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National Uranium Resource Evaluation

**URANIUM HYDROGEOCHEMICAL AND
STREAM SEDIMENT RECONNAISSANCE OF THE
YAKUTAT NTMS QUADRANGLE, ALASKA**

Data Compiled by

Bendix Field Engineering Corporation
Grand Junction, Colorado

Data Collection and Chemical Analysis by

Los Alamos National Laboratory
Los Alamos, New Mexico

September 1981

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PREPARED FOR THE U.S. DEPARTMENT OF ENERGY
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This report is a result of work performed as part of the National Uranium Resource Evaluation. NURE is a program of the U.S. Department of Energy's Grand Junction, Colorado, Office to acquire and compile geologic and other information with which to assess the magnitude and distribution of uranium resources and to determine areas favorable for the occurrence of uranium in the United States.

GJBX-261(81)

URANIUM HYDROGEOCHEMICAL AND STREAM SEDIMENT RECONNAISSANCE
OF THE
YAKUTAT NTMS QUADRANGLE, ALASKA

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INTRODUCTION

This report presents results of a Hydrogeochemical and Stream Sediment Reconnaissance (HSSR) of the Yakutat NTMS quadrangle, Alaska. In addition to this abbreviated data release, more complete data are available to the public in machine-readable form through the Grand Junction Office Information System (GJOIS) at Oak Ridge National Laboratory (ORNL). Inquiries regarding the machine-readable data should be directed to:

GJOIS Project
UCC-ND Computing Applications Department
4500 North Building
Oak Ridge National Laboratory
P.O. Box X
Oak Ridge, TN 37830

Presented in this data release are location data, field analyses, and laboratory analyses of several different sample media. For the sake of brevity, many field site observations have not been included in this volume. These data are, however, available on the magnetic tape. Appendices A and B describe the sample media and summarize the analytical results for each medium. The data were subdivided by one of the Los Alamos National Laboratory (LANL) sorting programs of Zinkl and others (1981a) into groups of stream sediment and lake sediment samples. For each group which contains a sufficient number of observations, statistical tables, tables of raw data, and 1:1000000 scale maps of pertinent elements have been included in this report. In addition, maps showing results of multivariate statistical analyses have been included.

The Yakutat NTMS quadrangle hydrogeochemical reconnaissance was performed by the LANL, under contract to the Grand Junction Office of the United States Department of Energy (DOE), as part of the National Uranium Resource Evaluation (NURE) program. LANL was responsible for conducting the HSSR program in the states of New Mexico, Colorado, Wyoming, Montana, and Alaska. This data release was prepared by the Bendix Field Engineering Corporation in order to make the data available to members of the public who wish to make use of the information, but who do not have access to computing facilities.

Further information about the HSSR program in general, or about the LANL portion of the program in particular, can be obtained in quarterly or semiannual program progress reports on open-file at DOE's Technical Library in Grand Junction. Inquiries should be directed to:

Technical Library
Bendix Field Engineering Corporation
P.O. Box 1569
Grand Junction, CO 81502-1569

Information about the field and analytical procedures used by LANL during sample collection and analysis may be found in any HSSR data release prepared by the LANL (see, for example, Planner and others, 1981), and will not be included in this report.

RESULTS

Population statistics for stream sediments are given in Table 1 and for lake sediments in Table 2. These tables contain statistics such as mean, standard deviation, skewness, and kurtosis for two different populations: the total population and a population consisting of only those analyses that are above the detection limit (ADL) for each element. In addition, data are provided for each variable for the total number of samples possessing analyses, the number of analyses above the detection limit (NADL), the number of analyses below the detection limit (NBDL), and the number of missing analyses (MISS). Also tabulated for each variable are the maximum value, the minimum value considered above detection limit, and the maximum detection limit. Variable detection limits account for the fact that the maximum value of the detection limit is occasionally greater than the minimum value considered above the detection limit.

Maps of elemental concentrations, ratios, factor scores, and residuals were prepared by a computer program which represents data values in their correct latitude-longitude positions by symbols which vary in size and intensity in proportion to the value being plotted (Zinkl and others, 1981b). Maps of uranium concentrations in stream sediment and lake sediment are presented as Plates 1 and 2, respectively. Thorium concentrations in stream and lake sediment samples and thorium-to-uranium ratios of stream and lake sediment samples are plotted in Plates 3, 4, 5, and 6. Locations of stream sediment and lake sediment samples are shown in Plates 7 and 8.

In addition to the full-sized plates, several page-sized maps and figures are included to assist in interpretation of the data. Scatter plots of uranium versus thorium in stream sediments and lake sediments are shown in Figures 1 and 2. These plots may be used to identify groups of samples which differ significantly from normal crustal Th/U ratios. Deviations from normal ratios may indicate areas showing uranium enrichment or depletion.

When multielement data are provided by LANL, maps of elements considered useful in uranium exploration are included in the data release. Figures 3, 4, 5, and 6 show vanadium in stream sediments, copper in stream sediments, vanadium in lake sediments, and copper in lake sediments, respectively.

Chemical analysis and field data for water samples from this quadrangle were open filed by the DOE Grand Junction Office as GJBX-199(81).

Table 1. Population Statistics for Stream Sediment Data

YAKUTAT STREAM SEDIMENT					FOR TOTAL ANALYSES:				FOR ABOVE DETECTION LIMIT ANALYSES:				MAXIMUM	MIN(ADL)	DEV.LIM.
VAR	TOTAL	NADL	NBDL	MISS	MEAN	STD.DEV.	SKEWNESS	KURTOSIS	MEAN	STD.DEV.	SKEWNESS	KURTOSIS			
1 PH	206	206	0	2	7.71	.48	-.46	3.10	7.71	.48	-.46	3.10	9.10	6.10	99999.00
2 HU	206	206	0	2	107.95	196.88	4.99	32.32	107.95	196.88	4.99	32.32	1550.00	4.00	99999.00
3 UR	162	162	0	46	6.20	4.80	5.04	44.07	6.20	4.80	5.04	44.07	50.00	1.00	99999.00
4 U	208	208	0	0	2.20	1.10	2.92	18.57	2.20	1.10	2.92	18.57	9.55	.09	99999.00
5 AG	203	1	202	5	2.51	.18	14.14	201.00	5.00	0.00	0.00	0.00	5.00	5.00	5.00
6 BI	203	4	199	5	2.56	.42	7.20	54.16	5.50	.50	0.00	1.00	6.00	5.00	5.00
7 CD	203	2	201	5	2.53	.30	10.33	110.23	5.50	.50	0.00	1.00	6.00	5.00	5.00
8 CU	203	203	0	5	52.66	36.12	3.53	20.23	52.66	36.12	3.53	20.23	316.00	12.00	99999.00
9 NS	203	0	203	5	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.00	10.00	20.00
10 HI	203	174	29	5	34.12	29.73	3.23	16.01	38.55	29.89	3.37	16.04	206.00	15.00	15.00
11 PA	203	64	139	5	4.19	3.14	2.72	13.39	7.86	3.40	2.57	11.27	23.00	5.00	5.00
12 SN	203	3	200	5	5.29	3.34	13.53	188.63	24.67	19.33	.71	1.50	52.00	11.00	10.00
13 W	203	7	196	5	7.90	2.23	6.22	44.98	19.00	4.00	1.41	3.86	28.00	15.00	15.00
14 BF	0	0	0	208	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	99999.00
15 LI	0	0	0	208	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	99999.00
16 AL	208	207	1	0	67557.50	13574.26	-1.67	7.51	67849.66	12938.16	-1.52	6.97	91760.00	10240.00	14160.00
17 AU	208	0	208	0	.04	.01	1.71	8.76	0.00	0.00	0.00	0.00	.04	.04	.10
18 BA	208	161	47	0	477.64	250.20	.05	2.17	575.92	189.10	.34	2.53	1170.00	226.00	243.00
19 CA	208	204	4	0	31022.60	25684.60	2.22	9.42	31565.97	25633.82	2.24	9.46	162300.00	6189.00	17260.00
20 CE	208	197	11	0	44.85	26.58	4.31	36.57	47.08	25.52	5.10	43.24	287.00	12.00	7.00
21 CL	208	10	198	0	208.50	1618.96	14.21	203.85	2829.90	6874.51	2.66	8.09	23440.00	263.00	141.00
22 CO	208	201	7	0	16.39	11.42	3.07	18.84	16.94	11.22	3.30	20.12	101.70	1.70	.10
23 CR	208	203	5	0	92.69	57.20	3.00	15.93	94.70	56.43	3.17	16.67	449.00	22.00	16.00
24 CS	208	62	146	0	1.60	1.04	1.86	6.94	2.90	1.00	1.42	5.89	6.40	1.40	1.90
25 DY	208	198	10	0	3.97	1.26	1.54	11.32	4.08	1.16	2.25	14.19	12.00	2.00	8.00
26 FU	208	201	7	0	1.13	.26	-.94	4.63	1.15	.22	-.26	3.15	1.70	.40	.60
27 IF	208	208	0	0	45234.14	18740.75	1.78	9.51	45234.14	18740.75	1.78	9.51	160900.00	7731.00	99999.00
28 HF	208	195	13	0	5.98	5.03	5.92	55.84	6.31	5.03	6.19	58.03	57.60	1.60	1.80
29 K	208	141	67	0	10219.20	6085.10	.37	2.68	13406.86	4384.83	.78	4.70	32590.00	5445.00	5682.00
30 LA	208	183	25	0	23.31	14.31	4.46	40.94	25.73	13.54	5.77	53.34	159.00	6.00	8.00
31 LU	208	198	10	0	.29	.11	1.62	10.31	.30	.11	2.04	12.08	1.00	.10	.20
32 MG	208	201	7	0	12746.06	6823.12	2.21	9.98	13059.29	6708.38	2.37	10.44	47270.00	3498.00	20740.00
33 MN	208	208	0	0	1182.68	1641.58	8.96	102.86	1182.68	1641.58	8.96	102.86	20960.00	130.00	99999.00
34 NA	208	208	0	0	18906.56	4422.59	-.94	5.65	18906.56	4422.59	-.94	5.65	30460.00	928.00	99999.00
35 PB	208	41	167	0	32.64	21.33	1.73	5.25	71.34	15.72	1.10	4.29	116.00	45.00	45.00
36 SB	208	0	208	0	1.29	.36	1.05	5.49	0.00	0.00	0.00	0.00	1.29	1.29	3.00
37 SC	208	208	0	0	18.60	8.92	1.82	6.92	18.60	8.92	1.82	6.92	54.70	1.80	99999.00
38 SM	208	201	7	0	3.83	2.41	5.38	48.70	3.94	2.38	5.72	51.85	27.50	1.00	1.00
39 SR	205	28	177	3	216.98	114.53	2.00	6.30	457.32	105.25	.09	2.11	664.00	288.00	363.00
40 TA	208	0	208	0	.64	.29	2.40	9.38	0.00	0.00	0.00	0.00	.64	.64	1.00
41 TR	208	37	171	0	.68	.47	3.51	15.96	1.43	.72	1.33	3.22	3.00	1.00	1.00
42 TH	208	193	15	0	5.53	4.81	6.30	58.47	5.88	4.81	6.63	60.86	55.10	1.70	1.70
43 TI	208	200	8	0	4524.52	1722.87	1.49	7.77	4656.12	1615.74	2.02	8.87	12210.00	1586.00	6512.00
44 V	208	205	3	0	136.60	55.73	1.18	5.22	138.23	54.41	1.33	5.36	345.00	37.00	102.00
45 YB	208	151	57	0	2.72	1.44	1.40	8.22	3.32	1.23	2.44	13.80	11.30	1.50	2.00
46 ZN	208	52	156	0	48.19	40.20	1.65	4.64	107.94	37.36	.06	2.02	177.00	30.00	46.00
47 TU	193	193	0	15	2.45	.71	1.91	11.26	2.45	.71	1.91	11.26	6.58	1.03	99999.00

NUMBER OF SAMPLES = 208

Table 2. Population Statistics for Lake Sediment Data

YAKUTAT LAKE SEDIMENT															
VAR					FOR TOTAL ANALYSES				FOR ABOVE DETECTION LIMIT ANALYSES				MAXIMUM	MIN(ADL)	DET.LIM.
	TOTAL	HAOL	NBDL	MISS	MEAN	STD.DEV.	SKEWNESS	KURTOSIS	MEAN	STD.DEV.	SKEWNESS	KURTOSIS			
1 PH	85	85	0	0	7.70	.60	.97	6.05	7.70	.60	.97	6.05	10.30	6.50	99999.00
2 MU	85	85	0	0	40.72	55.00	2.14	6.59	40.72	55.00	2.14	6.59	235.00	5.00	99999.00
3 UR	1	1	0	84	9.00	0.00	0.00	0.00	9.00	0.00	0.00	0.00	9.00	9.00	99999.00
4 U	85	85	0	0	1.88	.87	2.03	12.27	1.88	.87	2.03	12.27	6.64	.25	99999.00
5 AG	82	0	82	3	2.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.50	2.50	5.00
6 BI	82	0	82	3	2.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.50	2.50	5.00
7 CD	82	0	82	3	2.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.50	2.50	5.00
8 CU	82	82	0	3	44.26	26.67	2.94	16.55	44.26	26.67	2.94	16.55	203.00	15.00	99999.00
9 HN	82	0	82	3	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.00	10.00	20.00
10 NI	82	73	9	3	32.60	16.38	.87	4.54	35.70	14.63	1.35	5.53	90.00	15.00	15.00
11 PR	82	23	59	3	3.95	2.63	1.80	5.43	7.65	2.37	.87	3.06	14.00	5.00	5.00
12 SN	82	0	82	3	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00	5.00	10.00
13 W	82	1	81	3	7.65	1.37	8.89	80.01	20.00	0.00	0.00	0.00	20.00	20.00	15.00
14 BE	0	0	0	85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	99999.00
15 LI	0	0	0	85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	99999.00
16 AL	85	85	0	0	64664.59	14911.55	-1.32	5.32	64664.59	14911.55	-1.32	5.32	94230.00	12120.00	99999.00
17 AU	85	1	84	0	.06	.07	7.87	68.57	.64	0.00	0.00	0.00	.64	.64	.08
18 RA	85	61	24	0	437.59	231.41	.14	2.21	551.52	165.91	.44	3.07	1049.00	214.00	250.00
19 CA	85	82	3	0	28723.69	20668.80	2.97	16.85	29705.94	20383.51	3.14	17.73	152400.00	7295.00	4610.00
20 CF	85	78	7	0	38.62	23.14	3.35	23.44	41.42	22.08	4.08	28.27	192.00	9.00	11.00
21 CL	85	15	70	0	331.31	1182.73	6.39	46.48	1514.53	2495.21	2.33	7.47	9581.00	223.00	150.00
22 CO	85	78	7	0	13.07	8.68	1.67	8.06	14.17	8.20	2.07	9.35	52.30	2.70	.10
23 CR	85	82	3	0	86.74	33.70	.72	5.03	89.34	31.37	1.11	5.54	211.00	25.00	21.00
24 CS	85	12	73	0	1.55	.98	2.30	8.23	3.48	1.19	.22	1.97	5.60	1.60	1.60
25 DY	85	81	4	0	4.00	1.41	2.92	20.37	4.10	1.37	3.31	22.85	13.00	2.00	4.00
26 FU	85	81	4	0	1.08	.28	-.53	2.75	1.11	.24	-.26	2.09	1.60	.60	.40
27 FE	85	85	0	0	38506.25	15339.47	1.27	6.76	38506.25	15339.47	1.27	6.76	102000.00	8924.00	99999.00
28 HF	85	73	12	0	4.81	3.77	4.74	34.45	5.38	3.77	5.20	36.72	32.40	2.00	2.10
29 K	85	54	31	0	8638.69	5318.85	.43	2.08	11906.63	3882.16	.48	2.34	21950.00	5491.00	5061.00
30 LA	85	59	26	0	18.77	13.22	2.92	20.00	24.29	12.05	4.68	31.11	103.00	9.00	13.00
31 LU	85	71	14	0	.25	.11	1.17	7.55	.28	.10	1.92	10.85	.80	.10	.20
32 MG	85	83	2	0	12980.65	5442.08	.87	5.01	13250.51	5218.65	1.09	5.32	34390.00	4624.00	3260.00
33 MN	85	85	0	0	810.46	321.42	.60	3.51	810.46	321.42	.60	3.51	1707.00	177.00	99999.00
34 NA	85	85	0	0	19186.84	4981.20	-1.04	4.41	19186.84	4981.20	-1.04	4.41	28310.00	3224.00	99999.00
35 RB	85	5	80	0	29.48	14.68	2.12	7.48	69.40	14.32	-.62	2.07	84.00	45.00	36.00
36 SB	85	0	85	0	1.52	.54	1.45	7.32	0.00	0.00	0.00	0.00	1.52	1.52	2.00
37 SC	85	85	0	0	18.07	7.89	1.95	9.17	18.07	7.89	1.95	9.17	52.40	3.40	99999.00
38 SM	85	75	10	0	3.27	2.31	5.28	41.72	3.57	2.50	5.84	45.25	21.10	1.00	2.20
39 SR	85	6	79	0	215.92	87.01	2.59	10.65	474.00	94.45	.35	1.92	631.00	355.00	307.00
40 TA	85	0	85	0	.88	.49	1.69	6.71	0.00	0.00	0.00	0.00	.88	.88	1.00
41 TR	85	7	78	0	.64	.36	4.06	23.39	1.43	.73	1.36	3.23	3.00	1.00	1.00
42 TH	85	71	14	0	4.36	3.82	5.61	43.71	4.99	3.87	6.08	45.36	34.10	1.60	1.80
43 TI	85	82	3	0	4401.93	1481.14	.97	8.12	4533.20	1336.23	1.82	10.03	11070.00	1815.00	1642.00
44 V	85	85	0	0	132.93	48.59	1.43	8.50	132.93	48.59	1.43	8.50	359.00	29.00	99999.00
45 YB	85	39	46	0	2.29	1.39	2.03	10.44	3.38	1.33	2.71	13.73	9.70	1.30	2.50
46 ZM	85	24	61	0	61.68	59.58	2.49	10.53	130.21	72.36	1.46	5.28	363.00	44.00	41.00
47 TU	71	71	0	14	2.36	.65	.89	6.49	2.36	.65	.89	6.49	5.13	.71	99999.00

NUMBER OF SAMPLES = 85

YAKUTAT STREAM SEDIMENT

Figure 1. Uranium versus Thorium, Stream Sediments

YAKUTAT LAKE SEDIMENT

Figure 2. Uranium versus Thorium, Lake Sediments

YAKUTAT STREAM SEDIMENT - VANADIUM (PPM)

Figure 3. Vanadium (ppm) in Stream Sediments

Figure 4. Copper (ppm) in Stream Sediments

YAKUTAT LAKE SEDIMENT - VANADIUM (PPM)

Figure 5. Vanadium (ppm) in Lake Sediments

Figure 6. Copper (ppm) in Lake Sediments

MULTIVARIATE STATISTICAL ANALYSES

Stream-sediment and lake-sediment analyses were edited by the FACEDT computer program (Shettel and others, 1980) in preparation for multivariate statistical analyses, by eliminating samples and variables with insufficient data. Information contained in the stream-sediment and lake-sediment data sets before and after editing is shown in Tables 3 through 6. The edited data sets are logarithmically transformed prior to the application of statistical methods.

R-mode factor analysis (Tables 7 and 8) was performed on the transformed edited sediment data. R-mode compares variables over the range of samples; Q-mode compares samples using the variables. Factor analysis attempts to show the geochemical relationships that exist in the data by reducing the dimensionality of the multivariate observations (i.e., by grouping variables that are highly correlated into "factors"). In the sediment data, uranium typically loads with Ce, La, Fe, Mn, V, and Sc, which is characteristic of monazite, zircon, the magnetite-ilmenite suite, and the iron-manganese oxides families of minerals. Results of factor analysis of ground-water data usually show uranium loading with the major ions, confirming the relationship between uranium and specific conductance.

Because of the high degree of correlation between uranium and those elements associated with resistate minerals, step-wise multiple regression (Tables 9 and 10) was employed to "correct" the raw uranium value for that which is present in heavy or resistate minerals. A map of the regression residuals shows those areas where uranium cannot be explained by the occurrence of resistate or heavy minerals (high positive residuals). This technique enhances anomalous samples by suppressing background populations resulting from resistate or heavy minerals. Factor score and residual maps are shown in Figures 7 through 14.

Table 3. Stream Sediment Data Before Editing

YAKUTAT STREAM SEDIMENT						
VAR	# MISSING	%	#	BDL	%	MEAN STD DEV
1 PH	2	.96	0	0.00	7.71	.48
2 MU	2	.96	0	0.00	107.95	196.88
3 UP	46	22.12	0	0.00	6.20	4.80
4 U	0	0.00	0	0.00	2.20	1.10
5 AG	5	2.40	202	97.12	2.51	.18
6 BT	5	2.40	199	95.67	2.56	.42
7 CC	5	2.40	201	96.63	2.53	.30
8 CU	5	2.40	0	0.00	52.66	36.12
9 NB	5	2.40	203	97.60	10.00	0.00
10 NI	5	2.40	29	13.94	34.12	29.73
11 PR	5	2.40	139	66.83	4.19	3.14
12 SN	5	2.40	200	96.15	5.29	3.34
13 W	5	2.40	196	94.23	7.90	2.23
14 BE	208	100.00	0	0.00	0.00	0.00
15 LI	208	100.00	0	0.00	0.00	0.00
16 AL	0	0.00	1	.48	67557.50	13574.26
17 AU	0	0.00	208	100.00	.04	.01
18 BA	0	0.00	47	22.60	477.64	250.20
19 CA	0	0.00	4	1.92	31022.60	25684.60
20 CE	0	0.00	11	5.29	44.85	26.58
21 CL	0	0.00	198	95.19	208.50	1618.96
22 CO	0	0.00	7	3.37	16.39	11.42
23 CR	0	0.00	5	2.40	92.69	57.20
24 CS	0	0.00	146	70.19	1.60	1.04
25 DY	0	0.00	10	4.81	3.97	1.26
26 EU	0	0.00	7	3.37	1.13	.26
27 FE	0	0.00	0	0.00	45234.14	18740.75
28 HF	0	0.00	13	6.25	5.98	5.03
29 K	0	0.00	67	32.21	10219.20	6085.10
30 LA	0	0.00	25	12.02	23.31	14.31
31 LU	0	0.00	10	4.81	.29	.11
32 MG	0	0.00	7	3.37	12746.06	6823.12
33 MN	0	0.00	0	0.00	1182.68	1641.58
34 NA	0	0.00	0	0.00	18906.56	4422.59
35 RP	0	0.00	167	80.29	32.64	21.33
36 SB	0	0.00	208	100.00	1.29	.36
37 SC	0	0.00	0	0.00	18.60	8.92
38 SM	0	0.00	7	3.37	3.83	2.41
39 SR	3	1.44	177	85.10	216.98	114.53
40 TA	0	0.00	208	100.00	.64	.29
41 TB	0	0.00	171	82.21	.68	.47
42 TH	0	0.00	15	7.21	5.53	4.81
43 TI	0	0.00	8	3.85	4524.52	1722.87
44 V	0	0.00	3	1.44	136.60	55.73
45 YB	0	0.00	57	27.40	2.72	1.44
46 ZN	0	0.00	156	75.00	48.19	40.20
47 TU	15	7.21	0	0.00	2.45	.71

TOTAL NUMBER OF SAMPLES = 208

Table 4. Stream Sediment Data After Editing

YAKUTAT STREAM SEDIMENT						
VAR	# MISSING	%	# BDL	%	MEAN	STD DEV
1 PH	0	0.00	0	0.00	7.71	.48
2 MU	0	0.00	0	0.00	111.41	204.97
3 U	0	0.00	0	0.00	2.33	1.04
4 CU	0	0.00	0	0.00	49.75	28.82
5 NI	0	0.00	26	13.98	31.18	20.86
6 A	0	0.00	0	0.00	69576.13	10073.67
7 BA	0	0.00	29	15.59	502.63	239.19
8 CA	0	0.00	0	0.00	30407.19	25538.36
9 CE	0	0.00	1	.54	47.49	25.89
10 CO	0	0.00	1	.54	15.47	7.39
11 CP	0	0.00	0	0.00	87.92	38.10
12 DY	0	0.00	3	1.61	4.04	1.22
13 EU	0	0.00	1	.54	1.17	.21
14 FE	0	0.00	0	0.00	43700.43	14685.15
15 HF	0	0.00	2	1.08	6.33	5.10
16 K	0	0.00	48	25.81	10703.88	5850.12
17 LA	0	0.00	11	5.91	24.60	14.14
18 LU	0	0.00	2	1.08	.29	.11
19 MG	0	0.00	3	1.61	12135.18	4912.91
20 MN	0	0.00	0	0.00	1048.02	802.89
21 NA	0	0.00	0	0.00	19602.74	3328.29
22 SC	0	0.00	0	0.00	18.18	7.19
23 SP	0	0.00	1	.54	4.03	2.43
24 TH	0	0.00	0	0.00	5.91	4.89
25 TI	0	0.00	3	1.61	4550.81	1568.33
26 V	0	0.00	1	.54	134.40	47.94
27 YB	0	0.00	46	24.73	2.72	1.45
28 TU	0	0.00	0	0.00	2.45	.71

TOTAL NUMBER OF SAMPLES = 186

Table 5. Lake Sediment Data Before Editing

YAKUTAT LAKE SEDIMENT						
VAR	# MISSING	%	# BDL	%	MEAN	STD DEV
1 PH	0	0.00	0	0.00	7.70	.60
2 MU	0	0.00	0	0.00	40.72	55.00
3 UR	84	98.82	0	0.00	9.00	0.00
4 U	0	0.00	0	0.00	1.88	.87
5 AG	3	3.53	82	96.47	2.50	0.00
6 BI	3	3.53	82	96.47	2.50	0.00
7 CD	3	3.53	82	96.47	2.50	0.00
8 CU	3	3.53	0	0.00	44.26	26.67
9 NR	3	3.53	82	96.47	10.00	0.00
10 NI	3	3.53	9	10.59	32.60	16.38
11 PB	3	3.53	59	59.41	3.95	2.63
12 SN	3	3.53	82	96.47	5.00	0.00
13 W	3	3.53	81	95.29	7.65	1.37
14 BE	85	100.00	0	0.00	0.00	0.00
15 LI	85	100.00	0	0.00	0.00	0.00
16 AL	0	0.00	0	0.00	64664.59	14911.55
17 AU	0	0.00	84	98.82	.06	.07
18 BA	0	0.00	24	28.24	437.59	231.41
19 CA	0	0.00	3	3.53	28723.69	20668.80
20 CE	0	0.00	7	8.24	38.62	23.14
21 CL	0	0.00	70	82.35	331.31	1182.73
22 CO	0	0.00	7	8.24	13.07	8.68
23 CP	0	0.00	3	3.53	86.74	33.70
24 CS	0	0.00	73	85.88	1.55	.98
25 DY	0	0.00	4	4.71	4.00	1.41
26 EU	0	0.00	4	4.71	1.08	.28
27 FE	0	0.00	0	0.00	38506.25	15339.47
28 HF	0	0.00	12	14.12	4.81	3.77
29 K	0	0.00	31	36.47	8638.69	5318.85
30 LA	0	0.00	26	30.59	18.77	13.22
31 LU	0	0.00	14	16.47	.25	.11
32 MG	0	0.00	2	2.35	12980.65	5442.08
33 MN	0	0.00	0	0.00	810.46	321.42
34 NA	0	0.00	0	0.00	19186.84	4981.20
35 RB	0	0.00	80	94.12	29.48	14.68
36 SB	0	0.00	85	100.00	1.52	.54
37 SC	0	0.00	0	0.00	18.07	7.89
38 SM	0	0.00	10	11.76	3.27	2.31
39 SP	0	0.00	79	92.94	215.92	87.01
40 TA	0	0.00	85	100.00	.88	.49
41 TB	0	0.00	75	91.76	.64	.36
42 TH	0	0.00	14	16.47	4.36	3.82
43 TI	0	0.00	3	3.53	4401.93	1481.14
44 V	0	0.00	0	0.00	132.93	48.59
45 YB	0	0.00	46	54.12	2.29	1.39
46 ZN	0	0.00	61	71.76	61.68	59.58
47 TU	14	16.47	0	0.00	2.36	.65

TOTAL NUMBER OF SAMPLES = 85

Table 6. Lake Sediment Data After Editing

YAKUTAT LAKE SEDIMENT						
VAP	# MISSING	%	# BDL	%	MEAN	STD DEV
1 PH	0	0.00	0	0.00	7.64	.57
2 MU	0	0.00	0	0.00	44.43	57.24
3 U	0	0.00	0	0.00	2.09	.82
4 CU	0	0.00	0	0.00	41.12	19.17
5 NI	0	0.00	8	11.76	30.47	13.21
6 AL	0	0.00	0	0.00	67992.21	10870.94
7 BA	0	0.00	9	13.24	496.27	212.27
8 CA	0	0.00	0	0.00	29007.16	20722.72
9 CE	0	0.00	0	0.00	43.93	22.33
10 CC	0	0.00	2	2.94	12.71	5.88
11 CR	0	0.00	1	1.47	85.55	25.63
12 OY	0	0.00	0	0.00	4.10	1.41
13 EU	0	0.00	0	0.00	1.14	.23
14 FE	0	0.00	0	0.00	38835.59	10413.61
15 HF	0	0.00	3	4.41	5.42	3.92
16 K	0	0.00	19	27.94	9406.44	5210.27
17 LA	0	0.00	13	19.12	21.10	13.56
18 LU	0	0.00	4	5.88	.27	.11
19 MG	0	0.00	0	0.00	12772.37	4183.39
20 MN	0	0.00	0	0.00	812.54	273.42
21 NA	0	0.00	0	0.00	20438.40	3607.41
22 SC	0	0.00	0	0.00	17.73	4.99
23 SM	0	0.00	3	4.41	3.62	2.41
24 TH	0	0.00	0	0.00	5.04	3.94
25 TI	0	0.00	0	0.00	4476.78	1251.48
26 V	0	0.00	0	0.00	131.24	32.47
27 TU	0	0.00	0	0.00	2.36	.66

TOTAL NUMBER OF SAMPLES = 68

Table 7. R-mode Factor Analysis of Stream Sediment Data

FACTOR ANALYSIS (CASE 2)
YAKUTAT STREAM SEDIMENT
NUMBER OF SAMPLES 186
NUMBER OF VARIABLES 28

CORRELATION COEFFICIENTS

	PH	MU	U	CU	NI	AL	BA	CA	CE	CO	CR	DY	EU	FE	HF
PH	1.000														
MU	-.155	1.000													
U	.035	-.135	1.000												
CU	-.026	.032	-.172	1.000											
NI	-.108	.167	-.144	.622	1.000										
AL	-.146	-.306	.107	.126	.077	1.000									
BA	-.076	-.208	.280	-.140	-.231	.562	1.000								
CA	.194	.268	-.216	.098	.090	-.580	-.632	1.000							
CE	.105	-.082	.655	-.297	-.265	.215	.264	-.130	1.000						
CO	-.025	.155	-.194	.657	.710	.037	-.376	.337	-.213	1.000					
CR	-.099	.252	-.231	.527	.790	-.096	-.372	.310	-.243	.720	1.000				
DY	.054	-.140	.396	.161	.227	.281	.007	.170	.406	.233	.227	1.000			
EU	-.039	-.085	.246	.040	.048	.401	.232	-.079	.637	.124	.092	.332	1.000		
FE	-.103	.188	-.066	.544	.652	-.117	-.492	.338	-.088	.728	.764	.314	.218	1.000	
HF	.091	.026	.628	-.354	-.205	.006	.048	.026	.790	-.193	-.134	.320	.430	.004	1.000
K	-.137	-.138	.245	-.080	-.082	.610	.765	-.665	.314	-.221	-.220	-.014	.301	-.329	.125
LA	.094	-.116	.556	-.202	-.082	.291	.230	-.191	.749	-.090	-.110	.356	.523	.004	.733
LU	.086	-.078	.265	.130	.230	-.042	-.320	.305	.402	.325	.318	.507	.406	.468	.454
MG	-.065	.119	-.307	.556	.649	.102	-.296	.401	-.351	.698	.735	.397	.008	.615	-.338
MN	.028	.239	-.051	.304	.417	-.455	-.608	.431	-.031	.561	.479	.084	.054	.653	.103
NA	.089	-.133	.002	-.409	-.407	.393	.308	-.151	.316	-.343	-.500	-.028	.267	-.483	.271
SC	-.003	.127	-.141	.506	.661	-.074	-.501	.433	-.076	.749	.811	.430	.227	.850	-.032
SM	.102	-.074	.502	-.103	-.048	.207	.088	.011	.612	-.016	.050	.510	.746	.221	.704
TH	.088	-.135	.809	-.258	-.217	.186	.295	-.227	.848	-.272	-.252	.453	.469	-.080	.734
TI	-.094	.081	-.117	.411	.375	.059	-.269	.331	-.151	.427	.413	.368	.033	.510	-.055
V	-.159	.199	-.245	.573	.651	.079	-.314	.320	-.308	.687	.770	.259	.024	.726	-.227
YB	.092	-.007	.272	.021	.097	.041	-.191	.190	.343	.131	.213	.442	.305	.356	.429
TU	.104	-.060	.118	-.222	-.187	.180	.149	-.114	.616	-.217	-.137	.271	.485	-.052	.455

	K	LA	LU	MG	MN	NA	SC	SM	TH	TI	V	YB	TU
K	1.000												
LA	.383	1.000											
LU	-.171	.342	1.000										
MG	-.258	-.265	.181	1.000									
MN	-.486	-.027	.463	.191	1.000								
NA	.234	.297	-.116	-.285	-.386	1.000							
SC	-.378	-.013	.568	.683	.649	-.413	1.000						
SM	.209	.697	.596	-.132	.148	.206	.256	1.000					
TH	.337	.716	.359	-.403	-.061	.200	-.116	.773	1.000				
TI	-.312	-.102	.205	.589	.129	-.223	.449	-.069	-.217	1.000			
V	-.243	-.187	.200	.824	.292	-.407	.692	-.128	-.367	.731	1.000		
YB	-.089	.387	.481	.132	.232	.040	.401	.553	.414	.173	.157	1.000	
TU	.264	.516	.276	-.297	-.040	.336	-.020	.679	.679	-.220	-.314	.361	1.000

Table 7. R-mode Factor Analysis of Stream Sediment Data
(continued)

	FACTOR				
	1	2	3	4	5
EIGENVALUES	8.35512	6.33816	3.02448	1.46256	1.28940
CPTV	.29840	.52476	.63278	.68501	.73106
ELEMENTS		UNROTATED	FACTOR	LOADINGS	
PH	.07693	.07483	.28944	-.34887	-.09030
MU	-.26324	-.03231	.21977	.34896	.32491
U	.43788	.52498	.03283	.26311	-.59782
CU	-.63866	.10659	-.39475	.10390	-.06742
NI	-.71240	.23580	-.35392	.24887	.02825
AL	.27276	.19977	-.82456	-.22371	.08414
BA	.61372	-.06164	-.61877	.08201	-.06593
CA	-.52187	.12748	.58967	-.34366	.04764
CE	.55728	.73459	.07456	.03849	-.00471
CO	-.78321	.28588	-.20515	.07069	.10224
CR	-.80405	.30583	-.15888	.17832	.11674
DY	-.11476	.68775	-.16461	-.32533	-.33899
EU	.19367	.68834	-.24982	-.04782	.36413
FF	-.76461	.48517	-.02592	.16047	.03923
HF	.42573	.69620	.28720	.06928	-.07956
K	.54326	.08744	-.65572	.25679	.10144
LA	.45127	.69919	-.05877	.07343	.00516
LU	-.21236	.73949	.21436	-.05594	-.03790
MG	-.79918	.14352	-.32695	-.29109	-.03131
MN	-.56907	.33632	.43943	.34115	.13035
NA	.56848	.03535	-.07189	-.48905	.39950
SC	-.77946	.51503	-.00346	-.00248	.09412
SP	.29554	.88437	.06042	.00155	.15417
TH	.58200	.71286	.06315	.15588	-.18568
TI	-.57878	.20070	-.17928	-.37363	-.25802
V	-.81797	.18660	-.31397	-.10605	-.06702
YB	-.06568	.56093	.15377	-.17429	-.00683
TU	.43676	.54904	.06616	-.07087	.43644

Table 8. R-mode Factor Analysis of Lake Sediment Data

FACTOR ANALYSIS (CASE 2)
YAKUTAT LAKE SEDIMENT
NUMBER OF SAMPLES 68
NUMBER OF VARIABLES 27

CORRELATION COEFFICIENTS

	PH	MU	U	CU	NI	AL	BA	CA	CE	CO	CR	DY	EU	FE	HF
PH	1.000														
MU	-.097	1.000													
U	.032	.244	1.000												
CU	-.128	.193	-.003	1.000											
NI	-.027	.104	.025	.543	1.000										
AL	-.032	-.070	.505	.296	.487	1.000									
BA	-.088	-.115	.371	.209	.061	.503	1.000								
CA	.252	.322	-.089	.036	.109	-.184	-.443	1.000							
CE	.022	.020	.636	-.111	-.130	.399	.221	-.127	1.000						
CO	.132	.262	.245	.358	.442	.507	.054	.376	.136	1.000					
CR	.068	.001	-.086	.344	.681	.452	.041	.293	-.121	.557	1.000				
DY	.124	-.010	.605	.260	.258	.422	.206	.178	.508	.280	.163	1.000			
EU	-.012	-.036	.330	.035	.055	.374	.079	-.044	.702	.169	.086	.401	1.000		
FE	-.019	.083	.093	.394	.591	.403	-.111	.281	.175	.374	.549	.378	.462	1.000	
HF	.152	-.080	.497	-.275	-.239	.352	.207	.002	.757	.218	-.007	.403	.435	-.058	1.000
K	-.107	-.049	.359	.160	.048	.524	.468	-.497	.407	.133	.027	.138	.307	-.026	.236
LA	.122	-.025	.396	-.115	-.148	.422	.266	-.225	.766	.101	.020	.323	.633	.104	.699
LU	-.014	-.013	.274	.232	.197	.274	.035	.222	.515	.192	.176	.516	.374	.582	.318
MG	.095	.109	-.002	.366	.690	.319	-.183	.545	-.229	.497	.705	.257	.032	.686	-.288
MN	.183	.360	.280	.360	.494	.409	.040	.526	.176	.621	.560	.526	.195	.600	.210
NA	.220	-.070	.234	-.278	-.084	.459	.157	.036	.397	.336	.171	.098	.268	-.145	.541
SC	.119	.084	.052	.395	.652	.361	-.169	.505	.059	.486	.746	.499	.289	.825	.002
SM	.065	.085	.500	.075	.005	.304	.148	.000	.760	.039	.057	.599	.709	.400	.525
TH	-.014	.032	.732	-.009	-.090	.482	.414	-.216	.855	.173	-.065	.559	.559	.112	.699
TI	-.005	.061	.356	.234	.564	.494	.043	.298	.130	.466	.599	.430	.243	.513	.153
V	-.032	.084	-.013	.463	.786	.409	-.115	.372	-.203	.443	.731	.246	.102	.767	-.239
TU	-.055	-.222	-.029	-.009	-.159	.151	.199	-.219	.554	-.017	-.000	.197	.457	.061	.478
	K	LA	LU	MG	MN	NA	SC	SM	TH	TI	V	TU			
K	1.000														
LA	.421	1.000													
LU	.041	.378	1.000												
MG	-.204	-.325	.184	1.000											
MN	-.021	.167	.501	.576	1.000										
NA	.291	.410	-.007	.086	.086	1.000									
SC	-.114	.059	.515	.764	.723	-.027	1.000								
SM	.356	.697	.523	-.049	.332	.219	.325	1.000							
TH	.547	.747	.407	-.270	.198	.332	.064	.757	1.000						
TI	-.000	.117	.265	.697	.546	.031	.591	.194	.163	1.000					
V	-.102	-.198	.283	.888	.614	-.170	.788	.004	-.232	.729	1.000				
TU	.406	.658	.293	-.394	-.018	.231	.036	.559	.660	-.154	-.326	1.000			

Table 8. R-mode Factor Analysis of Lake Sediment Data
(continued)

	FACTOR				
	1	2	3	4	5
FIGENVALUES	7.86402	6.41558	2.31564	1.84648	1.57992
CPTV	.29126	.52887	.61464	.68303	.74154
ELEMENTS	UNROTATED FACTOR LOADINGS				
PH	-.08529	-.01073	-.35524	-.40719	.23251
MU	-.12721	-.14890	-.20009	-.14425	-.65041
U	-.51769	.40960	.06257	-.25473	-.57695
CU	-.37770	-.35016	.40915	.29315	-.21440
NI	-.55648	-.57446	.36214	.06038	.07475
AL	-.72134	.12790	.50617	-.25115	.07096
BA	-.20295	.36911	.63608	-.11618	-.16069
CA	-.25114	-.50094	-.57133	-.21887	-.07025
CE	-.55678	.72805	-.17562	.05671	-.07034
CO	-.60908	-.24500	.05707	-.45525	-.01742
CP	-.59847	-.50058	.17237	-.15361	.38519
DY	-.71098	.16364	-.12799	.07232	-.24755
FU	-.59600	.40669	-.13482	.25064	.17374
FE	-.73540	-.38064	-.07904	.38864	.07387
HF	-.43167	.67128	-.24946	-.30257	.10012
K	-.29302	.50153	.57671	-.01779	.03175
LA	-.48742	.71699	-.08731	.02403	.19162
LU	-.62518	.10082	-.27428	.38611	-.05734
MG	-.53338	-.78382	-.00092	-.08774	.05445
MN	-.75723	-.30025	-.19681	-.13353	-.17579
NA	-.27493	.38807	-.02037	-.64644	.35075
SC	-.76212	-.49214	-.17883	.16165	.17062
SM	-.64385	.50412	-.24211	.28645	-.03170
TH	-.57525	.73963	.02689	.03066	-.15561
TI	-.68512	-.34932	.06574	-.14632	-.03018
V	-.59198	-.73702	.13225	.08194	.06070
TU	-.27331	.63366	-.02968	.32493	.40594

Table 9. Regression Analysis Results, Stream Sediment

MULTIPLE REGRESSION ANALYSIS

PROBLEM YAKUTAT STREAM SEDIMENT

OBSERVATIONS 186

PROBLEM YAKUTAT STREAM SEDIMENT

STEPWISE REGRESSION CASE 1

DEPENDENT VARIABLE 3

F-LEVEL TO ENTER 5.00000

F-LEVEL TO REMOVE 5.00000

STANDARD ERROR OF Y .33225

STEP NO. 1

ENTERED VARIABLE 24

F-LEVEL 348.88512
STANDARD ERROR OF Y .19576
MULTIPLE CORRELATION .80914
R-SQUARED .65471
DEGREES OF FREEDOM 184
CONSTANT TERM -.20099

VARIABLE	BETA PRIME	BETA	SE(BETA)
24	.80914E+00	.59915E+00	.32023E-01

STEP NO. 2

ENTERED VARIABLE 28

F-LEVEL 10266117.88200
STANDARD ERROR OF Y .00083
MULTIPLE CORRELATION 1.00000
R-SQUARED .99999
DEGREES OF FREEDOM 183
CONSTANT TERM -.00006

VARIABLE	BETA PRIME	BETA	SE(BETA)
24	.13531E+01	.10003E+01	.18475E-03
28	-.80074E+00	-.10005E+01	.31226E-03

ANALYSIS OF VARIANCE

TERM	SS	DF	MS
TOTAL	.20422E+02	185	
REG	.20422E+02	2	.10211E+02
ERR	.12569E-03	183	.68686E-06

Table 10. Regression Analysis Results, Lake Sediment

MULTIPLE REGRESSION ANALYSIS

PROBLEM YAKUTAT LAKE SEDIMENT

OBSERVATIONS 68

PROBLEM YAKUTAT LAKE SEDIMENT

STEPWISE REGRESSION CASE 1

DEPENDENT VARIABLE 3

F-LEVEL TO ENTER 5.00000

F-LEVEL TO REMOVE 5.00000

STANDARD ERROR OF Y .32451

STEP NO. 1

ENTERED VARIABLE 24

F-LEVEL	76.18954
STANDARD ERROR OF Y	.22276
MULTIPLE CORRELATION	.73200
R-SQUARED	.53583
DEGREES OF FREEDOM	66
CONSTANT TERM	-.14461

VARIABLE	BETA PRIME	BETA	SE(BETA)
24	.73200E+00	.55002E+00	.63013E-01

STEP NO. 2

ENTERED VARIABLE 27

F-LEVEL	3914332.50916
STANDARD ERROR OF Y	.00091
MULTIPLE CORRELATION	1.00000
R-SQUARED	.99999
DEGREES OF FREEDOM	65
CONSTANT TERM	-.00011

VARIABLE	BETA PRIME	BETA	SE(BETA)
24	.13307E+01	.99987E+00	.34445E-03
27	-.90697E+00	-.99972E+00	.50530E-03

ANALYSIS OF VARIANCE

TERM	SS	DF	MS
TOTAL	.70556E+01	67	
REG	.70555E+01	2	.35278E+01
ERR	.54382E-04	65	.83665E-06

YAKUTAT STREAM SEDIMENT FACTOR SCORE 1

Figure 7. Stream Sediment Factor Score 1

YAKUTAT STREAM SEDIMENT FACTOR SCORE 2

Figure 8. Stream Sediment Factor Score 2

YAKUTAT STREAM SEDIMENT FACTOR SCORE 3

Figure 9. Stream Sediment Factor Score 3

YAKUTAT STREAM SEDIMENT RESIDUALS

SCALE 1: 1000000

Figure 10. Stream Sediment Residuals

YAKUTAT LAKE SEDIMENT FACTOR SCORE 1

Figure 11. Lake Sediment Factor Score 1

YAKUTAT LAKE SEDIMENT FACTOR SCORE 2

Figure 12. Lake Sediment Factor Score 2

YAKUTAT LAKE SEDIMENT FACTOR SCORE 3

Figure 13. Lake Sediment Factor Score 3

YAKUTAT LAKE SEDIMENT RESIDUALS

Figure 14. Lake Sediment Residuals

REFERENCES

- Arendt, J. W., 1981, Hydrogeochemical and Stream Sediment Reconnaissance Basic Data for Yakutat Quadrangle, Alaska: U.S. Department of Energy Open-File Report GJBX-199(81).
- Planner, H. N., Apel, C. T., Fuka, M. A., George, W. E., Hansel, J. M., Hensley, W. K., and Pirtle, J., 1981, Uranium Hydrogeochemical and Stream Sediment Reconnaissance Data Release for the Leadville NTMS Quadrangle, Colorado, Including Concentrations of Forty-two Additional Elements: U.S. Department of Energy Open-File Report GJBX-13(81).
- Shettel, D. L., Jr., D'Andrea, R. F., Jr., and Zinkl, R. J., 1980, FACEDT: A FORTRAN Program to Process Hydrogeochemical and Stream Sediment Reconnaissance Data for Multivariate Statistical Analysis: U.S. Department of Energy Open-File Report GJBX-246(80).
- Zinkl, R. J., D'Andrea, R. F., Jr., and Shettel, D. L., Jr., 1981a, FORTRAN Computer Programs to Read, Sort, and Edit Los Alamos Hydrogeochemical Data: U.S. Department of Energy Open-File Report GJBX-11(81).
- 1981b, Symbolic Plotting of Geochemical Exploration Data: U.S. Department of Energy Open-File Report (in preparation).

Appendix A. Stream Sediment Data

Appendix A. Stream Sediment Data

YAKUTAT STREAM SEDIMENT

PG. ONE - SAMPLE SET 1

SAMPLE NO.	LAT.	LONG.	PH	COND.	SCINT.	URANIUM PPM	SILVER PPM	BISMUTH PPM	CADMIUM PPM	COPPER PPM	NIOBIMUM PPM	NICKEL PPM	LEAD PPM	TIN PPM	TUNGSTEN PPM
467302	59.4917	139.6047	8.	12.	3.	1.66	-5.	-5.	-5.	43.	-20.	36.	-5.	-10.	-15.
467304	59.4922	139.5217	7.	25.	3.	.90	-5.	-5.	-5.	22.	-20.	18.	-5.	-10.	-15.
467305	59.4675	139.5186	7.	18.	3.	.55	-5.	-5.	-5.	39.	-20.	20.	7.	-10.	-15.
467306	59.4461	139.5081	7.	17.	-999.	.95	-5.	-5.	-5.	26.	-20.	19.	6.	-10.	-15.
467307	59.4317	139.5269	7.	20.	-999.	3.51	-5.	-5.	-5.	58.	-20.	49.	-5.	-10.	-15.
467309	59.4294	139.4014	6.	960.	6.	2.08	-5.	-5.	-5.	30.	-20.	30.	-5.	-10.	-15.
467312	59.4139	139.2111	7.	11.	1.	.25	-5.	-5.	-5.	135.	-20.	-15.	7.	-10.	-15.
467314	59.3642	139.2154	7.	322.	3.	1.82	-5.	-5.	-5.	38.	-20.	38.	-5.	-10.	-15.
467316	59.3481	139.1836	7.	452.	5.	3.47	-5.	-5.	-5.	36.	-20.	61.	-5.	-10.	-15.
467317	59.3606	139.1533	8.	227.	16.	4.16	-5.	-5.	-5.	37.	-20.	51.	-5.	-10.	-15.
467319	59.4144	139.1781	8.	257.	6.	2.11	-999.	-999.	-999.	-999.	-999.	-999.	-999.	-999.	-999.
467320	59.4547	139.1586	8.	251.	-999.	2.14	-5.	-5.	-5.	168.	-20.	36.	-5.	-10.	-15.
467321	59.4769	139.1275	8.	180.	8.	1.80	-5.	-5.	-5.	38.	-20.	18.	-5.	-10.	-15.
467322	59.4981	139.1469	8.	170.	-999.	2.52	-5.	-5.	-5.	34.	-20.	21.	-5.	-10.	-15.
467325	59.4872	139.2372	8.	162.	3.	1.71	-5.	-5.	-5.	39.	-20.	19.	-5.	-10.	-15.
467326	59.4711	139.2731	8.	162.	1.	1.71	-5.	-5.	6.	46.	-20.	37.	-5.	-10.	-16.
467327	59.4711	139.3336	8.	176.	-999.	2.07	-5.	-5.	-5.	46.	-20.	-15.	-5.	-10.	-15.
467328	59.4072	139.3522	-999.	-999.	5.	1.93	-5.	-5.	-5.	38.	-20.	32.	-5.	-10.	-15.
467329	59.4917	139.4147	8.	14.	-999.	1.93	-5.	-5.	-5.	37.	-20.	33.	-5.	-10.	-15.
467331	59.4728	139.4817	8.	312.	3.	.72	-5.	-5.	-5.	29.	-20.	-15.	-5.	-10.	-15.
467333	59.5478	139.8678	8.	32.	5.	2.64	-999.	-999.	-999.	-999.	-999.	-999.	-999.	-999.	-999.
467337	59.5303	139.6322	8.	274.	6.	2.56	-5.	-5.	-5.	24.	-20.	37.	-5.	-10.	-15.
467338	59.5178	139.5203	8.	148.	5.	.51	-5.	-5.	-5.	30.	-20.	25.	-5.	-10.	-15.
467339	59.5278	139.5228	7.	177.	6.	1.82	-5.	-5.	-5.	45.	-20.	33.	-5.	-10.	-15.
467340	59.5828	139.5072	7.	204.	9.	2.08	-999.	-999.	-999.	-999.	-999.	-999.	-999.	-999.	-999.
467346	59.6057	139.7583	8.	1550.	4.	2.65	-5.	-5.	-5.	27.	-20.	35.	-5.	-10.	-15.
467350	59.6383	139.5178	7.	165.	3.	1.81	-5.	-5.	-5.	30.	-20.	43.	-5.	-10.	-15.
467352	59.7125	139.5778	8.	11.	5.	1.61	-5.	-5.	-5.	94.	-20.	22.	-5.	-10.	-15.
467355	59.7417	139.5436	7.	49.	5.	2.29	-5.	-5.	-5.	39.	-20.	38.	-5.	-10.	-15.
467356	59.7203	139.4992	7.	48.	6.	2.74	-5.	-5.	-5.	32.	-20.	-15.	-5.	-10.	-15.
467357	59.6978	139.4739	7.	53.	9.	1.97	-5.	-5.	-5.	53.	-20.	37.	-5.	-10.	-15.
467361	59.5847	139.4903	7.	133.	-999.	1.95	-5.	-5.	-5.	75.	-20.	39.	6.	-10.	-15.
467367	59.7108	139.4125	7.	77.	8.	2.00	-5.	-5.	-5.	53.	-20.	58.	-5.	-10.	-15.
467372	59.7025	139.3339	7.	1125.	-999.	1.82	-5.	-5.	-5.	41.	-20.	33.	-5.	-10.	-15.
467373	59.7242	139.3497	8.	24.	1.	2.51	-5.	-5.	-5.	42.	-20.	36.	-5.	-10.	-15.
467374	59.7408	139.3517	7.	790.	3.	2.04	-5.	-5.	-5.	53.	-20.	26.	-5.	-10.	-15.
467376	59.7286	139.2902	8.	34.	3.	1.96	-5.	-5.	-5.	30.	-20.	18.	-5.	-10.	-15.
467377	59.6997	139.2750	8.	30.	8.	2.39	-5.	-5.	-5.	35.	-20.	26.	-5.	-10.	-15.
467378	59.6844	139.2631	7.	1503.	3.	2.21	-5.	-5.	-5.	64.	-20.	41.	12.	-10.	-15.
467379	59.6742	139.2656	8.	83.	6.	1.90	-5.	-5.	-5.	31.	-20.	24.	6.	-10.	-15.
467382	59.6414	139.2200	8.	73.	5.	1.94	-5.	-5.	-5.	72.	-20.	49.	8.	-10.	-15.
467383	59.6558	139.2061	8.	13.	8.	1.86	-5.	-5.	-5.	42.	-20.	26.	-5.	-10.	-15.
467384	59.6547	139.2061	8.	19.	-999.	2.39	-5.	-5.	-5.	43.	-20.	22.	5.	-10.	-19.
467387	59.5861	139.1547	8.	36.	3.	2.39	-5.	-5.	-5.	49.	-20.	31.	10.	-10.	-15.
467388	59.5669	139.1650	8.	11.	5.	2.44	-5.	-5.	-5.	61.	-20.	48.	12.	-10.	-15.
467393	59.5811	139.2572	7.	226.	3.	1.60	-5.	-5.	-5.	42.	-20.	29.	7.	-10.	-15.
467394	59.5628	139.2919	8.	365.	-999.	1.82	-5.	-5.	-5.	24.	-20.	31.	-5.	-10.	-15.
467395	59.7544	139.3594	8.	69.	3.	2.08	-5.	-5.	-5.	34.	-20.	21.	-5.	-10.	-15.
467396	59.7708	139.3581	7.	565.	9.	1.89	-5.	-5.	-5.	25.	-20.	-15.	6.	-10.	-15.

YAKUTAT STREAM SEDIMENT

PG. TWO - SAMPLE SET 1

SAMPLE NO.	BE PPM	LI PPM	AL PPM	AU PPM	BA PPM	CA PPM	CE PPM	CL PPM	CO PPM	CR PPM	CS PPM	DY PPM	EU PPM	FE PPM	HF PPM	K PPM	LA PPM
467302	-999.	-999.	72470.	-0.	480.	29630.	36.	-141.	12.9	109.	-2.0	4.	1.3	38860.	4.7	8675.	19.
467304	-999.	-999.	35990.	-0.	-224.	15500.	-8.	471.	-1	43.	-2.4	2.	-4	25640.	-1.8	-4966.	-11.
467305	-999.	-999.	27720.	-0.	-330.	10700.	-14.	-170.	-4.0	-24.	-3.8	-3.	-8	12670.	-2.9	-5271.	-25.
467306	-999.	-999.	33080.	-0.	-319.	-2166.	-10.	733.	-2	51.	-3.3	-2.	-6	11310.	-2.3	-5367.	-18.
467307	-999.	-999.	48030.	-0.	-288.	13760.	-11.	-175.	12.9	112.	-3.9	3.	-6	54530.	-2.6	-5793.	-14.
467309	-999.	-999.	67350.	-0.	294.	36630.	50.	-143.	16.0	102.	-2.3	3.	1.1	55390.	7.8	9390.	20.
467312	-999.	-999.	10240.	-0.	-450.	-4227.	-18.	474.	-2	-31.	-4.6	-4.	-1.0	7731.	-3.4	-6173.	-27.
467313	-999.	-999.	66320.	-0.	276.	59860.	31.	-136.	17.5	85.	-2.1	4.	1.1	42890.	3.5	7765.	16.
467314	-999.	-999.	63610.	-0.	276.	52670.	49.	-126.	20.7	117.	-1.6	4.	1.4	54900.	6.0	9604.	26.
467316	-999.	-999.	56010.	-0.	-178.	62320.	43.	-157.	15.2	125.	-1.6	5.	.8	82660.	20.2	-5762.	25.
467317	-999.	-999.	57700.	-0.	-192.	50760.	54.	-153.	21.0	144.	-2.1	4.	1.1	77890.	19.5	-5611.	28.
467319	-999.	-999.	59740.	-0.	364.	47730.	70.	-139.	18.8	121.	-2.2	4.	1.3	65280.	9.8	-4935.	31.
467320	-999.	-999.	67200.	-0.	430.	40510.	34.	-188.	9.4	86.	-2.0	5.	.9	37160.	5.9	-6743.	15.
467321	-999.	-999.	68490.	-0.	394.	24520.	33.	-172.	13.8	62.	-2.2	3.	1.0	31820.	3.1	10860.	20.
467322	-999.	-999.	76700.	-0.	737.	9155.	66.	-110.	7.9	71.	2.9	4.	1.3	34680.	8.5	15900.	36.
467325	-999.	-999.	64590.	-0.	482.	26980.	43.	-142.	13.2	63.	-1.8	3.	.9	28850.	5.9	7939.	27.
467326	-999.	-999.	60630.	-0.	-202.	28570.	42.	-156.	15.9	109.	-1.8	4.	1.3	66720.	6.7	-5727.	20.
467327	-999.	-999.	46430.	-0.	-303.	17390.	24.	-175.	7.2	68.	-3.0	-2.	1.0	69240.	3.7	-6976.	-10.
467328	-999.	-999.	55320.	-0.	-435.	31190.	16.	-323.	4.0	66.	-2.1	4.	.7	34950.	3.2	-13940.	-8.
47329	-999.	-999.	69910.	-0.	297.	38240.	33.	-154.	14.7	99.	-2.1	4.	.8	35340.	7.2	8888.	26.
457331	-999.	-999.	18060.	-0.	-552.	26890.	18.	-268.	-1	66.	-2.7	-3.	.7	97360.	-1.6	-15030.	-12.
467333	-999.	-999.	66320.	-0.	-385.	57210.	34.	23440.	5.8	113.	-2.5	5.	.8	46320.	9.6	-9913.	26.
467337	-999.	-999.	30270.	-0.	-514.	28790.	37.	-465.	10.1	142.	-2.0	-3.	.9	50680.	10.8	-16760.	22.
467338	-999.	-999.	24080.	-0.	-510.	-2831.	-11.	-208.	5.7	-21.	-3.4	-4.	-6	63070.	-2.3	-7183.	-16.
467339	-999.	-999.	50830.	-0.	-372.	28080.	45.	-364.	18.6	107.	-1.8	-2.	1.3	53710.	6.3	-13090.	24.
467340	-999.	-999.	64940.	-0.	-226.	37350.	50.	-166.	18.9	147.	-2.3	4.	1.2	54410.	10.2	-5929.	33.
467346	-999.	-999.	59540.	-0.	342.	34670.	43.	523.	17.2	81.	-2.5	4.	.9	36130.	5.8	-6471.	18.
467350	-999.	-999.	67710.	-0.	373.	40410.	52.	-175.	16.2	121.	-2.0	6.	1.4	64070.	5.9	6475.	25.
467352	-999.	-999.	72080.	-0.	464.	29580.	35.	263.	23.2	91.	-1.9	4.	1.2	44400.	4.7	7993.	18.
467355	-999.	-999.	59370.	-0.	375.	47170.	52.	-127.	14.7	69.	-1.9	4.	1.1	40800.	6.1	-4345.	21.
467356	-999.	-999.	71490.	-0.	755.	14970.	79.	-129.	11.6	82.	2.5	4.	1.4	35600.	12.4	13570.	41.
467357	-999.	-999.	71100.	-0.	488.	12000.	32.	-115.	16.3	96.	-1.9	3.	1.4	40900.	4.1	14030.	21.
467361	-999.	-999.	74070.	-0.	448.	26340.	46.	-151.	20.3	96.	-2.5	4.	1.2	45900.	4.8	13820.	21.
467367	-999.	-999.	65410.	-0.	537.	21150.	30.	-122.	18.5	97.	3.3	4.	.9	38300.	4.4	12640.	19.
467372	-999.	-999.	73100.	-0.	469.	23820.	42.	-141.	15.2	87.	2.4	4.	1.2	45500.	4.9	10920.	24.
467373	-999.	-999.	73080.	-0.	648.	16870.	50.	-127.	13.4	90.	-1.9	4.	1.1	39300.	6.3	13860.	21.
467374	-999.	-999.	77130.	-0.	702.	10860.	31.	-112.	10.8	68.	3.0	3.	1.0	37500.	3.5	15490.	20.
467376	-999.	-999.	74210.	-0.	661.	13000.	49.	-125.	9.3	56.	2.5	3.	1.2	36000.	4.7	12790.	24.
467377	-999.	-999.	73050.	-0.	630.	15720.	54.	-116.	9.7	69.	-1.6	3.	1.2	33100.	7.0	15960.	31.
467378	-999.	-999.	81780.	-0.	732.	15700.	32.	366.	17.8	100.	2.4	4.	1.2	45300.	4.2	16080.	23.
467379	-999.	-999.	62960.	-0.	606.	15240.	42.	-121.	8.0	46.	-1.5	3.	.9	23700.	5.1	13880.	22.
467382	-999.	-999.	72750.	-0.	750.	20620.	35.	-143.	16.0	106.	-2.2	4.	1.4	38500.	3.4	11360.	22.
467383	-999.	-999.	67660.	-0.	722.	12690.	33.	-120.	9.3	59.	2.3	2.	1.1	25600.	3.3	12390.	18.
467384	-999.	-999.	84040.	-0.	702.	13610.	55.	-130.	12.2	92.	3.0	4.	1.2	39700.	8.2	18140.	31.
467387	-999.	-999.	70200.	-0.	693.	11170.	43.	-125.	10.3	82.	-1.9	3.	1.1	30000.	4.7	15940.	24.
467388	-999.	-999.	87190.	-0.	877.	11500.	41.	-153.	20.0	129.	4.9	4.	1.3	51900.	4.5	19140.	25.
467393	-999.	-999.	65320.	-0.	396.	27050.	38.	-147.	13.8	82.	-2.0	3.	1.0	35600.	4.9	14250.	19.
467394	-999.	-999.	61230.	-0.	345.	30620.	37.	-125.	14.0	95.	-1.7	4.	1.2	39700.	6.7	8617.	19.
467395	-999.	-999.	64750.	-0.	744.	12330.	38.	-119.	8.0	51.	-1.5	3.	.9	24200.	5.3	12970.	26.
467396	-999.	-999.	68700.	-0.	763.	17030.	52.	-133.	7.2	55.	-1.2	3.	1.3	27300.	6.8	15100.	31.

YAKUTAT STREAM SEDIMENT

PG. THREE - SAMPLE SET 1

SAMPLE NO.	LU PPM	HG PPM	MN PPM	NA PPM	PB PPM	SB PPM	SC PPM	SH PPM	SR PPM	TA PPM	TB PPM	TH PPM	TI PPM	V PPM	YB PPM	ZN PPM	U/TH RATIO
467302	.3	13420.	734.	23780.	-41.	-3.	21.5	5.0	-318.	-1.	-1.	5.5	4467.	132.	2.8	-18.	3.311
467304	-.2	7351.	295.	5988.	-63.	-3.	5.0	-.9	-349.	-3.	-1.	-1.7	1733.	75.	-2.6	-81.	-999.000
467305	-.3	4168.	218.	7179.	-101.	-5.	5.5	-1.7	-447.	-4.	-2.	-2.6	1831.	47.	-4.2	-117.	-999.000
467306	-.2	5875.	228.	6924.	-80.	-4.	8.7	-1.3	-437.	-4.	-2.	-2.1	2484.	66.	-3.5	-99.	-999.000
467307	-.2	12560.	485.	11340.	-89.	-5.	15.7	-1.5	-463.	-3.	-2.	3.6	2850.	125.	-3.9	-116.	1.026
467309	.3	15100.	1178.	19530.	-53.	-3.	20.2	2.7	-351.	-2.	-1.	4.5	4623.	161.	2.6	121.	2.165
467312	-.4	3498.	130.	2475.	-122.	-6.	1.8	-2.0	-511.	-4.	-2.	-3.4	-1383.	-14.	-5.0	-148.	-999.000
467313	.2	15580.	961.	19830.	-48.	-3.	17.8	2.4	-325.	-1.	-1.	4.3	4093.	157.	2.0	-58.	2.336
467314	.3	14990.	1098.	19620.	-35.	-2.	24.3	4.4	-299.	-1.	1.	5.0	5564.	161.	3.0	-38.	2.747
467316	.4	16860.	1873.	14920.	-36.	-2.	18.1	4.0	-357.	-1.	1.	5.0	11550.	345.	4.1	-40.	1.441
467317	.4	14150.	1797.	16860.	-52.	-3.	21.3	4.1	-396.	-1.	-1.	8.2	9495.	267.	4.5	-59.	1.972
467319	.3	17030.	1216.	17270.	-47.	-3.	23.1	4.2	-380.	-1.	-1.	5.7	7215.	182.	3.9	-51.	2.703
467320	.2	15330.	1521.	19430.	-42.	-3.	15.4	2.4	-423.	-1.	-1.	4.0	6381.	196.	-1.9	-50.	1.669
467321	.3	9146.	1440.	21880.	-52.	-3.	12.3	2.7	-442.	-2.	1.	4.5	2930.	100.	-2.0	-60.	2.500
467322	.3	9970.	473.	21360.	73.	-2.	13.4	5.1	-230.	-1.	-1.	8.1	4244.	109.	2.7	72.	3.215
467325	.3	8241.	1072.	22660.	-40.	-2.	15.0	2.6	-330.	-1.	-1.	4.3	3449.	111.	2.7	-50.	2.513
467326	.3	13590.	1752.	19730.	71.	-2.	23.7	4.3	-403.	-1.	-1.	4.5	4312.	142.	3.6	107.	2.632
467327	.2	6957.	1500.	14030.	-71.	-4.	16.2	2.5	-558.	-2.	-1.	2.7	3399.	106.	-2.9	-94.	1.304
467328	.2	13640.	5409.	14260.	-46.	-3.	14.3	1.7	-896.	-2.	-1.	2.2	5167.	91.	2.9	-46.	1.140
467329	.3	13350.	1323.	21870.	-47.	-3.	18.9	2.3	-376.	-1.	-1.	4.5	5116.	145.	-2.1	-60.	2.331
467331	-.1	-5812.	5704.	5445.	-75.	-3.	9.9	2.6	-999.	-2.	-1.	-1.5	-2698.	53.	-2.5	-75.	-999.000
467333	.3	19290.	2077.	30310.	-55.	-3.	17.0	2.3	-697.	-2.	-1.	4.4	11030.	240.	-2.9	-64.	1.667
467337	.4	-7754.	6100.	10400.	-41.	-3.	19.5	3.6	-999.	-1.	-1.	4.5	-2607.	76.	2.7	-50.	1.757
467338	-.2	-3842.	430.	8653.	-90.	-5.	5.0	-1.4	-640.	-3.	-2.	-2.3	-1701.	87.	-3.6	-104.	-999.000
467339	.3	-5770.	4965.	18820.	-38.	-2.	23.2	5.2	-780.	-1.	-1.	4.7	3270.	135.	2.4	69.	2.584
467340	.4	14760.	1537.	20840.	-51.	-3.	23.4	4.0	-428.	-1.	-1.	5.5	4403.	154.	3.8	-66.	2.646
467346	-.1	12500.	1199.	20910.	-59.	-3.	14.6	2.0	-516.	-2.	-1.	3.9	5641.	141.	-2.6	-86.	1.473
467350	.4	15370.	1257.	22040.	-43.	-3.	25.2	5.3	-381.	-1.	1.	5.2	6192.	177.	4.2	164.	2.874
467352	.3	14070.	1040.	20600.	-45.	-2.	19.1	3.7	-340.	-1.	-1.	4.0	4407.	132.	2.6	-115.	2.481
467355	.3	15320.	962.	18740.	-43.	-2.	17.9	3.5	-327.	-1.	-1.	6.3	5370.	132.	3.0	-56.	2.755
467356	.3	8046.	604.	22650.	-46.	-1.	14.4	5.1	-241.	-1.	-1.	9.1	3858.	112.	3.4	75.	3.322
467357	.2	11330.	700.	17720.	60.	-2.	16.4	4.1	-274.	-1.	-1.	4.7	3697.	134.	2.8	127.	2.387
467361	.3	15440.	1053.	20110.	-52.	-3.	19.8	4.2	-375.	-2.	-1.	4.0	4524.	138.	3.3	-40.	2.049
467367	.3	12380.	828.	16890.	-44.	-2.	17.9	2.3	-315.	-1.	-1.	3.4	4201.	148.	2.2	-56.	1.701
467372	.2	13130.	819.	22000.	-34.	-2.	19.3	4.2	-278.	-1.	-1.	5.4	4238.	134.	3.2	-40.	2.967
467373	.2	11300.	705.	21080.	-40.	-2.	15.9	3.2	-285.	-1.	-1.	5.8	3902.	130.	3.2	-47.	2.309
467374	.2	9898.	642.	19600.	62.	-2.	14.8	2.7	-252.	-1.	-1.	4.7	3775.	123.	2.4	-40.	2.304
467376	.2	7706.	493.	21690.	59.	-1.	12.9	4.1	298.	-1.	-1.	6.4	3314.	101.	2.4	150.	3.268
467377	.2	8432.	489.	21800.	-33.	-2.	12.6	3.9	-243.	-1.	-1.	6.2	3132.	97.	1.8	-37.	2.597
467378	.3	14580.	936.	18460.	-38.	-2.	19.3	3.0	-316.	-1.	-1.	4.9	4881.	151.	3.2	-45.	2.217
467379	.2	5813.	532.	21310.	-35.	-2.	9.6	2.4	-281.	-1.	-1.	4.5	3136.	74.	1.5	-49.	2.370
467382	.2	10920.	923.	16360.	-45.	-2.	16.2	3.9	-372.	-1.	-1.	4.8	4777.	125.	2.7	-57.	2.475
467383	.2	8636.	461.	20650.	-36.	-2.	9.7	2.3	288.	-1.	-1.	4.1	3502.	88.	-1.3	-51.	2.203
467384	.2	9763.	589.	21400.	70.	-1.	15.3	4.5	-243.	-1.	-1.	7.4	3818.	126.	2.7	30.	3.096
467387	.2	9906.	594.	19720.	59.	-2.	12.3	2.2	-305.	-1.	-1.	5.0	3618.	113.	-1.5	171.	2.092
467388	.3	11690.	937.	16050.	86.	-2.	20.1	4.2	-342.	-1.	-1.	6.9	3797.	175.	-1.5	172.	2.825
467393	.3	9374.	1176.	22250.	-42.	-2.	16.8	3.6	-359.	-1.	-1.	5.3	3199.	116.	2.9	-46.	3.311
467394	.3	13430.	888.	22420.	-32.	-2.	21.8	4.1	599.	-1.	1.	4.9	4407.	140.	2.7	-38.	2.695
467395	.2	7552.	394.	22530.	-36.	-2.	10.1	2.2	536.	-1.	-1.	4.9	3260.	84.	1.9	-43.	2.358
467396	.2	7392.	437.	25990.	50.	-1.	11.5	4.0	394.	-1.	-1.	5.8	3172.	86.	2.2	-43.	3.067

YAKUTAT STREAM SEDIMENT

PG. ONE - SAMPLE SET 2

SAMPLE NO.	LAT.	LONG.	PH	COND.	SCINT.	URANIUM PPM	SILVER PPM	BISMUTH PPM	CADMIUM PPM	COPPER PPM	NIOBIUM PPM	NICKEL PPM	LEAD PPM	TIN PPM	TUNGSTEN PPM
467397	59.7958	139.3561	8.	48.	3.	1.90	-5.	-5.	-5.	53.	-20.	51.	-5.	-10.	-15.
467398	59.8089	139.3486	7.	56.	3.	1.81	-5.	-5.	-5.	51.	-20.	127.	8.	-10.	-15.
467399	59.8208	139.3492	8.	113.	5.	2.11	-5.	-5.	-5.	37.	-20.	40.	10.	-10.	-15.
467400	59.8381	139.3308	8.	120.	4.	2.13	-5.	-5.	-5.	52.	-20.	35.	9.	-10.	-15.
467401	59.8803	139.3447	8.	47.	4.	2.45	-5.	-5.	-5.	40.	-20.	32.	-5.	-10.	-15.
467402	59.8906	139.3608	8.	22.	7.	3.20	-5.	-5.	-5.	29.	-20.	21.	7.	-10.	-15.
467403	59.9047	139.3789	8.	82.	10.	2.61	-5.	5.	-5.	41.	-20.	24.	6.	-10.	-15.
467404	59.9092	139.3811	8.	171.	8.	2.63	-5.	-5.	-5.	50.	-20.	30.	9.	-10.	-15.
467405	59.9292	139.3939	8.	87.	11.	1.54	-5.	-5.	-5.	174.	-20.	39.	-5.	-10.	-15.
467406	59.9489	139.4269	8.	27.	12.	2.12	-5.	-5.	-5.	46.	-20.	18.	9.	-10.	-15.
467407	59.9800	139.4542	8.	81.	4.	2.13	-5.	-5.	-5.	31.	-20.	23.	5.	-10.	-15.
467408	59.9792	139.5036	8.	161.	9.	2.73	-5.	-5.	-5.	53.	-20.	41.	7.	-10.	-15.
467409	59.9697	139.5097	8.	49.	5.	2.15	-5.	-5.	-5.	47.	-20.	52.	13.	-10.	-15.
467410	59.9475	139.5261	8.	54.	8.	2.22	-5.	-5.	-5.	52.	-20.	38.	-5.	-10.	-15.
467411	59.9136	139.5122	8.	59.	9.	1.87	-5.	-5.	-5.	37.	-20.	23.	7.	-11.	-15.
467412	59.9053	139.4900	9.	21.	4.	2.02	-5.	-5.	-5.	50.	-20.	32.	6.	-10.	-15.
467413	59.9867	139.4750	8.	31.	10.	2.02	-5.	-5.	-5.	27.	-20.	18.	8.	-10.	-15.
467414	59.9169	139.5789	8.	60.	1.	2.39	-5.	-5.	-5.	60.	-20.	27.	11.	-10.	-15.
467415	59.9047	139.6044	8.	53.	7.	2.28	-999.	-999.	-999.	-999.	-999.	-999.	-999.	-999.	-999.
467416	59.8797	139.5517	8.	35.	8.	2.81	-5.	5.	-5.	44.	-20.	44.	12.	-10.	-15.
467417	59.8831	139.5636	8.	94.	5.	2.38	-5.	-5.	-5.	53.	-20.	23.	9.	-10.	-15.
467418	59.8453	139.6200	8.	49.	10.	1.75	-999.	-999.	-999.	-999.	-999.	-999.	-999.	-999.	-999.
467420	59.8525	139.5672	8.	18.	-999.	2.18	-5.	-5.	-5.	48.	-20.	26.	6.	-10.	20.
467421	59.8169	139.5897	8.	47.	11.	2.17	-5.	-5.	-5.	62.	-20.	43.	7.	-10.	17.
467422	59.8197	139.5900	8.	44.	5.	2.11	-5.	-5.	-5.	39.	-20.	25.	7.	-10.	-15.
467423	59.7742	139.5728	8.	194.	5.	1.88	-5.	-5.	-5.	53.	-20.	30.	7.	-10.	-15.
467425	59.7828	139.5186	8.	33.	-999.	2.12	-5.	-5.	-5.	45.	-20.	21.	-5.	-10.	-15.
467426	59.7869	139.4969	8.	31.	6.	2.04	-5.	-5.	-5.	47.	-20.	28.	-5.	-10.	-15.
467427	59.7863	139.4989	8.	55.	6.	2.18	-5.	-5.	-5.	52.	-20.	18.	7.	-10.	-15.
467428	59.9858	139.2839	8.	67.	5.	.16	-5.	-5.	-5.	316.	-20.	82.	-5.	-11.	18.
467429	59.9753	139.2419	8.	38.	1.	.10	5.	-5.	-5.	142.	-20.	117.	-5.	-10.	-15.
467430	59.9600	139.2533	8.	7.	5.	1.29	-5.	-5.	-5.	39.	-20.	25.	-5.	-10.	-15.
467434	59.9053	139.3142	8.	27.	3.	.96	-5.	-5.	-5.	46.	-20.	28.	-5.	-10.	-15.
467435	59.8794	139.2786	8.	113.	6.	2.95	-5.	-5.	-5.	173.	-20.	45.	23.	-10.	-15.
467436	59.8697	139.2672	8.	112.	7.	2.87	-5.	-5.	-5.	175.	-20.	78.	7.	-10.	28.
467437	59.8650	139.2250	8.	71.	1.	1.83	-5.	-5.	-5.	88.	-20.	68.	-5.	-10.	-15.
467438	59.8650	139.2186	8.	23.	1.	1.65	-5.	-5.	-5.	94.	-20.	88.	-5.	-10.	-15.
467439	59.8647	139.1789	8.	74.	6.	1.26	-5.	-5.	-5.	72.	-20.	46.	-5.	-10.	-15.
467440	59.8728	139.1506	8.	116.	5.	.94	-5.	-5.	-5.	58.	-20.	34.	-5.	-10.	-15.
467441	59.8644	139.1372	8.	103.	3.	1.49	-5.	-5.	-5.	98.	-20.	101.	-5.	-10.	-15.
467442	59.8675	139.0917	8.	28.	5.	6.18	-5.	-5.	5.	70.	-20.	46.	-5.	-10.	-15.
467443	59.8642	139.0792	8.	115.	5.	1.76	-5.	-5.	-5.	80.	-20.	134.	-5.	-10.	-15.
467444	59.8606	139.0783	8.	44.	3.	.71	-5.	-5.	-5.	95.	-20.	200.	-5.	-10.	-15.
467445	59.8572	139.0525	8.	35.	3.	.93	-5.	-5.	-5.	113.	-20.	147.	-5.	-10.	-15.
467446	59.8525	139.0306	9.	19.	1.	2.72	-5.	-5.	-5.	97.	-20.	70.	-5.	-10.	-15.
467447	59.8344	138.9958	8.	6.	3.	.09	-5.	-5.	-5.	143.	-20.	176.	-5.	-10.	-15.
467448	59.8200	138.9706	8.	20.	3.	.19	-5.	-5.	-5.	132.	-20.	208.	-5.	-10.	-15.
467449	59.8156	138.9278	8.	33.	3.	.95	-5.	-5.	-5.	112.	-20.	89.	-5.	-10.	-15.
467450	59.8139	138.8967	8.	5.	3.	1.01	-5.	-5.	-5.	71.	-20.	67.	-5.	-10.	-15.
467451	59.8144	138.8828	8.	12.	6.	3.86	-5.	-5.	-5.	42.	-20.	23.	-5.	-10.	-15.

YAKUTAT STREAM SEDIMENT

PG. TWO - SAMPLE SET 2

SAMPLE NO.	BE PPM	LI PPM	AL PPM	AU PPM	BA PPM	CA PPM	CE PPM	CL PPM	CO PPM	CR PPM	CS PPM	DY PPM	EU PPM	FE PPM	HF PPM	K PPM	LA PPM
467397	-999.	-999.	68770.	-0.	338.	27970.	58.	-137.	20.9	121.	-2.2	4.	1.3	52900.	4.5	13050.	23.
467398	-999.	-999.	66100.	-0.	671.	13500.	33.	-116.	16.9	203.	-1.6	4.	1.1	41600.	3.5	13700.	21.
467399	-999.	-999.	76240.	-0.	772.	21880.	53.	-141.	13.6	87.	-1.6	4.	1.5	40200.	6.9	12880.	31.
467400	-999.	-999.	83540.	-0.	386.	22850.	44.	-128.	18.1	95.	-2.4	4.	1.2	41700.	4.9	16460.	20.
467401	-999.	-999.	84130.	-0.	857.	17840.	51.	-105.	9.3	79.	3.1	4.	1.0	37600.	4.7	20400.	25.
467402	-999.	-999.	68280.	-0.	702.	19260.	58.	-118.	8.8	63.	-1.7	4.	1.1	24600.	12.8	14150.	29.
467403	-999.	-999.	81030.	-0.	746.	20440.	57.	-132.	12.4	74.	2.6	5.	1.4	36500.	9.3	21080.	32.
467404	-999.	-999.	87390.	-0.	645.	19720.	48.	-117.	12.2	80.	3.5	4.	1.1	37800.	5.4	20330.	27.
467405	-999.	-999.	67370.	-0.	443.	55250.	27.	-119.	23.0	109.	-1.8	4.	1.3	57900.	3.4	8532.	20.
467406	-999.	-999.	71060.	-0.	842.	10420.	46.	-114.	11.7	61.	-1.7	4.	1.1	29700.	3.7	14820.	19.
467407	-999.	-999.	79680.	-0.	700.	14690.	53.	-132.	11.2	78.	2.9	4.	1.4	37700.	3.8	17110.	27.
467408	-999.	-999.	90290.	-0.	555.	19310.	54.	-123.	17.1	92.	3.6	4.	1.5	48000.	6.1	20610.	32.
467409	-999.	-999.	78260.	-0.	927.	18140.	41.	-192.	14.3	98.	1.8	4.	1.4	37800.	5.2	14120.	25.
467410	-999.	-999.	69870.	-0.	661.	15490.	34.	-129.	11.7	73.	-2.0	4.	1.0	36300.	3.9	13650.	17.
467411	-999.	-999.	75850.	-0.	801.	20530.	47.	-135.	10.3	80.	2.2	3.	1.2	34700.	5.3	14610.	26.
467412	-999.	-999.	66620.	-0.	485.	13130.	52.	-124.	12.8	82.	-1.7	3.	1.2	31900.	8.9	13910.	30.
467413	-999.	-999.	70060.	-0.	840.	16520.	55.	-117.	9.0	65.	1.4	3.	1.3	30100.	6.3	12520.	25.
467414	-999.	-999.	72360.	-0.	769.	15910.	48.	-132.	16.4	70.	-2.1	3.	1.2	36400.	4.4	13390.	25.
467415	-999.	-999.	85200.	-0.	770.	18750.	50.	-137.	13.5	88.	2.5	4.	1.2	43000.	4.2	18110.	25.
467416	-999.	-999.	73900.	-0.	685.	14340.	65.	-122.	13.4	115.	-1.8	3.	1.3	37400.	11.0	12920.	30.
467417	-999.	-999.	81510.	-0.	902.	13510.	48.	-116.	12.6	78.	3.1	5.	1.3	38600.	5.3	18120.	25.
467418	-999.	-999.	70630.	-0.	664.	19480.	35.	-121.	11.7	84.	-1.8	3.	.8	32800.	3.2	11710.	20.
467420	-999.	-999.	73200.	-0.	591.	16980.	55.	-125.	12.2	79.	-1.8	3.	1.1	33400.	6.8	15750.	26.
467421	-999.	-999.	73970.	-0.	596.	29340.	35.	-135.	16.1	99.	-1.9	4.	1.1	48400.	4.9	11450.	23.
467422	-999.	-999.	70580.	-0.	684.	14750.	41.	-118.	10.9	65.	-1.7	3.	1.1	30700.	5.2	14910.	25.
467423	-999.	-999.	70710.	-0.	475.	19270.	39.	-204.	12.1	88.	-2.5	4.	1.1	38400.	3.8	9888.	15.
467425	-999.	-999.	71680.	-0.	838.	13030.	52.	-113.	8.5	64.	1.4	3.	1.2	32600.	6.8	15270.	26.
467426	-999.	-999.	71470.	-0.	708.	14100.	35.	-115.	10.2	61.	1.5	3.	.9	29200.	4.0	16900.	17.
467427	-999.	-999.	85070.	-0.	751.	17650.	49.	-137.	13.8	83.	2.9	4.	1.3	38000.	4.5	13880.	27.
467428	-999.	-999.	63440.	-0.	-201.	67430.	-7.	-148.	55.4	215.	-3.3	6.	1.1	98700.	-1.9	-5608.	-6.
467429	-999.	-999.	61690.	-0.	-185.	68550.	32.	-140.	47.2	263.	-2.5	6.	1.1	94800.	2.2	-5272.	6.
467430	-999.	-999.	71130.	-0.	-191.	49830.	12.	-143.	23.1	79.	-2.1	3.	.6	48300.	2.2	-4666.	9.
467434	-999.	-999.	71220.	-0.	226.	48110.	18.	-140.	23.3	142.	-2.2	3.	.8	45200.	2.3	-5046.	9.
467435	-999.	-999.	81680.	-0.	998.	20190.	53.	-168.	35.1	96.	3.7	4.	1.7	64100.	5.3	20530.	28.
467436	-999.	-999.	83890.	-0.	860.	16470.	48.	-161.	41.8	107.	2.5	5.	1.3	69500.	4.2	20030.	24.
467437	-999.	-999.	64670.	-0.	-198.	40420.	24.	-150.	27.8	138.	-2.2	5.	1.1	66700.	4.4	-5533.	18.
467438	-999.	-999.	62480.	-0.	-231.	52770.	23.	-155.	30.0	156.	-2.6	5.	.8	64000.	2.9	-5779.	14.
467439	-999.	-999.	71590.	-0.	-187.	54060.	32.	-169.	32.3	149.	-2.1	6.	1.4	74600.	3.3	-5959.	18.
467440	-999.	-999.	71120.	-0.	-174.	58240.	46.	-143.	29.8	154.	-2.4	4.	1.0	60800.	3.9	-5034.	16.
467441	-999.	-999.	65300.	-0.	-200.	55100.	18.	-150.	36.1	194.	-2.5	5.	1.1	71700.	3.5	-5630.	12.
467442	-999.	-999.	61620.	-0.	423.	32100.	68.	-148.	16.8	72.	-2.2	6.	1.2	42900.	8.2	-5443.	32.
467443	-999.	-999.	66630.	-0.	-197.	69270.	36.	-167.	42.9	239.	-2.3	7.	1.3	89100.	5.2	-6359.	16.
467444	-999.	-999.	63160.	-0.	-178.	71210.	46.	-136.	49.8	351.	-2.7	4.	.9	82000.	2.2	-5103.	-5.
467445	-999.	-999.	62780.	-0.	-174.	62000.	18.	-134.	42.9	314.	-2.2	5.	.9	79800.	2.4	-4912.	9.
467446	-999.	-999.	62110.	-0.	-255.	41100.	47.	-173.	29.2	131.	-2.6	5.	.9	62800.	3.9	-6478.	23.
467447	-999.	-999.	67299.	-0.	-170.	77400.	18.	-129.	58.2	401.	-2.7	3.	.6	85200.	-1.5	-4749.	-5.
467448	-999.	-999.	62290.	-0.	-169.	71620.	-5.	-125.	53.0	449.	-2.3	4.	.8	83300.	1.6	-4786.	-5.
467449	-999.	-999.	58290.	-0.	-211.	57980.	20.	-139.	39.3	197.	-2.6	5.	1.0	74630.	3.2	-5259.	13.
467450	-999.	-999.	68510.	-0.	-171.	60940.	25.	-156.	42.7	169.	-2.2	5.	1.1	64530.	2.4	-5459.	11.
467451	-999.	-999.	65270.	-0.	-212.	33310.	82.	-174.	16.4	60.	-2.3	5.	1.6	57280.	8.8	-6363.	39.

YAKUTAT STREAM SEDIMENT

PG. THREE - SAMPLE SET 2

SAMPLE NO.	LU PPM	MG PPM	MN PPM	NA PPM	RB PPM	SB PPM	SC PPM	SM PPM	SR PPM	TA PPM	TB PPM	TH PPM	TI PPM	V PPM	YB PPM	ZN PPM	U/TH RATIO
467397	.4	12860.	1182.	19570.	-45.	-2.	25.8	4.2	-340.	-1.	-1.	5.7	5420.	157.	3.0	-5.	3.073
467398	.2	21530.	697.	19590.	-35.	-2.	15.8	3.5	-272.	-1.	-1.	5.0	4050.	121.	2.2	-4.	2.701
467399	.2	14720.	616.	22810.	82.	-2.	17.8	5.3	-268.	-1.	-1.	6.3	4852.	123.	3.6	62.	2.701
467400	.2	11840.	781.	15050.	-49.	-3.	18.6	3.5	-333.	-1.	-1.	4.4	3794.	150.	2.9	-52.	2.006
467401	.3	9513.	586.	16570.	116.	-2.	15.6	4.0	-256.	-1.	1.	6.0	4114.	120.	3.2	-40.	2.451
467402	.3	8445.	467.	18220.	-39.	-2.	10.4	3.5	-280.	-1.	-1.	7.8	3392.	80.	2.0	-47.	2.439
467403	.3	9612.	538.	20680.	58.	-2.	14.5	4.8	-250.	-1.	1.	7.5	3579.	104.	3.1	74.	2.874
467404	.2	10560.	592.	16310.	105.	-2.	16.0	4.5	-280.	-1.	-1.	7.8	3967.	122.	3.6	-87.	2.967
467405	.3	19620.	959.	17780.	-37.	-2.	23.3	3.8	545.	-1.	1.	3.3	6707.	224.	2.8	-43.	2.141
467406	.2	8550.	455.	18890.	-38.	-2.	12.0	3.2	426.	-1.	-1.	5.6	3342.	107.	1.7	-57.	2.639
467407	.3	9378.	514.	22050.	67.	-2.	14.8	5.0	316.	-1.	-1.	6.5	3793.	118.	2.8	-35.	3.049
467408	.3	12520.	858.	16600.	62.	-2.	18.7	5.3	-298.	-1.	-1.	7.1	4096.	152.	2.4	53.	2.597
467409	.2	10530.	985.	20320.	-33.	-2.	16.1	4.1	-311.	-1.	-1.	5.8	4556.	133.	2.3	-41.	2.695
467410	.3	13640.	687.	18890.	-45.	-2.	13.9	2.4	-319.	-2.	-1.	4.7	4519.	127.	2.1	-42.	2.119
467411	.2	9750.	550.	22660.	80.	-2.	13.6	3.9	-247.	-1.	-1.	5.6	3301.	108.	2.8	92.	2.994
467412	.3	10300.	547.	23350.	60.	-2.	13.0	3.7	-264.	-1.	-1.	4.6	3468.	91.	-1.6	92.	2.278
467413	.2	8998.	496.	23830.	45.	-2.	12.1	3.8	-249.	-1.	-1.	5.3	3453.	104.	2.3	-32.	2.625
467414	.2	11150.	692.	17390.	-48.	-2.	14.9	2.8	-335.	-2.	-1.	5.0	4727.	141.	-1.8	138.	2.092
467415	.2	12400.	687.	21120.	87.	-2.	17.8	4.7	-261.	-1.	-1.	7.0	3878.	157.	2.9	-70.	3.067
467416	.3	9137.	651.	20990.	-38.	-2.	15.7	4.3	-274.	-1.	-1.	5.8	3713.	125.	2.3	87.	2.066
467417	.2	10380.	642.	19260.	80.	-2.	15.7	4.5	-267.	-1.	-1.	6.4	4018.	136.	2.6	-39.	2.688
467418	.2	11450.	619.	19770.	-41.	-2.	13.6	2.5	-360.	-1.	-1.	3.8	3743.	125.	2.9	-50.	1.949
467420	.2	10960.	531.	23110.	-36.	-2.	13.8	4.6	-267.	-1.	-1.	7.0	3546.	105.	2.7	64.	3.215
467421	.4	13790.	963.	20890.	-38.	-2.	19.6	3.6	-325.	-1.	-1.	4.5	5683.	169.	3.2	-45.	2.075
467422	.2	10060.	570.	19820.	-39.	-2.	12.9	2.3	376.	-1.	-1.	4.7	3278.	120.	2.3	118.	2.227
467423	.2	13380.	859.	18260.	-55.	-3.	15.8	4.0	-441.	-2.	-1.	4.3	3921.	128.	-2.1	146.	2.288
467425	.3	8548.	496.	23290.	-28.	-2.	13.7	3.8	-239.	-1.	-1.	5.8	3092.	111.	2.7	-35.	2.732
467426	.2	9326.	476.	19450.	-38.	-2.	11.8	2.6	-269.	-1.	-1.	4.2	3717.	107.	2.1	54.	2.058
467427	.2	10850.	542.	22050.	62.	-2.	15.1	4.5	631.	-1.	-1.	6.5	3550.	128.	2.6	98.	2.985
467428	.5	35540.	1671.	14640.	-65.	-4.	54.7	2.9	-408.	-2.	-1.	-1.8	5906.	325.	4.4	-81.	-999.000
467429	.5	33710.	1716.	14530.	-48.	-3.	53.1	2.8	-373.	-2.	2.	-1.1	8092.	326.	6.1	-61.	-999.000
467430	.2	22730.	1149.	20650.	-45.	-2.	23.7	1.6	-356.	-1.	1.	-1.2	5014.	115.	-1.6	-60.	-999.000
467434	.2	25500.	1246.	19420.	-48.	-3.	25.8	1.8	-372.	-1.	-1.	1.8	4336.	158.	3.1	94.	1.876
467435	.3	13610.	1124.	20910.	84.	-2.	21.1	5.2	-365.	-1.	-1.	6.4	4804.	169.	3.4	94.	2.169
467436	.3	18430.	1377.	18410.	-63.	-3.	23.2	4.5	-437.	-2.	-1.	5.7	5394.	201.	4.8	-70.	1.984
467437	.4	20950.	1778.	17860.	-44.	-3.	35.1	3.9	-395.	-1.	2.	4.5	6599.	218.	4.1	-53.	2.457
467438	.4	20240.	1848.	15350.	-54.	-3.	35.8	2.7	-441.	-2.	3.	3.1	6884.	230.	5.1	-65.	1.880
467439	.4	21470.	1792.	19030.	-43.	-2.	40.5	4.3	-379.	-1.	-1.	3.1	6788.	220.	4.0	-49.	2.463
467440	.3	20890.	1425.	18690.	-47.	-3.	36.5	2.8	-352.	-2.	1.	2.2	4642.	191.	-1.9	-53.	2.342
467441	.4	28030.	1685.	16800.	-48.	-3.	39.6	2.8	-398.	-1.	3.	3.0	5767.	242.	3.5	-60.	2.012
467442	.4	11320.	1514.	18730.	-50.	-3.	24.7	3.7	-417.	-2.	1.	8.5	4548.	144.	4.6	-64.	1.376
467443	.6	28500.	2096.	14960.	-47.	-3.	50.5	4.7	-400.	-1.	1.	4.6	7276.	242.	6.3	-53.	2.611
467444	.4	35310.	1597.	12710.	-54.	-3.	47.7	2.5	-366.	-2.	-1.	-1.6	5623.	255.	4.9	-63.	-999.000
467445	.5	35720.	1543.	14730.	-44.	-3.	44.7	3.0	-348.	-1.	2.	1.0	6609.	263.	4.6	-54.	1.934
467446	.5	17680.	2257.	14930.	-55.	-3.	37.1	3.6	-466.	-2.	2.	6.8	5361.	176.	5.3	-67.	2.500
467447	.3	47270.	1419.	12540.	-55.	-3.	47.7	1.0	-346.	-2.	-1.	-1.5	3293.	240.	-2.1	-68.	-999.000
467448	.4	46400.	1445.	12830.	-44.	-3.	45.5	1.9	-339.	-1.	-1.	-1.3	6501.	283.	4.0	-53.	-999.000
467449	.4	28190.	1713.	13690.	-57.	-3.	37.4	2.7	-402.	-2.	3.	1.7	10470.	277.	4.0	-73.	1.789
467450	.5	29620.	1600.	18670.	-46.	-3.	47.5	3.5	-341.	-1.	3.	2.7	5072.	296.	2.9	-54.	2.674
467451	.6	7119.	2287.	16890.	-47.	-3.	33.4	6.8	-442.	-1.	2.	11.2	4797.	103.	6.8	-52.	2.899

YAKUTAI STREAM SEDIMENT

PG. ONE - SAMPLE SET 3

SAMPLE NO.	LAT.	LONG.	PH	COND.	SCINT.	URANIUM PPM	SILVER PPM	BISMUTH PPM	CADMIUM PPM	COPPER PPM	NIOBIUM PPM	NICKEL PPM	LEAD PPM	ZIN PPM	TUNGSTEN PPM
467452	59.8056	138.8825	8.	20.	1.	1.48	-	-	-5.	76.	-20.	45.	-5.	-10.	-15.
467453	59.8056	138.8847	8.	35.	1.	.22	-	-	-5.	17.	-20.	118.	-5.	-10.	-15.
467455	59.7883	138.9772	9.	12.	5.	6.50	-	-5.	-5.	20.	-20.	-15.	-5.	-10.	-15.
467456	59.8064	138.9950	8.	17.	1.	4.58	-5.	-5.	-5.	25.	-20.	-15.	7.	-10.	-15.
467458	59.8386	139.1056	8.	49.	-999.	5.42	-5.	6.	-5.	33.	-20.	-15.	11.	-10.	-15.
467459	59.8375	139.1175	8.	8.	13.	9.55	-5.	6.	-5.	28.	-20.	17.	-5.	-10.	-15.
467460	59.8403	139.1903	9.	9.	6.	3.23	-5.	-5.	-5.	16.	-20.	-15.	12.	-10.	-15.
467461	59.8306	139.2344	8.	66.	13.	2.95	-5.	-5.	-5.	50.	-20.	25.	-5.	-10.	-15.
467462	59.8297	139.2483	8.	79.	3.	1.54	-5.	-5.	-5.	45.	-20.	32.	-5.	-10.	-15.
467463	59.8294	139.2658	8.	47.	11.	2.76	-5.	-5.	-5.	40.	-20.	38.	-5.	-10.	-15.
467464	59.8247	139.2864	8.	33.	7.	2.06	-5.	-5.	-5.	22.	-20.	15.	-5.	-10.	-15.
467465	59.7944	139.2572	3.	133.	6.	1.77	-5.	-5.	-5.	54.	-20.	31.	-5.	-10.	-15.
467466	59.7958	139.2447	8.	94.	6.	2.16	-5.	-5.	-5.	46.	-20.	34.	-5.	-10.	-15.
467467	59.7958	139.2378	8.	94.	5.	2.04	-5.	-5.	-5.	50.	-20.	17.	-5.	-10.	-15.
467468	59.7819	139.2597	8.	49.	16.	2.07	-5.	-5.	-5.	23.	-20.	-15.	-5.	-10.	-15.
467469	59.5525	139.4889	8.	160.	-999.	1.64	-5.	-5.	-5.	25.	-20.	20.	-5.	-10.	-15.
467470	59.5603	139.3797	8.	198.	4.	1.58	-5.	-5.	-5.	39.	-20.	39.	-5.	-10.	-15.
467472	59.5228	139.2761	8.	171.	-999.	1.31	-5.	-5.	-5.	26.	-20.	24.	-5.	-10.	-15.
467473	59.5697	139.3206	8.	220.	6.	1.47	-5.	-5.	-5.	40.	-20.	21.	-5.	-10.	-15.
467474	59.6022	139.3372	8.	229.	8.	1.63	-5.	-5.	-5.	33.	-20.	27.	-5.	-10.	-15.
467475	59.6117	139.3292	8.	223.	5.	1.42	-5.	-5.	-5.	36.	-20.	27.	-5.	-10.	-15.
467476	59.7744	139.2836	7.	45.	8.	2.20	-5.	-5.	-5.	29.	-20.	-15.	-5.	-10.	-15.
467477	59.1789	138.6614	8.	192.	6.	2.39	-5.	-5.	-5.	47.	-20.	26.	-5.	-10.	-15.
467478	59.1647	138.6625	8.	259.	-999.	3.04	-5.	-5.	-5.	41.	-20.	34.	22.	52.	-15.
467479	59.1108	138.4825	8.	170.	-999.	2.04	-5.	-5.	-5.	56.	-20.	50.	5.	-10.	-15.
467480	59.1206	138.4056	8.	253.	-999.	3.81	-5.	-5.	-5.	58.	-20.	26.	-5.	-10.	-15.
467481	59.0825	138.3503	8.	182.	-999.	1.37	-5.	-5.	-5.	40.	-20.	-15.	6.	-10.	-15.
467482	59.0789	138.3086	8.	215.	-999.	1.48	-5.	-5.	-5.	36.	-20.	-15.	-5.	-10.	-15.
467483	59.0978	138.2892	8.	217.	-999.	2.02	-5.	-5.	-5.	34.	-20.	-15.	-5.	-10.	-15.
467484	59.1917	138.1911	9.	36.	-999.	2.06	-5.	-5.	-5.	55.	-20.	29.	-5.	-10.	-15.
467485	59.2075	138.2033	8.	64.	11.	1.83	-5.	-5.	-5.	50.	-20.	-15.	-5.	-10.	-15.
467486	59.2389	138.2261	8.	13.	10.	2.97	-5.	-5.	-5.	46.	-20.	26.	-5.	-10.	-15.
467487	59.2275	138.2181	9.	25.	8.	1.90	-5.	-5.	-5.	53.	-20.	33.	-5.	-10.	-15.
467489	59.2011	138.4708	8.	40.	7.	1.65	-5.	-5.	-5.	36.	-20.	27.	5.	-10.	-15.
467490	59.2017	138.4717	8.	43.	7.	1.50	-5.	-5.	-5.	28.	-20.	16.	-5.	-10.	-15.
467491	59.1942	138.4164	8.	15.	-999.	1.76	-5.	-5.	-5.	35.	-20.	15.	-5.	-10.	-15.
467492	59.1631	138.4319	8.	203.	2.	3.68	-5.	-5.	-5.	54.	-20.	38.	-5.	-10.	-15.
467493	59.1683	138.4481	8.	157.	-999.	2.14	-5.	-5.	-5.	40.	-20.	19.	-5.	-10.	-15.
467494	59.1894	138.5439	8.	71.	5.	2.22	-5.	-5.	-5.	39.	-20.	28.	-5.	-10.	-15.
467500	59.1917	138.3042	8.	17.	11.	2.05	-5.	-5.	-5.	39.	-20.	20.	-5.	-10.	-15.
467502	59.2561	138.2417	8.	11.	1.	1.90	-5.	-5.	-5.	25.	-20.	-15.	-5.	-10.	-15.
467503	59.2864	138.2664	8.	12.	5.	2.58	-5.	-5.	-5.	52.	-20.	24.	-5.	-10.	-15.
467504	59.2967	138.2986	8.	9.	6.	1.91	-5.	-5.	-5.	33.	-20.	-15.	-5.	-10.	-15.
467505	59.3661	138.3453	8.	27.	3.	2.08	-5.	-5.	-5.	52.	-20.	23.	-5.	-10.	-15.
467508	59.4064	138.2369	8.	6.	1.	3.01	-5.	-5.	-5.	36.	-20.	23.	-5.	-10.	-15.
467509	59.4036	138.2653	8.	5.	-999.	8.61	-5.	-5.	-5.	25.	-20.	26.	-5.	-10.	-15.
467510	59.4492	138.3808	8.	4.	5.	3.31	-5.	-5.	-5.	42.	-20.	-15.	-5.	-10.	-15.
467512	59.4439	138.4803	8.	5.	-999.	2.61	-5.	-5.	-5.	70.	-20.	25.	-5.	-10.	-15.
467513	59.2200	138.6925	8.	118.	-999.	2.55	-5.	-5.	-5.	40.	-20.	22.	-5.	-10.	-15.
467514	59.2236	138.6981	8.	248.	-999.	2.60	-5.	-5.	-5.	66.	-20.	36.	11.	-10.	-15.

YAKUTAT STREAM SEDIMENT

PG. TWO - SAMPLE SET 3

SAMPLE NO.	BE PPM	LI PPM	AL PPM	AU PPM	BA PPM	CA PPM	CE PPM	CL PPM	CO PPM	CR PPM	CS PPM	DY PPM	EU PPM	FE PPM	HF PPM	K PPM	LA PPM
467452	-999.	-999.	65580.	-0.	-173.	58660.	48.	-137.	36.7	144.	-2.1	5.	1.4	73490.	5.8	-4957.	29.
467453	-999.	-999.	59920.	-0.	-203.	72740.	-6.	-130.	45.6	265.	-2.8	4.	1.0	74090.	-1.5	-49.	-7.
467455	-999.	-999.	75830.	-0.	647.	23140.	149.	-138.	7.6	36.	1.8	9.	1.2	33400.	22.	21700.	67.
467456	-999.	-999.	74030.	-0.	1170.	20840.	112.	-111.	6.7	36.	2.1	7.	1.3	27400.	16.0	24625	57.
467458	-999.	-999.	78650.	-0.	790.	22770.	150.	-147.	11.7	51.	2.4	7.	1.5	33900.	16.6	32590.	73.
467459	-999.	-999.	68480.	-0.	355.	21290.	287.	-172.	9.8	45.	-2.4	12.	1.7	52160.	57.6	-6279.	159.
467460	-999.	-999.	67530.	-0.	760.	19040.	121.	-125.	1.9	24.	-1.2	6.	1.2	19710.	11.1	18160.	61.
467461	-999.	-999.	83100.	-0.	679.	9187.	40.	-107.	17.9	81.	-2.0	4.	1.1	38110.	5.1	12930.	21.
467462	-999.	-999.	81410.	-0.	650.	18410.	42.	-144.	16.2	116.	2.9	4.	1.3	49200.	6.2	17800.	14.
467463	-999.	-999.	83910.	-0.	705.	16500.	54.	-120.	13.2	86.	3.6	5.	1.4	39590.	6.0	17790.	31.
467464	-999.	-999.	64210.	-0.	634.	18510.	52.	-117.	6.8	60.	1.9	4.	1.1	26260.	7.4	12680.	24.
467465	-999.	-999.	67400.	-0.	456.	23890.	28.	-130.	15.3	70.	-2.1	3.	.9	34730.	3.3	9015.	-7.
467466	-999.	-999.	82810.	-0.	676.	16720.	42.	-140.	17.9	98.	-1.7	4.	1.3	50880.	6.2	16140.	22.
467467	-999.	-999.	78330.	-0.	567.	19690.	45.	-134.	15.5	87.	-2.1	4.	1.0	44450.	5.9	11800.	21.
467468	-999.	-999.	71560.	-0.	736.	13410.	49.	-112.	7.1	55.	2.6	4.	1.1	32380.	5.8	13600.	27.
467469	-999.	-999.	59310.	-0.	465.	28400.	27.	-161.	14.3	80.	-2.2	4.	.9	31930.	4.0	7228.	18.
467470	-999.	-999.	70250.	-0.	420.	34300.	38.	-174.	14.5	102.	-1.9	4.	1.3	41640.	5.1	7459.	18.
467472	-999.	-999.	47850.	-0.	286.	119100.	32.	-148.	9.9	128.	-2.2	5.	1.0	44620.	5.9	-5247.	20.
467473	-999.	-999.	58360.	-0.	422.	29620.	34.	-189.	15.0	77.	-2.1	3.	.9	30830.	3.0	-7291.	-6.
467474	-999.	-999.	67600.	-0.	450.	32800.	42.	-150.	15.2	101.	-1.5	4.	1.3	40800.	5.9	-4855.	23.
467475	-999.	-999.	58710.	-0.	-272.	29060.	43.	-209.	18.6	99.	-2.1	3.	1.0	43660.	3.3	-8010.	22.
467476	-999.	-999.	71670.	-0.	733.	13770.	54.	-108.	6.8	56.	2.2	3.	1.1	32380.	6.2	14600.	29.
467477	-999.	-999.	64900.	-0.	524.	15550.	49.	-123.	11.2	71.	-1.7	3.	.9	40510.	7.0	12090.	25.
467478	-999.	-999.	41610.	-0.	-429.	28120.	73.	-423.	23.7	73.	-1.7	3.	1.4	48760.	10.6	-15660.	44.
467479	-999.	-999.	57110.	-0.	-171.	73750.	61.	-135.	29.1	159.	-2.3	4.	1.4	79030.	8.8	-4817.	29.
467480	-999.	-999.	59550.	-0.	407.	91760.	35.	-145.	16.3	86.	-2.0	5.	1.1	46720.	4.8	-5021.	26.
467481	-999.	-999.	39930.	-0.	-236.	159800.	23.	-151.	11.3	51.	-2.2	3.	.8	26560.	2.8	-5253.	-9.
467482	-999.	-999.	52180.	-0.	410.	129000.	34.	-146.	9.7	71.	-1.6	3.	1.0	37360.	4.2	-4500.	16.
467483	-999.	-999.	44150.	-0.	285.	162300.	29.	362.	11.5	65.	-2.3	3.	.8	27980.	2.9	-4479.	-8.
467484	-999.	-999.	58020.	-0.	390.	88400.	41.	-126.	19.1	83.	-1.8	4.	1.2	49820.	4.4	711.	22.
467485	-999.	-999.	53810.	-0.	391.	78640.	30.	-125.	16.6	71.	-1.9	3.	1.0	36250.	4.0	7410.	17.
467486	-999.	-999.	58560.	-0.	430.	92320.	34.	-143.	20.0	107.	-1.6	6.	1.5	57720.	5.8	5860.	26.
467487	-999.	-999.	59750.	-0.	336.	87010.	45.	-136.	17.8	88.	-2.1	4.	1.3	44360.	3.4	12390.	19.
467489	-999.	-999.	76770.	-0.	541.	22050.	28.	-145.	11.7	41.	-1.9	2.	.9	32810.	2.8	12990.	17.
467490	-999.	-999.	75800.	-0.	362.	26220.	35.	-150.	8.6	48.	-1.2	3.	1.2	28670.	5.9	7766.	16.
467491	-999.	-999.	67260.	-0.	287.	43970.	41.	-139.	13.7	65.	-1.4	3.	1.1	38390.	5.5	-4348.	20.
467492	-999.	-999.	54570.	-0.	381.	60200.	62.	-135.	18.2	123.	-1.9	5.	1.3	95980.	16.7	-4782.	37.
467493	-999.	-999.	55820.	-0.	-202.	77210.	34.	-140.	17.2	81.	-2.1	4.	1.1	39610.	4.5	-4782.	22.
467494	-999.	-999.	72170.	-0.	480.	19260.	50.	-149.	13.1	67.	2.2	5.	1.3	48680.	6.9	13010.	27.
467500	-999.	-999.	54980.	-0.	453.	71820.	41.	-129.	16.4	71.	-1.8	4.	1.0	38890.	4.4	7159.	21.
467502	-999.	-999.	73020.	-0.	-148.	29410.	43.	-137.	6.9	30.	-1.4	3.	1.2	22810.	6.4	-4016.	21.
467503	-999.	-999.	71780.	-0.	656.	57100.	50.	-146.	18.7	64.	-2.1	5.	1.4	46920.	4.2	12460.	27.
467504	-999.	-999.	72140.	-0.	573.	24320.	37.	-137.	9.7	39.	-1.5	3.	1.0	24350.	3.6	12150.	18.
467505	-999.	-999.	66050.	-0.	330.	60860.	47.	-149.	22.1	121.	-1.8	5.	1.4	55140.	5.8	7379.	22.
467508	-999.	-999.	65390.	-0.	474.	28420.	45.	-157.	17.4	72.	-2.4	4.	1.1	39300.	5.0	-5555.	27.
467509	-999.	-999.	71800.	-0.	481.	33610.	87.	-143.	7.6	92.	-1.3	7.	1.2	23030.	13.7	12890.	46.
467510	-999.	-999.	70010.	-0.	510.	29100.	74.	-154.	14.6	57.	-2.3	5.	1.3	49880.	12.5	-5506.	40.
467512	-999.	-999.	66500.	-0.	672.	15060.	38.	-127.	14.9	64.	-1.9	5.	1.1	42450.	4.2	12860.	24.
467513	-999.	-999.	72370.	-0.	396.	18530.	62.	-155.	16.2	75.	-1.7	5.	1.2	55080.	5.0	9452.	21.
467514	-999.	-999.	62930.	-0.	-271.	27830.	56.	-205.	23.3	111.	-2.2	3.	1.3	55380.	6.7	-7913.	31.

YAKUTAT STREAM SEDIMENT

PG. THREE - SAMPLE SET 3

SAMPLE NO.	LU PPM	MG PPM	MN PPM	NA PPM	RB PPM	SB PPM	SC PPM	SN PPM	SR PPM	TA PPM	TB PPM	TH PPM	TI PPM	V PPM	YB PPM	ZN PPM	U/TH RATIO
467452	.4	20780.	1505.	18040.	-43.	-3.	33.8	4.9	-346.	-1.	1.	3.7	10670.	223.	4.8	-51.	2.500
467453	.3	13570.	1450.	13560.	-51.	-7.	42.5	1.9	-316.	-2.	-1.	-1.6	777.	315.	3.4	-75.	-999.000
467454	.6	9425.	900.	1110.	-40.	-3.	17.2	2.0	-351.	-1.	1.	25.7	570.	60.	6.4	-39.	3.953
467455	.4	7028.	335.	2050.	-40.	-2.	12.1	10.0	-294.	-1.	1.	18.3	5131.	54.	5.0	-33.	4.000
467456	.5	5554.	358.	2750.	-16.	-2.	13.5	10.7	-282.	-1.	1.	25.9	3230.	78.	6.4	-55.	4.785
467459	1.0	3333.	2018.	20420.	-47.	-3.	31.4	7.5	-34.	-2.	3.	55.1	3807.	55.	11.3	-54.	5.780
467460	.3	3994.	729.	26260.	51.	-2.	10.0	10.2	-265.	-1.	-1.	21.3	1586.	37.	4.2	-32.	6.579
467461	.3	11460.	588.	14120.	-46.	-3.	17.2	2.5	-277.	-1.	-1.	4.3	5526.	151.	-2.0	-58.	1.458
467462	.3	16770.	920.	19490.	-37.	-2.	20.7	4.4	-295.	-1.	-1.	4.4	4226.	145.	3.5	-92.	2.268
467463	.3	11860.	583.	16910.	82.	-3.	17.7	4.3	-281.	-2.	-1.	7.3	4089.	134.	2.6	-92.	2.646
467464	.2	7669.	472.	23850.	-28.	-2.	11.5	3.6	-245.	-1.	1.	6.4	3425.	79.	2.4	-31.	3.106
467465	.2	12450.	742.	19390.	-47.	-3.	16.2	2.1	-331.	-1.	-1.	3.2	4483.	117.	-2.0	-57.	1.808
467466	.4	11230.	874.	18920.	-37.	-2.	21.0	4.8	-290.	-1.	-1.	5.2	4422.	150.	2.7	-41.	2.410
467467	.3	11930.	812.	19280.	-45.	-3.	20.3	5.1	-308.	-1.	1.	4.0	4304.	155.	3.4	108.	1.961
467468	.2	7422.	459.	21740.	60.	-2.	11.9	3.5	418.	-1.	-1.	7.2	3664.	90.	3.4	-31.	3.472
467469	.2	9854.	1394.	19120.	-48.	-3.	17.2	1.9	-456.	-2.	-1.	3.5	5076.	132.	-2.0	63.	2.132
467470	.4	15090.	786.	23870.	-40.	-3.	21.0	4.2	-335.	-1.	-1.	4.5	4046.	134.	3.0	-47.	2.849
467472	.4	10310.	1164.	13970.	-45.	-3.	21.5	2.9	-386.	-1.	-1.	3.5	5603.	132.	3.0	-56.	2.674
467473	.2	10130.	2141.	20480.	-49.	-3.	15.6	2.2	-559.	-1.	-1.	2.4	3836.	119.	-2.1	-60.	1.631
467474	.3	11940.	1022.	23820.	-32.	-2.	21.4	4.5	-297.	-1.	1.	4.3	4667.	124.	3.5	-60.	2.639
467475	.3	10470.	2860.	19410.	-45.	-3.	20.1	2.9	-568.	-1.	-1.	3.9	2537.	117.	4.8	131.	2.747
467476	.3	7207.	435.	21510.	66.	-2.	12.1	4.0	293.	-1.	-1.	6.9	3323.	91.	2.7	-31.	3.135
467477	.7	11040.	781.	18920.	-41.	-2.	12.8	2.5	-314.	-1.	-1.	5.0	5937.	139.	2.9	120.	2.092
467478	.4	-6674.	6230.	16110.	-39.	-2.	17.4	6.9	-915.	-1.	-1.	10.7	-2126.	-33.	-1.7	91.	3.521
467479	.4	19760.	1405.	15630.	-49.	-3.	30.5	4.9	-347.	-1.	-1.	5.9	7175.	245.	4.3	-54.	2.890
467480	.3	15610.	981.	18410.	-43.	-3.	19.5	3.0	-356.	-1.	-1.	4.3	5312.	148.	3.9	-54.	1.129
467481	.2	11010.	790.	11840.	-56.	-3.	10.9	1.6	-409.	-2.	-1.	3.6	3705.	95.	-2.3	-73.	2.625
467482	.2	10500.	727.	16380.	-39.	-2.	15.5	3.3	452.	-1.	-1.	3.9	4357.	127.	-1.4	-77.	2.639
467483	.2	10310.	574.	13960.	-53.	-3.	13.4	2.1	-325.	-2.	-1.	3.4	3262.	102.	2.2	-55.	1.684
467484	.3	17120.	959.	18310.	-37.	-2.	21.4	4.1	-301.	-1.	-1.	3.8	5217.	151.	3.2	-44.	1.845
467485	.2	15490.	827.	17610.	-44.	-3.	16.0	2.2	-318.	-1.	-1.	2.8	4436.	140.	2.4	-52.	1.529
467486	.4	15480.	1075.	18690.	-36.	-2.	21.9	5.8	481.	-1.	1.	5.4	6462.	185.	3.1	83.	1.818
467487	.3	18040.	870.	18930.	-46.	-3.	19.5	3.9	-320.	-1.	-1.	3.7	4140.	142.	-1.9	136.	1.946
467489	.1	11900.	549.	24780.	-43.	-3.	10.7	2.0	664.	-1.	-1.	3.0	3043.	109.	-1.7	-59.	1.818
467490	.3	6993.	593.	27840.	-27.	-2.	10.1	3.3	492.	-1.	-1.	4.0	3177.	78.	-1.1	68.	2.667
467491	.3	11940.	872.	24320.	-38.	-2.	15.5	4.6	-306.	-1.	-1.	4.6	3730.	109.	3.0	-42.	2.611
467492	.4	14540.	1283.	18230.	-44.	-3.	20.1	4.4	-338.	-1.	-1.	8.7	10040.	282.	3.9	-48.	2.364
467493	.3	14580.	932.	17720.	-50.	-3.	16.5	3.1	-368.	-2.	-1.	3.3	5862.	160.	-2.1	-60.	1.543
467494	.2	9989.	734.	22300.	-36.	-2.	14.5	4.4	-290.	-1.	1.	6.2	4352.	108.	2.3	88.	2.793
467500	.2	14060.	878.	18050.	-43.	-3.	16.4	2.5	-325.	-1.	-1.	3.3	4480.	139.	-1.6	-52.	1.610
467502	.3	5577.	614.	28190.	-31.	-2.	9.6	3.8	-283.	-1.	-1.	4.0	2971.	63.	3.4	-36.	2.105
467503	.4	14720.	871.	21720.	-45.	-3.	19.3	4.7	-345.	-1.	-1.	5.5	5336.	132.	3.7	-61.	2.132
467504	.2	8967.	638.	24590.	-36.	-2.	8.7	2.1	425.	-1.	-1.	3.1	3411.	68.	1.7	119.	1.623
467505	.3	18700.	1033.	20680.	-38.	-2.	25.7	5.0	487.	-1.	-1.	4.5	5298.	166.	3.3	-42.	2.165
467508	.3	16960.	1005.	19160.	-54.	-3.	15.3	2.7	-432.	-2.	-1.	5.0	4923.	152.	-2.5	-65.	1.662
467509	.5	10580.	667.	24990.	58.	-2.	12.6	7.5	492.	-1.	-1.	17.9	2226.	73.	5.6	11.	2.079
467510	.4	8630.	1529.	20800.	-45.	-3.	25.7	6.7	-392.	-1.	-1.	9.4	5101.	103.	6.2	-47.	2.841
467512	.2	7467.	988.	16800.	-44.	-3.	14.4	3.4	-349.	-1.	-1.	6.3	7470.	133.	2.6	129.	2.415
467513	.3	12720.	1050.	21170.	-40.	-2.	18.1	4.3	-326.	-1.	-1.	5.3	4109.	132.	2.4	62.	2.079
467514	.3	7379.	2804.	17020.	-51.	-3.	17.8	4.6	-570.	-1.	-1.	6.9	5201.	140.	2.9	-78.	2.653

YAKUTAT STREAM SEDIMENT

PG. ONE - SAMPLE SET 4

SAMPLE NO.	LAT.	LONG.	PH	COND.	SCINT.	URANIUM PPM	SILVER PPM	BISMUTH PPM	CADMIUM PPM	COPPER PPM	NIOBIMUM PPM	NICKEL PPM	LEAD PPM	TIN PPM	TUNGSTEN PPM
467515	59.1817	138.7197	8.	246.	-999.	2.98	-5.	-5.	-5.	52.	-20.	20.	-5.	-10.	-15.
467516	59.2417	138.6850	8.	255.	1.	2.12	-5.	-5.	-5.	54.	-20.	26.	-5.	-10.	-15.
467517	59.2536	138.7089	8.	216.	-999.	2.90	-5.	-5.	-5.	52.	-20.	34.	-5.	-10.	-15.
467518	59.2594	138.6447	8.	167.	11.	2.28	-5.	-5.	-5.	38.	-20.	22.	-5.	-10.	-15.
467519	59.2550	138.5923	7.	58.	10.	2.42	-5.	-5.	-5.	51.	-20.	19.	-5.	-10.	-15.
467520	59.2403	138.6411	7.	99.	-999.	2.44	-5.	-5.	-5.	12.	-20.	-15.	-5.	-10.	-15.
467521	59.2425	138.5694	7.	132.	6.	3.93	-5.	-5.	-5.	40.	-20.	7.	-5.	-10.	-15.
467522	59.2481	138.5447	7.	61.	3.	3.11	-5.	-5.	-5.	43.	-20.	25.	6.	-10.	-15.
467523	59.2328	138.5011	8.	11.	-999.	1.72	-5.	-5.	-5.	30.	-20.	-15.	-5.	-10.	-15.
467524	59.2422	138.4308	8.	9.	-999.	1.74	-5.	-5.	-5.	21.	-20.	-15.	-5.	-10.	-15.
467525	59.2533	138.4342	8.	13.	-999.	1.68	-5.	-5.	-5.	28.	-20.	-15.	7.	-10.	-15.
467526	59.2547	138.4702	8.	9.	9.	1.64	-5.	-5.	-5.	19.	-20.	-15.	-5.	-10.	-15.
467527	59.2711	138.5053	8.	7.	5.	1.69	-5.	-5.	-5.	40.	-20.	18.	-5.	-10.	-15.
467528	59.2808	138.5128	8.	8.	6.	1.74	-5.	-5.	-5.	28.	-20.	-15.	-5.	-10.	-15.
467533	59.2861	138.5008	7.	19.	-999.	2.58	-5.	-5.	-5.	23.	-20.	-15.	5.	-10.	-15.
467534	59.2850	138.6044	7.	19.	5.	2.78	-5.	-5.	-5.	74.	-20.	41.	5.	-10.	-15.
467535	59.2906	138.5906	7.	40.	3.	2.55	-5.	-5.	-5.	22.	-20.	-15.	-5.	-10.	-15.
467536	59.2833	138.6161	7.	12.	11.	2.28	-5.	-5.	-5.	42.	-20.	25.	-5.	-10.	-15.
467540	59.5728	139.0542	8.	21.	5.	2.38	-5.	-5.	-5.	32.	-20.	17.	-5.	-10.	-15.
467541	59.5808	139.0831	-999.	-999.	8.	2.91	-5.	-5.	-5.	56.	-20.	17.	7.	-10.	-15.
467542	59.5444	139.0564	7.	20.	-999.	4.03	-5.	-5.	-5.	38.	-20.	25.	7.	-10.	-15.
467543	59.5364	139.0581	7.	5.	8.	2.53	-5.	-5.	-5.	55.	-20.	39.	7.	-10.	-15.
467544	59.5175	139.0503	7.	8.	5.	2.33	-5.	-5.	-5.	78.	-20.	54.	-5.	-10.	-15.
467545	59.5117	139.0128	7.	8.	8.	2.35	-5.	-5.	-5.	40.	-20.	39.	5.	-10.	-15.
467546	59.5125	139.0158	7.	15.	8.	2.72	-5.	-5.	-5.	36.	-20.	18.	-5.	-10.	-15.
467547	59.5075	139.0319	7.	19.	8.	2.71	-5.	-5.	-5.	30.	-20.	22.	-5.	-10.	-15.
467551	59.4758	139.1103	7.	47.	-999.	1.43	-5.	-5.	-5.	33.	-20.	15.	-5.	-10.	-15.
467556	59.4053	139.1200	7.	87.	-999.	2.44	-5.	-5.	-5.	35.	-20.	30.	-5.	-10.	-15.
467557	59.2781	138.9586	7.	144.	-999.	.95	-5.	-5.	-5.	21.	-20.	-15.	-5.	-10.	-15.
467559	59.3008	138.8989	8.	11.	-999.	1.88	-5.	-5.	-5.	56.	-20.	42.	-5.	-10.	-15.
467560	59.3383	138.9144	8.	34.	-999.	2.40	-5.	-5.	-5.	48.	-20.	20.	5.	-10.	-15.
467561	59.3158	138.8661	8.	18.	-999.	2.00	-5.	-5.	-5.	31.	-20.	30.	-5.	-10.	-15.
467563	59.3444	138.7767	8.	12.	8.	2.01	-5.	-5.	-5.	75.	-20.	45.	7.	-10.	-15.
467564	59.2906	138.7275	7.	39.	7.	.59	-5.	-5.	-5.	57.	-20.	48.	-5.	-10.	-15.
467565	59.2186	138.6300	8.	24.	-999.	2.02	-5.	-5.	-5.	59.	-20.	36.	9.	-10.	-15.
467567	59.2428	138.8033	7.	60.	10.	1.90	-5.	-5.	-5.	75.	-20.	19.	-5.	-10.	-15.
467570	59.4064	138.8472	6.	13.	-999.	1.71	-5.	-5.	-5.	51.	-20.	32.	7.	-10.	-15.
467571	59.4131	138.8564	7.	31.	6.	1.73	-5.	-5.	-5.	57.	-20.	19.	-5.	-10.	-15.
467572	59.4225	138.8883	7.	21.	-999.	1.79	-5.	-5.	-5.	60.	-20.	29.	-5.	-10.	-15.
467573	59.4136	138.8706	7.	15.	1.	2.79	-5.	-5.	-5.	40.	-20.	27.	5.	-10.	-15.
467575	59.4328	138.8869	7.	47.	-999.	2.06	-5.	-5.	-5.	232.	-20.	35.	10.	-10.	-15.
467577	59.5092	138.9428	7.	14.	5.	2.28	-5.	-5.	-5.	30.	-20.	-15.	-5.	-10.	-15.
467578	59.5075	138.9431	7.	10.	5.	2.38	-5.	-5.	-5.	33.	-20.	19.	5.	-10.	-15.
467579	59.4644	138.8739	7.	51.	7.	1.83	-5.	-5.	-5.	31.	-20.	30.	-5.	-10.	-15.
467580	59.4597	138.8633	7.	70.	5.	2.16	-5.	-5.	-5.	46.	-20.	53.	-5.	-10.	-15.
467581	59.4447	138.8278	8.	22.	5.	2.05	-5.	-5.	-5.	50.	-20.	36.	-5.	-10.	-15.
467582	59.4292	138.8217	7.	19.	9.	1.64	-5.	-5.	-5.	46.	-20.	37.	-5.	-10.	-15.
467583	59.4167	138.8039	7.	22.	6.	2.22	-5.	-5.	-5.	55.	-20.	51.	-5.	-10.	-15.
467584	59.4156	138.8050	7.	18.	6.	1.96	-5.	-5.	-5.	69.	-20.	35.	-5.	-10.	-15.
467585	59.4236	138.8042	7.	37.	1.	2.54	-5.	-5.	-5.	60.	-20.	30.	6.	-10.	-15.

YAKUTAI STEAM SEDIMENT

PG. TWO - SAMPLE SET 4

SAMPLE NO.	BE PPM	LI PPM	AL PPM	AU PPM	BA PPM	CA PPM	CE PPM	CL PPM	CO PPM	CR PPM	CS PPM	UY PPM	EU PPM	FE PPM	HF PPM	K PPM	LA PPM
467515	-999.	-999.	45600.	-0.	-206.	99220.	107.	-148.	14.0	109.	-1.9	6.	1.1	78310.	17.1	6904.	50.
467516	-999.	-999.	69290.	-0.	547.	11430.	42.	-141.	14.5	62.	-2.1	4.	1.1	33160.	3.9	14020.	23.
467517	-999.	-999.	74970.	-0.	587.	12670.	65.	-171.	16.5	114.	-1.9	5.	1.6	55520.	14.7	13170.	33.
467518	-999.	-999.	72100.	-0.	360.	17200.	57.	-128.	13.4	60.	2.1	4.	1.3	36300.	5.5	9407.	33.
467519	-999.	-999.	72370.	-0.	635.	16640.	48.	-123.	11.2	71.	2.0	4.	1.3	60180.	6.6	11590.	27.
467520	-999.	-999.	61990.	-0.	431.	26810.	38.	-161.	9.5	67.	-2.5	5.	.9	29590.	3.0	-5073.	-10.
467521	-999.	-999.	72820.	-0.	536.	20380.	53.	-166.	19.2	58.	-1.8	4.	1.3	36490.	5.5	10940.	27.
467522	-999.	-999.	70140.	-0.	316.	23930.	76.	-150.	18.4	88.	-2.0	5.	1.3	54120.	10.5	12050.	36.
467523	-999.	-999.	65710.	-0.	322.	20650.	33.	-129.	5.2	36.	-1.2	3.	1.0	27190.	5.9	6753.	21.
467524	-999.	-999.	69920.	-0.	405.	22650.	29.	-142.	5.3	22.	-1.3	3.	.8	18850.	6.7	-4371.	15.
467525	-999.	-999.	79290.	-0.	318.	27000.	34.	-164.	8.5	31.	-1.2	3.	1.2	27440.	6.6	8286.	22.
467526	-999.	-999.	66770.	-0.	276.	23340.	31.	-134.	7.2	32.	-1.4	2.	1.1	23560.	5.9	5445.	15.
467527	-999.	-999.	75550.	-0.	587.	24190.	34.	-140.	9.2	53.	-1.5	3.	1.2	37520.	4.8	7689.	16.
467528	-999.	-999.	67640.	-0.	443.	22480.	34.	-134.	8.9	24.	-1.4	3.	.9	22550.	5.4	13060.	17.
467533	-999.	-999.	64110.	-0.	557.	15590.	44.	-163.	1.7	65.	3.0	4.	1.3	26880.	5.6	9729.	28.
467534	-999.	-999.	88560.	-0.	608.	11550.	63.	-125.	21.6	100.	4.5	5.	1.4	53250.	5.0	18520.	37.
467535	-999.	-999.	71800.	-0.	715.	10270.	62.	-130.	3.5	57.	1.7	4.	1.2	30730.	5.3	11920.	25.
467536	-999.	-999.	72290.	-0.	413.	6189.	43.	-126.	13.1	90.	4.0	3.	.8	34400.	4.9	13040.	21.
467540	-999.	-999.	72790.	-0.	813.	13830.	52.	-117.	8.5	45.	3.4	3.	1.0	25490.	4.5	16910.	28.
467541	-999.	-999.	86580.	-0.	908.	12400.	66.	-162.	17.6	69.	4.2	4.	1.5	40960.	6.2	21920.	36.
467542	-999.	-999.	74460.	-0.	635.	15220.	46.	-171.	10.3	63.	6.4	4.	1.4	30000.	4.0	16530.	-13.
467543	-999.	-999.	91760.	-0.	846.	10400.	39.	-127.	19.5	138.	3.7	5.	1.4	54600.	5.6	24070.	25.
467544	-999.	-999.	80620.	-0.	751.	7356.	37.	-126.	19.9	128.	3.8	5.	1.1	40740.	4.6	16980.	20.
467545	-999.	-999.	86820.	-0.	916.	11080.	44.	-158.	20.9	144.	4.5	4.	1.4	54460.	4.7	15870.	27.
467546	-999.	-999.	62780.	-0.	1026.	8230.	71.	-118.	9.9	62.	3.3	5.	1.4	37370.	5.4	22540.	35.
467547	-999.	-999.	83730.	-0.	740.	11730.	69.	-124.	9.4	67.	2.8	4.	1.5	36470.	6.3	16430.	33.
467551	-999.	-999.	49460.	-0.	327.	15870.	29.	-195.	-2.7	56.	-2.4	3.	.9	29790.	2.8	-6292.	-13.
467556	-999.	-999.	53780.	-0.	-336.	35720.	66.	-332.	22.7	139.	-1.8	4.	1.5	67060.	10.5	-12000.	38.
467557	-999.	-999.	16890.	-0.	-291.	25740.	-10.	475.	-1	-20.	-3.0	-3.	-6	17630.	-2.3	-4374.	-17.
467559	-999.	-999.	69330.	-0.	552.	8982.	28.	-180.	14.6	59.	-3.2	5.	1.1	75860.	-1.9	-7367.	-10.
467560	-999.	-999.	85440.	-0.	782.	20200.	57.	-163.	14.3	85.	3.6	5.	1.3	40260.	5.2	14730.	24.
467561	-999.	-999.	72750.	-0.	327.	35000.	49.	-145.	15.0	89.	-2.3	4.	1.4	50700.	6.9	8778.	25.
467563	-999.	-999.	72600.	-0.	604.	2592.	32.	-121.	17.3	88.	2.6	3.	1.1	45110.	3.3	14610.	26.
467564	-999.	-999.	-14160.	-0.	-1289.	-27260.	-7.	-1240.	101.7	-16.	-2.9	-8.	.4	160900.	-1.8	-47560.	-13.
467565	-999.	-999.	78360.	-0.	498.	15610.	56.	-142.	18.1	73.	-2.0	4.	1.4	40480.	4.6	7679.	31.
467567	-999.	-999.	63770.	-0.	-243.	17690.	31.	-152.	18.3	68.	-2.2	3.	.9	53000.	3.7	7982.	20.
467570	-999.	-999.	71260.	-0.	928.	15260.	28.	-115.	15.7	94.	3.3	3.	1.3	48680.	3.6	13650.	17.
467571	-999.	-999.	73730.	-0.	605.	15550.	25.	-146.	17.5	62.	2.9	4.	.9	37780.	3.7	12460.	13.
467572	-999.	-999.	75500.	-0.	794.	14560.	37.	-134.	17.0	64.	2.0	4.	1.2	48850.	3.9	12240.	20.
467573	-999.	-999.	77750.	-0.	485.	16070.	62.	-140.	13.2	64.	6.4	4.	1.4	50600.	4.9	12150.	37.
467575	-999.	-999.	61770.	-0.	515.	33190.	41.	-154.	18.5	83.	-2.7	4.	1.1	36340.	3.0	-5682.	-6.
467577	-999.	-999.	72590.	-0.	509.	13540.	53.	-120.	9.4	64.	-1.5	3.	1.2	31280.	7.4	13660.	25.
467578	-999.	-999.	72970.	-0.	650.	18640.	55.	-116.	9.1	91.	2.1	4.	1.4	36590.	6.4	14730.	35.
467579	-999.	-999.	62920.	-0.	422.	40110.	35.	-128.	15.4	94.	-1.9	3.	1.1	34930.	5.7	5465.	23.
467580	-999.	-999.	72660.	-0.	473.	44630.	55.	-157.	21.5	121.	-1.8	5.	1.6	59780.	4.4	9001.	28.
467581	-999.	-999.	81110.	-0.	373.	11020.	44.	-122.	17.6	89.	2.0	4.	1.2	45760.	4.1	16540.	14.
467582	-999.	-999.	81340.	-0.	614.	13370.	30.	-124.	16.8	60.	2.5	4.	1.2	54370.	4.5	13150.	16.
467583	-999.	-999.	80460.	-0.	772.	10390.	30.	-117.	17.9	82.	-1.9	4.	.9	40400.	4.1	13380.	23.
467584	-999.	-999.	85250.	-0.	614.	14030.	43.	-134.	19.6	120.	2.2	5.	1.4	55340.	6.6	13990.	24.
467585	-999.	-999.	90480.	-0.	747.	10040.	55.	-118.	13.9	93.	2.7	5.	1.2	44970.	5.6	19600.	28.

YAKUTAI STREAM SEDIMENT

PG. THREE - SAMPLE SET 4

SAMPLE NO.	LU PPM	MG PPM	MN PPM	NA PPM	RP PPM	SB PPM	SC PPM	SM PPM	SR PPM	TA PPM	TB PPM	TH PPM	TJ PPM	V PPM	YB PPM	ZN PPM	U/TH RATIO
467519	.6	9546.	127.	13670.	-45.	-3.	18.8	7.3	-414.	-1.	-1.	15.0	12210.	211.	5.7	-44.	5.025
467516	.3	10400.	753.	19030.	-49.	-3.	14.4	3.1	-361.	-1.	-1.	5.2	4520.	118.	-2.3	-61.	2.451
467517	.4	13600.	1205.	21630.	75.	-3.	19.5	5.8	-369.	-1.	-1.	7.7	4369.	141.	4.9	61.	2.653
467518	.3	9383.	744.	22020.	-39.	-2.	14.4	4.5	-292.	-1.	-1.	5.6	4542.	109.	3.5	-39.	2.457
467519	.3	10280.	869.	20760.	70.	-2.	15.4	4.3	-291.	-1.	-1.	6.7	2717.	114.	3.3	141.	2.770
467520	.3	12710.	624.	19500.	-56.	-4.	15.0	2.2	-397.	-2.	-1.	3.6	4766.	125.	-2.5	-72.	1.475
467521	.3	10250.	807.	21080.	-41.	-2.	14.1	4.7	-342.	-1.	-1.	5.0	4714.	102.	-1.9	-79.	1.527
467522	.4	9872.	1330.	20670.	-44.	-3.	18.2	6.1	-368.	-1.	-1.	11.1	5082.	139.	4.4	-63.	3.571
467523	.3	6126.	837.	24430.	-25.	-2.	10.1	2.7	-282.	-1.	-1.	4.5	5122.	60.	2.7	-29.	2.618
467524	.7	4170.	724.	27260.	-31.	-2.	6.8	1.6	454.	-1.	-1.	2.8	3563.	49.	2.3	-39.	1.610
467525	.3	5466.	666.	30460.	-28.	-2.	10.0	3.1	470.	-1.	-1.	4.2	3819.	82.	3.4	-22.	2.500
467526	.2	5798.	723.	25760.	-29.	-2.	8.8	2.8	353.	-1.	-1.	4.0	3798.	61.	2.9	-52.	2.439
467527	.2	7302.	802.	27590.	-32.	-2.	13.3	2.4	600.	-1.	-1.	4.7	3829.	94.	-1.4	-36.	2.778
467528	.2	7222.	713.	24630.	-32.	-2.	8.1	1.6	386.	-1.	-1.	3.0	4000.	78.	1.8	-87.	1.724
467533	.2	7191.	428.	16780.	-44.	-3.	14.8	3.4	-320.	-1.	-1.	4.9	5061.	110.	2.9	-50.	1.898
467534	.3	13780.	913.	16360.	27.	-3.	20.9	4.5	-323.	-2.	-1.	6.0	4440.	152.	2.9	47.	2.160
467535	.2	8552.	534.	23230.	62.	-2.	13.6	4.6	316.	-1.	-1.	6.9	4135.	102.	2.5	-42.	2.703
467536	.3	10250.	661.	17080.	-47.	-3.	14.5	2.4	-326.	-1.	-1.	4.4	4644.	130.	-2.1	-54.	1.931
467540	.2	8713.	422.	20390.	-36.	-2.	10.1	3.0	-263.	-1.	-1.	6.1	3545.	91.	2.9	-41.	2.564
467541	.3	10100.	785.	20940.	52.	-2.	14.9	5.3	-332.	-1.	-1.	7.1	4074.	121.	3.9	150.	2.439
467542	.4	12240.	594.	16390.	-66.	-4.	14.0	3.1	-421.	-2.	-1.	6.3	4392.	119.	-2.8	-82.	1.563
467543	.3	16830.	1024.	16470.	67.	-3.	23.3	7.1	-330.	-1.	-1.	6.1	5468.	188.	3.7	159.	2.410
467544	.2	13030.	963.	13620.	-52.	-3.	17.9	2.7	-372.	-1.	-1.	4.6	4833.	166.	-2.4	132.	1.818
467545	.3	13270.	1061.	14900.	-49.	-3.	22.9	4.8	-380.	-2.	-2.	6.2	4794.	182.	3.0	153.	2.639
467546	.2	10790.	553.	20890.	73.	-2.	14.3	4.0	-261.	-1.	-1.	7.8	3946.	108.	2.8	-89.	2.865
467547	.3	9765.	487.	21580.	74.	-2.	14.0	5.5	-229.	-1.	-1.	8.4	3802.	107.	2.5	74.	3.096
467551	.2	6607.	504.	14060.	-60.	-3.	10.3	3.6	-418.	-2.	-1.	3.3	3188.	62.	-2.4	-74.	2.309
467556	.5	13940.	4708.	15750.	-41.	-2.	27.5	6.6	-716.	-1.	-1.	7.5	-1671.	140.	4.4	-45.	3.077
467557	.2	-2434.	236.	3873.	-75.	-4.	5.2	-1.6	-462.	-3.	-2.	-2.2	-1057.	99.	-3.4	-95.	-999.000
467559	.2	12960.	1519.	15370.	-78.	-4.	16.3	2.2	-579.	-2.	-1.	5.6	4464.	134.	-3.2	-92.	2.976
467560	.3	10740.	560.	19690.	-47.	-3.	16.6	4.4	-318.	-1.	-1.	6.0	3973.	150.	2.7	168.	2.500
467561	.3	15590.	875.	22300.	-48.	-3.	19.8	4.4	-340.	-1.	1.	4.0	5463.	144.	-2.2	-51.	2.000
467563	.2	10850.	1070.	14660.	-45.	-3.	18.2	2.0	-345.	-1.	-1.	3.1	5044.	149.	-2.3	-58.	1.543
467564	.2	-20240.	20960.	928.	-102.	-4.	7.1	1.7	-999.	-3.	-1.	-1.7	-6512.	-102.	-3.0	177.	-999.000
467565	.3	11560.	977.	21720.	-45.	-3.	16.6	3.8	-340.	-1.	-1.	4.9	4631.	134.	-2.2	-49.	2.427
467567	.2	11930.	1231.	17480.	-59.	-3.	13.3	2.3	-445.	-2.	-1.	3.6	3883.	121.	2.5	-66.	1.894
467570	.3	12330.	1015.	17130.	-36.	-2.	20.0	3.8	-288.	-1.	1.	3.4	4896.	142.	4.2	-86.	1.988
467571	.2	12500.	1258.	17090.	-51.	-3.	16.0	2.4	-422.	-2.	-1.	3.3	4796.	137.	-2.0	-63.	1.908
467572	.3	12810.	991.	18570.	-34.	-2.	19.6	3.2	-280.	-1.	-1.	4.1	4266.	149.	-1.7	-37.	2.288
467573	.4	8685.	580.	14460.	-64.	-4.	15.4	5.0	-357.	-2.	-1.	6.1	4893.	134.	-2.6	96.	2.188
467575	.3	11910.	1042.	16210.	-61.	-4.	17.0	2.9	-449.	-2.	-1.	5.5	6059.	127.	-2.5	-66.	2.667
467577	.2	6646.	579.	22780.	-33.	-2.	11.6	4.0	-256.	-1.	-1.	6.7	2833.	91.	2.4	-33.	2.941
467578	.2	10010.	653.	21570.	65.	-2.	14.3	4.6	-260.	-1.	-1.	7.6	3962.	110.	2.7	-37.	2.195
467579	.3	13410.	967.	19530.	-41.	-3.	18.3	2.6	-321.	-1.	-1.	3.9	5517.	158.	2.7	-50.	2.132
467580	.4	20420.	1206.	21360.	-40.	-3.	25.8	5.6	-328.	-1.	-1.	6.0	5648.	189.	3.4	-45.	2.778
467581	.3	11190.	855.	17640.	73.	-3.	18.7	3.0	-299.	-1.	1.	4.1	4669.	141.	-1.8	115.	2.000
467582	.3	12230.	1121.	17440.	-36.	-3.	21.5	3.3	463.	-1.	1.	3.3	4609.	146.	3.2	-43.	2.012
467583	.4	12780.	785.	16100.	-45.	-3.	16.3	2.3	-311.	-1.	1.	3.4	4887.	150.	-2.0	-55.	1.531
467584	.3	14480.	981.	18460.	64.	-2.	22.0	4.5	-285.	-1.	-1.	4.6	4226.	170.	3.7	124.	2.347
467585	.3	11600.	689.	18600.	64.	-3.	19.1	4.5	-278.	-1.	-1.	5.9	3926.	152.	2.2	-51.	2.320

YAKUTAT STREAM SEDIMENT

PG. ONE - SAMPLE SET 5

SAMPLE NO.	LAT.	LONG.	PH	COND.	SCINT.	URANIUM PPM	SILVER PPM	BISMUTH PPM	CALCIUM PPM	COPPER PPM	NIOBIMUM PPM	NICKEL PPM	LEAD PPM	TIN PPM	TUNGSTEN PPM
467586	59.4689	138.8147	7.	20.	12.	1.90	-5.	-5.	-5.	46.	-20.	42.	5.	-10.	-15.
467587	59.4900	138.7592	7.	58.	5.	2.32	-5.	-5.	-5.	46.	-20.	22.	5.	-10.	-15.
467589	59.4592	138.6900	7.	56.	8.	2.16	-5.	-5.	-5.	27.	-20.	-15.	-5.	-10.	-15.
467590	59.4633	138.6850	8.	10.	3.	2.44	-5.	-5.	-5.	110.	-20.	21.	-5.	-10.	-15.
467592	59.4769	138.7578	7.	54.	5.	1.81	-5.	-5.	-5.	37.	-20.	38.	-5.	-10.	-15.
467593	59.4581	138.7633	7.	161.	5.	2.01	-5.	-5.	-5.	43.	-20.	28.	-5.	-10.	-15.
467594	59.4581	138.7658	8.	51.	5.	1.96	-5.	-5.	-5.	48.	-20.	33.	-5.	-10.	-15.
467595	59.3708	138.8900	8.	15.	18.	2.38	-5.	-5.	-5.	32.	-20.	22.	9.	-10.	-15.

YAKUTAT STREAM SEDIMENT

PG. TWO - SAMPLE SET 5

SAMPLE NO.	RE PPM	LI PPM	AL PPM	AU PPM	BA PPM	CA PPM	CE PPM	CL PPM	CO PPM	CR PPM	CS PPM	DY PPM	EU PPM	FE PPM	HF PPM	K PPM	LA PPM
467586	-999.	-999.	76710.	-0.	552.	11670.	28.	-117.	13.9	83.	2.7	4.	1.1	45930.	4.3	15400.	17.
467587	-999.	-999.	70060.	-0.	555.	19300.	40.	-128.	13.3	70.	-1.9	4.	1.0	35590.	5.3	13950.	26.
467589	-999.	-999.	66120.	-0.	395.	16600.	67.	-113.	6.3	49.	-1.4	3.	1.2	24290.	9.9	11510.	37.
467590	-999.	-999.	83440.	-0.	987.	15110.	51.	-110.	11.2	66.	2.7	4.	1.4	36950.	5.4	20080.	29.
467592	-999.	-999.	69790.	-0.	261.	66450.	49.	-148.	18.3	117.	-1.6	5.	1.3	55730.	6.8	9747.	26.
467593	-999.	-999.	69100.	-0.	404.	48560.	39.	-127.	17.5	100.	-2.0	4.	1.1	43530.	5.4	8652.	24.
467594	-999.	-999.	65470.	-0.	521.	55530.	51.	-129.	17.0	103.	-1.9	5.	1.2	47110.	5.4	8685.	13.
467595	-999.	-999.	73210.	-0.	723.	9307.	39.	-141.	15.2	60.	3.4	3.	.9	26390.	4.5	14420.	28.

YAKUTAT STREAM SEDIMENT

PG. THREE - SAMPLE SET 5

SAMPLE NO.	LU PPM	PG PPM	MN PPM	NA PPM	RB PPM	SB PPM	SC PPM	SM PPM	SR PPM	TA PPM	TB PPM	TH PPM	TI PPM	V PPM	Y PPM	Z PPM	U/TH RATIO
467586	.3	11960.	793.	19960.	-35.	-2.	18.3	3.8	-276.	-1.	-1.	4.6	4451.	137.	2.6	-39.	2.421
467587	.3	10840.	799.	18320.	-44.	-3.	14.6	2.4	-332.	-1.	-1.	5.3	5565.	131.	2.6	-54.	2.283
467589	.2	7401.	425.	24440.	-29.	-2.	10.2	5.7	-234.	-1.	-1.	7.1	3352.	74.	2.5	-21.	3.289
467590	.3	9191.	539.	19610.	-32.	-2.	13.5	4.3	571.	-1.	-1.	6.8	3371.	105.	1.6	-36.	2.786
467592	.4	18510.	1174.	20670.	-35.	-2.	25.2	5.0	579.	-1.	-1.	4.7	5442.	177.	3.2	-68.	2.597
467592	.4	13950.	856.	20320.	-42.	-3.	19.7	3.2	-296.	-1.	-1.	3.6	4505.	148.	-1.8	-47.	1.792
467594	.3	17100.	912.	20310.	-40.	-3.	21.5	4.3	-305.	-1.	1.	4.5	5410.	152.	3.0	-46.	2.294
467595	.2	66.3.	737.	18950.	-45.	-3.	9.9	2.3	-363.	-1.	-1.	5.2	3483.	99.	-2.0	157.	2.183

Appendix B. Lake Sediment Data

Appendix B. Lake Sediment Data

YAKUTAT LAKE SEDIMENT

PG. ONE - SAMPLE SET 1

SAMPLE NO	L.T.	LONG.	PH	COND.	SCINT.	URANIUM PPM	SILVER PPM	BISMUTH PPM	CADMIUM PPM	COPPER PPM	NIOSBIUM PPM	NICKEL PPM	LEAD PPM	TIN PPM	TUNGSTEN PPM
467301	59.4686	139.6275	8.	15.	-999.	.25	-5.	-5.	-5.	42.	-20.	19.	7.	-10.	-15.
467302	59.4778	139.5969	8.	8.	-999.	.35	-5.	-5.	-5.	28.	-20.	28.	-5.	-10.	-15.
467308	59.4111	139.4753	7.	12.	-999.	1.99	-5.	-5.	-5.	56.	-20.	48.	-5.	-10.	-15.
467311	59.4336	139.2886	7.	100.	-999.	2.01	-5.	-5.	-5.	64.	-20.	56.	-5.	-10.	-15.
467315	59.3500	139.2117	7.	235.	-999.	1.84	-5.	-5.	-5.	30.	-20.	41.	-5.	-10.	-15.
467318	59.3714	139.1342	8.	188.	-999.	2.06	-5.	-5.	-5.	40.	-20.	42.	-5.	-10.	-15.
467323	59.4958	139.1611	8.	8.	-999.	1.33	-5.	-5.	-5.	24.	-20.	-15.	8.	-10.	-15.
467324	59.4894	139.1981	8.	98.	-999.	2.04	-5.	-5.	-5.	55.	-20.	34.	11.	-10.	20.
467332	59.5208	139.7836	9.	35.	-999.	1.99	-5.	-5.	-5.	34.	-20.	30.	-5.	-10.	-15.
467334	59.5389	139.8139	8.	65.	-999.	2.75	-5.	-5.	-5.	52.	-20.	49.	-5.	-10.	-15.
467335	59.5392	139.7483	10.	35.	-999.	1.59	-5.	-5.	-5.	40.	-20.	38.	-5.	-10.	-15.
467336	59.5589	139.7019	9.	11.	-999.	1.83	-5.	-5.	-5.	18.	-20.	31.	-5.	-10.	-15.
467341	59.5978	139.5692	8.	8.	-999.	1.27	-5.	-5.	-5.	34.	-20.	40.	-5.	-10.	-15.
467342	59.5850	139.6200	8.	17.	-999.	1.05	-5.	-5.	-5.	30.	-20.	32.	-5.	-10.	-15.
467343	59.6033	139.6817	7.	13.	-999.	1.66	-5.	-5.	-5.	47.	-20.	48.	-5.	-10.	-15.
467344	59.5894	139.7236	7.	79.	-999.	2.96	-5.	-5.	-5.	19.	-20.	28.	-5.	-10.	-15.
467345	59.5958	139.7361	9.	220.	-999.	3.80	-5.	-5.	-5.	27.	-20.	34.	-5.	-10.	-15.
467347	59.6300	139.6558	8.	32.	-999.	.90	-5.	-5.	-5.	57.	-20.	34.	-5.	-10.	-15.
467348	59.6303	139.5667	8.	8.	-999.	1.53	-5.	-5.	-5.	37.	-20.	33.	-5.	-10.	-15.
467349	59.6353	139.5383	8.	8.	-999.	1.18	-5.	-5.	-5.	52.	-20.	60.	-5.	-10.	-15.
467351	59.6639	139.5294	8.	8.	-999.	.88	-5.	-5.	-5.	46.	-20.	54.	-5.	-10.	-15.
467353	59.7250	139.5692	7.	12.	-999.	1.09	-5.	-5.	-5.	43.	-20.	30.	-5.	-10.	-15.
467354	59.7206	139.5283	7.	12.	-999.	1.28	-5.	-5.	-5.	58.	-20.	38.	-5.	-10.	-15.
467358	59.6683	139.4981	8.	8.	-999.	1.33	-5.	-5.	-5.	71.	-20.	57.	-5.	-10.	-15.
467359	59.6608	139.4658	7.	9.	-999.	1.83	-5.	-5.	-5.	62.	-20.	25.	-5.	-10.	-15.
467360	59.6470	139.4964	7.	8.	-999.	2.18	-5.	-5.	-5.	72.	-20.	56.	8.	-10.	-15.
467362	59.6011	139.4128	8.	11.	-999.	1.44	-5.	-5.	-5.	38.	-20.	-15.	-5.	-10.	-15.
467363	59.6225	139.3967	7.	7.	-999.	1.57	-5.	-5.	-5.	20.	-20.	28.	-5.	-10.	-15.
467364	59.6344	139.4158	7.	7.	-999.	1.63	-5.	-5.	-5.	28.	-20.	36.	-5.	-10.	-15.
467365	59.6375	139.3817	7.	101.	-999.	1.51	-5.	-5.	-5.	38.	-20.	34.	-5.	-10.	-15.
467366	59.6642	139.3806	7.	22.	-999.	1.52	-5.	-5.	-5.	30.	-20.	50.	-5.	-10.	-15.
467368	59.6783	139.4519	8.	6.	-999.	.51	-5.	-5.	-5.	49.	-20.	34.	8.	-10.	-15.
467369	59.6608	139.3428	7.	71.	-999.	2.35	-5.	-5.	-5.	66.	-20.	42.	6.	-10.	-15.
467370	59.6486	139.3058	8.	7.	-999.	1.84	-5.	-5.	-5.	19.	-20.	-15.	-5.	-10.	-15.
467371	59.6636	139.3256	8.	14.	-999.	1.57	-5.	-5.	-5.	16.	-20.	-15.	-5.	-10.	-15.
467375	59.7436	139.3103	8.	27.	-999.	1.75	-5.	-5.	-5.	18.	-20.	22.	-5.	-10.	-15.
467380	59.6569	139.2433	8.	57.	-999.	1.60	-5.	-5.	-5.	53.	-20.	23.	-5.	-10.	-15.
467381	59.6533	139.2508	8.	34.	-999.	1.92	-5.	-5.	-5.	47.	-20.	40.	10.	-10.	-15.
467385	59.6439	139.2331	8.	29.	-999.	1.78	-5.	-5.	-5.	64.	-20.	34.	10.	-10.	-15.
467386	59.5911	139.1744	8.	25.	-999.	2.18	-5.	-5.	-5.	46.	-20.	45.	8.	-10.	-15.
467389	59.5608	139.1811	8.	5.	-999.	1.26	-5.	-5.	-5.	23.	-20.	21.	-5.	-10.	-15.
467390	59.5278	139.1603	8.	19.	-999.	2.13	-5.	-5.	-5.	35.	-20.	52.	-5.	-10.	-15.
467391	59.5333	139.1625	7.	37.	-999.	1.92	-5.	-5.	-5.	26.	-20.	29.	9.	-10.	-15.
467392	59.5733	139.2272	8.	9.	-999.	1.52	-5.	-5.	-5.	69.	-20.	42.	5.	-10.	-15.
467419	59.8531	139.6233	8.	167.	-999.	2.09	-5.	-5.	-5.	98.	-20.	31.	-5.	-10.	-15.
467424	59.7542	139.5442	8.	94.	-999.	2.35	-5.	-5.	-5.	62.	-20.	49.	11.	-10.	-15.
467431	59.9778	139.2789	8.	186.	-999.	.90	-5.	-5.	-5.	96.	-20.	90.	-5.	-10.	-15.
467432	59.9889	139.3578	8.	29.	-999.	.43	-5.	-5.	-5.	203.	-20.	85.	-5.	-10.	-15.
467433	59.9625	139.3269	9.	8.	-999.	1.42	-5.	-5.	-5.	66.	-20.	34.	-5.	-10.	-15.
467454	59.7869	138.9647	8.	42.	-999.	6.64	-5.	-5.	-5.	27.	-20.	17.	-5.	-10.	-15.

YAKUTAT LAKE SEDIMENT.

PG. TWO - SAMPLE SET 1

SAMPLE NO.	BE PPM	LI PPM	AL PPM	AU PPM	BA PPM	CA PPM	CE PPM	CL PPM	CO PPM	CR PPM	CS PPM	DY PPM	EU PPM	FE PPM	HF PPM	K PPM	LA PPM
467301	-999.	-999.	12120.	-0.	-570.	-3862.	-24.	486.	-7.6	-41.	-6.0	-5.	-1.4	8924.	-4.8	-6801.	-44.
467303	-999.	-999.	16690.	-0.	-452.	-2782.	-17.	652.	-2.	-31.	-4.6	-4.	-1.0	9307.	-3.5	-5760.	-26.
467308	-999.	-999.	76380.	-0.	589.	33960.	27.	-167.	11.5	67.	-2.0	5.	.9	34150.	3.0	10590.	-5.
467311	-999.	-999.	65530.	-0.	500.	29280.	38.	390.	23.5	110.	-3.5	3.	1.4	54650.	-2.1	15610.	-11.
467315	-999.	-999.	61670.	-0.	-199.	53720.	59.	-137.	21.4	101.	-2.3	4.	1.3	57490.	6.8	-4876.	28.
467318	-999.	-999.	64550.	-0.	539.	38680.	46.	-148.	18.6	108.	-2.1	4.	1.3	49700.	5.0	12160.	25.
467323	-999.	-999.	54090.	-0.	663.	9864.	37.	-151.	4.1	77.	-1.9	2.	1.1	25120.	6.0	11600.	25.
467324	-999.	-999.	72700.	-0.	682.	23440.	23.	-204.	10.8	56.	-2.0	4.	.8	27560.	3.0	-7814.	17.
467332	-999.	-999.	61250.	-0.	-218.	31580.	40.	3949.	17.0	104.	-2.5	3.	1.3	44880.	4.5	10230.	21.
467334	-999.	-999.	84060.	-0.	504.	32280.	36.	9581.	15.9	91.	-2.9	4.	.9	44230.	3.1	-7207.	-10.
467335	-999.	-999.	69920.	-0.	-327.	36130.	35.	314.	13.9	97.	-2.5	4.	1.2	30660.	3.5	17700.	-11.
467336	-999.	-999.	73430.	-0.	374.	41070.	54.	-162.	16.6	106.	-2.2	4.	1.4	42670.	7.4	-5196.	29.
467341	-999.	-999.	61530.	-0.	-298.	30140.	18.	-188.	4.1	63.	-2.5	5.	.6	26710.	2.9	-6298.	-7.
467342	-999.	-999.	35440.	-0.	-400.	20230.	9.	-197.	9.0	66.	-2.9	-3.	-.5	17250.	-2.0	10300.	-13.
467343	-999.	-999.	79730.	-0.	566.	34310.	38.	-225.	16.3	140.	-2.5	4.	1.1	47470.	3.4	16210.	25.
467344	-999.	-999.	65400.	-0.	-224.	42470.	51.	4262.	16.2	114.	-2.5	4.	1.2	46130.	7.5	-5693.	22.
467345	-999.	-999.	65100.	-0.	415.	30330.	20.	267.	8.0	66.	-2.1	4.	.7	25590.	2.0	9428.	-6.
467347	-999.	-999.	39890.	-0.	-422.	29390.	19.	531.	5.2	118.	-3.2	4.	.6	28840.	2.2	-8826.	-15.
467348	-999.	-999.	70950.	-0.	-257.	33740.	36.	-178.	9.9	81.	-2.7	4.	.9	33400.	4.6	10420.	19.
467349	-999.	-999.	53770.	-0.	-417.	30160.	-10.	-214.	16.3	118.	-3.7	5.	.8	37970.	-2.4	-7455.	-14.
467351	-999.	-999.	54860.	-0.	-301.	34680.	-12.	-174.	21.8	118.	-4.0	3.	.7	42100.	-2.6	-6391.	-11.
467353	-999.	-999.	64880.	-0.	214.	34950.	27.	-135.	18.3	79.	-2.3	3.	.8	41500.	3.0	-4245.	-5.
467354	-999.	-999.	53460.	-0.	480.	27940.	18.	338.	4.8	100.	-3.1	3.	.7	29100.	3.2	-5779.	-7.
467358	-999.	-999.	52930.	-0.	338.	33230.	27.	324.	8.0	127.	-3.4	4.	.7	39500.	-2.1	-6338.	-9.
467359	-999.	-999.	56430.	-0.	-328.	12500.	-14.	-165.	8.0	56.	-4.1	3.	1.3	21000.	-3.0	-5939.	-16.
467360	-999.	-999.	94230.	-0.	690.	16410.	37.	-164.	16.1	127.	3.6	5.	1.0	55400.	3.6	21950.	17.
467362	-999.	-999.	63620.	-0.	403.	30830.	27.	-125.	10.9	97.	-1.6	4.	1.1	34400.	5.0	10140.	21.
467363	-999.	-999.	56820.	-0.	372.	24690.	26.	-155.	10.0	71.	-2.5	3.	.8	27100.	4.2	7073.	-8.
467364	-999.	-999.	71220.	-0.	562.	19700.	33.	-188.	6.3	104.	-2.3	4.	1.2	34100.	4.6	8740.	17.
467365	-999.	-999.	68610.	-0.	503.	29400.	34.	-128.	14.4	91.	-1.9	3.	1.1	42400.	4.1	10520.	10.
467366	-999.	-999.	61760.	-0.	383.	26190.	23.	-161.	8.6	120.	-3.1	4.	1.1	40800.	2.9	-5890.	14.
467368	-999.	-999.	21870.	-0.	-462.	-4610.	-15.	-251.	-2	71.	-4.2	-4.	-.9	15000.	-3.1	-8370.	-21.
467369	-999.	-999.	82300.	-0.	1049.	8548.	52.	-153.	24.4	110.	4.6	5.	1.4	44100.	4.7	12970.	21.
467370	-999.	-999.	61450.	-0.	700.	17180.	51.	-123.	2.7	57.	-1.3	3.	1.1	19100.	8.5	11510.	23.
467371	-999.	-999.	55480.	-0.	536.	13620.	40.	-122.	6.2	39.	-1.4	2.	.9	16200.	5.9	11490.	25.
467375	-999.	-999.	59560.	-0.	528.	22380.	36.	-146.	9.6	58.	-2.1	3.	.9	25100.	4.7	5491.	21.
467380	-999.	-999.	63800.	-0.	480.	20920.	43.	-151.	8.3	81.	-1.6	4.	1.3	31100.	5.7	-4525.	22.
467381	-999.	-999.	69810.	-0.	404.	20010.	53.	-137.	12.9	77.	2.2	4.	1.3	38100.	7.1	10630.	24.
467385	-999.	-999.	66750.	-0.	585.	17010.	49.	-152.	16.8	89.	-2.3	4.	1.3	32500.	5.0	9956.	21.
467386	-999.	-999.	81420.	-0.	654.	8353.	29.	-128.	12.6	125.	3.6	3.	.9	47100.	3.8	12730.	15.
467389	-999.	-999.	57590.	-0.	-207.	17740.	33.	-168.	5.6	67.	-2.6	3.	1.3	22400.	4.1	11680.	13.
467390	-999.	-999.	72040.	-0.	610.	19420.	39.	-141.	16.2	102.	2.4	5.	1.4	37300.	4.8	13130.	20.
467391	-999.	-999.	68480.	-0.	511.	8545.	38.	-131.	9.8	64.	2.5	2.	.8	31300.	4.5	10910.	21.
467392	-999.	-999.	66630.	-0.	397.	28080.	52.	-146.	12.7	87.	-1.5	5.	1.3	36500.	7.1	7828.	24.
467419	-999.	-999.	69830.	-0.	447.	35890.	41.	-163.	14.7	94.	-2.0	4.	1.2	41300.	4.2	6975.	24.
467424	-999.	-999.	72810.	-0.	445.	24740.	42.	-146.	20.3	81.	-2.4	4.	1.1	43400.	3.9	15220.	25.
467431	-999.	-999.	71510.	-0.	-175.	64230.	19.	-160.	38.7	194.	-2.1	5.	1.0	77700.	2.3	-5622.	9.
467432	-999.	-999.	6450.	-0.	-203.	71270.	31.	-149.	52.3	211.	-3.3	5.	.7	92700.	-1.7	-5557.	-7.
467433	-999.	-999.	73850.	-0.	247.	57790.	23.	-141.	28.1	130.	-2.4	5.	1.0	67100.	3.8	-5120.	10.
467454	-999.	-999.	72110.	-0.	727.	26160.	192.	-156.	8.6	57.	1.6	13.	1.5	39240.	32.4	17220.	103.

YAKUTAT LAKE SEDIMENT

PG. THREE - SAMPLE SET 1

SAMPLE NO.	LU PPM	MG PPM	MM PPM	NA PPM	RB PPM	SB PPM	SC PPM	SH PPM	SR PPM	TA PPM	TB PPM	TH PPM	TI PPM	V PPM	YB PPM	ZN PPM	U/TH RATIO
467301	-.5	-3866.	274.	3224.	-158.	-8.	3.4	-3.1	-698.	-6.	-3.	-4.4	-1848.	38.	-7.2	-229.	-999.000
467303	-.3	-3260.	177.	4026.	-116.	-6.	4.5	-2.3	-530.	-4.	-2.	-3.3	-1394.	29.	-5.2	-142.	-999.000
467308	.3	19590.	859.	20870.	-40.	-3.	14.9	2.0	-342.	-1.	-1.	3.2	5590.	173.	-1.8	-54.	1.608
467311	.2	19330.	770.	16930.	-76.	-5.	22.2	4.3	-454.	-3.	-2.	4.3	4399.	152.	4.5	-94.	2.141
467315	.4	15930.	1116.	17380.	-48.	-3.	25.0	4.5	-375.	-2.	-1.	5.3	6213.	155.	3.3	-54.	2.882
467318	.3	16370.	1194.	18960.	-47.	-3.	21.4	4.4	-388.	-1.	1.	5.6	5295.	160.	3.0	80.	2.717
467323	.1	6134.	407.	22000.	-41.	-3.	9.1	2.3	-343.	-2.	-1.	4.4	2582.	66.	-2.5	-53.	3.311
467324	.2	11750.	1680.	19010.	-43.	-3.	12.6	2.0	-487.	-1.	-1.	2.6	3999.	130.	-2.1	-57.	1.274
467332	.4	14110.	827.	22070.	-54.	-3.	21.8	3.6	-291.	-2.	-1.	4.3	4593.	145.	3.1	-56.	2.160
467334	.2	17970.	848.	25700.	-68.	-4.	18.0	2.3	-547.	-2.	-1.	4.0	4605.	160.	-2.9	-89.	1.456
467335	.2	15170.	771.	16880.	-52.	-3.	16.4	3.4	-510.	-2.	-1.	-1.5	5046.	127.	-2.3	162.	-999.000
467336	.3	18120.	921.	26880.	-47.	-3.	19.6	4.1	-378.	-2.	-1.	3.6	5442.	136.	2.0	83.	1.969
467341	-.1	18850.	826.	19330.	-54.	-3.	15.1	1.0	-479.	-2.	-1.	-1.6	6214.	153.	-2.5	-62.	-999.000
467342	-.2	8674.	512.	13800.	-70.	-4.	10.4	-1.1	-549.	-3.	-1.	-2.0	2745.	88.	-3.1	157.	-999.000
467343	.3	19160.	925.	25210.	-57.	-3.	23.0	4.1	-468.	-2.	-1.	5.6	5009.	157.	2.6	-72.	3.378
467344	.4	15400.	1054.	25160.	-50.	-3.	23.4	4.0	-410.	-2.	-1.	3.4	5631.	168.	-2.2	-70.	1.148
467345	-.1	17850.	743.	21250.	-41.	-3.	13.5	1.9	-409.	-2.	-1.	2.7	4926.	143.	-2.1	127.	.711
467347	.2	12950.	827.	16580.	-72.	-4.	19.6	3.3	-621.	-3.	-1.	2.2	3149.	125.	-3.0	-93.	2.445
467348	.3	11650.	779.	23040.	-56.	-4.	19.4	3.0	-430.	-2.	-1.	3.6	4099.	132.	-2.7	66.	1.353
467349	-.2	17860.	873.	16200.	-86.	-5.	20.1	-1.3	-625.	-3.	-2.	-2.3	4251.	153.	-3.8	303.	-999.000
467351	-.2	18830.	881.	13040.	-93.	-4.	22.9	1.5	-514.	-3.	-2.	-2.5	5275.	152.	-3.6	-125.	-999.000
467353	.2	15040.	616.	20040.	-49.	-2.	17.6	-1.5	-312.	-1.	-1.	1.6	2917.	136.	-1.8	-44.	1.468
467354	.2	12420.	602.	15320.	-65.	-3.	17.8	1.8	-425.	-3.	-1.	2.3	3443.	110.	-2.5	-83.	1.795
467358	.4	15750.	771.	13350.	-73.	-4.	21.3	1.6	-464.	-3.	-2.	2.6	4489.	156.	-3.0	-67.	1.953
467359	-.3	9443.	353.	9351.	-102.	-5.	12.6	-1.3	-472.	-4.	-2.	-2.9	4154.	127.	-3.9	-136.	-999.000
467360	.3	17670.	810.	13340.	84.	-3.	25.5	3.7	-422.	-3.	-1.	5.5	5376.	208.	-2.4	178.	2.525
467362	.2	10900.	812.	22430.	-31.	-2.	19.6	3.2	-279.	-1.	-1.	3.8	4237.	124.	2.5	-38.	2.639
467363	.3	11590.	614.	19610.	-56.	-3.	15.0	-2.2	-383.	-2.	-1.	3.0	3877.	115.	-2.2	-75.	1.912
467364	.2	11530.	558.	22280.	-54.	-2.	16.8	3.0	-374.	-2.	-1.	3.9	4252.	137.	-1.9	-75.	2.392
467365	.2	11520.	852.	21210.	-38.	-2.	19.7	2.8	-289.	-1.	-1.	4.2	3704.	149.	2.6	87.	2.776
467366	-.2	18710.	732.	14410.	-63.	-3.	21.4	2.3	-425.	-2.	-1.	3.6	6184.	156.	-2.6	-85.	2.370
467368	-.3	7470.	499.	4957.	-110.	-4.	8.1	-1.5	-646.	-5.	-2.	-3.0	-1642.	62.	-4.1	-158.	-999.000
467369	.3	11310.	1160.	18030.	-53.	-3.	19.0	3.7	-404.	-2.	-1.	5.1	3899.	145.	3.8	-125.	2.169
467370	.2	7748.	382.	27660.	-26.	-1.	10.4	3.4	355.	-1.	-1.	4.9	3092.	79.	2.5	-28.	2.660
467371	.1	4624.	372.	24780.	-32.	-2.	8.0	1.9	-259.	-1.	-1.	4.6	2815.	62.	1.3	-40.	2.933
467375	.2	8205.	530.	23020.	-47.	-2.	12.5	2.1	-334.	-2.	-1.	3.6	3417.	88.	2.9	-59.	2.058
467380	.2	9346.	554.	24240.	-34.	-2.	14.8	3.8	-273.	-1.	-1.	4.7	3992.	101.	2.7	-76.	2.941
467381	.3	9949.	865.	21280.	-41.	-2.	16.1	3.4	-321.	-1.	-1.	4.6	3719.	121.	-1.6	-78.	2.398
467385	.2	8319.	682.	22410.	-48.	-2.	15.1	-4.3	-349.	-1.	-1.	4.8	3621.	123.	-2.0	-71.	2.695
467386	.3	13120.	1056.	15360.	-43.	-2.	18.0	2.7	-351.	-1.	-1.	5.0	5181.	165.	-1.8	-51.	2.294
467389	-.1	8811.	432.	21770.	-56.	-3.	13.0	2.1	-361.	-2.	-1.	3.3	3383.	95.	-2.4	-71.	2.618
467390	.2	13880.	886.	18690.	-43.	-2.	19.1	3.4	-349.	-2.	1.	4.3	5057.	148.	2.8	-53.	2.020
467391	.2	7633.	485.	20350.	-44.	-2.	11.2	1.7	-303.	-1.	-1.	3.6	4232.	113.	1.9	142.	1.876
467392	.3	11170.	837.	23830.	-32.	-2.	19.1	4.4	-282.	-1.	-1.	5.4	5147.	124.	2.8	54.	3.559
467419	.3	13840.	774.	20760.	-42.	-2.	19.6	4.3	-334.	-1.	-1.	4.7	4579.	130.	-1.6	-119.	2.247
467424	.2	11680.	978.	19300.	-50.	-3.	19.8	4.1	-361.	-1.	-1.	5.9	4904.	152.	-2.3	-57.	2.513
467431	.4	25080.	1590.	18906.	-43.	-2.	43.6	3.3	-347.	-1.	-1.	-1.1	4062.	239.	3.7	-49.	-999.000
467432	.4	34390.	1581.	15730.	-69.	-4.	52.4	2.4	-407.	-2.	-1.	-1.9	4908.	302.	4.8	-77.	-999.000
467433	.3	24790.	1309.	18610.	-44.	-3.	37.2	2.5	-364.	-2.	-1.	3.0	5033.	194.	3.3	-58.	2.114
467454	.8	5607.	1396.	22820.	-33.	-2.	22.4	21.1	-327.	-1.	3.	34.1	3420.	71.	4.7	-39.	5.128

YAKUTAT LAKE SEDIMENT

PG. ONE - SAMPLE SET 2

SAMPLE NO.	LAT.	LONG.	PH	COND.	SCINT.	URANIUM PPM	SILVER PPM	BISMUTH PPM	CADMIUM PPM	COPPER PPM	NIORUM PPM	NICKEL PPM	LEAD PPM	TIN PPM	TUNGSTEN PPM
467457	59.8258	139.0522	8.	40.	9.	4.10	-5.	-5.	-5.	23.	-20.	-15.	10.	-10.	-15.
467471	59.5447	139.3378	8.	167.	-999.	1.40	-5.	-5.	-5.	40.	-20.	27.	-5.	-10.	-15.
467488	59.1986	138.2422	9.	9.	-999.	2.43	-5.	-5.	-5.	34.	-20.	19.	6.	-10.	-15.
467495	59.1597	138.3611	8.	202.	-999.	1.99	-5.	-5.	-5.	36.	-20.	27.	-5.	-10.	-15.
467496	59.1325	138.3519	8.	188.	-999.	1.51	-5.	-5.	-5.	36.	-20.	-15.	-5.	-10.	-15.
467497	59.1986	138.3594	8.	22.	-999.	2.04	-5.	-5.	-5.	29.	-20.	31.	6.	-10.	-15.
467498	59.2025	138.3281	8.	9.	-999.	1.28	-5.	-5.	-5.	26.	-20.	19.	-5.	-10.	-15.
467499	59.1953	138.3142	8.	12.	-999.	1.81	-5.	-5.	-5.	26.	-20.	23.	-5.	-10.	-15.
467501	59.2233	138.3358	8.	10.	-999.	1.64	-999.	-999.	-999.	-999.	-999.	-999.	-999.	-999.	-999.
467506	59.4256	138.3408	8.	18.	-999.	2.65	-5.	-5.	-5.	41.	-20.	23.	-5.	-10.	-15.
467507	59.4119	138.3067	8.	48.	-999.	2.49	-5.	-5.	-5.	33.	-20.	15.	-5.	-10.	-15.
467511	59.4914	138.4347	8.	6.	-999.	.55	-5.	-5.	-5.	100.	-20.	70.	-5.	-10.	-15.
467529	59.2511	138.4708	8.	9.	-999.	2.40	-5.	-5.	-5.	50.	-20.	28.	-5.	-10.	-15.
467530	59.2772	138.5200	8.	5.	-999.	2.56	-5.	-5.	-5.	26.	-20.	20.	-5.	-10.	-15.
467531	59.2753	138.5442	7.	19.	-999.	2.40	-5.	-5.	-5.	60.	-20.	36.	-5.	-10.	-15.
467532	59.2797	138.5664	8.	7.	-999.	2.35	-5.	-5.	-5.	21.	-20.	19.	-5.	-10.	-15.
467537	59.2961	138.6897	8.	19.	-999.	2.32	-5.	-5.	-5.	55.	-20.	44.	-5.	-10.	-15.
467538	59.3044	138.7289	8.	19.	-999.	2.00	-5.	-5.	-5.	41.	-20.	29.	-5.	-10.	-15.
467539	59.3264	138.7697	8.	27.	-999.	1.13	-999.	-999.	-999.	-999.	-999.	-999.	-999.	-999.	-999.
467548	59.4900	139.0319	7.	11.	-999.	1.99	-5.	-5.	-5.	15.	-20.	17.	-5.	-10.	-15.
467549	59.5011	139.0558	7.	10.	-999.	1.57	-5.	-5.	-5.	19.	-20.	22.	-5.	-10.	-15.
467550	59.4869	139.0822	7.	12.	-999.	2.70	-5.	-5.	-5.	39.	-20.	22.	-5.	-10.	-15.
467552	59.4483	139.0650	7.	10.	-999.	1.14	-5.	-5.	-5.	25.	-20.	-15.	-5.	-10.	-15.
467553	59.4564	138.9678	7.	20.	-999.	2.19	-5.	-5.	-5.	44.	-20.	27.	6.	-10.	-15.
467554	59.4792	138.9725	7.	82.	-999.	3.05	-5.	-5.	-5.	37.	-20.	16.	6.	-10.	-15.
467558	59.2767	138.9056	8.	10.	-999.	1.17	-5.	-5.	-5.	25.	-20.	-15.	-5.	-10.	-15.
467562	59.3364	138.7756	7.	49.	-999.	2.03	-999.	-999.	-999.	-999.	-999.	-999.	-999.	-999.	-999.
467566	59.2044	138.7733	8.	11.	-999.	3.30	-5.	-5.	-5.	30.	-20.	27.	-5.	-10.	-15.
467568	59.3836	138.9900	9.	8.	-999.	1.68	-5.	-5.	-5.	34.	-20.	43.	-5.	-10.	-15.
467569	59.4039	138.9250	8.	11.	-999.	2.16	-5.	-5.	-5.	46.	-20.	29.	5.	-10.	-15.
467574	59.4283	138.8811	7.	23.	-999.	2.41	-5.	-5.	-5.	108.	-20.	37.	6.	-10.	-15.
467576	59.5058	138.8975	7.	39.	-999.	1.53	-5.	-5.	-5.	20.	-20.	-15.	-5.	-10.	-15.
467588	59.4858	138.7267	7.	17.	-999.	2.44	-5.	-5.	-5.	43.	-20.	26.	6.	-10.	-15.
467591	59.4744	138.7003	7.	29.	-999.	2.91	-5.	-5.	-5.	74.	-20.	40.	15.	-10.	-15.
467596	59.3783	138.8994	8.	17.	-999.	1.77	-5.	-5.	-5.	20.	-20.	46.	-5.	-10.	-15.

YAKUTAT LAKE SEDIMENT

PG. TWO - SAMPLE SET 2

SAMPLE NO.	BF PPM	LI PPM	AL PPM	AU PPM	BA PPM	CA PPM	CE PPM	CL PPM	CO PPM	CR PPM	CS PPM	DY PPM	EU PPM	FE PPM	HF PPM	K PPM	LA PPM
467457	-999.	-999.	68200.	-0.	703.	20220.	85.	-129.	6.0	25.	-1.6	6.	1.0	19910.	11.2	16140.	41.
467471	-999.	-999.	58140.	-0.	601.	91210.	34.	-177.	17.8	88.	-2.6	3.	1.0	36710.	5.5	-6372.	17.
467488	-999.	-999.	66820.	-0.	483.	26060.	52.	223.	16.7	70.	-2.3	4.	1.1	39760.	5.1	8653.	21.
467495	-999.	-999.	68780.	-0.	-183.	45600.	49.	-150.	21.1	89.	-2.4	4.	1.4	47940.	3.6	10130.	21.
467496	-999.	-999.	40150.	-0.	-259.	152400.	27.	-157.	9.8	50.	-2.4	3.	.8	28520.	4.1	-5290.	-10.
467497	-999.	-999.	72900.	-0.	475.	40780.	44.	-169.	21.1	103.	-1.9	4.	1.5	53570.	3.7	8667.	25.
467498	-999.	-999.	42500.	-0.	-343.	21700.	-11.	525.	-2.6	60.	-3.7	4.	.8	22430.	-2.6	-6205.	-17.
467499	-999.	-999.	59350.	-0.	463.	31470.	39.	-161.	9.3	74.	-2.5	4.	1.1	41500.	4.	6743.	-9.
467501	-999.	-999.	77210.	-0.	-162.	25200.	35.	-163.	7.0	45.	-1.2	3.	1.2	30330.	6.9	-5027.	20.
467506	-999.	-999.	62800.	-0.	333.	65130.	54.	-135.	17.6	85.	-2.1	5.	1.4	47230.	7.4	-4393.	27.
467507	-999.	-999.	71220.	-0.	734.	37110.	45.	-129.	12.3	74.	-1.8	5.	1.3	41590.	4.0	7020.	26.
467511	-999.	-999.	58900.	-0.	-187.	58790.	14.	-143.	42.5	163.	-2.4	6.	1.2	102000.	2.3	-5315.	-7.
467529	-999.	-999.	76730.	-0.	755.	19000.	58.	-165.	8.2	71.	2.8	4.	1.4	49210.	6.3	15060.	31.
467530	-999.	-999.	69660.	-0.	350.	30170.	56.	-141.	12.6	75.	-2.0	5.	1.6	38440.	6.1	9692.	27.
467531	-999.	-999.	80960.	-0.	866.	17030.	44.	-144.	14.0	61.	-2.0	5.	1.3	43810.	5.2	18880.	28.
467532	-999.	-999.	65850.	-0.	546.	18260.	35.	-154.	7.4	69.	-2.5	4.	.9	26800.	4.2	-5183.	20.
467537	-999.	-999.	86550.	-0.	723.	14650.	57.	-174.	22.2	110.	-2.1	6.	1.5	51930.	5.6	15390.	27.
467538	-999.	-999.	73460.	-0.	505.	16520.	49.	-131.	13.6	74.	-2.0	4.	1.2	41770.	4.7	13640.	25.
467539	-999.	-999.	63410.	-0.	333.	31250.	24.	-120.	13.7	84.	-1.6	3.	.9	38450.	3.5	6063.	13.
467548	-999.	-999.	75200.	-0.	420.	11900.	46.	-137.	6.8	86.	-1.8	3.	1.0	41030.	7.9	12320.	22.
467549	-999.	-999.	64160.	-0.	664.	14340.	37.	-154.	-1	88.	-2.4	3.	1.0	30430.	3.5	7113.	21.
467550	-999.	-999.	77510.	-0.	807.	7295.	46.	-141.	10.0	63.	3.4	5.	1.1	29280.	5.0	17660.	32.
467552	-999.	-999.	32750.	-0.	-260.	7752.	31.	280.	-1	-21.	-3.3	3.	1.3	42530.	-2.1	-4458.	-14.
467553	-999.	-999.	77560.	-0.	750.	32580.	38.	-160.	17.0	111.	-2.5	5.	1.2	50510.	3.9	10700.	24.
467554	-999.	-999.	53460.	-0.	544.	23540.	28.	-176.	10.6	54.	-2.8	4.	.9	24290.	3.9	-5666.	-9.
467558	-999.	-999.	31990.	-0.	-250.	11360.	23.	596.	-1	49.	-2.7	2.	.7	15290.	2.8	7103.	-13.
467562	-999.	-999.	80320.	-0.	678.	15760.	36.	-148.	14.0	124.	-2.3	5.	1.1	43690.	3.4	16120.	15.
467566	-999.	-999.	72080.	-0.	577.	30960.	77.	-152.	10.8	112.	-2.3	6.	1.4	49380.	13.7	8725.	31.
467568	-999.	-999.	77050.	-0.	518.	35000.	42.	-175.	16.1	110.	-2.2	5.	1.3	50960.	6.3	8057.	20.
467569	-999.	-999.	72300.	1.	391.	30540.	48.	-142.	17.5	51.	-2.3	4.	1.4	41610.	6.6	9751.	24.
467574	-999.	-999.	81270.	-0.	850.	12670.	56.	-135.	17.5	102.	4.3	4.	1.3	48340.	5.3	17860.	28.
467576	-999.	-999.	62540.	-0.	586.	17250.	48.	-141.	6.2	46.	-1.1	3.	1.1	22990.	5.5	11580.	30.
467588	-999.	-999.	80080.	-0.	717.	16430.	68.	-143.	9.9	51.	3.7	4.	1.3	34330.	8.5	17240.	38.
467591	-999.	-999.	86780.	-0.	867.	10810.	59.	-140.	9.0	67.	5.1	4.	1.3	32640.	6.5	17240.	37.
467596	-999.	-999.	72340.	-0.	307.	41670.	48.	-150.	19.1	115.	-1.6	5.	1.3	55590.	7.6	-5061.	25.

YAKUTAT LAKE SEDIMENT

PG. THREE - SAMPLE SET 2

SAMPLE NO.	LU PPM	HG PPM	MN PPM	NA PPM	RB PPM	SB PPM	SC PPM	SM PPM	SR PPM	TA PPM	TB PPM	TH PPM	TI PPM	V PPM	YB PPM	ZN PPM	U/TH RATIO
467457	.3	6275.	664.	22900.	71.	-2.	10.9	3.8	-302.	-1.	-1.	13.1	3122.	61.	5.3	-39.	3.195
467471	.3	10910.	1462.	16940.	-55.	-4.	19.7	2.7	-477.	-2.	-1.	3.0	3283.	134.	-2.3	150.	2.141
467488	.3	12990.	785.	19880.	-53.	-3.	14.7	2.8	-390.	-1.	-1.	4.2	4387.	123.	-2.4	-94.	1.727
467495	.3	18940.	933.	21970.	-50.	-3.	21.0	3.8	-360.	-2.	-1.	4.5	5209.	148.	-2.9	-56.	2.262
467496	.2	11510.	763.	12170.	-57.	-4.	11.4	2.0	-433.	-2.	-1.	2.5	4129.	114.	-2.5	-72.	1.656
467497	.3	18360.	979.	23760.	-42.	-2.	22.2	5.2	476.	-1.	-1.	4.5	4293.	151.	-2.2	-44.	2.208
467498	-.2	11100.	432.	12710.	-83.	-5.	11.8	-2.2	-515.	-3.	-2.	-2.3	3269.	97.	-4.0	-46.	-999.000
467499	.2	14660.	759.	19550.	-52.	-3.	17.6	3.5	-397.	-1.	-1.	3.3	4424.	135.	4.0	207.	1.825
467501	.3	7928.	1032.	28310.	-26.	-2.	11.8	3.2	548.	-1.	-1.	4.8	3811.	78.	3.2	-28.	2.924
467506	.4	16040.	967.	20310.	-42.	-3.	21.1	4.5	-314.	-1.	-1.	5.4	4885.	155.	3.8	127.	2.037
467507	.4	11440.	834.	22100.	-35.	-3.	21.9	3.9	-299.	-1.	-1.	6.0	3796.	99.	2.8	-45.	2.410
467511	.5	27650.	1707.	16480.	-49.	-3.	48.9	3.7	-375.	-2.	1.	-1.3	9470.	359.	4.4	-61.	-999.000
467529	.4	12570.	1062.	18870.	-42.	-2.	15.5	5.0	-356.	-1.	-1.	7.9	5594.	125.	2.9	80.	3.289
467530	.3	10640.	753.	22930.	-48.	-3.	16.9	5.3	-312.	-1.	-1.	6.7	4158.	117.	3.5	-51.	2.618
467531	.3	11540.	735.	22060.	83.	-3.	15.7	3.6	-328.	-1.	-1.	7.4	3996.	123.	-2.1	181.	3.086
467532	.2	9995.	557.	16590.	-58.	-4.	13.7	2.1	-398.	-2.	-1.	4.5	5514.	115.	-2.6	-69.	1.916
467537	.3	14250.	972.	21500.	-46.	-3.	20.3	5.2	-370.	-1.	-1.	5.8	5497.	150.	3.8	53.	2.500
467538	.3	9032.	740.	20940.	-45.	-3.	17.0	5.1	-298.	-1.	-1.	5.1	4057.	124.	2.5	-47.	2.551
467539	.2	10740.	846.	21300.	-33.	-2.	20.8	2.6	454.	-1.	2.	2.5	5326.	136.	2.2	-40.	2.212
467548	.2	10160.	525.	25810.	-42.	-3.	12.4	4.3	-289.	-1.	-1.	5.9	2753.	104.	2.7	-43.	2.967
467549	.2	9228.	472.	18010.	-53.	-3.	14.8	3.6	-355.	-1.	-1.	3.4	4084.	123.	-2.3	-65.	2.165
467550	.2	9667.	459.	19610.	-50.	-3.	11.9	3.0	-334.	-1.	-1.	6.3	4949.	100.	-2.3	-55.	2.331
467552	.3	5354.	241.	8661.	-82.	-5.	9.8	3.8	-370.	-3.	-2.	2.3	1815.	81.	-3.5	-105.	2.016
467553	.4	18180.	980.	21780.	-52.	-3.	22.3	3.4	-393.	-1.	-1.	4.5	5855.	166.	-2.3	-58.	2.053
467554	-.2	11180.	554.	16410.	-63.	-4.	11.8	2.0	-449.	-2.	-1.	4.1	4601.	100.	-3.0	263.	1.344
467558	-.2	5186.	225.	9112.	-62.	-4.	8.5	1.5	-362.	-3.	-1.	-1.8	2787.	68.	-3.0	99.	-999.000
467562	.3	12900.	1057.	17720.	-49.	-3.	19.1	2.8	-385.	-2.	-1.	4.2	5983.	167.	-2.8	129.	2.070
467566	.4	16890.	1193.	19960.	-48.	-3.	22.7	5.6	-391.	-1.	-1.	7.5	11070.	187.	4.2	-55.	2.273
467568	.3	17580.	903.	22200.	-50.	-3.	23.7	3.8	-354.	-1.	-1.	3.6	5381.	183.	4.6	121.	2.141
467569	.3	15750.	872.	20430.	-48.	-3.	20.1	3.8	-338.	-2.	1.	4.1	5082.	158.	3.1	-56.	1.898
467574	.3	11900.	1099.	17580.	64.	-3.	20.4	3.8	631.	-1.	1.	5.7	4750.	175.	3.6	-51.	2.364
467576	.2	5111.	701.	26260.	-24.	-1.	9.7	3.9	-255.	-1.	-1.	4.9	2795.	68.	2.4	-11.	3.205
467588	.2	9438.	581.	24080.	45.	-2.	13.7	5.5	380.	-1.	-1.	7.3	1872.	100.	3.5	49.	2.994
467591	.3	9085.	458.	18320.	-55.	-3.	13.6	3.8	-347.	-1.	-1.	6.9	5156.	124.	-2.5	-68.	2.370
467596	.3	15870.	1235.	22290.	-36.	-2.	25.8	4.5	-307.	-1.	-1.	5.7	6412.	177.	3.6	-41.	3.215

END