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MASTER

# Uranium Hydrogeochemical and Stream Sediment Reconnaissance of the Bozeman NTMS Quadrangle, Montana, Including Concentrations of Forty-Two Additional Elements

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

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# Uranium Hydrogeochemical and Stream Sediment Reconnaissance of the Bozeman NTMS Quadrangle, Montana, Including Concentrations of Forty-Two Additional Elements

By
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1. Index map for the Bozeman quadrangle, Montana. 2

# URANIUM HYDROGEOCHEMICAL AND STREAM SEDIMENT RECONNAISSANCE OF THE BOZEMAN NTMS QUADRANGLE, MONTANA, INCLUDING CONCENTRATIONS OF FORTY-TWO ADDITIONAL ELEMENTS

by

Stephen L. Bolivar

## SUMMARY

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

This report is a supplement to the HSSR uranium evaluation report for the Bozeman quadrangle (Bolivar, 1979), which presented the field and uranium data for the 1251 water and 1536 sediment samples collected from 1586 locations in the quadrangle. This supplement presents those data again and the results of subsequent multielement analyses of those HSSR samples. In addition to uranium, for both waters and sediments, the concentrations of 42 elements for the sediments are presented. These data are to be used in conjunction with the Bozeman uranium report, which gives a detailed evaluation of the uranium concentrations of the samples as well as descriptions of the geology, hydrology, climate, and uranium occurrences of the quadrangle. These data can also be used with the Bozeman special study report (Bolivar, 1980). This special study report will consist of analyses for additional samples collected in 1979 (at a density of approximately one sample location/km$^2$) for three areas in the quadrangle: the Three Forks Basin, the northern part of the Madison Range, and a region that includes several tributaries of the Boulder River in the Beartooth Mountains.

This report contains uranium analyses for water samples (Appendix I-A) and multielement analyses for sediment samples (Appendix I-B). 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,

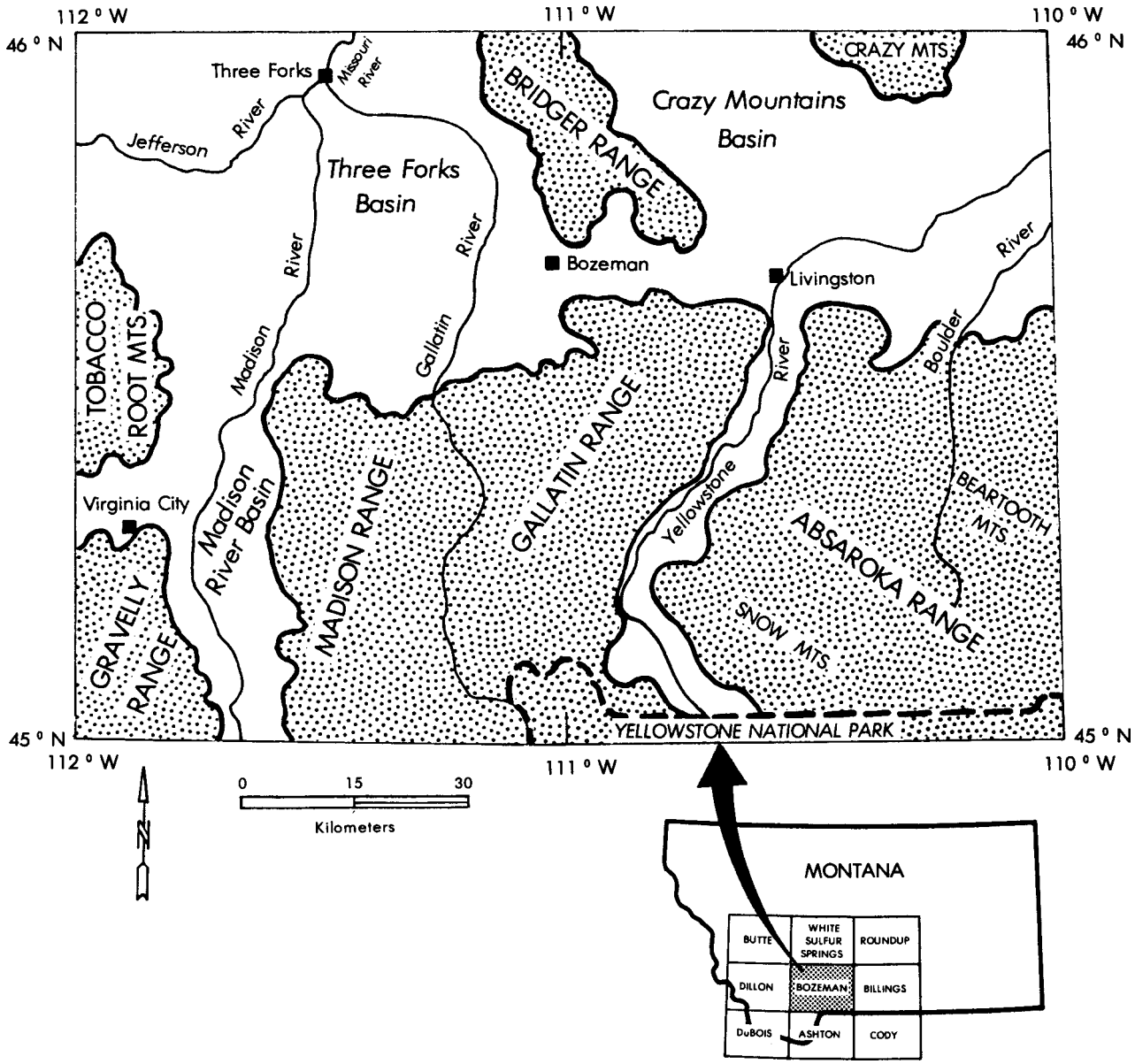


Fig. 1. Index map for the Bozeman quadrangle, Montana.

scandium, silver, sodium, strontium, tantalum, terbium, tin, titanium, tungsten, vanadium, ytterbium, and zinc. The data presented in Appendix I are also available on magnetic tape from GJOIS Project, UCC-ND Computer Applications Department, 4500 North Building, Oak Ridge National Laboratory, P. O. Box X, Oak Ridge, Tennessee 37830. Appendix II describes standard LASL HSSR field and analytical procedures and explains the codes used in Appendix I.

All elemental analyses were performed at the LASL. Water samples were initially analyzed for uranium by fluorometry. All water samples containing more than 40 parts per billion (ppb) uranium were reanalyzed by delayed-neutron counting (DNC). All sediments were analyzed for uranium by DNC. Other elemental concentrations in sediments were determined by neutron activation analysis

for 31 elements, by x-ray fluorescence for 9 elements, and by arc-source emission spectrography for 2 elements. Analytical results for sediments are reported as parts per million (ppm). Descriptions of procedures used for analysis of water and sediment samples as well as analytical precisions and detection limits are given in Appendix II-A.

Because this release is intended to make these data available to the DOE and the public as quickly as possible, no further discussion of the data is included.

## ACKNOWLEDGMENTS

The support and assistance of the following LASL groups and individuals are gratefully acknowledged. Nearly all water sample analyses and the x-ray fluorescence and emission spectrometry of sediment samples were performed by the Analytical Chemistry Group, under the direction of Glenn R. Waterbury. The delayed-neutron counting and neutron activation analyses of the sediments were performed by the Research Reactor Group, directed by Merle E. Bunker. The Statistics Group, headed by Ray A. Waller, was responsible for the data management and computer graphics. Special thanks are due the following members of the Geosciences Division: Nancy J. Eckhoff who typed and edited the report, Mary E. Luke who digitized latitudes and longitudes for all sample location points, and John A. Pasciewicz who drafted the figures and plates. Sincere appreciation is also expressed to the US Forest Service, the US National Park Service, and individual landowners who granted access to lands under their control so that the survey could be completed.

# APPENDIX I

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

## APPENDIX I-A

Listings of Field Data and Uranium Concentrations
for Water Samples from the Bozeman Quadrangle, Montana
(Pages 6 through 30)

(See Appendix II-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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 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 (A) UNITS IN ppb |
| 30- | 45.1925- | 111.1350- | 2- | 07- | | 0-M36001- | 09/27/76- | 18- | 19- | 7.8- | - | - | 6.2- | 478- | | -4- | 7- | 5- | 8- | 2- | 3- | 2- | 2- | 2- | 3- | 4- | 1- | -1- | - | - | - | - | 0.51 |
| 30- | 45.4159- | 111.4018- | 2- | 07- | | 0-M36002- | 09/29/76- | 11- | 21- | 8.3- | - | - | 5.3- | 48- | | -3- | 1- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 4- | 5- | 1- | -1- | - | - | - | - | 0.16 |
| 30- | 45.4110- | 111.3971- | 2- | 07- | | 0-M36003- | 09/29/76- | 11- | 21- | 8.5- | - | - | 5.2- | 49- | | -3- | 1- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 4- | 5- | 1- | -1- | - | - | - | - | 1.24 |
| 30- | 45.3933- | 111.4113- | 2- | 07- | | 0-M36004- | 09/29/76- | 14- | 22- | 8.0- | C- | - | 5.0- | 60- | | -3- | 7- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 4- | 5- | 1- | -1- | - | - | - | - | 0.86 |
| 30- | 45.3940- | 111.4152- | 2- | 07- | | 0-M36005- | 09/29/76- | 14- | 21- | 8.2- | C- | - | 5.0- | 56- | | -3- | 7- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 4- | 5- | 1- | -1- | - | - | - | - | 0.23 |
| 30- | 45.4642- | 111.4001- | 2- | 07- | | 0-M36006- | 09/30/76- | 12- | 22- | 11.3- | - | - | 5.6- | 85- | | -3- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 3- | 2- | 2- | 1- | -1- | - | - | - | - | 0.22 |
| 30- | 45.4632- | 111.3916- | 2- | 07- | | 0-M36007- | 09/30/76- | 12- | 22- | 9.6- | - | - | 5.4- | 76- | | -3- | 7- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 2- | 3- | 1- | -1- | - | - | - | - | 0.17 |
| 30- | 45.4597- | 111.4219- | 2- | 07- | | 0-M36008- | 09/30/76- | 13- | 21- | 8.5- | - | - | 5.7- | 88- | | -3- | 7- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 0.26 |
| 30- | 45.4504- | 111.4325- | 2- | 07- | | 0-M36009- | 09/30/76- | 14- | 22- | 8.4- | - | - | 5.6- | 85- | | -3- | 7- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 0.38 |
| 30- | 45.4516- | 111.4337- | 2- | 07- | | 0-M36010- | 09/30/76- | 14- | 22- | 8.7- | - | - | 5.6- | 90- | | -3- | 7- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 0.14 |
| 30- | 45.1293- | 111.1443- | 2- | 07- | | 0-M36011- | 09/27/76- | 19- | 11- | 8.0- | - | - | 6.1- | 270- | | -1- | 1- | 4- | 6- | 2- | 2- | 1- | 1- | 1- | 3- | 5- | 1- | -1- | - | - | - | - | 0.19 |
| 30- | 45.1343- | 111.1334- | 2- | 07- | | 0-M36012- | 09/27/76- | 19- | 10- | 10.0- | C- | - | 6.0- | 320- | | -4- | 1- | 1- | 1- | 4- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 2.96 |
| 30- | 45.1374- | 111.1264- | 2- | 07- | | 0-M36013- | 09/27/76- | 19- | 9- | 10.0- | - | - | 6.0- | 330- | | -4- | 1- | 2- | 1- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 1.00 |
| 30- | 45.2176- | 111.2045- | 2- | 07- | | 0-M36014- | 09/27/76- | 20- | 15- | 7.6- | - | - | 5.8- | 180- | | -3- | 7- | 3- | 7- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 0.40 |
| 30- | 45.2160- | 111.1903- | 2- | 07- | | 0-M36015- | 09/27/76- | 19- | 15- | 8.0- | - | - | 6.0- | 210- | | -3- | 7- | 3- | 7- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 0.63 |
| 30- | 45.2039- | 111.2033- | 2- | 07- | | 0-M36016- | 09/27/76- | 19- | 15- | 8.0- | - | - | 5.9- | 700- | | -3- | 7- | 5- | 8- | 2- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 0.25 |
| 30- | 45.2039- | 111.2015- | 2- | 07- | | 0-M36017- | 09/27/76- | 19- | 15- | 8.4- | C- | - | 6.1- | 700- | | -3- | 7- | 7- | 7- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 2.09 |
| 30- | 45.1566- | 111.1704- | 2- | 07- | | 0-M36018- | 09/27/76- | 20- | 4- | 11.0- | - | - | 6.0- | 200- | | -2- | 1- | 3- | 6- | 2- | 2- | 1- | 3- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 0.40 |
| 30- | 45.1419- | 111.1891- | 2- | 07- | | 0-M36019- | 09/27/76- | 19- | 7- | 10.5- | - | - | 5.9- | 210- | | -1- | 6- | 4- | 8- | 3- | 2- | 1- | 1- | 1- | 2- | 4- | 1- | -1- | - | - | - | - | 0.81 |
| 30- | 45.2069- | 111.1670- | 2- | 07- | | 0-M36022- | 09/27/76- | 18- | 17- | 8.5- | - | - | 5.6- | 194- | | -3- | 7- | 2- | 7- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 0.43 |
| 30- | 45.2070- | 111.1809- | 2- | 07- | | 0-M36023- | 09/27/76- | 19- | 15- | 8.2- | - | - | 5.6- | 200- | | -3- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 0.49 |
| 30- | 45.1670- | 110.0000- | 2- | 07- | | 0-M36024- | 09/20/76- | 13- | 13- | 7.4- | - | - | 5.5- | 81- | | -3- | 7- | 1- | | -4- | 3- | 1- | 2- | 1- | 3- | 5- | 1- | -1- | - | - | - | - | 0.22 |
| 30- | 45.1131- | 110.0020- | 2- | 07- | | 0-M36025- | 09/20/76- | 16- | 13- | 7.2- | - | - | 5.4- | 170- | | -2- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 4- | 2- | 5- | 1- | -1- | - | - | - | - | 0.43 |
| 30- | 45.1343- | 110.0080- | 2- | 07- | | 0-M36026- | 09/20/76- | 17- | 13- | 7.2- | - | - | 5.4- | 165- | | -2- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 4- | 2- | 5- | 1- | -1- | - | - | - | - | 0.79 |
| 30- | 45.4810- | 111.0420- | 2- | 06- | | 0-M36027- | 09/21/76- | 13- | 20- | 19.0- | - | - | 6.0- | 280- | | -1- | 6- | 6- | 6- | 1- | 2- | 5- | 2- | 3- | 3- | 4- | 1- | -1- | - | - | - | - | 2.36 |
| 30- | 45.4735- | 111.0446- | 2- | 07- | | 0-M36028- | 09/21/76- | 13- | 20- | 7.0- | - | - | 6.0- | 210- | | -1- | 6- | 3- | 6- | 3- | 2- | 1- | 2- | 1- | 4- | 4- | 1- | -1- | - | - | - | - | 2.00 |
| 30- | 45.4511- | 111.0351- | 2- | 07- | | 0-M36029- | 09/21/76- | 13- | 20- | 7.0- | - | - | 6.1- | 240- | | -1- | 6- | 3- | 6- | 3- | 2- | 1- | 2- | 1- | 4- | 4- | 1- | -1- | - | - | - | - | 0.31 |
| 30- | 45.4508- | 111.3719- | 2- | 07- | | 0-M36030- | 09/29/76- | 9- | 18- | 9.5- | - | - | 5.2- | 54- | | -3- | 1- | 3- | 4- | 2- | 3- | 1- | 2- | 3- | 3- | 4- | 1- | -1- | - | - | - | - | 0.25 |
| 30- | 45.1092- | 111.1888- | 2- | 07- | | 0-M36031- | 09/27/76- | 17- | 19- | 10.0- | - | - | 5.9- | 270- | | -2- | 1- | 4- | 7- | 3- | 2- | 1- | 1- | 4- | 3- | 5- | 1- | -1- | - | - | - | - | 0.88 |
| 30- | 45.1220- | 111.1633- | 2- | 07- | | 0-M36032- | 09/27/76- | 17- | 20- | 10.0- | - | - | 6.0- | 280- | | -2- | 1- | 4- | 7- | 3- | 2- | 1- | 2- | 4- | 3- | 5- | 1- | -1- | - | - | - | - | 0.19 |
| 30- | 45.1246- | 111.1581- | 2- | 07- | | 0-M36033- | 09/27/76- | 18- | 17- | 9.0- | - | - | 6.1- | 250- | | -2- | 1- | 4- | 6- | 4- | 2- | 1- | 2- | 1- | 4- | 5- | 1- | -1- | - | - | - | - | 0.95 |
| 30- | 45.1289- | 111.1521- | 2- | 07- | | 0-M36034- | 09/27/76- | 18- | 15- | 9.0- | - | - | 5.9- | 290- | | -1- | 1- | 6- | 6- | 3- | 2- | 1- | 1- | 1- | 2- | 5- | 1- | -1- | - | - | - | - | 0.52 |
| 30- | 45.1206- | 111.1419- | 2- | 07- | | 0-M36035- | 09/27/76- | 18- | 14- | 11.5- | - | - | 6.2- | 240- | | -1- | 1- | 3- | 6- | 1- | 2- | 1- | 3- | 2- | 2- | 3- | 1- | -1- | - | - | - | - | 0.52 |
| 30- | 45.1196- | 111.1425- | 2- | 07- | | 0-M36036- | 09/27/76- | 18- | 15- | 12.0- | - | - | 6.1- | 240- | | -1- | 1- | 4- | 6- | 3- | 2- | 1- | 1- | 2- | 4- | 3- | 1- | -1- | - | - | - | - | 0.75 |
| 30- | 45.2053- | 111.1597- | 2- | 07- | | 0-M36037- | 09/27/76- | 18- | 16- | 8.0- | C- | - | 5.6- | - | | -4- | | -5- | 8- | 2- | 3- | 4- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 0.32 |
| 30- | 45.5607- | 111.1116- | 2- | 07- | | 0-M36038- | 09/10/76- | 12- | 12- | 8.5- | - | - | 6.1- | 250- | | 8- | 2- | 7- | 2- | 7- | 3- | 3- | 1- | 2- | 3- | 4- | 4- | 1- | -3- | - | - | - | - | 0.29 |
| 30- | 45.5414- | 111.0971- | 2- | 07- | | 0-M36039- | 09/10/76- | 13- | 14- | 11.2- | - | - | 5.9- | 225- | | 4- | 2- | 7- | 2- | 7- | 3- | 3- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 0.21 |
| 30- | 45.5384- | 111.1334- | 2- | 07- | | 0-M36040- | 09/10/76- | 13- | 11- | 8.0- | - | - | 5.9- | 150- | | 6- | 3- | 7- | 2- | 7- | 3- | 3- | 1- | 2- | 1- | 2- | 3- | 1- | -3- | - | - | - | - | 0.99 |
| 30- | 45.5453- | 111.1647- | 2- | 07- | | 0-M36041- | 09/10/76- | 14- | 14- | 13.0- | - | - | 6.1- | 155- | | C- | 4- | -3- | 7- | 3- | 3- | 1- | 2- | 2- | 2- | 2- | 1- | -3- | - | - | - | - | 0.18 |
| 30- | 45.5334- | 111.1579- | 2- | 07- | | 0-M36042- | 09/10/76- | 14- | 12- | 9.0- | - | - | 6.1- | 235- | | 9- | 3- | 7- | 3- | 6- | 3- | 3- | 1- | 2- | 3- | 3- | 4- | 1- | -3- | - | - | - | - | 0.27 |
| 30- | 45.5440- | 111.1742- | 2- | 07- | | 0-M36043- | 09/10/76- | 15- | 13- | 13.5- | - | - | 6.1- | 225- | | 12- | 2- | 7- | 3- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 2- | 1- | -3- | - | - | - | - | 0.45 |
| 30- | 45.5269- | 111.1915- | 2- | 07- | | 0-M36044- | 09/10/76- | 15- | 15- | 12.0- | - | - | 6.1- | 230- | | 3- | 2- | 7- | 3- | 6- | 3- | 3- | 1- | 3- | 3- | 4- | 3- | 1- | -3- | - | - | - | - | 0.45 |
| 30- | 45.5165- | 111.1795- | 2- | 07- | | 0-M36045- | 09/10/76- | 16- | 14- | 12.0- | - | - | 5.9- | 150- | | 0- | 2- | 7- | 3- | 6- | 3- | 3- | 1- | 2- | 3- | 3- | 3- | 1- | -3- | - | - | - | - | 0.31 |
| 30- | 45.5206- | 111.2441- | 2- | 07- | | 0-M36047- | 09/10/76- | 17- | 15- | 12.0- | - | - | 5.9- | 200- | | 6- | 4- | -3- | 6- | 4- | 3- | 1- | 2- | 2- | 3- | 4- | 1- | -3- | - | - | - | - | 2.21 |
| 30- | 45.5795- | 111.2434- | 2- | 07- | | 0-M36048- | 09/10/76- | 17- | 13- | 12.0- | - | - | 6.3- | 365- | | 6- | 4- | -4- | 6- | 3- | 3- | 1- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 2.96 |
| 30- | 45.5968- | 111.2406- | 2- | 07- | | 0-M36049- | 09/10/76- | 18- | 15- | 14.5- | C- | - | 5.9- | 240- | | 9- | 4- | -3- | 7- | 3- | 3- | 3- | 2- | 4- | 4- | 2- | 1- | -3- | - | - | - | - | 0.40 |
| 30- | 45.6682- | 111.2285- | 2- | 07- | | 0-M36050- | 09/10/76- | 18- | 13- | 17.0- | - | - | 6.3- | 345- | | 12- | 4- | -5- | 7- | 3- | 3- | 3- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 1.10 |
| 30- | 45.6663- | 111.2140- | 2- | 07- | | 0-M36051- | 09/10/76- | 19- | 18- | 15.0- | - | - | 6.3- | 395- | | 3- | 4- | -5- | 8- | 1- | 2- | 1- | 3- | 4- | 4- | 2- | 1- | -3- | - | - | - | - | 0.97 |
| 30- | 45.6271- | 111.2404- | 2- | 07- | | 0-M36052- | 09/10/76- | 19- | 11- | 12.0- | - | - | 5.9- | 340- | | C- | 4- | -3- | 6- | 3- | 3- | 1- | 2- | 4- | 3- | 4- | 1- | -3- | - | - | - | - | 1.28 |
| 30- | 45.7285- | 111.2479- | 2- | 07- | | 0-M36053- | 09/11/76- | 11- | 14- | 11.0- | - | - | 6.1- | 470- | | 12- | 4- | -6- | 3- | 8- | 3- | 3- | 2- | 4- | 3- | 2- | 4- | -3- | - | - | - | - | 2.13 |
| 30- | 45.7281- | 111.2294- | 2- | 07- | | 0-M36054- | 09/11/76- | 11- | 12- | 11.5- | - | - | 5.9- | 275- | | 6- | 4- | -6- | 7- | 4- | 3- | 1- | 3- | 4- | 4- | 1- | 4- | -3- | - | - | - | - | 0.35 |

# 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 (θ) UNITS IN ppb |
| 30- | 45.7422- | 111.2204- | 2- | 07- | | 0-M36055- | 09/11/76- | 11- | 12- | 10.5- | - | - | 6.1- | 470- | 19- | 4- | -3- | 7- | 1- | 1- | 1- | 2- | 3- | 4- | 2- | 4- | -3- | - | - | - | - | 0.32 |
| 30- | 45.7425- | 111.1399- | 2- | 07- | | 0-M36056- | 09/11/76- | 12- | 12- | 11.0- | - | - | 6.1- | 350- | 12- | 4- | -3- | 7- | 3- | 3- | 2- | 2- | 4- | 3- | 1- | 4- | -3- | - | - | - | - | 1.11 |
| 30- | 45.7139- | 111.1123- | 2- | 07- | | 0-M36057- | 09/11/76- | 12- | 13- | 11.0- | - | - | 6.3- | 340- | 6- | 4- | -5- | 8- | 3- | 3- | 3- | 2- | 4- | 4- | 2- | 4- | -3- | - | - | - | - | 1.11 |
| 30- | 45.6994- | 111.1749- | 2- | 07- | | 0-M36058- | 09/11/76- | 13- | 12- | 10.0- | - | - | 6.3- | 340- | 12- | 4- | -3- | 6- | 4- | 3- | 2- | 2- | 3- | 5- | 1- | 3- | -3- | - | - | - | - | 1.68 |
| 30- | 45.6995- | 111.1362- | 2- | 07- | | 0-M36059- | 09/11/76- | 13- | 13- | 11.0- | - | - | 6.5- | 460- | 0- | 4- | - | -5- | 3- | 3- | 2- | 2- | 3- | 4- | 2- | 3- | -3- | - | - | - | - | 3.24 |
| 30- | 45.6706- | 111.0094- | 2- | 07- | | 0-M36062- | 09/11/76- | 15- | 14- | 11.5- | - | - | - | 255- | 3- | 4- | -3- | 6- | 4- | 3- | 1- | 2- | 3- | 4- | 2- | 3- | -7- | - | - | - | - | 0.30 |
| 30- | 45.5803- | 111.1697- | 2- | 07- | | 0-M36063- | 09/11/76- | 16- | 13- | 11.0- | - | - | 5.9- | 275- | 16- | 4- | -3- | 6- | 3- | 3- | 2- | 2- | 3- | 3- | 2- | 3- | -3- | - | - | - | - | 0.73 |
| 30- | 45.6233- | 111.1335- | 2- | 07- | | 0-M36064- | 09/11/76- | 16- | 14- | 11.0- | C- | - | 6.3- | 395- | 9- | 4- | -6- | 8- | 3- | 3- | 2- | 2- | 4- | 4- | 3- | 3- | -3- | - | - | - | - | 0.91 |
| 30- | 45.6558- | 111.1132- | 2- | 07- | | 0-M36065- | 09/11/76- | 17- | 14- | 13.0- | - | - | 3.6- | 330- | 0- | 4- | -2- | 6- | 3- | 3- | 2- | 2- | 4- | 3- | 1- | 3- | -3- | - | - | - | - | 0.55 |
| 30- | 45.6697- | 111.1048- | 2- | 07- | | 0-M36066- | 09/11/76- | 17- | 15- | 12.5- | C- | - | 6.3- | 420- | 9- | 4- | -5- | 8- | 2- | 3- | 1- | 3- | 4- | 3- | 2- | 3- | -3- | - | - | - | - | 0.81 |
| 30- | 45.6484- | 111.0687- | 2- | 07- | | 0-M36067- | 09/11/76- | 17- | 15- | 13.0- | - | - | 6.3- | 390- | 0- | 4- | -5- | 8- | 3- | 3- | 1- | 3- | 4- | 4- | 1- | 4- | -3- | - | - | - | - | 1.62 |
| 30- | 45.6337- | 111.0312- | 2- | 07- | | 0-M36068- | 09/11/76- | 18- | 14- | 11.0- | - | - | 6.1- | 280- | 12- | 4- | -2- | 6- | 3- | 3- | 1- | 2- | 3- | 4- | 2- | 4- | -7- | - | - | - | - | 0.39 |
| 30- | 45.6191- | 111.0178- | 2- | 07- | | 0-M36069- | 09/11/76- | 18- | 13- | 10.0- | - | - | 5.9- | 195- | 3- | 4- | -3- | 6- | 3- | 3- | 2- | 3- | 3- | 3- | 2- | 3- | -3- | - | - | - | - | 0.25 |
| 30- | 45.6051- | 111.0085- | 2- | 07- | | 0-M36070- | 09/11/76- | 18- | 13- | 10.0- | - | - | 6.3- | 250- | 3- | 4- | -3- | 4- | 3- | 3- | 1- | 3- | 4- | 4- | 2- | 3- | -3- | - | - | - | - | 3.68 |
| 30- | 45.5977- | 111.1163- | 2- | 07- | | 0-M36071- | 09/11/76- | 19- | 13- | 11.5- | - | - | 6.3- | 210- | 12- | 4- | -5- | 8- | 2- | 2- | 3- | 3- | 3- | 5- | 3- | 3- | -3- | - | - | - | - | 1.16 |
| 30- | 45.7083- | 110.9980- | 2- | 07- | | 0-M36072- | 09/12/76- | 10- | 13- | 10.5- | - | - | 6.3- | 405- | 16- | 4- | -3- | 6- | 4- | 3- | 1- | 2- | 4- | 4- | 3- | 3- | -3- | - | - | - | - | 0.70 |
| 30- | 45.7118- | 110.7844- | 2- | 07- | | 0-M36073- | 09/12/76- | 12- | 11- | 9.5- | - | - | 6.1- | 245- | 19- | 1- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 3- | -1- | - | - | - | - | 0.30 |
| 30- | 45.6909- | 110.8081- | 2- | 07- | | 0-M36074- | 09/12/76- | 12- | 12- | 10.0- | - | - | 6.1- | 255- | 6- | 1- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 3- | 3- | 4- | 2- | -1- | - | - | - | - | 1.03 |
| 30- | 45.6881- | 110.8235- | 2- | 07- | | 0-M36075- | 09/12/76- | 12- | 12- | 10.5- | - | - | 6.3- | 410- | 3- | 1- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | 2.13 |
| 30- | 45.7175- | 110.8518- | 2- | 07- | | 0-M36076- | 09/12/76- | 13- | 13- | 10.5- | - | - | 6.1- | 275- | 6- | 1- | 6- | 3- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 0.89 |
| 30- | 45.7370- | 110.8963- | 2- | 07- | | 0-M36077- | 09/12/76- | 13- | 13- | 12.0- | - | - | 6.1- | 330- | 12- | 4- | -3- | 6- | 4- | 3- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 1.03 |
| 30- | 45.7174- | 110.9123- | 2- | 07- | | 0-M36078- | 09/12/76- | 14- | 14- | 13.5- | - | - | 6.6- | 380- | 6- | 4- | -2- | 6- | 3- | 3- | 1- | 2- | 3- | 4- | 4- | 2- | -3- | - | - | - | - | 0.89 |
| 30- | 45.7147- | 110.9045- | 2- | 07- | | 0-M36079- | 09/12/76- | 14- | 14- | 13.0- | - | - | 5.9- | 390- | 3- | 4- | -2- | 6- | 2- | 2- | 1- | 2- | 3- | 4- | 2- | 2- | -3- | - | - | - | - | 0.75 |
| 30- | 45.6968- | 110.9144- | 2- | 07- | | 0-M36081- | 09/12/76- | 15- | 12- | 9.5- | - | - | 6.5- | 375- | 9- | 4- | -5- | 8- | 2- | 2- | 1- | 3- | 4- | 4- | 4- | 4- | -3- | - | - | - | - | 2.40 |
| 30- | 45.6692- | 110.9523- | 2- | 07- | | 0-M36082- | 09/12/76- | 15- | 15- | 11.0- | - | - | 6.5- | 390- | 3- | 4- | -4- | 6- | 3- | 2- | 2- | 2- | 3- | 5- | 2- | 2- | -3- | - | - | - | - | 1.87 |
| 30- | 45.6775- | 110.9815- | 2- | 07- | | 0-M36083- | 09/12/76- | 16- | 13- | 13.0- | - | - | 6.3- | 365- | 12- | 4- | -3- | 6- | 3- | 2- | 3- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 1.00 |
| 30- | 45.5961- | 110.9073- | 2- | 07- | | 0-M36084- | 09/12/76- | 16- | 10- | 10.0- | C- | C- | 6.1- | 295- | 3- | 1- | 7- | 2- | 4- | 4- | 3- | 2- | 2- | 2- | 3- | 3- | 2- | - | - | - | - | 0.22 |
| 30- | 45.6089- | 110.9246- | 2- | 07- | | 0-M36085- | 09/12/76- | 17- | 11- | 10.0- | - | - | 6.3- | 360- | 0- | 1- | 7- | 3- | 4- | 4- | 2- | 2- | 2- | 2- | 4- | 4- | 2- | -8- | - | - | - | - | 0.22 |
| 30- | 45.6520- | 110.9516- | 2- | 07- | | 0-M36086- | 09/12/76- | 17- | 12- | 12.0- | C- | - | 6.3- | 400- | 0- | 4- | -3- | 6- | 4- | 3- | 2- | 2- | 3- | 4- | 2- | 2- | -3- | - | - | - | - | 0.85 |
| 30- | 45.6521- | 110.9585- | 2- | 07- | | 0-M36087- | 09/12/76- | 18- | 12- | 12.0- | - | - | 6.3- | 485- | 0- | 4- | -6- | 8- | 2- | 3- | 2- | 3- | 4- | 4- | 1- | 2- | -3- | - | - | - | - | 0.77 |
| 30- | 45.0114- | 110.3036- | 2- | 07- | | 0-M36088- | 10/23/76- | 8- | 4- | 2.0- | - | - | 5.9- | 90- | -2- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 3- | -1- | - | - | - | - | 0.28 |
| 30- | 45.0149- | 110.2894- | 2- | 07- | | 0-M36089- | 10/23/76- | 8- | 4- | 2.0- | - | - | 5.9- | 90- | -2- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 3- | -1- | - | - | - | - | 0.10 |
| 30- | 45.0505- | 110.2944- | 2- | 07- | | 0-M36090- | 10/23/76- | 10- | 6- | 3.5- | - | - | 5.7- | 90- | -2- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 0.31 |
| 30- | 45.0326- | 110.2992- | 2- | 07- | | 0-M36091- | 10/23/76- | 9- | 3- | 1.0- | - | - | 5.8- | 95- | -2- | 6- | 3- | 6- | 4- | 4- | 1- | 2- | 2- | 3- | 4- | 2- | -1- | - | - | - | - | 0.60 |
| 30- | 45.0619- | 110.2839- | 2- | 07- | | 0-M36092- | 10/23/76- | 11- | 5- | 2.0- | - | - | 5.7- | 90- | -2- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 2- | 2- | -1- | - | - | - | - | 0.17 |
| 30- | 45.0629- | 110.2867- | 2- | 07- | | 0-M36093- | 10/23/76- | 11- | 5- | 2.0- | - | - | 5.7- | 90- | -2- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 0.18 |
| 30- | 45.1129- | 110.2684- | 2- | 07- | | 0-M36094- | 10/23/76- | 12- | 5- | 2.0- | C- | - | 5.7- | 90- | -3- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 0.18 |
| 30- | 45.1188- | 110.2637- | 2- | 07- | | 0-M36095- | 10/23/76- | 12- | 6- | 1.0- | - | - | 5.7- | 95- | -3- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 0.40 |
| 30- | 45.0407- | 110.2916- | 2- | 07- | | 0-M36096- | 10/23/76- | 9- | 3- | 1.0- | - | - | 5.9- | 90- | -3- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 0.25 |
| 30- | 45.1350- | 110.2615- | 2- | 07- | | 0-M36097- | 10/23/76- | 13- | 8- | 2.0- | - | - | 5.7- | 90- | -2- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 0.25 |
| 30- | 45.1031- | 110.4764- | 2- | 07- | | 0-M36098- | 10/24/76- | 13- | -1- | 1.0- | C- | - | 5.7- | 105- | -2- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 3- | -1- | - | - | - | - | 1.34 |
| 30- | 45.1141- | 110.4861- | 2- | 07- | | 0-M36099- | 10/24/76- | 15- | -5- | 1.0- | C- | - | 5.7- | 100- | -2- | 6- | 3- | 6- | 2- | 2- | 1- | 2- | 1- | 3- | 3- | 3- | -1- | - | - | - | - | 0.18 |
| 30- | 45.0909- | 110.2610- | 2- | 07- | | 0-M36100- | 10/23/76- | 13- | 6- | 2.0- | - | - | 5.7- | 90- | -2- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 0.53 |
| 30- | 45.1467- | 110.2462- | 2- | 07- | | 0-M36101- | 10/23/76- | 14- | 4- | 1.0- | - | - | 5.7- | 90- | -2- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 3- | 3- | 2- | 2- | -1- | - | - | - | - | 0.29 |
| 30- | 45.1399- | 110.2512- | 2- | 07- | | 0-M36102- | 10/23/76- | 13- | 8- | 2.0- | - | - | 5.7- | 90- | -2- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 0.20 |
| 30- | 45.0097- | 110.1694- | 2- | 07- | | 0-M36103- | 10/22/76- | 8- | 2- | 1.5- | - | - | 5.7- | 165- | -2- | 7- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 2- | 2- | -1- | - | - | - | - | 0.25 |
| 30- | 45.0268- | 110.1566- | 2- | 07- | | 0-M36104- | 10/22/76- | 8- | 2- | 1.4- | - | - | 5.6- | 169- | -2- | 7- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 2- | 2- | -1- | - | - | - | - | 0.12 |
| 30- | 45.1013- | 110.1278- | 2- | 07- | | 0-M36105- | 10/22/76- | 11- | 4- | 1.4- | - | - | 5.7- | 164- | -2- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 2- | 2- | -1- | - | - | - | - | 0.52 |
| 30- | 45.1052- | 110.0938- | 2- | 07- | | 0-M36106- | 10/22/76- | 11- | 4- | 1.4- | - | - | 5.7- | 165- | -2- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -2- | - | - | - | - | 0.81 |
| 30- | 45.1032- | 110.0652- | 2- | 07- | | 0-M36107- | 10/22/76- | 12- | 4- | 1.7- | - | - | 5.8- | 159- | -3- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 4- | 2- | 2- | 2- | -2- | - | - | - | - | 0.40 |
| 30- | 45.1160- | 110.1653- | 2- | 07- | | 0-M36108- | 10/22/76- | 11- | 3- | 1.2- | - | - | 5.7- | 157- | -2- | 7- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 0.18 |

# 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 (#) UNITS IN ppb |
| 30- | 45.1017- | 110.0656- | 2- | 07- | | 0-M36109- | 10/22/76- | 12- | 4- | 1.7- | - | - | 5.8- | 170- | | -3- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 4- | 2- | 2- | 2- | -2- | - | - | - | - | 0.28 |
| 30- | 45.1145- | 110.1815- | 2- | 07- | | 0-M36110- | 10/22/76- | 12- | 4- | 1.0- | - | - | 5.7- | 165- | | -2- | 7- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 0.29 |
| 30- | 45.1132- | 110.1816- | 2- | 07- | | 0-M36111- | 10/22/76- | 12- | 4- | 1.0- | - | - | 5.7- | 165- | | -2- | 7- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 0.35 |
| 30- | 45.1315- | 110.0719- | 2- | 07- | | 0-M36112- | 10/22/76- | 13- | 4- | 1.2- | - | - | 5.7- | 165- | | -4- | 7- | 2- | 7- | 3- | 3- | 1- | 2- | 1- | 4- | 3- | 2- | -1- | - | - | - | - | 0.10 |
| 30- | 45.1619- | 110.1141- | 2- | 07- | | 0-M36113- | 10/22/76- | 16- | 3- | 1.5- | - | - | 5.7- | 170- | | -3- | 7- | 2- | 4- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 0.24 |
| 30- | 45.1639- | 110.1007- | 2- | 07- | | 0-M36114- | 10/22/76- | 15- | 5- | 2.0- | - | - | 5.6- | 165- | | -3- | 7- | 2- | 4- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 0.11 |
| 30- | 45.0779- | 110.0781- | 2- | 07- | | 0-M36115- | 10/22/76- | 18- | 2- | 1.0- | - | - | 5.7- | 165- | | -3- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 0.35 |
| 30- | 45.0987- | 110.3984- | 2- | 07- | | 0-M36116- | 10/24/76- | 14- | 2- | 1.0- | - | - | 5.7- | 200- | | -2- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 0.49 |
| 30- | 45.1477- | 110.3808- | 2- | 07- | | 0-M36117- | 10/24/76- | 11- | 2- | 1.0- | - | - | 5.8- | 210- | | -2- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 0.37 |
| 30- | 45.1682- | 110.1535- | 2- | 07- | | 0-M36118- | 10/22/76- | 15- | 3- | 1.0- | - | - | 5.7- | 165- | | -2- | 4- | 1- | 7- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 0.27 |
| 30- | 45.0738- | 110.0923- | 2- | 07- | | 0-M36119- | 10/22/76- | 18- | 3- | 2.0- | - | - | 5.7- | 165- | | -3- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 1.35 |
| 30- | 45.1940- | 110.3631- | 2- | 07- | | 0-M36120- | 10/24/76- | 14- | 4- | 2.0- | - | - | 5.7- | 190- | | -2- | 6- | 2- | 6- | 4- | 3- | 1- | 2- | 3- | 3- | 3- | 3- | -1- | - | - | - | - | 0.38 |
| 30- | 45.0419- | 110.1842- | 2- | 07- | | 0-M36121- | 10/24/76- | 17- | - | 1.0- | - | - | 5.8- | 170- | | -2- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 0.68 |
| 30- | 45.2031- | 110.3633- | 2- | 07- | | 0-M36122- | 10/24/76- | 15- | 2- | 1.0- | - | - | 5.8- | 175- | | -2- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 0.82 |
| 30- | 45.1520- | 110.1285- | 2- | 07- | | 0-M36123- | 10/22/76- | 14- | 3- | 1.4- | - | - | 5.7- | 165- | | -2- | 7- | 2- | 7- | 4- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 0.67 |
| 30- | 45.2120- | 110.3571- | 2- | 07- | | 0-M36124- | 10/24/76- | 16- | 1- | 1.0- | - | - | 5.8- | 170- | | -2- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 3- | -1- | - | - | - | - | 0.40 |
| 30- | 45.0780- | 110.4249- | 2- | 07- | | 0-M36125- | 10/24/76- | 12- | - | 1.0- | - | - | 5.7- | 100- | | -2- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 0.25 |
| 30- | 45.0075- | 110.3803- | 2- | 07- | | 0-M36126- | 10/24/76- | 9- | - | 1.0- | - | - | 5.7- | 210- | | -2- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 0.45 |
| 30- | 45.0058- | 110.3739- | 2- | 07- | | 0-M36127- | 10/24/76- | 9- | -2- | 1.0- | - | - | 5.7- | 220- | | -2- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 0.32 |
| 30- | 45.1454- | 110.2459- | 2- | 07- | | 0-M36128- | 10/23/76- | 14- | 4- | 1.0- | - | - | 5.7- | 90- | | -2- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 0.66 |
| 30- | 45.1082- | 110.4764- | 2- | 07- | | 0-M36129- | 10/24/76- | 14- | -1- | 1.0- | C- | - | 5.7- | 90- | | -2- | 6- | 3- | 6- | 3- | 3- | 2- | 1- | 1- | 3- | 3- | 3- | -1- | - | - | - | - | 0.17 |
| 30- | 45.0776- | 110.2721- | 2- | 07- | | 0-M36130- | 10/23/76- | 12- | 5- | 2.0- | - | - | 5.7- | 90- | | -3- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 0.10 |
| 30- | 45.0987- | 110.2620- | 2- | 07- | | 0-M36131- | 10/23/76- | 14- | 6- | 2.0- | C- | - | 5.7- | 90- | | -2- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 0.45 |
| 30- | 45.0029- | 110.4149- | 2- | 07- | | 0-M36132- | 10/24/76- | 8- | - | 1.0- | - | - | 5.7- | 210- | | -2- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 0.44 |
| 30- | 45.0779- | 110.4217- | 2- | 07- | | 0-M36133- | 10/24/76- | 12- | -1- | | - | - | 5.7- | 100- | | -2- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 0.46 |
| 30- | 45.5452- | 111.8009- | 2- | 02- | | 0-M36135- | 10/20/76- | 9- | 1- | 1.5- | - | - | 5.5- | 200- | | -2- | 7- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 2- | 2- | -3- | - | - | - | - | 0.78 |
| 30- | 45.5127- | 111.8205- | 2- | 02- | | 0-M36137- | 10/20/76- | 10- | 2- | 2.0- | C- | - | 5.5- | 200- | | -2- | 7- | 4- | 1- | 3- | 2- | 1- | 2- | 4- | 4- | 2- | 2- | -3- | - | - | - | - | 0.91 |
| 30- | 45.5342- | 111.8847- | 2- | 02- | | 0-M36139- | 10/20/76- | 11- | 2- | 1.0- | - | - | 5.2- | 180- | | -2- | 7- | 3- | 1- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | 0.30 |
| 30- | 45.5297- | 111.8860- | 2- | 02- | | 0-M36140- | 10/20/76- | 11- | 2- | 1.0- | - | - | 5.5- | 240- | | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 3- | 2- | 2- | 2- | -3- | - | - | - | - | 0.45 |
| 30- | 45.5049- | 111.9096- | 2- | 02- | | 0-M36142- | 10/20/76- | 12- | 4- | 1.0- | - | - | 5.7- | 210- | | -2- | 7- | 3- | 1- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 1.27 |
| 30- | 45.5435- | 111.7717- | 2- | 02- | | 0-M36143- | 10/20/76- | 12- | 4- | 1.5- | - | - | 5.9- | 230- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 0.54 |
| 30- | 45.5530- | 111.7742- | 2- | 02- | | 0-M36144- | 10/20/76- | 13- | 4- | 1.5- | - | - | 5.5- | 210- | | -2- | 7- | 3- | 1- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 3- | -3- | - | - | - | - | 0.39 |
| 30- | 45.6624- | 111.9165- | 2- | 02- | | 0-M36145- | 10/19/76- | 12- | 2- | 2.0- | - | - | 5.7- | 270- | | -2- | 7- | 4- | 6- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 0.19 |
| 30- | 45.8468- | 111.5185- | 2- | 02- | | 0-M36148- | 10/19/76- | 11- | 1- | | - | - | 5.2- | 410- | | -2- | 7- | 4- | 1- | 2- | 2- | 2- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 0.33 |
| 30- | 45.7715- | 111.5423- | 2- | 02- | | 0-M36150- | 10/19/76- | 11- | 1- | | - | - | 5.2- | 380- | | -2- | 1- | 4- | 1- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 0.39 |
| 30- | 45.7582- | 111.4869- | 2- | 02- | | 0-M36151- | 10/19/76- | 12- | 2- | 1.0- | - | - | 5.5- | 280- | | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 3- | 3- | 2- | 1- | -3- | - | - | - | - | 0.11 |
| 30- | 45.7550- | 111.4266- | 2- | 02- | | 0-M36152- | 10/19/76- | 12- | 2- | 1.0- | - | - | 5.2- | 310- | | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 0.19 |
| 30- | 45.7658- | 111.3324- | 2- | 02- | | 0-M36155- | 10/19/76- | 13- | 4- | 1.5- | - | - | 5.5- | 240- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 4- | 2- | 2- | 1- | -3- | - | - | - | - | 0.21 |
| 30- | 45.7826- | 111.3339- | 2- | 02- | | 0-M36156- | 10/19/76- | 14- | 5- | 2.0- | - | - | 5.5- | 310- | | -2- | 7- | 4- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 0.16 |
| 30- | 45.7930- | 111.3156- | 2- | 02- | | 0-M36158- | 10/19/76- | 14- | 5- | 2.0- | - | - | 5.7- | 320- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 2- | 2- | 2- | 1- | -3- | - | - | - | - | 0.32 |
| 30- | 45.5791- | 111.3335- | 2- | 02- | | 0-M36161- | 10/19/76- | 16- | 4- | 1.0- | C- | - | 5.5- | 210- | | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 0.11 |
| 30- | 45.5905- | 111.3805- | 2- | 02- | | 0-M36162- | 10/19/76- | 16- | 3- | 1.0- | - | - | 5.5- | 190- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 0.27 |
| 30- | 45.5929- | 111.3873- | 2- | 02- | | 0-M36163- | 10/19/76- | 17- | 3- | 1.0- | - | - | 5.5- | 180- | | -2- | 7- | 4- | 7- | 3- | 2- | 1- | 2- | 3- | 3- | 3- | 1- | -3- | - | - | - | - | 0.10 |
| 30- | 45.5988- | 111.3904- | 2- | 02- | | 0-M36164- | 10/19/76- | 17- | 3- | 0.5- | - | - | 5.5- | 180- | | -2- | 7- | 3- | 7- | 3- | 2- | 1- | 2- | 1- | 2- | 3- | 1- | -3- | - | - | - | - | 0.10 |
| 30- | 45.7603- | 111.8782- | 2- | 02- | | 0-M36165- | 10/20/76- | 13- | 5- | 2.5- | - | - | 5.2- | 450- | | -2- | 7- | 5- | 6- | 2- | 2- | 2- | 1- | 4- | 4- | 2- | 3- | -3- | - | - | - | - | 0.10 |
| 30- | 45.8038- | 111.9289- | 2- | 02- | | 0-M36167- | 10/20/76- | 14- | 5- | 2.0- | - | - | 5.5- | 310- | | -2- | 7- | 4- | 1- | 3- | 2- | 1- | 2- | 2- | 3- | 2- | 3- | -3- | - | - | - | - | 0.10 |
| 30- | 45.4807- | 111.5207- | 2- | 02- | | 0-M36171- | 10/20/76- | 9- | 1- | | - | - | 5.2- | 185- | | -2- | 7- | 4- | 1- | 3- | 2- | 1- | 2- | 1- | 2- | 3- | 3- | -1- | - | - | - | - | 0.13 |
| 30- | 45.4718- | 111.5302- | 2- | 02- | | 0-M36172- | 10/20/76- | 10- | 1- | 1.0- | - | - | 5.4- | 195- | | -2- | 7- | 3- | 1- | 3- | 2- | 1- | 2- | 1- | 2- | 3- | 3- | -1- | - | - | - | - | 0.41 |
| 30- | 45.4720- | 111.5332- | 2- | 02- | | 0-M36173- | 10/20/76- | 10- | 1- | 1.0- | C- | - | 5.4- | 190- | | -2- | 7- | 4- | 1- | 3- | 2- | 1- | 2- | 1- | 2- | 3- | 3- | -1- | - | - | - | - | 0.10 |
| 30- | 45.4682- | 111.5582- | 2- | 02- | | 0-M36174- | 10/20/76- | 11- | 3- | 1.0- | - | - | 5.4- | 200- | | -2- | 7- | 4- | 1- | 3- | 2- | 1- | 2- | 1- | 2- | 3- | 3- | -1- | - | - | - | - | 0.69 |
| 30- | 45.3054- | 111.6221- | 2- | 02- | | 0-M36175- | 10/20/76- | 13- | 4- | 0.5- | - | - | 5.4- | 440- | | -2- | 7- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 2- | 3- | -3- | - | - | - | - | 0.10 |

# 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 (#) UNITS IN ppb |
| 30- | 45.2970- | 111.6307- | 2- | 02- | | 0-M36176- | 10/20/76- | 13- | 5- | 1.0- | - | - | 5.4- | 340- | | -2- | 7- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 2- | 3- | -3- | - | - | - | - | - | 0.31 |
| 30- | 45.3493- | 111.8282- | 2- | 02- | | 0-M36177- | 10/20/76- | 14- | 5- | 1.0- | - | - | 5.4- | 190- | | -2- | 7- | 3- | 7- | 3- | 2- | 1- | 2- | 3- | 3- | 3- | 3- | -3- | - | - | - | - | - | 0.46 |
| 30- | 45.3479- | 111.8282- | 2- | 02- | | 0-M36178- | 10/20/76- | 14- | 5- | 1.0- | - | - | 5.4- | 210- | | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 3- | -3- | - | - | - | - | - | 0.15 |
| 30- | 45.3469- | 111.8120- | 2- | 02- | | 0-M36179- | 10/20/76- | 15- | 4- | 2.0- | - | - | 5.5- | 220- | | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 3- | -3- | - | - | - | - | - | 0.55 |
| 30- | 45.3145- | 111.8194- | 2- | 02- | | 0-M36180- | 10/20/76- | 15- | 5- | 2.0- | - | - | 5.5- | 220- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 3- | -3- | - | - | - | - | - | 0.39 |
| 30- | 45.2791- | 111.9038- | 2- | 02- | | 0-M36182- | 10/20/76- | 16- | 4- | 1.0- | - | - | 5.7- | 220- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 3- | -3- | - | - | - | - | - | 0.10 |
| 30- | 45.3336- | 111.4891- | 2- | 07- | | 0-M36183- | 10/20/76- | 8- | 1- | 1.0- | - | - | 5.5- | 190- | | -1- | 6- | 1- | 6- | 1- | 3- | 1- | 2- | 2- | 3- | 3- | 1- | -1- | - | - | - | - | - | 0.22 |
| 30- | 45.3210- | 111.4424- | 2- | 07- | | 0-M36184- | 10/20/76- | 9- | 2- | 1.0- | - | - | 5.5- | 190- | | -1- | 6- | 2- | 6- | 3- | 3- | 1- | 1- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | - | 0.28 |
| 30- | 45.3261- | 111.4353- | 2- | 07- | | 0-M36185- | 10/20/76- | 10- | 3- | 2.0- | - | - | 5.5- | 200- | | -1- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | - | 0.21 |
| 30- | 45.0274- | 111.0401- | 2- | 07- | | 0-M36186- | 10/18/76- | 10- | 4- | 2.0- | - | - | 5.5- | 65- | | -3- | 7- | 1- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | - | 0.10 |
| 30- | 45.3489- | 111.4716- | 2- | 07- | | 0-M36187- | 10/20/76- | 12- | 1- | 1.0- | - | - | 5.5- | 190- | | -1- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | - | 0.25 |
| 30- | 45.2639- | 111.4877- | 2- | 07- | | 0-M36188- | 10/20/76- | 17- | 3- | 1.0- | - | - | 5.5- | 180- | | -1- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | - | 0.88 |
| 30- | 45.3071- | 111.4695- | 2- | 07- | | 0-M36189- | 10/20/76- | 15- | 7- | 1.0- | C- | - | 5.7- | 180- | | -1- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | - | 0.29 |
| 30- | 45.3341- | 111.4786- | 2- | 07- | | 0-M36190- | 10/20/76- | 8- | 1- | 1.0- | - | - | 5.5- | 190- | | -1- | 6- | 1- | 6- | 1- | 3- | 1- | 2- | 2- | 3- | 3- | 1- | -1- | - | - | - | - | - | 0.52 |
| 30- | 45.0282- | 111.0474- | 2- | 07- | | 0-M36191- | 10/18/76- | 10- | 4- | 2.0- | - | - | 5.5- | 65- | | -3- | 7- | 1- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | - | 0.10 |
| 30- | 45.0290- | 111.0397- | 2- | 07- | | 0-M36192- | 10/18/76- | 10- | 4- | 2.0- | - | - | 5.5- | 65- | | -3- | 7- | 1- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | - | 0.27 |
| 30- | 45.0418- | 110.9561- | 2- | 07- | | 0-M36193- | 10/18/76- | 16- | 4- | 1.0- | - | - | 5.5- | 60- | | -3- | 1- | 2- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | - | 0.23 |
| 30- | 45.3015- | 111.4883- | 2- | 07- | | 0-M36194- | 10/20/76- | 15- | 9- | 1.0- | C- | - | 5.6- | 210- | | -1- | 7- | 1- | 6- | 5- | 3- | 1- | 2- | 1- | 3- | 5- | 1- | -1- | - | - | - | - | - | 0.32 |
| 30- | 45.3021- | 111.4865- | 2- | 07- | | 0-M36195- | 10/20/76- | 15- | 9- | 1.0- | C- | - | 5.5- | 190- | | -1- | 7- | 1- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | - | 0.28 |
| 30- | 45.2826- | 111.4927- | 2- | 07- | | 0-M36196- | 10/20/76- | 16- | 4- | 1.0- | - | - | 5.5- | 190- | | -1- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | - | 1.52 |
| 30- | 45.3569- | 111.4912- | 2- | 07- | | 0-M36197- | 10/20/76- | 13- | 5- | 1.0- | C- | - | 5.5- | 200- | | -1- | 6- | 1- | 6- | 2- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | - | 1.40 |
| 30- | 45.0677- | 111.0186- | 2- | 07- | | 0-M36198- | 10/18/76- | 11- | 6- | 1.0- | - | - | 5.7- | 60- | | -3- | 7- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | - | 0.10 |
| 30- | 45.0705- | 111.0075- | 2- | 07- | | 0-M36199- | 10/18/76- | 12- | 9- | 2.0- | - | - | 5.5- | 65- | | -3- | 7- | 1- | 6- | 3- | 2- | 1- | 2- | 3- | 3- | 4- | 1- | -1- | - | - | - | - | - | 0.75 |
| 30- | 45.0717- | 111.0079- | 2- | 07- | | 0-M36200- | 10/18/76- | 12- | 9- | 2.0- | - | - | 5.5- | 65- | | -3- | 7- | 1- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | - | 0.60 |
| 30- | 45.0270- | 110.9764- | 2- | 07- | | 0-M36201- | 10/18/76- | 15- | 6- | 3.0- | - | - | 5.7- | 70- | | -3- | 7- | 1- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | - | 0.17 |
| 30- | 45.3285- | 111.4596- | 2- | 07- | | 0-M36202- | 10/20/76- | 9- | 1- | 1.0- | - | - | 5.6- | 195- | | -1- | 6- | 2- | 6- | 4- | 4- | 1- | 1- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | - | 0.96 |
| 30- | 45.0281- | 111.0072- | 2- | 07- | | 0-M36203- | 10/18/76- | 14- | 11- | 1.0- | - | - | 5.5- | 65- | | -3- | 7- | 2- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | - | 0.33 |
| 30- | 45.0514- | 111.0270- | 2- | 07- | | 0-M36204- | 10/18/76- | 11- | 4- | 1.0- | - | - | 5.7- | 55- | | -3- | 7- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | - | 0.10 |
| 30- | 45.0259- | 110.9765- | 2- | 07- | | 0-M36205- | 10/18/76- | 15- | 7- | 3.0- | - | - | 5.7- | 70- | | -3- | 7- | 1- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | - | 0.95 |
| 30- | 45.0294- | 111.0074- | 2- | 07- | | 0-M36206- | 10/18/76- | 14- | 11- | 1.0- | - | - | 5.5- | 70- | | -3- | 7- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | - | 0.15 |
| 30- | 45.0398- | 110.9556- | 2- | 07- | | 0-M36207- | 10/18/76- | 16- | 4- | 1.0- | - | - | 5.5- | 60- | | -3- | 1- | 2- | 6- | 4- | 3- | 1- | 2- | 1- | 2- | 3- | 1- | -1- | - | - | - | - | - | 0.30 |
| 30- | 45.1760- | 110.3991- | 2- | 07- | | 0-M36208- | 10/24/76- | 15- | 4- | 2.0- | - | - | 5.7- | 320- | | -2- | 6- | 1- | 6- | 3- | 2- | 1- | 2- | 1- | 4- | 4- | 3- | -1- | - | - | - | - | - | 0.59 |
| 30- | 45.1735- | 110.3989- | 2- | 07- | | 0-M36209- | 10/24/76- | 14- | 4- | 2.0- | - | - | 5.5- | 200- | | -2- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 3- | -1- | - | - | - | - | - | 0.14 |
| 30- | 45.0241- | 110.4403- | 2- | 07- | | 0-M36210- | 10/24/76- | 15- | 3- | 1.0- | - | - | 5.7- | 210- | | -2- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 3- | -1- | - | - | - | - | - | 0.10 |
| 30- | 45.0554- | 110.4397- | 2- | 07- | | 0-M36211- | 10/24/76- | 17- | 5- | 1.0- | - | - | 5.7- | 200- | | -2- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 3- | 3- | -1- | - | - | - | - | - | 0.71 |
| 30- | 45.1684- | 110.4624- | 2- | 07- | | 0-M36212- | 10/24/76- | 16- | 1- | 1.0- | - | - | 5.6- | 220- | | -2- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | - | 0.59 |
| 30- | 45.0547- | 110.4562- | 2- | 07- | | 0-M36213- | 10/24/76- | 18- | 8- | 2.0- | - | - | 5.7- | 200- | | -2- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 3- | 3- | -1- | - | - | - | - | - | 0.28 |
| 30- | 45.0987- | 110.3855- | 2- | 07- | | 0-M36214- | 10/24/76- | 15- | 3- | 1.0- | - | - | 5.7- | 210- | | -2- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 3- | -1- | - | - | - | - | - | 0.61 |
| 30- | 45.0908- | 110.3456- | 2- | 07- | | 0-M36215- | 10/24/76- | 17- | -1- | 1.0- | - | - | 5.5- | 220- | | -2- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | - | 0.20 |
| 30- | 45.0402- | 110.3998- | 2- | 07- | | 0-M36216- | 10/24/76- | 14- | 1- | 1.0- | - | - | 5.7- | 290- | | -2- | 7- | 4- | 6- | 3- | 2- | 1- | 2- | 1- | 4- | 4- | 3- | -1- | - | - | - | - | - | 0.47 |
| 30- | 45.0396- | 110.4024- | 2- | 07- | | 0-M36217- | 10/24/76- | 14- | 1- | 1.0- | - | - | 5.7- | 290- | | -2- | 7- | 4- | 6- | 3- | 2- | 1- | 2- | 1- | 4- | 4- | 3- | -1- | - | - | - | - | - | 0.35 |
| 30- | 45.1507- | 110.4361- | 2- | 07- | | 0-M36218- | 10/24/76- | 14- | 1- | 1.0- | - | - | 5.7- | 200- | | -2- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 3- | 3- | 4- | 3- | -1- | - | - | - | - | - | 0.42 |
| 30- | 45.3075- | 110.3186- | 2- | 07- | | 0-M36219- | 10/16/76- | 12- | 8- | 3.5- | - | - | 5.7- | 150- | | -1- | 7- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | - | 3.67 |
| 30- | 45.1903- | 110.1821- | 2- | 07- | | 0-M36220- | 10/16/76- | 17- | 5- | 2.5- | - | - | 5.5- | 70- | | -1- | 7- | 3- | 6- | 2- | 3- | 1- | 2- | 3- | 4- | 3- | 2- | -1- | - | - | - | - | - | 0.57 |
| 30- | 45.4661- | 110.3722- | 2- | 07- | | 0-M36221- | 10/16/76- | 10- | 6- | 2.0- | - | - | 6.1- | 350- | | -1- | 7- | 2- | 6- | 3- | 2- | 1- | 2- | 1- | 2- | 3- | 2- | -1- | - | - | - | - | - | 1.78 |
| 30- | 45.4945- | 110.3474- | 2- | 07- | | 0-M36222- | 10/16/76- | 8- | 4- | 2.5- | - | - | 6.1- | 290- | | -1- | 7- | 2- | 6- | 2- | 2- | 1- | 2- | 3- | 4- | 2- | 2- | -1- | - | - | - | - | - | 0.92 |
| 30- | 45.3050- | 110.3210- | 2- | 07- | | 0-M36223- | 10/16/76- | 12- | 8- | 3.5- | - | - | 5.5- | 150- | | -1- | 7- | 2- | 6- | 3- | 2- | 1- | 2- | 1- | 2- | 4- | 2- | -1- | - | - | - | - | - | 4.42 |
| 30- | 45.3042- | 110.3203- | 2- | 07- | | 0-M36224- | 10/16/76- | 12- | 8- | 3.5- | - | - | 5.5- | 140- | | -1- | 7- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | - | 4.58 |
| 30- | 45.2361- | 110.1866- | 2- | 07- | | 0-M36225- | 10/16/76- | 18- | 3- | 2.5- | - | - | 5.2- | 75- | | -1- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | - | 0.32 |
| 30- | 45.4620- | 110.3796- | 2- | 07- | | 0-M36226- | 10/16/76- | 11- | 5- | 2.0- | - | - | 6.3- | 350- | | -1- | 7- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 2- | 4- | 2- | -1- | - | - | - | - | - | 1.07 |
| 30- | 45.4563- | 110.3794- | 2- | 07- | | 0-M36227- | 10/16/76- | 11- | 6- | 2.0- | - | - | 6.1- | 350- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 3- | 2- | -1- | - | - | - | - | - | 0.95 |

# 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 (θ) UNITS IN ppb |
| 30- | 45.4244- | 110.4055- | 2- | 07- | | 0-M36228- | 10/16/76- | 14- | 10- | 3.5- | - | - | 6.1- | 275- | | -1- | 7- | 3- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -1- | - | - | - | - | 2.04 |
| 30- | 45.4850- | 111.4702- | 2- | 07- | | 0-M36229- | 10/19/76- | 14- | 14- | 5.0- | - | - | 5.7- | 225- | | -1- | 7- | 3- | 6- | 3- | 3- | 1- | 1- | 3- | 4- | 3- | 1- | -1- | - | - | - | - | 1.80 |
| 30- | 45.0791- | 110.3788- | 2- | 07- | | 0-M36230- | 10/24/76- | 14- | 3- | 1.0- | - | - | 5.6- | 145- | | -2- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 0.48 |
| 30- | 45.0771- | 111.1565- | 2- | 07- | | 0-M36231- | 10/25/76- | 10- | 2- | 1.4- | - | - | 6.1- | 490- | | -3- | 7- | 3- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 1.03 |
| 30- | 45.0803- | 111.1188- | 2- | 07- | | 0-M36232- | 10/25/76- | 12- | 4- | 1.5- | - | - | 5.9- | 350- | | -2- | 7- | 4- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 0.28 |
| 30- | 45.0802- | 111.1164- | 2- | 07- | | 0-M36233- | 10/25/76- | 12- | 4- | 1.5- | - | - | 5.9- | 360- | | -2- | 7- | 4- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 0.49 |
| 30- | 45.0911- | 110.3444- | 2- | 07- | | 0-M36234- | 10/24/76- | 11- | 3- | 1.0- | - | - | 5.4- | 140- | | -2- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 3- | -1- | - | - | - | - | 0.19 |
| 30- | 45.4581- | 110.3811- | 2- | 07- | | 0-M36235- | 10/16/76- | 11- | 6- | 2.0- | - | - | 6.1- | 340- | | -1- | 7- | 3- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 1.70 |
| 30- | 45.4506- | 110.3919- | 2- | 07- | | 0-M36236- | 10/16/76- | 11- | 10- | 2.5- | - | - | 6.1- | 350- | | -1- | 7- | 3- | 6- | 2- | 3- | 1- | 2- | 2- | 3- | 3- | 2- | -1- | - | - | - | - | 1.77 |
| 30- | 45.0308- | 110.8801- | 2- | 07- | | 0-M36237- | 10/31/76- | 11- | 1- | 1.0- | - | - | 5.5- | 80- | | -2- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 3- | 4- | 4- | 1- | -1- | - | - | - | - | 1.48 |
| 30- | 45.0158- | 110.8833- | 2- | 07- | | 0-M36238- | 10/31/76- | 11- | -1- | 1.0- | - | - | 5.7- | 210- | | -2- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 3- | 1- | -1- | - | - | - | - | 0.23 |
| 30- | 45.1682- | 110.3825- | 2- | 07- | | 0-M36239- | 10/24/76- | 13- | 2- | 1.0- | - | - | 5.7- | 200- | | -2- | 6- | 2- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 4- | 3- | -1- | - | - | - | - | 0.18 |
| 30- | 45.1750- | 110.3966- | 2- | 07- | | 0-M36240- | 10/24/76- | 15- | 2- | 1.0- | - | - | 5.7- | 320- | | -2- | 6- | 1- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 3- | -1- | - | - | - | - | 1.37 |
| 30- | 45.0164- | 110.8883- | 2- | 07- | | 0-M36241- | 10/31/76- | 11- | -1- | 1.0- | - | - | 5.7- | 210- | | -2- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 3- | 1- | -1- | - | - | - | - | 0.18 |
| 30- | 45.0147- | 110.9514- | 2- | 07- | | 0-M36242- | 10/31/76- | 13- | 1- | 1.0- | - | - | 5.5- | 80- | | -2- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 1- | -1- | - | - | - | - | 0.18 |
| 30- | 45.0856- | 110.4176- | 2- | 07- | | 0-M36243- | 10/24/76- | 12- | 3- | 2.0- | - | - | 6.0- | 500- | | -2- | 7- | 4- | 4- | 3- | 4- | 2- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 0.32 |
| 30- | 45.4088- | 110.4215- | 2- | 07- | | 0-M36244- | 10/16/76- | 15- | 8- | 4.0- | - | - | 5.9- | 275- | | -1- | 6- | 4- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -1- | - | - | - | - | 2.17 |
| 30- | 45.3982- | 110.4165- | 2- | 07- | | 0-M36245- | 10/16/76- | 15- | 2- | 3.0- | - | - | 5.9- | 280- | | -1- | 7- | 3- | 6- | 2- | 3- | 1- | 2- | 4- | 3- | 2- | 2- | -1- | - | - | - | - | 1.70 |
| 30- | 45.0576- | 111.1890- | 2- | 07- | | 0-M36246- | 10/25/76- | 7- | 1- | 1.0- | - | - | 6.1- | 400- | | -1- | 6- | 1- | 6- | 3- | 1- | 2- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 0.15 |
| 30- | 45.1394- | 110.3747- | 2- | 07- | | 0-M36247- | 10/24/76- | 10- | 3- | 1.0- | - | - | 5.7- | 140- | | -2- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 0.40 |
| 30- | 45.6557- | 110.9742- | 2- | 07- | | 0-M36248- | 09/12/76- | 18- | 11- | 12.0- | - | - | 6.5- | 480- | | 6- | 4- | -3- | 6- | 2- | 3- | 2- | 3- | 4- | 4- | 3- | 2- | -3- | - | - | - | - | 1.57 |
| 30- | 45.5932- | 111.0451- | 2- | 07- | | 0-M36249- | 09/12/76- | 19- | 10- | 10.5- | - | - | 6.1- | 130- | | 9- | 2- | 7- | 3- | 6- | 4- | 2- | 2- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 1.37 |
| 30- | 45.5813- | 111.0210- | 2- | 07- | | 0-M36250- | 09/12/76- | 19- | 11- | 10.5- | - | - | 6.3- | 185- | | 3- | 2- | 7- | 3- | 6- | 4- | 3- | 1- | 2- | 2- | 3- | 4- | 2- | -1- | - | - | - | - | 0.75 |
| 30- | 45.5732- | 110.7916- | 2- | 07- | | 0-M36251- | 09/13/76- | 11- | 9- | 7.5- | C- | - | 5.7- | 115- | | 19- | 1- | 6- | 3- | 6- | 4- | 2- | 1- | 2- | 3- | 3- | 4- | 1- | -2- | - | - | - | - | 0.10 |
| 30- | 45.5608- | 110.7598- | 2- | 07- | | 0-M36252- | 09/13/76- | 12- | 12- | 8.0- | - | - | 6.3- | 250- | | 0- | 1- | 7- | 3- | 6- | 3- | 3- | 2- | 2- | 4- | 3- | 4- | 1- | -3- | - | - | - | - | 0.22 |
| 30- | 45.5767- | 110.7724- | 2- | 07- | | 0-M36254- | 09/13/76- | 13- | 19- | 10.0- | C- | - | 6.9- | 565- | | 6- | 1- | 6- | 3- | 6- | 3- | 2- | 2- | 2- | 4- | 3- | 3- | 1- | -2- | - | - | - | - | 2.26 |
| 30- | 45.5783- | 110.7870- | 2- | 07- | | 0-M36255- | 09/13/76- | 13- | 21- | 10.5- | C- | - | 6.6- | 650- | | 3- | 1- | 6- | 3- | 6- | 2- | 2- | 1- | 2- | 4- | 4- | 4- | 1- | -2- | - | - | - | - | 0.32 |
| 30- | 45.5897- | 110.8023- | 2- | 07- | | 0-M36256- | 09/11/76- | 13- | 18- | 11.5- | - | - | 6.6- | 525- | | 9- | 4- | -5- | 8- | 2- | 2- | 2- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 0.46 |
| 30- | 45.5968- | 110.8063- | 2- | 07- | | 0-M36257- | 09/13/76- | 14- | 19- | 11.0- | - | - | - | 380- | | 6- | 4- | -3- | 6- | 2- | 3- | 1- | 2- | 4- | 4- | 3- | 2- | -3- | - | - | - | - | 0.20 |
| 30- | 45.6003- | 110.8204- | 2- | 07- | | 0-M36258- | 09/13/76- | 14- | 20- | 10.0- | - | - | 6.3- | 420- | | 8- | 4- | -4- | 6- | 2- | 3- | 1- | 2- | 4- | 4- | 3- | 1- | -3- | - | - | - | - | 1.19 |
| 30- | 45.6157- | 110.8536- | 2- | 07- | | 0-M36259- | 09/13/76- | 15- | 19- | 13.5- | - | - | 6.6- | 375- | | 0- | 1- | 6- | 2- | 6- | 3- | 2- | 1- | 2- | 3- | 2- | 4- | 1- | -3- | - | - | - | - | 0.56 |
| 30- | 45.6276- | 110.8425- | 2- | 07- | | 0-M36260- | 09/13/76- | 15- | 19- | 12.5- | - | - | 6.6- | 480- | | 12- | 4- | -3- | 6- | 3- | 2- | 1- | 2- | 3- | 3- | 3- | 1- | -3- | - | - | - | - | 0.20 |
| 30- | 45.6440- | 110.8721- | 2- | 07- | | 0-M36261- | 09/13/76- | 16- | 17- | 12.5- | - | - | 6.6- | 485- | | 3- | 1- | 6- | 3- | 6- | 3- | 2- | 1- | 2- | 3- | 4- | 4- | 1- | -3- | - | - | - | - | 1.07 |
| 30- | 45.6710- | 110.7955- | 2- | 07- | | 0-M36262- | 09/13/76- | 16- | 19- | 13.0- | - | - | 6.3- | 280- | | 0- | 1- | 6- | 3- | 6- | 3- | 2- | 1- | 2- | 3- | 5- | 4- | 1- | -3- | - | - | - | - | 1.64 |
| 30- | 45.6645- | 110.8396- | 2- | 07- | | 0-M36263- | 09/13/76- | 17- | 17- | 14.0- | C- | - | 6.3- | 260- | | 9- | 4- | -4- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 0.42 |
| 30- | 45.6609- | 110.8376- | 2- | 07- | | 0-M36264- | 09/13/76- | 17- | 18- | 13.5- | C- | - | 6.3- | 330- | | 8- | 4- | -3- | 6- | 3- | 2- | 1- | 2- | 3- | 4- | 4- | 1- | -3- | - | - | - | - | 1.00 |
| 30- | 45.5632- | 111.0713- | 2- | 07- | | 0-M36265- | 09/13/76- | 18- | 13- | 12.0- | - | - | 5.7- | 120- | | 9- | 2- | 7- | 1- | 7- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -8- | - | - | - | - | 0.65 |
| 30- | 45.6693- | 110.7523- | 2- | 07- | | 0-M36266- | 09/14/76- | 11- | 17- | 9.0- | - | - | 6.3- | 270- | | 6- | 1- | 6- | 3- | 6- | 3- | 2- | 1- | 2- | 3- | 3- | 4- | 1- | -3- | - | - | - | - | 1.53 |
| 30- | 45.6560- | 110.7568- | 2- | 07- | | 0-M36267- | 09/14/76- | 12- | 17- | 9.0- | - | - | 6.5- | 390- | | 6- | 4- | -5- | 6- | 2- | 2- | 1- | 2- | 3- | 4- | 3- | 2- | -3- | - | - | - | - | 2.46 |
| 30- | 45.5699- | 110.8032- | 2- | 07- | | 0-M36268- | 09/14/76- | 12- | 17- | 10.5- | C- | - | 6.6- | 355- | | 6- | 4- | -3- | 6- | 3- | 3- | 2- | 2- | 4- | 3- | 2- | 2- | -3- | - | - | - | - | 0.29 |
| 30- | 45.5553- | 110.8171- | 2- | 07- | | 0-M36269- | 09/14/76- | 14- | 17- | 10.0- | - | - | 6.3- | 270- | | 0- | 1- | 6- | 3- | 6- | 3- | 2- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | 1.36 |
| 30- | 45.6230- | 110.7621- | 2- | 07- | | 0-M36270- | 09/14/76- | 14- | 21- | 11.0- | - | - | 6.6- | 350- | | 0- | 1- | 6- | 3- | 6- | 3- | 3- | 2- | 2- | 3- | 4- | 4- | 2- | -3- | - | - | - | - | 1.27 |
| 30- | 45.5490- | 110.8107- | 2- | 07- | | 0-M36271- | 09/14/76- | 15- | 18- | 13.0- | - | - | 6.3- | 460- | | 3- | 1- | 6- | 3- | 6- | 3- | 2- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | 1.08 |
| 30- | 45.6666- | 110.7109- | 2- | 02- | | 0-M36273- | 09/14/76- | 16- | 18- | 12.0- | - | - | 6.5- | 510- | | 0- | 4- | -3- | 7- | 3- | 2- | 1- | 2- | 3- | 4- | 2- | 2- | -3- | - | - | - | - | 0.87 |
| 30- | 45.6693- | 110.7394- | 2- | 07- | | 0-M36274- | 09/14/76- | 16- | 19- | 11.5- | - | - | 6.3- | 325- | | 0- | 1- | 6- | 4- | 6- | 3- | 2- | 1- | 2- | 3- | 4- | 4- | 3- | -3- | - | - | - | - | 0.46 |
| 30- | 45.6604- | 110.7223- | 2- | 07- | | 0-M36275- | 09/14/76- | 17- | 17- | 13.0- | - | - | 6.3- | 300- | | 6- | 4- | 6- | 3- | 6- | 3- | 2- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | 0.53 |
| 30- | 45.6086- | 110.9847- | 2- | 07- | | 0-M36277- | 09/14/76- | 18- | 13- | 13.0- | - | - | 6.1- | 330- | | 0- | 4- | -3- | 6- | 4- | 2- | 1- | 2- | 3- | 3- | 2- | 2- | -3- | - | - | - | - | 0.23 |
| 30- | 45.5369- | 111.0173- | 2- | 07- | | 0-M36278- | 09/14/76- | 19- | 10- | 10.5- | - | - | 5.7- | 115- | | 6- | 2- | 6- | 2- | 6- | 4- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -8- | - | - | - | - | 0.23 |
| 30- | 45.5072- | 110.9828- | 2- | 07- | | 0-M36279- | 09/11/76- | 19- | 10- | 8.0- | - | - | 5.9- | 490- | | 3- | 2- | 7- | 5- | 8- | 2- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -8- | - | - | - | - | 0.32 |
| 30- | 45.5036- | 110.9893- | 2- | 07- | | 0-M36280- | 09/14/76- | 19- | 10- | 10.0- | - | - | 5.7- | 125- | | 6- | 2- | 7- | 3- | 6- | 4- | 3- | 1- | 2- | 1- | 4- | 3- | 1- | -8- | - | - | - | - | 0.17 |
| 30- | 45.7414- | 110.6444- | 2- | 07- | | 0-M36281- | 09/15/76- | 11- | 12- | 8.5- | - | - | 6.1- | 340- | | 3- | 2- | 6- | 3- | 6- | 2- | 2- | 1- | 2- | 4- | 4- | 2- | 1- | -3- | - | - | - | - | 0.93 |

# 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 (H) UNITS IN ppb |
| 30- | 45.7475- | 110.6885- | 2- | 07- | | 0-M36283- | 09/15/76- | 12- | 18- | 8.0- | - | - | 6.1- | 330- | | 0-1-6-3-6-3-2-1-2-4-3-3-1- | | | | | | | | | | | | -3- | - | - | - | - | 0.62 |
| 30- | 45.7792- | 110.7264- | 2- | 07- | | 0-M36284- | 09/15/76- | 12- | 17- | 12.0- | - | - | 6.1- | 295- | | 0-1-6-3-6-3-2-1-2-4-2-3-1- | | | | | | | | | | | | -3- | - | - | - | - | 0.62 |
| 30- | 45.1161- | 110.3868- | 2- | 07- | | 0-M36288- | 10/24/76- | 11- | 2- | 1.0- | - | - | 5.8- | 210- | | -2-7-4-6-3-3-1-2-1-3-4-2- | | | | | | | | | | | | -1- | - | - | - | - | 0.54 |
| 30- | 45.0159- | 111.2165- | 2- | 07- | | 0-M36289- | 10/25/76- | 10- | 2- | 1.0- | - | - | 5.7- | 390- | | -1-6-1-6-3-3-1-2-1-4-4-2- | | | | | | | | | | | | -1- | - | - | - | - | 0.63 |
| 30- | 45.1274- | 110.3988- | 2- | 07- | | 0-M36290- | 10/24/76- | 13- | 4- | 2.0- | - | - | 5.7- | 200- | | -2-6-3-6-3-3-1-2-1-3-4-2- | | | | | | | | | | | | -1- | - | - | - | - | 0.28 |
| 30- | 45.0158- | 111.2151- | 2- | 07- | | 0-M36291- | 10/25/76- | 10- | 7- | 3.0- | - | - | 5.9- | 400- | | -1-6-1-6-3-3-1-2-1-3-4-2- | | | | | | | | | | | | -1- | - | - | - | - | 0.61 |
| 30- | 45.0718- | 111.2676- | 2- | 07- | | 0-M36292- | 10/26/76- | 9- | 3- | 1.0- | - | - | 6.1- | 360- | | -2-7-2-4-3-3-1-2-1-3-3-1- | | | | | | | | | | | | -1- | - | - | - | - | 0.61 |
| 30- | 45.0217- | 111.3078- | 2- | 07- | | 0-M36293- | 10/26/76- | 12- | 4- | 1.0- | - | - | 6.0- | 350- | | -2-1-4-6-3-3-1-2-1-3-3-1- | | | | | | | | | | | | -1- | - | - | - | - | 0.54 |
| 30- | 45.1614- | 110.7442- | 2- | 07- | | 0-M36294- | 11/02/76- | 8- | 1- | 1.0- | - | - | 5.5- | 80- | | -2-6-1-6-3-3-1-2-1-2-4-1- | | | | | | | | | | | | -1- | - | - | - | - | 0.61 |
| 30- | 45.1617- | 110.7217- | 2- | 07- | | 0-M36295- | 11/02/76- | 9- | 1- | 1.0- | - | - | 5.5- | 80- | | -2-6-2-6-3-3-1-2-1-4-3-1- | | | | | | | | | | | | -1- | - | - | - | - | 0.55 |
| 30- | 45.0243- | 111.1942- | 2- | 07- | | 0-M36296- | 10/25/76- | 9- | 2- | 1.0- | - | - | 5.9- | 410- | | -1-6-2-6-3-3-1-2-1-4-3-2- | | | | | | | | | | | | -1- | - | - | - | - | 0.63 |
| 30- | 45.0239- | 111.1959- | 2- | 07- | | 0-M36297- | 10/25/76- | 9- | 2- | 1.0- | - | - | 5.9- | 400- | | -1-6-2-6-3-3-1-2-1-4-3-2- | | | | | | | | | | | | -1- | - | - | - | - | 0.91 |
| 30- | 45.0834- | 110.4009- | 2- | 07- | | 0-M36298- | 10/24/76- | 11- | 1- | 1.0- | - | - | 5.7- | 200- | | -2-6-4-6-3-3-1-2-1-3-4-3- | | | | | | | | | | | | -1- | - | - | - | - | 0.16 |
| 30- | 45.1590- | 110.3352- | 2- | 07- | | 0-M36299- | 10/24/76- | 12- | 3- | 1.0- | - | - | 6.0- | 345- | | -2-7-2-4-3-3-1-2-1-4-4-2- | | | | | | | | | | | | -1- | - | - | - | - | 0.96 |
| 30- | 45.1109- | 110.4279- | 2- | 07- | | 0-M36300- | 10/25/76- | 9- | 3- | 1.4- | - | - | 6.1- | 495- | | -2-7-4-6-3-3-1-2-1-4-4-2- | | | | | | | | | | | | -1- | - | - | - | - | 0.93 |
| 30- | 45.0853- | 110.4025- | 2- | 07- | | 0-M36301- | 10/24/76- | 11- | 2- | 1.0- | - | - | 5.8- | 210- | | -2-6-4-6-3-3-1-2-1-3-4-2- | | | | | | | | | | | | -1- | - | - | - | - | 0.10 |
| 30- | 45.1811- | 110.3073- | 2- | 07- | | 0-M36302- | 10/24/76- | 11- | 3- | 1.5- | - | - | 5.9- | 350- | | -2-8-1-1-3-3-1-2-1-4-4-2- | | | | | | | | | | | | -1- | - | - | - | - | 0.34 |
| 30- | 45.1262- | 110.3808- | 2- | 07- | | 0-M36303- | 10/24/76- | 9- | 2- | 1.0- | - | - | 5.7- | 135- | | -2-7-2-4-3-3-1-2-1-4-4-2- | | | | | | | | | | | | -1- | - | - | - | - | 0.59 |
| 30- | 45.0069- | 111.3839- | 2- | 07- | | 0-M36304- | 10/26/76- | 13- | 4- | 1.0- | - | - | 5.6- | 290- | | -2-1-2-4-3-3-1-2-1-3-3-1- | | | | | | | | | | | | -1- | - | - | - | - | 0.62 |
| 30- | 45.0071- | 111.3856- | 2- | 07- | | 0-M36305- | 10/26/76- | 13- | 4- | 1.0- | - | - | 5.7- | 270- | | -2-1-2-4-3-3-1-2-1-3-3-1- | | | | | | | | | | | | -1- | - | - | - | - | 0.72 |
| 30- | 45.0018- | 111.2814- | 2- | 07- | | 0-M36306- | 10/26/76- | 13- | 4- | 1.0- | - | - | 6.0- | 360- | | -2-1-4-6-3-3-1-2-1-3-3-1- | | | | | | | | | | | | -1- | - | - | - | - | 0.40 |
| 30- | 45.0362- | 111.3991- | 2- | 07- | | 0-M36307- | 10/26/76- | 10- | 4- | 1.0- | - | - | 5.7- | 290- | | -2-7-2-4-3-3-1-2-1-3-3-1- | | | | | | | | | | | | -1- | - | - | - | - | 0.16 |
| 30- | 45.0353- | 111.4002- | 2- | 07- | | 0-M36308- | 10/26/76- | 10- | 4- | 1.0- | - | - | 5.7- | 280- | | -2-7-2-4-3-3-1-2-1-3-3-1- | | | | | | | | | | | | -1- | - | - | - | - | 0.72 |
| 30- | 45.1480- | 110.3451- | 2- | 07- | | 0-M36309- | 10/24/76- | 11- | 3- | 1.0- | - | - | 6.0- | 350- | | -2-7-2-4-3-3-1-2-1-4-4-2- | | | | | | | | | | | | -1- | - | - | - | - | 0.93 |
| 30- | 45.3946- | 110.6063- | 2- | 07- | | 0-M36310- | 10/30/76- | 9- | -5- | 1.0- | - | - | 5.7- | 165- | | -2-6-3-6-3-3-1-2-1-3-4-2- | | | | | | | | | | | | -1- | - | - | - | - | 0.62 |
| 30- | 45.0569- | 110.8688- | 2- | 07- | | 0-M36311- | 10/31/76- | 9- | - | 1.0- | - | - | 5.5- | 280- | | -2-6-1-6-3-3-1-2-3-4-3-1- | | | | | | | | | | | | -1- | - | - | - | - | 0.13 |
| 30- | 45.0463- | 110.8788- | 2- | 07- | | 0-M36312- | 10/31/76- | 10- | 1- | 1.0- | - | - | 5.5- | 80- | | -2-6-1-6-3-3-1-2-1-3-4-1- | | | | | | | | | | | | -1- | - | - | - | - | 0.10 |
| 30- | 45.3821- | 110.6121- | 2- | 07- | | 0-M36313- | 10/30/76- | 8- | -4- | 1.0- | - | - | 5.7- | 160- | | -2-6-3-6-3-3-1-2-1-3-4-2- | | | | | | | | | | | | -1- | - | - | - | - | 0.10 |
| 30- | 45.3753- | 111.1363- | 2- | 07- | | 0-M36314- | 09/18/76- | 15- | 15- | 8.5- | - | - | 5.6- | 820- | | -1-7-2-4-4-3-1-2-1-4-4-2- | | | | | | | | | | | | -8- | - | - | - | - | 0.75 |
| 30- | 45.3766- | 111.0885- | 2- | 07- | | 0-M36315- | 09/18/76- | 16- | 14- | 8.0- | - | - | 5.5- | 82- | | -1-7-3-7-3-3-1-2-1-4-4-2- | | | | | | | | | | | | -8- | - | - | - | - | 0.10 |
| 30- | 45.3761- | 111.0761- | 2- | 07- | | 0-M36316- | 09/18/76- | 16- | 12- | 7.5- | - | - | 5.5- | 94- | | -1-7-3-7-3-3-1-2-1-5-4-2- | | | | | | | | | | | | -1- | - | - | - | - | 1.12 |
| 30- | 45.3784- | 111.0226- | 2- | 07- | | 0-M36317- | 09/18/76- | 17- | 11- | 6.2- | - | - | 6.0- | 177- | | -1-6-3-4-3-3-1-3-1-5-4-2- | | | | | | | | | | | | -1- | - | - | - | - | 0.85 |
| 30- | 45.3578- | 111.0601- | 2- | 07- | | 0-M36318- | 09/18/76- | 18- | 12- | 9.1- | - | - | 5.6- | 88- | | -1-6-6-6-2-3-2-1-1-5-3-2- | | | | | | | | | | | | -1- | - | - | - | - | 0.24 |
| 30- | 45.3577- | 111.0626- | 2- | 07- | | 0-M36319- | 09/18/76- | 18- | 12- | 7.4- | - | - | 5.5- | 75- | | -1-6-3-6-3-3-1-3-1-5-3-2- | | | | | | | | | | | | -1- | - | - | - | - | 0.17 |
| 30- | 45.3713- | 111.2475- | 2- | 07- | | 0-M36320- | 09/18/76- | 20- | 13- | 8.5- | - | - | 5.2- | 48- | | -3-7-3-4-3-3-1-3-1-3-4-2- | | | | | | | | | | | | -8- | - | - | - | - | 0.27 |
| 30- | 45.4589- | 110.9275- | 2- | 07- | | 0-M36321- | 09/21/76- | 12- | 17- | 7.3- | - | - | 5.4- | 62- | | -1-4-3-4-3-3-1-3-1-3-5-1- | | | | | | | | | | | | -8- | - | - | - | - | 1.18 |
| 30- | 45.4430- | 110.9093- | 2- | 07- | | 0-M36322- | 09/21/76- | 12- | 17- | 8.8- | - | - | 5.2- | 49- | | -1-4-3-4-3-3-1-3-1-2-5-1- | | | | | | | | | | | | -1- | - | - | - | - | 0.10 |
| 30- | 45.4434- | 110.9622- | 2- | 07- | | 0-M36323- | 09/21/76- | 13- | 17- | 7.0- | - | - | 5.1- | 44- | | -3-4-3-4-3-3-1-1-1-2-4-1- | | | | | | | | | | | | -1- | - | - | - | - | 0.10 |
| 30- | 45.4224- | 110.9594- | 2- | 07- | | 0-M36324- | 09/21/76- | 14- | 17- | 7.2- | - | - | 5.3- | 46- | | -3-4-3-4-3-3-1-2-1-2-4-1- | | | | | | | | | | | | -1- | - | - | - | - | 0.10 |
| 30- | 45.1871- | 111.1288- | 2- | 07- | | 0-M36325- | 09/27/76- | 17- | 19- | 7.8- | - | - | 6.1- | 500- | | -3-7-4-6-2-3-1-2-2-2-4-1- | | | | | | | | | | | | -1- | - | - | - | - | 0.43 |
| 30- | 45.1857- | 111.1342- | 2- | 07- | | 0-M36326- | 09/27/76- | 17- | 19- | 8.0- | - | - | 6.0- | 332- | | -3-7-3-7-3-3-1-2-2-2-4-1- | | | | | | | | | | | | -1- | - | - | - | - | 0.29 |
| 30- | 45.2191- | 110.7401- | 2- | 07- | | 0-M36327- | 10/12/76- | 17- | 9- | 6.0- | - | - | 6.2- | 70- | | -1-6-2-6-3-3-1-2-1-4-3-2- | | | | | | | | | | | | -1- | - | - | - | - | 0.15 |
| 30- | 45.2333- | 110.6746- | 2- | 07- | | 0-M36328- | 10/12/76- | 10- | 7- | 6.0- | - | - | 5.8- | 165- | | -1-6-3-6-3-2-1-2-1-3-4-2- | | | | | | | | | | | | -1- | - | - | - | - | 0.57 |
| 30- | 45.1942- | 110.6431- | 2- | 07- | | 0-M36329- | 10/12/76- | 12- | 9- | 5.0-C- | - | - | 5.9- | 150- | | -1-6-2-4-4-2-1-2-1-3-4-2- | | | | | | | | | | | | -1- | - | - | - | - | 0.39 |
| 30- | 45.1353- | 111.3333- | 2- | 07- | | 0-M36330- | 10/15/76- | 13- | 9- | 6.0- | - | - | 5.7- | 150- | | -1-7-3-6-3-3-1-2-1-2-4-1- | | | | | | | | | | | | -1- | - | - | - | - | 0.96 |
| 30- | 45.2691- | 111.3406- | 2- | 07- | | 0-M36331- | 10/13/76- | 16- | 10- | 5.0- | - | - | 5.7- | 300- | | -1-6-3-6-3-2-1-2-1-3-3-1- | | | | | | | | | | | | -1- | - | - | - | - | 0.29 |
| 30- | 45.2535- | 111.4426- | 2- | 07- | | 0-M36332- | 10/14/76- | 15- | 10- | 4.0- | - | - | 5.8- | 150- | | -1-6-4-6-2-2-1-1-4-3-3-1- | | | | | | | | | | | | -1- | - | - | - | - | 0.27 |
| 30- | 45.1312- | 111.3213- | 2- | 07- | | 0-M36333- | 10/15/76- | 11- | 9- | 6.0- | - | - | 5.7- | 140- | | -1-7-4-6-2-2-1-3-1-4-3-1- | | | | | | | | | | | | -1- | - | - | - | - | 0.24 |
| 30- | 45.2178- | 111.2750- | 2- | 07- | | 0-M36334- | 10/14/76- | 8- | 7- | 4.0-C- | - | - | 5.6- | 130- | | -1-7-1-6-4-3-1-1-1-3-4-1- | | | | | | | | | | | | -1- | - | - | - | - | 0.10 |
| 30- | 45.1511- | 110.5024- | 2- | 07- | | 0-M36335- | 10/14/76- | 13- | 9- | 2.2-C- | - | - | 5.5- | 85- | | -1-6-1-6-3-3-1-2-3-4-4-1- | | | | | | | | | | | | -1- | - | - | - | - | 0.10 |
| 30- | 45.2127- | 111.2756- | 2- | 07- | | 0-M36336- | 10/14/76- | 8- | 7- | 4.0- | - | - | 5.7- | 320- | | -1-7-4-6-3-3-1-2-1-4-4-1- | | | | | | | | | | | | -1- | - | - | - | - | 0.26 |

# 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 (#) UNITS IN ppb |
| 30- | 45.2419- | 111.4065- | 2- | 07- | | 0- | M36337- | 10/14/76- | 13- | 11- | 4.0- | - | - | 5.6- | 150- | | -1- | 6- | 1- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 0.21 |
| 30- | 45.0913- | 111.2962- | 2- | 07- | | 0- | M36338- | 10/15/76- | 15- | 7- | 12.0- | C- | - | 5.7- | 260- | | -1- | 7- | 6- | 6- | 1- | 2- | 1- | 1- | 6- | 4- | 2- | 1- | -9- | - | - | - | - | 1.15 |
| 30- | 45.2374- | 111.4114- | 2- | 07- | | 0- | M36339- | 10/14/76- | 13- | 11- | 7.0- | - | - | 6.0- | 220- | | -1- | 6- | 3- | 6- | 2- | 3- | 1- | 2- | 4- | 4- | 3- | 1- | -1- | - | - | - | - | 0.88 |
| 30- | 45.2869- | 111.3854- | 2- | 06- | | 0- | M36340- | 10/13/76- | 17- | 9- | 6.0- | - | - | 5.7- | 320- | | -1- | 7- | 4- | 8- | 1- | 2- | 1- | -3- | 3- | 3- | 1- | -1- | - | - | - | - | 0.84 |
| 30- | 45.0880- | 111.2838- | 2- | 07- | | 0- | M36341- | 10/15/76- | 16- | 4- | 5.0- | - | - | 5.8- | 230- | | -1- | 6- | 5- | 6- | 2- | 2- | 1- | 1- | 2- | 2- | 3- | 1- | -1- | - | - | - | - | 1.86 |
| 30- | 45.2879- | 111.3929- | 2- | 07- | | 0- | M36342- | 10/13/76- | 17- | 10- | 6.0- | - | - | 5.8- | 250- | | -1- | 1- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 0.81 |
| 30- | 45.1362- | 110.5937- | 2- | 07- | | 0- | M36343- | 10/14/76- | 12- | 7- | 2.5- | - | - | 5.2- | 48- | | -1- | 6- | 2- | 6- | 3- | 3- | 1- | 1- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 0.10 |
| 30- | 45.1360- | 111.3328- | 2- | 07- | | 0- | M36344- | 10/15/76- | 13- | 8- | 5.0- | - | - | 5.6- | 140- | | -1- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 5- | 4- | 1- | -1- | - | - | - | - | 0.10 |
| 30- | 45.0898- | 111.2967- | 2- | 07- | | 0- | M36345- | 10/15/76- | 15- | 7- | 4.0- | - | - | 5.7- | 140- | | -1- | 7- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 2- | 4- | 1- | -1- | - | - | - | - | 0.47 |
| 30- | 45.1286- | 111.3077- | 2- | 07- | | 0- | M36346- | 10/15/76- | 10- | 9- | 4.0- | - | - | 5.3- | 70- | | -1- | 1- | 6- | 6- | 1- | 2- | 1- | 1- | 4- | 4- | 3- | 1- | -1- | - | - | - | - | 0.10 |
| 30- | 45.0822- | 110.7485- | 2- | 07- | | 0- | M36347- | 10/14/76- | 14- | 10- | 2.0- | C- | - | 5.5- | 110- | | -3- | 6- | 2- | 6- | 2- | 2- | 1- | 1- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 0.66 |
| 30- | 45.0725- | 110.7351- | 2- | 07- | | 0- | M36348- | 10/14/76- | 19- | 10- | 2.0- | - | - | 5.6- | 100- | | -3- | 7- | 3- | 6- | 3- | 3- | 2- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 0.57 |
| 30- | 45.1371- | 110.6553- | 2- | 07- | | 0- | M36349- | 10/14/76- | 17- | 5- | 2.2- | - | - | 5.5- | 120- | | -1- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 4- | 4- | 4- | 1- | -1- | - | - | - | - | 1.00 |
| 30- | 45.1220- | 110.6583- | 2- | 07- | | 0- | M36350- | 10/14/76- | 17- | 4- | 2.6- | - | - | 5.5- | 110- | | -4- | 6- | 3- | 6- | 3- | 2- | 1- | 2- | 1- | 2- | 3- | 1- | -1- | - | - | - | - | 0.66 |
| 30- | 45.1072- | 110.6513- | 2- | 07- | | 0- | M36351- | 10/14/76- | 17- | 4- | 3.8- | C- | - | 5.7- | 100- | | -1- | 7- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 2- | 3- | 1- | -1- | - | - | - | - | 0.81 |
| 30- | 45.0435- | 110.5514- | 2- | 07- | | 0- | M36352- | 10/14/76- | 8- | 4- | 2.3- | - | - | 5.5- | 60- | | -2- | 6- | 3- | 6- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 1- | -1- | - | - | - | - | 0.62 |
| 30- | 45.2394- | 110.9684- | 2- | 07- | | 0- | M36353- | 10/14/76- | 16- | 4- | 2.0- | C- | - | 5.5- | 100- | | -2- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 1.00 |
| 30- | 45.2021- | 111.0621- | 2- | 07- | | 0- | M36354- | 10/14/76- | 18- | 5- | 2.0- | - | - | 5.8- | 235- | | -1- | 1- | 3- | 6- | 3- | 2- | 1- | 2- | 1- | 2- | 3- | 1- | -1- | - | - | - | - | 1.16 |
| 30- | 45.2184- | 111.0082- | 2- | 07- | | 0- | M36355- | 10/14/76- | 17- | 4- | 1.7- | C- | - | 5.2- | 115- | | -2- | 7- | 1- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -1- | - | - | - | - | 0.19 |
| 30- | 45.2160- | 111.0076- | 2- | 07- | | 0- | M36356- | 10/14/76- | 17- | 4- | 1.7- | - | - | 5.2- | 105- | | -2- | 7- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 2- | 3- | 1- | -1- | - | - | - | - | 0.10 |
| 30- | 45.0637- | 110.5460- | 2- | 07- | | 0- | M36357- | 10/14/76- | 9- | 4- | 2.0- | C- | - | 5.2- | 45- | | -3- | 7- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 0.92 |
| 30- | 45.1084- | 110.5984- | 2- | 07- | | 0- | M36358- | 10/14/76- | 11- | 7- | 2.0- | - | - | 5.2- | 50- | | -3- | 2- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 0.27 |
| 30- | 45.1918- | 111.0731- | 2- | 07- | | 0- | M36359- | 10/14/76- | 18- | 5- | 1.8- | - | - | 5.8- | 245- | | -1- | 1- | 3- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 2- | 1- | -3- | - | - | - | - | 0.10 |
| 30- | 45.7625- | 111.0092- | 2- | 07- | | 0- | M36361- | 09/14/76- | 11- | 16- | 10.0- | C- | - | 8.2- | 285- | | 16- | 1- | 6- | 4- | 6- | 3- | 3- | 1- | 1- | 4- | 4- | 1- | 2- | -3- | - | - | - | - | 0.83 |
| 30- | 45.7797- | 111.0284- | 2- | 07- | | 0- | M36362- | 09/14/76- | 12- | 16- | 11.0- | C- | - | 8.1- | 187- | | 16- | 1- | 1- | 3- | 6- | 3- | 3- | 1- | 2- | 3- | 2- | 2- | 2- | -3- | - | - | - | - | 1.51 |
| 30- | 45.8127- | 111.0543- | 2- | 07- | | 0- | M36363- | 09/14/76- | 12- | 18- | 12.0- | C- | - | 8.3- | 232- | | 12- | 1- | 7- | 3- | 6- | 3- | 3- | 1- | 2- | 4- | 3- | 1- | 2- | -3- | - | - | - | - | 1.20 |
| 30- | 45.8368- | 111.0022- | 2- | 07- | | 0- | M36364- | 09/14/76- | 13- | 21- | 9.0- | C- | - | 7.4- | 255- | | 12- | 1- | 1- | 2- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 2- | 2- | -3- | - | - | - | - | 0.17 |
| 30- | 45.8647- | 111.0279- | 2- | 07- | | 0- | M36366- | 09/14/76- | 14- | 21- | 10.0- | - | - | 7.4- | 110- | | 12- | 1- | 1- | 3- | 6- | 3- | 2- | 1- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 0.48 |
| 30- | 45.8548- | 111.0594- | 2- | 07- | | 0- | M36368- | 09/14/76- | 15- | 21- | 10.0- | C- | - | 8.1- | 250- | | 24- | 1- | 6- | 4- | 6- | 2- | 2- | 1- | 3- | 2- | 4- | 2- | 2- | -3- | - | - | - | - | 0.33 |
| 30- | 45.8762- | 111.0721- | 2- | 07- | | 0- | M36369- | 09/14/76- | 15- | 20- | 11.0- | C- | - | 8.1- | 162- | | 12- | 1- | 1- | 3- | 6- | 3- | 2- | 1- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 0.33 |
| 30- | 45.8646- | 111.0594- | 2- | 07- | | 0- | M36370- | 09/14/76- | 16- | 20- | 11.0- | C- | - | 7.4- | 130- | | 8- | 1- | 6- | 4- | 6- | 2- | 2- | 1- | 3- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 0.69 |
| 30- | 45.8467- | 111.0595- | 2- | 07- | | 0- | M36371- | 09/14/76- | 16- | 20- | 11.0- | C- | - | 8.3- | 260- | | 12- | 1- | 1- | 3- | 6- | 3- | 3- | 1- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 0.35 |
| 30- | 45.4990- | 110.9875- | 2- | 07- | | 0- | M36372- | 09/15/76- | 9- | 4- | 5.0- | C- | - | 7.7- | 245- | | 7- | 3- | 4- | - | - | 2- | 3- | 1- | 2- | 4- | 3- | 2- | 1- | -1- | - | - | - | - | 0.47 |
| 30- | 45.4841- | 110.9792- | 2- | 07- | | 0- | M36373- | 09/15/76- | 11- | 9- | 6.0- | C- | - | 7.5- | 134- | | 4- | 3- | 4- | 3- | 4- | 4- | 2- | 1- | 2- | 1- | 4- | 3- | 1- | -1- | - | - | - | - | 0.57 |
| 30- | 45.4752- | 110.9520- | 2- | 07- | | 0- | M36374- | 09/15/76- | 12- | 11- | 7.1- | C- | - | 7.2- | 45- | | 5- | 3- | 4- | 4- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 2- | 1- | -1- | - | - | - | - | 0.45 |
| 30- | 45.4729- | 110.9582- | 2- | 07- | | 0- | M36375- | 09/15/76- | 12- | 14- | 9.0- | C- | - | 7.2- | 55- | | 4- | 3- | 4- | 4- | 4- | 3- | 2- | 1- | 2- | 4- | 4- | 2- | 1- | -1- | - | - | - | - | 1.15 |
| 30- | 45.4989- | 110.9792- | 2- | 07- | | 0- | M36376- | 09/15/76- | 13- | 18- | 6.0- | C- | - | 7.5- | 140- | | 6- | 1- | 1- | 4- | 4- | 3- | 2- | 1- | 2- | 1- | 3- | 2- | 2- | -1- | - | - | - | - | 0.34 |
| 30- | 45.7868- | 111.1112- | 2- | 07- | | 0- | M36377- | 09/15/76- | 15- | 28- | 19.6- | C- | - | 6.0- | 398- | | -4- | -5- | 6- | 2- | 3- | 1- | 1- | 4- | 3- | 2- | 2- | -3- | - | - | - | - | 1.37 |
| 30- | 45.8112- | 111.1244- | 2- | 07- | | 0- | M36378- | 09/15/76- | 16- | 26- | 19.2- | C- | - | 6.0- | 410- | | -4- | -7- | -2- | 3- | 1- | 1- | 4- | 3- | 2- | 2- | -3- | - | - | - | - | 1.94 |
| 30- | 45.8204- | 111.1261- | 2- | 07- | | 0- | M36379- | 09/15/76- | 18- | 22- | 19.1- | C- | - | 6.2- | 350- | | -4- | -7- | -3- | 3- | 3- | 2- | 4- | 4- | 2- | 2- | -3- | - | - | - | - | 1.78 |
| 30- | 45.7375- | 111.7448- | 2- | 02- | | 0- | M36380- | 10/19/76- | 14- | 5- | 1.0- | - | - | 5.8- | 470- | | -2- | 7- | 4- | 1- | 2- | 2- | 4- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 0.60 |
| 30- | 45.7169- | 111.7075- | 2- | 02- | | 0- | M36381- | 10/19/76- | 15- | 5- | 1.0- | - | - | 5.6- | 420- | | -2- | 7- | 4- | 1- | 2- | 2- | 4- | 2- | 3- | 3- | 2- | 2- | -3- | - | - | - | - | 0.19 |
| 30- | 45.5750- | 111.7036- | 2- | 02- | | 0- | M36382- | 10/19/76- | 15- | 5- | 1.0- | - | - | 5.7- | 340- | | -2- | 7- | 4- | 1- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 0.31 |
| 30- | 45.5662- | 111.6415- | 2- | 02- | | 0- | M36384- | 10/19/76- | 16- | 5- | 1.5- | - | - | 5.3- | 345- | | -2- | 7- | 4- | 1- | 2- | 2- | 3- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 0.28 |
| 30- | 45.5526- | 111.6568- | 2- | 02- | | 0- | M36385- | 10/19/76- | 16- | 4- | 1.0- | - | - | 5.2- | 340- | | -2- | 7- | 5- | 6- | 2- | 2- | 2- | 2- | 3- | 4- | 3- | 3- | -3- | - | - | - | - | 0.31 |
| 30- | 45.5330- | 111.6383- | 2- | 02- | | 0- | M36386- | 10/19/76- | 17- | 4- | - | - | - | 5.6- | 240- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 3- | -3- | - | - | - | - | 0.18 |
| 30- | 45.5021- | 111.6436- | 2- | 02- | | 0- | M36387- | 10/19/76- | 18- | 4- | 1.0- | - | - | 5.3- | 270- | | -2- | 7- | 4- | 1- | 2- | 2- | 4- | 2- | 3- | 3- | 3- | 3- | -3- | - | - | - | - | 0.24 |
| 30- | 45.7291- | 111.8193- | 2- | 02- | | 0- | M36388- | 10/19/76- | 9- | 1- | 2.2- | - | - | 5.5- | 175- | | -2- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 0.27 |
| 30- | 45.7366- | 111.8504- | 2- | 02- | | 0- | M36389- | 10/19/76- | 8- | -2- | 0.2- | - | - | 5.7- | 255- | | -2- | 7- | 3- | 6- | 3- | 3- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 0.24 |
| 30- | 45.6992- | 111.9177- | 2- | 02- | | 0- | M36396- | 10/19/76- | 10- | 1- | 2.0- | - | - | 5.5- | 210- | | -2- | 1- | 5- | 6- | 3- | 3- | 1- | 2- | 1- | 2- | 3- | 2- | -3- | - | - | - | - | 0.99 |
| 30- | 45.6636- | 111.9170- | 2- | 02- | | 0- | M36397- | 10/19/76- | 12- | 2- | 3.4- | - | - | 5.5- | 275- | | -2- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 0.46 |

# 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 (θ) UNITS IN ppb |
| 30- | 45.7220- | 111.9597- | 2- | 02- | | 0-M36399- | 10/19/76- | 10- | 1- | 1.4- | - | - | 5.7- | 330- | | -2- | 1- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 2- | 2- | 2- | -3- | - | - | - | - | 0.29 |
| 30- | 45.7226- | 111.9633- | 2- | 02- | | 0-M36400- | 10/19/76- | 10- | 1- | 1.4- | - | - | 5.5- | 275- | | -2- | 1- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 2- | 3- | 2- | -8- | - | - | - | - | 0.18 |
| 30- | 45.7281- | 111.9722- | 2- | 02- | | 0-M36401- | 10/19/76- | 11- | 2- | 2.2- | - | - | 5.7- | 155- | | -2- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 2- | 2- | -8- | - | - | - | - | 0.35 |
| 30- | 45.6442- | 111.9231- | 2- | 02- | | 0-M36406- | 10/19/76- | 13- | 2- | 3.4- | - | - | 5.5- | 225- | | -2- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 2- | 3- | 2- | -3- | - | - | - | - | 0.66 |
| 30- | 45.6236- | 111.9453- | 2- | 02- | | 0-M36407- | 10/19/76- | 13- | 2- | 2.4- | - | - | 5.7- | 360- | | -2- | 7- | 4- | 6- | -1- | -2- | 1- | 2- | 3- | 2- | -3- | - | - | - | - | - | - | 0.21 |
| 30- | 45.6752- | 111.7675- | 2- | 02- | | 0-M36409- | 10/19/76- | 14- | 2- | 2.2- | - | - | 5.5- | 250- | | -2- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 2- | 2- | -3- | - | - | - | - | 0.10 |
| 30- | 45.6230- | 111.8578- | 2- | 02- | | 0-M36412- | 10/19/76- | 16- | 2- | 3.2- | - | - | 5.5- | 175- | | -2- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 0.21 |
| 30- | 45.6202- | 111.8639- | 2- | 02- | | 0-M36413- | 10/19/76- | 15- | 2- | 2.0- | - | - | 5.5- | 210- | | -2- | 7- | 3- | 1- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | 1.01 |
| 30- | 45.6071- | 111.8653- | 2- | 02- | | 0-M36414- | 10/19/76- | 16- | 2- | 2.0- | - | - | 5.7- | 180- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 1.11 |
| 30- | 45.6020- | 111.9005- | 2- | 01- | | 0-M36415- | 10/19/76- | 16- | 1- | 4.0- | - | - | 5.5- | 200- | | -2- | 7- | 3- | 7- | 2- | 3- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 1.37 |
| 30- | 45.6020- | 111.9035- | 2- | 02- | | 0-M36416- | 10/19/76- | 16- | 1- | 1.0- | - | - | 5.5- | 190- | | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 0.96 |
| 30- | 45.5944- | 111.9009- | 2- | 02- | | 0-M36417- | 10/19/76- | 17- | 2- | 2.0- | - | - | 5.9- | 210- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 3- | 2- | 3- | 2- | -3- | - | - | - | - | 0.34 |
| 30- | 45.5684- | 111.9208- | 2- | 02- | | 0-M36418- | 10/19/76- | 17- | 3- | 1.5- | - | - | 5.9- | 220- | | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 0.24 |
| 30- | 45.5595- | 111.9580- | 2- | 02- | | 0-M36419- | 10/19/76- | 17- | 2- | 1.0- | - | - | 5.5- | 220- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | 0.85 |
| 30- | 45.6077- | 111.8087- | 2- | 02- | | 0-M36421- | 10/19/76- | 18- | 2- | 2.5- | - | - | 5.7- | 230- | | -2- | 7- | 5- | 6- | 2- | 2- | 1- | 2- | 2- | 1- | 3- | 3- | -3- | - | - | - | - | 0.75 |
| 30- | 45.6024- | 111.7943- | 2- | 02- | | 0-M36422- | 10/19/76- | 18- | 2- | 1.5- | - | - | 5.2- | 180- | | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 0.49 |
| 30- | 45.5684- | 111.7628- | 2- | 02- | | 0-M36423- | 10/19/76- | 18- | 1- | 1.0- | - | - | 5.2- | 190- | | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 3- | 2- | 3- | 3- | -3- | - | - | - | - | 0.36 |
| 30- | 45.5651- | 111.7604- | 2- | 02- | | 0-M36424- | 10/20/76- | 8- | - | | - | - | 5.4- | 245- | | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 0.13 |
| 30- | 45.5630- | 111.7505- | 2- | 02- | | 0-M36425- | 10/20/76- | 8- | -1- | | - | - | 5.5- | 190- | | -2- | 7- | 5- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | 0.26 |
| 30- | 45.1064- | 110.6532- | 2- | 07- | | 0-M36426- | 10/14/76- | 17- | 4- | 2.3- | C- | - | 5.5- | 90- | | -1- | 4- | 3- | 6- | 2- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 0.19 |
| 30- | 45.2914- | 110.9822- | 2- | 07- | | 0-M36427- | 10/14/76- | 11- | 5- | 2.3- | - | - | 5.2- | 105- | | -1- | 6- | 1- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 0.25 |
| 30- | 45.2351- | 110.1491- | 2- | 07- | | 0-M36428- | 10/16/76- | 18- | 1- | 2.0- | - | - | 5.5- | 65- | | -2- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 0.97 |
| 30- | 45.2677- | 111.0301- | 2- | 07- | | 0-M36429- | 10/14/76- | 12- | 5- | 2.0- | C- | - | 5.5- | 95- | | -1- | 6- | 2- | 6- | 4- | 3- | 1- | 2- | 3- | 4- | 4- | 1- | -1- | - | - | - | - | 0.48 |
| 30- | 45.2337- | 110.1494- | 2- | 07- | | 0-M36430- | 10/16/76- | 18- | 1- | 2.0- | C- | - | 5.2- | 62- | | -2- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 0.25 |
| 30- | 45.2259- | 110.2588- | 2- | 07- | | 0-M36431- | 10/16/76- | 16- | 5- | 2.5- | C- | - | 5.5- | 100- | | -1- | 1- | 2- | 6- | 2- | 2- | 1- | 2- | 1- | 3- | 2- | 2- | -1- | - | - | - | - | 0.10 |
| 30- | 45.2049- | 110.2402- | 2- | 07- | | 0-M36432- | 10/16/76- | 16- | 5- | 2.5- | C- | - | 5.2- | 100- | | -1- | 7- | 4- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 2- | 2- | -1- | - | - | - | - | 0.30 |
| 30- | 45.1139- | 110.5067- | 2- | 07- | | 0-M36433- | 10/14/76- | 14- | 7- | 4.0- | C- | - | 5.5- | 90- | | -1- | 7- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 0.19 |
| 30- | 45.1123- | 110.5074- | 2- | 07- | | 0-M36434- | 10/14/76- | 14- | 7- | 4.0- | C- | - | 5.2- | 80- | | -1- | 7- | 2- | 6- | 3- | 2- | 1- | 2- | 4- | 4- | 3- | 1- | -1- | - | - | - | - | 0.56 |
| 30- | 45.3112- | 110.9183- | 2- | 07- | | 0-M36435- | 10/14/76- | 8- | 2- | 3.2- | - | - | 5.4- | 150- | | -1- | 6- | 2- | 6- | 3- | 2- | 1- | 2- | 2- | 4- | 3- | 1- | -1- | - | - | - | - | 0.62 |
| 30- | 45.2905- | 110.9835- | 2- | 07- | | 0-M36436- | 10/14/76- | 11- | 5- | 3.4- | - | - | 5.5- | 90- | | -1- | 6- | 1- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 2.18 |
| 30- | 45.3079- | 110.9262- | 2- | 07- | | 0-M36437- | 10/14/76- | 8- | 2- | 3.0- | - | - | 5.4- | 130- | | -1- | 7- | 4- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 0.33 |
| 30- | 45.2668- | 111.0400- | 2- | 07- | | 0-M36438- | 10/14/76- | 12- | 5- | 2.0- | C- | - | 5.5- | 140- | | -1- | 7- | 3- | 6- | 2- | 3- | 1- | 1- | 1- | 2- | 3- | 1- | -1- | - | - | - | - | 0.54 |
| 30- | 45.2758- | 111.0103- | 2- | 07- | | 0-M36439- | 10/14/76- | 12- | 5- | 2.2- | - | - | 5.5- | 100- | | -1- | 6- | 2- | 6- | 2- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 0.46 |
| 30- | 45.2999- | 110.9515- | 2- | 07- | | 0-M36440- | 10/14/76- | 9- | 3- | 2.2- | C- | - | 5.5- | 150- | | -1- | 6- | 2- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 0.17 |
| 30- | 45.1115- | 110.6007- | 2- | 07- | | 0-M36441- | 10/14/76- | 11- | 7- | 2.0- | - | - | 5.5- | 45- | | -1- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 0.90 |
| 30- | 45.2849- | 110.9781- | 2- | 07- | | 0-M36442- | 10/14/76- | 10- | 2- | 2.0- | C- | - | 5.3- | 150- | | -1- | 6- | 4- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -1- | - | - | - | - | 0.17 |
| 30- | 45.2655- | 111.0401- | 2- | 07- | | 0-M36443- | 10/14/76- | 12- | 5- | 2.0- | C- | - | 5.2- | 140- | | -1- | 6- | 2- | 6- | 3- | 2- | 1- | 2- | 3- | 2- | 3- | 1- | -1- | - | - | - | - | 0.29 |
| 30- | 45.3147- | 110.9712- | 2- | 07- | | 0-M36444- | 10/14/76- | 10- | 2- | 2.0- | - | - | 5.3- | 150- | | -1- | 7- | 4- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 2- | 1- | -1- | - | - | - | - | 0.10 |
| 30- | 45.3913- | 110.3090- | 2- | 07- | | 0-M36445- | 10/16/76- | 18- | 5- | 3.0- | C- | - | 5.2- | 65- | | -2- | 7- | 1- | 6- | 2- | 2- | 1- | 2- | 1- | 4- | 3- | 2- | -1- | - | - | - | - | 0.42 |
| 30- | 45.1853- | 110.1590- | 2- | 07- | | 0-M36446- | 10/16/76- | 17- | 5- | 2.5- | C- | - | 5.2- | 60- | | -2- | 7- | 1- | 6- | 2- | 2- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 0.41 |
| 30- | 45.0015- | 111.2798- | 2- | 07- | | 0-M36447- | 10/26/76- | 13- | 4- | 1.0- | - | - | 6.0- | 360- | | -2- | 1- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 1.34 |
| 30- | 45.2475- | 111.0651- | 2- | 07- | | 0-M36448- | 10/14/76- | 13- | 4- | 2.1- | C- | - | 5.4- | 130- | | -1- | 7- | 3- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 2- | 1- | -1- | - | - | - | - | 0.77 |
| 30- | 45.2081- | 110.1847- | 2- | 07- | | 0-M36449- | 10/16/76- | 17- | 5- | 2.5- | - | - | 5.5- | 90- | | -1- | 7- | 1- | 6- | 3- | 3- | 1- | 2- | 2- | 2- | 3- | 2- | -1- | - | - | - | - | 0.18 |
| 30- | 45.2122- | 110.2558- | 2- | 07- | | 0-M36450- | 10/16/76- | 16- | 5- | 2.5- | C- | - | 5.2- | 70- | | -1- | 7- | 1- | 6- | 4- | 2- | 1- | 2- | 1- | 5- | 4- | 2- | -1- | - | - | - | - | 0.17 |
| 30- | 45.3396- | 110.3236- | 2- | 07- | | 0-M36451- | 10/16/76- | 9- | 6- | 3.0- | C- | - | 5.2- | 55- | | -1- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 0.17 |
| 30- | 45.4861- | 110.2604- | 2- | 07- | | 0-M36452- | 10/16/76- | 8- | 1- | 3.0- | C- | - | 5.2- | 70- | | -1- | 7- | 1- | 6- | 3- | 2- | 1- | 2- | 2- | 2- | 4- | 3- | -1- | - | - | - | - | 0.23 |
| 30- | 45.4420- | 110.2540- | 2- | 07- | | 0-M36453- | 10/16/76- | 13- | 4- | 3.5- | C- | - | 5.2- | 60- | | -1- | 7- | 2- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 1.34 |
| 30- | 45.3816- | 110.3584- | 2- | 07- | | 0-M36454- | 10/16/76- | 18- | 5- | 3.0- | C- | - | 5.5- | 60- | | -1- | 6- | 1- | 6- | 2- | 2- | 1- | 2- | 2- | 4- | 2- | 2- | -1- | - | - | - | - | 0.10 |
| 30- | 45.4579- | 110.2620- | 2- | 07- | | 0-M36455- | 10/16/76- | 10- | 6- | 3.0- | - | - | 5.2- | 55- | | -1- | 7- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 0.83 |
| 30- | 45.2277- | 110.2636- | 2- | 07- | | 0-M36456- | 10/16/76- | 16- | 6- | 2.5- | C- | - | 5.2- | 110- | | -1- | 7- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 0.35 |
| 30- | 45.2427- | 110.2634- | 2- | 07- | | 0-M36457- | 10/16/76- | 16- | 6- | 3.0- | C- | - | 5.3- | 100- | | -1- | 7- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 0.29 |

# 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 |
| 30- | 45.2361- | 110.1886- | 2- | 07- | | 0- | M36458- | 10/16/76- | 18- | 3- | 2.5- | - | - | 5.7- | 45- | | -1- | 7- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 1.04 |
| 30- | 45.2599- | 110.2928- | 2- | 07- | | 0- | M36459- | 10/16/76- | 15- | 8- | 3.5- | C- | - | 5.5- | 45- | | -1- | 7- | 1- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 0.23 |
| 30- | 45.3798- | 110.3174- | 2- | 07- | | 0- | M36460- | 10/16/76- | 17- | 7- | 3.5- | - | - | 5.7- | 50- | | -1- | 7- | 2- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 1.46 |
| 30- | 45.3978- | 110.3303- | 2- | 07- | | 0- | M36461- | 10/16/76- | 17- | 7- | 3.5- | C- | - | 5.5- | 48- | | -1- | 2- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 0.57 |
| 30- | 45.3880- | 110.2747- | 2- | 07- | | 0- | M36462- | 10/16/76- | 16- | 9- | 3.0- | C- | - | 5.7- | 49- | | -1- | 7- | 3- | 6- | 2- | 2- | 1- | 2- | 1- | 4- | 3- | 2- | -1- | - | - | - | - | 0.88 |
| 30- | 45.4990- | 111.4592- | 2- | 07- | | 0- | M36463- | 10/19/76- | 13- | 14- | 4.0- | - | - | 5.7- | 235- | | -1- | 7- | 3- | 6- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 1- | -1- | - | - | - | - | 1.67 |
| 30- | 45.3363- | 110.2886- | 2- | 07- | | 0- | M36464- | 10/16/76- | 8- | 3- | 5.5- | C- | - | 5.2- | 75- | | -1- | 7- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 3- | 2- | -1- | - | - | - | - | 0.24 |
| 30- | 45.3161- | 110.2918- | 2- | 07- | | 0- | M36465- | 10/16/76- | 12- | 8- | 3.5- | - | - | 5.7- | 160- | | -1- | 7- | 3- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -1- | - | - | - | - | 5.16 |
| 30- | 45.2615- | 110.3028- | 2- | 07- | | 0- | M36466- | 10/16/76- | 15- | 9- | 3.0- | - | - | 5.2- | 50- | | -1- | 7- | 4- | 6- | 2- | 3- | 1- | 2- | 1- | 2- | 4- | 2- | -1- | - | - | - | - | 2.36 |
| 30- | 45.3104- | 110.3092- | 2- | 07- | | 0- | M36467- | 10/16/76- | 12- | 8- | 3.5- | - | - | 5.5- | 150- | | -1- | 7- | 3- | 6- | 2- | 3- | 1- | 2- | 1- | 3- | 2- | 2- | -1- | - | - | - | - | 9.19 |
| 30- | 45.4820- | 111.4985- | 2- | 07- | | 0- | M36468- | 10/19/76- | 14- | 12- | 4.0- | C- | - | 5.7- | 240- | | -1- | 7- | 2- | 6- | 3- | 2- | 1- | 1- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 2.63 |
| 30- | 45.2178- | 110.2506- | 2- | 07- | | 0- | M36469- | 10/16/76- | 16- | 5- | 2.5- | - | - | 5.2- | 45- | | -1- | 7- | 3- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 0.87 |
| 30- | 45.3360- | 110.2726- | 2- | 07- | | 0- | M36470- | 10/16/76- | 8- | 3- | 5.0- | - | - | 5.2- | 45- | | -1- | 7- | 4- | 6- | 2- | 2- | 1- | 2- | 1- | 3- | 2- | 2- | -1- | - | - | - | - | 1.50 |
| 30- | 45.0564- | 111.0831- | 2- | 07- | | 0- | M36471- | 10/25/76- | 14- | 4- | 1.5- | - | - | 5.7- | 140- | | -2- | 7- | 3- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 0.33 |
| 30- | 45.2309- | 110.9883- | 2- | 07- | | 0- | M36472- | 10/14/76- | 16- | 4- | 2.2- | C- | - | 5.5- | 105- | | -2- | 7- | 1- | 6- | 2- | 3- | 1- | 2- | 1- | 2- | 3- | 1- | -1- | - | - | - | - | 0.98 |
| 30- | 45.2085- | 111.0434- | 2- | 07- | | 0- | M36473- | 10/14/76- | 18- | 2- | 2.0- | - | - | 5.8- | 240- | | -1- | 1- | 3- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -1- | - | - | - | - | 1.19 |
| 30- | 45.3978- | 111.2951- | 2- | 07- | | 0- | M36474- | 10/10/76- | 11- | 8- | 4.0- | - | - | 6.0- | 40- | | -2- | 1- | 1- | 7- | 4- | 3- | 1- | | -1- | 4- | 4- | 1- | -1- | - | - | - | - | 0.10 |
| 30- | 45.3948- | 111.2919- | 2- | 07- | | 0- | M36475- | 10/10/76- | 10- | 8- | 4.0- | - | - | 6.0- | 55- | | -2- | 7- | 1- | 7- | 4- | 3- | 1- | 2- | 1- | 4- | | -1- | -1- | - | - | - | - | 1.00 |
| 30- | 45.2404- | 110.5621- | 2- | 07- | | 0- | M36476- | 10/09/76- | 8- | 5- | 4.2- | - | - | 5.2- | 70- | | -2- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 1- | -1- | - | - | - | - | 0.10 |
| 30- | 45.1890- | 110.5961- | 2- | 07- | | 0- | M36477- | 10/09/76- | 11- | 8- | 5.0- | - | - | 5.8- | 190- | | -2- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 1- | -1- | - | - | - | - | 0.17 |
| 30- | 45.2402- | 110.5640- | 2- | 07- | | 0- | M36478- | 10/09/76- | 8- | 5- | 4.0- | - | - | 5.2- | 72- | | -2- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 1- | -1- | - | - | - | - | 1.43 |
| 30- | 45.2306- | 110.5564- | 2- | 07- | | 0- | M36479- | 10/09/76- | 9- | 5- | 4.3- | - | - | 5.8- | 189- | | -2- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 1- | -1- | - | - | - | - | 0.42 |
| 30- | 45.2099- | 110.5760- | 2- | 07- | | 0- | M36480- | 10/09/76- | 10- | 8- | 4.2- | - | - | 5.2- | 70- | | -2- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 4- | 3- | 1- | -1- | - | - | - | - | 0.10 |
| 30- | 45.2049- | 110.5745- | 2- | 07- | | 0- | M36481- | 10/09/76- | 10- | 8- | 5.8- | - | - | 5.6- | 128- | | -2- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 4- | 3- | 1- | -1- | - | - | - | - | 0.10 |
| 30- | 45.2047- | 110.5711- | 2- | 07- | | 0- | M36482- | 10/09/76- | 10- | 8- | 6.0- | - | - | 5.6- | 128- | | -2- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 4- | 3- | 1- | -1- | - | - | - | - | 0.39 |
| 30- | 45.3207- | 110.4729- | 2- | 07- | | 0- | M36483- | 10/09/76- | 9- | 11- | 6.5- | - | - | 6.1- | 410- | | -1- | 1- | 3- | 1- | 3- | 2- | 1- | 2- | 1- | 5- | 3- | 2- | -1- | - | - | - | - | 0.61 |
| 30- | 45.3268- | 110.4429- | 2- | 07- | | 0- | M36484- | 10/09/76- | 13- | 12- | 7.0- | - | - | 5.7- | 200- | | -1- | 3- | 2- | 7- | 3- | 2- | 1- | 2- | 3- | 3- | 3- | 2- | -1- | - | - | - | - | 0.63 |
| 30- | 45.3361- | 110.4293- | 2- | 07- | | 0- | M36485- | 10/09/76- | 13- | 12- | 7.0- | - | - | 5.3- | 145- | | -1- | 7- | 2- | 6- | 2- | 2- | 1- | 2- | | -4- | 2- | 2- | -1- | - | - | - | - | 0.53 |
| 30- | 45.3406- | 110.3966- | 2- | 07- | | 0- | M36486- | 10/09/76- | 14- | 11- | 6.0- | C- | - | 5.4- | 155- | | -1- | 6- | 1- | 6- | 4- | 3- | 1- | 2- | 3- | 2- | 5- | 2- | -1- | - | - | - | - | 0.17 |
| 30- | 45.2674- | 110.4690- | 2- | 07- | | 0- | M36487- | 10/10/76- | 12- | 12- | 7.0- | - | - | 5.6- | 150- | | -1- | 4- | 3- | 7- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 0.10 |
| 30- | 45.2350- | 110.4937- | 2- | 07- | | 0- | M36488- | 10/10/76- | 8- | 6- | 6.0- | - | - | 5.8- | 120- | | -1- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 0.72 |
| 30- | 45.2063- | 110.5221- | 2- | 07- | | 0- | M36489- | 10/10/76- | 7- | 5- | 6.0- | - | - | 5.8- | 130- | | -1- | 7- | 2- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 3- | -1- | - | - | - | - | 0.17 |
| 30- | 45.2186- | 110.4796- | 2- | 07- | | 0- | M36490- | 10/10/76- | 9- | 6- | 6.0- | - | - | 5.8- | 130- | | -1- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 3- | 3- | 4- | 3- | -1- | - | - | - | - | 0.10 |
| 30- | 45.2677- | 110.4342- | 2- | 07- | | 0- | M36491- | 10/10/76- | 14- | 11- | 6.0- | - | - | 5.6- | 140- | | -1- | 6- | 2- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 4- | -1- | - | - | - | - | 0.10 |
| 30- | 45.2604- | 110.4192- | 2- | 07- | | 0- | M36492- | 10/10/76- | 15- | 10- | 5.0- | - | - | 5.6- | 150- | | -1- | 6- | 3- | 6- | 2- | 2- | 1- | 2- | 1- | 3- | 3- | 4- | -1- | - | - | - | - | 0.25 |
| 30- | 45.3316- | 110.4340- | 2- | 07- | | 0- | M36493- | 10/09/76- | 13- | 15- | 7.0- | - | - | 5.6- | 210- | | -1- | 3- | 3- | 7- | 2- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 0.53 |
| 30- | 45.2639- | 110.4011- | 2- | 07- | | 0- | M36494- | 10/10/76- | 15- | 9- | 5.0- | - | - | 5.7- | 140- | | -1- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 4- | -1- | - | - | - | - | 0.10 |
| 30- | 45.2477- | 110.4414- | 2- | 07- | | 0- | M36495- | 10/10/76- | 13- | 12- | 7.0- | - | - | 5.7- | 145- | | -1- | 6- | 3- | 7- | 3- | 2- | 1- | 2- | 3- | 3- | 4- | 4- | -1- | - | - | - | - | 0.19 |
| 30- | 45.2721- | 110.3858- | 2- | 07- | | 0- | M36496- | 10/10/76- | 17- | 9- | 6.0- | - | - | 5.6- | 135- | | -1- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 4- | -1- | - | - | - | - | 0.15 |
| 30- | 45.2714- | 110.4596- | 2- | 07- | | 0- | M36497- | 10/10/76- | 12- | 16- | 6.0- | - | - | 5.6- | 200- | | -1- | 3- | 3- | 7- | 3- | 2- | 1- | 2- | 1- | 4- | 4- | 1- | -1- | - | - | - | - | 0.31 |
| 30- | 45.2687- | 110.4685- | 2- | 07- | | 0- | M36498- | 10/10/76- | 12- | 16- | 7.0- | - | - | 5.6- | 140- | | -1- | 4- | 3- | 7- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 0.29 |
| 30- | 45.2956- | 110.4171- | 2- | 07- | | 0- | M36499- | 10/10/76- | 18- | 8- | 5.0- | C- | - | 6.1- | 350- | | -1- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 4- | -1- | - | - | - | - | 0.37 |
| 30- | 45.3053- | 110.6840- | 2- | 07- | | 0- | M36500- | 10/11/76- | 10- | 9- | 6.2- | - | - | 5.5- | 107- | | -2- | 7- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 2- | 5- | 3- | -1- | - | - | - | - | 0.53 |
| 30- | 45.2899- | 110.6790- | 2- | 07- | | 0- | M36501- | 10/11/76- | 10- | 9- | 5.9- | - | - | 5.5- | 110- | | -2- | 7- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 2- | 5- | 3- | -1- | - | - | - | - | 0.10 |
| 30- | 45.2539- | 110.6647- | 2- | 07- | | 0- | M36502- | 10/11/76- | 12- | 11- | 6.2- | - | - | 5.5- | 110- | | -2- | 7- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 4- | -1- | - | - | - | - | 1.61 |
| 30- | 45.2528- | 110.6681- | 2- | 07- | | 0- | M36503- | 10/11/76- | 12- | 11- | 6.2- | - | - | 5.5- | 100- | | -2- | 7- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 4- | -1- | - | - | - | - | 0.34 |
| 30- | 45.2295- | 110.6530- | 2- | 07- | | 0- | M36504- | 10/11/76- | 14- | 11- | 6.0- | - | - | 5.5- | 102- | | -2- | 7- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 4- | -1- | - | - | - | - | 0.14 |
| 30- | 45.2691- | 110.6791- | 2- | 07- | | 0- | M36505- | 10/11/76- | 11- | 9- | 6.2- | - | - | 5.5- | 100- | | -2- | 7- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 2- | 5- | 3- | -1- | - | - | - | - | 0.66 |
| 30- | 45.2177- | 110.7363- | 2- | 07- | | 0- | M36506- | 10/12/76- | 17- | 9- | 6.0- | - | - | 5.2- | 60- | | -1- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 3- | 2- | -1- | - | - | - | - | 0.56 |
| 30- | 45.2086- | 110.7095- | 2- | 07- | | 0- | M36507- | 10/12/76- | 17- | 10- | 6.0- | - | - | 5.1- | 60- | | -1- | 6- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 0.63 |
| 30- | 45.2071- | 110.6946- | 2- | 07- | | 0- | M36508- | 10/12/76- | 16- | 11- | 6.5- | - | - | 5.2- | 65- | | -1- | 6- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 5- | 2- | -1- | - | - | - | - | 0.30 |

# 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 (#) UNITS IN ppb |
| 30- | 45.2358- | 110.7429- | 2- | 07- | | 0-M36509- | 10/12/76- | 18- | 8- | 5.0- | - | - | 5.1- | 60- | | -1- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 3- | 2- | -1- | - | - | - | - | 0.10 |
| 30- | 45.4444- | 110.7986- | 2- | 07- | | 0-M36510- | 10/11/76- | 9- | 9- | 6.0- | - | - | 5.5- | 210- | | -1- | 6- | 4- | 6- | 3- | 2- | 1- | 1- | 2- | 2- | 3- | 2- | -1- | - | - | - | - | 1.71 |
| 30- | 45.4464- | 110.8263- | 2- | 07- | | 0-M36511- | 10/11/76- | 10- | 10- | 6.0- | - | - | 5.6- | 200- | | -1- | 6- | 4- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 0.29 |
| 30- | 45.4442- | 110.8276- | 2- | 07- | | 0-M36512- | 10/11/76- | 10- | 10- | 6.0- | - | - | 5.5- | 200- | | -1- | 6- | 4- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 0.32 |
| 30- | 45.4522- | 110.8505- | 2- | 07- | | 0-M36513- | 10/11/76- | 12- | 13- | 5.0- | - | - | 5.6- | 250- | | -3- | 6- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 0.36 |
| 30- | 45.4466- | 110.8802- | 2- | 07- | | 0-M36514- | 10/11/76- | 13- | 12- | 6.0- | - | - | 5.8- | 265- | | -3- | 6- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 4- | 5- | 3- | -1- | - | - | - | - | 0.10 |
| 30- | 45.4537- | 110.8498- | 2- | 07- | | 0-M36515- | 10/11/76- | 12- | 13- | 5.0- | - | - | 5.7- | 260- | | -3- | 6- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 0.39 |
| 30- | 45.1371- | 110.5973- | 2- | 07- | | 0-M36516- | 10/14/76- | 12- | 7- | 2.5- | - | - | 5.7- | 90- | | -1- | 6- | 3- | 6- | 2- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 0.41 |
| 30- | 45.3183- | 111.2598- | 2- | 07- | | 0-M36517- | 10/13/76- | 10- | 8- | 4.0- | - | - | 5.6- | 340- | | -1- | 7- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 1- | -1- | - | - | - | - | 0.58 |
| 30- | 45.2364- | 111.4099- | 2- | 07- | | 0-M36518- | 10/14/76- | 13- | 11- | 4.0- | - | - | 5.5- | 145- | | -1- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 2- | 2- | 1- | -1- | - | - | - | - | 0.26 |
| 30- | 45.1288- | 111.3227- | 2- | 07- | | 0-M36519- | 10/15/76- | 12- | 8- | 5.0- | - | - | 5.7- | 160- | | -1- | 1- | 2- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 1.18 |
| 30- | 45.2194- | 111.4556- | 2- | 07- | | 0-M36520- | 10/14/76- | 18- | 7- | 5.0- | - | - | 5.9- | 240- | | -1- | 2- | 4- | 6- | 2- | 2- | 1- | 1- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 0.53 |
| 30- | 45.3047- | 111.3437- | 2- | 07- | | 0-M36521- | 10/13/76- | 14- | 12- | 6.5- | - | - | 5.7- | 240- | | -1- | 6- | 4- | 6- | 2- | 2- | 1- | 1- | 1- | 2- | 3- | 1- | -1- | - | - | - | - | 0.37 |
| 30- | 45.2833- | 111.3282- | 2- | 07- | | 0-M36522- | 10/13/76- | 13- | 12- | 6.0- | - | - | 5.8- | 230- | | -1- | 6- | 1- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 0.26 |
| 30- | 45.2368- | 111.3754- | 2- | 07- | | 0-M36523- | 10/14/76- | 12- | 11- | 5.0- | - | - | 5.6- | 150- | | -1- | 6- | 2- | 6- | 2- | 3- | 1- | 2- | 2- | 3- | 3- | 1- | -1- | - | - | - | - | 0.63 |
| 30- | 45.0133- | 111.0754- | 2- | 27- | | 0-M36524- | 09/18/76- | 17- | 8- | 7.5- | - | - | 5.5- | 60- | | -4- | | -2- | 7- | 4- | 2- | 1- | 2- | 1- | 2- | 3- | 4- | -1- | - | - | - | - | 1.12 |
| 30- | 45.0350- | 111.1127- | 2- | 27- | | 0-M36525- | 09/18/76- | 17- | 8- | 7.5- | - | - | 5.7- | 140- | | -4- | | -2- | 7- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 4- | -1- | - | - | - | - | 0.70 |
| 30- | 45.0322- | 111.1176- | 2- | 27- | | 0-M36526- | 09/18/76- | 17- | 7- | 8.5- | - | - | 5.7- | 220- | | -4- | | -2- | 1- | 4- | 2- | 1- | 2- | 3- | 2- | 3- | 4- | -1- | - | - | - | - | 0.20 |
| 30- | 45.0481- | 111.1383- | 2- | 27- | | 0-M36527- | 09/18/76- | 18- | 9- | 10.0- | - | - | 5.9- | 350- | | -4- | | -2- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 2- | 4- | -1- | - | - | - | - | 0.80 |
| 30- | 45.0455- | 111.1422- | 2- | 27- | | 0-M36528- | 09/18/76- | 18- | 8- | 10.0- | - | - | 5.9- | 350- | | -4- | | -2- | 7- | 3- | 2- | 2- | 2- | 3- | 3- | 3- | 4- | -1- | - | - | - | - | 0.40 |
| 30- | 45.0628- | 111.1679- | 2- | 27- | | 0-M36529- | 09/18/76- | 18- | 8- | 9.0- | - | - | 6.3- | 500- | | -2- | 7- | 2- | 6- | 3- | 2- | 3- | 2- | 3- | 3- | 3- | 4- | -1- | - | - | - | - | 0.60 |
| 30- | 45.0699- | 111.2065- | 2- | 27- | | 0-M36530- | 09/18/76- | 18- | 8- | 10.0- | - | - | 6.0- | 280- | | -1- | 6- | 2- | 6- | 4- | 2- | 1- | 2- | 1- | 2- | 2- | 4- | -1- | - | - | - | - | 0.94 |
| 30- | 45.0141- | 111.1258- | 2- | 27- | | 0-M36531- | 09/19/76- | 15- | 16- | 7.5- | C- | - | 5.9- | 340- | | 3- | 2- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 4- | 2- | 2- | 2- | -3- | - | - | - | - | 0.55 |
| 30- | 45.0997- | 111.2190- | 2- | 27- | | 0-M36532- | 09/19/76- | 16- | 15- | 13.0- | C- | - | 6.5- | 400- | | 0- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | 1.32 |
| 30- | 45.1573- | 111.2433- | 2- | 27- | | 0-M36534- | 09/19/76- | 16- | 12- | 10.0- | - | - | 5.9- | 260- | | 4- | 1- | 1- | 2- | 7- | 4- | 2- | 3- | 2- | 1- | 2- | 2- | 2- | -1- | - | - | - | - | 0.63 |
| 30- | 45.4373- | 111.3536- | 2- | 07- | | 0-M36535- | 09/29/76- | 15- | 18- | 7.6- | - | - | 6.0- | 345- | | -3- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 3- | 1- | -1- | - | - | - | - | 0.24 |
| 30- | 45.4410- | 111.4584- | 2- | 07- | | 0-M36536- | 09/30/76- | 15- | 22- | 9.3- | - | - | 5.6- | 158- | | -3- | 7- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 0.20 |
| 30- | 45.1783- | 111.5481- | 2- | 07- | | 0-M36539- | 10/03/76- | 9- | 9- | 10.0- | C- | - | 5.7- | 220- | | -2- | 6- | 3- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -1- | - | - | - | - | 0.38 |
| 30- | 45.1772- | 111.5472- | 2- | 07- | | 0-M36540- | 10/03/76- | 9- | 9- | 10.0- | - | - | 5.7- | 210- | | -2- | 6- | 4- | 6- | 3- | 2- | 1- | 1- | 2- | 3- | 3- | 2- | -1- | - | - | - | - | 0.22 |
| 30- | 45.1995- | 111.5130- | 2- | 07- | | 0-M36541- | 10/03/76- | 11- | 8- | 11.0- | - | - | 5.8- | 210- | | -2- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 1- | 2- | 4- | 3- | -1- | - | - | - | - | 0.50 |
| 30- | 45.1984- | 111.5140- | 2- | 07- | | 0-M36542- | 10/03/76- | 11- | 8- | 11.0- | - | - | 5.7- | 230- | | -2- | 6- | 3- | 6- | 2- | 2- | 1- | 2- | 1- | 2- | 4- | 3- | -1- | - | - | - | - | 0.41 |
| 30- | 45.1766- | 111.5024- | 2- | 07- | | 0-M36543- | 10/03/76- | 13- | 9- | 10.0- | - | - | 5.9- | 210- | | -2- | 7- | 3- | 6- | 3- | 2- | 1- | 2- | 1- | 4- | 5- | 3- | -1- | - | - | - | - | 0.78 |
| 30- | 45.1519- | 111.5190- | 2- | 07- | | 0-M36544- | 10/03/76- | 15- | 6- | 11.0- | - | - | 5.7- | 200- | | -2- | 7- | 5- | 6- | 2- | 2- | 1- | 3- | 3- | 5- | 4- | 3- | -1- | - | - | - | - | 0.64 |
| 30- | 45.1133- | 111.5091- | 2- | 07- | | 0-M36545- | 10/03/76- | 17- | 8- | 11.0- | - | - | 5.8- | 210- | | -2- | 7- | 4- | 3- | 2- | 2- | 1- | 1- | 1- | 2- | 4- | 3- | -1- | - | - | - | - | 0.59 |
| 30- | 45.0594- | 111.5367- | 2- | 07- | | 0-M36546- | 10/03/76- | 19- | 7- | 10.0- | - | - | 5.9- | 220- | | -2- | 6- | 3- | 6- | 2- | 2- | 1- | 2- | 1- | 3- | 4- | 3- | -1- | - | - | - | - | 0.87 |
| 30- | 45.0589- | 111.5380- | 2- | 07- | | 0-M36547- | 10/03/76- | 19- | 7- | 10.0- | - | - | 5.9- | 280- | | -2- | 7- | 4- | 7- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 3- | -1- | - | - | - | - | 0.52 |
| 30- | 45.3591- | 111.3114- | 2- | 07- | | 0-M36548- | 10/10/76- | 13- | 9- | 4.0- | - | - | 5.2- | 485- | | -2- | 7- | 1- | 7- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 3- | -1- | - | - | - | - | 0.11 |
| 30- | 45.3597- | 111.3179- | 2- | 07- | | 0-M36549- | 10/10/76- | 14- | 7- | 4.0- | - | - | 5.5- | 475- | | -2- | 4- | 1- | 7- | 4- | 3- | 1- | 2- | 1- | 4- | 4- | 3- | -1- | - | - | - | - | 1.03 |
| 30- | 45.3371- | 110.4742- | 2- | 07- | | 0-M36550- | 10/09/76- | 10- | 11- | 5.0- | - | - | 6.2- | 425- | | -1- | 1- | 3- | 1- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 0.71 |
| 30- | 45.3222- | 110.4736- | 2- | 07- | | 0-M36551- | 10/09/76- | 9- | 11- | 6.5- | - | - | 6.1- | 420- | | -1- | 1- | 3- | 1- | 2- | 2- | 1- | 2- | 1- | 4- | 3- | 2- | -1- | - | - | - | - | 1.02 |
| 30- | 45.0890- | 111.4524- | 2- | 07- | | 0-M36552- | 10/04/76- | 16- | 11- | 10.0- | - | - | 5.8- | 210- | | -2- | 6- | 3- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 1.23 |
| 30- | 45.1458- | 111.4211- | 2- | 07- | | 0-M36553- | 10/04/76- | 12- | 12- | 9.0- | - | - | 5.7- | 240- | | -2- | 7- | 4- | 6- | 3- | 2- | 1- | 2- | 1- | 2- | 3- | 2- | -1- | - | - | - | - | 0.66 |
| 30- | 45.1465- | 111.4221- | 2- | 07- | | 0-M36554- | 10/04/76- | 12- | 13- | 10.0- | - | - | 5.7- | 260- | | -2- | 7- | 4- | 6- | 2- | 2- | 1- | 1- | 3- | 4- | 3- | 2- | -1- | - | - | - | - | 1.83 |
| 30- | 45.1310- | 111.4416- | 2- | 07- | | 0-M36555- | 10/04/76- | 10- | 10- | 9.0- | - | - | 5.6- | 240- | | -2- | 6- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 2- | 3- | 2- | -1- | - | - | - | - | 0.10 |
| 30- | 45.1332- | 111.4399- | 2- | 07- | | 0-M36557- | 10/04/76- | 10- | 10- | 10.0- | - | - | 5.8- | 290- | | -2- | 7- | 4- | 6- | 2- | 2- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 0.75 |
| 30- | 45.1243- | 111.4773- | 2- | 07- | | 0-M36558- | 10/04/76- | 8- | 8- | 9.0- | - | - | 5.6- | 280- | | -3- | 7- | 3- | 7- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 1.02 |
| 30- | 45.1251- | 111.4783- | 2- | 07- | | 0-M36559- | 10/04/76- | 8- | 9- | 10.0- | - | - | 5.9- | 310- | | -3- | 7- | 3- | 7- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 0.50 |
| 30- | 45.1173- | 111.4832- | 2- | 07- | | 0-M36560- | 10/04/76- | 7- | 6- | 10.0- | - | - | 5.8- | 310- | | -3- | 7- | 3- | 7- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 0.87 |
| 30- | 45.1158- | 111.4978- | 2- | 07- | | 0-M36561- | 10/04/76- | 7- | 6- | 11.0- | - | - | 5.7- | 310- | | -4- | 7- | 3- | 7- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 0.57 |
| 30- | 45.0806- | 111.4805- | 2- | 07- | | 0-M36562- | 09/04/76- | 7- | 6- | 11.0- | C- | - | 5.8- | 300- | | -4- | 7- | 1- | 4- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 0.81 |
| 30- | 45.1671- | 111.2472- | 2- | 27- | | 0-M36563- | 09/19/76- | 17- | 10- | 9.0- | - | - | 5.9- | 300- | | 0- | 1- | 4- | 2- | 1- | 4- | 2- | 1- | 2- | 1- | 2- | 3- | 2- | -1- | - | - | - | - | 0.47 |

# 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 (#) UNITS IN ppb |
| 30- | 45.2245- | 111.2372- | 2- | 27- | | 0-M36564- | 09/19/76- | 17- | 11- | 10.5- | - | - | 5.8- | 190- | | 6- | 1- | 4- | 2- | 7- | 3- | 2- | 3- | 2- | 1- | 3- | 2- | 2- | -1- | - | - | - | - | 0.66 |
| 30- | 45.1950- | 111.2312- | 2- | 27- | | 0-M36566- | 09/19/76- | 18- | 13- | 11.0- | - | - | 5.9- | 260- | | 9- | 1- | 4- | 1- | 7- | 4- | 2- | 2- | 2- | 1- | 2- | 2- | 1- | -1- | - | - | - | - | 0.52 |
| 30- | 45.1447- | 111.2423- | 2- | 27- | | 0-M36567- | 09/19/76- | 18- | 10- | 10.0- | - | - | 5.8- | 260- | | 3- | 1- | 4- | 1- | 7- | 4- | 2- | 3- | 2- | 1- | 2- | 2- | 1- | -1- | - | - | - | - | 1.17 |
| 30- | 45.2186- | 110.9301- | 2- | 07- | | 0-M36569- | 09/21/76- | 9- | 13- | 8.0- | C- | - | 5.9- | 200- | | 7- | 2- | 7- | 3- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 4- | 3- | -3- | - | - | - | - | 0.40 |
| 30- | 45.2180- | 110.9320- | 2- | 07- | | 0-M36570- | 09/21/76- | 9- | 10- | 7.5- | - | - | 5.7- | 150- | | 2- | 2- | 7- | 1- | 7- | 4- | 2- | 1- | 2- | 2- | 1- | 4- | 3- | -3- | - | - | - | - | 0.60 |
| 30- | 45.1988- | 110.9093- | 2- | 07- | | 0-M36571- | 09/21/76- | 10- | 10- | 8.0- | C- | - | 5.7- | 160- | | 2- | 1- | 4- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | 0.70 |
| 30- | 45.1915- | 110.9161- | 2- | 07- | | 0-M36572- | 09/21/76- | 11- | 10- | 8.0- | C- | - | 5.8- | 190- | | 3- | 2- | 7- | 3- | 6- | 4- | 2- | 2- | 2- | 2- | 4- | 3- | 3- | -3- | - | - | - | - | 0.50 |
| 30- | 45.1905- | 110.9359- | 2- | 07- | | 0-M36573- | 09/21/76- | 11- | 11- | 7.5- | - | - | 5.9- | 160- | | 8- | 2- | 7- | 1- | 7- | 4- | 2- | 1- | 2- | 2- | 4- | 4- | 3- | -1- | - | - | - | - | 0.36 |
| 30- | 45.1528- | 110.9611- | 2- | 07- | | 0-M36574- | 09/21/76- | 11- | 11- | 7.0- | - | - | 5.6- | 100- | | 3- | 2- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | 0.14 |
| 30- | 45.1341- | 110.9650- | 2- | 07- | | 0-M36575- | 09/21/76- | 12- | 12- | 8.0- | C- | - | 5.7- | 170- | | 6- | 1- | 7- | 2- | 7- | 2- | 2- | 1- | 2- | 2- | 2- | 4- | 4- | -3- | - | - | - | - | 0.29 |
| 30- | 45.1349- | 110.9636- | 2- | 07- | | 0-M36576- | 09/21/76- | 12- | 10- | 6.0- | C- | - | 5.2- | 55- | | 8- | 1- | 6- | 2- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 4- | -3- | - | - | - | - | 0.70 |
| 30- | 45.1630- | 110.9821- | 2- | 07- | | 0-M36577- | 09/21/76- | 13- | 11- | 8.0- | C- | - | 5.5- | 120- | | 4- | 1- | 6- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 4- | -3- | - | - | - | - | 0.30 |
| 30- | 45.1600- | 110.9824- | 2- | 07- | | 0-M36578- | 09/21/76- | 13- | 11- | 10.0- | C- | - | 5.5- | 500- | | 6- | 1- | 6- | 5- | 8- | 2- | 2- | 1- | 1- | 3- | 3- | 4- | 4- | -3- | - | - | - | - | 2.43 |
| 30- | 45.1422- | 111.0131- | 2- | 07- | | 0-M36579- | 09/21/76- | 14- | 10- | 8.5- | C- | - | 5.2- | 80- | | 7- | 1- | 6- | 6- | 8- | 2- | 2- | 5- | 1- | 3- | 2- | 2- | 4- | -3- | - | - | - | - | 0.10 |
| 30- | 45.1278- | 111.0203- | 2- | 07- | | 0-M36580- | 09/21/76- | 14- | 10- | 7.0- | C- | - | 5.7- | 120- | | 1- | 1- | 6- | 5- | 8- | 3- | 2- | 1- | 1- | 2- | 4- | 4- | 4- | -3- | - | - | - | - | 0.49 |
| 30- | 45.1286- | 111.0191- | 2- | 07- | | 0-M36581- | 09/21/76- | 14- | 9- | 5.5- | C- | - | 5.4- | 70- | | 0- | 1- | 6- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 2- | 3- | 4- | -3- | - | - | - | - | 0.39 |
| 30- | 45.1218- | 111.0358- | 2- | 07- | | 0-M36582- | 09/21/76- | 14- | 9- | 6.5- | C- | - | 5.7- | 90- | | 1- | 1- | 6- | 2- | 7- | 4- | 2- | 1- | 2- | 3- | 3- | 3- | 4- | -3- | - | - | - | - | 0.67 |
| 30- | 45.1218- | 111.0345- | 2- | 07- | | 0-M36583- | 09/21/76- | 15- | 8- | 6.0- | C- | - | 5.5- | 70- | | 0- | 1- | 6- | 2- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 4- | -3- | - | - | - | - | 0.60 |
| 30- | 45.1263- | 111.0401- | 2- | 07- | | 0-M36584- | 09/21/76- | 15- | 9- | 7.5- | C- | - | 5.7- | 150- | | 3- | 1- | 6- | 5- | 6- | 2- | 2- | 1- | 2- | 3- | 2- | 2- | 4- | -3- | - | - | - | - | 0.80 |
| 30- | 45.1262- | 111.0509- | 2- | 07- | | 0-M36585- | 09/21/76- | 15- | 8- | 6.5- | C- | - | 5.6- | 90- | | 0- | 1- | 6- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 3- | 2- | 4- | -3- | - | - | - | - | 1.27 |
| 30- | 45.1306- | 111.0729- | 2- | 07- | | 0-M36586- | 09/21/76- | 16- | 8- | 6.5- | - | - | 5.5- | 100- | | 3- | 1- | 6- | 2- | 7- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 4- | -8- | - | - | - | - | 0.10 |
| 30- | 45.1767- | 110.9613- | 2- | 07- | | 0-M36587- | 09/21/76- | 16- | 10- | 8.0- | C- | - | 5.7- | 180- | | 3- | 1- | 6- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 4- | -3- | - | - | - | - | 1.28 |
| 30- | 45.1705- | 110.8763- | 2- | 07- | | 0-M36589- | 09/21/76- | 17- | 12- | 9.0- | C- | - | 6.1- | 510- | | 2- | 1- | 7- | 4- | 6- | 2- | 2- | 1- | 2- | 3- | 2- | 4- | 4- | - | - | - | - | - | 1.14 |
| 30- | 45.0904- | 110.7735- | 2- | 06- | | 0-M36590- | 09/22/76- | 11- | 20- | 50.0- | C- | - | 6.8- | 2400- | | 6- | 1- | 4- | 2- | 6- | 4- | 3- | 5- | 3- | 5- | 3- | 4- | 3- | - | - | - | - | - | 0.57 |
| 30- | 45.0650- | 110.7760- | 2- | 07- | | 0-M36595- | 09/22/76- | 12- | 13- | 7.5- | - | - | 5.7- | 30- | | 2- | 1- | 4- | 2- | 7- | 4- | 2- | 1- | 2- | 4- | 3- | 3- | 3- | -1- | - | - | - | - | 1.43 |
| 30- | 45.1276- | 110.8077- | 2- | 07- | | 0-M36598- | 09/22/76- | 13- | 13- | 8.5- | C- | - | 5.9- | 260- | | 8- | 1- | 4- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | 2.10 |
| 30- | 45.1086- | 110.8191- | 2- | 07- | | 0-M36599- | 09/22/76- | 13- | 14- | 9.0- | - | - | 5.9- | 300- | | 9- | 1- | 7- | 2- | 4- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -1- | - | - | - | - | 0.88 |
| 30- | 45.0999- | 110.8207- | 2- | 07- | | 0-M36600- | 09/22/76- | 13- | 14- | 9.0- | C- | - | 5.7- | 270- | | 7- | 1- | 7- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -9- | - | - | - | - | 0.55 |
| 30- | 45.1459- | 110.8040- | 2- | 07- | | 0-M36601- | 09/22/76- | 14- | 14- | 9.0- | C- | - | 5.7- | 190- | | 4- | 1- | 4- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -9- | - | - | - | - | 1.40 |
| 30- | 45.1648- | 110.8343- | 2- | 07- | | 0-M36602- | 09/22/76- | 14- | 22- | 14.0- | - | - | 5.9- | 250- | | 1- | 1- | 7- | 2- | 7- | 3- | 2- | 5- | 2- | 2- | 3- | 4- | 2- | -3- | - | - | - | - | 0.22 |
| 30- | 45.4882- | 110.5932- | 2- | 07- | | 0-M36604- | 09/28/76- | 10- | 14- | 5.5- | - | - | 5.5- | 110- | | 8- | 1- | 7- | 3- | 7- | 2- | 2- | 3- | 2- | 4- | 4- | 2- | 1- | -3- | - | - | - | - | 1.74 |
| 30- | 45.4815- | 110.5618- | 2- | 07- | | 0-M36605- | 09/28/76- | 10- | 7- | 6.0- | C- | - | 5.7- | 140- | | 4- | 1- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 3- | 2- | 3- | 1- | -3- | - | - | - | - | 0.22 |
| 30- | 45.4781- | 110.5717- | 2- | 07- | | 0-M36606- | 09/28/76- | 11- | 10- | 6.0- | C- | - | 5.5- | 100- | | 3- | 1- | 7- | 5- | 8- | 4- | 2- | 1- | 2- | 4- | 4- | 2- | 1- | -3- | - | - | - | - | 0.21 |
| 30- | 45.2661- | 110.5805- | 2- | 07- | | 0-M36607- | 09/28/76- | 11- | 11- | 5.5- | C- | - | 5.7- | 140- | | 3- | 2- | 7- | 2- | 7- | 4- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -2- | - | - | - | - | 0.30 |
| 30- | 45.2868- | 110.5744- | 2- | 07- | | 0-M36608- | 09/28/76- | 12- | 13- | 6.0- | - | - | 5.7- | 120- | | 5- | 2- | 7- | 2- | 7- | 4- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 0.10 |
| 30- | 45.2958- | 110.5691- | 2- | 07- | | 0-M36609- | 09/28/76- | 12- | 7- | 5.5- | - | - | 5.5- | 120- | | 6- | 2- | 7- | 2- | 7- | 4- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 0.38 |
| 30- | 45.2738- | 110.5005- | 2- | 07- | | 0-M36610- | 09/28/76- | 12- | 13- | 5.0- | - | - | 5.7- | 150- | | 1- | 2- | 7- | 2- | 7- | 4- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -8- | - | - | - | - | 0.10 |
| 30- | 45.2840- | 110.5079- | 2- | 07- | | 0-M36611- | 09/28/76- | 13- | 25- | 5.5- | - | - | 6.0- | 440- | | 2- | 1- | 7- | 3- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 0.55 |
| 30- | 45.2871- | 110.5240- | 2- | 07- | | 0-M36612- | 09/28/76- | 13- | 10- | 5.5- | - | - | 5.7- | 270- | | 3- | 1- | 7- | 2- | 6- | 3- | 2- | 1- | 2- | 2- | 2- | 4- | 1- | -1- | - | - | - | - | 0.47 |
| 30- | 45.3214- | 110.5299- | 2- | 07- | | 0-M36613- | 09/28/76- | 14- | 13- | 10.5- | - | - | 6.1- | 300- | | 1- | 1- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -8- | - | - | - | - | 2.64 |
| 30- | 45.3183- | 110.5109- | 2- | 07- | | 0-M36614- | 09/28/76- | 14- | 12- | 6.5- | - | - | 5.7- | 170- | | 5- | 2- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 0.90 |
| 30- | 45.3163- | 110.5579- | 2- | 07- | | 0-M36616- | 09/28/76- | 14- | 22- | 7.5- | - | - | 5.7- | 180- | | 5- | 1- | 2- | 2- | 1- | 4- | 2- | 1- | 2- | 3- | 3- | 3- | 1- | -8- | - | - | - | - | 0.12 |
| 30- | 45.3171- | 110.7011- | 2- | 07- | | 0-M36617- | 09/28/76- | 15- | 14- | 8.0- | - | - | 5.7- | 130- | | 0- | 1- | 7- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -8- | - | - | - | - | 0.48 |
| 30- | 45.3220- | 110.7120- | 2- | 07- | | 0-M36618- | 09/28/76- | 16- | 11- | 8.0- | C- | - | 5.5- | 130- | | 7- | 1- | 7- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -8- | - | - | - | - | 0.41 |
| 30- | 45.3395- | 110.6746- | 2- | 07- | | 0-M36619- | 09/28/76- | 16- | 22- | 15.0- | C- | - | 5.7- | 150- | | 5- | 4- | | -3- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 0.41 |
| 30- | 45.4885- | 110.5007- | 2- | 07- | | 0-M36620- | 09/29/76- | 9- | 5- | 5.0- | - | - | 5.4- | 50- | | 6- | 1- | 7- | 1- | 7- | 4- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 0.40 |
| 30- | 45.4873- | 110.5011- | 2- | 07- | | 0-M36621- | 09/29/76- | 9- | 5- | 5.5- | - | - | 5.2- | 55- | | 3- | 1- | 7- | 2- | 7- | 2- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 0.35 |
| 30- | 45.4621- | 110.5872- | 2- | 07- | | 0-M36622- | 09/29/76- | 10- | 8- | 9.0- | C- | - | 5.5- | 210- | | 14- | 1- | 7- | 2- | 7- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 0.63 |
| 30- | 45.4622- | 111.7306- | 2- | 07- | | 0-M36625- | 10/20/76- | 11- | 6- | 2.4- | - | - | 5.9- | 400- | | | -4- | | -3- | 6- | 3- | 3- | 1- | 2- | 3- | 3- | 2- | 1- | -3- | - | - | - | - | 0.97 |
| 30- | 45.0762- | 110.6347- | 2- | 07- | | 0-M36626- | 09/22/76- | 9- | 7- | 7.0- | - | - | 5.5- | 100- | | 16- | 3- | 7- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 2- | 3- | 3- | -2- | - | - | - | - | 0.44 |
| 30- | 45.0759- | 110.6176- | 2- | 07- | | 0-M36627- | 09/22/76- | 10- | 7- | 6.0- | - | - | 5.7- | 130- | | 6- | 3- | 7- | 3- | 4- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 3- | - | - | - | - | - | 0.10 |

# 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 (#) UNITS IN ppb |
| 30- | 45.0789- | 110.6277- | 2- | 07- | | 0-M36628- | 09/22/76- | 10- | 7- | 6.8- | - | - | 5.5- | 70- | 16- | 1- | 6- | 4- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 3- | -1- | - | - | - | - | 0.69 |
| 30- | 45.0483- | 110.6287- | 2- | 07- | | 0-M36629- | 09/22/76- | 11- | 8- | 6.2- | - | - | 5.9- | 190- | 16- | 3- | 7- | 3- | 4- | 2- | 2- | 1- | 2- | 1- | 3- | 2- | 3- | -1- | - | - | - | - | 0.52 |
| 30- | 45.0665- | 110.6792- | 2- | 07- | | 0-M36630- | 09/22/76- | 11- | 8- | 7.6- | - | - | 5.5- | 165- | 9- | 1- | 1- | 3- | 4- | 3- | 2- | 1- | 2- | 3- | 3- | 2- | 4- | -1- | - | - | - | - | 0.26 |
| 30- | 45.0368- | 110.6645- | 2- | 07- | | 0-M36631- | 09/22/76- | 12- | 14- | 9.0- | - | - | 5.9- | 170- | 24- | 1- | 5- | 4- | 4- | 4- | 2- | 1- | 2- | 3- | 2- | 4- | 4- | -8- | - | - | - | - | 0.24 |
| 30- | 45.0647- | 110.7420- | 2- | 07- | | 0-M36633- | 09/22/76- | 14- | 13- | 6.0- | - | - | 5.2- | 100- | 6- | 1- | 4- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 2- | 4- | -1- | - | - | - | - | 0.31 |
| 30- | 45.0435- | 110.7468- | 2- | 07- | | 0-M36634- | 09/22/76- | 15- | 13- | 13.0- | - | - | 5.7- | 220- | 3- | 1- | 6- | -6- | 2- | 2- | 1- | 2- | 4- | 4- | 1- | 4- | -1- | - | - | - | - | 0.51 |
| 30- | 45.4994- | 111.3058- | 2- | 07- | | 0-M36635- | 09/24/76- | 8- | 7- | 7.0- | - | - | 5.2- | 130- | 40- | 2- | 4- | 3- | 4- | 3- | 3- | 1- | 7- | 3- | 3- | 3- | 1- | -3- | - | - | - | - | 0.45 |
| 30- | 45.5000- | 111.3200- | 2- | 07- | | 0-M36636- | 09/24/76- | 8- | 8- | 7.4- | - | - | 5.5- | 180- | 16- | 2- | 4- | 3- | 4- | 3- | 3- | 1- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 0.97 |
| 30- | 45.4992- | 111.3433- | 2- | 07- | | 0-M36637- | 09/24/76- | 9- | 10- | 7.8- | - | - | 5.7- | 160- | 16- | 1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 3- | 3- | 2- | 1- | -3- | - | - | - | - | 0.60 |
| 30- | 45.5000- | 111.3547- | 2- | 07- | | 0-M36638- | 09/24/76- | 9- | 11- | 8.8- | - | - | 5.9- | 380- | 16- | 1- | 1- | 4- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 1.87 |
| 30- | 45.4953- | 111.3553- | 2- | 07- | | 0-M36639- | 09/24/76- | 10- | 12- | 8.0- | - | - | 5.5- | 90- | 8- | 1- | 1- | 4- | 6- | 3- | 3- | 1- | 2- | 3- | 3- | 1- | 1- | -3- | - | - | - | - | 0.36 |
| 30- | 45.4978- | 111.3581- | 2- | 07- | | 0-M36640- | 09/24/76- | 10- | 12- | 8.0- | - | - | 6.1- | 500- | 16- | 1- | 1- | 4- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 1- | 1- | -3- | - | - | - | - | 1.09 |
| 30- | 45.4967- | 111.4150- | 2- | 27- | | 0-M36641- | 09/24/76- | 10- | 18- | 12.0- | - | - | 5.9- | 275- | 16- | 1- | 1- | 3- | 6- | 2- | 2- | 2- | 2- | 4- | 3- | 1- | 2- | -3- | - | - | - | - | 1.81 |
| 30- | 45.4931- | 111.2864- | 2- | 07- | | 0-M36642- | 09/24/76- | 12- | 18- | 8.0- | - | - | 5.9- | 280- | 16- | 2- | 6- | 4- | 6- | 3- | 2- | 1- | 2- | 3- | 2- | 1- | 1- | -3- | - | - | - | - | 1.89 |
| 30- | 45.4969- | 111.3228- | 2- | 07- | | 0-M36643- | 09/24/76- | 12- | 20- | 8.6- | - | - | 5.5- | 80- | 24- | 1- | 1- | 4- | 6- | 4- | 3- | 1- | 2- | 2- | 3- | 1- | 2- | -3- | - | - | - | - | 0.52 |
| 30- | 45.4825- | 111.3256- | 2- | 07- | | 0-M36644- | 09/24/76- | 13- | 20- | 8.6- | - | - | 5.5- | 160- | 24- | 1- | 4- | 4- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 1- | 3- | -3- | - | - | - | - | 3.21 |
| 30- | 45.4906- | 111.3272- | 2- | 07- | | 0-M36645- | 09/24/76- | 13- | 18- | 8.2- | - | - | 5.5- | 80- | 32- | 1- | 1- | 4- | 6- | 3- | 3- | 1- | 2- | 4- | 3- | 1- | 3- | -1- | - | - | - | - | 0.16 |
| 30- | 45.4744- | 111.2689- | 2- | 07- | | 0-M36646- | 09/24/76- | 13- | 15- | 12.0- | - | - | 6.1- | 300- | 8- | 1- | 2- | 3- | 6- | 3- | 2- | 1- | 2- | 2- | 2- | 2- | 4- | -3- | - | - | - | - | 0.16 |
| 30- | 45.4534- | 111.2450- | 2- | 07- | | 0-M36647- | 09/24/76- | 14- | 15- | 8.0- | - | - | 5.2- | 80- | 16- | 2- | 4- | 4- | 4- | 3- | 2- | 1- | 2- | 1- | 2- | 2- | 4- | -7- | - | - | - | - | 0.44 |
| 30- | 45.4476- | 111.2400- | 2- | 07- | | 0-M36648- | 09/24/76- | 14- | 15- | 7.8- | - | - | 5.5- | 60- | 24- | 2- | 2- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 3- | 2- | 4- | -7- | - | - | - | - | 1.03 |
| 30- | 45.4017- | 111.2213- | 2- | 07- | | 0-M36649- | 09/24/76- | 14- | 16- | 9.0- | - | - | 5.5- | 46- | 8- | 3- | 4- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 1- | 2- | -8- | - | - | - | - | 0.51 |
| 30- | 45.4422- | 111.2088- | 2- | 07- | | 0-M36650- | 09/24/76- | 15- | 14- | 8.8- | - | - | 5.9- | 290- | 19- | 1- | 1- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 2- | 2- | -8- | - | - | - | - | 0.16 |
| 30- | 45.4400- | 111.1754- | 2- | 07- | | 0-M36651- | 09/24/76- | 15- | 14- | 8.4- | - | - | 5.9- | 170- | 8- | 1- | 1- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 2- | 2- | 2- | -8- | - | - | - | - | 0.23 |
| 30- | 45.4367- | 111.1673- | 2- | 07- | | 0-M36652- | 09/24/76- | 13- | 12- | 9.0- | - | - | 5.7- | 95- | 16- | 3- | 3- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 2- | 2- | -1- | - | - | - | - | 0.30 |
| 30- | 45.4342- | 111.1680- | 2- | 07- | | 0-M36653- | 09/24/76- | 16- | 13- | 10.0- | C- | - | 5.9- | 200- | -3- | 7- | 4- | 5- | 2- | 2- | 1- | 2- | 1- | 3- | 3- | 2- | -8- | - | - | - | - | 0.11 |
| 30- | 45.4849- | 111.2646- | 2- | 07- | | 0-M36654- | 09/27/76- | 11- | 9- | 9.0- | C- | - | 5.9- | 250- | -1- | 2- | 5- | 8- | 2- | 2- | 1- | 2- | 4- | 2- | 1- | 1- | -1- | - | - | - | - | 1.57 |
| 30- | 45.4339- | 111.1524- | 2- | 07- | | 0-M36655- | 09/27/76- | 12- | 18- | 7.2- | C- | - | 5.7- | 150- | -1- | 1- | 4- | 4- | 3- | 3- | 1- | 2- | 2- | 2- | 2- | 1- | -3- | - | - | - | - | 0.74 |
| 30- | 45.4266- | 111.1305- | 2- | 07- | | 0-M36656- | 09/27/76- | 12- | 17- | 6.8- | C- | - | 5.9- | 95- | -1- | 1- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 2- | 1- | -1- | - | - | - | - | 0.50 |
| 30- | 45.4241- | 111.1180- | 2- | 07- | | 0-M36657- | 09/27/76- | 13- | 16- | 6.0- | C- | - | 5.7- | 90- | -3- | 4- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 2- | 1- | -1- | - | - | - | - | 0.46 |
| 30- | 45.4210- | 111.1182- | 2- | 07- | | 0-M36658- | 09/27/76- | 13- | 18- | 6.6- | C- | - | 5.5- | 120- | -3- | 7- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 2- | 2- | 1- | -1- | - | - | - | - | 1.40 |
| 30- | 45.4196- | 111.0916- | 2- | 07- | | 0-M36659- | 09/27/76- | 13- | 18- | 6.0- | C- | - | 5.2- | 95- | -3- | 4- | 3- | 4- | 3- | 2- | 1- | 2- | 1- | 3- | 2- | 1- | -1- | - | - | - | - | 0.67 |
| 30- | 45.4190- | 111.0710- | 2- | 07- | | 0-M36660- | 09/27/76- | 14- | 18- | 7.8- | C- | - | 5.5- | 70- | -2- | 8- | 4- | 6- | 3- | 3- | 1- | 2- | 4- | 2- | 3- | 1- | -1- | - | - | - | - | 0.73 |
| 30- | 45.4086- | 111.0373- | 2- | 07- | | 0-M36662- | 09/27/76- | 14- | 16- | 6.8- | C- | - | 5.2- | 45- | -3- | 4- | 4- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 1- | 1- | -1- | - | - | - | - | 0.22 |
| 30- | 45.4251- | 111.1476- | 2- | 07- | | 0-M36663- | 09/27/76- | 15- | 16- | 8.4- | C- | - | 5.7- | 220- | -3- | 7- | 4- | 6- | 2- | 2- | 1- | 2- | 1- | 3- | 1- | 1- | -1- | - | - | - | - | 0.53 |
| 30- | 45.3823- | 111.1768- | 2- | 07- | | 0-M36664- | 09/27/76- | 16- | 15- | 8.8- | C- | - | 5.9- | 180- | -3- | 5- | 4- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 0.30 |
| 30- | 45.3727- | 111.1725- | 2- | 07- | | 0-M36665- | 09/27/76- | 16- | 18- | 7.4- | C- | - | 3.2- | 80- | -3- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 2- | 1- | -1- | - | - | - | - | 0.10 |
| 30- | 45.3508- | 111.1572- | 2- | 07- | | 0-M36666- | 09/27/76- | 16- | 18- | 7.6- | C- | - | 5.9- | 210- | -3- | 4- | 4- | 6- | 4- | 3- | 1- | -1- | 3- | 2- | 1- | - | - | - | - | - | - | - | 0.21 |
| 30- | 45.3409- | 111.1315- | 2- | 07- | | 0-M36667- | 09/27/76- | 16- | 13- | 8.6- | C- | - | 5.2- | 260- | -3- | 1- | 4- | 6- | 2- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 1.51 |
| 30- | 45.0162- | 110.6918- | 2- | 07- | | 0-M36668- | 09/28/76- | 11- | 10- | 6.2- | C- | - | 6.4- | 700- | -1- | 1- | 4- | 6- | 2- | 2- | 1- | 2- | 4- | 2- | 2- | 1- | -1- | - | - | - | - | 1.54 |
| 30- | 45.0022- | 110.7055- | 2- | 07- | | 0-M36669- | 09/28/76- | 11- | 11- | 9.8- | C- | - | 5.9- | 230- | -1- | 1- | 3- | 6- | 2- | 2- | 1- | 2- | 4- | 2- | 3- | 1- | -1- | - | - | - | - | 0.90 |
| 30- | 45.0876- | 110.8343- | 2- | 07- | | 0-M36672- | 09/28/76- | 13- | 11- | 6.2- | C- | - | 6.6- | 600- | -1- | 5- | 3- | 7- | 2- | 2- | 1- | 2- | 1- | 3- | 2- | 1- | -1- | - | - | - | - | 1.69 |
| 30- | 45.0732- | 110.8546- | 2- | 07- | | 0-M36674- | 09/28/76- | 14- | 15- | 13.0- | C- | - | 5.9- | 180- | -3- | 6- | 4- | 4- | 2- | 2- | 1- | 2- | 2- | 3- | 2- | 1- | -1- | - | - | - | - | 1.22 |
| 30- | 45.1172- | 110.8634- | 2- | 07- | | 0-M36675- | 09/29/76- | 9- | 7- | - | - | - | 5.9- | 245- | 5- | 1- | 7- | 3- | 8- | 2- | 2- | 2- | 2- | 2- | 2- | 2- | 1- | -3- | - | - | - | - | 0.10 |
| 30- | 45.1121- | 110.8573- | 2- | 07- | | 0-M36676- | 09/29/76- | 10- | 8- | 4.6- | - | - | 5.7- | 120- | 3- | 3- | 4- | 3- | 4- | 3- | 3- | 1- | 2- | 2- | 2- | 2- | 1- | -3- | - | - | - | - | 0.34 |
| 30- | 45.1191- | 110.8837- | 2- | 07- | | 0-M36677- | 09/29/76- | 10- | 8- | 5.6- | - | - | 5.7- | 100- | 4- | 3- | 4- | 4- | 8- | 3- | 3- | 1- | 2- | 2- | 3- | 2- | 1- | -3- | - | - | - | - | 0.25 |
| 30- | 45.0954- | 110.8875- | 2- | 07- | | 0-M36678- | 09/29/76- | 11- | 8- | 6.2- | - | - | 5.2- | 80- | 9- | 3- | 4- | 4- | 4- | 3- | 3- | 1- | 2- | 2- | 2- | 1- | 1- | -3- | - | - | - | - | 0.76 |
| 30- | 45.0941- | 110.8867- | 2- | 07- | | 0-M36679- | 09/29/76- | 11- | 8- | 4.4- | C- | - | 5.2- | 60- | 4- | 3- | 7- | 3- | 4- | 3- | 3- | 1- | 2- | 2- | 3- | 1- | 1- | -3- | - | - | - | - | 0.25 |
| 30- | 45.1019- | 110.8832- | 2- | 07- | | 0-M36680- | 09/29/76- | 12- | 10- | 7.6- | - | - | 5.9- | 180- | 4- | 3- | 6- | - | -2- | 2- | 1- | 2- | 2- | 3- | 1- | 1- | -3- | - | - | - | - | 0.13 |
| 30- | 45.2326- | 110.7891- | 2- | 07- | | 0-M36682- | 09/29/76- | 15- | 16- | 12.0- | C- | - | 5.7- | 165- | 5- | 3- | 1- | 4- | 4- | 2- | 3- | 1- | 2- | 4- | 3- | 4- | 1- | -3- | - | - | - | - | 0.44 |
| 30- | 45.2276- | 110.7917- | 2- | 07- | | 0-M36683- | 09/29/76- | 15- | 15- | 9.4- | - | - | 5.9- | 185- | 4- | 3- | 4- | 3- | 4- | 2- | 2- | 1- | 2- | 2- | 2- | 3- | 1- | -3- | - | - | - | - | 0.10 |
| 30- | 45.2166- | 110.7871- | 2- | 07- | | 0-M36684- | 09/29/76- | 16- | 14- | 8.0- | - | - | 5.5- | 80- | 1- | 3- | 4- | 4- | 4- | 2- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -3- | - | - | - | - | 0.21 |

# 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 (ϕ) UNITS IN ppb |
| 30- | 45.2480- | 110.7621- | 2- | 07- | | 0-M36686- | 09/29/76- | 17- | 11- | 7.0- | - | - | 5.7- | 160- | | 11- | 2- | 5- | 3- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 2- | 1- | -1- | - | - | - | - | 0.64 |
| 30- | 45.2474- | 110.8586- | 2- | 06- | | 0-M36687- | 09/29/76- | 17- | 11- | 8.6- | - | - | 6.1- | 320- | | 11- | 3- | 3- | - | -4- | 3- | 1- | -4- | 4- | 3- | 1- | -1- | - | - | - | - | 3.05 |
| 30- | 45.2483- | 110.8621- | 2- | 07- | | 0-M36688- | 09/29/76- | 18- | 11- | 13.0- | - | - | 6.1- | 490- | | 9- | 3- | 4- | 4- | 6- | 2- | 2- | 1- | 2- | 4- | 2- | 3- | 1- | -3- | - | - | - | - | 4.92 |
| 30- | 45.4789- | 110.2003- | 2- | 07- | | 0-M36690- | 09/29/76- | 11- | 22- | 7.0- | - | - | 5.5- | 110- | | 7- | 3- | 1- | 3- | 6- | 4- | 3- | 1- | 2- | 1- | 4- | 2- | 1- | -2- | - | - | - | - | 0.89 |
| 30- | 45.4599- | 110.1911- | 2- | 07- | | 0-M36691- | 09/29/76- | 11- | 22- | 6.4- | - | - | 5.5- | 120- | | 1- | 3- | 4- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 2- | 1- | -1- | - | - | - | - | 0.14 |
| 30- | 45.4370- | 110.1919- | 2- | 07- | | 0-M36692- | 09/29/76- | 12- | 23- | 6.6- | - | - | 5.2- | 90- | | 3- | 3- | 3- | 4- | 1- | 3- | 3- | 1- | 2- | 1- | 4- | 1- | 1- | -1- | - | - | - | - | 0.20 |
| 30- | 45.4024- | 110.1946- | 2- | 07- | | 0-M36694- | 09/29/76- | 12- | 22- | 8.2- | - | - | 5.5- | 80- | | 4- | 3- | 5- | 5- | 8- | 3- | 3- | 1- | 3- | 1- | 3- | 2- | 1- | -8- | - | - | - | - | 0.26 |
| 30- | 45.3890- | 110.2021- | 2- | 07- | | 0-M36695- | 09/29/76- | 13- | 24- | 6.6- | - | - | 5.7- | 45- | | 13- | 3- | 4- | 4- | 4- | 4- | 3- | 1- | 2- | 1- | 3- | 2- | 1- | -8- | - | - | - | - | 1.30 |
| 30- | 45.3663- | 110.2138- | 2- | 07- | | 0-M36696- | 09/29/76- | 13- | 24- | 5.4- | - | - | 5.5- | 270- | | 24- | 3- | 5- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 0.76 |
| 30- | 45.3406- | 110.2441- | 2- | 07- | | 0-M36697- | 09/29/76- | 14- | 10- | 5.6- | - | - | 5.2- | 460- | | 4- | 3- | 1- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 0.41 |
| 30- | 45.3398- | 110.2423- | 2- | 07- | | 0-M36698- | 09/29/76- | 14- | 11- | 5.8- | - | - | 5.9- | 130- | | 4- | 3- | 4- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 0.76 |
| 30- | 45.3187- | 110.2315- | 2- | 07- | | 0-M36699- | 09/29/76- | 15- | 16- | 7.0- | - | - | 5.2- | 44- | | 8- | 3- | 4- | 4- | 4- | 2- | 2- | 1- | 2- | 1- | 4- | 2- | 1- | -1- | - | - | - | - | 1.88 |
| 30- | 45.3082- | 110.2364- | 2- | 07- | | 0-M36700- | 09/29/76- | 15- | 14- | 7.6- | - | - | 5.5- | 290- | | 11- | 3- | 1- | 3- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 2- | 1- | -1- | - | - | - | - | 0.55 |
| 30- | 45.2884- | 110.2434- | 2- | 07- | | 0-M36701- | 09/29/76- | 16- | 11- | 5.0- | - | - | 5.7- | 80- | | 8- | 3- | 1- | 4- | 4- | 3- | 3- | 1- | -1- | 3- | 2- | 1- | -1- | - | - | - | - | - | 0.30 |
| 30- | 45.2968- | 110.2418- | 2- | 07- | | 0-M36703- | 09/29/76- | 16- | 11- | 6.8- | - | - | 5.7- | 120- | | 6- | 3- | 4- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 2- | 1- | -1- | - | - | - | - | 0.56 |
| 30- | 45.3598- | 110.2180- | 2- | 07- | | 0-M36704- | 09/29/76- | 17- | 10- | 6.0- | - | - | 5.5- | 65- | | 16- | 3- | 4- | 6- | 6- | 2- | 2- | 2- | 1- | 1- | 3- | 2- | 1- | -1- | - | - | - | - | 7.19 |
| 30- | 45.4352- | 110.1879- | 2- | 07- | | 0-M36705- | 09/29/76- | 17- | 10- | 7.8- | - | - | 5.5- | 80- | | 13- | 3- | -4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 2- | 1- | -1- | - | - | - | - | - | 0.10 |
| 30- | 45.4971- | 110.2267- | 2- | 07- | | 0-M36707- | 09/29/76- | 18- | 10- | 7.0- | - | - | 5.5- | 55- | | 8- | 3- | 1- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 0.44 |
| 30- | 45.5836- | 110.4965- | 2- | 07- | | 0-M36708- | 10/01/76- | 10- | 7- | 6.0- | - | - | 5.9- | 245- | | 3- | 3- | 4- | 4- | 4- | 3- | 2- | 1- | 2- | 1- | 4- | 2- | 1- | -3- | - | - | - | - | 0.34 |
| 30- | 45.5750- | 110.4990- | 2- | 07- | | 0-M36710- | 10/01/76- | 10- | 7- | 5.6- | - | - | 6.1- | 330- | | 4- | 3- | 4- | 4- | 4- | 2- | 2- | 1- | 2- | 2- | 4- | 2- | 1- | -3- | - | - | - | - | 0.36 |
| 30- | 45.6099- | 110.3899- | 2- | 07- | | 0-M36711- | 10/01/76- | 13- | 14- | 7.8- | - | - | 6.3- | 250- | | 3- | 1- | 2- | 3- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -3- | - | - | - | - | 0.51 |
| 30- | 45.6093- | 110.3828- | 2- | 07- | | 0-M36712- | 10/01/76- | 13- | 18- | 8.0- | - | - | 6.6- | 330- | | 3- | 1- | 1- | 3- | 6- | 3- | 2- | 1- | 2- | 1- | 2- | 2- | 1- | -1- | - | - | - | - | 0.16 |
| 30- | 45.6151- | 110.3798- | 2- | 07- | | 0-M36713- | 10/01/76- | 13- | 18- | 8.8- | - | - | 6.3- | 245- | | 7- | 1- | 1- | 4- | 1- | 3- | 3- | 1- | 2- | 2- | 2- | 2- | 1- | -3- | - | - | - | - | 1.29 |
| 30- | 45.6290- | 110.4195- | 2- | 07- | | 0-M36714- | 10/01/76- | 14- | 14- | 10.4- | - | - | 6.6- | 390- | | 5- | 1- | 2- | 4- | 4- | 2- | 2- | 1- | 2- | 2- | 2- | 2- | 3- | -3- | - | - | - | - | 1.07 |
| 30- | 45.6544- | 110.4396- | 2- | 07- | | 0-M36715- | 10/01/76- | 15- | 16- | 11.0- | - | - | 6.6- | 800- | | 6- | 1- | 1- | 5- | 8- | 2- | 2- | 1- | 3- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | 0.80 |
| 30- | 45.6538- | 110.4698- | 2- | 07- | | 0-M36716- | 10/01/76- | 15- | 13- | 14.0- | - | - | 6.9- | 600- | | 3- | 1- | 7- | 5- | 8- | 2- | 2- | 1- | 2- | 4- | 3- | 1- | 3- | -3- | - | - | - | - | 1.74 |
| 30- | 45.6815- | 110.4906- | 2- | 07- | | 0-M36717- | 10/01/76- | 16- | 15- | 14.0- | - | - | 6.9- | 500- | | 10- | 1- | 1- | 5- | 8- | 2- | 2- | 2- | 2- | 2- | 2- | 1- | 3- | -3- | - | - | - | - | 1.14 |
| 30- | 45.6990- | 110.4590- | 2- | 07- | | 0-M36718- | 10/01/76- | 17- | 18- | 16.0- | - | - | 6.6- | 450- | | 4- | 1- | 1- | 3- | 6- | 2- | 2- | 2- | 2- | 4- | 3- | 1- | 3- | -3- | - | - | - | - | 2.73 |
| 30- | 45.7100- | 110.4187- | 2- | 07- | | 0-M36719- | 10/04/76- | 9- | 5- | 5.2- | - | - | 6.3- | 550- | | 6- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 2- | 2- | -3- | - | - | - | - | 4.54 |
| 30- | 45.7064- | 110.3999- | 2- | 07- | | 0-M36720- | 10/04/76- | 10- | 6- | 6.4- | - | - | 6.3- | 370- | | 6- | 1- | 1- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 0.90 |
| 30- | 45.6686- | 110.3961- | 2- | 07- | | 0-M36721- | 10/04/76- | 10- | 9- | 9.1- | - | - | 6.6- | 450- | | 7- | 1- | 1- | 5- | 8- | 2- | 2- | 2- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 6.18 |
| 30- | 45.6488- | 110.3937- | 2- | 07- | | 0-M36722- | 10/04/76- | 10- | 10- | 6.0- | - | - | 6.6- | 460- | | 8- | 1- | 6- | 4- | 6- | 2- | 2- | 2- | 2- | 2- | 3- | 2- | 2- | -3- | - | - | - | - | 0.90 |
| 30- | 45.4466- | 110.5922- | 2- | 07- | | 0-M36723- | 09/29/76- | 10- | 16- | 7.0- | - | - | 5.2- | 50- | | 9- | 1- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 0.21 |
| 30- | 45.4259- | 110.6141- | 2- | 07- | | 0-M36725- | 09/29/76- | 11- | 15- | 11.0- | C- | - | 5.7- | 200- | | 4- | 1- | 7- | 5- | 6- | 3- | 2- | 2- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 0.33 |
| 30- | 45.2858- | 110.7531- | 2- | 07- | | 0-M36726- | 09/29/76- | 12- | 11- | 6.5- | - | - | 5.7- | 230- | | 3- | 1- | 7- | 3- | 6- | 4- | 2- | 1- | 2- | 3- | 3- | 4- | 1- | -1- | - | - | - | - | 0.58 |
| 30- | 45.2941- | 110.7488- | 2- | 07- | | 0-M36727- | 09/29/76- | 12- | 19- | 7.5- | - | - | 5.9- | 170- | | 7- | 1- | 7- | 3- | 6- | 4- | 2- | 1- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 0.39 |
| 30- | 45.2612- | 110.7616- | 2- | 07- | | 0-M36728- | 09/29/76- | 12- | 14- | 7.5- | C- | - | 5.8- | 200- | | 0- | 1- | 7- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | - | - | - | - | - | 0.44 |
| 30- | 45.4654- | 110.6530- | 2- | 07- | | 0-M36729- | 09/29/76- | 13- | 21- | 12.5- | C- | - | 5.7- | 190- | | 4- | 1- | 1- | 5- | 6- | 2- | 2- | 2- | 3- | 4- | 4- | 1- | 1- | -3- | - | - | - | - | 0.23 |
| 30- | 45.4685- | 110.6936- | 2- | 07- | | 0-M36735- | 09/29/76- | 16- | 25- | 12.0- | - | - | 5.7- | 260- | | 6- | 1- | 7- | 5- | 6- | 3- | 2- | 1- | 2- | 4- | 2- | 2- | 1- | -3- | - | - | - | - | 0.21 |
| 30- | 45.4387- | 110.7354- | 2- | 07- | | 0-M36736- | 09/29/76- | 16- | 16- | 8.5- | - | - | 5.6- | 60- | | 2- | 1- | 7- | 2- | 6- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 1- | -3- | - | - | - | - | 0.10 |
| 30- | 45.3069- | 110.8519- | 2- | 07- | | 0-M36738- | 09/29/76- | 17- | 26- | 9.5- | - | - | 5.5- | 100- | | 5- | 1- | 7- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -1- | - | - | - | - | 0.69 |
| 30- | 45.3126- | 110.8962- | 2- | 07- | | 0-M36739- | 09/29/76- | 17- | 12- | 8.0- | - | - | 5.5- | 80- | | 6- | 2- | 7- | 2- | 7- | 4- | 2- | 1- | 2- | 1- | 2- | 4- | 1- | -8- | - | - | - | - | 0.23 |
| 30- | 45.3558- | 110.7808- | 2- | 07- | | 0-M36740- | 09/29/76- | 18- | 12- | 10.5- | - | - | 5.5- | 60- | | 1- | 1- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 1- | -1- | - | - | - | - | 0.10 |
| 30- | 45.3614- | 110.7983- | 2- | 07- | | 0-M36741- | 09/30/76- | 11- | 13- | 7.0- | - | - | 5.2- | 65- | | 6- | 1- | 4- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 1- | -1- | - | - | - | - | 0.10 |
| 30- | 45.3563- | 110.8049- | 2- | 07- | | 0-M36742- | 09/30/76- | 11- | 12- | 8.0- | - | - | 5.2- | 60- | | 1- | 1- | 4- | 3- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 0.23 |
| 30- | 45.3214- | 110.8998- | 2- | 07- | | 0-M36743- | 09/30/76- | 12- | 12- | 7.5- | C- | - | 5.7- | 145- | | 6- | 1- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -9- | - | - | - | - | 0.10 |
| 30- | 45.3294- | 110.9056- | 2- | 07- | | 0-M36744- | 09/30/76- | 12- | 15- | 9.0- | - | - | 5.5- | 130- | | 3- | 1- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 4- | 1- | -1- | - | - | - | - | 0.29 |
| 30- | 45.2627- | 110.8668- | 2- | 07- | | 0-M36745- | 09/30/76- | 13- | 23- | 13.0- | C- | - | 5.7- | 150- | | 0- | 1- | 7- | 3- | 6- | 2- | 2- | 1- | 2- | 2- | 2- | 2- | 1- | -3- | - | - | - | - | 0.66 |
| 30- | 45.2526- | 110.8937- | 2- | 07- | | 0-M36747- | 09/30/76- | 13- | 20- | 13.0- | - | - | 5.9- | 240- | | 0- | 3- | 7- | 2- | 7- | 2- | 2- | 1- | 3- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 0.71 |
| 30- | 45.3222- | 110.8329- | 2- | 07- | | 0-M36748- | 09/30/76- | 14- | 15- | 11.5- | - | - | 6.3- | 460- | | 8- | 3- | 7- | 3- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 4- | 1- | -3- | - | - | - | - | 2.70 |
| 30- | 45.3554- | 110.8846- | 2- | 07- | | 0-M36749- | 09/30/76- | 14- | 26- | 10.0- | - | - | 5.7- | 130- | | 3- | 3- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 1- | 2- | 3- | 1- | -1- | - | - | - | - | 0.10 |

# 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 |
| 30- | 45.5254- | 110.7012- | 2- | 07- | | 0-M36750- | 09/30/76- | 15- | 23- | 13.5- | C- | - | 6.8- | 2050- | | 6- | 1- | 4- | 6- | 6- | 2- | 2- | 2- | 1- | 6- | 3- | 2- | 1- | -3- | - | - | - | - | 5.68 |
| 30- | 45.5210- | 110.7050- | 2- | 07- | | 0-M36751- | 09/30/76- | 15- | 19- | 11.5- | - | - | 5.7- | 300- | | 4- | 1- | 4- | 3- | 6- | 3- | 2- | 2- | 2- | 3- | 3- | 2- | 1- | -3- | - | - | - | - | 0.69 |
| 30- | 45.5106- | 110.7367- | 2- | 07- | | 0-M36753- | 09/30/76- | 16- | 19- | 9.5- | - | - | 5.8- | 200- | | 0- | 1- | 7- | 2- | 6- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 1- | -3- | - | - | - | - | 0.50 |
| 30- | 45.5470- | 110.7234- | 2- | 07- | | 0-M36754- | 09/30/76- | 16- | 18- | 18.0- | C- | - | 6.3- | 500- | | 0- | 1- | 1- | 3- | 6- | 2- | 2- | 1- | 2- | 3- | 2- | 3- | 1- | -3- | - | - | - | - | 0.94 |
| 30- | 45.5721- | 110.6899- | 2- | 06- | | 0-M36755- | 09/30/76- | 17- | 18- | 12.5- | - | - | 6.3- | 950- | | 2- | 1- | 1- | 6- | 8- | 2- | 2- | 1- | 2- | 4- | 3- | 4- | 1- | -3- | - | - | - | - | 4.62 |
| 30- | 45.5639- | 110.6744- | 2- | 07- | | 0-M36756- | 09/30/76- | 18- | 15- | 9.0- | C- | - | 6.3- | 600- | | 6- | 1- | 3- | 5- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 1.30 |
| 30- | 45.5425- | 110.6219- | 2- | 07- | | 0-M36757- | 09/30/76- | 18- | 13- | 11.0- | C- | - | 6.1- | 700- | | 6- | 1- | 3- | 5- | 6- | 2- | 2- | 1- | 2- | 3- | 4- | 4- | 1- | -3- | - | - | - | - | 1.91 |
| 30- | 45.5681- | 110.6197- | 2- | 02- | | 0-M36758- | 10/01/76- | 9- | 15- | 7.5- | C- | - | 6.1- | 600- | | 8- | 1- | 1- | 3- | 1- | 2- | 2- | 1- | 2- | 4- | 2- | 2- | 1- | -3- | - | - | - | - | 2.84 |
| 30- | 45.5651- | 110.6163- | 2- | 07- | | 0-M36759- | 10/01/76- | 10- | 11- | 7.5- | C- | - | 6.1- | 500- | | 3- | 1- | 1- | 5- | 6- | 2- | 2- | 2- | 2- | 4- | 2- | 2- | 1- | -3- | - | - | - | - | 1.36 |
| 30- | 45.5192- | 110.5619- | 2- | 07- | | 0-M36760- | 10/01/76- | 11- | 10- | 7.0- | C- | - | 5.2- | 100- | | 2- | 1- | 1- | 5- | 6- | 2- | 2- | 2- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 0.25 |
| 30- | 45.5257- | 110.5117- | 2- | 07- | | 0-M36761- | 10/01/76- | 11- | 10- | 5.5- | - | - | 5.5- | 70- | | 3- | 3- | 7- | 1- | 1- | 4- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 0.17 |
| 30- | 45.5360- | 110.5568- | 2- | 07- | | 0-M36762- | 10/01/76- | 12- | 11- | 9.0- | - | - | 5.7- | 230- | | 4- | 1- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -8- | - | - | - | - | 2.33 |
| 30- | 45.5513- | 110.5198- | 2- | 07- | | 0-M36764- | 10/01/76- | 12- | 13- | 7.0- | C- | - | 5.8- | 120- | | 4- | 1- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 1- | 2- | 2- | 1- | -3- | - | - | - | - | 0.16 |
| 30- | 45.5715- | 110.5210- | 2- | 07- | | 0-M36765- | 10/01/76- | 12- | 12- | 8.0- | C- | - | 5.7- | 340- | | 3- | 1- | 7- | 2- | 3- | 3- | 2- | 1- | 2- | 2- | 2- | 2- | 1- | -3- | - | - | - | - | 1.11 |
| 30- | 45.5657- | 110.5471- | 2- | 07- | | 0-M36766- | 10/01/76- | 13- | 20- | 8.0- | C- | - | 5.9- | 345- | | 4- | 1- | 1- | 2- | 3- | 3- | 2- | 1- | 2- | 2- | 2- | 2- | 1- | -3- | - | - | - | - | 1.19 |
| 30- | 45.5705- | 110.5686- | 2- | 07- | | 0-M36767- | 10/01/76- | 13- | 13- | 10.0- | C- | - | 6.3- | 340- | | 3- | 1- | 7- | 2- | 7- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 1.27 |
| 30- | 45.6233- | 110.5985- | 2- | 07- | | 0-M36768- | 10/01/76- | 13- | 18- | 13.5- | C- | - | 6.5- | 700- | | 4- | 1- | 1- | 6- | 6- | 1- | 2- | 1- | 1- | 6- | 3- | 2- | 2- | -3- | - | - | - | - | 1.91 |
| 30- | 45.6158- | 110.5926- | 2- | 06- | | 0-M36769- | 10/01/76- | 14- | 13- | 10.5- | C- | - | 6.3- | 480- | | 1- | 1- | 1- | 3- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 4- | 2- | -3- | - | - | - | - | 2.62 |
| 30- | 45.6212- | 110.5860- | 2- | 07- | | 0-M36770- | 10/01/76- | 14- | 19- | 13.0- | C- | - | 6.3- | 480- | | 1- | 1- | 1- | 6- | 6- | 2- | 2- | 1- | 2- | 6- | 3- | 4- | 2- | -3- | - | - | - | - | 1.07 |
| 30- | 45.6303- | 110.5555- | 2- | 07- | | 0-M36771- | 10/01/76- | 16- | 22- | 12.0- | C- | - | 6.3- | 450- | | 2- | 3- | 7- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 1.07 |
| 30- | 45.6492- | 110.3824- | 2- | 07- | | 0-M36772- | 10/04/76- | 11- | 11- | 7.0- | - | - | 6.3- | 310- | | 3- | 1- | 1- | - | -3- | 2- | 1- | 2- | 2- | 3- | 2- | 2- | - | - | - | - | - | - | 0.70 |
| 30- | 45.7436- | 110.4894- | 2- | 07- | | 0-M36774- | 10/04/76- | 12- | 10- | 8.4- | - | - | 6.6- | 500- | | 3- | 1- | 7- | 5- | 8- | 2- | 2- | 1- | 2- | 2- | 3- | 2- | 2- | -3- | - | - | - | - | 1.32 |
| 30- | 45.7373- | 110.3556- | 2- | 07- | | 0-M36777- | 10/04/76- | 13- | 14- | 9.0- | - | - | 6.3- | 440- | | 4- | 1- | 7- | 4- | 6- | 2- | 2- | 2- | 1- | 4- | 2- | 2- | 2- | -3- | - | - | - | - | 2.19 |
| 30- | 45.7436- | 110.3218- | 2- | 07- | | 0-M36778- | 10/04/76- | 13- | 14- | 9.4- | - | - | 6.3- | 410- | | 6- | 1- | 7- | 5- | 6- | 2- | 2- | 2- | 2- | 4- | 2- | 2- | 2- | -3- | - | - | - | - | 2.12 |
| 30- | 45.7467- | 110.2863- | 2- | 07- | | 0-M36779- | 10/04/76- | 14- | 12- | 10.0- | - | - | 6.9- | 600- | | 5- | 1- | 7- | 4- | 6- | 2- | 2- | 2- | 2- | 2- | 2- | 2- | 3- | -3- | - | - | - | - | 4.75 |
| 30- | 45.6756- | 110.3601- | 2- | 27- | | 0-M36781- | 10/04/76- | 15- | 12- | 8.0- | - | - | 6.6- | 410- | | 6- | 1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 4- | 4- | 3- | 2- | -3- | - | - | - | - | 2.80 |
| 30- | 45.6651- | 110.3377- | 2- | 27- | | 0-M36782- | 10/04/76- | 16- | 11- | 8.2- | - | - | 6.6- | 420- | | 5- | 1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 2- | 4- | 2- | -3- | - | - | - | - | 1.75 |
| 30- | 45.6949- | 110.3347- | 2- | 27- | | 0-M36783- | 10/04/76- | 17- | 10- | 1.0- | - | - | 6.3- | 400- | | 7- | 1- | 1- | 4- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 2- | 2- | -3- | - | - | - | - | 3.03 |
| 30- | 45.6926- | 110.3150- | 2- | 27- | | 0-M36784- | 10/05/76- | 9- | 3- | 4.8- | - | - | 6.3- | 410- | | 7- | 1- | 6- | 4- | 6- | 3- | 2- | 2- | 2- | 4- | 2- | 3- | 3- | -3- | - | - | - | - | 1.12 |
| 30- | 45.6912- | 110.3030- | 2- | 27- | | 0-M36785- | 10/05/76- | 10- | 5- | 7.0- | - | - | 6.6- | 500- | | | -1- | 6- | 4- | 6- | 2- | 2- | 2- | 2- | 4- | 2- | 3- | 3- | -3- | - | - | - | - | 1.70 |
| 30- | 45.6896- | 110.2745- | 2- | 27- | | 0-M36786- | 10/05/76- | 10- | 6- | 7.2- | - | - | 6.3- | 450- | | 10- | 1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | 2.17 |
| 30- | 45.6895- | 110.2762- | 2- | 27- | | 0-M36787- | 10/05/76- | 10- | 6- | 5.6- | - | - | 6.3- | 375- | | 6- | 1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | 0.57 |
| 30- | 45.6565- | 110.2954- | 2- | 27- | | 0-M36789- | 10/05/76- | 12- | 11- | 5.8- | - | - | 6.6- | 330- | | 5- | 1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | 0.38 |
| 30- | 45.6567- | 110.2930- | 2- | 27- | | 0-M36790- | 10/05/76- | 12- | 11- | 4.4- | - | - | 6.3- | 390- | | 7- | 1- | 6- | 4- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | 0.54 |
| 30- | 45.6757- | 110.2503- | 2- | 27- | | 0-M36792- | 10/05/76- | 13- | 6- | 6.0- | - | - | 6.3- | 360- | | 3- | 1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | 1.20 |
| 30- | 45.6971- | 110.2550- | 2- | 27- | | 0-M36793- | 10/05/76- | 14- | 6- | 7.0- | - | - | 6.3- | 400- | | 5- | 1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 4- | -3- | - | - | - | - | 2.61 |
| 30- | 45.6026- | 110.3746- | 2- | 27- | | 0-M36794- | 10/05/76- | 15- | 6- | 4.0- | - | - | 6.3- | 330- | | 7- | 1- | 1- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 4- | -3- | - | - | - | - | 0.31 |
| 30- | 45.6040- | 110.3730- | 2- | 27- | | 0-M36795- | 10/05/76- | 15- | 6- | 4.6- | - | - | 6.6- | 360- | | 8- | 1- | 1- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 4- | -3- | - | - | - | - | 0.46 |
| 30- | 45.6142- | 110.3590- | 2- | 27- | | 0-M36797- | 10/05/76- | 16- | 7- | 5.0- | - | - | 6.6- | 340- | | 6- | 1- | 1- | 4- | 6- | 3- | 2- | 1- | 2- | 2- | 2- | 4- | 4- | -3- | - | - | - | - | 0.82 |
| 30- | 45.6041- | 110.3330- | 2- | 27- | | 0-M36798- | 10/05/76- | 16- | 6- | 6.0- | - | - | 6.9- | 550- | | 5- | 1- | 6- | 4- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 4- | 4- | -3- | - | - | - | - | 1.33 |
| 30- | 45.5992- | 110.3261- | 2- | 27- | | 0-M36799- | 10/05/76- | 17- | 6- | 5.0- | - | - | 6.3- | 275- | | 6- | 1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 4- | 4- | -3- | - | - | - | - | 1.77 |
| 30- | 45.6237- | 110.4017- | 2- | 27- | | 0-M36800- | 10/06/76- | 9- | 4- | 4.2- | - | - | 6.3- | 480- | | 8- | 1- | 6- | 4- | 6- | 2- | 2- | 3- | 2- | 4- | 2- | 2- | 2- | -3- | - | - | - | - | 2.34 |
| 30- | 45.5955- | 110.3279- | 2- | 27- | | 0-M36801- | 10/06/76- | 9- | 5- | 3.2- | - | - | 6.3- | 340- | | 6- | 1- | 6- | 4- | 6- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 0.70 |
| 30- | 45.5872- | 110.3230- | 2- | 27- | | 0-M36802- | 10/05/76- | 9- | 6- | 2.8- | - | - | 6.3- | 226- | | 7- | 1- | 1- | 4- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 0.91 |
| 30- | 45.5744- | 110.3367- | 2- | 27- | | 0-M36804- | 10/06/76- | 11- | 3- | 3.0- | - | - | 6.3- | 480- | | 7- | 1- | 7- | 4- | 6- | 2- | 2- | 3- | 2- | 1- | 2- | 2- | 3- | -3- | - | - | - | - | 0.84 |
| 30- | 45.5746- | 110.3379- | 2- | 27- | | 0-M36805- | 10/06/76- | 11- | 3- | 3.0- | - | - | 6.3- | 330- | | 2- | 1- | 7- | 4- | 6- | 3- | 2- | 1- | 2- | 1- | 2- | 2- | 3- | -3- | - | - | - | - | 1.67 |
| 30- | 45.6081- | 110.3183- | 2- | 27- | | 0-M36806- | 10/06/76- | 12- | 5- | 5.8- | - | - | 6.6- | 650- | | 5- | 1- | 7- | 4- | 6- | 2- | 2- | 2- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 2.29 |
| 30- | 45.6107- | 110.2672- | 2- | 27- | | 0-M36807- | 10/06/76- | 12- | 6- | 5.2- | - | - | 6.3- | 650- | | 8- | 1- | 7- | 4- | 6- | 2- | 2- | 2- | 2- | 4- | 3- | 2- | 3- | -3- | - | - | - | - | 1.70 |
| 30- | 45.6142- | 110.2576- | 2- | 27- | | 0-M36808- | 10/06/76- | 13- | 8- | 6.6- | - | - | 6.3- | 500- | | 3- | 1- | 7- | 3- | 8- | 2- | 2- | 2- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 0.44 |
| 30- | 45.5773- | 110.2650- | 2- | 27- | | 0-M36809- | 10/06/76- | 14- | 11- | 5.6- | - | - | 6.6- | 390- | | 7- | 1- | 6- | 4- | 8- | 2- | 2- | 1- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 0.79 |
| 30- | 45.5698- | 110.2735- | 2- | 27- | | 0-M36810- | 10/06/76- | 14- | 11- | 5.2- | - | - | 6.3- | 395- | | 8- | 1- | 6- | 3- | 1- | 3- | 3- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 1.09 |

# 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 (#) UNITS IN ppb |
| 30- | 45.5385- | 110.3205- | 2- | 27- | | 0-M36811- | 10/06/76- | 15- | 12- | 3.0- | - | - | 6.3- | 135- | | 8- | 1- | 6- | 4- | 6- | 2- | 2- | 2- | 2- | 1- | 2- | 2- | 2- | -3- | - | - | - | - | C.32 |
| 30- | 45.6233- | 110.2167- | 2- | 27- | | 0-M36813- | 10/06/76- | 16- | 1C- | 9.0- | - | - | 6.3- | 750- | | -1- | 6- | 3- | 1- | 2- | 2- | 2- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 6.13 |
| 30- | 45.5478- | 110.2133- | 2- | 27- | | 0-M36815- | 10/07/76- | 10- | 8- | 5.0- | C- | - | 6.6- | 470- | | 5- | 1- | 2- | 7- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 0.79 |
| 30- | 45.5555- | 110.199C- | 2- | 27- | | 0-M36817- | 10/07/76- | 11- | 10- | 5.8- | - | - | 6.3- | 370- | | 9- | 1- | 1- | 4- | 6- | 2- | 2- | - | -3- | 4- | 2- | 1- | -8- | - | - | - | - | - | 0.74 |
| 30- | 45.6143- | 110.1248- | 2- | 27- | | 0-M36818- | 10/07/76- | 11- | 12- | 6.2- | - | - | 5.9- | 370- | | 4- | 3- | 1- | 4- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 1- | 1- | -3- | - | - | - | - | 0.69 |
| 30- | 45.5936- | 110.1076- | 2- | 27- | | 0-M36819- | 10/07/76- | 12- | 13- | 5.0- | - | - | 6.6- | 1600- | | 1- | 1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 4- | 4- | 2- | 1- | -3- | - | - | - | - | 6.67 |
| 30- | 45.6752- | 110.5099- | 2- | 07- | | 0-M36821- | 10/01/76- | 16- | 21- | 12.0- | C- | - | 6.1- | 320- | | 4- | 1- | 1- | 2- | 1- | 2- | 2- | 1- | 2- | 3- | 1- | 3- | 1- | -3- | - | - | - | - | 1.34 |
| 30- | 45.6640- | 110.5027- | 2- | 07- | | 0-M36822- | 10/01/76- | 17- | 19- | 12.0- | C- | - | 6.0- | 500- | | -1- | 1- | 3- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | - | 1.11 |
| 30- | 45.6893- | 110.5610- | 2- | 07- | | 0-M36826- | 10/02/76- | 10- | 11- | 10.5- | C- | - | 5.9- | 650- | | 4- | 3- | 7- | 6- | 6- | 1- | 2- | 5- | 1- | 6- | 4- | 1- | 3- | -5- | - | - | - | - | 4.47 |
| 30- | 45.7078- | 110.5393- | 2- | 07- | | 0-M36828- | 10/02/76- | 10- | 12- | 9.5- | C- | - | 6.1- | 40- | | 6- | 3- | 1- | 3- | 7- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 3- | -3- | - | - | - | - | 0.71 |
| 30- | 45.7256- | 110.5662- | 2- | 07- | | 0-M36829- | 10/02/76- | 11- | 12- | 8.5- | C- | - | 6.3- | 35- | | 3- | 1- | 1- | 2- | 7- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 0.94 |
| 30- | 45.7474- | 110.5706- | 2- | 07- | | 0-M36830- | 10/02/76- | 11- | 13- | 9.0- | C- | - | 6.3- | 40- | | 3- | 1- | 1- | 5- | 7- | 2- | 2- | 1- | 2- | 4- | 2- | 3- | 3- | -3- | - | - | - | - | 1.25 |
| 30- | 45.7522- | 110.5842- | 2- | 07- | | 0-M36831- | 10/02/76- | 12- | 15- | 10.3- | C- | - | 6.3- | 60- | | 4- | 1- | 4- | 6- | 6- | 1- | 2- | 5- | 1- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 1.92 |
| 30- | 45.7514- | 110.5125- | 2- | 07- | | 0-M36834- | 10/02/76- | 12- | 15- | 9.2- | C- | - | 6.3- | 4C- | | 2- | 1- | 1- | 6- | 7- | 2- | 1- | 1- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 2.04 |
| 30- | 45.7642- | 110.5097- | 2- | 07- | | 0-M36835- | 10/02/76- | 13- | 16- | 10.2- | C- | - | 6.3- | 50- | | 4- | 1- | 1- | 5- | 6- | 2- | 2- | 3- | 2- | 3- | 4- | 3- | 3- | -3- | - | - | - | - | 1.13 |
| 30- | 45.6330- | 110.6161- | 2- | 07- | | 0-M36837- | 10/02/76- | 15- | 15- | 9.8- | - | - | 5.9- | 600- | | 4- | 1- | 1- | 3- | 6- | 3- | 2- | 1- | 1- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 1.92 |
| 30- | 45.6484- | 110.6081- | 2- | 07- | | 0-M36838- | 10/02/76- | 15- | 16- | 10.2- | - | - | 5.9- | 550- | | 4- | 1- | 1- | 5- | 6- | 2- | 2- | 3- | 2- | 2- | 3- | 2- | 2- | -3- | - | - | - | - | 1.75 |
| 30- | 45.6647- | 110.6050- | 2- | 07- | | 0-M36840- | 10/02/76- | 16- | 18- | 9.5- | - | - | 6.1- | 440- | | 5- | 1- | 1- | 2- | 6- | 3- | 2- | 1- | 2- | 2- | 4- | 3- | 2- | -3- | - | - | - | - | 1.27 |
| 30- | 45.6900- | 110.6636- | 2- | 07- | | 0-M36842- | 10/02/76- | 17- | 18- | 10.6- | - | - | 5.9- | 330- | | 4- | 1- | 7- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 1.67 |
| 30- | 45.6916- | 110.6938- | 2- | 06- | | 0-M36843- | 10/02/76- | 17- | 18- | 9.5- | C- | - | 5.9- | 335- | | 3- | 1- | 1- | 5- | 6- | 1- | 2- | 1- | 3- | -1- | 1- | 2- | -9- | - | - | - | - | - | 1.09 |
| 30- | 45.6975- | 110.6767- | 2- | 07- | | 0-M36844- | 10/02/76- | 17- | 18- | 9.8- | C- | - | 5.7- | 330- | | 4- | 1- | 1- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 0.91 |
| 30- | 45.6587- | 110.6483- | 2- | 07- | | 0-M36845- | 10/03/76- | 8- | 11- | 9.5- | C- | - | 5.9- | 445- | | 0- | 1- | 1- | 5- | 6- | 3- | 2- | 2- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | 0.99 |
| 30- | 45.6437- | 110.6673- | 2- | 07- | | 0-M36846- | 10/03/76- | 8- | 11- | 9.0- | - | - | 6.1- | 600- | | C- | 1- | 1- | 5- | 8- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 1.30 |
| 30- | 45.6366- | 110.7143- | 2- | 07- | | 0-M36847- | 10/03/76- | 9- | 12- | 10.2- | - | - | 5.7- | 440- | | 3- | 1- | 1- | 5- | 6- | 3- | 2- | 4- | 2- | 2- | 4- | 3- | 2- | -3- | - | - | - | - | 0.50 |
| 30- | 45.6179- | 110.7355- | 2- | 07- | | 0-M36848- | 10/03/76- | 9- | 12- | 10.5- | C- | - | 5.8- | 335- | | 2- | 3- | 7- | 5- | 6- | 2- | 2- | 2- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 0.56 |
| 30- | 45.6373- | 110.7477- | 2- | 07- | | 0-M36849- | 10/03/76- | 10- | 13- | 9.6- | C- | - | 5.9- | 330- | | 1- | 1- | 1- | 3- | 1- | 2- | 2- | 1- | 2- | 3- | 2- | 4- | 2- | -3- | - | - | - | - | 0.33 |
| 30- | 45.6698- | 110.6815- | 2- | 07- | | 0-M36850- | 10/03/76- | 10- | 13- | 10.2- | - | - | 5.7- | 300- | | 0- | 1- | 1- | 3- | 6- | 2- | 2- | 3- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 0.99 |
| 30- | 45.6607- | 110.7051- | 2- | 07- | | 0-M36851- | 10/03/76- | 11- | 13- | 9.8- | C- | - | 5.9- | 350- | | 4- | 1- | 1- | 6- | 6- | 3- | 2- | 4- | 2- | 2- | 3- | 3- | 2- | -4- | - | - | - | - | 1.57 |
| 30- | 45.6604- | 110.7195- | 2- | 07- | | 0-M36852- | 10/03/76- | 11- | 14- | 10.0- | - | - | 5.7- | 400- | | 3- | 1- | 1- | 5- | 6- | 3- | 2- | 4- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 1.12 |
| 30- | 45.8050- | 110.5428- | 2- | 07- | | 0-M36853- | 10/03/76- | 13- | 15- | 9.8- | C- | - | 6.3- | 550- | | 3- | 1- | 1- | 5- | 6- | 2- | 2- | 2- | 2- | 4- | 2- | 2- | 2- | -3- | - | - | - | - | 1.69 |
| 30- | 45.7914- | 110.5436- | 2- | 07- | | 0-M36854- | 10/03/76- | 13- | 14- | 9.8- | - | - | 5.9- | 500- | | 3- | 1- | 1- | 3- | 7- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 1.05 |
| 30- | 45.8178- | 110.5528- | 2- | 07- | | 0-M36855- | 10/03/76- | 13- | 15- | 10.2- | - | - | 5.7- | 350- | | 3- | 1- | 1- | 3- | 6- | 3- | 2- | 3- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 0.53 |
| 30- | 45.8386- | 110.5844- | 2- | 07- | | 0-M36856- | 10/03/76- | 14- | 16- | 9.8- | - | - | 5.7- | 400- | | 1- | 1- | 1- | 5- | 6- | 3- | 2- | 2- | 2- | 2- | 4- | 3- | 2- | -3- | - | - | - | - | C.47 |
| 30- | 45.8600- | 110.6175- | 2- | 07- | | 0-M36857- | 10/03/76- | 14- | 16- | 11.0- | C- | - | 5.7- | 400- | | 4- | 1- | 1- | 2- | 1- | 4- | 2- | 3- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 0.53 |
| 30- | 45.8647- | 110.5803- | 2- | 07- | | 0-M36858- | 10/03/76- | 14- | 16- | 10.5- | C- | - | 5.9- | 500- | | 0- | 1- | 1- | 5- | 6- | 2- | 2- | 2- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 1.45 |
| 30- | 45.8650- | 110.5800- | 2- | 07- | | 0-M36859- | 10/03/76- | 15- | 17- | 10.2- | - | - | 5.9- | 60- | | 4- | 1- | 6- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 4- | 3- | 2- | -3- | - | - | - | - | 1.57 |
| 30- | 45.8519- | 110.5756- | 2- | 07- | | 0-M36860- | 10/03/76- | 15- | 18- | 9.9- | - | - | 5.9- | 300- | | 8- | 1- | 6- | 2- | 7- | 4- | 2- | 3- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 0.45 |
| 30- | 45.8472- | 110.5736- | 2- | 07- | | 0-M36861- | 10/03/76- | 15- | 18- | 10.0- | C- | - | 5.9- | 440- | | 5- | 1- | 6- | 5- | 6- | 2- | 2- | 2- | 2- | 2- | 4- | 2- | 2- | -3- | - | - | - | - | 0.53 |
| 30- | 45.8275- | 110.5469- | 2- | 07- | | 0-M36862- | 10/03/76- | 15- | 18- | 11.0- | - | - | 5.9- | 490- | | C- | 1- | 1- | 5- | 6- | 4- | 2- | 3- | 2- | 2- | 4- | 4- | 2- | -3- | - | - | - | - | 0.76 |
| 30- | 45.8458- | 110.5064- | 2- | 07- | | 0-M36863- | 10/03/76- | 16- | 19- | 11.0- | - | - | 5.7- | 180- | | 4- | 1- | 1- | 2- | 1- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 1.57 |
| 30- | 45.8800- | 110.5886- | 2- | 07- | | 0-M36864- | 10/03/76- | 16- | 18- | 10.5- | C- | - | 5.7- | 48C- | | 5- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 0.99 |
| 30- | 45.8914- | 11C.5992- | 2- | 07- | | 0-M36865- | 10/03/76- | 17- | 19- | 9.9- | C- | - | 5.9- | 280- | | 3- | 1- | 1- | 2- | 1- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -9- | - | - | - | - | 0.55 |
| 30- | 45.8903- | 110.5344- | 2- | 07- | | 0-M36866- | 10/04/76- | 11- | 15- | 9.8- | C- | - | 5.9- | 370- | | 8- | 1- | 1- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 0.22 |
| 30- | 45.8981- | 110.5267- | 2- | 07- | | 0-M36867- | 10/04/76- | 12- | 16- | 10.0- | - | - | 5.7- | 210- | | 1- | 1- | 1- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 1.12 |
| 30- | 45.8978- | 110.5131- | 2- | C7- | | 0-M36868- | 10/04/76- | 12- | 16- | 9.5- | - | - | 5.7- | 200- | | 4- | 1- | 1- | 3- | 7- | 2- | 2- | 1- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 0.53 |
| 30- | 45.9406- | 110.5200- | 2- | 07- | | 0-M36869- | 10/04/76- | 12- | 16- | 11.2- | - | - | 5.5- | 205- | | 4- | 1- | 1- | 2- | 1- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 0.51 |
| 30- | 45.7446- | 110.2342- | 2- | 02- | | 0-M36870- | 10/07/76- | 10- | 13- | 16.0- | C- | - | 6.1- | 500- | | 3- | 1- | 1- | 5- | 6- | 3- | 2- | 3- | 2- | 2- | 3- | 2- | 1- | -3- | - | - | - | - | 1.38 |
| 30- | 45.7590- | 110.2487- | 2- | 02- | | 0-M36872- | 10/07/76- | 10- | 11- | 5.0- | C- | - | 5.7- | 460- | | 2- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 0.89 |
| 30- | 45.8022- | 11C.2335- | 2- | 02- | | 0-M36873- | 10/07/76- | 11- | 10- | 5.5- | C- | - | 5.9- | 360- | | 3- | 1- | 6- | 5- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 1.45 |
| 30- | 45.7989- | 110.2478- | 2- | 02- | | 0-M36874- | 10/07/76- | 11- | 12- | 6.5- | - | - | 5.9- | 5C0- | | 8- | 1- | 1- | 4- | 6- | 2- | 2- | 1- | 2- | 6- | 3- | 3- | 1- | -3- | - | - | - | - | 1.73 |
| 30- | 45.7932- | 110.2028- | 2- | 02- | | 0-M36875- | 10/07/76- | 12- | 13- | 6.0- | C- | - | 5.9- | 340- | | 0- | 1- | 1- | 2- | 1- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 0.32 |

# 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 (#) UNITS IN ppb |
| 30- | 45.7610- | 110.2064- | 2- | 02- | | 0-M36876- | 10/07/76- | 12- | 15- | 8.5- | C- | - | 6.1- | 750- | | 4- | 1- | 1- | 5- | 6- | 3- | 2- | 1- | 2- | 4- | 2- | 2- | 1- | -3- | - | - | - | - | 9.90 |
| 30- | 45.7698- | 110.1807- | 2- | 02- | | 0-M36877- | 10/07/76- | 12- | 14- | 7.0- | - | - | 5.9- | 430- | | 3- | 1- | 1- | 2- | 6- | 3- | 2- | 1- | 2- | 2- | 2- | 2- | 1- | -3- | - | - | - | - | 1.49 |
| 30- | 45.7360- | 110.2153- | 2- | 02- | | 0-M36878- | 10/07/76- | 13- | 17- | 12.0- | C- | - | 5.7- | 350- | | 4- | 1- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 3- | 2- | 2- | 1- | -3- | - | - | - | - | 0.69 |
| 30- | 45.6926- | 110.2127- | 2- | 02- | | 0-M36879- | 10/07/76- | 13- | 14- | 6.5- | - | - | 5.7- | 310- | | 1- | 1- | 6- | 3- | 7- | 2- | 2- | 1- | 2- | 2- | 3- | 2- | 1- | -3- | - | - | - | - | 1.28 |
| 30- | 45.7032- | 110.1963- | 2- | 02- | | 0-M36880- | 10/07/76- | 14- | 17- | 7.5- | C- | - | 5.7- | 310- | | 3- | 1- | 3- | 2- | 3- | 2- | 2- | 1- | 2- | 3- | 3- | 4- | 1- | -3- | - | - | - | - | 1.06 |
| 30- | 45.7074- | 110.1942- | 2- | 02- | | 0-M36881- | 10/07/76- | 14- | 14- | 7.5- | C- | - | 5.7- | 330- | | 5- | 1- | 3- | 3- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 0.46 |
| 30- | 45.7087- | 110.1920- | 2- | 02- | | 0-M36883- | 10/07/76- | 14- | 14- | 8.5- | C- | - | 5.7- | 380- | | 0- | 1- | 7- | 2- | 7- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 1.25 |
| 30- | 45.6946- | 110.1775- | 2- | 02- | | 0-M36884- | 10/07/76- | 15- | 16- | 8.5- | C- | - | 5.7- | 300- | | 3- | 1- | 1- | 2- | 3- | 2- | 2- | 1- | 2- | 2- | 2- | 3- | 1- | -3- | - | - | - | - | 0.68 |
| 30- | 45.7243- | 110.1999- | 2- | 02- | | 0-M36885- | 10/07/76- | 15- | 20- | 11.0- | C- | - | 5.7- | 650- | | 2- | 1- | 1- | 2- | 3- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 1- | -3- | - | - | - | - | 3.34 |
| 30- | 45.7252- | 110.1561- | 2- | 02- | | 0-M36887- | 10/07/76- | 16- | 18- | 9.5- | - | - | 5.7- | 270- | | 4- | 1- | 1- | 2- | 6- | 2- | 2- | 1- | 2- | 3- | 2- | 3- | 1- | -3- | - | - | - | - | 1.10 |
| 30- | 45.7475- | 110.1340- | 2- | 02- | | 0-M36889- | 10/07/76- | 16- | 19- | 11.0- | C- | - | 5.7- | 270- | | 1- | 1- | 7- | 3- | 6- | 2- | 2- | 1- | 2- | 3- | 3- | 2- | 1- | -3- | - | - | - | - | 1.14 |
| 30- | 45.7700- | 110.0819- | 2- | 02- | | 0-M36890- | 10/07/76- | 16- | 17- | 10.0- | - | - | 5.9- | 360- | | 4- | 1- | 7- | 5- | 6- | 4- | 2- | 1- | 2- | 4- | 3- | 4- | 1- | -3- | - | - | - | - | 1.49 |
| 30- | 45.7750- | 110.0642- | 2- | 02- | | 0-M36892- | 10/07/76- | 17- | 18- | 10.0- | C- | - | 5.7- | 270- | | 3- | 1- | 1- | 3- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 2- | 1- | -3- | - | - | - | - | 0.37 |
| 30- | 45.8978- | 110.4981- | 2- | 02- | | 0-M36893- | 10/08/76- | 9- | 6- | 6.0- | C- | - | 5.7- | 190- | | 4- | 1- | 1- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 1.32 |
| 30- | 45.9022- | 110.4925- | 2- | 02- | | 0-M36894- | 10/08/76- | 9- | 5- | 5.0- | C- | - | 5.7- | 450- | | 2- | 1- | 1- | 5- | 6- | 3- | 2- | 3- | 2- | 2- | 3- | 4- | 1- | -3- | - | - | - | - | 2.79 |
| 30- | 45.8875- | 110.4872- | 2- | 02- | | 0-M36895- | 10/08/76- | 10- | 10- | 6.0- | C- | - | 5.7- | 380- | | 9- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 1.81 |
| 30- | 45.8772- | 110.4767- | 2- | 02- | | 0-M36896- | 10/08/76- | 10- | 13- | 5.5- | - | - | 5.7- | 280- | | 9- | 1- | 1- | 5- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 2.54 |
| 30- | 45.8786- | 110.4303- | 2- | 02- | | 0-M36897- | 10/08/76- | 10- | 8- | 4.0- | C- | - | 5.9- | 375- | | 2- | 1- | 1- | 3- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 4- | 1- | -3- | - | - | - | - | 2.22 |
| 30- | 45.8992- | 110.4311- | 2- | 02- | | 0-M36898- | 10/08/76- | 11- | 3- | 4.0- | C- | - | 5.7- | 350- | | 3- | 1- | 1- | 2- | 6- | 3- | 2- | 1- | 2- | 1- | 2- | 4- | 1- | -3- | - | - | - | - | 1.50 |
| 30- | 45.9042- | 110.4317- | 2- | 02- | | 0-M36899- | 10/08/76- | 11- | 4- | 6.0- | C- | - | 5.5- | 140- | | 5- | 1- | 1- | 2- | 1- | 4- | 2- | 1- | 2- | 1- | 2- | 2- | 1- | -3- | - | - | - | - | 0.37 |
| 30- | 45.9147- | 110.4239- | 2- | 02- | | 0-M36900- | 10/08/76- | 11- | 8- | 6.0- | C- | - | 5.7- | 240- | | 3- | 1- | 1- | 2- | 1- | 4- | 2- | 1- | 2- | 3- | 2- | 2- | 1- | -3- | - | - | - | - | 0.72 |
| 30- | 45.9200- | 110.4325- | 2- | 02- | | 0-M36901- | 10/08/76- | 11- | 16- | 6.0- | C- | - | 6.1- | 500- | | 0- | 1- | 1- | 5- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 0.93 |
| 30- | 45.9233- | 110.4342- | 2- | 02- | | 0-M36902- | 10/08/76- | 12- | 14- | 5.0- | C- | - | 5.9- | 480- | | 3- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 0.79 |
| 30- | 45.9508- | 110.4528- | 2- | 02- | | 0-M36903- | 10/08/76- | 12- | 18- | 6.5- | - | - | 5.5- | 140- | | 4- | 1- | 1- | 2- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -1- | - | - | - | - | 0.10 |
| 30- | 45.9528- | 110.4744- | 2- | 02- | | 0-M36904- | 10/08/76- | 12- | 21- | 12.0- | C- | - | 5.7- | 280- | | 3- | 1- | 1- | 2- | 1- | 2- | 2- | 1- | 2- | 4- | 2- | 2- | 1- | -3- | - | - | - | - | 0.32 |
| 30- | 45.9544- | 110.4869- | 2- | 02- | | 0-M36905- | 10/08/76- | 13- | 19- | 9.5- | C- | - | 5.7- | 240- | | 6- | 1- | 1- | 5- | 6- | 3- | 2- | 1- | 1- | 6- | 3- | 3- | 1- | -3- | - | - | - | - | 0.40 |
| 30- | 45.9992- | 110.4222- | 2- | 02- | | 0-M36906- | 10/08/76- | 13- | 25- | 11.0- | - | - | 5.5- | 70- | | 5- | 3- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 1.24 |
| 30- | 45.9967- | 110.4233- | 2- | 02- | | 0-M36907- | 10/08/76- | 13- | 24- | 9.0- | - | - | 5.5- | 75- | | 5- | 3- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 0.10 |
| 30- | 45.7711- | 110.4794- | 2- | 02- | | 0-M36909- | 10/08/76- | 15- | 20- | 11.0- | C- | - | 5.9- | 550- | | 1- | 1- | 1- | 3- | 7- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 1.31 |
| 30- | 45.8006- | 110.4806- | 2- | 02- | | 0-M36910- | 10/08/76- | 16- | 21- | 9.0- | - | - | 5.9- | 500- | | 4- | 1- | 1- | 3- | 1- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 1.02 |
| 30- | 45.8203- | 110.4992- | 2- | 02- | | 0-M36911- | 10/08/76- | 16- | 17- | 11.0- | C- | - | 5.9- | 600- | | 5- | 1- | 1- | 5- | 6- | 2- | 2- | 3- | 2- | 2- | 2- | 3- | 1- | -3- | - | - | - | - | 1.49 |
| 30- | 45.7578- | 110.4533- | 2- | 02- | | 0-M36913- | 10/09/76- | 9- | 11- | 7.0- | C- | - | 5.9- | 460- | | 4- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 2- | 2- | 3- | 1- | -3- | - | - | - | - | 0.41 |
| 30- | 45.8458- | 110.4106- | 2- | 02- | | 0-M36915- | 10/09/76- | 10- | 13- | 7.0- | C- | - | 5.7- | 600- | | 2- | 3- | 7- | 3- | 6- | 2- | 2- | 1- | 2- | 4- | 2- | 2- | 1- | -3- | - | - | - | - | 0.59 |
| 30- | 45.8292- | 110.4400- | 2- | 02- | | 0-M36916- | 10/09/76- | 11- | 14- | 7.0- | C- | - | 5.7- | 550- | | 0- | 1- | 1- | 3- | 1- | 2- | 2- | 1- | 2- | 4- | 2- | 3- | 1- | -3- | - | - | - | - | 2.01 |
| 30- | 45.8325- | 110.4725- | 2- | 02- | | 0-M36918- | 10/09/76- | 12- | 18- | 8.0- | C- | - | 5.9- | 450- | | 7- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 3- | 2- | 2- | 1- | -3- | - | - | - | - | 1.67 |
| 30- | 45.9825- | 110.5183- | 2- | 07- | | 0-M36919- | 10/04/76- | 13- | 17- | 12.2- | C- | - | 5.7- | 335- | | 2- | 1- | 1- | 3- | 6- | 3- | 2- | 2- | 2- | 2- | 3- | 2- | 2- | -3- | - | - | - | - | 0.70 |
| 30- | 45.9861- | 110.5019- | 2- | 07- | | 0-M36920- | 10/04/76- | 13- | 15- | 9.9- | C- | - | 5.7- | 310- | | 7- | 1- | 1- | 3- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 1.14 |
| 30- | 45.9850- | 110.5014- | 2- | 07- | | 0-M36921- | 10/04/76- | 13- | 17- | 10.2- | C- | - | 5.8- | 500- | | 4- | 1- | 1- | 3- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 2.15 |
| 30- | 45.9956- | 110.5144- | 2- | 07- | | 0-M36922- | 10/04/76- | 14- | 17- | 10.0- | C- | - | 5.9- | 345- | | 5- | 1- | 1- | 2- | 7- | 3- | 2- | 2- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 0.53 |
| 30- | 45.9956- | 110.5372- | 2- | 07- | | 0-M36923- | 10/04/76- | 14- | 18- | 9.9- | C- | - | 5.7- | 340- | | 5- | 1- | 1- | 2- | 7- | 2- | 2- | 1- | 2- | 2- | 3- | 2- | 2- | -3- | - | - | - | - | 0.32 |
| 30- | 45.9833- | 110.6139- | 2- | 07- | | 0-M36924- | 10/04/76- | 15- | 19- | 9.8- | - | - | 5.7- | 440- | | 8- | 1- | 6- | 2- | 7- | 3- | 2- | 3- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 1.03 |
| 30- | 45.9689- | 110.5514- | 2- | 07- | | 0-M36926- | 10/04/76- | 15- | 19- | 12.5- | - | - | 5.7- | 420- | | 2- | 1- | 1- | 3- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 1.71 |
| 30- | 45.9641- | 110.6455- | 2- | 07- | | 0-M36928- | 10/04/76- | 16- | 20- | 9.8- | - | - | 5.9- | 520- | | 4- | 1- | 1- | 5- | 7- | 3- | 2- | 2- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 4.11 |
| 30- | 45.9622- | 110.6460- | 2- | 07- | | 0-M36929- | 10/04/76- | 16- | 19- | 9.8- | - | - | 5.9- | 610- | | 3- | 1- | 1- | 5- | 6- | 2- | 2- | 5- | 2- | 6- | 3- | 3- | 2- | -3- | - | - | - | - | 3.04 |
| 30- | 45.9310- | 110.6662- | 2- | 07- | | 0-M36930- | 10/04/76- | 17- | 20- | 10.6- | - | - | 5.7- | 700- | | 4- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 6- | 3- | 1- | 2- | -3- | - | - | - | - | 3.61 |
| 30- | 45.9338- | 110.6954- | 2- | 07- | | 0-M36931- | 10/04/76- | 17- | 20- | 11.0- | - | - | 5.9- | 850- | | 1- | 1- | 1- | 6- | 6- | 1- | 2- | 1- | 2- | 4- | 3- | 4- | 2- | -3- | - | - | - | - | 4.88 |
| 30- | 45.9381- | 110.5994- | 2- | 27- | | 0-M36932- | 10/05/76- | 10- | 8- | 3.5- | - | - | 5.7- | 450- | | 7- | 1- | 1- | 5- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 2.05 |
| 30- | 45.9461- | 110.5636- | 2- | 02- | | 0-M36933- | 10/05/76- | 10- | 6- | 3.5- | - | - | 5.7- | 360- | | 1- | 1- | 1- | 3- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | 0.48 |
| 30- | 45.9919- | 110.7081- | 2- | 07- | | 0-M36935- | 10/05/76- | 11- | 9- | 4.5- | C- | - | 5.9- | 500- | | 3- | 1- | 1- | 2- | 1- | 4- | 2- | 1- | 2- | 2- | 2- | 3- | 3- | -3- | - | - | - | - | 3.31 |
| 30- | 45.9163- | 110.7126- | 2- | 07- | | 0-M36936- | 10/05/76- | 11- | 11- | 3.0- | - | - | 5.7- | 650- | | 4- | 1- | 1- | 5- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 2- | 3- | -3- | - | - | - | - | 2.60 |
| 30- | 45.9101- | 110.6687- | 2- | 07- | | 0-M36937- | 10/05/76- | 12- | 9- | 4.0- | C- | - | 5.9- | 1200- | | 4- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 3- | 4- | 2- | 3- | -3- | - | - | - | - | 1.76 |

# 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 (#) UNITS IN ppb |
| 30- | 45.9077- | 110.6292- | 2- | 07- | | 0-M36938- | 10/05/76- | 12- | 8- | 9.0- | C- | - | 6.1- | 1050- | | - | 1- | 1- | 5- | 6- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | 3- | -3- | - | - | - | - | 1.61 |
| 30- | 45.8733- | 110.7244- | 2- | 07- | | 0-M36939- | 10/05/76- | 13- | 7- | 7.0- | C- | - | 5.7- | 500- | | 1- | 1- | 1- | 2- | 7- | 2- | 2- | 1- | 2- | 2- | 2- | 3- | 4- | -3- | - | - | - | - | 1.68 |
| 30- | 45.8833- | 110.7269- | 2- | 02- | | 0-M36940- | 10/05/76- | 13- | 5- | 5.0- | C- | - | 5.7- | 360- | | 6- | 1- | 1- | 2- | 7- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 4- | -3- | - | - | - | - | 0.29 |
| 30- | 45.8817- | 110.7149- | 2- | 02- | | 0-M36941- | 10/05/76- | 13- | 5- | 5.5- | C- | - | 5.7- | 750- | | 1- | 1- | 1- | 3- | 7- | 2- | 2- | 1- | 2- | 3- | 4- | 4- | 4- | -3- | - | - | - | - | 0.76 |
| 30- | 45.8425- | 110.7458- | 2- | 02- | | 0-M36942- | 10/05/76- | 14- | 6- | 5.5- | C- | - | 5.9- | 300- | | 4- | 1- | 1- | 2- | 7- | 2- | 2- | 1- | 2- | 2- | 2- | 4- | 4- | -3- | - | - | - | - | 0.18 |
| 30- | 45.8414- | 110.7392- | 2- | 02- | | 0-M36943- | 10/05/76- | 14- | 6- | 4.5- | C- | - | 5.7- | 30- | | 5- | 1- | 1- | 2- | 7- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 4- | -3- | - | - | - | - | 0.22 |
| 30- | 45.8700- | 110.6981- | 2- | 02- | | 0-M36945- | 10/05/76- | 14- | 6- | 7.0- | - | - | 5.9- | 360- | | 4- | 1- | 6- | 2- | 6- | 3- | 2- | 1- | 2- | 2- | 4- | 3- | 4- | -3- | - | - | - | - | 1.70 |
| 30- | 45.8658- | 110.6681- | 2- | 02- | | 0-M36946- | 10/05/76- | 15- | 8- | 6.0- | C- | - | 5.9- | 370- | | 3- | 1- | 6- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 4- | -3- | - | - | - | - | 0.88 |
| 30- | 45.8653- | 110.6728- | 2- | 02- | | 0-M36947- | 10/05/76- | 15- | 8- | 6.5- | C- | - | 5.9- | 350- | | 3- | 1- | 6- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 4- | -3- | - | - | - | - | 1.09 |
| 30- | 45.8650- | 110.6458- | 2- | 02- | | 0-M36948- | 10/05/76- | 15- | 8- | 5.5- | C- | - | 5.9- | 310- | | 4- | 3- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 4- | -3- | - | - | - | - | 1.21 |
| 30- | 45.8350- | 110.6519- | 2- | 02- | | 0-M36949- | 10/05/76- | 16- | 8- | 5.0- | C- | - | 5.7- | 310- | | 5- | 3- | 7- | 5- | 8- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 4- | -3- | - | - | - | - | 0.68 |
| 30- | 45.8303- | 110.6394- | 2- | 02- | | 0-M36950- | 10/05/76- | 14- | 7- | 5.0- | C- | - | 5.7- | 340- | | 5- | 3- | 7- | 2- | 7- | 2- | 2- | 1- | 2- | 3- | 3- | 4- | 4- | -3- | - | - | - | - | 0.54 |
| 30- | 45.8136- | 110.6539- | 2- | 02- | | 0-M36951- | 10/05/76- | 16- | 9- | 5.5- | C- | - | 5.7- | 340- | | 6- | 1- | 6- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 4- | -3- | - | - | - | - | 0.33 |
| 30- | 45.9131- | 110.0106- | 2- | 02- | | 0-M36953- | 10/06/76- | 11- | 14- | 7.5- | C- | - | 5.9- | 500- | | 3- | 1- | 1- | 2- | 7- | 2- | 2- | 1- | 2- | 4- | 3- | 4- | 2- | -3- | - | - | - | - | 1.77 |
| 30- | 45.8956- | 110.0236- | 2- | 02- | | 0-M36954- | 10/06/76- | 11- | 13- | 8.0- | C- | - | 5.9- | 360- | | 6- | 1- | 1- | 2- | 1- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 0.65 |
| 30- | 45.8797- | 110.0047- | 2- | 02- | | 0-M36955- | 10/06/76- | 11- | 12- | 8.5- | C- | - | 5.9- | 650- | | 3- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 1.94 |
| 30- | 45.8828- | 110.0286- | 2- | 02- | | 0-M36956- | 10/06/76- | 12- | 12- | 8.5- | C- | - | 5.9- | 700- | | 4- | 1- | 1- | 5- | 7- | 1- | 2- | 1- | 1- | 6- | 3- | 2- | 2- | -3- | - | - | - | - | 1.21 |
| 30- | 45.8819- | 110.0608- | 2- | 02- | | 0-M36957- | 10/06/76- | 12- | 13- | 7.5- | C- | - | 5.9- | 500- | | 4- | 1- | 1- | 2- | 1- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 0.48 |
| 30- | 45.9361- | 110.0050- | 2- | 02- | | 0-M36959- | 10/06/76- | 13- | 13- | 8.0- | C- | - | 5.9- | 500- | | 3- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 4- | 2- | -3- | - | - | - | - | 0.76 |
| 30- | 45.9372- | 110.0489- | 2- | 02- | | 0-M36960- | 10/06/76- | 14- | 13- | 7.5- | C- | - | 5.9- | 550- | | 3- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 4- | 3- | -3- | - | - | - | - | 0.87 |
| 30- | 45.9081- | 110.0719- | 2- | 02- | | 0-M36961- | 10/06/76- | 14- | 11- | 8.0- | C- | - | 5.7- | 240- | | 9- | 1- | 6- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | 0.54 |
| 30- | 45.9139- | 110.1147- | 2- | 02- | | 0-M36962- | 10/06/76- | 15- | 9- | 9.0- | C- | - | 5.7- | 270- | | 2- | 1- | 6- | 5- | 8- | 2- | 2- | 1- | 2- | 4- | 3- | 2- | 3- | -3- | - | - | - | - | 0.10 |
| 30- | 45.9483- | 110.0067- | 2- | 02- | | 0-M36963- | 10/06/76- | 15- | 10- | 9.0- | C- | - | 5.9- | 450- | | 7- | 1- | 1- | 5- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 4- | -3- | - | - | - | - | 0.37 |
| 30- | 45.9569- | 110.0372- | 2- | 02- | | 0-M36964- | 10/06/76- | 16- | 14- | 8.5- | C- | - | 5.9- | 500- | | 3- | 1- | 1- | 3- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 0.24 |
| 30- | 45.9689- | 110.0600- | 2- | 02- | | 0-M36965- | 10/06/76- | 16- | 11- | 9.5- | C- | - | 5.7- | 460- | | 1- | 1- | 1- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 0.67 |
| 30- | 45.9631- | 110.0689- | 2- | 02- | | 0-M36966- | 10/06/76- | 16- | 12- | 8.0- | - | - | 6.1- | 500- | | 3- | 1- | 1- | 3- | 6- | 2- | 2- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 1.64 |
| 30- | 45.9964- | 110.0847- | 2- | 02- | | 0-M36967- | 10/06/76- | 17- | 13- | 9.0- | - | - | 5.9- | 490- | | 5- | 1- | 1- | 3- | 6- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | 0.17 |
| 30- | 45.9792- | 110.0022- | 2- | 02- | | 0-M36968- | 10/06/76- | 18- | 14- | 8.5- | C- | - | 6.1- | 450- | | 0- | 1- | 1- | 3- | 6- | 2- | 2- | 1- | 2- | 3- | 3- | 2- | 2- | -3- | - | - | - | - | 0.57 |
| 30- | 45.5837- | 110.1099- | 2- | 27- | | 0-M36969- | 10/07/76- | 12- | 13- | 8.0- | - | - | 5.9- | 345- | | 1- | 3- | 1- | 4- | 6- | 3- | 2- | 1- | 2- | 2- | 4- | 1- | 1- | -3- | - | - | - | - | 0.97 |
| 30- | 45.5261- | 110.1348- | 2- | 27- | | 0-M36972- | 10/07/76- | 13- | 11- | 3.4- | - | - | 6.3- | 170- | | 4- | 1- | 1- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 2- | 1- | -3- | - | - | - | - | 0.58 |
| 30- | 45.5267- | 110.1328- | 2- | 27- | | 0-M36973- | 10/07/76- | 14- | 11- | 5.0- | - | - | 6.3- | 180- | | 3- | 1- | 1- | 3- | 1- | 3- | 2- | 1- | 2- | 1- | 4- | 2- | 1- | -3- | - | - | - | - | 0.77 |
| 30- | 45.5187- | 110.1098- | 2- | 27- | | 0-M36974- | 10/07/76- | 14- | 11- | 5.0- | - | - | 6.3- | 180- | | 2- | 3- | 1- | 4- | 6- | 3- | 2- | 1- | 2- | 1- | 4- | 2- | 1- | -3- | - | - | - | - | 0.71 |
| 30- | 45.5125- | 110.0867- | 2- | 27- | | 0-M36975- | 10/07/76- | 15- | 11- | 5.2- | - | - | 6.3- | 185- | | 4- | 3- | 1- | 4- | 6- | 3- | 2- | 1- | 2- | 1- | 4- | 2- | 1- | -3- | - | - | - | - | 0.71 |
| 30- | 45.5832- | 110.1072- | 2- | 27- | | 0-M36978- | 10/07/76- | 16- | 10- | 9.0- | - | - | 6.6- | 500- | | 4- | 3- | 1- | 4- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 2- | 1- | -3- | - | - | - | - | 1.86 |
| 30- | 45.6417- | 110.1485- | 2- | 07- | | 0-M36981- | 10/10/76- | 10- | 15- | 6.6- | - | - | 6.6- | 500- | | 6- | 1- | 7- | 5- | 8- | 2- | 2- | 1- | 2- | 3- | 2- | 3- | 2- | -3- | - | - | - | - | 1.72 |
| 30- | 45.5474- | 110.0582- | 2- | 07- | | 0-M36983- | 10/10/76- | 12- | 19- | 5.0- | - | - | 6.3- | 320- | | 3- | 1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 2- | 2- | -3- | - | - | - | - | 0.68 |
| 30- | 45.5664- | 110.0996- | 2- | 07- | | 0-M36987- | 10/10/76- | 13- | 20- | 10.4- | - | - | 6.3- | 175- | | 7- | 1- | 7- | 3- | 1- | 3- | 2- | 1- | 2- | 4- | 4- | 2- | 2- | -3- | - | - | - | - | 1.12 |
| 30- | 45.5786- | 110.0729- | 2- | 07- | | 0-M36988- | 10/10/76- | 14- | 15- | 10.0- | - | - | 6.6- | 450- | | 3- | 1- | 6- | 4- | 7- | 2- | 2- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 0.44 |
| 30- | 45.5795- | 110.0802- | 2- | 07- | | 0-M36989- | 10/10/76- | 14- | 16- | 10.2- | - | - | 7.2- | 1000- | | 3- | 1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 2- | 2- | -3- | - | - | - | - | 0.64 |
| 30- | 45.6356- | 110.0947- | 2- | 07- | | 0-M36990- | 10/10/76- | 15- | 15- | 9.6- | - | - | 6.0- | 335- | | 4- | 1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 1.00 |
| 30- | 45.6634- | 110.0751- | 2- | 07- | | 0-M36991- | 10/10/76- | 15- | 13- | 6.4- | - | - | 6.3- | 310- | | 7- | 1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 0.41 |
| 30- | 45.6418- | 110.0566- | 2- | 07- | | 0-M36992- | 10/10/76- | 17- | 12- | 6.6- | - | - | 6.3- | 230- | | 7- | 3- | 5- | 4- | 6- | 2- | 2- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 0.90 |
| 30- | 45.6931- | 110.0661- | 2- | 07- | | 0-M36993- | 10/10/76- | 18- | 10- | 10.4- | - | - | 6.3- | 210- | | 3- | 1- | 6- | 4- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 2- | 2- | -3- | - | - | - | - | 1.77 |
| 30- | 45.6745- | 110.2500- | 2- | 07- | | 0-M36994- | 10/11/76- | 11- | 8- | 6.0- | - | - | 6.3- | 380- | | 5- | 1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 2- | 2- | -3- | - | - | - | - | 2.06 |
| 30- | 45.6970- | 110.0140- | 2- | 06- | | 0-M36998- | 10/11/76- | 12- | 16- | 9.0- | - | - | 6.6- | 240- | | 5- | 1- | 5- | 5- | 8- | 2- | 3- | 1- | | -2- | 3- | 3- | 2- | -3- | - | - | - | - | 0.35 |
| 30- | 45.6478- | 110.0049- | 2- | 07- | | 0-M37000- | 10/11/76- | 13- | 18- | 9.0- | - | - | 6.3- | 185- | | 1- | 1- | 5- | 3- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 4- | 2- | -3- | - | - | - | - | 0.10 |
| 30- | 45.6452- | 110.0085- | 2- | 07- | | 0-M37001- | 10/11/76- | 14- | 18- | 8.4- | - | - | 6.3- | 190- | | 4- | 1- | 5- | 4- | 6- | 2- | 2- | 1- | 2- | 3- | 3- | 4- | 2- | -3- | - | - | - | - | 0.31 |
| 30- | 45.6306- | 110.0153- | 2- | 07- | | 0-M37003- | 10/11/76- | 14- | 18- | 7.0- | - | - | 6.3- | 255- | | 3- | 1- | 5- | 3- | 6- | 2- | 2- | 1- | 2- | 1- | 2- | 3- | 2- | -3- | - | - | - | - | 0.16 |
| 30- | 45.6206- | 110.0269- | 2- | 07- | | 0-M37004- | 10/11/76- | 15- | 17- | 8.0- | - | - | 6.6- | 170- | | 3- | 1- | 7- | 4- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 0.42 |
| 30- | 45.7413- | 110.0064- | 2- | 07- | | 0-M37006- | 10/11/76- | 17- | 10- | 9.0- | - | - | 6.3- | 250- | | 8- | 1- | 7- | 5- | 8- | 3- | 3- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 0.78 |
| 30- | 45.7124- | 110.1233- | 2- | 07- | | 0-M37009- | 10/12/76- | 10- | 8- | 4.0- | - | - | 6.3- | 315- | | 5- | 1- | 6- | 5- | 8- | 2- | 2- | 1- | 2- | 4- | 3- | 4- | 1- | -3- | - | - | - | - | 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 eU ppm | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (*) UNITS IN ppb |
| 30 | 45.7911 | 110.0422 | 2 | 07 | | 0-M37011 | 10/12/76 | 11 | 12 | 7.6 | - | - | 6.3 | 300 | | 3 | 1 | 6 | 5 | 7 | 2 | 2 | 2 | 2 | 4 | 4 | 1 | 1 | 3 | - | - | - | - | 4.04 |
| 30 | 45.7811 | 110.1247 | 2 | 07 | | 0-M37012 | 10/12/76 | 12 | 14 | 7.0 | - | - | 6.6 | 750 | | 5 | 1 | 7 | 5 | 6 | 2 | 2 | 2 | 2 | 4 | 4 | 1 | 1 | 3 | - | - | - | - | 4.46 |
| 30 | 45.7978 | 110.1042 | 2 | 07 | | 0-M37013 | 10/12/76 | 12 | 14 | 10.2 | - | - | 6.6 | 500 | | 6 | 1 | 6 | 5 | 8 | 2 | 2 | 2 | 2 | 4 | 3 | 1 | 1 | 3 | - | - | - | - | 2.35 |
| 30 | 45.7994 | 110.1092 | 2 | 07 | | 0-M37014 | 10/12/76 | 12 | 14 | 8.6 | - | - | 6.6 | 800 | | 4 | 1 | 6 | 4 | 6 | 2 | 2 | 2 | 2 | 4 | 3 | 1 | 1 | 3 | - | - | - | - | 3.15 |
| 30 | 45.8083 | 110.0692 | 2 | 07 | | 0-M37015 | 10/12/76 | 13 | 14 | 8.0 | - | - | 6.6 | 500 | | 7 | 1 | 6 | 4 | 6 | 2 | 2 | 1 | 2 | 4 | 3 | 1 | 1 | 3 | - | - | - | - | 1.47 |
| 30 | 45.8300 | 110.0447 | 2 | 07 | | 0-M37016 | 10/12/76 | 13 | 14 | 9.0 | - | - | 6.6 | 450 | | 4 | 1 | 6 | 4 | 6 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 3 | - | - | - | - | 0.66 |
| 30 | 45.8328 | 110.0536 | 2 | 07 | | 0-M37017 | 10/12/76 | 14 | 13 | 9.0 | - | - | 6.6 | 500 | | 2 | 1 | 6 | 4 | 6 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | - | - | - | - | 0.26 |
| 30 | 45.7978 | 110.4383 | 2 | 02 | | 0-M37019 | 10/09/76 | 12 | 17 | 9.0 | C | - | 5.9 | 350 | | 2 | 1 | 1 | 5 | 6 | 2 | 2 | 1 | 2 | 3 | 3 | 3 | 1 | 3 | - | - | - | - | 2.66 |
| 30 | 45.7808 | 110.4347 | 2 | 02 | | 0-M37020 | 10/09/76 | 12 | 19 | 9.0 | C | - | 5.7 | 380 | | 3 | 1 | 1 | 3 | 6 | 3 | 2 | 1 | 2 | 2 | 3 | 3 | 1 | 3 | - | - | - | - | 1.82 |
| 30 | 45.8083 | 110.4250 | 2 | 02 | | 0-M37021 | 10/09/76 | 13 | 19 | 8.5 | C | - | 5.9 | 380 | | 1 | 1 | 1 | 5 | 6 | 2 | 2 | 1 | 2 | 3 | 2 | 2 | 1 | 3 | - | - | - | - | 2.34 |
| 30 | 45.8100 | 110.4031 | 2 | 02 | | 0-M37022 | 10/09/76 | 13 | 21 | 9.0 | C | - | 5.9 | 360 | | 6 | 1 | 1 | 5 | 6 | 2 | 2 | 1 | 2 | 3 | 3 | 3 | 1 | 3 | - | - | - | - | 2.99 |
| 30 | 45.8092 | 110.4028 | 2 | 02 | | 0-M37023 | 10/09/76 | 13 | 20 | 9.0 | C | - | 5.9 | 360 | | 5 | 1 | 1 | 5 | 6 | 2 | 2 | 1 | 2 | 3 | 3 | 3 | 1 | 3 | - | - | - | - | 0.40 |
| 30 | 45.7931 | 110.3725 | 2 | 02 | | 0-M37024 | 10/09/76 | 14 | 18 | 9.5 | C | - | 5.7 | 360 | | 1 | 1 | 1 | 3 | 6 | 2 | 2 | 1 | 2 | 3 | 3 | 3 | 1 | 3 | - | - | - | - | 0.90 |
| 30 | 45.8069 | 110.3083 | 2 | 02 | | 0-M37025 | 10/09/76 | 15 | 21 | 9.0 | C | - | 5.7 | 370 | | 1 | 1 | 1 | 5 | 6 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 1 | 3 | - | - | - | - | 0.45 |
| 30 | 45.8128 | 110.3086 | 2 | 02 | | 0-M37026 | 10/09/76 | 15 | 21 | 9.5 | C | - | 5.9 | 360 | | 3 | 1 | 1 | 5 | 6 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 3 | - | - | - | - | 1.14 |
| 30 | 45.8097 | 110.3322 | 2 | 02 | | 0-M37027 | 10/09/76 | 16 | 20 | 8.5 | C | - | 5.9 | 380 | | 5 | 1 | 1 | 5 | 6 | 2 | 2 | 1 | 2 | 2 | 3 | 3 | 1 | 3 | - | - | - | - | 0.84 |
| 30 | 45.7769 | 110.6411 | 2 | 07 | | 0-M37029 | 10/10/76 | 8 | 11 | 6.5 | C | - | 5.9 | 340 | | | 1 | 1 | 5 | 6 | 2 | 2 | 1 | 2 | 3 | 3 | 2 | 2 | 3 | - | - | - | - | 1.28 |
| 30 | 45.7625 | 110.6744 | 2 | 07 | | 0-M37030 | 10/10/76 | 8 | 10 | 7.5 | C | - | 5.7 | 500 | | | 1 | 1 | 5 | 6 | 2 | 2 | 1 | 2 | 4 | 3 | 3 | 2 | 3 | - | - | - | - | 2.00 |
| 30 | 45.7761 | 110.7017 | 2 | 07 | | 0-M37031 | 10/10/76 | 9 | 10 | 7.5 | C | - | 5.7 | 450 | | | 1 | 1 | 5 | 6 | 2 | 2 | 3 | 2 | 4 | 3 | 2 | 2 | 3 | - | - | - | - | 0.73 |
| 30 | 45.7153 | 110.6973 | 2 | 07 | | 0-M37033 | 10/10/76 | 9 | 10 | 6.0 | C | - | 5.7 | 900 | | | 1 | 1 | 5 | 6 | 2 | 2 | 1 | 2 | 3 | 4 | 2 | 2 | 3 | - | - | - | - | 1.10 |
| 30 | 45.7131 | 110.6972 | 2 | 07 | | 0-M37034 | 10/10/76 | 9 | 11 | 6.5 | C | - | 5.7 | 380 | | | 1 | 1 | 3 | 6 | 2 | 2 | 1 | 2 | 3 | 3 | 3 | 2 | 3 | - | - | - | - | 0.95 |
| 30 | 45.6880 | 110.7171 | 2 | 07 | | 0-M37035 | 10/10/76 | 10 | 10 | 6.0 | C | - | 5.9 | 360 | | | 1 | 1 | 5 | 6 | 2 | 2 | 1 | 2 | 3 | 3 | 3 | 2 | 3 | - | - | - | - | 2.61 |
| 30 | 45.7159 | 110.6578 | 2 | 06 | | 0-M37036 | 10/10/76 | 10 | 11 | 6.5 | C | - | 6.1 | 450 | | | 1 | 1 | 5 | 6 | 2 | 2 | 1 | 2 | 2 | 2 | 3 | 2 | 3 | - | - | - | - | 1.54 |
| 30 | 45.7092 | 110.6609 | 2 | 06 | | 0-M37037 | 10/10/76 | 10 | 11 | 6.0 | C | - | 6.1 | 550 | | | 1 | 1 | 5 | 6 | 2 | 2 | 1 | 3 | 2 | 3 | 3 | 2 | 3 | - | - | - | - | 1.28 |
| 30 | 45.6571 | 110.6353 | 2 | 07 | | 0-M37038 | 10/10/76 | 11 | 11 | 7.0 | C | - | 5.9 | 340 | | | 1 | 1 | 3 | 6 | 3 | 2 | 1 | 2 | 2 | 3 | 3 | 2 | 3 | - | - | - | - | 1.07 |
| 30 | 45.7611 | 110.8806 | 2 | 07 | | 0-M37039 | 10/10/76 | 11 | 6 | 4.0 | C | - | 5.9 | 345 | | | 1 | 1 | 2 | 7 | 3 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | - | - | - | - | 0.54 |
| 30 | 45.7708 | 110.8186 | 2 | 07 | | 0-M37040 | 10/10/76 | 11 | 1 | 1.5 | C | - | 5.7 | 280 | | | 1 | 7 | 2 | 7 | 2 | 2 | 1 | 2 | 1 | 3 | 3 | 2 | 3 | - | - | - | - | 0.83 |
| 30 | 45.7592 | 110.8669 | 2 | 07 | | 0-M37041 | 10/10/76 | 11 | 2 | 1.5 | C | - | 5.7 | 300 | | | 1 | 1 | 2 | 7 | 3 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | - | - | - | - | 1.88 |
| 30 | 45.7667 | 110.8786 | 2 | 07 | | 0-M37042 | 10/10/76 | 12 | 2 | 3.5 | C | - | 5.9 | 320 | | | 1 | 1 | 2 | 7 | 3 | 2 | 1 | 2 | 3 | 3 | 2 | 2 | 3 | - | - | - | - | 2.35 |
| 30 | 45.7758 | 110.8736 | 2 | 07 | | 0-M37043 | 10/10/76 | 12 | 1 | 1.5 | C | - | 5.7 | 285 | | | 1 | 1 | 2 | 7 | 3 | 2 | 1 | 2 | 3 | 3 | 2 | 1 | 3 | - | - | - | - | 1.96 |
| 30 | 45.7875 | 110.8847 | 2 | 07 | | 0-M37044 | 10/10/76 | 12 | 8 | 3.0 | C | - | 5.7 | 300 | | | 1 | 1 | 2 | 7 | 3 | 2 | 1 | 2 | 2 | 3 | 3 | 2 | 3 | - | - | - | - | 0.45 |
| 30 | 45.8194 | 110.8939 | 2 | 07 | | 0-M37046 | 10/10/76 | 13 | 5 | 3.5 | C | - | 5.7 | 325 | | | 1 | 1 | 2 | 7 | 4 | 2 | 1 | 2 | 2 | 3 | 3 | 2 | 8 | - | - | - | - | 0.51 |
| 30 | 45.8208 | 110.8867 | 2 | 07 | | 0-M37047 | 10/10/76 | 13 | 6 | 4.0 | C | - | 5.7 | 300 | | | 1 | 1 | 2 | 7 | 3 | 2 | 1 | 2 | 2 | 3 | 3 | 2 | 8 | - | - | - | - | 0.53 |
| 30 | 45.8517 | 110.8833 | 2 | 07 | | 0-M37048 | 10/10/76 | 13 | 8 | 3.5 | C | - | 5.7 | 320 | | | 1 | 1 | 2 | 7 | 2 | 2 | 1 | 2 | 2 | 3 | 2 | 1 | 8 | - | - | - | - | 0.20 |
| 30 | 45.8597 | 110.9003 | 2 | 07 | | 0-M37049 | 10/10/76 | 13 | 8 | 3.5 | - | - | 5.7 | 280 | | | 1 | 1 | 2 | 7 | 3 | 2 | 1 | 2 | 1 | 3 | 3 | 1 | 1 | - | - | - | - | 0.72 |
| 30 | 45.8708 | 110.9097 | 2 | 07 | | 0-M37050 | 10/10/76 | 13 | 7 | 4.0 | - | - | 5.9 | 340 | | | 1 | 1 | 2 | 7 | 2 | 2 | 1 | 2 | 1 | 3 | 3 | 1 | 1 | - | - | - | - | 0.31 |
| 30 | 45.8722 | 110.9033 | 2 | 07 | | 0-M37051 | 10/10/76 | 13 | 8 | 2.0 | - | - | 5.9 | 325 | | | 1 | 1 | 3 | 7 | 2 | 2 | 1 | 2 | 1 | 3 | 3 | 1 | 1 | - | - | - | - | 0.58 |
| 30 | 45.8619 | 110.8392 | 2 | 07 | | 0-M37052 | 10/10/76 | 14 | 7 | 3.5 | - | - | 5.9 | 320 | | | 1 | 1 | 2 | 7 | 3 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 1 | - | - | - | - | 1.40 |
| 30 | 45.8647 | 110.8208 | 2 | 06 | | 0-M37053 | 10/10/76 | 14 | 8 | 3.5 | - | - | 5.7 | 310 | | | 1 | 1 | 3 | 7 | 2 | 2 | 1 | 2 | 1 | 2 | 3 | 1 | 1 | - | - | - | - | 1.73 |
| 30 | 45.8628 | 110.8108 | 2 | 07 | | 0-M37054 | 10/10/76 | 14 | 8 | 4.0 | - | - | 5.7 | 290 | | | 1 | 1 | 3 | 7 | 3 | 2 | 1 | 2 | 2 | 3 | 3 | 1 | 1 | - | - | - | - | 0.63 |
| 30 | 45.8389 | 110.8333 | 2 | 07 | | 0-M37055 | 10/10/76 | 15 | 8 | 4.0 | - | - | 5.9 | 300 | | | 1 | 1 | 3 | 7 | 2 | 2 | 1 | 2 | 3 | 3 | 4 | 1 | 1 | - | - | - | - | 1.42 |
| 30 | 45.8389 | 110.8000 | 2 | 07 | | 0-M37056 | 10/10/76 | 15 | 9 | 4.5 | - | - | 5.9 | 330 | | | 1 | 1 | 2 | 7 | 2 | 2 | 1 | 2 | 3 | 3 | 4 | 1 | 1 | - | - | - | - | 1.25 |
| 30 | 45.8306 | 110.7753 | 2 | 07 | | 0-M37057 | 10/10/76 | 15 | 8 | 4.0 | - | - | 5.9 | 340 | | | 1 | 1 | 2 | 7 | 2 | 2 | 1 | 2 | 1 | 2 | 3 | 1 | 1 | - | - | - | - | 0.69 |
| 30 | 45.8808 | 110.7889 | 2 | 07 | | 0-M37058 | 10/10/76 | 16 | 9 | 4.0 | - | - | 5.9 | 320 | | | 1 | 1 | 2 | 7 | 2 | 2 | 1 | 2 | 3 | 3 | 3 | 1 | 1 | - | - | - | - | 0.89 |
| 30 | 45.8908 | 110.7958 | 2 | 07 | | 0-M37059 | 10/10/76 | 16 | 9 | 3.5 | - | - | 5.9 | 310 | | | 1 | 1 | 2 | 7 | 3 | 2 | 1 | 2 | 1 | 3 | 2 | 1 | 1 | - | - | - | - | 1.15 |
| 30 | 45.8744 | 110.7722 | 2 | 07 | | 0-M37060 | 10/10/76 | 16 | 8 | 4.0 | - | - | 5.9 | 310 | | | 1 | 1 | 3 | 7 | 3 | 2 | 1 | 2 | 1 | 3 | 2 | 1 | 1 | - | - | - | - | 2.19 |
| 30 | 45.8972 | 110.8775 | 2 | 07 | | 0-M37061 | 10/10/76 | 17 | - | - | - | - | 5.7 | 370 | | | 1 | 1 | 3 | 7 | 2 | 2 | 1 | 2 | 2 | 3 | 2 | 3 | 3 | - | - | - | - | 0.10 |
| 30 | 45.8944 | 110.8731 | 2 | 07 | | 0-M37062 | 10/10/76 | 17 | -2 | - | - | - | 5.5 | 280 | | | 1 | 1 | 3 | 7 | 3 | 2 | 1 | 2 | 2 | 3 | 3 | 2 | 3 | - | - | - | - | 0.65 |
| 30 | 45.9175 | 110.8628 | 2 | 07 | | 0-M37063 | 10/10/76 | 17 | 2 | | C | - | 5.7 | 600 | | | 1 | 1 | 5 | 6 | 1 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 3 | - | - | - | - | 8.27 |
| 30 | 45.9256 | 110.8617 | 2 | 07 | | 0-M37064 | 10/11/76 | 8 | -2 | 0.2 | C | - | 5.7 | 340 | | | 1 | 1 | 5 | 6 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | - | - | - | - | 0.72 |
| 30 | 45.9281 | 110.8933 | 2 | 07 | | 0-M37065 | 10/11/76 | 8 | -2 | 0.1 | C | - | 5.7 | 350 | | | 1 | 1 | 5 | 6 | 3 | 2 | 1 | 2 | 4 | 3 | 2 | 2 | 3 | - | - | - | - | 0.48 |

# 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 |
| 30-45.9453 | -110.8839 | -2-07- | | | | 0-M37066 | -10/11/76- | 8- | -1- | 0.4 | -C- | - | 5.8 | 440- | | -1-1-4-6-3-2-3-2-2-3-3-2- | | | | | | | | | | | -3- | - | - | - | - | 0.58 |
| 30-45.9469 | -110.8886 | -2-07- | | | | 0-M37067 | -10/11/76- | 8- | -1- | 0.4 | -C- | - | 5.8 | 500- | | -1-1-5-6-2-2-1-2-2-3-4-2- | | | | | | | | | | | -3- | - | - | - | - | 0.99 |
| 30-45.9361 | -110.9161 | -2-07- | | | | 0-M37068 | -10/10/76- | 8- | 6- | 4.3 | -C- | - | 5.7 | 340- | | -1-1-5-6-3-2-1-2-4-3-3-2- | | | | | | | | | | | -3- | - | - | - | - | 0.62 |
| 30-45.9053 | -110.1339 | -2-07- | | | | 0-M37069 | -10/10/76- | 8- | 6- | 1.0 | - | - | 6.3 | 310- | | -1-6-4-6-3-3-2-2-2-4-2-2- | | | | | | | | | | | -3- | - | - | - | - | 0.50 |
| 30-45.9425 | -110.1908 | -2-07- | | | | 0-M37070 | -10/10/76- | 8- | 6- | | - | - | 6.3 | 250- | | -1-6-4-6-3-2-1-2-2-2-3-2- | | | | | | | | | | | -3- | - | - | - | - | 0.98 |
| 30-45.9406 | -110.1942 | -2-07- | | | | 0-M37071 | -10/10/76 | -10- | 6- | | - | - | 6.3 | 205- | | -1-6-4-6-3-2-1-2-2-2-3-2- | | | | | | | | | | | -3- | - | - | - | - | 0.82 |
| 30-45.9594 | -110.1683 | -2-07- | | | | 0-M37073 | -10/10/76 | -10- | 8- | 2.8 | - | - | 6.6 | 205- | | -1-6-4-8-2-2-2-2-2-3-1-2- | | | | | | | | | | | -3- | - | - | - | - | 0.19 |
| 30-45.9897 | -110.1400 | -2-02- | | | | 0-M37074 | -10/10/76 | -10- | 7- | 3.8 | - | - | 6.3 | 170- | | -1-6-4-6-3-2-1-2-2-3-1-2- | | | | | | | | | | | -3- | - | - | - | - | 0.10 |
| 30-45.9911 | -110.1411 | -2-02- | | | | 0-M37075 | -10/10/76 | -11- | 7- | 2.6 | - | - | 6.6 | 220- | | -1-6-4-6-3-2-1-2-2-3-2-2- | | | | | | | | | | | -3- | - | - | - | - | 0.10 |
| 30-45.9581 | -110.1303 | -2-02- | | | | 0-M37076 | -10/10/76 | -11- | 6- | | - | - | 6.6 | 250- | | -1-6-5-8-2-2-2-2-2-2-2-2- | | | | | | | | | | | -3- | - | - | - | - | 8.63 |
| 30-45.7717 | -111.7580 | -2-02- | | | | 0-M37078 | -10/10/76 | -12- | 5- | | - | - | 6.6 | 750- | | -1-6-5-8-2-2-1-2-4-3-3-1- | | | | | | | | | | | -3- | - | - | - | - | 3.06 |
| 30-45.7545 | -111.7639 | -2-02- | | | | 0-M37079 | -10/10/76 | -12- | 6- | 2.0 | - | - | 6.6 | 800- | | -1-6-5-8-2-2-2-2-4-3-3-1- | | | | | | | | | | | -3- | - | - | - | - | 3.94 |
| 30-45.8137 | -111.9511 | -2-02- | | | | 0-M37088 | -10/10/76 | -15- | 8- | 7.0 | - | - | 6.6 | 600- | | -1-6-4-6-2-2-1-2-2-2-3-1- | | | | | | | | | | | -3- | - | - | - | - | 9.52 |
| 30-45.7955 | -111.9175 | -2-02- | | | | 0-M37090 | -10/10/76 | -15- | 8- | 3.0 | - | - | 6.6 | 600- | | -1-6-4-7-2-2-1-2-2-3-2-1- | | | | | | | | | | | -3- | - | - | - | - | 3.26 |
| 30-45.7534 | -111.9644 | -2-02- | | | | 0-M37092 | -10/10/76 | -16- | 8- | 3.0 | - | - | 6.6 | 400- | | -1-6-5-8-2-2-1-2-1-3-3-1- | | | | | | | | | | | -3- | - | - | - | - | 0.22 |
| 30-45.8780 | -111.8865 | -2-02- | | | | 0-M37093 | -10/10/76 | -16- | 5- | | - | - | 6.3 | 650- | | -1-8-4-6-1-2-1-2-2-2-4-1- | | | | | | | | | | | -3- | - | - | - | - | 0.22 |
| 30-45.9243 | -111.9736 | -2-02- | | | | 0-M37098 | -10/10/76 | -17- | 7- | 5.0 | - | - | 6.6 | 500- | | -1-6-4-6-2-2-1-2-2-2-3-1- | | | | | | | | | | | -3- | - | - | - | - | 0.47 |
| 30-45.9380 | -111.9247 | -2-02- | | | | 0-M37099 | -10/10/76 | -17- | 7- | 1.0 | - | - | 6.9 | 600- | | -1-1- - -1-2-1-2-4-3-2-1- | | | | | | | | | | | -3- | - | - | - | - | 1.99 |
| 30-45.9440 | -111.9415 | -2-01- | | | | 0-M37100 | -10/10/76 | -17- | 7- | 2.0 | - | - | 6.6 | 550- | | -1-6-4-6-2-3-1- -4-3-1-1- | | | | | | | | | | | -3- | - | - | - | - | 2.38 |
| 30-45.9710 | -111.9725 | -2-02- | | | | 0-M37104 | -10/10/76 | -18- | 2- | 1.2 | - | - | 6.3 | 290- | | -1-1-3-4-2-2-1-2-1-2-3-3- | | | | | | | | | | | -3- | - | - | - | - | 1.89 |
| 30-45.9459 | -111.8130 | -2-01- | | | | 0-M37114 | -10/11/76 | -10- | 4- | | - | - | 6.9 | 2000- | | -1-6-5-6-2-2-3- -4-3-2-1- | | | | | | | | | | | -3- | - | - | - | - | 6.32 |
| 30-45.9785 | -111.7999 | -2-01- | | | | 0-M37117 | -10/11/76 | -11- | 4- | | - | - | 6.6 | 1700- | | -1-6-5-6-2-2-1- -4-2-2-1- | | | | | | | | | | | -3- | - | - | - | - | 5.66 |
| 30-45.8578 | -110.0017 | -2-07- | | | | 0-M37118 | -10/12/76 | -14- | 13- | 10.0 | - | - | 6.6 | 500- | | 7-1-7-4-6-2-2-1-2-2-2-2-2- | | | | | | | | | | | -3- | - | - | - | - | 1.69 |
| 30-45.8281 | -110.1056 | -2-07- | | | | 0-M37121 | -10/12/76 | -15- | 12- | 7.8 | - | - | 6.3 | 470- | | 5-1-6-4-6-2-2-1-2-4-2-3-2- | | | | | | | | | | | -3- | - | - | - | - | 2.40 |
| 30-45.7888 | -110.1444 | -2-07- | | | | 0-M37122 | -10/12/76 | -17- | 11- | 10.0 | - | - | 6.9 | 750- | | 7-1-6-5-8-2-2-2-2-4-3-2-2- | | | | | | | | | | | -3- | - | - | - | - | 2.40 |
| 30-45.8394 | -110.1053 | -2-07- | | | | 0-M37123 | -10/13/76 | -10- | 10- | 6.0 | - | - | 6.3 | 360- | | 3-1-6-4-6-1-2-2-2-3-2-3-2- | | | | | | | | | | | -3- | - | - | - | - | 1.06 |
| 30-45.8477 | -110.1298 | -2-07- | | | | 0-M37124 | -10/13/76 | -11- | 11- | 7.8 | - | - | 6.3 | 300- | | 8-1-6-5-6-2-2-2-2-3-2-3-2- | | | | | | | | | | | -3- | - | - | - | - | 0.54 |
| 30-45.8587 | -110.1437 | -2-07- | | | | 0-M37125 | -10/13/76 | -11- | 11- | 6.8 | - | - | 6.3 | 430- | | 2-1-6-5-8-2-2-1-2-2-3-3-2- | | | | | | | | | | | -3- | - | - | - | - | 2.68 |
| 30-45.8914 | -110.1494 | -2-07- | | | | 0-M37126 | -10/13/76 | -12- | 12- | 10.0 | - | - | 6.3 | 470- | | 8-1-6-6-8-2-2-1-2-3-2-3-2- | | | | | | | | | | | -3- | - | - | - | - | 0.83 |
| 30-45.9025 | -110.1617 | -2-07- | | | | 0-M37127 | -10/13/76 | -12- | 12- | 7.0 | - | - | 6.9 | 550- | | 2-1-6-4-5-2-2-1-2-2-3-3-2- | | | | | | | | | | | -3- | - | - | - | - | 0.19 |
| 30-45.8508 | -110.1920 | -2-07- | | | | 0-M37129 | -10/13/76 | -14- | 13- | 8.2 | - | - | 6.6 | 470- | | 6-1-6-5-8-2-2-2-2-2-3-3-2- | | | | | | | | | | | -3- | - | - | - | - | 0.35 |
| 30-45.8488 | -110.2017 | -2-07- | | | | 0-M37130 | -10/13/76 | -14- | 13- | 8.6 | - | - | 6.6 | 260- | | 6-1-6-4-6-2-3-1-2-2-3-3-2- | | | | | | | | | | | -3- | - | - | - | - | 2.68 |
| 30-45.8269 | -110.1958 | -2-07- | | | | 0-M37131 | -10/13/76 | -16- | 14- | 9.6 | - | - | 6.3 | 310- | | 3-1-6-4-6-3-2-1-2-2-3-3-1- | | | | | | | | | | | -3- | - | - | - | - | 0.68 |
| 30-45.8270 | -110.1937 | -2-07- | | | | 0-M37132 | -10/13/76 | -14- | 14- | 10.0 | - | - | 6.6 | 320- | | 7-1-6-4-8-2-2-2-2-2-3-3-1- | | | | | | | | | | | -3- | - | - | - | - | 0.98 |
| 30-45.7592 | -110.2692 | -2-27- | | | | 0-M37137 | -10/11/76 | -12- | 10- | 4.2 | - | - | 6.6 | 800- | | -1-6-5-8-2-2-3-2-2-3-2-1- | | | | | | | | | | | -3- | - | - | - | - | 3.05 |
| 30-45.7528 | -110.2761 | -2-07- | | | | 0-M37138 | -10/11/76 | -12- | 10- | 4.0 | - | - | 6.6 | 600- | | -1-6-5-8-2-2-1-2-2-2-3-1- | | | | | | | | | | | -3- | - | - | - | - | 1.62 |
| 30-45.7825 | -110.2875 | -2-07- | | | | 0-M37139 | -10/11/76 | -12- | 11- | 4.6 | - | - | 6.3 | 320- | | -1-6-4-6-2-2-1-2-2-3-2-1- | | | | | | | | | | | -3- | - | - | - | - | 0.40 |
| 30-45.8061 | -110.2756 | -2-07- | | | | 0-M37140 | -10/11/76 | -13- | 10- | 5.0 | - | - | 6.6 | 300- | | -1-6-5-8-3-3-1-2-3-3-3-1- | | | | | | | | | | | -3- | - | - | - | - | 2.47 |
| 30-45.8295 | -110.2471 | -2-07- | | | | 0-M37141 | -10/11/76 | -13- | 11- | 4.8 | - | - | 6.6 | 500- | | -1-6-4-6-2-2-1-2-2-2-3-1- | | | | | | | | | | | -3- | - | - | - | - | 1.40 |
| 30-45.8283 | -110.2783 | -2-07- | | | | 0-M37142 | -10/11/76 | -13- | 12- | 6.0 | - | - | 6.6 | 450- | | -1-6-5-6-1-2-2-2-3-3-3-1- | | | | | | | | | | | -3- | - | - | - | - | 3.68 |
| 30-45.8328 | -110.2900 | -2-07- | | | | 0-M37143 | -10/11/76 | -13- | 13- | 4.2 | - | - | 6.3 | 280- | | -1-6-3-6-3-3-1-2-2-3-3-1- | | | | | | | | | | | -3- | - | - | - | - | 0.34 |
| 30-45.8311 | -110.2911 | -2-07- | | | | 0-M37144 | -10/11/76 | -13- | 11- | 6.0 | - | - | 6.6 | 500- | | -1-6-4-6-3-3-1-2-2-3-3-1- | | | | | | | | | | | -3- | - | - | - | - | 2.94 |
| 30-45.8272 | -110.2942 | -2-07- | | | | 0-M37145 | -10/11/76 | -14- | 11- | 10.0 | - | - | 6.3 | 500- | | -1-6-4-6-2-2-1-2-4-2-3-1- | | | | | | | | | | | -3- | - | - | - | - | 2.15 |
| 30-45.8467 | -110.3203 | -2-07- | | | | 0-M37146 | -10/11/76 | -14- | 11- | 8.0 | - | - | 6.6 | 275- | | -1-6-4-6-3-3-1-2-4-2-3-1- | | | | | | | | | | | -3- | - | - | - | - | 1.59 |
| 30-45.8456 | -110.3208 | -2-07- | | | | 0-M37147 | -10/11/76 | -14- | 10- | 8.4 | - | - | 6.3 | 320- | | -1-6-4-6-3-3-1-2-3-2-3-1- | | | | | | | | | | | -3- | - | - | - | - | 3.00 |
| 30-45.8522 | -110.2628 | -2-27- | | | | 0-M37150 | -10/11/76 | -15- | 10- | 5.4 | - | - | 6.6 | 460- | | -1-6-5-6-2-2-1-2-2-3-3-1- | | | | | | | | | | | -3- | - | - | - | - | 0.84 |
| 30-45.8514 | -110.2569 | -2-27- | | | | 0-M37151 | -10/11/76 | -16- | 10- | 6.0 | - | - | 6.3 | 380- | | -1-6-4-6-3-2-1-2-2-3-3-1- | | | | | | | | | | | -3- | - | - | - | - | 0.83 |
| 30-45.8739 | -110.2736 | -2-27- | | | | 0-M37152 | -10/11/76 | -16- | 10- | 5.8 | - | - | 6.3 | 360- | | -1-6-4-6-2-2-1-2-2-2-3-1- | | | | | | | | | | | -3- | - | - | - | - | 0.35 |
| 30-45.8675 | -110.3047 | -2-27- | | | | 0-M37153 | -10/11/76 | -16- | 8- | 4.4 | - | - | 6.3 | 410- | | -1-6-4-8-3-2-1-2-2-3-3-1- | | | | | | | | | | | -3- | - | - | - | - | 1.68 |
| 30-45.8800 | -110.3319 | -2-07- | | | | 0-M37154 | -10/11/76 | -16- | 5- | 1.0 | - | - | 6.3 | 200- | | -1-6-4-6-3-3-1-2-2-2-3-2- | | | | | | | | | | | -3- | - | - | - | - | 2.68 |
| 30-45.8881 | -110.3483 | -2-06- | | | | 0-M37155 | -10/11/76 | -16- | 5- | 4.0 | - | - | 6.3 | 345- | | -1-6-4-6-2-2-1- -1-2-4-2- | | | | | | | | | | | -3- | - | - | - | - | 0.91 |

# 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 (FEET) | WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (#) UNITS IN ppb |
| 30- | 45.8950- | 110.3603- | 2- | 07- | | 0-M37156- | 10/11/76- | 17- | 5- | 2.0- | - | - | 6.3- | 290- | | -1- | 6- | 4- | 7- | 2- | 2- | 1- | 2- | 1- | 3- | 3- | 2- | -3- | - | - | - | - | 1.94 |
| 30- | 45.8928- | 110.3219- | 2- | 07- | | 0-M37157- | 10/11/76- | 17- | 6- | 6.0- | - | - | 6.3- | 250- | | -1- | 6- | 4- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 4- | 1- | -3- | - | - | - | - | 1.12 |
| 30- | 45.9169- | 110.3175- | 2- | 07- | | 0-M37158- | 10/11/76- | 18- | 8- | 3.0- | - | - | - | 220- | | -1- | 6- | 4- | 6- | 4- | 3- | 2- | 2- | 1- | 3- | 4- | 1- | -3- | - | - | - | - | 0.70 |
| 30- | 45.8781- | 110.2744- | 2- | 07- | | 0-M37159- | 10/11/76- | 18- | 10- | 2.4- | - | - | 6.3- | 280- | | -1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 4- | 1- | -3- | - | - | - | - | 0.74 |
| 30- | 45.8800- | 110.2800- | 2- | 07- | | 0-M37160- | 10/11/76- | 18- | 9- | 3.0- | - | - | 6.6- | 300- | | -1- | 6- | 3- | 6- | 2- | 2- | 1- | 2- | 2- | 2- | 4- | 1- | -3- | - | - | - | - | 0.58 |
| 30- | 45.8831- | 110.2561- | 2- | 07- | | 0-M37161- | 10/11/76- | 18- | 9- | 0.8- | - | - | 6.3- | 185- | | -1- | 6- | - | - | - | - | - | - | 2- | 2- | 4- | 1- | -3- | - | - | - | - | 0.18 |
| 30- | 45.8761- | 110.2478- | 2- | 07- | | 0-M37162- | 10/11/76- | 19- | 9- | 1.4- | - | - | 6.3- | 210- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 4- | 1- | -3- | - | - | - | - | 0.56 |
| 30- | 45.8761- | 110.2464- | 2- | 07- | | 0-M37163- | 10/11/76- | 19- | 9- | 2.0- | - | - | 6.3- | 230- | | -1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 2- | 2- | 4- | 1- | -3- | - | - | - | - | 1.03 |
| 30- | 45.8856- | 110.2100- | 2- | 07- | | 0-M37165- | 10/11/76- | 17- | 8- | 4.0- | - | - | 6.6- | 390- | | -1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 2- | 4- | 3- | 1- | -3- | - | - | - | - | 3.42 |
| 30- | 45.8869- | 110.1931- | 2- | 07- | | 0-M37166- | 10/15/76- | 8- | 8- | 3.6- | - | - | 6.6- | 550- | | -1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 2- | 2- | 2- | 1- | -3- | - | - | - | - | 0.71 |
| 30- | 45.9839- | 111.7685- | 2- | 01- | | 0-M37167- | 10/15/76- | 8- | 4- | - | - | - | 6.6- | 470- | | -1- | 6- | 4- | 6- | 2- | 2- | 2- | - | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 2.19 |
| 30- | 45.9017- | 111.8121- | 2- | 02- | | 0-M37168- | 10/15/76- | 8- | 5- | - | - | - | 6.9- | 1300- | | -1- | 6- | 4- | 6- | 2- | 2- | 2- | 2- | 2- | 2- | 1- | 1- | -3- | - | - | - | - | 3.22 |
| 30- | 45.9120- | 111.7648- | 2- | 01- | | 0-M37172- | 10/15/76- | 9- | 1- | - | - | - | 6.6- | 2000- | | -1- | 6- | 5- | 8- | 2- | 2- | 3- | - | 4- | 4- | 1- | 1- | -3- | - | - | - | - | 12.20 |
| 30- | 45.8648- | 111.8605- | 2- | 01- | | 0-M37176- | 10/15/76- | 10- | 2- | - | - | - | 6.3- | 550- | | -1- | 6- | 5- | 6- | 2- | 2- | 1- | - | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 2.00 |
| 30- | 45.9617- | 111.3095- | 2- | 01- | | 0-M37190- | 10/15/76- | 13- | 9- | 5.2- | - | - | 6.6- | 600- | | -1- | 6- | 5- | 8- | 2- | 2- | 2- | - | 1- | 2- | 3- | 1- | -3- | - | - | - | - | 3.54 |
| 30- | 45.6665- | 111.2601- | 2- | 02- | | 0-M37193- | 10/15/76- | 14- | 1- | 4.0- | - | - | 6.3- | 445- | | -1- | 6- | 4- | 4- | 3- | 2- | 2- | 2- | 4- | 4- | 2- | 2- | -3- | - | - | - | - | 1.58 |
| 30- | 45.6764- | 111.2680- | 2- | 02- | | 0-M37194- | 10/15/76- | 14- | 1- | 4.0- | - | - | 6.6- | 600- | | -1- | 6- | 4- | 4- | 3- | 2- | 2- | 2- | 4- | 4- | 2- | 2- | -3- | - | - | - | - | 1.33 |
| 30- | 45.6850- | 111.2677- | 2- | 02- | | 0-M37195- | 10/15/76- | 16- | 1- | 3.6- | - | - | 6.9- | 650- | | -1- | 6- | 5- | 8- | 2- | 2- | 2- | 2- | 4- | 4- | 2- | 2- | -3- | - | - | - | - | 11.15 |
| 30- | 45.7073- | 111.2568- | 2- | 02- | | 0-M37196- | 10/15/76- | 16- | 1- | 3.4- | - | - | 6.6- | 700- | | -1- | 6- | 5- | 6- | 3- | 2- | 2- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 5.72 |
| 30- | 45.7426- | 111.2680- | 2- | 02- | | 0-M37198- | 10/15/76- | 17- | 2- | 2.0- | C- | - | 6.3- | 550- | | -1- | 6- | 3- | 4- | 2- | 2- | 1- | 2- | 4- | 4- | 1- | 2- | -3- | - | - | - | - | 1.94 |
| 30- | 45.7013- | 111.3081- | 2- | 02- | | 0-M37200- | 10/15/76- | 18- | 2- | 5.6- | - | - | 6.6- | 550- | | -1- | 6- | 4- | 6- | 3- | 2- | 1- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 10.25 |
| 30- | 45.6870- | 111.2966- | 2- | 02- | | 0-M37202- | 10/16/76- | 8- | 3- | 8.0- | - | - | 6.3- | 600- | | -1- | 6- | 4- | 7- | 3- | 2- | 2- | 2- | 4- | 4- | 3- | 2- | -3- | - | - | - | - | 18.40 |
| 30- | 45.6463- | 111.3501- | 2- | 02- | | 0-M37203- | 10/16/76- | 8- | 4- | 2.0- | - | - | 6.6- | 550- | | -1- | 6- | 4- | 7- | 2- | 2- | 2- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 4.86 |
| 30- | 45.6373- | 111.3486- | 2- | 02- | | 0-M37204- | 10/16/76- | 9- | 3- | 1.0- | - | - | 6.6- | 600- | | -1- | 6- | 3- | 4- | 2- | 2- | 2- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 7.56 |
| 30- | 45.6065- | 111.3271- | 2- | 02- | | 0-M37205- | 10/16/76- | 9- | 4- | 3.6- | - | - | 6.6- | 340- | | -2- | 4- | 5- | 8- | 2- | 2- | 2- | 2- | 3- | 2- | 2- | 2- | -3- | - | - | - | - | 0.81 |
| 30- | 45.5992- | 111.3217- | 2- | 02- | | 0-M37206- | 10/16/76- | 10- | 5- | 2.6- | - | - | 6.3- | 475- | | -2- | 4- | 4- | 6- | 2- | 2- | 2- | 2- | 4- | 3- | 2- | 2- | -3- | - | - | - | - | 1.36 |
| 30- | 45.5990- | 111.2937- | 2- | 02- | | 0-M37207- | 10/16/76- | 10- | 7- | 0.6- | - | - | 6.6- | 900- | | -2- | 4- | 4- | 4- | 2- | 2- | 2- | 2- | 4- | 4- | 1- | 2- | -3- | - | - | - | - | 11.25 |
| 30- | 45.5924- | 111.2734- | 2- | 01- | | 0-M37208- | 10/16/76- | 10- | 7- | 6.6- | C- | - | 6.9- | 250- | | -2- | 4- | 5- | 8- | 1- | 2- | 3- | - | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 0.29 |
| 30- | 45.6949- | 111.3574- | 2- | 02- | | 0-M37209- | 10/16/76- | 11- | 6- | 3.6- | - | - | 6.6- | 650- | | -1- | 1- | 4- | 6- | 2- | 2- | 2- | 2- | 4- | 3- | 1- | 3- | -3- | - | - | - | - | 2.20 |
| 30- | 45.7113- | 111.3575- | 2- | 02- | | 0-M37212- | 10/16/76- | 12- | 6- | 4.0- | - | - | 6.3- | 550- | | -1- | 1- | 4- | 6- | 2- | 2- | 2- | 2- | 4- | 2- | 1- | 3- | -3- | - | - | - | - | 13.05 |
| 30- | 45.6512- | 111.4013- | 2- | 02- | | 0-M37216- | 10/16/76- | 13- | 5- | 4.2- | - | - | 6.6- | 700- | | -2- | 4- | 5- | 8- | 2- | 2- | 2- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 5.11 |
| 30- | 45.9578- | 110.9222- | 2- | 07- | | 0-M37217- | 10/15/76- | 8- | 5- | - | - | - | 5.7- | 380- | | -1- | 1- | 4- | 6- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 2.24 |
| 30- | 45.9639- | 110.9472- | 2- | 07- | | 0-M37218- | 10/15/76- | 8- | 4- | - | C- | - | 5.8- | 360- | | -1- | 1- | 3- | 7- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 3- | -3- | - | - | - | - | 0.62 |
| 30- | 45.9644- | 110.9497- | 2- | 07- | | 0-M37219- | 10/15/76- | 8- | 5- | - | - | - | 5.6- | 360- | | -1- | 1- | 3- | 7- | 3- | 2- | 1- | 2- | 1- | 2- | 3- | 3- | -3- | - | - | - | - | 1.06 |
| 30- | 45.9708- | 110.9844- | 2- | 07- | | 0-M37220- | 10/15/76- | 9- | 6- | - | C- | - | 5.7- | 270- | | -1- | 1- | 2- | 7- | 2- | 2- | 1- | 2- | 2- | 2- | 4- | 3- | -3- | - | - | - | - | 0.25 |
| 30- | 45.9736- | 110.9153- | 2- | 07- | | 0-M37221- | 10/15/76- | 9- | 6- | - | C- | - | 5.6- | 360- | | -1- | 1- | 5- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | 0.22 |
| 30- | 45.9811- | 111.8972- | 2- | 07- | | 0-M37222- | 10/15/76- | 9- | 7- | - | C- | - | 5.7- | 320- | | -1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 4- | 1- | 3- | -3- | - | - | - | - | 1.30 |
| 30- | 45.9772- | 110.8419- | 2- | 07- | | 0-M37223- | 10/15/76- | 9- | 8- | - | C- | - | 5.9- | 420- | | -1- | 1- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 4- | 2- | 2- | -3- | - | - | - | - | 1.94 |
| 30- | 45.9744- | 110.8211- | 2- | 07- | | 0-M37224- | 10/15/76- | 10- | 8- | - | - | - | 5.7- | 600- | | -1- | 1- | 5- | 6- | 2- | 2- | 2- | 1- | 4- | 4- | 2- | 2- | -3- | - | - | - | - | 1.78 |
| 30- | 45.9658- | 110.7617- | 2- | 07- | | 0-M37225- | 10/15/76- | 10- | 9- | - | C- | - | 5.7- | 700- | | -1- | 1- | 6- | 6- | 1- | 2- | 2- | 2- | 6- | 3- | 2- | 2- | -3- | - | - | - | - | 2.73 |
| 30- | 45.9931- | 110.7967- | 2- | 07- | | 0-M37226- | 10/15/76- | 10- | 9- | - | - | - | 5.7- | 700- | | -1- | 1- | 6- | 6- | 2- | 2- | 2- | 2- | 6- | 3- | 2- | 2- | -3- | - | - | - | - | 4.54 |
| 30- | 45.9844- | 110.7975- | 2- | 07- | | 0-M37227- | 10/15/76- | 10- | 8- | - | C- | - | 5.9- | 550- | | -1- | 1- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 0.59 |
| 30- | 45.9661- | 110.8447- | 2- | 07- | | 0-M37228- | 10/15/76- | 11- | 10- | - | C- | - | 5.7- | 550- | | -1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 2- | 2- | -3- | - | - | - | - | 4.13 |
| 30- | 45.9558- | 110.8539- | 2- | 07- | | 0-M37229- | 10/15/76- | 11- | 8- | - | C- | - | 5.7- | 440- | | -1- | 1- | 3- | 7- | 3- | 2- | 1- | 2- | 3- | 2- | 2- | 2- | -3- | - | - | - | - | 0.27 |
| 30- | 45.9561- | 110.8261- | 2- | 07- | | 0-M37230- | 10/15/76- | 11- | 7- | - | - | - | 5.7- | 600- | | -1- | 1- | 6- | 6- | 2- | 2- | 2- | 2- | 3- | 4- | 2- | 2- | -3- | - | - | - | - | 1.58 |
| 30- | 45.9336- | 110.8108- | 2- | 07- | | 0-M37231- | 10/15/76- | 12- | 8- | - | C- | - | 5.5- | 350- | | -1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 0.27 |
| 30- | 45.9383- | 110.8500- | 2- | 07- | | 0-M37232- | 10/15/76- | 12- | 8- | - | C- | - | 5.7- | 420- | | -1- | 1- | 3- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 2- | 2- | -3- | - | - | - | - | 0.79 |
| 30- | 45.7561- | 111.6496- | 2- | 02- | | 0-M37238- | 10/15/76- | 14- | 5- | 4.0- | C- | - | 5.7- | 430- | | -1- | 1- | 2- | 6- | 4- | 3- | 3- | 3- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 3.81 |
| 30- | 45.7905- | 111.6812- | 2- | 02- | | 0-M37239- | 10/15/76- | 14- | 4- | 3.5- | - | - | 5.7- | 700- | | -1- | 1- | 5- | 7- | 2- | 2- | 1- | 2- | 6- | 3- | 2- | 1- | -3- | - | - | - | - | 41.35 |
| 30- | 45.9011- | 111.6918- | 2- | 01- | | 0-M37247- | 10/15/76- | 16- | 6- | 5.0- | C- | - | 5.7- | 475- | | -1- | 1- | 5- | 6- | 2- | 2- | 1- | 1- | 6- | 3- | 4- | 1- | -1- | - | - | - | - | 2.38 |
| 30- | 45.8904- | 111.6755- | 2- | 02- | | 0-M37251- | 10/15/76- | 18- | 4- | 3.0- | C- | - | 5.7- | 1500- | | -1- | 1- | 2- | 1- | 2- | 2- | 2- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 29.05 |

# 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 (θ) UNITS IN ppb |
| 30- | 45.9379- | 111.6701- | 2- | 01- | | 0-M37256- | 10/16/76- | 8- | 5- | 4.0- | - | - | 6.1- | 2100- | | -1- | 1- | 5- | 6- | 1- | 2- | 3- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 12.20 |
| 30- | 45.9507- | 111.7192- | 2- | 02- | | 0-M37258- | 10/16/76- | 9- | 2- | 3.0- | - | - | 5.7- | 750- | | -1- | 1- | 5- | 1- | 2- | 2- | 1- | 1- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 11.85 |
| 30- | 45.2925- | 110.0172- | 2- | 07- | | 0-M37267- | 10/30/76- | 8- | 1- | 1.0- | - | - | 5.7- | 210- | | -1- | 6- | 4- | 6- | 3- | 3- | 2- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 0.10 |
| 30- | 45.2960- | 110.0389- | 2- | 07- | | 0-M37268- | 10/30/76- | 8- | 2- | 1.0- | - | - | 5.7- | 230- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 2- | 3- | 1- | -1- | - | - | - | - | 1.47 |
| 30- | 45.2934- | 110.0346- | 2- | 07- | | 0-M37269- | 10/30/76- | 8- | 2- | 1.0- | - | - | 5.7- | 220- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 2- | 3- | 1- | -1- | - | - | - | - | 0.47 |
| 30- | 45.3132- | 110.0976- | 2- | 07- | | 0-M37270- | 10/30/76- | 10- | 6- | 2.0- | - | - | 5.7- | 210- | | -1- | 6- | 2- | 6- | 2- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 0.93 |
| 30- | 45.3130- | 110.0996- | 2- | 07- | | 0-M37271- | 10/30/76- | 10- | 5- | 1.0- | - | - | 5.9- | 220- | | -1- | 6- | 3- | 6- | 3- | 2- | 1- | 2- | 3- | 4- | 3- | 1- | -1- | - | - | - | - | 1.32 |
| 30- | 45.2318- | 110.0084- | 2- | 07- | | 0-M37272- | 10/30/76- | 10- | 2- | 1.0- | - | - | 5.7- | 200- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 1- | -1- | - | - | - | - | 0.23 |
| 30- | 45.2258- | 110.0228- | 2- | 07- | | 0-M37273- | 10/30/76- | 13- | 2- | 1.0- | - | - | 5.9- | 210- | | -1- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 3- | 1- | 4- | 1- | -1- | - | - | - | - | 0.52 |
| 30- | 45.2244- | 110.0370- | 2- | 07- | | 0-M37274- | 10/30/76- | 14- | 1- | 1.0- | C- | - | 5.5- | 200- | | -1- | 6- | 1- | 6- | 2- | 3- | 1- | 2- | 1- | 4- | 4- | 1- | -1- | - | - | - | - | 0.21 |
| 30- | 45.2245- | 110.0228- | 2- | 07- | | 0-M37275- | 10/30/76- | 13- | 2- | 1.0- | - | - | 5.7- | 210- | | -1- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 4- | 1- | -1- | - | - | - | - | 1.45 |
| 30- | 45.2289- | 110.0707- | 2- | 07- | | 0-M37276- | 10/30/76- | 16- | - | 1.0- | - | - | 5.7- | 210- | | -1- | 6- | 1- | 6- | 4- | 3- | 1- | 2- | 1- | 4- | 5- | 1- | -1- | - | - | - | - | 0.10 |
| 30- | 45.2279- | 110.0694- | 2- | 07- | | 0-M37277- | 10/30/76- | 16- | - | 1.0- | - | - | 5.7- | 210- | | -1- | 6- | 1- | 6- | 4- | 3- | 1- | 2- | 1- | 4- | 5- | 1- | -1- | - | - | - | - | 0.38 |
| 30- | 45.0448- | 110.8805- | 2- | 07- | | 0-M37278- | 10/31/76- | 10- | - | 1.0- | - | - | 5.5- | 80- | | -2- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 0.10 |
| 30- | 45.1623- | 110.7217- | 2- | 07- | | 0-M37279- | 11/02/76- | 8- | 1- | 1.0- | - | - | 5.7- | 80- | | -2- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 3- | 1- | -1- | - | - | - | - | 0.79 |
| 30- | 45.0115- | 110.5850- | 2- | 07- | | 0-M37280- | 11/02/76- | 13- | 2- | 1.0- | - | - | 5.7- | 80- | | -3- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 3- | 1- | -1- | - | - | - | - | 0.73 |
| 30- | 45.0038- | 110.5106- | 2- | 07- | | 0-M37281- | 11/02/76- | 15- | 1- | 1.0- | - | - | 5.5- | 80- | | -3- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 2- | 4- | 4- | 1- | -1- | - | - | - | - | 0.62 |
| 30- | 45.0035- | 110.5094- | 2- | 07- | | 0-M37282- | 11/02/76- | 15- | 1- | 1.0- | - | - | 5.5- | 80- | | -3- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 2- | 4- | 4- | 1- | -1- | - | - | - | - | 0.84 |
| 30- | 45.0168- | 110.6020- | 2- | 07- | | 0-M37283- | 11/02/76- | 12- | 4- | 1.0- | - | - | 5.7- | 210- | | -3- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 4- | 4- | 3- | 1- | -1- | - | - | - | - | 0.73 |
| 30- | 45.0161- | 110.5737- | 2- | 07- | | 0-M37284- | 11/02/76- | 13- | 4- | 1.0- | - | - | 5.7- | 210- | | -3- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 3- | 1- | -1- | - | - | - | - | 0.20 |
| 30- | 45.3771- | 110.5801- | 2- | 07- | | 0-M37285- | 10/30/76- | 11- | -2- | 1.0- | - | - | 5.7- | 150- | | -2- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 0.74 |
| 30- | 45.0381- | 110.7946- | 2- | 07- | | 0-M37286- | 10/31/76- | 11- | 2- | 1.0- | - | - | 5.5- | 80- | | -2- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 3- | 2- | 4- | 1- | -1- | - | - | - | - | 0.91 |
| 30- | 45.0521- | 110.7900- | 2- | 07- | | 0-M37287- | 10/31/76- | 10- | 1- | 1.0- | - | - | 5.5- | 80- | | -2- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 1.38 |
| 30- | 45.3756- | 110.5730- | 2- | 07- | | 0-M37288- | 10/30/76- | 11- | -1- | 1.0- | - | - | 5.7- | 160- | | -2- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 1.67 |
| 30- | 45.3842- | 110.8794- | 2- | 07- | | 0-M37289- | 10/30/76- | 15- | 1- | 1.0- | - | - | 5.5- | 80- | | -2- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 1.25 |
| 30- | 45.3854- | 110.8960- | 2- | 07- | | 0-M37290- | 10/30/76- | 15- | 1- | 1.0- | - | - | 5.5- | 80- | | -2- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 3- | 4- | 4- | 2- | -1- | - | - | - | - | 0.98 |
| 30- | 45.0377- | 110.7932- | 2- | 07- | | 0-M37291- | 10/31/76- | 12- | 3- | 1.0- | - | - | 5.5- | 80- | | -2- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 3- | 2- | 4- | 1- | -1- | - | - | - | - | 0.10 |
| 30- | 45.0579- | 111.2764- | 2- | 07- | | 0-M37301- | 10/16/76- | 14- | - | 1.0- | - | - | 5.5- | 470- | | -3- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -1- | - | - | - | - | 0.31 |
| 30- | 45.0806- | 111.3738- | 2- | 07- | | 0-M37304- | 10/16/76- | 15- | 10- | 4.0- | C- | - | 5.7- | 500- | | -1- | 4- | 5- | 6- | 2- | 2- | 2- | 2- | 4- | 3- | 2- | 1- | -4- | - | - | - | - | 0.34 |
| 30- | 45.0793- | 111.3732- | 2- | 07- | | 0-M37305- | 10/16/76- | 16- | 10- | 4.2- | - | - | 5.7- | 500- | | -1- | 4- | 3- | 3- | 3- | 2- | 1- | 2- | 4- | 3- | 2- | 1- | -1- | - | - | - | - | 0.52 |
| 30- | 45.0757- | 111.3390- | 2- | 07- | | 0-M37306- | 10/16/76- | 16- | 9- | 4.0- | - | - | 5.7- | 500- | | -1- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 4- | 1- | -1- | - | - | - | - | 0.62 |
| 30- | 45.0727- | 111.3395- | 2- | 07- | | 0-M37307- | 10/16/76- | 16- | 8- | 3.6- | - | - | 5.5- | 290- | | -1- | 1- | 2- | 1- | 4- | 2- | 3- | 2- | 2- | 3- | 2- | 1- | -1- | - | - | - | - | 0.54 |
| 30- | 45.0690- | 111.3165- | 2- | 07- | | 0-M37308- | 10/16/76- | 17- | 5- | 3.0- | - | - | 5.7- | 350- | | -1- | 1- | 3- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 2- | 1- | -1- | - | - | - | - | 0.24 |
| 30- | 45.0628- | 111.2662- | 2- | 07- | | 0-M37309- | 10/16/76- | 17- | 11- | 4.0- | - | - | 5.6- | 360- | | -1- | 4- | 2- | 7- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 1- | -1- | - | - | - | - | 0.47 |
| 30- | 45.0614- | 111.2588- | 2- | 07- | | 0-M37310- | 10/16/76- | 17- | 10- | 4.0- | C- | - | 5.7- | 330- | | -1- | 4- | 5- | 6- | 2- | 2- | 1- | 2- | 2- | 2- | 2- | 1- | -3- | - | - | - | - | 0.24 |
| 30- | 45.2524- | 111.2537- | 2- | 02- | | 0-M37311- | 10/16/76- | 18- | 9- | | -C- | - | 5.7- | 340- | | -1- | 1- | 2- | 6- | 3- | 2- | 1- | 2- | 3- | 3- | 3- | 1- | -3- | - | - | - | - | 0.69 |
| 30- | 45.2670- | 111.2725- | 2- | 02- | | 0-M37312- | 10/16/76- | 18- | 11- | | -C- | - | 5.5- | 290- | | -1- | 1- | 2- | 7- | 3- | 2- | 1- | 2- | 1- | 2- | 3- | 1- | -8- | - | - | - | - | 0.60 |
| 30- | 45.2686- | 111.3031- | 2- | 02- | | 0-M37313- | 10/17/76- | 8- | 17- | | -C- | - | 5.7- | 250- | | -1- | 1- | 2- | 1- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 1- | -8- | - | - | - | - | 1.35 |
| 30- | 45.2437- | 111.3258- | 2- | 07- | | 0-M37314- | 10/17/76- | 8- | 12- | 4.2- | - | - | 5.7- | 260- | | -1- | 1- | 2- | 1- | 2- | 2- | 1- | 2- | 1- | 2- | 3- | 1- | -3- | - | - | - | - | 0.88 |
| 30- | 45.2393- | 111.3409- | 2- | 07- | | 0-M37315- | 10/17/76- | 8- | 12- | 4.2- | C- | - | 5.9- | 450- | | -1- | 1- | 2- | 1- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 1.35 |
| 30- | 45.2373- | 111.3485- | 2- | 07- | | 0-M37316- | 10/17/76- | 8- | 10- | 4.4- | - | - | 5.5- | 250- | | -1- | 1- | 2- | 7- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 0.62 |
| 30- | 45.2287- | 111.3504- | 2- | 07- | | 0-M37317- | 10/17/76- | 9- | 9- | 4.0- | - | - | 5.7- | 260- | | -1- | 1- | 2- | 7- | 2- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 1.00 |
| 30- | 45.2731- | 111.2434- | 2- | 07- | | 0-M37318- | 10/17/76- | 9- | 12- | | - | - | 5.9- | 550- | | -1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 0.62 |
| 30- | 45.2710- | 111.2372- | 2- | 07- | | 0-M37319- | 10/17/76- | 10- | 10- | | - | - | 5.7- | 500- | | -1- | 1- | 4- | 7- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -3- | - | - | - | - | 0.10 |
| 30- | 45.3018- | 111.2070- | 2- | 07- | | 0-M37320- | 10/17/76- | 10- | 12- | | - | - | 5.4- | 70- | | -1- | 7- | 2- | 7- | 4- | 4- | 1- | 2- | 1- | 3- | 2- | 1- | -1- | - | - | - | - | 0.22 |
| 30- | 45.3088- | 111.1951- | 2- | 07- | | 0-M37321- | 10/17/76- | 10- | 8- | | -C- | - | 5.2- | 80- | | -1- | 1- | 3- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -8- | - | - | - | - | 0.29 |
| 30- | 45.3145- | 111.1833- | 2- | 07- | | 0-M37322- | 10/17/76- | 11- | 5- | | - | - | 5.2- | 100- | | -1- | 7- | 2- | 7- | 4- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 0.28 |
| 30- | 45.2881- | 111.1367- | 2- | 07- | | 0-M37323- | 10/17/76- | 11- | 12- | | -C- | - | 5.2- | 130- | | -1- | 6- | 3- | 6- | 3- | 2- | 1- | 2- | 1- | 2- | 4- | 1- | -4- | - | - | - | - | 5.43 |
| 30- | 45.2996- | 111.1481- | 2- | 07- | | 0-M37324- | 10/17/76- | 11- | 9- | | -C- | - | 5.5- | 150- | | -1- | 6- | 2- | 7- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -4- | - | - | - | - | 0.10 |
| 30- | 45.3021- | 111.1568- | 2- | 07- | | 0-M37325- | 10/17/76- | 12- | 8- | | -C- | - | 5.5- | 150- | | -1- | 6- | 2- | 7- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -4- | - | - | - | - | 0.54 |
| 30- | 45.3241- | 111.1703- | 2- | 07- | | 0-M37326- | 10/17/76- | 12- | 13- | | -C- | - | 5.5- | 150- | | -1- | 6- | 2- | 7- | 4- | 2- | 1- | 2- | 1- | 2- | 3- | 1- | -8- | - | - | - | - | 1.64 |

# 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 (cpm) | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER EVIDENCE | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (H) UNITS IN ppb |
| 30- | 45.8472- | 110.9947- | 2- | 07- | | 0-M37327- | 10/17/76- | 12- | - | | -C- | - | 5.7- | 260- | | -1- | 1- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | C.2C |
| 30- | 45.8361- | 110.9986- | 2- | 07- | | 0-M37328- | 10/17/76- | 13- | -1- | | - | - | 5.7- | 250- | | -1- | 1- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 3- | 2- | 1- | -3- | - | - | - | - | 0.37 |
| 30- | 45.9245- | 111.0525- | 2- | 02- | | 0-M37331- | 10/17/76- | 14- | 6- | | -C- | - | 5.7- | 220- | | -1- | 1- | 3- | 7- | 4- | 2- | 1- | 2- | 4- | 3- | 2- | 2- | -3- | - | - | - | - | 0.79 |
| 30- | 45.9300- | 111.0750- | 2- | 02- | | 0-M37332- | 10/17/76- | 14- | 6- | | -C- | - | 5.6- | 240- | | -1- | 1- | 2- | 7- | 4- | 2- | 1- | 2- | 4- | 4- | 2- | 1- | -3- | - | - | - | - | 0.79 |
| 30- | 45.9724- | 111.0539- | 2- | 02- | | 0-M37335- | 10/17/76- | 15- | 8- | | - | - | 5.7- | 280- | | -1- | 1- | 2- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 1.23 |
| 30- | 45.9727- | 111.0906- | 2- | 02- | | 0-M37336- | 10/17/76- | 15- | 10- | | -C- | - | 5.7- | 300- | | -1- | 1- | 2- | 6- | 4- | 2- | 1- | 2- | 2- | 2- | 2- | 1- | -3- | - | - | - | - | 0.42 |
| 30- | 45.9792- | 111.0998- | 2- | 02- | | 0-M37337- | 10/17/76- | 16- | 11- | | -C- | - | 5.7- | 305- | | -1- | 1- | 5- | 6- | 4- | 2- | 1- | 2- | 3- | 3- | 3- | 1- | -3- | - | - | - | - | 1.45 |
| 30- | 45.9989- | 111.0858- | 2- | 02- | | 0-M37338- | 10/17/76- | 16- | 7- | | -C- | - | 5.7- | 485- | | -1- | 1- | 5- | 8- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 0.90 |
| 30- | 45.9981- | 111.1745- | 2- | 02- | | 0-M37339- | 10/17/76- | 16- | 8- | | - | - | 5.7- | 410- | | -1- | 1- | 3- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 2- | 1- | -3- | - | - | - | - | 0.17 |
| 30- | 45.9918- | 111.1651- | 2- | 02- | | 0-M37340- | 10/17/76- | 17- | 9- | | - | - | 5.7- | 500- | | -1- | 1- | 6- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 2- | 1- | -3- | - | - | - | - | 0.24 |
| 30- | 45.6596- | 111.3118- | 2- | 02- | | 0-M37342- | 10/10/76- | 8- | 2- | 3.0- | - | - | 6.3- | 650- | | -2- | 4- | 5- | 8- | 2- | 2- | 2- | 2- | 3- | 3- | 3- | 3- | -3- | - | - | - | - | 2.62 |
| 30- | 45.6649- | 111.3285- | 2- | 02- | | 0-M37343- | 10/10/76- | 9- | 3- | 6.0- | - | - | 6.6- | 600- | | -2- | 4- | 5- | 8- | 2- | 2- | 1- | 2- | 4- | 4- | 3- | 3- | -3- | - | - | - | - | 2.20 |
| 30- | 45.6581- | 111.4103- | 2- | 01- | | 0-M37345- | 10/10/76- | 9- | 2- | 3.0- | - | - | 6.9- | 500- | | -2- | 4- | 5- | 6- | 2- | 2- | 2- | -4- | 4- | 3- | 3- | -3- | - | - | - | - | 1.54 |
| 30- | 45.6291- | 111.3963- | 2- | 01- | | 0-M37346- | 10/10/76- | 11- | 3- | 2.0- | - | - | 6.3- | 550- | | -2- | 4- | 5- | 8- | 2- | 2- | 2- | -4- | 3- | 3- | 3- | -3- | - | - | - | - | 5.75 |
| 30- | 45.6478- | 111.4122- | 2- | 02- | | 0-M37347- | 10/10/76- | 10- | 3- | 2.0- | - | - | 6.0- | 240- | | -2- | 4- | 4- | 4- | 2- | 3- | 2- | 2- | 4- | 3- | 2- | 3- | -3- | - | - | - | - | 0.90 |
| 30- | 45.6465- | 111.4368- | 2- | 02- | | 0-M37348- | 10/10/76- | 10- | 3- | | - | - | 6.3- | 400- | | -2- | 4- | 4- | 4- | 2- | 2- | 2- | 2- | 4- | 3- | 1- | 3- | -3- | - | - | - | - | 2.10 |
| 30- | 45.6879- | 111.4698- | 2- | 01- | | 0-M37353- | 10/10/76- | 11- | 4- | 9.0- | - | - | 6.6- | 700- | | -2- | 5- | 4- | 4- | 2- | 2- | 1- | -4- | 3- | 3- | 2- | -3- | - | - | - | - | 10.8C |
| 30- | 45.5956- | 111.4910- | 2- | 02- | | 0-M37358- | 10/10/76- | 11- | 4- | 5.0- | - | - | 6.3- | 210- | | -2- | 5- | 4- | 7- | 3- | 3- | 1- | 2- | 2- | 4- | 3- | 2- | -3- | - | - | - | - | 0.90 |
| 30- | 45.3688- | 110.5619- | 2- | 07- | | 0-M37361- | 10/30/76- | 11- | -1- | 1.0- | - | - | 5.5- | 160- | | -2- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 1.89 |
| 30- | 45.3704- | 110.8529- | 2- | 07- | | 0-M37362- | 10/30/76- | 13- | 1- | 1.0- | - | - | 5.7- | 165- | | -2- | 6- | 1- | 6- | 2- | 2- | 1- | 2- | 3- | 4- | 3- | 2- | -1- | - | - | - | - | 0.20 |
| 30- | 45.3805- | 110.1038- | 2- | 07- | | 0-M37363- | 10/29/76- | 18- | 17- | | - | - | 5.2- | 310- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 0.41 |
| 30- | 45.3588- | 110.1064- | 2- | 07- | | 0-M37364- | 10/29/76- | 16- | 1- | 1.0- | - | - | 5.9- | 150- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 0.34 |
| 30- | 45.3673- | 110.0969- | 2- | 07- | | 0-M37365- | 10/29/76- | 15- | 1- | 1.0- | - | - | 5.7- | 210- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 0.45 |
| 30- | 45.3711- | 110.0500- | 2- | 07- | | 0-M37366- | 10/29/76- | 14- | 5- | 1.0- | - | - | 5.5- | 210- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 0.30 |
| 30- | 45.3718- | 110.0300- | 2- | 07- | | 0-M37367- | 10/29/76- | 14- | 6- | 1.0- | - | - | 5.5- | 210- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 2- | 4- | 2- | -1- | - | - | - | - | 1.25 |
| 30- | 45.4590- | 110.0865- | 2- | 07- | | 0-M37368- | 10/29/76- | 10- | 1- | | - | - | 5.5- | 210- | | -1- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 3- | 4- | 3- | 2- | -1- | - | - | - | - | 0.96 |
| 30- | 45.4602- | 110.0878- | 2- | 07- | | 0-M37369- | 10/29/76- | 10- | 1- | | - | - | 5.5- | 200- | | -1- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 3- | 5- | 3- | 2- | -1- | - | - | - | - | 0.95 |
| 30- | 45.4840- | 110.0833- | 2- | 07- | | 0-M37370- | 10/29/76- | 10- | - | 1.0- | - | - | 5.9- | 200- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 7- | 3- | 4- | 2- | -1- | - | - | - | - | 3.22 |
| 30- | 45.4881- | 110.0799- | 2- | 07- | | 0-M37371- | 10/29/76- | 10- | 1- | 1.0- | - | - | 6.1- | 210- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 4- | 3- | 2- | -1- | - | - | - | - | 0.49 |
| 30- | 45.4944- | 110.0404- | 2- | 07- | | 0-M37372- | 10/29/76- | 9- | -1- | 1.0- | - | - | 5.2- | 345- | | -1- | 4- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 2- | 3- | 2- | -1- | - | - | - | - | 1.65 |
| 30- | 45.4961- | 110.0391- | 2- | 07- | | 0-M37373- | 10/29/76- | 9- | - | 1.0- | - | - | 5.2- | 350- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 0.80 |
| 30- | 45.9789- | 111.2063- | 2- | 02- | | 0-M37375- | 10/10/76- | 11- | 10- | 7.6- | C- | - | 6.1- | 1100- | | -1- | 1- | 6- | 7- | 2- | 2- | 2- | 1- | 6- | 4- | 2- | 1- | -3- | - | - | - | - | 0.98 |
| 30- | 45.9618- | 111.1829- | 2- | 07- | | 0-M37379- | 10/10/76- | 10- | 13- | 8.8- | - | - | 5.9- | 430- | | -1- | 1- | 5- | 6- | 3- | 2- | 1- | 2- | 3- | 3- | 3- | 1- | -3- | - | - | - | - | 0.36 |
| 30- | 45.7504- | 111.2973- | 2- | 02- | | 0-M37380- | 10/10/76- | 13- | 1- | 0.2- | C- | - | 5.7- | 600- | | -4- | | -4- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 2- | 3- | -3- | - | - | - | - | 7.24 |
| 30- | 45.8424- | 111.3650- | 2- | 07- | | 0-M37387- | 10/11/76- | 10- | 5- | 3.4- | C- | - | 5.7- | 500- | | -1- | 1- | 5- | 6- | 2- | 2- | 2- | 2- | 4- | 3- | 2- | 3- | -3- | - | - | - | - | 12.30 |
| 30- | 45.8770- | 111.4028- | 2- | 06- | | 0-M37393- | 10/11/76- | 10- | 4- | 2.2- | - | - | 5.7- | 500- | | -1- | 1- | 5- | 6- | 2- | 2- | 1- | 1- | 6- | 4- | 2- | 3- | -3- | - | - | - | - | 15.35 |
| 30- | 45.9343- | 111.1381- | 2- | 07- | | 0-M37401- | 10/11/76- | 12- | 10- | 6.4- | - | - | 5.7- | 340- | | -1- | 1- | 4- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 2- | 3- | -3- | - | - | - | - | 1.55 |
| 30- | 45.9312- | 111.1700- | 2- | 07- | | 0-M37402- | 10/11/76- | 13- | 10- | 6.8- | - | - | 5.9- | 500- | | -1- | 1- | 5- | 6- | 4- | 2- | 1- | 2- | 2- | 3- | 2- | 3- | -3- | - | - | - | - | 1.28 |
| 30- | 45.9103- | 111.1486- | 2- | 07- | | 0-M37405- | 10/11/76- | 15- | 8- | 4.4- | C- | - | 5.7- | 310- | | -1- | 1- | 5- | 6- | 4- | 2- | 1- | 2- | 2- | 3- | 2- | 3- | -3- | - | - | - | - | 0.82 |
| 30- | 45.9112- | 111.1829- | 2- | 07- | | 0-M37406- | 10/11/76- | 14- | 10- | 8.8- | - | - | 5.7- | 410- | | -1- | 1- | 2- | 7- | 3- | 2- | 1- | 2- | 3- | 3- | 2- | 3- | -3- | - | - | - | - | 1.64 |
| 30- | 45.8500- | 111.1451- | 2- | 07- | | 0-M37410- | 10/11/76- | 15- | 9- | | -C- | - | 5.7- | 325- | | -1- | 1- | 5- | 8- | 3- | 2- | 3- | 2- | 2- | 2- | 2- | 3- | -3- | - | - | - | - | 3.C0 |
| 30- | 45.8530- | 111.1171- | 2- | 07- | | 0-M37411- | 10/11/76- | 15- | 9- | 6.6- | - | - | 5.7- | 410- | | -1- | 1- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 3- | 2- | 3- | -3- | - | - | - | - | 0.30 |
| 30- | 45.8861- | 111.1061- | 2- | 07- | | 0-M37412- | 10/20/76- | 10- | 5- | 2.0- | C- | - | 5.7- | 270- | | -4- | | -4- | 6- | 2- | 3- | 1- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 0.20 |
| 30- | 45.3333- | 111.7467- | 2- | 07- | | 0-M37413- | 10/20/76- | 10- | 5- | 2.4- | - | - | 5.7- | 290- | | -4- | | -4- | 6- | 3- | 3- | 1- | 2- | 3- | 3- | 2- | 1- | -3- | - | - | - | - | 2.78 |
| 30- | 45.4191- | 111.7501- | 2- | 07- | | 0-M37414- | 10/20/76- | 11- | 7- | 2.0- | - | - | 5.7- | 270- | | -4- | | -4- | 6- | 2- | 3- | 1- | 2- | 4- | 4- | 2- | 1- | -3- | - | - | - | - | 0.79 |
| 30- | 45.4352- | 111.7112- | 2- | 07- | | 0-M37415- | 10/20/76- | 11- | 6- | 2.0- | - | - | 5.7- | 300- | | -4- | | -4- | 6- | 4- | 3- | 1- | 2- | 4- | 4- | 2- | 1- | -3- | - | - | - | - | 1.95 |
| 30- | 45.5638- | 111.2639- | 2- | 02- | | 0-M37417- | 10/11/76- | 8- | -2- | 2.4- | - | - | 6.3- | 465- | | -1- | 6- | 4- | 7- | 2- | 2- | 1- | 2- | 2- | 2- | 3- | 3- | -3- | - | - | - | - | 3.47 |
| 30- | 45.5702- | 111.2944- | 2- | 02- | | 0-M37418- | 10/11/76- | 9- | -2- | | - | - | 6.0- | 160- | | -2- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 2- | 3- | -3- | - | - | - | - | 0.63 |
| 30- | 45.5074- | 111.3542- | 2- | 02- | | 0-M37420- | 10/11/76- | 10- | -1- | | - | - | 6.3- | 145- | | -2- | 4- | 4- | 4- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | C.16 |
| 30- | 45.5029- | 111.3596- | 2- | 02- | | 0-M37421- | 10/11/76- | 10- | -1- | | - | - | 6.3- | 350- | | -2- | 4- | 4- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 2.25 |
| 30- | 45.3799- | 111.9162- | 2- | 07- | | 0-M37423- | 10/21/76- | 11- | 3- | 4.5- | C- | - | 5.2- | 100- | | -3- | 7- | 4- | 6- | 4- | 2- | 1- | 2- | 2- | 3- | 4- | 1- | -3- | - | - | - | - | C.31 |

# 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 | SENTILOMETER | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | WATER SAMPLES ANALYZED BY FLUOROMETRY OR DNC (#) UNITS IN ppb |
| 30- | 45.3794- | 111.9145- | 2- | 07- | 0- | M37424- | 10/21/76- | 11- | 35- | 5.0- | C- | - | 5.5- | 120- | | -3- | 7- | 4- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -3- | - | - | - | - | 0.35 |
| 30- | 45.3694- | 111.9268- | 2- | 07- | 0- | M37425- | 10/21/76- | 12- | 8- | 3.0- | C- | - | 5.2- | 160- | | -4- | -4- | 6- | 2- | 2- | 1- | 2- | 3- | 3- | 4- | 1- | -3- | - | - | - | - | - | 0.47 |
| 30- | 45.3601- | 111.9338- | 2- | 07- | 0- | M37426- | 10/21/76- | 12- | 9- | 4.0- | C- | - | 5.5- | 120- | | -4- | -4- | 6- | 3- | 2- | 1- | 2- | 2- | 2- | 4- | 1- | -3- | - | - | - | - | - | 0.93 |
| 30- | 45.3583- | 111.9174- | 2- | 07- | 0- | M37427- | 10/21/76- | 12- | 9- | 3.0- | C- | - | 5.7- | 250- | | -3- | 8- | 4- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 0.55 |
| 30- | 45.3613- | 111.9095- | 2- | 07- | 0- | M37429- | 10/21/76- | 12- | 11- | 3.0- | C- | - | 5.5- | 120- | | -4- | -4- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | - | 0.24 |
| 30- | 45.3485- | 111.8904- | 2- | 07- | 0- | M37430- | 10/21/76- | 13- | 11- | 3.0- | C- | - | 5.5- | 140- | | -3- | 4- | 4- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 4- | 1- | -3- | - | - | - | - | 0.21 |
| 30- | 45.3886- | 111.8890- | 2- | 07- | 0- | M37431- | 10/21/76- | 13- | 10- | 3.5- | C- | - | 5.5- | 160- | | -3- | 4- | 4- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -3- | - | - | - | - | 0.32 |
| 30- | 45.3588- | 111.9415- | 2- | 07- | 0- | M37433- | 10/21/76- | 13- | 11- | 3.0- | C- | - | 5.5- | 120- | | -4- | -4- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -3- | - | - | - | - | - | 0.33 |
| 30- | 45.3576- | 111.9435- | 2- | 07- | 0- | M37434- | 10/21/76- | 13- | 11- | 3.5- | - | - | 5.5- | 140- | | -4- | -4- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -3- | - | - | - | - | - | 0.44 |
| 30- | 45.3252- | 111.9990- | 2- | 07- | 0- | M37435- | 10/21/76- | 14- | 12- | 4.0- | C- | - | 5.5- | 140- | | -4- | -4- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | - | 0.56 |
| 30- | 45.3119- | 111.9802- | 2- | 07- | 0- | M37436- | 10/21/76- | 15- | 11- | 5.5- | C- | - | 5.9- | 280- | | -4- | -4- | 6- | 2- | 2- | 3- | 2- | 3- | 4- | 3- | 1- | -3- | - | - | - | - | - | 3.28 |
| 30- | 45.2991- | 111.9763- | 2- | 07- | 0- | M37437- | 10/21/76- | 15- | 10- | 4.5- | C- | - | 6.0- | 400- | | -4- | -4- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 4- | 2- | -3- | - | - | - | - | - | 0.65 |
| 30- | 45.2592- | 111.9720- | 2- | 07- | 0- | M37439- | 10/21/76- | 15- | 9- | 3.5- | C- | - | 5.7- | 340- | | -3- | 1- | 4- | 6- | 2- | 2- | 1- | 2- | 1- | 3- | 4- | 2- | -2- | - | - | - | - | 0.15 |
| 30- | 45.4968- | 111.8046- | 2- | 07- | 0- | M37442- | 10/22/76- | 10- | - | 2.5- | C- | - | 6.0- | 60- | | -4- | -4- | 6- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | - | 2.03 |
| 30- | 45.4971- | 111.7931- | 2- | 07- | 0- | M37443- | 10/22/76- | 10- | - | 3.5- | C- | - | 5.9- | 150- | | -4- | -4- | 6- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | - | 0.62 |
| 30- | 45.4822- | 111.7891- | 2- | 07- | 0- | M37444- | 10/22/76- | 11- | 1- | 3.0- | C- | - | 5.7- | 250- | | -4- | -4- | 6- | 4- | 2- | 1- | 2- | 2- | 4- | 4- | 1- | -3- | - | - | - | - | - | 0.33 |
| 30- | 45.4485- | 111.7630- | 2- | 07- | 0- | M37445- | 10/22/76- | 11- | 2- | 3.5- | C- | - | 5.7- | 250- | | -4- | -4- | 6- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | - | 2.70 |
| 30- | 45.4485- | 111.8452- | 2- | 07- | 0- | M37446- | 10/22/76- | 11- | - | 2.0- | C- | - | 5.2- | 90- | | -2- | 7- | 4- | 6- | 4- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -3- | - | - | - | - | 1.83 |
| 30- | 45.4526- | 111.8851- | 2- | 07- | 0- | M37447- | 10/22/76- | 11- | - | 2.5- | C- | - | 5.2- | 80- | | -2- | 7- | 4- | 6- | 4- | 2- | 1- | 2- | 1- | 4- | 5- | 2- | -1- | - | - | - | - | 0.37 |
| 30- | 45.4640- | 111.8197- | 2- | 07- | 0- | M37448- | 10/22/76- | 12- | 4- | 3.0- | C- | - | 5.5- | 80- | | -4- | -4- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | - | 0.40 |
| 30- | 45.4507- | 111.8158- | 2- | 07- | 0- | M37449- | 10/22/76- | 12- | 5- | 3.5- | C- | - | 5.5- | 100- | | -4- | -4- | 6- | 4- | 2- | 1- | 2- | 2- | 4- | 3- | 1- | -3- | - | - | - | - | - | 0.59 |
| 30- | 45.4337- | 111.7750- | 2- | 07- | 0- | M37450- | 10/22/76- | 12- | 5- | 2.5- | C- | - | 6.1- | 380- | | -4- | -4- | 6- | 2- | 2- | 1- | 2- | 4- | 4- | 3- | 2- | -3- | - | - | - | - | - | 0.84 |
| 30- | 45.4070- | 111.7543- | 2- | 07- | 0- | M37451- | 10/22/76- | 12- | 4- | 3.5- | C- | - | 5.7- | 350- | | -4- | -4- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | - | 3.43 |
| 30- | 45.4197- | 111.8300- | 2- | 07- | 0- | M37452- | 10/22/76- | 13- | 4- | 3.0- | C- | - | 5.5- | 100- | | -4- | -4- | 6- | 2- | 2- | 1- | 2- | 1- | 3- | 3- | 2- | -3- | - | - | - | - | - | 0.69 |
| 30- | 45.3852- | 111.8428- | 2- | 07- | 0- | M37453- | 10/22/76- | 14- | 4- | 2.5- | C- | - | 5.5- | 70- | | -4- | -4- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 4- | 2- | -3- | - | - | - | - | - | 0.62 |
| 30- | 45.3713- | 111.8149- | 2- | 07- | 0- | M37454- | 10/22/76- | 15- | 3- | 2.5- | C- | - | 5.2- | 100- | | -4- | -4- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 4- | 2- | -3- | - | - | - | - | - | 1.04 |
| 30- | 45.3642- | 111.8143- | 2- | 07- | 0- | M37455- | 10/22/76- | 15- | 3- | 3.0- | C- | - | 5.5- | 120- | | -4- | -4- | 6- | 4- | 2- | 1- | 2- | 2- | 3- | 4- | 2- | -3- | - | - | - | - | - | 0.19 |
| 30- | 45.2546- | 111.9182- | 2- | 07- | 0- | M37457- | 10/22/76- | 17- | - | 2.5- | C- | - | 5.7- | 300- | | -2- | 1- | 4- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 2- | -2- | - | - | - | - | 2.62 |
| 30- | 45.2556- | 111.9172- | 2- | 07- | 0- | M37458- | 10/22/76- | 17- | - | 2.5- | C- | - | 5.7- | 250- | | -4- | -4- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 2- | -2- | - | - | - | - | - | 2.62 |
| 30- | 45.2580- | 111.9216- | 2- | 07- | 0- | M37459- | 10/22/76- | 17- | - | 2.5- | C- | - | 5.7- | 250- | | -4- | -4- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 4- | 2- | -2- | - | - | - | - | - | 3.27 |
| 30- | 45.2661- | 111.9254- | 2- | 07- | 0- | M37460- | 10/22/76- | 17- | - | 2.5- | C- | - | 5.7- | 300- | | -2- | 1- | 4- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 5- | 2- | -2- | - | - | - | - | 3.60 |
| 30- | 45.2890- | 111.9440- | 2- | 07- | 0- | M37461- | 10/22/76- | 17- | - | 2.5- | C- | - | 5.7- | 320- | | -4- | -4- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 4- | 2- | -2- | - | - | - | - | - | 4.17 |
| 30- | 45.3009- | 111.8813- | 2- | 06- | 0- | M37463- | 10/23/76- | 11- | -1- | 2.5- | C- | - | 5.5- | 140- | | -4- | -6- | 6- | 2- | 2- | 1- | -4- | 2- | 4- | 5- | -3- | - | - | - | - | - | - | 0.29 |
| 30- | 45.3266- | 111.8658- | 2- | 06- | 0- | M37464- | 10/23/76- | 10- | -2- | 2.0- | C- | - | 5.2- | 100- | | -4- | -6- | 6- | 3- | 2- | 1- | -4- | 3- | 4- | 5- | -3- | - | - | - | - | - | - | 0.24 |
| 30- | 45.3093- | 111.7954- | 2- | 07- | 0- | M37465- | 10/23/76- | 11- | -1- | 2.5- | C- | - | 5.9- | 400- | | -4- | -4- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 4- | 5- | -3- | - | - | - | - | - | 4.86 |
| 30- | 45.2958- | 111.7630- | 2- | 07- | 0- | M37466- | 10/23/76- | 11- | -1- | 2.0- | C- | - | 6.0- | 450- | | -4- | -4- | 6- | 3- | 2- | 1- | 2- | 3- | 3- | 3- | 5- | -3- | - | - | - | - | - | 3.97 |
| 30- | 45.2853- | 111.7687- | 2- | 07- | 0- | M37467- | 10/23/76- | 12- | -1- | 2.5- | C- | - | 5.7- | 120- | | -4- | -3- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 5- | -3- | - | - | - | - | - | 0.74 |
| 30- | 45.2809- | 111.8112- | 2- | 07- | 0- | M37468- | 10/23/76- | 12- | -1- | 2.5- | C- | - | 5.7- | 140- | | -4- | -4- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 5- | -3- | - | - | - | - | - | 0.20 |
| 30- | 45.2544- | 111.8163- | 2- | 07- | 0- | M37469- | 10/23/76- | 12- | - | 2.5- | C- | - | 5.5- | 200- | | -4- | -3- | 6- | 4- | 3- | 1- | 2- | 3- | 3- | 4- | 5- | -3- | - | - | - | - | - | 0.64 |
| 30- | 45.2675- | 111.7821- | 2- | 07- | 0- | M37470- | 10/23/76- | 12- | -1- | 2.5- | C- | - | 5.7- | 250- | | -4- | -4- | 6- | 4- | 4- | 1- | 2- | 2- | 3- | 3- | 5- | -3- | - | - | - | - | - | 0.95 |
| 30- | 45.2529- | 111.8169- | 2- | 07- | 0- | M37471- | 10/23/76- | 12- | - | 2.5- | C- | - | 5.7- | 180- | | -4- | -3- | 6- | 4- | 3- | 1- | 2- | 3- | 3- | 4- | 5- | -3- | - | - | - | - | - | 0.76 |
| 30- | 45.3379- | 111.6920- | 2- | 07- | 0- | M37472- | 10/21/76- | 11- | 4- | 0.6- | C- | - | 5.7- | 60- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 2- | 2- | 3- | 1- | -3- | - | - | - | - | - | 0.93 |
| 30- | 45.3973- | 111.6071- | 2- | 07- | 0- | M37477- | 10/21/76- | 12- | 8- | 2.2- | C- | - | 5.2- | 60- | | -4- | -4- | 6- | 4- | 3- | 1- | 2- | 2- | 3- | 4- | 1- | -3- | - | - | - | - | - | 0.10 |
| 30- | 45.2861- | 111.6812- | 2- | 07- | 0- | M37479- | 10/21/76- | 14- | 10- | 7.2- | C- | - | 5.7- | 240- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | - | 0.61 |
| 30- | 45.2682- | 111.6773- | 2- | 07- | 0- | M37481- | 10/21/76- | 14- | 14- | 7.2- | C- | - | 5.7- | 210- | | -4- | -4- | 6- | 2- | 3- | 2- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | - | 1.49 |
| 30- | 45.3001- | 111.6089- | 2- | 07- | 0- | M37483- | 10/21/76- | 15- | 10- | 5.0- | C- | - | 5.7- | 260- | | -4- | -4- | 6- | 4- | 3- | 1- | 2- | 4- | 3- | 4- | 2- | -3- | - | - | - | - | - | 0.31 |
| 30- | 45.3040- | 111.5774- | 2- | 07- | 0- | M37484- | 10/21/76- | 15- | 8- | 3.2- | C- | - | 5.7- | 300- | | -1- | 6- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -3- | - | - | - | - | 0.59 |
| 30- | 45.2958- | 111.5746- | 2- | 07- | 0- | M37485- | 10/21/76- | 16- | 7- | 3.0- | C- | - | 5.7- | 250- | | -4- | -4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 5- | 2- | -1- | - | - | - | - | - | 0.69 |
| 30- | 45.2814- | 111.5463- | 2- | 07- | 0- | M37486- | 10/21/76- | 16- | 4- | 3.2- | C- | - | 5.5- | 240- | | -1- | 6- | 5- | 8- | 4- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 0.47 |
| 30- | 45.2794- | 111.5052- | 2- | 07- | 0- | M37487- | 10/21/76- | 16- | 2- | 0.2- | C- | - | 5.5- | 280- | | -4- | -5- | 6- | 4- | 3- | 1- | 2- | 1- | 4- | 5- | 2- | -1- | - | - | - | - | - | 0.68 |
| 30- | 45.3079- | 111.6957- | 2- | 07- | 0- | M37489- | 10/21/76- | 17- | 7- | 9.2- | C- | - | 5.9- | 400- | | -4- | -4- | 6- | 4- | 3- | 1- | 2- | 3- | 2- | 3- | 2- | -3- | - | - | - | - | - | 1.49 |

# 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 (#) UNITS IN ppb |
| 30- | 45.2373- | 111.6689- | 2- | 07- | | 0-M37493- | 10/22/76- | 10- | 4- | 2.4- | C- | - | 5.7- | 190- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | - | 0.78 |
| 30- | 45.1832- | 111.5952- | 2- | 07- | | 0-M37494- | 10/22/76- | 11- | 8- | 2.8- | C- | - | 5.5- | 170- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | - | 0.66 |
| 30- | 45.1928- | 111.5857- | 2- | 06- | | 0-M37495- | 10/22/76- | 11- | 4- | 4.2- | C- | - | 5.5- | 150- | | -4- | -4- | 6- | 4- | 3- | 1- | 2- | 3- | 3- | 4- | 2- | -3- | - | - | - | - | - | 0.10 |
| 30- | 45.1784- | 111.6161- | 2- | 07- | | 0-M37496- | 10/22/76- | 12- | 8- | 2.4- | C- | - | 5.5- | 220- | | -4- | -3- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | - | 1.04 |
| 30- | 45.1560- | 111.5496- | 2- | 07- | | 0-M37497- | 10/22/76- | 12- | 6- | 3.8- | C- | - | 5.7- | 290- | | -4- | -3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | - | 7.00 |
| 30- | 45.1565- | 111.5560- | 2- | 07- | | 0-M37498- | 10/22/76- | 12- | 6- | 4.2- | C- | - | 5.7- | 290- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | - | 3.32 |
| 30- | 45.1659- | 111.5577- | 2- | 07- | | 0-M37499- | 10/22/76- | 12- | 6- | 2.6- | C- | - | 5.7- | 210- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -3- | - | - | - | - | - | 0.18 |
| 30- | 45.1001- | 111.5581- | 2- | 07- | | 0-M37501- | 10/22/76- | 13- | 10- | 2.8- | C- | - | 5.9- | 240- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | - | 2.50 |
| 30- | 45.0991- | 111.5626- | 2- | 07- | | 0-M37502- | 10/22/76- | 13- | 10- | 3.8- | C- | - | 5.7- | 260- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | - | 2.17 |
| 30- | 45.0636- | 111.5805- | 2- | 07- | | 0-M37503- | 10/22/76- | 14- | 10- | 3.8- | - | - | 5.5- | 100- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | - | 1.69 |
| 30- | 45.0428- | 111.5944- | 2- | 07- | | 0-M37504- | 10/22/76- | 14- | 10- | 3.6- | C- | - | 5.5- | 80- | | -4- | -4- | 4- | 4- | 3- | 1- | 2- | 2- | 3- | 4- | 2- | -1- | - | - | - | - | - | 2.38 |
| 30- | 45.1038- | 111.6471- | 2- | 07- | | 0-M37506- | 10/22/76- | 15- | 10- | 5.4- | C- | - | 5.7- | 270- | | -4- | -4- | 6- | 4- | 3- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | - | 4.82 |
| 30- | 45.0144- | 111.7000- | 2- | 07- | | 0-M37508- | 10/22/76- | 16- | 10- | 4.6- | C- | - | 5.5- | 180- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | - | 10.35 |
| 30- | 45.0205- | 111.7010- | 2- | 07- | | 0-M37509- | 10/22/76- | 16- | 8- | 2.2- | C- | - | 5.5- | 140- | | -4- | -4- | 6- | 4- | 3- | 1- | 2- | 3- | 4- | 3- | 3- | -3- | - | - | - | - | - | 0.56 |
| 30- | 45.0377- | 111.8350- | 2- | 06- | | 0-M37511- | 10/23/76- | 11- | -1- | 2.2- | C- | - | 5.7- | 300- | | -1- | 1- | 4- | 6- | 2- | 3- | 1- | 2- | 1- | 3- | 4- | 5- | -1- | - | - | - | - | 0.18 |
| 30- | 45.0030- | 111.9577- | 2- | 07- | | 0-M37512- | 10/23/76- | 13- | 3- | 2.8- | C- | - | 5.9- | 340- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 3- | 2- | 4- | 2- | -3- | - | - | - | - | - | 1.02 |
| 30- | 45.0145- | 111.9671- | 2- | 07- | | 0-M37513- | 10/23/76- | 13- | 4- | 2.8- | C- | - | 5.9- | 500- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | - | 0.33 |
| 30- | 45.0266- | 111.9722- | 2- | 07- | | 0-M37514- | 10/23/76- | 13- | 4- | 2.2- | C- | - | 5.7- | 500- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 3- | 2- | 3- | 2- | -3- | - | - | - | - | - | 0.37 |
| 30- | 45.0427- | 111.9871- | 2- | 07- | | 0-M37515- | 10/23/76- | 13- | 2- | 2.4- | C- | - | 5.7- | 600- | | -1- | 1- | 5- | 6- | 3- | 3- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 2.75 |
| 30- | 45.0385- | 111.9665- | 2- | 07- | | 0-M37516- | 10/23/76- | 14- | 5- | 2.8- | C- | - | 5.9- | 450- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -3- | - | - | - | - | - | 1.89 |
| 30- | 45.0309- | 111.9681- | 2- | 07- | | 0-M37517- | 10/23/76- | 14- | 5- | 19.8- | C- | - | 6.3- | 600- | | -4- | -4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | - | 1.13 |
| 30- | 45.0360- | 111.9339- | 2- | 07- | | 0-M37518- | 10/23/76- | 14- | 3- | 4.0- | - | - | 5.7- | 50- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 0.65 |
| 30- | 45.0398- | 111.9279- | 2- | 07- | | 0-M37519- | 10/23/76- | 14- | 3- | 3.8- | C- | - | 5.9- | 430- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 1.02 |
| 30- | 45.0699- | 111.9268- | 2- | 07- | | 0-M37520- | 10/23/76- | 14- | 2- | 2.2- | C- | - | 5.7- | 400- | | -1- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 0.90 |
| 30- | 45.0711- | 111.9368- | 2- | 07- | | 0-M37521- | 10/23/76- | 15- | 3- | 3.2- | C- | - | 5.7- | 350- | | -1- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 1.59 |
| 30- | 45.0502- | 111.9362- | 2- | 07- | | 0-M37522- | 10/23/76- | 15- | 3- | 3.2- | C- | - | 5.7- | 320- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 2- | 2- | -3- | - | - | - | - | 2.22 |
| 30- | 45.6086- | 111.5790- | 2- | 02- | | 0-M37525- | 10/19/76- | 10- | - | - | - | - | 5.4- | 250- | | -2- | 7- | 3- | 1- | 2- | 2- | 1- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 1.57 |
| 30- | 45.6239- | 111.5554- | 2- | 02- | | 0-M37526- | 10/19/76- | 10- | - | 0.5- | - | - | 5.2- | 310- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 1.02 |
| 30- | 45.6758- | 111.5390- | 2- | 02- | | 0-M37527- | 10/19/76- | 10- | 1- | - | - | - | 5.5- | 350- | | -2- | 7- | 3- | 7- | 3- | 2- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | 0.48 |
| 30- | 45.6973- | 111.5368- | 2- | 02- | | 0-M37528- | 10/19/76- | 10- | 1- | 1.0- | - | - | 5.5- | 320- | | -2- | 7- | 4- | 1- | 3- | 2- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | 0.85 |
| 30- | 45.7168- | 111.5304- | 2- | 02- | | 0-M37529- | 10/19/76- | 11- | 1- | 1.0- | - | - | 5.8- | 320- | | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | 0.91 |
| 30- | 45.7343- | 111.5405- | 2- | 02- | | 0-M37530- | 10/19/76- | 11- | 1- | 1.0- | - | - | 5.4- | 420- | | -2- | 7- | 3- | 1- | 2- | 2- | 4- | 2- | 3- | 2- | 3- | 2- | -3- | - | - | - | - | 1.01 |
| 30- | 45.5820- | 111.5752- | 2- | 02- | | 0-M37532- | 10/19/76- | 12- | 2- | 1.0- | - | - | 5.3- | 365- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 3- | 2- | 2- | 2- | -3- | - | - | - | - | 0.73 |
| 30- | 45.5637- | 111.5970- | 2- | 02- | | 0-M37533- | 10/19/76- | 12- | 4- | 1.0- | - | - | 5.3- | 330- | | -2- | 7- | 4- | 1- | 2- | 2- | 3- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | 0.73 |
| 30- | 45.5373- | 111.5870- | 2- | 02- | | 0-M37534- | 10/19/76- | 13- | 4- | 1.0- | - | - | 5.6- | 280- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 0.97 |
| 30- | 45.5610- | 111.5897- | 2- | 02- | | 0-M37535- | 10/19/76- | 13- | 5- | - | - | - | 5.4- | 310- | | -2- | 7- | 5- | 6- | 2- | 2- | 1- | 2- | 3- | 2- | 2- | 2- | -3- | - | - | - | - | 1.65 |
| 30- | 45.5853- | 111.5958- | 2- | 02- | | 0-M37536- | 10/19/76- | 14- | 5- | 1.0- | - | - | 5.5- | 380- | | -2- | 7- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 1.15 |
| 30- | 45.2333- | 111.8819- | 2- | 06- | | 0-M37539- | 10/23/76- | 14- | 1- | 2.0- | C- | - | 5.5- | 250- | | -3- | 8- | 5- | 6- | 3- | 3- | 1- | -4- | 3- | 4- | 3- | -3- | - | - | - | - | - | 0.40 |
| 30- | 45.4737- | 111.7430- | 2- | 07- | | 0-M37540- | 10/20/76- | 12- | 7- | 2.4- | C- | - | 5.9- | 360- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 3- | 3- | 3- | 1- | -3- | - | - | - | - | - | 3.91 |
| 30- | 45.4490- | 111.6927- | 2- | 07- | | 0-M37542- | 10/20/76- | 12- | 8- | 4.8- | C- | - | 5.7- | 300- | | -4- | -5- | 6- | 3- | 3- | 1- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | - | 1.36 |
| 30- | 45.4548- | 111.6480- | 2- | 07- | | 0-M37545- | 10/20/76- | 12- | 10- | 1.6- | C- | - | 5.5- | 150- | | -1- | 6- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 0.38 |
| 30- | 45.4692- | 111.6368- | 2- | 07- | | 0-M37546- | 10/20/76- | 13- | 10- | 1.2- | C- | - | 5.5- | 190- | | -1- | 6- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 5- | 1- | -1- | - | - | - | - | 0.80 |
| 30- | 45.4842- | 111.6289- | 2- | 07- | | 0-M37547- | 10/20/76- | 13- | 10- | 2.0- | C- | - | 5.5- | 110- | | -1- | 6- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 2- | 5- | 1- | -1- | - | - | - | - | 0.63 |
| 30- | 45.4241- | 111.6443- | 2- | 07- | | 0-M37548- | 10/20/76- | 14- | 11- | 4.8- | C- | - | 5.5- | 140- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | - | 0.10 |
| 30- | 45.4124- | 111.6464- | 2- | 07- | | 0-M37549- | 10/20/76- | 14- | 12- | 5.0- | C- | - | 5.7- | 210- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 2- | 1- | -3- | - | - | - | - | - | 0.47 |
| 30- | 45.3835- | 111.6805- | 2- | 07- | | 0-M37550- | 10/20/76- | 15- | 14- | 7.2- | C- | - | 5.9- | 410- | | -4- | -5- | 6- | 2- | 3- | 1- | 2- | 2- | 3- | 2- | 1- | -3- | - | - | - | - | - | 1.05 |
| 30- | 45.3564- | 111.5854- | 2- | 07- | | 0-M37551- | 10/20/76- | 15- | 9- | 2.0- | C- | - | 5.9- | 190- | | -1- | 6- | 4- | 6- | 4- | 3- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 0.31 |
| 30- | 45.3551- | 111.5431- | 2- | 07- | | 0-M37552- | 10/20/76- | 16- | 9- | 2.6- | C- | - | 5.7- | 230- | | -1- | 6- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -3- | - | - | - | - | 0.60 |
| 30- | 45.3548- | 111.5085- | 2- | 07- | | 0-M37553- | 10/20/76- | 16- | 8- | 3.0- | C- | - | 5.2- | 90- | | -4- | -4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | - | 0.30 |
| 30- | 45.3521- | 111.5034- | 2- | 07- | | 0-M37554- | 10/20/76- | 16- | 8- | 2.8- | C- | - | 5.7- | 200- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | - | 0.53 |
| 30- | 45.3453- | 111.5236- | 2- | 07- | | 0-M37555- | 10/20/76- | 16- | 7- | 1.6- | C- | - | 5.5- | 150- | | -1- | 6- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 0.10 |

# 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 |
| 30- | 45.3442- | 111.5327- | 2- | 07- | | 0-M37556- | 10/20/76- | 17- | 3- | 1.0- | C- | - | 5.7- | 330- | | -1- | 6- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 0.65 |
| 30- | 45.6873- | 111.7433- | 2- | 02- | | 0-M37557- | 10/18/76- | 8- | - | 1.0- | - | - | 5.7- | 350- | | -2- | 7- | 3- | 1- | 2- | 2- | 1- | 2- | 3- | 3- | 2- | 1- | -3- | - | - | - | - | 1.28 |
| 30- | 45.6475- | 111.7478- | 2- | 02- | | 0-M37558- | 10/18/76- | 8- | 1- | - | - | - | 5.4- | 260- | | -2- | 7- | 3- | 1- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 1.23 |
| 30- | 45.6419- | 111.6514- | 2- | 02- | | 0-M37559- | 10/18/76- | 8- | 1- | - | - | - | 5.4- | 300- | | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 3- | 2- | 3- | 1- | -3- | - | - | - | - | 0.78 |
| 30- | 45.6555- | 111.6532- | 2- | 01- | | 0-M37560- | 10/18/76- | 9- | 4- | 3.0- | - | - | 5.2- | 310- | | -2- | 7- | 4- | 1- | 2- | 3- | 1- | 1- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 1.06 |
| 30- | 45.6776- | 111.6578- | 2- | 02- | | 0-M37561- | 10/18/76- | 9- | 3- | 1.0- | - | - | 5.8- | 250- | | -2- | 7- | 3- | 1- | 2- | 2- | 1- | 2- | 4- | 2- | 3- | 1- | -3- | - | - | - | - | 1.20 |
| 30- | 45.6980- | 111.6865- | 2- | 02- | | 0-M37564- | 10/18/76- | 9- | 3- | 1.0- | - | - | 5.5- | 280- | | -2- | 7- | 3- | 1- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 1.34 |
| 30- | 45.7237- | 111.6357- | 2- | 02- | | 0-M37565- | 10/18/76- | 10- | 4- | 2.0- | - | - | 5.5- | 320- | | -2- | 7- | 3- | 1- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 0.85 |
| 30- | 45.7476- | 111.6516- | 2- | 02- | | 0-M37566- | 10/18/76- | 10- | 4- | 3.0- | - | - | 5.6- | 310- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 3- | -3- | - | - | - | - | 0.34 |
| 30- | 45.6182- | 111.6120- | 2- | 02- | | 0-M37567- | 10/18/76- | 10- | 3- | 2.0- | - | - | 5.8- | 380- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 0.59 |
| 30- | 45.6153- | 111.6415- | 2- | 01- | | 0-M37568- | 10/18/76- | 11- | 4- | 1.0- | - | - | 5.8- | 280- | | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 4- | 2- | 3- | 3- | -3- | - | - | - | - | 0.48 |
| 30- | 45.5854- | 111.6472- | 2- | 02- | | 0-M37569- | 10/18/76- | 11- | 5- | 2.0- | - | - | 5.8- | 350- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 3- | -3- | - | - | - | - | 0.82 |
| 30- | 45.5855- | 111.6700- | 2- | 02- | | 0-M37570- | 10/18/76- | 11- | 4- | - | - | - | 5.4- | 320- | | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 3- | -3- | - | - | - | - | 0.69 |
| 30- | 45.5981- | 111.6891- | 2- | 01- | | 0-M37571- | 10/18/76- | 12- | 4- | 1.0- | - | - | 5.4- | 300- | | -2- | 7- | 3- | 7- | 2- | 3- | 1- | 1- | 6- | 3- | 3- | 3- | -3- | - | - | - | - | 0.41 |
| 30- | 45.6117- | 111.7218- | 2- | 02- | | 0-M37572- | 10/18/76- | 12- | 5- | 1.0- | - | - | 5.7- | 250- | | -2- | 7- | 3- | 1- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 3- | -3- | - | - | - | - | 0.82 |
| 30- | 45.5968- | 111.7397- | 2- | 02- | | 0-M37573- | 10/18/76- | 13- | 4- | 1.5- | - | - | 5.2- | 250- | | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 4- | 2- | 3- | 3- | -3- | - | - | - | - | 1.68 |
| 30- | 45.5748- | 111.6834- | 2- | 01- | | 0-M37574- | 10/18/76- | 13- | 5- | 1.0- | - | - | 5.4- | 320- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 3- | -3- | - | - | - | - | 1.17 |
| 30- | 45.5365- | 111.6633- | 2- | 02- | | 0-M37576- | 10/18/76- | 14- | 5- | 2.0- | - | - | 5.7- | 400- | | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | 0.94 |
| 30- | 45.5161- | 111.6525- | 2- | 01- | | 0-M37577- | 10/18/76- | 15- | 5- | 2.0- | - | - | 5.6- | 380- | | -2- | 7- | 4- | 1- | 2- | 3- | 1- | 1- | 2- | 3- | 2- | 3- | -3- | - | - | - | - | 0.25 |
| 30- | 45.5195- | 111.6872- | 2- | 02- | | 0-M37578- | 10/18/76- | 15- | 5- | 1.0- | - | - | 5.6- | 320- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | 0.30 |
| 30- | 45.5389- | 111.7042- | 2- | 02- | | 0-M37580- | 10/18/76- | 15- | 5- | 1.0- | - | - | 5.3- | 320- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 2- | 2- | 2- | 3- | -3- | - | - | - | - | 0.95 |
| 30- | 45.5466- | 111.7059- | 2- | 02- | | 0-M37581- | 10/18/76- | 16- | 4- | 1.0- | - | - | 5.7- | 230- | | -2- | 7- | 3- | 1- | 3- | 2- | 1- | 2- | 3- | 4- | 2- | 3- | -3- | - | - | - | - | 0.44 |
| 30- | 45.5516- | 111.7139- | 2- | 02- | | 0-M37582- | 10/18/76- | 16- | 4- | 1.0- | - | - | 5.1- | 220- | | -2- | 7- | 4- | 1- | 2- | 2- | 3- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 1.21 |
| 30- | 45.6548- | 111.5180- | 2- | 02- | | 0-M37583- | 10/18/76- | 17- | 3- | - | - | - | 5.3- | 345- | | -2- | 7- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 0.59 |
| 30- | 45.6164- | 111.5415- | 2- | 02- | | 0-M37584- | 10/19/76- | 8- | -2- | - | - | - | 5.6- | 320- | | -2- | 7- | 3- | 7- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 0.68 |
| 30- | 45.6005- | 111.5318- | 2- | 02- | | 0-M37585- | 10/19/76- | 8- | -2- | - | - | - | 5.4- | 360- | | -2- | 7- | 4- | 7- | 2- | 2- | 1- | 2- | 3- | 2- | 2- | 3- | -3- | - | - | - | - | 0.58 |
| 30- | 45.5883- | 111.5307- | 2- | 02- | | 0-M37586- | 10/19/76- | 8- | -1- | - | - | - | 5.1- | 220- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 2- | 3- | 2- | 3- | -3- | - | - | - | - | 0.43 |

APPENDIX I-B

Listings of Field Data and Elemental Concentrations
for Sediment Samples from the Bozeman Quadrangle, Montana
(Pages 32 through 155)

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

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

(See Appendix II-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 |
| 30- | 45.1925- | 111.1350- | 2- | 12- | | 0-M36001- | 09/27/76- | 18- | 19- | 7.8- | - | - | 6.2- | 478- | | -4- | 7- | 5- | 8- | 2- | 3- | 2- | 2- | 2- | 3- | 4- | 1- | -1- | - | - | - | - | 3.00 |
| 30- | 45.4159- | 111.4018- | 2- | 12- | | 0-M36002- | 09/29/76- | 11- | 21- | 8.3- | - | - | 5.3- | 48- | | -3- | 1- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 4- | 5- | 1- | -1- | - | - | - | - | 19.10 |
| 30- | 45.4110- | 111.3971- | 2- | 12- | | 0-M36003- | 09/29/76- | 11- | 21- | 8.5- | - | - | 5.2- | 49- | | -3- | 1- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 4- | 5- | 1- | -1- | - | - | - | - | 4.20 |
| 30- | 45.3933- | 111.4113- | 2- | 12- | | 0-M36004- | 09/29/76- | 14- | 22- | 8.0- | C- | - | 5.0- | 60- | | -3- | 7- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 4- | 5- | 1- | -1- | - | - | - | - | 18.70 |
| 30- | 45.3940- | 111.4152- | 2- | 12- | | 0-M36005- | 09/29/76- | 14- | 21- | 8.2- | C- | - | 5.0- | 56- | | -3- | 7- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 4- | 5- | 1- | -1- | - | - | - | - | 19.60 |
| 30- | 45.4642- | 111.4001- | 2- | 12- | | 0-M36006- | 09/30/76- | 12- | 22- | 11.3- | - | - | 5.6- | 85- | | -3- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 3- | 2- | 2- | 1- | -1- | - | - | - | - | 3.10 |
| 30- | 45.4632- | 111.3916- | 2- | 12- | | 0-M36007- | 09/30/76- | 12- | 22- | 9.6- | - | - | 5.4- | 76- | | -3- | 7- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 2- | 3- | 1- | -1- | - | - | - | - | 5.10 |
| 30- | 45.4597- | 111.4219- | 2- | 12- | | 0-M36008- | 09/30/76- | 13- | 21- | 8.5- | - | - | 5.7- | 88- | | -3- | 7- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 5.90 |
| 30- | 45.4504- | 111.4325- | 2- | 12- | | 0-M36009- | 09/30/76- | 14- | 22- | 8.4- | - | - | 5.6- | 85- | | -3- | 7- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 5.80 |
| 30- | 45.4516- | 111.4337- | 2- | 12- | | 0-M36010- | 09/30/76- | 14- | 22- | 8.7- | - | - | 5.6- | 90- | | -3- | 7- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 5.30 |
| 30- | 45.1293- | 111.1443- | 2- | 12- | | 0-M36011- | 09/27/76- | 19- | 11- | 8.0- | - | - | 6.1- | 270- | | -1- | 1- | 4- | 6- | 2- | 2- | 1- | 1- | 1- | 3- | 5- | 1- | -1- | - | - | - | - | 2.80 |
| 30- | 45.1374- | 111.1264- | 2- | 12- | | 0-M36013- | 09/27/76- | 19- | 9- | 10.0- | - | - | 6.0- | 330- | | -4- | 1- | 2- | 1- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 3.30 |
| 30- | 45.2176- | 111.2045- | 2- | 12- | | 0-M36014- | 09/27/76- | 20- | 15- | 7.6- | - | - | 5.8- | 180- | | -3- | 7- | 3- | 7- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 2.60 |
| 30- | 45.2160- | 111.1903- | 2- | 12- | | 0-M36015- | 09/27/76- | 19- | 15- | 8.0- | - | - | 6.0- | 210- | | -3- | 7- | 3- | 7- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 2.80 |
| 30- | 45.2039- | 111.2033- | 2- | 12- | | 0-M36016- | 09/27/76- | 19- | 15- | 8.0- | - | - | 5.9- | 700- | | -3- | 7- | 5- | 8- | 2- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 2.50 |
| 30- | 45.1566- | 111.1704- | 2- | 12- | | 0-M36018- | 09/27/76- | 20- | 4- | 11.0- | - | - | 6.0- | 200- | | -2- | 1- | 3- | 6- | 2- | 2- | 1- | 3- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 3.50 |
| 30- | 45.1419- | 111.1891- | 2- | 12- | | 0-M36019- | 09/27/76- | 19- | 7- | 10.5- | - | - | 5.9- | 210- | | -1- | 6- | 4- | 8- | 3- | 2- | 1- | 1- | 1- | 2- | 4- | 1- | -1- | - | - | - | - | 3.40 |
| 30- | 45.1959- | 111.1417- | 2- | 15- | | 0-M36020- | 09/27/76- | 17- | 17- | -C- | - | | - | - | | -4- | 9- | 5- | 6- | -1- | - | - | 2- | 2- | 4- | 1- | -1- | - | - | - | - | 3.20 |
| 30- | 45.1930- | 111.1465- | 2- | 15- | | 0-M36021- | 09/27/76- | 17- | 17- | -C- | - | | - | - | | -4- | -5- | 8- | -1- | -2- | 2- | 2- | 4- | 1- | -1- | - | - | - | - | - | - | - | 2.60 |
| 30- | 45.2069- | 111.1670- | 2- | 12- | | 0-M36022- | 09/27/76- | 18- | 17- | 8.5- | - | - | 5.6- | 194- | | -3- | 7- | 2- | 7- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 3.10 |
| 30- | 45.2070- | 111.1809- | 2- | 12- | | 0-M36023- | 09/27/76- | 19- | 15- | 8.2- | - | - | 5.6- | 200- | | -3- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 6.00 |
| 30- | 45.1131- | 110.0020- | 2- | 12- | | 0-M36025- | 09/20/76- | 16- | 13- | 7.2- | - | - | 5.4- | 170- | | -2- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 4- | 2- | 5- | 1- | -1- | - | - | - | - | 4.60 |
| 30- | 45.1343- | 110.0080- | 2- | 12- | | 0-M36026- | 09/20/76- | 17- | 13- | 7.2- | - | - | 5.4- | 165- | | -2- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 4- | 2- | 5- | 1- | -1- | - | - | - | - | 5.50 |
| 30- | 45.4810- | 111.0420- | 2- | 11- | | 0-M36027- | 09/21/76- | 13- | 20- | 19.0- | - | - | 6.0- | 280- | | -1- | 6- | 6- | 6- | 1- | 2- | 5- | 2- | 3- | 3- | 4- | 1- | -1- | - | - | - | - | 3.60 |
| 30- | 45.4735- | 111.0446- | 2- | 12- | | 0-M36028- | 09/21/76- | 13- | 20- | 7.0- | - | - | 6.0- | 210- | | -1- | 6- | 3- | 6- | 3- | 2- | 1- | 2- | 1- | 4- | 4- | 1- | -1- | - | - | - | - | 3.30 |
| 30- | 45.4511- | 111.0351- | 2- | 12- | | 0-M36029- | 09/21/76- | 13- | 20- | 7.0- | - | - | 6.1- | 240- | | -1- | 6- | 3- | 6- | 3- | 2- | 1- | 2- | 1- | 4- | 4- | 1- | -1- | - | - | - | - | 5.90 |
| 30- | 45.4508- | 111.3719- | 2- | 12- | | 0-M36030- | 09/29/76- | 9- | 18- | 9.5- | - | - | 5.2- | 54- | | -3- | 1- | 3- | 4- | 2- | 3- | 1- | 2- | 3- | 3- | 4- | 1- | -1- | - | - | - | - | 10.40 |
| 30- | 45.1092- | 111.1888- | 2- | 12- | | 0-M36031- | 09/27/76- | 17- | 19- | 10.0- | - | - | 5.9- | 270- | | -2- | 1- | 4- | 7- | 3- | 2- | 1- | 1- | 4- | 3- | 5- | 1- | -1- | - | - | - | - | 2.90 |
| 30- | 45.1220- | 111.1633- | 2- | 12- | | 0-M36032- | 09/27/76- | 17- | 20- | 10.0- | - | - | 6.0- | 280- | | -2- | 1- | 4- | 7- | 3- | 2- | 1- | 2- | 4- | 3- | 5- | 1- | -1- | - | - | - | - | 2.30 |
| 30- | 45.1246- | 111.1581- | 2- | 12- | | 0-M36033- | 09/27/76- | 18- | 17- | 9.0- | - | - | 6.1- | 250- | | -2- | 1- | 4- | 6- | 4- | 2- | 1- | 2- | 1- | 4- | 5- | 1- | -1- | - | - | - | - | 7.70 |
| 30- | 45.1289- | 111.1521- | 2- | 12- | | 0-M36034- | 09/27/76- | 18- | 15- | 9.0- | - | - | 5.9- | 290- | | -1- | 1- | 6- | 6- | 3- | 2- | 1- | 1- | 1- | 2- | 5- | 1- | -1- | - | - | - | - | 3.40 |
| 30- | 45.1206- | 111.1419- | 2- | 12- | | 0-M36035- | 09/27/76- | 18- | 14- | 11.5- | - | - | 6.2- | 240- | | -1- | 1- | 3- | 6- | 1- | 2- | 1- | 3- | 2- | 2- | 3- | 1- | -1- | - | - | - | - | 3.40 |
| 30- | 45.1196- | 111.1425- | 2- | 12- | | 0-M36036- | 09/27/76- | 18- | 15- | 12.0- | - | - | 6.1- | 240- | | -1- | 1- | 4- | 6- | 3- | 2- | 1- | 1- | 2- | 4- | 3- | 1- | -1- | - | - | - | - | 4.30 |
| 30- | 45.2053- | 111.1597- | 2- | 12- | | 0-M36037- | 09/27/76- | 18- | 16- | 8.0- | C- | - | 5.6- | - | | -4- | -5- | 8- | 2- | 3- | 4- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | - | 3.30 |
| 30- | 45.5607- | 111.1116- | 2- | 12- | | 0-M36038- | 09/10/76- | 12- | 12- | 8.5- | - | - | 6.1- | 250- | | 8- | 2- | 7- | 2- | 7- | 3- | 3- | 1- | 2- | 3- | 4- | 4- | 1- | -3- | - | - | - | - | 4.20 |
| 30- | 45.5414- | 111.0971- | 2- | 12- | | 0-M36039- | 09/10/76- | 13- | 14- | 11.2- | - | - | 5.9- | 225- | | 4- | 2- | 7- | 2- | 7- | 3- | 3- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 4.10 |
| 30- | 45.5384- | 111.1334- | 2- | 12- | | 0-M36040- | 09/10/76- | 13- | 11- | 8.0- | - | - | 5.9- | 150- | | 6- | 3- | 7- | 2- | 7- | 3- | 3- | 1- | 2- | 1- | 2- | 3- | 1- | -3- | - | - | - | - | 3.30 |
| 30- | 45.5453- | 111.1647- | 2- | 12- | | 0-M36041- | 09/10/76- | 14- | 14- | 13.0- | - | - | 6.1- | 155- | | 0- | 4- | -3- | 7- | 3- | 3- | 1- | 2- | 2- | 2- | 2- | 1- | -3- | - | - | - | - | 19.60 |
| 30- | 45.5334- | 111.1579- | 2- | 12- | | 0-M36042- | 09/10/76- | 14- | 12- | 9.0- | - | - | 6.1- | 235- | | 9- | 3- | 7- | 3- | 6- | 3- | 3- | 1- | 2- | 3- | 3- | 4- | 1- | -3- | - | - | - | - | 4.30 |
| 30- | 45.5440- | 111.1742- | 2- | 12- | | 0-M36043- | 09/10/76- | 15- | 13- | 13.5- | - | - | 6.1- | 225- | | 12- | 2- | 7- | 3- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 2- | 1- | -3- | - | - | - | - | 3.90 |
| 30- | 45.5269- | 111.1915- | 2- | 12- | | 0-M36044- | 09/10/76- | 15- | 15- | 12.0- | - | - | 6.1- | 230- | | 3- | 2- | 7- | 3- | 6- | 3- | 3- | 1- | 3- | 3- | 4- | 3- | 1- | -3- | - | - | - | - | 4.10 |
| 30- | 45.5165- | 111.1795- | 2- | 12- | | 0-M36045- | 09/10/76- | 16- | 14- | 12.0- | - | - | 5.9- | 150- | | C- | 2- | 7- | 3- | 6- | 3- | 3- | 1- | 2- | 3- | 3- | 3- | 1- | -3- | - | - | - | - | 3.70 |
| 30- | 45.5222- | 111.2201- | 2- | 15- | | 0-M36046- | 09/10/76- | 16- | 24- | - | - | - | - | - | | 0- | 4- | -3- | 4- | -1- | - | - | 4- | 3- | 3- | 1- | -3- | - | - | - | - | - | 6.80 |
| 30- | 45.5206- | 111.2441- | 2- | 12- | | 0-M36047- | 09/10/76- | 17- | 15- | 12.0- | - | - | 5.9- | 200- | | 6- | 4- | -3- | 6- | 4- | 3- | 1- | 2- | 2- | 3- | 4- | 1- | -3- | - | - | - | - | 10.80 |
| 30- | 45.5795- | 111.2434- | 2- | 12- | | 0-M36048- | 09/10/76- | 17- | 13- | 12.0- | - | - | 6.3- | 365- | | 6- | 4- | -4- | 6- | 3- | 3- | 1- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 3.70 |
| 30- | 45.5968- | 111.2406- | 2- | 12- | | 0-M36049- | 09/10/76- | 18- | 15- | 14.5- | C- | - | 5.9- | 240- | | 9- | 4- | -3- | 7- | 3- | 3- | 3- | 2- | 4- | 4- | 2- | 1- | -3- | - | - | - | - | 3.50 |
| 30- | 45.6682- | 111.2285- | 2- | 12- | | 0-M36050- | 09/10/76- | 18- | 13- | 17.0- | - | - | 6.3- | 345- | | 12- | 4- | -5- | 7- | 3- | 3- | 3- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 3.90 |
| 30- | 45.6663- | 111.2140- | 2- | 12- | | 0-M36051- | 09/10/76- | 19- | 18- | 15.0- | - | - | 6.3- | 395- | | 3- | 4- | -5- | 8- | 1- | 2- | 1- | 3- | 4- | 4- | 2- | 1- | -3- | - | - | - | - | 2.90 |
| 30- | 45.6271- | 111.2404- | 2- | 12- | | 0-M36052- | 09/10/76- | 19- | 11- | 12.0- | - | - | 5.9- | 340- | | 0- | 4- | -3- | 6- | 3- | 3- | 1- | 2- | 4- | 3- | 4- | 1- | -3- | - | - | - | - | 3.80 |
| 30- | 45.7285- | 111.2479- | 2- | 12- | | 0-M36053- | 09/11/76- | 11- | 14- | 11.0- | - | - | 6.1- | 470- | | 12- | 4- | -6- | 3- | 8- | 3- | 3- | 2- | 4- | 3- | 2- | 4- | -3- | - | - | - | - | 3.20 |
| 30- | 45.7281- | 111.2294- | 2- | 12- | | 0-M36054- | 09/11/76- | 11- | 12- | 11.5- | - | - | 5.9- | 275- | | 6- | 4- | -6- | 7- | 4- | 3- | 1- | 3- | 4- | 4- | 1- | 4- | -3- | - | - | - | - | 2.70 |

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

②

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE (Concentrations reported in weight parts per million (ppm)) | | | | | | | | | ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY (Concentrations in weight ppm) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Ag | Bi | Cd | Cu | Nb | Ni | Pb | Sn | W | Be | Li |
| 30- | 45.1925- | 111.1350- | 2- | 12- | | 0-M36001 | -5 | -5 | -5 | 23 | -20 | 38 | 17 | -10 | -15 | 3 | 19 |
| 30- | 45.4159- | 111.4018- | 2- | 12- | | 0-M36002 | -5 | -5 | -5 | 25 | -20 | 64 | 9 | 11 | -15 | 3 | 29 |
| 30- | 45.4110- | 111.3971- | 2- | 12- | | 0-M36003 | -5 | -5 | -5 | 24 | -20 | 31 | 14 | -10 | -15 | 3 | 29 |
| 30- | 45.3933- | 111.4113- | 2- | 12- | | 0-M36004 | -5 | -5 | -5 | 33 | -20 | 79 | 6 | 11 | -15 | 3 | 49 |
| 30- | 45.3940- | 111.4152- | 2- | 12- | | 0-M36005 | -5 | -5 | -5 | 42 | -20 | 60 | 20 | -10 | -15 | 3 | 46 |
| 30- | 45.4642- | 111.4001- | 2- | 12- | | 0-M36006 | -5 | -5 | -5 | 31 | -20 | 17 | 12 | -10 | -15 | 3 | 26 |
| 30- | 45.4632- | 111.3916- | 2- | 12- | | 0-M36007 | -5 | -5 | -5 | -10 | -20 | 54 | 14 | -10 | -15 | 3 | 18 |
| 30- | 45.4597- | 111.4219- | 2- | 12- | | 0-M36008 | -5 | -5 | -5 | 10 | -20 | 74 | 9 | -10 | -15 | 3 | 14 |
| 30- | 45.4504- | 111.4325- | 2- | 12- | | 0-M36009 | -5 | 8 | -5 | 24 | -20 | 33 | 11 | -10 | -15 | 3 | 26 |
| 30- | 45.4516- | 111.4337- | 2- | 12- | | 0-M36010 | -5 | -5 | -5 | 27 | -20 | 57 | 15 | -10 | 18 | 3 | 29 |
| 30- | 45.1293- | 111.1443- | 2- | 12- | | 0-M36011 | -5 | -5 | -5 | 21 | -20 | 26 | 13 | -10 | -15 | 3 | 30 |
| 30- | 45.1374- | 111.1264- | 2- | 12- | | 0-M36013 | -5 | -5 | -5 | 27 | -20 | 27 | 11 | -10 | -15 | 3 | 34 |
| 30- | 45.2176- | 111.2045- | 2- | 12- | | 0-M36014 | -5 | -5 | -5 | 18 | -20 | 25 | 9 | -10 | -15 | 2 | 20 |
| 30- | 45.2160- | 111.1903- | 2- | 12- | | 0-M36015 | -5 | -5 | -5 | 25 | -20 | 42 | -5 | -10 | -15 | 3 | 29 |
| 30- | 45.2039- | 111.2033- | 2- | 12- | | 0-M36016 | -5 | -5 | -5 | 222 | -20 | -15 | 11 | -10 | -15 | 2 | 22 |
| 30- | 45.1566- | 111.1704- | 2- | 12- | | 0-M36018 | -5 | -5 | -5 | 34 | -20 | 27 | 13 | -10 | -15 | 3 | 28 |
| 30- | 45.1419- | 111.1891- | 2- | 12- | | 0-M36019 | -5 | -5 | -5 | 26 | -20 | 26 | 14 | -10 | -15 | 3 | 31 |
| 30- | 45.1959- | 111.1417- | 2- | 15- | | 0-M36020 | -5 | -5 | -5 | 28 | -20 | 30 | 16 | -10 | -15 | 3 | 44 |
| 30- | 45.1930- | 111.1465- | 2- | 15- | | 0-M36021 | -5 | -5 | -5 | 35 | -20 | 19 | 14 | -10 | -15 | 2 | 25 |
| 30- | 45.2069- | 111.1670- | 2- | 12- | | 0-M36022 | -5 | -5 | -5 | 29 | -20 | 31 | 13 | -10 | -15 | 3 | 30 |
| 30- | 45.2070- | 111.1809- | 2- | 12- | | 0-M36023 | -5 | -5 | -5 | 52 | -20 | 48 | 21 | -10 | -15 | 3 | 43 |
| 30- | 45.1131- | 110.0020- | 2- | 12- | | 0-M36025 | -5 | -5 | -5 | 249 | -20 | 361 | 8 | -10 | -15 | 3 | 35 |
| 30- | 45.1343- | 110.0080- | 2- | 12- | | 0-M36026 | -5 | -5 | -5 | 314 | -20 | 566 | 7 | -10 | -15 | 3 | 30 |
| 30- | 45.4810- | 111.0420- | 2- | 11- | | 0-M36027 | -5 | -5 | -5 | 31 | -20 | 36 | 12 | -10 | -15 | 5 | 46 |
| 30- | 45.4735- | 111.0446- | 2- | 12- | | 0-M36028 | -5 | -5 | -5 | 32 | -20 | 20 | 9 | -10 | -15 | 3 | 42 |
| 30- | 45.4511- | 111.0351- | 2- | 12- | | 0-M36029 | -5 | -5 | -5 | 29 | -20 | 18 | 8 | -10 | -15 | 2 | 26 |
| 30- | 45.4508- | 111.3719- | 2- | 12- | | 0-M36030 | -5 | -5 | -5 | 41 | -20 | 48 | 11 | -10 | -15 | 2 | 38 |
| 30- | 45.1092- | 111.1888- | 2- | 12- | | 0-M36031 | -5 | -5 | -5 | 21 | -20 | 28 | 14 | -10 | -15 | 2 | 42 |
| 30- | 45.1220- | 111.1633- | 2- | 12- | | 0-M36032 | -5 | -5 | -5 | 45 | -20 | 54 | -5 | -10 | -15 | 3 | 40 |
| 30- | 45.1246- | 111.1581- | 2- | 12- | | 0-M36033 | -5 | -5 | -5 | 36 | -20 | 28 | 9 | -10 | -15 | 3 | 44 |
| 30- | 45.1289- | 111.1521- | 2- | 12- | | 0-M36034 | -5 | -5 | -5 | 26 | -20 | 31 | 10 | -10 | -15 | 1 | 27 |
| 30- | 45.1206- | 111.1419- | 2- | 12- | | 0-M36035 | -5 | -5 | -5 | 33 | -20 | 17 | 10 | -10 | -15 | 3 | 48 |
| 30- | 45.1196- | 111.1425- | 2- | 12- | | 0-M36036 | -5 | -5 | -5 | 23 | -20 | -15 | -5 | -10 | -15 | 3 | 33 |
| 30- | 45.2053- | 111.1597- | 2- | 12- | | 0-M36037 | -5 | -5 | -5 | 20 | -20 | 25 | 11 | -10 | -15 | -1 | 69 |
| 30- | 45.5607- | 111.1116- | 2- | 12- | | 0-M36038 | 6 | -5 | -5 | 25 | -20 | 43 | -5 | -10 | -15 | -1 | 17 |
| 30- | 45.5414- | 111.0971- | 2- | 12- | | 0-M36039 | -5 | -5 | -5 | 11 | -20 | 56 | 12 | -10 | -15 | -1 | 74 |
| 30- | 45.5384- | 111.1334- | 2- | 12- | | 0-M36040 | -5 | -5 | -5 | 31 | -20 | 35 | 10 | -10 | 18 | -1 | 46 |
| 30- | 45.5453- | 111.1647- | 2- | 12- | | 0-M36041 | -5 | -5 | -5 | 29 | -20 | 41 | 12 | -10 | -15 | -1 | 66 |
| 30- | 45.5334- | 111.1579- | 2- | 12- | | 0-M36042 | -5 | -5 | -5 | 26 | -20 | 30 | 17 | -10 | -15 | -1 | 42 |
| 30- | 45.5440- | 111.1742- | 2- | 12- | | 0-M36043 | -5 | -5 | -5 | 16 | -20 | 33 | 9 | -10 | -15 | -1 | 45 |
| 30- | 45.5269- | 111.1915- | 2- | 12- | | 0-M36044 | -5 | -5 | -5 | 33 | 21 | 36 | 9 | -10 | -15 | 2 | 73 |
| 30- | 45.5165- | 111.1795- | 2- | 12- | | 0-M36045 | -5 | -5 | -5 | 27 | -20 | 72 | 15 | -10 | -15 | -1 | 65 |
| 30- | 45.5222- | 111.2201- | 2- | 15- | | 0-M36046 | -5 | -5 | -5 | 38 | -20 | 50 | 21 | -10 | -15 | 3 | 47 |
| 30- | 45.5206- | 111.2441- | 2- | 12- | | 0-M36047 | -5 | -5 | -5 | 23 | -20 | 36 | 7 | -10 | -15 | -1 | 39 |
| 30- | 45.5795- | 111.2434- | 2- | 12- | | 0-M36048 | -5 | -5 | -5 | 19 | -20 | 28 | 9 | -10 | -15 | 3 | 60 |
| 30- | 45.5968- | 111.2406- | 2- | 12- | | 0-M36049 | -5 | -5 | -5 | 21 | -20 | 18 | 16 | -10 | -15 | -1 | 71 |
| 30- | 45.6682- | 111.2285- | 2- | 12- | | 0-M36050 | -5 | -5 | -5 | 27 | -20 | 30 | 8 | -10 | -15 | 3 | 41 |
| 30- | 45.6663- | 111.2140- | 2- | 12- | | 0-M36051 | -5 | -5 | -5 | 23 | -20 | 29 | 12 | -10 | -15 | -1 | 41 |
| 30- | 45.6271- | 111.2404- | 2- | 12- | | 0-M36052 | -5 | -5 | -5 | 10 | -20 | 19 | 20 | -10 | -15 | 4 | 37 |
| 30- | 45.7285- | 111.2479- | 2- | 12- | | 0-M36053 | -5 | -5 | -5 | 35 | -20 | 18 | 5 | -10 | -15 | -1 | 82 |
| 30- | 45.7281- | 111.2294- | 2- | 12- | | 0-M36054 | -5 | -5 | -5 | 28 | -20 | 29 | -5 | -10 | -15 | 2 | 29 |

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

③

| DOE SAMPLE NUMBER | | | | | | | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (Concentrations reported in weight parts per million (ppm)) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LAB. SAMPLE LOCATION NUMBER | Al | Au | Ba | Ca | Ce | Cl | Co | Cr | Cs | Dy | Eu | Fe | Hf | K | La | Lu |
| 30- | 45.1925- | 111.1350- | 2- | 12- | | 0-M36001 | 47320 | -0.07 | 727 | 27550 | 57 | -113 | 10.6 | 89 | 3.2 | 3 | 1.7 | 24480 | 8.7 | 13690 | 29 | 0.4 |
| 30- | 45.4159- | 111.4018- | 2- | 12- | | 0-M36002 | 66930 | -0.08 | 510 | 26390 | 88 | -116 | 22.5 | 154 | 3.0 | 7 | 1.8 | 47490 | 11.0 | 10380 | 54 | 0.7 |
| 30- | 45.4110- | 111.3971- | 2- | 12- | | 0-M36003 | 58450 | -0.06 | 685 | 22330 | 88 | -104 | 13.2 | 135 | 3.9 | 5 | 1.8 | 35720 | 17.0 | 15480 | 44 | 0.6 |
| 30- | 45.3933- | 111.4113- | 2- | 12- | | 0-M36004 | 69890 | -0.07 | 510 | 28250 | 79 | 126 | 22.5 | 168 | 3.1 | 6 | 1.9 | 39960 | 14.1 | 15080 | 58 | 0.6 |
| 30- | 45.3940- | 111.4152- | 2- | 12- | | 0-M36005 | 67070 | -0.08 | 654 | 25230 | 87 | 132 | 19.9 | 164 | 3.1 | 6 | 2.4 | 36800 | 16.2 | 14360 | 56 | 0.6 |
| 30- | 45.4642- | 111.4001- | 2- | 12- | | 0-M36006 | 57670 | -0.06 | 951 | 29220 | 60 | 174 | 10.8 | 113 | 3.5 | 4 | 1.6 | 31930 | 11.0 | 17280 | 39 | 0.4 |
| 30- | 45.4632- | 111.3916- | 2- | 12- | | 0-M36007 | 58320 | -0.08 | 667 | 32260 | 87 | -130 | 24.0 | 159 | -2.2 | 11 | 2.8 | 65080 | 40.2 | 14420 | 47 | 1.3 |
| 30- | 45.4597- | 111.4219- | 2- | 12- | | 0-M36008 | 55610 | -0.08 | 492 | 32690 | 98 | 166 | 27.9 | 162 | -2.1 | 10 | 2.8 | 69690 | 49.9 | 12520 | 56 | 1.4 |
| 30- | 45.4504- | 111.4325- | 2- | 12- | | 0-M36009 | 54890 | -0.08 | 654 | 29160 | 95 | -93 | 18.7 | 170 | 3.3 | 6 | 1.9 | 44570 | 56.6 | 14090 | 44 | 1.0 |
| 30- | 45.4516- | 111.4337- | 2- | 12- | | 0-M36010 | 54440 | -0.07 | 721 | 30380 | 91 | -93 | 18.2 | 145 | 2.0 | 8 | 2.2 | 49550 | 44.5 | 14950 | 46 | 0.9 |
| 30- | 45.1293- | 111.1443- | 2- | 12- | | 0-M36011 | 58750 | -0.06 | 723 | 29760 | 68 | -98 | 14.1 | 131 | 3.7 | 4 | 1.6 | 35070 | 10.8 | 16130 | 40 | 0.4 |
| 30- | 45.1374- | 111.1264- | 2- | 12- | | 0-M36013 | 58660 | -0.06 | 704 | 25930 | 72 | -91 | 10.6 | 129 | 4.6 | 5 | 1.4 | 33750 | 10.9 | 18920 | 38 | 0.5 |
| 30- | 45.2176- | 111.2045- | 2- | 12- | | 0-M36014 | 61060 | -0.06 | 855 | 34070 | 61 | -94 | 15.0 | 158 | 2.4 | 3 | 1.7 | 39460 | 8.9 | 17570 | 35 | 0.3 |
| 30- | 45.2160- | 111.1903- | 2- | 12- | | 0-M36015 | 59180 | -0.07 | 952 | 32810 | 78 | 113 | 13.3 | 106 | 2.7 | 4 | 1.7 | 35650 | 11.8 | 15850 | 36 | 0.4 |
| 30- | 45.2039- | 111.2033- | 2- | 12- | | 0-M36016 | 41560 | -0.06 | 685 | 85090 | 53 | -73 | 4.7 | 48 | 3.2 | 4 | 1.3 | 20520 | 7.9 | 16170 | 29 | 0.3 |
| 30- | 45.1566- | 111.1704- | 2- | 12- | | 0-M36018 | 57410 | -0.06 | 641 | 37240 | 76 | -97 | 12.2 | 131 | 4.3 | 4 | 1.6 | 35620 | 11.8 | 17350 | 39 | 0.5 |
| 30- | 45.1419- | 111.1891- | 2- | 12- | | 0-M36019 | 57370 | -0.06 | 764 | 23770 | 84 | -94 | 9.9 | 139 | 13.3 | 4 | 1.5 | 34940 | 12.0 | 18150 | 39 | 0.4 |
| 30- | 45.1959- | 111.1417- | 2- | 15- | | 0-M36020 | 56610 | -0.06 | 656 | 23700 | 62 | -82 | 12.6 | 98 | 4.3 | 4 | 1.3 | 31210 | 11.8 | 20520 | 38 | 0.4 |
| 30- | 45.1930- | 111.1465- | 2- | 15- | | 0-M36021 | 53950 | -0.07 | 703 | 44260 | 69 | -87 | 12.7 | 122 | 4.1 | 4 | 1.5 | 33030 | 8.9 | 16480 | 35 | 0.5 |
| 30- | 45.2069- | 111.1670- | 2- | 12- | | 0-M36022 | 57740 | -0.06 | 770 | 26790 | 79 | -82 | 21.1 | 146 | 5.0 | 5 | 2.6 | 37560 | 11.7 | 15300 | 39 | 0.4 |
| 30- | 45.2070- | 111.1809- | 2- | 12- | | 0-M36023 | 61810 | -0.07 | 621 | 30300 | 195 | -107 | 18.1 | 360 | 4.0 | 6 | 2.0 | 52450 | 22.4 | 15040 | 105 | 0.5 |
| 30- | 45.1131- | 110.0020- | 2- | 12- | | 0-M36025 | 57470 | 0.44 | 613 | 23010 | 58 | -92 | 52.3 | 1424 | 3.4 | 3 | 1.3 | 61020 | 9.5 | 12950 | 36 | 0.3 |
| 30- | 45.1343- | 110.0080- | 2- | 12- | | 0-M36026 | 50940 | -0.08 | 433 | 22400 | 62 | -84 | 69.6 | 2289 | 2.7 | 3 | 1.3 | 62300 | 8.5 | 11140 | 35 | 0.3 |
| 30- | 45.4810- | 111.0420- | 2- | 11- | | 0-M36027 | 56910 | -0.06 | 759 | 21380 | 78 | -80 | 12.0 | 118 | 20.0 | 4 | 1.4 | 34170 | 9.6 | 19020 | 37 | 0.3 |
| 30- | 45.4735- | 111.0446- | 2- | 12- | | 0-M36028 | 56710 | -0.06 | 783 | 35590 | 82 | -98 | 12.1 | 128 | 3.5 | 4 | 1.7 | 34610 | 11.2 | 17880 | 40 | 0.4 |
| 30- | 45.4511- | 111.0351- | 2- | 12- | | 0-M36029 | 59820 | -0.06 | 933 | 28650 | 57 | -105 | 18.8 | 87 | 2.6 | 3 | 1.7 | 62550 | 10.2 | 17510 | 39 | 0.4 |
| 30- | 45.4508- | 111.3719- | 2- | 12- | | 0-M36030 | 59510 | -0.08 | 481 | 32520 | 98 | -101 | 21.7 | 180 | -2.2 | 7 | 2.3 | 50950 | 21.6 | 13520 | 51 | 0.8 |
| 30- | 45.1092- | 111.1888- | 2- | 12- | | 0-M36031 | 53590 | -0.06 | 785 | 41450 | 75 | -81 | 13.5 | 138 | 2.9 | 5 | 1.5 | 35290 | 13.3 | 16370 | 43 | 0.4 |
| 30- | 45.1220- | 111.1633- | 2- | 12- | | 0-M36032 | 61020 | -0.06 | 858 | 33450 | 65 | -95 | 14.9 | 192 | 3.7 | 3 | 1.7 | 41850 | 8.2 | 15400 | 34 | 0.4 |
| 30- | 45.1246- | 111.1581- | 2- | 12- | | 0-M36033 | 61290 | -0.06 | 801 | 28830 | 75 | -97 | 17.5 | 133 | 3.0 | 4 | 1.8 | 38890 | 11.1 | 15780 | 43 | 0.4 |
| 30- | 45.1289- | 111.1521- | 2- | 12- | | 0-M36034 | 58940 | -0.08 | 856 | 24690 | 79 | 100 | 13.3 | 122 | 4.0 | 4 | 1.6 | 36790 | 12.9 | 19000 | 38 | 0.4 |
| 30- | 45.1206- | 111.1419- | 2- | 12- | | 0-M36035 | 57050 | -0.06 | 761 | 35040 | 64 | -77 | 10.5 | 72 | 4.0 | 5 | 1.5 | 29580 | 10.9 | 16750 | 38 | 0.4 |
| 30- | 45.1196- | 111.1425- | 2- | 12- | | 0-M36036 | 51840 | -0.05 | 742 | 28540 | 88 | 138 | 9.3 | 94 | 4.7 | 5 | 1.9 | 28180 | 25.1 | 15780 | 46 | 0.5 |
| 30- | 45.2053- | 111.1597- | 2- | 12- | | 0-M36037 | 59740 | -0.06 | 708 | 27960 | 66 | -86 | 12.8 | 122 | 3.4 | 4 | 1.5 | 35450 | 9.5 | 19980 | 38 | 0.4 |
| 30- | 45.5607- | 111.1116- | 2- | 12- | | 0-M36038 | 51740 | -0.09 | 742 | 47690 | 97 | 182 | 33.5 | 362 | -2.5 | 5 | 2.3 | 91390 | 22.7 | 12990 | 55 | 0.7 |
| 30- | 45.5414- | 111.0971- | 2- | 12- | | 0-M36039 | 55770 | -0.07 | 551 | 27990 | 113 | -92 | 24.5 | 200 | 3.1 | 6 | 2.4 | 58990 | 23.4 | 23280 | 59 | 0.8 |
| 30- | 45.5384- | 111.1334- | 2- | 12- | | 0-M36040 | 57940 | -0.07 | 689 | 29870 | 78 | -104 | 21.8 | 191 | 3.5 | 5 | 1.8 | 55220 | 14.8 | 18520 | 44 | 0.6 |
| 30- | 45.5453- | 111.1647- | 2- | 12- | | 0-M36041 | 58300 | -0.06 | 666 | 24960 | 72 | -90 | 11.8 | 87 | 17.3 | 6 | 1.8 | 31260 | 20.1 | 18360 | 54 | 0.7 |
| 30- | 45.5334- | 111.1579- | 2- | 12- | | 0-M36042 | 58780 | -0.07 | 928 | 30920 | 78 | -91 | 17.0 | 130 | 6.6 | 4 | 1.8 | 37220 | 9.3 | 15520 | 35 | 0.3 |
| 30- | 45.5440- | 111.1742- | 2- | 12- | | 0-M36043 | 60290 | -0.08 | 579 | 32270 | 103 | -94 | 23.5 | 206 | -2.2 | 6 | 2.2 | 59300 | 19.8 | 19170 | 45 | 0.6 |
| 30- | 45.5269- | 111.1915- | 2- | 12- | | 0-M36044 | 60880 | -0.06 | 885 | 31820 | 73 | 107 | 16.0 | 201 | 3.3 | 4 | 2.0 | 46000 | 12.5 | 17760 | 41 | 0.5 |
| 30- | 45.5165- | 111.1795- | 2- | 12- | | 0-M36045 | 60610 | -0.08 | 575 | 32160 | 55 | 220 | 25.1 | 205 | -2.2 | 5 | 2.0 | 53020 | 9.9 | 13200 | 38 | 0.5 |
| 30- | 45.5222- | 111.2201- | 2- | 15- | | 0-M36046 | 63000 | -0.08 | 641 | 25260 | 87 | -115 | 20.6 | 258 | -2.4 | 6 | 2.1 | 48700 | 15.0 | 17310 | 43 | 0.7 |
| 30- | 45.5206- | 111.2441- | 2- | 12- | | 0-M36047 | 61760 | -0.07 | 664 | 21770 | 78 | -100 | 14.3 | 131 | 3.7 | 6 | 1.9 | 32750 | 22.4 | 15260 | 43 | 0.6 |
| 30- | 45.5795- | 111.2434- | 2- | 12- | | 0-M36048 | 64530 | -0.07 | 889 | 25570 | 121 | 250 | 12.7 | 152 | 3.5 | 7 | 2.4 | 43260 | 20.4 | 17670 | 60 | 0.8 |
| 30- | 45.5968- | 111.2406- | 2- | 12- | | 0-M36049 | 64930 | -0.06 | 771 | 20280 | 74 | 134 | 9.2 | 76 | 4.5 | 5 | 1.7 | 26600 | 10.3 | 27240 | 43 | 0.5 |
| 30- | 45.6682- | 111.2285- | 2- | 12- | | 0-M36050 | 63410 | -0.06 | 877 | 18530 | 82 | -111 | 11.2 | 95 | 4.0 | 6 | 1.5 | 30730 | 11.3 | 20440 | 37 | 0.4 |
| 30- | 45.6663- | 111.2140- | 2- | 12- | | 0-M36051 | 60930 | -0.08 | 912 | 22420 | 72 | -95 | 10.6 | 95 | 3.8 | 4 | 1.6 | 30730 | 9.7 | 18030 | 32 | 0.5 |
| 30- | 45.6271- | 111.2404- | 2- | 12- | | 0-M36052 | 59960 | -0.06 | 867 | 18000 | 91 | 149 | 8.0 | 79 | 3.4 | 5 | 1.7 | 26350 | 15.4 | 24080 | 46 | 0.6 |
| 30- | 45.7285- | 111.2479- | 2- | 12- | | 0-M36053 | 58370 | 0.11 | 695 | 19540 | 80 | -90 | 11.7 | 110 | 4.2 | 4 | 1.8 | 38610 | 16.0 | 15140 | 37 | 0.5 |
| 30- | 45.7281- | 111.2294- | 2- | 12- | | 0-M36054 | 55840 | -0.07 | 716 | 25520 | 78 | -98 | 12.3 | 132 | -1.8 | 4 | 1.9 | 33910 | 12.0 | 15680 | 36 | 0.4 |

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

④

| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | LASL SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) — Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | U/Th RATIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mg | Mn | Na | Rb | Sb | Sc | Sm | Sr | Ta | Tb | Th | Ti | V | Yb | Zn | |
| 30-45.1925-111.1350-2-12- | 0-M36001 | 8749 | 1852 | 10630 | 51 | -2 | 7.4 | 4.6 | -446 | -1 | -1 | 10.6 | 2387 | 71 | 2.8 | -35 | 0.283 |
| 30-45.4159-111.4018-2-12- | 0-M36002 | 14400 | 828 | 22960 | 73 | -2 | 16.9 | 11.8 | -331 | -1 | -1 | 12.8 | 5138 | 115 | 4.0 | 187 | 1.492 |
| 30-45.4110-111.3971-2-12- | 0-M36003 | 7830 | 702 | 16550 | 60 | -2 | 11.0 | 6.9 | -317 | -1 | -1 | 13.8 | 4129 | 94 | 4.1 | 85 | 0.304 |
| 30-45.3933-111.4113-2-12- | 0-M36004 | 15710 | 707 | 25390 | 65 | -2 | 15.4 | 10.7 | -303 | -1 | -1 | 15.5 | 4189 | 100 | 4.1 | -50 | 1.206 |
| 30-45.3940-111.4152-2-12- | 0-M36005 | 14390 | 684 | 24700 | 62 | -2 | 14.0 | 13.3 | -308 | -2 | -1 | 15.9 | 4678 | 102 | 6.3 | | 1.233 |
| 30-45.4642-111.4001-2-12- | 0-M36006 | 10290 | 622 | 14040 | 57 | -1 | 9.2 | 5.3 | -251 | -1 | -1 | 11.2 | 3191 | 84 | 4.2 | 75 | 0.277 |
| 30-45.4632-111.3916-2-12- | 0-M36007 | 12650 | 1320 | 19170 | 67 | -2 | 21.9 | 10.9 | -410 | 3 | -1 | 18.5 | 7543 | 127 | 9.4 | 82 | 0.276 |
| 30-45.4597-111.4219-2-12- | 0-M36008 | 14040 | 1540 | 16920 | -35 | -2 | 23.8 | 10.9 | -369 | 3 | 2 | 17.0 | 7808 | 132 | 9.6 | -47 | 0.347 |
| 30-45.4504-111.4325-2-12- | 0-M36009 | 12980 | 989 | 13290 | 72 | -2 | 12.7 | 8.4 | -306 | -1 | -1 | 17.9 | 7551 | 125 | 6.0 | -28 | 0.324 |
| 30-45.4516-111.4337-2-12- | 0-M36010 | 11400 | 1112 | 14110 | -33 | -2 | 15.4 | 7.4 | -309 | 2 | 2 | 17.1 | 6650 | 109 | 5.9 | -18 | 0.310 |
| 30-45.1293-111.1443-2-12- | 0-M36011 | 11430 | 690 | 13700 | -29 | -2 | 10.7 | 5.3 | -308 | -1 | 1 | 11.5 | 3361 | 86 | 3.6 | 81 | 0.243 |
| 30-45.1374-111.1264-2-12- | 0-M36013 | 10410 | 610 | 12200 | 59 | -1 | 9.7 | 4.9 | 337 | -1 | -1 | 10.3 | 3645 | 88 | 2.3 | -82 | 0.320 |
| 30-45.2176-111.2045-2-12- | 0-M36014 | 11700 | 717 | 16390 | 62 | -1 | 10.1 | 5.1 | -275 | -1 | -1 | 9.7 | 3885 | 95 | 2.3 | 124 | 0.268 |
| 30-45.2160-111.1903-2-12- | 0-M36015 | 10320 | 738 | 15370 | -33 | -2 | 8.4 | 5.7 | -274 | -1 | -1 | 11.3 | 3671 | 98 | 2.5 | 78 | 0.248 |
| 30-45.2039-111.2033-2-12- | 0-M36016 | 8742 | 362 | 7628 | 68 | -1 | 6.4 | 3.9 | 502 | -1 | -1 | 8.3 | 2932 | 56 | 3.1 | 104 | 0.301 |
| 30-45.1566-111.1704-2-12- | 0-M36018 | 10180 | 668 | 13540 | 54 | -1 | 10.1 | 6.1 | -314 | -1 | -1 | 12.5 | 3438 | 77 | 3.3 | 117 | 0.280 |
| 30-45.1419-111.1891-2-12- | 0-M36019 | 9269 | 610 | 12610 | 56 | | 10.0 | 5.8 | 241 | -1 | -1 | 11.6 | 3184 | 87 | 3.6 | 121 | 0.293 |
| 30-45.1959-111.1417-2-15- | 0-M36020 | 9764 | 548 | 12430 | 69 | -1 | 9.2 | 5.7 | -246 | -1 | -1 | 11.6 | 2880 | 99 | 2.9 | -106 | 0.276 |
| 30-45.1930-111.1465-2-15- | 0-M36021 | 11100 | 748 | 12150 | 66 | -2 | 8.4 | 6.1 | -280 | -1 | -1 | 9.9 | 3182 | 82 | 2.3 | -57 | 0.263 |
| 30-45.2069-111.1670-2-12- | 0-M36022 | 10670 | 629 | 12820 | 65 | -2 | 10.4 | 5.7 | 353 | -1 | -1 | 11.5 | 3665 | 103 | 3.3 | 116 | 0.270 |
| 30-45.2070-111.1809-2-12- | 0-M36023 | 13030 | 789 | 16820 | 43 | -2 | 13.0 | 15.0 | -337 | -2 | -1 | 66.2 | 3862 | 131 | 5.5 | 148 | 0.091 |
| 30-45.1131-110.0020-2-12- | 0-M36025 | 28280 | 847 | 13700 | -38 | -2 | 14.8 | 4.6 | -282 | -1 | -1 | 11.2 | 3289 | 120 | 2.8 | | 0.411 |
| 30-45.1343-110.0080-2-12- | 0-M36026 | 36190 | 905 | 12210 | -40 | -2 | 13.5 | 4.8 | -285 | -1 | -1 | 14.0 | 3255 | 114 | -2.2 | -76 | 0.393 |
| 30-45.4810-111.0420-2-11- | 0-M36027 | 10540 | 602 | 13430 | 77 | -1 | 10.4 | 4.1 | 362 | -2 | -1 | 10.9 | 3291 | 86 | 3.6 | 124 | 0.330 |
| 30-45.4735-111.0446-2-12- | 0-M36028 | 10820 | 684 | 13460 | 67 | -2 | 10.2 | 5.8 | -310 | -1 | -1 | 11.9 | 3165 | 88 | 3.3 | 87 | 0.277 |
| 30-45.4511-111.0351-2-12- | 0-M36029 | 12610 | 915 | 18500 | -35 | -2 | 12.7 | 5.9 | -303 | -1 | -1 | 10.4 | 3274 | 173 | 2.7 | 132 | 0.567 |
| 30-45.4508-111.3719-2-12- | 0-M36030 | 12540 | 989 | 17740 | 51 | -2 | 16.2 | 10.9 | -307 | -1 | -1 | 15.9 | 5982 | 124 | 4.7 | -49 | 0.654 |
| 30-45.1092-111.1888-2-12- | 0-M36031 | 12370 | 694 | 12420 | -29 | -2 | 10.6 | 6.1 | -254 | -1 | -1 | 11.5 | 3546 | 88 | 3.1 | 65 | 0.252 |
| 30-45.1220-111.1633-2-12- | 0-M36032 | 14780 | 732 | 13380 | 57 | -2 | 12.4 | 5.0 | 527 | -1 | -1 | 9.9 | 2907 | 108 | 2.8 | 83 | 0.232 |
| 30-45.1246-111.1581-2-12- | 0-M36033 | 10130 | 813 | 16090 | 65 | -2 | 11.0 | 6.2 | -285 | -1 | -1 | 9.7 | 3264 | 103 | 3.5 | 72 | 0.794 |
| 30-45.1289-111.1521-2-12- | 0-M36034 | 11800 | 657 | 13380 | -38 | -2 | 10.7 | 6.0 | -277 | -2 | 1 | 10.6 | 3316 | 98 | 4.5 | -51 | 0.321 |
| 30-45.1206-111.1419-2-12- | 0-M36035 | 11570 | 591 | 12200 | 59 | -1 | 8.7 | 5.7 | -237 | 2 | -1 | 12.5 | 2500 | 76 | 3.1 | -41 | 0.272 |
| 30-45.1196-111.1425-2-12- | 0-M36036 | 11520 | 513 | 11830 | 43 | -1 | 8.3 | 6.3 | 371 | -1 | -1 | 15.1 | 3107 | 76 | 4.1 | 83 | 0.285 |
| 30-45.2053-111.1597-2-12- | 0-M36037 | 9897 | 663 | 12890 | 71 | -1 | 9.8 | 5.9 | -262 | -1 | -1 | 10.9 | 3253 | 101 | 3.5 | 110 | 0.303 |
| 30-45.5607-111.1116-2-12- | 0-M36038 | 20690 | 1520 | 13370 | -43 | -2 | 20.2 | 10.2 | -372 | -2 | -1 | 20.1 | 9897 | 274 | 4.8 | -56 | 0.209 |
| 30-45.5414-111.0971-2-12- | 0-M36039 | 13400 | 1298 | 10630 | 87 | -2 | 18.4 | 8.2 | -328 | -1 | 1 | 17.8 | 5273 | 131 | 6.8 | -49 | 0.230 |
| 30-45.5384-111.1334-2-12- | 0-M36040 | 15720 | 970 | 12090 | 75 | -2 | 14.3 | 6.5 | -361 | -1 | -1 | 13.4 | 5218 | 142 | 4.8 | 103 | 0.246 |
| 30-45.5453-111.1647-2-12- | 0-M36041 | 8173 | 621 | 15990 | 77 | -1 | 9.6 | 9.0 | -255 | -1 | -1 | 14.6 | 3806 | 80 | 5.2 | 76 | 1.342 |
| 30-45.5334-111.1579-2-12- | 0-M36042 | 12660 | 828 | 15230 | -34 | -2 | 10.4 | 5.4 | 407 | -1 | -1 | 8.9 | 4416 | 105 | 3.5 | 118 | 0.483 |
| 30-45.5440-111.1742-2-12- | 0-M36043 | 14070 | 1050 | 12150 | 59 | -2 | 17.1 | 8.8 | 364 | -1 | -1 | 15.8 | 5651 | 148 | 4.9 | | 0.247 |
| 30-45.5269-111.1915-2-12- | 0-M36044 | 11800 | 836 | 15530 | 66 | -2 | 12.9 | 5.9 | -329 | 1 | -1 | 11.8 | 4093 | 120 | 4.7 | 82 | 0.347 |
| 30-45.5165-111.1795-2-12- | 0-M36045 | 15440 | 1294 | 18630 | 68 | -2 | 18.2 | 5.4 | -381 | -1 | -1 | 11.8 | 3217 | 105 | 3.8 | -57 | 0.314 |
| 30-45.5222-111.2201-2-15- | 0-M36046 | 13980 | 1177 | 18760 | -40 | -2 | 14.6 | 9.0 | 501 | -2 | -2 | 14.3 | 5259 | 120 | 5.4 | 72 | 0.476 |
| 30-45.5206-111.2441-2-12- | 0-M36047 | 8498 | 690 | 18730 | 48 | -2 | 10.9 | 8.4 | -296 | -1 | -1 | 13.5 | 3597 | 85 | 4.6 | 66 | 0.800 |
| 30-45.5795-111.2434-2-12- | 0-M36048 | 10410 | 948 | 15170 | 85 | -2 | 12.2 | 8.8 | -394 | -2 | -1 | 20.7 | 4131 | 91 | 4.7 | 105 | 0.179 |
| 30-45.5968-111.2406-2-12- | 0-M36049 | 6651 | 353 | 18040 | 93 | -2 | 7.9 | 6.2 | -256 | -1 | -1 | 15.1 | 2984 | 66 | 3.4 | 90 | 0.232 |
| 30-45.6682-111.2285-2-12- | 0-M36050 | 9150 | 388 | 13740 | 69 | -1 | 9.4 | 5.8 | -277 | -1 | -1 | 14.2 | 3435 | 87 | 3.5 | -56 | 0.275 |
| 30-45.6663-111.2140-2-12- | 0-M36051 | 8502 | 417 | 16540 | -38 | -2 | 8.4 | 6.1 | 547 | -2 | -1 | 9.9 | 3923 | 83 | 3.5 | -63 | 0.293 |
| 30-45.6271-111.2404-2-12- | 0-M36052 | 6290 | 588 | 15960 | 81 | -1 | 8.0 | 6.9 | -273 | -1 | 1 | 15.1 | 2754 | 61 | 5.0 | -80 | 0.252 |
| 30-45.7285-111.2479-2-12- | 0-M36053 | 9803 | 628 | 13580 | 56 | -1 | 9.1 | 5.5 | 365 | -1 | -1 | 10.2 | 3821 | 96 | 3.4 | 129 | 0.314 |
| 30-45.7281-111.2294-2-12- | 0-M36054 | 13080 | 544 | 15010 | 50 | -2 | 9.9 | 6.4 | -240 | -1 | -1 | 11.8 | 3506 | 94 | 3.0 | 85 | 0.229 |

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

①

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER AND FIELD DATA | | | | | | | | | | | | | | | | | | | | | | | | | U CONCENTRATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | TIME SAMPLED DATE | TIME SAMPLED HOUR | AIR TEMPERATURE | WATER TEMPERATURE | COMMENTS | SPECIAL MEASUREMENTS | pH | CONDUCTIVITY (µmho/cm) | SCINTILLOMETER (eU, ppm) | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm |
| 30- | 45.7422- | 111.2204- | 2- | 12- | | 0-M36055- | 09/11/76- | 11- | 12- | 10.5- | - | - | 6.1- | 470- | 19- | 4- | -3- | 7- | 1- | 1- | 1- | 2- | 3- | 4- | 2- | 4- | -3- | - | - | - | - | 3.00 |
| 30- | 45.7425- | 111.1399- | 2- | 12- | | 0-M36056- | 09/11/76- | 12- | 12- | 11.0- | - | - | 6.1- | 350- | 12- | 4- | -3- | 7- | 3- | 3- | 2- | 2- | 4- | 3- | 1- | 4- | -3- | - | - | - | - | 3.20 |
| 30- | 45.7139- | 111.1123- | 2- | 12- | | 0-M36057- | 09/11/76- | 12- | 13- | 11.0- | - | - | 6.3- | 340- | 6- | 4- | -5- | 8- | 3- | 3- | 3- | 2- | 4- | 4- | 2- | 4- | -3- | - | - | - | - | 4.20 |
| 30- | 45.6994- | 111.1749- | 2- | 12- | | 0-M36058- | 09/11/76- | 13- | 12- | 10.0- | - | - | 6.3- | 340- | 12- | 4- | -3- | 6- | 4- | 3- | 2- | 2- | 3- | 5- | 1- | 3- | -3- | - | - | - | - | 3.60 |
| 30- | 45.6995- | 111.1362- | 2- | 12- | | 0-M36059- | 09/11/76- | 13- | 13- | 11.0- | - | - | 6.5- | 460- | 0- | 4- | - | -5- | 3- | 3- | 2- | 2- | 3- | 4- | 2- | 3- | -3- | - | - | - | - | 3.00 |
| 30- | 45.7414- | 111.0547- | 2- | 15- | | 0-M36060- | 09/11/76- | 14- | 14- | - | - | - | - | - | 12- | 4- | -5- | 7- | -1- | -3- | 4- | 5- | 2- | 3- | -3- | - | - | - | - | - | - | 2.70 |
| 30- | 45.7365- | 111.0499- | 2- | 15- | | 0-M36061- | 09/11/76- | 14- | 14- | - | - | - | - | - | 12- | 4- | -5- | 7- | -1- | -2- | 4- | 3- | 2- | 2- | 3- | -3- | - | - | - | - | - | 2.90 |
| 30- | 45.6706- | 111.0094- | 2- | 12- | | 0-M36062- | 09/11/76- | 15- | 14- | 11.5- | - | - | - | 255- | 3- | 4- | -3- | 6- | 4- | 3- | 1- | 2- | 3- | 4- | 2- | 3- | -7- | - | - | - | - | 4.90 |
| 30- | 45.5803- | 111.1697- | 2- | 12- | | 0-M36063- | 09/11/76- | 16- | 13- | 11.0- | - | - | 5.9- | 275- | 16- | 4- | -3- | 6- | 3- | 3- | 2- | 2- | 3- | 3- | 2- | 3- | -3- | - | - | - | - | 2.90 |
| 30- | 45.6233- | 111.1335- | 2- | 12- | | 0-M36064- | 09/11/76- | 16- | 14- | 11.0- | C- | - | 6.3- | 395- | 9- | 4- | -6- | 8- | 3- | 3- | 2- | 2- | 4- | 4- | 3- | 3- | -3- | - | - | - | - | 2.70 |
| 30- | 45.6558- | 111.1132- | 2- | 12- | | 0-M36065- | 09/11/76- | 17- | 14- | 13.0- | - | - | 3.6- | 330- | 0- | 4- | -2- | 6- | 3- | 3- | 2- | 2- | 4- | 3- | 1- | 3- | -3- | - | - | - | - | 3.40 |
| 30- | 45.6697- | 111.1048- | 2- | 12- | | 0-M36066- | 09/11/76- | 17- | 15- | 12.5- | C- | - | 6.3- | 420- | 9- | 4- | -5- | 8- | 2- | 3- | 1- | 3- | 4- | 3- | 2- | 3- | -3- | - | - | - | - | 3.90 |
| 30- | 45.6484- | 111.0687- | 2- | 12- | | 0-M36067- | 09/11/76- | 17- | 15- | 13.0- | - | - | 6.3- | 390- | 0- | 4- | -5- | 8- | 3- | 3- | 1- | 3- | 4- | 4- | 1- | 4- | -3- | - | - | - | - | 2.10 |
| 30- | 45.6337- | 111.0312- | 2- | 12- | | 0-M36068- | 09/11/76- | 18- | 14- | 11.0- | - | - | 6.1- | 280- | 12- | 4- | -2- | 6- | 3- | 3- | 1- | 2- | 3- | 4- | 2- | 4- | -7- | - | - | - | - | 2.70 |
| 30- | 45.6191- | 111.0178- | 2- | 12- | | 0-M36069- | 09/11/76- | 18- | 13- | 10.0- | - | - | 5.9- | 195- | 3- | 4- | -3- | 6- | 3- | 3- | 2- | 3- | 3- | 3- | 2- | 3- | -3- | - | - | - | - | 4.50 |
| 30- | 45.6051- | 111.0085- | 2- | 12- | | 0-M36070- | 09/11/76- | 18- | 13- | 10.0- | - | - | 6.3- | 250- | 3- | 4- | -3- | 4- | 3- | 3- | 1- | 3- | 4- | 4- | 2- | 3- | -3- | - | - | - | - | 10.70 |
| 30- | 45.5977- | 111.1163- | 2- | 12- | | 0-M36071- | 09/11/76- | 19- | 13- | 11.5- | - | - | 6.3- | 210- | 12- | 4- | -5- | 8- | 2- | 2- | 3- | 3- | 3- | 5- | 3- | 3- | -3- | - | - | - | - | 7.60 |
| 30- | 45.7083- | 110.9980- | 2- | 12- | | 0-M36072- | 09/12/76- | 10- | 13- | 10.5- | - | - | 6.3- | 405- | 16- | 4- | -3- | 6- | 4- | 3- | 1- | 2- | 4- | 4- | 3- | 3- | -3- | - | - | - | - | 2.30 |
| 30- | 45.7118- | 110.7844- | 2- | 12- | | 0-M36073- | 09/12/76- | 12- | 11- | 9.5- | - | - | 6.1- | 245- | 19- | 1- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 3- | -1- | - | - | - | 2.60 |
| 30- | 45.6909- | 110.8081- | 2- | 12- | | 0-M36074- | 09/12/76- | 12- | 12- | 10.0- | - | - | 6.1- | 255- | 6- | 1- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 3- | 3- | 4- | 2- | -1- | - | - | - | 2.70 |
| 30- | 45.6881- | 110.8235- | 2- | 12- | | 0-M36075- | 09/12/76- | 12- | 12- | 10.5- | - | - | 6.3- | 410- | 3- | 1- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | 2.70 |
| 30- | 45.7175- | 110.8518- | 2- | 12- | | 0-M36076- | 09/12/76- | 13- | 13- | 10.5- | - | - | 6.1- | 275- | 6- | 1- | 6- | 3- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | 2.70 |
| 30- | 45.7370- | 110.8963- | 2- | 12- | | 0-M36077- | 09/12/76- | 13- | 13- | 12.0- | - | - | 6.1- | 330- | 12- | 4- | -3- | 6- | 4- | 3- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 4.90 |
| 30- | 45.7174- | 110.9123- | 2- | 12- | | 0-M36078- | 09/12/76- | 14- | 14- | 13.5- | - | - | 6.6- | 380- | 6- | 4- | -2- | 6- | 3- | 3- | 1- | 2- | 3- | 4- | 4- | 2- | -3- | - | - | - | - | 2.40 |
| 30- | 45.7147- | 110.9045- | 2- | 12- | | 0-M36079- | 09/12/76- | 14- | 14- | 13.0- | - | - | 5.9- | 390- | 3- | 4- | -2- | 6- | 2- | 2- | 1- | 2- | 3- | 4- | 2- | 2- | -3- | - | - | - | - | 2.60 |
| 30- | 45.7031- | 110.9286- | 2- | 15- | | 0-M36080- | 09/12/76- | 15- | 15- | | -C- | - | - | - | 3- | 1- | 6- | 5- | 8- | -1- | -3- | 4- | 3- | 3- | 4- | 2- | -3- | - | - | - | - | 2.40 |
| 30- | 45.6968- | 110.9144- | 2- | 12- | | 0-M36081- | 09/12/76- | 15- | 12- | 9.5- | - | - | 6.5- | 375- | 9- | 4- | -5- | 8- | 2- | 2- | 1- | 3- | 4- | 4- | 4- | 4- | -3- | - | - | - | - | 2.40 |
| 30- | 45.6692- | 110.9523- | 2- | 12- | | 0-M36082- | 09/12/76- | 15- | 15- | 11.0- | - | - | 6.5- | 390- | 3- | 4- | -4- | 6- | 3- | 2- | 2- | 2- | 3- | 5- | 2- | 2- | -3- | - | - | - | - | 2.60 |
| 30- | 45.6775- | 110.9815- | 2- | 12- | | 0-M36083- | 09/12/76- | 16- | 13- | 13.0- | - | - | 6.3- | 365- | 12- | 4- | -3- | 6- | 3- | 2- | 3- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 3.20 |
| 30- | 45.5961- | 110.9073- | 2- | 12- | | 0-M36084- | 09/12/76- | 16- | 10- | 10.0- | C- | - | 6.1- | 295- | 3- | 1- | 7- | 2- | 4- | 4- | 3- | 2- | 2- | 2- | 3- | 3- | 2- | - | - | - | - | 3.30 |
| 30- | 45.6089- | 110.9246- | 2- | 12- | | 0-M36085- | 09/12/76- | 17- | 11- | 10.0- | - | - | 6.3- | 360- | 0- | 1- | 7- | 3- | 4- | 4- | 2- | 2- | 2- | 2- | 4- | 4- | 2- | -8- | - | - | - | - | 2.10 |
| 30- | 45.6520- | 110.9516- | 2- | 12- | | 0-M36086- | 09/12/76- | 17- | 12- | 12.0- | C- | - | 6.3- | 400- | 0- | 4- | -3- | 6- | 4- | 3- | 2- | 2- | 3- | 4- | 2- | 2- | -3- | - | - | - | - | 3.20 |
| 30- | 45.6521- | 110.9585- | 2- | 12- | | 0-M36087- | 09/12/76- | 18- | 12- | 12.0- | - | - | 6.3- | 485- | 0- | 4- | -6- | 8- | 2- | 3- | 2- | 3- | 4- | 4- | 1- | 2- | -3- | - | - | - | - | 2.60 |
| 30- | 45.0114- | 110.3036- | 2- | 12- | | 0-M36088- | 10/23/76- | 8- | 4- | 2.0- | - | - | 5.9- | 90- | -2- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 3- | -1- | - | - | - | - | 2.60 |
| 30- | 45.0149- | 110.2894- | 2- | 12- | | 0-M36089- | 10/23/76- | 8- | 4- | 2.0- | - | - | 5.9- | 90- | -2- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 3- | -1- | - | - | - | - | 3.80 |
| 30- | 45.0505- | 110.2944- | 2- | 12- | | 0-M36090- | 10/23/76- | 10- | 6- | 3.5- | - | - | 5.7- | 90- | -2- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 3.60 |
| 30- | 45.0326- | 110.2992- | 2- | 12- | | 0-M36091- | 10/23/76- | 9- | 3- | 1.0- | - | - | 5.8- | 95- | -2- | 6- | 3- | 6- | 4- | 4- | 1- | 2- | 2- | 3- | 4- | 2- | -1- | - | - | - | - | 2.70 |
| 30- | 45.0619- | 110.2839- | 2- | 12- | | 0-M36092- | 10/23/76- | 11- | 5- | 2.0- | - | - | 5.7- | 90- | -2- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 2- | 2- | -1- | - | - | - | - | 2.50 |
| 30- | 45.0629- | 110.2867- | 2- | 12- | | 0-M36093- | 10/23/76- | 11- | 5- | 2.0- | - | - | 5.7- | 90- | -2- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 2.80 |
| 30- | 45.1188- | 110.2637- | 2- | 12- | | 0-M36095- | 10/23/76- | 12- | 6- | 1.0- | - | - | 5.7- | 95- | -3- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 3.50 |
| 30- | 45.0407- | 110.2916- | 2- | 12- | | 0-M36096- | 10/23/76- | 9- | 3- | 1.0- | - | - | 5.9- | 90- | -3- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 2.20 |
| 30- | 45.1350- | 110.2615- | 2- | 12- | | 0-M36097- | 10/23/76- | 13- | 8- | 2.0- | - | - | 5.7- | 90- | -2- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 1.80 |
| 30- | 45.0909- | 110.2610- | 2- | 12- | | 0-M36100- | 10/23/76- | 13- | 6- | 2.0- | - | - | 5.7- | 90- | -2- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 2.60 |
| 30- | 45.1467- | 110.2462- | 2- | 12- | | 0-M36101- | 10/23/76- | 14- | 4- | 1.0- | - | - | 5.7- | 90- | -2- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 3- | 3- | 2- | 2- | -1- | - | - | - | - | 2.10 |
| 30- | 45.1399- | 110.2512- | 2- | 12- | | 0-M36102- | 10/23/76- | 13- | 8- | 2.0- | - | - | 5.7- | 90- | -2- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 3.90 |
| 30- | 45.0097- | 110.1694- | 2- | 12- | | 0-M36103- | 10/22/76- | 8- | 2- | 1.5- | - | - | 5.7- | 165- | -2- | 7- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 2- | 2- | -1- | - | - | - | - | 6.90 |
| 30- | 45.0268- | 110.1566- | 2- | 12- | | 0-M36104- | 10/22/76- | 8- | 2- | 1.4- | - | - | 5.6- | 169- | -2- | 7- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 2- | 2- | -1- | - | - | - | - | 3.30 |
| 30- | 45.1013- | 110.1278- | 2- | 12- | | 0-M36105- | 10/22/76- | 11- | 4- | 1.4- | - | - | 5.7- | 164- | -2- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 2- | 2- | -1- | - | - | - | - | 1.60 |
| 30- | 45.1052- | 110.0938- | 2- | 12- | | 0-M36106- | 10/22/76- | 11- | 4- | 1.4- | - | - | 5.7- | 165- | -2- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 2- | 2- | -2- | - | - | - | - | 4.10 |
| 30- | 45.1032- | 110.0652- | 2- | 12- | | 0-M36107- | 10/22/76- | 12- | 4- | 1.7- | - | - | 5.8- | 159- | -3- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 4- | 2- | 2- | 2- | -2- | - | - | - | - | 1.40 |
| 30- | 45.1160- | 110.1653- | 2- | 12- | | 0-M36108- | 10/22/76- | 11- | 3- | 1.2- | - | - | 5.7- | 157- | -2- | 7- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 1.80 |

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

②

| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | 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) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ag | Bi | Cd | Cu | Nb | Ni | Pb | Sn | W | Be | Li |
| 30-45.7422-111.2204-2-12- | C-M36055 | -5 | -5 | -5 | 18 | -20 | -15 | 9 | -10 | -15 | 2 | 26 |
| 30-45.7425-111.1399-2-12- | 0-M36056 | -5 | -5 | -5 | 27 | -20 | 33 | 9 | -10 | -15 | 2 | 26 |
| 30-45.7139-111.1123-2-12- | 0-M36057 | -5 | -5 | -5 | 36 | -20 | 51 | 16 | -10 | -15 | 3 | 42 |
| 30-45.6994-111.1749-2-12- | 0-M36058 | -5 | -5 | -5 | 25 | -20 | 31 | 16 | -10 | -15 | -1 | 31 |
| 30-45.6995-111.1362-2-12- | 0-M36059 | -5 | -5 | -5 | 26 | -20 | 20 | 14 | -10 | -15 | 2 | 33 |
| 30-45.7414-111.0547-2-15- | 0-M36060 | -5 | -5 | -5 | 26 | -20 | 35 | 24 | -10 | -15 | 2 | 48 |
| 30-45.7365-111.0499-2-15- | 0-M36061 | -5 | -5 | -5 | 24 | -20 | 19 | 17 | -10 | -15 | 3 | 38 |
| 30-45.6706-111.0094-2-12- | 0-M36062 | -5 | -5 | -5 | 25 | -20 | 58 | 12 | -10 | -15 | 3 | 45 |
| 30-45.5803-111.1697-2-12- | 0-M36063 | -5 | -5 | -5 | 14 | 26 | -15 | 11 | -10 | -15 | 3 | 25 |
| 30-45.6233-111.1335-2-12- | 0-M36064 | -5 | -5 | -5 | 219 | -20 | -15 | 14 | -10 | -15 | 2 | 41 |
| 30-45.6558-111.1132-2-12- | 0-M36065 | -5 | -5 | -5 | 27 | -20 | 27 | 11 | -10 | -15 | 2 | 34 |
| 30-45.6697-111.1048-2-12- | 0-M36066 | -5 | -5 | -5 | 34 | -20 | 37 | 11 | -10 | -15 | 2 | 41 |
| 30-45.6484-111.0687-2-12- | 0-M36067 | -5 | -5 | -5 | 17 | -20 | 19 | 5 | -10 | -15 | 2 | 38 |
| 30-45.6337-111.0312-2-12- | 0-M36068 | 5 | -5 | -5 | 37 | 31 | 57 | -5 | -10 | -15 | 2 | 18 |
| 30-45.6191-111.0178-2-12- | 0-M36069 | -5 | -5 | -5 | 30 | -20 | 50 | 16 | -10 | -15 | 2 | 33 |
| 30-45.6051-111.0085-2-12- | 0-M36070 | -5 | -5 | -5 | 27 | -20 | 104 | -5 | -10 | -15 | 1 | 32 |
| 30-45.5977-111.1163-2-12- | 0-M36071 | -5 | -5 | -5 | 29 | -20 | 20 | 5 | -10 | -15 | -1 | 31 |
| 30-45.7083-110.9980-2-12- | 0-M36072 | -5 | -5 | -5 | 51 | -20 | 72 | 8 | -10 | 15 | -1 | 46 |
| 30-45.7118-110.7844-2-12- | 0-M36073 | -5 | -5 | -5 | 28 | -20 | 30 | 13 | -10 | -15 | 2 | 26 |
| 30-45.6909-110.8081-2-12- | 0-M36074 | -5 | -5 | -5 | 45 | -20 | 62 | -5 | -10 | -15 | -1 | 56 |
| 30-45.6881-110.8235-2-12- | 0-M36075 | -5 | -5 | -5 | 27 | -20 | 39 | -5 | -10 | -15 | -1 | 25 |
| 30-45.7175-110.8518-2-12- | 0-M36076 | 5 | -5 | -5 | 40 | -20 | 58 | 8 | -10 | -15 | -1 | 48 |
| 30-45.7370-110.8963-2-12- | 0-M36077 | -5 | -5 | -5 | 32 | -20 | 46 | 11 | -10 | -15 | 2 | 35 |
| 30-45.7174-110.9123-2-12- | 0-M36078 | -5 | -5 | -5 | 33 | -20 | 17 | 10 | -10 | -15 | 3 | 43 |
| 30-45.7147-110.9045-2-12- | 0-M36079 | -5 | -5 | -5 | 29 | -20 | -15 | 15 | -10 | -15 | 2 | 32 |
| 30-45.7031-110.9286-2-15- | 0-M36080 | -5 | -5 | -5 | 29 | -20 | -15 | 18 | -10 | -15 | 2 | 24 |
| 30-45.6968-110.9144-2-12- | 0-M36081 | -5 | -5 | -5 | 46 | -20 | 65 | 11 | -10 | -15 | 2 | 28 |
| 30-45.6692-110.9523-2-12- | 0-M36082 | -5 | -5 | -5 | 32 | 21 | 53 | -5 | -10 | -15 | 2 | 25 |
| 30-45.6775-110.9815-2-12- | 0-M36083 | -5 | -5 | -5 | 32 | -20 | 23 | 10 | -10 | -15 | 2 | 48 |
| 30-45.5961-110.9073-2-12- | 0-M36084 | -5 | -5 | -5 | 26 | -20 | -15 | 6 | -10 | -15 | 3 | 41 |
| 30-45.6089-110.9246-2-12- | 0-M36085 | -5 | -5 | -5 | 28 | -20 | 21 | 9 | -10 | -15 | 2 | 35 |
| 30-45.6520-110.9516-2-12- | 0-M36086 | -5 | -5 | -5 | 20 | -20 | 18 | 11 | -10 | -15 | 3 | 48 |
| 30-45.6521-110.9585-2-12- | 0-M36087 | -5 | -5 | -5 | 21 | -20 | 30 | 16 | -10 | -15 | 2 | 41 |
| 30-45.0114-110.3036-2-12- | 0-M36088 | -5 | -5 | -5 | 22 | -20 | 28 | 7 | -10 | -15 | 3 | 29 |
| 30-45.0149-110.2894-2-12- | 0-M36089 | -5 | -5 | -5 | 28 | -20 | 77 | 10 | -10 | -15 | 2 | 29 |
| 30-45.0505-110.2944-2-12- | 0-M36090 | -5 | -5 | -5 | 24 | -20 | 65 | 16 | -10 | -15 | 2 | 39 |
| 30-45.0326-110.2992-2-12- | 0-M36091 | -5 | -5 | -5 | 23 | -20 | 46 | 9 | -10 | -15 | 2 | 24 |
| 30-45.0619-110.2839-2-12- | 0-M36092 | -5 | -5 | -5 | 31 | -20 | 52 | 17 | -10 | -15 | 2 | 35 |
| 30-45.0629-110.2867-2-12- | 0-M36093 | -5 | -5 | -5 | 27 | -20 | 29 | 8 | -10 | 18 | 3 | 40 |
| 30-45.1188-110.2637-2-12- | 0-M36095 | -5 | -5 | -5 | 21 | -20 | 42 | 10 | -10 | -15 | 2 | 30 |
| 30-45.0407-110.2916-2-12- | 0-M36096 | -5 | -5 | -5 | 33 | -20 | 34 | 15 | -10 | -15 | 2 | 41 |
| 30-45.1350-110.2615-2-12- | 0-M36097 | -5 | -5 | -5 | 31 | -20 | 63 | 15 | -10 | -15 | 2 | 22 |
| 30-45.0909-110.2610-2-12- | 0-M36100 | -5 | -5 | -5 | 20 | -20 | 59 | 12 | -10 | -15 | 2 | 24 |
| 30-45.1467-110.2462-2-12- | 0-M36101 | -5 | -5 | -5 | 19 | -20 | 65 | 8 | -10 | -15 | 2 | 20 |
| 30-45.1399-110.2512-2-12- | 0-M36102 | -5 | -5 | -5 | 16 | -20 | 86 | 11 | -10 | -15 | 1 | 16 |
| 30-45.0097-110.1694-2-12- | 0-M36103 | -5 | -5 | -5 | 17 | -20 | 78 | 18 | -10 | -15 | 1 | 49 |
| 30-45.0268-110.1566-2-12- | 0-M36104 | -5 | -5 | -5 | 23 | -20 | 67 | 16 | -10 | -15 | 2 | 23 |
| 30-45.1013-110.1278-2-12- | 0-M36105 | -5 | -5 | -5 | 27 | -20 | 43 | 14 | -10 | -15 | 2 | 31 |
| 30-45.1052-110.0938-2-12- | 0-M36106 | -5 | 5 | -5 | 32 | -20 | 129 | 11 | -10 | -15 | 2 | 19 |
| 30-45.1032-110.0652-2-12- | 0-M36107 | -5 | -5 | -5 | 33 | -20 | 79 | 12 | 11 | -15 | 2 | 24 |
| 30-45.1160-110.1653-2-12- | 0-M36108 | -5 | -5 | -5 | 23 | -20 | 49 | 14 | -10 | -15 | 2 | 28 |

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

③

| DOE SAMPLE NUMBER | | | | | | LAB. SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (Concentrations reported in weight parts per million (ppm)) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Al | Au | Ba | Ca | Ce | Cl | Co | Cr | Cs | Dy | Eu | Fe | Hf | K | La | Lu |
| 30- | 45.7422- | 111.2204- | 2- | 12- | | 0-M36055 | 56770 | -0.06 | 745 | 28420 | 59 | -91 | 13.2 | 126 | -1.7 | 4 | 1.7 | 32360 | 12.2 | 15300 | 37 | 0.4 |
| 30- | 45.7425- | 111.1399- | 2- | 12- | | 0-M36056 | 58380 | -0.07 | 826 | 28470 | 93 | -93 | 21.4 | 174 | -2.0 | 4 | 1.7 | 52030 | 11.3 | 13390 | 39 | 0.5 |
| 30- | 45.7139- | 111.1123- | 2- | 12- | | 0-M36057 | 59930 | -0.06 | 1130 | 17270 | 93 | -81 | 19.5 | 197 | 4.6 | 6 | 1.7 | 39000 | 9.9 | 19280 | 45 | 0.5 |
| 30- | 45.6994- | 111.1749- | 2- | 12- | | 0-M36058 | 59850 | -0.07 | 871 | 32830 | 89 | -109 | 17.8 | 154 | 3.2 | 5 | 1.7 | 44230 | 15.9 | 16420 | 47 | 0.5 |
| 30- | 45.6995- | 111.1362- | 2- | 12- | | 0-M36059 | 56750 | -0.06 | 786 | 26170 | 55 | -109 | 8.7 | 80 | 3.1 | 4 | 1.3 | 27230 | 10.1 | 18090 | 38 | 0.5 |
| 30- | 45.7414- | 111.0547- | 2- | 15- | | 0-M36060 | 57220 | -0.06 | 614 | 25760 | 64 | 92 | 14.9 | 121 | 4.5 | 4 | 1.4 | 35750 | 9.0 | 19610 | 34 | 0.4 |
| 30- | 45.7365- | 111.0499- | 2- | 15- | | 0-M36061 | 54990 | -0.06 | 711 | 14860 | 74 | -95 | 7.1 | 103 | 4.0 | 5 | 1.4 | 30750 | 10.4 | 19960 | 35 | 0.4 |
| 30- | 45.6706- | 111.0094- | 2- | 12- | | 0-M36062 | 54540 | -0.07 | 689 | 26760 | 63 | -97 | 19.0 | 150 | 3.0 | 4 | 1.6 | 40070 | 9.3 | 21000 | 38 | 0.4 |
| 30- | 45.5803- | 111.1697- | 2- | 12- | | 0-M36063 | 64850 | -0.07 | 1256 | 22840 | 77 | -101 | 13.0 | 211 | 2.5 | 4 | 2.1 | 44980 | 14.0 | 18000 | 49 | 0.4 |
| 30- | 45.6233- | 111.1335- | 2- | 12- | | 0-M36064 | 57480 | -0.07 | 766 | 17700 | 75 | -105 | 9.7 | 80 | 3.7 | 5 | 1.5 | 27670 | 10.0 | 19170 | 37 | 0.4 |
| 30- | 45.6558- | 111.1132- | 2- | 12- | | 0-M36065 | 54470 | -0.06 | 655 | 28940 | 75 | -96 | 18.7 | 175 | 2.3 | 5 | 1.7 | 50340 | 17.7 | 14880 | 48 | 0.6 |
| 30- | 45.6697- | 111.1048- | 2- | 12- | | 0-M36066 | 56870 | -0.07 | 702 | 22390 | 86 | -88 | 12.5 | 121 | 3.4 | 4 | 1.5 | 33320 | 12.0 | 14830 | 46 | 0.3 |
| 30- | 45.6484- | 111.0687- | 2- | 12- | | 0-M36067 | 37400 | -0.04 | 515 | 5824 | 34 | -63 | 4.3 | 37 | 2.9 | 4 | 0.9 | 12940 | 8.6 | 19190 | 19 | 0.3 |
| 30- | 45.6337- | 111.0312- | 2- | 12- | | 0-M36068 | 47940 | -0.08 | 456 | 31660 | 204 | -164 | 32.2 | 415 | -2.3 | 5 | 2.3 | 87990 | 22.0 | -7410 | 107 | 0.8 |
| 30- | 45.6191- | 111.0178- | 2- | 12- | | 0-M36069 | 49560 | -0.07 | -312 | 24540 | 90 | -207 | 22.5 | 223 | -2.0 | 4 | 1.5 | 63850 | 16.1 | 8611 | 49 | 0.6 |
| 30- | 45.6051- | 111.0085- | 2- | 12- | | 0-M36070 | 40420 | -0.09 | -345 | 18150 | 226 | -227 | 32.0 | 393 | -2.6 | 4 | 2.2 | 92560 | 34.8 | -10060 | 135 | 1.2 |
| 30- | 45.5977- | 111.1163- | 2- | 12- | | 0-M36071 | 54410 | -0.07 | 674 | 12530 | 75 | 105 | 10.0 | 97 | 3.0 | 5 | 1.6 | 26180 | 16.1 | 16670 | 36 | 0.4 |
| 30- | 45.7083- | 110.9980- | 2- | 12- | | 0-M36072 | 39780 | -0.15 | 459 | 80470 | 66 | -78 | 18.3 | 222 | -1.7 | 4 | 1.4 | 40460 | 13.6 | 10980 | 40 | 0.4 |
| 30- | 45.7118- | 110.7844- | 2- | 12- | | 0-M36073 | 64150 | -0.17 | 839 | 22360 | 59 | -104 | 18.9 | 335 | 4.0 | 3 | 1.5 | 53470 | 7.7 | 20460 | 34 | 0.5 |
| 30- | 45.6909- | 110.8081- | 2- | 12- | | 0-M36074 | 60790 | -0.16 | 708 | 26660 | 84 | -95 | 35.2 | 532 | 3.7 | 3 | 2.5 | 76840 | 13.3 | 17130 | 55 | 0.3 |
| 30- | 45.6881- | 110.8235- | 2- | 12- | | 0-M36075 | 60360 | -0.18 | 1103 | 27350 | 91 | -96 | 30.3 | 563 | 2.8 | 3 | 2.8 | 55580 | 15.3 | 16890 | 37 | 0.3 |
| 30- | 45.7175- | 110.8518- | 2- | 12- | | 0-M36076 | 56860 | -0.17 | 768 | 30290 | 94 | -89 | 20.3 | 554 | 3.3 | 3 | 1.7 | 77730 | 11.2 | 23520 | 39 | 0.3 |
| 30- | 45.7370- | 110.8963- | 2- | 12- | | 0-M36077 | 54480 | -0.14 | 821 | 29230 | 66 | -96 | 18.7 | 365 | 3.4 | 4 | 1.7 | 61080 | 16.7 | 15010 | 62 | 0.4 |
| 30- | 45.7174- | 110.9123- | 2- | 12- | | 0-M36078 | 55870 | -0.07 | 762 | 35230 | 67 | -96 | 8.3 | 77 | 3.4 | 3 | 1.7 | 30130 | 9.3 | 17490 | 36 | 0.4 |
| 30- | 45.7147- | 110.9045- | 2- | 12- | | 0-M36079 | 55720 | -0.13 | 769 | 30510 | 52 | -79 | 11.5 | 95 | 4.1 | 3 | 1.4 | 28850 | 9.7 | 17270 | 49 | 0.4 |
| 30- | 45.7031- | 110.9286- | 2- | 15- | | 0-M36080 | 57840 | -0.14 | 831 | 23690 | 53 | -80 | 12.9 | 175 | -1.6 | 3 | 1.4 | 38460 | 11.5 | 14360 | 40 | 0.3 |
| 30- | 45.6968- | 110.9144- | 2- | 12- | | 0-M36081 | 60300 | -0.18 | 1225 | 27700 | 63 | -117 | 37.0 | 507 | 5.5 | 3 | 2.4 | 47720 | 5.3 | 14910 | 37 | 0.2 |
| 30- | 45.6692- | 110.9523- | 2- | 12- | | 0-M36082 | 59970 | -0.18 | 786 | 29020 | 74 | -115 | 21.9 | 666 | 3.1 | 4 | 2.0 | 69730 | 14.2 | 15330 | 51 | 0.4 |
| 30- | 45.6775- | 110.9815- | 2- | 12- | | 0-M36083 | 57410 | -0.12 | 653 | 25270 | 63 | -79 | 13.5 | 145 | 3.1 | 4 | 1.5 | 31220 | 11.9 | 17520 | 40 | 0.3 |
| 30- | 45.5961- | 110.9073- | 2- | 12- | | 0-M36084 | 48060 | -0.15 | 666 | 21830 | 66 | -54 | 10.4 | 45 | 6.2 | 4 | 2.3 | 17890 | 10.1 | 14980 | 32 | 0.4 |
| 30- | 45.6089- | 110.9246- | 2- | 12- | | 0-M36085 | 41460 | -0.12 | 633 | 39740 | 37 | -60 | 7.6 | 50 | 2.7 | 3 | 1.2 | 19150 | 5.6 | 9404 | -13 | 0.2 |
| 30- | 45.6520- | 110.9516- | 2- | 12- | | 0-M36086 | 51140 | -0.12 | 725 | 14490 | 64 | 132 | 6.6 | 69 | 8.0 | 4 | 1.4 | 22870 | 10.6 | 16260 | 43 | 0.4 |
| 30- | 45.6521- | 110.9585- | 2- | 12- | | 0-M36087 | 53990 | -0.13 | 616 | 18810 | 63 | -92 | 10.6 | 73 | 4.2 | 4 | 1.5 | 22800 | 8.9 | 19780 | -19 | 0.4 |
| 30- | 45.0114- | 110.3036- | 2- | 12- | | 0-M36088 | 61140 | -0.16 | 940 | 33480 | 73 | -87 | 13.8 | 132 | 4.0 | 4 | 1.7 | 31560 | 8.5 | 15010 | 39 | 0.3 |
| 30- | 45.0149- | 110.2894- | 2- | 12- | | 0-M36089 | 57030 | -0.17 | 865 | 32460 | 165 | -92 | 25.6 | 362 | 3.7 | 5 | 1.9 | 61310 | 18.3 | 15640 | 83 | 0.5 |
| 30- | 45.0505- | 110.2944- | 2- | 12- | | 0-M36090 | 61910 | -0.17 | 903 | 36060 | 96 | -107 | 19.2 | 225 | 3.6 | 5 | 1.9 | 49630 | 18.5 | 14980 | 48 | 0.5 |
| 30- | 45.0326- | 110.2992- | 2- | 12- | | 0-M36091 | 66070 | -0.14 | 878 | 39740 | 56 | -96 | 18.2 | 172 | 2.4 | 3 | 1.7 | 39720 | 8.0 | 13330 | 39 | 0.2 |
| 30- | 45.0619- | 110.2839- | 2- | 12- | | 0-M36092 | 66190 | -0.18 | 1223 | 34440 | 74 | 172 | 20.2 | 203 | -2.0 | 3 | 1.6 | 39960 | 9.7 | 13090 | -18 | 0.3 |
| 30- | 45.0629- | 110.2867- | 2- | 12- | | 0-M36093 | 64320 | -0.15 | 877 | 31380 | 67 | -88 | 17.1 | 165 | 3.4 | 4 | 1.6 | 38280 | 8.9 | 17440 | 50 | 0.4 |
| 30- | 45.1188- | 110.2637- | 2- | 12- | | 0-M36095 | 60910 | -0.17 | 1009 | 34040 | 175 | -109 | 24.5 | 357 | 2.8 | 5 | 1.9 | 60710 | 16.2 | 14080 | 100 | 0.6 |
| 30- | 45.0407- | 110.2916- | 2- | 12- | | 0-M36096 | 68490 | -0.15 | 901 | 39580 | 55 | -102 | 20.6 | 164 | 2.9 | 3 | 1.7 | 43640 | 6.7 | 17450 | 49 | 0.4 |
| 30- | 45.1350- | 110.2615- | 2- | 12- | | 0-M36097 | 75060 | -0.19 | 1551 | 37240 | 57 | -107 | 25.8 | 260 | -2.2 | 2 | 1.6 | 46270 | 5.3 | 16750 | 32 | 0.5 |
| 30- | 45.0909- | 110.2610- | 2- | 12- | | 0-M36100 | 65250 | -0.16 | 1127 | 32330 | 64 | -90 | 19.3 | 184 | 3.4 | 3 | 1.4 | 40180 | 7.9 | 18940 | -14 | 0.3 |
| 30- | 45.1467- | 110.2462- | 2- | 12- | | 0-M36101 | 70920 | -0.17 | 1201 | 38000 | 50 | -114 | 25.9 | 269 | 2.2 | 2 | 1.7 | 51120 | 5.9 | 13750 | 38 | 0.4 |
| 30- | 45.1399- | 110.2512- | 2- | 12- | | 0-M36102 | 60740 | -0.17 | 1080 | 36890 | 233 | -107 | 35.8 | 510 | -2.0 | 5 | 2.2 | 83080 | 20.1 | 13960 | 118 | 0.5 |
| 30- | 45.0097- | 110.1694- | 2- | 12- | | 0-M36103 | 60570 | 1.13 | 719 | 30950 | 309 | 228 | 27.1 | 379 | -2.8 | 10 | 3.3 | 82660 | 35.9 | 13680 | 151 | 0.7 |
| 30- | 45.0268- | 110.1566- | 2- | 12- | | 0-M36104 | 62800 | -0.17 | 1169 | 34620 | 153 | -101 | 29.9 | 405 | -2.1 | 5 | 1.9 | 68610 | 15.1 | 10960 | 90 | 0.4 |
| 30- | 45.1013- | 110.1278- | 2- | 12- | | 0-M36105 | 71680 | -0.16 | 1340 | 38340 | 60 | -116 | 21.1 | 262 | -1.8 | 3 | 1.7 | 44180 | 5.0 | 12320 | 35 | 0.2 |
| 30- | 45.1052- | 110.0938- | 2- | 12- | | 0-M36106 | 50930 | -0.18 | 613 | 40040 | 232 | -103 | 44.5 | 665 | -2.1 | 6 | 2.0 | 99250 | 25.6 | 11100 | 141 | 0.6 |
| 30- | 45.1032- | 110.0652- | 2- | 12- | | 0-M36107 | 66060 | -0.17 | 1058 | 39870 | 58 | -100 | 24.7 | 334 | -2.0 | 2 | 1.5 | 43520 | 3.8 | 13050 | -16 | 0.4 |
| 30- | 45.1160- | 110.1653- | 2- | 12- | | 0-M36108 | 71530 | -0.16 | 1243 | 37460 | 72 | -105 | 20.9 | 250 | -1.9 | 3 | 1.5 | 43140 | 5.4 | 16270 | 39 | 0.2 |

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

(4)

| DOE SAMPLE NUMBER | | | | | | | | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | U/Th RATIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | Mg | Mn | Na | Rb | Sb | Sc | Sm | Sr | Ta | Tb | Th | Ti | V | Yb | Zn | |
| 30- | 45.7422- | 111.2204- | 2- | 12- | | 0-M36055 | 11440 | 557 | 16300 | -31 | -1 | 9.9 | 5.4 | 416 | -1 | -1 | 9.6 | 3479 | 95 | 3.1 | 56 | 0.313 |
| 30- | 45.7425- | 111.1399- | 2- | 12- | | 0-M36056 | 12260 | 1005 | 15100 | -34 | -2 | 13.8 | 6.3 | -304 | -1 | -1 | 12.3 | 5521 | 168 | 3.1 | -46 | 0.260 |
| 30- | 45.7139- | 111.1123- | 2- | 12- | | 0-M36057 | 14610 | 746 | 11950 | 123 | -2 | 11.4 | 7.3 | -270 | -1 | 1 | 13.3 | 3760 | 101 | 4.6 | 79 | 0.316 |
| 30- | 45.6994- | 111.1749- | 2- | 12- | | 0-M36058 | 14500 | 750 | 16180 | 70 | -2 | 12.6 | 6.7 | -337 | -1 | -1 | 14.3 | 5006 | 125 | 3.3 | 97 | 0.252 |
| 30- | 45.6995- | 111.1362- | 2- | 12- | | 0-M36059 | 8665 | 618 | 14720 | 56 | -1 | 8.2 | 5.3 | -293 | -1 | -1 | 10.2 | 3393 | 74 | 3.5 | 49 | 0.294 |
| 30- | 45.7414- | 111.0547- | 2- | 15- | | 0-M36060 | 10560 | 839 | 12450 | 82 | -1 | 10.7 | 5.3 | -286 | -1 | -1 | 11.0 | 2767 | 85 | 2.9 | -98 | 0.245 |
| 30- | 45.7365- | 111.0499- | 2- | 15- | | 0-M36061 | 6880 | 578 | 12420 | 88 | -2 | 9.4 | 5.5 | -261 | -1 | -1 | 12.9 | 3385 | 70 | 3.9 | 139 | 0.225 |
| 30- | 45.6706- | 111.0094- | 2- | 12- | | 0-M36062 | 13430 | 1164 | 13400 | -35 | -2 | 11.4 | 6.4 | -336 | -1 | -1 | 9.9 | 3424 | 104 | 3.1 | -65 | 0.495 |
| 30- | 45.5803- | 111.1697- | 2- | 12- | | 0-M36063 | 10100 | 869 | 16970 | 72 | -2 | 9.7 | 6.0 | 521 | -1 | -1 | 12.2 | 4926 | 117 | 4.2 | 103 | 0.238 |
| 30- | 45.6233- | 111.1335- | 2- | 12- | | 0-M36064 | 6433 | 504 | 14290 | 62 | -2 | 8.6 | 5.9 | -318 | -1 | -1 | 11.1 | 3247 | 62 | 3.8 | 164 | 0.243 |
| 30- | 45.6558- | 111.1132- | 2- | 12- | | 0-M36065 | 10060 | 869 | 16910 | 48 | -1 | 12.4 | 5.9 | -286 | -1 | -1 | 13.4 | 5584 | 159 | 4.1 | 54 | 0.254 |
| 30- | 45.6697- | 111.1048- | 2- | 12- | | 0-M36066 | 8926 | 798 | 13080 | -34 | -2 | 9.1 | 6.5 | -288 | -1 | -1 | 11.9 | 3196 | 101 | 3.3 | 103 | 0.328 |
| 30- | 45.6484- | 111.0687- | 2- | 12- | | 0-M36067 | 4111 | 487 | 8782 | 55 | -1 | 4.6 | 3.2 | -207 | -1 | -1 | 5.8 | 2401 | 37 | 2.9 | -28 | 0.362 |
| 30- | 45.6337- | 111.0312- | 2- | 12- | | 0-M36068 | 16630 | 2600 | 12150 | -37 | -2 | 22.5 | 13.0 | -565 | -2 | 2 | 46.6 | 5686 | 194 | 6.0 | -49 | 0.056 |
| 30- | 45.6191- | 111.0178- | 2- | 12- | | 0-M36069 | 11910 | 2782 | 13270 | 52 | -2 | 22.1 | 6.8 | -603 | -1 | -1 | 20.2 | 3004 | 105 | 5.3 | -44 | 0.223 |
| 30- | 45.6051- | 111.0085- | 2- | 12- | | 0-M36070 | -4579 | 3883 | 9519 | -44 | -2 | 28.3 | 14.4 | -702 | -2 | -2 | 61.7 | -1687 | 103 | 8.8 | -62 | 0.173 |
| 30- | 45.5977- | 111.1163- | 2- | 12- | | 0-M36071 | 6907 | 525 | 14680 | 66 | -2 | 8.4 | 5.8 | -247 | -1 | -1 | 11.8 | 3862 | 74 | 3.5 | 69 | 0.644 |
| 30- | 45.7083- | 110.9980- | 2- | 12- | | 0-M36072 | 29280 | 762 | 11490 | -32 | -4 | 13.1 | 5.1 | -255 | -1 | -1 | 10.2 | 3458 | 96 | -3.1 | | 0.225 |
| 30- | 45.7118- | 110.7844- | 2- | 12- | | 0-M36073 | 13940 | 1111 | 13380 | 72 | -4 | 14.6 | 4.9 | 409 | -1 | -1 | 9.6 | 4058 | 146 | -2.5 | 153 | 0.271 |
| 30- | 45.6909- | 110.8081- | 2- | 12- | | 0-M36074 | 13840 | 965 | 14460 | -40 | -4 | 15.2 | 5.1 | 484 | -1 | -1 | 9.1 | 5369 | 230 | -2.5 | 128 | 0.297 |
| 30- | 45.6881- | 110.8235- | 2- | 12- | | 0-M36075 | 10100 | 1053 | 14980 | -40 | -4 | 12.7 | 5.4 | 487 | -1 | -1 | 10.0 | 5230 | 172 | 4.6 | 95 | 0.270 |
| 30- | 45.7175- | 110.8518- | 2- | 12- | | 0-M36076 | 14720 | 1000 | 13330 | 84 | -4 | 16.5 | 5.3 | 520 | -1 | -1 | 10.0 | 6405 | 235 | -2.6 | -131 | 0.270 |
| 30- | 45.7370- | 110.8963- | 2- | 12- | | 0-M36077 | 9861 | 897 | 13290 | 71 | -4 | 12.2 | 5.9 | -317 | -1 | -1 | 13.2 | 5159 | 167 | -2.8 | 83 | 0.371 |
| 30- | 45.7174- | 110.9123- | 2- | 12- | | 0-M36078 | 9180 | 586 | 9763 | 56 | -2 | 7.7 | 5.4 | 332 | -1 | -1 | 10.8 | 3009 | 90 | 2.9 | 67 | 0.222 |
| 30- | 45.7147- | 110.9045- | 2- | 12- | | 0-M36079 | 9780 | 530 | 10180 | 41 | -3 | 7.9 | 5.6 | 297 | -1 | -1 | 8.0 | 3114 | 103 | 3.3 | -106 | 0.325 |
| 30- | 45.7031- | 110.9286- | 2- | 15- | | 0-M36080 | 8352 | 725 | 14210 | -30 | -3 | 9.3 | 5.0 | -250 | -1 | -1 | 7.8 | 4335 | 125 | 3.9 | 71 | 0.308 |
| 30- | 45.6968- | 110.9144- | 2- | 12- | | 0-M36081 | 12450 | 1694 | 14200 | -42 | -5 | 14.8 | 3.0 | -424 | -1 | -1 | 6.9 | 3629 | 137 | -3.2 | 233 | 0.348 |
| 30- | 45.6692- | 110.9523- | 2- | 12- | | 0-M36082 | 11800 | 1148 | 14750 | -39 | -4 | 15.3 | 4.7 | 597 | -1 | -1 | 9.1 | 6657 | 196 | 4.2 | 125 | 0.286 |
| 30- | 45.6775- | 110.9815- | 2- | 12- | | 0-M36083 | 9915 | 606 | 12970 | 45 | -3 | 9.9 | 4.7 | -237 | -1 | -1 | 10.2 | 3206 | 92 | 4.3 | -71 | 0.314 |
| 30- | 45.5961- | 110.9073- | 2- | 12- | | 0-M36084 | 7647 | 327 | 4432 | -30 | -4 | 6.3 | 4.9 | -192 | -1 | -1 | 9.9 | 2559 | 64 | 3.0 | -97 | 0.333 |
| 30- | 45.6089- | 110.9246- | 2- | 12- | | 0-M36085 | 11410 | 490 | 5973 | -25 | -3 | 6.5 | 2.7 | -206 | -1 | -1 | 5.6 | 2229 | 62 | -2.5 | -57 | 0.375 |
| 30- | 45.6520- | 110.9516- | 2- | 12- | | 0-M36086 | 6862 | 456 | 9539 | 62 | -3 | 7.3 | 5.3 | -236 | -1 | -1 | 9.8 | 2695 | 66 | -1.8 | 92 | 0.327 |
| 30- | 45.6521- | 110.9585- | 2- | 12- | | 0-M36087 | 6449 | 932 | 11140 | 66 | -3 | 7.7 | 4.5 | -315 | -1 | -1 | 10.5 | 2794 | 60 | 2.6 | 91 | 0.248 |
| 30- | 45.0114- | 110.3036- | 2- | 12- | | 0-M36088 | 13250 | 663 | 15130 | -34 | -4 | 11.0 | 6.2 | 518 | -1 | -1 | 10.0 | 3820 | 95 | 2.9 | -36 | 0.260 |
| 30- | 45.0149- | 110.2894- | 2- | 12- | | 0-M36089 | 17580 | 837 | 15000 | -39 | -4 | 15.3 | 14.1 | 582 | -1 | -1 | 49.7 | 4970 | 185 | 5.2 | -45 | 0.076 |
| 30- | 45.0505- | 110.2944- | 2- | 12- | | 0-M36090 | 14270 | 813 | 17120 | 51 | -4 | 15.2 | 7.5 | 895 | -1 | -1 | 14.4 | 4960 | 133 | 6.1 | 109 | 0.250 |
| 30- | 45.0326- | 110.2992- | 2- | 12- | | 0-M36091 | 16170 | 738 | 16620 | -32 | -4 | 12.6 | 4.8 | 518 | -1 | -1 | 9.6 | 3197 | 120 | 4.2 | 110 | 0.281 |
| 30- | 45.0619- | 110.2839- | 2- | 12- | | 0-M36092 | 14700 | 773 | 17780 | -36 | -4 | 13.9 | 4.9 | 571 | -2 | -1 | 7.8 | 4052 | 126 | 4.6 | 89 | 0.321 |
| 30- | 45.0629- | 110.2867- | 2- | 12- | | 0-M36093 | 12430 | 723 | 15000 | 63 | -4 | 12.8 | 6.0 | 563 | -1 | -1 | 10.7 | 3320 | 112 | -3.1 | -86 | 0.262 |
| 30- | 45.1188- | 110.2637- | 2- | 12- | | 0-M36095 | 15090 | 827 | 16510 | -38 | -4 | 15.9 | 11.8 | 408 | -1 | -1 | 48.4 | 5305 | 179 | 7.5 | 120 | 0.072 |
| 30- | 45.0407- | 110.2916- | 2- | 12- | | 0-M36096 | 15890 | 816 | 18080 | 83 | -4 | 13.9 | 4.4 | 535 | -1 | -1 | 8.2 | 3555 | 119 | 3.3 | 102 | 0.268 |
| 30- | 45.1350- | 110.2615- | 2- | 12- | | 0-M36097 | 19550 | 850 | 20860 | -40 | -5 | 17.2 | 4.4 | 738 | -1 | -1 | 5.9 | 4194 | 143 | -2.9 | -31 | 0.305 |
| 30- | 45.0909- | 110.2610- | 2- | 12- | | 0-M36100 | 13200 | 714 | 16120 | -35 | -4 | 13.9 | 5.5 | 715 | -1 | -1 | 9.6 | 4295 | 124 | -2.5 | 81 | 0.271 |
| 30- | 45.1467- | 110.2462- | 2- | 12- | | 0-M36101 | 18810 | 793 | 19880 | -37 | -4 | 17.9 | 4.8 | 612 | -1 | -1 | 7.8 | 3484 | 141 | -2.6 | 122 | 0.269 |
| 30- | 45.1399- | 110.2512- | 2- | 12- | | 0-M36102 | 24380 | 977 | 18990 | -40 | -4 | 20.1 | 14.7 | 730 | -1 | -1 | 71.7 | 6423 | 275 | 8.4 | -46 | 0.054 |
| 30- | 45.0097- | 110.1694- | 2- | 12- | | 0-M36103 | 16750 | 949 | 17380 | -49 | -6 | 21.3 | 25.7 | -339 | -2 | -2 | 88.3 | 8523 | 245 | 19.0 | 122 | 0.078 |
| 30- | 45.0268- | 110.1566- | 2- | 12- | | 0-M36104 | 18480 | 937 | 18330 | -42 | -5 | 18.2 | 11.7 | 687 | -1 | -1 | 38.5 | 5401 | 209 | 8.3 | -47 | 0.086 |
| 30- | 45.1013- | 110.1278- | 2- | 12- | | 0-M36105 | 18560 | 684 | 23350 | -32 | -4 | 16.3 | 4.0 | 770 | -1 | -1 | 9.6 | 3495 | 105 | 4.3 | 58 | 0.167 |
| 30- | 45.1052- | 110.0938- | 2- | 12- | | 0-M36106 | 27810 | 1162 | 16470 | -40 | -5 | 24.9 | 18.5 | -321 | -1 | 2 | 81.4 | 7343 | 314 | 11.2 | 110 | 0.050 |
| 30- | 45.1032- | 110.0652- | 2- | 12- | | 0-M36107 | 21400 | 728 | 22080 | -36 | -5 | 17.8 | 4.0 | 705 | -1 | -1 | 11.4 | 3149 | 124 | -2.7 | -42 | 0.123 |
| 30- | 45.1160- | 110.1653- | 2- | 12- | | 0-M36108 | 17250 | 664 | 22800 | -36 | -4 | 14.9 | 5.7 | 640 | -1 | -1 | 10.5 | 3735 | 110 | -2.8 | -57 | 0.171 |

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

①

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER AND FIELD DATA | | | | | | | | | | | | | | | | | | | | | | | | U CONCENTRATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | TIME SAMPLED | | | | | | | | | | | | | | | | | | | | | | | |
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | DATE | HOUR | AIR TEMPERATURE | WATER TEMPERATURE | COMMENTS | SPECIAL MEASUREMENTS | pH | CONDUCTIVITY (µmho/cm) | SCINTILLOMETER (eU, ppm) | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm |
| 30- | 45.1017- | 110.0656- | 2- | 12- | | 0-M36109- | 10/22/76- | 12- | 4- | 1.7- | - | - | 5.8- | 170- | | -3- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 4- | 2- | 2- | 2- | -2- | - | - | - | - | 2.40 |
| 30- | 45.1145- | 110.1815- | 2- | 12- | | 0-M36110- | 10/22/76- | 12- | 4- | 1.0- | - | - | 5.7- | 165- | | -2- | 7- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 2.00 |
| 30- | 45.1132- | 110.1816- | 2- | 12- | | 0-M36111- | 10/22/76- | 12- | 4- | 1.0- | - | - | 5.7- | 165- | | -2- | 7- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 2.10 |
| 30- | 45.1315- | 110.0719- | 2- | 12- | | 0-M36112- | 10/22/76- | 13- | 4- | 1.2- | - | - | 5.7- | 165- | | -4- | 7- | 2- | 7- | 3- | 3- | 1- | 2- | 1- | 4- | 3- | 2- | -1- | - | - | - | - | 2.10 |
| 30- | 45.1619- | 110.1141- | 2- | 12- | | 0-M36113- | 10/22/76- | 16- | 3- | 1.5- | - | - | 5.7- | 170- | | -3- | 7- | 2- | 4- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 5.10 |
| 30- | 45.1639- | 110.1007- | 2- | 12- | | 0-M36114- | 10/22/76- | 15- | 5- | 2.0- | - | - | 5.6- | 165- | | -3- | 7- | 2- | 4- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 3.50 |
| 30- | 45.0779- | 110.0781- | 2- | 12- | | 0-M36115- | 10/22/76- | 18- | 2- | 1.0- | - | - | 5.7- | 165- | | -3- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 1.80 |
| 30- | 45.0987- | 110.3984- | 2- | 12- | | 0-M36116- | 10/24/76- | 14- | 2- | 1.0- | - | - | 5.7- | 200- | | -2- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 2.50 |
| 30- | 45.1477- | 110.3808- | 2- | 12- | | 0-M36117- | 10/24/76- | 11- | 2- | 1.0- | - | - | 5.8- | 210- | | -2- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 1.80 |
| 30- | 45.1682- | 110.1535- | 2- | 12- | | 0-M36118- | 10/22/76- | 15- | 3- | 1.0- | - | - | 5.7- | 165- | | -2- | 4- | 1- | 7- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 4.20 |
| 30- | 45.0738- | 110.0923- | 2- | 12- | | 0-M36119- | 10/22/76- | 18- | 3- | 2.0- | - | - | 5.7- | 165- | | -3- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 3.70 |
| 30- | 45.1940- | 110.3631- | 2- | 12- | | 0-M36120- | 10/24/76- | 14- | 4- | 2.0- | - | - | 5.7- | 190- | | -2- | 6- | 2- | 6- | 4- | 3- | 1- | 2- | 3- | 3- | 3- | 3- | -1- | - | - | - | - | 8.20 |
| 30- | 45.0419- | 110.1842- | 2- | 12- | | 0-M36121- | 10/24/76- | 17- | - | 1.0- | - | - | 5.8- | 170- | | -2- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 6.70 |
| 30- | 45.2031- | 110.3633- | 2- | 12- | | 0-M36122- | 10/24/76- | 15- | 2- | 1.0- | - | - | 5.8- | 175- | | -2- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 4.80 |
| 30- | 45.1520- | 110.1285- | 2- | 12- | | 0-M36123- | 10/22/76- | 14- | 3- | 1.4- | - | - | 5.7- | 165- | | -2- | 7- | 2- | 7- | 4- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 1.90 |
| 30- | 45.2120- | 110.3571- | 2- | 12- | | 0-M36124- | 10/24/76- | 16- | 1- | 1.0- | - | - | 5.8- | 170- | | -2- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 3- | -1- | - | - | - | - | 2.20 |
| 30- | 45.0780- | 110.4249- | 2- | 12- | | 0-M36125- | 10/24/76- | 12- | - | 1.0- | - | - | 5.7- | 100- | | -2- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 4.00 |
| 30- | 45.0075- | 110.3803- | 2- | 12- | | 0-M36126- | 10/24/76- | 9- | - | 1.0- | - | - | 5.7- | 210- | | -2- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 1.70 |
| 30- | 45.0058- | 110.3739- | 2- | 12- | | 0-M36127- | 10/24/76- | 9- | -2- | 1.0- | - | - | 5.7- | 220- | | -2- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 2.00 |
| 30- | 45.1454- | 110.2459- | 2- | 12- | | 0-M36128- | 10/23/76- | 14- | 4- | 1.0- | - | - | 5.7- | 90- | | -2- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 3.00 |
| 30- | 45.0776- | 110.2721- | 2- | 12- | | 0-M36130- | 10/23/76- | 12- | 5- | 2.0- | - | - | 5.7- | 90- | | -3- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 1.80 |
| 30- | 45.0029- | 110.4149- | 2- | 12- | | 0-M36132- | 10/24/76- | 8- | - | 1.0- | - | - | 5.7- | 210- | | -2- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 2.50 |
| 30- | 45.0779- | 110.4217- | 2- | 12- | | 0-M36133- | 10/24/76- | 12- | -1- | | - | - | 5.7- | 100- | | -2- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 5.60 |
| 30- | 45.5592- | 111.8208- | 2- | 15- | | 0-M36134- | 10/20/76- | 9- | 1- | | - | - | - | - | | -2- | 7- | 4- | 1- | -1- | -2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | - | - | 2.00 |
| 30- | 45.5452- | 111.8009- | 2- | 12- | | 0-M36135- | 10/20/76- | 9- | 1- | 1.5- | - | - | 5.5- | 200- | | -2- | 7- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 2- | 2- | -3- | - | - | - | - | 3.60 |
| 30- | 45.5513- | 111.8515- | 2- | 15- | | 0-M36136- | 10/20/76- | 9- | 1- | | -C- | - | - | - | | -2- | 7- | 3- | 7- | -1- | -2- | 1- | 3- | 4- | 2- | -3- | - | - | - | - | - | - | 5.90 |
| 30- | 45.5127- | 111.8205- | 2- | 12- | | 0-M36137- | 10/20/76- | 10- | 2- | 2.0- | C- | - | 5.5- | 200- | | -2- | 7- | 4- | 1- | 3- | 2- | 1- | 2- | 4- | 4- | 2- | 2- | -3- | - | - | - | - | 2.40 |
| 30- | 45.5036- | 111.8635- | 2- | 15- | | 0-M36138- | 10/20/76- | 10- | 1- | | - | - | - | - | | -2- | 7- | 3- | 7- | -1- | -2- | 4- | 2- | 3- | 2- | -3- | - | - | - | - | - | - | 2.70 |
| 30- | 45.5342- | 111.8847- | 2- | 12- | | 0-M36139- | 10/20/76- | 11- | 2- | 1.0- | - | - | 5.2- | 180- | | -2- | 7- | 3- | 1- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | 6.60 |
| 30- | 45.5297- | 111.8860- | 2- | 12- | | 0-M36140- | 10/20/76- | 11- | 2- | 1.0- | - | - | 5.5- | 240- | | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 3- | 2- | 2- | 2- | -3- | - | - | - | - | 2.50 |
| 30- | 45.5090- | 111.9075- | 2- | 15- | | 0-M36141- | 10/20/76- | 11- | 2- | | - | - | - | - | | -2- | 7- | 4- | 6- | -1- | -2- | 3- | 2- | 2- | 2- | -3- | - | - | - | - | - | - | 2.30 |
| 30- | 45.5049- | 111.9096- | 2- | 12- | | 0-M36142- | 10/20/76- | 12- | 4- | 1.0- | - | - | 5.7- | 210- | | -2- | 7- | 3- | 1- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 2.50 |
| 30- | 45.5435- | 111.7717- | 2- | 12- | | 0-M36143- | 10/20/76- | 12- | 4- | 1.5- | - | - | 5.9- | 230- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 2.30 |
| 30- | 45.5530- | 111.7742- | 2- | 12- | | 0-M36144- | 10/20/76- | 13- | 4- | 1.5- | - | - | 5.5- | 210- | | -2- | 7- | 3- | 1- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 3- | -3- | - | - | - | - | 2.70 |
| 30- | 45.6624- | 111.9165- | 2- | 12- | | 0-M36145- | 10/19/76- | 12- | 2- | 2.0- | - | - | 5.7- | 270- | | -2- | 7- | 4- | 6- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 2.60 |
| 30- | 45.8149- | 111.5134- | 2- | 15- | | 0-M36146- | 10/19/76- | 10- | - | | - | - | - | - | | -2- | 1- | 4- | 1- | -1- | -2- | 4- | 4- | 1- | 1- | -3- | - | - | - | - | - | - | 2.70 |
| 30- | 45.8252- | 111.5138- | 2- | 15- | | 0-M36147- | 10/19/76- | 10- | - | | - | - | - | - | | -2- | 1- | 4- | 1- | -1- | -2- | 4- | 4- | 1- | 1- | -3- | - | - | - | - | - | - | 1.80 |
| 30- | 45.8468- | 111.5185- | 2- | 12- | | 0-M36148- | 10/19/76- | 11- | 1- | | - | - | 5.2- | 410- | | -2- | 7- | 4- | 1- | 2- | 2- | 2- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 2.50 |
| 30- | 45.8574- | 111.5251- | 2- | 15- | | 0-M36149- | 10/19/76- | 11- | 1- | | - | - | - | - | | -2- | 4- | 4- | 1- | -1- | -2- | 4- | 4- | 2- | 1- | -3- | - | - | - | - | - | - | 2.50 |
| 30- | 45.7715- | 111.5423- | 2- | 12- | | 0-M36150- | 10/19/76- | 11- | 1- | | - | - | 5.2- | 380- | | -2- | 1- | 4- | 1- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 2.60 |
| 30- | 45.7582- | 111.4869- | 2- | 12- | | 0-M36151- | 10/19/76- | 12- | 2- | 1.0- | - | - | 5.5- | 280- | | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 3- | 3- | 2- | 1- | -3- | - | - | - | - | 1.50 |
| 30- | 45.7550- | 111.4266- | 2- | 12- | | 0-M36152- | 10/19/76- | 12- | 2- | 1.0- | - | - | 5.2- | 310- | | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 1.70 |
| 30- | 45.7526- | 111.3867- | 2- | 15- | | 0-M36153- | 10/19/76- | 13- | 4- | | - | - | - | - | | -2- | 7- | 4- | 1- | -1- | -2- | 4- | 4- | 3- | 1- | -3- | - | - | - | - | - | - | 2.80 |
| 30- | 45.7559- | 111.3583- | 2- | 15- | | 0-M36154- | 10/19/76- | 13- | 4- | | - | - | - | - | | -2- | 7- | 4- | 1- | -1- | -2- | 4- | 4- | 2- | 1- | -3- | - | - | - | - | - | - | 2.30 |
| 30- | 45.7658- | 111.3324- | 2- | 12- | | 0-M36155- | 10/19/76- | 13- | 4- | 1.5- | - | - | 5.5- | 240- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 4- | 2- | 2- | 1- | -3- | - | - | - | - | 12.00 |
| 30- | 45.7826- | 111.3339- | 2- | 12- | | 0-M36156- | 10/19/76- | 14- | 5- | 2.0- | - | - | 5.5- | 310- | | -2- | 7- | 4- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 4.30 |
| 30- | 45.8015- | 111.3414- | 2- | 15- | | 0-M36157- | 10/19/76- | 14- | 4- | | - | - | - | - | | -2- | 7- | 4- | 1- | -1- | -2- | 4- | 2- | 2- | 1- | -3- | - | - | - | - | - | - | 3.30 |
| 30- | 45.7930- | 111.3156- | 2- | 12- | | 0-M36158- | 10/19/76- | 14- | 5- | 2.0- | - | - | 5.7- | 320- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 2- | 2- | 2- | 1- | -3- | - | - | - | - | 2.70 |
| 30- | 45.7448- | 111.3062- | 2- | 15- | | 0-M36159- | 10/19/76- | 15- | 5- | | - | - | - | - | | -2- | 7- | 4- | 1- | -1- | -2- | 4- | 2- | 2- | 1- | -3- | - | - | - | - | - | - | 2.30 |
| 30- | 45.7343- | 111.2717- | 2- | 15- | | 0-M36160- | 10/19/76- | 15- | 5- | | - | - | - | - | | -2- | 7- | 4- | 7- | -1- | -2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | - | - | 2.40 |
| 30- | 45.5791- | 111.3335- | 2- | 12- | | 0-M36161- | 10/19/76- | 16- | 4- | 1.0- | C- | - | 5.5- | 210- | | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 2.80 |

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

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| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | 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) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ag | Bi | Cd | Cu | Nb | Ni | Pb | Sn | W | Be | Li |
| 30-45.1017-110.0656-2-12- | 0-M36109 | -5 | -5 | -5 | 26 | -20 | 62 | 9 | -10 | -15 | 2 | 25 |
| 30-45.1145-110.1815-2-12- | 0-M36110 | -5 | -5 | -5 | 30 | -20 | 78 | 9 | -10 | 16 | 2 | 21 |
| 30-45.1132-110.1816-2-12- | 0-M36111 | -5 | -5 | -5 | 23 | -20 | 76 | 5 | -10 | -15 | 2 | 22 |
| 30-45.1315-110.0719-2-12- | 0-M36112 | -5 | -5 | -5 | 16 | -20 | 80 | 15 | -10 | -15 | 2 | 21 |
| 30-45.1619-110.1141-2-12- | 0-M36113 | 6 | -5 | -5 | 30 | -20 | 68 | 6 | -10 | 23 | 1 | 21 |
| 30-45.1639-110.1007-2-12- | 0-M36114 | -5 | -5 | -5 | 16 | -20 | -15 | 5 | -10 | 18 | 2 | 15 |
| 30-45.0779-110.0781-2-12- | 0-M36115 | -5 | -5 | -5 | 22 | -20 | 66 | 16 | -10 | -15 | 1 | 30 |
| 30-45.0987-110.3984-2-12- | 0-M36116 | -5 | -5 | -5 | 31 | -20 | 56 | 14 | -10 | -15 | 2 | 17 |
| 30-45.1477-110.3808-2-12- | 0-M36117 | -5 | -5 | -5 | 17 | -20 | 57 | -5 | -10 | -15 | 2 | 26 |
| 30-45.1682-110.1535-2-12- | 0-M36118 | -5 | -5 | -5 | 13 | -20 | 117 | 19 | -10 | -15 | -1 | 41 |
| 30-45.0738-110.0923-2-12- | 0-M36119 | -5 | -5 | -5 | 26 | -20 | 64 | 18 | -10 | -15 | 1 | 30 |
| 30-45.1940-110.3631-2-12- | 0-M36120 | -5 | -5 | -5 | 46 | -20 | 135 | -5 | 10 | -15 | -1 | 16 |
| 30-45.0419-110.1842-2-12- | 0-M36121 | -5 | -5 | 8 | 26 | -20 | 113 | 15 | -10 | -15 | -1 | 17 |
| 30-45.2031-110.3633-2-12- | 0-M36122 | -5 | -5 | -5 | 24 | -20 | 112 | -5 | -10 | 28 | 1 | 17 |
| 30-45.1520-110.1285-2-12- | 0-M36123 | -5 | -5 | -5 | 17 | -20 | 78 | 17 | -10 | -15 | 1 | 14 |
| 30-45.2120-110.3571-2-12- | 0-M36124 | -5 | -5 | -5 | 16 | -20 | 60 | 21 | -10 | -15 | 1 | 20 |
| 30-45.0780-110.4249-2-12- | 0-M36125 | -5 | -5 | -5 | 22 | -20 | 46 | 11 | -10 | -15 | 1 | 23 |
| 30-45.0075-110.3803-2-12- | 0-M36126 | -5 | -5 | -5 | 25 | -20 | 66 | 8 | -10 | -15 | 2 | 21 |
| 30-45.0058-110.3739-2-12- | 0-M36127 | -5 | -5 | -5 | 32 | -20 | 58 | -5 | -10 | -15 | 1 | 24 |
| 30-45.1454-110.2459-2-12- | 0-M36128 | -5 | -5 | -5 | 24 | -20 | 30 | 16 | -10 | -15 | 2 | 36 |
| 30-45.0776-110.2721-2-12- | 0-M36130 | -5 | 5 | -5 | 21 | -20 | 67 | 13 | -10 | -15 | 2 | 20 |
| 30-45.0029-110.4149-2-12- | 0-M36132 | -5 | -5 | -5 | 26 | -20 | 60 | 6 | -10 | -15 | 2 | 32 |
| 30-45.0779-110.4217-2-12- | 0-M36133 | 10 | -5 | -5 | 29 | -20 | 89 | 17 | -10 | -15 | -1 | 18 |
| 30-45.5592-111.8208-2-15- | 0-M36134 | -5 | -5 | -5 | 53 | -20 | 46 | 107 | -10 | -15 | 2 | 45 |
| 30-45.5452-111.8009-2-12- | 0-M36135 | -5 | -5 | -5 | 19 | -20 | 23 | 21 | -10 | -15 | 2 | 28 |
| 30-45.5513-111.8515-2-15- | 0-M36136 | -5 | 7 | -5 | 91 | -20 | 126 | -5 | -10 | 15 | -1 | 20 |
| 30-45.5127-111.8205-2-12- | 0-M36137 | -5 | -5 | -5 | 27 | -20 | 38 | 11 | -10 | -15 | 3 | 48 |
| 30-45.5036-111.8635-2-15- | 0-M36138 | -5 | -5 | -5 | 24 | -20 | -15 | 6 | -10 | -15 | 2 | 23 |
| 30-45.5342-111.8847-2-12- | 0-M36139 | -5 | -5 | -5 | 22 | -20 | 21 | 19 | -10 | -15 | 2 | 32 |
| 30-45.5297-111.8860-2-12- | 0-M36140 | -5 | -5 | -5 | 39 | -20 | 32 | 31 | -10 | -15 | 2 | 16 |
| 30-45.5090-111.9075-2-15- | 0-M36141 | -5 | -5 | -5 | 22 | -20 | 23 | 9 | -10 | -15 | 2 | 27 |
| 30-45.5049-111.9096-2-12- | 0-M36142 | -5 | -5 | -5 | 27 | -20 | 21 | 12 | -10 | -15 | 3 | 38 |
| 30-45.5435-111.7717-2-12- | 0-M36143 | -5 | -5 | -5 | 13 | -20 | 15 | 11 | -10 | -15 | 2 | 12 |
| 30-45.5530-111.7742-2-12- | 0-M36144 | -5 | -5 | -5 | 40 | -20 | 29 | 6 | -10 | -15 | 2 | 35 |
| 30-45.6624-111.9165-2-12- | 0-M36145 | -5 | -5 | -5 | 29 | -20 | 37 | 16 | -10 | -15 | 2 | 29 |
| 30-45.8149-111.5134-2-15- | 0-M36146 | -5 | -5 | -5 | 23 | -20 | 16 | 16 | -10 | -15 | 3 | 41 |
| 30-45.8252-111.5138-2-15- | 0-M36147 | -5 | -5 | -5 | 28 | -20 | 31 | -5 | -10 | -15 | 2 | 47 |
| 30-45.8468-111.5185-2-12- | 0-M36148 | -5 | -5 | -5 | 23 | -20 | -15 | 11 | -10 | -15 | 2 | 38 |
| 30-45.8574-111.5251-2-15- | 0-M36149 | -5 | -5 | -5 | 32 | -20 | 31 | 10 | -10 | -15 | 2 | 20 |
| 30-45.7715-111.5423-2-12- | 0-M36150 | -5 | -5 | -5 | 18 | -20 | 35 | 8 | -10 | -15 | 2 | 26 |
| 30-45.7582-111.4869-2-12- | 0-M36151 | -5 | -5 | -5 | 30 | -20 | 19 | -5 | -10 | -15 | 1 | 10 |
| 30-45.7550-111.4266-2-12- | 0-M36152 | -5 | -5 | -5 | 28 | -20 | 17 | 7 | -10 | -15 | 2 | 18 |
| 30-45.7526-111.3867-2-15- | 0-M36153 | -5 | -5 | -5 | 17 | -20 | 22 | 5 | -10 | -15 | 2 | 33 |
| 30-45.7559-111.3583-2-15- | 0-M36154 | -5 | -5 | -5 | 15 | -20 | -15 | -5 | -10 | -15 | 2 | 20 |
| 30-45.7658-111.3324-2-12- | 0-M36155 | -5 | -5 | -5 | 29 | -20 | -15 | 14 | -10 | 19 | 3 | 33 |
| 30-45.7826-111.3339-2-12- | 0-M36156 | -5 | -5 | -5 | 34 | -20 | 55 | 11 | -10 | -15 | 2 | 35 |
| 30-45.8015-111.3414-2-15- | 0-M36157 | -5 | -5 | -5 | 24 | -20 | -15 | 12 | -10 | -15 | 3 | 40 |
| 30-45.7930-111.3156-2-12- | 0-M36158 | -5 | -5 | -5 | 12 | -20 | -15 | -5 | -10 | -15 | 2 | 10 |
| 30-45.7448-111.3062-2-15- | 0-M36159 | -5 | -5 | -5 | 18 | -20 | -15 | 9 | -10 | -15 | 2 | 21 |
| 30-45.7343-111.2717-2-15- | 0-M36160 | -5 | 5 | -5 | 15 | -20 | 16 | 7 | -10 | -15 | 2 | 21 |
| 30-45.5791-111.3335-2-12- | 0-M36161 | -5 | -5 | -5 | 40 | -20 | 32 | 15 | -10 | -15 | 2 | 40 |

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

③

| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | LASL SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS — Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Al | Au | Ba | Ca | Ce | Cl | Co | Cr | Cs | Dy | Eu | Fe | Hf | K | La | Lu |
| 30-45.1017-110.0656-2-12- | 0-M36109 | 65690 | -0.17 | 1101 | 33700 | 107 | -114 | 23.3 | 366 | 3.0 | 4 | 1.8 | 52530 | 10.9 | 13770 | 68 | 0.3 |
| 30-45.1145-110.1815-2-12- | 0-M36110 | 67850 | -0.16 | 1175 | 40590 | 83 | -107 | 29.4 | 379 | -1.9 | 3 | 1.8 | 55970 | 9.3 | 10480 | 56 | 0.3 |
| 30-45.1132-110.1816-2-12- | 0-M36111 | 64800 | -0.16 | 1141 | 37480 | 69 | -97 | 23.6 | 299 | -1.9 | 3 | 1.4 | 44660 | 9.0 | 12930 | 40 | 0.3 |
| 30-45.1315-110.0719-2-12- | 0-M36112 | 69360 | -0.07 | 1245 | 38470 | 94 | -123 | 24.5 | 360 | 1.9 | 3 | 1.7 | 56560 | 10.3 | 12630 | 48 | 0.3 |
| 30-45.1619-110.1141-2-12- | 0-M36113 | 55700 | -0.20 | 856 | 31890 | 307 | -100 | 40.5 | 632 | -2.3 | 7 | 2.2 | 103000 | 29.5 | 11010 | 181 | 0.7 |
| 30-45.1639-110.1007-2-12- | 0-M36114 | 35280 | -0.11 | 689 | 16110 | 73 | -59 | 2.9 | 87 | 2.5 | 4 | 1.3 | 13890 | 20.7 | 14750 | 40 | 0.4 |
| 30-45.0779-110.0781-2-12- | 0-M36115 | 67890 | -0.16 | 1207 | 41650 | 64 | -108 | 25.9 | 308 | -1.8 | 3 | 1.6 | 50130 | 6.4 | 12840 | 45 | 0.5 |
| 30-45.0987-110.3984-2-12- | 0-M36116 | 53190 | -0.18 | 790 | 44360 | 86 | -84 | 20.1 | 251 | 3.9 | 4 | 1.6 | 40610 | 11.1 | 14620 | -18 | 0.4 |
| 30-45.1477-110.3808-2-12- | 0-M36117 | 59200 | -0.20 | 981 | 53800 | 87 | -97 | 31.6 | 361 | 5.1 | 3 | 1.7 | 61250 | 9.3 | 14590 | 65 | 0.3 |
| 30-45.1682-110.1535-2-12- | 0-M36118 | 58180 | -0.19 | 786 | 34080 | 227 | -115 | 37.7 | 628 | -2.3 | 6 | 1.9 | 92930 | 22.0 | 10750 | 131 | 0.5 |
| 30-45.0738-110.0923-2-12- | 0-M36119 | 61980 | -0.18 | 1001 | 35150 | 192 | -108 | 32.3 | 441 | 2.8 | 5 | 2.1 | 72170 | 18.8 | 15440 | 120 | 0.4 |
| 30-45.1940-110.3631-2-12- | 0-M36120 | 48150 | -0.23 | 711 | 33150 | 629 | -101 | 49.8 | 999 | -2.6 | 12 | 3.0 | 143600 | 52.0 | 7544 | 321 | 0.8 |
| 30-45.0419-110.1842-2-12- | 0-M36121 | 52280 | -0.21 | 1009 | 36180 | 473 | -100 | 44.8 | 768 | -2.3 | 10 | 2.6 | 128300 | 42.9 | 8983 | 264 | 0.6 |
| 30-45.2031-110.3633-2-12- | 0-M36122 | 57410 | -0.20 | 829 | 36870 | 341 | -117 | 42.2 | 678 | -2.3 | 7 | 2.3 | 106000 | 28.2 | 10290 | 166 | 0.6 |
| 30-45.1520-110.1285-2-12- | 0-M36123 | 67430 | -0.16 | 1035 | 38950 | 75 | -106 | 27.5 | 328 | -1.9 | 3 | 1.7 | 51870 | 7.4 | 13020 | 48 | 0.4 |
| 30-45.2120-110.3571-2-12- | 0-M36124 | 65660 | -0.19 | 1153 | 37460 | 119 | -103 | 26.0 | 370 | -2.2 | 4 | 1.6 | 53910 | 10.2 | 13590 | 56 | 0.9 |
| 30-45.0780-110.4249-2-12- | 0-M36125 | 55240 | -0.18 | 740 | 36570 | 218 | -93 | 30.5 | 437 | -2.1 | 6 | 1.7 | 76410 | 20.1 | 12360 | 101 | 0.6 |
| 30-45.0075-110.3803-2-12- | 0-M36126 | 61500 | -0.20 | 902 | 49230 | 80 | -112 | 28.9 | 341 | 6.1 | 3 | 2.0 | 58730 | 8.8 | 12660 | 37 | 0.7 |
| 30-45.0058-110.3739-2-12- | 0-M36127 | 59390 | 0.61 | 703 | 52790 | 78 | -103 | 33.5 | 395 | 5.4 | 3 | 1.8 | 65360 | 12.1 | 10110 | 59 | 0.3 |
| 30-45.1454-110.2459-2-12- | 0-M36128 | 57710 | -0.15 | 862 | 26130 | 87 | -88 | 14.5 | 207 | 3.5 | 4 | 1.8 | 33360 | 11.1 | 18110 | 56 | 0.4 |
| 30-45.0776-110.2721-2-12- | 0-M36130 | 77360 | -0.17 | 1547 | 40780 | 67 | -107 | 25.9 | 261 | -2.2 | 3 | 1.7 | 49010 | 3.8 | 12580 | 36 | 0.2 |
| 30-45.0029-110.4149-2-12- | 0-M36132 | 59460 | -0.17 | 1039 | 43210 | 82 | -105 | 22.5 | 265 | 7.0 | 4 | 1.9 | 50860 | 11.0 | 13570 | 52 | 0.4 |
| 30-45.0779-110.4217-2-12- | 0-M36133 | 57100 | -0.18 | 850 | 36440 | 379 | -107 | 43.5 | 647 | -2.2 | 8 | 2.5 | 106500 | 31.8 | 11510 | 231 | 0.6 |
| 30-45.5592-111.8208-2-15- | 0-M36134 | 56680 | -0.19 | 512 | 24800 | 56 | -102 | 20.1 | 102 | -2.4 | 4 | 1.3 | 42910 | 7.8 | 16630 | -20 | 0.4 |
| 30-45.5452-111.8009-2-12- | 0-M36135 | 49160 | -0.14 | 573 | 28980 | 102 | -72 | 7.6 | 63 | 5.3 | 7 | 1.6 | 32010 | 23.7 | 15900 | 64 | 0.6 |
| 30-45.5513-111.8515-2-15- | 0-M36136 | 46850 | 0.35 | -357 | 26930 | 151 | -208 | 48.3 | 499 | -2.7 | 6 | 2.4 | 137100 | 23.5 | -9319 | 93 | 0.9 |
| 30-45.5127-111.8205-2-12- | 0-M36137 | 65130 | -0.13 | 617 | 31130 | 89 | 144 | 19.0 | 121 | 6.2 | 6 | 1.8 | 34700 | 10.2 | 18210 | 48 | 0.6 |
| 30-45.5036-111.8635-2-15- | 0-M36138 | 46010 | -0.14 | 595 | 35640 | 72 | 82 | 8.5 | 67 | 3.9 | 5 | 1.4 | 20700 | 11.8 | 18090 | 39 | 0.4 |
| 30-45.5342-111.8847-2-12- | 0-M36139 | 61840 | -0.15 | 552 | 31180 | 118 | -91 | 11.0 | 87 | 5.0 | 6 | 1.7 | 43070 | 40.5 | 18620 | 57 | 0.8 |
| 30-45.5297-111.8860-2-12- | 0-M36140 | 70600 | -0.12 | 326 | 25790 | 78 | -115 | 10.2 | 67 | 2.8 | 4 | 1.6 | 35500 | 9.5 | 15240 | 39 | 0.5 |
| 30-45.5090-111.9075-2-15- | 0-M36141 | 36040 | -0.10 | 369 | 63250 | 46 | -69 | 5.7 | 45 | 5.3 | 3 | 1.0 | 15630 | 8.0 | 13130 | 35 | 0.3 |
| 30-45.5049-111.9096-2-12- | 0-M36142 | 58890 | -0.15 | 559 | 46130 | 97 | -85 | 13.6 | 108 | 3.3 | 6 | 1.9 | 30580 | 10.3 | 17810 | 40 | 0.6 |
| 30-45.5435-111.7717-2-12- | 0-M36143 | 35790 | -0.11 | 542 | 61490 | 50 | -63 | 4.9 | 46 | 5.1 | 4 | 1.1 | 16210 | 7.7 | 11300 | 35 | 0.3 |
| 30-45.5530-111.7742-2-12- | 0-M36144 | 67890 | -0.15 | 972 | 17650 | 69 | -107 | 13.3 | 154 | 2.6 | 4 | 1.8 | 37170 | 8.7 | 22450 | 38 | 0.3 |
| 30-45.6624-111.9165-2-12- | 0-M36145 | 66110 | -0.13 | 918 | 32790 | 63 | 109 | 19.1 | 157 | 2.9 | 3 | 1.5 | 41730 | 8.7 | 13590 | 50 | 0.3 |
| 30-45.8149-111.5134-2-15- | 0-M36146 | 55840 | -0.14 | 735 | 38150 | 69 | -79 | 8.6 | 60 | 3.3 | 4 | 1.4 | 20830 | 6.9 | 20060 | 32 | 0.4 |
| 30-45.8252-111.5138-2-15- | 0-M36147 | 65780 | -0.16 | 1065 | 39950 | 47 | -94 | 19.2 | 503 | -2.0 | 3 | 1.6 | 49340 | 7.2 | 21000 | 39 | 0.3 |
| 30-45.8468-111.5185-2-12- | 0-M36148 | 61300 | -0.14 | 797 | 24290 | 59 | -107 | 12.3 | 84 | 2.6 | 4 | 1.4 | 37440 | 8.1 | 16150 | 33 | 0.3 |
| 30-45.8574-111.5251-2-15- | 0-M36149 | 62960 | -0.12 | 835 | 16310 | 57 | -84 | 14.5 | 163 | 3.3 | 3 | 1.5 | 35350 | 9.3 | 20430 | 43 | 0.3 |
| 30-45.7715-111.5423-2-12- | 0-M36150 | 57790 | -0.17 | 1069 | 34930 | 62 | -94 | 22.9 | 228 | -2.0 | 4 | 1.7 | 51450 | 9.8 | 14810 | 27 | 0.4 |
| 30-45.7582-111.4869-2-12- | 0-M36151 | 78930 | -0.17 | 1512 | 37500 | 74 | -115 | 30.7 | 134 | 3.2 | 4 | 2.3 | 70320 | 4.4 | 17020 | 37 | 0.3 |
| 30-45.7550-111.4266-2-12- | 0-M36152 | 77280 | -0.17 | 1304 | 38910 | 61 | -123 | 26.5 | 183 | -2.2 | 3 | 1.9 | 66880 | 6.6 | 14600 | 40 | 0.2 |
| 30-45.7526-111.3867-2-15- | 0-M36153 | 46550 | -0.12 | 532 | 35610 | 64 | -80 | 8.6 | 63 | 4.6 | 4 | 1.4 | 21380 | 12.0 | 19640 | 38 | 0.4 |
| 30-45.7559-111.3583-2-15- | 0-M36154 | 35150 | -0.12 | 399 | 60020 | 53 | -66 | 4.9 | 46 | 5.3 | 3 | 1.3 | 14190 | 8.6 | 13380 | 32 | 0.3 |
| 30-45.7658-111.3324-2-12- | 0-M36155 | 77900 | -0.15 | 431 | 25340 | 120 | -134 | 7.4 | 28 | 3.7 | 6 | 2.1 | 35390 | 19.8 | 18360 | 80 | 0.8 |
| 30-45.7826-111.3339-2-12- | 0-M36156 | 55310 | -0.17 | 519 | 36730 | 126 | -107 | 23.2 | 172 | 3.0 | 8 | 2.0 | 54910 | 18.7 | 13650 | 76 | 0.8 |
| 30-45.8015-111.3414-2-15- | 0-M36157 | 61580 | -0.14 | 687 | 51590 | 65 | 120 | 12.4 | 46 | 4.5 | 6 | 1.8 | 32270 | 9.1 | 18200 | 58 | 0.5 |
| 30-45.7930-111.3156-2-12- | 0-M36158 | 26890 | -0.10 | 430 | 62310 | 48 | -50 | 2.9 | 36 | 3.4 | 3 | 1.3 | 9617 | 11.4 | 9420 | 31 | 0.3 |
| 30-45.7448-111.3062-2-15- | 0-M36159 | 35500 | -0.11 | 488 | 58980 | 44 | -63 | 6.0 | 44 | 5.2 | 3 | 1.1 | 15190 | 7.4 | 13800 | 32 | 0.3 |
| 30-45.7343-111.2717-2-15- | 0-M36160 | 37270 | -0.11 | 472 | 61270 | 55 | -75 | 4.5 | 49 | 6.5 | 3 | 1.3 | 16590 | 8.8 | 11740 | 39 | 0.4 |
| 30-45.5791-111.3335-2-12- | 0-M36161 | 58960 | -0.12 | 790 | 58160 | 64 | -91 | 13.6 | 117 | 3.7 | 3 | 1.6 | 27760 | 6.6 | 13790 | 38 | 0.3 |

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



| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | LAB SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | U/Th RATIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mg | Mn | Na | Rb | Sb | Sc | Sm | Sr | Ta | Tb | Th | Ti | V | Yb | Zn | |
| 30-45.1017-110.0656-2-12- | 0-M36109 | 17160 | 732 | 20110 | 50 | -4 | 14.8 | 8.7 | 582 | -1 | -1 | 30.7 | 4644 | 147 | 8.1 | 147 | 0.078 |
| 30-45.1145-110.1815-2-12- | 0-M36110 | 23310 | 805 | 21970 | -36 | -4 | 19.4 | 6.2 | 887 | -1 | -1 | 20.0 | 4195 | 178 | 5.8 | | 0.100 |
| 30-45.1132-110.1816-2-12- | 0-M36111 | 18280 | 726 | 20490 | -34 | -4 | 15.3 | 5.8 | 681 | -1 | -1 | 14.4 | 3728 | 144 | 5.3 | -40 | 0.146 |
| 30-45.1315-110.0719-2-12- | 0-M36112 | 21700 | 797 | 21980 | -32 | -2 | 18.1 | 6.4 | 684 | -1 | -1 | 18.3 | 4467 | 172 | 2.6 | | 0.115 |
| 30-45.1619-110.1141-2-12- | 0-M36113 | 21260 | 1058 | 16470 | -47 | -5 | 19.8 | 23.4 | 585 | -2 | -1 | 104.5 | 8729 | 327 | 13.4 | 82 | 0.049 |
| 30-45.1639-110.1007-2-12- | 0-M36114 | 6064 | 262 | 6376 | 50 | -3 | 4.9 | 4.4 | -191 | -1 | -1 | 10.8 | 2623 | 55 | -1.7 | 51 | 0.324 |
| 30-45.0779-110.0781-2-12- | 0-M36115 | 22860 | 772 | 22560 | -33 | -4 | 18.1 | 5.3 | 889 | -1 | -1 | 13.7 | 3617 | 146 | -2.4 | -41 | 0.131 |
| 30-45.0987-110.3984-2-12- | 0-M36116 | 20180 | 818 | 13420 | -35 | -5 | 20.4 | 5.2 | 606 | -1 | -1 | 9.1 | 4489 | 146 | 4.6 | -42 | 0.275 |
| 30-45.1477-110.3808-2-12- | 0-M36117 | 25770 | 1007 | 17220 | -40 | -5 | 32.0 | 6.5 | 589 | -1 | -1 | 10.1 | 4723 | 192 | 6.0 | -49 | 0.178 |
| 30-45.1682-110.1535-2-12- | 0-M36118 | 23280 | 1016 | 17420 | -43 | -5 | 20.2 | 20.6 | 409 | -2 | -1 | 89.8 | 6527 | 279 | 13.9 | -50 | 0.047 |
| 30-45.0738-110.0923-2-12- | 0-M36119 | 21930 | 964 | 18490 | -40 | -5 | 18.2 | 13.7 | 545 | -2 | -1 | 62.4 | 6081 | 241 | 4.5 | -15 | 0.059 |
| 30-45.1940-110.3631-2-12- | 0-M36120 | 24930 | 1257 | 14270 | -51 | -6 | 21.1 | 48.5 | -340 | -2 | 3 | 221.7 | 12920 | 510 | 22.5 | -57 | 0.037 |
| 30-45.0419-110.1842-2-12- | 0-M36121 | 20410 | 1165 | 16300 | -48 | -5 | 22.2 | 36.2 | 478 | -2 | 3 | 172.2 | 10100 | 383 | 14.6 | -53 | 0.039 |
| 30-45.2031-110.3633-2-12- | 0-M36122 | 25900 | 1070 | 17510 | -47 | -5 | 22.7 | 25.3 | -373 | -2 | 2 | 114.3 | 8492 | 318 | 14.6 | 65 | 0.042 |
| 30-45.1520-110.1285-2-12- | 0-M36123 | 20640 | 789 | 22120 | -34 | -4 | 18.3 | 6.2 | 675 | -1 | -1 | 16.4 | 4143 | 154 | 4.4 | 99 | 0.116 |
| 30-45.2120-110.3571-2-12- | 0-M36124 | 22460 | 809 | 21290 | -38 | -5 | 17.9 | 8.6 | 669 | -1 | -1 | 27.7 | 4300 | 171 | -2.8 | -46 | 0.079 |
| 30-45.0780-110.4249-2-12- | 0-M36125 | 18410 | 990 | 15350 | -42 | -5 | 17.7 | 15.3 | 524 | -1 | 2 | 67.2 | 6234 | 232 | 11.2 | -47 | 0.060 |
| 30-45.0075-110.3803-2-12- | 0-M36126 | 21880 | 965 | 18080 | -39 | -5 | 30.0 | 5.4 | 767 | -1 | -1 | 8.9 | 3944 | 171 | -3.0 | 78 | 0.191 |
| 30-45.0058-110.3739-2-12- | 0-M36127 | 24880 | 1047 | 17490 | -37 | -4 | 30.8 | 6.6 | 604 | -1 | -1 | 10.5 | 5702 | 229 | -2.7 | -46 | 0.190 |
| 30-45.1454-110.2459-2-12- | 0-M36128 | 12840 | 694 | 14710 | -33 | -4 | 11.6 | 6.4 | -271 | -1 | -1 | 12.1 | 3768 | 107 | 3.8 | -78 | 0.248 |
| 30-45.0776-110.2721-2-12- | 0-M36130 | 18190 | 819 | 21140 | -39 | -4 | 18.8 | 4.7 | 763 | -2 | -1 | 6.2 | 4155 | 138 | -3.0 | -49 | 0.290 |
| 30-45.0029-110.4149-2-12- | 0-M36132 | 18710 | 855 | 16680 | -35 | -4 | 22.6 | 7.3 | 490 | -1 | -1 | 11.6 | 3970 | 148 | 4.9 | -46 | 0.216 |
| 30-45.0779-110.4217-2-12- | 0-M36133 | 23420 | 1083 | 17550 | -44 | -5 | 20.9 | 27.4 | 740 | -2 | 3 | 139.5 | 7796 | 342 | 9.3 | 113 | 0.040 |
| 30-45.5592-111.8208-2-15- | 0-M36134 | 11290 | 1200 | 13280 | 118 | -5 | 16.3 | 3.0 | -363 | -1 | -1 | 7.4 | 3596 | 116 | 4.4 | -57 | 0.270 |
| 30-45.5452-111.8009-2-12- | 0-M36135 | 7945 | 839 | 6893 | 78 | -3 | 8.0 | 9.6 | -276 | 2 | -1 | 20.4 | 4893 | 68 | 8.0 | -98 | 0.176 |
| 30-45.5513-111.8515-2-15- | 0-M36136 | 18360 | 3476 | 9786 | -50 | -6 | 34.7 | 12.7 | -704 | -2 | -2 | 25.9 | 6423 | 195 | 9.6 | -60 | 0.228 |
| 30-45.5127-111.8205-2-12- | 0-M36137 | 12390 | 786 | 15180 | 90 | -3 | 12.6 | 6.8 | -280 | -1 | -1 | 12.3 | 4002 | 92 | 5.0 | 61 | 0.195 |
| 30-45.5036-111.8635-2-15- | 0-M36138 | 9237 | 726 | 8407 | 49 | -3 | 7.0 | 6.2 | -261 | -1 | -1 | 11.6 | 2933 | 52 | 3.4 | 63 | 0.233 |
| 30-45.5342-111.8847-2-12- | 0-M36139 | 10730 | 829 | 16490 | 82 | -4 | 15.9 | 8.5 | -275 | -1 | -1 | 27.0 | 5192 | 133 | 9.7 | -39 | 0.244 |
| 30-45.5297-111.8860-2-12- | 0-M36140 | 5842 | 668 | 24460 | 103 | -3 | 9.5 | 6.6 | -316 | -1 | -1 | 17.0 | 2622 | 82 | 4.7 | -62 | 0.147 |
| 30-45.5090-111.9075-2-15- | 0-M36141 | 6372 | 681 | 6402 | 58 | -3 | 5.2 | 4.4 | -247 | -1 | -1 | 8.6 | 2564 | 41 | 2.5 | 97 | 0.267 |
| 30-45.5049-111.9096-2-12- | 0-M36142 | 10850 | 689 | 14580 | 78 | -4 | 10.9 | 10.8 | -261 | -1 | -1 | 13.7 | 4223 | 82 | 5.9 | 76 | 0.182 |
| 30-45.5435-111.7717-2-12- | 0-M36143 | 7892 | 677 | 5736 | 49 | -3 | 5.3 | 3.5 | -236 | -1 | -1 | 8.0 | 2634 | 43 | 2.5 | 55 | 0.288 |
| 30-45.5530-111.7742-2-12- | 0-M36144 | 7340 | 575 | 19170 | -31 | -4 | 11.7 | 5.4 | -312 | -1 | -1 | 10.1 | 4881 | 93 | 3.9 | 107 | 0.267 |
| 30-45.6624-111.9165-2-12- | 0-M36145 | 11310 | 778 | 15990 | 44 | -3 | 11.4 | 5.0 | -282 | -1 | -1 | 9.0 | 3742 | 122 | 4.5 | -103 | 0.289 |
| 30-45.8149-111.5134-2-15- | 0-M36146 | 10300 | 469 | 13060 | 75 | -3 | 7.4 | 5.5 | -233 | -1 | -1 | 11.7 | 2643 | 66 | 3.1 | -52 | 0.231 |
| 30-45.8252-111.5138-2-15- | 0-M36147 | 16150 | 895 | 16610 | -36 | -4 | 19.3 | 4.0 | 801 | -1 | -1 | 6.5 | 4257 | 164 | 3.5 | -43 | 0.277 |
| 30-45.8468-111.5185-2-12- | 0-M36148 | 9727 | 878 | 13930 | 48 | -4 | 9.3 | 5.0 | 530 | 1 | -1 | 8.6 | 3502 | 93 | -2.3 | 119 | 0.291 |
| 30-45.8574-111.5251-2-15- | 0-M36149 | 12010 | 562 | 14840 | 60 | -3 | 10.3 | 4.5 | 402 | -1 | -1 | 7.9 | 3217 | 100 | 2.9 | 93 | 0.316 |
| 30-45.7715-111.5423-2-12- | 0-M36150 | 15140 | 1007 | 14620 | -40 | -4 | 13.4 | 5.4 | -313 | -1 | -1 | 8.2 | 5818 | 174 | 3.7 | 60 | 0.317 |
| 30-45.7582-111.4869-2-12- | 0-M36151 | 14190 | 1122 | 20200 | -42 | -4 | 16.3 | 4.5 | 577 | -2 | -1 | 7.1 | 6810 | 183 | -3.0 | -162 | 0.211 |
| 30-45.7550-111.4266-2-12- | 0-M36152 | 16220 | 875 | 19930 | -41 | -4 | 16.5 | 4.7 | 832 | -1 | -1 | 7.3 | 6112 | 203 | -3.2 | 154 | 0.233 |
| 30-45.7526-111.3867-2-15- | 0-M36153 | 8961 | 757 | 8783 | 62 | -3 | 7.2 | 6.1 | -272 | -1 | -1 | 11.4 | 2953 | 63 | 4.2 | 94 | 0.246 |
| 30-45.7559-111.3583-2-15- | 0-M36154 | 7307 | 673 | 6160 | -26 | -3 | 5.0 | 4.2 | -245 | -1 | -1 | 8.3 | 2071 | 41 | 4.0 | 50 | 0.277 |
| 30-45.7658-111.3324-2-12- | 0-M36155 | 7717 | 1155 | 26340 | 73 | -4 | 9.8 | 13.2 | -387 | 2 | -1 | 32.9 | 3097 | 59 | 7.1 | -45 | 0.365 |
| 30-45.7826-111.3339-2-12- | 0-M36156 | 14550 | 1324 | 11390 | 48 | -4 | 17.5 | 9.8 | -391 | -1 | -1 | 21.7 | 4908 | 104 | 8.2 | -45 | 0.198 |
| 30-45.8015-111.3414-2-15- | 0-M36157 | 7795 | 530 | 10790 | 90 | -4 | 10.4 | 6.8 | -250 | -1 | -1 | 13.0 | 3594 | 79 | 5.7 | 127 | 0.254 |
| 30-45.7930-111.3156-2-12- | 0-M36158 | 7480 | 557 | 2885 | 34 | -2 | 3.4 | 5.6 | -201 | -1 | -1 | 8.4 | 1620 | 37 | 2.5 | -19 | 0.321 |
| 30-45.7448-111.3062-2-15- | 0-M36159 | 6771 | 677 | 5727 | 40 | -3 | 5.3 | 4.0 | -238 | -1 | -1 | 8.0 | 2073 | 44 | 3.1 | -54 | 0.288 |
| 30-45.7343-111.2717-2-15- | 0-M36160 | 6793 | 682 | 6176 | 52 | -3 | 5.6 | 4.6 | -280 | -1 | -1 | 7.7 | 2157 | 39 | 2.5 | -35 | 0.312 |
| 30-45.5791-111.3335-2-12- | 0-M36161 | 16070 | 756 | 13730 | 49 | -3 | 9.0 | 5.8 | -279 | 2 | -1 | 11.6 | 3377 | 71 | -2.6 | 204 | 0.241 |

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

①

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER AND FIELD DATA | | | | | | | | | | | | | | | | | | | | | | | | | U CONCENTRATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | TIME SAMPLED | | | | | | | | | | | | | | | | | | | | | | | | |
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | DATE | HOUR | AIR TEMPERATURE | WATER TEMPERATURE | COMMENTS | SPECIAL MEASUREMENTS | pH | CONDUCTIVITY (µmho/cm) | SCINTILLOMETER (eU, ppm) | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm |
| 30- | 45.5905- | 111.3805- | 2- | 12- | | 0-M36162- | 10/19/76- | 16- | 3- | 1.0- | - | - | 5.5- | 190- | | -2- | 7-4- | 1-2- | 2-1- | 2-2- | 3-3- | 1- | -3- | - | - | - | - | 2.80 |
| 30- | 45.5929- | 111.3873- | 2- | 12- | | 0-M36163- | 10/19/76- | 17- | 3- | 1.0- | - | - | 5.5- | 180- | | -2- | 7-4- | 7-3- | 2-1- | 2-3- | 3-3- | 1- | -3- | - | - | - | - | 2.40 |
| 30- | 45.5988- | 111.3904- | 2- | 12- | | 0-M36164- | 10/19/76- | 17- | 3- | 0.5- | - | - | 5.5- | 180- | | -2- | 7-3- | 7-3- | 2-1- | 2-1- | 2-3- | 1- | -3- | - | - | - | - | 3.50 |
| 30- | 45.7603- | 111.8782- | 2- | 12- | | 0-M36165- | 10/20/76- | 13- | 5- | 2.5- | - | - | 5.2- | 450- | | -2- | 7-5- | 6-2- | 2-2- | 2-1- | 4-4- | 2-3- | -3- | - | - | - | - | 5.10 |
| 30- | 45.7843- | 111.8920- | 2- | 15- | | 0-M36166- | 10/20/76- | 14- | 5- | - | - | - | - | - | | -2- | 7-4- | 1- | -1- | -2- | 4-4- | 2-3- | -3- | - | - | - | - | 2.30 |
| 30- | 45.8038- | 111.9289- | 2- | 12- | | 0-M36167- | 10/20/76- | 14- | 5- | 2.0- | - | - | 5.5- | 310- | | -2- | 7-4- | 1-3- | 2-1- | 2-2- | 3-2- | 3- | -3- | - | - | - | - | 2.90 |
| 30- | 45.8359- | 111.9738- | 2- | 15- | | 0-M36168- | 10/20/76- | 15- | 4- | - | - | - | - | - | | -2- | 7-4- | 1- | -1- | -2- | 4-3- | 3-3- | -3- | - | - | - | - | 2.80 |
| 30- | 45.8645- | 111.8306- | 2- | 15- | | 0-M36169- | 10/20/76- | 17- | 4- | - | - | - | - | - | | -2- | 7-4- | 1- | -1- | -2- | 3-3- | 3-3- | -3- | - | - | - | - | 5.10 |
| 30- | 45.8709- | 111.8158- | 2- | 15- | | 0-M36170- | 09/20/76- | 17- | 4- | - | - | - | - | - | | -2- | 7-4- | 1- | -1- | -2- | 2-3- | 3-3- | -3- | - | - | - | - | 2.80 |
| 30- | 45.4807- | 111.5207- | 2- | 12- | | 0-M36171- | 10/20/76- | 9- | 1- | - | - | - | 5.2- | 185- | | -2- | 7-4- | 1-3- | 2-1- | 2-1- | 2-3- | 3- | -1- | - | - | - | - | 20.40 |
| 30- | 45.4718- | 111.5302- | 2- | 12- | | 0-M36172- | 10/20/76- | 10- | 1- | 1.0- | - | - | 5.4- | 195- | | -2- | 7-3- | 1-3- | 2-1- | 2-1- | 2-3- | 3- | -1- | - | - | - | - | 2.90 |
| 30- | 45.4720- | 111.5332- | 2- | 12- | | 0-M36173- | 10/20/76- | 10- | 1- | 1.0- | C- | - | 5.4- | 190- | | -2- | 7-4- | 1-3- | 2-1- | 2-1- | 2-3- | 3- | -1- | - | - | - | - | 2.80 |
| 30- | 45.4682- | 111.5582- | 2- | 12- | | 0-M36174- | 10/20/76- | 11- | 3- | 1.0- | - | - | 5.4- | 200- | | -2- | 7-4- | 1-3- | 2-1- | 2-1- | 2-3- | 3- | -1- | - | - | - | - | 4.10 |
| 30- | 45.3054- | 111.6221- | 2- | 12- | | 0-M36175- | 10/20/76- | 13- | 4- | 0.5- | - | - | 5.4- | 440- | | -2- | 7-5- | 6-2- | 2-1- | 2-4- | 3-2- | 3- | -3- | - | - | - | - | 5.20 |
| 30- | 45.2970- | 111.6307- | 2- | 12- | | 0-M36176- | 10/20/76- | 13- | 5- | 1.0- | - | - | 5.4- | 340- | | -2- | 7-5- | 6-2- | 2-1- | 2-4- | 3-2- | 3- | -3- | - | - | - | - | 2.60 |
| 30- | 45.3493- | 111.8282- | 2- | 12- | | 0-M36177- | 10/20/76- | 14- | 5- | 1.0- | - | - | 5.4- | 190- | | -2- | 7-3- | 7-3- | 2-1- | 2-3- | 3-3- | 3- | -3- | - | - | - | - | 4.40 |
| 30- | 45.3479- | 111.8282- | 2- | 12- | | 0-M36178- | 10/20/76- | 14- | 5- | 1.0- | - | - | 5.4- | 210- | | -2- | 7-3- | 7-2- | 2-1- | 2-3- | 3-3- | 3- | -3- | - | - | - | - | 9.90 |
| 30- | 45.3469- | 111.8120- | 2- | 12- | | 0-M36179- | 10/20/76- | 15- | 4- | 2.0- | - | - | 5.5- | 220- | | -2- | 7-3- | 7-2- | 2-1- | 2-3- | 3-3- | 3- | -3- | - | - | - | - | 30.20 |
| 30- | 45.3145- | 111.8194- | 2- | 12- | | 0-M36180- | 10/20/76- | 15- | 5- | 2.0- | - | - | 5.5- | 220- | | -2- | 7-4- | 1-2- | 2-1- | 2-3- | 3-3- | 3- | -3- | - | - | - | - | 4.30 |
| 30- | 45.3282- | 111.8400- | 2- | 15- | | 0-M36181- | 10/20/76- | 16- | 5- | - | - | - | - | - | | -2- | 7-3- | 1- | -1- | -1- | 3-2- | 3-3- | -3- | - | - | - | - | 3.60 |
| 30- | 45.2791- | 111.9038- | 2- | 12- | | 0-M36182- | 10/20/76- | 16- | 4- | 1.0- | - | - | 5.7- | 220- | | -2- | 7-4- | 1-2- | 2-1- | 2-3- | 3-3- | 3- | -3- | - | - | - | - | 3.20 |
| 30- | 45.3336- | 111.4891- | 2- | 12- | | 0-M36183- | 10/20/76- | 8- | 1- | 1.0- | - | - | 5.5- | 190- | | -1- | 6-1- | 6-1- | 3-1- | 2-2- | 3-3- | 1- | -1- | - | - | - | - | 4.20 |
| 30- | 45.3210- | 111.4424- | 2- | 12- | | 0-M36184- | 10/20/76- | 9- | 2- | 1.0- | - | - | 5.5- | 190- | | -1- | 6-2- | 6-3- | 3-1- | 1-1- | 3-3- | 1- | -1- | - | - | - | - | 4.60 |
| 30- | 45.3261- | 111.4353- | 2- | 12- | | 0-M36185- | 10/20/76- | 10- | 3- | 2.0- | - | - | 5.5- | 200- | | -1- | 6-2- | 6-3- | 3-1- | 2-1- | 3-4- | 1- | -1- | - | - | - | - | 6.20 |
| 30- | 45.0274- | 111.0401- | 2- | 12- | | 0-M36186- | 10/18/76- | 10- | 4- | 2.0- | - | - | 5.5- | 65- | | -3- | 7-1- | 6-4- | 3-1- | 2-1- | 3-4- | 1- | -1- | - | - | - | - | 2.40 |
| 30- | 45.3489- | 111.4716- | 2- | 12- | | 0-M36187- | 10/20/76- | 12- | 1- | 1.0- | - | - | 5.5- | 190- | | -1- | 6-2- | 6-3- | 3-1- | 2-1- | 3-3- | 1- | -1- | - | - | - | - | 4.30 |
| 30- | 45.2639- | 111.4877- | 2- | 12- | | 0-M36188- | 10/20/76- | 17- | 3- | 1.0- | - | - | 5.5- | 180- | | -1- | 6-1- | 6-3- | 3-1- | 2-1- | 3-3- | 1- | -1- | - | - | - | - | 4.20 |
| 30- | 45.3071- | 111.4695- | 2- | 12- | | 0-M36189- | 10/20/76- | 15- | 7- | 1.0- | C- | - | 5.7- | 180- | | -1- | 6-1- | 6-3- | 3-1- | 2-1- | 3-3- | 1- | -1- | - | - | - | - | 4.00 |
| 30- | 45.3341- | 111.4786- | 2- | 12- | | 0-M36190- | 10/20/76- | 8- | 1- | 1.0- | - | - | 5.5- | 190- | | -1- | 6-1- | 6-1- | 3-1- | 2-2- | 3-3- | 1- | -1- | - | - | - | - | 4.20 |
| 30- | 45.0282- | 111.0474- | 2- | 12- | | 0-M36191- | 10/18/76- | 10- | 4- | 2.0- | - | - | 5.5- | 65- | | -3- | 7-1- | 6-4- | 3-1- | 2-1- | 3-4- | 1- | -1- | - | - | - | - | 1.80 |
| 30- | 45.0290- | 111.0397- | 2- | 12- | | 0-M36192- | 10/18/76- | 10- | 4- | 2.0- | - | - | 5.5- | 65- | | -3- | 7-1- | 6-4- | 3-1- | 2-1- | 3-4- | 1- | -1- | - | - | - | - | 2.10 |
| 30- | 45.0418- | 110.9561- | 2- | 12- | | 0-M36193- | 10/18/76- | 16- | 4- | 1.0- | - | - | 5.5- | 60- | | -3- | 1-2- | 6-4- | 3-1- | 2-1- | 3-3- | 1- | -1- | - | - | - | - | 1.70 |
| 30- | 45.2826- | 111.4927- | 2- | 12- | | 0-M36196- | 10/20/76- | 16- | 4- | 1.0- | - | - | 5.5- | 190- | | -1- | 6-1- | 6-3- | 3-1- | 2-1- | 3-3- | 1- | -1- | - | - | - | - | 4.00 |
| 30- | 45.3569- | 111.4912- | 2- | 12- | | 0-M36197- | 10/20/76- | 13- | 5- | 1.0- | C- | - | 5.5- | 200- | | -1- | 6-1- | 6-2- | 3-1- | 2-1- | 3-3- | 1- | -1- | - | - | - | - | 4.30 |
| 30- | 45.0677- | 111.0186- | 2- | 12- | | 0-M36198- | 10/18/76- | 11- | 6- | 1.0- | - | - | 5.7- | 60- | | -3- | 7-2- | 6-3- | 3-1- | 2-1- | 3-3- | 1- | -1- | - | - | - | - | 2.30 |
| 30- | 45.0705- | 111.0075- | 2- | 12- | | 0-M36199- | 10/18/76- | 12- | 9- | 2.0- | - | - | 5.5- | 65- | | -3- | 7-1- | 6-3- | 2-1- | 2-3- | 3-4- | 1- | -1- | - | - | - | - | 2.90 |
| 30- | 45.0717- | 111.0079- | 2- | 12- | | 0-M36200- | 10/18/76- | 12- | 9- | 2.0- | - | - | 5.5- | 65- | | -3- | 7-1- | 6-3- | 2-1- | 2-1- | 3-3- | 1- | -1- | - | - | - | - | 1.50 |
| 30- | 45.0270- | 110.9764- | 2- | 12- | | 0-M36201- | 10/18/76- | 15- | 6- | 3.0- | - | - | 5.7- | 70- | | -3- | 7-1- | 6-4- | 3-1- | 2-1- | 3-4- | 1- | -1- | - | - | - | - | 2.00 |
| 30- | 45.3285- | 111.4596- | 2- | 12- | | 0-M36202- | 10/20/76- | 9- | 1- | 1.0- | - | - | 5.6- | 195- | | -1- | 6-2- | 6-4- | 4-1- | 1-1- | 3-4- | 1- | -1- | - | - | - | - | 3.70 |
| 30- | 45.0281- | 111.0072- | 2- | 12- | | 0-M36203- | 10/18/76- | 14- | 11- | 1.0- | - | - | 5.5- | 65- | | -3- | 7-2- | 6-4- | 3-1- | 2-1- | 3-4- | 1- | -1- | - | - | - | - | 2.10 |
| 30- | 45.0514- | 111.0270- | 2- | 12- | | 0-M36204- | 10/18/76- | 11- | 4- | 1.0- | - | - | 5.7- | 55- | | -3- | 7-1- | 6-3- | 3-1- | 2-1- | 3-3- | 1- | -1- | - | - | - | - | 3.90 |
| 30- | 45.0259- | 110.9765- | 2- | 12- | | 0-M36205- | 10/18/76- | 15- | 7- | 3.0- | - | - | 5.7- | 70- | | -3- | 7-1- | 6-4- | 3-1- | 2-1- | 3-4- | 1- | -1- | - | - | - | - | 1.70 |
| 30- | 45.0294- | 111.0074- | 2- | 12- | | 0-M36206- | 10/18/76- | 14- | 11- | 1.0- | - | - | 5.5- | 70- | | -3- | 7-2- | 6-3- | 3-1- | 2-1- | 3-4- | 1- | -1- | - | - | - | - | 2.10 |
| 30- | 45.0398- | 110.9556- | 2- | 12- | | 0-M36207- | 10/18/76- | 16- | 4- | 1.0- | - | - | 5.5- | 60- | | -3- | 1-2- | 6-4- | 3-1- | 2-1- | 2-3- | 1- | -1- | - | - | - | - | 1.80 |
| 30- | 45.1760- | 110.3991- | 2- | 12- | | 0-M36208- | 10/24/76- | 15- | 4- | 2.0- | - | - | 5.7- | 320- | | -2- | 6-1- | 6-3- | 2-1- | 2-1- | 4-4- | 3- | -1- | - | - | - | - | 3.60 |
| 30- | 45.1735- | 110.3989- | 2- | 12- | | 0-M36209- | 10/24/76- | 14- | 4- | 2.0- | - | - | 5.5- | 200- | | -2- | 6-1- | 6-3- | 3-1- | 2-1- | 3-4- | 3- | -1- | - | - | - | - | 3.80 |
| 30- | 45.0241- | 110.4403- | 2- | 12- | | 0-M36210- | 10/24/76- | 15- | 3- | 1.0- | - | - | 5.7- | 210- | | -2- | 6-4- | 6-3- | 3-1- | 2-1- | 3-4- | 3- | -1- | - | - | - | - | 1.80 |
| 30- | 45.0554- | 110.4397- | 2- | 12- | | 0-M36211- | 10/24/76- | 17- | 5- | 1.0- | - | - | 5.7- | 200- | | -2- | 6-4- | 6-3- | 3-1- | 2-1- | 4-3- | 3- | -1- | - | - | - | - | 3.00 |
| 30- | 45.1684- | 110.4624- | 2- | 12- | | 0-M36212- | 10/24/76- | 16- | 1- | 1.0- | - | - | 5.6- | 220- | | -2- | 7-4- | 6-3- | 3-1- | 2-1- | 4-4- | 2- | -1- | - | - | - | - | 3.60 |
| 30- | 45.0547- | 110.4562- | 2- | 12- | | 0-M36213- | 10/24/76- | 18- | 8- | 2.0- | - | - | 5.7- | 200- | | -2- | 6-4- | 6-3- | 3-1- | 2-1- | 4-3- | 3- | -1- | - | - | - | - | 3.20 |
| 30- | 45.0987- | 110.3855- | 2- | 12- | | 0-M36214- | 10/24/76- | 15- | 3- | 1.0- | - | - | 5.7- | 210- | | -2- | 6-1- | 6-3- | 3-1- | 2-1- | 4-4- | 3- | -1- | - | - | - | - | 1.80 |

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

②

| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | 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) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ag | Bi | Cd | Cu | Nb | Ni | Pb | Sn | W | Be | Li |
| 30-45.5905-111.3805-2-12- | 0-M36162 | -5 | -5 | -5 | 26 | -20 | -15 | 18 | -10 | -15 | 2 | 36 |
| 30-45.5929-111.3873-2-12- | 0-M36163 | -5 | -5 | -5 | 10 | -20 | -15 | 7 | -10 | -15 | 2 | 23 |
| 30-45.5988-111.3904-2-12- | 0-M36164 | -5 | -5 | -5 | -10 | -20 | -15 | 14 | -10 | -15 | 2 | 17 |
| 30-45.7603-111.8782-2-12- | 0-M36165 | -5 | -5 | -5 | 12 | -20 | -15 | 16 | -10 | -15 | 4 | 48 |
| 30-45.7843-111.8920-2-15- | 0-M36166 | -5 | -5 | -5 | 19 | -20 | -15 | 5 | -10 | -15 | 2 | 27 |
| 30-45.8038-111.9289-2-12- | 0-M36167 | -5 | -5 | -5 | 18 | -20 | 15 | 11 | -10 | -15 | 2 | 28 |
| 30-45.8359-111.9738-2-15- | 0-M36168 | -5 | -5 | -5 | 21 | -20 | -15 | 12 | -10 | -15 | 2 | 31 |
| 30-45.8645-111.8306-2-15- | 0-M36169 | -5 | -5 | -5 | 17 | -20 | 47 | 11 | -10 | -15 | 4 | 42 |
| 30-45.8709-111.8158-2-15- | 0-M36170 | -5 | -5 | -5 | 31 | -20 | 15 | 9 | -10 | -15 | 2 | 73 |
| 30-45.4807-111.5207-2-12- | 0-M36171 | 5 | -5 | -5 | 31 | 21 | 31 | 10 | -10 | 27 | 1 | 39 |
| 30-45.4718-111.5302-2-12- | 0-M36172 | -5 | -5 | -5 | 19 | -20 | 15 | 14 | -10 | -15 | 2 | 41 |
| 30-45.4720-111.5332-2-12- | 0-M36173 | -5 | -5 | -5 | 38 | -20 | -15 | 7 | -10 | -15 | 2 | 38 |
| 30-45.4682-111.5582-2-12- | 0-M36174 | -5 | -5 | -5 | 33 | -20 | 43 | 17 | -10 | -15 | 3 | 40 |
| 30-45.3054-111.6221-2-12- | 0-M36175 | -5 | 5 | -5 | 21 | -20 | 22 | 26 | -10 | -15 | 2 | 54 |
| 30-45.2970-111.6307-2-12- | 0-M36176 | -5 | -5 | -5 | 27 | -20 | 18 | 6 | -10 | -15 | 2 | 68 |
| 30-45.3493-111.8282-2-12- | 0-M36177 | -5 | -5 | -5 | 36 | -20 | 23 | 9 | -10 | -15 | 1 | 37 |
| 30-45.3479-111.8282-2-12- | 0-M36178 | -5 | -5 | -5 | 36 | -20 | 38 | 6 | -10 | -15 | 1 | 37 |
| 30-45.3469-111.8120-2-12- | 0-M36179 | -5 | 6 | -5 | 132 | -20 | -15 | 39 | -10 | -15 | 2 | 53 |
| 30-45.3145-111.8194-2-12- | 0-M36180 | -5 | -5 | -5 | 42 | -20 | 22 | 16 | -10 | -15 | 2 | 43 |
| 30-45.3282-111.8400-2-15- | 0-M36181 | -5 | -5 | -5 | 26 | -20 | 22 | 8 | -10 | -15 | 2 | 52 |
| 30-45.2791-111.9038-2-12- | 0-M36182 | -5 | -5 | -5 | 25 | -20 | 20 | 6 | -10 | -15 | 2 | 35 |
| 30-45.3336-111.4891-2-12- | 0-M36183 | -5 | -5 | -5 | 27 | -20 | 32 | 10 | -10 | -15 | 2 | 40 |
| 30-45.3210-111.4424-2-12- | 0-M36184 | -5 | -5 | -5 | 15 | -20 | 17 | 14 | -10 | -15 | 2 | 37 |
| 30-45.3261-111.4353-2-12- | 0-M36185 | -5 | -5 | -5 | 14 | -20 | 51 | 8 | -10 | -15 | 1 | 28 |
| 30-45.0274-111.0401-2-12- | 0-M36186 | -5 | -5 | -5 | 25 | -20 | 57 | 9 | -10 | -15 | 2 | 26 |
| 30-45.3489-111.4716-2-12- | 0-M36187 | -5 | 6 | -5 | 18 | -20 | 17 | 9 | -10 | -15 | 2 | 23 |
| 30-45.2639-111.4877-2-12- | 0-M36188 | -5 | -5 | -5 | -10 | -20 | 16 | 11 | -10 | -15 | 3 | 44 |
| 30-45.3071-111.4695-2-12- | 0-M36189 | -5 | -5 | -5 | 15 | -20 | 16 | 10 | -10 | -15 | 3 | 48 |
| 30-45.3341-111.4786-2-12- | 0-M36190 | -5 | -5 | -5 | 24 | -20 | 18 | 5 | -10 | -15 | 3 | 38 |
| 30-45.0282-111.0474-2-12- | 0-M36191 | -5 | -5 | -5 | 31 | -20 | 59 | 14 | -10 | -15 | 2 | 37 |
| 30-45.0290-111.0397-2-12- | 0-M36192 | -5 | -5 | -5 | 35 | -20 | 40 | 7 | -10 | -15 | 2 | 22 |
| 30-45.0418-110.9561-2-12- | 0-M36193 | -5 | -5 | -5 | 38 | -20 | 35 | 18 | -10 | -15 | 3 | 32 |
| 30-45.2826-111.4927-2-12- | 0-M36196 | -5 | -5 | -5 | 12 | -20 | 24 | 7 | -10 | -15 | 3 | 43 |
| 30-45.3569-111.4912-2-12- | 0-M36197 | -5 | -5 | -5 | 13 | -20 | -15 | 19 | -10 | -15 | 4 | 52 |
| 30-45.0677-111.0186-2-12- | 0-M36198 | -5 | -5 | -5 | 23 | -20 | 21 | 7 | -10 | 20 | 3 | 37 |
| 30-45.0705-111.0075-2-12- | 0-M36199 | -5 | -5 | -5 | 27 | -20 | 35 | 16 | -10 | -15 | 3 | 44 |
| 30-45.0717-111.0079-2-12- | 0-M36200 | -5 | -5 | -5 | 27 | -20 | 66 | 11 | -10 | -15 | 2 | 45 |
| 30-45.0270-110.9764-2-12- | 0-M36201 | -5 | -5 | -5 | 24 | -20 | 58 | 11 | -10 | -15 | 2 | 24 |
| 30-45.3285-111.4596-2-12- | 0-M36202 | -5 | -5 | -5 | 24 | -20 | -15 | 13 | -10 | -15 | 2 | 39 |
| 30-45.0281-111.0072-2-12- | 0-M36203 | -5 | -5 | -5 | 36 | -20 | 48 | 10 | -10 | -15 | 3 | 28 |
| 30-45.0514-111.0270-2-12- | 0-M36204 | -5 | -5 | -5 | 24 | -20 | 23 | 16 | -10 | -15 | 4 | 30 |
| 30-45.0259-110.9765-2-12- | 0-M36205 | -5 | -5 | -5 | 35 | -20 | 51 | 10 | -10 | -15 | 2 | 21 |
| 30-45.0294-111.0074-2-12- | 0-M36206 | -5 | -5 | -5 | 27 | -20 | 27 | 17 | -10 | -15 | 2 | 42 |
| 30-45.0398-110.9556-2-12- | 0-M36207 | -5 | -5 | -5 | 24 | -20 | 55 | 9 | -10 | -15 | 2 | 25 |
| 30-45.1760-110.3991-2-12- | 0-M36208 | -5 | -5 | -5 | 33 | -20 | 46 | 5 | 10 | -15 | 3 | 34 |
| 30-45.1735-110.3989-2-12- | 0-M36209 | -5 | -5 | -5 | 36 | -20 | 20 | 12 | -10 | -15 | 3 | 34 |
| 30-45.0241-110.4403-2-12- | 0-M36210 | -5 | -5 | -5 | 19 | -20 | 77 | -5 | -10 | -15 | 2 | 14 |
| 30-45.0554-110.4397-2-12- | 0-M36211 | -5 | -5 | -5 | 30 | -20 | 39 | 13 | -10 | -15 | 2 | 23 |
| 30-45.1684-110.4624-2-12- | 0-M36212 | -5 | -5 | -5 | 22 | -20 | -15 | 6 | -10 | -15 | 3 | 32 |
| 30-45.0547-110.4562-2-12- | 0-M36213 | -5 | -5 | -5 | 33 | -20 | 42 | 12 | -10 | -15 | 3 | 28 |
| 30-45.0997-110.3855-2-12- | 0-M36214 | -5 | -5 | -5 | 36 | -20 | 71 | 7 | -10 | -15 | 2 | 21 |

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

③

| DOE SAMPLE NUMBER | | | | | | LAB. SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | |
| | | | | | | | Al | Au | Ba | Ca | Ce | Cl | Co | Cr | Cs | Dy | Eu | Fe | Hf | K | La | Lu |
| 30- | 45.5905- | 111.3805- | 2- | 12- | | 0-M36162 | 60200 | -0.15 | 685 | 14380 | 83 | 154 | 8.3 | 45 | 4.5 | 4 | 1.6 | 27640 | 10.2 | 18080 | 40 | 0.4 |
| 30- | 45.5929- | 111.3873- | 2- | 12- | | 0-M36163 | 35860 | -0.11 | 436 | 59830 | 48 | -66 | 5.4 | 51 | 5.7 | 4 | 1.1 | 15810 | 8.1 | 13170 | 33 | 0.4 |
| 30- | 45.5988- | 111.3904- | 2- | 12- | | 0-M36164 | 33370 | -0.11 | 535 | 23740 | 74 | -73 | 2.7 | 52 | 8.6 | 6 | 1.4 | 17080 | 27.5 | 15540 | 50 | 0.6 |
| 30- | 45.7603- | 111.8782- | 2- | 12- | | 0-M36165 | 71040 | -0.12 | 499 | 17610 | 241 | -136 | 5.0 | 24 | 4.5 | 7 | 1.8 | 28540 | 13.2 | 19450 | 140 | 0.7 |
| 30- | 45.7843- | 111.8920- | 2- | 15- | | 0-M36166 | 36000 | -0.12 | 522 | 59260 | 54 | -67 | 6.2 | 46 | 5.0 | 3 | 1.2 | 14010 | 7.9 | 12770 | 27 | 0.3 |
| 30- | 45.8038- | 111.9289- | 2- | 12- | | 0-M36167 | 45820 | -0.12 | 506 | 31810 | 68 | -72 | 7.1 | 59 | 4.4 | 6 | 1.3 | 21650 | 11.2 | 17290 | 35 | 0.5 |
| 30- | 45.8359- | 111.9738- | 2- | 15- | | 0-M36168 | 45080 | -0.12 | 583 | 35150 | 78 | -82 | 6.1 | 62 | 5.1 | 5 | 1.4 | 23420 | 12.1 | 15450 | 40 | 0.5 |
| 30- | 45.8645- | 111.8306- | 2- | 15- | | 0-M36169 | 58840 | -0.15 | 446 | 25370 | 120 | -103 | 20.8 | 126 | 2.9 | 16 | 2.5 | 49910 | 28.5 | 16940 | 74 | 1.4 |
| 30- | 45.8709- | 111.8158- | 2- | 15- | | 0-M36170 | 61940 | -0.17 | 717 | 25970 | 67 | 194 | 8.4 | 52 | 4.8 | 5 | 1.7 | 26320 | 9.3 | 20560 | 37 | 0.5 |
| 30- | 45.4807- | 111.5207- | 2- | 12- | | 0-M36171 | 60060 | -0.23 | -207 | 36620 | 171 | 290 | 25.0 | 84 | 7.1 | 9 | 1.6 | 83660 | 61.9 | 14590 | 99 | 1.3 |
| 30- | 45.4718- | 111.5302- | 2- | 12- | | 0-M36172 | 45200 | -0.12 | 583 | 37630 | 75 | -83 | 6.1 | 72 | 5.3 | 4 | 1.4 | 22750 | 13.1 | 16950 | 40 | 0.5 |
| 30- | 45.4720- | 111.5332- | 2- | 12- | | 0-M36173 | 69900 | -0.14 | 596 | 30310 | 74 | -110 | 12.6 | 51 | 3.6 | 4 | 1.5 | 32480 | 9.9 | 20940 | 52 | 0.5 |
| 30- | 45.4682- | 111.5582- | 2- | 12- | | 0-M36174 | 60530 | -0.17 | 604 | 23310 | 113 | -85 | 19.7 | 133 | 11.5 | 7 | 1.8 | 38890 | 14.0 | 19210 | 49 | 0.8 |
| 30- | 45.3054- | 111.6221- | 2- | 12- | | 0-M36175 | 55550 | -0.17 | 574 | 29680 | 245 | -74 | 11.8 | 75 | 6.9 | 8 | 2.4 | 43640 | 32.1 | 20700 | 134 | 0.8 |
| 30- | 45.2970- | 111.6307- | 2- | 12- | | 0-M36176 | 54410 | -0.12 | 738 | 41340 | 80 | -90 | 10.4 | 84 | 3.5 | 4 | 1.3 | 28550 | 9.1 | 19360 | 40 | 0.4 |
| 30- | 45.3493- | 111.8282- | 2- | 12- | | 0-M36177 | 58770 | -0.13 | 692 | 28030 | 68 | -94 | 14.5 | 116 | 3.9 | 4 | 1.7 | 34770 | 12.4 | 16060 | 43 | 0.5 |
| 30- | 45.3479- | 111.8282- | 2- | 12- | | 0-M36178 | 61060 | -0.17 | 776 | 26750 | 100 | -92 | 17.7 | 217 | 3.4 | 4 | 1.6 | 44320 | 11.5 | 16730 | 69 | 0.5 |
| 30- | 45.3469- | 111.8120- | 2- | 12- | | 0-M36179 | 64220 | -0.13 | 1120 | 19380 | 92 | -93 | 12.3 | 107 | 4.8 | 6 | 1.7 | 32670 | 18.3 | 20420 | 103 | 0.7 |
| 30- | 45.3145- | 111.8194- | 2- | 12- | | 0-M36180 | 58890 | -0.14 | 932 | 25870 | 78 | -105 | 13.0 | 125 | 3.2 | 4 | 1.6 | 38180 | 10.9 | 16480 | 48 | 0.5 |
| 30- | 45.3282- | 111.8400- | 2- | 15- | | 0-M36181 | 59800 | -0.13 | 658 | 26100 | 69 | -90 | 14.5 | 128 | 4.1 | 4 | 1.7 | 37490 | 12.5 | 16480 | 48 | 0.4 |
| 30- | 45.2791- | 111.9038- | 2- | 12- | | 0-M36182 | 52830 | -0.13 | 768 | 47120 | 73 | -78 | 8.7 | 70 | 3.4 | 4 | 1.3 | 23670 | 11.9 | 17670 | 47 | 0.5 |
| 30- | 45.3336- | 111.4891- | 2- | 12- | | 0-M36183 | 55450 | -0.12 | 784 | 20050 | 70 | -68 | 9.5 | 105 | 5.0 | 5 | 1.6 | 25080 | 11.9 | 15330 | 49 | 0.6 |
| 30- | 45.3210- | 111.4424- | 2- | 12- | | 0-M36184 | 54000 | -0.13 | 842 | 23930 | 82 | -81 | 17.1 | 186 | 6.1 | 5 | 2.9 | 31460 | 21.2 | 14070 | 47 | 0.5 |
| 30- | 45.3261- | 111.4353- | 2- | 12- | | 0-M36185 | 50020 | -0.13 | 417 | 48030 | 195 | -88 | 17.9 | 180 | 2.9 | 6 | 3.3 | 46550 | 19.0 | 12110 | 110 | 0.6 |
| 30- | 45.0274- | 111.0401- | 2- | 12- | | 0-M36186 | 64650 | -0.17 | 1078 | 36710 | 89 | 93 | 25.1 | 230 | 2.5 | 4 | 1.8 | 49570 | 8.8 | 15040 | 32 | 0.4 |
| 30- | 45.3489- | 111.4716- | 2- | 12- | | 0-M36187 | 56220 | -0.11 | 837 | 21630 | 67 | -66 | 7.4 | 66 | 5.6 | 5 | 1.5 | 23330 | 8.6 | 16990 | 46 | 0.4 |
| 30- | 45.2639- | 111.4877- | 2- | 12- | | 0-M36188 | 56730 | -0.11 | 778 | 24510 | 79 | -76 | 7.8 | 79 | 5.0 | 5 | 1.7 | 25010 | 10.3 | 14470 | 44 | 0.4 |
| 30- | 45.3071- | 111.4695- | 2- | 12- | | 0-M36189 | 56630 | -0.10 | 757 | 25970 | 62 | -69 | 9.6 | 85 | 4.9 | 4 | 1.6 | 26110 | 11.7 | 15270 | 43 | 0.3 |
| 30- | 45.3341- | 111.4786- | 2- | 12- | | 0-M36190 | 52130 | -0.13 | 832 | 22630 | 82 | -67 | 9.6 | 148 | 3.9 | 5 | 1.6 | 27170 | 16.9 | 14120 | 49 | 0.5 |
| 30- | 45.0282- | 111.0474- | 2- | 12- | | 0-M36191 | 72630 | -0.16 | 1500 | 38410 | 80 | -105 | 26.4 | 171 | -2.1 | 3 | 1.8 | 48490 | 4.9 | 16850 | 57 | 0.3 |
| 30- | 45.0290- | 111.0397- | 2- | 12- | | 0-M36192 | 77190 | -0.16 | 1232 | 31030 | 73 | -117 | 23.8 | 183 | 2.8 | 3 | 2.0 | 50170 | 5.3 | 13810 | 43 | 0.5 |
| 30- | 45.0418- | 110.9561- | 2- | 12- | | 0-M36193 | 70800 | -0.15 | 1069 | 43220 | 66 | -111 | 35.4 | 282 | -2.0 | 3 | 1.9 | 62040 | 5.1 | 11020 | 52 | 0.2 |
| 30- | 45.2826- | 111.4927- | 2- | 12- | | 0-M36196 | 53090 | -0.12 | 825 | 21530 | 78 | -67 | 7.8 | 84 | 4.2 | 5 | 1.6 | 21860 | 12.2 | 15340 | 51 | 0.5 |
| 30- | 45.3569- | 111.4912- | 2- | 12- | | 0-M36197 | 56700 | -0.12 | 750 | 21430 | 71 | -68 | 8.7 | 74 | 5.9 | 5 | 1.4 | 23510 | 10.5 | 18020 | 42 | 0.4 |
| 30- | 45.0677- | 111.0186- | 2- | 12- | | 0-M36198 | 63940 | -0.07 | 938 | 36240 | 82 | -108 | 17.2 | 172 | 2.9 | 4 | 1.8 | 46190 | 8.4 | 13230 | 43 | 0.4 |
| 30- | 45.0705- | 111.0075- | 2- | 12- | | 0-M36199 | 75630 | -0.16 | 1119 | 21470 | 105 | -111 | 17.7 | 130 | 3.9 | 4 | 1.8 | 45180 | 8.2 | 17420 | 39 | 0.5 |
| 30- | 45.0717- | 111.0079- | 2- | 12- | | 0-M36200 | 71580 | -0.16 | 1031 | 44910 | 63 | -110 | 37.1 | 295 | -2.1 | 3 | 1.9 | 62510 | 6.5 | 10100 | 39 | 0.2 |
| 30- | 45.0270- | 110.9764- | 2- | 12- | | 0-M36201 | 73950 | -0.17 | 1291 | 37110 | 91 | -105 | 25.7 | 220 | -2.3 | 3 | 2.1 | 47940 | 5.3 | 13990 | 43 | 0.3 |
| 30- | 45.3285- | 111.4596- | 2- | 12- | | 0-M36202 | 54930 | -0.14 | 793 | 11510 | 64 | 126 | 7.4 | 62 | 6.3 | 4 | 1.5 | 22290 | 7.7 | 20660 | 45 | 0.3 |
| 30- | 45.0281- | 111.0072- | 2- | 12- | | 0-M36203 | 75820 | -0.17 | 1522 | 38030 | 83 | -119 | 24.2 | 193 | -2.2 | 3 | 1.7 | 51660 | 6.3 | 12380 | 45 | 0.3 |
| 30- | 45.0514- | 111.0270- | 2- | 12- | | 0-M36204 | 58400 | -0.11 | 664 | 22650 | 64 | 166 | 11.6 | 89 | 3.7 | 5 | 1.6 | 29560 | 12.0 | 19320 | 50 | 0.4 |
| 30- | 45.0259- | 110.9765- | 2- | 12- | | 0-M36205 | 68350 | -0.19 | 1340 | 44970 | 86 | -108 | 31.5 | 287 | -2.5 | 3 | 1.9 | 58170 | 5.3 | 12150 | 43 | 0.6 |
| 30- | 45.0294- | 111.0074- | 2- | 12- | | 0-M36206 | 73900 | -0.16 | 1413 | 33450 | 88 | -103 | 25.4 | 185 | 2.4 | 4 | 1.9 | 51250 | 5.1 | 13990 | 47 | 0.2 |
| 30- | 45.0398- | 110.9556- | 2- | 12- | | 0-M36207 | 76370 | -0.18 | 1486 | 38960 | 75 | -126 | 26.8 | 248 | -2.3 | 3 | 1.8 | 56450 | 5.6 | 12710 | 33 | 0.4 |
| 30- | 45.1760- | 110.3991- | 2- | 12- | | 0-M36208 | 60930 | -0.08 | 912 | 26410 | 62 | 124 | 20.4 | 137 | 2.7 | 5 | 1.4 | 49720 | 11.5 | 15400 | 37 | 0.4 |
| 30- | 45.1735- | 110.3989- | 2- | 12- | | 0-M36209 | 57090 | -0.12 | 765 | 28390 | 62 | -90 | 17.1 | 136 | 4.5 | 4 | 1.6 | 38650 | 11.4 | 18610 | 48 | 0.5 |
| 30- | 45.0241- | 110.4403- | 2- | 12- | | 0-M36210 | 57200 | -0.19 | 862 | 53370 | 91 | -98 | 29.5 | 381 | 5.5 | 3 | 1.7 | 57210 | 8.9 | 9906 | 42 | 0.4 |
| 30- | 45.0554- | 110.4397- | 2- | 12- | | 0-M36211 | 59900 | -0.14 | 837 | 24900 | 78 | -87 | 15.2 | 112 | 3.9 | 5 | 1.7 | 39280 | 10.1 | 17320 | 49 | 0.4 |
| 30- | 45.1684- | 110.4624- | 2- | 12- | | 0-M36212 | 56120 | -0.12 | 635 | 20990 | 73 | -84 | 9.2 | 76 | 11.4 | 4 | 1.4 | 25040 | 11.5 | 17630 | 45 | 0.4 |
| 30- | 45.0547- | 110.4562- | 2- | 12- | | 0-M36213 | 60780 | -0.13 | 811 | 23010 | 64 | -92 | 16.9 | 123 | 3.3 | 4 | 1.7 | 37830 | 10.3 | 19220 | 39 | 0.4 |
| 30- | 45.0987- | 110.3855- | 2- | 12- | | 0-M36214 | 57890 | -0.19 | 893 | 53940 | 101 | -97 | 29.7 | 377 | 5.6 | 3 | 1.7 | 58640 | 8.8 | 11400 | 46 | 0.4 |

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

④

| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | LASL SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) — Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | U/Th RATIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mg | Mn | Na | Rb | Sb | Sc | Sm | Sr | Ta | Tb | Th | Ti | V | Yb | Zn | |
| 30-45.5905-111.3805-2-12- | 0-M36162 | 7275 | 662 | 14300 | 66 | -4 | 7.6 | 6.9 | -273 | -1 | -1 | 11.7 | 3110 | 77 | 3.7 | 96 | 0.239 |
| 30-45.5929-111.3873-2-12- | 0-M36163 | 7434 | 670 | 5818 | 74 | -3 | 5.5 | 4.9 | -237 | -1 | -1 | 9.5 | 2134 | 44 | -1.9 | -58 | 0.253 |
| 30-45.5988-111.3904-2-12- | 0-M36164 | -1542 | 615 | 6697 | -24 | -3 | 4.7 | 6.0 | -272 | -1 | -1 | 17.8 | 3500 | 36 | 6.1 | 66 | 0.197 |
| 30-45.7603-111.8782-2-12- | 0-M36165 | 5423 | 1001 | 30140 | 68 | -3 | 5.6 | 20.0 | -364 | 2 | 1 | 52.0 | 1575 | 27 | 7.4 | 77 | 0.098 |
| 30-45.7843-111.8920-2-15- | 0-M36166 | 7131 | 675 | 6031 | -26 | -3 | 5.0 | 4.6 | -244 | -1 | -1 | 8.4 | 2159 | 48 | 2.9 | -39 | 0.274 |
| 30-45.8038-111.9289-2-12- | 0-M36167 | 7542 | 724 | 8009 | 67 | -3 | 7.2 | 5.3 | -256 | -1 | -1 | 12.3 | 3135 | 51 | 5.7 | 58 | 0.236 |
| 30-45.8359-111.9738-2-15- | 0-M36168 | 8607 | 722 | 8267 | 69 | -3 | 7.6 | 5.2 | -297 | -1 | -1 | 15.1 | 2776 | 54 | 3.0 | 93 | 0.185 |
| 30-45.8645-111.8306-2-15- | 0-M36169 | 12690 | 1001 | 18140 | 86 | -4 | 17.4 | 13.1 | -306 | 4 | 2 | 25.0 | 7875 | 102 | 12.9 | 118 | 0.204 |
| 30-45.8709-111.8158-2-15- | 0-M36170 | 7759 | 691 | 11710 | 60 | -4 | 9.4 | 6.2 | -286 | -1 | -1 | 10.3 | 3916 | 68 | 4.1 | -65 | 0.272 |
| 30-45.4807-111.5207-2-12- | 0-M36171 | 15190 | 1415 | 16670 | -50 | -6 | 32.7 | 15.0 | -384 | 2 | -1 | 91.4 | 5413 | 271 | 16.1 | -59 | 0.223 |
| 30-45.4718-111.5302-2-12- | 0-M36172 | 9473 | 728 | 8314 | 68 | -3 | 7.5 | 5.6 | -302 | -1 | -1 | 13.6 | 2682 | 54 | 6.2 | 72 | 0.213 |
| 30-45.4720-111.5332-2-12- | 0-M36173 | 11050 | 877 | 20840 | 62 | -4 | 14.3 | 6.9 | -313 | -1 | -1 | 11.0 | 3256 | 76 | 4.4 | -25 | 0.255 |
| 30-45.4682-111.5582-2-12- | 0-M36174 | 11170 | 712 | 13340 | 88 | -4 | 13.2 | 9.3 | -272 | 1 | -1 | 19.0 | 4357 | 90 | 5.2 | 111 | 0.216 |
| 30-45.3054-111.6221-2-12- | 0-M36175 | 19730 | 813 | 7336 | -38 | -4 | 13.5 | 18.5 | -286 | -2 | -1 | 50.3 | 4590 | 93 | 9.2 | 57 | 0.103 |
| 30-45.2970-111.6307-2-12- | 0-M36176 | 11230 | 594 | 13080 | 53 | -3 | 8.7 | 6.3 | -284 | 1 | -1 | 12.2 | 2795 | 73 | 3.5 | 69 | 0.213 |
| 30-45.3493-111.8282-2-12- | 0-M36177 | 10430 | 714 | 14890 | -30 | -3 | 10.5 | 5.5 | -281 | -1 | -1 | 11.9 | 3173 | 104 | 3.5 | 111 | 0.370 |
| 30-45.3479-111.8282-2-12- | 0-M36178 | 11390 | 800 | 15120 | -37 | -4 | 12.1 | 5.7 | -297 | -1 | -1 | 14.3 | 4289 | 125 | -3.0 | -29 | 0.692 |
| 30-45.3469-111.8120-2-12- | 0-M36179 | 7446 | 642 | 17980 | 100 | -3 | 9.9 | 15.8 | 402 | -1 | -1 | 18.3 | 3291 | 70 | 7.7 | 182 | 1.650 |
| 30-45.3145-111.8194-2-12- | 0-M36180 | 11510 | 844 | 13870 | 39 | -3 | 10.9 | 6.5 | -348 | -1 | -1 | 12.5 | 2392 | 92 | 3.4 | 135 | 0.344 |
| 30-45.3282-111.8400-2-15- | 0-M36181 | 10600 | 688 | 14510 | 84 | -3 | 10.3 | 5.8 | -275 | -1 | -1 | 13.1 | 3527 | 96 | 4.0 | 140 | 0.275 |
| 30-45.2791-111.9038-2-12- | 0-M36182 | 11080 | 530 | 13010 | -31 | -3 | 7.6 | 6.3 | -244 | 1 | -1 | 13.4 | 2701 | 62 | 3.7 | 45 | 0.239 |
| 30-45.3336-111.4891-2-12- | 0-M36183 | 9806 | 410 | 9572 | 64 | -3 | 8.0 | 5.8 | -211 | -1 | -1 | 12.9 | 2326 | 72 | 5.1 | -86 | 0.326 |
| 30-45.3210-111.4424-2-12- | 0-M36184 | 9322 | 521 | 10420 | -31 | -3 | 9.3 | 8.1 | -266 | -1 | -1 | 13.9 | 3491 | 104 | -2.4 | 135 | 0.331 |
| 30-45.3261-111.4353-2-12- | 0-M36185 | 20690 | 766 | 13430 | 52 | -3 | 12.1 | 13.2 | -271 | -1 | 2 | 25.7 | 5345 | 121 | 6.3 | 97 | 0.241 |
| 30-45.0274-111.0401-2-12- | 0-M36186 | 18040 | 879 | 16210 | -40 | -4 | 15.4 | 6.6 | 619 | 2 | -1 | 11.7 | 4480 | 159 | -3.6 | -83 | 0.205 |
| 30-45.3489-111.4716-2-12- | 0-M36187 | 8795 | 326 | 9463 | 66 | -3 | 7.5 | 6.9 | -198 | -1 | -1 | 12.5 | 2647 | 75 | 5.0 | 92 | 0.344 |
| 30-45.2639-111.4877-2-12- | 0-M36188 | 11040 | 371 | 10030 | 88 | -3 | 7.6 | 5.6 | -236 | 1 | -1 | 14.1 | 2365 | 77 | -1.9 | 44 | 0.298 |
| 30-45.3071-111.4695-2-12- | 0-M36189 | 11690 | 450 | 10710 | 56 | -3 | 7.6 | 6.0 | -205 | -1 | -1 | 11.0 | 2509 | 76 | 3.2 | 81 | 0.364 |
| 30-45.3341-111.4786-2-12- | 0-M36190 | 9548 | 491 | 10080 | 81 | -3 | 8.0 | 6.3 | -212 | -1 | -1 | 12.4 | 3350 | 93 | 4.0 | 63 | 0.339 |
| 30-45.0282-111.0474-2-12- | 0-M36191 | 16590 | 887 | 19310 | -37 | -4 | 16.3 | 4.0 | 646 | -1 | -1 | 8.1 | 3996 | 124 | -2.6 | 88 | 0.222 |
| 30-45.0290-111.0397-2-12- | 0-M36192 | 16640 | 838 | 18670 | -38 | -4 | 17.2 | 5.3 | -359 | -1 | -1 | 9.7 | 3861 | 128 | -2.9 | -115 | 0.216 |
| 30-45.0418-110.9561-2-12- | 0-M36193 | 22300 | 1033 | 19500 | -35 | -4 | 20.8 | 3.9 | 522 | -1 | -1 | 7.4 | 5266 | 203 | 4.0 | 72 | 0.230 |
| 30-45.2826-111.4927-2-12- | 0-M36196 | 9913 | 415 | 10230 | 61 | -3 | 7.3 | 6.2 | -206 | -1 | -1 | 13.0 | 2880 | 80 | 3.0 | 43 | 0.308 |
| 30-45.3569-111.4912-2-12- | 0-M36197 | 9380 | 325 | 9790 | 68 | -3 | 7.9 | 6.1 | 231 | -1 | -1 | 13.3 | 2514 | 78 | 4.2 | 64 | 0.323 |
| 30-45.0677-111.0186-2-12- | 0-M36198 | 14110 | 782 | 15720 | 68 | -2 | 14.4 | 5.9 | 618 | -1 | -1 | 11.7 | 3535 | 111 | 3.4 | 117 | 0.197 |
| 30-45.0705-111.0075-2-12- | 0-M36199 | 11140 | 868 | 14560 | 60 | -4 | 14.7 | 5.7 | -375 | -1 | -1 | 13.1 | 4181 | 119 | 3.2 | 155 | 0.221 |
| 30-45.0717-111.0079-2-12- | 0-M36200 | 23920 | 1029 | 19590 | -38 | -4 | 22.1 | 4.4 | 690 | -1 | -1 | 6.0 | 4995 | 204 | 4.2 | -40 | 0.250 |
| 30-45.0270-110.9764-2-12- | 0-M36201 | 17110 | 875 | 18920 | -41 | -4 | 17.3 | 5.1 | 665 | -1 | -1 | 8.7 | 4662 | 141 | -3.9 | -48 | 0.230 |
| 30-45.3285-111.4596-2-12- | 0-M36202 | 6851 | 387 | 9725 | 82 | -3 | 7.7 | 4.3 | -239 | -1 | -1 | 11.9 | 2986 | 78 | 3.9 | -84 | 0.311 |
| 30-45.0281-111.0072-2-12- | 0-M36203 | 16520 | 852 | 18510 | -40 | -4 | 17.3 | 5.3 | 629 | -1 | -1 | 9.2 | 4035 | 143 | -2.7 | 124 | 0.228 |
| 30-45.0514-111.0270-2-12- | 0-M36204 | 10770 | 584 | 12280 | 49 | -3 | 8.9 | 6.1 | -241 | -1 | -1 | 12.1 | 2890 | 80 | 3.4 | 97 | 0.322 |
| 30-45.0259-110.9765-2-12- | 0-M36205 | 24490 | 971 | 19110 | -42 | -5 | 20.7 | 4.5 | 833 | -2 | -1 | 7.5 | 5150 | 189 | -3.0 | 95 | 0.227 |
| 30-45.0294-111.0074-2-12- | 0-M36206 | 17030 | 838 | 18250 | -38 | -4 | 17.5 | 5.6 | 672 | -1 | -1 | 8.7 | 4064 | 130 | 4.0 | -83 | 0.241 |
| 30-45.0398-110.9556-2-12- | 0-M36207 | 19960 | 940 | 19640 | -42 | -5 | 19.0 | 5.2 | 598 | -1 | -1 | 10.1 | 4363 | 145 | -2.8 | 121 | 0.178 |
| 30-45.1760-110.3991-2-12- | 0-M36208 | 12180 | 921 | 12280 | -49 | -2 | 13.4 | 5.0 | -347 | -1 | -1 | 9.8 | 4856 | 147 | 2.9 | 148 | 0.367 |
| 30-45.1735-110.3989-2-12- | 0-M36209 | 11310 | 898 | 12470 | 65 | -3 | 11.3 | 5.3 | -289 | -1 | -1 | 10.8 | 3470 | 107 | 3.7 | 107 | 0.352 |
| 30-45.0241-110.4403-2-12- | 0-M36210 | 30520 | 1041 | 17030 | -40 | -5 | 31.8 | 6.6 | -307 | -1 | -1 | 8.6 | 4470 | 204 | -4.1 | -50 | 0.209 |
| 30-45.0554-110.4397-2-12- | 0-M36211 | 11090 | 977 | 11020 | 75 | -4 | 12.2 | 7.0 | -298 | -1 | -1 | 11.0 | 3720 | 97 | 4.6 | | 0.273 |
| 30-45.1684-110.4624-2-12- | 0-M36212 | 7639 | 538 | 11460 | 71 | -1 | 7.9 | 5.9 | -268 | -1 | -1 | 13.4 | 2780 | 72 | 4.5 | 93 | 0.269 |
| 30-45.0547-110.4562-2-12- | 0-M36213 | 9658 | 1070 | 11540 | 48 | -3 | 11.5 | 5.7 | -315 | -1 | -1 | 11.8 | 3896 | 93 | 2.1 | 87 | 0.271 |
| 30-45.0987-110.3855-2-12- | 0-M36214 | 27660 | 1029 | 16690 | -39 | -5 | 30.8 | 5.9 | 559 | -1 | -1 | 9.2 | 4764 | 201 | -3.9 | -48 | 0.196 |

# 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 (µmhos/cm) | SCINTILLOMETER (eU, ppm) | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm |
| 30- | 45.0908- | 110.3456- | 2- | 12- | | 0-M36215- | 10/24/76- | 17- | -1- | 1.0- | - | - | 5.5- | 220- | | -2- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 3.00 |
| 30- | 45.0402- | 110.3998- | 2- | 12- | | 0-M36216- | 10/24/76- | 14- | 1- | 1.0- | - | - | 5.7- | 290- | | -2- | 7- | 4- | 6- | 3- | 2- | 1- | 2- | 1- | 4- | 4- | 3- | -1- | - | - | - | - | 3.90 |
| 30- | 45.0396- | 110.4024- | 2- | 12- | | 0-M36217- | 10/24/76- | 14- | 1- | 1.0- | - | - | 5.7- | 290- | | -2- | 7- | 4- | 6- | 3- | 2- | 1- | 2- | 1- | 4- | 4- | 3- | -1- | - | - | - | - | 3.20 |
| 30- | 45.1507- | 110.4361- | 2- | 12- | | 0-M36218- | 10/24/76- | 14- | 1- | 1.0- | - | - | 5.7- | 200- | | -2- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 3- | 3- | 4- | 3- | -1- | - | - | - | - | 3.60 |
| 30- | 45.3075- | 110.3186- | 2- | 12- | | 0-M36219- | 10/16/76- | 12- | 8- | 3.5- | - | - | 5.7- | 150- | | -1- | 7- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 3.60 |
| 30- | 45.1903- | 110.1821- | 2- | 12- | | 0-M36220- | 10/16/76- | 17- | 5- | 2.5- | - | - | 5.5- | 70- | | -1- | 7- | 3- | 6- | 2- | 3- | 1- | 2- | 3- | 4- | 3- | 2- | -1- | - | - | - | - | 3.10 |
| 30- | 45.4661- | 110.3722- | 2- | 12- | | 0-M36221- | 10/16/76- | 10- | 6- | 2.0- | - | - | 6.1- | 350- | | -1- | 7- | 2- | 6- | 3- | 2- | 1- | 2- | 1- | 2- | 3- | 2- | -1- | - | - | - | - | 2.80 |
| 30- | 45.4945- | 110.3474- | 2- | 12- | | 0-M36222- | 10/16/76- | 8- | 4- | 2.5- | - | - | 6.1- | 290- | | -1- | 7- | 2- | 6- | 2- | 2- | 1- | 2- | 3- | 4- | 2- | 2- | -1- | - | - | - | - | 4.30 |
| 30- | 45.3050- | 110.3210- | 2- | 12- | | 0-M36223- | 10/16/76- | 12- | 8- | 3.5- | - | - | 5.5- | 150- | | -1- | 7- | 2- | 6- | 3- | 2- | 1- | 2- | 1- | 2- | 4- | 2- | -1- | - | - | - | - | 3.10 |
| 30- | 45.3042- | 110.3203- | 2- | 12- | | 0-M36224- | 10/16/76- | 12- | 8- | 3.5- | - | - | 5.5- | 140- | | -1- | 7- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 6.70 |
| 30- | 45.2361- | 110.1866- | 2- | 12- | | 0-M36225- | 10/16/76- | 18- | 3- | 2.5- | - | - | 5.2- | 75- | | -1- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 2.70 |
| 30- | 45.4620- | 110.3796- | 2- | 12- | | 0-M36226- | 10/16/76- | 11- | 5- | 2.0- | - | - | 6.3- | 350- | | -1- | 7- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 2- | 4- | 2- | -1- | - | - | - | - | 5.80 |
| 30- | 45.4563- | 110.3794- | 2- | 12- | | 0-M36227- | 10/16/76- | 11- | 6- | 2.0- | - | - | 6.1- | 350- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 3- | 2- | -1- | - | - | - | - | 3.70 |
| 30- | 45.4244- | 110.4055- | 2- | 12- | | 0-M36228- | 10/16/76- | 14- | 10- | 3.5- | - | - | 6.1- | 275- | | -1- | 7- | 3- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -1- | - | - | - | - | 3.70 |
| 30- | 45.4850- | 111.4702- | 2- | 12- | | 0-M36229- | 10/19/76- | 14- | 14- | 5.0- | - | - | 5.7- | 225- | | -1- | 7- | 3- | 6- | 3- | 3- | 1- | 1- | 3- | 4- | 3- | 1- | -1- | - | - | - | - | 3.50 |
| 30- | 45.0791- | 110.3788- | 2- | 12- | | 0-M36230- | 10/24/76- | 14- | 3- | 1.0- | - | - | 5.6- | 145- | | -2- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 3.50 |
| 30- | 45.0771- | 111.1565- | 2- | 12- | | 0-M36231- | 10/25/76- | 10- | 2- | 1.4- | - | - | 6.1- | 490- | | -3- | 7- | 3- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 2.60 |
| 30- | 45.0803- | 111.1188- | 2- | 12- | | 0-M36232- | 10/25/76- | 12- | 4- | 1.5- | - | - | 5.9- | 350- | | -2- | 7- | 4- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 3.30 |
| 30- | 45.0802- | 111.1164- | 2- | 12- | | 0-M36233- | 10/25/76- | 12- | 4- | 1.5- | - | - | 5.9- | 360- | | -2- | 7- | 4- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 3.00 |
| 30- | 45.0911- | 110.3444- | 2- | 12- | | 0-M36234- | 10/24/76- | 11- | 3- | 1.0- | - | - | 5.4- | 140- | | -2- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 3- | -1- | - | - | - | - | 2.90 |
| 30- | 45.4581- | 110.3811- | 2- | 12- | | 0-M36235- | 10/16/76- | 11- | 6- | 2.0- | - | - | 6.1- | 340- | | -1- | 7- | 3- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 3.30 |
| 30- | 45.4506- | 110.3919- | 2- | 12- | | 0-M36236- | 10/16/76- | 11- | 10- | 2.5- | - | - | 6.1- | 350- | | -1- | 7- | 3- | 6- | 2- | 3- | 1- | 2- | 2- | 3- | 3- | 2- | -1- | - | - | - | - | 3.80 |
| 30- | 45.0308- | 110.8801- | 2- | 12- | | 0-M36237- | 10/31/76- | 11- | 1- | 1.0- | - | - | 5.5- | 80- | | -2- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 3- | 4- | 4- | 1- | -1- | - | - | - | - | 3.30 |
| 30- | 45.0158- | 110.8833- | 2- | 12- | | 0-M36238- | 10/31/76- | 11- | -1- | 1.0- | - | - | 5.7- | 210- | | -2- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 3- | 1- | -1- | - | - | - | - | 3.10 |
| 30- | 45.1682- | 110.3825- | 2- | 12- | | 0-M36239- | 10/24/76- | 13- | 2- | 1.0- | - | - | 5.7- | 200- | | -2- | 6- | 2- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 4- | 3- | -1- | - | - | - | - | 3.70 |
| 30- | 45.1750- | 110.3966- | 2- | 12- | | 0-M36240- | 10/24/76- | 15- | 2- | 1.0- | - | - | 5.7- | 320- | | -2- | 6- | 1- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 3- | -1- | - | - | - | - | 3.60 |
| 30- | 45.0164- | 110.8883- | 2- | 12- | | 0-M36241- | 10/31/76- | 11- | -1- | 1.0- | - | - | 5.7- | 210- | | -2- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 3- | 1- | -1- | - | - | - | - | 2.50 |
| 30- | 45.0147- | 110.9514- | 2- | 12- | | 0-M36242- | 10/31/76- | 13- | 1- | 1.0- | - | - | 5.5- | 80- | | -2- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 1- | -1- | - | - | - | - | 4.40 |
| 30- | 45.0856- | 110.4176- | 2- | 12- | | 0-M36243- | 10/24/76- | 12- | 3- | 2.0- | - | - | 6.0- | 500- | | -2- | 7- | 4- | 4- | 3- | 4- | 2- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 2.40 |
| 30- | 45.4088- | 110.4215- | 2- | 12- | | 0-M36244- | 10/16/76- | 15- | 8- | 4.0- | - | - | 5.9- | 275- | | -1- | 6- | 4- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -1- | - | - | - | - | 2.90 |
| 30- | 45.3982- | 110.4165- | 2- | 12- | | 0-M36245- | 10/16/76- | 15- | 2- | 3.0- | - | - | 5.9- | 280- | | -1- | 7- | 3- | 6- | 2- | 3- | 1- | 2- | 4- | 3- | 2- | 2- | -1- | - | - | - | - | 5.10 |
| 30- | 45.0576- | 111.1890- | 2- | 12- | | 0-M36246- | 10/25/76- | 7- | 1- | 1.0- | - | - | 6.1- | 400- | | -1- | 6- | 1- | 6- | 3- | 1- | 2- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 2.70 |
| 30- | 45.1394- | 110.3747- | 2- | 12- | | 0-M36247- | 10/24/76- | 10- | 3- | 1.0- | - | - | 5.7- | 140- | | -2- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 2.80 |
| 30- | 45.6557- | 110.9742- | 2- | 12- | | 0-M36248- | 09/12/76- | 18- | 11- | 12.0- | - | - | 6.5- | 480- | | 6- | 4- | -3- | 6- | 2- | 3- | 2- | 3- | 4- | 4- | 3- | 2- | -3- | - | - | - | - | 3.70 |
| 30- | 45.5932- | 111.0451- | 2- | 12- | | 0-M36249- | 09/12/76- | 19- | 10- | 10.5- | - | - | 6.1- | 130- | | 9- | 2- | 7- | 3- | 6- | 4- | 2- | 2- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 8.30 |
| 30- | 45.5813- | 111.0210- | 2- | 12- | | 0-M36250- | 09/12/76- | 19- | 11- | 10.5- | - | - | 6.3- | 185- | | 3- | 2- | 7- | 3- | 6- | 4- | 3- | 1- | 2- | 2- | 3- | 4- | 2- | -1- | - | - | - | - | 3.10 |
| 30- | 45.5732- | 110.7916- | 2- | 12- | | 0-M36251- | 09/13/76- | 11- | 9- | 7.5- | C- | - | 5.7- | 115- | | 19- | 1- | 6- | 3- | 6- | 4- | 2- | 1- | 2- | 3- | 3- | 4- | 1- | -2- | - | - | - | - | 4.00 |
| 30- | 45.5608- | 110.7598- | 2- | 12- | | 0-M36252- | 09/13/76- | 12- | 12- | 8.0- | - | - | 6.3- | 250- | | 0- | 1- | 7- | 3- | 6- | 3- | 3- | 2- | 2- | 4- | 3- | 4- | 1- | -3- | - | - | - | - | 2.20 |
| 30- | 45.5666- | 110.7737- | 2- | 15- | | 0-M36253- | 09/13/76- | 12- | 18- | - | - | - | - | - | | 12- | 1- | 7- | 5- | 6- | -1- | -3- | 4- | 4- | 3- | 1- | -3- | - | - | - | - | - | 2.10 |
| 30- | 45.5767- | 110.7724- | 2- | 12- | | 0-M36254- | 09/13/76- | 13- | 19- | 10.0- | C- | - | 6.9- | 565- | | 6- | 1- | 6- | 3- | 6- | 3- | 2- | 2- | 2- | 4- | 3- | 3- | 1- | -2- | - | - | - | - | 3.00 |
| 30- | 45.5783- | 110.7870- | 2- | 12- | | 0-M36255- | 09/13/76- | 13- | 21- | 10.5- | C- | - | 6.6- | 650- | | 3- | 1- | 6- | 3- | 6- | 2- | 2- | 1- | 2- | 4- | 4- | 4- | 1- | -2- | - | - | - | - | 3.80 |
| 30- | 45.5897- | 110.8023- | 2- | 12- | | 0-M36256- | 09/11/76- | 13- | 18- | 11.5- | - | - | 6.6- | 525- | | 9- | 4- | -5- | 8- | 2- | 2- | 2- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 2.80 |
| 30- | 45.5968- | 110.8063- | 2- | 12- | | 0-M36257- | 09/13/76- | 14- | 19- | 11.0- | - | - | - | 380- | | 6- | 4- | -3- | 6- | 2- | 3- | 1- | 2- | 4- | 4- | 3- | 2- | -3- | - | - | - | - | 2.70 |
| 30- | 45.6003- | 110.8204- | 2- | 12- | | 0-M36258- | 09/13/76- | 14- | 20- | 10.0- | - | - | 6.3- | 420- | | 8- | 4- | -4- | 6- | 2- | 3- | 1- | 2- | 4- | 4- | 3- | 1- | -3- | - | - | - | - | 2.50 |
| 30- | 45.6157- | 110.8536- | 2- | 12- | | 0-M36259- | 09/13/76- | 15- | 19- | 13.5- | - | - | 6.6- | 375- | | 0- | 1- | 6- | 2- | 6- | 3- | 2- | 1- | 2- | 3- | 2- | 4- | 1- | -3- | - | - | - | - | 3.10 |
| 30- | 45.6276- | 110.8425- | 2- | 12- | | 0-M36260- | 09/13/76- | 15- | 19- | 12.5- | - | - | 6.6- | 480- | | 12- | 4- | -3- | 6- | 3- | 2- | 1- | 2- | 3- | 3- | 3- | 1- | -3- | - | - | - | - | 3.20 |
| 30- | 45.6440- | 110.8721- | 2- | 12- | | 0-M36261- | 09/13/76- | 16- | 17- | 12.5- | - | - | 6.6- | 485- | | 3- | 1- | 6- | 3- | 6- | 3- | 2- | 1- | 2- | 3- | 4- | 4- | 1- | -3- | - | - | - | - | 3.00 |
| 30- | 45.6710- | 110.7955- | 2- | 12- | | 0-M36262- | 09/13/76- | 16- | 19- | 13.0- | - | - | 6.3- | 280- | | 0- | 1- | 6- | 3- | 6- | 3- | 2- | 1- | 2- | 3- | 5- | 4- | 1- | -3- | - | - | - | - | 3.00 |
| 30- | 45.6645- | 110.8396- | 2- | 12- | | 0-M36263- | 09/13/76- | 17- | 17- | 14.0- | C- | - | 6.3- | 260- | | 9- | 4- | -4- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 2.10 |
| 30- | 45.6609- | 110.8376- | 2- | 12- | | 0-M36264- | 09/13/76- | 17- | 18- | 13.5- | C- | - | 6.3- | 330- | | 8- | 4- | -3- | 6- | 3- | 2- | 1- | 2- | 3- | 4- | 4- | 1- | -3- | - | - | - | - | 5.10 |
| 30- | 45.5632- | 111.0713- | 2- | 12- | | 0-M36265- | 09/13/76- | 18- | 13- | 12.0- | - | - | 5.7- | 120- | | 9- | 2- | 7- | 1- | 7- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -8- | - | - | - | - | 3.20 |

# 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 |
| 30- | 45.0908- | 110.3456- | 2- | 12- | 0- | M36215 | -5 | -5 | -5 | 39 | -20 | 32 | 13 | -10 | -15 | 2 | 20 |
| 30- | 45.0402- | 110.3998- | 2- | 12- | 0- | M36216 | -5 | -5 | -5 | 24 | -20 | 29 | -5 | -10 | -15 | 3 | 28 |
| 30- | 45.0396- | 110.4024- | 2- | 12- | 0- | M36217 | -5 | -5 | -5 | 33 | -20 | -15 | 15 | -10 | -15 | 2 | 25 |
| 30- | 45.1507- | 110.4361- | 2- | 12- | 0- | M36218 | -5 | -5 | -5 | 32 | -20 | 21 | -5 | -10 | -15 | 3 | 43 |
| 30- | 45.3075- | 110.3186- | 2- | 12- | 0- | M36219 | -5 | -5 | -5 | 38 | -20 | 24 | 9 | -10 | -15 | 3 | 26 |
| 30- | 45.1903- | 110.1821- | 2- | 12- | 0- | M36220 | -5 | -5 | -5 | 27 | -20 | -15 | 10 | -10 | -15 | 2 | 56 |
| 30- | 45.4661- | 110.3722- | 2- | 12- | 0- | M36221 | -5 | -5 | -5 | 35 | -20 | 18 | 20 | -10 | -15 | 3 | 50 |
| 30- | 45.4945- | 110.3474- | 2- | 12- | 0- | M36222 | -5 | -5 | -5 | 39 | -20 | 33 | 16 | -10 | -15 | 3 | 47 |
| 30- | 45.3050- | 110.3210- | 2- | 12- | 0- | M36223 | -5 | -5 | -5 | 20 | -20 | 20 | 9 | -10 | -15 | 3 | 32 |
| 30- | 45.3042- | 110.3203- | 2- | 12- | 0- | M36224 | -5 | -5 | -5 | 39 | -20 | 28 | 17 | -10 | -15 | 3 | 31 |
| 30- | 45.2361- | 110.1866- | 2- | 12- | 0- | M36225 | -5 | -5 | -5 | 46 | -20 | 71 | 10 | -10 | -15 | 2 | 29 |
| 30- | 45.4620- | 110.3796- | 2- | 12- | 0- | M36226 | -5 | -5 | -5 | 38 | -20 | 32 | 14 | -10 | -15 | 3 | 39 |
| 30- | 45.4563- | 110.3794- | 2- | 12- | 0- | M36227 | -5 | -5 | -5 | 17 | -20 | 16 | 7 | -10 | -15 | 3 | 49 |
| 30- | 45.4244- | 110.4055- | 2- | 12- | 0- | M36228 | -5 | -5 | -5 | 36 | -20 | 26 | 12 | -10 | -15 | 2 | 35 |
| 30- | 45.4850- | 111.4702- | 2- | 12- | 0- | M36229 | -5 | -5 | -5 | 29 | -20 | 33 | -5 | -10 | -15 | 2 | 36 |
| 30- | 45.0791- | 110.3788- | 2- | 12- | 0- | M36230 | -5 | -5 | -5 | 37 | -20 | 25 | 11 | -10 | -15 | 2 | 49 |
| 30- | 45.0771- | 111.1565- | 2- | 12- | 0- | M36231 | -5 | -5 | -5 | 18 | -20 | 40 | 5 | -10 | -15 | 2 | 24 |
| 30- | 45.0803- | 111.1188- | 2- | 12- | 0- | M36232 | -5 | -5 | -5 | 21 | -20 | 34 | 13 | -10 | -15 | 3 | 34 |
| 30- | 45.0802- | 111.1164- | 2- | 12- | 0- | M36233 | -5 | -5 | -5 | 28 | -20 | 39 | 6 | -10 | -15 | 2 | 46 |
| 30- | 45.0911- | 110.3444- | 2- | 12- | 0- | M36234 | -5 | -5 | -5 | 32 | -20 | -15 | 10 | -10 | -15 | 3 | 30 |
| 30- | 45.4581- | 110.3811- | 2- | 12- | 0- | M36235 | -5 | -5 | -5 | 30 | -20 | 23 | 10 | -10 | -15 | 3 | 32 |
| 30- | 45.4506- | 110.3919- | 2- | 12- | 0- | M36236 | -5 | -5 | -5 | 30 | -20 | 24 | 6 | -10 | -15 | 2 | 26 |
| 30- | 45.0308- | 110.8801- | 2- | 12- | 0- | M36237 | -5 | -5 | -5 | 30 | -20 | 56 | -5 | -10 | -15 | 3 | 31 |
| 30- | 45.0158- | 110.8833- | 2- | 12- | 0- | M36238 | -5 | -5 | -5 | 38 | -20 | 57 | 14 | -10 | -15 | 2 | 30 |
| 30- | 45.1682- | 110.3825- | 2- | 12- | 0- | M36239 | -5 | -5 | -5 | 30 | -20 | 22 | 11 | -10 | -15 | 3 | 35 |
| 30- | 45.1750- | 110.3966- | 2- | 12- | 0- | M36240 | -5 | -5 | -5 | 41 | -20 | 40 | 7 | -10 | -15 | 3 | 43 |
| 30- | 45.0164- | 110.8883- | 2- | 12- | 0- | M36241 | -5 | -5 | -5 | 32 | -20 | 29 | 9 | -10 | -15 | 3 | 48 |
| 30- | 45.0147- | 110.9514- | 2- | 12- | 0- | M36242 | -5 | -5 | -5 | 32 | -20 | 62 | 5 | -10 | -15 | 2 | 63 |
| 30- | 45.0856- | 110.4176- | 2- | 12- | 0- | M36243 | -5 | -5 | -5 | 21 | -20 | 34 | 13 | -10 | -15 | 2 | 26 |
| 30- | 45.4088- | 110.4215- | 2- | 12- | 0- | M36244 | -5 | -5 | -5 | 26 | -20 | 16 | 8 | -10 | -15 | 3 | 36 |
| 30- | 45.3982- | 110.4165- | 2- | 12- | 0- | M36245 | -5 | -5 | -5 | 19 | -20 | -15 | 13 | -10 | -15 | 2 | 19 |
| 30- | 45.0576- | 111.1890- | 2- | 12- | 0- | M36246 | -5 | -5 | -5 | 18 | -20 | -15 | 7 | -10 | -15 | 2 | 24 |
| 30- | 45.1394- | 110.3747- | 2- | 12- | 0- | M36247 | -5 | -5 | -5 | 24 | -20 | 20 | 6 | -10 | -15 | 2 | 28 |
| 30- | 45.6557- | 110.9742- | 2- | 12- | 0- | M36248 | -5 | -5 | -5 | 23 | -20 | -15 | 12 | -10 | -15 | 3 | 50 |
| 30- | 45.5932- | 111.0451- | 2- | 12- | 0- | M36249 | -5 | -5 | -5 | 38 | -20 | 72 | 12 | -10 | -15 | 2 | 30 |
| 30- | 45.5813- | 111.0210- | 2- | 12- | 0- | M36250 | -5 | 5 | -5 | 31 | -20 | 65 | 10 | -10 | -15 | 2 | 18 |
| 30- | 45.5732- | 110.7916- | 2- | 12- | 0- | M36251 | -5 | -5 | -5 | 17 | -20 | -15 | 12 | -10 | -15 | 3 | 37 |
| 30- | 45.5608- | 110.7598- | 2- | 12- | 0- | M36252 | -5 | -5 | -5 | 17 | -20 | 17 | 10 | -10 | -15 | 2 | 27 |
| 30- | 45.5666- | 110.7737- | 2- | 15- | 0- | M36253 | -5 | -5 | -5 | 24 | -20 | -15 | 18 | -10 | -15 | 2 | 28 |
| 30- | 45.5767- | 110.7724- | 2- | 12- | 0- | M36254 | -5 | -5 | -5 | 14 | -20 | 15 | -5 | -10 | -15 | 1 | 22 |
| 30- | 45.5783- | 110.7870- | 2- | 12- | 0- | M36255 | -5 | -5 | -5 | 21 | -20 | 16 | -5 | -10 | -15 | 2 | 46 |
| 30- | 45.5897- | 110.8023- | 2- | 12- | 0- | M36256 | -5 | -5 | -5 | 21 | -20 | -15 | 8 | -10 | -15 | 3 | 33 |
| 30- | 45.5968- | 110.8063- | 2- | 12- | 0- | M36257 | -5 | -5 | -5 | 20 | -20 | 33 | 10 | -10 | -15 | 3 | 45 |
| 30- | 45.6003- | 110.8204- | 2- | 12- | 0- | M36258 | -5 | -5 | -5 | -10 | -20 | -15 | 11 | -10 | -15 | 3 | 28 |
| 30- | 45.6157- | 110.8536- | 2- | 12- | 0- | M36259 | -5 | -5 | -5 | 39 | -20 | 30 | 17 | -10 | -15 | 3 | 50 |
| 30- | 45.6276- | 110.8425- | 2- | 12- | 0- | M36260 | -5 | -5 | -5 | 15 | -20 | -15 | 11 | -10 | -15 | 3 | 32 |
| 30- | 45.6440- | 110.8721- | 2- | 12- | 0- | M36261 | -5 | -5 | -5 | 20 | -20 | -15 | 10 | -10 | -15 | 3 | 35 |
| 30- | 45.6710- | 110.7955- | 2- | 12- | 0- | M36262 | -5 | -5 | -5 | 31 | -20 | 56 | 5 | -10 | -15 | 2 | 61 |
| 30- | 45.6645- | 110.8396- | 2- | 12- | 0- | M36263 | -5 | -5 | -5 | 23 | -20 | 37 | 6 | -10 | -15 | 3 | 40 |
| 30- | 45.6609- | 110.8376- | 2- | 12- | 0- | M36264 | -5 | -5 | -5 | 38 | -20 | -15 | 10 | -10 | -15 | 2 | 41 |
| 30- | 45.5632- | 111.0713- | 2- | 12- | 0- | M36265 | -5 | -5 | -5 | 27 | -20 | 19 | 14 | -10 | -15 | 2 | 21 |

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



| DOE SAMPLE NUMBER | | | | | | LAB. SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (Concentrations reported in weight parts per million (ppm)) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Al | Au | Ba | Ca | Ce | Cl | Co | Cr | Cs | Dy | Eu | Fe | Hf | K | La | Lu |
| 30- | 45.0908- | 110.3456- | 2- | 12- | | 0-M36215 | 51350 | -0.14 | 590 | 49280 | 69 | -102 | 16.7 | 144 | 3.6 | 5 | 1.6 | 38850 | 10.6 | 16260 | 44 | 0.5 |
| 30- | 45.0402- | 110.3998- | 2- | 12- | | 0-M36216 | 53650 | -0.13 | 695 | 26110 | 86 | -87 | 13.0 | 125 | 3.4 | 5 | 1.8 | 36910 | 19.5 | 18910 | 43 | 0.6 |
| 30- | 45.0396- | 110.4024- | 2- | 12- | | 0-M36217 | 58650 | -0.12 | 744 | 35760 | 66 | 205 | 16.8 | 107 | 3.7 | 4 | 1.7 | 43690 | 13.3 | 17580 | 40 | 0.5 |
| 30- | 45.1507- | 110.4361- | 2- | 12- | | 0-M36218 | 56640 | -0.14 | 807 | 27250 | 79 | -82 | 12.9 | 154 | 4.4 | 4 | 1.7 | 31520 | 12.0 | 16180 | 29 | 0.5 |
| 30- | 45.3075- | 110.3186- | 2- | 12- | | 0-M36219 | 54220 | -0.13 | 710 | 28660 | 73 | -88 | 18.1 | 128 | 3.0 | 4 | 1.6 | 40040 | 11.0 | 15980 | 46 | 0.4 |
| 30- | 45.1903- | 110.1821- | 2- | 12- | | 0-M36220 | 50910 | -0.11 | 637 | 48360 | 73 | -86 | 8.4 | 76 | 4.2 | 5 | 1.4 | 26080 | 11.7 | 15040 | 53 | 0.4 |
| 30- | 45.4661- | 110.3722- | 2- | 12- | | 0-M36221 | 64350 | -0.13 | 652 | 32250 | 64 | -93 | 15.3 | 79 | 3.7 | 4 | 1.7 | 37910 | 9.1 | 19390 | 56 | 0.3 |
| 30- | 45.4945- | 110.3474- | 2- | 12- | | 0-M36222 | 54690 | -0.14 | 795 | 34010 | 75 | -81 | 12.4 | 111 | 3.8 | 4 | 1.6 | 31210 | 11.6 | 15590 | 38 | 0.3 |
| 30- | 45.3050- | 110.3210- | 2- | 12- | | 0-M36223 | 53890 | -0.11 | 681 | 28510 | 69 | -74 | 10.5 | 101 | 3.7 | 5 | 1.5 | 29790 | 14.9 | 16690 | 49 | 0.5 |
| 30- | 45.3042- | 110.3203- | 2- | 12- | | 0-M36224 | 60530 | -0.13 | 930 | 29190 | 83 | -98 | 14.3 | 155 | 4.7 | 4 | 1.6 | 37810 | 10.8 | 16150 | 53 | 0.4 |
| 30- | 45.2361- | 110.1866- | 2- | 12- | | 0-M36225 | 61590 | -0.13 | 459 | 25950 | 55 | 132 | 22.1 | 193 | 3.4 | 3 | 1.3 | 41010 | 8.4 | 18550 | 44 | 0.4 |
| 30- | 45.4620- | 110.3796- | 2- | 12- | | 0-M36226 | 57620 | -0.14 | 728 | 29000 | 80 | -84 | 13.8 | 114 | 3.1 | 4 | 1.8 | 31840 | 16.1 | 16950 | 42 | 0.5 |
| 30- | 45.4563- | 110.3794- | 2- | 12- | | 0-M36227 | 52640 | -0.12 | 725 | 32820 | 69 | -71 | 9.6 | 86 | 3.7 | 4 | 1.4 | 26960 | 13.7 | 17130 | 42 | 0.5 |
| 30- | 45.4244- | 110.4055- | 2- | 12- | | 0-M36228 | 60040 | -0.13 | 652 | 21940 | 97 | -91 | 10.7 | 110 | 4.3 | 5 | 1.8 | 33520 | 16.0 | 21900 | 65 | 0.5 |
| 30- | 45.4850- | 111.4702- | 2- | 12- | | 0-M36229 | 65040 | -0.13 | 787 | 26410 | 85 | 171 | 17.8 | 154 | 4.2 | 5 | 1.9 | 39630 | 15.9 | 18340 | 54 | 0.6 |
| 30- | 45.0791- | 110.3788- | 2- | 12- | | 0-M36230 | 54720 | -0.15 | 593 | 26280 | 94 | -95 | 15.4 | 94 | 2.6 | 5 | 1.8 | 38710 | 16.2 | 15700 | 46 | 0.6 |
| 30- | 45.0771- | 111.1565- | 2- | 12- | | 0-M36231 | 43690 | -0.12 | 787 | 43890 | 54 | -67 | 10.6 | 219 | 3.2 | 3 | 1.3 | 22450 | 7.9 | 17090 | 31 | 0.3 |
| 30- | 45.0803- | 111.1188- | 2- | 12- | | 0-M36232 | 59470 | -0.13 | 920 | 28110 | 84 | 103 | 16.9 | 185 | 6.0 | 5 | 1.7 | 41300 | 11.0 | 14180 | 48 | 0.4 |
| 30- | 45.0802- | 111.1164- | 2- | 12- | | 0-M36233 | 61530 | -0.13 | 860 | 28600 | 66 | -92 | 17.0 | 134 | 3.4 | 4 | 1.6 | 40090 | 9.8 | 17020 | 37 | 0.3 |
| 30- | 45.0911- | 110.3444- | 2- | 12- | | 0-M36234 | 58680 | -0.15 | 734 | 25310 | 82 | 93 | 14.8 | 115 | 3.3 | 5 | 1.6 | 41860 | 10.3 | 13880 | 45 | 0.4 |
| 30- | 45.4581- | 110.3811- | 2- | 12- | | 0-M36235 | 56010 | -0.13 | 695 | 24660 | 97 | -94 | 16.9 | 124 | 5.7 | 5 | 1.7 | 44570 | 13.1 | 13120 | 49 | 0.6 |
| 30- | 45.4506- | 110.3919- | 2- | 12- | | 0-M36236 | 46830 | -0.12 | 625 | 42940 | 79 | -108 | 13.7 | 95 | 3.3 | 4 | 1.7 | 43400 | 10.1 | 15350 | 38 | 0.5 |
| 30- | 45.0308- | 110.8801- | 2- | 12- | | 0-M36237 | 69550 | -0.13 | 847 | 27590 | 55 | -99 | 20.0 | 148 | 3.0 | 4 | 1.4 | 42880 | 7.5 | 16180 | 41 | 0.3 |
| 30- | 45.0158- | 110.8833- | 2- | 12- | | 0-M36238 | 61250 | -0.16 | 906 | 29000 | 79 | -93 | 19.5 | 142 | 4.3 | 4 | 1.5 | 45270 | 7.8 | 16600 | 35 | 0.2 |
| 30- | 45.1682- | 110.3825- | 2- | 12- | | 0-M36239 | 59870 | -0.12 | 831 | 30050 | 79 | 93 | 16.4 | 152 | 3.5 | 5 | 1.6 | 43250 | 14.4 | 17300 | 54 | 0.5 |
| 30- | 45.1750- | 110.3966- | 2- | 12- | | 0-M36240 | 61980 | -0.16 | 724 | 28540 | 81 | 107 | 34.9 | 154 | 4.8 | 5 | 2.8 | 53150 | 13.2 | 18850 | 48 | 0.5 |
| 30- | 45.0164- | 110.8883- | 2- | 12- | | 0-M36241 | 64760 | -0.12 | 846 | 31050 | 59 | -90 | 20.2 | 162 | 3.0 | 4 | 1.7 | 43910 | 8.3 | 17640 | 37 | 0.3 |
| 30- | 45.0147- | 110.9514- | 2- | 12- | | 0-M36242 | 76120 | -0.16 | 1075 | 29300 | 66 | -107 | 22.1 | 160 | 2.9 | 3 | 1.5 | 45180 | 6.6 | 17920 | -16 | 0.4 |
| 30- | 45.0856- | 110.4176- | 2- | 12- | | 0-M36243 | 44260 | -0.10 | 668 | 40140 | 50 | -62 | 8.7 | 173 | 2.5 | 3 | 1.3 | 23230 | 7.5 | 14550 | 31 | 0.2 |
| 30- | 45.4088- | 110.4215- | 2- | 12- | | 0-M36244 | 53070 | -0.11 | 694 | 32290 | 68 | -86 | 9.2 | 72 | 3.6 | 4 | 1.6 | 32260 | 12.0 | 18310 | 38 | 0.5 |
| 30- | 45.3982- | 110.4165- | 2- | 12- | | 0-M36245 | 49830 | -0.13 | 497 | 31710 | 100 | -86 | 13.4 | 92 | 2.8 | 6 | 1.7 | 38400 | 26.1 | 9003 | 59 | 0.7 |
| 30- | 45.0576- | 111.1890- | 2- | 12- | | 0-M36246 | 40250 | -0.11 | 714 | 30210 | 58 | -63 | 8.6 | 74 | 2.5 | 4 | 1.4 | 21040 | 15.4 | 12580 | 45 | 0.5 |
| 30- | 45.1394- | 110.3747- | 2- | 12- | | 0-M36247 | 56050 | -0.12 | 758 | 32490 | 73 | -79 | 14.0 | 195 | 3.2 | 4 | 1.7 | 37910 | 10.8 | 17770 | 47 | 0.3 |
| 30- | 45.6557- | 110.9742- | 2- | 12- | | 0-M36248 | 56600 | -0.15 | 792 | 14830 | 103 | -113 | 15.4 | 134 | 4.3 | 6 | 1.7 | 36140 | 16.4 | 15900 | 47 | 0.5 |
| 30- | 45.5932- | 111.0451- | 2- | 12- | | 0-M36249 | 57610 | -0.17 | 434 | 29400 | 110 | 276 | 34.6 | 286 | 2.7 | 5 | 2.0 | 72690 | 14.6 | 15030 | 77 | 0.6 |
| 30- | 45.5813- | 111.0210- | 2- | 12- | | 0-M36250 | 60320 | -0.17 | 633 | 33950 | 87 | 134 | 28.3 | 224 | 2.7 | 4 | 1.6 | 59140 | 8.2 | 14010 | 45 | 0.5 |
| 30- | 45.5732- | 110.7916- | 2- | 12- | | 0-M36251 | 48390 | -0.12 | 917 | 13340 | 71 | -69 | 12.4 | 105 | 3.0 | 4 | 1.5 | 32770 | 18.7 | 18710 | 42 | 0.4 |
| 30- | 45.5608- | 110.7598- | 2- | 12- | | 0-M36252 | 57030 | -0.11 | 945 | 24410 | 60 | -91 | 8.0 | 83 | 2.9 | 3 | 1.7 | 25230 | 10.7 | 15750 | 35 | 0.3 |
| 30- | 45.5666- | 110.7737- | 2- | 15- | | 0-M36253 | 72810 | -0.14 | 1238 | 36670 | 56 | -105 | 22.0 | 82 | 2.6 | 3 | 1.8 | 50440 | 5.9 | 19020 | -16 | 0.3 |
| 30- | 45.5767- | 110.7724- | 2- | 12- | | 0-M36254 | 26120 | -0.12 | 458 | 63470 | 41 | -51 | 4.4 | 57 | 2.2 | 3 | 1.4 | 14880 | 28.9 | 10770 | 22 | 0.6 |
| 30- | 45.5783- | 110.7870- | 2- | 12- | | 0-M36255 | 37460 | -0.11 | 765 | 26160 | 54 | -53 | 5.2 | 55 | 2.7 | 4 | 1.7 | 20600 | 34.4 | 13060 | 38 | 0.6 |
| 30- | 45.5897- | 110.8023- | 2- | 12- | | 0-M36256 | 43520 | -0.11 | 674 | 8990 | 51 | -63 | 4.4 | 47 | 4.0 | 4 | 1.4 | 17500 | 11.5 | 12500 | 30 | 0.3 |
| 30- | 45.5968- | 110.8063- | 2- | 12- | | 0-M36257 | 71210 | -0.13 | 1189 | 32500 | 60 | -103 | 19.9 | 130 | 2.9 | 4 | 1.7 | 44680 | 8.7 | 17100 | 41 | 0.3 |
| 30- | 45.6003- | 110.8204- | 2- | 12- | | 0-M36258 | 38280 | -0.12 | 684 | 8284 | 52 | -50 | 5.3 | 35 | 2.7 | 3 | 1.3 | 17000 | 10.5 | 11800 | 24 | 0.3 |
| 30- | 45.6157- | 110.8536- | 2- | 12- | | 0-M36259 | 61270 | -0.14 | 802 | 13190 | 62 | -61 | 11.7 | 60 | 6.1 | 5 | 1.6 | 34910 | 9.5 | 19010 | 33 | 0.5 |
| 30- | 45.6276- | 110.8425- | 2- | 12- | | 0-M36260 | 45130 | -0.11 | 731 | 8720 | 61 | -69 | 5.0 | 53 | 3.9 | 4 | 1.5 | 17160 | 16.7 | 16090 | 34 | 0.5 |
| 30- | 45.6440- | 110.8721- | 2- | 12- | | 0-M36261 | 53050 | -0.12 | 657 | 20740 | 45 | -72 | 6.8 | 44 | 3.6 | 3 | 1.3 | 22350 | 9.8 | 15070 | 25 | 0.4 |
| 30- | 45.6710- | 110.7955- | 2- | 12- | | 0-M36262 | 56870 | -0.18 | 878 | 29630 | 71 | -97 | 22.8 | 682 | -2.4 | 3 | 1.9 | 87090 | 16.4 | 14030 | 50 | 0.3 |
| 30- | 45.6645- | 110.8396- | 2- | 12- | | 0-M36263 | 65060 | -0.14 | 993 | 27970 | 74 | -91 | 15.9 | 339 | 2.7 | 3 | 1.7 | 43340 | 6.2 | 17770 | 36 | 0.3 |
| 30- | 45.6609- | 110.8376- | 2- | 12- | | 0-M36264 | 62110 | -0.13 | 897 | 26440 | 68 | -99 | 13.3 | 135 | 2.7 | 4 | 2.1 | 41270 | 13.7 | 17440 | 45 | 0.5 |
| 30- | 45.5632- | 111.0713- | 2- | 12- | | 0-M36265 | 61380 | -0.13 | 827 | 22960 | 57 | -97 | 17.0 | 101 | 2.1 | 3 | 1.8 | 38730 | 7.5 | 17310 | -17 | 0.4 |

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

④

| DOE SAMPLE NUMBER | | | | | | LAB. SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | U/Th RATIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Mg | Mn | Na | Rb | Sb | Sc | Sm | Sr | Ta | Tb | Th | Ti | V | Yb | Zn | |
| 30- | 45.0908- | 110.3456- | 2- | 12- | 0- | M36215 | 20100 | 1481 | 10880 | 55 | -4 | 12.0 | 5.9 | -368 | -1 | -1 | 12.2 | 5065 | 82 | 4.1 | -42 | 0.246 |
| 30- | 45.0402- | 110.3998- | 2- | 12- | 0- | M36216 | 11000 | 716 | 10720 | 86 | -3 | 9.8 | 6.8 | -296 | -1 | -1 | 14.4 | 4749 | 104 | 4.6 | -68 | 0.271 |
| 30- | 45.0396- | 110.4024- | 2- | 12- | 0- | M36217 | 9718 | 860 | 12590 | 77 | -3 | 10.0 | 5.5 | -283 | -1 | -1 | 11.3 | 3926 | 118 | 5.3 | -35 | 0.283 |
| 30- | 45.1507- | 110.4361- | 2- | 12- | 0- | M36218 | 12970 | 680 | 12370 | 52 | -4 | 9.6 | 7.0 | -265 | -1 | -1 | 10.6 | 3221 | 91 | 4.5 | 118 | 0.340 |
| 30- | 45.3075- | 110.3186- | 2- | 12- | 0- | M36219 | 12550 | 965 | 12880 | 86 | -3 | 11.3 | 5.5 | -296 | -1 | -1 | 9.1 | 3720 | 108 | 4.1 | -55 | 0.396 |
| 30- | 45.1903- | 110.1821- | 2- | 12- | 0- | M36220 | 12790 | 536 | 12820 | 71 | -3 | 8.1 | 6.1 | -263 | -1 | -1 | 12.9 | 2325 | 61 | 3.9 | 104 | 0.240 |
| 30- | 45.4661- | 110.3722- | 2- | 12- | 0- | M36221 | 11410 | 756 | 14150 | 86 | -3 | 9.4 | 4.7 | -288 | -1 | -1 | 11.1 | 3162 | 107 | 3.1 | 98 | 0.252 |
| 30- | 45.4945- | 110.3474- | 2- | 12- | 0- | M36222 | 13470 | 682 | 12610 | 59 | -3 | 9.3 | 5.0 | -262 | -1 | -1 | 12.2 | 3545 | 89 | 4.2 | -36 | 0.352 |
| 30- | 45.3050- | 110.3210- | 2- | 12- | 0- | M36223 | 10730 | 587 | 12730 | 63 | -3 | 9.4 | 6.0 | -227 | -1 | -1 | 10.7 | 3448 | 89 | 4.5 | 110 | 0.290 |
| 30- | 45.3042- | 110.3203- | 2- | 12- | 0- | M36224 | 10100 | 709 | 14500 | -31 | -3 | 11.3 | 4.7 | -309 | -1 | -1 | 12.4 | 3158 | 85 | 2.8 | 121 | 0.540 |
| 30- | 45.2361- | 110.1866- | 2- | 12- | 0- | M36225 | 13310 | 674 | 13690 | 65 | -3 | 12.4 | 4.6 | -255 | -1 | -1 | 10.2 | 3389 | 105 | 3.2 | 118 | 0.265 |
| 30- | 45.4620- | 110.3796- | 2- | 12- | 0- | M36226 | 11710 | 699 | 14440 | 58 | -3 | 10.0 | 8.2 | -263 | -1 | -1 | 12.5 | 3660 | 98 | 4.2 | 80 | 0.464 |
| 30- | 45.4563- | 110.3794- | 2- | 12- | 0- | M36227 | 10750 | 584 | 10370 | 56 | -3 | 8.2 | 5.2 | 417 | -1 | -1 | 10.5 | 3267 | 78 | -2.2 | 90 | 0.352 |
| 30- | 45.4244- | 110.4055- | 2- | 12- | 0- | M36228 | 9118 | 705 | 13460 | 67 | -3 | 11.6 | 8.1 | -295 | -1 | -1 | 19.2 | 3120 | 82 | 5.7 | 61 | 0.193 |
| 30- | 45.4850- | 111.4702- | 2- | 12- | 0- | M36229 | 12540 | 778 | 15640 | 71 | -3 | 12.7 | 7.3 | -283 | -1 | -1 | 14.8 | 3739 | 107 | 4.3 | 75 | 0.236 |
| 30- | 45.0791- | 110.3788- | 2- | 12- | 0- | M36230 | 11080 | 1267 | 12560 | -34 | -4 | 12.0 | 6.9 | -335 | -1 | -1 | 13.9 | 6158 | 96 | 6.7 | 98 | 0.252 |
| 30- | 45.0771- | 111.1565- | 2- | 12- | 0- | M36231 | 13300 | 614 | 6883 | 58 | -3 | 8.1 | 4.6 | 493 | -1 | -1 | 7.6 | 2646 | 79 | 2.9 | -26 | 0.342 |
| 30- | 45.0803- | 111.1188- | 2- | 12- | 0- | M36232 | 12790 | 727 | 14880 | -33 | -3 | 12.1 | 6.3 | -314 | -1 | -1 | 12.0 | 3967 | 116 | 3.4 | 106 | 0.275 |
| 30- | 45.0802- | 111.1164- | 2- | 12- | 0- | M36233 | 13900 | 767 | 13860 | -36 | -3 | 11.3 | 5.3 | -286 | -1 | -1 | 11.0 | 3883 | 113 | 3.2 | 112 | 0.273 |
| 30- | 45.0911- | 110.3444- | 2- | 12- | 0- | M36234 | 11640 | 939 | 13070 | 64 | -4 | 10.9 | 6.9 | -299 | -1 | -1 | 12.4 | 4674 | 111 | 3.5 | 100 | 0.234 |
| 30- | 45.4581- | 110.3811- | 2- | 12- | 0- | M36235 | 11690 | 1180 | 13020 | 70 | -3 | 13.0 | 6.0 | -316 | -1 | -1 | 13.7 | 6316 | 99 | 3.6 | 93 | 0.241 |
| 30- | 45.4506- | 110.3919- | 2- | 12- | 0- | M36236 | 17350 | 1428 | 10190 | 52 | -3 | 11.2 | 5.4 | -403 | -1 | -1 | 13.2 | 4281 | 107 | 3.8 | 84 | 0.288 |
| 30- | 45.0308- | 110.8801- | 2- | 12- | 0- | M36237 | 11030 | 717 | 17890 | 54 | -3 | 11.0 | 4.4 | -292 | -1 | -1 | 8.9 | 3666 | 104 | -2.5 | -45 | 0.371 |
| 30- | 45.0158- | 110.8833- | 2- | 12- | 0- | M36238 | 14100 | 848 | 14730 | -41 | -4 | 13.2 | 5.7 | 469 | -1 | -1 | 10.2 | 4162 | 133 | 6.0 | -35 | 0.304 |
| 30- | 45.1682- | 110.3825- | 2- | 12- | 0- | M36239 | 11760 | 769 | 12280 | 62 | -3 | 11.2 | 6.0 | -266 | -1 | -1 | 12.3 | 4276 | 118 | 4.7 | 159 | 0.301 |
| 30- | 45.1750- | 110.3966- | 2- | 12- | 0- | M36240 | 12620 | 940 | 13380 | 60 | -4 | 15.2 | 6.2 | -373 | -1 | -1 | 12.6 | 4850 | 143 | -3.0 | 153 | 0.286 |
| 30- | 45.0164- | 110.8883- | 2- | 12- | 0- | M36241 | 12040 | 798 | 15360 | 42 | -3 | 11.5 | 5.2 | 513 | -1 | -1 | 8.6 | 4057 | 125 | 3.8 | | 0.291 |
| 30- | 45.0147- | 110.9514- | 2- | 12- | 0- | M36242 | 11920 | 841 | 20460 | -42 | -4 | 11.4 | 5.1 | 656 | -1 | -1 | 8.8 | 4600 | 116 | -2.9 | 94 | 0.500 |
| 30- | 45.0856- | 110.4176- | 2- | 12- | 0- | M36243 | 15510 | 504 | 7146 | 73 | -3 | 7.3 | 5.0 | -215 | -1 | -1 | 6.9 | 2370 | 73 | -2.1 | 65 | 0.348 |
| 30- | 45.4088- | 110.4215- | 2- | 12- | 0- | M36244 | 9435 | 586 | 12570 | 76 | -3 | 8.4 | 6.3 | 287 | -1 | -1 | 12.7 | 2949 | 76 | 5.0 | 83 | 0.228 |
| 30- | 45.3982- | 110.4165- | 2- | 12- | 0- | M36245 | 7057 | 807 | 12070 | 63 | -3 | 13.1 | 8.1 | -274 | -1 | -1 | 23.4 | 3651 | 104 | 5.3 | 69 | 0.218 |
| 30- | 45.0576- | 111.1890- | 2- | 12- | 0- | M36246 | 10430 | 578 | 7902 | -28 | -3 | 6.6 | 4.0 | -216 | -1 | -1 | 8.1 | 2625 | 59 | 3.5 | -34 | 0.333 |
| 30- | 45.1394- | 110.3747- | 2- | 12- | 0- | M36247 | 13900 | 671 | 13130 | 76 | -3 | 11.3 | 6.5 | 403 | -1 | -1 | 10.5 | 3374 | 99 | 3.8 | 37 | 0.267 |
| 30- | 45.6557- | 110.9742- | 2- | 12- | 0- | M36248 | 8250 | 1266 | 10830 | -37 | -4 | 10.0 | 6.9 | -431 | -1 | -1 | 18.9 | 3797 | 79 | 4.2 | 142 | 0.196 |
| 30- | 45.5932- | 111.0451- | 2- | 12- | 0- | M36249 | 22230 | 2538 | 14840 | -45 | -4 | 23.6 | 8.8 | -525 | -2 | -2 | 27.2 | 5146 | 147 | 8.1 | -54 | 0.305 |
| 30- | 45.5813- | 111.0210- | 2- | 12- | 0- | M36250 | 18250 | 1807 | 13790 | -44 | -4 | 16.0 | 6.5 | -433 | -1 | -1 | 15.0 | 4062 | 129 | 4.3 | 73 | 0.207 |
| 30- | 45.5732- | 110.7916- | 2- | 12- | 0- | M36251 | 7277 | 512 | 9062 | 71 | -3 | 7.7 | 4.7 | -228 | -1 | -1 | 11.0 | 3863 | 111 | 5.1 | 98 | 0.364 |
| 30- | 45.5608- | 110.7598- | 2- | 12- | 0- | M36252 | 7877 | 543 | 12990 | 56 | -3 | 6.7 | 4.7 | 382 | -1 | -1 | 9.1 | 3081 | 72 | -2.0 | 107 | 0.242 |
| 30- | 45.5666- | 110.7737- | 2- | 15- | 0- | M36253 | 12330 | 855 | 17040 | -38 | -4 | 12.8 | 4.3 | -319 | -1 | -1 | 7.8 | 3895 | 127 | -2.3 | 108 | 0.269 |
| 30- | 45.5767- | 110.7724- | 2- | 12- | 0- | M36254 | 17550 | 394 | 3139 | -28 | -3 | 4.2 | 4.6 | -192 | -1 | -1 | 6.4 | 2326 | 45 | 3.0 | -36 | 0.469 |
| 30- | 45.5783- | 110.7870- | 2- | 12- | 0- | M36255 | 5901 | 435 | 4479 | -27 | -3 | 5.5 | 3.8 | 258 | -1 | -1 | 10.6 | 2888 | 67 | 3.8 | 70 | 0.358 |
| 30- | 45.5897- | 110.8023- | 2- | 12- | 0- | M36256 | 2719 | 258 | 5720 | 62 | -3 | 5.6 | 4.8 | -214 | -1 | -1 | 9.1 | 2514 | 51 | 3.9 | 119 | 0.308 |
| 30- | 45.5968- | 110.8063- | 2- | 12- | 0- | M36257 | 9313 | 865 | 16820 | -34 | -3 | 11.1 | 4.4 | 535 | -1 | -1 | 10.4 | 3492 | 112 | 3.2 | -76 | 0.260 |
| 30- | 45.6003- | 110.8204- | 2- | 12- | 0- | M36258 | 3031 | 255 | 4817 | -31 | -3 | 5.0 | 3.8 | -171 | -1 | -1 | 6.9 | 2208 | 60 | 2.7 | 46 | 0.362 |
| 30- | 45.6157- | 110.8536- | 2- | 12- | 0- | M36259 | 4991 | 881 | 3151 | 81 | -3 | 10.0 | 4.5 | -279 | -1 | -1 | 10.2 | 3221 | 102 | 3.0 | 92 | 0.304 |
| 30- | 45.6276- | 110.8425- | 2- | 12- | 0- | M36260 | 5367 | 304 | 7616 | 54 | -3 | 5.7 | 4.8 | -222 | -1 | -1 | 8.9 | 2806 | 66 | 4.3 | -61 | 0.360 |
| 30- | 45.6440- | 110.8721- | 2- | 12- | 0- | M36261 | 5938 | 569 | 6868 | -33 | -3 | 5.8 | 6.3 | -253 | -1 | -1 | 8.4 | 1922 | 78 | 3.7 | 117 | 0.357 |
| 30- | 45.6710- | 110.7955- | 2- | 12- | 0- | M36262 | 13240 | 1177 | 12540 | -48 | -5 | 14.8 | 5.4 | -344 | -1 | -2 | 11.2 | 6370 | 274 | -3.3 | 68 | 0.268 |
| 30- | 45.6645- | 110.8396- | 2- | 12- | 0- | M36263 | 10870 | 788 | 16560 | -36 | -4 | 14.6 | 4.8 | 472 | -1 | -1 | 6.8 | 4264 | 131 | -3.0 | 89 | 0.309 |
| 30- | 45.6609- | 110.8376- | 2- | 12- | 0- | M36264 | 10430 | 762 | 14240 | 71 | -3 | 10.7 | 5.7 | -320 | -1 | -1 | 11.5 | 4205 | 109 | -3.0 | 181 | 0.443 |
| 30- | 45.5632- | 111.0713- | 2- | 12- | 0- | M36265 | 10890 | 916 | 13100 | 64 | -3 | 10.6 | 5.8 | -313 | -1 | 2 | 8.7 | 3264 | 117 | 2.0 | -83 | 0.368 |

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

(1)

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER AND FIELD DATA | | | | | | | | | | | | | | | | | | | | | | | U CONCENTRATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | TIME SAMPLED DATE | TIME SAMPLED HOUR | AIR TEMPERATURE | WATER TEMPERATURE | COMMENTS | SPECIAL MEASUREMENTS | pH | CONDUCTIVITY (µmho/cm) | SCINTILLOMETER (eU ppm) | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm |
| 30- | 45.6693- | 110.7523- | 2- | 12- | | 0-M36266- | 09/14/76- | 11- | 17- | 9.0- | - | - | 6.3- | 270- | | 6- | 1- | 6- | 3- | 6- | 3- | 2- | 1- | 2- | 3- | 3- | 4- | 1- | -3- | - | - | - | - | 3.20 |
| 30- | 45.6560- | 110.7568- | 2- | 12- | | 0-M36267- | 09/14/76- | 12- | 17- | 9.0- | - | - | 6.5- | 390- | | 6- | 4- | -5- | 6- | 2- | 2- | 1- | 2- | 3- | 4- | 3- | 2- | -3- | - | - | - | - | 2.40 |
| 30- | 45.5699- | 110.8032- | 2- | 12- | | 0-M36268- | 09/14/76- | 12- | 17- | 10.5- | C- | - | 6.6- | 355- | | 6- | 4- | -3- | 6- | 3- | 3- | 2- | 2- | 4- | 3- | 2- | 2- | -3- | - | - | - | - | 2.30 |
| 30- | 45.5553- | 110.8171- | 2- | 12- | | 0-M36269- | 09/14/76- | 14- | 17- | 10.0- | - | - | 6.3- | 270- | | 0- | 1- | 6- | 3- | 6- | 3- | 2- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | 3.70 |
| 30- | 45.6230- | 110.7621- | 2- | 12- | | 0-M36270- | 09/14/76- | 14- | 21- | 11.0- | - | - | 6.6- | 350- | | 0- | 1- | 6- | 3- | 6- | 3- | 3- | 2- | 2- | 3- | 4- | 4- | 2- | -3- | - | - | - | - | 3.30 |
| 30- | 45.5490- | 110.8107- | 2- | 12- | | 0-M36271- | 09/14/76- | 15- | 18- | 13.0- | - | - | 6.3- | 460- | | 3- | 1- | 6- | 3- | 6- | 3- | 2- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | 2.90 |
| 30- | 45.5285- | 110.8274- | 2- | 15- | | 0-M36272- | 09/14/76- | 15- | 20- | - | - | - | - | - | | 0- | 1- | 6- | 5- | 6- | -1- | -3- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | - | - | 2.30 |
| 30- | 45.6666- | 110.7109- | 2- | 12- | | 0-M36273- | 09/14/76- | 16- | 18- | 12.0- | - | - | 6.5- | 510- | | 0- | 4- | -3- | 7- | 3- | 2- | 1- | 2- | 3- | 4- | 2- | 2- | -3- | - | - | - | - | - | 2.30 |
| 30- | 45.6693- | 110.7394- | 2- | 12- | | 0-M36274- | 09/14/76- | 16- | 19- | 11.5- | - | - | 6.3- | 325- | | 0- | 1- | 6- | 4- | 6- | 3- | 2- | 1- | 2- | 3- | 4- | 4- | 3- | -3- | - | - | - | - | 2.10 |
| 30- | 45.6604- | 110.7223- | 2- | 12- | | 0-M36275- | 09/14/76- | 17- | 17- | 13.0- | - | - | 6.3- | 300- | | 6- | 4- | 6- | 3- | 6- | 3- | 2- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | 4.20 |
| 30- | 45.5625- | 110.9971- | 2- | 15- | | 0-M36276- | 09/14/76- | 17- | 15- | - | - | - | - | - | | 3- | 4- | 6- | 5- | 6- | -1- | -3- | 4- | 2- | 5- | 4- | -3- | - | - | - | - | - | - | 2.60 |
| 30- | 45.6086- | 110.9847- | 2- | 12- | | 0-M36277- | 09/14/76- | 18- | 13- | 13.0- | - | - | 6.1- | 330- | | 0- | 4- | -3- | 6- | 4- | 2- | 1- | 2- | 3- | 3- | 2- | 2- | -3- | - | - | - | - | - | 6.10 |
| 30- | 45.5369- | 111.0173- | 2- | 12- | | 0-M36278- | 09/14/76- | 19- | 10- | 10.5- | - | - | 5.7- | 115- | | 6- | 2- | 6- | 2- | 6- | 4- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -8- | - | - | - | - | 2.70 |
| 30- | 45.5072- | 110.9828- | 2- | 12- | | 0-M36279- | 09/11/76- | 19- | 10- | 8.0- | - | - | 5.9- | 490- | | 3- | 2- | 7- | 5- | 8- | 2- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -8- | - | - | - | - | 2.60 |
| 30- | 45.5036- | 110.9893- | 2- | 12- | | 0-M36280- | 09/14/76- | 19- | 10- | 10.0- | - | - | 5.7- | 125- | | 6- | 2- | 7- | 3- | 6- | 4- | 3- | 1- | 2- | 1- | 4- | 3- | 1- | -8- | - | - | - | - | 2.30 |
| 30- | 45.7414- | 110.6444- | 2- | 12- | | 0-M36281- | 09/15/76- | 11- | 12- | 8.5- | - | - | 6.1- | 340- | | 3- | 2- | 6- | 3- | 6- | 2- | 2- | 1- | 2- | 4- | 4- | 2- | 1- | -3- | - | - | - | - | 2.50 |
| 30- | 45.7475- | 110.6885- | 2- | 12- | | 0-M36283- | 09/15/76- | 12- | 18- | 8.0- | - | - | 6.1- | 330- | | 0- | 1- | 6- | 3- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 3.40 |
| 30- | 45.7792- | 110.7264- | 2- | 12- | | 0-M36284- | 09/15/76- | 12- | 17- | 12.0- | - | - | 6.1- | 295- | | 0- | 1- | 6- | 3- | 6- | 3- | 2- | 1- | 2- | 4- | 2- | 3- | 1- | -3- | - | - | - | - | 2.40 |
| 30- | 45.7644- | 110.7414- | 2- | 15- | | 0-M36285- | 09/15/76- | 13- | 18- | - | - | - | - | - | | 0- | 1- | 6- | 5- | 7- | -1- | -2- | 4- | 4- | 4- | 1- | -3- | - | - | - | - | - | - | 2.20 |
| 30- | 45.8064- | 110.7106- | 2- | 15- | | 0-M36286- | 09/15/76- | 13- | 18- | - | - | - | - | - | | 16- | 1- | 6- | 4- | 6- | -1- | -2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | - | - | 2.80 |
| 30- | 45.7989- | 110.7433- | 2- | 15- | | 0-M36287- | 09/15/76- | 13- | 22- | - | - | - | - | - | | 9- | 1- | 6- | 5- | 6- | -1- | -3- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | - | - | 2.30 |
| 30- | 45.1161- | 110.3868- | 2- | 12- | | 0-M36288- | 10/24/76- | 11- | 2- | 1.0- | - | - | 5.8- | 210- | | -2- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | - | 2.00 |
| 30- | 45.0159- | 111.2165- | 2- | 12- | | 0-M36289- | 10/25/76- | 10- | 2- | 1.0- | - | - | 5.7- | 390- | | -1- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | - | 2.50 |
| 30- | 45.1274- | 110.3988- | 2- | 12- | | 0-M36290- | 10/24/76- | 13- | 4- | 2.0- | - | - | 5.7- | 200- | | -2- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | - | 2.20 |
| 30- | 45.0158- | 111.2151- | 2- | 12- | | 0-M36291- | 10/25/76- | 10- | 7- | 3.0- | - | - | 5.9- | 400- | | -1- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | - | 2.40 |
| 30- | 45.0718- | 111.2676- | 2- | 12- | | 0-M36292- | 10/26/76- | 9- | 3- | 1.0- | - | - | 6.1- | 360- | | -2- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | - | 2.90 |
| 30- | 45.0217- | 111.3078- | 2- | 12- | | 0-M36293- | 10/26/76- | 12- | 4- | 1.0- | - | - | 6.0- | 350- | | -2- | 1- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | - | 4.00 |
| 30- | 45.1614- | 110.7442- | 2- | 12- | | 0-M36294- | 11/02/76- | 8- | 1- | 1.0- | - | - | 5.5- | 80- | | -2- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 2- | 4- | 1- | -1- | - | - | - | - | - | 2.60 |
| 30- | 45.1617- | 110.7217- | 2- | 12- | | 0-M36295- | 11/02/76- | 9- | 1- | 1.0- | - | - | 5.5- | 80- | | -2- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 3- | 1- | -1- | - | - | - | - | - | 4.00 |
| 30- | 45.0243- | 111.1942- | 2- | 12- | | 0-M36296- | 10/25/76- | 9- | 2- | 1.0- | - | - | 5.9- | 410- | | -1- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 3- | 2- | -1- | - | - | - | - | - | 2.60 |
| 30- | 45.0239- | 111.1959- | 2- | 12- | | 0-M36297- | 10/25/76- | 9- | 2- | 1.0- | - | - | 5.9- | 400- | | -1- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 3- | 2- | -1- | - | - | - | - | - | 2.80 |
| 30- | 45.0834- | 110.4009- | 2- | 12- | | 0-M36298- | 10/24/76- | 11- | 1- | 1.0- | - | - | 5.7- | 200- | | -2- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 3- | -1- | - | - | - | - | - | 3.60 |
| 30- | 45.1590- | 110.3352- | 2- | 12- | | 0-M36299- | 10/24/76- | 12- | 3- | 1.0- | - | - | 6.0- | 345- | | -2- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | - | 2.40 |
| 30- | 45.1109- | 110.4279- | 2- | 12- | | 0-M36300- | 10/25/76- | 9- | 3- | 1.4- | - | - | 6.1- | 495- | | -2- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | - | 2.60 |
| 30- | 45.0853- | 110.4025- | 2- | 12- | | 0-M36301- | 10/24/76- | 11- | 2- | 1.0- | - | - | 5.8- | 210- | | -2- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | - | 2.70 |
| 30- | 45.1811- | 110.3073- | 2- | 12- | | 0-M36302- | 10/24/76- | 11- | 3- | 1.5- | - | - | 5.9- | 350- | | -2- | 8- | 1- | 1- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | - | 2.10 |
| 30- | 45.1262- | 110.3808- | 2- | 12- | | 0-M36303- | 10/24/76- | 9- | 2- | 1.0- | - | - | 5.7- | 135- | | -2- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | - | 2.80 |
| 30- | 45.0069- | 111.3839- | 2- | 12- | | 0-M36304- | 10/26/76- | 13- | 4- | 1.0- | - | - | 5.6- | 290- | | -2- | 1- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | - | 3.50 |
| 30- | 45.0071- | 111.3856- | 2- | 12- | | 0-M36305- | 10/26/76- | 13- | 4- | 1.0- | - | - | 5.7- | 270- | | -2- | 1- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | - | 4.90 |
| 30- | 45.0018- | 111.2814- | 2- | 12- | | 0-M36306- | 10/26/76- | 13- | 4- | 1.0- | - | - | 6.0- | 360- | | -2- | 1- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | - | 3.00 |
| 30- | 45.0362- | 111.3991- | 2- | 12- | | 0-M36307- | 10/26/76- | 10- | 4- | 1.0- | - | - | 5.7- | 290- | | -2- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | - | 4.90 |
| 30- | 45.0353- | 111.4002- | 2- | 12- | | 0-M36308- | 10/26/76- | 10- | 4- | 1.0- | - | - | 5.7- | 280- | | -2- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | - | 4.50 |
| 30- | 45.1480- | 110.3451- | 2- | 12- | | 0-M36309- | 10/24/76- | 11- | 3- | 1.0- | - | - | 6.0- | 350- | | -2- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | - | 2.10 |
| 30- | 45.3946- | 110.6063- | 2- | 12- | | 0-M36310- | 10/30/76- | 9- | -5- | 1.0- | - | - | 5.7- | 165- | | -2- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | - | 2.90 |
| 30- | 45.0569- | 110.8688- | 2- | 12- | | 0-M36311- | 10/31/76- | 9- | - | 1.0- | - | - | 5.5- | 280- | | -2- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 3- | 4- | 3- | 1- | -1- | - | - | - | - | - | 2.90 |
| 30- | 45.0463- | 110.8788- | 2- | 12- | | 0-M36312- | 10/31/76- | 10- | 1- | 1.0- | - | - | 5.5- | 80- | | -2- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | - | 3.00 |
| 30- | 45.3821- | 110.6121- | 2- | 12- | | 0-M36313- | 10/30/76- | 8- | -4- | 1.0- | - | - | 5.7- | 160- | | -2- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | - | 3.60 |
| 30- | 45.3753- | 111.1363- | 2- | 12- | | 0-M36314- | 09/18/76- | 15- | 15- | 8.5- | - | - | 5.6- | 820- | | -1- | 7- | 2- | 4- | 4- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -8- | - | - | - | - | - | 2.30 |
| 30- | 45.3766- | 111.0885- | 2- | 12- | | 0-M36315- | 09/18/76- | 16- | 14- | 8.0- | - | - | 5.5- | 82- | | -1- | 7- | 3- | 7- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -8- | - | - | - | - | - | 2.20 |
| 30- | 45.3761- | 111.0761- | 2- | 12- | | 0-M36316- | 09/18/76- | 16- | 12- | 7.5- | - | - | 5.5- | 94- | | -1- | 7- | 3- | 7- | 3- | 3- | 1- | 2- | 1- | 5- | 4- | 2- | -1- | - | - | - | - | - | 2.30 |
| 30- | 45.3784- | 111.0226- | 2- | 12- | | 0-M36317- | 09/18/76- | 17- | 11- | 6.2- | - | - | 6.0- | 177- | | -1- | 6- | 3- | 4- | 3- | 3- | 1- | 3- | 1- | 5- | 4- | 2- | -1- | - | - | - | - | - | 2.30 |

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

②

| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | 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) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ag | Bi | Cd | Cu | Nb | Ni | Pb | Sn | W | Be | Li |
| 30-45.6693-110.7523-2-12- | 0-M36266 | -5 | -5 | -5 | 32 | -20 | 26 | 15 | -10 | -15 | 2 | 25 |
| 30-45.6560-110.7568-2-12- | 0-M36267 | -5 | -5 | -5 | 114 | -20 | 52 | 13 | -10 | -15 | 2 | 29 |
| 30-45.5699-110.8032-2-12- | 0-M36268 | -5 | -5 | -5 | 37 | -20 | 41 | 10 | -10 | -15 | 2 | 41 |
| 30-45.5553-110.8171-2-12- | 0-M36269 | -5 | -5 | -5 | 33 | -20 | 46 | 10 | -10 | -15 | 4 | 39 |
| 30-45.6230-110.7621-2-12- | 0-M36270 | -5 | -5 | -5 | 27 | -20 | -15 | 6 | -10 | -15 | 2 | 25 |
| 30-45.5490-110.8107-2-12- | 0-M36271 | -5 | -5 | -5 | 26 | -20 | 17 | 21 | -10 | -15 | 2 | 27 |
| 30-45.5285-110.8274-2-15- | 0-M36272 | -5 | -5 | -5 | 24 | -20 | 22 | 15 | -10 | -15 | 2 | 19 |
| 30-45.6666-110.7109-2-12- | 0-M36273 | -5 | -5 | -5 | 25 | -20 | 30 | 6 | -10 | 21 | 2 | 30 |
| 30-45.6693-110.7394-2-12- | 0-M36274 | -5 | -5 | -5 | 25 | -20 | 53 | 9 | -10 | -15 | 2 | 25 |
| 30-45.6604-110.7223-2-12- | 0-M36275 | -5 | -5 | -5 | 21 | -20 | 58 | -5 | -10 | -15 | 1 | 15 |
| 30-45.5625-110.9971-2-15- | 0-M36276 | -5 | -5 | -5 | 33 | -20 | 43 | 18 | -10 | -15 | 2 | 32 |
| 30-45.6086-110.9847-2-12- | 0-M36277 | -5 | -5 | -5 | 18 | -20 | 76 | 8 | -10 | -15 | 2 | 43 |
| 30-45.5369-111.0173-2-12- | 0-M36278 | -5 | -5 | -5 | 23 | -20 | 24 | 15 | -10 | -15 | 2 | 45 |
| 30-45.5072-110.9828-2-12- | 0-M36279 | -5 | -5 | -5 | 23 | -20 | 24 | 11 | -10 | -15 | 2 | 32 |
| 30-45.5036-110.9893-2-12- | 0-M36280 | -5 | -5 | -5 | 21 | -20 | -15 | 9 | -10 | -15 | 3 | 44 |
| 30-45.7414-110.6444-2-12- | 0-M36281 | -5 | -5 | 5 | 34 | -20 | 38 | 5 | -10 | -15 | 3 | 31 |
| 30-45.7475-110.6885-2-12- | 0-M36283 | -5 | -5 | -5 | 29 | -20 | 46 | -5 | -10 | -15 | 1 | 34 |
| 30-45.7792-110.7264-2-12- | 0-M36284 | -5 | -5 | -5 | 32 | -20 | 51 | 17 | -10 | -15 | 2 | 33 |
| 30-45.7644-110.7414-2-15- | 0-M36285 | -5 | -5 | -5 | 41 | -20 | 46 | 14 | 10 | -15 | 3 | 47 |
| 30-45.8064-110.7106-2-15- | 0-M36286 | -5 | -5 | -5 | 22 | -20 | 60 | 19 | -10 | 18 | 3 | 29 |
| 30-45.7989-110.7433-2-15- | 0-M36287 | -5 | -5 | -5 | 34 | -20 | 35 | 13 | -10 | -15 | 2 | 37 |
| 30-45.1161-110.3868-2-12- | 0-M36288 | -5 | -5 | -5 | 16 | -20 | 29 | 9 | -10 | -15 | 2 | 25 |
| 30-45.0159-111.2165-2-12- | 0-M36289 | -5 | -5 | -5 | 23 | -20 | -15 | -5 | -10 | 19 | 2 | 20 |
| 30-45.1274-110.3988-2-12- | 0-M36290 | -5 | -5 | -5 | 33 | -20 | 42 | 7 | -10 | -15 | 2 | 36 |
| 30-45.0158-111.2151-2-12- | 0-M36291 | -5 | -5 | -5 | 18 | -20 | -15 | -5 | -10 | -15 | 2 | 24 |
| 30-45.0718-111.2676-2-12- | 0-M36292 | -5 | -5 | -5 | 20 | -20 | -15 | -5 | -10 | -15 | 2 | 28 |
| 30-45.0217-111.3078-2-12- | 0-M36293 | -5 | -5 | -5 | 42 | -20 | -15 | 11 | -10 | -15 | 2 | 46 |
| 30-45.1614-110.7442-2-12- | 0-M36294 | -5 | -5 | -5 | 17 | -20 | 24 | -5 | -10 | -15 | 2 | 43 |
| 30-45.1617-110.7217-2-12- | 0-M36295 | -5 | -5 | -5 | 28 | -20 | 54 | 9 | -10 | -15 | 2 | 32 |
| 30-45.0243-111.1942-2-12- | 0-M36296 | -5 | -5 | -5 | 13 | -20 | -15 | -5 | -10 | -15 | 2 | 33 |
| 30-45.0239-111.1959-2-12- | 0-M36297 | -5 | -5 | -5 | 21 | -20 | -15 | 5 | -10 | -15 | -1 | 31 |
| 30-45.0834-110.4009-2-12- | 0-M36298 | -5 | -5 | -5 | 22 | -20 | 42 | 12 | -10 | -15 | -1 | 47 |
| 30-45.1590-110.3352-2-12- | 0-M36299 | -5 | 5 | -5 | 30 | -20 | 46 | 11 | -10 | -15 | 2 | 31 |
| 30-45.1109-110.4279-2-12- | 0-M36300 | -5 | -5 | -5 | 18 | -20 | 40 | -5 | -10 | -15 | 2 | 26 |
| 30-45.0853-110.4025-2-12- | 0-M36301 | -5 | -5 | -5 | 20 | -20 | 76 | -5 | -10 | -15 | 2 | 17 |
| 30-45.1811-110.3073-2-12- | 0-M36302 | -5 | -5 | -5 | 16 | -20 | 46 | -5 | -10 | -15 | 3 | 33 |
| 30-45.1262-110.3808-2-12- | 0-M36303 | -5 | -5 | -5 | 30 | -20 | 44 | 7 | -10 | -15 | 2 | 23 |
| 30-45.0069-111.3839-2-12- | 0-M36304 | -5 | -5 | -5 | 22 | -20 | 43 | 11 | -10 | -15 | 3 | 34 |
| 30-45.0071-111.3856-2-12- | 0-M36305 | -5 | -5 | -5 | 20 | -20 | -15 | 11 | -10 | -15 | 3 | 36 |
| 30-45.0018-111.2814-2-12- | 0-M36306 | -5 | -5 | -5 | 20 | -20 | -15 | 12 | -10 | -15 | -1 | 48 |
| 30-45.0362-111.3991-2-12- | 0-M36307 | -5 | -5 | -5 | 11 | -20 | 21 | 7 | -10 | -15 | 3 | 25 |
| 30-45.0353-111.4002-2-12- | 0-M36308 | -5 | -5 | -5 | 28 | -20 | 17 | 7 | -10 | -15 | -1 | 35 |
| 30-45.1480-110.3451-2-12- | 0-M36309 | -5 | -5 | -5 | 28 | -20 | 32 | 11 | -10 | -15 | -1 | 39 |
| 30-45.3946-110.6063-2-12- | 0-M36310 | -5 | -5 | -5 | 30 | -20 | -15 | 12 | -10 | -15 | -1 | 35 |
| 30-45.0569-110.8688-2-12- | 0-M36311 | -5 | -5 | -5 | 42 | -20 | 24 | 9 | -10 | -15 | -1 | 41 |
| 30-45.0463-110.8788-2-12- | 0-M36312 | -5 | -5 | -5 | 32 | -20 | -15 | 6 | -10 | -15 | 3 | 27 |
| 30-45.3821-110.6121-2-12- | 0-M36313 | -5 | -5 | -5 | 36 | -20 | 42 | 10 | -10 | -15 | -1 | 40 |
| 30-45.3753-111.1363-2-12- | 0-M36314 | -5 | -5 | -5 | 31 | -20 | -15 | 7 | -10 | -15 | -1 | 28 |
| 30-45.3766-111.0885-2-12- | 0-M36315 | -5 | -5 | -5 | 24 | -20 | 35 | 7 | -10 | -15 | 3 | 30 |
| 30-45.3761-111.0761-2-12- | 0-M36316 | -5 | -5 | -5 | 38 | 21 | -15 | -5 | -10 | -15 | 3 | 30 |
| 30-45.3784-111.0226-2-12- | 0-M36317 | -5 | -5 | -5 | 25 | -20 | 36 | 6 | -10 | 17 | -1 | 39 |

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

③

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (Concentrations reported in weight parts per million (ppm)) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Al | Au | Ba | Ca | Ce | Cl | Co | Cr | Cs | Dy | Eu | Fe | Hf | K | La | Lu |
| 30- | 45.6693- | 110.7523- | 2- | 12- | | 0-M36266 | 58900 | -0.17 | 968 | 21250 | 74 | -84 | 14.6 | 348 | 2.4 | 3 | 1.9 | 44620 | 14.1 | 18810 | 46 | 0.6 |
| 30- | 45.6560- | 110.7568- | 2- | 12- | | 0-M36267 | 74210 | -0.14 | 1388 | 26470 | 64 | -99 | 17.0 | 271 | 2.3 | 3 | 1.6 | 41820 | 9.1 | 17580 | 39 | 0.4 |
| 30- | 45.5699- | 110.8032- | 2- | 12- | | 0-M36268 | 67990 | -0.13 | 1038 | 41930 | 84 | -108 | 13.3 | 189 | 3.9 | 4 | 1.7 | 37790 | 8.0 | 17970 | 50 | 0.3 |
| 30- | 45.5553- | 110.8171- | 2- | 12- | | 0-M36269 | 63980 | -0.13 | 794 | 30230 | 64 | -94 | 23.4 | 221 | 4.2 | 4 | 1.8 | 52640 | 10.5 | 18510 | 41 | 0.5 |
| 30- | 45.6230- | 110.7621- | 2- | 12- | | 0-M36270 | 48900 | -0.12 | 784 | 17780 | 65 | -69 | 8.1 | 80 | 2.6 | 4 | 1.6 | 23120 | 15.4 | 14700 | 41 | 0.4 |
| 30- | 45.5490- | 110.8107- | 2- | 12- | | 0-M36271 | 57030 | -0.14 | 877 | 22460 | 68 | -89 | 14.9 | 144 | 2.9 | 5 | 1.6 | 38600 | 14.7 | 15890 | 42 | 0.5 |
| 30- | 45.5285- | 110.8274- | 2- | 15- | | 0-M36272 | 46670 | -0.12 | 555 | 25440 | 45 | -79 | 3.7 | 58 | 4.3 | 4 | 1.6 | 20600 | 7.9 | 14320 | -14 | 0.3 |
| 30- | 45.6666- | 110.7109- | 2- | 12- | | 0-M36273 | 61570 | -0.10 | 901 | 19330 | 49 | -80 | 12.6 | 51 | 2.5 | 3 | 1.5 | 30650 | 8.0 | 14660 | 38 | 0.3 |
| 30- | 45.6693- | 110.7394- | 2- | 12- | | 0-M36274 | 64140 | -0.13 | 934 | 20950 | 64 | -84 | 12.5 | 208 | 2.4 | 3 | 1.5 | 31200 | 5.7 | 20430 | 37 | 0.2 |
| 30- | 45.6604- | 110.7223- | 2- | 12- | | 0-M36275 | 53970 | 0.39 | 710 | 22640 | 88 | -87 | 23.6 | 879 | -2.2 | 5 | 1.9 | 131900 | 34.7 | 15730 | 63 | 0.6 |
| 30- | 45.5625- | 110.9971- | 2- | 15- | | 0-M36276 | 70160 | -0.14 | 901 | 18010 | 74 | -94 | 13.8 | 180 | 4.5 | 4 | 1.6 | 41040 | 7.0 | 20800 | 40 | 0.4 |
| 30- | 45.6086- | 110.9847- | 2- | 12- | | 0-M36277 | 63310 | -0.17 | 638 | 29940 | 113 | 257 | 26.1 | 263 | 3.4 | 7 | 1.9 | 54180 | 18.0 | 25040 | 78 | 0.9 |
| 30- | 45.5369- | 111.0173- | 2- | 12- | | 0-M36278 | 72910 | -0.18 | 1228 | 29190 | 91 | -102 | 23.8 | 131 | 3.6 | 4 | 2.1 | 52290 | 6.7 | 17600 | 35 | 0.5 |
| 30- | 45.5072- | 110.9828- | 2- | 12- | | 0-M36279 | 39010 | -0.12 | 524 | 19990 | 50 | -70 | 9.3 | 97 | 2.6 | 3 | 1.3 | 23510 | 10.9 | 12170 | 32 | 0.3 |
| 30- | 45.5036- | 110.9893- | 2- | 12- | | 0-M36280 | 53910 | -0.11 | 915 | 20310 | 64 | -85 | 11.8 | 79 | 2.7 | 3 | 1.6 | 31580 | 6.6 | 16860 | 36 | 0.3 |
| 30- | 45.7414- | 110.6444- | 2- | 12- | | 0-M36281 | 67750 | -0.14 | 794 | 30570 | 65 | -98 | 16.9 | 282 | 2.7 | 3 | 1.8 | 49830 | 9.0 | 19160 | 39 | 0.3 |
| 30- | 45.7475- | 110.6885- | 2- | 12- | | 0-M36283 | 61630 | -0.16 | 985 | 24220 | 85 | -93 | 15.4 | 593 | 3.1 | 4 | 2.1 | 73240 | 20.8 | 17350 | 60 | 0.4 |
| 30- | 45.7792- | 110.7264- | 2- | 12- | | 0-M36284 | 66170 | -0.09 | 935 | 23610 | 63 | -93 | 18.9 | 309 | 3.5 | 4 | 1.6 | 49920 | 7.4 | 17230 | 38 | 0.3 |
| 30- | 45.7644- | 110.7414- | 2- | 15- | | 0-M36285 | 64880 | -0.12 | 695 | 44040 | 61 | -101 | 15.5 | 115 | 4.2 | 4 | 1.7 | 31720 | 4.7 | 18090 | 23 | -0.2 |
| 30- | 45.8064- | 110.7106- | 2- | 15- | | 0-M36286 | 60860 | -0.09 | 584 | 28160 | 80 | 143 | 16.7 | 137 | 3.1 | 4 | 1.7 | 41050 | 11.1 | 15560 | 43 | 0.4 |
| 30- | 45.7989- | 110.7433- | 2- | 15- | | 0-M36287 | 65700 | -0.09 | 907 | 24560 | 64 | -79 | 13.6 | 181 | 3.4 | 4 | 1.8 | 36550 | 6.6 | 18330 | 36 | 0.3 |
| 30- | 45.1161- | 110.3868- | 2- | 12- | | 0-M36288 | 64480 | -0.09 | 845 | 48250 | 65 | -90 | 25.0 | 248 | 4.9 | 4 | 1.6 | 48000 | 6.4 | 14840 | 39 | 0.3 |
| 30- | 45.0159- | 111.2165- | 2- | 12- | | 0-M36289 | 32450 | -0.07 | 833 | 34710 | 41 | -58 | 5.3 | 34 | 1.8 | 4 | 1.2 | 12780 | 19.3 | 10790 | 21 | 0.4 |
| 30- | 45.1274- | 110.3988- | 2- | 12- | | 0-M36290 | 64260 | -0.08 | 878 | 21790 | 77 | -83 | 15.5 | 281 | 2.4 | 3 | 1.6 | 40900 | 8.5 | 19240 | 41 | 0.3 |
| 30- | 45.0158- | 111.2151- | 2- | 12- | | 0-M36291 | 32780 | -0.06 | 558 | 33350 | 45 | -50 | 4.6 | 38 | 2.3 | 4 | 1.3 | 15810 | 16.1 | 13210 | 24 | 0.4 |
| 30- | 45.0718- | 111.2676- | 2- | 12- | | 0-M36292 | 41900 | -0.06 | 795 | 12930 | 50 | -46 | 8.5 | 39 | 2.7 | 4 | 1.4 | 17870 | 12.8 | 13470 | 25 | 0.3 |
| 30- | 45.0217- | 111.3078- | 2- | 12- | | 0-M36293 | 62810 | -0.09 | 784 | 27560 | 88 | -94 | 11.4 | 90 | 3.3 | 5 | 1.5 | 28770 | 13.8 | 16850 | 43 | 0.4 |
| 30- | 45.1614- | 110.7442- | 2- | 12- | | 0-M36294 | 61680 | -0.09 | 838 | 35890 | 72 | -92 | 23.9 | 202 | 2.4 | 3 | 1.7 | 55060 | 8.6 | 14670 | 35 | 0.4 |
| 30- | 45.1617- | 110.7217- | 2- | 12- | | 0-M36295 | 67500 | -0.09 | 932 | 29640 | 59 | -92 | 16.5 | 141 | 3.6 | 4 | 1.9 | 41730 | 9.8 | 14210 | 41 | 0.4 |
| 30- | 45.0243- | 111.1942- | 2- | 12- | | 0-M36296 | 35980 | -0.06 | 632 | 34300 | 42 | -52 | 11.2 | 41 | 3.0 | 4 | 1.8 | 14570 | 16.7 | 10210 | 22 | 0.4 |
| 30- | 45.0239- | 111.1959- | 2- | 12- | | 0-M36297 | 35370 | -0.07 | 884 | 35840 | 48 | -62 | 5.4 | 39 | -1.4 | 4 | 1.4 | 14710 | 20.9 | 11580 | 27 | 0.5 |
| 30- | 45.0834- | 110.4009- | 2- | 12- | | 0-M36298 | 59030 | -0.09 | 677 | 27870 | 86 | -89 | 18.1 | 185 | 3.8 | 5 | 1.8 | 39890 | 12.9 | 17690 | 49 | 0.4 |
| 30- | 45.1590- | 110.3352- | 2- | 12- | | 0-M36299 | 59570 | -0.06 | 1107 | 35880 | 72 | -124 | 23.7 | 293 | -1.8 | 4 | 1.5 | 57890 | 12.6 | 14020 | 43 | 0.3 |
| 30- | 45.1109- | 110.4279- | 2- | 12- | | 0-M36300 | 46530 | -0.07 | 704 | 40750 | 55 | -63 | 7.8 | 212 | 3.0 | 3 | 1.4 | 21620 | 9.0 | 17650 | 31 | 0.3 |
| 30- | 45.0853- | 110.4025- | 2- | 12- | | 0-M36301 | 60980 | -0.10 | 1008 | 49640 | 146 | -94 | 32.0 | 431 | 4.0 | 5 | 2.0 | 69310 | 14.6 | 10530 | 81 | 0.4 |
| 30- | 45.1811- | 110.3073- | 2- | 12- | | 0-M36302 | 65990 | -0.10 | 1222 | 33790 | 77 | -101 | 18.4 | 212 | 2.6 | 3 | 1.8 | 38640 | 9.6 | 14820 | 42 | 0.2 |
| 30- | 45.1262- | 110.3808- | 2- | 12- | | 0-M36303 | 63970 | -0.10 | 947 | 33540 | 85 | -99 | 29.0 | 225 | 2.6 | 3 | 1.8 | 55900 | 9.9 | 14230 | 46 | 0.3 |
| 30- | 45.0069- | 111.3839- | 2- | 12- | | 0-M36304 | 61310 | -0.08 | 929 | 27380 | 66 | -85 | 13.7 | 191 | 2.9 | 4 | 1.7 | 37230 | 11.5 | 16420 | 39 | 0.4 |
| 30- | 45.0071- | 111.3856- | 2- | 12- | | 0-M36305 | 60820 | -0.08 | 908 | 20130 | 71 | -60 | 6.6 | 41 | 6.4 | 6 | 1.7 | 20200 | 10.0 | 19560 | 42 | 0.4 |
| 30- | 45.0018- | 111.2814- | 2- | 12- | | 0-M36306 | 43960 | -0.08 | 789 | 12280 | 52 | -65 | 6.9 | 46 | 3.7 | 4 | 1.7 | 16890 | 15.3 | 13820 | 30 | 0.4 |
| 30- | 45.0362- | 111.3991- | 2- | 12- | | 0-M36307 | 56410 | -0.08 | 825 | 26550 | 79 | -65 | 5.4 | 56 | 5.4 | 5 | 1.6 | 20550 | 18.0 | 17820 | 46 | 0.5 |
| 30- | 45.0353- | 111.4002- | 2- | 12- | | 0-M36308 | 56990 | -0.08 | 738 | 26040 | 81 | 109 | 12.5 | 126 | 4.1 | 4 | 1.9 | 34210 | 13.8 | 17270 | 38 | 0.4 |
| 30- | 45.1480- | 110.3451- | 2- | 12- | | 0-M36309 | 65060 | -0.08 | 1133 | 34850 | 70 | -89 | 22.6 | 225 | 2.3 | 3 | 1.7 | 44410 | 8.8 | 12970 | 48 | 0.3 |
| 30- | 45.3946- | 110.6063- | 2- | 12- | | 0-M36310 | 55960 | -0.09 | 690 | 52160 | 61 | -92 | 10.8 | 92 | 2.9 | 4 | 1.5 | 27150 | 9.4 | 14290 | 32 | 0.4 |
| 30- | 45.0569- | 110.8688- | 2- | 12- | | 0-M36311 | 62170 | -0.08 | 747 | 34410 | 74 | -85 | 11.5 | 103 | 4.4 | 4 | 1.5 | 32680 | 9.3 | 19270 | 40 | 0.4 |
| 30- | 45.0463- | 110.8788- | 2- | 12- | | 0-M36312 | 64230 | -0.09 | 847 | 22200 | 69 | -82 | 19.5 | 162 | 3.1 | 4 | 1.8 | 50240 | 8.9 | 19870 | 36 | 0.4 |
| 30- | 45.3821- | 110.6121- | 2- | 12- | | 0-M36313 | 58670 | -0.08 | 791 | 26820 | 73 | -81 | 13.6 | 131 | 3.2 | 4 | 1.7 | 33610 | 14.4 | 14420 | 44 | 0.4 |
| 30- | 45.3753- | 111.1363- | 2- | 12- | | 0-M36314 | 85110 | -0.11 | 1310 | 38360 | 67 | 75 | 22.8 | 123 | 2.9 | 3 | 1.9 | 50890 | 6.6 | 15250 | 32 | 0.3 |
| 30- | 45.3766- | 111.0885- | 2- | 12- | | 0-M36315 | 80580 | -0.10 | 1166 | 36610 | 76 | -106 | 28.3 | 146 | 2.1 | 3 | 1.9 | 65840 | 6.3 | 17870 | 35 | 0.3 |
| 30- | 45.3761- | 111.0761- | 2- | 12- | | 0-M36316 | 79430 | -0.11 | 1251 | 32440 | 69 | -105 | 28.1 | 187 | 2.3 | 4 | 2.0 | 70330 | 7.0 | 14200 | 37 | 0.4 |
| 30- | 45.3784- | 111.0226- | 2- | 12- | | 0-M36317 | 73100 | -0.10 | 1140 | 34310 | 63 | -103 | 30.3 | 203 | 3.0 | 4 | 1.8 | 69160 | 6.4 | 13320 | 40 | 0.3 |

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

④

| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | LAB. SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | U/Th RATIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mg | Mn | Na | Rb | Sb | Sc | Sm | Sr | Ta | Tb | Th | Ti | V | Yb | Zn | |
| 30-45.6693-110.7523-2-12- | 0-M36266 | 9703 | 767 | 11230 | -42 | -4 | 10.2 | 5.2 | -297 | -1 | -1 | 10.2 | 4220 | 141 | -2.7 | -47 | 0.314 |
| 30-45.6560-110.7568-2-12- | 0-M36267 | 11020 | 792 | 18220 | 65 | -3 | 11.5 | 4.9 | 688 | -1 | -1 | 8.2 | 4363 | 113 | -2.4 | 54 | 0.293 |
| 30-45.5699-110.8032-2-12- | 0-M36268 | 12040 | 711 | 17400 | 91 | -3 | 11.2 | 5.4 | 617 | -1 | -1 | 10.7 | 2519 | 98 | 4.4 | 109 | 0.215 |
| 30-45.5553-110.8171-2-12- | 0-M36269 | 15080 | 883 | 13960 | 84 | -3 | 12.6 | 4.9 | -297 | -1 | -1 | 10.5 | 4923 | 173 | 3.4 | 163 | 0.352 |
| 30-45.6230-110.7621-2-12- | 0-M36270 | 7538 | 418 | 10780 | 69 | -3 | 6.8 | 5.6 | -211 | -1 | -1 | 10.0 | 2896 | 75 | 2.8 | -56 | 0.330 |
| 30-45.5490-110.8107-2-12- | 0-M36271 | 8863 | 674 | 14290 | -35 | -3 | 11.2 | 6.4 | -276 | -1 | -1 | 12.7 | 4691 | 118 | 4.7 | 124 | 0.228 |
| 30-45.5285-110.8274-2-15- | 0-M36272 | 8226 | 336 | 7850 | 72 | -3 | 6.4 | 3.6 | -256 | -1 | -1 | 7.8 | 2699 | 65 | -2.3 | -107 | 0.295 |
| 30-45.6666-110.7109-2-12- | 0-M36273 | 6896 | 632 | 12460 | 50 | -3 | 8.2 | 3.5 | 339 | -1 | -1 | 7.7 | 2659 | 84 | 3.1 | -34 | 0.299 |
| 30-45.6693-110.7394-2-12- | 0-M36274 | 9224 | 596 | 15070 | -33 | -3 | 9.6 | 5.2 | 578 | -1 | -1 | 7.3 | 3338 | 97 | 4.3 | 35 | 0.288 |
| 30-45.6604-110.7223-2-12- | 0-M36275 | 13340 | 1106 | 11090 | -46 | -4 | 14.4 | 6.9 | 571 | -1 | -1 | 12.9 | 6998 | 354 | 5.3 | 103 | 0.326 |
| 30-45.5625-110.9971-2-15- | 0-M36276 | 8664 | 727 | 10700 | 64 | -4 | 11.9 | 5.6 | -326 | -1 | -1 | 9.6 | 2971 | 112 | -2.8 | 112 | 0.271 |
| 30-45.6086-110.9847-2-12- | 0-M36277 | 17720 | 1485 | 9538 | -42 | -4 | 19.7 | 8.9 | -386 | -2 | -1 | 32.5 | 4526 | 118 | 7.5 | 151 | 0.188 |
| 30-45.5369-111.0173-2-12- | 0-M36278 | 13450 | 939 | 15520 | -44 | -4 | 13.7 | 5.1 | 612 | -1 | -1 | 9.9 | 5380 | 163 | -3.8 | -101 | 0.273 |
| 30-45.5072-110.9828-2-12- | 0-M36279 | 8300 | 502 | 8317 | -30 | -3 | 7.5 | 3.9 | -233 | -1 | -1 | 7.3 | 2661 | 65 | 2.2 | -20 | 0.356 |
| 30-45.5036-110.9893-2-12- | 0-M36280 | 7782 | 633 | 11210 | 71 | -3 | 8.4 | 5.2 | -282 | -1 | -1 | 10.0 | 3599 | 106 | 2.7 | 101 | 0.230 |
| 30-45.7414-110.6444-2-12- | 0-M36281 | 10310 | 788 | 14330 | -37 | -4 | 12.0 | 4.6 | 529 | -1 | -1 | 9.6 | 3732 | 153 | 3.3 | 83 | 0.260 |
| 30-45.7475-110.6885-2-12- | 0-M36283 | 12460 | 863 | 14640 | -43 | -4 | 12.6 | 5.6 | 589 | -1 | -1 | 11.4 | 5251 | 226 | 4.8 | 117 | 0.298 |
| 30-45.7792-110.7264-2-12- | 0-M36284 | 14270 | 878 | 14510 | -34 | -2 | 12.8 | 4.0 | 449 | -1 | -1 | 7.9 | 4230 | 145 | 3.8 | 104 | 0.304 |
| 30-45.7644-110.7414-2-15- | 0-M36285 | 13460 | 735 | 10530 | -42 | -3 | 10.7 | 5.1 | 339 | -1 | -1 | 7.4 | 3475 | 95 | 3.4 | -44 | 0.297 |
| 30-45.8064-110.7106-2-15- | 0-M36286 | 10040 | 855 | 13690 | 73 | -2 | 12.5 | 6.0 | -279 | -1 | -1 | 12.4 | 3554 | 106 | 4.3 | | 0.226 |
| 30-45.7989-110.7433-2-15- | 0-M36287 | 11120 | 710 | 10860 | 61 | -2 | 11.9 | 5.3 | -270 | -1 | -1 | 9.2 | 2902 | 113 | 4.0 | 106 | 0.250 |
| 30-45.1161-110.3868-2-12- | 0-M36288 | 20330 | 891 | 16550 | -31 | -2 | 24.8 | 4.8 | 582 | -1 | -1 | 7.3 | 3962 | 162 | 2.4 | -42 | 0.274 |
| 30-45.0159-111.2165-2-12- | 0-M36289 | 12300 | 620 | 3951 | -22 | -2 | 4.5 | 4.0 | -242 | -1 | -1 | 7.1 | 2456 | 44 | 3.5 | -28 | 0.352 |
| 30-45.1274-110.3988-2-12- | 0-M36290 | 13310 | 582 | 16250 | 48 | -2 | 11.8 | 4.7 | 600 | -1 | -1 | 7.7 | 3538 | 124 | 2.5 | 93 | 0.286 |
| 30-45.0158-111.2151-2-12- | 0-M36291 | 10940 | 578 | 4420 | 58 | -1 | 5.5 | 3.8 | -203 | -1 | -1 | 7.7 | 2136 | 43 | 3.0 | 68 | 0.312 |
| 30-45.0718-111.2676-2-12- | 0-M36292 | 4516 | 362 | 4835 | 64 | -1 | 5.8 | 3.7 | -164 | -1 | -1 | 7.4 | 2531 | 55 | 2.2 | -26 | 0.392 |
| 30-45.0217-111.3078-2-12- | 0-M36293 | 9083 | 633 | 14380 | 104 | -2 | 8.7 | 7.2 | -286 | -1 | -1 | 11.1 | 3154 | 85 | 3.9 | -34 | 0.360 |
| 30-45.1614-110.7442-2-12- | 0-M36294 | 15800 | 889 | 13940 | -35 | -2 | 13.3 | 5.4 | 679 | -1 | -1 | 9.1 | 5202 | 175 | 3.8 | 109 | 0.286 |
| 30-45.1617-110.7217-2-12- | 0-M36295 | 11120 | 746 | 16550 | -31 | -2 | 11.4 | 5.1 | 444 | -1 | -1 | 10.2 | 4676 | 109 | -2.2 | 137 | 0.392 |
| 30-45.0243-111.1942-2-12- | 0-M36296 | 11770 | 534 | 4603 | 47 | -1 | 5.3 | 4.1 | -202 | -1 | -1 | 8.0 | 2461 | 43 | 2.7 | -30 | 0.325 |
| 30-45.0239-111.1959-2-12- | 0-M36297 | 11620 | 610 | 4621 | 44 | -2 | 4.9 | 4.5 | -251 | -1 | -1 | 8.4 | 2540 | 45 | 2.8 | -32 | 0.333 |
| 30-45.0834-110.4009-2-12- | 0-M36298 | 11960 | 859 | 12570 | 60 | -2 | 13.1 | 6.8 | -284 | -1 | -1 | 14.6 | 3367 | 103 | 3.4 | 69 | 0.247 |
| 30-45.1590-110.3352-2-12- | 0-M36299 | 16170 | 892 | 15330 | -31 | -2 | 14.6 | 5.5 | 561 | -1 | -1 | 10.1 | 5811 | 179 | 3.5 | -97 | 0.238 |
| 30-45.1109-110.4279-2-12- | 0-M36300 | 14600 | 471 | 7662 | 60 | -2 | 8.2 | 4.7 | -208 | -1 | -1 | 7.7 | 2388 | 77 | -1.9 | 100 | 0.338 |
| 30-45.0853-110.4025-2-12- | 0-M36301 | 23400 | 976 | 17900 | -34 | -3 | 25.9 | 9.0 | 650 | -1 | -1 | 38.1 | 6424 | 211 | 5.4 | -44 | 0.071 |
| 30-45.1811-110.3073-2-12- | 0-M36302 | 13830 | 802 | 15730 | -33 | -3 | 12.0 | 6.2 | 626 | -1 | -1 | 9.1 | 4414 | 143 | 3.7 | 121 | 0.231 |
| 30-45.1262-110.3808-2-12- | 0-M36303 | 20090 | 944 | 15390 | -37 | -3 | 17.4 | 4.9 | 492 | -1 | -1 | 9.0 | 3904 | 185 | -1.9 | -78 | 0.311 |
| 30-45.0069-111.3839-2-12- | 0-M36304 | 11310 | 736 | 14720 | 47 | -2 | 11.6 | 5.4 | -271 | -1 | -1 | 10.8 | 3839 | 91 | 2.6 | 101 | 0.324 |
| 30-45.0071-111.3856-2-12- | 0-M36305 | 7578 | 326 | 6151 | 83 | -2 | 6.8 | 7.3 | -196 | 1 | -1 | 15.5 | 2495 | 65 | 2.9 | 67 | 0.316 |
| 30-45.0018-111.2814-2-12- | 0-M36306 | 3839 | 689 | 4781 | -26 | -2 | 6.0 | 5.8 | -269 | -1 | -1 | 7.9 | 2821 | 64 | 3.2 | | 0.380 |
| 30-45.0362-111.3991-2-12- | 0-M36307 | 8559 | 360 | 7625 | 67 | -2 | 6.6 | 6.2 | -207 | -1 | -1 | 15.4 | 2992 | 58 | 4.4 | 77 | 0.318 |
| 30-45.0353-111.4002-2-12- | 0-M36308 | 10950 | 642 | 12050 | -27 | -2 | 10.1 | 5.7 | 461 | -1 | -1 | 13.7 | 3930 | 91 | 3.9 | 104 | 0.328 |
| 30-45.1480-110.3451-2-12- | 0-M36309 | 14870 | 793 | 16070 | -30 | -2 | 13.3 | 4.9 | 592 | -1 | -1 | 9.0 | 4324 | 146 | 2.5 | -89 | 0.233 |
| 30-45.3946-110.6063-2-12- | 0-M36310 | 15990 | 663 | 11890 | 47 | -2 | 7.8 | 6.0 | -292 | -1 | -1 | 8.5 | 3402 | 87 | 2.4 | 90 | 0.341 |
| 30-45.0569-110.8688-2-12- | 0-M36311 | 11060 | 671 | 12950 | 75 | -2 | 10.1 | 5.0 | -261 | -1 | -1 | 11.1 | 3354 | 89 | 3.8 | 83 | 0.261 |
| 30-45.0463-110.8788-2-12- | 0-M36312 | 10530 | 674 | 13530 | 70 | -2 | 11.5 | 5.7 | -265 | -1 | -1 | 10.7 | 5169 | 175 | 3.8 | 107 | 0.280 |
| 30-45.3821-110.6121-2-12- | 0-M36313 | 10050 | 704 | 12040 | 55 | -2 | 9.3 | 5.1 | -257 | -1 | -1 | 10.2 | 3547 | 103 | 4.3 | -98 | 0.353 |
| 30-45.3753-111.1363-2-12- | 0-M36314 | 13190 | 959 | 19430 | 59 | -3 | 13.2 | 5.3 | -360 | -1 | -1 | 8.0 | 5889 | 136 | 2.6 | 109 | 0.288 |
| 30-45.3766-111.0885-2-12- | 0-M36315 | 13270 | 1027 | 18780 | 75 | -2 | 15.4 | 5.3 | -313 | -1 | -1 | 7.6 | 5669 | 181 | -1.9 | 77 | 0.289 |
| 30-45.3761-111.0761-2-12- | 0-M36316 | 14060 | 1056 | 17900 | -41 | -3 | 16.1 | 5.9 | 725 | -1 | -1 | 9.2 | 7292 | 191 | -2.4 | 108 | 0.250 |
| 30-45.3784-111.0226-2-12- | 0-M36317 | 16690 | 1152 | 17020 | 46 | -2 | 15.8 | 5.4 | 407 | -1 | -1 | 9.6 | 6692 | 215 | 2.5 | 149 | 0.240 |

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

(1)

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER AND FIELD DATA | | | | | | | | | | | | | | | | | | | | | | | | U CONCENTRATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | TIME SAMPLED DATE | TIME SAMPLED HOUR | AIR TEMPERATURE | WATER TEMPERATURE | COMMENTS | SPECIAL MEASUREMENTS | pH | CONDUCTIVITY (µmho/cm) | SCINTILLOMETER (eU, ppm) | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm |
| 30- | 45.3578- | 111.0601- | 2- | 12- | 0- | M36318- | 09/18/76- | 18- | 12- | 9.1- | - | - | 5.6- | 88- | | -1- | 6- | 6- | 6- | 2- | 3- | 2- | 1- | 1- | 5- | 3- | 2- | -1- | - | - | - | - | 2.40 |
| 30- | 45.3577- | 111.0626- | 2- | 12- | 0- | M36319- | 09/18/76- | 18- | 12- | 7.4- | - | - | 5.5- | 75- | | -1- | 6- | 3- | 6- | 3- | 3- | 1- | 3- | 1- | 5- | 3- | 2- | -1- | - | - | - | - | 2.30 |
| 30- | 45.3713- | 111.2475- | 2- | 12- | 0- | M36320- | 09/18/76- | 20- | 13- | 8.5- | - | - | 5.2- | 48- | | -3- | 7- | 3- | 4- | 3- | 3- | 1- | 3- | 1- | 3- | 4- | 2- | -8- | - | - | - | - | 16.30 |
| 30- | 45.4589- | 110.9275- | 2- | 12- | 0- | M36321- | 09/21/76- | 12- | 17- | 7.3- | - | - | 5.4- | 62- | | -1- | 4- | 3- | 4- | 3- | 3- | 1- | 3- | 1- | 3- | 5- | 1- | -8- | - | - | - | - | 1.50 |
| 30- | 45.4430- | 110.9093- | 2- | 12- | 0- | M36322- | 09/21/76- | 12- | 17- | 8.8- | - | - | 5.2- | 49- | | -1- | 4- | 3- | 4- | 3- | 3- | 1- | 3- | 1- | 2- | 5- | 1- | -1- | - | - | - | - | 3.50 |
| 30- | 45.4434- | 110.9622- | 2- | 12- | 0- | M36323- | 09/21/76- | 13- | 17- | 7.0- | - | - | 5.1- | 44- | | -3- | 4- | 3- | 4- | 3- | 3- | 1- | 1- | 1- | 2- | 4- | 1- | -1- | - | - | - | - | 1.70 |
| 30- | 45.4224- | 110.9594- | 2- | 12- | 0- | M36324- | 09/21/76- | 14- | 17- | 7.2- | - | - | 5.3- | 46- | | -3- | 4- | 3- | 4- | 3- | 3- | 1- | 2- | 1- | 2- | 4- | 1- | -1- | - | - | - | - | 1.70 |
| 30- | 45.1871- | 111.1288- | 2- | 12- | 0- | M36325- | 09/27/76- | 17- | 19- | 7.8- | - | - | 6.1- | 500- | | -3- | 7- | 4- | 6- | 2- | 3- | 1- | 2- | 2- | 2- | 4- | 1- | -1- | - | - | - | - | 2.30 |
| 30- | 45.1857- | 111.1342- | 2- | 12- | 0- | M36326- | 09/27/76- | 17- | 19- | 8.0- | - | - | 6.0- | 332- | | -3- | 7- | 3- | 7- | 3- | 3- | 1- | 2- | 2- | 2- | 4- | 1- | -1- | - | - | - | - | 3.20 |
| 30- | 45.2191- | 110.7401- | 2- | 12- | 0- | M36327- | 10/12/76- | 17- | 9- | 6.0- | - | - | 6.2- | 70- | | -1- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 3- | 2- | -1- | - | - | - | - | 2.10 |
| 30- | 45.2333- | 110.6746- | 2- | 12- | 0- | M36328- | 10/12/76- | 10- | 7- | 6.0- | - | - | 5.8- | 165- | | -1- | 6- | 3- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 4.40 |
| 30- | 45.1353- | 111.3333- | 2- | 12- | 0- | M36330- | 10/15/76- | 13- | 9- | 6.0- | - | - | 5.7- | 150- | | -1- | 7- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 2- | 4- | 1- | -1- | - | - | - | - | 3.20 |
| 30- | 45.2691- | 111.3406- | 2- | 12- | 0- | M36331- | 10/13/76- | 16- | 10- | 5.0- | - | - | 5.7- | 300- | | -1- | 6- | 3- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 4.20 |
| 30- | 45.2535- | 111.4426- | 2- | 12- | 0- | M36332- | 10/14/76- | 15- | 10- | 4.0- | - | - | 5.8- | 150- | | -1- | 6- | 4- | 6- | 2- | 2- | 1- | 1- | 4- | 3- | 3- | 1- | -1- | - | - | - | - | 3.40 |
| 30- | 45.1312- | 111.3213- | 2- | 12- | 0- | M36333- | 10/15/76- | 11- | 9- | 6.0- | - | - | 5.7- | 140- | | -1- | 7- | 4- | 6- | 2- | 2- | 1- | 3- | 1- | 4- | 3- | 1- | -1- | - | - | - | - | 5.10 |
| 30- | 45.2178- | 111.2750- | 2- | 12- | 0- | M36334- | 10/14/76- | 8- | 7- | 4.0- | C- | - | 5.6- | 130- | | -1- | 7- | 1- | 6- | 4- | 3- | 1- | 1- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 3.20 |
| 30- | 45.1511- | 110.5024- | 2- | 12- | 0- | M36335- | 10/14/76- | 13- | 9- | 2.2- | C- | - | 5.5- | 85- | | -1- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 3- | 4- | 4- | 1- | -1- | - | - | - | - | 3.00 |
| 30- | 45.2127- | 111.2756- | 2- | 12- | 0- | M36336- | 10/14/76- | 8- | 7- | 4.0- | - | - | 5.7- | 320- | | -1- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 1- | -1- | - | - | - | - | 4.00 |
| 30- | 45.2419- | 111.4065- | 2- | 12- | 0- | M36337- | 10/14/76- | 13- | 11- | 4.0- | - | - | 5.6- | 150- | | -1- | 6- | 1- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 3.50 |
| 30- | 45.0913- | 111.2962- | 2- | 11- | 0- | M36338- | 10/15/76- | 15- | 7- | 12.0- | C- | - | 5.7- | 260- | | -1- | 7- | 6- | 6- | 1- | 2- | 1- | 1- | 6- | 4- | 2- | 1- | -9- | - | - | - | - | 2.90 |
| 30- | 45.2374- | 111.4114- | 2- | 12- | 0- | M36339- | 10/14/76- | 13- | 11- | 7.0- | - | - | 6.0- | 220- | | -1- | 6- | 3- | 6- | 2- | 3- | 1- | 2- | 4- | 4- | 3- | 1- | -1- | - | - | - | - | 3.50 |
| 30- | 45.2869- | 111.3854- | 2- | 11- | 0- | M36340- | 10/13/76- | 17- | 9- | 6.0- | - | - | 5.7- | 320- | | -1- | 7- | 4- | 8- | 1- | 2- | 1- | | -3- | 3- | 3- | 1- | -1- | - | - | - | - | 2.90 |
| 30- | 45.0880- | 111.2838- | 2- | 12- | 0- | M36341- | 10/15/76- | 16- | 4- | 5.0- | - | - | 5.8- | 230- | | -1- | 6- | 5- | 6- | 2- | 2- | 1- | 1- | 2- | 2- | 3- | 1- | -1- | - | - | - | - | 3.60 |
| 30- | 45.2879- | 111.3929- | 2- | 12- | 0- | M36342- | 10/13/76- | 17- | 10- | 6.0- | - | - | 5.8- | 250- | | -1- | 1- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 2.80 |
| 30- | 45.1362- | 110.5937- | 2- | 12- | 0- | M36343- | 10/14/76- | 12- | 7- | 2.5- | - | - | 5.2- | 48- | | -1- | 6- | 2- | 6- | 3- | 3- | 1- | 1- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 3.30 |
| 30- | 45.1360- | 111.3328- | 2- | 12- | 0- | M36344- | 10/15/76- | 13- | 8- | 5.0- | - | - | 5.6- | 140- | | -1- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 5- | 4- | 1- | -1- | - | - | - | - | 3.70 |
| 30- | 45.0898- | 111.2967- | 2- | 12- | 0- | M36345- | 10/15/76- | 15- | 7- | 4.0- | - | - | 5.7- | 140- | | -1- | 7- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 2- | 4- | 1- | -1- | - | - | - | - | 4.20 |
| 30- | 45.1286- | 111.3077- | 2- | 11- | 0- | M36346- | 10/15/76- | 10- | 9- | 4.0- | - | - | 5.3- | 70- | | -1- | 1- | 6- | 6- | 1- | 2- | 1- | 1- | 4- | 4- | 3- | 1- | -1- | - | - | - | - | 4.40 |
| 30- | 45.0725- | 110.7351- | 2- | 12- | 0- | M36348- | 10/14/76- | 19- | 10- | 2.0- | - | - | 5.6- | 100- | | -3- | 7- | 3- | 6- | 3- | 3- | 2- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 2.80 |
| 30- | 45.1371- | 110.6553- | 2- | 12- | 0- | M36349- | 10/14/76- | 17- | 5- | 2.2- | - | - | 5.5- | 120- | | -1- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 4- | 4- | 4- | 1- | -1- | - | - | - | - | 3.70 |
| 30- | 45.1220- | 110.6583- | 2- | 12- | 0- | M36350- | 10/14/76- | 17- | 4- | 2.6- | - | - | 5.5- | 110- | | -4- | 6- | 3- | 6- | 3- | 2- | 1- | 2- | 1- | 2- | 3- | 1- | -1- | - | - | - | - | 2.20 |
| 30- | 45.0435- | 110.5514- | 2- | 12- | 0- | M36352- | 10/14/76- | 8- | 4- | 2.3- | - | - | 5.5- | 60- | | -2- | 6- | 3- | 6- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 1- | -1- | - | - | - | - | 6.80 |
| 30- | 45.2021- | 111.0621- | 2- | 12- | 0- | M36354- | 10/14/76- | 18- | 5- | 2.0- | - | - | 5.8- | 235- | | -1- | 1- | 3- | 6- | 3- | 2- | 1- | 2- | 1- | 2- | 3- | 1- | -1- | - | - | - | - | 3.00 |
| 30- | 45.2160- | 111.0076- | 2- | 12- | 0- | M36356- | 10/14/76- | 17- | 4- | 1.7- | - | - | 5.2- | 105- | | -2- | 7- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 2- | 3- | 1- | -1- | - | - | - | - | 3.30 |
| 30- | 45.1084- | 110.5984- | 2- | 12- | 0- | M36358- | 10/14/76- | 11- | 7- | 2.0- | - | - | 5.2- | 50- | | -3- | 2- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 3.00 |
| 30- | 45.1918- | 111.0731- | 2- | 12- | 0- | M36359- | 10/14/76- | 18- | 5- | 1.8- | - | - | 5.8- | 245- | | -1- | 1- | 3- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 2- | 1- | -3- | - | - | - | - | 4.30 |
| 30- | 45.7648- | 111.0082- | 2- | 15- | 0- | M36360- | 09/14/76- | 10- | 15- | - | - | - | - | - | | 12- | 1- | 1- | 1- | 1- | -1- | -2- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 7.20 |
| 30- | 45.7625- | 111.0092- | 2- | 12- | 0- | M36361- | 09/14/76- | 11- | 16- | 10.0- | C- | - | 8.2- | 285- | | 16- | 1- | 6- | 4- | 6- | 3- | 3- | 1- | 1- | 4- | 4- | 1- | 2- | -3- | - | - | - | - | 2.90 |
| 30- | 45.7797- | 111.0284- | 2- | 12- | 0- | M36362- | 09/14/76- | 12- | 16- | 11.0- | C- | - | 8.1- | 187- | | 16- | 1- | 1- | 3- | 6- | 3- | 3- | 1- | 2- | 3- | 2- | 2- | 2- | -3- | - | - | - | - | 4.00 |
| 30- | 45.8127- | 111.0543- | 2- | 12- | 0- | M36363- | 09/14/76- | 12- | 18- | 12.0- | C- | - | 8.3- | 232- | | 12- | 1- | 7- | 3- | 6- | 3- | 3- | 1- | 2- | 4- | 3- | 1- | 2- | -3- | - | - | - | - | 2.90 |
| 30- | 45.8368- | 111.0022- | 2- | 12- | 0- | M36364- | 09/14/76- | 13- | 21- | 9.0- | C- | - | 7.4- | 255- | | 12- | 1- | 1- | 2- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 2- | 2- | -3- | - | - | - | - | 2.50 |
| 30- | 45.8626- | 111.0307- | 2- | 15- | 0- | M36365- | 09/14/76- | 14- | 21- | - | - | - | - | - | | 8- | 2- | 6- | 4- | 6- | -1- | - | - | -3- | 3- | 2- | 2- | - | - | - | - | - | 4.10 |
| 30- | 45.8647- | 111.0279- | 2- | 12- | 0- | M36366- | 09/14/76- | 14- | 21- | 10.0- | - | - | 7.4- | 110- | | 12- | 1- | 1- | 3- | 6- | 3- | 2- | 1- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 3.00 |
| 30- | 45.8597- | 111.0377- | 2- | 15- | 0- | M36367- | 09/14/76- | 15- | 21- | | -C- | - | - | - | | 16- | 1- | 6- | 4- | 6- | - | - | - | - | -3- | 4- | 2- | 2- | -3- | - | - | - | - | 4.70 |
| 30- | 45.8548- | 111.0594- | 2- | 12- | 0- | M36368- | 09/14/76- | 15- | 21- | 10.0- | C- | - | 8.1- | 250- | | 24- | 1- | 6- | 4- | 6- | 2- | 2- | 1- | 3- | 2- | 4- | 2- | 2- | -3- | - | - | - | - | 24.20 |
| 30- | 45.8762- | 111.0721- | 2- | 12- | 0- | M36369- | 09/14/76- | 15- | 20- | 11.0- | C- | - | 8.1- | 162- | | 12- | 1- | 1- | 3- | 6- | 3- | 2- | 1- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 4.20 |
| 30- | 45.8646- | 111.0594- | 2- | 12- | 0- | M36370- | 09/14/76- | 16- | 20- | 11.0- | C- | - | 7.4- | 130- | | 8- | 1- | 6- | 4- | 6- | 2- | 2- | 1- | 3- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 3.10 |
| 30- | 45.8467- | 111.0595- | 2- | 12- | 0- | M36371- | 09/14/76- | 16- | 20- | 11.0- | C- | - | 8.3- | 260- | | 12- | 1- | 1- | 3- | 6- | 3- | 3- | 1- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 3.30 |
| 30- | 45.4990- | 110.9875- | 2- | 12- | 0- | M36372- | 09/15/76- | 9- | 4- | 5.0- | C- | - | 7.7- | 245- | | 7- | 3- | 4- | - | - | -2- | 3- | 1- | 2- | 4- | 3- | 2- | 1- | -1- | - | - | - | - | 2.70 |
| 30- | 45.4841- | 110.9792- | 2- | 12- | 0- | M36373- | 09/15/76- | 11- | 9- | 6.0- | C- | - | 7.5- | 134- | | 4- | 3- | 4- | 3- | 4- | 4- | 2- | 1- | 2- | 1- | 4- | 3- | 1- | -1- | - | - | - | - | 2.50 |
| 30- | 45.4752- | 110.9520- | 2- | 12- | 0- | M36374- | 09/15/76- | 12- | 11- | 7.1- | C- | - | 7.2- | 45- | | 5- | 3- | 4- | 4- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 2- | 1- | -1- | - | - | - | - | 1.60 |

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

②

| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | 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) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ag | Bi | Cd | Cu | Nb | Ni | Pb | Sn | W | Be | Li |
| 30-45.3578-111.0601-2-12- | 0-M36318 | -5 | -5 | -5 | 35 | -20 | 27 | -5 | -10 | -15 | 2 | 27 |
| 30-45.3577-111.0626-2-12- | 0-M36319 | -5 | -5 | -5 | 35 | -20 | 29 | 11 | -10 | -15 | -1 | 39 |
| 30-45.3713-111.2475-2-12- | 0-M36320 | -5 | -5 | -5 | 40 | -20 | 169 | 5 | -10 | -15 | 2 | 26 |
| 30-45.4589-110.9275-2-12- | 0-M36321 | -5 | -5 | -5 | 44 | -20 | -15 | 13 | 13 | -15 | 1 | 33 |
| 30-45.4430-110.9093-2-12- | 0-M36322 | -5 | -5 | -5 | 30 | 22 | 30 | 9 | -10 | -15 | 2 | 36 |
| 30-45.4434-110.9622-2-12- | 0-M36323 | -5 | -5 | -5 | 37 | -20 | 27 | 16 | 10 | -15 | 2 | 28 |
| 30-45.4224-110.9594-2-12- | 0-M36324 | -5 | -5 | -5 | 32 | -20 | 40 | 10 | 12 | -15 | 2 | 32 |
| 30-45.1871-111.1288-2-12- | 0-M36325 | -5 | 5 | -5 | 25 | -20 | -15 | 8 | -10 | -15 | -1 | 23 |
| 30-45.1857-111.1342-2-12- | 0-M36326 | -5 | -5 | -5 | 35 | -20 | -15 | 10 | -10 | -15 | 3 | 34 |
| 30-45.2191-110.7401-2-12- | 0-M36327 | -5 | -5 | -5 | 34 | -20 | -15 | -5 | -10 | -15 | -1 | 34 |
| 30-45.2333-110.6746-2-12- | 0-M36328 | -5 | -5 | -5 | 21 | -20 | 55 | 14 | -10 | -15 | 2 | 40 |
| 30-45.1353-111.3333-2-12- | 0-M36330 | -5 | 5 | -5 | 22 | -20 | 36 | 9 | -10 | -15 | 3 | 38 |
| 30-45.2691-111.3406-2-12- | 0-M36331 | -5 | -5 | -5 | -10 | -20 | 39 | 7 | -10 | -15 | -1 | 20 |
| 30-45.2535-111.4426-2-12- | 0-M36332 | -5 | -5 | 7 | 38 | -20 | 31 | 18 | -10 | -15 | 3 | 43 |
| 30-45.1312-111.3213-2-12- | 0-M36333 | -5 | -5 | -5 | 30 | -20 | 44 | 13 | -10 | -15 | 4 | 49 |
| 30-45.2178-111.2750-2-12- | 0-M36334 | -5 | -5 | -5 | 28 | -20 | 46 | -5 | -10 | -15 | 3 | 44 |
| 30-45.1511-110.5024-2-12- | 0-M36335 | -5 | -5 | -5 | 30 | -20 | 28 | 14 | -10 | -15 | 3 | 39 |
| 30-45.2127-111.2756-2-12- | 0-M36336 | -5 | -5 | -5 | 22 | -20 | 47 | 11 | -10 | -15 | -1 | 30 |
| 30-45.2419-111.4065-2-12- | 0-M36337 | -5 | -5 | -5 | 21 | -20 | 20 | 14 | -10 | -15 | 2 | 30 |
| 30-45.0913-111.2962-2-11- | 0-M36338 | -5 | -5 | -5 | 56 | -20 | 111 | 13 | 13 | 19 | 3 | 34 |
| 30-45.2374-111.4114-2-12- | 0-M36339 | -5 | -5 | -5 | 25 | -20 | -15 | 23 | -10 | -15 | 3 | 39 |
| 30-45.2869-111.3854-2-11- | 0-M36340 | -5 | -5 | -5 | 21 | -20 | 27 | 11 | -10 | -15 | 3 | 29 |
| 30-45.0880-111.2838-2-12- | 0-M36341 | -5 | -5 | -5 | 22 | -20 | 25 | -5 | -10 | -15 | 3 | 26 |
| 30-45.2879-111.3929-2-12- | 0-M36342 | -5 | 5 | -5 | 84 | -20 | 194 | 7 | -10 | -15 | 3 | 36 |
| 30-45.1362-110.5937-2-12- | 0-M36343 | -5 | -5 | -5 | 22 | -20 | 19 | 15 | -10 | -15 | 3 | 35 |
| 30-45.1360-111.3328-2-12- | 0-M36344 | -5 | -5 | -5 | 20 | -20 | 19 | 7 | -10 | -15 | 3 | 46 |
| 30-45.0898-111.2967-2-12- | 0-M36345 | -5 | 6 | -5 | 33 | -20 | 24 | 13 | 13 | -15 | 3 | 37 |
| 30-45.1286-111.3077-2-11- | 0-M36346 | -5 | -5 | -5 | 11 | -20 | -15 | 20 | -10 | -15 | 3 | 37 |
| 30-45.0725-110.7351-2-12- | 0-M36348 | -5 | -5 | -5 | 42 | -20 | 51 | 11 | -10 | -15 | 3 | 35 |
| 30-45.1371-110.6553-2-12- | 0-M36349 | -5 | -5 | -5 | 45 | -20 | 45 | 10 | -10 | -15 | 2 | 20 |
| 30-45.1220-110.6583-2-12- | 0-M36350 | -5 | -5 | -5 | 19 | -20 | -15 | 6 | 10 | -15 | 2 | 17 |
| 30-45.0435-110.5514-2-12- | 0-M36352 | -5 | -5 | -5 | 39 | -20 | 33 | 16 | -10 | -15 | 3 | 27 |
| 30-45.2021-111.0621-2-12- | 0-M36354 | -5 | -5 | -5 | 32 | -20 | 29 | -5 | 11 | -15 | 2 | 28 |
| 30-45.2160-111.0076-2-12- | 0-M36356 | -5 | -5 | -5 | 46 | -20 | 21 | 19 | -10 | -15 | 3 | 37 |
| 30-45.1084-110.5984-2-12- | 0-M36358 | -5 | -5 | -5 | 29 | -20 | 26 | -5 | -10 | -15 | 3 | 31 |
| 30-45.1918-111.0731-2-12- | 0-M36359 | -5 | -5 | -5 | 42 | -20 | 118 | 12 | -10 | -15 | 3 | 34 |
| 30-45.7648-111.0082-2-15- | 0-M36360 | -5 | -5 | -5 | 58 | -20 | 51 | 26 | -10 | -15 | 2 | 23 |
| 30-45.7625-111.0092-2-12- | 0-M36361 | -5 | -5 | -5 | 27 | -20 | 46 | 10 | -10 | -15 | 3 | 87 |
| 30-45.7797-111.0284-2-12- | 0-M36362 | -5 | -5 | -5 | 38 | -20 | 84 | -5 | -10 | -15 | 2 | 43 |
| 30-45.8127-111.0543-2-12- | 0-M36363 | -5 | -5 | -5 | 37 | -20 | 53 | 7 | -10 | -15 | 2 | 25 |
| 30-45.8368-111.0022-2-12- | 0-M36364 | -5 | -5 | -5 | 39 | -20 | 83 | 10 | -10 | -15 | 2 | 31 |
| 30-45.8626-111.0307-2-15- | 0-M36365 | -5 | -5 | -5 | 44 | -20 | 88 | 17 | -10 | -15 | 2 | 49 |
| 30-45.8647-111.0279-2-12- | 0-M36366 | -5 | -5 | -5 | 40 | -20 | 32 | -5 | -10 | -15 | 3 | 83 |
| 30-45.8597-111.0377-2-15- | 0-M36367 | -5 | -5 | -5 | 61 | -20 | 59 | 11 | -10 | -15 | 2 | 37 |
| 30-45.8548-111.0594-2-12- | 0-M36368 | 14 | -5 | -5 | -10 | -20 | 52 | -5 | -10 | -15 | 2 | 28 |
| 30-45.8762-111.0721-2-12- | 0-M36369 | -5 | -5 | -5 | 18 | -20 | 43 | 8 | -10 | -15 | 2 | 40 |
| 30-45.8646-111.0594-2-12- | 0-M36370 | -5 | -5 | -5 | 16 | -20 | 27 | -5 | -10 | 28 | 2 | 34 |
| 30-45.8467-111.0595-2-12- | 0-M36371 | -5 | -5 | -5 | -10 | -20 | 54 | 9 | -10 | -15 | 2 | 14 |
| 30-45.4990-110.9875-2-12- | 0-M36372 | -5 | -5 | -5 | 30 | -20 | 57 | 9 | -10 | -15 | 2 | 28 |
| 30-45.4841-110.9792-2-12- | 0-M36373 | -5 | -5 | -5 | 30 | -20 | 20 | 13 | -10 | -15 | 1 | 28 |
| 30-45.4752-110.9520-2-12- | 0-M36374 | -5 | -5 | -5 | 44 | -20 | 23 | -5 | -10 | -15 | 2 | 19 |

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

③

| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | LASL SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS — Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Al | Au | Ba | Ca | Ce | Cl | Co | Cr | Cs | Dy | Eu | Fe | Hf | K | La | Lu |
| 30-45.3578-111.0601-2-12- | 0-M36318 | 80220 | -0.11 | 1248 | 34410 | 65 | -122 | 28.8 | 162 | 2.4 | 3 | 2.2 | 61830 | 6.2 | 14660 | 32 | 0.3 |
| 30-45.3577-111.0626-2-12- | 0-M36319 | 80720 | -0.10 | 1047 | 39280 | 73 | -111 | 28.4 | 159 | -2.1 | 3 | 2.1 | 64160 | 5.4 | 16490 | 36 | 0.3 |
| 30-45.3713-111.2475-2-12- | 0-M36320 | 57400 | -0.10 | 408 | 40410 | 78 | 150 | 31.2 | 438 | -2.1 | 5 | 2.2 | 64130 | 15.1 | 8477 | 51 | 0.7 |
| 30-45.4589-110.9275-2-12- | 0-M36321 | 81180 | -0.09 | 1694 | 37770 | 53 | -111 | 26.2 | 86 | -1.9 | 4 | 1.9 | 64180 | 3.9 | 13740 | 32 | 0.3 |
| 30-45.4430-110.9093-2-12- | 0-M36322 | 67320 | -0.09 | 929 | 33440 | 73 | -101 | 16.4 | 116 | 3.5 | 3 | 1.8 | 36860 | 9.9 | 17070 | 42 | 0.4 |
| 30-45.4434-110.9622-2-12- | 0-M36323 | 79920 | -0.10 | 1511 | 38560 | 63 | -107 | 26.8 | 138 | 1.9 | 3 | 1.9 | 59350 | 5.3 | 20020 | 30 | 0.2 |
| 30-45.4224-110.9594-2-12- | 0-M36324 | 79690 | -0.10 | 1372 | 36620 | 47 | -100 | 24.2 | 135 | -2.0 | 3 | 1.6 | 58740 | 4.8 | 15390 | 27 | 0.3 |
| 30-45.1871-111.1288-2-12- | 0-M36325 | 70820 | -0.07 | 1119 | 33550 | 58 | -88 | 15.5 | 88 | 2.0 | 4 | 1.7 | 32130 | 6.2 | 13910 | 39 | 0.2 |
| 30-45.1857-111.1342-2-12- | 0-M36326 | 59030 | -0.08 | 878 | 26230 | 77 | -91 | 13.6 | 173 | 2.8 | 4 | 1.6 | 31680 | 10.5 | 15110 | 33 | 0.3 |
| 30-45.2191-110.7401-2-12- | 0-M36327 | 75460 | -0.10 | 1111 | 41240 | 71 | -108 | 19.9 | 145 | -2.0 | 4 | 2.0 | 52790 | 6.7 | 15980 | 34 | 0.3 |
| 30-45.2333-110.6746-2-12- | 0-M36328 | 61230 | -0.08 | 870 | 25030 | 82 | -81 | 14.0 | 132 | 4.1 | 3 | 1.8 | 37010 | 12.5 | 14820 | 41 | 0.5 |
| 30-45.1353-111.3333-2-12- | 0-M36330 | 59080 | -0.08 | 857 | 29440 | 72 | -78 | 13.4 | 90 | 4.1 | 5 | 1.6 | 31860 | 10.0 | 15780 | 43 | 0.4 |
| 30-45.2691-111.3406-2-12- | 0-M36331 | 47070 | -0.09 | 1051 | 30030 | 110 | 91 | 16.1 | 338 | -1.6 | 5 | 2.0 | 45350 | 29.9 | 9451 | 55 | 0.5 |
| 30-45.2535-111.4426-2-12- | 0-M36332 | 65100 | -0.09 | 739 | 21530 | 74 | -88 | 16.6 | 97 | 4.7 | 4 | 1.6 | 35900 | 7.6 | 15800 | 45 | 0.3 |
| 30-45.1312-111.3213-2-12- | 0-M36333 | 66730 | -0.10 | 790 | 12340 | 95 | -78 | 13.2 | 135 | 6.1 | 5 | 2.3 | 36830 | 10.7 | 13920 | 53 | 0.5 |
| 30-45.2178-111.2750-2-12- | 0-M36334 | 61370 | -0.07 | 824 | 21730 | 69 | -75 | 14.2 | 105 | 2.9 | 5 | 1.7 | 34080 | 9.0 | 20970 | 40 | 0.3 |
| 30-45.1511-110.5024-2-12- | 0-M36335 | 64200 | -0.08 | 841 | 26200 | 75 | -95 | 13.4 | 148 | 4.7 | 5 | 1.5 | 32210 | 8.6 | 17470 | 39 | 0.5 |
| 30-45.2127-111.2756-2-12- | 0-M36336 | 51150 | -0.08 | 1017 | 29520 | 95 | -79 | 18.7 | 300 | 2.5 | 4 | 1.7 | 50110 | 25.1 | 13860 | 46 | 0.5 |
| 30-45.2419-111.4065-2-12- | 0-M36337 | 56350 | -0.07 | 807 | 32190 | 116 | -77 | 12.9 | 121 | 3.8 | 4 | 2.1 | 33540 | 10.4 | 15740 | 61 | 0.4 |
| 30-45.0913-111.2962-2-11- | 0-M36338 | 58310 | -0.07 | 817 | 26330 | 72 | -84 | 23.0 | 590 | 3.5 | 3 | 1.4 | 51490 | 8.7 | 20650 | 30 | 0.3 |
| 30-45.2374-111.4114-2-12- | 0-M36339 | 56420 | -0.08 | 760 | 25680 | 75 | 124 | 9.7 | 119 | 3.0 | 4 | 1.5 | 25990 | 11.8 | 16080 | 39 | 0.4 |
| 30-45.2869-111.3854-2-11- | 0-M36340 | 54070 | -0.07 | 646 | 22790 | 67 | -77 | 12.0 | 121 | 3.4 | 3 | 1.5 | 30290 | 10.5 | 17830 | 35 | 0.3 |
| 30-45.0880-111.2838-2-12- | 0-M36341 | 53820 | -0.07 | 693 | 15760 | 70 | -101 | 8.8 | 161 | 4.0 | 5 | 1.2 | 26420 | 15.2 | 16640 | 36 | 0.5 |
| 30-45.2879-111.3929-2-12- | 0-M36342 | 59740 | -0.08 | 844 | 22390 | 44 | 148 | 36.7 | 1197 | 3.0 | 3 | 1.5 | 81990 | 8.2 | 19300 | 33 | 0.2 |
| 30-45.1362-110.5937-2-12- | 0-M36343 | 58100 | -0.07 | 879 | 25040 | 59 | -77 | 14.3 | 112 | 3.8 | 4 | 1.6 | 34280 | 11.2 | 16880 | 35 | 0.3 |
| 30-45.1360-111.3328-2-12- | 0-M36344 | 52360 | -0.08 | 666 | 30450 | 73 | -75 | 9.3 | 80 | 3.4 | 5 | 1.6 | 24960 | 12.6 | 17290 | 33 | 0.4 |
| 30-45.0898-111.2967-2-12- | 0-M36345 | 61440 | -0.08 | 653 | 19800 | 83 | -77 | 15.7 | 160 | 3.0 | 5 | 1.8 | 37500 | 11.6 | 14760 | 44 | 0.4 |
| 30-45.1286-111.3077-2-11- | 0-M36346 | 57720 | -0.05 | 925 | 16040 | 77 | -83 | 3.8 | 52 | 4.3 | 5 | 1.3 | 20270 | 8.7 | 18410 | 47 | 0.5 |
| 30-45.0725-110.7351-2-12- | 0-M36348 | 66610 | -0.06 | 810 | 22540 | 84 | -111 | 13.8 | 186 | 2.9 | 3 | 1.5 | 41270 | 7.9 | 14400 | 44 | 0.3 |
| 30-45.1371-110.6553-2-12- | 0-M36349 | 62870 | -0.09 | 716 | 29280 | 60 | -89 | 21.8 | 135 | 2.7 | 4 | 1.5 | 47840 | 8.2 | 14770 | 35 | 0.4 |
| 30-45.1220-110.6583-2-12- | 0-M36350 | 41850 | -0.05 | 687 | 20600 | 40 | -49 | 5.4 | 39 | 2.9 | 3 | 1.1 | 14280 | 6.2 | 14280 | 27 | 0.2 |
| 30-45.0435-110.5514-2-12- | 0-M36352 | 61170 | -0.08 | 926 | 34900 | 76 | -86 | 13.3 | 89 | 4.0 | 4 | 1.4 | 28030 | 8.7 | 18880 | 39 | 0.4 |
| 30-45.2021-111.0621-2-12- | 0-M36354 | 61270 | -0.07 | 684 | 27420 | 73 | -81 | 13.3 | 157 | 3.9 | 4 | 1.5 | 35190 | 10.5 | 17510 | 36 | 0.4 |
| 30-45.2160-111.0076-2-12- | 0-M36356 | 57620 | -0.07 | 680 | 31510 | 79 | -74 | 9.3 | 75 | 4.7 | 4 | 1.6 | 28980 | 10.7 | 21110 | 38 | 0.5 |
| 30-45.1084-110.5984-2-12- | 0-M36358 | 58420 | -0.07 | 709 | 32250 | 56 | 120 | 12.9 | 123 | 3.0 | 4 | 1.6 | 33780 | 9.7 | 19180 | 36 | 0.4 |
| 30-45.1918-111.0731-2-12- | 0-M36359 | 56870 | -0.11 | 672 | 28010 | 100 | -117 | 20.4 | 400 | 2.2 | 6 | 1.9 | 50260 | 13.5 | 19150 | 47 | 0.6 |
| 30-45.7648-111.0082-2-15- | 0-M36360 | 63610 | -0.08 | 795 | 27130 | 80 | -88 | 29.2 | 133 | 4.9 | 4 | 2.4 | 38300 | 11.5 | 17930 | 47 | 0.4 |
| 30-45.7625-111.0092-2-12- | 0-M36361 | 65910 | -0.09 | 419 | 44550 | 82 | 130 | 18.8 | 205 | 5.5 | 6 | 1.9 | 47110 | 8.9 | 27110 | 41 | 0.5 |
| 30-45.7797-111.0284-2-12- | 0-M36362 | 61980 | -0.10 | 594 | 28810 | 75 | 167 | 30.7 | 283 | 4.0 | 6 | 2.0 | 65080 | 11.6 | 18360 | 43 | 0.6 |
| 30-45.8127-111.0543-2-12- | 0-M36363 | 51000 | -0.09 | 486 | 55770 | 78 | 192 | 17.9 | 182 | -2.0 | 5 | 1.6 | 41190 | 13.1 | 16920 | 33 | 0.6 |
| 30-45.8368-111.0022-2-12- | 0-M36364 | 52430 | -0.09 | 360 | 53890 | 66 | 235 | 26.2 | 212 | -2.0 | 3 | 1.6 | 56550 | 7.9 | 12270 | 30 | 0.4 |
| 30-45.8626-111.0307-2-15- | 0-M36365 | 58560 | -0.11 | 587 | 30060 | 81 | 127 | 24.5 | 369 | 3.3 | 5 | 1.8 | 63130 | 12.9 | 19010 | 52 | 0.6 |
| 30-45.8647-111.0279-2-12- | 0-M36366 | 72470 | -0.09 | 554 | 55420 | 74 | 87 | 19.8 | 111 | 5.9 | 6 | 1.9 | 43530 | 6.2 | 33650 | 45 | 0.4 |
| 30-45.8597-111.0377-2-15- | 0-M36367 | 60250 | -0.12 | 416 | 27000 | 117 | -118 | 21.6 | 180 | 3.4 | 7 | 1.9 | 53750 | 16.2 | 15160 | 52 | 0.8 |
| 30-45.8548-111.0594-2-12- | 0-M36368 | 48250 | -0.13 | -256 | 23440 | 779 | -155 | 23.6 | 284 | -2.7 | 14 | 4.8 | 81070 | 76.4 | -7216 | 422 | 1.8 |
| 30-45.8762-111.0721-2-12- | 0-M36369 | 59510 | -0.09 | 664 | 19050 | 88 | 192 | 12.6 | 130 | 2.8 | 5 | 2.1 | 35520 | 26.9 | 17190 | 47 | 0.6 |
| 30-45.8646-111.0594-2-12- | 0-M36370 | 58910 | -0.08 | 1158 | 16740 | 99 | 181 | 15.7 | 115 | 1.8 | 5 | 2.1 | 32800 | 18.9 | 21480 | 64 | 0.6 |
| 30-45.8467-111.0595-2-12- | 0-M36371 | 46230 | -0.06 | 426 | 52660 | 84 | -137 | 20.0 | 246 | -1.9 | 5 | 1.7 | 57600 | 16.0 | 14960 | 44 | 0.6 |
| 30-45.4990-110.9875-2-12- | 0-M36372 | 45960 | -0.09 | 530 | 12560 | 56 | -93 | 27.5 | 81 | 3.5 | 4 | 1.4 | 29570 | 8.8 | 11650 | 34 | 0.4 |
| 30-45.4841-110.9792-2-12- | 0-M36373 | 38520 | -0.07 | 566 | 13560 | 29 | -64 | 6.5 | 59 | 2.6 | 2 | 0.9 | 18570 | 10.2 | 10480 | 17 | 0.3 |
| 30-45.4752-110.9520-2-12- | 0-M36374 | 78430 | -0.10 | 1297 | 36900 | 64 | -111 | 29.1 | 153 | 2.9 | 3 | 2.0 | 72980 | 5.6 | 14970 | 34 | 0.3 |

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

(4)

| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | LABS SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | U/Th RATIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mg | Mn | Na | Rb | Sb | Sc | Sm | Sr | Ta | Tb | Th | Ti | V | Yb | Zn | |
| 30-45.3578-111.0601-2-12- | 0-M36318 | 15230 | 1195 | 18260 | -37 | -3 | 14.5 | 6.6 | 599 | -1 | -1 | 7.0 | 6912 | 182 | 4.1 | -41 | 0.343 |
| 30-45.3577-111.0626-2-12- | 0-M36319 | 14860 | 1163 | 18290 | -35 | -3 | 15.6 | 4.8 | 600 | -1 | -1 | 7.5 | 5597 | 171 | 3.7 | -47 | 0.307 |
| 30-45.3713-111.2475-2-12- | 0-M36320 | 20090 | 1222 | 22380 | -37 | -3 | 20.2 | 11.2 | -348 | -1 | -1 | 12.3 | 6919 | 125 | 5.7 | 94 | 1.325 |
| 30-45.4589-110.9275-2-12- | 0-M36321 | 12980 | 1075 | 20210 | -35 | -2 | 13.8 | 4.8 | 588 | -1 | -1 | 6.3 | 5982 | 170 | 2.4 | 143 | 0.238 |
| 30-45.4430-110.9093-2-12- | 0-M36322 | 11620 | 840 | 14840 | 59 | -2 | 10.0 | 5.7 | 579 | -1 | -1 | 9.8 | 4228 | 110 | 3.1 | 106 | 0.357 |
| 30-45.4434-110.9622-2-12- | 0-M36323 | 16080 | 981 | 18610 | 59 | -3 | 15.8 | 3.7 | -317 | -1 | -1 | 6.2 | 4806 | 165 | -1.8 | 135 | 0.274 |
| 30-45.4224-110.9594-2-12- | 0-M36324 | 16880 | 888 | 18940 | 70 | -3 | 15.7 | 4.3 | 445 | -1 | -1 | 7.0 | 4910 | 152 | 3.0 | 140 | 0.243 |
| 30-45.1871-111.1288-2-12- | 0-M36325 | 8836 | 713 | 16270 | -27 | -2 | 8.9 | 4.5 | 694 | -1 | -1 | 8.5 | 3242 | 89 | 1.8 | 86 | 0.271 |
| 30-45.1857-111.1342-2-12- | 0-M36326 | 9999 | 713 | 13400 | -27 | -2 | 9.4 | 5.5 | -285 | -1 | -1 | 11.3 | 3307 | 106 | 3.5 | 104 | 0.283 |
| 30-45.2191-110.7401-2-12- | 0-M36327 | 13390 | 899 | 18750 | 52 | -2 | 13.0 | 4.3 | 561 | -1 | -1 | 7.8 | 4847 | 135 | 2.9 | 140 | 0.269 |
| 30-45.2333-110.6746-2-12- | 0-M36328 | 11630 | 680 | 14800 | 56 | -2 | 11.4 | 5.2 | -250 | -1 | -1 | 12.5 | 3702 | 108 | 3.3 | 116 | 0.352 |
| 30-45.1353-111.3333-2-12- | 0-M36330 | 10060 | 678 | 11460 | 73 | -2 | 9.5 | 6.0 | -250 | -1 | -1 | 11.9 | 3405 | 88 | 3.6 | -35 | 0.269 |
| 30-45.2691-111.3406-2-12- | 0-M36331 | 13960 | 800 | 10250 | -28 | -2 | 9.2 | 7.2 | -279 | -1 | -1 | 12.5 | 5928 | 160 | 4.3 | 57 | 0.336 |
| 30-45.2535-111.4426-2-12- | 0-M36332 | 10250 | 818 | 12480 | 87 | -2 | 11.1 | 6.5 | -283 | -1 | -1 | 13.0 | 3267 | 97 | 3.( | 89 | 0.262 |
| 30-45.1312-111.3213-2-12- | 0-M36333 | 8080 | 896 | 7967 | 104 | -2 | 11.9 | 8.1 | -303 | -1 | -1 | 14.7 | 4179 | 126 | 5.6 | 109 | 0.347 |
| 30-45.2178-111.2750-2-12- | 0-M36334 | 9731 | 748 | 10700 | 55 | -2 | 10.6 | 6.2 | 485 | -1 | -1 | 11.8 | 3551 | 99 | 3.3 | 131 | 0.271 |
| 30-45.1511-110.5024-2-12- | 0-M36335 | 9778 | 773 | 14340 | 63 | -2 | 10.0 | 5.3 | -305 | -1 | -1 | 9.5 | 4070 | 106 | 2.9 | -36 | 0.316 |
| 30-45.2127-111.2756-2-12- | 0-M36336 | 11380 | 805 | 11090 | -29 | -2 | 10.3 | 6.1 | -253 | -1 | -1 | 13.5 | 5337 | 149 | 4.5 | 129 | 0.296 |
| 30-45.2419-111.4065-2-12- | 0-M36337 | 12920 | 622 | 14070 | 51 | -2 | 10.1 | 8.0 | 403 | 1 | -1 | 15.4 | 3610 | 83 | 4.2 | 119 | 0.227 |
| 30-45.0913-111.2962-2-11- | 0-M36338 | 14900 | 875 | 13850 | 59 | -2 | 10.5 | 4.0 | 585 | -1 | -1 | 8.4 | 3412 | 203 | 2.1 | 121 | 0.345 |
| 30-45.2374-111.4114-2-12- | 0-M36339 | 11640 | 578 | 12540 | 35 | -2 | 8.0 | 5.6 | -275 | -1 | -1 | 12.0 | 3241 | 81 | 3.3 | -38 | 0.292 |
| 30-45.2869-111.3854-2-11- | 0-M36340 | 9316 | 659 | 12070 | 62 | -2 | 9.1 | 5.2 | -236 | -1 | -1 | 10.6 | 2889 | 87 | 2.7 | 98 | 0.274 |
| 30-45.0880-111.2838-2-12- | 0-M36341 | 8154 | 573 | 13970 | 63 | -2 | 7.3 | 7.0 | -256 | -1 | -1 | 11.7 | 2901 | 83 | 3.7 | 116 | 0.308 |
| 30-45.2879-111.3929-2-12- | 0-M36342 | 24180 | 1156 | 14750 | 83 | -2 | 11.1 | 3.9 | 887 | -1 | -1 | 8.3 | 4608 | 315 | 2.9 | 161 | 0.337 |
| 30-45.1362-110.5937-2-12- | 0-M36343 | 10060 | 635 | 12900 | 51 | -2 | 9.7 | 5.8 | 336 | -1 | -1 | 9.9 | 3356 | 101 | 2.7 | 125 | 0.333 |
| 30-45.1360-111.3328-2-12- | 0-M36344 | 10450 | 602 | 9255 | 64 | -2 | 7.6 | 6.2 | 454 | -1 | -1 | 11.0 | 3484 | 79 | 3.1 | -18 | 0.336 |
| 30-45.0898-111.2967-2-12- | 0-M36345 | 11100 | 755 | 10760 | 80 | -2 | 11.4 | 6.6 | -251 | -1 | -1 | 14.1 | 3719 | 111 | 3.8 | 81 | 0.298 |
| 30-45.1286-111.3077-2-11- | 0-M36346 | 8147 | 306 | 11360 | 81 | -1 | 6.6 | 7.0 | -203 | -1 | -1 | 16.7 | 2114 | 50 | 3.4 | -57 | 0.263 |
| 30-45.0725-110.7351-2-12- | 0-M36348 | 9861 | 700 | 17210 | 61 | -2 | 11.4 | 5.2 | -284 | -1 | -1 | 12.8 | 3799 | 80 | 2.8 | 92 | 0.219 |
| 30-45.1371-110.6553-2-12- | 0-M36349 | 14800 | 879 | 14920 | -33 | -2 | 16.7 | 5.7 | -288 | -1 | -1 | 10.2 | 4861 | 126 | 3.8 | -43 | 0.363 |
| 30-45.1220-110.6583-2-12- | 0-M36350 | 6867 | 288 | 5902 | 45 | -1 | 4.6 | 3.8 | 323 | -1 | -1 | 5.9 | 2125 | 61 | 1.4 | 73 | 0.373 |
| 30-45.0435-110.5514-2-12- | 0-M36352 | 11230 | 625 | 12900 | 48 | -2 | 9.1 | 6.6 | -270 | -1 | -1 | 9.8 | 3339 | 103 | 3.6 | -40 | 0.694 |
| 30-45.2021-111.0621-2-12- | 0-M36354 | 10620 | 683 | 12910 | 67 | -2 | 10.5 | 5.1 | -249 | -1 | -1 | 9.5 | 2550 | 99 | 3.2 | -62 | 0.316 |
| 30-45.2160-111.0076-2-12- | 0-M36356 | 10640 | 552 | 11460 | 66 | -2 | 8.5 | 6.0 | 329 | -1 | -1 | 13.0 | 2975 | 77 | 3.7 | 105 | 0.254 |
| 30-45.1084-110.5984-2-12- | 0-M36358 | 11000 | 697 | 13370 | 58 | -2 | 9.6 | 5.3 | 553 | -1 | -1 | 9.8 | 4283 | 95 | 3.6 | 109 | 0.306 |
| 30-45.1918-111.0731-2-12- | 0-M36359 | 18440 | 1648 | 11460 | 72 | -3 | 21.5 | 7.7 | -441 | -1 | -1 | 15.3 | 3562 | 123 | 5.7 | -65 | 0.281 |
| 30-45.7648-111.0082-2-15- | 0-M36360 | 11450 | 772 | 14930 | 60 | -2 | 11.8 | 4.8 | -263 | -1 | -1 | 10.9 | 3891 | 105 | 3.3 | 110 | 0.661 |
| 30-45.7625-111.0092-2-12- | 0-M36361 | 18770 | 801 | 5130 | 95 | -2 | 16.0 | 7.8 | -261 | -1 | -1 | 16.5 | 4020 | 95 | -1.7 | 117 | 0.176 |
| 30-45.7797-111.0284-2-12- | 0-M36362 | 22890 | 1507 | 8208 | 73 | -3 | 22.5 | 8.6 | -361 | -1 | -1 | 14.8 | 5005 | 144 | 3.9 | 136 | 0.270 |
| 30-45.8127-111.0543-2-12- | 0-M36363 | 21060 | 1085 | 9999 | -32 | -2 | 14.9 | 6.1 | -346 | -1 | -1 | 11.4 | 4121 | 109 | 3.2 | -64 | 0.254 |
| 30-45.8368-111.0022-2-12- | 0-M36364 | 28320 | 1266 | 10280 | -34 | -2 | 19.9 | 5.6 | -317 | -1 | -1 | 9.3 | 4377 | 128 | 3.7 | -43 | 0.269 |
| 30-45.8626-111.0307-2-15- | 0-M36365 | 18210 | 1702 | 12590 | 64 | -3 | 26.4 | 7.4 | -392 | -1 | -1 | 15.9 | 3848 | 140 | 5.1 | 89 | 0.258 |
| 30-45.8647-111.0279-2-12- | 0-M36366 | 17900 | 704 | 2826 | 118 | -2 | 14.6 | 6.9 | -244 | -1 | -1 | 15.2 | 3376 | 85 | 4.0 | 99 | 0.197 |
| 30-45.8597-111.0377-2-15- | 0-M36367 | 16060 | 1650 | 11630 | -37 | -3 | 23.6 | 10.0 | -429 | -2 | -1 | 20.0 | 4165 | 128 | 6.0 | -49 | 0.235 |
| 30-45.8548-111.0594-2-12- | 0-M36368 | 12230 | 2916 | 8336 | 66 | -3 | 33.7 | 69.3 | -514 | -2 | 6 | 179.2 | 4691 | 122 | 14.9 | -60 | 0.135 |
| 30-45.8762-111.0721-2-12- | 0-M36369 | 9143 | 992 | 20220 | 90 | -2 | 15.5 | 6.4 | -312 | -1 | -1 | 13.2 | 5299 | 99 | 5.1 | 99 | 0.318 |
| 30-45.8646-111.0594-2-12- | 0-M36370 | 10780 | 912 | 21740 | 68 | -2 | 14.4 | 8.2 | -284 | 1 | -1 | 14.1 | 4345 | 86 | 4.0 | 67 | 0.220 |
| 30-45.8467-111.0595-2-12- | 0-M36371 | 23380 | 1680 | 10080 | -30 | -2 | 19.6 | 6.9 | -427 | -1 | -1 | 16.1 | 5178 | 120 | 4.8 | -41 | 0.205 |
| 30-45.4990-110.9875-2-12- | 0-M36372 | 5458 | 1577 | 5692 | -32 | -2 | 9.4 | 5.2 | -406 | -1 | -1 | 8.7 | 2560 | 81 | 2.7 | 104 | 0.310 |
| 30-45.4841-110.9792-2-12- | 0-M36373 | 5177 | 494 | 5982 | 39 | -2 | 5.6 | 2.3 | -223 | -1 | -1 | 5.0 | 2141 | 61 | 3.0 | -41 | 0.500 |
| 30-45.4752-110.9520-2-12- | 0-M36374 | 16460 | 1110 | 19130 | -38 | -3 | 16.5 | 5.2 | -339 | -1 | -1 | 7.3 | 5835 | 192 | 2.9 | -130 | 0.219 |

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

(1)

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER AND FIELD DATA | | | | | | | | | | | | | | | | | | | | | | | | U CONCENTRATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | TIME SAMPLED DATE | TIME SAMPLED HOUR | AIR TEMPERATURE | WATER TEMPERATURE | COMMENTS | SPECIAL MEASUREMENTS | pH | CONDUCTIVITY (µmho/cm) | SCINTILLOMETER (eU,ppm) | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm |
| 30- | 45.4729- | 110.9582- | 2- | 12- | | 0-M36375- | 09/15/76- | 12- | 14- | 9.0- | C- | - | 7.2- | 55- | 4- | 3- | 4- | 4- | 4- | 3- | 2- | 1- | 2- | 4- | 4- | 2- | 1- | -1- | - | - | - | - | 2.10 |
| 30- | 45.4989- | 110.9792- | 2- | 12- | | 0-M36376- | 09/15/76- | 13- | 18- | 6.0- | C- | - | 7.5- | 140- | 6- | 1- | 1- | 4- | 4- | 3- | 2- | 1- | 2- | 1- | 3- | 2- | 2- | -1- | - | - | - | - | 3.70 |
| 30- | 45.7868- | 111.1112- | 2- | 12- | | 0-M36377- | 09/15/76- | 15- | 28- | 19.6- | C- | - | 6.0- | 398- | -4- | -5- | 6- | 2- | 3- | 1- | 1- | 4- | 3- | 2- | 2- | - | -3- | - | - | - | - | - | 2.90 |
| 30- | 45.7375- | 111.7448- | 2- | 12- | | 0-M36380- | 10/19/76- | 14- | 5- | 1.0- | - | - | 5.8- | 470- | -2- | 7- | 4- | 1- | 2- | 2- | 4- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | - | 3.60 |
| 30- | 45.7169- | 111.7075- | 2- | 12- | | 0-M36381- | 10/19/76- | 15- | 5- | 1.0- | - | - | 5.6- | 420- | -2- | 7- | 4- | 1- | 2- | 2- | 4- | 2- | 3- | 3- | 2- | 2- | -3- | - | - | - | - | - | 3.30 |
| 30- | 45.5750- | 111.7036- | 2- | 12- | | 0-M36382- | 10/19/76- | 15- | 5- | 1.0- | - | - | 5.7- | 340- | -2- | 7- | 4- | 1- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | - | 4.70 |
| 30- | 45.5701- | 111.7223- | 2- | 15- | | 0-M36383- | 10/19/76- | 16- | 5- | - | - | - | - | - | -2- | 7- | 3- | 1- | -1- | -2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | - | - | - | 2.90 |
| 30- | 45.5662- | 111.6415- | 2- | 12- | | 0-M36384- | 10/19/76- | 16- | 5- | 1.5- | - | - | 5.3- | 345- | -2- | 7- | 4- | 1- | 2- | 2- | 3- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | - | 5.70 |
| 30- | 45.5526- | 111.6568- | 2- | 12- | | 0-M36385- | 10/19/76- | 16- | 4- | 1.0- | - | - | 5.2- | 340- | -2- | 7- | 5- | 6- | 2- | 2- | 2- | 2- | 3- | 4- | 3- | 3- | -3- | - | - | - | - | - | 2.60 |
| 30- | 45.5330- | 111.6383- | 2- | 12- | | 0-M36386- | 10/19/76- | 17- | 4- | - | - | - | 5.6- | 240- | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 3- | -3- | - | - | - | - | - | 5.60 |
| 30- | 45.5021- | 111.6436- | 2- | 12- | | 0-M36387- | 10/19/76- | 18- | 4- | 1.0- | - | - | 5.3- | 270- | -2- | 7- | 4- | 1- | 2- | 2- | 4- | 2- | 3- | 3- | 3- | 3- | -3- | - | - | - | - | - | 4.50 |
| 30- | 45.7291- | 111.8193- | 2- | 12- | | 0-M36388- | 10/19/76- | 9- | 1- | 2.2- | - | - | 5.5- | 175- | -2- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | - | 2.60 |
| 30- | 45.7366- | 111.8504- | 2- | 12- | | 0-M36389- | 10/19/76- | 8- | -2- | 0.2- | - | - | 5.7- | 255- | -2- | 7- | 3- | 6- | 3- | 3- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | - | 2.20 |
| 30- | 45.7326- | 111.8468- | 2- | 15- | | 0-M36390- | 10/19/76- | 8- | -2- | - | - | - | - | - | -2- | 7- | 4- | 6- | -1- | -2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | - | - | - | 3.40 |
| 30- | 45.7306- | 111.8739- | 2- | 15- | | 0-M36391- | 10/19/76- | 8- | -1- | - | - | - | - | - | -2- | 7- | 4- | 6- | -1- | -2- | 1- | 2- | 3- | 2- | -3- | - | - | - | - | - | - | - | 2.50 |
| 30- | 45.7164- | 111.8866- | 2- | 15- | | 0-M36392- | 10/19/76- | 8- | -1- | - | - | - | - | - | -2- | 7- | 4- | 6- | -1- | -2- | 2- | 3- | 2- | 2- | -3- | - | - | - | - | - | - | - | 3.40 |
| 30- | 45.7068- | 111.8813- | 2- | 15- | | 0-M36393- | 10/19/76- | 9- | - | - | - | - | - | - | -2- | 7- | 4- | 6- | -1- | -2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | - | - | - | 6.80 |
| 30- | 45.6979- | 111.8883- | 2- | 15- | | 0-M36394- | 10/19/76- | 9- | 1- | - | - | - | - | - | -2- | 7- | 4- | 6- | -1- | -2- | 4- | 3- | 2- | 2- | -3- | - | - | - | - | - | - | - | 3.70 |
| 30- | 45.6978- | 111.8805- | 2- | 15- | | 0-M36395- | 10/19/76- | 9- | 1- | - | - | - | - | - | -2- | 7- | 4- | 6- | -1- | -2- | 4- | 3- | 2- | 2- | -3- | - | - | - | - | - | - | - | 2.90 |
| 30- | 45.6992- | 111.9177- | 2- | 12- | | 0-M36396- | 10/19/76- | 10- | 1- | 2.0- | - | - | 5.5- | 210- | -2- | 1- | 5- | 6- | 3- | 3- | 1- | 2- | 1- | 2- | 3- | 2- | -3- | - | - | - | - | - | 2.00 |
| 30- | 45.6636- | 111.9170- | 2- | 12- | | 0-M36397- | 10/19/76- | 12- | 2- | 3.4- | - | - | 5.5- | 275- | -2- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | - | 23.00 |
| 30- | 45.7082- | 111.9480- | 2- | 15- | | 0-M36398- | 10/19/76- | 10- | 1- | - | - | - | - | - | -2- | 7- | 4- | 6- | -1- | -2- | 1- | 2- | 3- | 2- | -3- | - | - | - | - | - | - | - | 6.30 |
| 30- | 45.7220- | 111.9597- | 2- | 12- | | 0-M36399- | 10/19/76- | 10- | 1- | 1.4- | - | - | 5.7- | 330- | -2- | 1- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 2- | 2- | 2- | -3- | - | - | - | - | - | 2.30 |
| 30- | 45.7226- | 111.9633- | 2- | 12- | | 0-M36400- | 10/19/76- | 10- | 1- | 1.4- | - | - | 5.5- | 275- | -2- | 1- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 2- | 3- | 2- | -8- | - | - | - | - | - | 5.30 |
| 30- | 45.7281- | 111.9722- | 2- | 12- | | 0-M36401- | 10/19/76- | 11- | 2- | 2.2- | - | - | 5.7- | 155- | -2- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 2- | 2- | -8- | - | - | - | - | - | 2.30 |
| 30- | 45.7261- | 111.9793- | 2- | 15- | | 0-M36402- | 10/19/76- | 11- | 2- | - | - | - | - | - | -2- | 7- | 4- | 6- | -1- | -2- | 1- | 3- | 3- | 2- | -8- | - | - | - | - | - | - | - | 3.30 |
| 30- | 45.6857- | 111.8625- | 2- | 15- | | 0-M36403- | 10/19/76- | 11- | 2- | - | - | - | - | - | -2- | 7- | 4- | 6- | -1- | -2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | - | - | - | 2.80 |
| 30- | 45.6785- | 111.8329- | 2- | 15- | | 0-M36404- | 10/19/76- | 12- | 2- | - | - | - | - | - | -2- | 7- | 4- | 6- | -1- | -2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | - | - | - | 3.80 |
| 30- | 45.6624- | 111.8655- | 2- | 15- | | 0-M36405- | 10/19/76- | 12- | 2- | - | - | - | - | - | -2- | 7- | 4- | 6- | -1- | -2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | - | - | - | 2.70 |
| 30- | 45.6442- | 111.9231- | 2- | 12- | | 0-M36406- | 10/19/76- | 13- | 2- | 3.4- | - | - | 5.5- | 225- | -2- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 2- | 3- | 2- | -3- | - | - | - | - | - | 3.00 |
| 30- | 45.6236- | 111.9453- | 2- | 12- | | 0-M36407- | 10/19/76- | 13- | 2- | 2.4- | - | - | 5.7- | 360- | -2- | 7- | 4- | 6- | -1- | -2- | 1- | 2- | 3- | 2- | -3- | - | - | - | - | - | - | - | 2.80 |
| 30- | 45.6494- | 111.8600- | 2- | 15- | | 0-M36408- | 10/19/76- | 14- | 2- | - | - | - | - | - | -2- | 1- | 4- | 6- | -1- | -2- | 3- | 2- | 3- | 2- | -3- | - | - | - | - | - | - | - | 4.40 |
| 30- | 45.6752- | 111.7675- | 2- | 12- | | 0-M36409- | 10/19/76- | 14- | 2- | 2.2- | - | - | 5.5- | 250- | -2- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 2- | 2- | -3- | - | - | - | - | - | 3.40 |
| 30- | 45.6600- | 111.7867- | 2- | 15- | | 0-M36410- | 10/19/76- | 15- | 2- | - | - | - | - | - | -2- | 7- | 4- | 6- | -1- | -2- | 3- | 2- | 2- | 2- | -3- | - | - | - | - | - | - | - | 5.00 |
| 30- | 45.6548- | 111.7851- | 2- | 15- | | 0-M36411- | 10/19/76- | 15- | 2- | - | - | - | - | - | -2- | 7- | 4- | 6- | -1- | -2- | 3- | 3- | 2- | 2- | -3- | - | - | - | - | - | - | - | 2.90 |
| 30- | 45.6230- | 111.8578- | 2- | 12- | | 0-M36412- | 10/19/76- | 16- | 2- | 3.2- | - | - | 5.5- | 175- | -2- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | - | 4.90 |
| 30- | 45.6202- | 111.8639- | 2- | 12- | | 0-M36413- | 10/19/76- | 15- | 2- | 2.0- | - | - | 5.5- | 210- | -2- | 7- | 3- | 1- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | - | 3.50 |
| 30- | 45.6071- | 111.8653- | 2- | 12- | | 0-M36414- | 10/19/76- | 16- | 2- | 2.0- | - | - | 5.7- | 180- | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | - | 2.30 |
| 30- | 45.6020- | 111.9005- | 2- | 11- | | 0-M36415- | 10/19/76- | 16- | 1- | 4.0- | - | - | 5.5- | 200- | -2- | 7- | 3- | 7- | 2- | 3- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | - | 2.70 |
| 30- | 45.6020- | 111.9035- | 2- | 12- | | 0-M36416- | 10/19/76- | 16- | 1- | 1.0- | - | - | 5.5- | 190- | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | - | 3.30 |
| 30- | 45.5944- | 111.9009- | 2- | 12- | | 0-M36417- | 10/19/76- | 17- | 2- | 2.0- | - | - | 5.9- | 210- | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 3- | 2- | 3- | 2- | -3- | - | - | - | - | - | 2.70 |
| 30- | 45.5684- | 111.9208- | 2- | 12- | | 0-M36418- | 10/19/76- | 17- | 3- | 1.5- | - | - | 5.9- | 220- | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | - | 2.10 |
| 30- | 45.5595- | 111.9580- | 2- | 12- | | 0-M36419- | 10/19/76- | 17- | 2- | 1.0- | - | - | 5.5- | 220- | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | - | 2.50 |
| 30- | 45.5701- | 111.9814- | 2- | 15- | | 0-M36420- | 10/19/76- | 17- | 2- | - | - | - | - | - | -2- | 7- | 3- | 7- | -1- | -2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | - | - | - | 32.90 |
| 30- | 45.6077- | 111.8087- | 2- | 12- | | 0-M36421- | 10/19/76- | 18- | 2- | 2.5- | - | - | 5.7- | 230- | -2- | 7- | 5- | 6- | 2- | 2- | 1- | 2- | 2- | 1- | 3- | 3- | -3- | - | - | - | - | - | 2.70 |
| 30- | 45.6024- | 111.7943- | 2- | 12- | | 0-M36422- | 10/19/76- | 18- | 2- | 1.5- | - | - | 5.2- | 180- | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | - | 2.90 |
| 30- | 45.5684- | 111.7628- | 2- | 12- | | 0-M36423- | 10/19/76- | 18- | 1- | 1.0- | - | - | 5.2- | 190- | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 3- | 2- | 3- | 3- | -3- | - | - | - | - | - | 4.00 |
| 30- | 45.5651- | 111.7604- | 2- | 12- | | 0-M36424- | 10/20/76- | 8- | - | - | - | - | 5.4- | 245- | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | - | 2.50 |
| 30- | 45.5630- | 111.7505- | 2- | 12- | | 0-M36425- | 10/20/76- | 8- | -1- | - | - | - | 5.5- | 190- | -2- | 7- | 5- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | - | 2.40 |
| 30- | 45.2914- | 110.9822- | 2- | 12- | | 0-M36427- | 10/14/76- | 11- | 5- | 2.3- | - | - | 5.2- | 105- | -1- | 6- | 1- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | - | 19.00 |
| 30- | 45.2351- | 110.1491- | 2- | 12- | | 0-M36428- | 10/16/76- | 18- | 1- | 2.0- | - | - | 5.5- | 65- | -2- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | - | 3.50 |

# 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 |
| 30- | 45.4729- | 110.9582- | 2- | 12- | 0- | M36375 | -5 | -5 | -5 | 22 | -20 | 15 | -5 | -10 | -15 | 2 | 20 |
| 30- | 45.4989- | 110.9792- | 2- | 12- | 0- | M36376 | -5 | -5 | -5 | 16 | -20 | -15 | 6 | -10 | -15 | 3 | 30 |
| 30- | 45.7868- | 111.1112- | 2- | 12- | 0- | M36377 | -5 | -5 | -5 | 24 | -20 | -15 | 6 | -10 | -15 | 3 | 30 |
| 30- | 45.7375- | 111.7448- | 2- | 12- | 0- | M36380 | -5 | -5 | -5 | 40 | -20 | -15 | 18 | -10 | -15 | 3 | 32 |
| 30- | 45.7169- | 111.7075- | 2- | 12- | 0- | M36381 | -5 | -5 | -5 | 20 | -20 | 17 | -5 | -10 | -15 | 2 | 17 |
| 30- | 45.5750- | 111.7036- | 2- | 12- | 0- | M36382 | -5 | -5 | -5 | 30 | -20 | 34 | -5 | -10 | -15 | 2 | 21 |
| 30- | 45.5701- | 111.7223- | 2- | 15- | 0- | M36383 | -5 | -5 | -5 | 28 | -20 | 26 | 7 | -10 | -15 | 4 | 29 |
| 30- | 45.5662- | 111.6415- | 2- | 12- | 0- | M36384 | -5 | -5 | -5 | 31 | -20 | 25 | 5 | -10 | -15 | 2 | 30 |
| 30- | 45.5526- | 111.6568- | 2- | 12- | 0- | M36385 | -5 | -5 | -5 | 32 | -20 | -15 | 25 | -10 | -15 | 2 | 22 |
| 30- | 45.5330- | 111.6383- | 2- | 12- | 0- | M36386 | -5 | -5 | -5 | 30 | -20 | 25 | 10 | -10 | -15 | 3 | 31 |
| 30- | 45.5021- | 111.6436- | 2- | 12- | 0- | M36387 | -5 | -5 | -5 | 31 | -20 | 36 | 11 | -10 | -15 | 3 | 43 |
| 30- | 45.7291- | 111.8193- | 2- | 12- | 0- | M36388 | -5 | -5 | -5 | 34 | -20 | 18 | 18 | -10 | -15 | 2 | 17 |
| 30- | 45.7366- | 111.8504- | 2- | 12- | 0- | M36389 | -5 | -5 | -5 | 40 | -20 | 36 | 8 | -10 | -15 | 3 | 38 |
| 30- | 45.7326- | 111.8468- | 2- | 15- | 0- | M36390 | -5 | -5 | -5 | 44 | -20 | -15 | 40 | -10 | -15 | 3 | 36 |
| 30- | 45.7306- | 111.8739- | 2- | 15- | 0- | M36391 | -5 | -5 | -5 | 23 | -20 | 17 | 9 | -10 | -15 | 3 | 29 |
| 30- | 45.7164- | 111.8866- | 2- | 15- | 0- | M36392 | -5 | -5 | -5 | 13 | -20 | -15 | 12 | -10 | -15 | 3 | 27 |
| 30- | 45.7068- | 111.8813- | 2- | 15- | 0- | M36393 | -5 | -5 | -5 | 28 | -20 | 37 | 10 | -10 | -15 | 2 | 28 |
| 30- | 45.6979- | 111.8883- | 2- | 15- | 0- | M36394 | -5 | -5 | -5 | 24 | -20 | -15 | -5 | -10 | -15 | 2 | 21 |
| 30- | 45.6978- | 111.8805- | 2- | 15- | 0- | M36395 | -5 | -5 | -5 | 34 | -20 | 16 | 16 | -10 | -15 | 3 | 27 |
| 30- | 45.6992- | 111.9177- | 2- | 12- | 0- | M36396 | -5 | -5 | -5 | 11 | -20 | -15 | -5 | -10 | -15 | 3 | 25 |
| 30- | 45.6636- | 111.9170- | 2- | 12- | 0- | M36397 | 11 | -5 | -5 | -10 | 38 | -15 | -5 | -10 | 21 | 2 | 27 |
| 30- | 45.7082- | 111.9480- | 2- | 15- | 0- | M36398 | -5 | -5 | -5 | 19 | -20 | 20 | 8 | -10 | -15 | 2 | 17 |
| 30- | 45.7220- | 111.9597- | 2- | 12- | 0- | M36399 | -5 | -5 | -5 | 20 | -20 | -15 | -5 | -10 | -15 | 2 | 18 |
| 30- | 45.7226- | 111.9633- | 2- | 12- | 0- | M36400 | -5 | -5 | -5 | 32 | 29 | 53 | 11 | -10 | -15 | 3 | 20 |
| 30- | 45.7281- | 111.9722- | 2- | 12- | 0- | M36401 | -5 | -5 | -5 | 14 | -20 | -15 | 7 | -10 | -15 | 2 | 23 |
| 30- | 45.7261- | 111.9793- | 2- | 15- | 0- | M36402 | -5 | -5 | -5 | 25 | -20 | 34 | 7 | -10 | -15 | 3 | 31 |
| 30- | 45.6857- | 111.8625- | 2- | 15- | 0- | M36403 | -5 | -5 | -5 | 14 | -20 | -15 | 9 | -10 | -15 | 3 | 20 |
| 30- | 45.6785- | 111.8329- | 2- | 15- | 0- | M36404 | -5 | -5 | -5 | 31 | -20 | 30 | 9 | -10 | -15 | 3 | 13 |
| 30- | 45.6624- | 111.8655- | 2- | 15- | 0- | M36405 | -5 | -5 | -5 | 19 | -20 | -15 | 9 | -10 | -15 | 3 | 21 |
| 30- | 45.6442- | 111.9231- | 2- | 12- | 0- | M36406 | -5 | -5 | -5 | 19 | -20 | 15 | 7 | -10 | -15 | 2 | 21 |
| 30- | 45.6236- | 111.9453- | 2- | 12- | 0- | M36407 | -5 | -5 | -5 | 19 | -20 | 19 | 7 | -10 | -15 | 2 | 28 |
| 30- | 45.6494- | 111.8600- | 2- | 15- | 0- | M36408 | -5 | -5 | -5 | 35 | -20 | -15 | -5 | -10 | -15 | 3 | 80 |
| 30- | 45.6752- | 111.7675- | 2- | 12- | 0- | M36409 | -5 | -5 | -5 | 16 | -20 | -15 | 10 | -10 | -15 | 3 | 33 |
| 30- | 45.6600- | 111.7867- | 2- | 15- | 0- | M36410 | -5 | -5 | -5 | 21 | -20 | -15 | 13 | -10 | -15 | 2 | 26 |
| 30- | 45.6548- | 111.7851- | 2- | 15- | 0- | M36411 | -5 | -5 | -5 | 31 | -20 | -15 | -5 | -10 | -15 | 3 | 25 |
| 30- | 45.6230- | 111.8578- | 2- | 12- | 0- | M36412 | -5 | -5 | -5 | 32 | 23 | 31 | 10 | -10 | -15 | 4 | 32 |
| 30- | 45.6202- | 111.8639- | 2- | 12- | 0- | M36413 | -5 | -5 | -5 | 28 | -20 | -15 | 6 | -10 | -15 | 3 | 34 |
| 30- | 45.6071- | 111.8653- | 2- | 12- | 0- | M36414 | -5 | -5 | -5 | 15 | -20 | 15 | 6 | -10 | -15 | 2 | 20 |
| 30- | 45.6020- | 111.9005- | 2- | 11- | 0- | M36415 | -5 | -5 | -5 | 15 | -20 | -15 | -5 | -10 | -15 | 2 | 15 |
| 30- | 45.6020- | 111.9035- | 2- | 12- | 0- | M36416 | -5 | -5 | -5 | 25 | -20 | -15 | 9 | -10 | -15 | 3 | 27 |
| 30- | 45.5944- | 111.9009- | 2- | 12- | 0- | M36417 | -5 | -5 | -5 | 37 | -20 | 38 | 9 | -10 | -15 | 3 | 23 |
| 30- | 45.5684- | 111.9208- | 2- | 12- | 0- | M36418 | -5 | -5 | -5 | 25 | -20 | 29 | 11 | -10 | -15 | 4 | 38 |
| 30- | 45.5595- | 111.9580- | 2- | 12- | 0- | M36419 | -5 | -5 | -5 | 37 | -20 | 21 | 11 | -10 | -15 | 2 | 20 |
| 30- | 45.5701- | 111.9814- | 2- | 15- | 0- | M36420 | -5 | 9 | -5 | 47 | -20 | -15 | 9 | -10 | -15 | 4 | 43 |
| 30- | 45.6077- | 111.8087- | 2- | 12- | 0- | M36421 | -5 | -5 | -5 | 16 | -20 | -15 | -5 | -10 | -15 | 3 | 24 |
| 30- | 45.6024- | 111.7943- | 2- | 12- | 0- | M36422 | -5 | -5 | -5 | 35 | -20 | -15 | 14 | -10 | -15 | 2 | 31 |
| 30- | 45.5684- | 111.7628- | 2- | 12- | 0- | M36423 | -5 | -5 | -5 | 23 | -20 | -15 | 5 | -10 | -15 | 3 | 25 |
| 30- | 45.5651- | 111.7604- | 2- | 12- | 0- | M36424 | -5 | -5 | -5 | 13 | -20 | -15 | -5 | -10 | -15 | 2 | 13 |
| 30- | 45.5630- | 111.7505- | 2- | 12- | 0- | M36425 | -5 | -5 | -5 | 18 | -20 | -15 | -5 | -10 | -15 | 2 | 19 |
| 30- | 45.2914- | 110.9822- | 2- | 12- | 0- | M36427 | -5 | -5 | -5 | 30 | -20 | -15 | 15 | -10 | -15 | 3 | 60 |
| 30- | 45.2351- | 110.1491- | 2- | 12- | 0- | M36428 | -5 | -5 | -5 | 27 | -20 | 24 | 10 | -10 | -15 | 2 | 24 |

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

③

| DOE SAMPLE NUMBER | | | | | | LAB. SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (Concentrations reported in weight parts per million (ppm)) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Al | Au | Ba | Ca | Ce | Cl | Co | Cr | Cs | Dy | Eu | Fe | Hf | K | La | Lu |
| 30- | 45.4729- | 110.9582- | 2- | 12- | | 0-M36375 | 77470 | -0.09 | 1413 | 37460 | 55 | -99 | 26.3 | 130 | 2.1 | 4 | 1.9 | 55920 | 5.4 | 13750 | 37 | 0.3 |
| 30- | 45.4989- | 110.9792- | 2- | 12- | | 0-M36376 | 59940 | -0.08 | 913 | 11560 | 59 | -74 | 5.2 | 34 | 4.3 | 4 | 1.5 | 16880 | 6.1 | 20710 | 37 | 0.3 |
| 30- | 45.7868- | 111.1112- | 2- | 12- | | 0-M36377 | 53950 | -0.07 | 578 | 42520 | 77 | -76 | 10.1 | 76 | 3.7 | 4 | 1.4 | 27330 | 10.3 | 18400 | 37 | 0.4 |
| 30- | 45.7375- | 111.7448- | 2- | 12- | | 0-M36380 | 56700 | -0.07 | 710 | 22760 | 86 | -77 | 11.4 | 133 | 5.1 | 5 | 1.7 | 34900 | 14.4 | 16690 | 41 | 0.4 |
| 30- | 45.7169- | 111.7075- | 2- | 12- | | 0-M36381 | 45470 | -0.07 | 426 | 60180 | 83 | -65 | 10.5 | 58 | 4.0 | 8 | 1.8 | 43990 | 25.5 | 11890 | 56 | 0.7 |
| 30- | 45.5750- | 111.7036- | 2- | 12- | | 0-M36382 | 51920 | -0.10 | 547 | 37200 | 185 | -99 | 20.1 | 200 | 3.0 | 6 | 2.2 | 113200 | 30.6 | 12730 | 84 | 0.7 |
| 30- | 45.5701- | 111.7223- | 2- | 15- | | 0-M36383 | 60630 | -0.08 | 612 | 41700 | 94 | 92 | 14.9 | 126 | 3.3 | 7 | 1.9 | 38170 | 11.5 | 19310 | 50 | 0.7 |
| 30- | 45.5662- | 111.6415- | 2- | 12- | | 0-M36384 | 55800 | -0.07 | 940 | 34930 | 79 | -78 | 12.4 | 125 | 2.9 | 4 | 1.8 | 40220 | 11.7 | 18400 | 42 | 0.4 |
| 30- | 45.5526- | 111.6568- | 2- | 12- | | 0-M36385 | 54000 | -0.07 | 540 | 18710 | 53 | 108 | 18.1 | 114 | 3.0 | 4 | 1.3 | 38890 | 13.3 | 14050 | 30 | 0.5 |
| 30- | 45.5330- | 111.6383- | 2- | 12- | | 0-M36386 | 66690 | -0.09 | 443 | 12440 | 107 | -86 | 14.3 | 112 | 3.7 | 6 | 1.9 | 31920 | 12.6 | 14460 | 54 | 0.6 |
| 30- | 45.5021- | 111.6436- | 2- | 12- | | 0-M36387 | 67850 | -0.08 | 578 | 11830 | 94 | -80 | 15.6 | 107 | 5.3 | 5 | 1.7 | 34400 | 10.6 | 18310 | 46 | 0.5 |
| 30- | 45.7291- | 111.8193- | 2- | 12- | | 0-M36388 | 53000 | -0.08 | 473 | 17560 | 63 | -81 | 16.1 | 127 | 3.4 | 4 | 1.5 | 40590 | 13.2 | 14410 | 33 | 0.5 |
| 30- | 45.7366- | 111.8504- | 2- | 12- | | 0-M36389 | 61720 | -0.08 | 541 | 20660 | 50 | -84 | 30.8 | 143 | 7.2 | 5 | 1.5 | 50490 | 7.8 | 14930 | 28 | 0.3 |
| 30- | 45.7326- | 111.8468- | 2- | 15- | | 0-M36390 | 67700 | -0.09 | 591 | 12500 | 90 | -93 | 13.1 | 93 | 5.5 | 5 | 1.8 | 32590 | 11.9 | 19350 | 46 | 0.6 |
| 30- | 45.7306- | 111.8739- | 2- | 15- | | 0-M36391 | 46240 | -0.06 | 427 | 86290 | 68 | -71 | 6.6 | 44 | 4.6 | 3 | 1.2 | 25020 | 10.4 | 19580 | 39 | 0.3 |
| 30- | 45.7164- | 111.8866- | 2- | 15- | | 0-M36392 | 57510 | -0.07 | 714 | 36210 | 90 | -77 | 5.9 | 50 | 3.7 | 6 | 1.7 | 27650 | 13.5 | 17280 | 50 | 0.6 |
| 30- | 45.7068- | 111.8813- | 2- | 15- | | 0-M36393 | 59860 | -0.08 | 747 | 29450 | 88 | -110 | 16.0 | 168 | -2.2 | 5 | 1.5 | 42500 | 14.3 | 17690 | 43 | 0.6 |
| 30- | 45.6979- | 111.8883- | 2- | 15- | | 0-M36394 | 44230 | -0.07 | 447 | 68450 | 77 | -84 | 16.8 | 97 | 2.6 | 5 | 1.5 | 57490 | 15.5 | 9623 | 48 | 0.6 |
| 30- | 45.6978- | 111.8805- | 2- | 15- | | 0-M36395 | 73650 | -0.11 | 678 | 21570 | 97 | -106 | 15.5 | 140 | 3.5 | 5 | 1.9 | 42020 | 12.0 | 23320 | 52 | 0.5 |
| 30- | 45.6992- | 111.9177- | 2- | 12- | | 0-M36396 | 45410 | -0.07 | 469 | 101200 | 62 | -65 | 4.5 | 32 | 12.2 | 4 | 1.2 | 19580 | 7.0 | 14190 | 40 | 0.5 |
| 30- | 45.6636- | 111.9170- | 2- | 12- | | 0-M36397 | 53780 | -0.10 | 323 | 26230 | 226 | -113 | 15.5 | 61 | 3.6 | 9 | 2.9 | 178200 | 54.4 | 10180 | 115 | 1.2 |
| 30- | 45.7082- | 111.9480- | 2- | 15- | | 0-M36398 | 46420 | -0.08 | 798 | 12400 | 189 | -69 | 15.5 | 137 | 4.4 | 11 | 2.5 | 46580 | 51.9 | 11080 | 103 | 1.1 |
| 30- | 45.7220- | 111.9597- | 2- | 12- | | 0-M36399 | 37750 | -0.07 | 584 | 65700 | 47 | -70 | 5.3 | 48 | 5.0 | 3 | 1.3 | 16570 | 7.7 | 10740 | 22 | 0.3 |
| 30- | 45.7226- | 111.9633- | 2- | 12- | | 0-M36400 | 60560 | -0.09 | 376 | 28070 | 151 | -99 | 27.8 | 297 | 4.5 | 11 | 2.1 | 60860 | 29.6 | 14210 | 80 | 1.4 |
| 30- | 45.7281- | 111.9722- | 2- | 12- | | 0-M36401 | 42160 | -0.06 | 576 | 38050 | 57 | 115 | 3.7 | 50 | 2.7 | 4 | 1.3 | 18510 | 10.1 | 14870 | 30 | 0.3 |
| 30- | 45.7261- | 111.9793- | 2- | 15- | | 0-M36402 | 61510 | -0.08 | 626 | 21910 | 92 | 106 | 19.8 | 212 | 4.3 | 9 | 2.1 | 50070 | 20.3 | 22470 | 60 | 0.7 |
| 30- | 45.6857- | 111.8625- | 2- | 15- | | 0-M36403 | 55570 | -0.07 | 790 | 25120 | 54 | 242 | 3.7 | 34 | 3.8 | 4 | 1.4 | 16710 | 4.8 | 19730 | 28 | 0.3 |
| 30- | 45.6785- | 111.8329- | 2- | 15- | | 0-M36404 | 63000 | -0.08 | 439 | 28630 | 105 | -95 | 23.9 | 219 | 5.3 | 9 | 2.1 | 49740 | 18.9 | 19240 | 54 | 1.1 |
| 30- | 45.6624- | 111.8655- | 2- | 15- | | 0-M36405 | 46730 | -0.07 | 593 | 28700 | 86 | 88 | 7.7 | 65 | 5.0 | 5 | 1.4 | 31420 | 15.6 | 17300 | 48 | 0.5 |
| 30- | 45.6442- | 111.9231- | 2- | 12- | | 0-M36406 | 41770 | -0.06 | 583 | 15380 | 65 | -59 | 6.6 | 46 | 3.8 | 4 | 1.4 | 19890 | 14.9 | 13710 | 38 | 0.4 |
| 30- | 45.6236- | 111.9453- | 2- | 12- | | 0-M36407 | 47180 | -0.07 | 588 | 37040 | 67 | 103 | 7.6 | 62 | 4.7 | 5 | 1.4 | 22480 | 11.8 | 19520 | 36 | 0.5 |
| 30- | 45.6494- | 111.8600- | 2- | 15- | | 0-M36408 | 58860 | -0.08 | 488 | 51010 | 75 | 7530 | 11.5 | 40 | 6.9 | 5 | 1.4 | 32550 | 9.8 | 22930 | 47 | 0.4 |
| 30- | 45.6752- | 111.7675- | 2- | 12- | | 0-M36409 | 66510 | -0.06 | 839 | 30470 | 74 | 183 | 5.8 | 51 | 3.4 | 5 | 1.6 | 20730 | 12.9 | 21190 | 39 | 0.6 |
| 30- | 45.6600- | 111.7867- | 2- | 15- | | 0-M36410 | 57260 | -0.07 | 680 | 27210 | 75 | 129 | 7.3 | 26 | 4.1 | 5 | 1.5 | 26080 | 10.5 | 18020 | 45 | 0.4 |
| 30- | 45.6548- | 111.7851- | 2- | 15- | | 0-M36411 | 53630 | -0.08 | 472 | 39730 | 63 | -84 | 6.9 | 62 | 7.2 | 5 | 1.3 | 22850 | 7.9 | 17110 | 30 | 0.3 |
| 30- | 45.6230- | 111.8578- | 2- | 12- | | 0-M36412 | 62230 | -0.07 | 669 | 24020 | 132 | 102 | 20.7 | 155 | 9.1 | 10 | 1.7 | 49290 | 20.8 | 16120 | 64 | 1.0 |
| 30- | 45.6202- | 111.8639- | 2- | 12- | | 0-M36413 | 51900 | -0.06 | 693 | 18040 | 88 | 165 | 5.6 | 71 | 4.4 | 5 | 1.4 | 27120 | 13.9 | 17950 | 37 | 0.5 |
| 30- | 45.6071- | 111.8653- | 2- | 12- | | 0-M36414 | 37650 | -0.06 | 541 | 63390 | 57 | -63 | 5.7 | 50 | 6.0 | 3 | 1.3 | 16400 | 8.3 | 11740 | 27 | 0.3 |
| 30- | 45.6020- | 111.9005- | 2- | 11- | | 0-M36415 | 54040 | -0.06 | 860 | 52290 | 59 | -98 | 4.1 | 22 | 3.7 | 4 | 1.6 | 14790 | 5.8 | 22130 | 32 | 0.4 |
| 30- | 45.6020- | 111.9035- | 2- | 12- | | 0-M36416 | 59230 | -0.06 | 528 | 19300 | 113 | -81 | 7.3 | 37 | 5.8 | 5 | 1.6 | 28940 | 12.7 | 18330 | 61 | 0.4 |
| 30- | 45.5944- | 111.9009- | 2- | 12- | | 0-M36417 | 61670 | -0.05 | 790 | 20450 | 89 | -115 | 16.6 | 177 | 3.5 | 8 | 2.0 | 43440 | 15.6 | 20940 | 48 | 0.8 |
| 30- | 45.5684- | 111.9208- | 2- | 12- | | 0-M36418 | 63110 | -0.08 | 611 | 49280 | 78 | -94 | 12.8 | 112 | 3.0 | 6 | 1.9 | 29990 | 7.4 | 17810 | 42 | 0.6 |
| 30- | 45.5595- | 111.9580- | 2- | 12- | | 0-M36419 | 52770 | -0.08 | 440 | 48450 | 64 | 118 | 13.1 | 90 | 7.6 | 3 | 1.4 | 33840 | 11.3 | 14910 | 30 | 0.3 |
| 30- | 45.5701- | 111.9814- | 2- | 15- | | 0-M36420 | 74330 | -0.10 | -246 | 29210 | 136 | 157 | 8.6 | 30 | 9.4 | 11 | 2.1 | 37040 | 45.7 | 20150 | 82 | 1.5 |
| 30- | 45.6077- | 111.8087- | 2- | 12- | | 0-M36421 | 45940 | -0.06 | 532 | 35940 | 75 | 110 | 6.0 | 65 | 4.6 | 5 | 1.4 | 23460 | 12.6 | 18000 | 41 | 0.5 |
| 30- | 45.6024- | 111.7943- | 2- | 12- | | 0-M36422 | 57210 | -0.06 | 669 | 20430 | 68 | -79 | 12.4 | 76 | 3.9 | 5 | 1.4 | 32710 | 13.1 | 22250 | 47 | 0.5 |
| 30- | 45.5684- | 111.7628- | 2- | 12- | | 0-M36423 | 54220 | -0.07 | 737 | 36290 | 107 | 159 | 8.8 | 75 | 3.3 | 7 | 1.8 | 26700 | 17.7 | 20210 | 57 | 0.6 |
| 30- | 45.5651- | 111.7604- | 2- | 12- | | 0-M36424 | 29100 | -0.05 | 300 | 68300 | 46 | -49 | 2.1 | 26 | 3.8 | 3 | 1.0 | 12220 | 9.9 | 12060 | 31 | 0.3 |
| 30- | 45.5630- | 111.7505- | 2- | 12- | | 0-M36425 | 36870 | -0.06 | 515 | 60380 | 53 | -60 | 4.5 | 58 | 6.1 | 3 | 1.1 | 16450 | 9.6 | 13400 | 30 | 0.4 |
| 30- | 45.2914- | 110.9822- | 2- | 12- | | 0-M36427 | 70910 | -0.07 | 763 | 13180 | 83 | -100 | 12.2 | 71 | 5.4 | 4 | 1.5 | 30930 | 7.0 | 21040 | 57 | 0.4 |
| 30- | 45.2351- | 110.1491- | 2- | 12- | | 0-M36428 | 67790 | -0.09 | 1102 | 29570 | 77 | 130 | 14.4 | 99 | 3.5 | 4 | 1.5 | 34500 | 8.4 | 15360 | 40 | 0.3 |

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



| DOE SAMPLE NUMBER | | | | | | | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | U/Th RATIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LAB. SAMPLE LOCATION NUMBER | Mg | Mn | Na | Rb | Sb | Sc | Sm | Sr | Ta | Tb | Th | Ti | V | Yb | Zn | |
| 30- | 45.4729- | 110.9582- | 2- | 12- | | 0-M36375 | 16190 | 848 | 17780 | -36 | -2 | 15.4 | 4.7 | 497 | -1 | -1 | 6.6 | 5061 | 152 | 3.0 | 134 | 0.318 |
| 30- | 45.4989- | 110.9792- | 2- | 12- | | 0-M36376 | 5806 | 403 | 9240 | 65 | -2 | 5.6 | 6.5 | 254 | -1 | -1 | 13.4 | 1937 | 62 | 4.1 | -39 | 0.276 |
| 30- | 45.7868- | 111.1112- | 2- | 12- | | 0-M36377 | 10010 | 598 | 12260 | 50 | -2 | 8.4 | 5.5 | -223 | 1 | -1 | 12.6 | 2772 | 69 | 3.9 | 79 | 0.230 |
| 30- | 45.7375- | 111.7448- | 2- | 12- | | 0-M36380 | 10380 | 676 | 12390 | 62 | -2 | 10.2 | 5.8 | -248 | -1 | -1 | 12.4 | 3513 | 98 | 4.3 | 79 | 0.290 |
| 30- | 45.7169- | 111.7075- | 2- | 12- | | 0-M36381 | 5272 | 717 | 5419 | 64 | -2 | 7.6 | 8.4 | -245 | -1 | -1 | 17.9 | 7656 | 93 | 5.1 | 101 | 0.184 |
| 30- | 45.5750- | 111.7036- | 2- | 12- | | 0-M36382 | 8123 | 1193 | 11870 | 61 | -2 | 13.2 | 12.9 | -339 | -1 | -1 | 32.6 | 5598 | 329 | 6.1 | 43 | 0.144 |
| 30- | 45.5701- | 111.7223- | 2- | 15- | | 0-M36383 | 12120 | 767 | 14390 | 80 | -2 | 13.2 | 8.2 | -258 | -1 | -1 | 14.3 | 3840 | 86 | 4.9 | 70 | 0.203 |
| 30- | 45.5662- | 111.6415- | 2- | 12- | | 0-M36384 | 11140 | 694 | 13150 | 54 | -2 | 10.5 | 5.3 | -246 | -1 | -1 | 11.5 | 3681 | 113 | 3.1 | 122 | 0.496 |
| 30- | 45.5526- | 111.6568- | 2- | 12- | | 0-M36385 | 11790 | 849 | 13630 | 59 | -2 | 12.7 | 5.0 | -256 | -1 | -1 | 8.7 | 3795 | 99 | 3.6 | 123 | 0.299 |
| 30- | 45.5330- | 111.6383- | 2- | 12- | | 0-M36386 | 14380 | 867 | 10000 | 64 | -2 | 10.4 | 10.8 | -309 | -1 | -1 | 19.9 | 3553 | 92 | 4.9 | 58 | 0.281 |
| 30- | 45.5021- | 111.6436- | 2- | 12- | | 0-M36387 | 14020 | 892 | 9984 | 97 | -2 | 11.0 | 7.3 | -279 | 2 | -1 | 17.2 | 3582 | 86 | 3.6 | 104 | 0.262 |
| 30- | 45.7291- | 111.8193- | 2- | 12- | | 0-M36388 | 11290 | 831 | 13700 | 49 | -2 | 13.0 | 5.0 | -261 | -1 | -1 | 10.3 | 4324 | 104 | 3.3 | 128 | 0.252 |
| 30- | 45.7366- | 111.8504- | 2- | 12- | | 0-M36389 | 22510 | 860 | 14240 | 59 | -2 | 16.2 | 4.7 | -274 | -1 | -1 | 8.2 | 4111 | 114 | 3.2 | 120 | 0.268 |
| 30- | 45.7326- | 111.8468- | 2- | 15- | | 0-M36390 | 9210 | 970 | 11900 | 104 | -2 | 10.3 | 8.0 | -327 | -1 | -1 | 15.7 | 3147 | 80 | 5.4 | 131 | 0.217 |
| 30- | 45.7306- | 111.8739- | 2- | 15- | | 0-M36391 | 15200 | 557 | 8826 | 58 | -1 | 6.4 | 5.3 | 311 | 1 | -1 | 10.8 | 2098 | 65 | 3.4 | 74 | 0.231 |
| 30- | 45.7164- | 111.8866- | 2- | 15- | | 0-M36392 | 5806 | 632 | 13660 | 88 | -2 | 7.8 | 7.8 | -242 | 2 | -1 | 15.1 | 2884 | 64 | 4.4 | 71 | 0.225 |
| 30- | 45.7068- | 111.8813- | 2- | 15- | | 0-M36393 | 13930 | 799 | 14020 | 73 | -2 | 12.9 | 7.7 | -290 | -1 | -1 | 12.6 | 3650 | 117 | 3.1 | 91 | 0.540 |
| 30- | 45.6979- | 111.8883- | 2- | 15- | | 0-M36394 | 17510 | 1315 | 8659 | 43 | -2 | 13.9 | 7.3 | -301 | 2 | -1 | 16.9 | 4431 | 88 | 4.4 | 66 | 0.219 |
| 30- | 45.6978- | 111.8805- | 2- | 15- | | 0-M36395 | 9020 | 749 | 16350 | -35 | -3 | 14.5 | 7.4 | -336 | -1 | -1 | 12.7 | 6225 | 154 | 3.2 | 116 | 0.228 |
| 30- | 45.6992- | 111.9177- | 2- | 12- | | 0-M36396 | 6741 | 500 | 5376 | 50 | -2 | 6.4 | 5.4 | -220 | -1 | -1 | 10.7 | 2312 | 47 | 4.9 | 62 | 0.187 |
| 30- | 45.6636- | 111.9170- | 2- | 12- | | 0-M36397 | 5568 | 1430 | 18320 | -46 | -3 | 11.4 | 14.4 | -369 | 5 | 2 | 122.6 | 4202 | 275 | 11.6 | 124 | 0.188 |
| 30- | 45.7082- | 111.9480- | 2- | 15- | | 0-M36398 | 6550 | 1021 | 6979 | 67 | -2 | 11.9 | 15.8 | -267 | 3 | 2 | 39.0 | 6737 | 94 | 9.2 | -39 | 0.162 |
| 30- | 45.7220- | 111.9597- | 2- | 12- | | 0-M36399 | 7140 | 686 | 5750 | 47 | -2 | 4.9 | 5.2 | -273 | -1 | -1 | 8.0 | 1743 | 45 | 3.3 | 87 | 0.288 |
| 30- | 45.7226- | 111.9633- | 2- | 12- | | 0-M36400 | 12500 | 1240 | 14490 | 58 | -2 | 21.0 | 13.0 | -311 | 3 | 2 | 26.4 | 7830 | 141 | 10.3 | -45 | 0.201 |
| 30- | 45.7281- | 111.9722- | 2- | 12- | | 0-M36401 | 5595 | 388 | 8745 | 60 | -1 | 5.3 | 4.7 | -202 | -1 | -1 | 9.5 | 2568 | 43 | 2.1 | 97 | 0.242 |
| 30- | 45.7261- | 111.9793- | 2- | 15- | | 0-M36402 | 10910 | 988 | 15020 | 51 | -2 | 14.8 | 11.4 | -282 | 2 | 1 | 16.0 | 6995 | 105 | 6.7 | 88 | 0.206 |
| 30- | 45.6857- | 111.8625- | 2- | 15- | | 0-M36403 | 4879 | 412 | 12450 | 64 | -2 | 5.0 | 5.0 | -257 | -1 | -1 | 10.8 | 2184 | 38 | 3.5 | -38 | 0.259 |
| 30- | 45.6785- | 111.8329- | 2- | 15- | | 0-M36404 | 13220 | 1050 | 15520 | 59 | -2 | 18.0 | 9.4 | -292 | 2 | 1 | 18.5 | 6063 | 115 | 8.3 | 41 | 0.205 |
| 30- | 45.6624- | 111.8655- | 2- | 15- | | 0-M36405 | 6720 | 606 | 7401 | 68 | -2 | 7.4 | 6.4 | -228 | -1 | -1 | 15.7 | 3827 | 69 | 4.9 | 109 | 0.172 |
| 30- | 45.6442- | 111.9231- | 2- | 12- | | 0-M36406 | 5973 | 633 | 7005 | 54 | -1 | 5.8 | 4.7 | -219 | -1 | -1 | 10.8 | 2526 | 51 | 4.3 | 66 | 0.278 |
| 30- | 45.6236- | 111.9453- | 2- | 12- | | 0-M36407 | 9657 | 737 | 7898 | 53 | -2 | 6.6 | 6.0 | -276 | -1 | -1 | 10.9 | 2946 | 54 | 3.6 | -52 | 0.257 |
| 30- | 45.6494- | 111.8600- | 2- | 15- | | 0-M36408 | 13400 | 688 | 29170 | 80 | -2 | 11.1 | 7.1 | -329 | -1 | -1 | 18.8 | 2610 | 65 | 5.7 | -47 | 0.234 |
| 30- | 45.6752- | 111.7675- | 2- | 12- | | 0-M36409 | 5100 | 573 | 19070 | 76 | -1 | 7.0 | 5.8 | -243 | -1 | -1 | 12.4 | 3374 | 50 | 4.6 | 65 | 0.274 |
| 30- | 45.6600- | 111.7867- | 2- | 15- | | 0-M36410 | 6407 | 525 | 13110 | 70 | 3 | 7.0 | 6.0 | -237 | 2 | -1 | 14.4 | 3124 | 57 | 2.7 | -66 | 0.347 |
| 30- | 45.6548- | 111.7851- | 2- | 15- | | 0-M36411 | 9468 | 955 | 7559 | 65 | -2 | 8.0 | 6.1 | -318 | -1 | -1 | 10.2 | 3039 | 58 | 3.5 | 70 | 0.284 |
| 30- | 45.6230- | 111.8578- | 2- | 12- | | 0-M36412 | 11880 | 973 | 13220 | 102 | -2 | 16.7 | 9.7 | -308 | 2 | -1 | 25.4 | 5998 | 92 | 8.4 | 75 | 0.193 |
| 30- | 45.6202- | 111.8639- | 2- | 12- | | 0-M36413 | 7187 | 662 | 11000 | 92 | -1 | 8.2 | 6.3 | -260 | -1 | -1 | 15.6 | 2930 | 53 | 4.2 | 100 | 0.224 |
| 30- | 45.6071- | 111.8653- | 2- | 12- | | 0-M36414 | 8016 | 684 | 5804 | 53 | -1 | 5.4 | 4.5 | -227 | -1 | -1 | 8.8 | 1864 | 41 | 2.7 | 56 | 0.261 |
| 30- | 45.6020- | 111.9005- | 2- | 11- | | 0-M36415 | 8322 | 1298 | 12390 | 68 | -1 | 5.2 | 5.2 | -348 | -1 | -1 | 9.1 | 1502 | 28 | 3.3 | 32 | 0.297 |
| 30- | 45.6020- | 111.9035- | 2- | 12- | | 0-M36416 | 8901 | 663 | 14360 | 72 | -2 | 7.4 | 7.6 | -244 | 1 | -1 | 20.2 | 2400 | 55 | 4.1 | 66 | 0.163 |
| 30- | 45.5944- | 111.9009- | 2- | 12- | | 0-M36417 | 11100 | 846 | 18280 | 69 | -1 | 13.6 | 8.3 | -286 | 2 | 2 | 12.2 | 5393 | 87 | 5.6 | 81 | 0.221 |
| 30- | 45.5684- | 111.9208- | 2- | 12- | | 0-M36418 | 12080 | 637 | 15330 | -30 | -2 | 10.4 | 7.8 | -281 | -1 | -1 | 12.3 | 3657 | 70 | 5.2 | -39 | 0.171 |
| 30- | 45.5595- | 111.9580- | 2- | 12- | | 0-M36419 | 22560 | 555 | 12590 | 50 | -2 | 11.2 | 2.9 | 408 | -1 | -1 | 7.0 | 3407 | 94 | 2.7 | 120 | 0.357 |
| 30- | 45.5701- | 111.9814- | 2- | 15- | | 0-M36420 | 11050 | 986 | 23400 | 111 | -2 | 19.3 | 21.0 | -424 | 4 | -2 | 131.9 | 3476 | 88 | 11.5 | -56 | 0.249 |
| 30- | 45.6077- | 111.8087- | 2- | 12- | | 0-M36421 | 9923 | 725 | 7821 | 63 | -2 | 7.5 | 6.1 | -241 | 2 | 1 | 13.1 | 2816 | 55 | 3.6 | 93 | 0.206 |
| 30- | 45.6024- | 111.7943- | 2- | 12- | | 0-M36422 | 8731 | 704 | 14530 | 68 | -2 | 9.4 | 6.3 | 385 | 2 | -1 | 11.7 | 3211 | 89 | 3.1 | 100 | 0.248 |
| 30- | 45.5684- | 111.7628- | 2- | 12- | | 0-M36423 | 8044 | 631 | 11190 | 73 | -2 | 8.2 | 9.3 | -266 | 2 | -1 | 16.0 | 4544 | 67 | 4.6 | -35 | 0.250 |
| 30- | 45.5651- | 111.7604- | 2- | 12- | | 0-M36424 | 6400 | 582 | 2559 | -18 | -1 | 3.7 | 4.2 | -196 | -1 | -1 | 7.7 | 1842 | 41 | 2.5 | 61 | 0.325 |
| 30- | 45.5630- | 111.7505- | 2- | 12- | | 0-M36425 | 8022 | 668 | 5805 | 47 | -1 | 5.4 | 4.5 | -227 | -1 | -1 | 8.4 | 2531 | 42 | 3.2 | 72 | 0.286 |
| 30- | 45.2914- | 110.9822- | 2- | 12- | | 0-M36427 | 7602 | 827 | 19260 | 100 | -2 | 9.3 | 7.6 | 419 | -1 | -1 | 20.2 | 2955 | 71 | 5.0 | 106 | 0.941 |
| 30- | 45.2351- | 110.1491- | 2- | 12- | | 0-M36428 | 10730 | 699 | 15470 | 55 | -2 | 10.0 | 5.3 | 369 | -1 | -1 | 7.5 | 3875 | 101 | -2.1 | 85 | 0.467 |

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

(1)

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER AND FIELD DATA | | | | | | | | | | | | | | | | | | | | | | | | | U CONCENTRATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | TIME SAMPLED DATE | TIME SAMPLED HOUR | AIR TEMPERATURE | WATER TEMPERATURE | COMMENTS | SPECIAL MEASUREMENTS | pH | CONDUCTIVITY (µmho/cm) | SCINTILLOMETER (eU, ppm) | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm |
| 30- | 45.3112- | 110.9183- | 2- | 12- | | 0-M36435- | 10/14/76- | 8- | 2- | 3.2- | - | - | 5.4- | 150- | | -1- | 6- | 2- | 6- | 3- | 2- | 1- | 2- | 2- | 4- | 3- | 1- | -1- | - | - | - | - | 3.40 |
| 30- | 45.2905- | 110.9835- | 2- | 12- | | 0-M36436- | 10/14/76- | 11- | 5- | 3.4- | - | - | 5.5- | 90- | | -1- | 6- | 1- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 2.10 |
| 30- | 45.3079- | 110.9262- | 2- | 12- | | 0-M36437- | 10/14/76- | 8- | 2- | 3.0- | - | - | 5.4- | 130- | | -1- | 7- | 4- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 3.70 |
| 30- | 45.2758- | 111.0103- | 2- | 12- | | 0-M36439- | 10/14/76- | 12- | 5- | 2.2- | - | - | 5.5- | 100- | | -1- | 6- | 2- | 6- | 2- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 2.30 |
| 30- | 45.1115- | 110.6007- | 2- | 12- | | 0-M36441- | 10/14/76- | 11- | 7- | 2.0- | - | - | 5.5- | 45- | | -1- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 3.20 |
| 30- | 45.2655- | 111.0401- | 2- | 12- | | 0-M36443- | 10/14/76- | 12- | 5- | 2.0- | C- | - | 5.2- | 140- | | -1- | 6- | 2- | 6- | 3- | 2- | 1- | 2- | 3- | 2- | 3- | 1- | -1- | - | - | - | - | 4.00 |
| 30- | 45.3147- | 110.9712- | 2- | 12- | | 0-M36444- | 10/14/76- | 10- | 2- | 2.0- | - | - | 5.3- | 150- | | -1- | 7- | 4- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 2- | 1- | -1- | - | - | - | - | 2.80 |
| 30- | 45.0015- | 111.2798- | 2- | 12- | | 0-M36447- | 10/26/76- | 13- | 4- | 1.0- | - | - | 6.0- | 360- | | -2- | 1- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 2.90 |
| 30- | 45.2081- | 110.1847- | 2- | 12- | | 0-M36449- | 10/16/76- | 17- | 5- | 2.5- | - | - | 5.5- | 90- | | -1- | 7- | 1- | 6- | 3- | 3- | 1- | 2- | 2- | 2- | 3- | 2- | -1- | - | - | - | - | 2.80 |
| 30- | 45.4579- | 110.2620- | 2- | 12- | | 0-M36455- | 10/16/76- | 10- | 6- | 3.0- | - | - | 5.2- | 55- | | -1- | 7- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 3.20 |
| 30- | 45.2361- | 110.1886- | 2- | 12- | | 0-M36458- | 10/16/76- | 18- | 3- | 2.5- | - | - | 5.7- | 45- | | -1- | 7- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 13.10 |
| 30- | 45.3798- | 110.3174- | 2- | 12- | | 0-M36460- | 10/16/76- | 17- | 7- | 3.5- | - | - | 5.7- | 50- | | -1- | 7- | 2- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 28.40 |
| 30- | 45.4990- | 111.4592- | 2- | 12- | | 0-M36463- | 10/19/76- | 13- | 14- | 4.0- | - | - | 5.7- | 235- | | -1- | 7- | 3- | 6- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 1- | -1- | - | - | - | - | 4.10 |
| 30- | 45.3161- | 110.2918- | 2- | 12- | | 0-M36465- | 10/16/76- | 12- | 8- | 3.5- | - | - | 5.7- | 160- | | -1- | 7- | 3- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -1- | - | - | - | - | 19.10 |
| 30- | 45.2615- | 110.3028- | 2- | 12- | | 0-M36466- | 10/16/76- | 15- | 9- | 3.0- | - | - | 5.2- | 50- | | -1- | 7- | 4- | 6- | 2- | 3- | 1- | 2- | 1- | 2- | 4- | 2- | -1- | - | - | - | - | 34.90 |
| 30- | 45.3104- | 110.3092- | 2- | 12- | | 0-M36467- | 10/16/76- | 12- | 8- | 3.5- | - | - | 5.5- | 150- | | -1- | 7- | 3- | 6- | 2- | 3- | 1- | 2- | 1- | 3- | 2- | 2- | -1- | - | - | - | - | 3.40 |
| 30- | 45.2178- | 110.2506- | 2- | 12- | | 0-M36469- | 10/16/76- | 16- | 5- | 2.5- | - | - | 5.2- | 45- | | -1- | 7- | 3- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 3.20 |
| 30- | 45.3360- | 110.2726- | 2- | 12- | | 0-M36470- | 10/16/76- | 8- | 3- | 5.0- | - | - | 5.2- | 45- | | -1- | 7- | 4- | 6- | 2- | 2- | 1- | 2- | 1- | 3- | 2- | 2- | -1- | - | - | - | - | 8.00 |
| 30- | 45.0564- | 111.0831- | 2- | 12- | | 0-M36471- | 10/25/76- | 14- | 4- | 1.5- | - | - | 5.7- | 140- | | -2- | 7- | 3- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 2.90 |
| 30- | 45.2085- | 111.0434- | 2- | 12- | | 0-M36473- | 10/14/76- | 18- | 2- | 2.0- | - | - | 5.8- | 240- | | -1- | 1- | 3- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -1- | - | - | - | - | 2.40 |
| 30- | 45.3978- | 111.2951- | 2- | 12- | | 0-M36474- | 10/10/76- | 11- | 8- | 4.0- | - | - | 6.0- | 40- | | -2- | 1- | 1- | 7- | 4- | 3- | 1- | | -1- | 4- | 4- | 1- | -1- | - | - | - | - | 19.90 |
| 30- | 45.3948- | 111.2919- | 2- | 12- | | 0-M36475- | 10/10/76- | 10- | 8- | 4.0- | - | - | 6.0- | 55- | | -2- | 7- | 1- | 7- | 4- | 3- | 1- | 2- | 1- | 4- | | -1- | -1- | - | - | - | - | 3.00 |
| 30- | 45.2404- | 110.5621- | 2- | 12- | | 0-M36476- | 10/09/76- | 8- | 5- | 4.2- | - | - | 5.2- | 70- | | -2- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 1- | -1- | - | - | - | - | 24.60 |
| 30- | 45.1890- | 110.5961- | 2- | 12- | | 0-M36477- | 10/09/76- | 11- | 8- | 5.0- | - | - | 5.8- | 190- | | -2- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 1- | -1- | - | - | - | - | 3.10 |
| 30- | 45.2402- | 110.5640- | 2- | 12- | | 0-M36478- | 10/09/76- | 8- | 5- | 4.0- | - | - | 5.2- | 72- | | -2- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 1- | -1- | - | - | - | - | 3.20 |
| 30- | 45.2306- | 110.5564- | 2- | 12- | | 0-M36479- | 10/09/76- | 9- | 5- | 4.3- | - | - | 5.8- | 189- | | -2- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 1- | -1- | - | - | - | - | 3.00 |
| 30- | 45.2099- | 110.5760- | 2- | 12- | | 0-M36480- | 10/09/76- | 10- | 8- | 4.2- | - | - | 5.2- | 70- | | -2- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 4- | 3- | 1- | -1- | - | - | - | - | 1.50 |
| 30- | 45.2049- | 110.5745- | 2- | 12- | | 0-M36481- | 10/09/76- | 10- | 8- | 5.8- | - | - | 5.6- | 128- | | -2- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 4- | 3- | 1- | -1- | - | - | - | - | 3.90 |
| 30- | 45.2047- | 110.5711- | 2- | 12- | | 0-M36482- | 10/09/76- | 10- | 8- | 6.0- | - | - | 5.6- | 128- | | -2- | 7- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 4- | 3- | 1- | -1- | - | - | - | - | 3.60 |
| 30- | 45.3207- | 110.4729- | 2- | 12- | | 0-M36483- | 10/09/76- | 9- | 11- | 6.5- | - | - | 6.1- | 410- | | -1- | 1- | 3- | 1- | 3- | 2- | 1- | 2- | 1- | 5- | 3- | 2- | -1- | - | - | - | - | 3.40 |
| 30- | 45.3268- | 110.4429- | 2- | 12- | | 0-M36484- | 10/09/76- | 13- | 12- | 7.0- | - | - | 5.7- | 200- | | -1- | 3- | 2- | 7- | 3- | 2- | 1- | 2- | 3- | 3- | 3- | 2- | -1- | - | - | - | - | 3.30 |
| 30- | 45.3361- | 110.4293- | 2- | 12- | | 0-M36485- | 10/09/76- | 13- | 12- | 7.0- | - | - | 5.3- | 145- | | -1- | 7- | 2- | 6- | 2- | 2- | 1- | 2- | | -4- | 2- | 2- | -1- | - | - | - | - | 2.30 |
| 30- | 45.2674- | 110.4690- | 2- | 12- | | 0-M36487- | 10/10/76- | 12- | 12- | 7.0- | - | - | 5.6- | 150- | | -1- | 4- | 3- | 7- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 1.70 |
| 30- | 45.2350- | 110.4937- | 2- | 12- | | 0-M36488- | 10/10/76- | 8- | 6- | 6.0- | - | - | 5.8- | 120- | | -1- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 3.30 |
| 30- | 45.2063- | 110.5221- | 2- | 12- | | 0-M36489- | 10/10/76- | 7- | 5- | 6.0- | - | - | 5.8- | 130- | | -1- | 7- | 2- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 3- | -1- | - | - | - | - | 3.00 |
| 30- | 45.2186- | 110.4796- | 2- | 12- | | 0-M36490- | 10/10/76- | 9- | 6- | 6.0- | - | - | 5.8- | 130- | | -1- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 3- | 3- | 4- | 3- | -1- | - | - | - | - | 2.50 |
| 30- | 45.2677- | 110.4342- | 2- | 12- | | 0-M36491- | 10/10/76- | 14- | 11- | 6.0- | - | - | 5.6- | 140- | | -1- | 6- | 2- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 4- | -1- | - | - | - | - | 2.60 |
| 30- | 45.2604- | 110.4192- | 2- | 12- | | 0-M36492- | 10/10/76- | 15- | 10- | 5.0- | - | - | 5.6- | 150- | | -1- | 6- | 3- | 6- | 2- | 2- | 1- | 2- | 1- | 3- | 3- | 4- | -1- | - | - | - | - | 3.20 |
| 30- | 45.3316- | 110.4340- | 2- | 12- | | 0-M36493- | 10/09/76- | 13- | 15- | 7.0- | - | - | 5.6- | 210- | | -1- | 3- | 3- | 7- | 2- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 3.20 |
| 30- | 45.2639- | 110.4011- | 2- | 12- | | 0-M36494- | 10/10/76- | 15- | 9- | 5.0- | - | - | 5.7- | 140- | | -1- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 4- | -1- | - | - | - | - | 3.00 |
| 30- | 45.2477- | 110.4414- | 2- | 12- | | 0-M36495- | 10/10/76- | 13- | 12- | 7.0- | - | - | 5.7- | 145- | | -1- | 6- | 3- | 7- | 3- | 2- | 1- | 2- | 3- | 3- | 4- | 4- | -1- | - | - | - | - | 3.50 |
| 30- | 45.2721- | 110.3858- | 2- | 12- | | 0-M36496- | 10/10/76- | 17- | 9- | 6.0- | - | - | 5.6- | 135- | | -1- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 4- | -1- | - | - | - | - | 3.40 |
| 30- | 45.2714- | 110.4596- | 2- | 12- | | 0-M36497- | 10/10/76- | 12- | 16- | 6.0- | - | - | 5.6- | 200- | | -1- | 3- | 3- | 7- | 3- | 2- | 1- | 2- | 1- | 4- | 4- | 1- | -1- | - | - | - | - | 3.30 |
| 30- | 45.2687- | 110.4685- | 2- | 12- | | 0-M36498- | 10/10/76- | 12- | 16- | 7.0- | - | - | 5.6- | 140- | | -1- | 4- | 3- | 7- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 2.70 |
| 30- | 45.3053- | 110.6840- | 2- | 12- | | 0-M36500- | 10/11/76- | 10- | 9- | 6.2- | - | - | 5.5- | 107- | | -2- | 7- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 2- | 5- | 3- | -1- | - | - | - | - | 4.30 |
| 30- | 45.2899- | 110.6790- | 2- | 12- | | 0-M36501- | 10/11/76- | 10- | 9- | 5.9- | - | - | 5.5- | 110- | | -2- | 7- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 2- | 5- | 3- | -1- | - | - | - | - | 2.10 |
| 30- | 45.2539- | 110.6647- | 2- | 12- | | 0-M36502- | 10/11/76- | 12- | 11- | 6.2- | - | - | 5.5- | 110- | | -2- | 7- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 4- | -1- | - | - | - | - | 2.90 |
| 30- | 45.2528- | 110.6681- | 2- | 12- | | 0-M36503- | 10/11/76- | 12- | 11- | 6.2- | - | - | 5.5- | 100- | | -2- | 7- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 4- | -1- | - | - | - | - | 9.60 |
| 30- | 45.2295- | 110.6530- | 2- | 12- | | 0-M36504- | 10/11/76- | 14- | 11- | 6.0- | - | - | 5.5- | 102- | | -2- | 7- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 4- | -1- | - | - | - | - | 5.20 |
| 30- | 45.2691- | 110.6791- | 2- | 12- | | 0-M36505- | 10/11/76- | 11- | 9- | 6.2- | - | - | 5.5- | 100- | | -2- | 7- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 2- | 5- | 3- | -1- | - | - | - | - | 2.90 |
| 30- | 45.2177- | 110.7363- | 2- | 12- | | 0-M36506- | 10/12/76- | 17- | 9- | 6.0- | - | - | 5.2- | 60- | | -1- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 3- | 2- | -1- | - | - | - | - | 2.90 |

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

②

| DOE SAMPLE NUMBER | | | | | | LAB. SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE (Concentrations reported in weight parts per million (ppm)) | | | | | | | | | ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY (Concentrations in weight ppm) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Ag | Bi | Cd | Cu | Nb | Ni | Pb | Sn | W | Be | Li |
| 30- | 45.3112- | 110.9183- | 2- | 12- | 0- | M36435 | -5 | -5 | -5 | 26 | -20 | -15 | 8 | -10 | -15 | 2 | 30 |
| 30- | 45.2905- | 110.9835- | 2- | 12- | 0- | M36436 | -5 | -5 | -5 | 21 | -20 | 23 | 7 | -10 | -15 | 2 | 23 |
| 30- | 45.3079- | 110.9262- | 2- | 12- | 0- | M36437 | -5 | -5 | -5 | 27 | -20 | 41 | -5 | -10 | -15 | 3 | 34 |
| 30- | 45.2758- | 111.0103- | 2- | 12- | 0- | M36439 | -5 | -5 | -5 | 21 | -20 | 16 | 5 | -10 | -15 | 2 | 19 |
| 30- | 45.1115- | 110.6007- | 2- | 12- | 0- | M36441 | -5 | -5 | -5 | 23 | -20 | 28 | 18 | -10 | -15 | 3 | 36 |
| 30- | 45.2655- | 111.0401- | 2- | 12- | 0- | M36443 | -5 | -5 | -5 | 23 | -20 | 40 | 5 | -10 | -15 | 2 | 21 |
| 30- | 45.3147- | 110.9712- | 2- | 12- | 0- | M36444 | -5 | -5 | -5 | 22 | -20 | 34 | 10 | -10 | -15 | 2 | 23 |
| 30- | 45.0015- | 111.2798- | 2- | 12- | 0- | M36447 | -5 | -5 | -5 | 23 | -20 | 16 | 5 | -10 | -15 | 2 | 28 |
| 30- | 45.2081- | 110.1847- | 2- | 12- | 0- | M36449 | -5 | -5 | -5 | 46 | -20 | 290 | -5 | -10 | -15 | 2 | 21 |
| 30- | 45.4579- | 110.2620- | 2- | 12- | 0- | M36455 | -5 | -5 | -5 | 42 | -20 | 69 | 10 | -10 | -15 | 2 | 38 |
| 30- | 45.2361- | 110.1886- | 2- | 12- | 0- | M36458 | -5 | -5 | -5 | 26 | -20 | 37 | 15 | -10 | -15 | 3 | 41 |
| 30- | 45.3798- | 110.3174- | 2- | 12- | 0- | M36460 | -5 | -5 | -5 | 40 | -20 | 56 | 11 | -10 | -15 | 3 | 57 |
| 30- | 45.4990- | 111.4592- | 2- | 12- | 0- | M36463 | -5 | -5 | -5 | 24 | -20 | 33 | 18 | -10 | -15 | 3 | 35 |
| 30- | 45.3161- | 110.2918- | 2- | 12- | 0- | M36465 | -5 | -5 | -5 | 25 | -20 | 24 | 14 | -10 | -15 | 2 | 34 |
| 30- | 45.2615- | 110.3028- | 2- | 12- | 0- | M36466 | -5 | -5 | -5 | 31 | -20 | 40 | 20 | -10 | -15 | 2 | 44 |
| 30- | 45.3104- | 110.3092- | 2- | 12- | 0- | M36467 | -5 | -5 | -5 | 47 | -20 | 30 | 17 | -10 | -15 | 3 | 35 |
| 30- | 45.2178- | 110.2506- | 2- | 12- | 0- | M36469 | -5 | -5 | -5 | 26 | -20 | 27 | 14 | -10 | -15 | 2 | 33 |
| 30- | 45.3360- | 110.2726- | 2- | 12- | 0- | M36470 | -5 | -5 | -5 | 39 | -20 | 60 | 15 | -10 | -15 | 2 | 22 |
| 30- | 45.0564- | 111.0831- | 2- | 12- | 0- | M36471 | -5 | -5 | -5 | 30 | -20 | 51 | -5 | -10 | -15 | 2 | 26 |
| 30- | 45.2085- | 111.0434- | 2- | 12- | 0- | M36473 | -5 | -5 | -5 | 20 | -20 | 25 | 9 | -10 | -15 | 2 | 18 |
| 30- | 45.3978- | 111.2951- | 2- | 12- | 0- | M36474 | -5 | -5 | -5 | 45 | -20 | 84 | 12 | -10 | -15 | 2 | 30 |
| 30- | 45.3948- | 111.2919- | 2- | 12- | 0- | M36475 | -5 | -5 | -5 | 56 | -20 | 22 | 23 | -10 | -15 | 2 | 25 |
| 30- | 45.2404- | 110.5621- | 2- | 12- | 0- | M36476 | -5 | -5 | -5 | 43 | -20 | 114 | 13 | -10 | -15 | 2 | 39 |
| 30- | 45.1890- | 110.5961- | 2- | 12- | 0- | M36477 | -5 | -5 | -5 | 21 | -20 | 26 | 10 | -10 | -15 | 2 | 29 |
| 30- | 45.2402- | 110.5640- | 2- | 12- | 0- | M36478 | -5 | -5 | -5 | 32 | -20 | 41 | -5 | -10 | -15 | 2 | 34 |
| 30- | 45.2306- | 110.5564- | 2- | 12- | 0- | M36479 | -5 | -5 | -5 | 24 | -20 | 25 | 14 | -10 | -15 | 3 | 31 |
| 30- | 45.2099- | 110.5760- | 2- | 12- | 0- | M36480 | -5 | -5 | -5 | 31 | -20 | 48 | 16 | -10 | -15 | 1 | 14 |
| 30- | 45.2049- | 110.5745- | 2- | 12- | 0- | M36481 | -5 | -5 | -5 | 29 | -20 | -15 | 42 | -10 | -15 | 2 | 36 |
| 30- | 45.2047- | 110.5711- | 2- | 12- | 0- | M36482 | -5 | 5 | -5 | 36 | -20 | 31 | 63 | -10 | -15 | 2 | 37 |
| 30- | 45.3207- | 110.4729- | 2- | 12- | 0- | M36483 | -5 | -5 | -5 | 24 | -20 | 16 | -5 | -10 | -15 | 2 | 31 |
| 30- | 45.3268- | 110.4429- | 2- | 12- | 0- | M36484 | -5 | -5 | -5 | 38 | -20 | 41 | 14 | -10 | -15 | 2 | 49 |
| 30- | 45.3361- | 110.4293- | 2- | 12- | 0- | M36485 | -5 | -5 | -5 | 21 | -20 | 25 | 14 | -10 | -15 | 2 | 28 |
| 30- | 45.2674- | 110.4690- | 2- | 12- | 0- | M36487 | -5 | -5 | -5 | 33 | -20 | 33 | 10 | -10 | -15 | 2 | 27 |
| 30- | 45.2350- | 110.4937- | 2- | 12- | 0- | M36488 | -5 | -5 | -5 | 25 | -20 | -15 | 10 | -10 | -15 | 2 | 35 |
| 30- | 45.2063- | 110.5221- | 2- | 12- | 0- | M36489 | -5 | -5 | -5 | 24 | -20 | 36 | -5 | -10 | -15 | 3 | 32 |
| 30- | 45.2186- | 110.4796- | 2- | 12- | 0- | M36490 | -5 | -5 | -5 | 28 | -20 | 28 | 11 | -10 | -15 | 3 | 39 |
| 30- | 45.2677- | 110.4342- | 2- | 12- | 0- | M36491 | -5 | -5 | -5 | 23 | -20 | 16 | 9 | -10 | -15 | 2 | 36 |
| 30- | 45.2604- | 110.4192- | 2- | 12- | 0- | M36492 | -5 | -5 | -5 | 29 | -20 | 19 | 17 | -10 | -15 | 2 | 31 |
| 30- | 45.3316- | 110.4340- | 2- | 12- | 0- | M36493 | -5 | -5 | -5 | 22 | -20 | -15 | 7 | -10 | -15 | 4 | 34 |
| 30- | 45.2639- | 110.4011- | 2- | 12- | 0- | M36494 | -5 | -5 | -5 | 33 | -20 | 28 | 12 | -10 | -15 | 3 | 49 |
| 30- | 45.2477- | 110.4414- | 2- | 12- | 0- | M36495 | -5 | -5 | -5 | 19 | -20 | 15 | 9 | -10 | -15 | 3 | 37 |
| 30- | 45.2721- | 110.3858- | 2- | 12- | 0- | M36496 | -5 | -5 | -5 | 22 | -20 | -15 | 14 | -10 | -15 | 3 | 58 |
| 30- | 45.2714- | 110.4596- | 2- | 12- | 0- | M36497 | -5 | -5 | -5 | 23 | -20 | 20 | 8 | -10 | -15 | 2 | 32 |
| 30- | 45.2687- | 110.4685- | 2- | 12- | 0- | M36498 | -5 | -5 | -5 | 35 | -20 | 23 | 6 | -10 | -15 | 2 | 31 |
| 30- | 45.3053- | 110.6840- | 2- | 12- | 0- | M36500 | -5 | 11 | -5 | 252 | -20 | 20 | 115 | -10 | 20 | 3 | 47 |
| 30- | 45.2899- | 110.6790- | 2- | 12- | 0- | M36501 | -5 | -5 | -5 | 74 | -20 | 116 | 8 | -10 | -15 | 1 | 17 |
| 30- | 45.2539- | 110.6647- | 2- | 12- | 0- | M36502 | -5 | -5 | -5 | 30 | -20 | 18 | 12 | -10 | -15 | 2 | 37 |
| 30- | 45.2528- | 110.6681- | 2- | 12- | 0- | M36503 | -5 | -5 | -5 | -10 | -20 | 64 | 15 | -10 | -15 | 4 | 40 |
| 30- | 45.2295- | 110.6530- | 2- | 12- | 0- | M36504 | -5 | -5 | -5 | 38 | -20 | 63 | -5 | -10 | -15 | -1 | 41 |
| 30- | 45.2691- | 110.6791- | 2- | 12- | 0- | M36505 | -5 | -5 | -5 | 24 | -20 | -15 | 9 | -10 | -15 | 2 | 29 |
| 30- | 45.2177- | 110.7363- | 2- | 12- | 0- | M36506 | -5 | -5 | -5 | 21 | -20 | 25 | 12 | -10 | -15 | 3 | 58 |

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

③

| DOE SAMPLE NUMBER | | | | | | LAB SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | |
| | | | | | | | Al | Au | Ba | Ca | Ce | Cl | Co | Cr | Cs | Dy | Eu | Fe | Hf | K | La | Lu |
| 30- | 45.3112- | 110.9183- | 2- | 12- | | 0-M36435 | 61090 | -0.07 | 708 | 34750 | 79 | -85 | 13.7 | 99 | 3.9 | 4 | 1.6 | 37620 | 12.2 | 17180 | 41 | 0.5 |
| 30- | 45.2905- | 110.9835- | 2- | 12- | | 0-M36436 | 79100 | -0.09 | 1372 | 31590 | 65 | -103 | 24.5 | 142 | -1.9 | 4 | 2.3 | 57510 | 6.9 | 15840 | 41 | 0.4 |
| 30- | 45.3079- | 110.9262- | 2- | 12- | | 0-M36437 | 58290 | -0.07 | 708 | 25660 | 80 | 128 | 18.1 | 888 | 9.3 | 4 | 1.4 | 34620 | 10.5 | 15410 | 45 | 0.4 |
| 30- | 45.2758- | 111.0103- | 2- | 12- | | 0-M36439 | 77660 | -0.10 | 1511 | 33810 | 88 | -120 | 24.0 | 139 | -2.2 | 4 | 1.9 | 52650 | 7.3 | 18000 | 43 | 0.3 |
| 30- | 45.1115- | 110.6007- | 2- | 12- | | 0-M36441 | 63130 | -0.07 | 773 | 29540 | 79 | -81 | 12.0 | 93 | 5.0 | 5 | 1.5 | 32470 | 10.0 | 22380 | 42 | 0.4 |
| 30- | 45.2655- | 111.0401- | 2- | 12- | | 0-M36443 | 70420 | -0.09 | 1336 | 28560 | 64 | -106 | 21.1 | 172 | -2.0 | 3 | 1.9 | 43650 | 6.2 | 13530 | 40 | 0.3 |
| 30- | 45.3147- | 110.9712- | 2- | 12- | | 0-M36444 | 73620 | -0.08 | 1406 | 31620 | 52 | -103 | 17.5 | 145 | 2.1 | 3 | 1.8 | 37590 | 6.3 | 15050 | 38 | 0.2 |
| 30- | 45.0015- | 111.2798- | 2- | 12- | | 0-M36447 | 50190 | -0.07 | 745 | 28570 | 64 | -77 | 10.4 | 83 | 3.5 | 4 | 1.5 | 25490 | 15.6 | 13090 | 30 | 0.5 |
| 30- | 45.2081- | 110.1847- | 2- | 12- | | 0-M36449 | 50300 | -0.08 | 436 | 29750 | 90 | 421 | 51.4 | 8726 | 2.0 | 3 | 1.2 | 52350 | 7.5 | 13210 | 35 | 0.2 |
| 30- | 45.4579- | 110.2620- | 2- | 12- | | 0-M36455 | 60960 | -0.08 | 456 | 30470 | 56 | 188 | 19.4 | 209 | 3.2 | 3 | 1.3 | 43070 | 7.2 | 13430 | 32 | 0.4 |
| 30- | 45.2361- | 110.1886- | 2- | 12- | | 0-M36458 | 70750 | -0.08 | 981 | 19450 | 99 | -86 | 19.9 | 142 | 4.3 | 5 | 1.8 | 44710 | 10.7 | 15850 | 58 | 0.5 |
| 30- | 45.3798- | 110.3174- | 2- | 12- | | 0-M36460 | 69720 | -0.09 | 657 | 17390 | 139 | -100 | 18.6 | 164 | 3.6 | 6 | 1.7 | 38580 | 11.0 | 21120 | 76 | 0.5 |
| 30- | 45.4990- | 111.4592- | 2- | 12- | | 0-M36463 | 59820 | -0.08 | 573 | 21920 | 89 | 136 | 16.8 | 146 | 7.8 | 6 | 1.9 | 38740 | 17.4 | 17140 | 56 | 0.7 |
| 30- | 45.3161- | 110.2918- | 2- | 12- | | 0-M36465 | 59440 | -0.09 | 746 | 16680 | 64 | 141 | 4.0 | 57 | 4.6 | 4 | 1.6 | 20770 | 6.9 | 14740 | 51 | 0.3 |
| 30- | 45.2615- | 110.3028- | 2- | 12- | | 0-M36466 | 66030 | -0.07 | 1114 | 28570 | 87 | -93 | 15.6 | 124 | 3.1 | 5 | 1.7 | 36700 | 11.6 | 16920 | 77 | 0.4 |
| 30- | 45.3104- | 110.3092- | 2- | 12- | | 0-M36467 | 63780 | 0.18 | 771 | 21810 | 84 | 136 | 14.2 | 143 | 5.0 | 5 | 1.6 | 32120 | 12.7 | 20480 | 47 | 0.5 |
| 30- | 45.2178- | 110.2506- | 2- | 12- | | 0-M36469 | 60190 | -0.07 | 723 | 31400 | 78 | -83 | 14.0 | 153 | 3.7 | 4 | 1.4 | 35650 | 12.1 | 17910 | 41 | 0.4 |
| 30- | 45.3360- | 110.2726- | 2- | 12- | | 0-M36470 | 63430 | -0.10 | 727 | 27100 | 114 | 194 | 29.9 | 234 | -2.3 | 9 | 2.2 | 70770 | 16.7 | 14880 | 64 | 0.9 |
| 30- | 45.0564- | 111.0831- | 2- | 12- | | 0-M36471 | 63960 | -0.08 | 920 | 30480 | 60 | -91 | 20.6 | 168 | 3.3 | 4 | 1.6 | 41340 | 10.0 | 13920 | 41 | 0.3 |
| 30- | 45.2085- | 111.0434- | 2- | 12- | | 0-M36473 | 72690 | -0.06 | 1225 | 28580 | 69 | -140 | 15.4 | 73 | -1.8 | 3 | 1.6 | 38690 | 6.4 | 24570 | 40 | 0.3 |
| 30- | 45.3978- | 111.2951- | 2- | 12- | | 0-M36474 | 68140 | -0.10 | 616 | 30740 | 189 | -126 | 20.6 | 188 | 3.7 | 6 | 3.0 | 62690 | 9.5 | 13640 | 93 | 0.5 |
| 30- | 45.3948- | 111.2919- | 2- | 12- | | 0-M36475 | 72140 | -0.08 | 960 | 29120 | 66 | -95 | 19.8 | 194 | 3.0 | 4 | 1.8 | 47820 | 14.6 | 17250 | 38 | 0.5 |
| 30- | 45.2404- | 110.5621- | 2- | 12- | | 0-M36476 | 58700 | -0.11 | 328 | 34330 | 77 | 144 | 37.1 | 330 | 4.2 | 7 | 1.7 | 70220 | 10.2 | 9804 | 52 | 0.9 |
| 30- | 45.1890- | 110.5961- | 2- | 12- | | 0-M36477 | 61130 | -0.07 | 939 | 32300 | 65 | -84 | 23.8 | 83 | 4.8 | 4 | 2.4 | 35880 | 10.3 | 21260 | 42 | 0.4 |
| 30- | 45.2402- | 110.5640- | 2- | 12- | | 0-M36478 | 67050 | -0.08 | 912 | 28450 | 82 | -96 | 16.1 | 134 | 3.4 | 4 | 1.6 | 34660 | 11.6 | 19100 | 43 | 0.4 |
| 30- | 45.2306- | 110.5564- | 2- | 12- | | 0-M36479 | 61070 | -0.08 | 765 | 30120 | 86 | -78 | 13.8 | 158 | 3.2 | 4 | 1.8 | 39740 | 11.5 | 19780 | 41 | 0.4 |
| 30- | 45.2099- | 110.5760- | 2- | 12- | | 0-M36480 | 70810 | -0.09 | 1434 | 38800 | 62 | -113 | 36.4 | 294 | 2.0 | 2 | 1.5 | 72370 | 5.5 | 10580 | 39 | 0.2 |
| 30- | 45.2049- | 110.5745- | 2- | 12- | | 0-M36481 | 63430 | -0.10 | 865 | 22270 | 88 | -91 | 24.3 | 144 | 10.0 | 3 | 2.6 | 34560 | 8.8 | 20380 | 37 | 0.2 |
| 30- | 45.2047- | 110.5711- | 2- | 12- | | 0-M36482 | 62340 | -0.09 | 1195 | 20800 | 86 | -95 | 13.8 | 139 | 6.4 | 4 | 1.8 | 38670 | 12.1 | 18360 | 43 | 0.3 |
| 30- | 45.3207- | 110.4729- | 2- | 12- | | 0-M36483 | 55110 | -0.08 | 700 | 28960 | 86 | -75 | 11.8 | 176 | 4.6 | 5 | 1.5 | 34580 | 14.5 | 16490 | 42 | 0.4 |
| 30- | 45.3268- | 110.4429- | 2- | 12- | | 0-M36484 | 57860 | -0.07 | 746 | 29820 | 65 | -91 | 16.1 | 142 | 3.7 | 4 | 1.5 | 34980 | 9.5 | 17500 | 32 | 0.4 |
| 30- | 45.3361- | 110.4293- | 2- | 12- | | 0-M36485 | 63940 | -0.09 | 913 | 36000 | 77 | -95 | 21.2 | 186 | 3.2 | 2 | 1.7 | 48450 | 10.3 | 15670 | 37 | 0.3 |
| 30- | 45.2674- | 110.4690- | 2- | 12- | | 0-M36487 | 77670 | -0.09 | 1320 | 31190 | 63 | -98 | 23.3 | 180 | 3.6 | 3 | 1.9 | 52700 | 5.3 | 17750 | 33 | 0.2 |
| 30- | 45.2350- | 110.4937- | 2- | 12- | | 0-M36488 | 56670 | -0.07 | 744 | 20350 | 79 | -80 | 14.8 | 144 | 3.8 | 5 | 1.9 | 38300 | 17.3 | 16580 | 43 | 0.5 |
| 30- | 45.2063- | 110.5221- | 2- | 12- | | 0-M36489 | 52080 | -0.06 | 592 | 18380 | 76 | -102 | 8.9 | 144 | 10.7 | 4 | 1.7 | 30440 | 10.1 | 18010 | 37 | 0.4 |
| 30- | 45.2186- | 110.4796- | 2- | 12- | | 0-M36490 | 59050 | -0.07 | 880 | 34200 | 57 | -91 | 16.1 | 92 | 3.8 | 4 | 1.5 | 32830 | 9.2 | 17500 | 37 | 0.3 |
| 30- | 45.2677- | 110.4342- | 2- | 12- | | 0-M36491 | 56710 | -0.08 | 617 | 44750 | 82 | -81 | 9.4 | 72 | 3.8 | 4 | 1.4 | 24570 | 8.4 | 18190 | 33 | 0.4 |
| 30- | 45.2604- | 110.4192- | 2- | 12- | | 0-M36492 | 60480 | -0.08 | 912 | 26250 | 72 | -84 | 16.0 | 136 | 3.5 | 3 | 1.6 | 38500 | 9.9 | 17710 | 41 | 0.4 |
| 30- | 45.3316- | 110.4340- | 2- | 12- | | 0-M36493 | 58340 | -0.08 | 918 | 25440 | 70 | -77 | 24.0 | 132 | 8.3 | 4 | 2.4 | 34870 | 10.2 | 14330 | 42 | 0.4 |
| 30- | 45.2639- | 110.4011- | 2- | 12- | | 0-M36494 | 60940 | -0.07 | 755 | 23730 | 65 | -91 | 17.0 | 121 | 4.4 | 4 | 1.5 | 37000 | 9.7 | 17730 | 38 | 0.4 |
| 30- | 45.2477- | 110.4414- | 2- | 12- | | 0-M36495 | 58480 | -0.08 | 814 | 26870 | 81 | 123 | 9.6 | 85 | 3.4 | 5 | 1.7 | 24790 | 13.6 | 19370 | 40 | 0.5 |
| 30- | 45.2721- | 110.3858- | 2- | 12- | | 0-M36496 | 57620 | -0.08 | 726 | 17810 | 78 | -69 | 9.8 | 121 | 6.3 | 4 | 1.6 | 27530 | 11.0 | 25440 | 42 | 0.4 |
| 30- | 45.2714- | 110.4596- | 2- | 12- | | 0-M36497 | 53740 | -0.07 | 757 | 19920 | 73 | 96 | 12.8 | 125 | 4.2 | 4 | 1.6 | 35050 | 14.2 | 14220 | 40 | 0.5 |
| 30- | 45.2687- | 110.4685- | 2- | 12- | | 0-M36498 | 60280 | -0.07 | 875 | 32280 | 57 | -91 | 14.7 | 77 | 4.1 | 4 | 1.5 | 31230 | 8.0 | 16320 | 39 | 0.4 |
| 30- | 45.3053- | 110.6840- | 2- | 12- | | 0-M36500 | 59420 | -0.08 | 1126 | 19680 | 107 | -92 | 15.5 | 81 | 4.3 | 4 | 1.8 | 40480 | 14.3 | 21840 | 55 | 0.4 |
| 30- | 45.2899- | 110.6790- | 2- | 12- | | 0-M36501 | 58960 | -0.08 | 289 | 21230 | 34 | 140 | 27.0 | 291 | 2.5 | 3 | 1.1 | 45960 | 5.1 | 11180 | 24 | 0.2 |
| 30- | 45.2539- | 110.6647- | 2- | 12- | | 0-M36502 | 62920 | -0.08 | 900 | 27390 | 70 | -91 | 14.9 | 111 | 2.7 | 3 | 1.7 | 36100 | 10.3 | 15550 | 42 | 0.4 |
| 30- | 45.2528- | 110.6681- | 2- | 12- | | 0-M36503 | 58720 | -0.08 | 738 | 24830 | 68 | 163 | 15.5 | 110 | 2.8 | 9 | 3.4 | 44160 | 63.7 | 24280 | 46 | 1.5 |
| 30- | 45.2295- | 110.6530- | 2- | 12- | | 0-M36504 | 60030 | -0.10 | 447 | 24990 | 115 | 147 | 19.0 | 203 | 2.9 | 8 | 2.0 | 49300 | 30.6 | 11210 | 54 | 1.0 |
| 30- | 45.2691- | 110.6791- | 2- | 12- | | 0-M36505 | 65210 | -0.08 | 953 | 31110 | 72 | -99 | 15.5 | 107 | 3.2 | 3 | 1.5 | 35020 | 8.7 | 14790 | 35 | 0.3 |
| 30- | 45.2177- | 110.7363- | 2- | 12- | | 0-M36506 | 58560 | -0.07 | 901 | 30450 | 72 | -78 | 13.8 | 102 | 3.1 | 4 | 1.6 | 36520 | 8.6 | 16990 | 42 | 0.3 |

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



| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | LAS SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | U/Th RATIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mg | Mn | Na | Rb | Sb | Sc | Sm | Sr | Ta | Tb | Th | Ti | V | Yb | Zn | |
| 30-45.3112-110.9183-2-12- | 0-M36435 | 12320 | 713 | 13780 | 70 | -2 | 10.2 | 5.2 | -257 | -1 | -1 | 11.6 | 3455 | 107 | 3.9 | 113 | 0.293 |
| 30-45.2905-110.9835-2-12- | 0-M36436 | 10510 | 891 | 19610 | 54 | -2 | 13.7 | 5.5 | 533 | -1 | -1 | 9.2 | 5617 | 142 | 2.9 | 126 | 0.228 |
| 30-45.3079-110.9262-2-12- | 0-M36437 | 14470 | 662 | 13220 | 86 | -2 | 10.2 | 5.0 | -243 | -1 | -1 | 11.7 | 3813 | 95 | 3.8 | 91 | 0.316 |
| 30-45.2758-111.0103-2-12- | 0-M36439 | 10840 | 881 | 19920 | -39 | -2 | 12.6 | 6.7 | 459 | -1 | -1 | 9.2 | 5281 | 161 | 3.1 | 73 | 0.250 |
| 30-45.1115-110.6007-2-12- | 0-M36441 | 8566 | 664 | 13160 | 86 | -2 | 9.7 | 5.9 | -243 | 1 | -1 | 13.7 | 3741 | 78 | 3.5 | 70 | 0.234 |
| 30-45.2655-111.0401-2-12- | 0-M36443 | 12600 | 803 | 19250 | 67 | -2 | 12.8 | 4.8 | 663 | -1 | -1 | 9.1 | 3779 | 101 | -2.2 | 121 | 0.440 |
| 30-45.3147-110.9712-2-12- | 0-M36444 | 13440 | 567 | 22060 | 40 | -2 | 11.4 | 3.7 | 665 | -1 | -1 | 5.9 | 3861 | 92 | 2.2 | -33 | 0.475 |
| 30-45.0015-111.2798-2-12- | 0-M36447 | 12370 | 653 | 8760 | 61 | -2 | 8.2 | 5.7 | -268 | -1 | -1 | 10.1 | 3434 | 78 | 3.6 | 45 | 0.287 |
| 30-45.2081-110.1847-2-12- | 0-M36449 | 38410 | 883 | 10350 | -33 | -2 | 11.9 | 4.0 | -271 | -1 | -1 | 9.0 | 3346 | 161 | 3.7 | -42 | 0.311 |
| 30-45.4579-110.2620-2-12- | 0-M36455 | 13710 | 674 | 13670 | 76 | -2 | 13.3 | 4.7 | -251 | -1 | -1 | 10.6 | 2969 | 100 | 2.4 | 133 | 0.302 |
| 30-45.2361-110.1886-2-12- | 0-M36458 | 12580 | 804 | 15340 | 81 | -2 | 13.4 | 8.6 | -269 | -1 | -1 | 16.9 | 3743 | 101 | 3.4 | -83 | 0.775 |
| 30-45.3798-110.3174-2-12- | 0-M36460 | 11920 | 734 | 16600 | 86 | -2 | 11.4 | 14.5 | -308 | -1 | -1 | 22.7 | 3390 | 100 | 4.0 | 52 | 1.251 |
| 30-45.4990-111.4592-2-12- | 0-M36463 | 11140 | 851 | 13910 | 72 | -2 | 12.3 | 7.3 | -278 | -1 | -1 | 17.4 | 3685 | 93 | 4.5 | 132 | 0.236 |
| 30-45.3161-110.2918-2-12- | 0-M36465 | 4643 | 503 | 18560 | 79 | -2 | 7.1 | 8.5 | -309 | -1 | -1 | 16.0 | 2602 | 43 | 4.0 | -68 | 1.194 |
| 30-45.2615-110.3028-2-12- | 0-M36466 | 10980 | 659 | 19410 | 57 | -2 | 11.5 | 10.4 | -265 | -1 | -1 | 20.6 | 3025 | 101 | 3.7 | 86 | 1.694 |
| 30-45.3104-110.3092-2-12- | 0-M36467 | 11220 | 735 | 13710 | 78 | -2 | 10.4 | 6.7 | -311 | -1 | -1 | 13.9 | 4094 | 87 | 4.9 | 77 | 0.245 |
| 30-45.2178-110.2506-2-12- | 0-M36469 | 10080 | 675 | 13080 | 42 | -2 | 10.5 | 5.9 | 398 | -1 | -1 | 10.7 | 3255 | 103 | 3.0 | -62 | 0.299 |
| 30-45.3360-110.2726-2-12- | 0-M36470 | 14470 | 1455 | 16350 | -38 | -3 | 23.4 | 10.2 | -366 | -1 | 2 | 17.4 | 5818 | 120 | 7.7 | 152 | 0.460 |
| 30-45.0564-111.0831-2-12- | 0-M36471 | 13970 | 829 | 15390 | -29 | -2 | 12.8 | 4.2 | 549 | -1 | -1 | 9.2 | 4655 | 120 | 3.1 | 89 | 0.315 |
| 30-45.2085-111.0434-2-12- | 0-M36473 | 6752 | 1313 | 28500 | 59 | -2 | 9.5 | 4.3 | -401 | -1 | -1 | 8.2 | 3144 | 84 | 3.0 | 86 | 0.293 |
| 30-45.3978-111.2951-2-12- | 0-M36474 | 15260 | 1095 | 20920 | -42 | -3 | 13.4 | 16.7 | -390 | -2 | -1 | 22.1 | 3619 | 92 | 4.3 | 98 | 0.900 |
| 30-45.3948-111.2919-2-12- | 0-M36475 | 10490 | 847 | 17060 | 65 | -2 | 12.0 | 5.1 | -282 | -1 | -1 | 10.5 | 4786 | 125 | 3.6 | 101 | 0.286 |
| 30-45.2404-110.5621-2-12- | 0-M36476 | 19390 | 1695 | 14790 | 75 | -3 | 24.5 | 10.8 | -403 | -2 | -1 | 15.4 | 6046 | 154 | 6.7 | 105 | 1.597 |
| 30-45.1890-110.5961-2-12- | 0-M36477 | 9234 | 729 | 13330 | 66 | -2 | 9.8 | 5.7 | 395 | -1 | -1 | 9.7 | 4789 | 102 | 2.6 | 124 | 0.320 |
| 30-45.2402-110.5640-2-12- | 0-M36478 | 11210 | 685 | 15900 | 53 | -2 | 10.6 | 6.2 | -295 | -1 | -1 | 13.2 | 3469 | 99 | 2.8 | 75 | 0.242 |
| 30-45.2306-110.5564-2-12- | 0-M36479 | 9961 | 684 | 13160 | 51 | -2 | 10.4 | 5.9 | -236 | -1 | -1 | 11.9 | 3824 | 106 | 3.8 | 131 | 0.252 |
| 30-45.2099-110.5760-2-12- | 0-M36480 | 21340 | 1122 | 18510 | -33 | -2 | 18.8 | 4.2 | 532 | -1 | -1 | 6.6 | 6208 | 236 | -1.7 | -43 | 0.227 |
| 30-45.2049-110.5745-2-12- | 0-M36481 | 9514 | 1001 | 12920 | 72 | -2 | 9.6 | 5.5 | 337 | -1 | -1 | 10.6 | 3198 | 96 | 3.3 | 235 | 0.368 |
| 30-45.2047-110.5711-2-12- | 0-M36482 | 9436 | 1187 | 13350 | 60 | -2 | 10.2 | 7.0 | -336 | -1 | -1 | 11.9 | 3683 | 90 | 5.0 | 393 | 0.303 |
| 30-45.3207-110.4729-2-12- | 0-M36483 | 11020 | 633 | 12120 | 71 | -2 | 9.8 | 5.7 | -232 | -1 | -1 | 13.6 | 3416 | 91 | 3.9 | 114 | 0.250 |
| 30-45.3268-110.4429-2-12- | 0-M36484 | 13120 | 714 | 12810 | 73 | -2 | 10.4 | 5.0 | -294 | -1 | -1 | 10.7 | 3284 | 97 | 2.6 | 104 | 0.308 |
| 30-45.3361-110.4293-2-12- | 0-M36485 | 10870 | 965 | 15240 | -33 | -2 | 10.7 | 5.0 | -291 | -1 | -1 | 9.9 | 5361 | 180 | 3.7 | -43 | 0.232 |
| 30-45.2674-110.4690-2-12- | 0-M36487 | 13340 | 809 | 18730 | -32 | -2 | 12.9 | 4.2 | 597 | -1 | -1 | 6.8 | 4872 | 166 | -1.6 | 124 | 0.250 |
| 30-45.2350-110.4937-2-12- | 0-M36488 | 9709 | 715 | 14660 | 69 | -2 | 11.5 | 6.5 | 306 | -1 | -1 | 12.6 | 3895 | 92 | 5.3 | | 0.262 |
| 30-45.2063-110.5221-2-12- | 0-M36489 | 10380 | 547 | 16620 | 90 | -1 | 9.1 | 5.6 | -301 | -1 | -1 | 11.5 | 3472 | 84 | 3.8 | -84 | 0.261 |
| 30-45.2186-110.4796-2-12- | 0-M36490 | 10330 | 647 | 14180 | 69 | -2 | 9.8 | 4.5 | 374 | 1 | -1 | 9.7 | 3381 | 93 | 2.5 | -83 | 0.258 |
| 30-45.2677-110.4342-2-12- | 0-M36491 | 11170 | 595 | 13480 | 58 | -2 | 7.6 | 6.1 | -234 | -1 | -1 | 11.4 | 2235 | 69 | 3.8 | -25 | 0.228 |
| 30-45.2604-110.4192-2-12- | 0-M36492 | 10280 | 708 | 14510 | 55 | -2 | 10.5 | 5.3 | 318 | -1 | -1 | 10.1 | 5151 | 106 | 3.5 | 120 | 0.317 |
| 30-45.3316-110.4340-2-12- | 0-M36493 | 10800 | 619 | 12830 | -29 | -2 | 10.7 | 5.5 | -240 | -1 | -1 | 12.0 | 3578 | 101 | 3.6 | 106 | 0.267 |
| 30-45.2639-110.4011-2-12- | 0-M36494 | 10960 | 759 | 13040 | 59 | -2 | 11.9 | 5.8 | 457 | -1 | -1 | 9.9 | 3676 | 101 | 3.0 | 97 | 0.303 |
| 30-45.2477-110.4414-2-12- | 0-M36495 | 9218 | 450 | 14460 | 64 | -2 | 7.9 | 7.3 | -229 | -1 | -1 | 12.5 | 3115 | 71 | 3.3 | 63 | 0.280 |
| 30-45.2721-110.3858-2-12- | 0-M36496 | 7824 | 815 | 6883 | 89 | -2 | 9.2 | 5.9 | -282 | -1 | -1 | 14.2 | 3417 | 66 | 3.6 | 113 | 0.239 |
| 30-45.2714-110.4596-2-12- | 0-M36497 | 10260 | 631 | 13220 | 79 | -2 | 10.2 | 5.6 | -232 | -1 | -1 | 12.2 | 3985 | 93 | 3.6 | -62 | 0.270 |
| 30-45.2687-110.4685-2-12- | 0-M36498 | 11660 | 629 | 13680 | 76 | -2 | 9.0 | 5.3 | -279 | -1 | -1 | 9.5 | 2917 | 83 | 2.5 | 112 | 0.284 |
| 30-45.3053-110.6840-2-12- | 0-M36500 | 6959 | 949 | 14140 | 54 | -2 | 7.2 | 7.6 | -286 | -1 | -1 | 15.0 | 3263 | 62 | 3.6 | 133 | 0.287 |
| 30-45.2899-110.6790-2-12- | 0-M36501 | 14890 | 588 | 14400 | -31 | -2 | 15.5 | 3.1 | -242 | -1 | -1 | 8.0 | 2994 | 105 | 3.1 | 104 | 0.263 |
| 30-45.2539-110.6647-2-12- | 0-M36502 | 10470 | 822 | 16060 | 52 | -2 | 10.2 | 5.6 | 427 | -1 | -1 | 9.7 | 3261 | 98 | 3.4 | 107 | 0.299 |
| 30-45.2528-110.6681-2-12- | 0-M36503 | 9717 | 760 | 19380 | 91 | -2 | 12.5 | 6.3 | -313 | 2 | 2 | 21.1 | 5333 | 87 | 12.4 | 88 | 0.455 |
| 30-45.2295-110.6530-2-12- | 0-M36504 | 12290 | 1239 | 14560 | -33 | -3 | 16.8 | 11.9 | -325 | 2 | -1 | 21.9 | 3702 | 101 | 7.6 | -43 | 0.237 |
| 30-45.2691-110.6791-2-12- | 0-M36505 | 9005 | 992 | 17620 | 58 | -2 | 9.8 | 4.8 | 620 | -1 | -1 | 10.0 | 3794 | 94 | 3.5 | 107 | 0.290 |
| 30-45.2177-110.7363-2-12- | 0-M36506 | 10940 | 650 | 13990 | 72 | -2 | 10.4 | 5.9 | -235 | 2 | -1 | 12.6 | 4241 | 101 | 4.0 | 79 | 0.230 |

# 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 (µmhos/cm) | SCINTILLOMETER (eU, ppm) | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm |
| 30- | 45.2086- | 110.7095- | 2- | 12- | | 0-M36507- | 10/12/76- | 17- | 10- | 6.0- | - | - | 5.1- | 60- | | -1- | 6- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 2.30 |
| 30- | 45.2071- | 110.6946- | 2- | 12- | | 0-M36508- | 10/12/76- | 16- | 11- | 6.5- | - | - | 5.2- | 65- | | -1- | 6- | 2- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 5- | 2- | -1- | - | - | - | - | 5.10 |
| 30- | 45.2358- | 110.7429- | 2- | 12- | | 0-M36509- | 10/12/76- | 18- | 8- | 5.0- | - | - | 5.1- | 60- | | -1- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 3- | 2- | -1- | - | - | - | - | 3.70 |
| 30- | 45.4444- | 110.7986- | 2- | 12- | | 0-M36510- | 10/11/76- | 9- | 9- | 6.0- | - | - | 5.5- | 210- | | -1- | 6- | 4- | 6- | 3- | 2- | 1- | 1- | 2- | 2- | 3- | 2- | -1- | - | - | - | - | 3.00 |
| 30- | 45.4464- | 110.8263- | 2- | 12- | | 0-M36511- | 10/11/76- | 10- | 10- | 6.0- | - | - | 5.6- | 200- | | -1- | 6- | 4- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 2.10 |
| 30- | 45.4442- | 110.8276- | 2- | 12- | | 0-M36512- | 10/11/76- | 10- | 10- | 6.0- | - | - | 5.5- | 200- | | -1- | 6- | 4- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 4.70 |
| 30- | 45.4522- | 110.8505- | 2- | 12- | | 0-M36513- | 10/11/76- | 12- | 13- | 5.0- | - | - | 5.6- | 250- | | -3- | 6- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 2.60 |
| 30- | 45.4466- | 110.8802- | 2- | 12- | | 0-M36514- | 10/11/76- | 13- | 12- | 6.0- | - | - | 5.8- | 265- | | -3- | 6- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 4- | 5- | 3- | -1- | - | - | - | - | 2.90 |
| 30- | 45.4537- | 110.8498- | 2- | 12- | | 0-M36515- | 10/11/76- | 12- | 13- | 5.0- | - | - | 5.7- | 260- | | -3- | 6- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 2.90 |
| 30- | 45.1371- | 110.5973- | 2- | 12- | | 0-M36516- | 10/14/76- | 12- | 7- | 2.5- | - | - | 5.7- | 90- | | -1- | 6- | 3- | 6- | 2- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 3.50 |
| 30- | 45.3183- | 111.2598- | 2- | 12- | | 0-M36517- | 10/13/76- | 10- | 8- | 4.0- | - | - | 5.6- | 340- | | -1- | 7- | 3- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 1- | -1- | - | - | - | - | 3.90 |
| 30- | 45.2364- | 111.4099- | 2- | 12- | | 0-M36518- | 10/14/76- | 13- | 11- | 4.0- | - | - | 5.5- | 145- | | -1- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 2- | 2- | 1- | -1- | - | - | - | - | 3.10 |
| 30- | 45.1288- | 111.3227- | 2- | 12- | | 0-M36519- | 10/15/76- | 12- | 8- | 5.0- | - | - | 5.7- | 160- | | -1- | 1- | 2- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 5.30 |
| 30- | 45.2194- | 111.4556- | 2- | 12- | | 0-M36520- | 10/14/76- | 18- | 7- | 5.0- | - | - | 5.9- | 240- | | -1- | 2- | 4- | 6- | 2- | 2- | 1- | 1- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 4.70 |
| 30- | 45.3047- | 111.3437- | 2- | 12- | | 0-M36521- | 10/13/76- | 14- | 12- | 6.5- | - | - | 5.7- | 240- | | -1- | 6- | 4- | 6- | 2- | 2- | 1- | 1- | 1- | 2- | 3- | 1- | -1- | - | - | - | - | 2.70 |
| 30- | 45.2833- | 111.3282- | 2- | 12- | | 0-M36522- | 10/13/76- | 13- | 12- | 6.0- | - | - | 5.8- | 230- | | -1- | 6- | 1- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 4.10 |
| 30- | 45.2368- | 111.3754- | 2- | 12- | | 0-M36523- | 10/14/76- | 12- | 11- | 5.0- | - | - | 5.6- | 150- | | -1- | 6- | 2- | 6- | 2- | 3- | 1- | 2- | 2- | 3- | 3- | 1- | -1- | - | - | - | - | 3.90 |
| 30- | 45.0133- | 111.0754- | 2- | 12- | | 0-M36524- | 09/18/76- | 17- | 8- | 7.5- | - | - | 5.5- | 60- | | -4- | | -2- | 7- | 4- | 2- | 1- | 2- | 1- | 2- | 3- | 4- | -1- | - | - | - | - | 1.80 |
| 30- | 45.0350- | 111.1127- | 2- | 12- | | 0-M36525- | 09/18/76- | 17- | 8- | 7.5- | - | - | 5.7- | 140- | | -4- | | -2- | 7- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 4- | -1- | - | - | - | - | 3.00 |
| 30- | 45.0322- | 111.1176- | 2- | 12- | | 0-M36526- | 09/18/76- | 17- | 7- | 8.5- | - | - | 5.7- | 220- | | -4- | | -2- | 1- | 4- | 2- | 1- | 2- | 2- | 3- | 2- | 3- | 4- | -1- | - | - | - | - | 2.30 |
| 30- | 45.0481- | 111.1383- | 2- | 12- | | 0-M36527- | 09/18/76- | 18- | 9- | 10.0- | - | - | 5.9- | 350- | | -4- | | -2- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 2- | 4- | -1- | - | - | - | - | 10.70 |
| 30- | 45.0455- | 111.1422- | 2- | 12- | | 0-M36528- | 09/18/76- | 18- | 8- | 10.0- | - | - | 5.9- | 350- | | -4- | | -2- | 7- | 3- | 2- | 2- | 2- | 3- | 3- | 3- | 4- | -1- | - | - | - | - | 1.90 |
| 30- | 45.0628- | 111.1679- | 2- | 12- | | 0-M36529- | 09/18/76- | 18- | 8- | 9.0- | - | - | 6.3- | 500- | | -2- | 7- | 2- | 6- | 3- | 2- | 3- | 2- | 3- | 3- | 3- | 4- | -1- | - | - | - | - | 3.30 |
| 30- | 45.0699- | 111.2065- | 2- | 12- | | 0-M36530- | 09/18/76- | 18- | 8- | 10.0- | - | - | 6.0- | 280- | | -1- | 6- | 2- | 6- | 4- | 2- | 1- | 2- | 1- | 2- | 2- | 4- | -1- | - | - | - | - | 4.60 |
| 30- | 45.0141- | 111.1258- | 2- | 12- | | 0-M36531- | 09/19/76- | 15- | 16- | 7.5- | C- | - | 5.9- | 340- | | 3- | 2- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 4- | 2- | 2- | 2- | -3- | - | - | - | - | 3.00 |
| 30- | 45.0997- | 111.2190- | 2- | 12- | | 0-M36532- | 09/19/76- | 16- | 15- | 13.0- | C- | - | 6.5- | 400- | | 0- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | 3.10 |
| 30- | 45.1121- | 111.2321- | 2- | 15- | | 0-M36533- | 09/19/76- | 16- | 12- | | -C- | - | | - | | 2- | 1- | 1- | 2- | 7- | | -1- | | -2- | 3- | 3- | 4- | 2- | -1- | - | - | - | - | 3.70 |
| 30- | 45.1573- | 111.2433- | 2- | 12- | | 0-M36534- | 09/19/76- | 16- | 12- | 10.0- | - | - | 5.9- | 260- | | 4- | 1- | 1- | 2- | 7- | 4- | 2- | 3- | 2- | 1- | 2- | 2- | 2- | -1- | - | - | - | - | 4.40 |
| 30- | 45.4373- | 111.3536- | 2- | 12- | | 0-M36535- | 09/29/76- | 15- | 18- | 7.6- | - | - | 6.0- | 345- | | -3- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 3- | 1- | -1- | - | - | - | - | 3.40 |
| 30- | 45.4410- | 111.4584- | 2- | 12- | | 0-M36536- | 09/30/76- | 15- | 22- | 9.3- | - | - | 5.6- | 158- | | -3- | 7- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 8.40 |
| 30- | 45.2245- | 111.5890- | 2- | 15- | | 0-M36537- | 10/03/76- | 8- | 7- | 11.0- | C- | - | | - | | -2- | 7- | 4- | 6- | | -1- | | -1- | 4- | 3- | 2- | 2- | -1- | - | - | - | - | 4.20 |
| 30- | 45.2311- | 111.5597- | 2- | 11- | | 0-M36538- | 10/03/76- | 9- | 7- | 11.0- | C- | - | | - | | -2- | 7- | 4- | 6- | 1- | 1- | | -1- | 3- | 4- | 4- | 3- | -1- | - | - | - | - | 4.80 |
| 30- | 45.1783- | 111.5481- | 2- | 12- | | 0-M36539- | 10/03/76- | 9- | 9- | 10.0- | C- | - | 5.7- | 220- | | -2- | 6- | 3- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -1- | - | - | - | - | 3.20 |
| 30- | 45.1772- | 111.5472- | 2- | 12- | | 0-M36540- | 10/03/76- | 9- | 9- | 10.0- | - | - | 5.7- | 210- | | -2- | 6- | 4- | 6- | 3- | 2- | 1- | 1- | 2- | 3- | 3- | 2- | -1- | - | - | - | - | 4.00 |
| 30- | 45.1995- | 111.5130- | 2- | 12- | | 0-M36541- | 10/03/76- | 11- | 8- | 11.0- | - | - | 5.8- | 210- | | -2- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 1- | 2- | 4- | 3- | -1- | - | - | - | - | 3.50 |
| 30- | 45.1984- | 111.5140- | 2- | 12- | | 0-M36542- | 10/03/76- | 11- | 8- | 11.0- | - | - | 5.7- | 230- | | -2- | 6- | 3- | 6- | 2- | 2- | 1- | 2- | 1- | 2- | 4- | 3- | -1- | - | - | - | - | 2.50 |
| 30- | 45.1766- | 111.5024- | 2- | 12- | | 0-M36543- | 10/03/76- | 13- | 9- | 10.0- | - | - | 5.9- | 210- | | -2- | 7- | 3- | 6- | 3- | 2- | 1- | 2- | 1- | 4- | 5- | 3- | -1- | - | - | - | - | 4.10 |
| 30- | 45.1519- | 111.5190- | 2- | 12- | | 0-M36544- | 10/03/76- | 15- | 6- | 11.0- | - | - | 5.7- | 200- | | -2- | 7- | 5- | 6- | 2- | 2- | 1- | 3- | 3- | 5- | 4- | 3- | -1- | - | - | - | - | 3.90 |
| 30- | 45.1133- | 111.5091- | 2- | 12- | | 0-M36545- | 10/03/76- | 17- | 8- | 11.0- | - | - | 5.8- | 210- | | -2- | 7- | 4- | 3- | 2- | 2- | 1- | 1- | 1- | 2- | 4- | 3- | -1- | - | - | - | - | 4.20 |
| 30- | 45.0594- | 111.5367- | 2- | 12- | | 0-M36546- | 10/03/76- | 19- | 7- | 10.0- | - | - | 5.9- | 220- | | -2- | 6- | 3- | 6- | 2- | 2- | 1- | 2- | 1- | 3- | 4- | 3- | -1- | - | - | - | - | 4.70 |
| 30- | 45.0589- | 111.5380- | 2- | 12- | | 0-M36547- | 10/03/76- | 19- | 7- | 10.0- | - | - | 5.9- | 280- | | -2- | 7- | 4- | 7- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 3- | -1- | - | - | - | - | 3.60 |
| 30- | 45.3591- | 111.3114- | 2- | 12- | | 0-M36548- | 10/10/76- | 13- | 9- | 4.0- | - | - | 5.2- | 485- | | -2- | 7- | 1- | 7- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 3- | -1- | - | - | - | - | 11.10 |
| 30- | 45.3597- | 111.3179- | 2- | 12- | | 0-M36549- | 10/10/76- | 14- | 7- | 4.0- | - | - | 5.5- | 475- | | -2- | 4- | 1- | 7- | 4- | 3- | 1- | 2- | 1- | 4- | 4- | 3- | -1- | - | - | - | - | 17.50 |
| 30- | 45.3371- | 110.4742- | 2- | 12- | | 0-M36550- | 10/09/76- | 10- | 11- | 5.0- | - | - | 6.2- | 425- | | -1- | 1- | 3- | 1- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 4.40 |
| 30- | 45.3222- | 110.4736- | 2- | 12- | | 0-M36551- | 10/09/76- | 9- | 11- | 6.5- | - | - | 6.1- | 420- | | -1- | 1- | 3- | 1- | 2- | 2- | 1- | 2- | 1- | 4- | 3- | 2- | -1- | - | - | - | - | 2.90 |
| 30- | 45.0890- | 111.4524- | 2- | 12- | | 0-M36552- | 10/04/76- | 16- | 11- | 10.0- | - | - | 5.8- | 210- | | -2- | 6- | 3- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 4.50 |
| 30- | 45.1458- | 111.4211- | 2- | 12- | | 0-M36553- | 10/04/76- | 12- | 12- | 9.0- | - | - | 5.7- | 240- | | -2- | 7- | 4- | 6- | 3- | 2- | 1- | 2- | 1- | 2- | 3- | 2- | -1- | - | - | - | - | 5.30 |
| 30- | 45.1465- | 111.4221- | 2- | 12- | | 0-M36554- | 10/04/76- | 12- | 13- | 10.0- | - | - | 5.7- | 260- | | -2- | 7- | 4- | 6- | 2- | 2- | 1- | 1- | 3- | 4- | 3- | 2- | -1- | - | - | - | - | 5.60 |
| 30- | 45.1310- | 111.4416- | 2- | 12- | | 0-M36555- | 10/04/76- | 10- | 10- | 9.0- | - | - | 5.6- | 240- | | -2- | 6- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 2- | 3- | 2- | -1- | - | - | - | - | 4.60 |
| 30- | 45.1188- | 111.4061- | 2- | 15- | | 0-M36556- | 10/04/76- | 15- | 12- | | - | - | | - | | -2- | 6- | 4- | 6- | | -1- | | -2- | 1- | 2- | 3- | 2- | -1- | - | - | - | - | 2.50 |
| 30- | 45.1332- | 111.4399- | 2- | 12- | | 0-M36557- | 10/04/76- | 10- | 10- | 10.0- | - | - | 5.8- | 290- | | -2- | 7- | 4- | 6- | 2- | 2- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 3.40 |

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

②

| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | 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) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ag | Bi | Cd | Cu | Nb | Ni | Pb | Sn | W | Be | Li |
| 30-45.2086-110.7095-2-12- | 0-M36507 | -5 | -5 | -5 | 23 | -20 | 36 | 15 | -10 | -15 | 2 | 45 |
| 30-45.2071-110.6946-2-12- | 0-M36508 | -5 | 5 | -5 | 494 | -20 | -15 | 154 | -10 | -15 | 4 | 49 |
| 30-45.2358-110.7429-2-12- | 0-M36509 | -5 | -5 | -5 | 13 | -20 | 24 | 7 | -10 | -15 | 3 | 40 |
| 30-45.4444-110.7986-2-12- | 0-M36510 | -5 | -5 | -5 | 25 | -20 | -15 | 12 | -10 | -15 | 3 | 38 |
| 30-45.4464-110.8263-2-12- | 0-M36511 | -5 | -5 | -5 | 25 | -20 | 17 | 10 | -10 | -15 | 2 | 22 |
| 30-45.4442-110.8276-2-12- | 0-M36512 | -5 | -5 | -5 | 23 | -20 | 23 | 17 | -10 | -15 | 3 | 36 |
| 30-45.4522-110.8505-2-12- | 0-M36513 | -5 | -5 | -5 | 12 | -20 | -15 | -5 | -10 | -15 | 2 | 29 |
| 30-45.4466-110.8802-2-12- | 0-M36514 | -5 | -5 | -5 | 16 | -20 | -15 | 11 | -10 | -15 | 3 | 24 |
| 30-45.4537-110.8498-2-12- | 0-M36515 | -5 | -5 | -5 | 14 | -20 | -15 | -5 | -10 | -15 | 2 | 32 |
| 30-45.1371-110.5973-2-12- | 0-M36516 | -5 | -5 | -5 | 34 | -20 | 21 | 16 | -10 | -15 | 2 | 24 |
| 30-45.3183-111.2598-2-12- | 0-M36517 | -5 | -5 | -5 | 14 | -20 | 47 | -5 | -10 | -15 | 1 | 15 |
| 30-45.2364-111.4099-2-12- | 0-M36518 | -5 | -5 | -5 | 21 | -20 | 25 | 39 | -10 | -15 | 2 | 29 |
| 30-45.1288-111.3227-2-12- | 0-M36519 | -5 | -5 | -5 | 24 | -20 | 62 | 13 | -10 | -15 | 2 | 24 |
| 30-45.2194-111.4556-2-12- | 0-M36520 | -5 | -5 | -5 | 32 | -20 | 19 | 13 | -10 | -15 | 2 | 28 |
| 30-45.3047-111.3437-2-12- | 0-M36521 | -5 | -5 | -5 | 66 | -20 | 157 | -5 | -10 | -15 | 3 | 36 |
| 30-45.2833-111.3282-2-12- | 0-M36522 | -5 | -5 | -5 | 21 | -20 | 27 | 6 | -10 | -15 | 2 | 31 |
| 30-45.2368-111.3754-2-12- | 0-M36523 | -5 | -5 | -5 | 13 | -20 | -15 | 10 | -10 | -15 | 2 | 32 |
| 30-45.0133-111.0754-2-12- | 0-M36524 | -5 | -5 | -5 | 36 | -20 | 52 | -5 | -10 | -15 | 2 | 23 |
| 30-45.0350-111.1127-2-12- | 0-M36525 | -5 | -5 | -5 | 24 | -20 | 34 | -5 | -10 | -15 | 2 | 24 |
| 30-45.0322-111.1176-2-12- | 0-M36526 | -5 | -5 | -5 | 25 | -20 | 53 | 13 | -10 | -15 | 1 | 18 |
| 30-45.0481-111.1383-2-12- | 0-M36527 | -5 | -5 | -5 | 20 | -20 | -15 | 10 | -10 | -15 | 3 | 45 |
| 30-45.0455-111.1422-2-12- | 0-M36528 | -5 | -5 | -5 | 20 | -20 | 33 | 18 | -10 | -15 | 2 | 26 |
| 30-45.0628-111.1679-2-12- | 0-M36529 | -5 | -5 | -5 | 33 | -20 | 36 | 5 | -10 | -15 | 2 | 29 |
| 30-45.0699-111.2065-2-12- | 0-M36530 | -5 | -5 | -5 | 15 | -20 | 15 | -5 | -10 | -15 | 3 | 29 |
| 30-45.0141-111.1258-2-12- | 0-M36531 | -5 | -5 | -5 | 17 | -20 | -15 | -5 | -10 | -15 | 1 | 25 |
| 30-45.0997-111.2190-2-12- | 0-M36532 | -5 | -5 | -5 | 51 | -20 | 21 | 7 | -10 | -15 | 2 | 40 |
| 30-45.1121-111.2321-2-15- | 0-M36533 | -5 | -5 | -5 | 19 | -20 | -15 | 7 | -10 | -15 | 2 | 25 |
| 30-45.1573-111.2433-2-12- | 0-M36534 | -5 | -5 | -5 | 25 | -20 | 25 | 8 | -10 | -15 | -1 | 46 |
| 30-45.4373-111.3536-2-12- | 0-M36535 | -5 | -5 | -5 | 23 | -20 | 17 | 10 | -10 | -15 | 2 | 26 |
| 30-45.4410-111.4584-2-12- | 0-M36536 | 9 | -5 | -5 | 14 | -20 | 36 | 16 | -10 | -15 | -1 | 21 |
| 30-45.2245-111.5890-2-15- | 0-M36537 | -5 | -5 | -5 | 27 | -20 | 23 | 8 | -10 | -15 | 6 | 49 |
| 30-45.2311-111.5597-2-11- | 0-M36538 | -5 | -5 | -5 | 23 | -20 | 18 | 6 | -10 | -15 | 9 | 53 |
| 30-45.1783-111.5481-2-12- | 0-M36539 | -5 | -5 | -5 | 26 | -20 | -15 | 8 | -10 | -15 | 3 | 33 |
| 30-45.1772-111.5472-2-12- | 0-M36540 | -5 | -5 | -5 | 24 | -20 | -15 | 7 | -10 | 18 | 7 | 49 |
| 30-45.1995-111.5130-2-12- | 0-M36541 | -5 | -5 | -5 | 17 | -20 | 18 | 8 | -10 | -15 | 5 | 89 |
| 30-45.1984-111.5140-2-12- | 0-M36542 | -5 | -5 | -5 | 24 | -20 | -15 | 9 | -10 | -15 | 2 | 13 |
| 30-45.1766-111.5024-2-12- | 0-M36543 | -5 | -5 | -5 | 21 | -20 | -15 | 7 | -10 | -15 | 7 | 50 |
| 30-45.1519-111.5190-2-12- | 0-M36544 | -5 | -5 | -5 | 21 | 21 | 18 | 5 | -10 | -15 | 7 | 49 |
| 30-45.1133-111.5091-2-12- | 0-M36545 | -5 | -5 | -5 | 19 | -20 | -15 | 7 | -10 | -15 | 7 | 48 |
| 30-45.0594-111.5367-2-12- | 0-M36546 | -5 | -5 | -5 | 24 | -20 | 25 | 13 | -10 | -15 | 6 | 38 |
| 30-45.0589-111.5380-2-12- | 0-M36547 | -5 | -5 | -5 | 26 | -20 | 36 | 8 | -10 | -15 | 3 | 44 |
| 30-45.3591-111.3114-2-12- | 0-M36548 | -5 | -5 | -5 | 33 | -20 | 64 | 15 | -10 | -15 | 3 | 46 |
| 30-45.3597-111.3179-2-12- | 0-M36549 | -5 | -5 | -5 | 31 | -20 | 39 | 16 | -10 | -15 | 2 | 40 |
| 30-45.3371-110.4742-2-12- | 0-M36550 | -5 | -5 | -5 | 24 | -20 | 21 | 13 | -10 | 15 | 7 | 50 |
| 30-45.3222-110.4736-2-12- | 0-M36551 | -5 | -5 | -5 | 38 | -20 | 37 | 10 | -10 | -15 | 2 | 35 |
| 30-45.0890-111.4524-2-12- | 0-M36552 | -5 | -5 | -5 | 20 | -20 | 39 | 6 | -10 | -15 | 5 | 45 |
| 30-45.1458-111.4211-2-12- | 0-M36553 | -5 | -5 | -5 | 11 | -20 | 23 | 12 | -10 | -15 | 3 | 31 |
| 30-45.1465-111.4221-2-12- | 0-M36554 | -5 | -5 | -5 | 23 | -20 | 17 | 9 | -10 | -15 | 10 | 45 |
| 30-45.1310-111.4416-2-12- | 0-M36555 | -5 | -5 | -5 | 22 | -20 | -15 | 5 | -10 | -15 | 10 | 41 |
| 30-45.1188-111.4061-2-15- | 0-M36556 | -5 | -5 | -5 | 32 | -20 | 44 | 14 | -10 | -15 | 3 | 44 |
| 30-45.1332-111.4399-2-12- | 0-M36557 | -5 | -5 | -5 | 11 | -20 | 23 | 7 | -10 | -15 | 3 | 32 |

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

③

| DOE SAMPLE NUMBER | | | | | | | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LAB. SAMPLE LOCATION NUMBER | Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | |
| | | | | | | | Al | Au | Ba | Ca | Ce | Cl | Co | Cr | Cs | Dy | Eu | Fe | Hf | K | La | Lu |
| 30-45.2086-110.7095-2-12- | | | | | | 0-M36507 | 61930 | -0.08 | 858 | 57290 | 56 | -104 | 20.7 | 117 | 2.7 | 4 | 1.7 | 45520 | 6.9 | 16100 | 34 | 0.3 |
| 30-45.2071-110.6946-2-12- | | | | | | 0-M36508 | 65050 | 0.49 | 1280 | 4231 | 134 | -106 | 16.8 | 32 | 5.9 | 3 | 1.7 | 40650 | 9.8 | 32800 | 62 | 0.3 |
| 30-45.2358-110.7429-2-12- | | | | | | 0-M36509 | 54390 | -0.07 | 597 | 16470 | 79 | -78 | 11.8 | 135 | 2.9 | 5 | 1.6 | 31850 | 20.5 | 15680 | 46 | 0.6 |
| 30-45.4444-110.7986-2-12- | | | | | | 0-M36510 | 56290 | -0.07 | 774 | 30750 | 67 | -73 | 9.4 | 78 | 4.2 | 4 | 1.5 | 30380 | 9.7 | 17880 | 42 | 0.4 |
| 30-45.4464-110.8263-2-12- | | | | | | 0-M36511 | 63900 | -0.08 | 1051 | 52480 | 51 | 160 | 36.9 | 159 | 2.9 | 3 | 2.5 | 52720 | 5.9 | 14380 | 32 | 0.2 |
| 30-45.4442-110.8276-2-12- | | | | | | 0-M36512 | 58820 | -0.09 | 717 | 30790 | 84 | 115 | 12.7 | 128 | 3.5 | 4 | 1.8 | 33060 | 12.2 | 15540 | 45 | 0.4 |
| 30-45.4522-110.8505-2-12- | | | | | | 0-M36513 | 46920 | -0.06 | 766 | 15730 | 55 | -55 | 5.8 | 45 | 2.4 | 4 | 1.4 | 17130 | 8.8 | 17860 | 31 | 0.3 |
| 30-45.4466-110.8802-2-12- | | | | | | 0-M36514 | 46360 | -0.06 | 797 | 15540 | 62 | -59 | 6.7 | 70 | 2.5 | 3 | 1.5 | 21490 | 14.7 | 15560 | 32 | 0.3 |
| 30-45.4537-110.8498-2-12- | | | | | | 0-M36515 | 47530 | -0.06 | 931 | 16210 | 51 | -67 | 8.9 | 52 | 3.0 | 4 | 1.3 | 18970 | 11.4 | 15690 | 34 | 0.3 |
| 30-45.1371-110.5973-2-12- | | | | | | 0-M36516 | 66710 | -0.10 | 1036 | 29410 | 84 | -97 | 14.9 | 186 | 2.5 | 4 | 1.8 | 39000 | 9.4 | 14700 | 39 | 0.3 |
| 30-45.3183-111.2598-2-12- | | | | | | 0-M36517 | 38910 | -0.08 | 1164 | 31130 | 111 | -72 | 21.0 | 411 | -1.6 | 5 | 1.6 | 59110 | 28.5 | 11580 | 57 | 0.7 |
| 30-45.2364-111.4099-2-12- | | | | | | 0-M36518 | 57110 | -0.08 | 955 | 32830 | 135 | -86 | 13.9 | 128 | 2.7 | 4 | 2.4 | 37150 | 7.9 | 14130 | 72 | 0.3 |
| 30-45.1288-111.3227-2-12- | | | | | | 0-M36519 | 46230 | -0.07 | 557 | 48330 | 181 | -87 | 18.6 | 179 | 2.0 | 6 | 3.0 | 48120 | 14.8 | 11220 | 105 | 0.4 |
| 30-45.2194-111.4556-2-12- | | | | | | 0-M36520 | 54600 | -0.08 | 577 | 19240 | 72 | 87 | 11.9 | 67 | 3.7 | 5 | 1.6 | 26240 | 11.9 | 14830 | 34 | 0.5 |
| 30-45.3047-111.3437-2-12- | | | | | | 0-M36521 | 62930 | -0.08 | 912 | 22280 | 56 | 149 | 31.8 | 546 | 4.0 | 3 | 1.4 | 54900 | 5.0 | 26260 | 27 | 0.2 |
| 30-45.2833-111.3282-2-12- | | | | | | 0-M36522 | 49970 | -0.08 | 1024 | 23960 | 91 | -75 | 17.3 | 305 | 2.8 | 4 | 1.8 | 52360 | 27.3 | 16270 | 55 | 0.5 |
| 30-45.2368-111.3754-2-12- | | | | | | 0-M36523 | 53480 | -0.06 | 771 | 18610 | 62 | -75 | 6.3 | 39 | 4.9 | 4 | 1.4 | 17720 | 11.7 | 19750 | 41 | 0.3 |
| 30-45.0133-111.0754-2-12- | | | | | | 0-M36524 | 76410 | -0.11 | 1330 | 38180 | 75 | -106 | 26.5 | 196 | 2.1 | 2 | 1.8 | 45830 | 5.0 | 12380 | 35 | 0.2 |
| 30-45.0350-111.1127-2-12- | | | | | | 0-M36525 | 52720 | -0.09 | 517 | 19610 | 64 | -83 | 18.2 | 128 | 2.9 | 4 | 1.8 | 31970 | 12.6 | 12750 | 39 | 0.4 |
| 30-45.0322-111.1176-2-12- | | | | | | 0-M36526 | 47910 | -0.09 | 813 | 41560 | 63 | -85 | 30.2 | 310 | -1.9 | 3 | 1.8 | 61560 | 16.0 | 9464 | 39 | 0.4 |
| 30-45.0481-111.1383-2-12- | | | | | | 0-M36527 | 52150 | -0.07 | 716 | 31880 | 68 | 154 | 10.7 | 73 | 3.8 | 5 | 1.7 | 26760 | 15.3 | 15950 | 42 | 0.5 |
| 30-45.0455-111.1422-2-12- | | | | | | 0-M36528 | 67420 | -0.09 | 975 | 35510 | 79 | -92 | 17.8 | 184 | 2.3 | 3 | 1.7 | 34880 | 5.1 | 15020 | 36 | 0.2 |
| 30-45.0628-111.1679-2-12- | | | | | | 0-M36529 | 53350 | -0.08 | 705 | 41510 | 70 | -75 | 14.4 | 143 | 4.0 | 3 | 1.6 | 32160 | 9.8 | 15850 | 35 | 0.3 |
| 30-45.0699-111.2065-2-12- | | | | | | 0-M36530 | 47490 | -0.07 | 815 | 21880 | 75 | -57 | 5.4 | 62 | 4.7 | 5 | 1.5 | 18380 | 24.2 | 17820 | 47 | 0.6 |
| 30-45.0141-111.1258-2-12- | | | | | | 0-M36531 | 35740 | -0.06 | 519 | 12860 | 38 | -73 | 8.1 | 43 | 3.2 | 3 | 1.2 | 27460 | 19.3 | 9880 | 27 | 0.3 |
| 30-45.0997-111.2190-2-12- | | | | | | 0-M36532 | 62980 | -0.09 | 743 | 24570 | 67 | 203 | 11.6 | 141 | 4.3 | 3 | 1.8 | 35100 | 10.0 | 18530 | 35 | 0.4 |
| 30-45.1121-111.2321-2-15- | | | | | | 0-M36533 | 51540 | -0.07 | 822 | 15870 | 66 | -52 | 5.9 | 44 | 4.8 | 4 | 1.5 | 21970 | 11.8 | 18530 | 34 | 0.4 |
| 30-45.1573-111.2433-2-12- | | | | | | 0-M36534 | 53070 | -0.07 | 752 | 24430 | 91 | -70 | 11.9 | 141 | 3.5 | 5 | 1.8 | 33690 | 30.1 | 15720 | 47 | 0.5 |
| 30-45.4373-111.3536-2-12- | | | | | | 0-M36535 | 55660 | -0.07 | 731 | 16470 | 65 | -96 | 12.1 | 94 | 3.3 | 4 | 1.4 | 27360 | 16.6 | 15250 | 39 | 0.4 |
| 30-45.4410-111.4584-2-12- | | | | | | 0-M36536 | 46640 | -0.10 | 395 | 30260 | 82 | -108 | 20.3 | 166 | 3.5 | 10 | 3.6 | 67530 | 116.2 | 12160 | 44 | 2.0 |
| 30-45.2245-111.5890-2-15- | | | | | | 0-M36537 | 50050 | -0.09 | 584 | 16160 | 87 | -80 | 10.8 | 89 | 46.7 | 5 | 1.4 | 30470 | 12.6 | 13960 | 49 | 0.5 |
| 30-45.2311-111.5597-2-11- | | | | | | 0-M36538 | 47920 | -0.10 | 655 | 15170 | 101 | -77 | 9.0 | 82 | 76.3 | 6 | 1.6 | 28580 | 12.8 | 15390 | 52 | 0.6 |
| 30-45.1783-111.5481-2-12- | | | | | | 0-M36539 | 56200 | -0.06 | 781 | 30480 | 62 | -85 | 10.7 | 68 | 7.8 | 4 | 1.5 | 26980 | 11.6 | 17210 | 41 | 0.3 |
| 30-45.1772-111.5472-2-12- | | | | | | 0-M36540 | 51490 | -0.10 | 488 | 14400 | 93 | 130 | 10.5 | 74 | 54.4 | 5 | 1.5 | 26110 | 11.1 | 19300 | 42 | 0.5 |
| 30-45.1995-111.5130-2-12- | | | | | | 0-M36541 | 50090 | -0.09 | 650 | 12930 | 71 | 105 | 10.6 | 73 | 56.3 | 5 | 1.5 | 25100 | 9.8 | 19120 | 43 | 0.5 |
| 30-45.1984-111.5140-2-12- | | | | | | 0-M36542 | 58540 | -0.08 | 845 | 23990 | 68 | 172 | 17.2 | 135 | 3.1 | 4 | 1.6 | 40950 | 10.8 | 11230 | 38 | 0.4 |
| 30-45.1766-111.5024-2-12- | | | | | | 0-M36543 | 53250 | -0.08 | 623 | 11330 | 71 | -83 | 11.6 | 69 | 48.0 | 6 | 1.4 | 25340 | 8.9 | 19660 | 49 | 0.5 |
| 30-45.1519-111.5190-2-12- | | | | | | 0-M36544 | 51570 | -0.09 | 606 | 14330 | 82 | 109 | 9.8 | 70 | 46.4 | 5 | 1.3 | 25750 | 10.9 | 19140 | 40 | 0.5 |
| 30-45.1133-111.5091-2-12- | | | | | | 0-M36545 | 53380 | -0.09 | 619 | 13620 | 77 | -73 | 10.7 | 78 | 50.6 | 6 | 1.5 | 27970 | 10.8 | 18830 | 46 | 0.7 |
| 30-45.0594-111.5367-2-12- | | | | | | 0-M36546 | 48590 | -0.08 | 655 | 18480 | 116 | -83 | 9.7 | 87 | 43.7 | 6 | 1.8 | 33960 | 18.4 | 16940 | 61 | 0.6 |
| 30-45.0589-111.5380-2-12- | | | | | | 0-M36547 | 51160 | -0.07 | 684 | 25190 | 70 | 105 | 13.4 | 102 | 18.8 | 5 | 1.5 | 31530 | 12.6 | 17290 | 43 | 0.4 |
| 30-45.3591-111.3114-2-12- | | | | | | 0-M36548 | 58940 | -0.09 | 685 | 27380 | 107 | -90 | 17.5 | 180 | 3.9 | 4 | 1.8 | 43340 | 12.3 | 13150 | 53 | 0.5 |
| 30-45.3597-111.3179-2-12- | | | | | | 0-M36549 | 57130 | -0.09 | 586 | 29020 | 382 | 115 | 19.5 | 185 | 3.2 | 8 | 3.8 | 46290 | 17.7 | 10920 | 215 | 0.6 |
| 30-45.3371-110.4742-2-12- | | | | | | 0-M36550 | 54650 | -0.09 | 584 | 13080 | 90 | -77 | 9.9 | 85 | 55.4 | 6 | 1.6 | 28990 | 10.6 | 23930 | 44 | 0.5 |
| 30-45.3222-110.4736-2-12- | | | | | | 0-M36551 | 56550 | -0.07 | 757 | 34080 | 57 | -90 | 13.3 | 162 | 3.6 | 4 | 1.5 | 33570 | 9.9 | 16450 | 34 | 0.4 |
| 30-45.0890-111.4524-2-12- | | | | | | 0-M36552 | 52760 | -0.09 | 631 | 18280 | 102 | -87 | 10.7 | 91 | 27.9 | 6 | 1.5 | 29820 | 16.6 | 16680 | 51 | 0.7 |
| 30-45.1458-111.4211-2-12- | | | | | | 0-M36553 | 50510 | -0.08 | 673 | 24410 | 110 | -82 | 14.2 | 119 | 18.4 | 6 | 1.8 | 39750 | 25.8 | 18960 | 63 | 0.7 |
| 30-45.1465-111.4221-2-12- | | | | | | 0-M36554 | 48990 | -0.10 | 586 | 18180 | 111 | 128 | 10.3 | 92 | 71.1 | 7 | 1.8 | 32410 | 20.9 | 17210 | 59 | 0.7 |
| 30-45.1310-111.4416-2-12- | | | | | | 0-M36555 | 50340 | -0.09 | 614 | 15630 | 86 | -89 | 11.6 | 74 | 71.6 | 6 | 1.5 | 27980 | 13.4 | 18540 | 55 | 0.5 |
| 30-45.1188-111.4061-2-15- | | | | | | 0-M36556 | 64120 | -0.09 | 499 | 30910 | 95 | 106 | 17.2 | 103 | 6.4 | 6 | 1.9 | 33100 | 10.4 | 16330 | 43 | 0.6 |
| 30-45.1332-111.4399-2-12- | | | | | | 0-M36557 | 53590 | -0.08 | 768 | 24670 | 74 | 154 | 11.5 | 130 | 10.2 | 5 | 1.6 | 33170 | 13.0 | 16540 | 45 | 0.5 |

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

④

| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | LAS SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) — Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | U/Th RATIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mg | Mn | Na | Rb | Sb | Sc | Sm | Sr | Ta | Tb | Th | Ti | V | Yb | Zn | |
| 30-45.2086-110.7095-2-12- | 0-M36507 | 21220 | 887 | 13740 | 57 | -2 | 12.2 | 4.7 | -342 | -1 | -1 | 7.2 | 4298 | 123 | 2.8 | 99 | 0.319 |
| 30-45.2071-110.6946-2-12- | 0-M36508 | -2182 | 1402 | 15260 | 105 | -2 | 5.3 | 8.1 | -350 | -1 | -1 | 16.2 | 2836 | 35 | 4.1 | 418 | 0.315 |
| 30-45.2358-110.7429-2-12- | 0-M36509 | 9154 | 683 | 13990 | 65 | -2 | 10.2 | 5.1 | -242 | -1 | -1 | 12.0 | 3930 | 85 | 5.4 | -30 | 0.308 |
| 30-45.4444-110.7986-2-12- | 0-M36510 | 11010 | 571 | 12240 | 81 | -2 | 8.6 | 5.4 | -225 | -1 | -1 | 12.5 | 2603 | 79 | 3.3 | 77 | 0.240 |
| 30-45.4464-110.8263-2-12- | 0-M36511 | 18700 | 931 | 16040 | -32 | -2 | 13.5 | 4.1 | -339 | -1 | -1 | 7.1 | 4603 | 136 | -1.5 | 90 | 0.296 |
| 30-45.4442-110.8276-2-12- | 0-M36512 | 11530 | 710 | 13510 | -29 | -2 | 9.8 | 7.5 | 334 | -1 | -1 | 13.0 | 3284 | 91 | 2.8 | -48 | 0.362 |
| 30-45.4522-110.8505-2-12- | 0-M36513 | 7150 | 261 | 9578 | 59 | -1 | 5.6 | 3.9 | 311 | -1 | 1 | 8.3 | 2200 | 66 | 2.5 | 77 | 0.313 |
| 30-45.4466-110.8802-2-12- | 0-M36514 | 6501 | 349 | 9315 | 56 | -2 | 6.4 | 4.7 | 297 | -1 | -1 | 9.9 | 2668 | 72 | 3.6 | 98 | 0.293 |
| 30-45.4537-110.8498-2-12- | 0-M36515 | 7018 | 307 | 9534 | 40 | -1 | 5.9 | 4.1 | 266 | -1 | -1 | 8.7 | 2868 | 71 | 2.5 | -64 | 0.333 |
| 30-45.1371-110.5973-2-12- | 0-M36516 | 12840 | 679 | 17160 | -34 | -2 | 10.8 | 5.0 | 429 | -1 | -1 | 9.1 | 3689 | 128 | 2.9 | 119 | 0.385 |
| 30-45.3183-111.2598-2-12- | 0-M36517 | 16070 | 862 | 9752 | -29 | -2 | 12.2 | 6.0 | -253 | -1 | -1 | 13.5 | 6746 | 180 | 4.6 | 94 | 0.289 |
| 30-45.2364-111.4099-2-12- | 0-M36518 | 13470 | 628 | 16740 | 38 | -2 | 11.3 | 9.0 | 417 | -1 | -1 | 15.5 | 3589 | 89 | 2.9 | 133 | 0.200 |
| 30-45.1288-111.3227-2-12- | 0-M36519 | 17340 | 776 | 12920 | 44 | -2 | 12.1 | 13.8 | -284 | -1 | -1 | 22.9 | 5166 | 112 | 4.4 | 100 | 0.231 |
| 30-45.2194-111.4556-2-12- | 0-M36520 | 8064 | 508 | 8495 | 63 | -2 | 9.7 | 6.4 | -214 | -1 | -1 | 12.1 | 3238 | 89 | 3.1 | 61 | 0.388 |
| 30-45.3047-111.3437-2-12- | 0-M36521 | 27330 | 978 | 16380 | 83 | -2 | 9.4 | 3.7 | 909 | -1 | -1 | 7.7 | 3567 | 165 | -1.7 | 96 | 0.351 |
| 30-45.2833-111.3282-2-12- | 0-M36522 | 10740 | 749 | 11400 | 55 | -2 | 10.3 | 6.5 | -244 | -1 | -1 | 16.5 | 6016 | 153 | 5.1 | 110 | 0.248 |
| 30-45.2368-111.3754-2-12- | 0-M36523 | 5613 | 469 | 10070 | 69 | -1 | 5.6 | 5.9 | -239 | 1 | -1 | 12.3 | 2390 | 58 | 2.6 | 87 | 0.317 |
| 30-45.0133-111.0754-2-12- | 0-M36524 | 17980 | 898 | 19300 | 73 | -3 | 16.6 | 5.2 | 579 | -1 | -1 | 8.8 | 4146 | 136 | 3.3 | 68 | 0.205 |
| 30-45.0350-111.1127-2-12- | 0-M36525 | 11390 | 787 | 12230 | -31 | -2 | 12.2 | 4.2 | -284 | 1 | -1 | 9.2 | 3827 | 86 | 2.5 | -66 | 0.326 |
| 30-45.0322-111.1176-2-12- | 0-M36526 | 25000 | 999 | 12520 | -31 | -2 | 20.1 | 5.8 | 303 | -1 | -1 | 10.1 | 4979 | 175 | 3.0 | | 0.228 |
| 30-45.0481-111.1383-2-12- | 0-M36527 | 10460 | 550 | 11610 | 73 | -2 | 8.7 | 5.9 | -267 | -1 | -1 | 11.1 | 3454 | 69 | 3.7 | 122 | 0.964 |
| 30-45.0455-111.1422-2-12- | 0-M36528 | 16050 | 710 | 17090 | -29 | -2 | 11.5 | 5.3 | 608 | -1 | -1 | 8.0 | 3165 | 121 | 2.7 | -37 | 0.237 |
| 30-45.0628-111.1679-2-12- | 0-M36529 | 19510 | 634 | 11330 | 45 | -2 | 10.1 | 4.6 | 352 | -1 | -1 | 10.8 | 2886 | 89 | 2.3 | 94 | 0.306 |
| 30-45.0699-111.2065-2-12- | 0-M36530 | 8611 | 409 | 7326 | 61 | -2 | 6.3 | 6.0 | -187 | -1 | -1 | 14.7 | 2646 | 53 | 4.3 | | 0.313 |
| 30-45.0141-111.1258-2-12- | 0-M36531 | 5501 | 730 | 7168 | 67 | -2 | 5.5 | 3.3 | -283 | -1 | -1 | 6.2 | 3013 | 82 | 3.0 | 130 | 0.484 |
| 30-45.0997-111.2190-2-12- | 0-M36532 | 9861 | 729 | 13010 | 62 | -2 | 10.2 | 7.0 | -267 | -1 | -1 | 8.8 | 3677 | 113 | 5.4 | | 0.352 |
| 30-45.1121-111.2321-2-15- | 0-M36533 | 6307 | 445 | 4690 | 69 | -2 | 7.4 | 5.5 | -201 | -1 | -1 | 11.1 | 2934 | 65 | 3.6 | -51 | 0.333 |
| 30-45.1573-111.2433-2-12- | 0-M36534 | 10990 | 560 | 11050 | 55 | -2 | 9.7 | 6.4 | -222 | -1 | -1 | 13.7 | 3954 | 95 | 4.9 | 85 | 0.321 |
| 30-45.4373-111.3536-2-12- | 0-M36535 | 6516 | 722 | 15310 | 77 | -2 | 8.3 | 5.1 | -308 | -1 | -1 | 11.4 | 3652 | 55 | 2.8 | 69 | 0.298 |
| 30-45.4410-111.4584-2-12- | 0-M36536 | 11210 | 1667 | 11690 | -36 | -3 | 16.1 | 14.0 | -366 | 4 | 1 | 15.5 | 13230 | 136 | 14.5 | -47 | 0.542 |
| 30-45.2245-111.5890-2-15- | 0-M36537 | 7760 | 753 | 11950 | 84 | -1 | 8.9 | 6.9 | -269 | -1 | -1 | 13.3 | 3461 | 77 | 4.1 | 92 | 0.316 |
| 30-45.2311-111.5597-2-11- | 0-M36538 | 7916 | 699 | 10850 | 84 | -4 | 8.6 | 8.1 | -263 | 2 | 1 | 14.9 | 3097 | 62 | 4.8 | 85 | 0.322 |
| 30-45.1783-111.5481-2-12- | 0-M36539 | 9786 | 508 | 13810 | 56 | -2 | 7.7 | 5.2 | -255 | -1 | -1 | 11.0 | 2547 | 63 | 3.0 | 97 | 0.291 |
| 30-45.1772-111.5472-2-12- | 0-M36540 | 7440 | 684 | 12050 | 85 | -5 | 7.7 | 8.6 | -262 | -1 | -1 | 12.9 | 2668 | 73 | 3.8 | -34 | 0.310 |
| 30-45.1995-111.5130-2-12- | 0-M36541 | 7331 | 513 | 12080 | 85 | -3 | 7.8 | 5.9 | -226 | -1 | -1 | 12.0 | 2734 | 61 | 3.6 | -30 | 0.292 |
| 30-45.1984-111.5140-2-12- | 0-M36542 | 10880 | 1088 | 15750 | -32 | -2 | 12.8 | 5.6 | -324 | -1 | -1 | 12.2 | 3192 | 102 | 3.1 | 111 | 0.205 |
| 30-45.1766-111.5024-2-12- | 0-M36543 | 7755 | 533 | 11680 | 65 | -4 | 7.9 | 6.0 | -268 | -1 | -1 | 12.1 | 2605 | 57 | 3.5 | 93 | 0.339 |
| 30-45.1519-111.5190-2-12- | 0-M36544 | 8065 | 617 | 12680 | 65 | -2 | 7.7 | 6.1 | -248 | -1 | 1 | 10.9 | 2641 | 60 | 3.7 | -38 | 0.358 |
| 30-45.1133-111.5091-2-12- | 0-M36545 | 7516 | 556 | 10940 | 82 | -4 | 8.9 | 7.4 | -242 | -1 | -1 | 12.6 | 3321 | 73 | 4.3 | 106 | 0.333 |
| 30-45.0594-111.5367-2-12- | 0-M36546 | 9604 | 860 | 12770 | 89 | -2 | 9.6 | 8.3 | -272 | 2 | 1 | 18.7 | 4163 | 71 | 5.3 | 106 | 0.251 |
| 30-45.0589-111.5380-2-12- | 0-M36547 | 10350 | 787 | 11850 | 61 | -1 | 9.6 | 6.2 | -296 | -1 | 1 | 12.3 | 3343 | 81 | 4.1 | -70 | 0.293 |
| 30-45.3591-111.3114-2-12- | 0-M36548 | 15480 | 847 | 14220 | 64 | -2 | 11.2 | 7.2 | -280 | -1 | -1 | 16.1 | 3113 | 102 | 3.5 | 85 | 0.689 |
| 30-45.3597-111.3179-2-12- | 0-M36549 | 15660 | 910 | 16070 | 44 | -2 | 13.6 | 22.1 | -302 | -2 | 2 | 43.6 | 5160 | 100 | 6.6 | 56 | 0.401 |
| 30-45.3371-110.4742-2-12- | 0-M36550 | 7060 | 644 | 10770 | 83 | -3 | 9.2 | 7.1 | -254 | -1 | 1 | 13.2 | 3113 | 70 | 4.9 | -91 | 0.333 |
| 30-45.3222-110.4736-2-12- | 0-M36551 | 10480 | 652 | 12690 | 61 | -2 | 9.8 | 4.8 | 372 | -1 | -1 | 10.2 | 2882 | 91 | 3.5 | 80 | 0.284 |
| 30-45.0890-111.4524-2-12- | 0-M36552 | 7704 | 823 | 13050 | 55 | -1 | 8.5 | 7.6 | -268 | -1 | -1 | 14.9 | 3541 | 79 | 5.6 | 70 | 0.302 |
| 30-45.1458-111.4211-2-12- | 0-M36553 | 9951 | 792 | 12670 | 62 | -2 | 10.9 | 8.2 | -268 | 2 | -1 | 18.8 | 4819 | 97 | 5.6 | -74 | 0.282 |
| 30-45.1465-111.4221-2-12- | 0-M36554 | 8730 | 719 | 11090 | 88 | -3 | 9.2 | 7.8 | -267 | -1 | -1 | 17.3 | 3838 | 76 | 4.9 | 133 | 0.324 |
| 30-45.1310-111.4416-2-12- | 0-M36555 | 6391 | 685 | 10930 | 98 | -2 | 8.6 | 6.4 | -299 | -1 | 1 | 13.5 | 3075 | 69 | 3.5 | 88 | 0.341 |
| 30-45.1188-111.4061-2-15- | 0-M36556 | 10490 | 758 | 14170 | 64 | -2 | 11.2 | 8.0 | -261 | -1 | -1 | 14.3 | 3404 | 92 | 4.4 | -30 | 0.175 |
| 30-45.1332-111.4399-2-12- | 0-M36557 | 9730 | 679 | 12840 | 69 | -1 | 9.8 | 5.8 | -254 | -1 | -1 | 13.1 | 3623 | 85 | 3.8 | 119 | 0.260 |

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

①

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER AND FIELD DATA | | | | | | | | | | | | | | | | | | | | | | | | | | | U CONCENTRATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | TIME SAMPLED DATE | TIME SAMPLED HOUR | AIR TEMPERATURE | WATER TEMPERATURE | COMMENTS | SPECIAL MEASUREMENTS | pH | CONDUCTIVITY (umho/cm) | SCINTILLOMETER (eU, ppm) | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm |
| 30- | 45.1243- | 111.4773- | 2- | 12- | 0- | M36558- | 10/04/76- | 8- | 8- | 9.0- | - | - | 5.6- | 280- | | - | 3- | 7- | 3- | 7- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 4.90 |
| 30- | 45.1251- | 111.4783- | 2- | 12- | 0- | M36559- | 10/04/76- | 8- | 9- | 10.0- | - | - | 5.9- | 310- | | - | 3- | 7- | 3- | 7- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 3.50 |
| 30- | 45.1173- | 111.4832- | 2- | 12- | 0- | M36560- | 10/04/76- | 7- | 6- | 10.0- | - | - | 5.8- | 310- | | - | 3- | 7- | 3- | 7- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 4.50 |
| 30- | 45.1158- | 111.4978- | 2- | 11- | 0- | M36561- | 10/04/76- | 7- | 6- | 11.0- | - | - | 5.7- | 310- | | - | 4- | 7- | 3- | 7- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 4.40 |
| 30- | 45.1671- | 111.2472- | 2- | 12- | 0- | M36563- | 09/19/76- | 17- | 10- | 9.0- | - | - | 5.9- | 300- | | 0- | 1- | 4- | 2- | 1- | 4- | 2- | 1- | 2- | 1- | 2- | 3- | 2- | -1- | - | - | - | - | 2.60 |
| 30- | 45.2245- | 111.2372- | 2- | 12- | 0- | M36564- | 09/19/76- | 17- | 11- | 10.5- | - | - | 5.8- | 190- | | 6- | 1- | 4- | 2- | 7- | 3- | 2- | 3- | 2- | 1- | 3- | 2- | 2- | -1- | - | - | - | - | 2.30 |
| 30- | 45.2051- | 111.2431- | 2- | 15- | 0- | M36565- | 09/19/76- | 17- | 12- | | -C- | - | - | - | | 5- | 1- | 4- | 5- | 6- | -1- | -2- | 3- | 3- | 3- | 2- | -1- | - | - | - | - | - | 3.70 |
| 30- | 45.1950- | 111.2312- | 2- | 12- | 0- | M36566- | 09/19/76- | 18- | 13- | 11.0- | - | - | 5.9- | 260- | | 9- | 1- | 4- | 1- | 7- | 4- | 2- | 2- | 2- | 1- | 2- | 2- | 1- | -1- | - | - | - | - | 3.30 |
| 30- | 45.1447- | 111.2423- | 2- | 12- | 0- | M36567- | 09/19/76- | 18- | 10- | 10.0- | - | - | 5.8- | 260- | | 3- | 1- | 4- | 1- | 7- | 4- | 2- | 3- | 2- | 1- | 2- | 2- | 1- | -1- | - | - | - | - | 3.40 |
| 30- | 45.1035- | 111.2228- | 2- | 15- | 0- | M36568- | 09/19/76- | 18- | 8- | | -C- | - | - | - | | 2- | 1- | 1- | 4- | 6- | -1- | -1- | 3- | 2- | 3- | 1- | -1- | - | - | - | - | - | 2.60 |
| 30- | 45.2186- | 110.9301- | 2- | 12- | 0- | M36569- | 09/21/76- | 9- | 13- | 8.0- | C- | - | 5.9- | 200- | | 7- | 2- | 7- | 3- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 4- | 3- | -3- | - | - | - | - | 3.60 |
| 30- | 45.2180- | 110.9320- | 2- | 12- | 0- | M36570- | 09/21/76- | 9- | 10- | 7.5- | - | - | 5.7- | 150- | | 2- | 2- | 7- | 1- | 7- | 4- | 2- | 1- | 2- | 2- | 1- | 4- | 3- | -3- | - | - | - | - | 1.60 |
| 30- | 45.1988- | 110.9093- | 2- | 12- | 0- | M36571- | 09/21/76- | 10- | 10- | 8.0- | C- | - | 5.7- | 160- | | 2- | 1- | 4- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | 2.70 |
| 30- | 45.1915- | 110.9161- | 2- | 12- | 0- | M36572- | 09/21/76- | 11- | 10- | 8.0- | C- | - | 5.8- | 190- | | 3- | 2- | 7- | 3- | 6- | 4- | 2- | 2- | 2- | 2- | 4- | 3- | 3- | -3- | - | - | - | - | 4.50 |
| 30- | 45.1905- | 110.9359- | 2- | 12- | 0- | M36573- | 09/21/76- | 11- | 11- | 7.5- | - | - | 5.9- | 160- | | 8- | 2- | 7- | 1- | 7- | 4- | 2- | 1- | 2- | 2- | 4- | 4- | 3- | -1- | - | - | - | - | 2.30 |
| 30- | 45.1528- | 110.9611- | 2- | 12- | 0- | M36574- | 09/21/76- | 11- | 11- | 7.0- | - | - | 5.6- | 100- | | 3- | 2- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | 2.20 |
| 30- | 45.1341- | 110.9650- | 2- | 12- | 0- | M36575- | 09/21/76- | 12- | 12- | 8.0- | C- | - | 5.7- | 170- | | 6- | 1- | 7- | 2- | 7- | 2- | 2- | 1- | 2- | 2- | 2- | 4- | 4- | -3- | - | - | - | - | 3.10 |
| 30- | 45.1349- | 110.9636- | 2- | 12- | 0- | M36576- | 09/21/76- | 12- | 10- | 6.0- | C- | - | 5.2- | 55- | | 8- | 1- | 6- | 2- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 4- | -3- | - | - | - | - | 1.40 |
| 30- | 45.1630- | 110.9821- | 2- | 12- | 0- | M36577- | 09/21/76- | 13- | 11- | 8.0- | C- | - | 5.5- | 120- | | 4- | 1- | 6- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 4- | -3- | - | - | - | - | 1.70 |
| 30- | 45.1600- | 110.9824- | 2- | 12- | 0- | M36578- | 09/21/76- | 13- | 11- | 10.0- | C- | - | 5.5- | 500- | | 6- | 1- | 6- | 5- | 8- | 2- | 2- | 1- | 1- | 3- | 3- | 4- | 4- | -3- | - | - | - | - | 2.90 |
| 30- | 45.1422- | 111.0131- | 2- | 12- | 0- | M36579- | 09/21/76- | 14- | 10- | 8.5- | C- | - | 5.2- | 80- | | 7- | 1- | 6- | 6- | 8- | 2- | 2- | 5- | 1- | 3- | 2- | 2- | 4- | -3- | - | - | - | - | 6.90 |
| 30- | 45.1278- | 111.0203- | 2- | 12- | 0- | M36580- | 09/21/76- | 14- | 10- | 7.0- | C- | - | 5.7- | 120- | | 1- | 1- | 6- | 5- | 8- | 3- | 2- | 1- | 1- | 2- | 4- | 4- | 4- | -3- | - | - | - | - | 2.60 |
| 30- | 45.1286- | 111.0191- | 2- | 12- | 0- | M36581- | 09/21/76- | 14- | 9- | 5.5- | C- | - | 5.4- | 70- | | 0- | 1- | 6- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 2- | 3- | 4- | -3- | - | - | - | - | 2.40 |
| 30- | 45.1218- | 111.0358- | 2- | 12- | 0- | M36582- | 09/21/76- | 14- | 9- | 6.5- | C- | - | 5.7- | 90- | | 1- | 1- | 6- | 2- | 7- | 4- | 2- | 1- | 2- | 3- | 3- | 3- | 4- | -3- | - | - | - | - | 1.60 |
| 30- | 45.1218- | 111.0345- | 2- | 12- | 0- | M36583- | 09/21/76- | 15- | 8- | 6.0- | C- | - | 5.5- | 70- | | 0- | 1- | 6- | 2- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 4- | -3- | - | - | - | - | 1.80 |
| 30- | 45.1263- | 111.0401- | 2- | 12- | 0- | M36584- | 09/21/76- | 15- | 9- | 7.5- | C- | - | 5.7- | 150- | | 3- | 1- | 6- | 5- | 6- | 2- | 2- | 1- | 2- | 3- | 2- | 2- | 4- | -3- | - | - | - | - | 1.80 |
| 30- | 45.1262- | 111.0509- | 2- | 12- | 0- | M36585- | 09/21/76- | 15- | 8- | 6.5- | C- | - | 5.6- | 90- | | 0- | 1- | 6- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 3- | 2- | 4- | -3- | - | - | - | - | 2.80 |
| 30- | 45.1306- | 111.0729- | 2- | 12- | 0- | M36586- | 09/21/76- | 16- | 8- | 6.5- | - | - | 5.5- | 100- | | 3- | 1- | 6- | 2- | 7- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 4- | -8- | - | - | - | - | 1.70 |
| 30- | 45.1767- | 110.9613- | 2- | 12- | 0- | M36587- | 09/21/76- | 16- | 10- | 8.0- | C- | - | 5.7- | 180- | | 3- | 1- | 6- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 4- | -3- | - | - | - | - | 1.60 |
| 30- | 45.1758- | 110.9598- | 2- | 15- | 0- | M36588- | 09/21/76- | 17- | 10- | | -C- | - | - | - | | 6- | 1- | 6- | 3- | 7- | -1- | -2- | 4- | 2- | 3- | 4- | -3- | - | - | - | - | - | 1.50 |
| 30- | 45.1705- | 110.8763- | 2- | 12- | 0- | M36589- | 09/21/76- | 17- | 12- | 9.0- | C- | - | 6.1- | 510- | | 2- | 1- | 7- | 4- | 6- | 2- | 2- | 1- | 2- | 3- | 2- | 4- | 4- | - | - | - | - | - | 2.50 |
| 30- | 45.0904- | 110.7735- | 2- | 11- | 0- | M36590- | 09/22/76- | 11- | 20- | 50.0- | C- | - | 6.8- | 2400- | | 6- | 1- | 4- | 2- | 6- | 4- | 3- | 5- | 3- | 5- | 3- | 4- | 3- | - | - | - | - | - | 2.80 |
| 30- | 45.0804- | 110.7627- | 2- | 15- | 0- | M36591- | 09/22/76- | 11- | 13- | | -C- | - | - | - | | 3- | 3- | 7- | 5- | 6- | -1- | -2- | 2- | 2- | 4- | 3- | -1- | - | - | - | - | - | 3.20 |
| 30- | 45.1107- | 110.7862- | 2- | 15- | 0- | M36592- | 09/22/76- | 11- | 13- | | -C- | - | - | - | | 18- | 3- | 7- | 2- | 7- | -1- | -2- | 1- | 2- | 3- | 3- | -1- | - | - | - | - | - | 6.80 |
| 30- | 45.0472- | 110.7540- | 2- | 15- | 0- | M36593- | 09/22/76- | 12- | 14- | | -C- | - | - | - | | 0- | 1- | 7- | 2- | 7- | -1- | -2- | 4- | 3- | 2- | 3- | -1- | - | - | - | - | - | 2.60 |
| 30- | 45.0526- | 110.7626- | 2- | 15- | 0- | M36594- | 09/22/76- | 12- | 14- | | -C- | - | - | - | | 0- | 1- | 7- | - | - | -1- | -1- | 4- | 3- | 2- | 3- | -1- | - | - | - | - | - | 2.00 |
| 30- | 45.0650- | 110.7760- | 2- | 12- | 0- | M36595- | 09/22/76- | 12- | 13- | 7.5- | - | - | 5.7- | 30- | | 2- | 1- | 4- | 2- | 7- | 4- | 2- | 1- | 2- | 4- | 3- | 3- | 3- | -1- | - | - | - | - | 2.70 |
| 30- | 45.0697- | 110.7775- | 2- | 15- | 0- | M36596- | 09/22/76- | 12- | 13- | | -C- | - | - | - | | 4- | 1- | 4- | 2- | 7- | -1- | -2- | 3- | 2- | 3- | 3- | -3- | - | - | - | - | - | 2.90 |
| 30- | 45.0863- | 110.7837- | 2- | 15- | 0- | M36597- | 09/22/76- | 12- | 15- | | -C- | - | - | - | | 8- | 1- | 4- | 2- | 7- | -1- | -2- | 4- | 3- | 2- | 3- | -3- | - | - | - | - | - | 3.50 |
| 30- | 45.1276- | 110.8077- | 2- | 12- | 0- | M36598- | 09/22/76- | 13- | 13- | 8.5- | C- | - | 5.9- | 260- | | 8- | 1- | 4- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | 2.30 |
| 30- | 45.1086- | 110.8191- | 2- | 12- | 0- | M36599- | 09/22/76- | 13- | 14- | 9.0- | - | - | 5.9- | 300- | | 9- | 1- | 7- | 2- | 4- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -1- | - | - | - | - | 2.70 |
| 30- | 45.0999- | 110.8207- | 2- | 12- | 0- | M36600- | 09/22/76- | 13- | 14- | 9.0- | C- | - | 5.7- | 270- | | 7- | 1- | 7- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -9- | - | - | - | - | 2.40 |
| 30- | 45.1459- | 110.8040- | 2- | 12- | 0- | M36601- | 09/22/76- | 14- | 14- | 9.0- | C- | - | 5.7- | 190- | | 4- | 1- | 4- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -9- | - | - | - | - | 2.20 |
| 30- | 45.1648- | 110.8343- | 2- | 12- | 0- | M36602- | 09/22/76- | 14- | 22- | 14.0- | - | - | 5.9- | 250- | | 1- | 1- | 7- | 2- | 7- | 3- | 2- | 5- | 2- | 2- | 3- | 4- | 2- | -3- | - | - | - | - | 2.20 |
| 30- | 45.1666- | 110.8379- | 2- | 15- | 0- | M36603- | 09/22/76- | 15- | 20- | | -C- | - | - | - | | 5- | 1- | 7- | 5- | 6- | -1- | -2- | 4- | 4- | 3- | 2- | -3- | - | - | - | - | - | 3.90 |
| 30- | 45.4882- | 110.5932- | 2- | 12- | 0- | M36604- | 09/28/76- | 10- | 14- | 5.5- | - | - | 5.5- | 110- | | 8- | 1- | 7- | 3- | 7- | 2- | 2- | 3- | 2- | 4- | 4- | 2- | 1- | -3- | - | - | - | - | 3.10 |
| 30- | 45.4815- | 110.5618- | 2- | 12- | 0- | M36605- | 09/28/76- | 10- | 7- | 6.0- | C- | - | 5.7- | 140- | | 4- | 1- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 3- | 2- | 3- | 1- | -3- | - | - | - | - | 2.50 |
| 30- | 45.4781- | 110.5717- | 2- | 12- | 0- | M36606- | 09/28/76- | 11- | 10- | 6.0- | C- | - | 5.5- | 100- | | 3- | 1- | 7- | 5- | 8- | 4- | 2- | 1- | 2- | 4- | 4- | 2- | 1- | -3- | - | - | - | - | 2.90 |
| 30- | 45.2661- | 110.5805- | 2- | 12- | 0- | M36607- | 09/28/76- | 11- | 11- | 5.5- | C- | - | 5.7- | 140- | | 3- | 2- | 7- | 2- | 7- | 4- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -2- | - | - | - | - | 3.40 |
| 30- | 45.2868- | 110.5744- | 2- | 12- | 0- | M36608- | 09/28/76- | 12- | 13- | 6.0- | - | - | 5.7- | 120- | | 5- | 2- | 7- | 2- | 7- | 4- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 2.60 |
| 30- | 45.2958- | 110.5691- | 2- | 12- | 0- | M36609- | 09/28/76- | 12- | 7- | 5.5- | - | - | 5.5- | 120- | | 6- | 2- | 7- | 2- | 7- | 4- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 2.60 |

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

②

| DOE SAMPLE NUMBER | | | | | | LAB. SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE (Concentrations reported in weight parts per million (ppm)) | | | | | | | | | ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY (Concentrations in weight ppm) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Ag | Bi | Cd | Cu | Nb | Ni | Pb | Sn | W | Be | Li |
| 30-45.1243-111.4773-2-12- | | | | | | 0-M36558 | -5 | -5 | -5 | 21 | 20 | -15 | 8 | -10 | -15 | 5 | 35 |
| 30-45.1251-111.4783-2-12- | | | | | | 0-M36559 | -5 | -5 | -5 | 22 | -20 | 37 | 7 | -10 | -15 | 3 | 35 |
| 30-45.1173-111.4832-2-12- | | | | | | 0-M36560 | -5 | -5 | -5 | 26 | -20 | 20 | 5 | -10 | -15 | 5 | 41 |
| 30-45.1158-111.4978-2-11- | | | | | | 0-M36561 | -5 | -5 | -5 | 21 | -20 | 22 | 9 | -10 | -15 | 4 | 31 |
| 30-45.1671-111.2472-2-12- | | | | | | 0-M36563 | | | | | | | | | | | |
| 30-45.2245-111.2372-2-12- | | | | | | 0-M36564 | -5 | 6 | -5 | 16 | -20 | -15 | 15 | -10 | -15 | 2 | 18 |
| 30-45.2051-111.2431-2-15- | | | | | | 0-M36565 | | | | | | | | | | | |
| 30-45.1950-111.2312-2-12- | | | | | | 0-M36566 | -5 | -5 | -5 | 26 | -20 | 23 | 6 | -10 | -15 | 2 | 29 |
| 30-45.1447-111.2423-2-12- | | | | | | 0-M36567 | -5 | -5 | -5 | 33 | -20 | -15 | 14 | -10 | -15 | 2 | 30 |
| 30-45.1035-111.2228-2-15- | | | | | | 0-M36568 | | | | | | | | | | | |
| 30-45.2186-110.9301-2-12- | | | | | | 0-M36569 | -5 | -5 | -5 | 21 | -20 | 16 | -5 | -10 | -15 | 2 | 23 |
| 30-45.2180-110.9320-2-12- | | | | | | 0-M36570 | -5 | -5 | -5 | 14 | -20 | -15 | 13 | -10 | -15 | 2 | 12 |
| 30-45.1988-110.9093-2-12- | | | | | | 0-M36571 | | | | | | | | | | | |
| 30-45.1915-110.9161-2-12- | | | | | | 0-M36572 | -5 | -5 | -5 | 34 | -20 | 44 | 13 | -10 | -15 | 3 | 40 |
| 30-45.1905-110.9359-2-12- | | | | | | 0-M36573 | -5 | -5 | -5 | 33 | -20 | 40 | 5 | -10 | -15 | 2 | 30 |
| 30-45.1528-110.9611-2-12- | | | | | | 0-M36574 | | | | | | | | | | | |
| 30-45.1341-110.9650-2-12- | | | | | | 0-M36575 | -5 | -5 | -5 | 17 | -20 | 31 | 11 | -10 | -15 | 2 | 33 |
| 30-45.1349-110.9636-2-12- | | | | | | 0-M36576 | -5 | -5 | -5 | 27 | -20 | 58 | -5 | -10 | -15 | 2 | 18 |
| 30-45.1630-110.9821-2-12- | | | | | | 0-M36577 | -5 | -5 | -5 | 17 | -20 | 58 | 5 | -10 | -15 | 2 | 15 |
| 30-45.1600-110.9824-2-12- | | | | | | 0-M36578 | -5 | 7 | -5 | 32 | -20 | 17 | 5 | -10 | -15 | 2 | 20 |
| 30-45.1422-111.0131-2-12- | | | | | | 0-M36579 | -5 | -5 | -5 | 30 | -20 | 30 | 11 | -10 | -15 | 2 | 37 |
| 30-45.1278-111.0203-2-12- | | | | | | 0-M36580 | -5 | -5 | -5 | 31 | -20 | 31 | -5 | -10 | -15 | 2 | 28 |
| 30-45.1286-111.0191-2-12- | | | | | | 0-M36581 | -5 | -5 | -5 | 20 | -20 | 36 | 11 | -10 | -15 | 2 | 32 |
| 30-45.1218-111.0358-2-12- | | | | | | 0-M36582 | -5 | -5 | -5 | 28 | -20 | 24 | 17 | -10 | -15 | 2 | 18 |
| 30-45.1218-111.0345-2-12- | | | | | | 0-M36583 | -5 | -5 | -5 | 23 | -20 | 35 | 8 | -10 | -15 | 2 | 21 |
| 30-45.1263-111.0401-2-12- | | | | | | 0-M36584 | -5 | -5 | -5 | 30 | -20 | 36 | 13 | -10 | -15 | 2 | 20 |
| 30-45.1262-111.0509-2-12- | | | | | | 0-M36585 | -5 | -5 | -5 | 26 | -20 | 47 | 13 | -10 | -15 | 2 | 24 |
| 30-45.1306-111.0729-2-12- | | | | | | 0-M36586 | | | | | | | | | | | |
| 30-45.1767-110.9613-2-12- | | | | | | 0-M36587 | | | | | | | | | | | |
| 30-45.1758-110.9598-2-15- | | | | | | 0-M36588 | -5 | -5 | -5 | 24 | -20 | 55 | -5 | -10 | -15 | 2 | 13 |
| 30-45.1705-110.8763-2-12- | | | | | | 0-M36589 | -5 | -5 | -5 | 25 | -20 | 39 | 14 | -10 | -15 | 2 | 29 |
| 30-45.0904-110.7735-2-11- | | | | | | 0-M36590 | -5 | -5 | -5 | 33 | -20 | 48 | 52 | -10 | -15 | 3 | 167 |
| 30-45.0804-110.7627-2-15- | | | | | | 0-M36591 | | | | | | | | | | | |
| 30-45.1107-110.7862-2-15- | | | | | | 0-M36592 | | | | | | | | | | | |
| 30-45.0472-110.7540-2-15- | | | | | | 0-M36593 | -5 | -5 | -5 | 19 | -20 | 34 | 8 | -10 | -15 | 3 | 37 |
| 30-45.0526-110.7626-2-15- | | | | | | 0-M36594 | -5 | -5 | -5 | 34 | -20 | 39 | 15 | -10 | -15 | 3 | 41 |
| 30-45.0650-110.7760-2-12- | | | | | | 0-M36595 | -5 | -5 | -5 | 32 | -20 | -15 | 31 | -10 | -15 | 2 | 36 |
| 30-45.0697-110.7775-2-15- | | | | | | 0-M36596 | -5 | -5 | -5 | 27 | -20 | -15 | 10 | -10 | -15 | 3 | 40 |
| 30-45.0863-110.7837-2-15- | | | | | | 0-M36597 | -5 | -5 | -5 | 19 | -20 | 25 | 8 | -10 | -15 | 3 | 58 |
| 30-45.1276-110.8077-2-12- | | | | | | 0-M36598 | -5 | -5 | -5 | 20 | -20 | 36 | 10 | -10 | -15 | 2 | 32 |
| 30-45.1086-110.8191-2-12- | | | | | | 0-M36599 | -5 | -5 | -5 | 30 | -20 | -15 | 6 | -10 | -15 | 2 | 37 |
| 30-45.0999-110.8207-2-12- | | | | | | 0-M36600 | -5 | -5 | -5 | 19 | -20 | 24 | 10 | -10 | -15 | 2 | 25 |
| 30-45.1459-110.8040-2-12- | | | | | | 0-M36601 | -5 | -5 | -5 | 24 | -20 | 52 | 17 | -10 | -15 | 2 | 29 |
| 30-45.1648-110.8343-2-12- | | | | | | 0-M36602 | -5 | -5 | -5 | 29 | -20 | 41 | 12 | -10 | -15 | 2 | 32 |
| 30-45.1666-110.8379-2-15- | | | | | | 0-M36603 | -5 | -5 | -5 | 26 | -20 | 60 | 12 | -10 | -15 | 2 | 27 |
| 30-45.4882-110.5932-2-12- | | | | | | 0-M36604 | -5 | -5 | -5 | 31 | -20 | 35 | 25 | -10 | -15 | 2 | 32 |
| 30-45.4815-110.5618-2-12- | | | | | | 0-M36605 | -5 | -5 | -5 | 25 | -20 | 48 | 9 | -10 | -15 | 2 | 15 |
| 30-45.4781-110.5717-2-12- | | | | | | 0-M36606 | -5 | -5 | -5 | 17 | -20 | 27 | 10 | -10 | -15 | 2 | 30 |
| 30-45.2661-110.5805-2-12- | | | | | | 0-M36607 | -5 | -5 | -5 | 35 | -20 | 32 | 52 | -10 | -15 | 3 | 35 |
| 30-45.2868-110.5744-2-12- | | | | | | 0-M36608 | -5 | -5 | -5 | 16 | -20 | 17 | 21 | -10 | -15 | 3 | 43 |
| 30-45.2958-110.5691-2-12- | | | | | | 0-M36609 | -5 | -5 | -5 | 57 | -20 | 78 | 28 | -10 | -15 | 2 | 42 |

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



| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | LAB SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (Concentrations reported in weight parts per million (ppm)) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Al | Au | Ba | Ca | Ce | Cl | Co | Cr | Cs | Dy | Eu | Fe | Hf | K | La | Lu |
| 30-45.1243-111.4773-2-12- | 0-M36558 | 48960 | -0.08 | 517 | 19370 | 115 | -78 | 11.2 | 108 | 29.1 | 7 | 1.8 | 37390 | 20.8 | 18560 | 58 | 0.7 |
| 30-45.1251-111.4783-2-12- | 0-M36559 | 56100 | -0.07 | 744 | 20410 | 66 | -86 | 13.4 | 132 | 3.7 | 5 | 1.5 | 32900 | 15.0 | 14070 | 40 | 0.5 |
| 30-45.1173-111.4832-2-12- | 0-M36560 | 51710 | -0.09 | 582 | 20250 | 112 | -83 | 12.1 | 104 | 23.2 | 5 | 1.6 | 31890 | 19.1 | 16310 | 55 | 0.6 |
| 30-45.1158-111.4978-2-11- | 0-M36561 | 51130 | -0.08 | 620 | 28280 | 112 | -80 | 12.6 | 120 | 17.4 | 6 | 1.5 | 38100 | 23.7 | 16400 | 64 | 0.6 |
| 30-45.1671-111.2472-2-12- | 0-M36563 | 49530 | -0.08 | 811 | 28610 | 51 | -63 | 13.3 | 356 | 2.7 | 4 | 1.5 | 34730 | 6.4 | 13830 | 31 | 0.4 |
| 30-45.2245-111.2372-2-12- | 0-M36564 | 69040 | -0.07 | 1052 | 31490 | 54 | -107 | 28.1 | 88 | 3.0 | 3 | 2.5 | 31880 | 6.6 | 13620 | 40 | 0.2 |
| 30-45.2051-111.2431-2-15- | 0-M36565 | 53280 | -0.09 | 1427 | 45780 | 57 | -54 | 18.2 | 62 | 4.7 | 4 | 2.0 | 27390 | 11.5 | 18700 | 31 | 0.4 |
| 30-45.1950-111.2312-2-12- | 0-M36566 | 53510 | -0.07 | 928 | 27630 | 60 | 78 | 9.4 | 89 | 3.1 | 4 | 1.7 | 24330 | 13.3 | 16860 | 33 | 0.4 |
| 30-45.1447-111.2423-2-12- | 0-M36567 | 60000 | -0.08 | 812 | 13540 | 88 | -70 | 10.8 | 101 | 4.4 | 5 | 1.9 | 33150 | 13.0 | 13580 | 43 | 0.4 |
| 30-45.1035-111.2228-2-15- | 0-M36568 | | | | | | | | | | | | | | | | |
| 30-45.2186-110.9301-2-12- | 0-M36569 | 68590 | -0.10 | 1270 | 30120 | 74 | -129 | 18.7 | 90 | 2.6 | 5 | 2.0 | 38910 | 9.0 | 15500 | 42 | 0.3 |
| 30-45.2180-110.9320-2-12- | 0-M36570 | 86560 | -0.09 | 1404 | 35060 | 81 | -114 | 19.0 | 80 | -1.9 | 2 | 1.9 | 45610 | 5.0 | 16160 | 38 | 0.2 |
| 30-45.1988-110.9093-2-12- | 0-M36571 | 62200 | -0.09 | 997 | 33100 | 98 | -94 | 27.1 | 209 | 3.3 | 4 | 1.8 | 60050 | 12.9 | 13840 | 42 | 0.4 |
| 30-45.1915-110.9161-2-12- | 0-M36572 | 62590 | -0.09 | 994 | 28420 | 106 | 163 | 19.6 | 173 | 4.8 | 5 | 1.9 | 42800 | 12.2 | 16040 | 64 | 0.5 |
| 30-45.1905-110.9359-2-12- | 0-M36573 | 70230 | -0.09 | 1123 | 35260 | 66 | -125 | 28.5 | 184 | 2.3 | 3 | 1.8 | 52050 | 7.4 | 10590 | 45 | 0.2 |
| 30-45.1528-110.9611-2-12- | 0-M36574 | 63220 | -0.09 | 785 | 39860 | 70 | -93 | 23.0 | 226 | -1.9 | 2 | 1.7 | 43280 | 6.8 | 12660 | 36 | 0.3 |
| 30-45.1341-110.9650-2-12- | 0-M36575 | 63790 | -0.09 | 1039 | 27250 | 72 | -93 | 15.9 | 136 | 2.8 | 4 | 1.5 | 36970 | 9.7 | 15440 | 34 | 0.3 |
| 30-45.1349-110.9636-2-12- | 0-M36576 | 69130 | -0.11 | 1079 | 45490 | 65 | -106 | 40.5 | 291 | -2.3 | 2 | 1.7 | 73620 | 4.2 | 7839 | 33 | 0.2 |
| 30-45.1630-110.9821-2-12- | 0-M36577 | 72130 | -0.09 | 1154 | 47800 | 71 | -115 | 43.4 | 327 | -2.1 | 3 | 1.9 | 82410 | 8.4 | 12110 | 41 | 0.2 |
| 30-45.1600-110.9824-2-12- | 0-M36578 | 66890 | -0.10 | 951 | 34780 | 131 | -136 | 20.7 | 156 | -2.2 | 3 | 2.5 | 39700 | 15.2 | 11980 | 66 | 0.5 |
| 30-45.1422-111.0131-2-12- | 0-M36579 | 58120 | -0.08 | 948 | 28880 | 76 | -85 | 14.8 | 134 | 3.3 | 4 | 1.6 | 36280 | 11.6 | 16200 | 45 | 0.5 |
| 30-45.1278-111.0203-2-12- | 0-M36580 | 73920 | -0.10 | 1509 | 32790 | 61 | -111 | 18.5 | 156 | 3.4 | 3 | 1.6 | 38870 | 6.9 | 16800 | 44 | 0.4 |
| 30-45.1286-111.0191-2-12- | 0-M36581 | 72220 | -0.08 | 1536 | 34530 | 63 | -123 | 24.1 | 162 | -1.8 | 2 | 1.3 | 44340 | 5.0 | 15130 | 43 | 0.1 |
| 30-45.1218-111.0358-2-12- | 0-M36582 | 81200 | -0.10 | 1157 | 42280 | 80 | -114 | 24.1 | 146 | -2.2 | 2 | 2.0 | 44220 | 4.0 | 11990 | 31 | 0.2 |
| 30-45.1218-111.0345-2-12- | 0-M36583 | 79740 | -0.10 | 1302 | 38750 | 69 | 126 | 26.0 | 159 | 3.1 | 3 | 1.6 | 50420 | 5.4 | 8022 | 34 | 0.3 |
| 30-45.1263-111.0401-2-12- | 0-M36584 | 77660 | -0.09 | 1305 | 40100 | 55 | -108 | 27.2 | 134 | -2.1 | 2 | 1.6 | 51330 | 4.0 | 13620 | 39 | 0.2 |
| 30-45.1262-111.0509-2-12- | 0-M36585 | 67410 | -0.10 | 1110 | 36200 | 89 | -112 | 28.8 | 253 | -2.3 | 3 | 1.8 | 63250 | 8.7 | 17170 | 45 | 0.3 |
| 30-45.1306-111.0729-2-12- | 0-M36586 | 69400 | -0.08 | 914 | 33040 | 67 | -95 | 23.9 | 143 | 2.6 | 3 | 1.6 | 50000 | 6.7 | 14870 | 35 | 0.3 |
| 30-45.1767-110.9613-2-12- | 0-M36587 | 68060 | -0.09 | 1244 | 42060 | 70 | -103 | 27.6 | 178 | -2.0 | 2 | 1.7 | 50640 | 5.4 | 16340 | 33 | 0.2 |
| 30-45.1758-110.9598-2-15- | 0-M36588 | 68380 | -0.09 | 1253 | 49370 | 58 | -103 | 34.7 | 228 | -2.1 | 3 | 1.7 | 62910 | 5.6 | 11420 | 41 | 0.2 |
| 30-45.1705-110.8763-2-12- | 0-M36589 | 65820 | -0.10 | 1048 | 38520 | 86 | -110 | 17.9 | 158 | 2.8 | 4 | 1.5 | 38300 | 7.2 | 18650 | 41 | 0.3 |
| 30-45.0904-110.7735-2-11- | 0-M36590 | 63090 | -0.09 | 894 | 68580 | 78 | -97 | 15.3 | 147 | 14.3 | 3 | 1.5 | 32860 | 4.8 | 21240 | 42 | 0.6 |
| 30-45.0804-110.7627-2-15- | 0-M36591 | 46640 | -0.07 | 713 | 8250 | 95 | 174 | 2.7 | 55 | 3.9 | 6 | 1.6 | 17560 | 11.6 | 22090 | 51 | 0.5 |
| 30-45.1107-110.7862-2-15- | 0-M36592 | 60550 | -0.08 | 586 | 14670 | 47 | -88 | 17.7 | 150 | 4.5 | 4 | 1.4 | 33380 | 6.0 | 11820 | 36 | 0.3 |
| 30-45.0472-110.7540-2-15- | 0-M36593 | 60860 | -0.09 | 807 | 27250 | 72 | -99 | 17.3 | 163 | 3.8 | 4 | 1.7 | 36290 | 9.3 | 18190 | 37 | 0.3 |
| 30-45.0526-110.7626-2-15- | 0-M36594 | 71810 | -0.09 | 1089 | 29720 | 91 | -103 | 24.5 | 101 | 4.0 | 3 | 2.0 | 45750 | 4.9 | 18470 | 49 | 0.3 |
| 30-45.0650-110.7760-2-12- | 0-M36595 | 65070 | -0.08 | 1032 | 30060 | 82 | -88 | 16.3 | 117 | 3.7 | 3 | 1.8 | 38710 | 6.6 | 16130 | 36 | 0.3 |
| 30-45.0697-110.7775-2-15- | 0-M36596 | 53030 | -0.07 | 849 | 39460 | 52 | -73 | 8.9 | 64 | 4.1 | 4 | 1.5 | 24760 | 5.6 | 15910 | 34 | 0.2 |
| 30-45.0863-110.7837-2-15- | 0-M36597 | 57290 | -0.08 | 908 | 28310 | 62 | -76 | 8.6 | 90 | 4.6 | 4 | 1.4 | 27450 | 7.8 | 17140 | 31 | 0.4 |
| 30-45.1276-110.8077-2-12- | 0-M36598 | 61990 | -0.08 | 892 | 32800 | 66 | 124 | 15.8 | 120 | 2.1 | 3 | 1.3 | 34390 | 7.0 | 17530 | 36 | 0.3 |
| 30-45.1086-110.8191-2-12- | 0-M36599 | 51720 | -0.07 | 897 | 23690 | 68 | -73 | 11.8 | 116 | 3.5 | 3 | 1.5 | 32090 | 11.8 | 14800 | 39 | 0.3 |
| 30-45.0999-110.8207-2-12- | 0-M36600 | 50480 | -0.07 | 1022 | 24730 | 51 | -71 | 14.1 | 100 | 3.0 | 3 | 1.4 | 27250 | 6.6 | 11800 | 37 | 0.2 |
| 30-45.1459-110.8040-2-12- | 0-M36601 | 67030 | -0.09 | 1218 | 24450 | 62 | -106 | 17.7 | 171 | -1.9 | 2 | 1.4 | 35430 | 7.5 | 10540 | 37 | 0.2 |
| 30-45.1648-110.8343-2-12- | 0-M36602 | 71070 | -0.09 | 1063 | 32750 | 83 | -99 | 19.9 | 129 | 5.0 | 4 | 1.6 | 41440 | 5.6 | 19620 | 48 | 0.4 |
| 30-45.1666-110.8379-2-15- | 0-M36603 | 67750 | -0.09 | 765 | 23950 | 135 | 161 | 21.7 | 199 | 2.4 | 5 | 2.1 | 42740 | 10.9 | 18510 | 69 | 0.5 |
| 30-45.4882-110.5932-2-12- | 0-M36604 | 67630 | -0.09 | 844 | 35210 | 98 | -102 | 23.1 | 181 | 5.8 | 4 | 1.6 | 48350 | 11.7 | 14450 | 56 | 0.5 |
| 30-45.4815-110.5618-2-12- | 0-M36605 | 62160 | -0.11 | 455 | 32840 | 61 | 139 | 23.3 | 99 | -2.3 | 4 | 1.5 | 46400 | 10.6 | 6861 | 29 | 0.5 |
| 30-45.4781-110.5717-2-12- | 0-M36606 | 57310 | -0.08 | 813 | 31270 | 73 | -80 | 15.3 | 196 | 3.4 | 4 | 1.4 | 36240 | 11.3 | 13530 | 34 | 0.4 |
| 30-45.2661-110.5805-2-12- | 0-M36607 | 54920 | -0.08 | 1096 | 16340 | 80 | -102 | 9.6 | 86 | 6.5 | 4 | 1.8 | 32040 | 11.5 | 18790 | 43 | 0.4 |
| 30-45.2868-110.5744-2-12- | 0-M36608 | 67900 | -0.07 | 1256 | 25300 | 62 | -96 | 16.4 | 107 | 3.8 | 2 | 1.6 | 36770 | 7.4 | 20200 | 45 | 0.2 |
| 30-45.2958-110.5691-2-12- | 0-M36609 | 65350 | -0.10 | 850 | 19270 | 79 | -84 | 23.6 | 205 | 6.4 | 4 | 1.5 | 45030 | 7.9 | 16420 | 35 | 0.3 |

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

④

| 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 | |
| 30- | 45.1243- | 111.4773- | 2- | 12- | | 0-M36558 | 8866 | 780 | 12020 | 73 | -2 | 10.4 | 8.2 | -259 | 2 | -1 | 19.1 | 4267 | 84 | 5.2 | 79 | 0.257 |
| 30- | 45.1251- | 111.4783- | 2- | 12- | | 0-M36559 | 8224 | 671 | 13210 | 58 | -2 | 10.1 | 5.6 | -277 | 1 | -1 | 12.1 | 4129 | 94 | 3.5 | 114 | 0.289 |
| 30- | 45.1173- | 111.4832- | 2- | 12- | | 0-M36560 | 9846 | 781 | 12710 | -31 | -2 | 9.1 | 8.7 | -262 | -1 | -1 | 15.3 | 4005 | 89 | 4.6 | -35 | 0.294 |
| 30- | 45.1158- | 111.4978- | 2- | 11- | | 0-M36561 | 11090 | 766 | 12610 | 59 | -2 | 10.2 | 9.1 | -266 | -1 | -1 | 15.3 | 4596 | 103 | 4.5 | 124 | 0.288 |
| 30- | 45.1671- | 111.2472- | 2- | 12- | | 0-M36563 | 13250 | 616 | 7304 | 62 | -2 | 11.7 | 4.6 | 320 | -1 | -1 | 9.0 | 2539 | 109 | -1.4 | 96 | 0.289 |
| 30- | 45.2245- | 111.2372- | 2- | 12- | | 0-M36564 | 6884 | 775 | 16790 | -29 | -2 | 8.2 | 4.3 | -330 | -1 | -1 | 7.7 | 3545 | 80 | 1.9 | 109 | 0.299 |
| 30- | 45.2051- | 111.2431- | 2- | 15- | | 0-M36565 | 12600 | 710 | 1821 | 78 | -2 | 8.6 | 6.7 | -240 | -1 | -1 | 10.7 | 3031 | 90 | 4.0 | -39 | 0.346 |
| 30- | 45.1950- | 111.2312- | 2- | 12- | | 0-M36566 | 11440 | 477 | 10320 | 81 | -2 | 8.1 | 5.2 | 535 | -1 | -1 | 11.0 | 3309 | 77 | 3.3 | 73 | 0.300 |
| 30- | 45.1447- | 111.2423- | 2- | 12- | | 0-M36567 | 6897 | 561 | 9615 | 80 | -2 | 10.2 | 7.3 | -241 | -1 | -1 | 12.9 | 3260 | 92 | 4.9 | 109 | 0.264 |
| 30- | 45.1035- | 111.2228- | 2- | 15- | | 0-M36568 | | | | | | | | | | | | | | | | |
| 30- | 45.2186- | 110.9301- | 2- | 12- | | 0-M36569 | 7711 | 802 | 17690 | 47 | -3 | 11.0 | 6.1 | -409 | -1 | -1 | 12.7 | 4826 | 103 | 3.3 | 72 | 0.283 |
| 30- | 45.2180- | 110.9320- | 2- | 12- | | 0-M36570 | 8505 | 833 | 22390 | -34 | -2 | 9.9 | 5.6 | 534 | -1 | -1 | 8.2 | 4655 | 128 | 3.3 | -49 | 0.195 |
| 30- | 45.1988- | 110.9093- | 2- | 12- | | 0-M36571 | 13590 | 803 | 17620 | 53 | -2 | 15.7 | 6.2 | 581 | -1 | -1 | 11.5 | 6340 | 188 | 2.9 | 108 | 0.235 |
| 30- | 45.1915- | 110.9161- | 2- | 12- | | 0-M36572 | 11200 | 769 | 15900 | -34 | -2 | 13.5 | 7.1 | -294 | -1 | -1 | 15.7 | 3941 | 114 | 3.9 | -63 | 0.287 |
| 30- | 45.1905- | 110.9359- | 2- | 12- | | 0-M36573 | 15270 | 1054 | 18820 | -36 | -2 | 14.7 | 4.8 | -397 | -1 | -1 | 9.1 | 4379 | 156 | 2.7 | 135 | 0.253 |
| 30- | 45.1528- | 110.9611- | 2- | 12- | | 0-M36574 | 18960 | 815 | 16080 | 47 | -2 | 15.6 | 5.6 | -273 | -1 | -1 | 8.8 | 3728 | 157 | 4.0 | 85 | 0.250 |
| 30- | 45.1341- | 110.9650- | 2- | 12- | | 0-M36575 | 12530 | 675 | 15290 | 62 | -2 | 11.8 | 3.8 | -285 | -2 | -1 | 9.0 | 3727 | 101 | -2.3 | -93 | 0.344 |
| 30- | 45.1349- | 110.9636- | 2- | 12- | | 0-M36576 | 25910 | 1067 | 19030 | -38 | -3 | 24.8 | 4.7 | 683 | -1 | -1 | 5.4 | 4466 | 223 | -2.1 | 50 | 0.259 |
| 30- | 45.1630- | 110.9821- | 2- | 12- | | 0-M36577 | 19770 | 921 | 19760 | -37 | -2 | 21.0 | 5.0 | -356 | -1 | 1 | 8.5 | 7271 | 281 | -1.8 | 121 | 0.200 |
| 30- | 45.1600- | 110.9824- | 2- | 12- | | 0-M36578 | 9975 | 1824 | 18970 | -36 | -3 | 12.2 | 8.4 | -448 | -1 | -1 | 20.0 | 3784 | 137 | 4.5 | -22 | 0.145 |
| 30- | 45.1422- | 111.0131- | 2- | 12- | | 0-M36579 | 11620 | 690 | 13790 | -32 | -2 | 10.8 | 7.4 | -276 | -1 | -1 | 9.8 | 3055 | 103 | 3.0 | 84 | 0.704 |
| 30- | 45.1278- | 111.0203- | 2- | 12- | | 0-M36580 | 14260 | 565 | 21630 | 49 | -2 | 12.5 | 3.4 | 769 | -2 | -1 | 7.1 | 4077 | 108 | -1.9 | 98 | 0.366 |
| 30- | 45.1286- | 111.0191- | 2- | 12- | | 0-M36581 | 12630 | 714 | 23370 | -32 | -2 | 12.4 | 3.3 | 793 | -1 | -1 | 6.3 | 4461 | 127 | -1.7 | 111 | 0.381 |
| 30- | 45.1218- | 111.0358- | 2- | 12- | | 0-M36582 | 17380 | 803 | 22390 | -36 | -3 | 15.2 | 4.1 | 567 | -1 | -1 | 5.4 | 3285 | 134 | -2.2 | -45 | 0.296 |
| 30- | 45.1218- | 111.0345- | 2- | 12- | | 0-M36583 | 17110 | 846 | 21170 | -37 | -3 | 16.2 | 3.5 | 876 | -2 | -1 | 6.8 | 4079 | 144 | -2.1 | -117 | 0.265 |
| 30- | 45.1263- | 111.0401- | 2- | 12- | | 0-M36584 | 17540 | 775 | 20360 | -39 | -2 | 15.5 | 3.6 | 818 | -1 | -1 | 6.3 | 3612 | 128 | -1.9 | 108 | 0.286 |
| 30- | 45.1262- | 111.0509- | 2- | 12- | | 0-M36585 | 13910 | 892 | 17130 | 52 | -3 | 14.5 | 6.3 | 749 | -1 | -1 | 9.4 | 5636 | 203 | -2.3 | -54 | 0.298 |
| 30- | 45.1306- | 111.0729- | 2- | 12- | | 0-M36586 | 14310 | 707 | 17320 | -34 | -2 | 13.5 | 4.2 | 656 | -2 | -1 | 6.8 | 3399 | 164 | 2.7 | -47 | 0.250 |
| 30- | 45.1767- | 110.9613- | 2- | 12- | | 0-M36587 | 17170 | 1044 | 18130 | -33 | -2 | 18.2 | 4.4 | 647 | -1 | -1 | 7.5 | 4071 | 134 | -1.7 | 158 | 0.213 |
| 30- | 45.1758- | 110.9598- | 2- | 15- | | 0-M36588 | 24640 | 983 | 19360 | -35 | -2 | 22.6 | 4.1 | 806 | -1 | -1 | 6.9 | 4115 | 173 | 1.8 | 103 | 0.217 |
| 30- | 45.1705- | 110.8763- | 2- | 12- | | 0-M36589 | 20530 | 647 | 16110 | -40 | -3 | 11.8 | 6.0 | 522 | -1 | -1 | 11.6 | 3321 | 101 | 3.7 | -58 | 0.216 |
| 30- | 45.0904- | 110.7735- | 2- | 11- | | 0-M36590 | 15400 | 820 | 10690 | 115 | -2 | 9.7 | 5.6 | 815 | -1 | -1 | 16.3 | 2538 | 69 | -1.8 | -89 | 0.172 |
| 30- | 45.0804- | 110.7627- | 2- | 15- | | 0-M36591 | 4630 | 404 | 10470 | 58 | -2 | 5.9 | 6.6 | -227 | -1 | -1 | 14.5 | 2434 | 49 | 4.1 | 116 | 0.221 |
| 30- | 45.1107- | 110.7862- | 2- | 15- | | 0-M36592 | 9776 | 658 | 14060 | 40 | -2 | 10.1 | 3.8 | -276 | -1 | -1 | 9.6 | 3278 | 69 | 2.0 | 82 | 0.708 |
| 30- | 45.0472- | 110.7540- | 2- | 15- | | 0-M36593 | 13670 | 708 | 14440 | -32 | -2 | 11.0 | 5.2 | -304 | -1 | -1 | 9.7 | 3034 | 101 | 2.8 | 53 | 0.268 |
| 30- | 45.0526- | 110.7626- | 2- | 15- | | 0-M36594 | 15400 | 942 | 16140 | -36 | -2 | 13.6 | 5.7 | 724 | -1 | -1 | 10.1 | 2934 | 94 | 2.7 | -89 | 0.198 |
| 30- | 45.0650- | 110.7760- | 2- | 12- | | 0-M36595 | 14660 | 660 | 14030 | 56 | -2 | 11.9 | 5.9 | 600 | -1 | -1 | 10.2 | 3170 | 112 | 2.4 | 128 | 0.265 |
| 30- | 45.0697- | 110.7775- | 2- | 15- | | 0-M36596 | 12830 | 375 | 10530 | 69 | -2 | 7.5 | 4.7 | -214 | -1 | -1 | 8.0 | 2671 | 89 | 2.3 | 95 | 0.363 |
| 30- | 45.0863- | 110.7837- | 2- | 15- | | 0-M36597 | 11500 | 478 | 9518 | 47 | -2 | 8.0 | 6.7 | -253 | -1 | -1 | 10.1 | 2320 | 108 | 3.2 | 82 | 0.347 |
| 30- | 45.1276- | 110.8077- | 2- | 12- | | 0-M36598 | 12730 | 587 | 14420 | 49 | -2 | 11.2 | 4.6 | 417 | -1 | -1 | 8.3 | 2810 | 112 | 2.2 | 97 | 0.277 |
| 30- | 45.1086- | 110.8191- | 2- | 12- | | 0-M36599 | 11030 | 525 | 11540 | 44 | -2 | 9.7 | 5.0 | 433 | -1 | -1 | 8.9 | 2734 | 98 | 3.0 | -54 | 0.303 |
| 30- | 45.0999- | 110.8207- | 2- | 12- | | 0-M36600 | 10950 | 505 | 11830 | -26 | -2 | 9.7 | 3.9 | -217 | -1 | -1 | 7.4 | 2270 | 86 | 2.2 | 107 | 0.324 |
| 30- | 45.1459- | 110.8040- | 2- | 12- | | 0-M36601 | 11180 | 640 | 18100 | -36 | -2 | 10.1 | 4.5 | -317 | -1 | -1 | 8.9 | 3276 | 91 | 3.6 | 75 | 0.247 |
| 30- | 45.1648- | 110.8343- | 2- | 12- | | 0-M36602 | 13070 | 769 | 18240 | 73 | -2 | 13.9 | 5.9 | 448 | -1 | -1 | 11.4 | 2572 | 112 | 2.7 | -129 | 0.193 |
| 30- | 45.1666- | 110.8379- | 2- | 15- | | 0-M36603 | 11480 | 680 | 15780 | 69 | -2 | 13.5 | 9.3 | -279 | -1 | 1 | 26.7 | 3423 | 96 | 3.8 | 122 | 0.146 |
| 30- | 45.4882- | 110.5932- | 2- | 12- | | 0-M36604 | 15650 | 809 | 17090 | -33 | -2 | 14.5 | 7.1 | -304 | -1 | -1 | 15.7 | 4231 | 142 | 3.5 | 127 | 0.197 |
| 30- | 45.4815- | 110.5618- | 2- | 12- | | 0-M36605 | 14560 | 1153 | 19360 | 49 | -3 | 19.2 | 4.6 | -348 | -1 | -1 | 9.8 | 6885 | 137 | 3.2 | 41 | 0.255 |
| 30- | 45.4781- | 110.5717- | 2- | 12- | | 0-M36606 | 12810 | 660 | 12930 | 63 | -2 | 11.7 | 3.9 | 246 | -1 | -1 | 8.9 | 3681 | 112 | 3.1 | -83 | 0.326 |
| 30- | 45.2661- | 110.5805- | 2- | 12- | | 0-M36607 | 7496 | 1126 | 11070 | 69 | -2 | 7.9 | 5.3 | -389 | -1 | -1 | 10.9 | 2762 | 76 | 4.1 | 238 | 0.312 |
| 30- | 45.2868- | 110.5744- | 2- | 12- | | 0-M36608 | 9445 | 637 | 18620 | 54 | -2 | 9.7 | 4.4 | 530 | -1 | -1 | 9.8 | 4063 | 102 | 3.1 | 86 | 0.265 |
| 30- | 45.2958- | 110.5691- | 2- | 12- | | 0-M36609 | 12940 | 810 | 11980 | -36 | -3 | 12.9 | 5.5 | -294 | -1 | -1 | 9.0 | 3706 | 114 | -2.7 | 85 | 0.289 |

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

①

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER AND FIELD DATA | | | | | | | | | | | | | | | | | | | | | | | | | U CONCENTRATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | TIME SAMPLED | | | | | | | | | | | | | | | | | | | | | | | | |
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | DATE | HOUR | AIR TEMPERATURE | WATER TEMPERATURE | COMMENTS | SPECIAL MEASUREMENTS | pH | CONDUCTIVITY (µmho/cm) | SCINTILLOMETER (eU, ppm) | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm |
| 30- | 45.2738- | 110.5005- | 2- | 12- | | 0-M36610- | 09/28/76- | 12- | 13- | 5.0- | - | - | 5.7- | 150- | | 1- | 2- | 7- | 2- | 7- | 4- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -8- | - | - | - | - | 1.50 |
| 30- | 45.2840- | 110.5079- | 2- | 12- | | 0-M36611- | 09/28/76- | 13- | 25- | 5.5- | - | - | 6.0- | 440- | | 2- | 1- | 7- | 3- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 2.50 |
| 30- | 45.2871- | 110.5240- | 2- | 12- | | 0-M36612- | 09/28/76- | 13- | 10- | 5.5- | - | - | 5.7- | 270- | | 3- | 1- | 7- | 2- | 6- | 3- | 2- | 1- | 2- | 2- | 2- | 4- | 1- | -1- | - | - | - | - | 2.60 |
| 30- | 45.3214- | 110.5299- | 2- | 12- | | 0-M36613- | 09/28/76- | 14- | 13- | 10.5- | - | - | 6.1- | 300- | | 1- | 1- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -8- | - | - | - | - | 2.90 |
| 30- | 45.3183- | 110.5109- | 2- | 12- | | 0-M36614- | 09/28/76- | 14- | 12- | 6.5- | - | - | 5.7- | 170- | | 5- | 2- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 5.00 |
| 30- | 45.3193- | 110.5187- | 2- | 15- | | 0-M36615- | 09/28/76- | 14- | 11- | -C- | - | - | - | - | | 4- | 2- | 7- | 5- | 8- | -1- | -3- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | - | - | 4.10 |
| 30- | 45.3163- | 110.5579- | 2- | 12- | | 0-M36616- | 09/28/76- | 14- | 22- | 7.5- | - | - | 5.7- | 180- | | 5- | 1- | 2- | 2- | 1- | 4- | 2- | 1- | 2- | 3- | 3- | 3- | 1- | -8- | - | - | - | - | 2.50 |
| 30- | 45.3171- | 110.7011- | 2- | 12- | | 0-M36617- | 09/28/76- | 15- | 14- | 8.0- | - | - | 5.7- | 130- | | 0- | 1- | 7- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -8- | - | - | - | - | 5.00 |
| 30- | 45.3220- | 110.7120- | 2- | 12- | | 0-M36618- | 09/28/76- | 16- | 11- | 8.0- | C- | - | 5.5- | 130- | | 7- | 1- | 7- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -8- | - | - | - | - | 4.80 |
| 30- | 45.3395- | 110.6746- | 2- | 12- | | 0-M36619- | 09/28/76- | 16- | 22- | 15.0- | C- | - | 5.7- | 150- | | 5- | 4- | -3- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | - | 3.30 |
| 30- | 45.4885- | 110.5007- | 2- | 12- | | 0-M36620- | 09/29/76- | 9- | 5- | 5.0- | - | - | 5.4- | 50- | | 6- | 1- | 7- | 1- | 7- | 4- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 4.40 |
| 30- | 45.4873- | 110.5011- | 2- | 12- | | 0-M36621- | 09/29/76- | 9- | 5- | 5.5- | - | - | 5.2- | 55- | | 3- | 1- | 7- | 2- | 7- | 2- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 2.70 |
| 30- | 45.4621- | 110.5872- | 2- | 12- | | 0-M36622- | 09/29/76- | 10- | 8- | 9.0- | C- | - | 5.5- | 210- | | 14- | 1- | 7- | 2- | 7- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 12.30 |
| 30- | 45.4614- | 110.5972- | 2- | 12- | | 0-M36623- | 09/29/76- | 10- | 8- | -C- | - | - | - | - | | 11- | 1- | 7- | 2- | 7- | -1- | -2- | 2- | 2- | 3- | 1- | -8- | - | - | - | - | - | - | 9.00 |
| 30- | 45.4758- | 111.7425- | 2- | 15- | | 0-M36624- | 10/20/76- | 12- | 6- | - | - | - | - | - | | -4- | -4- | 6- | -1- | -2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | - | - | - | - | 4.50 |
| 30- | 45.4622- | 111.7306- | 2- | 12- | | 0-M36625- | 10/20/76- | 11- | 6- | 2.4- | - | - | 5.9- | 400- | | -4- | -3- | 6- | 3- | 3- | 1- | 2- | 3- | 3- | 2- | 1- | -3- | - | - | - | - | - | - | 8.70 |
| 30- | 45.0762- | 110.6347- | 2- | 12- | | 0-M36626- | 09/22/76- | 9- | 7- | 7.0- | - | - | 5.5- | 100- | | 16- | 3- | 7- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 2- | 3- | 3- | -2- | - | - | - | - | 2.70 |
| 30- | 45.0759- | 110.6176- | 2- | 12- | | 0-M36627- | 09/22/76- | 10- | 7- | 6.0- | - | - | 5.7- | 130- | | 6- | 3- | 7- | 3- | 4- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 3- | - | - | - | - | - | 3.30 |
| 30- | 45.0789- | 110.6277- | 2- | 12- | | 0-M36628- | 09/22/76- | 10- | 7- | 6.8- | - | - | 5.5- | 70- | | 16- | 1- | 6- | 4- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 3- | -1- | - | - | - | - | 3.70 |
| 30- | 45.0483- | 110.6287- | 2- | 12- | | 0-M36629- | 09/22/76- | 11- | 8- | 6.2- | - | - | 5.9- | 190- | | 16- | 3- | 7- | 3- | 4- | 2- | 2- | 1- | 2- | 1- | 3- | 2- | 3- | -1- | - | - | - | - | 2.50 |
| 30- | 45.0665- | 110.6792- | 2- | 12- | | 0-M36630- | 09/22/76- | 11- | 8- | 7.6- | - | - | 5.5- | 165- | | 9- | 1- | 1- | 3- | 4- | 3- | 2- | 1- | 2- | 3- | 3- | 2- | 4- | -1- | - | - | - | - | 5.20 |
| 30- | 45.0368- | 110.6645- | 2- | 12- | | 0-M36631- | 09/22/76- | 12- | 14- | 9.0- | - | - | 5.9- | 170- | | 24- | 1- | 5- | 4- | 4- | 4- | 2- | 1- | 2- | 3- | 2- | 4- | 4- | -8- | - | - | - | - | 3.20 |
| 30- | 45.0406- | 110.6997- | 2- | 15- | | 0-M36632- | 09/22/76- | 14- | 14- | - | - | - | - | - | | 6- | 3- | 8- | 3- | 8- | - | - | - | -3- | 2- | 3- | 4- | -8- | - | - | - | - | - | 2.70 |
| 30- | 45.0647- | 110.7420- | 2- | 12- | | 0-M36633- | 09/22/76- | 14- | 13- | 6.0- | - | - | 5.2- | 100- | | 6- | 1- | 4- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 2- | 4- | -1- | - | - | - | - | 3.30 |
| 30- | 45.0435- | 110.7468- | 2- | 12- | | 0-M36634- | 09/22/76- | 15- | 13- | 13.0- | - | - | 5.7- | 220- | | 3- | 1- | 6- | -6- | 2- | 2- | 1- | 2- | 4- | 4- | 1- | 4- | -1- | - | - | - | - | - | 2.90 |
| 30- | 45.4994- | 111.3058- | 2- | 12- | | 0-M36635- | 09/24/76- | 8- | 7- | 7.0- | - | - | 5.2- | 130- | | 40- | 2- | 4- | 3- | 4- | 3- | 3- | 1- | 2- | 3- | 3- | 3- | 1- | -3- | - | - | - | - | 4.90 |
| 30- | 45.5000- | 111.3200- | 2- | 12- | | 0-M36636- | 09/24/76- | 8- | 8- | 7.4- | - | - | 5.5- | 180- | | 16- | 2- | 4- | 3- | 4- | 3- | 3- | 1- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 8.90 |
| 30- | 45.4992- | 111.3433- | 2- | 12- | | 0-M36637- | 09/24/76- | 9- | 10- | 7.8- | - | - | 5.7- | 160- | | 16- | 1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 3- | 3- | 2- | 1- | -3- | - | - | - | - | 6.40 |
| 30- | 45.5000- | 111.3547- | 2- | 12- | | 0-M36638- | 09/24/76- | 9- | 11- | 8.8- | - | - | 5.9- | 380- | | 16- | 1- | 1- | 4- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 3.80 |
| 30- | 45.4953- | 111.3553- | 2- | 12- | | 0-M36639- | 09/24/76- | 10- | 12- | 8.0- | - | - | 5.5- | 90- | | 8- | 1- | 1- | 4- | 6- | 3- | 3- | 1- | 2- | 3- | 3- | 1- | 1- | -3- | - | - | - | - | 3.40 |
| 30- | 45.4978- | 111.3581- | 2- | 12- | | 0-M36640- | 09/24/76- | 10- | 12- | 8.0- | - | - | 6.1- | 500- | | 16- | 1- | 1- | 4- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 1- | 1- | -3- | - | - | - | - | 2.40 |
| 30- | 45.4967- | 111.4150- | 2- | 12- | | 0-M36641- | 09/24/76- | 10- | 18- | 12.0- | - | - | 5.9- | 275- | | 16- | 1- | 1- | 3- | 6- | 2- | 2- | 2- | 2- | 4- | 3- | 1- | 2- | -3- | - | - | - | - | 4.40 |
| 30- | 45.4931- | 111.2864- | 2- | 12- | | 0-M36642- | 09/24/76- | 12- | 18- | 8.0- | - | - | 5.9- | 280- | | 16- | 2- | 6- | 4- | 6- | 3- | 2- | 1- | 2- | 3- | 2- | 1- | 1- | -3- | - | - | - | - | 4.70 |
| 30- | 45.4969- | 111.3228- | 2- | 12- | | 0-M36643- | 09/24/76- | 12- | 20- | 8.6- | - | - | 5.5- | 80- | | 24- | 1- | 1- | 4- | 6- | 4- | 3- | 1- | 2- | 2- | 3- | 1- | 2- | -3- | - | - | - | - | 9.90 |
| 30- | 45.4825- | 111.3256- | 2- | 12- | | 0-M36644- | 09/24/76- | 13- | 20- | 8.6- | - | - | 5.5- | 160- | | 24- | 1- | 4- | 4- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 1- | 3- | -3- | - | - | - | - | 2.70 |
| 30- | 45.4906- | 111.3272- | 2- | 12- | | 0-M36645- | 09/24/76- | 13- | 18- | 8.2- | - | - | 5.5- | 80- | | 32- | 1- | 1- | 4- | 6- | 3- | 3- | 1- | 2- | 4- | 3- | 1- | 3- | -1- | - | - | - | - | 16.90 |
| 30- | 45.4744- | 111.2689- | 2- | 12- | | 0-M36646- | 09/24/76- | 13- | 15- | 12.0- | - | - | 6.1- | 300- | | 8- | 1- | 2- | 3- | 6- | 3- | 2- | 1- | 2- | 2- | 2- | 2- | 4- | -3- | - | - | - | - | 2.70 |
| 30- | 45.4534- | 111.2450- | 2- | 12- | | 0-M36647- | 09/24/76- | 14- | 15- | 8.0- | - | - | 5.2- | 80- | | 16- | 2- | 4- | 4- | 4- | 3- | 2- | 1- | 2- | 1- | 2- | 2- | 4- | -7- | - | - | - | - | 8.30 |
| 30- | 45.4476- | 111.2400- | 2- | 12- | | 0-M36648- | 09/24/76- | 14- | 15- | 7.8- | - | - | 5.5- | 60- | | 24- | 2- | 2- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 3- | 2- | 4- | -7- | - | - | - | - | 24.20 |
| 30- | 45.4017- | 111.2213- | 2- | 12- | | 0-M36649- | 09/24/76- | 14- | 16- | 9.0- | - | - | 5.5- | 46- | | 8- | 3- | 4- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 1- | 2- | -8- | - | - | - | - | 9.50 |
| 30- | 45.4422- | 111.2088- | 2- | 12- | | 0-M36650- | 09/24/76- | 15- | 14- | 8.8- | - | - | 5.9- | 290- | | 19- | 1- | 1- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 2- | 2- | -8- | - | - | - | - | 5.80 |
| 30- | 45.4400- | 111.1754- | 2- | 12- | | 0-M36651- | 09/24/76- | 15- | 14- | 8.4- | - | - | 5.9- | 170- | | 8- | 1- | 1- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 2- | 2- | 2- | -8- | - | - | - | - | 4.30 |
| 30- | 45.4367- | 111.1673- | 2- | 12- | | 0-M36652- | 09/24/76- | 13- | 12- | 9.0- | - | - | 5.7- | 95- | | 16- | 3- | 3- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 2- | 2- | -1- | - | - | - | - | 8.20 |
| 30- | 45.4342- | 111.1680- | 2- | 12- | | 0-M36653- | 09/24/76- | 16- | 13- | 10.0- | C- | - | 5.9- | 200- | | -3- | 7- | 4- | 5- | 2- | 2- | 1- | 2- | 1- | 3- | 3- | 2- | -8- | - | - | - | - | - | 1.70 |
| 30- | 45.4849- | 111.2646- | 2- | 12- | | 0-M36654- | 09/27/76- | 11- | 9- | 9.0- | C- | - | 5.9- | 250- | | -1- | 2- | 5- | 8- | 2- | 2- | 1- | 2- | 4- | 2- | 1- | 1- | -1- | - | - | - | - | - | 4.20 |
| 30- | 45.4339- | 111.1524- | 2- | 12- | | 0-M36655- | 09/27/76- | 12- | 18- | 7.2- | C- | - | 5.7- | 150- | | -1- | 1- | 4- | 4- | 3- | 3- | 1- | 2- | 2- | 2- | 2- | 1- | -3- | - | - | - | - | - | 3.10 |
| 30- | 45.4266- | 111.1305- | 2- | 12- | | 0-M36656- | 09/27/76- | 12- | 17- | 6.8- | C- | - | 5.9- | 95- | | -1- | 1- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 2- | 1- | -1- | - | - | - | - | - | 3.30 |
| 30- | 45.4241- | 111.1180- | 2- | 12- | | 0-M36657- | 09/27/76- | 13- | 16- | 6.0- | C- | - | 5.7- | 90- | | -3- | 4- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 2- | 1- | -1- | - | - | - | - | - | 3.60 |
| 30- | 45.4210- | 111.1182- | 2- | 12- | | 0-M36658- | 09/27/76- | 13- | 18- | 6.6- | C- | - | 5.5- | 120- | | -3- | 7- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 2- | 2- | 1- | -1- | - | - | - | - | - | 2.80 |
| 30- | 45.4196- | 111.0916- | 2- | 12- | | 0-M36659- | 09/27/76- | 13- | 18- | 6.0- | C- | - | 5.2- | 95- | | -3- | 4- | 3- | 4- | 3- | 2- | 1- | 2- | 1- | 3- | 2- | 1- | -1- | - | - | - | - | - | 3.50 |
| 30- | 45.4190- | 111.0710- | 2- | 12- | | 0-M36660- | 09/27/76- | 14- | 18- | 7.8- | C- | - | 5.5- | 70- | | -2- | 8- | 4- | 6- | 3- | 3- | 1- | 2- | 4- | 2- | 3- | 1- | -1- | - | - | - | - | - | 3.70 |

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

②

| DOE SAMPLE NUMBER | | | | | | LAB. SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE (Concentrations reported in weight parts per million (ppm)) | | | | | | | | | ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY (Concentrations in weight ppm) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Ag | Bi | Cd | Cu | Nb | Ni | Pb | Sn | W | Be | Li |
| 30- | 45.2738- | 110.5005- | 2- | 12- | 0- | M36610 | -5 | -5 | -5 | 31 | -20 | 49 | 14 | -10 | -15 | 2 | 21 |
| 30- | 45.2840- | 110.5079- | 2- | 12- | 0- | M36611 | -5 | -5 | -5 | 25 | -20 | -15 | 8 | -10 | -15 | 3 | 66 |
| 30- | 45.2871- | 110.5240- | 2- | 12- | 0- | M36612 | -5 | -5 | -5 | 32 | -20 | 32 | 25 | -10 | -15 | 3 | 47 |
| 30- | 45.3214- | 110.5299- | 2- | 12- | 0- | M36613 | -5 | -5 | -5 | 30 | -20 | 21 | 8 | -10 | -15 | 3 | 40 |
| 30- | 45.3183- | 110.5109- | 2- | 12- | 0- | M36614 | -5 | -5 | -5 | 23 | -20 | 47 | 5 | -10 | -15 | 1 | 27 |
| 30- | 45.3193- | 110.5187- | 2- | 15- | 0- | M36615 | -5 | -5 | -5 | 29 | -20 | 23 | 13 | -10 | -15 | 3 | 30 |
| 30- | 45.3163- | 110.5579- | 2- | 12- | 0- | M36616 | -5 | -5 | -5 | 26 | -20 | -15 | -5 | -10 | -15 | 2 | 42 |
| 30- | 45.3171- | 110.7011- | 2- | 12- | 0- | M36617 | -5 | 7 | -5 | 370 | -20 | -15 | 122 | -10 | -15 | 4 | 42 |
| 30- | 45.3220- | 110.7120- | 2- | 12- | 0- | M36618 | -5 | 7 | -5 | 352 | -20 | 20 | 117 | -10 | -15 | 3 | 49 |
| 30- | 45.3395- | 110.6746- | 2- | 12- | 0- | M36619 | -5 | -5 | -5 | 77 | -20 | 32 | 26 | -10 | -15 | 3 | 40 |
| 30- | 45.4885- | 110.5007- | 2- | 12- | 0- | M36620 | -5 | -5 | -5 | 83 | -20 | 71 | 11 | -10 | 24 | 2 | 28 |
| 30- | 45.4873- | 110.5011- | 2- | 12- | 0- | M36621 | -5 | -5 | -5 | 41 | -20 | 22 | 8 | -10 | -15 | 2 | 32 |
| 30- | 45.4621- | 110.5872- | 2- | 12- | 0- | M36622 | -5 | -5 | -5 | 47 | -20 | 52 | 20 | -10 | -15 | 2 | 40 |
| 30- | 45.4614- | 110.5972- | 2- | 12- | 0- | M36623 | -5 | -5 | -5 | 31 | -20 | 56 | 17 | -10 | -15 | 3 | 43 |
| 30- | 45.4758- | 111.7425- | 2- | 15- | 0- | M36624 | -5 | -5 | -5 | 25 | -20 | 19 | 25 | -10 | -15 | 3 | 22 |
| 30- | 45.4622- | 111.7306- | 2- | 12- | 0- | M36625 | 5 | -5 | -5 | 19 | -20 | 35 | 15 | -10 | -15 | 2 | 18 |
| 30- | 45.0762- | 110.6347- | 2- | 12- | 0- | M36626 | -5 | -5 | -5 | 29 | -20 | 37 | 8 | -10 | -15 | 2 | 21 |
| 30- | 45.0759- | 110.6176- | 2- | 12- | 0- | M36627 | -5 | -5 | -5 | 25 | -20 | 31 | 15 | -10 | -15 | 3 | 28 |
| 30- | 45.0789- | 110.6277- | 2- | 12- | 0- | M36628 | -5 | -5 | -5 | 25 | -20 | 31 | 6 | -10 | -15 | 2 | 31 |
| 30- | 45.0483- | 110.6287- | 2- | 12- | 0- | M36629 | -5 | -5 | -5 | 24 | -20 | -15 | 15 | -10 | -15 | 2 | 24 |
| 30- | 45.0665- | 110.6792- | 2- | 12- | 0- | M36630 | -5 | -5 | -5 | 32 | -20 | 29 | 13 | -10 | -15 | 2 | 27 |
| 30- | 45.0368- | 110.6645- | 2- | 12- | 0- | M36631 | -5 | -5 | -5 | 32 | -20 | 35 | 15 | -10 | 25 | 2 | 29 |
| 30- | 45.0406- | 110.6997- | 2- | 15- | 0- | M36632 | -5 | -5 | -5 | 31 | -20 | 47 | 18 | -10 | -15 | 3 | 35 |
| 30- | 45.0647- | 110.7420- | 2- | 12- | 0- | M36633 | -5 | -5 | -5 | 35 | -20 | 57 | 5 | -10 | -15 | 2 | 34 |
| 30- | 45.0435- | 110.7468- | 2- | 12- | 0- | M36634 | -5 | -5 | -5 | 24 | -20 | 36 | 13 | -10 | -15 | 2 | 32 |
| 30- | 45.4994- | 111.3058- | 2- | 12- | 0- | M36635 | -5 | -5 | -5 | 37 | -20 | 35 | 10 | -10 | -15 | 3 | 32 |
| 30- | 45.5000- | 111.3200- | 2- | 12- | 0- | M36636 | 5 | -5 | -5 | 21 | -20 | 57 | -5 | -10 | -15 | 2 | 19 |
| 30- | 45.4992- | 111.3433- | 2- | 12- | 0- | M36637 | 8 | -5 | -5 | 19 | 56 | 47 | -5 | -10 | -15 | 3 | 19 |
| 30- | 45.5000- | 111.3547- | 2- | 12- | 0- | M36638 | -5 | -5 | -5 | 30 | -20 | 25 | 10 | -10 | -15 | 2 | 24 |
| 30- | 45.4953- | 111.3553- | 2- | 12- | 0- | M36639 | -5 | -5 | -5 | 26 | -20 | 26 | 9 | -10 | -15 | 3 | 27 |
| 30- | 45.4978- | 111.3581- | 2- | 12- | 0- | M36640 | -5 | -5 | -5 | 20 | -20 | 33 | 11 | -10 | -15 | 2 | 22 |
| 30- | 45.4967- | 111.4150- | 2- | 12- | 0- | M36641 | -5 | -5 | -5 | 23 | -20 | 19 | 10 | -10 | -15 | 3 | 34 |
| 30- | 45.4931- | 111.2864- | 2- | 12- | 0- | M36642 | -5 | -5 | -5 | 22 | -20 | 33 | 14 | -10 | -15 | 3 | 39 |
| 30- | 45.4969- | 111.3228- | 2- | 12- | 0- | M36643 | 7 | -5 | -5 | 10 | -20 | 78 | -5 | -10 | -15 | 2 | 14 |
| 30- | 45.4825- | 111.3256- | 2- | 12- | 0- | M36644 | -5 | -5 | -5 | 44 | -20 | 65 | 8 | -10 | -15 | 2 | 48 |
| 30- | 45.4906- | 111.3272- | 2- | 12- | 0- | M36645 | 12 | 11 | -5 | -10 | 41 | 61 | -5 | -10 | 15 | 1 | 12 |
| 30- | 45.4744- | 111.2689- | 2- | 12- | 0- | M36646 | -5 | -5 | -5 | 27 | -20 | 23 | 17 | -10 | -15 | 2 | 26 |
| 30- | 45.4534- | 111.2450- | 2- | 12- | 0- | M36647 | -5 | -5 | -5 | 24 | -20 | 46 | 13 | -10 | -15 | 3 | 34 |
| 30- | 45.4476- | 111.2400- | 2- | 12- | 0- | M36648 | 10 | -5 | -5 | 30 | -20 | 97 | -5 | 18 | -15 | 2 | 8 |
| 30- | 45.4017- | 111.2213- | 2- | 12- | 0- | M36649 | -5 | -5 | -5 | 37 | -20 | 91 | -5 | -10 | -15 | 3 | 24 |
| 30- | 45.4422- | 111.2088- | 2- | 12- | 0- | M36650 | -5 | -5 | -5 | 36 | -20 | 47 | 6 | -10 | -15 | 2 | 21 |
| 30- | 45.4400- | 111.1754- | 2- | 12- | 0- | M36651 | -5 | -5 | -5 | 30 | -20 | 47 | 12 | -10 | 20 | 2 | 29 |
| 30- | 45.4367- | 111.1673- | 2- | 12- | 0- | M36652 | -5 | -5 | -5 | 52 | -20 | 72 | 30 | -10 | -15 | 2 | 27 |
| 30- | 45.4342- | 111.1680- | 2- | 12- | 0- | M36653 | -5 | -5 | -5 | 42 | -20 | 23 | 14 | -10 | -15 | 2 | 11 |
| 30- | 45.4849- | 111.2646- | 2- | 12- | 0- | M36654 | -5 | -5 | -5 | 35 | -20 | 80 | 20 | -10 | -15 | 2 | 28 |
| 30- | 45.4339- | 111.1524- | 2- | 12- | 0- | M36655 | -5 | -5 | -5 | 21 | -20 | 30 | 7 | -10 | -15 | 2 | 22 |
| 30- | 45.4266- | 111.1305- | 2- | 12- | 0- | M36656 | -5 | -5 | -5 | 30 | -20 | 23 | 10 | -10 | -15 | 3 | 25 |
| 30- | 45.4241- | 111.1180- | 2- | 12- | 0- | M36657 | -5 | -5 | -5 | 37 | -20 | 31 | 9 | -10 | -15 | 3 | 26 |
| 30- | 45.4210- | 111.1182- | 2- | 12- | 0- | M36658 | -5 | -5 | -5 | 39 | -20 | 25 | 5 | -10 | -15 | 3 | 25 |
| 30- | 45.4196- | 111.0916- | 2- | 12- | 0- | M36659 | -5 | -5 | -5 | 27 | -20 | 39 | 8 | -10 | -15 | 2 | 30 |
| 30- | 45.4190- | 111.0710- | 2- | 12- | 0- | M36660 | -5 | -5 | -5 | 34 | -20 | 95 | 7 | -10 | -15 | 2 | 28 |

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

③

| DOE SAMPLE NUMBER | | | | | | LAB. SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (Concentrations reported in weight parts per million (ppm)) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Al | Au | Ba | Ca | Ce | Cl | Co | Cr | Cs | Dy | Eu | Fe | Hf | K | La | Lu |
| 30-45.2738-110.5005-2-12- | | | | | | 0-M36610 | 76320 | -0.09 | 1487 | 37530 | 71 | -102 | 24.1 | 192 | 2.1 | 3 | 1.6 | 51220 | 4.9 | 16340 | 34 | 0.2 |
| 30-45.2840-110.5079-2-12- | | | | | | 0-M36611 | 58040 | -0.08 | 1199 | 67430 | 89 | 129 | 7.9 | 78 | 4.4 | 4 | 1.3 | 27620 | 9.0 | 23690 | 53 | 0.3 |
| 30-45.2871-110.5240-2-12- | | | | | | 0-M36612 | 71690 | -0.09 | 1051 | 11130 | 68 | -97 | 22.7 | 93 | 14.7 | 4 | 1.9 | 38240 | 7.4 | 20730 | 42 | 0.3 |
| 30-45.3214-110.5299-2-12- | | | | | | 0-M36613 | 53800 | -0.10 | 578 | 39830 | 54 | -84 | 13.5 | 99 | 4.3 | 3 | 1.8 | 29250 | 7.6 | 16000 | 27 | 0.5 |
| 30-45.3183-110.5109-2-12- | | | | | | 0-M36614 | 52980 | -0.09 | 802 | 54540 | 126 | 169 | 26.9 | 254 | -1.9 | 5 | 1.8 | 66280 | 32.8 | 14010 | 67 | 0.5 |
| 30-45.3193-110.5187-2-15- | | | | | | 0-M36615 | 60800 | -0.10 | 1007 | 34290 | 80 | -108 | 10.3 | 112 | 6.2 | 4 | 1.8 | 32400 | 10.0 | 16150 | 37 | 0.3 |
| 30-45.3163-110.5579-2-12- | | | | | | 0-M36616 | 58710 | -0.08 | 690 | 60010 | 63 | -90 | 20.9 | 157 | -1.6 | 3 | 1.4 | 39200 | 10.6 | 14860 | 43 | 0.3 |
| 30-45.3171-110.7011-2-12- | | | | | | 0-M36617 | 66540 | -0.10 | 1293 | 8010 | 111 | -113 | 16.8 | 43 | 5.1 | 4 | 1.9 | 37390 | 8.6 | 30010 | 56 | 0.4 |
| 30-45.3220-110.7120-2-12- | | | | | | 0-M36618 | 68070 | -0.08 | 1255 | 8809 | 111 | -102 | 15.3 | 49 | 5.7 | 4 | 1.8 | 38630 | 9.0 | 28790 | 62 | 0.4 |
| 30-45.3395-110.6746-2-12- | | | | | | 0-M36619 | 67800 | -0.09 | 1018 | 19560 | 82 | -108 | 10.1 | 91 | 4.3 | 5 | 1.7 | 29240 | 7.4 | 17620 | 50 | 0.3 |
| 30-45.4885-110.5007-2-12- | | | | | | 0-M36620 | 64360 | -0.12 | -215 | 38110 | 58 | 175 | 35.3 | 137 | -2.4 | 4 | 1.8 | 68570 | 6.5 | 12000 | 34 | 0.3 |
| 30-45.4873-110.5011-2-12- | | | | | | 0-M36621 | 60440 | -0.09 | 1007 | 27790 | 70 | -83 | 13.5 | 170 | 4.0 | 4 | 1.7 | 35220 | 9.0 | 19530 | 38 | 0.3 |
| 30-45.4621-110.5872-2-12- | | | | | | 0-M36622 | 62210 | -0.10 | 678 | 20910 | 94 | -97 | 19.7 | 140 | 4.4 | 5 | 1.8 | 37430 | 8.7 | 15130 | 50 | 0.4 |
| 30-45.4614-110.5972-2-12- | | | | | | 0-M36623 | 64050 | -0.10 | 588 | 23600 | 85 | -114 | 16.1 | 147 | 4.7 | 4 | 1.7 | 41640 | 11.7 | 12250 | 46 | 0.5 |
| 30-45.4758-111.7425-2-15- | | | | | | 0-M36624 | 55200 | 0.08 | 514 | 30080 | 106 | -95 | 15.2 | 108 | 2.9 | 7 | 2.0 | 40930 | 16.4 | 17120 | 62 | 0.7 |
| 30-45.4622-111.7306-2-12- | | | | | | 0-M36625 | 49440 | 1.51 | 582 | 18070 | 85 | -146 | 15.7 | 177 | -2.0 | 4 | 1.8 | 68610 | 26.7 | 13890 | 61 | 0.7 |
| 30-45.0762-110.6347-2-12- | | | | | | 0-M36626 | 66580 | -0.10 | 1317 | 30270 | 83 | -98 | 22.5 | 152 | 7.6 | 3 | 1.8 | 49660 | 7.6 | 15970 | 47 | 0.4 |
| 30-45.0759-110.6176-2-12- | | | | | | 0-M36627 | 62770 | -0.08 | 924 | 22750 | 84 | -91 | 12.6 | 107 | 5.6 | 4 | 1.7 | 34150 | 10.8 | 17060 | 46 | 0.4 |
| 30-45.0789-110.6277-2-12- | | | | | | 0-M36628 | 53640 | -0.05 | 520 | 14350 | 59 | 94 | 12.7 | 142 | 4.3 | 4 | 1.2 | 33510 | 14.4 | 12980 | 30 | 0.6 |
| 30-45.0483-110.6287-2-12- | | | | | | 0-M36629 | 80340 | -0.09 | 1272 | 28250 | 72 | -110 | 33.9 | 72 | 5.5 | 3 | 2.9 | 43510 | 5.0 | 17350 | 51 | 0.3 |
| 30-45.0665-110.6792-2-12- | | | | | | 0-M36630 | 56080 | -0.09 | 813 | 28490 | 76 | -86 | 13.2 | 133 | 3.9 | 4 | 1.7 | 31320 | 14.7 | 15760 | 41 | 0.6 |
| 30-45.0368-110.6645-2-12- | | | | | | 0-M36631 | 67560 | -0.09 | 1205 | 26960 | 81 | -96 | 20.7 | 150 | 4.5 | 4 | 1.9 | 49440 | 8.3 | 17480 | 44 | 0.4 |
| 30-45.0406-110.6997-2-15- | | | | | | 0-M36632 | 65610 | -0.09 | 726 | 24120 | 63 | -107 | 19.8 | 112 | 8.7 | 4 | 1.5 | 39620 | 6.4 | 16860 | 34 | 0.3 |
| 30-45.0647-110.7420-2-12- | | | | | | 0-M36633 | 59970 | -0.08 | 358 | 15570 | 35 | -95 | 15.1 | 159 | 2.5 | 3 | 1.1 | 29410 | 8.1 | 8701 | 25 | 0.4 |
| 30-45.0435-110.7468-2-12- | | | | | | 0-M36634 | 58670 | -0.09 | 767 | 30490 | 68 | -78 | 13.8 | 167 | 3.8 | 4 | 1.4 | 30060 | 9.3 | 15220 | 31 | 0.4 |
| 30-45.4994-111.3058-2-12- | | | | | | 0-M36635 | 61410 | -0.09 | 801 | 29690 | 81 | 144 | 16.9 | 119 | 3.1 | 5 | 1.8 | 40510 | 17.7 | 14830 | 42 | 0.6 |
| 30-45.5000-111.3200-2-12- | | | | | | 0-M36636 | 64300 | -0.13 | -259 | 37190 | 94 | -149 | 31.9 | 241 | -2.5 | 11 | 2.8 | 94220 | 57.1 | -6484 | 59 | 1.8 |
| 30-45.4992-111.3433-2-12- | | | | | | 0-M36637 | 53100 | -0.10 | 512 | 33390 | 96 | 197 | 26.5 | 168 | 3.1 | 11 | 3.3 | 72210 | 62.2 | 7431 | 50 | 1.6 |
| 30-45.5000-111.3547-2-12- | | | | | | 0-M36638 | 58420 | -0.09 | 907 | 15130 | 77 | 138 | 11.9 | 88 | 3.6 | 5 | 1.7 | 27260 | 14.4 | 15720 | 41 | 0.7 |
| 30-45.4953-111.3553-2-12- | | | | | | 0-M36639 | 61150 | -0.09 | 739 | 30070 | 77 | 98 | 19.5 | 171 | 3.3 | 5 | 1.8 | 43850 | 15.8 | 16180 | 43 | 0.6 |
| 30-45.4978-111.3581-2-12- | | | | | | 0-M36640 | 70210 | -0.10 | 1166 | 36330 | 60 | -110 | 20.3 | 192 | -2.0 | 3 | 1.9 | 44150 | 6.4 | 16130 | 43 | 0.3 |
| 30-45.4967-111.4150-2-12- | | | | | | 0-M36641 | 59570 | -0.08 | 716 | 20560 | 85 | 81 | 12.3 | 89 | 6.6 | 5 | 1.7 | 26910 | 20.7 | 16630 | 50 | 0.6 |
| 30-45.4931-111.2864-2-12- | | | | | | 0-M36642 | 64500 | -0.10 | 716 | 27940 | 91 | 261 | 15.0 | 127 | 3.6 | 7 | 2.0 | 39100 | 20.4 | 18800 | 39 | 1.0 |
| 30-45.4969-111.3228-2-12- | | | | | | 0-M36643 | 53310 | -0.11 | -190 | 35570 | 149 | -116 | 29.2 | 281 | -2.2 | 12 | 2.9 | 81410 | 70.9 | 7627 | 82 | 1.7 |
| 30-45.4825-111.3256-2-12- | | | | | | 0-M36644 | 60110 | -0.09 | 556 | 36880 | 80 | 164 | 18.2 | 194 | 5.4 | 5 | 1.6 | 44390 | 10.1 | 24660 | 41 | 0.4 |
| 30-45.4906-111.3272-2-12- | | | | | | 0-M36645 | 50880 | -0.13 | -250 | 36120 | 241 | -144 | 28.9 | 369 | -2.5 | 18 | 5.0 | 100800 | 132.1 | -6143 | 122 | 3.1 |
| 30-45.4744-111.2689-2-12- | | | | | | 0-M36646 | 51340 | -0.07 | 402 | 78780 | 61 | -68 | 21.1 | 119 | 4.6 | 4 | 2.1 | 29500 | 8.7 | 20640 | 38 | 0.4 |
| 30-45.4534-111.2450-2-12- | | | | | | 0-M36647 | 58810 | -0.10 | 644 | 24360 | 126 | -85 | 15.7 | 131 | 4.6 | 6 | 2.4 | 35990 | 15.0 | 17800 | 68 | 0.5 |
| 30-45.4476-111.2400-2-12- | | | | | | 0-M36648 | 46860 | 0.21 | 427 | 29830 | 690 | -111 | 34.2 | 275 | -2.4 | 18 | 11.2 | 160100 | 44.1 | 7848 | 367 | 1.3 |
| 30-45.4017-111.2213-2-12- | | | | | | 0-M36649 | 60790 | -0.10 | 602 | 35090 | 68 | -118 | 22.2 | 258 | -1.9 | 4 | 1.8 | 46440 | 10.0 | 11970 | 41 | 0.4 |
| 30-45.4422-111.2088-2-12- | | | | | | 0-M36650 | 49780 | -0.08 | 535 | 27270 | 71 | -78 | 13.2 | 110 | 3.6 | 5 | 1.6 | 33210 | 15.8 | 13250 | 45 | 0.5 |
| 30-45.4400-111.1754-2-12- | | | | | | 0-M36651 | 52960 | -0.11 | 572 | 38220 | 97 | 144 | 16.8 | 150 | 3.9 | 5 | 1.7 | 38830 | 11.0 | 17610 | 53 | 0.5 |
| 30-45.4367-111.1673-2-12- | | | | | | 0-M36652 | 60610 | -0.11 | 505 | 25270 | 69 | 165 | 30.4 | 229 | 4.2 | 5 | 1.8 | 50820 | 9.0 | 14720 | 50 | 0.5 |
| 30-45.4342-111.1680-2-12- | | | | | | 0-M36653 | 80060 | -0.11 | 1179 | 32170 | 71 | -104 | 23.3 | 137 | 2.3 | 5 | 2.2 | 56370 | 5.5 | 13090 | 36 | 0.3 |
| 30-45.4849-111.2646-2-12- | | | | | | 0-M36654 | 59510 | -0.08 | 729 | 29070 | 83 | 312 | 22.1 | 238 | 4.1 | 4 | 2.1 | 55690 | 13.7 | 17390 | 40 | 0.4 |
| 30-45.4339-111.1524-2-12- | | | | | | 0-M36655 | 54060 | -0.08 | 708 | 25950 | 58 | -84 | 17.0 | 123 | 2.9 | 3 | 1.4 | 33610 | 10.5 | 16950 | 40 | 0.4 |
| 30-45.4266-111.1305-2-12- | | | | | | 0-M36656 | 59890 | -0.10 | 964 | 25570 | 74 | -86 | 27.8 | 141 | 9.5 | 4 | 2.4 | 38250 | 11.0 | 15970 | 38 | 0.4 |
| 30-45.4241-111.1180-2-12- | | | | | | 0-M36657 | 56660 | -0.09 | 771 | 27350 | 63 | -87 | 16.4 | 137 | 4.5 | 4 | 1.5 | 36630 | 9.8 | 14620 | 38 | 0.4 |
| 30-45.4210-111.1182-2-12- | | | | | | 0-M36658 | 62970 | -0.10 | 1077 | 27330 | 74 | -117 | 22.1 | 245 | 4.5 | 4 | 2.0 | 50060 | 10.2 | 18300 | 43 | 0.5 |
| 30-45.4196-111.0916-2-12- | | | | | | 0-M36659 | 55970 | -0.08 | 531 | 37590 | 73 | -89 | 16.8 | 185 | 3.2 | 4 | 1.6 | 37040 | 10.9 | 17900 | 36 | 0.5 |
| 30-45.4190-111.0710-2-12- | | | | | | 0-M36660 | 67440 | -0.13 | 953 | 35140 | 67 | -115 | 30.9 | 307 | -2.5 | 4 | 1.9 | 56490 | 5.8 | 14650 | 32 | 0.3 |

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

(4)

| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | LAB. SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) — Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | U/Th RATIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mg | Mn | Na | Rb | Sb | Sc | Sm | Sr | Ta | Tb | Th | Ti | V | Yb | Zn | |
| 30-45.2738-110.5005-2-12- | 0-M36610 | 16550 | 854 | 20380 | -34 | -2 | 14.9 | 3.7 | 652 | -1 | -1 | 6.8 | 3902 | 138 | -1.7 | -39 | 0.221 |
| 30-45.2840-110.5079-2-12- | 0-M36611 | 17140 | 668 | 11250 | 68 | -2 | 7.5 | 5.1 | -325 | -1 | -1 | 13.8 | 2915 | 52 | 3.3 | 101 | 0.181 |
| 30-45.2871-110.5240-2-12- | 0-M36612 | 7016 | 939 | 13920 | 83 | -1 | 10.0 | 6.0 | -315 | -1 | -1 | 11.5 | 4091 | 79 | 2.9 | -131 | 0.226 |
| 30-45.3214-110.5299-2-12- | 0-M36613 | 16170 | 621 | 11730 | -34 | -3 | 11.2 | 4.7 | -277 | -1 | -1 | 8.8 | 2891 | 88 | -1.9 | -45 | 0.330 |
| 30-45.3183-110.5109-2-12- | 0-M36614 | 27240 | 907 | 13100 | -35 | -2 | 14.6 | 8.3 | -285 | -1 | -1 | 31.9 | 6089 | 178 | 7.4 | 94 | 0.157 |
| 30-45.3193-110.5187-2-15- | 0-M36615 | 12740 | 499 | 15420 | -34 | -2 | 9.9 | 5.0 | -321 | -1 | -1 | 12.6 | 3821 | 79 | 3.0 | -51 | 0.325 |
| 30-45.3163-110.5579-2-12- | 0-M36616 | 30080 | 651 | 14400 | 53 | -2 | 11.7 | 5.0 | -263 | -1 | -1 | 12.9 | 3891 | 94 | 3.0 | 76 | 0.194 |
| 30-45.3171-110.7011-2-12- | 0-M36617 | 4033 | 1386 | 15770 | 107 | -2 | 6.8 | 7.6 | -390 | -1 | -1 | 14.5 | 2169 | 40 | 3.2 | 373 | 0.345 |
| 30-45.3220-110.7120-2-12- | 0-M36618 | 4473 | 979 | 16750 | 104 | -2 | 7.7 | 6.4 | -326 | -1 | -1 | 15.6 | 2754 | 43 | 2.5 | 294 | 0.308 |
| 30-45.3395-110.6746-2-12- | 0-M36619 | 7323 | 437 | 16440 | 65 | -2 | 9.2 | 6.0 | -308 | -1 | -1 | 12.7 | 3593 | 75 | 2.5 | 130 | 0.260 |
| 30-45.4885-110.5007-2-12- | 0-M36620 | 21020 | 1473 | 17840 | -41 | -3 | 23.8 | 4.7 | -414 | -1 | -1 | 9.6 | 5376 | 168 | 3.1 | -55 | 0.458 |
| 30-45.4873-110.5011-2-12- | 0-M36621 | 12660 | 711 | 12830 | 50 | -2 | 11.0 | 5.5 | 508 | -1 | -1 | 8.7 | 3761 | 112 | 3.3 | -16 | 0.310 |
| 30-45.4621-110.5872-2-12- | 0-M36622 | 10730 | 684 | 15180 | -37 | -3 | 13.0 | 8.3 | -295 | -1 | -1 | 15.1 | 3350 | 96 | -2.4 | 131 | 0.815 |
| 30-45.4614-110.5972-2-12- | 0-M36623 | 11850 | 761 | 18780 | 57 | -3 | 15.9 | 5.9 | -346 | -1 | -1 | 16.8 | 3980 | 104 | 6.4 | 68 | 0.536 |
| 30-45.4758-111.7425-2-15- | 0-M36624 | 8500 | 892 | 17060 | 39 | -2 | 12.2 | 8.2 | -281 | 2 | 2 | 23.9 | 3726 | 91 | 5.1 | -35 | 0.188 |
| 30-45.4622-111.7306-2-12- | 0-M36625 | 10480 | 2434 | 16650 | -37 | -3 | 10.6 | 9.9 | -509 | -2 | -1 | 31.8 | 4392 | 174 | 5.6 | -86 | 0.274 |
| 30-45.0762-110.6347-2-12- | 0-M36626 | 13440 | 925 | 15460 | -37 | -3 | 14.1 | 5.3 | 634 | -1 | -1 | 8.6 | 4893 | 127 | 2.3 | 99 | 0.314 |
| 30-45.0759-110.6176-2-12- | 0-M36627 | 9105 | 641 | 13380 | 76 | -2 | 10.0 | 5.8 | -293 | -1 | -1 | 13.5 | 3443 | 101 | 3.4 | 97 | 0.244 |
| 30-45.0789-110.6277-2-12- | 0-M36628 | 7325 | 793 | 15300 | 50 | -1 | 9.7 | 4.5 | -284 | -1 | -1 | 10.6 | 5095 | 69 | 3.8 | -49 | 0.349 |
| 30-45.0483-110.6287-2-12- | 0-M36629 | 6727 | 934 | 19280 | -34 | -2 | 11.0 | 4.7 | -327 | -1 | -1 | 9.7 | 5008 | 96 | 2.7 | 114 | 0.258 |
| 30-45.0665-110.6792-2-12- | 0-M36630 | 11450 | 675 | 13590 | -33 | -2 | 10.1 | 5.6 | -274 | -1 | -1 | 13.3 | 4120 | 90 | 3.1 | -43 | 0.391 |
| 30-45.0368-110.6645-2-12- | 0-M36631 | 9566 | 904 | 16680 | 35 | -2 | 12.9 | 5.1 | 803 | -1 | -1 | 11.4 | 5658 | 113 | 3.2 | 117 | 0.281 |
| 30-45.0406-110.6997-2-15- | 0-M36632 | 10450 | 842 | 14780 | 65 | -2 | 12.2 | 5.2 | -347 | -1 | -1 | 11.8 | 4341 | 92 | 3.6 | -68 | 0.229 |
| 30-45.0647-110.7420-2-12- | 0-M36633 | 8772 | 589 | 18030 | -28 | -2 | 9.7 | 3.6 | -264 | -1 | -1 | 9.2 | 2763 | 71 | 3.0 | -48 | 0.359 |
| 30-45.0435-110.7468-2-12- | 0-M36634 | 14580 | 581 | 12310 | -29 | -2 | 10.2 | 5.8 | -246 | -1 | -1 | 10.4 | 3100 | 110 | 4.3 | -35 | 0.279 |
| 30-45.4994-111.3058-2-12- | 0-M36635 | 11010 | 779 | 16670 | 71 | -2 | 12.9 | 8.5 | -261 | -1 | -1 | 17.1 | 3989 | 105 | 4.7 | 90 | 0.287 |
| 30-45.5000-111.3200-2-12- | 0-M36636 | 18410 | 2233 | 14240 | -42 | -3 | 34.6 | 10.2 | -499 | -2 | 2 | 22.5 | 8107 | 132 | 12.8 | -55 | 0.396 |
| 30-45.4992-111.3433-2-12- | 0-M36637 | 11560 | 1584 | 15110 | -34 | -3 | 22.2 | 11.7 | -353 | 4 | 3 | 16.6 | 11480 | 147 | 13.2 | 143 | 0.386 |
| 30-45.5000-111.3547-2-12- | 0-M36638 | 7865 | 631 | 14280 | -30 | -2 | 8.2 | 6.6 | 332 | -1 | -1 | 12.0 | 3884 | 70 | 4.1 | -26 | 0.317 |
| 30-45.4953-111.3553-2-12- | 0-M36639 | 15120 | 1025 | 14460 | 60 | -2 | 13.8 | 5.9 | -297 | -1 | -1 | 12.4 | 4545 | 108 | 3.8 | 111 | 0.274 |
| 30-45.4978-111.3581-2-12- | 0-M36640 | 16330 | 849 | 17160 | -34 | -2 | 15.6 | 4.5 | 649 | -1 | -1 | 7.6 | 3603 | 126 | -1.8 | 97 | 0.316 |
| 30-45.4967-111.4150-2-12- | 0-M36641 | 6787 | 629 | 13500 | 92 | -2 | 8.7 | 7.5 | -255 | -1 | -1 | 17.0 | 3430 | 65 | 5.3 | 100 | 0.259 |
| 30-45.4931-111.2864-2-12- | 0-M36642 | 10950 | 800 | 20180 | 76 | -2 | 13.6 | 6.3 | 402 | -1 | -1 | 16.8 | 4747 | 95 | 6.4 | -56 | 0.280 |
| 30-45.4969-111.3228-2-12- | 0-M36643 | 13120 | 1666 | 16710 | 73 | -3 | 27.5 | 14.3 | -363 | 3 | 3 | 27.5 | 11400 | 138 | 13.0 | -47 | 0.360 |
| 30-45.4825-111.3256-2-12- | 0-M36644 | 15260 | 931 | 9921 | 108 | -2 | 15.3 | 7.2 | -342 | -2 | -1 | 14.7 | 4321 | 103 | 3.7 | -48 | 0.184 |
| 30-45.4906-111.3272-2-12- | 0-M36645 | 13920 | 2022 | 14900 | -41 | -3 | 30.2 | 21.5 | -476 | 4 | 4 | 43.6 | 15580 | 172 | 23.1 | 163 | 0.388 |
| 30-45.4744-111.2689-2-12- | 0-M36646 | 21030 | 536 | 7058 | 60 | -2 | 9.3 | 5.3 | -221 | -1 | -1 | 12.0 | 2964 | 72 | 4.0 | 86 | 0.225 |
| 30-45.4534-111.2450-2-12- | 0-M36647 | 10220 | 778 | 13780 | 49 | -3 | 12.0 | 12.5 | -276 | -1 | -1 | 23.1 | 4415 | 100 | 5.9 | -39 | 0.359 |
| 30-45.4476-111.2400-2-12- | 0-M36648 | 13390 | 1540 | 15750 | -51 | -3 | 16.9 | 52.0 | -361 | -2 | 4 | 133.4 | 4961 | 110 | 14.0 | -56 | 0.181 |
| 30-45.4017-111.2213-2-12- | 0-M36649 | 16640 | 923 | 20120 | -33 | -2 | 14.9 | 5.4 | -358 | -1 | -1 | 10.8 | 4291 | 109 | -1.8 | 69 | 0.880 |
| 30-45.4422-111.2088-2-12- | 0-M36650 | 10470 | 685 | 9058 | 56 | -2 | 9.9 | 5.3 | -265 | -1 | -1 | 12.9 | 3397 | 91 | 3.7 | | 0.450 |
| 30-45.4400-111.1754-2-12- | 0-M36651 | 18200 | 1001 | 8554 | 57 | -3 | 11.4 | 8.0 | -312 | -1 | -1 | 16.3 | 3635 | 103 | 3.6 | 102 | 0.264 |
| 30-45.4367-111.1673-2-12- | 0-M36652 | 16890 | 938 | 14400 | 67 | -3 | 16.4 | 6.8 | -311 | -1 | -1 | 15.8 | 3829 | 115 | 4.0 | 116 | 0.519 |
| 30-45.4342-111.1680-2-12- | 0-M36653 | 13020 | 853 | 12180 | 60 | -3 | 14.6 | 6.1 | 613 | -2 | -1 | 10.1 | 5329 | 147 | -2.2 | -60 | 0.168 |
| 30-45.4849-111.2646-2-12- | 0-M36654 | 17970 | 895 | 27580 | 50 | -2 | 18.5 | 6.3 | -348 | -1 | -1 | 9.5 | 3991 | 113 | 4.1 | 148 | 0.442 |
| 30-45.4339-111.1524-2-12- | 0-M36655 | 13600 | 674 | 12270 | -29 | -2 | 11.2 | 4.7 | -260 | -1 | -1 | 9.2 | 3406 | 94 | 3.3 | 79 | 0.337 |
| 30-45.4266-111.1305-2-12- | 0-M36656 | 11390 | 840 | 12230 | -34 | -3 | 11.2 | 6.3 | -290 | -1 | -1 | 11.9 | 3927 | 116 | 3.4 | 98 | 0.277 |
| 30-45.4241-111.1180-2-12- | 0-M36657 | 13380 | 780 | 14190 | 44 | -2 | 13.2 | 5.3 | -269 | 1 | -1 | 11.0 | 3725 | 99 | 3.8 | -37 | 0.327 |
| 30-45.4210-111.1182-2-12- | 0-M36658 | 11280 | 1119 | 15720 | 68 | -3 | 13.7 | 6.5 | -398 | -1 | -1 | 10.7 | 5659 | 132 | 5.2 | 143 | 0.262 |
| 30-45.4196-111.0916-2-12- | 0-M36659 | 14030 | 813 | 12820 | -28 | -2 | 12.7 | 5.5 | -282 | -1 | -1 | 10.6 | 3364 | 109 | 3.4 | -37 | 0.330 |
| 30-45.4190-111.0710-2-12- | 0-M36660 | 20330 | 1321 | 17820 | -41 | -3 | 19.4 | 5.5 | -382 | -1 | -1 | 9.6 | 4845 | 143 | 3.5 | -53 | 0.385 |

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

(1)

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER AND FIELD DATA | | | | | | | | | | | | | | | | | | | | | | | | | U CONCENTRATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | TIME SAMPLED DATE | TIME SAMPLED HOUR | AIR TEMPERATURE | WATER TEMPERATURE | COMMENTS | SPECIAL MEASUREMENTS | pH | CONDUCTIVITY (umho/cm) | SCINTILLOMETER (eU,ppm) | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm |
| 30- | 45.4135- | 111.0573- | 2- | 15- | | 0-M36661- | 09/27/76- | 14- | 18- | -C- | - | - | - | - | | -3- | 4- | 3- | 4- | - | - | - | - | - | - | - | -1- | 3- | 4- | 1- | - | - | - | - | 3.50 |
| 30- | 45.4086- | 111.0373- | 2- | 12- | | 0-M36662- | 09/27/76- | 14- | 16- | 6.8-C- | - | - | 5.2- | 45- | | -3- | 4- | 4- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 1- | 1- | -1- | - | - | - | - | - | 1.40 |
| 30- | 45.4251- | 111.1476- | 2- | 12- | | 0-M36663- | 09/27/76- | 15- | 16- | 8.4-C- | - | - | 5.7- | 220- | | -3- | 7- | 4- | 6- | 2- | 2- | 1- | 2- | 1- | 3- | 1- | 1- | -1- | - | - | - | - | - | 1.60 |
| 30- | 45.3823- | 111.1768- | 2- | 12- | | 0-M36664- | 09/27/76- | 16- | 15- | 8.8-C- | - | - | 5.9- | 180- | | -3- | 5- | 4- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | - | 3.20 |
| 30- | 45.3727- | 111.1725- | 2- | 12- | | 0-M36665- | 09/27/76- | 16- | 18- | 7.4-C- | - | - | 3.2- | 80- | | -3- | 7- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 2- | 1- | -1- | - | - | - | - | - | 2.60 |
| 30- | 45.3508- | 111.1572- | 2- | 12- | | 0-M36666- | 09/27/76- | 16- | 18- | 7.6-C- | - | - | 5.9- | 210- | | -3- | 4- | 4- | 6- | 4- | 3- | 1- | -1- | 3- | 2- | 1- | - | - | - | - | - | - | - | 2.00 |
| 30- | 45.3409- | 111.1315- | 2- | 12- | | 0-M36667- | 09/27/76- | 16- | 13- | 8.6-C- | - | - | 5.2- | 260- | | -3- | 1- | 4- | 6- | 2- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | - | 4.40 |
| 30- | 45.0162- | 110.6918- | 2- | 12- | | 0-M36668- | 09/28/76- | 11- | 10- | 6.2-C- | - | - | 6.4- | 700- | | -1- | 1- | 4- | 6- | 2- | 2- | 1- | 2- | 4- | 2- | 2- | 1- | -1- | - | - | - | - | - | 2.50 |
| 30- | 45.0022- | 110.7055- | 2- | 12- | | 0-M36669- | 09/28/76- | 11- | 11- | 9.8-C- | - | - | 5.9- | 230- | | -1- | 1- | 3- | 6- | 2- | 2- | 1- | 2- | 4- | 2- | 3- | 1- | -1- | - | - | - | - | - | 5.00 |
| 30- | 45.0165- | 110.6999- | 2- | 15- | | 0-M36670- | 09/28/76- | 12- | 13- | -C- | - | - | - | - | | -1- | 1- | 3- | 4- | - | - | - | -4- | 2- | 2- | 1- | -1- | - | - | - | - | - | - | 3.20 |
| 30- | 45.0317- | 110.7176- | 2- | 15- | | 0-M36671- | 09/28/76- | 12- | 13- | -C- | - | - | - | - | | -1- | 1- | 3- | 6- | - | - | - | -4- | 2- | 2- | 1- | -1- | - | - | - | - | - | - | 2.50 |
| 30- | 45.0876- | 110.8343- | 2- | 12- | | 0-M36672- | 09/28/76- | 13- | 11- | 6.2-C- | - | - | 6.6- | 600- | | -1- | 5- | 3- | 7- | 2- | 2- | 1- | 2- | 1- | 3- | 2- | 1- | -1- | - | - | - | - | - | 3.60 |
| 30- | 45.0846- | 110.8470- | 2- | 15- | | 0-M36673- | 09/28/76- | 14- | 14- | -C- | - | - | - | - | | - | - | - | - | - | - | - | - | - | - | - | -1- | 3- | 3- | 1- | - | - | - | - | 2.30 |
| 30- | 45.0732- | 110.8546- | 2- | 12- | | 0-M36674- | 09/28/76- | 14- | 15- | 13.0-C- | - | - | 5.9- | 180- | | -3- | 6- | 4- | 4- | 2- | 2- | 1- | 2- | 2- | 3- | 2- | 1- | -1- | - | - | - | - | - | 3.80 |
| 30- | 45.1172- | 110.8634- | 2- | 12- | | 0-M36675- | 09/29/76- | 9- | 7- | - | - | - | 5.9- | 245- | | 5- | 1- | 7- | 3- | 8- | 2- | 2- | 2- | 2- | 2- | 2- | 2- | 1- | -3- | - | - | - | - | - | 1.70 |
| 30- | 45.1121- | 110.8573- | 2- | 12- | | 0-M36676- | 09/29/76- | 10- | 8- | 4.6- | - | - | 5.7- | 120- | | 3- | 3- | 4- | 3- | 4- | 3- | 3- | 1- | 2- | 2- | 2- | 2- | 1- | -3- | - | - | - | - | - | 1.70 |
| 30- | 45.1191- | 110.8837- | 2- | 12- | | 0-M36677- | 09/29/76- | 10- | 8- | 5.6- | - | - | 5.7- | 100- | | 4- | 3- | 4- | 4- | 8- | 3- | 3- | 1- | 2- | 2- | 3- | 2- | 1- | -3- | - | - | - | - | - | 1.90 |
| 30- | 45.0954- | 110.8875- | 2- | 12- | | 0-M36678- | 09/29/76- | 11- | 8- | 6.2- | - | - | 5.2- | 80- | | 9- | 3- | 4- | 4- | 4- | 3- | 3- | 1- | 2- | 2- | 2- | 1- | 1- | -3- | - | - | - | - | - | 1.50 |
| 30- | 45.0941- | 110.8867- | 2- | 12- | | 0-M36679- | 09/29/76- | 11- | 8- | 4.4-C- | - | - | 5.2- | 60- | | 4- | 3- | 7- | 3- | 4- | 3- | 3- | 1- | 2- | 2- | 3- | 1- | 1- | -3- | - | - | - | - | - | 2.60 |
| 30- | 45.1019- | 110.8832- | 2- | 12- | | 0-M36680- | 09/29/76- | 12- | 10- | 7.6- | - | - | 5.9- | 180- | | 4- | 3- | 6- | - | - | 2- | 2- | 1- | 2- | 2- | 3- | 1- | 1- | -3- | - | - | - | - | - | 2.70 |
| 30- | 45.1096- | 110.8404- | 2- | 15- | | 0-M36681- | 09/29/76- | 12- | 13- | - | - | - | - | - | | 8- | 3- | 4- | 3- | 6- | -1- | - | -1- | 2- | 2- | 1- | -1- | - | -1- | - | - | - | - | - | 1.80 |
| 30- | 45.2326- | 110.7891- | 2- | 12- | | 0-M36682- | 09/29/76- | 15- | 16- | 12.0- | - | - | 5.7- | 165- | | 5- | 3- | 1- | 4- | 4- | 2- | 3- | 1- | 2- | 4- | 3- | 4- | 1- | -3- | - | - | - | - | - | 14.80 |
| 30- | 45.2276- | 110.7917- | 2- | 12- | | 0-M36683- | 09/29/76- | 15- | 15- | 9.4- | - | - | 5.9- | 185- | | 4- | 3- | 4- | 3- | 4- | 2- | 2- | 1- | 2- | 2- | 2- | 3- | 1- | -3- | - | - | - | - | - | 2.10 |
| 30- | 45.2166- | 110.7871- | 2- | 12- | | 0-M36684- | 09/29/76- | 16- | 14- | 8.0- | - | - | 5.5- | 80- | | 1- | 3- | 4- | 4- | 4- | 2- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -3- | - | - | - | - | - | 1.90 |
| 30- | 45.2459- | 110.7923- | 2- | 15- | | 0-M36685- | 09/29/76- | 16- | 13- | - | - | - | - | - | | 8- | 2- | 5- | 3- | 6- | -1- | - | -3- | 2- | 3- | 1- | -3- | - | - | - | - | - | - | - | 2.40 |
| 30- | 45.2480- | 110.7621- | 2- | 12- | | 0-M36686- | 09/29/76- | 17- | 11- | 7.0- | - | - | 5.7- | 160- | | 11- | 2- | 5- | 3- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 2- | 1- | -1- | - | - | - | - | - | 3.40 |
| 30- | 45.2483- | 110.8621- | 2- | 12- | | 0-M36688- | 09/29/76- | 18- | 11- | 13.0- | - | - | 6.1- | 490- | | 9- | 3- | 4- | 4- | 6- | 2- | 2- | 1- | 2- | 4- | 2- | 3- | 1- | -3- | - | - | - | - | - | 4.00 |
| 30- | 45.4760- | 110.2082- | 2- | 15- | | 0-M36689- | 09/30/76- | 11- | 21- | - | - | - | - | - | | 5- | 3- | 5- | 5- | 8- | -1- | - | -1- | 4- | 2- | 1- | -1- | - | - | - | - | - | - | - | 2.00 |
| 30- | 45.4789- | 110.2003- | 2- | 12- | | 0-M36690- | 09/29/76- | 11- | 22- | 7.0- | - | - | 5.5- | 110- | | 7- | 3- | 1- | 3- | 6- | 4- | 3- | 1- | 2- | 1- | 4- | 2- | 1- | -2- | - | - | - | - | - | 1.20 |
| 30- | 45.4599- | 110.1911- | 2- | 12- | | 0-M36691- | 09/29/76- | 11- | 22- | 6.4- | - | - | 5.5- | 120- | | 1- | 3- | 4- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 2- | 1- | -1- | - | - | - | - | - | 1.30 |
| 30- | 45.4370- | 110.1919- | 2- | 12- | | 0-M36692- | 09/29/76- | 12- | 23- | 6.6- | - | - | 5.2- | 90- | | 3- | 3- | 3- | 4- | 1- | 3- | 3- | 1- | 2- | 1- | 4- | 1- | 1- | -1- | - | - | - | - | - | 3.70 |
| 30- | 45.4033- | 110.1870- | 2- | 15- | | 0-M36693- | 09/29/76- | 12- | 22- | - | - | - | - | - | | 4- | 3- | 5- | 4- | 6- | -1- | - | -1- | 3- | 2- | 1- | -1- | - | - | - | - | - | - | - | 2.10 |
| 30- | 45.4024- | 110.1946- | 2- | 12- | | 0-M36694- | 09/29/76- | 12- | 22- | 8.2- | - | - | 5.5- | 80- | | 4- | 3- | 5- | 5- | 8- | 3- | 3- | 1- | 3- | 1- | 3- | 2- | 1- | -8- | - | - | - | - | - | 4.10 |
| 30- | 45.3890- | 110.2021- | 2- | 12- | | 0-M36695- | 09/29/76- | 13- | 24- | 6.6- | - | - | 5.7- | 45- | | 13- | 3- | 4- | 4- | 4- | 4- | 3- | 1- | 2- | 1- | 3- | 2- | 1- | -8- | - | - | - | - | - | 13.30 |
| 30- | 45.3663- | 110.2138- | 2- | 12- | | 0-M36696- | 09/29/76- | 13- | 24- | 5.4- | - | - | 5.5- | 270- | | 24- | 3- | 5- | 3- | 4- | 4- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | - | 18.40 |
| 30- | 45.3406- | 110.2441- | 2- | 12- | | 0-M36697- | 09/29/76- | 14- | 10- | 5.6- | - | - | 5.2- | 460- | | 4- | 3- | 1- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | - | 7.30 |
| 30- | 45.3398- | 110.2423- | 2- | 12- | | 0-M36698- | 09/29/76- | 14- | 11- | 5.8- | - | - | 5.9- | 130- | | 4- | 3- | 4- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | - | 3.10 |
| 30- | 45.3187- | 110.2315- | 2- | 12- | | 0-M36699- | 09/29/76- | 15- | 16- | 7.0- | - | - | 5.2- | 44- | | 8- | 3- | 4- | 4- | 4- | 2- | 2- | 1- | 2- | 1- | 4- | 2- | 1- | -1- | - | - | - | - | - | 2.60 |
| 30- | 45.3082- | 110.2364- | 2- | 12- | | 0-M36700- | 09/29/76- | 15- | 14- | 7.6- | - | - | 5.5- | 290- | | 11- | 3- | 1- | 3- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 2- | 1- | -1- | - | - | - | - | - | 15.70 |
| 30- | 45.2884- | 110.2434- | 2- | 12- | | 0-M36701- | 09/29/76- | 16- | 11- | 5.0- | - | - | 5.7- | 80- | | 8- | 3- | 1- | 4- | 4- | 3- | 3- | 1- | -1- | 3- | 2- | 1- | -1- | - | - | - | - | - | 2.50 |
| 30- | 45.2871- | 110.2391- | 2- | 15- | | 0-M36702- | 09/29/76- | 16- | 11- | - | - | - | - | - | | 10- | 3- | 5- | 3- | 4- | -1- | - | -1- | 3- | 2- | 1- | -8- | - | - | - | - | - | - | 19.20 |
| 30- | 45.2968- | 110.2418- | 2- | 12- | | 0-M36703- | 09/29/76- | 16- | 11- | 6.8- | - | - | 5.7- | 120- | | 6- | 3- | 4- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 2- | 1- | -1- | - | - | - | - | - | 7.00 |
| 30- | 45.3598- | 110.2180- | 2- | 12- | | 0-M36704- | 09/29/76- | 17- | 10- | 6.0- | - | - | 5.5- | 65- | | 16- | 3- | 4- | 6- | 6- | 2- | 2- | 2- | 1- | 1- | 3- | 2- | 1- | -1- | - | - | - | - | - | 94.30 |
| 30- | 45.4352- | 110.1879- | 2- | 12- | | 0-M36705- | 09/29/76- | 17- | 10- | 7.8- | - | - | 5.5- | 80- | | 13- | 3- | -4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 2- | 1- | -1- | - | - | - | - | - | 2.60 |
| 30- | 45.4867- | 110.2219- | 2- | 15- | | 0-M36706- | 09/29/76- | 18- | 10- | - | - | - | - | - | | 8- | 3- | 1- | 3- | 1- | -1- | - | -1- | 4- | 2- | 1- | -8- | - | - | - | - | - | - | 3.90 |
| 30- | 45.4971- | 110.2267- | 2- | 12- | | 0-M36707- | 09/29/76- | 18- | 10- | 7.0- | - | - | 5.5- | 55- | | 8- | 3- | 1- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | - | 6.80 |
| 30- | 45.5836- | 110.4965- | 2- | 12- | | 0-M36708- | 10/01/76- | 10- | 7- | 6.0- | - | - | 5.9- | 245- | | 3- | 3- | 4- | 4- | 4- | 3- | 2- | 1- | 2- | 1- | 4- | 2- | 1- | -3- | - | - | - | - | - | 2.00 |
| 30- | 45.5860- | 110.4966- | 2- | 15- | | 0-M36709- | 10/01/76- | 10- | 7- | - | - | - | - | - | | 9- | 3- | 4- | 4- | 6- | -1- | - | -1- | 4- | 2- | 1- | -3- | - | - | - | - | - | - | 2.70 |
| 30- | 45.5750- | 110.4990- | 2- | 12- | | 0-M36710- | 10/01/76- | 10- | 7- | 5.6- | - | - | 6.1- | 330- | | 4- | 3- | 4- | 4- | 4- | 2- | 2- | 1- | 2- | 2- | 4- | 2- | 1- | -3- | - | - | - | - | - | 1.80 |
| 30- | 45.6099- | 110.3899- | 2- | 12- | | 0-M36711- | 10/01/76- | 13- | 14- | 7.8- | - | - | 6.3- | 250- | | 3- | 1- | 2- | 3- | 4- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -3- | - | - | - | - | - | 2.20 |
| 30- | 45.6093- | 110.3828- | 2- | 12- | | 0-M36712- | 10/01/76- | 13- | 18- | 8.0- | - | - | 6.6- | 330- | | 3- | 1- | 1- | 3- | 6- | 3- | 2- | 1- | 2- | 1- | 2- | 2- | 1- | -1- | - | - | - | - | - | 2.60 |

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

②

| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | 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) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ag | Bi | Cd | Cu | Nb | Ni | Pb | Sn | W | Be | Li |
| 30-45.4135-111.0573-2-15- | 0-M36661 | -5 | -5 | -5 | 40 | -20 | 35 | 10 | -10 | -15 | 2 | 24 |
| 30-45.4086-111.0373-2-12- | 0-M36662 | -5 | -5 | -5 | 39 | -20 | 40 | -5 | -10 | -15 | 2 | 14 |
| 30-45.4251-111.1476-2-12- | 0-M36663 | -5 | -5 | -5 | 33 | -20 | 26 | 6 | -10 | -15 | 3 | 16 |
| 30-45.3823-111.1768-2-12- | 0-M36664 | -5 | -5 | -5 | 27 | -20 | 44 | 10 | -10 | -15 | 3 | 21 |
| 30-45.3727-111.1725-2-12- | 0-M36665 | -5 | -5 | -5 | 28 | -20 | 21 | 11 | -10 | -15 | 3 | 28 |
| 30-45.3508-111.1572-2-12- | 0-M36666 | -5 | -5 | 6 | -10 | 28 | 70 | -5 | -10 | -15 | 2 | 7 |
| 30-45.3409-111.1315-2-12- | 0-M36667 | -5 | -5 | -5 | 47 | -20 | 22 | 21 | -10 | -15 | 3 | 25 |
| 30-45.0162-110.6918-2-12- | 0-M36668 | -5 | 5 | -5 | 15 | -20 | -15 | 11 | -10 | -15 | 2 | 14 |
| 30-45.0022-110.7055-2-12- | 0-M36669 | -5 | -5 | -5 | 11 | -20 | 22 | 14 | -10 | -15 | 3 | 17 |
| 30-45.0165-110.6999-2-15- | 0-M36670 | -5 | -5 | -5 | 32 | -20 | -15 | 12 | -10 | -15 | 3 | 27 |
| 30-45.0317-110.7176-2-15- | 0-M36671 | -5 | -5 | -5 | 32 | -20 | 31 | 7 | -10 | -15 | 3 | 36 |
| 30-45.0876-110.8343-2-12- | 0-M36672 | -5 | -5 | -5 | 10 | -20 | -15 | 9 | -10 | -15 | 2 | 18 |
| 30-45.0846-110.8470-2-15- | 0-M36673 | -5 | -5 | -5 | 28 | -20 | 52 | 13 | -10 | -15 | 3 | 23 |
| 30-45.0732-110.8546-2-12- | 0-M36674 | -5 | -5 | -5 | 23 | -20 | 49 | -5 | -10 | -15 | 2 | 19 |
| 30-45.1172-110.8634-2-12- | 0-M36675 | -5 | -5 | -5 | 28 | -20 | 41 | 15 | -10 | -15 | 2 | 16 |
| 30-45.1121-110.8573-2-12- | 0-M36676 | -5 | -5 | -5 | 33 | -20 | 53 | 9 | -10 | -15 | 2 | 16 |
| 30-45.1191-110.8837-2-12- | 0-M36677 | -5 | -5 | -5 | 26 | -20 | 19 | 11 | -10 | -15 | 2 | 14 |
| 30-45.0954-110.8875-2-12- | 0-M36678 | -5 | -5 | -5 | 31 | -20 | 45 | 17 | -10 | -15 | 2 | 13 |
| 30-45.0941-110.8867-2-12- | 0-M36679 | -5 | -5 | -5 | 27 | -20 | 36 | 7 | -10 | -15 | 3 | 21 |
| 30-45.1019-110.8832-2-12- | 0-M36680 | -5 | -5 | -5 | 26 | -20 | 36 | 14 | -10 | -15 | 2 | 19 |
| 30-45.1096-110.8404-2-15- | 0-M36681 | -5 | -5 | -5 | 24 | -20 | 106 | 17 | 13 | -15 | 2 | 34 |
| 30-45.2326-110.7891-2-12- | 0-M36682 | -5 | -5 | -5 | 24 | -20 | 31 | 13 | -10 | -15 | 3 | 25 |
| 30-45.2276-110.7917-2-12- | 0-M36683 | -5 | -5 | -5 | 23 | -20 | 40 | 17 | -10 | -15 | 3 | 20 |
| 30-45.2166-110.7871-2-12- | 0-M36684 | -5 | -5 | -5 | 25 | -20 | 39 | 19 | -10 | -15 | 2 | 10 |
| 30-45.2459-110.7923-2-15- | 0-M36685 | -5 | -5 | -5 | 69 | -20 | 34 | 19 | -10 | -15 | 2 | 26 |
| 30-45.2480-110.7621-2-12- | 0-M36686 | -5 | -5 | -5 | 33 | -20 | 43 | 18 | -10 | -15 | 3 | 38 |
| 30-45.2483-110.8621-2-12- | 0-M36688 | -5 | -5 | -5 | 14 | -20 | 29 | 11 | -10 | -15 | 2 | 20 |
| 30-45.4760-110.2082-2-15- | 0-M36689 | -5 | -5 | -5 | 41 | -20 | 101 | 20 | -10 | -15 | 2 | 35 |
| 30-45.4789-110.2003-2-12- | 0-M36690 | -5 | -5 | -5 | 76 | -20 | 275 | -5 | -10 | -15 | 1 | 12 |
| 30-45.4599-110.1911-2-12- | 0-M36691 | -5 | -5 | -5 | 72 | -20 | 309 | -5 | -10 | -15 | 2 | 10 |
| 30-45.4370-110.1919-2-12- | 0-M36692 | -5 | -5 | -5 | 38 | -20 | 81 | 9 | -10 | -15 | 2 | 28 |
| 30-45.4033-110.1870-2-15- | 0-M36693 | -5 | -5 | -5 | 51 | -20 | 156 | 10 | -10 | -15 | 2 | 43 |
| 30-45.4024-110.1946-2-12- | 0-M36694 | -5 | -5 | -5 | 44 | -20 | 93 | 7 | -10 | -15 | 2 | 49 |
| 30-45.3890-110.2021-2-12- | 0-M36695 | -5 | -5 | -5 | 18 | -20 | 27 | 18 | -10 | -15 | 2 | 43 |
| 30-45.3663-110.2138-2-12- | 0-M36696 | -5 | -5 | -5 | 23 | -20 | 49 | 12 | -10 | -15 | 3 | 31 |
| 30-45.3406-110.2441-2-12- | 0-M36697 | -5 | -5 | -5 | 18 | -20 | 33 | 17 | -10 | -15 | 2 | 27 |
| 30-45.3398-110.2423-2-12- | 0-M36698 | -5 | -5 | -5 | -10 | -20 | -15 | 7 | -10 | -15 | 2 | 18 |
| 30-45.3187-110.2315-2-12- | 0-M36699 | -5 | -5 | -5 | 20 | -20 | 41 | 9 | -10 | -15 | 2 | 19 |
| 30-45.3082-110.2364-2-12- | 0-M36700 | -5 | -5 | -5 | 22 | -20 | 30 | 17 | -10 | -15 | 3 | 43 |
| 30-45.2884-110.2434-2-12- | 0-M36701 | -5 | -5 | -5 | 30 | -20 | 47 | 5 | -10 | -15 | 2 | 19 |
| 30-45.2871-110.2391-2-15- | 0-M36702 | -5 | -5 | -5 | 38 | -20 | 25 | 19 | -10 | -15 | 2 | 24 |
| 30-45.2968-110.2418-2-12- | 0-M36703 | -5 | -5 | -5 | -10 | -20 | 19 | -5 | -10 | 34 | 2 | 21 |
| 30-45.3598-110.2180-2-12- | 0-M36704 | -5 | -5 | -5 | 12 | -20 | -15 | 18 | -10 | -15 | 3 | 24 |
| 30-45.4352-110.1879-2-12- | 0-M36705 | -5 | -5 | -5 | 55 | -20 | 161 | -5 | -10 | -15 | 1 | 45 |
| 30-45.4867-110.2219-2-15- | 0-M36706 | -5 | -5 | -5 | 45 | -20 | 49 | 13 | -10 | -15 | 2 | 33 |
| 30-45.4971-110.2267-2-12- | 0-M36707 | -5 | -5 | -5 | 48 | -20 | 130 | 8 | -10 | -15 | 2 | 17 |
| 30-45.5836-110.4965-2-12- | 0-M36708 | -5 | -5 | -5 | 46 | -20 | 25 | -5 | -10 | -15 | 2 | 19 |
| 30-45.5860-110.4966-2-15- | 0-M36709 | -5 | -5 | -5 | 28 | -20 | 19 | 10 | -10 | -15 | 3 | 88 |
| 30-45.5750-110.4990-2-12- | 0-M36710 | -5 | -5 | -5 | 23 | -20 | 18 | -5 | -10 | -15 | -1 | 27 |
| 30-45.6099-110.3899-2-12- | 0-M36711 | -5 | -5 | -5 | 31 | -20 | -15 | 10 | -10 | -15 | 3 | 49 |
| 30-45.6093-110.3828-2-12- | 0-M36712 | -5 | -5 | -5 | 21 | -20 | -15 | 6 | -10 | -15 | -1 | 37 |

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

③

| DOE SAMPLE NUMBER | | | | | | | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | |
| | | | | | | | Al | Au | Ba | Ca | Ce | Cl | Co | Cr | Cs | Dy | Eu | Fe | Hf | K | La | Lu |
| 30-45.4135-111.0573-2-15- | | | | | | 0-M36661 | 56900 | -0.09 | 668 | 21970 | 86 | -90 | 20.7 | 239 | 2.6 | 5 | 1.7 | 46810 | 20.8 | 16630 | 45 | 0.6 |
| 30-45.4086-111.0373-2-12- | | | | | | 0-M36662 | 76850 | -0.11 | 1397 | 35660 | 68 | -138 | 33.7 | 223 | 2.7 | 3 | 2.3 | 69400 | 5.2 | 15500 | 43 | 0.4 |
| 30-45.4251-111.1476-2-12- | | | | | | 0-M36663 | 73970 | -0.07 | 1340 | 32760 | 57 | -128 | 25.1 | 212 | 2.6 | 3 | 1.5 | 66870 | 6.4 | 18930 | 31 | 0.3 |
| 30-45.3823-111.1768-2-12- | | | | | | 0-M36664 | 76620 | -0.06 | 1092 | 25660 | 66 | -111 | 18.5 | 150 | 3.1 | 3 | 1.6 | 43240 | 8.4 | 21800 | 37 | 0.4 |
| 30-45.3727-111.1725-2-12- | | | | | | 0-M36665 | 67630 | -0.08 | 894 | 29470 | 61 | -92 | 22.5 | 120 | 3.6 | 3 | 1.6 | 47740 | 7.4 | 13760 | 32 | 0.3 |
| 30-45.3508-111.1572-2-12- | | | | | | 0-M36666 | 35600 | 0.29 | 784 | 25160 | 50 | -118 | 919.4 | 982 | 6.7 | 3 | 13.9 | 227000 | 12.0 | 8327 | 38 | -0.2 |
| 30-45.3409-111.1315-2-12- | | | | | | 0-M36667 | 64190 | -0.09 | 1108 | 29380 | 99 | -93 | 14.9 | 142 | 3.0 | 5 | 1.9 | 43820 | 12.2 | 18180 | 49 | 0.4 |
| 30-45.0162-110.6918-2-12- | | | | | | 0-M36668 | 46690 | -0.06 | 731 | 23590 | 57 | -64 | 5.8 | 46 | 3.2 | 4 | 1.2 | 20230 | 8.2 | 13150 | 31 | 0.2 |
| 30-45.0022-110.7055-2-12- | | | | | | 0-M36669 | 49640 | -0.09 | 562 | 38900 | 76 | 241 | 16.9 | 105 | 2.6 | 6 | 2.1 | 45360 | 39.1 | 14300 | 46 | 0.8 |
| 30-45.0165-110.6999-2-15- | | | | | | 0-M36670 | 52100 | -0.09 | 780 | 37660 | 69 | -75 | 13.6 | 107 | -1.7 | 3 | 1.5 | 35560 | 12.3 | 15830 | 40 | 0.4 |
| 30-45.0317-110.7176-2-15- | | | | | | 0-M36671 | 59050 | -0.08 | 783 | 22160 | 67 | -81 | 12.5 | 139 | 3.1 | 4 | 1.7 | 32330 | 9.4 | 16890 | 37 | 0.4 |
| 30-45.0876-110.8343-2-12- | | | | | | 0-M36672 | 40890 | -0.06 | 653 | 24030 | 64 | -62 | 1.8 | 55 | 3.2 | 4 | 1.2 | 14140 | 18.0 | 12520 | 39 | 0.4 |
| 30-45.0846-110.8470-2-15- | | | | | | 0-M36673 | 65450 | -0.09 | 964 | 25430 | 66 | -98 | 21.2 | 201 | 3.3 | 3 | 1.7 | 37750 | 7.4 | 19520 | 42 | 0.3 |
| 30-45.0732-110.8546-2-12- | | | | | | 0-M36674 | 65210 | -0.11 | 1377 | 40010 | 82 | -104 | 22.1 | 310 | -2.2 | 3 | 2.1 | 33270 | 6.3 | 15690 | 44 | 0.3 |
| 30-45.1172-110.8634-2-12- | | | | | | 0-M36675 | 68790 | -0.10 | 1235 | 36570 | 72 | -105 | 25.2 | 165 | -2.0 | 2 | 1.7 | 42620 | 5.9 | 15720 | 39 | 0.3 |
| 30-45.1121-110.8573-2-12- | | | | | | 0-M36676 | 72990 | -0.10 | 1279 | 41030 | 67 | -125 | 28.6 | 207 | -2.1 | 3 | 1.8 | 54060 | 5.3 | 11490 | 37 | 0.5 |
| 30-45.1191-110.8837-2-12- | | | | | | 0-M36677 | 76030 | -0.10 | 954 | 40950 | 51 | 117 | 25.9 | 146 | -1.9 | 3 | 1.9 | 45970 | 5.2 | 10800 | 39 | 0.2 |
| 30-45.0954-110.8875-2-12- | | | | | | 0-M36678 | 72710 | -0.11 | 1408 | 39680 | 61 | -106 | 26.8 | 163 | -2.1 | 2 | 1.7 | 44730 | 3.9 | 14760 | 33 | 0.3 |
| 30-45.0941-110.8867-2-12- | | | | | | 0-M36679 | 63680 | -0.10 | 1041 | 34920 | 68 | -85 | 17.9 | 140 | 2.9 | 3 | 1.9 | 36050 | 7.0 | 15210 | 34 | 0.3 |
| 30-45.1019-110.8832-2-12- | | | | | | 0-M36680 | 65120 | -0.10 | 905 | 25700 | 89 | -96 | 15.6 | 185 | 3.2 | 4 | 1.7 | 34390 | 9.9 | 16270 | 43 | 0.4 |
| 30-45.1096-110.8404-2-15- | | | | | | 0-M36681 | 64870 | -0.09 | 1758 | 42030 | 87 | -89 | 23.6 | 183 | 8.1 | 2 | 1.6 | 35250 | 5.0 | 17220 | 50 | 0.2 |
| 30-45.2326-110.7891-2-12- | | | | | | 0-M36682 | 64930 | -0.08 | 1357 | 18840 | 72 | -92 | 11.4 | 87 | 2.9 | 3 | 1.6 | 24910 | 10.3 | 20530 | 53 | 0.4 |
| 30-45.2276-110.7917-2-12- | | | | | | 0-M36683 | 82700 | -0.08 | 1531 | 28310 | 65 | -126 | 10.8 | 124 | 4.0 | 2 | 1.3 | 23440 | 5.6 | 12730 | 37 | 0.3 |
| 30-45.2166-110.7871-2-12- | | | | | | 0-M36684 | 85600 | -0.07 | 1560 | 29130 | 48 | -116 | 17.2 | 122 | 3.2 | 2 | 1.0 | 26670 | 4.6 | 15330 | 38 | 0.2 |
| 30-45.2459-110.7923-2-15- | | | | | | 0-M36685 | 66030 | -0.12 | 917 | 17900 | 76 | -100 | 24.4 | 104 | 5.4 | 4 | 1.6 | 43240 | 6.4 | 14030 | 33 | 0.4 |
| 30-45.2480-110.7621-2-12- | | | | | | 0-M36686 | 73330 | -0.09 | 1786 | 20200 | 92 | -98 | 15.6 | 120 | 4.1 | 3 | 1.9 | 32500 | 12.1 | 16390 | 62 | 0.3 |
| 30-45.2483-110.8621-2-12- | | | | | | 0-M36688 | 64200 | -0.10 | 873 | 39490 | 147 | -113 | 16.9 | 182 | 3.6 | 6 | 1.8 | 38680 | 16.2 | 18240 | 73 | 0.5 |
| 30-45.4760-110.2082-2-15- | | | | | | 0-M36689 | 63920 | -0.11 | 582 | 18110 | 44 | 141 | 29.2 | 252 | 3.5 | 3 | 1.3 | 47070 | 4.3 | 9698 | 26 | 0.3 |
| 30-45.4789-110.2003-2-12- | | | | | | 0-M36690 | 74120 | -0.13 | -168 | 53620 | 17 | 199 | 45.9 | 998 | -2.6 | 2 | 0.7 | 47650 | 3.0 | -3995 | -10 | 0.3 |
| 30-45.4599-110.1911-2-12- | | | | | | 0-M36691 | 67700 | -0.11 | -162 | 40130 | 25 | 146 | 46.6 | 1331 | -2.3 | 2 | 0.8 | 62580 | 3.2 | -3838 | 17 | 0.2 |
| 30-45.4370-110.1919-2-12- | | | | | | 0-M36692 | 69400 | -0.11 | 973 | 32640 | 73 | -116 | 29.9 | 327 | -2.1 | 3 | 1.7 | 66330 | 7.3 | 7917 | 45 | 0.3 |
| 30-45.4033-110.1870-2-15- | | | | | | 0-M36693 | 58970 | -0.09 | -123 | 9087 | 55 | -72 | 29.0 | 472 | 2.8 | 3 | 1.1 | 47920 | 5.8 | 9465 | 26 | 0.3 |
| 30-45.4024-110.1946-2-12- | | | | | | 0-M36694 | 72800 | -0.09 | 309 | 16920 | 42 | -101 | 17.9 | 240 | 3.2 | 2 | 1.3 | 36980 | 5.7 | 9845 | 22 | 0.3 |
| 30-45.3890-110.2021-2-12- | | | | | | 0-M36695 | 58050 | -0.08 | 705 | 23000 | 91 | 111 | 16.2 | 92 | 2.5 | 5 | 1.7 | 36570 | 22.3 | 19200 | 66 | 0.6 |
| 30-45.3663-110.2138-2-12- | | | | | | 0-M36696 | 59110 | -0.12 | 684 | 28200 | 124 | -103 | 20.3 | 121 | -2.2 | 9 | 2.6 | 47630 | 33.0 | 14900 | 73 | 1.0 |
| 30-45.3406-110.2441-2-12- | | | | | | 0-M36697 | 71630 | -0.09 | 1268 | 25920 | 97 | -96 | 15.1 | 123 | 3.5 | 4 | 1.7 | 32210 | 13.0 | 15360 | 63 | 0.4 |
| 30-45.3398-110.2423-2-12- | | | | | | 0-M36698 | 47970 | -0.06 | 679 | 9557 | 78 | -69 | 5.7 | 56 | 2.9 | 4 | 1.4 | 18770 | 17.0 | 15810 | 37 | 0.4 |
| 30-45.3187-110.2315-2-12- | | | | | | 0-M36699 | 75040 | -0.09 | 1141 | 35650 | 54 | -109 | 28.1 | 182 | -1.9 | 2 | 1.7 | 49170 | 3.7 | 13970 | 34 | 0.2 |
| 30-45.3082-110.2364-2-12- | | | | | | 0-M36700 | 58500 | 0.63 | 674 | 19420 | 101 | -94 | 10.0 | 83 | 2.2 | 5 | 1.6 | 23260 | 14.9 | 14460 | 63 | 0.6 |
| 30-45.2884-110.2434-2-12- | | | | | | 0-M36701 | 66310 | -0.10 | 1154 | 41790 | 66 | -95 | 29.5 | 202 | -2.0 | 3 | 1.8 | 56250 | 5.2 | 12240 | 34 | 0.2 |
| 30-45.2871-110.2391-2-15- | | | | | | 0-M36702 | 69320 | -0.10 | 946 | 16850 | 77 | -128 | 11.3 | 71 | 4.5 | 3 | 1.6 | 28890 | 5.3 | 15080 | 54 | 0.4 |
| 30-45.2968-110.2418-2-12- | | | | | | 0-M36703 | 61670 | -0.09 | 568 | 29230 | 63 | 114 | 19.8 | 56 | -1.9 | 3 | 1.5 | 86400 | 7.8 | 11400 | 37 | 0.3 |
| 30-45.3598-110.2180-2-12- | | | | | | 0-M36704 | 64110 | -0.10 | 1004 | 18290 | 95 | -90 | 5.0 | 41 | -1.7 | 8 | 2.4 | 13280 | 22.3 | 23070 | 156 | 1.0 |
| 30-45.4352-110.1879-2-12- | | | | | | 0-M36705 | 68840 | -0.12 | 252 | 12900 | 40 | 170 | 33.3 | 434 | 3.3 | 3 | 1.0 | 67710 | 4.1 | 7133 | 29 | 0.3 |
| 30-45.4867-110.2219-2-15- | | | | | | 0-M36706 | 61510 | -0.09 | 639 | 25770 | 63 | 136 | 16.1 | 162 | 4.0 | 4 | 1.5 | 37110 | 8.6 | 15450 | 39 | 0.3 |
| 30-45.4971-110.2267-2-12- | | | | | | 0-M36707 | 61230 | -0.10 | -143 | 16710 | 43 | 155 | 32.8 | 301 | 2.1 | 3 | 1.1 | 45980 | 4.5 | 10040 | 29 | 0.4 |
| 30-45.5836-110.4965-2-12- | | | | | | 0-M36708 | 44470 | -0.09 | 332 | 112800 | 58 | 187 | 16.3 | 67 | -1.8 | 4 | 1.4 | 32470 | 5.6 | 16650 | 30 | 0.3 |
| 30-45.5860-110.4966-2-15- | | | | | | 0-M36709 | 53380 | -0.08 | 602 | 56280 | 67 | 146 | 12.3 | 66 | 3.9 | 4 | 1.4 | 27880 | 6.5 | 21370 | 38 | 0.4 |
| 30-45.5750-110.4990-2-12- | | | | | | 0-M36710 | 39870 | -0.09 | 476 | 106800 | 43 | 172 | 6.1 | 68 | 2.8 | 3 | 1.1 | 20810 | 6.7 | 14230 | 20 | 0.2 |
| 30-45.6099-110.3899-2-12- | | | | | | 0-M36711 | 62110 | -0.09 | 661 | 51020 | 49 | 142 | 15.3 | 54 | -1.7 | 3 | 1.6 | 40620 | 8.7 | 17170 | 30 | 0.3 |
| 30-45.6093-110.3828-2-12- | | | | | | 0-M36712 | 48600 | -0.08 | 760 | 15690 | 59 | -62 | 6.9 | 34 | 3.0 | 3 | 1.4 | 18980 | 10.7 | 14590 | 33 | 0.3 |

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

④

| DOE SAMPLE NUMBER | | | | | | LAB. SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | U/Th RATIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Mg | Mn | Na | Rb | Sb | Sc | Sm | Sr | Ta | Tb | Th | Ti | V | Yb | Zn | |
| 30-45.4135-111.0573-2-15- | | | | | | 0-M36661 | 12870 | 1022 | 14460 | -31 | -2 | 13.7 | 8.0 | -293 | -1 | -1 | 11.5 | 4057 | 112 | 5.2 | 97 | 0.304 |
| 30-45.4086-111.0373-2-12- | | | | | | 0-M36662 | 13970 | 1569 | 16240 | -41 | -3 | 16.5 | 5.2 | 795 | -1 | -1 | 6.4 | 5124 | 168 | -2.7 | 162 | 0.219 |
| 30-45.4251-111.1476-2-12- | | | | | | 0-M36663 | 13130 | 978 | 20770 | 65 | -2 | 17.7 | 4.4 | -389 | -1 | -1 | 7.6 | 5743 | 176 | -1.8 | 147 | 0.211 |
| 30-45.3823-111.1768-2-12- | | | | | | 0-M36664 | 8480 | 823 | 20100 | 67 | -2 | 11.4 | 5.7 | -319 | -1 | -1 | 10.5 | 4021 | 118 | 2.7 | -41 | 0.305 |
| 30-45.3727-111.1725-2-12- | | | | | | 0-M36665 | 13480 | 877 | 13880 | 82 | -2 | 12.9 | 5.3 | -293 | -1 | 1 | 8.9 | 4401 | 136 | 3.4 | -39 | 0.292 |
| 30-45.3508-111.1572-2-12- | | | | | | 0-M36666 | 15240 | 2003 | 8986 | -84 | -4 | 22.1 | 6.1 | -412 | -2 | -1 | 8.3 | 23570 | 958 | -3.4 | 657 | 0.241 |
| 30-45.3409-111.1315-2-12- | | | | | | 0-M36667 | 10350 | 813 | 14620 | 54 | -2 | 11.4 | 7.3 | 788 | -1 | -1 | 16.1 | 3811 | 97 | 4.0 | 97 | 0.273 |
| 30-45.0162-110.6918-2-12- | | | | | | 0-M36668 | 7048 | 426 | 6582 | 40 | -2 | 5.5 | 4.0 | -219 | -1 | -1 | 8.9 | 2525 | 69 | -1.3 | 82 | 0.281 |
| 30-45.0022-110.7055-2-12- | | | | | | 0-M36669 | 8327 | 1682 | 14710 | 59 | -2 | 12.6 | 7.1 | -415 | -1 | 1 | 17.9 | 6881 | 86 | 5.3 | 137 | 0.279 |
| 30-45.0165-110.6999-2-15- | | | | | | 0-M36670 | 11640 | 756 | 10240 | 56 | -2 | 9.3 | 5.5 | 384 | -1 | -1 | 9.2 | 5068 | 130 | 3.1 | 97 | 0.348 |
| 30-45.0317-110.7176-2-15- | | | | | | 0-M36671 | 10720 | 632 | 13800 | 51 | -2 | 9.4 | 5.4 | 500 | -1 | -1 | 8.3 | 3297 | 94 | 2.8 | -44 | 0.301 |
| 30-45.0876-110.8343-2-12- | | | | | | 0-M36672 | 7001 | 271 | 6569 | 52 | -2 | 4.6 | 4.1 | -201 | -1 | -1 | 9.8 | 2036 | 57 | 3.3 | 65 | 0.367 |
| 30-45.0846-110.8470-2-15- | | | | | | 0-M36673 | 14670 | 814 | 15760 | -30 | -2 | 12.2 | 4.8 | -297 | -1 | -1 | 8.1 | 2711 | 105 | 2.3 | -132 | 0.284 |
| 30-45.0732-110.8546-2-12- | | | | | | 0-M36674 | 19150 | 720 | 20040 | -36 | -3 | 14.4 | 5.1 | 846 | -1 | -1 | 7.7 | 3856 | 114 | -2.4 | -50 | 0.494 |
| 30-45.1172-110.8634-2-12- | | | | | | 0-M36675 | 16150 | 809 | 19190 | -36 | -3 | 15.1 | 4.4 | 456 | -1 | -1 | 7.2 | 3908 | 109 | 2.4 | 50 | 0.236 |
| 30-45.1121-110.8573-2-12- | | | | | | 0-M36676 | 20160 | 982 | 20910 | -35 | -3 | 18.1 | 4.6 | 753 | -1 | -1 | 7.2 | 3882 | 149 | -1.9 | 164 | 0.236 |
| 30-45.1191-110.8837-2-12- | | | | | | 0-M36677 | 15640 | 745 | 20660 | -33 | -3 | 16.5 | 4.0 | 688 | -1 | -1 | 5.6 | 3368 | 132 | -2.2 | -43 | 0.339 |
| 30-45.0954-110.8875-2-12- | | | | | | 0-M36678 | 19920 | 864 | 21120 | -34 | -3 | 16.1 | 4.8 | 646 | -1 | -1 | 6.9 | 4233 | 134 | 3.0 | -48 | 0.217 |
| 30-45.0941-110.8867-2-12- | | | | | | 0-M36679 | 15480 | 662 | 15230 | -31 | -2 | 12.2 | 4.9 | 460 | -1 | -1 | 9.0 | 3800 | 127 | 3.0 | 96 | 0.289 |
| 30-45.1019-110.8832-2-12- | | | | | | 0-M36680 | 11450 | 707 | 17850 | 56 | -2 | 11.8 | 5.3 | 556 | -1 | -1 | 11.3 | 3762 | 98 | 3.3 | -67 | 0.239 |
| 30-45.1096-110.8404-2-15- | | | | | | 0-M36681 | 20170 | 652 | 12110 | -31 | -2 | 10.9 | 5.5 | 569 | -1 | -1 | 8.6 | 2640 | 99 | -1.8 | 105 | 0.209 |
| 30-45.2326-110.7891-2-12- | | | | | | 0-M36682 | 6290 | 615 | 18970 | 56 | -2 | 7.5 | 8.4 | 558 | -1 | -1 | 11.7 | 3072 | 68 | 2.7 | 78 | 1.265 |
| 30-45.2276-110.7917-2-12- | | | | | | 0-M36683 | 5224 | 637 | 24480 | 49 | -2 | 6.6 | 3.7 | 1093 | -1 | -1 | 7.5 | 2929 | 57 | -1.4 | 84 | 0.280 |
| 30-45.2166-110.7871-2-12- | | | | | | 0-M36684 | 6261 | 617 | 25380 | 43 | -2 | 7.2 | 2.8 | 756 | -1 | -1 | 7.3 | 3075 | 76 | -1.5 | 56 | 0.260 |
| 30-45.2459-110.7923-2-15- | | | | | | 0-M36685 | 8980 | 1138 | 13580 | -40 | -3 | 15.3 | 5.8 | -356 | -2 | -1 | 11.4 | 4533 | 122 | -2.8 | 92 | 0.211 |
| 30-45.2480-110.7621-2-12- | | | | | | 0-M36686 | 7985 | 619 | 20930 | -32 | -2 | 9.0 | 5.7 | 546 | -1 | -1 | 17.6 | 3721 | 76 | 2.6 | 45 | 0.193 |
| 30-45.2483-110.8621-2-12- | | | | | | 0-M36688 | 16550 | 854 | 18480 | 54 | -2 | 14.3 | 9.7 | 381 | -1 | -1 | 25.9 | 3220 | 100 | 6.2 | 98 | 0.154 |
| 30-45.4760-110.2082-2-15- | | | | | | 0-M36689 | 14620 | 1096 | 13980 | -38 | -3 | 14.6 | 3.3 | -365 | -1 | -1 | 8.8 | 3001 | 108 | 2.7 | 172 | 0.227 |
| 30-45.4789-110.2003-2-12- | | | | | | 0-M36690 | 45840 | 907 | 9937 | -42 | -3 | 23.9 | 1.8 | -311 | -1 | -1 | 3.1 | 2956 | 135 | -2.7 | -76 | 0.387 |
| 30-45.4599-110.1911-2-12- | | | | | | 0-M36691 | 44300 | 912 | 9057 | -40 | -3 | 22.6 | 1.7 | -293 | -2 | -1 | 4.6 | 2352 | 135 | -2.4 | -50 | 0.283 |
| 30-45.4370-110.1919-2-12- | | | | | | 0-M36692 | 19340 | 963 | 18930 | -37 | -3 | 20.2 | 6.0 | -362 | -1 | -1 | 16.5 | 4572 | 193 | 3.5 | 132 | 0.224 |
| 30-45.4033-110.1870-2-15- | | | | | | 0-M36693 | 13010 | 632 | 12240 | -31 | -2 | 15.2 | 3.3 | -224 | -1 | -1 | 8.8 | 3624 | 99 | -2.1 | -92 | 0.239 |
| 30-45.4024-110.1946-2-12- | | | | | | 0-M36694 | 11300 | 510 | 19080 | 48 | -2 | 11.6 | 3.2 | -282 | -1 | -1 | 9.9 | 3419 | 81 | -1.7 | -17 | 0.414 |
| 30-45.3890-110.2021-2-12- | | | | | | 0-M36695 | 7693 | 710 | 15840 | 77 | -2 | 11.2 | 9.4 | -255 | -1 | 1 | 26.9 | 3299 | 92 | 4.6 | -36 | 0.494 |
| 30-45.3663-110.2138-2-12- | | | | | | 0-M36696 | 11830 | 1244 | 15550 | 78 | -3 | 15.9 | 10.8 | -344 | -2 | -1 | 23.4 | 6447 | 108 | 6.7 | -55 | 0.786 |
| 30-45.3406-110.2441-2-12- | | | | | | 0-M36697 | 8141 | 560 | 23360 | 71 | -2 | 11.1 | 8.8 | 491 | -1 | -1 | 23.5 | 2985 | 73 | 4.5 | -41 | 0.311 |
| 30-45.3398-110.2423-2-12- | | | | | | 0-M36698 | 4312 | 372 | 10710 | 91 | -2 | 5.9 | 5.0 | -210 | -1 | -1 | 10.6 | 2770 | 57 | 3.0 | 85 | 0.292 |
| 30-45.3187-110.2315-2-12- | | | | | | 0-M36699 | 20060 | 916 | 20860 | -33 | -2 | 16.9 | 3.8 | 799 | -1 | -1 | 6.0 | 3365 | 135 | -2.2 | 123 | 0.433 |
| 30-45.3082-110.2364-2-12- | | | | | | 0-M36700 | 8249 | 695 | 17960 | 52 | -2 | 8.9 | 11.8 | -278 | -1 | -1 | 31.0 | 2238 | 68 | 5.0 | 66 | 0.506 |
| 30-45.2884-110.2434-2-12- | | | | | | 0-M36701 | 18620 | 923 | 17400 | -34 | -3 | 20.0 | 5.3 | 679 | -1 | 1 | 6.8 | 3952 | 163 | 2.3 | 78 | 0.368 |
| 30-45.2871-110.2391-2-15- | | | | | | 0-M36702 | 7530 | 864 | 20590 | 94 | -3 | 9.8 | 8.3 | -396 | -1 | -1 | 13.9 | 2208 | 72 | -2.2 | 119 | 1.381 |
| 30-45.2968-110.2418-2-12- | | | | | | 0-M36703 | 9182 | 1062 | 20920 | 64 | -2 | 14.2 | 5.0 | -328 | -1 | -1 | 10.6 | 3784 | 258 | 3.2 | 78 | 0.660 |
| 30-45.3598-110.2180-2-12- | | | | | | 0-M36704 | 4461 | 303 | 22060 | 69 | -2 | 8.4 | 28.6 | 311 | -1 | -1 | 24.2 | 2398 | 55 | 5.9 | -35 | 3.897 |
| 30-45.4352-110.1879-2-12- | | | | | | 0-M36705 | 20030 | 706 | 11990 | -43 | -3 | 18.8 | 2.8 | -276 | -1 | -1 | 8.2 | 3894 | 138 | -2.3 | -51 | 0.317 |
| 30-45.4867-110.2219-2-15- | | | | | | 0-M36706 | 11390 | 631 | 12770 | 60 | -2 | 11.4 | 6.0 | -288 | -1 | -1 | 13.2 | 3020 | 89 | 4.2 | | 0.295 |
| 30-45.4971-110.2267-2-12- | | | | | | 0-M36707 | 15060 | 663 | 13960 | 39 | -2 | 16.3 | 3.5 | -261 | -1 | -1 | 8.3 | 3182 | 113 | -1.8 | -90 | 0.819 |
| 30-45.5836-110.4965-2-12- | | | | | | 0-M36708 | 40350 | 657 | 7112 | 41 | -2 | 12.7 | 5.8 | -233 | -1 | -1 | 12.7 | 3910 | 87 | 2.9 | -37 | 0.157 |
| 30-45.5860-110.4966-2-15- | | | | | | 0-M36709 | 19420 | 568 | 10830 | 80 | -2 | 10.1 | 4.9 | -228 | -1 | -1 | 11.3 | 2862 | 67 | 4.1 | -83 | 0.239 |
| 30-45.5750-110.4990-2-12- | | | | | | 0-M36710 | 33560 | 415 | 7642 | 39 | -2 | 7.3 | 3.5 | -272 | -1 | -1 | 7.4 | 2262 | 57 | 3.4 | 86 | 0.243 |
| 30-45.6099-110.3899-2-12- | | | | | | 0-M36711 | 13110 | 792 | 14410 | -30 | -2 | 12.6 | 4.0 | 469 | -1 | -1 | 7.5 | 2938 | 114 | 2.3 | -80 | 0.293 |
| 30-45.6093-110.3828-2-12- | | | | | | 0-M36712 | 5226 | 427 | 8676 | 70 | -2 | 5.6 | 4.4 | -201 | -1 | -1 | 7.5 | 2928 | 82 | 2.2 | -31 | 0.347 |

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

①

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER AND FIELD DATA | | | | | | | | | | | | | | | | | | | | | | | | | U CONCENTRATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | TIME SAMPLED | | | | | | | | | | | | | | | | | | | | | | | | |
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | DATE | HOUR | AIR TEMPERATURE | WATER TEMPERATURE | COMMENTS | SPECIAL MEASUREMENTS | pH | CONDUCTIVITY (µmho/cm) | SCINTILLOMETER (eU, ppm) | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm |
| 30- | 45.6151- | 110.3798- | 2- | 12- | | 0-M36713- | 10/01/76- | 13- | 18- | 8.8- | - | - | 6.3- | 245- | | 7- | 1- | 1- | 4- | 1- | 3- | 3- | 1- | 2- | 2- | 2- | 2- | 1- | -3- | - | - | - | - | 2.30 |
| 30- | 45.6290- | 110.4195- | 2- | 12- | | 0-M36714- | 10/01/76- | 14- | 14- | 10.4- | - | - | 6.6- | 390- | | 5- | 1- | 2- | 4- | 4- | 2- | 2- | 1- | 2- | 2- | 2- | 2- | 3- | -3- | - | - | - | - | 3.70 |
| 30- | 45.6544- | 110.4396- | 2- | 12- | | 0-M36715- | 10/01/76- | 15- | 16- | 11.0- | - | - | 6.6- | 800- | | 6- | 1- | 1- | 5- | 8- | 2- | 2- | 1- | 3- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | 2.40 |
| 30- | 45.6538- | 110.4698- | 2- | 12- | | 0-M36716- | 10/01/76- | 15- | 13- | 14.0- | - | - | 6.9- | 600- | | 3- | 1- | 7- | 5- | 8- | 2- | 2- | 1- | 2- | 4- | 3- | 1- | 3- | -3- | - | - | - | - | 2.70 |
| 30- | 45.6815- | 110.4906- | 2- | 12- | | 0-M36717- | 10/01/76- | 16- | 15- | 14.0- | - | - | 6.9- | 500- | | 10- | 1- | 1- | 5- | 8- | 2- | 2- | 2- | 2- | 2- | 2- | 1- | 3- | -3- | - | - | - | - | 2.60 |
| 30- | 45.6990- | 110.4590- | 2- | 12- | | 0-M36718- | 10/01/76- | 17- | 18- | 16.0- | - | - | 6.6- | 450- | | 4- | 1- | 1- | 3- | 6- | 2- | 2- | 2- | 2- | 4- | 3- | 1- | 3- | -3- | - | - | - | - | 2.80 |
| 30- | 45.7100- | 110.4187- | 2- | 12- | | 0-M36719- | 10/04/76- | 9- | 5- | 5.2- | - | - | 6.3- | 550- | | 6- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 2- | 2- | -3- | - | - | - | - | 2.70 |
| 30- | 45.7064- | 110.3999- | 2- | 12- | | 0-M36720- | 10/04/76- | 10- | 6- | 6.4- | - | - | 6.3- | 370- | | 6- | 1- | 1- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 2.80 |
| 30- | 45.6686- | 110.3961- | 2- | 12- | | 0-M36721- | 10/04/76- | 10- | 9- | 9.1- | - | - | 6.6- | 450- | | 7- | 1- | 1- | 5- | 8- | 2- | 2- | 2- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 2.60 |
| 30- | 45.6488- | 110.3937- | 2- | 12- | | 0-M36722- | 10/04/76- | 10- | 10- | 6.0- | - | - | 6.6- | 460- | | 8- | 1- | 6- | 4- | 6- | 2- | 2- | 2- | 2- | 2- | 3- | 2- | 2- | -3- | - | - | - | - | 2.70 |
| 30- | 45.4466- | 110.5922- | 2- | 12- | | 0-M36723- | 09/29/76- | 10- | 16- | 7.0- | - | - | 5.2- | 50- | | 9- | 1- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 8.10 |
| 30- | 45.4381- | 110.6058- | 2- | 12- | | 0-M36724- | 09/29/76- | 11- | 9- | | -C- | - | - | - | | 6- | 1- | 7- | 2- | 7- | -1- | -2- | 2- | 2- | 3- | 1- | -3- | - | - | - | - | - | - | 7.00 |
| 30- | 45.4259- | 110.6141- | 2- | 12- | | 0-M36725- | 09/29/76- | 11- | 15- | 11.0- | C- | - | 5.7- | 200- | | 4- | 1- | 7- | 5- | 6- | 3- | 2- | 2- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 2.70 |
| 30- | 45.2858- | 110.7531- | 2- | 12- | | 0-M36726- | 09/29/76- | 12- | 11- | 6.5- | - | - | 5.7- | 230- | | 3- | 1- | 7- | 3- | 6- | 4- | 2- | 1- | 2- | 3- | 3- | 4- | 1- | -1- | - | - | - | - | 3.10 |
| 30- | 45.2941- | 110.7488- | 2- | 12- | | 0-M36727- | 09/29/76- | 12- | 19- | 7.5- | - | - | 5.9- | 170- | | 7- | 1- | 7- | 3- | 6- | 4- | 2- | 1- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 3.30 |
| 30- | 45.2612- | 110.7616- | 2- | 12- | | 0-M36728- | 09/29/76- | 12- | 14- | 7.5- | C- | - | 5.8- | 200- | | 0- | 1- | 7- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | - | - | - | - | - | 4.20 |
| 30- | 45.4654- | 110.6530- | 2- | 12- | | 0-M36729- | 09/29/76- | 13- | 21- | 12.5- | C- | - | 5.7- | 190- | | 4- | 1- | 1- | 5- | 6- | 2- | 2- | 2- | 3- | 4- | 4- | 1- | 1- | -3- | - | - | - | - | 3.80 |
| 30- | 45.5266- | 110.6678- | 2- | 15- | | 0-M36730- | 09/29/76- | 14- | 19- | | -C- | - | - | - | | 9- | 1- | 7- | 5- | 6- | -1- | -2- | 3- | 2- | 4- | 1- | -3- | - | - | - | - | - | - | 3.80 |
| 30- | 45.5239- | 110.6507- | 2- | 15- | | 0-M36731- | 09/29/76- | 14- | 23- | | -C- | - | - | - | | 3- | 1- | 1- | 3- | 1- | -1- | -2- | 3- | 2- | 4- | 1- | -3- | - | - | - | - | - | - | 2.70 |
| 30- | 45.5191- | 110.6311- | 2- | 15- | | 0-M36732- | 09/29/76- | 14- | 25- | | -C- | - | - | - | | 4- | 1- | 7- | 3- | 1- | -1- | -2- | 3- | 2- | 4- | 1- | -3- | - | - | - | - | - | - | 4.10 |
| 30- | 45.4987- | 110.7037- | 2- | 15- | | 0-M36733- | 09/29/76- | 15- | 30- | | -C- | - | - | - | | 4- | 1- | 7- | 5- | 1- | -1- | -2- | 3- | 2- | 4- | 1- | -3- | - | - | - | - | - | - | 3.00 |
| 30- | 45.4786- | 110.7031- | 2- | 15- | | 0-M36734- | 09/29/76- | 15- | 26- | | -C- | - | - | - | | 2- | 1- | 7- | 2- | 7- | -1- | -2- | 3- | 2- | 3- | 1- | -3- | - | - | - | - | - | - | 2.30 |
| 30- | 45.4685- | 110.6936- | 2- | 12- | | 0-M36735- | 09/29/76- | 16- | 25- | 12.0- | - | - | 5.7- | 260- | | 6- | 1- | 7- | 5- | 6- | 3- | 2- | 1- | 2- | 4- | 2- | 2- | 1- | -3- | - | - | - | - | 2.50 |
| 30- | 45.4387- | 110.7354- | 2- | 12- | | 0-M36736- | 09/29/76- | 16- | 16- | 8.5- | - | - | 5.6- | 60- | | 2- | 1- | 7- | 2- | 6- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 1- | -3- | - | - | - | - | 2.10 |
| 30- | 45.4151- | 110.7062- | 2- | 15- | | 0-M36737- | 09/29/76- | 17- | 26- | | -C- | - | - | - | | 3- | 3- | -3- | 7- | -1- | -2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | - | - | - | 2.10 |
| 30- | 45.3069- | 110.8519- | 2- | 12- | | 0-M36738- | 09/29/76- | 17- | 26- | 9.5- | - | - | 5.5- | 100- | | 5- | 1- | 7- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -1- | - | - | - | - | 2.10 |
| 30- | 45.3126- | 110.8962- | 2- | 12- | | 0-M36739- | 09/29/76- | 17- | 12- | 8.0- | - | - | 5.5- | 80- | | 6- | 2- | 7- | 2- | 7- | 4- | 2- | 1- | 2- | 1- | 2- | 4- | 1- | -8- | - | - | - | - | 2.50 |
| 30- | 45.3558- | 110.7808- | 2- | 12- | | 0-M36740- | 09/29/76- | 18- | 12- | 10.5- | - | - | 5.5- | 60- | | 1- | 1- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 1- | -1- | - | - | - | - | 4.40 |
| 30- | 45.3614- | 110.7983- | 2- | 12- | | 0-M36741- | 09/30/76- | 11- | 13- | 7.0- | - | - | 5.2- | 65- | | 6- | 1- | 4- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 1- | -1- | - | - | - | - | 2.20 |
| 30- | 45.3563- | 110.8049- | 2- | 12- | | 0-M36742- | 09/30/76- | 11- | 12- | 8.0- | - | - | 5.2- | 60- | | 1- | 1- | 4- | 3- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 3.40 |
| 30- | 45.3214- | 110.8998- | 2- | 12- | | 0-M36743- | 09/30/76- | 12- | 12- | 7.5- | C- | - | 5.7- | 145- | | 6- | 1- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -9- | - | - | - | - | 2.20 |
| 30- | 45.3294- | 110.9056- | 2- | 12- | | 0-M36744- | 09/30/76- | 12- | 15- | 9.0- | - | - | 5.5- | 130- | | 3- | 1- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 4- | 1- | -1- | - | - | - | - | 1.50 |
| 30- | 45.2627- | 110.8668- | 2- | 12- | | 0-M36745- | 09/30/76- | 13- | 23- | 13.0- | C- | - | 5.7- | 150- | | 0- | 1- | 7- | 3- | 6- | 2- | 2- | 1- | 2- | 2- | 2- | 2- | 1- | -3- | - | - | - | - | 2.60 |
| 30- | 45.2675- | 110.8757- | 2- | 15- | | 0-M36746- | 09/30/76- | 13- | 23- | | -C- | - | - | - | | 4- | 3- | 7- | 2- | 7- | -1- | -2- | 2- | 2- | 3- | 1- | -3- | - | - | - | - | - | - | 2.90 |
| 30- | 45.2526- | 110.8937- | 2- | 12- | | 0-M36747- | 09/30/76- | 13- | 20- | 13.0- | - | - | 5.9- | 240- | | 0- | 3- | 7- | 2- | 7- | 2- | 2- | 1- | 3- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 3.10 |
| 30- | 45.3222- | 110.8329- | 2- | 12- | | 0-M36748- | 09/30/76- | 14- | 15- | 11.5- | - | - | 6.3- | 460- | | 8- | 3- | 7- | 3- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 4- | 1- | -3- | - | - | - | - | 2.70 |
| 30- | 45.3554- | 110.8846- | 2- | 12- | | 0-M36749- | 09/30/76- | 14- | 26- | 10.0- | - | - | 5.7- | 130- | | 3- | 3- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 1- | 2- | 3- | 1- | -1- | - | - | - | - | 2.50 |
| 30- | 45.5254- | 110.7012- | 2- | 12- | | 0-M36750- | 09/30/76- | 15- | 23- | 13.5- | C- | - | 6.8- | 2050- | | 6- | 1- | 4- | 6- | 6- | 2- | 2- | 2- | 1- | 6- | 3- | 2- | 1- | -3- | - | - | - | - | 4.20 |
| 30- | 45.5210- | 110.7050- | 2- | 12- | | 0-M36751- | 09/30/76- | 15- | 19- | 11.5- | - | - | 5.7- | 300- | | 4- | 1- | 4- | 3- | 6- | 3- | 2- | 2- | 2- | 3- | 3- | 2- | 1- | -3- | - | - | - | - | 3.50 |
| 30- | 45.5139- | 110.7431- | 2- | 15- | | 0-M36752- | 09/30/76- | 16- | 24- | | -C- | - | - | - | | 7- | 1- | 7- | 5- | 7- | -1- | -2- | 4- | 1- | 4- | 1- | -3- | - | - | - | - | - | - | 2.60 |
| 30- | 45.5106- | 110.7367- | 2- | 12- | | 0-M36753- | 09/30/76- | 16- | 19- | 9.5- | - | - | 5.8- | 200- | | 0- | 1- | 7- | 2- | 6- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 1- | -3- | - | - | - | - | 2.70 |
| 30- | 45.5470- | 110.7234- | 2- | 12- | | 0-M36754- | 09/30/76- | 16- | 18- | 18.0- | C- | - | 6.3- | 500- | | 0- | 1- | 1- | 3- | 6- | 2- | 2- | 1- | 2- | 3- | 2- | 3- | 1- | -3- | - | - | - | - | 2.60 |
| 30- | 45.5721- | 110.6899- | 2- | 11- | | 0-M36755- | 09/30/76- | 17- | 18- | 12.5- | - | - | 6.3- | 950- | | 2- | 1- | 1- | 6- | 8- | 2- | 2- | 1- | 2- | 4- | 3- | 4- | 1- | -3- | - | - | - | - | 2.80 |
| 30- | 45.5639- | 110.6744- | 2- | 12- | | 0-M36756- | 09/30/76- | 18- | 15- | 9.0- | C- | - | 6.3- | 600- | | 6- | 1- | 3- | 5- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 3.10 |
| 30- | 45.5425- | 110.6219- | 2- | 12- | | 0-M36757- | 09/30/76- | 18- | 13- | 11.0- | C- | - | 6.1- | 700- | | 6- | 1- | 3- | 5- | 6- | 2- | 2- | 1- | 2- | 3- | 4- | 4- | 1- | -3- | - | - | - | - | 2.50 |
| 30- | 45.5681- | 110.6197- | 2- | 12- | | 0-M36758- | 10/01/76- | 9- | 15- | 7.5- | C- | - | 6.1- | 600- | | 8- | 1- | 1- | 3- | 1- | 2- | 2- | 1- | 2- | 4- | 2- | 2- | 1- | -3- | - | - | - | - | 2.30 |
| 30- | 45.5651- | 110.6163- | 2- | 12- | | 0-M36759- | 10/01/76- | 10- | 11- | 7.5- | C- | - | 6.1- | 500- | | 3- | 1- | 1- | 5- | 6- | 2- | 2- | 2- | 2- | 4- | 2- | 2- | 1- | -3- | - | - | - | - | 3.90 |
| 30- | 45.5192- | 110.5619- | 2- | 12- | | 0-M36760- | 10/01/76- | 11- | 10- | 7.0- | C- | - | 5.2- | 100- | | 2- | 1- | 1- | 5- | 6- | 2- | 2- | 2- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 3.20 |
| 30- | 45.5257- | 110.5117- | 2- | 12- | | 0-M36761- | 10/01/76- | 11- | 10- | 5.5- | - | - | 5.5- | 70- | | 3- | 3- | 7- | 1- | 1- | 4- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 5.90 |
| 30- | 45.5360- | 110.5568- | 2- | 12- | | 0-M36762- | 10/01/76- | 12- | 11- | 9.0- | - | - | 5.7- | 230- | | 4- | 1- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -8- | - | - | - | - | 2.90 |
| 30- | 45.5379- | 110.5312- | 2- | 15- | | 0-M36763- | 10/01/76- | 12- | 13- | | -C- | - | - | - | | 1- | 1- | 7- | 2- | 7- | -1- | -2- | 2- | 2- | 3- | 1- | -8- | - | - | - | - | - | - | 4.00 |

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

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| DOE SAMPLE NUMBER | | | | | | LAB. SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE (Concentrations reported in weight parts per million (ppm)) | | | | | | | | | ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY (Concentrations in weight ppm) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Ag | Bi | Cd | Cu | Nb | Ni | Pb | Sn | W | Be | Li |
| 30- | 45.6151- | 110.3798- | 2- | 12- | | 0-M36713 | -5 | 5 | -5 | 21 | -20 | 19 | 6 | -10 | -15 | 1 | 75 |
| 30- | 45.6290- | 110.4195- | 2- | 12- | | 0-M36714 | -5 | -5 | -5 | 16 | -20 | 16 | 10 | 11 | -15 | 3 | 28 |
| 30- | 45.6544- | 110.4396- | 2- | 12- | | 0-M36715 | -5 | -5 | -5 | 24 | -20 | -15 | 12 | -10 | -15 | 2 | 27 |
| 30- | 45.6538- | 110.4698- | 2- | 12- | | 0-M36716 | -5 | -5 | -5 | -10 | -20 | -15 | -5 | -10 | -15 | 2 | 14 |
| 30- | 45.6815- | 110.4906- | 2- | 12- | | 0-M36717 | -5 | -5 | -5 | 17 | -20 | 19 | 5 | -10 | -15 | 1 | 16 |
| 30- | 45.6990- | 110.4590- | 2- | 12- | | 0-M36718 | -5 | -5 | -5 | 25 | -20 | 54 | 8 | -10 | -15 | 2 | 50 |
| 30- | 45.7100- | 110.4187- | 2- | 12- | | 0-M36719 | -5 | -5 | -5 | 26 | -20 | 40 | 10 | -10 | -15 | 3 | 35 |
| 30- | 45.7064- | 110.3999- | 2- | 12- | | 0-M36720 | -5 | -5 | -5 | 17 | -20 | -15 | 8 | -10 | -15 | 2 | 17 |
| 30- | 45.6686- | 110.3961- | 2- | 12- | | 0-M36721 | -5 | -5 | -5 | 40 | -20 | -15 | 10 | -10 | -15 | 2 | 30 |
| 30- | 45.6488- | 110.3937- | 2- | 12- | | 0-M36722 | -5 | -5 | -5 | 30 | -20 | 38 | 11 | -10 | -15 | 3 | 30 |
| 30- | 45.4466- | 110.5922- | 2- | 12- | | 0-M36723 | -5 | -5 | -5 | 23 | -20 | 42 | 10 | -10 | -15 | 3 | 41 |
| 30- | 45.4381- | 110.6058- | 2- | 12- | | 0-M36724 | -5 | -5 | -5 | 20 | -20 | 30 | 5 | -10 | -15 | 3 | 44 |
| 30- | 45.4259- | 110.6141- | 2- | 12- | | 0-M36725 | -5 | -5 | -5 | 37 | -20 | 51 | 12 | -10 | -15 | 3 | 46 |
| 30- | 45.2858- | 110.7531- | 2- | 12- | | 0-M36726 | -5 | -5 | -5 | 25 | -20 | 27 | 9 | -10 | -15 | 2 | 43 |
| 30- | 45.2941- | 110.7488- | 2- | 12- | | 0-M36727 | -5 | -5 | -5 | 25 | -20 | 34 | 16 | -10 | -15 | 2 | 47 |
| 30- | 45.2612- | 110.7616- | 2- | 12- | | 0-M36728 | -5 | -5 | -5 | 21 | -20 | 26 | 13 | -10 | -15 | 3 | 44 |
| 30- | 45.4654- | 110.6530- | 2- | 12- | | 0-M36729 | -5 | -5 | -5 | 26 | -20 | 18 | 13 | -10 | -15 | 2 | 80 |
| 30- | 45.5266- | 110.6678- | 2- | 15- | | 0-M36730 | -5 | -5 | -5 | 21 | -20 | -15 | 8 | -10 | -15 | 3 | 23 |
| 30- | 45.5239- | 110.6507- | 2- | 15- | | 0-M36731 | -5 | -5 | -5 | 19 | -20 | 34 | 10 | -10 | -15 | 3 | 38 |
| 30- | 45.5191- | 110.6311- | 2- | 15- | | 0-M36732 | -5 | -5 | -5 | 21 | -20 | -15 | 5 | -10 | -15 | 2 | 39 |
| 30- | 45.4987- | 110.7037- | 2- | 15- | | 0-M36733 | -5 | -5 | -5 | 24 | -20 | 28 | 11 | -10 | -15 | -1 | 34 |
| 30- | 45.4786- | 110.7031- | 2- | 15- | | 0-M36734 | -5 | 6 | -5 | 18 | -20 | 38 | -5 | -10 | -15 | 2 | 19 |
| 30- | 45.4685- | 110.6936- | 2- | 12- | | 0-M36735 | -5 | -5 | -5 | 21 | -20 | -15 | 5 | -10 | -15 | 2 | 21 |
| 30- | 45.4387- | 110.7354- | 2- | 12- | | 0-M36736 | -5 | -5 | -5 | 30 | -20 | -15 | 7 | -10 | -15 | 2 | 17 |
| 30- | 45.4151- | 110.7062- | 2- | 15- | | 0-M36737 | -5 | -5 | -5 | 29 | -20 | -15 | 6 | -10 | -15 | 2 | 20 |
| 30- | 45.3069- | 110.8519- | 2- | 12- | | 0-M36738 | -5 | -5 | -5 | 38 | -20 | 31 | 8 | -10 | -15 | 1 | 18 |
| 30- | 45.3126- | 110.8962- | 2- | 12- | | 0-M36739 | -5 | -5 | -5 | 21 | -20 | 65 | -5 | -10 | -15 | 2 | 10 |
| 30- | 45.3558- | 110.7808- | 2- | 12- | | 0-M36740 | -5 | -5 | -5 | 35 | -20 | 21 | 7 | 12 | -15 | 2 | 21 |
| 30- | 45.3614- | 110.7983- | 2- | 12- | | 0-M36741 | -5 | -5 | -5 | 15 | -20 | 32 | 9 | -10 | -15 | 2 | 20 |
| 30- | 45.3563- | 110.8049- | 2- | 12- | | 0-M36742 | -5 | -5 | -5 | 29 | -20 | 17 | 11 | -10 | -15 | 2 | 22 |
| 30- | 45.3214- | 110.8998- | 2- | 12- | | 0-M36743 | -5 | -5 | -5 | 18 | -20 | 15 | 14 | -10 | -15 | 2 | 17 |
| 30- | 45.3294- | 110.9056- | 2- | 12- | | 0-M36744 | -5 | -5 | -5 | 43 | -20 | 23 | -5 | -10 | 40 | 1 | 13 |
| 30- | 45.2627- | 110.8668- | 2- | 12- | | 0-M36745 | -5 | -5 | -5 | 30 | -20 | 15 | 7 | -10 | -15 | 2 | 26 |
| 30- | 45.2675- | 110.8757- | 2- | 15- | | 0-M36746 | -5 | -5 | -5 | 27 | -20 | 26 | 14 | -10 | -15 | 2 | 20 |
| 30- | 45.2526- | 110.8937- | 2- | 12- | | 0-M36747 | -5 | -5 | -5 | 30 | -20 | 41 | 13 | -10 | -15 | 3 | 22 |
| 30- | 45.3222- | 110.8329- | 2- | 12- | | 0-M36748 | -5 | -5 | -5 | 24 | -20 | -15 | 7 | -10 | -15 | 2 | 22 |
| 30- | 45.3554- | 110.8846- | 2- | 12- | | 0-M36749 | -5 | -5 | -5 | 45 | -20 | 21 | 15 | -10 | -15 | 2 | 20 |
| 30- | 45.5254- | 110.7012- | 2- | 12- | | 0-M36750 | -5 | -5 | -5 | 17 | -20 | -15 | 13 | -10 | -15 | 3 | 24 |
| 30- | 45.5210- | 110.7050- | 2- | 12- | | 0-M36751 | -5 | -5 | -5 | 20 | -20 | 36 | 10 | -10 | -15 | 3 | 28 |
| 30- | 45.5139- | 110.7431- | 2- | 15- | | 0-M36752 | -5 | -5 | -5 | 14 | -20 | 20 | 12 | -10 | -15 | 3 | 24 |
| 30- | 45.5106- | 110.7367- | 2- | 12- | | 0-M36753 | -5 | -5 | -5 | 23 | -20 | 32 | -5 | -10 | -15 | 3 | 19 |
| 30- | 45.5470- | 110.7234- | 2- | 12- | | 0-M36754 | -5 | -5 | -5 | 24 | -20 | 40 | 8 | -10 | -15 | 2 | 16 |
| 30- | 45.5721- | 110.6899- | 2- | 11- | | 0-M36755 | -5 | -5 | -5 | 30 | -20 | 21 | 16 | -10 | -15 | 2 | 18 |
| 30- | 45.5639- | 110.6744- | 2- | 12- | | 0-M36756 | -5 | -5 | -5 | 17 | -20 | 37 | 7 | -10 | -15 | 2 | 19 |
| 30- | 45.5425- | 110.6219- | 2- | 12- | | 0-M36757 | -5 | 5 | -5 | 15 | -20 | -15 | -5 | -10 | -15 | 2 | 14 |
| 30- | 45.5681- | 110.6197- | 2- | 12- | | 0-M36758 | -5 | -5 | -5 | 18 | -20 | -15 | -5 | -10 | -15 | 2 | 17 |
| 30- | 45.5651- | 110.6163- | 2- | 12- | | 0-M36759 | -5 | -5 | -5 | 37 | -20 | -15 | 7 | -10 | -15 | 3 | 26 |
| 30- | 45.5192- | 110.5619- | 2- | 12- | | 0-M36760 | -5 | -5 | -5 | 23 | -20 | 28 | 9 | -10 | -15 | 3 | 13 |
| 30- | 45.5257- | 110.5117- | 2- | 12- | | 0-M36761 | -5 | -5 | -5 | 62 | -20 | 52 | 8 | -10 | -15 | 2 | 17 |
| 30- | 45.5360- | 110.5568- | 2- | 12- | | 0-M36762 | -5 | 7 | -5 | 46 | -20 | 62 | 13 | -10 | -15 | 2 | 17 |
| 30- | 45.5379- | 110.5312- | 2- | 15- | | 0-M36763 | -5 | -5 | -5 | 42 | -20 | 51 | 8 | -10 | -15 | 2 | 13 |

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

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| DOE SAMPLE NUMBER | | | | | | | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LAB. SAMPLE LOCATION NUMBER | Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | |
| | | | | | | | Al | Au | Ba | Ca | Ce | Cl | Co | Cr | Cs | Dy | Eu | Fe | Hf | K | La | Lu |
| 30- | 45.6151- | 110.3798- | 2- | 12- | | 0-M36713 | 55250 | -0.09 | 533 | 39010 | 62 | 168 | 16.2 | 73 | 3.1 | 4 | 1.6 | 38320 | 7.0 | 16750 | 29 | 0.3 |
| 30- | 45.6290- | 110.4195- | 2- | 12- | | 0-M36714 | 43840 | -0.08 | 632 | 8794 | 64 | -61 | 6.0 | 70 | 3.1 | 4 | 1.5 | 21630 | 22.5 | 13470 | 31 | 0.5 |
| 30- | 45.6544- | 110.4396- | 2- | 12- | | 0-M36715 | 45330 | -0.07 | 525 | 16820 | 44 | -68 | 7.7 | 50 | 3.7 | 3 | 1.2 | 16480 | 7.3 | 15690 | 28 | 0.3 |
| 30- | 45.6538- | 110.4698- | 2- | 12- | | 0-M36716 | 37540 | -0.07 | 538 | 41720 | 56 | -59 | 5.5 | 65 | 1.9 | 3 | 1.4 | 12050 | 17.7 | 11230 | 30 | 0.4 |
| 30- | 45.6815- | 110.4906- | 2- | 12- | | 0-M36717 | 55600 | -0.08 | 908 | 20620 | 75 | -74 | 11.3 | 114 | -1.5 | 4 | 1.6 | 32580 | 15.5 | 13720 | 36 | 0.3 |
| 30- | 45.6990- | 110.4590- | 2- | 12- | | 0-M36718 | 71660 | -0.11 | 756 | 31230 | 84 | 263 | 20.3 | 153 | 3.8 | 7 | 2.2 | 49900 | 12.9 | 13270 | 38 | 0.7 |
| 30- | 45.7100- | 110.4187- | 2- | 12- | | 0-M36719 | 68180 | -0.09 | 1153 | 27070 | 69 | -99 | 17.7 | 215 | 2.9 | 3 | 1.7 | 44770 | 11.3 | 16660 | 47 | 0.3 |
| 30- | 45.7064- | 110.3999- | 2- | 12- | | 0-M36720 | 55520 | -0.09 | 776 | 31520 | 61 | 141 | 12.2 | 101 | -1.6 | 4 | 1.7 | 30790 | 12.6 | 15140 | 32 | 0.4 |
| 30- | 45.6686- | 110.3961- | 2- | 12- | | 0-M36721 | 62810 | -0.09 | 910 | 20410 | 65 | -86 | 9.4 | 61 | 3.0 | 3 | 1.5 | 28660 | 9.8 | 16770 | 39 | 0.3 |
| 30- | 45.6488- | 110.3937- | 2- | 12- | | 0-M36722 | 63320 | -0.10 | 790 | 41410 | 65 | 106 | 26.8 | 297 | 3.4 | 4 | 1.9 | 62710 | 9.5 | 15740 | 38 | 0.4 |
| 30- | 45.4466- | 110.5922- | 2- | 12- | | 0-M36723 | 61790 | -0.10 | 609 | 23640 | 83 | 150 | 17.3 | 170 | 3.5 | 5 | 1.8 | 37600 | 14.0 | 15650 | 57 | 0.5 |
| 30- | 45.4381- | 110.6058- | 2- | 12- | | 0-M36724 | 61450 | -0.11 | 544 | 23550 | 125 | 162 | 15.9 | 142 | 2.5 | 7 | 1.9 | 36170 | 26.8 | 17230 | 64 | 0.8 |
| 30- | 45.4259- | 110.6141- | 2- | 12- | | 0-M36725 | 72280 | -0.10 | 1190 | 29510 | 75 | -98 | 17.4 | 128 | 8.4 | 3 | 1.7 | 38000 | 6.7 | 18060 | 46 | 0.4 |
| 30- | 45.2858- | 110.7531- | 2- | 12- | | 0-M36726 | 68860 | -0.10 | 1347 | 19370 | 81 | -110 | 13.4 | 101 | 11.1 | 3 | 1.2 | 33840 | 8.1 | 18370 | 36 | 0.3 |
| 30- | 45.2941- | 110.7488- | 2- | 12- | | 0-M36727 | 74000 | -0.10 | 1258 | 13860 | 70 | -113 | 16.9 | 75 | 7.5 | 3 | 1.9 | 35020 | 7.9 | 23650 | 47 | 0.3 |
| 30- | 45.2612- | 110.7616- | 2- | 12- | | 0-M36728 | 61950 | -0.08 | 823 | 21610 | 86 | -86 | 16.9 | 147 | 4.8 | 5 | 1.7 | 35000 | 13.5 | 13870 | 55 | 0.5 |
| 30- | 45.4654- | 110.6530- | 2- | 12- | | 0-M36729 | 59910 | -0.10 | 774 | 33200 | 83 | -80 | 15.1 | 119 | 5.7 | 4 | 1.6 | 32720 | 10.0 | 18400 | 40 | 0.4 |
| 30- | 45.5266- | 110.6678- | 2- | 15- | | 0-M36730 | 53710 | -0.08 | 789 | 13640 | 67 | -68 | 8.4 | 59 | 5.7 | 4 | 1.4 | 20060 | 8.7 | 19530 | 36 | 0.4 |
| 30- | 45.5239- | 110.6507- | 2- | 15- | | 0-M36731 | 56420 | -0.08 | 708 | 42740 | 68 | -83 | 8.3 | 84 | 4.5 | 4 | 1.6 | 26440 | 10.5 | 14010 | 38 | 0.3 |
| 30- | 45.5191- | 110.6311- | 2- | 15- | | 0-M36732 | 51960 | -0.07 | 731 | 80690 | 60 | -76 | 13.9 | 75 | 2.8 | 3 | 1.3 | 26320 | 8.4 | 15200 | 33 | 0.3 |
| 30- | 45.4987- | 110.7037- | 2- | 15- | | 0-M36733 | 59200 | -0.09 | 889 | 16160 | 73 | -75 | 10.6 | 75 | 4.4 | 4 | 1.7 | 21660 | 9.2 | 20770 | 37 | 0.4 |
| 30- | 45.4786- | 110.7031- | 2- | 15- | | 0-M36734 | 62880 | -0.09 | 1038 | 27810 | 68 | -87 | 22.0 | 206 | -1.7 | 3 | 1.8 | 45300 | 13.0 | 16360 | 38 | 0.3 |
| 30- | 45.4685- | 110.6936- | 2- | 12- | | 0-M36735 | 51860 | -0.07 | 923 | 18110 | 59 | -73 | 6.8 | 51 | 2.8 | 3 | 1.3 | 18880 | 8.3 | 17460 | 30 | 0.3 |
| 30- | 45.4387- | 110.7354- | 2- | 12- | | 0-M36736 | 80030 | -0.10 | 1151 | 35770 | 55 | -118 | 24.6 | 130 | 2.4 | 3 | 1.9 | 51270 | 5.8 | 18960 | 35 | 0.3 |
| 30- | 45.4151- | 110.7062- | 2- | 15- | | 0-M36737 | 77090 | -0.11 | 1353 | 33530 | 77 | -107 | 22.6 | 166 | -2.1 | 3 | 2.0 | 51490 | 6.2 | 15830 | 32 | 0.3 |
| 30- | 45.3069- | 110.8519- | 2- | 12- | | 0-M36738 | 71510 | -0.10 | 1399 | 35570 | 99 | -105 | 27.6 | 160 | -2.0 | 4 | 2.0 | 63030 | 8.4 | 18670 | 46 | 0.3 |
| 30- | 45.3126- | 110.8962- | 2- | 12- | | 0-M36739 | 64110 | -0.12 | 995 | 35990 | 71 | -128 | 48.3 | 364 | -2.3 | 4 | 2.2 | 128700 | 12.0 | 14520 | 46 | 0.5 |
| 30- | 45.3558- | 110.7808- | 2- | 12- | | 0-M36740 | 60940 | -0.08 | 767 | 28800 | 69 | -92 | 20.2 | 147 | 4.1 | 4 | 1.8 | 43790 | 13.4 | 15440 | 43 | 0.4 |
| 30- | 45.3614- | 110.7983- | 2- | 12- | | 0-M36741 | 67810 | -0.11 | 1193 | 36490 | 61 | -102 | 28.9 | 194 | -2.2 | 3 | 1.8 | 61250 | 6.9 | 14260 | 36 | 0.3 |
| 30- | 45.3563- | 110.8049- | 2- | 12- | | 0-M36742 | 65340 | -0.09 | 1174 | 25070 | 72 | -95 | 14.7 | 93 | 2.7 | 4 | 1.5 | 29120 | 7.0 | 20530 | 47 | 0.3 |
| 30- | 45.3214- | 110.8998- | 2- | 12- | | 0-M36743 | 76770 | -0.10 | 1218 | 33100 | 81 | -127 | 18.5 | 110 | -2.0 | 4 | 2.2 | 44360 | 6.8 | 17960 | 54 | 0.3 |
| 30- | 45.3294- | 110.9056- | 2- | 12- | | 0-M36744 | 71150 | -0.10 | 1013 | 41550 | 70 | -111 | 47.1 | 399 | -2.1 | 3 | 1.8 | 98090 | 4.8 | 9392 | 29 | 0.3 |
| 30- | 45.2627- | 110.8668- | 2- | 12- | | 0-M36745 | 73380 | -0.11 | 1134 | 26830 | 77 | -100 | 17.3 | 115 | 4.3 | 4 | 2.0 | 42670 | 8.1 | 16270 | 46 | 0.4 |
| 30- | 45.2675- | 110.8757- | 2- | 15- | | 0-M36746 | 75880 | -0.10 | 1426 | 33750 | 94 | -103 | 25.3 | 113 | 3.5 | 4 | 2.0 | 53960 | 7.0 | 14230 | 48 | 0.3 |
| 30- | 45.2526- | 110.8937- | 2- | 12- | | 0-M36747 | 65530 | -0.09 | 1040 | 30150 | 94 | -107 | 13.3 | 124 | 2.7 | 5 | 2.0 | 39920 | 10.2 | 17530 | 45 | 0.4 |
| 30- | 45.3222- | 110.8329- | 2- | 12- | | 0-M36748 | 41140 | -0.07 | 656 | 33380 | 44 | 78 | 11.4 | 74 | 2.8 | 4 | 1.3 | 22330 | 14.9 | 10870 | 26 | 0.4 |
| 30- | 45.3554- | 110.8846- | 2- | 12- | | 0-M36749 | 73000 | -0.12 | 1524 | 31770 | 69 | -108 | 19.8 | 92 | -2.4 | 3 | 1.8 | 44580 | 5.3 | 18140 | 29 | 0.3 |
| 30- | 45.5254- | 110.7012- | 2- | 12- | | 0-M36750 | 55520 | -0.08 | 769 | 13120 | 61 | -64 | 8.7 | 49 | 5.2 | 5 | 1.3 | 20260 | 9.2 | 18850 | 34 | 0.4 |
| 30- | 45.5210- | 110.7050- | 2- | 12- | | 0-M36751 | 61020 | -0.08 | 770 | 23870 | 73 | -88 | 10.5 | 111 | 8.9 | 4 | 1.7 | 30900 | 11.5 | 18430 | 36 | 0.4 |
| 30- | 45.5139- | 110.7431- | 2- | 15- | | 0-M36752 | 46640 | -0.07 | 628 | 56140 | 44 | -70 | 7.2 | 49 | 3.7 | 3 | 1.2 | 15740 | 5.7 | 15020 | 30 | 0.2 |
| 30- | 45.5106- | 110.7367- | 2- | 12- | | 0-M36753 | 57910 | -0.09 | 914 | 26710 | 63 | -81 | 18.0 | 175 | 4.5 | 3 | 1.6 | 40560 | 10.2 | 16590 | 37 | 0.5 |
| 30- | 45.5470- | 110.7234- | 2- | 12- | | 0-M36754 | 61720 | -0.08 | 852 | 24050 | 71 | -85 | 15.2 | 391 | 3.0 | 4 | 1.8 | 50760 | 11.1 | 18210 | 42 | 0.3 |
| 30- | 45.5721- | 110.6899- | 2- | 11- | | 0-M36755 | 51050 | -0.09 | 809 | 32340 | 62 | -80 | 9.0 | 73 | -1.7 | 4 | 1.4 | 27910 | 9.7 | 11130 | 35 | 0.4 |
| 30- | 45.5639- | 110.6744- | 2- | 12- | | 0-M36756 | 43220 | -0.07 | 633 | 44580 | 51 | -66 | 11.6 | 127 | 2.8 | 4 | 1.4 | 25620 | 20.7 | 16140 | 30 | 0.4 |
| 30- | 45.5425- | 110.6219- | 2- | 12- | | 0-M36757 | 27780 | -0.07 | 588 | 54930 | 46 | -45 | 4.6 | 43 | 2.2 | 3 | 1.2 | 10480 | 15.8 | 10940 | 26 | 0.4 |
| 30- | 45.5681- | 110.6197- | 2- | 12- | | 0-M36758 | 41550 | -0.07 | 568 | 92290 | 48 | 136 | 5.9 | 52 | 2.5 | 4 | 1.5 | 18210 | 8.5 | 16070 | 33 | 0.4 |
| 30- | 45.5651- | 110.6163- | 2- | 12- | | 0-M36759 | 74480 | -0.11 | 790 | 18150 | 92 | 255 | 13.9 | 104 | 5.6 | 6 | 2.0 | 43920 | 11.0 | 18130 | 48 | 0.5 |
| 30- | 45.5192- | 110.5619- | 2- | 12- | | 0-M36760 | 63170 | -0.08 | 616 | 25380 | 65 | -95 | 16.5 | 116 | 2.3 | 4 | 1.6 | 34580 | 13.2 | 12790 | 48 | 0.4 |
| 30- | 45.5257- | 110.5117- | 2- | 12- | | 0-M36761 | 66920 | -0.13 | 466 | 37450 | 80 | -108 | 34.7 | 126 | -2.8 | 5 | 1.8 | 61500 | 6.0 | 12230 | 35 | 0.6 |
| 30- | 45.5360- | 110.5568- | 2- | 12- | | 0-M36762 | 61720 | -0.11 | 451 | 36320 | 59 | 181 | 31.2 | 126 | -2.3 | 4 | 1.5 | 62860 | 6.0 | 9093 | 32 | 0.4 |
| 30- | 45.5379- | 110.5312- | 2- | 15- | | 0-M36763 | 63170 | -0.11 | 460 | 39020 | 48 | -123 | 30.1 | 128 | -2.4 | 4 | 1.5 | 64290 | 6.9 | 9312 | 29 | 0.4 |

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

④

| 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 | RERLICATE | | Mg | Mn | Na | Rb | Sb | Sc | Sm | Sr | Ta | Tb | Th | Ti | V | Yb | Zn | |
| 30- | 45.6151- | 110.3798- | 2- | 12- | 0- | M36713 | 15990 | 672 | 10270 | 55 | -2 | 13.1 | 5.9 | -251 | -1 | -1 | 11.9 | 3667 | 97 | 3.8 | 87 | 0.193 |
| 30- | 45.6290- | 110.4195- | 2- | 12- | 0- | M36714 | 4750 | 463 | 5131 | 52 | -2 | 6.7 | 5.0 | -235 | -1 | -1 | 10.2 | 3073 | 81 | 3.5 | 114 | 0.363 |
| 30- | 45.6544- | 110.4396- | 2- | 12- | 0- | M36715 | 4985 | 441 | 8741 | 54 | -2 | 5.3 | 4.1 | -217 | -1 | -1 | 7.8 | 1857 | 62 | 2.3 | 86 | 0.308 |
| 30- | 45.6538- | 110.4698- | 2- | 12- | 0- | M36716 | 5049 | 232 | 8664 | -24 | -2 | 4.4 | 4.9 | 362 | -1 | -1 | 8.1 | 2301 | 54 | 2.2 | -12 | 0.333 |
| 30- | 45.6815- | 110.4906- | 2- | 12- | 0- | M36717 | 7971 | 472 | 14280 | 44 | -2 | 8.5 | 4.7 | 441 | -1 | -1 | 9.8 | 3586 | 95 | 2.4 | 111 | 0.265 |
| 30- | 45.6990- | 110.4590- | 2- | 12- | 0- | M36718 | 12160 | 800 | 16160 | -38 | -3 | 15.8 | 7.4 | -353 | 2 | -1 | 14.6 | 5072 | 102 | 6.0 | 102 | 0.192 |
| 30- | 45.7100- | 110.4187- | 2- | 12- | 0- | M36719 | 10150 | 759 | 17500 | 46 | -2 | 10.7 | 4.7 | 510 | -1 | -1 | 9.8 | 3919 | 143 | 2.8 | 86 | 0.276 |
| 30- | 45.7064- | 110.3999- | 2- | 12- | 0- | M36720 | 9790 | 584 | 12710 | -28 | -2 | 9.0 | 4.7 | 445 | -1 | -1 | 8.5 | 3552 | 98 | 2.2 | -33 | 0.329 |
| 30- | 45.6686- | 110.3961- | 2- | 12- | 0- | M36721 | 7272 | 418 | 15300 | 81 | -2 | 7.5 | 4.3 | 341 | -1 | -1 | 9.2 | 2962 | 79 | -1.7 | 50 | 0.283 |
| 30- | 45.6488- | 110.3937- | 2- | 12- | 0- | M36722 | 17560 | 1063 | 14860 | 77 | -3 | 17.1 | 5.9 | -364 | -1 | -1 | 10.0 | 5619 | 191 | 4.4 | 131 | 0.270 |
| 30- | 45.4466- | 110.5922- | 2- | 12- | 0- | M36723 | 13580 | 733 | 14180 | 52 | -3 | 13.3 | 8.9 | -295 | -1 | -1 | 18.7 | 3374 | 103 | 4.3 | 105 | 0.433 |
| 30- | 45.4381- | 110.6058- | 2- | 12- | 0- | M36724 | 10300 | 765 | 14120 | 57 | -3 | 17.0 | 12.4 | -270 | -1 | -1 | 30.5 | 4338 | 95 | 5.6 | -41 | 0.230 |
| 30- | 45.4259- | 110.6141- | 2- | 12- | 0- | M36725 | 12090 | 684 | 18600 | -34 | -3 | 12.4 | 5.3 | 671 | -1 | -1 | 11.5 | 3782 | 97 | -2.1 | -70 | 0.235 |
| 30- | 45.2858- | 110.7531- | 2- | 12- | 0- | M36726 | 7812 | 538 | 17730 | 75 | -3 | 10.4 | 4.7 | -323 | -1 | -1 | 12.4 | 4230 | 84 | 2.9 | 140 | 0.250 |
| 30- | 45.2941- | 110.7488- | 2- | 12- | 0- | M36727 | 8394 | 1037 | 16470 | 93 | -3 | 10.9 | 4.1 | -360 | -1 | -1 | 11.5 | 3445 | 96 | 4.1 | 109 | 0.287 |
| 30- | 45.2612- | 110.7616- | 2- | 12- | 0- | M36728 | 10290 | 674 | 14510 | 75 | -2 | 10.2 | 6.4 | 329 | -1 | -1 | 18.9 | 3338 | 96 | 4.6 | 115 | 0.222 |
| 30- | 45.4654- | 110.6530- | 2- | 12- | 0- | M36729 | 11470 | 701 | 11100 | 53 | -3 | 9.8 | 6.2 | 379 | -1 | -1 | 11.4 | 4139 | 95 | 3.0 | -42 | 0.333 |
| 30- | 45.5266- | 110.6678- | 2- | 15- | 0- | M36730 | 5342 | 502 | 9199 | 64 | -2 | 6.6 | 5.2 | -227 | -1 | -1 | 11.8 | 2319 | 68 | 3.2 | 56 | 0.322 |
| 30- | 45.5239- | 110.6507- | 2- | 15- | 0- | M36731 | 13930 | 469 | 10740 | 71 | -2 | 8.5 | 5.4 | 423 | -1 | -1 | 11.5 | 2619 | 83 | 4.5 | 86 | 0.235 |
| 30- | 45.5191- | 110.6311- | 2- | 15- | 0- | M36732 | 19450 | 485 | 10280 | 72 | -2 | 8.6 | 4.5 | 302 | -1 | -1 | 9.2 | 2412 | 105 | 2.8 | 99 | 0.446 |
| 30- | 45.4987- | 110.7037- | 2- | 15- | 0- | M36733 | 8773 | 539 | 10510 | 57 | -2 | 7.8 | 5.6 | -244 | -1 | -1 | 12.3 | 2781 | 75 | 3.9 | 66 | 0.244 |
| 30- | 45.4786- | 110.7031- | 2- | 15- | 0- | M36734 | 13770 | 703 | 16030 | -32 | -2 | 13.2 | 5.5 | 535 | -1 | -1 | 8.3 | 4230 | 128 | 3.4 | 99 | 0.277 |
| 30- | 45.4685- | 110.6936- | 2- | 12- | 0- | M36735 | 6206 | 312 | 10510 | 59 | -2 | 5.9 | 4.3 | -221 | -1 | -1 | 8.6 | 2273 | 73 | 3.5 | 66 | 0.291 |
| 30- | 45.4387- | 110.7354- | 2- | 12- | 0- | M36736 | 13030 | 959 | 20020 | 56 | -3 | 13.1 | 4.7 | 599 | -1 | -1 | 7.4 | 4719 | 141 | 2.5 | 112 | 0.284 |
| 30- | 45.4151- | 110.7062- | 2- | 15- | 0- | M36737 | 12520 | 948 | 19350 | -37 | -3 | 13.4 | 5.0 | 532 | -1 | -1 | 7.9 | 5196 | 152 | 3.2 | 77 | 0.266 |
| 30- | 45.3069- | 110.8519- | 2- | 12- | 0- | M36738 | 12610 | 1044 | 18400 | -36 | -3 | 14.1 | 5.8 | 585 | -1 | -1 | 12.0 | 6009 | 189 | 2.7 | 126 | 0.175 |
| 30- | 45.3126- | 110.8962- | 2- | 12- | 0- | M36739 | 19590 | 1589 | 16550 | -44 | -3 | 20.5 | 7.0 | -450 | -1 | -1 | 13.5 | 12260 | 440 | 5.6 | 222 | 0.185 |
| 30- | 45.3558- | 110.7808- | 2- | 12- | 0- | M36740 | 12700 | 753 | 13800 | 69 | -2 | 11.9 | 5.4 | -287 | -1 | -1 | 10.5 | 3911 | 134 | 2.8 | 118 | 0.419 |
| 30- | 45.3614- | 110.7983- | 2- | 12- | 0- | M36741 | 16950 | 995 | 17140 | -38 | -3 | 15.4 | 5.3 | 505 | -1 | -1 | 7.9 | 6778 | 229 | -2.7 | 135 | 0.278 |
| 30- | 45.3563- | 110.8049- | 2- | 12- | 0- | M36742 | 8230 | 498 | 16830 | 78 | -2 | 9.6 | 5.6 | 522 | -1 | -1 | 13.0 | 3556 | 89 | 2.9 | 121 | 0.262 |
| 30- | 45.3214- | 110.8998- | 2- | 12- | 0- | M36743 | 10060 | 889 | 20610 | 44 | -2 | 12.2 | 6.9 | 580 | -1 | -1 | 12.0 | 4062 | 127 | -1.8 | 135 | 0.183 |
| 30- | 45.3294- | 110.9056- | 2- | 12- | 0- | M36744 | 22620 | 1239 | 17010 | -41 | -3 | 21.0 | 3.9 | -349 | -1 | -1 | 5.3 | 8204 | 373 | 3.1 | 121 | 0.283 |
| 30- | 45.2627- | 110.8668- | 2- | 12- | 0- | M36745 | 8273 | 821 | 17400 | -35 | -3 | 11.9 | 6.8 | 547 | -1 | -1 | 11.5 | 5141 | 130 | 3.3 | 98 | 0.226 |
| 30- | 45.2675- | 110.8757- | 2- | 15- | 0- | M36746 | 9821 | 1010 | 17610 | -37 | -3 | 15.1 | 6.3 | -322 | -1 | -1 | 9.1 | 5697 | 150 | 3.6 | 90 | 0.319 |
| 30- | 45.2526- | 110.8937- | 2- | 12- | 0- | M36747 | 10220 | 700 | 15620 | 50 | -2 | 11.4 | 6.7 | 672 | -1 | -1 | 13.5 | 4443 | 112 | 3.9 | 111 | 0.230 |
| 30- | 45.3222- | 110.8329- | 2- | 12- | 0- | M36748 | 13330 | 385 | 7197 | -24 | -2 | 6.9 | 3.6 | -197 | -1 | -1 | 6.7 | 2529 | 71 | 2.5 | 84 | 0.403 |
| 30- | 45.3554- | 110.8846- | 2- | 12- | 0- | M36749 | 11220 | 1051 | 15760 | -43 | -3 | 12.9 | 5.7 | 803 | -1 | -1 | 8.0 | 4625 | 116 | 3.4 | 123 | 0.313 |
| 30- | 45.5254- | 110.7012- | 2- | 12- | 0- | M36750 | 5871 | 438 | 7175 | 78 | -2 | 6.8 | 5.5 | -218 | -1 | -1 | 12.8 | 2062 | 69 | 4.2 | 101 | 0.328 |
| 30- | 45.5210- | 110.7050- | 2- | 12- | 0- | M36751 | 9709 | 624 | 11580 | 63 | -2 | 9.7 | 5.4 | -285 | -1 | -1 | 13.6 | 3391 | 98 | 3.5 | 123 | 0.257 |
| 30- | 45.5139- | 110.7431- | 2- | 15- | 0- | M36752 | 13390 | 431 | 7538 | 47 | -2 | 5.5 | 3.8 | -221 | -1 | -1 | 7.7 | 2475 | 69 | 1.6 | -55 | 0.338 |
| 30- | 45.5106- | 110.7367- | 2- | 12- | 0- | M36753 | 12180 | 703 | 13460 | 45 | -2 | 11.0 | 5.0 | 435 | -1 | -1 | 8.5 | 4732 | 157 | 3.1 | -50 | 0.318 |
| 30- | 45.5470- | 110.7234- | 2- | 12- | 0- | M36754 | 11790 | 733 | 15590 | 70 | -2 | 12.9 | 5.0 | 321 | -1 | -1 | 9.8 | 4756 | 146 | 3.2 | 71 | 0.265 |
| 30- | 45.5721- | 110.6899- | 2- | 11- | 0- | M36755 | 9403 | 498 | 8043 | 41 | -2 | 9.0 | 4.3 | -276 | -1 | -1 | 9.1 | 3315 | 75 | -1.7 | 35 | 0.308 |
| 30- | 45.5639- | 110.6744- | 2- | 12- | 0- | M36756 | 9270 | 475 | 7479 | -26 | -2 | 8.0 | 4.5 | -212 | -1 | -1 | 9.4 | 2635 | 76 | 3.5 | 78 | 0.330 |
| 30- | 45.5425- | 110.6219- | 2- | 12- | 0- | M36757 | 6619 | 245 | 3028 | -23 | -2 | 4.2 | 4.3 | 271 | -1 | -1 | 6.9 | 2225 | 40 | 2.8 | -13 | 0.362 |
| 30- | 45.5681- | 110.6197- | 2- | 12- | 0- | M36758 | 17540 | 340 | 7165 | 66 | -2 | 6.9 | 4.4 | -206 | -1 | -1 | 8.4 | 2430 | 47 | 3.3 | -52 | 0.274 |
| 30- | 45.5651- | 110.6163- | 2- | 12- | 0- | M36759 | 8601 | 878 | 16210 | 96 | -3 | 13.9 | 7.8 | -389 | -1 | -1 | 16.6 | 4945 | 94 | 4.0 | 92 | 0.235 |
| 30- | 45.5192- | 110.5619- | 2- | 12- | 0- | M36760 | 9725 | 671 | 18610 | 29 | -2 | 12.8 | 5.0 | -268 | -1 | -1 | 13.0 | 4159 | 101 | 3.6 | 87 | 0.246 |
| 30- | 45.5257- | 110.5117- | 2- | 12- | 0- | M36761 | 20290 | 1282 | 16650 | -44 | -3 | 24.6 | 6.4 | -380 | -1 | -2 | 9.5 | 5446 | 178 | 3.7 | -56 | 0.621 |
| 30- | 45.5360- | 110.5568- | 2- | 12- | 0- | M36762 | 19510 | 1076 | 14700 | -39 | -3 | 24.1 | 3.9 | -318 | -1 | -1 | 8.1 | 5381 | 161 | 2.9 | -51 | 0.358 |
| 30- | 45.5379- | 110.5312- | 2- | 15- | 0- | M36763 | 17840 | 1257 | 17850 | -38 | -3 | 25.8 | 5.0 | -406 | -2 | -1 | 9.5 | 6247 | 175 | -2.1 | -53 | 0.421 |

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

①

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER AND FIELD DATA | | | | | | | | | | | | | | | | | | | | | | | | | U CONCENTRATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | TIME SAMPLED | | | | | | | | | | | | | | | | | | | | | | | | |
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | DATE | HOUR | AIR TEMPERATURE | WATER TEMPERATURE | COMMENTS | SPECIAL MEASUREMENTS | pH | CONDUCTIVITY (µmho/cm) | SCINTILLOMETER (eU, ppm) | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm |
| 30- | 45.5513- | 110.5198- | 2- | 12- | | 0-M36764- | 10/01/76- | 12- | 13- | 7.0- | C- | - | 5.8- | 120- | | 4- | 1- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 1- | 2- | 2- | 1- | -3- | - | - | - | - | 3.10 |
| 30- | 45.5715- | 110.5210- | 2- | 12- | | 0-M36765- | 10/01/76- | 12- | 12- | 8.0- | C- | - | 5.7- | 340- | | 3- | 1- | 7- | 2- | 3- | 3- | 2- | 1- | 2- | 2- | 2- | 2- | 1- | -3- | - | - | - | - | 1.90 |
| 30- | 45.5657- | 110.5471- | 2- | 12- | | 0-M36766- | 10/01/76- | 13- | 20- | 8.0- | C- | - | 5.9- | 345- | | 4- | 1- | 1- | 2- | 3- | 3- | 2- | 1- | 2- | 2- | 2- | 2- | 1- | -3- | - | - | - | - | 3.10 |
| 30- | 45.5705- | 110.5686- | 2- | 12- | | 0-M36767- | 10/01/76- | 13- | 13- | 10.0- | C- | - | 6.3- | 340- | | 3- | 1- | 7- | 2- | 7- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 3.10 |
| 30- | 45.6233- | 110.5985- | 2- | 12- | | 0-M36768- | 10/01/76- | 13- | 18- | 13.5- | C- | - | 6.5- | 700- | | 4- | 1- | 1- | 6- | 6- | 1- | 2- | 1- | 1- | 6- | 3- | 2- | 2- | -3- | - | - | - | - | 3.10 |
| 30- | 45.6158- | 110.5926- | 2- | 11- | | 0-M36769- | 10/01/76- | 14- | 13- | 10.5- | C- | - | 6.3- | 480- | | 1- | 1- | 1- | 3- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 4- | 2- | -3- | - | - | - | - | 2.90 |
| 30- | 45.6212- | 110.5860- | 2- | 12- | | 0-M36770- | 10/01/76- | 14- | 19- | 13.0- | C- | - | 6.3- | 480- | | 1- | 1- | 1- | 6- | 6- | 2- | 2- | 1- | 2- | 6- | 3- | 4- | 2- | -3- | - | - | - | - | 2.40 |
| 30- | 45.6303- | 110.5555- | 2- | 12- | | 0-M36771- | 10/01/76- | 16- | 22- | 12.0- | C- | - | 6.3- | 450- | | 2- | 3- | 7- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 2.10 |
| 30- | 45.6492- | 110.3824- | 2- | 12- | | 0-M36772- | 10/04/76- | 11- | 11- | 7.0- | - | - | 6.3- | 310- | | 3- | 1- | 1- | - | -3- | 2- | 1- | 2- | 2- | 3- | 2- | 2- | - | - | - | - | - | - | 4.20 |
| 30- | 45.7331- | 110.4686- | 2- | 15- | | 0-M36773- | 10/04/76- | 12- | 10- | - | - | - | - | - | | 7- | 1- | 5- | 4- | 6- | - | - | - | -4- | 3- | 2- | 2- | -3- | - | - | - | - | - | 2.90 |
| 30- | 45.7436- | 110.4894- | 2- | 12- | | 0-M36774- | 10/04/76- | 12- | 10- | 8.4- | - | - | 6.6- | 500- | | 3- | 1- | 7- | 5- | 8- | 2- | 2- | 1- | 2- | 2- | 3- | 2- | 2- | -3- | - | - | - | - | 3.00 |
| 30- | 45.7260- | 110.4589- | 2- | 15- | | 0-M36775- | 10/04/76- | 12- | 14- | - | - | - | - | - | | 1- | 1- | 7- | 4- | 6- | - | - | - | -4- | 2- | 2- | 2- | -3- | - | - | - | - | - | 2.50 |
| 30- | 45.7309- | 110.3874- | 2- | 15- | | 0-M36776- | 10/04/76- | 13- | 14- | - | - | - | - | - | | 7- | 1- | 7- | 4- | 6- | - | - | - | -4- | 2- | 2- | 2- | -3- | - | - | - | - | - | 2.10 |
| 30- | 45.7373- | 110.3556- | 2- | 12- | | 0-M36777- | 10/04/76- | 13- | 14- | 9.0- | - | - | 6.3- | 440- | | 4- | 1- | 7- | 4- | 6- | 2- | 2- | 2- | 1- | 4- | 2- | 2- | 2- | -3- | - | - | - | - | 2.00 |
| 30- | 45.7436- | 110.3218- | 2- | 12- | | 0-M36778- | 10/04/76- | 13- | 14- | 9.4- | - | - | 6.3- | 410- | | 6- | 1- | 7- | 5- | 6- | 2- | 2- | 2- | 2- | 4- | 2- | 2- | 2- | -3- | - | - | - | - | 2.80 |
| 30- | 45.7467- | 110.2863- | 2- | 12- | | 0-M36779- | 10/04/76- | 14- | 12- | 10.0- | - | - | 6.9- | 600- | | 5- | 1- | 7- | 4- | 6- | 2- | 2- | 2- | 2- | 2- | 2- | 2- | 3- | -3- | - | - | - | - | 2.30 |
| 30- | 45.7045- | 110.3490- | 2- | 15- | | 0-M36780- | 10/04/76- | 15- | 12- | - | - | - | - | - | | 8- | 1- | 1- | 5- | 6- | - | - | - | -4- | 4- | 1- | 3- | -3- | - | - | - | - | - | 3.60 |
| 30- | 45.6756- | 110.3601- | 2- | 12- | | 0-M36781- | 10/04/76- | 15- | 12- | 8.0- | - | - | 6.6- | 410- | | 6- | 1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 4- | 4- | 3- | 2- | -3- | - | - | - | - | 2.00 |
| 30- | 45.6651- | 110.3377- | 2- | 12- | | 0-M36782- | 10/04/76- | 16- | 11- | 8.2- | - | - | 6.6- | 420- | | 5- | 1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 2- | 4- | 2- | -3- | - | - | - | - | 2.50 |
| 30- | 45.6949- | 110.3347- | 2- | 12- | | 0-M36783- | 10/04/76- | 17- | 10- | 1.0- | - | - | 6.3- | 400- | | 7- | 1- | 1- | 4- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 2- | 2- | -3- | - | - | - | - | 2.90 |
| 30- | 45.6926- | 110.3150- | 2- | 12- | | 0-M36784- | 10/05/76- | 9- | 3- | 4.8- | - | - | 6.3- | 410- | | 7- | 1- | 6- | 4- | 6- | 3- | 2- | 2- | 2- | 4- | 2- | 3- | 3- | -3- | - | - | - | - | 3.90 |
| 30- | 45.6912- | 110.3030- | 2- | 12- | | 0-M36785- | 10/05/76- | 10- | 5- | 7.0- | - | - | 6.6- | 500- | | | -1- | 6- | 4- | 6- | 2- | 2- | 2- | 2- | 4- | 2- | 3- | 3- | -3- | - | - | - | - | 2.50 |
| 30- | 45.6896- | 110.2745- | 2- | 12- | | 0-M36786- | 10/05/76- | 10- | 6- | 7.2- | - | - | 6.3- | 450- | | 10- | 1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | 2.50 |
| 30- | 45.6895- | 110.2762- | 2- | 12- | | 0-M36787- | 10/05/76- | 10- | 6- | 5.6- | - | - | 6.3- | 375- | | 6- | 1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | 3.90 |
| 30- | 45.6732- | 110.2818- | 2- | 15- | | 0-M36788- | 10/05/76- | 11- | 9- | - | - | - | - | - | | 3- | 1- | 6- | - | - | - | - | - | -3- | 3- | 3- | 3- | -3- | - | - | - | - | - | 3.50 |
| 30- | 45.6565- | 110.2954- | 2- | 12- | | 0-M36789- | 10/05/76- | 12- | 11- | 5.8- | - | - | 6.6- | 330- | | 5- | 1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | 3.10 |
| 30- | 45.6567- | 110.2930- | 2- | 12- | | 0-M36790- | 10/05/76- | 12- | 11- | 4.4- | - | - | 6.3- | 390- | | 7- | 1- | 6- | 4- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | 2.90 |
| 30- | 45.6885- | 110.2656- | 2- | 15- | | 0-M36791- | 10/05/76- | 13- | 6- | - | - | - | - | - | | 6- | 1- | 6- | 4- | 6- | - | - | - | -4- | 3- | 3- | 3- | -3- | - | - | - | - | - | 2.20 |
| 30- | 45.6757- | 110.2503- | 2- | 12- | | 0-M36792- | 10/05/76- | 13- | 6- | 6.0- | - | - | 6.3- | 360- | | 3- | 1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | 3.00 |
| 30- | 45.6971- | 110.2550- | 2- | 12- | | 0-M36793- | 10/05/76- | 14- | 6- | 7.0- | - | - | 6.3- | 400- | | 5- | 1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 4- | -3- | - | - | - | - | 3.20 |
| 30- | 45.6026- | 110.3746- | 2- | 12- | | 0-M36794- | 10/05/76- | 15- | 6- | 4.0- | - | - | 6.3- | 330- | | 7- | 1- | 1- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 4- | -3- | - | - | - | - | 3.90 |
| 30- | 45.6040- | 110.3730- | 2- | 12- | | 0-M36795- | 10/05/76- | 15- | 6- | 4.6- | - | - | 6.6- | 360- | | 8- | 1- | 1- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 4- | -3- | - | - | - | - | 2.60 |
| 30- | 45.6050- | 110.4018- | 2- | 15- | | 0-M36796- | 10/05/76- | 15- | 6- | - | - | - | - | - | | 8- | 1- | 1- | 5- | 8- | - | - | - | -1- | 3- | 4- | 4- | -3- | - | - | - | - | - | 2.60 |
| 30- | 45.6142- | 110.3590- | 2- | 12- | | 0-M36797- | 10/05/76- | 16- | 7- | 5.0- | - | - | 6.6- | 340- | | 6- | 1- | 1- | 4- | 6- | 3- | 2- | 1- | 2- | 2- | 2- | 4- | 4- | -3- | - | - | - | - | 2.00 |
| 30- | 45.6041- | 110.3330- | 2- | 12- | | 0-M36798- | 10/05/76- | 16- | 6- | 6.0- | - | - | 6.9- | 550- | | 5- | 1- | 6- | 4- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 4- | 4- | -3- | - | - | - | - | 2.70 |
| 30- | 45.5992- | 110.3261- | 2- | 12- | | 0-M36799- | 10/05/76- | 17- | 6- | 5.0- | - | - | 6.3- | 275- | | 6- | 1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 4- | 4- | -3- | - | - | - | - | 2.30 |
| 30- | 45.6237- | 110.4017- | 2- | 12- | | 0-M36800- | 10/06/76- | 9- | 4- | 4.2- | - | - | 6.3- | 480- | | 8- | 1- | 6- | 4- | 6- | 2- | 2- | 3- | 2- | 4- | 2- | 2- | 2- | -3- | - | - | - | - | 2.60 |
| 30- | 45.5955- | 110.3279- | 2- | 12- | | 0-M36801- | 10/06/76- | 9- | 5- | 3.2- | - | - | 6.3- | 340- | | 6- | 1- | 6- | 4- | 6- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 1.80 |
| 30- | 45.5872- | 110.3230- | 2- | 12- | | 0-M36802- | 10/05/76- | 9- | 6- | 2.8- | - | - | 6.3- | 226- | | 7- | 1- | 1- | 4- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 2.00 |
| 30- | 45.5914- | 110.3296- | 2- | 15- | | 0-M36803- | 10/06/76- | 10- | 6- | - | - | - | - | - | | 1- | 1- | 6- | 5- | 8- | - | - | - | -2- | 3- | 3- | 2- | -3- | - | - | - | - | - | 5.80 |
| 30- | 45.5744- | 110.3367- | 2- | 12- | | 0-M36804- | 10/06/76- | 11- | 3- | 3.0- | - | - | 6.3- | 480- | | 7- | 1- | 7- | 4- | 6- | 2- | 2- | 3- | 2- | 1- | 2- | 2- | 3- | -3- | - | - | - | - | 3.70 |
| 30- | 45.5746- | 110.3379- | 2- | 12- | | 0-M36805- | 10/06/76- | 11- | 3- | 3.0- | - | - | 6.3- | 330- | | 2- | 1- | 7- | 4- | 6- | 3- | 2- | 1- | 2- | 1- | 2- | 2- | 3- | -3- | - | - | - | - | 3.20 |
| 30- | 45.6081- | 110.3183- | 2- | 12- | | 0-M36806- | 10/06/76- | 12- | 5- | 5.8- | - | - | 6.6- | 650- | | 5- | 1- | 7- | 4- | 6- | 2- | 2- | 2- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 2.40 |
| 30- | 45.6107- | 110.2672- | 2- | 12- | | 0-M36807- | 10/06/76- | 12- | 6- | 5.2- | - | - | 6.3- | 650- | | 8- | 1- | 7- | 4- | 6- | 2- | 2- | 2- | 2- | 4- | 3- | 2- | 3- | -3- | - | - | - | - | 2.70 |
| 30- | 45.6142- | 110.2576- | 2- | 12- | | 0-M36808- | 10/06/76- | 13- | 8- | 6.6- | - | - | 6.3- | 500- | | 3- | 1- | 7- | 3- | 8- | 2- | 2- | 2- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 3.00 |
| 30- | 45.5773- | 110.2650- | 2- | 12- | | 0-M36809- | 10/06/76- | 14- | 11- | 5.6- | - | - | 6.6- | 390- | | 7- | 1- | 6- | 4- | 8- | 2- | 2- | 1- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 2.70 |
| 30- | 45.5698- | 110.2735- | 2- | 12- | | 0-M36810- | 10/06/76- | 14- | 11- | 5.2- | - | - | 6.3- | 395- | | 8- | 1- | 6- | 3- | 1- | 3- | 3- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 2.90 |
| 30- | 45.5385- | 110.3205- | 2- | 12- | | 0-M36811- | 10/06/76- | 15- | 12- | 3.0- | - | - | 6.3- | 135- | | 8- | 1- | 6- | 4- | 6- | 2- | 2- | 2- | 2- | 1- | 2- | 2- | 2- | -3- | - | - | - | - | 2.00 |
| 30- | 45.6112- | 110.2489- | 2- | 15- | | 0-M36812- | 10/06/76- | 16- | 11- | - | - | - | - | - | | 5- | 1- | 6- | 3- | 6- | - | - | - | -4- | 3- | 2- | 2- | -3- | - | - | - | - | - | 3.20 |
| 30- | 45.6233- | 110.2167- | 2- | 12- | | 0-M36813- | 10/06/76- | 16- | 10- | 9.0- | - | - | 6.3- | 750- | | | -1- | 6- | 3- | 1- | 2- | 2- | 2- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 2.80 |
| 30- | 45.6046- | 110.1704- | 2- | 15- | | 0-M36814- | 10/07/76- | 10- | 8- | - | - | - | - | - | | 11- | 1- | 6- | - | - | - | - | - | -4- | 3- | 3- | 1- | -3- | - | - | - | - | - | 2.70 |

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

②

| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | 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) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ag | Bi | Cd | Cu | Nb | Ni | Pb | Sn | W | Be | Li |
| 30-45.5513-110.5198-2-12- | 0-M36764 | -5 | -5 | -5 | 52 | -20 | 49 | -5 | -10 | -15 | 1 | 20 |
| 30-45.5715-110.5210-2-12- | 0-M36765 | -5 | -5 | -5 | 25 | -20 | 36 | -5 | -10 | -15 | 2 | 19 |
| 30-45.5657-110.5471-2-12- | 0-M36766 | -5 | -5 | -5 | 29 | -20 | 28 | 10 | -10 | -15 | 2 | 30 |
| 30-45.5705-110.5686-2-12- | 0-M36767 | -5 | -5 | -5 | 28 | -20 | 15 | 10 | -10 | -15 | 2 | 26 |
| 30-45.6233-110.5985-2-12- | 0-M36768 | -5 | -5 | -5 | 350 | -20 | -15 | 7 | -10 | -15 | 2 | 15 |
| 30-45.6158-110.5926-2-11- | 0-M36769 | -5 | -5 | -5 | 25 | -20 | -15 | 12 | -10 | -15 | 2 | 20 |
| 30-45.6212-110.5860-2-12- | 0-M36770 | -5 | -5 | -5 | 26 | -20 | 17 | 7 | -10 | -15 | 2 | 15 |
| 30-45.6303-110.5555-2-12- | 0-M36771 | -5 | -5 | -5 | 17 | -20 | -15 | 5 | -10 | -15 | 2 | 17 |
| 30-45.6492-110.3824-2-12- | 0-M36772 | -5 | -5 | -5 | 21 | -20 | 15 | 15 | -10 | -15 | 2 | 28 |
| 30-45.7331-110.4686-2-15- | 0-M36773 | -5 | -5 | -5 | 38 | -20 | 37 | 15 | -10 | -15 | 2 | 28 |
| 30-45.7436-110.4894-2-12- | 0-M36774 | -5 | -5 | -5 | 28 | -20 | 18 | 15 | -10 | -15 | 2 | 22 |
| 30-45.7260-110.4589-2-15- | 0-M36775 | -5 | -5 | -5 | 26 | -20 | 46 | 8 | -10 | 22 | 2 | 23 |
| 30-45.7309-110.3874-2-15- | 0-M36776 | -5 | -5 | -5 | 43 | -20 | 42 | -5 | -10 | -15 | 2 | 24 |
| 30-45.7373-110.3556-2-12- | 0-M36777 | -5 | -5 | -5 | 38 | -20 | 66 | 9 | -10 | -15 | 2 | 29 |
| 30-45.7436-110.3218-2-12- | 0-M36778 | -5 | -5 | -5 | 43 | -20 | 49 | 8 | -10 | -15 | 2 | 26 |
| 30-45.7467-110.2863-2-12- | 0-M36779 | -5 | -5 | -5 | 37 | -20 | 61 | 5 | -10 | -15 | 2 | 19 |
| 30-45.7045-110.3490-2-15- | 0-M36780 | -5 | -5 | -5 | 20 | -20 | 19 | 10 | -10 | -15 | 2 | 30 |
| 30-45.6756-110.3601-2-12- | 0-M36781 | -5 | -5 | -5 | 19 | -20 | -15 | 5 | -10 | -15 | 2 | 16 |
| 30-45.6651-110.3377-2-12- | 0-M36782 | -5 | -5 | -5 | -10 | -20 | -15 | -5 | -10 | -15 | 2 | 14 |
| 30-45.6949-110.3347-2-12- | 0-M36783 | -5 | -5 | -5 | 30 | -20 | -15 | 5 | -10 | -15 | 2 | 25 |
| 30-45.6926-110.3150-2-12- | 0-M36784 | -5 | -5 | -5 | 18 | -20 | 19 | 7 | -10 | -15 | 2 | 25 |
| 30-45.6912-110.3030-2-12- | 0-M36785 | -5 | -5 | -5 | 22 | -20 | 27 | 9 | -10 | -15 | 2 | 17 |
| 30-45.6896-110.2745-2-12- | 0-M36786 | -5 | -5 | -5 | 13 | -20 | -15 | 5 | -10 | -15 | 2 | 18 |
| 30-45.6895-110.2762-2-12- | 0-M36787 | -5 | -5 | -5 | 13 | -20 | -15 | -5 | -10 | -15 | 2 | 15 |
| 30-45.6732-110.2818-2-15- | 0-M36788 | -5 | -5 | -5 | 23 | -20 | -15 | 13 | -10 | -15 | 2 | 18 |
| 30-45.6565-110.2954-2-12- | 0-M36789 | -5 | -5 | -5 | 26 | -20 | 19 | 11 | -10 | -15 | 3 | 20 |
| 30-45.6567-110.2930-2-12- | 0-M36790 | -5 | -5 | -5 | 21 | -20 | -15 | -5 | -10 | -15 | 2 | 17 |
| 30-45.6885-110.2656-2-15- | 0-M36791 | -5 | -5 | -5 | 26 | -20 | -15 | 6 | -10 | -15 | 2 | 21 |
| 30-45.6757-110.2503-2-12- | 0-M36792 | -5 | -5 | -5 | 19 | -20 | -15 | 12 | -10 | -15 | 2 | 23 |
| 30-45.6971-110.2550-2-12- | 0-M36793 | -5 | -5 | -5 | 12 | -20 | -15 | 7 | -10 | -15 | 3 | 25 |
| 30-45.6026-110.3746-2-12- | 0-M36794 | -5 | -5 | -5 | 17 | -20 | 19 | 18 | -10 | -15 | 2 | 35 |
| 30-45.6040-110.3730-2-12- | 0-M36795 | -5 | -5 | -5 | 16 | -20 | -15 | -5 | -10 | -15 | 3 | 24 |
| 30-45.6050-110.4018-2-15- | 0-M36796 | -5 | -5 | -5 | 39 | -20 | 30 | 15 | -10 | -15 | 1 | 80 |
| 30-45.6142-110.3590-2-12- | 0-M36797 | -5 | -5 | -5 | 12 | -20 | -15 | 6 | -10 | -15 | -1 | 19 |
| 30-45.6041-110.3330-2-12- | 0-M36798 | -5 | -5 | -5 | 17 | -20 | -15 | 7 | -10 | -15 | -1 | 32 |
| 30-45.5992-110.3261-2-12- | 0-M36799 | -5 | -5 | -5 | 18 | -20 | -15 | 9 | -10 | -15 | 3 | 21 |
| 30-45.6237-110.4017-2-12- | 0-M36800 | -5 | -5 | -5 | 22 | -20 | 35 | 16 | -10 | -15 | 2 | 27 |
| 30-45.5955-110.3279-2-12- | 0-M36801 | -5 | -5 | -5 | 16 | -20 | -15 | 5 | -10 | -15 | 2 | 25 |
| 30-45.5872-110.3230-2-12- | 0-M36802 | -5 | -5 | -5 | 11 | -20 | -15 | -5 | -10 | -15 | 1 | 20 |
| 30-45.5914-110.3296-2-15- | 0-M36803 | -5 | -5 | -5 | 33 | -20 | 22 | 9 | -10 | -15 | 2 | 44 |
| 30-45.5744-110.3367-2-12- | 0-M36804 | -5 | -5 | -5 | 13 | -20 | -15 | 11 | -10 | -15 | 2 | 39 |
| 30-45.5746-110.3379-2-12- | 0-M36805 | -5 | -5 | -5 | 16 | -20 | 17 | 6 | -10 | -15 | 2 | 31 |
| 30-45.6081-110.3183-2-12- | 0-M36806 | -5 | -5 | -5 | 18 | -20 | -15 | 7 | -10 | -15 | 3 | 36 |
| 30-45.6107-110.2672-2-12- | 0-M36807 | -5 | -5 | -5 | 16 | -20 | -15 | 5 | -10 | -15 | 3 | 42 |
| 30-45.6142-110.2576-2-12- | 0-M36808 | -5 | -5 | -5 | 22 | -20 | 19 | 8 | -10 | -15 | 2 | 26 |
| 30-45.5773-110.2650-2-12- | 0-M36809 | -5 | -5 | -5 | 15 | -20 | 23 | 13 | -10 | -15 | 3 | 27 |
| 30-45.5698-110.2735-2-12- | 0-M36810 | -5 | -5 | -5 | 30 | -20 | 20 | 17 | -10 | -15 | 2 | 37 |
| 30-45.5385-110.3205-2-12- | 0-M36811 | -5 | -5 | -5 | 26 | -20 | 45 | 6 | 11 | -15 | 2 | 21 |
| 30-45.6112-110.2489-2-15- | 0-M36812 | -5 | -5 | -5 | 49 | -20 | 21 | 12 | -10 | -15 | 2 | 32 |
| 30-45.6233-110.2167-2-12- | 0-M36813 | -5 | -5 | -5 | 16 | -20 | 22 | 12 | -10 | -15 | 3 | 49 |
| 30-45.6046-110.1704-2-15- | 0-M36814 | -5 | -5 | -5 | 37 | -20 | 23 | 17 | -10 | -15 | -1 | 89 |

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

③

| DOE SAMPLE NUMBER | | | | | | LAB. SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (Concentrations reported in weight parts per million (ppm)) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Al | Au | Ba | Ca | Ce | Cl | Co | Cr | Cs | Dy | Eu | Fe | Hf | K | La | Lu |
| 30- | 45.5513- | 110.5198- | 2- | 12- | 0- | M36764 | 58600 | -0.11 | 335 | 38010 | 47 | 170 | 32.8 | 121 | -2.3 | 4 | 1.4 | 66600 | 6.9 | 9236 | 36 | 0.4 |
| 30- | 45.5715- | 110.5210- | 2- | 12- | 0- | M36765 | 49740 | -0.10 | 371 | 96650 | 55 | 177 | 15.6 | 57 | -1.9 | 3 | 1.4 | 30600 | 4.9 | 17530 | 31 | 0.4 |
| 30- | 45.5657- | 110.5471- | 2- | 12- | 0- | M36766 | 57520 | -0.08 | 886 | 30930 | 68 | -77 | 12.7 | 114 | 3.4 | 5 | 1.5 | 31830 | 11.5 | 15140 | 35 | 0.4 |
| 30- | 45.5705- | 110.5686- | 2- | 12- | 0- | M36767 | 58090 | -0.08 | 585 | 42870 | 83 | 151 | 13.2 | 88 | 4.3 | 5 | 1.6 | 33200 | 11.4 | 17680 | 38 | 0.4 |
| 30- | 45.6233- | 110.5985- | 2- | 12- | 0- | M36768 | 49160 | -0.07 | 629 | 22270 | 57 | -68 | 7.5 | 43 | 3.7 | 4 | 1.3 | 16040 | 7.4 | 17270 | 39 | 0.3 |
| 30- | 45.6158- | 110.5926- | 2- | 11- | 0- | M36769 | 50720 | -0.09 | 1018 | 28400 | 70 | 69 | 9.6 | 102 | 2.9 | 4 | 1.6 | 22910 | 10.3 | 15660 | 32 | 0.3 |
| 30- | 45.6212- | 110.5860- | 2- | 12- | 0- | M36770 | 43100 | -0.07 | 963 | 22400 | 46 | -60 | 6.2 | 70 | 3.2 | 3 | 1.8 | 18930 | 10.6 | 10490 | 28 | 0.4 |
| 30- | 45.6303- | 110.5555- | 2- | 12- | 0- | M36771 | 42010 | -0.07 | 503 | 67820 | 57 | -65 | 7.6 | 75 | 2.6 | 3 | 1.3 | 21540 | 9.1 | 13580 | 31 | 0.3 |
| 30- | 45.6492- | 110.3824- | 2- | 12- | 0- | M36772 | 58610 | -0.07 | 789 | 30720 | 59 | -82 | 15.1 | 102 | 4.1 | 3 | 1.6 | 37380 | 10.9 | 17980 | 38 | 0.4 |
| 30- | 45.7331- | 110.4686- | 2- | 15- | 0- | M36773 | 59490 | -0.09 | 773 | 29580 | 90 | -75 | 15.3 | 199 | 5.0 | 4 | 1.8 | 39960 | 9.3 | 14990 | 38 | 0.4 |
| 30- | 45.7436- | 110.4894- | 2- | 12- | 0- | M36774 | 57270 | -0.08 | 921 | 37140 | 69 | -79 | 12.9 | 144 | 3.3 | 4 | 1.4 | 34470 | 11.4 | 17420 | 43 | 0.4 |
| 30- | 45.7260- | 110.4589- | 2- | 15- | 0- | M36775 | 62920 | 0.26 | 840 | 28200 | 67 | -91 | 17.0 | 222 | 4.3 | 3 | 1.6 | 42270 | 8.4 | 18980 | 38 | 0.4 |
| 30- | 45.7309- | 110.3874- | 2- | 15- | 0- | M36776 | 64590 | -0.08 | 979 | 29570 | 59 | -89 | 20.4 | 334 | 3.2 | 3 | 1.5 | 48360 | 5.6 | 16880 | 41 | 0.2 |
| 30- | 45.7373- | 110.3556- | 2- | 12- | 0- | M36777 | 65520 | -0.09 | 1055 | 27640 | 60 | -91 | 18.8 | 436 | 2.7 | 3 | 1.8 | 44950 | 6.7 | 19800 | 36 | 0.4 |
| 30- | 45.7436- | 110.3218- | 2- | 12- | 0- | M36778 | 64220 | -0.09 | 912 | 29060 | 59 | -85 | 18.4 | 212 | 4.5 | 4 | 1.6 | 39730 | 7.0 | 15960 | 40 | 0.3 |
| 30- | 45.7467- | 110.2863- | 2- | 12- | 0- | M36779 | 71740 | -0.09 | 1174 | 26890 | 90 | -112 | 19.1 | 407 | 3.2 | 4 | 1.8 | 50860 | 8.2 | 18320 | 44 | 0.3 |
| 30- | 45.7045- | 110.3490- | 2- | 15- | 0- | M36780 | 63250 | -0.08 | 642 | 28160 | 53 | -84 | 16.2 | 113 | 3.7 | 4 | 1.6 | 35240 | 8.1 | 18290 | 39 | 0.4 |
| 30- | 45.6756- | 110.3601- | 2- | 12- | 0- | M36781 | 69760 | -0.07 | 1111 | 20640 | 64 | -85 | 8.4 | 65 | -1.4 | 3 | 1.6 | 24880 | 8.8 | 16340 | 33 | 0.3 |
| 30- | 45.6651- | 110.3377- | 2- | 12- | 0- | M36782 | 48040 | -0.05 | 771 | 9094 | 47 | -62 | 2.8 | 31 | 2.6 | 3 | 1.3 | 12270 | 10.4 | 14410 | 29 | 0.3 |
| 30- | 45.6949- | 110.3347- | 2- | 12- | 0- | M36783 | 65330 | -0.08 | 910 | 28920 | 74 | -98 | 11.0 | 90 | 4.0 | 4 | 1.8 | 34060 | 9.8 | 15160 | 39 | 0.5 |
| 30- | 45.6926- | 110.3150- | 2- | 12- | 0- | M36784 | 56420 | -0.07 | 601 | 26110 | 85 | -74 | 11.3 | 88 | 4.1 | 5 | 1.8 | 29330 | 19.6 | 20100 | 46 | 0.5 |
| 30- | 45.6912- | 110.3030- | 2- | 12- | 0- | M36785 | 57390 | -0.07 | 884 | 21390 | 69 | -73 | 8.5 | 46 | 2.3 | 3 | 1.7 | 21500 | 11.0 | 14440 | 31 | 0.3 |
| 30- | 45.6896- | 110.2745- | 2- | 12- | 0- | M36786 | 48510 | -0.06 | 630 | 9876 | 55 | -63 | 5.4 | 35 | 3.0 | 3 | 1.2 | 17640 | 8.1 | 13730 | 31 | 0.3 |
| 30- | 45.6895- | 110.2762- | 2- | 12- | 0- | M36787 | 44190 | -0.06 | 519 | 10060 | 73 | -62 | 4.8 | 62 | 2.9 | 4 | 1.6 | 17400 | 26.6 | 13200 | 38 | 0.5 |
| 30- | 45.6732- | 110.2818- | 2- | 15- | 0- | M36788 | 53520 | -0.07 | 561 | 11390 | 65 | -68 | 10.6 | 73 | 3.9 | 4 | 1.5 | 24710 | 14.8 | 16220 | 39 | 0.3 |
| 30- | 45.6565- | 110.2954- | 2- | 12- | 0- | M36789 | 50540 | -0.07 | 593 | 12770 | 62 | -62 | 9.2 | 48 | 3.2 | 4 | 1.4 | 18240 | 10.7 | 13140 | 33 | 0.4 |
| 30- | 45.6567- | 110.2930- | 2- | 12- | 0- | M36790 | 46800 | -0.06 | 588 | 11220 | 56 | -59 | 6.2 | 44 | 3.1 | 4 | 1.4 | 19330 | 13.3 | 13950 | 35 | 0.3 |
| 30- | 45.6885- | 110.2656- | 2- | 15- | 0- | M36791 | 71000 | -0.06 | 1037 | 16380 | 72 | -93 | 6.7 | 35 | 3.1 | 3 | 1.7 | 26270 | 8.3 | 15700 | 38 | 0.3 |
| 30- | 45.6757- | 110.2503- | 2- | 12- | 0- | M36792 | 52320 | -0.06 | 580 | 8623 | 56 | -68 | 8.2 | 56 | 3.5 | 3 | 1.4 | 19840 | 13.2 | 16080 | 38 | 0.3 |
| 30- | 45.6971- | 110.2550- | 2- | 12- | 0- | M36793 | 60300 | -0.08 | 792 | 27440 | 90 | -78 | 9.3 | 72 | 2.9 | 4 | 1.7 | 27060 | 17.5 | 14560 | 48 | 0.5 |
| 30- | 45.6026- | 110.3746- | 2- | 12- | 0- | M36794 | 53170 | -0.07 | 599 | 18920 | 90 | -77 | 11.8 | 101 | 3.9 | 6 | 1.7 | 34080 | 22.6 | 18160 | 53 | 0.7 |
| 30- | 45.6040- | 110.3730- | 2- | 12- | 0- | M36795 | 50610 | -0.06 | 644 | 17050 | 59 | -69 | 5.8 | 40 | 3.0 | 3 | 1.5 | 25310 | 12.8 | 15000 | 33 | 0.3 |
| 30- | 45.6050- | 110.4018- | 2- | 15- | 0- | M36796 | 58350 | -0.09 | 568 | 26130 | 59 | -89 | 16.8 | 74 | 4.6 | 4 | 1.7 | 33560 | 6.7 | 16980 | 33 | 0.4 |
| 30- | 45.6142- | 110.3590- | 2- | 12- | 0- | M36797 | 66750 | -0.07 | 941 | 29050 | 65 | -82 | 10.4 | 74 | 2.5 | 3 | 1.6 | 36660 | 8.7 | 16510 | 38 | 0.3 |
| 30- | 45.6041- | 110.3330- | 2- | 12- | 0- | M36798 | 51690 | -0.07 | 687 | 52580 | 54 | -74 | 5.7 | 46 | 3.1 | 4 | 1.3 | 21390 | 11.4 | 15030 | 35 | 0.3 |
| 30- | 45.5992- | 110.3261- | 2- | 12- | 0- | M36799 | 72650 | -0.07 | 976 | 24020 | 77 | -105 | 10.1 | 62 | 2.7 | 3 | 1.7 | 35780 | 9.4 | 16540 | 40 | 0.3 |
| 30- | 45.6237- | 110.4017- | 2- | 12- | 0- | M36800 | 57590 | -0.07 | 761 | 23670 | 76 | -83 | 14.0 | 184 | 2.8 | 3 | 1.5 | 34510 | 11.1 | 15620 | 41 | 0.3 |
| 30- | 45.5955- | 110.3279- | 2- | 12- | 0- | M36801 | 69700 | -0.08 | 957 | 34720 | 70 | -100 | 19.0 | 60 | 2.0 | 3 | 1.7 | 76630 | 7.5 | 13930 | 38 | 0.3 |
| 30- | 45.5872- | 110.3230- | 2- | 12- | 0- | M36802 | 66500 | -0.09 | 745 | 36780 | 82 | -110 | 29.1 | 62 | -1.9 | 3 | 2.0 | 137800 | 9.0 | 14270 | 49 | 0.4 |
| 30- | 45.5914- | 110.3296- | 2- | 15- | 0- | M36803 | 72670 | -0.08 | 1043 | 32430 | 78 | -102 | 15.2 | 72 | 3.8 | 4 | 1.9 | 50440 | 7.2 | 16670 | 42 | 0.3 |
| 30- | 45.5744- | 110.3367- | 2- | 12- | 0- | M36804 | 50020 | -0.06 | 813 | 23870 | 56 | -59 | 5.8 | 34 | 3.9 | 4 | 1.3 | 17210 | 9.3 | 14390 | 31 | 0.3 |
| 30- | 45.5746- | 110.3379- | 2- | 12- | 0- | M36805 | 51450 | -0.07 | 681 | 19840 | 58 | 90 | 7.0 | 50 | 3.6 | 4 | 1.6 | 19090 | 9.3 | 17460 | 31 | 0.3 |
| 30- | 45.6081- | 110.3183- | 2- | 12- | 0- | M36806 | 52460 | -0.06 | 733 | 22180 | 48 | -74 | 5.7 | 36 | 3.3 | 3 | 1.3 | 20440 | 8.4 | 15210 | 28 | 0.3 |
| 30- | 45.6107- | 110.2672- | 2- | 12- | 0- | M36807 | 57970 | -0.07 | 610 | 31320 | 60 | 111 | 4.3 | 46 | 4.0 | 4 | 1.5 | 19020 | 9.5 | 17060 | 31 | 0.4 |
| 30- | 45.6142- | 110.2576- | 2- | 12- | 0- | M36808 | 52510 | -0.06 | 632 | 23570 | 56 | -72 | 6.8 | 40 | 2.8 | 4 | 1.4 | 18620 | 15.5 | 16990 | 38 | 0.4 |
| 30- | 45.5773- | 110.2650- | 2- | 12- | 0- | M36809 | 56030 | -0.07 | 656 | 19170 | 64 | 105 | 8.4 | 54 | 2.4 | 4 | 1.2 | 20240 | 10.4 | 15180 | 34 | 0.4 |
| 30- | 45.5698- | 110.2735- | 2- | 12- | 0- | M36810 | 53240 | -0.08 | 664 | 32540 | 58 | -81 | 9.3 | 63 | 4.1 | 4 | 1.4 | 22830 | 6.3 | 15480 | 27 | 0.4 |
| 30- | 45.5385- | 110.3205- | 2- | 12- | 0- | M36811 | 60490 | -0.11 | 841 | 59520 | 82 | -110 | 32.8 | 407 | 5.6 | 4 | 1.9 | 67050 | 11.4 | 9641 | 53 | 0.4 |
| 30- | 45.6112- | 110.2489- | 2- | 15- | 0- | M36812 | 53000 | -0.07 | 549 | 58880 | 73 | 138 | 15.4 | 76 | 3.0 | 3 | 1.3 | 33130 | 12.5 | 15450 | 41 | 0.4 |
| 30- | 45.6233- | 110.2167- | 2- | 12- | 0- | M36813 | 52270 | -0.07 | 702 | 14790 | 68 | -68 | 8.4 | 65 | 3.2 | 4 | 1.4 | 23250 | 9.0 | 18540 | 30 | 0.4 |
| 30- | 45.6046- | 110.1704- | 2- | 15- | 0- | M36814 | 53530 | -0.07 | 745 | 35340 | 69 | -68 | 11.7 | 72 | 4.0 | 4 | 1.5 | 32760 | 7.4 | 14060 | 38 | 0.3 |

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

④

| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | LASL SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) — Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | U/Th RATIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mg | Mn | Na | Rb | Sb | Sc | Sm | Sr | Ta | Tb | Th | Ti | V | Yb | Zn | |
| 30-45.5513-110.5198-2-12- | 0-M36764 | 18050 | 1154 | 13210 | -38 | -3 | 25.7 | 4.7 | -334 | -1 | -1 | 10.0 | 6786 | 190 | 5.6 | -51 | 0.310 |
| 30-45.5715-110.5210-2-12- | 0-M36765 | 38410 | 603 | 8191 | 42 | -2 | 12.1 | 5.2 | -252 | -1 | -1 | 9.6 | 3665 | 87 | 2.2 | -26 | 0.198 |
| 30-45.5657-110.5471-2-12- | 0-M36766 | 15020 | 607 | 12020 | -29 | -2 | 10.8 | 5.2 | 340 | -1 | -1 | 10.6 | 3282 | 106 | 3.6 | 92 | 0.292 |
| 30-45.5705-110.5686-2-12- | 0-M36767 | 16460 | 689 | 12450 | 63 | -2 | 11.3 | 5.7 | -297 | -1 | -1 | 14.1 | 3494 | 89 | 3.3 | 72 | 0.220 |
| 30-45.6233-110.5985-2-12- | 0-M36768 | 7137 | 390 | 7285 | 51 | -2 | 5.6 | 4.7 | -225 | -1 | -1 | 11.9 | 1983 | 53 | 2.9 | 184 | 0.261 |
| 30-45.6158-110.5926-2-11- | 0-M36769 | 9623 | 530 | 10520 | -28 | -2 | 7.9 | 6.1 | -245 | -1 | -1 | 11.4 | 2874 | 75 | 4.0 | -71 | 0.254 |
| 30-45.6212-110.5860-2-12- | 0-M36770 | 6071 | 357 | 6452 | 40 | -2 | 7.0 | 4.0 | -198 | -1 | -1 | 7.5 | 2684 | 61 | 2.8 | -37 | 0.320 |
| 30-45.6303-110.5555-2-12- | 0-M36771 | 14250 | 372 | 6366 | 40 | -2 | 7.1 | 4.6 | -207 | -1 | -1 | 7.9 | 2739 | 60 | 2.6 | 51 | 0.266 |
| 30-45.6492-110.3824-2-12- | 0-M36772 | 9865 | 702 | 13090 | 65 | -2 | 10.2 | 4.9 | -247 | -1 | -1 | 10.3 | 3622 | 102 | 3.3 | 129 | 0.408 |
| 30-45.7331-110.4686-2-15- | 0-M36773 | 11500 | 713 | 11480 | 55 | -2 | 10.9 | 5.2 | 461 | -1 | -1 | 9.9 | 3633 | 132 | 3.0 | 72 | 0.293 |
| 30-45.7436-110.4894-2-12- | 0-M36774 | 12470 | 627 | 13430 | -29 | -2 | 10.5 | 6.3 | 442 | -1 | -1 | 10.8 | 3233 | 97 | 3.3 | 100 | 0.278 |
| 30-45.7260-110.4589-2-15- | 0-M36775 | 12010 | 783 | 12990 | 83 | -2 | 12.5 | 5.9 | -298 | -1 | -1 | 9.4 | 3642 | 115 | 2.2 | 118 | 0.266 |
| 30-45.7309-110.3874-2-15- | 0-M36776 | 14130 | 805 | 15570 | 69 | -2 | 14.0 | 4.6 | -264 | -1 | 1 | 7.1 | 3032 | 149 | 2.6 | -36 | 0.296 |
| 30-45.7373-110.3556-2-12- | 0-M36777 | 13420 | 765 | 17970 | -30 | -2 | 13.0 | 5.4 | 593 | -1 | -1 | 6.8 | 3277 | 150 | 4.2 | -57 | 0.294 |
| 30-45.7436-110.3218-2-12- | 0-M36778 | 16580 | 776 | 13770 | 59 | -2 | 13.3 | 5.1 | 618 | -1 | -1 | 9.6 | 3315 | 102 | 3.4 | 52 | 0.292 |
| 30-45.7467-110.2863-2-12- | 0-M36779 | 13170 | 873 | 19110 | 56 | -2 | 13.7 | 4.9 | 592 | -1 | -1 | 9.5 | 4239 | 142 | 2.7 | 149 | 0.242 |
| 30-45.7045-110.3490-2-15- | 0-M36780 | 11070 | 691 | 13860 | -27 | -2 | 11.4 | 4.5 | -260 | -1 | -1 | 9.6 | 3329 | 102 | 2.9 | 127 | 0.375 |
| 30-45.6756-110.3601-2-12- | 0-M36781 | 4923 | 409 | 20490 | 48 | -2 | 6.4 | 5.2 | 765 | -1 | -1 | 7.4 | 3142 | 71 | 2.3 | 100 | 0.270 |
| 30-45.6651-110.3377-2-12- | 0-M36782 | 3814 | 126 | 12950 | 45 | -1 | 4.3 | 3.5 | -155 | -1 | -1 | 6.6 | 2065 | 40 | 2.5 | -37 | 0.379 |
| 30-45.6949-110.3347-2-12- | 0-M36783 | 9929 | 676 | 14530 | 56 | -2 | 9.1 | 5.1 | -300 | -1 | -1 | 10.5 | 3080 | 85 | 3.5 | 82 | 0.276 |
| 30-45.6926-110.3150-2-12- | 0-M36784 | 8355 | 573 | 11580 | 55 | -2 | 8.5 | 7.0 | -228 | -1 | -1 | 12.9 | 3436 | 85 | 4.0 | 88 | 0.302 |
| 30-45.6912-110.3030-2-12- | 0-M36785 | 8317 | 422 | 13910 | 55 | -2 | 6.4 | 5.2 | 356 | -1 | -1 | 8.1 | 2810 | 66 | 2.1 | -30 | 0.309 |
| 30-45.6896-110.2745-2-12- | 0-M36786 | 4792 | 347 | 11360 | 55 | -1 | 5.5 | 4.2 | 237 | -1 | -1 | 7.3 | 2200 | 51 | 3.0 | 42 | 0.342 |
| 30-45.6895-110.2762-2-12- | 0-M36787 | 5243 | 349 | 8717 | 58 | -2 | 6.1 | 5.4 | -204 | -1 | -1 | 10.7 | 3207 | 59 | 4.0 | 80 | 0.364 |
| 30-45.6732-110.2818-2-15- | 0-M36788 | 7258 | 582 | 8439 | 57 | -2 | 8.3 | 5.4 | -231 | -1 | -1 | 9.7 | 2866 | 72 | 3.1 | 87 | 0.361 |
| 30-45.6565-110.2954-2-12- | 0-M36789 | 5890 | 466 | 9225 | 53 | -2 | 6.1 | 4.7 | -201 | -1 | -1 | 8.3 | 2959 | 70 | 3.5 | -31 | 0.373 |
| 30-45.6567-110.2930-2-12- | 0-M36790 | 5583 | 370 | 7966 | 87 | -2 | 6.4 | 4.3 | -186 | -1 | -1 | 8.7 | 2721 | 56 | 4.1 | -38 | 0.333 |
| 30-45.6885-110.2656-2-15- | 0-M36791 | 5302 | 435 | 19290 | 49 | -2 | 6.6 | 4.4 | 516 | -1 | -1 | 8.6 | 2204 | 61 | 2.6 | 101 | 0.256 |
| 30-45.6757-110.2503-2-12- | 0-M36792 | 4880 | 412 | 10820 | 57 | -1 | 5.9 | 4.3 | 351 | 1 | -1 | 9.6 | 2168 | 61 | 2.6 | 79 | 0.313 |
| 30-45.6971-110.2550-2-12- | 0-M36793 | 7862 | 601 | 14020 | 56 | -2 | 7.3 | 7.0 | -240 | -1 | -1 | 11.2 | 3391 | 78 | 2.9 | 95 | 0.286 |
| 30-45.6026-110.3746-2-12- | 0-M36794 | 8241 | 700 | 13880 | 62 | -2 | 10.2 | 6.9 | -237 | -1 | -1 | 14.8 | 4142 | 94 | 4.9 | 94 | 0.264 |
| 30-45.6040-110.3730-2-12- | 0-M36795 | 5129 | 388 | 9213 | 54 | -2 | 6.2 | 4.5 | -218 | -1 | -1 | 8.4 | 3005 | 87 | 2.7 | 76 | 0.310 |
| 30-45.6050-110.4018-2-15- | 0-M36796 | 10300 | 1084 | 7319 | 77 | -2 | 11.2 | 5.6 | -356 | -1 | -1 | 10.5 | 3580 | 87 | 2.8 | -121 | 0.248 |
| 30-45.6142-110.3590-2-12- | 0-M36797 | 7603 | 631 | 15770 | -26 | -2 | 6.9 | 4.9 | 696 | -1 | -1 | 6.9 | 3049 | 104 | 1.8 | -36 | 0.290 |
| 30-45.6041-110.3330-2-12- | 0-M36798 | 6969 | 482 | 9909 | 64 | -2 | 6.4 | 4.0 | 403 | -1 | -1 | 7.7 | 2732 | 78 | 3.2 | -69 | 0.351 |
| 30-45.5992-110.3261-2-12- | 0-M36799 | 6924 | 699 | 17440 | 50 | -2 | 7.7 | 4.8 | 769 | -1 | -1 | 8.0 | 3878 | 91 | 2.8 | -48 | 0.288 |
| 30-45.6237-110.4017-2-12- | 0-M36800 | 10870 | 580 | 15030 | -27 | -2 | 10.5 | 5.6 | 477 | -1 | -1 | 10.9 | 3175 | 112 | 3.8 | 71 | 0.239 |
| 30-45.5955-110.3279-2-12- | 0-M36801 | 9844 | 1188 | 16590 | -35 | -2 | 8.7 | 5.8 | 777 | -1 | -1 | 6.9 | 5158 | 183 | -2.2 | 125 | 0.261 |
| 30-45.5872-110.3230-2-12- | 0-M36802 | 8944 | 1637 | 15970 | 75 | -2 | 10.6 | 5.6 | 673 | -1 | -1 | 7.1 | 7840 | 263 | 3.6 | 133 | 0.282 |
| 30-45.5914-110.3296-2-15- | 0-M36803 | 11560 | 898 | 14560 | 63 | -2 | 12.8 | 5.6 | 579 | -1 | -1 | 10.9 | 3182 | 114 | -1.6 | 97 | 0.532 |
| 30-45.5744-110.3367-2-12- | 0-M36804 | 8386 | 255 | 7913 | 53 | -1 | 5.1 | 5.6 | 282 | -1 | -1 | 13.6 | 2041 | 64 | 3.0 | 106 | 0.272 |
| 30-45.5746-110.3379-2-12- | 0-M36805 | 8212 | 338 | 6196 | 70 | -2 | 6.4 | 4.9 | -181 | -1 | -1 | 9.7 | 2381 | 86 | 3.6 | | 0.330 |
| 30-45.6081-110.3183-2-12- | 0-M36806 | 5742 | 466 | 11740 | 56 | -2 | 5.6 | 4.3 | 406 | -1 | -1 | 7.3 | 2190 | 67 | 2.5 | -29 | 0.329 |
| 30-45.6107-110.2672-2-12- | 0-M36807 | 10430 | 279 | 12050 | 56 | -2 | 5.9 | 4.3 | -230 | -1 | -1 | 9.2 | 2231 | 70 | 2.8 | 102 | 0.293 |
| 30-45.6142-110.2576-2-12- | 0-M36808 | 6370 | 309 | 11770 | 42 | -2 | 5.9 | 4.5 | -195 | -1 | -1 | 9.5 | 2614 | 61 | 3.1 | -29 | 0.316 |
| 30-45.5773-110.2650-2-12- | 0-M36809 | 7288 | 467 | 14610 | -25 | -2 | 7.9 | 5.1 | -218 | -1 | -1 | 10.6 | 2510 | 69 | 3.0 | -24 | 0.255 |
| 30-45.5698-110.2735-2-12- | 0-M36810 | 9414 | 715 | 10040 | 60 | -2 | 8.2 | 4.5 | -270 | -1 | -1 | 12.0 | 2354 | 75 | 3.2 | 68 | 0.242 |
| 30-45.5385-110.3205-2-12- | 0-M36811 | 28180 | 1065 | 17470 | -36 | -2 | 33.4 | 6.2 | -348 | -1 | -1 | 11.1 | 4748 | 206 | 3.3 | 36 | 0.180 |
| 30-45.6112-110.2489-2-15- | 0-M36812 | 13630 | 653 | 11830 | -28 | -2 | 10.3 | 5.8 | -246 | -1 | -1 | 16.2 | 2867 | 94 | 3.1 | 103 | 0.198 |
| 30-45.6233-110.2167-2-12- | 0-M36813 | 6726 | 480 | 11490 | 54 | -2 | 6.7 | 5.1 | 244 | -1 | -1 | 12.3 | 2264 | 78 | 2.4 | -41 | 0.228 |
| 30-45.6046-110.1704-2-15- | 0-M36814 | 11150 | 548 | 10670 | 60 | -2 | 9.0 | 5.2 | 317 | -1 | -1 | 9.8 | 3168 | 112 | 3.8 | 97 | 0.276 |

# 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 COLOR | SEDIMENT TYPE | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm |
| 30- | 45.5478- | 110.2133- | 2- | 12- | | 0-M36815- | 10/07/76- | 10- | 8- | 5.0- | C- | - | 6.6- | 470- | | 5- | 1- | 2- | 7- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 2.40 |
| 30- | 45.5197- | 110.2258- | 2- | 15- | | 0-M36816- | 10/07/76- | 10- | 9- | - | - | - | - | - | | 9- | 1- | 1- | - | - | - | - | - | - | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 2.50 |
| 30- | 45.5555- | 110.1990- | 2- | 12- | | 0-M36817- | 10/07/76- | 11- | 10- | 5.8- | - | - | 6.3- | 370- | | 9- | 1- | 1- | 4- | 6- | 2- | 2- | - | - | 3- | 4- | 2- | 1- | -8- | - | - | - | - | 2.10 |
| 30- | 45.6143- | 110.1248- | 2- | 12- | | 0-M36818- | 10/07/76- | 11- | 12- | 6.2- | - | - | 5.9- | 370- | | 4- | 3- | 1- | 4- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 1- | 1- | -3- | - | - | - | - | 1.70 |
| 30- | 45.5936- | 110.1076- | 2- | 12- | | 0-M36819- | 10/07/76- | 12- | 13- | 5.0- | - | - | 6.6- | 1600- | | 1- | 1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 4- | 4- | 2- | 1- | -3- | - | - | - | - | 2.50 |
| 30- | 45.6329- | 110.5567- | 2- | 15- | | 0-M36820- | 10/01/76- | 16- | 19- | | -C- | - | - | - | | 4- | 3- | 7- | 5- | 6- | -1- | -2- | 4- | 3- | 3- | 2- | | -3- | - | - | - | - | - | 2.60 |
| 30- | 45.6752- | 110.5099- | 2- | 12- | | 0-M36821- | 10/01/76- | 16- | 21- | 12.0- | C- | - | 6.1- | 320- | | 4- | 1- | 1- | 2- | 1- | 2- | 2- | 1- | 2- | 3- | 1- | 3- | 1- | -3- | - | - | - | - | 2.40 |
| 30- | 45.6640- | 110.5027- | 2- | 12- | | 0-M36822- | 10/01/76- | 17- | 19- | 12.0- | C- | - | 6.0- | 500- | | -1- | 1- | 3- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | - | 3.10 |
| 30- | 45.6182- | 110.5201- | 2- | 15- | | 0-M36823- | 10/02/76- | 9- | 10- | | -C- | - | - | - | | 3- | 3- | 7- | 5- | 6- | -1- | -1- | 4- | 3- | 4- | 3- | | -3- | - | - | - | - | - | 2.80 |
| 30- | 45.6185- | 110.5220- | 2- | 15- | | 0-M36824- | 10/02/76- | 9- | 10- | | -C- | - | - | - | | 5- | 3- | 7- | 5- | 6- | -1- | -1- | 4- | 3- | 4- | 3- | | -3- | - | - | - | - | - | 2.90 |
| 30- | 45.6315- | 110.5121- | 2- | 15- | | 0-M36825- | 10/02/76- | 9- | 11- | | -C- | - | - | - | | 6- | 1- | 1- | 5- | 6- | -1- | -2- | 3- | 3- | 3- | 3- | | -3- | - | - | - | - | - | 4.20 |
| 30- | 45.6893- | 110.5610- | 2- | 12- | | 0-M36826- | 10/02/76- | 10- | 11- | 10.5- | C- | - | 5.9- | 650- | | 4- | 3- | 7- | 6- | 6- | 1- | 2- | 5- | 1- | 6- | 4- | 1- | 3- | -5- | - | - | - | - | 2.30 |
| 30- | 45.6881- | 110.5548- | 2- | 15- | | 0-M36827- | 10/02/76- | 10- | 11- | | -C- | - | - | - | | 0- | 3- | 7- | 6- | 7- | -1- | -2- | 3- | 3- | 2- | 3- | | -3- | - | - | - | - | - | 2.10 |
| 30- | 45.7078- | 110.5393- | 2- | 12- | | 0-M36828- | 10/02/76- | 10- | 12- | 9.5- | C- | - | 6.1- | 40- | | 6- | 3- | 1- | 3- | 7- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 3- | -3- | - | - | - | - | 2.90 |
| 30- | 45.7256- | 110.5662- | 2- | 12- | | 0-M36829- | 10/02/76- | 11- | 12- | 8.5- | C- | - | 6.3- | 35- | | 3- | 1- | 1- | 2- | 7- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 4.30 |
| 30- | 45.7474- | 110.5706- | 2- | 12- | | 0-M36830- | 10/02/76- | 11- | 13- | 9.0- | C- | - | 6.3- | 40- | | 3- | 1- | 1- | 5- | 7- | 2- | 2- | 1- | 2- | 4- | 2- | 3- | 3- | -3- | - | - | - | - | 2.30 |
| 30- | 45.7522- | 110.5842- | 2- | 12- | | 0-M36831- | 10/02/76- | 12- | 15- | 10.3- | C- | - | 6.3- | 60- | | 4- | 1- | 4- | 6- | 6- | 1- | 2- | 5- | 1- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 2.40 |
| 30- | 45.7744- | 110.6211- | 2- | 15- | | 0-M36832- | 10/02/76- | 12- | 14- | | -C- | - | - | - | | -1- | 1- | 3- | 1- | -1- | -2- | -4- | 3- | 3- | 3- | 3- | | -3- | - | - | - | - | - | 2.10 |
| 30- | 45.7811- | 110.5894- | 2- | 15- | | 0-M36833- | 10/02/76- | 12- | 15- | | -C- | - | - | - | | 4- | 1- | 1- | 4- | 6- | -1- | -2- | 4- | 3- | 4- | 3- | | -3- | - | - | - | - | - | 3.20 |
| 30- | 45.7514- | 110.5125- | 2- | 12- | | 0-M36834- | 10/02/76- | 12- | 15- | 9.2- | C- | - | 6.3- | 40- | | 2- | 1- | 1- | 6- | 7- | 2- | 1- | 1- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 2.40 |
| 30- | 45.7642- | 110.5097- | 2- | 12- | | 0-M36835- | 10/02/76- | 13- | 16- | 10.2- | C- | - | 6.3- | 50- | | 4- | 1- | 1- | 5- | 6- | 2- | 2- | 3- | 2- | 3- | 4- | 3- | 3- | -3- | - | - | - | - | 2.40 |
| 30- | 45.7614- | 110.5489- | 2- | 15- | | 0-M36836- | 10/02/76- | 13- | 16- | | - | - | - | - | | 6- | 1- | 7- | 5- | 7- | -1- | -2- | 4- | 3- | 4- | 3- | | -3- | - | - | - | - | - | 2.10 |
| 30- | 45.6330- | 110.6161- | 2- | 12- | | 0-M36837- | 10/02/76- | 15- | 15- | 9.8- | - | - | 5.9- | 600- | | 4- | 1- | 1- | 3- | 6- | 3- | 2- | 1- | 1- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 2.50 |
| 30- | 45.6484- | 110.6081- | 2- | 12- | | 0-M36838- | 10/02/76- | 15- | 16- | 10.2- | - | - | 5.9- | 550- | | 4- | 1- | 1- | 5- | 6- | 2- | 2- | 3- | 2- | 2- | 3- | 2- | 2- | -3- | - | - | - | - | 2.20 |
| 30- | 45.6512- | 110.6278- | 2- | 15- | | 0-M36839- | 10/02/76- | 16- | - | | -C- | - | - | - | | 6- | 1- | 1- | 4- | 7- | -1- | -2- | 3- | 2- | 4- | 2- | | -3- | - | - | - | - | - | 1.90 |
| 30- | 45.6647- | 110.6050- | 2- | 12- | | 0-M36840- | 10/02/76- | 16- | 18- | 9.5- | - | - | 6.1- | 440- | | 5- | 1- | 1- | 2- | 6- | 3- | 2- | 1- | 2- | 2- | 4- | 3- | 2- | -3- | - | - | - | - | 2.60 |
| 30- | 45.6786- | 110.6238- | 2- | 15- | | 0-M36841- | 10/02/76- | 17- | 19- | | -C- | - | - | - | | 2- | 1- | 1- | 2- | 7- | -1- | -2- | 4- | 3- | 2- | 2- | | -3- | - | - | - | - | - | 2.40 |
| 30- | 45.6900- | 110.6636- | 2- | 12- | | 0-M36842- | 10/02/76- | 17- | 18- | 10.6- | - | - | 5.9- | 330- | | 4- | 1- | 7- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 2.30 |
| 30- | 45.6916- | 110.6938- | 2- | 11- | | 0-M36843- | 10/02/76- | 17- | 18- | 9.5- | C- | - | 5.9- | 335- | | 3- | 1- | 1- | 5- | 6- | 1- | 2- | 1- | 3- | | -1- | 1- | 2- | -9- | - | - | - | - | 3.80 |
| 30- | 45.6975- | 110.6767- | 2- | 12- | | 0-M36844- | 10/02/76- | 17- | 18- | 9.8- | C- | - | 5.7- | 330- | | 4- | 1- | 1- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 2.30 |
| 30- | 45.6587- | 110.6483- | 2- | 12- | | 0-M36845- | 10/03/76- | 8- | 11- | 9.5- | C- | - | 5.9- | 445- | | 0- | 1- | 1- | 5- | 6- | 3- | 2- | 2- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | 2.30 |
| 30- | 45.6437- | 110.6673- | 2- | 12- | | 0-M36846- | 10/03/76- | 8- | 11- | 9.0- | - | - | 6.1- | 600- | | 0- | 1- | 1- | 5- | 8- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 2.80 |
| 30- | 45.6366- | 110.7143- | 2- | 12- | | 0-M36847- | 10/03/76- | 9- | 12- | 10.2- | - | - | 5.7- | 440- | | 3- | 1- | 1- | 5- | 6- | 3- | 2- | 4- | 2- | 2- | 4- | 3- | 2- | -3- | - | - | - | - | 3.00 |
| 30- | 45.6179- | 110.7355- | 2- | 12- | | 0-M36848- | 10/03/76- | 9- | 12- | 10.5- | C- | - | 5.8- | 335- | | 2- | 3- | 7- | 5- | 6- | 2- | 2- | 2- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 3.60 |
| 30- | 45.6373- | 110.7477- | 2- | 12- | | 0-M36849- | 10/03/76- | 10- | 13- | 9.6- | C- | - | 5.9- | 330- | | 1- | 1- | 1- | 3- | 1- | 2- | 2- | 1- | 2- | 3- | 2- | 4- | 2- | -3- | - | - | - | - | 2.80 |
| 30- | 45.6698- | 110.6815- | 2- | 12- | | 0-M36850- | 10/03/76- | 10- | 13- | 10.2- | - | - | 5.7- | 300- | | 0- | 1- | 1- | 3- | 6- | 2- | 2- | 3- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 2.40 |
| 30- | 45.6607- | 110.7051- | 2- | 12- | | 0-M36851- | 10/03/76- | 11- | 13- | 9.8- | C- | - | 5.9- | 350- | | 4- | 1- | 1- | 6- | 6- | 3- | 2- | 4- | 2- | 2- | 2- | 3- | 2- | -4- | - | - | - | - | 3.30 |
| 30- | 45.6604- | 110.7195- | 2- | 12- | | 0-M36852- | 10/03/76- | 11- | 14- | 10.0- | - | - | 5.7- | 400- | | 3- | 1- | 1- | 5- | 6- | 3- | 2- | 4- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 2.20 |
| 30- | 45.8050- | 110.5428- | 2- | 12- | | 0-M36853- | 10/03/76- | 13- | 15- | 9.8- | C- | - | 6.3- | 550- | | 3- | 1- | 1- | 5- | 6- | 2- | 2- | 2- | 2- | 4- | 2- | 2- | 2- | -3- | - | - | - | - | 2.10 |
| 30- | 45.7914- | 110.5436- | 2- | 12- | | 0-M36854- | 10/03/76- | 13- | 14- | 9.8- | - | - | 5.9- | 500- | | 3- | 1- | 1- | 3- | 7- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 2.30 |
| 30- | 45.8178- | 110.5528- | 2- | 12- | | 0-M36855- | 10/03/76- | 13- | 15- | 10.2- | - | - | 5.7- | 350- | | 3- | 1- | 1- | 3- | 6- | 3- | 2- | 3- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 2.10 |
| 30- | 45.8386- | 110.5844- | 2- | 12- | | 0-M36856- | 10/03/76- | 14- | 16- | 9.8- | - | - | 5.7- | 400- | | 1- | 1- | 1- | 5- | 6- | 3- | 2- | 2- | 2- | 2- | 4- | 3- | 2- | -3- | - | - | - | - | 2.00 |
| 30- | 45.8600- | 110.6175- | 2- | 12- | | 0-M36857- | 10/03/76- | 14- | 16- | 11.0- | C- | - | 5.7- | 400- | | 4- | 1- | 1- | 2- | 1- | 4- | 2- | 3- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 1.90 |
| 30- | 45.8647- | 110.5803- | 2- | 12- | | 0-M36858- | 10/03/76- | 14- | 16- | 10.5- | C- | - | 5.9- | 500- | | 0- | 1- | 1- | 5- | 6- | 2- | 2- | 2- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 2.30 |
| 30- | 45.8650- | 110.5800- | 2- | 12- | | 0-M36859- | 10/03/76- | 15- | 17- | 10.2- | - | - | 5.9- | 60- | | 4- | 1- | 6- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 4- | 3- | 2- | -3- | - | - | - | - | 2.60 |
| 30- | 45.8519- | 110.5756- | 2- | 12- | | 0-M36860- | 10/03/76- | 15- | 18- | 9.9- | - | - | 5.9- | 300- | | 8- | 1- | 6- | 2- | 7- | 4- | 2- | 3- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 2.40 |
| 30- | 45.8472- | 110.5736- | 2- | 12- | | 0-M36861- | 10/03/76- | 15- | 18- | 10.0- | C- | - | 5.9- | 440- | | 5- | 1- | 6- | 5- | 6- | 2- | 2- | 2- | 2- | 2- | 4- | 2- | 2- | -3- | - | - | - | - | 2.80 |
| 30- | 45.8275- | 110.5469- | 2- | 12- | | 0-M36862- | 10/03/76- | 15- | 18- | 11.0- | - | - | 5.9- | 490- | | 0- | 1- | 1- | 5- | 6- | 4- | 2- | 3- | 2- | 2- | 4- | 4- | 2- | -3- | - | - | - | - | 2.20 |
| 30- | 45.8458- | 110.5064- | 2- | 12- | | 0-M36863- | 10/03/76- | 16- | 19- | 11.0- | - | - | 5.7- | 180- | | 4- | 1- | 1- | 2- | 1- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 2.30 |
| 30- | 45.8800- | 110.5886- | 2- | 12- | | 0-M36864- | 10/03/76- | 16- | 18- | 10.5- | C- | - | 5.7- | 480- | | 5- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 4.00 |
| 30- | 45.8914- | 110.5992- | 2- | 12- | | 0-M36865- | 10/03/76- | 17- | 19- | 9.9- | C- | - | 5.9- | 280- | | 3- | 1- | 1- | 2- | 1- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -9- | - | - | - | - | 2.20 |

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

②

| DOE SAMPLE NUMBER | | | | | | LAB. SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE (Concentrations reported in weight parts per million (ppm)) | | | | | | | | | ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY (Concentrations in weight ppm) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Ag | Bi | Cd | Cu | Nb | Ni | Pb | Sn | W | Be | Li |
| 30-45.5478-110.2133-2-12- | | | | | | 0-M36815 | -5 | -5 | -5 | 17 | -20 | -15 | 5 | -10 | -15 | -1 | 42 |
| 30-45.5197-110.2258-2-15- | | | | | | 0-M36816 | -5 | -5 | -5 | 54 | -20 | 87 | 23 | -10 | -15 | 1 | 34 |
| 30-45.5555-110.1990-2-12- | | | | | | 0-M36817 | -5 | -5 | -5 | 18 | -20 | 35 | 12 | -10 | -15 | 3 | 17 |
| 30-45.6143-110.1248-2-12- | | | | | | 0-M36818 | -5 | -5 | -5 | 33 | -20 | 56 | 8 | -10 | -15 | 2 | 25 |
| 30-45.5936-110.1076-2-12- | | | | | | 0-M36819 | -5 | -5 | -5 | 17 | -20 | -15 | 10 | -10 | -15 | 2 | 36 |
| 30-45.6329-110.5567-2-15- | | | | | | 0-M36820 | -5 | -5 | -5 | 34 | -20 | -15 | 21 | -10 | -15 | 1 | 91 |
| 30-45.6752-110.5099-2-12- | | | | | | 0-M36821 | -5 | -5 | -5 | 21 | -20 | 24 | 15 | -10 | -15 | 2 | 27 |
| 30-45.6640-110.5027-2-12- | | | | | | 0-M36822 | -5 | -5 | -5 | 21 | -20 | 23 | 23 | -10 | -15 | -1 | 39 |
| 30-45.6182-110.5201-2-15- | | | | | | 0-M36823 | -5 | -5 | -5 | 18 | -20 | 21 | 11 | -10 | -15 | 3 | 44 |
| 30-45.6185-110.5220-2-15- | | | | | | 0-M36824 | -5 | -5 | -5 | 34 | -20 | 15 | 9 | -10 | -15 | 2 | 38 |
| 30-45.6315-110.5121-2-15- | | | | | | 0-M36825 | -5 | -5 | -5 | 36 | -20 | 18 | 8 | -10 | -15 | 2 | 36 |
| 30-45.6893-110.5610-2-12- | | | | | | 0-M36826 | -5 | -5 | -5 | 45 | -20 | 61 | 17 | -10 | -15 | -1 | 40 |
| 30-45.6881-110.5548-2-15- | | | | | | 0-M36827 | -5 | -5 | -5 | 25 | -20 | 61 | 15 | -10 | -15 | 1 | 37 |
| 30-45.7078-110.5393-2-12- | | | | | | 0-M36828 | -5 | -5 | -5 | 45 | -20 | 57 | 5 | -10 | -15 | 2 | 22 |
| 30-45.7256-110.5662-2-12- | | | | | | 0-M36829 | -5 | -5 | -5 | 36 | -20 | 22 | 12 | -10 | -15 | 2 | 37 |
| 30-45.7474-110.5706-2-12- | | | | | | 0-M36830 | -5 | -5 | -5 | 162 | -20 | 32 | 12 | -10 | -15 | 1 | 71 |
| 30-45.7522-110.5842-2-12- | | | | | | 0-M36831 | -5 | -5 | -5 | 37 | -20 | 57 | 10 | -10 | -15 | 3 | 35 |
| 30-45.7744-110.6211-2-15- | | | | | | 0-M36832 | -5 | -5 | -5 | 41 | -20 | 41 | 18 | -10 | -15 | 2 | 40 |
| 30-45.7811-110.5894-2-15- | | | | | | 0-M36833 | -5 | -5 | -5 | 35 | -20 | 27 | 14 | -10 | -15 | -1 | 55 |
| 30-45.7514-110.5125-2-12- | | | | | | 0-M36834 | -5 | -5 | -5 | 39 | -20 | 33 | 14 | -10 | -15 | 2 | 31 |
| 30-45.7642-110.5097-2-12- | | | | | | 0-M36835 | -5 | -5 | -5 | 35 | -20 | 42 | 9 | -10 | -15 | 2 | 35 |
| 30-45.7614-110.5489-2-15- | | | | | | 0-M36836 | -5 | -5 | -5 | 42 | -20 | 48 | 12 | -10 | -15 | 2 | 36 |
| 30-45.6330-110.6161-2-12- | | | | | | 0-M36837 | -5 | -5 | -5 | 28 | -20 | -15 | 5 | -10 | -15 | 2 | 24 |
| 30-45.6484-110.6081-2-12- | | | | | | 0-M36838 | -5 | -5 | -5 | 26 | -20 | 39 | 5 | -10 | -15 | 2 | 36 |
| 30-45.6512-110.6278-2-15- | | | | | | 0-M36839 | -5 | -5 | -5 | 48 | -20 | 88 | 11 | -10 | -15 | 2 | 33 |
| 30-45.6647-110.6050-2-12- | | | | | | 0-M36840 | -5 | -5 | -5 | 33 | -20 | 51 | 13 | -10 | -15 | 3 | 28 |
| 30-45.6786-110.6238-2-15- | | | | | | 0-M36841 | -5 | -5 | -5 | 33 | -20 | 47 | 9 | -10 | -15 | 2 | 30 |
| 30-45.6900-110.6636-2-12- | | | | | | 0-M36842 | -5 | -5 | -5 | 36 | -20 | 29 | 8 | -10 | -15 | 2 | 32 |
| 30-45.6916-110.6938-2-11- | | | | | | 0-M36843 | -5 | -5 | -5 | 28 | -20 | 40 | 17 | -10 | -15 | 3 | 24 |
| 30-45.6975-110.6767-2-12- | | | | | | 0-M36844 | -5 | -5 | -5 | 36 | -20 | 37 | 6 | -10 | -15 | 3 | 27 |
| 30-45.6587-110.6483-2-12- | | | | | | 0-M36845 | -5 | -5 | -5 | 20 | -20 | -15 | -5 | -10 | -15 | 2 | 27 |
| 30-45.6437-110.6673-2-12- | | | | | | 0-M36846 | -5 | -5 | -5 | 30 | -20 | -15 | 10 | -10 | -15 | 3 | 34 |
| 30-45.6366-110.7143-2-12- | | | | | | 0-M36847 | -5 | -5 | -5 | 22 | -20 | -15 | 6 | -10 | -15 | 3 | 28 |
| 30-45.6179-110.7355-2-12- | | | | | | 0-M36848 | -5 | -5 | -5 | 16 | -20 | 15 | 10 | -10 | -15 | 3 | 40 |
| 30-45.6373-110.7477-2-12- | | | | | | 0-M36849 | -5 | -5 | -5 | 31 | -20 | 20 | 12 | -10 | -15 | 2 | 31 |
| 30-45.6698-110.6815-2-12- | | | | | | 0-M36850 | -5 | -5 | -5 | 30 | -20 | 31 | 9 | -10 | -15 | 2 | 27 |
| 30-45.6607-110.7051-2-12- | | | | | | 0-M36851 | -5 | -5 | -5 | 29 | -20 | 25 | 7 | -10 | -15 | 2 | 31 |
| 30-45.6604-110.7195-2-12- | | | | | | 0-M36852 | -5 | -5 | -5 | 28 | -20 | 27 | 6 | -10 | -15 | 2 | 24 |
| 30-45.8050-110.5428-2-12- | | | | | | 0-M36853 | -5 | -5 | -5 | 29 | -20 | 27 | 9 | -10 | -15 | 2 | 36 |
| 30-45.7914-110.5436-2-12- | | | | | | 0-M36854 | -5 | -5 | -5 | 35 | -20 | 24 | 8 | -10 | -15 | 2 | 31 |
| 30-45.8178-110.5528-2-12- | | | | | | 0-M36855 | -5 | -5 | -5 | 26 | -20 | 29 | 7 | -10 | -15 | 3 | 47 |
| 30-45.8386-110.5844-2-12- | | | | | | 0-M36856 | -5 | -5 | -5 | 29 | -20 | 37 | 6 | -10 | -15 | 2 | 38 |
| 30-45.8600-110.6175-2-12- | | | | | | 0-M36857 | -5 | -5 | -5 | 27 | -20 | 39 | -5 | -10 | 21 | 2 | 27 |
| 30-45.8647-110.5803-2-12- | | | | | | 0-M36858 | -5 | -5 | -5 | 16 | -20 | 27 | -5 | -10 | -15 | 2 | 28 |
| 30-45.8650-110.5800-2-12- | | | | | | 0-M36859 | -5 | -5 | -5 | 38 | -20 | 28 | 15 | -10 | -15 | 3 | 35 |
| 30-45.8519-110.5756-2-12- | | | | | | 0-M36860 | -5 | -5 | -5 | 26 | -20 | -15 | 8 | -10 | -15 | 3 | 43 |
| 30-45.8472-110.5736-2-12- | | | | | | 0-M36861 | -5 | -5 | -5 | 30 | -20 | 44 | 10 | -10 | -15 | 2 | 33 |
| 30-45.8275-110.5469-2-12- | | | | | | 0-M36862 | -5 | -5 | -5 | 21 | -20 | 33 | -5 | -10 | -15 | 2 | 26 |
| 30-45.8458-110.5064-2-12- | | | | | | 0-M36863 | -5 | -5 | -5 | 30 | -20 | 34 | 5 | -10 | -15 | 2 | 32 |
| 30-45.8800-110.5886-2-12- | | | | | | 0-M36864 | -5 | -5 | -5 | 33 | -20 | 37 | 12 | -10 | -15 | 2 | 33 |
| 30-45.8914-110.5992-2-12- | | | | | | 0-M36865 | -5 | -5 | -5 | 30 | -20 | -15 | 7 | -10 | -15 | 2 | 37 |

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

③

| DOE SAMPLE NUMBER | | | | | | | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | |
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | Al | Au | Ba | Ca | Ce | Cl | Co | Cr | Cs | Dy | Eu | Fe | Hf | K | La | Lu |
| 30- | 45.5478- | 110.2133- | 2- | 12- | | 0-M36815 | 42510 | -0.07 | 424 | 106800 | 55 | -73 | 7.3 | 94 | 3.2 | 4 | 1.5 | 23310 | 9.8 | 14820 | 36 | 0.3 |
| 30- | 45.5197- | 110.2258- | 2- | 15- | | 0-M36816 | 71340 | -0.08 | 663 | 37640 | 50 | 112 | 24.4 | 239 | 3.0 | 2 | 1.3 | 40430 | 5.0 | 13340 | 30 | 0.3 |
| 30- | 45.5555- | 110.1990- | 2- | 12- | | 0-M36817 | 64110 | -0.08 | 649 | 26170 | 58 | -85 | 15.4 | 237 | -1.7 | 3 | 1.5 | 31780 | 7.8 | 13120 | 32 | 0.3 |
| 30- | 45.6143- | 110.1248- | 2- | 12- | | 0-M36818 | 56400 | -0.07 | 432 | 46640 | 37 | -66 | 16.9 | 240 | 2.4 | 3 | 0.9 | 27460 | 4.7 | 9178 | 21 | 0.3 |
| 30- | 45.5936- | 110.1076- | 2- | 12- | | 0-M36819 | 54660 | -0.06 | 705 | 39670 | 55 | -76 | 5.4 | 86 | 2.5 | 3 | 1.4 | 19920 | 9.5 | 14170 | 29 | 0.3 |
| 30- | 45.6329- | 110.5567- | 2- | 15- | | 0-M36820 | 56910 | -0.08 | 463 | 46590 | 60 | -65 | 13.4 | 65 | 4.9 | 4 | 1.5 | 28870 | 6.9 | 20750 | 36 | 0.4 |
| 30- | 45.6752- | 110.5099- | 2- | 12- | | 0-M36821 | 59110 | -0.08 | 871 | 23940 | 68 | -79 | 12.5 | 148 | 2.2 | 3 | 1.5 | 28260 | 9.3 | 15350 | 37 | 0.3 |
| 30- | 45.6640- | 110.5027- | 2- | 12- | | 0-M36822 | 59260 | -0.08 | 722 | 17490 | 67 | 85 | 9.5 | 98 | 2.9 | 4 | 1.5 | 25890 | 10.6 | 17200 | 32 | 0.3 |
| 30- | 45.6182- | 110.5201- | 2- | 15- | | 0-M36823 | 57660 | -0.08 | 804 | 13790 | 66 | -87 | 10.3 | 85 | 4.9 | 4 | 1.2 | 30390 | 8.7 | 18050 | 36 | 0.3 |
| 30- | 45.6185- | 110.5220- | 2- | 15- | | 0-M36824 | 53110 | -0.07 | 558 | 13770 | 51 | -74 | 11.3 | 78 | 3.6 | 3 | 1.4 | 24670 | 9.2 | 15110 | 34 | 0.3 |
| 30- | 45.6315- | 110.5121- | 2- | 15- | | 0-M36825 | 53790 | -0.08 | 686 | 39050 | 76 | -71 | 11.3 | 82 | 4.0 | 4 | 1.7 | 29010 | 9.6 | 18290 | 40 | 0.4 |
| 30- | 45.6893- | 110.5610- | 2- | 12- | | 0-M36826 | 69830 | -0.09 | 1087 | 24600 | 57 | -91 | 19.9 | 268 | 3.1 | 4 | 1.8 | 43200 | 5.8 | 19640 | 35 | 0.3 |
| 30- | 45.6881- | 110.5548- | 2- | 15- | | 0-M36827 | 67740 | -0.09 | 1085 | 32280 | 58 | -110 | 17.4 | 319 | 3.2 | 3 | 1.6 | 42850 | 5.6 | 16080 | 38 | 0.3 |
| 30- | 45.7078- | 110.5393- | 2- | 12- | | 0-M36828 | 58930 | -0.08 | 784 | 29470 | 78 | -88 | 19.9 | 537 | 2.7 | 3 | 1.8 | 64430 | 14.3 | 15650 | 42 | 0.4 |
| 30- | 45.7256- | 110.5662- | 2- | 12- | | 0-M36829 | 61270 | -0.08 | 898 | 27500 | 85 | 85 | 13.4 | 110 | 3.9 | 4 | 1.7 | 31730 | 13.1 | 13620 | 40 | 0.5 |
| 30- | 45.7474- | 110.5706- | 2- | 12- | | 0-M36830 | 69270 | -0.08 | 858 | 25280 | 63 | -88 | 18.1 | 187 | 4.4 | 4 | 1.7 | 40720 | 5.5 | 21410 | 31 | 0.4 |
| 30- | 45.7522- | 110.5842- | 2- | 12- | | 0-M36831 | 71880 | -0.08 | 1017 | 24580 | 60 | -98 | 16.6 | 192 | 4.1 | 4 | 1.8 | 39390 | 6.1 | 21750 | 39 | 0.3 |
| 30- | 45.7744- | 110.6211- | 2- | 15- | | 0-M36832 | 74050 | -0.08 | 725 | 28340 | 60 | -82 | 21.0 | 109 | 8.1 | 3 | 1.6 | 41140 | 4.5 | 25260 | 25 | 0.3 |
| 30- | 45.7811- | 110.5894- | 2- | 15- | | 0-M36833 | 64050 | -0.09 | 838 | 24380 | 69 | -88 | 16.4 | 147 | 3.8 | 4 | 1.6 | 37760 | 9.1 | 21840 | 37 | 0.3 |
| 30- | 45.7514- | 110.5125- | 2- | 12- | | 0-M36834 | 64010 | -0.08 | 1022 | 24790 | 62 | -83 | 15.8 | 191 | 3.4 | 3 | 1.5 | 37320 | 6.8 | 19500 | 33 | 0.3 |
| 30- | 45.7642- | 110.5097- | 2- | 12- | | 0-M36835 | 66010 | -0.08 | 878 | 28950 | 72 | -102 | 15.3 | 262 | 3.2 | 4 | 1.9 | 43990 | 10.0 | 19720 | 44 | 0.4 |
| 30- | 45.7614- | 110.5489- | 2- | 15- | | 0-M36836 | 71710 | -0.07 | 796 | 31210 | 51 | -85 | 18.0 | 150 | 3.7 | 3 | 1.6 | 39420 | 4.5 | 20750 | 34 | 0.3 |
| 30- | 45.6330- | 110.6161- | 2- | 12- | | 0-M36837 | 42210 | -0.07 | 648 | 16830 | 55 | -51 | 5.9 | 54 | 3.0 | 3 | 1.2 | 17120 | 10.6 | 15550 | 26 | 0.4 |
| 30- | 45.6484- | 110.6081- | 2- | 12- | | 0-M36838 | 66480 | -0.07 | 1041 | 23690 | 58 | -76 | 13.3 | 150 | 3.5 | 4 | 1.6 | 29930 | 5.8 | 16150 | 33 | 0.3 |
| 30- | 45.6512- | 110.6278- | 2- | 15- | | 0-M36839 | 70720 | -0.09 | 1143 | 22470 | 56 | -99 | 22.5 | 353 | 4.6 | 3 | 1.7 | 48340 | 6.0 | 21850 | 36 | 0.3 |
| 30- | 45.6647- | 110.6050- | 2- | 12- | | 0-M36840 | 67180 | -0.07 | 851 | 22010 | 59 | 116 | 17.9 | 189 | 4.4 | 3 | 1.6 | 39280 | 6.7 | 19340 | 33 | 0.4 |
| 30- | 45.6786- | 110.6238- | 2- | 15- | | 0-M36841 | 66640 | -0.09 | 908 | 28630 | 75 | -81 | 16.4 | 230 | 3.3 | 3 | 1.6 | 39750 | 5.9 | 18390 | 35 | 0.3 |
| 30- | 45.6900- | 110.6636- | 2- | 12- | | 0-M36842 | 66140 | -0.08 | 1003 | 29940 | 63 | -81 | 14.5 | 199 | 3.2 | 4 | 1.7 | 43980 | 6.6 | 20870 | 34 | 0.3 |
| 30- | 45.6916- | 110.6938- | 2- | 11- | | 0-M36843 | 64740 | -0.08 | 957 | 25820 | 76 | -96 | 16.7 | 166 | 4.2 | 5 | 1.8 | 39980 | 11.1 | 18800 | 45 | 0.4 |
| 30- | 45.6975- | 110.6767- | 2- | 12- | | 0-M36844 | 66450 | -0.08 | 861 | 23700 | 56 | -89 | 17.4 | 215 | 3.3 | 3 | 1.5 | 41540 | 7.3 | 23090 | 34 | 0.3 |
| 30- | 45.6587- | 110.6483- | 2- | 12- | | 0-M36845 | 55130 | -0.07 | 835 | 17260 | 56 | -66 | 8.7 | 49 | 3.1 | 3 | 1.6 | 23250 | 6.3 | 14850 | 32 | 0.3 |
| 30- | 45.6437- | 110.6673- | 2- | 12- | | 0-M36846 | 55480 | -0.08 | 646 | 20860 | 55 | -71 | 10.7 | 66 | 4.6 | 4 | 1.6 | 30150 | 7.1 | 15880 | 25 | 0.3 |
| 30- | 45.6366- | 110.7143- | 2- | 12- | | 0-M36847 | 51430 | -0.07 | 846 | 10550 | 63 | -64 | 6.1 | 48 | 4.0 | 4 | 1.4 | 21330 | 10.1 | 16000 | 27 | 0.3 |
| 30- | 45.6179- | 110.7355- | 2- | 12- | | 0-M36848 | 49870 | -0.06 | 723 | 8106 | 55 | 134 | 9.0 | 54 | 3.9 | 4 | 1.3 | 22000 | 8.8 | 19130 | 29 | 0.3 |
| 30- | 45.6373- | 110.7477- | 2- | 12- | | 0-M36849 | 70970 | -0.08 | 965 | 19560 | 65 | -77 | 11.1 | 73 | 3.7 | 4 | 1.7 | 31290 | 8.0 | 18600 | 29 | 0.3 |
| 30- | 45.6698- | 110.6815- | 2- | 12- | | 0-M36850 | 63490 | -0.07 | 927 | 23270 | 68 | -82 | 14.5 | 286 | 2.4 | 3 | 2.0 | 41240 | 8.8 | 19160 | 40 | 0.3 |
| 30- | 45.6607- | 110.7051- | 2- | 12- | | 0-M36851 | 63680 | -0.08 | 842 | 22570 | 67 | -88 | 13.2 | 174 | 5.6 | 5 | 2.3 | 38720 | 13.4 | 18090 | 40 | 0.5 |
| 30- | 45.6604- | 110.7195- | 2- | 12- | | 0-M36852 | 63850 | -0.07 | 812 | 21240 | 50 | -79 | 12.6 | 117 | 3.2 | 3 | 1.5 | 28860 | 5.5 | 17530 | 29 | 0.2 |
| 30- | 45.8050- | 110.5428- | 2- | 12- | | 0-M36853 | 64840 | -0.10 | 884 | 32040 | 70 | -98 | 16.7 | 180 | 4.3 | 3 | 1.5 | 42590 | 5.5 | 19340 | 29 | 0.3 |
| 30- | 45.7914- | 110.5436- | 2- | 12- | | 0-M36854 | 63350 | -0.08 | 1163 | 31000 | 69 | -91 | 15.9 | 256 | 3.4 | 3 | 1.6 | 46670 | 7.3 | 17860 | 40 | 0.3 |
| 30- | 45.8178- | 110.5528- | 2- | 12- | | 0-M36855 | 68420 | -0.08 | 989 | 24370 | 53 | -93 | 18.5 | 205 | 3.9 | 3 | 1.5 | 43610 | 5.9 | 16720 | 33 | 0.3 |
| 30- | 45.8386- | 110.5844- | 2- | 12- | | 0-M36856 | 70320 | -0.09 | 974 | 23540 | 63 | -88 | 14.8 | 181 | 3.0 | 3 | 1.5 | 39210 | 6.0 | 16800 | 30 | 0.3 |
| 30- | 45.8600- | 110.6175- | 2- | 12- | | 0-M36857 | 61150 | -0.08 | 1096 | 29290 | 68 | -86 | 17.0 | 295 | 2.3 | 3 | 1.8 | 55820 | 7.2 | 15590 | 36 | 0.3 |
| 30- | 45.8647- | 110.5803- | 2- | 12- | | 0-M36858 | 63180 | -0.08 | 894 | 27630 | 68 | -101 | 14.2 | 312 | 2.6 | 4 | 1.7 | 50900 | 11.2 | 15540 | 45 | 0.3 |
| 30- | 45.8650- | 110.5800- | 2- | 12- | | 0-M36859 | 67170 | -0.07 | 771 | 22050 | 61 | -90 | 15.9 | 118 | 3.9 | 4 | 1.7 | 39370 | 8.0 | 18700 | 39 | 0.4 |
| 30- | 45.8519- | 110.5756- | 2- | 12- | | 0-M36860 | 67360 | -0.08 | 1011 | 17730 | 85 | -86 | 13.6 | 131 | 3.3 | 4 | 1.8 | 40460 | 8.6 | 16630 | 41 | 0.3 |
| 30- | 45.8472- | 110.5736- | 2- | 12- | | 0-M36861 | 60180 | -0.07 | 862 | 22430 | 63 | -79 | 15.0 | 171 | 4.0 | 4 | 1.7 | 37320 | 10.9 | 14620 | 35 | 0.4 |
| 30- | 45.8275- | 110.5469- | 2- | 12- | | 0-M36862 | 63830 | -0.07 | 1145 | 23840 | 73 | -102 | 14.1 | 223 | 2.7 | 4 | 1.8 | 43350 | 9.3 | 21280 | 40 | 0.4 |
| 30- | 45.8458- | 110.5064- | 2- | 12- | | 0-M36863 | 67900 | -0.07 | 974 | 23430 | 57 | -88 | 16.1 | 120 | 3.4 | 3 | 1.7 | 40390 | 5.2 | 16110 | 33 | 0.3 |
| 30- | 45.8800- | 110.5886- | 2- | 12- | | 0-M36864 | 58710 | -0.08 | 833 | 25000 | 74 | 84 | 13.5 | 117 | 3.5 | 5 | 1.6 | 34380 | 11.8 | 16580 | 44 | 0.4 |
| 30- | 45.8914- | 110.5992- | 2- | 12- | | 0-M36865 | 66230 | -0.07 | 794 | 18890 | 68 | -79 | 14.6 | 98 | 3.3 | 4 | 1.7 | 43720 | 6.7 | 16070 | 38 | 0.3 |

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



| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | LASL SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | U/Th RATIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mg | Mn | Na | Rb | Sb | Sc | Sm | Sr | Ta | Tb | Th | Ti | V | Yb | Zn | |
| 30-45.5478-110.2133-2-12- | 0-M36815 | 13520 | 457 | 7271 | 44 | -2 | 7.7 | 5.6 | 300 | -1 | -1 | 10.9 | 2369 | 58 | 2.8 | 81 | 0.220 |
| 30-45.5197-110.2258-2-15- | 0-M36816 | 15040 | 731 | 15710 | 46 | -2 | 12.7 | 3.7 | 350 | -1 | -1 | 10.5 | 2672 | 98 | 2.4 | 152 | 0.238 |
| 30-45.5555-110.1990-2-12- | 0-M36817 | 12930 | 536 | 19000 | -29 | -2 | 11.2 | 3.9 | 370 | -1 | -1 | 12.2 | 2892 | 98 | 2.1 | 92 | 0.172 |
| 30-45.6143-110.1248-2-12- | 0-M36818 | 18630 | 496 | 10500 | 49 | -2 | 10.9 | 3.0 | -206 | -1 | -1 | 5.4 | 1695 | 82 | 1.9 | -33 | 0.315 |
| 30-45.5936-110.1076-2-12- | 0-M36819 | 8747 | 254 | 13480 | 59 | -1 | 6.1 | 4.2 | -210 | -1 | -1 | 8.8 | 2243 | 69 | 2.7 | -42 | 0.284 |
| 30-45.6329-110.5567-2-15- | 0-M36820 | 11780 | 570 | 5291 | 81 | -2 | 9.4 | 5.0 | -237 | -1 | -1 | 11.6 | 3013 | 71 | 2.1 | 102 | 0.224 |
| 30-45.6752-110.5099-2-12- | 0-M36821 | 8074 | 535 | 14530 | -28 | -2 | 9.0 | 6.2 | -241 | -1 | -1 | 9.4 | 3392 | 87 | 2.9 | 86 | 0.255 |
| 30-45.6640-110.5027-2-12- | 0-M36822 | 6912 | 373 | 11360 | 56 | -2 | 8.9 | 5.4 | 370 | -1 | -1 | 11.2 | 3230 | 81 | 3.0 | 48 | 0.277 |
| 30-45.6182-110.5201-2-15- | 0-M36823 | 5452 | 872 | 8864 | 69 | -2 | 9.3 | 5.2 | -326 | -1 | 1 | 10.6 | 2850 | 78 | -1.5 | 147 | 0.264 |
| 30-45.6185-110.5220-2-15- | 0-M36824 | 4761 | 694 | 9245 | 54 | -2 | 8.3 | 4.3 | -258 | -1 | -1 | 9.2 | 2417 | 81 | 3.0 | -108 | 0.315 |
| 30-45.6315-110.5121-2-15- | 0-M36825 | 11680 | 642 | 10470 | 61 | -2 | 8.5 | 6.4 | -238 | -1 | -1 | 12.3 | 3259 | 83 | 3.8 | 48 | 0.341 |
| 30-45.6893-110.5610-2-12- | 0-M36826 | 13750 | 831 | 14270 | -33 | -2 | 14.1 | 5.3 | 461 | -2 | -1 | 8.2 | 2836 | 123 | 2.9 | 109 | 0.280 |
| 30-45.6881-110.5548-2-15- | 0-M36827 | 15300 | 773 | 18410 | -31 | -2 | 13.7 | 4.6 | 684 | -1 | -1 | 8.1 | 3484 | 130 | -1.6 | 134 | 0.259 |
| 30-45.7078-110.5393-2-12- | 0-M36828 | 13180 | 868 | 14720 | -30 | -2 | 15.9 | 4.8 | -271 | -1 | -1 | 9.9 | 3926 | 191 | 2.6 | 75 | 0.293 |
| 30-45.7256-110.5662-2-12- | 0-M36829 | 12400 | 648 | 14200 | 28 | -2 | 9.9 | 6.4 | -254 | -1 | -1 | 11.8 | 3633 | 96 | 3.4 | -34 | 0.364 |
| 30-45.7474-110.5706-2-12- | 0-M36830 | 13150 | 793 | 13430 | 71 | -2 | 13.1 | 5.3 | 487 | -1 | -1 | 8.5 | 3389 | 117 | 2.0 | -30 | 0.271 |
| 30-45.7522-110.5842-2-12- | 0-M36831 | 14780 | 695 | 14900 | 81 | -2 | 12.7 | 4.9 | 536 | -1 | -1 | 8.2 | 2890 | 111 | -1.7 | 145 | 0.293 |
| 30-45.7744-110.6211-2-15- | 0-M36832 | 13110 | 813 | 11820 | 63 | -2 | 13.5 | 4.4 | -262 | -1 | -1 | 7.7 | 3084 | 119 | 1.9 | -102 | 0.273 |
| 30-45.7811-110.5894-2-15- | 0-M36833 | 13900 | 901 | 13420 | -32 | -2 | 11.1 | 6.0 | 614 | -1 | -1 | 8.6 | 3574 | 113 | 3.1 | -39 | 0.372 |
| 30-45.7514-110.5125-2-12- | 0-M36834 | 11540 | 653 | 14210 | 67 | -2 | 11.6 | 4.3 | 492 | -1 | -1 | 8.5 | 3383 | 107 | -2.0 | 81 | 0.282 |
| 30-45.7642-110.5097-2-12- | 0-M36835 | 8843 | 791 | 15850 | 77 | -2 | 12.2 | 5.4 | 554 | -1 | -1 | 8.4 | 2638 | 113 | 3.7 | 136 | 0.286 |
| 30-45.7614-110.5489-2-15- | 0-M36836 | 11810 | 736 | 13060 | 64 | -2 | 12.7 | 4.5 | 541 | -1 | -1 | 8.9 | 3051 | 119 | 2.5 | -39 | 0.236 |
| 30-45.6330-110.6161-2-12- | 0-M36837 | 5586 | 260 | 5841 | 43 | -2 | 5.5 | 4.3 | -171 | -1 | -1 | 8.6 | 2167 | 76 | 3.4 | 79 | 0.291 |
| 30-45.6484-110.6081-2-12- | 0-M36838 | 10540 | 556 | 12880 | 58 | -2 | 10.0 | 4.3 | 477 | -1 | -1 | 7.4 | 2710 | 89 | 2.0 | 62 | 0.297 |
| 30-45.6512-110.6278-2-15- | 0-M36839 | 14700 | 1011 | 12600 | 59 | -2 | 16.0 | 4.3 | 483 | -1 | -1 | 8.4 | 3130 | 128 | -1.8 | 43 | 0.226 |
| 30-45.6647-110.6050-2-12- | 0-M36840 | 12340 | 631 | 13660 | 68 | -2 | 11.8 | 5.1 | 381 | -1 | -1 | 8.8 | 3078 | 105 | 2.5 | 104 | 0.295 |
| 30-45.6786-110.6238-2-15- | 0-M36841 | 12070 | 719 | 11840 | -37 | -2 | 12.0 | 5.5 | 527 | -1 | -1 | 9.0 | 3872 | 121 | 2.7 | -49 | 0.267 |
| 30-45.6900-110.6636-2-12- | 0-M36842 | 11670 | 594 | 13550 | -32 | -2 | 11.5 | 4.7 | 362 | -1 | -1 | 7.4 | 3340 | 113 | 3.0 | 69 | 0.311 |
| 30-45.6916-110.6938-2-11- | 0-M36843 | 11440 | 744 | 13460 | 50 | -2 | 11.3 | 5.6 | -314 | -1 | -1 | 13.3 | 3674 | 96 | 3.1 | 150 | 0.286 |
| 30-45.6975-110.6767-2-12- | 0-M36844 | 12500 | 538 | 14200 | 74 | -2 | 12.0 | 4.9 | 553 | -1 | -1 | 7.9 | 3469 | 115 | 2.4 | 105 | 0.291 |
| 30-45.6587-110.6483-2-12- | 0-M36845 | 6114 | 415 | 10940 | -28 | -2 | 6.2 | 4.7 | 415 | -1 | -1 | 7.1 | 2649 | 74 | 2.2 | | 0.324 |
| 30-45.6437-110.6673-2-12- | 0-M36846 | 11130 | 907 | 6685 | 58 | -2 | 8.4 | 4.9 | -287 | -1 | -1 | 9.2 | 3314 | 77 | 3.0 | -101 | 0.304 |
| 30-45.6366-110.7143-2-12- | 0-M36847 | 4896 | 370 | 6583 | 55 | -2 | 6.9 | 5.0 | -219 | 1 | -1 | 10.2 | 2384 | 76 | 2.9 | 100 | 0.294 |
| 30-45.6179-110.7355-2-12- | 0-M36848 | 3142 | 633 | 6527 | 72 | -2 | 6.1 | 4.7 | -238 | -1 | -1 | 9.6 | 1723 | 88 | 2.3 | 76 | 0.375 |
| 30-45.6373-110.7477-2-12- | 0-M36849 | 6640 | 571 | 11710 | 58 | -2 | 9.0 | 3.9 | 385 | -2 | -1 | 7.5 | 3730 | 103 | 2.8 | 53 | 0.373 |
| 30-45.6698-110.6815-2-12- | 0-M36850 | 9655 | 660 | 13900 | 70 | -2 | 11.3 | 4.3 | 541 | -1 | -1 | 8.5 | 3755 | 111 | 2.1 | 120 | 0.282 |
| 30-45.6607-110.7051-2-12- | 0-M36851 | 10050 | 766 | 10630 | 82 | -2 | 11.2 | 5.9 | 529 | -1 | -1 | 11.4 | 3660 | 106 | 4.7 | 147 | 0.289 |
| 30-45.6604-110.7195-2-12- | 0-M36852 | 8843 | 537 | 12980 | 53 | -2 | 8.5 | 3.8 | 339 | -1 | -1 | 7.9 | 2870 | 87 | 1.9 | 124 | 0.278 |
| 30-45.8050-110.5428-2-12- | 0-M36853 | 13080 | 893 | 16180 | 64 | -2 | 11.6 | 4.8 | 702 | -1 | -1 | 7.1 | 3055 | 134 | 3.4 | 87 | 0.296 |
| 30-45.7914-110.5436-2-12- | 0-M36854 | 11680 | 826 | 17020 | -30 | -2 | 12.1 | 5.2 | 772 | -1 | -1 | 7.7 | 3977 | 130 | 2.5 | 88 | 0.299 |
| 30-45.8178-110.5528-2-12- | 0-M36855 | 13550 | 694 | 16350 | 79 | -2 | 12.7 | 4.1 | 523 | -1 | -1 | 8.0 | 2994 | 124 | 2.0 | -45 | 0.263 |
| 30-45.8386-110.5844-2-12- | 0-M36856 | 12440 | 701 | 16520 | -32 | -2 | 10.9 | 4.8 | 993 | -1 | -1 | 8.1 | 3196 | 104 | 2.6 | -14 | 0.247 |
| 30-45.8600-110.6175-2-12- | 0-M36857 | 11240 | 830 | 15640 | 40 | -2 | 13.7 | 4.5 | 800 | -1 | -1 | 8.4 | 4898 | 144 | 2.4 | 64 | 0.226 |
| 30-45.8647-110.5803-2-12- | 0-M36858 | 8635 | 777 | 17520 | -30 | -2 | 11.8 | 5.5 | 656 | -1 | -1 | 9.5 | 4467 | 149 | 2.9 | 137 | 0.242 |
| 30-45.8650-110.5800-2-12- | 0-M36859 | 9405 | 919 | 12470 | 59 | -2 | 10.9 | 4.9 | 522 | -1 | -1 | 9.3 | 3111 | 102 | 2.0 | 105 | 0.280 |
| 30-45.8519-110.5756-2-12- | 0-M36860 | 10770 | 638 | 17550 | 68 | -2 | 10.8 | 5.6 | 510 | -1 | -1 | 7.2 | 4372 | 114 | 3.3 | 91 | 0.333 |
| 30-45.8472-110.5736-2-12- | 0-M36861 | 10770 | 659 | 13490 | 84 | -2 | 10.9 | 5.1 | 362 | -1 | -1 | 10.0 | 3699 | 102 | 3.3 | -40 | 0.280 |
| 30-45.8275-110.5469-2-12- | 0-M36862 | 10530 | 707 | 19070 | 66 | -2 | 11.5 | 5.4 | 407 | -1 | -1 | 8.0 | 3903 | 124 | 2.8 | 102 | 0.275 |
| 30-45.8458-110.5064-2-12- | 0-M36863 | 12520 | 665 | 16100 | 38 | -2 | 11.4 | 4.7 | 920 | -1 | -1 | 8.7 | 2676 | 107 | 3.9 | -38 | 0.264 |
| 30-45.8800-110.5886-2-12- | 0-M36864 | 10230 | 660 | 13920 | 58 | -2 | 9.5 | 7.3 | -259 | -1 | -1 | 11.7 | 3872 | 99 | 3.0 | 102 | 0.342 |
| 30-45.8914-110.5992-2-12- | 0-M36865 | 11560 | 613 | 14870 | -28 | -2 | 10.7 | 5.2 | 408 | -1 | -1 | 6.7 | 4093 | 119 | 3.1 | -64 | 0.328 |

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

(1)

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER AND FIELD DATA | | | | | | | | | | | | | | | | | | | | | | | | U CONCENTRATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | TIME SAMPLED | | | | | | | | | | | | | | | | | | | | | | | |
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | DATE | HOUR | AIR TEMPERATURE | WATER TEMPERATURE | COMMENTS | SPECIAL MEASUREMENTS | pH | CONDUCTIVITY (µmho/cm) | SCINTILLOMETER (eU,ppm) | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm |
| 30- | 45.8903- | 110.5344- | 2- | 12- | | 0-M36866- | 10/04/76- | 11- | 15- | 9.8- | C- | - | 5.9- | 370- | | 8- | 1- | 1- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 2.50 |
| 30- | 45.8981- | 110.5267- | 2- | 12- | | 0-M36867- | 10/04/76- | 12- | 16- | 10.0- | - | - | 5.7- | 210- | | 1- | 1- | 1- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 2.40 |
| 30- | 45.8978- | 110.5131- | 2- | 12- | | 0-M36868- | 10/04/76- | 12- | 16- | 9.5- | - | - | 5.7- | 200- | | 4- | 1- | 1- | 3- | 7- | 2- | 2- | 1- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 3.00 |
| 30- | 45.9406- | 110.5200- | 2- | 12- | | 0-M36869- | 10/04/76- | 12- | 16- | 11.2- | - | - | 5.5- | 205- | | 4- | 1- | 1- | 2- | 1- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 2.10 |
| 30- | 45.7446- | 110.2342- | 2- | 12- | | 0-M36870- | 10/07/76- | 10- | 13- | 16.0- | C- | - | 6.1- | 500- | | 3- | 1- | 1- | 5- | 6- | 3- | 2- | 3- | 2- | 2- | 3- | 2- | 1- | -3- | - | - | - | - | 2.10 |
| 30- | 45.7349- | 110.2496- | 2- | 15- | | 0-M36871- | 10/07/76- | 10- | 10- | -C- | - | | - | - | | 3- | 1- | 1- | 5- | 6- | -1- | -2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | - | 2.30 |
| 30- | 45.7590- | 110.2487- | 2- | 12- | | 0-M36872- | 10/07/76- | 10- | 11- | 5.0- | C- | - | 5.7- | 460- | | 2- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 2.10 |
| 30- | 45.8022- | 110.2335- | 2- | 12- | | 0-M36873- | 10/07/76- | 11- | 10- | 5.5- | C- | - | 5.9- | 360- | | 3- | 1- | 6- | 5- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 2.20 |
| 30- | 45.7989- | 110.2478- | 2- | 12- | | 0-M36874- | 10/07/76- | 11- | 12- | 6.5- | - | - | 5.9- | 500- | | 8- | 1- | 1- | 4- | 6- | 2- | 2- | 1- | 2- | 6- | 3- | 3- | 1- | -3- | - | - | - | - | 2.30 |
| 30- | 45.7932- | 110.2028- | 2- | 12- | | 0-M36875- | 10/07/76- | 12- | 13- | 6.0- | C- | - | 5.9- | 340- | | 0- | 1- | 1- | 2- | 1- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 2.70 |
| 30- | 45.7610- | 110.2064- | 2- | 12- | | 0-M36876- | 10/07/76- | 12- | 15- | 8.5- | C- | - | 6.1- | 750- | | 4- | 1- | 1- | 5- | 6- | 3- | 2- | 1- | 2- | 4- | 2- | 2- | 1- | -3- | - | - | - | - | 1.80 |
| 30- | 45.7698- | 110.1807- | 2- | 12- | | 0-M36877- | 10/07/76- | 12- | 14- | 7.0- | - | - | 5.9- | 430- | | 3- | 1- | 1- | 2- | 6- | 3- | 2- | 1- | 2- | 2- | 2- | 2- | 1- | -3- | - | - | - | - | 2.20 |
| 30- | 45.7360- | 110.2153- | 2- | 12- | | 0-M36878- | 10/07/76- | 13- | 17- | 12.0- | C- | - | 5.7- | 350- | | 4- | 1- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 3- | 2- | 2- | 1- | -3- | - | - | - | - | 2.90 |
| 30- | 45.6926- | 110.2127- | 2- | 12- | | 0-M36879- | 10/07/76- | 13- | 14- | 6.5- | - | - | 5.7- | 310- | | 1- | 1- | 6- | 3- | 7- | 2- | 2- | 1- | 2- | 2- | 3- | 2- | 1- | -3- | - | - | - | - | 2.60 |
| 30- | 45.7032- | 110.1963- | 2- | 12- | | 0-M36880- | 10/07/76- | 14- | 17- | 7.5- | C- | - | 5.7- | 310- | | 3- | 1- | 3- | 2- | 3- | 2- | 2- | 1- | 2- | 3- | 3- | 4- | 1- | -3- | - | - | - | - | 2.80 |
| 30- | 45.7074- | 110.1942- | 2- | 12- | | 0-M36881- | 10/07/76- | 14- | 14- | 7.5- | C- | - | 5.7- | 330- | | 5- | 1- | 3- | 3- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 3.10 |
| 30- | 45.7150- | 110.1889- | 2- | 15- | | 0-M36882- | 10/07/76- | 14- | 16- | -C- | - | | - | - | | 2- | 1- | 7- | 3- | 7- | -1- | -2- | 4- | 2- | 4- | 1- | -3- | - | - | - | - | - | 2.30 |
| 30- | 45.7087- | 110.1920- | 2- | 12- | | 0-M36883- | 10/07/76- | 14- | 14- | 8.5- | C- | - | 5.7- | 380- | | 0- | 1- | 7- | 2- | 7- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 3.20 |
| 30- | 45.6946- | 110.1775- | 2- | 12- | | 0-M36884- | 10/07/76- | 15- | 16- | 8.5- | C- | - | 5.7- | 300- | | 3- | 1- | 1- | 2- | 3- | 2- | 2- | 1- | 2- | 2- | 2- | 3- | 1- | -3- | - | - | - | - | 2.60 |
| 30- | 45.7243- | 110.1999- | 2- | 12- | | 0-M36885- | 10/07/76- | 15- | 20- | 11.0- | C- | - | 5.7- | 650- | | 2- | 1- | 1- | 2- | 3- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 1- | -3- | - | - | - | - | 1.90 |
| 30- | 45.7251- | 110.1540- | 2- | 15- | | 0-M36886- | 10/07/76- | 15- | 19- | -C- | - | | - | - | | 4- | 1- | 1- | 3- | 1- | -1- | -2- | 3- | 2- | 4- | 1- | -3- | - | - | - | - | - | 1.10 |
| 30- | 45.7252- | 110.1561- | 2- | 12- | | 0-M36887- | 10/07/76- | 16- | 18- | 9.5- | - | - | 5.7- | 270- | | 4- | 1- | 1- | 2- | 6- | 2- | 2- | 1- | 2- | 3- | 2- | 3- | 1- | -3- | - | - | - | - | 1.40 |
| 30- | 45.7543- | 110.1330- | 2- | 15- | | 0-M36888- | 10/07/76- | 16- | 16- | -C- | - | | - | - | | 0- | 1- | 1- | 2- | 7- | -1- | -2- | 3- | 2- | 2- | 1- | -3- | - | - | - | - | - | 1.30 |
| 30- | 45.7475- | 110.1340- | 2- | 12- | | 0-M36889- | 10/07/76- | 16- | 19- | 11.0- | C- | - | 5.7- | 270- | | 1- | 1- | 7- | 3- | 6- | 2- | 2- | 1- | 2- | 3- | 3- | 2- | 1- | -3- | - | - | - | - | 1.70 |
| 30- | 45.7700- | 110.0819- | 2- | 12- | | 0-M36890- | 10/07/76- | 16- | 17- | 10.0- | - | - | 5.9- | 360- | | 4- | 1- | 7- | 5- | 6- | 4- | 2- | 1- | 2- | 4- | 3- | 4- | 1- | -3- | - | - | - | - | 2.30 |
| 30- | 45.7681- | 110.0542- | 2- | 15- | | 0-M36891- | 10/07/76- | 17- | 17- | -C- | - | | - | - | | 5- | 1- | 1- | 5- | 7- | -1- | -2- | 2- | 2- | 3- | 1- | -3- | - | - | - | - | - | 1.60 |
| 30- | 45.7750- | 110.0642- | 2- | 12- | | 0-M36892- | 10/07/76- | 17- | 18- | 10.0- | C- | - | 5.7- | 270- | | 3- | 1- | 1- | 3- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 2- | 1- | -3- | - | - | - | - | 1.60 |
| 30- | 45.8978- | 110.4981- | 2- | 12- | | 0-M36893- | 10/08/76- | 9- | 6- | 6.0- | C- | - | 5.7- | 190- | | 4- | 1- | 1- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 2.40 |
| 30- | 45.9022- | 110.4925- | 2- | 12- | | 0-M36894- | 10/08/76- | 9- | 5- | 5.0- | C- | - | 5.7- | 450- | | 2- | 1- | 1- | 5- | 6- | 3- | 2- | 3- | 2- | 2- | 3- | 4- | 1- | -3- | - | - | - | - | 2.60 |
| 30- | 45.8875- | 110.4872- | 2- | 12- | | 0-M36895- | 10/08/76- | 10- | 10- | 6.0- | C- | - | 5.7- | 380- | | 9- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 2.20 |
| 30- | 45.8772- | 110.4767- | 2- | 12- | | 0-M36896- | 10/08/76- | 10- | 13- | 5.5- | - | - | 5.7- | 280- | | 9- | 1- | 1- | 5- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 1.90 |
| 30- | 45.8786- | 110.4303- | 2- | 12- | | 0-M36897- | 10/08/76- | 10- | 8- | 4.0- | C- | - | 5.9- | 375- | | 2- | 1- | 1- | 3- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 4- | 1- | -3- | - | - | - | - | 2.50 |
| 30- | 45.8992- | 110.4311- | 2- | 12- | | 0-M36898- | 10/08/76- | 11- | 3- | 4.0- | C- | - | 5.7- | 350- | | 3- | 1- | 1- | 2- | 6- | 3- | 2- | 1- | 2- | 1- | 2- | 4- | 1- | -3- | - | - | - | - | 2.60 |
| 30- | 45.9042- | 110.4317- | 2- | 12- | | 0-M36899- | 10/08/76- | 11- | 4- | 6.0- | C- | - | 5.5- | 140- | | 5- | 1- | 1- | 2- | 1- | 4- | 2- | 1- | 2- | 1- | 2- | 2- | 1- | -3- | - | - | - | - | 2.60 |
| 30- | 45.9147- | 110.4239- | 2- | 12- | | 0-M36900- | 10/08/76- | 11- | 8- | 6.0- | C- | - | 5.7- | 240- | | 3- | 1- | 1- | 2- | 1- | 4- | 2- | 1- | 2- | 3- | 2- | 2- | 1- | -3- | - | - | - | - | 2.30 |
| 30- | 45.9200- | 110.4325- | 2- | 12- | | 0-M36901- | 10/08/76- | 11- | 16- | 6.0- | C- | - | 6.1- | 500- | | 0- | 1- | 1- | 5- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 2.30 |
| 30- | 45.9233- | 110.4342- | 2- | 12- | | 0-M36902- | 10/08/76- | 12- | 14- | 5.0- | C- | - | 5.9- | 480- | | 3- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 2.10 |
| 30- | 45.9508- | 110.4528- | 2- | 12- | | 0-M36903- | 10/08/76- | 12- | 18- | 6.5- | - | - | 5.5- | 140- | | 4- | 1- | 1- | 2- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -1- | - | - | - | - | 2.50 |
| 30- | 45.9528- | 110.4744- | 2- | 12- | | 0-M36904- | 10/08/76- | 12- | 21- | 12.0- | C- | - | 5.7- | 280- | | 3- | 1- | 1- | 2- | 1- | 2- | 2- | 1- | 2- | 4- | 2- | 2- | 1- | -3- | - | - | - | - | 2.70 |
| 30- | 45.9544- | 110.4869- | 2- | 12- | | 0-M36905- | 10/08/76- | 13- | 19- | 9.5- | C- | - | 5.7- | 240- | | 6- | 1- | 1- | 5- | 6- | 3- | 2- | 1- | 1- | 6- | 3- | 3- | 1- | -3- | - | - | - | - | 2.00 |
| 30- | 45.9992- | 110.4222- | 2- | 12- | | 0-M36906- | 10/08/76- | 13- | 25- | 11.0- | - | - | 5.5- | 70- | | 5- | 3- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 2.40 |
| 30- | 45.9967- | 110.4233- | 2- | 12- | | 0-M36907- | 10/08/76- | 13- | 24- | 9.0- | - | - | 5.5- | 75- | | 5- | 3- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 2.40 |
| 30- | 45.9011- | 110.3736- | 2- | 15- | | 0-M36908- | 10/08/76- | 14- | 22- | -C- | - | | - | - | | 4- | 3- | 7- | 2- | 1- | -1- | -2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | - | 2.40 |
| 30- | 45.7711- | 110.4794- | 2- | 12- | | 0-M36909- | 10/08/76- | 15- | 20- | 11.0- | C- | - | 5.9- | 550- | | 1- | 1- | 1- | 3- | 7- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 2.20 |
| 30- | 45.8006- | 110.4806- | 2- | 12- | | 0-M36910- | 10/08/76- | 16- | 21- | 9.0- | - | - | 5.9- | 500- | | 4- | 1- | 1- | 3- | 1- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 1.90 |
| 30- | 45.8203- | 110.4992- | 2- | 12- | | 0-M36911- | 10/08/76- | 16- | 17- | 11.0- | C- | - | 5.9- | 600- | | 5- | 1- | 1- | 5- | 6- | 2- | 2- | 3- | 2- | 2- | 2- | 3- | 1- | -3- | - | - | - | - | 2.90 |
| 30- | 45.8192- | 110.4733- | 2- | 15- | | 0-M36912- | 10/08/76- | 17- | 19- | -C- | - | | - | - | | 1- | 1- | 1- | 5- | 6- | -1- | -2- | 4- | 4- | 4- | 1- | -3- | - | - | - | - | - | 1.80 |
| 30- | 45.7578- | 110.4533- | 2- | 12- | | 0-M36913- | 10/09/76- | 9- | 11- | 7.0- | C- | - | 5.9- | 460- | | 4- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 2- | 2- | 3- | 1- | -3- | - | - | - | - | 1.90 |
| 30- | 45.8467- | 110.4194- | 2- | 15- | | 0-M36914- | 10/09/76- | 10- | 10- | -C- | - | | - | - | | 4- | 3- | 7- | 5- | 6- | -1- | -2- | 3- | 3- | 3- | 1- | -3- | - | - | - | - | - | 2.10 |
| 30- | 45.8458- | 110.4106- | 2- | 12- | | 0-M36915- | 10/09/76- | 10- | 13- | 7.0- | C- | - | 5.7- | 600- | | 2- | 3- | 7- | 3- | 6- | 2- | 2- | 1- | 2- | 4- | 2- | 2- | 1- | -3- | - | - | - | - | 2.10 |
| 30- | 45.8292- | 110.4400- | 2- | 12- | | 0-M36916- | 10/09/76- | 11- | 14- | 7.0- | C- | - | 5.7- | 550- | | 0- | 1- | 1- | 3- | 1- | 2- | 2- | 1- | 2- | 4- | 2- | 3- | 1- | -3- | - | - | - | - | 2.50 |

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

②

| DOE SAMPLE NUMBER | | | | | | | ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE (Concentrations reported in weight parts per million (ppm)) | | | | | | | | | ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY (Concentrations in weight ppm) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | Ag | Bi | Cd | Cu | Nb | Ni | Pb | Sn | W | Be | Li |
| 30-45.8903-110.5344-2-12- | | | | | | 0-M36866 | -5 | -5 | -5 | 32 | -20 | 23 | 12 | -10 | -15 | 2 | 42 |
| 30-45.8981-110.5267-2-12- | | | | | | 0-M36867 | -5 | -5 | -5 | 31 | -20 | 16 | 13 | -10 | -15 | 2 | 35 |
| 30-45.8978-110.5131-2-12- | | | | | | 0-M36868 | -5 | -5 | -5 | 13 | -20 | -15 | 13 | -10 | -15 | 2 | 36 |
| 30-45.9406-110.5200-2-12- | | | | | | 0-M36869 | -5 | 5 | -5 | 39 | -20 | 24 | -5 | -10 | -15 | 3 | 29 |
| 30-45.7446-110.2342-2-12- | | | | | | 0-M36870 | -5 | -5 | -5 | 32 | -20 | 38 | -5 | -10 | 16 | 2 | 31 |
| 30-45.7349-110.2496-2-15- | | | | | | 0-M36871 | -5 | -5 | -5 | 38 | -20 | 46 | 13 | -10 | -15 | 3 | 31 |
| 30-45.7590-110.2487-2-12- | | | | | | 0-M36872 | -5 | -5 | -5 | 26 | -20 | 64 | 7 | -10 | -15 | 3 | 34 |
| 30-45.8022-110.2335-2-12- | | | | | | 0-M36873 | -5 | -5 | -5 | 28 | -20 | 29 | 10 | -10 | -15 | 2 | 29 |
| 30-45.7989-110.2478-2-12- | | | | | | 0-M36874 | -5 | -5 | -5 | 41 | -20 | 30 | 11 | -10 | -15 | 2 | 29 |
| 30-45.7932-110.2028-2-12- | | | | | | 0-M36875 | -5 | -5 | -5 | 24 | -20 | 28 | 6 | -10 | -15 | 2 | 30 |
| 30-45.7610-110.2064-2-12- | | | | | | 0-M36876 | -5 | -5 | -5 | 54 | -20 | 67 | -5 | -10 | -15 | 2 | 31 |
| 30-45.7698-110.1807-2-12- | | | | | | 0-M36877 | -5 | -5 | -5 | 21 | -20 | 39 | 18 | -10 | -15 | 2 | 33 |
| 30-45.7360-110.2153-2-12- | | | | | | 0-M36878 | -5 | -5 | -5 | -10 | -20 | 15 | 8 | -10 | -15 | 2 | 20 |
| 30-45.6926-110.2127-2-12- | | | | | | 0-M36879 | -5 | -5 | -5 | 19 | -20 | -15 | 7 | -10 | -15 | 2 | 21 |
| 30-45.7032-110.1963-2-12- | | | | | | 0-M36880 | -5 | -5 | -5 | 10 | -20 | -15 | 10 | -10 | -15 | 2 | 21 |
| 30-45.7074-110.1942-2-12- | | | | | | 0-M36881 | -5 | -5 | -5 | 24 | -20 | 18 | 28 | -10 | -15 | 2 | 33 |
| 30-45.7150-110.1889-2-15- | | | | | | 0-M36882 | -5 | -5 | -5 | 21 | -20 | -15 | -5 | -10 | -15 | 2 | 32 |
| 30-45.7087-110.1920-2-12- | | | | | | 0-M36883 | -5 | -5 | -5 | 27 | -20 | 16 | 5 | -10 | -15 | 3 | 32 |
| 30-45.6946-110.1775-2-12- | | | | | | 0-M36884 | -5 | -5 | -5 | 22 | -20 | -15 | 12 | -10 | -15 | 2 | 24 |
| 30-45.7243-110.1999-2-12- | | | | | | 0-M36885 | -5 | -5 | -5 | 23 | -20 | -15 | -5 | -10 | -15 | 2 | 32 |
| 30-45.7251-110.1540-2-15- | | | | | | 0-M36886 | -5 | -5 | -5 | 31 | -20 | -15 | -5 | -10 | -15 | 2 | 13 |
| 30-45.7252-110.1561-2-12- | | | | | | 0-M36887 | -5 | -5 | -5 | 18 | -20 | -15 | -5 | -10 | -15 | 2 | 17 |
| 30-45.7543-110.1330-2-15- | | | | | | 0-M36888 | -5 | -5 | -5 | 13 | -20 | -15 | 7 | -10 | -15 | 2 | 18 |
| 30-45.7475-110.1340-2-12- | | | | | | 0-M36889 | -5 | -5 | -5 | 32 | -20 | 21 | -5 | -10 | -15 | 2 | 21 |
| 30-45.7700-110.0819-2-12- | | | | | | 0-M36890 | -5 | -5 | -5 | 29 | -20 | 57 | 12 | -10 | -15 | 2 | 34 |
| 30-45.7681-110.0542-2-15- | | | | | | 0-M36891 | -5 | -5 | -5 | 45 | -20 | 76 | 12 | -10 | -15 | 2 | 38 |
| 30-45.7750-110.0642-2-12- | | | | | | 0-M36892 | 24 | -5 | 7 | 68 | -20 | -15 | -5 | -10 | -15 | -1 | 7 |
| 30-45.8978-110.4981-2-12- | | | | | | 0-M36893 | -5 | -5 | -5 | 27 | -20 | 25 | 7 | -10 | -15 | 2 | 35 |
| 30-45.9022-110.4925-2-12- | | | | | | 0-M36894 | -5 | -5 | -5 | 29 | -20 | -15 | 10 | -10 | -15 | 2 | 38 |
| 30-45.8875-110.4872-2-12- | | | | | | 0-M36895 | -5 | -5 | -5 | 44 | -20 | -15 | 18 | -10 | -15 | 3 | 35 |
| 30-45.8772-110.4767-2-12- | | | | | | 0-M36896 | -5 | -5 | -5 | 37 | -20 | 44 | 23 | -10 | -15 | 2 | 34 |
| 30-45.8786-110.4303-2-12- | | | | | | 0-M36897 | -5 | -5 | -5 | 37 | -20 | -15 | 10 | -10 | -15 | 2 | 38 |
| 30-45.8992-110.4311-2-12- | | | | | | 0-M36898 | -5 | -5 | -5 | 36 | -20 | 35 | 11 | -10 | -15 | 2 | 39 |
| 30-45.9042-110.4317-2-12- | | | | | | 0-M36899 | -5 | -5 | -5 | 37 | -20 | -15 | 13 | -10 | -15 | 2 | 25 |
| 30-45.9147-110.4239-2-12- | | | | | | 0-M36900 | -5 | -5 | -5 | 36 | -20 | -15 | 12 | -10 | -15 | 2 | 42 |
| 30-45.9200-110.4325-2-12- | | | | | | 0-M36901 | -5 | -5 | -5 | 40 | -20 | 23 | -5 | -10 | -15 | 2 | 42 |
| 30-45.9233-110.4342-2-12- | | | | | | 0-M36902 | -5 | -5 | -5 | 21 | -20 | 20 | 5 | -10 | -15 | 2 | 37 |
| 30-45.9508-110.4528-2-12- | | | | | | 0-M36903 | -5 | -5 | -5 | 43 | -20 | 22 | 11 | -10 | -15 | 2 | 28 |
| 30-45.9528-110.4744-2-12- | | | | | | 0-M36904 | -5 | -5 | -5 | 31 | -20 | 20 | 17 | -10 | -15 | 2 | 35 |
| 30-45.9544-110.4869-2-12- | | | | | | 0-M36905 | -5 | -5 | -5 | 31 | -20 | -15 | 13 | -10 | -15 | 2 | 33 |
| 30-45.9992-110.4222-2-12- | | | | | | 0-M36906 | -5 | -5 | -5 | 25 | -20 | 22 | 16 | -10 | -15 | 2 | 44 |
| 30-45.9967-110.4233-2-12- | | | | | | 0-M36907 | -5 | 6 | -5 | 25 | -20 | 15 | 16 | -10 | -15 | 2 | 41 |
| 30-45.9011-110.3736-2-15- | | | | | | 0-M36908 | -5 | -5 | -5 | 43 | -20 | 31 | 10 | -10 | -15 | 3 | 50 |
| 30-45.7711-110.4794-2-12- | | | | | | 0-M36909 | -5 | -5 | -5 | 23 | -20 | 33 | -5 | -10 | -15 | 2 | 23 |
| 30-45.8006-110.4806-2-12- | | | | | | 0-M36910 | -5 | -5 | -5 | 34 | -20 | 34 | 8 | -10 | -15 | 2 | 37 |
| 30-45.8203-110.4992-2-12- | | | | | | 0-M36911 | -5 | -5 | -5 | 11 | -20 | 24 | 10 | -10 | 16 | 3 | 40 |
| 30-45.8192-110.4733-2-15- | | | | | | 0-M36912 | -5 | -5 | -5 | 30 | -20 | 51 | 6 | -10 | -15 | 2 | 34 |
| 30-45.7578-110.4533-2-12- | | | | | | 0-M36913 | -5 | -5 | -5 | 26 | -20 | 18 | 6 | -10 | -15 | 2 | 35 |
| 30-45.8467-110.4194-2-15- | | | | | | 0-M36914 | -5 | -5 | -5 | 37 | -20 | 44 | -5 | -10 | -15 | 2 | 40 |
| 30-45.8458-110.4106-2-12- | | | | | | 0-M36915 | -5 | -5 | -5 | 51 | -20 | 44 | 5 | -10 | -15 | 2 | 35 |
| 30-45.8292-110.4400-2-12- | | | | | | 0-M36916 | -5 | -5 | -5 | 44 | -20 | 33 | 11 | -10 | -15 | 2 | 41 |

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

③

| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | LASL SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (Concentrations reported in weight parts per million (ppm)) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Al | Au | Ba | Ca | Ce | Cl | Co | Cr | Cs | Dy | Eu | Fe | Hf | K | La | Lu |
| 30-45.8903-110.5344-2-12- | 0-M36866 | 70960 | -0.07 | 866 | 17990 | 76 | -98 | 15.1 | 131 | 3.3 | 4 | 1.8 | 43370 | 8.2 | 17380 | 43 | 0.3 |
| 30-45.8981-110.5267-2-12- | 0-M36867 | 69360 | -0.07 | 836 | 15730 | 62 | -87 | 17.1 | 112 | 3.0 | 3 | 1.8 | 43090 | 6.6 | 21070 | 43 | 0.3 |
| 30-45.8978-110.5131-2-12- | 0-M36868 | 55870 | -0.07 | 696 | 36000 | 81 | -76 | 10.0 | 80 | 3.4 | 5 | 1.5 | 27280 | 11.3 | 16320 | 39 | 0.4 |
| 30-45.9406-110.5200-2-12- | 0-M36869 | 67280 | -0.07 | 548 | 46950 | 57 | -76 | 11.8 | 65 | 4.4 | 3 | 1.4 | 35270 | 5.5 | 19240 | 28 | 0.4 |
| 30-45.7446-110.2342-2-12- | 0-M36870 | 65050 | -0.08 | 1003 | 28370 | 72 | -92 | 17.8 | 355 | 2.1 | 3 | 1.7 | 45640 | 7.2 | 17500 | 38 | 0.4 |
| 30-45.7349-110.2496-2-15- | 0-M36871 | 70620 | -0.07 | 941 | 28340 | 65 | -100 | 12.4 | 128 | 3.6 | 4 | 1.6 | 34430 | 7.8 | 17460 | 34 | 0.4 |
| 30-45.7590-110.2487-2-12- | 0-M36872 | 69540 | -0.07 | 878 | 25810 | 54 | -91 | 18.7 | 234 | 2.6 | 3 | 1.7 | 38370 | 5.4 | 22420 | 37 | 0.2 |
| 30-45.8022-110.2335-2-12- | 0-M36873 | 53470 | -0.05 | 663 | 24760 | 68 | -90 | 11.8 | 167 | 3.4 | 3 | 1.6 | 37070 | 7.7 | 19360 | 36 | 0.4 |
| 30-45.7989-110.2478-2-12- | 0-M36874 | 63840 | -0.07 | 969 | 24260 | 78 | -115 | 12.2 | 175 | 4.1 | 4 | 1.7 | 39240 | 8.3 | 19980 | 40 | 0.4 |
| 30-45.7932-110.2028-2-12- | 0-M36875 | 55500 | -0.05 | 654 | 27660 | 66 | -85 | 14.3 | 267 | 3.2 | 3 | 1.3 | 45560 | 13.1 | 15350 | 38 | 0.4 |
| 30-45.7610-110.2064-2-12- | 0-M36876 | 71030 | -0.08 | 1020 | 29660 | 73 | -97 | 18.9 | 312 | 4.4 | 3 | 1.6 | 45240 | 6.2 | 17610 | 38 | 0.4 |
| 30-45.7698-110.1807-2-12- | 0-M36877 | 55150 | -0.06 | 778 | 30610 | 57 | -101 | 13.2 | 194 | 3.4 | 3 | 1.3 | 37770 | 7.9 | 18520 | 39 | 0.4 |
| 30-45.7360-110.2153-2-12- | 0-M36878 | 60600 | -0.05 | 893 | 20130 | 107 | -109 | 10.1 | 114 | 2.2 | 4 | 1.8 | 39010 | 23.5 | 16340 | 51 | 0.6 |
| 30-45.6926-110.2127-2-12- | 0-M36879 | 65400 | -0.05 | 963 | 16590 | 63 | -95 | 8.7 | 50 | 2.4 | 3 | 1.2 | 25710 | 11.9 | 16060 | 37 | 0.3 |
| 30-45.7032-110.1963-2-12- | 0-M36880 | 64240 | -0.06 | 1020 | 23520 | 111 | -98 | 11.9 | 65 | 2.5 | 4 | 1.7 | 51070 | 19.2 | 15860 | 56 | 0.5 |
| 30-45.7074-110.1942-2-12- | 0-M36881 | 59780 | -0.06 | 765 | 25580 | 76 | 153 | 9.9 | 93 | 4.0 | 4 | 1.5 | 36230 | 11.6 | 16740 | 37 | 0.4 |
| 30-45.7150-110.1889-2-15- | 0-M36882 | 73720 | -0.06 | 1154 | 17260 | 72 | -115 | 8.5 | 44 | 3.6 | 3 | 1.3 | 34660 | 8.2 | 21720 | 45 | 0.4 |
| 30-45.7087-110.1920-2-12- | 0-M36883 | 59270 | -0.05 | 796 | 23900 | 71 | -94 | 10.9 | 88 | 3.1 | 4 | 1.4 | 30580 | 11.1 | 14500 | 44 | 0.4 |
| 30-45.6946-110.1775-2-12- | 0-M36884 | 70990 | -0.07 | 1183 | 19980 | 71 | -97 | 9.0 | 44 | -1.9 | 3 | 2.0 | 31200 | 7.8 | 16140 | 39 | 0.3 |
| 30-45.7243-110.1999-2-12- | 0-M36885 | 66910 | -0.06 | 764 | 32350 | 78 | -108 | 14.2 | 74 | 2.9 | 3 | 1.4 | 54450 | 5.9 | 18370 | 36 | 0.4 |
| 30-45.7251-110.1540-2-15- | 0-M36886 | 55770 | -0.07 | 443 | 41810 | 67 | -155 | 31.6 | 27 | -2.0 | 3 | 1.7 | 163900 | 3.9 | -6529 | 41 | 0.3 |
| 30-45.7252-110.1561-2-12- | 0-M36887 | 65970 | -0.05 | 685 | 40060 | 70 | -113 | 18.1 | 39 | 2.2 | 4 | 1.5 | 79040 | 6.0 | 16190 | 39 | 0.3 |
| 30-45.7543-110.1330-2-15- | 0-M36888 | 73010 | -0.07 | 1010 | 44260 | 99 | -118 | 19.7 | 42 | -2.1 | 3 | 2.1 | 74830 | 5.3 | 16430 | 40 | 0.4 |
| 30-45.7475-110.1340-2-12- | 0-M36889 | 67000 | -0.08 | 868 | 33470 | 86 | -104 | 16.1 | 165 | -1.6 | 3 | 1.4 | 53440 | 6.8 | 17090 | 38 | 0.2 |
| 30-45.7700-110.0819-2-12- | 0-M36890 | 66880 | -0.09 | 854 | 26030 | 70 | -102 | 14.8 | 275 | 3.9 | 4 | 1.5 | 44840 | 9.4 | 15200 | 39 | 0.3 |
| 30-45.7681-110.0542-2-15- | 0-M36891 | 67990 | -0.08 | 924 | 27620 | 50 | -92 | 18.0 | 300 | 2.8 | 2 | 1.3 | 41310 | 4.8 | 18070 | 29 | 0.2 |
| 30-45.7750-110.0642-2-12- | 0-M36892 | 24430 | -0.12 | -256 | 21290 | 80 | -177 | 53.2 | 223 | -2.3 | 2 | 1.7 | 323600 | 8.8 | -7488 | 67 | 0.3 |
| 30-45.8978-110.4981-2-12- | 0-M36893 | 66120 | -0.08 | 907 | 15340 | 60 | -82 | 13.5 | 119 | 2.5 | 4 | 1.3 | 38560 | 7.5 | 19560 | 41 | 0.3 |
| 30-45.9022-110.4925-2-12- | 0-M36894 | 61100 | -0.08 | 761 | 40790 | 62 | -101 | 12.0 | 117 | 3.9 | 4 | 1.4 | 36840 | 7.3 | 18680 | 40 | 0.3 |
| 30-45.8875-110.4872-2-12- | 0-M36895 | 66300 | -0.08 | 961 | 15510 | 67 | -94 | 15.3 | 96 | 2.9 | 3 | 1.4 | 37100 | 6.4 | 20780 | 47 | 0.3 |
| 30-45.8772-110.4767-2-12- | 0-M36896 | 77840 | -0.12 | 1584 | 31320 | 93 | -99 | 21.3 | 178 | 2.5 | 3 | 1.7 | 49560 | 6.6 | 11710 | 39 | 0.3 |
| 30-45.8786-110.4303-2-12- | 0-M36897 | 66050 | -0.09 | 1126 | 15270 | 74 | -102 | 16.5 | 135 | 2.5 | 4 | 1.4 | 39360 | 7.4 | 20510 | 38 | 0.3 |
| 30-45.8992-110.4311-2-12- | 0-M36898 | 68290 | -0.09 | 891 | 16920 | 77 | -116 | 14.7 | 161 | 4.2 | 4 | 1.7 | 43090 | 7.4 | 21030 | 43 | 0.3 |
| 30-45.9042-110.4317-2-12- | 0-M36899 | 69250 | -0.08 | 794 | 14950 | 59 | -89 | 15.3 | 106 | 3.5 | 4 | 1.3 | 42490 | 5.9 | 20250 | 39 | 0.2 |
| 30-45.9147-110.4239-2-12- | 0-M36900 | 65350 | -0.10 | 952 | 16370 | 87 | -87 | 12.1 | 110 | 3.7 | 4 | 1.4 | 35480 | 7.7 | 19370 | 39 | 0.3 |
| 30-45.9200-110.4325-2-12- | 0-M36901 | 57790 | -0.08 | 882 | 25800 | 65 | -88 | 13.6 | 183 | 3.0 | 3 | 1.3 | 37940 | 6.8 | 16440 | 32 | 0.3 |
| 30-45.9233-110.4342-2-12- | 0-M36902 | 63180 | -0.08 | 746 | 22830 | 72 | -102 | 13.0 | 138 | 3.0 | 4 | 1.5 | 37340 | 8.3 | 17250 | 39 | 0.3 |
| 30-45.9508-110.4528-2-12- | 0-M36903 | 67910 | -0.08 | 674 | 17090 | 65 | -82 | 13.5 | 85 | 3.1 | 3 | 1.3 | 41300 | 7.2 | 19750 | 39 | 0.3 |
| 30-45.9528-110.4744-2-12- | 0-M36904 | 61280 | 0.20 | 949 | 15960 | 93 | -84 | 14.6 | 147 | 2.6 | 4 | 1.6 | 44290 | 13.0 | 17200 | 46 | 0.4 |
| 30-45.9544-110.4869-2-12- | 0-M36905 | 60110 | -0.08 | 1137 | 27720 | 71 | 112 | 11.2 | 64 | 3.0 | 4 | 1.4 | 31490 | 6.3 | 18670 | 35 | 0.3 |
| 30-45.9992-110.4222-2-12- | 0-M36906 | 59260 | -0.08 | 822 | 13570 | 86 | -107 | 10.4 | 105 | 3.5 | 3 | 1.4 | 33690 | 9.5 | 17950 | 38 | 0.3 |
| 30-45.9967-110.4233-2-12- | 0-M36907 | 59510 | -0.07 | 848 | 13410 | 62 | -94 | 11.5 | 81 | 2.4 | 3 | 1.2 | 29430 | 8.4 | 18780 | 36 | 0.2 |
| 30-45.9011-110.3736-2-15- | 0-M36908 | 63600 | -0.11 | 950 | 14530 | 85 | -86 | 12.2 | 81 | 4.6 | 4 | 1.5 | 34590 | 7.0 | 18650 | 40 | 0.4 |
| 30-45.7711-110.4794-2-12- | 0-M36909 | 57250 | -0.08 | 968 | 20540 | 63 | -85 | 9.5 | 174 | 2.6 | 3 | 1.2 | 32710 | 6.5 | 18290 | 35 | 0.2 |
| 30-45.8006-110.4806-2-12- | 0-M36910 | 60740 | -0.08 | 984 | 30830 | 67 | -104 | 15.3 | 202 | 2.8 | 3 | 1.3 | 43730 | 6.8 | 14980 | 37 | 0.3 |
| 30-45.8203-110.4992-2-12- | 0-M36911 | 51060 | -0.06 | 530 | 46620 | 65 | -78 | 8.7 | 59 | 3.3 | 4 | 1.3 | 24390 | 10.6 | 15470 | 38 | 0.3 |
| 30-45.8192-110.4733-2-15- | 0-M36912 | 63370 | -0.09 | 957 | 30830 | 63 | -88 | 14.7 | 164 | 3.5 | 3 | 1.3 | 37740 | 5.3 | 16420 | 34 | 0.3 |
| 30-45.7578-110.4533-2-12- | 0-M36913 | 61800 | -0.08 | 997 | 24300 | 67 | -93 | 14.2 | 172 | 2.3 | 3 | 1.4 | 43700 | 4.5 | 16060 | 33 | 0.3 |
| 30-45.8467-110.4194-2-15- | 0-M36914 | 66260 | -0.09 | 908 | 37720 | 68 | -91 | 16.4 | 149 | 4.2 | 4 | 1.5 | 41860 | 5.2 | 19000 | 41 | 0.3 |
| 30-45.8458-110.4106-2-12- | 0-M36915 | 73340 | -0.08 | 930 | 38170 | 59 | -104 | 18.5 | 134 | 4.8 | 3 | 1.7 | 44570 | 5.9 | 19400 | 33 | 0.4 |
| 30-45.8292-110.4400-2-12- | 0-M36916 | 63720 | -0.07 | 665 | 31790 | 58 | -87 | 17.0 | 147 | 4.0 | 3 | 1.5 | 40480 | 7.1 | 15790 | 37 | 0.3 |

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

(4)

| DOE SAMPLE NUMBER: STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm): Mg | Mn | Na | Rb | Sb | Sc | Sm | Sr | Ta | Tb | Th | Ti | V | Yb | Zn | U/Th RATIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30- | 45.8903- | 110.5344- | 2- | 12- | 0- | M36866 | 13210 | 645 | 17340 | 61 | -2 | 12.1 | 5.7 | 468 | -1 | -1 | 8.4 | 4758 | 120 | 2.3 | 120 | 0.298 |
| 30- | 45.8981- | 110.5267- | 2- | 12- | 0- | M36867 | 11260 | 619 | 17140 | 66 | -2 | 11.9 | 5.1 | 468 | -1 | -1 | 8.2 | 4127 | 127 | 2.6 | 120 | 0.293 |
| 30- | 45.8978- | 110.5131- | 2- | 12- | 0- | M36868 | 10590 | 620 | 12760 | 61 | -2 | 8.0 | 6.5 | -237 | -1 | -1 | 13.2 | 3028 | 74 | 4.4 | 111 | 0.227 |
| 30- | 45.9406- | 110.5200- | 2- | 12- | 0- | M36869 | 14540 | 661 | 9505 | 80 | -2 | 10.4 | 5.9 | -261 | -1 | -1 | 7.1 | 2896 | 100 | 2.5 | -80 | 0.296 |
| 30- | 45.7446- | 110.2342- | 2- | 12- | 0- | M36870 | 10650 | 728 | 19030 | -31 | -2 | 13.2 | 3.8 | 489 | -1 | -1 | 6.8 | 4018 | 128 | 2.4 | 92 | 0.309 |
| 30- | 45.7349- | 110.2496- | 2- | 15- | 0- | M36871 | 9780 | 642 | 17240 | 79 | -2 | 10.5 | 5.0 | 603 | -1 | -1 | 10.1 | 2979 | 84 | 2.7 | 100 | 0.228 |
| 30- | 45.7590- | 110.2487- | 2- | 12- | 0- | M36872 | 12370 | 701 | 15830 | 49 | -2 | 12.0 | 4.3 | 660 | -1 | -1 | 8.5 | 2853 | 108 | 2.5 | -79 | 0.247 |
| 30- | 45.8022- | 110.2335- | 2- | 12- | 0- | M36873 | 10300 | 605 | 19270 | 68 | -1 | 10.1 | 5.6 | 480 | -1 | -1 | 7.7 | 3156 | 85 | 2.0 | -112 | 0.286 |
| 30- | 45.7989- | 110.2478- | 2- | 12- | 0- | M36874 | 8276 | 676 | 18400 | 63 | -2 | 12.2 | 5.6 | 508 | -1 | -1 | 10.1 | 3306 | 103 | 3.1 | -56 | 0.228 |
| 30- | 45.7932- | 110.2028- | 2- | 12- | 0- | M36875 | 11690 | 685 | 14630 | 62 | -1 | 10.0 | 4.9 | -257 | -1 | -1 | 8.8 | 3135 | 126 | 3.3 | 110 | 0.307 |
| 30- | 45.7610- | 110.2064- | 2- | 12- | 0- | M36876 | 15420 | 871 | 16360 | -36 | -2 | 13.7 | 6.0 | 625 | -1 | -1 | 8.2 | 4345 | 129 | 2.3 | 64 | 0.220 |
| 30- | 45.7698- | 110.1807- | 2- | 12- | 0- | M36877 | 10650 | 632 | 20200 | -31 | -2 | 10.7 | 5.0 | 452 | -1 | -1 | 8.2 | 3011 | 92 | 2.3 | 102 | 0.268 |
| 30- | 45.7360- | 110.2153- | 2- | 12- | 0- | M36878 | 4898 | 569 | 23430 | 43 | -1 | 8.9 | 6.2 | -294 | -1 | -1 | 14.0 | 4061 | 93 | 4.3 | 113 | 0.207 |
| 30- | 45.6926- | 110.2127- | 2- | 12- | 0- | M36879 | 4595 | 415 | 21790 | -45 | -1 | 6.6 | 4.5 | 518 | -1 | -1 | 8.5 | 2704 | 71 | 2.5 | 68 | 0.306 |
| 30- | 45.7032- | 110.1963- | 2- | 12- | 0- | M36880 | 7941 | 781 | 20680 | 58 | -2 | 8.7 | 6.9 | 470 | -1 | -1 | 10.4 | 5130 | 121 | 4.0 | 78 | 0.269 |
| 30- | 45.7074- | 110.1942- | 2- | 12- | 0- | M36881 | 7743 | 689 | 21240 | 73 | -1 | 9.7 | 5.6 | 484 | -1 | -1 | 13.6 | 3134 | 79 | 3.0 | -54 | 0.228 |
| 30- | 45.7150- | 110.1889- | 2- | 15- | 0- | M36882 | 4391 | 635 | 22290 | 79 | -1 | 9.1 | 5.0 | 775 | -1 | -1 | 10.3 | 2492 | 69 | 2.3 | 91 | 0.223 |
| 30- | 45.7087- | 110.1920- | 2- | 12- | 0- | M36883 | 7581 | 693 | 16950 | 58 | -1 | 8.9 | 5.6 | -273 | -1 | -1 | 11.2 | 3599 | 83 | 3.2 | -24 | 0.286 |
| 30- | 45.6946- | 110.1775- | 2- | 12- | 0- | M36884 | 6091 | 551 | 18640 | -33 | -2 | 7.9 | 6.3 | 452 | -1 | -1 | 9.9 | 3083 | 82 | 3.0 | -25 | 0.263 |
| 30- | 45.7243- | 110.1999- | 2- | 12- | 0- | M36885 | 11260 | 856 | 21560 | -31 | -2 | 10.4 | 4.9 | 513 | -1 | -1 | 8.1 | 3096 | 115 | 2.7 | -98 | 0.235 |
| 30- | 45.7251- | 110.1540- | 2- | 15- | 0- | M36886 | 11210 | 2067 | 16050 | -40 | -2 | 14.4 | 5.9 | -502 | -1 | -1 | 7.2 | 6014 | 323 | -1.5 | 288 | 0.153 |
| 30- | 45.7252- | 110.1561- | 2- | 12- | 0- | M36887 | 9498 | 1336 | 17750 | -30 | -1 | 10.2 | 5.0 | 490 | -1 | -1 | 6.7 | 3465 | 182 | 2.5 | 129 | 0.209 |
| 30- | 45.7543- | 110.1330- | 2- | 15- | 0- | M36888 | 10470 | 1453 | 17940 | -37 | -2 | 11.0 | 6.3 | 608 | -1 | 1 | 6.5 | 3982 | 174 | 3.2 | | 0.200 |
| 30- | 45.7475- | 110.1340- | 2- | 12- | 0- | M36889 | 7898 | 947 | 21290 | -39 | -2 | 11.1 | 4.7 | 636 | -1 | -1 | 7.0 | 3243 | 136 | 3.5 | -71 | 0.243 |
| 30- | 45.7700- | 110.0819- | 2- | 12- | 0- | M36890 | 12190 | 704 | 18030 | 78 | -2 | 13.1 | 5.7 | -302 | -1 | -1 | 8.6 | 3849 | 124 | 3.8 | 143 | 0.267 |
| 30- | 45.7681- | 110.0542- | 2- | 15- | 0- | M36891 | 14180 | 734 | 17930 | 55 | -2 | 12.8 | 3.7 | 680 | -1 | -1 | 6.0 | 3039 | 111 | 2.9 | 75 | 0.267 |
| 30- | 45.7750- | 110.0642- | 2- | 12- | 0- | M36892 | 4774 | 2783 | 5694 | -64 | -3 | 15.8 | 8.3 | -520 | -1 | -1 | 7.5 | 10740 | 641 | 3.3 | 350 | 0.213 |
| 30- | 45.8978- | 110.4981- | 2- | 12- | 0- | M36893 | 12970 | 446 | 18210 | 67 | -2 | 11.7 | 5.2 | 322 | -1 | -1 | 7.7 | 4207 | 106 | 2.2 | -54 | 0.312 |
| 30- | 45.9022- | 110.4925- | 2- | 12- | 0- | M36894 | 10130 | 765 | 14760 | 79 | -2 | 11.5 | 5.4 | -314 | -1 | -1 | 8.3 | 2576 | 94 | 3.5 | 103 | 0.313 |
| 30- | 45.8875- | 110.4872- | 2- | 12- | 0- | M36895 | 8843 | 771 | 15830 | 64 | -2 | 11.3 | 5.1 | 419 | -1 | -1 | 8.3 | 3239 | 106 | 2.8 | -121 | 0.265 |
| 30- | 45.8772- | 110.4767- | 2- | 12- | 0- | M36896 | 15120 | 813 | 18500 | -50 | -3 | 17.5 | 7.2 | 757 | -1 | -1 | 9.9 | 4162 | 136 | 3.4 | -51 | 0.192 |
| 30- | 45.8786- | 110.4303- | 2- | 12- | 0- | M36897 | 8306 | 880 | 18460 | -38 | -2 | 11.9 | 6.4 | 430 | -1 | -1 | 7.9 | 3454 | 105 | 3.7 | 107 | 0.316 |
| 30- | 45.8992- | 110.4311- | 2- | 12- | 0- | M36898 | 9819 | 816 | 19010 | 69 | -3 | 12.5 | 5.3 | -352 | -1 | -1 | 10.4 | 3467 | 112 | 3.6 | 101 | 0.250 |
| 30- | 45.9042- | 110.4317- | 2- | 12- | 0- | M36899 | 13110 | 704 | 14690 | 91 | -2 | 12.4 | 4.7 | -272 | -1 | -1 | 8.1 | 3304 | 122 | 2.5 | 80 | 0.321 |
| 30- | 45.9147- | 110.4239- | 2- | 12- | 0- | M36900 | 8585 | 737 | 14550 | 95 | -3 | 11.0 | 6.2 | -276 | -1 | 1 | 8.9 | 3608 | 98 | 2.5 | 106 | 0.258 |
| 30- | 45.9200- | 110.4325- | 2- | 12- | 0- | M36901 | 10940 | 666 | 17720 | -35 | -2 | 11.9 | 4.1 | 371 | -1 | -1 | 7.0 | 3250 | 102 | 4.2 | 113 | 0.329 |
| 30- | 45.9233- | 110.4342- | 2- | 12- | 0- | M36902 | 9991 | 638 | 17720 | 104 | -2 | 10.1 | 5.5 | 649 | -1 | -1 | 7.2 | 3518 | 89 | 2.3 | 103 | 0.292 |
| 30- | 45.9508- | 110.4528- | 2- | 12- | 0- | M36903 | 13350 | 649 | 13610 | 87 | -2 | 11.5 | 6.2 | -248 | -1 | -1 | 7.4 | 4310 | 133 | 3.7 | 119 | 0.338 |
| 30- | 45.9528- | 110.4744- | 2- | 12- | 0- | M36904 | 8114 | 766 | 14500 | 84 | -3 | 10.8 | 7.9 | -265 | -1 | -1 | 9.6 | 4407 | 126 | 4.3 | -42 | 0.281 |
| 30- | 45.9544- | 110.4869- | 2- | 12- | 0- | M36905 | 8869 | 738 | 17160 | 84 | -2 | 9.5 | 4.0 | 403 | -1 | -1 | 6.6 | 3231 | 77 | 3.1 | -16 | 0.303 |
| 30- | 45.9992- | 110.4222- | 2- | 12- | 0- | M36906 | 9401 | 861 | 18160 | 70 | -2 | 10.6 | 5.0 | 531 | -1 | -1 | 8.8 | 4390 | 98 | 2.8 | 87 | 0.273 |
| 30- | 45.9967- | 110.4233- | 2- | 12- | 0- | M36907 | 7868 | 832 | 16310 | 67 | -2 | 9.2 | 4.0 | 428 | -1 | -1 | 6.6 | 3519 | 86 | 2.2 | -32 | 0.364 |
| 30- | 45.9011- | 110.3736- | 2- | 15- | 0- | M36908 | 7567 | 769 | 11440 | 97 | -3 | 11.4 | 5.5 | 402 | -1 | -1 | 9.8 | 3695 | 93 | 3.8 | -84 | 0.245 |
| 30- | 45.7711- | 110.4794- | 2- | 12- | 0- | M36909 | 9874 | 440 | 18670 | 63 | -2 | 10.5 | 4.0 | 494 | -1 | -1 | 6.1 | 2655 | 91 | 2.5 | 89 | 0.361 |
| 30- | 45.8006- | 110.4806- | 2- | 12- | 0- | M36910 | 12260 | 761 | 18740 | 58 | -2 | 12.1 | 4.7 | 384 | -1 | -1 | 6.0 | 3145 | 104 | 3.3 | 110 | 0.317 |
| 30- | 45.8203- | 110.4992- | 2- | 12- | 0- | M36911 | 11980 | 518 | 13170 | 63 | -2 | 8.0 | 4.5 | -224 | -1 | -1 | 10.3 | 2345 | 61 | 2.8 | -34 | 0.282 |
| 30- | 45.8192- | 110.4733- | 2- | 15- | 0- | M36912 | 11760 | 766 | 16020 | 79 | -3 | 11.9 | 5.9 | 603 | -1 | -1 | 6.2 | 3302 | 106 | 3.8 | -42 | 0.290 |
| 30- | 45.7578- | 110.4533- | 2- | 12- | 0- | M36913 | 11350 | 713 | 19500 | -35 | -2 | 11.8 | 4.6 | 643 | -1 | -1 | 6.1 | 3879 | 112 | 2.3 | 63 | 0.311 |
| 30- | 45.8467- | 110.4194- | 2- | 15- | 0- | M36914 | 12540 | 785 | 13630 | -34 | -2 | 12.3 | 4.7 | 612 | -1 | -1 | 7.5 | 3412 | 110 | 2.8 | -44 | 0.280 |
| 30- | 45.8458- | 110.4106- | 2- | 12- | 0- | M36915 | 14080 | 891 | 14760 | 67 | -2 | 13.0 | 4.9 | 919 | -1 | -1 | 9.0 | 3211 | 106 | 2.9 | 111 | 0.233 |
| 30- | 45.8292- | 110.4400- | 2- | 12- | 0- | M36916 | 12140 | 790 | 14490 | 61 | -2 | 11.5 | 4.9 | 399 | -1 | -1 | 8.5 | 3236 | 117 | 2.4 | 84 | 0.294 |

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

(1)

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER AND FIELD DATA | | | | | | | | | | | | | | | | | | | | | | | | U CONCENTRATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | TIME SAMPLED DATE | TIME SAMPLED HOUR | AIR TEMPERATURE | WATER TEMPERATURE | COMMENTS | SPECIAL MEASUREMENTS | pH | CONDUCTIVITY (µmho/cm) | SCINTILLOMETER (eU, ppm) | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm |
| 30- | 45.8292- | 110.4489- | 2- | 15- | | 0-M36917- | 10/09/76- | 11- | 12- | -C- | - | | - | - | | 4- | 1- | 1- | 5- | 6- | -1- | -2- | 3- | 2- | 3- | 1- | -3- | - | - | - | - | 2.10 |
| 30- | 45.8325- | 110.4725- | 2- | 12- | | 0-M36918- | 10/09/76- | 12- | 18- | 8.0-C- | - | | 5.9- | 450- | | 7- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 3- | 2- | 2- | 1- | -3- | - | - | - | - | 2.10 |
| 30- | 45.9825- | 110.5183- | 2- | 12- | | 0-M36919- | 10/04/76- | 13- | 17- | 12.2-C- | - | | 5.7- | 335- | | 2- | 1- | 1- | 3- | 6- | 3- | 2- | 2- | 2- | 2- | 3- | 2- | 2- | -3- | - | - | - | - | 3.70 |
| 30- | 45.9861- | 110.5019- | 2- | 12- | | 0-M36920- | 10/04/76- | 13- | 15- | 9.9-C- | - | | 5.7- | 310- | | 7- | 1- | 1- | 3- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 2.50 |
| 30- | 45.9850- | 110.5014- | 2- | 12- | | 0-M36921- | 10/04/76- | 13- | 17- | 10.2-C- | - | | 5.8- | 500- | | 4- | 1- | 1- | 3- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 2.20 |
| 30- | 45.9956- | 110.5144- | 2- | 12- | | 0-M36922- | 10/04/76- | 14- | 17- | 10.0-C- | - | | 5.9- | 345- | | 5- | 1- | 1- | 2- | 7- | 3- | 2- | 2- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 2.60 |
| 30- | 45.9956- | 110.5372- | 2- | 12- | | 0-M36923- | 10/04/76- | 14- | 18- | 9.9-C- | - | | 5.7- | 340- | | 5- | 1- | 1- | 2- | 7- | 2- | 2- | 1- | 2- | 2- | 3- | 2- | 2- | -3- | - | - | - | - | 2.90 |
| 30- | 45.9833- | 110.6139- | 2- | 12- | | 0-M36924- | 10/04/76- | 15- | 19- | 9.8- | - | - | 5.7- | 440- | | 8- | 1- | 6- | 2- | 7- | 3- | 2- | 3- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 2.40 |
| 30- | 45.9889- | 110.6178- | 2- | 15- | | 0-M36925- | 10/04/76- | 15- | 19- | -C- | - | | - | - | | 5- | 1- | 6- | - | - | -1- | -2- | 6- | 3- | 2- | 2- | -3- | - | - | - | - | 2.30 |
| 30- | 45.9689- | 110.5514- | 2- | 12- | | 0-M36926- | 10/04/76- | 15- | 19- | 12.5- | - | - | 5.7- | 420- | | 2- | 1- | 1- | 3- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 2.40 |
| 30- | 45.9497- | 110.6025- | 2- | 15- | | 0-M36927- | 10/04/76- | 16- | 19- | -C- | - | | - | - | | 0- | 1- | 1- | 5- | 6- | -1- | -2- | 4- | 3- | 4- | 2- | -3- | - | - | - | - | 3.00 |
| 30- | 45.9641- | 110.6455- | 2- | 12- | | 0-M36928- | 10/04/76- | 16- | 20- | 9.8- | - | - | 5.9- | 520- | | 4- | 1- | 1- | 5- | 7- | 3- | 2- | 2- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 2.30 |
| 30- | 45.9622- | 110.6460- | 2- | 12- | | 0-M36929- | 10/04/76- | 16- | 19- | 9.8- | - | - | 5.9- | 610- | | 3- | 1- | 1- | 5- | 6- | 2- | 2- | 5- | 2- | 6- | 3- | 3- | 2- | -3- | - | - | - | - | 2.10 |
| 30- | 45.9310- | 110.6662- | 2- | 12- | | 0-M36930- | 10/04/76- | 17- | 20- | 10.6- | - | - | 5.7- | 700- | | 4- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 6- | 3- | 1- | 2- | -3- | - | - | - | - | 1.80 |
| 30- | 45.9338- | 110.6954- | 2- | 12- | | 0-M36931- | 10/04/76- | 17- | 20- | 11.0- | - | - | 5.9- | 850- | | 1- | 1- | 1- | 6- | 6- | 1- | 2- | 1- | 2- | 4- | 3- | 4- | 2- | -3- | - | - | - | - | 2.70 |
| 30- | 45.9381- | 110.5994- | 2- | 12- | | 0-M36932- | 10/05/76- | 10- | 8- | 3.5- | - | - | 5.7- | 450- | | 7- | 1- | 1- | 5- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 2.20 |
| 30- | 45.9461- | 110.5636- | 2- | 12- | | 0-M36933- | 10/05/76- | 10- | 6- | 3.5- | - | - | 5.7- | 360- | | 1- | 1- | 1- | 3- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | 2.40 |
| 30- | 45.9826- | 110.7298- | 2- | 15- | | 0-M36934- | 10/05/76- | 11- | 9- | -C- | - | | - | - | | 6- | 1- | 1- | 5- | 7- | -1- | -2- | 4- | 3- | 1- | 3- | -3- | - | - | - | - | 1.80 |
| 30- | 45.9919- | 110.7081- | 2- | 12- | | 0-M36935- | 10/05/76- | 11- | 9- | 4.5-C- | - | | 5.9- | 500- | | 3- | 1- | 1- | 2- | 1- | 4- | 2- | 1- | 2- | 2- | 2- | 3- | 3- | -3- | - | - | - | - | 1.90 |
| 30- | 45.9163- | 110.7126- | 2- | 12- | | 0-M36936- | 10/05/76- | 11- | 11- | 3.0- | - | - | 5.7- | 650- | | 4- | 1- | 1- | 5- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 2- | 3- | -3- | - | - | - | - | 2.10 |
| 30- | 45.9101- | 110.6687- | 2- | 12- | | 0-M36937- | 10/05/76- | 12- | 9- | 4.0-C- | - | | 5.9- | 1200- | | 4- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 3- | 4- | 2- | 3- | -3- | - | - | - | - | 2.60 |
| 30- | 45.9077- | 110.6292- | 2- | 12- | | 0-M36938- | 10/05/76- | 12- | 8- | 9.0-C- | - | | 6.1- | 1050- | | -1- | 1- | 5- | 6- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | 3- | -3- | - | - | - | - | 2.20 |
| 30- | 45.8733- | 110.7244- | 2- | 12- | | 0-M36939- | 10/05/76- | 13- | 7- | 7.0-C- | - | | 5.7- | 500- | | 1- | 1- | 1- | 2- | 7- | 2- | 2- | 1- | 2- | 2- | 2- | 3- | 4- | -3- | - | - | - | - | 3.80 |
| 30- | 45.8833- | 110.7269- | 2- | 12- | | 0-M36940- | 10/05/76- | 13- | 5- | 5.0-C- | - | | 5.7- | 360- | | 6- | 1- | 1- | 2- | 7- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 4- | -3- | - | - | - | - | 2.50 |
| 30- | 45.8817- | 110.7149- | 2- | 12- | | 0-M36941- | 10/05/76- | 13- | 5- | 5.5-C- | - | | 5.7- | 750- | | 1- | 1- | 1- | 3- | 7- | 2- | 2- | 1- | 2- | 3- | 4- | 4- | 4- | -3- | - | - | - | - | 2.40 |
| 30- | 45.8425- | 110.7458- | 2- | 12- | | 0-M36942- | 10/05/76- | 14- | 6- | 5.5-C- | - | | 5.9- | 300- | | 4- | 1- | 1- | 2- | 7- | 2- | 2- | 1- | 2- | 2- | 2- | 4- | 4- | -3- | - | - | - | - | 4.00 |
| 30- | 45.8414- | 110.7392- | 2- | 12- | | 0-M36943- | 10/05/76- | 14- | 6- | 4.5-C- | - | | 5.7- | 30- | | 5- | 1- | 1- | 2- | 7- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 4- | -3- | - | - | - | - | 2.20 |
| 30- | 45.8736- | 110.7108- | 2- | 15- | | 0-M36944- | 10/05/76- | 14- | 7- | -C- | - | | - | - | | 5- | 1- | 6- | 5- | 6- | -1- | -2- | 4- | 3- | 4- | 4- | -3- | - | - | - | - | 1.90 |
| 30- | 45.8700- | 110.6981- | 2- | 12- | | 0-M36945- | 10/05/76- | 14- | 6- | 7.0- | - | - | 5.9- | 360- | | 4- | 1- | 6- | 2- | 6- | 3- | 2- | 1- | 2- | 2- | 4- | 3- | 4- | -3- | - | - | - | - | 2.00 |
| 30- | 45.8658- | 110.6681- | 2- | 12- | | 0-M36946- | 10/05/76- | 15- | 8- | 6.0-C- | - | | 5.9- | 370- | | 3- | 1- | 6- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 4- | -3- | - | - | - | - | 2.00 |
| 30- | 45.8653- | 110.6728- | 2- | 12- | | 0-M36947- | 10/05/76- | 15- | 8- | 6.5-C- | - | | 5.9- | 350- | | 3- | 1- | 6- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 4- | -3- | - | - | - | - | 1.90 |
| 30- | 45.8650- | 110.6458- | 2- | 12- | | 0-M36948- | 10/05/76- | 15- | 8- | 5.5-C- | - | | 5.9- | 310- | | 4- | 3- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 4- | -3- | - | - | - | - | 2.20 |
| 30- | 45.8350- | 110.6519- | 2- | 12- | | 0-M36949- | 10/05/76- | 16- | 8- | 5.0-C- | - | | 5.7- | 310- | | 5- | 3- | 7- | 5- | 8- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 4- | -3- | - | - | - | - | 2.10 |
| 30- | 45.8303- | 110.6394- | 2- | 12- | | 0-M36950- | 10/05/76- | 14- | 7- | 5.0-C- | - | | 5.7- | 340- | | 5- | 3- | 7- | 2- | 7- | 2- | 2- | 1- | 2- | 3- | 3- | 4- | 4- | -3- | - | - | - | - | 2.00 |
| 30- | 45.8136- | 110.6539- | 2- | 12- | | 0-M36951- | 10/05/76- | 16- | 9- | 5.5-C- | - | | 5.7- | 340- | | 6- | 1- | 6- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 4- | -3- | - | - | - | - | 2.10 |
| 30- | 45.8131- | 110.6314- | 2- | 15- | | 0-M36952- | 10/05/76- | 17- | 9- | -C- | - | | - | - | | 4- | 1- | 6- | 5- | 7- | -1- | -2- | 3- | 2- | 3- | 4- | -3- | - | - | - | - | 2.00 |
| 30- | 45.9131- | 110.0106- | 2- | 12- | | 0-M36953- | 10/06/76- | 11- | 14- | 7.5-C- | - | | 5.9- | 500- | | 3- | 1- | 1- | 2- | 7- | 2- | 2- | 1- | 2- | 4- | 3- | 4- | 2- | -3- | - | - | - | - | 2.50 |
| 30- | 45.8956- | 110.0236- | 2- | 12- | | 0-M36954- | 10/06/76- | 11- | 13- | 8.0-C- | - | | 5.9- | 360- | | 6- | 1- | 1- | 2- | 1- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 5.90 |
| 30- | 45.8797- | 110.0047- | 2- | 12- | | 0-M36955- | 10/06/76- | 11- | 12- | 8.5-C- | - | | 5.9- | 650- | | 3- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 2.60 |
| 30- | 45.8828- | 110.0286- | 2- | 12- | | 0-M36956- | 10/06/76- | 12- | 12- | 8.5-C- | - | | 5.9- | 700- | | 4- | 1- | 1- | 5- | 7- | 1- | 2- | 1- | 1- | 6- | 3- | 2- | 2- | -3- | - | - | - | - | 2.40 |
| 30- | 45.8819- | 110.0608- | 2- | 12- | | 0-M36957- | 10/06/76- | 12- | 13- | 7.5-C- | - | | 5.9- | 500- | | 4- | 1- | 1- | 2- | 1- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 2.30 |
| 30- | 45.9233- | 110.0494- | 2- | 15- | | 0-M36958- | 10/06/76- | 13- | 13- | -C- | - | | - | - | | 4- | 1- | 1- | 5- | 7- | -1- | -2- | 4- | 2- | 2- | 2- | -3- | - | - | - | - | 2.40 |
| 30- | 45.9361- | 110.0050- | 2- | 12- | | 0-M36959- | 10/06/76- | 13- | 13- | 8.0-C- | - | | 5.9- | 500- | | 3- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 4- | 2- | -3- | - | - | - | - | 2.50 |
| 30- | 45.9372- | 110.0489- | 2- | 12- | | 0-M36960- | 10/06/76- | 14- | 13- | 7.5-C- | - | | 5.9- | 550- | | 3- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 4- | 3- | -3- | - | - | - | - | 2.50 |
| 30- | 45.9081- | 110.0719- | 2- | 12- | | 0-M36961- | 10/06/76- | 14- | 11- | 8.0-C- | - | | 5.7- | 240- | | 9- | 1- | 6- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | 2.30 |
| 30- | 45.9139- | 110.1147- | 2- | 12- | | 0-M36962- | 10/06/76- | 15- | 9- | 9.0-C- | - | | 5.7- | 270- | | 2- | 1- | 6- | 5- | 8- | 2- | 2- | 1- | 2- | 4- | 3- | 2- | 3- | -3- | - | - | - | - | 2.50 |
| 30- | 45.9483- | 110.0067- | 2- | 12- | | 0-M36963- | 10/06/76- | 15- | 10- | 9.0-C- | - | | 5.9- | 450- | | 7- | 1- | 1- | 5- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 4- | -3- | - | - | - | - | 2.40 |
| 30- | 45.9569- | 110.0372- | 2- | 12- | | 0-M36964- | 10/06/76- | 16- | 14- | 8.5-C- | - | | 5.9- | 500- | | 3- | 1- | 1- | 3- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 2.50 |
| 30- | 45.9689- | 110.0600- | 2- | 12- | | 0-M36965- | 10/06/76- | 16- | 11- | 9.5-C- | - | | 5.7- | 460- | | 1- | 1- | 1- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 2.60 |
| 30- | 45.9631- | 110.0689- | 2- | 12- | | 0-M36966- | 10/06/76- | 16- | 12- | 8.0- | - | - | 6.1- | 500- | | 3- | 1- | 1- | 3- | 6- | 2- | 2- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 2.30 |
| 30- | 45.9964- | 110.0847- | 2- | 12- | | 0-M36967- | 10/06/76- | 17- | 13- | 9.0- | - | - | 5.9- | 490- | | 5- | 1- | 1- | 3- | 6- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | 3.50 |

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

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| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | 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) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ag | Bi | Cd | Cu | Nb | Ni | Pb | Sn | W | Be | Li |
| 30-45.8292-110.4489-2-15- | 0-M36917 | -5 | -5 | -5 | 42 | -20 | 44 | 8 | -10 | -15 | 2 | 38 |
| 30-45.8325-110.4725-2-12- | 0-M36918 | -5 | -5 | -5 | 31 | -20 | 33 | 8 | -10 | -15 | 2 | 38 |
| 30-45.9825-110.5183-2-12- | 0-M36919 | -5 | -5 | -5 | 34 | -20 | 25 | 12 | -10 | -15 | -1 | 39 |
| 30-45.9861-110.5019-2-12- | 0-M36920 | -5 | -5 | -5 | 22 | -20 | 16 | 10 | -10 | -15 | 2 | 42 |
| 30-45.9850-110.5014-2-12- | 0-M36921 | -5 | -5 | -5 | 28 | -20 | -15 | 7 | -10 | -15 | 2 | 39 |
| 30-45.9956-110.5144-2-12- | 0-M36922 | -5 | -5 | -5 | 37 | -20 | 17 | 8 | -10 | -15 | 2 | 42 |
| 30-45.9956-110.5372-2-12- | 0-M36923 | -5 | -5 | -5 | 28 | -20 | 16 | 10 | -10 | -15 | 2 | 39 |
| 30-45.9833-110.6139-2-12- | 0-M36924 | -5 | -5 | -5 | 31 | -20 | -15 | 9 | -10 | -15 | 2 | 34 |
| 30-45.9889-110.6178-2-15- | 0-M36925 | -5 | -5 | -5 | 29 | -20 | -15 | 5 | -10 | -15 | 1 | 25 |
| 30-45.9689-110.5514-2-12- | 0-M36926 | -5 | -5 | -5 | 24 | -20 | 15 | 10 | -10 | -15 | 2 | 30 |
| 30-45.9497-110.6025-2-15- | 0-M36927 | -5 | -5 | -5 | 30 | -20 | 15 | 11 | -10 | -15 | 2 | 35 |
| 30-45.9641-110.6455-2-12- | 0-M36928 | -5 | -5 | -5 | 31 | -20 | 22 | 8 | -10 | -15 | 2 | 37 |
| 30-45.9622-110.6460-2-12- | 0-M36929 | -5 | -5 | -5 | 24 | -20 | 16 | 12 | -10 | -15 | 2 | 32 |
| 30-45.9310-110.6662-2-12- | 0-M36930 | -5 | -5 | -5 | 29 | -20 | 49 | -5 | -10 | -15 | 2 | 31 |
| 30-45.9338-110.6954-2-12- | 0-M36931 | -5 | -5 | -5 | 45 | -20 | 21 | 10 | -10 | -15 | 2 | 39 |
| 30-45.9381-110.5994-2-12- | 0-M36932 | -5 | -5 | -5 | 27 | -20 | 17 | 9 | -10 | -15 | 2 | 38 |
| 30-45.9461-110.5636-2-12- | 0-M36933 | -5 | -5 | -5 | 28 | -20 | 19 | 9 | -10 | -15 | 2 | 31 |
| 30-45.9826-110.7298-2-15- | 0-M36934 | -5 | -5 | -5 | 48 | -20 | 78 | -5 | -10 | -15 | 2 | 33 |
| 30-45.9919-110.7081-2-12- | 0-M36935 | -5 | -5 | -5 | 31 | -20 | 78 | -5 | -10 | -15 | 2 | 25 |
| 30-45.9163-110.7126-2-12- | 0-M36936 | -5 | -5 | -5 | 45 | -20 | 32 | -5 | -10 | -15 | 2 | 33 |
| 30-45.9101-110.6687-2-12- | 0-M36937 | -5 | -5 | -5 | 37 | -20 | 39 | 19 | -10 | -15 | 2 | 38 |
| 30-45.9077-110.6292-2-12- | 0-M36938 | -5 | -5 | -5 | 44 | -20 | 27 | 8 | -10 | 29 | 2 | 31 |
| 30-45.8733-110.7244-2-12- | 0-M36939 | -5 | -5 | -5 | 24 | -20 | 27 | 13 | -10 | -15 | 2 | 41 |
| 30-45.8833-110.7269-2-12- | 0-M36940 | -5 | -5 | -5 | 26 | -20 | 47 | 6 | -10 | -15 | 2 | 31 |
| 30-45.8817-110.7149-2-12- | 0-M36941 | -5 | -5 | -5 | 24 | -20 | 74 | -5 | -10 | -15 | 2 | 25 |
| 30-45.8425-110.7458-2-12- | 0-M36942 | -5 | -5 | -5 | 34 | -20 | 30 | 13 | -10 | -15 | 2 | 30 |
| 30-45.8414-110.7392-2-12- | 0-M36943 | -5 | -5 | -5 | 44 | -20 | 46 | 14 | -10 | -15 | 2 | 32 |
| 30-45.8736-110.7108-2-15- | 0-M36944 | -5 | -5 | -5 | 57 | -20 | 52 | 13 | -10 | -15 | 2 | 25 |
| 30-45.8700-110.6981-2-12- | 0-M36945 | -5 | -5 | 5 | 24 | -20 | 36 | 11 | -10 | -15 | 2 | 22 |
| 30-45.8658-110.6681-2-12- | 0-M36946 | -5 | -5 | -5 | 34 | -20 | 39 | 9 | -10 | -15 | 2 | 36 |
| 30-45.8653-110.6728-2-12- | 0-M36947 | -5 | 5 | -5 | 27 | -20 | 36 | 18 | -10 | -15 | 2 | 32 |
| 30-45.8650-110.6458-2-12- | 0-M36948 | -5 | -5 | -5 | 27 | -20 | 42 | 9 | -10 | -15 | 2 | 24 |
| 30-45.8350-110.6519-2-12- | 0-M36949 | -5 | -5 | -5 | 40 | -20 | 47 | 8 | -10 | -15 | 2 | 35 |
| 30-45.8303-110.6394-2-12- | 0-M36950 | -5 | -5 | -5 | 39 | -20 | 74 | 22 | -10 | -15 | 2 | 28 |
| 30-45.8136-110.6539-2-12- | 0-M36951 | -5 | -5 | -5 | 50 | -20 | 64 | 7 | -10 | -15 | 2 | 32 |
| 30-45.8131-110.6314-2-15- | 0-M36952 | -5 | -5 | -5 | 47 | -20 | 65 | 23 | -10 | -15 | 2 | 33 |
| 30-45.9131-110.0106-2-12- | 0-M36953 | -5 | -5 | -5 | 44 | -20 | 33 | 10 | -10 | -15 | 2 | 34 |
| 30-45.8956-110.0236-2-12- | 0-M36954 | -5 | -5 | -5 | 30 | -20 | 41 | 17 | -10 | -15 | 2 | 19 |
| 30-45.8797-110.0047-2-12- | 0-M36955 | -5 | -5 | -5 | 47 | -20 | 75 | 9 | -10 | -15 | 2 | 33 |
| 30-45.8828-110.0286-2-12- | 0-M36956 | -5 | -5 | -5 | 48 | -20 | 67 | 12 | -10 | -15 | 3 | 35 |
| 30-45.8819-110.0608-2-12- | 0-M36957 | -5 | -5 | -5 | 33 | -20 | 31 | 6 | -10 | -15 | 2 | 26 |
| 30-45.9233-110.0494-2-15- | 0-M36958 | -5 | -5 | -5 | 44 | -20 | 46 | 22 | -10 | -15 | 2 | 28 |
| 30-45.9361-110.0050-2-12- | 0-M36959 | -5 | -5 | -5 | 32 | -20 | 56 | 12 | -10 | -15 | 2 | 29 |
| 30-45.9372-110.0489-2-12- | 0-M36960 | -5 | -5 | -5 | 46 | -20 | 23 | 24 | -10 | -15 | 2 | 33 |
| 30-45.9081-110.0719-2-12- | 0-M36961 | -5 | -5 | -5 | 57 | -20 | 54 | 18 | -10 | -15 | 2 | 33 |
| 30-45.9139-110.1147-2-12- | 0-M36962 | -5 | -5 | -5 | 45 | -20 | 47 | 9 | -10 | -15 | 2 | 33 |
| 30-45.9483-110.0067-2-12- | 0-M36963 | -5 | -5 | -5 | 44 | -20 | 62 | 11 | -10 | -15 | 2 | 35 |
| 30-45.9569-110.0372-2-12- | 0-M36964 | -5 | -5 | -5 | 48 | -20 | 32 | 12 | -10 | -15 | 2 | 37 |
| 30-45.9689-110.0600-2-12- | 0-M36965 | -5 | -5 | -5 | 42 | -20 | 45 | 14 | -10 | -15 | 2 | 33 |
| 30-45.9631-110.0689-2-12- | 0-M36966 | -5 | -5 | -5 | 35 | -20 | 59 | 5 | -10 | -15 | 2 | 30 |
| 30-45.9964-110.0847-2-12- | 0-M36967 | -5 | -5 | -5 | 36 | -20 | 72 | 13 | -10 | 30 | 2 | 28 |

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

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| DOE SAMPLE NUMBER | | | | | | | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | |
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | Al | Au | Ba | Ca | Ce | Cl | Co | Cr | Cs | Dy | Eu | Fe | Hf | K | La | Lu |
| 30- | 45.8292- | 110.4489- | 2- | 15- | | 0-M36917 | 72130 | -0.09 | 824 | 32230 | 65 | -86 | 17.4 | 136 | 4.0 | 3 | 1.7 | 42770 | 5.3 | 20140 | 31 | 0.3 |
| 30- | 45.8325- | 110.4725- | 2- | 12- | | 0-M36918 | 64400 | -0.07 | 987 | 22480 | 69 | -84 | 17.6 | 272 | 2.1 | 3 | 1.8 | 44910 | 6.3 | 19160 | 35 | 0.3 |
| 30- | 45.9825- | 110.5183- | 2- | 12- | | 0-M36919 | 58640 | -0.07 | 796 | 32510 | 74 | -90 | 13.6 | 144 | 3.3 | 5 | 1.9 | 35030 | 15.1 | 16740 | 40 | 0.5 |
| 30- | 45.9861- | 110.5019- | 2- | 12- | | 0-M36920 | 65960 | -0.07 | 699 | 14090 | 61 | -78 | 12.7 | 72 | 3.8 | 3 | 1.4 | 35450 | 7.8 | 16280 | 40 | 0.3 |
| 30- | 45.9850- | 110.5014- | 2- | 12- | | 0-M36921 | 54990 | -0.07 | 644 | 46430 | 64 | -78 | 12.5 | 67 | 2.4 | 3 | 1.3 | 35430 | 6.6 | 14940 | 26 | 0.3 |
| 30- | 45.9956- | 110.5144- | 2- | 12- | | 0-M36922 | 62540 | -0.08 | 757 | 24480 | 58 | -80 | 13.0 | 76 | 4.2 | 4 | 1.4 | 35320 | 7.7 | 13440 | 35 | 0.5 |
| 30- | 45.9956- | 110.5372- | 2- | 12- | | 0-M36923 | 61660 | -0.06 | 743 | 16220 | 64 | -81 | 10.3 | 109 | 3.2 | 4 | 1.7 | 37000 | 16.0 | 16140 | 42 | 0.4 |
| 30- | 45.9833- | 110.6139- | 2- | 12- | | 0-M36924 | 59610 | -0.07 | 591 | 32970 | 55 | -84 | 14.4 | 77 | 3.2 | 3 | 1.5 | 37230 | 7.9 | 14280 | 36 | 0.4 |
| 30- | 45.9889- | 110.6178- | 2- | 15- | | 0-M36925 | 56370 | -0.08 | 694 | 66630 | 56 | -105 | 10.1 | 67 | 2.3 | 3 | 1.4 | 39640 | 6.4 | 15950 | 34 | 0.3 |
| 30- | 45.9689- | 110.5514- | 2- | 12- | | 0-M36926 | 66720 | -0.10 | 1185 | 22650 | 91 | -97 | 13.7 | 146 | 3.0 | 3 | 2.1 | 38240 | 7.8 | 19460 | 44 | 0.3 |
| 30- | 45.9497- | 110.6025- | 2- | 15- | | 0-M36927 | 63190 | -0.07 | 853 | 30160 | 70 | -88 | 13.4 | 107 | 3.5 | 4 | 1.8 | 50790 | 7.3 | 17130 | 35 | 0.4 |
| 30- | 45.9641- | 110.6455- | 2- | 12- | | 0-M36928 | 65700 | -0.08 | 836 | 44850 | 55 | 168 | 14.1 | 138 | 2.9 | 4 | 1.8 | 44420 | 6.8 | 19390 | 33 | 0.3 |
| 30- | 45.9622- | 110.6460- | 2- | 12- | | 0-M36929 | 67860 | -0.08 | 739 | 32640 | 53 | -97 | 15.4 | 132 | 3.9 | 3 | 1.6 | 45600 | 5.6 | 16630 | 34 | 0.3 |
| 30- | 45.9310- | 110.6662- | 2- | 12- | | 0-M36930 | 63840 | -0.08 | 986 | 38100 | 52 | -89 | 13.3 | 128 | 2.9 | 4 | 1.8 | 41130 | 6.1 | 18400 | 32 | 0.3 |
| 30- | 45.9338- | 110.6954- | 2- | 12- | | 0-M36931 | 67130 | -0.08 | 1067 | 23310 | 63 | -92 | 14.4 | 134 | 3.0 | 4 | 1.7 | 43480 | 6.2 | 19230 | 39 | 0.4 |
| 30- | 45.9381- | 110.5994- | 2- | 12- | | 0-M36932 | 64210 | -0.08 | 883 | 43800 | 64 | -102 | 12.5 | 107 | 3.5 | 3 | 1.9 | 40590 | 7.8 | 16450 | 37 | 0.3 |
| 30- | 45.9461- | 110.5636- | 2- | 12- | | 0-M36933 | 67020 | -0.07 | 1055 | 27880 | 76 | -90 | 14.7 | 86 | 2.3 | 4 | 1.9 | 39160 | 7.2 | 17960 | 52 | 0.4 |
| 30- | 45.9826- | 110.7298- | 2- | 15- | | 0-M36934 | 65610 | -0.10 | 902 | 51910 | 59 | -99 | 19.0 | 404 | 4.7 | 3 | 1.7 | 44810 | 5.7 | 17030 | 30 | 0.4 |
| 30- | 45.9919- | 110.7081- | 2- | 12- | | 0-M36935 | 66860 | -0.09 | 1005 | 50290 | 65 | -93 | 21.2 | 445 | -2.1 | 4 | 1.8 | 51620 | 7.2 | 16230 | 36 | 0.3 |
| 30- | 45.9163- | 110.7126- | 2- | 12- | | 0-M36936 | 67140 | -0.07 | 1105 | 26520 | 56 | 164 | 14.8 | 180 | 3.0 | 3 | 1.8 | 45550 | 7.5 | 24260 | 33 | 0.4 |
| 30- | 45.9101- | 110.6687- | 2- | 12- | | 0-M36937 | 63600 | -0.07 | 801 | 25880 | 57 | -87 | 15.4 | 119 | 3.9 | 3 | 1.5 | 38430 | 10.3 | 18290 | 39 | 0.4 |
| 30- | 45.9077- | 110.6292- | 2- | 12- | | 0-M36938 | 66460 | -0.09 | 958 | 35600 | 61 | 387 | 14.5 | 132 | 2.8 | 3 | 1.7 | 42180 | 6.2 | 16530 | 32 | 0.3 |
| 30- | 45.8733- | 110.7244- | 2- | 12- | | 0-M36939 | 57720 | -0.07 | 861 | 25680 | 79 | 161 | 9.9 | 92 | 3.8 | 4 | 1.6 | 27900 | 11.9 | 17310 | 47 | 0.4 |
| 30- | 45.8833- | 110.7269- | 2- | 12- | | 0-M36940 | 60500 | -0.08 | 967 | 29670 | 62 | -94 | 16.2 | 356 | -1.7 | 3 | 1.7 | 50240 | 10.7 | 14680 | 41 | 0.4 |
| 30- | 45.8817- | 110.7149- | 2- | 12- | | 0-M36941 | 59480 | -0.08 | 792 | 29750 | 71 | -92 | 24.4 | 577 | -1.9 | 3 | 1.8 | 74230 | 13.4 | 14640 | 39 | 0.3 |
| 30- | 45.8425- | 110.7458- | 2- | 12- | | 0-M36942 | 57760 | -0.08 | 792 | 26080 | 56 | -92 | 18.1 | 368 | 2.2 | 4 | 1.3 | 53090 | 11.3 | 14230 | 43 | 0.3 |
| 30- | 45.8414- | 110.7392- | 2- | 12- | | 0-M36943 | 60910 | -0.09 | 946 | 24480 | 69 | -80 | 16.6 | 329 | -2.0 | 4 | 1.6 | 43870 | 9.6 | 19250 | 30 | 0.3 |
| 30- | 45.8736- | 110.7108- | 2- | 15- | | 0-M36944 | 71560 | -0.08 | 972 | 28520 | 62 | -83 | 15.4 | 130 | 3.8 | 4 | 1.7 | 45820 | 5.3 | 18880 | 32 | 0.3 |
| 30- | 45.8700- | 110.6981- | 2- | 12- | | 0-M36945 | 64920 | -0.08 | 1150 | 23540 | 48 | -96 | 15.9 | 298 | 3.1 | 3 | 1.7 | 44410 | 7.9 | 17470 | 36 | 0.4 |
| 30- | 45.8658- | 110.6681- | 2- | 12- | | 0-M36946 | 69050 | -0.07 | 1000 | 24370 | 46 | -88 | 15.5 | 139 | 3.6 | 3 | 1.6 | 36950 | 4.6 | 21330 | 31 | 0.3 |
| 30- | 45.8653- | 110.6728- | 2- | 12- | | 0-M36947 | 61450 | -0.08 | 1056 | 26330 | 58 | -83 | 16.6 | 268 | 2.3 | 3 | 1.4 | 42650 | 6.8 | 18140 | 30 | 0.4 |
| 30- | 45.8650- | 110.6458- | 2- | 12- | | 0-M36948 | 54520 | 0.29 | 950 | 30660 | 87 | -87 | 19.8 | 475 | -1.9 | 3 | 1.7 | 70000 | 13.8 | 14180 | 33 | 0.4 |
| 30- | 45.8350- | 110.6519- | 2- | 12- | | 0-M36949 | 70260 | -0.09 | 927 | 24150 | 60 | -101 | 17.0 | 180 | 3.7 | 3 | 1.7 | 43490 | 5.7 | 19210 | 32 | 0.4 |
| 30- | 45.8303- | 110.6394- | 2- | 12- | | 0-M36950 | 66350 | -0.08 | 936 | 23370 | 56 | -89 | 19.8 | 223 | 2.6 | 3 | 1.8 | 49240 | 6.8 | 21830 | 38 | 0.3 |
| 30- | 45.8136- | 110.6539- | 2- | 12- | | 0-M36951 | 67310 | -0.09 | 971 | 21700 | 66 | -89 | 15.5 | 232 | 4.0 | 3 | 1.5 | 39760 | 6.3 | 18970 | 32 | 0.3 |
| 30- | 45.8131- | 110.6314- | 2- | 15- | | 0-M36952 | 66800 | -0.08 | 790 | 32290 | 54 | -86 | 18.0 | 164 | 4.2 | 4 | 1.6 | 45580 | 4.3 | 22180 | 34 | 0.3 |
| 30- | 45.9131- | 110.0106- | 2- | 12- | | 0-M36953 | 59850 | -0.08 | 802 | 22600 | 66 | -86 | 13.3 | 122 | 3.6 | 4 | 1.7 | 34090 | 8.7 | 16320 | 34 | 0.4 |
| 30- | 45.8956- | 110.0236- | 2- | 12- | | 0-M36954 | 49500 | -0.08 | 427 | 25300 | 121 | 110 | 15.1 | 84 | -1.7 | 6 | 1.8 | 44810 | 34.5 | 11590 | 83 | 0.8 |
| 30- | 45.8797- | 110.0047- | 2- | 12- | | 0-M36955 | 65050 | -0.09 | 1007 | 24550 | 64 | -73 | 14.0 | 115 | 4.1 | 4 | 1.6 | 33290 | 6.9 | 16240 | 33 | 0.3 |
| 30- | 45.8828- | 110.0286- | 2- | 12- | | 0-M36956 | 57520 | -0.08 | 905 | 32260 | 63 | 154 | 15.0 | 123 | 3.3 | 3 | 1.5 | 35780 | 6.8 | 17340 | 34 | 0.3 |
| 30- | 45.8819- | 110.0608- | 2- | 12- | | 0-M36957 | 53960 | -0.07 | 666 | 34400 | 57 | -85 | 12.5 | 139 | 2.7 | 3 | 1.7 | 34210 | 8.6 | 11680 | 35 | 0.3 |
| 30- | 45.9233- | 110.0494- | 2- | 15- | | 0-M36958 | 58730 | -0.07 | 713 | 7718 | 59 | -84 | 14.6 | 145 | 3.5 | 3 | 1.5 | 35360 | 9.1 | 16970 | 38 | 0.3 |
| 30- | 45.9361- | 110.0050- | 2- | 12- | | 0-M36959 | 56330 | -0.09 | 821 | 22710 | 67 | -81 | 14.4 | 131 | 2.9 | 4 | 1.6 | 31260 | 8.9 | 15280 | 44 | 0.4 |
| 30- | 45.9372- | 110.0489- | 2- | 12- | | 0-M36960 | 58910 | -0.07 | 819 | 23460 | 69 | -79 | 13.5 | 140 | 3.5 | 4 | 1.5 | 34410 | 10.2 | 18010 | 41 | 0.4 |
| 30- | 45.9081- | 110.0719- | 2- | 12- | | 0-M36961 | 59320 | -0.08 | 714 | 22820 | 77 | 458 | 13.3 | 130 | 4.4 | 4 | 1.5 | 39700 | 16.3 | 16870 | 45 | 0.5 |
| 30- | 45.9139- | 110.1147- | 2- | 12- | | 0-M36962 | 66120 | -0.07 | 818 | 16810 | 63 | -88 | 16.0 | 133 | 3.1 | 4 | 1.6 | 35690 | 9.2 | 17180 | 35 | 0.3 |
| 30- | 45.9483- | 110.0067- | 2- | 12- | | 0-M36963 | 58440 | -0.08 | 698 | 33680 | 66 | -79 | 14.4 | 114 | 3.2 | 3 | 1.6 | 32210 | 6.8 | 16980 | 31 | 0.4 |
| 30- | 45.9569- | 110.0372- | 2- | 12- | | 0-M36964 | 59350 | -0.08 | 795 | 26530 | 70 | -77 | 12.0 | 93 | 4.7 | 4 | 1.4 | 32560 | 8.0 | 19670 | 38 | 0.4 |
| 30- | 45.9689- | 110.0600- | 2- | 12- | | 0-M36965 | 55780 | -0.07 | 780 | 32930 | 61 | 104 | 11.7 | 136 | 3.8 | 4 | 1.5 | 32640 | 8.1 | 17140 | 36 | 0.3 |
| 30- | 45.9631- | 110.0689- | 2- | 12- | | 0-M36966 | 59560 | -0.07 | 379 | 41660 | 49 | -76 | 17.6 | 120 | 4.0 | 3 | 1.4 | 36060 | 6.2 | 14430 | 33 | 0.2 |
| 30- | 45.9964- | 110.0847- | 2- | 12- | | 0-M36967 | 57310 | -0.08 | 510 | 47720 | 69 | -74 | 14.4 | 117 | 3.9 | 3 | 1.5 | 32280 | 6.9 | 16140 | 28 | 0.3 |

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



| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | LAS SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | U/Th RATIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mg | Mn | Na | Rb | Sb | Sc | Sm | Sr | Ta | Tb | Th | Ti | V | Yb | Zn | |
| 30-45.8292-110.4489-2-15- | 0-M36917 | 14720 | 877 | 13880 | 59 | -2 | 12.2 | 5.0 | 483 | -1 | -1 | 7.3 | 3147 | 122 | -1.8 | 73 | 0.288 |
| 30-45.8325-110.4725-2-12- | 0-M36918 | 11890 | 744 | 15490 | 67 | -2 | 12.5 | 4.5 | 504 | -1 | -1 | 7.4 | 3854 | 133 | -1.5 | 96 | 0.284 |
| 30-45.9825-110.5183-2-12- | 0-M36919 | 12000 | 678 | 12880 | 73 | -2 | 10.6 | 6.2 | -291 | -1 | -1 | 13.1 | 3550 | 99 | 4.9 | 89 | 0.282 |
| 30-45.9861-110.5019-2-12- | 0-M36920 | 10060 | 548 | 12070 | 67 | -2 | 8.8 | 5.1 | 351 | -1 | -1 | 8.7 | 3296 | 90 | 2.6 | 111 | 0.287 |
| 30-45.9850-110.5014-2-12- | 0-M36921 | 12350 | 745 | 11170 | -30 | -2 | 7.3 | 5.3 | -257 | -1 | -1 | 7.7 | 3106 | 92 | 2.9 | 54 | 0.286 |
| 30-45.9956-110.5144-2-12- | 0-M36922 | 13340 | 603 | 11480 | 64 | -2 | 9.2 | 5.4 | 395 | -1 | -1 | 8.7 | 3364 | 95 | 4.0 | 139 | 0.299 |
| 30-45.9956-110.5372-2-12- | 0-M36923 | 11670 | 570 | 12030 | 61 | -2 | 7.9 | 5.5 | -255 | -1 | -1 | 9.7 | 4343 | 101 | 3.3 | 99 | 0.299 |
| 30-45.9833-110.6139-2-12- | 0-M36924 | 9831 | 715 | 12180 | 60 | -2 | 8.4 | 4.7 | 837 | -1 | -1 | 7.5 | 3531 | 103 | 3.4 | 102 | 0.320 |
| 30-45.9889-110.6178-2-15- | 0-M36925 | 14880 | 923 | 15160 | -32 | -2 | 10.1 | 4.8 | -331 | -1 | -1 | 6.4 | 3242 | 110 | 4.0 | 67 | 0.359 |
| 30-45.9689-110.5514-2-12- | 0-M36926 | 9360 | 749 | 15760 | 72 | -2 | 9.8 | 5.8 | -302 | -1 | -1 | 8.2 | 4887 | 117 | 3.3 | -31 | 0.293 |
| 30-45.9497-110.6025-2-15- | 0-M36927 | 11430 | 846 | 15460 | -31 | -2 | 11.2 | 4.8 | 797 | -1 | -1 | 8.5 | 3641 | 141 | 2.7 | 110 | 0.353 |
| 30-45.9641-110.6455-2-12- | 0-M36928 | 12350 | 962 | 13720 | 48 | -2 | 11.6 | 4.9 | 804 | -1 | -1 | 8.0 | 2993 | 116 | 2.7 | 89 | 0.288 |
| 30-45.9622-110.6460-2-12- | 0-M36929 | 10640 | 1141 | 11810 | 58 | -2 | 11.8 | 4.9 | 486 | -1 | -1 | 7.6 | 3642 | 126 | -1.6 | 111 | 0.276 |
| 30-45.9310-110.6662-2-12- | 0-M36930 | 11500 | 820 | 13840 | -34 | -2 | 9.8 | 5.0 | 767 | -1 | -1 | 6.2 | 3576 | 122 | 2.5 | 101 | 0.290 |
| 30-45.9338-110.6954-2-12- | 0-M36931 | 9405 | 843 | 15740 | 63 | -2 | 11.1 | 5.4 | 877 | -1 | -1 | 8.0 | 3452 | 109 | -1.9 | 86 | 0.338 |
| 30-45.9381-110.5994-2-12- | 0-M36932 | 13810 | 812 | 13090 | 65 | -2 | 10.2 | 5.0 | 476 | -1 | -1 | 7.4 | 4705 | 104 | 2.2 | 136 | 0.297 |
| 30-45.9461-110.5636-2-12- | 0-M36933 | 7465 | 717 | 15990 | 56 | -2 | 9.7 | 5.3 | 473 | -1 | -1 | 8.4 | 5174 | 115 | 3.3 | 119 | 0.286 |
| 30-45.9826-110.7298-2-15- | 0-M36934 | 16890 | 928 | 14580 | -40 | -3 | 14.8 | 5.5 | 532 | -1 | -1 | 7.4 | 3587 | 131 | -2.0 | -46 | 0.243 |
| 30-45.9919-110.7081-2-12- | 0-M36935 | 15320 | 816 | 16530 | -34 | -2 | 17.4 | 4.9 | 658 | -1 | -1 | 7.0 | 4401 | 151 | 2.3 | -43 | 0.271 |
| 30-45.9163-110.7126-2-12- | 0-M36936 | 11930 | 856 | 15840 | 63 | -2 | 10.4 | 4.7 | 749 | -1 | -1 | 7.5 | 4078 | 126 | 3.0 | -53 | 0.280 |
| 30-45.9101-110.6687-2-12- | 0-M36937 | 9852 | 855 | 12550 | 63 | -2 | 10.2 | 4.9 | -278 | -1 | -1 | 8.7 | 3192 | 111 | 3.2 | 114 | 0.299 |
| 30-45.9077-110.6292-2-12- | 0-M36938 | 11700 | 948 | 15660 | 70 | -2 | 10.3 | 5.7 | 856 | -2 | -1 | 8.3 | 3446 | 140 | 2.7 | -54 | 0.265 |
| 30-45.8733-110.7244-2-12- | 0-M36939 | 11640 | 536 | 14190 | 69 | -2 | 9.2 | 5.6 | -235 | -1 | -1 | 13.7 | 3492 | 75 | 2.8 | 95 | 0.277 |
| 30-45.8833-110.7269-2-12- | 0-M36940 | 11460 | 802 | 13800 | -30 | -2 | 13.7 | 5.1 | -302 | -1 | -1 | 9.4 | 4721 | 149 | 2.5 | 114 | 0.266 |
| 30-45.8817-110.7149-2-12- | 0-M36941 | 12710 | 1096 | 12710 | 73 | -2 | 15.1 | 4.1 | 533 | -1 | -1 | 6.6 | 5710 | 241 | -1.8 | 155 | 0.364 |
| 30-45.8425-110.7458-2-12- | 0-M36942 | 12000 | 877 | 14230 | -36 | -2 | 14.0 | 4.7 | 592 | -1 | -1 | 6.7 | 4096 | 161 | 3.4 | -38 | 0.597 |
| 30-45.8414-110.7392-2-12- | 0-M36943 | 11310 | 699 | 12780 | 47 | -2 | 12.0 | 4.5 | 759 | -1 | -1 | 6.7 | 4527 | 151 | 2.5 | 84 | 0.328 |
| 30-45.8736-110.7108-2-15- | 0-M36944 | 11630 | 857 | 11210 | 74 | -2 | 12.1 | 4.2 | 723 | -1 | -1 | 7.4 | 3398 | 131 | 2.3 | 119 | 0.257 |
| 30-45.8700-110.6981-2-12- | 0-M36945 | 11180 | 705 | 14600 | 74 | -2 | 12.6 | 5.1 | 710 | -1 | -1 | 7.5 | 4631 | 132 | 4.0 | 96 | 0.267 |
| 30-45.8658-110.6681-2-12- | 0-M36946 | 10600 | 718 | 12580 | -29 | -2 | 11.3 | 4.3 | 672 | -1 | -1 | 7.0 | 3284 | 109 | 2.3 | 107 | 0.286 |
| 30-45.8653-110.6728-2-12- | 0-M36947 | 10390 | 749 | 13960 | -32 | -2 | 11.5 | 4.7 | 781 | -1 | -1 | 6.0 | 4426 | 140 | 2.9 | 83 | 0.317 |
| 30-45.8650-110.6458-2-12- | 0-M36948 | 12490 | 966 | 14120 | -34 | -2 | 15.7 | 4.7 | 633 | -1 | -1 | 6.8 | 5989 | 198 | 3.2 | -43 | 0.324 |
| 30-45.8350-110.6519-2-12- | 0-M36949 | 12040 | 708 | 14640 | -33 | -2 | 13.4 | 4.4 | 810 | -1 | -1 | 7.7 | 3488 | 124 | -1.7 | 69 | 0.273 |
| 30-45.8303-110.6394-2-12- | 0-M36950 | 12800 | 747 | 15760 | -29 | -2 | 12.8 | 4.3 | 793 | -1 | 1 | 6.5 | 3570 | 138 | 2.0 | 67 | 0.308 |
| 30-45.8136-110.6539-2-12- | 0-M36951 | 12330 | 649 | 16260 | 53 | -2 | 12.3 | 4.7 | 771 | -1 | -1 | 8.5 | 3158 | 125 | 2.9 | | 0.247 |
| 30-45.8131-110.6314-2-15- | 0-M36952 | 12010 | 841 | 14380 | 66 | -2 | 13.4 | 4.3 | 520 | -1 | -1 | 7.5 | 3511 | 121 | 3.2 | 82 | 0.267 |
| 30-45.9131-110.0106-2-12- | 0-M36953 | 9723 | 623 | 10650 | 59 | -2 | 9.9 | 5.0 | -285 | -1 | -1 | 9.1 | 3641 | 98 | 2.6 | 152 | 0.275 |
| 30-45.8956-110.0236-2-12- | 0-M36954 | 7908 | 904 | 12260 | 64 | -2 | 15.2 | 9.3 | -273 | 3 | 2 | 30.4 | 4726 | 105 | 6.4 | -38 | 0.194 |
| 30-45.8797-110.0047-2-12- | 0-M36955 | 11500 | 642 | 9263 | 63 | -2 | 10.6 | 5.3 | -251 | -1 | -1 | 8.9 | 2986 | 108 | 3.1 | 109 | 0.292 |
| 30-45.8828-110.0286-2-12- | 0-M36956 | 11870 | 764 | 10050 | 53 | -2 | 10.4 | 5.2 | -259 | -1 | -1 | 8.1 | 3123 | 111 | 2.4 | -49 | 0.296 |
| 30-45.8819-110.0608-2-12- | 0-M36957 | 10210 | 747 | 10600 | 47 | -2 | 8.7 | 4.8 | -292 | -1 | -1 | 8.3 | 2922 | 87 | 3.0 | 87 | 0.277 |
| 30-45.9233-110.0494-2-15- | 0-M36958 | 9493 | 670 | 13050 | 51 | -2 | 9.5 | 4.1 | 420 | -1 | -1 | 8.1 | 3438 | 99 | 2.3 | 112 | 0.296 |
| 30-45.9361-110.0050-2-12- | 0-M36959 | 9414 | 610 | 14350 | 62 | -2 | 9.3 | 5.9 | -251 | -1 | -1 | 10.0 | 3476 | 91 | 2.9 | 96 | 0.250 |
| 30-45.9372-110.0489-2-12- | 0-M36960 | 11490 | 609 | 13430 | 60 | -2 | 10.3 | 4.6 | -239 | -1 | -1 | 9.8 | 3317 | 97 | 2.6 | -34 | 0.255 |
| 30-45.9081-110.0719-2-12- | 0-M36961 | 12300 | 823 | 12990 | 66 | -2 | 11.4 | 6.2 | -318 | -1 | -1 | 13.8 | 4037 | 100 | 3.9 | 112 | 0.167 |
| 30-45.9139-110.1147-2-12- | 0-M36962 | 10760 | 659 | 14880 | 34 | -2 | 10.6 | 4.4 | -256 | -1 | -1 | 9.2 | 3304 | 104 | 2.6 | 89 | 0.272 |
| 30-45.9483-110.0067-2-12- | 0-M36963 | 11020 | 820 | 9775 | -29 | -2 | 9.5 | 4.9 | -272 | -1 | -1 | 8.4 | 2677 | 99 | 1.9 | 53 | 0.286 |
| 30-45.9569-110.0372-2-12- | 0-M36964 | 10470 | 673 | 11120 | 83 | -2 | 10.1 | 4.6 | -250 | -1 | -1 | 10.2 | 3092 | 81 | 2.9 | 94 | 0.245 |
| 30-45.9689-110.0600-2-12- | 0-M36965 | 12990 | 643 | 12220 | 61 | -2 | 9.6 | 5.4 | -272 | -1 | -1 | 9.3 | 3328 | 108 | 3.7 | 94 | 0.280 |
| 30-45.9631-110.0689-2-12- | 0-M36966 | 14990 | 745 | 9054 | 68 | -2 | 10.5 | 4.7 | -259 | -1 | -1 | 7.8 | 2684 | 104 | 3.0 | 114 | 0.295 |
| 30-45.9964-110.0847-2-12- | 0-M36967 | 15880 | 751 | 8713 | 62 | -2 | 10.0 | 5.5 | -261 | -1 | -1 | 9.2 | 3224 | 97 | 3.4 | 90 | 0.380 |

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

①

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER AND FIELD DATA | | | | | | | | | | | | | | | | | | | | | | | | U CONCENTRATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | TIME SAMPLED DATE | TIME SAMPLED HOUR | AIR TEMPERATURE | WATER TEMPERATURE | COMMENTS | SPECIAL MEASUREMENTS | pH | CONDUCTIVITY (µmho/cm) | SCINTILLOMETER (eU, ppm) | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm |
| 30-45.9792 | -110.0022 | -2-12- | | | | 0-M36968 | -10/06/76 | -18- | 14- | 8.5 | -C- | - | 6.1 | -450- | | 0-1-1-3-6-2-2-1-2-3-3-2-2- | | | | | | | | | | | -3- | - | - | - | - | 2.20 |
| 30-45.5837 | -110.1099 | -2-12- | | | | 0-M36969 | -10/07/76 | -12- | 13- | 8.0 | - | - | 5.9 | -345- | | 1-3-1-4-6-3-2-1-2-2-4-1-1- | | | | | | | | | | | -3- | - | - | - | - | 1.90 |
| 30-45.5686 | -110.1369 | -2-15- | | | | 0-M36970 | -10/07/76 | -13- | 13- | - | - | - | - | - | | 3-1-1-5-8- -1- - -4-4-2-1- | | | | | | | | | | | -3- | - | - | - | - | 3.60 |
| 30-45.5314 | -110.1466 | -2-15- | | | | 0-M36971 | -10/07/76 | -13- | 13- | - | - | - | - | - | | 3-1-1-5-8- -1- - -1-4-2-1- | | | | | | | | | | | -3- | - | - | - | - | 2.20 |
| 30-45.5261 | -110.1348 | -2-12- | | | | 0-M36972 | -10/07/76 | -13- | 11- | 3.4 | - | - | 6.3 | -170- | | 4-1-1-3-6-3-3-1-2-1-4-2-1- | | | | | | | | | | | -3- | - | - | - | - | 2.10 |
| 30-45.5267 | -110.1328 | -2-12- | | | | 0-M36973 | -10/07/76 | -14- | 11- | 5.0 | - | - | 6.3 | -180- | | 3-1-1-3-1-3-2-1-2-1-4-2-1- | | | | | | | | | | | -3- | - | - | - | - | 1.90 |
| 30-45.5187 | -110.1098 | -2-12- | | | | 0-M36974 | -10/07/76 | -14- | 11- | 5.0 | - | - | 6.3 | -180- | | 2-3-1-4-6-3-2-1-2-1-4-2-1- | | | | | | | | | | | -3- | - | - | - | - | 2.60 |
| 30-45.5125 | -110.0867 | -2-12- | | | | 0-M36975 | -10/07/76 | -15- | 11- | 5.2 | - | - | 6.3 | -185- | | 4-3-1-4-6-3-2-1-2-1-4-2-1- | | | | | | | | | | | -3- | - | - | - | - | 1.60 |
| 30-45.5124 | -110.0869 | -2-15- | | | | 0-M36976 | -10/07/76 | -15- | 11- | - | - | - | - | - | | 6-3-1-4-6- -1- - -1-3-2-1- | | | | | | | | | | | -8- | - | - | - | - | 1.50 |
| 30-45.5210 | -110.1202 | -2-15- | | | | 0-M36977 | -10/07/76 | -15- | 11- | - | - | - | - | - | | 5-3-1-3-1- - - - -1-3-2-1- | | | | | | | | | | | -3- | - | - | - | - | 2.50 |
| 30-45.5832 | -110.1072 | -2-12- | | | | 0-M36978 | -10/07/76 | -16- | 10- | 9.0 | - | - | 6.6 | -500- | | 4-3-1-4-6-3-2-1-2-2-3-2-1- | | | | | | | | | | | -3- | - | - | - | - | 2.00 |
| 30-45.6133 | -110.1584 | -2-15- | | | | 0-M36979 | -10/07/76 | -16- | 11- | - | - | - | - | - | | 8-1-6-5-6- -1- - -4-2-4-1- | | | | | | | | | | | -3- | - | - | - | - | 2.60 |
| 30-45.6463 | -110.1799 | -2-15- | | | | 0-M36980 | -10/10/76 | -10- | 14- | - | - | - | - | - | | 5-1-7-4-6- -1- - -4-3-3-1- | | | | | | | | | | | -3- | - | - | - | - | 3.10 |
| 30-45.6417 | -110.1485 | -2-12- | | | | 0-M36981 | -10/10/76 | -10- | 15- | 6.6 | - | - | 6.6 | -500- | | 6-1-7-5-8-2-2-1-2-3-2-3-2- | | | | | | | | | | | -3- | - | - | - | - | 2.90 |
| 30-45.5524 | -110.0737 | -2-15- | | | | 0-M36982 | -10/10/76 | -11- | 18- | - | - | - | - | - | | 7-1-6-5-8- -1- - -4-3-3-2- | | | | | | | | | | | -3- | - | - | - | - | 2.40 |
| 30-45.5474 | -110.0582 | -2-12- | | | | 0-M36983 | -10/10/76 | -12- | 19- | 5.0 | - | - | 6.3 | -320- | | 3-1-6-4-6-2-2-1-2-2-3-2-2- | | | | | | | | | | | -3- | - | - | - | - | 1.90 |
| 30-45.5477 | -110.0540 | -2-15- | | | | 0-M36984 | -10/10/76 | -12- | 20- | - | - | - | - | - | | 5-1-1-4-6- -1- - -1-3-2-2- | | | | | | | | | | | -3- | - | - | - | - | 1.80 |
| 30-45.5478 | -110.0484 | -2-15- | | | | 0-M36985 | -10/10/76 | -12- | 20- | - | - | - | - | - | | 6-1-1-3-6- -1- - -1-3-2-2- | | | | | | | | | | | -3- | - | - | - | - | 3.80 |
| 30-45.5466 | -110.0444 | -2-15- | | | | 0-M36986 | -10/10/76 | -12- | 20- | - | - | - | - | - | | 2-3-7-4-6- - - - -1-4-2-2- | | | | | | | | | | | -3- | - | - | - | - | 1.40 |
| 30-45.5664 | -110.0996 | -2-12- | | | | 0-M36987 | -10/10/76 | -13- | 20- | 10.4 | - | - | 6.3 | -175- | | 7-1-7-3-1-3-2-1-2-4-4-2-2- | | | | | | | | | | | -3- | - | - | - | - | 2.60 |
| 30-45.5786 | -110.0729 | -2-12- | | | | 0-M36988 | -10/10/76 | -14- | 15- | 10.0 | - | - | 6.6 | -450- | | 3-1-6-4-7-2-2-1-2-2-2-3-2- | | | | | | | | | | | -3- | - | - | - | - | 2.60 |
| 30-45.5795 | -110.0802 | -2-12- | | | | 0-M36989 | -10/10/76 | -14- | 16- | 10.2 | - | - | 7.2 | -1000- | | 3-1-6-4-6-2-2-1-2-4-3-2-2- | | | | | | | | | | | -3- | - | - | - | - | 1.90 |
| 30-45.6356 | -110.0947 | -2-12- | | | | 0-M36990 | -10/10/76 | -15- | 15- | 9.6 | - | - | 6.0 | -335- | | 4-1-6-4-6-2-2-1-2-2-3-3-2- | | | | | | | | | | | -3- | - | - | - | - | 2.30 |
| 30-45.6634 | -110.0751 | -2-12- | | | | 0-M36991 | -10/10/76 | -15- | 13- | 6.4 | - | - | 6.3 | -310- | | 7-1-6-4-6-2-2-1-2-2-2-3-2- | | | | | | | | | | | -3- | - | - | - | - | 2.00 |
| 30-45.6418 | -110.0566 | -2-12- | | | | 0-M36992 | -10/10/76 | -17- | 12- | 6.6 | - | - | 6.3 | -230- | | 7-3-5-4-6-2-2-1-2-2-2-3-2- | | | | | | | | | | | -3- | - | - | - | - | 1.60 |
| 30-45.6931 | -110.0661 | -2-12- | | | | 0-M36993 | -10/10/76 | -18- | 10- | 10.4 | - | - | 6.3 | -210- | | 3-1-6-4-6-3-2-1-2-4-3-2-2- | | | | | | | | | | | -3- | - | - | - | - | 1.90 |
| 30-45.6808 | -110.0319 | -2-15- | | | | 0-M36995 | -10/11/76 | -12- | 15- | - | - | - | - | - | | 2-1-5-4-6- -1- - -2-3-2-2- | | | | | | | | | | | -3- | - | - | - | - | 1.10 |
| 30-45.6764 | -110.0329 | -2-15- | | | | 0-M36996 | -10/11/76 | -12- | 15- | - | - | - | - | - | | 2-1-5-4-6- -1- - -1-3-3-2- | | | | | | | | | | | -3- | - | - | - | - | 1.10 |
| 30-45.6734 | -110.0357 | -2-15- | | | | 0-M36997 | -10/11/76 | -12- | 15- | - | - | - | - | - | | 7-1-5-3-6- -1- - -4-3-3-2- | | | | | | | | | | | -3- | - | - | - | - | 1.30 |
| 30-45.6970 | -110.0140 | -2-11- | | | | 0-M36998 | -10/11/76 | -12- | 16- | 9.0 | - | - | 6.6 | -240- | | 5-1-5-5-8-2-3-1- -2-3-3-2- | | | | | | | | | | | -3- | - | - | - | - | 6.40 |
| 30-45.7066 | -110.0042 | -2-15- | | | | 0-M36999 | -10/11/76 | -13- | 16- | - | - | - | - | - | | 1-1-5-4-6- -1- - -4-2-3-2- | | | | | | | | | | | -3- | - | - | - | - | 1.34 |
| 30-45.6478 | -110.0049 | -2-12- | | | | 0-M37000 | -10/11/76 | -13- | 18- | 9.0 | - | - | 6.3 | -185- | | 1-1-5-3-6-2-2-1-2-4-3-4-2- | | | | | | | | | | | -3- | - | - | - | - | 1.00 |
| 30-45.6452 | -110.0085 | -2-12- | | | | 0-M37001 | -10/11/76 | -14- | 18- | 8.4 | - | - | 6.3 | -190- | | 4-1-5-4-6-2-2-1-2-3-3-4-2- | | | | | | | | | | | -3- | - | - | - | - | 1.40 |
| 30-45.6349 | -110.0145 | -2-15- | | | | 0-M37002 | -10/11/76 | -14- | 18- | - | - | - | - | - | | 3-1-5-4-6- -1- - -2-3-4-2- | | | | | | | | | | | -3- | - | - | - | - | 0.90 |
| 30-45.6306 | -110.0153 | -2-12- | | | | 0-M37003 | -10/11/76 | -14- | 18- | 7.0 | - | - | 6.3 | -255- | | 3-1-5-3-6-2-2-1-2-1-2-3-2- | | | | | | | | | | | -3- | - | - | - | - | 1.10 |
| 30-45.6206 | -110.0269 | -2-12- | | | | 0-M37004 | -10/11/76 | -15- | 17- | 8.0 | - | - | 6.6 | -170- | | 3-1-7-4-6-3-2-1-2-2-3-3-2- | | | | | | | | | | | -3- | - | - | - | - | 2.90 |
| 30-45.7416 | -110.0224 | -2-15- | | | | 0-M37005 | -10/11/76 | -17- | 11- | - | - | - | - | - | | 5-1-7-3-1- -1- - -4-3-3-2- | | | | | | | | | | | -3- | - | - | - | - | 2.10 |
| 30-45.7413 | -110.0064 | -2-12- | | | | 0-M37006 | -10/11/76 | -17- | 10- | 9.0 | - | - | 6.3 | -250- | | 8-1-7-5-8-3-3-1-2-4-3-3-2- | | | | | | | | | | | -3- | - | - | - | - | 3.20 |
| 30-45.7480 | -110.0354 | -2-15- | | | | 0-M37007 | -10/11/76 | -18- | 9- | - | - | - | - | - | | 6-1-7-5-6- -1- - -4-3-3-2- | | | | | | | | | | | -3- | - | - | - | - | 1.50 |
| 30-45.7390 | -110.0679 | -2-15- | | | | 0-M37008 | -10/11/76 | -18- | 9- | - | - | - | - | - | | 7-1-7-4-6- -1- - -3-3-3-2- | | | | | | | | | | | -3- | - | - | - | - | 1.90 |
| 30-45.7124 | -110.1233 | -2-12- | | | | 0-M37009 | -10/12/76 | -10- | 8- | 4.0 | - | - | 6.3 | -315- | | 5-1-6-5-8-2-2-1-2-4-3-4-1- | | | | | | | | | | | -3- | - | - | - | - | 2.60 |
| 30-45.7558 | -110.1183 | -2-15- | | | | 0-M37010 | -10/12/76 | -11- | 11- | - | - | - | - | - | | 6-1-6-4-6- - - - -4-3-1-1- | | | | | | | | | | | -3- | - | - | - | - | 2.40 |
| 30-45.7911 | -110.0422 | -2-12- | | | | 0-M37011 | -10/12/76 | -11- | 12- | 7.6 | - | - | 6.3 | -300- | | 3-1-6-5-7-2-2-2-2-4-4-1-1- | | | | | | | | | | | -3- | - | - | - | - | 2.20 |
| 30-45.7811 | -110.1247 | -2-12- | | | | 0-M37012 | -10/12/76 | -12- | 14- | 7.0 | - | - | 6.6 | -750- | | 5-1-7-5-6-2-2-2-2-4-4-1-1- | | | | | | | | | | | -3- | - | - | - | - | 2.60 |
| 30-45.7978 | -110.1042 | -2-12- | | | | 0-M37013 | -10/12/76 | -12- | 14- | 10.2 | - | - | 6.6 | -500- | | 6-1-6-5-8-2-2-2-2-4-3-1-1- | | | | | | | | | | | -3- | - | - | - | - | 2.10 |
| 30-45.7994 | -110.1092 | -2-12- | | | | 0-M37014 | -10/12/76 | -12- | 14- | 8.6 | - | - | 6.6 | -800- | | 4-1-6-4-6-2-2-2-2-4-3-1-1- | | | | | | | | | | | -3- | - | - | - | - | 2.20 |
| 30-45.8083 | -110.0692 | -2-12- | | | | 0-M37015 | -10/12/76 | -13- | 14- | 8.0 | - | - | 6.6 | -500- | | 7-1-6-4-6-2-2-1-2-4-3-1-1- | | | | | | | | | | | -3- | - | - | - | - | 1.90 |
| 30-45.8300 | -110.0447 | -2-12- | | | | 0-M37016 | -10/12/76 | -13- | 14- | 9.0 | - | - | 6.6 | -450- | | 4-1-6-4-6-2-2-2-2-2-2-2-1- | | | | | | | | | | | -3- | - | - | - | - | 2.80 |
| 30-45.8328 | -110.0536 | -2-12- | | | | 0-M37017 | -10/12/76 | -14- | 13- | 9.0 | - | - | 6.6 | -500- | | 2-1-6-4-6-2-2-2-2-2-2-2-2- | | | | | | | | | | | -3- | - | - | - | - | 2.40 |
| 30-45.8472 | -110.0325 | -2-15- | | | | 0-M37018 | -10/12/76 | -14- | 13- | - | - | - | - | - | | 2-1-6-4-7- -1- - -3-3-2-2- | | | | | | | | | | | -3- | - | - | - | - | 2.30 |
| 30-45.7978 | -110.4383 | -2-12- | | | | 0-M37019 | -10/09/76 | -12- | 17- | 9.0 | -C- | - | 5.9 | -350- | | 2-1-1-5-6-2-2-1-2-3-3-3-1- | | | | | | | | | | | -3- | - | - | - | - | 3.20 |

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

②

| DOE SAMPLE NUMBER (STATE-LATITUDE-LONGITUDE-DOE LAB-SAMPLE TYPE-REPLICATE) | 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) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ag | Bi | Cd | Cu | Nb | Ni | Pb | Sn | W | Be | Li |
| 30-45.9792-110.0022-2-12- | 0-M36968 | -5 | -5 | -5 | 52 | -20 | 58 | 17 | -10 | -15 | 2 | 39 |
| 30-45.5837-110.1099-2-12- | 0-M36969 | -5 | -5 | -5 | 49 | -20 | 88 | 10 | -10 | -15 | 2 | 19 |
| 30-45.5686-110.1369-2-15- | 0-M36970 | -5 | -5 | -5 | 39 | -20 | 21 | 25 | -10 | 26 | 2 | 19 |
| 30-45.5314-110.1466-2-15- | 0-M36971 | -5 | -5 | -5 | 41 | -20 | 40 | 12 | -10 | -15 | 2 | 36 |
| 30-45.5261-110.1348-2-12- | 0-M36972 | -5 | -5 | -5 | 39 | -20 | 88 | 17 | -10 | -15 | 2 | 25 |
| 30-45.5267-110.1328-2-12- | 0-M36973 | -5 | -5 | -5 | 65 | -20 | 162 | 10 | -10 | -15 | 2 | 25 |
| 30-45.5187-110.1098-2-12- | 0-M36974 | -5 | -5 | 5 | 57 | -20 | 128 | -5 | 14 | -15 | 2 | 27 |
| 30-45.5125-110.0867-2-12- | 0-M36975 | -5 | -5 | -5 | 62 | -20 | 239 | -5 | -10 | -15 | 1 | 18 |
| 30-45.5124-110.0869-2-15- | 0-M36976 | -5 | -5 | -5 | 29 | -20 | 24 | 19 | -10 | -15 | 1 | 25 |
| 30-45.5210-110.1202-2-15- | 0-M36977 | -5 | -5 | -5 | 45 | -20 | 48 | 13 | -10 | -15 | 2 | 28 |
| 30-45.5832-110.1072-2-12- | 0-M36978 | -5 | -5 | -5 | 32 | -20 | 34 | 9 | -10 | -15 | 2 | 27 |
| 30-45.6133-110.1584-2-15- | 0-M36979 | -5 | -5 | -5 | 34 | -20 | 25 | 16 | -10 | -15 | 3 | 30 |
| 30-45.6463-110.1799-2-15- | 0-M36980 | -5 | -5 | -5 | 16 | -20 | 28 | 12 | -10 | -15 | 2 | 17 |
| 30-45.6417-110.1485-2-12- | 0-M36981 | -5 | -5 | -5 | 17 | -20 | 19 | 13 | 12 | -15 | 2 | 17 |
| 30-45.5524-110.0737-2-15- | 0-M36982 | -5 | -5 | -5 | 21 | -20 | 24 | 21 | -10 | -15 | 2 | 25 |
| 30-45.5474-110.0582-2-12- | 0-M36983 | -5 | -5 | -5 | 33 | -20 | 25 | 7 | 10 | -15 | 1 | 19 |
| 30-45.5477-110.0540-2-15- | 0-M36984 | -5 | -5 | -5 | 26 | -20 | 25 | 14 | -10 | 18 | 2 | 27 |
| 30-45.5478-110.0484-2-15- | 0-M36985 | -5 | -5 | -5 | 76 | -20 | 50 | 31 | -10 | 41 | 2 | 31 |
| 30-45.5466-110.0444-2-15- | 0-M36986 | -5 | -5 | -5 | 26 | -20 | 34 | 17 | -10 | -15 | -1 | 16 |
| 30-45.5664-110.0996-2-12- | 0-M36987 | -5 | -5 | -5 | 52 | -20 | 52 | 13 | -10 | -15 | 2 | 30 |
| 30-45.5786-110.0729-2-12- | 0-M36988 | -5 | -5 | -5 | 25 | -20 | 25 | 12 | -10 | -15 | 2 | 24 |
| 30-45.5795-110.0802-2-12- | 0-M36989 | -5 | -5 | -5 | 31 | -20 | 19 | 11 | -10 | -15 | 2 | 26 |
| 30-45.6356-110.0947-2-12- | 0-M36990 | -5 | -5 | -5 | 90 | -20 | 22 | -5 | -10 | -15 | 2 | 21 |
| 30-45.6634-110.0751-2-12- | 0-M36991 | -5 | -5 | -5 | 25 | -20 | -15 | 11 | -10 | -15 | 1 | 20 |
| 30-45.6418-110.0566-2-12- | 0-M36992 | -5 | -5 | 5 | 43 | -20 | -15 | -5 | -10 | 17 | 1 | 22 |
| 30-45.6931-110.0661-2-12- | 0-M36993 | -5 | -5 | -5 | 38 | -20 | 16 | -5 | -10 | -15 | 2 | 18 |
| 30-45.6808-110.0319-2-15- | 0-M36995 | -5 | -5 | -5 | 26 | -20 | 27 | -5 | 10 | -15 | 1 | 15 |
| 30-45.6764-110.0329-2-15- | 0-M36996 | -5 | 5 | 8 | 58 | -20 | -15 | 6 | 16 | -15 | -1 | 11 |
| 30-45.6734-110.0357-2-15- | 0-M36997 | -5 | -5 | -5 | 23 | -20 | -15 | -5 | -10 | -15 | -1 | 11 |
| 30-45.6970-110.0140-2-11- | 0-M36998 | -5 | -5 | -5 | 63 | -20 | 38 | 27 | -10 | -15 | 2 | 31 |
| 30-45.7066-110.0042-2-15- | 0-M36999 | -5 | -5 | -5 | 48 | -20 | 23 | -5 | -10 | -15 | 1 | 19 |
| 30-45.6478-110.0049-2-12- | 0-M37000 | -5 | -5 | 5 | 39 | -20 | 35 | 7 | 11 | -15 | -1 | 17 |
| 30-45.6452-110.0085-2-12- | 0-M37001 | -5 | -5 | -5 | 47 | -20 | 32 | -5 | 11 | -15 | -1 | 17 |
| 30-45.6349-110.0145-2-15- | 0-M37002 | -5 | -5 | -5 | 44 | -20 | 37 | 8 | -10 | -15 | 2 | 17 |
| 30-45.6306-110.0153-2-12- | 0-M37003 | -5 | -5 | -5 | 40 | -20 | 35 | 8 | -10 | -15 | 1 | 20 |
| 30-45.6206-110.0269-2-12- | 0-M37004 | -5 | -5 | -5 | 48 | -20 | 33 | 17 | -10 | 23 | 2 | 22 |
| 30-45.7416-110.0224-2-15- | 0-M37005 | -5 | -5 | -5 | 34 | -20 | 39 | -5 | -10 | -15 | 2 | 26 |
| 30-45.7413-110.0064-2-12- | 0-M37006 | -5 | -5 | -5 | 53 | -20 | 59 | 6 | -10 | 21 | 2 | 32 |
| 30-45.7480-110.0354-2-15- | 0-M37007 | -5 | -5 | -5 | 49 | -20 | 24 | 22 | -10 | -15 | 2 | 34 |
| 30-45.7390-110.0679-2-15- | 0-M37008 | -5 | 5 | -5 | 22 | -20 | -15 | 12 | -10 | 17 | 2 | 22 |
| 30-45.7124-110.1233-2-12- | 0-M37009 | -5 | -5 | -5 | 19 | -20 | 22 | 14 | -10 | -15 | 3 | 27 |
| 30-45.7558-110.1183-2-15- | 0-M37010 | -5 | -5 | -5 | 25 | -20 | 75 | 31 | -10 | -15 | 3 | 36 |
| 30-45.7911-110.0422-2-12- | 0-M37011 | -5 | -5 | -5 | 63 | -20 | 116 | 36 | 11 | -15 | 2 | 49 |
| 30-45.7811-110.1247-2-12- | 0-M37012 | -5 | -5 | -5 | 29 | -20 | 71 | 18 | -10 | -15 | 2 | 42 |
| 30-45.7978-110.1042-2-12- | 0-M37013 | -5 | -5 | -5 | 36 | -20 | 67 | 13 | -10 | -15 | 2 | 33 |
| 30-45.7994-110.1092-2-12- | 0-M37014 | -5 | -5 | -5 | 90 | -20 | 84 | 17 | -10 | -15 | 3 | 37 |
| 30-45.8083-110.0692-2-12- | 0-M37015 | -5 | -5 | -5 | 46 | -20 | 58 | 12 | -10 | 18 | 2 | 33 |
| 30-45.8300-110.0447-2-12- | 0-M37016 | -5 | -5 | -5 | 42 | -20 | 54 | 14 | -10 | -15 | 2 | 45 |
| 30-45.8328-110.0536-2-12- | 0-M37017 | -5 | -5 | -5 | 43 | -20 | 68 | -5 | -10 | 15 | 2 | 31 |
| 30-45.8472-110.0325-2-15- | 0-M37018 | -5 | -5 | -5 | 70 | -20 | 120 | 23 | -10 | -15 | 2 | 30 |
| 30-45.7978-110.4383-2-12- | 0-M37019 | 6 | -5 | 8 | 29 | -20 | 81 | 13 | 10 | -15 | -1 | 23 |

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

③

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | |
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Al | Au | Ba | Ca | Ce | Cl | Co | Cr | Cs | Dy | Eu | Fe | Hf | K | La | Lu |
| 30- | 45.9792- | 110.0022- | 2- | 12- | | 0-M36968 | 58760 | -0.09 | 704 | 48010 | 64 | -86 | 16.8 | 127 | 3.4 | 3 | 1.4 | 38540 | 6.0 | 15840 | 31 | 0.3 |
| 30- | 45.5837- | 110.1099- | 2- | 12- | | 0-M36969 | 53400 | -0.07 | 451 | 47320 | 33 | -80 | 17.1 | 461 | -1.6 | 3 | 1.1 | 31000 | 8.7 | 10380 | 22 | 0.3 |
| 30- | 45.5686- | 110.1369- | 2- | 15- | | 0-M36970 | 51860 | -0.08 | 483 | 11730 | 51 | -72 | 9.4 | 65 | 5.2 | 4 | 1.2 | 23760 | 6.4 | 17070 | 33 | 0.4 |
| 30- | 45.5314- | 110.1466- | 2- | 15- | | 0-M36971 | 56230 | -0.10 | 694 | 17890 | 55 | -77 | 11.3 | 97 | 3.7 | 3 | 1.3 | 23470 | 6.6 | 12380 | 23 | 0.3 |
| 30- | 45.5261- | 110.1348- | 2- | 12- | | 0-M36972 | 68940 | -0.10 | 479 | 49070 | 44 | -89 | 18.2 | 138 | 2.7 | 3 | 1.0 | 35630 | 6.5 | 11200 | 21 | 0.2 |
| 30- | 45.5267- | 110.1328- | 2- | 12- | | 0-M36973 | 65960 | -0.10 | 614 | 53880 | 47 | -96 | 29.1 | 1174 | 2.8 | 3 | 1.3 | 57300 | 5.8 | 13310 | 30 | 0.3 |
| 30- | 45.5187- | 110.1098- | 2- | 12- | | 0-M36974 | 59950 | -0.08 | 467 | 45280 | 62 | 76 | 28.6 | 1147 | 3.3 | 3 | 1.1 | 56200 | 8.6 | 13800 | 29 | 0.3 |
| 30- | 45.5125- | 110.0867- | 2- | 12- | | 0-M36975 | 57280 | -0.10 | 332 | 54760 | 58 | 117 | 35.7 | 1311 | 2.4 | 3 | 0.9 | 57990 | 4.9 | 10030 | 20 | 0.3 |
| 30- | 45.5124- | 110.0869- | 2- | 15- | | 0-M36976 | 34250 | -0.07 | 333 | 145900 | 33 | 153 | 7.3 | 82 | 2.8 | 3 | 0.8 | 19330 | 2.5 | 14120 | 23 | 0.3 |
| 30- | 45.5210- | 110.1202- | 2- | 15- | | 0-M36977 | 62380 | -0.08 | 696 | 42570 | 57 | 422 | 15.9 | 122 | 3.4 | 4 | 1.4 | 34330 | 11.7 | 14690 | 33 | 0.4 |
| 30- | 45.5832- | 110.1072- | 2- | 12- | | 0-M36978 | 49920 | -0.07 | 501 | 40780 | 42 | -77 | 12.2 | 91 | 2.5 | 3 | 1.2 | 30680 | 7.6 | 11180 | 29 | 0.2 |
| 30- | 45.6133- | 110.1584- | 2- | 15- | | 0-M36979 | 54180 | -0.07 | 796 | 41390 | 50 | -65 | 5.5 | 28 | 3.7 | 3 | 1.2 | 17560 | 8.0 | 14820 | 31 | 0.3 |
| 30- | 45.6463- | 110.1799- | 2- | 15- | | 0-M36980 | 45270 | -0.07 | 568 | 7402 | 62 | -58 | 4.9 | 52 | 2.8 | 4 | 1.3 | 18210 | 14.5 | 14520 | 30 | 0.4 |
| 30- | 45.6417- | 110.1485- | 2- | 12- | | 0-M36981 | 43400 | -0.07 | 494 | 13170 | 58 | -70 | 3.1 | 50 | 2.9 | 4 | 1.2 | 15790 | 13.1 | 13660 | 32 | 0.4 |
| 30- | 45.5524- | 110.0737- | 2- | 15- | | 0-M36982 | 44180 | -0.07 | 568 | 21720 | 42 | -63 | 8.5 | 63 | 4.4 | 3 | 1.2 | 18530 | 10.1 | 13350 | 28 | 0.3 |
| 30- | 45.5474- | 110.0582- | 2- | 12- | | 0-M36983 | 34760 | -0.09 | 399 | 66700 | 43 | 214 | 5.2 | 61 | -1.7 | 2 | 1.0 | 15760 | 7.6 | 11270 | 20 | 0.2 |
| 30- | 45.5477- | 110.0540- | 2- | 15- | | 0-M36984 | 52990 | -0.08 | 534 | 61730 | 64 | -82 | 19.3 | 105 | 2.3 | 3 | 1.4 | 57090 | 7.4 | 11920 | 26 | 0.3 |
| 30- | 45.5478- | 110.0484- | 2- | 15- | | 0-M36985 | 60730 | -0.08 | 741 | 38580 | 78 | -102 | 19.3 | 117 | 3.8 | 5 | 1.7 | 56620 | 11.0 | 15300 | 46 | 0.5 |
| 30- | 45.5466- | 110.0444- | 2- | 15- | | 0-M36986 | 31020 | -0.05 | 253 | 153500 | 28 | 189 | 8.6 | 48 | 2.4 | 2 | 0.8 | 18470 | 2.8 | 11320 | 16 | 0.2 |
| 30- | 45.5664- | 110.0996- | 2- | 12- | | 0-M36987 | 60110 | -0.09 | 720 | 19700 | 66 | -76 | 11.4 | 132 | -1.8 | 4 | 1.8 | 26970 | 9.8 | 14210 | 37 | 0.4 |
| 30- | 45.5786- | 110.0729- | 2- | 12- | | 0-M36988 | 52640 | -0.07 | 644 | 36660 | 68 | -76 | 9.8 | 80 | 3.3 | 4 | 1.6 | 29360 | 9.5 | 14430 | 33 | 0.4 |
| 30- | 45.5795- | 110.0802- | 2- | 12- | | 0-M36989 | 51160 | -0.06 | 645 | 28340 | 55 | -87 | 7.4 | 166 | 1.6 | 3 | 1.2 | 24550 | 10.5 | 11450 | 28 | 0.3 |
| 30- | 45.6356- | 110.0947- | 2- | 12- | | 0-M36990 | 62680 | -0.07 | 875 | 17090 | 54 | -93 | 10.7 | 55 | 2.9 | 3 | 1.6 | 25450 | 7.7 | 15480 | 33 | 0.3 |
| 30- | 45.6634- | 110.0751- | 2- | 12- | | 0-M36991 | 66920 | -0.09 | 732 | 33800 | 60 | -93 | 16.1 | 41 | -1.9 | 3 | 1.5 | 38740 | 5.6 | 14380 | 27 | 0.2 |
| 30- | 45.6418- | 110.0566- | 2- | 12- | | 0-M36992 | 81050 | -0.09 | 782 | 36290 | 67 | -100 | 21.6 | 49 | -2.0 | 3 | 1.5 | 58630 | 5.1 | 15250 | 30 | 0.3 |
| 30- | 45.6931- | 110.0661- | 2- | 12- | | 0-M36993 | 65870 | -0.10 | 645 | 39000 | 71 | -101 | 17.3 | 31 | -1.9 | 3 | 1.6 | 74180 | 6.0 | 14360 | 37 | 0.3 |
| 30- | 45.6808- | 110.0319- | 2- | 15- | | 0-M36995 | 77110 | -0.09 | 672 | 55620 | 48 | -118 | 27.5 | 42 | -2.0 | 3 | 1.5 | 85780 | 3.9 | 14470 | 29 | 0.2 |
| 30- | 45.6764- | 110.0329- | 2- | 15- | | 0-M36996 | 79130 | -0.09 | 444 | 55630 | 42 | -101 | 26.5 | 27 | -1.9 | 2 | 1.3 | 75190 | 2.9 | 16250 | 26 | 0.2 |
| 30- | 45.6734- | 110.0357- | 2- | 15- | | 0-M36997 | 54070 | -0.11 | 382 | 44200 | 50 | -113 | 36.5 | 68 | -2.4 | 2 | 1.7 | 154800 | 5.3 | 9941 | 33 | 0.3 |
| 30- | 45.6970- | 110.0140- | 2- | 11- | | 0-M36998 | 61780 | -0.09 | 932 | 30080 | 66 | -89 | 17.0 | 135 | 3.3 | 5 | 1.8 | 39630 | 12.4 | 16560 | 41 | 0.4 |
| 30- | 45.7066- | 110.0042- | 2- | 15- | | 0-M36999 | 79340 | -0.09 | 640 | 46030 | 51 | -130 | 20.5 | 31 | -2.0 | 3 | 1.6 | 69480 | 3.9 | 13160 | 36 | 0.2 |
| 30- | 45.6478- | 110.0049- | 2- | 12- | | 0-M37000 | 76870 | -0.09 | 621 | 47370 | 53 | -111 | 24.1 | 52 | -2.0 | 3 | 1.6 | 68680 | 4.8 | 12680 | 32 | 0.3 |
| 30- | 45.6452- | 110.0085- | 2- | 12- | | 0-M37001 | 76810 | -0.08 | 526 | 52200 | 54 | -105 | 29.7 | 23 | -2.0 | 3 | 1.6 | 92750 | 3.1 | 11770 | 30 | 0.2 |
| 30- | 45.6349- | 110.0145- | 2- | 15- | | 0-M37002 | 78160 | -0.08 | 1033 | 47840 | 66 | -101 | 25.1 | 36 | -1.9 | 3 | 1.8 | 67680 | 2.8 | 15620 | 33 | 0.2 |
| 30- | 45.6306- | 110.0153- | 2- | 12- | | 0-M37003 | 71150 | -0.08 | 742 | 41360 | 53 | -98 | 29.4 | 37 | -1.9 | 3 | 1.7 | 90770 | 3.8 | 12680 | 28 | 0.3 |
| 30- | 45.6206- | 110.0269- | 2- | 12- | | 0-M37004 | 55130 | -0.09 | 733 | 26210 | 58 | -90 | 9.8 | 115 | 3.8 | 4 | 1.9 | 41300 | 9.7 | 15500 | 31 | 0.4 |
| 30- | 45.7416- | 110.0224- | 2- | 15- | | 0-M37005 | 73980 | -0.08 | 790 | 37480 | 84 | -101 | 14.4 | 136 | 2.7 | 4 | 1.8 | 50110 | 7.2 | 12820 | 36 | 0.5 |
| 30- | 45.7413- | 110.0064- | 2- | 12- | | 0-M37006 | 65440 | -0.08 | 826 | 24650 | 81 | -86 | 14.0 | 133 | 4.2 | 4 | 1.9 | 44790 | 10.8 | 17650 | 42 | 0.4 |
| 30- | 45.7480- | 110.0354- | 2- | 15- | | 0-M37007 | 83860 | -0.07 | 1338 | 32120 | 59 | -99 | 20.4 | 59 | 2.4 | 3 | 1.8 | 50420 | 4.4 | 21390 | 39 | 0.2 |
| 30- | 45.7390- | 110.0679- | 2- | 15- | | 0-M37008 | 70310 | -0.08 | 680 | 44290 | 74 | -111 | 14.3 | 45 | -1.8 | 4 | 1.6 | 52010 | 7.2 | 19690 | 38 | 0.3 |
| 30- | 45.7124- | 110.1233- | 2- | 12- | | 0-M37009 | 67570 | -0.08 | 764 | 36690 | 73 | -93 | 9.9 | 57 | 3.3 | 4 | 1.7 | 32140 | 11.4 | 17270 | 38 | 0.3 |
| 30- | 45.7558- | 110.1183- | 2- | 15- | | 0-M37010 | 71490 | -0.07 | 1026 | 31940 | 63 | -100 | 16.9 | 295 | 2.6 | 3 | 1.8 | 49440 | 6.1 | 14450 | 44 | 0.3 |
| 30- | 45.7911- | 110.0422- | 2- | 12- | | 0-M37011 | 69220 | -0.08 | 1040 | 37420 | 60 | -97 | 19.0 | 226 | 3.3 | 4 | 1.6 | 41780 | 6.0 | 20190 | 32 | 0.2 |
| 30- | 45.7811- | 110.1247- | 2- | 12- | | 0-M37012 | 67940 | -0.08 | 1093 | 24760 | 77 | -100 | 15.2 | 160 | 2.8 | 4 | 1.6 | 34610 | 9.4 | 16950 | 35 | 0.4 |
| 30- | 45.7978- | 110.1042- | 2- | 12- | | 0-M37013 | 57870 | -0.08 | 814 | 36860 | 69 | -95 | 16.1 | 365 | 3.6 | 3 | 1.6 | 46880 | 7.8 | 13480 | 37 | 0.2 |
| 30- | 45.7994- | 110.1092- | 2- | 12- | | 0-M37014 | 60980 | -0.09 | 882 | 39200 | 67 | -111 | 17.9 | 435 | 3.5 | 3 | 1.7 | 51650 | 7.8 | 15730 | 36 | 0.3 |
| 30- | 45.8083- | 110.0692- | 2- | 12- | | 0-M37015 | 59650 | -0.07 | 938 | 22720 | 55 | -84 | 17.2 | 225 | 4.0 | 3 | 1.5 | 36600 | 4.7 | 11440 | 33 | 0.2 |
| 30- | 45.8300- | 110.0447- | 2- | 12- | | 0-M37016 | 53640 | -0.07 | 620 | 32330 | 76 | -89 | 12.4 | 216 | 2.4 | 4 | 1.6 | 34610 | 13.7 | 10570 | 34 | 0.4 |
| 30- | 45.8328- | 110.0536- | 2- | 12- | | 0-M37017 | 56770 | -0.07 | 748 | 32040 | 69 | 151 | 14.9 | 184 | 3.3 | 3 | 1.6 | 37970 | 9.6 | 13970 | 38 | 0.4 |
| 30- | 45.8472- | 110.0325- | 2- | 15- | | 0-M37018 | 69800 | -0.08 | 1217 | 20880 | 80 | -82 | 20.2 | 238 | 5.5 | 4 | 1.6 | 47680 | 5.7 | 16620 | 39 | 0.3 |
| 30- | 45.7978- | 110.4383- | 2- | 12- | | 0-M37019 | 54300 | -0.08 | 737 | 26810 | 105 | -87 | 23.1 | 695 | -2.0 | 4 | 1.9 | 99510 | 17.8 | 15630 | 61 | 0.4 |

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



| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | LASL SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | U/Th RATIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mg | Mn | Na | Rb | Sb | Sc | Sm | Sr | Ta | Tb | Th | Ti | V | Yb | Zn | |
| 30-45.9792-110.0022-2-12- | 0-M36968 | 13850 | 873 | 9137 | -34 | -2 | 11.3 | 5.4 | -303 | -1 | -1 | 8.0 | 2485 | 99 | 2.5 | 160 | 0.275 |
| 30-45.5837-110.1099-2-12- | 0-M36969 | 19430 | 557 | 10090 | -27 | -2 | 11.4 | 3.8 | -260 | -1 | -1 | 7.2 | 2409 | 85 | 2.3 | 81 | 0.264 |
| 30-45.5686-110.1369-2-15- | 0-M36970 | 5938 | 534 | 6499 | 83 | -2 | 7.7 | 4.0 | -263 | -1 | -1 | 10.5 | 2366 | 73 | 3.8 | 102 | 0.343 |
| 30-45.5314-110.1466-2-15- | 0-M36971 | 8423 | 606 | 9035 | -33 | -2 | 9.4 | 4.2 | -266 | -1 | -1 | 8.7 | 2839 | 69 | 2.6 | -87 | 0.253 |
| 30-45.5261-110.1348-2-12- | 0-M36972 | 19440 | 678 | 11410 | -37 | -2 | 14.5 | 3.0 | 327 | -2 | -1 | 6.1 | 2633 | 100 | 2.7 | 120 | 0.344 |
| 30-45.5267-110.1328-2-12- | 0-M36973 | 27630 | 867 | 10530 | -37 | -3 | 18.6 | 4.1 | -334 | -1 | -1 | 7.4 | 3406 | 127 | -2.4 | 150 | 0.257 |
| 30-45.5187-110.1098-2-12- | 0-M36974 | 25080 | 845 | 9519 | 61 | -2 | 16.7 | 3.8 | -271 | -1 | -1 | 8.4 | 3762 | 129 | 2.6 | -59 | 0.310 |
| 30-45.5125-110.0867-2-12- | 0-M36975 | 38290 | 977 | 8009 | -37 | -3 | 21.5 | 3.9 | -285 | -1 | -1 | 7.2 | 3382 | 144 | 2.9 | -52 | 0.222 |
| 30-45.5124-110.0869-2-15- | 0-M36976 | 51030 | 353 | 2467 | 58 | -2 | 6.2 | 3.4 | -214 | -1 | -1 | 6.1 | 1643 | 42 | -1.4 | 101 | 0.246 |
| 30-45.5210-110.1202-2-15- | 0-M36977 | 14630 | 743 | 14310 | -30 | -2 | 13.4 | 4.7 | -316 | -1 | -1 | 10.8 | 2745 | 92 | 3.9 | 128 | 0.231 |
| 30-45.5832-110.1072-2-12- | 0-M36978 | 15910 | 516 | 11120 | 45 | -2 | 7.7 | 3.5 | -233 | -1 | -1 | 7.6 | 2722 | 93 | 1.5 | -31 | 0.263 |
| 30-45.6133-110.1584-2-15- | 0-M36979 | 14330 | 261 | 11050 | 56 | -2 | 5.3 | 4.7 | 288 | -1 | -1 | 7.8 | 1887 | 76 | 2.8 | 73 | 0.333 |
| 30-45.6463-110.1799-2-15- | 0-M36980 | 4398 | 204 | 9115 | 51 | -2 | 6.8 | 4.5 | -164 | -1 | -1 | 9.9 | 2546 | 58 | 3.1 | 73 | 0.313 |
| 30-45.6417-110.1485-2-12- | 0-M36981 | 5902 | 339 | 8538 | 52 | -2 | 5.7 | 4.4 | -225 | -1 | -1 | 9.6 | 2173 | 55 | 3.0 | -28 | 0.302 |
| 30-45.5524-110.0737-2-15- | 0-M36982 | 6805 | 342 | 7262 | 40 | -2 | 6.3 | 4.0 | -204 | -1 | -1 | 7.7 | 2754 | 56 | 2.3 | 65 | 0.312 |
| 30-45.5474-110.0582-2-12- | 0-M36983 | 31540 | 260 | 6472 | -32 | -2 | 5.0 | 3.0 | -216 | -1 | -1 | 5.3 | 2160 | 50 | -2.2 | -14 | 0.358 |
| 30-45.5477-110.0540-2-15- | 0-M36984 | 24160 | 883 | 11340 | -31 | -2 | 10.1 | 3.7 | 473 | -1 | -1 | 6.9 | 3576 | 149 | 2.7 | 102 | 0.261 |
| 30-45.5478-110.0484-2-15- | 0-M36985 | 15260 | 943 | 13710 | 74 | -2 | 11.7 | 6.8 | -343 | -1 | -1 | 13.4 | 4079 | 146 | 2.4 | -110 | 0.284 |
| 30-45.5466-110.0444-2-15- | 0-M36986 | 84740 | 273 | 4293 | 45 | -1 | 4.8 | 2.3 | -201 | -1 | -1 | 4.8 | 1568 | 47 | -1.2 | 42 | 0.292 |
| 30-45.5664-110.0996-2-12- | 0-M36987 | 10040 | 558 | 11590 | -31 | -2 | 8.8 | 4.9 | -248 | -1 | -1 | 8.9 | 2880 | 88 | 3.1 | -45 | 0.292 |
| 30-45.5786-110.0729-2-12- | 0-M36988 | 11590 | 561 | 13210 | 51 | -2 | 8.4 | 5.9 | 469 | -1 | -1 | 10.9 | 2769 | 82 | 3.2 | 73 | 0.239 |
| 30-45.5795-110.0802-2-12- | 0-M36989 | 9299 | 450 | 14160 | 40 | -2 | 6.7 | 3.6 | -255 | -1 | -1 | 8.1 | 1963 | 73 | 2.2 | 77 | 0.235 |
| 30-45.6356-110.0947-2-12- | 0-M36990 | 6609 | 475 | 16270 | 49 | -2 | 7.4 | 4.9 | 327 | -1 | -1 | 7.4 | 2598 | 77 | 2.5 | 81 | 0.311 |
| 30-45.6634-110.0751-2-12- | 0-M36991 | 9978 | 771 | 14210 | -35 | -2 | 9.1 | 3.8 | 532 | -1 | -1 | 5.7 | 3107 | 122 | 2.9 | -18 | 0.351 |
| 30-45.6418-110.0566-2-12- | 0-M36992 | 13340 | 1021 | 14630 | -38 | -2 | 11.4 | 4.4 | -338 | -1 | -1 | 7.3 | 3402 | 137 | -2.3 | 87 | 0.219 |
| 30-45.6931-110.0661-2-12- | 0-M36993 | 12280 | 1264 | 15470 | -45 | -3 | 11.1 | 5.6 | -337 | -1 | -1 | 6.0 | 3974 | 169 | 3.2 | 179 | 0.317 |
| 30-45.6808-110.0319-2-15- | 0-M36995 | 17780 | 1338 | 14800 | -38 | -2 | 15.7 | 4.6 | -402 | -1 | -1 | 5.5 | 4331 | 211 | 2.5 | 157 | 0.200 |
| 30-45.6764-110.0329-2-15- | 0-M36996 | 16100 | 1265 | 12370 | -36 | -2 | 14.3 | 3.1 | -345 | -1 | -1 | 4.7 | 3740 | 194 | -1.8 | 193 | 0.234 |
| 30-45.6734-110.0357-2-15- | 0-M36997 | 18460 | 1892 | 10800 | -46 | -3 | 17.5 | 5.1 | -398 | -1 | -1 | 5.0 | 9181 | 457 | 3.9 | -68 | 0.260 |
| 30-45.6970-110.0140-2-11- | 0-M36998 | 11650 | 756 | 14870 | 63 | -2 | 12.1 | 7.1 | -284 | -1 | -1 | 10.7 | 4132 | 109 | 4.0 | 115 | 0.598 |
| 30-45.7066-110.0042-2-15- | 0-M36999 | 12780 | 1396 | 16130 | 65 | -2 | 12.0 | 4.7 | 834 | -1 | -1 | 5.8 | 4016 | 170 | 3.3 | 225 | 0.231 |
| 30-45.6478-110.0049-2-12- | 0-M37000 | 14590 | 1186 | 15720 | -36 | -2 | 13.3 | 4.6 | 706 | -1 | -1 | 4.6 | 4146 | 200 | 1.9 | 160 | 0.217 |
| 30-45.6452-110.0085-2-12- | 0-M37001 | 17210 | 1349 | 14240 | -39 | -2 | 14.6 | 4.8 | -342 | -1 | -1 | 4.2 | 4158 | 225 | -2.1 | 135 | 0.333 |
| 30-45.6349-110.0145-2-15- | 0-M37002 | 18040 | 1125 | 17520 | 52 | -2 | 16.1 | 4.9 | 724 | -1 | -1 | 4.5 | 3589 | 161 | -1.8 | 91 | 0.200 |
| 30-45.6306-110.0153-2-12- | 0-M37003 | 17420 | 1143 | 15530 | -36 | -2 | 16.5 | 4.3 | 531 | -1 | -1 | 4.1 | 5766 | 254 | 2.3 | -70 | 0.268 |
| 30-45.6206-110.0269-2-12- | 0-M37004 | 10820 | 573 | 10730 | 76 | -2 | 8.6 | 5.3 | -293 | -1 | -1 | 9.4 | 3572 | 100 | 2.4 | -92 | 0.309 |
| 30-45.7416-110.0224-2-15- | 0-M37005 | 10500 | 905 | 18290 | -31 | -2 | 11.0 | 5.2 | 772 | -1 | -1 | 8.5 | 3444 | 126 | 3.3 | 115 | 0.247 |
| 30-45.7413-110.0064-2-12- | 0-M37006 | 10110 | 738 | 14050 | 81 | -2 | 10.7 | 5.7 | -274 | -1 | -1 | 11.4 | 4059 | 124 | 4.1 | 157 | 0.281 |
| 30-45.7480-110.0354-2-15- | 0-M37007 | 8473 | 1015 | 16960 | 54 | -2 | 8.7 | 4.0 | 632 | -1 | 1 | 7.1 | 3166 | 126 | 2.9 | 129 | 0.211 |
| 30-45.7390-110.0679-2-15- | 0-M37008 | 10650 | 1063 | 14690 | -32 | -2 | 8.5 | 5.9 | -359 | -1 | -1 | 8.5 | 3453 | 124 | 3.1 | -46 | 0.224 |
| 30-45.7124-110.1233-2-12- | 0-M37009 | 5838 | 479 | 14560 | -32 | -2 | 8.2 | 5.1 | 366 | -1 | -1 | 9.4 | 3281 | 82 | 3.1 | -86 | 0.277 |
| 30-45.7558-110.1183-2-15- | 0-M37010 | 10120 | 785 | 21740 | -32 | -2 | 12.6 | 4.9 | 637 | -1 | -1 | 7.9 | 3691 | 137 | 1.8 | 110 | 0.304 |
| 30-45.7911-110.0422-2-12- | 0-M37011 | 13370 | 706 | 16400 | -33 | -2 | 12.4 | 4.2 | 697 | -1 | -1 | 7.8 | 3294 | 120 | -1.6 | -44 | 0.282 |
| 30-45.7811-110.1247-2-12- | 0-M37012 | 11600 | 693 | 15570 | -31 | -2 | 9.9 | 5.1 | 499 | -1 | -1 | 9.7 | 3747 | 110 | 2.8 | 82 | 0.268 |
| 30-45.7978-110.1042-2-12- | 0-M37013 | 13140 | 716 | 17120 | 41 | -2 | 11.7 | 3.9 | -276 | -1 | -1 | 6.2 | 3006 | 144 | -1.5 | 105 | 0.339 |
| 30-45.7994-110.1092-2-12- | 0-M37014 | 12600 | 1166 | 18100 | -33 | -2 | 13.3 | 4.1 | 805 | -1 | -1 | 7.3 | 3271 | 151 | 2.7 | 86 | 0.301 |
| 30-45.8083-110.0692-2-12- | 0-M37015 | 10410 | 609 | 17930 | 66 | -2 | 11.3 | 4.1 | 656 | -1 | -1 | 7.1 | 2959 | 103 | 2.8 | 59 | 0.268 |
| 30-45.8300-110.0447-2-12- | 0-M37016 | 10840 | 735 | 12960 | -27 | -2 | 8.0 | 5.8 | -287 | -1 | -1 | 8.3 | 3044 | 92 | 2.5 | 89 | 0.337 |
| 30-45.8328-110.0536-2-12- | 0-M37017 | 11590 | 737 | 12490 | 66 | -2 | 9.8 | 4.5 | 438 | -1 | -1 | 8.5 | 2878 | 98 | 2.7 | 104 | 0.282 |
| 30-45.8472-110.0325-2-15- | 0-M37018 | 11800 | 820 | 13370 | 55 | -2 | 12.7 | 5.2 | 525 | -1 | -1 | 9.8 | 3576 | 127 | -1.8 | 109 | 0.235 |
| 30-45.7978-110.4383-2-12- | 0-M37019 | 11720 | 1029 | 13280 | -36 | -2 | 16.4 | 5.7 | 428 | -1 | -1 | 10.9 | 7196 | 295 | 3.0 | 98 | 0.294 |

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

(1)

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER AND FIELD DATA | | | | | | | | | | | | | | | | | | | | | | | | | | U CONCENTRATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | TIME SAMPLED | | | | | | | | | | | | | | | | | | | | | | | | | |
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | DATE | HOUR | AIR TEMPERATURE | WATER TEMPERATURE | COMMENTS | SPECIAL MEASUREMENTS | pH | CONDUCTIVITY (µmho/cm) | SCINTILLOMETER (eU, ppm) | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm |
| 30- | 45.7808- | 110.4347- | 2- | 12- | 0- | M37020- | 10/09/76- | 12- | 19- | 9.0- | C- | - | 5.7- | 380- | 3- | 1- | 1- | 3- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 2.40 |
| 30- | 45.8083- | 110.4250- | 2- | 12- | 0- | M37021- | 10/09/76- | 13- | 19- | 8.5- | C- | - | 5.9- | 380- | 1- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 3- | 2- | 2- | 1- | -3- | - | - | - | - | 2.80 |
| 30- | 45.8100- | 110.4031- | 2- | 12- | 0- | M37022- | 10/09/76- | 13- | 21- | 9.0- | C- | - | 5.9- | 360- | 6- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 1- | -3- | - | - | - | - | 3.40 |
| 30- | 45.8092- | 110.4028- | 2- | 12- | 0- | M37023- | 10/09/76- | 13- | 20- | 9.0- | C- | - | 5.9- | 360- | 5- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 1- | -3- | - | - | - | - | 2.80 |
| 30- | 45.7931- | 110.3725- | 2- | 12- | 0- | M37024- | 10/09/76- | 14- | 18- | 9.5- | C- | - | 5.7- | 360- | 1- | 1- | 1- | 3- | 6- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 1- | -3- | - | - | - | - | 2.00 |
| 30- | 45.8069- | 110.3083- | 2- | 12- | 0- | M37025- | 10/09/76- | 15- | 21- | 9.0- | C- | - | 5.7- | 370- | 1- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 2- | 2- | 3- | 1- | -3- | - | - | - | - | 2.20 |
| 30- | 45.8128- | 110.3086- | 2- | 12- | 0- | M37026- | 10/09/76- | 15- | 21- | 9.5- | C- | - | 5.9- | 360- | 3- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 2- | 2- | 2- | 1- | -3- | - | - | - | - | 2.90 |
| 30- | 45.8097- | 110.3322- | 2- | 12- | 0- | M37027- | 10/09/76- | 16- | 20- | 8.5- | C- | - | 5.9- | 380- | 5- | 1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 11.70 |
| 30- | 45.7869- | 110.6364- | 2- | 15- | 0- | M37028- | 10/10/76- | 8- | 11- | | -C- | - | - | - | -1- | 1- | 5- | 7- | -1- | -2- | 4- | 2- | 2- | 2- | -3- | - | - | - | - | 2.40 |
| 30- | 45.7769- | 110.6411- | 2- | 12- | 0- | M37029- | 10/10/76- | 8- | 11- | 6.5- | C- | - | 5.9- | 340- | -1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 3- | 3- | 2- | 2- | -3- | - | - | - | - | - | 1.90 |
| 30- | 45.7625- | 110.6744- | 2- | 12- | 0- | M37030- | 10/10/76- | 8- | 10- | 7.5- | C- | - | 5.7- | 500- | -1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | - | 2.40 |
| 30- | 45.7761- | 110.7017- | 2- | 12- | 0- | M37031- | 10/10/76- | 9- | 10- | 7.5- | C- | - | 5.7- | 450- | -1- | 1- | 5- | 6- | 2- | 2- | 3- | 2- | 4- | 3- | 2- | 2- | -3- | - | - | - | - | - | 2.10 |
| 30- | 45.7858- | 110.7039- | 2- | 15- | 0- | M37032- | 10/10/76- | 9- | 12- | | -C- | - | - | - | -1- | 1- | 5- | 7- | -1- | -2- | 4- | 2- | 2- | 2- | -3- | - | - | - | - | 2.50 |
| 30- | 45.7153- | 110.6973- | 2- | 12- | 0- | M37033- | 10/10/76- | 9- | 10- | 6.0- | C- | - | 5.7- | 900- | -1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 3- | 4- | 2- | 2- | -3- | - | - | - | - | - | 2.00 |
| 30- | 45.7131- | 110.6972- | 2- | 12- | 0- | M37034- | 10/10/76- | 9- | 11- | 6.5- | C- | - | 5.7- | 380- | -1- | 1- | 3- | 6- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | - | 2.90 |
| 30- | 45.6880- | 110.7171- | 2- | 12- | 0- | M37035- | 10/10/76- | 10- | 10- | 6.0- | C- | - | 5.9- | 360- | -1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | - | 2.50 |
| 30- | 45.7159- | 110.6578- | 2- | 11- | 0- | M37036- | 10/10/76- | 10- | 11- | 6.5- | C- | - | 6.1- | 450- | -1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | - | 2.20 |
| 30- | 45.7092- | 110.6609- | 2- | 11- | 0- | M37037- | 10/10/76- | 10- | 11- | 6.0- | C- | - | 6.1- | 550- | -1- | 1- | 5- | 6- | 2- | 2- | 1- | 3- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | - | 1.80 |
| 30- | 45.6571- | 110.6353- | 2- | 12- | 0- | M37038- | 10/10/76- | 11- | 11- | 7.0- | C- | - | 5.9- | 340- | -1- | 1- | 3- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | - | 2.70 |
| 30- | 45.7611- | 110.8806- | 2- | 12- | 0- | M37039- | 10/10/76- | 11- | 6- | 4.0- | C- | - | 5.9- | 345- | -1- | 1- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | - | 2.00 |
| 30- | 45.7708- | 110.8186- | 2- | 12- | 0- | M37040- | 10/10/76- | 11- | 1- | 1.5- | C- | - | 5.7- | 280- | -1- | 7- | 2- | 7- | 2- | 2- | 1- | 2- | 1- | 3- | 3- | 2- | -3- | - | - | - | - | - | 2.50 |
| 30- | 45.7592- | 110.8669- | 2- | 12- | 0- | M37041- | 10/10/76- | 11- | 2- | 1.5- | C- | - | 5.7- | 300- | -1- | 1- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | - | 2.50 |
| 30- | 45.7667- | 110.8786- | 2- | 12- | 0- | M37042- | 10/10/76- | 12- | 2- | 3.5- | C- | - | 5.9- | 320- | -1- | 1- | 2- | 7- | 3- | 2- | 1- | 2- | 3- | 3- | 2- | 2- | -3- | - | - | - | - | - | 2.50 |
| 30- | 45.7758- | 110.8736- | 2- | 12- | 0- | M37043- | 10/10/76- | 12- | 1- | 1.5- | C- | - | 5.7- | 285- | -1- | 1- | 2- | 7- | 3- | 2- | 1- | 2- | 3- | 3- | 2- | 1- | -3- | - | - | - | - | - | 2.20 |
| 30- | 45.7875- | 110.8847- | 2- | 12- | 0- | M37044- | 10/10/76- | 12- | 8- | 3.0- | C- | - | 5.7- | 300- | -1- | 1- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | - | 2.00 |
| 30- | 45.7958- | 110.8778- | 2- | 15- | 0- | M37045- | 10/10/76- | 12- | 7- | | -C- | - | - | - | -1- | 1- | 5- | 6- | -1- | -2- | 4- | 3- | 4- | 2- | -3- | - | - | - | - | 2.30 |
| 30- | 45.8194- | 110.8939- | 2- | 12- | 0- | M37046- | 10/10/76- | 13- | 5- | 3.5- | C- | - | 5.7- | 325- | -1- | 1- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -8- | - | - | - | - | - | 9.10 |
| 30- | 45.8208- | 110.8867- | 2- | 12- | 0- | M37047- | 10/10/76- | 13- | 6- | 4.0- | C- | - | 5.7- | 300- | -1- | 1- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -8- | - | - | - | - | - | 2.20 |
| 30- | 45.8517- | 110.8833- | 2- | 12- | 0- | M37048- | 10/10/76- | 13- | 8- | 3.5- | C- | - | 5.7- | 320- | -1- | 1- | 2- | 7- | 2- | 2- | 1- | 2- | 2- | 3- | 2- | 1- | -8- | - | - | - | - | - | 2.20 |
| 30- | 45.8597- | 110.9003- | 2- | 12- | 0- | M37049- | 10/10/76- | 13- | 8- | 3.5- | - | - | 5.7- | 280- | -1- | 1- | 2- | 7- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | - | 3.10 |
| 30- | 45.8708- | 110.9097- | 2- | 12- | 0- | M37050- | 10/10/76- | 13- | 7- | 4.0- | - | - | 5.9- | 340- | -1- | 1- | 2- | 7- | 2- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | - | 2.20 |
| 30- | 45.8722- | 110.9033- | 2- | 12- | 0- | M37051- | 10/10/76- | 13- | 8- | 2.0- | - | - | 5.9- | 325- | -1- | 1- | 3- | 7- | 2- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | - | 3.70 |
| 30- | 45.8619- | 110.8392- | 2- | 12- | 0- | M37052- | 10/10/76- | 14- | 7- | 3.5- | - | - | 5.9- | 320- | -1- | 1- | 2- | 7- | 3- | 2- | 1- | 2- | 1- | 2- | 2- | 1- | -1- | - | - | - | - | - | 2.30 |
| 30- | 45.8647- | 110.8208- | 2- | 12- | 0- | M37053- | 10/10/76- | 14- | 8- | 3.5- | - | - | 5.7- | 310- | -1- | 1- | 3- | 7- | 2- | 2- | 1- | 2- | 1- | 2- | 3- | 1- | -1- | - | - | - | - | - | 2.20 |
| 30- | 45.8628- | 110.8108- | 2- | 12- | 0- | M37054- | 10/10/76- | 14- | 8- | 4.0- | - | - | 5.7- | 290- | -1- | 1- | 3- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -1- | - | - | - | - | - | 2.10 |
| 30- | 45.8389- | 110.8333- | 2- | 12- | 0- | M37055- | 10/10/76- | 15- | 8- | 4.0- | - | - | 5.9- | 300- | -1- | 1- | 3- | 7- | 2- | 2- | 1- | 2- | 3- | 3- | 4- | 1- | -1- | - | - | - | - | - | 2.50 |
| 30- | 45.8389- | 110.8000- | 2- | 12- | 0- | M37056- | 10/10/76- | 15- | 9- | 4.5- | - | - | 5.9- | 330- | -1- | 1- | 2- | 7- | 2- | 2- | 1- | 2- | 3- | 3- | 4- | 1- | -1- | - | - | - | - | - | 2.70 |
| 30- | 45.8306- | 110.7753- | 2- | 12- | 0- | M37057- | 10/10/76- | 15- | 8- | 4.0- | - | - | 5.9- | 340- | -1- | 1- | 2- | 7- | 2- | 2- | 1- | 2- | 1- | 2- | 3- | 1- | -1- | - | - | - | - | - | 2.50 |
| 30- | 45.8808- | 110.7889- | 2- | 12- | 0- | M37058- | 10/10/76- | 16- | 9- | 4.0- | - | - | 5.9- | 320- | -1- | 1- | 2- | 7- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 1- | -1- | - | - | - | - | - | 2.80 |
| 30- | 45.8908- | 110.7958- | 2- | 12- | 0- | M37059- | 10/10/76- | 16- | 9- | 3.5- | - | - | 5.9- | 310- | -1- | 1- | 2- | 7- | 3- | 2- | 1- | 2- | 1- | 3- | 2- | 1- | -1- | - | - | - | - | - | 2.50 |
| 30- | 45.8744- | 110.7722- | 2- | 12- | 0- | M37060- | 10/10/76- | 16- | 8- | 4.0- | - | - | 5.9- | 310- | -1- | 1- | 3- | 7- | 3- | 2- | 1- | 2- | 1- | 3- | 2- | 1- | -1- | - | - | - | - | - | 2.10 |
| 30- | 45.8972- | 110.8775- | 2- | 12- | 0- | M37061- | 10/10/76- | 17- | - | | - | - | 5.7- | 370- | -1- | 1- | 3- | 7- | 2- | 2- | 1- | 2- | 2- | 3- | 2- | 3- | -3- | - | - | - | - | - | 2.60 |
| 30- | 45.8944- | 110.8731- | 2- | 12- | 0- | M37062- | 10/10/76- | 17- | -2- | | - | - | 5.5- | 280- | -1- | 1- | 3- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | - | 3.10 |
| 30- | 45.9175- | 110.8628- | 2- | 12- | 0- | M37063- | 10/10/76- | 17- | 2- | | -C- | - | 5.7- | 600- | -1- | 1- | 5- | 6- | 1- | 2- | 2- | 2- | 3- | 2- | 2- | 2- | -3- | - | - | - | - | - | 4.40 |
| 30- | 45.9256- | 110.8617- | 2- | 12- | 0- | M37064- | 10/11/76- | 8- | -2- | 0.2- | C- | - | 5.7- | 340- | -1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 2- | 2- | 2- | 3- | -3- | - | - | - | - | - | 4.00 |
| 30- | 45.9281- | 110.8933- | 2- | 12- | 0- | M37065- | 10/11/76- | 8- | -2- | 0.1- | C- | - | 5.7- | 350- | -1- | 1- | 5- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 2- | 2- | -3- | - | - | - | - | - | 2.90 |
| 30- | 45.9453- | 110.8839- | 2- | 12- | 0- | M37066- | 10/11/76- | 8- | -1- | 0.4- | C- | - | 5.8- | 440- | -1- | 1- | 4- | 6- | 3- | 2- | 3- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | - | 2.10 |
| 30- | 45.9469- | 110.8886- | 2- | 12- | 0- | M37067- | 10/11/76- | 8- | -1- | 0.4- | C- | - | 5.8- | 500- | -1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 4- | 2- | -3- | - | - | - | - | - | 2.90 |
| 30- | 45.9361- | 110.9161- | 2- | 12- | 0- | M37068- | 10/10/76- | 8- | 6- | 4.3- | C- | - | 5.7- | 340- | -1- | 1- | 5- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | - | 2.50 |
| 30- | 45.9053- | 110.1339- | 2- | 12- | 0- | M37069- | 10/10/76- | 8- | 6- | 1.0- | - | - | 6.3- | 310- | -1- | 6- | 4- | 6- | 3- | 3- | 2- | 2- | 2- | 4- | 2- | 2- | -3- | - | - | - | - | - | 2.70 |
| 30- | 45.9425- | 110.1908- | 2- | 12- | 0- | M37070- | 10/10/76- | 8- | 6- | | - | - | 6.3- | 250- | -1- | 6- | 4- | 6- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | - | 2.50 |

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

②

| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | 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) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ag | Bi | Cd | Cu | Nb | Ni | Pb | Sn | W | Be | Li |
| 30-45.7808-110.4347-2-12- | 0-M37020 | -5 | 6 | -5 | 43 | -20 | 83 | 10 | -10 | -15 | 2 | 41 |
| 30-45.8083-110.4250-2-12- | 0-M37021 | -5 | -5 | -5 | 54 | -20 | 64 | 15 | 19 | 20 | 2 | 24 |
| 30-45.8100-110.4031-2-12- | 0-M37022 | -5 | -5 | -5 | 34 | -20 | 68 | 16 | 12 | -15 | 2 | 31 |
| 30-45.8092-110.4028-2-12- | 0-M37023 | -5 | -5 | -5 | 55 | -20 | 71 | 29 | 13 | -15 | 2 | 35 |
| 30-45.7931-110.3725-2-12- | 0-M37024 | -5 | -5 | -5 | 38 | -20 | 83 | 20 | -10 | -15 | 2 | 29 |
| 30-45.8069-110.3083-2-12- | 0-M37025 | -5 | -5 | -5 | 40 | -20 | 64 | -5 | -10 | -15 | 2 | 28 |
| 30-45.8128-110.3086-2-12- | 0-M37026 | -5 | -5 | -5 | 39 | -20 | 36 | 17 | 13 | 18 | 3 | 37 |
| 30-45.8097-110.3322-2-12- | 0-M37027 | -5 | -5 | -5 | 57 | -20 | 62 | 20 | -10 | -15 | 3 | 42 |
| 30-45.7869-110.6364-2-15- | 0-M37028 | -5 | -5 | -5 | 60 | -20 | 67 | 11 | -10 | -15 | 3 | 46 |
| 30-45.7769-110.6411-2-12- | 0-M37029 | -5 | -5 | -5 | 34 | -20 | 45 | 6 | -10 | -15 | 3 | 35 |
| 30-45.7625-110.6744-2-12- | 0-M37030 | -5 | -5 | -5 | 38 | -20 | 77 | 5 | 10 | 15 | 3 | 32 |
| 30-45.7761-110.7017-2-12- | 0-M37031 | -5 | -5 | -5 | 112 | -20 | 81 | 14 | -10 | 22 | 3 | 44 |
| 30-45.7858-110.7039-2-15- | 0-M37032 | -5 | -5 | -5 | 64 | -20 | 88 | 16 | -10 | -15 | 3 | 35 |
| 30-45.7153-110.6973-2-12- | 0-M37033 | -5 | -5 | -5 | 38 | -20 | 44 | 8 | -10 | -15 | 2 | 36 |
| 30-45.7131-110.6972-2-12- | 0-M37034 | -5 | -5 | 6 | 45 | -20 | 110 | 10 | 19 | 38 | 2 | 33 |
| 30-45.6880-110.7171-2-12- | 0-M37035 | -5 | -5 | -5 | 37 | -20 | 60 | -5 | -10 | 16 | 3 | 25 |
| 30-45.7159-110.6578-2-11- | 0-M37036 | -5 | -5 | -5 | 43 | -20 | 59 | 14 | -10 | -15 | 3 | 20 |
| 30-45.7092-110.6609-2-11- | 0-M37037 | -5 | -5 | -5 | 17 | -20 | 62 | 10 | -10 | 19 | 3 | 22 |
| 30-45.6571-110.6353-2-12- | 0-M37038 | -5 | -5 | -5 | 23 | -20 | 35 | 14 | -10 | -15 | 2 | 20 |
| 30-45.7611-110.8806-2-12- | 0-M37039 | -5 | -5 | -5 | 33 | -20 | 101 | -5 | 12 | -15 | 2 | 19 |
| 30-45.7708-110.8186-2-12- | 0-M37040 | -5 | -5 | 5 | 50 | -20 | 82 | 19 | -10 | 15 | 2 | 27 |
| 30-45.7592-110.8669-2-12- | 0-M37041 | -5 | -5 | -5 | 46 | -20 | 78 | 12 | -10 | 23 | 2 | 26 |
| 30-45.7667-110.8786-2-12- | 0-M37042 | -5 | -5 | 6 | 48 | -20 | 73 | 6 | -10 | 39 | 2 | 20 |
| 30-45.7758-110.8736-2-12- | 0-M37043 | -5 | -5 | -5 | 41 | -20 | 66 | 9 | -10 | -15 | 3 | 20 |
| 30-45.7875-110.8847-2-12- | 0-M37044 | -5 | -5 | -5 | 55 | -20 | 76 | 12 | -10 | -15 | 2 | 16 |
| 30-45.7958-110.8778-2-15- | 0-M37045 | -5 | -5 | -5 | 49 | -20 | 86 | 15 | 14 | -15 | 2 | 23 |
| 30-45.8194-110.8939-2-12- | 0-M37046 | -5 | -5 | -5 | 49 | -20 | 92 | 24 | -10 | 18 | 3 | 22 |
| 30-45.8208-110.8867-2-12- | 0-M37047 | -5 | -5 | -5 | 36 | -20 | 93 | 24 | -10 | -15 | 2 | 26 |
| 30-45.8517-110.8833-2-12- | 0-M37048 | -5 | -5 | -5 | 35 | -20 | 57 | 9 | -10 | -15 | 3 | 17 |
| 30-45.8597-110.9003-2-12- | 0-M37049 | -5 | -5 | -5 | 81 | -20 | 55 | 9 | -10 | 30 | 2 | 27 |
| 30-45.8708-110.9097-2-12- | 0-M37050 | -5 | -5 | -5 | 34 | -20 | 66 | 24 | 10 | -15 | 2 | 20 |
| 30-45.8722-110.9033-2-12- | 0-M37051 | -5 | -5 | -5 | 40 | -20 | 76 | 6 | -10 | -15 | 2 | 37 |
| 30-45.8619-110.8392-2-12- | 0-M37052 | -5 | -5 | -5 | 36 | -20 | 52 | 8 | -10 | -15 | 2 | 23 |
| 30-45.8647-110.8208-2-12- | 0-M37053 | -5 | -5 | -5 | 40 | -20 | 85 | 12 | -10 | -15 | 3 | 27 |
| 30-45.8628-110.8108-2-12- | 0-M37054 | -5 | -5 | -5 | 43 | -20 | 47 | 19 | -10 | -15 | 2 | 29 |
| 30-45.8389-110.8333-2-12- | 0-M37055 | -5 | -5 | -5 | 27 | -20 | 63 | 15 | -10 | -15 | 2 | 19 |
| 30-45.8389-110.8000-2-12- | 0-M37056 | -5 | -5 | -5 | 34 | -20 | 72 | 6 | -10 | -15 | 2 | 20 |
| 30-45.8306-110.7753-2-12- | 0-M37057 | -5 | -5 | -5 | 38 | -20 | 65 | 10 | -10 | -15 | 2 | 20 |
| 30-45.8808-110.7889-2-12- | 0-M37058 | -5 | -5 | -5 | 30 | -20 | 45 | 10 | -10 | -15 | 3 | 24 |
| 30-45.8908-110.7958-2-12- | 0-M37059 | -5 | -5 | -5 | 35 | -20 | 40 | 18 | -10 | -15 | 2 | 27 |
| 30-45.8744-110.7722-2-12- | 0-M37060 | -5 | -5 | -5 | 38 | -20 | 45 | 7 | -10 | -15 | 3 | 20 |
| 30-45.8972-110.8775-2-12- | 0-M37061 | -5 | -5 | -5 | 38 | -20 | 24 | -5 | -10 | -15 | 2 | 26 |
| 30-45.8944-110.8731-2-12- | 0-M37062 | -5 | -5 | -5 | 32 | -20 | -15 | 23 | -10 | -15 | 2 | 25 |
| 30-45.9175-110.8628-2-12- | 0-M37063 | -5 | -5 | -5 | 37 | -20 | 48 | 11 | -10 | -15 | 2 | 30 |
| 30-45.9256-110.8617-2-12- | 0-M37064 | -5 | -5 | -5 | 42 | -20 | 52 | 12 | -10 | -15 | 3 | 23 |
| 30-45.9281-110.8933-2-12- | 0-M37065 | -5 | -5 | -5 | 20 | -20 | -15 | 15 | -10 | -15 | 3 | 23 |
| 30-45.9453-110.8839-2-12- | 0-M37066 | -5 | -5 | -5 | 33 | -20 | 39 | -5 | -10 | -15 | 3 | 24 |
| 30-45.9469-110.8886-2-12- | 0-M37067 | -5 | -5 | -5 | 38 | -20 | 36 | 6 | -10 | -15 | 2 | 23 |
| 30-45.9361-110.9161-2-12- | 0-M37068 | -5 | -5 | -5 | 14 | -20 | 17 | 11 | -10 | -15 | 2 | 29 |
| 30-45.9053-110.1339-2-12- | 0-M37069 | -5 | -5 | -5 | 37 | -20 | 38 | 14 | -10 | -15 | 2 | 28 |
| 30-45.9425-110.1908-2-12- | 0-M37070 | -5 | -5 | -5 | 32 | -20 | 46 | 10 | -10 | -15 | 3 | 32 |

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

③

| DOE SAMPLE NUMBER: STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | Al | Au | Ba | Ca | Ce | Cl | Co | Cr | Cs | Dy | Eu | Fe | Hf | K | La | Lu |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (Concentrations reported in weight parts per million (ppm)) | | | | | | | | | | | | | | | |
| 30- | 45.7808- | 110.4347- | 2- | 12- | | 0-M37020 | 64970 | -0.09 | 835 | 26170 | 87 | -101 | 15.8 | 336 | 3.6 | 4 | 1.7 | 47590 | 9.5 | 19940 | 33 | 0.3 |
| 30- | 45.8083- | 110.4250- | 2- | 12- | | 0-M37021 | 60030 | -0.08 | 701 | 23220 | 97 | -92 | 17.8 | 473 | -1.9 | 3 | 1.7 | 70670 | 12.4 | 19560 | 45 | 0.4 |
| 30- | 45.8100- | 110.4031- | 2- | 12- | | 0-M37022 | 63940 | -0.09 | 628 | 31750 | 58 | -99 | 22.4 | 139 | -2.2 | 4 | 1.6 | 50730 | 8.6 | 16030 | 38 | 0.4 |
| 30- | 45.8092- | 110.4028- | 2- | 12- | | 0-M37023 | 61180 | -0.07 | 899 | 22640 | 70 | -85 | 18.7 | 437 | 2.8 | 4 | 1.6 | 56710 | 12.7 | 18540 | 44 | 0.4 |
| 30- | 45.7931- | 110.3725- | 2- | 12- | | 0-M37024 | 65900 | -0.09 | 987 | 29240 | 80 | -107 | 16.1 | 347 | 2.3 | 3 | 1.8 | 39160 | 7.6 | 14860 | 34 | 0.3 |
| 30- | 45.8069- | 110.3083- | 2- | 12- | | 0-M37025 | 67690 | -0.08 | 916 | 29730 | 54 | -92 | 14.7 | 205 | 2.9 | 3 | 2.0 | 40680 | 6.5 | 19280 | 40 | 0.4 |
| 30- | 45.8128- | 110.3086- | 2- | 12- | | 0-M37026 | 65180 | -0.08 | 1044 | 36580 | 83 | -91 | 14.0 | 132 | 5.2 | 5 | 2.0 | 40100 | 12.6 | 19150 | 43 | 0.4 |
| 30- | 45.8097- | 110.3322- | 2- | 12- | | 0-M37027 | 58390 | -0.07 | 740 | 27920 | 70 | -83 | 14.3 | 95 | 5.4 | 6 | 1.7 | 32850 | 16.3 | 15360 | 52 | 0.7 |
| 30- | 45.7869- | 110.6364- | 2- | 15- | | 0-M37028 | 73160 | -0.09 | 612 | 20350 | 70 | -76 | 14.8 | 138 | 4.0 | 4 | 1.8 | 34670 | 6.0 | 18300 | 35 | 0.3 |
| 30- | 45.7769- | 110.6411- | 2- | 12- | | 0-M37029 | 64890 | -0.08 | 803 | 24250 | 59 | -91 | 14.6 | 232 | 2.5 | 3 | 1.5 | 39580 | 5.4 | 20140 | 36 | 0.3 |
| 30- | 45.7625- | 110.6744- | 2- | 12- | | 0-M37030 | 64410 | -0.08 | 973 | 23750 | 77 | -91 | 14.3 | 326 | 2.8 | 4 | 1.7 | 44680 | 9.4 | 22250 | 35 | 0.4 |
| 30- | 45.7761- | 110.7017- | 2- | 12- | | 0-M37031 | 65340 | -0.07 | 928 | 22820 | 56 | -91 | 16.7 | 185 | 2.6 | 3 | 1.5 | 37680 | 5.8 | 22370 | 37 | 0.3 |
| 30- | 45.7858- | 110.7039- | 2- | 15- | | 0-M37032 | 73970 | -0.09 | 710 | 19900 | 65 | -78 | 14.7 | 138 | 3.6 | 4 | 1.7 | 33350 | 6.1 | 20060 | 34 | 0.3 |
| 30- | 45.7153- | 110.6973- | 2- | 12- | | 0-M37033 | 66300 | -0.07 | 875 | 24350 | 59 | -90 | 13.7 | 222 | 2.2 | 3 | 1.4 | 36050 | 5.4 | 24590 | 39 | 0.3 |
| 30- | 45.7131- | 110.6972- | 2- | 12- | | 0-M37034 | 60730 | -0.08 | 987 | 24250 | 87 | -88 | 17.6 | 550 | 2.8 | 4 | 1.9 | 68400 | 17.1 | 20280 | 47 | 0.4 |
| 30- | 45.6880- | 110.7171- | 2- | 12- | | 0-M37035 | 63780 | -0.08 | 1058 | 25540 | 67 | -92 | 19.0 | 357 | 3.4 | 4 | 1.8 | 50010 | 10.5 | 21430 | 39 | 0.3 |
| 30- | 45.7159- | 110.6578- | 2- | 11- | | 0-M37036 | 67100 | -0.09 | 1003 | 23900 | 59 | -106 | 15.0 | 214 | -2.0 | 3 | 1.6 | 33820 | 6.7 | 19350 | 33 | 0.3 |
| 30- | 45.7092- | 110.6609- | 2- | 11- | | 0-M37037 | 65860 | -0.07 | 854 | 23100 | 54 | -89 | 13.3 | 170 | 2.6 | 3 | 1.5 | 32590 | 4.5 | 20310 | 37 | 0.3 |
| 30- | 45.6571- | 110.6353- | 2- | 12- | | 0-M37038 | 62800 | -0.08 | 947 | 24820 | 78 | -89 | 17.0 | 469 | 2.5 | 4 | 2.0 | 58160 | 13.4 | 17790 | 49 | 0.4 |
| 30- | 45.7611- | 110.8806- | 2- | 12- | | 0-M37039 | 63400 | -0.08 | 1035 | 29280 | 56 | 86 | 19.1 | 332 | 2.0 | 3 | 1.7 | 46050 | 6.5 | 19010 | 35 | 0.3 |
| 30- | 45.7708- | 110.8186- | 2- | 12- | | 0-M37040 | 67470 | -0.09 | 903 | 22830 | 72 | -101 | 15.3 | 252 | 3.4 | 4 | 1.6 | 39330 | 6.4 | 20110 | 31 | 0.4 |
| 30- | 45.7592- | 110.8669- | 2- | 12- | | 0-M37041 | 67670 | -0.08 | 814 | 22230 | 67 | -95 | 16.0 | 232 | 4.3 | 3 | 1.7 | 44230 | 6.0 | 22600 | 36 | 0.3 |
| 30- | 45.7667- | 110.8786- | 2- | 12- | | 0-M37042 | 64070 | -0.08 | 997 | 31370 | 64 | -88 | 18.2 | 403 | 3.0 | 4 | 1.7 | 53950 | 9.8 | 18010 | 41 | 0.3 |
| 30- | 45.7758- | 110.8736- | 2- | 12- | | 0-M37043 | 69360 | -0.08 | 891 | 27960 | 57 | -91 | 20.3 | 181 | 3.0 | 5 | 1.6 | 44980 | 6.6 | 18020 | 35 | 0.3 |
| 30- | 45.7875- | 110.8847- | 2- | 12- | | 0-M37044 | 60060 | -0.08 | 960 | 44130 | 64 | -95 | 16.1 | 334 | 3.0 | 3 | 1.4 | 43850 | 7.8 | 14890 | 28 | 0.3 |
| 30- | 45.7958- | 110.8778- | 2- | 15- | | 0-M37045 | 64680 | -0.08 | 746 | 24740 | 75 | -97 | 18.2 | 266 | 3.7 | 3 | 1.7 | 39960 | 7.1 | 16150 | 34 | 0.3 |
| 30- | 45.8194- | 110.8939- | 2- | 12- | | 0-M37046 | 64870 | -0.09 | 945 | 36170 | 66 | -103 | 17.5 | 257 | 5.1 | 5 | 1.8 | 47000 | 12.4 | 14730 | 37 | 0.6 |
| 30- | 45.8208- | 110.8867- | 2- | 12- | | 0-M37047 | 67720 | -0.08 | 1068 | 22780 | 55 | -84 | 19.2 | 325 | 3.9 | 4 | 1.6 | 37770 | 6.7 | 22210 | 34 | 0.3 |
| 30- | 45.8517- | 110.8833- | 2- | 12- | | 0-M37048 | 51740 | -0.08 | 767 | 19740 | 49 | -80 | 11.2 | 262 | 2.8 | 3 | 1.7 | 28650 | 10.6 | 14540 | 26 | 0.3 |
| 30- | 45.8597- | 110.9003- | 2- | 12- | | 0-M37049 | 62080 | -0.08 | 832 | 28310 | 69 | -86 | 14.5 | 182 | 5.3 | 4 | 1.9 | 37560 | 9.2 | 17530 | 34 | 0.4 |
| 30- | 45.8708- | 110.9097- | 2- | 12- | | 0-M37050 | 59030 | -0.08 | 827 | 29050 | 50 | -85 | 14.3 | 556 | 2.1 | 3 | 1.4 | 47860 | 8.5 | 16150 | 35 | 0.3 |
| 30- | 45.8722- | 110.9033- | 2- | 12- | | 0-M37051 | 70390 | -0.09 | 961 | 24370 | 54 | -88 | 19.9 | 280 | 4.3 | 4 | 1.7 | 43700 | 5.8 | 16790 | 32 | 0.3 |
| 30- | 45.8619- | 110.8392- | 2- | 12- | | 0-M37052 | 57470 | -0.10 | 876 | 31020 | 70 | -104 | 17.9 | 643 | 2.6 | 3 | 2.0 | 44370 | 10.4 | 17090 | 32 | 0.3 |
| 30- | 45.8647- | 110.8208- | 2- | 12- | | 0-M37053 | 65890 | -0.09 | 908 | 27080 | 78 | -90 | 23.6 | 310 | 3.1 | 3 | 1.8 | 55240 | 7.5 | 18380 | 36 | 0.3 |
| 30- | 45.8628- | 110.8108- | 2- | 12- | | 0-M37054 | 63220 | -0.08 | 930 | 25930 | 48 | -89 | 16.7 | 358 | 3.0 | 3 | 1.4 | 40650 | 5.4 | 18340 | 32 | 0.3 |
| 30- | 45.8389- | 110.8333- | 2- | 12- | | 0-M37055 | 50450 | -0.07 | 694 | 20230 | 45 | -67 | 14.5 | 309 | 3.0 | 3 | 1.3 | 36310 | 13.9 | 14990 | 29 | 0.3 |
| 30- | 45.8389- | 110.8000- | 2- | 12- | | 0-M37056 | 56660 | -0.09 | 826 | 25170 | 74 | -88 | 15.5 | 363 | 4.2 | 4 | 1.7 | 42530 | 15.5 | 19290 | 29 | 0.4 |
| 30- | 45.8306- | 110.7753- | 2- | 12- | | 0-M37057 | 59340 | -0.08 | 707 | 30240 | 63 | -89 | 17.3 | 434 | 3.1 | 3 | 1.7 | 45800 | 14.1 | 16740 | 31 | 0.4 |
| 30- | 45.8808- | 110.7889- | 2- | 12- | | 0-M37058 | 62180 | -0.09 | 915 | 22840 | 60 | -85 | 15.0 | 259 | 3.8 | 5 | 1.9 | 42500 | 13.7 | 17240 | 31 | 0.5 |
| 30- | 45.8908- | 110.7958- | 2- | 12- | | 0-M37059 | 56490 | -0.08 | 622 | 23980 | 58 | -82 | 16.3 | 181 | 3.8 | 4 | 1.5 | 35850 | 8.4 | 15060 | 32 | 0.3 |
| 30- | 45.8744- | 110.7722- | 2- | 12- | | 0-M37060 | 54470 | -0.08 | 790 | 21980 | 52 | -79 | 12.0 | 228 | 2.6 | 4 | 1.4 | 27100 | 8.5 | 16590 | 26 | 0.3 |
| 30- | 45.8972- | 110.8775- | 2- | 12- | | 0-M37061 | 74090 | -0.09 | 1070 | 27500 | 71 | -101 | 20.6 | 221 | 3.4 | 3 | 1.8 | 48350 | 5.9 | 20260 | 38 | 0.3 |
| 30- | 45.8944- | 110.8731- | 2- | 12- | | 0-M37062 | 59200 | -0.07 | 981 | 28090 | 68 | -75 | 9.7 | 129 | 2.8 | 4 | 1.7 | 27720 | 11.9 | 18060 | 39 | 0.4 |
| 30- | 45.9175- | 110.8628- | 2- | 12- | | 0-M37063 | 73590 | -0.08 | 1274 | 23960 | 52 | -93 | 15.1 | 174 | 4.4 | 4 | 1.9 | 37460 | 6.1 | 18900 | 39 | 0.2 |
| 30- | 45.9256- | 110.8617- | 2- | 12- | | 0-M37064 | 74610 | -0.10 | 1180 | 27060 | 71 | -108 | 16.1 | 303 | 3.6 | 3 | 1.7 | 37050 | 5.4 | 17170 | 32 | 0.3 |
| 30- | 45.9281- | 110.8933- | 2- | 12- | | 0-M37065 | 54670 | -0.08 | 627 | 28050 | 61 | -68 | 7.8 | 117 | 4.2 | 4 | 1.5 | 24780 | 9.9 | 18730 | 25 | 0.4 |
| 30- | 45.9453- | 110.8839- | 2- | 12- | | 0-M37066 | 69900 | -0.08 | 1079 | 26860 | 50 | -101 | 14.8 | 275 | 2.9 | 3 | 1.7 | 39030 | 7.7 | 18490 | 34 | 0.2 |
| 30- | 45.9469- | 110.8886- | 2- | 12- | | 0-M37067 | 57970 | -0.08 | 908 | 25790 | 56 | -84 | 13.8 | 134 | 3.7 | 4 | 1.6 | 34440 | 10.7 | 16200 | 38 | 0.3 |
| 30- | 45.9361- | 110.9161- | 2- | 12- | | 0-M37068 | 44690 | -0.06 | 481 | 32830 | 43 | -70 | 7.1 | 53 | 2.7 | 4 | 1.2 | 17570 | 9.4 | 14220 | 22 | 0.3 |
| 30- | 45.9053- | 110.1339- | 2- | 12- | | 0-M37069 | 60400 | -0.07 | 647 | 25940 | 65 | -80 | 16.0 | 224 | 3.3 | 3 | 1.6 | 37610 | 13.5 | 13760 | 36 | 0.4 |
| 30- | 45.9425- | 110.1908- | 2- | 12- | | 0-M37070 | 68610 | -0.07 | 803 | 14690 | 66 | -78 | 14.2 | 137 | 5.1 | 4 | 1.6 | 37960 | 8.6 | 15310 | 38 | 0.3 |

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



| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | LAS SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | U/Th RATIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mg | Mn | Na | Rb | Sb | Sc | Sm | Sr | Ta | Tb | Th | Ti | V | Yb | Zn | |
| 30-45.7808-110.4347-2-12- | 0-M37020 | 10670 | 793 | 15320 | -35 | -2 | 12.2 | 5.0 | 524 | -1 | -1 | 7.7 | 4810 | 150 | 2.8 | -36 | 0.312 |
| 30-45.8083-110.4250-2-12- | 0-M37021 | 12110 | 842 | 14880 | -35 | -2 | 14.8 | 4.9 | -280 | -1 | -1 | 10.3 | 4687 | 199 | 3.7 | | 0.272 |
| 30-45.8100-110.4031-2-12- | 0-M37022 | 15530 | 997 | 15700 | -36 | -2 | 18.3 | 5.2 | -325 | -1 | -1 | 10.4 | 4722 | 133 | 2.6 | 143 | 0.327 |
| 30-45.8092-110.4028-2-12- | 0-M37023 | 10400 | 739 | 15220 | 60 | -2 | 12.8 | 4.8 | 500 | -1 | -1 | 9.7 | 4905 | 171 | 2.9 | 114 | 0.289 |
| 30-45.7931-110.3725-2-12- | 0-M37024 | 10680 | 732 | 19170 | 52 | -2 | 12.0 | 5.1 | 939 | -1 | -1 | 7.6 | 3787 | 124 | 3.2 | -10 | 0.263 |
| 30-45.8069-110.3083-2-12- | 0-M37025 | 10680 | 606 | 13800 | 67 | -2 | 11.5 | 4.3 | 553 | -2 | -1 | 7.7 | 3407 | 121 | 3.6 | -113 | 0.286 |
| 30-45.8128-110.3086-2-12- | 0-M37026 | 13410 | 772 | 15300 | 82 | -2 | 11.7 | 6.0 | 380 | -1 | -1 | 11.6 | 4161 | 110 | 3.8 | 102 | 0.250 |
| 30-45.8097-110.3322-2-12- | 0-M37027 | 10870 | 668 | 13430 | 62 | -2 | 10.1 | 8.6 | -258 | -1 | -1 | 12.4 | 3982 | 100 | 4.5 | 77 | 0.944 |
| 30-45.7869-110.6364-2-15- | 0-M37028 | 13710 | 609 | 8255 | 61 | -2 | 11.3 | 5.7 | -278 | -1 | -1 | 8.9 | 3466 | 116 | 3.0 | -41 | 0.270 |
| 30-45.7769-110.6411-2-12- | 0-M37029 | 10600 | 598 | 17700 | 59 | -2 | 11.6 | 4.0 | 578 | -1 | -1 | 6.9 | 2756 | 118 | 2.8 | -39 | 0.275 |
| 30-45.7625-110.6744-2-12- | 0-M37030 | 12210 | 754 | 15900 | 55 | -2 | 12.4 | 5.1 | -281 | -1 | -1 | 10.4 | 4406 | 141 | 2.9 | 61 | 0.231 |
| 30-45.7761-110.7017-2-12- | 0-M37031 | 13180 | 650 | 15180 | 72 | -2 | 11.3 | 4.4 | 620 | -1 | -1 | 7.3 | 4025 | 113 | -1.9 | 81 | 0.288 |
| 30-45.7858-110.7039-2-15- | 0-M37032 | 14550 | 617 | 8264 | 61 | -2 | 11.1 | 5.7 | -276 | -1 | -1 | 9.2 | 3893 | 118 | 2.8 | -45 | 0.272 |
| 30-45.7153-110.6973-2-12- | 0-M37033 | 10690 | 585 | 17690 | 72 | -2 | 11.1 | 4.0 | 616 | -1 | -1 | 7.5 | 3137 | 103 | 3.4 | -34 | 0.267 |
| 30-45.7131-110.6972-2-12- | 0-M37034 | 11550 | 822 | 15310 | 69 | -2 | 13.9 | 5.9 | 594 | -1 | -1 | 13.2 | 5563 | 196 | 3.7 | 147 | 0.220 |
| 30-45.6880-110.7171-2-12- | 0-M37035 | 12890 | 782 | 15210 | 63 | -2 | 12.4 | 4.8 | 501 | -1 | -1 | 9.6 | 4098 | 154 | 3.1 | 125 | 0.260 |
| 30-45.7159-110.6578-2-11- | 0-M37036 | 10370 | 720 | 15430 | -33 | -2 | 10.6 | 5.7 | 504 | -1 | -1 | 7.1 | 3267 | 109 | -2.4 | 102 | 0.310 |
| 30-45.7092-110.6609-2-11- | 0-M37037 | 10430 | 529 | 17970 | 46 | -2 | 10.4 | 3.4 | 620 | -1 | -1 | 6.0 | 3054 | 95 | 1.8 | 64 | 0.300 |
| 30-45.6571-110.6353-2-12- | 0-M37038 | 12410 | 782 | 15690 | -33 | -2 | 13.9 | 6.1 | 582 | -1 | -1 | 11.2 | 5010 | 172 | 3.4 | 118 | 0.241 |
| 30-45.7611-110.8806-2-12- | 0-M37039 | 14430 | 752 | 14360 | -31 | -2 | 14.0 | 4.4 | 494 | -1 | -1 | 6.8 | 3631 | 141 | 1.7 | -63 | 0.294 |
| 30-45.7708-110.8186-2-12- | 0-M37040 | 12550 | 765 | 13440 | -33 | -2 | 11.7 | 5.0 | 732 | -1 | -1 | 8.5 | 3885 | 139 | 2.3 | 75 | 0.294 |
| 30-45.7592-110.8669-2-12- | 0-M37041 | 11500 | 722 | 13290 | -34 | -2 | 13.0 | 4.3 | 621 | -1 | -1 | 8.6 | 3459 | 139 | 2.9 | -77 | 0.291 |
| 30-45.7667-110.8786-2-12- | 0-M37042 | 15780 | 864 | 14130 | 71 | -2 | 14.7 | 5.2 | 733 | -1 | -1 | 9.6 | 4436 | 163 | 3.8 | 127 | 0.260 |
| 30-45.7758-110.8736-2-12- | 0-M37043 | 12910 | 788 | 14830 | 57 | -2 | 12.5 | 4.2 | 363 | -1 | 1 | 8.1 | 3896 | 127 | 2.2 | -62 | 0.272 |
| 30-45.7875-110.8847-2-12- | 0-M37044 | 16680 | 811 | 12610 | 68 | -2 | 12.2 | 3.9 | 564 | -1 | -1 | 7.2 | 3915 | 161 | 2.8 | 70 | 0.278 |
| 30-45.7958-110.8778-2-15- | 0-M37045 | 14570 | 924 | 15510 | 76 | -2 | 15.1 | 4.4 | -305 | -1 | 1 | 8.4 | 3445 | 114 | 2.7 | 137 | 0.274 |
| 30-45.8194-110.8939-2-12- | 0-M37046 | 13930 | 1017 | 14130 | 69 | -2 | 14.8 | 6.0 | -352 | -2 | -1 | 11.4 | 3964 | 122 | 4.5 | -106 | 0.798 |
| 30-45.8208-110.8867-2-12- | 0-M37047 | 12200 | 732 | 11640 | 84 | -2 | 14.2 | 4.2 | 499 | -1 | -1 | 7.0 | 3596 | 118 | 3.1 | -74 | 0.314 |
| 30-45.8517-110.8833-2-12- | 0-M37048 | 8572 | 562 | 9911 | 44 | -2 | 9.3 | 4.4 | 516 | -1 | -1 | 7.2 | 3658 | 116 | 2.2 | -35 | 0.306 |
| 30-45.8597-110.9003-2-12- | 0-M37049 | 11780 | 768 | 12160 | 59 | -2 | 12.0 | 5.7 | 450 | -1 | -1 | 11.4 | 3261 | 111 | 3.2 | -81 | 0.272 |
| 30-45.8708-110.9097-2-12- | 0-M37050 | 13420 | 829 | 12960 | 48 | -2 | 14.4 | 4.5 | -281 | -1 | -1 | 8.0 | 4097 | 149 | 2.2 | 143 | 0.275 |
| 30-45.8722-110.9033-2-12- | 0-M37051 | 14120 | 794 | 11360 | -33 | -2 | 15.7 | 4.2 | 658 | -1 | -1 | 7.3 | 3705 | 134 | 3.0 | 121 | 0.507 |
| 30-45.8619-110.8392-2-12- | 0-M37052 | 13620 | 883 | 13610 | -35 | -3 | 14.3 | 5.0 | 581 | -1 | -1 | 7.0 | 5101 | 160 | -1.9 | 91 | 0.329 |
| 30-45.8647-110.8208-2-12- | 0-M37053 | 13460 | 986 | 10580 | 67 | -2 | 15.6 | 4.8 | 401 | -1 | -1 | 8.7 | 3779 | 150 | 2.5 | -28 | 0.253 |
| 30-45.8628-110.8108-2-12- | 0-M37054 | 14460 | 796 | 13390 | 55 | -2 | 13.8 | 4.1 | 704 | -1 | -1 | 6.8 | 3393 | 121 | -1.8 | 104 | 0.309 |
| 30-45.8389-110.8333-2-12- | 0-M37055 | 8206 | 542 | 9369 | -25 | -2 | 10.1 | 3.6 | 294 | -1 | -1 | 7.0 | 3569 | 123 | 2.3 | 84 | 0.357 |
| 30-45.8389-110.8000-2-12- | 0-M37056 | 11090 | 817 | 10750 | -32 | -2 | 11.6 | 5.3 | -308 | -1 | -1 | 8.2 | 4925 | 159 | -2.3 | 127 | 0.329 |
| 30-45.8306-110.7753-2-12- | 0-M37057 | 14660 | 847 | 13210 | 60 | -2 | 14.9 | 4.6 | -280 | -1 | -1 | 7.8 | 4976 | 140 | 3.8 | -38 | 0.321 |
| 30-45.8808-110.7889-2-12- | 0-M37058 | 11550 | 920 | 10270 | 80 | -2 | 13.8 | 5.9 | -313 | -1 | -1 | 11.2 | 4611 | 129 | 3.2 | 120 | 0.250 |
| 30-45.8908-110.7958-2-12- | 0-M37059 | 9844 | 875 | 8806 | 68 | -2 | 12.1 | 4.3 | -301 | -1 | -1 | 8.5 | 3830 | 103 | 3.1 | 133 | 0.294 |
| 30-45.8744-110.7722-2-12- | 0-M37060 | 8103 | 568 | 9731 | -29 | -2 | 9.0 | 4.2 | -264 | -1 | -1 | 6.6 | 3214 | 102 | 2.1 | 62 | 0.318 |
| 30-45.8972-110.8775-2-12- | 0-M37061 | 11770 | 891 | 14730 | 71 | -2 | 14.9 | 4.6 | 578 | -1 | -1 | 8.2 | 3938 | 143 | -1.8 | 138 | 0.317 |
| 30-45.8944-110.8731-2-12- | 0-M37062 | 11580 | 543 | 11680 | 57 | -2 | 9.0 | 5.2 | 542 | -1 | -1 | 10.3 | 3408 | 82 | 3.7 | 75 | 0.301 |
| 30-45.9175-110.8628-2-12- | 0-M37063 | 8035 | 687 | 15400 | 55 | -2 | 11.7 | 5.3 | 630 | -1 | -1 | 9.1 | 3323 | 96 | 3.5 | 136 | 0.484 |
| 30-45.9256-110.8617-2-12- | 0-M37064 | 12600 | 822 | 15840 | 69 | -2 | 13.4 | 6.3 | -350 | -1 | -1 | 7.9 | 3601 | 118 | -2.4 | 63 | 0.506 |
| 30-45.9281-110.8933-2-12- | 0-M37065 | 11640 | 274 | 7602 | 57 | -2 | 8.8 | 4.8 | -202 | -1 | -1 | 9.7 | 3028 | 82 | 4.1 | 84 | 0.299 |
| 30-45.9453-110.8839-2-12- | 0-M37066 | 12490 | 855 | 17270 | 53 | -2 | 12.6 | 4.4 | 895 | -1 | -1 | 8.2 | 3711 | 116 | -1.6 | 125 | 0.256 |
| 30-45.9469-110.8886-2-12- | 0-M37067 | 9427 | 801 | 11830 | 77 | -2 | 10.4 | 5.3 | -285 | -1 | -1 | 9.1 | 3248 | 92 | 2.4 | -38 | 0.319 |
| 30-45.9361-110.9161-2-12- | 0-M37068 | 11410 | 556 | 7777 | 56 | -2 | 6.7 | 4.4 | -239 | -1 | -1 | 8.1 | 3359 | 60 | 3.2 | -41 | 0.309 |
| 30-45.9053-110.1339-2-12- | 0-M37069 | 10930 | 637 | 13850 | 58 | -2 | 9.9 | 4.7 | -238 | -1 | -1 | 8.7 | 3079 | 108 | 3.0 | -114 | 0.310 |
| 30-45.9425-110.1908-2-12- | 0-M37070 | 12650 | 588 | 13560 | 62 | -2 | 10.7 | 4.9 | 305 | -1 | -1 | 9.8 | 3465 | 99 | 2.8 | 103 | 0.255 |

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

①

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER AND FIELD DATA | | | | | | | | | | | | | | | | | | | | | | | | U CONCENTRATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | TIME SAMPLED DATE | TIME SAMPLED HOUR | AIR TEMPERATURE | WATER TEMPERATURE | COMMENTS | SPECIAL MEASUREMENTS | pH | CONDUCTIVITY (µmho/cm) | SCINTILLOMETER (eU, ppm) | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm |
| 30- | 45.9406- | 110.1942- | 2- | 12- | 0- | M37071- | 10/10/76- | 10- | 6- | - | - | - | 6.3- | 205- | | -1- | 6- | 4- | 6- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 2.60 |
| 30- | 45.9575- | 110.1653- | 2- | 15- | 0- | M37072- | 10/10/76- | 10- | 8- | - | - | - | - | - | | -1- | 6- | 4- | 6- | - | - | - | -2- | 3- | 1- | 2- | -3- | - | - | - | - | 2.70 |
| 30- | 45.9594- | 110.1683- | 2- | 12- | 0- | M37073- | 10/10/76- | 10- | 8- | 2.8- | - | - | 6.6- | 205- | | -1- | 6- | 4- | 8- | 2- | 2- | 2- | 2- | 2- | 3- | 1- | 2- | -3- | - | - | - | - | 2.60 |
| 30- | 45.9897- | 110.1400- | 2- | 12- | 0- | M37074- | 10/10/76- | 10- | 7- | 3.8- | - | - | 6.3- | 170- | | -1- | 6- | 4- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 1- | 2- | -3- | - | - | - | - | 2.40 |
| 30- | 45.9911- | 110.1411- | 2- | 12- | 0- | M37075- | 10/10/76- | 11- | 7- | 2.6- | - | - | 6.6- | 220- | | -1- | 6- | 4- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 2- | 2- | -3- | - | - | - | - | 2.40 |
| 30- | 45.9581- | 110.1303- | 2- | 12- | 0- | M37076- | 10/10/76- | 11- | 6- | - | - | - | 6.6- | 250- | | -1- | 6- | 5- | 8- | 2- | 2- | 2- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 2.40 |
| 30- | 45.7932- | 111.7526- | 2- | 15- | 0- | M37077- | 10/10/76- | 12- | 4- | - | - | - | - | - | | -1- | 6- | 5- | 6- | - | - | - | -4- | 2- | 3- | 1- | -3- | - | - | - | - | - | 2.90 |
| 30- | 45.7717- | 111.7580- | 2- | 12- | 0- | M37078- | 10/10/76- | 12- | 5- | - | - | - | 6.6- | 750- | | -1- | 6- | 5- | 8- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 2.80 |
| 30- | 45.7545- | 111.7639- | 2- | 12- | 0- | M37079- | 10/10/76- | 12- | 6- | 2.0- | - | - | 6.6- | 800- | | -1- | 6- | 5- | 8- | 2- | 2- | 2- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 3.20 |
| 30- | 45.7912- | 111.7824- | 2- | 15- | 0- | M37080- | 10/10/76- | 12- | 6- | -C- | - | - | - | - | | -1- | 6- | 5- | 6- | - | - | - | -4- | 3- | 3- | 1- | -3- | - | - | - | - | - | 2.20 |
| 30- | 45.7902- | 111.8136- | 2- | 15- | 0- | M37081- | 10/10/76- | 12- | 6- | - | - | - | - | - | | -1- | 1- | - | - | - | - | - | -4- | 3- | 4- | 1- | -3- | - | - | - | - | - | 2.30 |
| 30- | 45.8173- | 111.7500- | 2- | 15- | 0- | M37082- | 10/10/76- | 13- | 7- | - | - | - | - | - | | -1- | 6- | 5- | 6- | - | - | - | -4- | 3- | 2- | 1- | -3- | - | - | - | - | - | 2.90 |
| 30- | 45.8265- | 111.7872- | 2- | 15- | 0- | M37083- | 10/10/76- | 13- | 7- | - | - | - | - | - | | -1- | 6- | 4- | 6- | - | - | - | -4- | 3- | 2- | 1- | -3- | - | - | - | - | - | 2.00 |
| 30- | 45.8186- | 111.8160- | 2- | 15- | 0- | M37084- | 10/10/76- | 13- | 7- | - | - | - | - | - | | -1- | 6- | 4- | 6- | - | - | - | -4- | 3- | 2- | 1- | -3- | - | - | - | - | - | 2.60 |
| 30- | 45.8290- | 111.8517- | 2- | 15- | 0- | M37085- | 10/10/76- | 13- | 7- | - | - | - | - | - | | -1- | 1- | 4- | 6- | - | - | - | -3- | 3- | 3- | 1- | -8- | - | - | - | - | - | 2.20 |
| 30- | 45.8308- | 111.8980- | 2- | 15- | 0- | M37086- | 10/10/76- | 14- | 7- | -C- | - | - | - | - | | -1- | 1- | 4- | 6- | - | - | - | -3- | 2- | 4- | 1- | -8- | - | - | - | - | - | 3.70 |
| 30- | 45.8452- | 111.9150- | 2- | 15- | 0- | M37087- | 10/10/76- | 14- | 7- | -C- | - | - | - | - | | -2- | 5- | - | - | - | - | - | -3- | 2- | 4- | 1- | -8- | - | - | - | - | - | 2.60 |
| 30- | 45.8137- | 111.9511- | 2- | 12- | 0- | M37088- | 10/10/76- | 15- | 8- | 7.0- | - | - | 6.6- | 600- | | -1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 2- | 2- | 3- | 1- | -3- | - | - | - | - | 3.00 |
| 30- | 45.8322- | 111.9554- | 2- | 15- | 0- | M37089- | 10/10/76- | 15- | 8- | - | - | - | - | - | | -1- | 6- | 5- | 6- | - | - | - | -4- | 3- | 3- | 1- | -3- | - | - | - | - | - | 2.30 |
| 30- | 45.7955- | 111.9175- | 2- | 12- | 0- | M37090- | 10/10/76- | 15- | 8- | 3.0- | - | - | 6.6- | 600- | | -1- | 6- | 4- | 7- | 2- | 2- | 1- | 2- | 2- | 3- | 2- | 1- | -3- | - | - | - | - | 2.70 |
| 30- | 45.7596- | 111.9622- | 2- | 15- | 0- | M37091- | 10/10/76- | 16- | 8- | - | - | - | - | - | | -1- | 1- | 5- | 8- | - | - | - | -1- | 2- | 3- | 1- | -3- | - | - | - | - | - | 1.90 |
| 30- | 45.7534- | 111.9644- | 2- | 12- | 0- | M37092- | 10/10/76- | 16- | 8- | 3.0- | - | - | 6.6- | 400- | | -1- | 6- | 5- | 8- | 2- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -3- | - | - | - | - | 2.20 |
| 30- | 45.8780- | 111.8865- | 2- | 12- | 0- | M37093- | 10/10/76- | 16- | 5- | - | - | - | 6.3- | 650- | | -1- | 8- | 4- | 6- | 1- | 2- | 1- | 2- | 2- | 2- | 4- | 1- | -3- | - | - | - | - | 2.60 |
| 30- | 45.8916- | 111.9314- | 2- | 15- | 0- | M37094- | 10/10/76- | 16- | 7- | - | - | - | - | - | | -1- | 7- | 4- | 6- | - | - | - | -1- | 2- | 3- | 1- | -3- | - | - | - | - | - | 3.20 |
| 30- | 45.9116- | 111.9246- | 2- | 15- | 0- | M37095- | 10/10/76- | 16- | 6- | - | - | - | - | - | | -1- | 1- | 4- | 6- | - | - | - | -1- | 2- | 2- | 1- | -3- | - | - | - | - | - | 2.70 |
| 30- | 45.9226- | 111.9278- | 2- | 15- | 0- | M37096- | 10/10/76- | 16- | 7- | - | - | - | - | - | | -1- | 6- | 4- | 6- | - | - | - | -4- | 3- | 3- | 1- | -3- | - | - | - | - | - | 2.40 |
| 30- | 45.9202- | 111.9723- | 2- | 15- | 0- | M37097- | 10/10/76- | 16- | 7- | - | - | - | - | - | | -1- | 6- | 4- | 6- | - | - | - | -1- | 2- | 3- | 1- | -3- | - | - | - | - | - | 2.30 |
| 30- | 45.9243- | 111.9736- | 2- | 12- | 0- | M37098- | 10/10/76- | 17- | 7- | 5.0- | - | - | 6.6- | 500- | | -1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 2- | 2- | 3- | 1- | -3- | - | - | - | - | 2.20 |
| 30- | 45.9380- | 111.9247- | 2- | 12- | 0- | M37099- | 10/10/76- | 17- | 7- | 1.0- | - | - | 6.9- | 600- | | -1- | 1- | - | - | 1- | 2- | 1- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 3.10 |
| 30- | 45.9440- | 111.9415- | 2- | 11- | 0- | M37100- | 10/10/76- | 17- | 7- | 2.0- | - | - | 6.6- | 550- | | -1- | 6- | 4- | 6- | 2- | 3- | 1- | - | 4- | 3- | 1- | 1- | -3- | - | - | - | - | 2.00 |
| 30- | 45.8870- | 111.9765- | 2- | 15- | 0- | M37101- | 10/10/76- | 17- | 6- | - | - | - | - | - | | -1- | 1- | 5- | 6- | - | - | - | -4- | 3- | 2- | 1- | -3- | - | - | - | - | - | 1.80 |
| 30- | 45.8856- | 111.9870- | 2- | 15- | 0- | M37102- | 10/10/76- | 17- | 1- | - | - | - | - | - | | -1- | 6- | 4- | 6- | - | - | - | -1- | 2- | 2- | 1- | -3- | - | - | - | - | - | 3.50 |
| 30- | 45.9539- | 111.9095- | 2- | 15- | 0- | M37103- | 10/10/76- | 18- | 1- | - | - | - | - | - | | -1- | 6- | 4- | 6- | - | - | - | -3- | 3- | 1- | 1- | -3- | - | - | - | - | - | 5.10 |
| 30- | 45.9710- | 111.9725- | 2- | 12- | 0- | M37104- | 10/10/76- | 18- | 2- | 1.2- | - | - | 6.3- | 290- | | -1- | 1- | 3- | 4- | 2- | 2- | 1- | 2- | 1- | 2- | 3- | 3- | -3- | - | - | - | - | 2.90 |
| 30- | 45.9761- | 111.9211- | 2- | 15- | 0- | M37105- | 10/11/76- | 8- | 3- | - | - | - | - | - | | -1- | 6- | 4- | 6- | - | - | - | -4- | 2- | 1- | 3- | - | - | - | - | - | - | 4.40 |
| 30- | 45.9833- | 111.8958- | 2- | 15- | 0- | M37106- | 10/11/76- | 8- | 3- | - | - | - | - | - | | -1- | 6- | 4- | 4- | - | - | - | - | -3- | 1- | 3- | -3- | - | - | - | - | - | 3.70 |
| 30- | 45.9941- | 111.8945- | 2- | 15- | 0- | M37107- | 10/11/76- | 8- | 3- | - | - | - | - | - | | -1- | 6- | 4- | 6- | - | - | - | -3- | 2- | 1- | 1- | -3- | - | - | - | - | - | 3.20 |
| 30- | 45.9686- | 111.9000- | 2- | 15- | 0- | M37108- | 10/11/76- | 8- | 4- | - | - | - | - | - | | -1- | 6- | 4- | 6- | - | - | - | -3- | 3- | 1- | 1- | -3- | - | - | - | - | - | 3.30 |
| 30- | 45.9564- | 111.8849- | 2- | 15- | 0- | M37109- | 10/11/76- | 9- | 4- | - | - | - | - | - | | -1- | 6- | 4- | 6- | - | - | - | -3- | 3- | 2- | 1- | -3- | - | - | - | - | - | 6.80 |
| 30- | 45.9471- | 111.8927- | 2- | 15- | 0- | M37110- | 10/11/76- | 9- | 4- | - | - | - | - | - | | -1- | 6- | 4- | 6- | - | - | - | -3- | 3- | 1- | 1- | -3- | - | - | - | - | - | 4.40 |
| 30- | 45.9760- | 111.8814- | 2- | 15- | 0- | M37111- | 10/11/76- | 9- | 4- | - | - | - | - | - | | -1- | 6- | 4- | 6- | - | - | - | -3- | 3- | 3- | 1- | -3- | - | - | - | - | - | 4.50 |
| 30- | 45.9961- | 111.8782- | 2- | 15- | 0- | M37112- | 10/11/76- | 9- | 4- | - | - | - | - | - | | -1- | 6- | 4- | 6- | - | - | - | -3- | 3- | 2- | 1- | -3- | - | - | - | - | - | 13.10 |
| 30- | 45.9495- | 111.8569- | 2- | 15- | 0- | M37113- | 10/11/76- | 10- | 4- | - | - | - | - | - | | -1- | 6- | 4- | 6- | - | - | - | -3- | 3- | 1- | 1- | -3- | - | - | - | - | - | 5.60 |
| 30- | 45.9459- | 111.8130- | 2- | 11- | 0- | M37114- | 10/11/76- | 10- | 4- | - | - | - | 6.9- | 2000- | | -1- | 6- | 5- | 6- | 2- | 2- | 3- | - | 4- | 3- | 2- | 1- | -3- | - | - | - | - | - | 4.20 |
| 30- | 45.9561- | 111.8371- | 2- | 15- | 0- | M37115- | 10/11/76- | 10- | 4- | - | - | - | - | - | | -1- | 6- | 4- | 6- | - | - | - | -1- | 2- | 3- | 1- | -3- | - | - | - | - | - | 3.50 |
| 30- | 45.9567- | 111.8353- | 2- | 15- | 0- | M37116- | 10/11/76- | 11- | 5- | -C- | - | - | - | - | | -1- | 6- | 4- | 6- | - | - | - | -1- | 2- | 2- | 1- | -3- | - | - | - | - | - | 2.30 |
| 30- | 45.9785- | 111.7999- | 2- | 11- | 0- | M37117- | 10/11/76- | 11- | 4- | - | - | - | 6.6- | 1700- | | -1- | 6- | 5- | 6- | 2- | 2- | 1- | - | 4- | 2- | 2- | 1- | -3- | - | - | - | - | 3.10 |
| 30- | 45.8578- | 110.0017- | 2- | 12- | 0- | M37118- | 10/12/76- | 14- | 13- | 10.0- | - | - | 6.6- | 500- | | 7- | 1- | 7- | 4- | 6- | 2- | 2- | 1- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 2.40 |
| 30- | 45.8475- | 110.0269- | 2- | 15- | 0- | M37119- | 10/12/76- | 15- | 13- | - | - | - | - | - | | 5- | 1- | 6- | 4- | 6- | - | - | - | -3- | 2- | 3- | 2- | -3- | - | - | - | - | 2.30 |
| 30- | 45.8286- | 110.0872- | 2- | 15- | 0- | M37120- | 10/12/76- | 15- | 13- | - | - | - | - | - | | 8- | 1- | 6- | - | - | - | - | - | -4- | 2- | 3- | 2- | -3- | - | - | - | - | 2.30 |
| 30- | 45.8281- | 110.1056- | 2- | 12- | 0- | M37121- | 10/12/76- | 15- | 12- | 7.8- | - | - | 6.3- | 470- | | 5- | 1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 4- | 2- | 3- | 2- | -3- | - | - | - | - | 2.30 |

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

②

| DOE SAMPLE NUMBER | | | | | | LAB. SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE (Concentrations reported in weight parts per million (ppm)) | | | | | | | | | ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY (Concentrations in weight ppm) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Ag | Bi | Cd | Cu | Nb | Ni | Pb | Sn | W | Be | Li |
| 30- | 45.9406- | 110.1942- | 2- | 12- | | 0-M37071 | -5 | -5 | -5 | 27 | -20 | 30 | 12 | -10 | -15 | 3 | 28 |
| 30- | 45.9575- | 110.1653- | 2- | 15- | | 0-M37072 | -5 | -5 | -5 | 34 | -20 | 22 | 7 | -10 | -15 | 3 | 28 |
| 30- | 45.9594- | 110.1683- | 2- | 12- | | 0-M37073 | -5 | -5 | -5 | 23 | -20 | -15 | 8 | -10 | -15 | 2 | 38 |
| 30- | 45.9897- | 110.1400- | 2- | 12- | | 0-M37074 | -5 | -5 | -5 | 33 | -20 | 17 | 10 | -10 | -15 | 3 | 28 |
| 30- | 45.9911- | 110.1411- | 2- | 12- | | 0-M37075 | -5 | -5 | -5 | 33 | -20 | 31 | 5 | -10 | -15 | 3 | 24 |
| 30- | 45.9581- | 110.1303- | 2- | 12- | | 0-M37076 | -5 | -5 | -5 | 38 | -20 | -15 | 11 | -10 | -15 | 3 | 28 |
| 30- | 45.7932- | 111.7526- | 2- | 15- | | 0-M37077 | -5 | -5 | -5 | 29 | -20 | -15 | 16 | -10 | -15 | 3 | 17 |
| 30- | 45.7717- | 111.7580- | 2- | 12- | | 0-M37078 | -5 | -5 | -5 | 31 | -20 | 27 | 7 | -10 | -15 | 3 | 31 |
| 30- | 45.7545- | 111.7639- | 2- | 12- | | 0-M37079 | -5 | -5 | -5 | 31 | -20 | 25 | 6 | -10 | -15 | 2 | 35 |
| 30- | 45.7912- | 111.7824- | 2- | 15- | | 0-M37080 | -5 | -5 | -5 | 17 | -20 | 16 | 14 | -10 | -15 | 2 | 16 |
| 30- | 45.7902- | 111.8136- | 2- | 15- | | 0-M37081 | -5 | -5 | -5 | 16 | -20 | -15 | 10 | -10 | -15 | 2 | 21 |
| 30- | 45.8173- | 111.7500- | 2- | 15- | | 0-M37082 | -5 | -5 | -5 | 18 | -20 | -15 | 16 | -10 | -15 | 3 | 16 |
| 30- | 45.8265- | 111.7872- | 2- | 15- | | 0-M37083 | -5 | -5 | -5 | 22 | -20 | -15 | 6 | -10 | -15 | 2 | 24 |
| 30- | 45.8186- | 111.8160- | 2- | 15- | | 0-M37084 | -5 | -5 | -5 | 29 | -20 | 16 | 11 | -10 | -15 | 2 | 21 |
| 30- | 45.8290- | 111.8517- | 2- | 15- | | 0-M37085 | -5 | -5 | -5 | 34 | -20 | 40 | 8 | -10 | -15 | 3 | 34 |
| 30- | 45.8308- | 111.8980- | 2- | 15- | | 0-M37086 | -5 | -5 | -5 | 25 | -20 | -15 | 6 | -10 | -15 | 2 | 24 |
| 30- | 45.8452- | 111.9150- | 2- | 15- | | 0-M37087 | -5 | -5 | -5 | 71 | -20 | 53 | 31 | -10 | -15 | 3 | 49 |
| 30- | 45.8137- | 111.9511- | 2- | 12- | | 0-M37088 | -5 | -5 | -5 | 16 | -20 | 15 | -5 | -10 | -15 | 2 | 16 |
| 30- | 45.8322- | 111.9554- | 2- | 15- | | 0-M37089 | -5 | -5 | -5 | 39 | -20 | -15 | 16 | -10 | -15 | 3 | 38 |
| 30- | 45.7955- | 111.9175- | 2- | 12- | | 0-M37090 | -5 | -5 | -5 | 23 | -20 | 26 | 6 | -10 | -15 | 2 | 20 |
| 30- | 45.7596- | 111.9622- | 2- | 15- | | 0-M37091 | -5 | -5 | -5 | 57 | -20 | 62 | 27 | -10 | -15 | 2 | 19 |
| 30- | 45.7534- | 111.9644- | 2- | 12- | | 0-M37092 | -5 | -5 | -5 | 46 | -20 | 99 | 15 | -10 | -15 | 2 | 24 |
| 30- | 45.8780- | 111.8865- | 2- | 12- | | 0-M37093 | -5 | -5 | -5 | 38 | -20 | 45 | 11 | -10 | -15 | 3 | 30 |
| 30- | 45.8916- | 111.9314- | 2- | 15- | | 0-M37094 | -5 | -5 | -5 | 37 | -20 | 29 | -5 | -10 | -15 | 3 | 47 |
| 30- | 45.9116- | 111.9246- | 2- | 15- | | 0-M37095 | -5 | -5 | -5 | 36 | -20 | 69 | 5 | -10 | -15 | 3 | 48 |
| 30- | 45.9226- | 111.9278- | 2- | 15- | | 0-M37096 | -5 | -5 | -5 | 30 | -20 | -15 | 11 | -10 | -15 | 1 | 24 |
| 30- | 45.9202- | 111.9723- | 2- | 15- | | 0-M37097 | -5 | -5 | -5 | 30 | -20 | 22 | 8 | -10 | -15 | 5 | 32 |
| 30- | 45.9243- | 111.9736- | 2- | 12- | | 0-M37098 | -5 | -5 | -5 | 58 | -20 | 36 | 9 | -10 | -15 | 3 | 24 |
| 30- | 45.9380- | 111.9247- | 2- | 12- | | 0-M37099 | -5 | -5 | -5 | 29 | -20 | 20 | 13 | -10 | -15 | 3 | 45 |
| 30- | 45.9440- | 111.9415- | 2- | 11- | | 0-M37100 | -5 | -5 | -5 | 53 | -20 | 67 | 9 | -10 | -15 | 2 | 36 |
| 30- | 45.8870- | 111.9765- | 2- | 15- | | 0-M37101 | -5 | -5 | -5 | 45 | -20 | 80 | 7 | -10 | -15 | 3 | 24 |
| 30- | 45.8856- | 111.9870- | 2- | 15- | | 0-M37102 | -5 | -5 | -5 | 20 | -20 | 21 | 10 | -10 | -15 | 3 | 42 |
| 30- | 45.9539- | 111.9095- | 2- | 15- | | 0-M37103 | -5 | -5 | -5 | 29 | -20 | 50 | 11 | -10 | -15 | -1 | 30 |
| 30- | 45.9710- | 111.9725- | 2- | 12- | | 0-M37104 | -5 | -5 | -5 | 29 | -20 | -15 | 13 | -10 | -15 | 3 | 34 |
| 30- | 45.9761- | 111.9211- | 2- | 15- | | 0-M37105 | -5 | -5 | -5 | 33 | -20 | 16 | 16 | -10 | -15 | 3 | 44 |
| 30- | 45.9833- | 111.8958- | 2- | 15- | | 0-M37106 | -5 | -5 | -5 | 45 | -20 | -15 | 16 | -10 | -15 | 3 | 44 |
| 30- | 45.9941- | 111.8945- | 2- | 15- | | 0-M37107 | -5 | -5 | -5 | 45 | -20 | 38 | 12 | -10 | -15 | 2 | 47 |
| 30- | 45.9686- | 111.9000- | 2- | 15- | | 0-M37108 | -5 | -5 | -5 | 29 | -20 | 27 | 17 | -10 | -15 | 2 | 36 |
| 30- | 45.9564- | 111.8849- | 2- | 15- | | 0-M37109 | -5 | -5 | -5 | 24 | -20 | -15 | 11 | -10 | -15 | 3 | 42 |
| 30- | 45.9471- | 111.8927- | 2- | 15- | | 0-M37110 | -5 | -5 | -5 | 28 | -20 | -15 | 19 | -10 | -15 | 3 | 35 |
| 30- | 45.9760- | 111.8814- | 2- | 15- | | 0-M37111 | -5 | -5 | -5 | 13 | -20 | 29 | 12 | -10 | -15 | 3 | 44 |
| 30- | 45.9961- | 111.8782- | 2- | 15- | | 0-M37112 | -5 | -5 | -5 | 23 | 20 | -15 | -5 | -10 | 45 | -1 | 26 |
| 30- | 45.9495- | 111.8569- | 2- | 15- | | 0-M37113 | -5 | -5 | -5 | 20 | -20 | -15 | 20 | -10 | -15 | 3 | 33 |
| 30- | 45.9459- | 111.8130- | 2- | 11- | | 0-M37114 | -5 | -5 | -5 | 162 | -20 | -15 | 16 | -10 | -15 | 3 | 48 |
| 30- | 45.9561- | 111.8371- | 2- | 15- | | 0-M37115 | -5 | -5 | -5 | 20 | -20 | 19 | 9 | -10 | -15 | 1 | 23 |
| 30- | 45.9567- | 111.8353- | 2- | 15- | | 0-M37116 | -5 | -5 | -5 | 40 | -20 | -15 | 13 | -10 | -15 | 2 | 44 |
| 30- | 45.9785- | 111.7999- | 2- | 11- | | 0-M37117 | -5 | -5 | -5 | 29 | -20 | 19 | 9 | -10 | -15 | 3 | 39 |
| 30- | 45.8578- | 110.0017- | 2- | 12- | | 0-M37118 | -5 | -5 | -5 | 37 | -20 | 45 | 10 | -10 | -15 | 2 | 34 |
| 30- | 45.8475- | 110.0269- | 2- | 15- | | 0-M37119 | -5 | -5 | -5 | 50 | -20 | 62 | 10 | -10 | -15 | 2 | 49 |
| 30- | 45.8286- | 110.0872- | 2- | 15- | | 0-M37120 | -5 | -5 | -5 | 32 | -20 | 44 | 8 | -10 | -15 | 2 | 34 |
| 30- | 45.8281- | 110.1056- | 2- | 12- | | 0-M37121 | -5 | -5 | -5 | 27 | -20 | 35 | -5 | -10 | -15 | -1 | 34 |

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

③

| DOE SAMPLE NUMBER | | | | | | LAB. SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (Concentrations reported in weight parts per million (ppm)) | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Al | Au | Ba | Ca | Ce | Cl | Co | Cr | Cs | Dy | Eu | Fe | Hf | K | La | Lu |
| 30- | 45.9406- | 110.1942- | 2- | 12- | 0- | M37071 | 66850 | -0.07 | 877 | 14510 | 62 | -79 | 16.2 | 140 | 4.0 | 4 | 1.6 | 36780 | 7.4 | 17750 | 36 | 0.3 |
| 30- | 45.9575- | 110.1653- | 2- | 15- | 0- | M37072 | 75220 | -0.08 | 1150 | 20580 | 84 | -99 | 16.8 | 83 | 4.4 | 4 | 2.0 | 34920 | 6.5 | 18420 | 49 | 0.5 |
| 30- | 45.9594- | 110.1683- | 2- | 12- | 0- | M37073 | 67200 | -0.08 | 727 | 8412 | 71 | -85 | 14.3 | 116 | 4.8 | 3 | 1.7 | 34990 | 8.8 | 17290 | 34 | 0.3 |
| 30- | 45.9897- | 110.1400- | 2- | 12- | 0- | M37074 | 68470 | -0.07 | 847 | 28190 | 62 | -80 | 15.3 | 102 | 4.5 | 4 | 1.7 | 39600 | 5.9 | 21610 | 37 | 0.4 |
| 30- | 45.9911- | 110.1411- | 2- | 12- | 0- | M37075 | 67010 | -0.07 | 945 | 18930 | 76 | 112 | 20.4 | 148 | 3.6 | 4 | 1.7 | 44480 | 8.7 | 14250 | 44 | 0.3 |
| 30- | 45.9581- | 110.1303- | 2- | 12- | 0- | M37076 | 69800 | -0.09 | 953 | 25450 | 66 | -92 | 14.3 | 113 | 4.6 | 4 | 1.6 | 33550 | 5.6 | 20660 | 30 | 0.4 |
| 30- | 45.7932- | 111.7526- | 2- | 15- | 0- | M37077 | 51950 | -0.07 | 617 | 24530 | 74 | -81 | 9.3 | 79 | 3.4 | 4 | 1.4 | 29410 | 14.6 | 16050 | 40 | 0.5 |
| 30- | 45.7717- | 111.7580- | 2- | 12- | 0- | M37078 | 62780 | 0.60 | 685 | 45530 | 65 | 166 | 11.1 | 107 | 5.9 | 5 | 1.6 | 34020 | 6.9 | 17180 | 35 | 0.3 |
| 30- | 45.7545- | 111.7639- | 2- | 12- | 0- | M37079 | 60330 | -0.07 | 785 | 29460 | 82 | 125 | 12.5 | 80 | 4.5 | 5 | 1.8 | 28480 | 11.3 | 17270 | 44 | 0.5 |
| 30- | 45.7912- | 111.7824- | 2- | 15- | 0- | M37080 | 49790 | -0.07 | 501 | 74490 | 62 | -83 | 8.9 | 62 | 3.2 | 4 | 1.5 | 19390 | 10.0 | 13830 | 28 | 0.4 |
| 30- | 45.7902- | 111.8136- | 2- | 15- | 0- | M37081 | 37010 | -0.06 | 321 | 123400 | 54 | 114 | 7.4 | 61 | 3.3 | 3 | 1.0 | 19070 | 9.3 | 16970 | 26 | 0.3 |
| 30- | 45.8173- | 111.7500- | 2- | 15- | 0- | M37082 | 56780 | -0.07 | 647 | 22140 | 87 | 120 | 8.5 | 76 | 3.9 | 5 | 1.7 | 29210 | 13.6 | 20100 | 41 | 0.5 |
| 30- | 45.8265- | 111.7872- | 2- | 15- | 0- | M37083 | 52480 | -0.07 | 616 | 29190 | 51 | -84 | 8.0 | 56 | 2.5 | 3 | 1.0 | 23610 | 6.9 | 17690 | 32 | 0.3 |
| 30- | 45.8186- | 111.8160- | 2- | 15- | 0- | M37084 | 56210 | -0.08 | 706 | 27970 | 78 | -93 | 10.5 | 94 | 3.2 | 4 | 1.2 | 32480 | 8.3 | 20520 | 39 | 0.3 |
| 30- | 45.8290- | 111.8517- | 2- | 15- | 0- | M37085 | 59860 | -0.08 | 284 | 18510 | 48 | 82 | 15.8 | 107 | 2.8 | 3 | 1.1 | 37940 | 8.4 | 19660 | 29 | 0.3 |
| 30- | 45.8308- | 111.8980- | 2- | 15- | 0- | M37086 | 52700 | -0.09 | 554 | 16220 | 104 | -81 | 10.6 | 103 | 3.0 | 6 | 1.5 | 32420 | 24.1 | 17720 | 47 | 0.6 |
| 30- | 45.8452- | 111.9150- | 2- | 15- | 0- | M37087 | 57500 | -0.10 | 343 | 17610 | 52 | -107 | 24.0 | 174 | 2.4 | 5 | 1.4 | 52620 | 9.2 | 16080 | 31 | 0.5 |
| 30- | 45.8137- | 111.9511- | 2- | 12- | 0- | M37088 | 44580 | -0.06 | 611 | 56020 | 59 | -71 | 8.9 | 81 | 2.6 | 4 | 1.3 | 24020 | 12.4 | 13480 | 32 | 0.3 |
| 30- | 45.8322- | 111.9554- | 2- | 15- | 0- | M37089 | 64120 | -0.08 | 646 | 34160 | 65 | -91 | 13.8 | 73 | 3.8 | 5 | 1.4 | 28350 | 9.1 | 19660 | 35 | 0.4 |
| 30- | 45.7955- | 111.9175- | 2- | 12- | 0- | M37090 | 55610 | -0.07 | 554 | 30120 | 59 | -83 | 15.4 | 146 | 2.4 | 4 | 1.6 | 40310 | 10.9 | 17370 | 33 | 0.4 |
| 30- | 45.7596- | 111.9622- | 2- | 15- | 0- | M37091 | 46110 | -0.08 | 474 | 87130 | 54 | -83 | 12.6 | 225 | 4.0 | 4 | 1.2 | 29180 | 7.1 | 19580 | 33 | 0.4 |
| 30- | 45.7534- | 111.9644- | 2- | 12- | 0- | M37092 | 46170 | -0.08 | 524 | 56810 | 51 | -85 | 19.4 | 342 | 3.9 | 4 | 1.2 | 37190 | 7.2 | 15940 | 33 | 0.3 |
| 30- | 45.8780- | 111.8865- | 2- | 12- | 0- | M37093 | 57120 | -0.09 | 569 | 48410 | 70 | 130 | 14.7 | 193 | 4.6 | 5 | 1.4 | 27670 | 11.1 | 21000 | 38 | 0.4 |
| 30- | 45.8916- | 111.9314- | 2- | 15- | 0- | M37094 | 59000 | -0.07 | 573 | 32950 | 76 | -78 | 13.3 | 146 | 3.7 | 4 | 1.7 | 31640 | 13.6 | 17990 | 40 | 0.4 |
| 30- | 45.9116- | 111.9246- | 2- | 15- | 0- | M37095 | 65860 | -0.08 | 639 | 28970 | 68 | -76 | 21.8 | 256 | 5.5 | 4 | 1.4 | 35700 | 8.3 | 20510 | 40 | 0.4 |
| 30- | 45.9226- | 111.9278- | 2- | 15- | 0- | M37096 | 61580 | -0.08 | 738 | 68610 | 63 | -86 | 13.0 | 89 | 5.6 | 4 | 1.6 | 32190 | 7.3 | 16320 | 35 | 0.3 |
| 30- | 45.9202- | 111.9723- | 2- | 15- | 0- | M37097 | 57540 | -0.08 | 865 | 67230 | 70 | -94 | 15.1 | 226 | 4.9 | 4 | 1.5 | 35760 | 8.2 | 17410 | 32 | 0.3 |
| 30- | 45.9243- | 111.9736- | 2- | 12- | 0- | M37098 | 78480 | -0.08 | 1053 | 26760 | 91 | -91 | 17.3 | 133 | 4.4 | 4 | 2.0 | 51770 | 6.7 | 19900 | 43 | 0.4 |
| 30- | 45.9380- | 111.9247- | 2- | 12- | 0- | M37099 | 66870 | -0.08 | 815 | 36910 | 73 | -83 | 12.5 | 163 | 6.0 | 5 | 1.7 | 36740 | 13.6 | 20300 | 48 | 0.5 |
| 30- | 45.9440- | 111.9415- | 2- | 11- | 0- | M37100 | 59630 | -0.10 | 665 | 37490 | 50 | -111 | 29.1 | 386 | 4.1 | 4 | 1.3 | 52150 | 6.3 | 19710 | 30 | 0.4 |
| 30- | 45.8870- | 111.9765- | 2- | 15- | 0- | M37101 | 60260 | -0.12 | 625 | 47470 | 52 | -113 | 28.0 | 724 | -2.7 | 4 | 1.7 | 52660 | 5.2 | 20450 | 29 | 0.3 |
| 30- | 45.8856- | 111.9870- | 2- | 15- | 0- | M37102 | 64220 | -0.08 | 1253 | 38930 | 82 | -85 | 11.1 | 142 | 14.9 | 5 | 1.6 | 44790 | 28.5 | 19670 | 53 | 0.7 |
| 30- | 45.9539- | 111.9095- | 2- | 15- | 0- | M37103 | 60390 | -0.10 | 698 | 30650 | 139 | -102 | 18.3 | 562 | 6.0 | 5 | 2.3 | 78640 | 43.6 | 18830 | 70 | 0.8 |
| 30- | 45.9710- | 111.9725- | 2- | 12- | 0- | M37104 | 55060 | -0.06 | 669 | 41120 | 66 | -79 | 10.9 | 69 | 4.9 | 5 | 1.4 | 25580 | 11.2 | 15600 | 42 | 0.5 |
| 30- | 45.9761- | 111.9211- | 2- | 15- | 0- | M37105 | 67930 | 0.98 | 712 | 23850 | 77 | 385 | 15.3 | 369 | 5.8 | 5 | 1.6 | 64920 | 16.3 | 19830 | 33 | 0.5 |
| 30- | 45.9833- | 111.8958- | 2- | 15- | 0- | M37106 | 72500 | -0.09 | 707 | 27110 | 88 | 319 | 13.2 | 166 | 5.2 | 5 | 1.8 | 43510 | 12.7 | 26220 | 45 | 0.6 |
| 30- | 45.9941- | 111.8945- | 2- | 15- | 0- | M37107 | 67950 | -0.10 | 639 | 30510 | 90 | 126 | 19.8 | 537 | 4.0 | 5 | 1.8 | 62860 | 14.6 | 18390 | 49 | 0.4 |
| 30- | 45.9686- | 111.9000- | 2- | 15- | 0- | M37108 | 59470 | -0.08 | 786 | 34000 | 96 | 88 | 17.9 | 375 | 4.3 | 5 | 1.8 | 55220 | 17.2 | 22440 | 47 | 0.5 |
| 30- | 45.9564- | 111.8849- | 2- | 15- | 0- | M37109 | 67710 | -0.10 | 603 | 23160 | 133 | 257 | 12.7 | 92 | 5.2 | 7 | 1.8 | 71110 | 26.6 | 20810 | 59 | 0.7 |
| 30- | 45.9471- | 111.8927- | 2- | 15- | 0- | M37110 | 70920 | -0.09 | 678 | 19690 | 89 | 309 | 10.6 | 50 | 6.0 | 6 | 1.8 | 46530 | 18.8 | 23360 | 49 | 0.6 |
| 30- | 45.9760- | 111.8814- | 2- | 15- | 0- | M37111 | 57810 | -0.09 | 744 | 45120 | 108 | 135 | 13.8 | 140 | 5.0 | 8 | 1.8 | 54120 | 26.2 | 18510 | 58 | 0.9 |
| 30- | 45.9961- | 111.8782- | 2- | 15- | 0- | M37112 | 51300 | -0.10 | 475 | 18060 | 170 | 185 | 21.1 | 222 | 4.3 | 6 | 2.4 | 197600 | 53.4 | 15730 | 84 | 0.7 |
| 30- | 45.9495- | 111.8569- | 2- | 15- | 0- | M37113 | 68140 | -0.08 | 891 | 23790 | 137 | -101 | 10.5 | 88 | 4.8 | 5 | 1.5 | 52900 | 29.9 | 21910 | 65 | 0.7 |
| 30- | 45.9459- | 111.8130- | 2- | 11- | 0- | M37114 | 57660 | -0.08 | 503 | 24800 | 62 | 7716 | 9.6 | 54 | 6.2 | 4 | 1.5 | 24410 | 6.5 | 20960 | 35 | 0.3 |
| 30- | 45.9561- | 111.8371- | 2- | 15- | 0- | M37115 | 55660 | -0.08 | 611 | 27640 | 89 | -87 | 14.4 | 87 | 5.3 | 5 | 1.7 | 62210 | 23.2 | 16620 | 51 | 0.6 |
| 30- | 45.9567- | 111.8353- | 2- | 15- | 0- | M37116 | 52570 | -0.07 | 512 | 55090 | 55 | -73 | 11.2 | 56 | 5.4 | 5 | 1.3 | 28020 | 11.0 | 12990 | 29 | 0.4 |
| 30- | 45.9785- | 111.7999- | 2- | 11- | 0- | M37117 | 64820 | -0.09 | 639 | 30950 | 64 | -107 | 11.1 | 115 | 4.2 | 4 | 1.6 | 33640 | 10.1 | 15630 | 29 | 0.5 |
| 30- | 45.8578- | 110.0017- | 2- | 12- | 0- | M37118 | 59300 | -0.08 | 868 | 32750 | 71 | -90 | 16.9 | 200 | 4.4 | 3 | 1.6 | 40990 | 9.4 | 10740 | 34 | 0.3 |
| 30- | 45.8475- | 110.0269- | 2- | 15- | 0- | M37119 | 71150 | -0.08 | 984 | 21170 | 69 | -87 | 20.8 | 296 | 5.3 | 3 | 1.7 | 53970 | 7.2 | 17730 | 39 | 0.4 |
| 30- | 45.8286- | 110.0872- | 2- | 15- | 0- | M37120 | 68210 | -0.08 | 993 | 15200 | 57 | -85 | 18.1 | 166 | 3.8 | 4 | 1.7 | 39010 | 5.9 | 23020 | 44 | 0.3 |
| 30- | 45.8281- | 110.1056- | 2- | 12- | 0- | M37121 | 62480 | -0.08 | 922 | 18430 | 66 | -92 | 14.5 | 159 | 3.3 | 4 | 1.6 | 32640 | 7.3 | 16170 | 36 | 0.3 |

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



| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | LAB SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | U/Th RATIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mg | Mn | Na | Rb | Sb | Sc | Sm | Sr | Ta | Tb | Th | Ti | V | Yb | Zn | |
| 30-45.9406-110.1942-2-12- | 0-M37071 | 12920 | 638 | 14050 | 58 | -2 | 11.1 | 4.5 | 384 | -1 | -1 | 8.8 | 3467 | 106 | 3.4 | 104 | 0.295 |
| 30-45.9575-110.1653-2-15- | 0-M37072 | 11940 | 718 | 16450 | 67 | -2 | 11.7 | 6.3 | -307 | -1 | -1 | 9.8 | 4805 | 112 | 2.4 | 89 | 0.276 |
| 30-45.9594-110.1683-2-12- | 0-M37073 | 11390 | 567 | 13350 | 110 | -2 | 10.3 | 5.0 | 357 | -1 | -1 | 8.4 | 3191 | 99 | 2.6 | 120 | 0.310 |
| 30-45.9897-110.1400-2-12- | 0-M37074 | 14070 | 678 | 13540 | 63 | -2 | 11.4 | 5.6 | -248 | -1 | -1 | 10.0 | 3465 | 104 | 2.7 | 114 | 0.240 |
| 30-45.9911-110.1411-2-12- | 0-M37075 | 13850 | 653 | 15800 | -27 | -2 | 12.7 | 6.0 | 444 | -1 | -1 | 8.4 | 5070 | 127 | 2.5 | -23 | 0.286 |
| 30-45.9581-110.1303-2-12- | 0-M37076 | 14340 | 723 | 11320 | -33 | -2 | 11.3 | 5.6 | -321 | -1 | -1 | 8.5 | 3173 | 106 | 3.5 | -60 | 0.282 |
| 30-45.7932-111.7526-2-15- | 0-M37077 | 8600 | 624 | 12520 | 49 | -2 | 8.3 | 5.7 | -245 | -1 | -1 | 14.1 | 2610 | 72 | 3.3 | 90 | 0.206 |
| 30-45.7717-111.7580-2-12- | 0-M37078 | 12680 | 629 | 10680 | 48 | -2 | 11.6 | 5.6 | -271 | -1 | -1 | 12.2 | 3813 | 90 | 4.2 | 131 | 0.230 |
| 30-45.7545-111.7639-2-12- | 0-M37079 | 9840 | 622 | 13460 | 114 | -2 | 9.0 | 5.8 | 265 | -1 | -1 | 13.1 | 3453 | 78 | 3.4 | 96 | 0.244 |
| 30-45.7912-111.7824-2-15- | 0-M37080 | 18920 | 476 | 10100 | 71 | -2 | 7.2 | 4.7 | -257 | 1 | -1 | 9.0 | 2940 | 57 | 3.7 | 46 | 0.244 |
| 30-45.7902-111.8136-2-15- | 0-M37081 | 23270 | 528 | 5143 | 57 | -2 | 6.7 | 4.7 | -215 | -1 | -1 | 7.9 | 2364 | 55 | 2.3 | -44 | 0.291 |
| 30-45.8173-111.7500-2-15- | 0-M37082 | 9357 | 657 | 13670 | 61 | -2 | 8.8 | 6.3 | -255 | -1 | -1 | 15.1 | 2585 | 72 | 3.9 | 101 | 0.192 |
| 30-45.8265-111.7872-2-15- | 0-M37083 | 10710 | 554 | 16230 | 72 | -2 | 8.4 | 5.0 | -236 | -1 | -1 | 7.8 | 1774 | 57 | 3.4 | -33 | 0.256 |
| 30-45.8186-111.8160-2-15- | 0-M37084 | 9918 | 568 | 15440 | 85 | -2 | 10.3 | 5.7 | -273 | 1 | -1 | 10.8 | 2737 | 78 | 4.6 | 114 | 0.241 |
| 30-45.8290-111.8517-2-15- | 0-M37085 | 13830 | 746 | 18210 | 80 | -2 | 14.3 | 4.0 | -268 | -1 | -1 | 8.6 | 3632 | 95 | 3.5 | 97 | 0.256 |
| 30-45.8308-111.8980-2-15- | 0-M37086 | 8629 | 735 | 14500 | -37 | -2 | 10.3 | 7.7 | -253 | -1 | -1 | 13.6 | 4104 | 84 | 5.7 | 75 | 0.272 |
| 30-45.8452-111.9150-2-15- | 0-M37087 | 16100 | 1107 | 19250 | 108 | -3 | 20.8 | 6.0 | -326 | -1 | -1 | 8.2 | 4730 | 120 | 4.7 | 100 | 0.317 |
| 30-45.8137-111.9511-2-12- | 0-M37088 | 10000 | 491 | 11180 | 55 | -1 | 7.4 | 4.8 | -214 | -1 | -1 | 8.5 | 2732 | 69 | 3.4 | 92 | 0.353 |
| 30-45.8322-111.9554-2-15- | 0-M37089 | 10560 | 600 | 12660 | 70 | -2 | 9.8 | 6.2 | -290 | -1 | -1 | 10.8 | 3840 | 80 | 3.0 | 81 | 0.213 |
| 30-45.7955-111.9175-2-12- | 0-M37090 | 12530 | 757 | 13460 | 53 | -2 | 11.6 | 5.5 | -257 | -1 | -1 | 9.3 | 3404 | 119 | 3.1 | 43 | 0.290 |
| 30-45.7596-111.9622-2-15- | 0-M37091 | 19180 | 724 | 8086 | 56 | -2 | 9.8 | 4.3 | -291 | -1 | -1 | 8.8 | 3228 | 81 | 2.9 | 192 | 0.216 |
| 30-45.7534-111.9644-2-12- | 0-M37092 | 35060 | 1058 | 7356 | 49 | -2 | 12.6 | 3.9 | -332 | -1 | -1 | 8.2 | 3129 | 98 | 3.3 | 133 | 0.268 |
| 30-45.8780-111.8865-2-12- | 0-M37093 | 19090 | 652 | 10290 | 56 | -2 | 9.6 | 5.8 | -311 | -1 | -1 | 11.5 | 2875 | 70 | 3.9 | -71 | 0.226 |
| 30-45.8916-111.9314-2-15- | 0-M37094 | 13820 | 602 | 12420 | 73 | -2 | 10.9 | 5.2 | -241 | -1 | -1 | 12.8 | 3034 | 89 | 3.6 | -90 | 0.250 |
| 30-45.9116-111.9246-2-15- | 0-M37095 | 15550 | 639 | 11690 | 83 | -2 | 13.2 | 5.9 | -247 | -1 | -1 | 12.8 | 3030 | 93 | 2.7 | 120 | 0.211 |
| 30-45.9226-111.9278-2-15- | 0-M37096 | 10490 | 659 | 11680 | 55 | -2 | 10.4 | 5.3 | 512 | -1 | -1 | 10.2 | 3333 | 90 | 3.0 | 89 | 0.235 |
| 30-45.9202-111.9723-2-15- | 0-M37097 | 13970 | 738 | 12060 | 52 | -2 | 10.6 | 5.9 | -306 | -1 | -1 | 8.2 | 3397 | 119 | 3.7 | -49 | 0.280 |
| 30-45.9243-111.9736-2-12- | 0-M37098 | 7986 | 836 | 14240 | 61 | -2 | 13.7 | 6.7 | -283 | -1 | -1 | 10.8 | 5400 | 157 | 4.4 | 102 | 0.204 |
| 30-45.9380-111.9247-2-12- | 0-M37099 | 14900 | 752 | 11210 | 75 | -2 | 13.0 | 5.8 | -280 | -1 | -1 | 13.8 | 3914 | 107 | 3.7 | 98 | 0.225 |
| 30-45.9440-111.9415-2-11- | 0-M37100 | 22330 | 1646 | 12610 | 59 | -3 | 22.3 | 4.6 | -411 | -1 | 2 | 8.7 | 3373 | 145 | 2.6 | -50 | 0.230 |
| 30-45.8870-111.9765-2-15- | 0-M37101 | 27400 | 1061 | 14990 | 62 | -3 | 25.2 | 4.0 | -382 | -1 | -1 | 5.7 | 4261 | 193 | -2.3 | 86 | 0.316 |
| 30-45.8856-111.9870-2-15- | 0-M37102 | 9053 | 726 | 13320 | 66 | -2 | 10.6 | 6.3 | 315 | -1 | -1 | 15.0 | 3777 | 139 | 4.8 | 46 | 0.233 |
| 30-45.9539-111.9095-2-15- | 0-M37103 | 14720 | 1345 | 13850 | 85 | -2 | 19.2 | 9.1 | -354 | -1 | -1 | 25.2 | 6824 | 286 | 6.0 | 85 | 0.202 |
| 30-45.9710-111.9725-2-12- | 0-M37104 | 10260 | 588 | 12000 | 65 | -2 | 8.2 | 5.4 | -245 | -1 | -1 | 11.7 | 2719 | 71 | 3.7 | -102 | 0.248 |
| 30-45.9761-111.9211-2-15- | 0-M37105 | 7389 | 1041 | 13970 | 92 | -3 | 13.6 | 7.4 | -384 | -1 | -1 | 18.2 | 6336 | 260 | 4.2 | 105 | 0.242 |
| 30-45.9833-111.8958-2-15- | 0-M37106 | 10600 | 922 | 15750 | 73 | -2 | 15.9 | 6.8 | -331 | -1 | -1 | 15.3 | 4283 | 126 | 4.0 | 116 | 0.242 |
| 30-45.9941-111.8945-2-15- | 0-M37107 | 16360 | 1139 | 15290 | 103 | -2 | 18.1 | 6.2 | -331 | -1 | -1 | 15.2 | 5379 | 213 | 3.9 | 135 | 0.211 |
| 30-45.9686-111.9000-2-15- | 0-M37108 | 13540 | 983 | 13830 | 86 | -2 | 15.5 | 5.6 | -302 | -1 | -1 | 13.5 | 5370 | 190 | 3.3 | -39 | 0.244 |
| 30-45.9564-111.8849-2-15- | 0-M37109 | 6951 | 980 | 16160 | 72 | -2 | 13.2 | 9.9 | -359 | -1 | 2 | 33.9 | 5253 | 239 | 5.4 | 66 | 0.201 |
| 30-45.9471-111.8927-2-15- | 0-M37110 | 7426 | 857 | 15510 | 103 | -2 | 13.5 | 7.6 | -312 | -1 | -1 | 20.6 | 3920 | 131 | 4.3 | 112 | 0.214 |
| 30-45.9760-111.8814-2-15- | 0-M37111 | 13820 | 1086 | 12000 | 74 | -2 | 13.5 | 8.8 | -326 | 3 | -1 | 23.1 | 4875 | 122 | 6.3 | 133 | 0.195 |
| 30-45.9961-111.8782-2-15- | 0-M37112 | 6094 | 1201 | 11760 | -46 | -2 | 13.0 | 13.1 | -324 | 3 | -1 | 79.8 | 7617 | 719 | 8.3 | 123 | 0.164 |
| 30-45.9495-111.8569-2-15- | 0-M37113 | 7621 | 735 | 17550 | 88 | -2 | 10.5 | 9.4 | -301 | -1 | -1 | 31.2 | 4454 | 180 | 4.8 | 68 | 0.179 |
| 30-45.9459-111.8130-2-11- | 0-M37114 | 6705 | 611 | 26820 | 66 | -2 | 8.4 | 4.6 | -337 | -1 | -1 | 12.2 | 2237 | 65 | 2.9 | -97 | 0.344 |
| 30-45.9561-111.8371-2-15- | 0-M37115 | 8876 | 1050 | 12440 | 51 | -2 | 11.8 | 7.2 | -296 | -1 | -1 | 17.0 | 4934 | 165 | 4.0 | 123 | 0.206 |
| 30-45.9567-111.8353-2-15- | 0-M37116 | 15390 | 731 | 8068 | 72 | -2 | 9.4 | 5.4 | -258 | -1 | -1 | 11.0 | 2887 | 68 | 2.7 | 64 | 0.209 |
| 30-45.9785-111.7999-2-11- | 0-M37117 | 11230 | 707 | 15030 | -35 | -2 | 10.7 | 5.8 | -337 | -1 | -1 | 10.2 | 3846 | 135 | 2.5 | 86 | 0.304 |
| 30-45.8578-110.0017-2-12- | 0-M37118 | 10600 | 837 | 13270 | -29 | -2 | 10.1 | 5.3 | 395 | -1 | -1 | 8.6 | 2787 | 113 | 2.9 | | 0.279 |
| 30-45.8475-110.0269-2-15- | 0-M37119 | 14580 | 915 | 13820 | -33 | -2 | 12.9 | 5.9 | -293 | -1 | -1 | 8.4 | 3465 | 153 | 3.2 | 123 | 0.274 |
| 30-45.8286-110.0872-2-15- | 0-M37120 | 9995 | 696 | 12380 | -31 | -2 | 12.0 | 4.8 | 360 | -1 | -1 | 8.8 | 3740 | 115 | 3.1 | 120 | 0.261 |
| 30-45.8281-110.1056-2-12- | 0-M37121 | 10250 | 637 | 13310 | 55 | -2 | 9.7 | 5.4 | -292 | -1 | -1 | 7.8 | 3141 | 116 | -2.1 | 74 | 0.295 |

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

(1)

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER AND FIELD DATA | | | | | | | | | | | | | | | | | | | | | | | | U CONCENTRATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | TIME SAMPLED | | | | | | | | | | | | | | | | | | | | | | | |
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | DATE | HOUR | AIR TEMPERATURE | WATER TEMPERATURE | COMMENTS | SPECIAL MEASUREMENTS | pH | CONDUCTIVITY (µmho/cm) | SCINTILLOMETER (eU, ppm) | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm |
| 30- | 45.7888- | 110.1444- | 2- | 12- | | 0-M37122- | 10/12/76- | 17- | 11- | 10.0- | - | - | 6.9- | 750- | | 7- | 1- | 6- | 5- | 8- | 2- | 2- | 2- | 2- | 4- | 3- | 2- | 2- | -3- | - | - | - | - | 2.00 |
| 30- | 45.8394- | 110.1053- | 2- | 12- | | 0-M37123- | 10/13/76- | 10- | 10- | 6.0- | - | - | 6.3- | 360- | | 3- | 1- | 6- | 4- | 6- | 1- | 2- | 2- | 2- | 3- | 2- | 3- | 2- | -3- | - | - | - | - | 4.00 |
| 30- | 45.8477- | 110.1298- | 2- | 12- | | 0-M37124- | 10/13/76- | 11- | 11- | 7.8- | - | - | 6.3- | 300- | | 8- | 1- | 6- | 5- | 6- | 2- | 2- | 2- | 2- | 3- | 2- | 3- | 2- | -3- | - | - | - | - | 2.50 |
| 30- | 45.8587- | 110.1437- | 2- | 12- | | 0-M37125- | 10/13/76- | 11- | 11- | 6.8- | - | - | 6.3- | 430- | | 2- | 1- | 6- | 5- | 8- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 3.20 |
| 30- | 45.8914- | 110.1494- | 2- | 12- | | 0-M37126- | 10/13/76- | 12- | 12- | 10.0- | - | - | 6.3- | 470- | | 8- | 1- | 6- | 6- | 8- | 2- | 2- | 1- | 2- | 3- | 2- | 3- | 2- | -3- | - | - | - | - | 2.60 |
| 30- | 45.9025- | 110.1617- | 2- | 12- | | 0-M37127- | 10/13/76- | 12- | 12- | 7.0- | - | - | 6.9- | 550- | | 2- | 1- | 6- | 4- | 5- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 2.80 |
| 30- | 45.8640- | 110.1648- | 2- | 15- | | 0-M37128- | 10/13/76- | 13- | 13- | - | - | - | - | - | | 6- | 1- | 7- | 5- | 6- | - | - | - | - | -3- | 2- | 3- | 2- | -3- | - | - | - | - | 2.40 |
| 30- | 45.8508- | 110.1920- | 2- | 12- | | 0-M37129- | 10/13/76- | 14- | 13- | 8.2- | - | - | 6.6- | 470- | | 6- | 1- | 6- | 5- | 8- | 2- | 2- | 2- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 2.60 |
| 30- | 45.8488- | 110.2017- | 2- | 12- | | 0-M37130- | 10/13/76- | 14- | 13- | 8.6- | - | - | 6.6- | 260- | | 6- | 1- | 6- | 4- | 6- | 2- | 3- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 2.40 |
| 30- | 45.8269- | 110.1958- | 2- | 12- | | 0-M37131- | 10/13/76- | 16- | 14- | 9.6- | - | - | 6.3- | 310- | | 3- | 1- | 6- | 4- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 3.40 |
| 30- | 45.8270- | 110.1937- | 2- | 12- | | 0-M37132- | 10/13/76- | 14- | 14- | 10.0- | - | - | 6.6- | 320- | | 7- | 1- | 6- | 4- | 8- | 2- | 2- | 2- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 2.70 |
| 30- | 45.8238- | 110.2053- | 2- | 15- | | 0-M37133- | 10/13/76- | 17- | 14- | - | - | - | - | - | | 6- | 1- | 6- | 4- | 6- | - | - | - | - | -4- | 3- | 3- | 1- | -3- | - | - | - | - | 2.40 |
| 30- | 45.8166- | 110.2016- | 2- | 15- | | 0-M37134- | 10/13/76- | 17- | 14- | - | - | - | - | - | | 3- | 1- | 6- | 4- | 6- | - | - | - | - | -2- | 3- | 3- | 1- | -3- | - | - | - | - | 2.50 |
| 30- | 45.8092- | 110.2099- | 2- | 15- | | 0-M37135- | 10/13/76- | 17- | 13- | - | - | - | - | - | | 5- | 1- | 6- | - | - | - | - | - | - | -2- | 3- | 3- | 1- | -3- | - | - | - | - | 2.40 |
| 30- | 45.7813- | 110.2379- | 2- | 15- | | 0-M37136- | 10/13/76- | 18- | 11- | - | - | - | - | - | | 6- | 1- | 6- | 4- | 6- | - | - | - | - | -3- | 2- | 3- | 1- | -3- | - | - | - | - | 2.60 |
| 30- | 45.7592- | 110.2692- | 2- | 12- | | 0-M37137- | 10/11/76- | 12- | 10- | 4.2- | - | - | 6.6- | 800- | | | -1- | 6- | 5- | 8- | 2- | 2- | 3- | 2- | 2- | 3- | 2- | 1- | -3- | - | - | - | - | 2.20 |
| 30- | 45.7528- | 110.2761- | 2- | 12- | | 0-M37138- | 10/11/76- | 12- | 10- | 4.0- | - | - | 6.6- | 600- | | | -1- | 6- | 5- | 8- | 2- | 2- | 1- | 2- | 2- | 2- | 3- | 1- | -3- | - | - | - | - | 2.00 |
| 30- | 45.7825- | 110.2875- | 2- | 12- | | 0-M37139- | 10/11/76- | 12- | 11- | 4.6- | - | - | 6.3- | 320- | | | -1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 2- | 1- | -3- | - | - | - | - | 2.40 |
| 30- | 45.8061- | 110.2756- | 2- | 12- | | 0-M37140- | 10/11/76- | 13- | 10- | 5.0- | - | - | 6.6- | 300- | | | -1- | 6- | 5- | 8- | 3- | 3- | 1- | 2- | 3- | 3- | 3- | 1- | -3- | - | - | - | - | 2.30 |
| 30- | 45.8295- | 110.2471- | 2- | 12- | | 0-M37141- | 10/11/76- | 13- | 11- | 4.8- | - | - | 6.6- | 500- | | | -1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 2- | 2- | 3- | 1- | -3- | - | - | - | - | 2.40 |
| 30- | 45.8283- | 110.2783- | 2- | 12- | | 0-M37142- | 10/11/76- | 13- | 12- | 6.0- | - | - | 6.6- | 450- | | | -1- | 6- | 5- | 6- | 1- | 2- | 2- | 2- | 3- | 3- | 3- | 1- | -3- | - | - | - | - | 2.50 |
| 30- | 45.8328- | 110.2900- | 2- | 12- | | 0-M37143- | 10/11/76- | 13- | 13- | 4.2- | - | - | 6.3- | 280- | | | -1- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 2.80 |
| 30- | 45.8311- | 110.2911- | 2- | 12- | | 0-M37144- | 10/11/76- | 13- | 11- | 6.0- | - | - | 6.6- | 500- | | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 2.40 |
| 30- | 45.8272- | 110.2942- | 2- | 12- | | 0-M37145- | 10/11/76- | 14- | 11- | 10.0- | - | - | 6.3- | 500- | | | -1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 4- | 2- | 3- | 1- | -3- | - | - | - | - | 2.00 |
| 30- | 45.8467- | 110.3203- | 2- | 12- | | 0-M37146- | 10/11/76- | 14- | 11- | 8.0- | - | - | 6.6- | 275- | | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 4- | 2- | 3- | 1- | -3- | - | - | - | - | 2.30 |
| 30- | 45.8456- | 110.3208- | 2- | 12- | | 0-M37147- | 10/11/76- | 14- | 10- | 8.4- | - | - | 6.3- | 320- | | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 3- | 2- | 3- | 1- | -3- | - | - | - | - | 3.00 |
| 30- | 45.8325- | 110.3214- | 2- | 15- | | 0-M37148- | 10/11/76- | 15- | 10- | - | - | - | - | - | | | -1- | 6- | 4- | 6- | - | - | - | - | -4- | 2- | 3- | 1- | -3- | - | - | - | - | 2.00 |
| 30- | 45.8286- | 110.2606- | 2- | 15- | | 0-M37149- | 10/11/76- | 15- | 10- | - | - | - | - | - | | | -1- | 6- | 4- | 6- | - | - | - | - | -3- | 2- | 3- | 1- | -3- | - | - | - | - | 2.40 |
| 30- | 45.8522- | 110.2628- | 2- | 12- | | 0-M37150- | 10/11/76- | 15- | 10- | 5.4- | - | - | 6.6- | 460- | | | -1- | 6- | 5- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 2.40 |
| 30- | 45.8514- | 110.2569- | 2- | 12- | | 0-M37151- | 10/11/76- | 16- | 10- | 6.0- | - | - | 6.3- | 380- | | | -1- | 6- | 4- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 2.40 |
| 30- | 45.8739- | 110.2736- | 2- | 12- | | 0-M37152- | 10/11/76- | 16- | 10- | 5.8- | - | - | 6.3- | 360- | | | -1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 2- | 2- | 3- | 1- | -3- | - | - | - | - | 2.40 |
| 30- | 45.8675- | 110.3047- | 2- | 12- | | 0-M37153- | 10/11/76- | 16- | 8- | 4.4- | - | - | 6.3- | 410- | | | -1- | 6- | 4- | 8- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 2.30 |
| 30- | 45.8800- | 110.3319- | 2- | 12- | | 0-M37154- | 10/11/76- | 16- | 5- | 1.0- | - | - | 6.3- | 200- | | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 2.50 |
| 30- | 45.8881- | 110.3483- | 2- | 12- | | 0-M37155- | 10/11/76- | 16- | 5- | 4.0- | - | - | 6.3- | 345- | | | -1- | 6- | 4- | 6- | 2- | 2- | 1- | - | 1- | 2- | 4- | 2- | -3- | - | - | - | - | 3.10 |
| 30- | 45.8950- | 110.3603- | 2- | 12- | | 0-M37156- | 10/11/76- | 17- | 5- | 2.0- | - | - | 6.3- | 290- | | | -1- | 6- | 4- | 7- | 2- | 2- | 1- | 2- | 1- | 3- | 3- | 2- | -3- | - | - | - | - | 3.70 |
| 30- | 45.8928- | 110.3219- | 2- | 12- | | 0-M37157- | 10/11/76- | 17- | 6- | 6.0- | - | - | 6.3- | 250- | | | -1- | 6- | 4- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 4- | 1- | -3- | - | - | - | - | 2.20 |
| 30- | 45.9169- | 110.3175- | 2- | 12- | | 0-M37158- | 10/11/76- | 18- | 8- | 3.0- | - | - | - | 220- | | | -1- | 6- | 4- | 6- | 4- | 3- | 2- | 2- | 1- | 3- | 4- | 1- | -3- | - | - | - | - | 2.70 |
| 30- | 45.8781- | 110.2744- | 2- | 12- | | 0-M37159- | 10/11/76- | 18- | 10- | 2.4- | - | - | 6.3- | 280- | | | -1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 4- | 1- | -3- | - | - | - | - | 2.20 |
| 30- | 45.8800- | 110.2800- | 2- | 12- | | 0-M37160- | 10/11/76- | 18- | 9- | 3.0- | - | - | 6.6- | 300- | | | -1- | 6- | 3- | 6- | 2- | 2- | 1- | 2- | 2- | 2- | 4- | 1- | -3- | - | - | - | - | 2.50 |
| 30- | 45.8831- | 110.2561- | 2- | 12- | | 0-M37161- | 10/11/76- | 18- | 9- | 0.8- | - | - | 6.3- | 185- | | | -1- | 6- | - | - | - | - | - | - | 2- | 2- | 4- | 1- | -3- | - | - | - | - | 2.40 |
| 30- | 45.8761- | 110.2478- | 2- | 12- | | 0-M37162- | 10/11/76- | 19- | 9- | 1.4- | - | - | 6.3- | 210- | | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 4- | 1- | -3- | - | - | - | - | 3.10 |
| 30- | 45.8761- | 110.2464- | 2- | 12- | | 0-M37163- | 10/11/76- | 19- | 9- | 2.0- | - | - | 6.3- | 230- | | | -1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 2- | 2- | 4- | 1- | -3- | - | - | - | - | 2.40 |
| 30- | 45.8775- | 110.2383- | 2- | 15- | | 0-M37164- | 10/11/76- | 17- | 9- | - | - | - | - | - | | | -1- | 6- | 4- | 6- | - | - | - | - | -4- | 1- | 3- | 1- | -3- | - | - | - | - | 2.00 |
| 30- | 45.8856- | 110.2100- | 2- | 12- | | 0-M37165- | 10/11/76- | 17- | 8- | 4.0- | - | - | 6.6- | 390- | | | -1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 2- | 4- | 3- | 1- | -3- | - | - | - | - | 2.80 |
| 30- | 45.8869- | 110.1931- | 2- | 12- | | 0-M37166- | 10/15/76- | 8- | 8- | 3.6- | - | - | 6.6- | 550- | | | -1- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 2- | 2- | 2- | 1- | -3- | - | - | - | - | 3.60 |
| 30- | 45.9839- | 111.7685- | 2- | 11- | | 0-M37167- | 10/15/76- | 8- | 4- | - | - | - | 6.6- | 470- | | | -1- | 6- | 4- | 6- | 2- | 2- | 2- | - | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 2.70 |
| 30- | 45.9017- | 111.8121- | 2- | 12- | | 0-M37168- | 10/15/76- | 8- | 5- | - | - | - | 6.9- | 1300- | | | -1- | 6- | 4- | 6- | 2- | 2- | 2- | 2- | 2- | 2- | 1- | 1- | -3- | - | - | - | - | 6.40 |
| 30- | 45.8999- | 111.7961- | 2- | 15- | | 0-M37169- | 10/15/76- | 8- | 5- | - | - | - | - | - | | | -1- | 6- | 4- | 6- | - | - | - | - | -3- | 3- | 2- | 1- | -3- | - | - | - | - | 5.10 |
| 30- | 45.9028- | 111.7916- | 2- | 15- | | 0-M37170- | 10/15/76- | 8- | 5- | - | - | - | - | - | | | -1- | 6- | 4- | 6- | - | - | - | - | -3- | 3- | 2- | 1- | -3- | - | - | - | - | 6.50 |
| 30- | 45.8985- | 111.7657- | 2- | 15- | | 0-M37171- | 10/15/76- | 9- | 5- | - | - | - | - | - | | | -1- | 6- | 4- | 6- | - | - | - | - | -4- | 3- | 3- | 1- | -3- | - | - | - | - | 5.00 |
| 30- | 45.9120- | 111.7648- | 2- | 11- | | 0-M37172- | 10/15/76- | 9- | 1- | - | - | - | 6.6- | 2000- | | | -1- | 6- | 5- | 8- | 2- | 2- | 3- | - | 4- | 4- | 1- | 1- | -3- | - | - | - | - | 6.90 |

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

(2)

| DOE SAMPLE NUMBER | | | | | | LAB. SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE (Concentrations reported in weight parts per million (ppm)) | | | | | | | | | ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY (Concentrations in weight ppm) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Ag | Bi | Cd | Cu | Nb | Ni | Pb | Sn | W | Be | Li |
| 30- | 45.7888- | 110.1444- | 2- | 12- | 0- | M37122 | -5 | -5 | -5 | 42 | -20 | 63 | 11 | -10 | -15 | 3 | 35 |
| 30- | 45.8394- | 110.1053- | 2- | 12- | 0- | M37123 | -5 | -5 | -5 | 26 | -20 | 21 | 9 | -10 | -15 | 3 | 37 |
| 30- | 45.8477- | 110.1298- | 2- | 12- | 0- | M37124 | -5 | -5 | -5 | 30 | -20 | 33 | 7 | -10 | -15 | 3 | 34 |
| 30- | 45.8587- | 110.1437- | 2- | 12- | 0- | M37125 | -5 | -5 | -5 | 16 | -20 | -15 | 7 | -10 | -15 | 3 | 32 |
| 30- | 45.8914- | 110.1494- | 2- | 12- | 0- | M37126 | -5 | -5 | -5 | 37 | -20 | 29 | 7 | -10 | -15 | 2 | 40 |
| 30- | 45.9025- | 110.1617- | 2- | 12- | 0- | M37127 | -5 | -5 | -5 | 29 | -20 | 18 | 7 | -10 | -15 | 2 | 34 |
| 30- | 45.8640- | 110.1648- | 2- | 15- | 0- | M37128 | -5 | -5 | -5 | 28 | -20 | 20 | 9 | -10 | -15 | 2 | 39 |
| 30- | 45.8508- | 110.1920- | 2- | 12- | 0- | M37129 | -5 | 5 | -5 | 21 | -20 | 33 | -5 | -10 | -15 | 2 | 27 |
| 30- | 45.8488- | 110.2017- | 2- | 12- | 0- | M37130 | -5 | -5 | -5 | 34 | -20 | 23 | -5 | -10 | -15 | 2 | 44 |
| 30- | 45.8269- | 110.1958- | 2- | 12- | 0- | M37131 | -5 | -5 | -5 | 20 | -20 | 26 | 9 | -10 | -15 | 2 | 35 |
| 30- | 45.8270- | 110.1937- | 2- | 12- | 0- | M37132 | -5 | -5 | -5 | 32 | -20 | 32 | 6 | -10 | -15 | 2 | 35 |
| 30- | 45.8238- | 110.2053- | 2- | 15- | 0- | M37133 | -5 | -5 | -5 | 35 | -20 | 27 | 7 | -10 | -15 | 2 | 33 |
| 30- | 45.8166- | 110.2016- | 2- | 15- | 0- | M37134 | -5 | -5 | -5 | 38 | -20 | 32 | 11 | -10 | -15 | 2 | 34 |
| 30- | 45.8092- | 110.2099- | 2- | 15- | 0- | M37135 | -5 | -5 | -5 | 35 | -20 | 24 | -5 | -10 | -15 | 3 | 32 |
| 30- | 45.7813- | 110.2379- | 2- | 15- | 0- | M37136 | -5 | -5 | -5 | 29 | -20 | 17 | -5 | -10 | -15 | 2 | 24 |
| 30- | 45.7592- | 110.2692- | 2- | 12- | 0- | M37137 | -5 | -5 | -5 | 30 | -20 | 56 | 9 | -10 | -15 | 2 | 21 |
| 30- | 45.7528- | 110.2761- | 2- | 12- | 0- | M37138 | -5 | -5 | -5 | 46 | -20 | 55 | 8 | -10 | -15 | 2 | 17 |
| 30- | 45.7825- | 110.2875- | 2- | 12- | 0- | M37139 | -5 | -5 | -5 | 36 | -20 | 25 | -5 | -10 | -15 | 2 | 18 |
| 30- | 45.8061- | 110.2756- | 2- | 12- | 0- | M37140 | -5 | -5 | -5 | 31 | -20 | 26 | 6 | -10 | -15 | 2 | 21 |
| 30- | 45.8295- | 110.2471- | 2- | 12- | 0- | M37141 | -5 | -5 | -5 | 29 | -20 | 44 | -5 | -10 | -15 | 2 | 21 |
| 30- | 45.8283- | 110.2783- | 2- | 12- | 0- | M37142 | -5 | -5 | -5 | 33 | -20 | 43 | 6 | -10 | -15 | 2 | 21 |
| 30- | 45.8328- | 110.2900- | 2- | 12- | 0- | M37143 | -5 | -5 | -5 | 20 | -20 | 32 | -5 | -10 | -15 | 2 | 26 |
| 30- | 45.8311- | 110.2911- | 2- | 12- | 0- | M37144 | -5 | -5 | -5 | 29 | -20 | 29 | 13 | -10 | -15 | 2 | 26 |
| 30- | 45.8272- | 110.2942- | 2- | 12- | 0- | M37145 | -5 | -5 | -5 | 23 | -20 | 23 | -5 | -10 | -15 | 2 | 24 |
| 30- | 45.8467- | 110.3203- | 2- | 12- | 0- | M37146 | -5 | -5 | -5 | 347 | -20 | 39 | 16 | -10 | -15 | 1 | 38 |
| 30- | 45.8456- | 110.3208- | 2- | 12- | 0- | M37147 | -5 | -5 | -5 | 28 | -20 | 19 | 9 | -10 | -15 | 2 | 28 |
| 30- | 45.8325- | 110.3214- | 2- | 15- | 0- | M37148 | -5 | -5 | -5 | 35 | -20 | 38 | 6 | -10 | -15 | 2 | 31 |
| 30- | 45.8286- | 110.2606- | 2- | 15- | 0- | M37149 | -5 | -5 | -5 | 35 | -20 | 36 | 10 | -10 | -15 | 2 | 27 |
| 30- | 45.8522- | 110.2628- | 2- | 12- | 0- | M37150 | -5 | -5 | -5 | 32 | -20 | 23 | 12 | -10 | -15 | 2 | 13 |
| 30- | 45.8514- | 110.2569- | 2- | 12- | 0- | M37151 | -5 | -5 | -5 | 36 | -20 | 28 | -5 | -10 | -15 | 2 | 12 |
| 30- | 45.8739- | 110.2736- | 2- | 12- | 0- | M37152 | -5 | -5 | -5 | 34 | -20 | 45 | -5 | -10 | -15 | 2 | 20 |
| 30- | 45.8675- | 110.3047- | 2- | 12- | 0- | M37153 | -5 | -5 | -5 | 33 | -20 | 27 | 11 | -10 | -15 | 2 | 21 |
| 30- | 45.8800- | 110.3319- | 2- | 12- | 0- | M37154 | -5 | -5 | -5 | 32 | -20 | 42 | 5 | -10 | -15 | 2 | 30 |
| 30- | 45.8881- | 110.3483- | 2- | 12- | 0- | M37155 | -5 | -5 | -5 | 34 | -20 | 46 | 8 | -10 | -15 | 2 | 45 |
| 30- | 45.8950- | 110.3603- | 2- | 12- | 0- | M37156 | -5 | -5 | -5 | 27 | -20 | -15 | 5 | -10 | -15 | 5 | 57 |
| 30- | 45.8928- | 110.3219- | 2- | 12- | 0- | M37157 | -5 | -5 | -5 | 20 | -20 | 35 | -5 | -10 | -15 | 2 | 36 |
| 30- | 45.9169- | 110.3175- | 2- | 12- | 0- | M37158 | -5 | -5 | -5 | 12 | -20 | 21 | 8 | -10 | -15 | 2 | 41 |
| 30- | 45.8781- | 110.2744- | 2- | 12- | 0- | M37159 | -5 | -5 | -5 | 27 | -20 | 35 | 8 | -10 | -15 | 1 | 38 |
| 30- | 45.8800- | 110.2800- | 2- | 12- | 0- | M37160 | -5 | -5 | -5 | 38 | -20 | 35 | 8 | -10 | -15 | 1 | 43 |
| 30- | 45.8831- | 110.2561- | 2- | 12- | 0- | M37161 | -5 | -5 | -5 | 26 | -20 | 20 | -5 | -10 | -15 | 2 | 38 |
| 30- | 45.8761- | 110.2478- | 2- | 12- | 0- | M37162 | -5 | -5 | -5 | 24 | -20 | 30 | 9 | -10 | -15 | 2 | 36 |
| 30- | 45.8761- | 110.2464- | 2- | 12- | 0- | M37163 | -5 | -5 | -5 | 34 | -20 | 32 | -5 | -10 | -15 | 2 | 38 |
| 30- | 45.8775- | 110.2383- | 2- | 15- | 0- | M37164 | -5 | -5 | -5 | 30 | -20 | 19 | 8 | -10 | -15 | 2 | 46 |
| 30- | 45.8856- | 110.2100- | 2- | 12- | 0- | M37165 | -5 | -5 | -5 | 39 | -20 | 37 | -5 | -10 | 15 | 2 | 42 |
| 30- | 45.8869- | 110.1931- | 2- | 12- | 0- | M37166 | -5 | -5 | -5 | 29 | -20 | 34 | 6 | -10 | -15 | 2 | 35 |
| 30- | 45.9839- | 111.7685- | 2- | 11- | 0- | M37167 | -5 | -5 | -5 | 35 | -20 | -15 | 6 | -10 | -15 | 2 | 33 |
| 30- | 45.9017- | 111.8121- | 2- | 12- | 0- | M37168 | -5 | 6 | -5 | 34 | -20 | -15 | -5 | -10 | -15 | 3 | 34 |
| 30- | 45.8999- | 111.7961- | 2- | 15- | 0- | M37169 | -5 | -5 | -5 | 36 | -20 | -15 | 22 | -10 | -15 | 5 | 36 |
| 30- | 45.9028- | 111.7916- | 2- | 15- | 0- | M37170 | -5 | -5 | -5 | 27 | -20 | 21 | 14 | -10 | -15 | 3 | 37 |
| 30- | 45.8985- | 111.7657- | 2- | 15- | 0- | M37171 | -5 | -5 | -5 | 36 | -20 | -15 | 20 | -10 | -15 | 3 | 42 |
| 30- | 45.9120- | 111.7648- | 2- | 11- | 0- | M37172 | -5 | -5 | -5 | 53 | -20 | 16 | 17 | -10 | -15 | 3 | 44 |

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

③

| DOE SAMPLE NUMBER | | | | | | LAB. SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (Concentrations reported in weight parts per million (ppm)) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Al | Au | Ba | Ca | Ce | Cl | Co | Cr | Cs | Dy | Eu | Fe | Hf | K | La | Lu |
| 30- | 45.7888- | 110.1444- | 2- | 12- | 0- | M37122 | 72060 | -0.10 | 777 | 28350 | 67 | -101 | 20.7 | 227 | 4.6 | 3 | 1.7 | 43270 | 4.9 | 20410 | 34 | 0.3 |
| 30- | 45.8394- | 110.1053- | 2- | 12- | 0- | M37123 | 62970 | -0.08 | 911 | 36380 | 103 | 204 | 11.8 | 163 | 3.3 | 6 | 1.9 | 38230 | 17.1 | 22770 | 54 | 0.7 |
| 30- | 45.8477- | 110.1298- | 2- | 12- | 0- | M37124 | 60900 | -0.08 | 949 | 15320 | 61 | -79 | 16.2 | 149 | 3.7 | 4 | 1.8 | 35860 | 8.3 | 18670 | 40 | 0.3 |
| 30- | 45.8587- | 110.1437- | 2- | 12- | 0- | M37125 | 57800 | -0.08 | 604 | 32640 | 85 | -93 | 10.3 | 94 | 3.6 | 5 | 1.7 | 24560 | 12.3 | 17930 | 42 | 0.5 |
| 30- | 45.8914- | 110.1494- | 2- | 12- | 0- | M37126 | 60100 | -0.08 | 532 | 41490 | 60 | -79 | 13.5 | 99 | 3.8 | 4 | 1.4 | 33440 | 6.2 | 13200 | 32 | 0.3 |
| 30- | 45.9025- | 110.1617- | 2- | 12- | 0- | M37127 | 60210 | -0.08 | 838 | 23450 | 66 | -87 | 15.8 | 307 | 3.2 | 4 | 1.7 | 41740 | 18.6 | 15540 | 44 | 0.4 |
| 30- | 45.8640- | 110.1648- | 2- | 15- | 0- | M37128 | 62330 | -0.08 | 677 | 12630 | 53 | -72 | 13.6 | 89 | 3.7 | 4 | 1.5 | 31510 | 5.3 | 20060 | 35 | 0.4 |
| 30- | 45.8508- | 110.1920- | 2- | 12- | 0- | M37129 | 54910 | -0.08 | 766 | 31570 | 63 | -91 | 14.1 | 182 | 2.6 | 4 | 1.6 | 31270 | 12.3 | 13280 | 36 | 0.4 |
| 30- | 45.8488- | 110.2017- | 2- | 12- | 0- | M37130 | 63970 | -0.08 | 636 | 17370 | 61 | -85 | 13.7 | 147 | 2.9 | 3 | 1.5 | 36910 | 7.8 | 17230 | 34 | 0.4 |
| 30- | 45.8269- | 110.1958- | 2- | 12- | 0- | M37131 | 58670 | -0.07 | 740 | 23240 | 85 | -82 | 9.9 | 117 | 3.5 | 5 | 1.7 | 32060 | 16.0 | 19560 | 46 | 0.5 |
| 30- | 45.8270- | 110.1937- | 2- | 12- | 0- | M37132 | 62590 | -0.08 | 766 | 21730 | 54 | -80 | 15.7 | 124 | 4.1 | 4 | 1.6 | 34710 | 6.0 | 13710 | 38 | 0.3 |
| 30- | 45.8238- | 110.2053- | 2- | 15- | 0- | M37133 | 62860 | -0.08 | 593 | 26040 | 69 | -78 | 12.8 | 100 | 4.5 | 4 | 1.5 | 31230 | 5.7 | 16530 | 31 | 0.3 |
| 30- | 45.8166- | 110.2016- | 2- | 15- | 0- | M37134 | 60690 | -0.07 | 747 | 18870 | 70 | -79 | 14.6 | 120 | 4.0 | 4 | 1.9 | 34740 | 4.8 | 16210 | 36 | 0.3 |
| 30- | 45.8092- | 110.2099- | 2- | 15- | 0- | M37135 | 64480 | -0.08 | 839 | 32280 | 62 | -78 | 14.7 | 128 | 3.7 | 4 | 1.7 | 38520 | 5.7 | 17800 | 35 | 0.3 |
| 30- | 45.7813- | 110.2379- | 2- | 15- | 0- | M37136 | 57550 | -0.07 | 723 | 22200 | 60 | -77 | 14.8 | 176 | 2.8 | 4 | 1.5 | 35620 | 10.2 | 15360 | 37 | 0.3 |
| 30- | 45.7592- | 110.2692- | 2- | 12- | 0- | M37137 | 67380 | -0.10 | 1137 | 27470 | 81 | -113 | 19.5 | 332 | 3.8 | 4 | 1.6 | 40940 | 8.0 | 17960 | 41 | 0.4 |
| 30- | 45.7528- | 110.2761- | 2- | 12- | 0- | M37138 | 66360 | -0.09 | 870 | 35450 | 76 | -104 | 18.6 | 410 | 4.2 | 3 | 1.6 | 47040 | 6.5 | 12740 | 43 | 0.3 |
| 30- | 45.7825- | 110.2875- | 2- | 12- | 0- | M37139 | 66720 | -0.09 | 1057 | 23990 | 91 | -91 | 19.2 | 308 | 3.5 | 4 | 1.8 | 53490 | 8.7 | 16220 | 49 | 0.3 |
| 30- | 45.8061- | 110.2756- | 2- | 12- | 0- | M37140 | 57520 | -0.08 | 889 | 38060 | 53 | -91 | 15.3 | 127 | 3.0 | 4 | 1.4 | 32880 | 6.4 | 15110 | 35 | 0.3 |
| 30- | 45.8295- | 110.2471- | 2- | 12- | 0- | M37141 | 61190 | -0.08 | 777 | 22210 | 70 | -91 | 13.3 | 210 | 1.9 | 3 | 1.7 | 33390 | 12.1 | 14170 | 45 | 0.4 |
| 30- | 45.8283- | 110.2783- | 2- | 12- | 0- | M37142 | 64890 | -0.09 | 622 | 50040 | 67 | -91 | 15.8 | 138 | 4.7 | 3 | 1.8 | 35170 | 6.6 | 17160 | 38 | 0.3 |
| 30- | 45.8328- | 110.2900- | 2- | 12- | 0- | M37143 | 63260 | -0.08 | 968 | 23840 | 74 | -84 | 16.0 | 327 | 2.9 | 4 | 1.8 | 51550 | 16.3 | 17460 | 47 | 0.4 |
| 30- | 45.8311- | 110.2911- | 2- | 12- | 0- | M37144 | 59510 | -0.07 | 725 | 33180 | 70 | -79 | 15.3 | 121 | 3.3 | 4 | 1.5 | 33590 | 6.9 | 15950 | 35 | 0.3 |
| 30- | 45.8272- | 110.2942- | 2- | 12- | 0- | M37145 | 50770 | -0.07 | 553 | 37960 | 59 | -84 | 10.6 | 96 | 2.3 | 3 | 1.3 | 24560 | 5.0 | 11580 | 27 | 0.3 |
| 30- | 45.8467- | 110.3203- | 2- | 12- | 0- | M37146 | 70510 | -0.09 | 887 | 16210 | 69 | -104 | 18.0 | 141 | 4.4 | 4 | 1.9 | 40170 | 6.3 | 16880 | 37 | 0.4 |
| 30- | 45.8456- | 110.3208- | 2- | 12- | 0- | M37147 | 60020 | -0.08 | 769 | 24140 | 75 | 97 | 7.9 | 65 | 4.5 | 5 | 1.5 | 24500 | 9.5 | 20190 | 45 | 0.5 |
| 30- | 45.8325- | 110.3214- | 2- | 15- | 0- | M37148 | 64520 | -0.07 | 851 | 20630 | 47 | -84 | 15.4 | 114 | 3.3 | 4 | 1.6 | 36240 | 4.5 | 16660 | 31 | 0.3 |
| 30- | 45.8286- | 110.2606- | 2- | 15- | 0- | M37149 | 65460 | -0.08 | 694 | 32490 | 73 | -83 | 14.2 | 115 | 4.7 | 4 | 1.5 | 33470 | 6.1 | 14360 | 31 | 0.4 |
| 30- | 45.8522- | 110.2628- | 2- | 12- | 0- | M37150 | 60370 | -0.08 | 608 | 40250 | 74 | -91 | 15.7 | 154 | 3.3 | 4 | 1.7 | 35500 | 8.7 | 15310 | 35 | 0.4 |
| 30- | 45.8514- | 110.2569- | 2- | 12- | 0- | M37151 | 63330 | -0.08 | 885 | 19210 | 71 | -85 | 14.9 | 224 | 3.2 | 3 | 1.7 | 42460 | 10.7 | 19200 | 44 | 0.3 |
| 30- | 45.8739- | 110.2736- | 2- | 12- | 0- | M37152 | 65750 | -0.07 | 794 | 18630 | 62 | -85 | 16.7 | 184 | 3.7 | 4 | 1.6 | 40170 | 8.2 | 17630 | 40 | 0.3 |
| 30- | 45.8675- | 110.3047- | 2- | 12- | 0- | M37153 | 63960 | -0.08 | 973 | 19510 | 71 | -101 | 13.2 | 176 | 3.1 | 3 | 1.9 | 33800 | 8.1 | 17790 | 36 | 0.3 |
| 30- | 45.8800- | 110.3319- | 2- | 12- | 0- | M37154 | 68860 | -0.09 | 812 | 13320 | 82 | -90 | 16.2 | 160 | 4.3 | 3 | 1.8 | 43990 | 8.1 | 19600 | 41 | 0.3 |
| 30- | 45.8881- | 110.3483- | 2- | 12- | 0- | M37155 | 64310 | -0.09 | 873 | 26220 | 72 | -95 | 14.0 | 167 | 4.3 | 4 | 1.8 | 40320 | 12.9 | 20070 | 41 | 0.4 |
| 30- | 45.8950- | 110.3603- | 2- | 12- | 0- | M37156 | 54230 | -0.08 | 564 | 17650 | 67 | -81 | 11.9 | 92 | 32.5 | 5 | 1.4 | 26630 | 10.7 | 15820 | 40 | 0.5 |
| 30- | 45.8928- | 110.3219- | 2- | 12- | 0- | M37157 | 65970 | -0.10 | 935 | 28750 | 95 | -114 | 16.4 | 154 | 3.4 | 4 | 1.7 | 35180 | 8.6 | 24020 | 47 | 0.3 |
| 30- | 45.9169- | 110.3175- | 2- | 12- | 0- | M37158 | 66510 | -0.09 | 713 | 12340 | 60 | -93 | 12.3 | 121 | 3.6 | 4 | 1.5 | 32070 | 8.4 | 17190 | 36 | 0.3 |
| 30- | 45.8781- | 110.2744- | 2- | 12- | 0- | M37159 | 68370 | -0.09 | 771 | 28420 | 79 | -91 | 14.6 | 165 | 4.2 | 4 | 1.8 | 40580 | 6.8 | 18430 | 37 | 0.4 |
| 30- | 45.8800- | 110.2800- | 2- | 12- | 0- | M37160 | 69730 | -0.08 | 809 | 12910 | 68 | -85 | 18.4 | 167 | 3.9 | 4 | 1.7 | 42650 | 8.5 | 20380 | 40 | 0.4 |
| 30- | 45.8831- | 110.2561- | 2- | 12- | 0- | M37161 | 70490 | -0.09 | 786 | 13920 | 64 | -94 | 13.8 | 113 | 5.0 | 4 | 1.4 | 32530 | 5.8 | 22130 | 31 | 0.3 |
| 30- | 45.8761- | 110.2478- | 2- | 12- | 0- | M37162 | 59030 | -0.07 | 688 | 25100 | 69 | -83 | 12.6 | 111 | 3.9 | 4 | 1.5 | 30960 | 12.1 | 17690 | 40 | 0.4 |
| 30- | 45.8761- | 110.2464- | 2- | 12- | 0- | M37163 | 70790 | -0.08 | 866 | 15810 | 70 | -82 | 14.3 | 169 | 3.4 | 4 | 1.6 | 38980 | 8.9 | 19410 | 39 | 0.4 |
| 30- | 45.8775- | 110.2383- | 2- | 15- | 0- | M37164 | 56870 | -0.06 | 620 | 40720 | 46 | -75 | 16.4 | 114 | 3.6 | 3 | 1.4 | 34180 | 3.9 | 15480 | 30 | 0.2 |
| 30- | 45.8856- | 110.2100- | 2- | 12- | 0- | M37165 | 62500 | -0.08 | 876 | 19060 | 87 | -94 | 13.5 | 287 | 3.1 | 4 | 1.8 | 40750 | 15.3 | 17940 | 45 | 0.5 |
| 30- | 45.8869- | 110.1931- | 2- | 12- | 0- | M37166 | 60380 | -0.07 | 653 | 25900 | 60 | -81 | 14.0 | 150 | 3.4 | 3 | 1.6 | 35580 | 7.8 | 15940 | 34 | 0.4 |
| 30- | 45.9839- | 111.7685- | 2- | 11- | 0- | M37167 | 66050 | -0.08 | 771 | 28300 | 66 | -84 | 12.8 | 82 | 3.5 | 4 | 1.6 | 37630 | 10.0 | 15390 | 31 | 0.4 |
| 30- | 45.9017- | 111.8121- | 2- | 12- | 0- | M37168 | 64480 | -0.08 | 628 | 29750 | 144 | 146 | 10.6 | 93 | 4.6 | 8 | 1.7 | 39230 | 31.5 | 20410 | 83 | 0.7 |
| 30- | 45.8999- | 111.7961- | 2- | 15- | 0- | M37169 | 74250 | -0.09 | 586 | 16770 | 108 | 131 | 11.4 | 43 | 7.7 | 7 | 1.6 | 26750 | 11.3 | 23290 | 52 | 0.6 |
| 30- | 45.9028- | 111.7916- | 2- | 15- | 0- | M37170 | 57630 | -0.08 | 537 | 33660 | 77 | -83 | 11.5 | 119 | 4.8 | 5 | 1.4 | 28280 | 13.7 | 18740 | 49 | 0.5 |
| 30- | 45.8985- | 111.7657- | 2- | 15- | 0- | M37171 | 76890 | -0.09 | 729 | 24460 | 106 | -84 | 10.5 | 51 | 7.9 | 6 | 1.9 | 35690 | 21.4 | 21360 | 59 | 0.6 |
| 30- | 45.9120- | 111.7648- | 2- | 11- | 0- | M37172 | 61080 | -0.09 | 659 | 34340 | 90 | 1038 | 14.5 | 86 | 5.2 | 7 | 1.7 | 39160 | 25.1 | 16180 | 48 | 0.7 |

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

(4)

| DOE SAMPLE NUMBER: STATE-LATITUDE-LONGITUDE-DOE LAB-SAMPLE TYPE-REPLICATE | LAB. SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) — Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | U/Th RATIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mg | Mn | Na | Rb | Sb | Sc | Sm | Sr | Ta | Tb | Th | Ti | V | Yb | Zn | |
| 30-45.7888-110.1444-2-12- | 0-M37122 | 12640 | 983 | 13390 | -36 | -2 | 13.9 | 5.2 | 564 | -1 | -1 | 8.5 | 3569 | 121 | 2.8 | 123 | 0.235 |
| 30-45.8394-110.1053-2-12- | 0-M37123 | 10830 | 769 | 16670 | 79 | -2 | 13.5 | 8.0 | 452 | 1 | -1 | 17.1 | 3962 | 102 | 4.8 | 130 | 0.234 |
| 30-45.8477-110.1298-2-12- | 0-M37124 | 9689 | 638 | 12090 | 54 | -2 | 10.9 | 5.2 | -258 | -1 | -1 | 8.3 | 3575 | 105 | 2.2 | -37 | 0.301 |
| 30-45.8587-110.1437-2-12- | 0-M37125 | 9412 | 620 | 13820 | 69 | -2 | 8.4 | 6.5 | -290 | -1 | -1 | 12.5 | 3655 | 75 | 4.8 | 70 | 0.256 |
| 30-45.8914-110.1494-2-12- | 0-M37126 | 12530 | 657 | 8142 | 72 | -2 | 10.1 | 5.5 | -278 | -1 | -1 | 8.6 | 3087 | 94 | 3.1 | 88 | 0.302 |
| 30-45.9025-110.1617-2-12- | 0-M37127 | 12060 | 772 | 13740 | 44 | -2 | 9.8 | 5.3 | 441 | -1 | -1 | 11.3 | 3433 | 110 | 2.7 | 101 | 0.248 |
| 30-45.8640-110.1648-2-15- | 0-M37128 | 11710 | 683 | 8039 | 63 | -2 | 10.1 | 4.2 | -268 | -1 | -1 | 8.4 | 3121 | 106 | 2.1 | 146 | 0.286 |
| 30-45.8508-110.1920-2-12- | 0-M37129 | 10960 | 650 | 13220 | -27 | -2 | 7.8 | 5.1 | -290 | -1 | -1 | 8.4 | 3115 | 88 | 2.7 | 97 | 0.310 |
| 30-45.8488-110.2017-2-12- | 0-M37130 | 13130 | 596 | 13700 | -30 | -2 | 10.4 | 4.5 | -254 | -1 | -1 | 8.1 | 3327 | 106 | 2.3 | 91 | 0.296 |
| 30-45.8269-110.1958-2-12- | 0-M37131 | 9906 | 641 | 13730 | 86 | -2 | 9.7 | 6.5 | -256 | -1 | -1 | 13.3 | 3309 | 88 | 4.9 | 126 | 0.256 |
| 30-45.8270-110.1937-2-12- | 0-M37132 | 10820 | 581 | 11140 | 62 | -2 | 10.3 | 4.5 | -258 | -1 | -1 | 8.2 | 3333 | 100 | 2.2 | 107 | 0.329 |
| 30-45.8238-110.2053-2-15- | 0-M37133 | 10370 | 703 | 8757 | 57 | -2 | 9.4 | 5.1 | -274 | -1 | -1 | 8.5 | 2754 | 103 | 3.5 | -37 | 0.282 |
| 30-45.8166-110.2016-2-15- | 0-M37134 | 9351 | 656 | 11120 | 64 | -2 | 10.3 | 4.4 | -248 | -1 | -1 | 7.8 | 3167 | 106 | 2.1 | 96 | 0.321 |
| 30-45.8092-110.2099-2-15- | 0-M37135 | 10200 | 732 | 10510 | 56 | -2 | 10.8 | 4.7 | 563 | -1 | -1 | 9.0 | 2958 | 116 | -1.6 | 138 | 0.267 |
| 30-45.7813-110.2379-2-15- | 0-M37136 | 10940 | 593 | 12890 | -26 | -2 | 9.6 | 4.4 | -242 | -1 | -1 | 8.1 | 3394 | 100 | 3.0 | 94 | 0.321 |
| 30-45.7592-110.2692-2-12- | 0-M37137 | 13480 | 943 | 16010 | -36 | -2 | 12.2 | 6.1 | -371 | -1 | -1 | 9.0 | 4129 | 144 | 2.7 | 62 | 0.244 |
| 30-45.7528-110.2761-2-12- | 0-M37138 | 12640 | 850 | 18220 | -34 | -2 | 13.3 | 4.2 | 664 | -1 | -1 | 6.7 | 3162 | 146 | 2.5 | 103 | 0.299 |
| 30-45.7825-110.2875-2-12- | 0-M37139 | 14030 | 841 | 15060 | 60 | -2 | 15.0 | 6.0 | 485 | -1 | -1 | 9.4 | 4833 | 163 | -2.1 | 74 | 0.255 |
| 30-45.8061-110.2756-2-12- | 0-M37140 | 10160 | 895 | 11900 | 51 | -2 | 9.4 | 4.4 | 556 | -1 | -1 | 7.4 | 3885 | 96 | -1.5 | 96 | 0.311 |
| 30-45.8295-110.2471-2-12- | 0-M37141 | 11860 | 597 | 15140 | 55 | -2 | 9.0 | 6.1 | -278 | -1 | -1 | 8.0 | 3485 | 117 | 2.8 | 58 | 0.300 |
| 30-45.8283-110.2783-2-12- | 0-M37142 | 13030 | 676 | 10770 | 87 | -2 | 11.1 | 4.6 | 423 | -2 | -1 | 8.4 | 2772 | 98 | -2.2 | -48 | 0.298 |
| 30-45.8328-110.2900-2-12- | 0-M37143 | 11150 | 696 | 14630 | -30 | -2 | 11.5 | 5.8 | -262 | -1 | -1 | 9.4 | 4361 | 149 | 3.1 | 106 | 0.298 |
| 30-45.8311-110.2911-2-12- | 0-M37144 | 10720 | 661 | 11250 | 64 | -2 | 9.5 | 4.7 | 301 | -1 | -1 | 8.8 | 3244 | 94 | 2.9 | 71 | 0.273 |
| 30-45.8272-110.2942-2-12- | 0-M37145 | 7332 | 630 | 11580 | -24 | -2 | 6.9 | 4.3 | -272 | -1 | -1 | 7.0 | 2713 | 75 | 2.5 | -46 | 0.286 |
| 30-45.8467-110.3203-2-12- | 0-M37146 | 12930 | 1048 | 12970 | 88 | -2 | 12.6 | 5.3 | -347 | -1 | -1 | 10.1 | 3293 | 113 | 3.1 | 190 | 0.228 |
| 30-45.8456-110.3208-2-12- | 0-M37147 | 9751 | 545 | 13250 | 89 | -2 | 8.1 | 6.4 | -255 | 2 | -1 | 13.7 | 2937 | 69 | 4.1 | 106 | 0.219 |
| 30-45.8325-110.3214-2-15- | 0-M37148 | 11470 | 693 | 15310 | 49 | -2 | 10.7 | 3.6 | 314 | -1 | -1 | 7.3 | 3011 | 106 | 2.4 | -31 | 0.274 |
| 30-45.8286-110.2606-2-15- | 0-M37149 | 13230 | 714 | 9977 | 70 | -2 | 10.0 | 7.0 | -289 | -1 | -1 | 9.2 | 2754 | 104 | 3.6 | 56 | 0.261 |
| 30-45.8522-110.2628-2-12- | 0-M37150 | 11760 | 675 | 12490 | -33 | -2 | 10.5 | 4.9 | 443 | -1 | -1 | 8.4 | 3390 | 106 | 2.5 | 109 | 0.286 |
| 30-45.8514-110.2569-2-12- | 0-M37151 | 11640 | 646 | 15190 | 78 | -2 | 11.2 | 5.1 | 396 | -1 | -1 | 8.9 | 3474 | 124 | 3.2 | 130 | 0.270 |
| 30-45.8739-110.2736-2-12- | 0-M37152 | 12100 | 721 | 14530 | 46 | -2 | 11.3 | 5.4 | -264 | -1 | -1 | 8.3 | 3370 | 109 | 1.6 | 136 | 0.289 |
| 30-45.8675-110.3047-2-12- | 0-M37153 | 12010 | 701 | 15340 | 75 | -2 | 9.7 | 5.3 | 448 | -1 | -1 | 7.9 | 3670 | 107 | 2.3 | 88 | 0.291 |
| 30-45.8800-110.3319-2-12- | 0-M37154 | 12940 | 695 | 14300 | 85 | -2 | 12.8 | 5.2 | -277 | -1 | -1 | 10.0 | 4059 | 123 | 3.0 | 127 | 0.250 |
| 30-45.8881-110.3483-2-12- | 0-M37155 | 10700 | 819 | 16140 | 72 | -2 | 13.1 | 5.9 | -307 | -1 | -1 | 11.5 | 4547 | 118 | 4.3 | 85 | 0.270 |
| 30-45.8950-110.3603-2-12- | 0-M37156 | 7948 | 635 | 11740 | 87 | -1 | 8.7 | 5.1 | -263 | -1 | -1 | 12.2 | 3072 | 70 | 3.3 | 148 | 0.303 |
| 30-45.8928-110.3219-2-12- | 0-M37157 | 14730 | 675 | 17720 | 43 | -3 | 11.4 | 6.2 | -354 | -1 | -1 | 8.4 | 4511 | 108 | -1.9 | 94 | 0.262 |
| 30-45.9169-110.3175-2-12- | 0-M37158 | 12240 | 607 | 14280 | 63 | -2 | 10.0 | 4.4 | -287 | -1 | -1 | 10.1 | 3762 | 98 | 3.5 | 93 | 0.267 |
| 30-45.8781-110.2744-2-12- | 0-M37159 | 15410 | 804 | 12730 | 50 | -2 | 12.6 | 5.0 | -310 | -1 | -1 | 8.8 | 3455 | 116 | 3.3 | 117 | 0.250 |
| 30-45.8800-110.2800-2-12- | 0-M37160 | 12230 | 702 | 14470 | 65 | -2 | 11.8 | 4.8 | 403 | -1 | -1 | 8.8 | 3650 | 118 | 2.9 | 74 | 0.284 |
| 30-45.8831-110.2561-2-12- | 0-M37161 | 13040 | 608 | 13410 | -31 | -2 | 10.0 | 4.3 | -294 | -1 | -1 | 9.1 | 3011 | 110 | 3.2 | 91 | 0.264 |
| 30-45.8761-110.2478-2-12- | 0-M37162 | 10740 | 612 | 11940 | 79 | -2 | 9.8 | 5.3 | 353 | 1 | -1 | 10.5 | 3217 | 90 | 3.3 | 91 | 0.295 |
| 30-45.8761-110.2464-2-12- | 0-M37163 | 13960 | 604 | 13760 | -29 | -2 | 11.1 | 5.1 | -254 | -1 | -1 | 9.8 | 3463 | 117 | 3.6 | -110 | 0.245 |
| 30-45.8775-110.2383-2-15- | 0-M37164 | 13190 | 713 | 11090 | 45 | -2 | 10.0 | 3.8 | -245 | -1 | -1 | 6.8 | 2813 | 91 | 3.3 | 78 | 0.294 |
| 30-45.8856-110.2100-2-12- | 0-M37165 | 11780 | 685 | 14560 | -30 | -2 | 10.1 | 6.3 | -294 | -1 | -1 | 11.0 | 3653 | 113 | 4.3 | 101 | 0.255 |
| 30-45.8869-110.1931-2-12- | 0-M37166 | 11760 | 637 | 13580 | 53 | -2 | 9.5 | 4.3 | 622 | -1 | -1 | 7.9 | 2843 | 102 | 1.9 | 144 | 0.456 |
| 30-45.9839-111.7685-2-11- | 0-M37167 | 10560 | 707 | 12300 | 68 | -2 | 10.9 | 4.4 | -275 | -1 | -1 | 10.2 | 3808 | 125 | 3.8 | 114 | 0.265 |
| 30-45.9017-111.8121-2-12- | 0-M37168 | 8124 | 732 | 13640 | 75 | -2 | 9.5 | 11.3 | -285 | 2 | 2 | 30.2 | 3910 | 122 | 6.0 | 496 | 0.212 |
| 30-45.8999-111.7961-2-15- | 0-M37169 | 8643 | 774 | 11450 | 120 | -2 | 9.4 | 8.7 | -335 | 2 | -1 | 25.3 | 2885 | 79 | 5.7 | 79 | 0.202 |
| 30-45.9028-111.7916-2-15- | 0-M37170 | 12120 | 578 | 12250 | 65 | -2 | 9.6 | 6.3 | -252 | 2 | -1 | 15.6 | 2960 | 80 | 3.6 | 133 | 0.417 |
| 30-45.8985-111.7657-2-15- | 0-M37171 | 10560 | 718 | 11660 | 84 | -2 | 12.1 | 7.4 | -278 | 2 | -1 | 21.1 | 3143 | 105 | 4.6 | -75 | 0.237 |
| 30-45.9120-111.7648-2-11- | 0-M37172 | 9590 | 1091 | 13600 | 67 | -2 | 11.4 | 8.4 | -340 | -1 | -1 | 17.7 | 4173 | 79 | 5.2 | 110 | 0.390 |

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

(1)

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER AND FIELD DATA | | | | | | | | | | | | | | | | | | | | | | | | U CONCENTRATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | TIME SAMPLED DATE | TIME SAMPLED HOUR | AIR TEMPERATURE | WATER TEMPERATURE | COMMENTS | SPECIAL MEASUREMENTS | pH | CONDUCTIVITY (µmho/cm) | SCINTILLOMETER (eU, ppm) | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm |
| 30- | 45.9153- | 111.7532- | 2- | 15- | | 0-M37173- | 10/15/76- | 9- | 1- | | - | - | - | - | - | -1- | 6- | 4- | 6- | - | - | - | - | 3- | 3- | 1- | 1- | -3- | - | - | - | - | 3.90 |
| 30- | 45.8924- | 111.7590- | 2- | 15- | | 0-M37174- | 10/15/76- | 9- | 2- | | - | - | - | - | - | -1- | 6- | 4- | 6- | - | - | - | - | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 5.70 |
| 30- | 45.9075- | 111.7925- | 2- | 15- | | 0-M37175- | 10/15/76- | 10- | 2- | | - | - | - | - | - | -1- | 6- | 4- | 6- | -1- | - | - | 3- | 2- | 3- | 1- | -3- | - | - | - | - | 3.60 |
| 30- | 45.8648- | 111.8605- | 2- | 11- | | 0-M37176- | 10/15/76- | 10- | 2- | | - | - | 6.3- | 550- | | -1- | 6- | 5- | 6- | 2- | 2- | 1- | - | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 3.20 |
| 30- | 45.9884- | 111.4682- | 2- | 15- | | 0-M37177- | 10/15/76- | 10- | 4- | | - | - | - | - | - | -1- | 1- | 4- | 6- | -1- | - | - | 3- | 4- | 2- | 1- | -3- | - | - | - | - | 3.20 |
| 30- | 45.9506- | 111.4689- | 2- | 15- | | 0-M37178- | 10/15/76- | 10- | 8- | | - | - | - | - | - | -1- | 1- | 5- | 6- | -1- | - | - | 3- | 2- | 3- | 1- | -3- | - | - | - | - | 2.80 |
| 30- | 45.9853- | 111.4261- | 2- | 15- | | 0-M37179- | 10/15/76- | 11- | 8- | | - | - | - | - | - | -1- | 1- | - | - | - | - | - | - | 3- | 3- | 2- | 1- | -3- | - | - | - | - | 3.20 |
| 30- | 45.9834- | 111.4109- | 2- | 15- | | 0-M37180- | 10/15/76- | 11- | 8- | | - | - | - | - | - | -1- | 1- | 5- | 6- | -1- | - | - | 1- | 2- | 1- | 1- | -3- | - | - | - | - | 2.50 |
| 30- | 45.9915- | 111.3937- | 2- | 15- | | 0-M37181- | 10/15/76- | 11- | 8- | | - | - | - | - | - | -1- | 6- | 5- | 6- | -1- | - | - | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 3.10 |
| 30- | 45.9926- | 111.3905- | 2- | 15- | | 0-M37182- | 10/15/76- | 12- | 8- | | - | - | - | - | - | -1- | 6- | 4- | 6- | -1- | - | - | 1- | 2- | 2- | 1- | -3- | - | - | - | - | 2.70 |
| 30- | 45.9976- | 111.3925- | 2- | 15- | | 0-M37183- | 10/15/76- | 12- | 8- | | - | - | - | - | - | -1- | 6- | 4- | 6- | -1- | - | - | 4- | 2- | 3- | 1- | -3- | - | - | - | - | 3.20 |
| 30- | 45.9793- | 111.3594- | 2- | 15- | | 0-M37184- | 10/15/76- | 12- | 8- | | - | - | - | - | - | -1- | 7- | 3- | 7- | -1- | - | - | 4- | 4- | 3- | 1- | -3- | - | - | - | - | 3.70 |
| 30- | 45.9290- | 111.4561- | 2- | 15- | | 0-M37185- | 10/15/76- | 12- | 9- | | - | - | - | - | - | -1- | 1- | 4- | 6- | -1- | - | - | 4- | 4- | 3- | 1- | -3- | - | - | - | - | 2.80 |
| 30- | 45.9166- | 111.4512- | 2- | 15- | | 0-M37186- | 10/15/76- | 12- | 9- | | - | - | - | - | - | -1- | 6- | 3- | 6- | -1- | - | - | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 3.00 |
| 30- | 45.9089- | 111.4450- | 2- | 15- | | 0-M37187- | 10/15/76- | 13- | 9- | | - | - | - | - | - | -1- | 6- | 5- | 6- | -1- | - | - | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 2.80 |
| 30- | 45.8967- | 111.4072- | 2- | 15- | | 0-M37188- | 10/15/76- | 13- | 9- | | - | - | - | - | - | -1- | 6- | 4- | 4- | -1- | - | - | 1- | 2- | 3- | 1- | -3- | - | - | - | - | 3.50 |
| 30- | 45.9390- | 111.3735- | 2- | 15- | | 0-M37189- | 10/15/76- | 13- | 9- | | - | - | - | - | - | -1- | 1- | 5- | 7- | -1- | - | - | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 3.30 |
| 30- | 45.9617- | 111.3095- | 2- | 11- | | 0-M37190- | 10/15/76- | 13- | 9- | 5.2- | - | - | 6.6- | 600- | | -1- | 6- | 5- | 8- | 2- | 2- | 2- | - | 1- | 2- | 3- | 1- | -3- | - | - | - | - | 3.50 |
| 30- | 45.9893- | 111.3325- | 2- | 15- | | 0-M37191- | 10/15/76- | 14- | 8- | | - | - | - | - | - | -1- | 6- | 5- | 8- | -1- | - | - | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 3.00 |
| 30- | 45.9884- | 111.3262- | 2- | 15- | | 0-M37192- | 10/15/76- | 14- | 8- | | -C- | - | - | - | - | -1- | 7- | 5- | 8- | - | - | - | -1- | 3- | 3- | 1- | -3- | - | - | - | - | 2.90 |
| 30- | 45.6665- | 111.2601- | 2- | 12- | | 0-M37193- | 10/15/76- | 14- | 1- | 4.0- | - | - | 6.3- | 445- | | -1- | 6- | 4- | 4- | 3- | 2- | 2- | 2- | 4- | 4- | 2- | 2- | -3- | - | - | - | - | 3.80 |
| 30- | 45.6764- | 111.2680- | 2- | 12- | | 0-M37194- | 10/15/76- | 14- | 1- | 4.0- | - | - | 6.6- | 600- | | -1- | 6- | 4- | 4- | 3- | 2- | 2- | 2- | 4- | 4- | 2- | 2- | -3- | - | - | - | - | 5.30 |
| 30- | 45.6850- | 111.2677- | 2- | 12- | | 0-M37195- | 10/15/76- | 16- | 1- | 3.6- | - | - | 6.9- | 650- | | -1- | 6- | 5- | 8- | 2- | 2- | 2- | 2- | 4- | 4- | 2- | 2- | -3- | - | - | - | - | 3.40 |
| 30- | 45.7073- | 111.2568- | 2- | 12- | | 0-M37196- | 10/15/76- | 16- | 1- | 3.4- | - | - | 6.6- | 700- | | -1- | 6- | 5- | 6- | 3- | 2- | 2- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 3.40 |
| 30- | 45.7268- | 111.2664- | 2- | 15- | | 0-M37197- | 10/15/76- | 16- | 2- | | - | - | - | - | - | -1- | 6- | 4- | 7- | -1- | - | - | 4- | 3- | 2- | 2- | -3- | - | - | - | - | 2.80 |
| 30- | 45.7426- | 111.2680- | 2- | 12- | | 0-M37198- | 10/15/76- | 17- | 2- | 2.0- | C- | - | 6.3- | 550- | | -1- | 6- | 3- | 4- | 2- | 2- | 1- | 2- | 4- | 4- | 1- | 2- | -3- | - | - | - | - | 3.40 |
| 30- | 45.7188- | 111.3152- | 2- | 15- | | 0-M37199- | 10/15/76- | 17- | 2- | | - | - | - | - | - | -1- | 6- | 4- | 6- | -1- | - | - | 4- | 3- | 1- | 2- | -3- | - | - | - | - | 3.80 |
| 30- | 45.7013- | 111.3081- | 2- | 12- | | 0-M37200- | 10/15/76- | 18- | 2- | 5.6- | - | - | 6.6- | 550- | | -1- | 6- | 4- | 6- | 3- | 2- | 1- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 3.90 |
| 30- | 45.6884- | 111.3123- | 2- | 15- | | 0-M37201- | 10/16/76- | 8- | 3- | | - | - | - | - | - | -1- | 6- | 5- | 6- | -1- | - | - | 4- | 4- | 2- | 2- | -3- | - | - | - | - | 2.80 |
| 30- | 45.6870- | 111.2966- | 2- | 12- | | 0-M37202- | 10/16/76- | 8- | 3- | 8.0- | - | - | 6.3- | 600- | | -1- | 6- | 4- | 7- | 3- | 2- | 2- | 2- | 4- | 4- | 3- | 2- | -3- | - | - | - | - | 5.80 |
| 30- | 45.6463- | 111.3501- | 2- | 12- | | 0-M37203- | 10/16/76- | 8- | 4- | 2.0- | - | - | 6.6- | 550- | | -1- | 6- | 4- | 7- | 2- | 2- | 2- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 3.30 |
| 30- | 45.6373- | 111.3486- | 2- | 12- | | 0-M37204- | 10/16/76- | 9- | 3- | 1.0- | - | - | 6.6- | 600- | | -1- | 6- | 3- | 4- | 2- | 2- | 2- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 3.40 |
| 30- | 45.6065- | 111.3271- | 2- | 12- | | 0-M37205- | 10/16/76- | 9- | 4- | 3.6- | - | - | 6.6- | 340- | | -2- | 4- | 5- | 8- | 2- | 2- | 2- | 2- | 3- | 2- | 2- | 2- | -3- | - | - | - | - | 2.90 |
| 30- | 45.5992- | 111.3217- | 2- | 12- | | 0-M37206- | 10/16/76- | 10- | 5- | 2.6- | - | - | 6.3- | 475- | | -2- | 4- | 4- | 6- | 2- | 2- | 2- | 2- | 4- | 3- | 2- | 2- | -3- | - | - | - | - | 4.00 |
| 30- | 45.5990- | 111.2937- | 2- | 12- | | 0-M37207- | 10/16/76- | 10- | 7- | 0.6- | - | - | 6.6- | 900- | | -2- | 4- | 4- | 4- | 2- | 2- | 2- | 2- | 4- | 4- | 1- | 2- | -3- | - | - | - | - | 3.10 |
| 30- | 45.5924- | 111.2734- | 2- | 11- | | 0-M37208- | 10/16/76- | 10- | 7- | 6.6- | C- | - | 6.9- | 250- | | -2- | 4- | 5- | 8- | 1- | 2- | 3- | - | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 3.60 |
| 30- | 45.6949- | 111.3574- | 2- | 12- | | 0-M37209- | 10/16/76- | 11- | 6- | 3.6- | - | - | 6.6- | 650- | | -1- | 1- | 4- | 6- | 2- | 2- | 2- | 2- | 4- | 3- | 1- | 3- | -3- | - | - | - | - | 4.10 |
| 30- | 45.6907- | 111.3654- | 2- | 15- | | 0-M37210- | 10/16/76- | 11- | 6- | | - | - | - | - | - | -1- | 1- | - | - | -1- | - | - | 4- | 4- | 1- | 3- | -3- | - | - | - | - | 4.00 |
| 30- | 45.6999- | 111.3606- | 2- | 15- | | 0-M37211- | 10/16/76- | 12- | 6- | | - | - | - | - | - | -1- | 4- | 5- | 6- | -1- | - | - | 4- | 4- | 2- | 3- | -3- | - | - | - | - | 3.20 |
| 30- | 45.7113- | 111.3575- | 2- | 12- | | 0-M37212- | 10/16/76- | 12- | 6- | 4.0- | - | - | 6.3- | 550- | | -1- | 1- | 4- | 6- | 2- | 2- | 2- | 2- | 4- | 2- | 1- | 3- | -3- | - | - | - | - | 3.70 |
| 30- | 45.7264- | 111.3543- | 2- | 15- | | 0-M37213- | 10/16/76- | 12- | 6- | | - | - | - | - | - | -1- | 4- | - | - | -1- | - | - | 4- | 4- | 2- | 3- | -3- | - | - | - | - | 3.50 |
| 30- | 45.7479- | 111.3306- | 2- | 15- | | 0-M37214- | 10/16/76- | 13- | 6- | | - | - | - | - | - | -1- | 4- | 5- | 6- | -1- | - | - | 4- | 3- | 2- | 3- | -3- | - | - | - | - | 3.70 |
| 30- | 45.7276- | 111.3968- | 2- | 15- | | 0-M37215- | 10/16/76- | 13- | 6- | | - | - | - | - | - | -1- | 4- | 5- | 6- | - | - | - | 4- | 4- | 3- | 3- | -3- | - | - | - | - | 3.30 |
| 30- | 45.6512- | 111.4013- | 2- | 12- | | 0-M37216- | 10/16/76- | 13- | 5- | 4.2- | - | - | 6.6- | 700- | | -2- | 4- | 5- | 8- | 2- | 2- | 2- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 3.60 |
| 30- | 45.9578- | 110.9222- | 2- | 12- | | 0-M37217- | 10/15/76- | 8- | 5- | | - | - | - | 5.7- | 380- | -1- | 1- | 4- | 6- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 2.20 |
| 30- | 45.9639- | 110.9472- | 2- | 12- | | 0-M37218- | 10/15/76- | 8- | 4- | | -C- | - | - | 5.8- | 360- | -1- | 1- | 3- | 7- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 3- | -3- | - | - | - | - | 2.70 |
| 30- | 45.9644- | 110.9497- | 2- | 12- | | 0-M37219- | 10/15/76- | 8- | 5- | | - | - | - | 5.6- | 360- | -1- | 1- | 3- | 7- | 3- | 2- | 1- | 2- | 1- | 2- | 3- | 3- | -3- | - | - | - | - | 2.20 |
| 30- | 45.9708- | 110.9844- | 2- | 12- | | 0-M37220- | 10/15/76- | 9- | 6- | | -C- | - | - | 5.7- | 270- | -1- | 1- | 2- | 7- | 2- | 2- | 1- | 2- | 2- | 2- | 4- | 3- | -3- | - | - | - | - | 2.60 |
| 30- | 45.9736- | 110.9153- | 2- | 12- | | 0-M37221- | 10/15/76- | 9- | 6- | | -C- | - | - | 5.6- | 360- | -1- | 1- | 5- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | 1.90 |
| 30- | 45.9811- | 111.8972- | 2- | 12- | | 0-M37222- | 10/15/76- | 9- | 7- | | -C- | - | - | 5.7- | 320- | -1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 4- | 1- | 3- | -3- | - | - | - | - | 1.90 |
| 30- | 45.9772- | 110.8419- | 2- | 12- | | 0-M37223- | 10/15/76- | 9- | 8- | | -C- | - | - | 5.9- | 420- | -1- | 1- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 4- | 2- | 2- | -3- | - | - | - | - | 19.90 |

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

②

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE (Concentrations reported in weight parts per million (ppm)) | | | | | | | | | ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY (Concentrations in weight ppm) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Ag | Bi | Cd | Cu | Nb | Ni | Pb | Sn | W | Be | Li |
| 30- | 45.9153- | 111.7532- | 2- | 15- | 0- | M37173 | -5 | -5 | -5 | 21 | -20 | 29 | 6 | -10 | -15 | 3 | 32 |
| 30- | 45.8924- | 111.7590- | 2- | 15- | 0- | M37174 | -5 | -5 | -5 | 35 | -20 | -15 | 15 | -10 | -15 | 4 | 50 |
| 30- | 45.9075- | 111.7925- | 2- | 15- | 0- | M37175 | -5 | -5 | -5 | 19 | -20 | -15 | 11 | -10 | -15 | 3 | 31 |
| 30- | 45.8648- | 111.8605- | 2- | 11- | 0- | M37176 | -5 | -5 | -5 | 23 | -20 | -15 | 7 | -10 | -15 | 2 | 38 |
| 30- | 45.9884- | 111.4682- | 2- | 15- | 0- | M37177 | -5 | -5 | -5 | 20 | -20 | -15 | 13 | -10 | -15 | 2 | 31 |
| 30- | 45.9506- | 111.4689- | 2- | 15- | 0- | M37178 | -5 | -5 | -5 | 24 | -20 | -15 | 20 | -10 | -15 | 3 | 45 |
| 30- | 45.9853- | 111.4261- | 2- | 15- | 0- | M37179 | -5 | -5 | -5 | 32 | -20 | -15 | 23 | -10 | -15 | 3 | 50 |
| 30- | 45.9834- | 111.4109- | 2- | 15- | 0- | M37180 | -5 | -5 | -5 | 28 | -20 | 16 | 16 | -10 | -15 | 3 | 44 |
| 30- | 45.9915- | 111.3937- | 2- | 15- | 0- | M37181 | -5 | -5 | -5 | 23 | -20 | 56 | 17 | -10 | -15 | 3 | 43 |
| 30- | 45.9926- | 111.3905- | 2- | 15- | 0- | M37182 | -5 | -5 | -5 | 19 | -20 | 18 | 13 | -10 | -15 | 3 | 39 |
| 30- | 45.9976- | 111.3925- | 2- | 15- | 0- | M37183 | -5 | -5 | -5 | 26 | -20 | -15 | 9 | -10 | -15 | 3 | 50 |
| 30- | 45.9793- | 111.3594- | 2- | 15- | 0- | M37184 | -5 | -5 | -5 | 36 | -20 | -15 | 14 | -10 | -15 | 3 | 49 |
| 30- | 45.9290- | 111.4561- | 2- | 15- | 0- | M37185 | -5 | -5 | -5 | -10 | -20 | -15 | 12 | -10 | -15 | 3 | 28 |
| 30- | 45.9166- | 111.4512- | 2- | 15- | 0- | M37186 | -5 | -5 | -5 | 14 | -20 | -15 | 10 | -10 | -15 | 2 | 28 |
| 30- | 45.9089- | 111.4450- | 2- | 15- | 0- | M37187 | -5 | -5 | -5 | 18 | -20 | -15 | 14 | -10 | -15 | 3 | 34 |
| 30- | 45.8967- | 111.4072- | 2- | 15- | 0- | M37188 | -5 | -5 | -5 | 30 | -20 | 19 | 13 | -10 | -15 | 2 | 24 |
| 30- | 45.9390- | 111.3735- | 2- | 15- | 0- | M37189 | -5 | -5 | -5 | 22 | -20 | 31 | 10 | -10 | -15 | 3 | 32 |
| 30- | 45.9617- | 111.3095- | 2- | 11- | 0- | M37190 | -5 | -5 | -5 | 22 | -20 | -15 | 15 | -10 | -15 | 3 | 41 |
| 30- | 45.9893- | 111.3325- | 2- | 15- | 0- | M37191 | -5 | -5 | -5 | 31 | -20 | 22 | 11 | -10 | -15 | 3 | 38 |
| 30- | 45.9884- | 111.3262- | 2- | 15- | 0- | M37192 | -5 | -5 | -5 | 29 | -20 | 24 | 11 | -10 | -15 | 2 | 44 |
| 30- | 45.6665- | 111.2601- | 2- | 12- | 0- | M37193 | -5 | -5 | -5 | 14 | -20 | 28 | 12 | -10 | -15 | 3 | 32 |
| 30- | 45.6764- | 111.2680- | 2- | 12- | 0- | M37194 | -5 | -5 | -5 | 14 | -20 | 36 | 10 | -10 | -15 | 2 | 27 |
| 30- | 45.6850- | 111.2677- | 2- | 12- | 0- | M37195 | -5 | -5 | -5 | 22 | -20 | 15 | -5 | -10 | -15 | 3 | 42 |
| 30- | 45.7073- | 111.2568- | 2- | 12- | 0- | M37196 | -5 | -5 | -5 | 21 | -20 | 16 | 7 | -10 | -15 | 3 | 41 |
| 30- | 45.7268- | 111.2664- | 2- | 15- | 0- | M37197 | -5 | -5 | -5 | 30 | -20 | 19 | 10 | -10 | -15 | 2 | 49 |
| 30- | 45.7426- | 111.2680- | 2- | 12- | 0- | M37198 | -5 | -5 | -5 | 13 | -20 | -15 | 5 | -10 | -15 | 2 | 27 |
| 30- | 45.7188- | 111.3152- | 2- | 15- | 0- | M37199 | -5 | -5 | -5 | 34 | -20 | 15 | 11 | -10 | -15 | 2 | 37 |
| 30- | 45.7013- | 111.3081- | 2- | 12- | 0- | M37200 | -5 | -5 | -5 | 10 | -20 | 15 | 13 | -10 | -15 | 3 | 43 |
| 30- | 45.6884- | 111.3123- | 2- | 15- | 0- | M37201 | -5 | -5 | -5 | 29 | -20 | 24 | 9 | -10 | -15 | 3 | 48 |
| 30- | 45.6870- | 111.2966- | 2- | 12- | 0- | M37202 | -5 | -5 | -5 | 12 | -20 | 34 | 18 | -10 | -15 | 2 | 45 |
| 30- | 45.6463- | 111.3501- | 2- | 12- | 0- | M37203 | -5 | -5 | -5 | 22 | -20 | 32 | 11 | -10 | -15 | 3 | 43 |
| 30- | 45.6373- | 111.3486- | 2- | 12- | 0- | M37204 | -5 | -5 | -5 | 26 | -20 | 25 | 8 | -10 | -15 | 3 | 44 |
| 30- | 45.6065- | 111.3271- | 2- | 12- | 0- | M37205 | -5 | -5 | -5 | 30 | -20 | 44 | -5 | -10 | -15 | 2 | 46 |
| 30- | 45.5992- | 111.3217- | 2- | 12- | 0- | M37206 | -5 | -5 | -5 | 31 | -20 | 24 | 10 | -10 | -15 | 3 | 30 |
| 30- | 45.5990- | 111.2937- | 2- | 12- | 0- | M37207 | -5 | -5 | -5 | 31 | -20 | 23 | 6 | -10 | -15 | 2 | 43 |
| 30- | 45.5924- | 111.2734- | 2- | 11- | 0- | M37208 | -5 | -5 | -5 | 23 | -20 | -15 | 8 | -10 | -15 | 3 | 43 |
| 30- | 45.6949- | 111.3574- | 2- | 12- | 0- | M37209 | -5 | -5 | -5 | 21 | -20 | 20 | 5 | -10 | -15 | 3 | 58 |
| 30- | 45.6907- | 111.3654- | 2- | 15- | 0- | M37210 | -5 | -5 | -5 | 25 | -20 | 16 | 21 | -10 | -15 | 3 | 48 |
| 30- | 45.6999- | 111.3606- | 2- | 15- | 0- | M37211 | -5 | -5 | -5 | 25 | -20 | -15 | 9 | -10 | -15 | 3 | 41 |
| 30- | 45.7113- | 111.3575- | 2- | 12- | 0- | M37212 | -5 | -5 | -5 | 26 | -20 | 19 | 8 | -10 | -15 | 2 | 37 |
| 30- | 45.7264- | 111.3543- | 2- | 15- | 0- | M37213 | -5 | -5 | -5 | 23 | -20 | 31 | 17 | -10 | -15 | 3 | 61 |
| 30- | 45.7479- | 111.3306- | 2- | 15- | 0- | M37214 | -5 | -5 | -5 | 28 | -20 | 20 | 19 | -10 | -15 | 3 | 45 |
| 30- | 45.7276- | 111.3968- | 2- | 15- | 0- | M37215 | -5 | -5 | -5 | 24 | -20 | 24 | 8 | -10 | -15 | 3 | 45 |
| 30- | 45.6512- | 111.4013- | 2- | 12- | 0- | M37216 | -5 | -5 | -5 | 18 | -20 | -15 | 15 | -10 | -15 | 3 | 33 |
| 30- | 45.9578- | 110.9222- | 2- | 12- | 0- | M37217 | -5 | -5 | -5 | 22 | -20 | 23 | 10 | -10 | -15 | 2 | 36 |
| 30- | 45.9639- | 110.9472- | 2- | 12- | 0- | M37218 | -5 | -5 | -5 | 35 | -20 | 34 | 5 | -10 | -15 | 3 | 29 |
| 30- | 45.9644- | 110.9497- | 2- | 12- | 0- | M37219 | -5 | -5 | -5 | 46 | -20 | 51 | -5 | -10 | -15 | 2 | 41 |
| 30- | 45.9708- | 110.9844- | 2- | 12- | 0- | M37220 | -5 | -5 | -5 | 41 | -20 | 29 | 19 | -10 | -15 | 3 | 39 |
| 30- | 45.9736- | 110.9153- | 2- | 12- | 0- | M37221 | -5 | -5 | -5 | 24 | -20 | 44 | -5 | -10 | -15 | 3 | 25 |
| 30- | 45.9811- | 111.8972- | 2- | 12- | 0- | M37222 | -5 | -5 | -5 | 42 | -20 | 56 | 7 | -10 | -15 | 2 | 26 |
| 30- | 45.9772- | 110.8419- | 2- | 12- | 0- | M37223 | -5 | -5 | -5 | 55 | -20 | 29 | 22 | -10 | -15 | 2 | 20 |

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

③

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | |
| | | | | | | | Al | Au | Ba | Ca | Ce | Cl | Co | Cr | Cs | Dy | Eu | Fe | Hf | K | La | Lu |
| 30- | 45.9153- | 111.7532- | 2- | 15- | | 0-M37173 | 61360 | -0.09 | 788 | 29150 | 83 | -93 | 12.8 | 147 | 4.2 | 5 | 2.0 | 32970 | 18.6 | 16680 | 43 | 0.5 |
| 30- | 45.8924- | 111.7590- | 2- | 15- | | 0-M37174 | 71700 | -0.09 | 548 | 25770 | 90 | -89 | 11.0 | 48 | 6.6 | 6 | 1.5 | 35900 | 12.3 | 20510 | 44 | 0.5 |
| 30- | 45.9075- | 111.7925- | 2- | 15- | | 0-M37175 | 66340 | -0.08 | 647 | 22350 | 99 | -88 | 8.0 | 47 | 3.7 | 6 | 1.7 | 25240 | 13.6 | 22110 | 52 | 0.5 |
| 30- | 45.8648- | 111.8605- | 2- | 11- | | 0-M37176 | 54230 | -0.08 | 631 | 20460 | 74 | -79 | 31.7 | 75 | 10.5 | 5 | 4.4 | 23790 | 13.9 | 19690 | 39 | 0.6 |
| 30- | 45.9884- | 111.4682- | 2- | 15- | | 0-M37177 | 50350 | -0.08 | 591 | 57780 | 82 | 115 | 8.7 | 69 | 3.9 | 5 | 1.6 | 23530 | 14.4 | 17150 | 38 | 0.5 |
| 30- | 45.9506- | 111.4689- | 2- | 15- | | 0-M37178 | 61850 | -0.07 | 677 | 18970 | 75 | -88 | 8.4 | 66 | 5.0 | 5 | 1.3 | 22910 | 6.9 | 25100 | 44 | 0.4 |
| 30- | 45.9853- | 111.4261- | 2- | 15- | | 0-M37179 | 59000 | -0.08 | 798 | 15510 | 85 | -95 | 7.4 | 85 | 6.5 | 6 | 1.6 | 27170 | 11.0 | 26330 | 51 | 0.6 |
| 30- | 45.9834- | 111.4109- | 2- | 15- | | 0-M37180 | 60090 | -0.07 | 727 | 14620 | 61 | -84 | 10.4 | 54 | 4.1 | 5 | 1.3 | 21570 | 5.9 | 21280 | 36 | 0.3 |
| 30- | 45.9915- | 111.3937- | 2- | 15- | | 0-M37181 | 64660 | -0.09 | 975 | 23150 | 94 | 79 | 14.1 | 169 | 8.2 | 4 | 1.3 | 30600 | 10.6 | 31860 | 39 | 0.4 |
| 30- | 45.9926- | 111.3905- | 2- | 15- | | 0-M37182 | 55230 | -0.07 | 711 | 41760 | 71 | -80 | 9.9 | 95 | 3.9 | 4 | 1.5 | 25930 | 9.6 | 19350 | 44 | 0.5 |
| 30- | 45.9976- | 111.3925- | 2- | 15- | | 0-M37183 | 50910 | -0.07 | 625 | 67680 | 90 | 102 | 9.2 | 91 | 4.5 | 5 | 1.5 | 30400 | 14.8 | 20060 | 40 | 0.6 |
| 30- | 45.9793- | 111.3594- | 2- | 15- | | 0-M37184 | 60130 | -0.07 | 732 | 19930 | 68 | -82 | 12.8 | 111 | 4.5 | 5 | 1.5 | 30340 | 11.6 | 17750 | 36 | 0.5 |
| 30- | 45.9290- | 111.4561- | 2- | 15- | | 0-M37185 | 53980 | -0.07 | 633 | 39410 | 77 | 173 | 10.4 | 94 | 2.1 | 5 | 1.4 | 25230 | 10.9 | 18230 | 37 | 0.4 |
| 30- | 45.9166- | 111.4512- | 2- | 15- | | 0-M37186 | 54200 | -0.07 | 558 | 50710 | 65 | -82 | 8.5 | 78 | 3.8 | 4 | 1.6 | 27860 | 11.0 | 17350 | 45 | 0.5 |
| 30- | 45.9089- | 111.4450- | 2- | 15- | | 0-M37187 | 56510 | -0.08 | 839 | 42060 | 81 | -85 | 7.2 | 81 | 4.1 | 5 | 1.5 | 25720 | 10.3 | 20720 | 40 | 0.5 |
| 30- | 45.8967- | 111.4072- | 2- | 15- | | 0-M37188 | 51230 | -0.08 | 649 | 65620 | 77 | -77 | 15.3 | 172 | 2.4 | 5 | 1.5 | 44900 | 15.6 | 19510 | 47 | 0.5 |
| 30- | 45.9390- | 111.3735- | 2- | 15- | | 0-M37189 | 57920 | -0.08 | 703 | 30470 | 86 | -89 | 10.1 | 105 | 3.5 | 6 | 1.3 | 27180 | 15.1 | 18680 | 43 | 0.5 |
| 30- | 45.9617- | 111.3095- | 2- | 11- | | 0-M37190 | 54750 | -0.08 | 614 | 25750 | 75 | 132 | 7.9 | 79 | 4.5 | 4 | 1.5 | 23330 | 10.7 | 18460 | 39 | 0.5 |
| 30- | 45.9893- | 111.3325- | 2- | 15- | | 0-M37191 | 57640 | -0.09 | 605 | 15660 | 79 | -90 | 7.0 | 78 | 5.3 | 4 | 1.5 | 29490 | 9.7 | 18690 | 44 | 0.5 |
| 30- | 45.9884- | 111.3262- | 2- | 15- | | 0-M37192 | 54760 | -0.08 | 557 | 20790 | 73 | -82 | 9.9 | 75 | 5.7 | 5 | 1.5 | 26990 | 10.5 | 21640 | 39 | 0.6 |
| 30- | 45.6665- | 111.2601- | 2- | 12- | | 0-M37193 | 62380 | -0.09 | 849 | 26590 | 95 | 194 | 12.1 | 102 | -1.9 | 7 | 1.9 | 31340 | 16.1 | 18290 | 45 | 0.7 |
| 30- | 45.6764- | 111.2680- | 2- | 12- | | 0-M37194 | 58360 | 0.88 | 625 | 31560 | 116 | 153 | 18.4 | 185 | 3.1 | 6 | 1.9 | 52130 | 32.5 | 16490 | 60 | 1.0 |
| 30- | 45.6850- | 111.2677- | 2- | 12- | | 0-M37195 | 61030 | -0.08 | 831 | 18630 | 89 | 149 | 7.0 | 81 | 4.0 | 5 | 1.6 | 27050 | 13.3 | 21290 | 46 | 0.5 |
| 30- | 45.7073- | 111.2568- | 2- | 12- | | 0-M37196 | 56770 | -0.07 | 803 | 26130 | 64 | 107 | 10.4 | 90 | 3.5 | 5 | 1.7 | 25460 | 13.4 | 19960 | 43 | 0.5 |
| 30- | 45.7268- | 111.2664- | 2- | 15- | | 0-M37197 | 65130 | -0.09 | 895 | 27220 | 82 | -96 | 12.8 | 127 | 5.2 | 4 | 1.5 | 29680 | 9.6 | 18420 | 42 | 0.4 |
| 30- | 45.7426- | 111.2680- | 2- | 12- | | 0-M37198 | 57190 | -0.08 | 663 | 32930 | 83 | -91 | 11.4 | 127 | 3.1 | 5 | 1.8 | 34990 | 18.9 | 16960 | 50 | 0.5 |
| 30- | 45.7188- | 111.3152- | 2- | 15- | | 0-M37199 | 59380 | -0.09 | 754 | 42210 | 81 | 809 | 10.9 | 95 | 4.2 | 5 | 1.8 | 35550 | 17.1 | 18490 | 49 | 0.6 |
| 30- | 45.7013- | 111.3081- | 2- | 12- | | 0-M37200 | 62190 | -0.07 | 863 | 27710 | 69 | 194 | 9.4 | 67 | 3.9 | 6 | 1.5 | 22650 | 11.1 | 24920 | 42 | 0.4 |
| 30- | 45.6884- | 111.3123- | 2- | 15- | | 0-M37201 | 64490 | -0.09 | 757 | 38860 | 79 | -104 | 11.6 | 81 | 4.1 | 4 | 1.6 | 31480 | 8.4 | 17330 | 43 | 0.5 |
| 30- | 45.6870- | 111.2966- | 2- | 12- | | 0-M37202 | 61340 | -0.09 | 707 | 33210 | 125 | 209 | 15.7 | 217 | 3.3 | 7 | 2.5 | 46090 | 37.0 | 19560 | 66 | 1.0 |
| 30- | 45.6463- | 111.3501- | 2- | 12- | | 0-M37203 | 63010 | -0.10 | 731 | 25670 | 86 | 161 | 12.7 | 120 | 4.8 | 6 | 1.9 | 36970 | 13.9 | 19040 | 43 | 0.7 |
| 30- | 45.6373- | 111.3486- | 2- | 12- | | 0-M37204 | 56720 | -0.06 | 735 | 28840 | 63 | -82 | 14.7 | 105 | 2.7 | 5 | 1.7 | 32950 | 11.2 | 16700 | 40 | 0.4 |
| 30- | 45.6065- | 111.3271- | 2- | 12- | | 0-M37205 | 60390 | -0.08 | 590 | 22470 | 84 | -100 | 17.5 | 123 | -2.1 | 6 | 1.7 | 34830 | 13.1 | 18410 | 34 | 0.5 |
| 30- | 45.5992- | 111.3217- | 2- | 12- | | 0-M37206 | 57530 | -0.07 | 558 | 23610 | 91 | -93 | 13.4 | 127 | -1.7 | 6 | 2.1 | 33800 | 23.7 | 18510 | 52 | 0.7 |
| 30- | 45.5990- | 111.2937- | 2- | 12- | | 0-M37207 | 63570 | -0.07 | 903 | 26840 | 66 | 109 | 12.6 | 146 | 4.6 | 5 | 1.6 | 37870 | 12.3 | 16900 | 39 | 0.5 |
| 30- | 45.5924- | 111.2734- | 2- | 11- | | 0-M37208 | 54500 | -0.06 | 695 | 19840 | 74 | 99 | 13.5 | 119 | 3.6 | 5 | 1.7 | 30850 | 17.5 | 21550 | 45 | 0.5 |
| 30- | 45.6949- | 111.3574- | 2- | 12- | | 0-M37209 | 59690 | -0.07 | 933 | 30380 | 85 | 193 | 8.9 | 82 | 3.8 | 6 | 1.6 | 22650 | 13.4 | 21570 | 42 | 0.6 |
| 30- | 45.6907- | 111.3654- | 2- | 15- | | 0-M37210 | 60950 | -0.07 | 739 | 23380 | 78 | -86 | 13.3 | 117 | 4.2 | 4 | 1.6 | 35530 | 11.7 | 16800 | 42 | 0.5 |
| 30- | 45.6999- | 111.3606- | 2- | 15- | | 0-M37211 | 53480 | -0.06 | 656 | 50240 | 85 | -79 | 7.8 | 72 | 4.0 | 5 | 1.9 | 26670 | 12.4 | 18270 | 45 | 0.4 |
| 30- | 45.7113- | 111.3575- | 2- | 12- | | 0-M37212 | 56010 | -0.06 | 758 | 26660 | 71 | -81 | 14.9 | 90 | 2.1 | 4 | 1.6 | 46040 | 9.1 | 15110 | 39 | 0.3 |
| 30- | 45.7264- | 111.3543- | 2- | 15- | | 0-M37213 | 60010 | -0.07 | 749 | 23620 | 91 | -94 | 11.0 | 128 | 4.6 | 6 | 1.6 | 30660 | 14.7 | 18860 | 45 | 0.5 |
| 30- | 45.7479- | 111.3306- | 2- | 15- | | 0-M37214 | 61160 | -0.06 | 818 | 26340 | 74 | -89 | 13.0 | 116 | 3.9 | 4 | 1.8 | 35450 | 11.9 | 16850 | 43 | 0.4 |
| 30- | 45.7276- | 111.3968- | 2- | 15- | | 0-M37215 | 62570 | -0.06 | 1051 | 30260 | 85 | -87 | 13.2 | 121 | 3.7 | 4 | 1.5 | 35350 | 10.5 | 17370 | 37 | 0.4 |
| 30- | 45.6512- | 111.4013- | 2- | 12- | | 0-M37216 | 55430 | -0.06 | 759 | 23030 | 61 | 226 | 9.3 | 61 | 3.0 | 5 | 1.6 | 21200 | 10.5 | 20140 | 38 | 0.4 |
| 30- | 45.9578- | 110.9222- | 2- | 12- | | 0-M37217 | 56190 | -0.07 | 923 | 23740 | 56 | -88 | 11.6 | 134 | 2.8 | 3 | 1.4 | 28890 | 6.5 | 15190 | 28 | 0.2 |
| 30- | 45.9639- | 110.9472- | 2- | 12- | | 0-M37218 | 66820 | -0.08 | 912 | 27480 | 58 | -97 | 17.5 | 277 | 3.4 | 3 | 1.7 | 50410 | 7.5 | 16410 | 29 | 0.4 |
| 30- | 45.9644- | 110.9497- | 2- | 12- | | 0-M37219 | 74360 | -0.08 | 886 | 25680 | 61 | -96 | 17.6 | 241 | 4.1 | 4 | 1.7 | 46400 | 4.6 | 20530 | 37 | 0.3 |
| 30- | 45.9708- | 110.9844- | 2- | 12- | | 0-M37220 | 63830 | -0.07 | 933 | 20400 | 52 | -88 | 17.5 | 173 | 3.5 | 4 | 1.5 | 38230 | 7.1 | 15000 | 32 | 0.3 |
| 30- | 45.9736- | 110.9153- | 2- | 12- | | 0-M37221 | 65740 | -0.08 | 942 | 32650 | 51 | -109 | 17.9 | 322 | 2.8 | 3 | 1.8 | 40590 | 6.3 | 20490 | 30 | 0.3 |
| 30- | 45.9811- | 111.8972- | 2- | 12- | | 0-M37222 | 68640 | -0.08 | 919 | 37470 | 55 | -103 | 22.2 | 349 | -2.2 | 3 | 1.6 | 51300 | 4.4 | 24140 | 28 | 0.3 |
| 30- | 45.9772- | 110.8419- | 2- | 12- | | 0-M37223 | 60540 | -0.07 | 952 | 24070 | 86 | -88 | 11.7 | 131 | 3.4 | 5 | 1.9 | 35320 | 20.3 | 18690 | 62 | 0.6 |

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

(4)

| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | LAB. SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) — Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | U/Th RATIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mg | Mn | Na | Rb | Sb | Sc | Sm | Sr | Ta | Tb | Th | Ti | V | Yb | Zn | |
| 30-45.9153-111.7532-2-15- | 0-M37173 | 11520 | 668 | 12260 | 63 | -2 | 9.3 | 6.7 | -300 | -1 | -1 | 12.8 | 4445 | 115 | 3.5 | -20 | 0.305 |
| 30-45.8924-111.7590-2-15- | 0-M37174 | 10710 | 681 | 10520 | 80 | -2 | 12.8 | 8.2 | -289 | -1 | -1 | 20.3 | 3031 | 99 | 5.0 | -115 | 0.281 |
| 30-45.9075-111.7925-2-15- | 0-M37175 | 7706 | 633 | 17160 | 90 | -2 | 11.6 | 7.1 | 386 | -1 | -1 | 14.1 | 3033 | 70 | 4.1 | 72 | 0.255 |
| 30-45.8648-111.8605-2-11- | 0-M37176 | 6559 | 500 | 12790 | 52 | -1 | 7.9 | 6.7 | -240 | -1 | -1 | 12.2 | 3445 | 61 | 3.1 | 116 | 0.262 |
| 30-45.9884-111.4682-2-15- | 0-M37177 | 19300 | 590 | 10730 | -25 | -2 | 7.4 | 5.9 | -273 | -1 | -1 | 13.7 | 2957 | 67 | 3.9 | 87 | 0.234 |
| 30-45.9506-111.4689-2-15- | 0-M37178 | 7682 | 608 | 14590 | 86 | -2 | 7.8 | 5.9 | -261 | -1 | -1 | 13.4 | 2098 | 59 | 3.6 | 79 | 0.209 |
| 30-45.9853-111.4261-2-15- | 0-M37179 | 7472 | 789 | 13360 | 88 | -2 | 8.3 | 7.9 | -317 | -1 | -1 | 16.1 | 3025 | 58 | 4.3 | 129 | 0.199 |
| 30-45.9834-111.4109-2-15- | 0-M37180 | 6950 | 582 | 13970 | 82 | -2 | 7.3 | 5.8 | -257 | 2 | -1 | 12.0 | 2453 | 49 | 3.2 | 88 | 0.208 |
| 30-45.9915-111.3937-2-15- | 0-M37181 | 10470 | 588 | 8537 | 104 | -2 | 9.8 | 7.7 | 432 | -1 | -1 | 16.6 | 3576 | 71 | 3.9 | 87 | 0.187 |
| 30-45.9926-111.3905-2-15- | 0-M37182 | 9681 | 604 | 12760 | 68 | -2 | 8.5 | 5.3 | -243 | -1 | -1 | 12.2 | 2525 | 62 | 3.1 | -59 | 0.221 |
| 30-45.9976-111.3925-2-15- | 0-M37183 | 15730 | 648 | 8834 | 83 | -2 | 8.8 | 6.2 | -246 | -1 | -1 | 14.1 | 3348 | 72 | 4.1 | 90 | 0.227 |
| 30-45.9793-111.3594-2-15- | 0-M37184 | 9979 | 663 | 12750 | 65 | -2 | 9.6 | 5.4 | -255 | -1 | -1 | 11.7 | 3094 | 87 | 4.1 | -66 | 0.316 |
| 30-45.9290-111.4561-2-15- | 0-M37185 | 11530 | 620 | 16030 | 57 | -2 | 7.3 | 6.8 | -284 | -1 | -1 | 12.1 | 3076 | 69 | 3.9 | 27 | 0.231 |
| 30-45.9166-111.4512-2-15- | 0-M37186 | 13050 | 598 | 11970 | 58 | -2 | 8.7 | 5.6 | -245 | 1 | -1 | 12.5 | 3103 | 74 | 4.2 | 126 | 0.240 |
| 30-45.9089-111.4450-2-15- | 0-M37187 | 11970 | 570 | 13860 | 51 | -2 | 8.3 | 5.4 | -260 | -1 | -1 | 12.8 | 2555 | 73 | 4.8 | 82 | 0.219 |
| 30-45.8967-111.4072-2-15- | 0-M37188 | 14990 | 803 | 10150 | 66 | -2 | 11.1 | 5.9 | -266 | 2 | -1 | 14.8 | 4790 | 119 | 3.2 | 112 | 0.236 |
| 30-45.9390-111.3735-2-15- | 0-M37189 | 9553 | 606 | 13040 | 50 | -2 | 8.6 | 8.2 | -280 | -1 | -1 | 12.9 | 3007 | 83 | 4.2 | 38 | 0.256 |
| 30-45.9617-111.3095-2-11- | 0-M37190 | 9354 | 412 | 10320 | 80 | -2 | 8.3 | 5.7 | 304 | -1 | -1 | 12.7 | 2882 | 84 | 5.0 | -54 | 0.276 |
| 30-45.9893-111.3325-2-15- | 0-M37191 | 7737 | 771 | 11170 | 77 | -2 | 8.7 | 5.9 | -316 | -1 | -1 | 13.8 | 3440 | 75 | 2.9 | 129 | 0.217 |
| 30-45.9884-111.3262-2-15- | 0-M37192 | 8409 | 781 | 9999 | 64 | -2 | 9.0 | 5.5 | -304 | -1 | -1 | 12.7 | 3595 | 69 | 3.7 | -38 | 0.228 |
| 30-45.6665-111.2601-2-12- | 0-M37193 | 7946 | 762 | 16470 | 58 | -2 | 11.1 | 7.9 | -327 | -1 | 1 | 21.4 | 3941 | 80 | 5.3 | | 0.178 |
| 30-45.6764-111.2680-2-12- | 0-M37194 | 11070 | 1027 | 14400 | 60 | -2 | 14.8 | 8.8 | -309 | 1 | -1 | 22.2 | 6059 | 150 | 6.0 | 102 | 0.239 |
| 30-45.6850-111.2677-2-12- | 0-M37195 | 8536 | 562 | 14480 | 79 | -2 | 8.7 | 6.8 | -269 | -1 | -1 | 15.2 | 3400 | 79 | 3.9 | -39 | 0.224 |
| 30-45.7073-111.2568-2-12- | 0-M37196 | 10270 | 475 | 13920 | 92 | -2 | 8.4 | 5.5 | -249 | -1 | -1 | 13.6 | 3397 | 74 | 3.7 | -41 | 0.250 |
| 30-45.7268-111.2664-2-15- | 0-M37197 | 11690 | 668 | 12810 | 57 | -2 | 9.5 | 6.6 | -320 | -1 | -1 | 11.4 | 3916 | 89 | 3.8 | 72 | 0.246 |
| 30-45.7426-111.2680-2-12- | 0-M37198 | 9314 | 673 | 15390 | 74 | -2 | 9.9 | 6.4 | -271 | -1 | -1 | 13.5 | 4308 | 90 | 4.5 | -33 | 0.252 |
| 30-45.7188-111.3152-2-15- | 0-M37199 | 13440 | 781 | 14680 | 67 | -2 | 10.1 | 7.1 | -306 | -1 | -1 | 14.6 | 3838 | 82 | 4.6 | 89 | 0.260 |
| 30-45.7013-111.3081-2-12- | 0-M37200 | 7210 | 421 | 16450 | 94 | -2 | 7.8 | 5.7 | 294 | -1 | -1 | 14.2 | 2770 | 59 | 3.7 | 96 | 0.275 |
| 30-45.6884-111.3123-2-15- | 0-M37201 | 11480 | 720 | 13250 | 46 | -2 | 8.3 | 6.7 | -335 | -1 | -1 | 12.6 | 3398 | 95 | 3.0 | 104 | 0.222 |
| 30-45.6870-111.2966-2-12- | 0-M37202 | 9777 | 902 | 15910 | 80 | -2 | 14.9 | 10.1 | -295 | 2 | -1 | 21.4 | 5956 | 132 | 6.3 | 86 | 0.271 |
| 30-45.6463-111.3501-2-12- | 0-M37203 | 11490 | 1389 | 13310 | 61 | -2 | 12.7 | 7.1 | -412 | -1 | -1 | 15.5 | 4173 | 93 | 4.9 | -101 | 0.213 |
| 30-45.6373-111.3486-2-12- | 0-M37204 | 9211 | 740 | 13400 | 84 | -2 | 10.3 | 5.1 | 344 | -1 | -1 | 11.3 | 3195 | 84 | 3.3 | 72 | 0.301 |
| 30-45.6065-111.3271-2-12- | 0-M37205 | 12700 | 777 | 13130 | 68 | -2 | 12.0 | 7.0 | -331 | -1 | -1 | 12.6 | 3984 | 90 | 4.3 | -33 | 0.230 |
| 30-45.5992-111.3217-2-12- | 0-M37206 | 11200 | 803 | 15260 | 66 | -2 | 11.0 | 7.4 | -284 | -1 | -1 | 18.9 | 4017 | 75 | 5.6 | -72 | 0.212 |
| 30-45.5990-111.2937-2-12- | 0-M37207 | 11920 | 894 | 12600 | 61 | -2 | 11.9 | 6.1 | -297 | -1 | -1 | 14.4 | 3994 | 103 | 4.6 | 86 | 0.215 |
| 30-45.5924-111.2734-2-11- | 0-M37208 | 8890 | 616 | 13720 | 52 | -1 | 9.9 | 6.7 | -239 | -1 | -1 | 13.8 | 3834 | 81 | 4.0 | -34 | 0.261 |
| 30-45.6949-111.3574-2-12- | 0-M37209 | 8344 | 513 | 14370 | 69 | -2 | 7.9 | 8.1 | -275 | 1 | -1 | 15.9 | 3588 | 72 | 4.7 | 62 | 0.258 |
| 30-45.6907-111.3654-2-15- | 0-M37210 | 9191 | 692 | 13390 | 70 | -2 | 10.0 | 6.4 | -262 | 1 | -1 | 14.4 | 3384 | 98 | 5.1 | 67 | 0.278 |
| 30-45.6999-111.3606-2-15- | 0-M37211 | 13120 | 557 | 12830 | 70 | -1 | 8.2 | 6.0 | -244 | 2 | -1 | 14.7 | 2903 | 71 | 3.9 | 66 | 0.218 |
| 30-45.7113-111.3575-2-12- | 0-M37212 | 9390 | 724 | 14140 | -28 | -2 | 10.5 | 5.0 | -260 | -1 | -1 | 9.5 | 3497 | 131 | 2.5 | 95 | 0.389 |
| 30-45.7264-111.3543-2-15- | 0-M37213 | 9616 | 698 | 12890 | 60 | -2 | 9.3 | 7.0 | -303 | -1 | -1 | 14.3 | 4107 | 96 | 3.2 | 70 | 0.245 |
| 30-45.7479-111.3306-2-15- | 0-M37214 | 10340 | 663 | 14630 | 68 | -2 | 11.2 | 5.0 | 462 | -1 | -1 | 12.2 | 3400 | 101 | 3.4 | -38 | 0.303 |
| 30-45.7276-111.3968-2-15- | 0-M37215 | 12030 | 749 | 13800 | 61 | -2 | 10.3 | 5.4 | 417 | -1 | -1 | 11.6 | 3473 | 102 | 3.6 | 102 | 0.284 |
| 30-45.6512-111.4013-2-12- | 0-M37216 | 6559 | 446 | 14830 | 61 | -1 | 7.5 | 5.8 | 461 | -1 | -1 | 10.9 | 3021 | 56 | 2.9 | 108 | 0.330 |
| 30-45.9578-110.9222-2-12- | 0-M37217 | 8459 | 670 | 11110 | 57 | -2 | 8.8 | 4.0 | 426 | -1 | -1 | 6.9 | 2601 | 95 | 2.4 | 45 | 0.319 |
| 30-45.9639-110.9472-2-12- | 0-M37218 | 13320 | 907 | 13650 | 58 | -2 | 14.5 | 4.4 | -318 | -2 | -1 | 7.6 | 3657 | 153 | 2.5 | -44 | 0.355 |
| 30-45.9644-110.9497-2-12- | 0-M37219 | 12360 | 994 | 13140 | 90 | -2 | 15.6 | 4.9 | 469 | -1 | -1 | 8.0 | 4111 | 135 | -2.2 | 175 | 0.275 |
| 30-45.9708-110.9844-2-12- | 0-M37220 | 9030 | 931 | 10840 | 109 | -2 | 12.4 | 4.1 | -320 | -1 | -1 | 8.3 | 3905 | 103 | 2.9 | -115 | 0.313 |
| 30-45.9736-110.9153-2-12- | 0-M37221 | 14120 | 1038 | 14260 | -35 | -2 | 14.7 | 5.4 | -367 | -1 | -1 | 6.4 | 3573 | 146 | -2.4 | 134 | 0.297 |
| 30-45.9811-111.8972-2-12- | 0-M37222 | 17080 | 1165 | 14000 | -36 | -2 | 18.8 | 4.6 | 756 | -1 | -1 | 6.5 | 3471 | 172 | 3.0 | -67 | 0.292 |
| 30-45.9772-110.8419-2-12- | 0-M37223 | 10490 | 693 | 15770 | 81 | -2 | 10.4 | 9.4 | -269 | -1 | -1 | 16.6 | 3462 | 95 | 5.1 | 157 | 1.199 |

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

(1)

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER AND FIELD DATA | | | | | | | | | | | | | | | | | | | | | | | | | U CONCENTRATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | TIME SAMPLED DATE | TIME SAMPLED HOUR | AIR TEMPERATURE | WATER TEMPERATURE | COMMENTS | SPECIAL MEASUREMENTS | pH | CONDUCTIVITY (µmho/cm) | SCINTILLOMETER (eU ppm) | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm |
| 30- | 45.9744- | 110.8211- | 2- | 12- | | 0-M37224- | 10/15/76- | 10- | 8- | | - | - | 5.7- | 600- | | -1- | 1- | 5- | 6- | 2- | 2- | 2- | 1- | 4- | 4- | 2- | 2- | -3- | - | - | - | - | 2.80 |
| 30- | 45.9658- | 110.7617- | 2- | 12- | | 0-M37225- | 10/15/76- | 10- | 9- | -C- | - | - | 5.7- | 700- | | -1- | 1- | 6- | 6- | 1- | 2- | 2- | 2- | 6- | 3- | 2- | 2- | -3- | - | - | - | - | 2.80 |
| 30- | 45.9931- | 110.7967- | 2- | 12- | | 0-M37226- | 10/15/76- | 10- | 9- | - | - | - | 5.7- | 700- | | -1- | 1- | 6- | 6- | 2- | 2- | 2- | 2- | 6- | 3- | 2- | 2- | -3- | - | - | - | - | 1.90 |
| 30- | 45.9844- | 110.7975- | 2- | 12- | | 0-M37227- | 10/15/76- | 10- | 8- | -C- | - | - | 5.9- | 550- | | -1- | 1- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 1.90 |
| 30- | 45.9661- | 110.8447- | 2- | 12- | | 0-M37228- | 10/15/76- | 11- | 10- | -C- | - | - | 5.7- | 550- | | -1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 2- | 2- | -3- | - | - | - | - | 2.40 |
| 30- | 45.9558- | 110.8539- | 2- | 12- | | 0-M37229- | 10/15/76- | 11- | 8- | -C- | - | - | 5.7- | 440- | | -1- | 1- | 3- | 7- | 3- | 2- | 1- | 2- | 3- | 2- | 2- | 2- | -3- | - | - | - | - | 2.50 |
| 30- | 45.9561- | 110.8261- | 2- | 12- | | 0-M37230- | 10/15/76- | 11- | 7- | - | - | - | 5.7- | 600- | | -1- | 1- | 6- | 6- | 2- | 2- | 2- | 2- | 3- | 4- | 2- | 2- | -3- | - | - | - | - | 2.30 |
| 30- | 45.9336- | 110.8108- | 2- | 12- | | 0-M37231- | 10/15/76- | 12- | 8- | -C- | - | - | 5.5- | 350- | | -1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 2.00 |
| 30- | 45.9383- | 110.8500- | 2- | 12- | | 0-M37232- | 10/15/76- | 12- | 8- | -C- | - | - | 5.7- | 420- | | -1- | 1- | 3- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 2- | 2- | -3- | - | - | - | - | 1.70 |
| 30- | 45.8432- | 111.5693- | 2- | 15- | | 0-M37233- | 10/15/76- | 12- | 4- | -C- | - | - | - | - | | -1- | 1- | 5- | 1- | | -1- | | -2- | 3- | 3- | 2- | 1- | -3- | - | - | - | - | 3.60 |
| 30- | 45.8327- | 111.5699- | 2- | 15- | | 0-M37234- | 10/15/76- | 13- | 5- | -C- | - | - | - | - | | -1- | 1- | 3- | 1- | | -1- | | -2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 3.60 |
| 30- | 45.7958- | 111.5551- | 2- | 15- | | 0-M37235- | 10/15/76- | 13- | 3- | -C- | - | - | - | - | | -1- | 1- | 5- | 6- | | -1- | | -2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 3.20 |
| 30- | 45.7822- | 111.5891- | 2- | 15- | | 0-M37236- | 10/15/76- | 13- | 6- | -C- | - | - | - | - | | -1- | 1- | 5- | 1- | | -1- | | -2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 2.50 |
| 30- | 45.7954- | 111.6223- | 2- | 15- | | 0-M37237- | 10/15/76- | 13- | 9- | -C- | - | - | - | - | | -1- | 1- | 4- | 1- | | -1- | | -2- | 4- | 2- | 4- | 1- | -3- | - | - | - | - | 3.80 |
| 30- | 45.7561- | 111.6496- | 2- | 12- | | 0-M37238- | 10/15/76- | 14- | 5- | 4.0- | C- | - | 5.7- | 430- | | -1- | 1- | 2- | 6- | 4- | 3- | 3- | 3- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 3.60 |
| 30- | 45.7905- | 111.6812- | 2- | 12- | | 0-M37239- | 10/15/76- | 14- | 4- | 3.5- | - | - | 5.7- | 700- | | -1- | 1- | 5- | 7- | 2- | 2- | 1- | 2- | 6- | 3- | 2- | 1- | -3- | - | - | - | - | 2.70 |
| 30- | 45.7913- | 111.7048- | 2- | 15- | | 0-M37240- | 10/15/76- | 15- | 11- | -C- | - | - | - | - | | -1- | 1- | 5- | 7- | | -1- | | -2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 3.00 |
| 30- | 45.8181- | 111.7358- | 2- | 15- | | 0-M37241- | 10/15/76- | 15- | 5- | -C- | - | - | - | - | | -1- | 1- | 5- | 6- | | -1- | | -2- | 3- | 3- | 2- | 1- | -3- | - | - | - | - | 2.80 |
| 30- | 45.8191- | 111.7158- | 2- | 15- | | 0-M37242- | 10/15/76- | 15- | 8- | -C- | - | - | - | - | | -1- | 1- | 4- | 1- | | -1- | | -2- | 3- | 2- | 4- | 1- | -3- | - | - | - | - | 4.50 |
| 30- | 45.8413- | 111.6881- | 2- | 15- | | 0-M37243- | 10/15/76- | 16- | 10- | -C- | - | - | - | - | | -1- | 1- | 4- | 1- | | -1- | | -2- | 3- | 2- | 3- | 1- | -3- | - | - | - | - | 3.20 |
| 30- | 45.8622- | 111.6585- | 2- | 15- | | 0-M37244- | 10/15/76- | 16- | 8- | -C- | - | - | - | - | | -1- | 1- | 4- | 1- | | -1- | | -2- | 3- | 2- | 4- | 1- | -3- | - | - | - | - | 5.10 |
| 30- | 45.8742- | 111.6722- | 2- | 15- | | 0-M37245- | 10/15/76- | 16- | 8- | -C- | - | - | - | - | | -1- | 1- | 4- | 1- | | -1- | | -2- | 3- | 2- | 4- | 1- | -3- | - | - | - | - | 3.30 |
| 30- | 45.8756- | 111.6740- | 2- | 15- | | 0-M37246- | 10/15/76- | 16- | 7- | -C- | - | - | - | - | | -1- | 1- | 4- | 1- | | -1- | | -2- | 3- | 2- | 4- | 1- | -3- | - | - | - | - | 4.20 |
| 30- | 45.9011- | 111.6918- | 2- | 11- | | 0-M37247- | 10/15/76- | 16- | 6- | 5.0- | C- | - | 5.7- | 475- | | -1- | 1- | 5- | 6- | 2- | 2- | 1- | 1- | 6- | 3- | 4- | 1- | -1- | - | - | - | - | 4.10 |
| 30- | 45.9150- | 111.7047- | 2- | 15- | | 0-M37248- | 10/15/76- | 15- | 9- | -C- | - | - | - | - | | -1- | 1- | 4- | 1- | | -1- | | -2- | 3- | 2- | 2- | 1- | -3- | - | - | - | - | 3.80 |
| 30- | 45.9043- | 111.7223- | 2- | 15- | | 0-M37249- | 10/15/76- | 17- | 9- | -C- | - | - | - | - | | -1- | 1- | 5- | 1- | | -1- | | -1- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 2.60 |
| 30- | 45.9130- | 111.7267- | 2- | 15- | | 0-M37250- | 10/15/76- | 17- | 5- | -C- | - | - | - | - | | -1- | 1- | 4- | 1- | | -1- | | -2- | 3- | 2- | 3- | 1- | -3- | - | - | - | - | 5.60 |
| 30- | 45.8904- | 111.6755- | 2- | 12- | | 0-M37251- | 10/15/76- | 18- | 4- | 3.0- | C- | - | 5.7- | 1500- | | -1- | 1- | 2- | 1- | 2- | 2- | 2- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 4.70 |
| 30- | 45.8950- | 111.6073- | 2- | 15- | | 0-M37252- | 10/15/76- | 18- | 8- | -C- | - | - | - | - | | -1- | 1- | 4- | 1- | | -1- | | -2- | 3- | 2- | 4- | 1- | -3- | - | - | - | - | 3.40 |
| 30- | 45.9040- | 111.6063- | 2- | 15- | | 0-M37253- | 10/15/76- | 18- | 9- | -C- | - | - | - | - | | -1- | 1- | 4- | 1- | | -1- | | -2- | 3- | 2- | 2- | 1- | -3- | - | - | - | - | 7.70 |
| 30- | 45.9030- | 111.6179- | 2- | 15- | | 0-M37254- | 10/15/76- | 18- | 8- | -C- | - | - | - | - | | -1- | 1- | 5- | 1- | | -1- | | -2- | 3- | 2- | 3- | 1- | -3- | - | - | - | - | 3.50 |
| 30- | 45.9188- | 111.6094- | 2- | 15- | | 0-M37255- | 10/16/76- | 8- | 9- | -C- | - | - | - | - | | -1- | 1- | 5- | 1- | | -1- | | -2- | 3- | 2- | 4- | 1- | -9- | - | - | - | - | 2.90 |
| 30- | 45.9379- | 111.6701- | 2- | 11- | | 0-M37256- | 10/16/76- | 8- | 5- | 4.0- | - | - | 6.1- | 2100- | | -1- | 1- | 5- | 6- | 1- | 2- | 3- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 3.70 |
| 30- | 45.9448- | 111.6399- | 2- | 15- | | 0-M37257- | 10/16/76- | 8- | 4- | -C- | - | - | - | - | | -1- | 1- | 4- | 1- | | -1- | | -2- | 3- | 2- | 2- | 1- | -3- | - | - | - | - | 4.90 |
| 30- | 45.9507- | 111.7192- | 2- | 12- | | 0-M37258- | 10/16/76- | 9- | 2- | 3.0- | - | - | 5.7- | 750- | | -1- | 1- | 5- | 1- | 2- | 2- | 1- | 1- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 3.50 |
| 30- | 45.9525- | 111.7237- | 2- | 15- | | 0-M37259- | 10/16/76- | 9- | 6- | -C- | - | - | - | - | | -1- | 1- | 4- | 1- | | -1- | | -2- | 3- | 2- | 4- | 1- | -3- | - | - | - | - | 3.90 |
| 30- | 45.9606- | 111.6611- | 2- | 15- | | 0-M37260- | 10/16/76- | 10- | 4- | -C- | - | - | - | - | | -1- | 1- | 5- | 1- | | -1- | | -2- | 3- | 2- | 4- | 1- | -3- | - | - | - | - | 4.60 |
| 30- | 45.9568- | 111.6707- | 2- | 15- | | 0-M37261- | 10/16/76- | 10- | 6- | -C- | - | - | - | - | | -1- | 1- | 5- | 1- | | -1- | | -2- | 3- | 2- | 3- | 1- | -3- | - | - | - | - | 2.50 |
| 30- | 45.9555- | 111.6829- | 2- | 15- | | 0-M37262- | 10/16/76- | 10- | 6- | -C- | - | - | - | - | | -1- | 7- | 4- | 7- | | -1- | | -2- | 3- | 2- | 4- | 1- | -3- | - | - | - | - | 2.80 |
| 30- | 45.9552- | 111.6044- | 2- | 15- | | 0-M37263- | 10/16/76- | 11- | 3- | -C- | - | - | - | - | | -1- | 1- | 5- | 1- | | -1- | | -2- | 3- | 2- | 3- | 1- | -3- | - | - | - | - | 3.30 |
| 30- | 45.9656- | 111.6234- | 2- | 15- | | 0-M37264- | 10/16/76- | 11- | 9- | -C- | - | - | - | - | | -1- | 1- | 5- | 1- | | -1- | | -2- | 3- | 2- | 1- | 1- | -3- | - | - | - | - | 3.00 |
| 30- | 45.9723- | 111.6230- | 2- | 15- | | 0-M37265- | 10/16/76- | 11- | 5- | -C- | - | - | - | - | | -1- | 1- | 5- | 1- | | -1- | | -2- | 3- | 2- | 4- | 1- | -3- | - | - | - | - | 3.20 |
| 30- | 45.9730- | 111.6286- | 2- | 15- | | 0-M37266- | 10/16/76- | 12- | 5- | -C- | - | - | - | - | | -1- | 1- | 4- | 1- | | -1- | | -2- | 3- | 2- | 2- | 1- | -3- | - | - | - | - | 5.20 |
| 30- | 45.2925- | 110.0172- | 2- | 12- | | 0-M37267- | 10/30/76- | 8- | 1- | 1.0- | - | - | 5.7- | 210- | | -1- | 6- | 4- | 6- | 3- | 3- | 2- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 2.00 |
| 30- | 45.2960- | 110.0389- | 2- | 12- | | 0-M37268- | 10/30/76- | 8- | 2- | 1.0- | - | - | 5.7- | 230- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 2- | 3- | 1- | -1- | - | - | - | - | 4.00 |
| 30- | 45.2934- | 110.0346- | 2- | 12- | | 0-M37269- | 10/30/76- | 8- | 2- | 1.0- | - | - | 5.7- | 220- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 2- | 3- | 1- | -1- | - | - | - | - | 3.50 |
| 30- | 45.3132- | 110.0976- | 2- | 12- | | 0-M37270- | 10/30/76- | 10- | 6- | 2.0- | - | - | 5.7- | 210- | | -1- | 6- | 2- | 6- | 2- | 3- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 1.80 |
| 30- | 45.3130- | 110.0996- | 2- | 12- | | 0-M37271- | 10/30/76- | 10- | 5- | 1.0- | - | - | 5.9- | 220- | | -1- | 6- | 3- | 6- | 3- | 2- | 1- | 2- | 3- | 4- | 3- | 1- | -1- | - | - | - | - | 2.90 |
| 30- | 45.2318- | 110.0084- | 2- | 12- | | 0-M37272- | 10/30/76- | 10- | 2- | 1.0- | - | - | 5.7- | 200- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 1- | -1- | - | - | - | - | 3.20 |
| 30- | 45.2258- | 110.0228- | 2- | 12- | | 0-M37273- | 10/30/76- | 13- | 2- | 1.0- | - | - | 5.9- | 210- | | -1- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 3- | 1- | 4- | 1- | -1- | - | - | - | - | 3.20 |
| 30- | 45.2244- | 110.0370- | 2- | 12- | | 0-M37274- | 10/30/76- | 14- | 1- | 1.0- | C- | - | 5.5- | 200- | | -1- | 6- | 1- | 6- | 2- | 3- | 1- | 2- | 1- | 4- | 4- | 1- | -1- | - | - | - | - | 3.20 |

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

②

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE (Concentrations reported in weight parts per million (ppm)) | | | | | | | | | ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY (Concentrations in weight ppm) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Ag | Bi | Cd | Cu | Nb | Ni | Pb | Sn | W | Be | Li |
| 30- | 45.9744- | 110.8211- | 2- | 12- | 0- | M37224 | -5 | -5 | -5 | 34 | -20 | 45 | 11 | -10 | -15 | 2 | 31 |
| 30- | 45.9658- | 110.7617- | 2- | 12- | 0- | M37225 | -5 | -5 | -5 | 29 | -20 | 40 | 12 | -10 | -15 | 2 | 37 |
| 30- | 45.9931- | 110.7967- | 2- | 12- | 0- | M37226 | -5 | -5 | -5 | 47 | -20 | 88 | 6 | -10 | -15 | 3 | 45 |
| 30- | 45.9844- | 110.7975- | 2- | 12- | 0- | M37227 | -5 | -5 | -5 | 20 | -20 | 36 | 9 | -10 | -15 | 3 | 23 |
| 30- | 45.9661- | 110.8447- | 2- | 12- | 0- | M37228 | -5 | -5 | -5 | 41 | -20 | 36 | 6 | -10 | -15 | 2 | 38 |
| 30- | 45.9558- | 110.8539- | 2- | 12- | 0- | M37229 | -5 | -5 | -5 | 32 | -20 | 55 | 11 | -10 | -15 | 2 | 22 |
| 30- | 45.9561- | 110.8261- | 2- | 12- | 0- | M37230 | -5 | -5 | -5 | 29 | -20 | 51 | 6 | -10 | -15 | 2 | 30 |
| 30- | 45.9336- | 110.8108- | 2- | 12- | 0- | M37231 | -5 | -5 | -5 | 30 | -20 | 21 | 9 | -10 | -15 | 2 | 24 |
| 30- | 45.9383- | 110.8500- | 2- | 12- | 0- | M37232 | -5 | -5 | -5 | 24 | -20 | 41 | -5 | -10 | -15 | 2 | 26 |
| 30- | 45.8432- | 111.5693- | 2- | 15- | 0- | M37233 | -5 | -5 | -5 | 37 | -20 | 20 | 17 | -10 | -15 | 3 | 38 |
| 30- | 45.8327- | 111.5699- | 2- | 15- | 0- | M37234 | -5 | -5 | -5 | 23 | -20 | -15 | 13 | -10 | -15 | 3 | 23 |
| 30- | 45.7958- | 111.5551- | 2- | 15- | 0- | M37235 | -5 | -5 | -5 | 34 | -20 | 15 | 13 | -10 | -15 | 3 | 29 |
| 30- | 45.7822- | 111.5891- | 2- | 15- | 0- | M37236 | -5 | -5 | -5 | 28 | -20 | 15 | 10 | -10 | -15 | 3 | 40 |
| 30- | 45.7954- | 111.6223- | 2- | 15- | 0- | M37237 | -5 | -5 | -5 | 26 | -20 | -15 | 15 | -10 | -15 | 3 | 37 |
| 30- | 45.7561- | 111.6496- | 2- | 12- | 0- | M37238 | -5 | -5 | -5 | 18 | -20 | 28 | 14 | -10 | -15 | 3 | 40 |
| 30- | 45.7905- | 111.6812- | 2- | 12- | 0- | M37239 | -5 | -5 | -5 | 14 | -20 | -15 | 7 | -10 | -15 | 3 | 22 |
| 30- | 45.7913- | 111.7048- | 2- | 15- | 0- | M37240 | -5 | -5 | -5 | 26 | -20 | 23 | 10 | -10 | -15 | 2 | 39 |
| 30- | 45.8181- | 111.7358- | 2- | 15- | 0- | M37241 | -5 | -5 | -5 | 24 | -20 | -15 | 12 | -10 | -15 | 3 | 31 |
| 30- | 45.8191- | 111.7158- | 2- | 15- | 0- | M37242 | -5 | -5 | -5 | 15 | -20 | -15 | 8 | -10 | -15 | 2 | 23 |
| 30- | 45.8413- | 111.6881- | 2- | 15- | 0- | M37243 | -5 | -5 | -5 | 24 | -20 | 20 | 9 | -10 | -15 | 1 | 35 |
| 30- | 45.8622- | 111.6585- | 2- | 15- | 0- | M37244 | -5 | -5 | -5 | 30 | -20 | -15 | -5 | -10 | 18 | 3 | 48 |
| 30- | 45.8742- | 111.6722- | 2- | 15- | 0- | M37245 | -5 | -5 | -5 | 25 | -20 | 15 | 10 | -10 | -15 | 3 | 34 |
| 30- | 45.8756- | 111.6740- | 2- | 15- | 0- | M37246 | -5 | -5 | -5 | 27 | -20 | 21 | 6 | -10 | -15 | 2 | 60 |
| 30- | 45.9011- | 111.6918- | 2- | 11- | 0- | M37247 | -5 | -5 | -5 | 22 | -20 | -15 | 5 | -10 | -15 | 3 | 37 |
| 30- | 45.9150- | 111.7047- | 2- | 15- | 0- | M37248 | -5 | -5 | -5 | 19 | -20 | -15 | 22 | -10 | -15 | 3 | 32 |
| 30- | 45.9043- | 111.7223- | 2- | 15- | 0- | M37249 | -5 | -5 | -5 | 23 | -20 | -15 | 14 | -10 | -15 | 3 | 40 |
| 30- | 45.9130- | 111.7267- | 2- | 15- | 0- | M37250 | -5 | -5 | -5 | 22 | -20 | -15 | 23 | -10 | -15 | 4 | 43 |
| 30- | 45.8904- | 111.6755- | 2- | 12- | 0- | M37251 | -5 | -5 | -5 | 21 | -20 | -15 | 14 | -10 | -15 | 3 | 46 |
| 30- | 45.8950- | 111.6073- | 2- | 15- | 0- | M37252 | -5 | -5 | -5 | 16 | -20 | -15 | 15 | -10 | 15 | 3 | 34 |
| 30- | 45.9040- | 111.6063- | 2- | 15- | 0- | M37253 | -5 | -5 | -5 | 33 | -20 | 24 | 14 | 10 | -15 | 3 | 37 |
| 30- | 45.9030- | 111.6179- | 2- | 15- | 0- | M37254 | -5 | -5 | -5 | 22 | -20 | 20 | 9 | -10 | -15 | 3 | 37 |
| 30- | 45.9188- | 111.6094- | 2- | 15- | 0- | M37255 | -5 | -5 | -5 | 26 | -20 | 26 | 10 | -10 | -15 | 2 | 42 |
| 30- | 45.9379- | 111.6701- | 2- | 11- | 0- | M37256 | -5 | -5 | -5 | 30 | -20 | 18 | 12 | -10 | -15 | 3 | 35 |
| 30- | 45.9448- | 111.6399- | 2- | 15- | 0- | M37257 | -5 | -5 | -5 | 33 | -20 | -15 | 24 | -10 | -15 | 5 | 43 |
| 30- | 45.9507- | 111.7192- | 2- | 12- | 0- | M37258 | -5 | -5 | -5 | 33 | -20 | -15 | 7 | -10 | -15 | 3 | 40 |
| 30- | 45.9525- | 111.7237- | 2- | 15- | 0- | M37259 | -5 | -5 | -5 | 17 | -20 | -15 | 21 | -10 | -15 | 4 | 43 |
| 30- | 45.9606- | 111.6611- | 2- | 15- | 0- | M37260 | -5 | -5 | -5 | 29 | 21 | -15 | 26 | -10 | -15 | 5 | 32 |
| 30- | 45.9568- | 111.6707- | 2- | 15- | 0- | M37261 | -5 | -5 | -5 | 71 | -20 | -15 | 7 | -10 | -15 | 2 | 45 |
| 30- | 45.9555- | 111.6829- | 2- | 15- | 0- | M37262 | -5 | -5 | -5 | 56 | -20 | 21 | 8 | -10 | -15 | 3 | 32 |
| 30- | 45.9552- | 111.6044- | 2- | 15- | 0- | M37263 | -5 | 5 | -5 | 29 | -20 | -15 | 16 | -10 | -15 | 3 | 35 |
| 30- | 45.9656- | 111.6234- | 2- | 15- | 0- | M37264 | -5 | -5 | -5 | 26 | -20 | -15 | 16 | -10 | -15 | 3 | 43 |
| 30- | 45.9723- | 111.6230- | 2- | 15- | 0- | M37265 | -5 | -5 | -5 | 22 | -20 | 23 | 12 | -10 | -15 | 2 | 34 |
| 30- | 45.9730- | 111.6286- | 2- | 15- | 0- | M37266 | -5 | -5 | -5 | 31 | -20 | -15 | 14 | -10 | -15 | 3 | 53 |
| 30- | 45.2925- | 110.0172- | 2- | 12- | 0- | M37267 | -5 | -5 | -5 | 23 | -20 | 45 | -5 | -10 | 17 | 2 | 23 |
| 30- | 45.2960- | 110.0389- | 2- | 12- | 0- | M37268 | -5 | -5 | -5 | 25 | -20 | 26 | 12 | -10 | -15 | 2 | 44 |
| 30- | 45.2934- | 110.0346- | 2- | 12- | 0- | M37269 | -5 | -5 | -5 | 33 | -20 | 46 | 14 | 18 | -15 | 2 | 39 |
| 30- | 45.3132- | 110.0976- | 2- | 12- | 0- | M37270 | -5 | -5 | -5 | 15 | -20 | 67 | 11 | -10 | -15 | 2 | 22 |
| 30- | 45.3130- | 110.0996- | 2- | 12- | 0- | M37271 | -5 | -5 | -5 | 37 | -20 | 45 | 11 | -10 | 19 | 3 | 27 |
| 30- | 45.2318- | 110.0084- | 2- | 12- | 0- | M37272 | -5 | -5 | -5 | 38 | -20 | 22 | 13 | -10 | -15 | 2 | 49 |
| 30- | 45.2258- | 110.0228- | 2- | 12- | 0- | M37273 | -5 | -5 | -5 | 35 | -20 | 22 | 13 | -10 | -15 | 2 | 36 |
| 30- | 45.2244- | 110.0370- | 2- | 12- | 0- | M37274 | -5 | -5 | -5 | 31 | -20 | 26 | 12 | -10 | -15 | 3 | 31 |

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

③

| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | LASL SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS — Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Al | Au | Ba | Ca | Ce | Cl | Co | Cr | Cs | Dy | Eu | Fe | Hf | K | La | Lu |
| 30-45.9744-110.8211-2-12- | 0-M37224 | 66240 | -0.07 | 962 | 22350 | 65 | -94 | 18.5 | 257 | 4.7 | 3 | 1.6 | 40050 | 5.4 | 21770 | 32 | 0.4 |
| 30-45.9658-110.7617-2-12- | 0-M37225 | 68960 | -0.08 | 803 | 26020 | 78 | -98 | 14.3 | 150 | 4.0 | 3 | 1.9 | 34210 | 8.5 | 17340 | 36 | 0.4 |
| 30-45.9931-110.7967-2-12- | 0-M37226 | 65080 | -0.08 | 979 | 39820 | 62 | -99 | 25.1 | 281 | 5.1 | 3 | 1.4 | 44280 | 3.7 | 23700 | 24 | 0.3 |
| 30-45.9844-110.7975-2-12- | 0-M37227 | 70550 | -0.08 | 1125 | 35400 | 56 | -100 | 16.0 | 345 | 2.7 | 3 | 1.8 | 41820 | 7.2 | 17900 | 29 | 0.3 |
| 30-45.9661-110.8447-2-12- | 0-M37228 | 62810 | -0.07 | 1255 | 29490 | 55 | -99 | 20.2 | 241 | 4.3 | 3 | 1.7 | 42950 | 5.8 | 16090 | 35 | 0.3 |
| 30-45.9558-110.8539-2-12- | 0-M37229 | 66800 | -0.08 | 1091 | 29050 | 74 | -103 | 16.3 | 250 | 4.2 | 4 | 1.8 | 36010 | 8.8 | 16670 | 36 | 0.2 |
| 30-45.9561-110.8261-2-12- | 0-M37230 | 68540 | -0.07 | 1029 | 26550 | 53 | -106 | 17.4 | 298 | 4.0 | 2 | 1.6 | 39140 | 5.0 | 18810 | 33 | 0.3 |
| 30-45.9336-110.8108-2-12- | 0-M37231 | 66560 | -0.07 | 887 | 26200 | 56 | -95 | 15.8 | 313 | 3.1 | 3 | 1.7 | 44380 | 6.4 | 21240 | 33 | 0.3 |
| 30-45.9383-110.8500-2-12- | 0-M37232 | 68050 | -0.07 | 1050 | 36490 | 50 | -94 | 21.3 | 377 | -1.9 | 3 | 1.5 | 48410 | 5.5 | 15400 | 30 | 0.3 |
| 30-45.8432-111.5693-2-15- | 0-M37233 | 59920 | -0.07 | 845 | 28530 | 92 | -98 | 10.3 | 62 | 5.6 | 6 | 1.8 | 26000 | 15.1 | 16270 | 47 | 0.4 |
| 30-45.8327-111.5699-2-15- | 0-M37234 | 58940 | -0.06 | 759 | 30940 | 83 | -83 | 8.8 | 70 | 4.7 | 5 | 1.7 | 29090 | 12.9 | 16580 | 43 | 0.5 |
| 30-45.7958-111.5551-2-15- | 0-M37235 | 59490 | -0.06 | 743 | 20620 | 93 | -79 | 11.2 | 79 | 5.0 | 5 | 1.8 | 32410 | 15.3 | 20150 | 46 | 0.5 |
| 30-45.7822-111.5891-2-15- | 0-M37236 | 52960 | -0.06 | 714 | 45110 | 55 | -79 | 10.5 | 64 | 4.2 | 4 | 1.4 | 24040 | 7.0 | 19270 | 35 | 0.4 |
| 30-45.7954-111.6223-2-15- | 0-M37237 | 63470 | -0.07 | 613 | 23630 | 82 | -80 | 8.0 | 64 | 4.8 | 5 | 1.6 | 26610 | 9.7 | 15100 | 45 | 0.5 |
| 30-45.7561-111.6496-2-12- | 0-M37238 | 59080 | -0.06 | 632 | 28740 | 73 | 148 | 11.8 | 134 | 4.0 | 4 | 1.6 | 31740 | 12.1 | 15980 | 38 | 0.4 |
| 30-45.7905-111.6812-2-12- | 0-M37239 | 50050 | -0.05 | 690 | 37110 | 61 | -77 | 3.8 | 57 | 2.3 | 4 | 1.4 | 20130 | 12.2 | 17660 | 35 | 0.4 |
| 30-45.7913-111.7048-2-15- | 0-M37240 | 53740 | -0.06 | 728 | 37440 | 61 | 139 | 13.9 | 105 | 4.4 | 4 | 1.6 | 31520 | 10.8 | 15810 | 39 | 0.4 |
| 30-45.8181-111.7358-2-15- | 0-M37241 | 51500 | -0.06 | 682 | 20520 | 73 | -86 | 9.0 | 81 | 2.5 | 4 | 1.5 | 27370 | 14.1 | 18890 | 35 | 0.5 |
| 30-45.8191-111.7158-2-15- | 0-M37242 | 44300 | -0.06 | 455 | 29110 | 115 | -80 | 13.4 | 123 | -1.6 | 5 | 1.7 | 61300 | 28.5 | 14630 | 61 | 0.7 |
| 30-45.8413-111.6881-2-15- | 0-M37243 | 47280 | -0.06 | 546 | 55690 | 93 | -75 | 8.1 | 96 | 3.4 | 5 | 1.5 | 35150 | 16.9 | 15800 | 47 | 0.5 |
| 30-45.8622-111.6585-2-15- | 0-M37244 | 53240 | -0.06 | 723 | 49270 | 95 | 126 | 9.9 | 54 | 6.4 | 5 | 1.5 | 34540 | 26.5 | 15840 | 50 | 0.5 |
| 30-45.8742-111.6722-2-15- | 0-M37245 | 55680 | -0.07 | 785 | 62890 | 70 | -89 | 8.1 | 42 | 5.2 | 5 | 1.7 | 22040 | 11.4 | 20410 | 34 | 0.4 |
| 30-45.8756-111.6740-2-15- | 0-M37246 | 53930 | -0.06 | 686 | 50990 | 88 | -80 | 11.3 | 102 | 4.2 | 4 | 1.5 | 34950 | 18.5 | 17330 | 48 | 0.4 |
| 30-45.9011-111.6918-2-11- | 0-M37247 | 65070 | -0.07 | 702 | 30870 | 90 | -84 | 8.3 | 85 | 8.0 | 5 | 1.8 | 30210 | 13.1 | 19610 | 44 | 0.5 |
| 30-45.9150-111.7047-2-15- | 0-M37248 | 70260 | -0.05 | 727 | 18290 | 75 | -88 | 7.7 | 33 | 6.9 | 4 | 1.4 | 18460 | 10.3 | 24420 | 40 | 0.3 |
| 30-45.9043-111.7223-2-15- | 0-M37249 | 58620 | -0.07 | 705 | 38060 | 68 | -89 | 9.1 | 49 | 4.7 | 5 | 1.3 | 21270 | 6.9 | 18100 | 33 | 0.3 |
| 30-45.9130-111.7267-2-15- | 0-M37250 | 70400 | -0.06 | 678 | 20250 | 93 | 154 | 10.2 | 40 | 8.9 | 5 | 1.5 | 28900 | 14.7 | 22880 | 54 | 0.5 |
| 30-45.8904-111.6755-2-12- | 0-M37251 | 59900 | -0.07 | 643 | 49050 | 89 | 114 | 8.3 | 61 | 6.4 | 5 | 1.5 | 29100 | 14.6 | 19460 | 45 | 0.5 |
| 30-45.8950-111.6073-2-15- | 0-M37252 | 51760 | -0.06 | 620 | 41080 | 70 | -78 | 9.6 | 61 | 4.3 | 6 | 1.4 | 26740 | 13.9 | 17280 | 40 | 0.5 |
| 30-45.9040-111.6063-2-15- | 0-M37253 | 60320 | -0.08 | 791 | 27390 | 78 | 103 | 15.5 | 142 | 4.2 | 6 | 1.9 | 35390 | 16.3 | 17030 | 39 | 0.5 |
| 30-45.9030-111.6179-2-15- | 0-M37254 | 51700 | -0.06 | 457 | 47100 | 70 | 114 | 8.8 | 67 | 5.4 | 5 | 1.4 | 28330 | 16.1 | 18900 | 38 | 0.5 |
| 30-45.9188-111.6094-2-15- | 0-M37255 | 58590 | -0.06 | 738 | 33020 | 87 | -81 | 10.2 | 103 | 3.5 | 5 | 1.6 | 31890 | 10.9 | 18510 | 43 | 0.4 |
| 30-45.9379-111.6701-2-11- | 0-M37256 | 57440 | -0.06 | 719 | 38480 | 67 | -82 | 13.6 | 66 | 3.7 | 4 | 1.3 | 37570 | 9.6 | 16990 | 40 | 0.3 |
| 30-45.9448-111.6399-2-15- | 0-M37257 | 65090 | -0.07 | 576 | 21060 | 74 | -88 | 10.1 | 42 | 7.0 | 5 | 1.5 | 27150 | 8.9 | 19260 | 36 | 0.5 |
| 30-45.9507-111.7192-2-12- | 0-M37258 | 64370 | -0.06 | 621 | 29300 | 65 | 129 | 13.9 | 48 | 4.0 | 4 | 1.6 | 38350 | 9.2 | 20180 | 36 | 0.4 |
| 30-45.9525-111.7237-2-15- | 0-M37259 | 78810 | -0.06 | 695 | 18990 | 105 | 153 | 7.2 | 46 | 10.2 | 7 | 1.7 | 29830 | 14.8 | 24610 | 53 | 0.5 |
| 30-45.9606-111.6611-2-15- | 0-M37260 | 67260 | -0.06 | 603 | 17640 | 62 | 180 | 10.7 | 36 | 8.3 | 7 | 1.4 | 24900 | 9.4 | 21480 | 38 | 0.5 |
| 30-45.9568-111.6707-2-15- | 0-M37261 | 64690 | -0.08 | 561 | 33320 | 68 | -97 | 17.0 | 94 | 3.7 | 4 | 1.7 | 50620 | 7.8 | 18530 | 31 | 0.4 |
| 30-45.9555-111.6829-2-15- | 0-M37262 | 65790 | -0.07 | 593 | 25080 | 63 | 119 | 13.1 | 65 | 4.7 | 4 | 1.3 | 39180 | 7.3 | 22070 | 34 | 0.4 |
| 30-45.9552-111.6044-2-15- | 0-M37263 | 60230 | -0.06 | 702 | 35000 | 87 | -87 | 9.1 | 70 | 4.7 | 5 | 1.8 | 37650 | 14.7 | 21020 | 45 | 0.6 |
| 30-45.9656-111.6234-2-15- | 0-M37264 | 56490 | -0.05 | 789 | 24730 | 66 | -78 | 12.8 | 75 | 4.7 | 5 | 1.5 | 32260 | 9.1 | 20380 | 36 | 0.4 |
| 30-45.9723-111.6230-2-15- | 0-M37265 | 57640 | -0.07 | 705 | 31210 | 75 | -95 | 12.4 | 110 | 4.4 | 5 | 1.7 | 35020 | 10.8 | 18470 | 37 | 0.4 |
| 30-45.9730-111.6286-2-15- | 0-M37266 | 61340 | -0.06 | 569 | 32150 | 73 | -79 | 10.8 | 58 | 4.6 | 5 | 1.4 | 34290 | 9.1 | 16060 | 38 | 0.4 |
| 30-45.2925-110.0172-2-12- | 0-M37267 | 62340 | -0.08 | 1026 | 50850 | 88 | -97 | 46.5 | 340 | 8.3 | 3 | 2.9 | 59820 | 10.2 | 13450 | 45 | 0.3 |
| 30-45.2960-110.0389-2-12- | 0-M37268 | 53690 | -0.05 | 932 | 27340 | 69 | -72 | 16.9 | 129 | 4.1 | 5 | 1.6 | 39440 | 14.2 | 17250 | 43 | 0.5 |
| 30-45.2934-110.0346-2-12- | 0-M37269 | 64400 | -0.07 | 992 | 24110 | 98 | 108 | 33.8 | 182 | 4.6 | 5 | 2.9 | 46450 | 16.7 | 23260 | 43 | 0.5 |
| 30-45.3132-110.0976-2-12- | 0-M37270 | 56180 | -0.08 | 863 | 53590 | 95 | -96 | 36.1 | 409 | 5.3 | 3 | 2.1 | 67520 | 11.2 | 11330 | 43 | 0.4 |
| 30-45.3130-110.0996-2-12- | 0-M37271 | 57690 | -0.07 | 943 | 42090 | 73 | -85 | 21.8 | 272 | 4.6 | 4 | 1.9 | 50970 | 12.1 | 11450 | 46 | 0.5 |
| 30-45.2318-110.0084-2-12- | 0-M37272 | 58430 | -0.06 | 826 | 20920 | 64 | -82 | 17.9 | 133 | 3.2 | 5 | 1.6 | 38540 | 10.2 | 18160 | 42 | 0.4 |
| 30-45.2258-110.0228-2-12- | 0-M37273 | 61660 | -0.07 | 817 | 26550 | 76 | 102 | 16.3 | 110 | 3.1 | 4 | 1.8 | 37590 | 10.1 | 20470 | 34 | 0.4 |
| 30-45.2244-110.0370-2-12- | 0-M37274 | 60900 | -0.06 | 778 | 29250 | 78 | 119 | 15.8 | 170 | 4.0 | 4 | 1.6 | 41420 | 9.2 | 15010 | 36 | 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 | |
| 30-45.9744-110.8211-2-12- | | | | | | 0-M37224 | 10800 | 959 | 12960 | 52 | -2 | 13.8 | 4.7 | 595 | -1 | -1 | 8.2 | 3614 | 113 | 3.1 | 96 | 0.341 |
| 30-45.9658-110.7617-2-12- | | | | | | 0-M37225 | 9431 | 775 | 13830 | 59 | -2 | 10.0 | 5.9 | -320 | -1 | -1 | 10.3 | 3288 | 111 | 3.1 | -49 | 0.272 |
| 30-45.9931-110.7967-2-12- | | | | | | 0-M37226 | 19490 | 1352 | 11150 | -33 | -2 | 14.7 | 3.8 | 588 | -2 | -1 | 6.1 | 2324 | 121 | 2.0 | 96 | 0.311 |
| 30-45.9844-110.7975-2-12- | | | | | | 0-M37227 | 15490 | 873 | 16210 | 76 | -2 | 15.1 | 4.5 | 798 | -1 | -1 | 8.2 | 3696 | 118 | 2.1 | 139 | 0.232 |
| 30-45.9661-110.8447-2-12- | | | | | | 0-M37228 | 12800 | 966 | 14550 | -35 | -2 | 13.3 | 4.5 | 580 | -1 | -1 | 8.3 | 3459 | 117 | 2.3 | 100 | 0.289 |
| 30-45.9558-110.8539-2-12- | | | | | | 0-M37229 | 12290 | 755 | 14160 | -36 | -2 | 12.0 | 5.5 | -331 | -1 | -1 | 10.4 | 3593 | 114 | 3.0 | -46 | 0.240 |
| 30-45.9561-110.8261-2-12- | | | | | | 0-M37230 | 9687 | 1045 | 16720 | 57 | -2 | 13.6 | 4.7 | 569 | -1 | -1 | 8.2 | 3144 | 107 | 3.3 | 108 | 0.280 |
| 30-45.9336-110.8108-2-12- | | | | | | 0-M37231 | 13160 | 861 | 16420 | 69 | -2 | 14.4 | 4.5 | 774 | -1 | -1 | 7.4 | 3851 | 128 | 2.2 | 120 | 0.270 |
| 30-45.9383-110.8500-2-12- | | | | | | 0-M37232 | 14190 | 935 | 16240 | -31 | -2 | 16.9 | 4.0 | 823 | -1 | -1 | 6.6 | 4157 | 132 | -1.4 | 89 | 0.258 |
| 30-45.8432-111.5693-2-15- | | | | | | 0-M37233 | 8563 | 672 | 13170 | 72 | -2 | 8.8 | 7.0 | -317 | -1 | -1 | 13.9 | 3888 | 71 | 4.3 | 79 | 0.259 |
| 30-45.8327-111.5699-2-15- | | | | | | 0-M37234 | 8223 | 668 | 12640 | 73 | -1 | 9.3 | 6.4 | -252 | -1 | -1 | 15.3 | 3424 | 67 | 4.2 | -38 | 0.235 |
| 30-45.7958-111.5551-2-15- | | | | | | 0-M37235 | 8614 | 709 | 12110 | 72 | -2 | 10.1 | 7.0 | -264 | -1 | -1 | 14.6 | 3510 | 75 | 4.5 | 111 | 0.219 |
| 30-45.7822-111.5891-2-15- | | | | | | 0-M37236 | 13110 | 506 | 12370 | 73 | -1 | 7.9 | 4.9 | -235 | -1 | -1 | 11.0 | 2543 | 62 | 3.7 | -34 | 0.227 |
| 30-45.7954-111.6223-2-15- | | | | | | 0-M37237 | 10680 | 506 | 9675 | 52 | -2 | 9.6 | 5.9 | -267 | -1 | -1 | 13.6 | 3195 | 90 | 4.1 | 109 | 0.279 |
| 30-45.7561-111.6496-2-12- | | | | | | 0-M37238 | 12100 | 576 | 13810 | 54 | -2 | 10.0 | 5.7 | -244 | -1 | -1 | 12.6 | 2998 | 99 | 3.4 | 86 | 0.286 |
| 30-45.7905-111.6812-2-12- | | | | | | 0-M37239 | 8392 | 414 | 14590 | 58 | 2 | 6.1 | 5.1 | -217 | -1 | -1 | 11.4 | 2236 | 58 | 3.3 | 49 | 0.237 |
| 30-45.7913-111.7048-2-15- | | | | | | 0-M37240 | 11620 | 663 | 12330 | -27 | -2 | 9.8 | 5.8 | 324 | 1 | 1 | 11.1 | 2970 | 83 | 3.1 | 110 | 0.270 |
| 30-45.8181-111.7358-2-15- | | | | | | 0-M37241 | 9027 | 542 | 13850 | 40 | -2 | 8.1 | 4.9 | -263 | -1 | -1 | 12.0 | 3448 | 68 | 4.1 | 44 | 0.233 |
| 30-45.8191-111.7158-2-15- | | | | | | 0-M37242 | 8426 | 907 | 11620 | 51 | -2 | 10.5 | 9.0 | -259 | 2 | -1 | 20.8 | 4145 | 132 | 5.0 | -35 | 0.216 |
| 30-45.8413-111.6881-2-15- | | | | | | 0-M37243 | 10820 | 634 | 12150 | 47 | -1 | 8.4 | 7.5 | -237 | 2 | -1 | 17.0 | 3268 | 79 | 4.0 | 85 | 0.188 |
| 30-45.8622-111.6585-2-15- | | | | | | 0-M37244 | 12180 | 673 | 10890 | 59 | -2 | 8.6 | 6.9 | 336 | -1 | -1 | 17.5 | 3687 | 89 | 4.0 | 75 | 0.291 |
| 30-45.8742-111.6722-2-15- | | | | | | 0-M37245 | 10210 | 571 | 11210 | 45 | -2 | 7.2 | 5.3 | -282 | -1 | -1 | 11.1 | 2798 | 55 | 3.9 | 94 | 0.297 |
| 30-45.8756-111.6740-2-15- | | | | | | 0-M37246 | 14690 | 636 | 11550 | 56 | -2 | 9.3 | 6.9 | -247 | -1 | -1 | 14.1 | 3426 | 111 | 4.6 | 100 | 0.298 |
| 30-45.9011-111.6918-2-11- | | | | | | 0-M37247 | 12300 | 497 | 13360 | 73 | -2 | 10.3 | 6.2 | 439 | -1 | -1 | 15.3 | 3551 | 84 | 4.2 | 129 | 0.268 |
| 30-45.9150-111.7047-2-15- | | | | | | 0-M37248 | 4452 | 407 | 20290 | 94 | -1 | 6.5 | 5.8 | 412 | 1 | -1 | 13.2 | 2275 | 52 | 3.0 | -25 | 0.288 |
| 30-45.9043-111.7223-2-15- | | | | | | 0-M37249 | 9744 | 534 | 12320 | 68 | -2 | 8.1 | 6.1 | -282 | -1 | -1 | 12.4 | 2234 | 64 | 3.4 | -23 | 0.210 |
| 30-45.9130-111.7267-2-15- | | | | | | 0-M37250 | 6081 | 642 | 16650 | 130 | -2 | 8.0 | 6.5 | -274 | 3 | 1 | 20.9 | 2981 | 77 | 6.6 | -59 | 0.268 |
| 30-45.8904-111.6755-2-12- | | | | | | 0-M37251 | 12430 | 646 | 12690 | 92 | -2 | 9.5 | 6.0 | 447 | -1 | -1 | 16.2 | 3439 | 77 | 4.6 | 107 | 0.290 |
| 30-45.8950-111.6073-2-15- | | | | | | 0-M37252 | 9998 | 547 | 11230 | 52 | -1 | 8.0 | 5.8 | -243 | 3 | -1 | 15.9 | 2522 | 58 | 3.9 | 99 | 0.214 |
| 30-45.9040-111.6063-2-15- | | | | | | 0-M37253 | 11990 | 734 | 13300 | -33 | -2 | 11.0 | 8.8 | -320 | -1 | -1 | 12.4 | 4065 | 102 | 4.7 | -41 | 0.621 |
| 30-45.9030-111.6179-2-15- | | | | | | 0-M37254 | 15580 | 558 | 11250 | 62 | -1 | 8.4 | 5.9 | -237 | -1 | -1 | 15.0 | 2583 | 70 | 4.1 | 67 | 0.233 |
| 30-45.9188-111.6094-2-15- | | | | | | 0-M37255 | 9165 | 692 | 13370 | 56 | -1 | 9.0 | 6.3 | 410 | -1 | -1 | 13.7 | 2958 | 86 | 3.2 | 85 | 0.212 |
| 30-45.9379-111.6701-2-11- | | | | | | 0-M37256 | 13280 | 701 | 12730 | 72 | -1 | 10.2 | 5.9 | 502 | -1 | -1 | 10.9 | 3544 | 89 | 2.5 | 70 | 0.339 |
| 30-45.9448-111.6399-2-15- | | | | | | 0-M37257 | 8099 | 646 | 11380 | 94 | -2 | 9.0 | 8.0 | -302 | -1 | -1 | 15.0 | 3043 | 77 | 4.7 | | 0.327 |
| 30-45.9507-111.7192-2-12- | | | | | | 0-M37258 | 9403 | 802 | 14810 | 69 | -2 | 11.3 | 5.8 | -293 | -1 | -1 | 11.1 | 2712 | 109 | 3.4 | 123 | 0.315 |
| 30-45.9525-111.7237-2-15- | | | | | | 0-M37259 | 8573 | 465 | 16710 | 135 | -1 | 8.7 | 7.5 | 463 | 2 | -1 | 23.1 | 3469 | 86 | 4.6 | 126 | 0.169 |
| 30-45.9606-111.6611-2-15- | | | | | | 0-M37260 | 6815 | 561 | 12970 | 112 | -1 | 8.2 | 6.4 | -245 | 3 | -1 | 18.5 | 2878 | 55 | 4.3 | -106 | 0.249 |
| 30-45.9568-111.6707-2-15- | | | | | | 0-M37261 | 12510 | 1016 | 10320 | -36 | -2 | 13.5 | 5.4 | 467 | -1 | -1 | 9.4 | 4002 | 157 | 3.3 | -46 | 0.266 |
| 30-45.9555-111.6829-2-15- | | | | | | 0-M37262 | 10590 | 834 | 13420 | 100 | -2 | 12.1 | 5.1 | 620 | -1 | -1 | 10.3 | 3146 | 109 | 4.4 | 126 | 0.272 |
| 30-45.9552-111.6044-2-15- | | | | | | 0-M37263 | 10660 | 858 | 12620 | 61 | -2 | 10.9 | 6.5 | -291 | 2 | -1 | 15.7 | 3979 | 103 | 3.9 | -59 | 0.210 |
| 30-45.9656-111.6234-2-15- | | | | | | 0-M37264 | 10260 | 764 | 11480 | 81 | -1 | 10.5 | 5.2 | 338 | 2 | -1 | 11.2 | 3249 | 79 | 2.9 | -62 | 0.268 |
| 30-45.9723-111.6230-2-15- | | | | | | 0-M37265 | 10640 | 807 | 12980 | 62 | -2 | 10.1 | 6.0 | -314 | -1 | -1 | 11.4 | 3688 | 108 | 3.8 | -41 | 0.281 |
| 30-45.9730-111.6286-2-15- | | | | | | 0-M37266 | 10340 | 820 | 10590 | 88 | -1 | 10.7 | 5.7 | -262 | 2 | -1 | 13.5 | 3568 | 87 | 3.7 | -57 | 0.385 |
| 30-45.2925-110.0172-2-12- | | | | | | 0-M37267 | 23820 | 963 | 18230 | -34 | -2 | 29.3 | 6.3 | -295 | -1 | -1 | 10.1 | 4606 | 198 | 2.4 | -48 | 0.198 |
| 30-45.2960-110.0389-2-12- | | | | | | 0-M37268 | 9796 | 753 | 10390 | 60 | -1 | 10.1 | 5.4 | -247 | -1 | -1 | 11.9 | 4842 | 122 | 4.5 | 109 | 0.336 |
| 30-45.2934-110.0346-2-12- | | | | | | 0-M37269 | 8649 | 918 | 11670 | 75 | -2 | 11.7 | 6.9 | -328 | -1 | -1 | 14.4 | 4855 | 158 | 3.7 | 66 | 0.243 |
| 30-45.3132-110.0976-2-12- | | | | | | 0-M37270 | 26920 | 1064 | 15660 | -35 | -2 | 35.2 | 6.0 | 626 | -1 | -1 | 10.5 | 4463 | 207 | 3.2 | -48 | 0.171 |
| 30-45.3130-110.0996-2-12- | | | | | | 0-M37271 | 19300 | 900 | 14090 | -30 | -2 | 22.0 | 6.0 | 348 | -1 | -1 | 11.4 | 4811 | 164 | 4.2 | -38 | 0.254 |
| 30-45.2318-110.0084-2-12- | | | | | | 0-M37272 | 12100 | 904 | 11390 | -27 | -1 | 11.3 | 5.9 | -279 | -1 | -1 | 11.2 | 3769 | 96 | 3.6 | 119 | 0.286 |
| 30-45.2258-110.0228-2-12- | | | | | | 0-M37273 | 9687 | 1014 | 13160 | -30 | -2 | 11.2 | 6.7 | -343 | -1 | -1 | 9.8 | 3907 | 89 | 3.9 | -39 | 0.327 |
| 30-45.2244-110.0370-2-12- | | | | | | 0-M37274 | 10200 | 860 | 12680 | 61 | -2 | 12.0 | 6.2 | -278 | -1 | -1 | 10.0 | 3308 | 107 | 2.9 | 127 | 0.320 |

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

(1)

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER AND FIELD DATA | | | | | | | | | | | | | | | | | | | | | | | | | U CONCENTRATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | TIME SAMPLED DATE | TIME SAMPLED HOUR | AIR TEMPERATURE | WATER TEMPERATURE | COMMENTS | SPECIAL MEASUREMENTS | pH | CONDUCTIVITY (µmho/cm) | SCINTILLOMETER (eU,ppm) | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm |
| 30- | 45.2245- | 110.0228- | 2- | 12- | 0- | M37275- | 10/30/76- | 13- | 2- | 1.0- | - | - | 5.7- | 210- | | -1- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 4- | 1- | -1- | - | - | - | - | 3.10 |
| 30- | 45.2289- | 110.0707- | 2- | 12- | 0- | M37276- | 10/30/76- | 16- | - | 1.0- | - | - | 5.7- | 210- | | -1- | 6- | 1- | 6- | 4- | 3- | 1- | 2- | 1- | 4- | 5- | 1- | -1- | - | - | - | - | 3.10 |
| 30- | 45.2279- | 110.0694- | 2- | 12- | 0- | M37277- | 10/30/76- | 16- | - | 1.0- | - | - | 5.7- | 210- | | -1- | 6- | 1- | 6- | 4- | 3- | 1- | 2- | 1- | 4- | 5- | 1- | -1- | - | - | - | - | 3.20 |
| 30- | 45.0448- | 110.8805- | 2- | 12- | 0- | M37278- | 10/31/76- | 10- | - | 1.0- | - | - | 5.5- | 80- | | -2- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 2.80 |
| 30- | 45.1623- | 110.7217- | 2- | 12- | 0- | M37279- | 11/02/76- | 8- | 1- | 1.0- | - | - | 5.7- | 80- | | -2- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 3- | 1- | -1- | - | - | - | - | 3.60 |
| 30- | 45.0115- | 110.5850- | 2- | 12- | 0- | M37280- | 11/02/76- | 13- | 2- | 1.0- | - | - | 5.7- | 80- | | -3- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 3- | 1- | -1- | - | - | - | - | 4.50 |
| 30- | 45.0038- | 110.5106- | 2- | 12- | 0- | M37281- | 11/02/76- | 15- | 1- | 1.0- | - | - | 5.5- | 80- | | -3- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 2- | 4- | 4- | 1- | -1- | - | - | - | - | 3.60 |
| 30- | 45.0035- | 110.5094- | 2- | 12- | 0- | M37282- | 11/02/76- | 15- | 1- | 1.0- | - | - | 5.5- | 80- | | -3- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 2- | 4- | 4- | 1- | -1- | - | - | - | - | 4.50 |
| 30- | 45.0168- | 110.6020- | 2- | 12- | 0- | M37283- | 11/02/76- | 12- | 4- | 1.0- | - | - | 5.7- | 210- | | -3- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 4- | 4- | 3- | 1- | -1- | - | - | - | - | 3.50 |
| 30- | 45.0161- | 110.5737- | 2- | 12- | 0- | M37284- | 11/02/76- | 13- | 4- | 1.0- | - | - | 5.7- | 210- | | -3- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 3- | 1- | -1- | - | - | - | - | 2.80 |
| 30- | 45.3771- | 110.5801- | 2- | 12- | 0- | M37285- | 10/30/76- | 11- | -2- | 1.0- | - | - | 5.7- | 150- | | -2- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 3.00 |
| 30- | 45.0381- | 110.7946- | 2- | 12- | 0- | M37286- | 10/31/76- | 11- | 2- | 1.0- | - | - | 5.5- | 80- | | -2- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 3- | 2- | 4- | 1- | -1- | - | - | - | - | 2.40 |
| 30- | 45.0521- | 110.7900- | 2- | 12- | 0- | M37287- | 10/31/76- | 10- | 1- | 1.0- | - | - | 5.5- | 80- | | -2- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 2.80 |
| 30- | 45.3756- | 110.5730- | 2- | 12- | 0- | M37288- | 10/30/76- | 11- | -1- | 1.0- | - | - | 5.7- | 160- | | -2- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 3.00 |
| 30- | 45.3842- | 110.8794- | 2- | 12- | 0- | M37289- | 10/30/76- | 15- | 1- | 1.0- | - | - | 5.5- | 80- | | -2- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 2.30 |
| 30- | 45.3854- | 110.8960- | 2- | 12- | 0- | M37290- | 10/30/76- | 15- | 1- | 1.0- | - | - | 5.5- | 80- | | -2- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 3- | 4- | 4- | 2- | -1- | - | - | - | - | 2.10 |
| 30- | 45.0377- | 110.7932- | 2- | 12- | 0- | M37291- | 10/31/76- | 12- | 3- | 1.0- | - | - | 5.5- | 80- | | -2- | 6- | 1- | 6- | 3- | 3- | 1- | 2- | 3- | 2- | 4- | 1- | -1- | - | - | - | - | 6.50 |
| 30- | 45.9809- | 111.6382- | 2- | 15- | 0- | M37292- | 10/16/76- | 12- | 2- | | -C- | - | | - | | -1- | 1- | 4- | 1- | | -1- | | -2- | 3- | 2- | 3- | 1- | -3- | - | - | - | - | 3.50 |
| 30- | 45.9805- | 111.6296- | 2- | 15- | 0- | M37293- | 10/16/76- | 12- | 3- | | -C- | - | | - | | -1- | 1- | 4- | 1- | | -1- | | -2- | 3- | 2- | 3- | 1- | -3- | - | - | - | - | 3.50 |
| 30- | 45.9493- | 111.5937- | 2- | 15- | 0- | M37294- | 10/16/76- | 12- | 5- | | -C- | - | | - | | -1- | 1- | 4- | 1- | | -1- | | -2- | 3- | 2- | 3- | 1- | -3- | - | - | - | - | 3.60 |
| 30- | 45.9420- | 111.5884- | 2- | 15- | 0- | M37295- | 10/16/76- | 13- | 3- | | -C- | - | | - | | -1- | 1- | 4- | 1- | | -1- | | -2- | 3- | 2- | 4- | 1- | -3- | - | - | - | - | 2.10 |
| 30- | 45.9294- | 111.5644- | 2- | 15- | 0- | M37296- | 10/16/76- | 13- | 3- | | -C- | - | | - | | -1- | 1- | 4- | 1- | | -1- | | -2- | 3- | 2- | 4- | 1- | -3- | - | - | - | - | 2.90 |
| 30- | 45.9469- | 111.5355- | 2- | 15- | 0- | M37297- | 10/16/76- | 13- | 4- | | -C- | - | | - | | -1- | 1- | 4- | 1- | | -1- | | -2- | 3- | 2- | 4- | 1- | -3- | - | - | - | - | 2.60 |
| 30- | 45.9790- | 111.5151- | 2- | 15- | 0- | M37298- | 10/16/76- | 13- | 2- | | -C- | - | | - | | -1- | 1- | 3- | 1- | | -1- | | -2- | 3- | 2- | 4- | 1- | -3- | - | - | - | - | 3.00 |
| 30- | 45.9418- | 111.5041- | 2- | 15- | 0- | M37299- | 10/16/76- | 14- | 4- | | -C- | - | | - | | -1- | 1- | 4- | 1- | | -1- | | -2- | 3- | 2- | 2- | 1- | -3- | - | - | - | - | 3.10 |
| 30- | 45.9447- | 111.5972- | 2- | 15- | 0- | M37300- | 10/16/76- | 14- | 5- | | -C- | - | | - | | -1- | 1- | 5- | 6- | | -1- | | -2- | 2- | 2- | 2- | 1- | -3- | - | - | - | - | 3.30 |
| 30- | 45.0579- | 111.2764- | 2- | 12- | 0- | M37301- | 10/16/76- | 14- | - | 1.0- | - | - | 5.5- | 470- | | -3- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -1- | - | - | - | - | 9.30 |
| 30- | 45.0547- | 111.2727- | 2- | 15- | 0- | M37302- | 10/16/76- | 15- | - | | -C- | - | | - | | -3- | 7- | 5- | 6- | | -1- | | -2- | 2- | 4- | 2- | 1- | -1- | - | - | - | - | 2.60 |
| 30- | 45.0506- | 111.2765- | 2- | 15- | 0- | M37303- | 10/16/76- | 15- | 2- | | -C- | - | | - | | -3- | 7- | 5- | 6- | | -1- | | -2- | 2- | 3- | 2- | 1- | -1- | - | - | - | - | 3.70 |
| 30- | 45.0806- | 111.3738- | 2- | 12- | 0- | M37304- | 10/16/76- | 15- | 10- | 4.0- | C- | - | 5.7- | 500- | | -1- | 4- | 5- | 6- | 2- | 2- | 2- | 2- | 4- | 3- | 2- | 1- | -4- | - | - | - | - | 3.50 |
| 30- | 45.0793- | 111.3732- | 2- | 12- | 0- | M37305- | 10/16/76- | 16- | 10- | 4.2- | - | - | 5.7- | 500- | | -1- | 4- | 3- | 3- | 3- | 2- | 1- | 2- | 4- | 3- | 2- | 1- | -1- | - | - | - | - | 4.60 |
| 30- | 45.0757- | 111.3390- | 2- | 12- | 0- | M37306- | 10/16/76- | 16- | 9- | 4.0- | - | - | 5.7- | 500- | | -1- | 7- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 4- | 1- | -1- | - | - | - | - | 3.50 |
| 30- | 45.0727- | 111.3395- | 2- | 12- | 0- | M37307- | 10/16/76- | 16- | 8- | 3.6- | - | - | 5.5- | 290- | | -1- | 1- | 2- | 1- | 4- | 2- | 3- | 2- | 2- | 3- | 2- | 1- | -1- | - | - | - | - | 4.50 |
| 30- | 45.0690- | 111.3165- | 2- | 12- | 0- | M37308- | 10/16/76- | 17- | 5- | 3.0- | - | - | 5.7- | 350- | | -1- | 1- | 3- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 2- | 1- | -1- | - | - | - | - | 3.50 |
| 30- | 45.0628- | 111.2662- | 2- | 12- | 0- | M37309- | 10/16/76- | 17- | 11- | 4.0- | - | - | 5.6- | 360- | | -1- | 4- | 2- | 7- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 1- | -1- | - | - | - | - | 4.10 |
| 30- | 45.0614- | 111.2588- | 2- | 12- | 0- | M37310- | 10/16/76- | 17- | 10- | 4.0- | C- | - | 5.7- | 330- | | -1- | 4- | 5- | 6- | 2- | 2- | 1- | 2- | 2- | 2- | 2- | 1- | -3- | - | - | - | - | 2.90 |
| 30- | 45.2524- | 111.2537- | 2- | 12- | 0- | M37311- | 10/16/76- | 18- | 9- | | -C- | - | 5.7- | 340- | | -1- | 1- | 2- | 6- | 3- | 2- | 1- | 2- | 3- | 3- | 3- | 1- | -3- | - | - | - | - | 4.00 |
| 30- | 45.2670- | 111.2725- | 2- | 12- | 0- | M37312- | 10/16/76- | 18- | 11- | | -C- | - | 5.5- | 290- | | -1- | 1- | 2- | 7- | 3- | 2- | 1- | 2- | 1- | 2- | 3- | 1- | -8- | - | - | - | - | 4.40 |
| 30- | 45.2686- | 111.3031- | 2- | 12- | 0- | M37313- | 10/17/76- | 8- | 17- | | -C- | - | 5.7- | 250- | | -1- | 1- | 2- | 1- | 3- | 2- | 1- | 2- | 2- | 2- | 3- | 1- | -8- | - | - | - | - | 4.60 |
| 30- | 45.2437- | 111.3258- | 2- | 12- | 0- | M37314- | 10/17/76- | 8- | 12- | 4.2- | - | - | 5.7- | 260- | | -1- | 1- | 2- | 1- | 2- | 2- | 1- | 2- | 1- | 2- | 3- | 1- | -3- | - | - | - | - | 5.30 |
| 30- | 45.2393- | 111.3409- | 2- | 12- | 0- | M37315- | 10/17/76- | 8- | 12- | 4.2- | C- | - | 5.9- | 450- | | -1- | 1- | 2- | 1- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 4.40 |
| 30- | 45.2373- | 111.3485- | 2- | 12- | 0- | M37316- | 10/17/76- | 8- | 10- | 4.4- | - | - | 5.5- | 250- | | -1- | 1- | 2- | 7- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 4.60 |
| 30- | 45.2287- | 111.3504- | 2- | 12- | 0- | M37317- | 10/17/76- | 9- | 9- | 4.0- | - | - | 5.7- | 260- | | -1- | 1- | 2- | 7- | 2- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -1- | - | - | - | - | 5.60 |
| 30- | 45.2731- | 111.2434- | 2- | 12- | 0- | M37318- | 10/17/76- | 9- | 12- | | - | - | 5.9- | 550- | | -1- | 1- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 3.60 |
| 30- | 45.2710- | 111.2372- | 2- | 12- | 0- | M37319- | 10/17/76- | 10- | 10- | | - | - | 5.7- | 500- | | -1- | 1- | 4- | 7- | 3- | 2- | 1- | 2- | 1- | 3- | 3- | 1- | -3- | - | - | - | - | 3.70 |
| 30- | 45.3018- | 111.2070- | 2- | 12- | 0- | M37320- | 10/17/76- | 10- | 12- | | - | - | 5.4- | 70- | | -1- | 7- | 2- | 7- | 4- | 4- | 1- | 2- | 1- | 3- | 2- | 1- | -1- | - | - | - | - | 2.30 |
| 30- | 45.3088- | 111.1951- | 2- | 12- | 0- | M37321- | 10/17/76- | 10- | 8- | | -C- | - | 5.2- | 80- | | -1- | 1- | 3- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -8- | - | - | - | - | 2.80 |
| 30- | 45.3145- | 111.1833- | 2- | 12- | 0- | M37322- | 10/17/76- | 11- | 5- | | - | - | 5.2- | 100- | | -1- | 7- | 2- | 7- | 4- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 5.00 |
| 30- | 45.2881- | 111.1367- | 2- | 12- | 0- | M37323- | 10/17/76- | 11- | 12- | | -C- | - | 5.2- | 130- | | -1- | 6- | 3- | 6- | 3- | 2- | 1- | 2- | 1- | 2- | 4- | 1- | -4- | - | - | - | - | 3.00 |
| 30- | 45.2996- | 111.1481- | 2- | 12- | 0- | M37324- | 10/17/76- | 11- | 9- | | -C- | - | 5.5- | 150- | | -1- | 6- | 2- | 7- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -4- | - | - | - | - | 2.90 |
| 30- | 45.3021- | 111.1568- | 2- | 12- | 0- | M37325- | 10/17/76- | 12- | 8- | | -C- | - | 5.5- | 150- | | -1- | 6- | 2- | 7- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -4- | - | - | - | - | 2.80 |

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

②

| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | 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) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ag | Bi | Cd | Cu | Nb | Ni | Pb | Sn | W | Be | Li |
| 30-45.2245-110.0228-2-12- | 0-M37275 | -5 | -5 | -5 | 33 | -20 | 19 | 5 | -10 | -15 | 2 | 32 |
| 30-45.2289-110.0707-2-12- | 0-M37276 | -5 | -5 | -5 | 30 | -20 | 31 | 6 | -10 | -15 | 2 | 40 |
| 30-45.2279-110.0694-2-12- | 0-M37277 | -5 | -5 | -5 | 28 | -20 | 32 | 8 | -10 | -15 | 2 | 39 |
| 30-45.0448-110.8805-2-12- | 0-M37278 | -5 | -5 | -5 | 16 | -20 | 17 | 7 | -10 | -15 | 1 | 33 |
| 30-45.1623-110.7217-2-12- | 0-M37279 | -5 | -5 | -5 | 27 | -20 | 60 | 11 | -10 | -15 | 2 | 29 |
| 30-45.0115-110.5850-2-12- | 0-M37280 | -5 | -5 | -5 | 27 | -20 | 59 | 5 | -10 | -15 | 2 | 22 |
| 30-45.0038-110.5106-2-12- | 0-M37281 | -5 | -5 | -5 | 26 | -20 | 34 | 14 | -10 | -15 | 2 | 35 |
| 30-45.0035-110.5094-2-12- | 0-M37282 | -5 | -5 | -5 | 28 | -20 | 40 | 9 | -10 | -15 | 2 | 30 |
| 30-45.0168-110.6020-2-12- | 0-M37283 | -5 | -5 | -5 | 15 | -20 | 20 | 7 | -10 | -15 | 2 | 42 |
| 30-45.0161-110.5737-2-12- | 0-M37284 | -5 | -5 | -5 | 25 | -20 | 45 | 8 | -10 | -15 | 2 | 42 |
| 30-45.3771-110.5801-2-12- | 0-M37285 | -5 | -5 | -5 | 26 | -20 | 27 | 15 | -10 | -15 | 2 | 37 |
| 30-45.0381-110.7946-2-12- | 0-M37286 | -5 | -5 | -5 | 31 | -20 | -15 | 12 | -10 | -15 | 2 | 34 |
| 30-45.0521-110.7900-2-12- | 0-M37287 | -5 | -5 | -5 | 38 | -20 | 25 | 6 | -10 | -15 | 2 | 38 |
| 30-45.3756-110.5730-2-12- | 0-M37288 | -5 | 6 | -5 | 39 | -20 | 27 | 13 | -10 | -15 | 2 | 27 |
| 30-45.3842-110.8794-2-12- | 0-M37289 | -5 | -5 | -5 | 37 | -20 | 22 | 11 | -10 | -15 | 3 | 27 |
| 30-45.3854-110.8960-2-12- | 0-M37290 | -5 | -5 | -5 | 28 | -20 | 28 | -5 | -10 | 18 | 3 | 31 |
| 30-45.0377-110.7932-2-12- | 0-M37291 | 5 | -5 | -5 | 68 | -20 | 67 | 37 | -10 | -15 | 3 | 58 |
| 30-45.9809-111.6382-2-15- | 0-M37292 | -5 | -5 | -5 | 36 | -20 | 19 | 18 | -10 | -15 | 4 | 42 |
| 30-45.9805-111.6296-2-15- | 0-M37293 | -5 | -5 | -5 | 28 | -20 | 15 | 9 | -10 | -15 | 3 | 34 |
| 30-45.9493-111.5937-2-15- | 0-M37294 | -5 | -5 | -5 | 26 | -20 | 17 | 6 | -10 | -15 | 4 | 42 |
| 30-45.9420-111.5884-2-15- | 0-M37295 | -5 | -5 | -5 | 20 | -20 | -15 | 10 | -10 | -15 | 3 | 34 |
| 30-45.9294-111.5644-2-15- | 0-M37296 | -5 | -5 | -5 | 32 | -20 | -15 | 18 | -10 | -15 | 3 | 43 |
| 30-45.9469-111.5355-2-15- | 0-M37297 | -5 | -5 | -5 | 21 | -20 | 26 | 21 | -10 | -15 | 2 | 45 |
| 30-45.9790-111.5151-2-15- | 0-M37298 | -5 | -5 | -5 | 26 | -20 | 16 | 11 | -10 | -15 | 3 | 42 |
| 30-45.9418-111.5041-2-15- | 0-M37299 | -5 | -5 | -5 | 27 | -20 | 21 | 10 | -10 | -15 | 4 | 35 |
| 30-45.9447-111.5972-2-15- | 0-M37300 | -5 | -5 | -5 | 39 | -20 | 26 | 10 | -10 | -15 | 3 | 40 |
| 30-45.0579-111.2764-2-12- | 0-M37301 | -5 | -5 | -5 | 27 | -20 | -15 | 14 | -10 | -15 | 3 | 35 |
| 30-45.0547-111.2727-2-15- | 0-M37302 | -5 | -5 | -5 | 18 | -20 | -15 | -5 | -10 | -15 | 2 | 36 |
| 30-45.0506-111.2765-2-15- | 0-M37303 | -5 | -5 | -5 | 23 | -20 | -15 | 9 | -10 | -15 | 2 | 33 |
| 30-45.0806-111.3738-2-12- | 0-M37304 | -5 | -5 | -5 | 12 | -20 | -15 | 7 | -10 | -15 | 3 | 42 |
| 30-45.0793-111.3732-2-12- | 0-M37305 | -5 | -5 | -5 | 19 | -20 | -15 | 12 | -10 | -15 | 3 | 28 |
| 30-45.0757-111.3390-2-12- | 0-M37306 | -5 | -5 | -5 | 20 | -20 | -15 | -5 | -10 | -15 | 3 | 17 |
| 30-45.0727-111.3395-2-12- | 0-M37307 | -5 | -5 | -5 | 22 | -20 | -15 | 7 | -10 | -15 | 3 | 25 |
| 30-45.0690-111.3165-2-12- | 0-M37308 | -5 | -5 | -5 | 22 | -20 | -15 | 7 | -10 | -15 | 3 | 34 |
| 30-45.0628-111.2662-2-12- | 0-M37309 | -5 | -5 | -5 | 23 | -20 | -15 | -5 | -10 | -15 | 3 | 33 |
| 30-45.0614-111.2588-2-12- | 0-M37310 | -5 | -5 | -5 | 33 | -20 | 21 | 6 | -10 | -15 | 3 | 28 |
| 30-45.2524-111.2537-2-12- | 0-M37311 | -5 | -5 | -5 | 25 | -20 | -15 | 15 | -10 | -15 | 3 | 38 |
| 30-45.2670-111.2725-2-12- | 0-M37312 | -5 | -5 | -5 | 15 | -20 | 17 | 11 | -10 | -15 | 3 | 27 |
| 30-45.2686-111.3031-2-12- | 0-M37313 | -5 | -5 | -5 | 29 | -20 | 37 | -5 | -10 | -15 | 3 | 29 |
| 30-45.2437-111.3258-2-12- | 0-M37314 | -5 | -5 | -5 | 18 | -20 | -15 | 21 | -10 | -15 | 4 | 19 |
| 30-45.2393-111.3409-2-12- | 0-M37315 | -5 | -5 | -5 | 38 | -20 | 74 | 10 | 33 | -15 | 4 | 29 |
| 30-45.2373-111.3485-2-12- | 0-M37316 | -5 | -5 | -5 | 36 | -20 | 42 | 13 | -10 | -15 | 3 | 30 |
| 30-45.2287-111.3504-2-12- | 0-M37317 | -5 | -5 | -5 | 26 | -20 | 43 | 5 | -10 | -15 | 3 | 30 |
| 30-45.2731-111.2434-2-12- | 0-M37318 | -5 | -5 | -5 | 22 | -20 | 24 | 15 | -10 | -15 | 3 | 30 |
| 30-45.2710-111.2372-2-12- | 0-M37319 | -5 | -5 | -5 | 15 | -20 | 19 | 8 | -10 | -15 | 3 | 27 |
| 30-45.3018-111.2070-2-12- | 0-M37320 | -5 | -5 | -5 | 23 | -20 | 48 | 8 | -10 | -15 | 2 | 23 |
| 30-45.3088-111.1951-2-12- | 0-M37321 | -5 | -5 | -5 | 25 | -20 | 32 | 9 | -10 | -15 | 2 | 28 |
| 30-45.3145-111.1833-2-12- | 0-M37322 | -5 | -5 | -5 | 22 | -20 | 34 | 8 | -10 | -15 | 3 | 19 |
| 30-45.2881-111.1367-2-12- | 0-M37323 | -5 | -5 | -5 | 28 | -20 | 57 | 9 | -10 | 21 | 2 | 29 |
| 30-45.2996-111.1481-2-12- | 0-M37324 | -5 | -5 | -5 | 33 | -20 | 42 | 8 | -10 | -15 | 3 | 24 |
| 30-45.3021-111.1568-2-12- | 0-M37325 | -5 | -5 | -5 | 19 | -20 | 34 | 7 | -10 | -15 | 2 | 27 |

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



| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (Concentrations reported in weight parts per million (ppm)) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Al | Au | Ba | Ca | Ce | Cl | Co | Cr | Cs | Dy | Eu | Fe | Hf | K | La | Lu |
| 30- | 45.2245- | 110.0228- | 2- | 12- | | 0-M37275 | 62040 | -0.08 | 733 | 21380 | 92 | -104 | 15.4 | 114 | 3.8 | 4 | 1.7 | 35960 | 12.5 | 16380 | 42 | 0.5 |
| 30- | 45.2289- | 110.0707- | 2- | 12- | | 0-M37276 | 63430 | -0.07 | 851 | 27040 | 77 | -104 | 15.7 | 143 | 3.7 | 4 | 1.7 | 42090 | 8.7 | 17150 | 40 | 0.4 |
| 30- | 45.2279- | 110.0694- | 2- | 12- | | 0-M37277 | 60340 | -0.07 | 839 | 24630 | 79 | -101 | 15.2 | 184 | 4.0 | 4 | 1.9 | 45730 | 11.7 | 14370 | 43 | 0.5 |
| 30- | 45.0448- | 110.8805- | 2- | 12- | | 0-M37278 | 54700 | -0.06 | 921 | 31380 | 55 | -112 | 18.0 | 113 | 2.9 | 4 | 1.4 | 37680 | 10.3 | 12110 | 34 | 0.4 |
| 30- | 45.1623- | 110.7217- | 2- | 12- | | 0-M37279 | 75210 | -0.08 | 870 | 29270 | 74 | -128 | 22.4 | 165 | 2.8 | 3 | 1.8 | 44830 | 7.1 | 12050 | 38 | 0.4 |
| 30- | 45.0115- | 110.5850- | 2- | 12- | | 0-M37280 | 75190 | -0.07 | 1319 | 30630 | 66 | -125 | 23.0 | 155 | 2.2 | 4 | 1.8 | 51250 | 8.4 | 13240 | 36 | 0.3 |
| 30- | 45.0038- | 110.5106- | 2- | 12- | | 0-M37281 | 66870 | -0.07 | 965 | 28640 | 55 | -112 | 21.3 | 213 | 2.6 | 4 | 1.6 | 49080 | 9.5 | 13970 | 33 | 0.4 |
| 30- | 45.0035- | 110.5094- | 2- | 12- | | 0-M37282 | 65370 | -0.06 | 943 | 32580 | 65 | -125 | 19.4 | 119 | 3.8 | 4 | 1.7 | 39700 | 9.3 | 16580 | 38 | 0.3 |
| 30- | 45.0168- | 110.6020- | 2- | 12- | | 0-M37283 | 61370 | -0.08 | 911 | 32780 | 115 | 169 | 14.4 | 133 | 3.2 | 6 | 2.4 | 38630 | 19.9 | 20360 | 51 | 0.6 |
| 30- | 45.0161- | 110.5737- | 2- | 12- | | 0-M37284 | 60690 | -0.06 | 911 | 31410 | 74 | -102 | 15.1 | 110 | 3.0 | 4 | 1.6 | 39420 | 10.9 | 15910 | 39 | 0.5 |
| 30- | 45.3771- | 110.5801- | 2- | 12- | | 0-M37285 | 65260 | -0.07 | 939 | 25680 | 79 | -105 | 16.1 | 197 | 3.3 | 5 | 2.2 | 44600 | 10.5 | 19760 | 46 | 0.4 |
| 30- | 45.0381- | 110.7946- | 2- | 12- | | 0-M37286 | 84010 | -0.08 | 1130 | 37090 | 59 | -154 | 26.6 | 128 | 3.5 | 4 | 1.8 | 57600 | 5.9 | 19840 | 36 | 0.3 |
| 30- | 45.0521- | 110.7900- | 2- | 12- | | 0-M37287 | 65270 | -0.08 | 887 | 29630 | 75 | -109 | 22.0 | 225 | 3.3 | 3 | 1.9 | 49170 | 10.7 | 15470 | 37 | 0.4 |
| 30- | 45.3756- | 110.5730- | 2- | 12- | | 0-M37288 | 70970 | -0.07 | 994 | 25220 | 83 | -113 | 20.6 | 186 | 2.6 | 5 | 1.9 | 43680 | 10.6 | 21110 | 41 | 0.4 |
| 30- | 45.3842- | 110.8794- | 2- | 12- | | 0-M37289 | 68120 | -0.08 | 976 | 33320 | 66 | -117 | 31.7 | 267 | 3.0 | 4 | 1.9 | 77100 | 8.5 | 14480 | 39 | 0.4 |
| 30- | 45.3854- | 110.8960- | 2- | 12- | | 0-M37290 | 74630 | -0.07 | 1151 | 38450 | 54 | -145 | 36.5 | 242 | 1.6 | 4 | 2.0 | 80900 | 6.2 | 18700 | 34 | 0.4 |
| 30- | 45.0377- | 110.7932- | 2- | 12- | | 0-M37291 | 58710 | 1.01 | 441 | 32140 | 184 | -127 | 34.3 | 333 | 4.8 | 11 | 2.1 | 85500 | 32.1 | 16380 | 85 | 1.0 |
| 30- | 45.9809- | 111.6382- | 2- | 15- | | 0-M37292 | 62550 | -0.08 | 454 | 24820 | 94 | -100 | 12.9 | 94 | 4.0 | 5 | 1.6 | 45490 | 13.8 | 18890 | 41 | 0.6 |
| 30- | 45.9805- | 111.6296- | 2- | 15- | | 0-M37293 | 53250 | -0.06 | 622 | 37830 | 94 | -98 | 12.0 | 124 | 2.6 | 6 | 1.7 | 37710 | 18.4 | 19640 | 50 | 0.5 |
| 30- | 45.9493- | 111.5937- | 2- | 15- | | 0-M37294 | 53620 | -0.06 | 584 | 59290 | 72 | 1404 | 9.7 | 61 | 4.7 | 5 | 1.7 | 39060 | 12.5 | 14450 | 41 | 0.5 |
| 30- | 45.9420- | 111.5884- | 2- | 15- | | 0-M37295 | 51380 | -0.05 | 574 | 61840 | 43 | -103 | 7.6 | 41 | 3.5 | 4 | 1.1 | 19790 | 5.3 | 17910 | 28 | 0.3 |
| 30- | 45.9294- | 111.5644- | 2- | 15- | | 0-M37296 | 50860 | -0.07 | 490 | 54570 | 58 | -76 | 9.1 | 61 | 3.5 | 4 | 1.1 | 25490 | 11.1 | 18090 | 35 | 0.3 |
| 30- | 45.9469- | 111.5355- | 2- | 15- | | 0-M37297 | 48480 | -0.06 | 488 | 72540 | 62 | 154 | 8.6 | 66 | 5.1 | 4 | 1.4 | 21920 | 8.8 | 16030 | 30 | 0.4 |
| 30- | 45.9790- | 111.5151- | 2- | 15- | | 0-M37298 | 52530 | -0.05 | 650 | 46280 | 68 | -88 | 16.4 | 65 | 5.7 | 5 | 2.2 | 24650 | 11.2 | 15960 | 37 | 0.4 |
| 30- | 45.9418- | 111.5041- | 2- | 15- | | 0-M37299 | 53400 | -0.06 | 633 | 37980 | 89 | -86 | 8.5 | 74 | 4.8 | 5 | 1.7 | 26950 | 12.5 | 18040 | 43 | 0.5 |
| 30- | 45.9447- | 111.5972- | 2- | 15- | | 0-M37300 | 56980 | -0.05 | 902 | 30710 | 63 | 191 | 12.9 | 134 | 2.9 | 4 | 1.4 | 33160 | 12.7 | 15590 | 39 | 0.4 |
| 30- | 45.0579- | 111.2764- | 2- | 12- | | 0-M37301 | 58070 | -0.07 | 747 | 29970 | 87 | -103 | 14.5 | 137 | 3.8 | 4 | 1.8 | 36170 | 13.9 | 19760 | 50 | 0.5 |
| 30- | 45.0547- | 111.2727- | 2- | 15- | | 0-M37302 | 40660 | -0.05 | 759 | 8074 | 46 | -57 | 6.3 | 38 | 3.0 | 4 | 1.3 | 16550 | 8.8 | 12640 | 24 | 0.4 |
| 30- | 45.0506- | 111.2765- | 2- | 15- | | 0-M37303 | 46770 | -0.06 | 663 | 7626 | 56 | -60 | 7.2 | 51 | 3.9 | 4 | 1.6 | 20360 | 12.5 | 12690 | 29 | 0.4 |
| 30- | 45.0806- | 111.3738- | 2- | 12- | | 0-M37304 | 47560 | -0.08 | 768 | 28540 | 70 | -66 | 3.8 | 37 | 3.6 | 4 | 1.4 | 14100 | 17.2 | 16310 | 36 | 0.3 |
| 30- | 45.0793- | 111.3732- | 2- | 12- | | 0-M37305 | 59510 | -0.06 | 749 | 12920 | 72 | -84 | 13.0 | 44 | 6.8 | 6 | 2.2 | 20650 | 17.1 | 21580 | 42 | 0.5 |
| 30- | 45.0757- | 111.3390- | 2- | 12- | | 0-M37306 | 53740 | -0.06 | 682 | 10000 | 81 | -69 | 5.8 | 53 | 5.4 | 4 | 1.5 | 19030 | 12.7 | 17420 | 42 | 0.5 |
| 30- | 45.0727- | 111.3395- | 2- | 12- | | 0-M37307 | 54750 | -0.05 | 937 | 22900 | 76 | -70 | 5.5 | 48 | 5.0 | 5 | 1.6 | 17220 | 10.8 | 17730 | 38 | 0.5 |
| 30- | 45.0690- | 111.3165- | 2- | 12- | | 0-M37308 | 46870 | -0.05 | 678 | 13780 | 84 | -81 | 9.5 | 84 | 3.5 | 5 | 1.7 | 29440 | 24.9 | 15870 | 45 | 0.6 |
| 30- | 45.0628- | 111.2662- | 2- | 12- | | 0-M37309 | 48760 | -0.04 | 822 | 25350 | 65 | -80 | 7.3 | 104 | 3.4 | 5 | 1.4 | 17970 | 12.9 | 18810 | 35 | 0.4 |
| 30- | 45.0614- | 111.2588- | 2- | 12- | | 0-M37310 | 50110 | -0.06 | 556 | 16680 | 62 | -60 | 8.0 | 59 | 5.6 | 4 | 1.5 | 20890 | 12.1 | 13300 | 29 | 0.4 |
| 30- | 45.2524- | 111.2537- | 2- | 12- | | 0-M37311 | 57440 | -0.06 | 798 | 23460 | 77 | 113 | 11.2 | 98 | 5.0 | 5 | 1.4 | 28840 | 9.6 | 21550 | 36 | 0.4 |
| 30- | 45.2670- | 111.2725- | 2- | 12- | | 0-M37312 | 49690 | -0.05 | 856 | 10970 | 87 | -67 | 7.7 | 178 | 4.9 | 5 | 1.8 | 29310 | 23.0 | 16550 | 42 | 0.6 |
| 30- | 45.2686- | 111.3031- | 2- | 12- | | 0-M37313 | 61330 | -0.06 | 714 | 16710 | 78 | -103 | 13.6 | 134 | 4.6 | 5 | 1.8 | 31840 | 8.7 | 20280 | 49 | 0.4 |
| 30- | 45.2437- | 111.3258- | 2- | 12- | | 0-M37314 | 63480 | -0.06 | 982 | 12710 | 74 | -94 | 7.1 | 89 | 4.4 | 4 | 1.7 | 17760 | 10.3 | 16170 | 45 | 0.5 |
| 30- | 45.2393- | 111.3409- | 2- | 12- | | 0-M37315 | 58950 | -0.06 | 827 | 17050 | 68 | 103 | 17.3 | 384 | 4.5 | 4 | 1.7 | 39090 | 8.3 | 26860 | 39 | 0.5 |
| 30- | 45.2373- | 111.3485- | 2- | 12- | | 0-M37316 | 57700 | -0.07 | 743 | 16060 | 105 | -89 | 12.8 | 176 | 5.4 | 5 | 2.1 | 35610 | 10.3 | 16790 | 55 | 0.4 |
| 30- | 45.2287- | 111.3504- | 2- | 12- | | 0-M37317 | 58110 | -0.06 | 725 | 21630 | 129 | -108 | 21.2 | 240 | 5.0 | 6 | 3.3 | 34430 | 18.0 | 17960 | 74 | 0.5 |
| 30- | 45.2731- | 111.2434- | 2- | 12- | | 0-M37318 | 59680 | -0.07 | 562 | 28480 | 81 | -82 | 9.5 | 95 | 6.6 | 5 | 1.7 | 25170 | 10.3 | 21990 | 40 | 0.5 |
| 30- | 45.2710- | 111.2372- | 2- | 12- | | 0-M37319 | 51510 | -0.07 | 758 | 18390 | 66 | -72 | 8.5 | 113 | 2.8 | 4 | 1.2 | 26620 | 14.3 | 18490 | 34 | 0.3 |
| 30- | 45.3018- | 111.2070- | 2- | 12- | | 0-M37320 | 68670 | -0.06 | 994 | 31340 | 69 | -107 | 34.7 | 190 | 3.8 | 3 | 2.5 | 46110 | 7.5 | 17200 | 38 | 0.3 |
| 30- | 45.3088- | 111.1951- | 2- | 12- | | 0-M37321 | 52870 | -0.06 | 658 | 30520 | 60 | -96 | 12.2 | 106 | 3.7 | 4 | 1.4 | 32090 | 8.9 | 15410 | 34 | 0.3 |
| 30- | 45.3145- | 111.1833- | 2- | 12- | | 0-M37322 | 75490 | -0.10 | 1120 | 30710 | 59 | -123 | 19.6 | 165 | 2.2 | 4 | 1.5 | 52660 | 9.2 | 15130 | 36 | 0.4 |
| 30- | 45.2881- | 111.1367- | 2- | 12- | | 0-M37323 | 84000 | -0.07 | 1203 | 21980 | 67 | -126 | 25.0 | 134 | 3.2 | 4 | 1.8 | 48520 | 6.0 | 17630 | 34 | 0.4 |
| 30- | 45.2996- | 111.1481- | 2- | 12- | | 0-M37324 | 84440 | -0.08 | 1027 | 22420 | 95 | -112 | 22.8 | 162 | 3.2 | 3 | 2.1 | 49850 | 8.2 | 16270 | 38 | 0.4 |
| 30- | 45.3021- | 111.1568- | 2- | 12- | | 0-M37325 | 83200 | -0.07 | 1336 | 21830 | 67 | -109 | 21.5 | 147 | 4.1 | 3 | 1.9 | 49730 | 7.3 | 17250 | 38 | 0.3 |

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

④

| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | LASL SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | U/Th RATIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mg | Mn | Na | Rb | Sb | Sc | Sm | Sr | Ta | Tb | Th | Ti | V | Yb | Zn | |
| 30-45.2245-110.0228-2-12- | 0-M37275 | 11110 | 876 | 13080 | 62 | -2 | 11.7 | 7.2 | -287 | -1 | -1 | 16.6 | 3079 | 97 | 4.6 | -41 | 0.187 |
| 30-45.2289-110.0707-2-12- | 0-M37276 | 13010 | 998 | 12510 | 60 | -2 | 13.5 | 5.8 | -305 | -1 | -1 | 11.0 | 4037 | 108 | 2.9 | 123 | 0.282 |
| 30-45.2279-110.0694-2-12- | 0-M37277 | 13970 | 1017 | 11330 | 76 | -2 | 13.5 | 6.6 | 341 | -1 | -1 | 13.1 | 4225 | 110 | 3.5 | 127 | 0.244 |
| 30-45.0448-110.8805-2-12- | 0-M37278 | 12390 | 792 | 13640 | 42 | -2 | 11.8 | 4.8 | 595 | -1 | -1 | 8.5 | 4047 | 113 | 2.5 | 103 | 0.329 |
| 30-45.1623-110.7217-2-12- | 0-M37279 | 15320 | 809 | 21210 | 54 | -2 | 11.8 | 5.3 | -309 | -1 | -1 | 10.5 | 4173 | 111 | 3.8 | 112 | 0.343 |
| 30-45.0115-110.5850-2-12- | 0-M37280 | 11710 | 858 | 21090 | 54 | -2 | 12.9 | 5.5 | 458 | -1 | -1 | 8.1 | 6151 | 135 | 3.1 | 143 | 0.556 |
| 30-45.0038-110.5106-2-12- | 0-M37281 | 12280 | 801 | 18360 | 52 | -2 | 13.4 | 4.4 | 589 | -1 | -1 | 11.1 | 4678 | 122 | 3.4 | 124 | 0.324 |
| 30-45.0035-110.5094-2-12- | 0-M37282 | 12840 | 770 | 16220 | 47 | -2 | 11.2 | 5.7 | -341 | -1 | -1 | 10.6 | 3849 | 105 | 3.2 | | 0.425 |
| 30-45.0168-110.6020-2-12- | 0-M37283 | 12600 | 673 | 14620 | 67 | -2 | 10.9 | 8.7 | 446 | -1 | -1 | 13.7 | 3683 | 108 | 4.9 | 120 | 0.255 |
| 30-45.0161-110.5737-2-12- | 0-M37284 | 10450 | 818 | 13840 | 84 | -2 | 10.1 | 5.8 | -282 | -1 | -1 | 9.9 | 3824 | 109 | 3.0 | -57 | 0.283 |
| 30-45.3771-110.5801-2-12- | 0-M37285 | 11150 | 782 | 15140 | 76 | -2 | 11.9 | 5.9 | 467 | -1 | -1 | 10.8 | 3706 | 110 | 3.9 | -45 | 0.278 |
| 30-45.0381-110.7946-2-12- | 0-M37286 | 14440 | 1136 | 19040 | 58 | -2 | 14.2 | 5.7 | -430 | -1 | -1 | 7.6 | 5897 | 163 | 2.3 | -123 | 0.316 |
| 30-45.0521-110.7900-2-12- | 0-M37287 | 13350 | 857 | 14990 | -34 | -2 | 13.3 | 6.6 | -289 | -1 | -1 | 9.9 | 4806 | 150 | 2.6 | -40 | 0.283 |
| 30-45.3756-110.5730-2-12- | 0-M37288 | 10680 | 880 | 15650 | 52 | -2 | 12.1 | 5.2 | -303 | -1 | -1 | 11.0 | 5012 | 130 | 3.6 | 92 | 0.273 |
| 30-45.3842-110.8794-2-12- | 0-M37289 | 15500 | 1039 | 16480 | 47 | -2 | 17.0 | 5.8 | 469 | -1 | -1 | 9.0 | 6746 | 217 | 2.5 | 177 | 0.256 |
| 30-45.3854-110.8960-2-12- | 0-M37290 | 16820 | 1208 | 18370 | -35 | -2 | 17.1 | 4.6 | -398 | -1 | -1 | 7.3 | 8548 | 262 | -1.5 | 142 | 0.288 |
| 30-45.0377-110.7932-2-12- | 0-M37291 | 24560 | 1658 | 13430 | 92 | -4 | 28.3 | 13.3 | -455 | -2 | 2 | 27.4 | 5296 | 153 | 9.6 | 117 | 0.237 |
| 30-45.9809-111.6382-2-15- | 0-M37292 | 10310 | 928 | 11180 | 64 | -2 | 11.7 | 8.5 | -283 | -1 | 2 | 15.0 | 3645 | 128 | 3.8 | 112 | 0.233 |
| 30-45.9805-111.6296-2-15- | 0-M37293 | 10450 | 751 | 15210 | 79 | -1 | 10.5 | 6.5 | -261 | -1 | -1 | 15.0 | 4113 | 90 | 3.9 | 96 | 0.233 |
| 30-45.9493-111.5937-2-15- | 0-M37294 | 9307 | 765 | 13290 | 63 | -2 | 10.2 | 6.3 | -273 | 1 | -1 | 13.8 | 2881 | 87 | 4.2 | 67 | 0.261 |
| 30-45.9420-111.5884-2-15- | 0-M37295 | 15680 | 486 | 14280 | 69 | -1 | 6.8 | 3.8 | -255 | -1 | -1 | 7.8 | 2012 | 57 | 2.4 | 71 | 0.269 |
| 30-45.9294-111.5644-2-15- | 0-M37296 | 11690 | 545 | 11470 | 61 | -2 | 8.2 | 4.6 | -223 | -1 | -1 | 10.2 | 2665 | 64 | 3.2 | 70 | 0.284 |
| 30-45.9469-111.5355-2-15- | 0-M37297 | 19870 | 540 | 9653 | 87 | 2 | 7.8 | 5.4 | -227 | -1 | -1 | 10.9 | 2380 | 57 | 3.4 | 48 | 0.239 |
| 30-45.9790-111.5151-2-15- | 0-M37298 | 12310 | 545 | 12800 | 45 | -1 | 7.9 | 6.5 | -228 | -1 | 1 | 12.8 | 2895 | 62 | 4.0 | 88 | 0.234 |
| 30-45.9418-111.5041-2-15- | 0-M37299 | 10120 | 566 | 12240 | 82 | -1 | 8.6 | 6.5 | -226 | 2 | -1 | 14.9 | 2727 | 52 | 4.5 | 78 | 0.208 |
| 30-45.9447-111.5972-2-15- | 0-M37300 | 9838 | 695 | 12770 | 67 | -1 | 9.6 | 4.7 | -289 | -1 | -1 | 11.4 | 3522 | 89 | 4.0 | 64 | 0.289 |
| 30-45.0579-111.2764-2-12- | 0-M37301 | 11310 | 780 | 13480 | 69 | -2 | 10.7 | 6.4 | 373 | -1 | -1 | 13.3 | 2703 | 100 | 4.6 | 79 | 0.699 |
| 30-45.0547-111.2727-2-15- | 0-M37302 | 4664 | 342 | 5194 | 53 | -1 | 5.6 | 4.2 | -172 | -1 | -1 | 7.4 | 2187 | 59 | 2.0 | 29 | 0.351 |
| 30-45.0506-111.2765-2-15- | 0-M37303 | 5807 | 518 | 4527 | 53 | -1 | 7.5 | 5.2 | -213 | -1 | -1 | 9.5 | 2904 | 58 | 3.1 | 77 | 0.389 |
| 30-45.0806-111.3738-2-12- | 0-M37304 | 9611 | 448 | 9238 | 76 | -2 | 5.0 | 6.0 | 298 | -1 | -1 | 9.6 | 2310 | 51 | 3.3 | | 0.365 |
| 30-45.0793-111.3732-2-12- | 0-M37305 | 6530 | 540 | 6721 | 77 | -1 | 6.9 | 6.5 | -266 | -1 | -1 | 15.2 | 3175 | 75 | 4.5 | 105 | 0.303 |
| 30-45.0757-111.3390-2-12- | 0-M37306 | 5573 | 495 | 6241 | 77 | -2 | 6.3 | 6.9 | -213 | -1 | -1 | 12.5 | 2649 | 75 | 2.8 | 59 | 0.280 |
| 30-45.0727-111.3395-2-12- | 0-M37307 | 7914 | 329 | 8315 | 93 | -1 | 5.8 | 6.4 | -184 | -1 | -1 | 15.0 | 2284 | 50 | 3.1 | -42 | 0.300 |
| 30-45.0690-111.3165-2-12- | 0-M37308 | 5503 | 586 | 10070 | 58 | -1 | 7.8 | 5.7 | -233 | -1 | 1 | 13.3 | 3499 | 70 | 4.0 | 108 | 0.263 |
| 30-45.0628-111.2662-2-12- | 0-M37309 | 9189 | 392 | 8562 | 64 | -1 | 5.4 | 5.8 | 193 | -1 | -1 | 12.0 | 2366 | 52 | 3.1 | 70 | 0.342 |
| 30-45.0614-111.2588-2-12- | 0-M37310 | 6862 | 467 | 3648 | 59 | -2 | 7.7 | 5.1 | -201 | -1 | -1 | 9.4 | 2491 | 84 | 2.7 | -38 | 0.309 |
| 30-45.2524-111.2537-2-12- | 0-M37311 | 7992 | 713 | 10730 | 95 | -1 | 8.6 | 5.1 | -258 | -1 | -1 | 13.3 | 3044 | 83 | 3.5 | 85 | 0.301 |
| 30-45.2670-111.2725-2-12- | 0-M37312 | 7469 | 396 | 7673 | 69 | -1 | 8.0 | 6.7 | -188 | -1 | -1 | 12.6 | 2900 | 96 | 4.5 | 112 | 0.349 |
| 30-45.2686-111.3031-2-12- | 0-M37313 | 9405 | 701 | 10960 | 67 | -1 | 9.7 | 7.4 | -297 | -1 | -1 | 13.9 | 3104 | 93 | 2.8 | -36 | 0.331 |
| 30-45.2437-111.3258-2-12- | 0-M37314 | 6094 | 413 | 15090 | 65 | -1 | 5.9 | 7.6 | 385 | -1 | -1 | 15.9 | 2459 | 58 | 3.4 | 58 | 0.333 |
| 30-45.2393-111.3409-2-12- | 0-M37315 | 14000 | 815 | 11750 | 70 | -2 | 9.0 | 5.5 | 560 | -1 | -1 | 11.3 | 3423 | 145 | -1.4 | 80 | 0.389 |
| 30-45.2373-111.3485-2-12- | 0-M37316 | 9038 | 700 | 9789 | 72 | -2 | 10.6 | 7.5 | -258 | -1 | -1 | 16.2 | 3247 | 89 | 3.4 | 124 | 0.284 |
| 30-45.2287-111.3504-2-12- | 0-M37317 | 11100 | 803 | 11080 | 59 | -2 | 10.3 | 12.5 | -320 | -1 | -1 | 19.1 | 4029 | 116 | 3.8 | 111 | 0.293 |
| 30-45.2731-111.2434-2-12- | 0-M37318 | 10070 | 341 | 8415 | 95 | -2 | 8.7 | 7.0 | -211 | -1 | -1 | 14.6 | 3021 | 76 | 4.2 | 95 | 0.247 |
| 30-45.2710-111.2372-2-12- | 0-M37319 | 8934 | 495 | 10960 | 58 | -2 | 8.3 | 4.1 | -218 | -1 | -1 | 9.6 | 2900 | 78 | 3.8 | 96 | 0.385 |
| 30-45.3018-111.2070-2-12- | 0-M37320 | 15210 | 807 | 15940 | -30 | -2 | 13.2 | 5.3 | 454 | -1 | -1 | 8.7 | 3878 | 125 | 2.2 | -39 | 0.264 |
| 30-45.3088-111.1951-2-12- | 0-M37321 | 9169 | 610 | 14570 | 48 | -1 | 9.3 | 4.8 | -251 | -1 | -1 | 9.5 | 3643 | 70 | 3.1 | 109 | 0.295 |
| 30-45.3145-111.1833-2-12- | 0-M37322 | 11720 | 744 | 22360 | 85 | -3 | 14.1 | 5.5 | -359 | -1 | -1 | 9.7 | 4799 | 119 | 3.2 | 114 | 0.515 |
| 30-45.2881-111.1367-2-12- | 0-M37323 | 14540 | 770 | 15320 | 68 | -2 | 13.6 | 4.1 | 631 | -1 | -1 | 9.8 | 5051 | 122 | 3.1 | 117 | 0.306 |
| 30-45.2996-111.1481-2-12- | 0-M37324 | 11480 | 762 | 15060 | -38 | -2 | 13.7 | 5.6 | 397 | -1 | -1 | 11.7 | 4849 | 137 | 2.5 | -53 | 0.248 |
| 30-45.3021-111.1568-2-12- | 0-M37325 | 12960 | 760 | 15160 | 65 | -2 | 13.8 | 4.6 | -295 | 2 | -1 | 9.9 | 4878 | 126 | 2.4 | -68 | 0.283 |

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

(1)

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER AND FIELD DATA | | | | | | | | | | | | | | | | | | | | | | | | U CONCENTRATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | TIME SAMPLED DATE | TIME SAMPLED HOUR | AIR TEMPERATURE | WATER TEMPERATURE | COMMENTS | SPECIAL MEASUREMENTS | pH | CONDUCTIVITY (µmho/cm) | SCINTILLOMETER (eU, ppm) | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm |
| 30- | 45.3241- | 111.1703- | 2- | 12- | 0- | M37326- | 10/17/76- | 12- | 13- | | -C- | - | 5.5- | 150- | | -1- | 6- | 2- | 7- | 4- | 2- | 1- | 2- | 1- | 2- | 3- | 1- | -8- | - | - | - | - | 3.60 |
| 30- | 45.8472- | 110.9947- | 2- | 12- | 0- | M37327- | 10/17/76- | 12- | - | | -C- | - | 5.7- | 260- | | -1- | 1- | 2- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 3.20 |
| 30- | 45.8361- | 110.9986- | 2- | 12- | 0- | M37328- | 10/17/76- | 13- | -1- | | - | - | 5.7- | 250- | | -1- | 1- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 3- | 2- | 1- | -3- | - | - | - | - | 2.30 |
| 30- | 45.8691- | 111.0880- | 2- | 15- | 0- | M37329- | 10/17/76- | 13- | 5- | | -C- | - | - | - | | -1- | 1- | 2- | 7- | -1- | -2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | - | 3.60 |
| 30- | 45.9090- | 111.0730- | 2- | 15- | 0- | M37330- | 10/17/76- | 13- | 5- | | -C- | - | - | - | | -1- | 1- | 2- | 7- | -1- | -2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | - | 2.80 |
| 30- | 45.9245- | 111.0525- | 2- | 12- | 0- | M37331- | 10/17/76- | 14- | 6- | | -C- | - | 5.7- | 220- | | -1- | 1- | 3- | 7- | 4- | 2- | 1- | 2- | 4- | 3- | 2- | 2- | -3- | - | - | - | - | 8.00 |
| 30- | 45.9300- | 111.0750- | 2- | 12- | 0- | M37332- | 10/17/76- | 14- | 6- | | -C- | - | 5.6- | 240- | | -1- | 1- | 2- | 7- | 4- | 2- | 1- | 2- | 4- | 4- | 2- | 1- | -3- | - | - | - | - | 2.30 |
| 30- | 45.9419- | 111.0834- | 2- | 15- | 0- | M37333- | 10/17/76- | 14- | 8- | | -C- | - | - | - | | -1- | 1- | 2- | 7- | -1- | -2- | 2- | 2- | 3- | 1- | -3- | - | - | - | - | - | 2.50 |
| 30- | 45.9872- | 111.0217- | 2- | 15- | 0- | M37334- | 10/17/76- | 15- | 5- | | -C- | - | - | - | | -1- | 1- | 2- | 1- | -1- | -2- | 4- | 3- | 4- | 1- | -1- | - | - | - | - | - | 3.50 |
| 30- | 45.9724- | 111.0539- | 2- | 12- | 0- | M37335- | 10/17/76- | 15- | 8- | | - | - | 5.7- | 280- | | -1- | 1- | 2- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | 2.60 |
| 30- | 45.9727- | 111.0906- | 2- | 12- | 0- | M37336- | 10/17/76- | 15- | 10- | | -C- | - | 5.7- | 300- | | -1- | 1- | 2- | 6- | 4- | 2- | 1- | 2- | 2- | 2- | 2- | 1- | -3- | - | - | - | - | 3.10 |
| 30- | 45.9792- | 111.0998- | 2- | 12- | 0- | M37337- | 10/17/76- | 16- | 11- | | -C- | - | 5.7- | 305- | | -1- | 1- | 5- | 6- | 4- | 2- | 1- | 2- | 3- | 3- | 3- | 1- | -3- | - | - | - | - | 2.90 |
| 30- | 45.9989- | 111.0858- | 2- | 12- | 0- | M37338- | 10/17/76- | 16- | 7- | | -C- | - | 5.7- | 485- | | -1- | 1- | 5- | 8- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 3.20 |
| 30- | 45.9981- | 111.1745- | 2- | 12- | 0- | M37339- | 10/17/76- | 16- | 8- | | - | - | 5.7- | 410- | | -1- | 1- | 3- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 2- | 1- | -3- | - | - | - | - | 2.50 |
| 30- | 45.9918- | 111.1651- | 2- | 12- | 0- | M37340- | 10/17/76- | 17- | 9- | | - | - | 5.7- | 500- | | -1- | 1- | 6- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 2- | 1- | -3- | - | - | - | - | 3.60 |
| 30- | 45.9770- | 111.1834- | 2- | 15- | 0- | M37341- | 10/10/76- | 8- | 9- | | -C- | - | - | - | | -1- | 1- | 3- | 7- | -1- | -2- | 3- | 2- | 4- | 1- | -3- | - | - | - | - | - | 2.70 |
| 30- | 45.6596- | 111.3118- | 2- | 12- | 0- | M37342- | 10/10/76- | 8- | 2- | 3.0- | - | - | 6.3- | 650- | | -2- | 4- | 5- | 8- | 2- | 2- | 2- | 2- | 3- | 3- | 3- | 3- | -3- | - | - | - | - | 3.20 |
| 30- | 45.6649- | 111.3285- | 2- | 12- | 0- | M37343- | 10/10/76- | 9- | 3- | 6.0- | - | - | 6.6- | 600- | | -2- | 4- | 5- | 8- | 2- | 2- | 1- | 2- | 4- | 4- | 3- | 3- | -3- | - | - | - | - | 3.00 |
| 30- | 45.6512- | 111.3445- | 2- | 15- | 0- | M37344- | 10/10/76- | 10- | 2- | | - | - | - | - | | -2- | 4- | 4- | 8- | -1- | - | - | 4- | 4- | 3- | 3- | -3- | - | - | - | - | - | 3.20 |
| 30- | 45.6581- | 111.4103- | 2- | 11- | 0- | M37345- | 10/10/76- | 9- | 2- | 3.0- | - | - | 6.9- | 500- | | -2- | 4- | 5- | 6- | 2- | 2- | 2- | | 4- | 4- | 3- | 3- | -3- | - | - | - | - | 3.10 |
| 30- | 45.6291- | 111.3963- | 2- | 11- | 0- | M37346- | 10/10/76- | 11- | 3- | 2.0- | - | - | 6.3- | 550- | | -2- | 4- | 5- | 8- | 2- | 2- | 2- | | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 3.10 |
| 30- | 45.6478- | 111.4122- | 2- | 12- | 0- | M37347- | 10/10/76- | 10- | 3- | 2.0- | - | - | 6.0- | 240- | | -2- | 4- | 4- | 4- | 2- | 3- | 2- | 2- | 4- | 3- | 2- | 3- | -3- | - | - | - | - | 3.60 |
| 30- | 45.6465- | 111.4368- | 2- | 12- | 0- | M37348- | 10/10/76- | 10- | 3- | | - | - | 6.3- | 400- | | -2- | 4- | 4- | 4- | 2- | 2- | 2- | 2- | 4- | 3- | 1- | 3- | -3- | - | - | - | - | 3.00 |
| 30- | 45.6436- | 111.4543- | 2- | 15- | 0- | M37349- | 10/10/76- | 10- | 3- | | - | - | - | - | | -2- | 4- | 5- | 8- | -1- | -2- | 4- | 3- | 2- | 3- | -3- | - | - | - | - | - | 4.30 |
| 30- | 45.6417- | 111.4651- | 2- | 15- | 0- | M37350- | 10/10/76- | 11- | 3- | | - | - | - | - | | -2- | 4- | 4- | 4- | -1- | -2- | 4- | 3- | 2- | 3- | -3- | - | - | - | - | - | 3.10 |
| 30- | 45.6426- | 111.4970- | 2- | 15- | 0- | M37351- | 10/10/76- | 10- | 3- | | - | - | - | - | | -2- | 4- | 4- | 4- | -1- | -2- | 3- | 3- | 3- | 3- | -3- | - | - | - | - | - | 3.50 |
| 30- | 45.7003- | 111.4896- | 2- | 15- | 0- | M37352- | 10/10/76- | 11- | 4- | | - | - | - | - | | -2- | 5- | 4- | 6- | -1- | -2- | 4- | 3- | 2- | 2- | -3- | - | - | - | - | - | 4.50 |
| 30- | 45.6879- | 111.4698- | 2- | 11- | 0- | M37353- | 10/10/76- | 11- | 4- | 9.0- | - | - | 6.6- | 700- | | -2- | 5- | 4- | 4- | 2- | 2- | 1- | | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 4.90 |
| 30- | 45.6852- | 111.4584- | 2- | 15- | 0- | M37354- | 10/10/76- | 11- | 4- | | - | - | - | - | | -2- | 5- | 4- | 4- | -1- | -2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | - | 3.20 |
| 30- | 45.6810- | 111.4536- | 2- | 15- | 0- | M37355- | 10/10/76- | 9- | 4- | | - | - | - | - | | -2- | 1- | 4- | 4- | -1- | -2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | - | 3.50 |
| 30- | 45.7294- | 111.4850- | 2- | 15- | 0- | M37356- | 10/10/76- | 10- | 4- | | - | - | - | - | | -2- | 1- | 5- | 6- | -1- | -2- | 4- | 4- | 2- | 2- | -3- | - | - | - | - | - | 3.80 |
| 30- | 45.7404- | 111.4724- | 2- | 15- | 0- | M37357- | 10/10/76- | 11- | 4- | | - | - | - | - | | -2- | 1- | 5- | 6- | -1- | -2- | 4- | 3- | 2- | 2- | -3- | - | - | - | - | - | 3.60 |
| 30- | 45.5956- | 111.4910- | 2- | 12- | 0- | M37358- | 10/10/76- | 11- | 4- | 5.0- | - | - | 6.3- | 210- | | -2- | 5- | 4- | 7- | 3- | 3- | 1- | 2- | 2- | 4- | 3- | 2- | -3- | - | - | - | - | 5.50 |
| 30- | 45.7152- | 111.4109- | 2- | 15- | 0- | M37359- | 10/10/76- | 12- | 3- | | - | - | - | - | | -2- | 1- | 5- | 6- | -1- | -2- | 4- | 3- | 1- | 2- | -3- | - | - | - | - | - | 3.30 |
| 30- | 45.7437- | 111.4113- | 2- | 15- | 0- | M37360- | 10/10/76- | 11- | 3- | | - | - | - | - | | -2- | 1- | 5- | 7- | -1- | -2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | - | 3.10 |
| 30- | 45.3688- | 110.5619- | 2- | 12- | 0- | M37361- | 10/30/76- | 11- | -1- | 1.0- | - | - | 5.5- | 160- | | -2- | 6- | 2- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 3.40 |
| 30- | 45.3704- | 110.8529- | 2- | 12- | 0- | M37362- | 10/30/76- | 13- | 1- | 1.0- | - | - | 5.7- | 165- | | -2- | 6- | 1- | 6- | 2- | 2- | 1- | 2- | 3- | 4- | 3- | 2- | -1- | - | - | - | - | 3.50 |
| 30- | 45.3805- | 110.1038- | 2- | 12- | 0- | M37363- | 10/29/76- | 18- | 17- | | - | - | 5.2- | 310- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 6.50 |
| 30- | 45.3588- | 110.1064- | 2- | 12- | 0- | M37364- | 10/29/76- | 16- | 1- | 1.0- | - | - | 5.9- | 150- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 2.00 |
| 30- | 45.3673- | 110.0969- | 2- | 12- | 0- | M37365- | 10/29/76- | 15- | 1- | 1.0- | - | - | 5.7- | 210- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 3.30 |
| 30- | 45.3711- | 110.0500- | 2- | 12- | 0- | M37366- | 10/29/76- | 14- | 5- | 1.0- | - | - | 5.5- | 210- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 3.10 |
| 30- | 45.3718- | 110.0300- | 2- | 12- | 0- | M37367- | 10/29/76- | 14- | 6- | 1.0- | - | - | 5.5- | 210- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 2- | 4- | 2- | -1- | - | - | - | - | 2.30 |
| 30- | 45.4590- | 110.0865- | 2- | 12- | 0- | M37368- | 10/29/76- | 10- | 1- | | - | - | 5.5- | 210- | | -1- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 3- | 4- | 3- | 2- | -1- | - | - | - | - | 3.30 |
| 30- | 45.4602- | 110.0878- | 2- | 12- | 0- | M37369- | 10/29/76- | 10- | 1- | | - | - | 5.5- | 200- | | -1- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 3- | 5- | 3- | 2- | -1- | - | - | - | - | 3.70 |
| 30- | 45.4840- | 110.0833- | 2- | 12- | 0- | M37370- | 10/29/76- | 10- | - | 1.0- | - | - | 5.9- | 200- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 7- | 3- | 4- | 2- | -1- | - | - | - | - | 3.30 |
| 30- | 45.4881- | 110.0799- | 2- | 12- | 0- | M37371- | 10/29/76- | 10- | 1- | 1.0- | - | - | 6.1- | 210- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 4- | 3- | 2- | -1- | - | - | - | - | 3.40 |
| 30- | 45.4944- | 110.0404- | 2- | 12- | 0- | M37372- | 10/29/76- | 9- | -1- | 1.0- | - | - | 5.2- | 345- | | -1- | 4- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 2- | 3- | 2- | -1- | - | - | - | - | 3.20 |
| 30- | 45.4961- | 110.0391- | 2- | 12- | 0- | M37373- | 10/29/76- | 9- | - | 1.0- | - | - | 5.2- | 350- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 2.70 |
| 30- | 45.9810- | 111.2420- | 2- | 15- | 0- | M37374- | 10/10/76- | 10- | 11- | | -C- | - | - | - | | -1- | 1- | 5- | 6- | -1- | -1- | 2- | 2- | 2- | 1- | -3- | - | - | - | - | - | 2.90 |
| 30- | 45.9789- | 111.2063- | 2- | 12- | 0- | M37375- | 10/10/76- | 11- | 10- | 7.6- | -C- | - | 6.1- | 1100- | | -1- | 1- | 6- | 7- | 2- | 2- | 2- | 1- | 6- | 4- | 2- | 1- | -3- | - | - | - | - | 3.00 |
| 30- | 45.9749- | 111.2098- | 2- | 15- | 0- | M37376- | 10/10/76- | 10- | 10- | | -C- | - | - | - | | -1- | 1- | 4- | 1- | -1- | -2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | - | 3.30 |

# 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 |
| 30- | 45.3241- | 111.1703- | 2- | 12- | | 0-M37326 | -5 | -5 | -5 | 31 | -20 | 42 | 11 | -10 | -15 | 3 | 27 |
| 30- | 45.8472- | 110.9947- | 2- | 12- | | 0-M37327 | -5 | -5 | -5 | 29 | -20 | 36 | 10 | -10 | -15 | 2 | 38 |
| 30- | 45.8361- | 110.9986- | 2- | 12- | | 0-M37328 | -5 | -5 | -5 | 20 | -20 | -15 | 5 | -10 | -15 | 2 | 31 |
| 30- | 45.8691- | 111.0880- | 2- | 15- | | 0-M37329 | -5 | -5 | -5 | 23 | -20 | 41 | 13 | -10 | -15 | 3 | 50 |
| 30- | 45.9090- | 111.0730- | 2- | 15- | | 0-M37330 | -5 | -5 | -5 | 42 | -20 | 50 | 16 | -10 | -15 | 3 | 57 |
| 30- | 45.9245- | 111.0525- | 2- | 12- | | 0-M37331 | -5 | -5 | -5 | 34 | -20 | 36 | 10 | -10 | -15 | 3 | 51 |
| 30- | 45.9300- | 111.0750- | 2- | 12- | | 0-M37332 | -5 | -5 | -5 | 28 | -20 | 38 | 13 | -10 | -15 | 3 | 20 |
| 30- | 45.9419- | 111.0834- | 2- | 15- | | 0-M37333 | -5 | -5 | -5 | 34 | -20 | 31 | 15 | -10 | -15 | 3 | 39 |
| 30- | 45.9872- | 111.0217- | 2- | 15- | | 0-M37334 | -5 | -5 | -5 | 19 | -20 | -15 | 12 | -10 | -15 | 3 | 33 |
| 30- | 45.9724- | 111.0539- | 2- | 12- | | 0-M37335 | -5 | -5 | -5 | 23 | -20 | 20 | 9 | -10 | -15 | 2 | 38 |
| 30- | 45.9727- | 111.0906- | 2- | 12- | | 0-M37336 | -5 | -5 | -5 | 24 | -20 | -15 | 9 | -10 | -15 | 2 | 39 |
| 30- | 45.9792- | 111.0998- | 2- | 12- | | 0-M37337 | -5 | -5 | -5 | 35 | -20 | 40 | 10 | -10 | -15 | 2 | 90 |
| 30- | 45.9989- | 111.0858- | 2- | 12- | | 0-M37338 | -5 | -5 | -5 | 34 | -20 | 34 | 24 | -10 | -15 | 2 | 89 |
| 30- | 45.9981- | 111.1745- | 2- | 12- | | 0-M37339 | -5 | -5 | -5 | 23 | -20 | -15 | 8 | -10 | -15 | 2 | 35 |
| 30- | 45.9918- | 111.1651- | 2- | 12- | | 0-M37340 | -5 | -5 | -5 | 19 | -20 | -15 | 15 | -10 | -15 | 3 | 30 |
| 30- | 45.9770- | 111.1834- | 2- | 15- | | 0-M37341 | -5 | -5 | -5 | 21 | -20 | 15 | 14 | -10 | -15 | 3 | 30 |
| 30- | 45.6596- | 111.3118- | 2- | 12- | | 0-M37342 | -5 | -5 | -5 | 35 | -20 | 21 | 15 | -10 | -15 | 3 | 33 |
| 30- | 45.6649- | 111.3285- | 2- | 12- | | 0-M37343 | -5 | -5 | -5 | 28 | -20 | -15 | 10 | -10 | -15 | 3 | 41 |
| 30- | 45.6512- | 111.3445- | 2- | 15- | | 0-M37344 | -5 | -5 | -5 | 33 | -20 | 43 | 16 | -10 | -15 | 3 | 39 |
| 30- | 45.6581- | 111.4103- | 2- | 11- | | 0-M37345 | -5 | -5 | -5 | 41 | -20 | 18 | 14 | -10 | -15 | 3 | 41 |
| 30- | 45.6291- | 111.3963- | 2- | 11- | | 0-M37346 | -5 | -5 | -5 | 26 | -20 | 30 | 10 | -10 | -15 | 3 | 34 |
| 30- | 45.6478- | 111.4122- | 2- | 12- | | 0-M37347 | -5 | -5 | -5 | 45 | -20 | 62 | 9 | -10 | -15 | 2 | 42 |
| 30- | 45.6465- | 111.4368- | 2- | 12- | | 0-M37348 | -5 | -5 | -5 | 21 | -20 | 21 | 16 | -10 | -15 | 3 | 40 |
| 30- | 45.6436- | 111.4543- | 2- | 15- | | 0-M37349 | -5 | -5 | -5 | 36 | -20 | 40 | 12 | -10 | -15 | 3 | 33 |
| 30- | 45.6417- | 111.4651- | 2- | 15- | | 0-M37350 | -5 | -5 | -5 | 32 | -20 | 42 | 7 | -10 | -15 | 2 | 26 |
| 30- | 45.6426- | 111.4970- | 2- | 15- | | 0-M37351 | -5 | -5 | -5 | 40 | -20 | 66 | 7 | -10 | -15 | 2 | 24 |
| 30- | 45.7003- | 111.4896- | 2- | 15- | | 0-M37352 | -5 | -5 | -5 | 37 | -20 | 33 | 9 | -10 | -15 | 3 | 35 |
| 30- | 45.6879- | 111.4698- | 2- | 11- | | 0-M37353 | -5 | -5 | -5 | 40 | -20 | 38 | 12 | -10 | -15 | 3 | 39 |
| 30- | 45.6852- | 111.4584- | 2- | 15- | | 0-M37354 | -5 | -5 | -5 | 34 | -20 | 27 | -5 | -10 | -15 | 2 | 32 |
| 30- | 45.6810- | 111.4536- | 2- | 15- | | 0-M37355 | -5 | 5 | -5 | 25 | -20 | 22 | 18 | -10 | -15 | 3 | 29 |
| 30- | 45.7294- | 111.4850- | 2- | 15- | | 0-M37356 | -5 | -5 | -5 | 18 | -20 | 24 | 12 | -10 | -15 | 2 | 75 |
| 30- | 45.7404- | 111.4724- | 2- | 15- | | 0-M37357 | -5 | -5 | -5 | 30 | -20 | 26 | 14 | -10 | -15 | 2 | 116 |
| 30- | 45.5956- | 111.4910- | 2- | 12- | | 0-M37358 | -5 | -5 | -5 | 24 | -20 | -15 | 11 | -10 | -15 | 3 | 52 |
| 30- | 45.7152- | 111.4109- | 2- | 15- | | 0-M37359 | -5 | -5 | -5 | 18 | -20 | 20 | 6 | -10 | -15 | 3 | 74 |
| 30- | 45.7437- | 111.4113- | 2- | 15- | | 0-M37360 | -5 | -5 | -5 | 43 | -20 | 34 | 6 | -10 | -15 | 2 | 30 |
| 30- | 45.3688- | 110.5619- | 2- | 12- | | 0-M37361 | -5 | -5 | -5 | 30 | -20 | 23 | 10 | -10 | -15 | 2 | 39 |
| 30- | 45.3704- | 110.8529- | 2- | 12- | | 0-M37362 | -5 | -5 | -5 | 14 | -20 | -15 | 18 | -10 | -15 | 2 | 40 |
| 30- | 45.3805- | 110.1038- | 2- | 12- | | 0-M37363 | -5 | -5 | -5 | 44 | -20 | -15 | 16 | -10 | -15 | -1 | 35 |
| 30- | 45.3588- | 110.1064- | 2- | 12- | | 0-M37364 | -5 | -5 | -5 | 27 | -20 | 60 | 15 | -10 | -15 | -1 | 27 |
| 30- | 45.3673- | 110.0969- | 2- | 12- | | 0-M37365 | -5 | -5 | -5 | 34 | -20 | 27 | 10 | -10 | -15 | 3 | 42 |
| 30- | 45.3711- | 110.0500- | 2- | 12- | | 0-M37366 | -5 | -5 | -5 | 27 | -20 | 29 | 9 | -10 | -15 | 3 | 25 |
| 30- | 45.3718- | 110.0300- | 2- | 12- | | 0-M37367 | -5 | -5 | 5 | 23 | -20 | 71 | -5 | -10 | -15 | -1 | 27 |
| 30- | 45.4590- | 110.0865- | 2- | 12- | | 0-M37368 | -5 | -5 | -5 | 23 | -20 | 25 | 9 | -10 | -15 | -1 | 38 |
| 30- | 45.4602- | 110.0878- | 2- | 12- | | 0-M37369 | -5 | -5 | -5 | 29 | -20 | 19 | 12 | -10 | -15 | 2 | 38 |
| 30- | 45.4840- | 110.0833- | 2- | 12- | | 0-M37370 | -5 | -5 | -5 | 25 | -20 | 31 | -5 | -10 | -15 | 2 | 31 |
| 30- | 45.4881- | 110.0799- | 2- | 12- | | 0-M37371 | -5 | -5 | -5 | 36 | -20 | 34 | 10 | -10 | -15 | 3 | 24 |
| 30- | 45.4944- | 110.0404- | 2- | 12- | | 0-M37372 | -5 | -5 | -5 | 21 | -20 | 22 | 8 | 10 | -15 | 2 | 42 |
| 30- | 45.4961- | 110.0391- | 2- | 12- | | 0-M37373 | -5 | -5 | -5 | 34 | -20 | 42 | 13 | -10 | -15 | 2 | 38 |
| 30- | 45.9810- | 111.2420- | 2- | 15- | | 0-M37374 | -5 | -5 | -5 | 19 | -20 | 37 | 12 | -10 | -15 | 3 | 33 |
| 30- | 45.9789- | 111.2063- | 2- | 12- | | 0-M37375 | -5 | -5 | -5 | 29 | -20 | 25 | 10 | -10 | -15 | 2 | 34 |
| 30- | 45.9749- | 111.2098- | 2- | 15- | | 0-M37376 | -5 | -5 | 5 | 36 | -20 | 31 | 5 | -10 | -15 | -1 | 26 |

# 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 |
| 30- | 45.3241- | 111.1703- | 2- | 12- | 0- | M37326 | 60560 | -0.06 | 938 | 26670 | 69 | 105 | 14.6 | 191 | 3.1 | 4 | 1.6 | 37850 | 9.2 | 16440 | 39 | 0.4 |
| 30- | 45.8472- | 110.9947- | 2- | 12- | 0- | M37327 | 51850 | -0.05 | 740 | 41410 | 72 | 95 | 14.9 | 207 | 3.8 | 5 | 1.5 | 35440 | 10.7 | 26330 | 38 | 0.4 |
| 30- | 45.8361- | 110.9986- | 2- | 12- | 0- | M37328 | 47370 | -0.06 | 407 | 80450 | 57 | 148 | 10.0 | 58 | 3.6 | 4 | 1.3 | 21780 | 6.5 | 18610 | 25 | 0.4 |
| 30- | 45.8691- | 111.0880- | 2- | 15- | 0- | M37329 | 56110 | -0.06 | 526 | 15580 | 73 | -78 | 12.5 | 241 | 3.7 | 5 | 1.6 | 34400 | 19.8 | 25660 | 44 | 0.6 |
| 30- | 45.9090- | 111.0730- | 2- | 15- | 0- | M37330 | 62770 | -0.06 | 658 | 21120 | 85 | -73 | 14.5 | 174 | 4.8 | 4 | 1.8 | 38690 | 9.3 | 26190 | 36 | 0.4 |
| 30- | 45.9245- | 111.0525- | 2- | 12- | 0- | M37331 | 61440 | -0.07 | 758 | 13410 | 66 | -84 | 19.2 | 126 | 8.2 | 5 | 1.5 | 37630 | 9.2 | 21570 | 42 | 0.3 |
| 30- | 45.9300- | 111.0750- | 2- | 12- | 0- | M37332 | 68610 | -0.07 | 1120 | 35520 | 82 | -109 | 21.1 | 139 | 5.0 | 3 | 1.8 | 49030 | 7.9 | 13480 | 35 | 0.3 |
| 30- | 45.9419- | 111.0834- | 2- | 15- | 0- | M37333 | 57130 | -0.06 | 421 | 30490 | 69 | 76 | 12.5 | 83 | 6.3 | 4 | 1.5 | 28730 | 5.7 | 22960 | 37 | 0.4 |
| 30- | 45.9872- | 111.0217- | 2- | 15- | 0- | M37334 | 61820 | -0.05 | 820 | 8324 | 72 | -60 | 5.0 | 78 | 5.7 | 4 | 1.5 | 23590 | 8.6 | 18150 | 39 | 0.4 |
| 30- | 45.9724- | 111.0539- | 2- | 12- | 0- | M37335 | 45850 | -0.05 | 534 | 36360 | 45 | -63 | 7.7 | 64 | 3.3 | 3 | 1.2 | 19690 | 8.6 | 13680 | 27 | 0.3 |
| 30- | 45.9727- | 111.0906- | 2- | 12- | 0- | M37336 | 52840 | -0.06 | 584 | 23730 | 77 | -85 | 15.4 | 86 | 5.1 | 4 | 2.4 | 23410 | 13.7 | 16930 | 34 | 0.3 |
| 30- | 45.9792- | 111.0998- | 2- | 12- | 0- | M37337 | 57970 | -0.06 | 481 | 56730 | 73 | -77 | 13.2 | 78 | 5.4 | 4 | 1.4 | 31260 | 9.4 | 17680 | 34 | 0.3 |
| 30- | 45.9989- | 111.0858- | 2- | 12- | 0- | M37338 | 56930 | -0.06 | 569 | 26530 | 71 | -72 | 9.7 | 93 | 5.8 | 4 | 1.4 | 28940 | 11.2 | 19640 | 38 | 0.4 |
| 30- | 45.9981- | 111.1745- | 2- | 12- | 0- | M37339 | 55190 | -0.05 | 732 | 31890 | 59 | 99 | 13.0 | 81 | 4.5 | 4 | 1.5 | 36750 | 8.9 | 19110 | 35 | 0.4 |
| 30- | 45.9918- | 111.1651- | 2- | 12- | 0- | M37340 | 53910 | -0.06 | 594 | 21790 | 83 | 106 | 8.8 | 75 | 2.9 | 5 | 1.5 | 22830 | 17.2 | 19740 | 39 | 0.5 |
| 30- | 45.9770- | 111.1834- | 2- | 15- | 0- | M37341 | 56200 | -0.06 | 659 | 39080 | 74 | -80 | 10.9 | 66 | 3.9 | 4 | 1.5 | 33610 | 11.3 | 18230 | 37 | 0.4 |
| 30- | 45.6596- | 111.3118- | 2- | 12- | 0- | M37342 | 61060 | -0.07 | 814 | 28240 | 87 | 94 | 12.0 | 124 | 4.2 | 5 | 1.8 | 33760 | 11.7 | 19400 | 43 | 0.5 |
| 30- | 45.6649- | 111.3285- | 2- | 12- | 0- | M37343 | 58400 | -0.06 | 773 | 25370 | 59 | 207 | 11.2 | 82 | 3.8 | 5 | 1.4 | 24420 | 8.7 | 17930 | 32 | 0.4 |
| 30- | 45.6512- | 111.3445- | 2- | 15- | 0- | M37344 | 60640 | -0.07 | 653 | 25920 | 94 | -96 | 14.8 | 141 | 4.3 | 5 | 1.7 | 34250 | 14.7 | 20310 | 40 | 0.5 |
| 30- | 45.6581- | 111.4103- | 2- | 11- | 0- | M37345 | 62220 | -0.07 | 580 | 26870 | 77 | -100 | 10.4 | 77 | 5.2 | 6 | 1.6 | 31100 | 9.8 | 19520 | 38 | 0.5 |
| 30- | 45.6291- | 111.3963- | 2- | 11- | 0- | M37346 | 61490 | -0.07 | 759 | 20150 | 66 | 224 | 10.1 | 96 | 4.5 | 5 | 1.7 | 29860 | 10.6 | 23670 | 38 | 0.5 |
| 30- | 45.6478- | 111.4122- | 2- | 12- | 0- | M37347 | 56550 | -0.08 | 486 | 27410 | 87 | 328 | 42.2 | 179 | 3.9 | 6 | 3.0 | 56660 | 16.1 | 14360 | 48 | 0.5 |
| 30- | 45.6465- | 111.4368- | 2- | 12- | 0- | M37348 | 58500 | -0.07 | 650 | 31630 | 81 | 97 | 11.6 | 83 | 3.8 | 5 | 1.6 | 27950 | 10.6 | 18620 | 37 | 0.5 |
| 30- | 45.6436- | 111.4543- | 2- | 15- | 0- | M37349 | 55840 | -0.07 | 555 | 25370 | 84 | 125 | 26.1 | 114 | 4.8 | 7 | 3.1 | 42170 | 36.6 | 20110 | 42 | 0.9 |
| 30- | 45.6417- | 111.4651- | 2- | 15- | 0- | M37350 | 62340 | -0.07 | 765 | 28590 | 71 | -92 | 16.0 | 149 | 3.1 | 6 | 1.8 | 41280 | 15.5 | 15420 | 46 | 0.6 |
| 30- | 45.6426- | 111.4970- | 2- | 15- | 0- | M37351 | 53880 | -0.06 | 492 | 30350 | 83 | 106 | 25.8 | 218 | 1.6 | 6 | 1.9 | 56340 | 19.5 | 11330 | 48 | 0.7 |
| 30- | 45.7003- | 111.4896- | 2- | 15- | 0- | M37352 | 59460 | -0.07 | 633 | 29820 | 101 | 158 | 18.3 | 205 | 3.3 | 5 | 1.8 | 39060 | 21.6 | 19300 | 46 | 0.6 |
| 30- | 45.6879- | 111.4698- | 2- | 11- | 0- | M37353 | 60740 | -0.07 | 651 | 29510 | 105 | -99 | 20.0 | 214 | 3.1 | 5 | 2.0 | 48790 | 20.0 | 23760 | 52 | 0.6 |
| 30- | 45.6852- | 111.4584- | 2- | 15- | 0- | M37354 | 60040 | -0.07 | 665 | 32360 | 79 | 135 | 13.4 | 157 | 3.5 | 5 | 1.8 | 39190 | 11.7 | 18450 | 42 | 0.5 |
| 30- | 45.6810- | 111.4536- | 2- | 15- | 0- | M37355 | 59490 | -0.05 | 723 | 21430 | 66 | 149 | 13.6 | 106 | 3.0 | 5 | 1.5 | 29830 | 10.1 | 20300 | 40 | 0.4 |
| 30- | 45.7294- | 111.4850- | 2- | 15- | 0- | M37356 | 57260 | -0.07 | 674 | 20010 | 97 | 175 | 16.0 | 83 | 9.0 | 6 | 2.3 | 27490 | 12.8 | 23670 | 50 | 0.6 |
| 30- | 45.7404- | 111.4724- | 2- | 15- | 0- | M37357 | 59040 | -0.06 | 655 | 46550 | 83 | 162 | 9.9 | 72 | 4.7 | 5 | 1.6 | 28980 | 9.7 | 22780 | 45 | 0.6 |
| 30- | 45.5956- | 111.4910- | 2- | 12- | 0- | M37358 | 71540 | -0.08 | 698 | 31400 | 121 | -103 | 31.2 | 194 | 5.7 | 7 | 3.5 | 55560 | 28.8 | 13360 | 55 | 0.9 |
| 30- | 45.7152- | 111.4109- | 2- | 15- | 0- | M37359 | 59760 | -0.06 | 740 | 31620 | 71 | -82 | 18.6 | 56 | 5.9 | 5 | 2.1 | 27630 | 7.4 | 20340 | 37 | 0.4 |
| 30- | 45.7437- | 111.4113- | 2- | 15- | 0- | M37360 | 56850 | -0.07 | 612 | 14760 | 73 | -88 | 10.6 | 77 | 4.2 | 5 | 1.4 | 27410 | 9.4 | 21430 | 45 | 0.3 |
| 30- | 45.3688- | 110.5619- | 2- | 12- | 0- | M37361 | 61250 | -0.07 | 913 | 26860 | 84 | -96 | 13.9 | 144 | 4.6 | 5 | 1.8 | 34030 | 12.9 | 20510 | 41 | 0.6 |
| 30- | 45.3704- | 110.8529- | 2- | 12- | 0- | M37362 | 57240 | -0.06 | 719 | 39840 | 77 | -85 | 11.7 | 103 | 4.3 | 4 | 1.5 | 34510 | 12.9 | 17230 | 42 | 0.5 |
| 30- | 45.3805- | 110.1038- | 2- | 12- | 0- | M37363 | 61720 | -0.07 | 1239 | 25950 | 78 | -95 | 15.6 | 137 | 3.8 | 5 | 1.7 | 44110 | 13.1 | 18300 | 47 | 0.5 |
| 30- | 45.3588- | 110.1064- | 2- | 12- | 0- | M37364 | 56920 | -0.08 | 934 | 51850 | 100 | -94 | 35.6 | 390 | 6.3 | 4 | 1.8 | 67220 | 11.3 | 6506 | 46 | 0.4 |
| 30- | 45.3673- | 110.0969- | 2- | 12- | 0- | M37365 | 62280 | -0.07 | 885 | 24300 | 77 | -99 | 13.3 | 103 | 4.0 | 5 | 1.7 | 36950 | 10.6 | 13410 | 36 | 0.5 |
| 30- | 45.3711- | 110.0500- | 2- | 12- | 0- | M37366 | 58550 | -0.06 | 749 | 28960 | 77 | -88 | 14.4 | 223 | 3.1 | 4 | 1.8 | 41060 | 13.0 | 20800 | 40 | 0.5 |
| 30- | 45.3718- | 110.0300- | 2- | 12- | 0- | M37367 | 56410 | -0.08 | 1016 | 54260 | 91 | -102 | 37.3 | 477 | 5.4 | 4 | 1.9 | 80990 | 15.7 | 10240 | 56 | 0.4 |
| 30- | 45.4590- | 110.0865- | 2- | 12- | 0- | M37368 | 57900 | -0.06 | 762 | 25010 | 56 | -91 | 14.6 | 103 | 3.3 | 5 | 1.5 | 36740 | 9.8 | 17510 | 39 | 0.4 |
| 30- | 45.4602- | 110.0878- | 2- | 12- | 0- | M37369 | 55830 | -0.07 | 746 | 28600 | 82 | -88 | 11.6 | 104 | 4.3 | 5 | 2.2 | 30400 | 12.3 | 17780 | 40 | 0.4 |
| 30- | 45.4840- | 110.0833- | 2- | 12- | 0- | M37370 | 62010 | -0.07 | 758 | 26560 | 74 | -90 | 16.6 | 145 | 3.0 | 4 | 1.7 | 41300 | 9.5 | 19900 | 41 | 0.4 |
| 30- | 45.4881- | 110.0799- | 2- | 12- | 0- | M37371 | 60570 | -0.06 | 983 | 25570 | 72 | 77 | 14.3 | 148 | 4.2 | 5 | 1.7 | 40530 | 10.3 | 17100 | 47 | 0.5 |
| 30- | 45.4944- | 110.0404- | 2- | 12- | 0- | M37372 | 58490 | -0.06 | 892 | 23180 | 78 | -81 | 17.5 | 155 | 4.6 | 5 | 1.8 | 42320 | 12.7 | 17860 | 39 | 0.4 |
| 30- | 45.4961- | 110.0391- | 2- | 12- | 0- | M37373 | 64100 | -0.08 | 973 | 27780 | 85 | -101 | 18.7 | 210 | 3.2 | 5 | 2.0 | 45160 | 11.0 | 20820 | 33 | 0.4 |
| 30- | 45.9810- | 111.2420- | 2- | 15- | 0- | M37374 | 58420 | -0.06 | 873 | 28940 | 74 | -85 | 11.7 | 114 | 3.8 | 4 | 1.4 | 32170 | 9.9 | 16980 | 35 | 0.4 |
| 30- | 45.9789- | 111.2063- | 2- | 12- | 0- | M37375 | 57370 | -0.06 | 738 | 38480 | 76 | 126 | 10.0 | 121 | 4.4 | 4 | 1.7 | 32800 | 10.3 | 16260 | 43 | 0.5 |
| 30- | 45.9749- | 111.2098- | 2- | 15- | 0- | M37376 | 60930 | -0.07 | 1172 | 65990 | 63 | -63 | 20.8 | 122 | 4.6 | 5 | 1.8 | 36170 | 5.0 | 18360 | 33 | 0.4 |

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



| DOE SAMPLE NUMBER (STATE-LATITUDE-LONGITUDE-DOE LAB-SAMPLE TYPE-REPLICATE) | LASL SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | U/Th RATIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mg | Mn | Na | Rb | Sb | Sc | Sm | Sr | Ta | Tb | Th | Ti | V | Yb | Zn | |
| 30-45.3241-111.1703-2-12- | 0-M37326 | 12720 | 749 | 14330 | 62 | -1 | 11.5 | 5.3 | -267 | -1 | -1 | 10.8 | 3866 | 97 | 3.6 | 108 | 0.333 |
| 30-45.8472-110.9947-2-12- | 0-M37327 | 15410 | 578 | 3477 | 97 | -1 | 10.2 | 4.8 | -208 | -1 | -1 | 14.6 | 3220 | 70 | 3.3 | 73 | 0.219 |
| 30-45.8361-110.9986-2-12- | 0-M37328 | 17980 | 484 | 5793 | 61 | -1 | 7.6 | 5.0 | -244 | -1 | -1 | 8.9 | 2322 | 62 | -1.7 | -33 | 0.258 |
| 30-45.8691-111.0880-2-15- | 0-M37329 | 11330 | 631 | 12350 | 81 | -2 | 11.1 | 6.4 | -243 | -1 | -1 | 13.9 | 3172 | 76 | 4.3 | -34 | 0.259 |
| 30-45.9090-111.0730-2-15- | 0-M37330 | 13810 | 793 | 9773 | 113 | -2 | 12.1 | 5.6 | -256 | -1 | -1 | 13.8 | 3265 | 77 | 3.8 | 88 | 0.203 |
| 30-45.9245-111.0525-2-12- | 0-M37331 | 9941 | 830 | 12890 | 93 | -2 | 13.5 | 5.8 | -285 | 2 | -1 | 12.8 | 3771 | 100 | 3.6 | 138 | 0.625 |
| 30-45.9300-111.0750-2-12- | 0-M37332 | 13370 | 933 | 17200 | 41 | -2 | 12.5 | 5.7 | -345 | -1 | -1 | 7.7 | 4945 | 141 | 3.4 | -42 | 0.299 |
| 30-45.9419-111.0834-2-15- | 0-M37333 | 15740 | 692 | 8324 | 95 | -1 | 9.7 | 5.7 | -256 | -1 | -1 | 11.9 | 2704 | 73 | 2.4 | -77 | 0.210 |
| 30-45.9872-111.0217-2-15- | 0-M37334 | 6739 | 314 | 9632 | 85 | -1 | 8.1 | 5.2 | -184 | -1 | -1 | 11.7 | 3156 | 100 | 3.2 | 108 | 0.299 |
| 30-45.9724-111.0539-2-12- | 0-M37335 | 11520 | 352 | 8743 | 51 | -1 | 6.3 | 3.4 | -192 | -1 | -1 | 7.5 | 2393 | 63 | 3.0 | -10 | 0.347 |
| 30-45.9727-111.0906-2-12- | 0-M37336 | 10140 | 432 | 11740 | 67 | -2 | 7.8 | 5.2 | -256 | -1 | -1 | 14.0 | 3034 | 70 | 4.1 | 47 | 0.221 |
| 30-45.9792-111.0998-2-12- | 0-M37337 | 16960 | 674 | 8955 | 72 | -2 | 10.5 | 5.8 | -250 | -1 | -1 | 12.2 | 3017 | 72 | 2.8 | 45 | 0.238 |
| 30-45.9989-111.0858-2-12- | 0-M37338 | 16510 | 429 | 10880 | 83 | -2 | 10.3 | 5.5 | -226 | 1 | -1 | 14.3 | 3392 | 70 | 3.2 | 125 | 0.224 |
| 30-45.9981-111.1745-2-12- | 0-M37339 | 9094 | 453 | 10450 | 66 | -1 | 9.2 | 5.0 | -216 | -1 | -1 | 10.9 | 3231 | 95 | 2.9 | -58 | 0.229 |
| 30-45.9918-111.1651-2-12- | 0-M37340 | 8968 | 448 | 12800 | 70 | -1 | 7.8 | 7.0 | -242 | -1 | -1 | 13.4 | 3162 | 73 | 4.9 | 59 | 0.269 |
| 30-45.9770-111.1834-2-15- | 0-M37341 | 8930 | 676 | 11050 | 73 | -1 | 9.6 | 5.4 | 421 | -1 | -1 | 11.2 | 3540 | 91 | 3.1 | -73 | 0.241 |
| 30-45.6596-111.3118-2-12- | 0-M37342 | 11330 | 727 | 13160 | 75 | -2 | 10.3 | 5.9 | -287 | -1 | -1 | 14.7 | 3727 | 91 | 2.9 | 131 | 0.218 |
| 30-45.6649-111.3285-2-12- | 0-M37343 | 9281 | 518 | 14730 | -28 | -1 | 7.9 | 5.3 | -255 | -1 | -1 | 11.9 | 3081 | 83 | 3.6 | 60 | 0.252 |
| 30-45.6512-111.3445-2-15- | 0-M37344 | 10520 | 781 | 13200 | 64 | -2 | 10.8 | 7.6 | -323 | -1 | -1 | 12.9 | 3816 | 96 | 4.4 | 92 | 0.248 |
| 30-45.6581-111.4103-2-11- | 0-M37345 | 10320 | 1029 | 11570 | 81 | -2 | 10.7 | 6.3 | -349 | -1 | -1 | 15.6 | 2862 | 85 | 4.0 | 125 | 0.199 |
| 30-45.6291-111.3963-2-11- | 0-M37346 | 8641 | 576 | 14840 | 61 | -2 | 9.8 | 6.7 | -272 | -1 | -1 | 13.9 | 3060 | 67 | 4.2 | 91 | 0.223 |
| 30-45.6478-111.4122-2-12- | 0-M37347 | 12320 | 2034 | 13360 | 50 | -2 | 20.2 | 7.0 | -441 | -1 | -1 | 14.8 | 6026 | 109 | 5.0 | 151 | 0.243 |
| 30-45.6465-111.4368-2-12- | 0-M37348 | 10350 | 690 | 12890 | 80 | -2 | 9.0 | 6.5 | -307 | -1 | -1 | 12.8 | 3146 | 73 | 5.5 | -69 | 0.234 |
| 30-45.6436-111.4543-2-15- | 0-M37349 | 10290 | 944 | 12870 | -32 | -2 | 12.6 | 7.4 | -300 | 2 | 1 | 13.6 | 6568 | 99 | 5.9 | 110 | 0.316 |
| 30-45.6417-111.4651-2-15- | 0-M37350 | 12360 | 844 | 15780 | 58 | -2 | 12.5 | 6.9 | -291 | -1 | -1 | 14.5 | 4340 | 99 | 4.3 | 115 | 0.214 |
| 30-45.6426-111.4970-2-15- | 0-M37351 | 13910 | 1141 | 13500 | 60 | -2 | 18.1 | 7.4 | -297 | -1 | -1 | 14.9 | 4786 | 117 | 5.4 | 116 | 0.235 |
| 30-45.7003-111.4896-2-15- | 0-M37352 | 10360 | 967 | 14780 | 55 | -2 | 12.3 | 7.8 | -343 | -1 | -1 | 16.1 | 4588 | 100 | 4.3 | 80 | 0.280 |
| 30-45.6879-111.4698-2-11- | 0-M37353 | 10590 | 1038 | 14890 | 65 | -2 | 13.5 | 6.1 | -321 | -1 | -1 | 15.5 | 4291 | 107 | 6.0 | 74 | 0.316 |
| 30-45.6852-111.4584-2-15- | 0-M37354 | 13160 | 796 | 13730 | 38 | -2 | 11.7 | 6.7 | 496 | -1 | -1 | 13.3 | 4261 | 105 | 3.6 | 156 | 0.241 |
| 30-45.6810-111.4536-2-15- | 0-M37355 | 7608 | 694 | 17270 | 58 | -1 | 10.3 | 5.6 | -258 | -1 | -1 | 12.1 | 2666 | 71 | 3.9 | -36 | 0.289 |
| 30-45.7294-111.4850-2-15- | 0-M37356 | 9218 | 650 | 15120 | 86 | -2 | 7.8 | 8.0 | -323 | -1 | 1 | 16.8 | 3050 | 60 | 4.1 | 39 | 0.226 |
| 30-45.7404-111.4724-2-15- | 0-M37357 | 11590 | 625 | 12350 | 86 | -1 | 8.6 | 6.9 | -264 | 2 | -1 | 17.0 | 2399 | 63 | 4.2 | 100 | 0.212 |
| 30-45.5956-111.4910-2-12- | 0-M37358 | 14290 | 1324 | 13370 | 64 | -2 | 17.5 | 9.3 | -367 | -2 | -1 | 19.4 | 6541 | 116 | 6.2 | 77 | 0.284 |
| 30-45.7152-111.4109-2-15- | 0-M37359 | 9155 | 553 | 12030 | 74 | -2 | 7.9 | 6.0 | -264 | -1 | -1 | 11.4 | 2529 | 64 | 3.7 | 110 | 0.289 |
| 30-45.7437-111.4113-2-15- | 0-M37360 | 7678 | 694 | 13120 | 84 | -2 | 9.0 | 5.2 | -276 | -1 | -1 | 12.4 | 2635 | 68 | 4.7 | -52 | 0.250 |
| 30-45.3688-110.5619-2-12- | 0-M37361 | 10550 | 670 | 13570 | -32 | -2 | 9.3 | 7.5 | -314 | -1 | -1 | 12.5 | 3800 | 98 | 3.5 | -46 | 0.272 |
| 30-45.3704-110.8529-2-12- | 0-M37362 | 14180 | 625 | 12310 | 62 | -1 | 9.6 | 5.5 | -262 | -1 | -1 | 11.9 | 2752 | 92 | 3.0 | 72 | 0.294 |
| 30-45.3805-110.1038-2-12- | 0-M37363 | 10020 | 874 | 13470 | 57 | -2 | 11.2 | 6.0 | -323 | -2 | -1 | 13.3 | 4806 | 130 | 4.0 | -128 | 0.489 |
| 30-45.3588-110.1064-2-12- | 0-M37364 | 27700 | 1070 | 15760 | -34 | -2 | 34.1 | 6.0 | 672 | -1 | -1 | 11.1 | 5296 | 218 | 3.4 | -49 | 0.180 |
| 30-45.3673-110.0969-2-12- | 0-M37365 | 10320 | 1021 | 11440 | 75 | -2 | 10.4 | 7.2 | -366 | -1 | -1 | 12.6 | 4048 | 94 | 4.0 | 79 | 0.262 |
| 30-45.3711-110.0500-2-12- | 0-M37366 | 11020 | 721 | 13500 | 87 | -2 | 10.1 | 5.4 | -273 | 1 | 1 | 10.4 | 3256 | 118 | 3.8 | 103 | 0.298 |
| 30-45.3718-110.0300-2-12- | 0-M37367 | 29870 | 1209 | 16220 | 39 | -2 | 36.0 | 7.8 | -329 | -1 | -1 | 13.9 | 7376 | 262 | 3.7 | 122 | 0.165 |
| 30-45.4590-110.0865-2-12- | 0-M37368 | 11990 | 961 | 11920 | 73 | -2 | 10.4 | 5.1 | -316 | -1 | -1 | 10.8 | 3922 | 86 | 3.4 | 134 | 0.306 |
| 30-45.4602-110.0878-2-12- | 0-M37369 | 10300 | 727 | 10490 | -30 | -2 | 9.0 | 6.5 | -306 | -1 | -1 | 12.0 | 3163 | 84 | 3.2 | -44 | 0.308 |
| 30-45.4840-110.0833-2-12- | 0-M37370 | 10430 | 963 | 11060 | 52 | -2 | 11.9 | 5.7 | -309 | -1 | -1 | 11.3 | 3472 | 97 | 3.4 | 98 | 0.292 |
| 30-45.4881-110.0799-2-12- | 0-M37371 | 12700 | 975 | 12170 | 62 | -2 | 12.2 | 6.8 | -307 | -1 | 1 | 11.2 | 3744 | 95 | 3.3 | 72 | 0.304 |
| 30-45.4944-110.0404-2-12- | 0-M37372 | 10720 | 769 | 10950 | 74 | -2 | 10.9 | 5.9 | -277 | -1 | -1 | 11.4 | 4282 | 122 | 4.0 | 123 | 0.281 |
| 30-45.4961-110.0391-2-12- | 0-M37373 | 12310 | 916 | 12930 | 65 | -2 | 12.5 | 6.0 | -344 | -1 | -1 | 10.8 | 4628 | 138 | 3.2 | 113 | 0.250 |
| 30-45.9810-111.2420-2-15- | 0-M37374 | 10630 | 626 | 12810 | 69 | -2 | 9.9 | 5.4 | -261 | -1 | -1 | 11.0 | 3064 | 78 | 3.2 | 122 | 0.264 |
| 30-45.9789-111.2063-2-12- | 0-M37375 | 10970 | 692 | 12820 | 78 | -2 | 9.9 | 5.9 | -277 | -1 | -1 | 11.7 | 3777 | 87 | 3.7 | 122 | 0.256 |
| 30-45.9749-111.2098-2-15- | 0-M37376 | 10760 | 688 | 3561 | -34 | -2 | 12.0 | 5.5 | -265 | -1 | -1 | 7.9 | 3094 | 97 | 3.3 | 140 | 0.418 |

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

(1)

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER AND FIELD DATA | | | | | | | | | | | | | | | | | | | | | | | | U CONCENTRATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | TIME SAMPLED DATE | TIME SAMPLED HOUR | AIR TEMPERATURE | WATER TEMPERATURE | COMMENTS | SPECIAL MEASUREMENTS | pH | CONDUCTIVITY (µmho/cm) | SCINTILLOMETER (eU, ppm) | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm |
| 30- | 45.9725- | 111.1700- | 2- | 15- | 0- | M37377- | 10/10/76- | 12- | 10- | | -C- | - | - | - | | -1- | 1- | 5- | 6- | -1- | | -2- | 6- | 3- | 3- | 1- | -3- | - | - | - | - | 3.00 |
| 30- | 45.9657- | 111.1828- | 2- | 15- | 0- | M37378- | 10/10/76- | 13- | 11- | | -C- | - | - | - | | -1- | 1- | 5- | 1- | -1- | | -2- | 3- | 3- | 3- | 1- | -3- | - | - | - | - | 2.80 |
| 30- | 45.9618- | 111.1829- | 2- | 12- | 0- | M37379- | 10/10/76- | 10- | 13- | 8.8- | - | - | 5.9- | 430- | | -1- | 1- | 5- | 6- | 3- | 2- | 1- | 2- | 3- | 3- | 3- | 1- | -3- | - | - | - | - | 3.20 |
| 30- | 45.7504- | 111.2973- | 2- | 12- | 0- | M37380- | 10/10/76- | 13- | 1- | 0.2- | C- | - | 5.7- | 600- | | -4- | -4- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 2- | 3- | -3- | - | - | - | - | 3.90 |
| 30- | 45.7578- | 111.3966- | 2- | 15- | 0- | M37381- | 10/10/76- | 13- | 1- | | -C- | - | - | - | | -1- | 1- | 5- | 1- | -1- | | -2- | 4- | 3- | 2- | 3- | -3- | - | - | - | - | 3.00 |
| 30- | 45.8108- | 111.4644- | 2- | 15- | 0- | M37382- | 10/10/76- | 13- | 2- | | -C- | - | - | - | | -1- | 1- | 5- | 6- | -1- | | -2- | 3- | 2- | 3- | 3- | -3- | - | - | - | - | 3.00 |
| 30- | 45.7842- | 111.3978- | 2- | 15- | 0- | M37383- | 10/10/76- | 13- | 2- | | -C- | - | - | - | | -1- | 1- | 5- | 6- | -1- | | -2- | 3- | 2- | 2- | 3- | -3- | - | - | - | - | 3.50 |
| 30- | 45.7828- | 111.3979- | 2- | 15- | 0- | M37384- | 10/10/76- | 14- | 2- | | -C- | - | - | - | | -1- | 1- | 4- | 1- | -1- | | -2- | 3- | 2- | 2- | 3- | -3- | - | - | - | - | 3.40 |
| 30- | 45.7842- | 111.3994- | 2- | 15- | 0- | M37385- | 10/11/76- | 8- | 2- | | -C- | - | - | - | | -1- | 1- | 5- | 1- | -1- | | -2- | 3- | 2- | 2- | 3- | -3- | - | - | - | - | 3.30 |
| 30- | 45.8295- | 111.3499- | 2- | 15- | 0- | M37386- | 10/11/76- | 10- | 2- | | -C- | - | - | - | | -1- | 1- | 4- | 1- | -1- | | -2- | 3- | 2- | 2- | 3- | -3- | - | - | - | - | 2.80 |
| 30- | 45.8424- | 111.3650- | 2- | 12- | 0- | M37387- | 10/11/76- | 10- | 5- | 3.4- | C- | - | 5.7- | 500- | | -1- | 1- | 5- | 6- | 2- | 2- | 2- | 2- | 4- | 3- | 2- | 3- | -3- | - | - | - | - | 3.60 |
| 30- | 45.8340- | 111.4105- | 2- | 15- | 0- | M37388- | 10/11/76- | 10- | 5- | | -C- | - | - | - | | -1- | 1- | 4- | 1- | -1- | | -2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 2.70 |
| 30- | 45.8446- | 111.4108- | 2- | 15- | 0- | M37389- | 10/11/76- | 9- | 5- | | -C- | - | - | - | | -1- | 1- | 4- | 1- | -1- | | -2- | 3- | 3- | 2- | 3- | -3- | - | - | - | - | 3.00 |
| 30- | 45.8521- | 111.4193- | 2- | 15- | 0- | M37390- | 10/11/76- | 9- | 5- | | -C- | - | - | - | | -1- | 1- | 4- | 1- | -1- | | -2- | 4- | 2- | 2- | 3- | -3- | - | - | - | - | 3.40 |
| 30- | 45.8810- | 111.4377- | 2- | 15- | 0- | M37391- | 10/11/76- | 8- | 3- | | -C- | - | - | - | | -1- | 1- | 4- | 1- | -1- | | -2- | 4- | 3- | 4- | 3- | -3- | - | - | - | - | 3.70 |
| 30- | 45.8681- | 111.3910- | 2- | 15- | 0- | M37392- | 10/11/76- | 8- | 3- | | -C- | - | - | - | | -1- | 1- | 4- | 1- | -1- | | -2- | 3- | 2- | 2- | 3- | -3- | - | - | - | - | 3.00 |
| 30- | 45.8770- | 111.4028- | 2- | 11- | 0- | M37393- | 10/11/76- | 10- | 4- | 2.2- | - | - | 5.7- | 500- | | -1- | 1- | 5- | 6- | 2- | 2- | 1- | 1- | 6- | 4- | 2- | 3- | -3- | - | - | - | - | 3.50 |
| 30- | 45.8942- | 111.3334- | 2- | 15- | 0- | M37394- | 10/11/76- | 11- | 4- | | -C- | - | - | - | | -1- | 1- | 3- | 7- | -1- | | -2- | 3- | 2- | 5- | 3- | -3- | - | - | - | - | 3.60 |
| 30- | 45.9139- | 111.3564- | 2- | 15- | 0- | M37395- | 10/11/76- | 11- | 5- | | -C- | - | - | - | | -1- | 1- | 5- | 1- | -1- | | -2- | 3- | 2- | 4- | 3- | -3- | - | - | - | - | 2.60 |
| 30- | 45.9434- | 111.2805- | 2- | 15- | 0- | M37396- | 10/11/76- | 11- | 4- | | -C- | - | - | - | | -1- | 7- | 2- | 7- | -1- | | -2- | 1- | 1- | 5- | 3- | -3- | - | - | - | - | 3.40 |
| 30- | 45.9384- | 111.2979- | 2- | 15- | 0- | M37397- | 10/11/76- | 12- | 4- | | -C- | - | - | - | | -1- | 1- | 3- | 1- | -1- | | -2- | 1- | 2- | 5- | 3- | -3- | - | - | - | - | 3.10 |
| 30- | 45.9254- | 111.3174- | 2- | 15- | 0- | M37398- | 10/11/76- | 12- | 4- | | -C- | - | - | - | | -1- | 1- | 4- | 1- | -1- | | -2- | 3- | 1- | 4- | 3- | -3- | - | - | - | - | 3.00 |
| 30- | 45.9021- | 111.3189- | 2- | 15- | 0- | M37399- | 10/11/76- | 12- | 8- | | -C- | - | - | - | | -1- | 1- | 5- | 1- | -1- | | -2- | 3- | 3- | 4- | 3- | -3- | - | - | - | - | 3.30 |
| 30- | 45.9524- | 111.1709- | 2- | 15- | 0- | M37400- | 10/11/76- | 13- | 9- | | -C- | - | - | - | | -1- | 7- | 5- | 7- | -1- | | -2- | 3- | 2- | 2- | 3- | -3- | - | - | - | - | 2.50 |
| 30- | 45.9343- | 111.1381- | 2- | 12- | 0- | M37401- | 10/11/76- | 12- | 10- | 6.4- | - | - | 5.7- | 340- | | -1- | 1- | 4- | 7- | 3- | 2- | 1- | 2- | 2- | 3- | 2- | 3- | -3- | - | - | - | - | 2.70 |
| 30- | 45.9312- | 111.1700- | 2- | 12- | 0- | M37402- | 10/11/76- | 13- | 10- | 6.8- | - | - | 5.9- | 500- | | -1- | 1- | 5- | 6- | 4- | 2- | 1- | 2- | 2- | 3- | 2- | 3- | -3- | - | - | - | - | 2.60 |
| 30- | 45.9235- | 111.1841- | 2- | 15- | 0- | M37403- | 10/11/76- | 14- | 10- | | -C- | - | - | - | | -1- | 1- | 4- | 1- | -1- | | -2- | 3- | 2- | 4- | 3- | -3- | - | - | - | - | 2.10 |
| 30- | 45.9140- | 111.1448- | 2- | 15- | 0- | M37404- | 10/11/76- | 14- | 7- | | -C- | - | - | - | | -1- | 1- | 5- | 6- | -1- | | -2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 3.20 |
| 30- | 45.9103- | 111.1486- | 2- | 12- | 0- | M37405- | 10/11/76- | 15- | 8- | 4.4- | C- | - | 5.7- | 310- | | -1- | 1- | 5- | 6- | 4- | 2- | 1- | 2- | 2- | 3- | 2- | 3- | -3- | - | - | - | - | 3.30 |
| 30- | 45.9112- | 111.1829- | 2- | 12- | 0- | M37406- | 10/11/76- | 14- | 10- | 8.8- | - | - | 5.7- | 410- | | -1- | 1- | 2- | 7- | 3- | 2- | 1- | 2- | 3- | 3- | 2- | 3- | -3- | - | - | - | - | 2.60 |
| 30- | 45.8898- | 111.2225- | 2- | 15- | 0- | M37407- | 10/11/76- | 14- | 10- | | -C- | - | - | - | | -1- | 1- | 4- | 1- | -1- | | -2- | 1- | 1- | 3- | 3- | -3- | - | - | - | - | 2.70 |
| 30- | 45.8726- | 111.1792- | 2- | 15- | 0- | M37408- | 10/11/76- | 14- | 9- | | -C- | - | - | - | | -1- | 1- | 5- | 6- | -1- | | -2- | 4- | 3- | 2- | 3- | -3- | - | - | - | - | 2.70 |
| 30- | 45.8829- | 111.1404- | 2- | 15- | 0- | M37409- | 10/11/76- | 15- | 11- | | -C- | - | - | - | | -1- | 1- | 4- | 1- | -1- | | -2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | 2.70 |
| 30- | 45.8500- | 111.1451- | 2- | 12- | 0- | M37410- | 10/11/76- | 15- | 9- | | -C- | - | 5.7- | 325- | | -1- | 1- | 5- | 8- | 3- | 2- | 3- | 2- | 2- | 2- | 2- | 3- | -3- | - | - | - | - | 2.60 |
| 30- | 45.8530- | 111.1171- | 2- | 12- | 0- | M37411- | 10/11/76- | 15- | 9- | 6.6- | - | - | 5.7- | 410- | | -1- | 1- | 2- | 7- | 4- | 2- | 1- | 2- | 2- | 3- | 2- | 3- | -3- | - | - | - | - | 6.80 |
| 30- | 45.8861- | 111.1061- | 2- | 12- | 0- | M37412- | 10/20/76- | 10- | 5- | 2.0- | C- | - | 5.7- | 270- | | -4- | | -4- | 6- | 2- | 3- | 1- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | 4.70 |
| 30- | 45.3333- | 111.7467- | 2- | 12- | 0- | M37413- | 10/20/76- | 10- | 5- | 2.4- | - | - | 5.7- | 290- | | -4- | | -4- | 6- | 3- | 3- | 1- | 2- | 3- | 3- | 2- | 1- | -3- | - | - | - | - | 4.70 |
| 30- | 45.4191- | 111.7501- | 2- | 12- | 0- | M37414- | 10/20/76- | 11- | 7- | 2.0- | - | - | 5.7- | 270- | | -4- | | -4- | 6- | 2- | 3- | 1- | 2- | 4- | 4- | 2- | 1- | -3- | - | - | - | - | 9.00 |
| 30- | 45.4352- | 111.7112- | 2- | 12- | 0- | M37415- | 10/20/76- | 11- | 6- | 2.0- | - | - | 5.7- | 300- | | -4- | | -4- | 6- | 4- | 3- | 1- | 2- | 4- | 4- | 2- | 1- | -3- | - | - | - | - | 24.50 |
| 30- | 45.6290- | 111.2568- | 2- | 15- | 0- | M37416- | 10/11/76- | 8- | -3- | | - | - | - | - | | -1- | 6- | 3- | 6- | - | - | - | - | -4- | 3- | 3- | 3- | -3- | - | - | - | - | 3.20 |
| 30- | 45.5638- | 111.2639- | 2- | 12- | 0- | M37417- | 10/11/76- | 8- | -2- | 2.4- | - | - | 6.3- | 465- | | -1- | 6- | 4- | 7- | 2- | 2- | 1- | 2- | 2- | 2- | 3- | 3- | -3- | - | - | - | - | 3.90 |
| 30- | 45.5702- | 111.2944- | 2- | 12- | 0- | M37418- | 10/11/76- | 9- | -2- | | - | - | 6.0- | 160- | | -2- | 6- | 4- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 2- | 3- | -3- | - | - | - | - | 5.40 |
| 30- | 45.5315- | 111.2504- | 2- | 15- | 0- | M37419- | 10/11/76- | 9- | -1- | | - | - | - | - | | -2- | 4- | 4- | 6- | -1- | | -2- | 4- | 4- | 3- | 3- | -3- | - | - | - | - | 3.50 |
| 30- | 45.5074- | 111.3542- | 2- | 12- | 0- | M37420- | 10/11/76- | 10- | -1- | | - | - | 6.3- | 145- | | -2- | 4- | 4- | 4- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | 2.60 |
| 30- | 45.5029- | 111.3596- | 2- | 12- | 0- | M37421- | 10/11/76- | 10- | -1- | | - | - | 6.3- | 350- | | -2- | 4- | 4- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 2.50 |
| 30- | 45.6635- | 111.2950- | 2- | 15- | 0- | M37422- | 10/12/76- | 17- | - | | - | - | - | - | | -2- | 4- | 4- | 6- | - | - | - | -4- | 4- | 3- | 3- | -3- | - | - | - | - | 3.20 |
| 30- | 45.3799- | 111.9162- | 2- | 12- | 0- | M37423- | 10/21/76- | 11- | 3- | 4.5- | C- | - | 5.2- | 100- | | -3- | 7- | 4- | 6- | 4- | 2- | 1- | 2- | 2- | 3- | 4- | 1- | -3- | - | - | - | - | 16.20 |
| 30- | 45.3794- | 111.9145- | 2- | 12- | 0- | M37424- | 10/21/76- | 11- | 35- | 5.0- | C- | - | 5.5- | 120- | | -3- | 7- | 4- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -3- | - | - | - | - | 23.80 |
| 30- | 45.3694- | 111.9268- | 2- | 12- | 0- | M37425- | 10/21/76- | 12- | 8- | 3.0- | C- | - | 5.2- | 160- | | -4- | | -4- | 6- | 2- | 2- | 1- | 2- | 3- | 3- | 4- | 1- | -3- | - | - | - | - | 4.20 |
| 30- | 45.3601- | 111.9338- | 2- | 12- | 0- | M37426- | 10/21/76- | 12- | 9- | 4.0- | C- | - | 5.5- | 120- | | -4- | | -4- | 6- | 3- | 2- | 1- | 2- | 2- | 2- | 4- | 1- | -3- | - | - | - | - | 6.60 |
| 30- | 45.3583- | 111.9174- | 2- | 12- | 0- | M37427- | 10/21/76- | 12- | 9- | 3.0- | C- | - | 5.7- | 250- | | -3- | 8- | 4- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 3.90 |

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

②

| DOE SAMPLE NUMBER | | | | | | LABS SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE (Concentrations reported in weight parts per million (ppm)) | | | | | | | | | ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY (Concentrations in weight ppm) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Ag | Bi | Cd | Cu | Nb | Ni | Pb | Sn | W | Be | Li |
| 30- | 45.9725- | 111.1700- | 2- | 15- | 0- | M37377 | -5 | -5 | -5 | 24 | -20 | 37 | 7 | -10 | -15 | 2 | 35 |
| 30- | 45.9657- | 111.1828- | 2- | 15- | 0- | M37378 | -5 | -5 | -5 | 31 | -20 | -15 | 9 | -10 | -15 | 2 | 29 |
| 30- | 45.9618- | 111.1829- | 2- | 12- | 0- | M37379 | -5 | -5 | -5 | 17 | -20 | -15 | 10 | -10 | -15 | -1 | 37 |
| 30- | 45.7504- | 111.2973- | 2- | 12- | 0- | M37380 | -5 | -5 | -5 | 14 | -20 | 19 | 12 | -10 | -15 | 3 | 27 |
| 30- | 45.7578- | 111.3966- | 2- | 15- | 0- | M37381 | -5 | -5 | -5 | 22 | -20 | 22 | 16 | -10 | -15 | 3 | 37 |
| 30- | 45.8108- | 111.4644- | 2- | 15- | 0- | M37382 | -5 | -5 | -5 | 19 | -20 | -15 | 15 | -10 | -15 | 3 | 43 |
| 30- | 45.7842- | 111.3978- | 2- | 15- | 0- | M37383 | -5 | -5 | -5 | 28 | -20 | -15 | 18 | -10 | -15 | 3 | 44 |
| 30- | 45.7828- | 111.3979- | 2- | 15- | 0- | M37384 | -5 | -5 | -5 | 24 | -20 | -15 | 11 | -10 | -15 | 3 | 32 |
| 30- | 45.7842- | 111.3994- | 2- | 15- | 0- | M37385 | -5 | 6 | -5 | 21 | -20 | 27 | 9 | -10 | -15 | 3 | 16 |
| 30- | 45.8295- | 111.3499- | 2- | 15- | 0- | M37386 | -5 | -5 | -5 | 20 | -20 | -15 | 8 | -10 | -15 | 3 | 35 |
| 30- | 45.8424- | 111.3650- | 2- | 12- | 0- | M37387 | -5 | 7 | -5 | 17 | -20 | 22 | -5 | -10 | -15 | 3 | 31 |
| 30- | 45.8340- | 111.4105- | 2- | 15- | 0- | M37388 | -5 | -5 | -5 | 31 | -20 | 17 | 11 | -10 | -15 | 2 | 96 |
| 30- | 45.8446- | 111.4108- | 2- | 15- | 0- | M37389 | -5 | -5 | -5 | 23 | -20 | 22 | 12 | -10 | -15 | 3 | 42 |
| 30- | 45.8521- | 111.4193- | 2- | 15- | 0- | M37390 | -5 | -5 | -5 | 25 | -20 | -15 | 15 | -10 | -15 | 3 | 46 |
| 30- | 45.8810- | 111.4377- | 2- | 15- | 0- | M37391 | -5 | -5 | -5 | 22 | -20 | 15 | 9 | -10 | -15 | 1 | 27 |
| 30- | 45.8681- | 111.3910- | 2- | 15- | 0- | M37392 | -5 | -5 | -5 | 42 | -20 | 16 | 7 | -10 | -15 | 2 | 36 |
| 30- | 45.8770- | 111.4028- | 2- | 11- | 0- | M37393 | -5 | -5 | -5 | 38 | -20 | -15 | 9 | -10 | -15 | 2 | 24 |
| 30- | 45.8942- | 111.3334- | 2- | 15- | 0- | M37394 | -5 | 6 | -5 | 29 | -20 | 28 | 11 | -10 | -15 | 2 | 43 |
| 30- | 45.9139- | 111.3564- | 2- | 15- | 0- | M37395 | -5 | 6 | -5 | 12 | -20 | -15 | 10 | -10 | -15 | 2 | 39 |
| 30- | 45.9434- | 111.2805- | 2- | 15- | 0- | M37396 | -5 | -5 | -5 | 27 | -20 | 18 | 11 | -10 | -15 | 3 | 34 |
| 30- | 45.9384- | 111.2979- | 2- | 15- | 0- | M37397 | -5 | -5 | -5 | 43 | -20 | 65 | 5 | -10 | -15 | 3 | 48 |
| 30- | 45.9254- | 111.3174- | 2- | 15- | 0- | M37398 | -5 | -5 | -5 | 13 | -20 | -15 | 9 | -10 | -15 | 2 | 18 |
| 30- | 45.9021- | 111.3189- | 2- | 15- | 0- | M37399 | -5 | -5 | -5 | 39 | -20 | 43 | 26 | -10 | -15 | 3 | 48 |
| 30- | 45.9524- | 111.1709- | 2- | 15- | 0- | M37400 | -5 | -5 | -5 | 27 | -20 | -15 | 19 | -10 | -15 | 2 | 29 |
| 30- | 45.9343- | 111.1381- | 2- | 12- | 0- | M37401 | -5 | -5 | -5 | 30 | -20 | -15 | 9 | -10 | -15 | 2 | 27 |
| 30- | 45.9312- | 111.1700- | 2- | 12- | 0- | M37402 | -5 | -5 | -5 | 22 | -20 | -15 | 7 | -10 | -15 | 3 | 23 |
| 30- | 45.9235- | 111.1841- | 2- | 15- | 0- | M37403 | -5 | -5 | -5 | 36 | -20 | 24 | 9 | -10 | -15 | 2 | 99 |
| 30- | 45.9140- | 111.1448- | 2- | 15- | 0- | M37404 | -5 | -5 | -5 | 27 | -20 | 24 | 12 | -10 | -15 | 3 | 27 |
| 30- | 45.9103- | 111.1486- | 2- | 12- | 0- | M37405 | -5 | -5 | -5 | 22 | -20 | -15 | -5 | -10 | -15 | 3 | 28 |
| 30- | 45.9112- | 111.1829- | 2- | 12- | 0- | M37406 | -5 | -5 | -5 | 28 | -20 | 26 | 10 | -10 | -15 | 2 | 34 |
| 30- | 45.8898- | 111.2225- | 2- | 15- | 0- | M37407 | -5 | -5 | -5 | 28 | -20 | -15 | 13 | -10 | -15 | 2 | 40 |
| 30- | 45.8726- | 111.1792- | 2- | 15- | 0- | M37408 | -5 | -5 | -5 | 25 | -20 | 27 | -5 | -10 | -15 | 2 | 20 |
| 30- | 45.8829- | 111.1404- | 2- | 15- | 0- | M37409 | -5 | -5 | -5 | 24 | -20 | 24 | 5 | -10 | -15 | 2 | 35 |
| 30- | 45.8500- | 111.1451- | 2- | 12- | 0- | M37410 | -5 | -5 | -5 | 26 | -20 | 17 | 16 | -10 | -15 | 3 | 26 |
| 30- | 45.8530- | 111.1171- | 2- | 12- | 0- | M37411 | -5 | -5 | -5 | 10 | -20 | 44 | -5 | -10 | -15 | 1 | 19 |
| 30- | 45.8861- | 111.1061- | 2- | 12- | 0- | M37412 | -5 | -5 | -5 | 33 | -20 | 19 | -5 | -10 | -15 | 2 | 21 |
| 30- | 45.3333- | 111.7467- | 2- | 12- | 0- | M37413 | -5 | -5 | 5 | 28 | -20 | 61 | -5 | -10 | -15 | 3 | 28 |
| 30- | 45.4191- | 111.7501- | 2- | 12- | 0- | M37414 | -5 | -5 | -5 | -10 | -20 | 51 | 14 | -10 | -15 | 2 | 15 |
| 30- | 45.4352- | 111.7112- | 2- | 12- | 0- | M37415 | 44 | -5 | -5 | -10 | 60 | 69 | -5 | 11 | 55 | 2 | 11 |
| 30- | 45.6290- | 111.2568- | 2- | 15- | 0- | M37416 | -5 | -5 | -5 | 20 | -20 | -15 | 10 | -10 | -15 | 3 | 40 |
| 30- | 45.5638- | 111.2639- | 2- | 12- | 0- | M37417 | -5 | -5 | -5 | 31 | -20 | 41 | 15 | -10 | -15 | 2 | 37 |
| 30- | 45.5702- | 111.2944- | 2- | 12- | 0- | M37418 | -5 | -5 | -5 | 21 | -20 | 33 | 12 | -10 | -15 | 3 | 21 |
| 30- | 45.5315- | 111.2504- | 2- | 15- | 0- | M37419 | -5 | -5 | -5 | 14 | -20 | 43 | 9 | -10 | -15 | 2 | 11 |
| 30- | 45.5074- | 111.3542- | 2- | 12- | 0- | M37420 | -5 | 6 | -5 | 29 | -20 | 25 | 6 | -10 | -15 | 3 | 32 |
| 30- | 45.5029- | 111.3596- | 2- | 12- | 0- | M37421 | -5 | -5 | -5 | 29 | -20 | 30 | 14 | -10 | -15 | 2 | 40 |
| 30- | 45.6635- | 111.2950- | 2- | 15- | 0- | M37422 | -5 | -5 | -5 | 23 | -20 | -15 | 15 | -10 | -15 | 3 | 27 |
| 30- | 45.3799- | 111.9162- | 2- | 12- | 0- | M37423 | 19 | -5 | -5 | -10 | 44 | 63 | -5 | 13 | -15 | 2 | 8 |
| 30- | 45.3794- | 111.9145- | 2- | 12- | 0- | M37424 | 28 | -5 | -5 | -10 | 50 | 69 | -5 | -10 | -15 | 1 | 8 |
| 30- | 45.3694- | 111.9268- | 2- | 12- | 0- | M37425 | -5 | -5 | -5 | 36 | -20 | 19 | 12 | -10 | -15 | 2 | 23 |
| 30- | 45.3601- | 111.9338- | 2- | 12- | 0- | M37426 | -5 | -5 | -5 | 20 | -20 | 16 | -5 | 10 | -15 | 2 | 20 |
| 30- | 45.3583- | 111.9174- | 2- | 12- | 0- | M37427 | -5 | -5 | -5 | 31 | -20 | 24 | 13 | -10 | -15 | 2 | 41 |

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



| DOE SAMPLE NUMBER | | | | | | LAB. SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (Concentrations reported in weight parts per million (ppm)) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Al | Au | Ba | Ca | Ce | Cl | Co | Cr | Cs | Dy | Eu | Fe | Hf | K | La | Lu |
| 30- | 45.9725- | 111.1700- | 2- | 15- | | 0-M37377 | 58080 | -0.07 | 697 | 31770 | 80 | 123 | 18.2 | 159 | 3.7 | 5 | 1.7 | 41150 | 11.8 | 18050 | 36 | 0.4 |
| 30- | 45.9657- | 111.1828- | 2- | 15- | | 0-M37378 | 55890 | -0.06 | 640 | 38750 | 69 | -83 | 11.2 | 77 | 3.7 | 4 | 1.5 | 33660 | 10.6 | 16210 | 39 | 0.4 |
| 30- | 45.9618- | 111.1829- | 2- | 12- | | 0-M37379 | 61970 | -0.06 | 932 | 33120 | 69 | 217 | 11.9 | 96 | 3.4 | 4 | 1.8 | 37340 | 11.9 | 15710 | 40 | 0.5 |
| 30- | 45.7504- | 111.2973- | 2- | 12- | | 0-M37380 | 57190 | -0.05 | 836 | 26560 | 76 | 107 | 10.2 | 127 | 2.9 | 5 | 1.9 | 29640 | 16.8 | 17500 | 49 | 0.5 |
| 30- | 45.7578- | 111.3966- | 2- | 15- | | 0-M37381 | 58380 | -0.06 | 765 | 19480 | 82 | -90 | 10.2 | 78 | 4.3 | 5 | 1.6 | 26250 | 11.4 | 19930 | 43 | 0.6 |
| 30- | 45.8108- | 111.4644- | 2- | 15- | | 0-M37382 | 60740 | -0.06 | 693 | 19450 | 92 | -90 | 13.0 | 85 | 4.5 | 5 | 1.6 | 32560 | 10.5 | 19510 | 48 | 0.4 |
| 30- | 45.7842- | 111.3978- | 2- | 15- | | 0-M37383 | 64910 | -0.06 | 729 | 16910 | 99 | 112 | 9.0 | 84 | 5.0 | 6 | 1.7 | 30770 | 13.0 | 24540 | 55 | 0.5 |
| 30- | 45.7828- | 111.3979- | 2- | 15- | | 0-M37384 | 56430 | -0.05 | 733 | 20360 | 77 | -82 | 11.1 | 89 | 4.1 | 5 | 1.7 | 28070 | 11.8 | 18990 | 46 | 0.4 |
| 30- | 45.7842- | 111.3994- | 2- | 15- | | 0-M37385 | 55270 | -0.06 | 749 | 28380 | 97 | 123 | 10.6 | 86 | 3.4 | 5 | 1.7 | 26940 | 15.1 | 18710 | 47 | 0.5 |
| 30- | 45.8295- | 111.3499- | 2- | 15- | | 0-M37386 | 56890 | -0.06 | 665 | 32710 | 75 | -86 | 10.3 | 80 | 4.3 | 4 | 1.6 | 28820 | 8.9 | 19750 | 42 | 0.6 |
| 30- | 45.8424- | 111.3650- | 2- | 12- | | 0-M37387 | 59360 | -0.06 | 789 | 35290 | 91 | 116 | 8.0 | 97 | 4.4 | 5 | 1.7 | 29620 | 15.6 | 18790 | 45 | 0.5 |
| 30- | 45.8340- | 111.4105- | 2- | 15- | | 0-M37388 | 39360 | -0.05 | 353 | 87370 | 60 | 114 | 7.3 | 49 | 5.4 | 4 | 1.2 | 24650 | 10.0 | 14480 | 41 | 0.3 |
| 30- | 45.8446- | 111.4108- | 2- | 15- | | 0-M37389 | 54660 | -0.06 | 733 | 41540 | 92 | 133 | 15.9 | 68 | 4.8 | 4 | 2.2 | 24490 | 10.0 | 19400 | 39 | 0.5 |
| 30- | 45.8521- | 111.4193- | 2- | 15- | | 0-M37390 | 62130 | -0.12 | 729 | 21150 | 111 | 96 | 10.5 | 80 | 5.9 | 6 | 1.7 | 38080 | 12.1 | 21630 | 58 | 0.5 |
| 30- | 45.8810- | 111.4377- | 2- | 15- | | 0-M37391 | 51740 | -0.06 | 480 | 37860 | 99 | -89 | 21.1 | 144 | 3.5 | 5 | 2.7 | 40310 | 21.4 | 13990 | 54 | 0.6 |
| 30- | 45.8681- | 111.3910- | 2- | 15- | | 0-M37392 | 61150 | -0.06 | 634 | 32480 | 105 | -85 | 9.9 | 71 | 5.4 | 6 | 1.7 | 35120 | 12.9 | 21010 | 46 | 0.5 |
| 30- | 45.8770- | 111.4028- | 2- | 11- | | 0-M37393 | 53240 | -0.06 | 805 | 24740 | 66 | 165 | 10.4 | 91 | 2.8 | 5 | 1.5 | 29420 | 11.7 | 18160 | 41 | 0.4 |
| 30- | 45.8942- | 111.3334- | 2- | 15- | | 0-M37394 | 56430 | -0.07 | 643 | 34240 | 87 | -85 | 12.5 | 107 | 4.7 | 5 | 1.7 | 29090 | 15.6 | 18180 | 40 | 0.6 |
| 30- | 45.9139- | 111.3564- | 2- | 15- | | 0-M37395 | 54360 | -0.06 | 587 | 50210 | 68 | 116 | 14.8 | 66 | 5.6 | 5 | 2.2 | 24780 | 8.4 | 22600 | 34 | 0.4 |
| 30- | 45.9434- | 111.2805- | 2- | 15- | | 0-M37396 | 51460 | -0.06 | 664 | 54560 | 86 | -77 | 9.6 | 105 | 4.6 | 5 | 1.4 | 31470 | 14.8 | 18060 | 41 | 0.5 |
| 30- | 45.9384- | 111.2979- | 2- | 15- | | 0-M37397 | 49420 | -0.07 | -206 | 61020 | 70 | -104 | 26.4 | 166 | 7.9 | 5 | 1.3 | 47920 | 10.4 | 11820 | 40 | 0.5 |
| 30- | 45.9254- | 111.3174- | 2- | 15- | | 0-M37398 | 51190 | -0.06 | 625 | 46530 | 80 | -87 | 8.7 | 87 | 3.4 | 5 | 1.5 | 24460 | 11.7 | 17110 | 38 | 0.5 |
| 30- | 45.9021- | 111.3189- | 2- | 15- | | 0-M37399 | 62020 | -0.07 | 643 | 18810 | 91 | -87 | 24.1 | 109 | 7.8 | 5 | 2.4 | 35570 | 12.8 | 20950 | 44 | 0.4 |
| 30- | 45.9524- | 111.1709- | 2- | 15- | | 0-M37400 | 57050 | -0.05 | 697 | 32120 | 67 | -80 | 8.1 | 77 | 4.2 | 4 | 1.6 | 27900 | 8.5 | 19970 | 40 | 0.4 |
| 30- | 45.9343- | 111.1381- | 2- | 12- | | 0-M37401 | 53550 | -0.06 | 670 | 16780 | 61 | 111 | 9.5 | 81 | 3.6 | 4 | 1.4 | 23390 | 11.1 | 18910 | 35 | 0.4 |
| 30- | 45.9312- | 111.1700- | 2- | 12- | | 0-M37402 | 55270 | -0.06 | 759 | 30460 | 64 | -93 | 8.9 | 77 | 3.6 | 4 | 1.8 | 22730 | 9.1 | 18210 | 33 | 0.4 |
| 30- | 45.9235- | 111.1841- | 2- | 15- | | 0-M37403 | 48810 | -0.07 | 317 | 123300 | 49 | -83 | 29.0 | 114 | 4.3 | 5 | 2.2 | 36050 | 6.5 | 9144 | 28 | 0.4 |
| 30- | 45.9140- | 111.1448- | 2- | 15- | | 0-M37404 | 61120 | -0.06 | 794 | 16840 | 84 | -83 | 9.5 | 92 | 5.1 | 5 | 1.9 | 30200 | 14.0 | 19390 | 44 | 0.5 |
| 30- | 45.9103- | 111.1486- | 2- | 12- | | 0-M37405 | 52040 | -0.05 | 757 | 13210 | 64 | -79 | 8.8 | 71 | 2.9 | 4 | 1.6 | 22250 | 14.0 | 19120 | 37 | 0.4 |
| 30- | 45.9112- | 111.1829- | 2- | 12- | | 0-M37406 | 54530 | -0.06 | 647 | 38510 | 73 | -89 | 16.5 | 77 | 4.9 | 5 | 2.0 | 25840 | 10.3 | 19200 | 33 | 0.4 |
| 30- | 45.8898- | 111.2225- | 2- | 15- | | 0-M37407 | 52450 | -0.07 | 533 | 37960 | 70 | -71 | 18.3 | 75 | 6.3 | 4 | 2.1 | 27320 | 10.2 | 16760 | 42 | 0.4 |
| 30- | 45.8726- | 111.1792- | 2- | 15- | | 0-M37408 | 56750 | -0.07 | 912 | 20390 | 63 | -87 | 27.4 | 126 | 4.7 | 3 | 2.4 | 41010 | 8.7 | 15790 | 36 | 0.3 |
| 30- | 45.8829- | 111.1404- | 2- | 15- | | 0-M37409 | 57760 | -0.07 | 755 | 32040 | 82 | -82 | 11.5 | 81 | 4.2 | 4 | 1.4 | 27580 | 10.4 | 18660 | 37 | 0.4 |
| 30- | 45.8500- | 111.1451- | 2- | 12- | | 0-M37410 | 51860 | -0.07 | 675 | 26800 | 67 | 128 | 10.8 | 92 | 4.4 | 4 | 1.5 | 26700 | 8.8 | 19850 | 34 | 0.4 |
| 30- | 45.8530- | 111.1171- | 2- | 12- | | 0-M37411 | 50590 | -0.09 | -247 | 34010 | 192 | -141 | 22.9 | 282 | -2.3 | 8 | 3.0 | 68450 | 44.4 | 18070 | 87 | 1.3 |
| 30- | 45.8861- | 111.1061- | 2- | 12- | | 0-M37412 | 58940 | -0.07 | 806 | 17680 | 73 | 186 | 16.2 | 107 | 4.3 | 5 | 1.8 | 39670 | 19.7 | 15800 | 45 | 0.5 |
| 30- | 45.3333- | 111.7467- | 2- | 12- | | 0-M37413 | 56870 | 0.11 | 630 | 26380 | 135 | 167 | 20.9 | 170 | 7.0 | 10 | 2.6 | 53120 | 25.1 | 16070 | 58 | 1.1 |
| 30- | 45.4191- | 111.7501- | 2- | 12- | | 0-M37414 | 49700 | -0.09 | 322 | 24850 | 169 | -106 | 23.4 | 271 | -2.2 | 12 | 2.4 | 84320 | 74.6 | 12690 | 82 | 1.8 |
| 30- | 45.4352- | 111.7112- | 2- | 12- | | 0-M37415 | 39220 | 0.48 | -258 | 20240 | 453 | -148 | 39.8 | 268 | 12.5 | 13 | 7.8 | 156500 | 214.1 | -6583 | 237 | 2.9 |
| 30- | 45.6290- | 111.2568- | 2- | 15- | | 0-M37416 | 63250 | -0.06 | 718 | 22580 | 78 | 203 | 9.9 | 70 | 3.7 | 5 | 1.6 | 26740 | 11.6 | 24600 | 44 | 0.5 |
| 30- | 45.5638- | 111.2639- | 2- | 12- | | 0-M37417 | 61010 | -0.09 | 638 | 22470 | 107 | 155 | 14.3 | 121 | 3.6 | 6 | 2.0 | 34500 | 17.3 | 21000 | 51 | 0.6 |
| 30- | 45.5702- | 111.2944- | 2- | 12- | | 0-M37418 | 54190 | -0.09 | 757 | 28780 | 111 | 277 | 22.5 | 123 | 2.7 | 11 | 2.9 | 60360 | 34.1 | 20730 | 56 | 1.5 |
| 30- | 45.5315- | 111.2504- | 2- | 15- | | 0-M37419 | 45240 | -0.07 | 479 | 36540 | 122 | -93 | 24.3 | 252 | -1.8 | 6 | 2.3 | 62200 | 17.9 | 10790 | 55 | 0.7 |
| 30- | 45.5074- | 111.3542- | 2- | 12- | | 0-M37420 | 69680 | -0.06 | 900 | 16380 | 72 | -90 | 15.7 | 102 | 3.4 | 3 | 1.9 | 38160 | 6.5 | 19090 | 38 | 0.3 |
| 30- | 45.5029- | 111.3596- | 2- | 12- | | 0-M37421 | 54000 | -0.08 | 571 | 19180 | 63 | -84 | 11.5 | 136 | 4.0 | 4 | 1.6 | 26090 | 11.5 | 22760 | 33 | 0.3 |
| 30- | 45.6635- | 111.2950- | 2- | 15- | | 0-M37422 | 56750 | -0.06 | 745 | 16710 | 86 | 107 | 11.9 | 80 | 4.6 | 5 | 1.8 | 29760 | 11.4 | 17970 | 46 | 0.5 |
| 30- | 45.3799- | 111.9162- | 2- | 12- | | 0-M37423 | 40440 | -0.10 | -274 | 28270 | 196 | -172 | 29.4 | 222 | -2.4 | 12 | 4.2 | 124000 | 175.2 | -7269 | 103 | 3.4 |
| 30- | 45.3794- | 111.9145- | 2- | 12- | | 0-M37424 | 29390 | -0.10 | -228 | 15790 | 319 | -168 | 35.3 | 547 | -2.3 | 8 | 5.3 | 137600 | 184.9 | -7077 | 179 | 3.3 |
| 30- | 45.3694- | 111.9268- | 2- | 12- | | 0-M37425 | 64080 | -0.09 | 851 | 24800 | 108 | -99 | 14.2 | 124 | 3.2 | 7 | 1.6 | 48410 | 22.9 | 19400 | 47 | 0.6 |
| 30- | 45.3601- | 111.9338- | 2- | 12- | | 0-M37426 | 53110 | -0.08 | 476 | 30920 | 152 | -100 | 17.6 | 201 | 3.4 | 10 | 2.4 | 56160 | 54.7 | 16760 | 76 | 1.3 |
| 30- | 45.3593- | 111.9174- | 2- | 12- | | 0-M37427 | 56850 | -0.07 | 883 | 18480 | 88 | -91 | 20.4 | 112 | 4.5 | 5 | 1.9 | 38420 | 12.8 | 17470 | 45 | 0.6 |

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



| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | LABS SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | U/Th RATIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mg | Mn | Na | Rb | Sb | Sc | Sm | Sr | Ta | Tb | Th | Ti | V | Yb | Zn | |
| 30-45.9725-111.1700-2-15- | 0-M37377 | 14630 | 864 | 11080 | 49 | -2 | 11.6 | 6.1 | -324 | -1 | -1 | 11.5 | 4364 | 130 | 2.8 | -41 | 0.261 |
| 30-45.9657-111.1828-2-15- | 0-M37378 | 10890 | 682 | 12710 | -27 | -1 | 9.2 | 4.9 | -257 | -1 | -1 | 10.3 | 2900 | 80 | 4.3 | 97 | 0.272 |
| 30-45.9618-111.1829-2-12- | 0-M37379 | 9154 | 695 | 15090 | 74 | -2 | 9.8 | 5.5 | -280 | -1 | -1 | 11.4 | 3733 | 104 | 4.2 | -90 | 0.281 |
| 30-45.7504-111.2973-2-12- | 0-M37380 | 9285 | 475 | 15160 | 61 | -1 | 9.4 | 7.1 | -225 | -1 | -1 | 15.3 | 3529 | 78 | 3.5 | 102 | 0.255 |
| 30-45.7578-111.3966-2-15- | 0-M37381 | 7844 | 646 | 12960 | 71 | -2 | 8.3 | 7.6 | -288 | -1 | -1 | 13.1 | 3485 | 67 | 4.5 | -37 | 0.229 |
| 30-45.8108-111.4644-2-15- | 0-M37382 | 8710 | 830 | 12120 | 67 | -2 | 10.1 | 6.9 | -295 | -1 | -1 | 13.7 | 3226 | 76 | 3.9 | 82 | 0.219 |
| 30-45.7842-111.3978-2-15- | 0-M37383 | 8202 | 664 | 13330 | 81 | -2 | 9.3 | 8.1 | -283 | -1 | -1 | 18.1 | 2894 | 76 | 4.3 | 112 | 0.193 |
| 30-45.7828-111.3979-2-15- | 0-M37384 | 7758 | 622 | 14640 | 72 | -1 | 9.3 | 5.9 | -248 | -1 | -1 | 14.4 | 3177 | 76 | 3.9 | 106 | 0.236 |
| 30-45.7842-111.3994-2-15- | 0-M37385 | 9313 | 656 | 13750 | 60 | -2 | 8.4 | 8.1 | -294 | -1 | -1 | 14.8 | 3443 | 61 | 4.4 | 42 | 0.223 |
| 30-45.8295-111.3499-2-15- | 0-M37386 | 10360 | 591 | 12980 | 68 | -1 | 8.9 | 6.1 | -261 | -1 | -1 | 13.4 | 2870 | 67 | 3.8 | -38 | 0.209 |
| 30-45.8424-111.3650-2-12- | 0-M37387 | 11570 | 491 | 14150 | 76 | -1 | 9.1 | 6.4 | -253 | 1 | -1 | 14.6 | 3887 | 79 | 4.4 | 97 | 0.247 |
| 30-45.8340-111.4105-2-15- | 0-M37388 | 33270 | 532 | 6973 | 55 | -1 | 6.3 | 4.9 | -236 | -1 | -1 | 11.2 | 2057 | 53 | 2.4 | 138 | 0.241 |
| 30-45.8446-111.4108-2-15- | 0-M37389 | 9894 | 580 | 14070 | 59 | -2 | 7.9 | 7.8 | -286 | -1 | -1 | 13.6 | 2930 | 66 | 3.6 | -16 | 0.221 |
| 30-45.8521-111.4193-2-15- | 0-M37390 | 10630 | 741 | 10460 | 93 | -3 | 10.5 | 9.9 | -296 | -1 | -1 | 17.4 | 3586 | 102 | 6.3 | 69 | 0.195 |
| 30-45.8810-111.4377-2-15- | 0-M37391 | 9869 | 768 | 15230 | 55 | -1 | 10.8 | 7.6 | -263 | -1 | -1 | 18.5 | 3735 | 99 | 3.9 | 104 | 0.200 |
| 30-45.8681-111.3910-2-15- | 0-M37392 | 11090 | 686 | 12300 | 73 | 2 | 9.9 | 7.2 | -275 | -1 | -1 | 16.1 | 3097 | 88 | 4.2 | 112 | 0.186 |
| 30-45.8770-111.4028-2-11- | 0-M37393 | 8612 | 540 | 14400 | 54 | -1 | 8.7 | 4.7 | -252 | -1 | -1 | 10.2 | 3490 | 77 | 3.2 | 130 | 0.343 |
| 30-45.8942-111.3334-2-15- | 0-M37394 | 11330 | 575 | 10570 | 75 | -2 | 9.4 | 6.9 | -286 | -1 | -1 | 14.7 | 3028 | 85 | 4.0 | -48 | 0.245 |
| 30-45.9139-111.3564-2-15- | 0-M37395 | 11000 | 497 | 14600 | 99 | -1 | 7.8 | 6.3 | 582 | -1 | -1 | 11.7 | 2340 | 55 | 3.5 | -40 | 0.222 |
| 30-45.9434-111.2805-2-15- | 0-M37396 | 15850 | 654 | 9848 | 72 | -1 | 8.9 | 6.6 | -258 | 2 | -1 | 14.3 | 3564 | 92 | 4.8 | 88 | 0.238 |
| 30-45.9384-111.2979-2-15- | 0-M37397 | 21830 | 1720 | 10450 | 74 | -2 | 17.1 | 5.6 | -391 | -1 | -1 | 14.7 | 4051 | 110 | 2.9 | -18 | 0.211 |
| 30-45.9254-111.3174-2-15- | 0-M37398 | 14070 | 536 | 13030 | 61 | -1 | 8.1 | 6.9 | -269 | -1 | -1 | 13.4 | 3535 | 71 | 3.3 | 67 | 0.224 |
| 30-45.9021-111.3189-2-15- | 0-M37399 | 13350 | 689 | 12410 | 88 | -2 | 11.6 | 5.9 | -276 | -1 | -1 | 13.5 | 2936 | 81 | 2.9 | 128 | 0.244 |
| 30-45.9524-111.1709-2-15- | 0-M37400 | 9113 | 583 | 12480 | 73 | 2 | 8.7 | 5.9 | 208 | -1 | -1 | 12.7 | 3122 | 62 | 3.9 | 150 | 0.197 |
| 30-45.9343-111.1381-2-12- | 0-M37401 | 8415 | 415 | 14770 | 76 | -2 | 8.3 | 4.4 | -263 | -1 | -1 | 10.5 | 2593 | 58 | 3.9 | 128 | 0.257 |
| 30-45.9312-111.1700-2-12- | 0-M37402 | 9598 | 575 | 12470 | 54 | -2 | 7.5 | 5.9 | -303 | -1 | -1 | 10.7 | 2853 | 60 | 3.2 | -11 | 0.243 |
| 30-45.9235-111.1841-2-15- | 0-M37403 | 26660 | 592 | 9202 | -34 | -2 | 15.1 | 4.8 | -260 | -1 | -1 | 11.9 | 3074 | 99 | 3.5 | 170 | 0.176 |
| 30-45.9140-111.1448-2-15- | 0-M37404 | 9132 | 653 | 13010 | 92 | -2 | 9.6 | 6.5 | -269 | -1 | -1 | 15.7 | 3543 | 80 | 4.4 | 86 | 0.204 |
| 30-45.9103-111.1486-2-12- | 0-M37405 | 5786 | 402 | 14010 | 68 | -1 | 7.7 | 5.5 | -229 | -1 | -1 | 11.8 | 3278 | 58 | 3.7 | -51 | 0.280 |
| 30-45.9112-111.1829-2-12- | 0-M37406 | 9899 | 554 | 11430 | 68 | -2 | 8.0 | 5.6 | -291 | -1 | -1 | 10.0 | 2851 | 77 | 4.6 | -28 | 0.260 |
| 30-45.8898-111.2225-2-15- | 0-M37407 | 11930 | 547 | 10380 | 66 | -2 | 9.3 | 5.6 | -226 | -1 | -1 | 11.5 | 2620 | 66 | 3.4 | 114 | 0.235 |
| 30-45.8726-111.1792-2-15- | 0-M37408 | 8949 | 766 | 11480 | 86 | -2 | 10.9 | 4.9 | -295 | -1 | -1 | 10.3 | 4597 | 119 | -1.5 | 114 | 0.262 |
| 30-45.8829-111.1404-2-15- | 0-M37409 | 9701 | 608 | 14210 | 60 | -2 | 8.4 | 6.0 | -250 | -1 | -1 | 12.1 | 2804 | 76 | 3.5 | 36 | 0.223 |
| 30-45.8500-111.1451-2-12- | 0-M37410 | 10630 | 579 | 11600 | 77 | -2 | 9.4 | 5.5 | -265 | -1 | -1 | 11.5 | 2791 | 58 | 4.0 | | 0.226 |
| 30-45.8530-111.1171-2-12- | 0-M37411 | 13660 | 2087 | 13270 | 76 | -2 | 31.0 | 13.9 | -477 | -1 | 2 | 30.9 | 5925 | 117 | 10.3 | -47 | 0.220 |
| 30-45.8861-111.1061-2-12- | 0-M37412 | 7900 | 853 | 14020 | 59 | -2 | 10.3 | 6.0 | -298 | 2 | -1 | 13.7 | 4054 | 75 | 4.2 | 87 | 0.343 |
| 30-45.3333-111.7467-2-12- | 0-M37413 | 12260 | 1235 | 16810 | 71 | -2 | 18.2 | 14.7 | -337 | 2 | 2 | 24.8 | 5216 | 108 | 9.0 | -45 | 0.190 |
| 30-45.4191-111.7501-2-12- | 0-M37414 | 12100 | 1766 | 11760 | -36 | -2 | 24.4 | 14.5 | -365 | 2 | 3 | 34.3 | 8042 | 109 | 13.1 | -47 | 0.262 |
| 30-45.4352-111.7112-2-12- | 0-M37415 | 6032 | 2334 | 9493 | -44 | -2 | 23.7 | 31.7 | -501 | 8 | 4 | 111.5 | 20580 | 131 | 24.4 | 324 | 0.220 |
| 30-45.6290-111.2568-2-15- | 0-M37416 | 7158 | 597 | 13860 | 83 | -2 | 8.7 | 6.5 | -254 | 2 | -1 | 15.7 | 2800 | 69 | 4.1 | 85 | 0.204 |
| 30-45.5638-111.2639-2-12- | 0-M37417 | 10290 | 931 | 13540 | -36 | -2 | 11.6 | 8.3 | 377 | -2 | -1 | 18.3 | 4083 | 88 | 5.3 | -25 | 0.213 |
| 30-45.5702-111.2944-2-12- | 0-M37418 | 11630 | 1154 | 14620 | 72 | -2 | 20.8 | 11.3 | -312 | 3 | 3 | 24.2 | 8927 | 114 | 11.7 | 97 | 0.223 |
| 30-45.5315-111.2504-2-15- | 0-M37419 | 14490 | 1046 | 12480 | -31 | -2 | 19.8 | 8.4 | -313 | -1 | 1 | 14.5 | 4060 | 124 | 5.9 | 81 | 0.241 |
| 30-45.5074-111.3542-2-12- | 0-M37420 | 10820 | 615 | 17270 | 68 | -2 | 11.5 | 4.8 | -252 | -1 | -1 | 8.0 | 4324 | 120 | 2.5 | 95 | 0.325 |
| 30-45.5029-111.3596-2-12- | 0-M37421 | 10140 | 614 | 13200 | 75 | -2 | 8.8 | 5.6 | -261 | -1 | -1 | 10.9 | 3011 | 62 | 2.9 | 116 | 0.229 |
| 30-45.6635-111.2950-2-15- | 0-M37422 | 7228 | 696 | 12490 | 96 | -2 | 9.9 | 5.7 | -240 | -1 | -1 | 13.7 | 2739 | 80 | 3.8 | -50 | 0.234 |
| 30-45.3799-111.9162-2-12- | 0-M37423 | 9411 | 2446 | 13790 | -39 | -2 | 29.8 | 19.5 | -536 | 5 | 4 | 44.8 | 12230 | 101 | 24.3 | 201 | 0.362 |
| 30-45.3794-111.9145-2-12- | 0-M37424 | -3332 | 2299 | 6326 | 56 | -2 | 34.5 | 39.2 | -471 | 7 | 4 | 77.7 | 8996 | 74 | 26.0 | -52 | 0.306 |
| 30-45.3694-111.9268-2-12- | 0-M37425 | 8078 | 901 | 18070 | 114 | -3 | 14.1 | 8.3 | -296 | 2 | -1 | 14.9 | 5326 | 96 | 6.5 | 125 | 0.282 |
| 30-45.3601-111.9338-2-12- | 0-M37426 | 10960 | 1400 | 13260 | -32 | -2 | 15.9 | 16.3 | -334 | 3 | 2 | 26.6 | 6886 | 91 | 10.5 | 104 | 0.248 |
| 30-45.3583-111.9174-2-12- | 0-M37427 | 10590 | 1171 | 12390 | 79 | -2 | 12.2 | 7.7 | -318 | -1 | -1 | 14.9 | 4075 | 80 | 5.7 | 106 | 0.262 |

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

1

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER AND FIELD DATA | | | | | | | | | | | | | | | | | | | | | | | | U CONCENTRATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | TIME SAMPLED DATE | TIME SAMPLED HOUR | AIR TEMPERATURE | WATER TEMPERATURE | COMMENTS | SPECIAL MEASUREMENTS | pH | CONDUCTIVITY (µmho/cm) | SCINTILLOMETER (eU,ppm) | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm |
| 30- | 45.3591- | 111.8988- | 2- | 15- | | 0-M37428- | 10/21/76- | 12- | 9- | - | - | - | - | - | | -4- | -4- | 6- | -1- | -2- | 3- | 3- | 3- | 1- | -3- | - | - | - | - | 3.60 |
| 30- | 45.3613- | 111.9095- | 2- | 12- | | 0-M37429- | 10/21/76- | 12- | 11- | 3.0- | C- | - | 5.5- | 120- | | -4- | -4- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 7.60 |
| 30- | 45.3485- | 111.8904- | 2- | 12- | | 0-M37430- | 10/21/76- | 13- | 11- | 3.0- | C- | - | 5.5- | 140- | | -3- | 4- | 4- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 4- | 1- | -3- | - | - | - | - | 4.60 |
| 30- | 45.3886- | 111.8890- | 2- | 12- | | 0-M37431- | 10/21/76- | 13- | 10- | 3.5- | C- | - | 5.5- | 160- | | -3- | 4- | 4- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -3- | - | - | - | - | 3.60 |
| 30- | 45.3615- | 111.9226- | 2- | 15- | | 0-M37432- | 10/21/76- | 13- | 12- | - | - | - | - | - | | -2- | 6- | 4- | 6- | -1- | -2- | 1- | 2- | 4- | 1- | -3- | - | - | - | - | 2.70 |
| 30- | 45.3588- | 111.9415- | 2- | 12- | | 0-M37433- | 10/21/76- | 13- | 11- | 3.0- | C- | - | 5.5- | 120- | | -4- | -4- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -3- | - | - | - | - | 6.40 |
| 30- | 45.3576- | 111.9435- | 2- | 12- | | 0-M37434- | 10/21/76- | 13- | 11- | 3.5- | - | - | 5.5- | 140- | | -4- | -4- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -3- | - | - | - | - | 7.80 |
| 30- | 45.3252- | 111.9990- | 2- | 12- | | 0-M37435- | 10/21/76- | 14- | 12- | 4.0- | C- | - | 5.5- | 140- | | -4- | -4- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 20.60 |
| 30- | 45.3119- | 111.9802- | 2- | 12- | | 0-M37436- | 10/21/76- | 15- | 11- | 5.5- | C- | - | 5.9- | 280- | | -4- | -4- | 6- | 2- | 2- | 3- | 2- | 3- | 4- | 3- | 1- | -3- | - | - | - | - | 3.90 |
| 30- | 45.2991- | 111.9763- | 2- | 12- | | 0-M37437- | 10/21/76- | 15- | 10- | 4.5- | C- | - | 6.0- | 400- | | -4- | -4- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 4- | 2- | -3- | - | - | - | - | 6.30 |
| 30- | 45.2663- | 111.9740- | 2- | 15- | | 0-M37438- | 10/21/76- | 15- | 12- | | -C- | - | - | - | | -3- | 6- | 4- | 6- | -1- | -2- | 1- | 3- | 4- | 2- | -3- | - | - | - | - | 6.10 |
| 30- | 45.2592- | 111.9720- | 2- | 12- | | 0-M37439- | 10/21/76- | 15- | 9- | 3.5- | C- | - | 5.7- | 340- | | -3- | 1- | 4- | 6- | 2- | 2- | 1- | 2- | 1- | 3- | 4- | 2- | -2- | - | - | - | - | 4.60 |
| 30- | 45.3001- | 111.9784- | 2- | 15- | | 0-M37440- | 10/21/76- | 16- | 11- | - | - | - | - | - | | -4- | -4- | 6- | -1- | -2- | 3- | 2- | 3- | 2- | -2- | - | - | - | - | 4.10 |
| 30- | 45.3111- | 111.9704- | 2- | 15- | | 0-M37441- | 10/21/76- | 16- | 12- | - | - | - | - | - | | -4- | -4- | 6- | -1- | -2- | 3- | 3- | 3- | 1- | -3- | - | - | - | - | 4.30 |
| 30- | 45.4968- | 111.8046- | 2- | 12- | | 0-M37442- | 10/22/76- | 10- | - | 2.5- | C- | - | 6.0- | 60- | | -4- | -4- | 6- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | 2.90 |
| 30- | 45.4971- | 111.7931- | 2- | 12- | | 0-M37443- | 10/22/76- | 10- | - | 3.5- | C- | - | 5.9- | 150- | | -4- | -4- | 6- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | 7.60 |
| 30- | 45.4822- | 111.7891- | 2- | 12- | | 0-M37444- | 10/22/76- | 11- | 1- | 3.0- | C- | - | 5.7- | 250- | | -4- | -4- | 6- | 4- | 2- | 1- | 2- | 2- | 4- | 4- | 1- | -3- | - | - | - | - | 9.00 |
| 30- | 45.4485- | 111.7630- | 2- | 12- | | 0-M37445- | 10/22/76- | 11- | 2- | 3.5- | C- | - | 5.7- | 250- | | -4- | -4- | 6- | 4- | 2- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 3.30 |
| 30- | 45.4485- | 111.8452- | 2- | 12- | | 0-M37446- | 10/22/76- | 11- | - | 2.0- | C- | - | 5.2- | 90- | | -2- | 7- | 4- | 6- | 4- | 2- | 1- | 2- | 1- | 3- | 4- | 1- | -3- | - | - | - | - | 10.00 |
| 30- | 45.4526- | 111.8851- | 2- | 12- | | 0-M37447- | 10/22/76- | 11- | - | 2.5- | C- | - | 5.2- | 80- | | -2- | 7- | 4- | 6- | 4- | 2- | 1- | 2- | 1- | 4- | 5- | 2- | -1- | - | - | - | - | 5.50 |
| 30- | 45.4640- | 111.8197- | 2- | 12- | | 0-M37448- | 10/22/76- | 12- | 4- | 3.0- | C- | - | 5.5- | 80- | | -4- | -4- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 4.10 |
| 30- | 45.4507- | 111.8158- | 2- | 12- | | 0-M37449- | 10/22/76- | 12- | 5- | 3.5- | C- | - | 5.5- | 100- | | -4- | -4- | 6- | 4- | 2- | 1- | 2- | 2- | 4- | 3- | 1- | -3- | - | - | - | - | 4.30 |
| 30- | 45.4337- | 111.7750- | 2- | 12- | | 0-M37450- | 10/22/76- | 12- | 5- | 2.5- | C- | - | 6.1- | 380- | | -4- | -4- | 6- | 2- | 2- | 1- | 2- | 4- | 4- | 3- | 2- | -3- | - | - | - | - | 4.60 |
| 30- | 45.4070- | 111.7543- | 2- | 12- | | 0-M37451- | 10/22/76- | 12- | 4- | 3.5- | C- | - | 5.7- | 350- | | -4- | -4- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 1.70 |
| 30- | 45.4197- | 111.8300- | 2- | 12- | | 0-M37452- | 10/22/76- | 13- | 4- | 3.0- | C- | - | 5.5- | 100- | | -4- | -4- | 6- | 2- | 2- | 1- | 2- | 1- | 3- | 3- | 2- | -3- | - | - | - | - | 8.50 |
| 30- | 45.3852- | 111.8428- | 2- | 12- | | 0-M37453- | 10/22/76- | 14- | 4- | 2.5- | C- | - | 5.5- | 70- | | -4- | -4- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 4- | 2- | -3- | - | - | - | - | 8.80 |
| 30- | 45.3713- | 111.8149- | 2- | 12- | | 0-M37454- | 10/22/76- | 15- | 3- | 2.5- | C- | - | 5.2- | 100- | | -4- | -4- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 4- | 2- | -3- | - | - | - | - | 10.20 |
| 30- | 45.3642- | 111.8143- | 2- | 12- | | 0-M37455- | 10/22/76- | 15- | 3- | 3.0- | C- | - | 5.5- | 120- | | -4- | -4- | 6- | 4- | 2- | 1- | 2- | 2- | 3- | 4- | 2- | -3- | - | - | - | - | 21.00 |
| 30- | 45.2965- | 111.9558- | 2- | 15- | | 0-M37456- | 10/22/76- | 17- | 2- | - | - | - | - | - | | -4- | -4- | 6- | -1- | -2- | 3- | 2- | 4- | 2- | -2- | - | - | - | - | 4.20 |
| 30- | 45.2546- | 111.9182- | 2- | 12- | | 0-M37457- | 10/22/76- | 17- | - | 2.5- | C- | - | 5.7- | 300- | | -2- | 1- | 4- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 2- | -2- | - | - | - | - | 3.80 |
| 30- | 45.2556- | 111.9172- | 2- | 12- | | 0-M37458- | 10/22/76- | 17- | - | 2.5- | C- | - | 5.7- | 250- | | -4- | -4- | 6- | 3- | 2- | 1- | 2- | 1- | 3- | 4- | 2- | -2- | - | - | - | - | 3.20 |
| 30- | 45.2580- | 111.9216- | 2- | 12- | | 0-M37459- | 10/22/76- | 17- | - | 2.5- | C- | - | 5.7- | 250- | | -4- | -4- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 4- | 2- | -2- | - | - | - | - | 5.40 |
| 30- | 45.2661- | 111.9254- | 2- | 12- | | 0-M37460- | 10/22/76- | 17- | - | 2.5- | C- | - | 5.7- | 300- | | -2- | 1- | 4- | 6- | 2- | 2- | 1- | 2- | 2- | 3- | 5- | 2- | -2- | - | - | - | - | 7.50 |
| 30- | 45.2890- | 111.9440- | 2- | 12- | | 0-M37461- | 10/22/76- | 17- | - | 2.5- | C- | - | 5.7- | 320- | | -4- | -4- | 6- | 3- | 2- | 1- | 2- | 2- | 3- | 4- | 2- | -2- | - | - | - | - | 5.10 |
| 30- | 45.2952- | 111.9303- | 2- | 15- | | 0-M37462- | 10/23/76- | 10- | - | | -C- | - | - | - | | -4- | -4- | 6- | -1- | -2- | 4- | 2- | 3- | 5- | -9- | - | - | - | - | 2.40 |
| 30- | 45.3009- | 111.8813- | 2- | 11- | | 0-M37463- | 10/23/76- | 11- | -1- | 2.5- | C- | - | 5.5- | 140- | | -4- | -6- | 6- | 2- | 2- | 1- | -4- | 2- | 4- | 5- | -3- | - | - | - | - | 3.70 |
| 30- | 45.3266- | 111.8658- | 2- | 11- | | 0-M37464- | 10/23/76- | 10- | -2- | 2.0- | C- | - | 5.2- | 100- | | -4- | -6- | 6- | 3- | 2- | 1- | -4- | 3- | 4- | 5- | -3- | - | - | - | - | 1.90 |
| 30- | 45.3093- | 111.7954- | 2- | 12- | | 0-M37465- | 10/23/76- | 11- | -1- | 2.5- | C- | - | 5.9- | 400- | | -4- | -4- | 6- | 3- | 2- | 1- | 2- | 4- | 3- | 4- | 5- | -3- | - | - | - | - | 7.50 |
| 30- | 45.2958- | 111.7630- | 2- | 12- | | 0-M37466- | 10/23/76- | 11- | -1- | 2.0- | C- | - | 6.0- | 450- | | -4- | -4- | 6- | 3- | 2- | 1- | 2- | 3- | 3- | 3- | 5- | -3- | - | - | - | - | 3.40 |
| 30- | 45.2853- | 111.7687- | 2- | 12- | | 0-M37467- | 10/23/76- | 12- | -1- | 2.5- | C- | - | 5.7- | 120- | | -4- | -3- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 5- | -3- | - | - | - | - | 3.30 |
| 30- | 45.2809- | 111.8112- | 2- | 12- | | 0-M37468- | 10/23/76- | 12- | -1- | 2.5- | C- | - | 5.7- | 140- | | -4- | -4- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 5- | -3- | - | - | - | - | 3.10 |
| 30- | 45.2544- | 111.8163- | 2- | 12- | | 0-M37469- | 10/23/76- | 12- | - | 2.5- | C- | - | 5.5- | 200- | | -4- | -3- | 6- | 4- | 3- | 1- | 2- | 3- | 3- | 4- | 5- | -3- | - | - | - | - | 3.20 |
| 30- | 45.2675- | 111.7821- | 2- | 12- | | 0-M37470- | 10/23/76- | 12- | -1- | 2.5- | C- | - | 5.7- | 250- | | -4- | -4- | 6- | 4- | 4- | 1- | 2- | 2- | 3- | 3- | 5- | -3- | - | - | - | - | 2.90 |
| 30- | 45.2529- | 111.8169- | 2- | 12- | | 0-M37471- | 10/23/76- | 12- | - | 2.5- | C- | - | 5.7- | 180- | | -4- | -3- | 6- | 4- | 3- | 1- | 2- | 3- | 3- | 4- | 5- | -3- | - | - | - | - | 3.50 |
| 30- | 45.2491- | 111.7750- | 2- | 15- | | 0-M37472- | 10/23/76- | 12- | - | - | - | - | - | - | | -4- | -4- | 6- | -1- | -2- | 4- | 2- | 3- | 5- | -3- | - | - | - | - | 3.10 |
| 30- | 45.3379- | 111.6920- | 2- | 12- | | 0-M37473- | 10/21/76- | 11- | 4- | 0.6- | C- | - | 5.7- | 60- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 2- | 2- | 3- | 1- | -3- | - | - | - | - | 2.70 |
| 30- | 45.3383- | 111.6777- | 2- | 15- | | 0-M37474- | 10/21/76- | 11- | 5- | - | - | - | - | - | | -4- | -4- | 6- | -1- | -2- | 4- | 4- | 3- | 1- | -3- | - | - | - | - | 2.90 |
| 30- | 45.3490- | 111.6874- | 2- | 15- | | 0-M37475- | 10/21/76- | 11- | 5- | | -C- | - | - | - | | -4- | -4- | 6- | -1- | -3- | 4- | 4- | 2- | 1- | -3- | - | - | - | - | 2.70 |
| 30- | 45.3472- | 111.6054- | 2- | 15- | | 0-M37476- | 10/21/76- | 11- | 6- | - | - | - | - | - | | -4- | -4- | 6- | -1- | -2- | 3- | 3- | 3- | 1- | -3- | - | - | - | - | 3.30 |
| 30- | 45.3973- | 111.6071- | 2- | 12- | | 0-M37477- | 10/21/76- | 12- | 8- | 2.2- | C- | - | 5.2- | 60- | | -4- | -4- | 6- | 4- | 3- | 1- | 2- | 2- | 3- | 4- | 1- | -3- | - | - | - | - | 3.00 |
| 30- | 45.4035- | 111.6290- | 2- | 15- | | 0-M37478- | 10/21/76- | 12- | 8- | - | - | - | - | - | | -4- | -4- | 6- | -1- | -2- | 3- | 2- | 4- | 1- | -3- | - | - | - | - | 4.70 |

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

②

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE (Concentrations reported in weight parts per million (ppm)) | | | | | | | | | ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY (Concentrations in weight ppm) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Ag | Bi | Cd | Cu | Nb | Ni | Pb | Sn | W | Be | Li |
| 30- | 45.3591- | 111.8988- | 2- | 15- | 0- | M37428 | -5 | -5 | -5 | 61 | -20 | 94 | 10 | -10 | -15 | 2 | 20 |
| 30- | 45.3613- | 111.9095- | 2- | 12- | 0- | M37429 | -5 | -5 | -5 | 22 | -20 | 36 | 11 | -10 | -15 | 2 | 21 |
| 30- | 45.3485- | 111.8904- | 2- | 12- | 0- | M37430 | -5 | -5 | -5 | 38 | -20 | 61 | 8 | -10 | -15 | 2 | 21 |
| 30- | 45.3886- | 111.8890- | 2- | 12- | 0- | M37431 | -5 | -5 | -5 | 25 | -20 | 33 | 17 | -10 | -15 | 2 | 24 |
| 30- | 45.3615- | 111.9226- | 2- | 15- | 0- | M37432 | -5 | -5 | -5 | 76 | -20 | 114 | 14 | -10 | 20 | 2 | 29 |
| 30- | 45.3588- | 111.9415- | 2- | 12- | 0- | M37433 | -5 | -5 | -5 | 19 | -20 | 62 | 11 | -10 | -15 | 2 | 17 |
| 30- | 45.3576- | 111.9435- | 2- | 12- | 0- | M37434 | 7 | -5 | -5 | 22 | -20 | 53 | -5 | -10 | -15 | 2 | 19 |
| 30- | 45.3252- | 111.9990- | 2- | 12- | 0- | M37435 | 15 | 8 | -5 | -10 | 20 | 76 | -5 | 13 | 40 | 2 | 14 |
| 30- | 45.3119- | 111.9802- | 2- | 12- | 0- | M37436 | -5 | -5 | -5 | 33 | -20 | 39 | 15 | -10 | -15 | 2 | 31 |
| 30- | 45.2991- | 111.9763- | 2- | 12- | 0- | M37437 | 5 | -5 | -5 | 33 | -20 | 103 | 15 | -10 | -15 | 2 | 31 |
| 30- | 45.2663- | 111.9740- | 2- | 15- | 0- | M37438 | 5 | -5 | -5 | 40 | -20 | 383 | 11 | -10 | -15 | 2 | 19 |
| 30- | 45.2592- | 111.9720- | 2- | 12- | 0- | M37439 | -5 | -5 | -5 | 21 | -20 | 26 | 44 | -10 | -15 | 3 | 45 |
| 30- | 45.3001- | 111.9784- | 2- | 15- | 0- | M37440 | -5 | -5 | -5 | 31 | -20 | 42 | 11 | -10 | -15 | 2 | 37 |
| 30- | 45.3111- | 111.9704- | 2- | 15- | 0- | M37441 | -5 | -5 | -5 | 72 | -20 | 100 | 11 | -10 | -15 | 2 | 39 |
| 30- | 45.4968- | 111.8046- | 2- | 12- | 0- | M37442 | -5 | -5 | -5 | 20 | -20 | 19 | 5 | -10 | -15 | 3 | 46 |
| 30- | 45.4971- | 111.7931- | 2- | 12- | 0- | M37443 | -5 | -5 | -5 | 26 | -20 | 24 | 17 | -10 | -15 | 3 | 40 |
| 30- | 45.4822- | 111.7891- | 2- | 12- | 0- | M37444 | 9 | -5 | -5 | -10 | 24 | 30 | -5 | 10 | -15 | 2 | 13 |
| 30- | 45.4485- | 111.7630- | 2- | 12- | 0- | M37445 | -5 | -5 | -5 | 27 | -20 | 42 | -5 | -10 | -15 | 2 | 25 |
| 30- | 45.4485- | 111.8452- | 2- | 12- | 0- | M37446 | -5 | 8 | -5 | 66 | -20 | 73 | 634 | -10 | 15 | 2 | 19 |
| 30- | 45.4526- | 111.8851- | 2- | 12- | 0- | M37447 | -5 | -5 | -5 | 20 | -20 | 18 | 12 | -10 | -15 | 3 | 23 |
| 30- | 45.4640- | 111.8197- | 2- | 12- | 0- | M37448 | -5 | -5 | -5 | 22 | -20 | -15 | 13 | -10 | -15 | 3 | 43 |
| 30- | 45.4507- | 111.8158- | 2- | 12- | 0- | M37449 | -5 | -5 | -5 | 28 | -20 | 63 | 96 | -10 | -15 | 2 | 32 |
| 30- | 45.4337- | 111.7750- | 2- | 12- | 0- | M37450 | -5 | -5 | -5 | 22 | -20 | 17 | 14 | -10 | -15 | 3 | 30 |
| 30- | 45.4070- | 111.7543- | 2- | 12- | 0- | M37451 | -5 | -5 | -5 | 32 | -20 | 48 | 7 | -10 | -15 | 2 | 23 |
| 30- | 45.4197- | 111.8300- | 2- | 12- | 0- | M37452 | -5 | -5 | -5 | 24 | -20 | 50 | 22 | -10 | -15 | 2 | 39 |
| 30- | 45.3852- | 111.8428- | 2- | 12- | 0- | M37453 | 5 | -5 | -5 | 15 | 32 | 24 | 16 | -10 | 17 | 3 | 22 |
| 30- | 45.3713- | 111.8149- | 2- | 12- | 0- | M37454 | 6 | -5 | -5 | 10 | 20 | 39 | 6 | -10 | -15 | 3 | 30 |
| 30- | 45.3642- | 111.8143- | 2- | 12- | 0- | M37455 | 25 | -5 | -5 | -10 | 44 | 58 | 10 | 19 | -15 | 2 | 20 |
| 30- | 45.2965- | 111.9558- | 2- | 15- | 0- | M37456 | -5 | 7 | -5 | 54 | -20 | 75 | 12 | -10 | -15 | 3 | 48 |
| 30- | 45.2546- | 111.9182- | 2- | 12- | 0- | M37457 | -5 | -5 | -5 | 56 | -20 | 80 | 24 | -10 | -15 | 3 | 43 |
| 30- | 45.2556- | 111.9172- | 2- | 12- | 0- | M37458 | -5 | -5 | -5 | 24 | -20 | 48 | -5 | -10 | -15 | 3 | 35 |
| 30- | 45.2580- | 111.9216- | 2- | 12- | 0- | M37459 | -5 | 5 | -5 | 52 | -20 | 59 | 49 | -10 | -15 | 2 | 44 |
| 30- | 45.2661- | 111.9254- | 2- | 12- | 0- | M37460 | -5 | -5 | -5 | 54 | -20 | 79 | 53 | -10 | -15 | 2 | 33 |
| 30- | 45.2890- | 111.9440- | 2- | 12- | 0- | M37461 | -5 | -5 | -5 | 58 | -20 | 68 | 64 | -10 | -15 | 2 | 25 |
| 30- | 45.2952- | 111.9303- | 2- | 15- | 0- | M37462 | -5 | -5 | -5 | 41 | -20 | 16 | 89 | 43 | -15 | 3 | 30 |
| 30- | 45.3009- | 111.8813- | 2- | 11- | 0- | M37463 | -5 | -5 | -5 | 22 | -20 | -15 | 12 | -10 | -15 | 2 | 32 |
| 30- | 45.3266- | 111.8658- | 2- | 11- | 0- | M37464 | -5 | -5 | -5 | 35 | -20 | 56 | 13 | 13 | -15 | 2 | 21 |
| 30- | 45.3093- | 111.7954- | 2- | 12- | 0- | M37465 | -5 | -5 | -5 | 18 | 27 | 28 | -5 | -10 | -15 | 3 | 42 |
| 30- | 45.2958- | 111.7630- | 2- | 12- | 0- | M37466 | -5 | -5 | -5 | 25 | -20 | 31 | 10 | -10 | -15 | 2 | 47 |
| 30- | 45.2853- | 111.7687- | 2- | 12- | 0- | M37467 | -5 | -5 | -5 | 23 | -20 | -15 | 14 | -10 | 16 | 4 | 31 |
| 30- | 45.2809- | 111.8112- | 2- | 12- | 0- | M37468 | -5 | -5 | -5 | 25 | -20 | 60 | 12 | -10 | -15 | 3 | 62 |
| 30- | 45.2544- | 111.8163- | 2- | 12- | 0- | M37469 | -5 | -5 | -5 | 30 | -20 | 19 | 10 | -10 | -15 | 2 | 40 |
| 30- | 45.2675- | 111.7821- | 2- | 12- | 0- | M37470 | -5 | -5 | -5 | 27 | -20 | 19 | 14 | -10 | -15 | 3 | 39 |
| 30- | 45.2529- | 111.8169- | 2- | 12- | 0- | M37471 | -5 | -5 | -5 | 33 | -20 | 27 | 15 | -10 | -15 | 3 | 51 |
| 30- | 45.2491- | 111.7750- | 2- | 15- | 0- | M37472 | -5 | -5 | -5 | 23 | -20 | 39 | 15 | -10 | -15 | 3 | 36 |
| 30- | 45.3379- | 111.6920- | 2- | 12- | 0- | M37473 | -5 | -5 | -5 | 11 | -20 | -15 | -5 | -10 | -15 | 3 | 63 |
| 30- | 45.3383- | 111.6777- | 2- | 15- | 0- | M37474 | -5 | -5 | -5 | 17 | -20 | 23 | 13 | -10 | -15 | 3 | 46 |
| 30- | 45.3490- | 111.6874- | 2- | 15- | 0- | M37475 | -5 | -5 | -5 | 18 | -20 | -15 | 10 | -10 | -15 | 2 | 53 |
| 30- | 45.3472- | 111.6054- | 2- | 15- | 0- | M37476 | -5 | -5 | -5 | 19 | -20 | -15 | 8 | -10 | -15 | 3 | 66 |
| 30- | 45.3973- | 111.6071- | 2- | 12- | 0- | M37477 | -5 | -5 | -5 | 15 | -20 | 15 | 13 | -10 | -15 | 3 | 82 |
| 30- | 45.4035- | 111.6290- | 2- | 15- | 0- | M37478 | -5 | -5 | -5 | 40 | -20 | 27 | 8 | -10 | -15 | 3 | 50 |

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

③

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (Concentrations reported in weight parts per million (ppm)) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Al | Au | Ba | Ca | Ce | Cl | Co | Cr | Cs | Dy | Eu | Fe | Hf | K | La | Lu |
| 30 | -45.3591 | -111.8988 | -2 | -15 | - | 0-M37428 | 64080 | -0.09 | 303 | 26900 | 85 | -110 | 39.5 | 203 | 2.7 | 9 | 2.2 | 76110 | 14.6 | 11740 | 53 | 0.8 |
| 30 | -45.3613 | -111.9095 | -2 | -12 | - | 0-M37429 | 56090 | -0.07 | 463 | 34800 | 151 | -91 | 18.3 | 146 | 3.3 | 9 | 2.2 | 47570 | 43.9 | 15970 | 78 | 1.0 |
| 30 | -45.3485 | -111.8904 | -2 | -12 | - | 0-M37430 | 62800 | -0.09 | 719 | 24970 | 154 | 138 | 25.3 | 191 | 3.9 | 8 | 2.3 | 59250 | 28.1 | 18350 | 71 | 0.9 |
| 30 | -45.3886 | -111.8890 | -2 | -12 | - | 0-M37431 | 50950 | -0.06 | 607 | 36680 | 72 | 204 | 13.1 | 132 | 3.1 | 5 | 1.6 | 34390 | 13.2 | 15040 | 43 | 0.4 |
| 30 | -45.3615 | -111.9226 | -2 | -15 | - | 0-M37432 | 66950 | -0.08 | 605 | 23900 | 127 | -131 | 35.8 | 290 | 4.1 | 6 | 2.1 | 65150 | 17.0 | 17840 | 58 | 0.6 |
| 30 | -45.3588 | -111.9415 | -2 | -12 | - | 0-M37433 | 59720 | -0.07 | 424 | 28430 | 102 | 265 | 24.0 | 174 | 2.6 | 9 | 2.0 | 66690 | 48.4 | 16420 | 60 | 1.2 |
| 30 | -45.3576 | -111.9435 | -2 | -12 | - | 0-M37434 | 54720 | -0.10 | 541 | 26550 | 155 | -130 | 21.5 | 192 | -2.3 | 11 | 2.6 | 70650 | 73.4 | 12470 | 74 | 1.6 |
| 30 | -45.3252 | -111.9990 | -2 | -12 | - | 0-M37435 | 48280 | -0.10 | -259 | 26620 | 305 | 189 | 34.5 | 345 | -2.5 | 18 | 5.0 | 114400 | 204.9 | -7121 | 167 | 3.5 |
| 30 | -45.3119 | -111.9802 | -2 | -12 | - | 0-M37436 | 58650 | -0.07 | 678 | 29190 | 94 | -102 | 18.3 | 235 | 4.3 | 5 | 2.0 | 47230 | 21.5 | 14950 | 51 | 0.6 |
| 30 | -45.2991 | -111.9763 | -2 | -12 | - | 0-M37437 | 61620 | -0.07 | 692 | 27550 | 135 | 243 | 35.0 | 1997 | 3.5 | 10 | 2.2 | 63250 | 42.5 | 16120 | 66 | 1.0 |
| 30 | -45.2663 | -111.9740 | -2 | -15 | - | 0-M37438 | 54060 | -0.11 | -210 | 28040 | 192 | 262 | 71.5 | 5471 | -2.7 | 8 | 2.6 | 102200 | 39.3 | 9364 | 81 | 1.2 |
| 30 | -45.2592 | -111.9720 | -2 | -12 | - | 0-M37439 | 58640 | 0.09 | 952 | 28740 | 97 | -96 | 16.4 | 156 | 4.7 | 7 | 1.9 | 37910 | 17.8 | 19660 | 44 | 0.7 |
| 30 | -45.3001 | -111.9784 | -2 | -15 | - | 0-M37440 | 59420 | -0.07 | 677 | 26310 | 118 | 213 | 16.6 | 166 | 4.5 | 8 | 1.9 | 48690 | 24.5 | 14690 | 59 | 0.8 |
| 30 | -45.3111 | -111.9704 | -2 | -15 | - | 0-M37441 | 60070 | -0.08 | 496 | 22560 | 95 | 180 | 33.1 | 362 | 5.0 | 7 | 2.0 | 63180 | 14.9 | 13370 | 47 | 0.6 |
| 30 | -45.4968 | -111.8046 | -2 | -12 | - | 0-M37442 | 52020 | -0.07 | 617 | 47890 | 82 | -92 | 10.2 | 66 | 4.3 | 5 | 1.6 | 24060 | 13.5 | 17890 | 44 | 0.6 |
| 30 | -45.4971 | -111.7931 | -2 | -12 | - | 0-M37443 | 62610 | -0.07 | 960 | 18280 | 129 | 178 | 15.8 | 122 | 3.5 | 10 | 2.5 | 47820 | 35.1 | 21700 | 72 | 1.2 |
| 30 | -45.4822 | -111.7891 | -2 | -12 | - | 0-M37444 | 51490 | -0.09 | 770 | 32420 | 206 | 362 | 22.0 | 131 | -2.2 | 20 | 4.7 | 98760 | 92.7 | 10330 | 102 | 2.7 |
| 30 | -45.4485 | -111.7630 | -2 | -12 | - | 0-M37445 | 62280 | -0.07 | 822 | 34310 | 61 | -131 | 20.7 | 256 | 2.0 | 4 | 1.7 | 49600 | 8.1 | 14490 | 35 | 0.4 |
| 30 | -45.4485 | -111.8452 | -2 | -12 | - | 0-M37446 | 58730 | -0.12 | -218 | 28580 | 183 | -143 | 34.4 | 266 | 15.3 | 9 | 2.5 | 89020 | 35.1 | 10420 | 89 | 1.2 |
| 30 | -45.4526 | -111.8851 | -2 | -12 | - | 0-M37447 | 65630 | -0.08 | 1311 | 20350 | 199 | 332 | 10.9 | 61 | -2.0 | 15 | 3.7 | 43800 | 53.3 | 22490 | 106 | 1.2 |
| 30 | -45.4640 | -111.8197 | -2 | -12 | - | 0-M37448 | 48110 | -0.07 | 628 | 19630 | 87 | -78 | 10.0 | 224 | 9.0 | 5 | 1.8 | 41980 | 20.8 | 14510 | 49 | 0.6 |
| 30 | -45.4507 | -111.8158 | -2 | -12 | - | 0-M37449 | 57170 | -0.07 | 542 | 28600 | 115 | -131 | 21.6 | 159 | 5.2 | 9 | 1.9 | 60500 | 19.9 | 16210 | 55 | 0.8 |
| 30 | -45.4337 | -111.7750 | -2 | -12 | - | 0-M37450 | 59800 | -0.09 | 636 | 25290 | 131 | 222 | 16.6 | 109 | -2.1 | 9 | 2.3 | 52780 | 34.2 | 21200 | 67 | 1.1 |
| 30 | -45.4070 | -111.7543 | -2 | -12 | - | 0-M37451 | 67540 | -0.08 | 956 | 32980 | 58 | -123 | 22.9 | 172 | -2.1 | 3 | 1.7 | 49370 | 7.0 | 15160 | 29 | 0.3 |
| 30 | -45.4197 | -111.8300 | -2 | -12 | - | 0-M37452 | 57290 | -0.08 | 502 | 28620 | 95 | 134 | 21.8 | 172 | 3.6 | 6 | 2.0 | 51080 | 18.0 | 15330 | 58 | 0.7 |
| 30 | -45.3852 | -111.8428 | -2 | -12 | - | 0-M37453 | 65710 | -0.08 | 923 | 27670 | 157 | 493 | 16.3 | 87 | -1.8 | 19 | 3.3 | 62120 | 68.5 | 21630 | 82 | 1.7 |
| 30 | -45.3713 | -111.8149 | -2 | -12 | - | 0-M37454 | 54090 | -0.09 | 559 | 23010 | 138 | 279 | 16.1 | 100 | 2.8 | 12 | 2.7 | 64450 | 93.6 | 16980 | 63 | 2.1 |
| 30 | -45.3642 | -111.8143 | -2 | -12 | - | 0-M37455 | 61680 | -0.09 | 755 | 22570 | 164 | 453 | 18.3 | 106 | -2.1 | 21 | 4.6 | 93610 | 197.6 | 14440 | 98 | 3.4 |
| 30 | -45.2965 | -111.9558 | -2 | -15 | - | 0-M37456 | 61220 | 0.90 | 683 | 21260 | 157 | -116 | 25.0 | 213 | 4.4 | 11 | 2.5 | 59650 | 25.9 | 17900 | 76 | 1.1 |
| 30 | -45.2546 | -111.9182 | -2 | -12 | - | 0-M37457 | 61110 | 0.20 | 433 | 31450 | 86 | -129 | 36.3 | 242 | 4.5 | 9 | 1.9 | 57760 | 10.5 | 15090 | 44 | 0.6 |
| 30 | -45.2556 | -111.9172 | -2 | -12 | - | 0-M37458 | 60360 | -0.08 | 577 | 39740 | 85 | 220 | 16.1 | 163 | 6.1 | 7 | 1.9 | 37220 | 16.6 | 16240 | 38 | 0.7 |
| 30 | -45.2580 | -111.9216 | -2 | -12 | - | 0-M37459 | 63490 | 0.55 | 827 | 31320 | 110 | 160 | 29.6 | 260 | 3.8 | 9 | 2.1 | 57800 | 18.3 | 16030 | 55 | 0.8 |
| 30 | -45.2661 | -111.9254 | -2 | -12 | - | 0-M37460 | 60060 | 0.36 | 672 | 28100 | 152 | -125 | 32.3 | 310 | 3.8 | 12 | 2.7 | 77680 | 41.5 | 11640 | 79 | 1.3 |
| 30 | -45.2890 | -111.9440 | -2 | -12 | - | 0-M37461 | 56710 | 0.23 | 545 | 35440 | 119 | -149 | 32.9 | 260 | -2.2 | 10 | 2.2 | 70910 | 24.1 | 11070 | 61 | 1.1 |
| 30 | -45.2952 | -111.9303 | -2 | -15 | - | 0-M37462 | 67830 | -0.07 | 562 | 20940 | 79 | -114 | 14.5 | 111 | 4.4 | 4 | 1.9 | 35110 | 11.3 | 13720 | 35 | 0.5 |
| 30 | -45.3009 | -111.8813 | -2 | -11 | - | 0-M37463 | 57330 | -0.06 | 871 | 25260 | 64 | -100 | 13.7 | 87 | 3.2 | 3 | 1.4 | 44460 | 8.0 | 17710 | 37 | 0.3 |
| 30 | -45.3266 | -111.8658 | -2 | -11 | - | 0-M37464 | 62540 | -0.08 | 994 | 28180 | 59 | -121 | 20.8 | 149 | -2.3 | 4 | 1.8 | 46510 | 7.4 | 16250 | 36 | 0.3 |
| 30 | -45.3093 | -111.7954 | -2 | -12 | - | 0-M37465 | 51840 | -0.07 | 540 | 36760 | 189 | -126 | 17.9 | 137 | 5.8 | 11 | 3.1 | 67300 | 56.8 | 12870 | 106 | 1.2 |
| 30 | -45.2958 | -111.7630 | -2 | -12 | - | 0-M37466 | 59870 | -0.07 | 670 | 30540 | 73 | -97 | 14.1 | 161 | 3.1 | 4 | 1.7 | 36550 | 13.7 | 17780 | 40 | 0.4 |
| 30 | -45.2853 | -111.7687 | -2 | -12 | - | 0-M37467 | 68270 | 0.14 | 1222 | 24160 | 93 | -102 | 6.8 | 61 | 3.3 | 3 | 1.7 | 23690 | 17.3 | 17370 | 46 | 0.3 |
| 30 | -45.2809 | -111.8112 | -2 | -12 | - | 0-M37468 | 65080 | -0.08 | 730 | 29330 | 92 | 161 | 19.4 | 138 | 3.9 | 7 | 1.8 | 45360 | 12.8 | 16450 | 45 | 0.6 |
| 30 | -45.2544 | -111.8163 | -2 | -12 | - | 0-M37469 | 54240 | -0.06 | 816 | 33240 | 80 | -83 | 12.2 | 127 | 3.6 | 5 | 1.7 | 33640 | 16.5 | 17260 | 42 | 0.6 |
| 30 | -45.2675 | -111.7821 | -2 | -12 | - | 0-M37470 | 53560 | -0.05 | 765 | 23400 | 66 | -97 | 10.1 | 68 | 3.1 | 5 | 1.4 | 25370 | 11.6 | 19420 | 38 | 0.4 |
| 30 | -45.2529 | -111.8169 | -2 | -12 | - | 0-M37471 | 58990 | -0.07 | 603 | 30430 | 81 | 173 | 10.8 | 63 | 5.1 | 4 | 1.6 | 27380 | 13.1 | 20210 | 42 | 0.5 |
| 30 | -45.2491 | -111.7750 | -2 | -15 | - | 0-M37472 | 61240 | -0.06 | 776 | 26730 | 88 | 182 | 15.3 | 107 | 4.8 | 6 | 1.8 | 36320 | 12.0 | 22770 | 44 | 0.6 |
| 30 | -45.3379 | -111.6920 | -2 | -12 | - | 0-M37473 | 47720 | -0.05 | 657 | 24160 | 61 | -71 | 4.9 | 57 | 3.8 | 3 | 1.2 | 19540 | 7.2 | 16750 | 33 | 0.3 |
| 30 | -45.3383 | -111.6777 | -2 | -15 | - | 0-M37474 | 52380 | -0.05 | 774 | 17600 | 58 | -98 | 7.7 | 66 | 3.9 | 4 | 1.5 | 22600 | 10.3 | 21740 | 32 | 0.3 |
| 30 | -45.3490 | -111.6874 | -2 | -15 | - | 0-M37475 | 49990 | -0.06 | 564 | 25080 | 60 | 149 | 6.8 | 48 | 4.2 | 3 | 1.4 | 18410 | 6.4 | 16890 | 32 | 0.3 |
| 30 | -45.3472 | -111.6054 | -2 | -15 | - | 0-M37476 | 54620 | -0.06 | 625 | 26650 | 67 | -78 | 7.4 | 55 | 5.7 | 4 | 1.3 | 22350 | 9.0 | 19080 | 32 | 0.4 |
| 30 | -45.3973 | -111.6071 | -2 | -12 | - | 0-M37477 | 49350 | -0.05 | 703 | 44670 | 79 | -87 | 8.7 | 75 | 4.0 | 5 | 1.4 | 27460 | 12.1 | 15050 | 40 | 0.4 |
| 30 | -45.4035 | -111.6290 | -2 | -15 | - | 0-M37478 | 59040 | -0.07 | 715 | 20330 | 128 | -128 | 18.0 | 99 | 3.3 | 11 | 2.4 | 46480 | 18.5 | 19710 | 73 | 0.9 |

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

④

| DOE SAMPLE NUMBER | | | | | | | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | U/Th RATIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LAB. SAMPLE LOCATION NUMBER | Mg | Mn | Na | Rb | Sb | Sc | Sm | Sr | Ta | Tb | Th | Ti | V | Yb | Zn | |
| 30-45.3591-111.8988-2-15- | | | | | | 0-M37428 | 14880 | 1292 | 15220 | 69 | -2 | 29.9 | 11.6 | -361 | 3 | 2 | 21.3 | 5714 | 147 | 8.2 | -32 | 0.169 |
| 30-45.3613-111.9095-2-12- | | | | | | 0-M37429 | 13160 | 1114 | 12420 | -28 | -2 | 15.1 | 15.5 | -302 | 2 | 2 | 29.6 | 6015 | 115 | 8.2 | 131 | 0.257 |
| 30-45.3485-111.8904-2-12- | | | | | | 0-M37430 | 14380 | 1228 | 14150 | 70 | -2 | 17.2 | 13.0 | -330 | -2 | -1 | 29.7 | 5704 | 124 | 5.8 | 72 | 0.155 |
| 30-45.3886-111.8890-2-12- | | | | | | 0-M37431 | 15280 | 847 | 11570 | 58 | -2 | 10.6 | 5.5 | -263 | 1 | -1 | 13.1 | 3433 | 85 | 3.2 | 132 | 0.275 |
| 30-45.3615-111.9226-2-15- | | | | | | 0-M37432 | 19650 | 1211 | 15830 | 86 | -2 | 20.3 | 9.2 | -376 | -1 | -1 | 17.5 | 5049 | 127 | 6.3 | 173 | 0.154 |
| 30-45.3588-111.9415-2-12- | | | | | | 0-M37433 | 11610 | 1558 | 16060 | 60 | -2 | 20.4 | 10.9 | -362 | 2 | 2 | 20.3 | 5981 | 111 | 8.8 | 106 | 0.315 |
| 30-45.3576-111.9435-2-12- | | | | | | 0-M37434 | 11180 | 1657 | 13860 | -37 | -2 | 20.7 | 14.0 | -380 | 3 | 2 | 28.4 | 8105 | 114 | 10.9 | -47 | 0.275 |
| 30-45.3252-111.9990-2-12- | | | | | | 0-M37435 | 9615 | 2761 | 10210 | -40 | -3 | 35.6 | 36.8 | -514 | 6 | 4 | 71.4 | 12720 | 131 | 26.8 | -52 | 0.289 |
| 30-45.3119-111.9802-2-12- | | | | | | 0-M37436 | 12910 | 1002 | 12120 | 52 | -2 | 14.1 | 7.4 | -286 | -1 | 2 | 18.8 | 4236 | 101 | 5.5 | 139 | 0.207 |
| 30-45.2991-111.9763-2-12- | | | | | | 0-M37437 | 14620 | 1409 | 14340 | -31 | -2 | 19.3 | 9.6 | -388 | -1 | 2 | 28.1 | 5795 | 135 | 8.6 | -10 | 0.224 |
| 30-45.2663-111.9740-2-15- | | | | | | 0-M37438 | 22360 | 1966 | 11160 | -47 | -3 | 25.0 | 12.7 | -414 | -2 | -2 | 36.1 | 6120 | 141 | 9.4 | -57 | 0.169 |
| 30-45.2592-111.9720-2-12- | | | | | | 0-M37439 | 12850 | 760 | 14030 | 73 | -2 | 11.7 | 8.0 | -257 | -1 | -1 | 18.3 | 3562 | 82 | 5.4 | 113 | 0.251 |
| 30-45.3001-111.9784-2-15- | | | | | | 0-M37440 | 10880 | 944 | 15100 | 54 | -2 | 13.6 | 8.2 | -287 | -1 | 2 | 18.2 | 4684 | 88 | 6.6 | 101 | 0.225 |
| 30-45.3111-111.9704-2-15- | | | | | | 0-M37441 | 17040 | 1441 | 12650 | 71 | -2 | 19.9 | 7.5 | -405 | -1 | -1 | 15.7 | 5297 | 139 | 4.7 | 71 | 0.274 |
| 30-45.4968-111.8046-2-12- | | | | | | 0-M37442 | 10730 | 544 | 12880 | 82 | -2 | 8.0 | 6.6 | -229 | -1 | -1 | 13.1 | 2654 | 65 | 5.0 | 68 | 0.221 |
| 30-45.4971-111.7931-2-12- | | | | | | 0-M37443 | 10630 | 790 | 17370 | 92 | -2 | 13.0 | 11.9 | -286 | 2 | -1 | 22.5 | 5809 | 88 | 8.8 | 75 | 0.338 |
| 30-45.4822-111.7891-2-12- | | | | | | 0-M37444 | 10170 | 1943 | 16670 | 54 | -2 | 25.6 | 24.7 | -402 | 4 | 4 | 30.2 | 8243 | 83 | 22.1 | 155 | 0.298 |
| 30-45.4485-111.7630-2-12- | | | | | | 0-M37445 | 17260 | 976 | 18520 | -28 | -2 | 15.5 | 5.0 | 484 | -1 | -1 | 10.1 | 4043 | 146 | 3.1 | -36 | 0.327 |
| 30-45.4485-111.8452-2-12- | | | | | | 0-M37446 | 15610 | 1986 | 12030 | -46 | 18 | 28.6 | 16.6 | -429 | -2 | 2 | 30.4 | 8517 | 140 | 10.2 | 203 | 0.329 |
| 30-45.4526-111.8851-2-12- | | | | | | 0-M37447 | 7359 | 730 | 20170 | 89 | -2 | 14.0 | 20.4 | -295 | 2 | 2 | 27.8 | 6743 | 90 | 9.9 | 68 | 0.198 |
| 30-45.4640-111.8197-2-12- | | | | | | 0-M37448 | 10550 | 680 | 8964 | 52 | -2 | 10.6 | 6.0 | -230 | -1 | -1 | 16.1 | 3848 | 117 | 4.0 | 124 | 0.255 |
| 30-45.4507-111.8158-2-12- | | | | | | 0-M37449 | 14710 | 1429 | 12530 | 61 | 3 | 21.5 | 8.1 | -389 | 2 | 2 | 18.8 | 5192 | 108 | 6.8 | -41 | 0.229 |
| 30-45.4337-111.7750-2-12- | | | | | | 0-M37450 | 9282 | 1017 | 17990 | 59 | -2 | 15.0 | 14.5 | -310 | -1 | 2 | 23.4 | 5131 | 83 | 8.7 | -47 | 0.197 |
| 30-45.4070-111.7543-2-12- | | | | | | 0-M37451 | 12590 | 846 | 18480 | -34 | -2 | 15.4 | 3.9 | -322 | 2 | -1 | 6.3 | 7129 | 135 | 2.4 | -45 | 0.270 |
| 30-45.4197-111.8300-2-12- | | | | | | 0-M37452 | 13330 | 999 | 14400 | 61 | -2 | 17.8 | 7.7 | -296 | -1 | -1 | 17.1 | 5057 | 114 | 5.9 | 172 | 0.497 |
| 30-45.3852-111.8428-2-12- | | | | | | 0-M37453 | 7666 | 1291 | 25650 | 68 | -2 | 15.6 | 17.6 | -425 | 3 | 3 | 44.4 | 9754 | 89 | 14.0 | 135 | 0.198 |
| 30-45.3713-111.8149-2-12- | | | | | | 0-M37454 | 7809 | 1378 | 16520 | 58 | -2 | 14.2 | 13.7 | -337 | 4 | 2 | 55.9 | 8391 | 92 | 15.9 | 170 | 0.182 |
| 30-45.3642-111.8143-2-12- | | | | | | 0-M37455 | 6908 | 1816 | 21600 | 55 | -2 | 17.3 | 24.2 | -424 | 5 | 3 | 90.6 | 14820 | 108 | 22.3 | 155 | 0.232 |
| 30-45.2965-111.9558-2-15- | | | | | | 0-M37456 | 12250 | 1253 | 14190 | 78 | -2 | 17.7 | 12.4 | -337 | -1 | 2 | 29.5 | 4477 | 100 | 8.3 | 108 | 0.142 |
| 30-45.2546-111.9182-2-12- | | | | | | 0-M37457 | 22840 | 1218 | 14420 | -32 | -2 | 20.8 | 7.7 | -379 | -1 | -1 | 17.8 | 3867 | 131 | 5.4 | 99 | 0.213 |
| 30-45.2556-111.9172-2-12- | | | | | | 0-M37458 | 12950 | 656 | 16190 | 72 | -2 | 13.3 | 7.5 | 447 | 2 | -1 | 17.5 | 4548 | 94 | 6.3 | 92 | 0.183 |
| 30-45.2580-111.9216-2-12- | | | | | | 0-M37459 | 17310 | 1268 | 14820 | -37 | -2 | 19.3 | 8.2 | -363 | -1 | 2 | 18.7 | 4942 | 124 | 6.5 | 197 | 0.289 |
| 30-45.2661-111.9254-2-12- | | | | | | 0-M37460 | 17660 | 1628 | 11990 | -43 | 3 | 25.1 | 13.1 | -402 | -2 | 2 | 33.4 | 6773 | 126 | 10.0 | 189 | 0.225 |
| 30-45.2890-111.9440-2-12- | | | | | | 0-M37461 | 17620 | 1744 | 13320 | -34 | -2 | 25.3 | 9.6 | -455 | 2 | 2 | 22.5 | 4939 | 144 | 8.2 | 140 | 0.227 |
| 30-45.2952-111.9303-2-15- | | | | | | 0-M37462 | 9383 | 934 | 15760 | 47 | -2 | 11.7 | 6.7 | -296 | -1 | -1 | 10.7 | 3922 | 83 | 3.8 | -10 | 0.224 |
| 30-45.3009-111.8813-2-11- | | | | | | 0-M37463 | 8682 | 754 | 14320 | 51 | -2 | 10.5 | 4.9 | 461 | -1 | -1 | 10.7 | 3063 | 124 | 2.9 | 98 | 0.346 |
| 30-45.3266-111.8658-2-11- | | | | | | 0-M37464 | 10410 | 778 | 15940 | 53 | -2 | 14.3 | 4.3 | -324 | 2 | -1 | 8.4 | 5142 | 108 | 2.5 | -116 | 0.226 |
| 30-45.3093-111.7954-2-12- | | | | | | 0-M37465 | 9264 | 1191 | 13560 | 68 | -2 | 14.0 | 16.8 | -365 | 4 | 2 | 34.7 | 8850 | 119 | 10.5 | 127 | 0.216 |
| 30-45.2958-111.7630-2-12- | | | | | | 0-M37466 | 12200 | 704 | 13240 | 79 | -2 | 10.3 | 7.4 | -260 | -1 | -1 | 10.1 | 3149 | 100 | 3.9 | -30 | 0.337 |
| 30-45.2853-111.7687-2-12- | | | | | | 0-M37467 | 6325 | 477 | 16600 | 94 | -2 | 7.1 | 6.1 | 422 | -1 | -1 | 13.3 | 3083 | 54 | 3.7 | 93 | 0.248 |
| 30-45.2809-111.8112-2-12- | | | | | | 0-M37468 | 12060 | 740 | 15720 | 48 | -2 | 14.7 | 7.7 | -298 | 1 | -1 | 18.4 | 5070 | 97 | 3.9 | -32 | 0.168 |
| 30-45.2544-111.8163-2-12- | | | | | | 0-M37469 | 11140 | 578 | 11880 | 64 | -1 | 10.1 | 6.0 | -225 | -1 | -1 | 13.3 | 3813 | 84 | 4.0 | 125 | 0.241 |
| 30-45.2675-111.7821-2-12- | | | | | | 0-M37470 | 7362 | 532 | 12990 | 58 | -1 | 7.6 | 5.5 | -258 | -1 | -1 | 11.4 | 2832 | 69 | 3.2 | 106 | 0.254 |
| 30-45.2529-111.8169-2-12- | | | | | | 0-M37471 | 8669 | 668 | 13410 | 62 | -2 | 8.4 | 8.3 | -250 | -1 | -1 | 14.8 | 2941 | 76 | 4.9 | -38 | 0.236 |
| 30-45.2491-111.7750-2-15- | | | | | | 0-M37472 | 9790 | 773 | 13950 | 86 | -2 | 11.4 | 7.2 | -267 | -1 | -1 | 15.7 | 3896 | 92 | 4.0 | 120 | 0.197 |
| 30-45.3379-111.6920-2-12- | | | | | | 0-M37473 | 10050 | 281 | 11470 | 80 | -1 | 6.4 | 4.7 | 211 | -1 | -1 | 10.3 | 1925 | 71 | 2.8 | 92 | 0.262 |
| 30-45.3383-111.6777-2-15- | | | | | | 0-M37474 | 8061 | 485 | 13140 | 59 | -1 | 6.9 | 5.6 | 629 | -1 | -1 | 10.4 | 2707 | 74 | 2.9 | -59 | 0.279 |
| 30-45.3490-111.6874-2-15- | | | | | | 0-M37475 | 9587 | 312 | 11830 | 67 | -2 | 6.0 | 5.4 | -196 | -1 | -1 | 9.9 | 1816 | 71 | 1.9 | 63 | 0.273 |
| 30-45.3472-111.6054-2-15- | | | | | | 0-M37476 | 14000 | 426 | 9942 | 83 | -1 | 8.1 | 4.6 | -210 | -1 | -1 | 10.9 | 3141 | 98 | 3.8 | 51 | 0.303 |
| 30-45.3973-111.6071-2-12- | | | | | | 0-M37477 | 11080 | 529 | 12380 | 66 | -1 | 8.7 | 5.9 | 277 | 1 | -1 | 15.6 | 2513 | 64 | 4.5 | 103 | 0.192 |
| 30-45.4035-111.6290-2-15- | | | | | | 0-M37478 | 9418 | 1023 | 15610 | 67 | -2 | 13.8 | 11.3 | -359 | -1 | -1 | 19.0 | 5427 | 87 | 7.4 | 77 | 0.247 |

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

①

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER AND FIELD DATA | | | | | | | | | | | | | | | | | | | | | | | | U CONCENTRATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | TIME SAMPLED DATE | TIME SAMPLED HOUR | AIR TEMPERATURE | WATER TEMPERATURE | COMMENTS | SPECIAL MEASUREMENTS | pH | CONDUCTIVITY (µmho/cm) | SCINTILLOMETER (eU, ppm) | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm |
| 30- | 45.2861- | 111.6812- | 2- | 12- | | 0-M37479- | 10/21/76- | 14- | 10- | 7.2- | C- | - | 5.7- | 240- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 2.50 |
| 30- | 45.2531- | 111.6462- | 2- | 15- | | 0-M37480- | 10/21/76- | 14- | 15- | - | - | - | - | - | | -4- | -4- | 6- | -1- | -2- | 2- | 2- | 3- | 1- | -3- | - | - | - | - | 3.20 |
| 30- | 45.2682- | 111.6773- | 2- | 12- | | 0-M37481- | 10/21/76- | 14- | 14- | 7.2- | C- | - | 5.7- | 210- | | -4- | -4- | 6- | 2- | 3- | 2- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 2.80 |
| 30- | 45.2723- | 111.6362- | 2- | 15- | | 0-M37482- | 10/21/76- | 14- | 14- | - | - | - | - | - | | -4- | -4- | 6- | -1- | -2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | 1.90 |
| 30- | 45.3001- | 111.6089- | 2- | 12- | | 0-M37483- | 10/21/76- | 15- | 10- | 5.0- | C- | - | 5.7- | 260- | | -4- | -4- | 6- | 4- | 3- | 1- | 2- | 4- | 3- | 4- | 2- | -3- | - | - | - | - | 3.50 |
| 30- | 45.3040- | 111.5774- | 2- | 12- | | 0-M37484- | 10/21/76- | 15- | 8- | 3.2- | C- | - | 5.7- | 300- | | -1- | 6- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -3- | - | - | - | - | 3.30 |
| 30- | 45.2958- | 111.5746- | 2- | 12- | | 0-M37485- | 10/21/76- | 16- | 7- | 3.0- | C- | - | 5.7- | 250- | | -4- | -4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 5- | 2- | -1- | - | - | - | - | 3.30 |
| 30- | 45.2814- | 111.5463- | 2- | 12- | | 0-M37486- | 10/21/76- | 16- | 4- | 3.2- | C- | - | 5.5- | 240- | | -1- | 6- | 5- | 8- | 4- | 3- | 1- | 2- | 1- | 4- | 4- | 2- | -1- | - | - | - | - | 3.10 |
| 30- | 45.2794- | 111.5052- | 2- | 12- | | 0-M37487- | 10/21/76- | 16- | 2- | 0.2- | C- | - | 5.5- | 280- | | -4- | -5- | 6- | 4- | 3- | 1- | 2- | 1- | 4- | 5- | 2- | -1- | - | - | - | - | 3.40 |
| 30- | 45.3066- | 111.7014- | 2- | 15- | | 0-M37488- | 10/21/76- | 17- | 8- | - | - | - | - | - | | -4- | -4- | 6- | -1- | -2- | 2- | 3- | 4- | 2- | -3- | - | - | - | - | 3.10 |
| 30- | 45.3079- | 111.6957- | 2- | 12- | | 0-M37489- | 10/21/76- | 17- | 7- | 9.2- | C- | - | 5.9- | 400- | | -4- | -4- | 6- | 4- | 3- | 1- | 2- | 3- | 2- | 3- | 2- | -3- | - | - | - | - | 2.90 |
| 30- | 45.2410- | 111.6959- | 2- | 15- | | 0-M37490- | 10/22/76- | 10- | 4- | - | - | - | - | - | | -4- | -4- | 6- | -1- | -2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 3.40 |
| 30- | 45.2420- | 111.6459- | 2- | 15- | | 0-M37491- | 10/22/76- | 10- | 3- | - | - | - | - | - | | -4- | -4- | 6- | -1- | -2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 3.30 |
| 30- | 45.2359- | 111.6439- | 2- | 15- | | 0-M37492- | 10/22/76- | 10- | 3- | - | - | - | - | - | | -4- | -4- | 6- | -1- | -2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 3.10 |
| 30- | 45.2373- | 111.6689- | 2- | 12- | | 0-M37493- | 10/22/76- | 10- | 4- | 2.4- | C- | - | 5.7- | 190- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 2.60 |
| 30- | 45.1832- | 111.5952- | 2- | 12- | | 0-M37494- | 10/22/76- | 11- | 8- | 2.8- | C- | - | 5.5- | 170- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 3.40 |
| 30- | 45.1928- | 111.5857- | 2- | 11- | | 0-M37495- | 10/22/76- | 11- | 4- | 4.2- | C- | - | 5.5- | 150- | | -4- | -4- | 6- | 4- | 3- | 1- | 2- | 3- | 3- | 4- | 2- | -3- | - | - | - | - | 3.30 |
| 30- | 45.1784- | 111.6161- | 2- | 12- | | 0-M37496- | 10/22/76- | 12- | 8- | 2.4- | C- | - | 5.5- | 220- | | -4- | -3- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 3.20 |
| 30- | 45.1560- | 111.5496- | 2- | 12- | | 0-M37497- | 10/22/76- | 12- | 6- | 3.8- | C- | - | 5.7- | 290- | | -4- | -3- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 2.70 |
| 30- | 45.1565- | 111.5560- | 2- | 12- | | 0-M37498- | 10/22/76- | 12- | 6- | 4.2- | C- | - | 5.7- | 290- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 3.30 |
| 30- | 45.1659- | 111.5577- | 2- | 12- | | 0-M37499- | 10/22/76- | 12- | 6- | 2.6- | C- | - | 5.7- | 210- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -3- | - | - | - | - | 2.20 |
| 30- | 45.1487- | 111.6052- | 2- | 15- | | 0-M37500- | 10/22/76- | 13- | 10- | - | - | - | - | - | | -4- | -4- | 6- | -1- | -2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 7.70 |
| 30- | 45.1001- | 111.5581- | 2- | 12- | | 0-M37501- | 10/22/76- | 13- | 10- | 2.8- | C- | - | 5.9- | 240- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -1- | - | - | - | - | 2.90 |
| 30- | 45.0991- | 111.5626- | 2- | 12- | | 0-M37502- | 10/22/76- | 13- | 10- | 3.8- | C- | - | 5.7- | 260- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 8.90 |
| 30- | 45.0636- | 111.5805- | 2- | 12- | | 0-M37503- | 10/22/76- | 14- | 10- | 3.8- | - | - | 5.5- | 100- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 3.10 |
| 30- | 45.0428- | 111.5944- | 2- | 12- | | 0-M37504- | 10/22/76- | 14- | 10- | 3.6- | C- | - | 5.5- | 80- | | -4- | -4- | 4- | 4- | 3- | 1- | 2- | 2- | 3- | 4- | 2- | -1- | - | - | - | - | 5.30 |
| 30- | 45.0861- | 111.6370- | 2- | 15- | | 0-M37505- | 10/22/76- | 15- | 10- | - | - | - | - | - | | -4- | -4- | 6- | -1- | -2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | 6.80 |
| 30- | 45.1038- | 111.6471- | 2- | 12- | | 0-M37506- | 10/22/76- | 15- | 10- | 5.4- | C- | - | 5.7- | 270- | | -4- | -4- | 6- | 4- | 3- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 3.20 |
| 30- | 45.0020- | 111.6790- | 2- | 15- | | 0-M37507- | 10/22/76- | 15- | 10- | - | - | - | - | - | | -1- | 6- | 4- | 6- | -1- | -2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | 18.20 |
| 30- | 45.0144- | 111.7000- | 2- | 12- | | 0-M37508- | 10/22/76- | 16- | 10- | 4.6- | C- | - | 5.5- | 180- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | 3.20 |
| 30- | 45.0205- | 111.7010- | 2- | 12- | | 0-M37509- | 10/22/76- | 16- | 8- | 2.2- | C- | - | 5.5- | 140- | | -4- | -4- | 6- | 4- | 3- | 1- | 2- | 3- | 4- | 3- | 3- | -3- | - | - | - | - | 4.00 |
| 30- | 45.0354- | 111.7030- | 2- | 15- | | 0-M37510- | 10/22/76- | 16- | 8- | - | - | - | - | - | | -4- | -4- | 6- | -1- | -2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 2.90 |
| 30- | 45.0377- | 111.8350- | 2- | 11- | | 0-M37511- | 10/23/76- | 11- | -1- | 2.2- | C- | - | 5.7- | 300- | | -1- | 1- | 4- | 6- | 2- | 3- | 1- | 2- | 1- | 3- | 4- | 5- | -1- | - | - | - | - | 2.20 |
| 30- | 45.0030- | 111.9577- | 2- | 12- | | 0-M37512- | 10/23/76- | 13- | 3- | 2.8- | C- | - | 5.9- | 340- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 3- | 2- | 4- | 2- | -3- | - | - | - | - | 5.10 |
| 30- | 45.0145- | 111.9671- | 2- | 12- | | 0-M37513- | 10/23/76- | 13- | 4- | 2.8- | C- | - | 5.9- | 500- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | 4.00 |
| 30- | 45.0266- | 111.9722- | 2- | 12- | | 0-M37514- | 10/23/76- | 13- | 4- | 2.2- | C- | - | 5.7- | 500- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 3- | 2- | 3- | 2- | -3- | - | - | - | - | 3.60 |
| 30- | 45.0427- | 111.9871- | 2- | 12- | | 0-M37515- | 10/23/76- | 13- | 2- | 2.4- | C- | - | 5.7- | 600- | | -1- | 1- | 5- | 6- | 3- | 3- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 3.70 |
| 30- | 45.0385- | 111.9665- | 2- | 12- | | 0-M37516- | 10/23/76- | 14- | 5- | 2.8- | C- | - | 5.9- | 450- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 2- | -3- | - | - | - | - | 4.10 |
| 30- | 45.0309- | 111.9681- | 2- | 12- | | 0-M37517- | 10/23/76- | 14- | 5- | 19.8- | C- | - | 6.3- | 600- | | -4- | -4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 3- | 2- | -1- | - | - | - | - | 3.10 |
| 30- | 45.0360- | 111.9339- | 2- | 12- | | 0-M37518- | 10/23/76- | 14- | 3- | 4.0- | - | - | 5.7- | 50- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 2.40 |
| 30- | 45.0398- | 111.9279- | 2- | 12- | | 0-M37519- | 10/23/76- | 14- | 3- | 3.8- | C- | - | 5.9- | 430- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 2- | 3- | 2- | -3- | - | - | - | - | 2.40 |
| 30- | 45.0699- | 111.9268- | 2- | 12- | | 0-M37520- | 10/23/76- | 14- | 2- | 2.2- | C- | - | 5.7- | 400- | | -1- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 3- | 2- | -3- | - | - | - | - | 2.80 |
| 30- | 45.0711- | 111.9368- | 2- | 12- | | 0-M37521- | 10/23/76- | 15- | 3- | 3.2- | C- | - | 5.7- | 350- | | -1- | 6- | 3- | 6- | 3- | 3- | 1- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 3.70 |
| 30- | 45.0502- | 111.9362- | 2- | 12- | | 0-M37522- | 10/23/76- | 15- | 3- | 3.2- | C- | - | 5.7- | 320- | | -1- | 6- | 4- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 2- | 2- | -3- | - | - | - | - | 3.70 |
| 30- | 45.5717- | 111.5188- | 2- | 15- | | 0-M37523- | 10/19/76- | 9- | -1- | - | - | - | - | - | | -2- | 7- | 4- | 1- | -1- | -2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 7.50 |
| 30- | 45.6121- | 111.5915- | 2- | 15- | | 0-M37524- | 10/19/76- | 9- | -1- | - | - | - | - | - | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 3- | 2- | 3- | 3- | -3- | - | - | - | - | 2.40 |
| 30- | 45.6086- | 111.5790- | 2- | 12- | | 0-M37525- | 10/19/76- | 10- | - | - | - | - | 5.4- | 250- | | -2- | 7- | 3- | 1- | 2- | 2- | 1- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 4.10 |
| 30- | 45.6239- | 111.5554- | 2- | 12- | | 0-M37526- | 10/19/76- | 10- | - | 0.5- | - | - | 5.2- | 310- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | 2.90 |
| 30- | 45.6758- | 111.5390- | 2- | 12- | | 0-M37527- | 10/19/76- | 10- | 1- | - | - | - | 5.5- | 350- | | -2- | 7- | 3- | 7- | 3- | 2- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | 2.50 |
| 30- | 45.6973- | 111.5368- | 2- | 12- | | 0-M37528- | 10/19/76- | 10- | 1- | 1.0- | - | - | 5.5- | 320- | | -2- | 7- | 4- | 1- | 3- | 2- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | 4.00 |
| 30- | 45.7168- | 111.5304- | 2- | 12- | | 0-M37529- | 10/19/76- | 11- | 1- | 1.0- | - | - | 5.8- | 320- | | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | 2.90 |

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

(2)

| DOE SAMPLE NUMBER | | | | | | LAB. SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE (Concentrations reported in weight parts per million (ppm)) | | | | | | | | | ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY (Concentrations in weight ppm) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Ag | Bi | Cd | Cu | Nb | Ni | Pb | Sn | W | Be | Li |
| 30- | 45.2861- | 111.6812- | 2- | 12- | 0- | M37479 | -5 | -5 | -5 | 25 | -20 | 17 | 9 | -10 | -15 | 2 | 36 |
| 30- | 45.2531- | 111.6462- | 2- | 15- | 0- | M37480 | -5 | -5 | -5 | 28 | -20 | 24 | 14 | -10 | -15 | 3 | 44 |
| 30- | 45.2682- | 111.6773- | 2- | 12- | 0- | M37481 | -5 | -5 | -5 | 26 | -20 | -15 | 16 | -10 | -15 | 3 | 64 |
| 30- | 45.2723- | 111.6362- | 2- | 15- | 0- | M37482 | -5 | -5 | -5 | 26 | -20 | -15 | 5 | -10 | -15 | 2 | 25 |
| 30- | 45.3001- | 111.6089- | 2- | 12- | 0- | M37483 | -5 | -5 | -5 | 10 | -20 | -15 | 8 | -10 | -15 | 2 | 33 |
| 30- | 45.3040- | 111.5774- | 2- | 12- | 0- | M37484 | -5 | -5 | -5 | 24 | -20 | 22 | 9 | -10 | -15 | 3 | 55 |
| 30- | 45.2958- | 111.5746- | 2- | 12- | 0- | M37485 | -5 | -5 | -5 | 30 | -20 | -15 | 13 | -10 | -15 | 3 | 49 |
| 30- | 45.2814- | 111.5463- | 2- | 12- | 0- | M37486 | -5 | -5 | -5 | 13 | -20 | -15 | 6 | -10 | -15 | 4 | 63 |
| 30- | 45.2794- | 111.5052- | 2- | 12- | 0- | M37487 | -5 | -5 | -5 | 22 | -20 | 23 | 7 | -10 | -15 | 3 | 51 |
| 30- | 45.3066- | 111.7014- | 2- | 15- | 0- | M37488 | -5 | -5 | -5 | 32 | -20 | 25 | 10 | -10 | -15 | 3 | 37 |
| 30- | 45.3079- | 111.6957- | 2- | 12- | 0- | M37489 | -5 | -5 | -5 | 24 | -20 | 34 | 5 | -10 | -15 | 2 | 22 |
| 30- | 45.2410- | 111.6959- | 2- | 15- | 0- | M37490 | -5 | -5 | -5 | 35 | -20 | 34 | 14 | -10 | 18 | 3 | 41 |
| 30- | 45.2420- | 111.6459- | 2- | 15- | 0- | M37491 | -5 | -5 | -5 | 22 | -20 | -15 | 13 | -10 | -15 | 3 | 50 |
| 30- | 45.2359- | 111.6439- | 2- | 15- | 0- | M37492 | -5 | -5 | -5 | 18 | -20 | 34 | 8 | -10 | -15 | 3 | 42 |
| 30- | 45.2373- | 111.6689- | 2- | 12- | 0- | M37493 | -5 | -5 | -5 | 29 | -20 | 39 | 9 | -10 | -15 | 3 | 33 |
| 30- | 45.1832- | 111.5952- | 2- | 12- | 0- | M37494 | -5 | -5 | -5 | 28 | -20 | -15 | 19 | -10 | -15 | 3 | 42 |
| 30- | 45.1928- | 111.5857- | 2- | 11- | 0- | M37495 | -5 | -5 | -5 | 48 | -20 | 28 | 12 | -10 | -15 | 3 | 36 |
| 30- | 45.1784- | 111.6161- | 2- | 12- | 0- | M37496 | -5 | -5 | -5 | 31 | -20 | 59 | 15 | -10 | -15 | 2 | 18 |
| 30- | 45.1560- | 111.5496- | 2- | 12- | 0- | M37497 | -5 | -5 | -5 | 32 | -20 | 31 | 9 | -10 | -15 | 2 | 29 |
| 30- | 45.1565- | 111.5560- | 2- | 12- | 0- | M37498 | -5 | -5 | -5 | 21 | -20 | 21 | 9 | -10 | -15 | 2 | 20 |
| 30- | 45.1659- | 111.5577- | 2- | 12- | 0- | M37499 | -5 | -5 | -5 | 28 | -20 | 41 | 5 | -10 | -15 | 2 | 16 |
| 30- | 45.1487- | 111.6052- | 2- | 15- | 0- | M37500 | -5 | -5 | -5 | 17 | -20 | -15 | 31 | -10 | -15 | 5 | 43 |
| 30- | 45.1001- | 111.5581- | 2- | 12- | 0- | M37501 | -5 | -5 | -5 | 33 | -20 | 44 | 12 | -10 | -15 | 3 | 28 |
| 30- | 45.0991- | 111.5626- | 2- | 12- | 0- | M37502 | -5 | -5 | -5 | 26 | -20 | 43 | 43 | -10 | -15 | 3 | 29 |
| 30- | 45.0636- | 111.5805- | 2- | 12- | 0- | M37503 | -5 | -5 | -5 | 21 | -20 | -15 | 10 | -10 | -15 | 3 | 43 |
| 30- | 45.0428- | 111.5944- | 2- | 12- | 0- | M37504 | -5 | -5 | -5 | 31 | -20 | 28 | 12 | -10 | -15 | 3 | 31 |
| 30- | 45.0861- | 111.6370- | 2- | 15- | 0- | M37505 | -5 | -5 | -5 | 24 | -20 | 18 | 19 | -10 | -15 | 4 | 42 |
| 30- | 45.1038- | 111.6471- | 2- | 12- | 0- | M37506 | -5 | -5 | -5 | 24 | -20 | -15 | 13 | -10 | -15 | 3 | 36 |
| 30- | 45.0020- | 111.6790- | 2- | 15- | 0- | M37507 | -5 | 5 | -5 | 16 | -20 | -15 | 18 | -10 | -15 | 4 | 29 |
| 30- | 45.0144- | 111.7000- | 2- | 12- | 0- | M37508 | -5 | -5 | -5 | 20 | -20 | -15 | 8 | -10 | -15 | 2 | 37 |
| 30- | 45.0205- | 111.7010- | 2- | 12- | 0- | M37509 | -5 | -5 | -5 | 36 | -20 | 37 | 6 | -10 | -15 | 3 | 27 |
| 30- | 45.0354- | 111.7030- | 2- | 15- | 0- | M37510 | -5 | -5 | -5 | 39 | -20 | 56 | 6 | -10 | -15 | 3 | 45 |
| 30- | 45.0377- | 111.8350- | 2- | 11- | 0- | M37511 | -5 | -5 | -5 | 21 | -20 | 15 | 12 | -10 | -15 | 5 | 39 |
| 30- | 45.0030- | 111.9577- | 2- | 12- | 0- | M37512 | -5 | -5 | -5 | 28 | -20 | -15 | 16 | -10 | -15 | 3 | 33 |
| 30- | 45.0145- | 111.9671- | 2- | 12- | 0- | M37513 | -5 | -5 | -5 | 17 | -20 | -15 | 6 | -10 | -15 | 3 | 28 |
| 30- | 45.0266- | 111.9722- | 2- | 12- | 0- | M37514 | -5 | -5 | -5 | 14 | -20 | -15 | 9 | -10 | -15 | 3 | 30 |
| 30- | 45.0427- | 111.9871- | 2- | 12- | 0- | M37515 | -5 | -5 | -5 | 13 | -20 | -15 | 12 | -10 | -15 | 3 | 27 |
| 30- | 45.0385- | 111.9665- | 2- | 12- | 0- | M37516 | -5 | -5 | -5 | 27 | -20 | 22 | 15 | -10 | -15 | 3 | 60 |
| 30- | 45.0309- | 111.9681- | 2- | 12- | 0- | M37517 | -5 | -5 | -5 | 20 | -20 | -15 | -5 | -10 | -15 | 2 | 24 |
| 30- | 45.0360- | 111.9339- | 2- | 12- | 0- | M37518 | -5 | -5 | -5 | 27 | -20 | -15 | -5 | -10 | -15 | 2 | 23 |
| 30- | 45.0398- | 111.9279- | 2- | 12- | 0- | M37519 | -5 | -5 | -5 | 20 | -20 | -15 | 12 | -10 | -15 | 2 | 25 |
| 30- | 45.0699- | 111.9268- | 2- | 12- | 0- | M37520 | -5 | -5 | -5 | 23 | -20 | 19 | 11 | -10 | -15 | 3 | 38 |
| 30- | 45.0711- | 111.9368- | 2- | 12- | 0- | M37521 | -5 | -5 | -5 | 16 | -20 | -15 | 11 | -10 | 16 | 3 | 23 |
| 30- | 45.0502- | 111.9362- | 2- | 12- | 0- | M37522 | -5 | 5 | -5 | 12 | -20 | -15 | 13 | -10 | -15 | 3 | 20 |
| 30- | 45.5717- | 111.5188- | 2- | 15- | 0- | M37523 | -5 | 6 | -5 | 38 | -20 | -15 | 12 | -10 | -15 | 3 | 29 |
| 30- | 45.6121- | 111.5915- | 2- | 15- | 0- | M37524 | -5 | -5 | -5 | 26 | -20 | 37 | 7 | -10 | -15 | 3 | 28 |
| 30- | 45.6086- | 111.5790- | 2- | 12- | 0- | M37525 | -5 | 5 | -5 | 28 | -20 | 25 | 7 | -10 | -15 | 2 | 20 |
| 30- | 45.6739- | 111.5554- | 2- | 12- | 0- | M37526 | -5 | -5 | -5 | 15 | -20 | 18 | 13 | -10 | -15 | 2 | 19 |
| 30- | 45.6758- | 111.5390- | 2- | 12- | 0- | M37527 | -5 | -5 | -5 | 26 | -20 | 16 | 15 | -10 | -15 | 2 | 31 |
| 30- | 45.6973- | 111.5368- | 2- | 12- | 0- | M37528 | -5 | -5 | -5 | 29 | -20 | 23 | 14 | -10 | -15 | 3 | 28 |
| 30- | 45.7168- | 111.5304- | 2- | 12- | 0- | M37529 | -5 | -5 | -5 | 31 | -20 | 28 | 9 | -10 | -15 | 3 | 26 |

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

③

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (Concentrations reported in weight parts per million (ppm)) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Al | Au | Ba | Ca | Ce | Cl | Co | Cr | Cs | Dy | Eu | Fe | Hf | K | La | Lu |
| 30- | 45.2841- | 111.6812- | 2- | 12- | | 0-M37479 | 43130 | -0.06 | 573 | 30370 | 63 | 379 | 8.6 | 172 | 3.9 | 4 | 1.7 | 30180 | 9.7 | 21830 | 38 | 0.4 |
| 30- | 45.2531- | 111.6462- | 2- | 15- | | 0-M37480 | 57640 | -0.05 | 724 | 25030 | 62 | -97 | 14.3 | 179 | 10.1 | 5 | 1.5 | 33780 | 9.1 | 15650 | 37 | 0.3 |
| 30- | 45.2682- | 111.6773- | 2- | 12- | | 0-M37481 | 53660 | -0.06 | 640 | 33820 | 80 | -92 | 11.3 | 82 | 3.8 | 4 | 1.7 | 27190 | 13.6 | 18910 | 36 | 0.6 |
| 30- | 45.2723- | 111.6362- | 2- | 15- | | 0-M37482 | 66890 | -0.06 | 869 | 45580 | 89 | -116 | 17.8 | 58 | 2.5 | 4 | 1.9 | 59530 | 6.3 | 15370 | 37 | 0.3 |
| 30- | 45.3001- | 111.6089- | 2- | 12- | | 0-M37483 | 37210 | -0.05 | 603 | 30180 | 74 | -60 | 4.0 | 56 | 3.4 | 4 | 1.4 | 16890 | 18.3 | 15250 | 38 | 0.4 |
| 30- | 45.3040- | 111.5774- | 2- | 12- | | 0-M37484 | 59660 | -0.05 | 662 | 11900 | 57 | -86 | 9.0 | 56 | 6.7 | 4 | 1.3 | 25160 | 8.2 | 18140 | 33 | 0.3 |
| 30- | 45.2958- | 111.5746- | 2- | 12- | | 0-M37485 | 57560 | -0.06 | 696 | 39330 | 95 | 111 | 9.9 | 82 | 3.2 | 4 | 2.1 | 30300 | 14.0 | 17620 | 45 | 0.6 |
| 30- | 45.2814- | 111.5463- | 2- | 12- | | 0-M37486 | 52100 | -0.05 | 568 | 32520 | 52 | -70 | 7.7 | 49 | 5.5 | 4 | 1.1 | 20770 | 7.0 | 19140 | 32 | 0.3 |
| 30- | 45.2794- | 111.5052- | 2- | 12- | | 0-M37487 | 56780 | -0.06 | 647 | 17920 | 71 | -79 | 5.6 | 57 | 6.2 | 4 | 1.5 | 23310 | 9.8 | 16800 | 41 | 0.4 |
| 30- | 45.3066- | 111.7014- | 2- | 15- | | 0-M37488 | 55180 | -0.05 | 650 | 28140 | 58 | -103 | 12.5 | 143 | 3.4 | 4 | 1.3 | 30920 | 10.7 | 17230 | 37 | 0.5 |
| 30- | 45.3079- | 111.6957- | 2- | 12- | | 0-M37489 | 44080 | -0.07 | 505 | 31630 | 81 | -91 | 13.9 | 384 | 3.3 | 3 | 1.6 | 38550 | 13.4 | 13230 | 37 | 0.5 |
| 30- | 45.2410- | 111.6959- | 2- | 15- | | 0-M37490 | 57120 | -0.06 | 715 | 26200 | 72 | -88 | 12.4 | 175 | 20.0 | 4 | 1.4 | 33190 | 9.7 | 16990 | 40 | 0.4 |
| 30- | 45.2420- | 111.6459- | 2- | 15- | | 0-M37491 | 57040 | -0.05 | 831 | 13380 | 71 | -79 | 6.0 | 60 | 5.8 | 4 | 1.6 | 24730 | 8.5 | 15780 | 42 | 0.3 |
| 30- | 45.2359- | 111.6439- | 2- | 15- | | 0-M37492 | 57590 | -0.05 | 731 | 22320 | 63 | -103 | 12.5 | 119 | 4.7 | 4 | 1.5 | 31280 | 12.3 | 17810 | 37 | 0.5 |
| 30- | 45.2373- | 111.6689- | 2- | 12- | | 0-M37493 | 61310 | -0.08 | 769 | 31480 | 75 | -106 | 16.2 | 158 | 4.3 | 4 | 1.9 | 38390 | 9.5 | 23120 | 38 | 0.4 |
| 30- | 45.1832- | 111.5952- | 2- | 12- | | 0-M37494 | 57260 | -0.05 | 715 | 32200 | 79 | -92 | 10.6 | 89 | 3.8 | 5 | 1.5 | 28040 | 10.8 | 19510 | 42 | 0.5 |
| 30- | 45.1928- | 111.5857- | 2- | 11- | | 0-M37495 | 57970 | -0.06 | 909 | 25180 | 83 | 126 | 12.6 | 119 | 3.2 | 4 | 1.6 | 33620 | 13.4 | 17700 | 42 | 0.4 |
| 30- | 45.1784- | 111.6161- | 2- | 12- | | 0-M37496 | 43660 | -0.06 | 599 | 35330 | 66 | -103 | 17.6 | 527 | 1.9 | 4 | 1.3 | 53500 | 14.5 | 11960 | 39 | 0.3 |
| 30- | 45.1560- | 111.5496- | 2- | 12- | | 0-M37497 | 52710 | -0.07 | 567 | 35400 | 80 | -94 | 16.9 | 158 | 3.1 | 4 | 1.5 | 46440 | 9.2 | 16370 | 31 | 0.4 |
| 30- | 45.1565- | 111.5560- | 2- | 12- | | 0-M37498 | 47860 | -0.06 | 677 | 33060 | 54 | -85 | 10.8 | 128 | 2.6 | 4 | 1.3 | 30970 | 8.5 | 13740 | 29 | 0.3 |
| 30- | 45.1659- | 111.5577- | 2- | 12- | | 0-M37499 | 41280 | -0.05 | 451 | 87250 | 46 | -81 | 10.7 | 156 | 3.0 | 3 | 1.3 | 27500 | 5.8 | 11230 | 25 | 0.3 |
| 30- | 45.1487- | 111.6052- | 2- | 15- | | 0-M37500 | 63000 | -0.05 | 754 | 11740 | 132 | -116 | 10.3 | 64 | 4.1 | 8 | 1.7 | 28330 | 17.0 | 27060 | 75 | 0.7 |
| 30- | 45.1001- | 111.5581- | 2- | 12- | | 0-M37501 | 63270 | -0.07 | 828 | 24690 | 89 | -101 | 15.7 | 137 | 4.2 | 5 | 1.9 | 35850 | 9.9 | 18920 | 46 | 0.5 |
| 30- | 45.0991- | 111.5626- | 2- | 12- | | 0-M37502 | 64960 | -0.07 | 1072 | 43050 | 93 | -110 | 20.4 | 187 | 3.0 | 4 | 1.6 | 50680 | 10.5 | 20270 | 56 | 0.4 |
| 30- | 45.0636- | 111.5805- | 2- | 12- | | 0-M37503 | 49090 | -0.05 | 559 | 21400 | 67 | -72 | 5.4 | 48 | 4.5 | 4 | 1.3 | 20700 | 8.9 | 16560 | 36 | 0.4 |
| 30- | 45.0428- | 111.5944- | 2- | 12- | | 0-M37504 | 57330 | -0.06 | 751 | 29300 | 65 | -108 | 16.3 | 130 | 4.0 | 4 | 1.6 | 35600 | 13.7 | 13730 | 40 | 0.4 |
| 30- | 45.0861- | 111.6370- | 2- | 15- | | 0-M37505 | 66370 | -0.08 | 691 | 15810 | 132 | 164 | 13.2 | 102 | 5.5 | 8 | 2.3 | 34850 | 20.8 | 24750 | 69 | 1.0 |
| 30- | 45.1038- | 111.6471- | 2- | 12- | | 0-M37506 | 58050 | -0.05 | 666 | 17250 | 65 | -84 | 6.8 | 56 | 4.7 | 5 | 1.4 | 23490 | 7.5 | 19090 | 38 | 0.3 |
| 30- | 45.0020- | 111.6790- | 2- | 15- | | 0-M37507 | 55640 | -0.06 | 728 | 16170 | 62 | -99 | 7.5 | 67 | 4.0 | 5 | 1.5 | 20690 | 13.7 | 20060 | 40 | 0.7 |
| 30- | 45.0144- | 111.7000- | 2- | 12- | | 0-M37508 | 54560 | -0.05 | 659 | 48050 | 70 | -102 | 9.8 | 63 | 3.7 | 5 | 1.4 | 24010 | 11.4 | 19350 | 39 | 0.4 |
| 30- | 45.0205- | 111.7010- | 2- | 12- | | 0-M37509 | 60840 | -0.08 | 615 | 28290 | 63 | -109 | 20.7 | 177 | 4.9 | 5 | 1.7 | 46220 | 13.0 | 17050 | 34 | 0.7 |
| 30- | 45.0354- | 111.7030- | 2- | 15- | | 0-M37510 | 60590 | -0.07 | 609 | 13550 | 83 | 131 | 22.4 | 149 | 5.2 | 6 | 1.3 | 42950 | 9.2 | 21140 | 38 | 0.5 |
| 30- | 45.0377- | 111.8350- | 2- | 11- | | 0-M37511 | 63670 | -0.06 | 1253 | 20140 | 96 | -82 | 7.4 | 107 | 6.5 | 6 | 1.2 | 28460 | 14.0 | 15390 | 46 | 0.5 |
| 30- | 45.0030- | 111.9577- | 2- | 12- | | 0-M37512 | 61010 | -0.05 | 882 | 26470 | 74 | -93 | 11.3 | 61 | 5.2 | 6 | 1.6 | 28190 | 14.2 | 22500 | 45 | 0.5 |
| 30- | 45.0145- | 111.9671- | 2- | 12- | | 0-M37513 | 51780 | -0.06 | 670 | 38280 | 73 | -75 | 7.5 | 64 | 4.3 | 4 | 1.6 | 20820 | 15.1 | 16050 | 40 | 0.5 |
| 30- | 45.0266- | 111.9722- | 2- | 12- | | 0-M37514 | 56760 | -0.05 | 564 | 24840 | 62 | -71 | 6.8 | 32 | 5.8 | 4 | 1.5 | 22620 | 8.8 | 18050 | 37 | 0.4 |
| 30- | 45.0427- | 111.9871- | 2- | 12- | | 0-M37515 | 48460 | -0.05 | 653 | 59390 | 62 | -72 | 4.9 | 46 | 5.3 | 3 | 1.4 | 20410 | 9.9 | 15390 | 38 | 0.3 |
| 30- | 45.0385- | 111.9665- | 2- | 12- | | 0-M37516 | 65200 | -0.05 | 622 | 27150 | 71 | -90 | 11.5 | 76 | 5.8 | 5 | 1.5 | 31000 | 8.7 | 18260 | 41 | 0.4 |
| 30- | 45.0309- | 111.9681- | 2- | 12- | | 0-M37517 | 45060 | -0.06 | 661 | 33130 | 64 | -67 | 6.5 | 43 | 4.8 | 4 | 1.5 | 19830 | 14.5 | 12620 | 33 | 0.5 |
| 30- | 45.0360- | 111.9339- | 2- | 12- | | 0-M37518 | 47550 | -0.06 | 635 | 23250 | 39 | -54 | 7.1 | 37 | 2.2 | 3 | 1.1 | 17990 | 12.0 | 10940 | 23 | 0.3 |
| 30- | 45.0398- | 111.9279- | 2- | 12- | | 0-M37519 | 38540 | -0.09 | 617 | 48950 | 60 | 48 | 6.7 | 36 | 3.1 | 3 | 1.2 | 18300 | 9.6 | 14820 | 27 | 0.3 |
| 30- | 45.0699- | 111.9268- | 2- | 12- | | 0-M37520 | 50740 | -0.07 | 684 | 34400 | 70 | -83 | 8.9 | 67 | 3.0 | 5 | 1.2 | 25840 | 10.5 | 21430 | 34 | 0.4 |
| 30- | 45.0711- | 111.9368- | 2- | 12- | | 0-M37521 | 53930 | -0.07 | 681 | 27750 | 89 | -84 | 4.4 | 46 | 4.0 | 4 | 1.3 | 19460 | 11.7 | 18630 | 42 | 0.4 |
| 30- | 45.0502- | 111.9362- | 2- | 12- | | 0-M37522 | 50900 | -0.06 | 646 | 25460 | 72 | -68 | 5.2 | 37 | 3.5 | 4 | 1.1 | 15600 | 11.7 | 18500 | 37 | 0.3 |
| 30- | 45.5717- | 111.5188- | 2- | 15- | | 0-M37523 | 55480 | -0.09 | 709 | 34070 | 93 | -79 | 9.3 | 75 | 4.3 | 5 | 1.4 | 28770 | 14.3 | 17700 | 46 | 0.4 |
| 30- | 45.6121- | 111.5915- | 2- | 15- | | 0-M37524 | 64910 | -0.10 | 962 | 33000 | 73 | -103 | 24.7 | 234 | 2.1 | 4 | 1.5 | 64580 | 7.7 | 15850 | 31 | 0.3 |
| 30- | 45.6086- | 111.5790- | 2- | 12- | | 0-M37525 | 51890 | -0.07 | 546 | 23380 | 70 | -85 | 8.0 | 68 | 3.2 | 4 | 1.1 | 28340 | 9.3 | 15180 | 34 | 0.3 |
| 30- | 45.6239- | 111.5554- | 2- | 12- | | 0-M37526 | 38430 | -0.06 | 598 | 28900 | 47 | 50 | 6.5 | 41 | 2.6 | 3 | 1.1 | 18620 | 13.9 | 11130 | 27 | 0.3 |
| 30- | 45.6758- | 111.5390- | 2- | 12- | | 0-M37527 | 67500 | -0.11 | 1055 | 23500 | 75 | -93 | 16.3 | 84 | 3.6 | 5 | 2.2 | 43300 | 9.0 | 17160 | 39 | 0.3 |
| 30- | 45.6973- | 111.5368- | 2- | 12- | | 0-M37528 | 49820 | -0.07 | 525 | 19760 | 62 | -80 | 13.9 | 73 | 3.6 | 4 | 1.2 | 34200 | 9.8 | 16810 | 34 | 0.4 |
| 30- | 45.7168- | 111.5304- | 2- | 12- | | 0-M37529 | 54940 | -0.08 | 661 | 33890 | 89 | -97 | 9.4 | 136 | 4.2 | 4 | 1.4 | 34510 | 10.7 | 14770 | 41 | 0.4 |

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

④

| DOE SAMPLE NUMBER | | | | | | LAB. SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | U/Th RATIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Mg | Mn | Na | Rb | Sb | Sc | Sm | Sr | Ta | Tb | Th | Ti | V | Yb | Zn | |
| 30-45.2861-111.6812-2-12- | | | | | | 0-M37479 | 12830 | 585 | 9074 | 71 | -1 | 8.9 | 5.0 | -236 | -1 | -1 | 11.3 | 2974 | 79 | 3.0 | -111 | 0.221 |
| 30-45.2531-111.6462-2-15- | | | | | | 0-M37480 | 15110 | 735 | 9662 | 76 | -1 | 10.2 | 4.8 | -289 | 2 | -1 | 12.4 | 3100 | 111 | 2.5 | 124 | 0.258 |
| 30-45.2682-111.6773-2-12- | | | | | | 0-M37481 | 10690 | 540 | 12380 | 63 | -2 | 8.6 | 6.5 | -234 | -1 | -1 | 11.7 | 2572 | 72 | 3.9 | -33 | 0.239 |
| 30-45.2723-111.6362-2-15- | | | | | | 0-M37482 | 10230 | 1173 | 14960 | 49 | -1 | 10.0 | 4.9 | -328 | -1 | -1 | 9.1 | 3717 | 127 | 2.8 | | 0.209 |
| 30-45.3001-111.6089-2-12- | | | | | | 0-M37483 | 7679 | 295 | 5060 | 45 | -1 | 5.4 | 5.0 | -167 | -1 | -1 | 11.3 | 2462 | 59 | 3.1 | 62 | 0.310 |
| 30-45.3040-111.5774-2-12- | | | | | | 0-M37484 | 8642 | 466 | 7458 | 81 | -1 | 8.4 | 4.9 | -263 | -1 | -1 | 9.9 | 2807 | 126 | 3.4 | 122 | 0.333 |
| 30-45.2958-111.5746-2-12- | | | | | | 0-M37485 | 10890 | 640 | 13960 | 71 | -2 | 8.5 | 9.1 | -250 | -1 | -1 | 13.5 | 3726 | 68 | 4.5 | -31 | 0.244 |
| 30-45.2814-111.5463-2-12- | | | | | | 0-M37486 | 13520 | 355 | 9087 | 73 | -1 | 7.3 | 5.7 | 199 | 1 | -1 | 10.0 | 2537 | 100 | 2.5 | 74 | 0.310 |
| 30-45.2794-111.5052-2-12- | | | | | | 0-M37487 | 10450 | 394 | 9852 | 66 | -1 | 7.9 | 5.5 | -210 | -1 | -1 | 12.8 | 2540 | 86 | 3.2 | 102 | 0.266 |
| 30-45.3066-111.7014-2-15- | | | | | | 0-M37488 | 14630 | 714 | 10970 | 69 | -1 | 9.4 | 5.0 | -304 | -1 | -1 | 11.9 | 3131 | 95 | 3.3 | 314 | 0.261 |
| 30-45.3079-111.6957-2-12- | | | | | | 0-M37489 | 14500 | 847 | 9630 | 50 | -2 | 11.6 | 5.9 | -257 | -1 | -1 | 11.0 | 3303 | 120 | 3.3 | 84 | 0.264 |
| 30-45.2410-111.6959-2-15- | | | | | | 0-M37490 | 16710 | 753 | 10290 | 57 | -1 | 10.3 | 5.4 | -260 | -1 | -1 | 14.7 | 2954 | 93 | 3.5 | -82 | 0.231 |
| 30-45.2420-111.6459-2-15- | | | | | | 0-M37491 | 8920 | 347 | 10650 | 85 | -1 | 7.9 | 5.6 | -200 | -1 | -1 | 11.9 | 2693 | 83 | 2.7 | -105 | 0.277 |
| 30-45.2359-111.6439-2-15- | | | | | | 0-M37492 | 9751 | 610 | 12020 | 81 | -1 | 9.4 | 5.3 | -279 | -1 | -1 | 11.2 | 3551 | 95 | 3.0 | 62 | 0.277 |
| 30-45.2373-111.6689-2-12- | | | | | | 0-M37493 | 11140 | 759 | 14110 | -33 | -2 | 11.1 | 6.0 | -286 | -1 | -1 | 8.1 | 3551 | 103 | 2.7 | 73 | 0.321 |
| 30-45.1832-111.5952-2-12- | | | | | | 0-M37494 | 10800 | 594 | 12430 | 71 | -1 | 8.8 | 6.1 | -238 | -1 | -1 | 16.7 | 3208 | 77 | 3.3 | 120 | 0.204 |
| 30-45.1928-111.5857-2-11- | | | | | | 0-M37495 | 11060 | 655 | 13570 | 68 | -2 | 10.4 | 5.9 | 484 | -1 | -1 | 11.8 | 3484 | 79 | 3.9 | 108 | 0.280 |
| 30-45.1784-111.6161-2-12- | | | | | | 0-M37496 | 17040 | 1020 | 8526 | 43 | -1 | 12.7 | 5.1 | -323 | -1 | -1 | 9.8 | 4463 | 167 | 2.8 | -65 | 0.327 |
| 30-45.1560-111.5496-2-12- | | | | | | 0-M37497 | 15190 | 847 | 10330 | 53 | -2 | 12.3 | 6.1 | -270 | -1 | -1 | 10.8 | 2968 | 97 | 3.6 | 81 | 0.250 |
| 30-45.1565-111.5560-2-12- | | | | | | 0-M37498 | 14630 | 623 | 9840 | 44 | -1 | 8.9 | 4.4 | -245 | -1 | -1 | 7.9 | 3035 | 80 | 2.5 | -58 | 0.418 |
| 30-45.1659-111.5577-2-12- | | | | | | 0-M37499 | 31640 | 675 | 6606 | 52 | -1 | 8.6 | 4.1 | -242 | -1 | -1 | 7.3 | 2498 | 67 | 2.0 | 72 | 0.301 |
| 30-45.1487-111.6052-2-15- | | | | | | 0-M37500 | 5724 | 575 | 17790 | 140 | -1 | 7.5 | 9.8 | -286 | 2 | -1 | 43.2 | 2831 | 52 | 5.8 | 121 | 0.178 |
| 30-45.1001-111.5581-2-12- | | | | | | 0-M37501 | 10060 | 750 | 13550 | 67 | -2 | 11.2 | 7.0 | 428 | -1 | -1 | 11.7 | 3650 | 96 | 3.7 | | 0.248 |
| 30-45.0991-111.5626-2-12- | | | | | | 0-M37502 | 18000 | 722 | 17210 | 52 | -2 | 13.8 | 7.9 | 560 | -1 | -1 | 18.1 | 5357 | 167 | 3.5 | -36 | 0.492 |
| 30-45.0636-111.5805-2-12- | | | | | | 0-M37503 | 9626 | 299 | 9531 | 57 | -1 | 6.7 | 5.7 | -174 | 1 | -1 | 11.2 | 2489 | 81 | 2.5 | 91 | 0.277 |
| 30-45.0428-111.5944-2-12- | | | | | | 0-M37504 | 10940 | 752 | 12640 | 66 | -1 | 11.0 | 6.2 | 543 | -1 | -1 | 11.7 | 3952 | 104 | 3.4 | | 0.453 |
| 30-45.0861-111.6370-2-15- | | | | | | 0-M37505 | 9355 | 505 | 16380 | 117 | -2 | 11.2 | 11.4 | -247 | 2 | -1 | 27.1 | 3822 | 75 | 7.1 | 87 | 0.251 |
| 30-45.1038-111.6471-2-12- | | | | | | 0-M37506 | 10060 | 437 | 12170 | 67 | -1 | 7.5 | 5.1 | -215 | -1 | -1 | 10.3 | 2885 | 76 | 3.1 | 89 | 0.311 |
| 30-45.0020-111.6790-2-15- | | | | | | 0-M37507 | 6483 | 468 | 17280 | 89 | -1 | 8.7 | 6.8 | -231 | 2 | -1 | 16.8 | 3427 | 54 | 4.9 | -23 | 1.083 |
| 30-45.0144-111.7000-2-12- | | | | | | 0-M37508 | 12030 | 553 | 12900 | 57 | -1 | 7.7 | 5.3 | -263 | -1 | -1 | 11.6 | 2917 | 63 | 3.0 | -46 | 0.276 |
| 30-45.0205-111.7010-2-12- | | | | | | 0-M37509 | 11600 | 842 | 16050 | -32 | -2 | 15.5 | 5.4 | -282 | -1 | -1 | 10.9 | 7924 | 115 | 4.4 | -42 | 0.367 |
| 30-45.0354-111.7030-2-15- | | | | | | 0-M37510 | 10350 | 962 | 10450 | 86 | -2 | 14.3 | 5.6 | -300 | -1 | 1 | 13.4 | 3782 | 104 | 4.1 | 90 | 0.216 |
| 30-45.0377-111.8350-2-11- | | | | | | 0-M37511 | 11260 | 425 | 9924 | 82 | -1 | 7.3 | 6.7 | -219 | 2 | -1 | 19.9 | 3022 | 57 | 5.0 | 116 | 0.111 |
| 30-45.0030-111.9577-2-12- | | | | | | 0-M37512 | 8776 | 665 | 8811 | 78 | -1 | 8.4 | 6.6 | -279 | 1 | 1 | 15.3 | 3093 | 81 | 3.7 | 118 | 0.333 |
| 30-45.0145-111.9671-2-12- | | | | | | 0-M37513 | 7145 | 552 | 6469 | 77 | -1 | 6.2 | 7.9 | -223 | -1 | -1 | 14.4 | 2765 | 57 | 2.9 | 52 | 0.278 |
| 30-45.0266-111.9722-2-12- | | | | | | 0-M37514 | 6862 | 644 | 5744 | 110 | -1 | 7.1 | 5.8 | -233 | -1 | -1 | 12.5 | 2830 | 70 | 3.4 | 157 | 0.288 |
| 30-45.0427-111.9871-2-12- | | | | | | 0-M37515 | 7424 | 453 | 5413 | 73 | -1 | 6.1 | 5.2 | 311 | -1 | -1 | 13.8 | 1817 | 56 | 2.6 | 73 | 0.268 |
| 30-45.0385-111.9665-2-12- | | | | | | 0-M37516 | 9467 | 789 | 5945 | -28 | -1 | 9.3 | 6.2 | -309 | -1 | -1 | 13.8 | 2859 | 98 | 4.6 | 136 | 0.297 |
| 30-45.0309-111.9681-2-12- | | | | | | 0-M37517 | 6807 | 587 | 4582 | -27 | -1 | 5.8 | 5.6 | -213 | -1 | -1 | 9.3 | 2328 | 46 | 4.5 | 113 | 0.333 |
| 30-45.0360-111.9339-2-12- | | | | | | 0-M37518 | 6305 | 484 | 4618 | 63 | -2 | 6.2 | 3.8 | -200 | -1 | -1 | 6.2 | 2177 | 51 | 2.9 | -35 | 0.387 |
| 30-45.0398-111.9279-2-12- | | | | | | 0-M37519 | 12960 | 610 | 2253 | 60 | -2 | 6.2 | 5.3 | -230 | -1 | -1 | 7.2 | 2425 | 45 | 2.6 | -13 | 0.333 |
| 30-45.0699-111.9268-2-12- | | | | | | 0-M37520 | 10600 | 518 | 14840 | 87 | -2 | 8.2 | 5.1 | -234 | -1 | 1 | 10.6 | 2848 | 70 | 3.3 | 80 | 0.264 |
| 30-45.0711-111.9368-2-12- | | | | | | 0-M37521 | 7584 | 635 | 9326 | 80 | -2 | 6.2 | 6.4 | -293 | -1 | -1 | 14.2 | 2659 | 46 | 3.7 | 78 | 0.261 |
| 30-45.0502-111.9362-2-12- | | | | | | 0-M37522 | 6506 | 472 | 8424 | 90 | -2 | 5.2 | 4.6 | -219 | -1 | -1 | 10.2 | 2269 | 45 | 3.4 | 129 | 0.363 |
| 30-45.5717-111.5188-2-15- | | | | | | 0-M37523 | 9819 | 599 | 12810 | 82 | -3 | 9.3 | 7.2 | -244 | 2 | -1 | 16.2 | 2940 | 75 | 5.0 | 69 | 0.463 |
| 30-45.6121-111.5915-2-15- | | | | | | 0-M37524 | 14540 | 962 | 18070 | -43 | -3 | 15.1 | 4.2 | -314 | -1 | -1 | 7.0 | 6916 | 192 | 3.0 | 94 | 0.343 |
| 30-45.6086-111.5790-2-12- | | | | | | 0-M37525 | 10630 | 454 | 12490 | 81 | -2 | 8.9 | 5.2 | -258 | -1 | -1 | 10.0 | 2975 | 98 | 3.5 | 106 | 0.410 |
| 30-45.6239-111.5554-2-12- | | | | | | 0-M37526 | 10600 | 340 | 5339 | 53 | -2 | 5.3 | 3.7 | -181 | -1 | -1 | 6.7 | 2261 | 62 | 2.9 | 78 | 0.433 |
| 30-45.6758-111.5390-2-12- | | | | | | 0-M37527 | 9452 | 818 | 13300 | 111 | -3 | 11.6 | 5.4 | 503 | -1 | -1 | 8.5 | 4603 | 105 | 3.0 | -58 | 0.294 |
| 30-45.6973-111.5368-2-12- | | | | | | 0-M37528 | 10020 | 731 | 12710 | 69 | -2 | 9.8 | 6.2 | -259 | -1 | -1 | 9.0 | 2921 | 119 | 3.5 | 67 | 0.444 |
| 30-45.7168-111.5304-2-12- | | | | | | 0-M37529 | 11220 | 642 | 14850 | 76 | -2 | 10.6 | 5.3 | -308 | -1 | -1 | 11.6 | 3363 | 93 | 3.4 | 93 | 0.250 |

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

①

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER AND FIELD DATA | | | | | | | | | | | | | | | | | | | | | | | U CONCENTRATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | TIME SAMPLED | | | | | | | | | | | | | | | | | | | | | | |
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | DATE | HOUR | AIR TEMPERATURE | WATER TEMPERATURE | COMMENTS | SPECIAL MEASUREMENTS | pH | CONDUCTIVITY (µmho/cm) | SCINTILLOMETER (eU, ppm) | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm |
| 30- | 45.7343- | 111.5405- | 2- | 12- | | 0-M37530- | 10/19/76- | 11- | 1- | 1.0- | - | - | 5.4- | 420- | | -2- | 7- | 3- | 1- | 2- | 2- | 4- | 2- | 3- | 2- | 3- | 2- | -3- | - | - | - | - | - | 3.40 |
| 30- | 45.7372- | 111.5774- | 2- | 15- | | 0-M37531- | 10/19/76- | 12- | 2- | - | - | - | - | - | | -2- | 7- | 3- | 7- | -1- | -2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | - | - | - | 12.60 |
| 30- | 45.5820- | 111.5752- | 2- | 12- | | 0-M37532- | 10/19/76- | 12- | 2- | 1.0- | - | - | 5.3- | 365- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 3- | 2- | 2- | 2- | -3- | - | - | - | - | - | 10.20 |
| 30- | 45.5637- | 111.5970- | 2- | 12- | | 0-M37533- | 10/19/76- | 12- | 4- | 1.0- | - | - | 5.3- | 330- | | -2- | 7- | 4- | 1- | 2- | 2- | 3- | 2- | 3- | 3- | 3- | 2- | -3- | - | - | - | - | - | 3.10 |
| 30- | 45.5373- | 111.5870- | 2- | 12- | | 0-M37534- | 10/19/76- | 13- | 4- | 1.0- | - | - | 5.6- | 280- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 2- | 2- | 2- | 2- | -3- | - | - | - | - | - | 4.30 |
| 30- | 45.5610- | 111.5897- | 2- | 12- | | 0-M37535- | 10/19/76- | 13- | 5- | - | - | - | 5.4- | 310- | | -2- | 7- | 5- | 6- | 2- | 2- | 1- | 2- | 3- | 2- | 2- | 2- | -3- | - | - | - | - | - | 1.80 |
| 30- | 45.5853- | 111.5958- | 2- | 12- | | 0-M37536- | 10/19/76- | 14- | 5- | 1.0- | - | - | 5.5- | 380- | | -2- | 7- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | - | 2.90 |
| 30- | 45.2354- | 111.8058- | 2- | 15- | | 0-M37537- | 10/23/76- | 12- | - | - | - | - | - | - | | -4- | -4- | 6- | -1- | -2- | 3- | 2- | 3- | 3- | -3- | - | - | - | - | - | - | - | - | 2.50 |
| 30- | 45.2399- | 111.8549- | 2- | 15- | | 0-M37538- | 10/23/76- | 13- | -1- | - | - | - | - | - | | -4- | -6- | 6- | -1- | -2- | 3- | 3- | 4- | 3- | -3- | - | - | - | - | - | - | - | - | 2.60 |
| 30- | 45.2333- | 111.8819- | 2- | 11- | | 0-M37539- | 10/23/76- | 14- | 1- | 2.0- | C- | - | 5.5- | 250- | | -3- | 8- | 5- | 6- | 3- | 3- | 1- | -4- | 3- | 4- | 3- | -3- | - | - | - | - | - | - | 2.20 |
| 30- | 45.4737- | 111.7430- | 2- | 12- | | 0-M37540- | 10/20/76- | 12- | 7- | 2.4- | C- | - | 5.9- | 360- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 3- | 3- | 3- | 1- | -3- | - | - | - | - | - | - | 3.80 |
| 30- | 45.4449- | 111.7079- | 2- | 15- | | 0-M37541- | 10/20/76- | 12- | 8- | - | - | - | - | - | | -4- | -4- | 6- | -1- | -2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | - | - | - | - | 3.40 |
| 30- | 45.4490- | 111.6927- | 2- | 12- | | 0-M37542- | 10/20/76- | 12- | 8- | 4.8- | C- | - | 5.7- | 300- | | -4- | -5- | 6- | 3- | 3- | 1- | 2- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | - | - | 3.20 |
| 30- | 45.4518- | 111.6868- | 2- | 15- | | 0-M37543- | 10/20/76- | 12- | 8- | - | - | - | - | - | | -4- | -4- | 6- | -1- | -2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | - | - | - | - | 7.90 |
| 30- | 45.4504- | 111.6677- | 2- | 15- | | 0-M37544- | 10/20/76- | 12- | 8- | - | - | - | - | - | | -1- | 6- | 4- | 6- | -1- | -2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | - | - | - | 2.30 |
| 30- | 45.4548- | 111.6480- | 2- | 12- | | 0-M37545- | 10/20/76- | 12- | 10- | 1.6- | C- | - | 5.5- | 150- | | -1- | 6- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | - | 5.30 |
| 30- | 45.4692- | 111.6368- | 2- | 12- | | 0-M37546- | 10/20/76- | 13- | 10- | 1.2- | C- | - | 5.5- | 190- | | -1- | 6- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 5- | 1- | -1- | - | - | - | - | - | 5.10 |
| 30- | 45.4842- | 111.6289- | 2- | 12- | | 0-M37547- | 10/20/76- | 13- | 10- | 2.0- | C- | - | 5.5- | 110- | | -1- | 6- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 2- | 5- | 1- | -1- | - | - | - | - | - | 5.60 |
| 30- | 45.4241- | 111.6443- | 2- | 12- | | 0-M37548- | 10/20/76- | 14- | 11- | 4.8- | C- | - | 5.5- | 140- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | - | - | 14.40 |
| 30- | 45.4124- | 111.6464- | 2- | 12- | | 0-M37549- | 10/20/76- | 14- | 12- | 5.0- | C- | - | 5.7- | 210- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 2- | 3- | 2- | 1- | -3- | - | - | - | - | - | - | 4.30 |
| 30- | 45.3835- | 111.6805- | 2- | 12- | | 0-M37550- | 10/20/76- | 15- | 14- | 7.2- | C- | - | 5.9- | 410- | | -4- | -5- | 6- | 2- | 3- | 1- | 2- | 2- | 3- | 2- | 1- | -3- | - | - | - | - | - | - | 3.00 |
| 30- | 45.3564- | 111.5854- | 2- | 12- | | 0-M37551- | 10/20/76- | 15- | 9- | 2.0- | C- | - | 5.9- | 190- | | -1- | 6- | 4- | 6- | 4- | 3- | 1- | 2- | 2- | 3- | 3- | 1- | -3- | - | - | - | - | - | 3.10 |
| 30- | 45.3551- | 111.5431- | 2- | 12- | | 0-M37552- | 10/20/76- | 16- | 9- | 2.6- | C- | - | 5.7- | 230- | | -1- | 6- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -3- | - | - | - | - | - | 3.70 |
| 30- | 45.3548- | 111.5085- | 2- | 12- | | 0-M37553- | 10/20/76- | 16- | 8- | 3.0- | C- | - | 5.2- | 90- | | -4- | -4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | - | - | 4.30 |
| 30- | 45.3521- | 111.5034- | 2- | 12- | | 0-M37554- | 10/20/76- | 16- | 8- | 2.8- | C- | - | 5.7- | 200- | | -4- | -4- | 6- | 3- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | - | - | 4.30 |
| 30- | 45.3453- | 111.5236- | 2- | 12- | | 0-M37555- | 10/20/76- | 16- | 7- | 1.6- | C- | - | 5.5- | 150- | | -1- | 6- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | - | 3.60 |
| 30- | 45.3442- | 111.5327- | 2- | 12- | | 0-M37556- | 10/20/76- | 17- | 3- | 1.0- | C- | - | 5.7- | 330- | | -1- | 6- | 4- | 6- | 4- | 3- | 1- | 2- | 1- | 3- | 4- | 1- | -1- | - | - | - | - | - | 2.90 |
| 30- | 45.6873- | 111.7433- | 2- | 12- | | 0-M37557- | 10/18/76- | 8- | - | 1.0- | - | - | 5.7- | 350- | | -2- | 7- | 3- | 1- | 2- | 2- | 1- | 2- | 3- | 3- | 2- | 1- | -3- | - | - | - | - | - | 2.60 |
| 30- | 45.6475- | 111.7478- | 2- | 12- | | 0-M37558- | 10/18/76- | 8- | 1- | - | - | - | 5.4- | 260- | | -2- | 7- | 3- | 1- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 1- | -3- | - | - | - | - | - | 3.20 |
| 30- | 45.6419- | 111.6514- | 2- | 12- | | 0-M37559- | 10/18/76- | 8- | 1- | - | - | - | 5.4- | 300- | | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 3- | 2- | 3- | 1- | -3- | - | - | - | - | - | 2.60 |
| 30- | 45.6555- | 111.6532- | 2- | 11- | | 0-M37560- | 10/18/76- | 9- | 4- | 3.0- | - | - | 5.2- | 310- | | -2- | 7- | 4- | 1- | 2- | 3- | 1- | 1- | 4- | 3- | 2- | 1- | -3- | - | - | - | - | - | 3.70 |
| 30- | 45.6776- | 111.6578- | 2- | 12- | | 0-M37561- | 10/18/76- | 9- | 3- | 1.0- | - | - | 5.8- | 250- | | -2- | 7- | 3- | 1- | 2- | 2- | 1- | 2- | 4- | 2- | 3- | 1- | -3- | - | - | - | - | - | 2.40 |
| 30- | 45.6796- | 111.7004- | 2- | 15- | | 0-M37562- | 10/18/76- | 9- | 2- | - | - | - | - | - | | -2- | 7- | 4- | 1- | -1- | -2- | 4- | 3- | 3- | 2- | -3- | - | - | - | - | - | - | - | 2.00 |
| 30- | 45.6762- | 111.7202- | 2- | 15- | | 0-M37563- | 10/18/76- | 9- | 2- | - | - | - | - | - | | -2- | 7- | 4- | 1- | -1- | -2- | 3- | 3- | 3- | 3- | -3- | - | - | - | - | - | - | - | 2.80 |
| 30- | 45.6980- | 111.6865- | 2- | 12- | | 0-M37564- | 10/18/76- | 9- | 3- | 1.0- | - | - | 5.5- | 280- | | -2- | 7- | 3- | 1- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | - | 2.20 |
| 30- | 45.7237- | 111.6357- | 2- | 12- | | 0-M37565- | 10/18/76- | 10- | 4- | 2.0- | - | - | 5.5- | 320- | | -2- | 7- | 3- | 1- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | - | 3.70 |
| 30- | 45.7476- | 111.6516- | 2- | 12- | | 0-M37566- | 10/18/76- | 10- | 4- | 3.0- | - | - | 5.6- | 310- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 3- | -3- | - | - | - | - | - | 1.80 |
| 30- | 45.6182- | 111.6120- | 2- | 12- | | 0-M37567- | 10/18/76- | 10- | 3- | 2.0- | - | - | 5.8- | 380- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | - | 2.50 |
| 30- | 45.6153- | 111.6415- | 2- | 11- | | 0-M37568- | 10/18/76- | 11- | 4- | 1.0- | - | - | 5.8- | 280- | | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 4- | 2- | 3- | 3- | -3- | - | - | - | - | - | 2.10 |
| 30- | 45.5854- | 111.6472- | 2- | 12- | | 0-M37569- | 10/18/76- | 11- | 5- | 2.0- | - | - | 5.8- | 350- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 3- | -3- | - | - | - | - | - | 3.80 |
| 30- | 45.5855- | 111.6700- | 2- | 12- | | 0-M37570- | 10/18/76- | 11- | 4- | - | - | - | 5.4- | 320- | | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 3- | -3- | - | - | - | - | - | 4.10 |
| 30- | 45.5981- | 111.6891- | 2- | 11- | | 0-M37571- | 10/18/76- | 12- | 4- | 1.0- | - | - | 5.4- | 300- | | -2- | 7- | 3- | 7- | 2- | 3- | 1- | 1- | 6- | 3- | 3- | 3- | -3- | - | - | - | - | - | 2.10 |
| 30- | 45.6117- | 111.7218- | 2- | 12- | | 0-M37572- | 10/18/76- | 12- | 5- | 1.0- | - | - | 5.7- | 250- | | -2- | 7- | 3- | 1- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 3- | -3- | - | - | - | - | - | 2.10 |
| 30- | 45.5968- | 111.7397- | 2- | 12- | | 0-M37573- | 10/18/76- | 13- | 4- | 1.5- | - | - | 5.2- | 250- | | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 4- | 2- | 3- | 3- | -3- | - | - | - | - | - | 1.70 |
| 30- | 45.5748- | 111.6834- | 2- | 11- | | 0-M37574- | 10/18/76- | 13- | 5- | 1.0- | - | - | 5.4- | 320- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 3- | 3- | 3- | 3- | -3- | - | - | - | - | - | 2.90 |
| 30- | 45.5695- | 111.6679- | 2- | 15- | | 0-M37575- | 10/18/76- | 14- | 5- | - | C- | - | - | - | | -2- | 7- | 4- | 1- | -1- | -2- | 2- | 2- | 3- | 3- | -3- | - | - | - | - | - | - | - | 3.20 |
| 30- | 45.5365- | 111.6633- | 2- | 12- | | 0-M37576- | 10/18/76- | 14- | 5- | 2.0- | - | - | 5.7- | 400- | | -2- | 7- | 3- | 7- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | - | 2.80 |
| 30- | 45.5161- | 111.6525- | 2- | 11- | | 0-M37577- | 10/18/76- | 15- | 5- | 2.0- | - | - | 5.6- | 380- | | -2- | 7- | 4- | 1- | 2- | 3- | 1- | 1- | 2- | 3- | 2- | 3- | -3- | - | - | - | - | - | 2.30 |
| 30- | 45.5195- | 111.6872- | 2- | 12- | | 0-M37578- | 10/18/76- | 15- | 5- | 1.0- | - | - | 5.6- | 320- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 2- | 3- | 3- | 3- | -3- | - | - | - | - | - | 3.00 |
| 30- | 45.5172- | 111.6909- | 2- | 15- | | 0-M37579- | 10/18/76- | 15- | 5- | - | - | - | - | - | | -2- | 7- | 4- | 1- | -1- | -2- | 3- | 3- | 3- | 3- | -3- | - | - | - | - | - | - | - | 16.20 |
| 30- | 45.5389- | 111.7042- | 2- | 12- | | 0-M37580- | 10/18/76- | 15- | 5- | 1.0- | - | - | 5.3- | 320- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 2- | 2- | 2- | 3- | -3- | - | - | - | - | - | 3.60 |

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

②

| DOE SAMPLE NUMBER | | | | | | LAB. SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY X-RAY FLUORESCENCE (Concentrations reported in weight parts per million (ppm)) | | | | | | | | | ELEMENTAL CONCENTRATIONS DETERMINED BY ARC-SOURCE EMISSION SPECTROGRAPHY (Concentrations in weight ppm) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | | Ag | Bi | Cd | Cu | Nb | Ni | Pb | Sn | W | Be | Li |
| 30 | -45.7343 | -111.5405 | -2 | -12 | - | 0-M37530 | -5 | -5 | -5 | 41 | -20 | 30 | 19 | -10 | 15 | 3 | 29 |
| 30 | -45.7372 | -111.5774 | -2 | -15 | - | 0-M37531 | -5 | 5 | -5 | 28 | -20 | 40 | 16 | -10 | -15 | 3 | 39 |
| 30 | -45.5820 | -111.5752 | -2 | -12 | - | 0-M37532 | 5 | -5 | -5 | 17 | -20 | 75 | 6 | -10 | 15 | 3 | 24 |
| 30 | -45.5637 | -111.5970 | -2 | -12 | - | 0-M37533 | -5 | -5 | -5 | 20 | -20 | 42 | -5 | -10 | -15 | 3 | 26 |
| 30 | -45.5373 | -111.5870 | -2 | -12 | - | 0-M37534 | -5 | -5 | -5 | 14 | -20 | -15 | 7 | -10 | -15 | 4 | 32 |
| 30 | -45.5610 | -111.5897 | -2 | -12 | - | 0-M37535 | -5 | -5 | -5 | 20 | -20 | 61 | 11 | -10 | -15 | 2 | 18 |
| 30 | -45.5853 | -111.5958 | -2 | -12 | - | 0-M37536 | -5 | -5 | -5 | 32 | -20 | 27 | 10 | -10 | -15 | 2 | 35 |
| 30 | -45.2354 | -111.8058 | -2 | -15 | - | 0-M37537 | -5 | -5 | -5 | 32 | -20 | 22 | -5 | -10 | -15 | 3 | 46 |
| 30 | -45.2399 | -111.8549 | -2 | -15 | - | 0-M37538 | -5 | -5 | -5 | 40 | -20 | 44 | 8 | -10 | -15 | 3 | 41 |
| 30 | -45.2333 | -111.8819 | -2 | -11 | - | 0-M37539 | -5 | -5 | -5 | 45 | -20 | 130 | -5 | 18 | -15 | 2 | 41 |
| 30 | -45.4737 | -111.7430 | -2 | -12 | - | 0-M37540 | -5 | -5 | -5 | 22 | -20 | 36 | 10 | -10 | -15 | 3 | 23 |
| 30 | -45.4449 | -111.7079 | -2 | -15 | - | 0-M37541 | -5 | -5 | -5 | 27 | -20 | -15 | 7 | -10 | -15 | 3 | 26 |
| 30 | -45.4490 | -111.6927 | -2 | -12 | - | 0-M37542 | -5 | -5 | -5 | 23 | -20 | -15 | 7 | -10 | -15 | 2 | 33 |
| 30 | -45.4518 | -111.6868 | -2 | -15 | - | 0-M37543 | 5 | -5 | -5 | 23 | 27 | 41 | 12 | -10 | -15 | 2 | 21 |
| 30 | -45.4504 | -111.6677 | -2 | -15 | - | 0-M37544 | -5 | -5 | -5 | 24 | -20 | 36 | 14 | -10 | -15 | 3 | 38 |
| 30 | -45.4548 | -111.6480 | -2 | -12 | - | 0-M37545 | -5 | -5 | -5 | 37 | -20 | 83 | -5 | -10 | -15 | 2 | 23 |
| 30 | -45.4692 | -111.6368 | -2 | -12 | - | 0-M37546 | -5 | -5 | -5 | 17 | -20 | 17 | 21 | -10 | -15 | 3 | 24 |
| 30 | -45.4842 | -111.6289 | -2 | -12 | - | 0-M37547 | 5 | -5 | -5 | 46 | -20 | 42 | 13 | -10 | -15 | 2 | 29 |
| 30 | -45.4241 | -111.6443 | -2 | -12 | - | 0-M37548 | 21 | -5 | -5 | -10 | 52 | 69 | 5 | -10 | -15 | -1 | 21 |
| 30 | -45.4124 | -111.6464 | -2 | -12 | - | 0-M37549 | -5 | -5 | -5 | 26 | -20 | 35 | 6 | -10 | -15 | 3 | 36 |
| 30 | -45.3835 | -111.6805 | -2 | -12 | - | 0-M37550 | -5 | -5 | -5 | 15 | -20 | 33 | 9 | -10 | -15 | 3 | 41 |
| 30 | -45.3564 | -111.5854 | -2 | -12 | - | 0-M37551 | -5 | -5 | -5 | 43 | -20 | 17 | 15 | -10 | -15 | 2 | 26 |
| 30 | -45.3551 | -111.5431 | -2 | -12 | - | 0-M37552 | -5 | -5 | -5 | 16 | -20 | 29 | 11 | -10 | -15 | 3 | 58 |
| 30 | -45.3548 | -111.5085 | -2 | -12 | - | 0-M37553 | -5 | -5 | -5 | 14 | -20 | 17 | 9 | -10 | -15 | 3 | 39 |
| 30 | -45.3521 | -111.5034 | -2 | -12 | - | 0-M37554 | -5 | -5 | -5 | 14 | -20 | 63 | -5 | -10 | -15 | 2 | 26 |
| 30 | -45.3453 | -111.5236 | -2 | -12 | - | 0-M37555 | -5 | -5 | -5 | 17 | -20 | -15 | -5 | -10 | -15 | 3 | 29 |
| 30 | -45.3442 | -111.5327 | -2 | -12 | - | 0-M37556 | -5 | -5 | -5 | 30 | -20 | 16 | 12 | -10 | -15 | 3 | 48 |
| 30 | -45.6873 | -111.7433 | -2 | -12 | - | 0-M37557 | -5 | -5 | -5 | 16 | -20 | -15 | 5 | -10 | -15 | 2 | 23 |
| 30 | -45.6475 | -111.7478 | -2 | -12 | - | 0-M37558 | -5 | -5 | -5 | 20 | -20 | -15 | 7 | -10 | -15 | 2 | 34 |
| 30 | -45.6419 | -111.6514 | -2 | -12 | - | 0-M37559 | -5 | -5 | -5 | 19 | -20 | -15 | -5 | -10 | -15 | 3 | 34 |
| 30 | -45.6555 | -111.6532 | -2 | -11 | - | 0-M37560 | -5 | -5 | -5 | 20 | -20 | -15 | 17 | -10 | -15 | 3 | 29 |
| 30 | -45.6776 | -111.6578 | -2 | -12 | - | 0-M37561 | -5 | -5 | -5 | 29 | -20 | 16 | 5 | -10 | -15 | 2 | 35 |
| 30 | -45.6796 | -111.7004 | -2 | -15 | - | 0-M37562 | -5 | -5 | -5 | 24 | -20 | 41 | 7 | -10 | -15 | 2 | 40 |
| 30 | -45.6762 | -111.7202 | -2 | -15 | - | 0-M37563 | -5 | -5 | -5 | 23 | -20 | -15 | -5 | -10 | -15 | 2 | 26 |
| 30 | -45.6980 | -111.6865 | -2 | -12 | - | 0-M37564 | -5 | -5 | -5 | 23 | -20 | 26 | 12 | -10 | -15 | 2 | 30 |
| 30 | -45.7237 | -111.6357 | -2 | -12 | - | 0-M37565 | -5 | -5 | -5 | 18 | -20 | 20 | 13 | -10 | -15 | 2 | 23 |
| 30 | -45.7476 | -111.6516 | -2 | -12 | - | 0-M37566 | -5 | -5 | -5 | 22 | -20 | 65 | -5 | -10 | -15 | 2 | 19 |
| 30 | -45.6182 | -111.6120 | -2 | -12 | - | 0-M37567 | -5 | -5 | -5 | 16 | -20 | -15 | 14 | -10 | -15 | 3 | 16 |
| 30 | -45.6153 | -111.6415 | -2 | -11 | - | 0-M37568 | -5 | -5 | -5 | 23 | -20 | 22 | 7 | -10 | -15 | 2 | 26 |
| 30 | -45.5854 | -111.6472 | -2 | -12 | - | 0-M37569 | -5 | -5 | -5 | 29 | -20 | 21 | 16 | -10 | -15 | 4 | 44 |
| 30 | -45.5855 | -111.6700 | -2 | -12 | - | 0-M37570 | -5 | -5 | -5 | 30 | -20 | -15 | 19 | -10 | -15 | 4 | 37 |
| 30 | -45.5981 | -111.6891 | -2 | -11 | - | 0-M37571 | -5 | -5 | -5 | 34 | -20 | 44 | 8 | -10 | -15 | 3 | 42 |
| 30 | -45.6117 | -111.7218 | -2 | -12 | - | 0-M37572 | -5 | -5 | -5 | 27 | -20 | 42 | 11 | -10 | -15 | 2 | 33 |
| 30 | -45.5968 | -111.7397 | -2 | -12 | - | 0-M37573 | -5 | -5 | -5 | 27 | -20 | 39 | -5 | 10 | -15 | 3 | 21 |
| 30 | -45.5748 | -111.6834 | -2 | -11 | - | 0-M37574 | -5 | -5 | -5 | 22 | -20 | 18 | 9 | -10 | -15 | 3 | 37 |
| 30 | -45.5695 | -111.6679 | -2 | -15 | - | 0-M37575 | -5 | -5 | -5 | 24 | -20 | 26 | 13 | -10 | -15 | 3 | 40 |
| 30 | -45.5365 | -111.6633 | -2 | -12 | - | 0-M37576 | -5 | -5 | -5 | 27 | -20 | 22 | 13 | -10 | -15 | 2 | 39 |
| 30 | -45.5161 | -111.6525 | -2 | -11 | - | 0-M37577 | -5 | -5 | -5 | 22 | -20 | 15 | 11 | -10 | -15 | 4 | 49 |
| 30 | -45.5195 | -111.6872 | -2 | -12 | - | 0-M37578 | -5 | -5 | -5 | 24 | -20 | -15 | 13 | -10 | -15 | 3 | 44 |
| 30 | -45.5172 | -111.6909 | -2 | -15 | - | 0-M37579 | -5 | -5 | -5 | 30 | -20 | 29 | 10 | -10 | -15 | -1 | 32 |
| 30 | -45.5389 | -111.7042 | -2 | -12 | - | 0-M37580 | -5 | -5 | -5 | 28 | -20 | -15 | 10 | -10 | -15 | 3 | 33 |

# 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 |
| 30- | 45.7343- | 111.5405- | 2- | 12- | 0- | M37530 | 51750 | -0.08 | 383 | 8752 | 56 | -99 | 15.3 | 73 | 3.7 | 4 | 1.1 | 32500 | 7.6 | 14730 | 32 | 0.4 |
| 30- | 45.7372- | 111.5774- | 2- | 15- | 0- | M37531 | 56480 | -0.10 | 787 | 25840 | 117 | 146 | 15.6 | 191 | 3.5 | 4 | 1.4 | 37170 | 13.0 | 15750 | 60 | 0.4 |
| 30- | 45.5820- | 111.5752- | 2- | 12- | 0- | M37532 | 56600 | -0.10 | 425 | 28400 | 130 | 198 | 21.1 | 248 | 3.1 | 15 | 2.4 | 71190 | 75.2 | 17070 | 63 | 2.0 |
| 30- | 45.5637- | 111.5970- | 2- | 12- | 0- | M37533 | 58620 | -0.08 | 651 | 17000 | 81 | -105 | 10.6 | 130 | 3.6 | 5 | 1.4 | 34500 | 13.8 | 16550 | 40 | 0.4 |
| 30- | 45.5373- | 111.5870- | 2- | 12- | 0- | M37534 | 51280 | -0.07 | 613 | 20650 | 92 | 128 | 11.0 | 69 | 10.0 | 7 | 1.5 | 37340 | 21.5 | 23720 | 49 | 0.6 |
| 30- | 45.5610- | 111.5897- | 2- | 12- | 0- | M37535 | 67690 | -0.11 | 1243 | 41310 | 106 | -101 | 27.9 | 368 | -2.1 | 3 | 1.9 | 55040 | 9.3 | 13580 | 51 | 0.3 |
| 30- | 45.5853- | 111.5958- | 2- | 12- | 0- | M37536 | 56340 | -0.07 | 611 | 19990 | 70 | -87 | 11.7 | 112 | 2.3 | 4 | 1.1 | 32200 | 10.3 | 16230 | 32 | 0.4 |
| 30- | 45.2354- | 111.8058- | 2- | 15- | 0- | M37537 | 59530 | -0.08 | 849 | 25660 | 88 | -102 | 9.7 | 119 | 3.9 | 4 | 1.4 | 36250 | 8.7 | 20170 | 42 | 0.4 |
| 30- | 45.2399- | 111.8549- | 2- | 15- | 0- | M37538 | 76370 | -0.09 | 647 | 18940 | 79 | 116 | 17.1 | 152 | 4.4 | 4 | 1.3 | 45890 | 11.5 | 14910 | 38 | 0.3 |
| 30- | 45.2333- | 111.8819- | 2- | 11- | 0- | M37539 | 72130 | -0.13 | 948 | 33680 | 80 | -95 | 33.8 | 1059 | -2.6 | 4 | 1.7 | 64470 | 10.7 | 14500 | 38 | 0.4 |
| 30- | 45.4737- | 111.7430- | 2- | 12- | 0- | M37540 | 53390 | -0.07 | 606 | 28130 | 94 | -88 | 12.5 | 124 | 2.7 | 5 | 1.5 | 39290 | 13.8 | 14590 | 47 | 0.4 |
| 30- | 45.4449- | 111.7079- | 2- | 15- | 0- | M37541 | 52570 | -0.07 | 601 | 23170 | 81 | -93 | 10.1 | 107 | 2.5 | 5 | 1.3 | 30190 | 13.2 | 15010 | 43 | 0.4 |
| 30- | 45.4490- | 111.6927- | 2- | 12- | 0- | M37542 | 56620 | -0.07 | 693 | 31910 | 64 | 94 | 12.9 | 133 | 2.9 | 4 | 1.2 | 34750 | 11.3 | 16150 | 39 | 0.3 |
| 30- | 45.4518- | 111.6868- | 2- | 15- | 0- | M37543 | 49310 | -0.12 | 514 | 27570 | 181 | -101 | 24.6 | 344 | -2.3 | 9 | 1.9 | 89450 | 50.8 | 12400 | 80 | 1.1 |
| 30- | 45.4504- | 111.6677- | 2- | 15- | 0- | M37544 | 54770 | -0.07 | 525 | 20380 | 71 | -91 | 14.5 | 107 | 2.7 | 5 | 1.2 | 32050 | 6.9 | 17820 | 40 | 0.4 |
| 30- | 45.4548- | 111.6480- | 2- | 12- | 0- | M37545 | 33460 | -0.11 | -436 | 25570 | 121 | -307 | 27.6 | 356 | -2.3 | 2 | 1.9 | 89440 | 23.1 | -12520 | 67 | 1.1 |
| 30- | 45.4692- | 111.6368- | 2- | 12- | 0- | M37546 | 47440 | -0.06 | 658 | 12520 | 95 | 77 | 6.0 | 78 | 2.2 | 5 | 1.2 | 19960 | 13.0 | 18860 | 49 | 0.4 |
| 30- | 45.4842- | 111.6289- | 2- | 12- | 0- | M37547 | 53570 | -0.11 | 377 | 32210 | 144 | 1218 | 22.4 | 191 | -2.3 | 7 | 1.8 | 67230 | 40.3 | 10520 | 64 | 1.1 |
| 30- | 45.4241- | 111.6443- | 2- | 12- | 0- | M37548 | 49960 | -0.11 | -217 | 25810 | 285 | -126 | 23.5 | 240 | -2.2 | 15 | 3.5 | 87920 | 160.8 | -5450 | 153 | 2.1 |
| 30- | 45.4124- | 111.6464- | 2- | 12- | 0- | M37549 | 55920 | -0.09 | 869 | 23930 | 121 | -120 | 15.1 | 137 | 3.6 | 8 | 1.8 | 51030 | 26.0 | 19460 | 57 | 0.7 |
| 30- | 45.3835- | 111.6805- | 2- | 12- | 0- | M37550 | 53510 | -0.07 | 607 | 20730 | 54 | -74 | 8.3 | 76 | 2.7 | 4 | 1.2 | 23540 | 8.1 | 17860 | 32 | 0.3 |
| 30- | 45.3564- | 111.5854- | 2- | 12- | 0- | M37551 | 52680 | -0.09 | 697 | 39750 | 96 | -76 | 11.5 | 119 | 4.2 | 5 | 1.4 | 42810 | 12.8 | 19450 | 41 | 0.3 |
| 30- | 45.3551- | 111.5431- | 2- | 12- | 0- | M37552 | 55620 | -0.08 | 1132 | 25140 | 77 | -74 | 9.1 | 87 | 5.2 | 5 | 1.5 | 36090 | 13.3 | 18940 | 40 | 0.4 |
| 30- | 45.3548- | 111.5085- | 2- | 12- | 0- | M37553 | 55210 | -0.08 | 491 | 27900 | 82 | -94 | 9.2 | 101 | 4.0 | 8 | 1.7 | 38280 | 23.1 | 17740 | 50 | 0.7 |
| 30- | 45.3521- | 111.5034- | 2- | 12- | 0- | M37554 | 53220 | -0.08 | 545 | 25430 | 68 | 106 | 17.8 | 477 | 2.4 | 6 | 1.7 | 55440 | 35.0 | 14330 | 45 | 0.7 |
| 30- | 45.3453- | 111.5236- | 2- | 12- | 0- | M37555 | 54280 | -0.09 | 698 | 14400 | 76 | -70 | 10.2 | 142 | 4.4 | 4 | 1.5 | 27590 | 10.3 | 15910 | 39 | 0.4 |
| 30- | 45.3442- | 111.5327- | 2- | 12- | 0- | M37556 | 53680 | -0.07 | 727 | 20000 | 62 | -75 | 7.7 | 85 | 3.8 | 4 | 1.2 | 25330 | 9.4 | 20280 | 34 | 0.4 |
| 30- | 45.6873- | 111.7433- | 2- | 12- | 0- | M37557 | 51840 | -0.08 | 937 | 19210 | 64 | -96 | 17.3 | 155 | 3.1 | 4 | 1.3 | 48980 | 12.0 | 17420 | 37 | 0.3 |
| 30- | 45.6475- | 111.7478- | 2- | 12- | 0- | M37558 | 41210 | -0.07 | 392 | 34830 | 55 | -68 | 5.6 | 55 | 3.3 | 4 | 1.0 | 16010 | 8.6 | 17980 | 31 | 0.3 |
| 30- | 45.6419- | 111.6514- | 2- | 12- | 0- | M37559 | 47820 | -0.08 | 665 | 14060 | 63 | 86 | 6.7 | 57 | 2.9 | 4 | 1.5 | 20340 | 12.0 | 15210 | 38 | 0.3 |
| 30- | 45.6555- | 111.6532- | 2- | 11- | 0- | M37560 | 51950 | -0.08 | 653 | 8511 | 80 | -95 | 4.7 | 48 | 4.2 | 6 | 1.3 | 23310 | 11.6 | 21190 | 38 | 0.4 |
| 30- | 45.6776- | 111.6578- | 2- | 12- | 0- | M37561 | 53450 | -0.07 | 634 | 14100 | 87 | -89 | 10.7 | 218 | 2.1 | 4 | 1.4 | 37240 | 14.5 | 14040 | 46 | 0.3 |
| 30- | 45.6796- | 111.7004- | 2- | 15- | 0- | M37562 | 54550 | -0.07 | 747 | 24190 | 50 | -88 | 13.1 | 98 | 2.5 | 3 | 1.1 | 32000 | 5.6 | 16610 | 32 | 0.2 |
| 30- | 45.6762- | 111.7202- | 2- | 15- | 0- | M37563 | 47200 | -0.08 | 818 | 8500 | 62 | -56 | 6.3 | 47 | 3.8 | 4 | 1.2 | 19890 | 9.2 | 18970 | 29 | 0.3 |
| 30- | 45.6980- | 111.6865- | 2- | 12- | 0- | M37564 | 53900 | -0.07 | 1059 | 13750 | 76 | -86 | 12.6 | 180 | -1.4 | 3 | 1.2 | 33600 | 7.1 | 18580 | 33 | 0.2 |
| 30- | 45.7237- | 111.6357- | 2- | 12- | 0- | M37565 | 45000 | -0.07 | 419 | 28990 | 103 | -95 | 11.6 | 133 | 2.9 | 6 | 1.4 | 59890 | 28.7 | 15200 | 59 | 0.7 |
| 30- | 45.7476- | 111.6516- | 2- | 12- | 0- | M37566 | 66490 | -0.09 | 992 | 40900 | 78 | -105 | 26.6 | 335 | -1.8 | 3 | 1.5 | 55170 | 8.6 | 10150 | 47 | 0.2 |
| 30- | 45.6182- | 111.6120- | 2- | 12- | 0- | M37567 | 44260 | -0.09 | 608 | 26180 | 64 | -73 | 9.5 | 79 | 3.3 | 4 | 1.5 | 24050 | 12.9 | 14460 | 40 | 0.3 |
| 30- | 45.6153- | 111.6415- | 2- | 11- | 0- | M37568 | 59040 | -0.09 | 1159 | 25980 | 63 | -100 | 15.5 | 129 | 3.0 | 3 | 1.5 | 39520 | 7.3 | 17810 | 35 | 0.3 |
| 30- | 45.5854- | 111.6472- | 2- | 12- | 0- | M37569 | 57890 | -0.09 | 669 | 10300 | 130 | -111 | 4.8 | 61 | 4.1 | 8 | 1.3 | 26790 | 11.9 | 23460 | 63 | 0.5 |
| 30- | 45.5855- | 111.6700- | 2- | 12- | 0- | M37570 | 64280 | -0.07 | 917 | 27550 | 84 | -94 | 14.1 | 83 | 3.9 | 4 | 1.5 | 34910 | 10.2 | 15210 | 55 | 0.3 |
| 30- | 45.5981- | 111.6891- | 2- | 11- | 0- | M37571 | 66380 | -0.10 | 902 | 21440 | 78 | -89 | 15.2 | 232 | -2.0 | 4 | 1.5 | 40040 | 7.1 | 18380 | 39 | 0.4 |
| 30- | 45.6117- | 111.7218- | 2- | 12- | 0- | M37572 | 60100 | -0.08 | 965 | 26310 | 67 | -93 | 14.2 | 306 | 2.9 | 4 | 1.5 | 40480 | 8.4 | 20450 | 37 | 0.3 |
| 30- | 45.5968- | 111.7397- | 2- | 12- | 0- | M37573 | 60110 | -0.11 | 807 | 57520 | 98 | -114 | 30.0 | 448 | 5.1 | 4 | 1.7 | 70920 | 11.8 | 12760 | 46 | 0.3 |
| 30- | 45.5748- | 111.6834- | 2- | 11- | 0- | M37574 | 54200 | -0.07 | 570 | 37500 | 64 | -89 | 10.6 | 77 | 3.1 | 4 | 1.2 | 29040 | 11.3 | 18430 | 36 | 0.3 |
| 30- | 45.5695- | 111.6679- | 2- | 15- | 0- | M37575 | 60690 | -0.10 | 769 | 27140 | 91 | -82 | 11.9 | 138 | 4.0 | 4 | 1.4 | 34680 | 12.6 | 17040 | 44 | 0.4 |
| 30- | 45.5365- | 111.6633- | 2- | 12- | 0- | M37576 | 54800 | -0.08 | 693 | 27640 | 57 | -95 | 14.5 | 144 | 3.2 | 4 | 1.1 | 33810 | 9.6 | 18520 | 30 | 0.2 |
| 30- | 45.5161- | 111.6525- | 2- | 11- | 0- | M37577 | 73470 | -0.11 | 944 | 21090 | 80 | -115 | 15.4 | 104 | 4.1 | 3 | 1.7 | 43240 | 10.0 | 20740 | 41 | 0.4 |
| 30- | 45.5195- | 111.6872- | 2- | 12- | 0- | M37578 | 53010 | -0.08 | 741 | 10080 | 59 | -71 | 7.6 | 52 | 3.4 | 4 | 1.4 | 26230 | 9.1 | 13280 | 27 | 0.3 |
| 30- | 45.5172- | 111.6909- | 2- | 15- | 0- | M37579 | 59860 | -0.09 | 819 | 23650 | 94 | -91 | 12.9 | 135 | 2.9 | 5 | 1.6 | 37520 | 17.1 | 18210 | 60 | 0.6 |
| 30- | 45.5389- | 111.7042- | 2- | 12- | 0- | M37580 | 52580 | -0.06 | 724 | 23480 | 62 | -70 | 7.6 | 64 | 3.5 | 4 | 1.3 | 23090 | 9.2 | 16020 | 32 | 0.3 |

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



| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | LASL SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | U/Th RATIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mg | Mn | Na | Rb | Sb | Sc | Sm | Sr | Ta | Tb | Th | Ti | V | Yb | Zn | |
| 30-45.7343-111.5405-2-12- | 0-M37530 | 6891 | 1444 | 9444 | 97 | -2 | 10.6 | 5.6 | -386 | -1 | -1 | 9.6 | 2723 | 71 | 3.4 | -45 | 0.354 |
| 30-45.7372-111.5774-2-15- | 0-M37531 | 13070 | 676 | 13530 | -45 | -3 | 12.1 | 5.9 | 388 | -2 | -1 | 14.7 | 3219 | 90 | 3.6 | -47 | 0.857 |
| 30-45.5820-111.5752-2-12- | 0-M37532 | 13030 | 1052 | 20070 | 84 | -3 | 20.2 | 10.8 | -310 | 3 | 2 | 20.2 | 8327 | 136 | 16.1 | 121 | 0.505 |
| 30-45.5637-111.5970-2-12- | 0-M37533 | 8935 | 651 | 17610 | 75 | -2 | 12.1 | 6.4 | -317 | -1 | -1 | 11.4 | 3113 | 69 | 5.0 | 101 | 0.272 |
| 30-45.5373-111.5870-2-12- | 0-M37534 | 8691 | 632 | 14850 | 100 | -2 | 10.6 | 7.8 | -248 | 2 | -1 | 14.1 | 4634 | 79 | 5.4 | -36 | 0.305 |
| 30-45.5610-111.5897-2-12- | 0-M37535 | 19870 | 787 | 21770 | -46 | -3 | 19.8 | 6.6 | 779 | -1 | -1 | 15.4 | 4251 | 157 | 3.5 | -50 | 0.117 |
| 30-45.5853-111.5958-2-12- | 0-M37536 | 9349 | 696 | 16750 | 56 | -2 | 9.4 | 5.0 | -251 | -1 | -1 | 8.7 | 3097 | 78 | 3.3 | 96 | 0.333 |
| 30-45.2354-111.8058-2-15- | 0-M37537 | 9005 | 748 | 14390 | 93 | -2 | 11.4 | 6.6 | -324 | 2 | -1 | 11.9 | 3574 | 85 | 4.7 | 132 | 0.210 |
| 30-45.2399-111.8549-2-15- | 0-M37538 | 10510 | 696 | 11520 | 71 | -3 | 16.5 | 4.1 | -277 | -1 | -1 | 10.1 | 5241 | 104 | 3.1 | -120 | 0.257 |
| 30-45.2333-111.8819-2-11- | 0-M37539 | 17980 | 891 | 15420 | -56 | -4 | 23.1 | 6.6 | 445 | -1 | -1 | 9.1 | 9742 | 209 | 4.6 | -61 | 0.242 |
| 30-45.4737-111.7430-2-12- | 0-M37540 | 10100 | 700 | 18380 | 72 | -2 | 11.9 | 7.2 | -256 | 2 | -1 | 14.0 | 3784 | 94 | 3.9 | -34 | 0.271 |
| 30-45.4449-111.7079-2-15- | 0-M37541 | 8322 | 574 | 17620 | 64 | -2 | 9.6 | 6.1 | -267 | -1 | 1 | 11.4 | 2955 | 73 | 5.5 | 82 | 0.298 |
| 30-45.4490-111.6927-2-12- | 0-M37542 | 10330 | 665 | 13300 | 80 | -2 | 10.1 | 5.3 | -263 | -1 | -1 | 9.8 | 2889 | 91 | 3.3 | 119 | 0.327 |
| 30-45.4518-111.6868-2-15- | 0-M37543 | 12900 | 1486 | 12650 | -51 | -3 | 21.0 | 15.0 | -354 | 3 | -1 | 23.2 | 8742 | 178 | 9.0 | -55 | 0.341 |
| 30-45.4504-111.6677-2-15- | 0-M37544 | 9229 | 658 | 18990 | 83 | -2 | 11.2 | 5.8 | -258 | -1 | -1 | 10.3 | 2330 | 71 | 3.7 | 65 | 0.223 |
| 30-45.4548-111.6480-2-12- | 0-M37545 | -5911 | 3765 | 11860 | 75 | -3 | 31.2 | 11.6 | -884 | -1 | 2 | 20.1 | -2100 | 57 | 10.1 | -53 | 0.264 |
| 30-45.4692-111.6368-2-12- | 0-M37546 | 6467 | 299 | 13770 | 90 | -2 | 5.9 | 5.8 | -188 | 2 | -1 | 22.1 | 2384 | 59 | 5.0 | 104 | 0.231 |
| 30-45.4842-111.6289-2-12- | 0-M37547 | 12800 | 2069 | 14170 | 59 | -3 | 21.3 | 13.4 | -442 | 2 | -2 | 25.4 | 5517 | 115 | 7.6 | -53 | 0.220 |
| 30-45.4241-111.6443-2-12- | 0-M37548 | 9647 | 1926 | 16340 | -48 | -3 | 23.7 | 31.2 | -411 | 4 | 2 | 50.2 | 15480 | 125 | 15.6 | -52 | 0.287 |
| 30-45.4124-111.6464-2-12- | 0-M37549 | 9869 | 1059 | 18830 | 97 | -3 | 16.6 | 9.7 | -372 | -1 | 1 | 17.2 | 5455 | 90 | 8.9 | -45 | 0.250 |
| 30-45.3835-111.6805-2-12- | 0-M37550 | 10360 | 333 | 12740 | 80 | -2 | 7.9 | 4.6 | -207 | -1 | -1 | 9.2 | 2572 | 78 | 3.0 | -96 | 0.326 |
| 30-45.3564-111.5854-2-12- | 0-M37551 | 13400 | 824 | 10170 | -41 | -3 | 10.9 | 7.0 | -263 | -1 | -1 | 12.6 | 3237 | 97 | -2.0 | -24 | 0.246 |
| 30-45.3551-111.5431-2-12- | 0-M37552 | 11890 | 523 | 9613 | 100 | -2 | 10.2 | 5.7 | -238 | -1 | -1 | 11.8 | 3674 | 131 | 5.2 | -83 | 0.314 |
| 30-45.3548-111.5085-2-12- | 0-M37553 | 11990 | 658 | 13010 | 87 | -2 | 11.5 | 7.9 | -300 | -1 | 1 | 12.6 | 4218 | 85 | 6.0 | 82 | 0.341 |
| 30-45.3521-111.5034-2-12- | 0-M37554 | 12280 | 1033 | 15490 | 48 | -2 | 16.7 | 6.2 | 463 | -1 | -1 | 9.9 | 5444 | 109 | 6.4 | -18 | 0.434 |
| 30-45.3453-111.5236-2-12- | 0-M37555 | 8760 | 476 | 11080 | 78 | -2 | 9.2 | 7.2 | -218 | -1 | -1 | 10.7 | 3297 | 87 | 4.2 | 61 | 0.336 |
| 30-45.3442-111.5327-2-12- | 0-M37556 | 8702 | 534 | 12860 | 76 | -2 | 8.4 | 5.5 | -227 | -1 | -1 | 10.4 | 2638 | 73 | 3.3 | 98 | 0.279 |
| 30-45.6873-111.7433-2-12- | 0-M37557 | 9767 | 804 | 12760 | 71 | -2 | 10.5 | 5.8 | -323 | -1 | -1 | 8.8 | 5473 | 168 | 3.4 | 124 | 0.295 |
| 30-45.6475-111.7478-2-12- | 0-M37558 | 13070 | 423 | 7435 | 67 | -2 | 6.1 | 3.8 | -226 | -1 | 1 | 7.7 | 2563 | 50 | 2.7 | 145 | 0.416 |
| 30-45.6419-111.6514-2-12- | 0-M37559 | 5664 | 427 | 9303 | 66 | -2 | 6.6 | 5.9 | 272 | -1 | -1 | 8.8 | 2748 | 69 | 3.3 | -37 | 0.295 |
| 30-45.6555-111.6532-2-11- | 0-M37560 | 5539 | 658 | 15940 | 117 | -2 | 7.3 | 6.0 | -284 | -1 | -1 | 17.1 | 2922 | 52 | 3.5 | -71 | 0.216 |
| 30-45.6776-111.6578-2-12- | 0-M37561 | 9537 | 507 | 16650 | 54 | -2 | 9.9 | 5.4 | -259 | -1 | -1 | 7.1 | 4027 | 100 | 2.9 | 94 | 0.338 |
| 30-45.6796-111.7004-2-15- | 0-M37562 | 11260 | 804 | 12450 | -33 | -2 | 8.9 | 4.1 | -281 | -1 | -1 | 5.6 | 2430 | 84 | 3.4 | 102 | 0.357 |
| 30-45.6762-111.7202-2-15- | 0-M37563 | 4883 | 360 | 6683 | 62 | -2 | 6.4 | 5.9 | 265 | -1 | -1 | 8.9 | 2375 | 80 | 3.7 | 49 | 0.315 |
| 30-45.6980-111.6865-2-12- | 0-M37564 | 8549 | 488 | 18700 | 68 | -2 | 10.6 | 4.7 | 476 | -1 | -1 | 5.8 | 3097 | 96 | 2.9 | 60 | 0.379 |
| 30-45.7237-111.6357-2-12- | 0-M37565 | 10520 | 910 | 13670 | 57 | -2 | 11.3 | 7.9 | -305 | 2 | 1 | 19.7 | 4324 | 125 | 6.3 | 98 | 0.188 |
| 30-45.7476-111.6516-2-12- | 0-M37566 | 20150 | 783 | 21900 | -38 | -2 | 18.7 | 5.4 | 734 | -1 | -1 | 14.6 | 3413 | 166 | 3.1 | -41 | 0.123 |
| 30-45.6182-111.6120-2-12- | 0-M37567 | 13490 | 584 | 8929 | -41 | -2 | 7.6 | 6.3 | -250 | -1 | -1 | 8.6 | 3715 | 65 | 4.6 | 92 | 0.291 |
| 30-45.6153-111.6415-2-11- | 0-M37568 | 12160 | 800 | 17350 | 83 | -2 | 11.9 | 4.6 | 375 | -1 | -1 | 6.5 | 3903 | 118 | 2.4 | 87 | 0.323 |
| 30-45.5854-111.6472-2-12- | 0-M37569 | 5570 | 564 | 16900 | 103 | -2 | 8.4 | 8.6 | -339 | 2 | -1 | 18.0 | 3060 | 54 | 5.1 | 113 | 0.211 |
| 30-45.5855-111.6700-2-12- | 0-M37570 | 7797 | 817 | 15840 | 106 | -2 | 9.7 | 7.6 | -292 | -1 | 1 | 11.2 | 4393 | 84 | 3.0 | -35 | 0.366 |
| 30-45.5981-111.6891-2-11- | 0-M37571 | 11410 | 631 | 14860 | 61 | -3 | 12.0 | 4.8 | 681 | -1 | -1 | 8.7 | 3307 | 115 | 4.2 | 91 | 0.241 |
| 30-45.6117-111.7218-2-12- | 0-M37572 | 11120 | 750 | 17460 | 54 | -2 | 14.0 | 4.4 | 541 | -1 | -1 | 6.9 | 3422 | 123 | 2.1 | -40 | 0.304 |
| 30-45.5968-111.7397-2-12- | 0-M37573 | 25540 | 1084 | 18240 | -44 | -3 | 36.3 | 6.2 | 464 | -1 | -1 | 10.5 | 5978 | 214 | 3.0 | -50 | 0.162 |
| 30-45.5748-111.6834-2-11- | 0-M37574 | 9654 | 640 | 13660 | -34 | -2 | 8.7 | 5.0 | -268 | -1 | -1 | 10.3 | 3179 | 86 | 3.1 | 103 | 0.282 |
| 30-45.5695-111.6679-2-15- | 0-M37575 | 12380 | 681 | 12250 | 94 | -3 | 10.7 | 6.5 | -273 | -1 | -1 | 10.4 | 3368 | 96 | 3.2 | 76 | 0.308 |
| 30-45.5365-111.6633-2-12- | 0-M37576 | 10120 | 901 | 15480 | -33 | -2 | 10.3 | 4.4 | 558 | -1 | -1 | 7.6 | 3226 | 91 | 2.7 | 81 | 0.368 |
| 30-45.5161-111.6525-2-11- | 0-M37577 | 7649 | 937 | 16390 | 84 | -3 | 11.6 | 5.5 | -384 | -1 | -1 | 7.8 | 4072 | 120 | -2.9 | 76 | 0.295 |
| 30-45.5195-111.6872-2-12- | 0-M37578 | 4776 | 707 | 6805 | 87 | -2 | 7.9 | 4.7 | -265 | -1 | -1 | 8.4 | 2731 | 84 | 3.0 | -49 | 0.357 |
| 30-45.5172-111.6909-2-15- | 0-M37579 | 10660 | 789 | 14920 | 76 | -3 | 12.8 | 9.4 | -288 | -1 | -1 | 12.2 | 3973 | 101 | 4.7 | 121 | 1.328 |
| 30-45.5389-111.7042-2-12- | 0-M37580 | 9683 | 387 | 12360 | 87 | -2 | 7.1 | 5.7 | -204 | -1 | -1 | 10.1 | 2473 | 70 | 2.9 | -59 | 0.356 |

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

(1)

| DOE SAMPLE NUMBER | | | | | | LASL SAMPLE LOCATION NUMBER AND FIELD DATA | | | | | | | | | | | | | | | | | | | | | | | | | U CONCENTRATION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | TIME SAMPLED | | | | | | | | | | | | | | | | | | | | | | | | |
| STATE | LATITUDE | LONGITUDE | DOE LAB | SAMPLE TYPE | REPLICATE | LASL SAMPLE LOCATION NUMBER | DATE | HOUR | AIR TEMPERATURE | WATER TEMPERATURE | COMMENTS | SPECIAL MEASUREMENTS | pH | CONDUCTIVITY (µmho/cm) | SCINTILLOMETER (eU, ppm) | ROCK TYPE | ROCK COLOR | SEDIMENT TYPE | SEDIMENT COLOR | WATER FLOW | WATER LEVEL | WATER COLOR | STREAM CHANNEL | VEGETATION TYPE | VEGETATION DENSITY | RELIEF | WEATHER | OWNERSHIP | CONTAMINANTS | WELL TYPE | WELL DIAMETER (INCHES) | WELL DEPTH (FEET) | WATER DEPTH (FEET) | SEDIMENT SAMPLES ANALYZED BY DELAYED NEUTRON COUNTING (DNC) UNITS IN ppm |
| 30- | 45.5466- | 111.7059- | 2- | 12- | 0- | M37581- | 10/18/76- | 16- | 4- | 1.0- | - | - | 5.7- | 230- | | -2- | 7- | 3- | 1- | 3- | 2- | 1- | 2- | 3- | 4- | 2- | 3- | -3- | - | - | - | - | 2.20 |
| 30- | 45.5516- | 111.7139- | 2- | 12- | 0- | M37582- | 10/18/76- | 16- | 4- | 1.0- | - | - | 5.1- | 220- | | -2- | 7- | 4- | 1- | 2- | 2- | 3- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 2.70 |
| 30- | 45.6548- | 111.5180- | 2- | 12- | 0- | M37583- | 10/18/76- | 17- | 3- | | - | - | 5.3- | 345- | | -2- | 7- | 5- | 6- | 2- | 2- | 1- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 2.50 |
| 30- | 45.6164- | 111.5415- | 2- | 12- | 0- | M37584- | 10/19/76- | 8- | -2- | | - | - | 5.6- | 320- | | -2- | 7- | 3- | 7- | 3- | 2- | 1- | 2- | 4- | 3- | 3- | 3- | -3- | - | - | - | - | 2.40 |
| 30- | 45.6005- | 111.5318- | 2- | 12- | 0- | M37585- | 10/19/76- | 8- | -2- | | - | - | 5.4- | 360- | | -2- | 7- | 4- | 7- | 2- | 2- | 1- | 2- | 3- | 2- | 2- | 3- | -3- | - | - | - | - | 2.00 |
| 30- | 45.5883- | 111.5307- | 2- | 12- | 0- | M37586- | 10/19/76- | 8- | -1- | | - | - | 5.1- | 220- | | -2- | 7- | 4- | 1- | 2- | 2- | 1- | 2- | 2- | 3- | 2- | 3- | -3- | - | - | - | - | 2.60 |

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

(2)

| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | 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) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ag | Bi | Cd | Cu | Nb | Ni | Pb | Sn | W | Be | Li |
| 30-45.5466-111.7059-2-12- | 0-M37581 | -5 | -5 | -5 | 17 | -20 | 28 | -5 | -10 | -15 | 2 | 24 |
| 30-45.5516-111.7139-2-12- | 0-M37582 | -5 | -5 | -5 | 36 | -20 | 36 | 20 | -10 | -15 | 3 | 16 |
| 30-45.6548-111.5180-2-12- | 0-M37583 | -5 | -5 | -5 | 19 | -20 | 23 | 9 | -10 | -15 | 2 | 38 |
| 30-45.6164-111.5415-2-12- | 0-M37584 | -5 | -5 | -5 | 22 | -20 | -15 | -5 | -10 | -15 | 2 | 26 |
| 30-45.6005-111.5318-2-12- | 0-M37585 | -5 | -5 | -5 | 17 | -20 | -15 | 6 | -10 | -15 | -1 | 30 |
| 30-45.5883-111.5307-2-12- | 0-M37586 | -5 | -5 | -5 | 20 | -20 | -15 | 13 | -10 | -15 | 3 | 34 |

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

③

| 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 |
| 30- | 45.5466- | 111.7059- | 2- | 12- | 0- | M37581 | 30930 | -0.08 | 554 | 37870 | 48 | 98 | 9.1 | 60 | -1.5 | 4 | 0.9 | 16950 | 18.6 | 11400 | 29 | 0.4 |
| 30- | 45.5516- | 111.7139- | 2- | 12- | 0- | M37582 | 71950 | -0.09 | 1202 | 33190 | 55 | -111 | 15.5 | 150 | -1.7 | 3 | 1.5 | 36140 | 6.4 | 15400 | 32 | 0.2 |
| 30- | 45.6548- | 111.5180- | 2- | 12- | 0- | M37583 | 39640 | -0.09 | 950 | 130500 | 59 | -84 | 4.4 | 75 | 16.3 | 2 | 0.8 | 20050 | 5.0 | 10990 | 28 | 0.2 |
| 30- | 45.6164- | 111.5415- | 2- | 12- | 0- | M37584 | 49190 | -0.07 | 898 | 17890 | 51 | -79 | 13.6 | 81 | 2.1 | 4 | 1.3 | 30460 | 8.6 | 15050 | 31 | 0.3 |
| 30- | 45.6005- | 111.5318- | 2- | 12- | 0- | M37585 | 39840 | -0.08 | 638 | 48230 | 56 | -77 | 6.5 | 63 | 2.4 | 3 | 1.3 | 16320 | 7.9 | 13320 | 27 | 0.2 |
| 30- | 45.5883- | 111.5307- | 2- | 12- | 0- | M37586 | 62510 | -0.08 | 906 | 33700 | 66 | -96 | 14.2 | 99 | 3.3 | 3 | 1.2 | 36950 | 8.6 | 17410 | 30 | 0.3 |

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

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| DOE SAMPLE NUMBER (STATE, LATITUDE, LONGITUDE, DOE LAB, SAMPLE TYPE, REPLICATE) | LAB. SAMPLE LOCATION NUMBER | ELEMENTAL CONCENTRATIONS DETERMINED BY NEUTRON ACTIVATION ANALYSIS (continued) Concentrations reported in weight parts per million (ppm) | | | | | | | | | | | | | | | U/Th RATIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mg | Mn | Na | Rb | Sb | Sc | Sm | Sr | Ta | Tb | Th | Ti | V | Yb | Zn | |
| 30-45.5466-111.7059-2-12- | 0-M37581 | 12720 | 320 | 7633 | -32 | -2 | 5.2 | 4.1 | -225 | -1 | -1 | 5.3 | 2364 | 53 | 2.8 | 52 | 0.415 |
| 30-45.5516-111.7139-2-12- | 0-M37582 | 11360 | 580 | 22890 | -40 | -3 | 11.8 | 4.4 | 581 | -1 | -1 | 6.5 | 3494 | 88 | -2.2 | -47 | 0.415 |
| 30-45.6548-111.5180-2-12- | 0-M37583 | 12980 | 447 | 10440 | 66 | -1 | 6.3 | 3.3 | 1597 | -1 | -1 | 7.4 | 1957 | 49 | 2.3 | 98 | 0.338 |
| 30-45.6164-111.5415-2-12- | 0-M37584 | 7441 | 629 | 13340 | 62 | -2 | 8.3 | 4.2 | -246 | -1 | -1 | 6.5 | 3633 | 109 | 2.5 | | 0.369 |
| 30-45.6005-111.5318-2-12- | 0-M37585 | 18620 | 313 | 10120 | 66 | -2 | 5.9 | 4.3 | -232 | -1 | -1 | 7.7 | 2217 | 51 | 3.5 | -23 | 0.260 |
| 30-45.5883-111.5307-2-12- | 0-M37586 | 8937 | 741 | 16400 | 73 | -2 | 10.4 | 4.8 | -279 | -1 | -1 | 9.1 | 3587 | 102 | 3.4 | -57 | 0.286 |

# APPENDIX II

# STANDARD LASL HSSR PROCEDURES AND CODES

## APPENDIX II-A

Summary of Standard LASL HSSR Field and Analytical Procedures

## APPENDIX II-A

## SUMMARY OF STANDARD LASL HSSR FIELD AND ANALYTICAL PROCEDURES

### I. FIELD PROCEDURES

#### Water Sampling

Water samples are collected 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; and well waters are taken near the wellhead if the well is pumping.

#### 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.

#### 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.

#### 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. The field maps are generally 1:24 000-scale or 1:62 500-scale USGS topographic maps. 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 at 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 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 $K\alpha$ Compton peak. Concentrations of each element are then calculated using equations obtained by analyzing prepared standards. Detection limits are: 5 ppm for Ag, Bi, Cd, and Pb; 10 ppm for Cu and Sn; 15 ppm for Ni and W; and

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

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

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

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

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

# APPENDIX II-B

## Explanation of Codes Used in Appendix I

## APPENDIX II-B

## EXPLANATION OF CODES USED

### DOE SAMPLE NUMBER

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

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

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

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

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

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

### LASL SAMPLE LOCATION NUMBER AND FIELD DATA

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

| | | |
|---|---|---|
| 1 = Depositing | 2 = Eroding | 3 = Unknown |

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

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

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

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

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

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

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

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

OWNERSHIP: Not used.

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

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

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

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

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

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

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

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

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

# APPENDIX II-C

## Key to Sample Types Listed in Appendix I

## APPENDIX II-C

## KEY TO SAMPLE TYPES LISTED IN APPENDIX I

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. |
| 06 | Spring water sample filtered through a 0.45-μ membrane filter and acidified to a pH of $\leq 1$ 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 $\leq 1$ with reagent-grade nitric acid ($HNO_3$). |
| 11 | Wet spring sediment sample dried at $\leq 100°C$ and sieved to -100 mesh through stainless steel sieves. |
| 12 | Wet stream sediment sample dried at $\leq 100°C$ and sieved to -100 mesh through stainless steel sieves. |
| 15 | Dry stream sediment sample dried at $\leq 100°C$ (if necessary) and sieved to -100 mesh through stainless steel sieves. |
| 27 | Stream water sample acidified to a pH of $\leq 1$ with reagent grade nitric acid ($HNO_3$). |

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