Division of Geological & Geophysical Surveys

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MAJOR-OXIDE, MINOR-OXIDE, AND TRACE-ELEMENT GEOCHEMICAL DATA FROM ROCKS
COLLECTED IN THE CHISTOCHINA MINING DISTRICT, MOUNT HAYES QUADRANGLE,
ALASKA, IN 2005-2009

by

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and International Tower Hill Mines Ltd.

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Note: This report (including all analytical data and tables) is available in digital format from the DGGs web site (<http://www.dggs.alaska.gov>) at no charge. The digital data are available as PDF files and CSV spreadsheets.

MAJOR-OXIDE, MINOR-OXIDE, AND TRACE-ELEMENT GEOCHEMICAL DATA FROM ROCKS COLLECTED IN THE CHISTOCHINA MINING DISTRICT, MOUNT HAYES QUADRANGLE, ALASKA, IN 2005-2009

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INTRODUCTION

Mineral-resources geologists from the Alaska Division of Geological & Geophysical Surveys (DGGS) and the U.S. Geological Survey carried out a geological field survey, including mapping and sampling in the Chistochina mining district in the Mount Hayes A-2 and A-3 quadrangles, Alaska from June 30 to July 15, 2009. The fieldwork provides basic information critical to building an understanding of Alaska's geology and is part of an integrated program of airborne geophysical surveys followed by geological mapping. During 2009, 57 rock samples were collected for geochemical trace-element analysis (tables 1–3), 107 rock samples were collected for whole rock (major- and minor-oxide and petrogenetically important trace elements) analyses (tables 4–6), and 2 samples were collected for analysis of non-carbonate carbon content (table 7). Additionally, 288 polished rock slabs were analyzed for whole rock and petrogenetically important trace elements (tables 8 and 9). Location coordinates were collected using hand-held GPS units (no differential correction was applied). Coordinates are presented in latitude and longitude (based on the NAD 27 Alaska datum) and in UTM coordinates (based on the Clark 1866 spheroid, NAD 27 datum, UTM zone 6 projection). Additional details about the sampling program can be found in the metadata file associated with the digital version of this report. Sample numbers, location data, descriptions, and analytical results for each sample are tabulated in tables 1–9.

Mineral exploration personnel from International Tower Hill Mines Ltd. (ITH) collected 359 rock samples for geochemical trace-element analysis from the Mount Hayes A-2 Quadrangle, Alaska from July 2005 through August 2008 as part of ITH's Chisna Project. ITH kindly donated these analytical results and other data to DGGS in 2009 to aid DGGS investigations. Location coordinates and sample notes were collected using PDAs with integrated GPS units (no differential correction was applied). Coordinates are presented in latitude and longitude (based on the NAD 27 Alaska datum) and in UTM coordinates (based on the Clark 1866 spheroid, NAD 27 datum, UTM zone 6 projection). Additional details about the ITH sampling program can be found in the metadata file associated with the digital version of this report. Sample numbers, location data, descriptions, and analytical results for each sample are tabulated in tables 10–12.

SAMPLE COLLECTION TECHNIQUES

Samples of visibly mineralized rock, or rocks exhibiting features associated with mineralization, were collected and analyzed for geochemical trace elements by DGGS and ITH. Most samples were randomly “grabbed” at a location; however, a few samples are “high-grade” or select samples deliberately collected from a specific feature, and these instances are noted in the sample description. DGGS samples of visibly carbonaceous or graphite-bearing metamorphic rock were preferentially collected and analyzed for their non-carbonate carbon content. DGGS rock samples collected for major oxides, minor oxides, and trace elements include samples representative of a typical lithology, igneous or possible meta-igneous samples in order to determine composition, and samples whose petrogenetically important trace-elements could indicate their original tectonic setting. These rocks were collected in a random distribution across the study area.

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ANALYTICAL METHODS

Sample Preparation

Tables 1–7 and 10–12: Trace-element geochemical analyses (tables 2 and 11), whole-rock analyses (table 4), and non-carbonate carbon analyses (table 7) were performed by ALS Chemex. Rock samples were crushed with a Terminator oscillating jaw crusher with chrome steel alloy plates so that at least 70 percent of the material passes through a -10 mesh (2 mm) screen. Representative aliquots of 250 grams each were taken using a stainless steel riffle splitter. These samples were then pulverized in a chrome steel ring mill so that 85 percent of the sample passed through a -200 mesh (75 micron) screen. Trace-element analyses, whole-rock analyses, and gold analyses were performed using representative splits of each 250 gram pulp.

Tables 8–9: Major- and minor-oxide and trace-element compositions in table 8 were performed by X-ray fluorescence (XRF) spectroscopy at the University of Alaska Fairbanks (UAF) on polished rock slabs and are necessarily approximations to the true compositions. Rocks with a grain size of 3 mm or less were cut to fit in 37-mm-diameter sample holders. Samples with a clast or grain size larger than ~3 mm, or a texture such as banding, were noted as inhomogeneous in the table 8 Comments column.

Analytical Methods for DGGs Samples Analyzed by ALS Chemex

Tables 1–3: All potentially mineralized samples were assayed for gold by inductively coupled plasma-atomic emission spectroscopy following a 30 gram (g) fire assay fusion (FA-ICP-AES). Platinum and palladium were assayed for selected samples by inductively coupled plasma-atomic emission spectroscopy following a 30 g fire assay fusion (FA-ICP-AES). Trace-element geochemical analyses were performed by inductively coupled plasma-atomic emission spectroscopy (ICP-AES) methods after four-acid, near-total digestion. This method of digestion is possibly incomplete for some elements and may result in lower analytical results for these elements. The elements that may be affected by incomplete digestion, analytical methods, and lower and upper reporting limits are tabulated in table 3. Rock samples with trace gold and/or copper values above the detection limit in the initial trace element geochemical analysis were reanalyzed for those metals by the following methods: gold, fire assay with a gravimetric finish using a 30 gram sub-sample; copper, inductively coupled plasma-atomic emission spectroscopy (ICP-AES) methods after four-acid, near-total digestion. Detection limits for the second set of analyses are listed in table 3.

Tables 4–6: Major- and minor-element oxides were determined at ALS Chemex by XRF following a lithium borate fusion. Trace-element values for Ba, Nb, Rb, Sr, Y, and Zr were determined by XRF on a pressed pellet. Analytical methods and detection limits are tabulated in Table 6.

Table 7: Non-carbonate carbon analyses were performed by ALS Chemex. Non-carbonate carbon content was determined using a LECO furnace after a dilute acid digestion. The lower detection limit for non-carbonate carbon is 0.01 percent, and the upper detection limit is 50.00 percent.

Analytical Methods for DGGs Samples Analyzed at UAF

Tables 8–9: XRF spectroscopic analyses performed at UAF were standardized using well-characterized natural fine-grained rock and pure mineral standards as well as conventional pressed pellets of international rock standards. Because volatile components were not measured and rocks were of varying porosities, the analyses were normalized to 100 percent totals. In the vast majority of cases the original analyses yielded totals of approximately 95 to 102 weight percent. Comparison between these analyses and those produced on the same rocks by conventional pressed pellet (trace elements) and fused disk (major and minor oxides) techniques indicates that major- and minor-oxide and trace-element concentrations are most likely within 10 percent of the 'true' concentrations. Analytical methods and detection limits are tabulated in table 9.

Analytical Methods for ITH Samples Analyzed by ALS Chemex

Tables 10–12: All samples were analyzed for gold using a 50 g fire assay fusion and either ICP-AES or atomic absorption spectrometry (AAS). Trace-element geochemical analyses were performed by inductively coupled plasma-mass spectrometry (ICP-MS) methods after four-acid, near-total digestion. This method of digestion is possibly incomplete for some elements and may result in lower analytical results for these elements. Samples with greater than 10 percent calcium and showing interference were

reanalyzed by ICP-AES, and these results are shown. Mercury was analyzed by aqua regia digestion/cold vapor-AAS (detection limits on samples requiring dilutions for mercury analysis were increased according to the dilution factor). The elements that may be affected by incomplete digestion, analytical methods, and lower and upper reporting limits are tabulated in table 12. Rock samples with trace metal values above the detection limit in the initial trace element geochemical analysis were reanalyzed for those metals by the following methods: gold, fire assay with a gravimetric finish using a 50 gram sub-sample; silver and copper, ICP-AES methods after four-acid, near-total digestion; sulfur, total sulfur by Leco furnace. Detection limits for the second set of analyses are listed in table 12.

ACKNOWLEDGMENTS

This project is part of the Alaska Airborne Geophysical/Geological Mineral Inventory Program funded by the Alaska State Legislature and managed by the State of Alaska, Department of Natural Resources, Division of Geological & Geophysical Surveys. Partial funding for the geologic mapping and geochemical analyses was also provided through the State of Alaska General Fund and the U.S. Geological Survey STATEMAP Program under award number G09AC00177. In addition, DGGs gratefully appreciates the kind donation of geochemical data from International Tower Hill Mines Ltd., as this information will benefit the public directly and through additional interpretation in DGGs publications.

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Table 1. Location and description of rocks collected by DGGs for trace-element geochemical analyses in the Chistochina mining district, Mount Hayes Quadrangle, Alaska. UTM coordinates are based on the Clark 1866 spheroid, NAD 27 datum, zone 6 projection.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
2009ACH117A	63.1315563	-144.7460273	613638	7002243	6	Quartz-pyrite vein.
2009ACH171A	63.2129813	-144.9025187	605454	7011044	6	Sandstone(?); cut by numerous veins of quartz + calcite and a silvery metallic mineral that has no red streak.
2009JEA1A	63.2044489	-144.9292315	604142	7010050	6	Ultramafic rock; fine-grained. Cut by dark gray veinlets containing a shiny metallic mineral.
2009JEA10A	63.1880755	-144.9467609	603319	7008198	6	Pyrite and quartz gossan; vuggy.
2009JEA46D	63.0682089	-144.7287168	614760	6995219	6	Rhyolite; dark gray and aphanitic. Trace disseminated pyrite and pyrite in thin veinlets. Weathers to a red-brown color.
2009JEA58B	63.125826	-144.7374857	614091	7001620	6	Breccia; boxwork quartz with fine-grained pyrite and possible arsenopyrite.
2009JEA84A	63.167777	-144.7481996	613387	7006273	6	Quartz monzodiorite dike; carbonate altered. Veinlets with trace pyrite and a silver-gray metallic mineral.
2009JEA87A	63.1679566	-144.7521587	613187	7006286	6	Quartz vein; contains pyrite and possibly other sulfides.
2009JEA107A	63.1523132	-144.8676524	607431	7004345	6	Dacite(?); iron-oxide altered. Up to 1 percent pyrite cubes.
2009JEA171D	63.1748946	-144.8180666	609843	7006944	6	Quartz-calcite veins; several veins < 1 cm thick cutting quartz monzonite. Veins also contain dark chlorite.
2009JEA172A	63.1756806	-144.8172126	609883	7007033	6	Argillite; thin, anastomosing veinlets of mostly calcite, with trace amounts of red iron oxide and quartz. Rock is locally lighter in color and altered to chlorite. Poorly developed slickensides on one surface.
2009JEA172B	63.1756806	-144.8172126	609883	7007033	6	Quartz vein; very friable with oxidized, dark red, round sulfides. Iron oxide also occurs on vein margins.
2009LF1B	63.1438149	-144.8004147	610850	7003513	6	Quartz stockwork veining; moderate to strong quartz stockwork (10-80 percent of rock) with up to 5 percent pyrite + chalcopyrite in veinlets. Very strong, green, chlorite alteration.
2009LF15C	63.1207135	-144.8896048	606441	7000789	6	Rhyolite; porphyritic. Red "jasperoidal" veinlets of red iron oxide and quartz.
2009LF19D	63.1205113	-144.9025896	605787	7000745	6	Magnetite-epidote hornfels; protolith is probably volcanoclastic breccia.
2009LF26C	63.0947127	-144.7073675	615733	6998209	6	Epidote vein; 3 cm wide.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
2009LF49A	63.1299818	-144.7497801	613455	7002061	6	Porphyritic andesite(?); strongly brecciated. Stockwork vein infill of epidote-quartz-carbonate with 2 percent pyrite cubes and 1 percent chalcopyrite as interstitial clots. Chalcopyrite-bearing vein material was preferentially selected for analysis.
2009LF57C	63.1376895	-144.756228	613100	7002908	6	Iron-oxide-rich rock chip and soil; bright orange, iron-oxide-rich soil surrounding brecciated dacite.
2009LF58B	63.1385244	-144.756223	613097	7003001	6	Aphanitic rock; strongly silicified with 3-4 percent very-fine-grained, disseminated pyrite and 1 percent epidote. Sample selected from top of iron-oxide zone.
2009LF68B	63.1356777	-144.6629385	617809	7002852	6	Chert; lenses of pink, calcareous chert in 6 separate beds. Each bed is 0.1-0.2 m thick.
2009LF75D	63.1554256	-144.6810869	616815	7005018	6	Micrite; orange weathering, gray. Chalcocite disseminated and in veinlets with dolomite(?).
2009LF82B	63.1173062	-144.9001835	605920	7000392	6	Gossan; strongly oxidized zone of probable carbonate + epidote. Two percent (locally up to 10 percent) pits after pyrite. Local blebs of gray, submetallic mineral in sponge rock (tennantite?). Zone is 0.2 m thick and parallel to compositional layering in the greenstone.
2009LF83B	63.1166271	-144.8985867	606003	7000319	6	"Jasperoid" and quartz-hematite veins; red, yellow, brown, and black, silicified, and strongly fractured rock. Cut by red, clear, siliceous veins. Five percent of fractures have goethite and specularite coatings.
2009LF91B	63.2052638	-144.8840428	606411	7010215	6	Dacite(?); fine grained, granular, sericite-pyrite-quartz rock with 2 percent disseminated pyrite. Dacite(?) layers 0.5 to 1 m thick.
2009LF115C	63.11761	-144.9110086	605373	7000408	6	Massive magnetite; replacement of calcareous volcanoclastic rock within 3 cm of the contact with an ophitic basalt sill with columnar jointing.
2009LF115E	63.11761	-144.9110086	605373	7000408	6	Skarn; banded, honey-colored garnet, wispy magnetite layers, and epidote. Garnet (5 percent, 1 cm grains) is adjacent to magnetite layers. Epidote (1 mm grains) is 65 percent of the rock.
2009LF118A	63.1148575	-144.914934	605185	7000095	6	Hornfelsed latite porphyry; orange-brown weathered. Feldspar phenocrysts (20 percent, 2mm grains) with indistinct boundaries in an aphanitic groundmass. Disseminated pyrite (5 percent) in clots.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
2009LF125B	63.1082744	-144.9178641	605061	6999357	6	Quartz diorite; strongly altered to pale green sericite (30 percent), epidote (15 percent), pink feldspar (10 percent), and fine disseminated pyrite (10 percent).
2009LF142C	63.2191129	-144.8567827	607730	7011803	6	Altered mafic(?); green gray, orange weathering, slightly foliated, green mica(fuchsite?)-pyrite-quartz-carbonate semi-schist. Some graphitic partings on edges. Pyrite (2 percent, 0.1 mm grains) in anastomosing stringers parallel to foliation.
2009LF143A	63.2178734	-144.8561581	607766	7011666	6	Altered mafic; pale green-gray, orange weathering, weakly foliated, pyrite-fuchsite-iron carbonate-quartz semi-schist.
2009LF143C	63.2178734	-144.8561581	607766	7011666	6	Quartz vein; white quartz (75 percent) in bands parallel to foliation, gray-brown mica (20 percent) as shistose inclusions and stylolitic partings, and late iron carbonate (5 percent) filled fractures. Grab sample taken over 1.5-m zone.
2009MBW8A	63.1815317	-144.7685563	612309	7007769	6	Slate; gray, fine grained. Cut by sheared, white, quartz vein up to 2 ft wide. Quartz contains < 3 percent chlorite and 4 percent iron oxide.
2009MBW10C	63.1820684	-144.7695684	612256	7007827	6	Serpentinite(?); brown-green, massive, soft, with brown iron-oxide (about 5 percent) on anastomosing microfractures and in tiny disseminated pits.
2009MBW12A	63.1830205	-144.7707275	612194	7007931	6	Dike(?); white, fine grained, equigranular, containing gray-green chlorite (3 percent), possible plagioclase (48 percent), possible altered pyroxene (48 percent), and 1 percent disseminated iron-oxide cubes after pyrite.
2009MBW12B	63.1830205	-144.7707275	612194	7007931	6	Gabbro(?); dark green, fine grained, equigranular. Weathered surfaces have 5 percent elongate, bladed hornblende up to 2 mm long in a very-fine-grained, green matrix.
2009MBW13A	63.1830794	-144.7716174	612149	7007936	6	Dike; white weathering, fine grained, equigranular. Contains 2 percent iron sulfide disseminated and along microfractures.
2009MBW15B	63.1831795	-144.7711326	612173	7007948	6	Dike; white, iron-oxide stained. Five to seven percent iron oxide after pyrite, and pyrite disseminated and along microfractures.
2009MBW20B	63.1841299	-144.7716161	612145	7008053	6	Unknown; iron-oxide stained.
2009MBW51A	63.1815788	-144.8031943	610566	7007714	6	Slate; with iron-oxide staining, and disseminated cubes (5 percent) of pyrite or iron oxide after pyrite.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
2009MBW69A	63.1777045	-144.9306448	604167	7007069	6	Volcaniclastic conglomerate; cut by veins (1 mm to 2.5 cm wide) of quartz + epidote + orange calcite + red hematite + specular hematite. Only 2 percent of rock is veined.
2009MBW73A	63.1779336	-144.9278863	604305	7007099	6	Rhyolite(?); gray, porphyritic, with quartz + feldspar crystals about 15 percent of rock. Very-fine-grained, disseminated pyrite (5 percent) and possible arsenopyrite.
2009MBW75A	63.1777249	-144.9252782	604437	7007080	6	Volcaniclastic; local, heavy iron-oxide coating. Altered areas contain up to 30 percent disseminated pyrite and possible chalcopyrite.
2009MBW91A	63.1746883	-144.9356087	603928	7006725	6	Felsic dike; moderately iron-oxide-coated, highly altered, white, felsic, hypabyssal intrusion that contains porphyritic quartz and vugs after feldspar and pyrite. Original iron sulfide content was about 8 percent, but now, 1 percent pyrite is left.
2009Z4A	63.1432937	-144.8015458	610795	7003453	6	Strongly silicified rock; strongly iron-oxide-stained, brick red, pyrite-bearing jasperoid. Occasionally vuggy, with up to 10 percent veinlets and lenses of pyrite. Possible arsenopyrite.
2009Z45B	63.0670337	-144.710417	615689	6995121	6	Barite; massive to partially filled vugs with well developed, white, barite crystals. Minor iron-oxide staining.
2009Z53A	63.0624003	-144.6878002	616850	6994646	6	Porphyritic andesite; cut by quartz-calcite-chalcopyrite-malachite vein. White quartz with abundant vugs partially filled with sooty brown-black iron oxide, and 2-3 percent chalcopyrite grains and clots up to 2 mm in diameter. Malachite and iron oxide on fracture surfaces.
2009Z66B	63.1571019	-144.7246618	614614	7005126	6	Fault breccia; orange-weathered, iron-rich carbonate cementing black, angular, argillite clasts. Some slickensides on rubble surfaces.
2009Z68C	63.1560763	-144.7278995	614455	7005006	6	Quartz-calcite-iron oxide veins; mostly subhedral interlocking quartz crystals, minor calcite, and some open spaces filled with orange iron oxide. Vein is 1 cm wide in quartz diorite dike.
2009Z94C	63.1670512	-144.9581808	602819	7005838	6	Rhyolite; strongly iron-oxide-stained, brown-orange rock for 15 ft parallel to bedding. Contains 2-3 percent disseminated pyrite grains 1-2 mm in diameter and possible arsenopyrite.
2009Z97B	63.1615329	-144.9659171	602449	7005211	6	White quartz veins and veinlets; < 1 mm to 2 cm wide. No iron-oxide staining.
2009Z110A	63.1864189	-144.8992333	605716	7008091	6	Argillite; black, hornfelsed.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
2009Z120A	63.1607322	-144.7142281	615125	7005549	6	Serpentinite; dark brown-black, strongly weathered and (or) altered. Some pieces are strongly serpentinized, and polished surfaces are common. Contains pale mica (phlogopite?).
2009Z124A	63.1608977	-144.7072439	615476	7005580	6	Pyroxenite; black-weathering ultramafic rock. Contains light green interstitial olivine (20 percent), flakey phlogopite (5 percent), and pyroxene (75 percent). Rubble covers 50-ft-diameter area. Possible dike.
2009Z125B	63.1610418	-144.7050477	615586	7005600	6	Micaceous quartzite; gray weathering, gray-white fresh. Weakly iron-oxide stained on fracture surfaces, and shows some slickensides. Contains 3 percent pyrite as fine, disseminated grains and larger clots.
2009Z128A	63.1641671	-144.700649	615795	7005956	6	Pyroxenite; black and green. Contains discontinuous veinlets of pyrite (2-3 percent) and slickensides.
2009Z138A	63.1379375	-144.9728082	602185	7002572	6	Tonalite; highly iron-oxide stained and highly shattered. Fresh rock is light gray-pink, with a fine-grained, hypabyssal texture. Mafics are altered or weathered. Up to 5 percent fine-grained pyrite and magnetite (and arsenopyrite?) as disseminated clots and coatings on fractures. A highly iron-stained rock was selected for analysis.
2009Z139A	63.1369638	-144.973154	602171	7002463	6	Quartz monzonite(?); orange to pale green, highly fractured, strongly oxidized, blocky rock, with quartz phenocrysts (15 percent) in a very-fine-grained, siliceous matrix. Contains 5 percent fine-grained, disseminated pyrite on fracture surfaces. Some quartz veins and fractures filled with euhedral quartz crystals and pyrite. Also found on some fracture surfaces are silvery arsenopyrite(?) and magnetite. Pyrite-bearing sample was selected for analysis.

Table 2. Trace-element geochemical analyses for rocks collected by DGGS in the Chistochina mining district, Mount Hayes Quadrangle, Alaska. Definitions: ppm = parts per million; % = percent; --- = blank or null values, sample not analyzed for that element.

Sample Number	Au ppm	Au(+) ppm	Pt ppm	Pd ppm	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm
2009ACH117A	0.007	---	---	---	<0.5	4.57	25	510	<0.5	<2	0.85	<0.5	3
2009ACH171A	0.021	---	---	---	<0.5	5.05	656	30	<0.5	<2	9.46	<0.5	36
2009JEA1A	0.003	---	0.006	0.006	<0.5	0.24	<5	10	<0.5	<2	2.1	<0.5	152
2009JEA10A	0.019	---	---	---	1.2	4.43	27	1920	0.5	<2	0.15	<0.5	14
2009JEA46D	0.01	---	---	---	<0.5	7.13	5	1470	0.8	<2	0.45	<0.5	7
2009JEA58B	0.125	---	---	---	2.4	3.05	703	520	<0.5	<2	0.02	<0.5	1
2009JEA84A	0.001	---	---	---	<0.5	7.08	<5	540	1.4	<2	2.48	<0.5	4
2009JEA87A	0.002	---	---	---	<0.5	4.59	<5	1360	0.6	4	10.8	<0.5	30
2009JEA107A	0.001	---	---	---	<0.5	8.74	10	130	<0.5	<2	4.63	<0.5	44
2009JEA171D	0.002	---	<0.005	0.001	<0.5	6.89	<5	200	1.4	<2	2.15	<0.5	5
2009JEA172A	0.003	---	<0.005	0.007	<0.5	8.01	<5	380	0.8	<2	3.47	<0.5	27
2009JEA172B	0.012	---	<0.005	0.003	1.4	2.71	<5	130	0.5	3	4.4	1.2	8
2009LF1B	>10.0	11.9	---	---	46.3	2.29	992	150	<0.5	217	0.12	4.2	9
2009LF15C	0.008	---	---	---	<0.5	6.36	22	1360	1.1	<2	0.66	<0.5	1
2009LF19D	0.034	---	---	---	<0.5	8.69	17	210	<0.5	<2	4.64	<0.5	31
2009LF26C	0.005	---	---	---	<0.5	7.74	<5	60	<0.5	<2	7.96	<0.5	7
2009LF49A	0.014	---	---	---	12.6	1.95	216	920	<0.5	4	9.58	5.3	5
2009LF57C	0.015	---	---	---	0.6	6.71	58	2500	0.6	<2	0.07	<0.5	1
2009LF58B	0.009	---	---	---	0.5	6.72	68	1160	0.5	<2	0.14	<0.5	2
2009LF68B	<0.001	---	---	---	<0.5	0.13	5	30	<0.5	<2	5.74	<0.5	1
2009LF75D	0.003	---	---	---	<0.5	0.75	18	40	<0.5	2	17.15	<0.5	13
2009LF82B	0.008	---	---	---	<0.5	3.05	28	20	<0.5	4	4.53	<0.5	22
2009LF83B	0.001	---	---	---	<0.5	0.18	47	60	<0.5	<2	0.29	<0.5	3
2009LF91B	0.006	---	---	---	0.6	7.39	5	320	0.9	<2	2.23	1.3	15
2009LF115C	0.009	---	<0.005	0.001	<0.5	4.71	78	120	<0.5	4	10.25	1.7	12
2009LF115E	0.006	---	<0.005	0.002	0.5	3.37	92	100	0.5	4	9.08	9.4	18
2009LF118A	0.008	---	---	---	0.5	6.79	33	2380	<0.5	2	0.7	<0.5	2
2009LF125B	0.001	---	---	---	<0.5	7.2	30	200	0.6	<2	2.15	<0.5	10
2009LF142C	<0.001	---	---	---	<0.5	7.09	30	490	0.6	<2	4.43	1.3	12
2009LF143A	<0.001	---	---	---	<0.5	7.59	11	440	0.7	<2	4.47	<0.5	29
2009LF143C	<0.001	---	---	---	<0.5	0.75	10	100	<0.5	<2	0.65	<0.5	2
2009MBW8A	0.002	---	---	---	<0.5	3.45	6	140	0.8	<2	0.2	<0.5	6
2009MBW10C	0.001	---	<0.005	0.003	<0.5	7.22	<5	80	<0.5	<2	6.65	<0.5	40
2009MBW12A	<0.001	---	<0.005	0.001	<0.5	7.51	<5	740	1.5	<2	3.31	<0.5	6
2009MBW12B	0.001	---	---	---	<0.5	7.28	<5	70	<0.5	<2	6.51	<0.5	40

Sample Number	Cr ppm	Cu ppm	Cu(+) %	Fe %	Ga ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm
2009ACH117A	6	112	---	2.95	10	1.26	10	0.54	616	5	1	1
2009ACH171A	66	170	---	6.51	10	0.11	10	2.44	1280	<1	2.26	49
2009JEA1A	164	4	---	12.05	<10	0.02	10	20.6	2030	<1	0.04	595
2009JEA10A	7	214	---	11.1	10	2.98	10	0.51	638	23	0.6	3
2009JEA46D	7	9	---	3.8	20	1.74	30	1.47	1265	1	2.3	5
2009JEA58B	10	19	---	1.63	10	1.28	<10	0.17	66	4	0.03	<1
2009JEA84A	6	9	---	1.7	20	2.01	10	0.33	807	<1	3.63	2
2009JEA87A	284	5	---	5.39	10	1.89	10	3.51	1240	1	1.15	64
2009JEA107A	19	6	---	8.27	20	0.1	<10	2.32	1375	<1	2.16	9
2009JEA171D	12	25	---	1.88	20	1.33	<10	0.42	506	<1	4.65	2
2009JEA172A	95	91	---	6.7	20	1.22	10	2.68	1180	1	2.57	60
2009JEA172B	35	30	---	2.36	<10	0.4	10	0.65	398	16	0.99	19
2009LF1B	6	>10000	1.275	15.25	10	0.26	<10	0.67	944	14	0.12	<1
2009LF15C	6	27	---	1.93	10	2.59	30	0.32	553	<1	2.22	1
2009LF19D	8	74	---	8.26	20	0.98	10	2.07	747	<1	2.5	12
2009LF26C	57	7	---	5.2	30	0.14	10	1.02	626	1	1.02	21
2009LF49A	4	6700	---	4.23	<10	0.65	10	4.16	4790	2	0.21	3
2009LF57C	3	97	---	2.41	10	2.61	10	0.59	169	4	0.11	1
2009LF58B	2	27	---	2.92	20	2.46	10	0.98	379	7	0.57	<1
2009LF68B	10	3	---	0.5	<10	0.04	<10	0.03	100	1	0.01	<1
2009LF75D	6	377	---	0.78	<10	0.29	10	10.55	1535	1	0.03	26
2009LF82B	12	602	---	15.35	20	0.01	10	1.35	1265	<1	0.04	17
2009LF83B	33	17	---	17.15	<10	0.01	<10	0.15	167	3	0.01	4
2009LF91B	40	69	---	5	20	0.18	10	3.25	1075	1	1.78	16
2009LF115C	11	36	---	21.5	10	0.27	10	2.46	4160	2	0.07	16
2009LF115E	9	308	---	31.3	10	0.22	10	2.5	3300	2	0.13	18
2009LF118A	4	69	---	2.79	10	3.33	10	0.34	533	1	0.38	2
2009LF125B	3	70	---	5.07	20	0.33	10	0.94	434	1	4.06	3
2009LF142C	30	58	---	4.33	10	1.5	10	1.66	864	<1	1.49	14
2009LF143A	104	14	---	5.64	20	0.96	20	2.46	977	1	1.99	40
2009LF143C	24	8	---	1.26	<10	0.2	<10	0.09	164	1	0.06	5
2009MBW8A	16	22	---	1.5	<10	0.38	<10	0.21	269	1	1.62	8
2009MBW10C	148	119	---	7.93	10	0.31	<10	4.18	1295	1	1.5	86
2009MBW12A	33	27	---	2.47	20	1.31	10	1	906	<1	3.21	17
2009MBW12B	110	50	---	6.52	10	0.45	<10	4.66	1210	<1	2.34	94

Sample Number	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
2009ACH117A	200	7	0.53	5	7	38	<20	0.12	<10	10	18	<10	56
2009ACH171A	240	3	2.54	<5	29	123	<20	0.33	<10	10	193	20	64
2009JEA1A	40	<2	0.03	<5	18	13	<20	0.03	<10	10	26	<10	94
2009JEA10A	170	148	1.41	6	5	49	<20	0.07	<10	10	35	50	140
2009JEA46D	760	<2	0.28	<5	15	86	<20	0.33	<10	10	66	<10	61
2009JEA58B	10	41	0.7	90	4	5	<20	0.07	<10	<10	18	<10	10
2009JEA84A	470	7	0.31	<5	3	622	<20	0.15	<10	20	60	<10	67
2009JEA87A	1110	22	1.84	<5	37	607	<20	0.29	<10	10	214	<10	72
2009JEA107A	320	5	0.56	5	30	308	<20	0.41	<10	10	262	<10	98
2009JEA171D	490	7	0.41	<5	4	334	<20	0.13	<10	20	63	<10	48
2009JEA172A	1070	6	0.09	<5	28	254	<20	0.63	<10	10	240	<10	116
2009JEA172B	290	181	0.3	<5	8	144	<20	0.18	<10	10	69	<10	37
2009LF1B	110	141	9.34	77	8	12	<20	0.1	30	10	71	<10	552
2009LF15C	180	4	0.02	<5	5	72	<20	0.11	<10	10	13	<10	58
2009LF19D	400	<2	0.03	7	40	298	<20	0.49	<10	20	254	<10	57
2009LF26C	320	6	<0.01	<5	18	721	<20	0.24	<10	10	119	<10	17
2009LF49A	80	95	1.11	161	4	160	<20	0.04	<10	10	8	<10	503
2009LF57C	230	<2	0.09	10	11	22	<20	0.18	<10	<10	26	<10	14
2009LF58B	320	<2	0.34	5	12	17	<20	0.19	<10	<10	21	<10	37
2009LF68B	40	<2	0.02	<5	<1	22	<20	0.01	<10	10	3	<10	2
2009LF75D	50	<2	0.03	<5	3	144	<20	0.04	<10	10	25	<10	24
2009LF82B	160	17	0.3	11	9	371	<20	0.17	<10	10	72	<10	97
2009LF83B	220	<2	0.02	5	<1	12	<20	<0.01	<10	10	15	10	8
2009LF91B	1790	<2	1.89	<5	39	478	<20	0.52	<10	10	406	<10	80
2009LF115C	700	21	0.07	18	28	146	<20	0.39	<10	10	142	<10	308
2009LF115E	810	28	0.04	17	16	96	<20	0.25	<10	10	125	<10	2740
2009LF118A	230	166	0.33	7	16	80	<20	0.23	<10	<10	71	<10	120
2009LF125B	600	6	1.2	<5	20	220	<20	0.34	<10	20	164	<10	60
2009LF142C	440	7	0.11	26	20	254	<20	0.27	<10	10	141	<10	104
2009LF143A	510	3	0.76	<5	27	221	<20	0.48	<10	10	190	<10	59
2009LF143C	360	3	0.01	9	2	29	<20	0.03	<10	<10	31	<10	10
2009MBW8A	130	4	0.01	<5	2	93	<20	0.07	<10	10	23	<10	17
2009MBW10C	440	<2	0.01	<5	44	113	<20	0.59	<10	10	331	<10	90
2009MBW12A	960	6	0.03	<5	7	1145	<20	0.16	<10	10	75	<10	51
2009MBW12B	140	<2	0.02	<5	40	105	<20	0.25	<10	10	249	<10	68

Sample Number	Au ppm	Au(+) ppm	Pt ppm	Pd ppm	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm
2009MBW13A	<0.001	---	---	---	<0.5	7.46	<5	740	1.4	<2	2.69	<0.5	4
2009MBW15B	0.004	---	<0.005	0.002	<0.5	8.71	6	940	1.9	2	3.21	<0.5	3
2009MBW20B	<0.001	---	---	---	<0.5	6.8	<5	630	1	<2	1.75	<0.5	3
2009MBW51A	0.01	---	---	---	<0.5	6.44	9	1170	0.6	<2	0.2	<0.5	3
2009MBW69A	0.015	---	---	---	<0.5	5.68	17	370	1	<2	3.05	<0.5	3
2009MBW73A	<0.001	---	---	---	<0.5	5.63	9	2000	0.7	<2	0.25	<0.5	3
2009MBW75A	0.004	---	---	---	<0.5	7.15	52	410	0.6	<2	1.85	0.7	12
2009MBW91A	<0.001	---	---	---	<0.5	6.93	5	1000	0.7	<2	0.04	<0.5	1
2009Z4A	0.019	---	---	---	2.4	0.99	38	60	<0.5	4	0.07	<0.5	22
2009Z45B	0.001	---	---	---	0.5	1.27	<5	4790	<0.5	<2	0.15	0.6	2
2009Z53A	0.017	---	---	---	3.3	2.4	<5	400	<0.5	<2	0.3	0.8	5
2009Z66B	0.001	---	---	---	<0.5	1.4	10	1550	0.5	<2	9.53	<0.5	9
2009Z68C	0.001	---	---	---	0.6	4.59	23	730	<0.5	<2	4.74	<0.5	9
2009Z94C	0.002	---	---	---	1.1	7.02	120	3160	1.3	<2	0.72	1	49
2009Z97B	0.001	---	---	---	<0.5	2.79	12	110	<0.5	<2	2.21	<0.5	3
2009Z110A	0.003	---	---	---	<0.5	7.98	<5	380	0.7	<2	4.93	<0.5	25
2009Z120A	<0.001	---	0.036	0.002	<0.5	0.75	<5	30	<0.5	2	4	<0.5	121
2009Z124A	<0.001	---	0.007	0.001	<0.5	2.31	<5	50	<0.5	4	10.3	<0.5	62
2009Z125B	0.003	---	---	---	0.8	7.64	<5	560	1.2	2	3.26	<0.5	10
2009Z128A	0.003	---	---	---	<0.5	4.13	<5	240	<0.5	<2	10.3	<0.5	52
2009Z138A	<0.001	---	---	---	<0.5	7.14	11	400	0.6	<2	1.52	<0.5	9
2009Z139A	0.003	---	---	---	0.6	7.53	14	710	0.6	2	2.19	<0.5	21

Sample Number	Cr ppm	Cu ppm	Cu(+) %	Fe %	Ga ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm
2009MBW13A	6	4	---	1.83	20	1.4	20	0.31	877	<1	3.45	2
2009MBW15B	5	53	---	2.01	20	1.12	20	0.38	273	1	4.89	2
2009MBW20B	10	17	---	1.41	10	1.19	10	0.36	314	1	3.63	1
2009MBW51A	34	33	---	4.28	10	0.75	10	1.35	324	1	2.35	4
2009MBW69A	11	1	---	2.72	20	1.03	10	0.29	692	<1	2.18	2
2009MBW73A	6	<1	---	2.54	10	2.51	10	0.4	238	2	0.55	2
2009MBW75A	19	2	---	4.14	20	1.24	10	1.41	777	1	2.36	6
2009MBW91A	5	3	---	1.88	20	1.43	20	0.59	88	2	2.62	1
2009Z4A	13	285	---	10.35	<10	0.04	<10	0.52	518	5	0.03	2
2009Z45B	6	58	---	0.67	<10	0.33	10	0.16	240	<1	0.2	1
2009Z53A	26	3550	---	2.52	10	0.33	<10	0.65	561	1	0.67	6
2009Z66B	14	24	---	6.37	<10	0.33	10	2.2	1870	1	0.05	29
2009Z68C	7	65	---	3.64	10	1.5	10	0.98	955	1	0.16	4
2009Z94C	7	83	---	2.69	20	2.62	20	0.3	680	1	3.14	<1
2009Z97B	16	2	---	2.2	10	0.17	10	0.24	469	<1	0.51	2
2009Z110A	19	224	---	6.66	20	1	10	2.31	1145	2	1.63	17
2009Z120A	1790	7	---	9.21	<10	0.07	10	16.5	1530	<1	0.09	639
2009Z124A	319	1	---	6.9	10	0.14	10	10.65	1320	<1	0.3	178
2009Z125B	58	64	---	4.6	20	1.54	20	1.66	653	3	1.87	24
2009Z128A	93	191	---	11.3	10	0.49	10	5.88	1650	1	0.62	67
2009Z138A	9	38	---	4.02	10	0.47	10	0.86	652	1	3.41	3
2009Z139A	15	115	---	5.98	10	0.85	10	1.12	567	2	2.86	5

Sample Number	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
2009MBW13A	440	8	0.01	<5	2	957	<20	0.11	<10	10	54	<10	26
2009MBW15B	490	<2	0.08	<5	2	875	<20	0.16	<10	20	43	<10	12
2009MBW20B	340	4	0.02	<5	2	447	<20	0.09	<10	20	39	<10	16
2009MBW51A	830	3	0.2	<5	12	154	<20	0.19	<10	10	142	<10	69
2009MBW69A	260	5	<0.01	6	6	288	<20	0.13	<10	10	44	<10	29
2009MBW73A	190	<2	0.78	<5	9	44	<20	0.1	<10	<10	8	<10	19
2009MBW75A	300	6	1.22	<5	22	158	<20	0.29	<10	10	142	<10	116
2009MBW91A	110	<2	0.46	5	12	25	<20	0.22	<10	10	21	<10	10
2009Z4A	80	19	5.58	33	3	7	<20	0.04	<10	<10	40	10	40
2009Z45B	50	81	0.12	<5	2	2220	<20	0.03	<10	<10	11	<10	14
2009Z53A	200	328	0.33	7	9	22	<20	0.11	<10	<10	64	<10	96
2009Z66B	270	8	0.05	<5	4	450	<20	0.06	<10	10	31	<10	45
2009Z68C	1100	<2	0.11	18	10	115	<20	0.17	<10	10	104	<10	82
2009Z94C	670	131	0.46	5	11	335	<20	0.28	<10	10	54	<10	147
2009Z97B	240	4	<0.01	<5	6	168	<20	0.12	<10	10	57	<10	16
2009Z110A	1450	3	2.4	<5	25	522	<20	0.5	<10	10	263	<10	69
2009Z120A	130	<2	0.14	5	27	53	<20	0.07	<10	10	61	<10	74
2009Z124A	50	<2	0.01	<5	79	127	<20	0.28	<10	10	199	<10	46
2009Z125B	1030	44	0.08	<5	12	393	<20	0.37	<10	10	131	<10	93
2009Z128A	560	<2	0.59	<5	71	356	<20	0.69	<10	10	611	<10	99
2009Z138A	570	4	0.74	<5	15	214	<20	0.31	<10	20	92	<10	47
2009Z139A	580	16	2.72	<5	17	226	<20	0.31	<10	10	133	<10	40

Table 3. Detection limits and analytical methods for trace-element geochemical analyses of DGGS rock samples. Analytical methods include: FA-ICP-AES = fire assay-inductively coupled plasma-atomic emission spectroscopy; FA-GRAV = fire assay with a gravimetric determination; ICP-AES = inductively coupled plasma-atomic emission spectroscopy. Digestions include: 4 acid = HNO₃-HClO₄-HF + HCl. NOTE: * = possibly incomplete digestion dependent on mineralogy; --- = not applicable.

Element	Units	ALS Chemex			
		Lower Detection Limit	Upper Detection Limit	Analytical Method	Digestion
Au	ppm	0.001	10	FA-ICP-AES	---
Au(+)	ppm	0.05	1,000	FA-GRAV	---
Pt	ppm	0.005	10	FA-ICP-AES	---
Pd	ppm	0.001	10	FA-ICP-AES	---
Ag	ppm	0.5	100	ICP-AES	4 Acid
Al	%	0.01	50	ICP-AES	4 Acid
As	ppm	5	10,000	ICP-AES	4 Acid
Ba*	ppm	10	10,000	ICP-AES	4 Acid
Be	ppm	0.5	1,000	ICP-AES	4 Acid
Bi	ppm	2	10,000	ICP-AES	4 Acid
Ca	%	0.01	50	ICP-AES	4 Acid
Cd	ppm	0.5	1,000	ICP-AES	4 Acid
Co	ppm	1	10,000	ICP-AES	4 Acid
Cr*	ppm	1	10,000	ICP-AES	4 Acid
Cu	ppm	1	10,000	ICP-AES	4 Acid
Cu(+)	%	0.01	40	ICP-AES	4 Acid
Fe	%	0.01	50	ICP-AES	4 Acid
Ga	ppm	10	10,000	ICP-AES	4 Acid
K	%	0.01	10	ICP-AES	4 Acid
La	ppm	10	1,000	ICP-AES	4 Acid
Mg	%	0.01	50	ICP-AES	4 Acid
Mn	ppm	5	100,000	ICP-AES	4 Acid
Mo	ppm	1	10,000	ICP-AES	4 Acid
Na	%	0.01	10	ICP-AES	4 Acid
Ni	ppm	1	10,000	ICP-AES	4 Acid
P	ppm	10	10,000	ICP-AES	4 Acid
Pb	ppm	2	10,000	ICP-AES	4 Acid
S	%	0.01	10	ICP-AES	4 Acid
Sb	ppm	5	10,000	ICP-AES	4 Acid
Sc	ppm	1	10,000	ICP-AES	4 Acid
Sr	ppm	1	10,000	ICP-AES	4 Acid
Th	ppm	20	10,000	ICP-AES	4 Acid
Ti*	%	0.01	10	ICP-AES	4 Acid
Tl	ppm	10	10,000	ICP-AES	4 Acid
U	ppm	10	10,000	ICP-AES	4 Acid
V	ppm	1	10,000	ICP-AES	4 Acid
W*	ppm	10	10,000	ICP-AES	4 Acid
Zn	ppm	2	10,000	ICP-AES	4 Acid

Table 4. Location and description of rocks collected by DGGS for major-oxide, minor-oxide, and trace-element analyses in the Chistochina mining district, Mount Hayes Quadrangle, Alaska. UTM coordinates are based on the Clark 1866 spheroid, NAD 27 datum, zone 6 projection. Rock names in () are derived from geochemical data and rock textures in hand sample.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
2009ACH85A	63.11213	-144.84758	608592	6999903	6	Volcanic (dacite); gray, white weathering, fine-grained to aphanitic rock, with 5-10 percent plagioclase, 10-20 percent epidote, and 5-10 percent quartz in an aphanitic groundmass. Contains disseminated sulfides.
2009ACH93A	63.09793	-144.73785	614182	6998513	6	(Gabbro); intergrown plagioclase (50 percent) and pyroxene (50 percent) crystals up to two centimeters in length. Surrounding unit is hornfelsed. Dike(?) is 30 m thick.
2009ACH103A	63.05432	-144.70029	616251	6993723	6	Rhyolite (rhyolite); white, red-weathering, porphyritic rock, with 20 percent quartz, 5 percent feldspar, and 35 percent unknown dark phenocrysts in an aphanitic matrix.
2009ACH113A	63.05533	-144.66457	618052	6993901	6	Andesite (dacite); porphyritic rock, with 30 percent plagioclase phenocrysts < 1 cm long and altered to epidote in an aphanitic red and green matrix.
2009ACH115A	63.13093	-144.74804	613539	7002170	6	Andesite (dacite); gray-weathered, porphyritic rock, with 20-30 percent plagioclase < 2 mm in length and chloritized in a dark green, aphanitic matrix.
2009ACH123A	63.14080	-144.74277	613766	7003278	6	Rhyolite (altered dacite?); rust-colored, siliceous, aphanitic rock, with up to 5 percent, < 0.1-mm-sized pyrite.
2009ACH129B	63.15562	-144.72339	614684	7004963	6	(Basalt); dark gray, rust-orange-weathering, porphyritic rock, with 30-40 percent feldspar phenocrysts < 2 mm in length in an aphanitic matrix. Contains disseminated pyrite.
2009ACH130A	63.15505	-144.72246	614733	7004901	6	(Basalt) dike; gray, aphanitic dike, with local feldspar phenocrysts.
2009ACH132A	63.15420	-144.71715	615004	7004816	6	Basalt (basalt): dark green, green-weathering, aphanitic basalt. Contains possible pyroxene, minor epidote alteration, and dark mineral-filled amygdules up to 6 mm long.
2009ACH136C	63.14513	-144.72594	614597	7003790	6	Volcanic (dacite); green, felsic volcanic rock, with up to 15 percent feldspar phenocrysts < 1 mm long and dark green unknown phenocrysts < 3 mm in diameter in an aphanitic groundmass.
2009ACH169A	63.20699	-144.91530	604833	7010356	6	Pyroxenite (olivine melanogabbro); pyroxene crystals average 3-4 mm in diameter, but locally can be up to 2.5 cm in diameter.
2009ACH170A	63.20994	-144.90930	605124	7010694	6	Quartz monzonite (diorite); found in float.
2009ACH172A	63.21336	-144.90432	605362	7011083	6	Basalt (basalt); dark green-gray, sheared, aphanitic rock, cut by abundant quartz-epidote veins and veinlets.
2009ACH174A	63.22493	-144.91531	604768	7012354	6	(Basalt); dark green, aphanitic rock.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
2009ACH174B	63.22493	-144.91531	604768	7012354	6	(Quartz diorite) dike; leucocratic, porphyritic dike, with 30 percent feldspar and 10 percent hornblende phenocrysts.
2009ACH175A	63.22232	-144.91977	604553	7012056	6	(Basalt); dark green, aphanitic rock.
2009ACH178A	63.16330	-144.73258	614191	7005802	6	Andesite (basalt); dark green rock, with 30 percent feldspar phenocrysts. Rock is brittle strained, with slickensides.
2009ACH178B	63.16330	-144.73258	614191	7005802	6	(Rhyolite) dike; white, aphanitic dike with slickensides.
2009ACH184C	63.15843	-144.76577	612539	7005201	6	Felsic (granite) dike.
2009ACH190A	63.19107	-144.92848	604228	7008561	6	Conglomerate (basalt); boulders of conglomerate composed of dark green, subangular to sub-rounded, < 10 cm in diameter, volcanic clasts.
2009ACH197A	63.18846	-144.91741	604794	7008288	6	Monzonite (monzodiorite): equigranular rock containing 50 percent biotite, 25 percent plagioclase, and 25 percent quartz phenocrysts.
2009ACH207A	63.08859	-144.75869	613167	6997435	6	Tonalite (tonalite); coarse grained rock with 50 percent feldspar (< 7 mm in length), 20-30 percent green needle-like dendritic minerals up to 1.5 cm long, and 30 percent quartz crystals up to 2 mm in diameter.
2009ACH219C	63.17737	-144.80417	610533	7007244	6	Rhyolite (dacite tuff); light gray, white-weathering rock with possible flow banding.
2009ACH231A	63.17614	-144.82634	609422	7007069	6	Gabbro (gabbro); fine-grained biotite-hornblende(?) -plagioclase-pyroxene(?) gabbro.
2009ACH232A	63.17593	-144.82876	609301	7007041	6	Gabbro (gabbro); contains 50 percent hornblende phenocrysts < 5 mm in diameter and 50 percent feldspar phenocrysts.
2009JEA9B	63.18717	-144.94539	603391	7008099	6	Quartz monzonite (quartz monzonite); medium-grained rock with biotite and hornblende. Sample is float.
2009JEA11A	63.09347	-144.84329	608878	6997833	6	Granite (granite); contains 40 percent pink k-feldspar, 25 percent plagioclase, and 5-10 percent quartz. Some epidote alteration and possible sericite alteration.
2009JEA13A	63.09392	-144.83807	609140	6997892	6	Granodiorite (diorite); gray rock, with 80 percent feldspar + quartz and 10 percent hornblende. Possible dike.
2009JEA15B	63.09390	-144.83567	609261	6997893	6	Quartz monzonite (altered granite); light pink rock, with 30 percent round quartz, 50 percent k-feldspar, and 20 percent plagioclase phenocrysts.
2009JEA38A	63.06713	-144.71510	615452	6995123	6	Dacite (dacite); gray-green flow, with 15 percent plagioclase and 2 percent quartz (2 mm in diameter) phenocrysts in a green, aphanitic matrix.
2009JEA48A	63.06951	-144.73386	614495	6995355	6	Gabbro (gabbro); completely unaltered body intruding basalt. Contains 8 percent hornblende 2-3 mm in length and 92 percent plagioclase.
2009JEA84A	63.16778	-144.74820	613387	7006273	6	Anorthosite (quartz monzodiorite) dike; dike with carbonate alteration and veinlets. Trace pyrite and a silvery-gray metallic mineral. Some inclusions of argillite.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
2009JEA94B	63.18276	-144.79120	611165	7007866	6	Clinopyroxenite (gabbro); green, 3-5 mm pyroxene crystals altered to serpentine.
2009JEA106A	63.15212	-144.86610	607510	7004326	6	Rhyolite (rhyolite); light gray-blue-weathering, porphyritic rock, with 4 percent quartz crystals 3 mm in diameter and 5 percent feldspar crystals altered to chlorite.
2009JEA132A	63.13528	-144.70444	615719	7002732	6	Basalt (basalt); aphanitic except for amygdules filled with chlorite and local patches of up to 5 percent feldspar phenocrysts (< 0.8 cm in length). Weathers green and red. Local epidote alteration.
2009JEA143A	63.14619	-144.99946	600813	7003449	6	Quartz monzonite (quartz diorite); gray-green rock, with fine-grained feldspar < 4 mm in length. Patches of epidote and chlorite.
2009JEA155A	63.14517	-144.99304	601140	7003346	6	Quartz monzonite (tonalite); gray rock, with 20% quartz crystals about 5 mm in diameter. Lithology continues for about 30 feet.
2009JEA159B	63.09134	-144.82606	609756	6997625	6	Gabbro (gabbro); black rock, with 4 mm feldspar phenocrysts.
2009JEA160A	63.09135	-144.82437	609841	6997629	6	Quartz monzonite (tonalite); white to pink intrusion, with feldspar phenocrysts 6 mm in length, patches of mafics, and interstitial quartz.
2009JEA171C	63.17489	-144.81807	609843	7006944	6	Syenite (quartz monzonite); carbonate-altered, porphyritic sill, with 1-cm-long feldspar phenocrysts with cores altered to chlorite. Groundmass is generally aphanitic, but can contain crystals up to three millimeters in size. Sill is approximately 2 feet thick.
2009JEA173A	63.17546	-144.81896	609796	7007005	6	Microgabbro (gabbro); black dike that cuts across bedding. Contains 1 mm plagioclase crystals.
2009JEA177B	63.17293	-144.82533	609485	7006713	6	Gabbro (gabbro); carbonate-altered, porphyritic sill, with 15 percent, 1-cm-long, feldspar phenocrysts and 15 percent mafic minerals in a green, aphanitic groundmass.
2009LF5A	63.20314	-144.93028	604094	7009903	6	Ultramafic (olivine clinopyroxenite); dark green, brown-weathered rock, with 80 percent pyroxene (3 mm in diameter) and 20 percent olivine.
2009LF14A	63.12055	-144.88674	606586	7000775	6	Quartz syenite (granite); pink, white-weathering, porphyritic intrusion, with 10 percent round quartz (3-4 mm in diameter), 25 percent euhedral plagioclase (3 mm), 10 percent epidote (2 mm), 10 percent hornblende, 1 percent magnetite, and 35 percent intergrown K-feldspar crystals.
2009LF20A	63.12107	-144.90386	605721	7000805	6	Dacite (rhyolite); white-weathering porphyry, with 10 percent euhedral quartz (3 mm) and 20 percent feldspar (2-3 mm) in a green-gray, siliceous, aphanitic groundmass. Also contains 1-2 percent epidote.
2009LF27A	63.09487	-144.70399	615903	6998233	6	Andesite (andesite); porphyry, with 20 percent, blocky, twinned plagioclase (4 mm) and 15 percent, black hornblende (3mm) in a green, aphanitic groundmass. Shows moderate epidote alteration.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
2009LF40A	63.07961	-144.71246	615536	6996518	6	Diorite (quartz diorite); gray, blocky intrusion, with 15 percent plagioclase (1 mm) and 25 percent hornblende (1.5 mm) in a pale green, very fine-grained groundmass.
2009LF58C	63.13852	-144.75622	613097	7003001	6	Diorite (diorite); medium-grained intrusion, with 50 percent plagioclase (1-2 mm), 30 percent pyroxene (intergrown with plagioclase), and 20 percent, secondary, acicular amphibole (1.5 mm).
2009LF59A	63.14526	-144.68184	616818	7003884	6	Greenstone (sub-alkaline basalt); blocky, dark red-purple, brown-weathering rock, with 20 percent plagioclase laths in an aphanitic groundmass. Contains 5-40 percent amygdules filled with calcite > actinolite > epidote.
2009LF65A	63.13601	-144.67194	617354	7002872	6	Greenstone (basalt); orange-tan-weathering, blocky, massive, fine-grained rock, with actinolite, chlorite, epidote, albite, and calcite. Fractures are coated with epidote and calcite. Contains 0.1% chalcopryrite.
2009LF69C	63.14629	-144.67981	616916	7004003	6	Latite (monzonite); light green porphyry, with 15 percent, pink, blocky feldspar and 5 percent, elongate hornblende (1 mm) phenocrysts in a sugary groundmass.
2009LF71A	63.14975	-144.67495	617147	7004397	6	Andesite (basalt); porphyry, with 20 percent feldspar (2 mm) and 5 percent hornblende (1 mm) phenocrysts in an aphanitic, grainy groundmass. Strongly epidote-calcite altered in irregular patches.
2009LF72A	63.15059	-144.67262	617261	7004495	6	Greenstone (basalt); dark green-gray, brown-weathering, blocky rock, with epidote- and calcite-filled amygdules in an aphanitic groundmass.
2009LF81A	63.11797	-144.89962	605946	7000467	6	Gabbro (gabbro); gray, brown-weathering, medium-grained, blocky gabbro, with 35 percent plagioclase laths (2 mm) and 55 percent black pyroxene. Alteration includes 20 percent amphibole after pyroxene, and calcite- and actinolite-filled joints.
2009LF95B	63.20325	-144.89010	606114	7009981	6	Gabbro (gabbro); 80 percent coarse-bladed hornblende (2 cm long) and interstitial feldspar.
2009LF99A	63.19426	-144.88149	606580	7008994	6	Monzodiorite (monzodiorite); contains 20 percent, blocky, green pyroxene crystals (1.5 mm), 10 percent biotite flakes (2 mm average), and 65 percent feldspar.
2009LF100A	63.19765	-144.88028	606628	7009373	6	Pyroxenite (olivine clinopyroxenite); rust-brown, blocky rock, with 95 percent intergrown pyroxene (5 mm) and 2 percent interstitial olivine. Locally serpentinized on faults.
2009LF100B	63.19765	-144.88028	606628	7009373	6	Peridotite (Iherzolite); fine-grained peridotite, with 20 percent pyroxene, 10 percent olivine, and 70 percent unknown mafic minerals.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
2009LF101A	63.19544	-144.88094	606603	7009126	6	Quartz monzonite (monzodiorite); contains 15 percent quartz (2 mm), 15 percent hornblende, 10 percent biotite (4 mm), and 5 percent relict pyroxene with hornblende-biotite rims.
2009LF102A	63.15378	-144.61108	620347	7004964	6	Granite (granite); porphyry, with 3 percent K-feldspar (1.5 cm), 10 percent biotite (1 mm), and 25 percent quartz (2 mm) phenocrysts in a groundmass of 1-mm-long feldspar laths.
2009LF107A	63.15745	-144.60425	620676	7005386	6	Granite (granite); seriate intrusion, with 5 percent K-feldspar (1 cm), 5 percent hornblende (2 mm), 15 percent biotite (1 mm). Remainder is quartz + feldspar (3 mm).
2009LF113C	63.12004	-144.90974	605428	7000681	6	Diorite (tonalite); contains 10 percent biotite (1 mm), 15 percent acicular amphibole (2 mm), and 75 percent plagioclase (4 mm). Also contains 5 percent mafic inclusions.
2009LF127A	63.10510	-144.91797	605067	6999003	6	Tonalite (tonalite); contains 20 percent quartz (1.5 mm), 25 percent plagioclase (3 mm; altered to clinozoisite?), 20 percent mafic minerals, and 5 percent pink feldspar (2 mm). Remainder is 1-mm-sized feldspar + quartz.
2009LF138A	63.08159	-144.69913	616201	6996762	6	Dacite (rhyolite); green, platy to blocky, porphyritic rock, with 20 percent quartz (0.2 mm), 10 percent plagioclase (1 mm), 5 percent K-feldspar(?) (3 mm), and 10 percent irregular vesicles. Some elongation of the vesicles parallel to jointing.
2009LF143A	63.21787	-144.85616	607766	7011666	6	Semischist (altered monzogabbro?); orange-weathering, pale green-gray schist, with pyrite, fuchsite, iron carbonate, and quartz. Displays a weak fabric.
2009LF146A	63.19804	-145.08397	596383	7009094	6	Diorite (diorite); contains 20 percent biotite (2 mm), 10 percent altered hornblende (2 mm), and 20 percent euhedral plagioclase. Remainder is anhedral feldspar. Locally has mafic-rich areas up to 30 percent hornblende. Local hornblende coatings on fractures.
2009LF148A	63.21297	-145.08185	596440	7010760	6	Granite (granodiorite); contains 20 percent quartz, 8 percent biotite (0.2 mm), and mixed feldspar. Contains local ultramafic inclusions and abundant iron carbonate in fractures.
2009LF148B	63.21297	-145.08185	596440	7010760	6	Quartz diorite (granodiorite); contains 30 percent quartz and 20 percent chlorite-epidote-altered mafic minerals. Strongly fractured with chlorite- and epidote-filled fractures.
2009LF149C	63.21152	-145.12621	594215	7010533	6	Dacite (andesite); brecciated, green, subrounded clasts 5 cm in diameter in a red-brown matrix.
2009MBW11B	63.18230	-144.77086	612190	7007850	6	Gabbro (gabbro-norite); dark green, fine-grained, equigranular gabbro, with 20 percent plagioclase and 80 percent clinopyroxene.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
2009MBW15A	63.18318	-144.77113	612173	7007948	6	Mafic (syenodiorite); dark green, very fine-grained, massive mafic rock, with about 15 percent plagioclase intergrown with 85 percent dark green pyroxene.
2009MBW15C	63.18318	-144.77113	612173	7007948	6	(Basalt); dark green, very fine-grained, massive, porphyritic rock, with 7 percent feldspar phenocrysts up to 0.7 cm in diameter.
2009MBW16A	63.18329	-144.77341	612058	7007956	6	(Quartz monzodiorite) dike; light gray-weathering, porphyritic dike, with 20 percent brown biotite.
2009MBW55A	63.17876	-144.93900	603743	7007173	6	Mafic (olivine gabbro); medium green, brown-weathering, blocky, porphyritic dike, with 15 percent plagioclase phenocrysts up to 3 mm long in a fine-grained, granular, dark green groundmass. Cut by sparse quartz + calcite veinlets. Fracture surfaces are coated with iron oxide.
2009MBW56A	63.17875	-144.93884	603751	7007172	6	Felsic (tonalite); light gray, massive, blocky, porphyritic rock with 30 percent quartz (4 mm) and 5 percent feldspar phenocrysts in an aphanitic matrix. Contains 3-4 percent disseminated platelets of iron oxide/hydroxide.
2009MBW67B	63.17791	-144.93109	604144	7007091	6	Basalt (andesite); medium green-gray, light gray-weathering, blocky, massive, porphyritic rock, with 40 percent plagioclase (< 5 mm long, average 2 mm long; epidote altered) phenocrysts in a fine-grained groundmass.
2009MBW79A	63.17742	-144.92053	604677	7007054	6	Gabbro (gabbro); brown-weathering dike.
2009MBW86A	63.17602	-144.93235	604087	7006879	6	Microgabbro (gabbro-norite); brown-weathering, fine-grained, faintly plagioclase-porphyritic dike.
2009MBW89B	63.17547	-144.93420	603996	7006814	6	Gabbro (gabbro); dark gray, brown-weathering, blocky, porphyritic rock, with 20 percent plagioclase (< 1.5 mm) and 25 percent clinopyroxene (< 2.5 mm) phenocrysts in a dark gray, aphanitic groundmass. Locally contains fractures with pyrite.
2009MBW94A	63.17366	-144.93876	603773	7006605	6	(Gabbro); dark green-gray, white-weathering, massive, blocky, porphyritic plagioclase (12 percent) and clinopyroxene (15 percent) phenocrysts up to 2 mm in diameter in an aphanitic groundmass.
2009Z1A	63.11803	-144.88044	606913	7000505	6	Granite (granite); pink, orange-brown-weathering, porphyritic rock, with 25 percent cream to pale green feldspars (< 5 mm) and 15 percent gray quartz phenocrysts. Moderate iron-oxide staining on fractures.
2009Z2A	63.16225	-144.96350	602568	7005295	6	Gabbro (monzodiorite); green, green-orange-weathering, blocky rock, with 1-2 mm plagioclase laths in an aphanitic matrix.
2009Z3A	63.14392	-144.79993	610874	7003525	6	Gabbro (granodiorite); gray-green, dull green-weathering, aphanitic rock, with 12-13 percent equant to elongate pyroxene(?) (1-1.5 mm long), occasional plagioclase laths, and 1 percent, fine-grained, disseminated pyrite. Moderately to strongly iron-oxide stained.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
2009Z7B	63.14595	-144.72456	614663	7003884	6	Basalt (basalt); dark gray, brown-weathering, aphanitic dike that has a moderate reaction to hydrochloric acid. Dike is 5 feet thick in outcrop.
2009Z7B-DUP	63.14595	-144.72456	614663	7003884	6	Basalt (basalt); dark gray, brown-weathering, aphanitic dike that has a moderate reaction to hydrochloric acid. Dike is 5 feet thick in outcrop.
2009Z11A	63.17537	-144.95122	603140	7006776	6	Andesite (trachyte); gray to dark gray, massive, blocky, weakly iron-oxide stained rock, with 25 percent plagioclase (1-2 mm, epidote altered), 1 percent magnetite, 2-3 percent hornblende, and abundant mm-sized (volcaniclastic?) lithic fragments. Pale green epidote occurs on joint and fracture surfaces.
2009Z13B	63.17313	-144.95334	603041	7006523	6	Gabbro (gabbro); black, brown-weathering, fine- to medium-grained, angular rock. Dike is 8 feet thick.
2009Z18A	63.09848	-144.84817	608613	6998382	6	Granite (granite); pink and light green, gray- to light orange-weathering, fairly equigranular rock, with 25 percent quartz (1 mm), 40-45 percent pink K-feldspar (1-3 mm), 30 percent plagioclase, and 2-3 percent biotite and hornblende. Contains light green patches and fracture fillings of epidote.
2009Z26A	63.10214	-144.86971	607513	6998754	6	Diorite (diorite); black and white rock, with 40-45 percent hornblende (2 mm long) and 2-3 percent biotite phenocrysts. Feldspar phenocrysts are slightly epidote altered, but the hornblende look fresh.
2009Z35A	63.11510	-144.75069	613467	7000402	6	Andesite (andesite); green, brown-orange-weathering, massive, chloritized, porphyritic rock, with 20 percent white feldspar (2 mm, minor epidote alteration) and 1-2 percent magnetite clots.
2009Z37B	63.11521	-144.75572	613213	7000405	6	Rhyolite (dacite); light green-gray, platy to blocky outcrop. Possible welded tuff with 1 mm knobs of wispy, wavy, collapsed pumice fragments(?).
2009Z42A	63.11832	-144.77186	612387	7000723	6	Conglomerate (dacite); red-brown, black, and dark green, rounded to angular, aphanitic, volcanic clasts in a green, very fine-grained, chloritized matrix. Clast size varies from coarse-grained sand up to 1.5 cm in diameter.
2009Z46C	63.06785	-144.70588	615915	6995220	6	Diorite (monzodiorite); gray, green-gray-weathering, angular, blocky, possible dike, with 45 percent white feldspar and 15 percent hornblende (< 3 mm long) in a chloritized groundmass.
2009Z51A	63.06564	-144.69022	616715	6995002	6	Rhyolite (rhyolite); light brown, light orange-weathering, porphyritic rock with 25 percent K-feldspar and 10 percent quartz phenocrysts less than 1 mm in diameter.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
2009Z68B	63.15608	-144.72790	614455	7005006	6	Monzodiorite (quartz diorite); orange and white, yellow-orange- to pink-weathering, blocky dike, with fine-grained feldspar altered to clay, and 2-3 percent, partially oxidized iron sulfide. Moderately strong iron-oxide staining. Exposed as one 10-foot-wide and one 5-foot-wide dike along ridge.
2009Z92B	63.15860	-144.76744	612454	7005217	6	Monzonite (granite); tan-weathering, blocky, angular, porphyritic dike/sill, with white spots (feldspar?), 10 percent biotite, and possible hornblende altered to chlorite and epidote in a green and brown matrix. Minor iron oxide and calcite on joint and fracture surfaces.
2009Z94B	63.16705	-144.95818	602819	7005838	6	(Dacite?); gray, light gray-tan-white-weathering, aphanitic rock with conchoidal fractures. Contains very fine-grained disseminated pyrite. Layer is 3 feet thick. Possible tuff.
2009Z98A	63.15925	-144.96828	602338	7004953	6	Conglomerate (andesite); green, granular rock, with chlorite and weak to moderate epidote alteration. Few but present indicators of conglomeratic nature.
2009Z101A	63.15409	-144.97313	602112	7004371	6	Conglomerate (andesite); subangular to rounded, volcanic pebbles in a dark green epidote + chlorite matrix. Epidote alteration as clast replacements and epidote-calcite±quartz fracture filling.
2009Z105A	63.19236	-144.91009	605148	7008735	6	Quartz monzonite (quartz monzonite); light gray with black speckles, coarse-grained, equigranular rock, with 10 percent quartz, 30-40 percent mafic minerals (hornblende > biotite), and equal amounts of plagioclase and K-feldspar. Average phenocrysts are 8 mm long. Contains rare epidote veinlets, occasional feldspar megacrysts (< 4 cm long), and diorite xenoliths.
2009Z107B	63.19215	-144.91452	604926	7008704	6	Monzonite (monzodiorite); black and white, dark brown-weathering rock, with 50 percent fine-grained mafic minerals (hornblende >> biotite).
2009Z113A	63.18518	-144.89378	605995	7007962	6	Greenstone (basalt); dark green, fine-grained, chloritized rock with some epidote alteration. At least two orientations of slickensides. Possible pillows?
2009Z124A	63.16090	-144.70724	615476	7005580	6	Pyroxenite (olivine melanogabbro); black rock, with 20 percent interstitial olivine, 5 percent phlogopite, and pyroxene. Rubble covers 50-foot-diameter area. Possible dike.
2009Z137B	63.13843	-144.97317	602165	7002626	6	Gabbro (gabbro); chloritized and contains hornblende.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
2009Z140A	63.13575	-144.97356	602155	7002327	6	Quartz monzonite (tonalite); pale green, pale green- to orange-weathering, fine-grained, porphyritic rock, with feldspar (2-3 mm, some epidote alteration), quartz (1 mm), and mafic minerals in a granular matrix. Some pyrite, arsenopyrite, and iron-oxide staining on joint surfaces.
2009Z145C	63.06137	-144.74758	613834	6994424	6	Rhyolite (rhyolite); pale green, sugrosic rock, with tiny brown-orange spots. Only found in rubble.
2009Z146A	63.06253	-144.75085	613664	6994547	6	Dacite (dacite); porphyritic rock with a chloritized matrix.

Table 5. Major-oxide, minor-oxide, and trace-element analyses for rocks collected by DGGS in the Chistochina mining district, Mount Hayes Quadrangle, Alaska.

Sample Number	SiO2 %	Al2O3 %	Fe2O3 %	CaO %	MgO %	Na2O %	K2O %	Cr2O3 %	TiO2 %	MnO %	P2O5 %	SrO %	BaO %
2009ACH85A	65.93	16.22	4.34	3.3	1.91	4.46	1	0.01	0.43	0.13	0.096	0.03	0.22
2009ACH93A	48.29	15.47	9.57	14.34	8.79	1.39	0.13	0.06	0.93	0.15	0.072	0.02	<0.01
2009ACH103A	74.31	13.32	3.16	0.09	2.24	1.72	2.16	0.01	0.24	0.08	0.048	0.01	0.09
2009ACH113A	66.07	14.01	6.14	3.31	1.56	4.48	1.65	0.01	0.47	0.07	0.095	0.03	0.1
2009ACH115A	67.2	15.02	3.93	2.34	1.46	3.72	1.86	<0.01	0.3	0.13	0.079	0.02	0.15
2009ACH123A	80.25	10.26	2.68	0.22	0.37	3.11	1.32	<0.01	0.34	0.01	0.033	0.01	0.05
2009ACH129B	48.01	15.49	7.05	8.27	2.43	2.78	1.83	0.01	0.49	0.18	0.458	0.07	0.08
2009ACH130A	48.42	15.16	6.43	7.34	2.89	2.62	2.3	<0.01	0.57	0.17	0.314	0.05	0.07
2009ACH132A	47.5	17.24	11.36	6.74	6.12	3.52	1.22	0.01	1.67	0.15	0.136	0.04	0.04
2009ACH136C	66.96	14.42	5.95	0.32	3.58	3.43	1.08	<0.01	0.49	0.11	0.108	0.01	0.03
2009ACH169A	47.22	2.99	12	17.24	17.57	0.26	0.24	0.09	0.43	0.22	0.023	0.01	0.01
2009ACH170A	52.38	21.69	6.38	9.19	2.26	3.51	2.18	0.01	0.58	0.1	0.405	0.13	0.05
2009ACH172A	49.77	13.62	11.52	10.29	7.81	3.31	0.13	0.02	0.74	0.2	0.058	0.01	0.01
2009ACH174A	49.9	13.33	14.16	11.45	6.74	1.7	0.07	0.01	1.15	0.22	0.096	0.01	0.01
2009ACH174B	61.47	16.41	5.31	5.41	3.42	3.58	1.68	0.01	0.6	0.1	0.175	0.06	0.09
2009ACH175A	49.68	13.6	11.98	12.39	7.5	1.73	0.06	0.02	0.68	0.19	0.06	0.01	<0.01
2009ACH178A	44.06	17.22	12.2	12.36	5.33	2.54	1.2	0.01	1.03	0.23	0.775	0.17	0.08
2009ACH178B	69.15	14.59	0.98	3.45	0.16	4.8	2.44	<0.01	0.05	0.05	0.025	0.02	0.11
2009ACH184C	57.81	19.96	6.49	1.22	0.26	3.69	3.6	<0.01	0.63	0.1	0.535	0.06	0.11
2009ACH190A	48.07	13.58	13.78	6.54	6.8	2.95	0.05	0.01	1.09	0.24	0.084	0.01	<0.01
2009ACH197A	51.14	17.27	10.78	8.64	4.01	2.82	2.02	0.01	0.77	0.19	0.347	0.08	0.05
2009ACH207A	64.36	15.42	5.71	2.98	2.16	4.43	1	<0.01	0.48	0.13	0.098	0.03	0.05
2009ACH219C	65.68	15.8	2.31	8.08	1.56	3.47	0.3	0.01	0.59	0.08	0.256	0.03	0.02
2009ACH231A	50.94	16.53	10.06	8.39	3.79	2.66	1.81	0.01	0.78	0.18	0.376	0.13	0.04
2009ACH232A	53.84	16.68	8.78	7.75	3.98	3.16	2.52	0.01	0.68	0.19	0.293	0.1	0.05
2009JEA9B	60.89	17.66	5.66	3.63	1.16	3.52	5.41	<0.01	0.5	0.1	0.3	0.06	0.07
2009JEA11A	75.7	12.48	1.56	0.94	0.18	3.7	3.51	<0.01	0.16	0.03	0.026	0.02	0.22
2009JEA13A	48.79	16.16	12.07	12.35	6.27	2.06	0.22	0.03	1.7	0.18	0.134	0.03	0.01
2009JEA15B	81.08	10.85	1.35	0.13	0.2	4.74	0.59	<0.01	0.17	0.01	0.029	0.01	0.01
2009JEA38A	71.54	13.2	3.57	0.83	2.28	3.1	2.34	0.01	0.28	0.08	0.049	0.02	0.21
2009JEA48A	53.44	18.62	7.98	9.63	3.61	2.87	1.59	0.01	0.46	0.16	0.287	0.1	0.08
2009JEA84A	61.27	17.3	2.84	4.04	0.72	4.47	3.29	<0.01	0.25	0.13	0.124	0.08	0.12
2009JEA94B	44.97	14.47	10.26	17.66	6.95	1.34	0.26	0.06	0.3	0.15	0.029	0.02	0.01
2009JEA106A	74.11	12.7	2.78	2.21	0.59	2.56	1.66	<0.01	0.11	0.08	0.027	0.02	0.14
2009JEA132A	45.2	16.15	11.94	13.79	2.75	3.74	0.02	0.01	0.81	0.12	0.1	0.01	<0.01

Sample Number	Total %	Ba ppm	Nb ppm	Rb ppm	Sr ppm	Y ppm	Zr ppm
2009ACH85A	99.75	1930	5	17	241	21	120
2009ACH93A	99.97	40	4	2	145	15	46
2009ACH103A	100.1	870	4	36	27	21	101
2009ACH113A	99.34	930	3	19	163	17	64
2009ACH115A	99.88	1330	3	36	153	31	103
2009ACH123A	100.05	490	2	22	67	11	66
2009ACH129B	98.95	710	3	39	576	23	94
2009ACH130A	99.24	670	3	62	435	27	107
2009ACH132A	99.42	360	6	19	280	25	102
2009ACH136C	99.24	350	3	18	33	26	81
2009ACH169A	99.41	70	<2	7	68	12	2
2009ACH170A	99.19	470	2	41	1125	18	124
2009ACH172A	99.2	50	<2	2	71	23	25
2009ACH174A	99.54	50	2	2	69	35	50
2009ACH174B	99.75	840	5	34	497	15	134
2009ACH175A	99.46	30	<2	<2	55	24	20
2009ACH178A	99.87	660	2	23	1415	20	115
2009ACH178B	99.3	1000	4	51	150	14	66
2009ACH184C	99.19	990	4	68	478	28	113
2009ACH190A	98.82	40	2	<2	63	35	47
2009ACH197A	99.12	390	2	41	692	29	95
2009ACH207A	99.25	540	2	13	204	14	107
2009ACH219C	99.66	210	6	8	267	32	196
2009ACH231A	98.96	360	2	32	1145	22	134
2009ACH232A	99.48	460	2	38	843	22	104
2009JEA9B	99.27	590	7	154	490	47	196
2009JEA11A	98.95	1910	5	65	101	38	132
2009JEA13A	100.05	60	8	4	188	23	95
2009JEA15B	99.96	110	5	12	31	13	128
2009JEA38A	99.95	1940	3	26	91	26	109
2009JEA48A	100.1	610	2	19	862	14	84
2009JEA84A	98.81	1010	6	82	687	22	119
2009JEA94B	100.15	60	2	5	150	12	8
2009JEA106A	99.17	1340	3	31	112	58	125
2009JEA132A	99.78	20	<2	<2	44	19	20

Sample Number	SiO2 %	Al2O3 %	Fe2O3 %	CaO %	MgO %	Na2O %	K2O %	Cr2O3 %	TiO2 %	MnO %	P2O5 %	SrO %	BaO %
2009JEA143A	54.56	18.06	8.11	8.27	2.51	4.3	0.09	<0.01	0.68	0.2	0.209	0.04	0.01
2009JEA155A	73.81	13.31	2.39	1.36	0.47	5.65	0.56	<0.01	0.22	0.03	0.049	0.02	0.02
2009JEA159B	48.64	16.3	11.84	12.43	6.27	2.03	0.2	0.03	1.62	0.19	0.131	0.03	0.01
2009JEA160A	68.9	15	3.39	3.13	0.96	5.34	0.24	<0.01	0.42	0.08	0.099	0.03	0.03
2009JEA171C	63.82	17.13	2.75	2.95	0.35	7.07	2.55	<0.01	0.24	0.05	0.118	0.06	0.04
2009JEA173A	49.9	16.81	11.11	9.57	4.86	2.28	1.68	0.01	0.76	0.21	0.336	0.08	0.08
2009JEA177B	51.52	15.72	8.97	7.93	4.48	2.41	3.6	0.01	0.78	0.18	0.407	0.06	0.1
2009LF5A	48.19	1.74	9.68	17.14	21.07	0.18	0.05	0.16	0.2	0.18	0.017	0.01	0.01
2009LF14A	73.49	13.8	2.24	1.65	0.33	4.03	3.16	<0.01	0.19	0.06	0.045	0.02	0.23
2009LF20A	72.22	13.76	3.26	1.54	0.35	3.44	3.66	<0.01	0.2	0.07	0.051	0.03	0.23
2009LF27A	59	16.62	7.88	3.64	3.11	4.42	1.58	0.01	0.61	0.12	0.122	0.03	0.13
2009LF40A	56.43	17.8	5.92	6.41	2.06	3.85	0.9	<0.01	0.44	0.15	0.205	0.03	0.05
2009LF58C	47.39	15.82	11.27	12.04	8.2	1.8	0.45	0.03	0.62	0.21	0.079	0.03	0.03
2009LF59A	44.5	13.74	10.88	12.32	10.75	2.26	0.02	0.06	0.51	0.17	0.051	0.02	0.01
2009LF65A	48.65	15.96	10.65	9.31	5.74	3.21	0.26	0.02	0.69	0.17	0.096	0.04	0.02
2009LF69C	61.22	18.18	5.08	1.44	1.32	7.54	1.86	0.01	0.44	0.11	0.179	0.03	0.06
2009LF71A	48	16.91	10.52	8.06	7.56	4.44	0.16	0.02	0.54	0.18	0.081	0.02	0.02
2009LF72A	51.01	14.32	10.88	5.33	7.99	3.76	1.05	0.01	0.76	0.11	0.099	0.02	0.02
2009LF81A	46.5	12.85	12.8	10.31	13.35	1.65	0.36	0.11	0.8	0.19	0.086	0.02	0.02
2009LF95B	47.58	12.84	13.37	10.53	8.51	2.27	0.71	0.03	1.11	0.18	0.19	0.04	0.03
2009LF99A	50.3	16.24	11.24	8.79	4.52	2.58	2.35	0.01	0.85	0.2	0.35	0.07	0.05
2009LF100A	48.71	2.45	10.33	18.43	17.89	0.26	0.06	0.18	0.36	0.21	0.018	0.01	0.01
2009LF100B	37.95	0.39	20.5	1.81	35.4	0.02	0.03	0.04	0.05	0.31	0.019	0.01	<0.01
2009LF101A	54.08	19.94	6.66	7.05	1.96	3.56	3.35	0.01	0.62	0.12	0.464	0.11	0.09
2009LF102A	71.35	15.49	1.71	1.99	0.47	4.71	2.99	<0.01	0.2	0.03	0.054	0.1	0.16
2009LF107A	68.52	15.5	2.63	2.47	0.8	4.48	3.53	0.01	0.33	0.05	0.096	0.13	0.21
2009LF113C	62.18	14.01	3.06	14.14	1.77	0.34	0.01	<0.01	0.52	0.07	0.141	0.01	0.01
2009LF127A	67.9	15.72	1.84	4.7	1.46	6.11	0.62	<0.01	0.48	0.06	0.129	0.03	0.02
2009LF138A	76.13	12.46	2.59	0.18	0.94	5.79	0.34	<0.01	0.23	0.05	0.044	0.01	0.14
2009LF143A	41.02	14.39	8.73	7.01	6	2.28	1.41	0.02	0.78	0.13	0.104	0.03	0.06
2009LF146A	50.69	18.97	10.12	9.47	4.03	3.38	1.16	<0.01	0.74	0.2	0.367	0.11	0.06
2009LF148A	64.42	14.85	3.34	3.21	0.91	4.85	2.35	0.01	0.24	0.06	0.129	0.53	0.15
2009LF148B	65.45	15.92	3.52	3.17	0.97	4.91	2.31	0.01	0.28	0.05	0.14	0.1	0.13
2009LF149C	60.32	15.93	2.41	7.01	2.08	1.84	2.74	0.01	0.81	0.2	0.159	0.03	0.11
2009MBW11B	48.2	14.4	12.13	9.65	9.48	2.59	0.09	0.02	0.5	0.19	0.043	0.01	<0.01
2009MBW15A	56.45	23.54	2.98	5.49	0.85	6.7	1.64	<0.01	0.27	0.04	0.123	0.12	0.13
2009MBW15C	49.23	14.53	10.88	11.19	9.33	2.26	0.11	0.05	0.56	0.18	0.042	0.02	<0.01
2009MBW16A	59.1	15.83	5.75	4.41	4.5	3.96	1.95	0.02	0.64	0.1	0.197	0.05	0.1

Sample Number	Total %	Ba ppm	Nb ppm	Rb ppm	Sr ppm	Y ppm	Zr ppm
2009JEA143A	99.36	100	4	2	318	21	101
2009JEA155A	98.96	240	3	11	180	9	109
2009JEA159B	100.05	90	7	4	191	23	89
2009JEA160A	99.03	390	4	4	272	28	111
2009JEA171C	99.98	350	8	62	450	16	112
2009JEA173A	99.04	670	<2	42	703	27	87
2009JEA177B	99.65	800	4	89	514	34	115
2009LF5A	99.3	40	<2	<2	53	7	2
2009LF14A	99.79	2010	5	71	168	36	131
2009LF20A	99.52	2010	4	80	216	35	142
2009LF27A	100.1	1210	2	21	191	28	75
2009LF40A	99.41	480	4	11	262	16	101
2009LF58C	99.78	210	2	9	212	15	28
2009LF59A	100.05	50	<2	<2	83	13	9
2009LF65A	99.67	190	2	5	317	20	55
2009LF69C	99.19	640	4	23	193	23	105
2009LF71A	99.8	130	2	3	141	15	28
2009LF72A	100.05	170	<2	11	144	16	42
2009LF81A	99.05	170	3	9	117	23	49
2009LF95B	99	250	3	6	352	24	59
2009LF99A	99.29	440	3	53	605	32	92
2009LF100A	99.44	30	<2	2	62	14	2
2009LF100B	99.22	30	2	<2	11	3	2
2009LF101A	98.71	740	3	65	920	28	125
2009LF102A	99.92	1410	2	78	903	11	173
2009LF107A	99.18	1790	6	102	1160	19	256
2009LF113C	99.42	20	4	2	11	10	115
2009LF127A	100.1	270	3	9	224	22	115
2009LF138A	100.05	1270	4	7	63	23	130
2009LF143A	98.76	600	7	51	218	28	111
2009LF146A	99.9	490	<2	16	935	19	82
2009LF148A	99.38	1340	2	26	4630	2	427
2009LF148B	99.28	1180	3	24	838	7	124
2009LF149C	99.62	960	5	65	207	32	134
2009MBW11B	99.92	40	2	2	54	18	10
2009MBW15A	100.05	1180	4	37	1035	8	240
2009MBW15C	99.87	40	2	<2	117	18	17
2009MBW16A	99.8	890	6	40	438	15	135

Sample Number	SiO2 %	Al2O3 %	Fe2O3 %	CaO %	MgO %	Na2O %	K2O %	Cr2O3 %	TiO2 %	MnO %	P2O5 %	SrO %	BaO %
2009MBW55A	47.56	14.62	13.18	9.01	6.2	3.11	0.76	0.02	2.03	0.23	0.162	0.04	0.09
2009MBW56A	70.7	13.67	2.99	2.27	0.82	4.8	1.37	<0.01	0.28	0.18	0.069	0.01	0.01
2009MBW67B	59.62	15.91	7.83	5.69	3.09	3.16	1.35	<0.01	0.51	0.1	0.077	0.03	0.03
2009MBW79A	45.38	14.95	14.17	12	7.07	2.24	0.24	0.03	1.42	0.2	0.108	0.03	0.01
2009MBW86A	48.89	14.77	14.56	10.36	5.42	2.01	0.59	0.01	1.66	0.22	0.16	0.02	0.03
2009MBW89B	52.3	16.87	9.51	8.57	4.98	2.38	1.64	0.01	0.78	0.15	0.182	0.04	0.07
2009MBW94A	52.06	16.91	9.57	6.88	5.26	3.78	1.44	0.02	0.78	0.16	0.176	0.04	0.11
2009Z1A	76.5	12.57	1.85	0.19	0.12	3.89	3.69	<0.01	0.17	0.01	0.025	0.01	0.2
2009Z2A	58.54	17.13	6.86	5.6	2.16	4.96	0.93	<0.01	0.64	0.15	0.194	0.06	0.04
2009Z3A	56.02	16.53	8.83	2.2	5.6	2.07	1.58	0.01	0.66	0.35	0.104	0.02	0.08
2009Z7B	51.05	15.35	10.63	10.99	6.99	1.92	0.41	0.02	0.53	0.18	0.08	0.04	0.04
2009Z7B-DUP	51	15.4	10.65	11.11	7.22	1.9	0.28	0.01	0.55	0.17	0.081	0.03	0.04
2009Z11A	64.22	15.5	5.61	1.9	2.01	6.44	0.96	<0.01	0.56	0.12	0.193	0.02	0.06
2009Z13B	46.18	16.01	12.29	11.5	8.2	1.54	0.64	0.01	0.74	0.23	0.085	0.02	0.04
2009Z18A	75.79	12.25	1.6	0.57	0.14	3.29	4.05	<0.01	0.11	0.03	0.019	0.01	0.29
2009Z26A	48.93	16.23	11.64	12.28	6.52	2.06	0.16	0.03	1.56	0.18	0.13	0.03	0.01
2009Z35A	56.79	16.76	7.36	5.53	3.88	4.88	0.13	0.01	0.65	0.1	0.144	0.04	0.02
2009Z37B	66.32	14.41	4.87	1.54	2.87	2.78	2.72	<0.01	0.38	0.1	0.092	0.02	0.24
2009Z42A	65.62	13.05	5.9	1.26	4.31	0.7	2.38	<0.01	0.54	0.14	0.121	0.01	0.41
2009Z46C	51.5	17.98	8.21	6.8	4.14	3.96	1.85	<0.01	0.47	0.17	0.288	0.08	0.09
2009Z51A	75	13.77	1.51	0.06	0.24	4.22	3.97	<0.01	0.09	0.01	0.021	0.01	0.14
2009Z68B	52.46	16.88	5.11	4.81	2.41	4.43	1.49	0.01	0.53	0.13	0.449	0.08	0.05
2009Z92B	59.78	19.3	5.62	1.14	1.74	4.06	3.21	0.01	0.59	0.09	0.498	0.08	0.12
2009Z94B	69.82	13.87	3.09	2.51	1.95	3.09	2.85	0.01	0.42	0.09	0.094	0.04	0.31
2009Z98A	57.62	16.32	7.99	3.84	3.15	5.67	1.17	<0.01	0.69	0.26	0.186	0.05	0.15
2009Z101A	57.94	16.04	10.33	3.23	3.07	4.38	1.1	<0.01	0.64	0.26	0.145	0.04	0.07
2009Z105A	61.79	17.32	5.91	3.74	1.21	3.62	4.91	<0.01	0.51	0.11	0.292	0.06	0.06
2009Z107B	48.87	15.64	11.99	10.33	5.83	2.3	2.06	0.01	0.83	0.21	0.286	0.07	0.04
2009Z113A	45.3	13.57	12.92	12.26	5.83	1.53	0.23	0.02	0.94	0.24	0.07	0.01	0.01
2009Z124A	44.25	4.02	12.14	15.71	20.03	0.39	0.19	0.06	0.47	0.21	0.018	0.02	0.01
2009Z137b	46.51	19.65	7.2	12.11	7.22	1.62	1.58	0.02	0.43	0.16	0.151	0.04	0.12
2009Z140a	63.01	16.26	6.36	3.87	1.77	4.4	0.89	<0.01	0.6	0.1	0.159	0.04	0.05
2009Z145c	78.47	10.13	3.32	0.86	1.55	2.42	1.08	<0.01	0.17	0.07	0.042	0.02	0.14
2009Z146a	70.51	14.36	4.37	1.93	1.04	4.4	1.43	<0.01	0.3	0.08	0.07	0.03	0.18

Sample Number	Total %	Ba ppm	Nb ppm	Rb ppm	Sr ppm	Y ppm	Zr ppm
2009MBW55A	99.2	780	9	22	305	31	126
2009MBW56A	100.1	140	3	45	41	23	119
2009MBW67B	99.27	310	<2	56	198	34	67
2009MBW79A	99.45	130	3	8	176	20	72
2009MBW86A	99.36	230	6	21	149	37	101
2009MBW89B	99.47	620	3	50	269	30	85
2009MBW94A	99.76	930	2	43	286	26	83
2009Z1A	99.8	1790	5	77	47	29	143
2009Z2A	99.23	410	3	18	474	22	129
2009Z3A	98.98	720	2	115	120	20	53
2009Z7B	99.75	380	<2	8	262	19	39
2009Z7B-DUP	99.91	310	<2	5	201	18	34
2009Z11A	99.26	640	5	15	145	24	140
2009Z13B	99.48	370	<2	19	128	24	31
2009Z18A	98.9	2450	5	80	69	43	112
2009Z26A	100.05	100	8	3	191	22	91
2009Z35A	99.42	260	3	2	281	23	94
2009Z37B	99.21	2180	3	49	155	38	103
2009Z42A	98.96	3570	2	42	76	34	68
2009Z46C	99.2	810	2	23	671	15	71
2009Z51A	99.88	1320	6	37	40	36	98
2009Z68B	98.94	520	3	32	657	22	110
2009Z92B	100.1	1090	4	51	664	26	115
2009Z94B	98.95	2650	6	73	333	38	190
2009Z98A	99.18	1420	4	33	424	29	131
2009Z101A	99.66	670	3	42	270	20	104
2009Z105A	99.93	500	9	161	461	54	201
2009Z107B	100.1	310	<2	94	580	37	72
2009Z113A	99.91	90	<2	7	68	31	34
2009Z124A	99.57	60	<2	<2	116	9	5
2009Z137b	100.05	930	<2	35	318	19	30
2009Z140a	99.97	500	3	22	301	26	102
2009Z145c	99.96	1360	3	15	106	24	119
2009Z146a	100.05	1690	4	19	236	27	131

Table 6. Detection limits and analytical methods for major-oxide, minor-oxide, and trace-element analyses of DGGs whole-rock samples. Analytical methods include: LBF-XRF = Lithium borate fusion and X-ray fluorescence spectroscopy; pressed pellet-XRF = pressed pellet and X-ray fluorescence spectroscopy. Note: Fe₂O₃ = total iron as Fe₂O₃; LOI* = loss on ignition; --- = not applicable.

Element	Units	ALS Chemex		
		Lower Detection Limit	Upper Detection Limit	Analytical Method
SiO ₂	%	0.01	100	LBF-XRF
Al ₂ O ₃	%	0.01	100	LBF-XRF
Fe ₂ O ₃	%	0.01	100	LBF-XRF
CaO	%	0.01	100	LBF-XRF
MgO	%	0.01	100	LBF-XRF
Na ₂ O	%	0.01	100	LBF-XRF
K ₂ O	%	0.01	100	LBF-XRF
Cr ₂ O ₃	%	0.01	100	LBF-XRF
TiO ₂	%	0.01	100	LBF-XRF
MnO	%	0.01	100	LBF-XRF
P ₂ O ₅	%	0.001	100	LBF-XRF
SrO	%	0.01	100	LBF-XRF
BaO	%	0.01	100	LBF-XRF
LOI*	%	0.01	100	Gravimetric
Total	%	---	---	Calculation
Ba	ppm	10	10,000	Pressed pellet-XRF
Nb	ppm	2	10,000	Pressed pellet-XRF
Rb	ppm	2	10,000	Pressed pellet-XRF
Sr	ppm	2	10,000	Pressed pellet-XRF
Y	ppm	2	10,000	Pressed pellet-XRF
Zr	ppm	2	10,000	Pressed pellet-XRF

Table 7. Location, description, and non-carbonate carbon analyses for rocks collected by DGGs in the Chistochina mining district, Mount Hayes Quadrangle, Alaska. Carbon (non-carbonate) was analyzed by induction furnace pyrolysis following dilute acid digestion. The lower detection limit is 0.01 percent, and the upper detection limit is 50 percent carbon.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description	Non-carbonate Carbon (%)
2009JEA173B	63.17545604	-144.8189583	609796	7007005	6	Black argillite.	0.12
2009Z92A	63.15859947	-144.7674403	612454	7005217	6	Black argillite, with slight conchoidal fracturing, and iron-oxide staining on fractures. Makes very sharp, angular rubble.	0.24

Table 8. Location, description, and concentration of major-oxide, minor-oxide, and trace-element analyses on polished rock slabs for samples collected by DGGs in the Chistochina mining district, Mount Hayes Quadrangle, Alaska. Analyses were conducted on polished rock slabs, except for sample 2009LF93F, which was made into a pressed pellet. The quality of the pressed pellet analysis is higher than any polished slab analysis. Remarks in the Comments column such as small, porous, or inhomogeneous indicate that the quality of the analysis is lower than average/normal. Because volatile components were not measured and rocks were of varying porosities, the analyses were normalized to 100 percent totals. Root names are derived from geochemical data and rock textures in hand samples. UTM coordinates are based on the Clark 1866 spheroid, NAD 27 datum, zone 6 projection. Note: --- = not analyzed.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Root Name	Comments
2009ACH74A	63.11512	-144.87008	607446	7000199	6	monzonite dike	inhomogeneous
2009ACH75A	63.11486	-144.86709	607598	7000175	6	olivine gabbro	
2009ACH77A	63.11520	-144.85893	608008	7000226	6	dacite	small
2009ACH78A	63.11562	-144.85722	608093	7000276	6	basaltic andesite	small
2009ACH79A	63.11514	-144.85622	608145	7000224	6	andesite	
2009ACH82A	63.11336	-144.85340	608294	7000031	6	andesite	
2009ACH83A	63.11285	-144.85028	608453	6999979	6	sedimentary rock	
2009ACH83B	63.11285	-144.85028	608453	6999979	6	andesite	
2009ACH87H	63.10411	-144.73374	614365	6999208	6	basalt (dike?)	
2009ACH90A	63.10155	-144.73680	614221	6998918	6	felsic volcanic breccia	inhomogeneous
2009ACH91A	63.10029	-144.73727	614202	6998777	6	gabbro dike	
2009ACH99A	63.08988	-144.74886	613658	6997597	6	basaltic andesite (dike?)	
2009ACH104A	63.05386	-144.69469	616536	6993682	6	rhyolite	
2009ACH105A	63.05358	-144.69176	616685	6993657	6	rhyolite breccia	inhomogeneous
2009ACH106A	63.05365	-144.68836	616857	6993671	6	rhyolite	
2009ACH108A	63.05274	-144.67733	617418	6993589	6	andesite	
2009ACH108B	63.05274	-144.67733	617418	6993589	6	dacite	
2009ACH109A	63.05292	-144.67581	617494	6993612	6	trachyandesite	
2009ACH110A	63.05294	-144.67327	617622	6993619	6	rhyolite	
2009ACH111A	63.05296	-144.66771	617903	6993631	6	trachyandesite	
2009ACH112A	63.05215	-144.66851	617866	6993540	6	basalt dike	
2009ACH113B	63.05533	-144.66457	618052	6993901	6	andesite	
2009ACH114A	63.12998	-144.74831	613529	7002063	6	rhyolite	
2009ACH116A	63.13123	-144.74714	613583	7002205	6	basaltic andesite (dike?)	
2009ACH120A	63.13440	-144.74057	613902	7002569	6	basalt dike	
2009ACH121A	63.13644	-144.73827	614010	7002801	6	dacite	
2009ACH121B	63.13644	-144.73827	614010	7002801	6	altered andesite?	porous
2009ACH122A	63.13872	-144.73974	613927	7003052	6	rhyolite	
2009ACH124A	63.14207	-144.74485	613656	7003416	6	dacite?	
2009ACH125A	63.14318	-144.74703	613542	7003536	6	rhyolite	small

Sample Number	SiO ₂ %	Al ₂ O ₃ %	BaO %	CaO %	Fe ₂ O ₃ %	K ₂ O %	MgO %	MnO %	Na ₂ O %	P ₂ O ₅ %	TiO ₂ %	Total %	Rb ppm	Sr ppm	Y ppm	Zr ppm
2009ACH74A	65.1	15.7	0.07	3.21	4.43	0.89	1.6	0.14	8.4	0.18	0.35	100	13	431	19	77
2009ACH75A	47.3	14.0	0.29	8.69	15.49	0.99	9.2	0.26	2.5	0.25	1.06	100	33	286	34	75
2009ACH77A	64.6	15.0	0.04	6.40	5.35	0.52	3.9	0.18	3.4	0.12	0.50	100	10	245	19	58
2009ACH78A	55.5	18.6	0.08	4.64	8.83	1.25	6.0	0.23	4.2	0.09	0.65	100	38	286	17	77
2009ACH79A	59.7	17.6	0.15	6.86	6.86	0.85	4.1	0.20	3.0	0.11	0.63	100	15	246	16	74
2009ACH82A	58.6	16.7	0.04	5.54	8.37	0.42	4.6	0.34	3.8	0.39	1.18	100	8	231	25	194
2009ACH83A	59.1	17.8	0.04	6.57	7.00	0.97	4.3	0.17	3.2	0.16	0.63	100	20	233	24	132
2009ACH83B	60.7	11.3	0.01	8.39	9.91	0.22	5.9	0.26	2.6	0.15	0.57	100	6	282	18	63
2009ACH87H	47.3	15.1	0.04	12.31	13.39	0.43	8.9	0.22	1.5	0.06	0.75	100	11	108	23	41
2009ACH90A	75.7	11.5	0.07	0.43	4.78	2.28	2.5	0.09	2.1	0.08	0.49	100	62	28	23	99
2009ACH91A	47.3	15.4	0.03	13.20	11.23	0.33	10.6	0.16	1.2	0.10	0.48	100	6	235	14	27
2009ACH99A	56.9	13.7	0.09	4.05	14.51	0.32	6.0	0.46	3.0	0.07	0.93	100	8	219	14	25
2009ACH104A	77.1	10.7	0.09	0.22	4.14	1.12	3.2	0.16	2.8	0.09	0.35	100	25	56	40	134
2009ACH105A	76.1	10.9	0.08	3.57	3.03	1.62	1.5	0.15	2.8	0.05	0.22	100	43	64	19	107
2009ACH106A	77.1	10.6	0.06	3.24	2.81	1.73	1.2	0.18	2.8	0.06	0.23	100	40	68	17	114
2009ACH108A	60.2	13.3	0.02	6.30	9.01	0.00	6.0	0.10	4.6	0.08	0.45	100	<2	92	21	58
2009ACH108B	64.3	13.7	0.18	1.35	7.32	0.68	6.5	0.10	5.3	0.09	0.45	100	8	218	16	70
2009ACH109A	58.1	15.5	0.07	3.38	7.89	0.68	8.1	0.12	5.5	0.09	0.54	100	12	274	15	72
2009ACH110A	70.7	13.9	0.10	1.09	4.82	1.42	2.0	0.10	5.5	0.07	0.25	100	28	132	18	103
2009ACH111A	62.5	13.1	0.07	7.22	5.80	0.55	3.6	0.09	6.4	0.11	0.56	100	4	149	12	88
2009ACH112A	47.8	12.8	0.06	9.81	16.84	0.11	6.0	0.22	4.3	0.16	1.84	100	2	403	30	106
2009ACH113B	61.8	13.3	0.07	4.15	8.53	0.67	5.4	0.13	5.4	0.09	0.47	100	9	101	19	71
2009ACH114A	73.5	13.8	0.14	1.71	2.99	2.24	1.9	0.13	3.2	0.09	0.30	100	54	79	26	133
2009ACH116A	53.2	12.9	0.03	10.10	14.21	0.32	5.2	0.23	2.7	0.08	1.00	100	7	159	36	73
2009ACH120A	48.5	15.2	0.02	12.52	12.41	0.32	8.4	0.19	1.6	0.09	0.67	100	6	235	14	29
2009ACH121A	71.3	13.5	0.11	3.12	3.90	1.89	1.9	0.10	3.7	0.09	0.40	100	43	64	30	123
2009ACH121B	63.9	18.6	0.31	0.00	9.60	5.22	1.2	0.01	0.1	0.03	1.02	100	105	8	7	52
2009ACH122A	74.8	9.6	0.12	5.36	4.94	1.57	0.5	0.06	2.6	0.05	0.39	100	37	174	47	173
2009ACH124A	69.2	11.4	0.01	0.46	8.10	0.12	5.4	0.15	4.0	0.27	0.83	100	2	81	116	114
2009ACH125A	73.8	12.7	0.08	0.11	4.27	1.46	3.9	0.08	3.1	0.10	0.39	100	29	30	25	107

Sample Number	Nb ppm	As ppm	Cl ppm	Cr ppm	Cu ppm	F ppm	Ga ppm	Ni ppm	Pb ppm	S ppm	Se ppm	Th ppm	U ppm	V ppm	W ppm	Zn ppm
2009ACH74A	6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH75A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH77A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH78A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH79A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH82A	10	<5	164	35	<5	<100	9	<5	23	1540	<5	---	---	149	<10	67
2009ACH83A	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH83B	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH87H	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH90A	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH91A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH99A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH104A	4	<5	145	<10	127	<100	13	<5	15	200	<5	---	---	48	<10	142
2009ACH105A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH106A	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH108A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH108B	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH109A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH110A	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH111A	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH112A	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH113B	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH114A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH116A	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH120A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH121A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH121B	3	39	207	13	68	<100	32	<5	11	3700	<5	---	---	365	<10	19
2009ACH122A	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH124A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH125A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Root Name	Comments
2009ACH125B	63.14318	-144.74703	613542	7003536	6	basalt (dike?)	small
2009ACH126A	63.14385	-144.74821	613480	7003608	6	dacite	small
2009ACH127A	63.14639	-144.75371	613193	7003881	6	dacite volcaniclastic	small
2009ACH137A	63.15768	-144.72301	614695	7005193	6	gabbro dike	
2009ACH141A	63.16182	-144.71885	614888	7005662	6	andesite	
2009ACH156A	63.15556	-144.85270	608172	7004732	6	rhyolite	
2009ACH157A	63.15761	-144.85140	608230	7004962	6	dacite	
2009ACH158A	63.15950	-144.84687	608451	7005180	6	altered volcanic breccia	inhomogeneous
2009ACH159A	63.16017	-144.84247	608670	7005263	6	dacite	
2009ACH160A	63.15997	-144.83704	608944	7005249	6	andesite	small
2009ACH161A	63.16104	-144.83478	609054	7005372	6	rhyolite breccia	small
2009ACH166A	63.20906	-144.91844	604668	7010581	6	basaltic andesite dike	small
2009ACH168A	63.20733	-144.91721	604736	7010391	6	basalt dike	
2009ACH168B	63.20733	-144.91721	604736	7010391	6	tonalite dike	
2009ACH171B	63.21298	-144.90252	605454	7011044	6	basalt	quartz vein
2009ACH171C	63.21298	-144.90252	605454	7011044	6	quartz diorite dike	
2009ACH173A	63.21501	-144.90460	605342	7011267	6	basalt	
2009ACH178B	63.16330	-144.73258	614191	7005802	6	aphanitic rhyolite dike	
2009ACH179A	63.16280	-144.73037	614304	7005750	6	andesite	small
2009ACH187A	63.18860	-144.93179	604070	7008281	6	tonalite	
2009ACH188B	63.19064	-144.92690	604309	7008516	6	basalt	
2009ACH196A	63.18813	-144.91797	604767	7008251	6	basaltic andesite breccia	small
2009ACH197A	63.18846	-144.91741	604794	7008288	6	monzodiorite	small
2009ACH203A	63.08973	-144.75460	613369	6997570	6	rhyolite	
2009ACH203B	63.08973	-144.75460	613369	6997570	6	basalt	small
2009ACH204A	63.08978	-144.75544	613326	6997574	6	dacite	
2009ACH210A	63.08490	-144.75214	613512	6997036	6	quartz diorite	
2009ACH219D	63.17737	-144.80417	610533	7007244	6	sedimentary rock	
2009ACH233A	63.17529	-144.82980	609251	7006968	6	gabbro	
2009ACH233B	63.17529	-144.82980	609251	7006968	6	olivine gabbro	
2009JEA3A	63.18017	-144.94245	603564	7007324	6	rhyolite	inhomogeneous
2009JEA4D	63.18069	-144.94273	603548	7007382	6	rhyolite	
2009JEA5A	63.18135	-144.94285	603540	7007455	6	andesite	
2009JEA5B	63.18135	-144.94285	603540	7007455	6	rhyolite	
2009JEA6A	63.18237	-144.94220	603569	7007570	6	basalt dike	small
2009JEA7A	63.18386	-144.94122	603613	7007737	6	porphyritic granite	
2009JEA12A	63.09347	-144.84111	608988	6997836	6	basalt dike	
2009JEA15A	63.09390	-144.83567	609261	6997893	6	tonalite dike	small

Sample Number	SiO ₂ %	Al ₂ O ₃ %	BaO %	CaO %	Fe ₂ O ₃ %	K ₂ O %	MgO %	MnO %	Na ₂ O %	P ₂ O ₅ %	TiO ₂ %	Total %	Rb ppm	Sr ppm	Y ppm	Zr ppm
2009ACH125B	47.9	13.2	0.02	13.21	12.55	0.44	11.2	0.22	0.8	0.04	0.40	100	10	78	11	15
2009ACH126A	65.4	14.2	0.10	0.24	7.14	1.82	6.9	0.12	3.0	0.18	0.87	100	31	31	50	78
2009ACH127A	69.8	12.8	0.07	0.55	7.02	1.10	4.6	0.21	3.1	0.13	0.61	100	26	57	22	107
2009ACH137A	57.6	15.5	0.12	8.02	8.02	2.36	2.8	0.19	4.5	0.38	0.57	100	46	1055	19	65
2009ACH141A	61.9	14.7	0.17	7.12	6.44	3.28	2.8	0.09	2.6	0.17	0.80	100	85	570	15	125
2009ACH156A	76.3	12.2	0.13	0.87	4.03	1.31	1.3	0.11	3.4	0.02	0.32	100	28	81	18	149
2009ACH157A	64.5	14.1	0.04	5.97	7.35	0.43	3.4	0.20	3.4	0.10	0.48	100	10	272	20	83
2009ACH158A	74.9	13.4	0.11	2.47	2.90	1.40	1.0	0.03	3.5	0.03	0.30	100	30	166	22	152
2009ACH159A	65.4	13.3	0.13	4.23	7.92	0.22	3.5	0.15	4.6	0.08	0.49	100	6	145	19	91
2009ACH160A	57.8	16.4	0.04	3.97	9.82	0.33	6.0	0.20	4.7	0.09	0.62	100	6	287	20	77
2009ACH161A	76.6	10.4	0.21	2.94	4.36	1.20	1.9	0.11	2.0	0.08	0.26	100	26	96	26	97
2009ACH166A	55.9	16.4	0.02	10.32	9.40	0.45	3.8	0.15	2.7	0.31	0.53	100	12	757	19	46
2009ACH168A	50.4	11.5	0.05	12.58	12.26	0.97	9.7	0.22	1.5	0.20	0.61	100	36	501	16	28
2009ACH168B	61.8	15.6	0.09	8.13	6.35	2.01	2.1	0.09	2.6	0.19	0.98	100	45	441	14	127
2009ACH171B	48.3	11.2	0.01	12.20	16.30	0.23	7.8	0.27	2.7	0.19	0.86	100	7	124	30	52
2009ACH171C	59.0	15.0	0.08	7.78	7.67	1.22	4.2	0.14	3.7	0.17	1.09	100	35	609	18	115
2009ACH173A	49.9	12.1	0.01	11.63	13.87	0.11	8.4	0.22	2.8	0.05	0.84	100	3	107	28	50
2009ACH178B	73.5	13.9	0.17	3.98	0.88	2.32	0.3	0.06	4.8	0.02	0.08	100	57	183	5	82
2009ACH179A	60.9	14.5	0.13	8.46	6.82	2.00	3.5	0.11	2.6	0.18	0.82	100	45	598	15	126
2009ACH187A	67.7	16.2	0.18	3.91	3.28	1.59	1.4	0.12	5.1	0.12	0.38	100	32	357	12	91
2009ACH188B	50.6	12.1	0.00	11.42	15.20	0.10	7.5	0.30	1.7	0.06	1.03	100	<2	65	31	53
2009ACH196A	57.4	11.4	0.01	3.80	18.86	0.39	5.4	0.12	1.4	0.05	1.20	100	15	123	22	77
2009ACH197A	53.6	17.0	0.06	9.64	9.53	2.27	3.7	0.18	2.8	0.28	0.94	100	43	995	19	10
2009ACH203A	77.8	11.8	0.19	1.58	2.00	0.53	1.2	0.07	4.5	0.05	0.24	100	7	223	8	124
2009ACH203B	45.4	13.0	0.01	10.83	13.40	0.11	14.8	0.18	1.4	0.08	0.82	100	7	121	20	50
2009ACH204A	70.7	13.0	0.08	2.18	5.88	0.33	2.5	0.15	4.7	0.09	0.40	100	6	250	27	104
2009ACH210A	60.1	15.1	0.12	5.95	8.54	1.30	4.5	0.17	3.5	0.11	0.64	100	16	247	28	56
2009ACH219D	66	12.9	0.09	2.7	8.32	2.48	3.1	0.15	3.3	0.13	0.77	100	91	277	20	109
2009ACH233A	48.8	8.5	0.03	13.44	14.31	1.41	10.4	0.31	1.6	0.30	0.90	100	15	533	23	28
2009ACH233B	51.1	18.1	0.04	9.86	10.31	1.56	3.9	0.23	3.5	0.50	0.79	100	28	1564	23	17
2009JEA3A	75.7	12.5	0.45	1.45	1.96	2.69	1.1	0.10	3.7	0.04	0.27	100	49	124	23	165
2009JEA4D	78.7	10.4	0.76	0.10	3.46	4.19	0.8	0.08	1.2	0.03	0.28	100	75	62	11	123
2009JEA5A	59.7	14.5	0.19	7.13	8.97	2.25	4.2	0.71	1.3	0.22	0.80	100	69	283	26	106
2009JEA5B	74.6	12.9	0.46	1.88	2.30	2.82	1.4	0.11	3.2	0.07	0.28	100	55	137	25	135
2009JEA6A	49.8	14.1	0.01	12.15	12.68	0.31	6.7	0.19	2.1	0.13	1.79	100	8	194	28	90
2009JEA7A	74.0	13.2	0.21	1.56	2.82	2.92	1.6	0.14	3.2	0.07	0.28	100	70	166	17	109
2009JEA12A	46.1	12.9	1.16	11.16	15.09	0.32	10.0	0.23	1.6	0.15	1.22	100	8	212	26	76
2009JEA15A	59.7	10.9	0.05	4.77	12.52	0.00	6.2	0.23	4.2	0.12	1.29	100	2	76	27	102

Sample Number	Nb ppm	As ppm	Cl ppm	Cr ppm	Cu ppm	F ppm	Ga ppm	Ni ppm	Pb ppm	S ppm	Se ppm	Th ppm	U ppm	V ppm	W ppm	Zn ppm
2009ACH125B	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH126A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH127A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH137A	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH141A	7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH156A	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH157A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH158A	4	<5	129	<10	23	<100	11	28	19	2270	<5	---	---	35	<10	25
2009ACH159A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH160A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH161A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH166A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH168A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH168B	7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH171B	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH171C	6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH173A	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH178B	5	<5	225	<10	<5	<100	21	<5	11	422	<5	---	---	20	<10	52
2009ACH179A	7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH187A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH188B	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH196A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH197A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH203A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH203B	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH204A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH210A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH219D	7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH233A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009ACH233B	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA3A	6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA4D	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA5A	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA5B	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA6A	6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA7A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA12A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA15A	7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Root Name	Comments
2009JEA17A	63.09484	-144.83172	609457	6998005	6	tonalite	
2009JEA18A	63.09518	-144.83066	609509	6998044	6	qtz diorite	small
2009JEA22A	63.11237	-144.74825	613601	7000102	6	altered rhyolite	inhomogeneous
2009JEA23A	63.11288	-144.74634	613695	7000163	6	basaltic andesite	
2009JEA27A	63.11065	-144.74033	614007	6999925	6	basaltic trachyandesite	small
2009JEA29C	63.11008	-144.73631	614212	6999869	6	basalt dike	
2009JEA33B	63.10578	-144.73189	614452	6999397	6	basaltic trachyandesite breccia	small
2009JEA38A	63.06713	-144.71510	615452	6995123	6	rhyolite	
2009JEA38B	63.06713	-144.71510	615452	6995123	6	basalt	
2009JEA39B	63.06659	-144.71534	615442	6995063	6	rhyolite	
2009JEA44C	63.06737	-144.72431	614986	6995134	6	granite dike	small
2009JEA44C-DUP	63.06737	-144.72431	614986	6995134	6	granite dike	small
2009JEA45A	63.06762	-144.72702	614848	6995157	6	rhyolite	small
2009JEA46D	63.06821	-144.72872	614760	6995219	6	rhyolite	
2009JEA52A	63.12814	-144.74679	613613	7001861	6	altered dacite	small
2009JEA53B	63.12748	-144.74549	613681	7001790	6	basaltic andesite dike	
2009JEA53C	63.12748	-144.74549	613681	7001790	6	dacite	
2009JEA54A	63.12732	-144.74471	613721	7001774	6	quartz keratophyre	
2009JEA56C	63.12636	-144.74109	613907	7001673	6	rhyolite	
2009JEA59A	63.12513	-144.73429	614255	7001548	6	rhyolite volcanoclastic	
2009JEA77A	63.14246	-144.70743	615540	7003526	6	andesite	
2009JEA79A	63.14218	-144.71009	615412	7003290	6	altered basalt?	porous, poor polish
2009JEA86A	63.16788	-144.75155	613218	7006279	6	basalt dike	small
2009JEA88A	63.16818	-144.75407	613090	7006307	6	gabbronorite dike	
2009JEA91A	63.17080	-144.76660	612449	7006577	6	gabbronorite dike	
2009JEA92B	63.17149	-144.77205	612172	7006644	6	porphyritic monzonite dike	small
2009JEA94C	63.18276	-144.79120	611165	7007866	6	basaltic andesite dike?	small
2009JEA101A	63.15228	-144.85926	607854	7004355	6	basaltic trachyandesite	
2009JEA101B	63.15228	-144.85926	607854	7004355	6	basalt dike	
2009JEA102A	63.15206	-144.85957	607839	7004330	6	basaltic andesite	small
2009JEA102C	63.15206	-144.85957	607839	7004330	6	basalt	
2009JEA105B	63.15255	-144.86323	607653	7004379	6	altered andesite?	
2009JEA106C	63.15212	-144.86610	607510	7004326	6	basalt	
2009JEA112A	63.15181	-144.88494	606562	7004260	6	rhyolite?	
2009JEA113A	63.15259	-144.88627	606492	7004345	6	rhyolite	
2009JEA113C	63.15259	-144.88627	606492	7004345	6	volcanic sedimentary rock?	
2009JEA115A	63.15240	-144.88812	606400	7004320	6	rhyolite	
2009JEA122A	63.18888	-144.91134	605098	7008345	6	basaltic trachyandesite dike	

Sample Number	SiO ₂ %	Al ₂ O ₃ %	BaO %	CaO %	Fe ₂ O ₃ %	K ₂ O %	MgO %	MnO %	Na ₂ O %	P ₂ O ₅ %	TiO ₂ %	Total %	Rb ppm	Sr ppm	Y ppm	Zr ppm
2009JEA17A	74.5	13.3	0.01	6.59	1.24	0.00	1.3	0.09	2.6	0.07	0.24	100	<2	208	24	108
2009JEA18A	59.9	16.6	0.03	8.28	5.67	0.23	4.4	0.16	4.1	0.08	0.57	100	3	349	25	66
2009JEA22A	80.2	10.6	0.01	0.23	2.05	0.23	1.3	0.08	5.0	0.05	0.22	100	6	53	11	103
2009JEA23A	52.8	16.4	0.07	7.10	12.01	0.66	5.5	0.21	4.4	0.10	0.75	100	11	341	19	30
2009JEA27A	52.6	17.4	0.05	6.54	11.99	1.09	4.6	0.21	4.5	0.12	0.87	100	23	289	19	34
2009JEA29C	48.0	15.1	0.03	12.28	12.06	0.32	9.3	0.22	2.0	0.06	0.62	100	5	158	19	36
2009JEA33B	52.3	16.5	0.09	3.91	12.06	0.34	6.5	0.53	6.8	0.17	0.88	100	6	122	23	78
2009JEA38A	75.1	11.8	0.25	1.08	3.66	1.83	2.6	0.09	3.3	0.04	0.24	100	21	121	19	114
2009JEA38B	47.4	14.4	0.04	13.56	13.35	0.11	8.4	0.25	1.6	0.06	0.77	100	3	111	22	40
2009JEA39B	76.3	12.4	0.12	0.32	3.01	1.51	2.4	0.06	3.6	0.05	0.26	100	21	94	16	118
2009JEA44C	64.2	17.9	0.35	0.64	7.47	4.38	2.8	0.09	1.3	0.32	0.50	100	81	162	19	67
2009JEA44C-DUP	64.6	19.3	0.28	0.72	6.03	4.03	2.3	0.08	1.8	0.42	0.46	100	72	144	23	57
2009JEA45A	75.7	12.7	0.08	0.23	2.96	1.59	1.9	0.09	4.3	0.05	0.34	100	23	92	36	172
2009JEA46D	72.7	12.5	0.20	0.73	5.24	1.88	2.4	0.18	3.5	0.16	0.57	100	25	81	30	185
2009JEA52A	72.6	11.9	0.11	4.69	4.69	1.38	1.1	0.10	2.9	0.10	0.40	100	30	120	27	108
2009JEA53B	52.2	13.5	0.05	10.20	14.72	0.42	4.9	0.23	2.4	0.13	1.25	100	5	202	34	85
2009JEA53C	70.8	12.5	0.17	4.89	4.68	0.21	1.4	0.11	4.8	0.09	0.31	100	4	331	24	97
2009JEA54A	74.8	12.2	0.01	1.70	3.12	0.11	0.7	0.08	6.9	0.08	0.29	100	2	142	18	110
2009JEA56C	72.9	13.4	0.09	0.54	4.76	1.19	1.8	0.12	4.9	0.10	0.25	100	20	125	20	111
2009JEA59A	78.3	10.5	0.12	0.11	4.06	0.77	2.4	0.05	3.4	0.04	0.27	100	12	54	19	91
2009JEA77A	61.9	11.0	0.02	3.31	12.04	0.43	3.6	0.22	6.0	0.18	1.29	100	5	68	42	142
2009JEA79A	51.8	16.3	0.09	0.38	20.41	1.53	3.7	0.02	4.4	0.26	1.09	100	43	210	8	91
2009JEA86A	46.9	7.9	0.02	15.59	15.70	0.97	10.0	0.25	1.6	0.27	0.79	100	31	533	17	29
2009JEA88A	49.5	9.6	0.10	12.72	12.61	1.56	10.8	0.22	1.9	0.28	0.68	100	32	677	16	28
2009JEA91A	48.2	10.5	0.01	19.18	11.74	0.22	6.7	0.26	2.2	0.39	0.61	100	6	940	15	14
2009JEA92B	60.9	18.0	0.04	6.42	4.10	1.33	1.4	0.14	7.0	0.22	0.38	100	34	1182	13	65
2009JEA94C	57.0	16.3	0.09	9.23	8.34	1.33	2.3	0.13	3.6	0.39	1.28	100	30	686	24	130
2009JEA101A	50.9	20.0	0.14	3.34	11.57	1.67	5.7	0.33	5.2	0.09	1.10	100	37	165	13	39
2009JEA101B	49.4	15.1	0.01	13.69	10.34	0.11	9.6	0.20	1.2	0.04	0.37	100	2	112	12	18
2009JEA102A	54.2	13.9	0.04	1.11	16.49	0.44	10.1	0.56	2.3	0.07	0.73	100	13	96	16	41
2009JEA102C	49.4	20.0	0.09	6.41	10.18	0.22	7.6	0.30	4.8	0.12	0.83	100	3	396	11	23
2009JEA105B	63.6	14.5	0.05	1.74	8.80	0.33	4.5	0.23	5.3	0.12	0.79	100	8	133	10	36
2009JEA106C	47.8	13.6	0.02	13.42	11.95	0.00	11.6	0.22	0.9	0.03	0.44	100	<2	105	11	15
2009JEA112A	72.5	12.9	0.05	1.79	4.84	0.95	0.8	0.14	5.6	0.08	0.33	100	22	126	19	126
2009JEA113A	73.6	13.2	0.13	3.88	2.26	1.51	0.5	0.17	4.3	0.09	0.33	100	34	112	20	106
2009JEA113C	86.5	7.6	0.20	1.22	0.91	1.82	0.4	0.02	1.1	0.06	0.18	100	41	25	12	84
2009JEA115A	70.5	17.4	0.47	0.11	2.35	7.68	1.0	0.03	0.1	0.09	0.34	100	107	19	13	130
2009JEA122A	53.5	13.9	0.03	11.08	9.90	1.83	4.6	0.19	3.6	0.44	0.93	100	22	1302	19	44

Sample Number	Nb ppm	As ppm	Cl ppm	Cr ppm	Cu ppm	F ppm	Ga ppm	Ni ppm	Pb ppm	S ppm	Se ppm	Th ppm	U ppm	V ppm	W ppm	Zn ppm
2009JEA17A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA18A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA22A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA23A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA27A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA29C	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA33B	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA38A	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA38B	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA39B	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA44C	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA44C-DUP	<1	21	180	46	23	<100	16	39	14	137	<5	---	---	158	<10	76
2009JEA45A	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA46D	7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA52A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA53B	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA53C	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA54A	2	<5	378	<10	<5	<100	20	<5	33	162	<5	---	---	24	<10	64
2009JEA56C	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA59A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA77A	6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA79A	3	---	208	---	133	---	44	---	48	<30	---	---	---	301	---	39
2009JEA86A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA88A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA91A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA92B	6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA94C	7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA101A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA101B	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA102A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA102C	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA105B	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA106C	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA112A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA113A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA113C	2	<5	221	<10	<5	<100	21	<5	23	187	<5	---	---	69	<10	30
2009JEA115A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA122A	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Root Name	Comments
2009JEA128B	63.13279	-144.71129	615384	7002443	6	rhyolite	
2009JEA130A	63.13275	-144.71266	615315	7002435	6	aphanitic dacite	
2009JEA135A	63.13529	-144.72008	614931	7002705	6	basaltic andesite (dike?)	small
2009JEA138A	63.13539	-144.72235	614816	7002712	6	dacite breccia	
2009JEA138B	63.13539	-144.72235	614816	7002712	6	basaltic andesite dike	
2009JEA139A	63.13537	-144.72236	614816	7002710	6	andesite	
2009JEA140A	63.13703	-144.72185	614835	7002896	6	andesite	
2009JEA142A	63.14611	-145.00086	600743	7003438	6	dacite volcanoclastic	
2009JEA145A	63.14522	-144.99655	600963	7003346	6	tonalite (dike?)	
2009JEA146B	63.14131	-144.98883	601366	7002922	6	andesite (dike?)	
2009JEA158A	63.14662	-144.99491	601041	7003504	6	altered rhyolite	
2009JEA158B	63.14662	-144.99491	601041	7003504	6	rhyolite	
2009JEA158B-DUP	63.14662	-144.99491	601041	7003504	6	rhyolite	
2009JEA159A	63.09134	-144.82606	609756	6997625	6	porphyritic tonalite (dike?)	
2009JEA160B	63.09135	-144.82437	609841	6997629	6	tonalite (dike?)	
2009JEA174A	63.17538	-144.81994	609747	7006995	6	gabbro norite? dike	
2009JEA175A	63.17508	-144.82165	609662	7006958	6	basalt dike	
2009JEA176B	63.17424	-144.82336	609579	7006862	6	trachybasalt dike	small
2009LF1C	63.14381	-144.80041	610850	7003513	6	andesite	
2009LF2A	63.14383	-144.80133	610804	7003513	6	dacite	
2009LF2A-DUP	63.14383	-144.80133	610804	7003513	6	dacite	
2009LF3B	63.13372	-144.70235	615831	7002562	6	altered basaltic andesite	small
2009LF4A	63.14664	-144.72441	614668	7003961	6	basalt dike	
2009LF6A	63.17646	-144.95034	603180	7006899	6	porphyritic trachyte	small
2009LF8C	63.17773	-144.94811	603288	7007044	6	rhyolite	
2009LF9A	63.17790	-144.94190	603600	7007072	6	rhyolite	
2009LF10A	63.17684	-144.94195	603601	7006954	6	monzodiorite (dike?)	small
2009LF11B	63.11748	-144.87937	606969	7000446	6	basalt dike	
2009LF15A	63.12071	-144.88960	606441	7000789	6	porphyritic rhyolite	
2009LF15B	63.12071	-144.88960	606441	7000789	6	granite	
2009LF17B	63.12053	-144.89684	606077	7000757	6	basalt dike	
2009LF17C	63.12053	-144.89684	606077	7000757	6	basaltic andesite	
2009LF18C	63.12031	-144.90118	605859	7000725	6	olivine gabbro	
2009LF19C	63.12051	-144.90259	605787	7000745	6	basaltic trachyandesite (dike?)	
2009LF21A	63.12140	-144.90522	605651	7000840	6	gabbro norite dike	
2009LF21B	63.12140	-144.90522	605651	7000840	6	basaltic andesite breccia	inhomogeneous
2009LF22A	63.09569	-144.71773	615206	6998299	6	dacite	
2009LF22B	63.09569	-144.71773	615206	6998299	6	basalt dike	

Sample Number	SiO ₂ %	Al ₂ O ₃ %	BaO %	CaO %	Fe ₂ O ₃ %	K ₂ O %	MgO %	MnO %	Na ₂ O %	P ₂ O ₅ %	TiO ₂ %	Total %	Rb ppm	Sr ppm	Y ppm	Zr ppm
2009JEA128B	78.8	11.2	0.15	0.42	3.47	1.47	1.6	0.13	2.4	0.08	0.28	100	28	45	15	100
2009JEA130A	67.2	12.5	0.11	4.06	8.22	1.28	2.5	0.19	2.9	0.23	0.82	100	21	98	37	121
2009JEA135A	52.1	13.2	0.02	10.18	14.61	0.11	5.8	0.24	2.3	0.11	1.29	100	<2	279	41	95
2009JEA138A	71.0	13.6	0.13	0.90	4.84	1.80	3.9	0.18	2.9	0.16	0.61	100	28	110	22	99
2009JEA138B	52.4	12.9	0.03	9.95	13.82	0.42	5.9	0.24	3.1	0.12	1.19	100	7	241	35	85
2009JEA139A	57.1	16.0	0.09	0.47	11.56	1.06	7.9	0.35	4.4	0.21	0.79	100	18	218	22	124
2009JEA140A	61.4	15.8	0.22	0.55	7.69	1.54	9.2	0.12	2.5	0.16	0.82	100	25	118	15	84
2009JEA142A	67.7	15.7	0.02	2.63	3.61	0.11	1.9	0.09	7.6	0.14	0.56	100	2	193	10	73
2009JEA145A	66.4	14.0	0.02	7.26	5.68	0.11	1.5	0.21	4.3	0.14	0.43	100	2	341	19	82
2009JEA146B	62.4	15.1	0.13	7.27	7.27	1.04	2.7	0.19	2.9	0.21	0.75	100	15	394	23	98
2009JEA158A	85.8	7.2	0.40	0.42	1.25	3.24	1.1	0.03	0.3	0.05	0.19	100	35	40	16	118
2009JEA158B	78.3	11.8	0.08	1.91	1.11	1.11	1.0	0.04	4.3	0.07	0.30	100	28	236	24	187
2009JEA158B-DUP	77.8	12.1	0.07	1.79	1.10	1.09	0.9	0.04	4.7	0.10	0.27	100	33	238	23	174
2009JEA159A	79.9	11.6	0.01	0.63	0.63	0.11	0.5	0.02	6.4	0.03	0.19	100	2	85	20	122
2009JEA160B	74.4	13.4	0.02	0.97	2.90	0.32	1.0	0.11	6.6	0.06	0.21	100	9	143	17	90
2009JEA174A	50.2	10.7	0.05	11.36	12.64	1.07	11.2	0.21	1.7	0.19	0.71	100	46	401	17	48
2009JEA175A	48.9	9.3	0.05	12.79	13.77	0.44	10.3	0.22	3.2	0.19	0.89	100	6	694	19	32
2009JEA176B	50.4	16.0	0.12	8.46	12.37	2.28	5.3	0.22	3.6	0.33	0.91	100	64	692	22	52
2009LF1C	62.5	13.6	0.08	0.21	12.91	2.26	7.2	0.46	0.1	0.10	0.60	100	46	11	15	77
2009LF2A	68.7	11.0	0.02	2.22	10.04	0.00	3.1	0.31	3.5	0.30	0.79	100	2	128	42	160
2009LF2A-DUP	69.2	10.6	0.01	2.11	10.00	0.00	2.8	0.29	3.9	0.27	0.78	100	2	128	42	159
2009LF3B	52.4	15.9	0.01	15.95	9.68	0.00	1.7	0.19	3.2	0.39	0.61	100	<2	1473	23	51
2009LF4A	49.2	17.0	0.05	12.45	11.09	0.42	7.1	0.17	1.7	0.13	0.65	100	9	316	17	54
2009LF6A	67.7	14.9	0.40	2.49	4.05	3.74	1.0	0.09	4.9	0.19	0.49	100	73	230	26	141
2009LF8C	70.1	13.7	0.21	2.41	3.41	2.21	0.8	0.06	6.4	0.14	0.57	100	44	185	31	158
2009LF9A	78.5	12.2	0.06	0.10	0.83	1.45	0.3	0.02	6.2	0.06	0.29	100	21	31	17	134
2009LF10A	50.4	12.0	0.15	9.02	13.71	0.98	8.2	0.28	3.8	0.13	1.39	100	24	356	25	82
2009LF11B	47.6	14.8	0.16	12.29	12.84	0.77	9.5	0.20	1.2	0.08	0.50	100	33	126	16	28
2009LF15A	77.6	12.2	0.16	1.49	1.20	4.09	0.5	0.07	2.5	0.05	0.18	100	88	147	17	123
2009LF15B	78.5	12.0	0.29	0.41	1.03	3.90	0.3	0.03	3.4	0.02	0.15	100	65	59	25	95
2009LF17B	45.4	15.6	0.04	12.08	13.36	0.96	10.3	0.24	1.2	0.12	0.79	100	25	232	17	43
2009LF17C	51.0	17.9	0.09	8.95	10.48	1.75	4.0	0.27	4.5	0.34	0.74	100	23	664	36	52
2009LF18C	46.5	16.1	0.18	9.72	13.50	1.95	9.0	0.27	1.7	0.22	0.85	100	58	347	21	65
2009LF19C	53.2	16.3	0.02	8.81	9.67	0.43	5.2	0.19	5.3	0.11	0.81	100	11	408	19	34
2009LF21A	45.8	15.5	0.01	11.97	13.89	0.21	9.7	0.19	1.6	0.12	0.93	100	8	289	19	53
2009LF21B	53.3	16.8	0.03	10.10	11.25	0.52	4.7	0.19	2.3	0.07	0.79	100	10	428	15	31
2009LF22A	69.3	12.3	0.12	3.73	5.90	2.18	4.6	0.20	1.2	0.09	0.36	100	48	18	20	82
2009LF22B	46.2	14.1	0.01	11.66	13.12	0.10	12.2	0.18	1.5	0.11	0.90	100	4	152	23	61

Sample Number	Nb ppm	As ppm	Cl ppm	Cr ppm	Cu ppm	F ppm	Ga ppm	Ni ppm	Pb ppm	S ppm	Se ppm	Th ppm	U ppm	V ppm	W ppm	Zn ppm
2009JEA128B	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA130A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA135A	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA138A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA138B	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA139A	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA140A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA142A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA145A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA146B	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA158A	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA158B	7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA158B-DUP	6	<5	228	<10	<5	<100	13	<5	22	243	<5	14	8	75	<10	52
2009JEA159A	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA160B	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA174A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA175A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009JEA176B	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF1C	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF2A	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF2A-DUP	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF3B	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF4A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF6A	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF8C	6	7	131	<10	<5	<100	---	<5	40	52	<5	---	---	---	<10	103
2009LF9A	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF10A	7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF11B	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF15A	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF15B	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF17B	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF17C	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF18C	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF19C	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF21A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF21B	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF22A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF22B	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Root Name	Comments
2009LF25A	63.09502	-144.71174	615511	6998235	6	porphyritic andesite	
2009LF26A	63.09471	-144.70735	615734	6998209	6	basalt dike	
2009LF30B	63.09577	-144.69912	616145	6998342	6	basalt (dike?)	
2009LF32A	63.09661	-144.69382	616409	6998445	6	andesite	
2009LF33A	63.09692	-144.69162	616519	6998483	6	dacite	
2009LF36A	63.07715	-144.70517	615914	6996257	6	rhyolite	
2009LF37A	63.07747	-144.70639	615851	6996290	6	trachyte	
2009LF40B	63.07961	-144.71246	615536	6996518	6	dacite volcanoclastic	
2009LF41A	63.08037	-144.71305	615503	6996601	6	rhyolite flow	
2009LF42A	63.07851	-144.71688	615317	6996387	6	rhyolite	
2009LF43B	63.07951	-144.72025	615143	6996493	6	rhyolite	
2009LF44A	63.07853	-144.72185	615066	6996381	6	rhyolite	
2009LF46A	63.07889	-144.73307	614498	6996401	6	rhyolite	
2009LF48A	63.13000	-144.74889	613500	7002065	6	porphyritic rhyolite	
2009LF49E	63.12998	-144.74978	613455	7002061	6	basalt dike	
2009LF51A	63.13138	-144.75443	613215	7002208	6	dacite	
2009LF51B	63.13138	-144.75443	613215	7002208	6	basaltic andesite (dike?)	
2009LF54B	63.13382	-144.75377	613239	7002481	6	rhyolite	small
2009LF54B-DUP1	63.13382	-144.75377	613239	7002481	6	rhyolite	small
2009LF54B-DUP2	63.13382	-144.75377	613239	7002481	6	rhyolite	small
2009LF57A	63.13769	-144.75623	613100	7002908	6	dacite	
2009LF57B	63.13769	-144.75623	613100	7002908	6	dacite	small
2009LF59A	63.14526	-144.68184	616818	7003884	6	basalt	
2009LF60A	63.14319	-144.67383	617230	7003669	6	trachybasalt	
2009LF61B	63.14153	-144.67309	617274	7003485	6	trachyte	small
2009LF62A	63.14026	-144.67162	617353	7003346	6	basaltic andesite	
2009LF64A	63.13727	-144.67170	617361	7003013	6	basaltic trachyandesite	
2009LF64A-DUP	63.13727	-144.67170	617361	7003013	6	basaltic trachyandesite	
2009LF68G	63.13568	-144.66294	617809	7002852	6	calcareous sedimentary rock	
2009LF73C	63.15274	-144.67544	617110	7004729	6	volcanoclastic	
2009LF75A	63.15543	-144.68109	616815	7005018	6	basalt	
2009LF75B	63.15543	-144.68109	616815	7005018	6	calcareous volcanoclastic	
2009LF75E	63.15543	-144.68109	616815	7005018	6	calcareous volcanoclastic	
2009LF78A	63.15767	-144.68401	616659	7005263	6	basaltic trachyandesite	
2009LF82A	63.11731	-144.90018	605920	7000392	6	calcareous volcanoclastic	
2009LF83B	63.11663	-144.89859	606003	7000319	6	hematite-quartz altered	
2009LF83B-DUP	63.11663	-144.89859	606003	7000319	6	hematite-quartz altered	
2009LF87A	63.11286	-144.89489	606203	6999905	6	basalt (dike?)	

Sample Number	SiO ₂ %	Al ₂ O ₃ %	BaO %	CaO %	Fe ₂ O ₃ %	K ₂ O %	MgO %	MnO %	Na ₂ O %	P ₂ O ₅ %	TiO ₂ %	Total %	Rb ppm	Sr ppm	Y ppm	Zr ppm
2009LF25A	61.5	14.2	0.04	4.18	8.57	0.88	4.9	0.15	4.9	0.11	0.56	100	8	186	22	73
2009LF26A	47.0	14.6	0.01	12.39	12.49	0.21	10.4	0.17	1.7	0.08	0.99	100	4	159	19	49
2009LF30B	48.1	16.5	0.03	11.34	12.55	0.65	7.0	0.23	2.6	0.10	0.87	100	12	217	18	33
2009LF32A	62.2	14.8	0.10	4.22	7.99	2.60	4.8	0.09	2.4	0.14	0.66	100	37	136	24	82
2009LF33A	65.9	13.5	0.14	5.20	5.31	1.52	3.1	0.17	4.8	0.08	0.28	100	21	84	27	113
2009LF36A	79.6	10.8	0.04	2.44	0.91	0.71	0.3	0.02	5.1	0.02	0.09	100	8	128	25	107
2009LF37A	67.5	15.1	0.22	1.97	4.24	1.55	1.7	0.07	7.2	0.10	0.36	100	12	161	19	93
2009LF40B	67.3	15.0	0.13	3.69	5.54	2.50	2.9	0.14	2.2	0.13	0.47	100	50	360	29	104
2009LF41A	76.4	11.9	0.01	1.93	1.32	0.00	0.2	0.01	7.9	0.06	0.26	100	<2	111	21	95
2009LF42A	71.5	13.7	0.11	1.72	4.10	1.19	1.4	0.08	5.8	0.09	0.32	100	16	176	23	89
2009LF43B	74.2	12.8	0.07	0.42	3.35	1.05	1.2	0.09	6.4	0.08	0.31	100	10	73	18	121
2009LF44A	71.7	13.5	0.42	1.19	3.67	3.24	1.9	0.08	3.9	0.08	0.29	100	40	261	15	53
2009LF46A	77.2	9.1	0.25	5.50	0.50	6.89	0.4	0.05	0.0	0.02	0.07	100	51	22	24	76
2009LF48A	73.0	13.2	0.36	2.54	2.75	1.53	1.3	0.11	4.9	0.07	0.27	100	38	108	25	120
2009LF49E	50.3	15.0	0.02	11.56	12.08	0.31	6.1	0.22	2.3	0.14	1.99	100	8	198	30	123
2009LF51A	71.8	13.6	0.09	2.04	4.94	2.57	2.6	0.14	1.8	0.10	0.26	100	49	65	21	124
2009LF51B	54.4	13.7	0.05	6.97	14.66	0.73	3.9	0.24	3.9	0.15	1.32	100	17	240	37	103
2009LF54B	77.2	9.6	1.21	3.64	3.12	1.35	0.7	0.05	2.9	0.02	0.17	100	39	154	46	198
2009LF54B-DUP1	78.2	9.3	0.72	3.54	3.04	1.32	0.5	0.05	3.1	0.02	0.15	100	36	151	45	182
2009LF54B-DUP2	77.6	9.9	0.73	3.63	2.98	1.34	0.5	0.05	3.1	0.02	0.16	100	41	160	48	176
2009LF57A	71.8	13.5	0.14	2.31	4.42	2.00	2.8	0.08	2.5	0.08	0.33	100	37	76	25	117
2009LF57B	73.0	14.2	0.28	2.00	3.71	1.49	2.8	0.07	2.1	0.03	0.35	100	57	13	18	115
2009LF59A	47.3	12.2	0.00	12.76	12.01	0.00	12.1	0.19	2.8	0.04	0.56	100	<2	104	11	20
2009LF60A	51.1	13.6	0.02	9.18	12.11	0.11	7.8	0.18	5.0	0.09	0.77	100	<2	145	18	28
2009LF61B	64.2	16.8	0.05	4.74	3.66	0.75	1.0	0.14	8.1	0.17	0.38	100	18	389	22	114
2009LF62A	52.5	12.7	0.02	10.35	10.67	0.22	8.2	0.18	4.5	0.05	0.59	100	4	191	18	35
2009LF64A	54.5	12.9	0.01	5.91	11.16	0.00	8.5	0.18	6.1	0.06	0.62	100	2	120	13	27
2009LF64A-DUP	54.5	14.5	0.03	5.53	10.91	0.05	7.6	0.16	6.1	0.07	0.59	100	10	123	17	29
2009LF68G	55.8	4.8	0.11	29.84	4.51	0.82	3.0	0.07	0.4	0.13	0.53	100	35	143	15	71
2009LF73C	63.1	10.7	0.07	5.23	10.97	1.23	5.9	0.10	1.7	0.09	0.88	100	13	353	31	130
2009LF75A	47.2	12.2	0.04	10.73	13.37	2.32	11.9	0.24	0.7	0.08	1.30	100	31	121	13	55
2009LF75B	43.2	11.7	0.30	17.30	14.71	4.00	7.3	0.14	0.1	0.05	1.17	100	62	193	21	61
2009LF75E	40.6	6.1	0.03	26.70	9.39	2.01	14.2	0.19	0.0	0.04	0.70	100	33	157	10	56
2009LF78A	50.9	13.8	0.02	8.28	10.97	0.86	8.0	0.13	5.6	0.11	1.38	100	10	236	22	84
2009LF82A	53.4	5.7	0.00	20.97	13.55	0.00	4.6	1.17	0.2	0.10	0.29	100	<2	202	18	54
2009LF83B	61.7	1.6	0.02	0.49	35.09	0.02	0.8	0.06	0.1	0.10	0.03	100	<2	47	11	18
2009LF83B-DUP	61.0	1.8	0.01	0.54	35.51	0.02	0.8	0.07	0.1	0.10	0.02	100	10	63	13	<10
2009LF87A	46.6	14.3	0.03	12.27	12.88	0.61	10.9	0.32	1.2	0.08	0.78	100	16	211	17	39

Sample Number	Nb ppm	As ppm	Cl ppm	Cr ppm	Cu ppm	F ppm	Ga ppm	Ni ppm	Pb ppm	S ppm	Se ppm	Th ppm	U ppm	V ppm	W ppm	Zn ppm
2009LF25A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF26A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF30B	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF32A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF33A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF36A	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF37A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF40B	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF41A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF42A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF43B	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF44A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF46A	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF48A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF49E	8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF51A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF51B	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF54B	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF54B-DUP1	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF54B-DUP2	3	<5	93	<10	16	295	13	30	<5	646	<5	---	---	34	<10	53
2009LF57A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF57B	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF59A	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF60A	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF61B	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF62A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF64A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF64A-DUP	<1	<5	119	187	159	<100	16	198	19	498	<5	---	---	267	<10	73
2009LF68G	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF73C	6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF75A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF75B	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF75E	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF78A	6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF82A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF83B	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF83B-DUP	<1	75	74	<10	57	<100	---	54	8	82	<5	---	---	54	<10	38
2009LF87A	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Root Name	Comments
2009LF87C	63.11286	-144.89489	606203	6999905	6	rhyolite	
2009LF89A	63.11041	-144.90387	605759	6999618	6	basaltic andesite	
2009LF89D	63.11041	-144.90387	605759	6999618	6	sedimentary rock	
2009LF91B	63.20526	-144.88404	606411	7010215	6	dacite?	
2009LF91B-DUP	63.20526	-144.88404	606411	7010215	6	dacite?	
2009LF91C	63.20526	-144.88404	606411	7010215	6	dacite	
2009LF91C-DUP	63.20526	-144.88404	606411	7010215	6	dacite	
2009LF93C	63.20677	-144.87878	606670	7010391	6	volcanic sedimentary rock	small
2009LF93D	63.20677	-144.87878	606670	7010391	6	basalt (dike?)	small
2009LF93E	63.20677	-144.87878	606670	7010391	6	quartz diorite dike	
2009LF93F	63.20677	-144.87878	606670	7010391	6	porphyritic monzonite (dike?)	pressed pellet
2009LF111B	63.20323	-144.80241	610523	7010127	6	listwaenite?	
2009LF111B-DUP	63.20323	-144.80241	610523	7010127	6	listwaenite?	
2009LF115A	63.11761	-144.91101	605373	7000408	6	trachyte?	small
2009LF115A-DUP	63.11761	-144.91101	605373	7000408	6	trachyte?	small
2009LF115D	63.11761	-144.91101	605373	7000408	6	basalt sill	
2009LF117B	63.11459	-144.91315	605276	7000068	6	porphyritic rhyolite	
2009LF117C	63.11459	-144.91315	605276	7000068	6	porphyritic granodiorite dike	
2009LF119A	63.11404	-144.91335	605268	7000007	6	altered rhyolite	small
2009LF119A-DUP	63.11404	-144.91335	605268	7000007	6	altered rhyolite	small
2009LF120A	63.11343	-144.91331	605272	6999939	6	basalt	
2009LF123A	63.11086	-144.91316	605289	6999653	6	quartz diorite	
2009LF124A	63.10919	-144.91703	605100	6999460	6	quartz diorite	
2009LF124A-DUP	63.10919	-144.91703	605100	6999460	6	quartz diorite	
2009LF130A	63.07418	-144.68746	616820	6995958	6	dacite	
2009LF132A	63.07582	-144.68475	616950	6996146	6	dacite breccia	
2009LF135A	63.07911	-144.68635	616856	6996509	6	basaltic trachyandesite	
2009LF136B	63.07948	-144.69504	616416	6996535	6	basalt dike	
2009LF139A	63.08190	-144.70022	616145	6996795	6	rhyolite	
2009LF140A	63.08330	-144.70114	616093	6996949	6	rhyolite	
2009LF141C	63.22115	-144.85723	607700	7012029	6	listwaenite	
2009LF141C-DUP	63.22115	-144.85723	607700	7012029	6	listwaenite	
2009LF142C	63.21911	-144.85678	607730	7011803	6	altered mafic?	small, inhomogeneous
2009LF151A	63.21222	-145.13054	593995	7010604	6	dacite volcanoclastic?	
2009MBW15B	63.18318	-144.77113	612173	7007948	6	diorite dike	
2009MBW28A	63.18358	-144.78001	611725	7007977	6	basalt	
2009MBW70A	63.17779	-144.93030	604184	7007079	6	dacite	
2009MBW70B	63.17779	-144.93030	604184	7007079	6	altered andesite	

Sample Number	SiO ₂ %	Al ₂ O ₃ %	BaO %	CaO %	Fe ₂ O ₃ %	K ₂ O %	MgO %	MnO %	Na ₂ O %	P ₂ O ₅ %	TiO ₂ %	Total %	Rb ppm	Sr ppm	Y ppm	Zr ppm
2009LF87C	72.9	12.0	0.18	3.36	4.69	2.34	0.7	0.14	3.1	0.13	0.41	100	45	105	33	115
2009LF89A	52.8	14.6	0.05	11.29	8.99	1.04	6.9	0.09	3.1	0.18	0.98	100	30	475	16	51
2009LF89D	73.0	11.7	0.10	1.15	7.09	1.77	1.7	0.06	2.7	0.13	0.69	100	46	114	14	68
2009LF91B	68.0	16.0	0.01	5.89	2.79	0.00	1.8	0.09	5.0	0.22	0.26	100	<2	704	19	97
2009LF91B-DUP	67.9	16.6	0.02	5.65	2.30	0.03	1.7	0.09	5.2	0.31	0.24	100	5	707	19	91
2009LF91C	63.0	16.3	0.23	6.97	5.55	1.53	2.1	0.10	3.1	0.20	0.95	100	27	650	15	132
2009LF91C-DUP	63.2	15.9	0.23	7.03	5.73	1.51	1.8	0.10	3.4	0.17	0.94	100	26	644	15	131
2009LF93C	73.0	15.0	0.12	3.47	1.86	2.61	0.2	0.01	3.5	0.09	0.15	100	91	333	<5	145
2009LF93D	50.6	11.6	0.01	10.96	14.97	0.63	7.8	0.23	2.2	0.07	0.92	100	19	106	33	58
2009LF93E	60.5	17.0	0.11	6.37	6.58	2.02	2.7	0.12	3.7	0.21	0.75	100	51	593	18	126
2009LF93F	55.5	16.4	0.12	6.48	9.13	3.29	2.6	0.21	4.9	0.58	0.72	100	29	934	21	93
2009LF111B	54.7	14.8	0.10	6.09	11.73	1.30	5.5	0.20	3.4	0.39	1.84	100	47	433	32	215
2009LF111B-DUP	54.0	14.6	0.11	6.12	11.91	1.20	5.9	0.20	3.8	0.36	1.82	100	44	442	32	212
2009LF115A	67.8	16.0	1.14	3.26	1.26	7.78	0.8	0.13	1.5	0.08	0.31	100	77	174	47	230
2009LF115A-DUP	68.4	16.4	1.12	3.00	1.11	6.65	1.0	0.12	1.8	0.11	0.26	100	83	165	43	216
2009LF115D	46.4	14.6	0.01	14.66	12.67	0.21	9.0	0.28	1.3	0.05	0.79	100	9	110	17	28
2009LF117B	73.9	13.5	0.23	0.94	2.73	2.41	4.0	0.03	1.9	0.05	0.29	100	44	82	12	100
2009LF117C	72.9	13.5	0.22	2.50	3.09	2.40	0.7	0.07	4.2	0.08	0.32	100	35	221	25	144
2009LF119A	81.3	10.4	0.22	2.07	0.55	1.85	0.2	0.04	3.2	0.05	0.14	100	29	193	11	90
2009LF119A-DUP	80.1	11.0	0.21	2.01	0.52	1.82	0.3	0.04	3.8	0.06	0.16	100	29	180	7	62
2009LF120A	50.1	15.8	0.04	9.41	10.82	0.32	9.3	0.28	2.7	0.21	1.00	100	6	358	21	65
2009LF123A	56.6	16.6	0.07	8.88	8.88	0.52	4.3	0.21	3.1	0.09	0.74	100	8	326	19	54
2009LF124A	65.3	16.0	0.05	5.07	4.76	0.62	2.1	0.08	5.4	0.10	0.53	100	7	363	20	62
2009LF124A-DUP	65.7	15.6	0.06	4.99	4.79	0.51	1.7	0.08	5.9	0.10	0.51	100	7	357	19	61
2009LF130A	68.8	14.2	0.28	2.55	4.98	0.95	1.9	0.10	5.7	0.10	0.37	100	12	342	18	102
2009LF132A	68.2	10.2	0.12	12.29	4.49	1.07	1.5	0.12	1.5	0.09	0.49	100	17	89	17	63
2009LF135A	55.1	16.5	0.11	4.39	10.00	0.55	6.4	0.15	5.9	0.19	0.69	100	8	233	25	61
2009LF136B	47.2	14.9	0.03	9.91	14.33	0.65	9.0	0.20	2.7	0.12	0.99	100	13	214	25	58
2009LF139A	75.9	12.7	0.10	0.31	2.92	1.88	0.5	0.02	5.3	0.05	0.32	100	26	101	22	183
2009LF140A	73.6	13.2	0.12	0.11	4.00	2.59	1.2	0.03	4.7	0.04	0.38	100	48	82	19	203
2009LF141C	47.5	8.8	0.10	18.68	12.67	1.29	7.9	0.27	1.5	0.20	1.05	100	41	809	17	55
2009LF141C-DUP	44.8	9.1	0.11	18.64	13.06	1.29	9.8	0.28	1.7	0.18	1.06	100	40	798	18	74
2009LF142C	59.1	9.7	0.07	7.78	12.15	1.38	5.5	0.40	1.8	0.29	1.83	100	43	226	37	390
2009LF151A	71.9	11.2	0.18	9.13	3.71	2.76	0.4	0.08	0.1	0.11	0.43	100	58	107	18	150
2009MBW15B	50.7	11.8	0.00	9.26	13.62	0.11	10.9	0.21	2.9	0.03	0.52	100	2	70	17	24
2009MBW28A	50.7	12.7	0.00	8.31	13.06	0.00	10.7	0.19	3.8	0.04	0.48	100	2	29	15	26
2009MBW70A	69.8	12.5	0.22	2.42	6.33	2.63	1.7	0.17	3.8	0.11	0.35	100	58	106	34	361
2009MBW70B	61.6	4.3	0.01	10.14	20.39	0.10	2.6	0.43	0.0	0.13	0.32	100	4	130	32	61

Sample Number	Nb ppm	As ppm	Cl ppm	Cr ppm	Cu ppm	F ppm	Ga ppm	Ni ppm	Pb ppm	S ppm	Se ppm	Th ppm	U ppm	V ppm	W ppm	Zn ppm
2009LF87C	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF89A	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF89D	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF91B	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF91B-DUP	<1	<5	217	<10	47	<100	16	32	<5	9600	6	---	---	63	57	21
2009LF91C	8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF91C-DUP	7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF93C	11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF93D	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF93E	8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF93F	4	---	---	---	---	---	---	---	11	---	---	4	<2	---	---	---
2009LF111B	15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF111B-DUP	16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF115A	7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF115A-DUP	9	28	249	<10	22	314	15	44	31	108	<5	---	---	<10	<10	73
2009LF115D	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF117B	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF117C	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF119A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF119A-DUP	<1	12	122	<10	18	<100	<5	27	11	113	<5	---	---	17	<10	20
2009LF120A	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF123A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF124A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF124A-DUP	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF130A	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF132A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF135A	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF136B	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF139A	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF140A	6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF141C	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF141C-DUP	6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009LF142C	10	38	98	1180	105	1120	16	79	32	2080	<5	23	<2	282	<10	123
2009LF151A	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009MBW15B	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009MBW28A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009MBW70A	20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009MBW70B	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Root Name	Comments
2009MBW79A	63.17742	-144.92053	604677	7007054	6	olivine gabbro dike	
2009Z1A	63.11803	-144.88044	606913	7000505	6	granite	
2009Z10A	63.17617	-144.95074	603161	7006866	6	trachyte breccia	inhomogeneous
2009Z14A	63.17217	-144.95573	602924	7006412	6	dacite breccia	inhomogeneous
2009Z14B	63.17217	-144.95573	602924	7006412	6	quartzite	
2009Z15B	63.17089	-144.95872	602778	7006265	6	quartz-veined quartzite	quartz vein
2009Z16A	63.16925	-144.95876	602782	7006082	6	rhyolite	
2009Z17A	63.16835	-144.96015	602715	7005980	6	rhyolite	small
2009Z19A	63.09790	-144.85093	608476	6998313	6	rhyolite	
2009Z20A	63.09921	-144.85161	608437	6998458	6	basaltic andesite volcanoclastic	small
2009Z21A	63.09890	-144.85486	608274	6998418	6	porphyritic granodiorite (dike?)	
2009Z22A	63.09892	-144.85736	608148	6998416	6	diorite dike	small
2009Z23A	63.10003	-144.86142	607939	6998533	6	porphyritic tonalite	
2009Z25A	63.10052	-144.86798	607606	6998576	6	rhyolite	
2009Z27A	63.10194	-144.87148	607424	6998728	6	basalt (dike?)	
2009Z28A	63.10181	-144.87387	607304	6998710	6	rhyolite volcanoclastic	
2009Z29A	63.10110	-144.87815	607091	6998624	6	dacite	
2009Z30A	63.10119	-144.88006	606994	6998631	6	rhyolite	
2009Z31A	63.10187	-144.88590	606697	6998696	6	dacite volcanoclastic	small
2009Z32A	63.11265	-144.74835	613595	7000133	6	basalt (dike?)	
2009Z32B	63.11265	-144.74835	613595	7000133	6	rhyolite	small
2009Z34A	63.11435	-144.74867	613572	7000322	6	dacite conglomerate	
2009Z36B	63.11502	-144.75437	613282	7000387	6	basalt dike	
2009Z37A	63.11521	-144.75572	613213	7000405	6	volcanic sedimentary rock	
2009Z37B	63.11521	-144.75572	613213	7000405	6	dacite	
2009Z38A	63.11581	-144.75855	613068	7000467	6	dacite	small
2009Z40A	63.11694	-144.76659	612658	7000579	6	dacite conglomerate	
2009Z41A	63.11706	-144.76926	612523	7000588	6	basalt (dike?)	
2009Z42A	63.11832	-144.77186	612387	7000723	6	dacite conglomerate	inhomogeneous
2009Z43B	63.06736	-144.71405	615504	6995151	6	rhyolite	inhomogeneous
2009Z48B	63.06596	-144.70286	616075	6995015	6	rhyolite volcanoclastic	inhomogeneous
2009Z49A	63.06595	-144.69975	616232	6995020	6	rhyolite	small
2009Z50A	63.06544	-144.69443	616503	6994973	6	rhyolite volcanoclastic	inhomogeneous
2009Z50C	63.06544	-144.69443	616503	6994973	6	volcanic sedimentary rock	small
2009Z51A	63.06564	-144.69022	616715	6995002	6	rhyolite	
2009Z54A	63.06268	-144.68386	617048	6994684	6	andesite	small
2009Z57B	63.12191	-144.69584	616206	7001259	6	dacite	
2009Z59B	63.12035	-144.70049	615978	7001077	6	andesite	

Sample Number	SiO ₂ %	Al ₂ O ₃ %	BaO %	CaO %	Fe ₂ O ₃ %	K ₂ O %	MgO %	MnO %	Na ₂ O %	P ₂ O ₅ %	TiO ₂ %	Total %	Rb ppm	Sr ppm	Y ppm	Zr ppm
2009MBW79A	46.5	14.5	0.02	12.24	14.48	0.21	7.9	0.19	2.5	0.11	1.35	100	6	217	22	76
2009Z1A	79.0	11.7	0.21	0.20	1.00	3.90	0.1	0.01	3.7	0.02	0.18	100	77	53	18	95
2009Z10A	68.6	15.1	0.22	2.54	2.96	2.96	0.8	0.07	6.0	0.19	0.56	100	49	228	27	155
2009Z14A	67.1	13.7	0.31	2.77	6.07	3.30	2.8	0.17	3.2	0.14	0.51	100	73	289	21	150
2009Z14B	93.3	3.3	0.21	0.10	1.40	0.50	0.3	0.01	0.6	0.07	0.19	100	19	65	9	48
2009Z15B	99.2	0.4	0.08	0.00	0.10	0.10	0.1	0.00	0.0	0.01	0.01	100	4	6	<5	13
2009Z16A	69.4	14.8	0.27	2.25	3.33	3.87	1.1	0.16	4.1	0.17	0.55	100	90	149	32	168
2009Z17A	72.5	13.4	0.25	1.09	4.57	3.05	0.8	0.14	3.6	0.14	0.48	100	70	118	28	141
2009Z19A	73.8	12.4	0.09	2.98	4.26	1.70	0.6	0.12	3.7	0.07	0.27	100	46	101	24	129
2009Z20A	55.9	12.2	0.13	12.54	8.67	1.14	5.8	0.16	2.7	0.13	0.59	100	18	350	22	89
2009Z21A	68.7	14.1	0.13	4.29	3.87	1.47	1.7	0.17	4.9	0.19	0.51	100	25	229	23	131
2009Z22A	43.9	8.8	0.04	10.68	26.33	0.63	6.7	0.24	1.5	0.22	0.96	100	17	128	30	78
2009Z23A	75.4	11.7	0.06	4.70	3.88	2.25	1.1	0.22	0.2	0.08	0.37	100	56	175	24	162
2009Z25A	73.8	12.1	0.13	1.79	4.63	1.68	2.7	0.08	2.5	0.12	0.42	100	34	196	19	122
2009Z27A	51.5	21.7	0.47	8.39	8.39	0.95	3.9	0.52	3.4	0.07	0.66	100	18	428	29	55
2009Z28A	82.9	7.2	0.14	0.30	3.76	1.32	3.3	0.30	0.5	0.05	0.21	100	18	28	22	86
2009Z29A	68.9	14.4	0.21	0.76	4.86	2.27	2.7	0.18	5.1	0.16	0.46	100	22	68	18	116
2009Z30A	76.7	10.9	0.22	0.32	4.79	1.81	2.6	0.21	2.1	0.09	0.25	100	30	36	19	144
2009Z31A	70.8	12.7	0.02	4.66	4.77	0.12	1.4	0.12	4.7	0.14	0.60	100	<2	561	30	96
2009Z32A	47.5	16.1	0.04	12.70	12.27	0.65	8.1	0.19	1.7	0.06	0.65	100	12	189	18	27
2009Z32B	75.8	11.6	0.09	1.19	3.99	1.72	2.2	0.13	2.9	0.06	0.34	100	32	124	19	95
2009Z34A	63.3	13.9	0.07	3.19	7.74	0.57	5.0	0.07	5.4	0.15	0.62	100	7	190	29	93
2009Z36B	45.5	14.4	0.11	12.26	13.01	1.81	10.9	0.21	1.2	0.05	0.61	100	36	103	16	24
2009Z37A	76.4	10.3	0.01	2.09	3.87	0.10	2.0	0.07	4.6	0.09	0.42	100	<2	168	21	76
2009Z37B	71.4	13.1	0.29	1.30	4.98	2.92	2.9	0.10	2.5	0.09	0.43	100	59	167	33	128
2009Z38A	71.5	12.1	0.12	2.27	6.09	1.91	1.8	0.19	3.6	0.08	0.38	100	41	110	30	112
2009Z40A	64.7	13.5	0.13	5.05	7.30	2.36	3.5	0.12	2.6	0.13	0.61	100	39	148	25	89
2009Z41A	50.6	13.7	0.01	11.24	13.23	0.31	6.4	0.20	2.2	0.18	1.94	100	7	200	32	119
2009Z42A	71.7	11.2	0.27	1.88	6.47	2.61	4.5	0.15	0.6	0.09	0.53	100	44	56	23	87
2009Z43B	74.9	12.7	0.04	1.60	2.67	0.85	1.8	0.06	5.1	0.04	0.25	100	14	128	19	125
2009Z48B	78.3	10.1	0.04	3.23	1.87	0.62	0.9	0.12	4.5	0.05	0.21	100	13	129	18	106
2009Z49A	78.6	8.6	0.63	4.11	3.39	2.16	1.3	0.06	0.8	0.04	0.25	100	46	37	25	104
2009Z50A	78.1	11.8	0.09	0.96	1.70	1.07	0.7	0.01	5.2	0.09	0.30	100	30	86	16	77
2009Z50C	55.0	15.9	0.06	3.27	11.57	1.05	5.4	0.16	6.5	0.08	1.08	100	30	155	16	54
2009Z51A	79.7	11.4	0.14	0.10	1.35	3.10	0.4	0.01	3.7	0.01	0.13	100	31	39	27	111
2009Z54A	60.0	14.9	0.27	3.78	8.23	2.22	5.6	0.19	4.0	0.13	0.70	100	37	248	20	108
2009Z57B	64.7	11.6	0.11	5.23	7.47	0.53	7.1	0.19	2.6	0.05	0.41	100	9	219	16	71
2009Z59B	62.2	15.1	0.13	2.13	7.95	1.34	5.5	0.12	4.8	0.07	0.62	100	17	134	19	71

Sample Number	Nb ppm	As ppm	Cl ppm	Cr ppm	Cu ppm	F ppm	Ga ppm	Ni ppm	Pb ppm	S ppm	Se ppm	Th ppm	U ppm	V ppm	W ppm	Zn ppm
2009MBW79A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z1A	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z10A	6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z14A	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z14B	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z15B	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z16A	6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z17A	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z19A	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z20A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z21A	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z22A	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z23A	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z25A	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z27A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z28A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z29A	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z30A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z31A	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z32A	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z32B	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z34A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z36B	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z37A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z37B	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z38A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z40A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z41A	7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z42A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z43B	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z48B	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z49A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z50A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z50C	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z51A	6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z54A	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z57B	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z59B	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Root Name	Comments
2009Z60A	63.11942	-144.70409	615800	7000967	6	basalt conglomerate	
2009Z60B	63.11942	-144.70409	615800	7000967	6	basaltic andesite dike	
2009Z60C	63.11942	-144.70409	615800	7000967	6	andesite	small
2009Z61A	63.11918	-144.70810	615599	7000933	6	calcareous volcanic conglomerate	
2009Z62C	63.11869	-144.71156	615426	7000872	6	basaltic andesite	
2009Z64B	63.11904	-144.72205	614896	7000892	6	andesite	
2009Z69A	63.15557	-144.72901	614401	7004948	6	monzodiorite dike	
2009Z71A	63.15393	-144.73381	614166	7004756	6	altered andesite?	
2009Z72B	63.15281	-144.73769	613975	7004625	6	basalt dike	
2009Z84A	63.16195	-144.74182	613731	7005635	6	quartz monzodiorite dike	
2009Z92B	63.15860	-144.76744	612454	7005217	6	quartz syenite dike/sill	small
2009Z94B	63.16705	-144.95818	602819	7005838	6	rhyolite	
2009Z94C	63.16705	-144.95818	602819	7005838	6	rhyolite	
2009Z94D	63.16705	-144.95818	602819	7005838	6	quartz monzonite (dike?)	
2009Z97A	63.16153	-144.96592	602449	7005211	6	trachyandesite	
2009Z98A	63.15925	-144.96828	602338	7004953	6	trachyandesite	
2009Z100B	63.15685	-144.97099	602210	7004681	6	rhyolite	
2009Z100C	63.15685	-144.97099	602210	7004681	6	quartz monzonite dike	
2009Z101A	63.15409	-144.97313	602112	7004371	6	volcanic conglomerate	
2009Z102A	63.15199	-144.97252	602150	7004138	6	quartz-rich sandstone	
2009Z105A	63.19236	-144.91009	605148	7008735	6	quartz monzonite (dike?)	
2009Z107B	63.19215	-144.91452	604926	7008704	6	monzodiorite (dike?)	
2009Z112B	63.18554	-144.89413	605976	7008002	6	altered andesite	small
2009Z113A	63.18518	-144.89378	605995	7007962	6	basalt	
2009Z119A	63.16101	-144.71490	615090	7005579	6	olivine gabbro	
2009Z119B	63.16101	-144.71490	615090	7005579	6	calcareous sedimentary rock	
2009Z120A	63.16073	-144.71423	615125	7005549	6	serpentinite	small
2009Z120B	63.16073	-144.71423	615125	7005549	6	clinopyroxenite	small
2009Z122A	63.16098	-144.71083	615295	7005583	6	alkali gabbro	
2009Z123B	63.16098	-144.70817	615429	7005587	6	fine-grained monzonite?	
2009Z123B-DUP	63.16098	-144.70817	615429	7005587	6	fine-grained monzonite?	
2009Z124B	63.16090	-144.70724	615476	7005580	6	metasedimentary rock	
2009Z125B	63.16104	-144.70505	615586	7005600	6	gneiss	
2009Z126B	63.16288	-144.70274	615695	7005809	6	quartz monzodiorite dike	
2009Z128B	63.16417	-144.70065	615795	7005956	6	listwaenite	
2009Z130A	63.16406	-144.69796	615931	7005949	6	conglomerate	inhomogeneous
2009Z137A	63.13843	-144.97317	602165	7002626	6	altered gabbroonorite	
2009Z137B	63.13843	-144.97317	602165	7002626	6	gabbroonorite	

Sample Number	SiO ₂ %	Al ₂ O ₃ %	BaO %	CaO %	Fe ₂ O ₃ %	K ₂ O %	MgO %	MnO %	Na ₂ O %	P ₂ O ₅ %	TiO ₂ %	Total %	Rb ppm	Sr ppm	Y ppm	Zr ppm
2009Z60A	45.2	19.7	0.01	16.36	11.15	0.00	4.5	0.11	2.2	0.06	0.75	100	<2	204	14	35
2009Z60B	54.3	18.2	0.13	8.18	9.98	1.38	3.8	0.22	2.9	0.08	0.78	100	24	339	18	34
2009Z60C	57.8	15.0	0.04	4.47	11.61	0.78	5.6	0.11	3.9	0.07	0.60	100	16	123	19	69
2009Z61A	37.4	7.0	0.16	38.84	8.61	1.72	3.0	1.15	1.6	0.06	0.44	100	48	102	30	37
2009Z62C	53.3	16.7	0.03	5.96	12.25	0.33	6.3	0.10	4.2	0.10	0.71	100	5	461	15	26
2009Z64B	58.0	16.1	0.03	5.80	10.02	0.11	3.9	0.09	5.0	0.14	0.79	100	2	277	27	59
2009Z69A	55.7	16.0	0.62	8.42	7.44	2.08	3.2	0.19	5.4	0.48	0.53	100	36	1452	17	48
2009Z71A	58.6	18.4	0.11	9.39	7.58	1.36	2.8	0.16	0.8	0.21	0.54	100	31	284	17	78
2009Z72B	49.8	7.8	0.04	15.73	12.88	0.85	10.8	0.18	1.1	0.19	0.70	100	18	331	13	26
2009Z84A	58.7	17.3	0.15	4.39	8.79	3.32	2.1	0.18	3.7	0.44	0.88	100	79	805	28	80
2009Z92B	60.3	18.0	0.16	1.04	8.49	3.44	2.9	0.15	4.3	0.44	0.75	100	69	698	18	75
2009Z94B	72.8	13.0	0.62	2.67	2.46	3.59	1.9	0.05	2.4	0.08	0.44	100	113	317	34	183
2009Z94C	70.5	14.6	0.53	2.70	3.01	3.22	0.9	0.16	3.8	0.15	0.41	100	55	378	24	147
2009Z94D	64.3	17.6	0.07	4.02	3.91	4.97	0.8	0.10	3.6	0.19	0.43	100	126	584	16	140
2009Z97A	61.1	15.6	0.13	4.10	7.87	1.83	2.9	0.19	5.5	0.17	0.61	100	36	451	24	108
2009Z98A	60.3	15.4	0.15	4.10	7.88	0.75	3.6	0.33	6.6	0.19	0.69	100	23	458	31	119
2009Z100B	75.0	11.4	0.06	5.23	1.33	1.74	0.4	0.06	4.3	0.09	0.37	100	35	42	30	198
2009Z100C	62.2	17.8	0.19	3.79	4.55	5.96	1.3	0.09	3.4	0.27	0.52	100	138	658	15	108
2009Z101A	60.0	15.1	0.13	2.47	10.60	1.61	4.0	0.31	5.0	0.19	0.61	100	33	211	22	102
2009Z102A	90.9	4.4	0.31	0.00	1.90	0.90	1.1	0.04	0.2	0.02	0.21	100	41	15	9	65
2009Z105A	63.6	16.9	0.08	4.89	4.29	4.29	0.8	0.08	4.4	0.23	0.44	100	134	613	18	133
2009Z107B	50.2	15.5	0.04	10.53	11.79	2.00	5.8	0.22	2.8	0.34	0.79	100	137	612	19	24
2009Z112B	59.4	12.1	0.08	10.13	11.65	1.42	2.2	0.21	2.0	0.10	0.77	100	40	290	16	96
2009Z113A	48.2	12.3	0.03	15.29	14.63	0.44	5.0	0.33	3.0	0.06	0.76	100	16	107	24	42
2009Z119A	51.7	16.2	0.09	8.53	10.46	1.60	6.3	0.12	3.6	0.26	1.10	100	56	642	22	128
2009Z119B	32.8	11.6	0.01	40.71	9.55	0.11	3.8	0.45	0.0	0.25	0.72	100	<2	1459	28	139
2009Z120A	38.5	6.1	0.05	15.02	19.04	1.44	17.1	0.21	0.2	0.93	1.41	100	45	153	12	21
2009Z120B	51.1	1.7	0.00	21.53	6.85	0.11	18.1	0.13	0.2	0.02	0.31	100	2	119	<5	13
2009Z122A	49.8	19.6	0.03	12.24	8.93	0.55	3.6	0.11	4.1	0.32	0.73	100	7	1361	24	17
2009Z123B	51.8	17.0	1.16	4.38	11.35	6.08	5.2	0.09	1.7	0.28	0.99	100	122	766	11	140
2009Z123B-DUP	52.8	18.4	0.98	4.06	9.42	5.96	4.8	0.08	2.1	0.41	0.88	100	112	708	9	104
2009Z124B	87.2	4.0	0.02	4.56	2.02	0.74	1.1	0.03	0.1	0.08	0.19	100	12	184	8	37
2009Z125B	64.7	16.3	0.14	2.21	6.51	3.05	3.6	0.05	2.7	0.17	0.59	100	79	416	18	153
2009Z126B	66.6	17.8	0.09	3.71	1.97	2.95	0.8	0.11	5.7	0.09	0.19	100	68	977	11	85
2009Z128B	57.6	0.3	0.00	20.98	7.43	0.00	13.5	0.11	0.0	0.02	0.03	100	<2	232	<5	10
2009Z130A	61.7	15.5	0.20	5.18	7.43	2.70	3.4	0.10	2.8	0.22	0.78	100	66	820	21	130
2009Z137A	47.1	17.3	0.11	15.87	7.14	1.92	9.4	0.18	0.6	0.02	0.38	100	67	177	7	15
2009Z137B	47.7	19.5	0.20	13.26	7.48	2.03	7.8	0.17	1.5	0.06	0.33	100	58	354	11	13

Sample Number	Nb ppm	As ppm	Cl ppm	Cr ppm	Cu ppm	F ppm	Ga ppm	Ni ppm	Pb ppm	S ppm	Se ppm	Th ppm	U ppm	V ppm	W ppm	Zn ppm
2009Z60A	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z60B	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z60C	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z61A	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z62C	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z64B	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z69A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z71A	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z72B	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z84A	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z92B	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z94B	7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z94C	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z94D	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z97A	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z98A	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z100B	7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z100C	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z101A	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z102A	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z105A	6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z107B	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z112B	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z113A	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z119A	8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z119B	6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z120A	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z120B	1	<5	338	2620	<5	<100	---	170	<5	331	<5	---	---	50	<10	32
2009Z122A	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z123B	7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z123B-DUP	5	<5	94	86	37	<100	32	93	39	371	<5	20	<2	305	<10	166
2009Z124B	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z125B	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z126B	8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z128B	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z130A	9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z137A	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z137B	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Root Name	Comments
2009Z138A	63.13794	-144.97281	602185	7002572	6	tonalite	small
2009Z140A	63.13575	-144.97356	602155	7002327	6	tonalite	
2009Z142A	63.05999	-144.74210	614116	6994280	6	rhyolite	
2009Z145B	63.06137	-144.74758	613834	6994424	6	basalt dike	
2009Z145C	63.06137	-144.74758	613834	6994424	6	sandstone	
2009Z146A	63.06253	-144.75085	613664	6994547	6	rhyolite	
2009Z148A	63.06309	-144.75770	613316	6994597	6	rhyolite	

Sample Number	SiO ₂ %	Al ₂ O ₃ %	BaO %	CaO %	Fe ₂ O ₃ %	K ₂ O %	MgO %	MnO %	Na ₂ O %	P ₂ O ₅ %	TiO ₂ %	Total %	Rb ppm	Sr ppm	Y ppm	Zr ppm
2009Z138A	68.7	11.6	0.01	4.63	6.44	0.11	2.1	0.10	5.4	0.18	0.68	100	5	54	24	107
2009Z140A	66.8	15.1	0.05	4.64	5.59	0.63	2.3	0.14	3.9	0.21	0.62	100	16	304	24	92
2009Z142A	75.6	12.4	0.11	0.85	3.10	0.85	1.6	0.10	5.1	0.05	0.19	100	12	142	26	150
2009Z145B	47.7	14.8	0.03	13.21	12.69	0.62	8.7	0.23	1.2	0.07	0.78	100	16	121	20	38
2009Z145C	84.0	7.2	0.37	1.10	3.00	0.60	1.4	0.07	2.1	0.03	0.14	100	4	164	23	121
2009Z146A	74.1	12.9	0.25	1.87	3.74	1.45	1.1	0.08	4.2	0.08	0.26	100	20	239	24	125
2009Z148A	76.3	12.0	0.15	1.96	2.78	1.13	0.8	0.04	4.5	0.06	0.24	100	19	193	22	123

Sample Number	Nb ppm	As ppm	Cl ppm	Cr ppm	Cu ppm	F ppm	Ga ppm	Ni ppm	Pb ppm	S ppm	Se ppm	Th ppm	U ppm	V ppm	W ppm	Zn ppm
2009Z138A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z140A	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z142A	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z145B	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z145C	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z146A	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2009Z148A	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Table 9. Detection limits and analytical methods for major-oxide, minor-oxide, and trace-element analyses of DGGs polished rock slab samples. Analytical methods include: XRF = X-ray fluorescence spectroscopy. Note: Fe₂O₃ = total iron as Fe₂O₃; --- = not applicable.

Element	Units	UAF		
		Lower Detection Limit	Upper Detection Limit	Analytical Method
SiO ₂	%	0.1	100	XRF
Al ₂ O ₃	%	0.1	100	XRF
BaO	%	0.02	100	XRF
CaO	%	0.05	100	XRF
Fe ₂ O ₃	%	0.05	100	XRF
K ₂ O	%	0.05	100	XRF
MgO	%	0.1	100	XRF
MnO	%	0.02	100	XRF
Na ₂ O	%	0.1	100	XRF
P ₂ O ₅	%	0.05	100	XRF
TiO ₂	%	0.02	100	XRF
Total	%	---	---	Calculation
Rb	ppm	2	1,000	XRF
Sr	ppm	2	1,000	XRF
Y	ppm	5	1,000	XRF
Zr	ppm	10	1,000	XRF
Nb	ppm	1	1,000	XRF
As	ppm	5	10,000	XRF
Cl	ppm	50	50,000	XRF
Cr	ppm	10	10,000	XRF
Cu	ppm	5	10,000	XRF
F	ppm	100	50,000	XRF
Ga	ppm	5	1,000	XRF
Ni	ppm	5	10,000	XRF
Pb	ppm	5	10,000	XRF
S	ppm	30	50,000	XRF
Se	ppm	5	10,000	XRF
Th	ppm	2	1,000	XRF
U	ppm	2	1,000	XRF
V	ppm	10	10,000	XRF
W	ppm	10	10,000	XRF
Zn	ppm	5	10,000	XRF

Table 10. Location and description of rock samples collected by International Tower Hill Mines Ltd. for trace-element geochemical analyses in the Chistochina mining district, Mount Hayes Quadrangle, Alaska. UTM coordinates are based on the Clark 1866 spheroid, NAD 27 datum, zone 6 projection. Note: --- = data not available.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
RK210311	63.1558	-144.8570	608068	7004606	6	Basalt; brown, aphanitic, igneous rock, with small silver-colored crystals.
RK210312	63.1561	-144.8560	608102	7004634	6	Gabbro; dark gray, phaneritic, igneous rock, with dark green and other dark crystals.
RK210313	63.1565	-144.8550	608149	7004684	6	Quartzite; light gray, orange-weathering.
RK210314	63.1563	-144.8550	608180	7004669	6	Quartzite; light gray, orange-weathering.
RK210315	63.1560	-144.8540	608224	7004631	6	Basalt; black rock, with dark staining.
RK210316	63.1555	-144.8520	608336	7004579	6	Basalt; black rock, with no visible staining or mineralization.
RK210317	63.1554	-144.8510	608383	7004572	6	Diorite; light gray.
RK210318	63.1548	-144.8500	608427	7004504	6	Diorite(?); dark gray.
RK210319	63.1541	-144.8500	608447	7004430	6	Diorite(?); light gray.
RK210321	63.1538	-144.8480	608535	7004395	6	Basalt; gray-green rock, with epidote alteration.
RK210322	63.1537	-144.8470	608565	7004387	6	Basalt; black rock, with no visible staining.
RK210323	63.1536	-144.8490	608480	7004371	6	Basalt; dark gray rock. Contains magnetite and veins with iron oxide.
RK210324	63.1535	-144.8480	608552	7004364	6	Basalt; dark gray rock, with magnetite.
RK210325	63.1532	-144.8460	608622	7004337	6	Basalt; dark gray rock, with magnetite.
RK210326	63.1475	-144.8220	609850	7003743	6	Andesite; dark gray rock, with specular hematite veins.
RK210327	63.1491	-144.8250	609691	7003911	6	Volcaniclastic, black rock. Possible andesite. Contains veins of specular hematite (5 percent), chalcopryrite (0.5 percent), and has epidote alteration.
RK210328	63.1491	-144.8250	609693	7003911	6	Volcaniclastic; black rock, with massive specular hematite and malachite in fractures.
RK210329	63.1491	-144.8250	609693	7003912	6	Volcaniclastic; black, fine-grained, bedded volcaniclastics, with malachite on fractures.
RK210331	63.1495	-144.8280	609565	7003947	6	Volcaniclastic; dark gray, quartz veinlets (3 mm wide) with euhedral pyrite (1 percent) and 5-mm-wide epidote selvages.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
RK210332	63.1495	-144.8280	609555	7003950	6	Volcaniclastic; dark gray, coarse-grained pyroclastic rock, with dark fragments in a white matrix, and disseminated euhedral pyrite. Contains vuggy quartz-pyrite veins.
RK210333	63.1491	-144.8260	609665	7003915	6	Volcaniclastic; dark brown, calc-silicate-altered volcaniclastics with pink and green bands, and brecciated pyrite-chalcopyrite veins.
RK210334	63.1491	-144.8260	609636	7003913	6	Tectonic breccia; orange, limonitic gossan with hematite, goethite, and minor quartz.
RK210335	63.1493	-144.8270	609627	7003927	6	Volcaniclastic; hematite in calc-silicate matrix.
RK210336	63.1492	-144.8270	609628	7003923	6	Volcaniclastic; green-gray, fine-grained, calc-silicate rock that is partially replaced by hematite. Contains malachite on fractures.
RK210337	63.1492	-144.8300	609446	7003918	6	Andesite; silicified andesite, with vuggy maghemite.
RK210338	63.1492	-144.8300	609446	7003915	6	Andesite; dark gray, epidote-altered andesite, with maghemite.
RK210339	63.1486	-144.8330	609300	7003837	6	Andesite; replaced by 25 percent disseminated pyrite. Rock is locally, weakly magnetic.
RK210341	63.1485	-144.8330	609300	7003835	6	Andesite; replaced by 25 percent disseminated pyrite. Rock is locally, weakly magnetic.
RK210342	63.1766	-144.8320	609245	7006961	6	Gabbro; black, coarse-grained rock, with rusty staining.
RK210343	63.1777	-144.8330	609200	7007088	6	Gabbro; green-gray.
RK210401	63.1446	-144.8090	610537	7003434	6	Talus near top of ridge; red rock contains pyrite.
RK210402	63.1445	-144.8090	610539	7003431	6	Talus near top of ridge; red-brown rock contains pyrite.
RK210403	63.1445	-144.8060	610677	7003433	6	Quartzite; green-gray rock, with pyrite.
RK210404	63.1442	-144.8030	610820	7003400	6	Rock contains pyrite.
RK210405	63.1441	-144.8020	610902	7003396	6	---
RK210409	63.1454	-144.8150	610242	7003516	6	Slate; 10 percent hematite and 0.5 percent chalcopyrite associated with moderate pervasive chloritization.
RK210475	63.1482	-144.7970	611115	7003859	6	Vein; vuggy (spongy) quartz-pyrite vein with silicified rhyolite wallrock. Also scorodite staining, minor iron-oxide staining, 1 percent pyrite, and trace chalcopyrite.
RK210476	63.1484	-144.7970	611133	7003877	6	Andesite; green-gray.
RK210477	63.1484	-144.7970	611126	7003880	6	Andesite; light gray, bleached, pyrite-altered rock.
RK210478	63.1483	-144.7970	611133	7003871	6	Vein; orange, quartz vein, and silicified andesite with quartz veinlets and occasional boxworks.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
RK210479	63.1483	-144.7970	611132	7003876	6	Andesite; green-gray, pyrite-altered andesite, with variable bleaching.
RK210480	63.1483	-144.7970	611126	7003876	6	Andesite; green-gray, least-altered andesite.
RK210482	63.1484	-144.7970	611121	7003883	6	Vein; red-brown, 4-cm-wide, moderately iron-oxidized quartz vein in andesite. Vein is vuggy with subhedral to euhedral crystals perpendicular to the vein margin.
RK210483	63.1486	-144.7970	611124	7003902	6	Vein; red-brown-stained, 2- to 3-cm-wide, white to clear, vuggy quartz vein, with subhedral to euhedral crystals perpendicular to the vein margin.
RK210484	63.1485	-144.7970	611130	7003895	6	Andesite; green-gray, slightly altered andesite next to vein margin. Contains trace amounts of euhedral pyrite.
RK210485	63.1486	-144.7970	611131	7003909	6	Andesite; green-gray, slightly altered andesite next to vein margin.
RK210486	63.1488	-144.7970	611122	7003924	6	Vein; orange, 2- to 3-cm-wide, highly iron-oxidized, gossanous quartz vein in altered andesite(?).
RK210487	63.1485	-144.7970	611131	7003898	6	Vein; red-brown, 1- to 2-cm-thick, gossanous quartz-iron oxide vein in altered andesite(?).
RK210488	63.1487	-144.7970	611127	7003912	6	Andesite; orange, highly altered andesite(?) next to a quartz-iron oxide vein. The original rock texture has been obliterated.
RK210489	63.1487	-144.7970	611128	7003912	6	Andesite; light gray, less-altered andesite with 5 percent iron-oxide pockets and trace amounts of relict pyrite.
RK210490	63.1486	-144.7970	611097	7003908	6	Vein; 10-cm-thick, sheeted quartz-iron oxide vein. Vein is vuggy with large subhedral to euhedral quartz crystals in altered andesite(?).
RK210492	63.1501	-144.7980	611056	7004068	6	Vein; orange, highly iron-oxidized, slightly silicified shear in bleached andesite, with pyrite pits.
RK210493	63.1500	-144.7980	611064	7004061	6	Tectonic breccia; orange, brecciated, moderately iron-oxidized, altered andesite, with no quartz or silicification.
RK210496	63.1432	-144.8020	610906	7003295	6	Hydrothermal breccia; silicified, iron-oxidized, gossanous breccia.
RK210497	63.1431	-144.8000	611011	7003286	6	Hydrothermal breccia; highly clay-altered, partially iron-oxidized, brecciated andesite(?).
RK210499	63.1448	-144.8040	610760	7003463	6	Jasperoid; red jasperoid, with white, vuggy veins and gossanous patches.
RK210500	63.1447	-144.8040	610765	7003456	6	Jasperoid; jasperoid and gossan with up to 20 percent sulfides (chalcopyrite and pyrite).

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
RK210502	63.1585	-144.8520	608311	7004912	6	Quartz-feldspar porphyry; orange rock, with pits from weathered sulfides and bleaching. Sample is from talus slope.
RK210503	63.1583	-144.8520	608326	7004887	6	Mafic intrusive; green-gray, aphanitic, mafic dike that shows glassy chill margins. Rock is found as float in talus field. Contains a coarse-grained acicular mineral and trace sulfide/sulfosalt(?) on margin (not sampled).
RK210504	63.1581	-144.8500	608416	7004869	6	Dacite; orange, moderately to highly iron-oxidized dacite, with a somewhat spongy texture from relict sulfide pits.
RK210505	63.1577	-144.8480	608494	7004831	6	Mafic intrusive; green-gray rock, with milky white, open-space, tension-gash quartz vein (1-2.5 cm thick) and a little iron oxide.
RK210506	63.1576	-144.8480	608514	7004822	6	Dacite(?); red-brown, highly iron-oxidized, gossanous dacite. No remaining sulfides.
RK210507	63.1527	-144.8580	608041	7004253	6	Unknown; orange, bleached, highly oxidized rock.
RK210508	63.1515	-144.8550	608167	7004128	6	Gossan; orange, highly oxidized gossan, with goethite after magnetite(?).
RK210509	63.1509	-144.8530	608312	7004067	6	Vein; diorite cut by orange quartz-iron oxide vein.
RK210510	63.1473	-144.8220	609867	7003717	6	Mafic intrusive; dark gray rock, with coarse specular hematite. Hematite after pyrite? Rock shows intermediate argillitic alteration.
RK210512	63.1473	-144.8220	609867	7003714	6	Mafic intrusive; green-gray rock, with 3 percent pyritic alteration.
RK210513	63.1474	-144.8230	609814	7003731	6	Gossan; orange, highly iron-oxidized rock, with 1 percent pyrite remaining, and minor goethite-hematite (not specularite).
RK210514	63.1463	-144.8210	609928	7003608	6	Tectonic breccia; orange, highly iron-oxidized breccia, with interstitial quartz veining and limonite-goethite.
RK210515	63.1449	-144.8160	610200	7003459	6	Unknown; orange, highly iron-oxidized shear(?), with goethite-hematite.
RK210516	63.1439	-144.8230	609813	7003340	6	Unknown; orange, highly iron-oxidized, gossanous, banded rock, with goethite-hematite. Associated with a hornfelsed outcrop.
RK210517	63.1519	-144.8590	608005	7004161	6	Tectonic breccia; orange, highly iron-oxidized tectonic breccia, with a somewhat gossanous texture.
RK210518	63.1768	-144.8300	609327	7006987	6	Gabbro; green-gray, pyroxene-hornblende gabbro float, with well-developed, iron-oxide slickensides along fracture surfaces.
RK210519	63.1775	-144.8290	609422	7007069	6	Gabbro; light gray, medium-grained, pyroxene-hornblende gabbro, with an uncommon violet-brown stain.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
RK210520	63.1820	-144.8260	609556	7007578	6	Gabbro; altered, magnetic, pyroxene-hornblende gabbro, with iron oxide and pyrrhotite. Contains thin quartz-feldspar veins.
RK210522	63.1812	-144.8250	609574	7007491	6	Gabbro; very coarse-grained, cumulate, pyroxene-hornblende gabbro, with minor (1 percent) interstitial pyrrhotite.
RK210523	63.1820	-144.8260	609556	7007578	6	Vein; hematite-quartz-carbonate vein.
RK210524	63.1820	-144.8260	609556	7007578	6	Tectonic breccia; red-brown pod of breccia bounded by iron-oxide slickensides.
RK210551	63.1473	-144.8220	609867	7003711	6	Volcaniclastic; yellow, iron-stained rock, with pyrite casts but no sulfides.
RK210552	63.1474	-144.8220	609870	7003727	6	Volcaniclastic; red-brown rock, with heavy iron staining, specular hematite, and pyrite. Hematite is in bands and selectively replaces pyrite.
RK210553	63.1468	-144.8240	609791	7003655	6	Unknown; black specular hematite with malachite staining.
RK210554	63.1461	-144.8240	609747	7003576	6	Volcaniclastic; red-brown, altered rock.
RK210555	63.1448	-144.8320	609357	7003423	6	Calc-silicate rock; green-gray calc-silicate rock with quartz veins. No sulfides present and not magnetic.
RK210556	63.1450	-144.8340	609266	7003442	6	Basalt; dark gray, highly magnetic basalt.
RK210557	63.1469	-144.8240	609786	7003669	6	Volcaniclastic; dark gray, mineralized rock, with malachite, azurite, and pyrite.
RK210558	63.1469	-144.8230	609798	7003675	6	Volcaniclastic; dark gray, mineralized rock, with malachite, auzurite, and sulfides. Rock has a limonitic color.
RK210559	63.1458	-144.8350	609194	7003524	6	Andesite; green-gray, strongly magnetic andesite with maghemite(?).
RK210561	63.1454	-144.8060	610666	7003536	6	Gabbro; dark gray gabbro dike with trace pyrite.
RK210562	63.1451	-144.8060	610695	7003497	6	Volcaniclastic(?); red-brown volcaniclastic, with strong pervasive silicification and vuggy quartz-pyrite veins.
RK210758	63.1455	-144.8020	610856	7003555	6	Volcanic breccia; black volcanic breccia with massive quartz veins. Breccia is largely replaced by specular hematite, 3 percent pyrite, and 2 percent chalcopyrite. Malachite and hematite are altered from chalcopyrite and specular hematite, respectively.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
RK210759	63.1446	-144.8030	610836	7003448	6	Volcanic; green-gray, moderately silicified volcanic rock, with 10 percent, disseminated, fine- to medium-grained, euhedral pyrite. Contains phenocrysts of plagioclase (< 1 mm long) in a gray-green, fine-grained groundmass.
RK210760	63.1396	-144.8210	609940	7002863	6	Volcanic; massive, pervasive replacement of volcanic rock with silica, magnetite, and specularite after magnetite. Rare, relict volcanic textures preserved where malachite is present.
RK210762	63.1452	-144.8100	610471	7003499	6	Volcaniclastic; orange, narrow zone of strong, pervasive, argillic alteration, with kaolinite after sericite and 5 percent pyrite. Oxidized pyrite imparts rusty-orange appearance to the rock.
RK336403	63.1456	-144.8140	610255	7003545	6	Volcaniclastic; red-brown rock that appears epiclastic. Contains 20 percent pyrite, strong pervasive chloritization, and strong silicification, with vuggy, clear, crystalline quartz-sulfide veinlets.
RK336404	63.1474	-144.8150	610200	7003735	6	Volcaniclastic; red-brown volcaniclastic sediment replaced with strong pervasive chloritization, moderate pervasive silicification, and 2 percent pyrite. Fluid's focus can be traced along bedding.
RK336405	63.1478	-144.8150	610236	7003785	6	Volcaniclastic; red-brown rock, with 30-cm-wide, vuggy quartz vein with 12 percent pyrite. Rock contains patchy moderate silicification and patchy moderate chloritization.
RK336406	63.1467	-144.8200	609993	7003652	6	Volcaniclastic; red-brown quartz fragments in an iron-oxide and pyrite matrix in a 10-cm-wide fault zone.
RK336407	63.1473	-144.8220	609879	7003721	6	Volcaniclastic; bedding horizons in volcaniclastic sediments replaced by patchy moderate silicification, specular hematite, and pyrite.
RK336408	63.1453	-144.8000	610987	7003526	6	Volcanic; mafic volcanic rock, with plagioclase phenocrysts and 5 percent pyrite.
RK336409	63.1461	-144.7970	611120	7003624	6	Veins; 5-m-wide, milky white and vitreous, quartz stockwork. Quartz shows inward growth.
RK336410	63.1467	-144.7960	611153	7003689	6	Volcanic; contains surficial weathering of chlorite to clay, 5-7 percent boxwork and non-boxwork pyrite, and hematite.
RK336411	63.1471	-144.7960	611183	7003740	6	Volcaniclastic; volcaniclastic sediments with a 1-m-wide zone containing 3-5 percent pyrite. Pyrite imparts a rusty appearance.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
RK336413	63.1563	-144.8560	608121	7004658	6	Volcanic; red-brown, mafic volcanic rock, with chlorite and sericite weathering to clay, and 2 percent pyrite. Overall, the rock contains weak pervasive chloritization.
RK800225	63.1033	-144.8090	610687	6998837	6	Volcanic; red, fine-grained, leached, pervasively silicified, volcanic rock, with 1-2 percent pyrite.
RK800226	63.1033	-144.8090	610687	6998838	6	Volcanic; red, fine-grained volcanic rock, with pervasive silicification and 2 percent pyrite.
RK800227	63.1033	-144.8090	610687	6998838	6	Volcanic; red-brown, rusty, 2-cm-wide, quartz-iron oxide vein.
RK800403	63.1453	-144.8030	610817	7003530	6	Hydrothermal breccia; white-purple breccia, with some vuggy quartz-sulfide veinlets, up to 2 percent disseminated pyrite and quartz replacing some purple-red volcanic clasts, local chert-jasperoid alteration, and strong pervasive silicification.
RK800404	63.1452	-144.8030	610847	7003518	6	Volcaniclastic; green, pervasively silicified, volcaniclastic rock replaced by purple, semi-massive pyrite (10 percent) and quartz. Contains a few thin, small, vuggy quartz pockets.
RK800406	63.1500	-144.9110	605392	7003873	6	Volcanic; orange, strongly silicified and pyritized (5 percent) volcanic or exhalite rock that forms gossanous cliffs.
RK800407	63.1660	-144.7020	615834	7006009	6	Skarn; red-green, very fine-grained skarn, with pervasive carbonate alteration and carbonate stockwork veins. Rock contains 1 percent, disseminated pyrite, 0.5 percent magnetite, and a fine-grained, green mineral (pyroxene?).
RK800408	63.1621	-144.6940	616247	7005590	6	Volcanic; dark gray, very fine-grained to aphanitic, strongly silicified rock, with a sulfide smell, 1 percent disseminated pyrite, and veinlets of quartz and carbonate.
RK800409	63.1542	-144.8600	607935	7004421	6	Volcanic; green-gray, strong pervasively epidote-altered, mafic volcanic rock, with 2 percent disseminated pyrite rimmed by specular hematite, and euhedral specular hematite on some fractures. Contains a few amygdules filled with calcite and malachite.
RK800410	63.1543	-144.8600	607933	7004436	6	Mafic volcanic; green-gray, strong pervasively epidote-altered, mafic volcanic rock, with 1 percent disseminated pyrite and 2 percent malachite. Contains a few amygdules filled with pyrite and specular hematite.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
RK800411	63.1547	-144.8590	607974	7004482	6	Volcanic; orange, feldspar-porphyritic, mafic volcanic, with strong pervasive silicification, moderate patchy propylitic alteration, and 3 percent disseminated pyrite.
RK800412	63.1550	-144.8590	607986	7004510	6	Volcanic; purple-orange gossan (altered volcanics) with 1 percent, disseminated pyrite and very strong, pervasive silicification. Groundmass is gray-white on fresh surfaces.
RK800413	63.1552	-144.8590	607985	7004536	6	Mafic volcanic; orange-red, oxidized, mafic volcanic, with strong pervasive silicification, 2 percent disseminated pyrite, and quartz-iron oxide veinlets.
RK801642	63.1530	-144.8610	607870	7004287	6	Dacite; green, fine-grained, porphyritic dacite, with a 1-cm-thick, sugary, quartz vein in a fine-grained, dark magnetic host, and sheeted, mm-sized, quartz veins.
RK801643	63.1531	-144.8610	607872	7004294	6	Dacite; yellow, limonitic, porphyritic dacite, with cm-sized holes in a boxwork gossan. Probable carbonate.
RK801644	63.1528	-144.8600	607923	7004264	6	Dacite; limonitic, dacite porphyry, with irregular cavities and breccia with quartz and iron-oxide fill. Quartz crystals are < 1 mm in diameter.
RK801645	63.1529	-144.8600	607949	7004274	6	Rhyolite; gray-green, porphyritic rock, with compacted, welded tuff-type fabric. Rock is silicified to a white, very fine-grained, sugary matrix with quartz crystal-lined vugs.
RK801646	63.1526	-144.8580	608012	7004243	6	Dacite; limonitic, porphyritic dacite, with black botryoidal, goethite veins and vuggy, iron-oxide gossan.
RK801647	63.1527	-144.8570	608064	7004253	6	Dacite(?); gossanous, siliceous, limonitic dacite, with quartz-limonite boxwork but no veining.
RK801648	63.1523	-144.8540	608232	7004213	6	Unknown; orange, fine-grained, rusty brown rock, with limonite.
RK801649	63.1533	-144.8550	608165	7004328	6	Tectonic breccia; white, angular, volcanic clasts in limonite matrix, with some boxwork gossan and strong supergene oxidation.
RK801650	63.1533	-144.8550	608158	7004323	6	Andesite; dark green, very fine-grained, igneous rock, with < 1 percent scattered pyrite blebs (1-2 mm) and possible silicification along one fracture.
RK801652	63.1523	-144.8540	608237	7004218	6	Volcaniclastic; light gray, altered, fine-grained rock, with relict quartz phenocrysts. Contains quartz and 0.5 percent pyrite alteration.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
RK801653	63.1523	-144.8540	608250	7004218	6	Volcaniclastic; rusty, fine-grained rock, with quartz and 1 percent pyrite alteration.
RK801654	63.1520	-144.8520	608331	7004185	6	Diorite; light gray, fine-grained, crystalline rock, with 2 percent pyrite (< 4 mm) disseminated and in veins.
RK801655	63.1517	-144.8510	608382	7004155	6	Volcaniclastic; dark gray, felsic to intermediate rock (possible crystal tuff), with 2 percent, 1-mm-wide, planar, pyrite veinlets with 3-mm-wide, iron-oxide selvages.
RK801656	63.1473	-144.8220	609862	7003714	6	Andesite; dark green andesite, with 5 percent specular hematite, trace pyrite, and 1 percent malachite on fractures.
RK801657	63.1496	-144.8260	609657	7003969	6	Volcaniclastic; minor, orange, limonitic fault, with a 1-cm-wide quartz vein and small quartz veinlets.
RK801658	63.1491	-144.8300	609457	7003907	6	Fault gouge; limonitic, sheared rock, with 5 percent disseminated pyrite.
RK801659	63.1486	-144.8300	609435	7003846	6	Andesite; limonitic, goassanous andesite, with epidote, 5 percent magnetite, silica, and 3 percent pyrite alteration.
RK801660	63.1486	-144.8300	609437	7003843	6	Andesite; dark green, massive andesite, with 1 percent pyrite veinlets.
RK801662	63.1392	-144.8600	607962	7002745	6	Volcaniclastic; felsic, lithic tuff, with 1 percent, disseminated, anhedral pyrite.
RK801834	63.1452	-144.8020	610889	7003519	6	Volcanic; yellow-orange-gray-red brown dacitic tuff(?), with strong pervasive silicification and strong pervasive propylitic alteration. Also contains 25 percent oxidized pyrite, 5 percent chalcopyrite, and quartz.
RK801835	63.1451	-144.8020	610905	7003506	6	Dacite; red-brown, fine-grained, partially brecciated dacite tuff, with a few partially vuggy, quartz veins < 2 mm wide with 3 percent, strongly oxidized sulfides. Also contains strong propylitic and silicic alteration, and weak to moderate argillitic alteration in a shear zone.
RK801836	63.1592	-144.8370	609060	7005013	6	Tectonic breccia; green-gray, fine- to medium-grained, chloritic dacite and quartz breccia. Contains partially vuggy, medium-grained, euhedral quartz and moderately to strongly oxidized pyrite (anhedral masses, disseminated, and in veins). Rock is also strongly silicified and chloritized.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
RK801837	63.1592	-144.8370	609055	7005017	6	Volcaniclastic; orange-green-red brown, fine- to medium-grained, strongly chloritized dacite, with moderately to strongly oxidized, 10 percent disseminated pyrite and 3 percent chalcopyrite.
RK801838	63.1576	-144.8400	608920	7004831	6	Tectonic breccia; orange-yellow-red brown, milky to glassy, fine- to medium-grained quartz and dacite(?) breccia. Breccia is partially vuggy, with euhedral quartz and 5 percent, disseminated, subhedral to euhedral pyrite. Rock is strongly oxidized, silicified, and argillic altered.
RK801840	63.1580	-144.8390	608959	7004884	6	Tectonic breccia; orange-white-green, fine- to medium-grained, partially vuggy quartz and dacite breccia, with 4 percent, disseminated, subhedral to euhedral pyrite, and moderate to strong iron-oxide alteration. Also with patchy, strong silicification and chloritization.
RK801841	63.1576	-144.8400	608922	7004829	6	Tectonic breccia; orange-yellow-red brown, milky to glassy, fine- to medium-grained, partially vuggy quartz and dacite(?) breccia, with euhedral quartz, 3 percent, disseminated, subhedral to euhedral pyrite, and moderate to strong iron-oxide staining. Also with patchy but strong silicification and argillitic alteration.
RK801842	63.1555	-144.8440	608736	7004594	6	Tectonic breccia; orange-yellow-red brown, milky to glassy, fine- to medium-grained, vuggy quartz and dacite(?) breccia, with euhedral quartz and 7 percent oxidized sulfides with iridescent tarnish. Rock also has strong, patchy argillitic alteration.
RK801843	63.1523	-144.8470	608598	7004237	6	Dacite; orange-yellow-red brown-green, fine- to medium-grained, strongly chloritized, weakly brecciated dacite. Breccia is partially vuggy, with oxidized 10 percent pyrite and 2 percent chalcopyrite with iridescent tarnish. Rock has patchy, strong argillitic alteration.
RK801844	63.1489	-144.8410	608884	7003861	6	Massive quartz; milky white, sparsely vuggy, coarse crystalline quartz, with 1 percent oxidized pyrite.
RK801845	63.1344	-144.8510	608450	7002234	6	Vein; milky white, coarse crystalline, sparsely vuggy, anhedral to subhedral, 7-cm-wide, quartz vein in a moraine, with 3 percent, partially oxidized pyrite and a blue-green copper mineral (malachite?).
RK801846	63.1420	-144.7180	615130	7003310	6	Tectonic breccia; orange-yellow-red brown-green-white, fine- to coarse-grained breccia, with partially vuggy quartz and 5 percent sulfide. Contains strong iron-oxide and argillitic alteration.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
RK801847	63.1365	-144.7130	615399	7002703	6	Tectonic breccia; orange-red brown-yellow-green-white, strongly oxidized, vuggy breccia, with microcrystalline to medium crystalline quartz and 10 percent disseminated pyrite.
RK801848	63.1381	-144.7210	615007	7002867	6	Tectonic breccia; orange-red brown-yellow-green, vuggy, weakly brecciated quartz and pyrite. Contains microcrystalline (chalcedony) to medium crystalline quartz and 10 percent, disseminated, euhedral to anhedral pyrite ≤ 1 mm in diameter.
RK801865	63.1530	-144.7520	613349	7004469	6	Shale; black, brecciated shale, with milky white, fine- to medium-grained crystalline, stockwork quartz veins hairline to 3 cm wide. Moderate red brown-yellow iron-oxide staining and 1 percent oxidized pyrite.
RK801866	63.1653	-144.7630	612765	7005824	6	Vein; milky white-smoky-glassy, coarse crystalline, quartz-sulfide vein in phyllite, with 1 percent oxidized pyrite. Vein is several centimeters wide.
RK801867	63.1653	-144.7630	612766	7005824	6	Tectonic breccia; orange-red brown-yellow, fine- to medium-grained, quartz and phyllite breccia that is strongly iron oxidized, and contains 2 percent oxidized pyrite.
RK801868	63.1653	-144.7630	612765	7005824	6	Tectonic breccia; gray-green, fine-grained, siliceous, weakly brecciated, pyritic rock, with milky, fine-grained crystalline quartz veinlets (hairline to 2 mm wide) and masses with 5 percent sulfide. Shows strong, pervasive chloritization and silicification.
RK801870	63.1653	-144.7630	612764	7005827	6	Vein; red-brown, milky to glassy, sugary, fine to medium crystalline, quartz vein, with 2 percent oxidized sulfides and strong iron-oxide staining along fractures.
RK801871	63.1623	-144.7760	612135	7005467	6	Vein; milky white-smoky-glassy, coarse crystalline quartz vein fragment several centimeters wide, with 1 percent oxidized pyrite.
RK801891	63.1536	-144.8620	607847	7004345	6	Gabbro; dark gray gabbro dike(?), with cubes of pyrite.
RK801892	63.1525	-144.8620	607843	7004230	6	Dacite; medium brown dacite, with chalcopyrite, idocrase(?), and iron-oxide staining.
RK801893	63.1499	-144.8630	607779	7003934	6	Vein; massive, milky white, quartz veins. Possible shear zone.
RK801894	63.1493	-144.8600	607954	7003876	6	Diorite; green-gray, non-magnetic diorite. Sample collected at a contact with magnetic dacite.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
RK801895	63.1493	-144.8620	607822	7003869	6	Dacite; dark gray, magnetic dacite in contact with non-magnetic diorite. Contains xenoliths.
RK801896	63.1489	-144.8610	607882	7003832	6	Dacite; green dacite, with malachite(?) and sulfides.
RK801897	63.1477	-144.8220	609853	7003760	6	Volcaniclastic; dark gray, banded rock, with malachite and iron oxide in veinlets, specular hematite, and pyrite.
RK801898	63.1471	-144.8220	609880	7003697	6	Volcaniclastic; red-brown rock, with heavy, limonite-colored, iron-oxide staining.
RK801899	63.1472	-144.8220	609861	7003707	6	Volcaniclastic; red-brown rock, with heavy, limonite-colored staining, pyrite casts, and specular hematite. Rock is half pyrite and half hematite?
RK801955	63.1313	-144.8650	607752	7001857	6	Vein; toothy quartz stockwork in sericite-altered granite (boulder of float from cirque), with 1 percent each of chalcopyrite, pyrite, galena, and fine-grained arsenopyrite(?).
RK801956	63.1439	-144.7970	611114	7003379	6	Hydrothermal breccia; wide-spread area of vuggy, quartz stockwork and breccia with silica cement.
RK801957	63.1455	-144.7940	611305	7003562	6	Vein; vuggy, quartz breccia, with altered volcanic clasts.
RK801958	63.1142	-144.6950	616388	7000252	6	Vein; white toothy quartz vein, with 1 percent disseminated galena and 0.5 percent pyrite.
RK801959	63.1088	-144.8210	610065	6999432	6	Quartz porphyry; bone-white quartz porphyry, with quartz stockwork, trace to 1 percent chalcopyrite, and weak argillic alteration.
RK801960	63.1438	-144.7120	615400	7003521	6	Volcaniclastic; dark gray rock containing 8-10 percent dusty pyrite and carbonate veins.
RK801961	63.1442	-144.7120	615414	7003562	6	Volcaniclastic; equigranular volcaniclastic rock, with 2 percent pyrite and 0.5 percent chalcopyrite.
RK801962	63.1443	-144.7120	615418	7003580	6	Volcaniclastic; semimassive (60 percent) pyrite lense(?) within pyritic volcaniclastic rocks.
RK801975	63.1310	-144.8650	607762	7001828	6	Tectonic breccia; yellow-tan-red brown-orange, fine- to coarse-grained, silicified, granite(?) breccia, with vuggy, glassy to milky, coarse crystalline, quartz veins 1-4 cm wide, and 2 percent, disseminated, anhedral to euhedral, partially oxidized pyrite. Rock also shows strong silicification and moderately pervasive sericitic alteration.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
RK801976	63.1310	-144.8650	607761	7001827	6	Volcaniclastic; tan-yellow-red brown, fine- to coarse-grained, carbonate-altered, volcaniclastic rock, with partially vuggy, quartz-calcite-ankerite veins and 3 percent pyrite.
RK801977	63.1591	-144.8530	608275	7004983	6	Tectonic breccia; tan-yellow-red brown-orange-pink, fine-grained, sugary, partially vuggy, silicified breccia, with 2 percent arsenopyrite and 1 percent pyrite. Strong iron-oxide alteration along fractures.
RK801978	63.1630	-144.8510	608338	7005416	6	Quartzite(?); orange-yellow-red brown-green-gray, silicified, fine-grained, sugary, quartz-sulfide breccia, with strong iron-oxide alteration along fractures, 6 percent arsenopyrite, and 5 percent pyrite.
RK801980	63.1635	-144.8510	608344	7005476	6	Tectonic breccia; orange-yellow-red brown-green-gray, silicified, vuggy, fine-grained, sugary, quartz-sulfide breccia, with strong iron-oxide alteration and 10 percent, fine- to medium-grained, anhedral to subhedral, oxidized sulfides.
RK801981	63.1476	-144.7990	611039	7003792	6	Tectonic breccia; yellow-orange-red brown, fine- to medium-grained, partially vuggy, silicified breccia, with 5 percent, strongly oxidized, euhedral pyrite.
RK801982	63.1483	-144.7980	611062	7003871	6	Tectonic breccia; light green-gray to dark red-brown, microcrystalline to fine-grained, sugary, siliceous breccia, with hairline to 4-mm-wide, glassy to milky, partially vuggy quartz veins and 5 percent, disseminated, fine-grained pyrite.
RK801983	63.1483	-144.7980	611063	7003869	6	Volcaniclastic; orange to dark red-brown, silicified volcaniclastic(?) rock, with cross-cutting, hairline to 5-mm-wide, glassy, vuggy, quartz veinlets and 2 percent, disseminated, fine-grained pyrite. Rock is strongly iron-oxide altered.
RK801984	63.1500	-144.8000	610967	7004051	6	Tectonic breccia; patchy light green-gray to dark red-brown, microcrystalline to fine-grained, sugary, siliceous breccia, with hairline to 4-mm-wide, glassy to milky, partially vuggy, quartz veinlets and 1 percent, disseminated, fine-grained pyrite. Strong iron-oxide alteration.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
RK801985	63.1513	-144.8000	610947	7004204	6	Vein; light green-gray, red, and orange, microcrystalline to medium-grained, sugary, partially vuggy, quartz fragments (up to 25 cm in diameter) in zone of fault gouge, with 5 percent, disseminated, fine-grained pyrite.
RK801986	63.1572	-144.8070	610573	7004841	6	Vein; white milky-rosy-smoky, fine to coarse crystalline, vuggy, quartz vein and breccia, with 3 percent, fine- to medium-grained, anhedral, bronze-colored, copper sulfide (chalcopyrite and [or] cuprite[?]), 2 percent, green, earthy malachite, and 2 percent, partially oxidized pyrite. The vein is in a green, microcrystalline to fine-grained, silicified host rock.
RK801987	63.0798	-144.7570	613408	6996317	6	Diorite; speckled light green-gray to dark green, fine-grained, feldspar-biotite diorite, with 4 percent, disseminated, fine- to medium-grained, anhedral pyrite.
RK801988	63.1306	-144.7810	611979	7001922	6	Tectonic breccia; orange, green-gray, and red-brown, microcrystalline to medium crystalline, quartz breccia, with hairline to 2-mm-wide quartz veins containing 4 percent, disseminated, medium-grained, anhedral pyrite. Breccia is strongly silicified, and strongly oxidized on weathered surfaces.
RK801990	63.1835	-144.7570	612987	7007860	6	Vein; milky white, green-gray, orange, red-brown, and black, coarse crystalline, sparsely vuggy, quartz vein fragments, with 5 percent, irregular masses of coarse-grained, crystalline graphite, and 1 percent pyrite as vein- and fracture-fill and disseminated. Strong iron-oxide alteration along fractures.
RK801991	63.1364	-144.7230	614899	7002679	6	Tectonic breccia; orange, red-brown, yellow, green-gray, and white, fine- to coarse-grained, vuggy, highly oxidized breccia, with angular volcanoclastic rock fragments and quartz clasts in a silica + iron-oxide cement. Contains 2 percent sulfide and strong iron-oxide alteration.
RK801992	63.1362	-144.7240	614833	7002651	6	Tectonic breccia; dark red-brown, orange, yellow, red, and green-gray, microcrystalline to fine-grained breccia, with quartz and 10 percent, anhedral to euhedral pyrite. Shows patchy argillic alteration.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
RK801993	63.1360	-144.7250	614820	7002626	6	Tectonic breccia; white, dark red-brown, orange, and yellow, brecciated, quartz stockwork veins 1 mm to 5 cm wide, with white to glassy, vuggy quartz and 2 percent, oxidized sulfide.
RK801994	63.1374	-144.7230	614869	7002784	6	Volcaniclastic; green-gray to red-brown, microcrystalline to fine crystalline, silicified, partially vuggy, volcaniclastic rock, with 8 percent, disseminated, fine-grained, anhedral to euhedral pyrite and 1 percent arsenopyrite.
RK801995	63.1396	-144.7260	614717	7003031	6	Tectonic breccia; dark red-brown, orange, yellow, red, and green-gray, microcrystalline to fine-grained quartz and pyrite breccia, with vuggy, sheeted, cross-cutting, quartz veins 0.25 to 4 cm wide, and 5 percent, medium-grained, anhedral to euhedral pyrite. Strong oxidation along fractures and in the vuggy veins.
RK801996	63.1402	-144.7280	614606	7003089	6	Rhyolite/quartz porphyry; light green-gray, orange, and yellow rhyolite/quartz porphyry, with 8 percent, fine-grained, anhedral to euhedral pyrite in vugs. Strong iron-oxide alteration along fractures and in some vugs.
RK801997	63.1402	-144.7290	614601	7003089	6	Rhyolite/quartz porphyry; light green-gray, orange, and yellow rhyolite/quartz porphyry, with vuggy, 1- to 25-mm-wide, cross-cutting quartz veins containing 3 percent, fine-grained, anhedral to euhedral pyrite. Strong iron-oxide alteration along fractures and in vugs.
RK802158	63.1621	-144.8620	607806	7005297	6	Basalt; epidote-altered basalt, with anastomosing, 1-mm-wide, quartz veinlets forming bands up to 1 cm wide. Thicker veinlets are slightly vuggy.
RK802159	63.1641	-144.8650	607640	7005518	6	Volcaniclastic; highly iron-oxide altered, gossanous, sheared volcaniclastic rock, with remnant magnetite.
RK802160	63.1649	-144.8660	607562	7005600	6	Volcaniclastic; sheared and cemented with iron oxide.
RK802161	63.1654	-144.8660	607597	7005658	6	Volcaniclastic; sheared and cemented with iron oxide.
RK802299	63.1446	-144.8040	610785	7003451	6	Jasperoid; white, vuggy, quartz veins and relatively few gossanous patches.
RK802300	63.1451	-144.8030	610854	7003510	6	Andesite; bleached, silicified, gossanous andesite(?), with 15 percent disseminated pyrite + arsenopyrite.
RK802489	63.1767	-144.8320	609256	7006977	6	Hornfels; black hornfelsed argillite 3 m from gabbro/diorite contact.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
RK802490	63.1763	-144.8330	609205	7006929	6	Hornfels; black hornfelsed argillite.
RK802491	63.1765	-144.8330	609186	7006950	6	Diorite; medium-grained diorite, with 30 percent, 1-3 mm, stubby, hornblende phenocrysts. Contains hairline fractures filled with 1 percent specular hematite and 0.5 percent malachite. Sample is float.
RK802511	63.1452	-144.8010	610921	7003516	6	Andesite porphyry; tan and reddish-brown rock, with strong argillic alteration and 1-m-wide shear zone(?).
RK802513	63.1452	-144.8010	610913	7003517	6	Andesite porphyry; red-brown rock, with strong argillic alteration and 10 percent pyrite in a 1-m-wide shear zone(?).
RK802514	63.1451	-144.8010	610931	7003513	6	Andesite porphyry; red-brown rock, with massive area of 4- to 5-mm-wide, anastomosing quartz veins with iron-oxide-stained vugs.
RK802515	63.1452	-144.8010	610933	7003519	6	Andesite porphyry; red-brown rock, with 5- to 6-mm-wide, vuggy, iron-stained quartz veins.
RK802516	63.1452	-144.8010	610936	7003517	6	Andesite porphyry; red-brown rock in 1-m-wide shear zone(?) with strong argillic alteration.
RK802517	63.1452	-144.8010	610947	7003515	6	Andesite porphyry; red-brown rock in 1-m-wide shear zone(?) with strong argillic alteration and vuggy quartz veins.
RK802518	63.1452	-144.8000	610960	7003518	6	Andesite porphyry; red-brown rock in 0.67-m-wide shear zone with strong argillic alteration and vuggy quartz veins.
RK802519	63.1452	-144.8000	610970	7003520	6	Andesite porphyry; red-brown rock in 1-m-wide shear zone with strong argillic alteration.
RK802520	63.1453	-144.8000	610988	7003534	6	Andesite porphyry; red-brown rock in 1.5-m-wide shear zone(?) with strong argillic alteration and 1 percent pyrite.
RK802524	63.1517	-144.7980	611051	7004252	6	Felsic intrusive; green-gray felsic intrusive (diorite?), with 1- to 2-mm-wide, sheeted, quartz veins and some iron-oxide staining.
RK802525	63.1521	-144.7980	611036	7004286	6	Felsic intrusive; red-brown intrusive in recessed saddle with 25 percent pyrite and slickensides (possible fault/shear).
RK802526	63.1521	-144.7980	611045	7004295	6	Quartz; red-brown, vuggy, iron-stained, silicified jasperoid and massive quartz.
RK802527	63.1522	-144.7980	611043	7004301	6	Quartz; green andesite, with vuggy, massive quartz veins containing 15 percent pyrite and 5 percent chalcopyrite. Vugs are associated with epidote(?).

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
RK802528	63.1523	-144.7980	611043	7004313	6	Andesite; red-brown andesite, with heavy iron staining, 30 percent pyrite, and 15 percent chalcopyrite.
RK802529	63.1525	-144.7980	611041	7004338	6	Volcaniclastic; red-brown volcaniclastic dacite(?) in a recessed saddle with 2-m-wide shear zone(?) and 10 percent pyrite.
RK802530	63.1528	-144.7980	611033	7004370	6	Andesite; red-brown, heavily iron-stained andesite, with massive area of 3-to 4-mm-wide quartz veins and 10 percent pyrite.
RK802531	63.1530	-144.7980	611029	7004390	6	Dacite porphyry; green dacite porphyry(?), with epidote and iron staining.
RK802533	63.1535	-144.7990	611023	7004445	6	Dacite porphyry; red-brown dacite porphyry in 0.5-m-wide shear zone(?).
RK802534	63.1543	-144.7980	611026	7004536	6	Andesite; green andesite, with massive, milky-white quartz veins.
RK802535	63.1544	-144.7980	611042	7004545	6	Dacite; red-brown, gossanous(?) dacite(?), with iron staining.
RK802536	63.1545	-144.7990	610990	7004554	6	Andesite; red-brown rock in 1-m-wide shear zone(?) with argillic alteration.
RK802537	63.1493	-144.7950	611208	7003987	6	Andesite; red-brown rock with 1-mm-wide pyrite veinlets (10 percent pyrite) in a 1.5-m-wide shear zone(?) with argillic alteration.
RK802538	63.1494	-144.7950	611196	7003993	6	Andesite; red-brown andesite(?), with quartz-jasperoid veinlets in a 2-m-wide shear zone with argillic alteration.
RK802539	63.1495	-144.7960	611186	7004002	6	Andesite porphyry; green andesite porphyry, with pyrite and malachite in light green phenocrysts that react to HCl.
RK802540	63.1498	-144.7960	611154	7004034	6	Andesite porphyry; green, silicified andesite porphyry, with some jasperoid, 5 percent pyrite, and slickensides.
RK802541	63.1499	-144.7960	611151	7004049	6	Andesite; red-brown andesite(?), with 5 percent pyrite disseminated and in 1-to 2-mm-wide quartz veinlets.
RK802543	63.1506	-144.7970	611098	7004124	6	Andesite; red-brown, silicified, gossanous andesite, with vuggy quartz veins and iron-oxide staining.
RK802544	63.1519	-144.7980	611039	7004272	6	Mafic intrusive; dark brown intrusive, with iron staining and 5 percent magnetic pyrrhotite.
RK802545	63.1619	-144.8160	610100	7005356	6	Dacite porphyry; red-brown porphyry, with massive, 2- to 3-m-wide, 1-m-long quartz veins and heavy iron-oxide staining.
RK802546	63.1612	-144.8160	610099	7005277	6	Dacite porphyry; red-brown dacite porphyry in a 5- to 6-cm-wide, 5-m-long shear zone with heavy iron-oxide staining.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
RK802547	63.1610	-144.8160	610105	7005248	6	Dacite porphyry; green dacite porphyry, with 1- to 3-mm-wide quartz veinlets in a highly fractured, iron-oxide-stained zone.
RK802548	63.1606	-144.8160	610104	7005202	6	Dacite; red-brown dacite porphyry with a 2-m-wide, brecciated fault zone that contains 25 percent pyrite.
RK802549	63.1597	-144.8150	610176	7005107	6	Dacite; red-brown dacite, with 25 percent, semi-massive pyrite, 2-cm-wide chalcopyrite vein, and 5- to 6-mm-wide quartz veins.
RK802550	63.1596	-144.8150	610186	7005101	6	Dacite; red-brown dacite, with semi-massive and vein-fill pyrite (60 percent of rock).
RK802551	63.1602	-144.8150	610180	7005166	6	Dacite porphyry; green dacite porphyry, with 3- to 4-mm-wide quartz veinlets with 20 percent pyrite.
RK802553	63.1606	-144.8160	610135	7005207	6	Dacite porphyry; green dacite porphyry, with massive area of 2- to 3-mm-wide quartz veins and iron-oxide staining in a riedel shear zone.
RK802681	63.1432	-144.8030	610837	7003295	6	Vein; dacite, with vuggy, iron-oxide stained, white, quartz vein in 15-cm-wide shear.
RK802682	63.1432	-144.8030	610824	7003294	6	Vein; dacite, with gossanous, vuggy, quartz vein in shear up to 2 m wide.
RK802683	63.1432	-144.8030	610834	7003293	6	Vein; dacite, with slightly vuggy, white, quartz vein in shear zone.
RK802684	63.1433	-144.8020	610874	7003307	6	---
RK802685	63.1432	-144.8030	610849	7003294	6	Vein; variably silicified, 50-cm-wide shear, with boxworks and strong iron-oxide alteration.
RK802686	63.1429	-144.8020	610880	7003259	6	Fault gouge; iron-oxide-altered gouge between andesite and volcanoclastic unit.
RK802687	63.1428	-144.8020	610880	7003251	6	Jasperoid; volcanoclastic rock, with jasperoid and very little iron oxide.
RK802688	63.1429	-144.8020	610869	7003259	6	Gouge zone; discontinuous, highly oxidized gouge, with sulfide pits and very little silicification.
RK802689	63.1442	-144.8020	610891	7003400	6	Andesite; highly altered andesite(?) with gossanous patches and significant clay and iron oxide.
RK802691	63.1472	-144.8000	610976	7003746	6	Vein; oxidized, clay-altered andesite, with 15-cm-wide shear containing 15 percent pyrite and gossanous patches.
RK802692	63.1351	-144.7410	613998	7002498	6	Vein; vuggy, white quartz + iron-oxide vein with gossanous patches. Sample is float.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
RK802693	63.1380	-144.7400	614009	7002824	6	Dacite; 3-m-wide, white, highly clay-altered iron oxide + dacite(?) breccia.
RK802694	63.1377	-144.7410	614006	7002785	6	Dacite; matrix-supported, quartz-clay-altered, dacite breccia, with minor iron-oxide staining. Taken from margin of gouge zone.
RK802695	63.1375	-144.7410	613997	7002765	6	Dacite; altered, iron-oxide-cemented dacite breccia from margin of fault gouge. No silicification present.
RK802696	63.1376	-144.7410	614003	7002775	6	Vein; 10-cm-wide, vuggy, sheeted, quartz vein from a fault gouge zone. Contains iron-oxide-lined vugs.
RK802697	63.1355	-144.7430	613890	7002535	6	Dacite; sheared quartz vein sample taken from an iron-oxide zone in the dacite. Vein contains sulfide pits and trace chalcopyrite.
RK802698	63.1354	-144.7430	613885	7002530	6	Andesite porphyry; altered porphyritic andesite(?), with a trace chrysocolla-malachite.
RK802699	63.1350	-144.7440	613854	7002484	6	Dacite; sheeted, 50-cm-wide, quartz vein with sulfide pits from 1-m-wide oxidized zone. Only the quartz vein was sampled.
RK802700	63.1737	-144.8280	609471	7006651	6	Basalt; red-brown, porphyritic basalt, with plagioclase phenocrysts in an aphanitic groundmass. Red-stained chips were preferentially sampled.
RK802736	63.1250	-144.8370	609211	7001209	6	Granite; medium-grained rock, with pyrite disseminated and in fractures.
RK802737	63.1249	-144.8360	609260	7001195	6	Andesite; strongly chlorite-epidote-altered andesite(?), with 10 percent boxworks after pyrite, and 1 percent pyrite remaining.
RK802738	63.1246	-144.8340	609326	7001165	6	Andesite; sheared mafic rock, with abundant pyrite (5 percent) and iron oxide.
RK802917	63.1460	-144.7970	611112	7003615	6	Andesite; light gray rock, with 4- to 13-mm-wide, locally vuggy, quartz veins that vary in density from very open to intense stockwork/breccia zones. Weak iron-oxide staining.
RK802918	63.1461	-144.7970	611125	7003626	6	Andesite; orange, gossanous, recessively weathering andesite, with cubic pyrite casts, locally strongly disseminated iron oxide, and rare, white, siliceous zones.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
RK802919	63.1463	-144.7970	611125	7003643	6	Andesite; orange, recessively weathering andesite in 5-m-wide saddle, with intense iron-oxide alteration of pyrite, 5 percent cubic pyrite casts, and no remaining sulfides. Possible specular hematite on fractures.
RK802920	63.1464	-144.7970	611144	7003655	6	Dacite; dark red to yellow-orange gossan, with 2-10 percent cubic pyrite casts and local siliceous zones. Weakly recessively weathering.
RK802921	63.1467	-144.7960	611163	7003695	6	Dacite; orange, recessively weathering, gossanous zones in dacite, with a core of white siliceous material and 15 percent cubic pyrite casts. Altered wall rock contains up to 5 percent pyrite casts.
RK802922	63.1474	-144.7960	611199	7003774	6	Dacite porphyry; orange, 40-cm-wide, recessively weathering, strongly gossanous zone in dacite, with a core of very pitted rock (pits are not after cubic pyrite, but more vesicular-looking). Specular hematite present on fractures.
RK802923	63.1484	-144.7940	611256	7003885	6	Dacite; dark red, 1-m-wide, gossanous lense in dacite, with 5 percent cubic pyrite casts. Five additional, parallel, gossanous zones that are less red in color are present within 15 meters.
RK802924	63.1493	-144.7960	611189	7003984	6	Andesite; light gray, silicified andesite, with 2 percent disseminated pyrite and 1- to 3-mm-wide, vuggy quartz veins, which have a deep red color on their margins.
RK802925	63.1498	-144.7960	611145	7004044	6	Andesite; 60 cm zone of white, siliceous, altered andesite, with 10 percent cubic pyrite casts.
RK802926	63.1504	-144.8000	610963	7004103	6	Andesite; white, intensely silica-altered andesite, with pale green sericite(?), 10 percent cubic pyrite casts, and 1 percent remnant pyrite.
RK802928	63.1512	-144.8000	610981	7004190	6	Andesite; dark red brown, strongly silicified andesite(?) with no original texture. Contains 6 percent disseminated pyrite and 4 percent cubic pyrite casts.
RK802929	63.1514	-144.7990	610991	7004216	6	Dacite porphyry; red-brown, moderately silicified, dacite porphyry, with 50 percent remnant texture. Contains 1 percent disseminated pyrite and fracture-controlled specular hematite(?).

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
RK803281	63.1585	-144.7190	614986	7005139	6	Limestone; dark gray limestone, with abundant stockwork of quartz-carbonate veins and brecciation. Contains 1 percent, coarsely disseminated, fine- to medium-grained pyrite, and patchy dolomitization.
RK803282	63.1620	-144.7200	614930	7005528	6	Argillite; dark gray, bedded argillite, with silty interbeds.
RK803283	63.1639	-144.7230	614809	7005734	6	Gabbro; red-brown, gossanous, chlorite-altered gabbro, with sheeted quartz-carbonate veins and trace disseminated pyrite.
RK803284	63.1643	-144.7230	614808	7005787	6	Argillite; light brown, bedded argillite and siltstone, with some quartz veinlets and 1 percent pyrite and (or) pyrrhotite at contact with gabbro.
RK803285	63.1644	-144.7270	614607	7005786	6	Vein; two, 30-cm-wide, quartz veins.
RK803286	63.1644	-144.7270	614607	7005786	6	Vein; two, 30-cm-wide, quartz veins.
RK803287	63.1803	-144.8130	610201	7007406	6	Shale; clean, black shale.
RK803288	63.1843	-144.8190	609872	7007843	6	Gabbro; black, coarse-grained rock, with sheeted quartz-carbonate veins containing ankerite(?).
RK803289	63.1824	-144.8260	609552	7007622	6	Gabbro; 7-cm-wide, felsic dike in gabbro.
RK803291	63.1810	-144.8330	609183	7007455	6	Gabbro; medium-grained, plagioclase-rich gabbro, with disseminated pyrite.
RK803292	63.1811	-144.8330	609179	7007459	6	Gabbro; dark gray, coarse-grained, plagioclase-rich gabbro, with disseminated pyrite.
RK803293	63.1792	-144.8370	608987	7007238	6	Gabbro; medium-grained, altered, plagioclase-rich gabbro, with pyrite along fractures.
RK803295	63.1446	-144.8080	610588	7003435	6	Dacite; altered dacite, with quartz-pyrite vein.
RK803296	63.1448	-144.8070	610655	7003461	6	Dacite; dacite with pyrite veins.
RK803297	63.1462	-144.8040	610761	7003626	6	Shale; black shale and pyrite cubes in altered andesite.
RK803298	63.1463	-144.8050	610747	7003630	6	Jasperoid; red jasperoid in altered andesite.
RK803299	63.1462	-144.8040	610752	7003626	6	Andesite; black andesite, with specular hematite, chalcopyrite, and malachite near calcite veining.
RK803401	63.1462	-144.8040	610760	7003628	6	Andesite; andesite with pyrite and chalcopyrite near calcite veining.
RK803402	63.1461	-144.8050	610750	7003613	6	Andesite; 30-cm-wide layer of altered andesite(?) with pyrite disseminated throughout.
RK803403	63.1470	-144.7960	611177	7003727	6	Dacite; dark gray, dacite porphyry, with 4-cm-wide, weathered quartz vein.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
RK803404	63.1449	-144.8070	610622	7003477	6	Dacite; dacite with weathered quartz vein.
RK803405	63.1449	-144.8070	610621	7003478	6	Andesite; andesite with 2-cm-wide, quartz-pyrite vein.
RK803406	63.1449	-144.8070	610631	7003471	6	Limestone; 0.5- to 1-m-thick limestone preferentially replaced by specular hematite and some pyrite, chalcopyrite, and malachite.
RK803407	63.1448	-144.8070	610637	7003468	6	Vein; andesite with quartz vein.
RK803408	63.1738	-144.8280	609478	7006663	6	Hornfels; dark gray-brown hornfels 2 m north of fault.
RK803409	63.1746	-144.8280	609454	7006742	6	Hornfels; hornfels with a sericite-altered vein and some hematite coating on the outside of the rock.
RK803411	63.1632	-144.8580	607972	7005421	6	Latite porphyry; green-gray latite porphyry, with 29 percent, equidimensional, feldspar phenocrysts in a green, sericite-altered groundmass. Contains 3 percent pyrite.
RK803412	63.1646	-144.8600	607877	7005583	6	Volcaniclastic; altered volcanoclastic rock, with some pyrite.
RK803413	63.1652	-144.8610	607844	7005643	6	Andesite; altered andesite/dacite breccia, with vein of calcite, quartz, and brilliant green, radial crystals (epidote?).
RK803414	63.1652	-144.8610	607842	7005646	6	Dacite; with 7 percent pyrite.
RK803415	63.1658	-144.8640	607678	7005707	6	Andesite; with pyrite.
RK803502	63.1443	-144.7980	611090	7003419	6	Tectonic breccia; 30-cm-thick breccia with 1-3 cm, angular clasts of sericitic volcanic rock in a sugary quartz matrix. Contains stockwork veining with open cavities lined with euhedral quartz crystals.
RK803503	63.1441	-144.7980	611109	7003405	6	Tectonic breccia; 45-cm-wide stockwork breccia between 1-2 cm quartz veins. Original quartz has greenish cast and is cut by white, vuggy veins with needle-like euhedral quartz crystals in cavities.
RK803504	63.1442	-144.7980	611110	7003408	6	Andesite; andesite and float of vuggy quartz vein with iron oxide after sulfides in crystal-lined cavities. Malachite and iron-oxide staining on float.
RK803505	63.1441	-144.7980	611105	7003406	6	Andesite; iron-oxide-stained, andesite and quartz breccia.
RK803506	63.1442	-144.7980	611107	7003408	6	Basalt; crushed quartz vein and trace copper staining.
RK803507	63.1441	-144.7980	611099	7003402	6	Andesite; selected sample of vuggy quartz vein from area of abundant vein and breccia float. Needle-like euhedral quartz crystals line cavities.
RK803508	63.1441	-144.7980	611098	7003407	6	Andesite; tectonic breccia with 1-5 cm, angular clasts of andesite in a green-white matrix of sugary quartz, with minor vuggy cavities.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
RK803509	63.1441	-144.7980	611098	7003407	6	Andesite; with very rare float of vuggy quartz vein with hematite pseudomorphs after sulfide in cavities around quartz crystals.
RK803510	63.1438	-144.7960	611176	7003369	6	Andesite; with float of 1- to 3-cm-wide quartz veins and quartz-filled cavities.
RK803512	63.1438	-144.7960	611165	7003370	6	Andesite; with very scarce, 1-5 cm pieces of gossan talus with hematite pseudomorphs after pyrite.
RK803513	63.1436	-144.7980	611110	7003346	6	Andesite; with sheeted, vuggy, 1- to 15-mm-wide quartz veins with euhedral quartz crystals lining cavities.
RK803514	63.1436	-144.7980	611113	7003348	6	Andesite; hematite-stained andesite, with local pseudomorphs after pyrite on fractures.
RK803515	63.1438	-144.7980	611100	7003371	6	Andesite; with oxidized, 3-5 percent pyrite.
RK803516	63.1446	-144.8050	610720	7003440	6	Volcaniclastic; brecciated, silicified volcaniclastic rock, with zones of vuggy, quartz vein breccia and massive sugary quartz $\pm$ 1 percent pyrite.
RK803517	63.1446	-144.8050	610726	7003441	6	Vein; high-grade sample of iron-oxide-rich, vuggy vein material.
RK803518	63.1446	-144.8050	610718	7003445	6	Vein; brecciated, vuggy quartz vein with limonite.
RK803519	63.1445	-144.8050	610717	7003439	6	Volcaniclastic; dacite volcaniclastic breccia, with 1 percent hematite and 1 percent pyrite.
RK803520	63.1445	-144.8060	610695	7003432	6	Volcaniclastic; massive, vuggy, partially oxidized vein with quartz and 1 percent pyrite.
RK803522	63.1445	-144.8060	610676	7003436	6	Volcaniclastic; with 10-cm-wide, spongy vein of quartz and 30-40 percent, partially oxidized pyrite.
RK803523	63.1445	-144.8060	610695	7003432	6	Volcaniclastic; dacite volcaniclastic rock cut by two spongy veins with quartz and 40 percent, partially oxidized pyrite.
RK803524	63.1445	-144.8060	610694	7003432	6	Vein; 4-cm-wide, vuggy vein with needle-like, euhedral quartz. Contains 7 percent, cubic pyrite and 10 percent iron oxide filling the space between quartz crystals.
RK803525	63.1446	-144.8050	610732	7003440	6	Volcaniclastic; 10-cm-wide, silicified, pyrite-bearing zone in volcaniclastic rock in footwall of 2-cm-wide, vuggy and spongy quartz-iron oxide vein.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
RK803526	63.1460	-144.8020	610892	7003608	6	Dacite; silicified dacite, with vein of gray-white, massive, fine, sugary quartz and 1 percent, disseminated, anhedral to euhedral pyrite. Locally displayed as coarse, comby quartz with euhedral quartz crystals in cavities with iron oxide.
RK803527	63.1760	-144.8290	609407	7006900	6	Mafic intrusive; feldspar-porphyrific basalt(?), with 20 percent plagioclase laths (1-3 mm) and 5 percent, dark green, equidimensional phenocrysts (1 mm) in a dark green, aphanitic groundmass. Contains moderate, pervasive propylitic alteration and red hematitic clay on joints.
RK803528	63.1740	-144.8280	609482	7006681	6	Gabbro; feldspar-porphyrific gabbro dikes, with massive, 1- to 4-cm-wide, sugary quartz veins at the contact between them.
RK803529	63.1736	-144.8270	609491	7006639	6	Gabbro; 2-m-wide, dark green, fine-grained, phaneritic, gabbro dike, with epidote.
RK803530	63.1647	-144.8590	607923	7005588	6	Volcaniclastic; heterolithic gravel of andesite volcaniclastic breccia.
RK803532	63.1649	-144.8590	607936	7005616	6	Quartz latite; quartz latite float, with 1 percent rounded quartz phenocrysts (1 mm) and rare 2-mm-long feldspar in an aphanitic groundmass. Contains neodosite [DGGS: neotocite?] specks and manganese oxide on fracture surfaces.
RK803533	63.1667	-144.8590	607947	7005811	6	Latite porphyry; altered latite porphyry, with 25 percent, 1-mm-long, feldspar phrocrysts in a translucent, aphanitic groundmass. Contains sprays of epidote and 1 percent chalcopyrite, and cross-cutting, 1- to 10-cm-thick, stockwork veins.
RK803534	63.1666	-144.8590	607947	7005805	6	Latite porphyry; with hairline to 3-mm-wide, quartz-magnetite-pyrite veins. Locally actinolite or fibrous epidote are present.
RK803535	63.1665	-144.8580	607956	7005798	6	Latite porphyry; with quartz-chalcopyrite veins. Chalcopyrite also present as replacement in altered rock with minor fibrous epidote. Contains 2 percent chalcopyrite and 1 percent malachite overall.
RK803563	63.1749	-144.8270	609519	7006784	6	Gabbro; coarse-grained gabbro, with pyroxene crystals up to 10 mm in size. Cut by 0.5-mm-wide stockwork veinlets of pyrite, calcite-pyrite, and rare chalcopyrite.
RK803564	63.1770	-144.8200	609864	7007030	6	Hornfels; gravel of black slate with a red mineral on occasional surfaces (hematite or cinnabar).

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
RK803565	63.1738	-144.8270	609503	7006661	6	Intermediate intrusive; gravel of medium green-gray, fine-grained rock, with occasional 2 mm feldspar phenocrysts in an aphanitic groundmass. Cut by quartz veinlets up to 3 mm wide. Locally brecciated and possibly sericite altered.
RK803582	63.1403	-144.7420	613913	7003073	6	Dacite; gossanous vein with minor white quartz and 10 percent hematite parallel to the contact between a felsic dike and dacite volcanic rock.
RK803583	63.1388	-144.7410	613989	7002910	6	Dacite; 1-m-wide, dark brown, rusty band of dacitic volcanic rock with 1 percent disseminated pyrite adjacent to a 0.5-m-wide, dark green-gray, fine-grained dike.
RK803584	63.1376	-144.7400	614021	7002777	6	Volcanics; dacite volcanic rock cut by 10- to 30-cm-wide, brecciated quartz vein with massive quartz and vuggy, crystal-lined zones; boxwork after sulfide; and zones of iron-oxide breccia with quartz fragments 1 mm to 1 cm in diameter.
RK803585	63.1352	-144.7410	614016	7002511	6	Dacite; rare rusty float with 1 percent pyrite in dacite boulder field.
RK803586	63.1353	-144.7400	614023	7002519	6	Tectonic breccia; crushed, white quartz breccia with 10 percent iron oxide in the matrix.
RK803587	63.1451	-144.8020	610883	7003502	6	Andesite porphyry; rock with 10 percent, 1 mm, dark green to light green-gray feldspar phenocrysts and 1 percent disseminated pyrite.
RK804202	63.1225	-144.7450	613821	7001084	6	Felsic volcanic; light green-gray, aphanitic to very fine-grained, sugary, felsic volcanic rock. Rock is weakly vuggy, and contains some brecciation, and medium to dark red-brown, weakly oxidized, trace to 1 percent sulfides.
RK804203	63.1227	-144.7480	613676	7001110	6	Felsic volcanic; white to medium green porphyry, with patchy subhedral to euhedral quartz in an aphanitic groundmass. Rock is partially vuggy, and contains patchy red-brown, weakly oxidized, trace to 1 percent sulfides.
RK804204	63.1233	-144.7520	613463	7001163	6	Felsic volcanic; red-brown and yellow, aphanitic to very fine-grained porphyry, with subhedral to euhedral quartz phenocrysts. Rock is vuggy and finely brecciated, and contains trace to 1 percent unoxidized sulfides and strong supergene oxidation.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
RK804221	63.1238	-144.7590	613146	7001210	6	Tectonic breccia; red-brown and yellow, aphanitic to very fine-grained, partially vuggy, brecciated dacite(?), with strong supergene oxidization and 5-10(?) percent sulfides.
RK808333	63.1322	-144.7560	613260	7002155	6	Intermediate volcanic; medium green-gray to red-brown, aphanitic to very fine-grained, chlorite-altered, brecciated, intermediate volcanic rock, with strong iron-oxide alteration, 5 percent disseminated pyrite, and 5-mm-wide, vuggy, milky to red-brown, quartz and iron-oxide veinlets.
RK808334	63.1313	-144.7520	613458	7002054	6	Intermediate volcanic; light green-gray to dark red-brown, porphyritic, intermediate volcanic(?) rock with aphanitic groundmass. Contains 7 percent, very fine- to fine-grained, disseminated pyrite; fault breccia with 2-10 mm clasts; vuggy, milky to red-brown, quartz and iron-oxide veins; patches of strong supergene oxidation; and pervasive sericitization.
RK808335	63.1310	-144.7510	613509	7002024	6	Tectonic breccia; red-brown and yellow, faulted, brecciated, vuggy, altered, intermediate volcanic rock, with patchy, strong, supergene oxidation and 7 percent pyrite.
RK808337	63.1309	-144.7510	613519	7002015	6	Vein; milky to white, brecciated, vuggy, fine to coarse crystalline, quartz vein, with trace to 2 percent sulfide.
RK808338	63.1306	-144.7500	613558	7001977	6	Vein; milky to white, brecciated, vuggy, fine to coarse crystalline, quartz vein, with trace to 2 percent pyrite.
RK808339	63.1297	-144.7490	613599	7001886	6	Vein; strongly chloritized and altered basalt(?) cut by white-milky-red brown, 2- to 5-cm-wide, fine to coarse crystalline, vuggy, quartz-calcite-iron oxide-ankerite(?) vein. Contains 3 percent sulfide.
RK808340	63.1295	-144.7490	613607	7001861	6	Basalt; red-brown, chlorite-altered basalt cut by 0.5- to 3-cm-wide, rosy-glassy-milky, fine to medium crystalline, sugary, vuggy, locally banded, quartz-calcite-iron oxide-sulfide veins. Veins contain iron oxide in vugs and along the margins, 8 percent pyrite, and 3 percent chalcopyrite.

Sample Number	Latitude	Longitude	UTM E	UTM N	Zone	Description
RK808341	63.1271	-144.7390	614102	7001605	6	Rhyolite; light green-gray, red-brown, yellow, and orange, porphyritic, quartz-eye rhyolite with an aphanitic groundmass. Rock is faulted, brecciated, and vuggy, and contains 10 percent (with patches up to 50 percent), very fine- to fine-grained, disseminated pyrite and strong supergene oxidation.
RK808467	63.0940	-144.7670	612853	6997875	6	Hydrothermal breccia; orange, gossanous, brecciated volcanic(?) rock with no sulfides remaining.
RK808762	63.1221	-144.7340	614410	7001067	6	Volcaniclastic; green-gray, andesite volcaniclastic rock in contact with brecciated, quartz porphyry. Contains 5 percent, fine, disseminated pyrite in clasts and matrix.
RK808763	63.1259	-144.7410	614035	7001478	6	Volcaniclastic; red-brown volcaniclastic/lithic tuff with 20 percent disseminated pyrite and 0.5 percent hematite. Areas with no pyrite are more rusty with a silicified, white matrix.
RK808764	63.1254	-144.7490	613635	7001405	6	Lithic tuff; green-gray, fractured, rusty, and crumbly volcaniclastic rock adjacent to fairly fresh dacite. Fractures and matrix contain 10 percent pyrite.

Table 11. Trace-element geochemical analyses for rocks collected by International Tower Hill Mines Ltd. in the Chistochina mining district, Mount Hayes Quadrangle, Alaska. Definitions: ppm = parts per million; % = percent; "---" = blank or null values, sample not analyzed for that element; NSS = not sufficient sample.

Sample Number	Au ppm	Au(2) ppm	Au(+) ppm	Ag ppm	Ag(+) ppm	As ppm	Sb ppm	Cu ppm	Cu(+) %	Pb ppm	Zn ppm	Al %	Ba ppm	Be ppm
RK210311	---	<0.005	---	0.05	---	1.7	1.06	58.7	---	1.8	52	8.56	360	0.65
RK210312	---	<0.005	---	0.04	---	1	1.04	60.7	---	1.7	56	10.4	300	0.58
RK210313	---	<0.005	---	0.03	---	1.8	0.39	21.9	---	2	34	8.89	380	0.61
RK210314	---	<0.005	---	0.02	---	1.3	0.61	22.2	---	1.6	37	9.38	520	0.72
RK210315	---	<0.005	---	0.31	---	2.5	1.89	375	---	1.9	47	4.53	230	0.38
RK210316	---	<0.005	---	0.06	---	2.6	3.26	31.8	---	2.5	119	9.21	190	0.35
RK210317	---	<0.005	---	0.01	---	2.9	2.54	7.5	---	3.3	114	9.05	260	0.75
RK210318	---	<0.005	---	0.01	---	3	4.87	7.1	---	2.2	66	8.91	380	0.89
RK210319	---	<0.005	---	0.01	---	1.2	0.87	11	---	1.4	50	8.43	230	0.72
RK210321	---	0.006	---	0.08	---	4.6	6.4	92.5	---	4.7	77	9.71	280	0.45
RK210322	---	<0.005	---	0.07	---	1.8	3.85	91.6	---	1.5	65	9.8	310	0.35
RK210323	---	<0.005	---	0.09	---	5.7	9.57	27	---	6.8	52	9.85	340	0.37
RK210324	---	<0.005	---	0.05	---	1	2.21	118	---	1.6	97	9.78	360	0.72
RK210325	---	<0.005	---	0.13	---	3.7	1.4	52.4	---	0.8	56	1.7	30	0.31
RK210326	---	<0.005	---	0.27	---	1	1.24	617	---	3.6	143	1.56	20	0.12
RK210327	---	<0.005	---	6.31	---	16	5.91	7480	---	9.1	124	4.26	30	0.89
RK210328	---	<0.005	---	6.42	---	13.1	4.12	>10000	1.26	6.1	51	2.51	60	0.13
RK210329	---	<0.005	---	2.85	---	15.2	4.76	9280	---	10.9	53	7.5	40	0.81
RK210331	---	<0.005	---	0.05	---	1.5	3.73	106.5	---	4.5	77	7.48	400	0.58
RK210332	---	0.010	---	0.13	---	13.7	1.89	110.5	---	3.4	21	6.67	1070	0.46
RK210333	---	<0.005	---	4.7	---	80.8	3.52	>10000	3.95	3.6	64	3.08	50	0.29
RK210334	---	0.015	---	2.07	---	27.9	3.34	1720	---	10.2	26	1.83	170	0.3
RK210335	---	<0.005	---	3.92	---	4.4	8.23	8810	---	4.8	53	2.55	30	1.41
RK210336	---	<0.005	---	0.13	---	3.3	4.97	5240	---	6.3	79	7.43	30	0.96
RK210337	---	<0.005	---	0.08	---	8.6	6.98	58	---	4.9	27	3.82	40	0.84
RK210338	---	0.008	---	0.03	---	3.9	3.72	34.1	---	5.2	44	7.65	60	0.61
RK210339	---	0.014	---	2.59	---	11.7	1.57	1360	---	3.7	64	3.09	30	0.24
RK210341	---	<0.005	---	0.11	---	7	2.57	33	---	3	20	3.43	140	0.28
RK210342	---	<0.005	---	0.15	---	0.8	0.1	173	---	1.9	75	7.94	300	0.52
RK210343	---	<0.005	---	0.05	---	<0.2	0.19	264	---	3	106	10.25	220	0.65
RK210401	---	0.006	---	0.09	---	3.2	7.24	8.8	---	120	6	2.76	1680	0.24
RK210402	---	NSS	---	0.66	---	10.2	2.55	64.8	---	6.8	3	0.67	140	0.05
RK210403	---	0.027	---	0.49	---	10.6	3.58	33	---	15	20	5.65	160	0.37
RK210404	---	<0.005	---	0.5	---	19.6	48.5	50.3	---	16.8	266	7.44	1130	0.59

Sample Number	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Fe %	Ga ppm	Ge ppm	Hf ppm	Hg ppm	In ppm	K %	La ppm
RK210311	0.24	1.12	0.02	16.85	7.1	3	0.61	5.4	17.1	0.14	2.7	<0.01	0.052	0.52	7.7
RK210312	0.16	2.65	0.06	14.95	14.3	2	1.1	6.95	20.5	0.13	1.4	<0.01	0.077	0.17	6.7
RK210313	0.56	0.21	<0.02	10.55	1.6	8	0.15	3.54	16.95	0.11	2.1	<0.01	0.046	0.68	4.8
RK210314	0.65	0.51	<0.02	19.9	2	7	0.21	2.93	17	0.1	2.4	<0.01	0.122	0.58	9.9
RK210315	2.53	0.71	0.02	10.35	4.9	13	0.39	5.67	9.46	0.11	1.5	<0.01	0.727	0.35	5.4
RK210316	0.08	5.52	0.05	4.95	34.2	30	0.07	7.46	16.85	0.12	0.8	<0.01	0.065	0.15	2.2
RK210317	0.22	2.38	0.04	28.4	8.9	9	0.14	3.61	16.5	0.13	1.5	<0.01	0.109	0.37	14
RK210318	2.66	1.27	0.02	29.2	8.7	6	0.17	3.98	16.55	0.12	2	<0.01	0.175	0.64	14.5
RK210319	0.14	0.66	0.05	48.3	8.1	5	0.14	2.31	15	0.12	2.8	<0.01	0.038	0.46	22
RK210321	0.46	5.94	0.07	6.99	20.6	12	0.09	7.32	18.55	0.14	0.7	<0.01	0.176	0.2	3.2
RK210322	0.19	6	0.08	5.16	27.2	30	0.11	5.47	14.45	0.11	0.8	<0.01	0.123	0.39	2.3
RK210323	1.08	6.08	0.08	9.32	18.9	11	0.11	7.96	20.8	0.15	0.8	<0.01	0.295	0.48	4.3
RK210324	0.18	2.97	0.08	3.84	33.4	42	0.34	9.54	17.5	0.15	0.5	<0.01	0.082	0.43	1.7
RK210325	0.19	1.06	0.05	1.62	22.1	2	0.05	>50	7.89	2.09	0.1	<0.01	0.151	0.05	0.8
RK210326	0.47	0.47	0.06	5.58	18.1	16	0.05	10.6	7.14	0.12	0.5	<0.01	0.183	0.04	4.7
RK210327	2.65	13.3	0.28	14.8	45.8	3	0.66	11.5	11.4	0.16	1	0.12	0.477	0.02	10.5
RK210328	3.4	0.36	0.62	9.32	11.7	4	0.2	43	11	0.53	0.3	0.11	0.315	<0.01	7.2
RK210329	0.98	6.07	0.97	33.6	15	22	1.94	10.35	17.7	0.14	1.6	0.09	0.515	0.05	23.9
RK210331	0.62	1.44	0.04	22.5	12.4	5	0.27	4.25	12.7	0.06	1.4	<0.01	0.248	0.52	10.7
RK210332	1.83	0.39	0.03	20.6	9.3	5	0.4	5.82	11.6	0.09	2.4	0.01	0.191	1.15	11
RK210333	1.41	0.48	0.44	8.68	13.5	7	0.49	11.2	11.85	0.25	0.6	0.07	0.622	0.03	7.3
RK210334	9.29	0.1	0.07	4.79	25.5	7	1	22.1	11.3	0.29	0.8	0.14	0.234	0.43	5.7
RK210335	25.9	8.28	0.8	8	19.4	3	0.28	19.55	6.8	0.26	0.5	0.09	0.351	0.03	6.9
RK210336	1.4	6.56	0.11	25.6	14.7	6	0.1	15.6	18.65	0.23	1.6	<0.01	2.01	0.04	15.6
RK210337	3.19	2.27	0.11	10.6	14.4	11	0.13	18.95	11.65	0.22	0.9	0.01	1.48	0.04	5.5
RK210338	0.9	5.88	0.13	25.9	18	16	0.16	15.25	20.4	0.2	1.7	<0.01	1.43	0.05	14.5
RK210339	4.1	1.71	0.16	5.83	170.5	13	0.08	22.6	8.63	0.45	0.5	0.42	0.909	0.09	4.6
RK210341	2.83	1.58	0.03	6.2	76	9	0.12	11.25	9.2	0.2	0.4	0.05	1.54	0.44	3.5
RK210342	0.05	6.48	0.07	20.7	30.2	108	0.19	8.1	17.8	0.13	1.6	0.04	0.085	1.18	9
RK210343	0.04	6.79	0.04	27.1	26.7	45	0.53	8.45	21.8	0.13	1.2	0.02	0.073	1.22	12.9
RK210401	0.28	0.03	<0.02	1.95	0.8	4	0.33	0.78	6.02	<0.05	1.1	0.07	0.057	0.99	1
RK210402	2.27	0.02	<0.02	2.37	28.8	7	0.08	6.67	1.7	0.09	0.3	0.01	0.02	0.23	1
RK210403	2.5	0.04	0.03	5.4	10.9	4	0.41	3.03	12.3	<0.05	2.8	0.04	0.13	2.2	2.2
RK210404	0.09	1.97	1.41	12.2	19.4	15	0.87	6.14	12.95	0.08	1.7	<0.01	0.036	1.37	6.6

Sample Number	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Nb ppm	Ni ppm	P ppm	Rb ppm	Re ppm	S %	S(+) %	Sc ppm	Se ppm	Sn ppm
RK210311	3.3	1.48	795	1.76	2.67	3.6	1.7	420	10.9	<0.002	0.66	---	28.1	3	1.7
RK210312	6.8	2.76	961	0.39	1.92	2.7	2	460	1.5	<0.002	0.07	---	38.7	2	1.6
RK210313	2.5	1.13	248	1.2	4.4	4	1.7	310	14.2	<0.002	0.53	---	19	3	2.1
RK210314	2.6	1.17	348	1.87	4.48	5	1.9	270	12.4	<0.002	0.09	---	18.8	2	1.9
RK210315	3	1.31	617	0.82	0.99	3	2.3	360	7.3	<0.002	0.11	---	12.9	6	2.5
RK210316	4	3.75	1755	0.21	1.73	1.2	10	390	0.5	<0.002	<0.01	---	38.2	1	0.4
RK210317	3	1.27	1070	0.35	3.74	5.5	2.8	480	6.2	<0.002	<0.01	---	17.6	2	0.9
RK210318	3.6	1.57	1305	0.33	3.2	6	2.4	420	12.6	<0.002	<0.01	---	15.6	2	1.4
RK210319	2.2	1.23	478	0.37	4.3	5.7	2.2	350	8	<0.002	0.01	---	15.1	2	0.8
RK210321	2.5	2.19	1595	0.47	1.98	1.5	2.4	510	1.3	<0.002	0.01	---	35.5	2	0.5
RK210322	0.9	3.34	2050	0.21	2.26	1.2	9.8	310	1.8	<0.002	0.01	---	36.5	2	0.4
RK210323	2.1	1.37	1770	0.51	1.82	1.4	2.1	500	6.2	<0.002	<0.01	---	36.3	2	0.8
RK210324	8.3	5.02	2560	0.55	1.4	1.3	14.6	320	2	<0.002	0.01	---	33.5	1	0.3
RK210325	0.4	0.58	629	1.61	0.16	1	15.4	230	0.5	<0.002	0.01	---	5.3	2	3.1
RK210326	1.8	1.1	959	1.82	0.01	1	8.9	220	0.4	0.003	0.16	---	3.1	2	0.8
RK210327	7.5	3.36	6330	1.34	0.01	2.2	23.8	1150	0.2	<0.002	0.06	---	10.1	7	0.4
RK210328	4.8	1.4	976	9.35	<0.01	2.3	32.7	570	0.2	0.003	0.35	---	4.3	7	1.6
RK210329	8.2	1.65	2240	1	0.02	5.6	73.6	820	1	<0.002	0.28	---	16.5	6	1.2
RK210331	4.3	1.67	1210	0.56	2.15	4.2	3	410	10.4	0.002	0.11	---	11.7	1	0.9
RK210332	1.6	0.54	420	12.4	2.19	4	1.3	340	24.7	<0.002	0.53	---	9.9	3	0.9
RK210333	16.3	0.84	1275	1.97	0.01	1.4	9.5	710	0.3	<0.002	1.93	---	7.7	39	0.6
RK210334	3	0.16	304	46.7	0.03	1.9	3.6	430	8.3	0.004	0.09	---	8	17	0.6
RK210335	6.9	1.79	5600	9.19	0.01	1.5	5.6	510	0.2	<0.002	0.53	---	7.7	8	0.3
RK210336	3.2	2.14	2820	3.12	0.03	3.5	6	910	0.4	<0.002	0.02	---	22.5	3	0.7
RK210337	3.9	1.01	1075	4.23	0.02	2.3	7	330	0.9	<0.002	<0.01	---	9.3	2	2.5
RK210338	3.9	2.01	1485	4.42	0.26	3.5	7.3	500	1.3	<0.002	<0.01	---	14.9	2	4
RK210339	1.4	0.88	517	2.88	0.22	0.9	19.6	280	1.6	0.003	>10.0	---	10.8	44	3.1
RK210341	1.4	0.83	587	12.9	0.47	0.8	3	100	9.8	0.007	8.41	---	12.2	21	2.6
RK210342	8.5	3.78	1325	0.59	1.59	2.6	15.9	1810	15.6	<0.002	0.72	---	48.7	5	0.8
RK210343	13.5	3.04	1160	0.4	1.33	4.2	27.5	2790	26.4	<0.002	0.06	---	30.5	3	0.9
RK210401	1.8	0.09	30	1.17	0.07	1.2	0.6	20	23.9	<0.002	0.13	---	4.9	2	0.4
RK210402	1.9	0.04	59	0.52	0.04	0.5	1.3	40	5.1	<0.002	2.7	---	1	7	0.3
RK210403	0.9	0.21	87	42.1	0.1	2.2	0.9	350	47.8	0.005	2.25	---	20.9	3	0.8
RK210404	4	2.49	2860	0.85	0.89	1.8	5.1	360	28.9	<0.002	0.51	---	28.5	2	0.6

Sample Number	Sr ppm	Ta ppm	Te ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zr ppm
RK210311	186.5	0.22	0.08	2.2	0.428	0.17	1.7	130	0.7	15.9	83
RK210312	300	0.2	<0.05	1.4	0.451	0.07	0.8	284	0.4	15.6	41.5
RK210313	98.4	0.23	0.45	2	0.282	0.22	1.1	86	0.8	5.4	63
RK210314	125	0.29	0.2	2.7	0.345	0.17	1.7	81	0.8	9.1	70.1
RK210315	74.8	0.16	2.17	1.6	0.188	0.11	1	59	0.6	8.7	47.9
RK210316	377	0.09	0.06	0.3	0.419	0.04	0.3	309	0.3	9.7	21.9
RK210317	188	0.29	<0.05	2.2	0.269	0.09	1.1	53	0.5	18.6	41.6
RK210318	172	0.32	0.06	2.6	0.249	0.19	1.4	49	2.4	20.9	60.6
RK210319	110	0.32	<0.05	3.8	0.221	0.16	1.3	42	2.9	27	89.4
RK210321	479	0.11	<0.05	0.5	0.428	0.07	0.4	287	0.7	12.5	17.9
RK210322	316	0.1	<0.05	0.3	0.287	0.14	0.3	206	1.4	7.8	21.2
RK210323	525	0.09	<0.05	0.6	0.394	0.17	0.4	275	1.4	15.6	20.8
RK210324	264	0.11	<0.05	0.3	0.284	0.22	0.3	231	1.4	7.4	14.1
RK210325	37.9	0.08	0.09	<0.2	0.138	0.02	0.4	130	47	5	3.8
RK210326	4.9	<0.05	0.11	0.4	0.047	<0.02	0.4	28	51.4	8.8	17.4
RK210327	188.5	0.12	0.27	0.9	0.157	<0.02	1	39	12.9	16.1	30.7
RK210328	6	0.07	1.74	0.8	0.087	0.05	0.5	132	401	8.2	8
RK210329	468	0.28	0.34	1.9	0.378	0.03	0.8	106	20.2	22.5	52.8
RK210331	149	0.24	0.11	1.7	0.211	0.13	1	54	1.5	13.1	38.9
RK210332	61.2	0.22	0.69	2.1	0.183	0.31	1.5	41	1.2	13.7	85.4
RK210333	4.9	0.07	0.15	0.6	0.108	0.07	0.5	40	10.6	11	19.7
RK210334	7.6	0.08	5.05	0.7	0.125	0.11	0.9	88	3.4	10.1	26.4
RK210335	143	0.06	12.25	0.5	0.109	0.02	1.1	47	112.5	12.6	19.2
RK210336	386	0.18	0.26	1.2	0.308	<0.02	2.5	102	37.2	24.9	47.6
RK210337	162	0.1	0.3	0.9	0.137	<0.02	2.5	87	10	12.7	30
RK210338	358	0.21	0.09	1.8	0.242	0.02	4.8	141	27.3	24.5	53.4
RK210339	175.5	0.06	12	0.5	0.093	0.02	0.8	86	0.7	7.2	15.8
RK210341	123	0.06	3.18	0.2	0.123	0.12	0.6	103	0.6	5.4	12.9
RK210342	632	0.22	0.16	1.3	0.565	0.07	0.6	390	0.5	21.8	32.8
RK210343	1505	0.27	0.1	1	0.603	0.15	0.3	395	0.3	22.5	21.7
RK210401	1135	0.07	0.08	0.8	0.062	0.34	0.6	25	0.4	3.9	33.2
RK210402	8.5	<0.05	2.01	0.2	0.017	0.07	0.2	6	0.2	2.9	11.5
RK210403	22.5	0.13	0.54	1.5	0.4	0.7	2.2	101	2.5	13.6	78.8
RK210404	87.8	0.13	0.06	1.6	0.288	0.69	1.3	179	2.3	16.1	51.9

Sample Number	Au ppm	Au(2) ppm	Au(+) ppm	Ag ppm	Ag(+) ppm	As ppm	Sb ppm	Cu ppm	Cu(+) %	Pb ppm	Zn ppm	Al %	Ba ppm	Be ppm
RK210405	---	0.403	---	8.31	---	1485	213	278	---	148	59	3.55	710	0.29
RK210409	---	0.005	---	2.5	---	7.3	3.27	1470	---	4.9	604	2.8	30	0.26
RK210475	---	0.241	---	2.35	---	4.9	5.08	30.8	---	22.3	13	2.46	420	0.17
RK210476	---	0.009	---	0.07	---	1.5	1.74	73.3	---	3.3	59	7.25	300	0.62
RK210477	---	<0.005	---	0.22	---	1.7	0.51	30.9	---	2.1	6	6.66	670	0.51
RK210478	---	0.042	---	1.34	---	5.5	0.94	17.9	---	8.5	5	5.78	360	0.44
RK210479	---	<0.005	---	0.17	---	2.6	0.79	85.3	---	2.9	18	6.94	600	0.55
RK210480	---	<0.005	---	0.08	---	2.3	3.53	130.5	---	4.9	98	7.2	1130	0.73
RK210482	---	0.011	---	0.36	---	5.3	1.7	191	---	10.5	30	3.5	1100	0.35
RK210483	---	0.012	---	0.35	---	5.3	0.75	84.5	---	3.1	28	3.02	320	0.27
RK210484	---	0.029	---	0.62	---	10	1.3	81.1	---	5.9	62	6.84	630	0.51
RK210485	---	<0.005	---	0.1	---	3.5	1.5	120	---	4.3	210	7.91	750	0.52
RK210486	---	0.082	---	1.54	---	18	2.04	161.5	---	17	20	2.4	380	0.24
RK210487	---	0.029	---	0.45	---	31.2	1.28	404	---	11.3	18	1.23	210	0.12
RK210488	---	0.007	---	0.33	---	4.1	1.09	37.6	---	6.4	11	5.74	720	0.36
RK210489	---	<0.005	---	0.19	---	3.2	0.88	92.9	---	3	41	7.14	660	0.52
RK210490	---	0.083	---	1.46	---	17.3	2.87	360	---	6.6	11	1.02	110	0.16
RK210492	---	0.032	---	1.08	---	46.9	1.95	164.5	---	8.3	9	3.85	470	0.32
RK210493	---	0.014	---	0.51	---	72.9	1.97	164	---	10.3	30	6.19	650	0.46
RK210496	---	0.014	---	1.35	---	14	35.2	418	---	25.7	127	1.2	570	0.15
RK210497	---	>10.0	13.00	>100	110	701	53.8	557	---	6250	190	1.33	530	0.21
RK210499	---	0.034	---	2.36	---	41.3	49.7	556	---	18.1	34	0.26	20	0.13
RK210500	---	0.054	---	1.66	---	45.6	12.8	1300	---	19.6	9	0.21	20	<0.05
RK210502	---	<0.005	---	0.13	---	5.8	0.83	39.3	---	3.4	23	8.37	540	0.67
RK210503	---	<0.005	---	0.05	---	5	1.63	24.8	---	14.6	29	9.28	190	0.37
RK210504	---	0.009	---	0.56	---	8.1	2.93	86.5	---	5.6	50	6.71	1040	0.49
RK210505	---	<0.005	---	0.01	---	1.3	0.86	7.5	---	0.9	41	2.03	340	0.15
RK210506	---	0.007	---	0.17	---	9.8	1.33	6.1	---	2.5	9	2.11	1690	0.23
RK210507	---	0.014	---	0.16	---	14.3	2.68	19	---	6.3	11	2.09	370	0.2
RK210508	---	0.012	---	0.79	---	27.4	1.5	443	---	23.8	24	1.07	130	0.11
RK210509	---	0.009	---	0.61	---	137.5	8.36	97	---	17.5	4	5.59	40	0.27
RK210510	---	<0.005	---	0.1	---	2.5	2.7	728	---	3.2	172	7.38	20	0.25
RK210512	---	<0.005	---	0.79	---	4.6	2.97	310	---	7.2	92	5.91	10	0.19
RK210513	---	0.015	---	3.06	---	31.4	1.35	229	---	8	107	5.38	10	0.07
RK210514	---	0.140	---	15.4	---	68.3	3.78	1410	---	22.1	14	0.55	20	0.06
RK210515	---	0.065	---	6.75	---	72.9	146	1030	---	48.5	14	2.38	390	0.33
RK210516	---	0.020	---	0.54	---	56.2	2.87	570	---	8.3	10	3.16	790	0.22
RK210517	---	0.013	---	0.31	---	51.5	1.29	120	---	3.8	25	1.17	180	0.09

Sample Number	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Fe %	Ga ppm	Ge ppm	Hf ppm	Hg ppm	In ppm	K %	La ppm
RK210405	17.25	0.01	0.07	5.89	1.8	5	0.46	19.1	11.65	0.27	1	1.85	0.668	1.54	3.1
RK210409	1.6	9.28	4.24	8.21	14.2	11	0.06	9.17	7.03	0.12	0.4	0.05	0.446	0.04	7.8
RK210475	8.57	0.02	<0.02	4.47	0.8	28	0.13	2.49	7.18	0.08	1.1	0.01	0.277	1.21	2.1
RK210476	0.14	0.66	0.03	18.3	1.9	5	0.11	3.1	15.45	0.09	2.4	<0.01	0.099	0.5	8.2
RK210477	0.37	0.12	<0.02	5.81	0.5	5	0.17	2	15.3	0.06	3	<0.01	0.131	1.06	3.2
RK210478	2.97	0.07	<0.02	9.01	1.2	7	0.27	5.81	14.9	0.13	2.3	<0.01	0.196	1.66	5.3
RK210479	0.15	0.17	<0.02	12.8	0.9	3	0.21	2.84	16.85	0.07	2.8	<0.01	0.155	0.96	7
RK210480	0.19	0.08	<0.02	25.6	6.1	5	0.5	5.44	16.1	0.13	2.3	<0.01	0.743	1.81	13
RK210482	0.67	0.04	<0.02	19.2	1.5	22	0.22	5.15	8.81	0.1	1.2	<0.01	0.257	0.98	8.9
RK210483	0.34	0.05	<0.02	12	2.5	31	0.13	2.55	6.19	0.06	1	<0.01	0.089	0.53	6.6
RK210484	0.56	0.11	<0.02	15.5	4.3	9	0.22	3.38	14.45	0.08	2.3	<0.01	0.227	1.15	7.4
RK210485	0.06	0.12	0.02	2.36	18.9	35	0.3	6.82	19.85	0.12	1.3	<0.01	0.186	1.42	0.9
RK210486	3.23	0.03	0.06	4.32	1.4	27	0.26	9.28	6.54	0.19	1.2	0.01	0.214	0.84	2.5
RK210487	6.29	0.02	0.04	5.57	1.9	9	0.19	21.3	6	0.37	0.5	<0.01	0.17	0.45	3.6
RK210488	1.02	0.06	0.02	10.55	0.8	6	0.41	2.95	13.2	0.08	2.9	<0.01	0.233	1.56	5.6
RK210489	0.31	0.28	0.03	15.3	1.7	7	0.3	2.86	17.25	0.09	2.1	<0.01	0.186	1.55	8.7
RK210490	4.03	0.02	0.03	3.9	1.3	18	0.15	10.6	3.14	0.2	0.3	0.01	0.096	0.32	1.8
RK210492	1.76	0.04	<0.02	6.75	0.4	11	0.45	5.46	9.81	0.12	1.7	<0.01	0.224	1.21	3.1
RK210493	0.73	0.13	0.05	10.6	1	6	0.83	5.47	17.75	0.11	3.1	<0.01	0.201	1.57	5.3
RK210496	5.42	0.04	0.13	1.23	1.7	10	0.14	10.7	5.28	0.22	0.6	0.02	0.085	0.48	0.7
RK210497	52.2	0.01	1.42	1.61	0.7	6	0.16	8.38	3.93	0.2	0.2	1.62	7.99	0.65	1
RK210499	4.25	0.04	<0.02	1.83	4.3	19	0.07	9.08	1.5	0.14	0.1	0.03	0.116	0.02	1.1
RK210500	4.4	0.12	0.03	2.47	20.4	18	<0.05	7.35	1.84	0.13	0.2	0.02	0.088	0.04	1.4
RK210502	0.76	0.53	<0.02	8.51	4.3	9	1.58	3.94	16.35	0.07	1.8	<0.01	0.067	0.68	4.4
RK210503	0.02	13.45	0.11	10.05	28	162	0.91	7.59	23.7	0.08	1.9	<0.01	0.085	0.01	4
RK210504	2.21	0.48	<0.02	7.93	10.2	12	3.72	9.87	16.55	0.12	1.4	0.01	0.286	1.17	3.7
RK210505	0.16	0.4	<0.02	3.9	5.9	15	1.01	2.51	4.62	<0.05	0.2	<0.01	0.12	0.26	1.6
RK210506	1.52	0.04	<0.02	2.85	9	10	1.78	5.54	6.71	0.08	1	0.02	0.062	0.63	1.6
RK210507	4.57	0.53	<0.02	2.43	2.2	11	0.33	9.58	8.58	0.09	0.2	0.03	0.746	0.42	1.2
RK210508	9.37	0.04	<0.02	3.33	5.1	10	0.33	19.1	12.7	0.24	0.3	0.04	0.283	0.13	1.5
RK210509	0.71	5.7	<0.02	9.42	3.1	5	0.09	6.92	27	0.13	0.8	0.22	0.27	0.01	4.7
RK210510	0.31	2.45	0.03	15.7	17.8	1	0.11	22.1	23.2	0.23	1.1	<0.01	1.705	<0.01	8.7
RK210512	1.6	2.63	<0.02	8.42	56.8	4	0.19	15.15	19.5	0.16	0.7	0.01	0.657	0.02	5.3
RK210513	5.16	0.98	<0.02	13.15	79.9	2	0.09	22.5	29.4	0.31	1.2	0.01	0.534	0.01	8.7
RK210514	9.5	0.02	<0.02	1.23	1.3	3	0.11	17.35	3.61	0.25	0.4	0.05	0.931	0.02	0.5
RK210515	16.15	0.02	<0.02	7.05	4	9	1.67	13.5	8.56	0.18	1.3	3.01	0.432	0.65	4.3
RK210516	6.04	0.14	<0.02	5.78	5.5	2	0.38	14.75	13.6	0.19	1.3	0.09	0.245	0.93	3.2
RK210517	5.02	0.07	<0.02	1.77	10.4	7	1.43	9.44	5.54	0.14	0.1	0.02	0.092	0.16	0.8

Sample Number	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Nb ppm	Ni ppm	P ppm	Rb ppm	Re ppm	S %	S(+) %	Sc ppm	Se ppm	Sn ppm
RK210405	1	0.2	62	51.2	0.03	0.8	0.4	340	35.3	0.003	0.3	---	20.3	10	13.9
RK210409	4.5	2.1	3300	1.3	0.01	0.8	5.7	280	0.5	<0.002	0.11	---	9.9	3	0.3
RK210475	2.9	0.11	130	57.1	0.03	0.8	1.2	110	26.1	<0.002	0.56	---	---	1	1
RK210476	3	0.57	802	1.14	3.42	1.7	0.8	140	12.4	<0.002	0.03	---	---	<1	1.1
RK210477	0.8	0.12	88	0.4	3.29	1.7	0.5	100	25.8	<0.002	0.19	---	---	<1	1
RK210478	1	0.15	88	2.08	1.71	1.5	0.9	170	38.3	<0.002	0.65	---	---	6	2.2
RK210479	1.4	0.28	203	0.46	3.16	1.6	0.4	200	24.5	<0.002	0.07	---	---	<1	1.1
RK210480	5.3	1.67	1140	0.32	0.37	2.5	1.2	340	46.2	<0.002	0.04	---	---	<1	1.4
RK210482	3.1	0.45	357	3.16	0.51	1.2	1.2	430	23.4	<0.002	0.2	---	---	<1	3.5
RK210483	3	0.37	292	1.47	0.94	0.7	1.5	200	12.2	<0.002	0.07	---	---	<1	0.7
RK210484	2.7	0.93	597	3.49	2.22	1.6	1.3	190	26.7	<0.002	0.11	---	---	<1	1.3
RK210485	8.3	3.38	1775	0.5	1.47	1.6	6.1	430	6.9	<0.002	0.03	---	---	<1	1.3
RK210486	2.2	0.15	146	4.06	0.24	0.8	0.9	90	20.3	<0.002	0.06	---	---	14	0.9
RK210487	1.6	0.06	100	8.62	0.07	0.5	0.7	590	10.5	<0.002	0.29	---	---	20	0.5
RK210488	1	0.15	126	3.06	1.65	1.5	0.6	70	36.5	<0.002	0.09	---	---	2	1.1
RK210489	2.1	0.51	492	0.65	2.16	1.6	0.7	90	35.6	<0.002	0.05	---	---	<1	1
RK210490	3.1	0.04	141	6.76	0.02	0.3	0.9	110	7.7	<0.002	0.08	---	---	13	0.3
RK210492	1.6	0.11	104	11.2	0.77	0.9	0.8	160	25.8	<0.002	0.13	---	---	4	0.8
RK210493	1.3	0.3	166	26.7	1.51	1.7	1.2	260	35.6	<0.002	0.02	---	---	1	0.9
RK210496	1.9	0.07	95	19.1	0.02	0.8	1.5	190	11.9	0.003	0.12	---	5.1	27	0.4
RK210497	3.7	0.08	82	17.5	0.02	0.4	1.3	390	12.7	0.002	0.59	---	4.4	25	84.7
RK210499	1.4	0.07	256	6.17	0.01	0.5	4.6	140	0.9	<0.002	0.59	---	1	6	0.3
RK210500	3.5	0.04	92	13.6	0.01	0.4	5.1	70	0.8	0.003	5.59	---	1.3	11	0.3
RK210502	2.3	0.69	174	6.14	3.73	2	2.7	260	19.7	<0.002	0.43	---	21.8	4	2
RK210503	1.2	1.66	1385	0.73	0.09	3.4	57.9	490	0.7	<0.002	0.08	---	44.3	2	0.7
RK210504	2.1	0.62	385	5.06	1.31	1.6	1.9	410	26.8	<0.002	0.18	---	23	4	2.7
RK210505	3.2	0.7	631	0.99	0.03	0.5	2.8	50	5.3	<0.002	<0.01	---	4.2	2	0.5
RK210506	1.6	0.13	83	19.4	0.17	1.1	1.6	110	16.5	0.002	0.2	---	7.2	7	1
RK210507	0.8	0.09	213	45.6	0.12	0.4	1	140	9.1	0.004	0.05	---	5.4	5	0.5
RK210508	0.6	0.08	130	56	0.02	0.6	1.2	350	3.2	0.007	0.08	---	5.7	13	1
RK210509	1.2	0.12	397	1.72	0.25	1.1	2	290	0.4	0.002	0.04	---	14.5	19	3.1
RK210510	4.6	3.42	2440	3.35	<0.01	2.1	2.7	330	0.1	<0.002	<0.01	---	11.3	3	1.1
RK210512	4.5	2.48	1490	0.67	0.03	1.5	2.3	110	3.4	<0.002	6.09	---	8.1	7	0.5
RK210513	3.7	3.12	1360	0.41	0.01	2.8	1.9	260	0.8	<0.002	8.31	---	14.9	25	0.7
RK210514	3.2	0.03	100	113.5	0.01	0.8	0.9	190	0.5	0.004	0.18	---	2	40	0.2
RK210515	3.2	0.12	99	36.6	0.15	2.4	0.9	190	16	0.002	0.35	---	4.9	21	0.5
RK210516	1.8	0.34	127	84.7	0.07	1.6	1.3	800	19.4	0.003	0.27	---	12.7	14	0.9
RK210517	2	0.33	279	75.6	0.01	0.4	1.5	130	4.1	0.007	0.04	---	4.1	16	0.2

Sample Number	Sr ppm	Ta ppm	Te ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zr ppm
RK210405	3.4	0.05	6.78	0.9	0.135	6.03	2.3	144	1.4	6	33.1
RK210409	52.8	0.05	0.5	0.5	0.074	0.02	0.9	49	27.3	15.2	13.2
RK210475	3.7	0.05	0.58	0.7	0.152	0.37	0.9	42	1.2	7.1	33.4
RK210476	120.5	0.12	0.05	1.7	0.096	0.18	1.7	1	0.4	12.8	70.6
RK210477	89.3	0.13	0.45	1.9	0.097	0.38	1.7	3	0.5	6.1	85.4
RK210478	119.5	0.11	1.71	1.2	0.084	0.53	1.1	14	0.5	5.5	66.1
RK210479	97.8	0.12	0.21	1.8	0.088	0.38	1.5	2	0.4	7.7	77.8
RK210480	15.7	0.18	<0.05	2	0.213	0.88	1.3	41	1.1	11.2	66.2
RK210482	25.6	0.08	0.29	1	0.099	0.41	0.9	25	0.6	3.9	36.6
RK210483	32.9	0.05	0.23	0.7	0.064	0.18	0.6	25	0.3	3.1	27.1
RK210484	68.2	0.13	0.43	1.7	0.139	0.41	1.3	42	0.6	9	63.8
RK210485	50.6	0.11	<0.05	0.3	0.392	0.54	0.9	205	1.7	4.6	35.9
RK210486	6.5	0.05	1.74	0.7	0.06	0.3	0.8	20	0.4	6.2	34.7
RK210487	4.7	<0.05	6.7	0.7	0.024	0.15	0.4	11	0.2	2.9	15.5
RK210488	23.8	0.12	0.67	1.5	0.095	0.56	1.4	8	0.6	8.3	82.3
RK210489	49.8	0.13	0.22	1.6	0.09	0.55	1.7	3	0.5	12.6	57.9
RK210490	2.3	<0.05	2.87	0.3	0.012	0.12	0.4	11	0.2	4.1	9.1
RK210492	16.3	0.07	0.64	1	0.057	0.35	0.9	7	0.4	7.5	50.6
RK210493	31.1	0.12	0.43	1.8	0.099	0.5	1.5	6	0.7	11.8	86.4
RK210496	7.8	<0.05	7.22	0.5	0.093	0.33	0.5	58	0.8	2.4	17.5
RK210497	7.1	<0.05	<0.05	0.2	0.03	0.52	0.2	43	0.3	0.8	6
RK210499	2.9	<0.05	1.08	<0.2	0.012	0.02	1	32	19.2	1.3	5.4
RK210500	2.3	<0.05	2.73	0.2	0.025	0.02	0.2	12	0.7	2.2	8.2
RK210502	162	0.13	1.28	2.1	0.223	0.26	1	111	1.8	6.3	54
RK210503	827	0.2	0.09	0.3	0.791	<0.02	0.1	298	0.3	20.7	52.6
RK210504	64	0.11	2.29	1.9	0.216	0.37	0.7	152	1.2	8.5	40.5
RK210505	22.5	<0.05	0.12	0.3	0.043	0.06	0.2	39	0.5	3.2	8.3
RK210506	14.4	0.07	3.01	0.9	0.124	0.19	0.5	51	1	3.6	31.2
RK210507	43.6	<0.05	2.45	<0.2	0.13	0.12	0.1	103	1	2.5	5.7
RK210508	5.4	<0.05	3.64	0.2	0.155	0.05	0.2	113	2.5	2.2	7.3
RK210509	577	0.06	0.53	1	0.118	<0.02	0.7	115	0.5	14.5	23
RK210510	164	0.11	0.08	1.3	0.16	<0.02	2.2	62	82.4	13.5	33.4
RK210512	183.5	0.08	2.21	0.8	0.128	0.04	1.1	52	1.8	6.6	22.9
RK210513	65.1	0.14	6.34	1	0.288	<0.02	1.3	79	2.7	7.4	37
RK210514	1.9	<0.05	1.54	0.3	0.083	<0.02	0.7	63	0.7	2.5	13.6
RK210515	16.6	0.16	4.11	2.4	0.078	0.2	1.4	38	1.2	7.5	38.4
RK210516	22.7	0.07	3.55	1	0.272	0.21	0.8	108	1.8	5.5	39.5
RK210517	4.9	<0.05	6.21	<0.2	0.078	0.04	0.1	47	0.9	3	4.4

Sample Number	Au ppm	Au(2) ppm	Au(+) ppm	Ag ppm	Ag(+) ppm	As ppm	Sb ppm	Cu ppm	Cu(+) %	Pb ppm	Zn ppm	Al %	Ba ppm	Be ppm
RK210518	---	<0.005	---	0.16	---	1.1	0.32	153.5	---	4.5	94	9.79	520	0.79
RK210519	---	<0.005	---	0.11	---	1.3	0.42	202	---	5	94	9.79	450	1.08
RK210520	---	0.008	---	0.11	---	1.4	0.56	89.7	---	2.3	102	5.95	150	0.51
RK210522	---	<0.005	---	0.02	---	2.4	0.84	10.9	---	1.7	75	10.35	170	0.26
RK210523	---	0.027	---	0.06	---	15	3.68	42.7	---	1.6	44	2.37	50	0.26
RK210524	---	<0.005	---	0.12	---	4.3	0.96	81.8	---	4.6	18	8.89	260	1.09
RK210551	---	0.008	---	1.12	---	1.8	1.31	104	---	1.6	4	0.16	10	<0.05
RK210552	---	<0.005	---	0.67	---	2	2.59	773	---	1	65	1.63	<10	0.08
RK210553	---	<0.005	---	0.05	---	2.9	1.34	48.2	---	2.3	67	7.53	440	0.77
RK210554	---	<0.005	---	2.02	---	3.6	3.33	4710	---	2.5	198	6.33	10	0.19
RK210555	---	<0.005	---	0.03	---	3	2.22	11.7	---	3	8	5.55	200	0.71
RK210556	---	<0.005	---	0.04	---	6.4	5.12	36.3	---	2.2	24	4.05	20	0.59
RK210557	---	<0.005	---	4.86	---	3.4	1.81	>10000	1.325	2.8	243	7.46	10	0.32
RK210558	---	<0.005	---	1.3	---	3	1.29	9080	---	2.6	185	2.83	10	0.14
RK210559	---	<0.005	---	0.1	---	5.9	3.65	106.5	---	1.2	37	3.87	40	1.58
RK210561	---	<0.005	---	0.11	---	12.9	5.24	144	---	2.5	114	7.87	140	0.73
RK210562	---	0.071	---	1.54	---	27	3.4	328	---	36.5	48	2.09	280	0.15
RK210758	---	>10.0	12.20	6.52	---	17.7	6.15	7470	---	17.2	357	6.49	450	0.43
RK210759	---	0.019	---	0.6	---	152.5	5.24	51	---	9.5	225	8.68	2020	0.65
RK210760	---	<0.005	---	1.21	---	4.6	9.7	8620	---	5.3	64	2.19	20	1.06
RK210762	---	<0.005	---	0.23	---	10.6	1.06	123	---	6.1	15	7.09	680	0.51
RK336403	---	0.029	---	0.42	---	10.4	1.8	113.5	---	20.9	54	4.06	230	0.26
RK336404	---	<0.005	---	0.87	---	6.6	1.29	52	---	17	11	4.83	370	0.39
RK336405	---	0.405	---	1.1	---	36.1	2.86	106	---	21.6	16	1.99	280	0.17
RK336406	---	0.086	---	0.47	---	49	6.61	150.5	---	28.9	134	1.36	550	0.67
RK336407	---	<0.005	---	1.64	---	3.5	2.81	351	---	1.5	8	0.48	10	0.08
RK336408	---	0.038	---	1.3	---	35.7	7.39	68.8	---	121.5	306	7.67	1190	0.61
RK336409	---	<0.005	---	0.08	---	1.4	1.67	45.4	---	1.5	85	4.53	420	0.21
RK336410	---	0.019	---	1.31	---	18	4.97	193	---	6.1	25	5.38	1090	0.45
RK336411	---	<0.005	---	0.18	---	5.7	1.02	201	---	2.2	127	7.52	600	0.56
RK336413	---	<0.005	---	1	---	26.9	1.95	162	---	9.7	43	8.29	680	0.45
RK800225	---	0.006	---	0.14	---	32.5	7.6	187.5	---	4.1	48	7.03	560	0.83
RK800226	---	<0.005	---	0.03	---	8.2	1.72	80.3	---	4.3	21	6.22	750	0.83
RK800227	---	0.007	---	0.17	---	116	4.15	262	---	5.9	14	4.92	1160	0.6
RK800403	---	>10.0	10.20	22.6	---	745	41.7	708	---	204	93	0.41	70	0.14
RK800404	---	<0.005	---	81.6	---	1290	22.2	>10000	3.55	209	692	1.21	50	0.13
RK800406	---	0.130	---	2.47	---	23.7	6.01	98.6	---	10.6	5	4.53	260	0.3
RK800407	---	<0.005	---	0.22	---	114	5.05	43.6	---	37	201	0.25	20	0.25

Sample Number	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Fe %	Ga ppm	Ge ppm	Hf ppm	Hg ppm	In ppm	K %	La ppm
RK210518	0.02	6.37	0.05	23.6	29.4	11	0.68	7.06	20.1	0.11	1.4	0.05	0.076	1.55	11.6
RK210519	<0.01	5.57	<0.02	23.8	27.9	20	0.63	6.81	21.7	0.13	1.2	0.05	0.076	2.04	10.3
RK210520	0.05	8	0.05	16.75	64.4	45	0.19	12.95	22.5	0.13	1.1	0.22	0.099	0.77	7
RK210522	<0.01	8.57	0.02	6.98	42	3	0.27	8.28	21.2	0.09	1	0.01	0.086	1.06	2.5
RK210523	<0.01	16.4	0.64	7.42	23.9	15	0.16	6.18	7.09	0.06	0.6	0.06	0.027	0.14	4
RK210524	0.09	6.33	<0.02	18.15	10.4	32	1.46	3.5	17.15	0.05	0.7	0.09	0.024	0.5	8.4
RK210551	3	0.04	<0.02	1.29	1.7	10	0.09	2.79	1.61	<0.05	0.8	0.05	0.032	0.01	0.8
RK210552	1.05	0.02	<0.02	1.73	6.3	11	0.07	15.65	9.47	0.19	0.3	0.05	0.229	0.01	1.9
RK210553	0.23	0.39	0.03	39.7	8.1	3	1.32	4.56	16.95	0.14	3.2	0.05	0.125	0.72	16.2
RK210554	0.92	0.33	0.32	17.85	31.8	3	0.1	30.4	28	0.41	0.5	0.05	1.115	<0.01	16.2
RK210555	0.1	1.64	0.02	28.6	5	18	0.08	2.28	11.55	0.11	1.9	0.05	0.051	0.2	14.4
RK210556	1.43	5.54	0.03	8.88	14	11	0.78	22.2	10.65	0.27	1	0.05	1.01	0.01	6
RK210557	0.92	0.99	0.37	12.9	29.4	2	0.11	25.9	34.2	0.38	0.5	0.05	1.365	0.01	10.6
RK210558	0.48	0.16	0.1	8.12	15.2	13	0.09	9.63	13.25	0.12	0.7	0.05	0.559	0.01	4.4
RK210559	1.17	3.35	0.09	21.3	17.3	6	0.11	28.2	13.1	0.43	0.9	0.05	2.62	0.02	15.7
RK210561	0.02	6.57	0.18	17.75	49.6	36	0.09	11.3	23	0.18	2.3	<0.01	0.105	0.13	7.1
RK210562	3.79	0.05	0.03	2.79	10.7	24	0.11	6.26	6.38	0.1	0.8	0.05	0.077	0.36	1.4
RK210758	2.08	0.63	0.89	13.65	26.1	8	0.22	10.95	16.4	0.18	1.3	---	13.55	1.01	7.1
RK210759	0.47	0.56	0.3	9.5	14.8	9	0.31	5.27	14.35	0.15	1.5	---	0.133	1.07	4.1
RK210760	1.01	3.82	0.14	6.99	21.9	4	0.08	21.4	8.19	0.3	0.4	---	0.955	0.01	4.9
RK210762	0.34	0.07	<0.02	21.9	1.2	4	0.34	2.77	14.75	0.11	2.5	---	0.1	1.6	10.4
RK336403	1.07	0.04	<0.02	4.16	17.6	4	0.17	6.24	9	0.14	1.7	---	0.079	0.5	2.1
RK336404	1.88	0.05	<0.02	7.98	1.1	3	0.24	3.1	9.32	0.08	2.9	---	0.11	0.88	4.7
RK336405	4.29	0.03	<0.02	3.55	2.2	13	0.4	4.29	4.28	0.11	0.7	---	0.061	0.61	1.7
RK336406	2.44	0.02	0.02	18.6	21.1	<1	1.58	25.8	16.95	0.33	1.2	---	1.445	0.16	10.5
RK336407	1.62	0.04	<0.02	3.72	1	7	0.06	24.6	5.44	0.26	0.4	---	0.156	0.01	3.5
RK336408	1.82	0.02	0.23	10.65	3.3	14	0.99	5.07	14.15	0.12	1.8	---	0.693	2.47	4.3
RK336409	0.59	0.02	0.02	36.4	14.9	21	0.13	4.33	12.05	0.1	0.8	---	0.147	0.96	7.3
RK336410	30.9	0.02	<0.02	13.2	0.6	5	0.24	6.36	14	0.14	2.6	---	1.025	2.27	6
RK336411	0.85	0.03	<0.02	2.5	7.3	1	0.23	7.4	19.35	0.13	2.3	---	0.481	1.38	0.9
RK336413	3.92	0.36	0.04	11.5	6.7	2	0.53	5.72	17.85	0.12	0.8	---	0.206	1.2	5.4
RK800225	0.73	0.06	0.03	23.2	2.4	90	1	2.6	16.7	0.22	3.6	---	0.162	2.18	10.9
RK800226	0.48	0.06	0.02	25.1	1.8	3	0.5	2.3	14.45	0.21	2.8	---	0.162	1.56	12.5
RK800227	3.95	0.02	0.03	21.1	0.5	91	2.34	13.9	16.4	0.41	2.3	---	0.497	1.82	10.2
RK800403	74.8	0.02	0.84	1.81	2.2	13	0.08	4.86	1.44	0.19	0.1	---	1.955	0.1	0.9
RK800404	218	0.02	5.85	0.33	8.8	13	<0.05	15.3	4.87	1.36	0.2	---	74.4	0.09	<0.5
RK800406	4.36	0.01	0.02	20.1	3.4	18	1.26	2.81	6.89	0.16	3.1	---	0.218	1.72	8.1
RK800407	0.49	14.6	2.38	0.7	75.9	1175	3.24	6.39	0.68	0.11	<0.1	---	0.109	0.03	<0.5

Sample Number	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Nb ppm	Ni ppm	P ppm	Rb ppm	Re ppm	S %	S(+) %	Sc ppm	Se ppm	Sn ppm
RK210518	10.8	2.5	1295	0.86	2.13	3.3	17.4	1630	33.3	<0.002	<0.01	---	43.8	3	1
RK210519	10.3	2.48	1445	0.39	1.87	3.2	16.3	2070	38.5	<0.002	<0.01	---	38.5	2	0.9
RK210520	8.7	5.49	1950	0.29	1.51	2	43.7	300	12.4	<0.002	<0.01	---	89.1	3	1
RK210522	16.5	4.69	1145	0.22	1.34	1.2	31.5	200	12.9	<0.002	<0.01	---	77.6	2	0.8
RK210523	27	2.04	4780	0.21	0.4	0.4	14.1	320	2.5	<0.002	<0.01	---	41.4	2	0.2
RK210524	18.2	0.53	321	0.47	0.93	3.1	13.4	1080	4.7	<0.002	<0.01	---	16.2	2	0.5
RK210551	1.2	0.04	46	0.91	0.01	1.4	1.3	70	1	<0.002	0.06	---	1.4	4	0.5
RK210552	2.1	1.05	483	0.86	0.01	0.6	7.9	60	0.2	<0.002	2.56	---	5.9	3	0.6
RK210553	8.1	1.9	1395	0.36	2.83	6.2	3.6	610	17.6	<0.002	0.01	---	19.2	2	1.3
RK210554	5.5	4.69	2660	7.66	0.01	2.4	2.8	710	0.2	0.002	0.23	---	23.4	4	0.5
RK210555	2	0.62	427	0.41	2.51	4.4	4.3	260	5.3	<0.002	<0.01	---	10.1	2	1.1
RK210556	4	1.84	765	3.38	0.04	1.5	15.3	420	0.3	<0.002	<0.01	---	14.2	2	3.9
RK210557	7.9	5.35	3190	3.67	0.01	2.4	3.8	730	0.2	0.003	0.71	---	23.9	9	0.8
RK210558	2	2.47	1485	0.56	0.01	1.4	21.6	220	0.3	<0.002	0.72	---	6.9	9	0.6
RK210559	3.2	2.76	838	0.82	0.92	1.5	12.3	610	0.3	<0.002	0.01	---	10.7	2	15.5
RK210561	6.4	3.3	1760	0.49	2.77	6	54.6	660	3.2	0.003	0.17	---	37.2	2	1.2
RK210562	5.6	0.69	629	108.5	0.08	1	3.4	210	9.3	0.009	1.55	---	7.9	9	0.4
RK210758	6.5	2.97	2730	3.29	0.04	1.6	8.8	400	21.5	0.003	0.63	---	---	7	16.8
RK210759	8.2	3.03	2930	0.12	2.87	1.8	5.3	440	12.6	0.002	1.16	---	---	2	0.9
RK210760	4.4	1.54	2140	8.49	0.01	0.8	2.1	340	0.1	0.004	0.09	---	---	3	0.4
RK210762	4.1	0.28	100	0.43	2.01	3.2	0.5	110	37.2	<0.002	0.02	---	---	2	1
RK336403	4.8	0.8	652	23.1	1.12	2.3	1	60	12.5	0.005	2.55	---	---	7	0.6
RK336404	4.6	0.17	68	0.53	1.97	3.1	0.5	150	20	<0.002	0.75	---	---	3	0.9
RK336405	6.5	0.2	121	7.92	0.28	0.8	0.7	130	14.8	<0.002	0.11	---	---	11	0.4
RK336406	8.6	0.11	1400	29.7	0.02	0.9	2	110	3.8	0.004	0.24	---	---	8	0.9
RK336407	0.9	0.18	110	2.31	0.01	1.4	0.7	100	0.4	0.002	0.21	---	---	3	1.1
RK336408	6.8	2.77	1480	1.36	0.04	1.7	2.5	250	41	0.002	0.18	---	---	2	0.9
RK336409	8.7	1.98	1290	0.17	0.05	1.1	2.9	210	22.1	<0.002	0.03	---	---	1	1.4
RK336410	1.3	0.33	142	0.86	0.05	2.1	0.3	260	54.4	<0.002	0.32	---	---	2	41.1
RK336411	8.6	2.13	1340	0.48	0.89	3.4	1.1	210	15.4	<0.002	0.06	---	---	1	1.4
RK336413	4	1.41	394	2.14	2.25	1	2.6	350	31.9	0.004	0.56	---	---	6	2.2
RK800225	3.7	1.73	740	1.1	0.94	3.4	2.5	170	43.5	<0.002	1.58	---	---	3	1.4
RK800226	3.3	1.39	386	0.73	1.55	3.1	0.5	130	33.6	<0.002	1.22	---	---	3	1.4
RK800227	3.9	0.87	179	7.6	0.06	2.2	1.8	730	36.4	<0.002	0.6	---	---	20	2.3
RK800403	3.4	0.07	77	3.53	0.02	0.1	1.8	30	2	0.003	4.21	---	---	29	2.4
RK800404	5.4	0.34	601	16.15	0.01	0.2	1.2	30	1.7	0.004	>10.0	---	---	332	14.4
RK800406	0.7	0.06	18	1.89	0.08	2.9	1.4	80	42.8	<0.002	2.43	---	---	18	1.8
RK800407	17.9	7.72	1050	0.48	0.02	0.1	441	40	2.2	<0.002	0.02	---	---	1	<0.2

Sample Number	Sr ppm	Ta ppm	Te ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zr ppm
RK210518	993	0.22	0.07	2.3	0.527	0.13	0.9	349	0.3	21.7	28.3
RK210519	1060	0.2	0.05	1.6	0.503	0.22	0.7	330	0.3	18.2	21.7
RK210520	415	0.14	0.08	0.7	0.557	0.06	0.3	620	0.6	19.8	23.2
RK210522	1010	0.08	<0.05	0.3	0.585	0.08	0.2	396	0.4	14.1	21.5
RK210523	103.5	<0.05	0.11	0.2	0.177	<0.02	0.2	189	2.9	13.5	18.7
RK210524	595	0.19	0.07	1.3	0.198	0.02	0.7	191	1.6	7.8	14.1
RK210551	3.6	0.09	3.84	0.7	0.075	<0.02	1	9	3.1	2.6	25.2
RK210552	2.3	<0.05	0.79	0.3	0.063	<0.02	0.5	43	22.7	2.8	11.8
RK210553	148.5	0.37	<0.05	3.6	0.323	0.22	1.7	51	2.7	24.2	113
RK210554	5.7	0.12	0.09	0.6	0.291	0.02	0.9	73	169.5	25.1	18.8
RK210555	139.5	0.28	0.05	3.2	0.151	0.07	1.7	40	1.1	16.5	71.4
RK210556	328	0.09	<0.05	1.1	0.159	<0.02	2.8	103	5	17.2	27.6
RK210557	11.9	0.12	0.19	0.6	0.297	0.03	0.8	94	220	16.7	13.5
RK210558	7.5	0.08	0.07	1	0.093	<0.02	0.6	47	17.6	5.8	22.7
RK210559	139	0.09	0.52	1.1	0.157	<0.02	2.2	83	5.7	15.6	29.2
RK210561	317	0.4	<0.05	0.6	1.08	0.06	0.2	399	0.3	24.8	72
RK210562	8.3	0.05	1.86	0.5	0.163	0.16	0.6	32	1.8	4.1	26.3
RK210758	7.7	0.14	0.49	1.2	0.277	0.95	1.2	159	13	14.9	36.8
RK210759	119	0.15	0.15	1	0.368	0.59	1	189	1.1	9.7	41.1
RK210760	70.5	0.06	0.15	0.5	0.122	0.02	0.5	44	91.7	13.5	8.8
RK210762	41.7	0.22	0.35	2.3	0.16	0.44	1.6	27	1.5	16	81.6
RK336403	19	0.15	0.72	1.5	0.166	0.14	1.2	37	1.3	6.2	55.4
RK336404	53.2	0.21	0.56	2.6	0.201	0.24	1.6	37	1.2	9.3	86.4
RK336405	9.6	0.05	2.73	0.6	0.058	0.19	0.5	21	0.4	3.3	20.9
RK336406	6.4	0.08	0.77	1.4	0.028	0.04	1.9	82	2.4	49.4	65.5
RK336407	3.7	0.05	1.73	0.8	0.061	<0.02	0.9	43	91.8	2.7	13.4
RK336408	5.3	0.13	0.14	1.3	0.238	1.19	1.8	171	1.8	4.4	55.9
RK336409	2.8	0.06	0.25	0.9	0.188	0.26	0.7	107	2	6.9	19.8
RK336410	5.1	0.15	0.17	2.4	0.108	0.81	1.6	18	1.2	11.8	75
RK336411	15.8	0.23	0.17	1.2	0.254	0.44	1.3	60	2.2	5.3	68.7
RK336413	120.5	0.08	0.12	0.7	0.411	0.51	1	269	1	4.6	20.6
RK800225	31.3	0.25	1.03	3	0.182	0.33	1.8	15	0.9	18	110
RK800226	36.2	0.23	0.6	2.5	0.163	0.25	1.5	11	0.6	16.2	84.7
RK800227	43.1	0.16	6.2	2.1	0.132	0.28	1.3	42	2.9	8.4	69.6
RK800403	15.4	<0.05	<0.05	<0.2	0.021	3.04	0.2	14	0.3	1	4.3
RK800404	2.5	<0.05	<0.05	0.2	0.036	4.95	0.5	31	0.3	0.9	6.4
RK800406	24.6	0.17	3.06	3.1	0.192	1.01	1.8	49	0.7	16.7	93.3
RK800407	379	<0.05	0.05	<0.2	0.019	0.02	0.1	16	<0.1	0.7	1.1

Sample Number	Au ppm	Au(2) ppm	Au(+) ppm	Ag ppm	Ag(+) ppm	As ppm	Sb ppm	Cu ppm	Cu(+) %	Pb ppm	Zn ppm	Al %	Ba ppm	Be ppm
RK800408	---	<0.005	---	0.15	---	5	0.07	35.8	---	1.1	14	0.48	40	0.11
RK800409	---	0.006	---	4.31	---	4	2.7	2990	---	15.5	76	7.81	20	0.4
RK800410	---	<0.005	---	1.1	---	2.9	6.3	>10000	2.85	8.7	93	6.33	10	0.73
RK800411	---	<0.005	---	0.09	---	3.6	1.07	198	---	2.8	42	7.92	370	0.83
RK800412	---	<0.005	---	0.04	---	0.9	0.61	234	---	1.5	21	7.87	480	0.64
RK800413	---	<0.005	---	0.14	---	3.6	2.14	116.5	---	3.2	107	9.46	490	0.44
RK801642	---	<0.005	---	0.02	---	3.3	2.57	2.9	---	4.2	95	7.07	560	0.38
RK801643	---	0.006	---	2.22	---	142.5	3.27	1120	---	5.9	24	4.31	1660	0.45
RK801644	---	<0.005	---	2.06	---	12.1	4.7	609	---	18.4	36	3.98	750	0.26
RK801645	---	<0.005	---	0.04	---	1.3	0.83	37.4	---	1.2	26	7.55	130	0.58
RK801646	---	0.014	---	1.44	---	34.6	3.71	193.5	---	54.4	106	6.18	1200	0.39
RK801647	---	0.010	---	0.44	---	16.2	1.86	264	---	18.6	34	1.73	310	0.19
RK801648	---	<0.005	---	0.32	---	44.4	92	140	---	18.1	103	6.58	590	0.58
RK801649	---	<0.005	---	0.45	---	4.6	2.1	356	---	10.7	28	1.28	220	0.13
RK801650	---	<0.005	---	0.12	---	12.6	6.76	89.5	---	5.3	55	6.85	780	0.46
RK801652	---	<0.005	---	0.03	---	3.6	0.96	4.9	---	1.9	20	6.71	650	0.55
RK801653	---	<0.005	---	0.03	---	4	1.07	4.2	---	1.8	20	6.41	840	0.5
RK801654	---	<0.005	---	0.18	---	19.5	0.68	302	---	1.6	17	3.97	220	0.22
RK801655	---	<0.005	---	0.08	---	6.1	1.2	155	---	1	24	9.87	320	0.76
RK801656	---	<0.005	---	0.79	---	2.7	2.53	2290	---	3.3	132	6.51	10	0.25
RK801657	---	<0.005	---	0.23	---	7.6	2.04	65.1	---	7.2	43	1.87	310	0.17
RK801658	---	<0.005	---	0.22	---	3.5	0.51	64.6	---	8.5	101	5.29	200	0.16
RK801659	---	0.021	---	1.91	---	19.3	4.5	569	---	5.3	15	1.69	20	0.25
RK801660	---	<0.005	---	0.15	---	4.7	3.98	157	---	7.3	32	8.46	20	0.42
RK801662	---	<0.005	---	0.15	---	5.5	3.2	20.6	---	7	29	7.84	350	0.77
RK801834	---	0.034	---	46.7	---	958	16.8	>10000	3.65	142.5	853	0.62	90	0.17
RK801835	---	0.006	---	0.67	---	66.4	7.35	161.5	---	22.1	334	6.84	2950	0.62
RK801836	---	0.031	---	0.22	---	4.4	1.29	106.5	---	3.3	30	2.23	1120	0.13
RK801837	---	0.010	---	2.99	---	8.3	3.06	2700	---	4.7	78	6.66	1420	0.39
RK801838	---	0.034	---	0.15	---	23.9	2.85	38.7	---	4.7	22	2.01	2840	0.21
RK801840	---	<0.005	---	0.09	---	1.9	0.88	21.5	---	1.6	12	6.49	1440	0.81
RK801841	---	<0.005	---	0.11	---	5.6	1.05	58.7	---	1.2	13	6.42	1120	0.57
RK801842	---	0.008	---	1.13	---	20.4	7.06	450	---	6.1	11	0.73	20	0.15
RK801843	---	<0.005	---	0.27	---	8.5	2.35	1580	---	2.1	50	9.07	310	1.24
RK801844	---	<0.005	---	0.02	---	0.6	0.26	18.4	---	1.1	5	0.27	160	<0.05
RK801845	---	<0.005	---	0.56	---	3.3	0.5	765	---	622	1145	0.18	70	<0.05
RK801846	---	<0.005	---	0.74	---	38.6	1.86	34.6	---	5.7	24	6.93	230	0.23
RK801847	---	0.006	---	0.13	---	13.2	6.13	25.5	---	10.7	152	5.74	160	0.63

Sample Number	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Fe %	Ga ppm	Ge ppm	Hf ppm	Hg ppm	In ppm	K %	La ppm
RK800408	0.1	19.4	0.08	5.98	7.9	11	0.27	1.68	1.19	0.06	0.1	---	0.029	0.05	2.8
RK800409	5.47	8.06	0.07	13.35	32.1	14	<0.05	9.46	16.65	0.14	0.6	---	1.285	<0.01	6.7
RK800410	4.13	4.62	0.35	15.75	43.9	14	0.06	16.75	14.05	0.24	0.5	---	1.445	<0.01	7.8
RK800411	0.99	2.01	0.03	31.6	7.2	6	0.27	3.13	16.35	0.1	2.3	---	0.133	0.68	15.1
RK800412	0.51	0.19	0.02	10.7	1.4	4	0.38	1.97	16.15	0.08	3.1	---	0.053	1.02	4.8
RK800413	1.1	2.78	0.02	7.51	11.9	2	0.42	5.78	19.8	0.13	0.6	---	0.152	1.37	3
RK801642	0.08	1.71	0.08	10.7	15.6	23	1.28	6.4	15	0.12	0.5	<0.01	0.161	0.87	4.9
RK801643	15.5	0.24	0.08	13.95	5.4	24	0.65	25.5	17.6	0.32	0.6	0.5	0.499	1.27	8.7
RK801644	21.2	0.08	0.13	3.92	3.6	9	0.72	6.01	10.3	0.07	0.5	0.04	3.82	1.43	2.8
RK801645	0.21	2.34	0.05	19.1	16.2	117	0.08	2.7	10.05	0.11	2.9	<0.01	0.024	0.12	8.1
RK801646	12.15	0.39	0.16	3.89	11.3	4	0.75	17.15	16.2	0.22	0.3	0.05	0.716	1.2	2.5
RK801647	7.01	0.2	0.03	2.31	7	7	0.49	10.7	8.87	0.13	0.2	0.05	0.147	0.23	1.7
RK801648	0.36	0.02	0.1	33.1	10.7	4	3.14	9.74	16.1	0.22	2.2	0.09	0.129	0.74	16.6
RK801649	4.69	0.07	0.05	3.1	11.7	15	0.23	9.62	7.64	0.13	0.3	0.05	0.295	0.2	1.6
RK801650	2.3	2.79	0.07	22.8	12.6	12	0.45	6.85	15.15	0.15	1.8	0.05	1.195	0.21	12.3
RK801652	0.38	0.21	<0.02	9.04	5.7	6	1.12	3.65	14.45	0.1	2.4	0.01	0.066	0.63	4.8
RK801653	0.47	0.19	0.02	7.44	3.5	4	1.13	3.12	13.5	0.11	2.3	<0.01	0.073	0.81	4.1
RK801654	0.51	0.49	0.02	14.6	29.9	7	0.35	10.3	10.4	0.18	0.9	0.01	0.038	0.18	7
RK801655	0.17	3.59	0.03	8.3	27.1	30	0.59	5.59	19.35	0.17	0.5	<0.01	0.07	0.27	3.6
RK801656	0.61	3.04	0.13	13.75	16.3	3	0.07	16	19.2	0.19	0.8	0.05	1.485	<0.01	8.4
RK801657	4.11	0.09	0.03	5.31	22.6	3	0.91	9.3	6.93	0.12	0.6	0.03	0.074	0.14	4.1
RK801658	2.81	0.03	<0.02	14.3	109	2	0.18	24.8	16.5	0.27	2.7	0.2	0.422	0.15	7.1
RK801659	11.3	1.3	0.03	7.33	6.4	10	0.06	19.35	7.46	0.24	0.5	0.5	0.955	0.02	4.2
RK801660	2.94	6.79	0.03	26.8	10.4	25	<0.05	11.15	21.5	0.15	2.1	0.01	2.1	0.01	14.4
RK801662	0.59	1.02	0.03	23.6	6.4	4	0.38	2.95	18	0.13	3	<0.01	0.039	0.25	10.3
RK801834	293	0.02	8.82	0.4	8.4	7	<0.05	15.05	2.49	1.06	0.1	---	49.7	0.09	<0.5
RK801835	1.12	0.04	0.03	4.16	6.6	8	0.29	6.04	15.95	0.11	1.3	---	0.192	1.63	1.7
RK801836	1.57	0.32	0.03	8.54	9.5	13	0.21	2.69	5.34	0.08	0.6	---	0.285	0.38	4.1
RK801837	3.32	4.3	0.18	12.25	27.9	21	0.28	10.15	14.55	0.14	1.4	---	0.927	0.37	5.9
RK801838	0.94	0.05	<0.02	2.67	7.1	11	0.33	3.71	3.72	0.07	0.4	---	0.06	0.56	1.2
RK801840	0.49	0.34	<0.02	13.65	0.9	4	0.25	1.9	14.35	0.09	3.4	---	0.071	1.34	6.7
RK801841	1.07	0.07	<0.02	7.41	0.9	3	0.6	5.33	15.1	0.09	2.7	---	0.09	1.76	3.9
RK801842	16.85	0.52	<0.02	2.12	2.1	8	<0.05	20.6	8.17	0.29	0.4	---	3.73	0.02	1.5
RK801843	0.45	6.95	0.1	13.9	25.7	18	0.18	12.25	21.3	0.21	1.4	---	0.654	0.67	6.6
RK801844	0.02	0.03	0.02	0.82	0.5	21	0.11	0.3	0.62	<0.05	<0.1	---	0.009	0.02	<0.5
RK801845	0.19	0.14	8.7	0.43	0.7	22	0.08	0.26	0.35	<0.05	<0.1	---	0.006	0.04	<0.5
RK801846	1.5	0.18	0.04	45.1	0.8	4	0.13	9.44	17.05	0.17	1.3	---	0.133	0.44	24.3
RK801847	0.08	0.42	0.05	24.8	4.3	5	0.39	5.97	12.7	0.12	2.4	---	0.073	1.21	11.6

Sample Number	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Nb ppm	Ni ppm	P ppm	Rb ppm	Re ppm	S %	S(+) %	Sc ppm	Se ppm	Sn ppm
RK800408	3.7	10.85	829	4.03	0.06	0.3	22.2	90	1	0.005	0.14	---	---	2	<0.2
RK800409	2.1	2.41	1910	0.63	0.02	2.6	5.4	790	<0.1	<0.002	1.79	---	---	6	0.5
RK800410	3.3	2.97	3060	1.9	0.02	2.9	5.6	830	<0.1	0.002	0.45	---	---	3	0.5
RK800411	4.3	1.34	641	0.33	2.24	3.9	1.8	460	13	0.002	1.21	---	---	2	1.4
RK800412	2.5	0.92	185	0.21	3.38	3.4	0.7	100	22	<0.002	0.33	---	---	2	3.1
RK800413	2.8	1.88	1120	0.12	2.16	1	2.4	310	24.4	<0.002	1.82	---	---	2	3.4
RK801642	8.4	2.52	1710	0.13	1.06	1.4	10.2	480	23	<0.002	<0.01	---	23.1	2	0.7
RK801643	0.7	0.35	155	0.66	0.06	1.4	2.1	650	26.5	<0.002	0.18	---	14.3	15	0.4
RK801644	3.2	0.33	201	0.5	0.06	1.1	1.6	260	31.1	<0.002	0.05	---	12.6	3	1.3
RK801645	1.5	1.63	553	0.54	4.38	2.6	41.9	90	1.8	<0.002	0.01	---	17.7	2	0.4
RK801646	2.9	1.68	887	5.48	0.15	0.9	3.9	370	27.2	0.002	0.05	---	22.2	4	1
RK801647	2.5	0.5	258	159	0.02	0.5	1.9	270	5.8	0.024	0.07	---	7.1	4	0.5
RK801648	28.1	0.09	358	2.08	0.08	1.4	3.3	490	17.8	<0.002	0.02	---	12.9	3	1.4
RK801649	1.1	0.22	197	6.48	0.02	0.8	2.4	240	4.8	0.007	0.05	---	6.4	5	0.4
RK801650	8.8	1.69	1470	0.27	1.18	3	2.2	330	4.7	<0.002	0.48	---	14.6	2	1.1
RK801652	2.9	0.95	249	1.44	2.88	2.1	1.7	240	14.4	<0.002	0.35	---	10.5	2	1.3
RK801653	2.5	0.79	222	0.69	2.49	2.1	0.8	260	15.8	<0.002	0.25	---	9.7	2	1.7
RK801654	3.4	1.04	340	0.87	1.17	1.8	7.5	250	4	<0.002	5.26	---	8.1	7	2.4
RK801655	5.9	2.7	567	1.12	2.68	1.6	8.2	470	1.9	0.013	1.21	---	35	6	1.8
RK801656	4.6	2.79	2160	1.31	0.01	1.5	1.6	290	0.1	<0.002	0.06	---	10.3	3	0.7
RK801657	6.3	0.56	302	5.98	0.02	0.8	1.5	190	3.6	0.002	0.14	---	5.7	7	0.2
RK801658	6.1	3.04	1590	4.36	0.01	3.7	5	100	3.1	<0.002	7.56	---	9.1	14	1.1
RK801659	1	0.42	400	6.08	0.02	1.3	1.6	270	0.5	0.004	0.63	---	4.2	23	0.6
RK801660	3	2.54	1885	0.72	0.03	3.9	8.4	400	0.2	<0.002	0.48	---	26.1	3	1.5
RK801662	3.3	0.9	216	1.37	2.77	1.9	1.1	250	6.6	<0.002	0.16	---	19.6	2	3.2
RK801834	4.5	0.11	159	20	0.02	0.1	0.7	20	1.6	0.003	>10.0	---	---	260	20.8
RK801835	8.5	3.15	3300	0.72	0.41	1.6	3.1	290	13	<0.002	0.18	---	---	1	0.8
RK801836	5.7	0.84	452	1.86	0.04	0.6	2.5	100	9	0.002	0.18	---	---	2	1.1
RK801837	6.9	2.51	1400	8.62	0.45	2.4	18.6	400	8.3	0.003	1.12	---	---	4	1
RK801838	3.6	0.26	119	35.9	0.06	0.4	1.7	70	12.9	0.005	0.2	---	---	2	0.7
RK801840	3.3	0.53	117	2.22	1.95	2.9	0.7	250	32.7	<0.002	0.14	---	---	2	2
RK801841	2.4	0.38	144	2.38	1.31	2	0.6	490	36.4	<0.002	0.05	---	---	2	3.9
RK801842	1.8	0.03	69	9.41	0.01	0.8	0.7	470	0.1	0.002	1.16	---	---	15	2.2
RK801843	3.7	3.93	1190	4.25	1.01	2.6	11.5	460	15.7	0.014	3.93	---	---	12	7.8
RK801844	3.5	0.02	232	0.22	0.08	0.1	2	90	1	<0.002	0.01	---	---	1	<0.2
RK801845	12.5	0.02	46	0.24	0.02	0.1	0.9	10	1.1	<0.002	0.09	---	---	3	<0.2
RK801846	7.1	2.74	412	0.12	2.06	1	1.1	2020	9	<0.002	0.41	---	---	2	0.8
RK801847	5.2	1.29	3490	5.58	0.56	2.3	1.3	260	28	<0.002	2.43	---	---	2	0.9

Sample Number	Sr ppm	Ta ppm	Te ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zr ppm
RK800408	149.5	<0.05	0.07	<0.2	0.027	<0.02	3.5	35	0.1	9.6	4.3
RK800409	479	0.13	3.03	0.6	0.447	<0.02	0.6	137	1.6	14.2	16.2
RK800410	276	0.14	1.65	0.7	0.442	<0.02	0.9	134	40	19.4	11.7
RK800411	286	0.26	0.42	2.8	0.233	0.18	1.9	61	0.7	22.3	69.2
RK800412	104	0.23	0.22	2.8	0.234	0.29	1.9	58	0.9	11.8	91.9
RK800413	239	0.08	0.54	0.5	0.435	0.42	0.4	312	0.4	10.2	15.3
RK801642	124	0.07	<0.05	0.5	0.261	0.34	0.4	147	0.4	11.3	13.8
RK801643	28.8	0.08	10.45	0.5	0.272	0.33	0.3	189	1.7	9.4	10.5
RK801644	11.2	0.06	0.29	0.4	0.183	0.41	0.4	116	1.1	3.4	13
RK801645	109.5	0.17	<0.05	2.8	0.094	0.04	1.6	63	0.1	19.6	93.9
RK801646	30.8	0.05	1.26	0.5	0.201	0.46	0.4	179	3.9	5.6	6.5
RK801647	20.5	<0.05	2.43	0.2	0.111	0.09	0.2	74	1.2	4.2	4.6
RK801648	184.5	0.11	0.2	2.6	0.118	0.29	1.4	53	7	14.3	75.6
RK801649	6.6	0.05	2.61	0.4	0.126	0.08	0.3	53	1.9	4.5	7.6
RK801650	253	0.2	0.68	2.3	0.205	0.06	1.9	53	1	19.7	55.5
RK801652	87.8	0.16	0.15	2.6	0.114	0.18	1.5	31	0.5	7.6	86.6
RK801653	82.1	0.14	0.16	2.6	0.11	0.19	1.3	26	0.5	5.6	77.6
RK801654	67.8	0.12	0.48	1.7	0.118	0.06	0.7	37	0.9	6.2	29.1
RK801655	260	0.09	0.08	0.4	0.34	0.09	0.5	183	0.9	11.3	13.4
RK801656	179	0.1	0.25	1	0.146	<0.02	1.5	45	41.7	15	23.6
RK801657	6.7	0.05	1.36	0.6	0.086	0.05	0.6	45	0.8	8.5	14.5
RK801658	3.1	0.29	1.94	2.8	0.117	0.04	1.6	73	0.7	8	86.4
RK801659	95.9	0.07	11.65	0.7	0.073	<0.02	0.6	83	87.9	5.4	14.5
RK801660	452	0.25	2.07	2.4	0.366	<0.02	2.2	141	10	22.1	61.9
RK801662	196.5	0.13	0.11	2.2	0.173	0.12	2.2	49	1.8	16.5	98.5
RK801834	3	<0.05	<0.05	<0.2	0.015	0.52	0.2	16	0.2	0.6	2.4
RK801835	64.8	0.12	<0.05	0.6	0.312	1.08	0.9	202	1.3	3.3	38.4
RK801836	29.3	<0.05	0.15	0.7	0.079	0.11	0.4	44	0.8	5.5	17
RK801837	257	0.16	2.02	1.5	0.368	0.1	0.7	185	1.2	18.7	36.5
RK801838	44.9	<0.05	1.16	0.5	0.058	0.16	0.4	42	0.4	1.3	12.3
RK801840	74.6	0.2	0.35	3.3	0.18	0.4	2.6	12	0.9	17.6	108
RK801841	32.7	0.16	0.96	2.9	0.109	0.6	1.7	26	0.4	11.1	82.6
RK801842	20.3	<0.05	11.7	0.6	0.102	<0.02	0.2	79	3.8	2.2	10.4
RK801843	249	0.16	0.75	1.8	0.346	0.16	0.8	209	3	41.8	31
RK801844	12.5	<0.05	<0.05	<0.2	0.005	<0.02	<0.1	2	0.1	1.7	0.7
RK801845	3.9	<0.05	<0.05	<0.2	<0.005	<0.02	0.4	3	0.1	0.5	0.9
RK801846	56.7	0.06	1.84	0.8	0.27	0.1	0.8	115	1.2	7.3	35.6
RK801847	30.9	0.14	<0.05	1.9	0.147	1.39	1.5	38	1.4	16.3	67.7

Sample Number	Au ppm	Au(2) ppm	Au(+) ppm	Ag ppm	Ag(+) ppm	As ppm	Sb ppm	Cu ppm	Cu(+) %	Pb ppm	Zn ppm	Al %	Ba ppm	Be ppm
RK801848	---	0.008	---	0.67	---	41.7	4.95	24.3	---	40.6	100	6.7	300	0.61
RK801865	---	<0.005	---	0.17	---	11.9	1.41	21.3	---	2.9	40	1.9	140	0.28
RK801866	---	<0.005	---	<0.01	---	1.2	0.06	5.1	---	3.4	11	0.46	60	0.13
RK801867	---	<0.005	---	0.06	---	21	1.55	37.6	---	10.8	106	4.31	2300	0.6
RK801868	---	<0.005	---	0.1	---	5.2	1.6	169	---	14.4	78	8.7	800	0.78
RK801870	---	<0.005	---	0.1	---	4.9	1	43.7	---	1.8	5	2.23	700	0.72
RK801871	---	<0.005	---	<0.01	---	<0.2	<0.05	9.7	---	4	11	0.62	2840	0.11
RK801891	---	<0.005	---	0.12	---	0.5	0.57	102.5	---	2.1	77	7.74	100	0.13
RK801892	---	<0.005	---	0.06	---	4	1.32	7.8	---	3.6	59	9.25	380	0.49
RK801893	---	<0.005	---	0.01	---	0.4	0.16	14.4	---	2.7	68	7.41	1320	0.47
RK801894	---	<0.005	---	0.03	---	3	2.19	4.3	---	30.5	62	8.35	330	0.51
RK801895	---	<0.005	---	0.05	---	4.1	0.77	83.9	---	1.6	30	7.93	550	0.47
RK801896	---	<0.005	---	1.08	---	3	1.95	884	---	21	83	7.48	190	0.45
RK801897	---	<0.005	---	0.56	---	1.9	1.13	1840	---	5.8	245	3.6	50	0.2
RK801898	---	0.009	---	1.12	---	8.5	2.22	245	---	12.6	113	2.92	150	0.24
RK801899	---	0.014	---	5.73	---	3.5	2.17	689	---	1.4	7	0.32	<10	0.09
RK801955	---	<0.005	---	1.31	---	16.6	21	3310	---	1410	1845	1.18	3530	0.24
RK801956	---	<0.005	---	0.02	---	3.2	3	12.5	---	8.6	169	4.83	1090	0.3
RK801957	---	0.019	---	1.52	---	1.9	3.81	23.6	---	8.3	12	0.62	150	0.06
RK801958	---	0.689	---	2.08	---	10.5	23.4	409	---	1990	2110	1.06	830	0.13
RK801959	---	<0.005	---	0.14	---	3.1	0.53	24.1	---	9	50	6	590	0.41
RK801960	---	0.008	---	0.81	---	28.2	7.1	26.7	---	31.1	55	7.54	250	0.78
RK801961	---	<0.005	---	0.12	---	16.2	1.98	36.9	---	2.9	136	7	680	1.01
RK801962	---	0.009	---	2.31	---	307	18.7	338	---	35.9	28	4.85	30	0.16
RK801975	---	<0.005	---	0.09	---	4.6	1.66	62.3	---	20.5	104	3.69	560	0.66
RK801976	---	0.013	---	0.08	---	16	1.5	115	---	3.9	36	4.66	120	0.61
RK801977	---	<0.005	---	0.09	---	0.6	0.53	10.4	---	1.9	5	5.88	1170	0.8
RK801978	---	<0.005	---	0.28	---	6	1.67	252	---	4.5	43	8.64	120	0.49
RK801980	---	0.013	---	0.12	---	4	0.98	10.1	---	2.2	6	7.02	3110	0.72
RK801981	---	0.017	---	1.02	---	37.1	1.54	913	---	17.3	42	4.08	770	0.54
RK801982	---	0.017	---	0.45	---	4.8	6.23	17.9	---	3.7	12	5.17	910	0.57
RK801983	---	0.011	---	0.6	---	8.2	1.15	104	---	3.2	34	5.31	620	0.27
RK801984	---	0.010	---	0.68	---	22.9	1.41	30.3	---	4.4	10	5.09	870	0.3
RK801985	---	0.021	---	0.25	---	135	1.94	5.3	---	6.3	11	5.15	90	0.43
RK801986	---	<0.005	---	0.52	---	8	0.93	2620	---	0.9	13	0.92	30	0.11
RK801987	---	<0.005	---	0.04	---	5.9	0.82	22.2	---	4.5	56	8.46	150	0.45
RK801988	---	0.012	---	1.18	---	82.9	5.48	168.5	---	14.4	97	7.13	250	0.43
RK801990	---	<0.005	---	0.06	---	5.9	1.4	41.3	---	10.7	25	5.25	190	0.74

Sample Number	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Fe %	Ga ppm	Ge ppm	Hf ppm	Hg ppm	In ppm	K %	La ppm
RK801848	0.45	0.15	0.09	12.25	10.1	7	0.41	4.59	15.35	0.13	1.8	---	0.1	1.87	5.5
RK801865	0.02	9.47	0.25	8.71	4.1	10	1.22	1.72	4.57	0.08	0.6	---	0.056	0.17	4.4
RK801866	0.01	7.45	0.07	2.4	1.9	14	0.16	0.52	1.02	0.05	0.1	---	0.005	0.07	1.4
RK801867	0.03	10.75	0.33	13.4	22.7	80	0.97	4.95	8.99	0.1	0.8	---	0.037	0.21	6.3
RK801868	0.11	6.08	0.09	22.3	27.5	7	2.52	6.85	18.35	0.14	1.4	---	0.065	1.71	10.9
RK801870	<0.01	0.19	<0.02	1.88	0.9	15	0.5	0.52	2.2	<0.05	<0.1	---	<0.005	0.21	1.4
RK801871	0.06	4.15	0.03	1.63	1.9	12	0.14	0.54	1.16	0.05	<0.1	---	0.005	0.08	1
RK801891	0.02	8.34	0.15	3.07	49.3	373	0.16	7.23	12.55	0.13	0.6	<0.01	0.047	0.05	1.4
RK801892	0.49	2.42	<0.02	10.2	28	8	0.18	6.38	15.75	0.18	0.9	<0.01	0.108	0.5	4.1
RK801893	0.04	0.29	0.02	31.3	4.7	11	0.59	3.37	12.5	0.16	0.4	<0.01	0.03	0.54	15.1
RK801894	0.46	4.12	0.7	10.5	11.7	15	0.09	3.25	15.1	0.18	2.4	0.01	0.107	0.16	4.7
RK801895	<0.01	3.98	0.09	13.5	19.1	15	0.78	5.14	15.45	0.19	2	<0.01	0.07	0.56	6
RK801896	0.82	3.36	0.08	13.65	16.6	13	0.95	4.83	16.9	0.18	2	0.1	0.317	0.3	5.9
RK801897	0.4	3.06	0.08	15.55	14.1	7	0.16	8.13	10.65	0.15	1.3	<0.01	0.637	0.06	9.2
RK801898	3.88	0.25	0.06	11.4	17.3	5	0.5	14.8	12.8	0.2	1.8	0.3	0.15	0.16	6.6
RK801899	2.8	0.02	0.02	2.11	1.8	5	0.05	23.6	7.16	0.23	0.3	0.05	0.376	<0.01	1.7
RK801955	0.59	0.04	15.85	4.75	0.7	23	0.45	0.84	3.15	0.07	0.7	---	0.057	0.29	2.8
RK801956	0.01	0.16	0.17	12.6	14	13	0.23	3.91	10.6	0.08	1.4	---	0.071	0.88	6
RK801957	0.65	0.02	0.04	0.34	0.5	8	<0.05	1	1.32	<0.05	0.6	---	0.03	0.2	<0.5
RK801958	<0.01	0.61	21.4	2.34	1.2	21	0.22	0.41	2.18	<0.05	0.2	---	0.008	0.35	1.2
RK801959	0.08	0.11	0.04	13	1.8	11	0.37	0.76	11.7	<0.05	2.9	---	0.017	0.82	6
RK801960	0.06	2.1	0.14	8.23	5.4	3	0.58	2.64	15.05	0.07	3.4	---	0.046	2.35	2.6
RK801961	0.17	2.39	0.03	11.2	12.1	4	0.5	3.83	14.75	0.07	2.7	---	0.03	1.05	4.7
RK801962	0.02	0.07	0.44	1.23	14.1	2	0.63	20.2	12.15	0.23	1.4	---	0.018	1.87	<0.5
RK801975	0.08	0.09	0.38	35.5	0.9	14	0.37	0.81	6.67	0.05	2.2	---	0.006	0.44	17.1
RK801976	0.03	19.7	0.05	31	1.4	2	0.49	0.79	6.72	0.05	2.8	---	0.007	0.46	17.7
RK801977	0.2	0.23	<0.02	3.54	0.9	4	1.07	1.18	9.6	0.06	4	---	0.043	1.22	1.7
RK801978	0.85	2.46	0.03	11.1	12.6	18	0.35	6.07	15.65	0.08	1.4	---	0.225	0.19	4.8
RK801980	0.79	0.03	<0.02	3.01	0.7	8	0.6	4.16	14.55	0.09	2.6	---	0.066	2.78	1.3
RK801981	2.45	0.03	<0.02	38.4	4.2	2	0.34	16	11.4	0.18	1.5	---	1.115	1.36	25.9
RK801982	0.72	0.04	<0.02	6.05	0.7	3	0.27	1.42	13.65	0.06	3	---	0.252	2.2	2.1
RK801983	1.21	0.03	<0.02	10.95	1.4	4	0.24	4.47	15.85	0.08	2.1	---	0.644	1.6	4.6
RK801984	1.25	0.03	<0.02	1.29	0.4	3	0.34	3.61	14.55	0.07	2.4	---	0.391	2.13	0.6
RK801985	2.43	0.01	<0.02	7.12	4.4	6	0.19	5.9	10.8	0.11	2.2	---	0.382	2.23	3
RK801986	0.08	10.85	0.09	1.55	2.1	9	0.22	1.1	2.64	<0.05	0.2	---	0.028	0.06	1.1
RK801987	0.12	3.18	0.08	18.15	18.6	9	<0.05	6.76	16.85	0.1	1.8	---	0.189	0.21	8.9
RK801988	1.52	0.46	0.07	15.8	8.4	8	1.13	4.61	16.4	0.11	2.6	---	0.361	2.05	7.4
RK801990	0.06	1.63	0.13	5.2	6.4	15	0.36	1.5	5.98	0.06	0.1	---	0.015	0.38	2.5

Sample Number	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Nb ppm	Ni ppm	P ppm	Rb ppm	Re ppm	S %	S(+) %	Sc ppm	Se ppm	Sn ppm
RK801848	6.7	1.52	863	0.55	0.77	2.3	2.9	450	43.2	<0.002	2.66	---	---	5	1.3
RK801865	23.6	0.7	351	0.33	0.08	1	6	170	5.5	0.003	0.28	---	---	2	0.4
RK801866	6.7	0.23	430	0.16	0.07	0.2	2.9	100	2.4	0.002	0.02	---	---	1	<0.2
RK801867	60.4	4.23	1170	0.29	0.07	2.6	54.5	560	8	<0.002	0.15	---	---	2	0.6
RK801868	33.3	2.48	952	0.32	2.34	2.4	13.9	1560	39.4	0.002	1.27	---	---	3	0.7
RK801870	5.9	0.08	45	0.17	1	0.2	2.3	20	7.2	<0.002	0.02	---	---	1	<0.2
RK801871	4.4	0.16	382	0.09	0.18	0.1	3.4	160	2.8	<0.002	0.08	---	---	1	<0.2
RK801891	4.3	6.04	1365	0.19	0.91	0.5	186.5	180	1	<0.002	0.05	---	44.9	2	0.2
RK801892	3.1	2.41	1470	0.28	3.53	2	7.1	740	5.7	<0.002	0.34	---	28	2	0.4
RK801893	41.6	1.58	121	0.16	3.75	4.9	5.9	260	18.8	<0.002	<0.01	---	7.1	2	1.1
RK801894	4.4	1.82	883	0.3	3.47	1.4	8.4	330	1.5	<0.002	0.01	---	26.6	2	0.8
RK801895	4.3	1.75	797	0.54	2.07	1.3	8.8	330	6.7	<0.002	0.01	---	28.3	1	0.8
RK801896	11.5	2.01	1010	0.27	1.28	1.4	8.6	310	5	<0.002	0.05	---	25.3	4	2
RK801897	4.1	1.67	2040	0.65	0.01	1.8	5	310	1.4	<0.002	0.06	---	8.8	3	0.6
RK801898	5.6	0.97	554	1.63	0.34	1.6	2.3	670	3.8	0.002	0.18	---	17.6	9	0.8
RK801899	1.6	0.1	66	3.42	<0.01	0.7	1.1	100	0.2	<0.002	0.14	---	1.8	6	2
RK801955	15.5	0.04	41	0.59	0.28	1	2.2	20	10.4	<0.002	0.22	---	---	8	0.9
RK801956	7.3	2.21	1690	0.17	0.36	1.4	5.2	190	21.9	<0.002	0.02	---	---	<1	0.7
RK801957	4.4	0.05	48	8.82	0.02	0.5	1.9	50	4.9	<0.002	0.03	---	---	1	0.3
RK801958	17.7	0.07	158	7.77	0.07	0.3	1.5	60	9.8	<0.002	0.25	---	---	<1	0.2
RK801959	2.9	0.76	213	23.1	2.65	2.4	4.2	170	19.3	0.159	0.01	---	---	<1	2.4
RK801960	4.1	0.88	428	3.36	0.18	2.6	2.1	250	55.4	<0.002	1.88	---	---	<1	1
RK801961	25.9	2.16	683	0.69	0.18	1.7	4.8	220	27	<0.002	0.35	---	---	<1	0.9
RK801962	1.2	0.23	28	3.23	0.04	1.3	5.3	50	47.9	0.002	>10.0	---	---	2	0.6
RK801975	6.2	0.09	144	0.36	1.79	3.8	1.3	10	19.9	<0.002	0.05	---	---	<1	0.8
RK801976	3.2	0.14	382	0.31	2.56	4.7	<0.2	60	20.6	<0.002	0.1	---	---	<1	0.9
RK801977	0.7	0.13	35	1.74	2.04	3.1	0.8	40	30	<0.002	0.24	---	---	1	1.6
RK801978	8.6	2.63	804	0.34	2.41	1.6	7.4	210	2.8	<0.002	1.48	---	---	2	1.9
RK801980	2.5	0.3	41	37.1	0.28	2.3	0.6	150	51.8	0.022	0.26	---	---	8	5
RK801981	1.9	0.19	109	9.16	0.07	1.6	0.7	1970	35.5	<0.002	0.39	---	---	3	9.5
RK801982	1.2	0.25	83	15.6	0.07	2.8	0.6	220	57.3	<0.002	0.17	---	---	1	1.9
RK801983	2.3	0.52	146	3.06	0.6	2.7	0.9	160	37.6	<0.002	0.28	---	---	1	1.5
RK801984	1.6	0.22	64	7.18	0.21	1.5	0.7	150	56.6	<0.002	0.06	---	---	2	1.2
RK801985	0.7	0.17	71	0.32	0.05	2.2	1.1	40	53	<0.002	5.62	---	---	4	28.1
RK801986	7.4	0.36	552	0.41	0.1	0.3	2.7	40	1.5	<0.002	0.26	---	---	1	0.3
RK801987	4	1.85	746	0.56	3.35	2.1	2.4	530	2.4	<0.002	0.42	---	---	<1	1.3
RK801988	4.6	1.58	706	20.4	0.44	2.3	3.2	420	45.4	0.002	2.03	---	---	3	4.1
RK801990	6.3	0.29	406	0.84	2.73	1.5	7.2	170	10.7	<0.002	0.11	---	---	2	0.3

Sample Number	Sr ppm	Ta ppm	Te ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zr ppm
RK801848	38.5	0.13	0.95	1.5	0.269	0.66	1.4	123	0.9	13.7	49.4
RK801865	155.5	0.05	<0.05	0.5	0.101	0.07	0.5	37	0.5	18.8	17.6
RK801866	159	<0.05	<0.05	<0.2	0.015	<0.02	0.1	11	0.1	2.2	3
RK801867	619	0.18	0.05	1.4	0.259	0.04	0.6	153	0.9	11.9	25.6
RK801868	974	0.16	0.06	1.8	0.44	0.31	1	369	0.9	13.8	37
RK801870	113	<0.05	<0.05	<0.2	0.016	0.05	0.1	15	0.1	0.6	1.5
RK801871	206	<0.05	<0.05	<0.2	0.014	<0.02	<0.1	10	0.1	1.3	0.7
RK801891	85.7	<0.05	0.08	0.3	0.219	0.02	0.2	234	0.1	11.5	17.3
RK801892	159.5	0.14	0.21	0.6	0.43	0.14	0.4	191	0.5	12.5	23.2
RK801893	126	0.4	<0.05	5.7	0.174	0.11	0.3	34	0.4	9.9	9.2
RK801894	198	0.13	<0.05	1.8	0.285	0.05	1.3	152	0.8	21	65
RK801895	185.5	0.1	<0.05	1.4	0.266	0.17	0.9	155	0.4	20	53.4
RK801896	268	0.11	0.2	1.5	0.262	0.12	1.4	162	1.2	21	54
RK801897	83.4	0.13	0.17	1.5	0.145	0.02	1	47	42.8	15.3	36.8
RK801898	20.3	0.11	4	1.6	0.346	0.05	1.9	139	2.7	10.6	53.4
RK801899	1.2	<0.05	4.05	0.4	0.038	<0.02	1.4	51	79.7	2.4	11.1
RK801955	24.9	0.06	0.1	2.2	0.016	0.07	5.9	4	0.3	3.1	16
RK801956	22.6	0.08	<0.05	1.3	0.149	0.36	1.2	88	0.8	10.4	39.6
RK801957	2.9	<0.05	0.32	0.4	0.053	0.05	0.4	5	0.4	2.1	14.9
RK801958	856	<0.05	<0.05	<0.2	0.039	0.12	0.2	20	0.3	4.1	7.3
RK801959	44.5	0.18	0.06	3.4	0.12	0.2	1.4	28	0.7	11.2	84.7
RK801960	40.8	0.18	<0.05	2.7	0.172	1.44	2.8	44	0.8	23.6	96.2
RK801961	45.8	0.12	0.21	2	0.124	0.41	2.4	33	0.4	19.1	76.5
RK801962	8	0.07	<0.05	0.6	0.14	1.26	2.8	24	0.5	3.1	38.3
RK801975	18.7	0.24	<0.05	8.1	0.051	0.16	3	3	0.6	13.5	50.9
RK801976	354	0.28	<0.05	9.4	0.076	0.15	5.8	4	6.7	18.9	71.2
RK801977	94.4	0.19	0.2	2.4	0.106	0.48	2.3	17	0.7	10	113
RK801978	237	0.11	0.4	1.5	0.279	0.06	1.2	194	0.7	10.2	37.1
RK801980	13.5	0.17	0.51	1.8	0.158	0.68	1.7	53	3.1	7.8	72.9
RK801981	7.8	0.1	0.67	1.7	0.14	0.51	1	52	1	14.5	41.8
RK801982	8.1	0.16	0.25	1.9	0.429	0.76	2.1	71	2.8	18.1	80.9
RK801983	10.7	0.15	0.56	2	0.238	0.5	1.1	52	1.5	9.3	62.6
RK801984	6.7	0.1	0.87	1.5	0.075	0.75	1.1	14	0.7	6.5	65.9
RK801985	3.5	0.14	<0.05	1.8	0.101	1.01	1.2	12	1.3	10.2	63.8
RK801986	82.8	<0.05	<0.05	0.2	0.032	<0.02	0.2	17	0.1	5.2	7.3
RK801987	182	0.13	0.08	1.6	0.389	0.03	1.2	286	0.2	19	52.9
RK801988	13.5	0.15	1.08	1.8	0.308	0.55	1.9	107	1.4	15.5	71.1
RK801990	106.5	0.1	<0.05	0.4	0.067	0.08	0.3	26	0.2	4.3	3.5

Sample Number	Au ppm	Au(2) ppm	Au(+) ppm	Ag ppm	Ag(+) ppm	As ppm	Sb ppm	Cu ppm	Cu(+) %	Pb ppm	Zn ppm	Al %	Ba ppm	Be ppm
RK801991	---	0.011	---	1.21	---	76.2	3.88	203	---	48.4	295	7.19	390	0.77
RK801992	---	0.016	---	2.23	---	49.9	6.5	87.6	---	39.4	88	7.37	210	0.47
RK801993	---	<0.005	---	0.3	---	15.8	5.93	447	---	20.8	186	8.55	400	0.51
RK801994	---	<0.005	---	0.05	---	9.3	3.85	28	---	4.3	107	7.73	1130	0.57
RK801995	---	0.089	---	1.32	---	61.1	5.94	27.3	---	11.5	10	4.86	740	0.24
RK801996	---	0.009	---	0.25	---	6.5	3.14	3.4	---	3.1	4	5.27	1940	0.39
RK801997	---	0.037	---	0.83	---	15.1	8.85	3.1	---	6.3	2	5.26	1260	0.22
RK802158	---	<0.005	---	0.12	---	9	1.8	129.5	---	6.2	63	7.44	10	0.32
RK802159	---	0.030	---	1.09	---	54.8	2.93	366	---	8	28	2.36	90	0.33
RK802160	---	<0.005	---	0.13	---	4.7	0.77	88.2	---	3.7	66	7.93	430	0.72
RK802161	---	<0.005	---	0.13	---	6.4	0.64	86.7	---	2.6	21	5.98	750	0.69
RK802299	---	0.015	---	0.51	---	59.6	21.4	22.3	---	5.4	20	0.07	10	0.17
RK802300	---	>10.0	10.85	65.3	---	1030	20.6	2440	---	178	535	0.27	60	0.2
RK802489	---	<0.005	---	0.04	---	0.6	0.15	104	---	7	117	8.38	510	1.13
RK802490	---	0.005	---	0.06	---	3.3	0.18	82.4	---	8	118	8.18	480	1.17
RK802491	---	<0.005	---	0.85	---	3.3	1.84	8420	---	2.4	59	8.41	350	0.67
RK802511	---	0.025	---	1.13	---	126.5	11.85	107.5	---	431	400	7.52	830	0.62
RK802513	---	0.021	---	1.07	---	99.9	16.95	26.1	---	31.1	161	6.99	560	0.44
RK802514	---	<0.005	---	0.04	---	6.9	2.74	10	---	2.8	297	6.36	430	0.34
RK802515	---	<0.005	---	0.22	---	65.1	5.77	8.7	---	2.6	218	7.24	710	0.51
RK802516	---	0.015	---	0.75	---	127.5	7.54	8.8	---	16.3	125	6.06	690	0.41
RK802517	---	0.033	---	1.05	---	126.5	5.22	10.9	---	23	134	4	4160	0.26
RK802518	---	<0.005	---	0.34	---	31.7	4.27	29.6	---	33.1	306	6.92	3300	0.4
RK802519	---	0.010	---	0.47	---	29.7	5.64	38.5	---	188	470	7.36	1830	0.58
RK802520	---	0.027	---	1.2	---	30.2	7.6	72.9	---	117	295	6.76	850	0.52
RK802524	---	0.008	---	0.1	---	3.8	1.52	394	---	2	91	8.2	330	0.31
RK802525	---	0.064	---	3.06	---	5.4	1.61	8.2	---	4.8	9	3.61	1050	0.36
RK802526	---	<0.005	---	0.85	---	6	3.97	122.5	---	42.3	77	1.26	40	0.25
RK802527	---	<0.005	---	0.6	---	3.1	3.34	1250	---	39.3	316	3.85	60	0.39
RK802528	---	0.040	---	0.25	---	31.2	1.3	205	---	11	255	11.7	450	0.25
RK802529	---	0.031	---	0.78	---	46.4	3.58	93.1	---	69.9	447	6.29	760	0.43
RK802530	---	0.140	---	28.4	---	280	4.69	2350	---	182.5	377	6.11	700	0.36
RK802531	---	<0.005	---	0.22	---	4.9	3.38	28.8	---	7.7	82	7.71	130	0.51
RK802533	---	0.015	---	0.86	---	1.9	1.67	4.8	---	5	16	4.08	890	0.29
RK802534	---	<0.005	---	0.53	---	7	7.55	75.8	---	147	34	2.88	20	0.18
RK802535	---	0.006	---	0.45	---	2.1	1.77	3.7	---	3.2	5	5.89	1220	0.53
RK802536	---	<0.005	---	0.21	---	3.1	1.05	8.2	---	3.7	38	5.9	950	0.41
RK802537	---	<0.005	---	0.27	---	6.3	1.33	334	---	2.7	40	6.03	830	0.54

Sample Number	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Fe %	Ga ppm	Ge ppm	Hf ppm	Hg ppm	In ppm	K %	La ppm
RK801991	0.09	1.5	0.57	17.65	30.5	11	0.79	10.9	15.85	0.17	2.1	---	0.17	0.36	7.9
RK801992	1.31	0.07	<0.02	14.6	11.2	4	0.39	6.49	20.9	0.12	2.3	---	0.137	1.88	7
RK801993	0.08	3.7	0.29	17.3	45.2	53	0.59	10.8	19.45	0.17	2.4	---	0.116	0.31	6.8
RK801994	0.02	1.72	0.04	16.9	7.1	5	0.1	3.86	16.65	0.1	2.1	---	0.103	0.51	7.9
RK801995	6.65	0.04	0.02	5.1	4	14	2.06	6.21	13.95	0.13	1.3	---	0.209	2.02	2.5
RK801996	0.95	0.02	<0.02	5.38	0.9	4	1.26	1.38	13.1	0.07	3.1	---	0.155	2.25	2.6
RK801997	1.85	0.01	<0.02	2.24	0.7	4	0.8	1.38	8.34	0.08	2.8	---	0.036	2.14	1.4
RK802158	0.08	11.25	0.29	4.12	38.3	60	0.11	6.88	18.75	0.11	0.9	0.01	0.059	0.01	1.7
RK802159	2.97	1	<0.02	3.21	5.4	13	0.16	22.1	9.94	0.49	0.8	0.02	0.409	0.1	1.4
RK802160	0.36	0.74	<0.02	16.6	5.1	12	0.31	6.87	17	0.14	1.9	0.01	0.052	0.45	7.8
RK802161	0.29	0.96	<0.02	21.7	3.3	9	0.35	6.03	14.4	0.14	2	0.01	0.051	0.39	10.6
RK802299	1.21	0.02	<0.02	0.46	2.9	29	0.07	3.98	0.77	0.1	0.1	0.01	0.011	0.01	<0.5
RK802300	188.5	0.02	4.51	0.13	5.5	13	<0.05	10.75	0.97	1.48	0.1	0.04	20.8	0.05	<0.5
RK802489	0.03	2.97	0.08	30.5	23.9	79	3.25	5.68	19.1	0.15	0.8	0.05	0.067	1.52	15.4
RK802490	0.09	3.05	0.1	29.7	24.6	86	3.68	5.93	19.45	0.15	1.5	0.05	0.071	1.5	14.7
RK802491	0.03	6.86	0.7	25.2	32.7	120	0.28	7.06	18.15	0.17	1.3	0.2	0.081	1.18	12.3
RK802511	0.08	0.03	0.13	10.85	3.4	10	0.68	5.43	15.35	0.12	1.8	0.16	0.106	2.61	4.8
RK802513	0.95	0.07	0.16	7.11	8.6	10	0.42	3.87	12.9	0.1	1.5	0.04	0.055	2.78	3.4
RK802514	0.06	0.08	0.11	11.4	14.2	17	0.24	6.08	14.4	0.1	1.5	<0.01	0.086	1	5.4
RK802515	0.33	0.02	<0.02	3.86	10.3	16	0.48	5.76	16	0.11	1.8	0.01	0.096	1.79	1.7
RK802516	1.94	0.02	<0.02	7.93	7.1	16	0.46	6.2	14.35	0.11	1.4	0.05	0.147	1.64	3.8
RK802517	1.17	0.02	0.04	9.8	7.6	16	0.26	4.69	9.01	0.09	0.8	0.02	0.109	0.95	4.7
RK802518	0.2	0.19	0.36	6.26	16.1	24	0.42	5.75	13.75	0.11	1.3	0.01	0.271	1.88	2.6
RK802519	0.27	0.09	0.4	5.6	10.8	15	0.62	5.23	15.55	0.11	1.9	0.04	0.119	2.02	2.3
RK802520	1.64	0.03	0.16	4.94	4.4	13	0.7	5.96	14.05	0.11	1.7	0.02	0.539	1.76	2.2
RK802524	0.08	7.43	0.19	7.41	42.5	163	0.19	7.46	13.25	0.15	0.9	<0.01	0.083	0.37	2.7
RK802525	1.64	0.03	<0.02	2.43	7.7	8	0.4	2.8	8.16	0.11	1.3	0.01	0.37	1.66	1.1
RK802526	0.69	0.54	0.13	2.64	3.7	16	0.16	2.1	3.69	0.08	0.2	0.13	0.053	0.07	1.4
RK802527	0.26	2.03	1.09	11.6	17.9	11	0.22	4.56	10.25	0.1	0.6	0.01	0.167	0.07	5.9
RK802528	1.46	0.21	<0.02	5.14	37.1	10	0.34	20.1	18.05	0.5	1.8	<0.01	0.91	1.67	1.8
RK802529	1.87	0.14	0.12	8.8	9.8	14	1.01	8.26	13.3	0.19	1.7	0.01	0.619	1.36	4.3
RK802530	112	0.02	<0.02	4.24	6.8	15	1.07	15.95	14.6	0.78	1.8	0.02	8.12	1.22	2.1
RK802531	0.71	1.66	0.05	18.75	16.2	7	0.34	5.62	16.35	0.16	1.7	0.01	0.196	0.32	8.4
RK802533	1.21	0.04	<0.02	11.2	3.3	2	0.58	6.66	13	0.14	2.1	<0.01	0.207	1.45	8
RK802534	0.84	18.75	0.06	4.27	15.2	158	0.49	2.64	6.29	0.08	0.4	<0.01	0.028	0.03	2.2
RK802535	0.36	0.11	<0.02	6.2	0.7	4	0.49	2.59	12.7	0.11	3.6	0.01	0.109	1.92	3.3
RK802536	0.26	1.07	0.05	8.48	12	23	0.77	4.77	11.85	0.15	2.5	0.01	0.082	1.23	4.1
RK802537	1.64	1.79	<0.02	9.86	7.2	12	0.23	8.32	15.25	0.18	2.3	0.01	0.62	1.75	4.4

Sample Number	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Nb ppm	Ni ppm	P ppm	Rb ppm	Re ppm	S %	S(+) %	Sc ppm	Se ppm	Sn ppm
RK801991	16.9	2.39	1400	6.81	1.75	1.9	26.6	1250	7.8	<0.002	0.13	---	---	2	0.6
RK801992	4.6	1.42	801	0.9	1.08	2.8	2	470	50	<0.002	2.47	---	---	4	1
RK801993	13.3	2.67	1510	0.78	1.1	2.9	48.9	1030	3.3	<0.002	0.17	---	---	2	0.9
RK801994	5.1	1.69	1110	0.23	2.69	2	2.1	420	10.7	<0.002	0.62	---	---	1	0.8
RK801995	3	0.28	51	2.05	0.06	1.5	1.8	150	45.2	0.002	1.42	---	---	12	6.4
RK801996	1.7	0.24	35	3.59	0.08	1.8	0.6	30	47.1	0.004	0.29	---	---	3	6
RK801997	1.7	0.13	21	6.44	0.06	1.7	0.6	20	39.4	0.007	0.28	---	---	6	3.8
RK802158	7.4	2.76	1090	0.33	0.28	1.3	58.4	210	0.9	0.002	0.03	---	44.9	1	0.5
RK802159	1.1	0.43	350	28.1	0.42	1	2.2	170	3	0.072	0.58	---	8.8	75	3.7
RK802160	5.4	2.65	844	3.18	2.62	2.2	3.6	470	12.1	0.009	0.16	---	26.5	5	1.5
RK802161	3.3	1.43	313	6.58	1.82	1.9	1.8	430	8.8	0.007	0.47	---	21.5	7	2.4
RK802299	2.2	0.01	83	3.36	0.01	0.2	3	40	0.9	<0.002	0.02	---	0.5	2	<0.2
RK802300	6	0.01	80	17.95	0.02	0.4	1.6	20	1.2	<0.002	9.46	---	0.5	373	17.4
RK802489	30.4	2.48	772	0.45	1.23	8.7	55.5	1090	57.9	<0.002	0.01	---	---	<1	1
RK802490	30	2.51	790	0.48	1.76	9	56.3	990	60.1	<0.002	0.01	---	---	<1	1.1
RK802491	14.8	3.71	1390	0.51	1.86	3.6	37.3	1750	21.6	<0.002	0.22	---	---	1	1
RK802511	5.6	1.96	1545	1.09	0.05	1.6	1.9	230	65.9	<0.002	0.21	---	---	<1	0.8
RK802513	4.4	1.63	1615	2.06	0.74	1.6	2.9	140	58.2	<0.002	0.88	---	---	<1	0.7
RK802514	11.2	4.02	2920	0.44	0.03	1.4	6.5	220	25.2	<0.002	0.04	---	---	<1	0.6
RK802515	8.7	3.19	2040	6.07	0.02	1.6	4.9	250	28	<0.002	0.17	---	---	<1	0.8
RK802516	6.6	1.87	997	11.15	0.03	1.3	3.2	220	42.6	0.002	0.18	---	---	<1	0.9
RK802517	5.4	1.56	1160	11.4	0.06	0.8	3.4	160	24.9	0.002	0.21	---	---	<1	3.5
RK802518	7.8	2.96	2990	0.42	0.17	1.3	6.2	220	27.9	<0.002	0.16	---	---	<1	1.6
RK802519	7.3	3.03	2690	0.85	0.55	1.9	5.2	230	17.3	<0.002	0.22	---	---	<1	0.8
RK802520	8.1	2.91	1685	1.89	0.09	1.5	2.8	200	24.2	<0.002	0.18	---	---	<1	0.9
RK802524	6.3	4.63	1270	0.28	1.69	1.1	118	340	7.3	<0.002	0.02	---	44.9	1	0.3
RK802525	1.4	0.15	90	9.9	0.04	1.8	1.7	20	35.8	0.002	1.48	---	10.2	4	9.5
RK802526	3.5	0.6	487	0.62	0.03	0.3	1.7	40	2.2	<0.002	0.09	---	4.2	3	<0.2
RK802527	5.9	2.21	2010	0.62	0.08	0.7	2.1	180	1.9	<0.002	0.28	---	14.7	3	0.3
RK802528	9	4.53	2340	1.14	0.05	1.7	4.1	490	2.2	<0.002	6.29	---	26.1	80	15.1
RK802529	6.1	2.49	1890	2.47	0.07	1.4	3.7	240	31.7	<0.002	0.83	---	28.7	19	10.5
RK802530	5.5	2.25	1890	1.5	0.05	1.5	2.3	320	26	<0.002	1.15	---	30.1	175	34.7
RK802531	8.3	2.35	1230	0.27	2.8	2.1	4.4	440	7.5	0.002	0.07	---	30.5	2	0.9
RK802533	2.2	0.44	109	0.51	0.42	2.3	0.7	300	34.5	0.003	0.16	---	6.5	2	1.9
RK802534	9	1.32	1090	0.18	0.58	0.5	59.7	90	0.9	<0.002	0.05	---	17.5	3	<0.2
RK802535	1.5	0.26	59	1.35	1.45	3.2	0.9	80	39.1	<0.002	0.15	---	9.4	2	1.1
RK802536	5.8	1.52	458	1.1	1.27	2.1	4.2	270	26.3	0.007	0.56	---	17.6	2	0.7
RK802537	2.6	0.81	401	0.33	0.27	2.6	4.5	330	34.2	<0.002	0.42	---	21.4	5	23.2

Sample Number	Sr ppm	Ta ppm	Te ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zr ppm
RK801991	55.6	0.14	1.11	1.4	0.451	0.13	1	322	1.4	27.4	58.2
RK801992	47.9	0.18	2	1.6	0.379	0.69	1.6	155	1.3	16.5	62.1
RK801993	283	0.2	0.25	1.1	0.6	0.13	0.7	307	0.6	21.9	62.3
RK801994	143	0.14	0.48	1.7	0.27	0.2	1.6	105	0.5	19.1	54.6
RK801995	10.1	0.08	6.59	0.9	0.23	0.61	1	136	1	4.9	41.3
RK801996	6	0.14	0.98	1.7	0.117	0.77	1.6	43	0.9	6.8	94.1
RK801997	6.1	0.13	0.73	1.2	0.113	0.72	1	33	0.9	4.5	76.3
RK802158	120	0.07	<0.05	0.2	0.364	<0.02	0.1	316	1	20	25.6
RK802159	83.1	0.06	1.77	0.8	0.148	0.04	0.6	93	5.5	3.7	21.5
RK802160	145.5	0.14	0.1	3.7	0.296	0.17	1.2	172	0.8	9.4	57.1
RK802161	165.5	0.12	0.16	2.8	0.195	0.16	1.3	159	1.4	9.4	64.4
RK802299	2.4	<0.05	0.56	<0.2	<0.005	0.02	0.3	15	3.1	0.4	4.2
RK802300	2.8	<0.05	<0.05	<0.2	<0.005	0.19	<0.1	6	0.1	0.2	3.4
RK802489	366	0.54	0.08	3.9	0.592	0.3	1.2	213	0.5	22.3	16.5
RK802490	365	0.56	0.09	3.6	0.569	0.31	1.2	206	0.7	23.5	45.9
RK802491	793	0.28	0.06	1.8	0.454	0.08	0.8	310	0.2	20.7	26.8
RK802511	6.9	0.1	<0.05	1.5	0.285	1.59	1.2	192	1.5	8	53.8
RK802513	79.5	0.09	0.14	1.1	0.26	1.83	1.1	155	1.3	7.3	44.9
RK802514	9	0.09	<0.05	1.3	0.231	0.42	1.2	144	0.9	8.5	46
RK802515	10.9	0.1	0.19	1	0.248	0.99	1.4	158	1	5	54.2
RK802516	4.8	0.08	1.1	1.3	0.223	1	1.3	140	1.1	6.2	44.3
RK802517	94.5	<0.05	0.66	0.7	0.138	0.58	1.2	92	0.7	4.7	23.9
RK802518	51.3	0.08	0.08	0.9	0.231	0.97	1.6	156	0.9	8.6	39
RK802519	36	0.12	0.11	0.9	0.28	1.09	1.8	178	1.2	6.1	57.9
RK802520	5.6	0.1	0.15	0.8	0.225	0.98	1.7	155	1	3.3	51.2
RK802524	213	0.08	<0.05	0.3	0.366	0.1	0.1	268	0.1	16.2	26.7
RK802525	19.8	0.1	0.33	1.1	0.135	0.53	0.8	33	1.2	4.2	40.3
RK802526	33.3	<0.05	<0.05	<0.2	0.028	0.03	0.1	40	0.1	2.5	9.6
RK802527	106.5	<0.05	0.07	0.6	0.136	0.02	0.4	111	0.5	14.3	16.8
RK802528	16.6	0.12	0.09	0.3	0.439	0.32	1.2	260	2.3	5.8	58.4
RK802529	16.5	0.1	0.57	1.5	0.238	0.44	0.9	149	1.4	7.8	49.7
RK802530	12.8	0.1	0.57	1.6	0.247	0.41	1.4	168	1.1	5.9	56.1
RK802531	122.5	0.13	0.05	1.4	0.311	0.11	1.3	165	0.6	26.8	48.7
RK802533	15.1	0.15	0.82	2.4	0.105	0.42	1.3	27	0.8	8.4	68.1
RK802534	259	<0.05	0.13	<0.2	0.104	<0.02	0.1	93	0.2	11.3	11.3
RK802535	34.1	0.2	0.82	2.7	0.121	0.49	2.4	11	0.5	11.9	119.5
RK802536	94.3	0.13	0.45	1.6	0.203	0.33	1.3	82	0.8	11.6	74.4
RK802537	148	0.16	0.1	1.8	0.272	0.46	0.9	85	1.2	12.7	72

Sample Number	Au ppm	Au(2) ppm	Au(+) ppm	Ag ppm	Ag(+) ppm	As ppm	Sb ppm	Cu ppm	Cu(+) %	Pb ppm	Zn ppm	Al %	Ba ppm	Be ppm
RK802538	---	<0.005	---	0.44	---	2.1	0.72	410	---	1	35	6.17	780	0.31
RK802539	---	<0.005	---	0.13	---	1.6	5.01	685	---	1.8	194	7.44	790	0.81
RK802540	---	<0.005	---	0.05	---	2.6	0.97	41	---	1.4	55	5.54	640	0.53
RK802541	---	0.014	---	0.27	---	4.9	1.63	8.5	---	11.1	14	5.94	1040	0.38
RK802543	---	0.500	---	1.85	---	29	1.57	172.5	---	13.3	9	0.15	10	<0.05
RK802544	---	0.005	---	0.09	---	4	1.07	173	---	4	91	8.73	90	0.27
RK802545	---	<0.005	---	0.07	---	31.9	1.96	130.5	---	2.9	48	6.7	710	0.58
RK802546	---	<0.005	---	0.07	---	33.1	1.63	131.5	---	3.8	181	9.12	220	1.31
RK802547	---	<0.005	---	0.03	---	2.9	2.34	3.5	---	3.2	42	5.96	640	0.5
RK802548	---	0.008	---	0.61	---	55.1	2.8	674	---	5.1	39	3.78	320	0.47
RK802549	---	0.114	---	2.51	---	81	2.54	6220	---	23.9	36	3.59	160	0.28
RK802550	---	0.063	---	0.88	---	64.6	3.74	71	---	17	7	4.86	190	0.38
RK802551	---	<0.005	---	0.03	---	5.3	1.95	15.6	---	1.8	66	5.73	1260	0.64
RK802553	---	<0.005	---	0.02	---	7	1.19	11.2	---	2.8	50	6.7	740	0.68
RK802681	---	<0.005	---	0.15	---	2.2	2.69	230	---	4.6	88	2.81	500	0.19
RK802682	---	0.007	---	1.8	---	459	6.06	914	---	13.6	39	0.33	3910	0.05
RK802683	---	<0.005	---	0.17	---	2.1	2.88	94.9	---	1.2	18	1.1	610	0.18
RK802684	---	0.031	---	0.24	---	32.3	3.24	70.1	---	9.5	157	0.6	210	0.21
RK802685	---	0.021	---	0.8	---	36.5	7.04	1160	---	12.8	25	0.72	120	0.1
RK802686	---	0.054	---	20.2	---	292	83.4	151	---	867	479	5.05	1480	0.77
RK802687	---	0.019	---	4.85	---	18.5	103.5	313	---	31.3	133	1.33	3230	0.31
RK802688	---	0.009	---	0.42	---	40.6	18	806	---	49.5	125	1.28	150	0.27
RK802689	---	0.095	---	3.65	---	125.5	5.28	135	---	32.5	22	2.13	460	0.15
RK802691	---	0.863	---	46	---	337	14.75	270	---	542	1560	0.95	260	0.12
RK802692	---	0.147	---	13.15	---	78	22.2	378	---	40.1	37	0.19	60	0.05
RK802693	---	0.014	---	0.38	---	69.1	3.53	852	---	13.7	20	6.14	1040	0.65
RK802694	---	1.510	---	9.64	---	14.6	14.05	32	---	6.5	2	0.71	90	0.09
RK802695	---	0.009	---	1.46	---	14.6	3.62	787	---	361	38	6.31	770	0.46
RK802696	---	0.083	---	7.72	---	17.6	12.6	67.1	---	534	8	0.64	70	0.09
RK802697	---	0.085	---	22.1	---	57.2	39.6	543	---	26.6	10	0.53	150	0.06
RK802698	---	0.007	---	0.18	---	19.8	3.14	630	---	6.1	136	7.07	1210	0.79
RK802699	---	0.058	---	21.6	---	6.5	13.45	87.3	---	565	5	0.63	340	0.1
RK802700	---	0.051	---	0.28	---	10	5.49	120.5	---	26.8	113	8.45	590	1.42
RK802736	0.005	---	---	0.18	---	9.9	0.88	5.7	---	6	16	6.53	370	0.75
RK802737	0.010	---	---	0.37	---	8.1	3.28	51	---	7.9	61	7.37	1090	0.53
RK802738	0.004	---	---	0.07	---	2.3	0.2	135	---	4.5	42	8.75	640	0.95
RK802917	---	<0.005	---	0.01	---	1.5	2	26.7	---	1.2	46	4.29	720	0.43
RK802918	---	0.007	---	0.09	---	4.1	7.8	108	---	3	34	5.01	680	0.45

Sample Number	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Fe %	Ga ppm	Ge ppm	Hf ppm	Hg ppm	In ppm	K %	La ppm
RK802538	0.85	0.04	<0.02	5.95	0.9	4	0.25	3.97	11.15	0.09	2	<0.01	0.411	2.13	2.7
RK802539	0.69	1.5	0.1	23.4	12.2	1	0.86	5.18	14.25	0.18	2.5	<0.01	0.345	1.83	10.9
RK802540	0.63	0.05	0.02	3.71	6.2	6	0.82	4	9.02	0.11	2.1	<0.01	0.357	1.83	1.8
RK802541	0.7	0.02	0.03	2.55	0.5	3	0.49	1.36	8.46	0.05	1.6	0.02	0.165	2.65	1.2
RK802543	1.38	0.03	<0.02	0.77	1.7	12	0.07	9.24	0.73	0.18	0.4	0.01	0.273	0.04	<0.5
RK802544	0.1	8.64	0.2	6.25	50.2	193	0.22	7.88	14.3	0.14	0.9	<0.01	0.057	0.2	2.5
RK802545	0.63	1.78	<0.02	22	5.6	4	3.27	7.21	15.15	0.17	2	0.29	0.338	1	10.7
RK802546	0.06	1.21	0.02	23.2	53.7	219	0.8	10.4	13.9	0.19	1.2	0.27	0.063	0.11	9
RK802547	0.51	3.32	<0.02	23.2	9.8	4	0.79	5.15	13.05	0.17	1.7	0.03	0.635	0.81	10.5
RK802548	1.58	0.7	<0.02	24.3	9	8	1.28	7.43	9.38	0.18	2.4	0.23	0.383	0.96	10.8
RK802549	4.12	0.3	0.05	17.15	24.4	7	0.45	10.15	8.77	0.24	1.3	0.07	1.005	0.84	8.1
RK802550	105.5	0.01	<0.02	34.2	31.5	6	0.93	11.85	13.5	0.23	1.8	4.24	0.631	2.07	15.2
RK802551	0.59	0.8	0.02	32.5	9.4	5	2.45	5.07	15.4	0.14	1.6	0.03	0.451	1.09	21.3
RK802553	0.31	0.47	<0.02	18.75	5	4	1.99	3.59	14.15	0.1	2.1	0.1	0.147	1.15	8.9
RK802681	0.62	0.33	0.02	14.95	14.6	13	0.17	4.92	7.81	0.1	1.9	<0.01	0.25	0.27	8.7
RK802682	0.97	0.04	0.55	20.9	5.8	9	0.07	11.95	2.42	0.16	0.3	0.01	0.098	0.04	10.8
RK802683	0.81	0.23	0.03	19.6	3.5	14	0.21	1.35	2.8	0.06	0.3	<0.01	0.073	0.27	8.4
RK802684	4.92	0.05	0.65	3.44	6.9	5	0.13	24.9	8.4	0.32	0.2	0.01	0.131	0.07	1.4
RK802685	4.97	0.03	<0.02	2.16	3.4	9	0.12	14.3	5.6	0.24	0.6	0.02	0.236	0.14	1.1
RK802686	2.64	0.12	2.56	8.39	3.6	19	0.83	6.24	12.45	0.13	1.8	0.38	1.59	1.76	5.2
RK802687	1	0.15	1.41	10.45	4.1	30	0.17	3.61	3.96	0.09	1.8	0.05	0.045	0.25	5.5
RK802688	2.38	0.06	0.09	7.29	25.7	5	0.14	20	21.8	0.22	0.2	0.1	0.297	0.11	2.2
RK802689	6.31	0.01	0.07	0.89	1.7	13	0.13	6.29	6.21	0.16	0.4	0.05	0.162	0.89	<0.5
RK802691	24	0.02	9.27	6.09	1.1	8	0.12	6.3	3.56	0.09	0.4	0.3	3.25	0.38	3.3
RK802692	10.75	0.02	0.68	0.25	1.9	17	0.05	3.55	1.08	0.08	0.1	0.2	0.71	0.04	<0.5
RK802693	0.32	0.07	0.03	7.16	1	2	0.73	10.45	18	0.15	3.4	0.05	0.832	1.79	4.1
RK802694	25	0.01	<0.02	0.87	0.9	14	0.07	1.22	2.05	0.06	0.3	0.05	0.056	0.23	<0.5
RK802695	0.61	0.02	0.02	10.3	1.4	2	0.77	10.75	15.4	0.15	3	0.05	0.806	2.04	4.3
RK802696	6	0.01	0.06	1.02	1.1	15	0.11	1.49	1.92	0.08	0.1	0.9	0.098	0.19	<0.5
RK802697	80.7	0.02	0.1	1.24	1.6	21	0.15	4.78	1.9	0.16	0.1	0.05	0.46	0.14	0.8
RK802698	0.38	0.57	0.25	30	20.5	5	1.16	4.84	14.7	0.12	3.1	0.05	0.161	2.06	13
RK802699	11.25	0.01	0.03	0.95	1.2	14	0.11	1.43	1.92	0.06	0.2	1.9	0.163	0.22	0.6
RK802700	0.17	3.82	0.19	33.9	26	76	2.23	7.1	18.6	0.14	2	0.2	0.067	2.1	16.7
RK802736	0.27	0.34	0.03	7.01	1.3	3	0.32	1.92	16.45	0.09	3.9	0.01	0.041	0.51	3.4
RK802737	2.08	3.07	<0.02	43.3	3.6	13	0.7	7.05	21.8	0.2	2.3	0.02	0.424	1.31	23.3
RK802738	0.14	4.19	0.06	39.8	13.6	11	0.63	4	19.5	0.19	2.3	0.01	0.033	2.61	18.8
RK802917	0.38	0.01	<0.02	10.55	2.9	6	0.23	2.37	9.99	0.08	2	<0.01	0.276	1.64	5.4
RK802918	1.59	0.02	<0.02	19.55	0.9	2	0.22	4.82	13	0.11	2.7	<0.01	1.175	2.01	8.8

Sample Number	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Nb ppm	Ni ppm	P ppm	Rb ppm	Re ppm	S %	S(+) %	Sc ppm	Se ppm	Sn ppm
RK802538	1.6	0.51	309	0.34	0.11	1.9	0.8	270	26.1	<0.002	0.18	---	12.7	2	31
RK802539	4.4	1.61	2030	0.17	1.2	2.2	0.5	870	32.2	<0.002	0.05	---	19.8	2	0.8
RK802540	3.4	1.19	630	0.62	0.08	1.6	1.9	190	32.4	<0.002	0.18	---	14.3	1	0.8
RK802541	0.7	0.24	83	5.85	0.1	0.9	1.3	50	34	<0.002	0.12	---	6.6	1	0.6
RK802543	4.4	0.02	114	144	0.01	0.5	1.4	70	0.5	<0.002	0.17	---	1.1	5	0.4
RK802544	4.3	5.07	1395	0.91	1.29	1.1	155.5	340	3.9	<0.002	0.03	---	45	1	<0.2
RK802545	5.5	1.37	816	1.48	1.11	3.4	1.6	380	20.3	<0.002	0.11	---	14.5	2	3
RK802546	15.8	5.17	2300	0.93	2.11	1.1	113	370	2.3	<0.002	0.06	---	46.7	2	<0.2
RK802547	6.1	1.35	1055	2.45	0.1	3.3	1.2	330	16.8	0.002	0.08	---	13.5	1	2
RK802548	5.9	0.94	524	5.16	0.05	2.4	2.2	240	23.4	0.003	2.83	---	9	5	8.7
RK802549	4.2	0.88	545	14.9	0.04	1.9	2.1	160	22.3	0.017	8.27	---	6.3	36	7.1
RK802550	2.2	0.17	54	2.06	0.04	1.8	2.7	50	51.3	<0.002	>10.0	12.70	8.3	21	47.9
RK802551	8.5	1.49	938	1.91	0.13	2.9	1.3	650	27.7	<0.002	0.22	---	16.7	1	4
RK802553	3.9	1.42	603	1.02	1.67	3.8	1.3	370	28.6	<0.002	0.22	---	12.9	<1	1.8
RK802681	5.5	1.05	996	1.86	0.21	2.9	1.8	90	7.1	<0.002	0.52	---	4.3	2	0.6
RK802682	6.1	0.06	446	2.69	0.01	0.4	1.9	60	1.2	<0.002	0.25	---	0.9	5	0.2
RK802683	5.7	0.21	498	0.51	0.02	0.5	1.8	50	6.5	<0.002	0.02	---	3.7	2	0.4
RK802684	2.3	0.06	198	7.22	0.04	0.5	1.3	220	2	<0.002	0.19	---	1.2	30	0.2
RK802685	2	0.05	74	22.3	0.02	0.8	1	190	3.9	0.006	0.35	---	3.7	29	0.4
RK802686	1.8	0.36	135	9.29	0.23	2.2	2.4	170	46.3	0.003	0.24	---	18.1	10	1.9
RK802687	2.1	0.33	334	1.11	0.03	2	2.5	120	7.2	0.002	0.16	---	26.1	6	1.3
RK802688	3.1	0.08	632	40.8	0.02	0.4	1.9	100	3	0.003	0.12	---	4.3	7	0.2
RK802689	2.4	0.11	90	106.5	0.02	0.5	1.4	80	24.5	0.002	0.2	---	6.5	29	2
RK802691	4.5	0.06	59	13.4	0.02	0.5	1.2	20	10.9	<0.002	0.88	---	4.7	4	39.8
RK802692	15.1	0.01	56	62.5	0.01	0.3	1.5	30	0.9	0.002	0.29	---	0.2	9	0.7
RK802693	1.1	0.28	69	1.56	1.12	3.1	0.5	500	47.8	<0.002	0.08	---	11.7	1	1
RK802694	5.8	0.03	47	6.67	0.02	0.3	1.3	20	6	<0.002	0.01	---	0.8	7	0.6
RK802695	1	0.2	42	1.5	0.29	2.6	0.6	350	56.7	<0.002	0.13	---	10	<1	1.1
RK802696	6.5	0.02	48	4.36	0.02	0.2	1.6	20	5.7	<0.002	0.05	---	0.9	9	4.5
RK802697	12.3	0.03	60	20.5	0.02	0.3	1.6	30	4.5	0.002	0.19	---	0.5	29	0.6
RK802698	6.4	0.91	802	0.43	0.18	2.9	3.1	330	54	<0.002	1.32	---	11.6	1	0.8
RK802699	9.5	0.03	59	1.59	0.03	0.2	1.7	20	6	<0.002	0.14	---	1	5	1.2
RK802700	31	2.58	1215	0.3	1.95	4.7	43	2030	64.4	<0.002	0.01	---	28.2	<1	1.1
RK802736	2.4	0.19	143	0.86	3.74	3.3	1.2	160	16.8	<0.002	0.11	---	---	3	1.4
RK802737	2.4	1.18	1065	9.58	0.94	3	3.3	360	36.2	0.007	0.37	---	---	4	4.1
RK802738	3.6	1.12	808	0.38	2.67	4	7.3	1220	59.6	<0.002	0.45	---	---	3	0.8
RK802917	3.6	0.6	394	0.68	0.06	1.9	1	50	43.3	<0.002	0.02	---	---	1	0.7
RK802918	2.8	0.28	151	1.83	0.05	2.3	0.4	180	55.6	<0.002	0.13	---	---	1	4.6

Sample Number	Sr ppm	Ta ppm	Te ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zr ppm
RK802538	6.1	0.12	0.16	1.6	0.223	0.39	0.8	33	2	6.9	57.9
RK802539	37.6	0.13	<0.05	2.1	0.359	0.43	1.8	53	2	36.8	71.3
RK802540	7.4	0.12	0.07	2.1	0.137	0.43	1.1	96	0.5	7.7	63.1
RK802541	3.5	0.07	0.27	1	0.079	0.51	0.8	10	0.4	5.3	47.5
RK802543	4.4	<0.05	0.25	0.2	0.051	<0.02	0.3	5	0.5	3.7	11.3
RK802544	213	0.08	<0.05	0.3	0.329	0.07	0.1	248	0.1	14.9	29
RK802545	210	0.22	0.25	2.8	0.205	0.23	1.7	76	1.2	18.7	59.7
RK802546	141.5	0.07	0.05	0.4	0.452	0.03	0.3	273	2.2	34.3	30.1
RK802547	191	0.21	0.1	2.9	0.184	0.2	1.6	36	0.9	19.7	47
RK802548	30.2	0.16	0.49	2.1	0.124	0.3	3.1	43	0.8	18.4	70.3
RK802549	25.4	0.11	2.43	1.3	0.098	0.39	1.2	28	0.8	15.3	43.9
RK802550	4.5	0.12	0.34	1.7	0.08	0.7	1.7	15	1.1	23.6	61.1
RK802551	85.4	0.17	0.08	2.1	0.281	0.34	1.7	32	1.4	48.8	49.5
RK802553	87.1	0.24	0.09	2.7	0.204	0.35	1.7	43	1.8	18.8	67
RK802681	35.4	0.18	0.13	2	0.077	0.1	1.4	26	0.6	11.5	63.6
RK802682	277	<0.05	0.58	0.2	0.008	0.02	0.5	15	0.6	18.7	9.9
RK802683	10.1	<0.05	0.15	0.2	0.021	0.1	0.2	14	0.3	11.1	10
RK802684	9.3	<0.05	3.89	0.3	0.018	0.04	0.3	55	0.2	2.7	8.9
RK802685	4.8	<0.05	4.13	0.6	0.093	0.08	1	45	0.6	4	21.5
RK802686	298	0.12	0.57	1.8	0.377	6.95	3.1	170	4.3	8.5	61
RK802687	57.3	0.11	0.81	2	0.357	0.41	2.3	54	4.5	30	59.7
RK802688	5.9	<0.05	1.64	0.4	0.019	0.09	0.8	54	0.3	5.9	8.1
RK802689	4.3	<0.05	5.12	0.3	0.069	0.77	0.3	69	0.5	1.5	14
RK802691	4.8	<0.05	<0.05	0.3	0.076	0.3	0.5	39	0.4	3	15.4
RK802692	3.9	<0.05	2.85	<0.2	0.01	0.02	0.1	5	0.1	0.7	6
RK802693	37.1	0.19	1.4	3.3	0.191	0.63	2.3	31	1.2	15.9	107.5
RK802694	2.9	<0.05	21.3	0.2	0.013	0.08	0.2	5	0.2	1.1	10.5
RK802695	22.6	0.16	0.69	2.7	0.154	0.78	2.1	26	1	16.8	94.1
RK802696	3.7	<0.05	2.99	<0.2	0.009	0.08	0.1	8	0.1	0.6	6.7
RK802697	4.1	<0.05	70.9	<0.2	0.008	0.06	0.1	7	0.1	2.6	5.9
RK802698	29.7	0.17	0.29	2.8	0.169	0.73	2.3	28	0.9	26.5	98.6
RK802699	6.3	<0.05	2.53	<0.2	0.011	0.08	0.1	6	0.1	0.9	10.2
RK802700	896	0.29	0.26	3.7	0.477	0.22	1.4	276	4.8	22.1	60.4
RK802736	74.2	0.24	0.4	4.2	0.122	0.17	2.2	15	1	16.4	124.5
RK802737	274	0.19	2.62	2.8	0.276	0.42	1.8	183	2.6	24.9	71.8
RK802738	914	0.24	0.12	3.1	0.254	0.29	1.6	143	0.2	16.3	78.1
RK802917	10.2	0.13	0.22	2.1	0.09	0.57	1.2	18	0.8	8.1	60.7
RK802918	4.5	0.16	0.31	2.6	0.115	0.81	1.5	21	1.4	11.2	79.2

Sample Number	Au ppm	Au(2) ppm	Au(+) ppm	Ag ppm	Ag(+) ppm	As ppm	Sb ppm	Cu ppm	Cu(+) %	Pb ppm	Zn ppm	Al %	Ba ppm	Be ppm
RK802919	---	<0.005	---	0.1	---	12.9	4.57	170	---	2.5	27	4.63	620	0.32
RK802920	---	<0.005	---	0.09	---	18.2	6.27	22.3	---	1.6	27	5.63	880	0.46
RK802921	---	0.024	---	0.8	---	3.9	3.54	178	---	9.5	20	3.99	840	0.39
RK802922	---	0.024	---	4.86	---	85.1	1.93	1130	---	26.1	25	3.94	510	0.36
RK802923	---	<0.005	---	0.15	---	3	0.86	318	---	4	59	5.96	930	0.56
RK802924	---	<0.005	---	0.47	---	2.2	0.99	86.2	---	1.1	4	5.83	750	0.51
RK802925	---	0.351	---	0.63	---	5.5	4.9	53.3	---	7.7	4	1.34	280	0.13
RK802926	---	0.005	---	0.06	---	4.7	1.69	2.5	---	2.1	9	5.29	860	0.44
RK802928	---	0.035	---	0.51	---	88.4	2	20.1	---	7.5	9	5.62	320	0.33
RK802929	---	0.021	---	0.09	---	6.9	0.89	28.9	---	4.7	29	4.95	770	0.59
RK803281	---	<0.005	---	0.02	---	9	1.98	3.1	---	2.3	24	0.23	250	0.17
RK803282	---	<0.005	---	0.08	---	1.1	0.28	21.7	---	6.5	88	8.44	500	1.08
RK803283	---	0.005	---	0.14	---	0.4	0.27	70.2	---	12.2	95	7.8	500	1.1
RK803284	---	<0.005	---	0.02	---	15.4	0.29	1.9	---	10.9	227	5.44	120	0.62
RK803285	---	<0.005	---	0.18	---	20.5	0.69	74.9	---	8.6	158	5.83	1370	0.99
RK803286	---	<0.005	---	0.1	---	0.2	<0.05	111.5	---	0.5	4	0.81	70	<0.05
RK803287	---	0.006	---	0.16	---	4.7	0.49	107	---	7.2	114	8.05	720	1.08
RK803288	---	0.027	---	0.13	---	2.7	2.4	424	---	118	106	4.79	290	0.82
RK803289	---	0.006	---	0.09	---	<0.2	0.95	86.8	---	6.3	20	7.14	700	0.59
RK803291	---	0.020	---	0.67	---	9.8	2.08	1810	---	2.3	43	7.11	50	0.42
RK803292	---	0.019	---	0.24	---	3.6	0.74	479	---	1.7	57	8.58	50	0.43
RK803293	---	<0.005	---	0.16	---	1.4	0.1	571	---	2.1	67	7.05	240	0.49
RK803295	---	0.014	---	0.16	---	6.5	2.09	11.5	---	12.6	208	4.56	380	0.29
RK803296	---	<0.005	---	0.23	---	4	2.69	75.9	---	9.2	212	5.3	220	0.29
RK803297	---	0.041	---	0.22	---	22.9	2.21	65.5	---	19.3	65	6.46	270	0.3
RK803298	---	<0.005	---	0.27	---	9.6	49.9	202	---	5.1	113	0.55	50	0.15
RK803299	---	0.008	---	7.17	---	17	5.54	>10000	1.455	15.6	282	4.1	70	0.16
RK803401	---	0.009	---	13.3	---	18	3.6	>10000	2.21	28.6	378	6.74	110	0.29
RK803402	---	0.052	---	2.64	---	23.3	7.45	637	---	36.9	89	2.19	170	0.09
RK803403	---	0.014	---	0.2	---	10.8	2.66	171	---	4	46	2.43	340	0.44
RK803404	---	0.008	---	0.19	---	6.7	1.87	77.1	---	3.4	37	1.02	60	0.08
RK803405	---	<0.005	---	0.27	---	4.7	1.97	162.5	---	6.7	157	3.59	80	0.16
RK803406	---	0.005	---	5.25	---	4.6	5.58	2640	---	8.5	655	3.96	40	0.7
RK803407	---	<0.005	---	0.05	---	5.1	3.73	10	---	4.4	104	5.93	380	0.63
RK803408	---	0.011	---	0.22	---	13	6.97	51.7	---	9.9	142	8.44	600	1.24
RK803409	---	0.005	---	0.39	---	4.8	2.64	85.2	---	7.9	88	8.22	610	1.25
RK803411	---	<0.005	---	0.06	---	7.6	2.21	76.3	---	4.3	34	8.36	510	0.64
RK803412	---	<0.005	---	0.05	---	8.6	2.01	26.6	---	1.4	27	6.61	1310	0.64

Sample Number	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Fe %	Ga ppm	Ge ppm	Hf ppm	Hg ppm	In ppm	K %	La ppm
RK802919	1.6	0.02	<0.02	17.6	0.4	3	0.27	9.25	12.05	0.17	2.6	<0.01	0.937	1.78	8.8
RK802920	2.11	0.01	<0.02	12.65	0.4	2	0.28	6.32	15.7	0.15	3.2	<0.01	1.43	2.41	5.7
RK802921	4.89	0.01	<0.02	9.14	1.1	6	0.24	5.63	12.35	0.12	2.3	<0.01	0.747	1.71	4.2
RK802922	5.72	0.03	<0.02	12	2.9	1	0.75	23	14.05	0.36	1.4	0.01	1.46	1.3	5.4
RK802923	1.13	0.03	<0.02	11.95	1	1	0.24	5.4	16.05	0.11	2.7	<0.01	0.741	1.83	6
RK802924	1.31	0.08	<0.02	9.76	0.4	6	0.43	1.51	16.3	0.09	2.3	<0.01	0.515	2.34	4.1
RK802925	0.61	0.01	<0.02	3.13	0.2	7	0.15	1.45	3.29	0.07	0.6	<0.01	0.149	0.58	1.4
RK802926	0.86	0.01	<0.02	16.25	0.3	4	0.43	1.28	11.5	0.1	2.9	<0.01	0.411	2.5	8.1
RK802928	3.27	0.02	<0.02	13.25	2	3	0.24	4.68	12.4	0.14	2.7	<0.01	0.759	2.59	6.5
RK802929	0.37	0.09	0.02	15.15	1.1	6	0.26	4.7	12.05	0.12	2.8	<0.01	0.416	1.85	7.2
RK803281	<0.01	33.9	0.69	1.49	1	13	0.16	0.3	0.55	0.08	0.1	0.13	<0.005	0.07	1.2
RK803282	0.03	4.08	0.18	26.5	15.8	46	1.61	4.48	18.05	0.15	1.2	0.01	0.046	1.07	12.7
RK803283	0.13	4.93	0.19	26.5	13.7	84	0.55	5.51	18.55	0.18	0.8	0.01	0.058	1.45	12.5
RK803284	<0.01	7.22	1.2	20.8	13.6	33	2.02	3.61	11.4	0.11	0.9	<0.01	0.037	0.18	10.5
RK803285	0.1	0.23	0.64	39	32.3	19	0.97	4.62	12.3	0.16	1.6	0.23	0.049	1.02	15.7
RK803286	<0.01	0.04	0.02	0.58	1.4	7	0.07	1.44	2.11	0.06	<0.1	<0.01	<0.005	0.71	<0.5
RK803287	0.14	5.07	0.11	29.5	29.1	100	2.51	6.17	18.8	0.17	1.6	0.02	0.077	1.29	14
RK803288	4.49	8.96	14.6	20.5	92	22	0.27	9	13.95	0.2	1	0.22	0.03	0.25	10.1
RK803289	0.01	0.98	0.05	8.36	9.8	6	0.6	2.3	13.3	0.11	1	0.22	0.014	4.6	4.7
RK803291	0.03	7.34	0.12	21.7	71.2	46	0.15	13.2	16.15	0.31	1.2	3.52	0.083	0.23	9.1
RK803292	<0.01	9.58	0.05	20	50	41	0.08	11.05	19.55	0.25	1.1	0.25	0.084	0.16	8.4
RK803293	0.01	6.97	0.15	19.75	48.7	83	0.18	8.2	16.5	0.18	1.6	0.04	0.078	1.05	8.4
RK803295	0.41	0.62	0.29	13.1	27.2	14	0.33	5.75	9.99	0.13	1.9	0.02	0.113	0.78	6.5
RK803296	9.76	0.44	0.43	13.9	13.5	4	0.3	11.4	12.9	0.21	1.6	0.39	0.269	1	6.6
RK803297	0.87	0.09	0.03	4.01	40.9	16	0.32	7.64	11.35	0.17	1.7	---	0.099	0.71	2
RK803298	0.29	4.26	2.03	2.52	3.4	32	0.06	1.89	2	0.12	0.2	---	0.012	0.03	1.4
RK803299	1.39	17.55	1.08	13.25	12.5	3	0.05	13.6	11.05	0.22	0.6	---	0.651	0.02	8.7
RK803401	2.42	11.4	1.4	17	19	7	0.13	14.25	17.75	0.29	1.7	0.07	1.235	0.08	10.3
RK803402	5.94	0.05	0.13	1.85	58	11	0.08	10.2	7.04	0.17	0.9	0.05	0.196	0.23	1
RK803403	2.28	0.02	0.06	24.3	5.2	19	0.21	3.03	5.63	0.11	0.9	<0.01	0.161	0.67	14.5
RK803404	0.46	0.02	<0.02	24.3	5	21	0.07	3.23	3.34	0.1	0.3	0.01	0.052	0.11	12.2
RK803405	0.58	0.06	<0.02	4.17	25.6	15	0.07	6.77	8.45	0.15	1.1	0.01	0.046	0.15	1.9
RK803406	34.8	4.56	0.27	10.05	27.7	7	0.07	17.15	10.75	0.27	0.7	<0.01	0.323	0.01	5.4
RK803407	0.76	2.02	0.12	31.8	8.9	8	0.25	4.42	12.4	0.14	2.7	<0.01	0.364	0.58	14.9
RK803408	0.15	1.62	0.02	37.1	17.4	100	4.23	6.51	20	0.25	1	0.14	0.079	1.79	19
RK803409	0.15	2.75	<0.02	19.65	14.5	46	3.49	4.48	14.8	0.23	2.6	0.22	0.061	1.42	8
RK803411	0.3	2.73	0.06	16.3	13.7	15	0.19	4.25	15	0.13	1.8	<0.01	0.101	0.67	7.8
RK803412	0.36	0.13	<0.02	5.84	6.7	7	1.06	3.14	12.45	0.16	2.4	0.01	0.062	1.61	3.1

Sample Number	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Nb ppm	Ni ppm	P ppm	Rb ppm	Re ppm	S %	S(+) %	Sc ppm	Se ppm	Sn ppm
RK802919	1	0.2	114	0.55	0.05	2.3	0.5	370	46.4	<0.002	0.35	---	---	1	8.9
RK802920	1.8	0.29	121	0.63	0.04	2.8	0.3	130	62.1	<0.002	0.18	---	---	1	18.6
RK802921	1.4	0.3	144	0.85	0.05	2.3	0.9	150	43	<0.002	0.36	---	---	1	29.8
RK802922	1.4	0.14	97	49.7	0.39	1.8	0.3	1470	29.7	<0.002	0.23	---	---	11	1.2
RK802923	2.7	0.77	432	0.59	0.54	3	0.4	250	43.7	<0.002	0.13	---	---	2	5.7
RK802924	1.4	0.14	80	0.36	0.09	2.7	0.7	310	47.5	<0.002	0.04	---	---	3	29.1
RK802925	4	0.06	51	5.06	0.03	0.4	0.5	30	14	<0.002	0.07	---	---	3	0.7
RK802926	1.3	0.28	99	0.16	0.04	2.6	0.3	30	65.6	<0.002	0.24	---	---	4	31.2
RK802928	0.7	0.27	90	0.22	0.05	2.7	0.6	30	65.7	<0.002	3.58	---	---	4	29.2
RK802929	1	0.35	178	0.13	0.06	2.4	1.5	130	45.4	<0.002	0.33	---	---	1	7.9
RK803281	0.6	0.89	100	1.5	0.01	0.4	<0.2	30	2.4	0.008	0.11	---	---	2	<0.2
RK803282	29.1	1.9	680	0.74	3.01	8.1	21.3	900	23.9	<0.002	0.12	---	---	1	0.8
RK803283	5.6	2.33	803	2.13	2.42	7.7	36.2	1080	40	0.006	0.15	---	---	2	0.4
RK803284	49	2.21	742	1.14	0.34	6.5	21.5	610	8.2	0.002	0.03	---	---	1	0.8
RK803285	16.6	0.5	1970	1.98	1.37	4	74.2	350	36.8	0.003	0.42	---	---	3	0.7
RK803286	1.2	0.02	66	0.18	0.09	0.1	2	20	11.4	<0.002	0.01	---	---	1	<0.2
RK803287	34.7	2.52	1995	0.59	1.78	9.4	54.6	1020	41.4	0.002	0.05	---	---	2	1.3
RK803288	25.7	1.73	38500	1.88	1.8	1.6	71.9	1000	7.5	0.002	0.01	---	---	2	0.5
RK803289	6.8	0.97	417	0.13	2.39	2.2	6.9	120	84.9	<0.002	<0.01	---	---	1	0.3
RK803291	6.9	2.64	1305	0.85	0.94	3.6	57.6	2900	4.4	0.012	6.45	---	---	8	0.6
RK803292	7.4	2.85	1300	0.53	0.78	1.9	26.9	2900	2.3	0.006	2.98	---	---	5	0.6
RK803293	10.1	3.76	1350	0.35	1.61	2.5	39.7	1590	16.2	<0.002	1.45	---	---	4	0.8
RK803295	6	1.11	1210	0.41	0.08	2.7	5	400	21.3	0.003	1.34	---	11.6	2	0.6
RK803296	3.5	0.81	672	0.6	0.73	3.5	2.3	270	27.6	0.004	6.78	---	8.9	5	1
RK803297	6.1	1.29	693	0.49	2.16	1.5	7.2	230	18.5	0.003	4.17	---	28.2	3	0.5
RK803298	1	0.23	1015	0.53	0.01	0.2	3	30	1	0.003	0.17	---	2.8	1	<0.2
RK803299	6.8	2.78	4760	1.18	0.01	1.2	6	250	0.5	0.006	1.3	---	7	7	0.4
RK803401	11.3	4.27	5150	0.9	0.03	3.1	10.5	450	2.5	0.005	2.07	---	14.2	13	0.7
RK803402	4.9	0.87	608	77.7	0.02	1.1	6.3	120	5.9	0.027	7.78	---	6	10	0.4
RK803403	3.2	0.35	309	2.75	0.23	1.3	1.4	380	17.5	<0.002	0.11	---	7.2	2	0.6
RK803404	4.4	0.36	449	1.49	0.02	0.7	1.6	100	3.6	0.004	0.19	---	3.7	2	0.2
RK803405	8	1.68	1825	1.08	0.28	2	3.7	320	4.2	0.005	1.74	---	7.5	4	0.2
RK803406	6.2	2.31	4840	1.59	0.01	1.6	12.4	470	0.5	0.005	1.24	---	10.1	5	0.5
RK803407	6.9	1.46	1770	0.28	0.6	4.6	6.8	250	17	0.004	<0.01	---	9.2	1	1
RK803408	47.1	2.43	956	0.35	1.92	8.6	45.7	1810	78.2	0.004	<0.01	---	28.6	2	1.2
RK803409	30.7	1.78	588	0.5	1.98	14	29.4	460	51.7	0.004	<0.01	---	16.4	1	1.2
RK803411	3.7	1.69	280	1.03	2.13	2.1	6.7	300	12.9	0.002	1.39	---	25.4	3	1.6
RK803412	5	0.84	227	7.68	1.36	2	2.5	210	39.6	0.037	0.88	---	13.5	4	2.5

Sample Number	Sr ppm	Ta ppm	Te ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zr ppm
RK802919	5.9	0.16	<0.05	2.7	0.109	0.77	1.5	19	1.7	11.9	73.6
RK802920	4.4	0.21	<0.05	3.2	0.136	0.89	1.8	23	1.1	14.4	94.1
RK802921	4.8	0.15	0.15	2.2	0.13	0.62	1.4	30	1.6	11.3	66.8
RK802922	11	0.11	2.11	1.6	0.121	0.38	0.8	141	0.8	7.1	40.1
RK802923	8.8	0.2	<0.05	2.5	0.237	0.58	1.5	38	0.9	8.7	75.3
RK802924	6.6	0.17	0.77	2.2	0.2	0.71	1.4	42	2.9	16.3	65.4
RK802925	3	<0.05	0.34	0.4	0.019	0.18	0.3	7	0.2	3.8	16.1
RK802926	4.8	0.18	<0.05	2.8	0.124	1.1	1.7	15	0.9	15.4	84.4
RK802928	4.3	0.18	<0.05	2.7	0.123	1.16	1.7	16	1	13.5	80.8
RK802929	9	0.16	<0.05	3	0.112	0.83	1.6	15	1.2	12.8	84.4
RK803281	230	<0.05	<0.05	<0.2	0.015	0.08	8	33	0.4	4.1	3.6
RK803282	432	0.48	<0.05	2.6	0.453	0.25	1.2	144	0.6	14.8	31.3
RK803283	466	0.45	0.09	1.3	0.531	0.21	0.9	207	0.7	21.5	15.9
RK803284	136.5	0.45	<0.05	3.1	0.288	0.05	0.6	107	0.5	11.2	14.8
RK803285	151.5	0.28	0.12	4	0.162	0.22	1.3	92	1	15	42.1
RK803286	8.3	<0.05	<0.05	<0.2	0.006	0.05	<0.1	4	<0.1	0.4	<0.5
RK803287	376	0.63	0.09	3.3	0.642	0.28	1.6	229	0.8	25.1	36.6
RK803288	445	0.09	0.44	0.5	0.24	0.04	0.7	205	1.7	65.4	26.2
RK803289	335	0.31	<0.05	2.3	0.135	0.33	0.7	90	0.3	5	20.1
RK803291	745	0.22	0.47	0.5	0.487	0.17	0.4	387	0.2	23.9	24.2
RK803292	1340	0.13	0.22	0.3	0.491	0.02	0.2	404	0.2	21.1	19.9
RK803293	539	0.17	0.08	1.1	0.517	0.15	0.6	362	0.1	22	32.1
RK803295	13.9	0.15	0.31	1.8	0.189	0.29	1.1	55	1.3	16.5	60.5
RK803296	38.9	0.21	8.91	2	0.147	0.39	1.3	36	0.8	13.2	49.5
RK803297	38.1	0.1	0.59	1.5	0.259	0.32	1.1	127	1.7	5.3	47.8
RK803298	36.2	<0.05	0.07	<0.2	0.005	0.03	2.7	35	0.7	4.4	31.4
RK803299	78.8	0.07	0.35	0.9	0.076	0.04	7	154	138	32.8	19.3
RK803401	64.9	0.2	0.24	2.7	0.222	0.05	9.1	145	33	32	51.4
RK803402	2.9	0.05	5.94	0.7	0.105	0.09	1.1	43	0.9	3.4	29.2
RK803403	9.3	0.07	1.41	0.9	0.099	0.23	0.6	21	0.6	5.6	28.9
RK803404	2.1	<0.05	0.45	0.5	0.044	0.04	0.3	19	0.4	4.5	10.8
RK803405	7.9	0.11	0.54	0.9	0.189	0.05	0.7	52	1.5	5.2	34.6
RK803406	38.5	0.08	26.3	0.6	0.161	<0.02	0.7	100	142	9.8	19.6
RK803407	112.5	0.29	0.07	2.8	0.153	0.19	1.4	45	1.7	21	88.8
RK803408	290	0.53	0.15	2.6	0.652	0.29	0.9	235	2.7	33.8	29
RK803409	387	1.07	0.09	9.3	0.424	0.24	2.5	133	0.9	15	70.4
RK803411	255	0.16	0.08	2.2	0.302	0.37	1.4	157	0.4	13.9	54.4
RK803412	45.6	0.14	0.24	2.9	0.124	0.43	1.6	68	0.7	9.3	75.7

Sample Number	Au ppm	Au(2) ppm	Au(+) ppm	Ag ppm	Ag(+) ppm	As ppm	Sb ppm	Cu ppm	Cu(+) %	Pb ppm	Zn ppm	Al %	Ba ppm	Be ppm
RK803413	---	<0.005	---	0.03	---	2.7	1.8	8.8	---	2.9	75	6.73	30	0.1
RK803414	---	<0.005	---	0.54	---	14.5	1.03	205	---	3.2	48	6.42	290	0.81
RK803415	---	<0.005	---	0.11	---	2	1.63	66.4	---	2.4	114	8.79	230	0.7
RK803502	---	0.005	---	0.07	---	6.5	2.82	8	---	2.4	79	2.32	240	0.2
RK803503	---	<0.005	---	0.03	---	0.8	3.24	12.7	---	3.8	143	4.31	640	0.27
RK803504	---	0.033	---	9.2	---	2.2	5.94	4440	---	110	8	0.85	860	0.11
RK803505	---	<0.005	---	1.24	---	2.2	3.44	1225	---	65.1	55	3.32	1160	0.21
RK803506	---	0.066	---	6.22	---	6.5	4.99	435	---	109.5	21	2.07	520	0.17
RK803507	---	<0.005	---	0.05	---	1.2	3.86	17.2	---	4.3	101	4.99	9470	0.32
RK803508	---	<0.005	---	0.04	---	0.6	2.67	11.6	---	1.6	116	5.26	550	0.22
RK803509	---	0.183	---	3.36	---	128	6.13	344	---	202	196	6.46	3220	0.46
RK803510	---	<0.005	---	0.03	---	1.3	2.93	14.2	---	2.1	141	3.44	210	0.21
RK803512	---	0.280	---	2.87	---	38.3	12.45	996	---	100.5	139	3.46	210	0.31
RK803513	---	<0.005	---	0.04	---	1.6	2.46	5.4	---	2.4	183	6.66	500	0.4
RK803514	---	0.044	---	0.56	---	153.5	9.63	13	---	23	108	6.69	830	0.62
RK803515	---	0.081	---	1.31	---	188	11.85	261	---	39.2	160	6.97	880	0.52
RK803516	---	0.489	---	1.11	---	17	5.23	76.7	---	24.4	7	2.15	540	0.15
RK803517	---	0.883	---	0.99	---	17.3	5.17	74.3	---	21.9	6	1.37	390	0.1
RK803518	---	0.128	---	0.94	---	17.3	3.84	138.5	---	30.1	27	6.11	870	0.38
RK803519	---	0.151	---	0.19	---	14	2.69	55.6	---	9.7	45	7.75	1010	0.39
RK803520	---	0.018	---	0.41	---	9.3	3.26	491	---	8.6	23	1.72	610	0.12
RK803522	---	0.081	---	0.95	---	15.3	2	21.6	---	13	8	1.61	300	0.14
RK803523	---	0.012	---	0.23	---	4.8	2.31	57.7	---	3.9	20	2.33	490	0.11
RK803524	---	0.008	---	0.97	---	14.1	21.6	414	---	9.3	33	3.56	540	0.16
RK803525	---	0.023	---	0.34	---	8.5	2.32	68.6	---	16.3	19	2.88	560	0.28
RK803526	---	0.032	---	0.29	---	17.9	3.92	71.8	---	7.8	10	1.47	470	0.13
RK803527	---	0.006	---	0.11	---	3.3	2.5	96.1	---	12.3	107	8.92	740	1.27
RK803528	---	0.406	---	0.26	---	24.3	6.23	58.1	---	44.5	49	3.31	100	0.96
RK803529	---	<0.005	---	0.04	---	2.3	1.92	64.5	---	11.6	94	6.84	360	0.7
RK803530	---	<0.005	---	0.03	---	17	2.05	8.6	---	3.4	65	7.99	610	0.6
RK803532	---	<0.005	---	0.1	---	6.3	6.9	183.5	---	2.5	33	6.68	2500	0.82
RK803533	---	<0.005	---	0.72	---	5.1	3.95	1300	---	6.9	67	8.28	100	0.62
RK803534	---	<0.005	---	0.3	---	4.7	1.03	470	---	2.4	73	8.33	470	0.79
RK803535	---	0.008	---	8.15	---	6.9	7.51	>10000	1.38	8.9	60	9.02	100	0.69
RK803563	---	0.009	---	0.23	---	26	17.9	439	---	2.8	101	2.74	100	0.28
RK803564	---	0.009	---	0.13	---	5.3	0.71	112.5	---	9.6	123	8.07	510	1.17
RK803565	---	0.367	---	0.35	---	15.7	4.43	67.1	---	49.5	96	7.69	600	1.4
RK803582	0.008	---	---	0.68	---	9.3	2.87	507	---	6.9	13	5.46	1250	0.42

Sample Number	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Fe %	Ga ppm	Ge ppm	Hf ppm	Hg ppm	In ppm	K %	La ppm
RK803413	0.01	7.54	0.36	5.36	37.1	150	0.18	6.27	13.05	0.17	0.4	<0.01	0.103	0.03	2.5
RK803414	0.63	0.97	<0.02	12.5	17.5	4	0.32	5.56	13.15	0.25	2.6	0.01	0.111	0.55	6.2
RK803415	0.46	1.84	0.03	18.3	19.2	19	0.38	6.45	17.85	0.25	1.7	<0.01	0.274	0.53	7.8
RK803502	0.19	0.03	0.08	7.18	7	20	0.49	2.22	5.84	0.1	0.7	0.02	0.066	0.54	2.9
RK803503	0.04	0.2	0.09	10.8	10.2	15	0.22	3.09	8.87	0.14	1.1	0.01	0.113	0.87	6.1
RK803504	69.8	0.02	0.07	2.99	1.4	16	0.12	3.55	2.24	0.1	0.3	0.01	3.73	0.3	2
RK803505	1.74	0.08	0.04	8.29	4.7	19	0.31	3.49	8.45	0.13	1	<0.01	1.065	1.1	4.7
RK803506	96.3	0.06	0.03	11.15	2.3	19	0.2	1.73	5.12	0.06	0.5	0.01	0.678	0.71	6.9
RK803507	0.31	0.57	0.11	18.15	9.9	15	0.24	3.93	10.9	0.09	1	0.01	0.2	0.91	9.7
RK803508	0.28	0.85	0.07	18.9	11.7	12	0.16	3.9	10.55	0.1	1.2	<0.01	0.152	0.88	10.7
RK803509	3.82	0.11	0.17	8.53	21.2	13	0.31	8.6	15.05	0.13	1.8	0.01	0.353	1.34	6.3
RK803510	0.17	0.21	0.05	7.98	9.3	20	0.11	3.61	7.38	0.07	0.9	<0.01	0.111	0.37	3.6
RK803512	3.88	0.09	0.08	67.5	13.2	11	0.17	10.9	9.4	0.21	0.8	0.02	0.336	0.21	38.6
RK803513	0.11	0.27	0.2	13.2	18	15	0.33	5.38	13.9	0.09	1.5	<0.01	0.096	1.09	6.8
RK803514	2.63	0.1	0.13	17.8	13.7	12	0.55	4.95	14.35	0.11	1.7	0.07	0.125	1.87	12.4
RK803515	0.79	0.11	0.07	11.95	10.4	18	0.54	5.68	12.65	0.09	1.5	0.06	0.144	1.76	5.3
RK803516	4.72	0.01	<0.02	5.65	2.1	20	0.16	2.61	4.63	0.06	0.8	0.06	0.072	0.78	2.7
RK803517	3.21	0.01	<0.02	4.62	1.6	22	0.13	2.63	3.19	0.06	0.5	0.04	0.051	0.48	2.4
RK803518	3.23	0.03	0.02	11.55	3.2	11	0.45	4.39	12.95	0.09	2.1	0.03	0.23	1.9	4.8
RK803519	1.19	0.03	<0.02	12	3.9	8	0.43	3.96	14.95	0.09	2.3	0.02	0.14	2.22	4.7
RK803520	2.35	0.01	<0.02	2.76	26.7	22	0.11	5.43	3.87	0.1	0.8	0.02	0.109	0.4	1.3
RK803522	3.09	0.03	0.02	2.36	3	21	0.13	1.97	3.06	0.08	1.2	0.01	0.036	0.51	1.1
RK803523	14.8	0.01	<0.02	5.59	4.8	22	0.15	3.84	5.23	0.08	1.2	0.03	0.095	0.71	2.4
RK803524	31.4	0.01	0.07	7.71	8.4	9	0.23	8.92	7.05	0.12	1.4	0.25	0.412	1.33	3.5
RK803525	2.39	0.01	0.05	12.65	6	17	0.22	3.56	6.58	0.08	2	0.02	0.085	0.95	6.2
RK803526	1.38	0.02	<0.02	2.57	8.4	31	0.12	3.98	3.96	0.07	0.4	0.01	0.073	0.58	1.5
RK803527	0.06	3.58	0.11	37.9	25.9	76	1.29	6.12	18.2	0.14	2.5	0.04	0.061	2.4	18.3
RK803528	0.22	4.16	0.98	18.5	15.8	162	4.93	4.53	8.94	0.09	0.5	0.18	0.053	1.04	7.7
RK803529	0.01	5.38	0.54	16.2	47.5	484	4.93	7.66	14.2	0.13	1.2	0.05	0.066	1.43	6.9
RK803530	0.52	2.09	0.02	16.65	29	17	0.46	5.81	14.8	0.11	1.7	0.05	0.122	0.42	8.8
RK803532	0.04	1.77	0.08	26	17.7	5	0.8	1.66	12.5	0.09	3.2	0.1	0.038	1.37	13.5
RK803533	0.31	5.42	0.11	25.7	12.4	14	0.14	5.04	17.65	0.11	1.7	0.05	0.111	0.04	11.9
RK803534	0.05	3.27	0.14	28.5	16.4	18	0.59	4.77	15.65	0.11	1.9	0.05	0.034	0.55	13.2
RK803535	1.47	8.47	0.54	22.4	27	12	0.11	8.81	22.6	0.18	1.5	0.05	0.7	0.01	10.7
RK803563	0.17	11.25	0.21	8.78	68.2	398	0.54	8.32	9.29	0.16	0.5	0.18	0.094	0.57	3.2
RK803564	0.23	3.38	0.1	30.4	31.8	100	6.75	6.67	21.5	0.17	1.2	1.41	0.074	1.55	14.7
RK803565	0.2	1.08	0.46	37.8	16.8	34	2.92	5.01	17.3	0.17	1.5	0.22	0.04	1.59	19.1
RK803582	4.92	0.05	0.04	15	1.3	2	1	9.37	15.8	0.22	2.7	0.05	0.356	2.06	7.8

Sample Number	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Nb ppm	Ni ppm	P ppm	Rb ppm	Re ppm	S %	S(+) %	Sc ppm	Se ppm	Sn ppm
RK803413	5.9	3.48	1320	0.26	1.16	0.9	100.5	200	0.9	0.005	<0.01	---	27.2	1	0.7
RK803414	4.1	1.19	538	4.04	2.26	2.8	3.9	200	16	0.165	3.12	---	11.5	17	2.6
RK803415	8.1	2.51	1530	1.98	2.51	1.8	6.7	350	15.4	0.045	0.8	---	31.3	4	3.2
RK803502	4.4	0.83	688	0.86	0.02	0.7	2.5	90	22.9	0.004	<0.01	---	7.3	1	0.5
RK803503	5.4	1.41	1335	0.22	0.43	1.2	3	170	21.4	0.003	<0.01	---	13.3	1	0.8
RK803504	5.7	0.08	184	1.37	0.02	0.4	1.3	60	7.3	0.004	0.18	---	2.7	1	0.3
RK803505	4.1	0.55	386	0.89	0.04	1.1	2.3	150	27.2	0.003	0.08	---	11.9	1	0.6
RK803506	5.4	0.22	336	5.38	0.03	0.6	1.7	60	17.9	<0.002	0.08	---	6.7	1	0.6
RK803507	5	1.34	1535	0.29	0.62	1.1	2.7	330	19.8	<0.002	0.23	---	15.8	1	0.9
RK803508	5.1	1.42	1255	0.2	0.82	1.2	2.8	410	20	<0.002	<0.01	---	17.9	1	1.1
RK803509	6	2.43	2000	1.42	0.11	1.7	3.7	280	33.6	<0.002	0.19	---	19.9	4	1.7
RK803510	6.9	1.88	1390	0.38	0.25	0.9	3.2	130	8.9	<0.002	<0.01	---	10.4	1	0.7
RK803512	7.5	1.84	992	19.85	0.01	0.8	2.5	460	5.2	<0.002	0.04	---	10.8	9	0.4
RK803513	7.9	3.43	1940	0.24	0.53	1.6	5.9	270	17.7	<0.002	<0.01	---	20.4	1	0.8
RK803514	5.3	1.88	905	16.75	0.22	1.8	4.3	290	46.7	0.002	0.03	---	21.6	2	1
RK803515	6.7	2.65	1615	10.25	0.3	1.7	4.1	380	45.2	0.002	0.97	---	26	4	1.2
RK803516	2.2	0.09	60	102.5	0.06	1.3	1.3	50	19.7	<0.002	0.49	---	4.6	4	0.4
RK803517	2.5	0.06	67	63.8	0.04	1	1.2	50	12.6	<0.002	0.24	---	3.3	5	0.3
RK803518	2.2	0.3	154	27.3	0.44	3.5	1.2	260	48.7	<0.002	0.07	---	12.8	3	0.8
RK803519	2.5	0.53	237	11.85	0.87	3.9	1.3	480	58	<0.002	0.13	---	16.9	1	0.8
RK803520	3.4	0.2	144	0.96	0.08	1.3	1.8	130	9.6	<0.002	3.25	---	3.3	8	0.3
RK803522	3.1	0.07	74	1.24	0.09	1.7	1.6	40	12.7	<0.002	0.24	---	3.4	10	0.3
RK803523	2.9	0.16	110	0.41	0.08	1.7	1.8	90	16.9	<0.002	0.73	---	3.7	5	0.6
RK803524	1.7	0.1	153	0.6	0.06	2.2	1.4	110	31.3	<0.002	2.31	---	5.9	3	0.6
RK803525	2.3	0.15	89	38.9	0.2	2.7	1.7	80	25.4	0.003	1.2	---	5.3	4	0.6
RK803526	4.1	0.12	97	8.54	0.02	0.5	2.4	50	14.5	<0.002	2.06	---	6.6	3	0.5
RK803527	19.1	2.57	1200	0.3	2.07	4.5	42.3	2140	75.9	<0.002	<0.01	---	25.3	2	1
RK803528	29.8	1.29	1045	1.36	0.07	1.3	30.4	640	50.4	<0.002	<0.01	---	39.4	2	0.5
RK803529	34.1	5.72	1465	0.13	1.16	1.6	122	1480	66.3	<0.002	<0.01	---	55.8	1	0.6
RK803530	10.6	2.18	955	5.01	1.88	2.4	6.9	350	10.5	0.038	1.02	---	21.8	3	4.2
RK803532	4.5	0.33	930	0.93	1.71	2.4	2.3	200	33.8	<0.002	0.01	---	10	1	0.9
RK803533	4.5	1.97	1185	0.89	1.84	3.2	6.6	380	0.7	0.015	0.19	---	23	3	1.9
RK803534	5.6	2.06	867	0.67	2.4	3.7	6.4	430	9.9	0.015	0.55	---	26.7	3	1.1
RK803535	3.1	1.15	1500	14.25	0.63	3	9.2	420	0.2	0.181	1.54	---	20.4	20	4.4
RK803563	11.7	8.27	1415	1.91	0.19	0.7	139.5	390	26.8	0.003	2.32	---	81.4	5	1.4
RK803564	30	2.73	1025	0.77	2.06	7.9	68.6	1110	61.1	<0.002	0.11	---	30.2	3	1.3
RK803565	25.8	1.14	494	1.2	3.1	4	12.9	2250	52.3	<0.002	0.01	---	14.9	2	0.7
RK803582	1.2	0.24	56	0.98	0.55	2.1	1	570	45.9	<0.002	0.07	---	---	12	1.8

Sample Number	Sr ppm	Ta ppm	Te ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zr ppm
RK803413	461	0.05	<0.05	<0.2	0.24	<0.02	0.1	185	0.1	12.6	11.1
RK803414	140.5	0.19	1.08	3	0.118	0.18	1.4	59	0.5	15.7	79.8
RK803415	221	0.12	0.2	1.7	0.297	0.18	1.1	208	1	19.3	50.5
RK803502	3.1	0.12	0.11	0.6	0.076	0.37	0.5	43	0.4	4.1	20.8
RK803503	13.2	0.07	<0.05	1.1	0.138	0.31	1	77	0.7	7.9	35.9
RK803504	7.1	<0.05	0.07	0.2	0.026	0.12	0.2	18	0.3	1.6	8.3
RK803505	15.1	0.07	<0.05	0.9	0.121	0.42	0.8	71	0.7	5.1	30.3
RK803506	9.1	0.06	0.3	0.5	0.067	0.25	0.5	47	0.9	4.7	17
RK803507	202	0.06	<0.05	0.6	0.248	0.35	1	105	0.8	14.5	28.8
RK803508	16.4	0.07	<0.05	0.7	0.295	0.33	1	95	0.9	13	35.3
RK803509	24.9	0.12	0.76	1.8	0.212	0.51	2.7	134	1.2	12.4	57.6
RK803510	7.4	0.07	0.06	0.9	0.111	0.14	0.6	61	0.6	7.1	29.8
RK803512	16.8	0.06	1.17	0.8	0.097	0.12	3.1	174	1	30	25.4
RK803513	18.3	0.11	0.07	1.3	0.213	0.46	1.3	135	1	14.5	49.1
RK803514	21.9	0.12	2.5	2	0.219	0.93	2.6	152	1.2	13.9	54.7
RK803515	18.8	0.11	0.1	1.4	0.283	0.9	3.1	185	1.6	10.6	48
RK803516	9	0.07	1.44	0.7	0.095	0.31	0.6	31	0.6	5.5	26.2
RK803517	7.5	0.05	1.5	0.4	0.06	0.19	0.4	22	0.4	3.3	16.6
RK803518	18.5	0.21	0.96	1.9	0.256	0.72	1.3	68	1.5	9.3	68.3
RK803519	21.6	0.23	0.54	2.1	0.311	0.79	1.4	85	1.7	11.9	75.7
RK803520	17.9	0.08	1.63	0.7	0.071	0.15	0.4	19	0.7	2.7	26.5
RK803522	7.9	0.12	1.95	1	0.078	0.17	0.7	16	0.6	4	38.3
RK803523	10.3	0.11	9.03	1.1	0.068	0.25	0.5	22	0.5	4.6	39.5
RK803524	4.1	0.13	1.17	1.4	0.083	0.42	0.7	29	0.7	7.1	45.1
RK803525	11	0.17	1.34	1.9	0.079	0.36	1.3	29	0.5	9	63.9
RK803526	6	<0.05	0.62	0.3	0.057	0.29	0.2	47	0.4	1.1	12.3
RK803527	795	0.29	0.06	4	0.478	0.25	1.7	251	1.5	21.1	76.6
RK803528	336	0.08	1.56	0.7	0.183	0.18	0.4	208	5.6	15.3	16.4
RK803529	270	0.1	<0.05	0.8	0.465	0.2	0.5	331	1.9	15.5	35.2
RK803530	222	0.16	0.14	2.4	0.269	0.15	1.4	139	1.2	16.9	52.3
RK803532	76.1	0.17	<0.05	2.6	0.139	0.7	2.5	13	0.7	28	96.3
RK803533	464	0.21	0.07	2.9	0.294	<0.02	1.7	183	0.7	23.1	52.5
RK803534	279	0.24	<0.05	3.2	0.338	0.2	1.2	177	0.3	24	63.5
RK803535	801	0.2	0.38	3.2	0.262	<0.02	1.9	196	1	27.7	47.1
RK803563	82.4	<0.05	0.47	0.9	0.329	0.12	0.5	304	0.9	8.1	13.1
RK803564	382	0.54	0.1	3	0.578	0.32	1.2	253	1.2	23.3	34
RK803565	307	0.24	1.31	3.3	0.31	0.21	1.1	143	9.3	17.5	49.6
RK803582	15	0.13	2.32	2.4	0.13	0.64	1.7	34	1.2	11.5	87.1

Sample Number	Au ppm	Au(2) ppm	Au(+) ppm	Ag ppm	Ag(+) ppm	As ppm	Sb ppm	Cu ppm	Cu(+) %	Pb ppm	Zn ppm	Al %	Ba ppm	Be ppm
RK803583	0.025	---	---	0.12	---	62.9	2.18	58.6	---	9.2	50	7.12	1520	0.49
RK803584	0.028	---	---	6.18	---	53.1	15.05	556	---	10.2	13	0.74	70	<0.05
RK803585	0.005	---	---	0.09	---	10	2.51	11.6	---	6.1	60	7.26	820	0.49
RK803586	0.065	---	---	6.37	---	140.5	18.2	684	---	17.3	16	0.34	20	0.05
RK803587	0.005	---	---	0.22	---	36.6	3.33	16.1	---	37.4	373	7.2	4940	0.6
RK804202	0.002	---	---	0.07	---	18.1	3.84	7.5	---	9.6	95	5.36	1360	0.54
RK804203	0.009	---	---	2.55	---	182.5	10.5	32.7	---	413	276	5.54	2000	0.51
RK804204	0.006	---	---	0.74	---	193.5	3.65	302	---	157.5	358	5.76	1280	0.49
RK804221	0.004	---	---	0.25	---	41.9	26.7	47.3	---	18.2	83	5.36	1120	0.76
RK808333	---	0.039	---	2.16	---	24.3	3.22	628	---	27.8	153	5.8	3660	0.5
RK808334	---	0.017	---	4.54	---	74.3	42.1	1185	---	1035	126	4.94	720	0.53
RK808335	---	0.109	---	37.1	---	244	318	582	---	808	43	3.13	960	0.25
RK808337	---	0.016	---	12.75	---	83.7	76.2	184.5	---	89.7	74	1.78	1500	0.3
RK808338	---	0.015	---	6.24	---	40.6	16.15	132.5	---	375	53	0.61	6700	0.1
RK808339	---	<0.005	---	0.26	---	13.8	32.5	46.6	---	4.8	23	1.4	3670	0.24
RK808340	---	0.010	---	4.54	---	39.8	14.7	104.5	---	18.7	128	5.84	390	0.34
RK808341	---	0.134	---	11.35	---	155.5	116	9.9	---	123.5	12	3.91	4310	0.15
RK808467	---	0.026	---	1	---	9.4	2.69	404	---	8.5	12	2	380	0.2
RK808762	---	0.019	---	12.45	---	2440	168.5	206	---	66.3	218	7.78	1340	0.47
RK808763	---	0.017	---	0.58	---	202	9.12	116.5	---	40.5	2060	7.95	1190	0.47
RK808764	---	0.006	---	0.7	---	132	7.72	65.1	---	33.6	84	7.53	2000	0.41

Sample Number	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Fe %	Ga ppm	Ge ppm	Hf ppm	Hg ppm	In ppm	K %	La ppm
RK803583	0.72	0.31	<0.02	24.8	4	2	0.61	4.13	17.1	0.17	3.3	0.05	0.22	2.22	12.8
RK803584	41.8	0.02	<0.02	1.13	1.4	7	0.11	13.05	2.36	0.31	0.1	0.1	0.645	0.21	0.5
RK803585	0.62	0.23	<0.02	22.3	4.2	3	0.75	3.12	15.8	0.13	3.3	0.05	0.151	1.85	10.5
RK803586	6.92	0.08	0.1	1.63	1.9	6	0.08	10.9	4.47	0.17	0.1	0.1	1.32	0.04	0.7
RK803587	0.27	1	0.55	13.7	23.5	11	0.16	5.59	13.05	0.09	1.5	0.05	0.114	0.6	6.3
RK804202	0.09	3.55	0.34	17.9	4.4	4	0.42	2.02	11.85	0.09	3.3	0.03	0.03	1.25	7.2
RK804203	0.51	0.09	1	23.3	0.5	10	0.61	2.83	14.3	0.1	3.4	0.04	0.071	1.4	12.3
RK804204	0.01	0.13	1.23	17.05	0.7	1	0.53	9.45	14.7	0.15	3	0.09	0.337	1.1	8.7
RK804221	0.25	0.2	0.25	6.49	2.3	4	0.45	1.7	9.97	0.05	1.5	0.05	0.047	1.14	3.1
RK808333	1.5	0.18	0.04	16.25	6.2	4	0.55	6.93	15.15	0.14	2.3	0.03	0.189	1.31	7.4
RK808334	0.7	2.19	0.9	18.3	4.3	5	0.56	3.22	9.41	0.09	1.9	0.73	0.104	1.53	8.4
RK808335	5.04	0.02	0.05	5.22	0.5	8	0.42	6.83	8.91	0.19	1	3.46	2.17	1.26	2.3
RK808337	0.73	0.07	0.8	5.3	1.1	16	0.21	1.19	4.41	0.05	0.6	0.99	0.173	0.65	2.3
RK808338	2.01	0.01	0.19	0.74	0.1	3	0.13	0.41	1.83	<0.05	0.1	1.41	0.11	0.17	0.5
RK808339	0.01	1.99	0.08	2.11	6.2	23	0.22	2.69	4.17	0.06	0.1	0.03	0.01	0.14	1
RK808340	<0.01	4.53	0.29	7.93	46.4	11	0.55	9.72	11.45	0.15	0.5	0.52	0.034	0.28	2.9
RK808341	0.06	0.02	0.06	8.97	0.3	10	0.45	1.4	8.45	0.05	1.5	0.2	0.149	1.48	4.5
RK808467	1.54	0.06	<0.02	4.39	9.6	9	0.26	24.5	9.9	0.54	0.2	0.5	0.21	0.86	2.3
RK808762	0.02	0.37	0.49	6.7	8.2	5	0.99	6.12	21.6	0.12	1.1	1	0.059	2.63	2.1
RK808763	0.03	0.15	11.4	6.7	10.4	2	0.3	7.35	20.5	0.14	1.8	0.17	0.199	0.98	2.8
RK808764	0.6	0.2	0.13	11.75	14	13	0.23	6.26	18.45	0.13	1.5	0.02	0.033	0.39	4.3

Sample Number	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Nb ppm	Ni ppm	P ppm	Rb ppm	Re ppm	S %	S(+) %	Sc ppm	Se ppm	Sn ppm
RK803583	4.5	1.01	400	1.62	1.59	3	1.2	300	51.8	<0.002	0.08	---	---	4	1.3
RK803584	3.4	0.03	45	11.55	0.02	0.3	1.6	110	4.6	<0.002	0.11	---	---	37	2.1
RK803585	3.2	1.16	508	0.85	1.77	2.9	1	330	49.2	<0.002	0.55	---	---	3	0.8
RK803586	9.8	0.03	92	37	0.01	0.3	1.5	40	1.4	0.005	0.11	---	---	19	2.9
RK803587	9.8	3.66	4110	0.68	2.24	1.7	5.2	300	6.5	<0.002	0.87	---	---	1	0.6
RK804202	6	0.97	944	0.18	0.13	3.5	4.2	270	19.9	<0.002	0.42	---	---	2	0.7
RK804203	6	0.92	111	1.48	0.09	3	1	260	30.8	<0.002	0.12	---	---	7	1.8
RK804204	11.3	1.78	589	1.19	0.06	2.1	0.8	420	26.6	<0.002	0.07	---	---	2	0.7
RK804221	6.9	0.78	225	0.27	1.03	1.9	1.2	180	21.1	<0.002	0.84	---	---	2	1.1
RK808333	11.4	1.5	710	10.8	0.57	2.3	1.2	250	29.2	<0.002	0.25	---	8.1	5	0.7
RK808334	7.5	0.96	2100	1.74	0.73	2.1	1.3	230	37.5	<0.002	0.82	---	7.8	3	0.3
RK808335	7.4	0.14	85	6.5	0.06	1.5	0.7	460	34.7	<0.002	0.19	---	5.7	19	0.5
RK808337	6.9	0.1	180	5.55	0.14	1.3	0.8	70	17.4	<0.002	0.22	---	2.9	3	0.3
RK808338	2.8	0.03	26	1.36	0.05	0.5	0.4	40	5.8	<0.002	0.04	---	1	4	<0.2
RK808339	8.6	0.36	696	0.4	0.13	0.4	2.7	90	3.5	<0.002	0.21	---	7.7	2	0.2
RK808340	18.4	1.67	1075	2	0.58	0.9	13.1	390	5.3	0.002	1.91	---	18.7	2	0.3
RK808341	7.4	0.14	76	1.94	0.03	1.6	0.7	20	32.9	<0.002	0.29	---	4.8	4	0.6
RK808467	2	0.16	93	18.1	0.03	0.7	1.4	380	23.9	0.005	0.4	---	12.1	53	2
RK808762	10.1	1.7	2940	0.63	0.67	1.4	1.6	490	49	<0.002	1.12	---	34.9	1	0.5
RK808763	13.6	3.13	1935	0.15	0.04	2.3	1.7	920	8	<0.002	4.08	---	31.6	2	0.9
RK808764	13.9	2.97	770	1	2.38	3.2	10.5	960	2.5	<0.002	1.78	---	36.7	7	0.6

Sample Number	Sr ppm	Ta ppm	Te ppm	Th ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Y ppm	Zr ppm
RK803583	72.8	0.18	0.38	3.2	0.17	0.69	2.8	27	1.3	16.5	107
RK803584	3.6	<0.05	35.1	0.2	0.008	0.08	0.1	11	0.2	1	3.4
RK803585	47.4	0.18	0.38	3.2	0.168	0.65	2.5	29	1.1	19.8	104
RK803586	3.6	<0.05	1.06	<0.2	0.01	0.02	0.6	33	3.7	3.3	3
RK803587	385	0.14	0.05	1.3	0.268	0.35	1	152	1	14.3	43.9
RK804202	64.1	0.23	1.3	3.1	0.168	0.42	1.8	32	0.3	25.9	101
RK804203	24	0.2	2.21	2.9	0.159	0.93	2.1	28	0.9	17	104
RK804204	39.7	0.15	0.06	1.9	0.173	0.69	1.8	22	0.8	16.8	88.2
RK804221	48.2	0.16	0.38	2.7	0.109	0.52	1.8	26	0.5	8.8	55.2
RK808333	123.5	0.14	0.77	2.3	0.135	0.39	1.9	26	0.6	17.2	70.2
RK808334	119.5	0.13	0.24	1.9	0.122	0.49	1.3	16	1.2	16.3	59.6
RK808335	19.1	0.07	2.58	1.1	0.065	0.44	1.1	22	0.6	6.9	35.1
RK808337	1515	<0.05	0.18	0.6	0.051	0.22	0.7	11	0.8	7.2	22.9
RK808338	1305	<0.05	0.25	0.2	0.016	0.09	0.2	5	0.1	1.9	7.4
RK808339	704	<0.05	<0.05	<0.2	0.073	0.05	0.1	63	0.2	3	5.3
RK808340	116.5	0.05	<0.05	0.3	0.25	0.13	0.7	166	0.5	13.1	16.9
RK808341	94.8	0.1	0.09	1.9	0.079	5.66	1.8	19	3.1	7.9	43.7
RK808467	4.3	<0.05	4.78	0.5	0.107	0.23	0.4	128	2.7	4.7	8.1
RK808762	50	0.07	<0.05	0.7	0.448	2.86	0.8	298	5.6	10.7	33.4
RK808763	72.4	0.11	0.08	0.5	0.561	0.84	0.8	245	1.5	6.6	54.6
RK808764	115	0.17	0.95	0.9	0.751	0.28	0.9	289	0.5	8.2	46.9

Table 12. Detection limits and analytical methods for trace-element geochemical analyses of rock samples collected by International Tower Hill Mines Ltd. in the Chistochina mining district, Mount Hayes Quadrangle, Alaska. Analytical methods include: FA-ICP-AES = fire assay-inductively coupled plasma-atomic emission spectroscopy; FA-AAS = fire assay with an atomic absorption spectroscopy determination; FA-GRAV = fire assay with a gravimetric determination; ICP-MS = inductively coupled plasma-mass spectroscopy; ICP-AES = inductively coupled plasma-atomic emission spectroscopy; AAS = atomic absorption spectrometry; Leco = Leco furnace. Digestions include: 4 acid = HNO₃-HClO₄-HF + HCl; AR/CV = aqua regia/cold vapor. NOTE: * = possibly incomplete digestion dependent on mineralogy; -- = not applicable.

Element	Units	ALS Chemex			
		Lower Detection Limit	Upper Detection Limit	Analytical Method	Digestion
Au	ppm	0.001	10	FA-ICP-AES	---
Au(2)	ppm	0.005	10	FA-AAS	---
Au(+)	ppm	0.05	1,000	FA-GRAV	---
Ag	ppm	0.01	100	ICP-MS	4 Acid
Ag(+)	ppm	1	1,500	ICP-AES	4 Acid
As	ppm	0.2	10,000	ICP-MS	4 Acid
Sb	ppm	0.05	10,000	ICP-MS	4 Acid
Cu	ppm	0.2	10,000	ICP-MS	4 Acid
Cu(+)	%	0.001	40	ICP-AES	4 Acid
Pb	ppm	0.5	10,000	ICP-MS	4 Acid
Zn	ppm	2	10,000	ICP-MS	4 Acid
Al	%	0.01	50	ICP-MS	4 Acid
Ba*	ppm	10	10,000	ICP-MS	4 Acid
Be	ppm	0.05	1,000	ICP-MS	4 Acid
Bi	ppm	0.01	10,000	ICP-MS	4 Acid
Ca	%	0.01	50	ICP-MS	4 Acid
Cd	ppm	0.02	1,000	ICP-MS	4 Acid
Ce	ppm	0.01	500	ICP-MS	4 Acid
Co	ppm	0.1	10,000	ICP-MS	4 Acid
Cr*	ppm	1	10,000	ICP-MS	4 Acid
Cs	ppm	0.05	500	ICP-MS	4 Acid
Fe	%	0.01	50	ICP-MS	4 Acid
Ga	ppm	0.05	10,000	ICP-MS	4 Acid
Ge	ppm	0.05	500	ICP-MS	4 Acid
Hf	ppm	0.1	500	ICP-MS	4 Acid
Hg	ppm	0.01	100	AAS	AR/CV
In	ppm	0.005	500	ICP-MS	4 Acid
K	%	0.01	10	ICP-MS	4 Acid
La	ppm	0.5	10,000	ICP-MS	4 Acid
Li	ppm	0.2	10,000	ICP-MS	4 Acid
Mg	%	0.01	50	ICP-MS	4 Acid
Mn	ppm	5	100,000	ICP-MS	4 Acid
Mo	ppm	0.05	10,000	ICP-MS	4 Acid
Na	%	0.01	10	ICP-MS	4 Acid
Nb	ppm	0.1	500	ICP-MS	4 Acid
Ni	ppm	0.2	10,000	ICP-MS	4 Acid
P	ppm	10	10,000	ICP-MS	4 Acid
Rb	ppm	0.1	10,000	ICP-MS	4 Acid
Re	ppm	0.002	50	ICP-MS	4 Acid
S	%	0.01	10	ICP-MS	4 Acid
S(+)	%	0.01	50	Leco	---

Element	Units	ALS Chemex			
		Lower Detection Limit	Upper Detection Limit	Analytical Method	Digestion
Sc	ppm	0.1	10,000	ICP-MS	4 Acid
Se	ppm	1	1,000	ICP-MS	4 Acid
Sn	ppm	0.2	500	ICP-MS	4 Acid
Sr	ppm	0.2	10,000	ICP-MS	4 Acid
Ta	ppm	0.05	100	ICP-MS	4 Acid
Te	ppm	0.05	500	ICP-MS	4 Acid
Th	ppm	0.2	10,000	ICP-MS	4 Acid
Ti*	%	0.005	10	ICP-MS	4 Acid
Tl	ppm	0.02	10,000	ICP-MS	4 Acid
U	ppm	0.1	10,000	ICP-MS	4 Acid
V	ppm	1	10,000	ICP-MS	4 Acid
W*	ppm	0.1	10,000	ICP-MS	4 Acid
Y	ppm	0.1	500	ICP-MS	4 Acid
Zr	ppm	0.5	500	ICP-MS	4 Acid