



# **GEOCHEMICAL DATA FROM THE MAKKOVIK AREA, LABRADOR (NTS 13O/03 AND PARTS OF NTS 13O/02)**

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**Open File 013O/0139**

**St. John's  
Newfoundland and Labrador  
October, 2014**

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## SUMMARY

This open file release consists of whole-rock geochemical data from rock samples collected in the Makkovik area of Labrador (NTS 13O/03 and parts of NTS 13O/02). The geological context of these samples and a description of the regional geology are contained in reports and maps by Hinchee (2007, 2013), Kennedy (2007), LaFlamme (2011), Hinchee and Davis (2013).

This data compilation contains whole-rock geochemical analyses of lithological units compiled from LaFlamme (2011), and Kennedy (2007). For these samples, details of the geochemical methods used are contained in the data sources (see References). In addition, this open file contains unpublished geochemical analyses collected by the author. For these samples, the analytical methods are outlined below. This open file places data in the public domain; no interpretation of the data is included in this report. The release includes the location, brief sample descriptions, and major-element and trace-element data. The data are tabulated below and are also available in digital format, *i.e.*, comma separated value files (\*.csv files).

The release also includes unprocessed data for several standards completed at the Newfoundland and Labrador Department of Natural Resources laboratory as well as at external commercial laboratories. These may be used by the reader to assess the accuracy of the analyzed data. Laboratory duplicate analyses of selected samples are also included, to assess analytical precision.

Major elements and selected trace elements were analyzed at the Department of Natural Resources laboratory using Inductively-coupled-plasma–emission-spectrometry (ICP-ES) (see Finch, 1998). Other trace elements, including REE's, were analyzed at Activation Analytical laboratories (Actlabs; <http://www.actlabs.com>) using Inductively-coupled-plasma (ICP) emission spectrometry (ES) and mass spectrometry (MS). Analytical method of determination is indicated for each element in Appendices A to E. Details of geochemical methods, detection limits and standard analytical errors for all of the techniques applied are readily available from the relevant laboratories.

A value of -99 or -999, reported for a given element, indicates that it was not analyzed. All other negative numbers indicate the concentration of the specific element in the sample was below the detection limit (*e.g.*, -0.01 indicates the measured value was below the detection limit of 0.01). Values above the upper limit are indicated by adding 1 to the last unit indicated (*e.g.*, for K%, the value of 5.01 indicates the measured value was above the upper limit of 5.00). Major elements are reported in weight percent, and trace elements are reported in ppm.

The UTM coordinates are based on Zone 21 and NAD27.



## **STRUCTURE OF THE DATA FILES**

To assist the user in interpreting the information provided in the compilation, a description of the fields and general principles followed in preparing Appendix A to Appendix E are provided below. Mineral abbreviations employed in sample descriptions are after Kretz (1983) and may include: Qtz (quartz), Bt (biotite), Cpx (clinopyroxene), Grt (garnet), Hbl (amphibole), Pl (plagioclase), Kfs (potassium feldspar), Ol (olivine) and Opx (orthopyroxene). Abbreviations for the method and units are outlined in the Appendix F.

[SampleID] - Sample number as given in the original data source

[StationID] – Station number as given in the original data source

[LabNumber] – A unique number for each sample, allocated by the Newfoundland and Labrador Department of Natural Resources Geological Survey Laboratory

[UTMEast] - UTM easting coordinate, NAD 27

[UTMNorth] - UTM northing coordinate, NAD 27

[UTMZone] - UTM zone, NAD 27

[NTS\_Map] – The National Topographic System (NTS) Index Map number

[Analysis] – Type of analysis completed on the samples

[IgpetLcode] – Coding of rocks by lithology for the software

[IgpetKcode] - Coding of rocks by Group or Suite for the software

[Lithology] - Rock lithology as given in the original data source or as assigned using classification diagrams based on whole-rock composition.

[Notes] Descriptive information pertaining to a specific field for a given sample

[Map\_Unit] - Geological unit as given in the geological map based on Hinckley's (2013) nomenclature. If cell is blank, the sample is from a rock type that was not a mappable unit, at the scale of mapping (such as some dykes)

[Classification] – Broad categorization of rock type

[GroupSuite] – Main geological unit (*e.g.*, tectonostratigraphic name, suite or group, batholith name) as given to the sample

## **Major Element Oxides**

[LOI] – Loss on Ignition

[IshAltIdx] – Hashimoto Index of Ishikawa (IA) =  $100(K_2O + MgO) / (K_2O + MgO + Na_2O + CaO)$

[ChlCarbPyI] - Chlorite-carbonate-pyrite Index (CCPI) =  $100(Mg + FeO) / (MgO + FeO + Na_2O + K_2O)$

[AdvArgAltI] - Advanced Argillic Alteration Index [AAAI =  $100(SiO_2) / (SiO_2 + 10MgO + 10CaO + 10Na_2O)$ ],

## **Trace Elements**

[REFERENCE] - First author and publication year of main data source (no year for unpublished data)

[COMMENTS] - Descriptive information pertaining to a specific field for a given sample

## **REFERENCES**

Finch, C.

1998: Inductively Coupled Plasma-Emission Spectrometry (ICP-ES) at the Geochemical Laboratory. In Current Research. Newfoundland and Labrador Department of Natural Resources, Geological Survey, Report 98-1, pages 179-193.

Hinchey, A.M.

2007: The Paleoproterozoic metavolcanic, metasedimentary and igneous rocks of the Aillik Domain, Makkovik Province, Labrador (NTS Map Area 13O/03). In Current Research. Newfoundland and Labrador Department of Natural Resources, Geological Survey, Report 07-1, pages 25-44.

Hinchey, A.M.,

2013: Geology of the Makkovik area, Labrador (NTS 13O/03 and parts of NTS 13O/02). Map 2012-18, scale 1:50,000. Open file 013O/0138.

Hinchey, A.M. and Davis, W.J.

2013: New U-Pb zircon geochronology for the Measles Point Granite, Aillik domain, Makkovik Province, Labrador (NTS map area 13O/03) In Current Research. Newfoundland Department of Natural Resources, Geological Survey, Report 13-1, pages 223-232.

Kennedy, S.

2007: Geology, tectonostratigraphy and geochemistry of the Ford's Bight area, Aillik domain, Makkovik Province, Labrador. Unpublished B.Sc. (Hons) thesis, Memorial University of Newfoundland, St. John's, Newfoundland, 71 pages.

Kretz, R.

1983: Symbols for rock-forming minerals. American Mineralogy, Volume 68, Pages 277-279.

LaFlamme, C.

2011: Lithology, geochemistry and geochronology of the Aillik Group and foliated granitic intrusions: implications on the formation and early evolution of the Aillik domain, Makkovik Province, Labrador. Unpublished M.Sc. thesis, Memorial University of Newfoundland, St. John's, Newfoundland. 253 pages.

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**Appendix A: Major element and trace element data**

SampleID	StationID	LabNumber	UTMEast	UTMNorth	UTMZone	NTS_Map	Analysis	IgpetCode	IgpetKcode	Lithology	Notes
Units											
Detection Limit											
Upper Limit											
Analysis Method											
06AH024A01	06AH024	6540331	355559	6107090	21	130/03	thin section;geochemistry;isotopic	5	2	metabasalt (pillows)	
06AH027A01	06AH027	6540332	358825	6106989	21	130/03	thin section;geochemistry	5	2	metabasalt (pillows)	
06AH027A02	06AH027	6540254	358825	6106989	21	130/03	assay	5	2	metabasalt (pillows)	
06AH028A01	06AH028	6540333	358264	6106750	21	130/03	thin section;geochemistry	5	23	lithi felsic tuff	low SiO?
06AH036A01	06AH036	6540334	359481	6108570	21	130/03	thin section;geochemistry	5	23	felsic tuff	
06AH045A01	06AH045	6540335	359102	6108660	21	130/03	thin section;geochemistry	5	25	polymictic conglomerate	
06AH057A01	06AH057	6540336	363405	6109777	21	130/03	thin section;geochemistry	7	7	porphyry	qtz-fp porphyry
06AH057B02	06AH057	6540273	363405	6109777	21	130/03	geochemistry;isotopic	10	10	diabase	
06AH060C01	06AH060	6540337	365048	6110527	21	130/03	thin section;geochemistry	5	6	metarhyolite	
06AH061A01	06AH061	6540338	365414	6110347	21	130/03	polish;thin section;geochemistry	5	18	tuffaceous sandstone	
06AH063D02	06AH063	6540265	365547	6109144	21	130/03	assay	5	6	metarhyolite	
06AH068B01	06AH068	6540339	361985	6107981	21	130/03	thin section;geochemistry	28	28	amphibolite	
06AH070A01	06AH070	6540341	362128	6107142	21	130/03	thin section;geochemistry	5	6	metarhyolite	
06AH073A02	06AH073	6540342	347906	6111946	21	130/03	geochemistry	2	20	metabasalt	
06AH078A02	06AH078	6540274	346162	6108967	21	130/03	geochemistry;isotopic	2	20	metabasalt	
06AH080B02	06AH080	6540275	364040	6120483	21	130/03	geochemistry;isotopic	28	28	amphibolite	
06AH082A01	06AH082	6540343	363241	6122118	21	130/03	thin section;geochemistry	7	7	porphyry	qtz-fp porphyry
06AH083A01	06AH083	6540344	362588	6122488	21	130/03	thin section;geochemistry	5	23	felsic tuff	
06AH084B01	06AH084	6540345	362303	6122209	21	130/03	polish;thin section;geochemistry;isotopic	10	10	diabase	
06AH090C01	06AH090	6540255	361951	6120415	21	130/03	assay	5	23	felsic tuff	
06AH100A02	06AH100	6540276	359275	6115756	21	130/03	geochemistry;isotopic	5	1	metabasalt	
06AH104B01	06AH104	6540346	358412	6117204	21	130/03	thin section;geochemistry	5	6	metarhyolite	
06AH108A01	06AH108	6540347	359039	6120274	21	130/03	thin section;geochemistry	28	28	amphibolite	
06AH113A02	06AH113	6540277	352799	6101824	21	130/03	geochemistry;isotopic	13	13	monzogranite	
06AH115B01	06AH115	6540348	353379	6102318	21	130/03	thin section;geochemistry;isotopic	5	1	metabasalt	
06AH117A02	06AH117	6540278	355057	6103962	21	130/03	geochemistry;isotopic	13	13	qz monzonite	
06AH120A02	06AH120	6540279	366126	6108320	21	130/03	geochemistry;isotopic	5	23	felsic tuff	
06AH122A02	06AH122	6540256	365927	6107167	21	130/03	assay	5	19	mafic tuff	
06AH126A01	06AH126	6540349	364794	6105675	21	130/03	polish;thin section;geochemistry	5	1	mafic tuff	
06AH128A02	06AH128	6540281	367311	6109289	21	130/03	geochemistry;isotopic	12	15	syenogranite	
06AH146A02	06AH146	6540282	364091	6116470	21	130/03	geochemistry;isotopic	7	7	porphyry	qtz-fp porphyry
06AH155A02	06AH155	6540283	366946	6114588	21	130/03	geochemistry	17	34	ol leucogabbro	
06AH165A02	06AH165	6540284	357784	6110892	21	130/03	geochemistry;isotopic	13	13	monzogranite	
06AH173A01	06AH173	6540351	356809	6119606	21	130/03	thin section;geochemistry	5	36	metasandstone	
06AH187A01	06AH187	6540352	354854	6118640	21	130/03	thin section;geochemistry	5	36	metasandstone	
06AH187A02	06AH187	6540257	354854	6118640	21	130/03	assay	5	36	metasandstone	
06AH187B01	06AH187	6540353	354854	6118640	21	130/03	thin section;geochemistry	5	25	volcanic breccia	
06AH189A02	06AH189	6540285	354609	6116947	21	130/03	geochemistry;isotopic	15	16	qz monzonite	
06AH197B02	06AH197	6540286	367815	6111877	21	130/03	geochemistry;isotopic	10	10	diabase	
06AH200A01	06AH200	6540354	372010	6112791	21	130/03	polish;thin section;geochemistry	7	7	porphyry	qtz-kfs porphyritic granite
06AH202A02	06AH202	6540258	372375	6111470	21	130/03	assay	7	7	porphyry	qtz-kfs porphyritic granite
06AH203A02	06AH203	6540287	372098	6110761	21	130/03	geochemistry	7	7	porphyry	qtz-kfs porphyritic granite
06AH216A02	06AH216	6540316	365244	6110424	21	130/03	geochemistry;isotopic	5	6	metarhyolite	
06AH225B01	06AH225	6540355	362118	6106670	21	130/03	thin section;geochemistry	5	6	metarhyolite	
06AH226B01	06AH226	6540356	361410	6105988	21	130/03	thin section;geochemistry	5	23	lithi felsic tuff	
06AH228A02	06AH228	6540288	361297	6105166	21	130/03	geochemistry;isotopic	5	6	metarhyolite	
06AH246A02	06AH246	6540289	356991	6102473	21	130/03	geochemistry;isotopic	5	23	felsic tuff	lithic crystal felsic tuff
06AH250A01	06AH250	6540357	349807	6105152	21	130/03	thin section;geochemistry	7	7	qtz-kfs porphyritic granite	
06AH266A02	06AH266	6540291	366822	6101159	21	130/03	geochemistry;isotopic	15	16	monzogranite	
06AH273A01	06AH273	6540358	368882	6099803	21	130/03	polish;thin section;geochemistry	5	23	kfs altered felsic tuff	
06AH276B02	06AH276	6540292	357630	6096855	21	130/03	geochemistry;isotopic	15	16	monzogranite	

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**Appendix A: Major element and trace element data**

SampleID	StationID	LabNumber	UTMEast	UTMNorth	UTMZone	NTS_Map	Analysis	IgpetCode	IgpetKcode	Lithology	Notes
Units											
Detection Limit											
Upper Limit											
Analysis Method											
06AH279A02	06AH279	6540293	359669	6097222	21	130/03	geochemistry;isotopic	5	19	mafic tuff	
06AH280A01	06AH280	6540359	360203	6096951	21	130/03	thin section;geochemistry	5	18	tuffaceous sandstone	apparent tuffites
06AH286A02	06AH286	6540259	363347	6099687	21	130/03	assay	15	16	monzogranite	
06AH287A02	06AH287	6540294	363134	6100538	21	130/03	geochemistry;isotopic	5	19	mafic tuff	
06AH290A01	06AH290	6540586	364358	6099040	21	130/03	polish;thin section;geochemistry	5	19	mafic tuff	
06AH297A02	06AH297	6540295	364470	6097210	21	130/03	geochemistry;isotopic	5	6	metarhyolite	
06AH299A02	06AH299	6540296	365855	6097451	21	130/03	geochemistry;isotopic	5	23	crystal felsic tuff	
06AH301A01	06AH301	6540361	365687	6101359	21	130/03	polish;thin section;geochemistry	5	18	tuffaceous sandstone	apparent tuffites
06AH306A02	06AH306	6540261	369115	6106805	21	130/03	assay	5	23	tuffaceous sandstone	
06AH310A02	06AH310	6540297	370566	6102748	21	130/03	geochemistry;isotopic	7	7	porphyry	qtz porphyritic granite
06AH317A02	06AH317	6540298	370293	6106369	21	130/03	geochemistry;isotopic	5	23	felsic tuff	lithic crystal felsic tuff
06AH319A02	06AH319	6540299	353639	6105679	21	130/03	geochemistry;isotopic	5	2	metabasalt (pillows)	
06AH325A02	06AH325	6540301	350729	6106525	21	130/03	geochemistry;isotopic	7	7	porphyry	
06AH343A02	06AH343	6540302	363360	6120405	21	130/03	geochemistry;isotopic	5	23	felsic tuff	crystal felsic tuff
06AH345A02	06AH345	6540303	360345	6117969	21	130/03	geochemistry;isotopic	5	1	metabasalt	
06AH346B02	06AH346	6540262	360802	6117883	21	130/03	assay	5	1	metabasalt	
06AH360A01	06AH360	6540362	355742	6097931	21	130/03	thin section;geochemistry	5	23	felsic tuff	crystal lithic felsic tuff
06AH362A01	06AH362	6540363	359128	6102740	21	130/03	thin section;geochemistry	5	18	tuffaceous sandstone	
06AH368A01	06AH368	6540588	342901	6100128	21	130/03	polish;thin section;geochemistry	2	20	metabasalt	Kitt's Pillow Lava
06AH386A02	06AH386	6540304	342465	6098699	21	130/03	geochemistry;isotopic	2	20	metabasalt	
06AH386A03	06AH386	6540263	342465	6098699	21	130/03	assay	2	20	metabasalt	
06AH398A02	06AH398	6540305	369998	6107664	21	130/03	geochemistry;isotopic	5	6	metarhyolite	
06AH427B01	06AH427	6540364	352515	6112108	21	130/03	thin section;geochemistry	5	18	tuffaceous sandstone	apparent tuffites
06AH429A02	06AH429	6540309	351604	6110816	21	130/03	geochemistry;isotopic	5	6	metarhyolite	pl-qtz porphyry
06AH430A02	06AH430	6540306	351313	6110180	21	130/03	geochemistry;isotopic	5	6	metarhyolite	pl porphyry
06AH433C01	06AH433	6540264	349424	6108078	21	130/02	assay	9	21	granite pegmatite	
06AH435B02	06AH435	6540272	365796	6108872	21	130/03	assay	5	6	metarhyolite	
06AH436A02	06AH436	6540266	367370	6107688	21	130/03	assay	5	6	metarhyolite	
06AH437A02	06AH437	6540307	367399	6106826	21	130/03	geochemistry;isotopic	5	23	felsic tuff	
06AH441A02	06AH441	6540267	365773	6104528	21	130/03	assay	5	23	felsic tuff	
06AH456A02	06AH456	6540308	365595	6109120	21	130/03	geochemistry;isotopic	5	6	metarhyolite	qtz porphyry
06AH467A02	06AH467	6540311	361191	6120127	21	130/03	geochemistry;isotopic	5	23	felsic tuff	crystal felsic tuff
06AH467B02	06AH467	6540312	361191	6120127	21	130/03	geochemistry;isotopic	9	9	aplite	
06AH467C02	06AH467	6540313	361191	6120127	21	130/03	geochemistry;isotopic	28	28	amphibolite	
06AH468A02	06AH468	6540314	372204	6109966	21	130/03	geochemistry;isotopic	7	7	porphyry	qtz-fp porphyry
06AH487B02	06AH487	6540269	374881	6110893	21	130/02	assay	5	23	felsic tuff	
06AH488A02	06AH488	6540315	373115	6108493	21	130/02	geochemistry;isotopic	5	23	felsic tuff	lithic felsic tuff
06AH490A02	06AH490	6540268	374299	6110742	21	130/02	assay	5	23	felsic tuff	
06AH506A02	06AH506	6540271	375444	6108521	21	130/02	assay	5	1	metabasalt	
06SK006B02	06SK006	6540317	365797	6108863	21	130/03	geochemistry	5	6	metarhyolite	
06SK009A02	06SK009	6540318	366117	6108186	21	130/03	geochemistry	5	18	tuffaceous sandstone	
06SK010A02	06SK010	6540319	366083	6107908	21	130/03	geochemistry	5	18	tuffaceous sandstone	
06SK011A02	06SK011	-99	366063	6107618	21	130/03	geochemistry	5	23	felsic tuff	
06SK013A02	06SK013	6540321	365581	6106696	21	130/03	geochemistry	5	6	metarhyolite	
06SK013B02	06SK013	-99	365581	6106696	21	130/03	geochemistry	5	23	felsic tuff	
06SK039A02	06SK039	6540322	366044	6107958	21	130/03	geochemistry	5	18	tuffaceous sandstone	
06SK040A02	06SK040	6540323	365982	6108396	21	130/03	geochemistry	5	23	felsic tuff	
06SK041A02	06SK041	6540324	365859	6108727	21	130/03	geochemistry	12	15	monzogranite	
06SK042A02	06SK042	6540325	365463	6109149	21	130/03	geochemistry	5	6	metarhyolite	
06SK043A02	06SK043	6540326	365457	6107051	21	130/03	geochemistry	5	6	metarhyolite	
06SK044A02	06SK044	6540327	365407	6107161	21	130/03	geochemistry	5	23	felsic tuff	
06SK047A02	06SK047	6540328	366187	6107910	21	130/03	geochemistry	5	6	metarhyolite	

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## Appendix A: Major element and trace element data

SampleID	StationID	LabNumber	UTMEast	UTMNorth	UTMZone	NTS_Map	Analysis	IgpetCode	IgpetKcode	Lithology	Notes
Units											
Detection Limit											
Upper Limit											
Analysis Method											
06SK048A02	06SK048	6540329	365806	6107950	21	130/03	geochemistry	5		6 metarhyolite	
08CL346A02	08CL346	6540543	373829	6109336	21	130/02	geochemistry	5		23 felsic tuff	
08CL346B02	08CL346	6540544	373829	6109336	21	130/02	geochemistry	5		6 metarhyolite	
08CL370A02	08CL370	6540545	374194	6108706	21	130/02	geochemistry	9		9 granite	
08CL371A02	08CL371	6540546	373846	6108477	21	130/02	geochemistry;isotopic	5		19 mafic tuff	
08CL374A02	08CL374	6540547	374960	6107752	21	130/02	geochemistry	8		15 monzogranite	was classified as qfp
08CL384B02	08CL384	6540548	373338	6106227	21	130/02	geochemistry	10		10 gabbro	
08CL388A02	08CL388	6540549	373462	6108467	21	130/02	geochemistry	7		7 porphyry	qtz-fp porphyry
08CL389A02	08CL389	6540551	374498	6103719	21	130/02	geochemistry	5		6 metarhyolite	
08CL398A02	08CL398	6540552	375464	6108493	21	130/02	geochemistry;isotopic	5		1 metabasalt	
08CL398B02	08CL398	6540553	375464	6108493	21	130/02	geochemistry	5		23 felsic tuff	
08CL399A02	08CL399	6540554	376143	6108328	21	130/02	geochemistry	8		15 monzogranite	
08CL400A02	08CL400	6540555	374619	6110879	21	130/02	geochemistry	5		6 metarhyolite	
08CL452A02	08CL452	6540556	374899	6110896	21	130/02	geochemistry;isotopic	5		23 felsic tuff	
08CL453A02	08CL453	6540557	375033	6108819	21	130/02	geochemistry;isotopic	5		23 felsic tuff	crystal felsic tuff
08CL454A02	08CL454	6540558	374128	6106923	21	130/02	geochemistry;isotopic	5		19 mafic tuff	
08CL456A02	08CL456	6540559	374181	6108194	21	130/02	geochemistry	9		9 granite	
08CL458A02	08CL458	6540561	374438	6110829	21	130/02	geochemistry;isotopic	5		23 felsic tuff	
08CL465A02	08CL465	6540573	374122	6108309	21	130/02	geochemistry	5		19 mafic tuff	mylonite
08EW004A02	08EW004	6540508	359831	6106853	21	130/02	geochemistry	28		28 amphibolite	
08EW006A02	08EW006	6540509	359846	6106945	21	130/02	geochemistry	28		28 amphibolite	
08EW009A02	08EW009	6540511	360211	6107310	21	130/02	geochemistry	10		10 diabase	plag porphyritic diabase
08EW010A02	08EW010	6540512	360368	6107520	21	130/02	geochemistry	10		10 diabase	
08EW011A02	08EW011	6540567	361057	6107925	21	130/02	geochemistry	10		10 diabase	
08EW012A02	08EW012	6540513	361093	6107730	21	130/02	geochemistry	10		10 diabase	
08EW013A02	08EW013	6540514	374685	6110870	21	130/02	geochemistry	10		10 diabase	
08EW014A02	08EW014	6540515	374813	6111019	21	130/02	geochemistry	10		10 gabbro	
08EW015A02	08EW015	6540516	374980	6110820	21	130/02	geochemistry	10		10 gabbro	
08EW018A02	08EW018	6540517	374652	6110871	21	130/03	geochemistry	9		9 granite	
08EW019A02	08EW019	6540518	374452	6110847	21	130/02	geochemistry	10		10 gabbro	
08EW022A02	08EW022	6540519	359752	6106731	21	130/03	geochemistry	28		28 amphibolite	
09AMH001A02	09AMH001	6540668	356885	6105700	21	130/03	geochemistry	5		36 metasandstone	
09AMH002A02	09AMH002	6540669	356824	6105657	21	130/03	geochemistry	5		1 metabasalt	
09AMH003A02	09AMH003	6540671	358379	6106754	21	130/03	geochemistry	5		1 metabasalt	
09AMH004A02	09AMH004	6540672	358616	6107680	21	130/03	geochemistry	5		1 metabasalt	
09AMH005A02	09AMH005	6540673	359073	6107641	21	130/03	geochemistry	5		1 metabasalt	
09AMH006A02	09AMH006	6540674	359173	6106724	21	130/03	geochemistry	5		1 metabasalt	
09AMH007A02	09AMH007	6540778	353279	6113574	21	130/03	geochemistry	5		37 granite clast	granite clast in polymict conglomerate
09AMH008A02	09AMH008	6540675	353772	6115922	21	130/03	geochemistry	5		36 metasandstone	
09AMH009A02	09AMH009	6540677	358575	6112788	21	130/03	geochemistry	5		36 metasandstone	
09AMH011A02	09AMH011	6540678	361907	6120278	21	130/03	geochemistry	5		1 metabasalt	
09AMH012B02	09AMH012	6540779	374805	6110992	21	130/02	geochemistry	10		10 phenocystic diabase	
09AMH013A02	09AMH013	6540792	374914	6110913	21	130/02	geochemistry;assay	5		25 polymeric conglomerate	
09AMH015A02	09AMH015	6540781	375471	6108493	21	130/02	geochemistry	5		1 metabasalt	
09AMH016A02	09AMH016	6540681	376382	6112734	21	130/02	geochemistry	5		23 felsic tuff	felsic lapilli tuff
09AMH017A02	09AMH017	6540682	364509	6104367	21	130/03	geochemistry	5		1 metabasalt	
09AMH018A02	09AMH018	6540683	359677	6110152	21	130/03	geochemistry	5		1 metabasalt	
09AMH021A02	09AMH021	6540684	356158	6107863	21	130/03	geochemistry	5		1 metabasalt	
09AMH022A02	09AMH022	6540782	375054	6108677	21	130/02	geochemistry	5		1 metabasalt	
09AMH032A02	09AMH032	6540685	368760	6112350	21	130/03	geochemistry	14		14 synengranite 65-90kf	Strawberry Intrusive Suite (BHG)
09AMH033A02	09AMH033	6540686	344282	6105632	21	130/03	geochemistry	2		20 metabasalt	
09AMH034A02	09AMH034	6540687	355712	6119116	21	130/03	geochemistry	5		36 metasandstone	

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## Appendix A: Major element and trace element data

SampleID	StationID	LabNumber	UTMEast	UTMNorth	UTMZone	NTS_Map	Analysis	IgpetLcode	IgpetKcode	Lithology	Notes
Units											
Detection Limit											
Upper Limit											
Analysis Method											
10AMH005A02	10AMH005	6540796	362925	6109226	21	130/03	geochemistry	10	10	diabase	
10AMH006A02	10AMH006	6540797	359023	6107634	21	130/03	geochemistry	10	10	diabase	
10AMH007A02	10AMH007	6540799	359036	6107638	21	130/03	geochemistry	5	1	metabasalt	
10AMH009A02	10AMH009	6540801	356027	6107723	21	130/03	geochemistry	5	1	metabasalt	
10AMH010A02	10AMH010	6540802	356782	6105344	21	130/03	geochemistry	10	10	diabase	
10AMH011A02	10AMH011	6540803	353970	6103024	21	130/03	geochemistry	10	10	diabase	
10AMH012A02	10AMH012	6540804	361973	6120876	21	130/03	geochemistry	5	1	metabasalt	
10AMH013A02	10AMH013	6540805	361947	6120903	21	130/03	geochemistry	10	10	diabase	
10AMH014A02	10AMH014	6540806	362067	6120854	21	130/03	geochemistry	10	8	mafic lamprophyre	
10AMH015A02	10AMH015	6540807	361885	6120952	21	130/03	geochemistry	10	10	diabase	
10AMH016A02	10AMH016	6540808	361877	6120954	21	130/03	geochemistry	10	10	diabase	
10AMH017A02	10AMH017	6540809	361888	6120936	21	130/03	geochemistry	10	10	diabase	
10AMH018A02	10AMH018	6540812	359371	6120351	21	130/03	geochemistry	10	8	mafic lamprophyre	
10AMH020A02	10AMH020	6540811	360164	6119198	21	130/03	geochemistry	10	10	diabase	

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## Appendix A: Major element and trace element data

SampleID	StationID	Map_Unit	Classification	GroupSuite	SiO2	Al2O3	Fe2O3T	Fe2O3	FeO	MgO	CaO	Na2O	K2O	TiO2	MnO	P2O5	Cr	Zr	Ba	LOI	Total
					wt. %	ppm	ppm	ppm	wt. %	wt. %											
					0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.001	0.001	100	100	1	1	0.01	
Units																					
Detection Limit																					
Upper Limit																					
Analysis Method					GS Maj	Gravimetric															
06AH024A01	06AH024	P2vpb	flow	Aillik Group	48.23	13.60	14.63	4.13	9.45	7.73	10.89	2.84	0.37	1.066	0.225	0.082	123	59	54	0.66 100.33	
06AH027A01	06AH027	P2bsc	flow	Aillik Group	46.09	15.13	11.69	7.04	4.19	7.76	8.57	3.34	2.59	1.197	0.138	0.512	409	107	779	1.22 98.24	
06AH027A02	06AH027	P2bsc	flow	Aillik Group	39.63	5.13	5.56	3.21	2.11	8.96	27.81	1.00	0.86	0.409	0.260	0.181	174	45	228	11.10 100.91	
06AH028A01	06AH028	P2bfvt	pyroclastic	Aillik Group	68.66	12.72	6.47	6.33	0.13	0.01	2.12	5.95	2.45	0.535	0.132	0.073	-100	433	1721	1.55 100.68	
06AH036A01	06AH036	P2bfvt	pyroclastic	Aillik Group	73.78	11.96	2.96	2.82	0.13	-0.01	0.94	5.45	2.80	0.237	0.028	0.033	115	564	290	1.00 99.15	
06AH045A01	06AH045	P2bsc	clastic	Aillik Group	70.86	12.44	2.45	1.87	0.52	0.26	1.42	3.74	5.76	0.207	0.036	0.034	-100	309	357	1.29 98.50	
06AH057A01	06AH057	P2bgr	plutonic	Measles Point Granite	76.89	11.08	3.34	2.14	1.08	-0.01	0.31	3.62	4.59	0.219	0.049	0.009	-100	428	85	0.49 100.59	
06AH057B02	06AH057		dykes/sills	mafic dyke	47.57	14.31	11.63	1.19	9.39	7.64	10.97	2.58	1.96	0.823	0.194	0.060	229	47	84	0.96 98.69	
06AH060C01	06AH060	P2bvr	flow	Aillik Group	72.20	11.38	4.21	2.85	1.22	-0.01	0.67	0.60	9.54	0.192	0.020	0.025	-100	353	637	0.61 99.45	
06AH061A01	06AH061	P2bvr	tuffite	Aillik Group	72.51	11.90	2.45	1.08	1.23	0.10	1.13	1.73	8.50	0.255	0.043	0.037	-100	599	270	0.89 99.54	
06AH063D02	06AH063	P2bvr	flow	Aillik Group	57.91	13.88	7.66	5.38	2.05	0.70	6.09	2.40	8.50	0.546	0.330	0.108	-100	226	441	0.92 99.03	
06AH068B01	06AH068	P2bgr	dyke	mafic dyke	50.23	17.12	9.31	2.74	5.92	4.79	9.53	4.53	1.58	1.056	0.151	0.284	-100	68	648	1.17 99.74	
06AH070A01	06AH070	P2bvr	flow	Aillik Group	71.16	12.16	3.24	2.01	1.10	0.11	1.03	2.29	7.62	0.263	0.068	0.046	-100	491	339	0.60 98.57	
06AH073A02	06AH073	P2amv	flow	Post Hill Group	52.55	16.55	9.62	3.59	5.43	4.40	7.55	3.42	2.70	0.925	0.145	0.279	-100	127	1040	1.12 99.25	
06AH078A02	06AH078	P2amv	flow	Post Hill Group	12.14	4.06	66.45	64.63	1.64	1.11	6.07	0.29	0.41	6.729	0.152	0.021	2600	108	209	0.95 98.38	
06AH080B02	06AH080		dyke	mafic dyke	53.98	15.79	11.43	2.21	8.30	0.92	3.80	5.26	4.00	1.088	0.261	0.463	-100	718	3445	1.02 98.02	
06AH082A01	06AH082	P2bgr	plutonic	Measles Point Granite	72.87	13.71	2.20	-0.99	-0.99	0.12	0.61	4.39	5.15	0.218	0.034	0.032	-100	300	953	0.61 99.94	
06AH083A01	06AH083	P2bfvt	pyroclastic	Aillik Group	74.15	12.06	1.91	-0.99	-0.99	0.01	0.55	2.97	6.71	0.262	0.036	0.038	-100	588	727	1.06 99.77	
06AH084B01	06AH084		dykes/sills	mafic dyke	58.71	16.35	7.57	2.33	4.71	2.62	4.45	3.87	3.28	0.776	0.130	0.230	-100	193	1047	1.29 99.27	
06AH090C01	06AH090	P2bvm	pyroclastic	Aillik Group	73.70	12.16	3.30	0.07	2.91	0.06	0.31	6.55	0.30	0.224	0.026	0.037	-100	535	333	1.75 98.41	
06AH100A02	06AH100	P2bvm	flow	Aillik Group	49.05	15.18	14.05	2.61	10.29	5.64	9.73	3.34	0.48	1.068	0.211	0.077	-100	56	25	0.45 99.27	
06AH104B01	06AH104	P2bsp	flow	Aillik Group	74.71	13.19	0.75	0.28	4.42	0.06	0.79	4.05	4.69	0.094	0.044	0.012	-100	117	493	0.53 98.91	
06AH108A01	06AH108	P3bd	dyke	mafic dyke	61.76	14.22	8.54	2.75	5.21	1.40	3.42	3.80	4.39	1.427	0.139	0.405	-100	358	1387	0.43 99.93	
06AH113A02	06AH113	P2cmg	plutonic	Kennedy Mtn Intrusive Suite	68.92	13.28	4.03	2.16	1.68	0.42	1.41	3.74	5.40	0.527	0.084	0.100	-100	398	930	0.20 98.12	
06AH115B01	06AH115	P2vpb	flow	Aillik Group	39.79	13.15	13.24	6.30	6.25	13.68	12.74	2.46	0.96	0.585	0.343	0.335	1219	56	169	1.18 98.45	
06AH117A02	06AH117	P2cmg	plutonic	Kennedy Mtn Intrusive Suite	70.75	14.10	2.48	1.34	1.03	0.35	1.35	4.94	3.90	0.366	0.047	0.077	-100	332	902	0.33 98.69	
06AH120A02	06AH120	P2bss	pyroclastic	Aillik Group	75.92	11.74	2.15	1.16	0.88	0.09	1.12	6.07	0.83	0.137	0.066	0.010	-100	459	219	1.11 99.23	
06AH122A02	06AH122	P2bvr	pyroclastic	Aillik Group	78.03	5.84	6.61	1.09	4.97	0.19	0.82	2.39	1.43	0.252	0.087	0.055	-100	123	671	3.12 98.83	
06AH126A01	06AH126	P2bvt	flow	Aillik Group	51.71	13.93	10.49	4.08	5.77	4.50	8.42	5.30	2.14	0.847	0.156	0.089	-100	65	265	1.46 99.03	
06AH128A02	06AH128	P3agr	plutonic	Strawberry Intrusive Suite	73.56	13.14	2.80	1.00	1.62	0.32	1.01	3.42	4.94	0.291	0.051	0.063	-100	401	531	0.91 100.51	
06AH146A02	06AH146	P2bgr	plutonic	Measles Point Granite	76.69	11.48	3.64	2.56	0.97	0.03	0.36	4.01	4.05	0.228	0.059	0.011	-100	642	133	0.26 100.81	
06AH155A02	06AH155	P3bgb	plutonic	Adlavik Intrusive Suite	48.73	18.98	8.94	2.16	6.10	7.49	10.44	2.88	0.84	0.480	0.134	0.107	209	21	528	0.62 99.64	
06AH165A02	06AH165	P2cgr	plutonic	Kennedy Mtn Intrusive Suite	74.98	12.67	2.33	1.48	0.76	0.09	0.46	3.91	4.87	0.208	0.039	0.026	-100	393	230	0.29 99.87	
06AH173A01	06AH173	P2bsp	clastic	Aillik Group	80.58	9.89	0.85	0.45	0.35	0.42	1.31	3.15	3.19	0.154	0.033	0.110	-100	129	1034	0.47 100.15	
06AH187A01	06AH187	P2bsp	clastic	Aillik Group	74.84	12.25	2.83	2.69	0.13	0.98	1.45	4.43	3.05	0.314	0.038	0.118	-100	126	750	0.65 100.96	
06AH187A02	06AH187	P2bsp	clastic	Aillik Group	85.29	2.96	2.06	1.87	0.17	2.25	2.71	0.76	1.33	0.083	0.116	0.034	-100	30	267	0.92 98.51	
06AH187B01	06AH187	P2bsp	pyroclastic	Aillik Group	68.73	12.83	3.09	2.88	0.19	1.28	2.27	2.37	7.19	0.339	0.068	0.136	-100	171	667	1.06 99.36	
06AH189A02	06AH189	P3bad	plutonic	Monkey Hill Intrusive Suite	72.06	14.03	1.52	0.80	0.64	0.24	0.94	3.89	4.86	0.118	0.019	0.044	-100	137	1178	0.56 98.28	
06AH197B02	06AH197		dykes/sills	mafic dyke	52.55	17.07	10.19	3.15	6.34	4.08	7.87	3.32	1.93	1.089	0.157	0.221	-100	95	764	0.83 99.31	
06AH200A01	06AH200	P2bgr	plutonic	Measles Point Granite	75.78	10.93	3.66	2.21	1.31	0.04	0.43	3.44	5.22	0.213	0.075	0.011	-100	696	82	0.41 100.21	
06AH202A02	06AH202	P2bgr	plutonic	Measles Point Granite	74.91	13.44	0.79	0.55	0.21	-0.01	0.15	5.13	4.08	0.010	0.010	0.004	-100	83	38	0.43 98.96	
06AH203A02	06AH203	P2bgr	plutonic	Measles Point Granite	74.21	10.74	3.89	2.02	1.68	0.04	0.44	3.80	4.38	0.203	0.079	0.011	-100	1066	34	0.43 98.22	
06AH216A02	06AH216	P2bvr	flow	Aillik Group	75.58	11.87	2.26	1.61	0.58	0.08	0.02	1.23	8.52	0.136	0.004	0.012	-100	369	431	0.18 99.89	
06AH225B01	06AH225	P2bvr	flow	Aillik Group	76.47	11.80	2.68	2.12	0.51	-0.01	0.34	3.83	4.73	0.183	0.024	0.012	-100	601	177	0.43 100.49	
06AH226B01	06AH226	P2bvt	pyroclastic	Aillik Group	73.17	11.88	4.00	3.26	0.66	-0.01	2.76	6.45	0.94	0.260	0.171	0.042	-100	592	326	0.39 100.06	
06AH228A02	06AH228	P2bvr	flow	Aillik Group	74.04	11.67	2.23	1.48	0.67	0.11	0.59	2.73	6.05	0.155	0.113	0.009	-100	469	117	0.47 98.17	
06AH246A02	06AH246	P2bvb	volcanic	Measles Point Granite	75.50	10.64	3.64	3.52	0.10	-0.01	0.29	3.27	4.30	0.198	0.030	0.022	-				

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## Appendix A: Major element and trace element data

SampleID	StationID	Map_Unit	Classification	GroupSuite	SiO2	Al2O3	Fe2O3T	Fe2O3	FeO	MgO	CaO	Na2O	K2O	TiO2	MnO	P2O5	Cr	Zr	Ba	LOI	Total
Units					wt. %	ppm	ppm	ppm	wt. %	wt. %											
Detection Limit					0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.001	0.001	100	1	1	0.01	0.01	
Upper Limit																					
Analysis Method					GS Maj	Gravimetric															
06AH279A02	06AH279	P2bvb	pyroclastic	Aillik Group	48.55	16.59	11.96	5.02	6.25	6.92	6.69	4.22	1.81	0.857	0.185	0.122	-100	47	374	0.98	98.85
06AH280A01	06AH280	P2bvs	tuffites	Aillik Group	70.84	12.14	4.33	3.06	1.14	0.02	0.62	3.93	5.11	0.380	0.182	0.032	-100	476	1470	0.55	98.14
06AH286A02	06AH286	P2bsc	plutonic	Monkey Hill Intrusive Suite	53.68	10.08	15.05	6.44	7.75	0.77	9.87	3.30	3.54	0.337	0.242	0.099	-100	285	409	1.77	98.75
06AH287A02	06AH287	P3bgr	pyroclastic	Aillik Group	48.03	17.22	10.49	2.72	6.99	7.13	8.53	3.02	1.77	0.526	0.247	0.057	-100	20	499	2.09	99.11
06AH290A01	06AH290	P2bvb	pyroclastic	Aillik Group	46.51	16.89	11.72	2.97	7.87	7.44	8.60	3.08	1.80	0.796	0.203	0.056	-100	34	571	1.34	98.44
06AH297A02	06AH297	P2bvt	flow?	Aillik Group	73.46	11.95	2.38	1.96	0.38	0.08	0.50	2.12	7.24	0.134	0.052	0.011	-100	473	277	0.45	98.37
06AH299A02	06AH299	P2bvft	pyroclastic	Aillik Group	74.48	11.52	3.56	2.30	1.14	0.14	0.07	2.98	5.73	0.250	0.085	0.012	-100	519	83	0.46	99.29
06AH301A01	06AH301	P2bvs	tuffites	Aillik Group	67.30	12.82	6.00	5.78	0.20	-0.01	1.59	2.39	7.79	0.505	0.132	0.067	-100	458	3698	0.42	98.99
06AH306A02	06AH306	P2bvf	pyroclastic	Aillik Group	68.72	13.92	3.01	2.13	0.79	0.14	0.04	1.38	10.14	0.175	0.031	0.013	-100	468	572	0.83	98.40
06AH310A02	06AH310	P2bgr	plutonic	Measles Point Granite	74.59	10.95	3.42	3.21	0.18	0.13	0.27	1.95	7.07	0.228	0.043	0.008	-100	443	68	0.25	98.89
06AH317A02	06AH317	P2bgr	volcanic	Measles Point Granite	76.04	10.97	3.31	2.40	0.82	0.10	0.12	3.03	5.45	0.212	0.061	0.007	-100	284	66	0.16	99.46
06AH319A02	06AH319	P2bsp	flow	Aillik Group	48.63	18.19	11.04	4.77	5.64	4.77	10.12	4.20	0.59	0.846	0.149	0.102	-100	48	162	0.30	98.99
06AH325A02	06AH325	P2bvf	pyroclastic	Aillik Group	70.00	13.87	3.12	2.62	0.45	0.20	0.55	4.29	5.21	0.429	0.065	0.056	-100	460	1469	0.22	98.02
06AH343A02	06AH343	P2bgr	plutonic	Measles Point Granite	74.87	11.54	3.69	2.28	1.28	0.03	0.25	3.15	5.38	0.246	0.094	0.013	-100	500	103	0.36	99.62
06AH345A02	06AH345	P2bvm	flow	Aillik Group	47.98	14.15	11.29	1.53	8.79	8.85	12.58	1.73	0.14	0.692	0.184	0.041	348	37	20	0.71	98.34
06AH346B02	06AH346	P2bvm	flow	Aillik Group	74.91	10.80	4.46	2.18	2.06	0.07	0.08	3.59	3.11	0.139	0.074	0.004	-100	464	38	1.17	98.40
06AH360A01	06AH360	P2bsc	tuffites	Aillik Group	75.81	11.71	2.38	1.32	0.95	0.05	0.16	3.44	5.19	0.174	0.007	0.020	-100	266	241	0.36	99.31
06AH362A01	06AH362	P2bvt	tuffites	Aillik Group	70.01	12.90	6.33	4.06	2.05	0.07	0.14	4.65	4.53	0.520	0.086	0.068	-100	455	1762	0.39	99.69
06AH368A01	06AH368	P2cqm	flow	Post Hill Group	48.17	13.65	13.14	3.65	8.54	7.86	12.24	2.06	0.43	0.679	0.247	0.048	176	35	54	0.64	99.16
06AH386A02	06AH386	P2amv	flow	Post Hill Group	49.88	14.15	13.58	2.05	10.38	6.08	11.33	1.99	0.42	1.075	0.214	0.082	105	68	103	0.61	99.41
06AH386A03	06AH386	P2amv	flow	Post Hill Group	53.81	16.95	7.94	-99	-99	3.27	5.13	6.10	0.61	1.445	0.084	0.096	110	180	107	3.19	98.62
06AH398A02	06AH398	P2bvt	flow	Aillik Group	65.91	16.39	3.17	2.27	0.81	0.09	0.13	2.77	10.53	0.219	0.017	0.020	-100	535	560	0.28	99.52
06AH427B01	06AH427	P2bvf	tuffites	Aillik Group	71.16	13.92	3.07	2.26	0.73	0.32	0.62	8.05	0.37	0.444	0.057	0.068	-100	411	2104	0.53	98.61
06AH429A02	06AH429	P2bvr	flow	Aillik Group	71.54	13.82	3.00	1.96	0.93	0.29	0.82	4.38	4.98	0.407	0.077	0.055	-100	457	1567	0.36	99.74
06AH430A02	06AH430	P2bvr	flow	Aillik Group	70.47	13.75	2.97	1.90	0.96	0.27	0.80	4.64	4.89	0.405	0.055	0.051	-100	442	1375	0.43	98.72
06AH433C01	06AH433	dykes/sills	felsic dyke		61.62	6.32	23.02	22.17	0.77	0.09	0.29	2.06	2.20	1.933	0.289	0.034	-100	139	592	0.32	98.19
06AH435B02	06AH435	P2bvt	flow	Aillik Group	49.30	15.05	12.96	11.43	1.38	3.90	6.75	4.43	1.99	1.886	0.194	0.494	-100	192	994	1.06	98.00
06AH436A02	06AH436	P2bvr	flow	Aillik Group	72.92	12.25	3.24	1.66	1.43	0.30	0.47	3.21	5.25	0.200	0.057	0.009	-100	357	594	0.72	98.63
06AH437A02	06AH437	P2bvt	pyroclastic	Aillik Group	74.51	12.12	2.13	1.56	0.51	0.02	1.69	7.07	0.13	0.175	0.091	0.010	-100	430	11	1.16	99.11
06AH441A02	06AH441	P2bvs	pyroclastic	Aillik Group	77.51	5.35	7.33	1.38	5.36	0.03	2.11	2.91	0.13	0.191	0.104	0.013	-100	230	90	2.58	98.27
06AH456A02	06AH456	P2bvr	flow	Aillik Group	67.38	12.51	5.33	3.20	1.92	0.21	2.23	1.99	8.31	0.459	0.129	0.060	-100	427	227	0.49	99.10
06AH467A02	06AH467	P2bvpr	pyroclastic	Aillik Group	75.82	10.90	3.64	3.26	0.34	-0.01	0.33	4.28	3.29	0.234	0.027	0.013	-100	605	120	0.11	98.62
06AH467B02	06AH467	dyke	felsic dyke		74.49	13.05	0.78	0.25	0.48	0.06	0.83	3.89	4.60	0.077	0.045	0.003	-100	107	465	0.42	98.24
06AH467C02	06AH467	dyke	mafic dyke		46.32	15.62	12.75	2.79	8.97	7.93	5.61	3.02	3.98	1.159	0.312	0.297	299	72	662	1.60	98.59
06AH468A02	06AH468	P2bgr	plutonic	Measles Point Granite	74.68	11.19	3.48	1.82	1.50	0.02	0.42	3.50	4.89	0.224	0.088	0.011	-100	491	63	0.44	98.94
06AH487B02	06AH487	P2bsc	pyroclastic	Aillik Group	65.68	15.82	5.00	4.45	0.50	0.73	2.23	4.11	4.42	0.486	0.049	0.177	-100	255	980	1.14	99.85
06AH488A02	06AH488	P2bvt	plutonic	Aillik Group	73.11	10.73	3.35	3.29	0.05	0.22	0.62	1.63	7.25	0.211	0.160	0.009	-100	412	486	0.94	98.22
06AH490A02	06AH490	P2bvt	pyroclastic	Aillik Group	74.64	9.73	3.30	0.30	2.70	0.96	1.46	1.50	5.67	0.166	0.033	0.037	-100	276	1651	1.22	98.71
06AH506A02	06AH506	P2bvb	flow	Aillik Group	60.86	9.63	8.61	-99	-99	0.19	9.58	1.11	5.85	0.246	0.884	0.010	-100	411	186	0.77	97.75
06SK006B02	06SK006	P2bvt	flow	Aillik Group	65.99	12.37	6.14	4.83	1.18	0.14	2.67	1.72	8.47	0.496	0.391	0.066	-100	415	2408	0.59	99.04
06SK009A02	06SK009	P2bss	tuffites	Aillik Group	75.37	11.86	2.61	1.28	1.20	0.16	1.00	6.54	0.18	0.193	0.062	0.011	-100	485	80	0.43	98.43
06SK010A02	06SK010	P2bss	tuffites	Aillik Group	75.85	11.84	2.98	2.42	0.51	0.17	1.04	6.77	0.21	0.197	0.065	0.013	-100	495	84	0.32	99.45
06SK011A02	06SK011	P2bss	pyroclastic	Aillik Group	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06SK013A02	06SK013	P2bvb	flow	Aillik Group	71.39	11.96	3.15	0.54	2.35	0.15	1.05	1.54	8.38	0.205	0.067	0.010	-100	511	161	2.23	100.13
06SK013B02	06SK013	P2bvb	pyroclastic	Aillik Group	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06SK039A02	06SK039	P2bss	tuffites	Aillik Group	76.58	11.45	2.07	0.77	1.17	0.11	0.63	2.62	6.20	0.133	0.071	0.006	-100	500	189	0.82	100.68
06SK040A02	06SK040	P2bvr	pyroclastic	Aillik Group	76.88	11.38	2.04	1.02	0.92	0.11	0.61	2.58	6.08	0.130	0.070	0.006	-100	496	187	0.24	100.13
06SK041A02	06SK041	P2bvt	plutonic	Strawberry Intrusive Suite	76.23	12.68	1.22	0.53	0.62	0.03	0.69	4.22	4.44	0.099	0.021	0.010	-100	203	167	0.56	100.20
06SK042A02	06SK042	P2bvt	flow	Aillik Group	71.09	10.59	2.11	0.94	1.06	0.13	0.78	0.63	8.55	0.158	0.032	0.011	-100	467	183	0.78	94.87
06SK043A02	06SK043	P2bvt	flow	Aillik Group	74.86	11.70	2.46	1.63	0.75	0.05	0.14	2.64	6.58	0.144	0.031	0.006	-100	480	81	0.24	98.85
06SK044A02	06SK044	P2bvr	pyroclastic	Aillik Group	74.32	11.95	2.25	1.28	0.88	0.07	0.32	3.83	5.02	0.156	0.053	0.008	-100	491	143	0.28	98.26
06SK047A02	06SK047	P2bss	flow	Aillik Group	71.09	11.63	3.62	1.94	1.51	-0.01	3.34	5.36	2.16	0.170	0.153	0.006	-100	497	223	2.56	100.09

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## Appendix A: Major element and trace element data

SampleID Units	StationID	Map_Unit	Classification	GroupSuite	SiO2	Al2O3	Fe2O3T	Fe2O3	FeO	MgO	CaO	Na2O	K2O	TiO2	MnO	P2O5	Cr	Zr	Ba	LOI	Total		
					wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	ppm	ppm	ppm	wt. %	wt. %			
					0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.001	0.001	100	1	1	0.01	0.01			
<b>Detection Limit</b>																							
<b>Upper Limit</b>																							
<b>Analysis Method</b>																							
06SK048A02	06SK048	P2bvt	flow	Aillik Group	74.11	11.72	2.17	1.35	0.74	0.16	0.03	2.02	7.43	0.149	0.031	0.007	-100	447	84	0.25	98.09		
08CL346A02	08CL346	P2bvft	pyroclastic	Aillik Group	76.04	11.78	2.10	-99	-99	-0.01	0.07	2.87	6.51	0.157	0.003	0.009	-100	382	262	0.30	99.80		
08CL346B02	08CL346	P2bvft	flow	Aillik Group	77.42	10.34	2.10	-99	-99	0.09	0.16	1.32	7.24	0.151	0.007	0.008	-100	367	350	0.35	99.18		
08CL370A02	08CL370	P2bsc	dyke	felsic dyke	71.66	14.65	2.16	-99	-99	0.26	0.52	4.17	5.84	0.432	0.057	0.053	-100	355	1009	0.46	100.26		
08CL371A02	08CL371	P2bvb	pyroclastic	Aillik Group	49.84	15.48	10.93	-99	-99	7.34	7.67	4.86	1.50	1.154	0.152	0.538	-100	385	86	661	1.05	100.51	
08CL374A02	08CL374	P3bag	flow	October Harbour	72.77	12.66	2.19	-99	-99	0.51	0.60	3.63	6.36	0.179	0.084	0.009	-100	319	92	0.45	99.44		
08CL384B02	08CL384	P3bag	dyke	mafic dyke	56.57	15.83	8.08	-99	-99	4.77	6.40	3.78	2.13	0.687	0.131	0.168	-100	116	780	1.20	99.76		
08CL388A02	08CL388	P2bvft	pluton	Measles Point Granite	76.53	10.43	3.25	-99	-99	0.02	0.05	3.06	5.03	0.203	0.018	0.013	-100	432	123	0.25	98.86		
08CL389A02	08CL389	P3bag	flow	Aillik Group	72.72	13.09	3.74	-99	-99	0.02	0.35	4.96	4.67	0.303	0.026	0.033	-100	732	1239	0.28	100.20		
08CL398A02	08CL398	P2bvb	flow	Aillik Group	46.34	15.46	11.42	-99	-99	8.11	12.07	2.59	0.51	1.104	0.185	0.443	-100	44	137	0.72	98.96		
08CL398B02	08CL398	P2bvb	pyroclastic	Aillik Group	76.58	11.56	2.20	-99	-99	0.28	0.62	3.14	5.62	0.175	0.034	0.024	-100	457	44	0.45	100.67		
08CL399A02	08CL399	P3bag	pluton	October Harbour	72.52	12.91	3.29	-99	-99	0.30	0.98	3.45	5.27	0.349	0.062	0.070	-100	420	579	0.62	99.82		
08CL400A02	08CL400	P2bvft	flow	Aillik Group	76.45	11.25	2.05	-99	-99	0.21	0.11	2.00	7.02	0.155	0.006	0.006	-100	383	756	0.36	99.63		
08CL452A02	08CL452	P2bsc	pyroclastic	Aillik Group	75.01	11.82	3.29	-99	-99	0.32	1.06	4.41	3.11	0.242	0.053	0.031	-100	537	188	0.85	100.21		
08CL453A02	08CL453	P2bvft	pyroclastic	Aillik Group	77.13	10.89	3.29	-99	-99	0.11	0.18	3.85	3.81	0.200	0.035	0.024	-100	686	467	0.29	99.82		
08CL454A02	08CL454	P2bsc	pyroclastic	Aillik Group	56.20	15.28	11.90	-99	-99	1.49	5.59	3.61	2.66	1.499	0.163	0.516	-100	243	1049	0.17	99.08		
08CL456A02	08CL456		dyke	felsic dyke	72.24	14.17	1.94	-99	-99	0.21	0.60	4.02	5.65	0.309	0.058	0.033	-100	396	541	0.46	99.68		
08CL458A02	08CL458	P2bvft	pyroclastic	Aillik Group	79.63	9.82	1.15	-99	-99	0.23	0.36	1.92	5.45	0.129	0.008	0.014	-100	345	392	0.44	99.16		
08CL465A02	08CL465	P2bsc	pyroclastic	Aillik Group	53.73	14.77	8.60	4.55	3.65	4.20	10.92	3.34	1.14	0.813	0.188	0.289	-100	75	1191	0.93	98.92		
08EW004A02	08EW004		dyke	mafic dyke	50.03	14.51	10.80	1.92	7.99	5.22	9.18	4.09	1.36	1.070	0.232	0.310	-100	112	76	694	2.31	99.11	
08EW006A02	08EW006		dyke	mafic dyke	46.15	16.57	13.00	3.49	8.56	6.48	8.52	3.40	1.74	1.087	0.232	0.155	-100	50	620	2.39	99.72		
08EW009A02	08EW009		dyke	mafic dyke	54.28	16.29	8.55	2.71	5.25	4.06	6.44	3.85	2.11	0.771	0.137	0.193	-100	113	922	2.08	98.77		
08EW010A02	08EW010		dyke	mafic dyke	52.62	18.13	9.02	1.65	6.63	2.65	7.11	4.13	2.21	1.389	0.132	0.356	-100	187	819	0.88	98.64		
08EW011A02	08EW011		dyke	mafic dyke	52.11	18.56	9.89	2.00	7.10	3.30	7.86	4.42	1.83	1.349	0.154	0.307	-100	147	802	0.82	100.59		
08EW012A02	08EW012		dyke	mafic dyke	53.51	16.47	9.59	2.12	6.72	4.29	5.95	4.59	2.33	0.767	0.187	0.195	-100	125	1010	1.75	99.62		
08EW013A02	08EW013		dyke	mafic dyke	57.27	16.84	8.19	2.82	4.83	3.26	6.07	3.88	2.28	0.814	0.139	0.241	-100	137	899	1.00	99.99		
08EW014A02	08EW014		dyke	mafic dyke	50.43	16.92	11.76	1.59	9.15	4.85	8.17	3.54	1.48	1.509	0.179	0.329	-100	151	620	1.01	100.17		
08EW015A02	08EW015		dyke	mafic dyke	55.98	16.99	8.80	2.99	5.22	3.48	6.45	3.69	2.12	0.894	0.139	0.253	-100	138	835	0.86	99.65		
08EW018A02	08EW018		dyke	felsic dyke	74.59	12.81	1.76	0.96	0.72	0.05	0.35	4.11	4.78	0.127	0.010	0.007	-100	315	101	0.40	98.99		
08EW019A02	08EW019		dyke	mafic dyke	49.06	14.84	11.31	1.46	8.86	8.29	7.91	2.51	2.75	1.105	0.176	0.375	-100	347	60	827	1.32	99.66	
08EW022A02	08EW022		dyke	mafic dyke	46.18	14.18	11.80	2.25	8.60	7.77	9.51	3.30	3.07	1.052	0.192	0.157	-100	309	40	597	2.06	99.27	
09AMH001A02	09AMH001	P2bscg	clastic	Aillik Group	85.35	6.69	0.55	0.02	0.48	0.34	0.81	1.06	2.42	0.113	0.020	0.038	-100	223	609	0.64	98.03		
09AMH002A02	09AMH002	P2bsp	flow	Aillik Group	42.37	11.60	10.46	5.66	4.31	11.64	12.66	3.00	2.11	0.498	0.220	0.259	-100	627	31	430	3.63	98.44	
09AMH003A02	09AMH003	P2bvb	flow	Aillik Group	46.64	17.18	11.79	9.44	2.12	7.62	7.50	5.70	0.75	0.971	0.180	0.136	-100	55	260	2.19	100.67		
09AMH004A02	09AMH004	P2bvb	flow	Aillik Group	47.77	16.19	11.43	8.51	2.63	9.63	7.74	4.74	0.28	0.895	0.231	0.124	-100	51	165	1.37	100.41		
09AMH005A02	09AMH005	P2bvb	flow	Aillik Group	50.19	16.43	12.26	5.57	6.02	5.93	7.61	4.01	1.23	1.000	0.204	0.230	-100	116	454	1.16	100.25		
09AMH006A02	09AMH006	P2bvb	flow	Aillik Group	49.00	17.00	11.09	5.63	4.91	6.93	5.87	4.39	1.14	1.131	0.176	0.196	-100	113	468	2.32	99.25		
09AMH007A02	09AMH007	P2bvf	clastic	Aillik Group	70.73	10.25	1.96	1.69	0.24	1.06	7.78	2.08	3.46	0.193	0.081	0.072	-100	101	931	1.33	98.99		
09AMH008A02	09AMH008	P2bsp	clastic	Aillik Group	61.71	15.29	1.72	1.54	0.16	0.61	3.72	1.05	12.29	0.132	0.024	0.046	-100	140	971	2.82	99.41		
09AMH009A02	09AMH009	P2bsp	clastic	Aillik Group	72.78	12.49	2.02	1.26	0.69	0.18	1.01	2.76	6.54	0.448	0.012	0.119	-100	244	1194	0.48	98.83		
09AMH011A02	09AMH011	P2bvm	flow	Aillik Group	48.27	14.77	11.53	1.88	8.68	8.75	11.23	2.51	0.31	0.741	0.181	0.047	-100	339	45	29	0.64	98.98	
09AMH012B02	09AMH012	vein/dyke		Aillik Group	51.14	17.38	11.23	2.55	7.81	4.35	7.85	3.69	1.75	1.560	0.171	0.343	-100	154	807	1.07	100.53		
09AMH013A02	09AMH013	P2bsc	clastic	Aillik Group	67.17	15.08	3.25	2.89	0.32	0.68	1.94	3.50	5.60	0.470	0.044	0.174	-100	257	895	1.33	99.23		
09AMH015A02	09AMH015	P2bvb	flow	Aillik Group	47.75	15.84	11.33	9.45	1.69	7.17	12.33	2.93	0.62	1.158	0.168	0.472	-100	48	332	0.63	100.39		
09AMH016A02	09AMH016	P2bvft	pyroclastic	Aillik Group	73.18	12.92	1.82	0.93	0.80	0.59	1.47	3.83	4.14	0.190	0.059	0.050	-100	135	479	1.11	99.36		
09AMH017A02	09AMH017	P2bvb	flow	Aillik Group	48.64	17.20	10.68	3.71	6.28	7.20	8.24	4.6											

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## Appendix A: Major element and trace element data

SampleID Units	StationID	Map_Unit	Classification	GroupSuite	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	Fe <sub>2</sub> O <sub>3T</sub>	Fe <sub>2</sub> O <sub>3</sub>	FeO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	TiO <sub>2</sub>	MnO	P <sub>2</sub> O <sub>5</sub>	Cr	Zr	Ba	LOI	Total
					wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	ppm	ppm	ppm	wt. %	wt. %	
					0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.001	0.001	100	1	1	0.01	0.01	
					GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	Gravimetric		
10AMH005A02	10AMH005	P2bgr	dyke	mafic dyke	47.22	16.25	13.83	3.71	9.10	5.88	8.04	3.92	1.54	1.701	0.210	0.251	-100	110	640	1.79	100.62
10AMH006A02	10AMH006	P2bvb	dyke	mafic dyke	53.43	16.24	8.18	2.40	5.21	4.10	5.92	3.52	2.25	0.727	0.144	0.190	-100	106	814	2.23	96.94
10AMH007A02	10AMH007	P2bvb	flow	Aillik Group	49.11	13.50	11.77	2.58	8.27	7.99	8.61	3.06	0.93	0.818	0.231	0.056	204	33	718	1.30	97.39
10AMH009A02	10AMH009	P2bvpb	flow	Aillik Group	49.30	13.75	15.22	3.58	10.48	6.68	10.68	2.64	0.44	1.140	0.219	0.084	-100	63	50	0.59	100.75
10AMH010A02	10AMH010		dyke	mafic dyke	43.94	13.53	17.90	4.74	11.85	4.88	7.69	3.83	1.90	3.232	0.274	1.027	-100	140	1206	0.64	98.84
10AMH011A02	10AMH011		dyke	mafic dyke	44.83	14.18	16.61	3.61	11.71	5.82	7.79	3.66	1.37	2.479	0.226	0.543	124	121	769	0.96	98.48
10AMH012A02	10AMH012	P2bvm	flow	Aillik Group	49.25	13.95	11.46	2.76	7.83	8.25	10.63	3.31	0.47	0.755	0.197	0.053	240	27	70	0.63	98.93
10AMH013A02	10AMH013		dyke	mafic dyke	45.58	14.20	15.45	4.46	9.89	3.65	6.60	4.04	2.18	3.438	0.233	1.545	-100	255	1348	2.61	99.52
10AMH014A02	10AMH014		dyke	mafic lamprophyre	35.36	6.78	13.22	3.94	8.35	9.02	14.56	1.13	2.14	5.606	0.169	0.780	423	592	807	9.86	98.64
10AMH015A02	10AMH015	P2bvft	dyke	mafic dyke	46.53	15.90	10.39	1.93	7.62	6.96	9.20	3.41	1.58	1.068	0.191	0.157	-100	68	367	1.32	96.69
10AMH016A02	10AMH016	P2bvft	dyke	mafic dyke	52.71	16.16	8.34	2.12	5.60	3.92	5.93	3.66	2.99	0.773	0.141	0.209	-100	69	823	1.80	96.64
10AMH017A02	10AMH017	P2bvft	dyke	mafic dyke	45.04	14.08	15.00	3.12	10.70	3.65	7.63	3.85	1.98	3.538	0.236	1.532	-100	246	1117	2.93	99.46
10AMH018A02	10AMH018		dyke	mafic lamprophyre	19.60	3.18	16.71	8.43	7.45	15.85	18.71	0.26	2.16	3.839	0.280	3.251	532	679	2464	13.16	96.99
10AMH020A02	10AMH020	P2bs0	dyke	mafic dyke	47.50	15.35	14.82	3.90	9.82	3.56	7.17	4.01	2.49	3.385	0.211	1.492	-100	224	1409	0.33	100.32

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Appendix A: Major element and trace element data

SampleID	StationID	IshAltIndx	ChiCarbPyl	AdvArgAltI	As	Be	Co	Cr	Cu	Li	Nb	Ni	P	Pb	Rb	Sc	Sr	V	Zn	Ag	Ga	Ge	Y	In	Sn
Units					ppm	ppm	ppm	ppm	ppm																
Detection Limit					2	0.1	1	1	1	0.1	1	1	1	1	1	0.1	1	1	1	0.1	1	1	1	0.2	1
Upper Limit																									
Analysis Method					GS Tr	GS BPD	AL 4B2Std	AL 4B2Std	AL 4B2Std	AL 4B2Std															
06AH024A01	06AH024	37.09	84.27	18.35	4	-0.1	52	96	153	20.6	10	76	340	12	19	45.3	102	340	97	-0.1	13	-1	23	-0.2	-1
06AH027A01	06AH027	46.49	66.85	18.98	12	3.3	42	287	5	97.6	12	172	2099	18	103	30.0	1024	236	97	-0.1	16	-1	19	-0.2	-1
06AH027A02	06AH027	25.43	85.58	9.49	9	1.8	18	140	29	46.0	5	43	801	24	23	11.0	856	102	58	-0.1	-99	-99	-99	-99	-99
06AH028A01	06AH028	23.40	1.63	45.92	13	5.1	4	2	-1	1.9	16	-1	312	23	51	10.6	125	3	67	-0.1	23	-1	61	-0.2	2
06AH036A01	06AH036	-99	-99	-99	6	2.5	2	2	-1	0.7	17	-1	134	9	39	1.9	63	7	24	-0.1	20	-1	61	-0.2	2
06AH045A01	06AH045	53.80	7.55	56.66	7	1.0	3	2	2	1.9	16	-1	141	16	110	3.4	66	4	35	-0.1	21	-1	50	-0.2	2
06AH057A01	06AH057	-99	-99	-99	5	2.9	3	1	5	1.5	21	-1	43	20	94	0.5	36	-1	106	-0.1	26	1	64	-0.2	3
06AH057B02	06AH057	41.46	78.97	18.33	6	0.8	47	20	22	79.8	14	22	2229	12	67	24.8	470	184	147	-0.1	21	1	33	-0.2	2
06AH060C01	06AH060	88.25	10.77	85.05	8	5.0	2	2	5	1.3	17	-1	108	6	214	2.2	26	-1	13	-0.1	22	-1	51	-0.2	3
06AH061A01	06AH061	75.07	11.48	71.05	16	4.3	3	1	3	3.9	19	-1	164	14	160	2.7	37	-1	20	-0.1	25	1	70	-0.2	3
06AH063D02	06AH063	52.01	20.15	38.66	10	6.1	8	10	22	7.2	19	4	479	29	182	9.2	125	35	78	-0.1	-99	-99	-99	-99	-99
06AH068B01	06AH068	31.18	63.67	21.05	5	0.6	32	74	31	40.2	8	26	1222	13	43	27.2	606	231	130	-0.1	18	1	18	-0.2	-1
06AH070A01	06AH070	69.93	10.88	67.50	6	5.4	3	1	10	1.3	23	-1	197	46	159	2.4	121	-1	110	-0.1	26	1	55	-0.2	4
06AH073A02	06AH073	39.28	61.63	25.48	5	0.6	31	43	25	20.1	9	7	1222	9	57	24.6	686	183	79	-0.1	19	1	21	-0.2	-1
06AH078A02	06AH078	41.84	66.57	18.23	10	1.5	45	222	41	50.7	8	116	264	10	117	47.8	377	288	98	-0.1	15	2	17	-0.2	-1
06AH080B02	06AH080	35.20	49.88	35.11	4	3.7	13	2	10	20.2	42	3	2126	10	60	32.0	362	-1	136	0.1	28	2	70	-0.2	6
06AH082A01	06AH082	51.31	-99	58.75	7	2.9	4	1	15	4.7	14	-1	145	11	72	3.1	105	-1	26	-0.1	21	1	37	-0.2	1
06AH083A01	06AH083	-99	-99	32	1.4	4	1	20	2.4	18	-1	158	95	54	1.8	64	-1	792	0.5	23	1	61	-0.2	2	
06AH084B01	06AH084	41.50	50.63	34.93	4	1.4	23	19	24	21.2	12	6	1035	9	62	14.7	500	126	84	-0.1	20	-1	26	-0.2	-1
06AH090C01	06AH090	4.87	30.22	51.57	12	1.8	3	1	5	0.7	20	3	164	11	6	1.3	95	4	129	-0.1	-99	-99	-99	-99	-99
06AH100A02	06AH100	31.91	80.68	20.77	3	-0.1	49	11	176	18.6	10	44	333	3	15	44.1	150	345	103	-0.1	17	1	23	-0.2	-1
06AH104B01	06AH104	49.61	5.28	60.42	3	2.1	1	-1	-1	3.3	9	-1	39	23	100	0.7	119	-1	31	0.1	17	1	16	-0.2	-1
06AH108A01	06AH108	44.51	44.70	41.74	7	2.4	26	3	8	12.4	20	-1	1859	22	108	17.4	248	49	103	-0.1	22	2	47	-0.2	3
06AH113A02	06AH113	53.05	18.73	55.27	12	2.4	7	10	5	4.1	22	3	461	29	128	7.6	125	-1	75	-0.1	22	1	61	-0.2	3
06AH115B01	06AH115	48.78	84.98	12.42	59	4.2	53	1236	-1	44.2	15	460	1437	12	18	38.1	525	217	324	-0.1	16	3	17	-0.2	4
06AH117A02	06AH117	40.29	13.51	51.57	6	4.6	6	3	3	3.7	20	4	345	29	152	5.1	157	3	40	-0.1	20	1	44	-0.2	3
06AH120A02	06AH120	11.35	12.42	51.07	6	2.5	1	1	8	5.1	19	3	48	27	25	0.5	63	-1	180	-0.1	26	-1	77	-0.2	6
06AH122A02	06AH122	33.66	57.48	69.64	11	2.5	9	-1	198	4.6	13	5	232	20	30	13.6	61	1	80	0.5	-99	-99	-99	-99	-99
06AH126A01	06AH126	32.60	58.00	22.11	26	1.7	40	34	-1	147.2	7	43	381	53	77	25.4	246	179	117	-0.1	16	4	17	-0.2	-1
06AH128A02	06AH128	54.27	18.82	60.78	8	5.1	4	2	2	10.8	19	5	284	29	123	3.5	81	-1	60	-0.1	24	1	53	-0.2	4
06AH146A02	06AH146	48.25	11.04	63.57	6	4.6	3	2	5	8.0	28	4	48	50	95	0.9	25	1	146	-0.1	28	2	106	-0.2	5
06AH155A02	06AH155	38.49	78.51	18.98	7	0.3	38	228	19	8.6	5	92	453	-1	18	21.6	789	98	63	-0.1	16	1	7	-0.2	-1
06AH165A02	06AH165	53.22	8.86	62.72	4	4.0	3	2	2	1.1	20	3	112	35	136	1.8	44	2	41	-0.1	26	1	50	-0.2	3
06AH173A01	06AH173	44.77	10.92	62.28	17	1.4	4	7	-1	1.3	6	-1	478	10	77	1.9	217	-1	21	-0.1	11	2	26	-0.2	-1
06AH187A01	06AH187	40.67	12.88	52.18	26	1.6	8	12	-1	14.1	7	2	531	11	60	7.7	354	30	38	-0.1	14	2	17	-0.2	1
06AH187A02	06AH187	50.75	53.67	59.88	9	1.6	12	10	2	7.9	2	4	152	10	36	17.4	79	14	63	-0.1	-99	-99	-99	-99	-99
06AH187B01	06AH187	64.63	13.37	53.71	37	2.7	8	13	-1	25.6	15	3	593	17	179	6.0	260	29	56	-0.1	14	2	25	-0.2	2
06AH189A02	06AH189	51.36	9.14	58.71	5	1.3	2	1	12	4.0	7	3	204	15	78	1.7	217	-1	19	-0.1	16	-1	10	-0.2	-1
06AH197B02	06AH197	34.95	66.50	25.60	5	0.8	32	21	30	45.5	10	8	968	14	59	25.1	620	212	93	-0.1	19	1	22	-0.2	1
06AH200A01	06AH200	57.58	13.54	65.93	10	6.9	2	-1	23.4	33	-1	46	23	174	0.7	31	3	178	-0.1	28	3	121	-0.2	5	
06AH202A02	06AH202	-99	-99	-99	11	4.1	-1	1	37	0.8	25	3	10	32	333	0.2	13	-1	20	-0.1	-99	-99	-99	-99	-99
06AH203A02	06AH203	51.04	17.36	63.45	11	8.5	2	-1	4	82.8	39	4	27	33	170	0.3	20	-1	223	-0.1	31	2	159	-0.2	8
06AH216A02	06AH216	87.27	6.32	85.04	13	1.7	-1	1	1	4.9	13	-1	50	12	185	0.5	11	-1	11	-0.1	27	1	31	-0.2	4
06AH225B01	06AH225	53.20	5.58	64.75	7	2.8	1	1	-1	3.2	21	-1	58	91	113	0.8	51	-1	96	-0.1	25	3	74	-0.2	4
06AH226B01	06AH226	-99	-99	6	3.6	3	1	-1	2.1	20	-1	189	70	23	2.9	80	-1	256	-0.1	24	2	60	-0.2	2	
06AH228A02	06AH228	64.98	8.19	68.34	4	2.6	2	-1	12	9.8	22	3	33	17	141	0.6	32	-1	38	-0.1	26	1	72	-0.2	3
06AH246A02	06AH246	-99	-99	51	5.9	2	1	3	1.0	29	2	92	55	119	1.5	64	4	92	-0.1	27	1	122	-0.2	6	
06AH250A01	06AH250	47.65	1.62	60.04	5	1.6	3																		

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## Appendix A: Major element and trace element data

SampleID	StationID	IshAltIndx	ChiCarbPyl	AdvArgAltI	As	Be	Co	Cr	Cu	Li	Nb	Ni	P	Pb	Rb	Sc	Sr	V	Zn	Ag	Ga	Ge	Y	In	Sn	
Units					ppm	ppm																				
Detection Limit					2	0.1	1	1	1	0.1	1	1	1	1	1	0.1	1	1	1	0.1	1	1	1	0.2	1	
Upper Limit					GS Tr	AL 4B2Std	AL 4B2Std																			
Analysis Method																									AL 4B2Std	AL 4B2Std
06AH279A02	06AH279	44.45	68.60	21.40	5	0.2	47	47	-1	115.7	8	56	515	14	109	31.7	400	196	174	-0.1	20	1	21	-0.2	-1	
06AH280A01	06AH280	52.95	11.41	60.74	9	2.8	5	1	35	1.0	22	-1	142	38	78	5.7	64	-1	93	-0.1	23	2	69	-0.2	2	
06AH286A02	06AH286	24.69	55.47	27.80	8	1.5	33	44	128	9.0	17	21	455	30	129	3.8	95	27	91	0.6	-99	-99	-99	-99	-99	
06AH287A02	06AH287	43.50	74.66	20.45	4	0.6	38	27	5	54.7	6	71	231	16	109	19.2	555	121	195	-0.1	15	1	11	-0.2	-1	
06AH290A01	06AH290	44.17	75.82	19.57	3	-0.1	49	54	49	75.9	4	122	229	21	135	32.1	502	187	229	-0.1	17	1	18	-0.2	-1	
06AH297A02	06AH297	73.68	4.68	73.17	6	6.3	1	-1	1	0.7	17	3	39	23	150	0.5	32	-1	35	-0.1	27	1	71	-0.2	3	
06AH299A02	06AH299	65.78	12.80	69.98	7	3.5	3	1	4	19.1	25	4	30	28	133	0.7	11	-1	127	-0.1	28	2	65	-0.2	4	
06AH301A01	06AH301	-99	-99	-99	14	2.3	5	1	2	1.2	17	-1	309	14	175	10.9	59	-1	31	-0.1	24	2	58	-0.2	3	
06AH306A02	06AH306	87.85	7.43	81.49	15	1.6	2	1	35	7.9	17	4	53	56	242	0.8	22	-1	59	0.4	-99	-99	-99	-99	-99	
06AH310A02	06AH310	76.49	3.37	76.08	6	1.0	2	2	-1	13.1	21	5	44	32	168	0.5	33	8	97	-0.1	26	1	62	-0.2	3	
06AH317A02	06AH317	63.78	9.77	70.04	6	3.1	2	1	-1	2.2	27	3	45	14	162	0.6	21	6	82	-0.1	29	2	67	-0.2	4	
06AH319A02	06AH319	27.24	68.46	20.30	10	0.2	40	51	-1	19.5	7	65	443	10	12	30.7	587	168	113	-0.1	18	1	19	-0.2	-1	
06AH325A02	06AH325	52.80	6.41	58.11	2	0.6	4	-1	-1	13.8	18	3	248	20	39	6.0	18	-1	44	-0.1	21	1	27	-0.2	2	
06AH343A02	06AH343	61.40	13.29	68.55	10	3.8	3	1	14	8.4	26	4	46	32	129	0.9	30	-1	213	-0.1	27	2	83	-0.2	4	
06AH345A02	06AH345	38.57	90.42	17.16	3	-0.1	46	361	42	12.8	7	138	181	5	10	45.0	100	256	143	-0.1	15	1	17	-0.2	-1	
06AH346B02	06AH346	46.53	24.11	66.73	4	6.9	2	-1	54	16.5	520	3	19	266	367	0.9	18	4	78	0.6	-99	-99	-99	-99	-99	
06AH360A01	06AH360	59.32	10.43	67.49	5	0.7	2	2	-1	1.8	15	-1	84	16	127	1.6	30	11	19	-0.1	19	2	40	-0.2	2	
06AH362A01	06AH362	49.01	18.75	59.07	5	2.3	4	1	3	8.3	15	-1	294	6	78	12.3	46	-1	25	-0.1	24	2	47	-0.2	2	
06AH368A01	06AH368	36.66	86.83	17.86	-2	-0.1	42	171	5	25.3	4	114	182	-1	21	49.1	102	266	94	-0.1	14	2	18	-0.2	-1	
06AH386A02	06AH386	32.77	87.24	20.45	4	0.1	48	100	191	14.5	11	68	365	4	17	40.6	264	299	94	-0.1	-99	-99	-99	-99	-99	
06AH386A03	06AH386	25.64	54.80	27.07	57	0.8	41	97	377	13.6	11	46	427	77	26	32.2	115	281	1342	-0.1	18	2	19	-0.2	-1	
06AH398A02	06AH398	78.59	6.33	68.88	6	2.0	2	1	2	1.3	24	4	100	16	193	1.5	47	-1	138	-0.1	31	1	79	-0.2	5	
06AH427B01	06AH427	7.34	11.10	44.19	10	2.7	7	1	3	3.5	22	-1	300	10	5	8.4	132	-1	57	-0.1	21	2	36	-0.2	2	
06AH429A02	06AH429	50.30	11.57	56.55	5	3.6	5	1	-1	10.7	24	-1	240	28	127	7.7	70	-1	67	-0.1	22	1	41	-0.2	2	
06AH430A02	06AH430	48.66	11.40	55.25	5	3.0	5	1	28	2.8	24	-1	237	56	105	7.5	65	-1	72	-0.1	21	1	40	-0.2	2	
06AH433C01	06AH433	49.36	16.69	71.66	2	2.0	14	1	5	9.7	42	4	152	25	81	26.8	30	3	89	-0.1	25	-1	69	-0.2	3	
06AH435B02	06AH435	34.49	45.14	24.65	16	2.4	2	2	2	10.3	21	2	58	23	92	2.8	36	3	40	-0.1	23	2	61	-0.2	2	
06AH436A02	06AH436	60.07	16.92	64.68	5	9.2	3	1	9	5.2	23	3	37	9	113	2.8	36	-1	75	-0.1	27	1	93	-0.2	4	
06AH437A02	06AH437	1.67	6.89	45.90	4	2.5	2	-1	-1	0.8	18	-1	55	4	5	1.5	44	-1	18	-0.1	17	1	20	-0.2	-1	
06AH441A02	06AH441	3.13	63.95	60.51	21	2.2	11	3	98	1.4	14	2	67	29	4	6.8	36	4	30	0.3	22	2	19	0.3	5	
06AH456A02	06AH456	66.88	17.13	60.32	8	4.8	5	1	19	4.4	20	-1	264	55	159	11.2	45	-1	120	-0.1	29	2	88	-0.2	4	
06AH467A02	06AH467	-99	-99	-99	7	3.6	2	-1	-1	0.8	24	-1	66	14	66	0.9	32	1	48	-0.1	25	2	58	-0.2	2	
06AH467B02	06AH467	49.68	5.91	60.94	3	2.6	-1	-1	1	2.5	12	-1	20	29	134	0.7	96	-1	28	-0.1	-99	-99	-99	-99	-99	
06AH467C02	06AH467	57.99	70.73	21.86	8	2.1	37	294	-1	131.9	11	82	1330	11	283	33.1	323	232	495	-0.1	-99	-99	-99	-99	-99	
06AH468A02	06AH468	55.63	15.33	65.46	15	4.2	3	1	3	11.8	25	-1	37	28	111	0.6	16	-1	157	-0.1	-99	-99	-99	-99	-99	
06AH487B02	06AH487	44.80	12.57	48.17	12	2.8	8	15	2	14.8	12	3	813	24	117	7.7	243	37	62	-0.1	-99	-99	-99	-99	-99	
06AH488A02	06AH488	76.84	2.96	74.79	16	2.7	2	1	-1	3.1	20	-1	52	41	153	0.5	83	-1	152	-0.1	-99	-99	-99	-99	-99	
06AH490A02	06AH490	69.17	33.77	65.60	81	0.8	12	15	77	3.5	10	4	169	77	108	4.2	217	33	39	0.1	-99	-99	-99	-99	-99	
06AH506A02	06AH506	36.11	43.31	35.86	105	-0.1	46	1049	-1	7.0	40	48	97	17	28	7.9	206	464	54	-0.1	-99	-99	-99	-99	-99	
06SK006B02	06SK006	66.25	11.46	59.34	10	1.6	196	1	9	2.2	24	-1	56	25	143	1.2	25	-1	130	-0.1	-99	-99	-99	-99	-99	
06SK009A02	06SK009	4.32	16.77	49.44	5	3.1	121	-1	1	20.3	31	-1	38	15	8	0.9	50	-1	109	-0.1	-99	-99	-99	-99	-99	
06SK010A02	06SK010	4.63	8.80	48.76	9	4.2	112	1	11	2.0	16	-1	16	31	5	0.7	81	-1	386	-0.1	-99	-99	-99	-99	-99	
06SK011A02	06SK011	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
06SK013A02	06SK013	76.68	20.09	72.26	11	3.8	135	2	16	14.5	17	-1	296	116	134	13.1	189	-1	399	-0.1	-99	-99	-99	-99	-99	
06SK013B02	06SK013	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
06SK039A02	06SK039	66.02	12.62	69.54	6	4.7	169	1	7	4.5	33	-1	33	55	141	1.1	44	-1	151	-0.1	-99	-99	-99	-99	-99	
06SK040A02	06SK040	65.94	10.61	69.93	5	2.2	183	1	6	8.5	22	-1	21	35	83	0.8	50	-1	103	-0.1	-99	-99	-99	-99	-99	
06SK041A02	06SK04																									

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## Appendix A: Major element and trace element data

SampleID	StationID	IshAltIndx	ChiCarbPyl	AdvArgAltI	As	Be	Co	Cr	Cu	Li	Nb	Ni	P	Pb	Rb	Sc	Sr	V	Zn	Ag	Ga	Ge	Y	In	Sn	
Units					ppm	ppm	ppm	ppm	ppm																	
Detection Limit					2	0.1	1	1	1	0.1	1	1	1	1	1	0.1	1	1	1	0.1	1	1	1	0.2	1	
Upper Limit					GS Tr	GS BPD	AL 4B2Std	AL 4B2Std	AL 4B2Std	AL 4B2Std																
Analysis Method																										
06SK048A02	06SK048	78.68	8.65	77.01	5	2.5	122	11	11	20.0	23	-1	20	30	123	0.8	18	-1	68	-0.1	-99	-99	-99	-99	-99	
08CL346A02	08CL346	68.90	10.15	72.14	7	2.3	-1	-1	0.4	20	-1	36	12	152	0.5	29	-1	9	-0.1	-99	-99	-99	-99	-99	-99	
08CL346B02	08CL346	83.23	12.24	83.18	4	1.1	1	1	7	1.5	14	2	36	25	155	0.8	32	-1	32	-0.1	-99	-99	-99	-99	-99	-99
08CL370A02	08CL370	56.54	11.73	59.16	4	3.5	5	2	-1	14.7	18	2	241	23	143	6.3	70	-1	62	-0.1	-99	-99	-99	-99	-99	-99
08CL371A02	08CL371	41.39	69.07	20.06	25	1.5	45	330	-1	101.3	14	120	2300	20	56	28.7	436	159	122	-0.1	-99	-99	-99	-99	-99	-99
08CL374A02	08CL374	61.89	13.74	60.56	18	2.3	2	1	-1	44.4	29	-1	41	24	170	2.0	93	2	128	-0.1	-99	-99	-99	-99	-99	-99
08CL384B02	08CL384	40.39	62.51	27.45	2	0.7	30	28	46	16.7	11	32	753	7	42	23.2	520	145	75	-0.1	-99	-99	-99	-99	-99	-99
08CL388A02	08CL388	61.83	17.95	70.94	5	2.0	1	1	5	1.0	22	-1	60	27	113	0.3	60	3	53	-0.1	-99	-99	-99	-99	-99	-99
08CL389A02	08CL389	46.94	16.53	57.68	20	3.2	3	1	-1	1.6	25	2	151	29	125	2.5	105	-1	47	-0.1	-99	-99	-99	-99	-99	-99
08CL398A02	08CL398	37.05	84.05	16.91	54	0.8	46	239	-1	33.7	10	138	1870	4	11	31.3	634	181	153	-0.1	-99	-99	-99	-99	-99	-99
08CL398B02	08CL398	61.03	13.98	65.47	54	3.3	1	2	-1	0.9	29	-1	113	9	136	2.5	83	5	61	-0.1	-99	-99	-99	-99	-99	-99
08CL399A02	08CL399	55.62	18.93	60.51	8	6.5	5	2	-1	45.7	37	3	317	32	214	5.5	90	-1	90	-0.1	-99	-99	-99	-99	-99	-99
08CL400A02	08CL400	77.36	12.35	76.63	9	1.5	1	1	1	23.6	18	2	32	28	174	1.3	31	-1	23	-0.1	-99	-99	-99	-99	-99	-99
08CL452A02	08CL452	38.56	22.27	56.43	9	4.2	3	4	-1	12.6	36	4	142	20	74	1.5	75	10	65	-0.1	-99	-99	-99	-99	-99	-99
08CL453A02	08CL453	49.28	20.04	65.06	28	3.7	2	-1	-1	13.4	29	-1	98	25	130	0.4	65	-1	30	-0.1	-99	-99	-99	-99	-99	-99
08CL454A02	08CL454	31.09	58.60	34.47	32	2.2	35	9	-1	45.2	21	24	2237	17	79	28.1	500	206	129	-0.1	-99	-99	-99	-99	-99	-99
08CL456A02	08CL456	55.89	10.88	59.95	4	3.9	3	1	25	5.1	20	2	140	27	158	5.6	36	-1	59	-0.1	-99	-99	-99	-99	-99	-99
08CL458A02	08CL458	71.39	10.53	76.02	10	1.6	2	2	11	9.9	15	-1	60	28	127	1.2	56	-1	29	-0.1	-99	-99	-99	-99	-99	-99
08CL465A02	08CL465	27.24	63.64	22.55	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	5.6	-99	-99	-99	-99	-99	-99
08EW004A02	08EW004	33.13	70.77	21.29	3	0.8	37	113	70	56.0	7	35	1329	30	50	35.1	480	227	150	-0.1	16	1	21	-0.2	-1	-1
08EW006A02	08EW006	40.83	74.55	20.05	-2	1.2	46	66	39	44.8	7	52	643	23	83	35.2	528	323	199	-0.1	19	2	16	-0.2	2	-1
08EW009A02	08EW009	37.48	60.98	27.44	3	0.8	28	20	42	50.3	8	23	831	11	75	22.0	510	154	87	-0.1	17	2	19	1.7	9	-1
08EW010A02	08EW010	30.19	59.41	27.46	5	1.0	30	10	38	45.0	11	20	1532	9	82	20.1	505	152	97	-0.1	22	1	32	-0.2	1	-1
08EW011A02	08EW011	29.42	62.45	25.06	-2	0.7	33	17	5	35.5	9	25	1324	10	61	23.3	515	174	109	-0.1	21	1	29	-0.2	2	-1
08EW012A02	08EW012	38.60	61.41	26.52	3	1.5	35	15	93	25.2	8	21	852	28	84	24.4	484	174	149	-0.1	20	1	23	-0.2	1	-1
08EW013A02	08EW013	35.74	56.77	30.24	3	0.9	23	20	8	34.6	8	19	1026	8	67	16.5	539	129	92	-0.1	19	1	20	-0.2	-1	-1
08EW014A02	08EW014	35.10	73.62	23.34	5	0.6	43	23	49	34.9	10	40	1372	14	48	25.4	461	189	124	-0.1	20	1	29	-0.2	1	-1
08EW015A02	08EW015	35.58	59.95	29.12	-2	0.7	34	20	37	22.6	9	19	1086	6	64	17.9	563	140	95	-0.1	19	1	20	-0.2	-1	-1
08EW018A02	08EW018	52.04	7.96	62.37	7	3.2	-1	2	56	3.0	16	-1	19	13	104	1.3	13	-1	23	-0.1	23	1	49	-0.2	1	-1
08EW019A02	08EW019	51.45	76.52	20.78	126	0.3	44	344	7	57.1	7	103	1595	16	109	27.7	463	190	104	-0.1	15	1	15	-0.2	1	-1
08EW022A02	08EW022	45.85	71.99	18.32	4	0.2	43	298	14	111.9	5	86	662	17	90	34.3	416	230	110	-0.1	16	1	13	-0.2	-1	-1
09AMH001A02	09AMH001	59.54	19.03	79.43	6	2.9	1	3	23	14.9	7	-1	180	19	42	3.3	361	2	29	-0.1	11	3	27	-0.2	-1	-1
09AMH002A02	09AMH002	46.75	75.73	13.43	30	2.6	47	619	-1	88.4	5	317	1166	239	94	25.9	849	172	248	-0.1	11	1	10	-0.2	-1	-1
09AMH003A02	09AMH003	38.82	60.15	18.30	6	-0.1	47	43	-1	55.1	4	54	614	11	38	28.0	479	162	104	-0.1	19	2	20	-0.2	-1	-1
09AMH004A02	09AMH004	44.26	70.97	17.77	6	-0.1	42	40	-1	49.8	5	50	540	-1	16	26.8	278	159	126	-0.1	16	1	18	-0.2	-1	-1
09AMH005A02	09AMH005	38.11	69.49	22.24	6	0.6	41	59	28	22.2	7	71	969	2	56	29.6	418	190	109	-0.1	18	1	28	-0.2	4	-1
09AMH006A02	09AMH006	44.03	68.14	22.19	6	-0.1	42	59	-1	50.8	6	63	850	-1	53	27.0	409	158	107	-0.1	17	1	29	-0.2	-1	-1
09AMH007A02	09AMH007	31.41	18.92	39.31	28	1.7	5	22	-1	6.1	5	6	335	5	79	4.1	166	34	33	-0.1	13	1	15	-0.2	1	-1
09AMH008A02	09AMH008	73.03	5.46	53.46	6	1.3	1	6	-1	1.5	6	1	193	4	129	1.6	193	-1	9	-0.1	17	-1	8	-0.2	3	-1
09AMH009A02	09AMH009	64.11	8.52	64.88	11	0.9	6	30	-1	1.5	10	7	575	25	158	3.1	152	6	23	-0.1	13	-1	18	-0.2	1	-1
09AMH011A02	09AMH011	39.74	86.08	17.68	11	-0.1	43	330	89	12.2	5	110	218	-1	17	45.2	136	255	79	0.1	14	1	16	-0.2	-1	-1
09AMH012B02	09AMH012	34.58	69.06	24.35	6	-0.1	39	22	44	27.5	10	21	1508	14	44	24.3	465	193	107	-0.1	21	2	28	-0.2	2	-1
09AMH013A02	09AMH013	53.57	9.94	52.30	11	2.7	5	8	3	14.5	6	5	781	21	158	7.0	176	23	62	-0.1	20	1	22	-0.2	1	-1
09AMH015A02	09AMH015	33.77	71.40	17.55	76	-0.1	41	196	-1	36.2	7	135	2114	-1	12	29.1	673	145	124	-0.1	15	2	16	-0.2	-1	-1
09AMH016A02	09AMH016	47.20	14.85	55.42	8	2.3	3	10	-1	35.5	7	4	253	29	95	4.1	272	8	71	-0.1	16	-1	23	-0.2	2	-1
09																										

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## Appendix A: Major element and trace element data

SampleID	StationID	IshAltIndx	ChiCarbPyl	AdvArgAltI	As	Be	Co	Cr	Cu	Li	Nb	Ni	P	Pb	Rb	Sc	Sr	V	Zn	Ag	Ga	Ge	Y	In	Sn
Units					ppm	ppm	ppm	ppm	ppm																
Detection Limit					2	0.1	1	1	1	0.1	1	1	1	1	1	0.1	1	1	1	0.1	1	1	1	0.2	1
Upper Limit					GS Tr	GS BPD	AL 4B2Std	AL 4B2Std	AL 4B2Std	AL 4B2Std															
Analysis Method																									
10AMH005A02	10AMH005	38.28	73.32	20.93	3	0.6	53	9	42	42.9	15	27	1051	3	52	28.6	499	252	242	-0.1	21	2	26	-0.2	2
10AMH006A02	10AMH006	40.21	61.74	28.30	2	1.0	28	21	29	40.2	11	14	852	4	74	22.9	558	168	105	-0.1	18	1	18	-0.2	-1
10AMH007A02	10AMH007	43.32	80.27	19.98	-2	0.5	43	201	103	14.7	12	77	265	-1	45	50.9	228	309	100	-0.1	14	2	18	-0.2	-1
10AMH009A02	10AMH009	34.83	84.79	19.77	-2	0.1	51	80	76	9.0	15	55	375	-1	12	49.6	164	368	97	-0.1	17	2	23	-0.2	-1
10AMH010A02	10AMH010	37.05	74.47	21.13	-2	0.6	63	7	128	51.5	20	13	4215	1	94	38.2	388	253	144	-0.1	22	2	40	-0.2	2
10AMH011A02	10AMH011	38.58	77.67	20.61	3	0.7	60	126	33	34.1	19	53	2280	-1	60	31.0	420	294	128	-0.1	21	2	32	-0.2	2
10AMH012A02	10AMH012	38.47	80.98	18.17	-2	0.1	46	231	27	11.4	12	92	226	3	10	47.0	188	287	159	-0.1	13	2	15	-0.2	-1
10AMH013A02	10AMH013	35.37	68.53	24.19	-2	1.2	53	4	9	27.1	25	5	6450	-1	46	25.1	433	89	118	-0.1	20	2	46	-0.2	3
10AMH014A02	10AMH014	41.57	84.18	12.52	-2	1.9	80	374	107	77.9	35	236	3229	-1	75	26.8	441	345	89	-0.1	21	3	24	-0.2	4
10AMH015A02	10AMH015	40.36	74.52	19.21	2	0.9	46	74	13	23.4	11	59	683	9	49	32.1	504	224	171	-0.1	18	2	19	-0.2	2
10AMH016A02	10AMH016	41.88	58.87	28.06	-2	1.4	28	39	6	18.4	11	11	952	-1	85	23.5	592	181	98	-0.1	19	2	16	-0.2	1
10AMH017A02	10AMH017	32.90	71.10	22.94	-2	1.2	54	3	79	31.3	23	5	6479	-1	54	24.7	425	93	115	-0.1	20	1	39	-0.2	9
10AMH018A02	10AMH018	48.71	90.61	5.33	9	2.2	80	391	67	25.0	146	169	13070	9	103	31.5	1643	244	106	-0.1	17	2	40	-0.2	4
10AMH020A02	10AMH020	35.11	67.28	24.37	-2	1.1	52	3	7	21.1	22	3	6375	-1	38	24.6	542	84	110	-0.1	22	2	41	-0.2	2

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**Appendix A: Major element and trace element data**

SampleID Units	StationID	Sb ppm	Cs ppm	La ppm	Ce ppm	Pr ppm	Nd ppm	Sm ppm	Eu ppm	Gd ppm	Tb ppm	Dy ppm	Ho ppm	Er ppm	Tm ppm	Yb ppm	Lu ppm	Hf ppm	Ta ppm
		0.5	0.5	0.1	0.1	0.5	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.05	0.1	0.04	0.2	0.1
Detection Limit		0.5	0.5	0.1	0.1	0.5	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.05	0.1	0.04	0.2	0.1
Upper Limit																			
Analysis Method		AL 4B2Std																	
06AH024A01	06AH024	-0.5	-0.5	3.2	8.5	1.2	6.7	2.2	0.90	2.6	0.6	4.0	0.8	2.5	0.36	2.3	0.36	1.9	0.1
06AH027A01	06AH027	-0.5	36.7	28.2	58.2	6.8	25.1	5.4	1.96	4.9	0.7	3.6	0.7	1.9	0.27	1.6	0.26	2.6	0.3
06AH027A02	06AH027	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH028A01	06AH028	-0.5	-0.5	62.9	124.0	14.4	54.1	12.3	3.15	11.2	1.9	11.0	2.2	6.8	1.02	6.4	1.08	11.2	1.0
06AH036A01	06AH036	-0.5	-0.5	67.3	132.0	15.3	57.1	12.7	1.94	11.5	1.9	11.0	2.2	6.9	1.03	6.4	1.05	12.4	1.1
06AH045A01	06AH045	-0.5	0.8	95.1	177.0	19.9	69.8	14.0	1.09	12.5	1.7	9.3	1.8	5.3	0.76	4.7	0.73	8.9	1.3
06AH057A01	06AH057	-0.5	-0.5	94.2	180.0	20.9	75.7	15.9	1.56	13.5	2.0	11.5	2.3	6.7	0.98	6.0	0.94	11.5	1.3
06AH057B02	06AH057	-0.5	3.4	27.9	64.9	8.0	33.5	6.9	2.60	6.4	1.1	6.1	1.2	3.2	0.46	2.9	0.45	4.6	0.4
06AH060C01	06AH060	-0.5	1.0	95.7	177.0	19.7	68.1	13.8	0.96	11.7	1.7	9.2	1.9	5.8	0.89	5.7	0.92	10.3	1.3
06AH061A01	06AH061	-0.5	0.7	75.3	142.0	16.0	60.1	12.9	1.15	11.8	2.0	12.2	2.5	7.7	1.15	7.4	1.21	13.8	1.2
06AH063D02	06AH063	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH068B01	06AH068	13.1	1.0	13.7	29.1	3.5	14.2	3.6	1.43	3.3	0.6	3.3	0.7	1.9	0.27	1.7	0.26	2.2	-0.1
06AH070A01	06AH070	-0.5	1.0	83.0	159.0	18.0	65.5	14.2	1.40	12.2	1.9	10.6	2.0	6.1	0.88	5.6	0.93	13.2	1.4
06AH073A02	06AH073	-0.5	1.2	26.6	53.0	6.1	23.9	5.5	1.93	4.7	0.7	4.0	0.8	2.2	0.30	1.9	0.30	3.5	0.2
06AH078A02	06AH078	-0.5	16.5	1.9	5.8	0.9	4.8	1.6	0.70	2.2	0.4	2.9	0.6	1.9	0.28	1.8	0.29	1.4	0.1
06AH080B02	06AH080	-0.5	0.9	54.3	142.0	17.7	74.8	15.5	5.83	13.4	2.3	13.1	2.4	7.2	1.03	7.0	1.09	16.5	3.7
06AH082A01	06AH082	-0.5	0.5	85.7	153.0	15.9	50.3	9.6	1.14	8.3	1.2	6.7	1.3	3.9	0.58	3.6	0.58	8.8	0.8
06AH083A01	06AH083	-0.5	-0.5	80.8	153.0	17.2	63.4	13.5	1.17	11.3	1.8	10.5	2.1	6.5	0.98	6.3	1.03	13.7	1.1
06AH084B01	06AH084	-0.5	1.0	37.7	74.4	8.2	29.4	6.2	1.62	5.4	0.8	4.6	0.9	2.6	0.38	2.4	0.38	5.2	0.4
06AH090C01	06AH090	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH100A02	06AH100	-0.5	-0.5	2.5	7.2	1.1	6.1	2.1	0.83	2.7	0.6	3.9	0.8	2.4	0.37	2.4	0.36	1.8	-0.1
06AH104B01	06AH104	-0.5	0.7	26.1	45.9	4.4	14.0	2.6	0.44	2.3	0.4	2.3	0.5	1.6	0.26	1.8	0.32	3.7	0.7
06AH108A01	06AH108	1.2	2.7	51.5	107.0	12.3	45.3	10.1	2.30	8.9	1.4	8.1	1.7	5.1	0.76	4.8	0.74	10.1	1.2
06AH113A02	06AH113	-0.5	1.1	91.8	193.0	20.6	75.6	12.9	1.76	11.2	1.9	11.2	2.1	6.2	0.93	6.0	0.89	9.9	1.2
06AH115B01	06AH115	1.1	-0.5	45.1	71.3	7.2	24.4	4.8	1.34	3.9	0.5	3.0	0.6	1.8	0.25	1.6	0.24	1.9	0.6
06AH117A02	06AH117	-0.5	1.1	59.0	126.0	12.7	42.8	7.4	1.07	6.3	1.2	7.0	1.4	4.4	0.71	4.7	0.73	9.5	1.6
06AH120A02	06AH120	-0.5	-0.5	93.3	199.0	21.7	80.8	14.3	0.72	12.2	2.1	12.7	2.5	8.0	1.29	8.4	1.25	12.8	1.4
06AH122A02	06AH122	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH126A01	06AH126	1.7	1.5	7.4	17.0	2.2	10.2	2.9	1.18	2.8	0.5	2.9	0.6	1.7	0.25	1.5	0.23	1.6	-0.1
06AH128A02	06AH128	-0.5	0.8	165.0	315.0	29.4	93.8	13.0	1.21	9.4	1.5	8.7	1.7	5.3	0.82	5.5	0.85	10.4	1.1
06AH146A02	06AH146	-0.5	-0.5	102.0	226.0	25.5	100	19.5	1.96	17.7	3.2	18.9	3.6	10.8	1.66	10.7	1.59	17.1	1.8
06AH155A02	06AH155	-0.5	0.8	4.7	10.6	1.3	6.0	1.3	0.85	1.3	0.2	1.3	0.2	0.7	0.10	0.6	0.09	0.8	-0.1
06AH165A02	06AH165	0.6	1.0	39.1	94.6	11.1	44.5	9.4	0.43	8.4	1.6	9.1	1.7	5.3	0.83	5.4	0.81	10.1	1.1
06AH173A01	06AH173	0.8	5.6	32.3	55.3	7.4	27.4	5.7	1.07	4.5	0.7	4.2	0.8	2.6	0.39	2.3	0.38	3.3	0.4
06AH187A01	06AH187	1.4	3.1	27.2	54.4	5.6	19.2	3.8	1.00	3.0	0.4	2.6	0.5	1.6	0.25	1.6	0.27	3.8	0.6
06AH187A02	06AH187	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH187B01	06AH187	1.0	6.4	29.4	60.4	6.9	24.9	5.3	0.77	4.4	0.7	4.1	0.8	2.6	0.38	2.4	0.41	4.2	1.0
06AH189A02	06AH189	-0.5	0.5	25.1	48.2	4.9	16.5	2.6	0.84	1.9	0.3	1.6	0.3	1.0	0.17	1.2	0.19	3.9	0.4
06AH197B02	06AH197	-0.5	1.0	20.7	47.9	5.7	23.6	4.9	1.65	4.6	0.8	4.1	0.7	2.0	0.29	1.9	0.29	2.9	0.2
06AH200A01	06AH200	-0.5	0.8	113.0	223.0	26.9	106	23.4	1.90	21.0	3.3	20.5	4.4	13.4	1.95	12.1	1.90	16.9	2.4
06AH202A02	06AH202	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH203A02	06AH203	-0.5	0.9	98.0	230.0	27.5	110	24.5	2.10	23.7	4.5	26.7	5.2	15.7	2.42	15.4	2.36	28.2	2.9
06AH216A02	06AH216	-0.5	0.7	42.3	98.6	9.9	36.0	6.2	0.33	4.5	0.9	5.3	1.1	3.6	0.61	4.1	0.63	10.9	1.7
06AH225B01	06AH225	0.8	0.8	94.9	181.0	20.3	71.8	14.8	0.82	12.1	1.9	11.8	2.6	8.3	1.24	8.2	1.29	14.9	1.5
06AH226B01	06AH226	0.7	-0.5	77.8	151.0	17.3	61.1	12.8	1.09	10.1	1.6	9.7	2.1	6.8	1.06	6.7	1.12	13.4	1.3
06AH228A02	06AH228	-0.5	1.1	81.2	177.0	19.6	73.1	13.2	0.78	11.9	2.1	12.3	2.4	7.6	1.17	7.4	1.08	12.5	1.5
06AH246A02	06AH246	-0.5	0.7	100.0	227.0	26.4	104	22.0	2.17	20.6	3.6	21.6	4.4	13.5	2.06	13.2	1.89	21.5	2.3
06AH250A01	06AH250	-0.5	-0.5	16.0	40.8	4.1	14.6	3.0	0.63	2.6	0.5	3.1	0.7	2.3	0.36	2.4	0.45	9.2	1.4
06AH266A02	06AH266	-0.5	1.0	15.9	35.2	3.0	10.3	2.0	0.28	1.8	0.4	2.6	0.6	2.0	0.36	2.7	0.43	3.6	1.1
06AH273A01	06AH273	1.0	0.9	33.1	67.7	7.8	29.6	6.3	1.14	4.9	0.7	3.3	0.6	1.7	0.23	1.4	0.21	7.5	0.8
06AH276B02	06AH276	-0.5	1.8	15.9	32.6	3.1	10.6	1.9	0.25	1.6	0.3	2.2	0.5	1.9	0.39	3.1	0.57	4.4	2.0

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**Appendix A: Major element and trace element data**

SampleID Units	StationID	Sb ppm	Cs ppm	La ppm	Ce ppm	Pr ppm	Nd ppm	Sm ppm	Eu ppm	Gd ppm	Tb ppm	Dy ppm	Ho ppm	Er ppm	Tm ppm	Yb ppm	Lu ppm	Hf ppm	Ta ppm
		0.5	0.5	0.1	0.1	0.5	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.05	0.1	0.04	0.2	0.1
Detection Limit		0.5	0.5	0.1	0.1	0.5	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.05	0.1	0.04	0.2	0.1
Upper Limit																			
Analysis Method		AL 4B2Std																	
06AH279A02	06AH279	-0.5	9.6	6.8	17.9	2.5	11.9	3.0	1.28	3.3	0.6	3.7	0.7	2.2	0.32	2.0	0.30	1.6	-0.1
06AH280A01	06AH280	1.0	-0.5	70.4	142.0	16.5	63.4	13.7	2.89	11.7	1.9	11.8	2.5	7.8	1.15	7.3	1.19	13.2	1.4
06AH286A02	06AH286	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99
06AH287A02	06AH287	-0.5	1.0	1.9	4.8	0.7	3.6	1.2	0.82	1.5	0.3	2.0	0.4	1.2	0.18	1.1	0.17	0.7	-0.1
06AH290A01	06AH290	-0.5	7.6	2.6	5.6	0.9	5.3	1.8	0.81	2.8	0.5	3.1	0.6	2.0	0.29	1.8	0.26	1.2	-0.1
06AH297A02	06AH297	-0.5	0.6	79.3	169.0	18.7	69.9	13.1	0.68	11.7	2.1	12.3	2.4	7.1	1.09	7.0	1.06	12.1	1.5
06AH299A02	06AH299	-0.5	0.7	49.4	159.0	12.6	47.9	9.0	1.01	8.4	1.7	11.2	2.4	7.3	1.15	7.5	1.14	12.3	1.6
06AH301A01	06AH301	3.0	0.9	53.4	116.0	12.8	48.4	10.7	2.55	9.1	1.5	9.5	2.1	6.9	1.09	7.0	1.03	12.0	1.1
06AH306A02	06AH306	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99
06AH310A02	06AH310	-0.5	0.7	83.6	194.0	20.5	78.2	13.9	1.48	11.1	1.9	11.2	2.2	6.6	1.03	6.7	1.01	11.3	1.5
06AH317A02	06AH317	-0.5	-0.5	71.5	170.0	18.2	68.6	13.0	1.26	11.0	2.0	12.3	2.5	7.8	1.23	8.0	1.19	9.4	1.9
06AH319A02	06AH319	-0.5	-0.5	5.8	14.4	1.9	9.2	2.5	1.08	2.8	0.5	3.3	0.7	2.0	0.30	1.9	0.29	1.6	-0.1
06AH325A02	06AH325	-0.5	1.2	44.2	133.0	11.8	41.2	7.3	1.28	5.5	0.9	5.4	1.0	3.0	0.47	3.1	0.47	10.6	1.6
06AH343A02	06AH343	-0.5	-0.5	106.0	238.0	25.7	98.5	18.7	1.96	15.8	2.7	15.6	3.0	9.0	1.36	8.7	1.29	12.7	1.6
06AH345A02	06AH345	-0.5	-0.5	2.0	5.8	0.9	4.8	1.6	0.70	2.1	0.4	3.0	0.6	1.8	0.27	1.7	0.26	1.3	0.1
06AH346B02	06AH346	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99
06AH360A01	06AH360	-0.5	1.2	57.0	117.0	12.0	40.2	8.2	0.67	6.5	1.1	6.6	1.4	4.2	0.65	4.2	0.61	7.2	1.3
06AH362A01	06AH362	5.8	-0.5	22.3	58.0	4.8	17.3	3.8	1.28	4.4	1.0	7.5	1.7	5.6	0.92	6.2	0.97	11.8	1.2
06AH368A01	06AH368	0.5	-0.5	2.0	4.2	0.7	4.0	1.4	0.57	2.4	0.4	2.9	0.6	2.1	0.32	2.0	0.30	1.1	0.1
06AH386A02	06AH386	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99
06AH386A03	06AH386	-0.5	-0.5	7.2	18.0	2.3	10.6	2.8	1.15	3.1	0.6	3.6	0.7	2.0	0.30	1.9	0.28	1.9	0.3
06AH398A02	06AH398	-0.5	1.5	30.6	91.8	7.7	29.9	6.5	0.75	7.5	1.7	12.1	2.7	9.4	1.58	10.3	1.50	13.3	1.6
06AH427B01	06AH427	-0.5	-0.5	111.0	196.0	20.2	61.7	11.2	1.95	8.1	1.1	6.3	1.3	3.7	0.55	3.5	0.56	10.7	1.6
06AH429A02	06AH429	-0.5	1.1	88.3	180.0	18.4	63.1	9.9	1.61	7.4	1.3	7.0	1.3	4.1	0.63	4.0	0.60	10.6	1.6
06AH430A02	06AH430	-0.5	0.6	86.6	176.0	17.7	61.0	9.6	1.55	7.1	1.2	6.9	1.3	4.1	0.61	4.0	0.59	10.4	1.5
06AH433C01	06AH433	-0.5	-0.5	79.6	168.0	18.4	69.5	12.6	1.08	11.0	1.9	11.3	2.2	6.9	1.05	6.8	1.02	11.0	1.3
06AH435B02	06AH435	-0.5	1.7	57.0	126.0	14.3	55.8	11.0	2.84	10.0	1.8	10.3	2.0	6.2	0.94	6.3	0.99	10.5	1.1
06AH436A02	06AH436	-0.5	-0.5	97.3	213.0	24.2	96.1	17.8	1.77	15.1	2.7	15.8	3.1	9.7	1.46	9.3	1.39	13.5	1.6
06AH437A02	06AH437	-0.5	0.7	18.7	37.4	3.9	13.4	2.7	0.37	2.3	0.4	2.8	0.6	2.0	0.34	2.4	0.39	3.4	1.0
06AH441A02	06AH441	-0.5	18.6	13.1	26.2	3.1	13.5	3.2	1.04	3.3	0.6	3.4	0.7	1.9	0.27	1.7	0.25	2.1	0.1
06AH456A02	06AH456	-0.5	0.8	108.0	229.0	25.6	99.4	17.9	1.83	14.8	2.6	15.3	2.9	9.0	1.38	8.7	1.35	12.7	1.5
06AH467A02	06AH467	-0.5	0.5	80.6	158.0	17.8	66.7	12.0	1.30	10.2	1.8	10.7	2.1	6.5	1.01	6.6	1.04	10.5	1.2
06AH467B02	06AH467	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99
06AH467C02	06AH467	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99
06AH468A02	06AH468	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99
06AH487B02	06AH487	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99
06AH488A02	06AH488	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99
06AH490A02	06AH490	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99
06AH506A02	06AH506	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99
06SK006B02	06SK006	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99
06SK009A02	06SK009	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99
06SK010A02	06SK010	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99
06SK011A02	06SK011	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99
06SK013A02	06SK013	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99
06SK013B02	06SK013	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99
06SK039A02	06SK039	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99
06SK040A02	06SK040	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99
06SK041A02	06SK041	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99
06SK042A02	06SK042	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99
06SK043A02	06SK043	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99
06SK044A02	06SK044	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99
06SK047A02	06SK047	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99	-.99

## Open File 013O/0139

## Appendix A: Major element and trace element data

SampleID Units	StationID	Sb ppm	Cs ppm	La ppm	Ce ppm	Pr ppm	Nd ppm	Sm ppm	Eu ppm	Gd ppm	Tb ppm	Dy ppm	Ho ppm	Er ppm	Tm ppm	Yb ppm	Lu ppm	Hf ppm	Ta ppm
		0.5	0.5	0.1	0.1	0.5	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.05	0.1	0.04	0.2	0.1
Detection Limit																			
Upper Limit																			
Analysis Method		AL 4B2Std																	
06SK048A02	06SK048	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL346A02	08CL346	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL346B02	08CL346	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL370A02	08CL370	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL371A02	08CL371	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL374A02	08CL374	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL384B02	08CL384	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL388A02	08CL388	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL389A02	08CL389	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL398A02	08CL398	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL398B02	08CL398	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL399A02	08CL399	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL400A02	08CL400	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL452A02	08CL452	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL453A02	08CL453	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL454A02	08CL454	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL456A02	08CL456	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL458A02	08CL458	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL465A02	08CL465	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08EW004A02	08EW004	-0.5	0.5	16.3	36.8	4.8	18.0	4.2	1.40	4.5	0.7	3.8	0.8	2.3	0.33	2.0	0.28	2.5	0.2
08EW006A02	08EW006	1.6	1.0	8.9	19.4	2.5	10.6	2.7	0.99	3.1	0.5	2.8	0.6	1.7	0.24	1.5	0.21	1.4	-0.1
08EW009A02	08EW009	4.5	-0.5	25.4	51.3	6.0	20.9	4.4	1.27	4.2	0.6	3.3	0.7	2.0	0.29	1.8	0.26	3.0	0.3
08EW010A02	08EW010	0.9	3.7	30.5	64.4	7.9	29.2	6.4	1.79	6.4	0.9	5.6	1.1	3.3	0.48	3.0	0.43	5.4	0.4
08EW011A02	08EW011	0.5	2.2	22.3	48.0	6.2	22.9	5.2	1.71	5.4	0.8	4.8	1.0	2.9	0.41	2.5	0.37	4.3	0.3
08EW012A02	08EW012	-0.5	-0.5	27.2	55.3	6.6	23.1	5.0	1.47	4.8	0.7	4.0	0.8	2.4	0.34	2.1	0.31	3.5	0.2
08EW013A02	08EW013	0.7	1.5	30.0	59.7	6.8	22.6	4.5	1.34	4.1	0.6	3.4	0.7	2.0	0.29	1.8	0.26	4.2	0.3
08EW014A02	08EW014	1.9	5.3	22.5	50.4	6.4	24.7	5.6	1.80	5.9	0.9	5.1	1.0	3.1	0.44	2.7	0.37	4.3	0.3
08EW015A02	08EW015	-0.5	1.6	28.1	57.9	6.7	23.4	4.7	1.49	4.3	0.6	3.5	0.7	2.1	0.30	1.9	0.29	3.7	0.3
08EW018A02	08EW018	1.4	0.9	88.6	176.0	19.8	61.0	11.6	0.31	10.1	1.5	8.6	1.7	5.3	0.80	4.8	0.68	11.1	1.1
08EW019A02	08EW019	0.7	17.7	12.8	27.1	3.5	13.2	3.1	1.23	3.1	0.4	2.5	0.5	1.4	0.20	1.2	0.18	1.7	0.2
08EW022A02	08EW022	1.4	1.5	8.1	17.9	2.3	9.1	2.2	0.98	2.4	0.4	2.2	0.4	1.3	0.18	1.1	0.17	0.9	-0.1
09AMH001A02	09AMH001	-0.5	3.5	26.4	96.3	6.9	25.1	4.5	0.56	3.9	0.6	4.0	0.9	3.1	0.55	4.0	0.70	5.1	0.6
09AMH002A02	09AMH002	0.6	25.5	9.3	20.2	2.9	10.9	2.3	0.85	2.1	0.3	1.9	0.4	1.0	0.15	1.0	0.15	0.8	0.1
09AMH003A02	09AMH003	-0.5	6.4	7.6	17.8	2.7	12.0	3.1	1.13	3.4	0.6	3.6	0.7	2.1	0.32	2.1	0.32	1.7	-0.1
09AMH004A02	09AMH004	-0.5	-0.5	7.3	17.2	2.6	11.8	2.9	1.05	3.3	0.5	3.3	0.7	2.0	0.29	1.9	0.30	1.4	-0.1
09AMH005A02	09AMH005	-0.5	1.1	17.9	37.6	5.3	21.9	4.8	1.38	5.0	0.8	5.0	1.0	2.9	0.43	2.9	0.47	2.9	0.3
09AMH006A02	09AMH006	-0.5	2.2	15.8	33.7	4.8	19.3	4.7	1.46	4.8	0.9	5.3	1.0	3.0	0.44	3.0	0.43	2.8	0.2
09AMH007A02	09AMH007	1.3	1.7	27.9	65.2	5.3	19.2	3.5	0.63	2.8	0.4	2.6	0.5	1.6	0.25	1.7	0.29	2.9	0.3
09AMH008A02	09AMH008	0.6	2.9	28.3	42.5	6.7	22.1	3.4	0.30	2.0	0.3	1.3	0.2	0.7	0.11	0.7	0.10	4.4	0.7
09AMH009A02	09AMH009	1.6	-0.5	41.7	78.6	9.2	31.8	5.3	0.96	4.0	0.6	3.3	0.6	1.8	0.27	1.8	0.29	7.4	0.9
09AMH011A02	09AMH011	0.5	-0.5	1.7	4.8	0.9	4.4	1.5	0.57	2.2	0.4	2.7	0.6	1.7	0.25	1.7	0.26	1.0	-0.1
09AMH012B02	09AMH012	1.7	4.8	23.2	49.2	6.4	27.0	5.9	1.79	5.6	0.9	5.2	1.1	3.0	0.41	2.8	0.46	3.7	0.3
09AMH013A02	09AMH013	4.6	2.3	45.4	92.9	10.2	37.4	6.8	0.96	5.4	0.8	4.3	0.8	2.5	0.37	2.4	0.39	7.2	0.9
09AMH015A02	09AMH015	6.7	-0.5	12.9	30.3	4.4	20.1	4.0	1.46	3.6	0.5	2.9	0.6	1.8	0.25	1.5	0.22	1.3	0.2
09AMH016A02	09AMH016	2.6	2.8	26.4	53.8	6.9	24.5	5.0	0.62	4.3	0.7	4.1	0.8	2.4	0.35	2.5	0.39	4.4	0.8
09AMH017A02	09AMH017	-0.5	2.4	4.5	10.9	1.7	8.2	2.3	0.86	2.9	0.5	3.2	0.6	1.9	0.29	1.9	0.28	1.2	-0.1
09AMH018A02	09AMH018	-0.5	-0.5	1.8	5.3	0.9	4.8	1.7	0.68	2.4	0.4	3.0	0.6	1.9	0.28	1.9	0.28	1.1	-0.1
09AMH021A02	09AMH021	-0.5	-0.5	3.1	8.3	1.4	7.3	2.4	0.86	3.4	0.6	4.2	0.9	2.5	0.38	2.5	0.40	1.7	0.2
09AMH022A02	09AMH022	3.3	19.8	13.8	32.4	4.9	24.2	5.7	1.97	5.5	0.8	4.8	1.0	2.9	0.42	2.6	0.38	2.4	0.1
09AMH032A02	09AMH032	-0.5	-0.5	106.0	189.0	22.0	69.6	11.7	1.12	9.3	1.5	9.3	1.9	5.8	0.93	6.4	1.05	10.6	1.9
09AMH033A02	09AMH033	1.3	0.9	16.5	37.3	5.5	23.6	6.0	2.01	6.1	1.0	5.9	1.1	3.3	0.49	3.2	0.51	4.1	0.3
09AMH034A02	09AMH034	0.9	-0.5	31.0	59.2	7.9	28.7	5.2	1.08	4.3	0.7	4.2	0.8	2.3	0.33	2.1	0.30	4.8	0.6

**Open File 013O/0139**  
**Appendix A: Major element and trace element data**

SampleID Units	StationID	Sb ppm	Cs ppm	La ppm	Ce ppm	Pr ppm	Nd ppm	Sm ppm	Eu ppm	Gd ppm	Tb ppm	Dy ppm	Ho ppm	Er ppm	Tm ppm	Yb ppm	Lu ppm	Hf ppm	Ta ppm
Detection Limit		0.5	0.5	0.1	0.1	0.5	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.05	0.1	0.04	0.2	0.1
Upper Limit																			
Analysis Method		AL 4B2Std																	
10AMH005A02	10AMH005	0.8	0.5	15.6	34.1	4.7	20.7	5.1	1.58	5.2	0.9	4.9	1.0	2.7	0.40	2.6	0.40	3.0	0.2
10AMH006A02	10AMH006	-0.5	1.3	25.8	50.0	6.0	23.6	4.5	1.23	4.0	0.6	3.2	0.6	1.8	0.26	2.7	0.26	2.7	0.3
10AMH007A02	10AMH007	0.8	0.6	2.2	6.0	1.0	5.3	1.9	0.65	2.7	0.5	3.2	0.7	2.0	0.31	2.1	0.33	1.2	0.1
10AMH009A02	10AMH009	-0.5	-0.5	3.6	9.5	1.5	7.5	2.5	0.90	3.4	0.6	4.0	0.8	2.5	0.38	2.5	0.40	1.6	0.2
10AMH010A02	10AMH010	1.0	14.8	26.8	60.3	8.6	39.6	9.1	3.68	9.3	1.4	7.8	1.5	4.1	0.60	3.7	0.59	3.8	0.4
10AMH011A02	10AMH011	-0.5	3.3	21.1	46.5	6.5	29.0	6.7	2.50	6.9	1.1	6.0	1.2	3.3	0.48	3.0	0.48	3.1	0.3
10AMH012A02	10AMH012	0.9	-0.5	2.4	5.9	0.9	4.8	1.6	0.68	2.3	0.4	2.8	0.6	1.7	0.26	1.7	0.27	1.0	0.1
10AMH013A02	10AMH013	-0.5	3.2	45.7	101.0	14.0	61.3	12.5	3.90	11.5	1.7	9.0	1.7	4.7	0.67	4.2	0.67	5.4	1.2
10AMH014A02	10AMH014	-0.5	1.9	61.4	136.0	17.8	74.2	14.3	4.13	10.7	1.4	6.3	1.0	2.4	0.30	1.9	0.26	10.9	5.9
10AMH015A02	10AMH015	-0.5	2.2	10.1	23.0	3.3	14.6	3.6	1.27	3.8	0.6	3.6	0.7	2.0	0.29	1.8	0.27	1.9	0.2
10AMH016A02	10AMH016	-0.5	-0.5	21.5	41.9	5.2	21.0	4.3	1.30	3.8	0.6	3.0	0.6	1.7	0.25	1.6	0.24	2.1	0.4
10AMH017A02	10AMH017	-0.5	3.0	37.2	87.7	12.7	56.1	11.9	3.84	10.3	1.6	8.8	1.6	4.5	0.63	4.2	0.68	4.7	1.1
10AMH018A02	10AMH018	-0.5	3.2	386.0	880.0	108	406	58.8	13.9	31.1	3.3	13.9	1.9	4.2	0.41	2.1	0.29	10.0	7.4
10AMH020A02	10AMH020	-0.5	1.6	40.0	93.0	13.4	60.0	13.1	4.21	10.9	1.7	9.2	1.7	4.8	0.67	4.3	0.71	4.8	1.3

**Open File 013O/0139**  
**Appendix A: Major element and trace element data**

SampleID Units	StationID	W ppm	Tl ppm	Bi ppm	Th ppm	U ppm	Li ppm	Cd ppm	Hf ppm	Ni ppm	Er ppm	Be ppm	Ho ppm	Cs ppm	Co ppm	Eu ppm	Bi ppm	Se ppm	Zn ppm	Ga ppm	As ppm	Rb ppm	Y ppm	Sr ppm
		1	0.1	0.4	0.1	0.1	0.5	0.01	0.1	0.5	0.1	0.1	0.1	0.05	0.1	0.05	0.02	0.1	0.1	0.02	0.1	0.1	0.01	0.5
Detection Limit																								
Upper Limit																								
Analysis Method		AL 4B2Std	AL UT6	AL UT6	AL UT6																			
06AH024A01	06AH024	-1	-0.1	-0.4	0.2	0.1	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH027A01	06AH027	-1	0.9	-0.4	1.1	1.0	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH027A02	06AH027	-99	-99	-99	-99	-99	43.8	0.4	1.3	62.8	1.2	2.1	0.4	5.06	22.0	1.22	0.39	-0.1	59.7	7.0	6.9	20.3	11.2	950
06AH028A01	06AH028	1	0.3	-0.4	8.4	4.1	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH036A01	06AH036	-1	-0.1	-0.4	9.5	3.6	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH045A01	06AH045	-1	0.7	-0.4	16.2	2.3	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH057A01	06AH057	-1	0.7	-0.4	8.9	3.0	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH057B02	06AH057	2	0.6	-0.4	1.8	1.0	86.3	-0.1	2.4	29.5	3.3	1.0	1.2	3.79	39.8	2.52	0.14	2.3	165	22.9	4.7	62.4	30.7	466
06AH060C01	06AH060	1	2.3	0.5	13.0	4.1	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH061A01	06AH061	-1	1.7	-0.4	10.6	2.3	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH063D02	06AH063	-99	-99	-99	-99	-99	4.2	0.2	5.7	3.7	4.1	5.6	1.3	1.66	3.7	1.09	0.40	0.9	78.2	19.4	8.7	153	36.3	92.8
06AH068B01	06AH068	-1	0.3	-0.4	1.3	1.1	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH070A01	06AH070	-1	0.9	-0.4	10.6	0.9	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH073A02	06AH073	-1	0.3	0.4	2.7	0.8	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH078A02	06AH078	-1	0.8	-0.4	0.3	0.6	51.1	0.1	1.1	128	1.9	1.7	0.6	16.3	48.2	0.68	0.06	-0.1	103	14.7	5.1	125	16.3	376
06AH080B02	06AH080	-1	0.1	-0.4	2.0	0.8	18.8	0.4	14.6	0.6	4.8	3.5	1.6	0.79	3.5	3.32	0.05	-0.1	145	33.8	3.3	37.0	37.0	314
06AH082A01	06AH082	-1	0.3	-0.4	8.1	2.1	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH083A01	06AH083	-1	1.0	0.6	10.8	7.1	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH084B01	06AH084	-1	0.4	-0.4	6.1	1.6	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH090C01	06AH090	-99	-99	-99	-99	-99	-0.5	0.4	13.2	-0.5	3.6	1.7	1.2	0.06	0.7	0.50	0.16	-0.1	153	24.6	11.3	1.3	27.4	54.9
06AH100A02	06AH100	-1	-0.1	-0.4	0.2	0.1	17.6	0.2	0.9	53.0	2.3	-0.1	0.7	-0.05	52.2	0.72	0.04	1.8	114	17.5	0.8	1.1	17.6	141
06AH104B01	06AH104	-1	0.6	-0.4	9.7	2.8	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH108A01	06AH108	-1	1.1	0.7	10.9	4.6	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH113A02	06AH113	-1	1.0	-0.4	16.5	3.2	5.0	0.2	6.1	2.1	5.9	2.3	2.0	1.24	2.3	1.34	0.06	5.1	134	25.5	10.5	161	50.8	109
06AH115B01	06AH115	28	0.1	1.7	2.9	1.7	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH117A02	06AH117	-1	1.0	-0.4	20.2	7.7	3.5	-0.1	8.7	1.1	3.3	4.6	1.0	1.05	2.6	0.60	0.05	4.3	39.4	22.2	6.3	129	26.8	95.1
06AH120A02	06AH120	-1	0.1	-0.4	12.0	4.0	5.4	0.9	13.2	-0.5	7.6	2.4	2.5	0.30	0.1	0.61	0.06	1.4	215	26.8	4.6	21.2	64.9	52.6
06AH122A02	06AH122	-99	-99	-99	-99	-99	5.0	-0.1	3.4	0.8	3.4	2.3	1.1	0.55	7.2	1.20	0.15	4.0	94.4	11.4	13.2	33.2	30.3	55.5
06AH126A01	06AH126	1	0.8	-0.4	0.3	1.0	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH128A02	06AH128	-1	0.8	-0.4	19.9	4.4	11.0	-0.1	8.1	0.6	4.4	4.6	1.4	0.75	1.9	0.79	0.03	1.9	195	23.1	4.5	122	37.2	57.4
06AH146A02	06AH146	-1	0.6	1.0	14.7	5.8	8.2	-0.1	16.7	-0.5	10.0	4.3	3.3	0.35	0.3	1.62	0.37	0.3	175	29.1	3.4	113	85.2	17.7
06AH155A02	06AH155	-1	0.1	-0.4	0.5	0.2	6.7	-0.1	0.8	109	0.5	-0.1	0.2	0.44	44.2	0.57	0.07	2.7	59.8	16.6	4.3	3.2	4.2	800
06AH165A02	06AH165	-1	1.0	1.0	13.5	3.8	1.3	-0.1	6.1	-0.5	3.5	3.1	1.2	1.17	0.8	0.25	0.05	0.7	39.0	25.9	2.9	150	29.5	17.8
06AH173A01	06AH173	-1	1.3	0.5	5.5	1.2	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH187A01	06AH187	-1	0.5	-0.4	7.1	1.6	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH187A02	06AH187	-99	-99	-99	-99	-99	13.6	-0.1	0.5	11.9	0.4	1.2	0.1	1.23	11.8	0.22	0.10	1.3	78.1	4.5	10.2	38.9	4.3	68.9
06AH187B01	06AH187	-1	1.2	-0.4	9.2	1.6	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH189A02	06AH189	-1	0.5	-0.4	5.5	1.5	3.2	0.2	3.1	0.6	0.4	1.3	0.1	0.53	0.9	0.27	-0.02	1.3	14.7	15.3	2.8	65.4	3.4	91.1
06AH197B02	06AH197	-1	0.3	-0.4	3.0	0.9	41.0	0.3	2.7	10.4	2.0	1.1	0.7	0.74	30.1	1.31	-0.02	-0.1	106	21.0	0.3	17.1	15.2	613
06AH200A01	06AH200	-1	0.5	-0.4	15.1	4.3	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH202A02	06AH202	-99	-99	-99	-99	0.5	-0.1	7.8	-0.5	2.9	3.0	0.6	1.26	0.2	-0.05	0.08	1.1	14.4	43.8	9.0	355	7.9	5.4	
06AH203A02	06AH203	-1	0.6	0.4	17.9	8.8	81.3	0.3	20.0	-0.5	15.2	8.0	5.1	0.94	0.2	2.06	0.14	1.9	275	33.5	6.4	208	135.0	15.6
06AH216A02	06AH216	2	2.4	2.1	9.6	5.1	4.4	-0.1	11.6	-0.5	3.1	1.5	0.9	0.76	0.2	0.29	0.73	0.2	6.2	23.9	13.7	228	20.9	8.6
06AH225B01	06AH225	-1	0.7	-0.4	11.9	5.9	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH226B01	06AH226	-1	0.2	0.4	9.6	4.6	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH228A02	06AH228	-1	0.7	-0.4	10.9	3.8	8.6	0.3	13.9	-0.5	5.9	2.1	2.0	1.32	0.1	0.60	0.08	-0.1	40.2	26.7	2.1	164	48.0	25.6
06AH246A02	06AH246	-1	0.6	-0.4	16.6	6.3	-0.5	0.3	20.3	0.6	7.0	5.2	2.2	0.78	0.5	0.98	0.11	-0.1	128	28.9	74.5	132	55.8	21.6
06AH250A01	06AH250	2	0.6	-0.4	7.6	4.1	-99	-99	-99	-99	-99	-												

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## Appendix A: Major element and trace element data

SampleID	StationID	W	Tl	Bi	Th	U	Li	Cd	Hf	Ni	Er	Be	Ho	Cs	Co	Eu	Bi	Se	Zn	Ga	As	Rb	Y	Sr
Units		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit		1	0.1	0.4	0.1	0.1	0.5	0.01	0.1	0.5	0.1	0.1	0.1	0.1	0.05	0.1	0.05	0.1	0.02	0.1	0.02	0.1	0.01	0.5
Upper Limit																								
Analysis Method		AL 4B2Std	AL 4B2Std	AL 4B2Std	AL 4B2Std	AL UT6																		
06AH279A02	06AH279	-1	1.0	0.8	0.7	0.2	105	0.3	1.6	67.3	1.8	0.5	0.6	6.81	50.9	0.93	0.22	-0.1	206	20.1	1.6	37.5	14.1	389
06AH280A01	06AH280	-1	0.6	0.4	10.5	3.1	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH286A02	06AH286	-99	-99	-99	-99	-99	7.5	0.4	7.1	26.9	2.2	1.6	0.7	0.49	40.0	1.00	1.43	7.9	104	14.9	7.6	109	21.3	87.9
06AH287A02	06AH287	-1	1.0	0.5	0.1	-0.1	47.3	0.5	0.5	91.1	0.9	0.8	0.3	0.57	45.7	0.58	0.16	-0.1	238	15.6	0.2	18.1	7.0	574
06AH290A01	06AH290	2	2.2	1.2	0.4	0.3	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH297A02	06AH297	1	1.2	-0.4	11.3	1.9	0.7	0.2	13.0	-0.5	6.2	5.3	2.1	0.76	0.3	0.57	0.05	-0.1	37.6	27.4	1.5	184	52.7	26.1
06AH299A02	06AH299	-1	0.7	-0.4	11.3	3.3	17.8	0.2	13.9	0.5	3.8	3.2	1.2	0.97	0.4	0.78	0.04	-0.1	148	28.3	2.9	159	26.6	10.6
06AH301A01	06AH301	1	1.5	-0.4	9.1	1.9	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH306A02	06AH306	-99	-99	-99	-99	-99	38.8	-0.1	11.2	-0.5	3.7	1.5	1.1	0.75	0.5	0.44	0.11	-0.1	66.0	35.5	13.6	280	27.3	16.4
06AH310A02	06AH310	1	0.9	-0.4	9.7	3.4	13.8	0.2	11.8	0.6	6.1	1.0	2.1	0.85	0.4	1.37	0.04	-0.1	122	27.2	4.8	215	50.6	26.7
06AH317A02	06AH317	-1	0.7	-0.4	12.7	1.6	1.7	0.1	10.1	-0.5	7.1	2.6	2.3	0.46	0.3	1.15	0.03	1.1	91.0	27.9	4.9	198	54.7	16.6
06AH319A02	06AH319	-1	-0.1	-0.4	0.4	0.5	15.0	0.2	0.8	78.4	1.5	0.5	0.5	0.05	40.9	0.80	0.10	-0.1	123	18.2	5.9	0.8	11.0	592
06AH325A02	06AH325	-1	0.9	-0.4	13.8	3.9	12.7	0.2	9.4	-0.5	1.4	2.1	0.5	1.30	0.8	0.53	0.05	3.3	46.5	18.2	3.1	129	10.7	30.4
06AH343A02	06AH343	-1	0.7	-0.4	11.1	3.8	7.8	0.3	12.3	0.5	4.7	3.0	1.6	1.90	0.5	1.11	0.03	-0.1	239	27.6	5.5	149	40.1	21.2
06AH345A02	06AH345	-1	-0.1	-0.4	0.3	-0.1	9.9	0.4	0.6	157	1.8	0.1	0.6	0.32	52.1	0.65	-0.02	-0.1	168	14.4	-0.1	2.2	14.8	94.6
06AH346B02	06AH346	-99	-99	-99	-99	-99	15.1	0.2	16.5	-0.5	30.2	6.4	7.5	12.0	0.6	0.16	41.3	3.0	67.9	46.8	3.4	411	194.0	11.6
06AH360A01	06AH360	3	0.8	-0.4	12.1	4.9	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH362A01	06AH362	1	0.4	-0.4	7.3	2.2	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH368A01	06AH368	-1	0.4	0.4	0.2	-0.1	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH386A02	06AH386	-99	-99	-99	-99	-99	10.6	0.2	1.3	74.9	2.0	0.5	0.7	0.36	49.0	1.15	-0.02	6.2	102	18.5	3.5	7.6	17.4	263
06AH386A03	06AH386	-1	0.1	-0.4	1.0	0.6	12.7	12.1	5.1	58.2	2.2	1.0	0.8	0.21	38.7	1.43	1.32	2.5	1790	28.8	46.5	9.6	19.4	87.2
06AH398A02	06AH398	-1	1.7	-0.4	14.2	4.5	-0.5	0.3	11.6	0.5	9.0	1.9	2.6	1.56	0.4	0.69	0.03	-0.1	161	32.4	2.8	255	64.7	39.9
06AH427B01	06AH427	-1	-0.1	-0.4	15.7	3.4	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH429A02	06AH429	-1	0.9	-0.4	15.4	4.5	8.8	0.1	10.2	-0.5	1.5	2.7	0.5	1.21	0.8	0.41	0.07	0.3	58.1	20.5	3.0	98.6	11.8	30.2
06AH430A02	06AH430	-1	0.8	-0.4	16.0	5.2	1.8	0.3	12.6	-0.5	3.3	2.7	1.1	0.59	0.9	0.10	0.05	-0.1	80.7	22.0	1.0	125	27.9	51.8
06AH433C01	06AH433	-1	-0.1	1.1	8.8	3.9	9.7	-0.1	4.3	-0.5	1.4	2.2	0.4	1.46	1.7	0.30	0.65	1.6	186	19.2	3.6	84.7	12.0	21.1
06AH435B02	06AH435	-1	1.1	-0.4	7.0	2.7	9.1	0.3	10.9	1.6	30.8	2.3	9.7	1.74	2.1	1.96	0.12	4.3	36.0	31.2	18.5	111	273.0	26.5
06AH436A02	06AH436	2	0.3	-0.4	11.3	2.6	4.5	-0.1	6.7	-0.5	5.2	9.3	1.6	0.50	0.8	0.45	0.19	0.8	80.4	26.9	2.6	111	41.3	18.3
06AH437A02	06AH437	-1	0.7	-0.4	10.0	4.0	0.6	-0.1	7.8	0.5	5.5	2.6	1.9	0.07	0.5	0.88	0.42	-0.1	17.7	23.7	0.5	1.1	49.4	36.3
06AH441A02	06AH441	-1	2.1	-0.4	1.3	0.8	2.3	-0.1	5.3	1.2	8.2	2.4	2.6	0.13	13.2	1.00	2.63	4.4	29.0	13.2	20.9	0.7	72.0	31.7
06AH456A02	06AH456	2	0.5	-0.4	10.8	3.7	3.1	0.3	11.5	0.7	4.9	4.7	1.6	1.64	1.4	1.73	0.20	-0.1	137	24.3	7.2	162	37.0	29.2
06AH467A02	06AH467	2	1.0	-0.4	8.2	2.9	-0.5	0.2	13.8	-0.5	7.7	3.2	2.6	0.28	0.2	1.47	-0.02	-0.1	54.2	25.7	5.4	73.9	63.9	20.2
06AH467B02	06AH467	-99	-99	-99	-99	1.8	-0.1	3.8	-0.5	1.1	2.2	0.3	0.86	0.2	0.16	-0.02	-0.1	26.8	16.9	0.7	140	8.8	51.5	
06AH467C02	06AH467	-99	-99	-99	-99	112	0.2	1.5	87.9	1.5	2.6	0.5	14.0	31.9	0.72	0.05	-0.1	591	19.7	4.1	122	12.4	298	
06AH468A02	06AH468	-99	-99	-99	-99	11.1	0.1	12.3	-0.5	5.8	3.7	2.0	0.85	0.3	1.10	0.06	1.1	166	25.9	5.7	120	49.3	7.2	
06AH487B02	06AH487	-99	-99	-99	-99	15.0	-0.1	5.8	6.1	1.8	2.6	0.6	4.05	5.4	0.63	0.10	2.7	65.8	19.9	13.9	85.8	14.0	195	
06AH488A02	06AH488	-99	-99	-99	-99	2.5	0.2	9.1	-0.5	5.9	2.5	2.0	0.59	0.3	1.06	-0.02	1.2	183	25.4	15.2	175	47.0	65.2	
06AH490A02	06AH490	-99	-99	-99	-99	3.1	-0.1	7.8	6.5	3.0	0.9	0.9	1.75	12.4	0.45	0.21	5.0	40.7	15.6	84.9	121	24.2	188	
06AH506A02	06AH506	-99	-99	-99	-99	4.2	-0.1	1.8	57.8	7.8	-0.1	2.7	0.71	15.2	5.21	1.68	-0.1	42.9	10.0	47.2	12.2	68.3	206	
06SK006B02	06SK006	-99	-99	-99	-99	1.4	0.3	14.5	1.2	6.0	1.5	2.0	0.77	204	0.49	-0.02	-0.1	149	24.6	-0.1	161	49.9	14.8	
06SK009A02	06SK009	-99	-99	-99	-99	18.2	0.3	12.5	-0.5	8.0	2.5	2.6	0.14	117	0.50	-0.02	0.6	113	26.1	-0.1	1.8	63.1	27.2	
06SK010A02	06SK010	-99	-99	-99	-99	1.1	1.5	11.0	-0.5	2.8	3.2	0.9	-0.05	111	0.31	-0.02	-0.1	392	31.4	-0.1	1.6	22.1	36.0	
06SK011A02	06SK011	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
06SK013A02	06SK013	-99	-99	-99	-99	13.4	1.7	9.4	1.1	4.1	3.3	1.4	1.25	148	1.42	-0.02	-0.1	479	29.5	-0.1	124	32.6	138	
06SK013B02	06SK013	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
06SK039A02	06SK039	-99	-99	-99	-99	3.6	0.5	13.1	0.9	7.9	4.2	2.6	0.75	175	0.54	-0.02	-0.1	174	25.4	-0.1	134	65.6		

**Open File 013O/0139**

## **Appendix A: Major element and trace element data**

SampleID	StationID	W	Tl	Bi	Th	U	Li	Cd	Hf	Ni	Er	Be	Ho	Cs	Co	Eu	Bi	Se	Zn	Ga	As	Rb	Y	Sr			
Units		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm			
Detection Limit		1	0.1	0.4	0.1	0.1	0.5	0.01	0.1	0.5	0.1	0.1	0.1	0.05	0.1	0.05	0.1	0.02	0.1	79.5	26.8	-0.1	127	50.6	10.7		
Upper Limit																											
Analysis Method		AL 4B2Std	AL UT6																								
06SK048A02	06SK048	-99	-99	-99	-99	-99	18.5	0.2	15.5	0.7	6.5	2.2	2.1	0.33	127	0.48	-0.02	-0.1	79.5	26.8	-0.1	127	50.6	10.7			
08CL346A02	08CL346	-99	-99	-99	-99	-99	5.9	-99	-99	-99	-99	-99	-99	0.62	-99	-99	-99	-99	-99	-99	-99	-99	35.6	-99	264.2	19.6	
08CL346B02	08CL346	-99	-99	-99	-99	-99	6.0	-99	-99	-99	-99	-99	-99	0.69	-99	-99	-99	-99	-99	-99	-99	-99	-99	36.7	-99	262.8	17.6
08CL370A02	08CL370	-99	-99	-99	-99	-99	6.0	-99	-99	-99	-99	-99	-99	1.03	-99	-99	-99	-99	-99	-99	-99	-99	-99	26.2	-99	269.7	17.6
08CL371A02	08CL371	-99	-99	-99	-99	-99	2.1	-99	-99	-99	-99	-99	-99	1.69	-99	-99	-99	-99	-99	-99	-99	-99	-99	16.8	-99	83.7	10.3
08CL374A02	08CL374	-99	-99	-99	-99	-99	7.0	-99	-99	-99	-99	-99	-99	0.26	-99	-99	-99	-99	-99	-99	-99	-99	-99	43.7	-99	265.6	26.6
08CL384B02	08CL384	-99	-99	-99	-99	-99	3.1	-99	-99	-99	-99	-99	-99	1.21	-99	-99	-99	-99	-99	-99	-99	-99	-99	14.3	-99	103.0	6.4
08CL388A02	08CL388	-99	-99	-99	-99	-99	5.9	-99	-99	-99	-99	-99	-99	0.93	-99	-99	-99	-99	-99	-99	-99	-99	-99	35.3	-99	251.6	19.1
08CL389A02	08CL389	-99	-99	-99	-99	-99	10.3	-99	-99	-99	-99	-99	-99	1.73	-99	-99	-99	-99	-99	-99	-99	-99	-99	37.3	-99	502.7	19.8
08CL398A02	08CL398	-99	-99	-99	-99	-99	1.3	-99	-99	-99	-99	-99	-99	1.40	-99	-99	-99	-99	-99	-99	-99	-99	-99	13.1	-99	39.7	5.7
08CL398B02	08CL398	-99	-99	-99	-99	-99	10.2	-99	-99	-99	-99	-99	-99	0.30	-99	-99	-99	-99	-99	-99	-99	-99	-99	47.4	-99	364.4	25.0
08CL399A02	08CL399	-99	-99	-99	-99	-99	11.2	-99	-99	-99	-99	-99	-99	1.12	-99	-99	-99	-99	-99	-99	-99	-99	-99	56.6	-99	377.6	29.9
08CL400A02	08CL400	-99	-99	-99	-99	-99	7.0	-99	-99	-99	-99	-99	-99	0.63	-99	-99	-99	-99	-99	-99	-99	-99	-99	38.7	-99	306.9	19.8
08CL452A02	08CL452	-99	-99	-99	-99	-99	10.5	-99	-99	-99	-99	-99	-99	0.22	-99	-99	-99	-99	-99	-99	-99	-99	-99	47.1	-99	474.5	36.6
08CL453A02	08CL453	-99	-99	-99	-99	-99	11.0	-99	-99	-99	-99	-99	-99	1.45	-99	-99	-99	-99	-99	-99	-99	-99	-99	89.2	-99	535.9	33.3
08CL454A02	08CL454	-99	-99	-99	-99	-99	5.8	-99	-99	-99	-99	-99	-99	2.15	-99	-99	-99	-99	-99	-99	-99	-99	-99	32.2	-99	241.7	12.3
08CL456A02	08CL456	-99	-99	-99	-99	-99	8.1	-99	-99	-99	-99	-99	-99	0.81	-99	-99	-99	-99	-99	-99	-99	-99	-99	34.1	-99	355.3	19.2
08CL458A02	08CL458	-99	-99	-99	-99	-99	5.7	-99	-99	-99	-99	-99	-99	0.89	-99	-99	-99	-99	-99	-99	-99	-99	-99	47.4	-99	251.0	15.4
08CL465A02	08CL465	-99	-99	-99	-99	-99	2.0	-99	-99	-99	-99	-99	-99	1.58	-99	-99	-99	-99	-99	-99	-99	-99	-99	15.7	-99	83.8	3.7
08EW004A02	08EW004	-1	0.7	-0.4	1.9	1.4	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08EW006A02	08EW006	3	0.7	-0.4	0.5	0.5	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08EW009A02	08EW009	-1	0.6	-0.4	3.4	1.0	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08EW010A02	08EW010	-1	1.1	-0.4	3.3	1.6	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08EW011A02	08EW011	-1	0.8	-0.4	2.2	1.1	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08EW012A02	08EW012	1	0.9	-0.4	2.6	0.8	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08EW013A02	08EW013	1	0.7	-0.4	3.8	1.0	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08EW014A02	08EW014	-1	1.2	-0.4	1.9	1.0	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08EW015A02	08EW015	2	0.8	-0.4	3.5	1.0	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08EW018A02	08EW018	-1	0.9	-0.4	8.6	2.9	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08EW019A02	08EW019	-1	2.7	-0.4	1.4	0.7	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08EW022A02	08EW022	-1	1.1	-0.4	0.4	0.3	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH001A02	09AMH001	-1	0.2	-0.4	13.0	1.3	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH002A02	09AMH002	-1	0.6	0.8	1.4	0.9	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH003A02	09AMH003	-1	-0.1	-0.4	0.3	0.4	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH004A02	09AMH004	-1	-0.1	-0.4	0.2	0.5	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH005A02	09AMH005	-1	-0.1	-0.4	2.1	0.8	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH006A02	09AMH006	-1	0.1	-0.4	1.7	1.1	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH007A02	09AMH007	3	0.6	-0.4	5.6	1.4	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH008A02	09AMH008	-1	1.0	-0.4	3.3	0.5	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH009A02	09AMH009	-1	0.8	-0.4	10.7	1.6	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH011A02	09AMH011	-1	-0.1	-0.4	0.1	-0.1	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH012B02	09AMH012	-1	0.5	-0.4	1.9	0.9	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH013A02	09AMH013	-1	0.7	-0.4	12.1	2.9	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH015A02	09AMH015	-1	-0.1	-0.4	0.6	0.4	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH016A02	09AMH016	-1	0.5	-0.4	5.7	2.2	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH017A02	09AMH017	-1	0.4	-0.4	0.3	0.3	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH018A02	09AMH018	-1	-0.1	-0.4	0.1	-0.1	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH021A02	09AMH021	-1	-0.1	-0.4	0.3	-0.1	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH022A02	09AMH022	5	0.5	-0.4	0.4	1.3	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH032A02	09AMH032	-1	0.6	-0.4	16.8	4.0	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH033A02	09AMH033	-1	-0.1	-0.4	2.9	0.9	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH034A02	09AMH034	-1	0.4	-0.4	8.5	1.6	-99	-99	-99	-99</																	

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## Appendix A: Major element and trace element data

SampleID Units	StationID	W ppm	Tl ppm	Bi ppm	Th ppm	U ppm	Li ppm	Cd ppm	Hf ppm	Ni ppm	Er ppm	Be ppm	Ho ppm	Cs ppm	Co ppm	Eu ppm	Bi ppm	Se ppm	Zn ppm	Ga ppm	As ppm	Rb ppm	Y ppm	Sr ppm
		1	0.1	0.4	0.1	0.1	0.5	0.01	0.1	0.5	0.1	0.1	0.1	0.05	0.1	0.05	0.02	0.1	0.1	0.02	0.1	0.1	0.01	0.5
Detection Limit																								
Upper Limit																								
Analysis Method		AL 4B2Std	AL 4B2Std	AL 4B2Std	AL 4B2Std	AL UT6	AL UT6	AL UT6	AL UT6	AL UT6	AL UT6	AL UT6	AL UT6	AL UT6	AL UT6	AL UT6	AL UT6	AL UT6	AL UT6	AL UT6	AL UT6	AL UT6	AL UT6	AL UT6
10AMH005A02	10AMH005	1	0.3	-0.4	1.4	0.8	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
10AMH006A02	10AMH006	-1	0.4	-0.4	3.8	1.2	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
10AMH007A02	10AMH007	-1	0.3	-0.4	0.6	0.2	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
10AMH009A02	10AMH009	-1	-0.1	-0.4	0.3	0.3	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
10AMH010A02	10AMH010	1	0.9	0.7	1.0	0.6	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
10AMH011A02	10AMH011	1	0.5	0.5	1.0	0.5	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
10AMH012A02	10AMH012	-1	-0.1	-0.4	0.1	0.1	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
10AMH013A02	10AMH013	-1	0.3	-0.4	1.5	0.5	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
10AMH014A02	10AMH014	3	-0.1	-0.4	9.9	2.7	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
10AMH015A02	10AMH015	2	0.3	-0.4	0.6	0.3	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
10AMH016A02	10AMH016	44	0.4	-0.4	3.2	0.8	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
10AMH017A02	10AMH017	8	0.3	-0.4	1.2	0.4	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
10AMH018A02	10AMH018	1	2.5	-0.4	23.7	4.4	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
10AMH020A02	10AMH020	-1	0.2	-0.4	1.2	0.4	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99

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## **Appendix A: Major element and trace element data**

SampleID	StationID	Zr	Nb	Mo	In	Sn	Sb	Te	Ba	La	Ce	Pr	Nd	Sm	Gd	Tb	Dy	Cu	Ge	Tm	Yb	Lu	Ta	W	Re	Tl
Units		ppm																								
Detection Limit		1	0.1	0.01	0.1	1	0.01	0.1	0.5	0.5	0.01	0.1	0.02	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.001	0.1
Upper Limit																										200
Analysis Method		AL UT6																								
06AH024A01	06AH024	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH027A01	06AH027	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH027A02	06AH027	45	4.1	1.5	-0.1	-1	1.7	2.9	248	14.5	31.4	4.0	15.6	3.0	2.7	0.4	2.2	23.8	-0.1	0.2	1.0	0.1	-0.1	1.0	0.007	0.14
06AH028A01	06AH028	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH036A01	06AH036	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH045A01	06AH045	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH057A01	06AH057	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH057B02	06AH057	93	7.7	1.9	-0.1	2	0.8	0.4	1090	32.0	72.6	9.5	39.5	8.3	7.5	1.0	6.2	1.6	0.4	0.5	2.9	0.4	0.3	0.9	0.003	0.65
06AH060C01	06AH060	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH061A01	06AH061	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH063D02	06AH063	197	16.2	2.1	0.2	12	0.7	0.2	420	27.1	69.3	8.0	33.5	8.2	7.6	1.1	7.2	15.5	0.2	0.6	4.4	0.7	0.6	2.6	-0.001	1.25
06AH068B01	06AH068	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH070A01	06AH070	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH073A02	06AH073	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH078A02	06AH078	33	2.7	0.8	-0.1	-1	0.5	0.6	89	2.1	6.4	1.0	5.3	1.8	2.6	0.4	3.1	33.1	-0.1	0.3	1.8	0.3	0.1	1.1	0.004	0.84
06AH080B02	06AH080	653	40.0	3.7	0.2	6	-0.1	0.2	3430	31.0	92.6	11.5	47.9	10.5	9.4	1.3	8.6	-0.2	0.5	0.7	4.3	0.6	2.9	-0.1	0.002	0.15
06AH082A01	06AH082	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH083A01	06AH083	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH084B01	06AH084	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH090C01	06AH090	535	20.1	3.3	-0.1	4	0.3	-0.1	173	27.4	60.5	7.8	30.5	6.3	5.7	0.9	5.7	24.2	0.1	0.6	3.9	0.6	0.9	0.2	0.005	-0.05
06AH100A02	06AH100	21	5.8	0.7	-0.1	-1	-0.1	0.6	27	2.3	7.0	1.1	5.8	2.0	2.7	0.5	3.5	196	0.1	0.3	2.1	0.3	1.0	-0.1	0.004	0.07
06AH104B01	06AH104	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH108A01	06AH108	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH113A02	06AH113	223	19.7	3.4	0.1	4	0.7	-0.1	985	72.3	186	17.2	62.0	11.8	10.3	1.5	10.1	2.3	0.4	0.9	5.4	0.8	0.7	-0.1	0.001	1.03
06AH115B01	06AH115	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH117A02	06AH117	299	21.2	1.8	-0.1	4	0.3	-0.1	878	29.2	77.5	7.3	25.6	5.1	4.3	0.7	4.9	3.6	0.1	0.5	3.5	0.5	1.4	0.3	0.004	0.98
06AH120A02	06AH120	484	21.9	3.9	0.1	8	0.2	-0.1	229	93.7	217	22.1	81.9	14.9	12.0	1.8	11.8	5.1	0.2	1.1	7.8	1.2	0.9	0.3	0.001	0.15
06AH122A02	06AH122	141	10.5	0.7	-0.1	2	0.4	0.2	217	25.6	58.7	6.9	27.7	5.8	5.5	0.8	5.5	211	0.1	0.5	3.1	0.5	0.3	0.3	0.004	0.20
06AH126A01	06AH126	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH128A02	06AH128	251	18.7	3.7	-0.1	5	0.2	-0.1	528	108	284	21.4	66.6	10.2	7.7	1.1	7.0	-0.2	0.2	0.7	4.7	0.7	0.8	0.5	0.002	0.72
06AH146A02	06AH146	649	27.6	3.6	0.2	6	0.4	0.1	135	106	237	27.3	101	20.3	16.8	2.6	16.4	-0.2	0.3	1.5	9.5	1.5	1.1	0.3	0.007	0.55
06AH155A02	06AH155	21	2.0	0.3	-0.1	-1	0.4	1.6	550	3.8	7.9	1.2	5.1	1.2	1.3	0.2	1.0	12.3	-0.1	-0.1	0.5	-0.1	0.2	0.1	0.002	0.12
06AH165A02	06AH165	201	15.1	0.8	-0.1	3	-0.1	-0.1	123	21.4	49.5	6.8	27.0	6.2	5.7	0.9	5.9	-0.2	0.5	0.5	3.5	0.6	0.5	-0.1	0.003	0.92
06AH173A01	06AH173	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH187A01	06AH187	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH187B01	06AH187	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH189A02	06AH189	118	5.9	0.2	-0.1	-1	-0.1	-0.1	1060	8.6	15.9	1.7	5.7	0.9	0.9	0.1	0.6	11.3	0.1	-0.1	0.5	-0.1	0.5	0.4	0.003	0.47
06AH197B02	06AH197	99	5.3	0.5	-0.1	-1	-0.1	0.5	821	13.8	35.6	4.4	18.7	4.4	4.5	0.6	3.6	27.9	0.1	0.3	1.7	0.3	0.3	0.3	0.002	0.33
06AH200A01	06AH200	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH202A02	06AH202	81	24.8	9.5	-0.1	1	0.3	-0.1	22	5.2	10.7	1.9	6.4	2.0	1.4	0.3	2.9	37.7	0.1	0.6	6.2	1.0	3.4	0.3	-0.001	1.39
06AH203A02	06AH203	796	40.9	1.0	0.2	8	0.9	0.2	35	105	239	29.9	115	26.4	26.4	4.1	25.5	1.4	0.4	2.3	14.6	2.2	2.7	0.8	0.004	0.57
06AH216A02	06AH216	393	19.4	0.3	0.3	3	2.2	-0.1	455	44.7	91.0	10.6	36.3	6.5	4.6	0.7	4.5	-0.2	0.2	0.5	3.5	0.6	1.3	2.1	-0.001	2.20
06AH225B01	06AH225	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH226B01	06AH226	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH228A02	06AH228	512	22.9	0.8	-0.1	3	0.2	0.1	119	57.8	154	14.8	55.6	11.5	10.7	1.6	9.6	11.0	0.2	0.9	5.9	0.9	1.3	1.1	0.004	0.71
06AH246A02	06AH246	789	31.4	1.4	0.2	6	2.7	0.2	104	40.0	107	11.8	47.7	10.8	11.1	1.7	10.1	-0.2	0.2	1.0	6.8	1.0	2.0	1.3	0.001	0.57
06AH250A01	06AH250	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH266A02	06AH266	98	12.5	0.5	-0.1	1	0.2	-0.1	67	5.2	10.1	1.1	3.7	0.8	0.8	0.1	0.9	12.6	0.1	0.1	1.0	0.2	0.9	0.2	0.002	0.77
06AH273A01	06AH273	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH276B02	06AH276	102	19.8	7.0	-0.1	2	-0.1	-0.1	137	4.3	8.1	1.0	3.4	0.7	0.8	0.1	0.9	20.8	-0.1	0.2	1.5	0.3	1.5	1.1		

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## **Appendix A: Major element and trace element data**

SampleID	StationID	Zr	Nb	Mo	In	Sn	Sb	Te	Ba	La	Ce	Pr	Nd	Sm	Gd	Tb	Dy	Cu	Ge	Tm	Yb	Lu	Ta	W	Re	Tl
		Units	ppm																							
Detection Limit			1	0.1	0.01	0.1	1	0.01	0.1	0.5	0.01	0.1	0.02	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.001	0.1
Upper Limit																										200
Analysis Method		AL UT6																								
06AH279A02	06AH279	30	2.9	0.4	-0.1	-1	0.2	0.5	398	5.5	14.1	2.0	9.2	2.4	2.9	0.5	2.9	-0.2	0.1	0.3	1.7	0.3	0.3	0.4	0.001	0.93
06AH280A01	06AH280	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH286A02	06AH286	260	11.0	34.3	0.1	11	0.4	1.0	294	14.2	46.5	6.6	26.8	5.7	4.4	0.6	3.6	137	0.2	0.3	2.1	0.3	0.7	8.0	0.004	0.50
06AH287A02	06AH287	11	1.3	16.8	-0.1	-1	0.4	0.6	547	1.3	3.3	0.5	2.6	0.9	1.4	0.2	1.5	-0.2	-0.1	0.1	0.9	0.1	0.1	0.6	0.005	0.98
06AH290A01	06AH290	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH297A02	06AH297	501	21.2	0.3	-0.1	3	1.4	-0.1	296	65.7	141	16.8	60.9	12.5	11.5	1.7	10.5	0.2	0.2	1.0	6.3	1.0	1.3	1.9	0.002	1.15
06AH299A02	06AH299	519	24.2	1.3	0.2	4	1.1	0.1	80	42.6	129	11.5	42.3	8.3	6.6	0.9	5.9	1.1	0.3	0.6	4.5	0.8	1.6	0.8	0.001	0.68
06AH301A01	06AH301	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH306A02	06AH306	445	18.0	3.3	-0.1	4	0.7	-0.1	611	43.2	90.7	9.9	34.8	6.5	5.0	0.7	5.0	35.2	0.2	0.6	4.3	0.6	1.0	2.8	0.006	2.14
06AH310A02	06AH310	438	22.3	0.4	0.1	2	1.5	-0.1	71	80.3	181	20.3	74.9	13.9	11.7	1.7	10.3	-0.2	0.3	0.9	6.2	1.0	1.3	2.2	0.002	0.99
06AH317A02	06AH317	292	25.6	0.2	0.2	4	1.1	-0.1	68	70.5	158	18.1	67.5	13.4	11.6	1.8	11.2	-0.2	0.5	1.1	7.4	1.1	1.6	1.6	0.003	0.62
06AH319A02	06AH319	13	2.7	3.0	-0.1	-1	3.1	0.8	172	4.1	9.9	1.5	6.8	1.9	2.3	0.4	2.5	-0.2	-0.1	0.2	1.4	0.2	0.2	0.9	0.002	0.09
06AH325A02	06AH325	394	16.2	0.4	-0.1	2	-0.1	-0.1	1330	17.3	43.6	4.9	17.6	3.4	2.7	0.4	2.5	-0.2	0.3	0.2	1.6	0.2	0.7	0.2	0.002	0.84
06AH343A02	06AH343	496	22.2	1.3	0.2	3	0.7	-0.1	68	57.0	134	15.0	58.8	11.9	9.9	1.4	8.0	4.4	0.5	0.7	4.9	0.8	1.5	0.2	0.004	0.61
06AH345A02	06AH345	13	2.2	0.4	-0.1	-1	0.1	1.4	25	2.2	5.9	0.9	4.8	1.8	2.4	0.4	2.7	38.4	-0.1	0.3	1.7	0.3	0.2	0.3	0.007	-0.05
06AH346B02	06AH346	462	78.2	0.4	0.8	12	0.2	0.2	38	11.3	26.2	3.5	15.3	6.4	10.5	3.0	26.5	29.9	0.1	5.4	40.4	6.0	2.3	-0.1	-0.001	2.14
06AH360A01	06AH360	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH362A01	06AH362	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH368A01	06AH368	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH386A02	06AH386	41	4.2	0.4	-0.1	-1	0.5	0.7	111	7.8	17.9	2.5	11.3	3.1	3.7	0.6	3.5	181	0.4	0.3	1.8	0.3	0.3	0.1	0.004	0.12
06AH386A03	06AH386	178	13.3	587	-0.1	-1	0.7	0.3	101	60.7	129	16.4	62.5	11.4	7.9	0.9	4.4	374	0.2	0.3	2.0	0.3	0.6	1.8	0.014	0.59
06AH398A02	06AH398	420	24.9	-0.1	-0.1	5	0.6	-0.1	582	33.3	93.7	8.4	31.3	7.3	7.7	1.4	10.9	0.6	0.2	1.5	9.7	1.4	1.4	1.2	0.004	1.57
06AH427B01	06AH427	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06AH429A02	06AH429	413	19.0	0.5	-0.1	2	0.1	-0.1	1400	21.6	54.3	4.6	15.8	2.7	2.5	0.3	2.3	-0.2	0.4	0.2	1.5	0.2	1.1	0.2	0.002	0.81
06AH430A02	06AH430	479	23.4	1.2	-0.1	2	-0.1	-0.1	1410	64.6	171	13.5	45.4	7.4	6.4	0.9	5.4	25.6	0.2	0.5	3.3	0.5	1.4	0.3	0.001	0.76
06AH433C01	06AH433	131	35.4	3.6	0.3	7	0.2	0.1	610	17.8	34.2	3.8	13.5	2.4	2.0	0.3	2.2	-0.2	0.3	0.2	1.7	0.3	2.3	0.1	0.001	0.79
06AH435B02	06AH435	402	21.8	112	1.6	35	1.1	0.3	192	50.0	109	14.6	70.6	25.9	34.3	6.4	46.2	-0.2	0.3	4.6	31.5	4.8	0.6	8.2	0.026	0.67
06AH436A02	06AH436	233	23.1	1.0	-0.1	4	0.1	-0.1	435	21.1	61.8	5.4	20.4	5.2	6.2	1.1	8.0	6.1	0.2	0.7	5.0	0.8	0.8	1.0	0.002	0.59
06AH437A02	06AH437	243	20.8	1.0	0.1	3	0.3	-0.1	12	84.0	177	18.8	66.3	12.2	10.4	1.5	9.0	-0.2	0.2	0.8	5.6	0.9	1.2	0.4	-0.001	-0.05
06AH441A02	06AH441	185	19.2	1040	-0.1	5	0.8	1.1	101	96.9	183	21.3	77.1	14.3	12.3	1.9	12.8	111	0.2	1.2	8.2	1.3	0.3	0.2	0.073	-0.05
06AH456A02	06AH456	465	18.3	1.5	0.1	3	0.6	0.1	212	27.9	85.9	7.9	31.9	7.2	7.3	1.2	7.6	19.6	0.2	0.8	5.3	0.8	1.1	1.0	0.003	1.23
06AH467A02	06AH467	563	23.3	0.5	-0.1	4	1.4	-0.1	116	85.6	180	21.6	81.4	15.6	13.5	2.0	12.1	-0.2	0.3	1.2	7.6	1.2	1.4	1.0	-0.001	0.31
06AH467B02	06AH467	107	11.7	0.5	-0.1	-1	-0.1	-0.1	395	6.0	11.8	1.4	5.2	1.2	1.2	0.2	1.4	0.4	-0.1	0.2	1.3	0.2	0.9	0.2	0.002	0.71
06AH467C02	06AH467	51	3.6	0.9	0.4	4	0.6	0.7	662	8.5	18.6	2.3	9.7	2.5	2.8	0.4	2.7	-0.2	0.2	0.2	1.3	0.2	0.2	0.6	0.004	1.92
06AH468A02	06AH468	485	19.4	1.1	0.2	3	0.5	-0.1	35	68.8	129	17.6	66.4	12.6	11.1	1.6	9.8	0.8	0.3	0.9	5.7	0.9	1.1	1.0	0.002	0.48
06AH487B02	06AH487	207	13.0	2.5	-0.1	3	1.8	0.2	977	20.4	54.8	5.8	22.4	4.3	3.3	0.5	2.8	-0.2	0.1	0.3	1.7	0.2	0.8	0.3	0.003	0.79
06AH488A02	06AH488	350	21.7	0.3	0.1	2	3.6	-0.1	505	64.9	144	15.1	56.6	10.8	10.0	1.5	9.7	-0.2	0.2	0.9	6.2	1.0	1.1	1.6	0.001	0.87
06AH490A02	06AH490	269	10.4	40.1	-0.1	3	4.7	0.2	445	28.7	64.9	7.1	25.9	4.8	4.2	0.7	4.4	80.3	0.1	0.4	3.1	0.5	0.6	1.0	0.001	1.16
06AH506A02	06AH506	45	22.5	2.3	0.1	2	11.8	0.1	221	68.4	170	23.3	90.0	17.5	15.0	2.2	13.7	-0.2	0.4	1.0	6.6	0.8	0.2	-0.1	0.005	0.09
06SK006B02	06SK006	530	19.1	13.5	0.2	4	0.5	-0.1	233	39.1	121	10.6	39.6	8.5	8.5	1.4	9.2	10.7	0.2	0.9	6.0	0.9	2.1	201	0.009	0.95
06SK009A02	06SK009	437	15.1	0.2	0.2	8	0.2	-0.1	74	51.5	96.0	11.9	44.4	10.0	10.0	1.8	12.0	-0.2	0.2	1.2	7.9	1.2	0.9	185	0.002	-0.05
06SK010A02	06SK010	388	5.8	7.8	0.1	2	0.1	-0.1	99	58.6	65.0	13.5	49.1	8.2	5.5	0.7	4.2	8.4	0.2	0.4	3.0	0.4	0.2	165	0.003	-0.05
06SK011A02	06SK011	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06SK013A02	06SK013	392	15.3	1.2	0.2	2	0.7	-0.1	2370	22.5	74.0	6.6	26.2	5.8	6.4	1.0	7.0	10.5	0.1	0.6	3.9	0.5	1.5	201	0.012	1.09
06SK013B02	06SK013	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
06SK039A02	06SK039	514	17.5	0.6	0.3	8	0.6	-0.1	152	59.5	148	14.5	53.9	11.3	11.3	1.8	12.3	3.7	0.2	1.2	8.0	1.2	1.0	201	0.005	0.95
06SK040A02	06SK040	482	7.8	-0.1	0.1	5	0.2	-0.1	194	49.1	124	12.3	46.4	9.5	9.7	1.6	10.5	4.8	0.2	1.1	7.2	1.1	0.8	176	0.001	0.75
06SK041A02	06SK041	200	12.5	1.4	-0.1	3	0.3	-0.1	143	22.3	51.9	5.3	18													

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## Appendix A: Major element and trace element data

SampleID	StationID	Zr	Nb	Mo	In	Sn	Sb	Te	Ba	La	Ce	Pr	Nd	Sm	Gd	Tb	Dy	Cu	Ge	Tm	Yb	Lu	Ta	W	Re	Tl	
Units		ppm																									
Detection Limit		1	0.1	0.01	0.1	1	0.01	0.1	0.5	0.5	0.01	0.02	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.001	0.1	
Upper Limit																										200	
Analysis Method		AL UT6																									
06SK048A02	06SK048	558	11.7	2.1	-0.1	5	0.4	-0.1	87	55.3	169	13.9	51.0	10.3	9.7	1.5	9.7	10.0	0.2	1.0	6.7	1.0	0.8	175	0.006	0.85	
08CL346A02	08CL346	.99	.99	.99	.99	.99	.99	.99	265	50.6	101	12.0	44.5	8.3	5.2	7.4	1.4	4.4	0.7	4.5	0.7	1.0	.99	.99	8.2	.99	
08CL346B02	08CL346	.99	.99	.99	.99	.99	.99	.99	378	60.6	116	13.6	52.0	9.4	7.3	1.2	7.6	1.5	4.8	0.7	5.0	0.7	0.9	.99	.99	8.2	.99
08CL370A02	08CL370	.99	.99	.99	.99	.99	.99	.99	1101	50.1	101	11.5	43.1	7.2	5.3	0.8	5.1	1.0	3.1	0.5	3.3	0.5	0.9	.99	.99	10.8	.99
08CL371A02	08CL371	.99	.99	.99	.99	.99	.99	.99	793	28.1	61	8.1	32.7	6.0	4.8	0.7	3.6	0.7	1.9	0.3	1.8	0.3	0.4	.99	.99	1.1	.99
08CL374A02	08CL374	.99	.99	.99	.99	.99	.99	.99	110	88.0	170	19.9	72.7	12.3	9.0	1.4	8.5	1.7	5.1	0.8	5.5	0.8	1.4	.99	.99	17.2	.99
08CL384B02	08CL384	.99	.99	.99	.99	.99	.99	.99	875	23.3	45	5.5	21.3	4.7	3.9	0.6	3.3	0.6	1.7	0.3	1.6	0.3	0.4	.99	.99	3.3	.99
08CL388A02	08CL388	.99	.99	.99	.99	.99	.99	.99	140	43.6	110	11.1	45.8	9.4	7.8	1.3	8.0	1.5	4.7	0.7	5.0	0.9	1.1	.99	.99	6.7	.99
08CL389A02	08CL389	.99	.99	.99	.99	.99	.99	.99	1281	51.2	107	12.6	49.2	10.2	8.5	1.4	8.3	1.6	4.7	0.7	4.7	0.8	1.1	.99	.99	4.6	.99
08CL398A02	08CL398	.99	.99	.99	.99	.99	.99	.99	165	12.1	26	3.7	16.9	3.6	3.5	0.5	3.1	0.6	1.6	0.2	1.5	0.3	0.2	.99	.99	0.6	.99
08CL398B02	08CL398	.99	.99	.99	.99	.99	.99	.99	48.0	62.7	126	15.9	59.1	12.3	10.0	1.6	9.9	1.9	5.8	0.9	6.0	1.0	1.6	.99	.99	14.9	.99
08CL399A02	08CL399	.99	.99	.99	.99	.99	.99	.99	606	146	272	29.1	95.9	16.8	11.7	1.9	11.4	2.1	6.4	1.0	6.6	1.1	1.7	.99	.99	23.3	.99
08CL400A02	08CL400	.99	.99	.99	.99	.99	.99	.99	773	58.0	104	14.4	53.8	8.5	6.9	1.1	7.1	1.6	4.7	0.7	5.2	0.8	1.0	.99	.99	8.2	.99
08CL452A02	08CL452	.99	.99	.99	.99	.99	.99	.99	211	118	239	27.6	99.0	16.1	11.6	1.5	9.0	1.9	5.6	0.9	5.7	0.9	1.6	.99	.99	15.4	.99
08CL453A02	08CL453	.99	.99	.99	.99	.99	.99	.99	509	94.4	195	23.9	92.2	18.5	16.4	2.6	16.7	3.6	10.3	1.5	9.7	1.4	1.9	.99	.99	13.9	.99
08CL454A02	08CL454	.99	.99	.99	.99	.99	.99	.99	1279	36.9	87	10.6	44.0	8.6	7.7	1.1	6.4	1.3	3.8	0.5	3.4	0.5	0.5	.99	.99	2.9	.99
08CL456A02	08CL456	.99	.99	.99	.99	.99	.99	.99	623	60.6	121	14.3	51.8	8.9	6.8	1.0	6.3	1.3	3.9	0.6	4.2	0.6	1.1	.99	.99	12.1	.99
08CL458A02	08CL458	.99	.99	.99	.99	.99	.99	.99	327	52.9	118	13.6	55.0	11.2	9.7	1.4	8.5	1.8	5.3	0.8	5.3	0.8	0.9	.99	.99	7.7	.99
08CL465A02	08CL465	.99	.99	.99	.99	.99	.99	.99	1368	16.5	38	5.2	23.9	5.4	5.2	0.6	3.2	0.6	1.7	0.2	1.4	0.2	-0.1	.99	.99	1.5	.99
08EW004A02	08EW004	.99	.99	.99	.99	.99	.99	.99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08EW006A02	08EW006	.99	.99	.99	.99	.99	.99	.99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08EW009A02	08EW009	.99	.99	.99	.99	.99	.99	.99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08EW010A02	08EW010	.99	.99	.99	.99	.99	.99	.99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08EW011A02	08EW011	.99	.99	.99	.99	.99	.99	.99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08EW012A02	08EW012	.99	.99	.99	.99	.99	.99	.99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08EW013A02	08EW013	.99	.99	.99	.99	.99	.99	.99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08EW014A02	08EW014	.99	.99	.99	.99	.99	.99	.99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08EW015A02	08EW015	.99	.99	.99	.99	.99	.99	.99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08EW018A02	08EW018	.99	.99	.99	.99	.99	.99	.99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08EW019A02	08EW019	.99	.99	.99	.99	.99	.99	.99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08EW022A02	08EW022	.99	.99	.99	.99	.99	.99	.99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH001A02	09AMH001	.99	.99	.99	.99	.99	.99	.99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH002A02	09AMH002	.99	.99	.99	.99	.99	.99	.99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH003A02	09AMH003	.99	.99	.99	.99	.99	.99	.99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH004A02	09AMH004	.99	.99	.99	.99	.99	.99	.99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH005A02	09AMH005	.99	.99	.99	.99	.99	.99	.99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH006A02	09AMH006	.99	.99	.99	.99	.99	.99	.99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH007A02	09AMH007	.99	.99	.99	.99	.99	.99	.99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH008A02	09AMH008	.99	.99	.99	.99	.99	.99	.99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH009A02	09AMH009	.99	.99	.99	.99	.99	.99	.99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH011A02	09AMH011	.99	.99	.99	.99	.99	.99	.99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH012B02	09AMH012	.99	.99	.99	.99	.99	.99	.99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH013A02	09AMH013	.99	.99	.99	.99	.99	.99	.99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH015A02	09AMH015	.99	.99	.99	.99	.99	.99	.99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
09AMH016A02	09AMH016	.99	.99	.99	.99	.99	.99	.99	-99																		

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## Appendix A: Major element and trace element data

SampleID	StationID	Zr	Nb	Mo	In	Sn	Sb	Te	Ba	La	Ce	Pr	Nd	Sm	Gd	Tb	Dy	Cu	Ge	Tm	Yb	Lu	Ta	W	Re	Tl	
Units		ppm																									
Detection Limit		1	0.1	0.01	0.1	1	0.01	0.1	0.5	0.5	0.01	0.02	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.001	0.1	
Upper Limit																											200
Analysis Method		AL UT6																									
10AMH005A02	10AMH005	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
10AMH006A02	10AMH006	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
10AMH007A02	10AMH007	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
10AMH009A02	10AMH009	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
10AMH010A02	10AMH010	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
10AMH011A02	10AMH011	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
10AMH012A02	10AMH012	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
10AMH013A02	10AMH013	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
10AMH014A02	10AMH014	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
10AMH015A02	10AMH015	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
10AMH016A02	10AMH016	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
10AMH017A02	10AMH017	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
10AMH018A02	10AMH018	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
10AMH020A02	10AMH020	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	

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**Appendix A: Major element and trace element data**

SampleID	StationID	Th	U	Reference
Units		ppm	ppm	
Detection Limit		0.1	0.1	
Upper Limit		200		
Analysis Method		AL UT6	AL UT6	
06AH024A01	06AH024	-99	-99	Hinchey, this publication
06AH027A01	06AH027	-99	-99	Hinchey, this publication
06AH027A02	06AH027	0.5	1.2	Hinchey, this publication
06AH028A01	06AH028	-99	-99	Hinchey, this publication
06AH036A01	06AH036	-99	-99	Hinchey, this publication
06AH045A01	06AH045	-99	-99	Hinchey, this publication
06AH057A01	06AH057	-99	-99	Hinchey, this publication
06AH057B02	06AH057	1.9	0.9	Hinchey, this publication
06AH060C01	06AH060	-99	-99	Hinchey, this publication
06AH061A01	06AH061	-99	-99	Hinchey, this publication
06AH063D02	06AH063	3.4	2.5	Hinchey, this publication
06AH068B01	06AH068	-99	-99	Hinchey, this publication
06AH070A01	06AH070	-99	-99	Hinchey, this publication
06AH073A02	06AH073	-99	-99	Hinchey, this publication
06AH078A02	06AH078	0.3	0.5	Hinchey, this publication
06AH080B02	06AH080	1.0	0.4	Hinchey, this publication
06AH082A01	06AH082	-99	-99	Hinchey, this publication
06AH083A01	06AH083	-99	-99	Hinchey, this publication
06AH084B01	06AH084	-99	-99	Hinchey, this publication
06AH090C01	06AH090	4.3	3.3	Hinchey, this publication
06AH100A02	06AH100	0.2	-0.1	Hinchey, this publication
06AH104B01	06AH104	-99	-99	Hinchey, this publication
06AH108A01	06AH108	-99	-99	Hinchey, this publication
06AH113A02	06AH113	13.3	2.5	Hinchey, this publication
06AH115B01	06AH115	-99	-99	Hinchey, this publication
06AH117A02	06AH117	9.8	2.9	Hinchey, this publication
06AH120A02	06AH120	10.7	3.6	Hinchey, this publication
06AH122A02	06AH122	3.3	1.3	Hinchey, this publication
06AH126A01	06AH126	-99	-99	Hinchey, this publication
06AH128A02	06AH128	12.0	2.4	Hinchey, this publication
06AH146A02	06AH146	12.6	5.1	Hinchey, this publication
06AH155A02	06AH155	0.2	0.2	Hinchey, this publication
06AH165A02	06AH165	6.0	1.3	Hinchey, this publication
06AH173A01	06AH173	-99	-99	Hinchey, this publication
06AH187A01	06AH187	-99	-99	Hinchey, this publication
06AH187A02	06AH187	0.8	0.4	Hinchey, this publication
06AH187B01	06AH187	-99	-99	Hinchey, this publication
06AH189A02	06AH189	1.5	0.4	Hinchey, this publication
06AH197B02	06AH197	1.6	0.7	Hinchey, this publication
06AH200A01	06AH200	-99	-99	Hinchey, this publication
06AH202A02	06AH202	6.9	2.2	Hinchey, this publication
06AH203A02	06AH203	18.2	8.2	Hinchey, this publication
06AH216A02	06AH216	9.9	4.6	Hinchey, this publication
06AH225B01	06AH225	-99	-99	Hinchey, this publication
06AH226B01	06AH226	-99	-99	Hinchey, this publication
06AH228A02	06AH228	8.3	3.1	Hinchey, this publication
06AH246A02	06AH246	4.5	1.4	Hinchey, this publication
06AH250A01	06AH250	-99	-99	Hinchey, this publication
06AH266A02	06AH266	4.2	1.0	Hinchey, this publication
06AH273A01	06AH273	-99	-99	Hinchey, this publication
06AH276B02	06AH276	3.8	0.6	Hinchey, this publication

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**Appendix A: Major element and trace element data**

SampleID	StationID	Th	U	Reference
Units		ppm	ppm	
Detection Limit		0.1	0.1	
Upper Limit		200		
Analysis Method		AL UT6	AL UT6	
06AH279A02	06AH279	0.2	0.2	Hinchey, this publication
06AH280A01	06AH280	.99	.99	Hinchey, this publication
06AH286A02	06AH286	6.7	2.7	Hinchey, this publication
06AH287A02	06AH287	-0.1	-0.1	Hinchey, this publication
06AH290A01	06AH290	.99	.99	Hinchey, this publication
06AH297A02	06AH297	9.9	1.5	Hinchey, this publication
06AH299A02	06AH299	10.1	2.6	Hinchey, this publication
06AH301A01	06AH301	.99	.99	Hinchey, this publication
06AH306A02	06AH306	10.9	5.6	Hinchey, this publication
06AH310A02	06AH310	9.9	3.1	Hinchey, this publication
06AH317A02	06AH317	13.0	1.5	Hinchey, this publication
06AH319A02	06AH319	0.2	0.4	Hinchey, this publication
06AH325A02	06AH325	4.5	0.8	Hinchey, this publication
06AH343A02	06AH343	5.9	2.6	Hinchey, this publication
06AH345A02	06AH345	0.3	-0.1	Hinchey, this publication
06AH346B02	06AH346	201	167	Hinchey, this publication
06AH360A01	06AH360	.99	.99	Hinchey, this publication
06AH362A01	06AH362	.99	.99	Hinchey, this publication
06AH368A01	06AH368	.99	.99	Hinchey, this publication
06AH386A02	06AH386	1.1	0.6	Hinchey, this publication
06AH386A03	06AH386	5.3	3.1	Hinchey, this publication
06AH398A02	06AH398	15.0	4.1	Hinchey, this publication
06AH427B01	06AH427	.99	.99	Hinchey, this publication
06AH429A02	06AH429	3.8	1.0	Hinchey, this publication
06AH430A02	06AH430	14.3	4.4	Hinchey, this publication
06AH433C01	06AH433	6.4	5.8	Hinchey, this publication
06AH435B02	06AH435	8.0	4.7	Hinchey, this publication
06AH436A02	06AH436	3.6	0.9	Hinchey, this publication
06AH437A02	06AH437	8.1	3.8	Hinchey, this publication
06AH441A02	06AH441	10.1	25.4	Hinchey, this publication
06AH456A02	06AH456	3.8	1.6	Hinchey, this publication
06AH467A02	06AH467	10.3	2.2	Hinchey, this publication
06AH467B02	06AH467	2.9	2.9	Hinchey, this publication
06AH467C02	06AH467	0.5	0.6	Hinchey, this publication
06AH468A02	06AH468	6.3	1.2	Hinchey, this publication
06AH487B02	06AH487	6.2	1.7	Hinchey, this publication
06AH488A02	06AH488	7.2	2.1	Hinchey, this publication
06AH490A02	06AH490	6.7	2.1	Hinchey, this publication
06AH506A02	06AH506	7.1	4.8	Hinchey, this publication
06SK006B02	06SK006	7.4	2.5	Kennedy, 2007
06SK009A02	06SK009	5.5	1.5	Kennedy, 2007
06SK010A02	06SK010	7.0	0.4	Kennedy, 2007
06SK011A02	06SK011	.99	.99	Kennedy, 2007
06SK013A02	06SK013	3.2	1.0	Kennedy, 2007
06SK013B02	06SK013	.99	.99	Kennedy, 2007
06SK039A02	06SK039	9.2	3.1	Kennedy, 2007
06SK040A02	06SK040	7.9	2.4	Kennedy, 2007
06SK041A02	06SK041	31.7	14.1	Kennedy, 2007
06SK042A02	06SK042	7.6	7.3	Kennedy, 2007
06SK043A02	06SK043	11.4	2.7	Kennedy, 2007
06SK044A02	06SK044	10.2	2.7	Kennedy, 2007
06SK047A02	06SK047	6.0	0.7	Kennedy, 2007

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**Appendix A: Major element and trace element data**

SampleID	StationID	Th	U	Reference
Units		ppm	ppm	
Detection Limit		0.1	0.1	
Upper Limit		200		
Analysis Method	AL UT6	AL UT6		
06SK048A02	06SK048	10.6	3.5	Kennedy, 2007
08CL346A02	08CL346	.99	-99	LaFlamme, 2011
08CL346B02	08CL346	.99	-99	LaFlamme, 2011
08CL370A02	08CL370	.99	-99	LaFlamme, 2011
08CL371A02	08CL371	.99	-99	LaFlamme, 2011
08CL374A02	08CL374	.99	-99	LaFlamme, 2011
08CL384B02	08CL384	.99	-99	LaFlamme, 2011
08CL388A02	08CL388	.99	-99	LaFlamme, 2011
08CL389A02	08CL389	.99	-99	LaFlamme, 2011
08CL398A02	08CL398	.99	-99	LaFlamme, 2011
08CL398B02	08CL398	.99	-99	LaFlamme, 2011
08CL399A02	08CL399	.99	-99	LaFlamme, 2011
08CL400A02	08CL400	.99	-99	LaFlamme, 2011
08CL452A02	08CL452	.99	-99	LaFlamme, 2011
08CL453A02	08CL453	.99	-99	LaFlamme, 2011
08CL454A02	08CL454	.99	-99	LaFlamme, 2011
08CL456A02	08CL456	.99	-99	LaFlamme, 2011
08CL458A02	08CL458	.99	-99	LaFlamme, 2011
08CL465A02	08CL465	.99	-99	LaFlamme, 2011
08EW004A02	08EW004	.99	-99	Hinchey, this publication
08EW006A02	08EW006	.99	-99	Hinchey, this publication
08EW009A02	08EW009	.99	-99	Hinchey, this publication
08EW010A02	08EW010	.99	-99	Hinchey, this publication
08EW011A02	08EW011	.99	-99	Hinchey, this publication
08EW012A02	08EW012	.99	-99	Hinchey, this publication
08EW013A02	08EW013	.99	-99	Hinchey, this publication
08EW014A02	08EW014	.99	-99	Hinchey, this publication
08EW015A02	08EW015	.99	-99	Hinchey, this publication
08EW018A02	08EW018	.99	-99	Hinchey, this publication
08EW019A02	08EW019	.99	-99	Hinchey, this publication
08EW022A02	08EW022	.99	-99	Hinchey, this publication
09AMH001A02	09AMH001	.99	-99	Hinchey, this publication
09AMH002A02	09AMH002	.99	-99	Hinchey, this publication
09AMH003A02	09AMH003	.99	-99	Hinchey, this publication
09AMH004A02	09AMH004	.99	-99	Hinchey, this publication
09AMH005A02	09AMH005	.99	-99	Hinchey, this publication
09AMH006A02	09AMH006	.99	-99	Hinchey, this publication
09AMH007A02	09AMH007	.99	-99	Hinchey, this publication
09AMH008A02	09AMH008	.99	-99	Hinchey, this publication
09AMH009A02	09AMH009	.99	-99	Hinchey, this publication
09AMH011A02	09AMH011	.99	-99	Hinchey, this publication
09AMH012B02	09AMH012	.99	-99	Hinchey, this publication
09AMH013A02	09AMH013	.99	-99	Hinchey, this publication
09AMH015A02	09AMH015	.99	-99	Hinchey, this publication
09AMH016A02	09AMH016	.99	-99	Hinchey, this publication
09AMH017A02	09AMH017	.99	-99	Hinchey, this publication
09AMH018A02	09AMH018	.99	-99	Hinchey, this publication
09AMH021A02	09AMH021	.99	-99	Hinchey, this publication
09AMH022A02	09AMH022	.99	-99	Hinchey, this publication
09AMH032A02	09AMH032	.99	-99	Hinchey, this publication
09AMH033A02	09AMH033	.99	-99	Hinchey, this publication
09AMH034A02	09AMH034	.99	-99	Hinchey, this publication

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**Appendix A: Major element and trace element data**

SampleID	StationID	Th	U	Reference
Units		ppm	ppm	
Detection Limit		0.1	0.1	
Upper Limit		200		
Analysis Method		AL UT6	AL UT6	
10AMH005A02	10AMH005	-99	-99	Hinchey, this publication
10AMH006A02	10AMH006	-99	-99	Hinchey, this publication
10AMH007A02	10AMH007	-99	-99	Hinchey, this publication
10AMH009A02	10AMH009	-99	-99	Hinchey, this publication
10AMH010A02	10AMH010	-99	-99	Hinchey, this publication
10AMH011A02	10AMH011	-99	-99	Hinchey, this publication
10AMH012A02	10AMH012	-99	-99	Hinchey, this publication
10AMH013A02	10AMH013	-99	-99	Hinchey, this publication
10AMH014A02	10AMH014	-99	-99	Hinchey, this publication
10AMH015A02	10AMH015	-99	-99	Hinchey, this publication
10AMH016A02	10AMH016	-99	-99	Hinchey, this publication
10AMH017A02	10AMH017	-99	-99	Hinchey, this publication
10AMH018A02	10AMH018	-99	-99	Hinchey, this publication
10AMH020A02	10AMH020	-99	-99	Hinchey, this publication

**Open File 013O/0139**  
**Appendix B: Major element ICP-ES standards and duplicate data**

LabNumber	SampleID	SiO2	Al2O3	Fe2O3T	Fe2O3	FeO	MgO	CaO	Na2O	K2O	TiO2	MnO	P2O5	Cr	Zr	Ba	LOI	Total	Comments
Units		wt.%	ppm	ppm	ppm	wt.%	wt.%												
Detection Limit		0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.001	0.001	0.001	100	1	1	0.01		
Analysis Method		GS Maj	Gravimetric																
6540260	BS-1	54.61	15.22	8.05	-99	-99	5.98	4.67	6.17	0.14	1.167	0.097	0.265	-100	120	147	-0.01	96.37	standard
6540280	SCO-1	60.31	13.25	5.06	-99	-99	2.62	2.53	0.93	2.69	0.570	0.053	0.202	-100	166	583	-0.01	88.21	standard
6540282	06AH146A02	76.69	11.48	3.64	2.56	0.97	0.03	0.36	4.01	4.05	0.228	0.059	0.011	-100	642	133	0.26	100.81	original sample
6540290	6540282	74.98	11.36	3.51	2.42	0.98	0.02	0.35	3.97	3.98	0.226	0.058	0.010	-100	607	131	0.18	98.65	duplicate
6540300	GA-1	52.56	16.00	9.23	-99	-99	5.72	8.53	2.71	1.14	0.818	0.135	0.155	126	78	411	-0.01	97.00	standard
6540303	06AH345A2	47.98	14.15	11.29	1.53	8.79	8.85	12.58	1.73	0.14	0.692	0.184	0.041	348	37	20	0.71	98.34	original sample
6540310	6540303	48.75	14.32	11.23	1.35	8.89	8.94	12.27	1.74	0.13	0.700	0.182	0.047	400	48	20	0.49	98.78	duplicate
6540320	QL0-1	73.34	15.54	0.68	-99	-99	-0.01	0.33	8.80	0.29	0.097	0.038	0.003	-100	610	137	-0.01	99.13	standard
6540323	06SK040A2	76.88	11.38	2.04	1.02	0.92	0.11	0.61	2.58	6.08	0.130	0.070	0.006	-100	496	187	0.24	100.13	original sample
6540330	6540323	75.64	11.17	2.06	1.08	0.88	0.10	0.64	2.56	6.13	0.132	0.073	0.005	-100	457	189	0.42	98.93	duplicate
6540335	06AH045A1	70.86	12.44	2.45	1.87	0.52	0.26	1.42	3.74	5.76	0.207	0.036	0.034	-100	309	357	1.29	98.50	original sample
6540340	STM-1	60.41	18.38	5.32	-99	-99	0.08	1.13	9.04	4.32	0.135	0.226	0.160	-100	1246	613	-0.01	99.20	standard
6540350	6540335	72.44	12.57	2.68	2.17	0.46	0.29	1.39	3.75	5.76	0.205	0.037	0.033	-100	334	359	1.17	100.34	duplicate
6540360	RH-1	74.29	13.28	2.54	-99	-99	0.85	0.29	6.94	0.74	0.295	0.043	0.045	-100	246	277	-0.01	99.30	standard
6540380	STM-1	60.85	18.58	5.14	-99	-99	0.08	1.12	8.53	4.14	0.129	0.219	0.155	-100	1342	618	-99	-99	standard
6540400	MRG-1	38.81	8.26	18.10	-99	-99	13.25	14.63	0.73	0.18	3.673	0.176	0.058	430	97	28	-99	-99	standard
6540668	09AMH001A2	85.35	6.69	0.55	0.02	0.48	0.34	0.81	1.06	2.42	0.113	0.020	0.038	-100	223	609	0.64	98.03	original sample
6540670	6540668	86.34	6.87	1.02	0.23	0.71	0.36	0.87	1.05	2.45	0.113	0.020	0.046	-100	230	608	0.66	99.80	duplicate
6540800	STM-1	59.62	18.70	5.24	-99	-99	0.04	1.11	8.57	4.21	0.131	0.222	0.151	-100	1305	598	-99	-99	standard
6540804	10AMH012A2	49.25	13.95	11.46	2.76	7.83	8.25	10.63	3.31	0.47	0.755	0.197	0.053	240	27	70	0.63	98.93	original sample
6540810	6540804	49.47	14.06	11.46	2.83	7.77	8.26	10.60	3.15	0.56	0.809	0.200	0.048	238	37	68	0.63	99.25	duplicate

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**Appendix C: Trace element ICP-ES standards and duplicate data**

LabNumber	SampleID	As	Ba	Be	Cd	Ce	Co	Cr	Cu	Dy	Fe	La	Li	Mn	Mo	Nb	Ni	P	Pb	Rb	Sc	Sr	Ti	V	Y	Zn	Comments
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm																
Detection Limit	2	1	0.1	0.1	1	1	1	1	0.01	1	0.1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Analysis Method	GS Tr	GS Tr	GS Tr	GS Tr	GS Tr	GS Tr	GS Tr	GS Tr	GS Tr	GS Tr	GS Tr	GS Tr	GS Tr	GS Tr	GS Tr	GS Tr	GS Tr	GS Tr	GS Tr	GS Tr	GS Tr	GS Tr	GS Tr	GS Tr	GS Tr	GS Tr	
6540260	SY-4	5	339	2.8	-0.1	124	3	11	3	18.3	4.39	59	38.0	867	-1	15	4	582	3	57	1.1	1105	1698	-1	113	92 standard	
6540265	06AH063D2	10	427	6.1	-0.1	92	8	10	22	10.9	5.51	47	7.2	2657	1	19	4	479	29	182	9.2	125	3523	35	63	78 original sample	
6540270	6540265	10	428	6.2	-0.1	95	8	10	23	11.4	5.52	49	7.6	2669	1	19	4	489	31	181	9.6	126	3519	35	68	78 duplicate	
6540280	WGB-1	5	782	0.2	-0.1	13	29	284	106	2.4	4.46	8	42.8	1052	-1	8	66	366	8	23	43.5	116	4927	221	15	37 standard	
6540282	06AH146A2	6	136	4.6	-0.1	227	3	2	5	18.8	2.51	106	8.0	491	4	28	4	48	50	95	0.9	25	1540	1	111	146 original sample	
6540290	6540282	6	136	4.6	-0.1	228	3	2	6	18.8	2.50	107	8.1	493	4	29	2	47	50	94	0.9	25	1547	2	111	146 duplicate	
6540300	SY-4	5	336	2.7	-0.1	122	3	9	4	17.5	4.30	57	37.0	871	-1	15	5	572	5	53	1.1	1090	1683	-1	112	91 standard	
6540303	06AH345A2	3	20	-0.1	0.5	4	46	361	42	3.0	7.85	2	12.8	1384	-1	7	138	181	5	10	45.0	100	4204	256	15	143 original sample	
6540310	6540303	3	22	-0.1	0.6	5	47	358	42	3.1	7.98	2	13.2	1415	-1	7	136	185	6	10	47.4	102	4342	268	16	147 duplicate	
6540320	WGB-1	5	752	0.2	-0.1	11	29	272	104	2.6	4.54	8	44.4	1070	-1	8	62	356	9	24	42.4	114	5005	219	15	37 standard	
6540323	06SK040A2	5	190	2.2	0.3	157	183	1	6	12.7	1.47	75	8.5	627	-1	22	-1	21	35	83	0.8	50	873	-1	75	103 original sample	
6540330	6540323	5	190	2.2	0.2	154	182	1	6	12.6	1.48	74	8.4	626	-1	22	-1	21	35	89	0.8	50	877	-1	76	103 duplicate	
6540335	06AH045A1	7	362	1.0	-0.1	204	3	2	2	8.5	1.62	97	1.9	317	1	16	-1	141	16	110	3.4	66	1088	4	48	35 original sample	
6540340	SY-4	5	339	2.7	-0.1	122	3	10	3	17.1	4.31	57	36.8	896	-1	14	-1	571	5	55	1.0	1086	1736	-1	112	95 standard	
6540350	6540335	7	362	1.0	-0.1	204	2	2	1	8.2	1.63	98	1.9	303	-1	16	-1	142	16	110	3.5	67	1104	4	48	36 duplicate	
6540360	WGB-1	5	794	0.2	-0.1	12	29	275	105	2.7	4.50	8	43.3	1047	-1	8	59	362	8	24	43.5	116	5167	224	15	39 standard	
6540380	WGB-1	2	814	0.2	-0.1	12	27	270	108	2.8	4.52	8	44.8	980	-1	5	67	346	7	24	43.4	115	4976	216	14	38 standard	
6540400	SY-4	-2	339	2.7	-0.1	124	3	11	4	18.5	4.34	59	36.8	835	-1	12	12	565	2	56	1.1	1078	1753	-1	122	95 standard	
6540539	08CL295A2	6	1032	3.0	-0.1	151	8	3	2	7.6	2.58	72	22.2	582	2	30	6	608	25	141	8.1	163	3808	2	47	67 original sample	
6540550	6540539	7	1063	3.1	-0.1	154	8	3	2	7.6	2.65	74	22.9	584	2	31	5	616	25	156	7.9	161	3885	2	47	66 duplicate	
6540668	09AMH001A2	6	606	2.9	-0.1	105	1	3	23	1.5	0.61	29	14.9	179	-1	7	-1	180	19	42	3.3	361	686	2	13	29 original sample	
6540670	6540668	6	605	2.8	-0.1	104	1	4	22	1.6	0.61	29	14.9	179	-1	7	-1	177	19	41	3.3	361	689	2	13	29 duplicate	
6540681	09AMH016A2	8	487	2.3	0.1	59	3	10	-1	2.6	1.51	27	35.5	483	-1	7	4	253	29	95	4.1	272	779	8	18	71 original sample	
6540690	6540681	9	475	2.3	0.1	59	3	10	-1	2.6	1.49	27	35.1	468	-1	7	3	246	28	101	4.0	270	755	8	17	68 duplicate	
6540800	SY-4	2	346	2.8	-0.1	123	3	9	2	18.7	4.40	59	38.2	820	-1	13	5	574	-1	49	0.9	1153	1708	3	123	90 standard	
6540804	10AMH012A2	-2	76	0.1	0.7	14	46	231	27	3.0	8.05	3	11.4	1416	-1	12	92	226	3	10	47.0	188	4968	287	16	159 original sample	
6540810	6540804	-2	76	0.1	0.7	12	46	228	28	2.6	8.05	2	11.3	1425	1	12	93	232	3	11	46.8	188	4951	285	16	161 duplicate	

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## Appendix D: Trace element ICP-MS standards and duplicate data dissolved by fusion method

LabNumber	SampleID	V Units	Cr ppm	Co ppm	Ni ppm	Cu ppm	Zn ppm	Ga ppm	Ge ppm	As ppm	Rb ppm	Sr ppm	Y ppm	Zr ppm	Nb ppm	Mo ppm	Ag ppm	In ppm
		5	20	1	20	10	30	1	1	5	2	2	1	5	1	2	0.5	0.2
Analysis Method		FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	
6540280	SY-4	-5	-20	-1	-20	-10	220	35	-1	-5	56	1290	131	575	13	-2	-0.5	-0.2
6540282	06AH146A2	-5	-20	-1	-20	-10	170	28	2	-5	112	21	106	614	25	4	-0.5	-0.2
6540290	6540282	-5	-20	-1	-20	-10	170	30	2	-5	117	21	111	646	26	5	-0.5	-0.2
6540300	WGB-1	224	280	26	90	100	-30	12	2	-5	18	106	16	49	6	-2	-0.5	-0.2
6540310	6540316	251	370	48	140	40	130	15	2	-5	-2	93	17	43	2	2	-0.5	-0.2
6540316	06AH216A2	-5	-20	-1	-20	-10	-30	27	1	14	247	8	31	391	21	-2	-0.5	-0.2
6540668	09AMH001A2	8	-20	-1	-20	30	-30	11	3	-5	41	358	27	233	11	-2	-0.5	-0.2
6540670	6540668	8	-20	-1	-20	30	-30	11	3	-5	41	364	27	242	13	-2	0.6	-0.2
6540778	09AMH007A2	38	20	3	-20	-10	-30	12	1	19	86	147	15	98	5	-2	-0.5	-0.2
6540778	6540778	40	20	2	-20	-10	30	13	1	23	84	147	15	137	4	-2	-0.5	-0.2
6540779	09AMH012B2	200	20	35	40	60	120	21	2	5	40	483	28	168	5	-2	-0.5	-0.2
6540779	6540779	184	20	34	20	50	110	20	2	-5	40	446	28	141	6	-2	0.6	-0.2
6540780	SY-4	-5	-20	3	-20	10	100	38	2	-5	53	1220	121	643	13	-2	1.3	-0.2
6540804	10AMH012A2	274	250	50	130	40	190	13	2	-5	9	173	15	41	2	-2	-0.5	-0.2
6540810	6540804	242	200	38	90	30	130	11	1	-5	7	123	12	27	1	-2	-0.5	-0.2

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## Appendix D: Trace element ICP-MS standards and duplicate data dissolved by fusion method

LabNumber	SampleID	Sn Units	Sb ppm	Cs ppm	Ba ppm	La ppm	Ce ppm	Pr ppm	Nd ppm	Sm ppm	Eu ppm	Gd ppm	Tb ppm	Dy ppm	Ho ppm	Er ppm	Tm ppm	Yb ppm
		1	0.5	0.5	3	0.1	0.1	0.05	0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.1	0.05	0.1
Analysis Method		FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	
6540280	SY-4	8	-0.5	1.6	337	56.4	124	14.20	55.7	12.2	2.09	13.2	2.9	19.4	4.3	14.6	2.41	15.6
6540282	06AH146A2	5	-0.5	-0.5	129	102	226	25.50	100	19.5	1.96	17.7	3.2	18.9	3.6	10.8	1.66	10.7
6540290	6540282	5	-0.5	-0.5	119	106	238	26.90	105	20.2	2.03	18.3	3.2	18.9	3.6	11.1	1.69	10.7
6540300	WGB-1	4	-0.5	0.6	738	7.6	17.3	2.13	9.5	2.5	1.31	2.7	0.5	2.8	0.5	1.6	0.22	1.4
6540310	6540316	-1	-0.5	-0.5	17	1.9	5.4	0.83	4.6	1.5	0.64	2.0	0.4	2.8	0.6	1.7	0.26	1.7
6540316	06AH216A2	4	-0.5	0.7	412	42.3	98.6	9.89	36.0	6.2	0.33	4.5	0.9	5.3	1.1	3.6	0.61	4.1
6540668	09AMH001A2	-1	-0.5	3.5	663	26.4	96.3	6.93	25.1	4.5	0.56	3.9	0.6	4.0	0.9	3.1	0.55	4.0
6540670	6540668	-1	-0.5	3.5	664	26.3	95.1	6.98	24.8	4.6	0.56	3.9	0.6	4.1	0.9	3.1	0.56	4.1
6540778	09AMH007A2	1	1	1.8	934	25.1	60.6	5.39	20.4	3.7	0.63	2.9	0.4	2.6	0.5	1.7	0.26	1.7
6540778	6540778	1	1.3	1.7	975	27.9	65.2	5.33	19.2	3.5	0.63	2.8	0.4	2.6	0.5	1.6	0.25	1.7
6540779	09AMH012B2	2	1.7	4.8	825	23.2	49.2	6.38	27	5.9	1.79	5.6	0.9	5.2	1.1	3.0	0.41	2.8
6540779	6540779	2	1	5	792	20.2	44.4	6.27	27.9	6.1	1.72	5.6	0.9	5.0	1.0	3.0	0.42	2.6
6540780	SY-4	10	-0.5	1.7	358	61.1	126	15.30	58.9	13.3	1.97	13.8	2.8	18.7	4.5	14.2	2.28	15.4
6540804	10AMH012A2	-1	0.9	-0.5	62	2.4	5.9	0.94	4.8	1.6	0.68	2.3	0.4	2.8	0.6	1.7	0.26	1.7
6540810	6540804	-1	-0.5	-0.5	52	1.8	4.8	0.78	4.0	1.4	0.59	1.8	0.4	2.3	0.5	1.5	0.22	1.5

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## Appendix D: Trace element ICP-MS standards and duplicate data dissolved by fusion method

LabNumber	SampleID	Lu Units	Hf ppm	Ta ppm	W ppm	Tl ppm	Pb ppm	Bi ppm	Th ppm	U ppm	Comments
		0.04	0.2	0.1	1	0.1	5	0.4	0.1	0.1	
Analysis Method		FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	
6540280	SY-4	2.22	11.4	0.7	-1	0.2	24	-0.4	1.4	0.9	standard
6540282	06AH146A2	1.59	17.1	1.8	-1	0.6	52	1.0	14.7	5.8	original sample
6540290	6540282	1.59	16.5	1.9	-1	0.5	40	0.8	14.1	5.5	duplicate
6540300	WGB-1	0.22	1.5	0.4	-1	0.4	8	-0.4	1.0	0.7	standard
6540310	6540316	0.26	1.2	0.1	-1	-0.1	6	-0.4	0.4	-0.1	duplicate
6540316	06AH216A2	0.63	10.9	1.7	2	2.4	10	2.1	9.6	5.1	original sample
6540668	09AMH001A2	0.70	5.1	0.6	-1	0.2	17	-0.4	13.0	1.3	original sample
6540670	6540668	0.72	5.5	0.6	-1	0.2	17	-0.4	12.9	1.3	duplicate
6540778	09AMH007A2	0.26	2.8	0.3	-1	0.5	12	-0.4	5.9	1.4	original sample
6540778	6540778	0.29	2.9	0.3	3	0.6	9	-0.4	5.6	1.4	duplicate
6540779	09AMH012B2	0.46	3.7	0.3	-1	0.5	21	-0.4	1.9	0.9	original sample
6540779	6540779	0.39	3.7	0.3	-1	0.4	22	-0.4	1.9	0.9	duplicate
6540780	SY-4	2.45	10.0	0.9	23	0.3	10	-0.4	1.2	0.9	standard
6540804	10AMH012A2	0.27	1.0	0.1	-1	-0.1	12	-0.4	0.1	0.1	original sample
6540810	6540804	0.25	0.8	0.1	-1	-0.1	-5	-0.4	0.1	-0.1	duplicate

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**Appendix E: Trace element ICP-MS standards and duplicate data dissolved by total digestion method**

LabNumber	SampleID	Li Units	B ppm	Na %	Mg %	Al %	K %	Ca %	Cd ppm	V ppm	Cr ppm	Mn ppm	Fe %	Hf ppm	Ni ppm	Er ppm	Be ppm	Ho ppm
Lower Detection Limit		0.5	1	0.001	0.01	0.01	0.01	0.01	0.1	1	0.5	1	0.01	0.1	0.5	0.1	0.1	
Upper Limit				3.00		5.00												
Analysis Method		TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	
6540260	WGB-1	47.1	-1	1.73	5.52	6.05	0.80	12.70	-0.1	227	117	1190	4.83	1.3	84.1	1.7	0.3	0.6
6540265	06AH063D2	4.2	-1	1.80	0.25	4.38	5.01	4.12	0.2	35	6.7	2380	5.04	5.7	3.7	4.1	5.6	1.3
6540270	654265	5.6	-1	2.02	0.33	6.10	5.01	4.80	0.2	39	7.4	2740	5.93	6.6	3.9	5.4	6.4	1.7
6540280	SY-4	32.8	-1	3.01	0.12	4.29	1.21	5.63	-0.1	5	7.3	867	4.18	1.9	8.0	7.8	2.2	2.2
6540282	06AH146A2	8.2	-1	3.01	0.03	5.15	3.55	0.20	-0.1	3	2.8	452	2.47	16.7	-0.5	10.0	4.3	3.3
6540290	6540282	7.5	-1	3.01	0.02	3.64	3.66	0.23	0.3	4	1.8	378	2.24	17.2	-0.5	6.5	4.2	2.2
6540300	WGB-1	37.5	-1	1.74	5.88	6.07	0.81	11.70	0.2	223	123	1210	4.65	1.0	77.9	1.5	0.5	0.6
6540303	06AH345A2	9.9	-1	1.39	5.67	7.82	0.09	9.32	0.4	266	197	1580	7.96	0.6	157	1.8	0.1	0.6
6540310	6540303	8.8	-1	1.43	5.72	7.32	0.07	9.31	0.5	254	178	1610	8.08	0.7	155	1.7	0.2	0.6
6540320	SY-4	33.2	-1	3.01	0.24	5.26	1.38	5.61	-0.1	6	6.7	804	3.67	1.6	7.7	11.9	2.3	3.5
6540323	06SK040A2	7.9	-1	2.27	0.03	3.57	5.01	0.37	0.4	1	0.9	508	1.27	13.3	0.7	7.0	2.1	2.2
6540330	6540323	6.7	-1	2.17	0.03	3.42	5.01	0.34	0.4	1	1.1	491	1.27	12.8	0.7	6.2	2.3	2.0

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**Appendix E: Trace element ICP-MS standards and duplicate data dissolved by total digestion method**

LabNumber Units	SampleID	Ag ppm	Cs ppm	Co ppm	Eu ppm	Bi ppm	Se ppm	Zn ppm	Ga ppm	As ppm	Rb ppm	Y ppm	Sr ppm	Zr ppm	Nb ppm	Mo ppm	In ppm	Sn ppm
Lower Detection Limit		0.05	0.05	0.1	0.05	0.02	0.1	0.2	0.1	0.1	0.2	0.1	0.2	1	0.1	0.1	0.1	
Upper Limit																		
Analysis Method		TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS										
6540260	WGB-1	0.08	0.47	30.7	1.24	0.10	0.3	32.5	11.7	2.9	19.3	15.5	116	34	6.1	1.0	-0.1	5
6540265	06AH063D2	-0.05	1.66	3.7	1.09	0.40	0.9	78.2	19.4	8.7	153	36.3	92.8	197	16.2	2.1	0.2	12
6540270	654265	-0.05	1.94	3.9	1.39	0.15	3.9	87.7	22.2	12.0	175	47.4	112	229	17.9	2.3	0.3	14
6540280	SY-4	-0.05	1.51	3.6	0.89	-0.02	0.2	100	35.9	3.3	17.3	49.3	1001	96	12.8	0.3	-0.1	9
6540282	06AH146A2	-0.05	0.35	0.3	1.62	0.37	0.3	175	29.1	3.4	113	85.2	17.7	649	27.6	3.6	0.2	6
6540290	6540282	-0.05	0.35	0.4	1.04	0.31	-0.1	161	28.5	2.7	103	56.7	10.6	636	27.0	3.4	0.2	5
6540300	WGB-1	-0.05	0.66	28.3	1.29	-0.02	-0.1	31.9	13.2	0.2	19.8	14.0	107	29	6.2	0.7	-0.1	4
6540303	06AH345A2	-0.05	0.32	52.1	0.65	-0.02	-0.1	168	14.4	-0.1	2.2	14.8	94.6	13	2.2	0.4	-0.1	-1
6540310	6540303	-0.05	-0.05	51.7	0.58	-0.02	0.4	166	14.1	0.4	0.5	13.3	94.3	12	2.8	0.5	-0.1	-1
6540320	SY-4	-0.05	1.36	3.1	1.59	-0.02	-0.1	98.6	33.5	4.8	32.1	83.7	1001	87	13.2	0.1	-0.1	7
6540323	06SK040A2	-0.05	0.59	196	0.47	-0.02	-0.1	131	25.3	-0.1	94.8	56.5	33.2	482	7.8	-0.1	0.1	5
6540330	6540323	-0.05	0.37	187	0.42	-0.02	-0.1	118	24.8	-0.1	98.7	50.7	31.7	458	7.1	0.2	-0.1	5

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**Appendix E: Trace element ICP-MS standards and duplicate data dissolved by total digestion method**

LabNumber	SampleID	Sb Units	Te ppm	Ba ppm	La ppm	Ce ppm	Pr ppm	Nd ppm	Sm ppm	Gd ppm	Tb ppm	Dy ppm	Cu ppm	Ge ppm	Tm ppm	Yb ppm	Lu ppm	Ta ppm
		Lower Detection Limit	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1
		Upper Limit																
Analysis Method		TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	
6540260	WGB-1	2.4	1.9	927	9.4	19.2	2.7	11.5	3.1	3.4	0.5	3.2	108	0.1	0.2	1.4	0.2	0.4
6540265	06AH063D2	0.7	0.2	420	27.1	69.3	8.0	33.5	8.2	7.6	1.1	7.2	15.5	0.2	0.6	4.4	0.7	0.6
6540270	654265	0.7	0.3	466	38.0	90.8	11.2	45.3	10.9	10.0	1.4	8.9	16.7	0.2	0.8	5.8	0.9	0.6
6540280	SY-4	-0.1	0.3	330	21.6	57.4	6.7	26.4	6.4	6.7	1.3	9.7	-0.2	0.2	1.2	8.3	1.1	0.6
6540282	06AH146A2	0.4	0.1	135	106	237	27.3	101	20.3	16.8	2.6	16.4	-0.2	0.3	1.5	9.5	1.5	1.1
6540290	6540282	0.4	-0.1	62	51.4	135	13.7	53.8	11.3	11.1	1.7	10.5	3.9	0.2	1.0	6.6	1.0	1.6
6540300	WGB-1	2.2	2.5	879	9.3	19.2	2.6	10.8	2.9	3.2	0.5	2.9	99.3	0.1	0.2	1.4	0.2	0.4
6540303	06AH345A2	0.1	1.4	25	2.2	5.9	0.9	4.8	1.8	2.4	0.4	2.7	38.4	-0.1	0.3	1.7	0.3	0.2
6540310	6540303	-0.1	0.9	22	1.8	4.9	0.8	4.2	1.5	2.1	0.4	2.6	37.3	-0.1	0.3	1.6	0.2	0.2
6540320	SY-4	-0.1	0.2	310	40.0	87.3	11.4	44.4	10.4	11.6	2.2	15.5	1.6	0.1	1.9	12.2	1.7	0.8
6540323	06SK040A2	0.2	-0.1	194	49.1	124	12.3	46.4	9.5	9.7	1.6	10.5	4.8	0.2	1.1	7.2	1.1	0.8
6540330	6540323	0.2	-0.1	181	43.9	123	10.8	41.3	8.5	8.7	1.4	9.2	4.5	0.2	1.0	6.4	1.0	0.6

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**Appendix E: Trace element ICP-MS standards and duplicate data dissolved by total digestion method**

LabNumber	SampleID	W Units	Re ppm	Tl ppm	Pb ppm	Th ppm	U ppm	Ti %	P %	S %	Comments
Lower Detection Limit		0.1	0.001	0.05	0.5	0.1	0.1	0.01	0.001	0.01	
Upper Limit											
Analysis Method		TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-ES	TD-ES	TD-ES		
6540260	WGB-1	1.3	0.005	0.38	7.3	1.0	0.8	0.57	0.037	0.02	standard
6540265	06AH063D2	2.6	-0.001	1.25	28.0	3.4	2.5	0.35	0.040	0.10	original sample
6540270	654265	2.6	0.003	1.40	31.5	5.3	3.5	0.37	0.043	0.11	duplicate
6540280	SY-4	-0.1	0.001	0.25	9.7	0.4	0.2	0.17	0.033	0.01	standard
6540282	06AH146A2	0.3	0.007	0.55	42.8	12.6	5.1	0.16	0.005	0.03	original sample
6540290	6540282	1.0	0.006	0.55	34.7	5.5	1.9	0.15	0.004	0.03	duplicate
6540300	WGB-1	1.3	0.003	0.38	7.2	1.1	0.5	0.53	0.032	0.02	standard
6540303	06AH345A2	0.3	0.007	-0.05	5.3	0.3	-0.1	0.45	0.017	0.04	original sample
6540310	6540303	-0.1	-0.001	-0.05	5.1	0.1	-0.1	0.41	0.017	0.04	duplicate
6540320	SY-4	0.5	0.003	0.25	8.2	0.8	0.2	0.17	0.043	0.01	standard
6540323	06SK040A2	176	0.001	0.75	33.7	7.9	2.4	0.09	0.002	0.03	original sample
6540330	6540323	175	0.008	0.69	31.1	6.8	2.4	0.09	0.003	0.02	duplicate

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**Appendix F: Explanation of abbreviations for methods and units from Appendix A to Appendix E**

<b>Code</b>	<b>Explanation</b>
GS	Geological Survey of Newfoundland and Labrador
AL	Activation Laboratories Ltd. (Actlabs)
GS Maj	GS major element package: lithium metaborate fusion followed by a multi-acid digestion, analysis by ICP-OES
GS Tr	GS trace element package: four acid digestion (HF, HClO <sub>4</sub> , HNO <sub>3</sub> and HCl), analysis by ICP-OES
GS BPD	GS basic partial dilution via HNO <sub>3</sub> , analysis by ICP-OES
FUS-MS	AL 4B2STD - lithogeochemistry analytical package - lithium metaborate/tetraborate fusion, ICP-MS trace element analysis
TD-MS	AL UT6 - ultratrace 6 analytical package - four acid digestion (HF, HClO <sub>4</sub> , HNO <sub>3</sub> and HCl), ICP-MS trace element analysis
TD-ES	AL UT6 - ultratrace 6 analytical package - four acid digestion (HF, HClO <sub>4</sub> , HNO <sub>3</sub> and HCl), ICP-ES trace element analysis
ppm	parts per million
wt %	weight percent
-99	sample was not analysed for that element
-999	sample was not analysed for that element (Cr with detection limit of 100 ppm)