			0	W	35	W15385	64180	-0.08	857	22070	70	-76	5.6	22	-1.2	3	0.9	13650	6.2	15360	46	0.2
56-42.0119-106.5144-2-15-			0	W	36	W15386	57220	-0.05	698	11390	67	-82	9.3	31	1.5	4	0.7	10300	8.4	17310	47	0.3
56-42.0050-106.6644-2-15-			0	W	37	W15387	46100	-0.06	465	6341	73	-62	5.6	39	1.7	4	0.9	10210	22.7	16810	50	0.6
56-42.0419-106.6564-2-15-			0	W	38	W15388	36590	-0.05	483	6907	52	-38	5.4	30	1.8	3	0.7	8187	4.8	12830	22	0.2
56-42.0419-106.6531-2-15-			0	W	39	W15389	39840	-0.07	528	8064	40	-37	4.8	23	2.0	4	0.7	8050	8.0	12950	27	0.3
56-42.0253-106.7289-2-15-			0	W	40	W15390	36230	-0.04	524	4833	43	-38	7.8	23	1.6	3	0.5	6560	6.6	10920	25	0.2
56-42.0669-106.7025-2-15-			0	W	41	W15391	55260	-0.05	451	10950	45	-72	4.1	27	2.7	2	0.8	9443	5.1	15230	25	0.2
56-42.0406-106.7064-2-15-			0	W	42	W15392	37640	-0.05	506	14660	46	-49	5.0	27	1.8	3	0.8	7771	6.8	14490	27	0.3
56-42.1131-106.7269-2-15-			0	W	43	W15394	56710	-0.09	813	25680	65	-57	6.8	39	3.9	4	1.0	14000	8.4	17590	36	0.3
56-42.0847-106.6756-2-99-			0	W	44	W15400	53080	-0.06	573	10790	78	-80	9.3	31	1.8	5	0.8	9052	12.9	14790	58	0.4
56-42.0911-106.6361-2-99-			0	W	45	W15402	51780	-0.07	501	12450	101	-92	6.5	36	1.9	5	1.0	12210	19.2	17770	65	0.6
56-42.0683-106.6478-2-15-			0	W	46	W15403	46550	-0.06	521	9466	56	-52	5.5	45	2.5	3	0.8	9451	6.6	15110	31	0.3
56-42.0719-106.6783-2-15-			0	W	47	W15404	50190	-0.10	562	10300	115	-83	7.0	35	-1.4	7	1.0	11410	23.6	14520	61	0.6
56-42.1156-106.7900-2-15-			0	W	48	W15405	50310	-0.05	645	37310	40	-64	8.3	31	3.4	3	0.6	8415	5.0	15780	26	0.2
56-42.1036-106.8208-2-15-			0	W	49	W15406	43270	-0.05	503	20410	58	-73	3.4	23	-0.7	2	0.7	6770	11.6	15600	36	0.3
56-42.1086-106.7647-2-15-			0	W	50	W15407	49240	-0.06	555	11340	64	-60	5.0	35	1.7	3	0.7	8349	10.6	16900	34	0.3
56-42.0958-106.7567-2-15-			0	W	51	W15409	41770	-0.06	492	27520	46	83	4.8	32	1.6	3	0.7	7844	9.0	14250	29	0.3
56-42.0667-106.5056-2-12-			0	W	52	W15412	42470	-0.05	392	49470	34	-71	9.9	28	1.7	3	0.6	7811	4.8	15190	18	0.2

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

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)														U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LAB. SAMPLE LOCATION NUMBER	Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
56-42.2797-106.7772-2-12-						0-W15351	9949	316	12130	34	-2	4.1	4.0	-228	-1	-1	15.7	2977	64	2.2	30	0.157
56-42.3192-106.7858-2-15-						0-W15353	7186	262	12060	52	-2	5.3	4.4	-209	-1	-1	17.0	2688	51	3.7	49	0.211
56-42.3169-106.7969-2-11-						0-W15354	5119	148	10970	30	-1	2.1	3.1	-210	-1		11.2	2387	21	2.0	-17	0.244
56-42.3317-106.6858-2-15-						0-W15355	22760	390	11170	-26	-3	7.9	3.6	-320	-1	-1	11.7	2264	57	2.6	-37	0.236
56-42.1594-106.0822-2-15-						0-W15356	12930	248	6604	30	-2	4.7	3.4	-183		-1	9.9	2782	96	1.9	61	0.291
56-42.3089-106.8206-2-11-						0-W15357	6345	116	13420	36	-2	4.0	8.3	-199	-1	-1	11.8	2099	32	2.6	-25	3.039
56-42.3172-106.8417-2-11-						0-W15358	8328	238	11910	45	-2	4.8	4.0	-265	-1	-1	13.8	3508	56	3.4	78	0.349
56-42.3347-106.8481-2-11-						0-W15359	5496	197	12990	50	-2	5.0	4.3	-258	-1	-1	14.7	2702	36	-2.1	-53	0.276
56-42.3486-106.8447-2-11-						0-W15360	-3370	247	12380	37	-2	3.8	7.5	-316	1	1	29.6	3526	32	3.6	-18	0.154
56-42.3583-106.8203-2-15-						0-W15361	8164	283	13170	51	-2	5.2	4.9	367	-1	-1	21.3	2656	49	3.5	43	0.270
56-42.3581-106.8222-2-15-						0-W15362	6752	354	11710	21	-2	3.8	4.5	-255	-1	-1	17.0	2843	50	3.2	42	0.229
56-42.3611-106.8186-2-11-						0-W15363	-3531	256	12980	57	-3	5.0	5.2	-272	-1	-1	30.0	2845	40	4.7	-32	0.155
56-42.3672-106.8297-2-12-						0-W15364	6596	441	12730	32	-2	5.1	13.0	-245	1	1	67.7	5080	51	6.2	22	0.144
56-42.3658-106.8267-2-12-						0-W15365	4853	531	12340	-20	-2	4.7	8.2	-252	-1	-1	39.1	4548	46	7.2	-18	0.182
56-42.3136-106.7697-2-12-						0-W15366	7104	418	12490	28	-2	4.1	6.8	-265	1		24.1	3668	61	4.2	22	0.270
56-42.3603-106.7842-2-11-						0-W15367	-3327	216	14360	37	-2	4.2	6.4	-238	-1	-1	32.9	3058	29	5.6	40	0.317
56-42.3694-106.7744-2-11-						0-W15368	9596	197	13910	45	-2	5.3	4.3	442	-1	-1	18.1	2619	48	3.8	30	0.415
56-42.3497-106.7761-2-11-						0-W15369	8765	310	11620	-23	-3	4.5	2.3	-244	-1	-1	9.6	2401	46	-1.8	-34	0.546
56-42.3647-106.7528-2-11-						0-W15370	8941	238	12250	34	-2	3.7	4.3	-239	-1	-1	11.2	2700	37	3.2	-26	0.386
56-42.2294-106.1142-2-15-						0-W15371	8946	420	13810	51	-2	6.0	5.0	-284	-1	-1	14.7	2877	55	4.0	-45	0.237
56-42.2144-106.1111-2-15-						0-W15372	17240	325	5754	71	-2	7.9	5.4	-213	-1	-1	11.4	3308	138	2.7	-25	0.296
56-42.2000-106.1028-2-15-						0-W15373	11220	215	6554	39	-3	6.0	3.4	-183	-1	-1	9.1	2733	112	4.0	-34	0.374
56-42.5956-107.5353-2-15-						0-W15374	8243	397	12380	51	-2	4.9	4.6	-257	-1	-1	16.4	3329	64	3.8	42	0.201
56-42.5789-107.5622-2-15-						0-W15375	11490	298	14200	48	-2	4.8	3.7	348	-1	-1	13.6	2706	45	2.8	29	0.308
56-42.5722-107.6031-2-12-						0-W15376	7569	156	17360	44	-2	3.9	4.6	227	-1	-1	15.9	2314	24	3.0	51	0.403
56-42.5717-107.5939-2-11-						0-W15377	13210	231	14940	41	-3	5.3	5.2	374	-1	-1	13.6	2848	60	-1.7	-31	2.855
56-42.5556-107.5978-2-11-						0-W15378	10920	304	14840	44	-2	4.0	7.7	-269	-1	-1	17.8	2630	44	3.7	92	1.845
56-42.5553-107.5953-2-15-						0-W15379	8672	95	18950	86	-2	6.5	32.1	-270	-1	-1	58.4	2077	31	6.3	51	1.829
56-42.5411-107.5053-2-15-						0-W15380	8708	435	12470	44	-2	5.6	13.0	-235	1	1	59.0	4125	77	4.7	-22	0.182
56-42.5400-107.5181-2-15-						0-W15381	11350	283	10580	47	-2	4.5	3.7	432	-1	-1	12.3	2741	57	2.6	-22	0.502
56-42.5289-107.5414-2-99-						0-W15382	10660	237	13760	52	-2	4.8	7.1	-248	-1	1	21.8	2759	52	3.6	57	0.578
56-42.5178-107.5561-2-15-						0-W15383	10020	475	14600	36	-2	6.9	10.7	-295	-1	1	49.7	4634	91	5.3	66	0.154
56-42.5072-107.5561-2-15-						0-W15384	9566	405	11180	36	-2	4.5	11.6	-223	-1	-1	54.8	5262	111	5.3	-28	0.114
56-42.5103-107.5900-2-15-						0-W15385	14510	380	15840	-20	-2	5.9	4.3	388	-1	-1	15.4	3041	67	2.3	-30	0.214
56-42.0119-106.5144-2-15-						0-W15386	8759	396	14090	54	-2	4.5	5.1	-266	-1	-1	15.8	2815	52	3.2	48	0.303
56-42.0050-106.6644-2-15-						0-W15387	7935	239	7590	36	-2	6.2	6.2	-213	1	-1	32.7	3211	55	5.2	-30	0.346
56-42.0419-106.6564-2-15-						0-W15388	6651	205	3468	27	-2	3.8	3.2	-152		-1	7.1	1864	52	3.4	49	0.321
56-42.0419-106.6531-2-15-						0-W15389	8246	226	3304	24	-2	4.2	1.9	-158	-1	-1	7.0	2666	55	2.9	-28	0.403
56-42.0253-106.7289-2-15-						0-W15390	6394	147	3055	32	-1	3.5	2.7	-152			6.3	2442	52	2.2	28	0.392
56-42.0669-106.7025-2-15-						0-W15391	7510	163	12580	39	-2	4.5	2.9	-209			5.5	1786	47	2.0	54	0.387
56-42.0406-106.7064-2-15-						0-W15392	9340	249	6069	28	-2	3.7	3.2	-174		-1	7.1	2089	40	2.5	56	0.408
56-42.1131-106.7269-2-15-						0-W15394	13830	304	7305	39	-3	6.4	2.4	265	-1	-1	12.2	3529	146	-1.8	82	0.286
56-42.0847-106.6756-2-99-						0-W15400	8996	241	12770	32	-2	5.0	7.3	-257	-1	1	36.1	3298	51	4.3	55	0.279
56-42.0911-106.6361-2-99-						0-W15402	6340	442	13490	38	-2	6.6	6.6	-312	-1	-1	39.9	3908	54	5.0	63	0.255
56-42.0683-106.6478-2-15-						0-W15403	9475	196	8251	35	-2	4.7	4.1	-171	-1	-1	10.4	2513	64	3.2	44	0.243
56-42.0719-106.6783-2-15-						0-W15404	9583	675	12920	-25	-3	5.8	6.7	-313	-1	-1	68.9	3863	56	8.1	92	0.137
56-42.1156-106.7900-2-15-						0-W15405	13840	222	8954	38	-2	4.2	3.7	-210	-1	-1	8.2	2449	97	2.7	47	0.380
56-42.1036-106.8208-2-15-						0-W15406	8794	184	12530	44	-1	3.7	3.6	-215	-1		13.1	1892	37	3.0	-24	0.255
56-42.1086-106.7647-2-15-						0-W15407	10180	226	11490	33	-2	4.3	5.0	-185	-1	-1	11.9	2268	51	2.7	47	0.250
56-42.0958-106.7567-2-15-						0-W15409	19740	196	8782	-16	-2	3.9	2.8	-168		-1	10.0	2403	51	-1.4	-23	0.287
56-42.0667-106.5056-2-12-						0-W15412	17080	378	8365	32	-2	4.1	3.1	-257		-1	5.2	2451	37	2.2	-41	0.519

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

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																							U CONCENTRATION
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	TIME SAMPLED: DATE	TIME SAMPLED: HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
56-42.0731-106.5033-2-15-		0-W15413-09/21/77-12-		14-		-	-	-	-					18-1-6-4-6-	-	-	-2-3-2-5-2-	-1-	-	-	-	-	1.88
56-42.0917-106.5300-2-11-		0-W15414-09/21/77-12-		20-18.8-		-	-	6.5-	3500-			13-1-6-6-8-1-2-2-1-3-3-3-2-																	3.17
56-42.1222-106.5456-2-15-		0-W15415-09/21/77-14-		21-		-	-	-	-			9-1-1-4-6-		-	-	-2-3-3-5-2-	-1-	-	-	-	-	2.26							
56-42.1231-106.5472-2-15-		0-W15416-09/21/77-15-		21-		-	-	-	-			13-1-1-4-6-		-	-	-2-3-3-5-2-	-1-	-	-	-	-	1.57							
56-42.1211-106.5703-2-12-		0-W15417-09/21/77-16-		23-12.0-		-	-	5.9-	500-			6-2-1-4-4-3-2-1-1-1-4-5-1-																	2.90
56-42.0931-106.5900-2-15-		0-W15418-09/21/77-16-		14-		-	-	-	-			18-1-6-5-4-		-	-	-2-3-3-4-2-	-1-	-	-	-	-	2.66							
56-42.1003-106.3731-2-15-		0-W15419-09/22/77-16-		18-		-C-	-	-	-			11-1-6-3-6-		-	-	-2-3-2-3-3-	-1-	-	-	-	-	2.47							
56-42.1047-106.4167-2-11-		0-W15420-09/22/77-17-		14-	7.0-	C-	-	8.4-	2300-			13-1-6-5-8-2-2-1-1-4-3-2-3-																	3.69
56-42.1314-106.4114-2-11-		0-W15421-09/23/77-10-		5-	5.0-	-	-	7.7-	600-			13-1-6-4-6-2-2-1-1-3-2-3-3-																	2.05
56-42.1286-106.4289-2-12-		0-W15422-09/23/77-11-		5-10.0-		C-	-	6.9-	2200-			15-1-6-6-8-2-2-1-1-3-3-3-6-																	2.72
56-42.1303-106.4319-2-15-		0-W15423-09/23/77-11-		5-		-C-	-	-	-			27-1-6-4-6-		-	-	-2-3-3-3-6-	-1-	-	-	-	-	2.38							
56-42.1286-106.4333-2-15-		0-W15424-09/23/77-11-		5-		-C-	-	-	-			18-1-6-4-6-		-	-	-2-3-3-3-6-	-1-	-	-	-	-	2.61							
56-42.1550-106.4658-2-12-		0-W15425-09/23/77-12-		-		-C-	-	7.0-	600-			18-1-1-3-9-2-2-1-1-4-3-3-5-																	3.85
56-42.1492-106.4522-2-11-		0-W15426-09/23/77-14-		8-	7.0-	C-	-	6.5-	500-			18-1-1-6-8-2-2-3-1-4-2-2-3-																	7.78
56-42.1628-106.4933-2-11-		0-W15427-09/23/77-14-		8-	7.0-	-	-	7.4-	300-			27-1-4-3-3-3-2-1-1-1-4-5-3-																	5.94
56-42.1667-106.4947-2-15-		0-W15428-09/23/77-14-		8-		-	-	-	-			31-1-1-4-6-		-	-	-2-3-2-4-3-	-1-	-	-	-	-	3.84							
56-42.1578-106.4119-2-12-		0-W15429-09/23/77-15-		8-	6.0-	-	-	7.8-	100-			22-1-1-3-6-2-2-1-1-1-3-4-2-																	5.71
56-42.2394-106.3919-2-15-		0-W15430-09/26/77-13-		23-		-	-	-	-			18-1-7-5-6-		-1-	-2-3-2-2-2-	-1-	-	-	-	-	2.98								
56-42.2425-106.4306-2-15-		0-W15431-09/26/77-13-		22-		-	-	-	-			9-1-7-5-6-		-1-	-2-4-2-2-3-	-1-	-	-	-	-	2.61								
56-42.2531-106.3911-2-11-		0-W15432-09/26/77-14-		18-15.0-		-	-	6.9-	4200-			9-1-7-6-8-1-2-1-2-4-3-2-3-																	1.36
56-42.3117-106.4306-2-15-		0-W15433-09/26/77-15-		18-		-	-	-	-			45-1-7-5-6-		-1-	-2-4-2-2-3-	-1-	-	-	-	-	6.60								
56-42.3164-106.4281-2-15-		0-W15434-09/26/77-15-		18-		-	-	-	-			13-1-7-5-6-		-1-	-2-4-2-2-3-	-1-	-	-	-	-	4.00								
56-42.3425-106.3633-2-15-		0-W15435-09/26/77-15-		18-		-	-	-	-			24-1-6-5-6-		-1-	-2-4-3-2-3-	-1-	-	-	-	-	8.22								
56-42.3350-106.3492-2-15-		0-W15436-09/26/77-15-		17-		-	-	-	-			27-1-7-5-6-		-1-	-2-4-2-2-3-	-1-	-	-	-	-	4.97								
56-42.3433-106.2950-2-15-		0-W15437-09/26/77-16-		17-		-	-	-	-			27-1-7-5-6-		-1-	-2-4-2-2-3-	-1-	-	-	-	-	5.92								
56-42.2339-106.4444-2-15-		0-W15438-09/27/77-	-	18-		-	-	-	-			24-1-6-4-7-		-1-	-2-3-2-2-1-	-1-	-	-	-	-	3.53								
56-42.2372-106.4628-2-15-		0-W15439-09/27/77-	-	18-		-	-	-	-			22-1-6-4-7-		-1-	-2-3-2-2-1-	-1-	-	-	-	-	2.91								
56-42.2458-106.4631-2-15-		0-W15440-09/27/77-	-	20-		-	-	-	-			22-1-6-4-7-		-1-	-2-3-2-1-1-	-1-	-	-	-	-	3.29								
56-42.1783-106.4361-2-12-		0-W15443-09/27/77-	-	20-18.0-		-	-	8.2-	400-			9-1-6-4-6-2-2-1-1-3-3-3-1-																	3.80
56-42.1997-106.4492-2-15-		0-W15444-09/27/77-	-	18-		-	-	-	-			13-1-6-4-6-		-	-	-2-3-3-2-1-	-1-	-	-	-	-	4.95							
56-42.1875-106.4828-2-12-		0-W15445-09/27/77-	-	20-12.0-		-	-	8.0-	700-			22-1-6-6-8-2-2-1-1-2-3-2-1-																	10.34
56-42.2006-106.4803-2-15-		0-W15446-09/27/77-	-	-		-	-	-	-			31-1-6-4-6-		-	-	-4-2-3-1-	-1-	-	-	-	-	7.92							
56-42.2308-106.5328-2-15-		0-W15448-09/27/77-	-	26-		-	-	-	-			40-1-6-4-6-		-	-	-2-4-4-2-2-	-1-	-	-	-	-	50.43							
56-42.2256-106.5358-2-11-		0-W15449-09/27/77-	-	21-14.0-		-	-	8.6-	2900-			27-1-6-5-8-2-2-2-1-4-2-2-2-																	7.61
56-42.2389-106.5481-2-11-		0-W15450-09/27/77-	-	15-10.0-		-	-	9.1-	200-			27-1-6-4-6-3-3-1-1-4-4-4-2-																	90.76
56-42.2469-106.5628-2-15-		0-W15451-09/27/77-	-	15-		-	-	-	-			36-1-7-4-6-		-	-	-	-4-2-2-2-	-1-	-	-	-	-	4.31						
56-42.2481-106.5322-2-15-		0-W15452-09/27/77-	-	17-		-	-	-	-			27-1-6-4-6-		-	-	-	-3-2-2-2-	-1-	-	-	-	-	2.95						
56-42.1978-106.5064-2-15-		0-W15453-09/28/77-	-	18-		-	-	-	-			27-1-6-4-6-		-	-	-	-4-4-1-1-	-1-	-	-	-	-	6.45						
56-42.4281-106.2506-2-11-		0-W15454-09/23/77-15-		6-	7.5-	-	-	6.6-	280-			27-1-	-3-6-	-	-	-	-4-3-3-3-	-1-	-	-	-	-	5.29						
56-42.3969-106.2792-2-15-		0-W15455-09/23/77-14-		8-		-	-	-	-			37-4-	-4-6-	-	-	-	-4-3-2-3-	-1-	-	-	-	-	6.04						
56-42.4694-106.3697-2-11-		0-W15457-09/23/77-16-		10-	2.5-	-	-	6.8-	550-			13-1-1-5-7-		-	-	-	-4-3-4-2-	-1-	-	-	-	-	2.70						
56-42.3806-106.0992-2-15-		0-W15458-09/26/77-14-		16-		-	-	-	-			37-1-4-4-1-		-	-	-	-4-2-3-3-	-1-	-	-	-	-	6.66						
56-42.4019-106.0761-2-11-		0-W15459-09/26/77-15-		17-10.5-		-	-	7.2-	625-			18-4-	-5-7-	-	-	-	-4-3-2-2-	-1-	-	-	-	-	9.33						
56-42.4064-106.0633-2-11-		0-W15460-09/26/77-16-		18-	9.5-	-	-	7.3-	650-			8-4-	-6-7-	-	-	-	-4-3-2-2-	-1-	-	-	-	-	7.17						
56-42.4667-106.0247-2-11-		0-W15462-09/27/77-11-		19-	9.5-	-	-	6.6-	150-			41-4-	-5-6-	-	-	-	-4-3-2-1-	-1-	-	-	-	-	4.80						
56-42.4608-106.0258-2-11-		0-W15463-09/27/77-12-		19-	9.5-	-	-	6.7-	205-			23-1-6-5-6-		-	-	-1-4-3-3-1-	-1-	-	-	-	-	4.28							
56-42.4842-106.0125-2-11-		0-W15464-09/27/77-13-		19-	9.0-	-	-	5.7-	44-			41-3-6-6-6-		-	-	-1-4-3-4-1-	-1-	-	-	-	-	8.32							
56-42.4722-106.0003-2-11-		0-W15465-09/27/77-	-	19-10.0-		-	-	6.5-	74-			32-1-6-5-6-		-	-	-1-4-3-3-1-	-1-	-	-	-	-	4.36							
56-42.4297-106.0225-2-12-		0-W15466-09/27/77-	-	20-14.5-		-	-	7.4-	415-			4-1-6-5-6-		-	-	-1-4-3-3-1-	-1-	-	-	-	-	6.04							
56-42.4294-106.0319-2-15-		0-W15467-09/27/77-15-		19-		-	-	-	-			18-3-4-4-6-		-	-	-	-4-3-3-1-	-1-	-	-	-	-	5.39						
56-42.2000-106.5364-2-15-		0-W15468-09/28/77-	-	16-		-	-	-	-			22-1-6-4-6-		-	-	-2-3-3-2-1-	-1-	-	-	-	-	4.92							

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

(2)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
56-42.0731-106.5033-2-15-						0-W15413	-5	-5	-5	14	-20	-15	-5	-10	-15	1	12
56-42.0917-106.5300-2-11-						0-W15414	-5	-5	-5	18	-20	-15	-5	-10	-15	2	30
56-42.1222-106.5456-2-15-						0-W15415	-5	-5	-5	14	-20	-15	-5	-10	-15	2	16
56-42.1231-106.5472-2-15-						0-W15416	-5	-5	-5	18	-20	-15	-5	-10	-15	2	11
56-42.1211-106.5703-2-12-						0-W15417	-5	-5	-5	16	-20	-15	-5	-10	-15	2	43
56-42.0931-106.5900-2-15-						0-W15418	-5	-5	-5	26	-20	22	5	10	-15	2	56
56-42.1003-106.3731-2-15-						0-W15419	-5	-5	-5	22	-20	-15	-5	-10	-15	2	43
56-42.1047-106.4167-2-11-						0-W15420	-5	-5	-5	24	-20	18	6	-10	-15	2	28
56-42.1314-106.4114-2-11-						0-W15421	-5	5	-5	17	-20	-15	9	-10	-15	2	29
56-42.1286-106.4289-2-12-						0-W15422	-5	-5	-5	16	-20	-15	-5	-10	-15	2	56
56-42.1303-106.4319-2-15-						0-W15423	-5	-5	-5	24	-20	-15	10	-10	-15	2	47
56-42.1286-106.4333-2-15-						0-W15424	-5	-5	-5	26	-20	-15	7	-10	-15	2	51
56-42.1550-106.4658-2-12-						0-W15425	-5	-5	-5	30	-20	-15	14	-10	-15	2	26
56-42.1492-106.4522-2-11-						0-W15426	-5	-5	-5	14	-20	-15	-5	-10	-15	2	10
56-42.1628-106.4933-2-11-						0-W15427	-5	-5	-5	20	-20	24	12	-10	-15	2	38
56-42.1667-106.4947-2-15-						0-W15428	-5	-5	-5	26	29	18	14	-10	-15	2	35
56-42.1578-106.4119-2-12-						0-W15429	-5	-5	-5	12	-20	-15	11	-10	-15	1	11
56-42.2394-106.3919-2-15-						0-W15430	-5	-5	-5	21	-20	23	14	-10	-15	3	43
56-42.2425-106.4306-2-15-						0-W15431	-5	-5	-5	22	-20	-15	11	-10	-15	2	35
56-42.2531-106.3911-2-11-						0-W15432	-5	-5	-5	31	-20	-15	-5	-10	-15	1	16
56-42.3117-106.4306-2-15-						0-W15433	-5	-5	-5	27	-20	-15	18	-10	-15	3	35
56-42.3164-106.4281-2-15-						0-W15434	-5	-5	-5	18	-20	21	18	11	-15	2	27
56-42.3425-106.3633-2-15-						0-W15435	-5	-5	-5	19	-20	-15	15	-10	-15	3	36
56-42.3350-106.3492-2-15-						0-W15436	-5	-5	-5	21	-20	-15	16	-10	-15	3	36
56-42.3433-106.2950-2-15-						0-W15437	-5	-5	-5	30	-20	-15	17	-10	-15	2	29
56-42.2339-106.4444-2-15-						0-W15438	-5	-5	-5	44	-20	19	10	-10	-15	3	43
56-42.2372-106.4628-2-15-						0-W15439	-5	-5	-5	33	-20	15	12	-10	-15	3	47
56-42.2458-106.4631-2-15-						0-W15440	-5	-5	-5	27	-20	-15	5	-10	-15	3	67
56-42.1783-106.4361-2-12-						0-W15443	-5	-5	-5	16	-20	-15	16	-10	-15	3	26
56-42.1997-106.4492-2-15-						0-W15444	-5	-5	-5	25	-20	41	17	-10	-15	3	59
56-42.1875-106.4828-2-12-						0-W15445	-5	-5	-5	22	-20	-15	10	-10	-15	2	25
56-42.2006-106.4803-2-15-						0-W15446	-5	-5	-5	24	-20	18	20	-10	-15	2	33
56-42.2308-106.5328-2-15-						0-W15448	-5	-5	-5	20	-20	23	14	-10	-15	3	35
56-42.2256-106.5358-2-11-						0-W15449	-5	-5	-5	26	-20	46	12	-10	-15	3	40
56-42.2389-106.5481-2-11-						0-W15450	-5	-5	-5	37	-20	17	20	-10	-15	2	18
56-42.2469-106.5628-2-15-						0-W15451	-5	-5	-5	24	-20	21	10	-10	-15	2	48
56-42.2481-106.5322-2-15-						0-W15452	-5	-5	-5	16	-20	16	5	-10	-15	2	47
56-42.1978-106.5064-2-15-						0-W15453	-5	-5	-5	13	-20	26	11	-10	-15	2	24
56-42.4281-106.2506-2-11-						0-W15454	-5	-5	-5	23	-20	-15	13	-10	-15	2	34
56-42.3969-106.2792-2-15-						0-W15455	-5	-5	-5	30	-20	-15	16	-10	-15	2	25
56-42.4694-106.3697-2-11-						0-W15457	-5	-5	-5	16	-20	15	9	-10	-15	2	37
56-42.3806-106.0992-2-15-						0-W15458	-5	-5	-5	19	-20	-15	18	-10	-15	2	26
56-42.4019-106.0761-2-11-						0-W15459	-5	-5	-5	20	-20	-15	9	-10	-15	3	49
56-42.4064-106.0633-2-11-						0-W15460	-5	-5	-5	21	-20	-15	13	-10	-15	2	26
56-42.4667-106.0247-2-11-						0-W15462	-5	-5	-5	44	-20	-15	10	-10	-15	2	27
56-42.4608-106.0258-2-11-						0-W15463	-5	-5	-5	29	-20	-15	10	-10	-15	2	20
56-42.4842-106.0125-2-11-						0-W15464	-5	-5	-5	26	-20	18	25	-10	-15	3	25
56-42.4722-106.0003-2-11-						0-W15465	-5	-5	-5	28	-20	-15	10	-10	-15	4	24
56-42.4297-106.0225-2-12-						0-W15466	-5	-5	-5	27	32	-15	14	-10	-15	2	57
56-42.4294-106.0319-2-15-						0-W15467	-5	-5	-5	32	-20	15	10	-10	-15	3	44
56-42.2000-106.5364-2-15-						0-W15468	-5	-5	-5	15	-20	-15	10	-10	-15	2	22

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
56-	42.0731-	106.5033-	2-	15-	0-	W15413	25550	-0.05	1557	43330	28	-52	4.2	25	1.3	2	1.0	5927	6.8	10110	17	0.3
56-	42.0917-	106.5300-	2-	11-	0-	W15414	40980	-0.08	390	69750	48	-69	7.7	46	2.7	3	0.7	12270	5.9	15770	24	0.3
56-	42.1222-	106.5456-	2-	15-	0-	W15415	31250	-0.06	312	3672	33	-40	4.2	31	1.2	2	0.5	5792	5.8	12770	15	0.2
56-	42.1231-	106.5472-	2-	15-	0-	W15416	24220	-0.03	311	3082	22	-35	6.3	21	1.0	2	0.5	3105	6.9	12510	12	0.2
56-	42.1211-	106.5703-	2-	12-	0-	W15417	45360	-0.07	306	40880	50	-73	6.8	46	2.8	3	0.7	12420	7.0	17490	29	0.4
56-	42.0931-	106.5900-	2-	15-	0-	W15418	60630	-0.10	409	39060	54	-76	9.6	55	4.2	4	0.9	17270	5.7	22200	31	0.3
56-	42.1003-	106.3731-	2-	15-	0-	W15419	39410	-0.05	284	89090	41	97	8.8	42	2.0	3	0.6	9103	7.9	19210	26	0.3
56-	42.1047-	106.4167-	2-	11-	0-	W15420	35400	-0.05	406	56420	42	-69	4.4	30	1.2	2	0.7	7772	9.1	15000	22	0.3
56-	42.1314-	106.4114-	2-	11-	0-	W15421	39780	-0.06	473	47270	44	-61	5.8	31	1.9	3	0.7	9175	9.3	15290	20	0.2
56-	42.1286-	106.4289-	2-	12-	0-	W15422	55710	-0.09	377	46730	44	-68	8.3	41	3.9	4	0.7	14240	4.4	18900	33	0.3
56-	42.1303-	106.4319-	2-	15-	0-	W15423	53970	-0.06	448	36120	45	-72	11.6	40	2.6	4	0.7	12840	5.4	17390	25	0.3
56-	42.1286-	106.4333-	2-	15-	0-	W15424	50820	-0.07	438	37130	53	-73	7.7	51	3.4	2	0.9	13790	6.9	17510	34	0.3
56-	42.1550-	106.4658-	2-	12-	0-	W15425	46200	-0.07	449	33240	73	-63	7.5	53	2.2	4	0.9	11690	13.5	16850	44	0.4
56-	42.1492-	106.4522-	2-	11-	0-	W15426	26390	-0.06	297	3199	44	-41	3.5	49	-1.0	4	0.7	3887	37.3	8087	26	0.5
56-	42.1628-	106.4933-	2-	11-	0-	W15427	53610	-0.06	477	14310	68	-73	11.7	41	3.1	5	0.7	11600	9.3	17580	42	0.4
56-	42.1667-	106.4947-	2-	15-	0-	W15428	48210	-0.06	356	29240	63	-72	6.4	52	2.4	3	0.9	12820	8.1	14800	36	0.3
56-	42.1578-	106.4119-	2-	12-	0-	W15429	24960	-0.06	552	83410	104	-60	3.9	43	-0.9	6	1.2	5112	37.5	12540	57	0.7
56-	42.2394-	106.3919-	2-	15-	0-	W15430	53560	-0.08	787	17760	47	-50	7.1	47	3.6	4	0.7	13220	6.6	16250	30	0.2
56-	42.2425-	106.4306-	2-	15-	0-	W15431	47430	-0.05	731	17930	45	-49	10.3	42	2.8	3	0.6	11440	5.0	14020	23	0.3
56-	42.2531-	106.3911-	2-	11-	0-	W15432	21230	-0.07	285	174800	23	-82	4.4	19	1.5	1	0.4	8766	2.5	8055	23	-0.1
56-	42.3117-	106.4306-	2-	15-	0-	W15433	72450	-0.07	535	10570	144	-86	7.7	41	1.5	4	1.0	10680	10.0	17510	83	0.4
56-	42.3164-	106.4281-	2-	15-	0-	W15434	63560	-0.08	521	6849	65	-70	6.4	36	2.1	3	0.6	10660	7.3	19040	46	0.2
56-	42.3425-	106.3633-	2-	15-	0-	W15435	61760	-0.06	619	4995	91	-79	10.5	39	2.0	4	0.7	10650	10.4	17940	54	0.4
56-	42.3350-	106.3492-	2-	15-	0-	W15436	59550	-0.06	648	6316	85	-87	7.4	35	1.8	3	0.8	12080	7.2	17060	43	0.3
56-	42.3433-	106.2950-	2-	15-	0-	W15437	61810	-0.07	583	6640	99	-72	7.4	41	2.1	3	1.0	12560	10.5	17680	52	0.4
56-	42.2339-	106.4444-	2-	15-	0-	W15438	66180	-0.09	752	30290	49	-52	7.9	58	3.5	4	1.0	14060	4.2	17560	32	0.3
56-	42.2372-	106.4628-	2-	15-	0-	W15439	57730	-0.06	712	18030	52	-53	11.7	55	3.8	4	0.7	13890	4.3	15380	31	0.3
56-	42.2458-	106.4631-	2-	15-	0-	W15440	64440	-0.08	693	15730	62	-57	8.6	75	4.9	3	1.0	18650	5.5	16910	40	0.3
56-	42.1783-	106.4361-	2-	12-	0-	W15443	61460	-0.08	468	7703	82	-52	7.9	56	2.8	5	1.1	14200	8.7	14950	48	0.5
56-	42.1997-	106.4492-	2-	15-	0-	W15444	63080	-0.10	658	62860	48	-60	8.8	55	4.1	4	0.8	13940	4.6	18710	34	-0.2
56-	42.1875-	106.4828-	2-	12-	0-	W15445	45020	-0.07	420	42090	58	-75	6.1	32	2.1	2	0.8	11280	6.9	13220	50	0.3
56-	42.2006-	106.4803-	2-	15-	0-	W15446	52670	-0.07	475	5786	96	-67	7.5	45	2.6	5	1.0	14680	14.7	18540	48	0.5
56-	42.2308-	106.5328-	2-	15-	0-	W15448	58900	-0.09	591	11130	86	-66	7.0	24	2.7	7	0.6	12140	10.9	15900	90	0.4
56-	42.2256-	106.5358-	2-	11-	0-	W15449	52380	-0.07	672	100700	35	447	13.6	42	4.9	3	0.6	13140	2.7	14230	32	0.2
56-	42.2389-	106.5481-	2-	11-	0-	W15450	45640	-0.07	453	10780	76	133	4.9	31	1.8	3	0.8	14250	8.3	17640	95	0.5
56-	42.2469-	106.5628-	2-	15-	0-	W15451	66070	-0.08	790	15600	96	64	9.0	52	2.9	5	1.1	16500	9.6	16510	55	0.4
56-	42.2481-	106.5322-	2-	15-	0-	W15452	59760	-0.09	828	14320	53	-47	7.3	45	-1.5	5	0.8	14170	5.8	16010	35	-0.1
56-	42.1978-	106.5064-	2-	15-	0-	W15453	41890	-0.06	616	108400	57	-99	12.7	33	2.4	3	0.7	12890	5.2	11780	39	0.3
56-	42.4281-	106.2506-	2-	11-	0-	W15454	51720	-0.07	573	17580	103	90	6.2	33	2.1	5	0.9	13220	10.6	19080	57	0.6
56-	42.3969-	106.2792-	2-	15-	0-	W15455	65410	-0.07	587	10570	88	-73	6.7	37	3.0	3	0.8	12530	7.3	17030	49	0.3
56-	42.4694-	106.3697-	2-	11-	0-	W15457	57880	-0.08	733	45590	45	-71	6.8	36	-1.4	3	0.7	11230	5.1	16080	33	0.3
56-	42.3806-	106.0992-	2-	15-	0-	W15458	68170	-0.06	1074	23750	64	-66	10.8	25	2.5	4	0.5	12300	6.6	12180	42	0.4
56-	42.4019-	106.0761-	2-	11-	0-	W15459	60690	-0.07	566	22020	66	-92	6.4	31	4.0	3	0.9	13040	6.6	18480	47	0.4
56-	42.4064-	106.0633-	2-	11-	0-	W15460	40230	-0.09	545	52960	50	209	7.6	33	2.5	2	0.9	10790	4.6	13020	34	0.3
56-	42.4667-	106.0247-	2-	11-	0-	W15462	57290	-0.09	757	8912	54	-71	7.1	41	2.7	4	0.7	12160	7.4	16780	34	0.3
56-	42.4608-	106.0258-	2-	11-	0-	W15463	48460	-0.05	698	11430	46	-73	9.8	30	1.2	4	0.7	5369	7.4	13730	31	0.4
56-	42.4842-	106.0125-	2-	11-	0-	W15464	52020	-0.12	526	8459	113	-103	9.5	33	2.6	6	1.1	13320	7.0	14750	63	0.7
56-	42.4722-	106.0003-	2-	11-	0-	W15465	50680	-0.08	490	8321	105	-77	9.7	36	2.1	5	1.0	17530	12.4	14240	49	0.5
56-	42.4297-	106.0225-	2-	12-	0-	W15466	61870	-0.10	618	28910	60	-63	8.3	43	2.3	4	0.7	12840	3.9	16550	42	0.2
56-	42.4294-	106.0319-	2-	15-	0-	W15467	62940	-0.06	758	12760	64	131	10.9	34	2.3	4	0.8	10820	7.1	18480	43	0.4
56-	42.2000-	106.5364-	2-	15-	0-	W15468	36200	-0.05	442	7103	55	-65	4.0	22	1.4	2	0.7	6213	12.4	12960	37	0.3

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

DOE SAMPLE NUMBER						LAS SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)														U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
56-42.0731-106.5033-2-15-				0-	W15413		9387	421	3354	20	-1	3.1	2.3	-236			4.1	1637	25	2.0	30	0.459
56-42.0917-106.5300-2-11-				0-	W15414		22250	588	5646	40	-2	5.7	3.8	776	-1	-1	8.0	2534	48	2.3	80	0.396
56-42.1222-106.5456-2-15-				0-	W15415		5280	238	4193	-14	-2	3.0	2.2	-158	-1	-1	5.0	1685	27	-1.2	-35	0.452
56-42.1231-106.5472-2-15-				0-	W15416		4643	149	2591	18	-1	1.9	1.2	-149			3.7	1094	18	1.4	-14	0.424
56-42.1211-106.5703-2-12-				0-	W15417		32330	333	7132	34	-2	6.6	3.6	-272	-1	-1	7.0	2776	43	2.4	72	0.414
56-42.0931-106.5900-2-15-				0-	W15418		25760	563	9044	42	-3	9.3	3.2	-287	-1	-1	8.4	3812	74	-2.2	-43	0.317
56-42.1003-106.3731-2-15-				0-	W15419		39170	325	4077	30	-1	4.8	3.2	-227		-1	6.1	2588	41	2.7	-33	0.405
56-42.1047-106.4167-2-11-				0-	W15420		13380	188	8311	31	-2	4.0	2.9	-220	-1	-1	6.2	2134	36	2.2	-33	0.595
56-42.1314-106.4114-2-11-				0-	W15421		15590	341	8593	33	-2	4.6	3.1	-212	-1	-1	6.2	2433	39	2.2	34	0.331
56-42.1286-106.4289-2-12-				0-	W15422		30480	387	9117	-26	-3	7.8	1.7	-250	-1	-1	7.1	3767	68	-1.8	-43	0.383
56-42.1303-106.4319-2-15-				0-	W15423		27360	414	8158	48	-2	6.6	2.8	-274	-1	-1	7.1	3255	61	2.7	-48	0.335
56-42.1286-106.4333-2-15-				0-	W15424		32240	479	6918	46	-2	7.4	4.4	-296	-1	-1	8.9	2939	56	2.4	49	0.293
56-42.1550-106.4658-2-12-				0-	W15425		17450	292	8316	57	-2	5.6	4.8	-215	-1	-1	14.5	2976	52	3.5	53	0.266
56-42.1492-106.4522-2-11-				0-	W15426		4104	94	5329	-16	-2	3.1	2.8	-133	-1	1	6.6	1889	24	3.0	-25	1.179
56-42.1628-106.4933-2-11-				0-	W15427		11980	295	9475	34	-2	5.5	5.5	-258	-1	-1	17.3	3249	62	3.5	51	0.343
56-42.1667-106.4947-2-15-				0-	W15428		10960	462	6947	40	-2	6.1	4.3	-289	-1	-1	16.2	3078	53	3.8	-63	0.237
56-42.1578-106.4119-2-12-				0-	W15429		8619	402	6581	22	-2	3.2	7.9	252	-1	-1	25.0	2215	20	5.7	-20	0.228
56-42.2394-106.3919-2-15-				0-	W15430		17750	249	5446	46	-2	6.5	2.5	-185	-1	-1	7.4	3014	124	2.6	76	0.403
56-42.2425-106.4306-2-15-				0-	W15431		17760	226	4824	34	-2	5.6	3.3	-198		-1	7.2	2531	114	2.0	55	0.363
56-42.2531-106.3911-2-11-				0-	W15432		16450	248	3937	-19	-2	2.8	1.6	4072	-1	-1	4.2	-673	40	-1.4	-39	0.324
56-42.3117-106.4306-2-15-				0-	W15433		7866	273	20400	44	-2	5.3	9.8	-251	-1	-1	52.7	2505	55	6.3	100	0.125
56-42.3164-106.4281-2-15-				0-	W15434		8078	166	12270	-23	-3	5.4	2.6	-209	-1	-1	19.2	3248	56	2.8	87	0.208
56-42.3425-106.3633-2-15-				0-	W15435		6181	347	12180	53	-2	5.3	6.2	-266	-1	-1	26.4	2962	55	2.8	60	0.311
56-42.3350-106.3492-2-15-				0-	W15436		7329	366	12690	46	-2	5.7	4.8	-288	-1	-1	23.8	2856	52	3.8	56	0.209
56-42.3433-106.2950-2-15-				0-	W15437		11020	438	11880	57	-2	6.3	7.2	-247	-1	-1	26.6	2741	68	4.9	65	0.223
56-42.2339-106.4444-2-15-				0-	W15438		18230	229	5018	55	-3	7.5	2.1	-200	-1	-1	9.8	3494	174	-2.0	-37	0.360
56-42.2372-106.4628-2-15-				0-	W15439		20470	211	4404	93	-2	7.0	3.2	-211	-1	-1	9.6	3326	146	2.7	77	0.303
56-42.2458-106.4631-2-15-				0-	W15440		21070	200	4033	47	-3	9.8	4.8	-235	-1	-1	9.6	4414	170	3.5	107	0.343
56-42.1783-106.4361-2-12-				0-	W15443		14070	385	4339	44	-2	8.0	6.0	-231	-1	-1	11.5	3391	67	3.2	-56	0.330
56-42.1997-106.4492-2-15-				0-	W15444		18960	257	5083	47	-3	7.7	2.4	278	-1	-1	10.1	3189	207	-2.1	119	0.490
56-42.1875-106.4828-2-12-				0-	W15445		12370	237	7654	33	-2	5.4	4.6	-263	-1	-1	19.6	2775	77	3.5	-45	0.528
56-42.2006-106.4803-2-15-				0-	W15446		10400	416	10610	55	-2	5.6	9.1	-238	-1	-1	67.7	3594	94	8.1	67	0.117
56-42.2308-106.5328-2-15-				0-	W15448		12890	221	10610	-25	-3	7.0	7.4	-215	-1	-1	28.0	3678	74	3.5	-39	1.801
56-42.2256-106.5358-2-11-				0-	W15449		27700	180	4634	36	4	5.9	3.6	404	-1	-1	6.5	2545	277	2.0	77	1.171
56-42.2389-106.5481-2-11-				0-	W15450		-3593	135	11060	49	-2	3.7	11.7	-252	-1	-1	16.7	1561	46	2.8	303	5.435
56-42.2469-106.5628-2-15-				0-	W15451		15310	404	8492	51	-2	8.1	7.1	-242	-1	-1	24.8	3367	117	4.2	-52	0.174
56-42.2481-106.5322-2-15-				0-	W15452		16320	218	4846	43	-3	7.5	1.6	-183	-1	-1	8.8	3760	142	-1.9	-60	0.335
56-42.1978-106.5064-2-15-				0-	W15453		15560	1246	6548	42	-2	4.9	4.6	-445	-1	-1	22.4	2531	95	2.3	62	0.288
56-42.4281-106.2506-2-11-				0-	W15454		11230	304	11700	38	-2	6.0	6.1	-293	-1	-1	27.1	2645	64	5.0	127	0.195
56-42.3969-106.2792-2-15-				0-	W15455		13000	308	13200	46	-2	6.1	4.9	309	-1	-1	22.6	3077	57	3.7	73	0.267
56-42.4694-106.3697-2-11-				0-	W15457		17550	334	10280	-22	-3	5.7	1.5	-233	-1	-1	10.0	2494	55	-1.8	-34	0.270
56-42.3806-106.0992-2-15-				0-	W15458		12410	343	5840	-16	-2	5.3	4.8	-268	-1	-1	17.0	3000	49	3.4	72	0.392
56-42.4019-106.0761-2-11-				0-	W15459		17660	524	9577	58	-2	6.6	4.4	-342	-1	1	13.0	2266	55	3.3	68	0.718
56-42.4064-106.0633-2-11-				0-	W15460		11780	675	5939	-24	-3	4.3	4.0	494	-1	-1	9.5	1415	36	-2.3	77	0.755
56-42.4667-106.0247-2-11-				0-	W15462		11190	383	10370	-24	-3	6.0	3.4	-247	-1	-1	13.7	2949	54	2.5	-69	0.350
56-42.4608-106.0258-2-11-				0-	W15463		6606	85	12200	36	-2	3.6	3.8	-213	-1	-1	10.5	2762	46	2.7	16	0.408
56-42.4842-106.0125-2-11-				0-	W15464		11450	289	7202	-31	-3	6.9	8.2	-392	-1	-1	22.9	2540	66	6.1	141	0.363
56-42.4722-106.0003-2-11-				0-	W15465		6917	622	9752	44	-2	5.5	7.2	-305	-1	-1	27.0	3503	60	5.0	-20	0.161
56-42.4297-106.0225-2-12-				0-	W15466		25770	339	5833	-27	-3	6.7	4.3	-246	-1	-1	12.6	3199	59	3.0	-43	0.479
56-42.4294-106.0319-2-15-				0-	W15467		12750	425	10470	45	-2	5.5	3.9	-294	1	-1	13.8	2883	54	2.9	55	0.391
56-42.2000-106.5364-2-15-				0-	W15468		5214	185	8110	32	-2	3.8	4.3	-209	-1	-1	22.7	2177	33	4.0	27	0.217

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

(1)

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																									U CONCENTRATION
							TIME SAMPLED																								
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (µmho/cm)	SCINTILLOMETER (eU, ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
56-42.1992-106.5333-2-15-						0-W15469-09/28/77-			- 16-		-	-	-	-		27-1-6-4-6-	-	-	-2-3-3-2-1-	-1-	-	-	-	-	5.18
56-42.2069-106.5436-2-12-						0-W15470-09/28/77-			- 20-	9.0-	-	-	8.8-	500-		27-1-6-6-6-3-3-1-1-4-3-2-1-	-1-	-	-	-	-	6.04
56-42.1936-106.5706-2-12-						0-W15471-09/28/77-			- 20-	6.0-	-	-	8.6-	100-		13-1-6-4-6-3-2-1-1-1-3-2-1-	-1-	-	-	-	-	1.30
56-42.2058-106.5975-2-15-						0-W15472-09/28/77-			- 26-		-	-	-	-		13-1-6-4-6-	-	-	-	-1-2-2-1-	-1-	-	-	-	-	2.90
56-42.2278-106.6103-2-12-						0-W15473-09/28/77-			- 26-	7.0-	-	-	8.9-	-		-2-6-4-6-3-3-1-1-3-3-4-1-	-1-	-	-	-	-	6.95
56-42.2472-106.6014-2-12-						0-W15474-09/28/77-			- 21-	14.0-	C-	-	8.3-	300-		22-1-6-6-8-2-2-1-1-4-3-2-1-	-1-	-	-	-	-	8.04
56-42.1983-106.6289-2-12-						0-W15475-09/28/77-			- 20-	12.0-	-	-	8.8-	300-		22-1-6-4-6-3-3-1-1-4-3-2-1-	-1-	-	-	-	-	3.53
56-42.1981-106.6453-2-15-						0-W15476-09/28/77-			- 21-		-	-	-	-		112-1-6-4-6-	-	-	-2-3-2-2-1-	-1-	-	-	-	-	3.50
56-42.2017-106.6664-2-15-						0-W15477-09/28/77-			- 21-		-	-	-	-		27-1-6-4-6-	-	-	-1-3-2-2-1-	-1-	-	-	-	-	4.29
56-42.2253-106.6689-2-12-						0-W15478-09/28/77-			- 20-	15.0-	-	-	8.4-	150-		27-1-6-6-6-2-2-2-1-3-2-2-1-	-1-	-	-	-	-	3.89
56-42.1425-106.6178-2-12-						0-W15479-09/29/77-			- 15-	7.0-	-	-	8.6-	50-		13-1-4-3-4-2-2-1-1-1-3-2-2-	-	-	-	-	-	6.10
56-42.9814-106.5222-2-15-						0-W15480-10/27/77-15-			16-		-	-	-	-		7-1-1-5-6-	-1-	-	-4-1-2-1-	-1-	-	-	-	-	2.89
56-42.9792-106.5519-2-15-						0-W15481-10/27/77-			- 17-		-	-	-	-		5-1-1-5-8-	-1-	-	-3-4-2-1-	-1-	-	-	-	-	3.42
56-42.6481-106.8875-2-12-						0-W15482-10/28/77-12-			17-	11.0-	-	-	6.6-	202-		14-1-1-6-8-1-2-5-2-3-3-3-1-	-1-	-	-	-	-	13.00
56-42.6503-106.8903-2-15-						0-W15483-10/28/77-12-			17-		-	-	-	-		23-1-1-4-6-	-1-	-	-3-3-3-1-	-1-	-	-	-	-	3.38
56-42.6481-106.8925-2-15-						0-W15484-10/28/77-12-			17-		-	-	-	-		13-1-1-4-6-	-1-	-	-3-3-3-1-	-1-	-	-	-	-	3.11
56-42.6917-106.8878-2-11-						0-W15486-10/28/77-13-			19-	13.5-	-	-	7.8-	100-		6-1-1-	-	-	-	-	-	-3-3-3-1-	-1-	-	-	-	-	4.06
56-42.7297-106.9178-2-15-						0-W15487-10/28/77-15-			18-		-	-	-	-		9-1-1-4-1-	-1-	-	-3-2-3-1-	-1-	-	-	-	-	11.73
56-42.7067-106.9444-2-11-						0-W15488-10/28/77-15-			18-	10.5-	-	-	7.7-	300-		3-1-1-5-8-2-2-5-	-3-3-4-1-	-1-	-	-	-	4.63
56-42.6614-106.9681-2-15-						0-W15489-10/28/77-16-			18-		-	-	-	-		8-1-1-4-1-	-1-	-	-3-2-3-1-	-1-	-	-	-	-	2.54
56-42.6611-106.9719-2-12-						0-W15490-10/28/77-16-			17-	13.0-	-	-	8.1-	222-		22-1-1-5-1-2-2-1-2-3-2-3-1-	-1-	-	-	-	-	4.31
56-42.6625-106.9892-2-15-						0-W15492-10/28/77-17-			16-		-	-	-	-		18-1-1-4-6-	-1-	-	-4-2-3-2-	-1-	-	-	-	-	3.70
56-42.6583-106.9292-2-15-						0-W15493-10/28/77-17-			16-		-	-	-	-		7-1-1-4-6-	-1-	-	-3-3-3-2-	-1-	-	-	-	-	3.02
56-42.6600-106.9317-2-15-						0-W15494-10/28/77-17-			16-		-	-	-	-		14-1-1-4-6-	-1-	-	-3-3-3-2-	-1-	-	-	-	-	2.86
56-42.5453-107.2706-2-11-						0-W15495-10/28/77-18-			14-	10.0-	-	-	7.3-	145-		18-3-6-6-5-1-2-5-	-4-3-3-2-	-1-	-	-	-	6.50
56-42.5450-107.2522-2-15-						0-W15496-10/28/77-18-			15-		-	-	-	-		5-3-6-4-6-	-1-	-	-3-3-3-2-	-1-	-	-	-	-	4.39
56-42.5283-107.2606-2-15-						0-W15497-10/28/77-19-			15-		-	-	-	-		7-3-6-5-6-	-1-	-	-3-3-3-2-	-1-	-	-	-	-	3.13
56-42.7078-107.7519-2-15-						0-W15498-10/29/77-11-			15-		-	-	-	-		4-1-1-5-6-	-1-	-	-4-3-3-2-	-1-	-	-	-	-	4.42
56-42.7167-107.7506-2-15-						0-W15499-10/29/77-11-			15-		-	-	-	-		18-1-1-4-6-	-1-	-	-3-3-3-2-	-1-	-	-	-	-	4.66
56-42.7433-107.7589-2-12-						0-W15500-10/29/77-12-			16-	13.0-	-	-	7.7-	980-		32-1-1-4-1-1-2-1-	-3-4-3-2-	-1-	-	-	-	22.08
56-42.6975-107.8644-2-15-						0-W15501-10/29/77-13-			17-		-	-	-	-		18-1-1-4-6-	-1-	-	-3-2-3-2-	-1-	-	-	-	-	2.07
56-42.7028-107.8653-2-15-						0-W15502-10/29/77-			- 17-		-	-	-	-		13-1-1-4-6-	-1-	-	-3-3-3-2-	-1-	-	-	-	-	2.24
56-42.6514-107.8450-2-12-						0-W15503-10/29/77-13-			17-	12.5-	-	-	8.3-	182-		13-1-1-5-1-2-2-1-	-4-3-3-2-	-1-	-	-	-	2.37
56-42.6686-107.8508-2-15-						0-W15504-10/29/77-14-			17-		-	-	-	-		13-1-1-5-6-	-1-	-	-3-4-2-2-	-1-	-	-	-	-	2.98
56-42.6289-107.8656-2-11-						0-W15505-10/29/77-14-			16-	11.0-	-	-	8.2-	271-		15-3-1-5-6-3-3-1-	-3-3-3-2-	-1-	-	-	-	5.65
56-42.6261-107.8333-2-15-						0-W15506-10/29/77-14-			16-		-	-	-	-		22-1-1-4-6-	-1-	-	-3-3-3-3-	-1-	-	-	-	-	3.10
56-42.6472-107.8133-2-15-						0-W15507-10/29/77-15-			15-		-	-	-	-		9-1-1-5-6-	-1-	-	-3-3-3-3-	-1-	-	-	-	-	2.97
56-42.6506-107.8067-2-15-						0-W15508-10/29/77-15-			16-		-	-	-	-		7-1-1-5-6-	-1-	-	-3-3-3-3-	-1-	-	-	-	-	3.43
56-42.6272-107.7508-2-15-						0-W15509-10/29/77-16-			16-		-	-	-	-		27-1-1-4-6-	-1-	-	-4-2-2-2-	-1-	-	-	-	-	5.82
56-42.4706-107.4900-2-15-						0-W15513-10/29/77-19-			10-		-	-	-	-		9-4-	-4-1-	-1-	-	-3-3-3-4-	-1-	-	-	-	-	4.07
56-42.3806-106.8839-2-15-						0-W15514-10/31/77-15-			18-		-	-	-	-		9-3-6-4-1-	-	-	-	-4-2-4-2-	-1-	-	-	-	-	3.10
56-42.4200-106.8833-2-15-						0-W15515-10/31/77-15-			17-		-	-	-	-		16-3-6-4-6-	-	-	-	-3-2-3-2-	-1-	-	-	-	-	2.46
56-42.6122-106.3547-2-15-						0-W15516-10/30/77-13-			12-		-	-	-	-		5-1-4-4-4-	-1-	-	-2-3-4-2-	-1-	-	-	-	-	1.93
56-42.5400-106.2967-2-12-						0-W15518-10/30/77-13-			12-	6.0-	-	-	8.2-	171-		18-1-1-6-4-3-3-1-2-1-2-4-2-	-1-	-	-	-	-	3.62
56-42.5311-106.3500-2-15-						0-W15519-10/30/77-14-			11-		-	-	-	-		23-1-1-4-6-	-1-	-	-3-3-3-2-	-1-	-	-	-	-	4.69
56-42.5181-106.3214-2-15-						0-W15520-10/30/77-14-			11-		-	-	-	-		18-1-1-5-6-	-1-	-	-3-3-3-2-	-1-	-	-	-	-	4.01
56-42.5200-106.3036-2-11-						0-W15521-10/30/77-14-			11-	8.0-	-	-	7.9-	205-		6-1-1-4-4-4-3-1-2-2-2-3-2-	-1-	-	-	-	-	3.44
56-42.5022-106.2767-2-15-						0-W15522-10/30/77-15-			12-		-	-	-	-		13-1-1-4-1-	-1-	-	-3-3-3-2-	-1-	-	-	-	-	4.49
56-42.5161-106.2611-2-11-						0-W15523-10/30/77-15-			11-	6.5-	-	-	7.6-	220-		23-1-1-3-4-2-2-1-2-4-3-3-2-	-1-	-	-	-	-	3.75
56-42.5922-106.3503-2-15-						0-W15524-10/30/77-16-			11-		-	-	-	-		3-1-4-5-4-	-1-	-	-4-2-4-2-	-1-	-	-	-	-	2.47
56-42.6092-106.3306-2-12-						0-W15526-10/30/77-17-			10-	6.0-	-	-	8.2-	210-		8-1-4-5-4-2-2-1-2-4-2-4-2-	-1-	-	-	-	-	2.94

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

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE Concentrations reported in weight parts per million (ppm)									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY Concentrations in weight ppm	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
56-42.1992-106.5333-2-15-						0-W15469	-5	-5	-5	19	-20	-15	12	-10	-15	2	28
56-42.2069-106.5436-2-12-						0-W15470	-5	-5	-5	22	-20	24	9	-10	-15	2	40
56-42.1936-106.5706-2-12-						0-W15471	-5	-5	-5	-10	-20	-15	-5	-10	-15	1	6
56-42.2058-106.5975-2-15-						0-W15472	-5	7	-5	25	-20	15	15	-10	-15	2	27
56-42.2278-106.6103-2-12-						0-W15473	-5	-5	-5	19	-20	22	14	-10	-15	2	33
56-42.2472-106.6014-2-12-						0-W15474	-5	-5	-5	31	-20	-15	11	-10	-15	2	36
56-42.1983-106.6289-2-12-						0-W15475	-5	-5	-5	26	-20	-15	5	-10	-15	1	50
56-42.1981-106.6453-2-15-						0-W15476	-5	-5	-5	28	22	-15	7	-10	-15	2	38
56-42.2017-106.6664-2-15-						0-W15477	-5	-5	-5	26	-20	22	12	-10	-15	2	46
56-42.2253-106.6689-2-12-						0-W15478	-5	-5	-5	28	-20	22	5	-10	-15	2	48
56-42.1425-106.6178-2-12-						0-W15479	-5	-5	-5	30	-20	28	19	-10	-15	2	42
56-42.9814-106.5222-2-15-						0-W15480	-5	-5	-5	18	-20	35	19	-10	-15	1	42
56-42.9792-106.5519-2-15-						0-W15481	-5	-5	-5	25	23	23	6	-10	-15	3	82
56-42.6481-106.8875-2-12-						0-W15482	-5	-5	-5	18	-20	16	13	-10	-15	1	44
56-42.6503-106.8903-2-15-						0-W15483	-5	-5	-5	-10	25	-15	17	-10	-15	2	35
56-42.6481-106.8925-2-15-						0-W15484	-5	-5	-5	22	-20	15	14	-10	-15	-1	130
56-42.6917-106.8878-2-11-						0-W15486	-5	-5	-5	20	-20	18	12	-10	-15	-1	50
56-42.7297-106.9178-2-15-						0-W15487	-5	-5	-5	13	-20	-15	17	-10	22	2	49
56-42.7067-106.9444-2-11-						0-W15488	-5	5	-5	11	-20	-15	15	-10	-15	-1	41
56-42.6614-106.9681-2-15-						0-W15489	-5	-5	-5	16	-20	-15	12	-10	-15	2	39
56-42.6611-106.9719-2-12-						0-W15490	-5	-5	-5	11	23	-15	-5	-10	-15	2	47
56-42.6625-106.9892-2-15-						0-W15492	-5	-5	-5	17	-20	-15	10	-10	-15	-1	41
56-42.6583-106.9292-2-15-						0-W15493	-5	5	-5	17	-20	20	14	-10	-15	2	33
56-42.6600-106.9317-2-15-						0-W15494	-5	-5	-5	-10	-20	-15	9	-10	-15	-1	34
56-42.5453-107.2706-2-11-						0-W15495	-5	-5	-5	10	-20	-15	19	-10	-15	2	31
56-42.5450-107.2522-2-15-						0-W15496	-5	-5	-5	21	-20	-15	23	-10	-15	-1	31
56-42.5283-107.2606-2-15-						0-W15497	-5	-5	-5	24	-20	-15	14	-10	-15	-1	29
56-42.7078-107.7519-2-15-						0-W15498	-5	-5	-5	20	-20	24	13	-10	-15	-1	55
56-42.7167-107.7506-2-15-						0-W15499	-5	-5	-5	18	-20	31	14	-10	-15	1	45
56-42.7433-107.7589-2-12-						0-W15500	8	5	-5	-10	-20	21	43	-10	32	1	24
56-42.6975-107.8644-2-15-						0-W15501	-5	5	-5	21	-20	20	12	-10	-15	-1	193
56-42.7028-107.8653-2-15-						0-W15502	-5	-5	-5	22	-20	27	18	-10	-15	1	39
56-42.6514-107.8450-2-12-						0-W15503	-5	-5	-5	20	-20	26	9	-10	-15	2	29
56-42.6686-107.8508-2-15-						0-W15504	-5	-5	-5	32	-20	21	23	-10	-15	2	40
56-42.6289-107.8656-2-11-						0-W15505	-5	-5	-5	22	-20	-15	10	-10	-15	2	34
56-42.6261-107.8333-2-15-						0-W15506	-5	-5	-5	22	-20	23	17	-10	-15	2	47
56-42.6472-107.8133-2-15-						0-W15507	-5	-5	-5	16	-20	-15	13	-10	-15	1	31
56-42.6506-107.8067-2-15-						0-W15508	-5	-5	-5	28	-20	-15	10	-10	-15	2	41
56-42.6272-107.7508-2-15-						0-W15509	-5	-5	-5	21	-20	26	10	-10	-15	-1	35
56-42.4706-107.4900-2-15-						0-W15513	-5	-5	-5	19	-20	-15	14	-10	-15	2	51
56-42.3806-106.8839-2-15-						0-W15514	-5	-5	-5	10	-20	-15	9	-10	-15	-1	14
56-42.4200-106.8833-2-15-						0-W15515	-5	-5	-5	12	-20	-15	10	-10	-15	1	26
56-42.6122-106.3547-2-15-						0-W15516	-5	-5	-5	20	-20	15	8	-10	-15	-1	32
56-42.5400-106.2967-2-12-						0-W15518	-5	-5	-5	21	-20	15	7	-10	-15	-1	36
56-42.5311-106.3500-2-15-						0-W15519	-5	-5	-5	18	-20	-15	13	-10	-15	2	32
56-42.5181-106.3214-2-15-						0-W15520	-5	-5	-5	-10	-20	-15	11	-10	-15	1	49
56-42.5200-106.3036-2-11-						0-W15521	-5	-5	-5	22	-20	-15	12	-10	-15	2	32
56-42.5022-106.2767-2-15-						0-W15522	-5	-5	-5	-10	-20	-15	11	-10	-15	2	34
56-42.5161-106.2611-2-11-						0-W15523	-5	-5	-5	26	-20	-15	14	-10	-15	2	35
56-42.5922-106.3503-2-15-						0-W15524	-5	-5	-5	22	-20	-15	10	-10	-15	2	80
56-42.6092-106.3306-2-12-						0-W15526	-5	-5	-5	13	-20	-15	-5	-10	-15	1	41

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)														
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
56-	42.1992-	106.5333-	2-	15-	0-	W15469	46930	-0.06	502	7170	79	-67	6.2	41	2.1	4	0.9	9650	16.4	15370	50	0.5
56-	42.2069-	106.5436-	2-	12-	0-	W15470	44540	-0.09	403	110100	34	-67	7.2	47	2.6	3	0.4	10280	4.4	12110	20	0.3
56-	42.1936-	106.5706-	2-	12-	0-	W15471	10450	-0.03	148	1136	14	-20	5.8	10	-0.4	1	0.4	1809	7.9	7388	8	0.2
56-	42.2058-	106.5975-	2-	15-	0-	W15472	47300	-0.08	342	10710	47	-76	6.8	30	2.1	2	0.6	9022	6.1	16950	22	0.2
56-	42.2278-	106.6103-	2-	12-	0-	W15473	53000	-0.06	576	7740	87	-69	10.2	38	1.8	4	0.9	9791	11.7	17350	53	0.4
56-	42.2472-	106.6014-	2-	12-	0-	W15474	58620	-0.08	669	8699	88	-76	7.7	52	2.8	4	1.0	13520	9.6	17800	58	0.4
56-	42.1983-	106.6289-	2-	12-	0-	W15475	41100	-0.06	473	7121	65	-62	5.8	38	1.9	3	0.8	7780	11.9	15160	34	0.3
56-	42.1981-	106.6453-	2-	15-	0-	W15476	48060	-0.08	557	8589	66	-79	6.1	29	-1.2	3	1.0	8751	13.4	17520	36	0.4
56-	42.2017-	106.6664-	2-	15-	0-	W15477	56250	-0.07	634	8286	67	-77	12.6	37	1.9	4	0.8	11540	9.9	19860	40	0.3
56-	42.2253-	106.6689-	2-	12-	0-	W15478	56240	-0.06	592	7885	79	104	5.8	38	2.8	4	0.9	11470	11.0	17050	45	0.4
56-	42.1425-	106.6178-	2-	12-	0-	W15479	52880	-0.08	640	8381	114	-96	8.4	45	2.3	5	1.0	14950	14.6	14040	65	0.5
56-	42.9814-	106.5222-	2-	15-	0-	W15480	49690	-0.06	734	11070	46	50	9.0	43	2.7	4	0.7	10970	7.0	14850	25	0.3
56-	42.9792-	106.5519-	2-	15-	0-	W15481	57110	-0.07	755	29220	60	103	7.8	53	3.8	4	1.0	14340	6.1	13980	34	0.3
56-	42.6481-	106.8875-	2-	12-	0-	W15482	54010	-0.09	888	15280	73	-89	7.2	31	1.0	3	0.9	10580	8.6	16710	47	0.4
56-	42.6503-	106.8903-	2-	15-	0-	W15483	52910	-0.07	538	16200	94	-86	7.5	35	-1.2	2	1.1	18610	15.5	15690	61	0.4
56-	42.6481-	106.8925-	2-	15-	0-	W15484	57450	-0.05	737	14880	81	-72	9.8	34	1.7	4	0.8	15330	10.7	17600	48	0.3
56-	42.6917-	106.8878-	2-	11-	0-	W15486	54980	-0.06	797	14750	112	-73	6.5	52	1.6	5	1.0	16000	14.9	15170	61	0.5
56-	42.7297-	106.9178-	2-	15-	0-	W15487	65020	0.27	603	13000	243	-86	8.6	53	2.0	8	1.1	15070	18.5	18230	137	0.7
56-	42.7067-	106.9444-	2-	11-	0-	W15488	58550	-0.08	593	11560	76	-92	5.1	35	-1.1	4	0.7	8330	13.1	17470	50	0.5
56-	42.6614-	106.9681-	2-	15-	0-	W15489	58580	-0.05	654	19840	60	96	7.7	30	1.5	3	0.9	10990	6.7	16130	42	0.3
56-	42.6611-	106.9719-	2-	12-	0-	W15490	59290	-0.07	766	20750	140	-81	7.9	46	2.5	5	1.0	22480	15.9	15860	84	0.5
56-	42.6625-	106.9892-	2-	15-	0-	W15492	57160	-0.07	507	18850	115	-83	7.9	56	1.3	4	1.1	22990	16.0	14460	68	0.4
56-	42.6583-	106.9292-	2-	15-	0-	W15493	57040	-0.08	531	14770	75	-87	7.0	38	-1.2	3	0.8	15780	9.2	15980	44	0.3
56-	42.6600-	106.9317-	2-	15-	0-	W15494	53900	-0.02	767	15980	58	-72	3.6	20	1.0	3	0.5	12155	8.0	16580	20	0.2
56-	42.5453-	107.2706-	2-	11-	0-	W15495	53280	-0.05	659	28420	102	106	6.8	56	1.8	5	0.9	19855	15.9	18690	40	0.4
56-	42.5450-	107.2522-	2-	15-	0-	W15496	50690	-0.03	574	12980	64	-78	7.3	40	2.0	4	0.7	21660	9.0	15350	26	0.2
56-	42.5283-	107.2606-	2-	15-	0-	W15497	53220	-0.09	565	13550	57	-83	5.8	29	2.4	2	0.8	15950	6.5	17030	20	0.2
56-	42.7078-	107.7519-	2-	15-	0-	W15498	64510	-0.03	833	21100	58	141	7.0	43	2.2	4	0.5	16345	7.2	19100	22	0.2
56-	42.7167-	107.7506-	2-	15-	0-	W15499	71720	-0.05	862	14760	98	-79	8.0	79	3.3	5	1.0	23685	18.0	14790	39	0.4
56-	42.7433-	107.7589-	2-	12-	0-	W15500	35290	0.90	995	15420	692	-57	6.5	130	1.0	18	2.7	26435	159.2	7603	288	2.3
56-	42.6975-	107.8644-	2-	15-	0-	W15501	46590	-0.03	449	11470	59	-51	6.9	48	2.7	3	0.5	17415	7.8	14510	18	0.2
56-	42.7028-	107.8653-	2-	15-	0-	W15502	38160	-0.03	387	9019	48	-51	5.6	36	1.8	3	0.4	14660	7.1	10140	16	0.2
56-	42.6514-	107.8450-	2-	12-	0-	W15503	39650	-0.05	345	23800	80	-50	8.3	71	1.9	4	1.0	21740	13.5	11370	29	0.3
56-	42.6686-	107.8508-	2-	15-	0-	W15504	60570	-0.04	672	13120	54	-80	8.3	52	2.7	4	0.8	21670	5.9	16250	23	0.2
56-	42.6289-	107.8656-	2-	11-	0-	W15505	49960	-0.03	479	38780	70	-97	6.8	50	1.2	4	0.8	19210	12.9	14870	24	0.2
56-	42.6261-	107.8333-	2-	15-	0-	W15506	55670	-0.03	729	17150	57	-74	5.9	36	1.4	3	0.7	16290	9.7	13840	18	0.2
56-	42.6472-	107.8133-	2-	15-	0-	W15507	56570	-0.05	708	12990	64	121	6.9	56	2.6	4	1.0	18490	10.8	17120	27	0.3
56-	42.6506-	107.8067-	2-	15-	0-	W15508	53700	-0.03	657	23620	74	158	7.1	50	1.6	4	0.8	22795	13.7	13480	29	0.2
56-	42.6272-	107.7508-	2-	15-	0-	W15509	54150	-0.03	712	28250	67	-86	6.0	46	1.9	3	0.5	19560	11.1	10900	23	0.2
56-	42.4706-	107.4900-	2-	15-	0-	W15513	59350	-0.02	669	12340	57	96	4.1	27	1.9	4	0.6	12000	6.0	20210	20	0.2
56-	42.3806-	106.8839-	2-	15-	0-	W15514	46010	-0.04	646	11770	75	267	4.8	32	0.9	3	0.7	16365	12.1	19240	27	0.3
56-	42.4200-	106.8833-	2-	15-	0-	W15515	47450	-0.02	667	19610	46	360	3.4	20	1.3	3	0.6	10960	7.7	18220	18	0.2
56-	42.6122-	106.3547-	2-	15-	0-	W15516	28430	-0.02	412	27120	29	110	3.0	18	1.3	1	0.5	8190	6.7	10240	10	0.1
56-	42.5400-	106.2967-	2-	12-	0-	W15518	41820	-0.02	739	45160	48	114	2.7	19	1.6	4	0.4	9265	7.6	16200	18	0.2
56-	42.5311-	106.3500-	2-	15-	0-	W15519	42640	-0.05	594	39900	99	531	5.8	49	2.4	4	0.9	22340	17.4	16120	38	0.4
56-	42.5181-	106.3214-	2-	15-	0-	W15520	42320	-0.03	583	26740	89	512	5.1	31	1.6	5	0.8	20145	14.9	13490	37	0.3
56-	42.5200-	106.3036-	2-	11-	0-	W15521	43830	-0.02	564	21360	58	225	3.4	27	1.7	3	0.3	13610	9.2	14530	21	0.2
56-	42.5022-	106.2767-	2-	15-	0-	W15522	39080	-0.02	578	13190	71	-56	3.4	29	1.2	5	0.7	15195	19.1	13560	25	0.3
56-	42.5161-	106.2611-	2-	11-	0-	W15523	48530	-0.04	793	41850	70	797	4.9	26	1.7	4	0.9	13950	7.7	15850	23	0.3
56-	42.5922-	106.3503-	2-	15-	0-	W15524	45870	-0.03	403	53790	36	590	6.1	36	2.6	4	0.6	15370	6.4	16990	13	0.2
56-	42.6092-	106.3306-	2-	12-	0-	W15526	34640	-0.02	473	18160	39	153	4.0	32	1.7	3	0.3	11260	15.0	12390	13	0.3

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

DOE SAMPLE NUMBER						LAB SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
56-	42.1992-	106.5333-2-	15-			0-W15469	7792	515	9406	39	-2	5.1	5.2	-258	-1	-1	25.5	3198	50	4.6	28	0.203
56-	42.2069-	106.5436-2-	12-			0-W15470	12520	417	4056	-26	-3	5.2	2.8	-262	-1	-1	7.2	2758	101	-2.0	-42	0.839
56-	42.1936-	106.5706-2-	12-			0-W15471	-721	53	1693	17	-1	0.9	0.9	-53			3.2	700	7	1.3	-42	0.406
56-	42.2058-	106.5975-2-	15-			0-W15472	8837	465	6772	-21	-2	4.8	2.7	-311	-1	-1	8.9	2288	44	-1.8	79	0.326
56-	42.2278-	106.6103-2-	12-			0-W15473	8101	439	10440	36	-2	4.9	6.6	-245	-1	-1	24.6	2859	53	3.7	44	0.283
56-	42.2472-	106.6014-2-	12-			0-W15474	10460	331	11180	58	-2	6.7	6.4	-258	-1	-1	20.0	3143	57	-1.9	66	0.402
56-	42.1983-	106.6289-2-	12-			0-W15475	7417	277	7108	40	-2	4.2	4.4	-230	-1	-1	13.7	2428	33	3.6	36	0.258
56-	42.1981-	106.6453-2-	15-			0-W15476	5660	298	11720	47	-2	4.8	3.1	-262	-1	-1	14.9	2679	43	1.9	-31	0.235
56-	42.2017-	106.6664-2-	15-			0-W15477	10650	431	10530	34	-2	5.1	3.8	-279	-1	-1	18.0	3450	54	2.9	56	0.238
56-	42.2253-	106.6689-2-	12-			0-W15478	8320	315	12240	44	-2	5.6	5.1	-220	-1	-1	16.7	2669	54	3.1	35	0.233
56-	42.1425-	106.6178-2-	12-			0-W15479	10660	676	12620	44	-2	6.4	7.7	-355	-1	-1	34.6	3221	60	6.0	66	0.176
56-	42.9814-	106.5222-2-	15-			0-W15480	15810	193	6416	26	-2	5.3	3.2	-169		-1	7.5	2926	102	2.9	56	0.385
56-	42.9792-	106.5519-2-	15-			0-W15481	16550	511	7439	46	-2	7.6	3.8	-267	-1	-1	10.5	3265	123	3.2	-48	0.326
56-	42.6481-	106.8875-2-	12-			0-W15482	8457	224	14180	46	-2	4.9	5.5	475	-1	-1	14.5	2739	64	3.2	-30	0.897
56-	42.6503-	106.8903-2-	15-			0-W15483	8186	460	14420	-20	-2	5.7	4.6	-274	-1	-1	20.0	4129	91	4.3	35	0.169
56-	42.6481-	106.8925-2-	15-			0-W15484	9559	445	13520	35	-2	5.1	4.9	473	-1	-1	19.8	4167	82	3.5	56	0.157
56-	42.6917-	106.8878-2-	11-			0-W15486	9518	363	13990	37	-2	6.1	7.1	361	-1	1	26.5	4179	78	4.7	68	0.153
56-	42.7297-	106.9178-2-	15-			0-W15487	12240	444	14450	29	-2	7.3	16.6	-289	1	1	72.0	4083	66	7.5	60	0.163
56-	42.7067-	106.9444-2-	11-			0-W15488	7196	212	17390	36	-2	4.4	4.7	-268	-1	-1	20.9	2995	48	3.4	-31	0.222
56-	42.6614-	106.9681-2-	15-			0-W15489	11540	390	14940	33	-2	6.2	4.0	464	1	-1	10.6	3250	57	2.6	54	0.240
56-	42.6611-	106.9719-2-	12-			0-W15490	15650	558	14880	50	-2	7.3	7.8	-274	-1	-1	27.0	5095	105	5.3	52	0.160
56-	42.6625-	106.9892-2-	15-			0-W15492	12530	527	14040	28	-2	6.9	6.8	-284	-1	-1	18.8	4199	113	3.2	96	0.197
56-	42.6583-	106.9292-2-	15-			0-W15493	11350	418	13790	-21	-2	5.7	3.3	-292	-1	-1	15.2	3241	69	3.9	-90	0.199
56-	42.6600-	106.9317-2-	15-			0-W15494	9672	366	15330	45	-1	3.8	3.9	488	1	1	10.6	3164	59	2.3	44	0.270
56-	42.5453-	107.2706-2-	11-			0-W15495	9676	288	13240	97	-1	6.8	7.3	526	-1	-1	31.7	3654	60	4.9	101	0.205
56-	42.5450-	107.2522-2-	15-			0-W15496	9191	453	11560	66	-1	5.2	4.5	-268		-1	15.1	3984	92	1.8	60	0.291
56-	42.5283-	107.2606-2-	15-			0-W15497	11420	432	11220	69	-1	5.2	3.5	-296		-1	11.0	2796	60	2.3	61	0.285
56-	42.7078-	107.7519-2-	15-			0-W15498	17650	661	11000	65	-1	4.9	3.8	-305	1	-1	12.6	3136	54	2.5	57	0.351
56-	42.7167-	107.7506-2-	15-			0-W15499	14570	329	16770	92	-2	7.6	6.3	-239	-1	-1	27.0	3477	51	6.2	60	0.173
56-	42.7433-	107.7589-2-	12-			0-W15500	-2199	384	11200	37	-2	11.2	45.2	-187	4	8	249.0	7597	56	26.3	52	0.089
56-	42.6975-	107.8644-2-	15-			0-W15501	11120	380	9422	61	-1	6.0	3.8	-164		-1	9.8	2962	50	2.8	52	0.211
56-	42.7028-	107.8653-2-	15-			0-W15502	8451	287	7957	46	-1	4.6	3.2	-132		-1	8.6	2250	38	2.4	67	0.260
56-	42.6514-	107.8450-2-	12-			0-W15503	11900	265	8761	79	-2	7.3	5.8	222	-1	-2	16.0	2132	45	3.7	51	0.148
56-	42.6686-	107.8508-2-	15-			0-W15504	16310	475	9470	78	-1	7.2	4.2	-306		-1	11.5	3267	69	2.1	55	0.259
56-	42.6289-	107.8656-2-	11-			0-W15505	14840	442	14710	35	-1	6.8	4.0	-315		-1	15.0	3744	84	3.1	64	0.377
56-	42.6261-	107.8333-2-	15-			0-W15506	14270	432	13210	52	-1	4.9	3.8	-243		-1	10.1	3404	74	2.5	37	0.307
56-	42.6472-	107.8133-2-	15-			0-W15507	11860	432	12910	84	-1	6.3	6.2	373	-1	-1	14.1	3218	53	3.1	73	0.211
56-	42.6506-	107.8067-2-	15-			0-W15508	13320	501	13520	50	-1	5.6	4.7	620	1	-1	15.9	3880	88	2.5	50	0.216
56-	42.6272-	107.7508-2-	15-			0-W15509	15050	397	12890	57	-1	6.2	3.8	-283		-1	11.5	2513	73	2.7	71	0.506
56-	42.4706-	107.4900-2-	15-			0-W15513	12390	301	11050	65	-1	4.0	4.0	337		-1	13.6	2843	46	2.4	43	0.299
56-	42.3806-	106.8839-2-	15-			0-W15514	8124	250	12980	71	-1	3.9	4.7	-188	-1	-1	16.3	2983	58	2.9	65	0.190
56-	42.4200-	106.8833-2-	15-			0-W15515	6711	251	12150	65	-1	3.1	3.1	389		1	9.6	1888	40	2.1	40	0.256
56-	42.6122-	106.3547-2-	15-			0-W15516	9457	241	5726	48	-1	2.9	2.0	-195		-1	4.9	2211	26	1.7	27	0.394
56-	42.5400-	106.2967-2-	12-			0-W15518	16870	332	7454	48	-1	3.0	4.0	-224		-1	12.1	2780	38	2.6	40	0.299
56-	42.5311-	106.3500-2-	15-			0-W15519	9749	394	9777	65	-1	5.1	8.6	330	2	-1	33.1	3757	68	4.4	69	0.142
56-	42.5181-	106.3214-2-	15-			0-W15520	6424	379	10260	52	-1	4.0	6.6	-243		-1	31.0	3670	76	3.5	40	0.129
56-	42.5200-	106.3036-2-	11-			0-W15521	9161	283	11230	60	-1	4.0	3.7	-242		1	12.1	2359	51	2.6	36	0.284
56-	42.5022-	106.2767-2-	15-			0-W15522	7592	390	8017	36	-1	3.6	5.1	-211	1	1	18.2	5010	75	3.7	43	0.247
56-	42.5161-	106.2611-2-	11-			0-W15523	13190	443	9664	81	-1	4.4	5.6	-255	-1	-1	17.3	2104	54	4.2	80	0.217
56-	42.5922-	106.3503-2-	15-			0-W15524	22690	406	7076	53	-1	5.5	3.3	-255		-1	7.1	2947	50	2.2	41	0.348
56-	42.6092-	106.3306-2-	12-			0-W15526	12420	251	5920	56	-1	3.9	2.9	-219		-1	7.1	2974	39	2.8	25	0.414

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER AND FIELD DATA																									U CONCENTRATION
							TIME SAMPLED																								
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	DATE	HOUR	AIR TEMPERATURE	WATER TEMPERATURE	COMMENTS	SPECIAL MEASUREMENTS	pH	CONDUCTIVITY (μmho/cm)	SCINTILLOMETER (eU,ppm)	ROCK TYPE	ROCK COLOR	SEDIMENT TYPE	SEDIMENT COLOR	WATER FLOW	WATER LEVEL	WATER COLOR	STREAM CHANNEL	VEGETATION TYPE	VEGETATION DENSITY	RELIEF	WEATHER	OWNERSHIP	CONTAMINANTS	WELL TYPE	WELL DIAMETER (INCHES)	WELL DEPTH (FEET)	WATER DEPTH (FEET)	SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm
56-	42.4592-	106.9458-	2-	15-		0-W15527-	10/31/77-	12-	14-		-	-	-	-	-	12-	3-	6-	4-	3-	-	-	-	-	-4-	2-	3-	2-	-1-	-	-	-	-	2.90
56-	42.4806-	106.9928-	2-	15-		0-W15528-	10/31/77-	12-	16-		-	-	-	-	-	9-	3-	6-	4-	1-	-	-	-	-	-3-	2-	3-	2-	-1-	-	-	-	-	3.83
56-	42.4917-	106.9744-	2-	15-		0-W15529-	10/31/77-	13-	18-		-	-	-	-	-	12-	3-	6-	4-	1-	-	-	-	-	-3-	2-	3-	2-	-1-	-	-	-	-	2.00
56-	42.4956-	106.9333-	2-	15-		0-W15530-	10/31/77-	14-	18-		-	-	-	-	-	9-	3-	6-	4-	1-	-	-	-	-	-3-	2-	3-	2-	-1-	-	-	-	-	3.00
56-	42.6225-	106.3589-	2-	12-		0-W15531-	11/12/77-	10-	13-	1.0-	-	-	6.4-	439-		14-	4-	5-	5-	6-	2-	2-	1-	2-	4-	3-	3-	1-	-1-	-	-	-	-	2.51
56-	42.5567-	106.3381-	2-	15-		0-W15532-	11/12/77-	10-	14-		-	-	-	-	-	9-	1-	4-	5-	4-	-1-	-	-1-	2-	3-	1-	-1-	-	-	-	-	-	2.82
56-	42.5403-	106.3333-	2-	12-		0-W15533-	10/12/77-	10-	13-	4.0-	-	-	6.2-	283-		34-	1-	2-	4-	1-	3-	2-	1-	2-	3-	1-	3-	1-	-1-	-	-	-	-	6.35
56-	42.5361-	106.2050-	2-	15-		0-W15534-	11/12/77-	11-	13-		-	-	-	-	-	41-	3-	4-	4-	4-	-1-	-	-2-	2-	3-	1-	-1-	-	-	-	-	-	12.26
56-	42.5383-	106.2039-	2-	15-		0-W15535-	11/12/77-	11-	14-		-	-	-	-	-	27-	3-	4-	5-	6-	-2-	-	-3-	2-	3-	1-	-1-	-	-	-	-	-	6.71
56-	42.5267-	106.1858-	2-	99-		0-W15536-	11/12/77-	12-	15-		-C-	-	-	-	-	27-	3-	4-	4-	5-	-1-	-	-4-	3-	3-	1-	-1-	-	-	-	-	-	7.53
56-	42.5222-	106.1617-	2-	15-		0-W15537-	11/12/77-	12-	15-		-	-	-	-	-	46-	3-	4-	4-	4-	-1-	-	-4-	3-	2-	1-	-1-	-	-	-	-	-	10.33
56-	42.5136-	106.1428-	2-	11-		0-W15538-	11/12/77-	12-	15-	8.0-	-	-	6.3-	312-		5-	1-	1-	5-	8-	2-	2-	1-	2-	4-	3-	3-	1-	-1-	-	-	-	-	4.36
56-	42.5017-	106.1594-	2-	12-		0-W15539-	11/12/77-	12-	14-	5.0-	-	-	7.5-	165-		74-	1-	6-	-	-	2-	2-	1-	2-	4-	3-	2-	1-	-1-	-	-	-	-	11.05
56-	42.5014-	106.1731-	2-	11-		0-W15540-	11/12/77-	13-	13-	7.0-	-	-	7.3-	165-		14-	1-	6-	-	-	2-	2-	1-	-	3-	3-	2-	1-	-1-	-	-	-	-	14.17
56-	42.5108-	106.1714-	2-	15-		0-W15541-	11/12/77-	14-	13-		-	-	-	-	-	37-	1-	1-	4-	4-	-1-	-	-3-	2-	3-	1-	-1-	-	-	-	-	-	3.89
56-	42.5117-	106.1925-	2-	12-		0-W15542-	11/12/77-	14-	13-	1.5-	-	-	7.7-	312-		18-	1-	1-	-	-	2-	2-	1-	2-	4-	3-	3-	1-	-1-	-	-	-	-	3.89
56-	42.5108-	106.2156-	2-	15-		0-W15543-	11/12/77-	14-	13-		-	-	-	-	-	18-	1-	1-	5-	6-	-1-	-	-4-	3-	3-	1-	-1-	-	-	-	-	-	4.22
56-	42.5536-	106.2139-	2-	15-		0-W15544-	11/12/77-	15-	13-		-	-	-	-	-	37-	3-	4-	4-	4-	-1-	-	-4-	3-	2-	2-	-1-	-	-	-	-	-	6.04
56-	42.2600-	106.1181-	2-	15-		0-W15545-	11/15/77-	12-	4-		-	-	-	-	-	16-	1-	7-	4-	7-	-1-	-2-	4-	3-	1-	3-	-1-	-	-	-	-	-	8.42
56-	42.2856-	106.1008-	2-	15-		0-W15546-	11/15/77-	12-	4-		-	-	-	-	-	35-	1-	7-	5-	7-	-1-	-2-	4-	3-	2-	3-	-1-	-	-	-	-	-	5.21
56-	42.2778-	106.0797-	2-	15-		0-W15547-	11/15/77-	12-	4-		-	-	-	-	-	9-	1-	7-	4-	7-	-1-	-	-3-	3-	2-	3-	-1-	-	-	-	-	-	9.13
56-	42.2806-	106.0608-	2-	15-		0-W15548-	11/15/77-	12-	4-		-	-	-	-	-	22-	1-	6-	4-	6-	-1-	-	-3-	3-	2-	3-	-1-	-	-	-	-	-	5.60
56-	42.2761-	106.0594-	2-	15-		0-W15549-	11/15/77-	12-	4-		-	-	-	-	-	44-	1-	6-	2-	7-	-1-	-2-	3-	3-	2-	3-	-1-	-	-	-	-	-	5.68
56-	42.2636-	106.0506-	2-	15-		0-W15550-	11/15/77-	13-	4-		-	-	-	-	-	18-	1-	6-	5-	6-	-1-	-2-	3-	3-	1-	3-	-1-	-	-	-	-	-	6.22
56-	42.2617-	106.0222-	2-	15-		0-W15551-	11/15/77-	13-	4-		-	-	-	-	-	13-	1-	4-	5-	4-	-1-	-	-3-	3-	2-	2-	-1-	-	-	-	-	-	3.03
56-	42.2628-	106.0944-	2-	11-		0-W15552-	11/15/77-	13-	4-	2.0-	-	-	6.9-	1000-		18-	1-	6-	5-	6-	2-	2-	1-	-4-	3-	2-	2-	-1-	-	-	-	-	-	4.86
56-	42.2919-	106.1103-	2-	15-		0-W15553-	11/15/77-	13-	4-		-	-	-	-	-	39-	1-	7-	4-	7-	-1-	-	-3-	3-	2-	2-	-1-	-	-	-	-	-	11.93
56-	42.3328-	106.0556-	2-	15-		0-W15554-	11/15/77-	14-	4-		-	-	-	-	-	18-	1-	7-	4-	7-	-1-	-	-3-	3-	2-	2-	-1-	-	-	-	-	-	6.73
56-	42.3369-	106.0292-	2-	15-		0-W15555-	11/15/77-	14-	5-		-C-	-	-	-	-	46-	1-	1-	4-	7-	-1-	-2-	3-	2-	2-	3-	-1-	-	-	-	-	-	8.99
56-	42.3536-	106.0422-	2-	15-		0-W15556-	11/15/77-	14-	3-		-	-	-	-	-	9-	1-	7-	4-	7-	-1-	-	-4-	3-	2-	3-	-1-	-	-	-	-	-	8.27
56-	42.3567-	106.0181-	2-	12-		0-W15557-	11/15/77-	14-	3-	2.0-	-	-	7.2-	600-		9-	1-	4-	5-	6-	2-	2-	1-	-4-	4-	3-	3-	-1-	-	-	-	-	-	13.72
56-	42.3383-	106.0967-	2-	15-		0-W15558-	11/15/77-	15-	3-		-	-	-	-	-	48-	1-	1-	4-	7-	-1-	-	-3-	2-	2-	2-	-1-	-	-	-	-	-	8.42
56-	42.3456-	106.1208-	2-	15-		0-W15559-	11/15/77-	15-	2-		-	-	-	-	-	5-	1-	4-	4-	4-	-1-	-	-2-	4-	3-	2-	2-	-1-	-	-	-	-	-	8.27
56-	42.3431-	106.1225-	2-	15-		0-W15560-	11/15/77-	15-	2-		-	-	-	-	-	11-	1-	7-	4-	7-	-1-	-	-3-	2-	2-	2-	-1-	-	-	-	-	-	9.24
56-	42.3544-	106.0903-	2-	15-		0-W15561-	11/15/77-	15-	2-		-	-	-	-	-	27-	1-	6-	4-	6-	-1-	-2-	4-	3-	2-	2-	-1-	-	-	-	-	-	11.24
56-	42.3647-	106.0792-	2-	15-		0-W15562-	11/15/77-	16-	2-		-	-	-	-	-	46-	1-	6-	5-	6-	-1-	-2-	4-	3-	2-	2-	-1-	-	-	-	-	-	7.14
56-	42.5286-	106.1181-	2-	11-		0-W15563-	11/01/77-	12-	2-	4.0-	-	-	7.2-	65-		13-	3-	6-	5-	6-	2-	3-	1-	-4-	2-	2-	1-	-1-	-	-	-	-	-	11.74
56-	42.5372-	106.1003-	2-	12-		0-W15564-	11/01/77-	13-	3-		-	-	7.6-	35-		27-	3-	6-	4-	3-	3-	2-	1-	2-	4-	3-	2-	1-	-1-	-	-	-	-	10.12
56-	42.5383-	106.0983-	2-	99-		0-W15565-	11/01/77-	13-	3-		-C-	-	-	-	-	46-	3-	6-	5-	6-	2-	2-	1-	-4-	3-	2-	1-	-1-	-	-	-	-	-	4.92
56-	42.5486-	106.0708-	2-	11-		0-W15566-	11/01/77-	13-	3-	2.5-	-	-	6.9-	45-		32-	3-	6-	5-	6-	2-	2-	1-	-4-	3-	2-	1-	-1-	-	-	-	-	-	17.00
56-	42.5319-	106.0911-	2-	11-		0-W15567-	11/01/77-	13-	4-	6.0-	C-	-	7.0-	55-		18-	3-	4-	5-	6-	2-	2-	1-	-4-	3-	3-	1-	-1-	-	-	-	-	-	14.57
56-	42.5208-	106.1086-	2-	11-		0-W15568-	11/01/77-	14-	5-	6.0-	-	-	6.9-	-		30-	3-	4-	5-	6-	2-	2-	5-	-4-	3-	3-	1-	-1-	-	-	-	-	-	12.10
56-	42.5169-	106.0944-	2-	11-		0-W15569-	11/01/77-	14-	6-	4.0-	-	-	7.2-	-		74-	3-	4-	5-	6-	3-	3-	1-	2-	4-	3-	2-	1-	-1-	-	-	-	-	5.14
56-	42.5164-	106.0692-	2-	12-		0-W15570-	11/01/77-	14-	6-	1.5-	-	-	7.7-	-		-3-	4-	4-	4-	4-	2-	1-	2-	3-	3-	3-	1-	-1-	-	-	-	-	-	16.29

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

(2)

DOE SAMPLE NUMBER							ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE									ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY	
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE	LASL SAMPLE LOCATION NUMBER	Concentrations reported in weight parts per million (ppm)									Concentrations in weight ppm	
							Ag	Bi	Cd	Cu	Nb	Ni	Pb	Sn	W	Be	Li
56-42.4592-106.9458-2-15-						0-W15527	-5	-5	-5	19	-20	-15	22	-10	-15	2	30
56-42.4806-106.9928-2-15-						0-W15528	-5	-5	-5	13	-20	-15	11	-10	-15	2	43
56-42.4917-106.9744-2-15-						0-W15529	-5	-5	-5	14	-20	-15	12	-10	-15	2	28
56-42.4956-106.9333-2-15-						0-W15530	-5	-5	-5	13	-20	-15	9	-10	-15	2	29
56-42.6225-106.3589-2-12-						0-W15531	-5	-5	-5	22	-20	-15	9	-10	-15	2	37
56-42.5567-106.3381-2-15-						0-W15532	-5	-5	-5	19	-20	-15	9	-10	-15	1	34
56-42.5403-106.3333-2-12-						0-W15533	-5	-5	-5	-10	-20	-15	13	-10	-15	1	40
56-42.5361-106.2050-2-15-						0-W15534	-5	-5	-5	22	-20	-15	16	-10	-15	2	39
56-42.5383-106.2039-2-15-						0-W15535	-5	-5	-5	32	-20	-15	14	-10	-15	2	40
56-42.5267-106.1858-2-99-						0-W15536	-5	-5	-5	20	-20	34	20	-10	-15	2	49
56-42.5222-106.1617-2-15-						0-W15537	-5	-5	-5	21	-20	-15	18	-10	-15	2	31
56-42.5136-106.1428-2-11-						0-W15538	-5	-5	-5	25	-20	-15	8	-10	-15	2	31
56-42.5017-106.1594-2-12-						0-W15539	-5	-5	-5	19	-20	-15	13	-10	-15	2	36
56-42.5014-106.1731-2-11-						0-W15540	-5	-5	-5	19	-20	-15	9	-10	-15	2	21
56-42.5108-106.1714-2-15-						0-W15541	-5	-5	-5	25	-20	17	15	-10	-15	2	40
56-42.5117-106.1925-2-12-						0-W15542	-5	-5	-5	22	-20	-15	11	-10	-15	2	38
56-42.5108-106.2156-2-15-						0-W15543	-5	-5	-5	16	-20	-15	8	-10	-15	2	48
56-42.5536-106.2139-2-15-						0-W15544	-5	-5	-5	22	-20	19	20	-10	15	2	25
56-42.2600-106.1181-2-15-						0-W15545	-5	-5	-5	29	-20	-15	9	-10	-15	2	25
56-42.2856-106.1008-2-15-						0-W15546	-5	-5	-5	20	-20	20	11	-10	-15	3	64
56-42.2778-106.0797-2-15-						0-W15547	-5	-5	-5	-10	-20	-15	22	-10	-15	2	24
56-42.2806-106.0608-2-15-						0-W15548	-5	-5	-5	14	-20	19	11	-10	-15	2	42
56-42.2761-106.0594-2-15-						0-W15549	-5	-5	-5	21	-20	-15	11	-10	-15	2	42
56-42.2636-106.0506-2-15-						0-W15550	-5	-5	-5	19	-20	-15	8	-10	-15	3	49
56-42.2617-106.0222-2-15-						0-W15551	-5	-5	-5	32	-20	20	13	-10	-15	2	32
56-42.2628-106.0944-2-11-						0-W15552	-5	-5	-5	18	-20	-15	17	-10	-15	2	47
56-42.2919-106.1103-2-15-						0-W15553	-5	-5	-5	18	-20	-15	18	-10	-15	2	30
56-42.3328-106.0556-2-15-						0-W15554	-5	-5	-5	23	-20	-15	21	-10	-15	2	39
56-42.3369-106.0292-2-15-						0-W15555	-5	-5	-5	22	-20	-15	22	-10	-15	2	39
56-42.3536-106.0422-2-15-						0-W15556	-5	-5	-5	21	-20	-15	24	-10	-15	2	48
56-42.3567-106.0181-2-12-						0-W15557	-5	-5	-5	23	-20	-15	18	-10	-15	3	31
56-42.3383-106.0967-2-15-						0-W15558	-5	-5	-5	19	-20	-15	22	-10	-15	4	61
56-42.3456-106.1208-2-15-						0-W15559	-5	-5	-5	12	-20	-15	16	-10	-15	2	40
56-42.3431-106.1225-2-15-						0-W15560	-5	-5	-5	-10	-20	19	17	-10	-15	2	26
56-42.3544-106.0903-2-15-						0-W15561	-5	-5	-5	14	-20	-15	22	-10	-15	2	37
56-42.3647-106.0792-2-15-						0-W15562	-5	-5	-5	22	-20	-15	17	-10	-15	2	36
56-42.5286-106.1181-2-11-						0-W15563	-5	-5	-5	13	-20	-15	11	-10	-15	2	37
56-42.5372-106.1003-2-12-						0-W15564	-5	-5	-5	-10	-20	-15	16	-10	-15	2	40
56-42.5383-106.0983-2-99-						0-W15565	-5	-5	-5	24	-20	-15	-5	-10	-15	1	10
56-42.5486-106.0708-2-11-						0-W15566	-5	5	-5	30	-20	26	19	-10	-15	3	35
56-42.5319-106.0911-2-11-						0-W15567	-5	-5	-5	14	-20	-15	13	-10	-15	3	42
56-42.5208-106.1086-2-11-						0-W15568	-5	-5	-5	20	-20	-15	13	-10	-15	2	28
56-42.5169-106.0944-2-11-						0-W15569	-5	-5	-5	22	-20	-15	5	-10	17	2	36
56-42.5164-106.0692-2-12-						0-W15570	-5	-5	-5	27	-20	20	18	-10	-15	4	49

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

DOE SAMPLE NUMBER						LASL SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS Concentrations reported in weight parts per million (ppm)													
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Al	Au	Ba	Ca	Ce	Cl	Co	Cr	Cs	Dy	Eu	Fe	Hf	K	La	Lu
56-42.4592-106.9458-2-15-						0-W15527	51970	-0.02	622	10180	53	-70	3.7	24	1.6	3	0.5	11950	7.2	17380	19	0.2
56-42.4806-106.9928-2-15-						0-W15528	45990	-0.05	631	22430	119	389	9.0	64	1.8	4	1.1	35525	30.6	13390	47	0.4
56-42.4917-106.9744-2-15-						0-W15529	47950	-0.02	680	13470	50	401	3.5	19	1.0	2	0.7	12605	7.5	17010	22	0.1
56-42.4956-106.9333-2-15-						0-W15530	44790	-0.02	534	16110	86	-82	6.9	43	1.1	3	0.7	29860	13.4	16260	31	0.2
56-42.6225-106.3589-2-12-						0-W15531	41700	-0.02	564	22540	34	-50	4.5	24	1.4	3	0.5	11145	7.5	15470	11	0.2
56-42.5567-106.3381-2-15-						0-W15532	44930	-0.04	605	46660	64	474	6.3	49	2.5	4	0.9	17390	13.4	15500	21	0.3
56-42.5403-106.3333-2-12-						0-W15533	42060	-0.03	1121	30490	144	415	5.9	33	1.7	7	1.0	22730	21.6	15970	53	0.4
56-42.5361-106.2050-2-15-						0-W15534	53630	0.04	549	11280	103	150	7.6	21	1.6	4	1.1	16105	13.3	25560	43	0.4
56-42.5383-106.2039-2-15-						0-W15535	51430	-0.03	682	10940	72	-71	5.3	28	2.1	5	0.8	15025	11.5	16570	26	0.3
56-42.5267-106.1858-2-99-						0-W15536	53770	-0.05	643	9587	104	413	9.0	45	2.7	5	1.0	19725	15.6	15230	42	0.4
56-42.5222-106.1617-2-15-						0-W15537	52760	-0.03	580	10210	115	435	6.6	28	1.7	8	0.9	15935	17.8	17350	50	0.5
56-42.5136-106.1428-2-11-						0-W15538	46090	-0.03	561	14630	52	171	3.3	31	2.0	3	0.4	10825	6.4	15410	17	0.2
56-42.5017-106.1594-2-12-						0-W15539	51610	-0.03	648	10620	129	-72	4.2	28	1.5	9	0.9	13385	15.0	15110	43	0.5
56-42.5014-106.1731-2-11-						0-W15540	40880	-0.06	721	12250	99	550	3.5	30	1.2	6	0.8	11460	17.2	13440	39	0.5
56-42.5108-106.1714-2-15-						0-W15541	57270	-0.03	869	13000	72	395	7.0	31	2.5	5	0.8	18295	8.6	17610	24	0.2
56-42.5117-106.1925-2-12-						0-W15542	49710	-0.03	615	9756	61	149	3.9	32	1.7	3	0.4	13590	9.6	15420	21	0.2
56-42.5108-106.2156-2-15-						0-W15543	50190	-0.03	780	37540	58	-65	4.9	25	1.6	4	0.7	12955	8.2	15340	19	0.2
56-42.5536-106.2139-2-15-						0-W15544	51290	-0.04	655	10710	102	325	9.0	24	1.5	4	1.0	15665	13.0	19310	37	0.4
56-42.2600-106.1181-2-15-						0-W15545	39450	0.07	845	88150	63	343	4.8	34	1.8	4	0.4	10745	10.6	9967	23	0.3
56-42.2856-106.1008-2-15-						0-W15546	68490	-0.03	465	7614	68	141	7.8	55	3.9	3	0.8	17500	6.2	20310	23	0.3
56-42.2778-106.0797-2-15-						0-W15547	52680	-0.02	2365	2178	105	62	2.3	13	0.9	9	0.5	7085	11.6	24000	35	0.5
56-42.2806-106.0608-2-15-						0-W15548	54730	-0.05	1165	5473	87	363	5.9	36	2.7	5	0.9	18110	12.2	12420	31	0.4
56-42.2761-106.0594-2-15-						0-W15549	42940	-0.03	581	3760	60	239	6.2	24	1.9	5	0.6	12035	11.8	10810	26	0.3
56-42.2636-106.0506-2-15-						0-W15550	54250	-0.03	574	4236	57	108	7.2	33	2.9	3	0.7	13715	5.4	15460	20	0.2
56-42.2617-106.0222-2-15-						0-W15551	52860	-0.03	560	5380	48	-45	5.5	29	1.7	4	0.6	13015	7.2	16230	15	0.2
56-42.2628-106.0944-2-11-						0-W15552	47840	-0.05	638	16650	62	315	5.6	37	2.4	4	0.8	14575	10.5	15290	25	0.3
56-42.2919-106.1103-2-15-						0-W15553	41260	-0.02	1059	2175	135	253	3.4	17	0.8	9	0.4	7275	11.6	24950	51	0.5
56-42.3328-106.0556-2-15-						0-W15554	66000	-0.03	565	5650	77	116	4.0	33	2.4	5	0.7	15795	9.3	16090	28	0.3
56-42.3369-106.0292-2-15-						0-W15555	64880	-0.03	473	5155	103	102	5.6	32	1.5	8	0.5	16660	8.4	23100	35	0.5
56-42.3536-106.0422-2-15-						0-W15556	65180	-0.05	639	6591	146	250	6.0	27	2.6	8	0.9	16305	16.5	19080	55	0.7
56-42.3567-106.0181-2-12-						0-W15557	71010	-0.04	636	20100	113	769	7.7	27	1.9	8	0.9	21295	11.9	18320	48	0.5
56-42.3383-106.0967-2-15-						0-W15558	70040	-0.03	534	37190	132	-63	4.2	24	1.8	7	0.4	14360	14.8	18030	44	0.6
56-42.3456-106.1208-2-15-						0-W15559	50620	-0.02	497	25300	93	-34	2.4	17	0.8	9	0.5	8070	19.9	20350	32	0.6
56-42.3431-106.1225-2-15-						0-W15560	38740	-0.04	419	18950	242	161	2.8	24	-0.7	16	0.6	8220	32.0	17710	88	1.3
56-42.3544-106.0903-2-15-						0-W15561	67300	-0.03	1040	7749	94	203	4.1	27	2.4	7	0.4	14625	13.3	17220	41	0.4
56-42.3647-106.0792-2-15-						0-W15562	63020	-0.03	604	6378	57	112	5.6	30	2.9	3	0.7	16740	7.6	15960	21	0.2
56-42.5286-106.1181-2-11-						0-W15563	48250	-0.03	580	7483	56	87	3.6	28	1.3	3	0.6	8685	9.3	16640	20	0.2
56-42.5372-106.1003-2-12-						0-W15564	47740	-0.05	569	12050	99	188	4.6	35	1.6	7	0.9	14650	26.0	17820	46	0.6
56-42.5383-106.0983-2-99-						0-W15565	22440	-0.06	-321	8203	61	500	22.6	23	2.1	3	0.5	40965	-0.8	-6083	17	0.1
56-42.5486-106.0708-2-11-						0-W15566	53560	-0.03	637	7962	109	-89	5.9	35	2.2	6	1.1	15610	12.5	13960	48	0.4
56-42.5319-106.0911-2-11-						0-W15567	50170	-0.03	639	6817	54	-66	2.1	24	1.3	6	0.7	6385	8.8	16390	21	0.3
56-42.5208-106.1086-2-11-						0-W15568	46630	-0.05	603	7514	76	183	3.0	37	1.7	5	1.0	9550	17.0	15340	42	0.5
56-42.5169-106.0944-2-11-						0-W15569	51210	-0.03	636	11370	71	172	5.7	31	1.6	5	0.7	15280	12.8	15690	27	0.3
56-42.5164-106.0692-2-12-						0-W15570	49810	-0.04	453	13840	233	-117	7.4	38	1.7	15	1.1	22815	26.5	15300	87	1.1

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

DOE SAMPLE NUMBER						LAB. SAMPLE LOCATION NUMBER	ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm)													U/Th RATIO
STATE	LATITUDE	LONGITUDE	DOE LAB	SAMPLE TYPE	REPLICATE		Mg	Mn	Na	Rb	Sb	Sc	Sm	Sr	Ta	Tb	Th	Ti	V	Yb	Zn	
56-	42.4592-	106.9458-	2-	15-	0-	W15527	8460	333	12180	58	-1	3.5	3.8	327		-1	11.7	2909	54	2.7	54	0.248
56-	42.4806-	106.9928-	2-	15-	0-	W15528	14050	412	12580	62	-1	7.0	7.6	427	-1	-1	23.1	5752	123	5.0	66	0.166
56-	42.4917-	106.9744-	2-	15-	0-	W15529	5863	256	14170	52	-1	3.2	3.2	415		-1	9.4	2283	51	1.9	35	0.213
56-	42.4956-	106.9333-	2-	15-	0-	W15530	5500	509	12720	56	-1	4.6	4.2	-284	1	-1	14.7	4227	127	2.5	45	0.204
56-	42.6225-	106.3589-	2-	12-	0-	W15531	12480	358	5650	33	-1	3.7	3.0	-208		-1	6.3	2763	45	2.0	43	0.398
56-	42.5567-	106.3381-	2-	15-	0-	W15532	16800	387	7808	57	-1	6.0	5.3	-214		-1	12.8	2950	53	4.6	107	0.220
56-	42.5403-	106.3333-	2-	12-	0-	W15533	12090	470	9177	45	-1	4.7	10.5	-268	1	2	60.8	4103	71	4.8	39	0.104
56-	42.5361-	106.2050-	2-	15-	0-	W15534	10320	681	15560	87	-1	5.1	7.6	-365	-1	2	57.6	3166	56	3.4	47	0.213
56-	42.5383-	106.2039-	2-	15-	0-	W15535	12480	435	9879	71	-1	4.5	5.8	-259		1	18.0	3285	60	2.9	48	0.373
56-	42.5267-	106.1858-	2-	99-	0-	W15536	10470	435	10850	85	-2	6.4	9.1	-245	-1	-2	35.9	3491	66	4.5	90	0.210
56-	42.5222-	106.1617-	2-	15-	0-	W15537	8064	492	12960	83	-1	5.6	9.2	-300	1	1	40.1	4538	57	6.6	51	0.258
56-	42.5136-	106.1428-	2-	11-	0-	W15538	6645	106	9729	62	-1	4.2	2.8	-256		-1	9.1	2930	58	2.3	38	0.479
56-	42.5017-	106.1594-	2-	12-	0-	W15539	12330	359	10470	79	-1	5.0	10.4	-253	1	2	36.9	3996	69	4.1	58	0.299
56-	42.5014-	106.1731-	2-	11-	0-	W15540	7630	196	10900	74	-2	5.5	9.4	-236	-1	-1	36.3	3792	52	6.8	81	0.390
56-	42.5108-	106.1714-	2-	15-	0-	W15541	16180	367	9697	58	-1	6.0	5.7	-269	-1	2	16.7	3282	81	3.9	46	0.233
56-	42.5117-	106.1925-	2-	12-	0-	W15542	10490	184	9804	78	-1	4.8		-236		-1	12.8	2837	56	3.0	55	0.304
56-	42.5108-	106.2156-	2-	15-	0-	W15543	20980	372	7902	60	-1	4.1	3.8	257		-1	13.8	2597	59	2.3	64	0.306
56-	42.5536-	106.2139-	2-	15-	0-	W15544	8057	447	14350	88	-1	4.5	8.8	-283	1	-1	48.8	3087	43	5.1	48	0.124
56-	42.2600-	106.1181-	2-	15-	0-	W15545	6570	135	3132	44	2	4.3	4.6	346		2	15.3	2504	149	3.4	46	0.550
56-	42.2856-	106.1008-	2-	15-	0-	W15546	11040	156	2950	93	-1	8.1	4.6	-206	-1	-1	14.8	3354	104	2.7	86	0.352
56-	42.2778-	106.0797-	2-	15-	0-	W15547	3124	118	5331	78	-1	3.1	7.2	-147	1	2	28.8	3068	31	5.7	-20	0.317
56-	42.2806-	106.0608-	2-	15-	0-	W15548	5844	493	4614	63	-1	5.6	7.3	-243	-1	-1	25.0	2581	46	4.6	81	0.224
56-	42.2761-	106.0594-	2-	15-	0-	W15549	5341	512	3452	47	-1	4.0	4.2	-260	1	1	14.4	2443	47	3.0	44	0.394
56-	42.2636-	106.0506-	2-	15-	0-	W15550	9368	620	3918	58	-1	5.6	3.5	-309		1	10.0	2169	62	2.8	79	0.622
56-	42.2617-	106.0222-	2-	15-	0-	W15551	11840	362	3632	54	-1	4.6	3.6	-215	1	-1	8.1	3299	58	2.9	34	0.374
56-	42.2628-	106.0944-	2-	11-	0-	W15552	6509	586	5299	70	-1	4.7	4.4	-261	-1	-1	17.5	2488	49	4.5	87	0.278
56-	42.2919-	106.1103-	2-	15-	0-	W15553	3316	163	4273	81	-1	2.6	7.9	-171	1	2	41.2	2484	26	6.4	35	0.290
56-	42.3328-	106.0556-	2-	15-	0-	W15554	6608	276	7692	73	-1	5.6	4.9	-247		2	19.8	3217	62	4.2	69	0.340
56-	42.3369-	106.0292-	2-	15-	0-	W15555	7393	577	9466	91	-1	4.6	7.2	-279	1	2	29.9	3285	49	6.5	36	0.301
56-	42.3536-	106.0422-	2-	15-	0-	W15556	7684	525	10650	103	-1	5.4	12.2	-260	1	-1	52.5	3604	41	8.7	-15	0.158
56-	42.3567-	106.0181-	2-	12-	0-	W15557	15370	458	13090	93	-1	6.9	8.2	-314	-1	2	30.4	3608	62	6.0	60	0.451
56-	42.3383-	106.0967-	2-	15-	0-	W15558	7078	329	5224	82	-1	6.1	7.9	-247	1	2	40.5	3379	48	7.0	39	0.208
56-	42.3456-	106.1208-	2-	15-	0-	W15559	6618	203	1777	75	-1	3.8	6.9	-154	1	2	27.6	3365	31	7.0	-22	0.300
56-	42.3431-	106.1225-	2-	15-	0-	W15560	4449	207	1683	84	-1	4.4	19.8	-151	2	5	90.0	3774	26	17.3	-24	0.103
56-	42.3544-	106.0903-	2-	15-	0-	W15561	7577	255	7284	89	-1	4.9		-231	-1	1	27.6	3377	43	5.1	46	0.407
56-	42.3647-	106.0792-	2-	15-	0-	W15562	8360	399	6964	76	-1	5.5	3.6	-284		-1	15.7	2673	49	2.6	46	0.455
56-	42.5286-	106.1181-	2-	11-	0-	W15563	5522	121	11470	38	-1	4.0	4.0	-196		1	10.2	2956	49	2.5	-32	1.151
56-	42.5372-	106.1003-	2-	12-	0-	W15564	7516	314	14040	62	-1	5.9	12.7	-228	2	3	68.7	4344	48	7.9	75	0.147
56-	42.5383-	106.0983-	2-	99-	0-	W15565	-5611	1482	2570	69	-2	3.3	4.4	-712	-1	-1	6.9	-1654	47	-1.2	85	0.713
56-	42.5486-	106.0708-	2-	11-	0-	W15566	7900	481	10720	84	-1	5.8	10.1	-334	-1	2	22.5	3452	56	4.5	43	0.756
56-	42.5319-	106.0911-	2-	11-	0-	W15567	5037	90	11930	43	-1	3.4	5.3	-188		-1	11.5	2967	51	3.7	27	1.267
56-	42.5208-	106.1086-	2-	11-	0-	W15568	7355	121	11600	69	-1	4.9	9.8	-193	1	-1	24.6	2975	39	5.5	70	0.492
56-	42.5169-	106.0944-	2-	11-	0-	W15569	13660	315	11080	62	-1	5.3	4.8	-270	1	-1	23.4	3545	63	3.6	59	0.220
56-	42.5164-	106.0692-	2-	12-	0-	W15570	-4981	1028	13760	72	-1	8.4	18.1	-461	1	6	107.2	4969	84	15.1	49	0.152

APPENDIX II

URANIUM OCCURRENCES IN THE CASPER NTMS QUADRANGLE, WYOMING

APPENDIX II

URANIUM OCCURRENCES IN THE CASPER NTMS QUADRANGLE, WYOMING

Ref.	Name	Location	Formation	Comment
Gas Hills District				
1, 2	Joy Claim, Hunter Lease, Upetco-Hope Mine, Jack No. 2 Mine	Sec. 1, T32N, R91W	Wind River	
1	Phil Mines 3 and 4, Andria Mine, Blarco Mines 1 and 3, Idiots Delight	Sec. 12, T32N, R91W	Wind River	
1	Day-Loma, Clyde Mine, D-1, D-3, D-26 wall pits	Sec. 14, 23, 24, T32N, R91W	Wind River	
7	Western Nuclear	Sec. 32, T32N, R91W	Wind River	
1	Lucky McNoble Mine	Sec. 13, T33N, R90W	Wind River	
1	George No. 2 Mine, plus others	Sec. 19, T33N, R90W	Wind River	
1	George No. 12, 13 Mines	Sec. 19, 30, T33N, R90W	Wind River	
1	McNiece Discovery	Sec. 22, T33N, R90W	Wind River	
1	Lucky Mc No. 1, 2 Mines	Sec. 22, 23, T33N, R90W	Wind River	
1	Lucky Mc No. 4	Sec. 26, T33N, R90W	Wind River	
1, 2	Bullrush Mine, Dick No. 19 Mine	Sec. 29, T33N, R90W	Wind River	
1, 2	Dick Mines, Loco Pits, Sagebrush, Tablestakes Mines	Sec. 31, 32, T33N, R90W	Wind River	
1	Stan Mine	Sec. 33, 34, T33N, R90W	Wind River	
1	School Sec. Mine, plus others	Sec. 36, T33N, R90W	Wind River	
1	E Pits, Peach Mine, Lisbon Shaft, Hidden Splendor	Sec. 3, T32N, R90W	Wind River	
1	Sunset Mine, Bart Mine	Sec. 6,T32N, R90W	Wind River	
1	Yellow Buck Mine	Sec. 4, T33N, R89W	Wind River	
1	Rim Mine, plus others	Sec. 8, 9, T33N, R89W	Wind River	
1	Tee Mine, Ran Rex,	Sec. 14, T33N, R89W	Wind River	
1	Pay-Aljob, Dee, Globe Mine, Pay No. 9 Mine, Russ Mine, D-8 Pit	Sec.15, T33N, R89W	Wind River	
1, 2	D and M Claim No. 1, Levi Mine, State School Section Mine	Sec. 16, T33N, R89W	Wind River	

APPENDIX II (continued)

Ref.	Name	Location	Formation	Comment
1	Deseret No. 1 Claim, PC Mine, Rox and Thunderbird shafts,	Sec. 21, T33N, R89W	Wind River	
1	Bountiful, Redwood Mine, Two States Mine	Sec. 21, 22, T33N, R89W	Wind River	
1	Pix, Veco Mines, Blackstone No. 5 Mine	Sec. 22, T33N, R89W	Wind River	
1	Mars, Bengal Mines	Sec. 22, 27, T33N, R89W	Wind River	
1, 2,	Buss Mine, Russ-Buss, Blackstone No. 51 Claim Ray No. 6 Mine	Sec. 27, T33N, R89W	Wind River	
1	Ridge Mine, Wentz Mine, Lee Mine	Sec. 25, R34N, T89W	Wind River	
1	Skyline Mine, Boss Mine	Sec. 30, R34N, T89W	Wind River	
1	Jay Mine, Frazier-Lamac Sateco Mine, Vitro John Mine	Sec. 25, 26, R33N, T90W		Past production.
2	Skyline Mine	Sec. 36, T34N, R89W	Wind River	
1	Unnamed	Sec. 22, 23, 26, T35N, R89W	Wind River	
Shirley Basin District				
1	Unnamed (Discovery Location)	Sec. 2, T27N, R78W	Wind River	
2	Petrotomics Mine	Sec. 4, T27N, R78W		
1, 5	Petrotomics Dave Pit	Sec. 9, T27N, R78W	Wind River	
1	North Walker Mine	Sec. 10, T27N, R78W		
1	South Walker-Sullivan Mine, plus others	Sec. 14, T27N, R78W	Wind River	
1, 5	Petrotomics Pit	Sec. 15, T27N, R78W	Wind River	
1	Wyoming State, Medicine Bow Rim	Sec. 36, T28N, R78W	White River	
1	Getty Mine	Sec. 32, T28N, R78W	Wind River	
5	Utah Const. and Mining Co.	Sec. 28, T28N, R78W	Wind River	In situ leach.
1, 2	Nall Lease, Homestake Mine	Sec. 26, T28N,78W	Wind River	
2	Utah Const. and Mining Co. Pit	Sec. 21, T28N, R78W		
3	Double Eagle	Sec. 20, T27N, R79W		In situ leach test site.
1	Arbob Claims	Sec. 3, T28N, R78W	Wind River	

APPENDIX II (continued)

Ref.	Name	Location	Formation	Comment
Crooks Gap and Great Divide Basin Area				
1	Beatrice Claims, Hazel Claim	Sec. 9, T28N, R92W	Battle Spring	Gouge zone.
1	Section 16 Mine, Congo, Shinkolobwe	Sec. 16, T28N, R92W	Wasatch	
1	Golden Goose I and II, Seismic Mine, Reserve Mine, Pay Dirt Mine, Sheep Mountain No. 1	Sec. 21, T28N, R92W	Battle Springs	
1	Sundog Mine, Sheep Mountain No. 2	Sec. 28, T28N, R92W	Battle Springs	
1	Helen May Mine	Sec. 20, T28N, R92W	Battle Springs	
1	Sno-ball Mines	Sec. 28, 29, T28N, R93W		
1	B and H Group of Claims	Sec. 10, 11, 14, 15, T27N, R93W	Wasatch	
1	Airborne Anomaly B17-66	Sec. 17,T27N, R93W	Fort Union	
1	Friday 13th Claims	Sec. 15, 16, T27N, R93W	Wasatch	
1	Airborne Anomaly B17-64	Sec. 20, T27N, R93W		Calcareous siltstone.
1, 5	Serg, Regs	Sec. 20, 21, 28, 29, T27N, R93W		Uranium in sandstone.
1	Airborne Anomaly B17-67	Sec. 31, T27N, R93W		Uranium in calcareous siltstone.
1	Loma Uranium	Sec. 1, T27N, R91W		No description.
5	Butte	Sec. 31, T27N, R92W		Uranium in arkosic sandstone.
5	Lost Creek	Sec. 1, 12, 26, T26N, R93W		Uranium in sandstone.
5	Airborne Anomaly B17-68	Sec. 6, T26N, R92W		Uranium in arkosic sandstone.
5	Airborne Anomaly B17-72	Sec. 3, T26N, R92W		Uranium in arkosic sandstone.
5	Big Bertha	Sec. 35, T27N, R92W		Uranium in arkosic sandstone.
1	Utah Mine	Sec. 2, T27N, R92W	Battle Springs	
5	Airborne Anomaly B17-78	Sec. 13, T27N, R92W	Wasatch	
1	Emily	Sec. 6, T26N, R91W		Uranium in arkosic sandstone.
1	Sandy	Sec. 4, T26N, R91W		Uranium in arkosic sandstone.
1, 5	Hays, Diehl C and L, plus others	Sec. 1, T26N, R91W	Wasatch	
5	Lost Soldier Claims	Sec. 18, T26N, R90W	Wasatch	

APPENDIX II (continued)

Ref.	Name	Location	Formation	Comment
1, 5	Black Eagle	Sec. 13, T26N, R91W		Uranium in arkosic sandstone.
1, 5	Valley View	Sec. 14, T26N, R91W		Uranium in arkosic sandstone.
1, 5	State School	Sec. 16, T26N, R91W		Uranium in arkosic sandstone.
1, 5	Iris	Sec. 12, T26N, R92W		Uranium in arkosic sandstone.
5	Airborne Anomaly B17-86	Sec. 8, T26N, R92W	Wasatch	
1	Wycal	Sec. 12, T26N, R93W	Wasatch	
1	Unnamed	Sec. 20, T26N, R91W		Uranium in arkosic sandstone.
1	Jayhawk, Titunkas	Sec. 24, T26N, R91W		Uranium in arkosic sandstone.
1	Bab	Sec. 35, T26N, R91W		Uranium in arkosic sandstone.
1, 5	Wasatch Claims	Sec. 30, T25N, R90W		Uranium in arkosic sandstone.
1	State School	Sec. 36, T24N, R92W		Uranium in arkosic sandstone.
5	State School	Sec. 36, T24N, R94W		
1	Cox	Sec. 1, T24N, R92W		Uranium in arkosic sandstone.
5	Gamma Ray	Sec. 3, T25N, R92W		Uranium in arkosic sandstone.
1	Unnamed	Sec. 6, 8, T24N, R92W		Uranium in arkosic sandstone.
1	Unnamed	Sec. 9, 10, T24N, R93W	Wasatch	
1	Unnamed	Sec. 3, T24N, R93W	Wasatch	
1	Unnamed	Sec. 6, T24N, R93W	Wasatch	
3	Minerals Exploration Co. Red Desert Site 1	Sec. 29, T24N, R93W		In situ leach test site (inactive).
3	Minerals Exploration Co. Red Desert Site 2	Sec. 20, 29, T24N, R93W		In situ leach test site (expansion planned).
3	Wold Nuclear Corp.	Sec. 1, T24N, R94W		In situ leach pilot-scale operation.
Poison Spring Creek-Clarkson Hill Area				
1, 7	Phyllis Claim	Sec. 33, T32N, R83W	Wind River	Meta-autinite, uranocircite
1	Poison Creek	Sec. 34, T32N, R83W	Wind River	
1	Phyllis No. 15 Claim	Sec. 4, T31N, R83W	Wind River	

APPENDIX II (continued)

Ref.	Name	Location	Formation	Comment
1, 7	Pine Tree Group	Sec. 17, T31N, R82W	Wind River	Meta-autinite
1, 7	Clarkson Hill Area	Sec. 16, T31N, R82W	Wind River	
7	Pipe Dream Claims	Sec. 17, T31N, R82W	Wind River Fort Union	Meta-autinite found along contact between Wind River and Fort Union formations.
1	Clarkson Hill Area	Sec. 4, T31N, R82W	Wind River	
1, 7	Black Cat Group of Claims	Sec. 29, 30, 31, 32, T32N, R82W	Wind River	
1	Burnt Wagon Draw	Sec. 20, T32N, R84W	Wind River	
1	Verna Bell Claim	Sec. 9, T32N, R84W	Wind River	Uranium in conglomeritic sandstone.
1	Unnamed	Sec. 36, T34N, R84W		Uranium in sandstone.
Other Occurrences				
1	Hades No. 17	Sec. 20, T32N, R93W		Uranium in Eocene arkosic sandstone of Beaver Rim.
1	Unnamed	Sec. 11, T30N, R91W		Past production.
1	Sage Hen Creek	Sec. 24, T30N, R90W		Uranium in recent calcareous tufa.
1	Split Rock	Sec. 30, T30N, R89W	Wind River	
1	Middle Fork, Casper Creek	Sec. 33, T34N, R86W	Wind River	
1	Unnamed	Sec. 16, T34N, R86W	Wind River	
1	Unnamed	Sec. 25, T34N, R86W	Wind River	
1, 7	Last Chance	Sec. 31, T30N, R85W	Wind River	
1, 7	Dyper-Bar-Mac Group	Sec. 35, T33N, R82W	Morrison Frontier	Radioactive anomaly in Cloverly formation.
1	Bates Creek	SE Sec. 9, T32N, R81W	Morrison	Radioactive zone along top of formation.
1, 7	Dry Lake (Lybyer) Claims, Meyers	Sec. 29, 32, 33, T35N, R79W	Mesa Verde	Carnotite disseminations in association with carbonaceous fragments, past production.
1	Unnamed	Sec. 15, T35N, R79W	Mesa Verde Group	
1	Night Owl Claims	Sec. 12, T28N, R77W	Casper	Uranium along a brecciated zone in association with an iron-bearing pegmatite.
8	Airborne Anomaly No. 57-12	Sec. 13, T25N, R79W	Cloverly	
8	Airborne Anomaly No. 57-11	Sec. 24, T25N, R79W	Cloverly	
1	Ajo Claims No. 2 and 7	Sec. 18, T25N, R80W	Tensleep	Past production.

APPENDIX II (continued)

Ref.	Name	Location	Formation	Comment
1	Dry Creek	Sec. 35, 36, T25N, R82W	Tensleep	
8	Gem Claims	Sec. 14, T25N, R81W	Precambrian, Tensleep, Madison	
1	Bald Mountain Area	Sec. 22, T25N, R81W	Madison	Past production.
8	Chimney Rock Claims	Sec. 30, T25N, R82W	Tensleep	
1	Union Pacific Prospect, plus others	Sec. 36, T25N, R82W	Tensleep	Metatyuyamunite with calcite in sandstone.
1	Chimney Rock Claim	Sec. 11, T24N, R82W	North Park (?)	
1	Unnamed	Sec. 8, T26N, R81W	Precambrian	
1	Unnamed	Sec. 34, T28N, R80W	Wind River	
1	Unnamed	Sec. 14, T26N, R83W	Precambrian	
1	Becky Lynn Claim Doozle No. 3	Sec. 28, T27N, R83W	No Description	
1	Big Bug Claim	Sec. 22, T27N, R83W	Precambrian	
1	Martha Claims	Sec. 11, T27N, R84W		Uranium in association with lignite.
1	Rocky Gap	Sec. 22, T28N, R83W	Precambrian	
1	Omega Claim Group plus others	Sec. 17, T27N, R83W	Precambrian	
1	Canyon No. 1 Claim	Sec. 34, T28N, R84W	Precambrian	
1	Little Man Mine	Sec. 14, T27N, R84W	Precambrian	Past production, uraninite, uranophane in fractured granite.
1	Prospect Incline	Sec. 22, T27N, R84W	Precambrian	
1	Hard Head	Sec. 34, T27N, R84W	Precambrian	Vein-type deposit.
1	Seminoe Dam	Sec. 7, T25N, R84W	Precambrian	In granodiorite.
1	Cooper Creek	Sec. 20, T28N, R90W	Precambrian	Autunite in fractures.
3	Rocky Mountain Energy Co. Nine-Mile Lake Site 2	Sec. 27, 34, T35N, R79W	Mesa Verde	In situ leach pilot-scale operation (active).
1	Unnamed	Sec. 14, T31N, R77W	Precambrian	Uranium in quartz monzonite.

1. Elevatorski, 1976.
2. Texas Instruments, 1979.
3. Larson, W. C., 1978.
4. Harshman, 1972.
5. AEC, 1972.
6. Stephens, 1964.
7. Finch, 1967.
8. Shannon and Ruzycki, 1957.

APPENDIX III

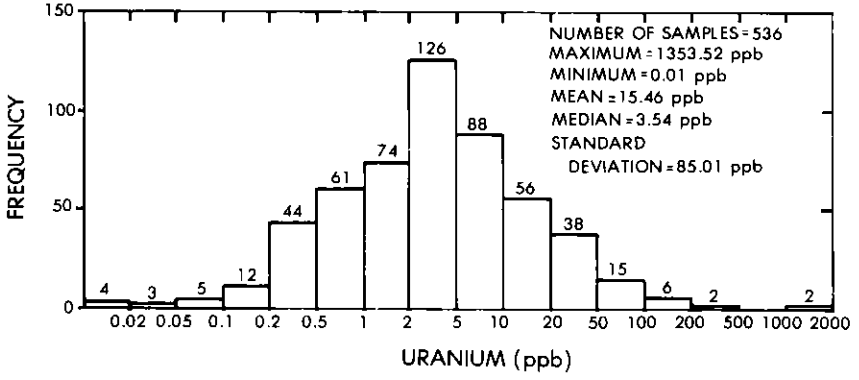
HISTOGRAMS OF URANIUM CONCENTRATIONS IN WATER AND SEDIMENT SAMPLES AND THORIUM CONCENTRATIONS IN SEDIMENT SAMPLES FROM THE CASPER NTMS QUADRANGLE, WYOMING

APPENDIX III-A

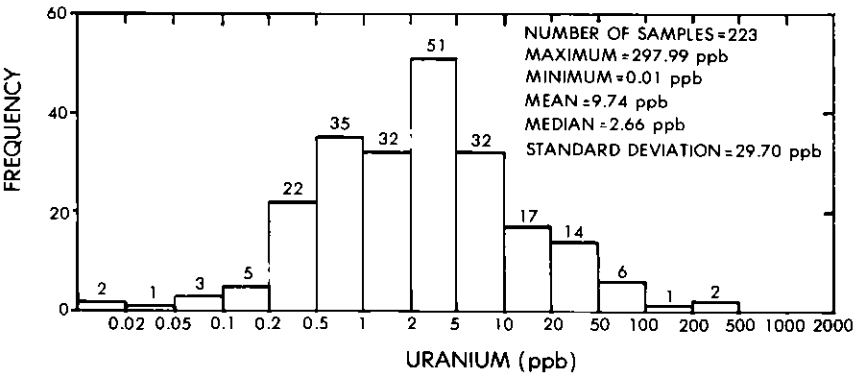
Histograms of Uranium Concentrations in Water Samples from the Casper Quadrangle, Wyoming

APPENDIX III A

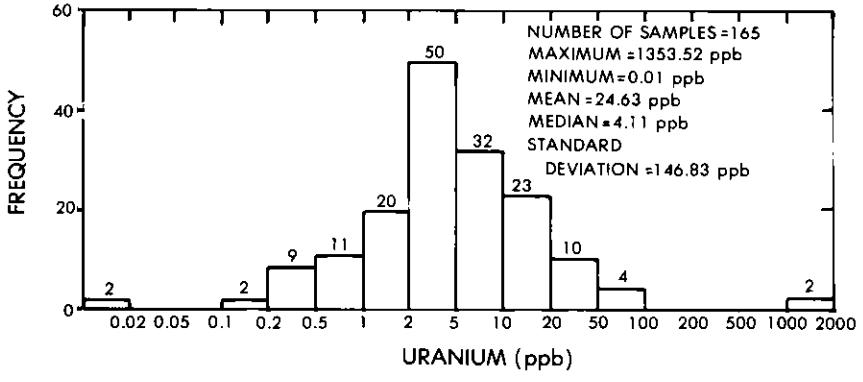
SEMILOGARITHMIC HISTOGRAMS FOR URANIUM CONCENTRATIONS IN WATERS FOR THE CASPER QUADRANGLE, WYOMING



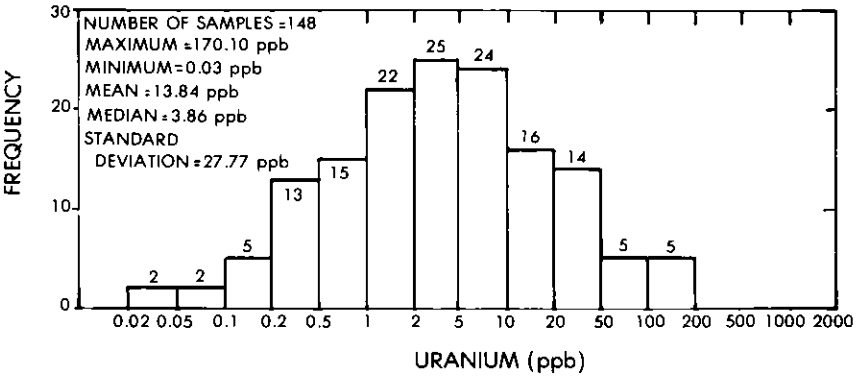
a. All waters



b. Spring waters



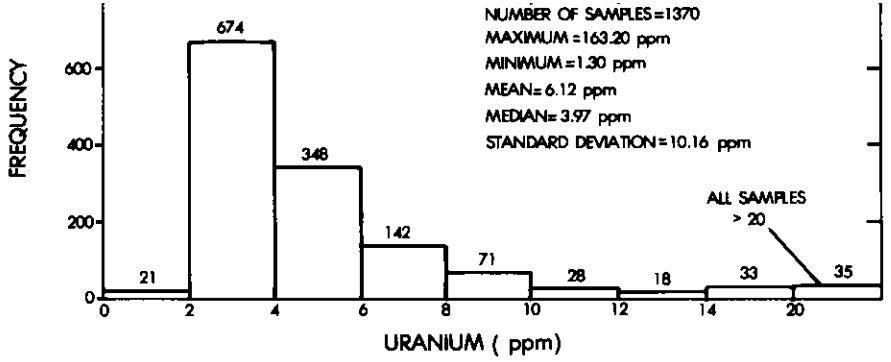
c. Stream waters



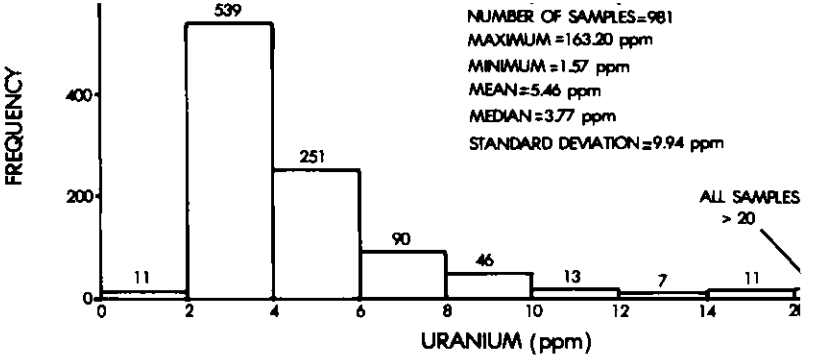
d. Well waters

APPENDIX III-B

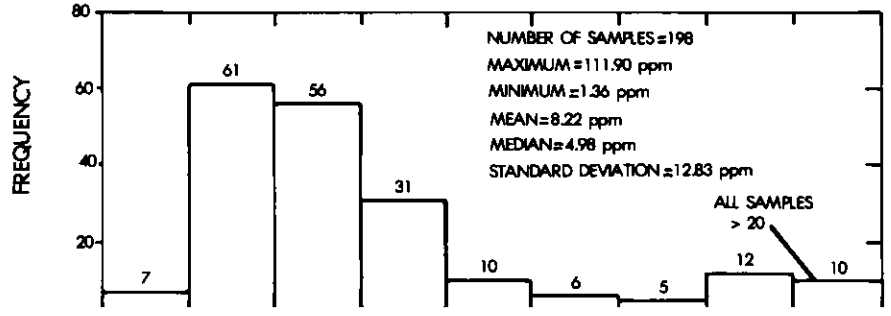
Histograms of Uranium Concentrations in Sediment Samples from the Casper Quadrangle, Wyoming

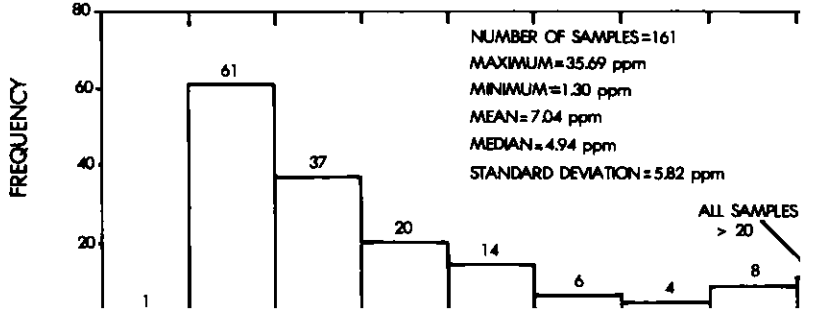


a. All sediments



b. Dry stream sediments



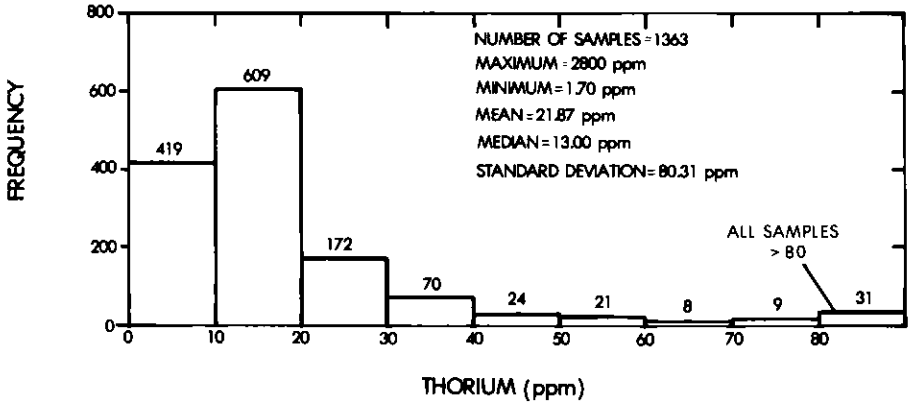


APPENDIX III-C

Histograms of Thorium Concentrations in Sediment Samples from the Casper Quadrangle, Wyoming

APPENDIX III C

HISTOGRAM FOR THORIUM CONCENTRATIONS IN SEDIMENTS FROM THE CASPER QUADRANGLE, WYOMING



All sediments

APPENDIX IV

SUMMARY OF STANDARD LASL HSSR PROCEDURES AND CODES

APPENDIX IV-A

Summary of Standard LASL HSSR Field and Analytical Procedures

APPENDIX IV-A

SUMMARY OF STANDARD LASL HSSR FIELD AND ANALYTICAL PROCEDURES

I. FIELD PROCEDURES

Water Sampling

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

Sediment Sampling (Wet or Dry)

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

Field Measurements

The air temperature, read in the shade at the time of sampling, is recorded to the nearest whole degree Celsius. The water temperature is measured in the source water and recorded to the nearest one-half degree Celsius. The pH of the source water is measured with a calibrated, portable pH meter and recorded to the nearest one-tenth of a pH unit. The conductivity (in μmho/cm) of the source water is measured with a calibrated, temperature-compensated (25°C), portable meter. 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. Whether concentrated or not (which can be determined from the uranium level in the listing), the fluorometric analytical precision is ≈30% at the lower detection limit, ≈20% at one order of magnitude above this, and ≈10% at two or more orders of magnitude above the lower detection limit. The basic fluorometric method used is described in detail by Hues et al (1977).

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

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

Uranium Determination in Sediment Samples by DNC

All sediment samples are analyzed for total uranium by DNC. A split of each sample (dried and sieved as described) is transferred to a clean 4-ml rabbit, weighed, and its weight (less that of the rabbit) recorded along with the appropriate location number. These rabbits are then loaded into a 50-sample transfer clip. The reactor pneumatic transfer system and background radiation levels are checked, and standards are run for calibration. The transfer clip is installed and the samples are cycled through the system (typically, a 20-s irradiation, 10-s delay, and 30-s count cycle is used). The uranium concentration is automatically measured, converted to ppm, and

entered into the data base. The lower limit of detection of this method is 0.01 ppm uranium, far below the range of uranium concentrations in natural sediment samples. Above the 1 ppm level, the uranium values in sediment measured by DNC at the LASL have a one-sigma error of less than 4%. The specially designed delayed-neutron detectors, built by the LASL and used for these analyses, are described by Balestrini et al (1976).

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

A computer-controlled, energy-dispersive x-ray fluorescence system is used to determine Ag, Bi, Cd, Cu, Nb, Ni, Pb, Sn, and W in sediments. The system consists of an automatic 20-position sample changer, a lithium-drifted silicon detector, a pulsed molybdenum transmission-target x-ray tube, a multichannel analyzer, and a minicomputer. The sediment samples are prepared for analysis by grinding 6 g of each minus 100-mesh sample to a minus 325-mesh powder. A computer program positions the 6-g samples in the x-ray beam, unfolds overlapping peaks, determines peak intensities for each element, and calculates the ratio of the intensity of each peak to that of the molybdenum Kα Compton peak. Concentrations of each element are then calculated using equations obtained by analyzing prepared standards. Detection limits are: 5 ppm for Ag, Bi, Cd, and Pb; 10 ppm for Cu and Sn; 15 ppm for Ni and W; and 20 ppm for Nb. When an analysis results in an elemental concentration that is below the detection limit, a minus sign preceding the value of the detection limit for that element is inserted in the data listings. The relative standard deviation is 10% or less at the 100-ppm level and 20% or less at the 20-ppm level. Details of the method and equipment used are described by Hansel and Martell (1977).

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

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

Explanation of Codes Used in Appendix I

APPENDIX IV-B

EXPLANATION OF CODES USED

DEPARTMENT OF ENERGY SAMPLE NUMBER

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

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

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

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

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

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

LASL SAMPLE LOCATION NUMBER AND FIELD DATA

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

1 = Depositing	2 = Eroding	3 = Unknown

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

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

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

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

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

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

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

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

OWNERSHIP: Not used.

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

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

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

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

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

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

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

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

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

APPENDIX IV-C

Key to Sample Types Listed in Appendix I

APPENDIX IV-C

KEY TO SAMPLE TYPES

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

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

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

KEY NO. SOURCE / MEDIUM / TREATMENT

01 - Spring water sample untreated.

02 - Stream water sample untreated.

03 - Well water sample untreated.

04 - Natural pond water sample untreated.

05 - Artificial pond water sample untreated.

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

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

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

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

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

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

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

13 - Wet natural pond sediment sample dried at ≤100°C and sieved to -100 mesh through stainless steel sieves.

14 - Wet artificial pond sediment sample dried at ≤100°C and sieved to -100 mesh through stainless steel sieves.

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

27 - Stream water sample acidified to a pH of ≤1 with reagent-grade nitric acid (HNO_3).

29 - Natural pond or lake water sample acidified to a pH of ≤1 with reagent-grade nitric acid (HNO_3).

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

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

98 - Other water
99 - Other sediment

These key numbers are to be used only for water (98) or sediment (99) samples coming from a special source and/or given a special treatment not described for any of the types of samples above. When used in the listings published herein, the source and treatment of the samples so designated are described in the text.

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☆U.S. Government Printing Office: 1980 — 677-115/106

LA-7511-MS

PLATE I

108° 00′ W — 45′ — 30′ — 15′ — 107° 00′ W — 45′ — 30′ — 15′ — 106° 00′ W

43° 00′ N

45′

30′

15′

42° 00′ N

The LASL sample location numbers above are the same as those used in APPENDIXES I-A and I-B except the leading two alphanumeric characters have been dropped.

SCALE 1:250 000

5 0 5 10 15 20 25 MILES

5 0 5 10 15 20 25 KILOMETERS

SAMPLE LOCATION OVERLAY FOR THE CASPER NTMS QUADRANGLE, WYOMING

WYOMING

THERMOPOLIS	ARMINTO	NEWCASTLE
LANDER	CASPER	TORRINGTON
ROCK SPRINGS	RAWLINS	CHEYENNE

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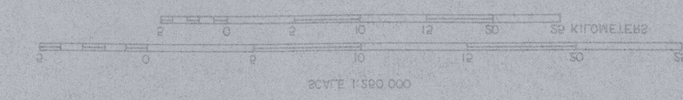
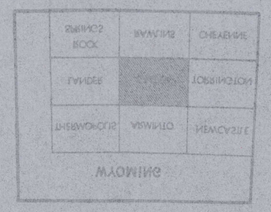
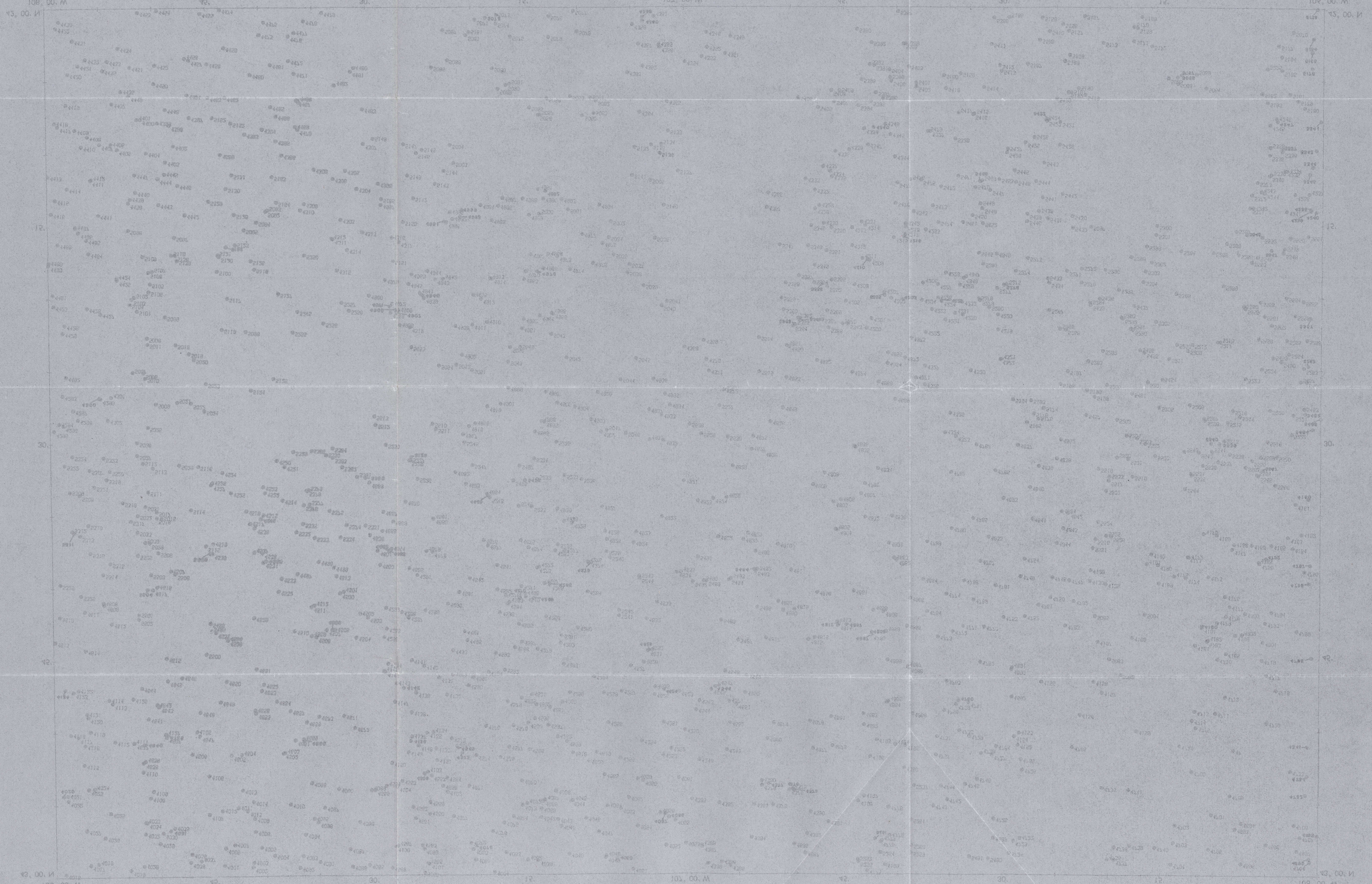
CASPER NW 30' QUADRANGLE, WYOMING

SAMPLE LOCATION OVERLAY FOR THE





two alphanumeric characters have been dropped.
those used in APPENDIXES I-A and I-B except the leading
The LA-LARS sample location numbers above are the same as



LA-12511-MS

PLATE I

LA-7511-MS

PLATE II

108° 00′ W 45′ 30′ 15′ 107° 00′ W 45′ 30′ 15′ 106° 00′ W

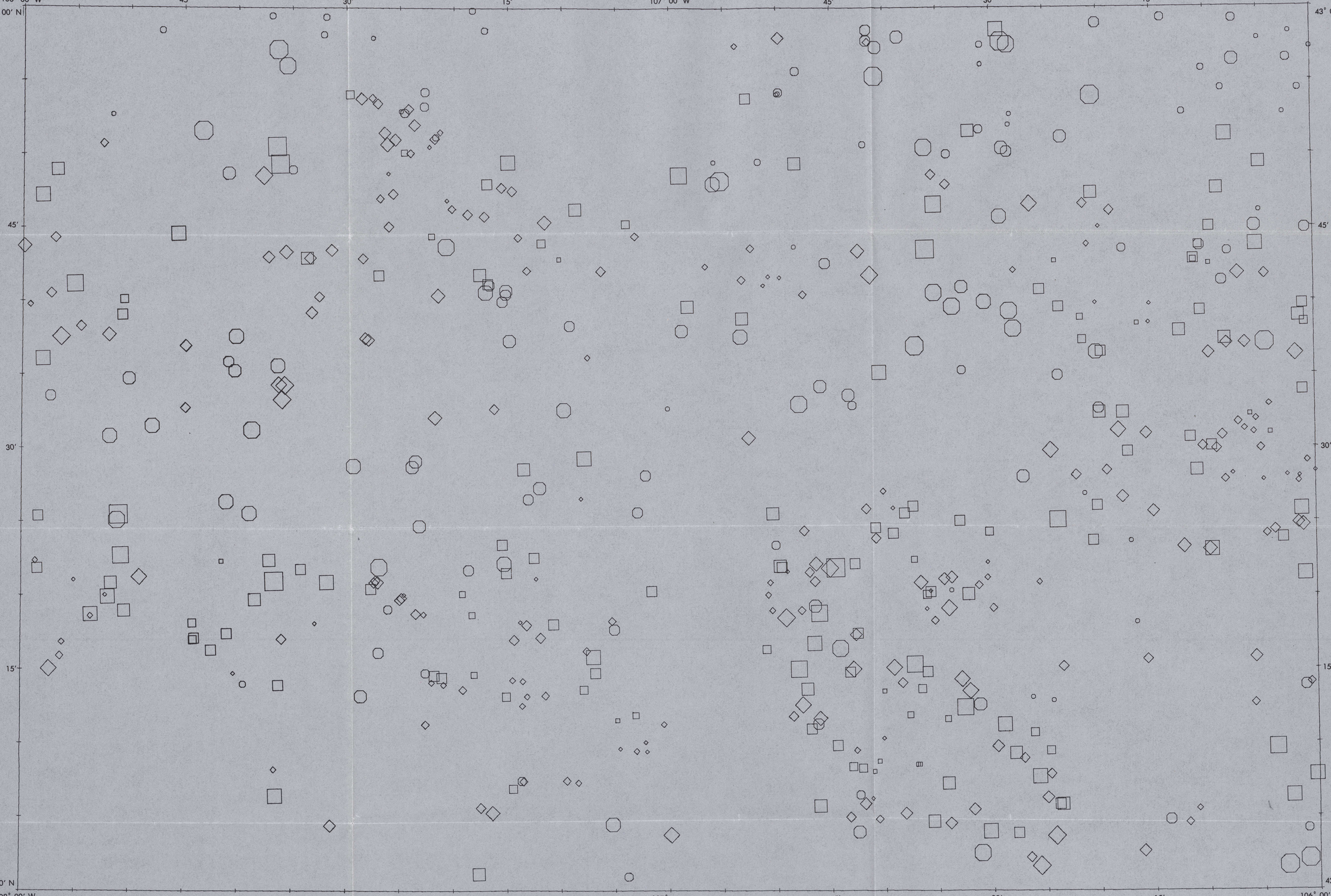
43° 00′ N

45′

30′

15′

42° 00′ N



LEGEND

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

SCALE 1:250 000

5 0 5 10 15 20 25 MILES

5 0 5 10 15 20 25 KILOMETERS

N

URANIUM CONCENTRATIONS (ppb) IN WATERS OVERLAY TO THE CASPER NTMS QUADRANGLE, WYOMING

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LOS ALAMOS SCIENTIFIC LABORATORY
Post Office Box 1663, Los Alamos, New Mexico 87545

TO THE CASPER NTMS QUADRANGLE, WYOMING

OVERLAY

URANIUM CONCENTRATIONS (ppb) IN WATERS

SCALE 1:250 000

0 2 5 10 15 50 52 KILOMETERS

0 2 5 10 15 50 52 MILES

LOS ALAMOS SCIENTIFIC LABORATORY
of the University of California

LEGEND

SYMBOLS	CONCENTRATIONS (ppb)
WELL	> 20.00
	10.01 – 20.00
	5.01 – 10.00
SURFACE STREAM	2.01 – 5.00
	1.01 – 2.00
	.51 – 1.00
SPRING	0.00 – .50

108° 00' W

43° 00' N

45'

30'

15'

LA-7511-MS

PLATE II

LA-7511-MS

PLATE III

108° 00′ W 45′ 30′ 15′ 107° 00′ W 45′ 30′ 15′ 106° 00′ W

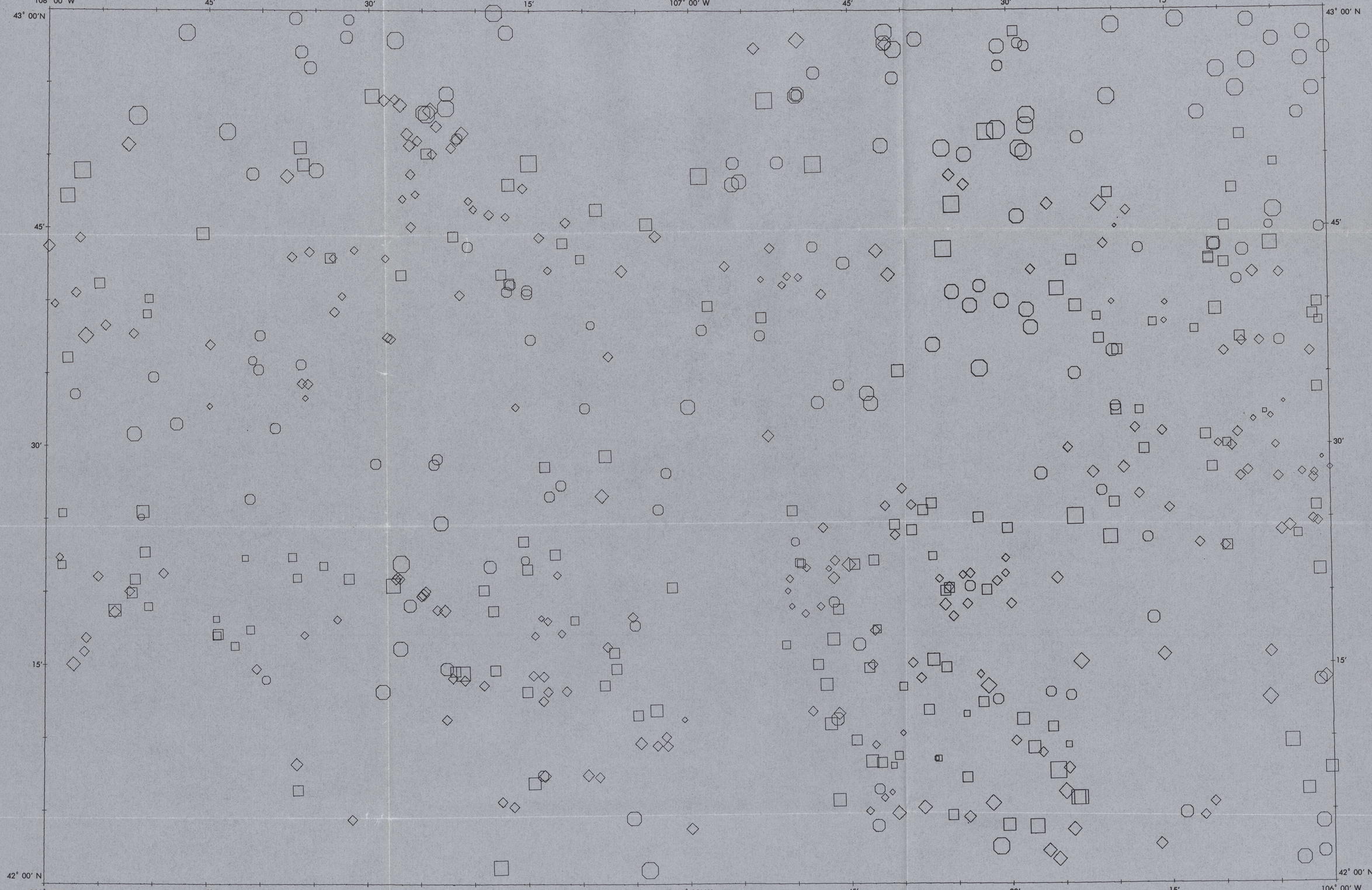
43° 00′ N

45′

30′

15′

42° 00′ N



LEGEND

SYMBOLS	CONDUCTIVITIES (μmho/cm)	
◇ SPRING	◇ □ ○	0.00– 50.00
	◇ □ ○	50.01– 100.00
	◇ □ ○	100.01– 200.00
	◇ □ ○	200.01– 500.00
□ SURFACE STREAM	◇ □ ○	500.01–1000.00
	◇ □ ○	1000.01–2000.00
	◇ □ ○	2000.01–5000.00
○ WELL	◇ □ ○	> 5000.00

SCALE 1:250 000

5 0 5 10 15 20 25 MILES

5 0 5 10 15 20 25 KILOMETERS

N

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Post Office Box 1663, Los Alamos, New Mexico 87545

CONDUCTIVITIES (μmho/cm) IN WATERS
OVERLAY
TO THE CASPER NTMS QUADRANGLE, WYOMING

SCALE 1:250 000

25 MILES

25 KILOMETERS

LEGEND

SYMBOLS	CONDUCTIVITIES (umho/cm)
SPRING	0.00- 50.00
SURFACE STREAM	50.01- 100.00
WELL	100.01- 200.00
	200.01- 500.00
	500.01-1000.00
	1000.01-2000.00
	2000.01-5000.00
	> 5000.00

CONDUCTIVITIES (umho/cm) IN WATERS

OVERLAY

TO THE CASPER NTMS QUADRANGLE, WYOMING

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PLATE IV

108° 00′ W — 45′ — 30′ — 15′ — 107° 00′ W — 45′ — 30′ — 15′ — 106° 00′ W

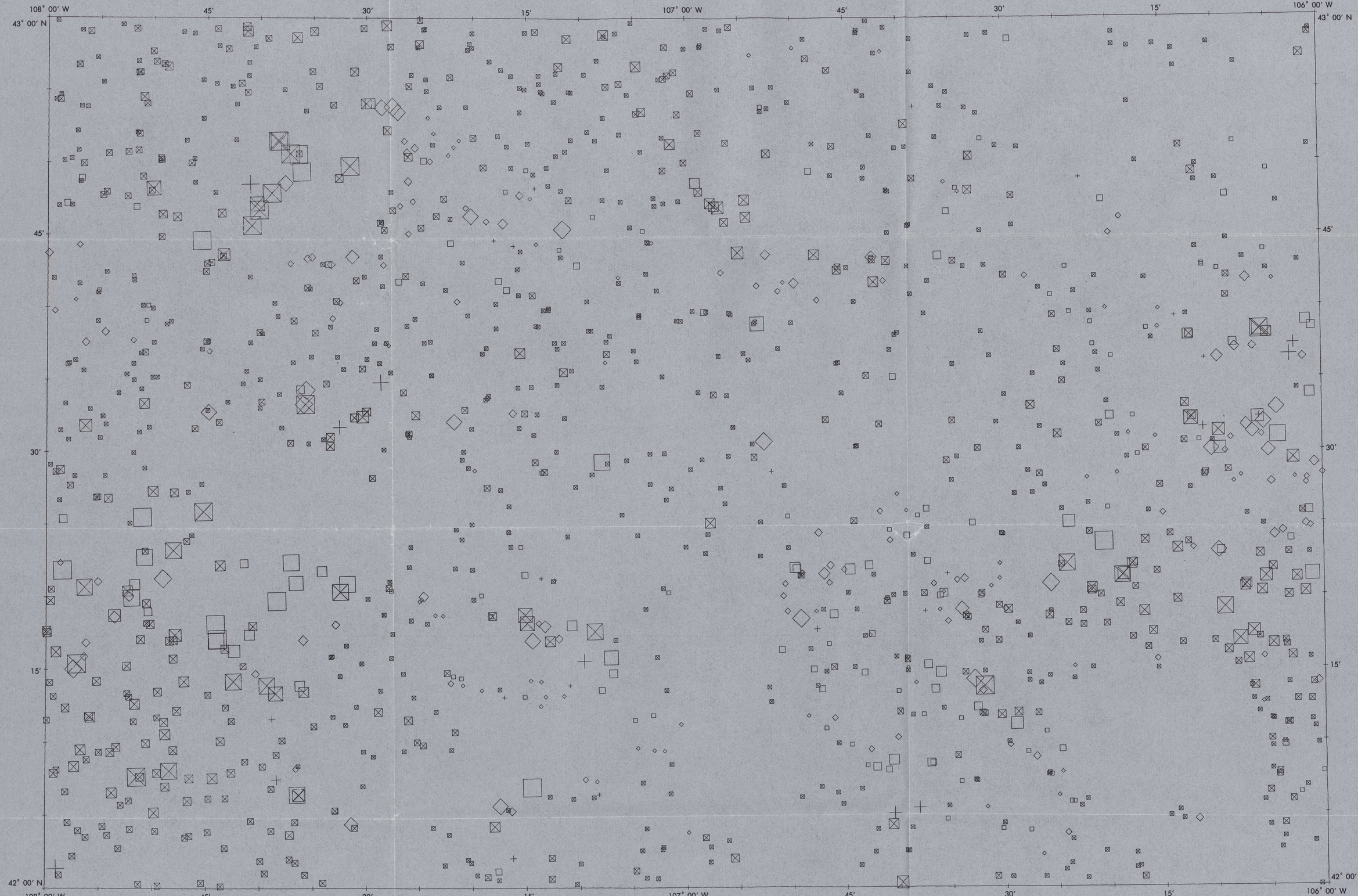
43° 00′ N

45′

30′

15′

42° 00′ N



LEGEND

SYMBOLS	CONCENTRATIONS (ppm)
◇ WET SPRING	0.0– 4.0
□ WET STREAM	4.1– 6.0
⊠ DRY STREAM	6.1– 8.0
+ DRY SPRINGS	8.1– 10.0
	10.1– 12.0
	12.1– 14.0
	14.1– 20.0
	> 20.0

SCALE 1:250 000

5 0 5 10 15 20 25 MILES

5 0 5 10 15 20 25 KILOMETERS

URANIUM CONCENTRATIONS (ppm) IN SEDIMENTS

OVERLAY

TO THE CASPER NTMS QUADRANGLE, WYOMING

N

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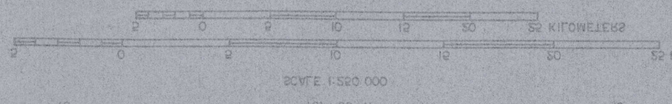
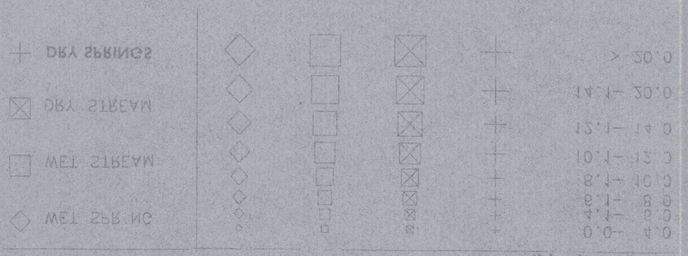
PLATE IV

URANIUM CONCENTRATIONS (ppm) IN SEDIMENTS
OVERLAY
TO THE CASPER NTMS QUADRANGLE, WYOMING



SCALE 1:250 000



LA-7511-MS

LA-7511-MS

PLATE V

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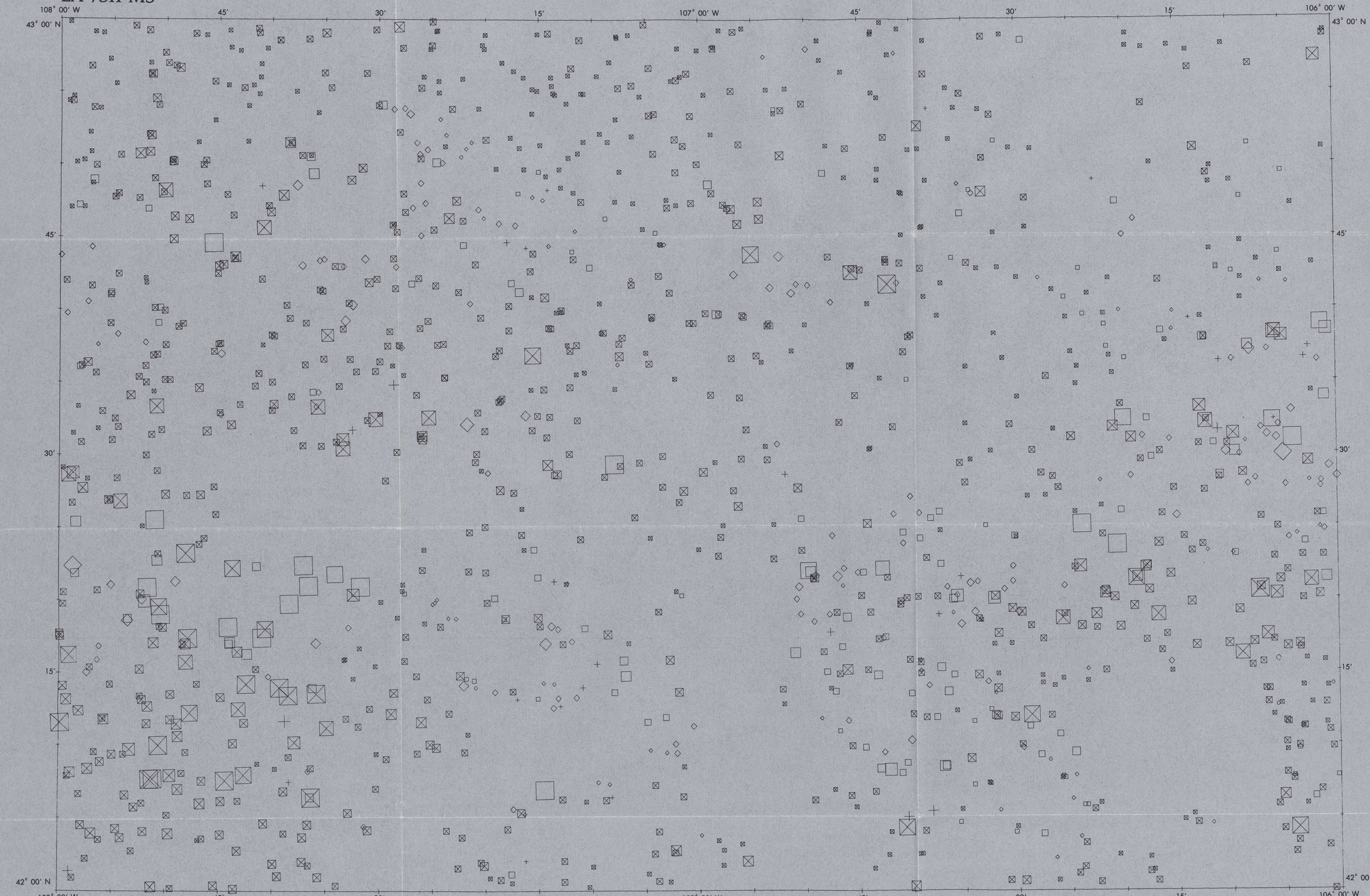
43° 00′ N

45′

30′

15′

42° 00′ N



108° 00′ W 45′ 30′ 15′ 107° 00′ W 45′ 30′ 15′ 106° 00′ W

LEGEND

SYMBOLS	CONCENTRATIONS (ppm)
◇ WET SPRING	0.0– 10.0
□ WET STREAM	10.1– 20.0
⊠ DRY STREAM	20.1– 30.0
+ DRY SPRINGS	30.1– 40.0
	40.1– 50.0
	50.1– 60.0
	60.1– 80.0
	> 80.0

SCALE 1:250 000

5 0 5 10 15 20 25 MILES

5 0 5 10 15 20 25 KILOMETERS

THORIUM CONCENTRATIONS (ppm) IN SEDIMENTS OVERLAY TO THE CASPER NTMS QUADRANGLE, WYOMING

N

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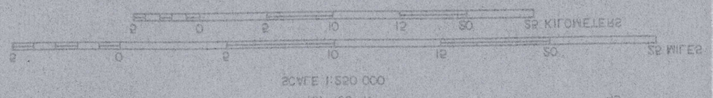
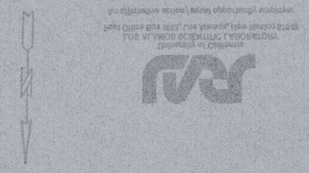
Post Office Box 1663, Los Alamos, New Mexico 87545

THORIUM CONCENTRATIONS (ppm) IN SEDIMENTS
OVERLAY
TO THE CASPER NW 2° QUADRANGLE, WYOMING





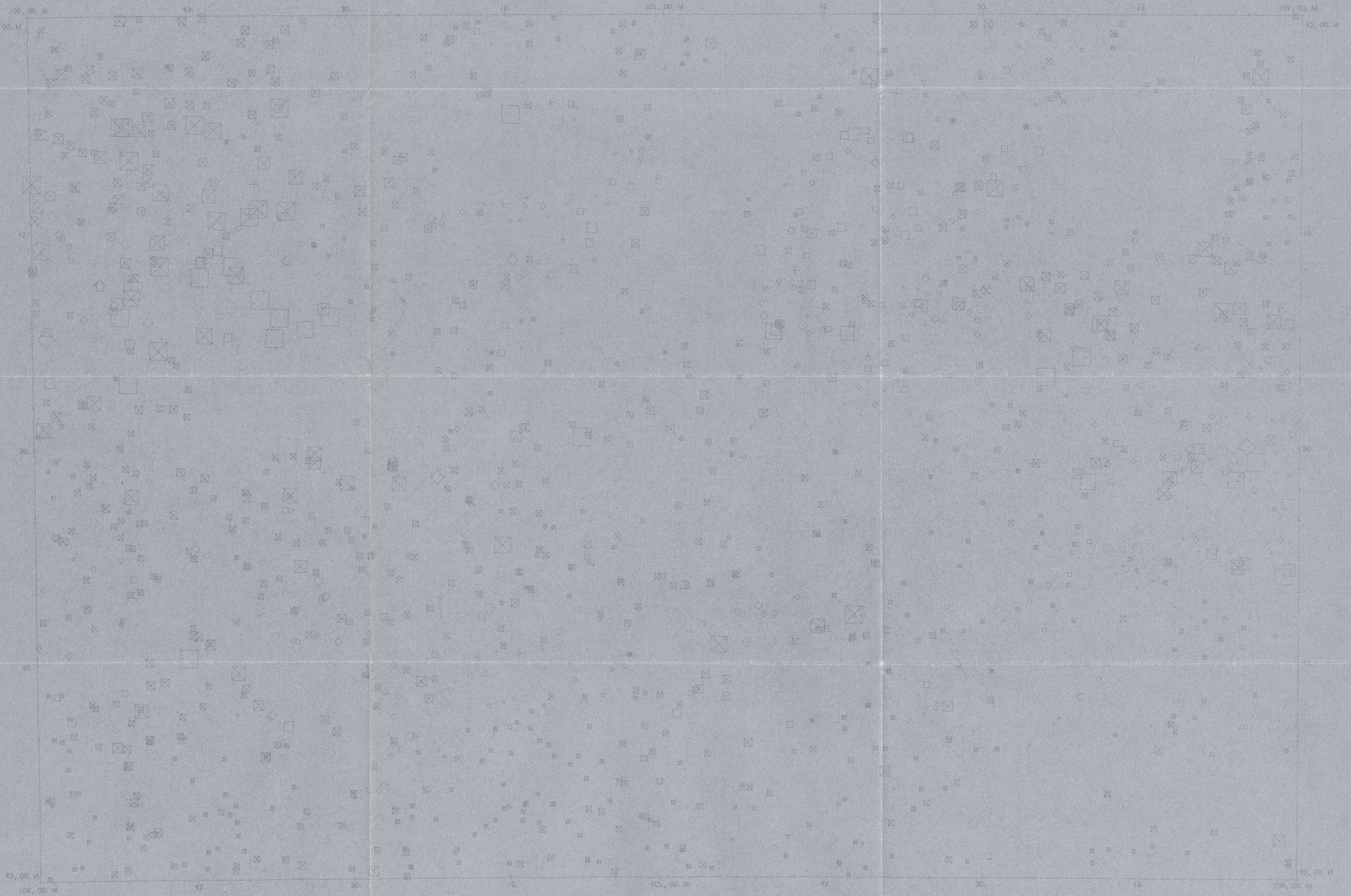


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PLATE V