

**U.S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

Analytical results and sample locality map of soil samples from the Tanama-Helecho porphyry copper district, Municipios of Utuado and Adjuntas, Puerto Rico

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INTRODUCTION

In 1971, 1974, and 1978, the U.S. Geological Survey conducted a geochemical soil survey of the Tamamá-Helecho copper district Municipios of Utuado and Adjuntas, Puerto Rico.

The Tamamá-Helecho district, occupies about 12 km² in the southwest corner of the Municipio of Utuado and the northwest corner of the Municipio of Adjuntas, Puerto Rico, and lies about 4km south of the pueblo of Angeles. Access to the study area is provided from the north by Route PR-602.

The geology of the Bayaney and Monte Guilarte quadrangles, in which the Tamamá-Helecho district lies, was mapped by Nelson and Tobisch (1968) and by Krushensky and Curet (1985), respectively. The geology of the Tamamá-Helecho district was described and mapped in detail by Cox (1985).

The principal lithologic units of the area are Cretaceous and Lower Tertiary lavas and tuffs, but significant units of Upper Cretaceous and Eocene intrusive rocks are also present. The Utuado batholith, a Late Cretaceous granodiorite body, is the major intrusive unit of the area, but the copper deposits occur in small, quartz diorite porphyry stocks of Eocene age that intrude the batholith along its southwestern margin as well as the adjacent volcanic rocks.

The Tamamá-Helecho district is located in west-central Puerto Rico on the northern slope of the Cordillera Central. Topographically, the area is characterized by gently sloping uplands which are deeply dissected by Rio Camuy and Rio Tanamá, the latter being a tributary of the Rio Grande de Arecibo. Elevations in the area range from 400 to 600 m above sea level. Average annual rainfall in the area exceeds 200 cm. The vegetation present is that of coffee, banana, and citrus farms, as well as pasture.

METHODS OF STUDY

Sample Media

Soil was the medium chosen to geochemically characterize the deposits and environs of the Tamamá-Helecho district, inasmuch as rock in the region is commonly covered by tens of meters of soil-saprolite overburden. The results of our study clearly reflect the mineralization known from drill core information, indicating that the soils of the area are essentially residual rather than transported.

Sample Collection

Soil samples were collected at 50-meter intervals along ridge-and-spur traverses crossing an area of approximately 12 km². Most of the 547 samples collected represent the B-horizon of the solum, although analysis of variance applied to samples from 30 soil profiles indicates that choice of soil horizon is not critical, and that chemical differentiation in these immature soils was minimal. Sampling of the B-horizon simply avoids the troublesome organic content of the A-horizon as well as excessive augering or shovelling to reach the C-horizon.

Figure 1. Localities of soil samples from the Tamamá-Helecho district Municipios of Utuado and Adjuntas, Puerto Rico. The grid is the Puerto Rican map grid system, ticks are 1000 m apart.

Sample Preparation

The soil samples were oven-dried at approximately 105°C, then sieved using a 0.25 mm stainless steel sieve. The minus 0.25 mm fraction was retained for analysis, although a pilot study of 6 grain-size fractions indicate that choice of fraction was not critical for most elements of interest, with the possible exception of gold.

Sample Analysis

Spectrographic method

The soil samples were analyzed for 31 elements using a semiquantitative, direct-current arc emission spectrographic method (Grimes and Marranzino, 1968). The elements analyzed and their lower limits of determination are listed in table 1. Spectrographic results were obtained by visual comparison of spectra derived from the sample against spectra obtained from standards made from pure oxides and carbonates. Standard concentrations are geometrically spaced over any given order of magnitude of concentration as follows: 100, 50, 20, 10, and so forth. Samples whose concentrations are estimated to fall between those values are assigned values of 70, 30, 15, and so forth. The precision of the analytical method is approximately plus or minus one reporting interval at the 83 percent confidence level and plus or minus two reporting intervals at the 96 percent confidence level (Motooka and Grimes, 1976). Values determined for the major elements (iron, magnesium, calcium, and titanium) are given in weight percent; all others are given in parts per million (micrograms/gram). Analytical data for samples from the Tamamá-Helecho district are listed in table 3.

Chemical methods

Other methods of analysis used on samples from the Tamamá-Helecho are summarized in table 2.

Analytical results for soil samples are listed in table 3.

GEOCHEMICAL DATA STORAGE SYSTEM

Upon completion of all analytical work, the results were entered into a geochemical data base. This data base contains both descriptive geological information and analytical data. Any or all of this information may be retrieved and converted to a binary form (STATPAC) for computerized statistical analysis or publication (VanTrump and Miesch, 1977).

DESCRIPTION OF DATA TABLES

Table 3 lists the results of analyses for the soil samples. The data in table 3 are arranged so that column 1 contains the USGS-assigned sample numbers. These numbers correspond to the numbers shown on the site location maps (plate 1). Columns in which the element headings show the letter "S" before the element symbol are emission spectrographic analyses; "AA" indicates atomic absorption analyses. A letter "N" in the tables indicates that a given element was looked for but not detected at the lower limit of determination shown for that element in tables 1 and 2. If an element was observed but was below the lowest reporting value, a "less than" symbol (<) was entered in the tables in front of the lower limit of determination. If an element was observed but was above the highest reporting value, a "greater than" symbol (>) was entered in the tables in front of the upper limit of determination. Because of the formatting used in the computer program that produced table 3, some of the elements listed in these tables carry one or more nonsignificant digits to the right of the significant digits. The analysts did not determine these elements to the accuracy suggested by the extra zeros. The columns for elements not detected by the emission spectrographic method have been deleted from table 3.

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TABLE 1.-- Limits of determination for the spectrographic analysis of soils based on a 10-mg sample.

Elements	Lower determination limit	Upper determination limit
Percent		
Calcium (Ca)	.05	20
Iron (Fe)	0.05	20
Magnesium (Mg)	.02	10
Sodium (Na)	0.2	5
Phosphorus (P)	0.2	10
Titanium (Ti)	.002	1
Parts per million		
Silver (Ag)	0.5	5,000
Arsenic (As)	200	10,000
Gold (Au)	10	500
Boron (B)	10	2,000
Barium (Ba)	20	5,000
Beryllium (Be)	1	1,000
Bismuth (Bi)	10	1,000
Cadmium (Cd)	20	500
Cobalt (Co)	10	2,000
Chromium (Cr)	10	5,000
Copper (Cu)	5	20,000
Gallium (Ga)	5	500
Germanium (Ge)	10	100
Lanthanum (La)	50	1,000
Manganese (Mn)	10	5,000
Molybdenum (Mo)	5	2,000
Niobium (Nb)	20	2,000
Nickel (Ni)	5	5,000
Lead (Pb)	10	20,000
Antimony (Sb)	100	10,000
Scandium (Sc)	5	100
Tin (Sn)	10	1,000
Strontium (Sr)	100	5,000
Thorium (Th)	100	2,000
Vanadium (V)	10	10,000
Tungsten (W)	20	10,000
Yttrium (Y)	10	2,000
Zinc (Zn)	200	10,000
Zirconium (Zr)	10	1,000

TABLE 2. Chemical methods
[AA = atomic absorption]

Element or constituent determined	Method	Determination limit (micrograms/gram or ppm)	Reference
Gold (Au)	AA	0.05	Thompson and others, 1968.
Copper (Cu)	AA	5	Ward, and others, 1969.
Lead (Pb)	AA	5	
Zinc (Zn)	AA	5	

Table 3. Results of chemical analysis for the Tamamá-Helecho soil samples.

Sample	X-COORD.	Y-COORD.	S-FE%	S-MG%	S-CA%	S-TI%	S-MN	S-AG	S-B	S-BA	S-CO	S-CR	S-CU	S-MO
0702	115,130	46,850	5.0	.70	.10	.50	1,500	N	<10	300	15	150	700	7
0703	115,090	46,820	5.0	.30	<.05	.30	200	N	<10	200	5	150	150	N
0704	115,030	46,760	5.0	.70	<.05	.50	500	.5	<10	200	5	150	200	N
0705	114,970	46,720	5.0	.10	<.05	>1.00	30	N	<10	200	N	50	150	7
0706	114,900	46,680	7.0	.10	.07	.70	10	N	<10	200	N	30	300	10
0707	114,850	46,660	7.0	.20	<.05	.70	30	N	<10	300	N	100	150	10
0708	114,790	46,690	7.0	.30	<.05	.70	30	N	<10	300	N	300	150	15
0709	114,740	46,730	7.0	.30	.05	.70	15	N	<10	500	N	50	300	30
0710	114,690	46,740	7.0	.30	<.05	.30	20	N	<10	200	N	20	150	50
0711	114,620	46,745	3.0	.30	<.05	.30	30	N	<10	200	N	500	700	20
0712	114,820	46,575	7.0	.30	<.05	.30	20	N	<10	1,000	N	150	150	5
0713	114,810	46,620	7.0	.30	<.05	.30	20	N	<10	700	N	200	700	N
0714	114,760	46,655	7.0	.10	<.05	.30	300	N	<10	300	N	150	700	5
0715	114,530	46,610	7.0	.03	<.05	.50	15	.5	<10	70	N	700	150	N
0716	114,550	46,670	7.0	.70	<.05	.50	300	.5	<10	300	30	1,000	1,500	7
0717	114,580	46,700	10.0	.20	<.05	.30	150	.5	<10	200	20	2,000	1,500	10
0718	114,550	46,795	7.0	.10	<.05	.30	50	.5	<10	150	N	700	700	N
0719	114,550	46,865	5.0	.02	<.05	.20	10	N	<10	150	N	20	200	10
0720	114,520	46,920	5.0	.05	<.05	.30	15	.5	<10	150	N	700	500	7
0721	114,770	46,910	3.0	.30	.10	.30	10	N	<10	150	N	30	500	15
0722	114,730	46,920	1.5	.20	.20	.30	30	N	<10	100	N	20	150	70
0723	114,680	46,920	1.5	.10	<.05	.30	20	N	<10	150	N	20	150	7
0724	114,640	46,910	3.0	.20	<.05	.30	20	N	<10	300	N	20	300	7
0725	114,570	46,920	2.0	.20	<.05	.30	30	N	<10	150	N	20	150	5
0726	114,630	47,045	3.0	.30	<.05	.30	30	N	<10	150	N	70	150	50
0727	114,590	47,015	7.0	.30	<.05	.30	30	N	<10	300	N	20	300	200
0728	114,560	46,990	7.0	.30	<.05	.70	30	N	<10	300	N	300	200	300
0729	114,530	46,960	7.0	.30	<.05	.30	20	N	<10	1,000	N	20	200	70
0730	114,960	46,790	7.0	.30	<.05	.70	150	N	<10	150	N	50	700	30
0731	114,910	46,770	7.0	.50	<.05	1.00	30	N	<10	700	N	20	300	20
0732	114,860	46,760	7.0	.50	<.05	.50	30	N	<10	300	N	20	300	30
0733	114,810	46,740	7.0	.10	<.05	.70	20	N	<10	300	N	50	500	30
0734	114,780	46,730	7.0	.70	<.05	.50	20	N	<10	300	N	70	200	30
0735	115,060	46,940	7.0	.70	.10	.70	2,000	N	<10	700	20	300	500	5
0736	115,010	46,870	7.0	.70	<.05	.70	300	N	<10	200	5	150	700	7
0737	114,940	46,870	7.0	.20	<.05	.30	200	N	<10	150	5	30	1,000	10
0738	114,890	46,900	7.0	.20	<.05	.70	100	N	<10	100	15	100	1,500	10
0739	114,850	46,940	7.0	.70	<.05	.50	50	N	<10	150	5	70	1,500	10
0740	114,830	47,000	7.0	.70	<.05	.30	500	N	<10	20	10	100	2,000	N
0741	114,810	47,050	7.0	.20	<.05	.50	1,500	N	<10	20	15	150	1,500	N
0742	114,790	47,100	10.0	.20	<.05	.50	1,500	N	<10	20	30	100	1,000	N
0743	114,770	47,140	7.0	.05	<.05	.20	150	N	<10	20	5	20	700	N
0744	114,750	47,170	7.0	.05	<.05	.20	200	N	<10	50	N	20	700	N
0745	114,730	47,210	7.0	.05	<.05	.30	150	N	<10	70	N	20	1,000	N
0746	114,770	47,220	3.0	.05	<.05	.20	100	N	<10	50	N	70	700	5

Sample	S-NI	S-PB	S-SC	S-SN	S-SR	S-V	S-Y	S-ZN	S-ZR	AA-AU	AA-CD	AA-ZN	AA-CU	AA-PB	PH
0702	30	30	30	N	N	300	20	N	150	.03	1.5	71.00	380.0	18	5.0
0703	30	20	30	N	N	200	<10	N	150	<.02	1.4	47.00	88.0	14	4.7
0704	70	30	30	N	N	300	10	N	150	.05	1.7	46.00	150.0	16	5.2
0705	<5	N	30	N	N	300	70	N	150	.08	1.1	24.00	35.0	5	4.7
0706	<5	N	30	N	N	300	30	N	70	.06	1.9	4.00	330.0	12	4.0
0707	<5	<10	20	N	N	200	20	N	150	.04	1.3	5.00	76.0	9	5.2
0708	10	10	30	N	N	300	15	N	100	<.02	1.4	5.00	140.0	11	5.2
0709	<5	N	30	N	N	200	30	N	150	<.02	1.5	4.00	240.0	8	5.5
0710	<5	N	15	N	N	150	10	N	70	.03	.7	1.00	65.0	8	5.0
0711	30	10	70	N	N	300	10	N	70	.15	1.4	7.00	770.0	14	5.5
0712	<5	10	30	N	N	200	20	N	150	<.02	1.0	10.00	68.0	7	4.0
0713	<5	10	30	N	N	200	N	N	70	<.02	1.6	3.00	390.0	14	5.5
0714	<5	10	15	N	N	150	10	N	150	.25	1.5	28.00	370.0	14	4.5
0715	<5	<10	30	N	N	150	30	N	100	<.02	1.9	3.00	38.0	11	5.0
0716	100	15	70	N	N	300	10	N	70	.11	1.6	22.00	960.0	10	5.5
0717	100	N	70	N	N	300	20	N	70	<.02	2.3	42.00	1,100.0	9	5.5
0718	<5	10	30	N	N	150	20	N	70	.40	1.0	6.00	400.0	8	6.0
0719	<5	N	5	N	N	70	N	N	50	.43	1.4	3.00	310.0	4	5.7
0720	15	<10	30	N	N	150	15	N	70	.71	.9	3.00	520.0	1	5.5
0721	<5	<10	30	N	N	150	10	N	100	.15	1.7	3.00	740.0	2	5.5
0722	<5	<10	20	N	N	150	15	N	300	.43	.4	<1.00	150.0	4	5.5
0723	<5	<10	15	N	N	70	N	N	70	.26	.5	<1.00	150.0	3	6.0
0724	<5	N	10	N	N	150	N	N	100	.58	1.1	2.00	180.0	1	5.0
0725	<5	10	20	N	N	150	10	N	100	<.02	.8	3.00	60.0	2	5.0
0726	<5	10	30	N	N	300	10	N	70	.06	1.3	4.00	110.0	8	5.0
0727	<5	30	20	N	N	200	10	N	100	.09	1.6	7.00	180.0	14	5.5
0728	<5	15	30	N	N	200	20	N	70	.09	1.2	5.00	88.0	9	6.0
0729	<5	<10	15	N	N	100	N	N	100	.09	.6	2.00	48.0	3	5.0
0730	<5	<10	20	N	N	200	10	N	100	.29	.7	11.00	360.0	7	4.5
0731	<5	10	50	N	N	300	30	N	100	.20	1.0	4.00	150.0	9	4.2
0732	<5	<10	30	N	N	300	10	N	100	.11	.8	2.00	280.0	7	5.0
0733	<5	<10	30	N	N	300	30	N	70	.03	1.3	3.00	220.0	10	5.2
0734	<5	<10	30	N	N	300	10	N	100	<.02	.8	10.00	290.0	8	5.5
0735	50	20	30	N	N	300	30	N	100	.12	.8	116.00	460.0	18	4.7
0736	30	20	30	N	N	300	10	N	150	.07	.5	44.00	360.0	8	4.5
0737	<5	10	15	N	N	200	N	N	100	.32	1.1	11.00	870.0	7	5.0
0738	70	10	50	N	N	300	N	N	70	.03	2.2	12.00	900.0	10	5.0
0739	15	10	50	N	N	300	15	N	70	<.02	1.6	9.00	1,100.0	3	5.0
0740	30	10	30	N	N	150	30	N	70	5.60	2.1	32.00	1,100.0	16	6.0
0741	30	10	50	N	N	200	N	N	70	1.01	1.5	8.00	940.0	14	5.5
0742	20	10	20	N	N	300	N	N	100	.85	1.5	7.00	600.0	12	6.0
0743	5	<10	5	N	N	100	N	N	50	.92	1.6	12.00	510.0	11	5.5
0744	<5	10	10	N	N	100	N	N	100	1.02	1.3	10.00	420.0	9	5.5
0745	5	10	15	N	N	100	10	N	150	.90	1.7	13.00	650.0	8	6.0
0746	<5	10	5	N	N	100	N	N	150	.82	1.0	5.00	500.0	7	5.2

Sample	X-COORD.	Y-COORD.	S-FE%	S-MG%	S-CA%	S-TI%	S-MN	S-AG	S-B	S-BA	S-CO	S-CR	S-CU	S-MO
0747	114,820	47,270	7.0	.50	<.05	.30	200	N	<10	150	N	20	1,500	<5
0748	114,870	47,290	3.0	.30	<.05	.30	300	N	<10	100	N	30	1,500	15
0749	114,930	47,300	3.0	.20	<.05	.30	200	N	<10	150	N	20	500	50
0750	114,980	47,280	7.0	.70	<.05	.30	1,500	.5	<10	150	70	150	1,500	20
0751	115,080	47,250	7.0	1.50	<.05	.30	1,500	.5	<10	150	50	1,000	5,000	N
0752	115,130	47,240	7.0	.50	.20	.50	100	N	<10	200	5	50	700	30
0753	115,190	47,210	7.0	.70	<.05	.30	500	N	<10	200	10	200	500	7
0754	115,300	47,180	10.0	.70	<.05	.50	1,500	N	<10	50	20	3,000	700	N
0755	114,970	47,460	7.0	.50	<.05	.30	100	N	<10	50	5	700	1,500	10
0756	114,960	47,400	7.0	.20	<.05	.30	150	N	<10	100	5	50	1,000	10
0757	114,930	47,370	1.5	.50	<.05	.50	30	N	<10	200	N	N	500	150
0758	114,900	47,320	2.0	.20	<.05	.70	30	N	<10	150	N	20	150	30
0759	114,780	47,410	7.0	.70	<.05	.70	500	.5	<10	30	N	300	3,000	10
0761	114,740	47,310	7.0	.05	<.05	.30	100	N	<10	20	N	20	700	5
0762	114,710	47,250	5.0	.05	<.05	.50	150	N	<10	50	N	20	1,500	N
0763	114,550	47,560	7.0	.50	<.05	.50	300	N	<10	300	N	50	300	N
0764	114,570	47,520	10.0	.70	<.05	.70	300	.5	<10	200	10	500	500	N
0765	114,610	47,480	10.0	.10	<.05	.70	300	.5	<10	150	5	700	500	N
0766	114,610	47,440	7.0	.10	<.05	.50	50	N	<10	150	N	70	500	N
0767	114,610	47,400	5.0	.30	<.05	.50	70	N	<10	30	N	700	300	10
0759	114,600	47,350	5.0	.30	<.05	.50	70	N	<10	150	5	500	1,000	10
0769	114,590	47,310	7.0	.20	<.05	.70	700	N	<10	50	5	1,500	1,500	15
0770	114,580	47,270	5.0	.05	<.05	.70	300	N	<10	20	N	50	700	10
0771	114,670	47,210	5.0	.07	<.05	.50	300	N	<10	50	N	70	1,500	N
0772	114,630	47,220	3.0	.10	<.05	.70	300	N	<10	70	N	20	1,500	N
0773	114,590	47,240	7.0	.50	<.05	1.00	1,000	.5	<10	30	N	70	1,500	5
0774	114,550	47,250	5.0	.50	<.05	.30	1,500	.5	<10	50	50	20	1,500	20
0775	114,520	47,265	7.0	.10	<.05	.70	300	.5	<10	30	5	20	1,500	N
0776	114,480	47,270	7.0	.70	<.05	.30	700	.5	<10	70	10	70	1,500	N
0777	114,670	47,080	5.0	.20	<.05	.30	300	N	<10	50	5	70	1,500	5
0778	114,670	47,120	3.0	.20	<.05	.30	1,000	N	<10	50	5	20	700	N
0779	114,670	47,160	7.0	.10	<.05	.30	100	N	<10	100	10	20	1,500	N
0780	114,900	47,190	3.0	.30	<.05	.30	300	N	<10	70	5	100	1,500	7
0781	114,860	47,230	5.0	.70	<.05	.30	1,500	N	<10	70	10	700	1,500	<5
0782	115,000	47,060	5.0	.70	<.05	.30	1,000	N	<10	150	15	100	1,500	30
0783	114,960	47,100	7.0	.70	<.05	.30	700	N	<10	100	5	70	1,500	N
0784	114,930	47,140	7.0	.70	.05	.30	1,500	.7	<10	150	10	70	2,000	N
0785	114,810	46,890	7.0	.50	<.05	.50	100	N	<10	300	5	70	700	70
0786	114,790	46,850	7.0	.50	<.05	.50	50	N	<10	500	5	50	500	70
0787	114,760	46,810	3.0	.30	<.05	.30	10	N	<10	200	N	30	150	50
0788	114,740	46,770	7.0	.20	<.05	.50	10	N	<10	300	N	30	700	50
0789	114,450	46,870	3.0	.02	<.05	.30	15	N	<10	70	N	20	300	10
0790	114,460	46,910	3.0	.30	<.05	.30	30	N	<10	200	N	70	200	20
0791	114,380	46,800	5.0	.05	<.05	.30	20	N	<10	100	N	20	500	N
0792	114,340	46,850	7.0	.10	<.05	.30	30	N	<10	100	N	20	1,000	5

Sample	S-NI	S-PB	S-SC	S-SN	S-SR	S-V	S-Y	S-ZN	S-ZR	AA-AU	AA-CD	AA-ZN	AA-CU	AA-PB	PH
0747	<5	20	30	N	N	200	N	N	70	.49	1.3	6.00	840.0	19	5.2
0748	<5	<10	20	N	N	150	N	N	150	.32	.7	3.00	500.0	4	5.2
0749	<5	10	15	N	N	100	N	N	100	.43	.7	2.00	150.0	5	5.2
0750	50	10	50	N	N	200	30	N	150	.29	1.1	4.00	510.0	6	5.5
0751	200	<10	70	N	N	300	200	N	70	.09	2.2	103.00	2,000.0	11	5.0
0752	30	10	20	N	N	200	10	N	100	<.02	1.4	12.00	370.0	11	5.5
0753	150	20	30	N	N	150	10	N	100	.08	2.2	45.00	290.0	15	6.0
0754	150	20	100	N	N	300	10	N	100	.06	2.7	124.00	250.0	21	5.2
0755	30	15	30	N	N	300	N	N	70	.18	2.0	6.00	1,100.0	14	5.5
0756	15	20	20	N	N	200	N	N	100	.12	1.4	11.00	440.0	4	5.0
0757	<5	<10	10	N	N	100	N	N	70	.19	.7	4.00	150.0	5	5.5
0758	<5	10	7	N	N	150	N	N	150	.22	1.0	5.00	120.0	9	5.0
0759	20	10	70	N	N	300	10	N	70	.38	1.9	16.00	1,800.0	15	5.0
0761	<5	<10	10	N	N	150	N	N	100	.45	1.6	7.00	410.0	9	4.5
0762	<5	10	10	N	N	100	N	N	150	.57	2.4	11.00	640.0	12	5.2
0763	<5	10	15	N	N	200	10	N	70	.02	2.5	60.00	140.0	14	4.7
0764	50	30	70	N	N	300	30	N	70	.06	2.4	117.00	140.0	12	5.0
0765	100	30	70	N	N	300	15	N	70	.12	2.5	21.00	200.0	17	5.5
0766	<5	30	30	N	N	200	10	N	50	.04	2.4	48.00	360.0	15	5.2
0767	20	15	30	N	N	200	N	N	70	.11	1.4	7.00	150.0	9	4.5
0759	<5	10	30	N	N	200	15	N	150	.02	1.9	5.00	790.0	6	5.2
0769	50	15	70	N	N	300	10	N	100	.32	1.9	44.00	1,100.0	12	5.7
0770	<5	10	10	N	N	150	15	N	300	.80	1.6	8.00	210.0	5	5.7
0771	5	30	30	N	N	150	N	N	100	.36	1.2	9.00	510.0	6	5.7
0772	5	15	15	N	N	100	N	N	200	.26	1.3	8.00	360.0	13	5.2
0773	10	15	30	N	N	300	10	N	100	.50	1.9	23.00	420.0	14	5.0
0774	30	10	30	N	N	100	15	N	100	.45	1.6	15.00	670.0	14	5.0
0775	5	10	30	N	N	300	N	N	70	.72	1.9	3.00	600.0	10	5.2
0776	<5	10	50	N	N	300	N	N	200	.88	1.7	6.00	1,100.0	18	5.2
0777	10	15	20	N	N	200	N	N	100	.57	2.5	16.00	640.0	16	5.0
0778	<5	10	10	N	N	100	N	N	100	.45	2.8	17.00	560.0	20	4.7
0779	5	10	20	N	N	200	N	N	100	.55	2.9	11.00	710.0	16	5.2
0780	5	10	20	N	N	150	N	N	70	.60	2.4	12.00	1,100.0	16	5.5
0781	5	<10	30	N	N	150	70	N	70	.49	2.4	17.00	2,000.0	10	5.0
0782	15	20	20	N	N	200	15	N	100	.46	2.3	30.00	1,300.0	19	5.0
0783	<10	<10	15	N	N	150	N	N	100	.80	2.8	22.00	1,100.0	12	5.0
0784	<5	<10	15	N	N	150	N	N	200	.70	2.8	33.00	1,300.0	14	5.5
0785	5	15	30	N	N	300	15	N	100	.23	2.8	12.00	600.0	26	5.0
0786	5	20	30	N	N	300	20	N	100	.07	2.5	6.00	290.0	41	5.5
0787	<5	<10	15	N	N	100	15	N	100	.06	1.9	2.00	170.0	2	5.5
0788	<5	<10	30	N	N	300	30	N	150	.07	3.4	3.00	460.0	8	5.2
0789	<5	<10	10	N	N	100	N	N	70	.35	3.1	4.00	310.0	4	5.0
0790	<5	<10	10	N	N	100	N	N	100	.23	1.4	7.00	170.0	6	5.2
0791	<5	<10	10	N	N	100	N	N	50	.80	2.6	6.00	280.0	6	4.7
0792	<5	70	20	N	N	150	N	N	100	.80	2.9	7.00	910.0	41	5.5

Sample	X-COORD.	Y-COORD.	S-FE%	S-MG%	S-CA%	S-TI%	S-MN	S-AG	S-B	S-BA	S-CO	S-CR	S-CU	S-MO
0793	114,340	46,900	5.0	.70	<.05	.30	30	N	<10	300	N	30	150	70
0794	114,360	46,950	7.0	.70	<.05	.30	30	N	<10	300	N	100	200	70
0795	114,460	46,950	7.0	.70	<.05	.30	20	N	<10	300	N	700	500	70
0796	114,400	46,970	7.0	.70	<.05	.30	20	N	<10	300	N	70	200	30
0797	114,360	47,000	5.0	.50	<.05	.70	<10	N	<10	150	N	20	150	5
0798	114,330	47,060	7.0	.10	<.05	.50	30	N	<10	300	N	30	200	15
0799	114,280	47,080	7.0	.05	<.05	.30	10	N	<10	150	N	30	200	10
0800	114,240	46,940	5.0	.30	<.05	.70	30	N	<10	150	N	30	200	10
0801	114,270	46,980	7.0	.30	<.05	.70	70	N	20	200	N	70	150	10
0802	114,290	47,030	5.0	.20	<.05	.70	<10	N	<10	50	N	20	150	10
0803	114,170	46,930	3.0	.15	<.05	.50	30	N	<10	50	N	30	200	7
0804	114,150	46,970	3.0	.07	<.05	.50	30	N	<10	200	N	30	100	5
0805	114,120	46,990	2.0	.10	<.05	.50	30	N	<10	150	N	20	100	5
0806	114,090	47,030	2.0	.10	<.05	.30	200	N	<10	50	N	20	100	N
0807	114,070	47,070	3.0	.10	<.05	.50	30	N	<10	50	N	20	150	N
0808	114,490	47,160	1.5	.20	<.05	.30	100	N	<10	150	N	70	700	<5
0809	114,450	47,140	1.5	.15	<.05	.50	30	N	<10	70	N	30	200	30
0810	114,400	47,100	2.0	.30	<.05	.50	50	N	<10	100	N	70	150	30
0811	114,210	47,090	2.0	.10	<.05	.30	20	N	<10	150	N	20	100	N
0812	114,120	47,110	7.0	.30	<.05	.50	50	N	<10	300	N	100	200	5
0813	114,190	47,180	7.0	.30	<.05	.30	50	N	<10	200	N	100	500	10
0814	114,140	47,200	5.0	.10	<.05	.30	30	N	<10	30	N	100	150	5
0815	114,100	47,230	7.0	.05	<.05	.30	50	N	<10	150	N	70	200	5
0816	114,050	47,250	7.0	.10	<.05	.50	50	N	<10	50	N	150	200	7
0817	113,980	47,280	3.0	.10	<.05	.30	50	N	<10	30	N	150	150	N
0818	114,420	47,280	5.0	.20	<.05	.30	200	N	<10	70	10	700	700	20
0819	114,380	47,310	3.0	.10	<.05	.30	50	N	<10	70	N	100	300	30
0820	114,320	47,310	1.5	.20	<.05	.30	70	N	<10	100	N	70	200	10
0821	114,260	47,320	5.0	.20	<.05	.30	70	N	<10	50	N	500	150	15
0822	114,200	47,320	3.0	.10	<.05	.50	70	N	<10	30	N	200	100	N
0823	114,140	47,330	3.0	.20	<.05	.50	100	N	<10	30	N	700	50	N
0824	114,070	47,330	1.5	.05	<.05	.30	100	N	<10	20	N	100	30	N
0825	114,040	46,820	5.0	.50	<.05	.30	30	N	<10	1,000	N	70	200	N
0826	114,000	46,810	3.0	.50	<.05	.30	30	N	<10	1,000	N	50	100	N
0827	113,940	46,800	7.0	.15	<.05	.30	50	N	<10	100	N	700	300	N
0828	113,890	46,810	7.0	.15	<.05	.50	200	N	<10	100	N	150	150	N
0829	113,830	46,830	7.0	.15	<.05	.70	300	N	<10	100	N	100	150	N
0830	113,780	46,850	7.0	.07	<.05	.50	500	N	<10	150	N	150	150	N
0831	113,720	46,850	7.0	.30	<.05	.30	200	N	<10	200	N	700	150	N
0832	113,650	46,840	7.0	.10	<.05	.50	200	N	<10	70	N	300	200	N
0833	113,580	46,850	3.0	.20	<.05	.70	70	N	<10	150	N	500	100	N
0834	114,310	46,570	7.0	.30	<.05	.50	30	N	<10	70	N	700	1,000	N
0835	114,300	46,630	7.0	.30	<.05	.50	100	N	<10	70	10	700	1,500	5
0836	114,250	46,680	2.0	.30	<.05	.30	200	N	<10	300	15	150	1,500	30
0837	114,200	46,710	7.0	.50	<.05	.70	300	N	<10	150	<5	700	700	30

Sample	S-NI	S-PB	S-SC	S-SN	S-SR	S-V	S-Y	S-ZN	S-ZR	AA-AU	AA-CD	AA-ZN	AA-CU	AA-PB	PH
0793	<5	30	20	N	N	300	10	N	70	.07	2.3	7.00	71.0	21	5.5
0794	<5	20	30	<10	N	300	15	N	700	.08	3.5	11.00	110.0	23	5.2
0795	<5	<10	20	N	N	200	10	N	200	.10	2.5	5.00	120.0	6	5.0
0796	<5	<10	30	N	N	300	15	N	100	.08	3.3	7.00	350.0	8	5.0
0797	<5	15	30	<10	N	300	10	N	200	<.02	2.4	6.00	170.0	8	5.0
0798	<5	50	20	N	N	300	<10	N	70	.05	4.4	5.00	87.0	36	5.0
0799	<5	10	30	N	N	300	10	N	70	<.02	4.4	18.00	110.0	22	5.0
0800	<5	50	15	N	N	200	N	N	50	.03	5.2	9.00	190.0	15	4.7
0801	<5	30	30	N	N	300	10	N	70	.08	3.7	10.00	140.0	33	4.5
0802	<5	50	30	N	N	300	15	N	70	.03	2.7	4.00	140.0	32	5.0
0803	<5	<10	30	N	N	200	10	N	70	<.02	2.7	8.00	240.0	14	5.0
0804	<5	<10	15	N	N	200	10	N	70	<.02	2.8	4.00	83.0	6	5.2
0805	<5	10	20	N	N	200	15	N	70	<.02	2.2	16.00	190.0	7	5.0
0806	<5	10	15	N	N	100	10	N	70	<.02	2.8	38.00	94.0	13	5.5
0807	<5	10	30	N	N	200	15	N	70	.04	3.3	17.00	170.0	12	5.0
0808	<5	30	30	N	N	150	N	N	70	.19	2.5	16.00	1,100.0	29	5.0
0809	<5	10	20	N	N	200	10	N	70	.07	3.0	8.00	210.0	10	5.0
0810	<5	10	30	N	N	200	N	N	70	.03	2.8	7.00	200.0	11	5.0
0811	<5	15	15	N	N	150	10	N	70	.05	4.5	13.00	120.0	20	5.0
0812	<5	15	30	N	N	300	10	N	70	<.02	3.5	15.00	140.0	15	5.0
0813	<5	70	20	N	N	150	10	N	50	.05	3.6	20.00	380.0	96	5.0
0814	<5	<10	20	N	N	200	<10	N	70	<.02	3.2	9.00	170.0	10	5.2
0815	<5	10	30	N	N	300	N	N	70	.04	2.9	16.00	230.0	21	5.0
0816	<5	15	30	N	N	300	10	N	150	.02	3.4	31.00	130.0	16	5.0
0817	<5	15	15	N	N	200	10	N	100	.06	2.8	22.00	53.0	16	5.5
0818	15	30	30	N	N	500	10	N	70	.57	3.1	47.00	1,100.0	49	5.2
0819	<5	15	15	N	N	150	<10	N	70	.06	3.3	14.00	310.0	20	5.2
0820	<5	10	10	N	N	100	N	N	70	.15	2.4	11.00	130.0	11	5.5
0821	<5	15	20	N	N	300	10	N	70	.15	3.1	21.00	150.0	17	5.5
0822	<5	<10	20	N	N	150	10	N	100	.05	3.6	16.00	79.0	9	5.2
0823	<5	10	15	N	N	200	15	N	300	.13	3.0	20.00	40.0	16	5.2
0824	<5	10	10	N	N	150	10	N	200	<.02	3.3	11.00	18.0	12	5.0
0825	<5	<10	30	N	N	300	10	N	100	.10	3.5	10.00	210.0	8	5.0
0826	<5	15	15	N	N	150	10	N	100	.03	2.9	4.00	71.0	24	5.0
0827	20	10	30	N	N	200	N	N	70	.17	2.3	22.00	250.0	10	5.5
0828	70	15	30	N	N	300	10	N	150	<.02	1.8	40.00	110.0	22	5.5
0829	30	20	30	N	N	300	10	<200	70	<.02	1.7	39.00	95.0	37	5.0
0830	70	50	30	N	N	300	10	<200	100	.09	2.2	130.00	180.0	90	5.7
0831	70	30	30	N	N	300	10	<200	70	<.02	2.0	150.00	110.0	30	5.7
0832	30	30	30	N	N	300	15	<200	100	<.02	2.4	110.00	170.0	22	4.7
0833	15	10	20	N	N	300	10	<200	150	<.02	1.7	34.00	41.0	12	5.2
0834	30	10	30	N	N	300	10	N	100	<.02	2.2	27.00	1,000.0	9	5.5
0835	50	15	100	N	N	300	15	N	70	.09	2.8	40.00	2,000.0	35	5.7
0836	15	10	30	N	N	300	10	N	70	<.02	1.5	11.00	1,300.0	8	5.5
0837	50	10	70	N	N	300	<10	N	100	.07	1.7	39.00	1,300.0	17	5.5

Sample	X-COORD.	Y-COORD.	S-FE%	S-MG%	S-CA%	S-TI%	S-MN	S-AG	S-B	S-BA	S-CO	S-CR	S-CU	S-MO
0838	114,140	46,730	2.0	.30	<.05	.30	30	N	<10	200	<5	70	300	70
0839	114,100	46,710	3.0	.30	<.05	.50	30	N	<10	700	<5	30	300	30
0840	114,060	46,660	7.0	.20	<.05	.70	70	N	<10	20	10	700	500	N
0841	114,020	46,610	3.0	.20	<.05	.70	50	N	<10	150	N	700	150	5
0842	114,160	46,410	7.0	.30	<.05	.50	1,500	.5	<10	700	15	100	200	<5
0843	114,110	46,450	7.0	.30	<.05	.30	1,500	N	<10	300	20	150	150	N
0844	114,060	46,490	7.0	.20	<.05	.50	200	N	<10	70	5	200	150	N
0845	114,020	46,550	3.0	.50	<.05	.30	50	N	<10	500	N	70	150	N
0846	113,960	46,600	7.0	.20	<.05	.30	30	N	<10	300	N	700	200	N
0847	113,850	46,620	7.0	.20	<.05	.50	300	N	<10	150	<5	70	200	N
0848	113,770	46,630	7.0	.30	<.05	.50	300	N	<10	150	N	70	300	N
0849	113,700	46,620	7.0	.70	<.05	.50	1,500	N	<10	500	7	70	300	N
0850	113,640	46,590	7.0	.70	<.05	.30	1,500	.5	<10	500	<5	70	300	N
0851	113,620	46,530	7.0	.70	<.05	.50	700	.5	<10	500	N	50	200	5
0852	113,590	46,470	7.0	.70	<.05	.50	300	N	20	1,500	N	150	150	N
0853	113,590	46,420	7.0	.70	<.05	.50	300	N	15	1,000	N	70	150	N
0854	113,540	46,370	7.0	.10	<.05	.70	200	N	<10	200	N	500	150	5
0855	113,500	46,350	7.0	.50	<.05	.70	5,000	N	<10	500	N	700	150	5
0856	113,440	46,330	5.0	.30	<.05	.30	700	N	<10	1,000	N	70	100	5
0857	113,390	46,300	7.0	.50	<.05	.50	1,500	1.0	<10	500	5	700	500	5
0858	113,360	46,340	5.0	.30	<.05	.20	300	2.0	<10	1,500	N	50	300	5
0859	113,330	46,380	7.0	.30	<.05	.70	1,500	N	<10	300	5	500	300	N
0860	113,310	46,420	7.0	.50	<.05	.70	2,000	.5	<10	1,000	5	100	300	N
0861	113,290	46,450	7.0	.30	<.05	.70	300	N	<10	300	N	700	500	N
0862	113,280	46,480	7.0	.70	<.05	.70	1,000	N	20	1,000	5	100	500	N
0863	113,610	46,710	7.0	.70	<.05	.70	>5,000	N	<10	1,000	150	1,500	300	N
0864	113,570	46,660	7.0	.70	<.05	.70	300	N	<10	300	5	150	300	N
0865	113,510	46,630	7.0	.50	<.05	.70	700	N	<10	300	5	700	150	N
0866	113,450	46,590	7.0	.70	<.05	.70	300	N	<10	700	N	70	150	<5
0867	113,400	46,540	7.0	.70	<.05	.70	300	N	<10	1,000	5	200	300	7
0868	113,530	46,870	7.0	.70	<.05	.70	150	N	<10	1,000	15	200	200	N
0869	113,560	46,330	7.0	.20	<.05	.70	1,500	N	<10	200	5	1,000	300	N
0870	113,620	46,300	7.0	.50	<.05	.70	1,500	N	<10	1,000	5	1,700	300	7
0871	113,670	46,300	7.0	.30	<.05	.70	1,000	1.0	<10	500	<5	700	500	N
0872	113,740	46,320	7.0	.30	<.05	.70	1,000	N	<10	500	5	100	150	N
0873	113,810	46,360	7.0	.30	<.05	.50	300	N	<10	500	5	150	300	N
0874	113,860	46,400	7.0	.50	<.05	.30	100	N	<10	1,000	N	30	300	N
0875	113,920	46,430	5.0	.70	.10	.30	>5,000	N	<10	1,000	15	70	500	N
0876	113,980	46,440	5.0	.70	<.05	.50	>5,000	N	<10	1,500	20	70	300	N
0877	114,180	46,080	7.0	.30	<.05	.30	150	.5	<10	300	5	300	300	N
0878	114,130	46,110	7.0	.20	<.05	.70	70	N	<10	300	N	150	150	<5
0879	114,060	46,170	7.0	.50	<.05	.30	150	N	<10	1,000	5	500	200	<5
0880	114,010	46,200	7.0	.30	<.05	.30	50	N	<10	500	5	200	150	5
0881	113,950	46,250	7.0	.70	<.05	.70	200	N	<10	1,000	15	300	300	N
0882	113,890	46,290	7.0	.30	<.05	.30	50	N	<10	1,000	15	500	200	N

Sample	S-NI	S-PB	S-SC	S-SN	S-SR	S-V	S-Y	S-ZN	S-ZR	AA-AU	AA-CD	AA-ZN	AA-CU	AA-PB	PH
0838	<5	<10	20	N	N	150	15	N	150	.11	1.0	8.00	520.0	12	5.5
0839	<5	50	30	<10	N	300	30	N	70	<.02	2.3	6.00	410.0	30	5.2
0840	30	10	50	N	N	300	N	<200	100	<.02	2.3	43.00	390.0	14	4.5
0841	30	30	30	N	N	300	10	N	100	<.02	1.7	11.00	200.0	38	5.2
0842	15	50	30	N	N	300	10	500	100	.09	2.4	280.00	180.0	48	5.2
0843	30	30	30	N	N	300	<10	300	70	<.02	2.6	330.00	130.0	24	5.5
0844	70	15	30	N	N	300	15	<200	100	<.02	2.2	140.00	200.0	23	5.2
0845	5	50	15	N	N	150	15	N	100	<.02	1.5	16.00	150.0	20	5.2
0846	5	30	30	N	N	200	20	N	100	.05	2.1	16.00	310.0	22	5.2
0847	50	50	20	N	N	300	15	N	100	<.02	1.7	20.00	81.0	25	5.5
0848	20	70	30	N	N	300	N	N	100	<.02	1.3	27.00	110.0	31	5.0
0849	30	50	30	N	N	300	10	N	100	<.02	1.2	40.00	100.0	30	5.0
0850	5	50	30	N	N	300	N	N	100	.04	1.8	100.00	330.0	55	5.0
0851	<5	70	30	N	N	300	15	300	150	.10	1.8	240.00	140.0	57	5.0
0852	30	30	30	N	N	300	15	N	100	<.02	1.6	40.00	100.0	19	5.0
0853	5	70	30	N	N	300	15	200	150	.03	1.8	63.00	78.0	31	5.7
0854	50	30	20	N	N	200	15	200	150	<.02	1.9	160.00	64.0	37	5.0
0855	100	150	30	N	N	300	15	300	150	<.02	2.6	290.00	140.0	120	5.5
0856	<5	15	30	N	N	150	10	<200	100	.04	1.5	120.00	77.0	29	5.2
0857	70	500	70	N	N	300	30	300	100	<.02	3.0	310.00	470.0	430	5.7
0858	5	150	10	N	N	150	15	700	150	<.02	1.6	840.00	260.0	180	5.0
0859	30	70	70	N	N	300	30	300	150	<.02	2.8	250.00	190.0	61	5.2
0860	20	200	30	N	N	300	20	500	100	.33	3.1	380.00	290.0	230	5.0
0861	100	50	70	N	N	300	20	200	150	<.02	3.2	200.00	240.0	88	5.0
0862	30	70	30	N	N	500	20	300	300	<.02	2.0	150.00	300.0	52	4.7
0863	1,500	30	70	N	N	500	15	300	70	<.02	3.8	150.00	110.0	55	4.5
0864	30	20	30	N	N	500	20	N	150	<.02	1.8	74.00	130.0	22	4.5
0865	70	30	70	N	N	500	10	N	70	<.02	2.2	43.00	77.0	30	4.7
0866	10	30	20	N	N	700	10	N	150	<.02	1.6	48.00	85.0	28	4.5
0867	20	30	30	N	N	700	15	N	200	.03	1.5	82.00	110.0	32	5.5
0868	70	30	30	N	N	700	15	N	200	<.02	1.3	27.00	79.0	18	5.0
0869	150	50	70	N	N	700	20	300	150	<.02	2.4	210.00	120.0	65	5.2
0870	50	200	30	N	N	500	10	200	150	<.02	2.1	170.00	110.0	110	4.7
0871	100	200	30	N	N	700	15	200	150	.11	2.4	160.00	150.0	56	5.0
0872	30	30	30	N	N	300	10	200	300	.02	1.6	82.00	70.0	32	5.2
0873	30	70	30	N	N	300	N	N	150	<.02	1.6	58.00	290.0	59	5.2
0874	<5	30	30	N	N	200	<10	N	70	.08	1.3	31.00	160.0	20	4.7
0875	30	20	15	N	N	300	15	700	100	<.02	2.8	550.00	290.0	29	5.2
0876	30	70	20	N	N	300	10	700	100	<.02	3.0	610.00	250.0	55	4.5
0877	20	30	20	N	N	300	<10	N	100	<.02	2.2	53.00	160.0	32	5.0
0878	5	15	15	N	N	300	15	N	150	<.02	2.6	27.00	110.0	32	4.7
0879	20	20	30	N	N	300	15	N	100	<.02	3.0	52.00	170.0	24	4.7
0880	20	10	20	N	N	300	15	N	150	<.02	3.2	28.00	110.0	23	4.7
0881	30	30	50	N	N	300	30	N	100	<.02	2.2	80.00	220.0	28	5.3
0882	30	50	30	N	N	300	15	N	100	<.02	2.3	40.00	210.0	65	4.7

Sample	X-COORD.	Y-COORD.	S-FE%	S-MG%	S-CA%	S-TI%	S-MN	S-AG	S-B	S-BA	S-CO	S-CR	S-CU	S-MO
0883	113,830	46,310	7.0	.30	<.05	.70	70	N	<10	700	N	150	100	N
0884	113,920	46,010	7.0	.50	<.05	.70	30	N	<10	300	N	150	150	7
0885	113,880	46,050	7.0	.30	<.05	.30	10	N	<10	300	N	50	70	5
0886	113,830	46,090	7.0	.10	<.05	.30	10	N	<10	200	N	50	70	N
0887	113,770	46,140	7.0	.20	<.05	.30	30	N	<10	1,000	N	70	70	5
0888	113,750	46,200	7.0	.20	<.05	.70	300	N	<10	300	5	700	500	5
0889	113,720	46,250	7.0	.10	<.05	.70	300	N	<10	150	5	1,000	300	5
0890	113,970	45,960	5.0	.50	<.05	.50	15	N	<10	500	N	30	300	10
0891	113,970	45,890	5.0	.20	<.05	.50	15	N	<10	500	N	50	150	30
0892	113,990	45,830	3.0	.30	<.05	.30	70	N	<10	200	N	150	700	30
0893	114,020	45,770	7.0	.70	<.05	.70	100	N	<10	200	10	700	1,500	5
0894	114,020	45,710	3.0	.70	<.05	.50	30	N	<10	200	15	70	1,500	50
0895	114,040	45,650	5.0	.70	<.05	.30	30	N	<10	700	N	100	700	30
0896	114,010	45,570	7.0	.70	<.05	.30	100	N	<10	200	10	500	700	5
0897	113,830	45,770	7.0	.50	<.05	.70	150	N	<10	700	5	150	700	10
0898	113,850	45,830	7.0	.70	<.05	.70	70	N	<10	700	N	200	500	70
0899	113,850	45,880	7.0	.70	<.05	.70	50	N	<10	500	N	300	700	70
0900	113,840	45,930	7.0	.70	<.05	.70	30	N	<10	300	N	150	700	70
0901	113,800	45,980	7.0	.10	<.05	.50	15	N	<10	300	N	100	500	10
0902	113,740	46,010	7.0	.05	<.05	.30	15	N	<10	300	N	70	100	30
0903	113,710	46,040	7.0	.10	<.05	.30	100	N	<10	500	N	150	150	7
0904	113,640	46,070	7.0	.20	<.05	.50	300	N	<10	300	5	500	700	10
0905	113,580	46,080	7.0	.50	<.05	.50	1,500	N	<10	300	15	500	500	N
0906	113,510	46,110	7.0	.70	<.05	.50	1,500	N	<10	300	10	200	500	N
0907	113,450	46,140	7.0	.30	<.05	.50	300	N	<10	300	5	150	300	N
0908	113,440	46,100	7.0	.30	<.05	.50	300	N	<10	200	10	200	300	<5
0909	113,770	45,690	7.0	.70	<.05	.50	700	N	<10	300	15	300	500	5
0910	113,760	45,740	7.0	.70	<.05	.50	500	N	<10	300	5	100	700	N
0911	113,750	45,790	7.0	.50	<.05	.50	300	N	<10	500	N	150	500	7
0912	113,720	45,840	7.0	.20	<.05	.30	30	N	<10	200	5	70	700	15
0913	113,680	45,890	7.0	.30	<.05	.70	30	N	<10	300	N	150	200	7
0914	113,630	45,920	7.0	.70	<.05	.50	30	N	<10	300	N	150	300	5
0915	113,570	45,950	7.0	.70	<.05	.70	300	N	<10	1,000	5	150	300	<5
0916	113,510	46,000	7.0	.30	<.05	.50	70	N	<10	500	N	150	700	150
0917	113,460	46,030	7.0	.30	<.05	.70	70	N	<10	500	N	70	150	5
0918	113,620	45,700	7.0	.20	<.05	.30	100	N	<10	150	5	20	1,000	5
0919	113,580	45,720	5.0	.20	<.05	.30	50	N	<10	70	5	150	1,000	5
0920	113,530	45,740	3.0	.50	<.05	.50	30	N	<10	30	N	500	500	5
0921	113,490	45,780	7.0	.70	<.05	.70	50	N	<10	300	N	1,000	700	5
0922	113,440	45,810	7.0	.70	<.05	.70	50	N	<10	700	N	200	200	<5
0923	113,420	45,880	7.0	.50	<.05	.70	70	N	<10	700	N	1,500	300	N
0924	113,400	45,950	7.0	.30	<.05	.70	50	N	<10	300	N	1,500	150	N
0925	113,390	46,020	7.0	.50	<.05	.70	1,000	N	<10	700	5	1,000	700	<5
0926	113,340	45,510	7.0	.70	<.20	.70	300	N	<10	300	5	1,000	1,000	7
0927	113,350	45,560	7.0	.70	<.05	.70	200	N	<10	500	10	500	300	15

Sample	S-NI	S-PB	S-SC	S-SN	S-SR	S-V	S-Y	S-ZN	S-ZR	AA-AU	AA-CD	AA-ZN	AA-CU	AA-PB	PH
0883	30	30	15	N	N	300	15	N	100	<.02	2.1	25.00	71.0	39	5.0
0884	<5	<10	30	N	N	300	30	N	200	<.02	1.9	8.00	59.0	8	5.0
0885	<5	<10	15	N	N	100	30	N	200	<.02	2.4	3.00	31.0	8	5.2
0886	<5	10	20	N	N	300	15	N	70	<.02	2.6	2.00	26.0	9	4.7
0887	<5	10	15	N	N	150	15	N	200	<.02	2.7	3.00	28.0	13	5.7
0888	70	70	30	N	N	300	20	<200	200	<.02	3.6	100.00	140.0	59	5.2
0889	70	20	30	N	N	300	15	<200	100	<.02	3.5	100.00	190.0	33	5.0
0890	<5	<10	30	N	N	150	30	N	100	<.02	3.3	5.00	200.0	8	4.5
0891	<5	<10	30	N	N	300	30	N	150	<.02	1.9	1.00	91.0	9	5.0
0892	30	15	30	N	N	300	N	N	70	<.02	1.4	19.00	320.0	16	5.0
0893	70	150	50	N	N	300	20	N	150	<.02	2.7	14.00	1,000.0	110	5.0
0894	50	30	20	N	N	200	10	N	150	.26	1.6	22.00	600.0	33	4.7
0895	<5	<10	30	N	N	150	15	N	100	.04	.8	10.00	380.0	17	4.7
0896	70	30	30	N	N	200	15	N	150	<.02	2.7	6.00	730.0	43	4.7
0897	30	70	50	N	N	300	15	<200	150	<.02	2.1	55.00	360.0	30	4.5
0898	30	10	50	N	N	300	20	N	100	.22	2.3	8.00	890.0	12	5.2
0899	30	10	50	N	N	300	20	N	150	<.02	2.7	8.00	290.0	12	4.5
0900	15	<10	20	N	N	300	20	N	200	<.02	1.8	3.00	230.0	9	4.5
0901	<5	<10	30	N	N	300	10	N	150	<.02	2.4	2.00	120.0	6	4.5
0902	<5	<10	15	N	N	150	30	N	150	<.02	2.1	4.00	70.0	3	4.5
0903	<5	15	15	N	N	150	10	200	70	<.02	2.8	45.00	83.0	23	4.5
0904	50	70	30	N	N	300	15	200	150	<.02	3.2	160.00	200.0	61	5.0
0905	70	30	30	N	N	300	10	200	150	<.02	2.8	120.00	130.0	42	5.2
0906	50	30	30	N	N	200	15	<200	150	<.02	2.3	110.00	190.0	60	5.2
0907	20	70	30	N	N	300	15	<200	150	<.02	3.5	110.00	310.0	110	5.2
0908	20	30	20	N	N	300	15	<200	150	<.02	2.7	130.00	200.0	48	5.2
0909	70	30	30	N	N	300	15	<200	150	<.02	2.6	110.00	200.0	46	5.2
0910	<5	30	15	N	N	300	15	N	150	<.02	2.5	87.00	260.0	31	5.0
0911	<5	10	15	N	N	300	15	N	150	<.02	2.4	8.00	370.0	18	4.7
0912	30	10	15	N	N	150	N	N	70	<.02	1.8	11.00	560.0	22	5.0
0913	<5	30	20	N	N	300	30	N	150	<.02	2.3	15.00	100.0	52	4.5
0914	15	70	30	N	N	300	15	N	150	<.02	3.0	15.00	150.0	76	5.2
0915	15	15	30	N	N	300	10	N	100	<.02	2.6	17.00	160.0	8	5.2
0916	20	30	20	N	N	300	10	N	100	<.02	2.5	17.00	340.0	52	5.0
0917	10	20	30	N	N	300	10	N	100	<.02	2.5	60.00	120.0	23	5.0
0918	10	<10	15	N	N	100	N	N	150	.38	2.0	9.00	850.0	10	5.2
0919	70	10	15	N	N	100	N	N	150	.17	1.8	9.00	750.0	22	5.0
0920	30	<10	30	N	N	100	N	N	70	.03	2.8	16.00	920.0	15	5.2
0921	30	150	50	N	N	300	15	N	70	<.02	3.3	11.00	320.0	130	5.0
0922	<5	70	30	N	N	200	30	N	150	<.02	2.8	6.00	210.0	98	5.2
0923	50	70	50	N	N	300	15	N	150	<.02	2.7	47.00	140.0	58	5.0
0924	70	50	50	N	N	300	10	N	200	.04	1.9	39.00	60.0	38	5.0
0925	70	150	50	N	N	300	10	<200	150	.07	3.2	150.00	240.0	300	5.5
0926	70	70	50	N	N	300	15	<200	300	<.02	4.0	100.00	470.0	59	4.7
0927	70	30	20	N	N	300	10	N	150	<.02	2.8	75.00	420.0	45	5.0

Sample	X-COORD.	Y-COORD.	S-FE%	S-MG%	S-CA%	S-TI%	S-MN	S-AG	S-B	S-BA	S-CO	S-CR	S-CU	S-MO
0928	113,360	45,610	7.0	.70	<.05	.70	300	N	<10	500	10	200	700	20
0929	113,370	45,670	7.0	.70	<.05	.70	50	N	<10	300	5	700	700	<5
0930	113,380	45,720	7.0	.70	<.05	.50	70	N	<10	700	N	300	300	<5
0931	113,410	45,780	7.0	.70	<.05	.70	70	N	<10	700	N	700	300	7
0932	113,390	46,090	7.0	.30	<.05	.70	700	.5	<10	500	10	500	300	<5
0933	113,420	46,150	7.0	.30	<.05	.70	>5,000	N	<10	1,500	20	150	300	<5
0934	113,400	46,220	7.0	.70	.05	.70	>5,000	N	<10	500	20	300	300	<5
0935	113,260	45,530	7.0	.70	<.05	.30	150	N	<10	1,500	5	100	200	<5
0936	113,230	45,580	7.0	.70	<.05	.30	1,500	.5	<10	700	20	100	150	<5
0937	113,230	45,630	7.0	.70	<.05	.70	100	N	<10	1,000	N	200	150	10
0938	113,240	45,690	7.0	.70	<.05	.50	30	N	<10	700	N	700	150	<5
0939	113,220	45,750	7.0	.70	<.05	.70	300	N	<10	300	10	500	300	N
0940	113,190	45,800	7.0	.70	<.05	.50	30	N	<10	1,500	N	150	300	N
0941	113,190	45,860	7.0	.50	<.05	.70	300	N	<10	500	15	700	700	7
0942	113,200	45,930	7.0	.70	<.05	.70	3,000	N	<10	300	50	1,000	700	5
0943	113,190	46,000	7.0	.70	<.05	.70	700	N	<10	300	5	150	500	N
0944	113,160	46,060	7.0	.70	<.05	.50	200	N	<10	500	5	100	300	N
0945	114,090	45,560	7.0	1.00	<.05	.70	300	N	<10	700	20	70	1,500	<5
0946	114,090	45,500	7.0	.70	<.05	.70	150	N	<10	300	15	70	1,500	<5
0947	114,080	45,440	7.0	.70	<.05	.70	50	N	<10	500	N	150	500	<5
0948	114,050	45,390	7.0	.70	.70	.50	20	N	<10	500	N	30	150	<5
0949	114,030	45,330	7.0	.70	<.05	.70	30	N	<10	300	N	150	300	N
0950	113,990	45,280	7.0	1.00	<.05	.70	1,000	N	<10	200	10	700	500	N
0951	113,950	45,240	7.0	.70	<.05	.70	70	N	<10	500	5	70	200	N
0952	113,910	45,190	7.0	.70	<.05	.70	200	N	<10	50	7	700	150	N
0953	113,860	45,250	7.0	.70	<.05	.70	150	N	<10	150	50	1,500	500	N
0954	113,840	45,320	7.0	3.00	<.05	.70	1,000	N	<10	70	70	>5,000	700	5
0955	113,820	45,380	1.5	.30	.50	.30	50	N	<10	150	N	20	700	20
0956	113,800	45,440	5.0	.10	<.05	.30	30	N	<10	50	N	70	700	<5
0957	113,820	45,490	7.0	.10	<.05	.50	300	N	<10	70	10	1,000	1,500	<5
0958	113,860	45,530	7.0	.30	<.05	.30	30	N	<10	100	7	30	700	N
0959	113,890	45,560	7.0	1.50	<.05	.30	150	N	<10	70	30	30	1,500	N
0960	113,920	45,610	7.0	.70	<.05	.30	700	N	<10	150	10	30	1,500	<5
0961	113,970	45,660	7.0	.70	.07	.50	1,500	N	<10	200	70	700	1,000	<5
0962	113,540	45,310	7.0	1.00	<.05	.70	300	N	<10	300	15	1,500	700	5
0963	113,580	45,340	5.0	.70	.05	.50	30	N	<10	150	5	200	150	10
0964	113,630	45,370	7.0	.70	<.05	.50	300	N	<10	150	7	150	500	N
0965	113,670	45,400	7.0	.20	<.05	.70	100	N	<10	70	10	1,500	1,500	<5
0966	113,700	45,440	7.0	.70	<.05	.30	100	N	<10	30	7	300	1,500	<5
0967	113,720	45,470	7.0	.30	<.05	.30	50	N	<10	200	5	50	1,000	N
0968	113,720	45,520	7.0	.30	<.05	.30	150	N	<10	150	10	500	1,500	<5
0969	113,730	45,560	5.0	.70	<.05	.30	700	N	<10	300	20	70	1,500	N
0970	113,750	45,610	7.0	.70	<.05	.50	100	N	15	70	10	150	1,500	<5
0971	113,780	45,640	5.0	1.50	<.05	.30	700	N	<10	150	15	30	3,000	N
0972	113,810	45,670	7.0	.70	.07	.50	700	.5	<10	150	15	700	3,000	N

Sample	S-NI	S-PB	S-SC	S-SN	S-SR	S-V	S-Y	S-ZN	S-ZR	AA-AU	AA-CD	AA-ZN	AA-CU	AA-PB	PH
0928	20	70	30	N	N	300	15	N	150	.03	3.1	31.00	460.0	42	4.2
0929	50	30	50	N	N	500	15	N	100	<.02	3.8	53.00	470.0	26	4.5
0930	<5	200	30	N	N	300	20	N	100	.02	3.1	18.00	220.0	870	5.0
0931	10	300	30	15	N	300	30	N	150	<.02	2.7	17.00	180.0	280	5.0
0932	70	150	30	N	N	300	15	<200	150	<.02	3.2	100.32	250.0	190	4.2
0933	70	150	20	N	N	300	15	<200	150	<.02	2.6	110.00	83.0	100	4.2
0934	50	150	30	N	N	300	10	300	150	<.02	3.9	310.00	180.0	160	5.0
0935	30	70	30	N	N	500	30	N	150	<.02	2.9	30.00	140.0	45	5.0
0936	30	150	30	N	N	200	10	200	150	<.02	2.1	120.00	79.0	160	5.0
0937	10	30	20	N	N	500	15	N	200	<.02	3.1	26.00	69.0	31	5.0
0938	10	30	30	N	N	500	15	N	150	<.02	3.1	25.00	100.0	33	5.2
0939	30	30	30	N	N	300	15	N	100	<.02	3.1	56.00	230.0	31	5.2
0940	<5	20	20	N	N	200	10	N	100	.04	2.8	10.00	190.0	23	5.0
0941	70	70	30	N	N	500	15	<200	150	.03	3.1	160.00	310.0	110	4.7
0942	150	200	50	N	N	1,000	20	300	150	.02	3.4	270.00	320.0	200	5.2
0943	150	150	30	N	N	300	10	<200	150	<.02	2.7	120.00	230.0	100	4.7
0944	30	20	30	N	N	300	15	N	150	<.02	2.7	51.00	230.0	22	5.0
0945	70	10	30	N	N	500	50	N	150	<.02	2.5	83.00	980.0	16	4.5
0946	70	15	30	N	N	500	15	N	150	<.02	1.9	53.00	690.0	17	4.7
0947	20	30	30	N	N	500	15	N	150	<.02	2.4	61.00	220.0	24	5.0
0948	<5	10	15	N	100	150	10	N	200	<.02	1.5	5.00	44.0	11	4.5
0949	50	30	30	N	N	500	10	N	150	<.02	2.8	16.00	120.0	38	4.7
0950	300	50	50	N	N	500	10	N	70	<.02	2.4	95.00	120.0	53	4.7
0951	30	20	20	N	N	300	15	N	150	<.02	1.9	18.00	64.0	18	5.2
0952	150	20	70	N	N	500	N	N	70	<.02	2.4	35.00	100.0	18	4.7
0953	150	10	70	N	N	700	10	N	70	<.02	3.1	20.00	210.0	9	4.5
0954	1,000	10	50	N	N	300	10	N	70	<.02	3.2	41.00	380.0	14	5.2
0955	<5	<10	10	N	200	100	15	N	150	.04	1.0	6.00	380.0	5	5.0
0956	<5	<10	5	N	N	100	N	N	150	.44	1.8	6.00	660.0	8	5.2
0957	70	50	30	N	N	300	10	N	100	.60	3.8	22.00	1,700.0	44	5.5
0958	10	<10	15	N	N	200	N	N	100	.63	1.6	5.00	660.0	8	5.5
0959	70	15	20	N	N	200	N	N	150	.05	2.6	89.00	2,000.0	23	5.0
0960	15	15	20	N	N	300	<10	N	150	.27	2.1	21.00	1,200.0	22	5.0
0961	200	30	30	N	N	300	30	N	150	.06	3.1	110.00	510.0	32	4.7
0962	200	<10	70	N	N	700	15	N	150	.03	3.2	57.00	390.0	10	5.0
0963	20	<10	20	N	N	200	15	N	300	<.02	2.2	9.00	82.0	9	5.2
0964	30	30	20	N	N	300	10	N	150	<.02	2.5	64.00	240.0	24	5.2
0965	70	30	30	N	N	500	15	N	100	.39	3.6	19.00	800.0	24	5.2
0966	70	20	30	N	N	200	N	N	100	.44	2.9	14.00	1,100.0	23	5.5
0967	20	150	20	N	N	200	10	N	100	.32	2.1	9.00	520.0	110	5.3
0968	70	30	15	N	N	200	N	N	100	.33	2.7	7.00	1,200.0	40	5.3
0969	10	70	20	N	N	200	N	N	100	.08	2.2	30.00	700.0	100	4.7
0970	50	15	30	N	N	200	15	N	150	.30	2.9	23.00	1,100.0	20	5.2
0971	15	<10	20	N	N	300	15	N	100	.17	2.7	100.00	2,400.0	11	4.5
0972	150	150	30	N	N	300	N	N	100	.39	2.3	83.00	1,800.0	42	5.0

Sample	X-COORD.	Y-COORD.	S-FE%	S-MG%	S-CA%	S-TI%	S-MN	S-AG	S-B	S-BA	S-CO	S-CR	S-CU	S-MO
0973	113,610	45,610	3.0	.30	<.05	.30	150	N	<10	100	7	100	300	N
0974	113,610	45,560	3.0	.10	<.05	.30	70	N	<10	50	N	100	700	N
0975	113,630	45,500	5.0	.10	<.05	.30	30	N	<10	150	N	70	700	N
0976	113,670	45,480	.7	.20	<.05	.10	150	N	<10	20	N	50	700	N
0977	113,650	45,200	7.0	.70	<.05	.30	200	N	<10	150	7	300	150	N
0978	113,680	45,160	3.0	.20	<.05	.30	20	3.0	<10	100	N	50	150	N
0979	113,710	45,120	3.0	.10	.05	.30	15	N	<10	150	N	70	150	N
0980	113,770	45,130	3.0	.70	<.05	.30	70	N	<10	70	5	300	150	N
0981	113,830	45,130	7.0	.70	<.05	.30	70	N	<10	70	20	1,500	150	N
0982	113,880	45,140	7.0	.20	<.05	.30	300	N	<10	50	30	700	150	N
0983	113,520	45,530	5.0	.50	<.05	.30	3,000	N	<10	150	300	100	1,500	N
0984	113,490	45,500	5.0	.70	<.05	.30	500	N	<10	150	30	30	1,500	N
0985	113,460	45,460	3.0	.30	<.05	.50	150	N	<10	70	5	70	150	N
0986	113,430	45,430	7.0	.70	<.05	.70	70	N	<10	70	5	1,500	150	<5
0987	113,400	45,390	7.0	1.50	<.05	.30	100	N	<10	50	20	3,000	150	<5
0988	113,270	45,500	5.0	.70	<.05	.30	300	N	<10	200	5	500	150	<5
0989	113,280	45,460	5.0	.70	<.05	.30	30	N	<10	150	7	100	150	N
0990	113,310	45,410	7.0	.70	<.05	.50	300	N	<10	50	20	1,500	700	N
0991	113,350	45,360	7.0	.70	<.05	.30	30	N	<10	150	N	150	200	5
0992	113,350	45,300	3.0	.10	<.05	.30	30	N	<10	70	N	70	200	N
0993	113,310	45,250	7.0	.70	.10	.70	2,000	N	15	300	15	70	150	N
0994	113,260	45,210	5.0	.70	<.05	.70	1,000	N	<10	300	5	50	150	N
0995	113,640	45,280	7.0	.70	<.05	.70	50	N	<10	200	10	1,000	200	<5
0996	113,590	45,250	7.0	.70	<.05	.70	200	N	<10	150	10	1,500	700	<5
0997	113,540	45,210	5.0	.10	<.05	.30	30	N	<10	300	N	70	300	N
0998	113,500	45,170	5.0	.70	<.05	.30	30	N	<10	300	N	30	700	<5
0999	113,450	45,150	7.0	.70	<.05	.30	150	N	<10	300	10	30	1,000	<5
1000	113,410	45,110	7.0	.70	<.05	.30	70	N	<10	150	10	150	1,000	<5
1001	113,380	45,060	7.0	.70	<.05	.30	1,500	N	<10	500	15	150	300	N
1002	113,340	45,030	7.0	.70	<.05	.70	300	N	20	300	5	30	100	5
1003	113,290	45,010	3.0	.70	<.05	.30	700	N	<10	500	5	30	150	N
1004	113,230	44,990	7.0	.70	<.05	.70	500	N	<10	200	5	20	150	N
1005	115,280	47,300	3.0	.20	<.05	.30	1,500	N	<10	150	30	20	700	N
1006	115,250	47,370	7.0	.70	<.05	.30	200	N	<10	200	5	150	700	5
1007	115,200	47,420	7.0	.10	<.05	.30	100	N	<10	200	5	100	500	7
1008	115,190	47,480	7.0	.50	<.05	.30	100	N	<10	100	5	300	700	<5
1009	115,200	47,540	7.0	.30	<.05	.50	50	N	<10	500	N	20	1,000	5
1010	115,190	47,620	3.0	.70	<.05	.30	50	N	<10	70	N	30	700	30
1011	115,190	47,700	5.0	.20	<.05	.30	50	N	<10	70	5	500	300	7
1012	115,190	47,780	7.0	.30	<.05	.50	150	N	10	50	5	200	300	N
1013	115,210	47,860	7.0	.20	<.05	.50	500	N	<10	200	5	30	300	N
1014	115,200	47,950	7.0	.30	<.05	.50	700	N	10	700	N	20	300	N
1015	115,200	48,040	5.0	.50	<.05	.30	700	N	<10	700	N	30	100	N
1016	115,200	48,120	5.0	.20	<.05	.30	200	N	<10	700	N	30	150	N
1017	115,200	48,210	7.0	.20	<.05	.30	1,000	N	<10	200	5	30	150	N

Sample	S-NI	S-PB	S-SC	S-SN	S-SR	S-V	S-Y	S-ZN	S-ZR	AA-AU	AA-CD	AA-ZN	AA-CU	AA-PB	PH
0973	30	10	15	N	N	150	10	N	150	.15	1.5	33.00	550.0	20	4.5
0974	15	10	15	N	N	150	N	N	150	.31	1.4	16.00	530.0	17	5.0
0975	<5	70	15	N	N	150	N	N	100	.20	1.2	24.00	580.0	79	4.5
0976	5	<10	5	N	N	30	N	N	30	.23	1.6	81.00	2,500.0	59	5.0
0977	70	15	30	N	N	300	15	N	150	<.02	1.6	57.00	120.0	29	5.0
0978	<5	<10	30	N	N	200	15	N	100	<.02	1.7	2.00	83.0	14	5.0
0979	15	<10	20	10	200	150	15	N	100	<.02	1.6	3.00	100.0	5	5.0
0980	70	10	30	N	N	150	10	N	70	<.02	1.7	14.00	150.0	12	5.0
0981	150	15	30	N	N	300	15	N	100	<.02	2.4	25.00	100.0	32	5.0
0982	300	30	70	N	N	300	10	N	50	<.02	2.4	29.00	140.0	43	4.5
0983	30	10	20	N	N	150	N	N	150	.21	1.4	17.00	1,200.0	13	4.0
0984	15	10	15	N	N	100	N	N	100	.11	1.4	27.00	980.0	13	4.7
0985	10	<10	15	N	N	150	10	N	150	<.02	1.3	40.00	65.0	19	4.7
0986	150	<10	30	N	N	200	20	N	200	<.02	1.4	10.00	70.0	11	5.0
0987	700	<10	30	N	N	300	N	N	70	<.02	1.9	16.00	170.0	15	5.2
0988	70	10	20	N	N	150	20	N	100	<.02	1.6	21.00	120.0	16	4.7
0989	70	<10	30	N	N	150	15	N	150	<.02	1.5	6.00	100.0	4	5.0
0990	200	15	50	N	N	300	15	N	70	<.02	2.3	33.00	410.0	24	5.0
0991	15	10	30	N	N	150	15	N	150	<.02	1.6	8.00	130.0	17	4.7
0992	15	<10	10	N	N	150	N	N	150	.02	1.2	4.00	130.0	15	5.0
0993	15	10	20	N	N	200	150	200	300	<.02	1.5	280.00	35.0	22	4.7
0994	<5	30	20	N	N	200	10	N	300	<.02	1.5	35.00	80.0	35	5.0
0995	150	<10	30	N	N	300	15	N	70	<.02	2.6	20.00	190.0	7	4.5
0996	300	10	50	N	N	300	20	<200	150	<.02	2.5	55.00	480.0	15	5.7
0997	<5	10	15	N	N	150	10	N	100	<.02	1.6	10.00	380.0	9	5.0
0998	<5	<10	15	N	N	100	15	N	150	.08	1.3	3.00	400.0	11	5.0
0999	5	<10	30	N	N	300	10	N	100	.04	1.9	230.00	620.0	12	5.2
1000	7	10	30	N	N	300	15	N	100	.03	2.6	15.00	720.0	16	5.0
1001	10	10	30	N	N	300	15	<200	150	<.02	2.0	84.00	250.0	19	4.7
1002	<5	150	30	N	N	300	15	200	200	<.02	1.8	70.00	15.0	67	5.0
1003	<5	70	20	N	N	100	10	200	200	<.02	1.1	73.00	63.0	51	5.0
1004	<5	30	20	N	N	300	10	<200	150	<.02	2.0	54.00	77.0	41	5.0
1005	50	<10	30	N	N	100	20	N	150	<.02	1.8	48.00	320.0	7	4.7
1006	70	30	70	N	N	300	10	N	100	<.02	1.9	41.00	250.0	23	4.7
1007	15	10	30	N	N	300	15	N	100	<.02	2.2	24.00	230.0	15	5.0
1008	50	20	30	N	N	300	15	N	70	<.02	1.9	9.00	260.0	13	5.0
1009	<5	10	>100	N	N	300	15	N	30	<.02	3.0	5.00	580.0	10	4.5
1010	<5	<10	20	N	N	100	N	N	70	<.02	1.2	4.00	330.0	5	4.5
1011	50	<10	20	N	N	150	20	N	100	<.02	1.5	44.00	190.0	9	5.0
1012	30	<10	30	N	N	300	15	N	50	<.02	1.9	24.00	120.0	10	5.0
1013	10	10	20	N	N	150	N	N	150	<.02	1.5	28.00	170.0	15	5.5
1014	<5	20	30	N	N	200	N	<200	70	<.02	1.5	62.00	180.0	18	5.0
1015	<5	20	30	N	N	200	N	200	150	<.02	1.1	84.00	44.0	22	5.0
1016	<5	20	20	N	N	100	N	<200	100	<.02	1.7	110.00	110.0	15	5.5
1017	10	30	30	N	N	150	10	300	150	<.02	1.9	150.00	76.0	24	5.5

Sample	X-COORD.	Y-COORD.	S-FE%	S-MG%	S-CA%	S-TI%	S-MV	S-AG	S-B	S-BA	S-CO	S-CR	S-CU	S-MO
1018	115,060	47,620	10.0	.50	<.05	.70	300	N	<10	150	10	150	700	20
1019	115,040	47,680	7.0	.50	<.05	.30	300	N	<10	150	7	100	700	20
1020	115,010	47,740	7.0	.50	<.05	.30	50	N	<10	100	N	50	300	<5
1021	114,980	47,810	7.0	.50	<.05	.50	50	N	<10	150	N	70	200	<5
1022	114,950	47,870	7.0	.20	<.05	.50	30	N	<10	150	N	150	200	N
1023	114,920	47,930	7.0	.20	<.05	.50	30	N	<10	200	<5	150	150	<5
1024	115,010	47,520	7.0	.70	<.05	.70	150	N	<10	150	5	700	1,000	30
1025	114,980	47,580	7.0	.70	<.05	.70	30	N	<10	300	<5	150	700	7
1026	114,940	47,620	7.0	.50	<.05	.70	30	N	<10	300	<5	700	1,000	50
1027	114,800	47,460	7.0	1.50	<.05	.70	1,500	.5	<10	200	30	700	3,000	20
1028	114,820	47,520	7.0	.70	<.05	.70	500	N	<10	200	30	150	1,500	15
1029	114,840	47,580	7.0	.70	<.05	.70	50	N	<10	150	5	150	1,000	10
1030	114,860	47,640	7.0	.70	<.05	.30	100	N	<10	150	7	1,000	1,500	70
1031	114,880	47,700	3.0	.10	<.05	.70	50	N	<10	200	<5	150	150	30
1032	114,880	47,760	7.0	.70	<.05	.30	50	N	10	200	<5	70	500	<5
1033	114,860	47,820	7.0	.50	<.05	.50	50	N	<10	70	N	150	300	10
1034	114,850	47,870	3.0	.30	<.05	.50	100	N	<10	150	N	500	300	500
1035	114,600	47,600	7.0	.70	<.05	.70	2,000	.5	<10	500	30	150	2,000	30
1036	114,640	47,660	7.0	.30	<.05	.70	70	N	<10	1,000	N	150	1,500	30
1037	114,680	47,710	7.0	.30	<.05	.70	1,500	N	<10	150	N	70	150	70
1038	114,730	47,760	7.0	.30	<.05	.70	300	N	<10	300	N	100	700	300
1039	114,750	47,810	7.0	.30	<.05	.70	1,500	N	<10	200	N	500	1,500	700
1040	114,760	47,860	7.0	.30	<.05	.70	70	N	<10	70	5	70	200	7
1041	114,510	47,640	7.0	.20	<.05	.70	1,500	N	<10	200	20	20	700	N
1042	114,470	47,680	7.0	.70	<.05	.70	700	N	<10	70	10	150	700	N
1043	114,500	47,480	7.0	.50	<.05	.50	200	.5	<10	1,000	5	150	700	5
1044	114,440	47,520	7.0	.50	<.05	.30	70	N	<10	150	N	700	500	7
1045	114,400	47,550	7.0	.50	<.05	.30	30	N	<10	700	N	150	500	<5
1046	114,360	47,600	7.0	.30	<.05	.30	50	N	<10	500	N	1,000	300	<5
1047	114,340	47,660	7.0	.50	<.05	.30	50	N	<10	30	N	1,500	150	N
1048	114,180	47,550	7.0	.20	<.05	.50	300	N	<10	50	N	700	700	N
1049	114,120	47,640	7.0	.20	<.05	.70	200	N	<10	30	N	150	150	N
1050	114,220	47,680	7.0	.10	<.05	.70	150	.5	<10	70	N	1,500	500	N
1051	114,300	47,720	7.0	.30	<.05	.70	70	N	<10	70	N	150	70	N
1052	114,370	47,780	7.0	.30	<.05	.30	100	N	<10	30	N	150	70	N
1053	114,460	47,820	7.0	.05	<.05	.50	300	N	<10	50	10	70	700	N
1054	114,550	47,880	7.0	.05	<.05	.50	200	N	<10	30	10	150	700	N
1055	114,650	47,920	7.0	.20	<.05	.70	70	N	<10	30	5	100	300	N
1056	114,970	48,010	5.0	.10	<.05	.70	50	N	<10	150	<5	70	300	N
1057	115,040	48,050	7.0	.10	<.05	.70	1,500	N	<10	150	<5	20	300	N
1058	115,160	48,090	5.0	.10	<.05	.30	150	N	10	100	<5	20	70	N
1636	114,680	46,220	3.0	.20	<.05	.20	700	N	10	150	20	70	100	N
1637	114,670	46,120	7.0	.70	.20	.20	700	N	15	100	20	10	100	N
1638	114,670	46,010	5.0	.20	<.05	.20	300	N	20	150	7	20	70	N
1639	114,660	45,910	7.0	.50	<.05	.30	500	.5	30	150	10	100	200	N

Sample	S-NI	S-PB	S-SC	S-SN	S-SR	S-V	S-Y	S-ZN	S-ZR	AA-AU	AA-CD	AA-ZN	AA-CU	AA-PB	PH
1018	70	15	70	N	N	500	N	N	70	<.02	2.2	13.00	480.0	23	5.0
1019	15	10	30	N	N	300	N	N	50	<.02	2.1	10.00	680.0	17	5.5
1020	30	<10	70	N	N	300	N	N	30	<.02	1.6	4.00	260.0	12	5.0
1021	10	<10	70	N	N	300	<10	N	50	<.02	2.0	2.00	140.0	6	5.2
1022	20	<10	30	N	N	300	<10	N	70	<.02	1.6	3.00	94.0	7	5.0
1023	30	10	30	N	N	300	<10	N	100	<.02	2.4	4.00	93.0	12	5.2
1024	50	10	70	N	N	300	<10	N	70	.03	1.8	4.00	480.0	11	5.0
1025	<5	10	70	N	N	300	20	N	70	<.02	2.2	5.00	390.0	10	4.5
1026	15	10	70	N	N	300	30	N	70	<.02	2.1	5.00	460.0	6	6.0
1027	150	10	70	N	N	300	30	N	70	.20	1.9	78.00	2,900.0	20	5.0
1028	150	10	70	N	N	300	10	N	70	<.02	1.9	22.00	690.0	15	5.0
1029	30	<10	70	N	N	300	15	N	70	<.02	2.2	9.00	540.0	11	5.5
1030	150	15	70	N	N	300	N	N	70	<.02	1.6	19.00	680.0	18	5.0
1031	<5	<10	30	N	N	200	70	N	200	.05	.6	1.00	53.0	6	5.5
1032	<5	15	70	N	N	500	N	N	30	.11	1.2	5.00	200.0	21	5.0
1033	20	<10	30	N	N	300	N	N	50	<.02	1.5	4.00	100.0	7	5.0
1034	50	<10	30	10	N	150	10	N	70	<.02	1.0	3.00	180.0	2	5.5
1035	100	10	70	N	N	300	10	200	50	<.02	2.0	100.00	1,300.0	7	5.5
1036	<5	10	30	N	N	150	30	N	70	.14	2.4	8.00	950.0	7	5.5
1037	10	<10	100	N	N	300	20	<200	70	<.02	1.2	8.00	100.0	5	5.5
1038	10	<10	50	N	N	200	10	N	50	<.02	1.2	6.00	240.0	97	5.7
1039	10	10	70	N	N	300	10	500	70	<.02	2.0	22.00	1,300.0	15	5.7
1040	30	10	70	N	N	300	15	N	70	<.02	1.9	6.00	84.0	24	5.2
1041	20	10	100	N	N	300	N	N	50	.02	2.3	99.00	170.0	11	4.5
1042	100	10	70	N	N	300	N	300	50	<.02	1.8	210.00	320.0	11	4.7
1043	5	70	70	15	N	300	15	<200	70	.09	2.6	52.00	350.0	8	5.0
1044	20	<10	70	N	N	300	10	N	70	<.02	2.2	10.00	310.0	13	5.2
1045	15	10	30	N	N	200	N	N	150	<.02	1.7	5.00	280.0	8	5.5
1046	30	50	50	N	N	300	10	N	100	<.02	2.5	22.00	140.0	4	5.0
1047	20	10	50	N	N	300	N	N	70	<.02	1.9	21.00	100.0	19	5.0
1048	150	100	100	N	N	300	N	300	70	<.02	6.4	100.00	420.0	120	5.0
1049	30	30	50	N	N	300	N	<200	100	<.02	2.3	46.00	79.0	16	4.5
1050	50	30	>100	N	N	300	N	700	150	<.02	2.1	300.00	210.0	28	5.0
1051	10	10	20	N	N	300	20	N	300	<.02	1.8	11.00	23.0	14	4.5
1052	5	10	30	N	N	300	N	300	70	<.02	1.7	69.00	34.0	15	4.5
1053	70	10	70	N	N	300	N	N	70	<.02	1.9	25.00	390.0	12	4.5
1054	15	<10	70	N	N	300	N	N	100	<.02	2.1	74.00	270.0	11	5.0
1055	10	10	50	N	N	500	15	N	70	<.02	1.4	6.00	69.0	7	4.5
1056	<5	10	30	N	N	150	15	N	70	<.02	1.2	6.00	120.0	7	5.0
1057	<5	15	30	N	N	200	N	N	200	<.02	1.3	54.00	98.0	19	5.0
1058	<5	<10	10	N	N	100	N	N	150	<.02	.7	50.00	17.0	6	5.0
1636	15	70	15	N	N	150	10	200	50	<.05	--	140.00	160.0	85	5.5
1637	10	<10	30	N	N	150	30	N	50	<.05	--	85.00	110.0	10	5.5
1638	15	30	15	N	N	150	N	N	50	<.05	--	35.00	60.0	20	5.5
1639	30	50	15	N	N	150	10	<200	70	.15	--	100.00	120.0	40	5.2

Sample	X-COORD.	Y-COORD.	S-FE%	S-MG%	S-CA%	S-TI%	S-MV	S-AG	S-B	S-BA	S-CO	S-CR	S-CU	S-MO
1640	114,700	45,820	7.0	.50	<.05	.70	300	N	30	200	5	200	30	N
1641	114,740	45,710	7.0	.50	<.05	.30	200	N	30	150	<5	50	50	N
1642	114,140	45,910	7.0	.30	.20	.30	50	N	30	300	<5	100	70	7
1643	114,250	45,890	5.0	.10	<.05	.15	20	N	10	150	<5	20	100	<5
1644	114,360	45,880	3.0	.10	<.05	.15	200	N	10	100	<5	20	70	N
1645	114,460	45,860	3.0	.10	<.05	.15	200	N	10	70	<5	15	70	N
1646	114,560	45,800	3.0	.10	<.05	.15	200	.5	10	100	<5	50	70	N
1647	114,640	45,730	3.0	.15	<.05	.20	700	N	15	100	15	50	150	N
1648	113,890	45,030	3.0	.70	.30	.15	500	N	15	150	20	300	200	N
1649	113,940	44,940	3.0	.15	<.05	.15	200	5.0	15	150	<5	200	100	N
1650	113,960	44,840	7.0	.15	<.05	.15	700	.5	<10	150	15	700	500	N
1651	114,050	44,790	3.0	.20	<.05	.20	300	N	10	150	5	100	70	N
1652	114,130	44,720	7.0	.10	<.05	.15	300	N	10	150	10	500	300	N
1653	114,220	44,680	10.0	.20	<.05	.50	700	N	<10	100	30	1,500	700	N
1654	114,300	44,630	7.0	.20	<.05	.23	300	N	<10	50	10	700	150	N
1655	113,720	44,460	7.0	.50	<.05	.20	500	N	15	50	10	30	150	N
1656	113,760	44,540	7.0	.20	<.05	.20	300	N	10	50	5	30	70	N
1657	113,800	44,630	7.0	.10	<.05	.20	300	N	<10	70	10	500	300	N
1658	113,850	44,720	7.0	.15	<.05	.20	200	N	10	150	5	200	200	N
1659	113,900	44,780	5.0	.20	<.05	.15	700	N	10	150	15	100	100	N
1660	114,140	44,980	7.0	.70	1.00	.70	500	.5	15	2,000	15	100	100	N
1661	114,240	45,010	7.0	.20	<.05	.20	300	N	10	150	5	150	70	N
1662	114,340	45,040	5.0	.10	<.05	.15	200	N	<10	30	5	200	70	N
1663	114,450	45,040	7.0	.20	<.05	.20	300	N	10	30	7	300	300	N
1664	114,530	45,080	7.0	.10	<.05	.30	300	N	<10	30	7	700	100	N
1665	113,530	44,660	5.0	.50	<.05	.20	700	N	10	150	15	30	70	N
1666	113,430	44,680	7.0	.50	<.05	.30	150	N	10	150	5	15	50	N
1667	113,330	44,720	3.0	.10	<.05	.20	500	N	10	70	10	30	50	N
1668	113,220	44,700	7.0	.30	<.05	.30	700	N	<10	100	20	20	700	N
1669	113,130	44,650	3.0	.10	<.05	.15	150	N	10	150	N	10	70	N
1670	113,080	44,620	5.0	.20	<.05	.20	150	N	10	150	N	15	500	N
1671	113,080	45,420	5.0	.50	<.05	.20	300	N	10	70	N	30	70	N
1672	113,100	45,300	3.0	.15	<.05	.15	300	N	10	150	10	30	500	N
1673	113,100	45,200	5.0	.20	.10	.20	500	N	10	50	10	70	70	N
1674	113,100	45,120	5.0	.20	<.05	.20	300	N	10	50	10	100	70	N
1675	113,110	45,010	5.0	.20	<.05	.15	300	N	10	150	10	15	200	N
1676	113,120	44,900	3.0	.15	<.05	.15	300	N	10	150	10	10	30	N
1677	112,440	45,980	7.0	.10	<.05	.20	200	N	<10	100	10	1,000	70	N
1678	112,480	45,890	7.0	.20	<.05	.20	300	N	<10	50	10	1,000	100	N
1679	112,550	45,810	7.0	.70	<.05	.15	200	N	<10	50	10	1,500	70	N
1680	112,640	45,770	7.0	.70	<.05	.15	300	N	<10	100	15	1,500	70	N
1681	112,730	45,710	7.0	1.00	.50	.15	500	N	<10	100	20	1,500	70	N
1682	112,820	45,680	7.0	1.00	<.05	.15	700	N	<10	30	50	1,500	700	N
1683	112,920	45,660	5.0	.30	<.05	.20	200	N	10	150	5	70	70	N
1684	113,030	45,630	5.0	.20	.05	.20	100	N	10	100	5	20	150	N

Sample	S-NI	S-PB	S-SC	S-SN	S-SR	S-V	S-Y	S-ZN	S-ZR	AA-AU	AA-CD	AA-ZN	AA-CU	AA-PB	PH
1640	30	20	20	N	N	200	10	<200	70	<.05	--	30.00	30.0	15	5.0
1641	15	20	10	N	N	150	N	N	70	<.05	--	25.00	60.0	15	5.0
1642	10	300	20	N	N	150	15	N	70	<.05	--	5.00	85.0	120	5.0
1643	10	30	15	N	N	150	N	N	50	.05	--	5.00	120.0	20	5.2
1644	10	20	10	N	N	150	N	N	50	--	--	25.00	90.0	25	5.5
1645	10	20	10	N	N	150	N	<200	50	.05	--	50.00	70.0	30	5.2
1646	15	50	10	N	N	150	N	<200	50	.10	--	150.00	100.0	110	5.2
1647	20	30	20	N	N	150	10	<200	50	<.05	--	60.00	140.0	25	5.5
1648	150	30	20	N	N	150	15	300	50	<.05	--	280.00	200.0	35	6.0
1649	30	50	15	N	N	150	N	200	50	.05	--	80.00	110.0	75	5.0
1650	70	50	20	N	N	150	N	200	50	<.05	--	260.00	350.0	75	5.5
1651	20	20	15	N	N	150	N	200	50	<.05	--	270.00	110.0	45	5.2
1652	15	30	15	N	N	100	10	<200	70	<.05	--	45.00	120.0	45	5.2
1653	200	15	30	N	N	200	N	300	50	<.05	--	200.00	320.0	10	5.5
1654	150	50	15	N	N	200	N	300	50	<.05	--	180.00	140.0	60	5.5
1655	15	30	20	N	N	150	N	300	70	<.05	--	65.00	100.0	25	5.0
1656	15	20	15	N	N	150	N	200	70	<.05	--	90.00	65.0	20	5.2
1657	70	20	30	N	N	150	N	300	30	<.05	--	230.00	280.0	30	5.5
1658	30	20	15	N	N	100	N	200	50	<.05	--	95.00	130.0	20	5.5
1659	30	20	15	N	N	100	N	200	70	.05	--	85.00	100.0	20	5.5
1660	30	20	30	N	N	200	30	300	100	<.05	--	200.00	65.1	15	5.5
1661	30	30	15	N	N	150	N	200	70	<.05	--	120.00	75.0	25	5.5
1662	30	30	15	N	N	100	N	<200	50	<.05	--	50.00	140.0	25	5.5
1663	50	30	20	N	N	150	N	<200	70	<.05	--	50.00	260.0	30	5.5
1664	150	15	30	N	N	150	N	<200	70	<.05	--	60.00	85.0	15	5.7
1665	30	50	20	N	N	150	15	200	70	<.05	--	230.00	100.0	30	5.5
1666	7	30	15	N	N	150	10	200	70	<.05	--	150.00	35.0	25	5.0
1667	20	50	15	N	N	100	10	200	70	<.05	--	280.00	50.0	75	5.2
1668	20	70	15	N	N	150	30	200	70	<.05	--	170.00	310.0	75	5.5
1669	5	15	15	N	N	70	N	200	70	<.05	--	45.00	45.0	15	5.5
1670	5	70	15	N	N	150	N	200	70	<.05	--	50.00	220.0	55	5.0
1671	7	20	15	N	N	150	N	200	70	.05	--	62.00	170.0	25	5.0
1672	15	30	20	N	N	100	N	200	70	<.05	--	80.00	260.0	25	5.0
1673	20	20	15	N	N	100	N	200	100	<.05	--	120.00	35.0	20	5.7
1674	20	10	15	N	N	100	N	200	100	--	--	40.00	30.0	15	5.0
1675	10	20	10	N	N	100	N	200	70	<.05	--	70.00	40.0	20	5.2
1676	5	10	10	N	N	100	N	200	70	<.05	--	65.00	40.0	15	5.2
1677	500	20	30	N	N	150	N	200	50	<.05	--	70.00	60.0	20	5.5
1678	500	30	30	N	N	150	N	200	50	--	--	80.00	100.0	30	5.7
1679	700	30	30	N	N	150	N	200	50	--	--	100.00	95.0	30	5.2
1680	500	30	30	N	N	150	N	200	50	<.05	--	130.00	80.0	40	5.7
1681	700	30	30	N	N	150	N	200	50	<.05	--	110.00	90.3	30	7.0
1682	700	15	30	N	N	150	10	<200	30	.05	--	85.00	430.0	14	6.0
1683	20	30	15	N	N	150	10	N	150	<.05	--	40.00	69.0	29	5.2
1684	10	30	15	N	N	150	20	N	70	.05	--	15.00	260.0	15	5.0

Sample	X-COORD.	Y-COORD.	S-FE%	S-MG%	S-CA%	S-TI%	S-MV	S-AG	S-B	S-BA	S-CO	S-CR	S-CU	S-MO
1685	113,120	45,590	5.0	.10	<.05	.15	150	N	10	20	5	15	1,000	N
1686	113,200	45,520	5.0	.15	<.05	.15	150	N	10	70	5	15	700	N
1687	112,830	45,380	5.0	.30	<.05	.20	100	N	10	150	5	15	50	N
1688	112,770	45,460	5.0	.30	<.05	.20	150	N	10	200	5	15	50	N
1689	112,720	45,550	5.0	.20	<.05	.15	150	N	10	150	7	300	50	N
1690	112,650	45,630	7.0	.70	<.05	.15	200	N	10	150	20	500	100	N
1691	112,480	46,150	7.0	.70	<.05	.20	300	N	<10	20	20	300	100	N
1692	112,450	46,300	7.0	.70	<.05	.30	1,000	N	10	150	30	2,000	300	N
1693	112,410	46,390	5.0	.10	<.05	.20	2,000	N	10	150	15	1,500	200	N
1694	112,400	46,500	7.0	.10	<.05	.30	300	N	<10	20	10	500	70	N
1695	112,430	46,580	7.0	.10	<.05	.30	700	N	<10	20	15	300	150	N
1696	112,510	46,610	7.0	.10	<.05	.30	1,000	N	<10	100	20	700	300	N
1697	112,590	46,670	7.0	.30	<.05	.50	300	N	<10	50	7	700	500	N
1698	113,180	46,390	7.0	.10	<.05	.20	300	N	<10	70	7	200	70	N
1699	113,100	46,370	7.0	.30	.50	.30	700	N	<10	200	30	200	70	N
1700	113,000	46,400	7.0	.20	.05	.20	300	N	<10	150	20	200	100	N
1701	112,930	46,490	7.0	.15	<.05	.20	500	N	<10	20	20	200	70	N
1702	112,860	46,430	7.0	.30	<.05	.50	150	N	<10	150	10	50	70	N
1703	112,840	46,340	7.0	.70	<.05	.50	3,000	.5	<10	150	30	50	300	N
1704	112,820	46,260	7.0	.20	<.05	.30	300	N	<10	100	10	100	150	N
1705	112,800	46,140	7.0	.15	<.05	.50	150	N	<10	20	5	700	70	N
1706	112,790	46,080	7.0	.15	<.05	.50	200	N	<10	30	5	700	200	N
1707	112,800	46,690	5.0	.50	<.05	.30	150	N	<10	300	N	10	200	N
1708	112,870	46,760	7.0	.50	<.05	.50	200	N	<10	50	7	70	70	N
1709	112,940	46,860	7.0	.70	<.05	.30	1,000	N	<10	50	50	700	150	N
1710	113,040	46,870	7.0	.15	<.05	.30	1,500	N	<10	50	30	700	100	N
1711	113,120	46,880	7.0	.15	<.05	.70	2,000	N	<10	70	15	700	100	N
1712	113,240	46,900	7.0	.15	<.05	.70	300	1.0	<10	30	5	700	70	N
1713	112,980	45,790	7.0	.70	<.05	.20	1,500	N	<10	150	30	700	200	N
1714	112,910	45,870	7.0	.30	<.05	.20	300	N	<10	150	10	300	150	N
1715	112,900	45,970	7.0	.30	<.05	.30	300	.5	<10	70	15	500	500	N
1716	112,880	46,060	7.0	.10	<.05	.30	700	N	<10	50	20	100	500	N
1717	114,570	45,330	7.0	.30	<.05	.30	300	N	10	50	10	70	100	N
1718	114,480	45,380	5.0	.70	<.05	.20	700	N	10	700	10	20	70	N
1719	114,380	45,430	7.0	.70	<.05	.30	200	N	<10	150	10	15	700	N
1720	114,290	45,480	5.0	.20	<.05	.30	150	N	10	200	10	30	100	N
1721	114,200	45,530	5.0	.50	<.05	.30	150	N	10	200	10	20	70	N
1722	113,360	46,940	7.0	.10	<.05	.30	300	N	<10	50	10	70	70	N
1723	113,460	46,920	7.0	.20	<.05	.50	300	N	10	150	5	70	50	N
1724	113,360	47,070	7.0	.10	<.05	.30	150	N	<10	20	N	150	100	N
1725	113,460	47,070	7.0	.15	<.05	.20	300	N	10	150	5	100	100	N
1726	113,560	47,050	7.0	.15	<.05	.30	700	N	10	150	7	100	70	N
1727	113,660	47,020	5.0	.15	<.05	.15	1,000	N	<10	150	10	70	70	N
1728	113,760	47,060	7.0	.15	<.05	.20	1,000	N	<10	20	7	150	70	N
1729	113,880	47,080	5.0	.10	<.05	.20	70	N	<10	<20	N	70	70	N

Sample	S-NI	S-PB	S-SC	S-SN	S-SR	S-V	S-Y	S-ZN	S-ZR	AA-AU	AA-CD	AA-ZN	AA-CU	AA-PB	PH
1685	10	30	15	N	N	100	10	N	70	.05	--	65.00	410.0	26	5.5
1686	10	10	15	N	N	100	N	N	70	.10	--	30.00	360.0	8	5.0
1687	10	30	15	N	N	150	10	N	100	<.05	--	5.00	59.0	19	5.0
1688	10	30	15	10	N	100	15	N	100	<.05	--	130.00	35.0	21	5.0
1689	50	30	15	N	N	100	10	N	100	<.05	--	50.00	57.0	27	5.7
1690	100	20	15	N	N	150	10	<200	70	<.05	--	180.00	120.0	21	6.0
1691	100	10	15	N	N	150	10	<200	70	<.05	--	110.00	100.0	30	5.7
1692	100	30	15	N	N	150	N	<200	70	<.05	--	200.00	130.0	27	5.5
1693	300	30	15	N	N	150	N	1,500	70	<.05	--	280.00	130.0	29	5.0
1694	50	20	15	N	N	150	N	300	70	<.05	--	140.00	64.0	15	5.5
1695	100	30	30	N	N	150	N	1,000	70	<.05	--	560.00	120.0	33	6.0
1696	150	30	15	N	N	150	N	1,000	70	<.05	--	380.00	210.0	27	5.5
1697	50	15	15	N	N	150	N	N	70	<.05	--	80.00	300.0	13	5.5
1698	30	30	15	N	N	150	N	N	70	<.05	--	75.00	97.0	45	5.5
1699	70	20	20	N	N	150	30	200	70	<.05	--	250.00	78.0	18	5.5
1700	50	20	15	N	N	150	N	N	50	<.05	--	30.00	100.0	15	5.2
1701	70	20	15	N	N	150	N	N	50	<.05	--	65.00	97.0	19	5.5
1702	15	15	15	N	N	150	N	<200	50	<.05	--	55.00	110.0	15	5.5
1703	30	30	20	N	N	150	30	700	70	<.05	--	570.00	320.0	25	5.2
1704	30	20	30	N	N	150	N	<200	70	<.05	--	95.00	140.0	21	5.7
1705	100	20	20	N	N	150	N	200	70	<.05	--	180.00	100.0	29	6.0
1706	100	30	30	N	N	200	N	200	70	<.05	--	100.00	190.0	30	5.7
1707	5	30	15	N	N	150	15	N	70	.05	--	10.00	170.0	20	4.7
1708	30	20	20	N	N	150	N	N	70	.25	--	30.00	20.0	13	5.5
1709	700	20	30	N	N	150	N	200	30	<.05	--	100.00	110.0	25	6.0
1710	150	30	30	N	N	150	N	200	50	<.05	--	100.00	100.0	32	5.5
1711	150	70	50	N	N	200	N	200	70	<.05	--	100.00	96.0	83	5.5
1712	50	30	15	N	N	150	N	<200	70	<.05	--	40.00	56.0	25	5.0
1713	300	30	50	N	N	200	N	200	50	<.05	--	110.00	150.0	34	5.5
1714	30	150	15	N	N	150	N	200	100	<.05	--	110.00	150.0	160	5.5
1715	70	70	30	N	N	150	N	200	70	<.05	--	140.00	220.0	110	5.7
1716	30	700	30	N	N	150	N	300	70	<.05	--	310.00	270.0	1,000	6.0
1717	30	30	15	N	N	150	N	<200	100	<.05	--	40.00	78.0	23	6.2
1718	10	20	15	N	N	150	N	N	70	<.05	--	75.00	67.0	15	6.2
1719	10	20	15	N	N	150	N	N	70	.05	--	90.00	400.0	14	5.7
1720	10	50	15	10	N	150	N	N	70	<.05	--	15.00	180.0	38	5.0
1721	10	50	15	10	N	150	N	N	70	<.05	--	10.00	93.0	26	5.2
1722	30	30	20	N	N	100	N	<200	70	<.05	--	90.00	78.0	58	5.5
1723	15	30	20	N	N	150	N	<200	70	<.05	--	65.00	60.0	16	5.7
1724	20	10	20	N	N	150	N	<200	70	<.05	--	85.00	72.0	10	6.0
1725	20	30	20	N	N	150	N	<200	70	<.05	--	65.00	130.0	32	5.5
1726	15	50	20	N	N	200	10	<200	100	<.05	--	110.00	170.0	61	5.0
1727	15	30	20	N	N	150	N	<200	50	<.05	--	210.00	110.0	34	5.7
1728	15	20	20	N	N	200	N	<200	50	<.05	--	65.00	56.0	18	5.5
1729	10	20	15	N	N	150	N	N	50	<.05	--	65.00	93.0	12	5.2

Sample	X-COORD.	Y-COORD.	S-FE%	S-MG%	S-CA%	S-TI%	S-MV	S-AG	S-B	S-BA	S-CO	S-CR	S-CU	S-MO
1730	113,280	47,270	7.0	.15	<.05	.20	300	N	<10	150	10	100	70	N
1731	113,340	47,350	7.0	.15	.05	.30	300	N	10	150	10	70	70	N
1732	113,430	47,390	3.0	.10	<.05	.20	150	N	10	20	7	150	70	N
1733	113,540	47,400	7.0	.15	<.05	.20	500	N	15	50	15	200	70	N
1734	113,650	47,420	7.0	.10	<.05	.15	200	N	10	50	10	150	50	N
1735	113,730	47,490	7.0	.15	<.05	.20	300	.7	10	20	5	200	100	N
1736	113,840	47,510	3.0	.15	<.05	.10	70	N	10	50	N	100	30	N
1737	113,950	47,520	7.0	.15	<.05	.20	150	N	15	20	10	200	70	N
1738	114,040	47,560	7.0	.10	<.05	.20	100	N	10	20	7	100	30	<5
1739	115,350	47,820	7.0	.20	<.05	.20	200	N	10	150	10	100	500	N
1740	115,460	47,790	3.0	.15	<.05	.10	200	N	<10	150	5	10	100	N
1741	115,560	47,740	5.0	.15	<.05	.20	300	N	10	70	15	30	500	5
1742	115,650	47,690	7.0	.30	<.05	.20	300	N	15	30	200	300	200	5
1743	115,720	47,600	7.0	.50	<.05	.20	700	N	10	30	30	300	70	N
1744	115,580	47,290	5.0	.15	<.05	.15	150	N	<10	<20	10	200	50	N
1745	115,720	47,270	3.0	.15	<.05	.10	200	N	10	<20	15	700	50	N
1746	115,760	47,180	7.0	.20	<.05	.30	300	N	15	<20	15	500	100	N
1747	115,820	47,100	7.0	.15	<.05	.15	500	.5	<10	30	30	700	500	N
1748	115,900	47,040	3.0	.10	<.05	.10	100	N	10	20	5	100	20	N
1749	115,980	46,960	5.0	.10	<.05	.20	300	N	10	20	15	70	70	N
1750	115,040	47,030	7.0	.20	<.05	.30	300	N	10	100	15	70	500	N
1751	115,100	46,960	5.0	.15	<.05	.20	150	N	<10	50	5	50	200	N
1752	115,210	46,920	7.0	.15	<.05	.15	150	N	10	50	10	15	200	N
1753	115,340	46,890	7.0	.70	1.00	.15	700	N	15	150	30	100	500	N
1754	115,430	46,830	5.0	.15	.05	.20	700	N	15	150	20	15	100	N
1755	115,530	46,800	5.0	.10	<.05	.15	700	N	10	70	20	70	70	N
1756	115,620	46,720	7.0	.10	<.05	.20	500	N	15	150	20	100	150	N
1757	115,690	46,640	5.0	.15	<.05	.15	300	N	20	150	5	70	70	N
1758	115,780	46,580	5.0	.10	<.05	.20	200	N	10	<20	15	150	70	N
1759	115,860	46,510	5.0	.15	<.05	.30	300	N	15	<20	5	100	70	N
1760	115,700	46,260	5.0	.20	<.05	.15	150	N	15	100	7	150	150	N
1761	115,630	46,330	5.0	.15	<.05	.15	150	N	10	20	5	150	70	N
1762	115,520	46,380	7.0	.15	<.05	.20	150	N	15	70	5	70	100	N
1763	115,440	46,450	7.0	.15	<.05	.30	200	1.5	15	<20	5	70	100	N
1764	115,420	46,540	3.0	.10	<.05	.15	200	N	10	30	N	50	70	N
1765	115,420	46,640	7.0	.15	<.05	.30	300	N	<10	20	15	70	150	N
1766	115,400	46,720	3.0	.10	<.05	.10	200	N	15	20	N	50	20	N
1767	115,560	47,430	7.0	.30	<.05	.20	300	N	10	150	30	300	700	7
1768	115,080	46,680	5.0	.10	<.05	.15	1,500	N	<10	30	10	30	500	N
1769	115,170	46,630	7.0	.50	1.50	.20	500	.5	10	150	30	300	700	N
1770	115,270	46,600	5.0	.15	.07	.15	700	N	10	150	20	100	50	N
1771	115,360	46,560	7.0	.10	<.05	.15	150	.5	10	30	10	700	1,500	N
1772	115,360	46,360	7.0	.10	<.05	.30	500	N	10	70	7	70	100	N
1773	115,280	46,300	5.0	.20	<.05	.20	300	.5	15	150	10	10	200	N
1774	115,180	46,270	7.0	.15	<.05	.20	200	N	20	150	7	15	50	N

Sample	S-NI	S-PB	S-SC	S-SN	S-SR	S-V	S-Y	S-ZN	S-ZR	AA-AU	AA-CD	AA-ZN	AA-CU	AA-PB	PH
1730	15	30	20	N	N	150	N	<200	50	<.05	--	65.00	130.0	35	5.7
1731	15	30	20	N	N	150	N	<200	50	<.05	--	60.00	150.0	44	5.5
1732	15	20	15	N	N	100	N	200	10	<.05	--	140.00	120.0	41	5.7
1733	15	30	30	N	N	150	N	<200	50	<.05	--	100.00	72.0	47	5.5
1734	15	15	20	N	N	150	N	200	20	<.05	--	110.00	89.0	32	5.2
1735	30	30	30	N	N	150	N	300	30	<.05	--	160.00	96.0	27	5.2
1736	5	10	10	N	N	100	10	N	50	<.05	--	30.00	48.0	16	5.0
1737	15	30	20	N	N	200	10	<200	100	<.05	--	55.00	86.0	36	5.2
1738	10	30	15	N	N	200	N	<200	70	<.05	--	80.00	44.0	27	5.2
1739	15	10	30	N	N	150	10	<200	30	<.05	--	40.00	280.0	11	6.0
1740	5	10	10	N	N	50	10	N	20	<.05	--	25.00	170.0	10	5.2
1741	15	10	15	N	N	100	N	N	50	<.05	--	25.00	330.0	10	5.2
1742	15	10	15	N	N	150	10	<200	50	<.05	--	130.00	190.0	21	6.5
1743	30	<10	20	N	N	150	20	<200	30	<.05	--	100.00	80.0	9	5.7
1744	20	<10	20	N	N	100	N	N	30	<.05	--	55.00	83.0	13	5.5
1745	20	<10	30	N	N	100	N	N	10	<.05	--	90.00	110.0	33	5.7
1746	30	15	30	N	N	200	N	200	70	<.05	--	75.00	100.0	18	5.5
1747	50	100	20	N	N	200	N	700	10	.25	--	400.00	420.0	230	5.7
1748	15	<10	10	N	N	70	N	N	20	<.05	--	30.00	30.0	9	5.2
1749	20	<10	20	N	N	150	N	N	20	<.05	--	35.00	54.0	10	5.5
1750	30	15	20	N	N	150	20	<200	70	<.05	--	90.00	280.0	20	5.5
1751	10	10	20	N	N	100	10	N	50	<.05	--	20.00	250.0	21	5.7
1752	7	<10	15	N	N	100	10	N	50	<.05	--	15.00	230.0	12	5.5
1753	20	<10	30	N	N	150	10	<200	30	.05	--	90.00	470.0	10	6.5
1754	10	<10	30	N	N	150	15	300	70	<.05	--	150.00	120.0	14	5.7
1755	15	<10	20	N	N	100	N	<200	20	<.05	--	100.00	120.0	17	5.7
1756	20	15	30	N	N	200	N	700	30	.05	--	410.00	180.0	25	5.7
1757	10	10	15	N	N	150	N	N	70	<.05	--	40.00	44.0	10	5.5
1758	30	<10	20	N	N	300	N	N	50	<.05	--	55.00	100.0	11	5.5
1759	15	10	30	N	N	200	N	N	70	<.05	--	40.00	36.0	11	5.5
1760	15	10	20	N	N	150	N	N	50	<.05	--	20.00	62.0	14	5.5
1761	20	<10	20	N	N	150	N	N	50	<.05	--	30.00	34.0	16	5.2
1762	10	10	20	N	N	200	N	N	50	<.05	--	55.00	82.0	12	5.7
1763	15	<10	30	N	N	300	N	N	70	<.05	--	60.00	63.0	10	5.5
1764	10	<10	10	N	N	100	N	N	70	<.05	--	65.00	75.0	12	5.5
1765	15	15	30	N	N	200	10	300	70	<.05	--	150.00	160.0	14	6.0
1766	7	<10	7	N	N	70	N	N	50	<.05	--	50.00	50.0	7	5.5
1767	50	30	20	N	N	200	20	N	70	<.05	--	100.00	440.0	24	5.5
1768	15	10	20	N	N	150	10	N	50	.05	--	40.00	580.0	17	5.5
1769	20	10	30	N	N	300	15	N	50	.05	--	100.00	380.0	14	6.0
1770	10	<10	15	N	N	150	N	<200	50	<.05	--	140.00	82.0	19	5.5
1771	15	15	30	N	N	150	N	300	30	.55	--	110.00	1,300.0	27	5.5
1772	15	15	15	N	N	150	N	<200	50	<.05	--	110.00	120.0	11	5.7
1773	10	15	15	N	N	100	10	<200	50	<.05	--	140.00	210.0	12	5.5
1774	15	15	20	N	N	100	10	<200	50	<.05	--	70.00	69.0	17	5.7

Sample	X-COORD.	Y-COORD.	S-FE%	S-MG%	S-CA%	S-TI%	S-MV	S-AG	S-B	S-BA	S-CO	S-CR	S-CU	S-MO
1775	115,080	46,230	5.0	.10	<.05	.30	150	.5	10	150	7	15	50	N
1776	114,980	46,230	7.0	.20	<.05	.30	700	1.0	15	150	10	70	70	N
1777	114,870	46,310	5.0	.15	<.05	.20	500	.5	10	100	15	70	70	N
1778	114,900	46,400	5.0	.30	<.05	.30	500	N	20	150	20	70	70	N
1779	114,920	46,480	5.0	.30	<.05	.20	300	N	<10	150	20	70	100	N
1780	114,930	46,570	7.0	.70	.20	.30	300	N	10	200	10	70	500	N
1781	114,770	46,350	10.0	.70	<.05	.50	300	N	<10	70	30	300	150	N
1782	114,680	46,370	7.0	.70	<.05	.20	>5,000	1.0	<10	300	30	300	1,000	5
1783	114,570	46,360	7.0	.20	<.05	.50	700	N	<10	150	20	300	150	N
1784	114,450	46,380	7.0	.50	.05	.50	1,500	.5	<10	150	30	500	150	N
1785	114,340	46,380	3.0	.30	<.05	.10	500	N	<10	150	15	50	50	N
1786	114,240	46,370	5.0	.15	<.05	.15	1,000	.5	10	150	15	20	100	N
1787	114,430	46,490	7.0	.20	<.05	.20	500	.5	<10	150	30	200	500	N
1788	114,410	46,600	7.0	.50	.30	.20	100	N	10	150	5	10	150	N
2480	115,120	48,280	5.0	.20	.10	.20	700	N	<10	150	N	10	70	N
2481	115,040	48,330	5.0	.20	.05	.30	500	N	<10	150	10	15	70	N
2482	114,940	48,360	3.0	.10	<.05	.30	500	N	<10	100	N	15	70	N
2483	114,860	48,410	5.0	.20	<.05	.30	700	N	10	200	N	10	100	N
2484	114,760	48,450	7.0	.50	<.05	.50	700	N	<10	150	N	20	100	N
2485	114,670	48,500	7.0	.10	<.05	.50	1,500	N	<10	200	10	15	100	N
2486	114,580	48,550	3.0	.20	<.05	.20	300	N	<10	70	N	10	100	N
2487	114,530	48,390	5.0	.20	<.05	.30	200	N	<10	200	N	10	200	5
2488	114,450	48,320	7.0	.50	<.05	.30	700	N	10	150	N	10	300	N
2489	114,430	48,230	5.0	.20	<.05	.30	500	N	<10	200	N	70	300	N
2490	114,720	48,320	5.0	.20	<.05	.30	500	N	<10	150	N	20	200	N
2491	114,640	48,250	5.0	.20	<.05	.30	1,000	N	<10	300	N	70	200	N
2492	114,560	48,180	3.0	.20	<.05	.30	300	N	10	70	N	30	150	N
2493	114,940	48,070	5.0	.20	<.05	.30	500	N	<10	200	N	150	150	N
2494	114,860	48,100	3.0	.20	<.05	.30	3,000	N	15	700	N	10	150	N
2495	114,780	48,150	3.0	.20	<.05	.30	200	N	<10	70	N	30	150	N
2496	114,690	48,160	5.0	.20	<.05	.30	150	N	<10	200	N	5	200	N
2497	114,510	47,990	5.0	.10	<.05	.30	150	N	<10	150	N	150	150	N
2498	114,480	48,080	7.0	.20	<.05	.30	70	N	<10	200	N	70	200	N
2499	114,290	47,840	5.0	.10	<.05	.30	200	N	10	150	N	70	100	N
2500	114,280	47,930	5.0	.10	<.05	.30	300	N	<10	100	N	20	150	N
2501	114,230	48,020	5.0	.05	<.05	.30	200	N	10	70	N	15	100	N
2502	114,200	48,210	5.0	.05	<.05	.30	300	N	<10	100	N	15	100	N
2503	114,170	48,200	5.0	.07	<.05	.30	150	N	<10	150	N	30	200	N
2504	113,870	48,030	3.0	.07	.05	.50	150	N	<10	100	N	10	150	N
2505	113,950	47,970	3.0	.10	<.05	.50	100	N	15	70	N	15	50	N
2506	114,020	47,890	5.0	.07	<.05	.30	700	N	N	150	15	20	100	N
2507	114,040	47,770	5.0	.07	<.05	.30	3,000	N	<10	500	30	30	100	N
2508	114,060	47,680	5.0	.07	<.05	.30	500	N	N	150	N	20	100	N
2509	113,650	47,550	3.0	.05	<.05	.20	150	N	N	N	N	15	150	N
2510	113,670	47,650	3.0	.02	<.05	.30	100	N	N	N	N	10	30	N

Sample	S-NI	S-PB	S-SC	S-SN	S-SR	S-V	S-Y	S-ZN	S-ZR	AA-AU	AA-CD	AA-ZN	AA-CU	AA-PB	PH
1775	15	10	15	N	N	100	10	N	70	<.05	--	35.00	66.0	12	4.2
1776	15	20	15	N	N	100	10	<200	70	<.05	--	110.00	140.0	25	5.5
1777	15	30	15	N	N	100	N	<200	50	<.05	--	70.00	84.0	53	5.5
1778	30	15	15	N	N	100	20	<200	50	<.05	--	110.00	140.0	19	5.7
1779	30	15	15	N	N	100	15	<200	70	<.05	--	100.00	190.0	26	5.5
1780	20	15	20	N	N	150	10	200	70	<.05	--	100.00	370.0	18	5.5
1781	70	15	30	N	N	150	10	300	70	<.05	--	70.00	110.0	13	5.5
1782	50	100	20	N	N	150	15	1,500	30	.15	--	630.00	1,300.0	170	5.0
1783	50	30	30	N	N	150	15	1,500	70	<.05	--	400.00	120.0	44	6.0
1784	100	30	30	N	N	150	20	1,000	50	<.05	--	420.00	120.0	33	6.0
1785	15	20	15	N	N	150	10	200	50	<.05	--	420.00	110.0	35	6.2
1786	15	30	15	N	N	150	10	300	50	.10	--	290.00	180.0	60	5.5
1787	70	20	30	N	N	150	20	300	70	<.05	--	260.00	460.0	27	5.5
1788	10	<10	20	N	N	150	20	N	70	<.05	--	10.00	140.0	5	4.5
2480	5	15	20	N	N	150	10	200	70	<.05	--	55.00	35.0	34	--
2481	10	15	20	N	N	150	10	200	100	<.05	--	30.00	25.0	23	--
2482	N	15	10	N	N	100	N	<200	70	<.05	--	35.00	95.0	27	--
2483	N	50	20	N	N	150	20	300	70	<.05	--	170.00	30.0	71	--
2484	5	10	30	N	N	200	10	300	70	<.05	--	50.00	30.0	19	--
2485	5	15	15	N	N	150	N	<200	70	<.05	--	65.00	75.0	16	--
2486	N	<10	10	N	N	100	N	<200	30	<.05	--	35.00	45.0	13	--
2487	N	30	15	N	N	150	10	200	100	.08	--	100.00	210.0	40	--
2488	5	15	15	N	N	150	10	300	70	<.05	--	60.00	135.0	27	--
2489	15	15	20	N	N	150	10	200	100	<.05	--	30.00	190.0	19	--
2490	5	15	20	N	N	150	10	<200	100	<.05	--	10.00	30.0	14	--
2491	10	15	20	N	N	100	N	<200	100	<.05	--	40.00	130.0	14	--
2492	5	10	15	N	N	100	N	<200	70	<.05	--	15.00	40.0	8	--
2493	5	10	15	N	N	100	10	<200	70	<.05	--	20.00	95.0	18	--
2494	N	10	15	N	N	70	10	<200	50	<.05	--	35.00	140.0	19	--
2495	15	<10	15	N	N	70	N	<200	50	<.05	--	20.00	90.0	11	--
2496	5	<10	15	N	N	100	N	N	70	<.05	--	2.00	70.0	9	--
2497	10	<10	15	N	N	150	10	N	70	<.05	--	7.00	65.0	6	--
2498	10	N	15	N	N	150	N	N	70	<.05	--	5.00	50.0	10	--
2499	10	<10	10	N	N	100	N	N	70	<.05	--	20.00	20.0	12	--
2500	15	10	20	N	N	150	10	<200	70	.06	--	65.00	50.0	17	--
2501	N	10	20	N	N	150	10	<200	300	<.05	--	55.00	40.0	14	--
2502	N	10	20	N	N	200	10	<200	70	<.05	--	20.00	200.0	13	--
2503	20	<10	30	N	N	150	N	N	50	<.05	--	5.00	30.0	9	--
2504	N	10	15	N	N	200	10	N	100	<.05	--	8.00	15.0	8	--
2505	5	10	10	N	N	200	10	N	150	<.05	--	66.00	40.0	14	--
2506	70	15	30	N	N	200	N	300	30	<.05	--	190.00	70.0	24	--
2507	70	100	30	N	N	200	N	500	70	<.05	--	220.00	60.0	106	--
2508	50	20	30	N	N	300	N	500	50	<.05	--	110.00	63.0	25	--
2509	30	<10	20	N	N	100	N	N	50	<.05	--	50.00	45.0	21	--
2510	50	<10	20	N	N	150	N	N	50	<.05	--	30.00	40.0	17	--

Sample	X-COORD.	Y-COORD.	S-FE%	S-MG%	S-CA%	S-TI%	S-MN	S-AG	S-B	S-BA	S-CO	S-CR	S-CU	S-MO
2511	113,660	47,760	5.0	.10	<.05	.20	300	N	<10	100	N	20	150	N
2512	113,620	47,860	5.0	.10	<.05	.30	300	N	<10	150	N	20	150	N
2513	113,430	47,510	3.0	.10	<.05	.30	500	N	<10	150	N	5	100	N
2514	113,460	47,610	5.0	.20	<.05	.50	300	N	10	N	N	30	150	N
2515	113,440	47,700	5.0	.10	<.05	.50	200	N	<10	N	N	30	150	N
2516	113,200	47,370	5.0	.10	<.05	.50	200	N	<10	70	N	30	200	N
2517	113,180	47,480	5.0	.10	<.05	.30	200	N	15	20	N	15	150	N

Sample	S-NI	S-PB	S-SC	S-SN	S-SR	S-V	S-Y	S-ZN	S-ZR	AA-AU	AA-CD	AA-ZN	AA-CU	AA-PB	PH
2511	100	30	50	N	N	200	N	300	50	<.05	--	70.00	50.0	54	--
2512	30	10	50	N	N	300	N	300	50	<.05	--	110.00	100.0	16	--
2513	70	30	20	N	N	150	N	N	30	<.05	--	110.00	80.0	66	--
2514	70	15	30	N	N	300	N	200	50	<.05	--	60.00	65.0	20	--
2515	100	N	30	N	N	300	N	N	30	<.05	--	20.00	45.0	13	--
2516	100	15	30	N	N	300	N	N	30	<.05	--	15.00	60.0	24	--
2517	70	10	30	N	N	200	N	N	20	<.05	--	35.00	50.0	14	--