



Natural Resources

Mines

GEOCHEMICAL DATA FROM THE MONKEY HILL AREA, LABRADOR (NTS 13J/14)

A.M. Hinckey

Open File 013J/14/0306

St. John's, Newfoundland
April, 2016

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SUMMARY

This open-file release consists of whole-rock geochemical data from rock samples collected in the Monkey Hill area, Labrador (NTS 13J/14). The geological context of these samples and a description of the regional geology are contained in reports and maps by Hinchey and LaFlamme (2009a, b), LaFlamme *et al.* (2009), MacFarlane (2009), LaFlamme (2011), LaFlamme *et al.* (2012) and Hinchey and Davis (2013).

This data compilation contains whole-rock geochemical analyses of lithological units compiled from reports by LaFlamme (2011) and MacFarlane (2009); details of the geochemical methods used are 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 In addition, this open file contains unpublished geochemical analyses collected by the author.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 Geochemical Laboratory as well as at external and independent 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 some trace elements were analyzed by ICP-ES (inductively coupled plasma-emission spectrometry) following lithium borate fusion and multi-acid attack. Other trace elements, including REE's (rare-earth elements), were analyzed by a combination ICP-MS (inductively coupled plasma-mass spectrometry), and INAA (instrumental neutron activation analysis). Analytical method of determination is indicated for each element in Appendices A to G. Where an element was analyzed using multiple methods, the value determined by the method that appears most reliable is presented. 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) except for LOI where a value of -1 indicates gain-on-ignition. 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 except for Au which is reported in ppb.

The UTM coordinates are based on Zone 21 and NAD 27.

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 Appendices A to G 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 methods and units are also outlined.

[SampleID]	Sample 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 Geochemical 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 (<i>e.g.</i> , 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) / ($\text{SiO}_2 + 10\text{MgO} + 10\text{CaO} + 10\text{Na}_2\text{O}$)]

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

ABBREVIATIONS FOR METHODS AND UNITS

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_4 , NHO_3 , and HCl), analysis by ICP-OES
GS BPD	GS basic partial dilution <i>via</i> HNO_3 , analysis by ICP-OES
ISE	Ion specific electrode
FUS-MS	AL 4B2STD – lithogeochemistry analytical package – lithium metaborate/tetraborate fusion, ICP-MS trace element analysis
INAA	Instrumental Neutron Activation Analysis; Becquerel Laboratories Ltd.
ppm	parts per million
ppb	parts per billion
wt%	weight percent
-1	a code representing gain-on-ignition (in LOI column only)
-99	sample was not analyzed for that element
-999	sample was not analyzed for that element (<i>e.g.</i> , Cr with detection limit of 100 ppm)

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Appendix A – Major-element and Trace-element Data

SampleID	LabNumber	UTMZone	North	UTMZone	NTS_Map	Analysis	IgpetCode	IgpetKCode	Lithology	Notes
Units										
Detection Limit										
Upper Limit										
Analysis Method										
08AH006A01	6540589	367786	6095632	21	13J/14	geochemistry			5	1
08AH011A02	6540379	353923	6092513	21	13J/14	geochemistry			5	6
08AH016A02	6540365	357248	6092626	21	13J/14	assay			15	16
08AH030A02	6540381	367104	6084803	21	13J/14	geochemistry			16	22
08AH038A02	6540382	368298	6091924	21	13J/14	geochemistry			17	34
08AH050A02	6540383	360453	6084219	21	13J/14	geochemistry			5	18
08AH058A02	6540384	343238	6096626	21	13J/14	geochemistry			33	29
08AH059A02	6540562	358691	6095402	21	13J/14	geochemistry			5	1
08AH069A02	6540386	359160	6087046	21	13J/14	geochemistry			7	7
08AH069A03	6540366	359160	6087046	21	13J/14	assay			7	7
08AH070A02	6540387	362220	6083834	21	13J/14	geochemistry			16	22
08AH072A02	6540563	343987	6087602	21	13J/14	geochemistry			5	6
08AH072A02	6540388	3622660	6081193	21	13J/14	geochemistry			16	22
08AH073A02	6540389	341908	6072500	21	13J/14	geochemistry			18	30
08AH074A02	6540391	340312	6070199	21	13J/14	geochemistry			18	30
08AH076A02	6540392	358141	6093489	21	13J/14	geochemistry			5	18
08AH090A01	6540591	366283	6094868	21	13J/14	geochemistry			17	34
08AH092A02	6540394	359620	6091334	21	13J/14	geochemistry			5	6
08AH106A02	6540395	352028	6083251	21	13J/14	geochemistry			13	13
08AH116A02	6540396	366061	6090236	21	13J/14	geochemistry			7	7
08AH123A02	6540397	362571	6095338	21	13J/14	geochemistry			5	36
08AH132A02	6540398	361394	6089740	21	13J/14	geochemistry			5	18
08AH140A02	6540399	340850	6084551	21	13J/14	geochemistry			13	13
08AH143A02	6540367	349626	6091871	21	13J/14	assay			3	3
08AH143A03	6540368	349626	6091871	21	13J/14	assay			3	3
08AH143A04	6540369	349626	6091871	21	13J/14	assay			3	3
08AH145A02	6540592	348967	6091292	21	13J/14	assay			3	3
08AH149C01	6540373	345206	6089757	21	13J/14	assay			9	21
08AH154A02	6540564	347587	6092669	21	13J/14	geochemistry			26	33
08AH165A02	6540402	350620	6091550	21	13J/14	geochemistry			5	18
08AH166A02	6540403	346971	6090312	21	13J/14	geochemistry; isotopic			5	23
08AH168A02	6540404	346129	6090393	21	13J/14	geochemistry			5	18
08AH169A02	6540405	346796	6089232	21	13J/14	geochemistry			5	18
08AH173A02	6540407	343099	6090416	21	13J/14	geochemistry			13	12
08AH175A02	6540565	342565	6092628	21	13J/14	geochemistry			5	18
08AH176A02	6540408	341081	6085991	21	13J/14	geochemistry			13	13
08AH189A02	6540409	364290	6074077	21	13J/14	geochemistry			32	11
08AH190A02	6540574	344001	6077138	21	13J/14	geochemistry			18	30
08AH210A02	6540411	366926	6072124	21	13J/14	geochemistry; isotopic			32	11
08AH211A02	6540575	358753	6072185	21	13J/14	geochemistry			26	33
08AH219A02	6540576	356368	6072717	21	13J/14	geochemistry			18	24
08AH222A02	6540412	357674	6073915	21	13J/14	geochemistry			26	33
08AH233A02	6540413	345316	6085609	21	13J/14	geochemistry; isotopic			13	13
08AH225A02	6540415	364858	6076267	21	13J/14	geochemistry			11	29
08AH263A02	6540416	369416	6093919	21	13J/14	geochemistry			5	19

Appendix A – Major-element and Trace-element Data

SampleID	LabNumber	UTMZone	North	UTMZone	NTS_Map	Analysis	IgpetCode	IgpetKCode	Lithology	Notes
Units										
Detection Limit										
Upper Limit										
Analysis Method										
08AH267A02	6540417	360735	6093131	21	131/14	geochemistry	5	19	mafic tuff	
08AH268A02	6540418	358715	6092726	21	131/14	geochemistry	5	1	metabasalt	
08AH270A02	6540419	363932	6091160	21	131/14	geochemistry	5	18	tuffaceous sandstone	
08AH271A02	6540421	365207	6090905	21	131/14	geochemistry	7	7	porphyry	
08AH276A02	6540422	361652	6086144	21	131/14	geochemistry	5	18	tuffaceous sandstone	
08AH277A02	6540423	359260	6085609	21	131/14	geochemistry	7	7	fp-qz porphyry	
08AH279A02	6540424	351698	6084027	21	131/14	geochemistry	6	18	apparent tuffaceous sandstone	
08AH281A02	6540425	360846	6080090	21	131/14	geochemistry	26	26	fp-qz porphyry	
08AH284A02	6540426	339559	6075011	21	131/14	geochemistry	5	1	qz porphyry? Freshsteak? Ailik	
08AH289A02	6540427	340500	6078764	21	131/14	geochemistry	5	6	gabbro	
08AH290A02	6540428	362128	6095752	21	131/14	geochemistry; isotopic	5	6	metaryholite	
08AH296A02	6540429	340219	6096158	21	131/14	geochemistry; isotopic	2	20	metabasalt	
08AH308A02	6540433	342120	6092854	21	131/14	geochemistry; isotopic	5	6	metaryholite	
08AH309A02	6540434	344928	6088120	21	131/14	geochemistry; isotopic	5	6	metaryholite	
08AH310A02	6540435	355522	6084607	21	131/14	geochemistry; isotopic	6	26	granodiorite	
08AH311A02	6540436	345776	6076370	21	131/14	geochemistry; isotopic	5	6	metaryholite	
08AH312A02	6540437	365218	6089626	21	131/14	geochemistry; isotopic	7	27	qz monzonite 35-65kf	
08AH313A02	6540438	361647	6095378	21	131/14	geochemistry; isotopic	7	7	fp porphyry	
08AH314A02	6540439	360648	6095031	21	131/14	geochemistry; isotopic	5	1	metabasalt	
08AH315A02	6540441	371642	6092794	21	131/14	geochemistry	17	34	gabbro	
08AH316A02	6540442	371084	6086182	21	131/14	geochemistry	16	22	granodiorite	
08AH318A02	6540443	371398	6077764	21	131/14	geochemistry	32	11	monzogranite	
08AH322A02	6540444	365246	6070162	21	131/14	geochemistry	32	11	syenogranite	
08AH327A02	6540445	351782	6070318	21	131/14	geochemistry	26	33	gabbro	
08AH328A02	6540446	348421	6069755	21	131/14	geochemistry	18	24	monzonite	
08AH329A02	6540577	346391	6070300	21	131/14	geochemistry	18	27	qz monzonite	
08AH330A02	6540578	345865	6071152	21	131/14	geochemistry	18	27	qz monzonite	
08AH331A02	6540447	346970	6074802	21	131/14	geochemistry	18	30	monzogranite	
08AH333A02	6540448	345527	6077455	21	131/14	geochemistry	18	30	monzogranite	
08AH335A02	6540449	359642	6095304	21	131/14	geochemistry	5	18	tuffaceous sandstone	
08AH338A02	6540451	353915	6091493	21	131/14	geochemistry	5	6	metaryholite	
08AH342A02	6540452	340571	6073726	21	131/14	geochemistry	18	30	monzogranite	
08AH343A02	6540579	341299	6071960	21	131/14	geochemistry	18	30	monzogranite	
08AH344A02	6540453	339489	6071918	21	131/14	geochemistry	5	23	felsic tuff	
08AH345A02	6540454	348887	6073728	21	131/14	geochemistry	18	24	monzonite	
08CL011A02	6540455	359135	6090432	21	131/14	geochemistry	13	13	monzogranite	
08CL019A02	6540456	365563	6087461	21	131/14	geochemistry	5	18	tuffaceous sandstone	
08CL037A02	6540457	367416	6089845	21	131/14	geochemistry	17	34	gabbro	
08CL047A02	6540458	360659	6082507	21	131/14	geochemistry	5	18	tuffaceous sandstone	
08CL050A02	6540374	343960	6095160	21	131/14	assay	5	18	tuffaceous sandstone	
08CL057A02	6540459	346448	6096860	21	131/14	geochemistry	5	23	felsic tuff	
08CL068A02	6540461	349252	6096749	21	131/14	geochemistry	5	19	mafic tuff	
08CL075A02	6540462	352564	6095026	21	131/14	geochemistry	5	1	metabasalt	
08CL085A02	6540375	348209	6089252	21	131/14	assay	13	13	monzogranite	
08CL087A02	6540463	348095	6090083	21	131/14	geochemistry	5	18	tuffaceous sandstone	

Appendix A – Major-element and Trace-element Data

SampleID	LabNumber	UTMZone	North	UTMZone	NTS_Map	Analysis	IgpetCode	IgpetKcode	Lithology	Notes
Units										
Detection Limit										
Upper Limit										
Analysis Method										
08CL099B02	6540568	349482	6096713	21	131/14	geochemistry; isotopic	5	1	metabasalt	
08CL099B02	6540568	349482	6096713	21	131/14	geochemistry; isotopic	5	1	metabasalt	Middle Head
08CL107A02	6540521	349144	6096408	21	131/14	geochemistry; isotopic	5	2	metabasalt (MORB)	
08CL125A02	6540464	349030	6085686	21	131/14	geochemistry	13	13	monzogranite	
08CL131A03	6540376	362951	6087778	21	131/14	assay	7	7	porphyry	qz-fp porphyry
08CL135A02	6540465	361144	6087584	21	131/14	geochemistry	5	18	tuffaceous sandstone	apparent tuffaceous sandstone
08CL148A02	6540466	359688	6089174	21	131/14	geochemistry	5	18	tuffaceous sandstone	
08CL149A02	6540467	360221	6089739	21	131/14	geochemistry	5	18	tuffaceous sandstone	
08CL153A02	6540524	348863	6096306	21	131/14	geochemistry	5	6	metarhyolite	
08CL159A02	6540525	348933	6095610	21	131/14	geochemistry	5	1	metabasalt	Middle Head
08CL160A02	6540526	348916	6095489	21	131/14	geochemistry	5	1	metabasalt	Middle Head
08CL167A02	6540569	350812	6095951	21	131/14	geochemistry; isotopic	28	28	amphibolite	
08CL167A02	6540569	350812	6095951	21	131/14	geochemistry; isotopic	28	28	amphibolite	
08CL175A02	6540571	350477	6094711	21	131/14	geochemistry	5	1	metabasalt	
08CL175A02	6540571	350477	6094711	21	131/14	geochemistry	5	1	metabasalt	Middle Head
08CL179A02	6540527	350551	6095338	21	131/14	geochemistry	5	1	metabasalt	Middle Head
08CL195A02	6540528	349176	6096365	21	131/14	geochemistry; isotopic	5	2	metabasalt (MORB)	Middle Head
08CL196A02	6540529	349299	6096030	21	131/14	geochemistry	5	19	mafic tuff	Middle Head
08CL197A02	6540531	349601	6096109	21	131/14	geochemistry; isotopic	5	6	metarhyolite	Middle Head
08CL198A02	6540532	349589	6095957	21	131/14	geochemistry; isotopic	5	23	felsic tuff	Middle Head
08CL199A02	6540533	350305	6095440	21	131/14	geochemistry; isotopic	13	32	syenogranite	Middle Head
08CL202A02	6540522	350848	6094677	21	131/14	geochemistry	5	19	mafic tuff	Middle Head
08CL203A02	6540534	351033	6094509	21	131/14	geochemistry	5	23	felsic tuff	Middle Head
08CL204A02	6540572	351173	6094736	21	131/14	geochemistry	9	21	granite pegmatite	
08CL204A02	6540572	351173	6094736	21	131/14	geochemistry	9	21	granite pegmatite	Middle Head
08CL214A02	6540468	341647	6091311	21	131/14	geochemistry	13	32	syenogranite	Middle Head
08CL265A02	6540535	348829	6096673	21	131/14	geochemistry; isotopic	13	32	syenogranite	Middle Head
08CL266A02	6540536	349025	6096298	21	131/14	geochemistry; isotopic	5	2	metabasalt (MORB)	Middle Head
08CL268A02	6540537	349483	6096238	21	131/14	geochemistry; isotopic	5	1	metabasalt	Middle Head
08CL272A02	6540469	349218	6092116	21	131/14	geochemistry	5	18	tuffaceous sandstone	
08CL273A02	6540471	349939	6091034	21	131/14	geochemistry	5	18	tuffaceous sandstone	
08CL274A02	6540472	347626	6090498	21	131/14	geochemistry	3	31	tuffaceous sandstone	
08CL275A02	6540473	346633	6091315	21	131/14	geochemistry	5	36	metasandstone	
08CL276A02	6540474	345311	6091008	21	131/14	geochemistry	13	32	syenogranite	
08CL277A02	6540475	347178	6088320	21	131/14	geochemistry	13	29	granodiorite	
08CL287A02	6540476	345942	6088762	21	131/14	geochemistry	5	23	felsic tuff	
08CL279A02	6540477	345333	6087452	21	131/14	geochemistry	13	29	granodiorite	
08CL280A02	6540478	343449	6089155	21	131/14	geochemistry	13	32	syenogranite	
08CL281A02	6540479	341066	6091938	21	131/14	geochemistry	13	33	monzogranite	
08CL282A02	6540481	343182	6087047	21	131/14	geochemistry	5	18	tuffaceous sandstone	
08CL283A02	6540482	341035	6085364	21	131/14	geochemistry	13	32	syenogranite	
08CL284A02	6540483	344763	6084927	21	131/14	geochemistry	13	32	syenogranite	
08CL296A02	6540581	350363	6072387	21	131/14	geochemistry	26	33	gabbro	
08CL305A02	6540485	354442	6074174	21	131/14	geochemistry	18	24	monzonite	
08CL312A02	6540566	368799	6071585	21	131/14	geochemistry	32	11	monzogranite	qz monzonite 35-65kf 08CL313A02?

Appendix A – Major-element and Trace-element Data

SampleID	LabNumber	UTMZone	North	UTMZone	North	Analysis	IgpetCode	IgpetKCode	Lithology	Notes
Units										
Detection Limit										
Upper Limit										
Analysis Method										
08CL321A02	6540541	350657	6095215	21	13J/14	geochemistry	5		18 tuffaceous sandstone	Middle Head
08CL341A02	6540487	353218	6079495	21	13J/14	geochemistry	6		26 qz monzonite	
08CL412A02	6540488	364952	6092820	21	13J/14	geochemistry	7		7 porphyry	fp-qz porphyry
08CL418A02	6540489	366666	6096170	21	13J/14	geochemistry	15		16 monzogranite	monzogranite 35-65kf?
08CL419A02	6540491	359284	6091929	21	13J/14	geochemistry	5		18 tuffaceous sandstone	
08CL420A02	6540492	359987	6091166	21	13J/14	geochemistry	5		6 metarhyolite	
08CL421A02	6540493	362566	6091275	21	13J/14	geochemistry	5		18 tuffaceous sandstone	
08CL423A02	6540494	361402	6089079	21	13J/14	geochemistry	5		23 felic tuff	lapilli tuff
08CL424A02	6540495	365974	6089548	21	13J/14	geochemistry	7		7 porphyry	qz-fp porphyry
08CL427A02	6540496	364001	6086347	21	13J/14	geochemistry	5		18 tuffaceous sandstone	
08CL428A02	6540497	361901	6085011	21	13J/14	geochemistry	7		7 porphyry	qz-fp porphyry
08CL429A02	6540498	358099	6085048	21	13J/14	geochemistry	13		32 synogranite	
08CL430A02	6540499	357327	6083396	21	13J/14	geochemistry	7		7 porphyry	qz-fp porphyry
08CL431A02	6540501	350459	6084529	21	13J/14	geochemistry	13		32 synogranite	
08CL450A02	6540502	340518	6087872	21	13J/14	geochemistry	4		4 orthogneiss	
08CL472A02	6540503	371783	6094018	21	13J/14	geochemistry	5		18 tuffaceous sandstone	FC: metasandstone
08CL481A02	6540582	359076	6069738	21	13J/14	geochemistry	26		33 gabbro	
08CL487A02	6540583	348359	6073046	21	13J/14	geochemistry	18		24 monzonite	qz monzonite 35-65kf
08CL489A02	6540584	349538	6077901	21	13J/14	geochemistry	18		30 monzogranite	syenogranite 65-90kf
08CL491A02	6540504	360725	6096131	21	13J/14	geochemistry	5		18 tuffaceous sandstone	
08CL492A02	6540505	363653	6096319	21	13J/14	geochemistry	5		6 metarhyolite	
08CL499A02	6540507	341580	6078925	21	13J/14	geochemistry	5		6 metarhyolite	Could be part of FSG
08CL501A02	6540585	341923	6070663	21	13J/14	geochemistry	18		30 monzogranite	syenogranite 65-90kf

Appendix A – Major-element and Trace-element Data

SampleID	LabNumber	Classification	GroupSuite	SiO ₂		Al2O ₃		Fe2O _{3T}		Fe2O ₃		MgO		CaO		Na2O		K2O		TiO ₂		MnO		P2O ₅	
				wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	
Units				0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
Detection Limit																									
Upper Limit																									
Analysis Method						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	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	
08AH006A01	6540589	volcanic flow	Aillik Group	48.69	14.62	15.08	8.77	5.68	5.51	9.63	4.03	0.25	1.652	0.201	0.600										
08AH011A02	6540379	pluton	Aillik Group	76.57	11.56	2.87	2.57	0.27	-0.01	0.20	3.75	4.14	0.205	0.011	0.009										
08AH016A02	6540365	pluton	Monkey Hill Intrusive Suite	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08AH030A02	6540381	pluton	Lanceground Intrusive Suite	65.17	17.62	2.33	1.49	0.76	0.25	0.86	5.52	6.37	0.355	0.032	0.062										
08AH038A02	6540382	pluton	Adlilik Intrusive Suite	46.88	16.59	7.13	2.06	4.57	11.18	14.89	1.16	0.11	0.278	0.113	0.016										
08AH050A02	6540383	tuffites	Aillik Group	77.96	10.51	3.20	2.41	0.71	0.04	0.64	4.57	2.41	0.174	0.041	0.010										
08AH058A02	6540384	pluton	Long Island Qtz Monzonite	62.12	15.47	5.98	1.86	3.71	1.77	3.57	4.13	4.07	0.976	0.100	0.284										
08AH059A02	6540562	flow	Aillik Group	46.66	16.88	12.92	9.41	3.16	7.45	7.14	4.18	2.05	0.795	0.295	0.118										
08AH069A02	6540386	porphyry	Measles Point Granite	74.31	11.28	4.02	2.19	1.65	0.11	1.42	3.83	4.04	0.337	0.096	0.035										
08AH069A03	6540366	porphyry	Measles Point Granite	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08AH070A02	6540387	pluton	Lanceground Intrusive Suite	73.19	11.96	3.91	1.60	2.07	0.06	0.76	4.12	4.83	0.333	0.101	0.027										
08AH072A02	6540563	flow	Aillik Group	71.05	12.41	3.79	1.84	1.76	0.21	0.98	3.72	5.17	0.470	0.089	0.081										
08AH072A02	6540388	pluton	Lanceground Intrusive Suite	66.74	12.86	7.35	4.63	2.46	0.24	2.28	3.86	4.75	0.611	0.191	0.102										
08AH073A02	6540389	pluton	Southern Numok Suite	72.16	12.24	2.79	0.62	1.95	0.06	0.70	3.65	5.13	0.273	0.069	0.015										
08AH074A02	6540391	pluton	Southern Numok Suite	73.15	12.75	2.31	0.54	1.59	0.20	0.94	3.42	5.12	0.337	0.053	0.048										
08AH076A02	6540392	tuffites	Aillik Group	75.17	11.94	2.45	2.15	0.27	-0.01	0.09	3.61	5.07	0.186	0.021	0.014										
08AH090A01	6540591	pluton	Adlilik Intrusive Suite	44.93	15.78	15.10	8.51	5.93	6.97	13.36	1.62	0.15	1.244	0.150	0.036										
08AH092A02	6540394	flow	Aillik Group	74.32	11.62	2.38	1.41	0.87	0.06	0.55	2.89	5.44	0.179	0.086	0.018										
08AH106A02	6540395	porphyry	Kennedy Mtn Intrusive Suite	74.45	12.66	3.29	1.68	1.45	0.11	0.64	4.00	4.64	0.273	0.054	0.022										
08AH116A02	6540396	clastic	Measles Point Granite	73.48	11.52	3.44	2.28	1.05	0.13	0.39	2.86	5.73	0.263	0.108	0.019										
08AH123A02	6540397	clastic	Aillik Group	72.03	10.04	1.72	0.53	1.08	0.26	3.76	5.68	0.79	0.197	0.102	0.020										
08AH132A02	6540398	tuffites	Aillik Group	74.52	12.53	2.89	1.52	1.24	0.40	1.06	7.14	0.24	0.242	0.059	0.037										
08AH140A02	6540399	pluton	Kennedy Mtn Intrusive Suite	78.39	11.33	1.81	1.18	0.57	0.06	0.10	5.08	2.17	0.081	0.016	0.007										
08AH143A02	6540367	clastic	Present Lake seq	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08AH143A03	6540368	clastic	Present Lake seq	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08AH143A04	6540369	clastic	Present Lake seq	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08AH145A02	6540592	dyke	felsic dyke	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08AH149C01	6540373	pluton	Unclassified Hbl Gabbro	51.23	12.62	13.90	5.29	7.75	6.29	7.78	2.35	2.45	1.095	0.156	0.195										
08AH154A02	6540564	tuffites	Aillik Group	71.15	12.16	4.98	3.83	1.03	0.03	1.51	5.32	2.68	0.397	0.236	0.035										
08AH165A02	6540402	pyroclastic	Aillik Group	77.62	11.55	1.30	0.72	0.53	0.20	1.68	4.65	2.81	0.090	0.087	0.007										
08AH166A02	6540403	tuffites	Aillik Group	77.96	11.71	5.09	4.50	0.53	0.04	1.05	3.10	4.47	0.380	0.101	0.034										
08AH168A02	6540404	pluton	Kennedy Mtn Intrusive Suite	77.15	11.50	0.98	-0.99	0.28	0.04	0.60	2.31	5.17	0.082	0.081	0.007										
08AH169A02	6540405	tuffites	Aillik Group	66.52	15.35	3.69	1.52	1.96	0.96	2.54	4.20	4.02	0.670	0.080	0.211										
08AH173A02	6540407	pluton	Aillik Group	71.83	13.95	2.36	1.67	0.63	0.09	0.43	3.94	5.89	0.239	0.048	0.020										
08AH175A02	6540565	tuffites	Aillik Group	49.17	16.72	9.96	2.92	1.13	0.15	0.66	3.32	5.16	0.230	0.026	0.012										
08AH176A02	6540408	pluton	Kennedy Mtn Intrusive Suite	75.39	12.14	1.28	0.75	0.48	0.07	0.49	3.46	4.90	0.145	0.027	0.018										
08AH189A02	6540409	pluton	Big River Granite	71.05	13.05	4.50	1.13	3.03	0.10	1.10	3.83	5.38	0.459	0.117	0.044										
08AH190A02	6540574	pluton	Southern Numok Suite	67.42	14.43	3.74	1.48	2.03	0.53	1.62	3.96	5.31	0.608	0.073	0.140										
08AH210A02	6540411	pluton	Big River Granite	49.17	16.72	9.96	2.92	1.13	0.15	0.66	3.32	5.16	0.230	0.026	0.012										
08AH211A02	6540575	pluton	Unclassified Gabbro	57.32	18.69	6.38	1.90	4.04	1.91	4.66	5.09	3.87	0.852	0.108	0.264										
08AH219A02	6540576	pluton	Unclassified Gabbro	45.83	10.90	9.81	1.68	7.31	15.52	7.12	1.64	1.60	0.586	0.153	0.183										
08AH222A02	6540412	pluton	Kennedy Mtn Intrusive Suite	74.45	11.58	2.69	0.94	1.57	0.02	0.52	2.91	5.42	0.207	0.054	0.011										
08AH233A02	6540413	pluton	Unclassified Granodiorite	60.16	18.49	4.52	1.00	3.16	0.87	3.38	4.46	5.56	0.841	0.087	0.225										
08AH225A02	6540415	pluton	Aillik Group	45.67	18.05	9.77	5.56	3.79	10.13	5.77	2.35	2.35	0.711	0.132	0.049										

Appendix A – Major-element and Trace-element Data

SampleID	LabNumber	Classification	GroupSuite	SiO ₂	Al2O ₃	Fe2O _{3T}	Fe2O ₃	MgO	CaO	Na2O	K2O	TiO ₂	MnO	P2O ₅
				wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %
Units	Detection Limit	Upper Limit	Analysis Method	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj
08AH267A02	6540417	pyroclastic flow	Aillik Group	48.56	16.03	11.86	4.77	6.38	5.65	8.91	4.23	1.36	0.926	0.288
08AH268A02	6540418	tuffites	Aillik Group	46.43	16.34	13.16	3.62	8.58	7.79	9.23	3.08	0.46	1.149	0.184
08AH270A02	6540419	porphyry tuffites	Aillik Group	68.17	13.17	5.75	4.65	1.00	0.16	0.85	4.23	5.01	0.527	0.088
08AH271A02	6540421	porphyry tuffites	Measles Point Granite	74.19	11.31	3.36	2.02	1.20	0.07	0.34	5.77	0.243	0.060	0.015
08AH276A02	6540422	porphyry pluton	Aillik Group	74.90	11.32	3.18	1.87	1.18	0.14	0.18	3.08	5.27	0.221	0.091
08AH277A02	6540423	porphyry pluton	Measles Point Granite	75.63	11.53	2.42	1.49	0.83	0.10	0.26	3.13	5.23	0.189	0.052
08AH279A02	6540424	porphyry pluton	Freshsteak Granitoid? KMIS?	76.38	11.53	2.40	1.71	0.62	0.16	0.41	6.42	0.22	0.173	0.014
08AH281A02	6540425	flow	Unclassified Gabbro	48.08	17.91	10.59	2.06	7.68	5.25	8.28	3.04	2.23	0.945	0.190
08AH284A02	6540426	flow	Aillik Group	74.35	12.89	1.33	0.34	0.89	0.17	0.52	3.58	4.98	0.174	0.034
08AH289A02	6540427	flow	Aillik Group	52.33	14.50	14.40	8.53	5.29	3.01	7.54	3.90	1.28	1.984	0.187
08AH290A02	6540428	flow	Aillik Group	74.21	11.57	2.61	1.62	0.89	0.18	0.32	2.52	6.05	0.178	0.018
08AH296A02	6540429	flow	Post Hill Group	47.13	14.65	11.82	1.61	9.18	10.15	10.78	1.84	0.21	0.795	0.191
08AH308A02	6540433	flow	Aillik Group	72.29	13.26	2.47	2.40	0.06	0.08	0.53	4.05	5.32	0.263	0.065
08AH309A02	6540434	flow	Aillik Group	67.75	12.85	7.28	5.07	1.98	0.08	0.91	4.54	4.19	0.591	0.127
08AH310A02	6540435	pluton	Freshsteak Granitoid	71.90	12.68	3.51	1.65	1.68	0.08	0.76	3.54	5.49	0.288	0.068
08AH311A02	6540436	pluton	Southern Numok Suite	64.54	14.80	6.25	1.39	4.37	3.0	1.82	4.41	5.42	0.692	0.156
08AH312A02	6540437	porphyry	Measles Point Granite	72.63	11.39	3.30	1.75	1.40	0.09	0.62	3.08	5.23	0.293	0.092
08AH313A02	6540438	flow	Aillik Group	48.69	16.83	11.31	4.17	6.42	6.21	9.38	4.76	0.68	0.803	0.178
08AH314A02	6540439	flow	Aillik Group	48.88	17.27	11.79	4.16	6.87	6.41	8.53	3.75	0.88	0.799	0.211
08AH315A02	6540441	pluton	Adlavik Intrusive Suite	59.87	17.52	4.01	1.24	2.49	1.10	2.58	5.27	5.23	1.209	0.251
08AH316A02	6540442	pluton	Lanceground Intrusive Suite	53.74	17.24	8.71	2.03	6.01	4.27	7.49	3.84	2.09	0.824	0.135
08AH318A02	6540443	pluton	Big River Granite	71.41	13.58	2.15	0.61	1.39	0.18	0.87	3.70	5.38	0.283	0.046
08AH322AA02	6540444	pluton	Big River Granite	61.61	16.77	4.85	2.99	1.67	0.94	2.38	6.13	5.25	0.851	0.065
08AH327A02	6540445	pluton	Unclassified Gabbro	45.93	15.39	11.52	3.04	7.63	7.93	11.50	2.11	1.42	0.910	0.183
08AH328A02	6540446	pluton	Southern Numok Suite	57.13	16.88	7.01	1.57	4.89	2.45	5.06	3.90	4.03	0.920	0.110
08AH329A02	6540577	pluton	Southern Numok Suite	61.44	13.75	6.15	1.53	4.16	3.99	4.71	2.94	4.41	0.696	0.109
08AH330A02	6540578	pluton	Southern Numok Suite	62.05	15.91	5.41	1.10	3.87	1.61	3.57	3.70	4.41	0.798	0.100
08AH331A02	6540447	pluton	Southern Numok Suite	67.23	15.77	2.91	1.13	1.60	0.41	1.67	4.12	5.19	0.489	0.070
08AH333A02	6540448	pluton	Southern Numok Suite	72.18	13.87	1.83	0.74	0.98	0.68	1.42	3.49	4.76	0.351	0.051
08AH335A02	6540449	flow?	Aillik Group	72.54	12.39	3.23	1.12	1.91	0.04	0.61	3.64	5.14	0.321	0.079
08AH338A02	6540451	pluton	Aillik Group	75.09	11.57	1.99	1.65	0.30	0.07	1.08	3.61	4.37	0.208	0.075
08AH342A02	6540452	pluton	Southern Numok Suite	61.28	16.67	6.06	3.88	1.96	0.48	1.96	6.07	4.95	0.903	0.062
08AH343A02	6540579	pyroclastic	Aillik Group	74.17	11.84	3.28	1.55	1.55	0.06	0.61	3.56	5.26	0.278	0.074
08AH344A02	6540453	pyroclastic	Southern Numok Suite	57.28	16.38	6.16	2.32	3.46	2.25	6.06	4.68	3.71	0.857	0.093
08AH345A02	6540454	pyroclastic	Kennedy Mtn Intrusive Suite	75.52	11.81	1.83	0.06	1.59	0.05	0.52	4.23	3.68	0.149	0.031
08CL011A02	6540455	pyroclastic	Aillik Group	79.01	10.18	1.30	1.07	0.21	0.07	0.31	4.09	2.85	0.205	0.025
08CL019A02	6540456	pyroclastic	Adlavik Intrusive Suite	48.37	16.45	12.82	4.29	7.68	6.44	8.81	3.09	0.72	1.158	0.174
08CL037A02	6540457	pyroclastic	Aillik Group	73.62	10.13	1.43	1.34	0.07	0.03	0.46	0.80	7.88	0.131	0.014
08CL047A02	6540458	pyroclastic	Aillik Group	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL050A02	6540374	pyroclastic	Aillik Group	73.34	13.29	2.28	2.21	0.06	0.07	0.25	4.08	5.27	0.244	0.032
08CL057A02	6540459	pyroclastic	Aillik Group	48.88	14.23	11.85	4.16	6.92	7.49	10.42	3.28	1.25	0.742	0.183
08CL068A02	6540461	flow	Aillik Group	47.78	17.58	11.91	6.02	5.30	6.12	9.65	4.16	0.84	0.805	0.173
08CL075A02	6540462	pluton	Kennedy Mtn Intrusive Suite	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL085A02	6540375	pluton	Aillik Group	59.87	17.67	6.19	4.79	1.26	1.26	4.64	9.04	0.29	0.624	0.327
08CL087A02	6540463	tuffites												

Appendix A – Major-element and Trace-element Data

SampleID	LabNumber	Classification	GroupSuite	SiO ₂	Al2O ₃	Fe2O _{3T}	Fe2O ₃	MgO	CaO	Na2O	K2O	TiO ₂	MnO	P2O ₅	
				wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	
Units	Detection Limit	Upper Limit	Analysis Method	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	
08CL099B02	6540568	flow	Aillik Group	47.03	12.07	9.50	-99	-99	9.71	13.30	2.40	1.62	0.501	0.036	
08CL099B02	6540568	flow	Aillik Group	48.05	12.15	9.91	3.19	6.05	9.89	13.64	2.47	1.62	0.518	0.184	
08CL107A02	6540521	flow	Aillik Group	48.97	14.22	11.09	-99	-99	8.47	10.42	3.59	0.90	0.740	0.051	
08CL125A02	6540464	pluton	Kennedy Mtn Intrusive Suite	75.37	12.29	1.97	0.98	0.89	0.09	0.48	5.29	2.74	0.207	0.049	
08CL131A03	6540376	porphyry	Measles Point Granite	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL135A02	6540465	tuffites	Aillik Group	70.47	11.72	3.80	3.67	0.12	0.03	0.36	1.78	7.71	0.313	0.034	
08CL148A02	6540466	tuffites	Aillik Group	76.63	11.61	2.52	1.49	0.92	0.36	0.93	4.66	1.35	0.194	0.051	
08CL149A02	6540467	flow	Aillik Group	46.97	17.31	11.47	7.98	3.15	6.49	9.13	3.94	1.09	0.841	0.167	
08CL153A02	6540524	flow	Aillik Group	74.64	11.21	2.46	-99	-99	0.12	0.14	0.67	8.97	0.136	0.010	
08CL159A02	6540525	flow	Aillik Group	47.12	17.60	10.30	-99	-99	5.80	10.15	4.28	0.91	0.850	0.154	
08CL160A02	6540526	clastic	Aillik Group	76.45	9.95	2.72	-99	-99	0.64	0.73	2.34	6.12	0.240	0.065	
08CL167A02	6540569	dyke	Mafic dyke	54.31	13.80	12.20	-99	-99	2.87	5.44	4.00	2.31	2.322	0.192	
08CL167A02	6540569	dyke	Mafic dyke	54.81	13.74	12.58	4.41	7.35	2.87	5.55	3.98	2.25	2.377	0.192	
08CL175A02	6540571	flow	Aillik Group	51.49	17.07	9.67	3.21	5.82	5.60	7.92	2.84	2.16	0.882	0.154	
08CL175A02	6540571	flow	Aillik Group	51.09	17.06	9.34	-99	-99	5.61	7.68	2.77	2.20	0.862	0.149	
08CL179A02	6540527	flow	Aillik Group	51.92	14.74	9.69	-99	-99	7.41	9.41	3.59	1.26	0.572	0.229	
08CL195A02	6540528	flow	Aillik Group	48.10	16.08	9.01	-99	-99	8.40	13.50	2.52	0.62	0.572	0.155	
08CL196A02	6540529	pyroclastic	Aillik Group	62.29	15.58	4.95	-99	-99	2.08	5.96	4.42	1.37	0.518	0.137	
08CL197A02	6540531	flow	Aillik Group	77.11	10.63	2.24	-99	-99	-0.01	0.06	0.58	8.59	0.124	0.067	
08CL198A02	6540532	pyroclastic	Aillik Group	78.79	10.33	2.33	-99	-99	0.01	0.14	1.73	6.85	0.107	0.008	
08CL199A02	6540533	pluton	Kennedy Mtn Intrusive Suite	70.80	13.47	3.60	-99	-99	0.27	1.12	4.45	5.28	0.446	0.076	
08CL202A02	6540522	pyroclastic	Aillik Group	60.55	14.58	6.16	-99	-99	3.18	7.80	6.19	0.99	0.611	0.138	
08CL203A02	6540534	pyroclastic	Aillik Group	76.89	11.34	3.40	-99	-99	0.11	0.48	7.74	0.16	0.247	0.063	
08CL204A02	6540572	dyke/sill	felsic dyke	72.83	17.58	0.19	-99	-99	0.04	0.09	9.76	0.06	0.032	0.003	
08CL204A02	6540572	dyke/sill	felsic dyke	72.45	17.36	0.21	0.07	0.12	0.05	0.09	9.77	0.06	0.033	-0.001	
08CL214A02	6540468	pluton	Kennedy Mtn Intrusive Suite	65.93	15.76	4.30	1.25	2.74	0.57	1.80	4.40	5.11	0.683	0.087	
08CL265A02	6540535	pluton	Kennedy Mtn Intrusive Suite	70.36	14.06	3.73	-99	-99	0.34	1.28	3.85	5.37	0.363	0.032	
08CL266A02	6540536	flow	Aillik Group	50.04	14.21	11.39	-99	-99	8.04	10.78	3.89	1.04	0.714	0.202	
08CL268A02	6540537	flow	Aillik Group	49.12	13.24	13.35	-99	-99	8.76	9.52	3.84	0.76	0.820	0.127	
08CL272A02	6540469	tuffites	Aillik Group	76.87	11.55	1.24	0.68	0.68	0.50	0.13	1.10	3.58	3.03	0.053	-0.001
08CL273A02	6540471	tuffites	Aillik Group	70.12	12.81	5.04	3.37	1.50	0.13	0.81	4.85	4.03	0.405	0.122	
08CL274A02	6540472	tuffites	Present Lake seq	72.84	12.41	3.46	2.26	1.07	0.01	0.47	3.52	5.20	0.288	0.065	
08CL275A02	6540473	pluton	Aillik Group	73.98	12.13	2.27	1.00	1.14	0.53	2.02	1.71	5.29	0.125	0.096	
08CL276A02	6540474	pluton	Kennedy Mtn Intrusive Suite	63.92	15.97	3.85	1.91	1.75	0.98	2.38	4.39	5.15	0.861	0.044	
08CL277A02	6540475	pluton	Kennedy Mtn Intrusive Suite	75.75	11.81	2.68	1.45	1.10	0.02	0.38	5.30	2.51	0.215	0.048	
08CL278A02	6540476	pyroclastic	Aillik Group	76.61	11.92	0.93	0.88	0.05	0.02	0.87	5.43	2.29	0.108	0.020	
08CL279A02	6540477	pluton	Kennedy Mtn Intrusive Suite	58.12	13.78	9.54	2.13	6.67	1.67	4.03	4.30	4.34	1.431	0.177	
08CL280A02	6540478	pluton	Kennedy Mtn Intrusive Suite	66.18	15.82	4.46	1.45	2.71	1.10	2.59	4.42	4.42	0.813	0.083	
08CL281A02	6540479	pluton	Kennedy Mtn Intrusive Suite	69.79	14.13	2.68	2.10	0.53	0.37	0.98	4.34	4.98	0.471	0.061	
08CL282A02	6540481	tuffites	Aillik Group	67.92	13.40	7.00	5.06	1.74	0.16	2.56	5.77	2.61	0.613	0.135	
08CL283A02	6540482	pluton	Kennedy Mtn Intrusive Suite	72.80	12.51	4.06	2.59	1.32	0.06	0.71	3.50	5.24	0.340	0.068	
08CL284A02	6540483	pluton	Kennedy Mtn Intrusive Suite	76.82	11.33	2.54	1.11	1.29	0.09	0.44	3.05	4.99	0.178	0.067	
08CL296A02	6540581	Unclassified Gabbro		49.94	18.74	9.47	3.33	5.52	3.99	7.49	3.98	2.03	1.139	0.151	
08CL305A02	6540485	pluton	Southern Numok Suite	58.53	17.99	6.59	2.11	4.04	1.69	3.98	4.44	4.92	1.019	0.107	
08CL312A02	6540566	pluton	Big River Granite	74.77	12.59	1.11	0.49	0.56	0.13	0.58	3.26	5.28	0.215	0.024	

Appendix A – Major-element and Trace-element Data

SampleID	LabNumber	Classification	GroupSuite	SiO ₂	Al2O ₃	Fe2O _{3T}	Fe2O ₃	MgO	CaO	Na2O	K2O	TiO ₂	MnO	P2O ₅	
				wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	wt. %	
Units				0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.001	0.001	0.001	
Detection Limit															
Upper Limit															
Analysis Method				GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	
08CL321A02	6540541	tuffites	Aillik Group	68.08	15.17	3.69	-99	1.52	2.85	5.71	2.66	0.410	0.078	0.105	
08CL341A02	6540487	pluton	Freshsteak Granitoid	65.06	15.58	5.19	1.71	3.13	1.27	3.22	4.13	4.01	0.859	0.102	0.308
08CL412A02	6540488	porphyry	Measles Point Granite	75.27	11.46	3.34	1.89	1.31	0.05	0.21	3.47	5.03	0.241	0.077	0.014
08CL418A02	6540489	pluton	Monkey Hill Intrusive Suite	74.79	10.61	3.16	2.08	0.97	0.10	0.10	2.68	5.83	0.173	0.046	0.004
08CL419A02	6540491	tuffites	Aillik Group	74.68	12.16	2.87	1.77	0.99	0.37	0.88	5.62	1.20	0.198	0.079	0.024
08CL420A02	6540492	flow	Aillik Group	75.20	11.50	2.72	1.45	1.14	0.05	0.33	3.49	4.37	0.197	0.071	0.009
08CL421A02	6540493	tuffites	Aillik Group	73.84	11.69	2.69	1.65	0.94	0.28	0.51	2.84	5.63	0.144	0.023	0.007
08CL423A02	6540494	pyroclastic	Aillik Group	76.60	10.90	2.19	1.40	0.71	0.07	0.42	3.71	3.58	0.170	0.031	0.006
08CL424A02	6540495	porphyry	Measles Point Granite	72.96	10.92	2.98	2.69	0.26	0.09	0.41	2.05	6.69	0.220	0.042	0.013
08CL427A02	6540496	tuffites	Aillik Group	73.55	11.38	2.57	2.55	0.02	0.04	0.43	2.30	6.69	0.204	0.039	0.008
08CL428A02	6540497	porphyry	Measles Point Granite	72.72	11.55	3.05	1.72	1.19	0.12	0.34	2.71	6.11	0.259	0.086	0.021
08CL429A02	6540498	pluton	Kennedy Mtn Intrusive Suite	69.48	12.98	4.77	2.74	1.82	0.12	0.96	3.70	5.19	0.396	0.091	0.040
08CL430A02	6540499	porphyry	Measles Point Granite	70.91	13.31	3.17	1.90	1.14	0.13	1.92	3.14	5.50	0.271	0.048	0.020
08CL431A02	6540501	pluton	Kennedy Mtn Intrusive Suite	74.23	11.45	3.23	1.05	1.96	0.06	0.80	3.47	4.43	0.269	0.066	0.030
08CL450A02	6540502	gneiss	Archean	68.29	15.02	3.61	0.80	2.53	1.87	4.51	4.56	0.54	0.353	0.055	0.072
08CL472A02	6540503	clastic	Aillik Group	62.65	19.12	2.59	2.39	0.17	1.27	4.33	5.35	2.82	0.250	0.049	0.114
08CL481A02	6540582	pluton	Unclassified Gabbro	47.64	20.80	10.88	2.98	7.11	3.74	7.40	4.18	1.48	1.436	0.163	0.847
08CL487A02	6540583	pluton	Southern Numok Suite	58.65	17.57	6.89	1.61	4.75	2.35	5.49	4.27	3.42	0.828	0.113	0.297
08CL489A02	6540584	pluton	Southern Numok Suite	73.06	13.05	1.33	0.17	1.04	0.30	0.70	3.15	5.25	0.280	0.030	0.042
08CL491A02	6540504	tuffites	Aillik Group	69.36	13.62	3.79	2.30	1.34	0.43	1.13	5.56	3.37	0.470	0.080	0.125
08CL492A02	6540505	flow	Aillik Group	72.92	13.31	1.96	1.26	0.63	0.48	0.26	3.53	6.14	0.250	0.034	0.035
08CL499A02	6540507	pluton	Aillik Group	72.31	13.62	1.45	1.12	0.30	0.25	0.58	4.03	5.30	0.378	0.053	0.038
08CL501A02	6540585	pluton	Southern Numok Suite	72.14	13.20	2.06	0.47	1.43	0.32	0.87	3.68	5.15	0.326	0.046	0.066

Appendix A – Major-element and Trace-element Data

SampleID	LabNumber	Cr	Zr	Ba	LOI	Total	IshAltIndx	ChiCarbPy1AdvArgAtt1	As		Be		Co		Cr		Cu		Fe		Li		Mn		Nb		Ni			
									ppm	2	0.1	1	0.01	1	1	0.01	1	0.01	0.1	0.01	0.1	0.01	0.1	0.01	0.1	0.01	0.1			
Units																														
Detection Limit																														
Upper Limit																														
Analysis Method				GS Maj	GS Maj	GS Maj	GS Maj	Gravimetric																						
				GS Maj	GS Maj	GS Maj	GS Maj		GS Tr																					
08AH006A01	6540589	140	129	592	0.26	100.51	29.65	72.34	20.26	17	0.8	53	138	-1	10.39	55.3	1442	10	103											
08AH011A02	6540379	-100	560	35	0.41	99.73	51.08	3.15	65.98	3	2.8	1	1	2	1.25	1.9	69	32	2											
08AH016A02	6540365	-999	-99	-99	-99	-99	-99	-99	-99	-2	11.2	-1	1	18	1.15	0.6	59	338	2											
08AH030A02	6540381	-100	422	903	0.46	99.03	50.89	7.77	49.57	3	5.0	9	142	11	7.26	37.7	1756	97	34											
08AH038A02	6540382	132	12	89	0.57	98.91	41.28	92.52	14.69	3	5.2	2	1	2	1.60	15.4	549	56	3											
08AH050A02	6540383	-100	846	21	0.23	99.78	31.99	9.70	59.76	12	1.6	4	1	6	3.76	2.3	649	23	5											
08AH058A02	6540384	-100	314	1354	0.67	99.15	43.12	40.05	39.61	17	2.3	2	2	49	2.17	7.8	514	23	2											
08AH059A02	6540562	-100	54	641	1.36	99.84	45.63	62.97	19.91	16	1.0	39	40	-1	6.23	197.4	2014	4	69											
08AH069A02	6540386	-100	685	605	0.30	99.79	44.12	18.29	58.05	8	0.6	2	6	-1	0.46	4.5	108	6	2											
08AH069A03	6540366	-999	-99	-99	-99	-99	-99	-99	-99	-2	6.1	5	1	14	12.95	5.1	1563	39	19											
08AH070A02	6540387	-100	1325	119	0.54	99.84	50.13	19.29	59.72	3	2.8	1	1	2	1.25	1.9	69	32	2											
08AH072A02	6540563	-100	681	461	0.24	98.20	53.37	18.14	59.13	2	5.1	5	2	1	2.65	1.0	694	28	4											
08AH072A02	6540388	-100	435	2645	0.62	99.61	44.89	23.87	51.14	4	3.1	8	2	19	5.13	3.4	1467	20	9											
08AH073A02	6540389	-100	573	165	0.39	97.48	54.35	18.65	62.03	5	3.1	3	1	3	2.19	1.4	592	27	3											
08AH074A02	6540391	-100	481	476	0.55	98.88	54.99	17.34	61.65	5	5.0	4	2	2	1.82	5.9	451	28	3											
08AH076A02	6540392	-100	567	98	0.33	98.89	57.73	2.96	67.05	-2	4.6	1	-1	2	1.35	2.0	160	23	-1											
08AH090A01	6540591	-100	20	157	1.34	100.67	32.21	87.94	16.99	-2	-0.1	57	53	196	10.44	9.7	1121	5	82											
08AH092A02	6540394	-100	553	219	1.24	98.79	61.54	10.02	67.99	3	0.7	2	1	10	1.89	10.4	732	20	1											
08AH106A02	6540395	-100	483	422	0.36	100.50	50.60	15.26	61.07	-2	1.3	1	4	1	4	2.45	1.4	457	13	2										
08AH116A02	6540396	-100	370	143	0.45	98.39	64.29	12.07	68.48	4	3.5	3	2	83	2.53	1.6	904	21	2											
08AH123A02	6540397	-100	463	223	1.29	98.89	29.97	40.10	36.19	-2	-0.1	-1	-1	1	-0.01	0.2	-1	-1	2											
08AH132A02	6540398	-100	523	38	0.18	99.30	7.23	18.18	46.41	3	2.6	4	7	2	2.11	10.6	482	20	4											
08AH140A02	6540399	-100	105	60	0.26	99.31	30.12	8.04	59.91	2	3.5	1	1	10	1.53	0.7	131	7	2											
08AH143A02	6540367	-999	-99	-99	-99	-99	-99	-99	-99	-20	0.8	2	3	44	12.45	19.8	4813	7	17											
08AH143A03	6540368	-999	-99	-99	-99	-99	-99	-99	-99	-2	0.4	7	5	5	12	26.00	5.9	12922	15	29										
08AH143A04	6540369	-999	-99	-99	-99	-99	-99	-99	-99	-2	0.7	10	5	113	21.51	7.1	7440	13	28											
08AH145A02	6540592	-100	7	3	-1	99.42	74.43	99.61	40.69	-2	0.4	8	6	10	29.22	5.7	14280	19	39											
08AH149C01	6540373	-999	-99	-99	-99	-99	-99	-99	-99	-3	5.0	9	142	11	7.26	37.7	1756	97	34											
08AH154A02	6540564	-100	51	823	1.47	99.55	46.30	23.77	-2	0.8	40	42	18	9.25	16.1	1117	10	20												
08AH165A02	6540402	-100	443	1475	0.22	98.72	28.39	11.71	50.89	2	2.5	4	1	2	3.58	10.7	1873	21	6											
08AH166A02	6540403	-100	175	153	0.62	100.61	32.21	8.88	54.32	3	3.0	2	14	4	1.12	5.9	734	66	4											
08AH168A02	6540404	-100	441	1351	0.62	99.55	52.11	7.06	63.53	-2	2.4	3	3	3	0.84	12.1	712	24	-1											
08AH169A02	6540405	-100	170	130	0.27	98.41	65.21	-99	70.81	4	2.3	4	1	1	3.75	6.4	837	21	5											
08AH173A02	6540407	-100	255	1186	0.65	98.90	42.53	26.21	46.34	3	3.3	11	7	5	2.77	26.4	667	17	7											
08AH175A02	6540565	-100	475	351	0.30	99.10	57.75	6.78	61.70	3	4.9	3	1	7	1.63	2.8	389	31	4											
08AH176A02	6540408	-100	207	875	0.28	98.88	57.20	13.18	63.92	-2	1.7	3	4	3	2.56	1.0	231	28	5											
08AH189A02	6540409	-100	254	254	0.39	98.30	55.69	6.10	65.24	2	3.8	2	1	2	1.05	229	24	1												
08AH190A02	6540574	-100	998	228	0.12	99.73	52.67	25.32	58.60	4	1.3	5	1	2	3.26	2.0	978	28	1											
08AH210A02	6540411	-100	634	964	0.67	98.49	51.17	21.63	52.48	2	3.1	9	3	3	2.79	10.3	615	25	6											
08AH211A02	6540575	-100	178	151	0.58	99.54	35.28	71.14	20.10	-2	1.2	36	174	60	7.02	16.0	1131	9	53											
08AH219A02	6540576	-100	490	841	0.28	99.41	37.23	39.90	32.97	5	2.7	19	22	14	4.49	15.6	846	17	10											
08AH222A02	6540412	1608	155	354	4.73	98.07	66.14	87.57	15.88	2	1.5	58	1518	39	6.91	48.7	1130	12	462											
08AH233A02	6540413	-100	573	282	0.35	98.22	61.35	16.03	68.33	2	1.2	3	2.5	12	3	2.20	2.9	476	23	3										
08AH225A02	6540415	-100	293	1719	0.54	99.13	45.08	2																						

Appendix A – Major-element and Trace-element Data

Appendix A – Major-element and Trace-element Data

SampleID	LabNumber	Cr	Zr	Ba	LOI	Total	IshAltIndx	ChiCarbPy1AdvArgAtt1	As		Be		Co		Cr		Cu		Fe		Li		Mn		Nb		Ni	
									ppm																			
Units									2	0.1	1	0.01	1	1	0.01	1	0.01	1	0.1	0.01	1	0.1	1	0.01	1	0.01	1	
Detection Limit																												
Upper Limit																												
Analysis Method				GS Maj	GS Maj	GS Maj	GS Maj	Gravimetric																				
				GS Maj	GS Maj	GS Maj	GS Maj		GS Tr																			
08CL099B02	6540568	589	33	119	0.97	97.32	41.90	-99	15.62	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL099B02	6540568	614	33	104	1.02	99.48	41.68	79.57	15.60	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL107A02	6540521	326	34	84	1.00	99.64	40.05	-99	17.88	-2	0.5	41	333	15	7.70	42.5	1262	8	111									
08CL125A02	6540464	-100	351	343	0.28	98.77	32.86	10.80	56.29	2	3.5	2	1	2	1.55	1.4	409	32	2									
08CL131A03	6540376	-99	-99	-99	-99	-99	-99	-99	17	2.3	2	2	49	2.17	7.8	514	23	2										
08CL135A02	6540465	-100	523	634	0.21	96.47	78.37	1.52	76.50	10	3.0	2	1	1	1.26	0.29	269	18	2									
08CL148A02	6540466	-100	433	215	0.47	98.79	23.32	17.53	56.30	2	3.2	4	6	1	2.04	15.2	441	23	4									
08CL149A02	6540467	-100	45	214	1.15	98.67	36.71	65.72	19.36	8	3.1	44	44	-1	6.61	67.6	1193	5	72									
08CL153A02	6540524	-100	347	61	0.21	98.60	91.82	-99	88.93	13	1.7	2	2	-1	1.62	20.5	82	58	2									
08CL159A02	6540525	121	47	364	1.20	98.63	31.72	-99	18.89	3	0.7	42	124	1	7.15	20.6	1096	9	69									
08CL160A02	6540526	-100	597	159	0.51	99.78	68.78	-99	67.31	12	2.8	4	3	3	1.36	39.1	506	38	5									
08CL167A02	6540569	-100	215	794	0.52	98.18	35.43	-99	30.62	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL167A02	6540569	-100	183	801	0.39	98.97	34.94	62.15	30.66	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL175A02	6540571	-100	68	803	1.74	99.70	41.89	69.53	23.93	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL175A02	6540571	-100	66	819	1.82	98.76	42.77	-99	24.13	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL179A02	6540527	233	65	484	1.31	100.34	39.99	-99	20.28	-2	1.3	32	227	15	6.63	37.2	1456	10	47									
08CL195A02	6540528	517	27	65	0.75	99.75	36.03	-99	16.46	2	-0.1	36	519	126	6.32	45.1	1094	5	115									
08CL196A02	6540529	-100	191	569	0.76	98.22	24.95	-99	33.32	7	3.2	13	24	-1	3.60	29.1	1043	14	13									
08CL197A02	6540531	-100	437	126	0.39	99.75	93.10	-99	92.49	6	1.7	1	2	1	1.59	1.0	29	59	2									
08CL198A02	6540532	-100	420	50	0.29	100.60	78.56	-99	80.70	5	1.3	1	5	-1	1.71	0.7	70	87	1									
08CL199A02	6540533	-100	490	899	0.49	100.09	49.86	-99	54.79	3	3.7	6	2	-1	2.62	3.3	605	32	4									
08CL202A02	6540522	-100	138	223	0.47	100.77	23.00	-99	26.07	6	6.5	19	68	-1	4.23	49.2	978	24	31									
08CL203A02	6540534	-100	606	5	0.25	100.69	3.12	-99	48.02	58	26.8	3	-1	-1	2.35	150.6	500	59	3									
08CL204A02	6540572	-100	2	18	0.39	100.98	0.98	-99	42.40	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL204A02	6540572	-100	3	11	0.79	100.81	1.04	1.64	42.25	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL214A02	6540468	-100	546	1435	0.63	99.43	47.80	25.84	49.33	8	2.6	10	2	3	3.06	10.5	714	24	6									
08CL265A02	6540535	-100	468	443	0.98	100.41	52.69	-99	56.27	4	1.6	5	2	4	2.62	3.9	254	34	4									
08CL266A02	6540536	323	38	160	0.60	100.97	38.24	-99	18.05	-2	1.2	42	325	47	7.83	33.8	1381	8	107									
08CL268A02	6540537	208	43	100	0.99	100.58	41.59	-99	18.17	3	-0.1	45	209	55	9.14	26.5	868	10	98									
08CL272A02	6540469	-100	166	77	0.42	98.02	40.33	8.72	61.54	-2	3.1	-1	1	18	1.10	12.6	516	52	2									
08CL273A02	6540471	-100	484	1245	0.16	98.52	42.38	15.51	54.80	3	3.1	4	1	6	3.61	9.9	1008	24	4									
08CL274A02	6540472	-100	582	496	0.52	98.81	56.64	11.06	64.54	18	3.6	3	1	9	2.54	3.5	566	35	3									
08CL275A02	6540473	-100	199	223	0.81	98.97	60.96	19.33	63.44	-2	4.1	3	14	18	1.80	17.7	796	54	6									
08CL276A02	6540474	-100	618	1574	1.05	98.79	47.51	22.22	45.20	3	2.4	13	4	-1	2.82	7.8	352	23	8									
08CL277A02	6540475	-100	589	54	0.26	98.99	30.81	12.55	57.03	3	3.9	2	1	4	2.10	1.8	417	31	2									
08CL278A02	6540476	-100	516	154	0.67	98.87	26.78	0.84	54.77	4	9.9	-1	4	4	0.57	0.7	175	60	3									
08CL279A02	6540477	-100	366	1798	0.32	98.51	41.90	49.11	36.76	2	5.2	22	2	3	6.71	57.0	1342	30	11									
08CL280A02	6540478	-100	301	1503	0.54	100.51	44.66	30.52	45.45	15	2.7	13	3	3	3.17	22.4	659	18	6									
08CL281A02	6540479	-100	361	1459	0.35	98.24	50.11	8.76	55.10	5	3.1	6	2	31	1.63	15.0	500	26	2									
08CL282A02	6540481	-100	427	1683	0.20	100.46	24.91	18.46	44.44	6	2.2	6	2	34	4.67	1.2	1062	20	7									
08CL283A02	6540482	-100	768	477	0.37	99.68	55.79	13.70	63.05	3	2.1	3	2	6	2.83	0.9	582	30	5									
08CL284A02	6540483	-100	754	61	0.42	99.93	59.23	14.63	68.16	4	1.3	2	1	9	1.94	1.9	576	20	3									
08CL296A02	6540581	-100	404	1244	2.36	99.68	34.42	61.29	24.40	2	1.6	29	49	52	6.87	22.0	1162	16	26									
08CL305A02	6540485	-100	700	1183	0.65																							

Appendix A – Major-element and Trace-element Data

SampleID	LabNumber	Cr	Zr	Ba	LOI	Total	IshAltIndx	ChlCarbPy1AdvArgAtt1	As		Be	Co	Cr	Cu	Fe	Li	Mn	Nb	Ni
									ppm	wt. %									
Units									2	0.1									
Detection Limit																			
Upper Limit																			
Analysis Method				GS Maj	GS Maj	GS Maj	Gravimetric				GS Tr								
08CL321A02	6540541	-100	186	560	0.44	100.70	32.82	-.99	40.32	8	3.0	11	45	-1	2.70	25.6	605	14	
08CL341A02	6540487	-100	256	1492	0.46	100.19	41.77	35.09	43.01	3	2.1	14	7	1	3.55	8.3	813	16	
08CL412A02	6540488	-100	527	128	0.33	99.49	58.06	13.81	66.87	6	3.9	2	2	5	2.37	3.9	637	25	
08CL418A02	6540489	-100	878	31	0.28	97.76	68.08	11.15	72.22	4	4.1	2	1	5	2.48	42.8	412	31	
08CL419A02	6540491	-100	345	105	0.35	98.44	19.44	16.59	52.08	2	0.8	4	7	2	2.20	25.2	717	22	
08CL420A02	6540492	-100	512	408	0.32	98.27	53.61	13.14	66.01	2	2.3	2	1	7	2.05	7.1	629	33	
08CL421A02	6540493	-100	415	185	0.46	98.12	63.82	12.53	67.05	4	3.1	2	2	7	1.98	2.7	208	23	
08CL423A02	6540494	-100	452	111	0.35	98.04	46.94	9.72	64.57	3	8.2	-1	4	4	1.66	8.3	274	35	
08CL424A02	6540495	-100	553	105	0.38	96.76	73.31	3.79	74.06	6	3.3	2	1	3	1.40	1.3	360	28	
08CL427A02	6540496	-100	489	50	0.31	97.51	71.16	0.65	72.66	9	3.0	1	1	3	1.01	3.3	348	31	
08CL428A02	6540497	-100	369	167	0.41	97.37	67.10	12.96	69.63	6	2.7	3	2	3	2.45	1.6	785	21	
08CL429A02	6540498	-100	781	723	0.47	98.20	53.26	17.97	59.23	5	2.8	4	2	4	3.44	1.6	776	33	
08CL430A02	6540499	-100	620	421	0.53	98.94	52.63	12.77	57.77	4	3.9	3	1	4	2.35	0.6	412	33	
08CL431A02	6540501	-100	561	739	0.22	98.25	51.31	20.35	63.21	3	2.9	3	2	2	2.36	5.8	548	41	
08CL450A02	6540502	-100	77	294	0.90	99.78	20.95	46.27	38.43	-2	0.7	13	51	24	2.66	26.0	443	4	
08CL472A02	6540503	-100	94	918	0.64	99.17	29.69	15.03	36.41	42	2.0	7	8	2	1.11	90.6	363	5	
08CL481A02	6540582	-100	39	1014	1.73	100.30	31.04	65.72	23.72	3	0.7	28	8	16	7.84	17.4	1247	9	
08CL487A02	6540583	-100	245	881	0.60	100.49	37.14	48.04	32.62	12	2.9	20	26	35	4.80	20.8	840	14	
08CL489A02	6540584	-100	229	1216	0.91	98.10	59.04	13.79	63.77	3	1.3	3	2	14	1.19	2.3	251	10	
08CL491A02	6540504	-100	190	669	0.08	98.00	36.20	16.50	49.35	7	1.2	7	18	1	2.74	2.1	666	18	
08CL492A02	6540505	-100	271	654	0.42	99.33	63.63	10.31	63.09	3	1.2	3	6	4	1.64	5.1	310	9	
08CL499A02	6540507	-100	348	904	0.49	98.49	54.65	5.56	59.87	73	3.1	4	2	-1	1.02	13.7	453	20	
08CL501A02	6540585	-100	340	630	0.49	98.34	54.55	16.54	59.70	3	5.8	5	3	5	1.75	12.9	388	22	

Appendix A – Major-element and Trace-element Data

SampleID	LabNumber	P	Pb	Sc	Sr	Ti	V	Zn	Ag	F	V	Cr	Co	Ni	Cu	Zn	Ga	Ge
Units		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	1	1	2	0.1	1	1	1	1	0.1	5	5	20	1	20	10	30	1	
Upper Limit																		
Analysis Method																		
08AH006A01	6540589	2484	3	9	32.4	653	9892	260	131	-0.1	1151	-99	-99	-99	-99	-99	-99	-99
08AH011A02	6540379	36	15	134	0.6	17	937	-1	14	-0.1	208	-99	-99	-99	-99	-99	-99	-99
08AH016A02	6540365	18	69	76	0.3	35	265	-1	21	-0.1	-99	-99	-99	-99	-99	-99	-99	-99
08AH030A02	6540381	77	123	250	9.2	25	2832	97	236	-0.1	162	6	-20	-1	-20	-10	40	24
08AH038A02	6540382	72	89	330	10.4	28	1441	-1	42	0.1	46	120	140	54	120	200	40	13
08AH050A02	6540383	169	62	320	6.0	16	2814	-1	116	-0.1	64	5	-20	-1	-20	-10	-30	27
08AH058A02	6540384	51	307	191	1.1	26	1657	-1	238	-0.1	818	83	-20	11	-20	10	70	20
08AH059A02	6540562	491	21	204	24.8	337	3741	128	353	-0.1	1387	158	50	36	-20	-10	290	16
08AH069A02	6540386	150	19	144	2.8	98	724	-1	11	-0.1	114	-5	-20	-1	-20	10	50	22
08AH069A03	6540366	195	12	15	4.2	68	2751	-1	163	-0.1	-99	-99	-99	-99	-99	-99	-99	-99
08AH070A02	6540387	36	15	134	0.6	17	937	-1	14	-0.1	2194	-5	-20	-1	-20	-10	150	39
08AH072A02	6540563	350	34	126	5.6	75	3081	1	83	-0.1	179	7	-20	1	-20	-10	80	25
08AH072A02	6540388	450	150	115	16.7	118	4007	-1	334	-0.1	261	6	-20	-1	-20	20	260	22
08AH073A02	6540389	63	34	143	2.8	26	1849	-1	98	-0.1	208	-5	-20	-1	-20	-10	70	26
08AH074A02	6540391	216	27	187	5.0	72	2294	-1	48	-0.1	1460	-5	-20	-1	-20	-10	40	23
08AH076A02	6540392	64	34	207	0.6	74	1076	-1	66	-0.1	70	-5	-20	-1	-20	-10	40	27
08AH090A01	6540591	89	-1	5	35.4	985	7328	467	104	-0.1	65	448	50	58	30	180	140	20
08AH092A02	6540394	65	21	154	0.9	44	1041	-1	106	-0.1	2551	-5	-20	4	30	-10	90	25
08AH096A02	6540395	98	16	81	2.1	40	1918	-1	82	-0.1	104	-5	-20	-1	-20	-10	70	26
08AH116A02	6540396	84	20	177	1.3	54	1896	2	175	-0.1	115	-5	-20	-1	-20	-10	70	25
08AH123A02	6540397	-1	6	-2	-0.1	-1	1	-1	2	-0.1	4860	10	-20	-1	-20	20	290	15
08AH132A02	6540398	172	5	-2	2.7	149	1563	16	86	-0.1	104	14	-20	-1	-20	-10	80	25
08AH140A02	6540399	22	7	60	0.7	29	509	1	29	-0.1	33	-5	-20	-1	-20	-20	-30	1
08AH143A02	6540367	122	155	6	1.1	96	53	27	608	0.4	-99	-99	-99	-99	-99	-99	-99	-99
08AH143A03	6540368	1346	17	11	1.8	23	78	27	129	-0.1	-99	-99	-99	-99	-99	-99	-99	-99
08AH143A04	6540369	1584	16	10	1.5	13	66	25	189	0.1	-99	-99	-99	-99	-99	-99	-99	-99
08AH145A02	6540592	1246	14	5	2.2	21	118	39	143	-0.1	492	12	-20	2	-20	-10	-30	-1
08AH149C01	6540373	77	123	250	9.2	25	2832	97	236	-0.1	-99	-99	-99	-99	-99	-99	-99	-99
08AH154A02	6540564	811	11	88	41.1	407	6432	396	92	-0.1	512	398	40	39	-20	20	210	17
08AH165A02	6540402	164	62	60	7.5	67	2699	-1	124	-0.1	285	-5	-20	-1	-20	-10	80	24
08AH166A02	6540403	29	26	98	4.2	63	599	17	34	-0.1	211	18	-20	-1	-20	-10	-30	22
08AH168A02	6540404	31	9	183	3.4	25	550	1	19	-0.1	493	5	-20	1	-20	-10	-30	17
08AH169A02	6540405	157	37	153	6.8	76	2682	-1	51	-0.1	199	-5	-20	-1	-20	-10	50	23
08AH173A02	6540407	977	33	138	8.6	370	4210	24	80	-0.1	677	36	-20	5	-20	-10	50	19
08AH175A02	6540565	79	42	189	5.1	18	1639	-1	49	-0.1	203	-5	-20	-1	-20	-10	50	26
08AH176A02	6540408	51	11	115	2.0	88	1599	-1	21	-0.1	123	7	-20	-1	-20	-10	-30	20
08AH189A02	6540409	80	34	189	2.1	50	988	-1	39	-0.1	736	-5	40	10	110	-10	-30	19
08AH190A02	6540574	187	12	101	6.5	30	3098	-1	93	-0.1	74	-5	-20	-1	-20	-10	90	26
08AH210A02	6540411	638	24	136	8.1	149	4153	6	73	-0.1	402	19	-20	4	-20	-10	60	22
08AH211A02	6540575	1443	-1	73	36.8	568	7959	198	81	-0.1	579	199	180	30	-20	60	90	19
08AH219A02	6540576	1190	8	101	14.9	473	5457	61	81	-0.1	855	67	20	16	-20	10	80	24
08AH222A02	6540412	775	5	50	28.3	89	3601	104	96	-0.1	916	111	1810	65	520	40	80	16
08AH233A02	6540413	47	18	109	1.0	21	1508	-1	74	-0.1	72	-5	-20	-1	-20	-10	50	25
08AH2258A02	6540415	1036	18	147	9.2	509	5246	-1	65	-0.1	609	21	-20	6	-20	20	60	21
08AH263A02	6540416	211	9	128	28.7	313	4275	161	98	-0.1	807	162	60	46	70	-10	60	17

Appendix A – Major-element and Trace-element Data

SampleID	LabNumber	P	Pb	Sc	Sr	Ti	V	Zn	Ag	F	V	Cr	Co	Ni	Cu	Zn	Ga	Ge
Units		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	1	1	2	0.1	1	1	1	1	0.1	5	5	20	1	20	10	30	1	
Upper Limit																		
Analysis Method																		
08AH267A02	6540417	629	17	48	28.1	540	5611	212	294	-0.1	773	198	40	27	30	-10	160	17
08AH268A02	6540418	569	13	29	32.7	395	6723	234	94	-0.1	86	236	80	45	60	20	70	18
08AH270A02	6540419	341	40	143	11.0	76	2635	-1	204	-0.1	732	-5	-20	1	-20	-10	180	26
08AH271A02	6540421	48	439	163	1.3	31	1646	-1	410	-0.1	1350	-5	-20	2	-20	-10	320	26
08AH276A02	6540422	38	14	146	1.0	22	1535	2	114	-0.1	214	-5	-20	1	-20	-10	120	28
08AH277A02	6540423	36	64	160	0.8	20	1316	-1	67	-0.1	480	-5	-20	-1	-20	-10	70	28
08AH279A02	6540424	19	6	-2	0.3	33	1092	-1	194	-0.1	1175	-5	-20	-1	-20	-10	180	37
08AH281A02	6540425	1398	11	109	32.2	607	5919	228	114	-0.1	538	224	40	29	-20	80	90	20
08AH284A02	6540426	97	29	203	2.4	58	1212	-1	26	-0.1	1142	-5	-20	-1	-20	-10	30	21
08AH289A02	6540427	1614	8	47	39.5	394	11847	326	112	-0.1	638	324	-20	35	-20	30	130	24
08AH290A02	6540428	17	26	155	0.3	41	850	-1	105	-0.1	976	-5	-20	2	-20	-10	90	33
08AH296A02	6540429	237	-1	12	49.1	117	4671	315	83	-0.1	78	300	320	44	130	80	70	15
08AH308A02	6540433	80	24	156	4.3	17	1662	-1	42	-0.1	1182	-5	-20	2	-20	-10	50	21
08AH309A02	6540434	436	19	134	17.2	104	3987	-1	80	-0.1	693	17	20	2	-20	-10	40	19
08AH310A02	6540435	102	26	130	2.1	42	1966	-1	94	-0.1	177	-5	-20	-1	-20	-10	150	26
08AH311A02	6540436	509	18	97	11.2	85	4601	-1	151	-0.1	378	-5	-20	-1	-20	-10	70	15
08AH312A02	6540437	72	20	131	1.2	66	2022	-1	209	-0.1	464	-5	-20	-1	-20	-10	190	25
08AH313A02	6540438	273	50	13	31.2	522	4731	205	228	-0.1	1142	168	40	25	-20	-10	60	12
08AH314A02	6540439	350	19	61	30.0	497	4579	198	204	-0.1	182	129	40	18	-20	20	-30	8
08AH315A02	6540441	1133	5	69	11.5	654	6714	-1	51	-0.1	155	24	-20	2	-20	-10	100	18
08AH316A02	6540442	833	5	65	21.1	723	4909	175	90	-0.1	344	165	40	27	-20	20	120	19
08AH318A02	6540443	180	23	133	4.4	86	1940	-1	57	-0.1	127	-5	-20	1	-20	-10	50	21
08AH322A02	6540444	873	17	116	11.7	125	5538	24	55	-0.1	431	30	-20	6	-20	-10	50	19
08AH327A02	6540445	347	-1	54	54.8	486	5561	354	68	-0.1	327	338	150	26	-20	80	30	12
08AH328A02	6540446	1191	13	123	15.5	454	5863	91	83	-0.1	632	94	30	17	-20	30	120	21
08AH329A02	6540577	912	12	175	18.1	373	4509	96	67	-0.1	977	101	210	20	-20	30	80	17
08AH330A02	6540578	1068	19	159	9.9	419	5023	54	67	-0.1	674	60	-20	11	-20	30	80	20
08AH331A02	6540447	340	19	110	8.7	230	3397	-1	67	-0.1	134	5	-20	1	-20	20	50	23
08AH333A02	6540448	434	23	192	5.6	262	2353	19	36	-0.1	425	23	-20	3	-20	-10	30	14
08AH335A02	6540449	228	20	113	3.4	33	2058	-1	89	-0.1	535	-5	-20	-1	-20	-10	100	25
08AH338A02	6540451	59	63	160	2.0	53	1407	-1	82	-0.1	116	-5	-20	-1	-20	-10	90	22
08AH342A02	6540452	672	7	115	5.7	168	5916	8	53	-0.1	274	17	-20	2	-20	-10	70	21
08AH343A02	6540579	86	19	150	3.8	13	2005	-1	70	-0.1	73	-5	-20	-1	-20	-10	60	25
08AH344A02	6540453	97	29	173	3.7	25	2170	-1	73	-0.1	415	-5	-20	-1	-20	-10	30	22
08AH345A02	6540454	1187	14	92	14.8	591	5343	84	56	-0.1	555	75	20	11	-20	-10	50	16
08CL011A02	6540455	14	25	136	1.0	21	1041	-1	40	-0.1	1179	-5	-20	-1	-20	-10	40	23
08CL019A02	6540456	81	30	71	2.9	65	1087	34	36	-0.1	81	46	-20	2	-20	-10	180	18
08CL037A02	6540457	729	2	26	31.6	457	6517	220	99	-0.1	198	202	60	30	-20	10	230	16
08CL047A02	6540458	18	27	241	0.9	10	526	1	30	-0.1	1853	-5	-20	-1	-20	-10	100	18
08CL050A02	6540374	72	89	330	10.4	28	1441	-1	42	-0.1	99	-99	-99	-99	-99	-99	-99	-99
08CL057A02	6540459	87	24	158	4.6	15	1446	-1	38	-0.1	311	-5	-20	-1	-20	-10	180	21
08CL068A02	6540461	258	29	80	44.6	421	4359	918	193	0.5	1275	855	370	36	-100	270	580	14
08CL075A02	6540462	360	7	54	29.9	572	4652	188	132	-0.1	691	150	50	15	-20	-10	150	8
08CL085A02	6540375	169	62	320	6.0	16	2814	-1	116	0.2	-99	-99	-99	-99	-99	-99	-99	-99
08CL087A02	6540463	245	61	2	10.9	209	3652	2	63	-0.1	154	-5	-20	2	-20	-10	270	34

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Appendix A – Major-element and Trace-element Data

SampleID	LabNumber	P	Pb	Rb	Sc	Sr	Ti	V	Zn	Ag	F	V	Cr	Co	Ni	Cu	Zn	Ga	Ge
Units		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	1	1	2	0.1	1	1	1	1	1	0.1	5	5	20	1	20	10	30	1	1
Upper Limit																			
Analysis Method																			
08CL099B02	6540568	-99	-99	-99	-99	-99	-99	-99	-99	-0.1	1250	-99	-99	-99	-99	-99	-99	-99	-99
08CL099B02	6540568	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL107A02	6540521	222	7	41	47.2	280	4332	267	98	-0.1	880	-99	-99	-99	-99	-99	-99	-99	-99
08CL125A02	6540464	70	14	62	1.2	43	1395	-1	52	-0.1	116	-5	-20	-1	-20	-10	140	29	1
08CL131A03	6540376	51	307	191	1.1	26	1657	-1	238	0.7	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL135A02	6540465	219	18	243	2.2	36	1474	-1	32	-0.1	81	-5	-20	2	-20	10	220	24	1
08CL148A02	6540466	70	24	76	1.8	120	1213	12	102	-0.1	389	15	-20	3	-20	-10	410	25	2
08CL149A02	6540467	510	14	59	27.7	534	4420	159	233	-0.1	1067	187	60	41	40	-10	350	16	2
08CL153A02	6540524	140	27	260	0.9	50	816	3	39	-0.1	288	-99	-99	-99	-99	-99	-99	-99	-99
08CL159A02	6540525	1166	29	33	29.0	688	5191	190	125	-0.1	529	-99	-99	-99	-99	-99	-99	-99	-99
08CL160A02	6540526	102	30	168	2.2	33	1390	8	100	-0.1	357	-99	-99	-99	-99	-99	-99	-99	-99
08CL167A02	6540569	-99	-99	-99	-99	-99	-99	-99	-99	-0.1	1042	-99	-99	-99	-99	-99	-99	-99	-99
08CL167A02	6540569	-99	-99	-99	-99	-99	-99	-99	-99	-0.1	339	-99	-99	-99	-99	-99	-99	-99	-99
08CL175A02	6540571	-99	-99	-99	-99	-99	-99	-99	-99	-0.1	925	-99	-99	-99	-99	-99	-99	-99	-99
08CL175A02	6540571	-99	-99	-99	-99	-99	-99	-99	-99	-0.1	19	-99	-99	-99	-99	-99	-99	-99	-99
08CL179A02	6540527	937	11	53	33.5	588	3456	182	131	-0.1	650	-99	-99	-99	-99	-99	-99	-99	-99
08CL195A02	6540528	159	4	18	48.5	154	3478	231	63	-0.1	339	-99	-99	-99	-99	-99	-99	-99	-99
08CL196A02	6540529	695	4	61	14.2	470	3358	76	75	-0.1	925	-99	-99	-99	-99	-99	-99	-99	-99
08CL197A02	6540531	42	23	264	0.1	23	622	19	12	-0.1	19	-99	-99	-99	-99	-99	-99	-99	-99
08CL198A02	6540532	22	14	228	0.2	34	729	10	22	-0.1	57	-99	-99	-99	-99	-99	-99	-99	-99
08CL199A02	6540533	393	41	155	6.7	113	3012	-1	72	-0.1	381	-99	-99	-99	-99	-99	-99	-99	-99
08CL202A02	6540522	412	19	38	17.6	302	3680	74	114	-0.1	334	-99	-99	-99	-99	-99	-99	-99	-99
08CL203A02	6540534	128	20	-2	1.5	33	1654	20	446	-0.1	116	-99	-99	-99	-99	-99	-99	-99	-99
08CL204A02	6540572	-99	-99	-99	-99	-99	-99	-99	-99	-0.1	24	-99	-99	-99	-99	-99	-99	-99	-99
08CL204A02	6540572	-99	-99	-99	-99	-99	-99	-99	-99	-0.1	230	-99	-99	-99	-99	-99	-99	-99	-99
08CL214A02	6540468	699	22	123	9.1	160	4524	-1	74	-0.1	364	14	-20	5	-20	-10	320	23	1
08CL265A02	6540535	200	11	178	4.4	214	2425	3	21	-0.1	133	-99	-99	-99	-99	-99	-99	-99	-99
08CL266A02	6540536	231	12	28	45.6	350	4160	359	212	0.4	1382	-99	-99	-99	-99	-99	-99	-99	-99
08CL268A02	6540537	219	3	35	47.8	219	4875	265	59	-0.1	331	-99	-99	-99	-99	-99	-99	-99	-99
08CL272A02	6540469	9	14	155	2.3	40	358	-1	37	-0.1	230	-5	-20	-1	-20	-20	100	20	1
08CL273A02	6540471	159	27	118	7.3	69	2822	-1	165	-0.1	275	-5	-20	-1	-20	-20	500	25	1
08CL274A02	6540472	107	50	140	2.1	34	2007	-1	172	-0.1	636	-5	-20	-1	-20	-20	410	26	2
08CL275A02	6540473	3538	17	176	16.7	395	9103	54	231	-0.1	1813	66	-20	6	-20	-20	180	15	-1
08CL280A02	6540478	1095	26	128	9.4	331	5217	30	72	-0.1	552	51	-20	9	-20	-20	430	21	1
08CL281A02	6540479	393	26	137	7.1	137	3188	-1	59	-0.1	794	12	-20	3	-20	-20	80	21	1
08CL282A02	6540481	419	19	58	16.6	142	3931	-1	38	-0.1	375	-5	-20	-1	-20	-20	30	40	24
08CL283A02	6540482	137	32	140	2.5	37	2302	-1	70	-0.1	180	-5	-20	-1	-20	-20	50	25	2
08CL284A02	6540483	23	10	104	0.7	17	1196	-1	74	-0.1	108	-5	-20	-1	-20	-20	10	70	23
08CL296A02	6540581	1589	4	86	22.1	603	7088	142	102	-0.1	744	147	50	24	-20	-20	130	21	1
08CL305A02	6540485	1261	17	127	12.0	461	6314	58	85	-0.1	797	66	-20	12	-20	-20	110	23	1
08CL312A02	6540566	103	25	135	2.7	94	1501	-1	28	-0.1	141	-5	-20	-1	-20	-20	-10	-30	18

Appendix A – Major-element and Trace-element Data

SampleID	LabNumber	P	Pb	Rb	Sc	Sr	Ti	V	Zn	Ag	F	V	Cr	Co	Ni	Cu	Zn	Ga	Ge
Units		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	1	1	2	0.1	1	1	1	1	1	0.1	5	20	1	20	10	30	1	1	
Upper Limit																			
Analysis Method					GS Tr	ISE FUS-MS	FUS-MS	FUS-MS	FUS-MS										
08CL321A02	6540541	475	17	66	10.2	369	2670	82	70	-0.1	1084	-99	-99	-99	-99	-99	-99	-99	
08CL341A02	6540487	1370	20	93	11.4	400	5270	34	74	-0.1	584	47	-20	7	-20	-10	70	20	
08CL412A02	6540488	42	29	137	0.9	27	1577	-1	150	-0.1	298	-5	-20	-1	-20	-10	100	27	
08CL418A02	6540489	7	41	233	0.3	21	1110	1	122	-0.1	418	-5	-20	-1	-20	-10	140	31	
08CL419A02	6540491	110	10	33	2.0	58	1305	17	94	-0.1	271	12	-20	2	-20	-10	70	24	
08CL420A02	6540492	19	20	100	0.7	45	1109	-1	66	-0.1	249	-5	-20	-1	-20	-10	60	26	
08CL421A02	6540493	31	18	132	0.9	24	917	-1	254	-0.1	1384	-5	-20	1	-20	-10	230	26	
08CL423A02	6540494	4	20	128	0.4	39	558	-1	39	-0.1	1848	-5	-20	-1	-20	-10	-30	30	
08CL424A02	6540495	46	97	193	0.5	32	1103	28	142	-0.1	53	40	-20	-1	-20	-10	110	27	
08CL427A02	6540496	32	27	196	0.7	22	882	-1	56	-0.1	78	-5	-20	2	-20	-10	70	27	
08CL428A02	6540497	85	27	160	1.3	31	1861	1	170	-0.1	244	5	-20	1	-20	-10	120	25	
08CL429A02	6540498	176	22	119	3.7	74	2707	-1	93	-0.1	534	9	-20	-1	-20	-10	80	27	
08CL430A02	6540499	87	10	154	2.0	39	1869	-1	51	-0.1	308	-5	-20	-1	-20	-10	50	27	
08CL431A02	6540501	122	20	135	2.4	44	1831	-1	152	-0.1	335	-5	-20	-1	-20	-10	110	26	
08CL450A02	6540502	316	-1	9	8.2	289	2219	54	56	-0.1	121	51	-20	11	-20	20	40	16	
08CL472A02	6540503	490	12	86	5.6	948	1405	40	49	-0.1	1169	54	-20	6	-20	-10	40	21	
08CL481A02	6540582	3621	-1	52	5.5	1199	8691	82	117	-0.1	913	95	-20	24	-20	20	160	23	
08CL487A02	6540583	1234	12	134	13.2	542	5160	85	79	-0.1	575	91	-20	16	-20	30	90	21	
08CL489A02	6540584	176	12	101	2.4	159	1641	-1	24	-0.1	64	11	-20	2	-20	10	-30	18	
08CL491A02	6540504	576	12	91	5.9	83	3253	30	57	-0.1	273	35	-20	3	-20	-10	60	18	
08CL492A02	6540505	150	34	127	4.0	100	1208	4	72	-0.1	113	11	-20	1	-20	-10	50	15	
08CL499A02	6540507	161	31	153	4.6	101	2509	-1	60	-0.1	471	7	-20	-1	-20	-10	50	18	
08CL501A02	6540585	292	23	172	4.7	104	2178	3	50	-0.1	1156	10	-20	2	-20	-10	60	22	

Appendix A – Major-element and Trace-element Data

SampleID	LabNumber	As	Rb	Sr	Y	Zr	Nb	Mo	Ag	In	Sn	Sb	Cs	Ba	La	Ce	Pr	Nd
Units		ppm																
Detection Limit		5	2	2	1	5	1	2	0.5	0.2	1	0.5	0.5	3	0.1	0.5	0.1	
Upper Limit																		
Analysis Method		FUS-MS																
08AH006A01	6540589	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08AH011A02	6540379	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08AH016A02	6540365	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08AH030A02	6540381	-5	184	133	48	512	26	-2	-0.5	-0.2	6	2.5	0.6	926	70.7	157	16.2	
08AH038A02	6540382	6	2	866	8	21	-1	-2	1.5	-0.2	-1	4.0	-0.5	104	2.9	9.1	1.5	
08AH050A02	6540383	10	78	18	114	904	35	-2	-0.5	-0.2	6	4.8	-0.5	16	66.9	160	19.4	
08AH058A02	6540384	32	110	344	40	341	15	-2	-0.5	-0.2	2	6.3	1.8	1430	39.5	88.1	10.2	
08AH059A02	6540562	25	199	322	14	42	2	-2	-0.5	-0.2	-1	0.5	6.3	628	4.9	11.2	1.6	
08AH069A02	6540386	5	76	54	65	677	23	-2	-0.5	-0.2	3	2.0	-0.5	572	48.4	129	12.9	
08AH069A03	6540366	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08AH070A02	6540387	6	157	15	139	1450	49	4	-0.5	-0.2	7	2.4	0.6	118	235	498	54.7	
08AH072A02	6540563	-5	127	63	77	815	26	-2	-0.5	-0.2	3	-0.5	-0.5	456	88.7	212	25.1	
08AH072A02	6540388	7	106	100	64	464	17	-2	-0.5	-0.2	4	3.8	0.9	2690	66.5	141	16.7	
08AH073A02	6540389	-5	145	21	66	740	26	-2	-0.5	-0.2	3	2.8	1.4	151	166	444	36.2	
08AH074A02	6540391	5	181	62	70	583	27	2	-0.5	-0.2	3	2.9	1.4	502	93.5	206	22.5	
08AH076A02	6540392	-5	190	66	60	664	24	-2	-0.5	-0.2	6	2.2	1.1	108	34.7	87.6	8.8	
08AH090A01	6540591	-5	-2	1010	14	18	-1	-2	-0.5	-0.2	1	-0.5	-0.5	135	4.9	11.6	1.9	
08AH092A02	6540394	7	143	36	79	595	21	6	-0.5	-0.2	4	3.2	-0.5	229	93.8	195	22.6	
08AH092A02	6540395	5	76	34	62	606	11	-2	0.6	-0.2	2	2.9	-0.5	422	67.1	192	19.1	
08AH106A02	6540396	-5	156	45	65	414	18	-2	0.5	-0.2	4	3.1	0.7	146	94.0	199	22.4	
08AH123A02	6540397	6	68	234	45	512	16	-2	0.7	-0.2	3	3.3	2.5	233	53.2	108	13.3	
08AH132A02	6540398	-5	-2	135	63	528	19	-2	0.77.1	-0.2	4	2.9	-0.5	23	42.5	101	12.4	
08AH140A02	6540399	-5	58	24	38	127	7	-2	12.8	-0.2	2	1.9	-0.5	74	48.7	117	12.9	
08AH143A02	6540367	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08AH143A03	6540368	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08AH143A04	6540369	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08AH145A02	6540592	-5	-2	13	6	5	-1	-2	-0.5	-0.2	-1	-0.5	-0.5	-3	2.9	4.5	0.7	
08AH149C01	6540373	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08AH154A02	6540564	-5	82	401	22	72	6	-2	1.5	-0.2	2	0.6	1.0	815	22.3	49.5	6.3	
08AH165A02	6540402	-5	61	59	73	495	20	-2	0.6	-0.2	3	3.5	-0.5	1460	65.8	147	18.4	
08AH166A02	6540403	-5	97	53	56	205	68	-2	-0.5	-0.2	5	2.6	-0.5	154	20.8	58.5	7.8	
08AH168A02	6540404	-5	167	19	21	202	25	-2	-0.5	-0.2	2	2.0	0.7	147	44.2	107	10.4	
08AH169A02	6540405	6	151	63	80	535	24	-2	-0.5	-0.2	5	3.1	0.6	1350	32.8	93.7	11.0	
08AH173A02	6540407	11	132	341	35	337	20	-2	-0.5	-0.2	7	3.2	1.8	1190	32.1	77.6	9.8	
08AH175A02	6540565	-5	187	15	45	535	30	4	-0.5	-0.2	3	1.3	1.1	367	86.2	173	18.9	
08AH176A02	6540408	-5	114	74	35	237	25	-2	-0.5	-0.2	3	2.5	-0.5	877	33.2	76.0	9.3	
08AH189A02	6540409	-5	182	41	50	240	21	-2	-0.5	-0.2	3	2.5	0.7	263	68.5	160	16.0	
08AH190A02	6540574	18	97	24	52	990	23	-2	-0.5	-0.2	-1	-0.5	0.6	217	97.6	222	23.4	
08AH210A02	6540411	-5	135	134	52	629	23	-2	-0.5	-0.2	2	3.4	1.6	991	42.7	118	12.1	
08AH211A02	6540575	-5	64	556	26	204	7	-2	-0.5	-0.2	1	-0.5	1.0	710	20.4	46.2	6.2	
08AH219A02	6540576	6	93	460	33	512	13	-2	-0.5	-0.2	1	-0.5	0.7	798	58.2	120	13.4	
08AH222A02	6540412	-5	47	81	28	147	13	-2	-0.5	-0.2	-1	3.5	2.5	379	39.5	82.7	9.8	
08AH233A02	6540413	-5	107	16	97	639	20	-2	-0.5	-0.2	-1	2.2	0.5	283	79.4	214	20.2	
08AH258A02	6540415	7	150	497	38	371	23	-2	-0.5	-0.2	2	2.7	1.4	1740	47.4	115	13.8	
08AH263A02	6540416	39	148	320	20	44	4	-2	-0.5	-0.2	-1	3.2	0.5	591	528	2.6	7.8	
																	1.1	

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Appendix A – Major-element and Trace-element Data

SampleID	LabNumber	As	Rb	Sr	Y	Zr	Nb	Mo	Ag	In	Sn	Sb	Cs	Ba	La	Ce	Pr	Nd
Units		ppm	ppm															
Detection Limit		5	2	2	1	5	1	2	0.5	0.5	0.2	1	0.5	0.5	0.1	0.5	0.1	
Upper Limit		FUS-MS																
Analysis Method																		
08AH267A02	6540417	7	40	512	32	91	4	-2	-0.5	-0.2	-1	1.8	-0.5	780	8.5	25.0	3.3	
08AH268A02	6540418	-5	22	385	21	45	1	-2	0.6	-0.2	-1	3.2	1.6	209	3.6	10.3	1.6	
08AH270A02	6540419	22	141	63	66	495	17	-2	-0.5	-0.2	3	6.0	0.7	1690	68.5	139	17.5	
08AH271A02	6540421	6	164	26	83	564	30	-2	-0.5	-0.2	2	3.6	1.0	273	101	205	25.0	
08AH276A02	6540422	7	154	17	73	576	22	-2	-0.5	-0.2	5	3.4	1.1	99	98.1	209	23.8	
08AH277A02	6540423	9	161	16	87	513	32	11	-0.5	-0.2	4	3.0	1.3	130	97.8	214	24.3	
08AH279A02	6540424	-5	2	29	174	596	47	-2	-0.5	-0.2	6	2.1	-0.5	28	134	291	34.5	
08AH281A02	6540425	-5	100	624	32	135	8	-2	-0.5	-0.2	-1	2.6	-0.5	1050	29.2	67.8	8.8	
08AH284A02	6540426	-5	206	50	48	250	26	-2	-0.5	-0.2	3	3.0	0.8	343	71.0	152	16.7	
08AH289A02	6540427	8	43	398	42	214	9	-2	-0.5	-0.2	1	4.7	-0.5	771	42.6	87.9	10.9	
08AH290A02	6540428	6	155	34	122	618	45	-2	-0.5	-0.2	9	3.4	0.7	312	58.1	127	14.2	
08AH296A02	6540429	-5	6	110	19	46	2	-2	-0.5	-0.2	-1	3.7	-0.5	38	1.8	6.4	1.0	
08AH308A02	6540433	7	145	12	47	517	26	-2	-0.5	-0.2	2	-0.5	0.9	437	87.1	218	21.4	
08AH309A02	6540434	8	115	82	59	422	14	-2	-0.5	-0.2	2	53.9	-0.5	2160	60.2	124	14.8	
08AH310A02	6540435	-5	127	33	69	731	25	-3	-0.5	-0.2	3	-0.5	0.8	407	75.2	170	19.1	
08AH311A02	6540436	-5	49	38	45	718	15	-2	-0.5	-0.2	-1	-0.5	-0.5	431	48.7	97.8	12.8	
08AH312A02	6540437	-5	122	54	63	339	20	-2	-0.5	-0.2	3	-0.5	1.1	132	75.0	158	18.8	
08AH313A02	6540438	-5	13	477	24	74	2	-2	-0.5	-0.2	-1	-0.5	1.3	334	4.7	15.3	1.7	
08AH314A02	6540439	-5	43	449	17	14	1	-2	-0.5	-0.2	-1	-0.5	1.2	270	4.9	11.9	1.7	
08AH315A02	6540441	-5	67	622	22	49	21	-2	-0.5	-0.2	-1	0.8	0.5	7190	32.2	64.8	8.1	
08AH316A02	6540442	-5	60	700	21	53	5	-2	-0.5	-0.2	1	2.1	1.2	593	23.7	49.8	6.2	
08AH318A02	6540443	-5	121	88	50	451	26	-2	-0.5	-0.2	1	-0.5	-0.5	596	67.3	169	17.3	
08AH322A02	6540444	-5	99	106	65	825	29	-2	-0.5	-0.2	3	-0.5	-0.5	1000	46.3	137	15.5	
08AH327A02	6540445	-5	49	482	18	33	4	-2	-0.5	-0.2	-1	-0.5	0.9	318	12.5	27.7	3.6	
08AH328A02	6540446	6	117	439	39	481	15	-2	-0.5	-0.2	2	0.7	1.8	751	50.5	104	12.6	
08AH329A02	6540577	8	167	358	36	232	18	-2	-0.5	-0.2	3	-0.5	1.4	850	43.8	97.7	11.4	
08AH330A02	6540578	8	152	405	39	503	36	-2	-0.5	-0.2	6	-0.5	1.6	821	50.4	104	11.8	
08AH331A02	6540447	-5	98	199	47	800	16	-2	-0.5	-0.2	-1	-0.5	-0.5	1330	69.1	146	16.9	
08AH333A02	6540448	-5	162	219	28	175	14	-2	-0.5	-0.2	1	-0.5	5.3	752	53.7	109	11.8	
08AH335A02	6540449	-5	102	25	65	626	19	-2	-0.5	-0.2	3	-0.5	1.3	599	65.1	136	16.2	
08AH338A02	6540451	-5	157	42	83	579	36	-2	-0.5	-0.2	6	1.1	-0.5	268	92.2	226	21.7	
08AH342A02	6540452	-5	101	138	37	878	22	-2	-0.5	-0.2	3	0.6	0.6	1040	31.8	74.0	8.6	
08AH343A02	6540579	-5	149	10	48	602	24	-2	-0.5	-0.2	3	-0.5	0.5	117	54.9	123	13.5	
08AH344A02	6540453	-5	144	17	79	755	28	-2	-0.5	-0.2	4	-0.5	1.5	129	98.3	207	25.2	
08AH345A02	6540454	-5	83	522	29	201	13	-2	-0.5	-0.2	2	-0.5	-0.5	722	37.8	83.2	9.8	
08CL011A02	6540455	-5	123	16	60	408	36	-2	1.3	-0.2	4	-0.5	0.5	51	52.3	110	12.7	
08CL019A02	6540456	-5	76	60	23	223	13	-2	1.9	-0.2	7	3.6	-0.5	586	84.8	165	16.4	
08CL037A02	6540457	-5	21	426	24	76	2	-2	0.6	-0.2	-1	-0.5	16.8	409	10.0	24.6	3.1	
08CL047A02	6540458	-5	216	7	56	253	27	-2	2.3	-0.2	2	1.9	-0.5	80	75.4	152	13.5	
08CL050A02	6540374	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL057A02	6540459	-5	153	17	32	424	23	-2	3.7	-0.2	3	1.8	1.3	314	63.4	133	12.6	
08CL068A02	6540461	-5	76	406	30	40	16	-4	4.0	-0.2	3	-0.5	5.1	380	86.4	143	12.2	
08CL075A02	6540462	-5	42	542	18	40	2	-2	-0.5	-0.2	-1	-0.5	0.7	209	5.4	13.6	1.7	
08CL085A02	6540375	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL087A02	6540463	-5	4	196	81	683	41	-2	6.1	-0.2	6	-0.5	0.9	118	24.1	221	83.0	

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Appendix A – Major-element and Trace-element Data

SampleID	LabNumber	As	Rb	Sr	Y	Zr	Nb	Mo	Ag	In	Sn	Sb	Cs	Ba	La	Ce	Pr	Nd
Units		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm								
Detection Limit		5	2	2	1	5	1	2	0.5	0.2	1	0.5	0.5	3	0.1	0.5	0.1	
Upper Limit																		
Analysis Method																		
08CL099B02	6540568	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL099B02	6540568	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL107A02	6540521	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL125A02	6540464	-5	64	40	82	354	27	-2	3.0	-0.2	3	0.8	-0.5	383	57.9	130	13.4	52.7
08CL131A03	6540376	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL135A02	6540465	18	229	31	57	547	18	-2	5.2	-0.2	3	3.4	0.5	674	72.3	145	18.5	60.1
08CL148A02	6540466	-5	74	110	77	446	19	-2	3.7	-0.2	5	0.9	1.3	223	86.8	174	21.1	70.3
08CL149A02	6540467	9	54	522	20	55	2	-2	-0.5	-0.2	-1	2.0	0.8	221	8.5	20.1	2.8	11.6
08CL153A02	6540524	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL159A02	6540525	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL160A02	6540526	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL167A02	6540569	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL167A02	6540569	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL175A02	6540571	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL175A02	6540571	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL179A02	6540527	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL195A02	6540528	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL196A02	6540529	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL197A02	6540531	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL198A02	6540532	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL199A02	6540533	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL202A02	6540522	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL203A02	6540534	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL204A02	6540572	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL204A02	6540572	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL214A02	6540468	8	117	146	49	544	20	-2	5.0	-0.2	3	2.7	3.2	1410	48.7	108	13.2	46.0
08CL265A02	6540535	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL266A02	6540536	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL268A02	6540537	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL272A02	6540469	-5	144	35	27	182	46	-2	1.5	-0.2	-1	0.8	0.7	92	15.1	65.3	5.1	18.6
08CL273A02	6540471	-5	111	64	68	491	19	-2	4.9	-0.2	5	2.9	-0.5	1300	73.2	152	20.0	66.8
08CL274A02	6540472	16	123	32	91	676	28	2	6.2	-0.2	3	1.8	1.0	511	146	272	36.6	11.6
08CL275A02	6540473	-5	224	113	37	225	49	-2	2.4	-0.2	3	1.5	2.2	233	62.9	134	15.6	46.1
08CL276A02	6540474	-5	143	227	44	647	21	-2	5.6	-0.2	3	1.3	0.6	1590	71.8	136	16.2	49.1
08CL277A02	6540475	-5	70	21	80	593	25	-2	5.3	-0.2	6	1.3	-0.5	57	126	247	31.2	99.5
08CL278A02	6540476	-5	60	28	133	535	55	-2	4.6	-0.2	11	1.4	-0.5	1650	33.0	81.4	10.2	41.5
08CL279A02	6540477	-5	139	347	44	320	19	-2	2.7	-0.2	2	-0.5	1.0	1750	96.6	195	25.4	72.4
08CL280A02	6540478	17	124	313	37	349	20	-2	2.9	-0.2	3	3.0	2.9	1520	52.6	112	13.5	43.6
08CL281A02	6540479	-5	131	123	45	428	23	-2	0.5	-0.2	3	1.1	1.1	1470	95.0	187	19.0	61.0
08CL282A02	6540481	12	57	123	49	460	17	-2	0.5	-0.2	4	3.0	-0.5	1650	33.0	81.4	10.2	41.5
08CL283A02	6540482	-5	137	28	76	787	27	-2	0.5	-0.2	3	1.3	0.6	469	68.1	152	16.5	63.7
08CL284A02	6540483	-5	104	14	60	749	16	-2	0.5	-0.2	1	-0.5	0.5	148	65	306	31.6	104
08CL296A02	6540581	41	78	581	31	511	13	-2	0.5	-0.2	2	1.8	0.5	1170	34.7	74.7	9.2	32.6
08CL305A02	6540485	-5	129	435	48	724	26	-2	0.5	-0.2	3	-0.5	1.160	61.7	139	15.8	54.8	33.0
08CL312A02	6540566	6	128	79	23	184	13	-2	0.5	-0.2	1	-0.5	0.9	524	54.1	128	11.6	33.0

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Appendix A – Major-element and Trace-element Data

SampleID	LabNumber	As	Rb	Sr	Y	Zr	Nb	Mo	Ag	In	Sn	Sb	Cs	Ba	La	Ce	Pr	Nd
Units		ppm																
Detection Limit		5	2	2	1	5	1	2	0.5	0.2	1	0.5	0.5	3	0.1	0.5	0.1	
Upper Limit																		
Analysis Method		FUS-MS																
08CL321A02	6540541	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL341A02	6540487	5	91	355	41	283	15	-2	-0.5	-0.2	2	1.0	0.6	1450	50.8	102	11.4	40.6
08CL412A02	6540488	6	130	21	68	576	22	-2	-0.5	-0.2	3	-0.5	0.9	127	72.8	149	16.6	57.8
08CL418A02	6540489	12	239	16	73	928	27	-2	-0.5	-0.2	8	2.5	-0.5	39	27.0	59.7	6.2	23.0
08CL419A02	6540491	-5	39	47	61	360	20	-2	-0.5	-0.2	4	-0.5	-0.5	98	36.1	104	9.1	36.5
08CL420A02	6540492	-5	104	36	85	589	30	-2	-0.5	-0.2	4	-0.5	-0.6	398	56.3	119	12.3	45.0
08CL421A02	6540493	-5	129	18	72	440	20	-2	-0.5	-0.2	2	0.6	-0.5	178	73.2	149	16.2	58.9
08CL423A02	6540494	-5	124	29	128	474	35	3	-0.5	-0.2	5	2.4	-0.5	103	87.3	192	19.5	73.6
08CL424A02	6540495	8	187	24	80	575	25	-2	-0.5	-0.2	4	1.7	-0.5	90	97.8	199	22.0	77.9
08CL427A02	6540496	208	197	16	79	525	30	-2	-0.5	-0.2	4	12.2	-0.5	46	91.7	191	20.3	71.4
08CL428A02	6540497	5	151	23	59	416	17	-2	-0.5	-0.2	2	-0.5	1.4	167	72.2	141	16.3	58.3
08CL429A02	6540498	7	111	59	74	833	30	3	-0.5	-0.2	3	1.4	1.4	686	71.9	153	17.3	64.6
08CL430A02	6540499	5	140	30	76	684	28	-2	-0.5	-0.2	3	-0.5	1.1	385	93.6	192	20.9	72.8
08CL431A02	6540501	-5	118	33	90	545	32	4	-0.5	0.3	6	-0.5	-0.5	676	80.7	161	17.8	65.8
08CL450A02	6540502	-5	9	247	7	91	3	-2	-0.5	-0.2	-1	0.7	-0.5	269	9.3	15.6	1.6	5.9
08CL472A02	6540503	61	80	906	11	82	5	-2	-0.5	-0.2	-1	1.0	1.0	4.5	838	22.4	41.4	4.5
08CL481A02	6540502	-5	49	1340	25	36	5	-2	-0.5	-0.2	-1	-0.5	0.7	1050	33.0	71.7	9.0	31.7
08CL487A02	6540503	31	127	534	34	366	11	-2	-0.5	-0.2	5	0.7	4.5	811	47.2	95.2	10.9	36.9
08CL489A02	6540504	-5	97	141	14	258	10	-2	-0.5	-0.2	-1	-0.5	0.5	1180	35.5	73.0	6.5	19.4
08CL491A02	6540504	12	85	68	23	206	16	-2	-0.5	-0.2	2	0.6	-0.5	652	27.7	64.6	7.2	23.4
08CL492A02	6540505	-5	114	82	21	272	12	-2	-0.5	-0.2	2	-0.5	-0.5	556	10.5	22.1	2.7	9.3
08CL499A02	6540507	109	139	84	34	372	17	-2	-0.5	-0.2	2	1.0	1.1	832	45.1	104	11.5	37.7
08CL501A02	6540505	6	175	90	46	298	18	-2	-0.5	-0.2	4	0.5	1.6	625	84.6	170	17.5	53.8

Appendix A – Major-element and Trace-element Data

SampleID	LabNumber	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	W	Tl	Pb	Bi	Th
Units		ppm																
Detection Limit		0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.05	0.1	0.04	0.2	0.1	0.1	0.1	0.4	0.1	0.1
Upper Limit		FUS-MS																
Analysis Method																		
08AH006A01	<u>6540589</u>	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH011A02	<u>6540379</u>	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH016A02	<u>6540365</u>	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH030A02	<u>6540381</u>	9.7	1.05	8.0	1.3	8.0	1.7	5.2	0.85	5.6	0.80	13.3	1.7	-1	0.9	28	2.4	19.5
08AH038A02	<u>6540382</u>	2.0	0.74	2.1	0.3	1.6	0.3	0.9	0.13	0.8	0.11	0.7	-0.1	-1	-0.1	-5	2.0	0.3
08AH050A02	<u>6540383</u>	16.8	1.51	16.5	3.0	19.2	4.1	12.4	1.85	11.4	1.59	22.4	2.3	1	0.3	6	9.4	16.8
08AH058A02	<u>6540384</u>	7.6	1.71	7.0	1.1	6.8	1.4	4.3	0.65	4.2	0.61	8.4	1.1	1	0.7	21	3.1	12.1
08AH059A02	<u>6540562</u>	1.8	0.63	2.3	0.4	2.3	0.5	1.5	0.21	1.3	0.20	1.3	-0.1	-1	2.4	14	1.1	0.6
08AH069A02	<u>6540386</u>	11.0	1.77	10.9	1.8	11.1	2.4	7.1	1.11	7.2	1.07	13.8	1.4	-1	0.4	9	11.6	9.7
08AH069A03	<u>6540366</u>	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH070A02	<u>6540387</u>	33.9	1.77	26.2	4.3	25.7	5.2	15.6	2.38	15.6	2.28	32.7	2.8	-1	0.9	45	10.6	21.5
08AH072A02	<u>6540563</u>	17.3	1.31	15.1	2.4	14.1	2.8	8.5	1.27	7.9	1.15	20.6	1.3	-1	1.4	19	-0.4	16.4
08AH072A02	<u>6540388</u>	12.6	3.30	11.1	1.8	10.9	2.3	7.0	1.09	6.9	1.02	10.9	1.1	-1	0.7	93	3.2	7.5
08AH073A02	<u>6540389</u>	18.9	0.94	13.3	2.0	12.0	2.5	7.8	1.24	8.1	1.28	17.4	1.6	-1	0.7	22	4.9	23.3
08AH074A02	<u>6540391</u>	14.1	1.10	11.6	2.0	12.2	2.5	7.9	1.27	8.4	1.18	15.8	1.9	1	1.1	22	5.3	29.5
08AH076A02	<u>6540392</u>	7.6	0.57	8.1	1.5	10.1	2.2	7.0	1.12	7.4	1.09	16.1	2.0	1	0.7	17	6.9	9.3
08AH090A01	<u>6540591</u>	2.7	0.89	3.2	0.5	2.6	0.5	1.5	0.20	1.1	0.16	0.8	-0.1	-1	0.1	-5	0.5	-0.1
08AH092A02	<u>6540394</u>	15.5	1.00	14.1	2.2	13.0	2.7	8.5	1.30	8.2	1.17	14.6	1.4	2	1.0	15	14.5	12.3
08AH106A02	<u>6540395</u>	14.4	1.49	12.3	2.0	11.9	2.4	7.1	1.06	6.7	0.94	13.3	0.5	-1	0.5	10	4.7	9.2
08AH116A02	<u>6540396</u>	15.0	1.82	12.7	2.0	11.4	2.4	7.3	1.08	6.9	1.04	10.2	1.1	-1	0.8	11	5.4	9.6
08AH123A02	<u>6540397</u>	8.8	0.55	8.0	1.2	7.4	1.5	4.7	0.75	4.9	0.73	9.6	1.2	-1	0.3	11	5.3	11.3
08AH132A02	<u>6540398</u>	11.5	0.86	10.8	1.8	11.0	2.3	7.0	1.06	6.6	0.93	13.2	1.3	-1	0.1	6	5.2	9.7
08AH140A02	<u>6540399</u>	9.1	0.21	7.3	1.2	7.4	1.5	4.4	0.62	3.6	0.48	4.1	0.4	-1	-0.1	-5	-0.4	11.2
08AH143A02	<u>6540367</u>	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH143A03	<u>6540368</u>	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH143A04	<u>6540369</u>	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH145A02	<u>6540592</u>	0.6	0.22	0.9	0.1	0.9	0.2	0.6	0.09	0.6	0.08	-0.2	-0.1	-1	-0.1	-5	-0.4	-0.1
08AH149C01	<u>6540373</u>	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH154A02	<u>6540564</u>	5.3	1.42	5.0	0.7	3.9	0.8	2.2	0.32	1.9	0.27	2.5	0.4	-1	0.8	10	-0.4	6.0
08AH165A02	<u>6540402</u>	13.9	3.31	12.5	2.0	12.0	2.5	7.9	1.20	7.5	1.12	12.0	1.2	-1	0.2	37	-0.4	9.5
08AH166A02	<u>6540403</u>	8.3	0.11	7.9	1.4	9.1	1.9	5.8	0.90	5.5	0.75	9.2	4.5	1	0.3	27	1.8	32.5
08AH168A02	<u>6540404</u>	5.4	-0.05	3.6	0.5	3.4	0.8	2.5	0.39	2.5	0.35	5.9	1.6	1	0.7	5	-0.4	16.7
08AH169A02	<u>6540405</u>	11.9	2.57	12.0	2.1	13.2	2.8	8.7	1.30	8.2	1.13	12.8	1.4	-1	0.8	21	-0.4	10.5
08AH173A02	<u>6540407</u>	7.3	1.53	6.1	1.0	5.8	1.2	3.9	0.63	4.1	0.59	8.5	1.4	-1	0.5	23	2.0	16.1
08AH175A02	<u>6540565</u>	9.8	0.68	7.9	1.2	7.3	1.5	4.7	0.74	4.8	0.71	14.9	2.0	1	2.2	30	-0.4	27.0
08AH176A02	<u>6540408</u>	7.5	0.77	6.4	1.0	6.4	1.3	3.8	0.55	3.2	0.41	5.5	2.1	-1	0.6	8	4.1	5.3
08AH189A02	<u>6540409</u>	9.1	0.52	6.8	1.2	7.7	1.7	5.4	0.87	5.9	0.84	7.9	1.2	-1	0.8	24	5.8	35.5
08AH190A02	<u>6540574</u>	14.4	1.07	11.3	1.7	10.0	2.0	6.0	0.92	6.1	0.97	20.9	1.1	-1	1.2	12	-0.4	11.9
08AH210A02	<u>6540411</u>	9.8	1.78	8.5	1.4	8.7	1.8	5.6	0.87	5.6	0.82	15.6	1.3	1	0.7	25	3.0	15.6
08AH211A02	<u>6540575</u>	5.9	1.96	5.8	0.8	4.7	0.9	2.7	0.38	2.2	0.31	4.3	0.4	-1	0.4	-5	61.4	2.1
08AH219A02	<u>6540576</u>	8.7	1.68	7.3	1.1	5.9	1.2	3.4	0.49	3.0	0.46	11.9	0.5	-1	0.5	10	5.9	6.8
08AH222A02	<u>6540412</u>	6.3	1.36	5.2	0.8	4.7	0.9	2.9	0.45	2.8	0.41	4.3	0.9	-1	0.3	-5	1.5	11.0
08AH233A02	<u>6540413</u>	16.0	0.98	16.2	3.0	19.4	4.0	11.7	1.61	8.9	1.18	18.7	0.4	-1	0.4	9	2.2	18.1
08AH225A02	<u>6540415</u>	9.3	2.30	7.6	1.2	6.6	1.4	4.0	0.60	3.8	0.54	8.8	1.3	1	0.5	23	3.4	13.6
08AH263A02	<u>6540416</u>	1.9	0.81	2.7	0.5	3.4	0.7	2.4	0.35	2.1	0.29	1.2	0.2	-1	1.6	-5	4.2	0.3

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Appendix A – Major-element and Trace-element Data

SampleID	LabNumber	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	W	Tl	Pb	Bi	Th
Units		ppm	ppm															
Detection Limit		0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.05	0.1	0.04	0.2	0.1	0.1	0.1	0.4	0.4	
Upper Limit		FUS-MS																
Analysis Method																		
08AH267A02	6540417	3.9	1.65	4.7	0.8	5.2	1.1	3.4	0.49	2.8	0.42	2.1	0.1	-1	0.2	-5	2.5	
08AH268A02	6540418	2.4	1.18	3.1	0.6	3.6	0.8	2.3	0.35	2.2	0.30	1.3	-0.1	-1	0.2	9	1.0	
08AH270A02	6540419	12.4	3.16	10.9	1.7	10.7	2.3	7.2	1.09	7.0	1.05	11.7	1.0	2	0.8	28	2.5	
08AH271A02	6540421	17.3	1.86	14.6	2.3	13.9	8.9	1.37	8.6	1.23	13.4	1.9	2	0.9	274	5.9	9.1	
08AH276A02	6540422	15.8	1.65	13.1	2.1	12.8	2.7	8.0	1.21	7.6	1.12	14.2	1.4	1	0.8	15	7.5	
08AH277A02	6540423	17.1	0.88	14.6	2.4	15.0	3.1	9.2	1.39	8.5	1.15	13.1	2.1	-1	0.9	61	12.2	
08AH279A02	6540424	26.5	0.87	25.5	4.5	29.8	6.3	19.6	2.95	18.1	2.45	19.8	3.3	-1	-0.1	-5	17.4	
08AH281A02	6540425	6.8	1.86	6.0	0.9	5.6	1.1	3.4	0.50	3.1	0.43	3.2	0.3	-1	0.2	7	30.1	
08AH284A02	6540426	9.2	0.51	6.8	1.2	7.3	1.6	5.2	0.85	5.7	0.81	8.2	2.3	-1	1.3	31	1.0	
08AH289A02	6540427	8.2	2.75	7.5	1.1	7.0	1.4	4.2	0.64	3.8	0.56	5.3	0.5	1	0.3	12	26.6	
08AH290A02	6540428	10.9	0.40	11.8	2.5	18.7	4.4	14.3	2.28	14.7	2.01	19.9	3.2	2	0.8	14.1	5.4	
08AH296A02	6540429	1.7	0.75	2.5	0.5	3.2	0.7	2.0	0.30	1.8	0.28	1.1	-0.1	-1	0.1	5	24.3	
08AH308A02	6540433	11.4	0.84	8.7	1.4	8.0	1.6	4.9	0.74	4.6	0.65	14.2	1.7	-1	0.7	11	0.3	
08AH309A02	6540434	10.8	3.15	10.3	1.6	9.4	2.0	6.3	0.94	6.0	0.90	11.4	0.9	-1	0.6	-5	18.8	
08AH310A02	6540435	13.6	1.57	12.8	2.0	12.3	2.6	7.8	1.16	7.2	1.03	17.7	1.5	-1	0.6	12	5.4	
08AH311A02	6540436	9.7	1.46	9.0	1.4	8.0	1.6	4.9	0.75	4.8	0.76	16.4	0.7	-1	0.4	-5	24.3	
08AH312A02	6540437	13.1	1.62	12.1	1.8	10.8	2.2	6.8	1.03	6.5	0.99	9.8	1.1	2	1.1	14	0.3	
08AH313A02	6540438	2.3	0.89	3.2	0.6	3.9	0.8	2.4	0.36	2.2	0.30	1.8	-0.1	-1	0.1	-5	18.8	
08AH314A02	6540439	2.2	0.82	2.8	0.5	2.9	0.6	1.9	0.27	1.7	0.24	0.9	-0.1	-1	0.1	-5	7.2	
08AH315A02	6540441	5.9	4.63	5.3	0.7	4.0	0.8	2.2	0.31	1.9	0.28	1.4	0.1	-1	0.5	18	13.0	
08AH316A02	6540442	5.0	1.30	4.5	0.7	3.8	0.8	2.3	0.34	2.1	0.31	1.8	0.3	-1	0.4	6	4.4	
08AH318A02	6540443	11.5	1.24	9.5	1.6	9.5	1.9	5.6	0.79	4.7	0.69	12.6	1.0	-1	0.9	11	8.4	
08AH322A02	6540444	13.0	1.75	12.0	1.9	11.3	2.3	6.9	1.05	6.6	0.95	21.8	1.7	-1	0.8	-5	16.4	
08AH327A02	6540445	3.6	1.17	3.8	0.5	3.3	0.7	2.0	0.28	1.6	0.24	1.6	0.2	-1	0.1	-5	15.6	
08AH328A02	6540446	8.9	1.54	7.6	1.2	6.7	1.3	4.1	0.61	3.9	0.59	12.7	1.0	-1	0.8	18	2.9	
08AH329A02	6540577	7.4	1.10	6.4	1.0	5.8	1.2	3.7	0.56	3.5	0.52	5.9	1.4	-1	1.3	19	8.0	
08AH330A02	6540578	7.6	1.31	6.7	1.1	6.4	1.3	4.1	0.64	4.1	0.62	11.9	3.9	2	1.0	24	30.4	
08AH331A02	6540447	12.0	1.94	11.2	1.7	9.6	1.9	5.3	0.73	4.4	0.67	19.7	0.6	-1	0.7	11	19.9	
08AH333A02	6540448	6.4	0.89	4.6	0.8	4.4	0.9	3.0	0.48	3.2	0.46	5.5	1.1	-1	0.8	12	15.6	
08AH335A02	6540449	12.1	1.34	11.2	1.8	11.1	2.4	7.2	1.12	7.1	1.04	16.4	1.3	-1	1.0	18	10.5	
08AH338A02	6540451	14.3	0.48	13.1	2.2	13.7	2.8	8.8	1.33	8.6	1.30	16.4	2.6	-1	2.0	57	14.6	
08AH342A02	6540452	5.9	1.64	5.5	0.9	5.9	1.2	3.8	0.58	3.8	0.61	24.2	1.3	-1	0.5	-5	27.9	
08AH343A02	6540579	9.4	0.57	8.1	1.4	8.2	1.7	5.4	0.85	5.8	0.93	13.9	1.6	-1	1.5	12	14.6	
08AH344A02	6540453	14.1	0.56	12.6	2.3	14.0	2.8	8.3	1.27	8.3	1.25	22.1	1.8	-1	0.7	12	15.5	
08AH345A02	6540454	5.8	1.22	5.0	0.8	5.0	1.0	2.9	0.45	2.9	0.44	6.1	0.9	-1	0.2	11	19.6	
08CL011A02	6540455	8.6	0.29	8.5	1.6	10.2	2.1	6.0	0.91	5.8	0.85	13.9	2.7	-1	0.5	12	14.6	
08CL019A02	6540456	9.5	0.82	6.4	0.7	3.9	0.8	2.7	0.44	2.9	0.45	7.0	1.3	3	0.4	24	21.5	
08CL037A02	6540457	3.8	1.41	4.4	0.7	4.0	0.9	2.6	0.38	2.3	0.34	2.4	0.1	-1	0.1	-5	20.9	
08CL047A02	6540458	8.1	0.15	7.0	1.3	8.4	1.9	6.1	0.93	5.9	0.89	9.9	2.7	2	0.8	14	3.3	
08CL050A02	6540374	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL057A02	6540459	8.2	0.58	6.1	1.0	5.7	1.2	3.7	0.58	3.7	0.55	13.0	1.9	3	0.8	21	21.4	
08CL068A02	6540461	6.1	0.76	4.8	0.8	4.9	1.0	3.1	0.44	2.7	0.38	1.3	0.4	-1	0.4	-5	53.9	
08CL075A02	6540462	2.3	0.95	2.8	0.5	3.0	0.6	2.0	0.29	1.8	0.28	1.4	0.4	-1	0.1	-5	1.0	
08CL085A02	6540375	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL087A02	6540463	17.1	3.20	15.3	2.4	14.6	3.0	9.2	1.34	8.3	1.20	20.7	1.9	2	-0.1	164	9.4	

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Appendix A – Major-element and Trace-element Data

SampleID	LabNumber	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	W	Tl	Pb	Bi	Th
Units		ppm	ppm															
Detection Limit		0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.05	0.1	0.04	0.2	0.1	0.1	0.1	0.4	0.1	
Upper Limit																		
Analysis Method		FUS-MS																
08CL099B02	6540568	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL099B02	6540568	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL107A02	6540521	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL125A02	6540464	12.3	1.02	12.4	2.1	13.8	3.0	9.3	1.36	8.4	1.15	11.6	2.5	1	0.1	8	16.3	
08CL131A03	6540376	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL135A02	6540465	11.3	1.25	9.9	1.5	9.1	1.9	6.2	0.91	5.7	0.84	14.1	1.2	2	1.8	23	11.2	
08CL148A02	6540466	13.5	0.67	12.5	2.1	12.7	2.8	8.8	1.31	8.2	1.18	15.0	1.3	2	0.5	19	13.2	
08CL149A02	6540467	2.9	1.15	3.4	0.6	3.4	0.7	2.2	0.33	2.0	0.29	1.7	-0.1	1	0.1	-5	0.3	
08CL153A02	6540524	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL159A02	6540525	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL160A02	6540526	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL167A02	6540569	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL167A02	6540569	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL175A02	6540571	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL175A02	6540571	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL179A02	6540527	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL195A02	6540528	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL196A02	6540529	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL197A02	6540531	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL198A02	6540532	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL199A02	6540533	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL202A02	6540522	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL203A02	6540534	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL204A02	6540572	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL204A02	6540572	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL214A02	6540468	9.3	2.16	8.6	1.4	8.3	1.8	5.5	0.81	5.2	0.80	14.8	1.3	2	0.8	21	10.2	
08CL265A02	6540535	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL266A02	6540536	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL268A02	6540537	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL272A02	6540469	4.0	-0.05	3.5	0.6	4.5	1.0	3.2	0.48	3.1	0.45	7.9	3.3	2	0.7	11	7.3	
08CL273A02	6540471	13.2	2.74	12.2	1.9	11.7	2.5	8.0	1.16	7.3	1.09	14.1	1.3	2	0.5	20	9.7	
08CL274A02	6540472	21.2	2.05	18.7	2.7	16.1	3.4	10.6	1.56	9.7	1.47	18.8	2.1	2	0.5	24	11.2	
08CL275A02	6540473	8.7	0.14	6.6	1.0	6.2	1.3	4.0	0.60	3.8	0.54	9.1	3.3	2	1.8	26	24.8	
08CL276A02	6540474	9.1	2.19	7.9	1.2	7.2	1.5	4.9	0.75	5.0	0.76	17.9	2.0	2	0.6	11	9.1	
08CL277A02	6540475	18.2	0.64	15.5	2.5	15.0	3.1	9.7	1.47	9.3	1.36	20.2	1.1	2	0.3	31	11.8	
08CL278A02	6540476	19.1	0.51	19.8	3.4	22.1	4.9	15.8	2.38	14.9	2.13	22.5	4.8	5	0.3	6	16.3	
08CL279A02	6540477	13.2	3.23	10.3	1.3	7.5	1.5	4.7	0.70	4.5	0.67	7.9	1.1	-1	0.1	-5	6.2	
08CL280A02	6540478	8.3	1.77	6.9	1.1	6.4	1.3	4.3	0.64	4.1	0.63	10.1	1.5	3	0.8	28	14.5	
08CL281A02	6540479	11.3	1.66	8.4	1.3	7.7	1.6	4.9	0.75	4.8	0.70	11.7	1.6	-1	1.7	24	18.7	
08CL282A02	6540481	10.1	2.82	9.4	1.5	9.0	2.0	6.0	0.91	5.8	0.92	12.6	1.1	-1	0.4	14	10.4	
08CL283A02	6540482	14.4	1.67	13.6	2.2	13.7	2.9	8.9	1.33	8.1	1.16	19.8	2.0	-1	1.0	17	10.8	
08CL284A02	6540483	20.6	0.70	15.6	2.3	12.9	2.4	7.0	1.04	6.5	0.98	23.6	0.5	-1	1.0	9	18.4	
08CL296A02	6540581	7.0	1.90	6.4	0.9	5.3	1.0	3.2	0.46	2.8	0.43	10.0	0.6	-1	0.7	13	2.6	
08CL305A02	6540485	11.3	1.75	9.1	1.4	8.1	1.7	5.1	0.79	5.0	0.73	19.1	1.4	-1	0.7	13	8.3	
08CL312A02	6540566	5.5	0.93	3.7	0.6	3.8	0.8	2.5	0.40	2.6	0.37	5.8	0.9	-1	1.3	15	14.2	

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Appendix A – Major-element and Trace-element Data

SampleID	LabNumber	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	W	Tl	Pb	Bi	Th
Units		ppm	ppm															
Detection Limit		0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.05	0.1	0.04	0.2	0.1	0.1	0.1	0.4	0.1	
Upper Limit																		
Analysis Method		FUS-MS																
08CL321A02	6540541	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	
08CL341A02	6540487	8.7	1.95	7.6	1.2	6.9	1.5	4.5	0.68	4.3	0.63	7.8	1.0	-1	0.8	12	-0.4	
08CL412A02	6540488	12.5	1.24	10.6	1.8	11.3	2.4	7.6	1.17	7.6	1.17	15.5	1.5	-1	1.0	16	-0.4	
08CL418A02	6540489	5.1	0.44	5.1	1.2	10.2	2.8	10.3	1.64	10.6	1.61	34.3	2.8	-1	2.2	35	-0.4	
08CL419A02	6540491	8.8	0.44	8.5	1.5	9.8	2.1	6.8	1.07	6.8	0.96	12.4	1.4	4	0.3	6	-0.4	
08CL420A02	6540492	9.8	0.66	10.2	2.0	13.5	3.0	9.4	1.43	9.1	1.37	16.7	2.3	-1	0.8	12	-0.4	
08CL421A02	6540493	12.7	0.59	11.8	1.9	12.1	2.6	7.8	1.14	7.1	1.02	13.4	1.4	-1	1.6	26	-0.4	
08CL423A02	6540494	16.4	0.80	16.5	3.1	20.7	4.5	14.3	2.23	13.9	1.93	17.3	2.6	-1	0.9	12	-0.4	
08CL424A02	6540495	16.5	1.53	14.6	2.3	13.6	2.8	8.8	1.36	8.4	1.24	16.0	1.5	-1	1.9	51	-0.4	
08CL427A02	6540496	14.7	0.94	12.9	2.1	13.1	2.8	8.7	1.36	8.6	1.26	15.4	2.2	-1	1.8	18	-0.4	
08CL428A02	6540497	12.4	1.58	10.6	1.6	10.0	2.1	6.4	0.99	6.2	0.95	11.4	1.1	-1	1.5	11	-0.4	
08CL429A02	6540498	14.2	2.20	12.6	2.0	12.2	2.6	8.0	1.25	8.2	1.24	20.4	1.7	-1	1.2	12	-0.4	
08CL430A02	6540499	15.2	1.48	13.0	2.1	12.7	2.7	8.4	1.30	8.2	1.25	17.5	1.8	-1	1.4	6	-0.4	
08CL431A02	6540501	14.6	1.94	14.4	2.5	15.7	3.3	9.9	1.46	9.0	1.34	16.4	1.2	-1	1.0	10	-0.4	
08CL450A02	6540502	1.3	0.72	1.2	0.2	1.2	0.7	0.7	0.11	0.7	0.10	2.7	0.1	-1	0.1	-5	-0.4	
08CL472A02	6540503	2.8	1.16	2.3	0.3	1.9	0.4	1.2	0.18	1.2	0.17	2.5	0.5	-1	1.0	11	-0.4	
08CL481A02	6540582	6.9	2.42	6.2	0.8	4.4	0.8	2.4	0.32	1.8	0.23	1.0	0.3	-1	0.5	5	-0.4	
08CL487A02	6540583	7.2	1.59	6.3	1.0	5.4	1.1	3.5	0.52	3.4	0.51	8.4	0.9	-1	0.8	21	-0.4	
08CL489A02	6540584	3.5	0.86	2.7	0.4	2.4	0.5	1.5	0.21	1.4	0.21	6.2	0.5	-1	0.7	9	-0.4	
08CL491A02	6540504	4.6	0.83	4.1	0.6	3.7	0.8	2.5	0.39	2.5	0.36	5.8	1.2	-1	0.9	10	-0.4	
08CL492A02	6540505	2.0	0.33	2.4	0.5	3.1	0.7	2.4	0.38	2.4	0.34	6.4	0.8	-1	1.1	15	-0.4	
08CL499A02	6540507	7.1	0.85	5.9	1.0	5.6	1.2	3.8	0.60	3.9	0.56	10.0	1.3	-1	1.5	19	-0.4	
08CL501A02	6540585	9.4	0.99	7.6	1.2	7.3	1.5	4.9	0.76	5.0	0.76	8.5	1.8	-1	2.5	32	22.8	
																	27.1	

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Appendix A – Major-element and Trace-element Data

SampleID	LabNumber	U	Sb	As	Ba	Br	Ce	Cs	Cr	Co	Eu	Au	Hf	La	Fe	Lu	Mo	Rb	Sm	Sc	Se	Ag	Ta
Units		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.1	0.1	0.5	50	0.5	5,28	0.5	20	5	1	2	0.2	0.2	1	2	0.2	1	5	0.3,3.8	0.2	5,28	2	0.5
Upper Limit		FUS-MS																					
Analysis Method																							
08AH006A01	6540589	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH011A02	6540379	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH016A02	6540365	-99	0.1	1.3	80	0.6	94	-0.5	33	-5	1	-2	53	20	1.5	3.7	5	76	11.6	0.4	-28	3	58.8
08AH030A02	6540381	4.6	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH038A02	6540382	-0.1	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH050A02	6540383	4.9	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH058A02	6540384	4.2	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH059A02	6540562	0.3	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH069A02	6540386	2.2	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH069A03	6540366	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH070A02	6540387	5.7	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH072A02	6540563	3.1	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH072A02	6540388	4.8	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH073A02	6540389	4.8	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH074A02	6540391	5.5	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH076A02	6540392	3.1	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH090A01	6540591	-0.1	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH092A02	6540394	3.4	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH106A02	6540395	1.6	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH116A02	6540396	2.2	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH123A02	6540397	2.5	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH132A02	6540398	2.7	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH140A02	6540399	0.8	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH143A02	6540367	-99	0.4	24.0	-50	-0.5	-28	-0.5	-20	-5	-1	-2	-1	-2	-1	-2	-1	-2	-1	-2	-1	-2	-0.5
08AH143A03	6540368	-99	-0.1	4.2	-50	-0.5	-5	-0.5	-20	11	-1	3	-1	7	27.2	-0.2	-1	-5	1.5	0.7	-5	-2	-0.5
08AH143A04	6540369	-99	-0.1	4.3	-50	-0.5	-5	-0.5	-20	14	-1	10	-1	6	21.5	-0.2	-1	-5	1.4	0.6	-5	-2	-0.5
08AH145A02	6540592	0.2	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH149C01	6540373	-99	0.3	2.2	170	0.8	120	5.0	150	7	-1	-2	24	49	7.1	-0.2	-1	270	14.8	8.0	-5	-2	6.3
08AH154A02	6540564	2.2	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH165A02	6540402	3.3	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH166A02	6540403	7.0	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH168A02	6540404	2.5	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH169A02	6540405	3.3	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH173A02	6540407	4.6	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH175A02	6540565	8.3	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH176A02	6540408	1.3	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH189A02	6540409	6.8	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH190A02	6540574	1.9	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH191A02	6540411	2.5	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH211A02	6540575	0.8	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH219A02	6540576	2.4	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH222A02	6540412	2.3	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH223A02	6540413	2.3	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH225A02	6540415	2.0	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH263A02	6540416	0.1	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99

Appendix A – Major-element and Trace-element Data

SampleID	LabNumber	U	Sb	As	Ba	Br	Ce	Cs	Cr	Co	Eu	Au	Hf	La	Fe	Lu	Mo	Rb	Sm	Sc	Se	Ag	Ta
Units		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.1	0.1	0.5	50	0.5	5,28	0.5	20	5	1	2	0.2	0.2	1	2	0.2	1	5	0.3,3.8	0.2	5,28	2	0.5
Upper Limit		FUS-MS	INAA	INAA	INAA	INAA	INAA																
Analysis Method																							
08AH267A02	6540417	0.9	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH268A02	6540418	-0.1	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH270A02	6540419	2.8	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH271A02	6540421	2.8	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH276A02	6540422	2.9	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH277A02	6540423	2.9	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH279A02	6540424	5.8	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH281A02	6540425	0.6	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH284A02	6540426	6.8	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH289A02	6540427	2.0	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH290A02	6540428	5.5	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH296A02	6540429	-0.1	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH308A02	6540433	3.7	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH309A02	6540434	3.2	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH310A02	6540435	2.0	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH311A02	6540436	1.1	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH312A02	6540437	1.9	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH313A02	6540438	0.5	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH314A02	6540439	0.5	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH315A02	6540441	0.5	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH316A02	6540442	1.0	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH318A02	6540443	2.5	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH322A02	6540444	4.8	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH327A02	6540445	0.4	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH328A02	6540446	3.0	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH329A02	6540577	5.4	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH330A02	6540578	10.1	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH331A02	6540447	2.2	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH333A02	6540448	3.8	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH335A02	6540449	3.1	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH338A02	6540451	5.3	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH342A02	6540452	4.6	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH343A02	6540579	2.3	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH344A02	6540453	6.7	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08AH345A02	6540454	5.9	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL011A02	6540455	5.5	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL019A02	6540456	3.3	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL037A02	6540457	0.2	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL047A02	6540458	3.2	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL050A02	6540374	-99	0.2	1.1	470	-0.5	120	6.7	-20	-5	-1	2	13	62	1.6	0.3	-1	350	7.1	10.0	-5	-2	10.0
08CL057A02	6540459	4.5	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL068A02	6540461	4.6	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL075A02	6540462	1.3	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL085A02	6540375	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL087A02	6540463	69.4	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99

30

Appendix A – Major-element and Trace-element Data

SampleID	LabNumber	U	Sb	As	Ba	Br	Ce	Cs	Cr	Co	Eu	Au	Hf	La	Fe	Lu	Mo	Rb	Sm	Sc	Se	Ag	Ta
Units		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.1	0.1	0.5	0.5	50	0.5	5, 28	0.5	20	5	1	2	1	2	0.2	0.2	1	5	0.3, 3.8	0.2	5, 28	2	
Upper Limit																							0.5
Analysis Method		FUS-MS																					
08CL099B02	6540568	-99	0.3	1.6	110	-0.5	32	6.1	680	52	-1	-2	-1	19	6.7	-0.2	-1	70	2.3	37.6	-5	-2	-0.5
08CL099B02	6540568	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL107A02	6540521	-99	0.2	0.7	69	-0.5	7	-0.5	300	46	-1	-2	-1	3	6.7	-0.2	-1	34	1.7	34.6	-5	-2	-0.5
08CL125A02	6540464	2.0	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL131A03	6540376	-99	1.4	18.0	260	0.7	77	2.2	-20	-5	1	4	13	40	2.2	-0.2	41	210	6.4	1.2	-5	-2	1.8
08CL135A02	6540465	1.8	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL148A02	6540466	1.6	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL149A02	6540467	0.5	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL153A02	6540524	-99	0.8	12.0	56	-0.5	120	1.5	-20	-5	-1	-2	12	44	1.6	0.9	-1	220	13.4	0.7	-5	-2	4.5
08CL159A02	6540525	-99	0.6	2.9	380	0.6	26	-0.5	120	46	-1	-2	-1	11	6.5	-0.2	-1	27	3.5	23.1	-5	-2	-0.5
08CL160A02	6540526	-99	0.8	10.0	160	-0.5	130	1.3	-20	-5	2	-2	14	61	1.7	0.8	-1	140	14.4	1.8	-5	-2	1.8
08CL167A02	6540569	-99	0.3	1.6	800	-0.5	75	7.4	-20	33	2	-2	6	36	8.6	0.4	-1	170	7.7	27.9	-5	-2	0.9
08CL167A02	6540569	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL175A02	6540571	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL175A02	6540571	-99	-0.1	-0.5	780	0.5	38	1.3	21	33	1	-2	2	19	6.3	-0.2	-1	100	4.1	36.2	-5	-2	-0.5
08CL179A02	6540527	-99	0.2	1.3	440	-0.5	26	1.3	240	36	-1	-2	1	12	6.0	-0.2	-1	44	3.6	27.5	-5	-2	-0.5
08CL195A02	6540528	-99	0.2	0.7	51	-0.5	6	-0.5	550	44	-1	-2	6	36	8.6	0.4	-1	170	7.7	27.9	-5	-2	-0.5
08CL196A02	6540529	-99	1.2	5.5	540	-0.5	61	7.3	21	10	-1	2	5	32	3.2	-0.2	-1	55	5.1	12.0	-5	-2	0.7
08CL197A02	6540531	-99	0.2	5.5	130	-0.5	83	0.7	20	-5	-1	-2	16	35	1.5	-1	230	8.4	-0.2	-5	-2	4.0	
08CL198A02	6540532	-99	0.4	5.8	-50	-0.5	20	0.9	-20	-5	-1	-2	16	7	1.6	0.7	-1	190	2.8	0.3	-5	-2	5.0
08CL199A02	6540533	-99	0.1	1.3	880	0.6	93	0.7	-20	-5	-1	-2	13	39	2.4	0.7	-4	140	10.0	5.8	-5	-2	1.8
08CL202A02	6540522	-99	1.1	4.9	220	-0.5	69	1.2	67	19	2	-2	4	21	3.7	0.2	-1	39	6.7	14.0	-5	-2	1.9
08CL203A02	6540534	-99	2.5	60.8	-50	-0.5	200	-0.5	-20	-5	1	-2	18	92	2.3	0.9	-1	-5	16.0	1.5	-5	-2	2.3
08CL204A02	6540572	-99	0.2	1.0	-50	2.9	5	-0.5	20	0.9	-20	-5	-1	-2	-1	-2	-0.2	-0.2	-1	-5	-0.3	0.7	-2
08CL204A02	6540572	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL214A02	6540468	2.8	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL265A02	6540535	-99	-0.1	-0.5	370	1.6	180	-0.5	-20	-5	-1	-2	13	84	2.6	0.8	-1	160	12.6	4.0	-5	-2	1.8
08CL266A02	6540536	-99	0.3	1.3	120	-0.5	6	0.9	-360	54	-1	-2	1	3	7.9	-0.2	-1	34	1.6	42.4	-5	-2	-0.5
08CL268A02	6540537	-99	0.5	2.8	110	0.7	-0.5	230	52	1	-1	14	9.4	-0.2	2	35	1.8	44.0	-5	-2	-0.5		
08CL272A02	6540469	4.3	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL273A02	6540471	3.5	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL274A02	6540472	2.9	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL275A02	6540473	7.3	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL276A02	6540474	8.0	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL277A02	6540475	4.7	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL278A02	6540476	8.0	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL279A02	6540477	2.5	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL280A02	6540478	6.1	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL281A02	6540479	4.4	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL282A02	6540481	6.3	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL283A02	6540482	1.9	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL284A02	6540483	3.4	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL285A02	6540581	1.1	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL286A02	6540485	3.3	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL312A02	6540566	3.2	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99

Appendix A – Major-element and Trace-element Data

SampleID	LabNumber	U	Sb	As	Ba	Br	Ce	Cs	Cr	Co	Eu	Au	Hf	La	Fe	Lu	Mo	Rb	Sn	Sc	Se	Ag	Ta
Units		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.1	0.1	0.5	50	0.5	5,28	0.5	20	5	1	2	1	2	1	2	0.2	1	5	0.3,3.8	0.2	5,28	2	0.5
Upper Limit		FUS-MS	INAA	INAA	INAA	INAA	INAA																
Analysis Method																							
08CL321A02	6540541	-99	1.2	6.4	560	-0.5	60	0.8	42	10	-1	-2	5	21	2.6	-0.2	-1	66	4.6	9.0	-5	-2	0.9
08CL341A02	6540487	2.2	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL412A02	6540488	3.7	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL418A02	6540489	2.6	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL419A02	6540491	3.0	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL420A02	6540492	3.9	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL421A02	6540493	3.1	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL423A02	6540494	5.8	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL424A02	6540495	13.4	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL427A02	6540496	2.8	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL428A02	6540497	2.1	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL429A02	6540498	2.8	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL430A02	6540499	2.5	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL431A02	6540501	7.2	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL450A02	6540502	0.1	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL472A02	6540503	3.8	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL481A02	6540582	0.6	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL487A02	6540583	4.0	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL489A02	6540584	1.4	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL491A02	6540504	2.7	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL492A02	6540505	1.5	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL499A02	6540507	3.2	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
08CL501A02	6540585	4.3	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99

Appendix A – Major-element and Trace-element Data

SampleID	LabNumber	Na	Tb	Th	W	U	Yb	Zn	Reference
Units		%	ppm	ppm	ppm	ppm	ppm	ppm	
Detection Limit		0.01	0.5	0.2	1	0.1	2	100	200
Upper Limit				INAA	INAA	INAA	INAA	INAA	INAA
Analysis Method									
08AH006A01	6540589	-99	-99	-99	-99	-99	-99	-999	-999
08AH011A02	6540379	-99	-99	-99	-99	-99	-99	-999	-999
08AH016A02	6540365	5.10	5.5	206	4	64.8	45	-100	670
08AH030A02	6540381	-99	-99	-99	-99	-99	-99	-999	-999
08AH038A02	6540382	-99	-99	-99	-99	-99	-99	-999	-999
08AH050A02	6540383	-99	-99	-99	-99	-99	-99	-999	-999
08AH058A02	6540384	-99	-99	-99	-99	-99	-99	-999	-999
08AH059A02	6540562	-99	-99	-99	-99	-99	-99	-999	-999
08AH069A02	6540386	-99	-99	-99	-99	-99	-99	-999	-999
08AH069A03	6540366	-99	-99	-99	-99	-99	-99	-999	-999
08AH070A02	6540387	-99	-99	-99	-99	-99	-99	-999	-999
08AH072A02	6540563	-99	-99	-99	-99	-99	-99	-999	-999
08AH072A02	6540388	-99	-99	-99	-99	-99	-99	-999	-999
08AH073A02	6540389	-99	-99	-99	-99	-99	-99	-999	-999
08AH074A02	6540391	-99	-99	-99	-99	-99	-99	-999	-999
08AH076A02	6540392	-99	-99	-99	-99	-99	-99	-999	-999
08AH090A01	6540591	-99	-99	-99	-99	-99	-99	-999	-999
08AH092A02	6540394	-99	-99	-99	-99	-99	-99	-999	-999
08AH106A02	6540395	-99	-99	-99	-99	-99	-99	-999	-999
08AH116A02	6540396	-99	-99	-99	-99	-99	-99	-999	-999
08AH123A02	6540397	-99	-99	-99	-99	-99	-99	-999	-999
08AH132A02	6540398	-99	-99	-99	-99	-99	-99	-999	-999
08AH140A02	6540399	-99	-99	-99	-99	-99	-99	-999	-999
08AH143A02	6540367	0.11	-0.5	0.4	-1	153	-2	810	-200
08AH143A03	6540368	0.09	-0.5	-0.2	-1	0.3	-2	160	-200
08AH143A04	6540369	0.10	-0.5	-0.2	-1	0.4	-2	260	-200
08AH145A02	6540592	-99	-99	-99	-99	-99	-99	-999	-999
08AH149C01	6540373	1.30	2.8	173	1	42.8	6	330	810
08AH154A02	6540564	-99	-99	-99	-99	-99	-99	-999	-999
08AH165A02	6540402	-99	-99	-99	-99	-99	-99	-999	-999
08AH166A02	6540403	-99	-99	-99	-99	-99	-99	-999	-999
08AH168A02	6540404	-99	-99	-99	-99	-99	-99	-999	-999
08AH169A02	6540405	-99	-99	-99	-99	-99	-99	-999	-999
08AH173A02	6540407	-99	-99	-99	-99	-99	-99	-999	-999
08AH175A02	6540565	-99	-99	-99	-99	-99	-99	-999	-999
08AH176A02	6540408	-99	-99	-99	-99	-99	-99	-999	-999
08AH189A02	6540409	-99	-99	-99	-99	-99	-99	-999	-999
08AH190A02	6540574	-99	-99	-99	-99	-99	-99	-999	-999
08AH210A02	6540411	-99	-99	-99	-99	-99	-99	-999	-999
08AH211A02	6540575	-99	-99	-99	-99	-99	-99	-999	-999
08AH219A02	6540576	-99	-99	-99	-99	-99	-99	-999	-999
08AH222A02	6540412	-99	-99	-99	-99	-99	-99	-999	-999
08AH233A02	6540413	-99	-99	-99	-99	-99	-99	-999	-999
08AH258A02	6540415	-99	-99	-99	-99	-99	-99	-999	-999
08AH263A02	6540416	-99	-99	-99	-99	-99	-99	-999	-999

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Appendix A – Major-element and Trace-element Data

SampleID	LabNumber	Na	Tb	Th	W	U	Yb	Zn	Reference
Units		%	ppm	ppm	ppm	ppm	ppm	ppm	
Detection Limit		0.01	0.5	0.2	1	0.1	2	100	200
Upper Limit				INAA	INAA	INAA	INAA	INAA	INAA
Analysis Method									
08AH267A02	6540417	-99	-99	-99	-99	-99	-99	-999	-999
08AH268A02	6540418	-99	-99	-99	-99	-99	-99	-999	-999
08AH270A02	6540419	-99	-99	-99	-99	-99	-99	-999	-999
08AH271A02	6540421	-99	-99	-99	-99	-99	-99	-999	-999
08AH276A02	6540422	-99	-99	-99	-99	-99	-99	-999	-999
08AH277A02	6540423	-99	-99	-99	-99	-99	-99	-999	-999
08AH279A02	6540424	-99	-99	-99	-99	-99	-99	-999	-999
08AH281A02	6540425	-99	-99	-99	-99	-99	-99	-999	-999
08AH284A02	6540426	-99	-99	-99	-99	-99	-99	-999	-999
08AH289A02	6540427	-99	-99	-99	-99	-99	-99	-999	-999
08AH290A02	6540428	-99	-99	-99	-99	-99	-99	-999	-999
08AH296A02	6540429	-99	-99	-99	-99	-99	-99	-999	-999
08AH308A02	6540433	-99	-99	-99	-99	-99	-99	-999	-999
08AH309A02	6540434	-99	-99	-99	-99	-99	-99	-999	-999
08AH310A02	6540435	-99	-99	-99	-99	-99	-99	-999	-999
08AH311A02	6540436	-99	-99	-99	-99	-99	-99	-999	-999
08AH312A02	6540437	-99	-99	-99	-99	-99	-99	-999	-999
08AH313A02	6540438	-99	-99	-99	-99	-99	-99	-999	-999
08AH314A02	6540439	-99	-99	-99	-99	-99	-99	-999	-999
08AH315A02	6540441	-99	-99	-99	-99	-99	-99	-999	-999
08AH316A02	6540442	-99	-99	-99	-99	-99	-99	-999	-999
08AH318A02	6540443	-99	-99	-99	-99	-99	-99	-999	-999
08AH322A02	6540444	-99	-99	-99	-99	-99	-99	-999	-999
08AH327A02	6540445	-99	-99	-99	-99	-99	-99	-999	-999
08AH328A02	6540446	-99	-99	-99	-99	-99	-99	-999	-999
08AH329A02	6540577	-99	-99	-99	-99	-99	-99	-999	-999
08AH330A02	6540578	-99	-99	-99	-99	-99	-99	-999	-999
08AH331A02	6540447	-99	-99	-99	-99	-99	-99	-999	-999
08AH332A02	6540448	-99	-99	-99	-99	-99	-99	-999	-999
08AH333A02	6540449	-99	-99	-99	-99	-99	-99	-999	-999
08AH335A02	6540451	-99	-99	-99	-99	-99	-99	-999	-999
08AH338A02	6540452	-99	-99	-99	-99	-99	-99	-999	-999
08AH342A02	6540455	-99	-99	-99	-99	-99	-99	-999	-999
08AH343A02	6540579	-99	-99	-99	-99	-99	-99	-999	-999
08AH344A02	6540453	-99	-99	-99	-99	-99	-99	-999	-999
08AH345A02	6540454	-99	-99	-99	-99	-99	-99	-999	-999
08CL011A02	6540455	-99	-99	-99	-99	-99	-99	-999	-999
08CL019A02	6540456	-99	-99	-99	-99	-99	-99	-999	-999
08CL037A02	6540457	-99	-99	-99	-99	-99	-99	-999	-999
08CL047A02	6540458	-99	-99	-99	-99	-99	-99	-999	-999
08CL050A02	6540374	2.06	1.2	23.5	2	19.0	7	110	520
08CL057A02	6540459	-99	-99	-99	-99	-99	-99	-999	-999
08CL068A02	6540461	-99	-99	-99	-99	-99	-99	-999	-999
08CL075A02	6540462	-99	-99	-99	-99	-99	-99	-999	-999
08CL085A02	6540375	-99	-99	-99	-99	-99	-99	-999	-999
08CL087A02	6540463	-99	-99	-99	-99	-99	-99	-999	-999

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Appendix A – Major-element and Trace-element Data

SampleID	LabNumber	Na	Tb	Th	W	U	Yb	Zn	Reference
Units		%	ppm	ppm	ppm	ppm	ppm	ppm	
Detection Limit		0.01	0.5	0.2	1	0.1	2	100	200
Upper Limit				INAA	INAA	INAA	INAA	INAA	INAA
Analysis Method									
08CL099B02	6540568	1.90	0.6	1.7	1	2.3	2	170	-200
08CL099B02	6540568	-99	-99	-99	-99	-99	-99	-999	-999
08CL107A02	6540521	2.18	-0.5	-0.2	-1	0.9	-2	100	-200
08CL125A02	6540464	-99	-99	-99	-99	-99	-99	-999	-999
08CL131A03	6540376	1.20	1.5	11.0	2	63.5	6	310	420
08CL135A02	6540465	-99	-99	-99	-99	-99	-99	-999	-999
08CL148A02	6540466	-99	-99	-99	-99	-99	-99	-999	-999
08CL149A02	6540467	-99	-99	-99	-99	-99	-99	-999	-999
08CL153A02	6540524	0.49	2.2	35.9	2	3.2	7	-100	240
08CL159A02	6540525	2.54	0.5	0.5	-1	0.4	-2	170	-200
08CL160A02	6540526	1.40	2.0	13.0	2	3.3	7	120	520
08CL167A02	6540569	2.99	1.2	8.6	2	3.2	4	120	-200
08CL167A02	6540569	-99	-99	-99	-99	-99	-99	-999	-999
08CL175A02	6540571	-99	-99	-99	-99	-99	-99	-999	-999
08CL175A02	6540571	2.07	-0.5	3.5	2	0.9	-2	-100	-200
08CL179A02	6540527	2.40	-0.5	3.4	-1	1.5	-2	100	-200
08CL195A02	6540528	1.80	-0.5	-0.2	-1	0.3	-2	-100	-200
08CL196A02	6540529	2.88	0.6	8.8	-1	5.1	2	-100	-200
08CL197A02	6540531	0.49	2.1	23.5	2	2.5	11	-100	280
08CL198A02	6540532	1.10	1.1	8.7	-1	3.0	6	-100	350
08CL199A02	6540533	2.83	1.5	18.0	3	2.8	6	-100	440
08CL202A02	6540522	4.01	0.9	14.0	1	3.0	3	110	-200
08CL203A02	6540534	5.47	1.7	19.0	2	2.9	6	490	460
08CL204A02	6540572	7.21	-0.5	8.7	2	6.3	-2	-100	-200
08CL204A02	6540572	-99	-99	-99	-99	-99	-99	-999	-999
08CL214A02	6540468	-99	-99	-99	-99	-99	-99	-999	-999
08CL265A02	6540535	2.74	1.4	23.6	-1	4.3	7	-100	420
08CL266A02	6540536	2.80	-0.5	-0.2	-1	0.8	-2	-100	-200
08CL268A02	6540537	2.57	-0.5	0.3	1	1.7	-2	-100	-200
08CL272A02	6540469	-99	-99	-99	-99	-99	-99	-999	-999
08CL273A02	6540471	-99	-99	-99	-99	-99	-99	-999	-999
08CL274A02	6540472	-99	-99	-99	-99	-99	-99	-999	-999
08CL275A02	6540473	-99	-99	-99	-99	-99	-99	-999	-999
08CL276A02	6540474	-99	-99	-99	-99	-99	-99	-999	-999
08CL277A02	6540475	-99	-99	-99	-99	-99	-99	-999	-999
08CL278A02	6540476	-99	-99	-99	-99	-99	-99	-999	-999
08CL279A02	6540477	-99	-99	-99	-99	-99	-99	-999	-999
08CL280A02	6540478	-99	-99	-99	-99	-99	-99	-999	-999
08CL281A02	6540479	-99	-99	-99	-99	-99	-99	-999	-999
08CL282A02	6540481	-99	-99	-99	-99	-99	-99	-999	-999
08CL283A02	6540482	-99	-99	-99	-99	-99	-99	-999	-999
08CL284A02	6540483	-99	-99	-99	-99	-99	-99	-999	-999
08CL296A02	6540581	-99	-99	-99	-99	-99	-99	-999	-999
08CL305A02	6540485	-99	-99	-99	-99	-99	-99	-999	-999
08CL312A02	6540566	-99	-99	-99	-99	-99	-99	-999	-999

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Appendix A – Major-element and Trace-element Data

SampleID	LabNumber	Na	Tb	Th	W	U	Yb	Zn	Rb	Reference
Units		%	ppm							
Detection Limit		0.01	0.5	0.2	1	0.1	2	100	200	
Upper Limit										
Analysis Method		INAA								
08CL321A02	6540541	3.95	0.5	12.0	2	2.7	2	-100	-200	LaFlamme, 2011
08CL341A02	6540487	-99	-99	-99	-99	-99	-99	-999	-999	
08CL412A02	6540488	-99	-99	-99	-99	-99	-99	-999	-999	
08CL418A02	6540489	-99	-99	-99	-99	-99	-99	-999	-999	
08CL419A02	6540491	-99	-99	-99	-99	-99	-99	-999	-999	
08CL420A02	6540492	-99	-99	-99	-99	-99	-99	-999	-999	
08CL421A02	6540493	-99	-99	-99	-99	-99	-99	-999	-999	
08CL423A02	6540494	-99	-99	-99	-99	-99	-99	-999	-999	
08CL424A02	6540495	-99	-99	-99	-99	-99	-99	-999	-999	
08CL427A02	6540496	-99	-99	-99	-99	-99	-99	-999	-999	
08CL428A02	6540497	-99	-99	-99	-99	-99	-99	-999	-999	
08CL429A02	6540498	-99	-99	-99	-99	-99	-99	-999	-999	
08CL430A02	6540499	-99	-99	-99	-99	-99	-99	-999	-999	
08CL431A02	6540501	-99	-99	-99	-99	-99	-99	-999	-999	
08CL450A02	6540502	-99	-99	-99	-99	-99	-99	-999	-999	
08CL472A02	6540503	-99	-99	-99	-99	-99	-99	-999	-999	
08CL481A02	6540582	-99	-99	-99	-99	-99	-99	-999	-999	
08CL487A02	6540583	-99	-99	-99	-99	-99	-99	-999	-999	
08CL489A02	6540584	-99	-99	-99	-99	-99	-99	-999	-999	
08CL491A02	6540504	-99	-99	-99	-99	-99	-99	-999	-999	MacFarlane, 2010
08CL492A02	6540505	-99	-99	-99	-99	-99	-99	-999	-999	MacFarlane, 2010
08CL499A02	6540507	-99	-99	-99	-99	-99	-99	-999	-999	
08CL501A02	6540585	-99	-99	-99	-99	-99	-99	-999	-999	MacFarlane, 2010

Appendix B – Major-element ICP-ES Standards and Duplicate Data

LabNumber	SampleID	SiO ₂	Al ₂ O ₃	FeO	FeO _T	CaO	Na ₂ O	K ₂ O	TiO ₂	MnO	P2O ₅	Cr	Zr	Ba	LOI	Total	Comments	
Units		wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	ppm	ppm	ppm	wt.%	wt.%		
Detection Limit		0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.001	0.001	100	100	1	0.01	0.01		
Analysis Method		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	GS Maj	Gravimetric	
6540380	STM-1	60.85	18.58	5.14	-99	0.08	1.12	8.53	4.14	0.129	0.155	-100	1342	618	-99	-99	standard	
6540400	MRG-1	38.81	8.26	18.10	-99	13.25	14.63	0.73	0.18	3.673	0.058	430	97	28	-99	-99	standard	
6540408	08AH176A02	73.25	12.20	3.58	2.32	1.13	0.15	0.66	3.32	5.16	0.230	0.026	0.012	-100	207	875	0.28	original sample
6540410	6540408	73.32	12.27	3.49	2.18	1.17	0.14	0.67	3.33	5.21	0.235	0.027	0.011	-100	205	884	0.28	duplicate
6540419	08AH270A02	68.17	13.17	5.75	4.65	1.00	0.16	0.85	4.23	5.01	0.527	0.088	0.074	-100	471	1702	0.37	original sample
6540420	RGM-1	71.89	13.42	1.57	-99	0.28	1.17	3.85	4.08	0.261	0.035	0.042	-100	215	865	-99	standard	
6540430	6540419	68.25	13.21	5.86	4.77	0.98	0.17	0.86	4.28	5.09	0.525	0.087	0.078	-100	462	1697	0.39	duplicate
6540434	08AH309A02	67.75	12.85	7.28	5.07	1.98	0.08	0.91	4.54	4.19	0.591	0.127	0.098	-100	418	2288	0.24	original sample
6540440	SCO-1	61.09	13.53	4.96	-99	2.68	2.52	0.91	2.67	0.593	0.050	0.205	-100	161	605	-99	standard	
6540450	6540434	67.94	12.85	6.84	4.65	1.98	0.05	0.92	4.43	4.12	0.588	0.122	0.096	-100	420	2311	0.14	duplicate
6540460	FK-N	63.29	18.41	0.02	-99	0.99	-0.01	2.38	12.26	0.003	0.003	0.011	-100	1	187	-99	standard	
6540461	08CL068A02	48.88	14.23	11.85	4.16	6.92	7.49	10.42	3.28	1.25	0.742	0.183	0.062	369	36	155	0.80	original sample
6540470	6540461	48.63	14.34	11.82	4.10	6.95	7.42	10.40	3.37	1.26	0.736	0.184	0.058	370	37	162	0.77	duplicate
6540480	SDC-1	65.48	15.56	6.93	-99	1.69	1.43	2.04	3.15	1.018	0.115	0.150	-100	288	649	-99	standard	
6540487	08CL341A02	65.06	15.58	5.19	1.71	3.13	1.27	3.22	4.13	4.01	0.859	0.102	0.308	-100	256	1492	0.46	original sample
6540490	6540487	63.73	15.39	5.23	1.80	3.09	1.25	3.18	4.16	4.00	0.869	0.103	0.303	-100	337	1477	0.42	duplicate
6540503	08CL472A02	62.65	19.12	2.59	2.39	0.17	1.27	4.33	5.35	2.82	0.250	0.049	0.114	-100	94	918	0.64	original sample
6540510	6540503	62.32	19.04	2.56	2.46	0.09	1.26	4.33	5.34	2.81	0.248	0.047	0.114	-100	104	917	0.70	duplicate
6540520	QLO-1	64.32	15.84	4.21	-99	0.99	3.16	4.16	3.52	0.617	0.091	0.253	-100	176	1415	-99	standard	
6540525	08CL159A02	47.12	17.60	10.30	-99	5.80	10.15	4.28	0.91	0.850	0.154	0.266	121	47	364	1.20	original sample	
6540530	6540525	48.62	17.88	10.41	-99	5.83	10.32	4.37	0.92	0.870	0.157	0.272	119	45	367	1.10	duplicate	
6540568	08CL099B02	47.03	12.07	9.50	-99	9.71	13.30	2.40	1.62	0.501	0.180	0.036	589	33	119	0.97	original sample	
6540568	08CL099B02	48.05	12.15	9.91	3.19	6.05	9.89	13.64	2.47	1.62	0.518	0.184	0.037	614	33	104	1.02	duplicate
6540570	6540568	47.03	12.09	9.51	-99	9.71	13.38	2.40	1.62	0.502	0.181	0.038	588	32	88	0.83	97	
6540580	MA-N	67.65	17.94	0.24	-99	0.06	0.60	5.84	3.07	0.012	0.038	1.439	-100	27	48	-99	standard	
6540589	08AH006A01	48.69	14.62	15.08	8.77	5.68	5.51	9.63	4.03	0.25	1.652	0.201	0.600	140	129	592	0.26	original sample
6540590	6540589	47.14	14.39	14.93	8.55	5.74	5.43	9.53	3.96	0.24	1.631	0.197	0.581	140	126	583	0.20	duplicate

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
Units		ppm	%	ppm																		
Detection Limit		2	1	0.1	0.1	1	1	1	1	0.1	0.01	1	0.1	1	1	1	1	1	1	1	0.1	1
Analysis Method		GSTr	GSTr	GSTr	GSTr	GSTr	GSTr	GSTr	GSTr	GSTr	GSTr	GSTr	GSTr									
6540366	08AH069A03	-2	156	6.1	0.3	157	5	1	14	14.3	12.95	4.8	5.1	1563	-1	39	19	195	12	15	4.2	68
6540370	6540366	-2	156	6.2	0.3	157	5	1	14	15.1	13.13	4.9	5.2	1570	-1	37	16	192	12	15	4.3	68
6540377	08CL185A02	8	1092	0.6	-0.1	54	2	6	-1	1.1	0.46	21	4.5	108	-1	6	2	150	19	144	2.8	98
6540390	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
6540397	6540377	7	1089	0.6	-0.1	55	2	6	-1	1.0	0.46	21	4.5	109	-1	6	2	150	20	151	2.8	98
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
6540408	08AH176A02	-2	864	1.7	-0.1	75	3	4	3	6.0	2.56	30	1.0	231	-1	28	5	51	11	115	2.0	88
6540410	6540408	2	858	1.7	-0.1	75	3	4	3	6.0	2.63	31	1.1	233	-1	27	4	51	11	110	2.0	88
6540419	08AH270A02	13	1589	5.0	-0.1	141	5	2	2	10.5	2.98	67	15.1	720	-1	17	3	341	40	143	11.0	76
6540420	WGB-1	2	809	0.1	-0.1	13	29	283	106	2.9	4.67	8	46.5	1030	-1	5	67	359	6	20	44.4	118
6540430	6540419	14	1585	5.0	-0.1	142	5	2	2	10.3	3.09	67	15.1	724	-1	18	5	335	41	145	11.1	76
6540434	08AH309A02	7	2485	3.8	-0.1	138	6	2	-1	10.3	4.95	67	8.9	1046	-1	21	7	436	19	134	17.2	104
6540440	SY-4	-2	338	2.7	-0.1	122	3	10	5	18.5	4.30	58	36.8	830	-1	13	11	570	2	51	1.1	1076
6540450	6540434	7	2527	3.7	-0.1	135	6	2	-1	10.3	4.90	65	8.8	1028	-1	20	7	421	18	141	17.0	102
6540460	WGB-1	2	813	0.1	-0.1	12	28	277	108	2.7	4.62	8	45.8	1010	-1	5	66	353	7	19	43.9	116
6540461	08CL068A02	3	165	3.1	0.7	137	43	376	322	4.3	8.11	80	41.3	1306	3	17	132	258	29	80	44.6	421
6540470	6540461	3	166	3.0	0.6	138	43	354	328	4.5	7.90	80	39.5	1271	2	18	135	255	30	81	43.1	413
6540480	SY-4	3	333	2.7	0.1	120	3	9	4	18.5	4.29	57	36.2	829	-1	13	13	559	3	53	1.1	1061
6540487	08CL341A02	3	1388	2.1	-0.1	102	14	7	1	6.3	3.55	48	8.3	813	1	16	8	1370	20	93	11.4	400
6540490	6540487	3	1375	2.1	-0.1	102	14	7	2	6.4	3.56	48	8.2	807	1	16	8	1350	18	92	11.3	398
6540500	WGB-1	-2	808	0.1	-0.1	12	29	268	105	2.7	4.52	8	44.5	999	-1	5	68	341	7	24	43.2	115
6540503	08CL472A02	42	889	2.0	-0.1	40	7	8	2	1.6	1.11	24	90.6	363	-1	5	5	490	12	86	5.6	948
6540510	6540503	41	913	2.1	-0.1	42	7	7	2	1.7	1.06	26	92.4	369	-1	6	6	498	12	90	5.8	983
6540520	SY-4	-2	335	2.7	-0.1	120	3	10	4	17.4	4.35	57	36.9	816	-1	12	11	544	3	53	1.1	1065
6540525	08CL159A02	3	363	0.7	0.5	27	42	124	1	2.7	7.15	13	20.6	1096	-1	9	69	1166	29	33	29.0	688
6540530	6540525	3	360	0.7	0.5	27	42	124	1	2.7	7.06	13	20.4	1087	-1	9	69	1148	28	33	28.5	685
6540540	SY-4	2	338	2.7	0.1	122	3	10	-1	18.7	4.32	58	36.7	791	-1	18	11	568	1	51	1.1	1084
6540560	WGB-1	3	824	0.1	-0.1	11	28	268	102	3.0	4.61	8	46.0	977	-1	8	65	351	7	20	43.6	116
6540580	WGB-1	3	814	0.2	-0.1	11	28	275	101	3.1	4.68	8	46.1	1024	-1	5	79	350	2	21	42.8	114
6540589	08AH006A01	17	581	0.8	0.4	74	53	138	-1	6.6	10.39	32	55.3	1442	-1	10	103	2484	3	9	32.4	653
6540590	6540589	18	581	0.8	0.4	74	53	139	-1	6.7	10.40	32	55.2	1438	-1	10	103	2486	3	7	32.5	646

Appendix C – Trace-element ICP-ES Standards and Duplicate Data

LabNumber	SampleID	Ti	V	Y	Zn	Comments
Units		ppm	ppm	ppm	ppm	
Detection Limit		1	1	1	1	
Analysis Method		GSTr	GS Tr	GS Tr	GS Tr	
6540366	08AH069A03	2751	-1	85	163	Original Sample
6540370	6540366	2736	-1	86	163	Duplicate
6540377	08CL185A02	724	-1	5	11	Original Sample
6540380	WGB-1	4976	216	14	38	Standard
6540390	6540377	724	-1	5	9	Duplicate
6540400	SY-4	1753	-1	122	95	Standard
6540408	08AH176A02	1599	-1	34	21	Original Sample
6540410	6540408	1589	-1	33	21	Duplicate
6540419	08AH270A02	2635	-1	64	204	Original Sample
6540420	WGB-1	4904	225	14	37	Standard
6540430	6540419	2741	-1	64	207	Duplicate
6540434	08AH309A02	3987	-1	64	80	Original Sample
6540440	SY-4	1674	-1	120	92	Standard
6540450	6540434	3957	-1	64	78	Duplicate
6540460	WGB-1	4977	219	14	37	Standard
6540461	08CL068A02	4359	918	27	193	Original Sample
6540470	6540461	4402	903	26	196	Duplicate
6540480	SY-4	1716	-1	121	93	Standard
6540487	08CL341A02	5270	34	38	74	Original Sample
6540490	6540487	5171	34	38	72	Duplicate
6540500	WGB-1	5030	214	14	37	Standard
6540503	08CL472A02	1405	40	11	49	Original Sample
6540510	6540503	1395	36	12	50	Duplicate
6540520	SY-4	1660	1	113	90	Standard
6540525	08CL159A02	5191	190	12	125	Original Sample
6540530	6540525	5159	188	12	124	Duplicate
6540540	SY-4	1668	-1	120	92	Standard
6540560	WGB-1	5193	219	15	38	Standard
6540580	WGB-1	5170	216	14	38	Standard
6540589	08AH006A01	9892	260	29	131	Original Sample
6540590	6540589	9888	260	29	131	Duplicate

Appendix D – Trace-element ICP-MS Standards and Duplicate Data Dissolved by Fusion Method

LabNumber Units	SampleID	V	Cr	Co	Ni	Cu	Zn	Ga	Ge	As	Rb	Sr	Y	Zr	Nb	Mo	Ag
Detection Limit		ppm															
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	
6540380	SY-4	6	-20	-1	-20	-10	70	35	1	-5	54	1120	131	620	13	-2	5.8
6540400	WGB-1	227	280	26	60	90	-30	11	2	-5	19	106	16	53	6	-2	0.5
6540408	08AH176A02D	7	-20	-1	-20	-10	-30	20	1	-5	114	74	35	237	25	-2	-0.5
6540410	6540408	7	-20	-1	-20	-10	-30	20	1	-5	114	75	36	230	26	-2	-0.5
6540411	08AH1770A02D	-5	-20	1	-20	-10	180	26	1	22	141	63	66	495	17	-2	-0.5
6540419	SY-4	-5	-20	2	-20	-10	60	35	1	-5	54	1120	128	656	13	-2	-0.5
6540420	6540419	-5	-20	-1	-20	-10	220	26	2	26	143	63	64	510	18	-2	-0.5
6540430	08AH309A02D	-5	-20	1	-20	-10	50	22	1	9	120	83	59	438	16	-2	-0.5
6540434	SY-4	-5	-20	1	-20	-10	100	35	1	-5	55	1060	124	682	15	-2	-0.5
6540440	6540434	-5	-20	1	-20	-10	50	22	1	9	120	83	59	438	16	-2	-0.5
6540450	WGB-1	222	290	26	50	110	190	11	2	56	19	112	16	69	8	-2	0.6
6540460	08CL068A02D	855	370	36	100	270	580	14	-1	-5	76	406	30	40	16	4	4.0
6540461	6540461	920	410	49	150	350	920	16	3	-5	80	401	30	48	16	4	6.9
6540470	WGB-1	210	270	26	30	90	50	11	2	-5	21	101	15	53	6	-2	-0.5
6540480	08CL341A02D	47	-20	7	-20	-10	70	20	1	5	91	355	41	283	15	-2	-0.5
6540487	6540487	47	-20	7	-20	-10	100	21	1	5	93	352	41	301	14	-2	-0.5
6540490	SY-4	-5	-20	1	-20	-10	80	34	1	-5	50	993	114	575	12	-2	-0.5
6540500	WGB-1	228	290	25	50	90	50	12	2	7	18	106	16	72	6	-2	-0.5
6540580	08AH006A01	259	150	41	-20	-10	120	18	2	38	2	647	31	128	4	-2	-0.5
6540589	6540589	269	150	43	20	-10	130	20	2	47	-2	655	31	122	4	-2	-0.5

Appendix D – Trace-element ICP-MS Standards and Duplicate Data Dissolved by Fusion Method

LabNumber Units	SampleID	In	Sn	Sb	Cs	Ba	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er
Detection Limit		FUS-MS															
Analysis Method		FUS-MS															
6540380	SY-4	-0.2	8	3.7	1.5	347	61.7	135	15.9	56.2	13.1	2.03	14.3	2.8	19.6	4.6	15.8
6540400	WGB-1	-0.2	3	6.6	-0.5	852	7.6	17.0	2.22	9.3	2.4	1.23	2.6	0.4	2.7	0.5	1.6
6540408	08AH176A02D	-0.2	3	2.5	-0.5	877	33.2	76.0	9.33	33.8	7.5	0.77	6.4	1.0	6.4	1.3	3.8
6540410	6540408	-0.2	3	3.0	-0.5	877	31.7	73.8	9.17	33.2	7.2	0.75	6.2	1.0	6.3	1.3	3.7
6540419	08AH2770A02D	-0.2	3	6.0	0.7	1690	68.5	139	17.5	59.2	12.4	3.16	10.9	1.7	10.7	2.3	7.2
6540420	SY-4	-0.2	7	3.2	1.4	345	59.9	129	15.6	57.1	12.5	2.12	13.4	2.6	18.5	4.5	15.1
6540430	6540419	0.3	81	8.3	0.8	1670	63.4	129	16.2	56.9	11.8	2.91	10.9	1.7	10.5	2.2	7.1
6540434	08AH309A02D	-0.2	3	-0.5	0.5	2170	61.4	126	15.3	53.6	11.3	3.19	10.6	1.6	9.8	2.1	6.5
6540440	SY-4	-0.2	8	-0.5	1.6	340	57.2	123	14.9	54.1	12.2	1.90	14.0	2.6	18.3	4.4	15.0
6540450	6540434	-0.2	3	-0.5	0.5	2170	61.4	126	15.3	53.6	11.3	3.19	10.6	1.6	9.8	2.1	6.5
6540460	WGB-1	-0.2	4	5.0	-0.5	899	8.2	18.0	2.07	9.4	2.6	1.25	3.0	0.5	2.7	0.6	1.7
6540461	08CL068A02D	-0.2	3	-0.5	5.1	380	86.4	143	12.2	35.3	6.1	0.76	4.8	0.8	4.9	1.0	3.1
6540470	6540461	-0.2	4	1.9	5.6	181	104	164	16.6	43.6	6.7	0.80	5.3	0.8	5.1	1.1	3.2
6540480	WGB-1	-0.2	4	3.7	-0.5	830	8.7	18.3	2.26	10.0	2.7	1.25	2.9	0.5	2.8	0.6	1.7
6540487	08CL341A02D	-0.2	2	1.0	0.6	1450	50.8	102	11.4	40.6	8.7	1.95	7.6	1.2	6.9	1.5	4.5
6540490	6540487	-0.2	2	0.6	0.7	1400	48.8	99.3	11.1	39.8	8.4	1.93	7.3	1.2	6.9	1.4	4.4
6540500	SY-4	-0.2	7	-0.5	1.4	317	52.4	109	12.4	49.1	11.6	1.84	12.7	2.5	17.1	4.1	14.3
6540580	WGB-1	-0.2	8	1.6	-0.5	832	8.0	16.1	2.12	9.3	2.5	1.16	3.0	0.5	2.8	0.6	1.6
6540589	08AH006A01	-0.2	1	-0.5	0.5	562	30.8	70.0	9.25	35.1	7.8	2.39	7.2	1.0	5.4	1.1	3.2
6540590	6540589	-0.2	1	-0.5	-0.5	577	32.1	73.1	9.61	36.4	8.1	2.48	7.5	1.0	5.6	1.1	3.3

Appendix D – Trace-element ICP-MS Standards and Duplicate Data Dissolved by Fusion Method

LabNumber Units	SampleID	Tm	Yb	Lu	Hf	Ta	W	Th	Pb	Bi	U	Comments
Detection Limit		ppm										
Analysis Method		FUS-MS										
6540380	SY-4	2.52	15.8	2.13	11.2	0.8	-1	0.2	7	0.9	1.2	0.9
6540400	WGB-1	0.22	1.3	0.19	1.4	0.3	2	0.3	-5	-0.4	1.0	0.6
6540408	08AH176A02D	0.55	3.2	0.41	5.5	2.1	-1	0.6	8	4.1	5.3	1.3 Original Sample
6540410	6540408	0.54	3.2	0.40	5.2	2.0	1	0.5	8	2.8	5.3	1.3 Duplicate
6540419	08AHF770A02D	1.09	7.0	1.05	11.7	1.0	2	0.8	28	2.5	9.1	2.8 Original Sample
6540420	SY-4	2.38	15.4	2.09	11.6	0.7	-1	0.1	-5	1.9	1.2	0.8 Standard
6540430	6540419	1.08	6.7	1.00	13.7	1.1	1	1.8	31	-0.4	8.5	3.1 Duplicate
6540434	08AH309A02D	0.97	6.2	0.93	11.7	1.0	-1	0.7	-5	-0.4	7.4	3.3 Original Sample
6540440	SY-4	2.37	15.1	2.04	13.6	0.8	-1	0.6	9	-0.4	1.3	1.2 Standard
6540450	6540434	0.97	6.2	0.93	11.7	1.0	-1	0.7	-5	-0.4	7.4	3.3 Duplicate
6540460	WGB-1	0.25	1.5	0.21	2.0	0.5	3	0.3	5	0.9	1.2	0.8 Standard
6540461	08CL068A02D	0.44	2.7	0.38	1.3	0.4	-1	0.4	-5	54	1.0	4.6 Original Sample
6540470	6540461	0.46	2.7	0.39	1.4	0.4	2	0.7	44	123	1.2	4.5 Duplicate
6540480	WGB-1	0.24	1.5	0.22	1.7	0.4	5	0.5	-5	-0.4	1.2	0.8 Standard
6540487	08CL341A02D	0.68	4.3	0.63	7.8	1.0	-1	0.8	12	-0.4	7.8	2.2 Original Sample
6540490	6540487	0.67	4.2	0.63	8.5	1.0	-1	0.8	13	-0.4	8.0	2.3 Duplicate
6540500	SY-4	2.31	14.9	2.04	11.9	0.8	-1	0.4	6	-0.4	1.2	0.9 Standard
6540580	WGB-1	0.24	1.4	0.21	1.8	0.4	2	0.7	6	-0.4	1.3	0.7 Standard
6540589	08AH006A01	0.46	2.7	0.39	3.2	0.2	-1	-0.1	-5	-0.4	0.2	0.3 Original Sample
6540590	6540589	0.47	2.8	0.40	3.1	0.2	-1	-0.1	-5	1.9	0.2	0.3 Duplicate

Appendix E – Trace-element INAA Standards Data

LabNumber	SampleID	Wt	Sb	As	Ba	Br	Ce	Cs	Cr	Co	Eu	Au	Hf	La	Lu	Mo	Rb	Sm	Sc	Se	Ag	Ta	Tb
Units	g	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm									
Detection Limit	0.1	0.5	0.1	0.5	50	0.5	5	0.5	20	5	1	2	1	2	0.2	1	5	3.8	0.2	5	2	0.5	
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	
6540540	WGB-1	12.444	2.2	2.2	830	0.6	16	0.7	300	27	-1	3	2	7	-0.2	-1	20	2.5	39.7	-5	-2	-0.5	
6540560	SY-4	10.866	-0.1	-0.5	310	216	130	1.6	-20	-5	2	-2	11	57	2.2	-1	42	13.1	1.2	-5	-2	1.1	
																						2.6	

LabNumber	SampleID	Th	W	U	Yb	Zn	Zr	Comment
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Detection Limit	0.2	1	0.1	2	100	200		
Analysis Method	INAA	INAA	INAA	INAA	INAA	INAA	INAA	
6540540	WGB-1	1.2	1	0.6	-2	-100	-200	Standard
6540560	SY-4	0.7	-1	0.7	14	180	490	Standard

Appendix F – Silver Standards and Duplicates
Dissolved by Partial Dilution

LabNumber	SampleID	Ag	Comments
Units		ppm	
Detection Limit		0.1	
Analysis Method		GS BPD	
6540366	08AH069A03	-0.1	Original Sample
6540370	6540366	-0.1	Duplicate
6540377	08CL185A02	-0.1	Original Sample
6540380	WGB-1	-0.1	Standard
6540390	6540377	-0.1	Duplicate
6540400	SY-4	-0.1	Standard
6540408	08AH176A02	-0.1	Original Sample
6540410	6540408	-0.1	Duplicate
6540419	08AH270A02	-0.1	Original Sample
6540420	WGB-1	-0.1	Standard
6540430	6540419	-0.1	Duplicate
6540434	08AH309A02	-0.1	Original Sample
6540440	SY-4	-0.1	Standard
6540450	6540434	-0.1	Duplicate
6540460	WGB-1	-0.1	Standard
6540461	08CL068A02	0.5	Original Sample
6540470	6540461	0.6	Duplicate
6540480	SY-4	-0.1	Standard
6540487	08CL341A02	-0.1	Original Sample
6540490	6540487	-0.1	Duplicate
6540500	WGB-1	-0.1	Standard
6540503	08CL472A02	-0.1	Original Sample
6540510	6540503	-0.1	Duplicate
6540525	08CL159A02	-0.1	Original Sample
6540530	6540525	-0.1	Duplicate
6540560	SY-4	-0.1	Standard
6540568	08CL099B02	-0.1	Original Sample
6540570	6540568	-0.1	Duplicate
6540580	WGB-1	-0.1	Standard
6540589	08AH006A01	-0.1	Original Sample
6540590	6540589	-0.1	Duplicate

**Appendix G – Fluorine Standards and Duplicates Analyzed by
Ion-specific Electrode Standards and Duplicates**

LabNumber	SampleID	F	Comments
Units		ppm	
Detection Limit		5	
Analysis Method		ISE	
6540380	GD-1	202	Standard
6540400	AND-1	252	Standard
6540419	08AH270A02	732	Original Sample
6540420	GD-1	214	Standard
6540430	6540419	661	Duplicate
6540434	08AH309A02	693	Original Sample
6540440	GA-1	243	Standard
6540450	6540434	714	Duplicate
6540460	GD-2	37	Standard
6540461	08CL068A02	1275	Original Sample
6540470	6540461	1141	Duplicate
6540480	RH-1	95	Standard
6540487	08CL341A02	584	Original Sample
6540490	6540487	581	Duplicate
6540500	RH-1	274	Standard
6540503	08CL472A02	1169	Original Sample
6540510	6540503	1081	Duplicate
6540560	RH-1	92	Standard
6540568	08CL099B02	1250	Original Sample
6540570	6540568	1516	Duplicate
6540580	GD-2	175	Standard
6540520	RH-1	90	Standard