Newfoundland Labrador

Natural Resources

GEOCHEMICAL DATA FROM THE WESTERN AVALON ZONE (NTS MAP AREAS 2D/1, 2, 7, 9, 10, 15, 16; 1L/13, 14; 1M/3, 4, 6, 7, 9, 10, 11, 15, 16), NEWFOUNDLAND

G.W. Sparkes and H.A.I. Sandeman

Open File NFLD/3265

St. John's
Newfoundland and Labrador
October, 2015

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GEOCHEMICAL DATA FROM THE WESTERN AVALON ZONE (NTS MAP AREAS 2D/1, 2, 7, 9, 10, 15, 16; 1L/13, 14; 1M/3, 4, 6, 7, 9, 10, 11, 15, 16), NEWFOUNDLAND

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CONTENTS

SUMMARY

This open file release consists of geochemical data for rock samples collected along the western margin of the Avalon Zone, Newfoundland. These samples were collected from outcrop in areas hosting the development of Neoproterozoic epithermal alteration and related mineralization. Samples were collected as part of mineral deposit studies aimed at understanding the nature and timing of these uniquely preserved systems, which include both high- and low-sulphidation styles of epithermal mineralization. Sample sites are focused around known prospects and include samples of representative alteration as well as unaltered host rocks, where observed. This report does not provide any interpretation of the geochemical data, however summary reports containing a discussion of the various prospects and the styles of epithermal alteration observed in relation to sample collection can be found in Sparkes (2012) and Sparkes and Dunning (2014).

NOTES ON DATABASE

This open file release contains lithogeochemical data from variably altered volcanic, plutonic and sedimentary rocks along the western Avalon Zone, Newfoundland (Figure 1). Sampling was conducted as part of mineral deposit studies on Neoproterozoic epithermal systems along the western margin of the Avalon Zone in Newfoundland. The results of much of these investigations have been previously summarized in Sparkes (2012), and Sparkes and Dunning (2014). The geochemical data presented was collected from epithermal alteration associated with the development of both high- and low-sulphidation style epithermal systems, where most samples displayed some degree of alteration. As part of these investigations the alteration assemblages developed in association with the high- and low-sulphidation systems were investigated using Visible/Infrared Spectroscopy (VIRS). A review of this technique and its applications can be found in Kerr *et al*. (2011). All of the spectral data collected as part of this study will be released in a subsequent open file. Included in the present release are location data, brief sample descriptions and a column containing the dominant two alteration mineral phases present in each sample, as determined by TSG™ Pro software utilizing the VIRS data. Samples are prefixed by the collecting geologist's initials, those sample numbers containing the letters 'GS' were collected by Greg Sparkes and those with the letters 'HS' were collected by Hamish Sandeman. This release places data in the public domain; no interpretation of the data is included within this report.

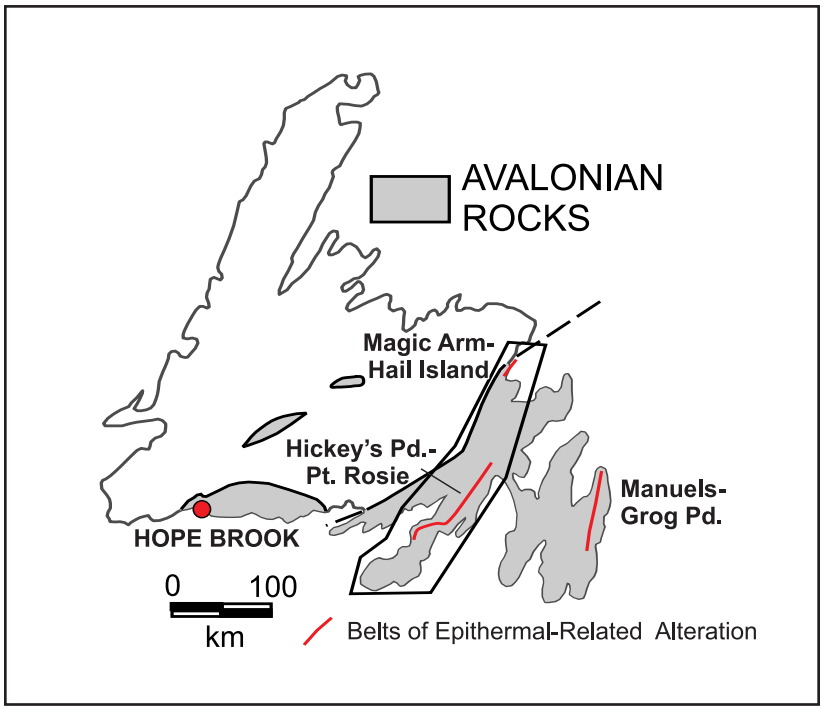

Figure 1. *Index map of study area.*

Samples representing relatively unaltered rock types within the region have been separated (Appendix A) from those containing variable hydrothermal alteration (Appendices B, C and D). Each appendix includes major- and trace-element data from samples analyzed at the Department of Natural Resources GSNL laboratory and supplemented using different analytical packages from external commercial laboratories; these include Activation Laboratories 1EPI/MS (Au + 23) package (Appendix B), Activation Laboratories Ultratrace 3 (Au + 63) package (Appendix C) and Becquerel Laboratories INAA (Au + 34) package (Appendix D). In addition, various samples collected by the second author are included in Appendix E. This includes major- and trace-element data from the Department of Natural Resources GSNL laboratory supplemented with trace-element data from Becquerel Laboratories. The data are tabulated below (see Appendices) and are also available in digital format, *i.e.* comma separated value files (*. csv files).

Analytical methods for the GSNL data (Ag, Be, Cd, Co, Cr, Cu, Fe, Li, Mn, Mo, Ni, P, Pb, Sc, Ti V and Zn) are after Finch (1998) but use a 4-acid digestion of HF-$HClO_4$-HCl plus HNO_3 rather than the 3-acid digestion. The major and some trace elements (Ba and Zr) were analyzed by ICP-OES (inductively coupled plasma - optical emission spectrometry) following lithium borate fusion. The sample rock powders were fused at 1000° C for 30 minutes in a graphite crucible using a blend of different lithium borates (C. Finch, personal communication, 2014). The molten fusion bead was poured directly into a 10 % solution of nitric acid and stirred for approximately 15 minutes until dissolved. The solution was then topped-up to a final volume of 100 ml. An aliquot of this solution was measured directly by a Thermo Instruments iCap 6500 ICP-OES for major-element and Ba and Zr trace-element abundances. This original analyte solution was further diluted 20 times, and topped-up to volume with a 2 % solution of nitric acid and analyzed by a Thermo Instruments X-Series II, Inductively Coupled Plasma Mass Spectrometer (ICP-MS) for most other trace- and rare-earth elements.

Volatiles are reported as loss on ignition (LOI), and are determined by the GSNL lab using the gravimetric methods. Where an element was determined by multiple methods, the value determined by the method that appears most reliable is presented. Details of the analytical procedures for external commercial analyses are provided on the respective company websites (Activation Laboratories, http://www.actlabs.com; Becquerel Laboratories, http://maxxam.ca/services/radiochemistry-neutron-activation-analysis). In addition, raw, unprocessed data for several reference materials completed at the Department of Natural Resources GSNL laboratory as well as external commercial laboratories are provided in Appendices F-L. These and duplicate analyses of select samples are included so the reader can assess the accuracy and precision of the data. A list of abbreviations used within the database is provided in Appendix M.

Note that the negative value, -99, reported for a given sample indicates that a particular element was not analyzed for in the sample, whereas all other negative numbers indicate the concentration of the specific element in the sample was below the detection limit; major elements are reported in weight percent, and trace elements are reported in ppm or ppb.

Note that the location data for all samples are provided in Universal Transverse Mercator (UTM), Zone 21 coordinate system based on the datum NAD27.

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APPENDICES

Appendix A - Major- and Trace-element data for unaltered samples

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

Appendix C - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 63) data

Appendix D - Major- and Trace-element data for altered samples; GSNL data supplemented with Becquerel (Au + 34) data

Appendix E - Major- and Trace-element data; various samples (Sandeman)

Appendix F - Major-element GSNL ICP-ES standards and duplicates

Appendix G - Trace-element GSNL ICP-ES standards and duplicates

Appendix H - Trace-element GSNL ICP-MS standards and duplicates

Appendix I - Trace-element Actlabs (Au + 23) standards and duplicates

Appendix J - Trace-element Actlabs (Au + 63) standards and duplicates

Appendix K - Trace-element Becquerel (INAA) standards and duplicates

Appendix L - Major and Trace Element Standards and Duplicates for Appendix E

Appendix M - List of Abbreviated Terms Used in the Release

Appendix A - Major- and Trace-element data for unaltered samples

SampleNum	Year	UTMZone	UTMEast	UTMNorth	Datum	StationID	LabNum	Prospect	Analysis
GS-11-003	2011	21	688869	5287480	NAD27	11GWS003	7740486	Monkstown Road	Au + 34; ICP majors & traces
GS-11-013	2011	21	689045	5287704	NAD27	11GWS010	7740487	Monkstown Road	Au + 34; ICP majors & traces
GS-11-027	2011	21	650174	5253579	NAD27	11GWS021	7740506	Stewart	ICP majors & traces
GS-11-032	2011	21	650153	5253594	NAD27	11GWS025	7740469	Stewart	Au + 23; ICP majors & traces
GS-11-033	2011	21	650144	5253611	NAD27	11GWS025	7740507	Stewart	ICP majors & traces
GS-11-047	2011	21	649728	5253944	NAD27	11GWS036	7740454	Stewart	Au + 34; ICP majors & traces
GS-11-052	2011	21	649633	5254018	NAD27	11GWS040	7740455	Stewart	Au + 34; ICP majors & traces; Geochron
GS-11-059	2011	21	649677	5252996	NAD27	11GWS046	7740473	Stewart	Au + 23; ICP majors & traces
GS-11-064	2011	21	649673	5253029	NAD27	11GWS050	7740508	Stewart	ICP majors & traces
GS-11-074	2011	21	649566	5252581	NAD27	11GWS060	7740509	Stewart	ICP majors & traces
GS-11-087	2011	21	689564	5288520	NAD27	11GWS068	7740494	Ridge	Au + 34; ICP majors & traces
GS-11-094	2011	21	649270	5253527	NAD27	11GWS073	7740511	Stewart	ICP majors & traces
GS-11-095	2011	21	649817	5252873	NAD27	11GWS074	7740458	Stewart	Au + 34; ICP majors & traces
GS-11-096	2011	21	650232	5252438	NAD27	11GWS075	7740459	Stewart	Au + 34; ICP majors & traces
GS-11-098A	2011	21	650457	5251971	NAD27	11GWS077	7740498	Stewart	Au + 34; ICP majors & traces
GS-11-099	2011	21	650658	5254028	NAD27	11GWS080	7740512	Stewart	ICP majors & traces
GS-11-100	2011	21	650590	5253964	NAD27	11GWS081	7740513	Stewart	ICP majors & traces
GS-11-101	2011	21	650635	5254118	NAD27	11GWS082	7740514	Stewart	ICP majors & traces
GS-11-104	2011	21	650693	5254413	NAD27	11GWS085	7740515	Stewart	ICP majors & traces
GS-11-107	2011	21	650867	5254403	NAD27	11GWS088	7740517	Stewart	ICP majors & traces
GS-11-114	2011	21	689203	5288327	NAD27	11GWS093	7740462	Monkstown Road	Au + 34; ICP majors & traces
GS-11-123	2011	21	688515	5287426	NAD27	11GWS101	7740518	Monkstown Road South	ICP majors & traces
GS-11-129	2011	21	690743	5286435	NAD27	11GWS109	7740519	Monkstown Road	ICP majors & traces
GS-11-154	2011	21	692433	5286427	NAD27	11GWS122	7740463	Tower	Au + 34; ICP majors & traces
GS-11-158	2011	21	693452	5287554	NAD27	11GWS128	7740505	Tower	Au + 34; ICP majors & traces
GS-11-163	2011	21	667844	5262417	NAD27	11GWS132	7740478	Western Feeder Pond	Au + 23; ICP majors & traces
GS-11-173	2011	21	651243	5254514	NAD27	11GWS138	7740521	Stewart	ICP majors & traces
GS-11-175	2011	21	651243	5254514	NAD27	11GWS138	7740522	Stewart	ICP majors & traces
GS-11-178	2011	21	651371	5254737	NAD27	11GWS141	7740523	Stewart	ICP majors & traces
GS-11-180	2011	21	651597	5254552	NAD27	11GWS143	7740422	Stewart	Au + 23; ICP majors & traces
GS-11-181	2011	21	651510	5254658	NAD27	11GWS144	7740423	Stewart	Au + 23; ICP majors & traces
GS-11-185	2011	21	651811	5254308	NAD27	11GWS148	7740524	Stewart	ICP majors & traces
GS-11-194	2011	21	651845	5254527	NAD27	11GWS154	7740413	Stewart	Au + 34; ICP majors & traces
GS-11-195	2011	21	651939	5254494	NAD27	11GWS155	7740525	Stewart	ICP majors & traces
GS-11-199	2011	21	652147	5254467	NAD27	11GWS158	7740414	Stewart	Au + 34; ICP majors & traces
GS-11-200	2011	21	652128	5254585	NAD27	11GWS159	7740483	Stewart	Au + 23; ICP majors & traces
GS-11-209	2011	21	657124	5256218	NAD27	11GWS168	7740416	Stewart	Au + 34; ICP majors & traces
GS-11-210	2011	21	654798	5255410	NAD27	11GWS170	7740527	Stewart	ICP majors & traces

Appendix A - Major- and Trace-element data for unaltered samples

SampleNum	Year	UTMZone	UTMEast	UTMNorth	Datum	StationID	LabNum	Prospect	Analysis
GS-11-212	2011	21	653889	5255041	NAD27	11GWS172	7740528	Stewart	ICP majors & traces
GS-11-213	2011	21	653892	5255069	NAD27	11GWS173	7740464	Stewart	Au + 34; ICP majors & traces
GS-11-214	2011	21	653862	5255122	NAD27	11GWS174	7740529	Stewart	ICP majors & traces
GS-11-222	2011	21	695751	5300379	NAD27	11GWS181	7740417	Power Line	Au + 34; ICP majors & traces
GS-11-231	2011	21	650520	5250044	NAD27	11GWS188	7740453	Man Head Pond	Au + 63; ICP majors & traces
GS-11-232	2011	21	650348	5249398	NAD27	11GWS189	7740421	Man Head Pond	Au + 34; ICP majors & traces
GS-11-233	2011	21	650374	5250003	NAD27	11GWS190	7740531	Man Head Pond	Au + 34; ICP majors & traces
GS-11-234	2011	21	635398	5252117	NAD27	11GWS191	7740574	Point Rosie	Au + 34; ICP majors & traces
GS-11-236	2011	21	645541	5256863	NAD27	11GWS192	7740575	White Mountain Pond	Au + 34; ICP majors & traces
GS-11-238	2011	21	646352	5256802	NAD27	11GWS194	7740661	White Mountain Pond	Au + 63; ICP majors & traces
GS-11-240	2011	21	639120	5226165	NAD27	11GWS196	7740673	Kelstone	ICP majors & traces
GS-11-242	2011	21	639086	5226279	NAD27	11GWS198	7740585	Kelstone	Au + 23; ICP majors & traces
GS-11-250	2011	21	639080	5226732	NAD27	11GWS203	7740534	Kelstone	Au + 34; ICP majors & traces
GS-11-255	2011	21	639071	5226721	NAD27	11GWS211	7740536	Kelstone	Au + 34; ICP majors & traces
GS-11-258	2011	21	638922	5226721	NAD27	11GWS212	7740583	Kelstone	Au + 34; ICP majors & traces
GS-11-259	2011	21	637479	5229629	NAD27	11GWS214	7740578	Braxton-Bradly	Au + 34; ICP majors & traces
GS-11-262	2011	21	645867	5256454	NAD27	11GWS216	7740588	White Mountain Pond	Au + 23; ICP majors & traces
GS-11-268	2011	21	646530	5256876	NAD27	11GWS220	7740539	White Mountain Pond	Au + 34; ICP majors & traces
GS-11-272	2011	21	647957	5256477	NAD27	11GWS224	7740542	White Mountain Pond	Au + 34; ICP majors & traces
GS-11-275	2011	21	653166	5254529	NAD27	11GWS226	7740674	Stewart	ICP majors & traces
GS-11-277	2011	21	587728	5193823	NAD27	11GWS229	7740593	Peter Brook	Au + 23; ICP majors & traces
GS-11-278	2011	21	587731	5193813	NAD27	11GWS229	7740543	Peter Brook	Au + 34; ICP majors & traces
GS-11-281	2011	21	587709	5193944	NAD27	11GWS230	7740596	Peter Brook	Au + 23; ICP majors & traces
GS-11-284	2011	21	645844	5229009	NAD27	11GWS233	7740599	Spanish Room	Au + 23; ICP majors & traces
GS-11-292	2011	21	645874	5235953	NAD27	11GWS239	7740605	Spanish Room	Au + 23; ICP majors & traces
GS-11-296	2011	21	647534	5237864	NAD27	11GWS242	7740544	Burin Highway	Au + 34; ICP majors & traces
GS-11-298	2011	21	648725	5239214	NAD27	11GWS243	7740545	Burin Highway	Au + 34; ICP majors & traces
GS-11-302	2011	21	652186	5243073	NAD27	11GWS244	7740547	Red Harbour River East	Au + 34; ICP majors & traces
GS-11-303	2011	21	655614	5248327	NAD27	11GWS245	7740548	Burin Highway	Au + 34; ICP majors & traces
GS-11-308	2011	21	710330	5351020	NAD27	11GWS247	7740569	Big Easy	Au + 34; ICP majors & traces
GS-11-331	2011	21	718414	5331249	NAD27	11GWS276	7740581	Tug Pond	Au + 34; ICP majors & traces
GS-11-332	2011	21	718917	5331545	NAD27	11GWS278	7740675	Tug Pond	ICP majors & traces
GS-11-336	2011	21	725529	5393578	NAD27	11GWS285	7740668	Magic River	Au + 63; ICP majors & traces
GS-11-337	2011	21	725578	5396926	NAD27	11GWS287	7740571	Cull's Harbour	Au + 34; ICP majors & traces
GS-11-338	2011	21	725578	5396962	NAD27	11GWS287	7740572	Cull's Harbour	Au + 34; ICP majors & traces
GS-11-342	2011	21	725569	5396898	NAD27	11GWS288	7740671	Cull's Harbour	Au + 63; ICP majors & traces
GS-11-348	2011	21	719218	5331952	NAD27	11GWS299	7740554	Tug Pond	Au + 34; ICP majors & traces
GS-11-358	2011	21	659025	5282703	NAD27	11GWS309	7740676	Goldhammer	ICP majors & traces

Appendix A - Major- and Trace-element data for unaltered samples

SampleNum	Year	UTMZone	UTMEast	UTMNorth	Datum	StationID	LabNum	Prospect	Analysis
GS-11-362	2011	21	658986	5282489	NAD27	11GWS312	7740558	Goldhammer	Au + 34; ICP majors & traces
GS-11-365	2011	21	658829	5282682	NAD27	11GWS314	7740559	Goldhammer	Au + 34; ICP majors & traces
GS-11-379	2011	21	658875	5281842	NAD27	11GWS325	7740679	Goldhammer	ICP majors & traces
GS-11-380	2011	21	658715	5281915	NAD27	11GWS326	7740681	Goldhammer	ICP majors & traces
GS-11-381	2011	21	658648	5282024	NAD27	11GWS327	7740682	Goldhammer	ICP majors & traces
GS-11-383	2011	21	658532	5282028	NAD27	11GWS328	7740683	Goldhammer	ICP majors & traces
GS-11-385	2011	21	658219	5282161	NAD27	11GWS330	7740684	Goldhammer	ICP majors & traces
GS-11-388	2011	21	658425	5282501	NAD27	11GWS332	7740685	Goldhammer	ICP majors & traces
GS-11-410	2011	21	656213	5284080	NAD27	11GWS347	7740686	543 Trend	ICP majors & traces
GS-11-412	2011	21	656146	5284075	NAD27	11GWS349	7740687	543 Trend	ICP majors & traces
GS-11-417	2011	21	656376	5283883	NAD27	11GWS353	7740688	543 Trend	ICP majors & traces
GS-11-428	2011	21	691820	5285155	NAD27	11GWS111	7740819	Tower	ICP majors & traces; Geochron
GS-11-433	2011	21	709983	5344214	NAD27	11GWS363	7740627	Big Easy	Au + 23; ICP majors & traces
GS-11-434	2011	21	709981	5344212	NAD27	11GWS363	7740628	Big Easy	Au + 23; ICP majors & traces
GS-11-440	2011	21	659204	5283223	NAD27	11GWS368	7740689	Goldhammer	ICP majors & traces
GS-11-442	2011	21	659189	5283212	NAD27	11GWS368	7740564	Goldhammer	Au + 34; ICP majors & traces
GS-11-479	2011	21	629955	5247669	NAD27	11GWS394	7740567	Point Rosie	Au + 34; ICP majors & traces
GS-11-480	2011	21	633595	5247354	NAD27	11GWS395	7740644	Point Rosie	Au + 23; ICP majors & traces
GS-12-024	2012	21	661722	5257186	NAD27	12GWS412	7740696	Rattle Brook	ICP majors & traces
GS-12-061	2012	21	587164	5192363	NAD27	12GWS432	7740707	Peter Brook	ICP majors & traces
GS-12-063	2012	21	587709	5193944	NAD27	11GWS230	7740709	Peter Brook	ICP majors & traces; Geochron
GS-12-067	2012	21	670723	5279907	NAD27	12GWS440	7740712	Terenceville East	Au + 34; ICP majors & traces
GS-12-193	2012	21	713007	5329724	NAD27	12GWS532	7740748	Tug Pond	Au + 34; ICP majors & traces
GS-12-255	2012	21	651341	5253898	NAD27	12GWS580	7740774	Stewart	ICP majors & traces
GS-12-273	2012	21	652856	5254748	NAD27	12GWS599	7740781	Stewart	Au + 23; ICP majors & traces
GS-12-335	2012	21	600924	5192607	NAD27	12GWS662	7740792	Lord's Cove	ICP majors & traces; Geochron
GS-12-369	2012	21	741247	5418496	NAD27	12GWS689	7740812	Pit Sound Island	Au + 34; ICP majors & traces
GS-12-379	2012	21	730304	5400128	NAD27	12GWS696	7740817	Fair & False Bay	Au + 34; ICP majors & traces
GS-12-385	2012	21	634445	5224772	NAD27	12GWS700	7740853	Creston North	Au + 23; 1g; ICP majors & traces
GS-12-387	2012	21	634470	5224753	NAD27	12GWS701	7740854	Creston North	Au + 23; 1g; ICP majors & traces
GS-12-389	2012	21	634519	5224692	NAD27	12GWS703	7740856	Creston North	Au + 23; 1g; ICP majors & traces
GS-13-008	2013	21	583075	5193945	NAD27	13GWS710	7740858	Heritage	Ultratrace 7; ICP majors & traces
GS-13-019	2013	21	634114	5226850	NAD27	N/A	7740863	Creston North	Au + 23; 1g; ICP majors & traces

Appendix A - Major- and Trace-element data for unaltered samples

SampleNum	Description	Group	Rock Type
GS-11-003	Chlorite crystal tuff	Marystown	Crystal tuff
GS-11-013	Intense pyrite-chlorite alteration	Marystown	Crystal tuff
GS-11-027	Relatively fresh quartz diorite	Burin Knee Intrusive Suite	Quartz diorite
GS-11-032	Chlorite altered quartz diorite	Burin Knee Intrusive Suite	Quartz diorite
GS-11-033	Fine-grained mafic dyke	Undefined	Mafic dyke
GS-11-047	White mica-pyrite altered crystal tuff	Marystown	Crystal tuff
GS-11-052	Fine-grained granodiorite; 575.5 +/- 1 Ma	Burin Knee Intrusive Suite	Granodiorite
GS-11-059	Chlorite-pyrite-white mica altered quartz diorite	Burin Knee Intrusive Suite	Quartz diorite
GS-11-064	Fine-grained mafic dyke	Undefined	Mafic dyke
GS-11-074	Fine-grained Kspar-rich granite	Burin Knee Intrusive Suite	Granite
GS-11-087	White mica altered crystal tuff	Marystown	Crystal tuff
GS-11-094	Fine-grained Kspar-rich granite	Burin Knee Intrusive Suite	Granite
GS-11-095	Fine-grained, plagioclase-phyric mafic volcanic	Marystown	Mafic volcanic
GS-11-096	Fine-grained Kspar-rich granite	Burin Knee Intrusive Suite	Granite
GS-11-098A	Sheared mafic volcanic	Marystown	Mafic volcanic
GS-11-099	Plagioclase-phyric mafic volcanic	Marystown	Mafic volcanic
GS-11-100	Crystal tuff	Marystown	Crystal tuff
GS-11-101	Fine-grained mafic dyke	Undefined	Mafic dyke
GS-11-104	Plagioclase-phyric, light grey crystal tuff	Marystown	Crystal tuff
GS-11-107	Quartz-feldspar porphyry	Marystown	Porphyry
GS-11-114	Fine-grained, grey-green siliceous mafic volcanic	Marystown	Mafic volcanic
GS-11-123	Feldspar-phyric porphyry	Marystown	Porphyry
GS-11-129	Fine-grained non-magnetic mafic dyke	Undefined	Mafic dyke
GS-11-154	Medium-grained, epidote altered granodiorite	Swift Current Intrusive Suite	Granodiorite
GS-11-158	Pyritic crystal tuff	Marystown	Crystal tuff
GS-11-163	Silicified mafic dyke	Undefined	Mafic dyke
GS-11-173	Fine-grained mafic intrusive	Marystown	Mafic intrusive
GS-11-175	Feldspar and quartz-phyric crystal tuff	Marystown	Crystal tuff
GS-11-178	Fine-grained granite	Burin Knee Intrusive Suite	Granite
GS-11-180	White mica-pyrite altered crystal tuff	Marystown	Crystal tuff
GS-11-181	White mica-pyrite altered crystal tuff	Marystown	Crystal tuff
GS-11-185	Fine-grained mafic intrusive	Marystown	Mafic intrusive
GS-11-194	White mica-pyrite altered crystal tuff	Marystown	Crystal tuff
GS-11-195	Fine-grained diorite	Burin Knee Intrusive Suite	Quartz diorite
GS-11-199	White mica altered crystal tuff	Marystown	Crystal tuff
GS-11-200	Mafic volcaniclastic	Marystown	Mafic volcaniclastic
GS-11-209	Feldspar-phyric crystal tuff	Marystown	Crystal tuff
GS-11-210	Feldspar and quartz-phyric crystal tuff	Marystown	Crystal tuff

Appendix A - Major- and Trace-element data for unaltered samples

SampleNum	Description	Group	Rock Type
GS-11-212	Intermediate crystal tuff	Marystown	Intermediate tuff
GS-11-213	Feldspar-phyric crystal tuff	Marystown	Crystal tuff
GS-11-214	Feldspar-phyric crystal tuff	Marystown	Crystal tuff
GS-11-222	Rusty weathering siliceous, locally crystal-rich reddish-purple tuff	Marystown	Crystal tuff
GS-11-231	Silicified felsic tuff	Marystown	Crystal tuff
GS-11-232	Silica-altered fine-grained volcanic	Marystown	Felsic volcanic
GS-11-233	Silica-altered fine-grained volcanic with up to 10% Py	Marystown	Felsic volcanic
GS-11-234	Siliceous crystal tuff	Marystown	Crystal tuff
GS-11-236	Feldspar-phyric crystal tuff	Marystown	Crystal tuff
GS-11-238	Siliceous, locally crystal-rich, tuff	Marystown	Crystal tuff
GS-11-240	Fine-grained mafic intrusive	Marystown	Mafic intrusive
GS-11-242	Chlorite-silica-pyrite altered lapilli tuff with localized vugs infilled with Py	Marystown	Lapilli tuff
GS-11-250	Chlorite altered, strongly foliated volcaniclastic with weak pyrite alteration	Marystown	Intermediate tuff
GS-11-255	Dark purple volcaniclastic	Marystown	Volcaniclastic sandstone
GS-11-258	Fine-grained pinkish felsic dyke	Undefined	Felsic dyke
GS-11-259	Pyritic fine-grained mafic volcanic float	Marystown	Mafic volcanic
GS-11-262	Chlorite-pyrite altered lapilli tuff	Marystown	Lapilli tuff
GS-11-268	Realtively unaltered, chlorite-rich crystal tuff	Marystown	Crystal tuff
GS-11-272	Chlorite-white mica altered crystal tuff	Marystown	Crystal tuff
GS-11-275	Intermediate intrusive x-cut by hem-rich fractures	Undefined	Mafic intrusive
GS-11-277	Dark purple, vessicular mafic volcanic hosting crustiform banded veins	Marystown	Mafic volcanic
GS-11-278	Tuffisite brecciated granite	Undefined	Granite
GS-11-281	Pyritic granite	Undefined	Granite
GS-11-284	Malachite stained flow-banded rhyolite float	Marystown	Felsic volcanic
GS-11-292	Pale grey, brecciated silicified crystal tuff	Marystown	Crystal tuff
GS-11-296	White mica altered crystal tuff	Marystown	Crystal tuff
GS-11-298	Quartz porphyry	Undefined	Porphyry
GS-11-302	Pyrite-rich white mica alteration	Marystown	Crystal tuff
GS-11-303	Fine-grained, pinkish silica-rich dyke hosting fracture-hosted copper	Undefined	Felsic dyke
GS-11-308	Flow-banded rhyolite dyke crosscutting Musgravetown Group sediments	Undefined	Felsic dyke
GS-11-331	Mafic fragmental volcanic	Marystown	Mafic volcanic
GS-11-332	Feldspar-phyric mafic volcanic	Marystown	Mafic volcanic
GS-11-336	K-feldspar-phyric fine-grained granite	Louil Hills	Granite
GS-11-337	Gabbroic to granodiorite	Louil Hills	Granodiorite
GS-11-338	K-feldspar-rich, fine-grained granodiorite	Louil Hills	Granodiorite
GS-11-342	Fe-carbonate altered granodiorite	Louil Hills	Granodiorite
GS-11-348	Mafic fragmental volcanic	Marystown	Mafic volcanic
GS-11-358	Relatively fresh, dark purple rhyolite	Long Harbour	Felsic volcanic

Appendix A - Major- and Trace-element data for unaltered samples

SampleNum	Description	Group	Rock Type
GS-11-362	Rusty weathering rhyolite	Long Harbour	Felsic volcanic
GS-11-365	Silica-pyrite-altered crystal tuff	Long Harbour	Crystal tuff
GS-11-379	Grey-green silicious, fine-grained volcanic	Long Harbour	Felsic volcanic
GS-11-380	Maroon to reddish-purple, fine-grained, hematite-rich felsic volanic	Long Harbour	Felsic volcanic
GS-11-381	Mafic intrusion	Undefined	Mafic intrusive
GS-11-383	Maroon to reddish-purple, fine-grained, hematite-rich felsic volanic	Long Harbour	Felsic volcanic
GS-11-385	Maroon to reddish-purple, fine-grained, hematite-rich felsic volanic	Long Harbour	Felsic volcanic
GS-11-388	Fine-grained mafic inrtrusive	Undefined	Mafic intrusive
GS-11-410	Maroon to reddish-purple, fine-grained, hematite-rich felsic volanic	Marystown	Felsic volcanic
GS-11-412	Epidote-rich basalt	Marystown	Mafic volcanic
GS-11-417	Maroon to reddish-purple, fine-grained, hematite-rich felsic volanic	Long Harbour	Felsic volcanic
GS-11-428	Fine-grained foliated rhyolite 576.2 +/- 2.8 Ma	Marystown	Felsic volcanic
GS-11-433	Chlorite-altered sandstone	Musgravetown Group	Sandstone
GS-11-434	Pyritized, chlorite-rich sandstone	Musgravetown Group	Sandstone
GS-11-440	Fine-grained, hematite-rich felsic volcanic	Long Harbour	Felsic volcanic
GS-11-442	Rusty weathering volcaniclastic	Long Harbour	Felsic volcaniclastic
GS-11-479	Silica-pyrite altered vessicular mafic volcanic	Marystown	Mafic volcanic
GS-11-480	Silca-pyrite altered volcaniclastic	Marystown	Felsic volcaniclastic
GS-12-024	Unaltered crystal tuff	Marystown	Crystal tuff
GS-12-061	Maroon, vessicular basalt	Marystown	Mafic volcanic
GS-12-063	Medium-grained granite to granodiorite; 635 +/- 2 Ma	Undefined	Granodiorite
GS-12-067	Sheared, fine-grained pyritic siltstone	Marystown	Siltstone
GS-12-193	Fine-grained, strongly foliated chloritic tuff	Marystown	Tuff
GS-12-255	Fine-grained, pink, felsic dyke	Undefined	Felsic dyke
GS-12-273	Fine-grained, dark-green, mafic volcanic	Marystown	Mafic volcanic
GS-12-335	Red, fine-grained crystal tuff; 576.8 +/- 2.6 Ma	Marystown	Crystal tuff
GS-12-369	Brecciated mafic volcanic	Marystown	Mafic volcanic
GS-12-379	Pyritic siltstone	Love Cove	Siltstone
GS-12-385	Lapilli tuff	Marystown	Lapilli tuff
GS-12-387	Fine-grained felsic intrusive	Undefined	Felsic dyke
GS-12-389	Fine-grained intrusive with disseminated sulphide	Undefined	Felsic dyke
GS-13-008	Fine-grained basalt	Marystown	Mafic volcanic
GS-13-019	Fine-grained intrusive crosscut by several quartz-specularite veins.	Undefined	Felsic dyke

Appendix A - Major- and Trace-element data for unaltered samples

SampleNum	TSG AltMin		SiO2	Al2O3	Fe2O3(T)	Fe2O3	FeO	MnO	MgO	CaO	Na2O
		Units	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%
		Detection Limit	0.01	0.01	0.01	0.01	0.01	0.001	0.01	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-11-003	FeMgChlorite,Epidote		52.75	16.68	9.63	6.70	2.64	0.215	2.58	6.80	2.53
GS-11-013	FeMgChlorite,Epidote		56.92	17.46	7.67	2.66	4.50	0.183	1.53	5.53	5.61
GS-11-027	Aspectral,NULL		76.84	13.10	7.26	2.38	4.40	0.019	0.08	0.02	0.19
GS-11-032	FeChlorite,Paragonite		74.32	12.10	7.01	0.91	5.49	0.071	1.52	0.08	0.15
GS-11-033	FeMgChlorite,Muscovite		51.85	17.65	14.36	1.72	11.37	0.123	6.78	0.28	0.11
GS-11-047	Paragonite,NULL		74.39	14.94	2.96	0.76	1.99	0.009	0.88	-0.01	0.45
GS-11-052	FeMgChlorite,Phengitic Illite		67.91	16.08	3.37	1.17	1.98	0.107	1.43	1.39	5.63
GS-11-059	Muscovite,Pyrophyllite		73.18	12.04	6.22	2.19	3.63	0.022	0.38	0.05	-0.01
GS-11-064	FeChlorite,NULL		53.84	17.32	12.94	1.47	10.32	0.130	6.17	0.51	0.04
GS-11-074	Phengite,FeMgChlorite		75.21	13.43	1.57	0.71	0.77	0.076	0.38	0.85	4.39
GS-11-087	Muscovite,NULL		61.26	17.68	6.28	1.37	4.42	0.060	1.77	0.19	0.67
GS-11-094	Phengite,Epidote		74.90	12.94	1.67	0.59	0.97	0.042	0.33	0.90	4.06
GS-11-095	Epidote,Actinolite		47.52	16.10	9.23	3.79	4.90	0.207	8.28	10.70	2.05
GS-11-096	Muscovite,Epidote		72.94	13.28	1.77	0.81	0.86	0.078	0.47	1.39	4.65
GS-11-098A	FeMgChlorite,Epidote		53.30	17.53	9.23	3.89	4.80	0.117	2.79	10.92	1.44
GS-11-099	Phengite,Epidote		48.60	18.58	10.41	4.83	5.02	0.156	5.36	8.53	3.20
GS-11-100	Phengite,NULL		75.29	12.65	1.16	0.77	0.35	0.074	0.36	1.19	3.15
GS-11-101	FeMgChlorite,Epidote		50.97	16.32	9.04	3.97	4.56	0.165	5.08	6.93	3.85
GS-11-104	Muscovite,FeChlorite		75.68	13.74	1.92	0.69	1.10	0.048	0.51	0.15	5.71
GS-11-107	Phengite,Epidote		74.77	12.92	1.54	0.74	0.72	0.079	0.55	1.12	4.71
GS-11-114	Epidote,FeMgChlorite		66.32	12.71	5.59	3.49	1.89	0.143	2.13	5.98	2.88
GS-11-123	FeMgChlorite,Muscovite		66.14	15.54	4.19	2.88	1.18	0.152	2.07	6.25	0.86
GS-11-129	N/A		55.39	18.20	9.49	3.83	5.10	0.187	2.97	5.83	2.92
GS-11-154	Epidote,Phengite		62.75	15.78	4.73	2.93	1.62	0.152	1.50	4.84	4.04
GS-11-158	Muscovite,NULL		69.39	15.49	2.48	2.47	0.01	0.048	1.17	0.34	3.40
GS-11-163	FeMgChlorite,Epidote		54.46	16.30	8.38	1.22	6.44	0.175	3.58	7.49	3.12
GS-11-173	N/A		48.26	18.75	10.53	5.25	4.75	0.142	5.31	7.31	2.92
GS-11-175	Phengite,NULL		74.32	13.19	1.45	0.55	0.81	0.075	0.40	1.21	3.99
GS-11-178	Phengite,Ankerite		80.74	10.72	0.59	0.44	0.14	0.028	0.25	0.49	5.19
GS-11-180	Muscovite,NULL		75.15	14.59	1.84	1.65	0.17	0.039	1.12	0.01	0.54
GS-11-181	Phengite,NULL		72.46	14.48	2.19	0.76	1.29	0.045	0.80	0.98	4.22
GS-11-185	N/A		47.50	19.32	10.01	2.92	6.38	0.212	8.16	3.04	3.87
GS-11-194	Phengite,NULL		72.79	14.22	2.00	0.60	1.27	0.057	0.53	0.86	3.81
GS-11-195	N/A		60.88	16.48	5.60	2.02	3.22	0.140	1.98	3.19	5.15
GS-11-199	Muscovite,NULL		71.26	14.64	2.47	0.65	1.64	0.015	0.43	0.22	4.54
GS-11-200	Phengite,Epidote		64.65	15.64	5.01	2.05	2.66	0.124	1.19	3.66	3.57
GS-11-209	Phengite,NULL		72.30	14.34	2.96	2.07	0.80	0.017	0.74	0.18	2.30
GS-11-210	N/A		71.32	13.96	2.73	2.17	0.51	0.085	1.05	1.68	4.72

Appendix A - Major- and Trace-element data for unaltered samples

SampleNum	TSG AltMin		SiO2	Al2O3	Fe2O3(T)	Fe2O3	FeO	MnO	MgO	CaO	Na2O
		Units	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%
		Detection Limit	0.01	0.01	0.01	0.01	0.01	0.001	0.01	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-11-212	Epidote,FeMgChlorite		59.49	16.93	8.17	8.15	0.02	0.170	2.34	3.34	2.40
GS-11-213	Muscovite,NULL		76.01	12.35	1.90	1.61	0.26	0.024	0.58	0.15	2.00
GS-11-214	Muscovite,NULL		73.90	12.99	1.50	0.25	1.13	0.055	0.39	1.81	4.45
GS-11-222	Phengite,NULL		75.14	12.96	1.83	1.61	0.20	0.009	-0.01	0.03	4.63
GS-11-231	Phengite,Ankerite		69.65	15.07	3.27	0.88	2.15	0.092	0.68	0.88	5.31
GS-11-232	Phengite,NULL		75.46	13.34	1.26	0.89	0.33	0.016	0.18	0.38	5.10
GS-11-233	Phengite,NULL		73.51	12.91	1.36	-99	-99	0.028	0.30	1.00	5.26
GS-11-234	Epidote,NULL		72.21	14.99	1.56	-99	-99	0.097	0.19	0.60	5.72
GS-11-236	Phengite,NULL		74.40	14.18	1.63	-99	-99	0.050	0.60	0.87	2.44
GS-11-238	Muscovite,NULL		77.14	12.74	0.94	-99	-99	0.021	0.18	0.94	2.49
GS-11-240	N/A		52.82	15.87	9.09	2.33	6.09	0.282	4.45	5.80	2.96
GS-11-242	Muscovite,FeChlorite		69.03	11.40	9.76	4.36	4.86	0.155	0.24	-0.01	0.02
GS-11-250	Muscovite,FeChlorite		71.97	13.69	4.06	2.28	1.61	0.207	0.66	0.16	0.04
GS-11-255	FeMgChlorite,Muscovite		77.90	12.56	1.00	-99	-99	0.063	0.22	0.05	0.97
GS-11-258	N/A		77.86	12.85	0.92	0.67	0.23	0.020	0.22	1.37	4.56
GS-11-259	N/A		53.98	16.16	10.57	2.82	6.97	0.171	4.17	5.75	2.86
GS-11-262	Muscovite,FeMgChlorite		61.39	21.27	5.04	3.78	1.13	0.071	1.12	0.64	1.05
GS-11-268	Muscovite,NULL		65.85	18.25	4.01	1.66	2.12	0.067	0.82	2.08	1.43
GS-11-272	Phengite,FeChlorite		73.31	14.12	2.30	1.35	0.86	0.060	0.51	0.08	1.58
GS-11-275	Epidote,NULL		50.52	17.63	12.01	9.98	1.83	0.224	4.27	6.41	3.98
GS-11-277	Prehnite,NULL		61.75	12.85	7.06	5.15	1.73	0.113	1.90	12.71	-0.01
GS-11-278	N/A		66.18	14.51	4.11	1.12	2.69	0.125	1.23	2.82	3.48
GS-11-281	N/A		77.69	10.53	2.74	-99	-99	0.038	0.49	0.44	2.32
GS-11-284	FeChlorite,NULL		71.27	14.25	2.82	-99	-99	0.108	0.58	0.66	6.79
GS-11-292	Muscovite,NULL		86.95	5.52	2.24	0.02	2.00	0.025	0.43	0.83	0.06
GS-11-296	Phengite,Ankerite		73.52	13.19	2.04	-99	-99	0.064	0.56	1.96	3.55
GS-11-298	Kaolinite,Ankerite		64.30	11.99	2.92	1.07	1.67	0.170	1.66	4.96	3.77
GS-11-302	Muscovite,Pyrophyllite		76.63	11.24	5.51	4.63	0.79	0.005	-0.01	0.30	0.14
GS-11-303	N/A		76.13	11.80	1.11	0.48	0.56	0.059	0.21	0.31	2.18
GS-11-308	N/A		73.35	13.85	1.09	0.72	0.33	0.022	0.14	0.62	4.25
GS-11-331	N/A		37.84	17.47	18.03	9.05	8.08	0.211	7.63	11.92	0.34
GS-11-332	N/A		52.88	16.23	9.36	2.54	6.13	0.165	5.23	6.39	4.34
GS-11-336	N/A		75.67	11.83	1.38	0.84	0.49	0.023	-0.01	0.22	4.39
GS-11-337	N/A		50.24	16.62	10.27	3.38	6.20	0.161	4.69	6.11	4.32
GS-11-338	N/A		50.05	15.50	8.45	1.68	6.10	0.159	2.85	6.34	4.35
GS-11-342	Ankerite,NULL		38.49	10.83	12.13	3.14	8.09	0.243	4.23	10.54	3.50
GS-11-348	MgChlorite,Muscovite		55.61	14.76	10.14	3.88	5.63	0.216	4.71	6.73	3.18
GS-11-358	N/A		74.92	11.68	3.95	3.56	0.35	0.023	0.08	0.05	2.32

Appendix A - Major- and Trace-element data for unaltered samples

SampleNum	TSG AltMin		SiO2	Al2O3	Fe2O3(T)	Fe2O3	FeO	MnO	MgO	CaO	Na2O
		Units	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%
		Detection Limit	0.01	0.01	0.01	0.01	0.01	0.001	0.01	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-11-362	Phengite,NULL		75.96	11.41	2.65	2.42	0.21	0.006	0.03	0.03	4.36
GS-11-365	Muscovite,Pyrophyllite		75.68	14.19	2.29	-99	-99	0.002	0.03	0.01	0.14
GS-11-379	Phengite,NULL		76.18	10.65	3.42	1.55	1.68	0.089	0.05	0.71	0.56
GS-11-380	NULL,NULL		76.02	10.99	2.98	2.83	0.14	0.053	0.03	0.15	2.68
GS-11-381	FeMgChlorite,NULL		48.68	13.15	14.87	10.61	3.84	0.204	3.19	6.36	3.78
GS-11-383	N/A		73.98	11.99	3.23	3.18	0.05	0.064	0.03	0.14	3.32
GS-11-385	N/A		72.46	13.05	4.55	4.54	0.01	0.086	0.02	0.46	4.87
GS-11-388	MgChlorite,NULL		54.47	14.03	11.31	4.31	6.30	0.312	3.20	5.15	4.70
GS-11-410	FeChlorite,NULL		78.20	10.49	1.84	0.43	1.27	0.042	0.08	0.26	3.21
GS-11-412	Epidote,NULL		47.84	13.28	14.68	5.47	8.30	0.261	4.41	9.03	3.60
GS-11-417	Phengite,NULL		76.64	10.67	2.98	2.85	0.12	0.055	0.06	0.22	1.33
GS-11-428	Phengite,FeTourmaline		75.55	14.79	1.18	0.88	0.27	0.042	0.29	0.07	4.21
GS-11-433	Phengite,Epidote		68.47	15.13	2.94	1.25	1.52	0.073	1.57	4.71	-0.01
GS-11-434	Muscovitic Illite,FeMgChlorite		63.13	15.81	6.21	2.19	3.62	0.133	1.70	3.41	-0.01
GS-11-440	Phengite,NULL		77.25	11.33	3.47	3.17	0.27	0.049	0.06	0.03	1.83
GS-11-442	Montmorillonite,NULL		64.10	16.03	5.17	2.50	2.40	0.098	0.20	0.46	5.85
GS-11-479	FeMgChlorite,Muscovite		60.96	15.86	6.53	-99	-99	0.167	2.34	3.03	2.49
GS-11-480	Phengite,NULL		72.36	13.36	2.24	0.11	1.92	0.094	0.81	0.32	3.33
GS-12-024	Phengite,NULL		71.30	14.69	2.55	2.16	0.35	0.080	1.20	0.85	2.58
GS-12-061	FeMgChlorite,NULL		50.18	17.20	12.06	7.48	4.12	0.227	3.47	7.18	4.12
GS-12-063	Phengite,FeMgChlorite		67.22	14.08	3.70	0.54	2.84	0.102	1.08	1.77	3.04
GS-12-067	Phengite,NULL		71.22	13.78	4.25	1.32	2.63	0.087	0.66	0.66	1.64
GS-12-193	FeMgChlorite,Epidote		58.62	14.16	9.19	3.41	5.20	0.160	2.21	4.87	3.66
GS-12-255	Phengite,Epidote		74.98	12.78	1.87	1.03	0.76	0.076	0.38	1.16	3.87
GS-12-273	Phengite,Epidote		63.21	15.92	5.78	3.06	2.45	0.150	1.75	3.66	4.42
GS-12-335	Phengitic Illite,NULL		77.92	13.17	1.49	0.90	0.53	0.039	0.22	0.15	4.34
GS-12-369	FeMgChlorite,NULL		55.73	10.40	16.00	6.00	9.00	0.264	6.19	4.51	0.37
GS-12-379	N/A		69.49	13.99	3.06	0.93	1.92	0.222	0.94	2.39	2.96
GS-12-385	N/A		71.90	11.76	3.30	0.19	2.80	0.138	0.89	1.83	2.82
GS-12-387	N/A		72.27	13.79	2.35	0.06	2.06	0.061	0.29	0.34	3.83
GS-12-389	N/A		67.72	14.80	3.19	0.49	2.43	0.094	0.46	0.17	2.58
GS-13-008	N/A		49.01	17.96	9.44	2.69	6.08	0.185	3.18	9.30	3.46
GS-13-019	N/A		73.40	12.47	2.74	2.04	0.63	0.023	0.11	1.51	0.14

Appendix A - Major- and Trace-element data for unaltered samples

SampleNum	K2O	TiO2	P2O5	LOI	Total	Au	Ag	As	Ba	Be	Bi	Br	Cd	Ce
	wt.%	wt.%	wt.%	wt.%	wt.%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.01	0.001	0.001	0.01		5	0.2	2	1	0.1	0.4	1	0.1	0.1
	GS Maj	GS Maj	GS Maj	Grav		INAA	INAA	GS Tr	GS Tr ES	GS Tr ES	GS Tr MS	INAA	GS Tr ES	GS Tr MS
GS-11-003	1.20	1.186	0.253	4.43	98.27	-5	-99	7	230	1.2	-0.4	-1	0.1	30.8
GS-11-013	0.23	1.134	0.185	3.31	99.76	-5	-99	6	86	1.4	-0.4	-1	0.1	29.7
GS-11-027	0.43	0.362	0.073	2.05	100.42	-99	-99	5	79	0.5	-0.4	-99	-0.1	82.2
GS-11-032	1.85	0.340	0.076	2.78	100.30	55	-0.2	4	377	0.9	-0.4	-99	0.2	37.7
GS-11-033	1.34	1.085	0.249	5.72	99.56	-99	-99	-2	400	1.1	-0.4	-99	-0.1	53.4
GS-11-047	2.87	0.425	0.045	3.92	100.90	-5	-99	-2	611	1.4	-0.4	-1	-0.1	70.8
GS-11-052	1.51	0.595	0.171	1.95	100.15	-5	-99	-2	580	1.6	-0.4	-1	0.1	66.3
GS-11-059	2.21	0.275	0.081	3.86	98.31	189	0.4	3	261	0.7	-0.4	-99	0.6	77.2
GS-11-064	0.15	1.478	0.487	6.09	99.14	-99	-99	3	597	0.4	-0.4	-99	-0.1	30.8
GS-11-074	3.25	0.282	0.045	1.09	100.58	-99	-99	-2	855	1.4	-0.4	-99	-0.1	71.0
GS-11-087	3.80	1.203	0.194	5.90	99.02	-5	-99	13	491	1.9	-0.4	-1	-0.1	128.7
GS-11-094	3.54	0.260	0.043	1.09	99.76	-99	-99	-2	1123	1.7	-0.4	-99	-0.1	74.1
GS-11-095	1.11	0.848	0.160	2.52	98.74	-5	-99	-2	298	0.5	-0.4	-1	0.2	19.0
GS-11-096	2.86	0.302	0.059	0.75	98.55	-5	-99	-2	726	1.6	-0.4	-1	-0.1	65.1
GS-11-098A	0.56	0.896	0.201	3.51	100.49	-5	-99	11	179	0.6	-0.4	-1	0.1	24.1
GS-11-099	0.57	1.051	0.172	2.41	99.04	-99	-99	-2	215	0.6	-0.4	-99	-0.1	20.7
GS-11-100	3.06	0.189	0.040	2.08	99.24	-99	-99	-2	799	1.3	-0.4	-99	-0.1	52.8
GS-11-101	1.43	0.841	0.153	3.37	98.14	-99	-99	-2	392	0.7	-0.4	-99	-0.1	27.1
GS-11-104	1.01	0.259	0.048	1.52	100.58	-99	-99	-2	537	1.9	-0.4	-99	-0.1	65.4
GS-11-107	2.59	0.222	0.043	0.94	99.50	-99	-99	-2	968	1.2	-0.4	-99	-0.1	48.8
GS-11-114	-0.01	0.747	0.141	1.97	98.63	-5	-99	5	16	1.8	-0.4	-1	0.2	95.1
GS-11-123	1.71	0.573	0.067	2.69	100.22	-99	-99	5	351	2.1	-0.4	-99	-0.1	72.9
GS-11-129	1.39	1.034	0.168	3.18	100.78	-99	-99	3	254	0.8	-0.4	-99	-0.1	32.8
GS-11-154	1.79	0.675	0.212	1.91	98.38	-5	-99	-2	535	1.0	-0.4	-1	0.2	55.9
GS-11-158	2.72	0.427	0.052	2.60	98.12	-5	-99	4	779	1.3	-0.4	-1	-0.1	21.3
GS-11-163	0.11	0.970	0.406	4.06	99.04	-5	-0.2	6	35	1.1	-0.4	-99	0.3	90.8
GS-11-173	2.03	1.070	0.177	3.28	99.78	-99	-99	-2	473	0.6	-0.4	-99	-0.1	24.7
GS-11-175	3.10	0.214	0.041	1.63	99.63	-99	-99	-2	875	1.5	-0.4	-99	-0.1	52.0
GS-11-178	0.53	0.126	0.012	0.85	99.52	-99	-99	-2	266	1.1	-0.4	-99	-0.1	45.6
GS-11-180	3.46	0.359	0.077	3.13	100.31	-5	-0.2	-2	1112	1.6	-0.4	-99	-0.1	11.0
GS-11-181	2.49	0.372	0.086	2.10	100.23	-5	-0.2	3	137	1.6	-0.4	-99	-0.1	54.1
GS-11-185	0.58	1.112	0.192	5.42	99.40	-99	-99	3	390	0.9	-0.4	-99	-0.1	27.2
GS-11-194	2.41	0.390	0.111	2.11	99.30	-5	-99	2	170	1.7	-0.4	-1	-0.1	50.6
GS-11-195	1.48	0.845	0.386	2.61	98.74	-99	-99	-2	464	1.5	-0.4	-99	-0.1	71.0
GS-11-199	2.35	0.400	0.050	2.48	98.87	-5	-99	-2	387	1.4	-0.4	-1	0.2	30.1
GS-11-200	2.95	0.934	0.241	1.56	99.53	-5	-0.2	2	817	2.0	-0.4	-99	0.2	67.6
GS-11-209	3.61	0.412	0.059	2.61	99.53	44	-99	7	695	1.5	-0.4	-1	0.1	36.0
GS-11-210	2.40	0.339	0.070	1.25	99.60	-99	-99	-2	726	1.0	-0.4	-99	-0.1	49.3

Appendix A - Major- and Trace-element data for unaltered samples

SampleNum	K2O	TiO2	P2O5	LOI	Total	Au	Ag	As	Ba	Be	Bi	Br	Cd	Ce
	wt.%	wt.%	wt.%	wt.%	wt.%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.01	0.001	0.001	0.01		5	0.2	2	1	0.1	0.4	1	0.1	0.1
	GS Maj	GS Maj	GS Maj	Grav		INAA	INAA	GS Tr	GS Tr ES	GS Tr ES	GS Tr MS	INAA	GS Tr ES	GS Tr MS
GS-11-212	2.30	0.897	0.130	2.98	99.14	-99	-99	-2	767	1.4	-0.4	-99	-0.1	46.0
GS-11-213	2.82	0.224	0.022	1.95	98.03	-5	-99	-2	610	1.1	-0.4	-1	-0.1	27.1
GS-11-214	1.66	0.286	0.045	2.37	99.46	-99	-99	-2	454	1.3	-0.4	-99	-0.1	52.0
GS-11-222	4.06	0.151	0.012	0.90	99.69	-5	-99	2	514	2.9	-0.4	-1	-0.1	90.2
GS-11-231	1.96	0.624	0.156	2.49	96.46	-5	-0.2	-2	438	1.7	-0.4	-1	0.1	71.1
GS-11-232	2.70	0.366	0.042	1.08	99.92	-5	-99	-2	811	1.7	-0.4	-1	-0.1	62.0
GS-11-233	1.40	0.364	0.046	2.00	98.18	-5	-99	-2	411	1.5	-0.4	-1	-0.1	66.6
GS-11-234	3.41	0.390	0.047	0.82	100.04	-5	-99	5	205	1.7	-0.4	-1	-0.1	86.7
GS-11-236	3.76	0.380	0.066	1.95	100.32	-5	-99	16	895	1.6	-0.4	-1	-0.1	43.7
GS-11-238	2.26	0.163	0.015	1.93	98.82	-5	-0.2	3	1070	1.6	-0.4	-1	0.1	50.2
GS-11-240	1.51	1.330	0.401	4.79	99.30	-99	-99	9	366	1.6	-0.4	-99	0.4	50.4
GS-11-242	3.30	0.047	-0.001	4.49	98.45	8	1.1	1322	50	2.5	-0.4	-99	2.3	21.3
GS-11-250	4.05	0.483	0.120	2.79	98.23	-5	-99	7	93	4.8	-0.4	-1	-0.1	21.4
GS-11-255	4.02	0.030	-0.001	2.02	98.83	-5	-99	8	140	4.1	-0.4	-1	-0.1	14.9
GS-11-258	1.31	0.037	-0.001	1.14	100.28	-5	-99	2	370	3.6	-0.4	-1	-0.1	30.5
GS-11-259	0.58	1.342	0.354	3.98	99.90	-5	-99	4	218	0.6	-0.4	-1	-0.1	44.7
GS-11-262	4.12	0.887	0.185	4.27	100.04	-5	-0.2	5	1225	1.9	-0.4	-99	-0.1	15.1
GS-11-268	3.40	0.756	0.224	2.80	99.70	-5	-99	-2	858	2.0	-0.4	-1	-0.1	59.8
GS-11-272	3.92	0.310	0.042	2.14	98.38	-5	-99	9	943	1.5	-0.4	-1	-0.1	18.2
GS-11-275	0.31	1.169	0.193	2.79	99.51	-99	-99	-2	202	0.7	-0.4	-99	0.2	21.4
GS-11-277	0.08	0.674	0.300	2.86	100.03	-5	-0.2	5	19	0.7	-0.4	-99	0.1	22.7
GS-11-278	3.12	0.470	0.121	3.03	99.21	-5	-99	4	329	0.9	-0.4	-1	-0.1	75.2
GS-11-281	3.04	0.354	0.098	1.76	99.48	13	1.2	9	126	1.1	-0.4	-99	0.1	55.5
GS-11-284	0.28	0.476	0.082	1.22	98.54	-5	2.7	5	211	1.2	-0.4	-99	0.8	42.3
GS-11-292	0.79	0.242	0.473	1.82	99.36	186	1.5	33	238	1.0	-0.4	-99	-0.1	14.7
GS-11-296	2.22	0.307	0.057	1.67	99.14	-5	-99	-2	830	1.7	-0.4	-1	-0.1	38.9
GS-11-298	1.27	0.281	0.057	8.02	99.41	-5	-99	5	590	1.0	-0.4	-1	-0.1	33.1
GS-11-302	1.01	0.702	0.283	2.77	98.60	-5	-99	-2	114	0.2	-0.4	-1	-0.1	47.0
GS-11-303	5.74	0.181	0.007	0.96	98.68	-5	-99	3	1394	1.4	-0.4	-1	0.1	93.7
GS-11-308	4.11	0.016	0.006	1.13	98.58	-5	-99	-2	431	3.7	-0.4	-1	-0.1	11.7
GS-11-331	0.18	1.030	0.066	6.06	100.78	-5	-99	6	23	0.4	-0.4	-1	-0.1	12.8
GS-11-332	0.65	0.918	0.192	2.22	98.58	-99	-99	-2	220	0.7	-0.4	-99	0.2	25.1
GS-11-336	4.04	0.086	-0.001	0.37	98.01	-5	-0.2	-2	21	10.7	-0.4	-1	0.1	80.5
GS-11-337	1.01	1.165	0.309	4.37	99.27	-5	-99	3	706	1.1	-0.4	-1	-0.1	37.0
GS-11-338	1.33	1.232	0.463	7.69	98.41	-5	-99	3	284	1.0	-0.4	-1	-0.1	53.1
GS-11-342	0.89	2.370	0.260	15.04	98.52	-5	1.1	6	127	0.7	-0.4	-1	0.5	26.4
GS-11-348	0.94	0.907	0.120	1.85	99.16	-5	-99	-2	221	0.5	-0.4	-1	-0.1	19.5
GS-11-358	5.15	0.197	0.008	0.73	99.10	-99	-99	17	43	6.8	-0.4	-99	0.1	83.9

Appendix A - Major- and Trace-element data for unaltered samples

SampleNum	K2O	TiO2	P2O5	LOI	Total	Au	Ag	As	Ba	Be	Bi	Br	Cd	Ce
	wt.%	wt.%	wt.%	wt.%	wt.%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.01	0.001	0.001	0.01		5	0.2	2	1	0.1	0.4	1	0.1	0.1
	GS Maj	GS Maj	GS Maj	Grav		INAA	INAA	GS Tr	GS Tr ES	GS Tr ES	GS Tr MS	INAA	GS Tr ES	GS Tr MS
GS-11-362	2.97	0.193	-0.001	0.56	98.16	-5	-99	5	21	2.9	-0.4	-1	-0.1	56.8
GS-11-365	2.50	0.503	0.050	2.98	98.39	-5	-99	80	125	2.3	-0.4	-1	0.5	165.5
GS-11-379	5.26	0.240	0.003	1.72	98.88	-99	-99	13	131	5.8	-0.4	-99	0.2	188.8
GS-11-380	5.51	0.196	-0.001	0.29	98.90	-99	-99	59	56	2.8	-0.4	-99	0.2	179.0
GS-11-381	1.71	3.318	0.822	2.08	98.18	-99	-99	51	551	2.1	-0.4	-99	0.4	63.0
GS-11-383	5.56	0.250	0.014	0.24	98.81	-99	-99	12	86	3.9	-0.4	-99	-0.1	150.7
GS-11-385	4.31	0.368	0.017	0.37	100.55	-99	-99	8	103	2.7	-0.4	-99	0.1	120.9
GS-11-388	1.01	2.366	1.238	2.10	99.88	-99	-99	10	449	2.4	-0.4	-99	0.2	94.2
GS-11-410	3.54	0.137	0.010	0.49	98.31	-99	-99	2	232	3.8	-0.4	-99	-0.1	110.5
GS-11-412	0.49	2.709	0.606	1.90	98.80	-99	-99	7	168	1.4	-0.4	-99	0.4	40.8
GS-11-417	6.92	0.199	0.005	0.51	99.59	-99	-99	3	115	4.3	-0.4	-99	-0.1	183.6
GS-11-428	3.35	0.181	0.012	1.16	100.83	-99	-99	-99	-99	1.2	-0.4	-99	-99	62.9
GS-11-433	2.92	0.474	0.075	2.55	98.71	-5	-0.2	26	287	2.7	-0.4	-99	0.1	52.1
GS-11-434	3.66	0.824	0.174	3.98	98.87	-5	-0.2	43	471	2.8	-0.4	-99	-0.1	53.4
GS-11-440	5.15	0.183	0.002	1.05	100.41	-99	-99	5	35	3.8	-0.4	-99	-0.1	70.8
GS-11-442	4.57	0.459	0.098	1.02	98.05	-5	-99	5	53	2.9	-0.4	-1	-0.1	156.1
GS-11-479	2.40	1.256	0.522	3.99	99.55	6	-99	8	109	2.0	-0.4	-1	1.2	77.3
GS-11-480	2.47	0.551	0.115	2.47	98.11	-5	-0.2	-2	629	2.1	-0.4	-99	-0.1	43.0
GS-12-024	3.50	0.410	0.076	2.08	99.31	-99	-99	-99	-99	1.6	-0.4	-99	-99	66.7
GS-12-061	0.48	1.270	0.267	4.25	100.69	-99	-99	-99	-99	1.9	-0.4	-99	-99	29.4
GS-12-063	3.62	0.454	0.120	2.82	98.01	-99	-99	-99	-99	1.7	-0.4	-99	-99	82.2
GS-12-067	2.81	0.539	0.093	2.38	98.11	-5	-99	-99	-99	2.7	-0.4	-1	-99	74.9
GS-12-193	1.74	1.672	0.413	2.35	99.03	-5	-99	-99	-99	1.7	-0.4	-1	-99	69.0
GS-12-255	3.29	0.256	0.041	0.71	99.40	-99	-99	-99	-99	1.6	-0.4	-99	-99	66.6
GS-12-273	1.60	0.994	0.305	2.02	99.80	-5	-0.2	-99	-99	1.6	-0.4	-99	-99	69.9
GS-12-335	1.30	0.250	0.024	1.66	100.56	-99	-99	-99	-99	1.6	-0.4	-99	-99	65.2
GS-12-369	0.15	1.268	0.126	4.57	99.57	8	-99	-99	-99	0.5	-0.4	-1	-99	15.1
GS-12-379	2.72	0.352	0.137	2.77	99.03	-5	-99	-99	-99	1.6	-0.4	-1	-99	41.0
GS-12-385	4.32	0.558	0.152	1.81	99.48	-5	-0.2	-99	968	1.4	-0.4	-99	-99	64.0
GS-12-387	6.15	0.502	0.085	1.17	100.85	-5	-0.2	-99	867	1.1	-0.4	-99	-99	94.7
GS-12-389	8.23	0.555	0.092	1.34	99.23	-5	-0.2	-99	1162	1.1	-0.4	-99	-99	39.3
GS-13-008	0.71	1.108	0.227	5.06	99.63	-99	-99	-99	204	0.9	-0.4	-99	-99	41.6
GS-13-019	8.78	0.302	0.037	0.59	100.10	43	0.3	-99	884	1.0	-0.4	-99	-99	77.1

Appendix A - Major- and Trace-element data for unaltered samples

SampleNum	Co	Cr	Cs	Cu	Dy	Er	Eu	Ga	Ge	Gd	Hf	Hg
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	1	1	0.5	1	0.1	0.1	0.05	1	1	0.1	0.2	1
	GS Tr MS	GS Tr ES	GS Tr MS	GS Tr ES	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	INAA
GS-11-003	13	1	0.5	11	5.5	3.3	1.70	28	4	5.3	3.8	-99
GS-11-013	14	1	-0.5	13	5.2	3.1	1.60	21	3	5.2	3.5	-99
GS-11-027	3	2	-0.5	13	1.1	0.6	0.99	15	5	2.4	4.0	-99
GS-11-032	8	2	-0.5	242	2.6	1.5	0.88	12	3	3.6	3.6	-1
GS-11-033	38	22	-0.5	14	4.2	2.4	2.00	22	5	5.4	2.8	-99
GS-11-047	4	3	0.7	4	3.7	2.3	1.26	17	3	4.6	5.0	-99
GS-11-052	6	1	0.7	6	6.9	4.0	2.03	18	3	7.4	6.5	-99
GS-11-059	13	3	0.6	908	1.7	1.1	0.76	11	4	2.8	3.0	-1
GS-11-064	32	113	-0.5	5	4.1	2.4	1.33	19	5	5.0	3.2	-99
GS-11-074	3	2	0.5	3	4.1	2.7	1.14	15	2	4.6	4.9	-99
GS-11-087	14	18	1.9	49	7.2	3.9	2.68	24	4	10.5	6.5	-99
GS-11-094	3	2	0.7	7	4.6	3.1	1.02	16	3	5.3	5.0	-99
GS-11-095	35	263	-0.5	6	2.8	1.5	1.11	19	4	3.1	1.4	-99
GS-11-096	4	2	-0.5	6	4.3	2.6	1.22	15	2	4.8	5.5	-99
GS-11-098A	23	38	-0.5	41	3.5	2.0	1.31	23	4	3.8	2.2	-99
GS-11-099	33	13	-0.5	33	3.0	1.7	1.21	18	3	3.3	1.8	-99
GS-11-100	3	1	0.9	2	2.7	1.8	0.74	14	2	3.1	2.9	-99
GS-11-101	29	50	-0.5	57	3.2	1.8	1.18	17	5	3.4	2.3	-99
GS-11-104	2	1	-0.5	1	4.4	3.1	1.17	17	2	5.0	6.0	-99
GS-11-107	5	3	-0.5	4	2.7	1.8	0.67	10	2	2.8	2.9	-99
GS-11-114	13	42	-0.5	5	11.7	7.4	1.69	20	4	11.3	8.8	-99
GS-11-123	8	41	0.6	7	8.7	5.9	1.35	21	3	8.5	9.8	-99
GS-11-129	26	3	0.8	10	4.9	2.9	1.34	20	3	4.9	4.5	-99
GS-11-154	8	1	-0.5	2	4.6	2.9	1.54	18	3	5.5	4.7	-99
GS-11-158	5	3	1.1	6	0.6	0.6	0.38	17	2	0.9	5.4	-99
GS-11-163	23	-1	-0.5	11	7.4	4.1	4.87	22	6	9.8	4.7	-1
GS-11-173	32	13	0.7	196	3.1	1.8	1.13	20	3	3.5	1.9	-99
GS-11-175	3	2	0.6	3	2.7	1.8	0.70	14	2	3.1	3.0	-99
GS-11-178	1	1	-0.5	3	4.7	3.3	0.59	11	2	3.9	3.5	-99
GS-11-180	2	2	1.6	2	1.0	1.1	0.36	16	2	0.7	5.4	-1
GS-11-181	3	2	0.8	4	2.8	1.8	1.04	16	2	3.5	5.1	-1
GS-11-185	22	90	-0.5	25	4.2	2.3	1.17	15	3	4.4	2.2	-99
GS-11-194	3	2	1.0	6	3.0	1.8	0.87	15	2	3.6	4.7	-99
GS-11-195	10	1	0.7	2	6.2	3.7	2.18	20	4	7.7	6.0	-99
GS-11-199	5	3	0.7	8	1.9	1.3	0.74	14	2	2.3	4.5	-99
GS-11-200	13	3	0.5	86	6.0	3.3	1.86	15	3	6.9	5.4	-1
GS-11-209	6	4	2.8	5	1.3	0.9	0.44	16	2	1.9	5.2	-99
GS-11-210	7	10	-0.5	11	2.8	1.8	0.75	14	2	3.1	3.1	-99

Appendix A - Major- and Trace-element data for unaltered samples

SampleNum	Co	Cr	Cs	Cu	Dy	Er	Eu	Ga	Ge	Gd	Hf	Hg
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	1	1	0.5	1	0.1	0.1	0.05	1	1	0.1	0.2	1
	GS Tr MS	GS Tr ES	GS Tr MS	GS Tr ES	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	INAA
GS-11-212	21	17	-0.5	11	3.7	2.3	1.44	18	3	4.8	4.0	-99
GS-11-213	2	3	0.9	7	1.2	0.9	0.42	12	2	1.4	2.7	-99
GS-11-214	3	1	0.7	3	4.0	2.6	1.02	12	2	4.7	5.4	-99
GS-11-222	-1	-1	-0.5	2	12.5	8.3	1.26	17	2	11.0	8.3	-99
GS-11-231	4	1	0.9	4	8.4	5.3	2.32	22	3	9.0	5.9	-1
GS-11-232	3	1	0.6	2	5.4	3.9	1.35	17	2	6.1	7.3	-99
GS-11-233	2	1	-0.5	1	8.3	5.1	2.01	16	3	8.7	7.2	-99
GS-11-234	3	2	-0.5	2	6.4	4.0	1.67	15	2	7.0	8.2	-99
GS-11-236	4	3	1.5	5	2.0	1.4	0.65	17	2	2.2	5.4	-99
GS-11-238	3	-1	0.9	2	2.5	1.6	0.73	13	2	2.9	2.5	-1
GS-11-240	30	69	0.5	25	4.6	2.6	1.69	15	4	5.3	3.3	-99
GS-11-242	22	2	0.6	160	7.8	5.1	0.18	18	3	5.7	4.8	-1
GS-11-250	6	28	0.6	7	6.7	4.7	0.30	21	4	4.1	5.0	-99
GS-11-255	-1	1	1.6	10	5.7	3.9	0.06	23	2	3.6	4.4	-99
GS-11-258	-1	1	1.7	6	6.1	4.0	0.36	14	2	4.6	4.3	-99
GS-11-259	32	25	-0.5	66	4.5	2.8	1.78	20	4	5.4	2.8	-99
GS-11-262	7	13	3.2	5	2.0	1.7	0.60	22	2	1.6	6.1	-1
GS-11-268	14	5	2.5	7	3.4	2.2	1.57	24	4	4.3	6.7	-99
GS-11-272	3	3	4.0	2	1.8	1.5	0.29	16	2	1.2	3.4	-99
GS-11-275	32	7	-0.5	52	3.6	2.0	1.23	20	4	4.0	1.7	-99
GS-11-277	22	129	-0.5	22	2.6	1.4	0.86	19	4	2.9	1.7	-1
GS-11-278	5	2	2.0	25	5.1	3.0	1.50	22	3	6.3	5.5	-99
GS-11-281	7	7	2.0	8	3.6	2.1	0.81	14	2	4.1	4.9	-1
GS-11-284	5	2	0.5	15336	4.8	3.6	1.31	11	2	4.7	5.5	-1
GS-11-292	5	2	0.7	8	1.7	1.0	0.60	11	1	1.9	1.5	-1
GS-11-296	9	3	1.1	8	2.8	1.7	0.79	14	1	2.9	4.3	-99
GS-11-298	4	2	0.5	-1	2.9	1.8	0.75	12	2	3.0	3.7	-99
GS-11-302	2	10	0.5	9	1.7	1.0	0.69	30	2	2.7	6.1	-99
GS-11-303	3	2	0.9	733	7.0	4.5	1.34	15	2	8.0	5.2	-99
GS-11-308	-1	1	1.6	350	1.4	0.4	0.34	20	1	2.5	4.0	-99
GS-11-331	33	337	-0.5	92	3.8	2.4	1.54	26	4	2.8	1.9	-99
GS-11-332	31	84	-0.5	119	3.9	2.4	1.18	16	4	4.0	1.9	-99
GS-11-336	-1	-1	0.7	4	18.1	12.8	0.16	31	2	12.4	15.2	-1
GS-11-337	31	40	-0.5	101	3.6	1.8	1.51	21	5	4.5	2.3	-99
GS-11-338	22	7	-0.5	45	4.4	2.6	1.95	20	4	5.8	4.7	-99
GS-11-342	31	44	-0.5	313	4.6	2.5	1.51	15	5	4.9	2.8	-1
GS-11-348	30	71	-0.5	85	3.4	2.0	1.17	16	3	3.6	1.8	-99
GS-11-358	2	2	1.3	5	19.7	13.7	0.93	33	3	13.8	23.5	-99

Appendix A - Major- and Trace-element data for unaltered samples

SampleNum	Co	Cr	Cs	Cu	Dy	Er	Eu	Ga	Ge	Gd	Hf	Hg
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	1	1	0.5	1	0.1	0.1	0.05	1	1	0.1	0.2	1
	GS Tr MS	GS Tr ES	GS Tr MS	GS Tr ES	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	INAA
GS-11-362	2	2	0.7	4	23.5	17.3	0.82	31	2	10.8	23.4	-99
GS-11-365	2	9	1.7	6	23.4	15.3	2.35	40	6	22.2	28.2	-99
GS-11-379	2	1	2.6	2	24.7	15.2	2.85	34	6	24.6	20.6	-99
GS-11-380	2	1	-0.5	2	21.8	14.8	1.82	29	5	21.4	22.2	-99
GS-11-381	45	30	0.9	26	10.9	6.2	3.52	20	6	11.6	6.9	-99
GS-11-383	2	1	0.7	3	17.7	10.7	2.00	22	4	17.9	18.2	-99
GS-11-385	4	1	0.5	-1	15.5	10.3	2.19	22	5	14.5	17.8	-99
GS-11-388	30	2	0.7	4	15.3	8.4	4.64	23	5	15.8	9.0	-99
GS-11-410	1	2	-0.5	7	12.9	7.6	1.01	16	4	12.4	8.6	-99
GS-11-412	48	23	-0.5	22	8.5	4.7	2.56	22	7	8.4	3.8	-99
GS-11-417	2	2	1.0	4	28.0	16.9	2.15	26	5	26.7	22.0	-99
GS-11-428	-99	1	-0.5	4	1.9	1.3	0.47	17	1	2.7	3.2	-99
GS-11-433	8	9	1.2	11	6.1	3.6	1.59	15	2	5.9	4.7	-1
GS-11-434	17	19	1.5	26	7.1	4.5	2.56	20	3	7.9	4.7	-1
GS-11-440	2	1	1.4	2	15.4	11.3	0.93	31	4	10.0	24.1	-99
GS-11-442	6	3	1.2	7	17.9	11.2	1.43	35	5	16.2	25.7	-99
GS-11-479	17	1	0.9	4	6.9	3.9	2.19	21	4	8.2	5.8	-99
GS-11-480	4	2	-0.5	5	3.9	3.1	0.90	16	2	3.4	7.1	-1
GS-12-024	-99	2	1.4	-1	3.1	1.9	1.03	18	2	3.7	6.3	-99
GS-12-061	-99	21	0.7	16	5.2	3.5	1.53	19	5	6.3	2.9	-99
GS-12-063	-99	3	1.4	7	4.9	2.9	1.31	17	2	6.1	5.4	-99
GS-12-067	-99	8	0.8	20	9.0	6.0	1.53	20	2	9.1	9.8	-99
GS-12-193	-99	1	0.8	7	7.9	4.7	2.35	22	4	8.5	6.4	-99
GS-12-255	-99	2	-0.5	7	3.0	2.0	0.86	14	2	3.6	4.2	-99
GS-12-273	-99	5	-0.5	3	5.7	3.7	1.96	20	3	7.3	5.6	-1
GS-12-335	-99	-1	0.6	6	4.8	3.4	1.29	15	3	5.1	4.7	-99
GS-12-369	-99	92	-0.5	14840	3.4	2.1	0.70	18	4	3.3	1.9	-99
GS-12-379	-99	9	0.5	20	4.2	2.8	0.96	16	3	4.3	4.2	-99
GS-12-385	-99	7	-0.5	8	4.7	2.8	1.72	9	3	5.1	4.4	-1
GS-12-387	-99	3	-0.5	24	6.5	4.1	2.17	14	2	7.1	7.4	-1
GS-12-389	-99	2	0.6	3295	5.5	4.3	1.38	13	1	4.5	8.1	-1
GS-13-008	-99	15	2.2	74	3.9	2.3	1.46	19	3	4.4	2.7	-99
GS-13-019	-99	3	0.8	40	2.2	1.4	0.99	13	2	2.9	4.6	-1

Appendix A - Major- and Trace-element data for unaltered samples

SampleNum	Ho	In	La	Li	Lu	Mn	Mo	Nb	Nd	Ni	P	Pb
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.1	0.2	0.1	0.1	0.05	1	2	1	0.1	1	1	1
	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr ES	GS Tr MS	GS Tr ES	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr ES	GS Tr ES	GS Tr ES
GS-11-003	1.1	-0.2	14.8	13.8	0.49	1539	-2	5	19.0	10	1040	4
GS-11-013	1.0	-0.2	14.5	11.2	0.43	1314	3	8	17.9	6	765	4
GS-11-027	0.2	-0.2	33.5	1.6	0.15	151	11	11	38.3	6	308	13
GS-11-032	0.5	0.4	18.3	44.8	0.25	540	10	8	17.7	4	328	56
GS-11-033	0.8	-0.2	23.2	176.7	0.32	881	-2	6	28.7	28	991	5
GS-11-047	0.7	-0.2	37.8	7.8	0.37	73	3	10	26.9	-1	199	41
GS-11-052	1.3	-0.2	29.9	23.0	0.63	797	-2	12	34.7	-1	739	-1
GS-11-059	0.3	0.4	40.9	9.1	0.22	172	52	7	27.7	6	356	93
GS-11-064	0.8	-0.2	12.7	124.2	0.34	934	-2	8	19.5	69	1905	8
GS-11-074	0.8	-0.2	35.3	4.3	0.42	584	-2	10	28.2	-1	205	10
GS-11-087	1.3	-0.2	63.7	15.1	0.47	444	2	13	59.7	12	768	13
GS-11-094	0.9	-0.2	36.9	7.8	0.50	320	-2	11	31.1	-1	198	17
GS-11-095	0.5	-0.2	8.0	17.8	0.19	1468	-2	2	12.4	66	659	-1
GS-11-096	0.8	-0.2	32.7	3.8	0.46	594	3	14	26.0	-1	265	7
GS-11-098A	0.7	-0.2	10.4	16.1	0.28	792	2	4	14.6	31	758	-1
GS-11-099	0.6	-0.2	10.1	12.8	0.23	1096	-2	4	13.3	29	702	-1
GS-11-100	0.6	-0.2	27.8	6.4	0.30	556	-2	8	18.3	-1	178	15
GS-11-101	0.6	-0.2	13.1	22.4	0.27	1166	-2	4	14.9	27	651	-1
GS-11-104	1.0	-0.2	31.5	5.3	0.55	363	2	13	28.0	-1	203	4
GS-11-107	0.6	-0.2	26.1	5.0	0.32	580	-2	9	18.0	-1	202	6
GS-11-114	2.3	-0.2	43.6	15.5	1.03	1054	-2	21	46.7	13	600	15
GS-11-123	1.8	-0.2	34.6	12.5	0.89	1081	-2	19	34.6	11	295	75
GS-11-129	0.9	-0.2	13.4	30.2	0.43	1241	-2	8	18.2	11	675	-1
GS-11-154	0.9	-0.2	27.2	6.1	0.44	1138	-2	9	26.7	2	898	7
GS-11-158	0.2	-0.2	11.6	10.8	0.22	371	2	11	6.9	-1	226	7
GS-11-163	1.4	-0.2	43.7	16.7	0.48	1241	-2	10	45.4	4	1671	27
GS-11-173	0.6	-0.2	11.3	17.3	0.24	993	-2	5	15.3	29	698	-1
GS-11-175	0.6	-0.2	27.9	6.6	0.33	556	-2	9	18.9	-1	181	4
GS-11-178	1.0	-0.2	21.8	9.4	0.56	214	-2	10	19.9	-1	66	21
GS-11-180	0.3	-0.2	7.6	11.7	0.25	309	3	11	3.7	-1	338	24
GS-11-181	0.5	-0.2	28.6	8.4	0.31	334	3	10	20.3	-1	359	15
GS-11-185	1.0	-0.2	15.0	44.7	0.29	1472	2	5	17.3	38	777	-1
GS-11-194	0.6	-0.2	26.7	14.0	0.33	462	-2	8	19.9	-1	471	40
GS-11-195	1.2	-0.2	33.1	22.7	0.53	996	-2	11	36.5	5	1565	-1
GS-11-199	0.4	-0.2	14.7	4.3	0.24	123	2	9	12.8	1	224	33
GS-11-200	1.1	-0.2	32.0	13.0	0.46	936	-2	11	34.1	4	1050	21
GS-11-209	0.2	-0.2	19.4	7.1	0.20	138	2	9	12.9	1	269	13
GS-11-210	0.5	-0.2	26.3	8.1	0.32	626	-2	8	18.8	3	303	12

Appendix A - Major- and Trace-element data for unaltered samples

SampleNum	Ho	In	La	Li	Lu	Mn	Mo	Nb	Nd	Ni	P	Pb
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.1	0.2	0.1	0.1	0.05	1	2	1	0.1	1	1	1
	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr ES	GS Tr MS	GS Tr ES	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr ES	GS Tr ES	GS Tr ES
GS-11-212	0.8	-0.2	21.6	14.2	0.38	1201	-2	8	22.9	14	543	-1
GS-11-213	0.3	-0.2	19.0	4.4	0.21	200	2	9	8.7	-1	116	14
GS-11-214	0.8	-0.2	24.1	3.8	0.47	422	-2	10	24.7	-1	202	21
GS-11-222	2.6	-0.2	39.1	-0.1	1.18	73	-2	24	40.5	-1	55	5
GS-11-231	1.7	-0.2	34.6	10.4	0.73	696	2	12	40.8	-1	668	8
GS-11-232	1.2	-0.2	29.1	3.5	0.67	138	3	12	29.6	-1	197	12
GS-11-233	1.6	-0.2	31.5	4.8	0.81	219	-2	9	36.6	-1	206	4
GS-11-234	1.3	-0.2	40.6	3.2	0.64	761	2	15	38.7	-1	225	6
GS-11-236	0.4	-0.2	23.8	11.2	0.27	400	6	11	15.4	-1	296	12
GS-11-238	0.5	-0.2	32.5	1.3	0.27	165	2	10	18.7	-1	81	13
GS-11-240	0.9	-0.2	24.0	25.6	0.36	1986	-2	8	26.0	38	1541	-1
GS-11-242	1.6	0.2	8.5	13.1	0.92	1242	3	45	12.5	8	27	8
GS-11-250	1.3	-0.2	10.2	9.3	0.78	1654	3	50	8.8	10	545	-1
GS-11-255	1.2	-0.2	2.0	3.3	0.70	520	-2	35	3.0	-1	10	12
GS-11-258	1.2	-0.2	13.8	0.9	0.62	164	-2	33	15.1	-1	14	3
GS-11-259	0.9	-0.2	20.6	31.3	0.36	1219	-2	6	25.2	21	1414	-1
GS-11-262	0.5	-0.2	7.3	16.9	0.37	542	8	14	6.6	4	784	11
GS-11-268	0.7	-0.2	31.1	13.7	0.38	527	-2	13	23.2	4	965	6
GS-11-272	0.4	-0.2	7.1	14.3	0.29	499	-2	12	4.6	-1	199	5
GS-11-275	0.7	-0.2	11.1	18.2	0.28	1551	-2	2	15.5	17	741	-1
GS-11-277	0.5	-0.2	11.2	14.1	0.21	822	-2	4	13.2	53	1243	3
GS-11-278	1.0	-0.2	38.2	9.8	0.43	1297	-2	15	34.0	3	256	3
GS-11-281	0.7	-0.2	26.6	14.7	0.32	300	3	14	23.9	-1	419	26
GS-11-284	1.1	-0.2	17.5	12.1	0.63	819	2	9	22.8	2	395	66
GS-11-292	0.3	-0.2	8.4	3.9	0.15	199	112	2	7.6	-1	2054	4
GS-11-296	0.5	-0.2	20.2	24.8	0.30	966	31	7	15.9	3	533	2
GS-11-298	0.6	-0.2	16.9	10.1	0.29	518	-2	5	15.4	-1	274	7
GS-11-302	0.3	-0.2	27.3	6.9	0.14	54	8	7	18.2	3	1276	4
GS-11-303	1.4	0.2	43.1	7.3	0.69	493	-2	10	43.7	-1	57	7
GS-11-308	0.2	-0.2	5.2	6.0	-0.05	174	-2	39	6.2	-1	33	2
GS-11-331	0.8	-0.2	6.3	24.0	0.37	1428	3	4	8.9	47	274	-1
GS-11-332	0.7	-0.2	11.3	15.1	0.33	1197	-2	3	14.8	41	777	-1
GS-11-336	3.8	-0.2	36.7	4.0	1.89	178	2	68	35.1	-1	4	14
GS-11-337	0.6	-0.2	17.3	32.1	0.23	1169	2	9	21.1	30	1275	-1
GS-11-338	0.8	-0.2	25.4	20.4	0.30	1171	-2	10	29.2	12	1908	-1
GS-11-342	0.9	-0.2	11.1	11.8	0.34	1667	-2	11	17.4	44	992	426
GS-11-348	0.7	-0.2	9.0	16.1	0.29	1572	-2	3	12.2	31	514	-1
GS-11-358	4.2	-0.2	26.6	2.2	1.78	194	2	43	33.7	2	25	17

Appendix A - Major- and Trace-element data for unaltered samples

SampleNum	Ho	In	La	Li	Lu	Mn	Mo	Nb	Nd	Ni	P	Pb
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.1	0.2	0.1	0.1	0.05	1	2	1	0.1	1	1	1
	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr ES	GS Tr MS	GS Tr ES	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr ES	GS Tr ES	GS Tr ES
GS-11-362	5.2	-0.2	18.8	2.5	2.53	81	-2	37	22.3	-1	16	6
GS-11-365	4.7	0.2	74.3	8.3	2.25	9	13	54	81.7	-1	164	29
GS-11-379	4.9	-0.2	82.1	9.1	2.17	678	-2	42	103.4	1	32	16
GS-11-380	4.6	-0.2	65.1	0.8	2.21	408	-2	42	86.2	-1	18	16
GS-11-381	2.1	-0.2	25.8	32.6	0.83	1384	-2	12	42.5	29	3205	-1
GS-11-383	3.5	-0.2	71.8	1.0	1.63	514	-2	28	84.2	-1	70	19
GS-11-385	3.2	-0.2	53.6	0.5	1.77	616	-2	28	62.4	2	71	13
GS-11-388	2.9	-0.2	38.7	24.7	1.08	2102	2	16	61.5	12	4862	-1
GS-11-410	2.4	-0.2	54.9	7.3	1.07	321	-2	25	55.9	-1	55	16
GS-11-412	1.6	-0.2	16.7	26.4	0.61	1769	-2	6	27.4	28	2401	-1
GS-11-417	5.5	-0.2	92.8	4.1	2.29	431	-2	41	115.5	-1	20	41
GS-11-428	0.4	-0.2	37.1	2.0	0.23	375	7	13	19.3	-1	-99	5
GS-11-433	1.2	-0.2	24.3	10.2	0.56	565	-2	8	26.8	5	348	1
GS-11-434	1.4	-0.2	28.1	11.2	0.62	1033	-2	8	31.2	10	782	2
GS-11-440	3.3	-0.2	21.2	6.1	1.99	372	-2	47	32.9	-1	17	11
GS-11-442	3.5	-0.2	83.0	9.8	1.53	782	4	123	70.5	4	448	-1
GS-11-479	1.3	-0.2	35.9	18.6	0.50	1213	-2	13	41.2	5	2111	66
GS-11-480	0.9	-0.2	20.3	4.8	0.52	229	-2	14	19.3	-1	281	-1
GS-12-024	0.6	-0.2	34.3	18.7	0.35	588	-2	12	24.0	1	-99	13
GS-12-061	1.1	-0.2	14.2	33.5	0.46	1176	-2	5	21.5	7	-99	7
GS-12-063	0.9	-0.2	43.8	18.2	0.40	774	-2	13	34.1	3	-99	20
GS-12-067	1.9	-0.2	32.7	9.8	1.04	690	-2	17	37.8	4	-99	8
GS-12-193	1.6	-0.2	33.0	17.3	0.63	1148	-2	18	35.6	7	-99	-1
GS-12-255	0.6	-0.2	34.8	2.2	0.36	558	-2	13	23.4	-1	-99	15
GS-12-273	1.2	-0.2	33.7	5.9	0.50	1080	2	12	35.7	6	-99	4
GS-12-335	1.0	-0.2	33.9	94.0	0.55	302	-2	10	31.9	-1	-99	5
GS-12-369	0.7	-0.2	6.4	25.1	0.29	1808	13	4	9.7	55	-99	68
GS-12-379	0.9	-0.2	20.5	10.7	0.45	1631	2	10	19.4	6	-99	6
GS-12-385	0.9	-0.2	31.4	8.4	0.41	1073	-2	8	31.8	7	-99	6
GS-12-387	1.3	-0.2	45.0	2.9	0.68	454	14	11	44.5	3	-99	10
GS-12-389	1.3	-0.2	15.6	5.2	0.73	715	10	13	19.3	4	-99	-1
GS-13-008	0.9	-0.2	21.9	46.1	0.48	1274	-2	7	22.7	19	-99	4
GS-13-019	0.4	-0.2	42.8	4.8	0.23	177	3	8	31.5	4	-99	14

Appendix A - Major- and Trace-element data for unaltered samples

SampleNum	Pr	Rb	S	Sb	Sc	Se	Sm	Sn	Sr	Ta	Tb	Te	Ti
	ppm	ppm	wt.%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.05	1	0.01	0.2	0.1	1	0.1	1	2	0.5	0.1	0.1	1
	GS Tr MS	GS Tr ES	ICP	INAA	GS Tr ES	INAA	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	ICP-MS	GS Tr ES
GS-11-003	4.09	54	-99	1.2	31.7	-1	5.0	2	329	-0.5	0.9	-99	8022
GS-11-013	3.98	18	-99	1.0	29.1	-1	4.9	2	282	0.9	0.8	-99	6954
GS-11-027	10.05	19	-99	-99	2.9	-99	4.8	20	75	0.9	0.2	-99	176
GS-11-032	4.36	42	0.07	-0.2	5.0	-1	4.1	7	38	0.9	0.4	-0.1	910
GS-11-033	6.87	41	-99	-99	32.5	-99	6.2	2	64	0.5	0.7	-99	4209
GS-11-047	7.66	76	-99	0.2	6.4	2	5.1	2	123	1.0	0.6	-99	569
GS-11-052	8.17	62	-99	-0.2	9.2	-1	7.6	2	254	1.0	1.1	-99	3412
GS-11-059	8.14	58	2.78	0.6	7.5	6	3.6	19	72	0.8	0.3	0.4	439
GS-11-064	4.49	12	-99	-99	26.7	-99	4.9	2	84	0.6	0.7	-99	1125
GS-11-074	7.69	84	-99	-99	4.1	-99	4.8	2	144	0.9	0.7	-99	1616
GS-11-087	15.17	152	-99	1.1	23.1	2	11.6	3	79	1.0	1.3	-99	2639
GS-11-094	8.36	82	-99	-99	3.9	-99	5.7	3	159	0.9	0.7	-99	1386
GS-11-095	2.60	39	-99	0.3	38.5	-1	2.9	1	390	-0.5	0.4	-99	5160
GS-11-096	7.40	57	-99	-0.2	4.6	-1	5.6	6	171	1.7	0.7	-99	1846
GS-11-098A	3.28	20	-99	0.5	22.1	-1	3.4	1	897	-0.5	0.6	-99	4574
GS-11-099	2.80	22	-99	-99	25.4	-99	3.2	2	620	-0.5	0.5	-99	5005
GS-11-100	5.11	80	-99	-99	3.4	-99	3.0	6	84	0.8	0.5	-99	935
GS-11-101	3.52	42	-99	-99	33.7	-99	3.3	2	356	-0.5	0.5	-99	5189
GS-11-104	7.85	37	-99	-99	4.2	-99	5.3	3	96	1.3	0.8	-99	905
GS-11-107	5.13	57	-99	-99	4.6	-99	3.4	2	117	1.0	0.4	-99	1500
GS-11-114	11.50	12	-99	1.1	18.0	-1	10.9	4	371	1.8	1.8	-99	4815
GS-11-123	8.77	70	-99	-99	12.6	-99	7.8	5	297	1.7	1.4	-99	3388
GS-11-129	4.26	58	-99	-99	22.5	-99	4.7	2	491	0.8	0.8	-99	6519
GS-11-154	6.55	41	-99	0.3	14.2	-1	5.7	1	567	0.8	0.8	-99	3667
GS-11-158	2.15	96	-99	0.7	6.1	2	1.0	2	291	1.2	0.1	-99	2781
GS-11-163	11.16	17	1.25	1.4	20.8	1	9.9	3	736	1.3	1.3	-0.1	6017
GS-11-173	3.35	82	-99	-99	26.5	-99	3.7	1	499	-0.5	0.5	-99	4621
GS-11-175	5.66	83	-99	-99	3.7	-99	3.5	2	93	1.0	0.5	-99	1234
GS-11-178	5.28	22	-99	-99	2.4	-99	4.2	2	118	1.4	0.7	-99	711
GS-11-180	1.03	98	0.12	-0.2	4.2	2	0.7	3	88	1.0	0.2	0.2	1426
GS-11-181	5.71	68	0.69	-0.2	4.8	-1	3.6	1	250	0.9	0.5	0.4	1991
GS-11-185	3.86	29	-99	-99	37.6	-99	4.0	1	350	-0.5	0.7	-99	6594
GS-11-194	5.44	79	-99	-0.2	5.4	-1	3.7	2	114	0.7	0.5	-99	1729
GS-11-195	8.83	49	-99	-99	16.0	-99	7.3	2	329	1.1	1.1	-99	4388
GS-11-199	3.42	71	-99	0.2	5.6	-1	2.2	2	37	0.7	0.3	-99	1791
GS-11-200	8.33	89	0.09	0.7	17.6	-1	7.1	7	380	0.9	0.9	-0.1	5724
GS-11-209	3.56	97	-99	0.5	5.9	8	2.1	1	111	0.8	0.2	-99	2603
GS-11-210	5.21	50	-99	-99	7.6	-99	3.6	1	183	0.9	0.5	-99	2131

Appendix A - Major- and Trace-element data for unaltered samples

SampleNum	Pr	Rb	S	Sb	Sc	Se	Sm	Sn	Sr	Ta	Tb	Te	Ti
	ppm	ppm	wt.%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.05	1	0.01	0.2	0.1	1	0.1	1	2	0.5	0.1	0.1	1
	GS Tr MS	GS Tr ES	ICP	INAA	GS Tr ES	INAA	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	ICP-MS	GS Tr ES
GS-11-212	5.71	66	-99	-99	23.7	-99	4.8	2	305	0.7	0.7	-99	5738
GS-11-213	2.60	77	-99	-0.2	4.9	-1	1.8	4	75	1.2	0.2	-99	1313
GS-11-214	6.48	54	-99	-99	4.1	-99	5.3	2	92	0.8	0.7	-99	1605
GS-11-222	10.62	98	-99	0.4	5.1	-1	9.8	4	39	2.0	2.0	-99	484
GS-11-231	9.26	46	1.07	-0.2	16.2	2	9.1	2	163	0.9	1.4	0.8	2512
GS-11-232	7.23	52	-99	1.0	9.8	-1	5.9	2	120	1.1	0.9	-99	2014
GS-11-233	8.90	35	-99	-0.2	11.5	-1	7.7	1	150	0.7	1.3	-99	1375
GS-11-234	9.99	65	-99	0.3	6.3	-1	7.4	2	118	1.3	1.0	-99	2624
GS-11-236	4.54	98	-99	0.6	4.5	-1	2.7	2	194	1.0	0.3	-99	2356
GS-11-238	5.63	60	0.61	1.1	1.8	-1	3.3	1	193	1.4	0.4	0.2	1097
GS-11-240	6.33	62	-99	-99	23.9	-99	5.6	2	591	0.7	0.8	-99	8026
GS-11-242	2.95	77	2.98	29.8	3.5	3	4.8	6	5	4.5	1.1	0.3	304
GS-11-250	2.17	142	-99	0.4	11.4	-1	3.5	7	10	5.0	0.9	-99	2564
GS-11-255	0.59	118	-99	0.2	2.3	-1	2.2	7	15	4.5	0.9	-99	176
GS-11-258	3.84	44	-99	1.5	1.1	-1	4.4	5	439	2.9	0.9	-99	234
GS-11-259	5.75	31	-99	0.6	33.3	-1	5.6	2	649	-0.5	0.8	-99	8294
GS-11-262	1.57	131	0.04	2.0	13.3	-1	1.5	3	192	1.2	0.3	-0.1	5652
GS-11-268	6.14	130	-99	0.6	12.9	-1	4.4	2	289	1.0	0.7	-99	4484
GS-11-272	1.39	174	-99	0.8	5.5	-1	1.1	2	85	1.5	0.3	-99	1512
GS-11-275	3.05	15	-99	-99	33.9	-99	3.8	1	502	-0.5	0.6	-99	6028
GS-11-277	2.91	13	-0.01	0.4	21.4	-1	2.5	2	627	-0.5	0.4	-0.1	4360
GS-11-278	8.58	38	-99	0.6	6.1	-1	6.5	2	334	1.4	0.8	-99	1048
GS-11-281	6.28	88	0.84	3.6	6.7	-1	4.5	3	56	1.5	0.6	-0.1	2068
GS-11-284	5.36	13	0.53	1.0	12.7	-1	4.6	4	156	1.0	0.8	0.3	3131
GS-11-292	1.96	24	1.16	1.0	5.3	1	1.7	-1	70	-0.5	0.3	7.9	1640
GS-11-296	4.45	119	-99	0.2	9.7	-1	3.3	1	184	0.8	0.5	-99	2885
GS-11-298	3.85	63	-99	-0.2	5.6	-1	2.8	1	183	0.6	0.5	-99	2094
GS-11-302	4.95	24	-99	0.3	3.8	-1	3.7	2	39	0.7	0.3	-99	1352
GS-11-303	11.13	117	-99	0.2	4.9	-1	9.2	2	41	1.0	1.2	-99	1188
GS-11-308	1.21	167	-99	0.7	0.9	-1	2.2	5	45	4.9	0.3	-99	89
GS-11-331	1.79	22	-99	2.1	47.7	-1	2.7	2	319	-0.5	0.6	-99	6299
GS-11-332	3.34	24	-99	-99	32.9	-99	3.4	1	323	-0.5	0.6	-99	5826
GS-11-336	9.34	146	-0.01	-0.2	-0.1	-1	10.2	9	8	7.1	2.5	-0.1	392
GS-11-337	4.64	34	-99	0.8	25.3	-1	4.9	1	604	0.9	0.6	-99	7568
GS-11-338	6.77	45	-99	1.3	18.2	-1	5.9	1	419	0.9	0.8	-99	6222
GS-11-342	3.67	29	0.13	9.4	31.3	-1	4.2	1	533	1.0	0.7	-0.1	2673
GS-11-348	2.62	31	-99	-0.2	37.2	-1	3.2	1	334	-0.5	0.5	-99	5714
GS-11-358	7.76	157	-99	-99	-0.1	-99	9.1	9	40	3.5	2.8	-99	1182

Appendix A - Major- and Trace-element data for unaltered samples

SampleNum	Pr	Rb	S	Sb	Sc	Se	Sm	Sn	Sr	Ta	Tb	Te	Ti
	ppm	ppm	wt.%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.05	1	0.01	0.2	0.1	1	0.1	1	2	0.5	0.1	0.1	1
	GS Tr MS	GS Tr ES	ICP	INAA	GS Tr ES	INAA	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	ICP-MS	GS Tr ES
GS-11-362	4.86	89	-99	1.2	-0.1	-1	7.2	9	37	3.6	2.9	-99	1344
GS-11-365	20.13	90	-99	3.9	4.5	-1	18.6	11	77	4.4	3.7	-99	892
GS-11-379	24.25	160	-99	-99	0.3	-99	24.1	8	119	3.8	3.9	-99	1623
GS-11-380	18.74	143	-99	-99	0.2	-99	20.8	9	35	4.1	3.6	-99	1236
GS-11-381	8.94	82	-99	-99	40.6	-99	10.8	2	241	1.2	1.8	-99	17977
GS-11-383	20.16	163	-99	-99	2.1	-99	18.7	5	11	2.3	2.9	-99	1675
GS-11-385	15.06	96	-99	-99	3.1	-99	13.4	5	27	2.1	2.5	-99	2486
GS-11-388	13.12	31	-99	-99	27.2	-99	15.3	3	443	1.3	2.5	-99	15508
GS-11-410	14.10	92	-99	-99	1.4	-99	11.9	3	33	2.2	2.0	-99	725
GS-11-412	5.78	20	-99	-99	44.6	-99	7.7	2	272	0.5	1.3	-99	17652
GS-11-417	27.52	327	-99	-99	0.4	-99	26.5	8	37	3.5	4.4	-99	1426
GS-11-428	5.95	64	-99	-99	5.4	-99	2.6	2	70	1.6	0.4	-99	1241
GS-11-433	6.52	155	0.15	3.4	13.0	-1	5.8	3	366	0.9	1.0	-0.1	3243
GS-11-434	7.24	190	1.12	4.1	19.6	-1	7.2	3	241	0.8	1.1	-0.1	5838
GS-11-440	7.35	160	-99	-99	-0.1	-99	8.9	9	28	3.6	2.1	-99	1274
GS-11-442	18.56	101	-99	0.4	4.6	-1	14.3	7	38	9.7	2.8	-99	2944
GS-11-479	9.75	83	-99	1.0	22.3	-1	8.8	5	272	1.0	1.2	-99	8303
GS-11-480	5.07	143	0.77	0.6	5.5	1	4.1	2	193	1.1	0.6	0.8	2547
GS-12-024	6.70	114	-99	-99	4.7	-99	4.2	2	184	1.0	0.5	-99	2264
GS-12-061	4.36	97	-99	-99	10.0	-99	5.6	2	679	-0.5	0.9	-99	3028
GS-12-063	9.50	107	-99	-99	9.6	-99	6.7	2	95	1.1	0.9	-99	2938
GS-12-067	9.45	132	-99	1.5	11.1	-1	8.0	3	83	1.3	1.5	-99	3665
GS-12-193	8.55	53	-99	0.9	31.1	-1	8.1	3	157	1.6	1.2	-99	10709
GS-12-255	7.17	53	-99	-99	4.2	-99	3.9	2	275	1.3	0.6	-99	1669
GS-12-273	8.68	39	-0.01	-0.2	19.4	-1	7.3	2	392	1.1	1.0	0.2	5348
GS-12-335	8.40	27	-99	-99	3.6	-99	5.8	2	137	0.9	0.8	-99	1567
GS-12-369	2.15	6	-99	-0.2	23.8	8	2.7	1	214	-0.5	0.6	-99	7290
GS-12-379	4.79	63	-99	0.9	11.5	-1	4.7	2	134	1.1	0.7	-99	2338
GS-12-385	8.10	-99	1.00	-0.2	8.2	-1	6.5	1	153	0.6	0.8	2.5	3110
GS-12-387	11.73	-99	1.10	-0.2	7.2	-1	8.6	2	68	0.7	1.1	3.5	2809
GS-12-389	4.71	-99	1.16	-0.2	7.8	1	4.3	2	89	0.8	0.7	0.5	2106
GS-13-008	5.38	-99	0.02	-0.2	28.6	-1	5.4	1	504	0.7	0.7	-0.1	6944
GS-13-019	8.66	-99	-0.01	4.5	3.5	-1	5.1	1	286	0.7	0.4	0.4	1361

Appendix A - Major- and Trace-element data for unaltered samples

SampleNum	Th	Tl	Tm	U	V	W	Y	Yb	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.1	0.1	0.05	0.1	5	1	1	0.1	1	1
	GS Tr MS	ICP-MS	GS Tr MS	GS Tr MS	GS Tr ES	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr ES	GS Tr ES
GS-11-003	3.4	-0.1	0.48	0.8	154	-1	29	3.3	79	128
GS-11-013	3.2	-0.1	0.44	0.8	133	3	27	3.0	75	124
GS-11-027	24.1	-0.1	0.10	1.0	39	2	5	0.8	44	150
GS-11-032	7.7	-0.1	0.23	1.4	43	-1	14	1.5	543	143
GS-11-033	4.0	-0.1	0.34	0.9	315	-1	21	2.2	245	94
GS-11-047	11.3	-0.1	0.36	2.7	57	2	22	2.5	65	193
GS-11-052	6.9	-0.1	0.58	2.0	30	-1	37	4.2	51	244
GS-11-059	15.1	-0.1	0.16	1.9	52	2	9	1.3	203	86
GS-11-064	1.6	-0.1	0.37	0.4	290	-1	21	2.5	250	127
GS-11-074	9.6	-0.1	0.39	2.1	17	-1	23	2.9	36	169
GS-11-087	10.7	-0.1	0.50	2.4	169	1	37	3.2	115	245
GS-11-094	10.3	-0.1	0.48	2.6	14	-1	27	3.2	41	171
GS-11-095	0.9	-0.1	0.22	0.2	256	-1	14	1.4	101	48
GS-11-096	9.3	-0.1	0.41	2.0	30	3	24	2.9	58	195
GS-11-098A	0.8	-0.1	0.29	0.3	198	-1	18	1.9	55	81
GS-11-099	0.7	-0.1	0.23	0.2	278	-1	16	1.6	85	58
GS-11-100	9.8	-0.1	0.27	1.9	16	-1	17	2.0	51	99
GS-11-101	2.0	-0.1	0.27	0.4	255	-1	16	1.7	79	79
GS-11-104	9.7	-0.1	0.46	2.3	14	2	26	3.5	49	170
GS-11-107	9.2	-0.1	0.26	2.1	13	-1	16	1.9	40	99
GS-11-114	13.0	-0.1	1.06	3.0	125	2	64	7.2	81	284
GS-11-123	12.9	-0.1	0.86	3.0	65	2	51	6.1	78	338
GS-11-129	2.0	-0.1	0.42	0.5	168	-1	26	2.7	131	158
GS-11-154	7.3	-0.1	0.41	1.6	63	1	26	2.9	83	170
GS-11-158	9.4	-0.1	0.14	2.1	56	2	4	1.1	35	200
GS-11-163	8.2	-0.1	0.53	1.9	152	2	43	3.3	275	167
GS-11-173	0.8	-0.1	0.23	0.2	251	-1	16	1.6	69	60
GS-11-175	10.3	-0.1	0.29	2.3	13	-1	17	2.1	35	94
GS-11-178	11.1	-0.1	0.52	2.9	-5	-1	29	3.7	15	94
GS-11-180	8.1	-0.1	0.18	1.5	33	2	8	1.4	33	201
GS-11-181	10.7	-0.1	0.26	2.5	35	1	16	1.9	27	203
GS-11-185	1.2	-0.1	0.27	0.3	283	2	19	2.0	161	85
GS-11-194	8.6	-0.1	0.28	2.0	32	2	18	2.1	20	169
GS-11-195	4.1	0.2	0.53	0.9	55	-1	33	3.7	64	239
GS-11-199	5.9	-0.1	0.20	1.3	40	1	11	1.5	28	188
GS-11-200	8.4	-0.1	0.48	1.9	63	-1	30	3.1	87	216
GS-11-209	12.3	-0.1	0.15	2.2	49	2	8	1.3	30	200
GS-11-210	9.4	0.1	0.27	1.9	38	-1	16	1.9	45	121

Appendix A - Major- and Trace-element data for unaltered samples

SampleNum	Th	Tl	Tm	U	V	W	Y	Yb	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.1	0.1	0.05	0.1	5	1	1	0.1	1	1
	GS Tr MS	ICP-MS	GS Tr MS	GS Tr MS	GS Tr ES	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr ES	GS Tr ES
GS-11-212	6.0	-0.1	0.31	1.0	146	-1	19	2.4	48	141
GS-11-213	15.7	-0.1	0.16	2.6	43	2	8	1.1	30	88
GS-11-214	9.2	-0.1	0.43	2.0	15	-1	24	3.0	43	196
GS-11-222	20.5	-0.1	1.18	3.4	7	-1	75	8.3	16	260
GS-11-231	4.9	-0.1	0.72	1.2	21	2	48	4.9	39	210
GS-11-232	5.9	-0.1	0.60	1.5	7	2	32	4.2	24	261
GS-11-233	6.1	-0.1	0.76	1.7	-5	-1	47	5.3	20	253
GS-11-234	10.4	-0.1	0.58	2.6	18	1	36	4.3	39	296
GS-11-236	10.9	-0.1	0.23	2.0	41	1	12	1.8	14	191
GS-11-238	15.6	0.1	0.26	3.4	13	2	16	1.6	50	96
GS-11-240	4.5	-0.1	0.31	1.0	174	1	23	2.4	142	167
GS-11-242	14.6	-0.1	0.77	6.4	11	3	43	6.2	390	88
GS-11-250	11.5	0.7	0.71	3.0	82	5	41	5.4	80	112
GS-11-255	14.2	-0.1	0.62	1.3	-5	-1	36	4.8	511	72
GS-11-258	8.7	-0.1	0.63	2.3	7	-1	34	4.4	34	94
GS-11-259	2.1	-0.1	0.37	0.6	292	-1	24	2.4	91	113
GS-11-262	8.8	0.2	0.27	2.0	135	2	13	2.1	76	256
GS-11-268	9.3	-0.1	0.32	2.0	99	1	19	2.4	73	254
GS-11-272	15.1	0.4	0.24	3.2	40	2	12	1.8	40	112
GS-11-275	0.6	-0.1	0.29	0.2	335	-1	18	1.9	128	76
GS-11-277	1.4	-0.1	0.21	0.5	174	-1	13	1.2	44	71
GS-11-278	11.2	0.2	0.40	2.4	40	2	28	3.0	38	224
GS-11-281	11.4	0.5	0.30	2.0	33	2	20	2.4	48	169
GS-11-284	5.5	0.1	0.55	2.4	70	1	28	4.1	103	211
GS-11-292	1.7	-0.1	0.13	0.6	90	-1	9	0.9	45	51
GS-11-296	5.6	0.2	0.26	1.6	32	-1	15	1.8	64	152
GS-11-298	4.8	0.1	0.25	1.2	51	-1	17	1.8	26	136
GS-11-302	4.6	-0.1	0.13	0.5	72	3	7	0.9	11	227
GS-11-303	12.0	-0.1	0.65	2.8	11	-1	40	4.5	201	164
GS-11-308	9.6	-0.1	-0.05	5.8	15	-1	7	0.2	37	80
GS-11-331	1.8	-0.1	0.32	0.4	394	2	19	2.3	93	69
GS-11-332	1.7	-0.1	0.33	0.5	258	-1	21	2.4	86	92
GS-11-336	26.1	-0.1	2.00	9.1	8	2	114	14.0	88	305
GS-11-337	3.3	0.2	0.25	1.5	319	2	17	1.7	92	75
GS-11-338	3.4	0.2	0.33	1.3	198	-1	23	2.0	71	205
GS-11-342	0.8	-0.1	0.33	0.4	296	24	23	2.5	203	129
GS-11-348	1.1	0.2	0.30	0.3	274	-1	18	2.0	94	65
GS-11-358	18.1	-0.1	1.95	3.6	-5	1	117	13.2	136	964

Appendix A - Major- and Trace-element data for unaltered samples

SampleNum	Th	Tl	Tm	U	V	W	Y	Yb	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.1	0.1	0.05	0.1	5	1	1	0.1	1	1
	GS Tr MS	ICP-MS	GS Tr MS	GS Tr MS	GS Tr ES	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr ES	GS Tr ES
GS-11-362	18.2	-0.1	2.49	3.7	-5	2	142	17.2	86	955
GS-11-365	22.9	-0.1	2.23	7.1	39	5	130	15.9	48	1122
GS-11-379	15.0	0.2	2.15	3.3	6	2	132	14.6	182	870
GS-11-380	17.6	0.1	2.22	2.7	28	7	111	14.7	121	968
GS-11-381	3.4	-0.1	0.85	1.1	356	2	56	5.6	126	294
GS-11-383	15.7	-0.1	1.55	2.8	5	1	90	10.8	96	826
GS-11-385	12.9	-0.1	1.51	3.5	6	2	86	11.3	84	940
GS-11-388	5.0	-0.1	1.12	1.3	123	-1	76	7.6	143	389
GS-11-410	15.5	-0.1	1.06	2.5	7	-1	67	7.4	80	302
GS-11-412	2.0	-0.1	0.65	0.5	394	2	43	4.4	119	149
GS-11-417	16.9	-0.1	2.37	4.4	14	3	144	16.3	79	933
GS-11-428	19.2	-0.1	0.17	3.4	17	3	12	1.7	27	109
GS-11-433	5.9	0.2	0.53	1.5	36	2	33	3.9	69	166
GS-11-434	4.6	0.1	0.62	1.3	100	3	45	4.4	92	169
GS-11-440	18.5	-0.1	1.77	2.9	11	3	85	13.3	89	903
GS-11-442	18.1	0.2	1.58	4.7	33	3	98	10.4	141	1071
GS-11-479	8.1	-0.1	0.50	1.9	92	1	35	3.5	288	205
GS-11-480	11.4	-0.1	0.50	2.3	37	-1	25	3.5	17	270
GS-12-024	12.5	-0.1	0.28	2.8	39	-1	17	2.1	59	217
GS-12-061	1.3	-0.1	0.41	0.5	282	-1	30	3.0	68	103
GS-12-063	13.2	-0.1	0.37	3.2	36	-1	27	2.8	66	208
GS-12-067	9.9	-0.1	0.90	2.5	51	5	51	6.7	87	410
GS-12-193	9.0	-0.1	0.64	2.1	150	3	39	4.3	85	243
GS-12-255	13.2	0.1	0.29	3.1	23	2	18	2.4	40	146
GS-12-273	8.9	-0.1	0.47	1.9	91	1	31	3.3	77	216
GS-12-335	9.9	-0.1	0.46	2.5	85	1	28	3.9	34	166
GS-12-369	0.5	-0.1	0.27	0.4	210	-1	19	1.9	199	76
GS-12-379	6.3	0.1	0.42	1.9	36	2	25	2.8	54	151
GS-12-385	7.6	-0.1	0.40	1.8	42	-1	26	2.8	63	177
GS-12-387	11.1	-0.1	0.60	2.7	19	-1	37	4.6	591	292
GS-12-389	12.4	-0.1	0.67	3.3	23	-1	33	5.0	64	325
GS-13-008	5.4	-99	0.48	1.1	295	2	19	2.1	82	96
GS-13-019	12.6	-0.1	0.19	3.4	64	5	13	1.5	12	164

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	Year	UTMZone	UTMEast	UTMNorth	Datum	StationID	LabNum	Prospect	Analysis
GS-11-029	2011	21	650164	5253584	NAD27	11GWS023	7740466	Stewart	Au + 23; ICP majors & traces
GS-11-030	2011	21	650159	5253584	NAD27	11GWS024	7740467	Stewart	Au + 23; ICP majors & traces
GS-11-031	2011	21	650159	5253584	NAD27	11GWS024	7740468	Stewart	Au + 23; ICP majors & traces
GS-11-039	2011	21	650059	5253686	NAD27	11GWS030	7740471	Stewart	Au + 23; ICP majors & traces
GS-11-075	2011	21	649455	5252679	NAD27	11GWS061	7740474	Stewart	Au + 23; ICP majors & traces
GS-11-078	2011	21	649476	5252787	NAD27	11GWS063	7740475	Stewart	Au + 23; ICP majors & traces
GS-11-086	2011	21	689577	5288500	NAD27	11GWS068	7740476	Ridge	Au + 23; ICP majors & traces
GS-11-089	2011	21	649528	5253126	NAD27	11GWS070	7740477	Stewart	Au + 23; ICP majors & traces
GS-11-184	2011	21	651718	5254311	NAD27	11GWS147	7740479	Stewart	Au + 23; ICP majors & traces
GS-11-189	2011	21	651680	5254462	NAD27	11GWS150	7740481	Stewart	Au + 23; ICP majors & traces
GS-11-190	2011	21	651744	5254445	NAD27	11GWS151	7740424	Stewart	Au + 23; ICP majors & traces
GS-11-191	2011	21	651754	5254412	NAD27	11GWS152	7740482	Stewart	Au + 23; ICP majors & traces
GS-11-205	2011	21	652273	5254325	NAD27	11GWS162	7740425	Stewart	Au + 23; ICP majors & traces
GS-11-216	2011	21	654926	5255805	NAD27	11GWS176	7740426	Forty Creek	Au + 23; ICP majors & traces
GS-11-237	2011	21	646088	5256685	NAD27	11GWS193	7740584	White Mountain Pond	Au + 23; ICP majors & traces
GS-11-254	2011	21	639115	5226821	NAD27	11GWS210	7740586	Kelstone	Au + 23; ICP majors & traces
GS-11-261	2011	21	645827	5256454	NAD27	11GWS215	7740587	White Mountain Pond	Au + 23; ICP majors & traces
GS-11-263	2011	21	645867	5256454	NAD27	11GWS216	7740589	White Mountain Pond	Au + 23; ICP majors & traces
GS-11-264	2011	21	645856	5256440	NAD27	11GWS216	7740591	White Mountain Pond	Au + 23; ICP majors & traces
GS-11-276	2011	21	587728	5193823	NAD27	11GWS229	7740592	Peter Brook	Au + 23; ICP majors & traces
GS-11-279	2011	21	587709	5193844	NAD27	11GWS229	7740594	Peter Brook	Au + 23; ICP majors & traces
GS-11-280	2011	21	587709	5193944	NAD27	11GWS230	7740595	Peter Brook	Au + 23; ICP majors & traces
GS-11-282	2011	21	587704	5193952	NAD27	11GWS230	7740597	Peter Brook	Au + 23; ICP majors & traces
GS-11-283	2011	21	587571	5193972	NAD27	11GWS232	7740598	Peter Brook	Au + 23; ICP majors & traces
GS-11-287	2011	21	645963	5228985	NAD27	11GWS234	7740602	Spanish Room	Au + 23; ICP majors & traces
GS-11-290	2011	21	646018	5229267	NAD27	11GWS236	7740603	Spanish Room	Au + 23; ICP majors & traces
GS-11-291	2011	21	646131	5229352	NAD27	11GWS237	7740604	Spanish Room	Au + 23; ICP majors & traces
GS-11-304	2011	21	659426	5251954	NAD27	11GWS246	7740606	Burin Highway	Au + 23; ICP majors & traces
GS-11-309	2011	21	709840	5348186	NAD27	11GWS248	7740647	Big Easy	Au + 23; AL 1G; ICP majors & traces
GS-11-310	2011	21	709832	5348188	NAD27	11GWS248	7740648	Big Easy	Au + 23; AL 1G; ICP majors & traces
GS-11-311	2011	21	709988	5347827	NAD27	11GWS249	7740649	Big Easy	Au + 23; AL 1G; ICP majors & traces
GS-11-312	2011	21	709876	5347887	NAD27	11GWS250	7740651	Big Easy	Au + 23; AL 1G; ICP majors & traces
GS-11-319	2011	21	716413	5401064	NAD27	11GWS257	7740607	Calvin's Landing	Au + 23; ICP majors & traces
GS-11-322	2011	21	716358	5400998	NAD27	11GWS260	7740608	Calvin's Landing	Au + 23; ICP majors & traces
GS-11-323	2011	21	716414	5401000	NAD27	11GWS261	7740609	Calvin's Landing	Au + 23; ICP majors & traces
GS-11-324	2011	21	716414	5401000	NAD27	11GWS261	7740611	Calvin's Landing	Au + 23; ICP majors & traces
GS-11-329	2011	21	710217	5347247	NAD27	11GWS270	7740612	Big Easy	Au + 23; ICP majors & traces
GS-11-339	2011	21	725578	5396962	NAD27	11GWS287	7740646	Cull's Harbour	Au + 23; ICP majors & traces
GS-11-354	2011	21	668971	5256453	NAD27	11GWS307	7740613	Boat Harbor	Au + 23; ICP majors & traces
GS-11-364	2011	21	658870	5282568	NAD27	11GWS313	7740614	Goldhammer	Au + 23; ICP majors & traces

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	Year	UTMZone	UTMEast	UTMNorth	Datum	StationID	LabNum	Prospect	Analysis
GS-11-373	2011	21	658700	5282715	NAD27	11GWS320	7740615	Goldhammer	Au + 23; ICP majors & traces
GS-11-375	2011	21	658690	5282775	NAD27	11GWS321	7740616	Goldhammer	Au + 23; ICP majors & traces
GS-11-378	2011	21	658832	5282916	NAD27	11GWS324	7740617	Goldhammer	Au + 23; ICP majors & traces
GS-11-390	2011	21	658368	5282630	NAD27	11GWS333	7740618	Goldhammer	Au + 23; ICP majors & traces
GS-11-395	2011	21	658887	5282387	NAD27	11GWS337	7740619	Goldhammer	Au + 23; ICP majors & traces
GS-11-396	2011	21	658887	5282387	NAD27	11GWS337	7740621	Goldhammer	Au + 23; ICP majors & traces
GS-11-399	2011	21	658986	5282989	NAD27	11GWS338	7740622	Goldhammer	Au + 23; ICP majors & traces
GS-11-403	2011	21	658844	5283067	NAD27	11GWS340	7740623	Goldhammer	Au + 23; ICP majors & traces
GS-11-409	2011	21	659062	5283144	NAD27	11GWS346	7740624	Goldhammer	Au + 23; ICP majors & traces
GS-11-414	2011	21	656408	5283939	NAD27	11GWS351	7740652	543 Trend	Au + 23; AL 1G; ICP majors & traces
GS-11-415	2011	21	656408	5283939	NAD27	11GWS351	7740625	543 Trend	Au + 23; ICP majors & traces
GS-11-418	2011	21	656376	5283883	NAD27	11GWS353	7740653	543 Trend	Au + 23; AL 1G; ICP majors & traces
GS-11-419	2011	21	656376	5283883	NAD27	11GWS353	7740654	543 Trend	Au + 23; AL 1G; ICP majors & traces
GS-11-420	2011	21	656376	5283883	NAD27	11GWS353	7740655	543 Trend	Au + 23; AL 1G; ICP majors & traces
GS-11-421	2011	21	656313	5283770	NAD27	11GWS354	7740626	543 Trend	Au + 23; ICP majors & traces
GS-11-444	2011	21	659202	5283377	NAD27	11GWS370	7740629	Goldhammer	Au + 23; ICP majors & traces
GS-11-447	2011	21	659289	5283507	NAD27	11GWS373	7740656	Goldhammer	Au + 23; AL 1G; ICP majors & traces
GS-11-449	2011	21	659292	5283505	NAD27	11GWS373	7740657	Goldhammer	Au + 23; AL 1G; ICP majors & traces
GS-11-451	2011	21	659280	5283488	NAD27	11GWS374	7740658	Goldhammer	Au + 23; AL 1G; ICP majors & traces
GS-11-452	2011	21	659278	5283487	NAD27	11GWS374	7740659	Goldhammer	Au + 23; AL 1G; ICP majors & traces
GS-11-453	2011	21	697082	5291455	NAD27	11GWS375	7740631	Chimney Falls	Au + 23; ICP majors & traces
GS-11-454	2011	21	697080	5291457	NAD27	11GWS375	7740632	Chimney Falls	Au + 23; ICP majors & traces
GS-11-455	2011	21	699307	5295047	NAD27	11GWS376	7740633	Hickey's Pond	Au + 23; ICP majors & traces
GS-11-456	2011	21	699320	5295031	NAD27	11GWS377	7740634	Hickey's Pond	Au + 23; ICP majors & traces
GS-11-457	2011	21	699316	5295025	NAD27	11GWS378	7740635	Hickey's Pond	Au + 23; ICP majors & traces
GS-11-460	2011	21	699326	5295013	NAD27	11GWS379	7740636	Hickey's Pond	Au + 23; ICP majors & traces
GS-11-461	2011	21	699428	5294996	NAD27	11GWS380	7740637	Hickey's Pond	Au + 23; ICP majors & traces
GS-11-462	2011	21	701786	5297622	NAD27	11GWS381	7740638	Eric's Occurrence	Au + 23; ICP majors & traces
GS-11-466	2011	21	687453	5285768	NAD27	11GWS384	7740639	Bullwinkle	Au + 23; ICP majors & traces
GS-11-470	2011	21	687749	5285874	NAD27	11GWS388	7740641	Bullwinkle	Au + 23; ICP majors & traces
GS-11-471	2011	21	686336	5284547	NAD27	11GWS389	7740642	Strange	Au + 23; ICP majors & traces
GS-11-478	2011	21	629947	5247667	NAD27	11GWS394	7740643	Point Rosie	Au + 23; ICP majors & traces
GS-11-482	2011	21	633351	5248014	NAD27	11GWS396	7740645	Point Rosie	Au + 23; ICP majors & traces
GS-12-011	2012	21	661624	5257261	NAD27	12GWS400	7740691	Rattle Brook	Au + 23
GS-12-012	2012	21	661641	5257284	NAD27	12GWS400	7740692	Rattle Brook	Au + 23; AL 1G
GS-12-019	2012	21	660724	5257628	NAD27	12GWS407	7740694	Rattle Brook	Au + 23
GS-12-020	2012	21	660696	5257646	NAD27	12GWS407	7740695	Rattle Brook	Au + 23

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	Year	UTMZone	UTMEast	UTMNorth	Datum	StationID	LabNum	Prospect	Analysis
GS-12-026	2012	21	654942	5255820	NAD27	11GWS177	7740697	Forty Creek	Au + 23; AL 1G
GS-12-038	2012	21	584744	5195041	NAD27	12GWS415	7740699	Heritage	Au + 23; AL 1G
GS-12-043	2012	21	585101	5195644	NAD27	12GWS417	7740701	Heritage	Au + 23
GS-12-044	2012	21	585208	5195835	NAD27	12GWS418	7740702	Heritage	Au + 23
GS-12-047	2012	21	585208	5195835	NAD27	12GWS418	7740703	Heritage	Au + 23; AL 1G
GS-12-057	2012	21	652632	5243778	NAD27	12GWS428	7740704	Red Harbour River East	Au + 23
GS-12-060	2012	21	675643	5266281	NAD27	12GWS431	7740706	Cape Rodgers	Au + 23
GS-12-062	2012	21	586753	5193415	NAD27	12GWS434	7740708	Peter Brook	Au + 23
GS-12-065	2012	21	670747	5280202	NAD27	12GWS438	7740711	Terenceville East	Au + 23
GS-12-069	2012	21	670663	5279763	NAD27	12GWS441	7740714	Terenceville East	Au + 23
GS-12-070	2012	21	670663	5279763	NAD27	12GWS441	7740715	Terenceville East	Au + 23
GS-12-085	2012	21	660379	5257405	NAD27	12GWS457	7740717	Rattle Brook	Au + 23; AL 1G
GS-12-089	2012	21	692000	5285778	NAD27	12GWS464	7740719	Tower	Au + 23
GS-12-096	2012	21	658456	5246971	NAD27	12GWS469	7740722	Baine Harbour	Au + 23
GS-12-099	2012	21	678850	5282309	NAD27	12GWS470	7740723	Pork Hills South	Au + 23
GS-12-101	2012	21	670630	5288193	NAD27	12GWS472	7740724	Owls Lookout	Au + 23; AL 1G
GS-12-135	2012	21	632342	5249685	NAD27	12GWS491	7740727	Point Rosie	Au + 23
GS-12-137	2012	21	631974	5249336	NAD27	12GWS493	7740728	Point Rosie	Au + 23
GS-12-138	2012	21	631918	5249304	NAD27	12GWS494	7740729	Point Rosie	Au + 23; ICP majors & traces
GS-12-147	2012	21	662121	5256711	NAD27	12GWS503	7740731	Rattle Brook	Au + 23
GS-12-149	2012	21	662192	5256747	NAD27	12GWS504	7740852	Rattle Brook	Au + 23; AL 1G; ICP majors & traces
GS-12-155	2012	21	662192	5256747	NAD27	12GWS504	7740733	Rattle Brook	Au + 23
GS-12-159A	2012	21	662965	5256886	NAD27	12GWS509	7740734	Rattle Brook	Au + 23; AL 1G
GS-12-165	2012	21	584744	5195041	NAD27	12GWS415	7740735	Heritage	Au + 23; AL 1G
GS-12-166	2012	21	585101	5195644	NAD27	12GWS417	7740736	Heritage	Au + 23; AL 1G; ICP majors & traces
GS-12-167	2012	21	585208	5195835	NAD27	12GWS418	7740737	Heritage	Au + 23; AL 1G; ICP majors & traces
GS-12-168	2012	21	585017	5196123	NAD27	12GWS514	7740738	Heritage	Au + 23; AL 1G; ICP majors & traces
GS-12-169	2012	21	585017	5196123	NAD27	12GWS514	7740739	Heritage	Au + 23; AL 1G; ICP majors & traces
GS-12-171	2012	21	686447	5283825	NAD27	12GWS516	7740741	Strange	Au + 23
GS-12-178	2012	21	685896	5284508	NAD27	12GWS520	7740743	Strange	Au + 23; AL 1G; ICP majors & traces
GS-12-180	2012	21	686098	5284580	NAD27	12GWS522	7740744	Strange	Au + 23
GS-12-185	2012	21	686455	5284672	NAD27	12GWS526	7740745	Strange	Au + 23
GS-12-187	2012	21	686455	5284672	NAD27	12GWS526	7740746	Strange	Au + 23; AL 1G
GS-12-188	2012	21	686455	5284672	NAD27	12GWS526	7740747	Strange	Au + 23
GS-12-200	2012	21	694030	5332359	NAD27	12GWS537	7740754	W of Western Pd	Au + 23
GS-12-201	2012	21	694030	5332359	NAD27	12GWS537	7740755	W of Western Pd	Au + 23
GS-12-202	2012	21	694030	5332359	NAD27	12GWS537	7740756	W of Western Pd	Au + 23

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	Year	UTMZone	UTMEast	UTMNorth	Datum	StationID	LabNum	Prospect	Analysis
GS-12-203	2012	21	694030	5332359	NAD27	12GWS537	7740757	W of Western Pd	Au + 23
GS-12-206	2012	21	620730	5220027	NAD27	12GWS540	7740758	Beacon Hill	Au + 23
GS-12-207	2012	21	620735	5220024	NAD27	12GWS540	7740759	Beacon Hill	Au + 23
GS-12-210	2012	21	620710	5220143	NAD27	12GWS541	7740761	Beacon Hill	Au + 23; AL 1G
GS-12-211	2012	21	620743	5220006	NAD27	12GWS543	7740762	Beacon Hill	Au + 23; AL 1G
GS-12-214	2012	21	619812	5220198	NAD27	12GWS545	7740763	Beacon Hill	Au + 23
GS-12-221	2012	21	692510	5286126	NAD27	12GWS550	7740764	Tower	Au + 23
GS-12-233	2012	21	659289	5283507	NAD27	11GWS374	7740765	Goldhammer	Au + 23
GS-12-234	2012	21	659289	5283507	NAD27	11GWS374	7740766	Goldhammer	Au + 23
GS-12-235	2012	21	659289	5283507	NAD27	11GWS374	7740767	Goldhammer	Au + 23
GS-12-236	2012	21	658227	5283305	NAD27	12GWS563	7740768	Goldhammer	Au + 23
GS-12-237	2012	21	658244	5283278	NAD27	12GWS563	7740769	Goldhammer	Au + 23
GS-12-238	2012	21	658259	5283240	NAD27	12GWS563	7740771	Goldhammer	Au + 23
GS-12-242	2012	21	658075	5283539	NAD27	12GWS566	7740772	Goldhammer	Au + 23
GS-12-244	2012	21	658089	5283537	NAD27	12GWS566	7740773	Goldhammer	Au + 23; ICP majors & traces
GS-12-263	2012	21	649063	5252620	NAD27	12GWS588	7740776	Stewart	Au + 23
GS-12-269	2012	21	649257	5252079	NAD27	12GWS596	7740777	Stewart	Au + 23
GS-12-271	2012	21	649370	5252124	NAD27	12GWS597	7740779	Stewart	Au + 23
GS-12-280	2012	21	653632	5255020	NAD27	12GWS603	7740782	Stewart	Au + 23; AL 1G; ICP majors & traces
GS-12-286	2012	21	652879	5255565	NAD27	12GWS614	7740783	Stewart	Au + 23
GS-12-309	2012	21	654330	5255901	NAD27	12GWS637	7740784	Stewart	Au + 23
GS-12-318	2012	21	645330	5272242	NAD27	12GWS645	7740785	Long Harbour	Au + 23; AL 1G
GS-12-320	2012	21	645313	5272252	NAD27	12GWS646	7740786	Long Harbour	Au + 23; AL 1G
GS-12-322	2012	21	645295	5272273	NAD27	12GWS647	7740787	Long Harbour	Au + 23
GS-12-323	2012	21	645293	5272280	NAD27	12GWS647	7740788	Long Harbour	Au + 23
GS-12-324	2012	21	645292	5272284	NAD27	12GWS647	7740789	Long Harbour	Au + 23; AL 1G
GS-12-325	2012	21	645289	5272287	NAD27	12GWS647	7740791	Long Harbour	Au + 23
GS-12-340	2012	21	688752	5281149	NAD27	12GWS668	7740794	Heffern Pond	Au + 23
GS-12-341	2012	21	688738	5281096	NAD27	12GWS669	7740795	Heffern Pond	Au + 23
GS-12-343	2012	21	688739	5281079	NAD27	12GWS671	7740796	Heffern Pond	Au + 23
GS-12-346	2012	21	680986	5269208	NAD27	12GWS674	7740797	Cape Rodgers	Au + 23
GS-12-349	2012	21	681171	5269351	NAD27	12GWS677	7740798	Cape Rodgers	Au + 23
GS-12-354	2012	21	679076	5265343	NAD27	12GWS682	7740802	Cape Rodgers	Au + 23
GS-12-355	2012	21	636428	5248093	NAD27	12GWS683	7740803	Point Rosie	Au + 23
GS-12-356	2012	21	636426	5248088	NAD27	12GWS683	7740804	Point Rosie	Au + 23
GS-12-359	2012	21	636839	5248237	NAD27	12GWS684	7740805	Point Rosie	Au + 23
GS-12-360	2012	21	735103	5406576	NAD27	12GWS685	7740806	Hail Island	Au + 23; AL 1G

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	Year	UTMZone	UTMEast	UTMNorth	Datum	StationID	LabNum	Prospect	Analysis
GS-12-362	2012	21	735155	5406593	NAD27	12GWS686	7740807	Hail Island	Au + 23
GS-12-364	2012	21	735421	5407265	NAD27	12GWS687	7740809	Varket Channel	Au + 23
GS-12-365	2012	21	735419	5407264	NAD27	12GWS687	7740811	Varket Channel	Au + 23
GS-12-373	2012	21	740298	5415628	NAD27	12GWS691	7740814	Tumbler Island	Au + 23
GS-12-374	2012	21	737899	5411614	NAD27	12GWS692	7740815	Tumbler Island	Au + 23
GS-12-378	2012	21	730351	5400085	NAD27	12GWS695	7740816	Fair & False Bay	Au + 23
GS-12-382	2012	21	730080	5400689	NAD27	12GWS698	7740818	Fair & False Bay	Au + 23
GS-12-388	2012	21	634494	5224701	NAD27	12GWS702	7740855	Creston North	Au + 23; AL 1G; ICP majors & traces
GS-12-392	2012	21	654942	5255820	NAD27	11GWS177	7740857	Forty Creek	Au + 23; AL 1G; ICP majors & traces
GS-13-016	2013	21	634573	5224669	NAD27	12GWS704	7740859	Creston North	Au + 23; AL 1G; ICP majors & traces
GS-13-017	2013	21	634573	5224669	NAD27	12GWS704	7740861	Creston North	Au + 23; AL 1G; ICP majors & traces
GS-13-018	2013	21	709856	5348361	NAD27	N/A	7740862	Big Easy	Au + 23; AL 1G; ICP majors & traces

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SampleNum	Description	Rock Type	TSG AltMin
GS-11-029	White-mica pyrite alteration	Hydrothermal alteration	Pyrophyllite,Kaolinite
GS-11-030	White-mica pyrite alteration	Hydrothermal alteration	Pyrophyllite,Dickite
GS-11-031	Chlorite-pyrite altered quartz diorite	Hydrothermal alteration	NULL,NULL
GS-11-039	Cu-bearing silica vein	Hydrothermal alteration	Paragonite,Kaolinite
GS-11-075	White mica-pyrite altered crystal tuff	Hydrothermal alteration	Pyrophyllite,Muscovite
GS-11-078	Diaspore	Hydrothermal alteration	Diaspore,NULL
GS-11-086	Silica-alunite alteration	Hydrothermal alteration	Na Alunite,NULL
GS-11-089	Silicified crystal tuff	Hydrothermal alteration	Muscovite,Pyrophyllite
GS-11-184	Massive grey silica alteration	Hydrothermal alteration	K Alunite,NULL
GS-11-189	Silica altered lapilli tuff	Hydrothermal alteration	K Alunite,Pyrophyllite
GS-11-190	Reddish-pink alteration	Hydrothermal alteration	K Alunite,NULL
GS-11-191	Silica alteration crosscut by abundant rusty orange fractures	Hydrothermal alteration	K Alunite,NULL
GS-11-205	Silica-pyrite-alunite alteration	Hydrothermal alteration	K Alunite,NULL
GS-11-216	Massive white quartz vein	Quartz vein	Muscovite,NULL
GS-11-237	Crenulated white mica alteration	Hydrothermal alteration	Paragonite,Montmorillonite
GS-11-254	Pale green fine-grained silica alteration with minor Cu staining along foliation planes	Hydrothermal alteration	Muscovitic Illite,NULL
GS-11-261	Quartz-Chlorite vein with minor rusting	Hydrothermal alteration	Aspectral,NULL
GS-11-263	Massive pyrite-bearing quartz vein	Hydrothermal alteration	Aspectral,NULL
GS-11-264	Strongly fol'td white mica-pyrite alteration	Hydrothermal alteration	Paragonite,NULL
GS-11-276	Pale green silica-white mica altered granite	Hydrothermal alteration	Muscovite,NULL
GS-11-279	Cockade breccia	Hydrothermal alteration	Muscovitic Illite,NULL
GS-11-280	Mm-scale crustiform banding veining in granite	Hydrothermal alteration	Muscovite,NULL
GS-11-282	Crustiform banded chalcedonic silica with silverish metallic mineral	Hydrothermal alteration	N/A
GS-11-283	15cm wide banded vein	Hydrothermal alteration	Muscovite,NULL
GS-11-287	Red jasperodial fine-grained massive silica	Hydrothermal alteration	N/A
GS-11-290	Silica-pyrite alteration	Hydrothermal alteration	Pyrophyllite,Dickite
GS-11-291	Foliated white mica alteration	Hydrothermal alteration	Muscovitic Illite,NULL
GS-11-304	Fine-grained pale beige silica alteration	Hydrothermal alteration	Muscovite,NULL
GS-11-309	Pyrite-rich chalcedonic silica vein	Hydrothermal alteration	Muscovite,Magnesite
GS-11-310	Well-developed chalcedonic silica vein	Hydrothermal alteration	Muscovite,Ankerite
GS-11-311	Massive pale grey chalcedonic silica crosscut by rusty fractures	Hydrothermal alteration	Phengite,NULL
GS-11-312	Large rectilinear fragment of laminated silica within lapilli tuff/coarse-grained sandstone	Hydrothermal alteration	Phengite,NULL
GS-11-319	Quartz-specularite-alunite alteration	Hydrothermal alteration	Pyrophyllite,NULL
GS-11-322	Rusty-weathering white mica-pyrite alteration; possible sedimentary protolith	Hydrothermal alteration	Muscovite,NULL
GS-11-323	Silica-pyrite alteration	Hydrothermal alteration	Muscovite,NULL
GS-11-324	Aluninte-pyrite alteration	Hydrothermal alteration	Pyrophyllite,Dickite
GS-11-329	Silica-pyrite alteration	Hydrothermal alteration	Muscovite,Epidote
GS-11-339	Brecciated Fe-carbonate alteration	Hydrothermal alteration	Ankerite,NULL
GS-11-354	Chalcopyrite-galena-bearing white quartz vein	Hydrothermal alteration	Phengite,NULL
GS-11-364	Rusty zones within pervassive silica alteration	Hydrothermal alteration	Paragonite,NULL

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	Description	Rock Type	TSG AltMin
GS-11-373	Pyrite altered lapilli tuff	Hydrothermal alteration	Muscovite,NULL
GS-11-375	Silica-pyrite alteration	Hydrothermal alteration	Pyrophyllite,NULL
GS-11-378	Sheared silica-white mica alteration with lesser chlorite-pyrite alteration	Hydrothermal alteration	FeChlorite,Paragonite
GS-11-390	Silica-pyrite alteration	Hydrothermal alteration	Muscovite,Pyrophyllite
GS-11-395	Pale beige silica alteration	Hydrothermal alteration	Paragonite,NULL
GS-11-396	Hematite-rich breccia	Hydrothermal alteration	Muscovite,NULL
GS-11-399	Silica alteration	Hydrothermal alteration	Muscovite,NULL
GS-11-403	Possible chalcedonic silica in float	Hydrothermal alteration	Muscovite,NULL
GS-11-409	Pale green silica alteration	Hydrothermal alteration	Muscovite,NULL
GS-11-414	Comb textured quartz veins with lesser chalcedonic silica	Hydrothermal alteration	Muscovite,NULL
GS-11-415	Cockade breccia	Hydrothermal alteration	Phengite,Siderite
GS-11-418	Cockads breccia with late chalcedonic silica	Hydrothermal alteration	Muscovite,NULL
GS-11-419	Banded chalcedonic silica vein	Hydrothermal alteration	Muscovite,NULL
GS-11-420	Banded chalcedonic silica vein	Hydrothermal alteration	N/A
GS-11-421	Silica-rich breccia	Hydrothermal alteration	Muscovite,NULL
GS-11-444	Massive silica alteration	Hydrothermal alteration	Muscovite,NULL
GS-11-447	Fracture-hosted massive chalcedonic silica	Hydrothermal alteration	Phengite,NULL
GS-11-449	Banded chalcedonic silica	Hydrothermal alteration	Phengite,NULL
GS-11-451	Fracture-hosted massive chalcedonic silica	Hydrothermal alteration	Phengite,NULL
GS-11-452	Banded chalcedonic silica	Hydrothermal alteration	Phengite,NULL
GS-11-453	Fine-grain quartz-specularite-alunite alteration	Hydrothermal alteration	Na Alunite,NULL
GS-11-454	Rusty weathering alunite-rich alteration	Hydrothermal alteration	Na Alunite,NULL
GS-11-455	Quartz-alunite alteration; no pyrite	Hydrothermal alteration	Na Alunite,NULL
GS-11-456	Quartz-alunite alteration; no pyrite	Hydrothermal alteration	Na Alunite,NULL
GS-11-457	Vuggy silica zone; sample is highly oxidized	Hydrothermal alteration	NULL,NULL
GS-11-460	Silica-specularite alteration	Hydrothermal alteration	Na Alunite,NULL
GS-11-461	Quartz-alunite alteration; no pyrite	Hydrothermal alteration	K Alunite,NULL
GS-11-462	Alunit-rich alteration; rare vugs	Hydrothermal alteration	Na Alunite,Kaolinite
GS-11-466	Brecciated silica-alunite alteration	Hydrothermal alteration	Na Alunite,Phengite
GS-11-470	Grey silica alteration with fine-grain disseminated pyrite	Hydrothermal alteration	Jarosite,Epidote
GS-11-471	White mica-pyrite altered crystal tuff	Hydrothermal alteration	Phengite,NULL
GS-11-478	Silica-pyrite alteration	Hydrothermal alteration	Muscovite,FeMgChlorite
GS-11-482	Rusty weathering silica-pyrite alteration	Hydrothermal alteration	Muscovite,NULL
GS-12-011	Fine-grained beige silica interfingered with more massive wht silica	Hydrothermal alteration	Muscovite,NULL
GS-12-012	Grey chalcedonic looking silica	Hydrothermal alteration	Muscovite,NULL
GS-12-019	Foliated quartz-alunite alteration	Hydrothermal alteration	K Alunite,NULL
GS-12-020	Massive, grey silica alteration	Hydrothermal alteration	Muscovite,Na Alunite

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SampleNum	Description	Rock Type	TSG AltMin
GS-12-026	Cm-scale quartz veining	Quartz vein	Muscovite,NULL
GS-12-038	Pale cream chalcedonic silica alteration	Hydrothermal alteration	Phengite,NULL
GS-12-043	Chalccedonic silica vein	Hydrothermal alteration	FeChlorite,Phengite
GS-12-044	Chalcedonic silica breccia within intermediate volcanic rocks	Hydrothermal alteration	FeMgChlorite,Phengite
GS-12-047	Lattice bladed textrure witin chalcedonic silica vein along with trace pyrite	Hydrothermal alteration	FeMgChlorite,Phengite
GS-12-057	Silica altered cataclastic breccia with minor py	Hydrothermal alteration	Kaolinite ,Muscovite
GS-12-060	Vuggy silica altered felsic volcanic	Hydrothermal alteration	Phengitic Illite,NULL
GS-12-062	Hematite-rich breccia	Hydrothermal alteration	Phengite,NULL
GS-12-065	Breccia	Hydrothermal alteration	Phengite,Siderite
GS-12-069	Rusty weathering silica-pyrite alteration	Hydrothermal alteration	Phengite,NULL
GS-12-070	Siliceous, pyritic altered felsic volcanic	Hydrothermal alteration	Siderite,Phengite
GS-12-085	Pale beige silica alteration overprinted by a secondary purple silica	Hydrothermal alteration	Aspectral,NULL
GS-12-089	Pyrite-aluninte alteration in float containing up to 20% py	Hydrothermal alteration	Na Alunite,NULL
GS-12-096	Foliated, rusty weathering silica-rich alteration	Hydrothermal alteration	Phengite,Ankerite
GS-12-099	Crenulated white mica-chlorite-pyrite alteration within shear zone	Hydrothermal alteration	Phengite,Epidote
GS-12-101	Pyritic breccia	Hydrothermal alteration	Siderite,Muscovite
GS-12-135	Silica-chlorite-pyrite alteration cross-cut by network style brecciation	Hydrothermal alteration	Muscovite,FeMgChlorite
GS-12-137	Pyrite-rich silica alteration	Hydrothermal alteration	Muscovite,FeMgChlorite
GS-12-138	Massive silica alteration	Hydrothermal alteration	Muscovite,NULL
GS-12-147	Silica-chlorite-pyrite altered felsic volcanic	Hydrothermal alteration	Muscovite,Epidote
GS-12-149	Foliated silica-pyrite alteration	Hydrothermal alteration	NULL,NULL
GS-12-155	Hematite-white mica alteration	Hydrothermal alteration	Muscovite,NULL
GS-12-159A	Deformed quartz vein with moly	Hydrothermal alteration	Muscovite,FeMgChlorite
GS-12-165	Grey chalcedonic silica cross-cut white crystalline quartz	Hydrothermal alteration	Muscovite,Siderite
GS-12-166	Brecciated chalcedonic silica vein contain trace specularite	Hydrothermal alteration	Muscovite,NULL
GS-12-167	5-6cm wide vein comb texture quartz vein containing pyrite and specularite	Hydrothermal alteration	FeMgChlorite,Phengite
GS-12-168	Pyrite-bearing chalcedonic silica vein	Hydrothermal alteration	N/A
GS-12-169	Jasperoidal vein	Hydrothermal alteration	Aspectral,NULL
GS-12-171	Pale red alteration mineral in crystal tuff	Hydrothermal alteration	Phengite,Epidote
GS-12-178	Silica-pyrite altered crystal tuff	Hydrothermal alteration	Phengite,Ankerite
GS-12-180	Silica-pyrite alteration	Hydrothermal alteration	FeMgChlorite,Epidote
GS-12-185	Silica-specular hematite-white mica alteration	Hydrothermal alteration	Muscovite,NULL
GS-12-187	Silica-specular hematite-white mica alteration	Hydrothermal alteration	Muscovite,NULL
GS-12-188	Vuggy silica zone	Hydrothermal alteration	Muscovite,NULL
GS-12-200	Vuggy-textured quartz vein hosting minor copper staining	Quartz vein	Aspectral,NULL
GS-12-201	Vuggy-textured quartz vein hosting minor copper staining	Quartz vein	Muscovite,NULL
GS-12-202	Hematite-rich chalcedonic silica	Hydrothermal alteration	Phengite,NULL

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SampleNum	Description	Rock Type	TSG AltMin
GS-12-203	Hematite-rich, brecciated quartz vein	Hydrothermal alteration	Phengite,NULL
GS-12-206	Relic rosettes in silica alteration	Hydrothermal alteration	N/A
GS-12-207	Silica-pyrite alteration	Hydrothermal alteration	K Alunite,NULL
GS-12-210	Vuggy silica zone	Hydrothermal alteration	Kaolinite,K Alunite
GS-12-211	Silica-pyrite alteration	Hydrothermal alteration	Pyrophyllite,Muscovite
GS-12-214	Highly fractures, pyritic intermediate volcanic rocks	Hydrothermal alteration	FeMgChlorite,Muscovite
GS-12-221	White mica altered crystal tuff	Hydrothermal alteration	Phengite,NULL
GS-12-233	Chalcedonic silica with weakly developed crustifrom banding	Hydrothermal alteration	Phengite,NULL
GS-12-234	Chalcedonic silica with weakly developed crustifrom banding	Hydrothermal alteration	Phengite,NULL
GS-12-235	Chalcedonic silica with weakly developed crustifrom banding	Hydrothermal alteration	Phengite,NULL
GS-12-236	Silicified lapilli tuff	Hydrothermal alteration	NULL,NULL
GS-12-237	Silica-pyrite alteration	Hydrothermal alteration	Muscovite,NULL
GS-12-238	Massive silica alteration	Hydrothermal alteration	NULL,NULL
GS-12-242	Silica-pyrite alteration	Hydrothermal alteration	Muscovite,NULL
GS-12-244	Pinkish silica alteration	Hydrothermal alteration	Muscovite,NULL
GS-12-263	White mica altered crystal tuff	Hydrothermal alteration	Muscovite,NULL
GS-12-269	Chlorite-pyrite altered mafic volcanic	Hydrothermal alteration	Phengite,NULL
GS-12-271	White mica altered crystal tuff	Hydrothermal alteration	Epidote,NULL
GS-12-280	Quartz vein	Quartz vein	Aspectral,NULL
GS-12-286	Silica-white mica altered lapilli tuff	Hydrothermal alteration	Phengite,Ankerite
GS-12-309	Silica-white mica alteration	Hydrothermal alteration	Paragonite,NULL
GS-12-318	Colloform-curstiform banded chalcedonic silica vein	Hydrothermal alteration	Aspectral,NULL
GS-12-320	Colloform-curstiform banded chalcedonic silica vein	Hydrothermal alteration	Muscovite,Siderite
GS-12-322	Lattice-bladed texture within chalcedonic silica vein	Hydrothermal alteration	Kaolinite,NULL
GS-12-323	Cockade-style breccia	Hydrothermal alteration	Kaolinite,NULL
GS-12-324	Colloform-curstiform banded chalcedonic silica vein	Hydrothermal alteration	Siderite,Muscovite
GS-12-325	Colloform-curstiform banded chalcedonic silica vein	Hydrothermal alteration	Muscovite,NULL
GS-12-340	Sheared white mica-chlorite alteration	Hydrothermal alteration	Muscovite,FeMgChlorite
GS-12-341	Sheared white mica-chlorite alteration	Hydrothermal alteration	Muscovite,NULL
GS-12-343	Silica-pyrite alteration	Hydrothermal alteration	Muscovite,NULL
GS-12-346	White mica-pyrite altered crystal tuff	Hydrothermal alteration	Phengite,NULL
GS-12-349	Silica-pyrite alteration	Hydrothermal alteration	Muscovite,NULL
GS-12-354	White mica-pyrite altered crystal tuff	Hydrothermal alteration	Phengite,NULL
GS-12-355	Dark grey, silica-pyrite alteration	Hydrothermal alteration	Muscovite,NULL
GS-12-356	Silica-pyrite alteration	Hydrothermal alteration	Muscovite,NULL
GS-12-359	Silica-pyrite alteration	Hydrothermal alteration	Muscovite,NULL
GS-12-360	Silica-pyrite alteration	Hydrothermal alteration	Phengite,NULL

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	Description	Rock Type	TSG AltMin
GS-12-362	Foliated white mica alteration	Hydrothermal alteration	Phengite,NULL
GS-12-364	Whtie mica-pyrite alteration	Hydrothermal alteration	Phengite,NULL
GS-12-365	Brecciated silica alteration	Hydrothermal alteration	Phengite,NULL
GS-12-373	Massive carbonate-rich vein	Hydrothermal alteration	Phengite,NULL
GS-12-374	Whtie mica-pyrite alteration	Hydrothermal alteration	Paragonite,Epidote
GS-12-378	Massive silica alteration	Hydrothermal alteration	FeMgChlorite,NULL
GS-12-382	Whtie mica-pyrite alteration	Hydrothermal alteration	Muscovite,Gypsum
GS-12-388	Altered fine-grained felsic intrusive	Hydrothermal alteration	N/A
GS-12-392	Mineralized Forty Creek boulder	Quartz vein	N/A
GS-13-016	Pale grey, carbonate brecciated volcaniclastic rock	Hydrothermal alteration	N/A
GS-13-017	Fault zone hosting anomalous Mo	Hydrothermal alteration	N/A
GS-13-018	Crustiform banded chalcedonic silica vein	Hydrothermal alteration	N/A

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum		SiO2	Al2O3	Fe2O3(T)	Fe2O3	FeO	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	LOI
	Units	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%
	Detection Limit	0.01	0.01	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.001	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	Grav
GS-11-029		82.26	13.57	0.22	-99	-99	-0.001	-0.01	0.06	0.01	0.03	0.385	0.061	2.95
GS-11-030		78.27	15.05	0.88	0.71	0.15	-0.001	-0.01	-0.01	0.04	0.20	0.443	0.033	3.59
GS-11-031		74.17	11.40	7.08	1.52	5.00	0.032	0.30	0.04	0.10	1.06	0.322	0.083	3.75
GS-11-039		78.54	12.84	1.63	0.36	1.15	-0.001	0.10	-0.01	0.13	3.40	0.337	0.019	2.57
GS-11-075		75.52	15.58	3.02	2.06	0.87	0.002	0.07	0.01	0.18	1.71	0.395	0.079	3.92
GS-11-078		21.17	62.22	4.71	-99	-99	0.003	0.07	0.04	0.52	2.29	0.453	0.323	8.02
GS-11-086		58.81	16.92	0.22	0.05	0.15	-0.001	-0.01	0.04	2.13	1.25	0.473	0.166	19.57
GS-11-089		88.48	4.59	2.73	1.08	1.49	0.003	0.02	-0.01	0.07	0.79	0.281	0.019	1.87
GS-11-184		64.08	13.88	0.59	0.40	0.17	-0.001	-0.01	0.09	0.82	2.36	0.768	0.169	15.93
GS-11-189		81.81	6.17	0.37	0.13	0.22	-0.001	-0.01	0.01	0.23	1.30	0.241	0.037	8.13
GS-11-190		69.70	12.07	0.46	0.30	0.15	-0.001	-0.01	-0.01	0.34	2.59	0.151	0.048	14.18
GS-11-191		68.40	12.15	0.99	0.76	0.20	-0.001	-0.01	-0.01	0.28	2.32	0.164	0.040	14.18
GS-11-205		62.20	12.90	2.88	1.08	1.62	0.001	-0.01	0.07	0.78	2.44	0.582	0.135	16.37
GS-11-216		95.56	1.47	0.37	-99	-99	0.015	0.21	0.07	-0.01	0.32	0.030	0.040	0.55
GS-11-237		81.49	12.53	0.55	0.53	0.02	0.002	0.05	0.02	0.59	2.53	0.164	0.007	1.92
GS-11-254		76.67	12.97	1.05	0.52	0.47	0.172	0.22	1.26	0.06	4.36	0.050	-0.001	3.18
GS-11-261		97.62	0.79	0.45	0.30	0.14	0.045	0.03	0.41	-0.01	0.11	0.029	0.006	0.80
GS-11-263		90.70	3.77	1.54	-99	-99	0.011	0.16	0.29	-0.01	0.58	0.329	0.049	1.08
GS-11-264		74.20	14.81	2.94	2.64	0.28	0.005	0.21	0.02	0.47	3.47	0.315	0.022	2.94
GS-11-276		83.48	9.46	1.27	0.70	0.51	0.021	0.39	0.04	-0.01	2.85	0.087	0.008	1.74
GS-11-279		91.32	3.96	0.86	0.10	0.68	0.012	0.16	0.11	-0.01	1.06	0.100	0.024	1.04
GS-11-280		90.13	4.29	1.07	-99	-99	0.018	0.19	0.29	0.46	1.24	0.112	0.029	1.04
GS-11-282		88.76	5.06	1.07	-99	-99	0.016	0.21	0.33	-0.01	1.43	0.123	0.029	1.54
GS-11-283		95.81	1.54	0.40	0.07	0.30	0.004	0.02	-0.01	-0.01	0.34	0.010	-0.001	0.46
GS-11-287		76.00	12.81	1.22	0.84	0.35	0.064	0.16	0.44	2.61	5.49	0.088	0.013	0.82
GS-11-290		93.36	2.57	0.60	0.07	0.48	0.029	0.05	0.37	-0.01	0.05	0.368	0.027	1.29
GS-11-291		75.93	13.14	2.10	0.69	1.27	0.018	0.62	0.09	-0.01	4.08	0.374	0.047	3.20
GS-11-304		76.54	13.23	1.12	-99	-99	0.011	0.21	0.19	4.16	1.88	0.246	0.026	1.51
GS-11-309		80.76	6.39	3.65	0.23	3.08	0.022	0.31	0.23	-0.01	4.49	0.350	0.083	2.20
GS-11-310		95.21	1.41	0.76	0.61	0.14	0.004	0.05	0.04	-0.01	0.60	0.062	0.005	0.46
GS-11-311		95.17	2.25	0.18	0.08	0.09	0.003	0.07	0.02	-0.01	0.69	0.216	0.010	0.52
GS-11-312		83.83	6.66	1.50	-99	-99	0.003	0.08	0.06	-0.01	5.16	0.383	0.043	1.29
GS-11-319		78.74	8.16	3.94	1.37	2.31	0.041	0.28	0.94	0.41	2.70	0.591	0.079	2.45
GS-11-322		73.90	13.59	2.67	0.88	1.62	0.055	0.29	0.07	3.46	2.18	0.442	0.057	1.92
GS-11-323		79.07	11.01	1.84	0.30	1.39	0.016	0.28	0.03	1.94	2.02	0.325	0.006	1.98
GS-11-324		81.44	5.64	9.41	9.36	0.05	0.006	-0.01	0.03	-0.01	0.02	0.703	0.129	1.69
GS-11-329		69.43	2.90	23.83	23.37	0.42	0.016	-0.01	0.06	-0.01	0.01	0.740	0.201	1.13
GS-11-339		61.77	9.95	4.36	0.43	3.54	0.098	1.85	6.06	5.45	0.18	0.514	0.181	8.77
GS-11-354		90.46	2.91	0.69	0.16	0.48	0.023	0.21	1.68	0.10	0.81	0.073	0.015	1.64
GS-11-364		96.59	1.97	0.76	-99	-99	-0.001	-0.01	-0.01	-0.01	0.49	0.204	0.003	0.78

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum		SiO2	Al2O3	Fe2O3(T)	Fe2O3	FeO	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	LOI
	Units	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%
	Detection Limit	0.01	0.01	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.001	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	Grav
GS-11-373		57.00	15.93	11.47	6.40	4.56	0.040	1.36	0.27	-0.01	4.21	1.737	0.265	7.09
GS-11-375		88.61	7.88	1.19	0.07	1.01	-0.001	-0.01	-0.01	-0.01	0.10	0.583	0.047	2.21
GS-11-378		85.47	7.12	2.90	-99	-99	0.008	0.03	-0.01	-0.01	1.40	0.164	0.001	1.46
GS-11-390		83.32	9.56	1.53	-99	-99	0.001	-0.01	-0.01	-0.01	1.37	0.175	0.002	2.38
GS-11-395		88.51	7.04	1.63	0.13	1.35	0.004	-0.01	-0.01	-0.01	1.84	0.143	0.003	1.59
GS-11-396		79.19	4.32	13.37	13.04	0.30	0.012	-0.01	-0.01	-0.01	1.33	0.185	0.017	0.93
GS-11-399		79.51	11.71	1.94	-99	-99	0.016	0.06	0.01	0.88	4.07	0.188	0.002	1.75
GS-11-403		85.59	7.68	1.39	0.92	0.42	0.011	0.05	-0.01	-0.01	2.52	0.164	0.007	1.34
GS-11-409		79.01	11.25	2.25	1.37	0.79	0.011	0.04	-0.01	-0.01	3.86	0.184	-0.001	1.92
GS-11-414		95.52	1.55	0.39	0.29	0.08	0.012	0.08	0.05	-0.01	0.66	0.036	-0.001	0.51
GS-11-415		84.32	6.49	2.28	1.72	0.50	0.094	0.26	0.09	-0.01	4.71	0.205	0.011	0.61
GS-11-418		92.39	2.72	1.17	1.06	0.10	0.008	0.06	0.03	-0.01	1.12	0.050	0.003	0.76
GS-11-419		94.19	2.43	0.75	0.60	0.14	0.007	0.05	0.03	-0.01	0.82	0.035	0.002	0.64
GS-11-420		94.99	1.93	0.46	0.24	0.20	0.004	0.03	0.03	-0.01	0.65	0.032	-0.001	0.70
GS-11-421		89.82	3.47	1.76	1.02	0.66	0.026	0.09	0.14	-0.01	2.19	0.244	0.058	0.63
GS-11-444		79.72	10.86	2.21	0.74	1.32	0.023	-0.01	-0.01	-0.01	5.14	0.180	-0.001	1.96
GS-11-447		85.43	7.39	1.19	0.89	0.27	0.012	0.23	0.01	-0.01	2.95	0.186	0.013	1.41
GS-11-449		82.90	8.03	1.07	0.67	0.36	0.011	0.17	0.02	-0.01	4.82	0.179	0.012	1.06
GS-11-451		90.05	5.57	1.54	1.48	0.05	0.014	0.11	0.01	-0.01	2.43	0.111	0.028	1.06
GS-11-452		82.80	7.96	1.21	0.79	0.38	0.010	0.16	0.02	-0.01	4.15	0.187	0.016	1.12
GS-11-453		77.95	6.62	4.72	4.18	0.49	0.003	-0.01	0.03	0.56	0.40	0.355	0.105	7.39
GS-11-454		74.03	17.50	2.03	1.31	0.65	0.001	-0.01	0.04	-0.01	0.14	0.489	0.114	4.30
GS-11-455		62.76	13.54	0.37	0.26	0.10	0.001	-0.01	0.06	0.90	2.23	0.522	0.159	16.45
GS-11-456		56.87	14.57	2.07	2.04	0.03	0.001	-0.01	0.05	1.23	2.08	0.589	0.162	17.85
GS-11-457		87.69	2.15	4.01	3.76	0.23	0.003	-0.01	0.02	0.04	0.17	0.424	0.054	4.40
GS-11-460		64.67	11.18	3.90	2.09	1.63	0.003	0.01	0.05	1.23	1.22	0.756	0.122	15.66
GS-11-461		62.57	12.91	3.85	3.80	0.05	0.003	-0.01	0.10	0.79	2.33	0.522	0.217	15.82
GS-11-462		76.25	11.14	0.30	0.15	0.14	-0.001	0.01	-0.01	0.77	1.33	0.259	0.034	9.90
GS-11-466		89.03	2.90	2.17	1.82	0.32	0.002	-0.01	0.02	0.05	0.21	0.489	0.066	3.55
GS-11-470		77.72	9.54	2.85	-99	-99	0.025	-0.01	1.05	3.12	2.55	0.196	-0.001	1.46
GS-11-471		72.03	15.73	1.54	1.39	0.14	0.029	0.75	0.27	2.86	3.62	0.423	0.060	2.18
GS-11-478		66.68	13.43	5.99	2.28	3.34	0.140	2.04	1.26	2.82	1.95	0.810	0.232	4.22
GS-11-482		76.93	13.12	1.28	0.69	0.54	0.027	0.42	0.05	2.86	2.60	0.305	0.041	1.75
GS-12-011		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-012		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-019		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-020		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum		SiO2	Al2O3	Fe2O3(T)	Fe2O3	FeO	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	LOI
	Units	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%
	Detection Limit	0.01	0.01	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.001	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	Grav
GS-12-026		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-038		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-043		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-044		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-047		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-057		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-060		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-062		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-065		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-069		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-070		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-085		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-089		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-096		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-099		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-101		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-135		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-137		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-138		73.26	14.45	2.68	0.46	2.00	0.009	0.40	0.16	0.34	3.38	0.539	0.050	3.40
GS-12-147		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-149		89.53	0.63	5.52	0.65	4.39	0.005	0.02	0.03	0.02	0.10	1.092	0.004	2.97
GS-12-155		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-159A		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-165		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-166		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-167		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-168		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-169		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-171		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-178		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-180		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-185		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-187		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-188		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-200		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-201		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-202		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum		SiO2	Al2O3	Fe2O3(T)	Fe2O3	FeO	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	LOI
	Units	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%
	Detection Limit	0.01	0.01	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.001	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	Grav
GS-12-203		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-206		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-207		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-210		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-211		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-214		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-221		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-233		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-234		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-235		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-236		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-237		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-238		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-242		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-244		97.73	0.45	0.09	-99	-99	-0.001	-0.01	0.02	-0.01	0.10	0.163	0.006	0.36
GS-12-263		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-269		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-271		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-280		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-286		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-309		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-318		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-320		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-322		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-323		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-324		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-325		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-340		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-341		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-343		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-346		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-349		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-354		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-355		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-356		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-359		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-360		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum		SiO2	Al2O3	Fe2O3(T)	Fe2O3	FeO	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	LOI
	Units	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%
	Detection Limit	0.01	0.01	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.001	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	Grav
GS-12-362		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-364		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-365		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-373		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-374		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-378		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-382		-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99	-99
GS-12-388		70.77	14.00	2.30	-99	-99	0.071	0.32	0.53	3.14	7.39	0.533	0.089	1.19
GS-12-392		97.80	1.06	0.28	-99	-99	0.004	0.06	0.04	0.02	0.23	0.015	0.004	0.46
GS-13-016		67.26	10.53	3.30	-99	-99	0.184	0.97	6.15	3.82	2.02	0.507	0.147	5.36
GS-13-017		64.58	14.15	6.04	1.36	4.21	0.269	1.79	0.47	2.58	4.98	0.894	0.267	3.42
GS-13-018		96.43	1.55	0.16	-99	-99	0.003	0.07	0.03	0.03	0.73	0.015	0.004	0.35

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	Total	Au	Ag	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs
	wt.%	ppb	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
		5	0.2	2	1	0.1	0.1	0.01	0.5	0.1	1	1	0.05
		AL INAA	AL INAA	AL INAA	AL INAA	Gs Tr ES	AL ICP-MS	AL ICP-ES	AL ICP-ES	Gs Tr MS	Gs Tr ES	Gs Tr ES	AL INAA
GS-11-029	99.54	37	-0.2	3	6	0.2	-0.1	0.06	-0.5	11.0	-1	1	-0.05
GS-11-030	98.49	46	-0.2	5	16	0.4	0.7	-0.01	-0.5	38.7	2	2	0.11
GS-11-031	98.33	1060	0.4	7	16	1.0	1.1	0.04	-0.5	48.5	12	2	0.16
GS-11-039	99.59	-5	-0.2	3	26	0.7	0.7	-0.01	-0.5	29.6	3	2	0.10
GS-11-075	100.49	10	-0.2	3	22	0.4	2.3	-0.01	-0.5	61.0	2	2	0.13
GS-11-078	99.82	14	-0.2	10	327	0.6	1.2	-0.01	-0.5	165.6	-1	6	0.75
GS-11-086	99.56	30	-0.2	10	28	0.1	0.8	-0.01	-0.5	85.3	-1	1	-0.05
GS-11-089	98.86	34	-0.2	4	38	0.1	2.2	-0.01	-0.5	28.0	1	2	0.15
GS-11-184	98.69	-5	-0.2	-2	40	0.2	-0.1	0.02	-0.5	45.2	-1	2	-0.05
GS-11-189	98.28	-5	-0.2	-2	54	-0.1	0.2	-0.01	-0.5	20.3	-1	3	-0.05
GS-11-190	99.51	-5	-0.2	-2	28	-0.1	-0.1	-0.01	-0.5	38.6	-1	1	-0.05
GS-11-191	98.53	-5	-0.2	3	40	-0.1	-0.1	-0.01	-0.5	63.3	-1	2	-0.05
GS-11-205	98.33	-5	-0.2	4	17	-0.1	0.2	0.01	-0.5	55.9	2	2	-0.05
GS-11-216	98.61	-5	-0.2	3	23	0.2	0.1	0.08	1.9	1.3	-1	-1	0.09
GS-11-237	99.87	-5	-0.2	3	72	0.8	-0.1	-0.01	-0.5	23.7	1	1	0.48
GS-11-254	99.99	-5	4.3	7	34	5.3	0.2	1.11	-0.5	36.1	-1	3	1.23
GS-11-261	100.29	-5	-0.2	5	11	-0.1	-0.1	0.37	-0.5	5.6	-1	2	0.11
GS-11-263	98.4	-5	-0.2	5	38	0.3	-0.1	0.15	-0.5	10.2	3	5	0.34
GS-11-264	99.4	-5	-0.2	25	127	1.8	0.2	-0.01	-0.5	5.6	3	4	0.81
GS-11-276	99.12	-5	3.0	4	38	1.9	-0.1	0.04	-0.5	41.0	2	1	2.07
GS-11-279	98.39	544	36	6	33	0.9	-0.1	0.09	0.6	12.7	1	2	0.89
GS-11-280	98.87	17	1.3	6	25	0.7	-0.1	0.25	-0.5	20.9	2	1	0.79
GS-11-282	98.33	127	15	18	29	1.1	-0.1	0.29	-0.5	18.9	3	2	1.45
GS-11-283	98.33	50	3.9	18	12	0.4	-0.1	-0.01	-0.5	5.0	-1	2	0.27
GS-11-287	99.71	-5	-0.2	7	67	1.6	-0.1	0.27	-0.5	29.5	1	2	0.66
GS-11-290	98.42	20	0.7	10	416	0.4	0.4	0.33	0.6	32.0	2	9	0.06
GS-11-291	99.42	48	1.0	8	12	1.7	0.2	0.07	2.6	44.1	5	-1	0.44
GS-11-304	99.12	-5	0.3	-2	44	1.4	-0.1	0.04	-0.5	35.3	2	1	0.24
GS-11-309	98.2	114	1.7	286	9	1.2	-0.1	0.18	-0.5	12.8	6	9	0.19
GS-11-310	98.35	401	3.0	95	7	1.2	-0.1	0.03	-0.5	1.7	-1	5	0.08
GS-11-311	98.78	-5	-0.2	18	7	1.2	-0.1	0.02	-0.5	3.2	2	9	0.11
GS-11-312	98.71	47	1.8	67	21	1.4	-0.1	0.05	-0.5	20.9	9	11	0.23
GS-11-319	98.34	148	1.7	244	15	1.8	-0.1	0.45	-0.5	22.4	10	58	0.73
GS-11-322	98.65	-5	-0.2	15	67	2.0	-0.1	0.03	-0.5	21.2	3	2	0.41
GS-11-323	98.53	-5	-0.2	3	26	1.8	-0.1	-0.01	-0.5	44.6	2	1	0.36
GS-11-324	98.79	30	1.0	6	24	0.2	15.9	-0.01	-0.5	49.7	-1	9	-0.05
GS-11-329	98.03	169	5.1	20	110	0.2	27.7	-0.01	0.8	63.1	-1	20	-0.05
GS-11-339	99.19	12	-0.2	-2	56	0.3	-0.1	4.42	-0.5	35.0	10	4	0.08
GS-11-354	98.6	49	1.5	-2	57	0.3	1.0	1.39	-0.5	7.3	2	3	0.38
GS-11-364	100.61	16	0.4	86	11	0.6	0.5	-0.01	-0.5	12.1	2	3	0.18

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	Total	Au	Ag	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs
	wt.%	ppb	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
		5	0.2	2	1	0.1	0.1	0.01	0.5	0.1	1	1	0.05
		AL INAA	AL INAA	AL INAA	AL INAA	Gs Tr ES	AL ICP-MS	AL ICP-ES	AL ICP-ES	Gs Tr MS	Gs Tr ES	Gs Tr ES	AL INAA
GS-11-373	99.31	-5	-0.2	17	7	5.0	0.2	0.21	0.7	33.6	45	177	1.21
GS-11-375	100.38	33	0.2	143	10	0.9	1.0	-0.01	-0.5	127.0	3	8	0.24
GS-11-378	98.41	-5	-0.2	9	5	0.9	-0.1	-0.01	-0.5	29.3	1	2	0.50
GS-11-390	98.22	-5	-0.2	63	7	1.2	-0.1	0.01	-0.5	33.0	2	1	0.40
GS-11-395	100.6	-5	-0.2	41	4	0.6	0.2	-0.01	-0.5	35.2	1	1	0.67
GS-11-396	99.1	-5	0.2	100	8	1.7	0.4	-0.01	0.9	190.3	1	1	1.32
GS-11-399	100.13	-5	-0.2	32	6	3.6	-0.1	-0.01	-0.5	65.1	2	1	0.45
GS-11-403	98.49	-5	-0.2	14	6	1.9	0.5	-0.01	-0.5	71.3	1	3	0.51
GS-11-409	98.27	-5	-0.2	12	6	2.5	-0.1	-0.01	-0.5	41.0	2	-1	1.13
GS-11-414	98.56	-5	0.5	-2	8	2.4	11.0	0.02	-0.5	11.7	-1	3	0.42
GS-11-415	98.89	-5	1.1	-2	17	2.8	15.7	0.06	-0.5	68.3	3	20	0.59
GS-11-418	98.04	-5	0.9	5	27	2.0	18.2	0.01	-0.5	11.0	-1	2	0.88
GS-11-419	98.67	-5	0.6	4	20	1.8	11.7	-0.01	-0.5	8.7	-1	2	0.93
GS-11-420	98.57	-5	-0.2	2	8	2.3	3.6	0.01	-0.5	4.0	-1	2	1.02
GS-11-421	98.25	-5	0.3	3	32	1.1	8.8	0.12	-0.5	21.3	3	3	1.03
GS-11-444	99.92	28	-0.2	69	8	1.9	0.1	-0.01	0.7	28.6	2	1	0.54
GS-11-447	98.57	-5	-0.2	19	20	3.0	0.2	-0.01	-0.5	59.4	2	2	0.92
GS-11-449	98.09	10	-0.2	25	22	2.3	0.3	-0.01	-0.5	52.4	2	2	0.76
GS-11-451	100.72	27	-0.2	44	16	2.3	0.2	-0.01	-0.5	166.2	1	2	1.01
GS-11-452	97.32	113	-0.2	21	18	2.8	0.3	-0.01	-0.5	123.2	2	2	0.68
GS-11-453	98.14	45	0.2	5	45	-0.1	1.3	-0.01	-0.5	47.3	-1	2	-0.05
GS-11-454	98.4	171	-0.2	5	342	0.1	3.7	-0.01	-0.5	67.3	-1	2	-0.05
GS-11-455	96.98	632	0.2	18	54	-0.1	5.3	0.01	-0.5	51.4	-1	6	-0.05
GS-11-456	95.49	143	-0.2	5	30	-0.1	2.1	0.01	-0.5	59.6	-1	5	-0.05
GS-11-457	98.87	31000	110	2830	36	-0.1	476	-0.01	-0.5	5.8	-1	4	-0.05
GS-11-460	98.81	179	0.6	10	13	-0.1	4.8	-0.01	-0.5	32.0	9	37	-0.05
GS-11-461	99.12	6	0.3	6	43	-0.1	0.3	-0.01	-0.5	60.1	-1	4	0.08
GS-11-462	99.99	1040	0.7	9	31	0.1	17.5	0.02	-0.5	26.0	-1	6	-0.05
GS-11-466	98.49	54	-0.2	11	88	-0.1	11.3	-0.01	-0.5	18.4	-1	2	-0.05
GS-11-470	98.5	-5	0.3	2	18	5.0	0.4	0.54	3.0	138.4	2	-1	0.13
GS-11-471	99.49	-5	-0.2	2	93	1.9	0.3	0.07	-0.5	18.2	6	2	0.37
GS-11-478	99.58	-5	-0.2	10	11	1.1	2.0	0.71	0.6	36.0	17	8	1.95
GS-11-482	99.38	-5	-0.2	2	96	1.7	0.2	0.02	-0.5	29.0	3	-1	0.26
GS-12-011	-99	-5	-0.2	-2	25	-0.1	0.6	-0.01	-0.5	-99	-99	-99	0.09
GS-12-012	-99	-5	-0.2	2	12	-0.1	0.2	-0.01	-0.5	-99	-99	-99	-0.05
GS-12-019	-99	-5	-0.2	4	13	-0.1	0.5	-0.01	-0.5	-99	-99	-99	-0.05
GS-12-020	-99	-5	-0.2	-2	10	-0.1	0.1	-0.01	-0.5	-99	-99	-99	-0.05

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	Total	Au	Ag	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs
	wt.%	ppb	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
		5	0.2	2	1	0.1	0.1	0.01	0.5	0.1	1	1	0.05
		AL INAA	AL INAA	AL INAA	AL INAA	Gs Tr ES	AL ICP-MS	AL ICP-ES	AL ICP-ES	Gs Tr MS	Gs Tr ES	Gs Tr ES	AL INAA
GS-12-026	-99	20	0.9	-2	28	0.3	0.2	0.11	-0.5	-99	-99	-99	0.14
GS-12-038	-99	86	1.3	33	5	0.9	-0.1	0.02	-0.5	-99	-99	-99	0.26
GS-12-043	-99	253	3.6	7	9	0.2	-0.1	-0.01	-0.5	-99	-99	-99	0.15
GS-12-044	-99	41	4.6	45	16	0.4	-0.1	0.06	-0.5	-99	-99	-99	0.31
GS-12-047	-99	254	43	24	10	1.2	-0.1	0.04	-0.5	-99	-99	-99	0.26
GS-12-057	-99	-5	0.2	16	37	1.4	-0.1	2.35	-0.5	-99	-99	-99	0.22
GS-12-060	-99	-5	-0.2	-2	9	0.9	0.1	1.81	-0.5	-99	-99	-99	1.13
GS-12-062	-99	-5	-0.2	8	105	1.7	0.1	3.05	-0.5	-99	-99	-99	2.56
GS-12-065	-99	-5	-0.2	3	30	1.4	0.1	0.36	-0.5	-99	-99	-99	0.19
GS-12-069	-99	-5	0.5	4	26	1.9	0.2	-0.01	-0.5	-99	-99	-99	0.22
GS-12-070	-99	17	0.8	10	80	1.4	0.3	0.05	-0.5	-99	-99	-99	0.30
GS-12-085	-99	-5	-0.2	-2	139	-0.1	-0.1	-0.01	-0.5	-99	-99	-99	-0.05
GS-12-089	-99	21	0.5	3	31	0.2	1.3	-0.01	-0.5	-99	-99	-99	-0.05
GS-12-096	-99	-5	-0.2	-2	44	1.3	0.6	1.15	1.3	-99	-99	-99	0.12
GS-12-099	-99	-5	0.2	10	45	4.7	1.6	1.21	-0.5	-99	-99	-99	0.92
GS-12-101	-99	-5	-0.2	4	21	2.7	0.2	0.05	-0.5	-99	-99	-99	0.19
GS-12-135	-99	-5	0.3	-2	36	1.1	0.4	1.01	-0.5	-99	-99	-99	0.78
GS-12-137	-99	-5	0.4	-2	9	1.1	0.8	0.70	-0.5	-99	-99	-99	1.41
GS-12-138	98.68	-5	-0.2	-2	33	1.1	0.6	0.09	-0.5	46.7	-99	-1	0.88
GS-12-147	-99	-5	-0.2	4	19	1.2	0.7	1.06	0.7	-99	-99	-99	0.99
GS-12-149	99.93	-5	0.3	16	-1	-0.1	1.8	0.01	-0.5	2.4	-99	3	-0.05
GS-12-155	-99	-5	-0.2	-2	48	0.7	-0.1	0.85	-0.5	-99	-99	-99	3.69
GS-12-159A	-99	11	0.2	8	41	0.9	1.0	0.04	-0.5	-99	-99	-99	0.45
GS-12-165	-99	128	4.7	186	5	0.4	0.6	-0.01	-0.5	-99	-99	-99	0.28
GS-12-166	-99	120	3.4	16	-1	0.4	0.3	0.05	-0.5	-99	-99	-99	0.57
GS-12-167	-99	1110	26	24	-1	1.9	-0.1	0.36	-0.5	-99	-99	-99	0.61
GS-12-168	-99	262	3.7	62	-1	1.0	0.1	0.16	-0.5	-99	-99	-99	3.34
GS-12-169	-99	21	0.3	15	-1	0.8	-0.1	0.06	-0.5	-99	-99	-99	0.40
GS-12-171	-99	-5	-0.2	8	-1	1.8	-0.1	1.04	-0.5	-99	-99	-99	0.17
GS-12-178	-99	-5	-0.2	33	-1	1.2	1.0	0.88	-0.5	-99	-99	-99	0.17
GS-12-180	-99	-5	-0.2	19	13	1.0	3.9	0.56	-0.5	-99	-99	-99	0.08
GS-12-185	-99	325	0.5	39	5	-0.1	19.0	-0.01	-0.5	-99	-99	-99	-0.05
GS-12-187	-99	39	0.3	8	10	-0.1	4.5	-0.01	-0.5	-99	-99	-99	-0.05
GS-12-188	-99	136	-0.2	4	10	-0.1	13.6	-0.01	-0.5	-99	-99	-99	-0.05
GS-12-200	-99	-5	3.4	-2	5	-0.1	8.6	2.82	-0.5	-99	-99	-99	-0.05
GS-12-201	-99	-5	-0.2	-2	3	-0.1	0.4	0.22	-0.5	-99	-99	-99	-0.05
GS-12-202	-99	-5	-0.2	-2	30	0.3	0.5	0.02	-0.5	-99	-99	-99	0.25

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	Total	Au	Ag	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs
	wt.%	ppb	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
		5	0.2	2	1	0.1	0.1	0.01	0.5	0.1	1	1	0.05
		AL INAA	AL INAA	AL INAA	AL INAA	Gs Tr ES	AL ICP-MS	AL ICP-ES	AL ICP-ES	Gs Tr MS	Gs Tr ES	Gs Tr ES	AL INAA
GS-12-203	-99	-5	-0.2	-2	14	0.1	0.1	-0.01	-0.5	-99	-99	-99	0.20
GS-12-206	-99	-5	-0.2	35	411	-0.1	1.7	-0.01	-0.5	-99	-99	-99	-0.05
GS-12-207	-99	-5	-0.2	12	90	0.1	1.9	-0.01	-0.5	-99	-99	-99	-0.05
GS-12-210	-99	-5	-0.2	9	72	0.1	12.9	-0.01	-0.5	-99	-99	-99	-0.05
GS-12-211	-99	-5	-0.2	13	11	0.3	2.7	-0.01	-0.5	-99	-99	-99	-0.05
GS-12-214	-99	-5	0.4	20	29	1.4	1.0	0.17	-0.5	-99	-99	-99	2.65
GS-12-221	-99	-5	-0.2	5	50	1.5	-0.1	0.51	-0.5	-99	-99	-99	0.26
GS-12-233	-99	-5	-0.2	14	15	3.2	0.4	-0.01	-0.5	-99	-99	-99	0.71
GS-12-234	-99	-5	-0.2	27	15	2.7	0.2	-0.01	-0.5	-99	-99	-99	0.47
GS-12-235	-99	26	-0.2	22	16	2.6	0.2	-0.01	-0.5	-99	-99	-99	0.58
GS-12-236	-99	-5	-0.2	7	8	0.3	-0.1	0.10	-0.5	-99	-99	-99	0.05
GS-12-237	-99	-5	0.2	38	8	2.1	-0.1	-0.01	-0.5	-99	-99	-99	0.59
GS-12-238	-99	-5	-0.2	35	5	0.8	0.3	-0.01	-0.5	-99	-99	-99	0.08
GS-12-242	-99	-5	1.3	53	6	0.7	0.4	0.02	0.9	-99	-99	-99	0.12
GS-12-244	98.93	-5	0.4	-2	4	0.4	0.1	-0.01	-0.5	9.7	-99	5	-0.05
GS-12-263	-99	-5	-0.2	-2	36	1.9	0.4	0.04	-0.5	-99	-99	-99	0.82
GS-12-269	-99	-5	0.2	-2	24	1.9	0.2	0.34	-0.5	-99	-99	-99	0.69
GS-12-271	-99	-5	-0.2	-2	13	0.9	0.3	1.24	-0.5	-99	-99	-99	0.10
GS-12-280	-99	-5	-0.2	-2	-1	-0.1	-0.1	0.68	-0.5	-99	-99	-99	-0.05
GS-12-286	-99	-5	-0.2	7	134	1.5	0.2	1.10	0.6	-99	-99	-99	0.40
GS-12-309	-99	-5	-0.2	-2	74	0.5	-0.1	-0.01	-0.5	-99	-99	-99	0.17
GS-12-318	-99	36	-0.2	11	7	97.4	0.1	-0.01	-0.5	-99	-99	-99	1.87
GS-12-320	-99	108	0.3	14	7	177.3	-0.1	-0.01	-0.5	-99	-99	-99	3.86
GS-12-322	-99	2690	4.2	5	6	150.2	-0.1	-0.01	-0.5	-99	-99	-99	1.95
GS-12-323	-99	46	-0.2	12	51	190.9	0.2	-0.01	-0.5	-99	-99	-99	1.82
GS-12-324	-99	859	2.1	7	9	424.7	0.1	-0.01	-0.5	-99	-99	-99	1.39
GS-12-325	-99	5280	10	5	8	228.3	0.1	-0.01	-0.5	-99	-99	-99	1.67
GS-12-340	-99	-5	-0.2	-2	109	2.6	0.2	0.03	-0.5	-99	-99	-99	0.25
GS-12-341	-99	14	0.6	-2	72	2.0	0.3	-0.01	-0.5	-99	-99	-99	0.26
GS-12-343	-99	-5	-0.2	-2	52	0.8	0.3	-0.01	-0.5	-99	-99	-99	0.11
GS-12-346	-99	-5	-0.2	5	63	1.3	0.3	0.02	-0.5	-99	-99	-99	0.08
GS-12-349	-99	-5	-0.2	-2	39	1.5	0.1	-0.01	-0.5	-99	-99	-99	0.10
GS-12-354	-99	-5	-0.2	-2	56	1.3	0.3	-0.01	-0.5	-99	-99	-99	0.12
GS-12-355	-99	-5	-0.2	2	143	1.4	0.3	-0.01	-0.5	-99	-99	-99	0.11
GS-12-356	-99	-5	-0.2	-2	90	0.6	-0.1	-0.01	-0.5	-99	-99	-99	0.38
GS-12-359	-99	-5	0.4	4	78	1.3	0.6	0.06	-0.5	-99	-99	-99	0.67
GS-12-360	-99	-5	-0.2	14	34	0.6	-0.1	0.06	-0.5	-99	-99	-99	0.09

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	Total	Au	Ag	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs
	wt.%	ppb	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
		5	0.2	2	1	0.1	0.1	0.01	0.5	0.1	1	1	0.05
		AL INAA	AL INAA	AL INAA	AL INAA	Gs Tr ES	AL ICP-MS	AL ICP-ES	AL ICP-ES	Gs Tr MS	Gs Tr ES	Gs Tr ES	AL INAA
GS-12-362	-99	-5	-0.2	97	113	1.4	-0.1	0.20	-0.5	-99	-99	-99	0.29
GS-12-364	-99	30	0.6	59	72	1.4	-0.1	0.22	-0.5	-99	-99	-99	0.31
GS-12-365	-99	-5	0.3	13	123	1.1	0.2	0.08	-0.5	-99	-99	-99	0.32
GS-12-373	-99	-5	-0.2	-2	9	0.2	-0.1	24.3	-0.5	-99	-99	-99	0.24
GS-12-374	-99	-5	-0.2	15	27	1.4	1.3	0.79	-0.5	-99	-99	-99	1.00
GS-12-378	-99	-5	-0.2	2	34	1.1	-0.1	0.89	-0.5	-99	-99	-99	0.36
GS-12-382	-99	-5	-0.2	36	36	1.7	-0.1	2.94	-0.5	-99	-99	-99	1.02
GS-12-388	100.34	-5	0.2	6	-1	1.2	-0.1	0.34	-0.5	82.2	-99	-1	0.05
GS-12-392	99.98	29	1.0	3	200	0.2	-0.1	0.02	71.1	1.6	-99	3	0.08
GS-13-016	100.25	-5	0.2	-2	-1	2.0	0.1	4.55	-0.5	73.5	-99	6	0.50
GS-13-017	99.43	116	0.8	-2	-1	2.4	0.2	0.29	-0.5	123.3	-99	13	1.91
GS-13-018	99.38	710	8.1	4	-1	2.4	-0.1	-0.01	-0.5	2.0	-99	6	0.08

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	Cu	Dy	Er	Eu	Fe	Ga	Ge	Gd	Hf	Hg	Hg	Ho
	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppb	ppm
	1	0.1	0.10	0.05	0.02	1	0.1	0.1	0.2	1	5	0.1
	AL ICP-ES	Gs Tr MS	Gs Tr MS	Gs Tr MS	AL INAA	AL ICP-MS	AL ICP-MS	Gs Tr MS	Gs Tr MS	AL INAA	AL 1G	Gs Tr MS
GS-11-029	12	0.5	0.25	0.16	0.18	-1	-0.1	0.6	4.3	-1	-99	-0.1
GS-11-030	38	0.5	0.36	0.40	0.69	-1	-0.1	1.2	4.5	-1	-99	-0.1
GS-11-031	1917	2.7	1.60	0.71	4.56	6	-0.1	2.9	3.4	-1	-99	-0.1
GS-11-039	106	1.5	1.09	0.42	1.00	2	-0.1	1.6	4.6	-1	-99	0.3
GS-11-075	18	2.2	1.74	0.79	2.00	1	-0.1	2.7	5.7	-1	-99	0.5
GS-11-078	6	1.3	0.84	1.32	3.12	2	-0.1	3.0	6.0	-1	-99	0.2
GS-11-086	2	2.9	2.48	1.22	0.17	3	-0.1	3.8	8.8	-1	-99	0.6
GS-11-089	79	0.5	0.34	0.23	1.89	-1	-0.1	0.6	4.8	-1	-99	0.1
GS-11-184	2	0.9	0.67	0.77	0.44	1	-0.1	1.8	6.4	-1	-99	0.2
GS-11-189	4	0.2	0.26	0.25	0.25	1	-0.1	0.2	1.8	-1	-99	-0.1
GS-11-190	3	0.2	0.28	0.28	0.70	2	-0.1	0.6	2.6	-1	-99	-0.1
GS-11-191	2	0.2	0.23	0.36	0.33	1	-0.1	1.1	2.6	-1	-99	-0.1
GS-11-205	3	0.9	0.74	0.48	1.82	2	-0.1	1.4	5.9	-1	-99	0.2
GS-11-216	14	-0.1	0.12	0.09	0.26	-1	-0.1	0.2	0.2	-1	-99	-0.1
GS-11-237	-1	1.3	1.06	0.19	0.38	2	-0.1	1.3	2.8	-1	-99	0.3
GS-11-254	822	8.5	5.42	0.13	0.69	3	-0.1	7.2	5.2	-1	-99	1.7
GS-11-261	7	0.5	0.31	0.11	0.36	-1	-0.1	0.6	0.6	-1	-99	0.1
GS-11-263	7	0.9	0.78	0.22	1.05	2	-0.1	1.1	2.4	-1	-99	0.2
GS-11-264	5	0.7	0.59	0.15	2.13	3	-0.1	0.5	3.4	-1	-99	0.2
GS-11-276	2	3.9	2.47	0.51	0.90	2	-0.1	3.5	4.7	-1	-99	0.8
GS-11-279	159	0.9	0.44	0.22	0.62	-1	-0.1	1.1	1.0	-1	-99	0.2
GS-11-280	6	1.5	0.87	0.38	0.81	2	-0.1	1.8	1.8	-1	-99	0.3
GS-11-282	57	1.3	0.73	0.32	0.74	1	-0.1	1.3	2.0	-1	-99	0.3
GS-11-283	4	0.9	0.52	0.09	0.26	-1	-0.1	0.6	0.4	-1	-99	0.2
GS-11-287	39	3.5	2.18	0.66	0.82	4	-0.1	2.9	2.6	-1	-99	0.7
GS-11-290	308	0.9	0.75	0.55	0.34	4	-0.1	1.8	4.4	-1	-99	0.2
GS-11-291	40	5.3	3.46	1.17	1.64	2	-0.1	4.5	5.1	-1	-99	1.1
GS-11-304	5	1.7	1.30	0.41	0.86	1	-0.1	1.9	4.5	-1	-99	0.4
GS-11-309	10	1.9	1.22	0.61	2.81	7	-0.1	1.9	1.7	-1	43	0.4
GS-11-310	3	0.2	0.13	0.05	0.62	-1	-0.1	0.2	0.4	-1	319	-0.1
GS-11-311	1	0.2	0.16	0.08	0.14	1	-0.1	0.2	0.5	-1	38	-0.1
GS-11-312	10	1.7	1.23	0.47	1.14	2	-0.1	1.9	2.5	-1	331	0.4
GS-11-319	15	2.9	1.81	0.90	2.73	3	-0.1	2.9	2.2	-1	-99	0.6
GS-11-322	3	7.2	5.18	0.90	1.74	3	-0.1	4.1	8.0	-1	-99	1.6
GS-11-323	1	5.2	3.79	1.26	1.28	2	-0.1	5.0	6.0	-1	-99	1.2
GS-11-324	14	4.6	3.49	1.33	6.36	3	0.1	4.5	5.8	-1	-99	1.1
GS-11-329	26	2.9	1.71	1.75	16.8	6	0.3	6.1	3.1	5	-99	0.5
GS-11-339	4	3.1	1.87	0.95	2.65	-1	-0.1	3.5	4.0	-1	-99	0.6
GS-11-354	423	0.4	0.23	0.12	0.50	1	-0.1	0.5	0.5	-1	-99	0.1
GS-11-364	4	6.9	4.34	0.56	0.53	1	-0.1	5.1	22.7	-1	-99	1.3

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	Cu	Dy	Er	Eu	Fe	Ga	Ge	Gd	Hf	Hg	Hg	Ho
	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppb	ppm
	1	0.1	0.10	0.05	0.02	1	0.1	0.1	0.2	1	5	0.1
	AL ICP-ES	Gs Tr MS	Gs Tr MS	Gs Tr MS	AL INAA	AL ICP-MS	AL ICP-MS	Gs Tr MS	Gs Tr MS	AL INAA	AL 1G	Gs Tr MS
GS-11-373	47	9.8	6.84	1.01	7.95	6	-0.1	7.1	11.6	-1	-99	2.1
GS-11-375	3	19.9	14.02	1.33	0.78	-1	-0.1	13.6	44.0	-1	-99	4.1
GS-11-378	3	15.8	11.97	0.46	2.21	8	-0.1	7.2	21.2	-1	-99	3.4
GS-11-390	2	15.7	12.63	0.36	1.07	2	-0.1	7.9	21.1	-1	-99	3.6
GS-11-395	3	10.0	7.40	0.38	1.06	5	-0.1	6.3	17.5	-1	-99	2.2
GS-11-396	1	12.0	8.08	0.90	9.26	5	0.1	9.6	23.5	-1	-99	2.5
GS-11-399	3	21.6	14.77	1.11	1.40	4	-0.1	15.8	23.1	-1	-99	4.5
GS-11-403	7	11.4	8.80	0.62	0.99	3	-0.1	7.6	13.5	-1	-99	2.7
GS-11-409	-1	12.1	7.86	0.39	1.50	4	-0.1	8.7	22.1	-1	-99	2.4
GS-11-414	15	2.1	1.17	0.16	0.30	1	-0.1	1.5	1.6	-1	9	0.3
GS-11-415	71	10.2	5.95	0.97	1.49	4	-0.1	9.2	7.8	-1	-99	2.0
GS-11-418	26	3.5	2.77	0.17	0.85	2	-0.1	2.0	4.3	-1	6	0.8
GS-11-419	12	2.7	2.01	0.14	0.54	2	-0.1	1.4	3.3	-1	-5	0.6
GS-11-420	6	1.8	1.72	0.09	0.37	1	-0.1	0.9	2.9	-1	-5	0.4
GS-11-421	43	4.2	2.91	0.61	1.26	3	-0.1	3.1	3.8	-1	-99	0.9
GS-11-444	5	21.9	15.74	0.99	1.57	3	-0.1	13.7	23.9	-1	-99	4.9
GS-11-447	3	3.9	2.49	0.49	0.88	3	-0.1	4.3	3.8	-1	-5	0.8
GS-11-449	4	4.6	3.04	0.50	0.77	2	-0.1	4.6	3.9	-1	-5	0.9
GS-11-451	3	5.2	2.47	0.93	1.11	2	0.2	10.3	3.2	-1	-5	0.8
GS-11-452	2	5.8	3.20	0.81	0.93	2	0.1	8.8	4.2	-1	-5	1.0
GS-11-453	3	0.4	0.43	0.48	3.14	3	-0.1	1.2	3.4	-1	-99	-0.1
GS-11-454	2	2.3	1.76	0.96	1.47	-1	-0.1	3.3	4.9	-1	-99	0.5
GS-11-455	4	2.1	1.53	0.89	0.31	7	-0.1	2.7	4.4	-1	-99	0.5
GS-11-456	5	1.4	1.38	0.92	1.41	8	-0.1	2.6	5.5	-1	-99	0.3
GS-11-457	360	0.3	0.25	0.14	2.69	3	0.5	0.4	2.2	27	-99	-0.1
GS-11-460	27	0.7	0.58	0.41	2.48	5	-0.1	1.2	2.2	-1	-99	0.1
GS-11-461	13	5.1	3.15	1.14	0.25	1	-0.1	4.4	4.4	-1	-99	1.0
GS-11-462	3	1.0	1.09	0.49	2.66	6	-0.1	0.7	6.0	-1	-99	0.3
GS-11-466	2	1.2	0.99	0.30	1.74	1	-0.1	1.2	4.2	-1	-99	0.3
GS-11-470	179	14.2	10.44	1.34	1.90	8	0.3	14.2	21.0	-1	-99	3.0
GS-11-471	5	1.7	1.43	0.41	1.16	2	-0.1	1.4	7.1	-1	-99	0.4
GS-11-478	56	3.2	2.03	1.11	4.01	5	-0.1	3.8	3.3	-1	-99	0.6
GS-11-482	2	3.5	2.68	0.58	0.87	2	-0.1	2.9	6.5	-1	-99	0.7
GS-12-011	7	-99	-99	-99	0.11	-1	-0.1	-99	-99	-1	-99	-99
GS-12-012	6	-99	-99	-99	0.06	-1	-0.1	-99	-99	-1	-5	-99
GS-12-019	5	-99	-99	-99	-0.02	3	-0.1	-99	-99	-1	-99	-99
GS-12-020	6	-99	-99	-99	0.10	-1	-0.1	-99	-99	-1	-99	-99

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	Cu	Dy	Er	Eu	Fe	Ga	Ge	Gd	Hf	Hg	Hg	Ho
	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppb	ppm
	1	0.1	0.10	0.05	0.02	1	0.1	0.1	0.2	1	5	0.1
	AL ICP-ES	Gs Tr MS	Gs Tr MS	Gs Tr MS	AL INAA	AL ICP-MS	AL ICP-MS	Gs Tr MS	Gs Tr MS	AL INAA	AL 1G	Gs Tr MS
GS-12-026	32	-99	-99	-99	1.19	-1	-0.1	-99	-99	-1	6	-99
GS-12-038	12	-99	-99	-99	0.78	-1	-0.1	-99	-99	-1	8	-99
GS-12-043	10	-99	-99	-99	0.28	-1	-0.1	-99	-99	-1	-99	-99
GS-12-044	14	-99	-99	-99	1.69	5	-0.1	-99	-99	-1	-99	-99
GS-12-047	13	-99	-99	-99	1.20	2	-0.1	-99	-99	-1	37	-99
GS-12-057	7	-99	-99	-99	4.38	5	-0.1	-99	-99	-1	-99	-99
GS-12-060	-1	-99	-99	-99	0.52	1	-0.1	-99	-99	-1	-99	-99
GS-12-062	14	-99	-99	-99	3.53	6	0.1	-99	-99	-1	-99	-99
GS-12-065	2	-99	-99	-99	2.73	5	0.1	-99	-99	-1	-99	-99
GS-12-069	6	-99	-99	-99	2.14	3	-0.1	-99	-99	-1	-99	-99
GS-12-070	11	-99	-99	-99	1.62	3	-0.1	-99	-99	-1	-99	-99
GS-12-085	6	-99	-99	-99	0.08	-1	-0.1	-99	-99	-1	-5	-99
GS-12-089	23	-99	-99	-99	2.55	1	0.1	-99	-99	-1	-99	-99
GS-12-096	5	-99	-99	-99	1.17	-1	-0.1	-99	-99	-1	-99	-99
GS-12-099	3	-99	-99	-99	3.67	4	-0.1	-99	-99	-1	-99	-99
GS-12-101	5	-99	-99	-99	1.55	4	-0.1	-99	-99	-1	-5	-99
GS-12-135	22	-99	-99	-99	4.36	5	-0.1	-99	-99	-1	-99	-99
GS-12-137	18	-99	-99	-99	8.27	5	0.1	-99	-99	-1	-99	-99
GS-12-138	5	4.3	3.07	0.98	1.91	2	-0.1	4.2	6.8	-1	-99	0.9
GS-12-147	7	-99	-99	-99	6.00	7	-0.1	-99	-99	-1	-99	-99
GS-12-149	77	0.3	0.30	0.15	3.34	-1	-0.1	0.3	4.4	-1	-99	-0.1
GS-12-155	16	-99	-99	-99	0.69	3	-0.1	-99	-99	-1	-99	-99
GS-12-159A	9	-99	-99	-99	1.56	-1	0.1	-99	-99	-1	-5	-99
GS-12-165	23	-99	-99	-99	2.32	-1	-0.1	-99	-99	-1	-5	-99
GS-12-166	7	-99	-99	-99	1.78	3	-0.1	-99	-99	-1	-99	-99
GS-12-167	32	-99	-99	-99	1.74	2	-0.1	-99	-99	-1	-99	-99
GS-12-168	8	-99	-99	-99	2.07	3	-0.1	-99	-99	-1	-99	-99
GS-12-169	7	-99	-99	-99	1.52	-1	-0.1	-99	-99	-1	-99	-99
GS-12-171	3	-99	-99	-99	0.85	5	-0.1	-99	-99	-1	-5	-99
GS-12-178	2	-99	-99	-99	3.16	3	-0.1	-99	-99	-1	-99	-99
GS-12-180	5	-99	-99	-99	5.22	8	-0.1	-99	-99	-1	-99	-99
GS-12-185	10	-99	-99	-99	2.31	-1	0.1	-99	-99	-1	-99	-99
GS-12-187	9	-99	-99	-99	1.91	-1	-0.1	-99	-99	-1	-5	-99
GS-12-188	3	-99	-99	-99	2.86	-1	-0.1	-99	-99	-1	-99	-99
GS-12-200	1980	-99	-99	-99	0.16	-1	-0.1	-99	-99	-1	-99	-99
GS-12-201	515	-99	-99	-99	0.17	-1	-0.1	-99	-99	-1	-99	-99
GS-12-202	11	-99	-99	-99	0.41	-1	-0.1	-99	-99	-1	-99	-99

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	Cu	Dy	Er	Eu	Fe	Ga	Ge	Gd	Hf	Hg	Hg	Ho
	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppb	ppm
	1	0.1	0.10	0.05	0.02	1	0.1	0.1	0.2	1	5	0.1
	AL ICP-ES	Gs Tr MS	Gs Tr MS	Gs Tr MS	AL INAA	AL ICP-MS	AL ICP-MS	Gs Tr MS	Gs Tr MS	AL INAA	AL 1G	Gs Tr MS
GS-12-203	2	-99	-99	-99	0.22	-1	-0.1	-99	-99	-1	-99	-99
GS-12-206	4	-99	-99	-99	0.19	-1	-0.1	-99	-99	-1	-99	-99
GS-12-207	6	-99	-99	-99	0.48	2	-0.1	-99	-99	-1	-99	-99
GS-12-210	2	-99	-99	-99	0.24	3	-0.1	-99	-99	-1	-5	-99
GS-12-211	3	-99	-99	-99	1.76	-1	-0.1	-99	-99	-1	-5	-99
GS-12-214	31	-99	-99	-99	7.09	5	-0.1	-99	-99	-1	-99	-99
GS-12-221	6	-99	-99	-99	2.17	3	-0.1	-99	-99	-1	-99	-99
GS-12-233	6	-99	-99	-99	0.73	2	0.1	-99	-99	-1	-99	-99
GS-12-234	33	-99	-99	-99	0.82	1	-0.1	-99	-99	-1	-99	-99
GS-12-235	5	-99	-99	-99	0.78	1	-0.1	-99	-99	-1	-99	-99
GS-12-236	3	-99	-99	-99	0.25	-1	-0.1	-99	-99	-1	-99	-99
GS-12-237	2	-99	-99	-99	1.61	3	0.2	-99	-99	-1	-99	-99
GS-12-238	5	-99	-99	-99	0.65	-1	-0.1	-99	-99	-1	-99	-99
GS-12-242	36	-99	-99	-99	6.64	-1	0.2	-99	-99	7	-99	-99
GS-12-244	4	3.4	2.63	0.28	0.12	-1	-0.1	2.8	16.3	-1	-99	0.7
GS-12-263	10	-99	-99	-99	2.36	1	-0.1	-99	-99	-1	-99	-99
GS-12-269	14	-99	-99	-99	4.63	6	0.1	-99	-99	-1	-99	-99
GS-12-271	37	-99	-99	-99	1.06	7	0.3	-99	-99	-1	-99	-99
GS-12-280	3	-99	-99	-99	0.25	-1	-0.1	-99	-99	-1	-99	-99
GS-12-286	12	-99	-99	-99	1.76	4	-0.1	-99	-99	-1	-99	-99
GS-12-309	2	-99	-99	-99	0.18	-1	-0.1	-99	-99	-1	-99	-99
GS-12-318	5	-99	-99	-99	0.20	2	0.1	-99	-99	-1	-5	-99
GS-12-320	4	-99	-99	-99	0.23	5	0.7	-99	-99	-1	-5	-99
GS-12-322	2	-99	-99	-99	0.16	4	0.8	-99	-99	-1	-99	-99
GS-12-323	3	-99	-99	-99	0.88	3	-0.1	-99	-99	-1	-99	-99
GS-12-324	2	-99	-99	-99	0.35	2	-0.1	-99	-99	-1	-5	-99
GS-12-325	2	-99	-99	-99	0.36	2	-0.1	-99	-99	-1	-99	-99
GS-12-340	34	-99	-99	-99	2.44	4	-0.1	-99	-99	-1	-99	-99
GS-12-341	139	-99	-99	-99	3.49	5	-0.1	-99	-99	-1	-99	-99
GS-12-343	4	-99	-99	-99	1.32	-1	-0.1	-99	-99	-1	-99	-99
GS-12-346	4	-99	-99	-99	0.20	1	-0.1	-99	-99	-1	-99	-99
GS-12-349	4	-99	-99	-99	0.63	1	-0.1	-99	-99	-1	-99	-99
GS-12-354	2	-99	-99	-99	0.79	1	-0.1	-99	-99	-1	-99	-99
GS-12-355	4	-99	-99	-99	1.01	1	-0.1	-99	-99	-1	-99	-99
GS-12-356	-1	-99	-99	-99	3.21	3	-0.1	-99	-99	-1	-99	-99
GS-12-359	6	-99	-99	-99	1.29	2	-0.1	-99	-99	-1	-99	-99
GS-12-360	17	-99	-99	-99	0.50	-1	-0.1	-99	-99	-1	-5	-99

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	Cu	Dy	Er	Eu	Fe	Ga	Ge	Gd	Hf	Hg	Hg	Ho
	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppb	ppm
	1	0.1	0.10	0.05	0.02	1	0.1	0.1	0.2	1	5	0.1
	AL ICP-ES	Gs Tr MS	Gs Tr MS	Gs Tr MS	AL INAA	AL ICP-MS	AL ICP-MS	Gs Tr MS	Gs Tr MS	AL INAA	AL 1G	Gs Tr MS
GS-12-362	13	-99	-99	-99	1.43	3	-0.1	-99	-99	-1	-99	-99
GS-12-364	22	-99	-99	-99	2.64	2	-0.1	-99	-99	-1	-99	-99
GS-12-365	11	-99	-99	-99	1.17	2	-0.1	-99	-99	-1	-99	-99
GS-12-373	4	-99	-99	-99	0.06	-1	-0.1	-99	-99	-1	-99	-99
GS-12-374	37	-99	-99	-99	5.14	5	-0.1	-99	-99	-1	-99	-99
GS-12-378	10	-99	-99	-99	1.59	7	-0.1	-99	-99	-1	-99	-99
GS-12-382	52	-99	-99	-99	4.27	5	-0.1	-99	-99	-1	-99	-99
GS-12-388	7	7.7	4.71	2.16	1.67	3	-0.1	8.0	7.8	-1	-99	1.6
GS-12-392	201	0.1	-0.10	-0.05	0.28	-1	-0.1	-0.1	-0.2	-1	-99	-0.1
GS-13-016	439	6.2	3.16	2.04	2.14	5	-0.1	6.9	4.5	-1	-99	1.0
GS-13-017	8	5.9	3.61	2.70	3.63	9	0.1	8.7	5.1	-1	-99	1.1
GS-13-018	2	-0.1	-0.10	-0.05	0.29	-1	-0.1	-0.1	0.3	-1	-99	-0.1

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	In	K	La	Li	Lu	Mn	Mo	Na	Nb	Nd	Ni	P
	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
	0.2	0.01	0.1	0.1	0.05	2	2	0.01	1	0.1	1	1
	Gs Tr MS	AL ICP-ES	Gs Tr MS	Gs Tr ES	Gs Tr MS	AL ICP-ES	AL ICP-ES	AL INAA	Gs Tr ES	Gs Tr MS	AL ICP-ES	Gs Tr ES
GS-11-029	-0.2	-0.01	7.8	2.6	0.09	7	4	0.04	2	4.0	-1	281
GS-11-030	-0.2	0.03	24.1	10.0	0.10	3	5	0.07	3	12.7	-1	157
GS-11-031	1.0	0.10	24.7	8.0	0.26	196	12	0.09	-1	18.5	-1	364
GS-11-039	-0.2	0.29	16.3	1.8	0.22	5	28	0.14	1	10.0	-1	100
GS-11-075	-0.2	0.14	32.6	2.6	0.39	-2	3	0.16	1	22.0	-1	325
GS-11-078	0.4	0.22	88.3	18.6	0.21	6	83	0.43	-1	53.5	-1	1036
GS-11-086	-0.2	0.16	42.7	1.0	0.48	-2	3	1.61	1	34.4	-1	702
GS-11-089	-0.2	0.12	15.5	0.1	0.13	11	14	0.09	-1	9.7	-1	98
GS-11-184	-0.2	0.32	24.5	0.4	0.19	6	3	0.67	2	18.8	-1	717
GS-11-189	-0.2	0.29	13.7	0.1	0.08	8	5	0.22	1	5.7	-1	178
GS-11-190	-0.2	0.34	24.4	-0.1	0.10	-2	2	0.26	-1	10.3	-1	229
GS-11-191	-0.2	0.45	38.9	-0.1	0.10	-2	-2	0.30	-1	16.5	-1	198
GS-11-205	-0.2	0.33	28.6	-0.1	0.21	3	2	0.57	1	18.3	-1	558
GS-11-216	-0.2	0.09	0.7	3.1	-0.05	135	4	-0.01	-1	0.6	-1	192
GS-11-237	-0.2	0.24	13.9	4.8	0.23	3	-2	0.59	7	8.1	-1	36
GS-11-254	-0.2	0.48	14.4	4.1	0.97	818	3	0.07	47	19.8	-1	33
GS-11-261	-0.2	0.03	4.8	0.3	-0.05	425	2	-0.01	-1	2.7	-1	41
GS-11-263	-0.2	0.10	7.2	2.2	0.14	77	2	0.13	5	4.3	-1	224
GS-11-264	-0.2	0.31	3.5	6.9	0.16	20	-2	0.55	9	1.7	-1	107
GS-11-276	-0.2	0.35	17.4	13.9	0.41	160	-2	0.05	11	15.5	-1	45
GS-11-279	-0.2	0.19	5.6	28.9	0.07	91	-2	-0.01	2	5.6	-1	114
GS-11-280	-0.2	0.15	9.9	27.0	0.14	153	-2	0.55	2	10.2	-1	137
GS-11-282	-0.2	0.23	10.8	26.6	0.12	128	5	-0.01	2	9.2	-1	141
GS-11-283	-0.2	0.08	2.5	27.2	0.07	20	257	-0.01	-1	2.7	-1	6
GS-11-287	-0.2	0.35	9.3	4.1	0.35	407	-2	2.06	12	11.3	-1	74
GS-11-290	-0.2	0.01	27.3	3.9	0.21	242	3	-0.01	1	11.4	-1	114
GS-11-291	-0.2	0.39	20.8	7.3	0.55	46	-2	0.09	6	21.4	-1	200
GS-11-304	-0.2	0.21	19.7	2.1	0.28	23	-2	3.31	7	12.6	-1	132
GS-11-309	-0.2	0.28	5.7	8.3	0.17	161	4	0.06	2	7.7	-1	390
GS-11-310	-0.2	0.07	2.3	7.8	-0.05	24	3	-0.01	-1	0.6	-1	29
GS-11-311	-0.2	0.12	2.7	5.7	-0.05	7	4	-0.01	2	1.6	-1	60
GS-11-312	-0.2	0.34	11.1	3.2	0.23	10	10	0.06	5	9.4	2	213
GS-11-319	-0.2	0.34	11.1	6.5	0.29	191	2	0.52	4	12.0	6	361
GS-11-322	-0.2	0.21	10.4	8.6	0.84	457	3	2.71	8	10.7	-1	257
GS-11-323	-0.2	0.23	21.1	7.5	0.55	118	2	1.60	7	22.2	-1	34
GS-11-324	1.6	-0.01	22.7	1.7	0.67	8	8	-0.01	2	27.0	-1	355
GS-11-329	10.7	-0.01	33.8	0.4	0.34	15	56	-0.01	-1	29.5	-1	382
GS-11-339	-0.2	0.04	16.9	4.2	0.23	732	-2	3.74	2	17.7	3	764
GS-11-354	-0.2	0.23	5.5	3.6	-0.05	178	2	0.27	-1	2.7	-1	74
GS-11-364	-0.2	0.09	5.1	3.7	0.70	9	29	-0.01	38	8.9	-1	20

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	In	K	La	Li	Lu	Mn	Mo	Na	Nb	Nd	Ni	P
	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
	0.2	0.01	0.1	0.1	0.05	2	2	0.01	1	0.1	1	1
	Gs Tr MS	AL ICP-ES	Gs Tr MS	Gs Tr ES	Gs Tr MS	AL ICP-ES	AL ICP-ES	AL INAA	Gs Tr ES	Gs Tr MS	AL ICP-ES	Gs Tr ES
GS-11-373	-0.2	0.34	15.2	47.1	1.10	252	3	0.16	22	18.9	96	1151
GS-11-375	-0.2	0.01	59.5	10.5	2.32	11	23	-0.01	52	54.9	-1	168
GS-11-378	-0.2	0.16	16.6	19.5	1.93	72	3	0.09	36	9.1	2	12
GS-11-390	-0.2	0.13	14.3	19.9	2.10	8	2	0.12	40	17.3	-1	18
GS-11-395	-0.2	0.17	15.7	3.7	1.18	18	11	0.05	33	16.1	-1	13
GS-11-396	-0.2	0.20	110.5	1.6	1.16	31	4	-0.01	46	65.2	-1	69
GS-11-399	-0.2	0.35	21.8	1.8	2.26	23	13	0.82	42	37.3	-1	13
GS-11-403	-0.2	0.35	29.3	4.2	1.34	23	22	-0.01	29	35.5	-1	49
GS-11-409	-0.2	0.57	13.2	2.5	1.67	18	3	-0.01	39	15.0	-1	15
GS-11-414	-0.2	0.09	4.8	191.7	0.13	94	41	-0.01	3	5.4	-1	11
GS-11-415	-0.2	0.18	28.7	58.0	0.84	759	71	0.08	15	33.5	2	66
GS-11-418	-0.2	0.15	4.5	186.1	0.43	34	92	-0.01	7	5.3	-1	16
GS-11-419	-0.2	0.14	4.5	201.5	0.30	32	110	-0.01	5	3.9	-1	11
GS-11-420	-0.2	0.12	2.7	196.7	0.25	24	17	-0.01	5	1.5	-1	7
GS-11-421	-0.2	0.15	11.5	107.1	0.44	213	66	0.08	9	12.1	-1	273
GS-11-444	-0.2	0.34	10.7	0.9	2.40	34	3	0.05	46	22.4	2	17
GS-11-447	-0.2	0.42	29.4	5.3	0.38	29	7	-0.01	11	26.8	-1	63
GS-11-449	-0.2	0.36	26.5	3.8	0.43	34	6	0.06	8	22.6	-1	60
GS-11-451	-0.2	0.33	67.9	3.9	0.31	56	13	-0.01	7	77.8	-1	126
GS-11-452	-0.2	0.37	54.7	5.5	0.44	38	8	0.06	10	59.7	-1	83
GS-11-453	-0.2	0.07	26.2	-0.1	0.11	-2	2	0.62	-1	16.8	-1	450
GS-11-454	-0.2	0.01	37.2	0.8	0.32	-2	10	0.06	-1	24.9	-1	451
GS-11-455	-0.2	0.35	26.0	-0.1	0.31	8	3	0.88	-1	21.0	-1	737
GS-11-456	-0.2	0.31	30.6	-0.1	0.31	7	-2	1.07	-1	25.0	-1	731
GS-11-457	4.0	0.04	3.4	-0.1	-0.05	6	6	0.27	-1	2.2	-1	208
GS-11-460	-0.2	0.17	15.6	-0.1	0.11	-2	-2	1.06	-1	14.0	8	514
GS-11-461	-0.2	0.20	30.3	-0.1	0.43	8	2	0.79	-1	26.0	-1	900
GS-11-462	-0.2	0.35	16.4	-0.1	0.29	3	2	0.74	2	5.2	-1	153
GS-11-466	-0.2	0.05	11.0	-0.1	0.19	-2	2	0.30	1	7.1	-1	303
GS-11-470	-0.2	0.09	67.8	-0.1	1.89	150	2	2.44	68	66.7	-1	20
GS-11-471	-0.2	0.38	11.3	8.8	0.35	78	2	2.22	12	7.0	-1	514
GS-11-478	-0.2	0.26	17.4	13.8	0.25	1020	5	2.18	6	19.3	-1	992
GS-11-482	-0.2	0.35	14.8	3.4	0.46	59	4	2.22	13	13.6	-1	194
GS-12-011	-99	0.08	-99	0.4	-99	7	-2	0.04	-99	-99	-1	-99
GS-12-012	-99	0.02	-99	0.2	-99	9	-2	0.02	-99	-99	-1	-99
GS-12-019	-99	0.42	-99	-0.1	-99	4	-2	0.89	-99	-99	-1	-99
GS-12-020	-99	-0.01	-99	-0.1	-99	21	-2	0.02	-99	-99	-1	-99

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	In	K	La	Li	Lu	Mn	Mo	Na	Nb	Nd	Ni	P
	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
	0.2	0.01	0.1	0.1	0.05	2	2	0.01	1	0.1	1	1
	Gs Tr MS	AL ICP-ES	Gs Tr MS	Gs Tr ES	Gs Tr MS	AL ICP-ES	AL ICP-ES	AL INAA	Gs Tr ES	Gs Tr MS	AL ICP-ES	Gs Tr ES
GS-12-026	-99	0.14	-99	3.2	-99	73	11	0.03	-99	-99	3	-99
GS-12-038	-99	0.08	-99	33.7	-99	46	5	0.03	-99	-99	-1	-99
GS-12-043	-99	0.06	-99	30.8	-99	44	-2	0.02	-99	-99	-1	-99
GS-12-044	-99	0.16	-99	28.5	-99	786	-2	0.06	-99	-99	-1	-99
GS-12-047	-99	0.10	-99	21.4	-99	511	-2	0.04	-99	-99	-1	-99
GS-12-057	-99	0.12	-99	32.4	-99	1020	-2	2.06	-99	-99	5	-99
GS-12-060	-99	0.31	-99	68.4	-99	465	-2	0.12	-99	-99	-1	-99
GS-12-062	-99	0.38	-99	18.5	-99	1150	-2	2.47	-99	-99	3	-99
GS-12-065	-99	0.27	-99	2.0	-99	295	-2	1.04	-99	-99	-1	-99
GS-12-069	-99	0.31	-99	11.5	-99	48	21	0.30	-99	-99	-1	-99
GS-12-070	-99	0.23	-99	2.2	-99	105	21	0.16	-99	-99	-1	-99
GS-12-085	-99	-0.01	-99	-0.1	-99	6	-2	0.01	-99	-99	-1	-99
GS-12-089	-99	0.13	-99	-0.1	-99	4	16	0.80	-99	-99	-1	-99
GS-12-096	-99	0.22	-99	5.2	-99	378	3	2.53	-99	-99	-1	-99
GS-12-099	-99	0.42	-99	8.5	-99	307	-2	0.27	-99	-99	1	-99
GS-12-101	-99	0.06	-99	3.4	-99	271	-2	3.66	-99	-99	-1	-99
GS-12-135	-99	0.28	-99	20.4	-99	1100	-2	1.35	-99	-99	2	-99
GS-12-137	-99	0.27	-99	19.1	-99	253	-2	2.01	-99	-99	-1	-99
GS-12-138	-0.2	0.30	23.0	4.6	0.48	47	-2	0.22	-99	22.1	-1	-99
GS-12-147	-99	0.21	-99	13.4	-99	752	-2	2.53	-99	-99	11	-99
GS-12-149	-0.2	0.02	4.8	-0.1	-0.05	5	5	-0.01	-99	1.1	35	-99
GS-12-155	-99	0.31	-99	9.2	-99	95	-2	0.44	-99	-99	-1	-99
GS-12-159A	-99	0.16	-99	4.7	-99	105	294	0.17	-99	-99	-1	-99
GS-12-165	-99	0.05	-99	37.3	-99	17	8	0.02	-99	-99	-1	-99
GS-12-166	-99	0.11	-99	47.5	-99	1180	3	0.03	-99	-99	1	-99
GS-12-167	-99	0.07	-99	21.1	-99	535	-2	0.02	-99	-99	-1	-99
GS-12-168	-99	0.48	-99	29.0	-99	173	15	0.03	-99	-99	-1	-99
GS-12-169	-99	0.04	-99	20.1	-99	59	-2	0.04	-99	-99	-1	-99
GS-12-171	-99	0.16	-99	5.9	-99	598	-2	2.91	-99	-99	-1	-99
GS-12-178	-99	0.24	-99	4.1	-99	283	-2	3.53	-99	-99	2	-99
GS-12-180	-99	0.08	-99	4.1	-99	494	2	4.45	-99	-99	3	-99
GS-12-185	-99	0.01	-99	-0.1	-99	10	16	0.02	-99	-99	-1	-99
GS-12-187	-99	0.02	-99	-0.1	-99	7	16	0.02	-99	-99	-1	-99
GS-12-188	-99	0.03	-99	-0.1	-99	3	-2	0.02	-99	-99	-1	-99
GS-12-200	-99	-0.01	-99	0.6	-99	378	-2	0.01	-99	-99	-1	-99
GS-12-201	-99	-0.01	-99	0.4	-99	56	-2	0.01	-99	-99	-1	-99
GS-12-202	-99	0.12	-99	7.6	-99	13	-2	0.01	-99	-99	-1	-99

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	In	K	La	Li	Lu	Mn	Mo	Na	Nb	Nd	Ni	P
	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
	0.2	0.01	0.1	0.1	0.05	2	2	0.01	1	0.1	1	1
	Gs Tr MS	AL ICP-ES	Gs Tr MS	Gs Tr ES	Gs Tr MS	AL ICP-ES	AL ICP-ES	AL INAA	Gs Tr ES	Gs Tr MS	AL ICP-ES	Gs Tr ES
GS-12-203	-99	0.07	-99	3.5	-99	6	-2	-0.01	-99	-99	-1	-99
GS-12-206	-99	-0.01	-99	4.7	-99	4	-2	-0.01	-99	-99	-1	-99
GS-12-207	-99	0.20	-99	3.9	-99	9	3	0.50	-99	-99	-1	-99
GS-12-210	-99	0.10	-99	50.9	-99	-2	9	0.34	-99	-99	-1	-99
GS-12-211	-99	-0.01	-99	14.5	-99	2	7	0.04	-99	-99	-1	-99
GS-12-214	-99	0.30	-99	22.5	-99	549	-2	0.16	-99	-99	26	-99
GS-12-221	-99	0.23	-99	13.3	-99	88	-2	2.46	-99	-99	-1	-99
GS-12-233	-99	0.30	-99	5.9	-99	21	-2	0.08	-99	-99	-1	-99
GS-12-234	-99	0.24	-99	4.9	-99	76	2	0.04	-99	-99	-1	-99
GS-12-235	-99	0.30	-99	2.6	-99	43	4	0.03	-99	-99	-1	-99
GS-12-236	-99	-0.01	-99	1.0	-99	10	10	-0.01	-99	-99	-1	-99
GS-12-237	-99	0.29	-99	2.6	-99	37	-2	0.05	-99	-99	-1	-99
GS-12-238	-99	-0.01	-99	1.4	-99	12	14	-0.01	-99	-99	-1	-99
GS-12-242	-99	0.05	-99	1.2	-99	15	49	0.01	-99	-99	13	-99
GS-12-244	-0.2	0.02	7.1	2.8	0.50	7	3	-0.01	-99	5.6	-1	-99
GS-12-263	-99	0.46	-99	8.0	-99	46	3	0.23	-99	-99	3	-99
GS-12-269	-99	0.50	-99	26.5	-99	1530	-2	2.65	-99	-99	-1	-99
GS-12-271	-99	0.02	-99	0.6	-99	342	-2	3.71	-99	-99	-1	-99
GS-12-280	-99	0.03	-99	1.2	-99	198	-2	0.10	-99	-99	-1	-99
GS-12-286	-99	0.35	-99	9.2	-99	785	-2	1.81	-99	-99	-1	-99
GS-12-309	-99	0.19	-99	5.7	-99	6	-2	0.12	-99	-99	-1	-99
GS-12-318	-99	0.09	-99	465.9	-99	52	-2	0.03	-99	-99	-1	-99
GS-12-320	-99	0.19	-99	859.3	-99	82	-2	0.03	-99	-99	-1	-99
GS-12-322	-99	0.18	-99	835.1	-99	117	-2	0.02	-99	-99	-1	-99
GS-12-323	-99	0.20	-99	155.0	-99	249	-2	0.28	-99	-99	-1	-99
GS-12-324	-99	0.11	-99	141.6	-99	64	-2	0.04	-99	-99	-1	-99
GS-12-325	-99	0.16	-99	166.0	-99	50	-2	0.08	-99	-99	-1	-99
GS-12-340	-99	0.36	-99	12.5	-99	654	3	0.19	-99	-99	-1	-99
GS-12-341	-99	0.24	-99	4.2	-99	234	38	0.15	-99	-99	-1	-99
GS-12-343	-99	0.23	-99	0.7	-99	2	-2	0.16	-99	-99	-1	-99
GS-12-346	-99	0.24	-99	1.4	-99	28	-2	0.01	-99	-99	-1	-99
GS-12-349	-99	0.21	-99	3.4	-99	29	-2	2.06	-99	-99	-1	-99
GS-12-354	-99	0.22	-99	2.8	-99	72	-2	3.30	-99	-99	-1	-99
GS-12-355	-99	0.31	-99	4.3	-99	48	-2	1.59	-99	-99	-1	-99
GS-12-356	-99	0.37	-99	3.2	-99	59	-2	0.07	-99	-99	-1	-99
GS-12-359	-99	0.47	-99	3.8	-99	129	6	0.77	-99	-99	-1	-99
GS-12-360	-99	0.08	-99	1.4	-99	124	-2	2.15	-99	-99	-1	-99

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	In	K	La	Li	Lu	Mn	Mo	Na	Nb	Nd	Ni	P
	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
	0.2	0.01	0.1	0.1	0.05	2	2	0.01	1	0.1	1	1
	Gs Tr MS	AL ICP-ES	Gs Tr MS	Gs Tr ES	Gs Tr MS	AL ICP-ES	AL ICP-ES	AL INAA	Gs Tr ES	Gs Tr MS	AL ICP-ES	Gs Tr ES
GS-12-362	-99	0.54	-99	15.4	-99	58	-2	2.86	-99	-99	-1	-99
GS-12-364	-99	0.58	-99	19.1	-99	53	-2	0.09	-99	-99	-1	-99
GS-12-365	-99	0.36	-99	16.8	-99	146	-2	1.15	-99	-99	-1	-99
GS-12-373	-99	0.04	-99	6.5	-99	416	-2	0.01	-99	-99	-1	-99
GS-12-374	-99	0.14	-99	42.0	-99	471	-2	1.25	-99	-99	25	-99
GS-12-378	-99	0.41	-99	9.7	-99	480	-2	3.37	-99	-99	-1	-99
GS-12-382	-99	0.17	-99	16.8	-99	1120	-2	1.99	-99	-99	2	-99
GS-12-388	-0.2	0.15	37.3	3.5	0.72	671	12	2.18	-99	39.0	-1	-99
GS-12-392	-0.2	0.04	4.2	3.2	-0.05	27	-2	0.01	-99	0.7	3	-99
GS-13-016	-0.2	0.08	35.1	13.1	0.44	1440	21	2.70	-99	37.2	1	-99
GS-13-017	-0.2	0.24	57.9	21.7	0.52	2190	362	1.68	-99	57.2	6	-99
GS-13-018	-0.2	0.07	5.9	4.7	-0.05	10	-2	0.02	-99	0.8	-1	-99

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	Pb	Pr	Rb	S	Sb	Sc	Se	Sm	Sn	Sr	Ta	Tb
	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	2	0.05	1	0.001	0.2	0.1	0.1	0.1	1	2	0.5	0.1
	AL ICP-ES	Gs Tr MS	Gs Tr ES	AL ICP-ES	AL INAA	Gs Tr ES	AL ICP-MS	Gs Tr MS	Gs Tr MS	Gs Tr MS	Gs Tr MS	Gs Tr MS
GS-11-029	3	1.10	8	0.004	0.4	0.7	0.3	0.7	9	17	0.8	-0.1
GS-11-030	6	3.88	10	0.049	-0.2	2.4	0.5	1.7	10	33	1.9	0.1
GS-11-031	15	5.05	26	2.185	0.7	7.2	6.6	3.4	9	42	0.5	0.4
GS-11-039	34	2.97	73	1.024	0.8	5.8	2.0	1.5	8	81	0.8	0.2
GS-11-075	47	6.42	39	1.554	0.4	6.5	2.5	3.5	9	232	0.9	0.3
GS-11-078	103	16.67	20	0.032	1.6	10.3	0.4	5.4	38	846	0.7	0.3
GS-11-086	6	9.46	10	0.973	5.2	10.5	0.9	5.0	5	858	1.8	0.5
GS-11-089	271	3.03	10	0.913	0.5	2.6	5.1	1.0	8	83	2.4	-0.1
GS-11-184	7	5.00	9	0.857	0.5	5.6	0.6	2.8	4	239	1.5	0.2
GS-11-189	13	1.94	8	0.691	0.4	1.8	0.2	0.7	4	275	1.1	-0.1
GS-11-190	10	3.55	7	0.798	-0.2	2.8	1.5	1.1	8	212	0.9	-0.1
GS-11-191	21	5.74	9	1.057	-0.2	3.6	0.5	1.5	3	191	1.1	-0.1
GS-11-205	9	5.81	6	3.113	0.6	5.2	2.9	2.0	3	237	0.9	0.2
GS-11-216	249	0.15	14	0.145	0.4	0.4	2.6	-0.1	1	3	-0.5	-0.1
GS-11-237	2	2.53	78	0.002	0.5	2.5	0.4	1.4	1	97	0.9	0.2
GS-11-254	328	4.87	118	0.047	0.4	2.9	1.1	6.4	7	17	5.6	1.3
GS-11-261	4	0.70	8	0.006	0.3	0.8	0.2	0.7	6	8	1.5	-0.1
GS-11-263	3	1.24	22	0.128	0.6	5.1	0.2	1.0	7	40	1.4	0.2
GS-11-264	6	0.53	110	0.042	1.3	4.4	0.5	0.4	3	97	1.2	-0.1
GS-11-276	-2	4.01	129	-0.001	3.6	6.2	0.4	3.3	3	6	1.2	0.6
GS-11-279	104	1.58	46	0.101	8.6	2.0	1.1	1.2	1	8	-0.5	0.2
GS-11-280	15	2.45	40	0.305	12.1	2.5	0.3	2.3	1	24	-0.5	0.2
GS-11-282	50	2.20	59	0.351	9.3	2.6	0.5	1.7	1	8	1.2	0.2
GS-11-283	143	0.61	19	0.004	16.5	0.6	0.2	0.3	1	6	0.8	0.1
GS-11-287	7	2.82	161	0.003	1.4	2.4	0.4	2.5	4	75	1.5	0.5
GS-11-290	91	3.15	7	0.096	0.7	2.3	0.8	2.1	5	109	1.1	0.2
GS-11-291	425	5.45	83	1.527	0.7	8.6	3.7	5.1	2	43	1.0	0.7
GS-11-304	84	3.61	37	0.713	-0.2	3.2	1.6	2.1	3	110	0.6	0.2
GS-11-309	4	1.79	154	1.799	6.6	9.9	0.6	1.7	1	71	-0.5	0.3
GS-11-310	-2	0.20	27	0.019	9.6	1.1	0.3	-0.1	-1	10	-0.5	-0.1
GS-11-311	-2	0.40	53	0.009	1.8	1.6	-0.1	0.3	1	5	-0.5	-0.1
GS-11-312	3	2.37	286	0.988	12.6	8.0	0.3	2.2	1	29	-0.5	0.3
GS-11-319	4	2.86	94	1.523	5.8	14.8	0.9	2.6	2	88	1.0	0.4
GS-11-322	11	2.44	55	0.031	0.9	9.0	0.3	2.7	4	66	1.5	1.0
GS-11-323	11	5.46	45	0.956	0.5	7.1	0.7	4.8	2	83	1.1	0.8
GS-11-324	15	6.49	7	0.009	15.8	7.8	15	5.2	321	786	1.8	0.7
GS-11-329	16	7.08	4	0.055	50.8	5.1	38	6.4	2350	1216	0.6	0.7
GS-11-339	4	4.20	9	0.004	2.6	7.8	0.4	3.6	1	296	-0.5	0.5
GS-11-354	1620	0.79	30	0.072	0.4	1.8	2.2	0.4	14	31	-0.5	-0.1
GS-11-364	11	1.67	19	0.221	6.2	-0.1	0.3	3.4	12	8	3.8	1.0

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	Pb	Pr	Rb	S	Sb	Sc	Se	Sm	Sn	Sr	Ta	Tb
	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	2	0.05	1	0.001	0.2	0.1	0.1	0.1	1	2	0.5	0.1
	AL ICP-ES	Gs Tr MS	Gs Tr ES	AL ICP-ES	AL INAA	Gs Tr ES	AL ICP-MS	Gs Tr MS	Gs Tr MS	Gs Tr MS	Gs Tr MS	Gs Tr MS
GS-11-373	27	4.39	157	6.209	3.4	29.9	1.1	5.5	6	37	2.6	1.3
GS-11-375	29	14.31	8	0.807	5.9	3.2	5.1	12.0	17	58	7.9	2.7
GS-11-378	30	2.74	47	0.151	1.0	-0.1	0.8	3.9	6	9	4.1	1.8
GS-11-390	9	4.03	42	1.149	6.1	-0.1	0.3	4.8	7	11	3.9	2.0
GS-11-395	9	3.83	49	0.498	5.9	-0.1	0.4	4.9	9	6	3.0	1.3
GS-11-396	41	19.78	48	0.004	23.8	0.2	0.3	10.5	13	9	4.2	1.7
GS-11-399	16	8.31	136	0.489	0.9	-0.1	0.6	12.1	10	18	3.5	3.0
GS-11-403	22	9.12	99	0.006	1.9	0.4	0.5	7.1	6	3	2.0	1.6
GS-11-409	6	3.44	170	0.019	0.9	-0.1	0.3	6.3	11	2	3.5	1.8
GS-11-414	88	1.18	89	0.005	4.7	0.5	0.2	1.1	2	12	2.0	0.3
GS-11-415	212	7.85	379	0.008	0.9	2.9	0.8	8.0	11	32	2.6	1.7
GS-11-418	125	1.36	89	0.010	3.1	0.5	0.5	1.5	4	13	-0.5	0.5
GS-11-419	103	0.94	67	0.006	2.9	0.3	0.4	1.3	2	15	-0.5	0.4
GS-11-420	8	0.41	62	0.002	3.5	0.2	0.1	0.7	2	12	-0.5	0.2
GS-11-421	63	2.80	158	0.043	1.5	2.7	0.3	3.1	7	15	1.6	0.6
GS-11-444	194	4.24	149	0.764	0.9	-0.1	1.3	10.0	10	23	4.0	3.1
GS-11-447	31	7.04	169	0.025	2.6	3.1	1.5	5.2	3	10	-0.5	0.7
GS-11-449	31	5.91	182	0.015	2.0	3.0	0.7	4.5	3	28	-0.5	0.7
GS-11-451	115	19.54	116	0.015	3.4	1.3	2.1	14.5	3	12	-0.5	1.0
GS-11-452	61	14.86	159	0.006	2.4	3.5	1.6	11.0	3	24	0.9	1.1
GS-11-453	38	4.65	5	0.484	7.2	2.7	3.1	2.2	1	387	0.7	-0.1
GS-11-454	30	7.01	8	0.301	10.9	6.4	8.6	4.2	2	543	0.9	0.4
GS-11-455	76	5.67	6	1.083	12.2	10.6	7.3	3.6	6	388	0.8	0.4
GS-11-456	58	6.70	7	1.142	21.8	11.3	0.5	4.0	4	444	1.6	0.3
GS-11-457	31	0.66	2	0.559	2690	2.2	139	0.3	851	194	-0.5	-0.1
GS-11-460	46	3.83	7	3.492	15.0	8.1	11	2.1	6	390	-0.5	0.1
GS-11-461	147	6.69	5	0.687	1.6	8.2	0.2	5.0	2	489	0.7	0.7
GS-11-462	37	1.86	9	1.008	19.0	4.2	4.3	0.6	4	125	4.0	0.1
GS-11-466	27	1.96	2	0.349	9.8	5.1	1.6	1.1	3	141	1.2	0.2
GS-11-470	401	16.50	47	1.007	0.4	-0.1	4.6	14.0	5	104	5.3	2.2
GS-11-471	4	1.78	98	0.048	0.3	11.8	0.7	1.4	2	94	1.1	0.2
GS-11-478	37	4.70	79	3.495	0.3	18.2	1.5	3.9	1	106	0.5	0.5
GS-11-482	17	3.45	84	0.177	0.6	6.3	1.0	2.4	1	65	1.1	0.5
GS-12-011	-2	-99	11	0.002	14.5	6.8	0.1	-99	-99	-99	-99	-99
GS-12-012	-2	-99	2	0.002	0.5	1.0	-0.1	-99	-99	-99	-99	-99
GS-12-019	3	-99	3	1.033	-0.2	1.3	0.3	-99	-99	-99	-99	-99
GS-12-020	-2	-99	-1	0.024	3.4	1.0	-0.1	-99	-99	-99	-99	-99

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	Pb	Pr	Rb	S	Sb	Sc	Se	Sm	Sn	Sr	Ta	Tb
	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	2	0.05	1	0.001	0.2	0.1	0.1	0.1	1	2	0.5	0.1
	AL ICP-ES	Gs Tr MS	Gs Tr ES	AL ICP-ES	AL INAA	Gs Tr ES	AL ICP-MS	Gs Tr MS	Gs Tr MS	Gs Tr MS	Gs Tr MS	Gs Tr MS
GS-12-026	85	-99	20	1.249	0.3	3.2	1.9	-99	-99	-99	-99	-99
GS-12-038	7	-99	26	0.021	14.7	3.0	0.3	-99	-99	-99	-99	-99
GS-12-043	8	-99	17	0.023	3.5	1.2	-0.1	-99	-99	-99	-99	-99
GS-12-044	29	-99	148	0.212	4.2	10.6	0.2	-99	-99	-99	-99	-99
GS-12-047	32	-99	70	0.063	17.1	4.9	0.3	-99	-99	-99	-99	-99
GS-12-057	27	-99	28	2.020	-0.2	22.1	1.5	-99	-99	-99	-99	-99
GS-12-060	14	-99	17	0.001	0.3	33.0	0.2	-99	-99	-99	-99	-99
GS-12-062	7	-99	112	0.002	1.2	9.7	0.3	-99	-99	-99	-99	-99
GS-12-065	25	-99	140	0.019	-0.2	9.0	1.0	-99	-99	-99	-99	-99
GS-12-069	30	-99	158	0.020	0.5	1.4	0.2	-99	-99	-99	-99	-99
GS-12-070	76	-99	154	0.275	1.1	0.6	0.8	-99	-99	-99	-99	-99
GS-12-085	-2	-99	-1	0.003	1.9	-0.1	-0.1	-99	-99	-99	-99	-99
GS-12-089	4	-99	3	3.351	2.1	4.2	34	-99	-99	-99	-99	-99
GS-12-096	31	-99	47	1.103	-0.2	3.6	5.2	-99	-99	-99	-99	-99
GS-12-099	43	-99	305	0.606	2.9	20.0	0.5	-99	-99	-99	-99	-99
GS-12-101	246	-99	44	0.099	0.5	11.1	0.6	-99	-99	-99	-99	-99
GS-12-135	47	-99	71	2.087	-0.2	21.1	1.9	-99	-99	-99	-99	-99
GS-12-137	24	-99	70	8.128	-0.2	19.0	6.9	-99	-99	-99	-99	-99
GS-12-138	10	5.53	93	1.763	0.5	13.5	1.5	4.4	14	24	1.5	0.7
GS-12-147	8	-99	66	4.132	-0.2	28.4	0.9	-99	-99	-99	-99	-99
GS-12-149	18	0.27	-99	4.630	1.6	1.3	4.3	0.3	1	7	-0.5	-0.1
GS-12-155	-2	-99	58	0.007	-0.2	15.8	-0.1	-99	-99	-99	-99	-99
GS-12-159A	160	-99	56	1.424	1.4	8.7	9.3	-99	-99	-99	-99	-99
GS-12-165	26	-99	8	2.048	5.7	1.3	2.2	-99	-99	-99	-99	-99
GS-12-166	6	-99	51	0.300	2.8	5.4	0.4	-99	-99	-99	-99	-99
GS-12-167	39	-99	34	0.062	41.0	4.3	0.3	-99	-99	-99	-99	-99
GS-12-168	32	-99	156	0.343	3.0	10.2	0.8	-99	-99	-99	-99	-99
GS-12-169	2	-99	7	0.027	22.6	0.9	-0.1	-99	-99	-99	-99	-99
GS-12-171	14	-99	129	0.006	0.9	2.5	0.4	-99	-99	-99	-99	-99
GS-12-178	10	-99	47	2.370	-0.2	14.1	0.1	-99	-99	-99	-99	-99
GS-12-180	11	-99	17	4.165	0.5	31.1	1.1	-99	-99	-99	-99	-99
GS-12-185	9	-99	-1	0.697	7.6	2.9	28	-99	-99	-99	-99	-99
GS-12-187	-2	-99	3	1.298	6.2	4.6	3.5	-99	-99	-99	-99	-99
GS-12-188	-2	-99	5	0.253	4.8	7.9	2.5	-99	-99	-99	-99	-99
GS-12-200	90	-99	-1	0.054	1.2	-0.1	0.4	-99	-99	-99	-99	-99
GS-12-201	4	-99	-1	0.005	2.5	-0.1	-0.1	-99	-99	-99	-99	-99
GS-12-202	-2	-99	21	-0.001	0.7	2.1	-0.1	-99	-99	-99	-99	-99

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	Pb	Pr	Rb	S	Sb	Sc	Se	Sm	Sn	Sr	Ta	Tb
	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	2	0.05	1	0.001	0.2	0.1	0.1	0.1	1	2	0.5	0.1
	AL ICP-ES	Gs Tr MS	Gs Tr ES	AL ICP-ES	AL INAA	Gs Tr ES	AL ICP-MS	Gs Tr MS	Gs Tr MS	Gs Tr MS	Gs Tr MS	Gs Tr MS
GS-12-203	-2	-99	10	-0.001	0.8	0.9	-0.1	-99	-99	-99	-99	-99
GS-12-206	-2	-99	-1	0.010	0.9	8.1	0.2	-99	-99	-99	-99	-99
GS-12-207	4	-99	5	0.573	0.6	12.1	3.9	-99	-99	-99	-99	-99
GS-12-210	5	-99	4	0.266	1.9	17.3	3.3	-99	-99	-99	-99	-99
GS-12-211	3	-99	6	1.548	0.9	8.5	1.8	-99	-99	-99	-99	-99
GS-12-214	19	-99	121	3.128	0.8	39.5	3.2	-99	-99	-99	-99	-99
GS-12-221	12	-99	84	1.563	0.6	7.3	2.9	-99	-99	-99	-99	-99
GS-12-233	14	-99	143	0.016	0.9	3.3	0.7	-99	-99	-99	-99	-99
GS-12-234	69	-99	148	0.045	1.3	3.7	0.8	-99	-99	-99	-99	-99
GS-12-235	87	-99	111	0.030	1.1	4.8	1.0	-99	-99	-99	-99	-99
GS-12-236	14	-99	2	0.004	1.0	5.4	0.1	-99	-99	-99	-99	-99
GS-12-237	21	-99	78	0.060	1.0	1.1	0.6	-99	-99	-99	-99	-99
GS-12-238	24	-99	7	0.416	3.9	14.6	-0.1	-99	-99	-99	-99	-99
GS-12-242	148	-99	6	7.910	2.4	12.7	3.2	-99	-99	-99	-99	-99
GS-12-244	27	1.14	-1	0.011	0.3	0.6	-0.1	2.0	6	2	2.5	0.5
GS-12-263	12	-99	122	2.437	-0.2	7.9	2.4	-99	-99	-99	-99	-99
GS-12-269	10	-99	100	3.525	-0.2	18.7	1.8	-99	-99	-99	-99	-99
GS-12-271	5	-99	8	0.005	-0.2	12.1	0.5	-99	-99	-99	-99	-99
GS-12-280	5	-99	6	0.003	0.2	0.3	0.1	-99	-99	-99	-99	-99
GS-12-286	34	-99	79	0.363	0.8	6.6	0.1	-99	-99	-99	-99	-99
GS-12-309	-2	-99	26	0.008	0.3	2.1	-0.1	-99	-99	-99	-99	-99
GS-12-318	-2	-99	68	0.001	88.8	-0.1	-0.1	-99	-99	-99	-99	-99
GS-12-320	-2	-99	141	0.001	116	0.1	-0.1	-99	-99	-99	-99	-99
GS-12-322	-2	-99	126	0.001	43.3	-0.1	-0.1	-99	-99	-99	-99	-99
GS-12-323	5	-99	129	0.004	23.3	0.6	-0.1	-99	-99	-99	-99	-99
GS-12-324	-2	-99	147	-0.001	55.9	0.2	-0.1	-99	-99	-99	-99	-99
GS-12-325	-2	-99	197	0.001	56.6	0.2	-0.1	-99	-99	-99	-99	-99
GS-12-340	52	-99	77	0.006	-0.2	9.8	0.2	-99	-99	-99	-99	-99
GS-12-341	40	-99	59	0.162	-0.2	13.5	1.2	-99	-99	-99	-99	-99
GS-12-343	2	-99	59	0.038	-0.2	10.1	0.4	-99	-99	-99	-99	-99
GS-12-346	8	-99	82	0.101	5.4	1.8	0.1	-99	-99	-99	-99	-99
GS-12-349	8	-99	90	0.008	0.5	1.9	-0.1	-99	-99	-99	-99	-99
GS-12-354	13	-99	80	0.021	0.6	1.8	-0.1	-99	-99	-99	-99	-99
GS-12-355	12	-99	102	0.036	1.0	3.7	0.3	-99	-99	-99	-99	-99
GS-12-356	-2	-99	75	0.002	0.5	10.9	-0.1	-99	-99	-99	-99	-99
GS-12-359	24	-99	92	0.264	0.9	7.7	-0.1	-99	-99	-99	-99	-99
GS-12-360	3	-99	9	0.107	-0.2	4.6	0.2	-99	-99	-99	-99	-99

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	Pb	Pr	Rb	S	Sb	Sc	Se	Sm	Sn	Sr	Ta	Tb
	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	2	0.05	1	0.001	0.2	0.1	0.1	0.1	1	2	0.5	0.1
	AL ICP-ES	Gs Tr MS	Gs Tr ES	AL ICP-ES	AL INAA	Gs Tr ES	AL ICP-MS	Gs Tr MS	Gs Tr MS	Gs Tr MS	Gs Tr MS	Gs Tr MS
GS-12-362	10	-99	52	0.610	0.9	13.5	-0.1	-99	-99	-99	-99	-99
GS-12-364	126	-99	89	3.416	3.3	20.3	0.1	-99	-99	-99	-99	-99
GS-12-365	154	-99	65	0.125	0.9	8.4	0.4	-99	-99	-99	-99	-99
GS-12-373	-2	-99	9	0.002	-0.2	-0.1	0.2	-99	-99	-99	-99	-99
GS-12-374	17	-99	35	3.103	0.7	15.2	0.4	-99	-99	-99	-99	-99
GS-12-378	4	-99	38	0.010	0.4	10.5	-0.1	-99	-99	-99	-99	-99
GS-12-382	14	-99	75	2.546	1.5	20.9	0.4	-99	-99	-99	-99	-99
GS-12-388	28	9.67	-99	1.100	-0.2	7.9	0.8	8.1	2	69	0.8	1.3
GS-12-392	1430	0.12	-99	0.259	0.6	0.4	9.6	-0.1	1	5	0.6	-0.1
GS-13-016	541	8.86	-99	1.348	1.1	8.1	5.4	7.4	2	155	0.6	1.1
GS-13-017	60	14.30	-99	2.365	-0.2	12.1	1.3	11.0	2	106	0.6	1.2
GS-13-018	-2	0.11	-99	0.004	1.3	0.4	0.1	-0.1	-1	6	-0.5	-0.1

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	Te	Ti	Th	Tl	Tm	U	V	W	Y	Yb	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.1	1	0.1	0.1	0.05	0.1	5	4	1	0.1	1	1
	AL ICP-MS	Gs Tr ES	Gs Tr MS	AL ICP-MS	Gs Tr MS	AL INAA/ICP	Gs Tr MS	AL INAA	Gs Tr MS	Gs Tr MS	AL ICP-ES	Gs Tr MS
GS-11-029	-0.1	522	4.4	-0.1	-0.05	-0.1	42	-4	2	0.3	10	174
GS-11-030	0.3	1253	9.3	-0.1	0.07	-0.1	59	-4	3	0.5	6	169
GS-11-031	0.9	598	7.8	-0.1	0.23	-0.1	37	-4	15	1.8	197	153
GS-11-039	0.2	534	9.0	-0.1	0.17	0.2	38	-4	9	1.3	7	156
GS-11-075	0.1	431	11.7	-0.1	0.30	0.1	41	-4	15	2.6	7	190
GS-11-078	-0.1	361	30.2	-0.1	0.13	0.1	76	-4	6	1.2	6	222
GS-11-086	0.4	201	13.2	-0.1	0.39	-0.1	42	-4	16	3.0	2	290
GS-11-089	0.2	242	4.5	-0.1	0.09	-0.1	105	-4	2	0.6	13	188
GS-11-184	-0.1	664	6.4	-0.1	0.10	-0.1	78	-4	5	1.0	3	211
GS-11-189	-0.1	337	4.1	-0.1	-0.05	-0.1	39	-4	2	0.5	3	58
GS-11-190	0.1	133	10.7	-0.1	0.07	-0.1	22	-4	2	0.5	2	83
GS-11-191	0.1	103	13.1	-0.1	-0.05	-0.1	20	-4	1	0.5	2	83
GS-11-205	0.1	473	7.9	-0.1	0.15	-0.1	44	-4	5	1.3	1	223
GS-11-216	0.7	146	0.2	-0.1	-0.05	-0.1	6	-4	1	-0.1	133	6
GS-11-237	-0.1	949	15.6	-0.1	0.17	-0.1	13	-4	9	1.4	2	96
GS-11-254	-0.1	324	15.3	0.5	0.88	0.1	11	-4	51	6.6	98	92
GS-11-261	-0.1	164	0.7	0.9	-0.05	-0.1	17	-4	2	0.3	23	8
GS-11-263	-0.1	2092	3.0	0.4	0.14	-0.1	40	-4	6	0.9	12	95
GS-11-264	-0.1	1987	11.7	-0.1	0.09	-0.1	36	-4	5	0.9	11	116
GS-11-276	-0.1	551	11.6	-0.1	0.38	0.1	15	-4	21	2.6	24	137
GS-11-279	-0.1	515	2.0	-0.1	0.07	-0.1	12	-4	5	0.5	45	43
GS-11-280	-0.1	600	3.4	-0.1	0.12	-0.1	10	-4	8	1.0	22	57
GS-11-282	-0.1	602	3.2	0.6	0.10	0.1	24	-4	7	0.7	34	56
GS-11-283	0.2	44	0.7	0.4	0.05	0.3	-5	-4	5	0.3	9	10
GS-11-287	-0.1	591	15.2	-0.1	0.33	0.1	19	-4	21	2.4	19	60
GS-11-290	0.2	475	4.4	0.2	0.13	-0.1	88	-4	6	0.9	8	122
GS-11-291	1.3	2404	5.8	-0.1	0.51	-0.1	19	-4	30	3.7	188	172
GS-11-304	0.4	1666	7.9	-0.1	0.22	-0.1	12	-4	11	1.8	3	156
GS-11-309	-0.1	2399	1.5	-0.1	0.19	0.3	62	-4	11	1.2	20	57
GS-11-310	-0.1	424	0.3	0.5	-0.05	0.1	19	-4	1	0.2	6	11
GS-11-311	-0.1	1542	0.4	0.3	-0.05	-0.1	87	-4	2	0.2	4	20
GS-11-312	-0.1	2734	2.1	-0.1	0.19	1.4	44	5	10	1.5	39	82
GS-11-319	0.2	4137	1.3	0.6	0.28	0.3	240	4	15	1.7	27	90
GS-11-322	-0.1	1911	7.3	0.3	0.76	-0.1	19	-4	46	5.7	64	294
GS-11-323	0.2	1497	5.2	0.2	0.56	-0.1	11	-4	31	4.0	73	221
GS-11-324	24.6	1212	7.2	0.2	0.49	-0.1	86	70	25	4.1	9	254
GS-11-329	63.4	1196	3.7	-0.1	0.28	-0.1	164	338	13	2.0	5	126
GS-11-339	-0.1	1873	4.1	-0.1	0.25	-0.1	42	14	17	1.8	69	149
GS-11-354	2.2	510	1.3	-0.1	-0.05	-0.1	24	-4	2	0.3	13	29
GS-11-364	0.4	1317	10.4	-0.1	0.69	-0.1	14	-4	31	4.7	2	1007

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	Te	Ti	Th	Tl	Tm	U	V	W	Y	Yb	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.1	1	0.1	0.1	0.05	0.1	5	4	1	0.1	1	1
	AL ICP-MS	Gs Tr ES	Gs Tr MS	AL ICP-MS	Gs Tr MS	AL INAA/ICP	Gs Tr MS	AL INAA	Gs Tr MS	Gs Tr MS	AL ICP-ES	Gs Tr MS
GS-11-373	0.1	11783	8.4	0.5	1.02	0.2	182	-4	56	7.3	159	440
GS-11-375	0.1	2648	30.2	1.0	2.20	-0.1	103	14	105	16.3	8	1841
GS-11-378	-0.1	1174	16.3	0.6	1.80	-0.1	10	-4	93	13.1	71	854
GS-11-390	0.1	1257	16.2	0.5	2.00	-0.1	12	-4	89	14.0	3	885
GS-11-395	-0.1	1061	12.2	0.2	1.17	-0.1	10	6	56	7.9	11	774
GS-11-396	-0.1	1096	19.9	0.1	1.23	-0.1	19	21	63	8.1	32	965
GS-11-399	-0.1	1324	18.0	-0.1	2.11	-0.1	8	-4	125	15.8	87	980
GS-11-403	-0.1	1080	10.1	-0.1	1.26	-0.1	14	-4	70	9.2	7	561
GS-11-409	-0.1	1288	17.1	-0.1	1.36	0.2	21	-4	67	10.8	8	939
GS-11-414	0.3	225	1.2	-0.1	0.15	0.1	10	-4	10	1.2	37	47
GS-11-415	0.2	1341	6.3	1.2	0.89	0.3	28	18	54	6.0	182	319
GS-11-418	0.6	314	4.0	0.1	0.37	0.2	13	-4	24	2.8	41	177
GS-11-419	0.5	228	2.7	-0.1	0.30	0.2	15	-4	17	2.4	27	130
GS-11-420	0.2	183	2.3	-0.1	0.26	0.1	9	-4	13	2.0	9	131
GS-11-421	0.4	1602	3.1	0.7	0.41	0.2	28	7	24	2.8	27	180
GS-11-444	-0.1	1331	18.5	-0.1	2.31	-0.1	-5	-4	133	16.2	144	930
GS-11-447	0.2	1227	10.4	-0.1	0.36	0.2	23	-4	24	2.7	9	128
GS-11-449	0.2	921	11.2	-0.1	0.42	0.2	23	-4	27	3.2	10	132
GS-11-451	-0.1	725	8.9	0.5	0.34	0.1	21	-4	24	2.4	17	114
GS-11-452	0.1	1168	11.3	0.2	0.46	0.2	17	-4	33	2.9	11	116
GS-11-453	4.6	288	8.8	-0.1	0.08	-0.1	52	-4	3	0.7	2	135
GS-11-454	4.4	122	15.3	-0.1	0.30	-0.1	75	9	13	2.2	1	184
GS-11-455	3.7	247	9.9	-0.1	0.29	-0.1	96	-4	12	2.0	2	166
GS-11-456	1.1	269	11.2	-0.1	0.24	-0.1	89	-4	9	1.9	2	191
GS-11-457	789	170	1.8	-0.1	0.06	-0.1	29	-4	2	0.4	4	76
GS-11-460	10.8	298	3.2	-0.1	0.12	-0.1	136	-4	4	0.9	2	83
GS-11-461	0.2	188	11.3	-0.1	0.46	-0.1	90	-4	27	3.2	7	161
GS-11-462	7.6	301	6.8	0.5	0.22	-0.1	32	4	7	1.7	-1	163
GS-11-466	4.2	605	6.4	0.3	0.15	-0.1	31	-4	8	1.3	-1	168
GS-11-470	0.6	1292	24.9	-0.1	1.68	-0.1	14	-4	85	12.4	219	832
GS-11-471	0.5	3280	10.4	-0.1	0.24	0.1	32	-4	11	2.0	16	256
GS-11-478	0.4	5349	4.2	-0.1	0.25	0.2	126	-4	16	1.6	104	116
GS-11-482	0.2	1824	12.7	-0.1	0.44	-0.1	14	-4	21	3.1	12	234
GS-12-011	0.2	5484	-99	-0.1	-99	-99	-99	20	-99	-99	2	-99
GS-12-012	0.2	297	-99	-0.1	-99	-99	-99	-4	-99	-99	1	-99
GS-12-019	0.7	186	-99	-0.1	-99	-99	-99	-4	-99	-99	2	-99
GS-12-020	0.1	895	-99	-0.1	-99	-99	-99	-4	-99	-99	2	-99

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	Te	Ti	Th	Tl	Tm	U	V	W	Y	Yb	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.1	1	0.1	0.1	0.05	0.1	5	4	1	0.1	1	1
	AL ICP-MS	Gs Tr ES	Gs Tr MS	AL ICP-MS	Gs Tr MS	AL INAA/ICP	Gs Tr MS	AL INAA	Gs Tr MS	Gs Tr MS	AL ICP-ES	Gs Tr MS
GS-12-026	7.5	895	-99	-0.1	-99	-99	-99	-4	-99	-99	21	-99
GS-12-038	0.5	734	-99	-0.1	-99	-99	-99	-4	-99	-99	8	-99
GS-12-043	0.2	171	-99	-0.1	-99	-99	-99	-4	-99	-99	13	-99
GS-12-044	0.2	2415	-99	-0.1	-99	-99	-99	-4	-99	-99	44	-99
GS-12-047	0.3	1048	-99	-0.1	-99	-99	-99	-4	-99	-99	44	-99
GS-12-057	0.5	4745	-99	-0.1	-99	-99	-99	-4	-99	-99	151	-99
GS-12-060	0.1	7643	-99	0.2	-99	-99	-99	-4	-99	-99	6	-99
GS-12-062	-0.1	2636	-99	0.1	-99	-99	-99	-4	-99	-99	66	-99
GS-12-065	-0.1	3923	-99	0.2	-99	-99	-99	-4	-99	-99	29	-99
GS-12-069	0.2	958	-99	0.1	-99	-99	-99	-4	-99	-99	14	-99
GS-12-070	0.2	909	-99	0.1	-99	-99	-99	-4	-99	-99	57	-99
GS-12-085	0.2	2845	-99	-0.1	-99	-99	-99	-4	-99	-99	2	-99
GS-12-089	0.4	284	-99	-0.1	-99	-99	-99	-4	-99	-99	3	-99
GS-12-096	1.0	1147	-99	-0.1	-99	-99	-99	-4	-99	-99	201	-99
GS-12-099	0.4	5715	-99	0.2	-99	-99	-99	-4	-99	-99	14	-99
GS-12-101	0.2	2666	-99	-0.1	-99	-99	-99	-4	-99	-99	47	-99
GS-12-135	0.2	3433	-99	0.1	-99	-99	-99	-4	-99	-99	145	-99
GS-12-137	0.3	4999	-99	0.2	-99	-99	-99	-4	-99	-99	26	-99
GS-12-138	0.3	2135	11.2	-0.1	0.45	0.2	45	-4	25	3.1	15	270
GS-12-147	0.5	5806	-99	0.3	-99	-99	-99	-4	-99	-99	66	-99
GS-12-149	3.5	2333	0.4	0.3	-0.05	-99	34	-4	2	0.3	8	154
GS-12-155	0.2	3214	-99	0.2	-99	-99	-99	-4	-99	-99	9	-99
GS-12-159A	1.8	1445	-99	0.2	-99	-99	-99	-4	-99	-99	53	-99
GS-12-165	0.9	129	-99	-0.1	-99	-99	-99	-4	-99	-99	9	-99
GS-12-166	0.5	932	-99	-0.1	-99	-99	-99	-4	-99	-99	75	-99
GS-12-167	-0.1	467	-99	-0.1	-99	-99	-99	-4	-99	-99	97	-99
GS-12-168	-0.1	2089	-99	0.2	-99	-99	-99	-4	-99	-99	15	-99
GS-12-169	-0.1	96	-99	-0.1	-99	-99	-99	-4	-99	-99	3	-99
GS-12-171	-0.1	1155	-99	-0.1	-99	-99	-99	-4	-99	-99	11	-99
GS-12-178	1.8	4898	-99	-0.1	-99	-99	-99	-4	-99	-99	14	-99
GS-12-180	0.3	8066	-99	-0.1	-99	-99	-99	-4	-99	-99	34	-99
GS-12-185	12.9	933	-99	-0.1	-99	-99	-99	-4	-99	-99	3	-99
GS-12-187	3.3	656	-99	-0.1	-99	-99	-99	-4	-99	-99	10	-99
GS-12-188	9.6	961	-99	-0.1	-99	-99	-99	15	-99	-99	1	-99
GS-12-200	0.7	12	-99	-0.1	-99	-99	-99	-4	-99	-99	3	-99
GS-12-201	0.4	9	-99	-0.1	-99	-99	-99	-4	-99	-99	2	-99
GS-12-202	0.2	459	-99	-0.1	-99	-99	-99	-4	-99	-99	3	-99

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	Te	Ti	Th	Tl	Tm	U	V	W	Y	Yb	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.1	1	0.1	0.1	0.05	0.1	5	4	1	0.1	1	1
	AL ICP-MS	Gs Tr ES	Gs Tr MS	AL ICP-MS	Gs Tr MS	AL INAA/ICP	Gs Tr MS	AL INAA	Gs Tr MS	Gs Tr MS	AL ICP-ES	Gs Tr MS
GS-12-203	0.1	164	-99	-0.1	-99	-99	-99	-4	-99	-99	3	-99
GS-12-206	1.9	2559	-99	-0.1	-99	-99	-99	-4	-99	-99	2	-99
GS-12-207	25.5	2171	-99	-0.1	-99	-99	-99	-4	-99	-99	2	-99
GS-12-210	16.4	1950	-99	-0.1	-99	-99	-99	-4	-99	-99	4	-99
GS-12-211	5.2	3919	-99	0.2	-99	-99	-99	-4	-99	-99	2	-99
GS-12-214	2.8	3306	-99	0.2	-99	-99	-99	-4	-99	-99	47	-99
GS-12-221	1.3	2915	-99	-0.1	-99	-99	-99	-4	-99	-99	13	-99
GS-12-233	0.5	1002	-99	0.1	-99	-99	-99	-4	-99	-99	7	-99
GS-12-234	0.3	1159	-99	-0.1	-99	-99	-99	-4	-99	-99	47	-99
GS-12-235	0.4	1610	-99	0.1	-99	-99	-99	-4	-99	-99	15	-99
GS-12-236	0.2	10625	-99	-0.1	-99	-99	-99	9	-99	-99	7	-99
GS-12-237	0.2	1913	-99	-0.1	-99	-99	-99	-4	-99	-99	10	-99
GS-12-238	0.4	62613	-99	-0.1	-99	-99	-99	44	-99	-99	24	-99
GS-12-242	0.3	2285	-99	0.6	-99	-99	-99	-4	-99	-99	111	-99
GS-12-244	0.3	626	7.0	-0.1	0.41	-0.1	15	-4	22	3.4	5	666
GS-12-263	0.3	1307	-99	0.1	-99	-99	-99	-4	-99	-99	7	-99
GS-12-269	0.7	4617	-99	0.2	-99	-99	-99	-4	-99	-99	95	-99
GS-12-271	0.2	2429	-99	-0.1	-99	-99	-99	-4	-99	-99	6	-99
GS-12-280	-0.1	56	-99	-0.1	-99	-99	-99	6	-99	-99	12	-99
GS-12-286	0.2	2062	-99	-0.1	-99	-99	-99	-4	-99	-99	61	-99
GS-12-309	0.2	505	-99	-0.1	-99	-99	-99	-4	-99	-99	2	-99
GS-12-318	0.4	28	-99	0.1	-99	-99	-99	6	-99	-99	13	-99
GS-12-320	0.3	49	-99	0.3	-99	-99	-99	12	-99	-99	22	-99
GS-12-322	0.1	52	-99	0.2	-99	-99	-99	32	-99	-99	20	-99
GS-12-323	0.2	479	-99	0.1	-99	-99	-99	-4	-99	-99	28	-99
GS-12-324	0.3	137	-99	0.1	-99	-99	-99	-4	-99	-99	10	-99
GS-12-325	0.2	162	-99	0.2	-99	-99	-99	-4	-99	-99	13	-99
GS-12-340	0.3	712	-99	0.2	-99	-99	-99	-4	-99	-99	289	-99
GS-12-341	0.4	530	-99	0.1	-99	-99	-99	-4	-99	-99	282	-99
GS-12-343	0.2	431	-99	0.1	-99	-99	-99	-4	-99	-99	3	-99
GS-12-346	0.2	667	-99	-0.1	-99	-99	-99	6	-99	-99	3	-99
GS-12-349	0.2	677	-99	-0.1	-99	-99	-99	-4	-99	-99	3	-99
GS-12-354	0.4	695	-99	-0.1	-99	-99	-99	-4	-99	-99	8	-99
GS-12-355	0.7	1019	-99	-0.1	-99	-99	-99	-4	-99	-99	7	-99
GS-12-356	0.1	1055	-99	-0.1	-99	-99	-99	-4	-99	-99	6	-99
GS-12-359	0.3	1201	-99	0.1	-99	-99	-99	-4	-99	-99	50	-99
GS-12-360	0.3	402	-99	-0.1	-99	-99	-99	-4	-99	-99	8	-99

Appendix B - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 23) data

SampleNum	Te	Ti	Th	Tl	Tm	U	V	W	Y	Yb	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.1	1	0.1	0.1	0.05	0.1	5	4	1	0.1	1	1
	AL ICP-MS	Gs Tr ES	Gs Tr MS	AL ICP-MS	Gs Tr MS	AL INAA/ICP	Gs Tr MS	AL INAA	Gs Tr MS	Gs Tr MS	AL ICP-ES	Gs Tr MS
GS-12-362	0.1	1123	-99	0.6	-99	-99	-99	-4	-99	-99	14	-99
GS-12-364	0.2	3214	-99	0.5	-99	-99	-99	-4	-99	-99	154	-99
GS-12-365	0.3	1493	-99	0.2	-99	-99	-99	-4	-99	-99	22	-99
GS-12-373	0.2	11	-99	-0.1	-99	-99	-99	-4	-99	-99	2	-99
GS-12-374	0.2	3850	-99	0.1	-99	-99	-99	-4	-99	-99	83	-99
GS-12-378	0.2	1682	-99	0.1	-99	-99	-99	-4	-99	-99	56	-99
GS-12-382	0.2	6082	-99	-0.1	-99	-99	-99	-4	-99	-99	100	-99
GS-12-388	5.4	3095	11.8	-0.1	0.70	-99	21	-4	43	5.1	109	309
GS-12-392	1.8	85	-0.1	-0.1	-0.05	-99	25	-4	1	-0.1	3180	6
GS-13-016	6.0	2000	7.0	0.1	0.40	-99	44	-4	32	3.0	73	170
GS-13-017	17.4	2625	7.8	1.6	0.45	-99	92	-4	29	3.4	189	195
GS-13-018	0.4	46	0.1	-0.1	-0.05	-99	38	-4	1	-0.1	6	3

Appendix C - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 63) data

SampleNum	Year	UTMZone	UTMEast	UTMNorth	Datum	StationID	LabNum	Prospect
GS-11-002	2011	21	688612	5287616	NAD27	11GWS002	7740427	Monkstown Road
GS-11-004	2011	21	688801	5287550	NAD27	11GWS004	7740484	Monkstown Road
GS-11-005	2011	21	688787	5287534	NAD27	11GWS004	7740485	Monkstown Road
GS-11-010	2011	21	688906	5287746	NAD27	11GWS008	7740428	Monkstown Road
GS-11-011	2011	21	688901	5287762	NAD27	11GWS008	7740429	Monkstown Road
GS-11-021	2011	21	650234	5253525	NAD27	11GWS016	7740431	Stewart
GS-11-040	2011	21	650042	5253700	NAD27	11GWS030	7740432	Stewart
GS-11-056	2011	21	649577	5253723	NAD27	11GWS043	7740433	Stewart
GS-11-066	2011	21	649927	5253415	NAD27	11GWS052	7740434	Stewart
GS-11-112	2011	21	689135	5288184	NAD27	11GWS092	7740435	Monkstown Road
GS-11-126	2011	21	688283	5286937	NAD27	11GWS103	7740436	Little Pond
GS-11-127	2011	21	688134	5286601	NAD27	11GWS104	7740437	Paradise River
GS-11-131	2011	21	690743	5286435	NAD27	11GWS109	7740438	Monkstown Road
GS-11-134	2011	21	692357	5286163	NAD27	11GWS112	7740439	Tower
GS-11-136	2011	21	692347	5286177	NAD27	11GWS112	7740441	Tower
GS-11-139	2011	21	692365	5286192	NAD27	11GWS112	7740442	Tower
GS-11-144	2011	21	692423	5286147	NAD27	11GWS116	7740443	Tower
GS-11-145	2011	21	692429	5286163	NAD27	11GWS116	7740444	Tower
GS-11-147	2011	21	692411	5286162	NAD27	11GWS116	7740445	Tower
GS-11-156	2011	21	692519	5286911	NAD27	11GWS125	7740446	Tower
GS-11-179	2011	21	651508	5254506	NAD27	11GWS142	7740447	Stewart
GS-11-193	2011	21	651777	5254446	NAD27	11GWS153	7740448	Stewart
GS-11-202	2011	21	652238	5254297	NAD27	11GWS161	7740449	Stewart
GS-11-218	2011	21	654942	5255820	NAD27	11GWS177	7740451	Forty Creek
GS-11-219	2011	21	654909	5255826	NAD27	11GWS178	7740452	Forty Creek
GS-11-243	2011	21	639069	5226353	NAD27	11GWS199	7740662	Kelstone
GS-11-270	2011	21	646511	5256864	NAD27	11GWS220	7740663	White Mountain Pond
GS-11-285	2011	21	645844	5229009	NAD27	11GWS233	7740664	Spanish Room
GS-11-333	2011	21	718985	5331541	NAD27	11GWS279	7740665	Tug Pond
GS-11-334	2011	21	719005	5331628	NAD27	11GWS280	7740666	Tug Pond
GS-11-335	2011	21	719225	5331669	NAD27	11GWS284	7740667	Tug Pond
GS-11-341	2011	21	725569	5396898	NAD27	11GWS288	7740669	Cull's Harbour

Appendix C - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 63) data

SampleNum	Analysis	Description	Rock Type
GS-11-002	Au + 63; ICP majors & traces	Strongly foliated quartz-white mica schist	Hydrothermal alteration
GS-11-004	Au + 63; ICP majors & traces	Silica alteration; locally note minor hydrothermal brecciation	Hydrothermal alteration
GS-11-005	Au + 63; ICP majors & traces	Massive pinkish silica-hematite hosting alunite alteration and quartz veining	Hydrothermal alteration
GS-11-010	Au + 63; ICP majors & traces	Silica-pyrite alteration	Hydrothermal alteration
GS-11-011	Au + 63; ICP majors & traces	Silica-hematite-alnunite alteration	Hydrothermal alteration
GS-11-021	Au + 63; ICP majors & traces	Quartz-pyrite vein	Quartz vein
GS-11-040	Au + 63; ICP majors & traces	Silica vein with trace pyrite	Quartz vein
GS-11-056	Au + 63; ICP majors & traces	Silica vein with trace pyrite	Quartz vein
GS-11-066	Au + 63; ICP majors & traces	Silica-white mica alteration	Hydrothermal alteration
GS-11-112	Au + 63; ICP majors & traces	White mica-pyrite alteration	Hydrothermal alteration
GS-11-126	Au + 63; ICP majors & traces	Silica alteration	Hydrothermal alteration
GS-11-127	Au + 63; ICP majors & traces	Alunite-spec hematite alteration	Hydrothermal alteration
GS-11-131	Au + 63; ICP majors & traces	White mica-pyrite alteration	Hydrothermal alteration
GS-11-134	Au + 63; ICP majors & traces	Alunite-specularite alteration	Hydrothermal alteration
GS-11-136	Au + 63; ICP majors & traces	Silica-alunite alteration	Hydrothermal alteration
GS-11-139	Au + 63; ICP majors & traces	Alunite-specularite alteration	Hydrothermal alteration
GS-11-144	Au + 63; ICP majors & traces	White mica-pyrite alteration	Hydrothermal alteration
GS-11-145	Au + 63; ICP majors & traces	Buff brown silica-pyrite vein	Hydrothermal alteration
GS-11-147	Au + 63; ICP majors & traces	Quartz-specularite-alunite alteration	Hydrothermal alteration
GS-11-156	Au + 63; ICP majors & traces	Silica alteration	Hydrothermal alteration
GS-11-179	Au + 63; ICP majors & traces	White mica alteration	Hydrothermal alteration
GS-11-193	Au + 63; ICP majors & traces	Silica-alunite alteration	Hydrothermal alteration
GS-11-202	Au + 63; ICP majors & traces	Silica-alunite alteration	Hydrothermal alteration
GS-11-218	Au + 63; ICP majors & traces	Massive white quartz vein	Hydrothermal alteration
GS-11-219	Au + 63; ICP majors & traces	Massive white quartz vein with chalcopyrite, galena and silverish mineral	Hydrothermal alteration
GS-11-243	Au + 63; ICP majors & traces	Malachite-stained float of silicified volcaniclastic	Hydrothermal alteration
GS-11-270	Au + 63; ICP majors & traces	Siliceous, pyrite-rich altered lapilli tuff	Hydrothermal alteration
GS-11-285	Au + 63; ICP majors & traces	Pale beige silica-flooded sedimentary breccia	Hydrothermal alteration
GS-11-333	Au + 63; ICP majors & traces	Mafic-rich breccia	Hydrothermal alteration
GS-11-334	Au + 63; ICP majors & traces	Mafic-rich breccia	Hydrothermal alteration
GS-11-335	Au + 63; ICP majors & traces	Mafic-rich breccia	Hydrothermal alteration
GS-11-341	Au + 63; ICP majors & traces	Brecciated Fe-carbonate alteration	Hydrothermal alteration

Appendix C - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 63) data

SampleNum	TSG AltMin		SiO2	Al2O3	Fe2O3(T)	Fe2O3	FeO	MnO	MgO	CaO
		Units	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%
		Detection Limit	0.01	0.01	0.01	0.01	0.01	0.001	0.01	0.01
		Analysis Method	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj
GS-11-002	Muscovite,NULL		78.82	10.98	1.75	-99.00	-99.00	0.009	0.45	0.01
GS-11-004	Alunite,NULL		95.40	1.01	2.01	1.88	0.12	-0.001	-0.01	0.02
GS-11-005	NULL,NULL		94.58	1.07	1.07	0.35	0.64	0.005	0.07	0.08
GS-11-010	Na Alunite,NULL		71.31	11.63	1.91	0.23	1.51	-0.001	-0.01	0.08
GS-11-011	Na Alunite,NULL		78.74	8.57	2.31	-99.00	-99.00	-0.001	-0.01	0.08
GS-11-021	Aspectral,NULL		95.44	2.30	1.70	-99.00	-99.00	0.004	0.10	0.02
GS-11-040	Aspectral,NULL		93.89	2.29	1.14	-99.00	-99.00	0.003	0.08	-0.01
GS-11-056	NULL,NULL		97.55	0.50	0.44	-99.00	-99.00	-0.001	-0.01	-0.01
GS-11-066	Dickite,Paragonite		94.50	2.21	0.95	-99.00	-99.00	0.002	-0.01	0.01
GS-11-112	Paragonitic Illite,Montmorillonite		66.95	15.42	6.30	6.13	0.15	0.041	1.79	-0.01
GS-11-126	K Alunite,NULL		51.92	19.20	0.26	-99.00	-99.00	-0.001	-0.01	0.02
GS-11-127	K Alunite,NULL		66.64	13.71	1.14	1.09	0.05	-0.001	-0.01	0.06
GS-11-131	Muscovite,NULL		60.56	20.27	6.78	1.84	4.45	0.013	0.35	0.03
GS-11-134	Na Alunite,NULL		67.59	16.28	5.45	3.27	1.96	0.002	0.03	0.12
GS-11-136	Na Alunite,NULL		59.14	15.70	0.21	0.10	0.10	-0.001	-0.01	0.05
GS-11-139	Na Alunite,Kaolinite		66.73	13.80	3.12	3.04	0.07	0.002	-0.01	0.06
GS-11-144	Na Alunite,Nacrite		65.91	13.89	3.13	0.83	2.08	-0.001	-0.01	0.05
GS-11-145	NULL,NULL		60.51	15.00	2.36	0.58	1.60	-0.001	-0.01	0.03
GS-11-147	Muscovite,NULL		64.73	16.16	8.66	8.53	0.12	0.005	0.10	0.29
GS-11-156	Muscovite,NULL		96.20	0.62	0.07	-99.00	-99.00	-0.001	-0.01	0.08
GS-11-179	Pyrophyllite,Muscovite		72.17	16.35	3.84	2.76	0.97	0.002	0.04	0.20
GS-11-193	K Alunite,NULL		61.33	13.78	2.17	0.43	1.56	0.001	-0.01	0.07
GS-11-202	K Alunite,NULL		96.75	1.36	0.36	-99.00	-99.00	0.005	0.08	0.02
GS-11-218	Muscovite,NULL		55.73	14.51	4.43	2.03	2.16	0.002	-0.01	0.17
GS-11-219	Muscovite,NULL		95.74	0.98	0.48	-99.00	-99.00	0.002	0.02	0.08
GS-11-243	Muscovite,NULL		74.42	12.69	2.33	0.33	1.80	0.046	0.21	0.05
GS-11-270	Muscovite,NULL		80.19	9.07	3.05	-99.00	-99.00	0.026	0.72	0.14
GS-11-285	N/A		97.04	0.46	0.11	-99.00	-99.00	0.001	-0.01	0.05
GS-11-333	FeMgChlorite,Epidote		56.47	15.53	9.53	5.61	3.52	0.177	2.94	6.06
GS-11-334	Phengite,Epidote		66.92	14.66	5.35	4.79	0.51	0.089	0.98	2.99
GS-11-335	Epidote,Phengite		58.47	15.57	9.16	5.77	3.05	0.148	2.21	6.46
GS-11-341	Ankerite,NULL		33.26	4.76	11.10	1.19	8.92	0.282	5.57	16.59

Appendix C - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 63) data

SampleNum	Na2O	K2O	TiO2	P2O5	LOI	Total	Au	Ag	Al	As	Ba
	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	ppb	ppm	%	ppm	ppm
	0.01	0.01	0.001	0.001	0.01		2	0.05	0.01	2	1
	GS Maj	GS Maj	GS Maj	GS Maj	Grav		AL INAA	AL INAA/ICP	AL TD-ICP	AL INAA	AL INAA/ICP
GS-11-002	0.10	3.52	0.357	0.019	2.37	98.40	-2	-0.05	4.45	-2	292
GS-11-004	-0.01	-0.01	0.693	0.055	0.56	98.71	-2	-0.05	0.50	5	306
GS-11-005	-0.01	0.08	0.708	0.095	0.43	98.19	-2	-0.05	0.46	3	111
GS-11-010	1.22	1.46	0.466	0.199	12.34	100.59	5	-0.05	3.81	16	57
GS-11-011	0.96	0.86	0.425	0.222	8.53	100.68	-2	-0.05	3.43	4	112
GS-11-021	0.03	0.05	0.107	0.024	1.22	101.00	85	0.24	0.91	13	20
GS-11-040	-0.01	0.32	0.083	0.006	1.18	98.98	7	0.25	0.90	7	282
GS-11-056	-0.01	0.07	0.416	0.005	0.25	99.06	9	-0.05	0.20	2	14
GS-11-066	-0.01	0.29	0.070	0.010	0.74	98.80	97	-0.05	0.87	2	45
GS-11-112	0.80	2.94	1.483	0.093	4.51	100.35	32	-0.05	6.03	24	437
GS-11-126	1.18	3.25	0.158	0.133	21.33	97.42	-2	-0.05	7.08	7	42
GS-11-127	0.63	2.19	0.503	0.183	14.85	99.86	11	-0.05	5.17	12	96
GS-11-131	0.64	4.92	0.993	0.034	5.97	100.57	-2	-0.05	6.67	5	95
GS-11-134	0.53	1.42	0.952	0.223	7.49	100.08	-2	-0.05	5.84	6	140
GS-11-136	2.02	1.52	0.518	0.161	17.85	97.15	-2	-0.05	5.85	2	51
GS-11-139	0.97	0.81	0.493	0.164	12.49	98.65	-2	-0.05	3.50	3	169
GS-11-144	1.14	0.81	0.480	0.165	12.49	98.05	50	-0.05	5.50	7	118
GS-11-145	1.11	1.69	0.574	0.145	16.72	98.13	76	-0.05	1.39	13	236
GS-11-147	0.11	4.35	1.186	0.432	3.28	99.31	-2	-0.05	5.67	3	172
GS-11-156	-0.01	0.13	0.590	0.001	0.43	98.09	-2	-0.05	0.31	-2	42
GS-11-179	0.07	1.53	1.023	0.322	4.68	100.2	6	-0.05	6.18	3	1240
GS-11-193	0.38	2.83	0.484	0.126	17.51	98.68	-2	-0.05	5.44	-2	84
GS-11-202	0.02	0.32	0.020	0.002	0.67	99.6	-2	0.10	0.59	2	34
GS-11-218	1.15	2.40	0.952	0.292	18.97	98.59	4	-0.05	5.49	6	219
GS-11-219	0.02	0.23	0.017	0.039	0.88	98.48	4430	234	0.47	2	32
GS-11-243	-0.01	6.37	0.041	0.003	1.79	97.69	-2	0.53	5.08	505	2100
GS-11-270	0.15	1.76	0.504	0.022	2.82	98.46	58	0.26	3.54	85	281
GS-11-285	-0.01	0.01	0.529	0.030	0.25	98.23	8	0.34	0.21	2	138
GS-11-333	4.96	0.81	1.074	0.272	2.01	99.82	13	0.15	5.67	4	261
GS-11-334	4.42	1.44	0.713	0.143	1.54	99.25	131	0.17	5.58	9	206
GS-11-335	2.80	1.19	1.042	0.230	1.69	98.97	-2	0.23	5.90	4	363
GS-11-341	1.85	0.34	1.093	0.193	24.09	99.14	-2	0.17	1.91	8	56

Appendix C - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 63) data

SampleNum	Be	Bi	Br	Ca	Cd	Ce	Co	Cr	Cs	Cu
	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
	0.1	0.1	0.5	0.01	0.1	3	0.1	1	0.05	0.2
	AL TD-ICP	AL TD-ICP	AL INAA	AL TD-ICP	AL INAA/ICP	AL INAA	AL INAA/ICP	AL INAA/ICP	AL INAA/ICP	AL INAA/ICP
GS-11-002	1.2	1.4	-0.5	0.08	0.2	52	1.6	4	2.50	14.0
GS-11-004	0.1	0.2	-0.5	0.03	-0.1	53	-0.1	3	0.50	5.2
GS-11-005	0.2	1.2	-0.5	0.07	-0.1	56	0.4	4	0.47	4.6
GS-11-010	0.2	0.7	-0.5	0.09	-0.1	62	1.8	4	0.73	4.2
GS-11-011	-0.1	0.8	-0.5	0.08	-0.1	65	-0.1	3	0.82	1.3
GS-11-021	0.1	1.5	2.2	0.03	0.5	20	4.7	2	0.58	126
GS-11-040	-0.1	1.7	1.6	0.02	5.4	18	0.6	3	0.70	155
GS-11-056	-0.1	0.5	-0.5	-0.01	-0.1	20	0.3	-1	0.60	23.2
GS-11-066	0.1	0.5	2.0	-0.01	-0.1	4	0.1	-1	0.62	35.5
GS-11-112	1.7	2.1	-0.5	0.01	-0.1	67	-0.1	2	4.62	24.5
GS-11-126	0.3	0.2	-0.5	0.03	-0.1	86	1.1	4	0.61	3.7
GS-11-127	0.2	3.1	-0.5	0.06	-0.1	74	-0.1	3	0.62	6.4
GS-11-131	1.1	-0.1	-0.5	0.03	-0.1	71	13.3	9	6.20	16.0
GS-11-134	0.5	2.5	-0.5	0.10	-0.1	64	3.0	7	1.13	18.5
GS-11-136	0.2	0.2	-0.5	0.09	-0.1	74	-0.1	5	0.63	7.4
GS-11-139	-0.1	0.9	-0.5	0.06	-0.1	78	-0.1	8	0.55	3.5
GS-11-144	0.1	4.0	-0.5	0.03	-0.1	42	2.0	6	0.59	14.0
GS-11-145	-0.1	1.4	-0.5	0.01	-0.1	15	1.0	9	0.56	12.7
GS-11-147	0.6	0.9	-0.5	0.24	-0.1	97	-0.1	3	1.89	0.7
GS-11-156	-0.1	0.3	-0.5	0.07	-0.1	-3	0.2	1	0.57	3.8
GS-11-179	0.3	0.4	-0.5	0.17	0.1	85	0.6	6	0.92	4.5
GS-11-193	-0.1	0.3	-0.5	0.06	-0.1	76	2.0	3	0.55	1.2
GS-11-202	0.2	0.1	-0.5	0.02	0.1	-3	0.3	2	0.70	15.0
GS-11-218	0.1	0.3	-0.5	0.14	-0.1	64	7.3	6	0.51	9.2
GS-11-219	-0.1	4.0	-0.5	0.08	66.4	-3	0.6	3	0.69	1460
GS-11-243	6.0	1.7	-0.5	0.05	9.3	28	4.8	2	1.59	2040
GS-11-270	1.2	0.2	-0.5	0.17	-0.1	28	3.5	10	3.06	13.4
GS-11-285	0.2	4.6	1.0	0.06	-0.1	-3	0.2	5	0.44	24.8
GS-11-333	1.0	0.1	-0.5	4.48	-0.1	50	20.7	8	1.14	33.7
GS-11-334	1.1	-0.1	-0.5	2.43	-0.1	56	8.1	4	4.47	13.4
GS-11-335	1.2	0.2	-0.5	5.02	0.1	50	22.5	33	2.26	4.4
GS-11-341	0.4	-0.1	-0.5	11.9	0.9	23	27.5	33	1.07	63.2

Appendix C - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 63) data

SampleNum	Dy	Er	Eu	Fe	Ga	Ge	Gd	Hf	Hg	Ho	In
	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.1	0.1	0.2	0.01	0.1	0.1	0.1	1	1	0.1	0.1
	AL TD-MS	AL TD-MS	AL INAA	AL INAA	AL TD-MS	AL TD-MS	AL TD-MS	AL INAA	AL INAA	AL TD-MS	AL TD-MS
GS-11-002	2.2	1.3	0.8	1.12	11.9	-0.1	2.2	4	-1	0.4	0.1
GS-11-004	2.7	1.9	1.0	1.47	2.9	0.3	2.2	7	-1	0.6	-0.1
GS-11-005	2.4	1.8	0.8	0.81	2.1	0.2	1.8	6	-1	0.6	-0.1
GS-11-010	1.2	0.7	1.1	1.37	8.9	-0.1	2.2	5	-1	0.2	-0.1
GS-11-011	2.0	1.4	0.9	1.63	8.5	-0.1	2.4	5	-1	0.4	-0.1
GS-11-021	0.2	-0.1	-0.2	1.19	1.2	-0.1	0.4	-1	-1	-0.1	-0.1
GS-11-040	0.6	0.3	-0.2	0.86	2.4	-0.1	0.6	-1	-1	0.1	0.6
GS-11-056	0.4	0.3	0.4	0.38	0.8	0.1	0.4	6	-1	-0.1	-0.1
GS-11-066	-0.1	-0.1	-0.2	0.67	1.4	0.3	0.2	-1	-1	-0.1	-0.1
GS-11-112	2.8	1.5	1.5	4.93	18.0	0.5	3.8	5	-1	0.5	0.2
GS-11-126	1.2	1.0	0.5	0.24	10.1	-0.1	1.1	6	-1	0.3	-0.1
GS-11-127	1.6	0.9	0.9	0.90	14.4	0.1	2.1	5	-1	0.3	-0.1
GS-11-131	4.2	2.4	1.6	4.86	16.4	-0.1	4.5	4	-1	0.8	0.6
GS-11-134	1.3	0.9	0.9	3.96	18.4	-0.1	1.9	5	-1	0.3	-0.1
GS-11-136	0.7	0.5	1.1	0.21	8.3	-0.1	1.2	4	-1	0.1	-0.1
GS-11-139	0.8	0.6	1.2	2.41	5.6	-0.1	1.4	6	-1	0.2	-0.1
GS-11-144	0.3	0.3	-0.2	1.80	12.0	-0.1	0.3	4	-1	-0.1	-0.1
GS-11-145	0.5	0.6	0.5	0.89	3.3	-0.1	0.3	9	-1	0.2	-0.1
GS-11-147	5.9	2.7	2.6	6.60	18.0	0.1	7.4	7	-1	1.0	-0.1
GS-11-156	0.2	0.3	-0.2	0.11	0.6	-0.1	-0.1	3	-1	-0.1	-0.1
GS-11-179	2.6	1.0	1.8	3.04	18.2	0.2	4.0	7	-1	0.4	-0.1
GS-11-193	1.2	0.7	1.4	1.59	4.3	-0.1	2.5	5	-1	0.2	-0.1
GS-11-202	-0.1	-0.1	-0.2	0.34	1.0	-0.1	-0.1	-1	-1	-0.1	-0.1
GS-11-218	1.3	0.9	1.4	3.16	15.1	-0.1	2.2	5	-1	0.3	-0.1
GS-11-219	0.2	-0.1	-0.2	0.42	0.5	0.4	0.2	-1	-1	-0.1	-0.1
GS-11-243	9.7	6.3	-0.2	1.68	24.5	0.1	8.1	5	-1	2.0	1.5
GS-11-270	1.9	1.3	0.8	2.17	10.0	-0.1	1.6	5	-1	0.4	-0.1
GS-11-285	0.4	0.3	0.2	0.16	0.6	0.2	0.3	4	-1	-0.1	-0.1
GS-11-333	4.8	2.6	1.4	6.90	14.9	0.5	4.4	5	-1	1.0	-0.1
GS-11-334	4.7	2.8	1.5	3.83	16.6	0.4	4.2	6	-1	0.9	-0.1
GS-11-335	4.9	2.7	1.5	6.69	16.1	0.5	4.6	4	-1	1.0	-0.1
GS-11-341	3.0	1.5	1.5	7.53	5.9	0.5	2.9	2	-1	0.6	-0.1

Appendix C - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 63) data

SampleNum	Ir	K	La	Li	Lu	Mg	Mn	Mo	Na	Nb	Nd
	ppb	%	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm
	5	0.01	0.5	0.5	0.05	0.01	1	1	0.01	0.1	5
	AL INAA	AL TD-ICP	AL INAA	AL TD-MS	AL INAA	AL TD-ICP	AL TD-ICP	AL TD-ICP	AL INAA	AL TD-MS	AL INAA
GS-11-002	-5	3.08	24.1	1.9	0.38	0.31	80	14	0.09	5.2	35
GS-11-004	-5	0.03	24.6	-0.5	0.61	-0.01	28	-1	0.02	1.6	32
GS-11-005	-5	0.09	28.1	0.7	0.54	0.05	62	-1	0.03	2.3	28
GS-11-010	-5	1.32	30.4	-0.5	0.35	0.01	18	9	0.96	5.6	34
GS-11-011	-5	0.82	27.5	-0.5	0.62	-0.01	12	3	0.76	4.7	30
GS-11-021	-5	0.10	8.3	0.7	-0.05	0.08	33	11	0.07	0.6	9
GS-11-040	-5	0.34	6.7	2.0	0.07	0.07	29	50	0.04	1.2	15
GS-11-056	-5	0.07	9.9	-0.5	0.20	-0.01	23	67	0.04	3.6	10
GS-11-066	-5	0.31	1.9	1.5	-0.05	-0.01	21	48	0.05	0.9	-5
GS-11-112	-5	2.78	23.1	17.2	0.52	1.15	334	3	0.73	0.8	39
GS-11-126	-5	2.92	39.3	-0.5	0.45	0.01	18	2	0.98	7.8	31
GS-11-127	-5	1.95	33.2	0.6	0.33	-0.01	7	1	0.56	4.9	43
GS-11-131	-5	4.10	27.6	5.3	0.67	0.21	77	4	0.55	5.2	44
GS-11-134	-5	1.82	29.5	1.1	0.36	0.02	7	9	0.48	5.7	30
GS-11-136	-5	1.37	36.9	-0.5	0.20	-0.01	15	2	1.60	6.5	39
GS-11-139	-5	0.70	37.3	-0.5	0.36	-0.01	11	3	1.01	4.7	39
GS-11-144	-5	1.49	21.1	-0.5	0.12	-0.01	13	27	0.96	4.6	15
GS-11-145	-5	0.44	9.2	0.6	0.29	-0.01	15	99	0.28	10.6	-5
GS-11-147	-5	3.85	39.0	1.0	0.89	0.07	13	2	0.13	3.7	65
GS-11-156	-5	0.17	-0.5	-0.5	0.13	-0.01	8	-1	0.03	1.9	-5
GS-11-179	-5	1.36	35.1	1.2	0.64	0.03	8	1	0.09	6.3	48
GS-11-193	-5	2.52	32.0	-0.5	0.27	-0.01	6	-1	0.52	7.0	40
GS-11-202	-5	0.31	0.9	2.5	-0.05	0.06	51	-1	0.03	0.1	-5
GS-11-218	-5	2.65	24.6	-0.5	0.44	-0.01	8	-1	0.90	7.6	31
GS-11-219	-5	0.24	2.6	1.6	-0.05	0.02	32	-1	0.03	-0.1	8
GS-11-243	-5	6.23	15.2	8.8	1.31	0.14	363	1	0.09	26.3	22
GS-11-270	-5	2.25	11.8	6.9	0.43	0.44	216	38	0.41	6.3	14
GS-11-285	-5	0.06	1.2	0.6	0.09	0.01	40	3	0.03	2.6	-5
GS-11-333	-5	0.74	18.6	11.3	0.62	1.65	1240	-1	4.02	1.9	33
GS-11-334	-5	1.33	23.4	12.0	0.64	0.59	665	-1	3.49	1.3	44
GS-11-335	-5	1.11	17.3	10.6	0.54	1.31	1080	1	2.41	1.3	31
GS-11-341	-5	0.34	7.3	2.9	0.29	3.27	1970	-1	1.52	1.8	14

Appendix C - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 63) data

SampleNum	Ni	P	Pb	Pr	Rb	Re	S	Sb	Sc	Se
	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
	0.5	0.001	0.5	0.1	0.2	0.001	0.01	0.1	0.1	0.1
	AL INAA/ICP	AL TD-ICP	AL TD-ICP	AL TD-MS	AL INAA/ICP	AL TD-MS	AL TD-ICP	AL INAA	AL INAA	AL INAA/ICP
GS-11-002	0.5	0.010	32.3	4.3	98.4	0.011	1.02	0.6	6.8	2.1
GS-11-004	0.6	0.017	43.3	3.7	-0.2	-0.001	0.04	4.6	10.4	-0.1
GS-11-005	-0.5	0.029	12.0	4.1	2.2	0.006	-0.01	3.5	10.0	-0.1
GS-11-010	0.9	0.087	18.6	4.4	6.0	0.003	4.05	1.7	5.7	4.9
GS-11-011	-0.5	0.101	17.3	5.1	7.8	0.001	2.57	3.0	6.8	0.6
GS-11-021	2.5	0.014	401	1.7	2.7	0.251	0.89	4.7	1.0	1.6
GS-11-040	1.1	0.006	216	1.2	8.1	0.312	0.35	0.8	1.5	0.3
GS-11-056	0.6	0.003	14.4	1.8	1.5	0.065	0.09	0.2	1.4	-0.1
GS-11-066	-0.5	0.007	14.1	0.5	1.3	0.041	0.05	0.3	0.9	0.9
GS-11-112	-0.5	0.038	41.1	5.5	110	0.007	0.21	1.7	35.2	1.8
GS-11-126	0.7	0.063	41.4	5.7	2.3	0.015	7.79	0.8	8.4	0.4
GS-11-127	-0.5	0.085	118	5.8	2.6	0.001	4.66	5.5	6.7	2.0
GS-11-131	6.7	0.017	9.5	6.0	144	0.026	3.47	0.5	23.3	-0.1
GS-11-134	1.1	0.099	42.1	4.5	22.9	0.069	2.24	1.8	15.3	8.4
GS-11-136	-0.5	0.075	155	6.4	4.2	0.003	6.38	1.5	5.4	-0.1
GS-11-139	-0.5	0.072	228	5.3	0.4	0.004	3.71	1.3	6.5	-0.1
GS-11-144	-0.5	0.067	477	2.5	1.3	0.119	5.84	0.7	5.6	2.6
GS-11-145	0.6	0.025	196	1.1	0.9	0.220	1.63	1.2	4.6	1.7
GS-11-147	-0.5	0.181	28.4	8.5	35.9	0.002	0.24	3.4	24.9	0.2
GS-11-156	-0.5	0.003	3.9	-0.1	3.3	0.002	0.02	0.4	2.4	-0.1
GS-11-179	1.3	0.128	98.6	6.8	33.4	0.002	0.68	0.4	16.4	5.1
GS-11-193	0.9	0.060	79.9	5.8	1.7	-0.001	7.47	0.6	5.4	2.8
GS-11-202	0.5	0.003	24.4	0.1	8.7	0.001	0.28	0.3	0.5	-0.1
GS-11-218	2.0	0.132	120	5.7	1.5	0.001	9.76	0.8	21.0	5.0
GS-11-219	0.6	0.022	2950	0.3	6.0	0.001	0.66	0.2	0.4	85
GS-11-243	1.0	0.004	195	4.7	109	0.002	0.19	20.9	3.0	1.9
GS-11-270	3.2	0.011	19.6	1.9	43.6	0.007	1.31	3.5	10.1	16
GS-11-285	1.3	0.012	2.2	0.2	0.6	0.007	0.02	0.6	1.7	-0.1
GS-11-333	6.5	0.097	4.2	4.2	14.0	0.003	-0.01	-0.1	31.3	-0.1
GS-11-334	1.1	0.050	10.1	5.4	64.1	0.001	-0.01	5.6	18.1	0.8
GS-11-335	12.3	0.088	8.2	4.5	31.5	0.001	0.01	0.4	30.1	-0.1
GS-11-341	37.9	0.063	48.7	2.4	7.6	0.004	0.02	3.3	16.0	-0.1

Appendix C - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 63) data

SampleNum	Sm	Sn	Sr	Ta	Tb	Te	Ti	Th	Tl	Tm
	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
	0.1	1	0.2	0.1	0.5	0.1	0.01	0.1	0.05	0.1
	AL INAA	AL TD-MS	AL TD-MS	AL INAA/ICP	AL INAA	AL TD-MS	AL TD-ICP	AL INAA/ICP	AL TD-MS	AL TD-MS
GS-11-002	3.3	6	3.9	0.3	-0.5	0.4	0.24	5.7	1.11	0.2
GS-11-004	3.2	-1	99.8	-0.1	-0.5	0.5	0.14	17.5	-0.05	0.3
GS-11-005	3.4	-1	48.3	-0.1	-0.5	0.3	0.16	17.4	-0.05	0.3
GS-11-010	4.6	-1	357	0.4	-0.5	2.1	0.29	14.5	0.24	0.1
GS-11-011	4.2	-1	572	0.3	-0.5	0.4	0.24	19.3	0.09	0.2
GS-11-021	1.2	3	17.7	-0.1	-0.5	0.2	0.07	1.4	0.08	-0.1
GS-11-040	1.1	2	22.0	-0.1	-0.5	0.2	0.05	1.7	0.22	-0.1
GS-11-056	1.0	4	3.1	0.2	-0.5	0.1	0.26	2.1	-0.05	-0.1
GS-11-066	0.5	2	14.9	-0.1	-0.5	-0.1	0.05	1.1	0.09	-0.1
GS-11-112	7.4	4	94.7	-0.1	-0.5	0.3	0.24	6.3	1.01	0.2
GS-11-126	2.5	2	404	0.6	-0.5	0.3	0.11	18.6	0.09	0.2
GS-11-127	4.1	2	417	0.3	-0.5	0.6	0.25	16.6	0.31	0.2
GS-11-131	8.2	3	34.0	0.2	-0.5	-0.1	0.61	5.4	1.22	0.3
GS-11-134	3.8	2	346	0.4	-0.5	2.0	0.55	11.3	0.34	0.2
GS-11-136	3.7	7	386	0.4	-0.5	-0.1	0.34	12.4	0.07	-0.1
GS-11-139	3.6	5	350	0.3	-0.5	-0.1	0.23	13.1	-0.05	0.1
GS-11-144	0.9	17	312	0.3	-0.5	0.6	0.39	2.7	0.08	-0.1
GS-11-145	0.7	25	138	0.6	-0.5	0.4	0.78	7.6	0.07	0.1
GS-11-147	9.6	1	159	-0.1	-0.5	-0.1	0.40	8.9	1.15	0.4
GS-11-156	-0.1	2	1.4	-0.1	-0.5	-0.1	0.17	1.0	-0.05	-0.1
GS-11-179	6.9	3	334	0.2	-0.5	0.2	0.53	13.6	0.58	0.2
GS-11-193	4.7	2	294	0.4	0.7	-0.1	0.37	12.5	-0.05	0.1
GS-11-202	0.2	-1	2.8	-0.1	-0.5	0.3	0.02	0.7	0.07	-0.1
GS-11-218	5.2	8	351	0.4	-0.5	0.3	0.62	40.8	-0.05	0.2
GS-11-219	0.5	-1	6.7	-0.1	-0.5	497	0.02	1.0	0.15	-0.1
GS-11-243	6.9	5	14.5	1.0	1.5	0.5	0.03	19.9	1.36	1.1
GS-11-270	2.4	1	61.4	0.3	-0.5	0.9	0.33	7.5	0.39	0.2
GS-11-285	0.4	8	2.6	0.1	-0.5	-0.1	0.36	0.6	-0.05	-0.1
GS-11-333	6.2	-1	236	-0.1	-0.5	-0.1	0.20	2.9	0.07	0.4
GS-11-334	5.8	-1	246	-0.1	0.9	-0.1	0.16	7.0	0.21	0.4
GS-11-335	6.3	-1	292	-0.1	0.9	-0.1	0.28	2.8	0.20	0.4
GS-11-341	3.2	-1	566	-0.1	-0.5	-0.1	0.30	1.5	-0.05	0.2

Appendix C - Major- and Trace-element data for altered samples; GSNL data supplemented with Actlabs (Au + 63) data

SampleNum	U	V	W	Y	Yb	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.1	2	1	0.1	0.2	0.5	1
	GS Tr MS	AL TD-ICP	AL INAA	AL TD-MS	AL INAA	AL INAA/ICP	AL TD-MS
GS-11-002	1.0	58	-1	11.9	1.9	31.8	58
GS-11-004	3.6	16	-1	15.1	3.2	4.1	31
GS-11-005	3.8	12	-1	13.6	2.7	3.2	48
GS-11-010	2.6	52	-1	5.3	1.7	2.0	93
GS-11-011	2.1	55	2	10.8	3.6	2.2	88
GS-11-021	0.2	15	-1	0.8	-0.2	56.7	11
GS-11-040	0.4	9	-1	2.5	0.4	65.1	9
GS-11-056	1.1	9	6	2.3	0.8	92.4	58
GS-11-066	0.1	12	-1	0.4	-0.2	27.2	8
GS-11-112	0.7	101	-1	12.5	2.7	48.0	103
GS-11-126	1.9	39	-1	7.0	1.8	2.1	150
GS-11-127	1.9	70	-1	6.9	1.5	1.9	103
GS-11-131	0.8	183	3	21.8	3.6	21.0	112
GS-11-134	1.6	220	-1	6.7	1.6	13.6	126
GS-11-136	1.9	85	28	3.8	0.9	2.6	98
GS-11-139	2.0	56	23	4.4	1.4	1.7	87
GS-11-144	1.3	115	5	2.1	0.7	3.8	103
GS-11-145	2.2	43	10	4.7	1.4	8.2	240
GS-11-147	1.5	89	9	23.8	4.7	27.3	170
GS-11-156	0.8	5	-1	1.6	0.6	3.2	48
GS-11-179	1.8	98	-1	9.7	2.7	12.4	156
GS-11-193	1.6	69	-1	5.1	1.0	1.7	90
GS-11-202	0.1	5	-1	0.5	-0.2	13.7	4
GS-11-218	1.5	119	-1	7.0	2.0	3.5	150
GS-11-219	0.1	5	-1	0.7	-0.2	1920	4
GS-11-243	4.1	3	-1	57.9	7.7	836	105
GS-11-270	1.4	55	7	10.9	2.1	66.1	128
GS-11-285	0.6	12	-1	2.4	0.5	8.2	53
GS-11-333	0.7	65	-1	22.4	3.6	67.9	77
GS-11-334	1.2	43	-1	26.2	3.5	45.6	150
GS-11-335	0.6	55	-1	24.7	3.1	77.6	70
GS-11-341	0.4	85	11	14.1	1.7	208	36

Appendix D - Major- and Trace-element data for altered samples; GSNL data supplemented with Becquerel (Au + 34) data

SampleNum	Year	UTMZone	UTMEast	UTMNorth	Datum	StationID	LabNum	Prospect	Analysis
GS-11-061	2011	21	649687	5253014	NAD27	11GWS048	7740456	Stewart	Au + 34; ICP majors & traces
GS-11-063	2011	21	649664	5253002	NAD27	11GWS049	7740488	Stewart	Au + 34; ICP majors & traces
GS-11-065	2011	21	649980	5253368	NAD27	11GWS051	7740489	Stewart	Au + 34; ICP majors & traces
GS-11-076	2011	21	649474	5252771	NAD27	11GWS062	7740491	Stewart	Au + 34; ICP majors & traces
GS-11-079	2011	21	649476	5252787	NAD27	11GWS063	7740492	Stewart	Au + 34; ICP majors & traces
GS-11-084	2011	21	689563	5288348	NAD27	11GWS067	7740493	Ridge	Au + 34; ICP majors & traces
GS-11-088	2011	21	649619	5253079	NAD27	11GWS069	7740495	Stewart	Au + 34; ICP majors & traces
GS-11-090	2011	21	649528	5253126	NAD27	11GWS070	7740496	Stewart	Au + 34; ICP majors & traces
GS-11-091	2011	21	649350	5253200	NAD27	11GWS071	7740457	Stewart	Au + 34; ICP majors & traces
GS-11-092	2011	21	649365	5253466	NAD27	11GWS072	7740497	Stewart	Au + 34; ICP majors & traces
GS-11-103	2011	21	650681	5254328	NAD27	11GWS084	7740461	Stewart	Au + 34; ICP majors & traces
GS-11-115	2011	21	689203	5288327	NAD27	11GWS093	7740499	Monkstown Road	Au + 34; ICP majors & traces
GS-11-125	2011	21	688309	5286941	NAD27	11GWS103	7740501	Little Pond	Au + 34; ICP majors & traces
GS-11-138A	2011	21	692347	5286177	NAD27	11GWS112	7740502	Tower	Au + 34; ICP majors & traces
GS-11-138B	2011	21	692347	5286177	NAD27	11GWS112	7740503	Tower	Au + 34; ICP majors & traces
GS-11-140	2011	21	692365	5286192	NAD27	11GWS112	7740504	Tower	Au + 34; ICP majors & traces
GS-11-206	2011	21	659252	5255975	NAD27	11GWS164	7740415	Stewart	Au + 34; ICP majors & traces
GS-11-224	2011	21	695897	5300508	NAD27	11GWS183	7740465	Power Line	Au + 34; ICP majors & traces
GS-11-226	2011	21	695922	5300539	NAD27	11GWS183	7740418	Power Line	Au + 34; ICP majors & traces
GS-11-230	2011	21	696063	5300900	NAD27	11GWS187	7740419	Power Line	Au + 34; ICP majors & traces
GS-11-241	2011	21	639071	5226220	NAD27	11GWS197	7740582	Kelstone	Au + 34; ICP majors & traces
GS-11-246	2011	21	639067	5226595	NAD27	11GWS201	7740576	Kelstone	Au + 34; ICP majors & traces
GS-11-247	2011	21	639060	5226592	NAD27	11GWS201	7740577	Kelstone	Au + 34; ICP majors & traces
GS-11-248	2011	21	639144	5226678	NAD27	11GWS202	7740532	Kelstone	Au + 34; ICP majors & traces
GS-11-249	2011	21	639144	5226678	NAD27	11GWS202	7740533	Kelstone	Au + 34; ICP majors & traces
GS-11-252	2011	21	639183	5227067	NAD27	11GWS208	7740535	Kelstone	Au + 34; ICP majors & traces
GS-11-256	2011	21	639009	5226720	NAD27	11GWS211	7740537	Kelstone	Au + 34; ICP majors & traces
GS-11-260	2011	21	637479	5229629	NAD27	11GWS214	7740579	Braxton-Bradly	Au + 34; ICP majors & traces
GS-11-265	2011	21	646206	5256086	NAD27	11GWS217	7740538	White Mountain Pond	Au + 34; ICP majors & traces
GS-11-269	2011	21	646511	5256875	NAD27	11GWS220	7740541	White Mountain Pond	Au + 34; ICP majors & traces
GS-11-299	2011	21	648725	5239214	NAD27	11GWS243	7740546	Burin Highway	Au + 34; ICP majors & traces
GS-11-307	2011	21	710338	5351012	NAD27	11GWS247	7740549	Big Easy	Au + 34; ICP majors & traces
GS-11-325	2011	21	715999	5400765	NAD27	11GWS262	7740551	Calvin's Landing	Au + 34; ICP majors & traces
GS-11-345	2011	21	725661	5396836	NAD27	11GWS293	7740552	Cull's Harbour	Au + 34; ICP majors & traces
GS-11-347	2011	21	719173	5331887	NAD27	11GWS298	7740553	Tug Pond	Au + 34; ICP majors & traces
GS-11-349	2011	21	662806	5255360	NAD27	11GWS303	7740555	Boat Harbor	Au + 34; ICP majors & traces
GS-11-350	2011	21	662839	5255378	NAD27	11GWS304	7740556	Boat Harbor	Au + 34; ICP majors & traces
GS-11-352	2011	21	662945	5255403	NAD27	11GWS305	7740557	Boat Harbor	Au + 34; ICP majors & traces
GS-11-359	2011	21	658959	5282651	NAD27	11GWS310	7740573	Goldhammer	Au + 34; ICP majors & traces
GS-11-407	2011	21	659152	5283302	NAD27	11GWS344	7740561	Goldhammer	Au + 34; ICP majors & traces
GS-11-429	2011	21	686552	5289656	NAD27	11GWS361	7740562	Monkstown Road	Au + 34; ICP majors & traces

Appendix D - Major- and Trace-element data for altered samples; GSNL data supplemented with Becquerel (Au + 34) data

SampleNum	Year	UTMZone	UTMEast	UTMNorth	Datum	StationID	LabNum	Prospect	Analysis
GS-11-441	2011	21	659195	5283204	NAD27	11GWS368	7740563	Goldhammer	Au + 34; ICP majors & traces
GS-11-446	2011	21	659280	5283535	NAD27	11GWS372	7740565	Goldhammer	Au + 34; ICP majors & traces
GS-11-473	2011	21	625588	5208523	NAD27	11GWS392	7740566	Stroud's Pond	Au + 34; ICP majors & traces
GS-11-481	2011	21	633352	5248016	NAD27	11GWS396	7740568	Point Rosie	Au + 34; ICP majors & traces
GS-12-058	2012	21	652632	5243778	NAD27	12GWS428	7740705	Red Harbour River East	Au + 34
GS-12-068	2012	21	670663	5279763	NAD27	12GWS441	7740713	Terenceville East	Au + 34; ICP majors & traces
GS-12-073	2012	21	670508	5279573	NAD27	12GWS443	7740716	Terenceville East	Au + 34; ICP majors & traces
GS-12-088	2012	21	691772	5285374	NAD27	12GWS463	7740718	Tower	Au + 34; ICP majors & traces
GS-12-094	2012	21	658163	5247116	NAD27	12GWS468	7740721	Baine Harbour	Au + 34; ICP majors & traces
GS-12-121	2012	21	658576	5248400	NAD27	12GWS477	7740725	Baine Harbour	Au + 34
GS-12-150	2012	21	662192	5256747	NAD27	12GWS504	7740732	Rattle Brook	Au + 34; ICP majors & traces
GS-12-196	2012	21	690960	5325898	NAD27	12GWS534	7740751	W of Western Pd	Au + 34; ICP majors & traces
GS-12-198	2012	21	694520	5332793	NAD27	12GWS535	7740752	W of Western Pd	Au + 34; ICP majors & traces
GS-12-262	2012	21	649051	5252669	NAD27	12GWS587	7740775	Stewart	Au + 34; ICP majors & traces
GS-12-270	2012	21	649370	5252121	NAD27	12GWS597	7740778	Stewart	Au + 34; ICP majors & traces
GS-12-338	2012	21	688746	5281226	NAD27	12GWS666	7740793	Heffern Pond	Au + 34; ICP majors & traces
GS-12-352	2012	21	681058	5269024	NAD27	12GWS680	7740799	Cape Rodgers	Au + 34; ICP majors & traces
GS-12-353	2012	21	679114	5265395	NAD27	12GWS681	7740801	Cape Rodgers	Au + 34; ICP majors & traces
GS-12-370	2012	21	741247	5418498	NAD27	12GWS689	7740813	Pit Sound Island	Au + 34; ICP majors & traces

Appendix D - Major- and Trace-element data for altered samples; GSNL data supplemented with Becquerel (Au + 34) data

SampleNum	Description	Rock Type	TSG AltMin
GS-11-061	Fine-graind mafic dyke	Hydrothermal alteration	Diaspore,Muscovite
GS-11-063	Chlorite-pyrite-white mica altered quartz diorite	Hydrothermal alteration	Muscovite,Pyrophyllite
GS-11-065	White-mica pyrite alteration	Hydrothermal alteration	Pyrophyllite,Dickite
GS-11-076	Silica-white mica alteration	Hydrothermal alteration	Pyrophyllite,Muscovite
GS-11-079	White mica-pyrite altered crystal tuff	Hydrothermal alteration	Pyrophyllite,Muscovite
GS-11-084	White mica-pyrite alteration	Hydrothermal alteration	Muscovite,NULL
GS-11-088	Silica-white mica altered crystal tuff	Hydrothermal alteration	Pyrophyllite,Muscovite
GS-11-090	Vuggy silica alteration	Hydrothermal alteration	Muscovite,NULL
GS-11-091	Silica-white mica altered crystal tuff	Hydrothermal alteration	Pyrophyllite,Muscovite
GS-11-092	Massive grey silica alteration with up to 10%	Hydrothermal alteration	Muscovite,NULL
GS-11-103	White mica-pyrite alteration	Hydrothermal alteration	Pyrophyllite,Na Alunite
GS-11-115	White mica-pyrite alteration	Hydrothermal alteration	Phengite,Epidote
GS-11-125	Silica-pyrite alteration	Hydrothermal alteration	FeMgChlorite,Muscovite
GS-11-138A	Alunite-pyrite alteration	Hydrothermal alteration	Na Alunite,NULL
GS-11-138B	Alunite-specularite alteration	Hydrothermal alteration	Na Alunite,Pyrophyllite
GS-11-140	Alunite-specularite alteration	Hydrothermal alteration	Na Alunite,NULL
GS-11-206	White mica-pyrite alteration	Hydrothermal alteration	Muscovite,FeMgChlorite
GS-11-224	K-feldspar-specularite vein	Hydrothermal alteration	NULL,NULL
GS-11-226	Crenulated white mica alteration	Hydrothermal alteration	Phengite,NULL
GS-11-230	Chloritic altered volcanic	Hydrothermal alteration	FeChlorite,Siderite
GS-11-241	White mica alteration	Hydrothermal alteration	Muscovite,NULL
GS-11-246	Rusty weathering, fine-grained, silica alteration	Hydrothermal alteration	Muscovite,NULL
GS-11-247	Silica-rich alteration with 5-10% and trace chalcopyrite	Hydrothermal alteration	Muscovite,NULL
GS-11-248	Chloritic altered volcanic	Hydrothermal alteration	Muscovite,FeChlorite
GS-11-249	Silica-Py altered volcaniclastic	Hydrothermal alteration	FeChlorite,Muscovite
GS-11-252	Pervasive, pale beige silica alteration	Hydrothermal alteration	Muscovite,NULL
GS-11-256	White mica alteration	Hydrothermal alteration	Muscovite,NULL
GS-11-260	Silica altered volcanic	Hydrothermal alteration	FeMgChlorite,Muscovite
GS-11-265	Silica-pyrite altered fine-grained felsic volcanic	Hydrothermal alteration	Phengite,NULL
GS-11-269	White mica alteration	Hydrothermal alteration	Paragonite,NULL
GS-11-299	Sulphide-rich vein crosscutting rhyolite	Hydrothermal alteration	Kaolinite,NULL
GS-11-307	White quartz vein	Hydrothermal alteration	Calcite,Muscovite
GS-11-325	Massive quartz vein	Hydrothermal alteration	Phengite,Biotite
GS-11-345	Brecciated Fe-carbonate alteration	Hydrothermal alteration	Muscovitic Illite,Siderite
GS-11-347	Mafic-rich breccia	Hydrothermal alteration	MgChlorite,Epidote
GS-11-349	White mica-pyrite alteration	Hydrothermal alteration	Paragonite,FeChlorite
GS-11-350	Chlorite-pyrite alteration	Hydrothermal alteration	FeChlorite,Paragonite
GS-11-352	Crenulated chlorite-pyrite-rich alteration	Hydrothermal alteration	FeChlorite,Paragonite
GS-11-359	Fine-grained, silica altered breccia	Hydrothermal alteration	Paragonite,NULL
GS-11-407	Pale green silica alteration	Hydrothermal alteration	Phengitic Illite,NULL
GS-11-429	Pyrite-rich stringer alteration in volcaniclastic	Hydrothermal alteration	Phengite,Jarosite

Appendix D - Major- and Trace-element data for altered samples; GSNL data supplemented with Becquerel (Au + 34) data

SampleNum	Description	Rock Type	TSG AltMin
GS-11-441	Brecciated fine-grained felsic volcanic	Hydrothermal alteration	NULL,NULL
GS-11-446	Pyritic alteration (locally up to 20% pyrite)	Hydrothermal alteration	Phengite,NULL
GS-11-473	Silica-pyrite alteration within flow-banded rhyolite	Hydrothermal alteration	Kaolinite,Paragonite
GS-11-481	Silica-white mica-pyrite alteration	Hydrothermal alteration	Muscovite,NULL
GS-12-058	Clay altered maroon crystal tuff	Hydrothermal alteration	Kaolinite,NULL
GS-12-068	Rusty weathering white quartz vein	Hydrothermal alteration	Aspectral,NULL
GS-12-073	Massive white quartz vein	Hydrothermal alteration	Aspectral,NULL
GS-12-088	Pyritic white mica alteration	Hydrothermal alteration	Phengite,NULL
GS-12-094	White mica-pyrite alteration developed along shear	Hydrothermal alteration	Phengite,NULL
GS-12-121	Cataclastic breccia in fine-grained pink porphyry	Hydrothermal alteration	Epidote,NULL
GS-12-150	Sheard white mica-pyrite alteration	Hydrothermal alteration	Muscovite,Pyrophyllite
GS-12-196	2m wide massive bull qtz vein	Quartz vein	Muscovite,Magnesite
GS-12-198	Foliated white mica alteration	Hydrothermal alteration	Muscovite,NULL
GS-12-262	White mica altered crystal tuff	Hydrothermal alteration	Muscovite,NULL
GS-12-270	White mica altered crystal tuff	Hydrothermal alteration	Epidote,Phengite
GS-12-338	Sheared white mica alteration	Hydrothermal alteration	Phengite,NULL
GS-12-352	White mica-pyrite altered crystal tuff	Hydrothermal alteration	Phengite,NULL
GS-12-353	White mica-pyrite altered crystal tuff	Hydrothermal alteration	Phengite,NULL
GS-12-370	Vein-hosted chalcopyrite	Hydrothermal alteration	Calcite,NULL

Appendix D - Major- and Trace-element data for altered samples; GSNL data supplemented with Becquerel (Au + 34) data

SampleNum	Notes		SiO2	Al2O3	Fe2O3(T)	Fe2O3	FeO	MnO	MgO	CaO
		Units	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%
		Detection Limit	0.01	0.01	0.01	0.01	0.01	0.001	0.01	0.01
		Analysis Method	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj
GS-11-061			15.26	66.19	5.58	2.56	2.72	0.004	0.05	0.11
GS-11-063			71.11	14.29	6.68	1.59	4.58	0.005	0.05	0.05
GS-11-065			82.81	10.78	0.95	0.93	0.02	0.001	-0.01	-0.01
GS-11-076			73.97	17.88	1.80	0.19	1.45	-0.001	-0.01	0.03
GS-11-079			75.18	16.68	1.79	1.14	0.59	-0.001	0.03	0.02
GS-11-084			66.74	15.70	3.85	3.24	0.55	0.086	2.09	0.24
GS-11-088			79.96	12.40	2.39	-99	-99	-0.001	-0.01	-0.01
GS-11-090			92.54	4.01	0.90	0.71	0.17	0.002	0.04	0.01
GS-11-091			77.30	14.99	1.20	-99	-99	0.001	0.05	-0.01
GS-11-092			96.23	0.63	1.94	-99	-99	0.002	0.02	-0.01
GS-11-103			72.31	16.29	1.56	-99	-99	-0.001	-0.01	0.15
GS-11-115			66.01	18.04	2.50	2.29	0.18	0.025	0.31	1.28
GS-11-125			56.87	15.26	7.72	2.29	4.89	0.096	4.36	1.45
GS-11-138A			66.58	10.70	3.24	-99	-99	0.002	0.01	0.08
GS-11-138B			67.10	10.82	3.84	3.79	0.05	0.003	0.02	0.09
GS-11-140			44.08	24.73	2.04	-99	-99	0.001	-0.01	0.11
GS-11-206			52.39	18.48	10.48	8.22	2.04	0.064	1.50	0.61
GS-11-224			61.31	18.24	3.91	3.81	0.09	0.051	0.10	0.04
GS-11-226			76.18	12.13	2.59	2.16	0.38	0.018	0.05	0.03
GS-11-230			72.54	11.91	6.53	5.69	0.76	0.053	0.27	0.86
GS-11-241			76.79	12.59	1.22	0.52	0.62	0.030	0.06	-0.01
GS-11-246			80.09	11.06	2.20	-99	-99	0.032	0.07	-0.01
GS-11-247			73.49	12.56	5.36	0.27	4.58	0.044	0.13	-0.01
GS-11-248			76.16	12.02	4.61	0.83	3.40	0.093	0.30	0.02
GS-11-249			77.20	12.30	2.82	1.98	0.76	0.031	0.12	-0.01
GS-11-252			50.55	15.25	9.07	5.20	3.48	0.727	2.67	6.73
GS-11-256			80.61	10.47	0.68	0.07	0.55	0.107	0.23	0.72
GS-11-260			83.22	6.29	3.69	-99	-99	0.044	0.60	1.00
GS-11-265			75.04	13.24	1.42	-99	-99	0.043	0.47	0.59
GS-11-269			68.49	14.26	6.35	5.87	0.43	0.019	0.49	0.13
GS-11-299			54.50	12.68	5.93	0.16	5.20	0.130	0.67	8.47
GS-11-307			85.38	4.13	1.49	0.95	0.48	0.043	0.37	3.30
GS-11-325			85.75	7.44	0.42	0.37	0.05	0.006	0.04	0.03
GS-11-345			42.72	13.23	9.12	1.27	7.07	0.157	4.72	8.48
GS-11-347			57.64	15.90	8.68	4.43	3.82	0.200	3.30	6.52
GS-11-349	composite chip sample over ~ 6m wm-py alt		65.30	14.67	4.13	-99	-99	0.080	0.83	3.71
GS-11-350	composite chip sample over ~40m wm-py alt		61.15	16.42	7.33	1.00	5.70	0.120	1.30	4.30
GS-11-352			66.14	15.58	4.29	0.27	3.62	0.085	0.70	2.79
GS-11-359			82.46	10.73	0.26	0.11	0.14	-0.001	-0.01	-0.01
GS-11-407			76.91	11.04	3.04	-99	-99	0.035	0.02	0.03
GS-11-429			72.49	10.28	6.19	2.03	3.75	0.070	1.03	0.55

Appendix D - Major- and Trace-element data for altered samples; GSNL data supplemented with Becquerel (Au + 34) data

SampleNum	Notes		SiO2	Al2O3	Fe2O3(T)	Fe2O3	FeO	MnO	MgO	CaO
		Units	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%
		Detection Limit	0.01	0.01	0.01	0.01	0.01	0.001	0.01	0.01
		Analysis Method	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj
GS-11-441			63.46	17.50	5.28	2.12	2.84	0.079	0.20	0.07
GS-11-446			64.57	8.50	12.52	4.41	7.30	0.064	0.39	0.09
GS-11-473			78.71	12.51	1.54	-99	-99	0.003	0.02	0.02
GS-11-481			66.49	15.83	4.00	-99	-99	0.049	1.11	0.40
GS-12-058			-99	-99	-99	-99	-99	-99	-99	-99
GS-12-068			99.45	0.22	0.11	-99	-99	-0.001	0.01	0.02
GS-12-073			97.20	0.65	0.21	0.20	0.01	0.003	-0.01	0.01
GS-12-088			71.13	15.69	3.57	1.98	1.43	0.071	0.86	0.10
GS-12-094			72.43	14.29	1.81	0.42	1.25	0.021	0.57	0.35
GS-12-121			-99	-99	-99	-99	-99	-99	-99	-99
GS-12-150	sample contains up to 30-40% py		72.13	1.82	15.14	9.66	4.94	0.008	0.01	0.02
GS-12-196			99.15	0.62	0.10	-99	-99	0.002	0.03	0.03
GS-12-198			76.11	13.70	2.08	1.83	0.22	0.020	0.39	0.22
GS-12-262			76.22	14.94	1.15	1.00	0.13	0.024	0.43	0.02
GS-12-270			74.77	13.75	2.25	1.14	1.00	0.106	0.49	1.13
GS-12-338			78.06	12.97	1.13	-99	-99	0.071	0.23	0.46
GS-12-352			78.29	11.73	1.06	1.05	0.01	0.048	0.14	0.69
GS-12-353			79.64	11.66	2.50	2.32	0.16	0.014	0.13	0.02
GS-12-370			63.48	2.09	4.02	1.66	2.13	0.063	1.01	14.75

Appendix D - Major- and Trace-element data for altered samples; GSNL data supplemented with Becquerel (Au + 34) data

SampleNum	Na2O	K2O	TiO2	P2O5	LOI	Total	Au	Ag	As	Ba	Be	Bi	Br
	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	ppb	ppm	ppm	ppm	ppm	ppm	ppm
	0.01	0.01	0.001	0.001	0.01		1	0.1	0.5	50	0.1	0.4	1
	GS Maj	GS Maj	GS Maj	GS Maj	Grav		BQ INAA	GS Tr ES	BQ INAA	BQ INAA	GS Tr ES	GS Tr MS	BQ INAA
GS-11-061	0.41	2.53	0.159	0.352	8.91	99.57	49	-99	13.0	1300	1.1	-0.4	-1
GS-11-063	0.28	3.07	0.767	0.123	3.79	100.22	549	-99	4.0	940	0.8	-0.4	-1
GS-11-065	0.15	0.69	0.290	0.052	2.43	98.15	54	-99	1.9	190	0.2	-0.4	1
GS-11-076	0.19	1.10	0.461	0.095	3.87	99.40	11	-99	2.6	470	0.1	-0.4	-1
GS-11-079	0.21	1.02	0.477	0.069	3.29	98.76	11	-99	2.2	350	0.1	-0.4	-1
GS-11-084	0.29	4.08	0.581	0.167	4.37	98.18	1	-99	11.0	900	1.9	-0.4	-1
GS-11-088	0.05	0.46	0.341	0.044	3.07	98.74	246	-99	118.0	540	0.2	-0.4	-1
GS-11-090	-0.01	0.90	0.320	0.022	0.93	99.51	14	-99	1.6	130	-0.1	-0.4	-1
GS-11-091	0.18	2.14	0.409	0.045	3.01	99.34	5	-99	0.8	280	0.3	-0.4	-1
GS-11-092	-0.01	0.11	0.121	0.012	0.99	99.81	22	-99	1.1	-50	0.1	-0.4	-1
GS-11-103	0.26	0.22	0.915	0.269	6.09	98.06	8	-99	0.9	1200	0.1	-0.4	-1
GS-11-115	7.45	1.44	0.223	0.015	1.36	98.66	-1	-99	1.9	270	3.3	-0.4	-1
GS-11-125	4.17	1.20	0.945	0.175	6.50	98.75	-1	-99	30.0	240	1.2	-0.4	-1
GS-11-138A	1.48	0.87	0.386	0.116	15.62	99.09	10	-99	2.7	430	0.1	-0.4	-1
GS-11-138B	1.55	0.85	0.401	0.117	14.27	99.05	1	-99	1.6	440	0.1	-0.4	-1
GS-11-140	2.34	1.40	0.459	0.335	23.97	99.46	-1	-99	2.4	1600	0.2	-0.4	-1
GS-11-206	2.63	3.94	1.086	0.271	7.08	98.52	4	-99	-0.5	360	1.3	-0.4	-1
GS-11-224	0.59	13.45	0.265	0.021	1.05	99.03	-1	-99	6.4	2600	2.1	-0.4	-1
GS-11-226	4.34	2.34	0.236	0.022	1.57	99.51	1	-99	1.7	490	2.0	-0.4	-1
GS-11-230	4.81	1.05	0.803	0.194	1.06	100.08	4	-99	8.6	370	1.7	-0.4	-1
GS-11-241	0.08	6.26	0.035	-0.001	1.55	98.62	1	-99	70.0	190	3.6	-0.4	-1
GS-11-246	0.02	3.39	0.055	0.003	2.17	99.1	2	-99	16.0	120	3.4	-0.4	-1
GS-11-247	0.03	3.61	0.034	0.002	3.63	98.89	34	-99	39.0	220	4.3	-0.4	-1
GS-11-248	-0.01	3.26	0.040	0.005	2.27	98.56	12	-99	2.3	150	4.0	-0.4	-1
GS-11-249	-0.01	3.76	0.038	0.003	2.42	98.49	15	-99	3.3	130	3.8	-0.4	-1
GS-11-252	0.06	3.78	0.905	0.279	8.86	98.88	-1	-99	1.8	170	5.4	-0.4	-1
GS-11-256	0.06	3.21	0.031	-0.001	2.24	98.36	2	-99	1.8	68	4.5	-0.4	-1
GS-11-260	0.06	1.59	0.370	0.059	3.12	100.05	48	-99	13.0	180	0.4	-0.4	-1
GS-11-265	2.08	3.80	0.239	0.030	1.80	98.77	-1	-99	9.3	810	1.4	-0.4	-1
GS-11-269	0.92	2.76	0.703	0.162	4.66	98.95	7	-99	5.4	600	1.8	-0.4	-1
GS-11-299	3.78	0.73	0.865	0.381	8.31	96.46	8	-99	21.0	190	1.1	-0.4	-1
GS-11-307	0.13	0.97	0.161	0.029	3.44	99.44	-1	-99	0.6	130	0.4	-0.4	-1
GS-11-325	2.43	2.26	0.071	0.001	0.46	98.91	-1	-99	0.6	440	1.0	-0.4	-1
GS-11-345	2.05	2.37	1.809	0.361	14.59	99.6	-1	-99	7.4	260	1.8	-0.4	-1
GS-11-347	3.80	1.18	0.883	0.200	1.03	99.34	-1	-99	1.4	320	0.9	-0.4	-1
GS-11-349	3.48	1.11	0.386	0.182	4.31	98.19	-1	-99	1.9	280	1.2	-0.4	-1
GS-11-350	3.45	1.22	0.761	0.252	4.22	100.51	-1	-99	0.6	300	1.0	-0.4	-1
GS-11-352	3.71	1.59	0.452	0.184	3.10	98.61	-1	-99	-0.5	430	1.2	-0.4	-1
GS-11-359	0.08	2.88	0.197	0.020	1.51	98.12	-1	-99	50.0	-50	0.8	-0.4	-1
GS-11-407	1.39	4.90	0.172	0.002	1.37	98.91	-1	-99	8.6	-50	4.2	-0.4	-1
GS-11-429	3.56	1.78	0.464	0.154	3.21	99.78	10	-99	2.6	360	1.2	-0.4	-1

Appendix D - Major- and Trace-element data for altered samples; GSNL data supplemented with Becquerel (Au + 34) data

SampleNum	Na2O	K2O	TiO2	P2O5	LOI	Total	Au	Ag	As	Ba	Be	Bi	Br
	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	ppb	ppm	ppm	ppm	ppm	ppm	ppm
	0.01	0.01	0.001	0.001	0.01		1	0.1	0.5	50	0.1	0.4	1
	GS Maj	GS Maj	GS Maj	GS Maj	Grav		BQ INAA	GS Tr ES	BQ INAA	BQ INAA	GS Tr ES	GS Tr MS	BQ INAA
GS-11-441	6.89	3.85	0.300	0.041	0.93	98.6	-1	-99	2.3	-50	3.5	-0.4	-1
GS-11-446	-0.01	2.91	2.090	0.089	7.29	98.52	22	-99	791.0	58	5.2	-0.4	-1
GS-11-473	0.06	0.76	0.139	0.006	4.75	98.51	-1	-99	7.3	89	2.3	-0.4	-1
GS-11-481	-0.01	5.04	0.827	0.176	4.41	98.21	-1	-99	1.4	670	2.5	-0.4	-1
GS-12-058	-99	-99	-99	-99	-99	-99	1	-0.1	26.0	110	1.2	-99	-1
GS-12-068	-0.01	0.03	0.001	-0.001	0.16	100.01	-1	-0.1	1.2	-50	-0.1	-0.4	-1
GS-12-073	0.02	0.31	0.006	-0.001	0.24	98.63	-1	-0.1	0.9	-50	0.1	-0.4	-1
GS-12-088	3.01	2.81	0.472	0.110	2.76	100.58	2	-0.1	2.4	460	1.9	-0.4	-1
GS-12-094	4.43	2.13	0.338	0.051	2.06	98.48	2	0.7	2.1	510	1.2	-0.4	-1
GS-12-121	-99	-99	-99	-99	-99	-99	1	-0.1	2.0	220	0.8	-99	-1
GS-12-150	0.07	0.18	1.368	0.055	8.80	99.61	27	0.8	4.3	-50	-0.1	-0.4	-1
GS-12-196	0.01	0.14	0.005	-0.001	0.36	100.46	-1	-0.1	-0.5	-50	-0.1	-0.4	-1
GS-12-198	4.06	1.85	0.424	0.058	1.84	100.75	3	-0.1	43.0	340	1.5	-0.4	-1
GS-12-262	0.15	3.86	0.371	0.010	2.51	99.69	-1	-0.1	-0.5	490	1.2	-0.4	-1
GS-12-270	5.02	1.79	0.439	0.045	0.99	100.78	-1	-0.1	8	728	1.6	-0.4	-99
GS-12-338	2.95	2.69	0.147	0.012	1.20	99.92	9	-0.1	-0.5	1100	1.8	-0.4	-1
GS-12-352	3.50	3.12	0.224	0.019	1.13	99.95	-1	-0.1	1.1	760	1.8	-0.4	-1
GS-12-353	0.19	2.91	0.210	0.014	1.85	99.14	-1	-0.1	0.6	560	0.9	-0.4	-1
GS-12-370	0.12	0.13	0.122	0.014	9.13	94.92	4	2.2	3.9	-50	-0.1	-0.4	-1

Appendix D - Major- and Trace-element data for altered samples; GSNL data supplemented with Becquerel (Au + 34) data

SampleNum	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Ge
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	wt.%	ppm	ppm
	0.1	3	2	10	0.5	1	0.1	0.1	0.5	0.1	1	1
	GS Tr ES	BQ INAA	BQ INAA	BQ INAA	BQ INAA	GS Tr ES	GS Tr MS	GS Tr MS	BQ INAA	BQ INAA	GS Tr MS	GS Tr MS
GS-11-061	0.1	70	3	20	3.0	44	2.6	1.3	1.5	3.8	26	9
GS-11-063	0.3	61	12	-10	1.6	944	6.7	4.2	1.1	3.9	17	5
GS-11-065	-0.1	26	-2	-10	-0.5	20	0.3	0.2	-0.5	0.6	9	3
GS-11-076	-0.1	52	-2	-10	0.5	25	0.7	0.6	-0.5	1.0	9	2
GS-11-079	-0.1	56	-2	-10	0.7	22	0.9	0.8	0.6	1.1	6	2
GS-11-084	-0.1	16	-2	-10	5.8	3	0.9	0.8	-0.5	2.3	19	2
GS-11-088	0.4	15	-2	-10	-0.5	132	0.3	0.3	-0.5	1.4	17	3
GS-11-090	0.3	20	-2	-10	-0.5	65	0.9	0.6	-0.5	0.5	4	3
GS-11-091	0.2	34	-2	-10	1.0	18	0.8	0.7	0.5	0.7	13	2
GS-11-092	-0.1	27	-2	-10	-0.5	34	0.4	0.4	-0.5	1.3	2	1
GS-11-103	-0.1	52	-2	-10	-0.5	8	2.4	2.0	0.9	0.9	13	2
GS-11-115	-0.1	66	-2	12	2.8	1	6.2	4.7	0.5	1.6	24	2
GS-11-125	0.1	35	20	71	1.5	54	4.1	2.4	1.1	5.0	16	3
GS-11-138A	-0.1	46	5	10	-0.5	43	0.8	0.8	0.9	2.2	10	2
GS-11-138B	-0.1	50	-2	-10	-0.5	3	1.0	0.8	0.7	2.5	11	2
GS-11-140	-0.1	98	-2	12	-0.5	1	0.7	0.6	1.1	1.4	17	15
GS-11-206	0.1	26	3	-10	2.0	22	1.3	1.0	-0.5	1.5	23	4
GS-11-224	-0.1	41	-2	-10	6.0	2	8.7	7.1	-0.5	2.3	17	2
GS-11-226	-0.1	83	-2	-10	0.6	7	11.2	6.8	0.9	1.1	17	4
GS-11-230	0.1	87	-2	-10	3.0	2	17.6	12.1	1.2	1.5	17	4
GS-11-241	0.2	33	-2	-10	2.3	25	6.5	3.3	-0.5	0.8	17	3
GS-11-246	0.9	31	-2	-10	0.9	68	5.3	3.5	-0.5	1.4	21	2
GS-11-247	0.1	13	-2	-10	1.0	95	6.8	4.4	-0.5	3.4	22	2
GS-11-248	1.2	47	-2	-10	1.8	87	8.3	5.2	-0.5	2.9	21	4
GS-11-249	-0.1	20	-2	-10	1.7	18	7.9	5.1	-0.5	1.8	22	3
GS-11-252	3.1	34	28	30	4.9	5	5.6	3.2	1.0	5.8	19	4
GS-11-256	0.5	15	-2	-10	3.5	12	6.7	4.4	-0.5	0.4	17	3
GS-11-260	1.2	10	9	11	1.7	51	1.4	0.9	-0.5	2.3	9	2
GS-11-265	-0.1	49	-2	-10	3.7	3	2.4	1.5	0.6	0.9	17	1
GS-11-269	-0.1	9	-2	15	5.6	15	1.1	0.9	-0.5	4.2	18	2
GS-11-299	0.7	42	38	150	0.9	44	3.9	2.1	1.1	4.0	11	3
GS-11-307	-0.1	7	2	-10	2.0	24	1.1	0.8	-0.5	0.9	5	1
GS-11-325	-0.1	28	-2	-10	0.9	-1	2.7	1.9	-0.5	0.3	9	1
GS-11-345	0.1	22	24	120	2.8	10	5.1	3.0	1.6	6.2	24	4
GS-11-347	0.1	20	20	69	2.1	37	4.4	2.7	1.2	5.7	21	3
GS-11-349	-0.1	28	3	-10	2.7	3	2.8	1.6	0.9	2.6	15	1
GS-11-350	-0.1	24	12	-10	2.4	25	3.3	2.0	1.2	4.7	18	3
GS-11-352	-0.1	32	7	-10	2.0	4	3.3	2.1	1.4	2.8	18	2
GS-11-359	-0.1	170	-2	-10	1.9	1	12.0	8.5	-0.5	0.2	38	4
GS-11-407	0.6	58	-2	14	5.1	3	18.9	13.2	0.9	2.0	31	3
GS-11-429	-0.1	21	10	-10	-0.5	65	3.3	2.3	0.7	4.2	13	3

Appendix D - Major- and Trace-element data for altered samples; GSNL data supplemented with Becquerel (Au + 34) data

SampleNum	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Ge
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	wt.%	ppm	ppm
	0.1	3	2	10	0.5	1	0.1	0.1	0.5	0.1	1	1
	GS Tr ES	BQ INAA	BQ INAA	BQ INAA	BQ INAA	GS Tr ES	GS Tr MS	GS Tr MS	BQ INAA	BQ INAA	GS Tr MS	GS Tr MS
GS-11-441	-0.1	180	-2	16	2.5	4	16.1	9.7	-0.5	3.4	40	5
GS-11-446	1.5	18	30	83	6.8	48	7.6	4.0	1.7	8.4	31	3
GS-11-473	-0.1	35	3	-10	6.3	1	2.0	1.7	-0.5	1.1	30	2
GS-11-481	-0.1	51	4	-10	5.3	7	4.6	3.4	1.1	2.5	25	2
GS-12-058	-99	53	9	-10	1.0	24	-99	-99	1.5	3.1	-99	-99
GS-12-068	-99	-3	-2	-10	-0.5	3	-0.1	-0.1	-0.5	-0.1	-1	-1
GS-12-073	-99	-3	-2	-10	-0.5	2	0.6	0.5	-0.5	-0.1	1	1
GS-12-088	-99	50	3	-10	2.8	8	0.7	0.5	0.8	2.2	14	2
GS-12-094	-99	24	-2	-10	4.6	6	1.8	1.3	0.5	1.2	16	1
GS-12-121	-99	11	-2	-10	0.9	1	-99	-99	-0.5	0.7	-99	-99
GS-12-150	-99	-3	-2	33	-0.5	11	0.1	0.1	-0.5	11.0	12	3
GS-12-196	-99	-3	-2	-10	-0.5	1	-0.1	-0.1	-0.5	-0.1	1	-1
GS-12-198	-99	49	-2	-10	3.2	-1	4.6	3.7	0.9	1.4	16	2
GS-12-262	-99	6	-2	-10	3.2	15	0.6	0.4	-0.5	0.8	17	1
GS-12-270	-99	58	4	-10	0.5	1	6.8	4.7	-99	-99	18	3
GS-12-338	-99	53	-2	-10	2.1	3	2.6	1.8	-0.5	0.8	12	2
GS-12-352	-99	67	-2	-10	2.9	6	5.4	3.2	-0.5	0.7	11	2
GS-12-353	-99	40	-2	-10	4.3	3	3.9	2.9	-0.5	1.8	16	3
GS-12-370	-99	-3	22	57	-0.5	9694	0.5	0.3	-0.5	2.9	3	1

Appendix D - Major- and Trace-element data for altered samples; GSNL data supplemented with Becquerel (Au + 34) data

SampleNum	Gd	Hf	Ho	In	La	Li	Lu	Mn	Mo	Na	Nb	Nd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	wt.%	ppm	ppm
	0.1	1	0.1	0.2	1	0.1	0.05	1	1	0.05	1	0.1
	GS Tr MS	BQ INAA	GS Tr MS	GS Tr MS	BQ INAA	GS Tr ES	BQ INAA	GS Tr ES	BQ INAA	BQ INAA	GS Tr MS	GS Tr MS
GS-11-061	4.9	-1	0.5	0.4	32	10.6	0.13	33	12	0.53	2	30.9
GS-11-063	6.5	5	1.4	1.2	30	1.9	0.42	40	33	0.21	15	34.3
GS-11-065	0.7	3	-0.1	-0.2	13	2.7	-0.05	16	9	0.13	10	10.9
GS-11-076	1.2	5	0.2	-0.2	28	3.4	0.12	17	8	0.18	11	17.1
GS-11-079	1.5	5	0.2	-0.2	31	2.6	0.15	16	8	0.20	10	19.0
GS-11-084	1.0	5	0.2	-0.2	11	15.4	0.10	664	-1	0.26	9	6.7
GS-11-088	0.5	4	-0.1	-0.2	7	1.0	-0.05	18	17	0.09	9	6.6
GS-11-090	1.3	4	0.2	-0.2	12	-0.1	0.09	16	39	0.06	9	7.8
GS-11-091	1.2	5	0.2	-0.2	22	2.3	0.10	12	16	0.15	9	12.0
GS-11-092	0.8	2	0.1	-0.2	15	-0.1	-0.05	19	17	-0.05	6	7.5
GS-11-103	3.7	7	0.5	-0.2	27	-0.1	0.26	9	1	0.20	17	27.6
GS-11-115	5.2	8	1.3	-0.2	31	1.9	0.64	186	2	5.15	25	26.7
GS-11-125	4.9	4	0.8	-0.2	17	31.1	0.28	686	-1	2.80	8	21.3
GS-11-138A	2.0	4	0.2	-0.2	23	-0.1	0.12	22	37	1.10	6	18.7
GS-11-138B	2.2	4	0.2	-0.2	25	-0.1	0.15	23	-1	1.10	6	20.1
GS-11-140	2.7	5	0.2	-0.2	47	-0.1	0.12	10	5	1.70	7	33.3
GS-11-206	1.7	5	0.3	-0.2	13	13.2	0.17	495	-1	2.90	4	9.7
GS-11-224	5.2	12	2.0	-0.2	9	1.2	0.84	419	-1	0.42	31	13.4
GS-11-226	10.2	8	2.2	-0.2	35	1.2	1.00	149	-1	2.90	28	50.1
GS-11-230	14.7	13	3.7	-0.2	39	8.6	0.79	402	-1	2.80	21	48.8
GS-11-241	5.5	5	1.1	-0.2	11	3.1	0.27	266	-1	0.10	42	17.1
GS-11-246	4.6	5	1.0	0.2	12	1.7	0.49	269	3	0.05	52	17.5
GS-11-247	4.9	5	1.4	0.2	5	4.4	0.54	355	1	0.06	52	8.4
GS-11-248	6.2	5	1.7	2.9	15	11.5	0.48	757	-1	0.08	41	21.2
GS-11-249	4.7	5	1.5	0.8	6	2.8	0.64	263	-1	0.08	45	10.3
GS-11-252	5.9	2	1.0	-0.2	16	28.8	0.37	5519	-1	0.12	14	22.2
GS-11-256	5.1	4	1.4	-0.2	6	2.3	0.59	872	-1	0.09	50	10.4
GS-11-260	1.7	1	0.3	-0.2	7	5.6	-0.05	356	7	0.07	3	8.0
GS-11-265	2.6	3	0.5	-0.2	27	8.1	0.16	356	-1	1.50	10	17.8
GS-11-269	1.0	5	0.3	-0.2	6	9.9	0.20	163	-1	0.71	14	4.8
GS-11-299	4.9	3	0.8	-0.2	19	15.6	0.23	981	69	2.70	6	25.2
GS-11-307	1.3	-1	0.3	-0.2	3	12.9	0.09	330	-1	0.12	1	4.6
GS-11-325	2.4	3	0.6	-0.2	11	0.3	0.29	58	-1	1.60	10	11.8
GS-11-345	5.7	3	1.0	-0.2	10	10.7	0.35	1166	-1	1.60	12	18.9
GS-11-347	4.5	3	0.8	-0.2	11	14.5	0.30	1463	-1	2.60	5	17.2
GS-11-349	3.1	3	0.5	-0.2	12	16.3	0.26	629	-1	2.40	5	16.1
GS-11-350	3.4	3	0.7	-0.2	12	14.3	0.26	883	-1	2.30	5	17.1
GS-11-352	3.9	3	0.6	-0.2	14	8.3	0.27	668	-1	2.60	5	18.8
GS-11-359	9.0	24	2.5	-0.2	82	3.0	1.20	3	3	0.10	35	48.5
GS-11-407	13.0	24	4.0	-0.2	21	5.1	2.10	270	-1	1.10	33	30.8
GS-11-429	2.9	4	0.7	-0.2	11	2.7	0.35	530	17	2.60	8	13.0

Appendix D - Major- and Trace-element data for altered samples; GSNL data supplemented with Becquerel (Au + 34) data

SampleNum	Gd	Hf	Ho	In	La	Li	Lu	Mn	Mo	Na	Nb	Nd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	wt.%	ppm	ppm
	0.1	1	0.1	0.2	1	0.1	0.05	1	1	0.05	1	0.1
	GS Tr MS	BQ INAA	GS Tr MS	GS Tr MS	BQ INAA	GS Tr ES	BQ INAA	GS Tr ES	BQ INAA	BQ INAA	GS Tr MS	GS Tr MS
GS-11-441	13.6	26	3.2	-0.2	64	14.0	1.10	635	2	4.90	149	65.0
GS-11-446	7.5	3	1.4	-0.2	13	3.9	0.36	490	42	-0.05	9	22.3
GS-11-473	1.5	7	0.5	-0.2	32	139.0	0.17	21	13	0.23	38	9.6
GS-11-481	5.0	6	1.0	-0.2	21	5.3	0.44	397	9	0.12	13	28.4
GS-12-058	-99	5	-99	-99	24	45.2	0.44	958	-1	2.30	-99	-99
GS-12-068	-0.1	-1	-0.1	-0.2	-1	-0.1	-0.05	6	22	-0.05	7	0.1
GS-12-073	0.4	-1	0.1	-0.2	-1	-0.1	0.06	10	-1	-0.05	6	0.7
GS-12-088	1.5	5	-0.1	-0.2	24	8.5	0.32	552	-1	2.00	9	15.3
GS-12-094	1.9	5	0.3	-0.2	14	7.5	0.22	176	2	3.10	7	10.1
GS-12-121	-99	2	-99	-99	4	5.9	0.16	135	-1	1.60	-99	-99
GS-12-150	0.2	5	-0.1	-0.2	3	1.6	0.08	101	11	-0.05	7	0.5
GS-12-196	-0.1	-1	-0.1	-0.2	-1	0.6	-0.05	20	-1	-0.05	1	-0.1
GS-12-198	3.7	8	1.1	-0.2	20	2.4	0.71	160	-1	2.80	13	18.9
GS-12-262	0.4	6	-0.1	-0.2	2	5.5	0.10	201	11	0.12	13	1.8
GS-12-270	7.5	6	1.4	-0.2	28	4.6	0.65	802	-1	-99	12	29.5
GS-12-338	3.0	4	0.5	-0.2	28	1.6	0.22	536	-1	2.10	8	16.2
GS-12-352	6.2	4	1.1	-0.2	36	3.7	0.15	304	8	3.00	12	30.4
GS-12-353	4.0	6	0.9	-0.2	17	3.9	0.50	112	-1	0.13	12	16.8
GS-12-370	0.6	-1	0.1	-0.2	1	7.1	0.06	460	-1	0.09	1	1.8

Appendix D - Major- and Trace-element data for altered samples; GSNL data supplemented with Becquerel (Au + 34) data

SampleNum	Ni	P	Pb	Pr	Rb	Sb	Sc	Se	Sm	Sn	Sr	Ta
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	1	1	1	0.05	5	0.1	0.1	1	0.1	1	2	0.2
	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr MS	BQ INAA	BQ INAA	BQ INAA	BQ INAA	BQ INAA	GS Tr MS	GS Tr MS	BQ INAA
GS-11-061	2	1291	205	8.27	47	1.6	21.3	8	6.4	31	620	-0.2
GS-11-063	4	525	83	8.42	55	0.4	12.5	3	6.3	11	173	0.9
GS-11-065	-1	229	61	3.27	7	0.4	3.0	-1	1.2	6	261	0.5
GS-11-076	-1	342	74	5.40	12	0.2	5.3	3	1.9	20	188	0.9
GS-11-079	-1	250	93	6.11	7	0.4	6.2	-1	2.0	16	220	0.8
GS-11-084	3	680	11	1.97	180	0.6	6.8	-1	1.1	5	52	0.8
GS-11-088	-1	158	55	1.96	6	9.0	4.0	3	0.7	9	285	0.4
GS-11-090	-1	87	80	2.39	7	0.3	2.1	2	1.2	13	73	0.5
GS-11-091	-1	191	62	3.86	24	0.2	3.7	-1	1.6	7	128	0.8
GS-11-092	-1	48	79	2.51	-5	-0.1	1.3	1	0.9	5	6	0.7
GS-11-103	-1	369	47	6.79	-5	0.2	9.5	3	4.8	14	339	1.0
GS-11-115	-1	74	8	7.42	78	0.6	3.8	-1	4.2	6	140	2.5
GS-11-125	26	670	2	4.92	43	2.1	22.6	5	4.3	2	191	0.5
GS-11-138A	2	492	37	4.89	-5	0.6	4.3	9	3.1	2	270	0.5
GS-11-138B	-1	496	34	5.36	-5	0.6	4.3	-1	3.2	2	287	0.5
GS-11-140	-1	1217	354	10.31	-5	1.0	4.6	-1	3.8	10	1071	0.5
GS-11-206	9	1131	4	2.18	75	0.2	4.6	-1	2.3	1	144	0.8
GS-11-224	-1	113	28	3.22	320	2.3	7.5	-1	3.2	5	61	2.1
GS-11-226	-1	105	8	12.82	100	0.3	4.8	-1	8.6	4	36	2.1
GS-11-230	4	806	4	11.65	81	1.6	8.9	-1	10.0	4	115	2.2
GS-11-241	-1	21	16	4.45	150	2.3	1.3	-1	5.1	6	28	4.6
GS-11-246	-1	22	75	4.35	89	0.8	1.8	-1	4.6	11	2	4.4
GS-11-247	3	19	125	1.94	92	1.6	2.1	-1	3.2	12	4	4.9
GS-11-248	4	38	24	5.48	99	0.6	2.0	-1	6.0	9	5	4.8
GS-11-249	-1	27	2	2.49	120	0.4	2.3	-1	3.6	12	5	5.3
GS-11-252	28	1185	5	5.28	120	0.3	25.2	-1	5.0	2	53	1.1
GS-11-256	-1	16	187	2.41	99	0.2	1.6	-1	3.7	8	17	4.7
GS-11-260	8	268	363	1.98	53	0.7	8.5	1	1.6	1	16	-0.2
GS-11-265	-1	152	10	5.20	120	0.4	3.4	-1	2.6	1	82	0.9
GS-11-269	4	712	16	1.10	95	0.9	10.4	-1	0.9	3	158	0.7
GS-11-299	39	1618	37	5.56	21	-0.1	15.7	-1	4.9	2	204	0.4
GS-11-307	-1	149	-1	1.07	24	0.1	3.5	-1	1.1	2	24	-0.2
GS-11-325	-1	22	7	3.07	42	0.1	1.2	-1	2.2	2	28	0.7
GS-11-345	53	1490	-1	3.80	62	7.1	28.5	-1	4.5	3	340	0.7
GS-11-347	28	844	-1	3.86	34	0.2	25.1	-1	4.0	1	635	0.3
GS-11-349	2	789	1	3.84	21	-0.1	5.0	-1	3.2	1	342	0.3
GS-11-350	10	1038	-1	4.04	21	-0.1	15.5	-1	3.5	1	332	0.4
GS-11-352	3	819	-1	4.51	27	-0.1	7.2	-1	3.7	1	332	0.4
GS-11-359	-1	56	5	16.13	92	5.0	0.5	-1	6.8	10	8	3.2
GS-11-407	-1	12	17	7.10	160	0.5	0.4	-1	9.5	9	30	3.3
GS-11-429	7	664	1062	3.12	50	0.1	10.8	3	2.7	3	40	0.5

Appendix D - Major- and Trace-element data for altered samples; GSNL data supplemented with Becquerel (Au + 34) data

SampleNum	Ni	P	Pb	Pr	Rb	Sb	Sc	Se	Sm	Sn	Sr	Ta
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	1	1	1	0.05	5	0.1	0.1	1	0.1	1	2	0.2
	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr MS	BQ INAA	BQ INAA	BQ INAA	BQ INAA	BQ INAA	GS Tr MS	GS Tr MS	BQ INAA
GS-11-441	3	193	-1	17.26	91	0.4	2.4	-1	12.3	6	47	11.0
GS-11-446	32	395	13	4.77	190	3.4	30.9	22	5.7	2	6	-0.2
GS-11-473	-1	38	11	3.45	42	4.1	2.2	-1	1.4	7	26	4.0
GS-11-481	2	790	40	6.89	180	0.7	14.6	5	5.0	3	12	0.9
GS-12-058	7	-99	11	-99	11	0.6	16.2	-1	5.8	-99	-99	0.4
GS-12-068	-1	-99	7	-0.05	-5	0.2	-0.1	-1	-0.1	1	-2	-0.2
GS-12-073	-1	-99	-1	0.22	11	0.6	-0.1	-1	0.3	-1	3	-0.2
GS-12-088	3	-99	18	4.79	100	0.3	8.0	-1	3.8	3	445	0.6
GS-12-094	-1	-99	540	2.99	62	0.4	5.5	-1	1.8	1	124	0.5
GS-12-121	-1	-99	3	-99	17	0.5	1.1	-1	0.7	-99	-99	0.3
GS-12-150	10	-99	50	0.14	6	1.1	7.9	-1	0.2	1	12	0.5
GS-12-196	-1	-99	-1	-0.05	8	0.1	0.1	-1	-0.1	-1	2	-0.2
GS-12-198	-1	-99	18	5.13	73	0.6	10.4	-1	3.9	3	66	0.9
GS-12-262	-1	-99	3	0.41	160	-0.1	2.8	-1	0.3	1	10	0.8
GS-12-270	-1	-99	4	7.45	47	-99	13.1	-99	7.2	2	175	1.4
GS-12-338	-1	-99	16	4.72	98	0.2	2.9	-1	3.4	2	96	0.9
GS-12-352	-1	-99	-1	8.43	170	0.9	2.3	-1	3.4	2	94	1.4
GS-12-353	-1	-99	-1	4.23	130	0.4	9.2	-1	3.5	2	12	0.9
GS-12-370	39	-99	60	0.44	-5	-0.1	5.5	7	0.5	-1	66	-0.2

Appendix D - Major- and Trace-element data for altered samples; GSNL data supplemented with Becquerel (Au + 34) data

SampleNum	Tb	Ti	Th	Tm	U	V	W	Y	Yb	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.5	1	0.1	0.05	0.1	5	1	1	0.5	1	1
	BQ INAA	GS Tr ES	BQ INAA	GS Tr MS	BQ INAA	GS Tr MS	BQ INAA	GS Tr MS	BQ INAA	GS Tr ES	GS Tr ES
GS-11-061	0.5	157	12.8	0.18	2.2	83	2	12	0.6	25	26
GS-11-063	1.0	1029	10.4	0.62	3.2	45	1	38	3.1	81	227
GS-11-065	-0.5	450	5.9	-0.05	0.5	35	2	2	-0.5	22	102
GS-11-076	-0.5	379	10.9	0.12	1.1	42	1	5	0.5	21	211
GS-11-079	-0.5	484	11.5	0.15	1.3	42	3	6	0.6	15	199
GS-11-084	-0.5	3511	11.2	0.13	1.9	96	-1	7	0.7	66	192
GS-11-088	-0.5	431	4.2	0.07	1.0	40	2	2	-0.5	18	145
GS-11-090	-0.5	266	2.8	0.14	0.4	58	-1	5	-0.5	56	182
GS-11-091	-0.5	523	6.1	0.12	1.4	34	1	5	0.8	11	199
GS-11-092	-0.5	198	8.6	0.07	1.4	25	2	3	-0.5	15	66
GS-11-103	-0.5	89	6.0	0.31	1.5	67	-1	14	1.8	6	272
GS-11-115	0.9	1466	32.9	0.76	6.1	31	-1	40	4.3	20	229
GS-11-125	0.7	6280	6.1	0.32	1.4	184	-1	22	1.6	75	152
GS-11-138A	-0.5	309	8.1	0.13	1.7	46	16	6	-0.5	6	150
GS-11-138B	-0.5	417	8.5	0.14	1.8	76	14	6	0.8	5	152
GS-11-140	-0.5	206	12.0	0.10	1.4	82	24	4	0.6	6	171
GS-11-206	-0.5	7306	5.9	0.14	1.4	178	-1	7	1.0	62	88
GS-11-224	1.0	1143	15.4	1.12	3.2	-5	1	56	6.0	64	488
GS-11-226	1.8	932	19.8	1.01	3.5	-5	-1	53	6.8	41	498
GS-11-230	1.6	5180	14.8	1.61	3.6	24	2	126	5.7	68	307
GS-11-241	1.0	232	14.5	0.46	3.4	-5	3	28	2.6	327	83
GS-11-246	0.7	322	10.3	0.55	2.0	8	3	30	3.3	60	84
GS-11-247	1.0	223	14.4	0.69	5.2	16	2	42	4.4	49	89
GS-11-248	1.2	233	14.0	0.78	4.0	6	1	44	4.2	482	82
GS-11-249	1.0	232	15.1	0.81	3.9	-5	1	44	4.9	90	94
GS-11-252	0.8	3576	4.3	0.47	1.2	199	1	32	2.8	490	87
GS-11-256	0.9	179	12.7	0.65	2.0	-5	-1	37	4.3	71	71
GS-11-260	-0.5	1745	1.2	0.14	1.1	131	1	8	0.7	70	40
GS-11-265	-0.5	1440	15.1	0.24	3.0	23	-1	14	1.1	23	103
GS-11-269	-0.5	4209	9.3	0.16	1.6	110	-1	7	0.9	39	199
GS-11-299	0.6	4464	2.0	0.30	1.7	123	-1	21	1.9	51	116
GS-11-307	-0.5	1031	0.6	0.09	0.3	76	-1	7	0.6	18	26
GS-11-325	-0.5	350	5.5	0.31	1.2	8	-1	16	1.9	22	68
GS-11-345	0.8	9734	1.0	0.40	0.3	293	4	28	2.4	89	111
GS-11-347	0.7	5722	1.9	0.36	0.6	179	-1	25	2.2	109	96
GS-11-349	-0.5	2596	1.3	0.23	0.4	29	-1	14	1.5	77	105
GS-11-350	0.5	4992	1.3	0.30	0.5	127	-1	18	2.0	75	110
GS-11-352	-0.5	3016	1.4	0.30	0.5	31	-1	18	1.9	59	108
GS-11-359	1.5	1419	17.3	1.31	2.1	7	6	69	7.9	10	959
GS-11-407	2.4	1051	16.8	2.01	2.7	6	-1	104	13.0	174	902
GS-11-429	0.5	3201	3.6	0.34	0.9	78	-1	18	2.1	80	139

Appendix D - Major- and Trace-element data for altered samples; GSNL data supplemented with Becquerel (Au + 34) data

SampleNum	Tb	Ti	Th	Tm	U	V	W	Y	Yb	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.5	1	0.1	0.05	0.1	5	1	1	0.5	1	1
	BQ INAA	GS Tr ES	BQ INAA	GS Tr MS	BQ INAA	GS Tr MS	BQ INAA	GS Tr MS	BQ INAA	GS Tr ES	GS Tr ES
GS-11-441	2.4	1992	18.7	1.38	4.7	11	2	84	8.8	127	1167
GS-11-446	1.1	13596	0.5	0.48	3.0	158	4	45	2.5	256	142
GS-11-473	-0.5	297	23.2	0.31	7.1	11	4	11	2.1	10	149
GS-11-481	0.6	5209	9.1	0.50	2.6	75	1	27	2.9	39	229
GS-12-058	0.7	4356	3.4	-99	1.1	-99	-1	-99	2.7	46	-99
GS-12-068	-0.5	13	-0.1	-0.05	-0.1	5	-1	-1	-0.5	6	-1
GS-12-073	-0.5	28	0.7	0.07	0.2	-5	-1	4	-0.5	5	23
GS-12-088	-0.5	2042	10.0	0.09	2.3	63	-1	4	1.8	75	174
GS-12-094	-0.5	2380	5.1	0.22	1.5	34	-1	10	1.3	27	180
GS-12-121	-0.5	455	2.2	-99	0.9	-99	-1	-99	1.1	8	-99
GS-12-150	-0.5	1770	0.5	-0.05	-0.1	32	2	1	-0.5	15	167
GS-12-196	-0.5	32	-0.1	-0.05	-0.1	-5	-1	-1	-0.5	3	3
GS-12-198	0.6	2748	10.0	0.59	2.3	13	-1	29	4.3	47	279
GS-12-262	-0.5	797	1.6	0.06	0.9	49	1	4	0.6	22	216
GS-12-270	1.2	2550	5.9	0.62	1.5	18	2	39	4.6	65	225
GS-12-338	-0.5	960	15.6	0.25	3.6	14	-1	16	1.5	64	110
GS-12-352	-0.5	688	21.4	0.46	4.0	13	2	30	0.9	17	158
GS-12-353	0.5	1024	10.0	0.43	1.6	11	2	23	2.9	18	188
GS-12-370	-0.5	690	0.3	-0.05	-0.1	25	-1	3	-0.5	45	11

Appendix E - Major- and Trace-element data; various samples (Sandeman)

SampleNum	UTMZone	UTMEast	UTMNorth	Datum	LabNum	Geologist	Prospect
HS12-087	21	649677	5253010	NAD27	8940553	H. Sandeman	Stewart
LH10-1	21	644750	5271900	NAD27	8940561	H. Sandeman	Long Harbour
947073A	21	718902	5338220	NAD27	8940514	H. Sandeman	Avalon Regional
947073B	21	718902	5338220	NAD27	8940515	H. Sandeman	Avalon Regional
HS09-085B	21	716373	5400948	NAD27	8940398	H. Sandeman	Calvins Landing
HS09-086	21	713546	5399151	NAD27	8940399	H. Sandeman	Calvins Landing
HS09-091	21	716403	5401011	NAD27	8940401	H. Sandeman	Calvins Landing
HS10-107	21	716407	5401210	NAD27	8940424	H. Sandeman	Calvins Landing
HS12-207	21	714746	5339682	NAD27	8940531	H. Sandeman	Avalon Regional
HS12-228B	21	714458	5340043	NAD27	8940732	H. Sandeman	Avalon Regional
HS12-228C	21	714458	5340043	NAD27	8940733	H. Sandeman	Avalon Regional
HS09-096A	21	661457	5257459	NAD27	8940402	H. Sandeman	Rattle Brook
HS09-097	21	661371	5257445	NAD27	8940201	H. Sandeman	Rattle Brook
HS09-098	21	661058	5257662	NAD27	8940202	H. Sandeman	Rattle Brook
HS09-099	21	661181	5257664	NAD27	8940403	H. Sandeman	Rattle Brook
HS09-102	21	661334	5257312	NAD27	8940183	H. Sandeman	Rattle Brook
HS09-123A	21	661820	5257231	NAD27	8940185	H. Sandeman	Rattle Brook
HS09-125	21	661859	5257373	NAD27	8940404	H. Sandeman	Rattle Brook
HS09-129A	21	660864	5255818	NAD27	8940405	H. Sandeman	Rattle Brook
HS09-132	21	660440	5256189	NAD27	8940186	H. Sandeman	Rattle Brook
HS09-133A	21	660470	5256240	NAD27	8940406	H. Sandeman	Rattle Brook
HS09-135	21	660928	5256003	NAD27	8940407	H. Sandeman	Rattle Brook
HS09-140	21	660897	5257659	NAD27	8940187	H. Sandeman	Rattle Brook
HS09-141	21	660761	5257727	NAD27	8940188	H. Sandeman	Rattle Brook
HS09-142	21	660632	5257750	NAD27	8940189	H. Sandeman	Rattle Brook
HS09-142	21	660632	5257750	NAD27	8940652	H. Sandeman	Rattle Brook
HS09-143B	21	660575	5257609	NAD27	8940191	H. Sandeman	Rattle Brook
HS09-143C	21	660575	5257609	NAD27	8940192	H. Sandeman	Rattle Brook
HS09-144	21	660616	5257460	NAD27	8940193	H. Sandeman	Rattle Brook
HS09-145	21	660805	5257263	NAD27	8940408	H. Sandeman	Rattle Brook

Appendix E - Major- and Trace-element data; various samples (Sandeman)

SampleNum	UTMZone	UTMEast	UTMNorth	Datum	LabNum	Geologist	Prospect
HS09-147	21	661729	5257381	NAD27	8940194	H. Sandeman	Rattle Brook
HS09-150	21	660857	5255384	NAD27	8940195	H. Sandeman	Rattle Brook
HS09-152	21	661323	5255570	NAD27	8940409	H. Sandeman	Rattle Brook
HS09-155	21	661283	5256226	NAD27	8940411	H. Sandeman	Rattle Brook
HS09-158	21	655939	5248969	NAD27	8940196	H. Sandeman	Rattle Brook
HS09-163	21	661145	5257214	NAD27	8940412	H. Sandeman	Rattle Brook
HS09-164A	21	660510	5257515	NAD27	8940413	H. Sandeman	Rattle Brook
HS09-173	21	661330	5257403	NAD27	8940414	H. Sandeman	Rattle Brook
HS09-175A	21	661556	5257296	NAD27	8940415	H. Sandeman	Rattle Brook
HS09-175A	21	661556	5257296	NAD27	8940416	H. Sandeman	Rattle Brook
HS09-175B	21	661556	5257296	NAD27	8940417	H. Sandeman	Rattle Brook
HS12-031	21	662121	5257934	NAD27	8940538	H. Sandeman	Rattle Brook
HS12-032	21	662160	5258025	NAD27	8940539	H. Sandeman	Rattle Brook
HS12-035	21	661647	5258749	NAD27	8940541	H. Sandeman	Rattle Brook
HS12-038	21	661176	5258505	NAD27	8940542	H. Sandeman	Rattle Brook
HS12-049	21	657617	5256300	NAD27	8940543	H. Sandeman	Rattle Brook
HS12-050	21	657929	5256406	NAD27	8940544	H. Sandeman	Rattle Brook
HS12-058	21	670174	5269360	NAD27	8940545	H. Sandeman	Rattle Brook
HS12-070	21	660050	5256665	NAD27	8940546	H. Sandeman	Rattle Brook
HS12-073	21	659340	5256782	NAD27	8940547	H. Sandeman	Rattle Brook
HS12-076	21	659471	5257629	NAD27	8940548	H. Sandeman	Rattle Brook
HS12-078	21	659967	5257420	NAD27	8940549	H. Sandeman	Rattle Brook
HS12-080	21	659966	5256950	NAD27	8940551	H. Sandeman	Rattle Brook
HS12-086	21	661109	5256570	NAD27	8940552	H. Sandeman	Rattle Brook
HS12-213A	21	587143	5192398	NAD27	8940535	H. Sandeman	Peter Brook

Appendix E - Major- and Trace-element data; various samples (Sandeman)

SampleNum	UTMZone	UTMEast	UTMNorth	Datum	LabNum	Geologist	Prospect
HS12-213B	21	587143	5192398	NAD27	8940536	H. Sandeman	Peter Brook
HS12-214	21	583096	5193924	NAD27	8940537	H. Sandeman	Heritage
HS12-217	21	660255	5257799	NAD27	8940728	H. Sandeman	Rattle Brook
HS12-218	21	660155	5257844	NAD27	8940729	H. Sandeman	Rattle Brook
HS12-222	21	659600	5258135	NAD27	8940731	H. Sandeman	Rattle Brook
MTR-002	21	688604	5287632	NAD27	8940455	H. Sandeman	Monkstown Road
MTR-003B	21	688903	5287382	NAD27	8940456	H. Sandeman	Monkstown Road
MTR-004A	21	688794	5287566	NAD27	8940457	H. Sandeman	Monkstown Road
BE10-008	21	710364	5351021	NAD27	8940395	H. Sandeman	Big Easy
HS12-209	21	587351	5193258	NAD27	8940533	H. Sandeman	Peter Brook
HS12-212A	21	587718	5194003	NAD27	8940727	H. Sandeman	Peter Brook
HS12-212B	21	587572	5193466	NAD27	8940534	H. Sandeman	Peter Brook

Appendix E - Major- and Trace-element data; various samples (Sandeman)

SampleNum	Description	Group
HS12-087	Qtz sericite schist, possible alunite. 15% pyrite with specular hematite, minor chalcopyrite and possible bornite.	Burin Knee Intrusive Suite
LH10-1	Low-S epithermal, chalcedonic and banded quartz vein with adularia from the Long Harbour showing (from M. Basha)	Long Harbour Group
947073A	Siliceous, pyritic black glassy rhyolite	Love Cove Group
947073B	Siliceous, pyritic black glassy rhyolite	Love Cove Group
HS09-085B	Quartz-hematite breccia	Love Cove Group
HS09-086	Fine-medium grained sericite schist	Love Cove Group
HS09-091	Strongly foliated altered sericite-silica-pyrite felsic volcanic	Love Cove Group
HS10-107	Quartz - adularia(?) veined sericite schist	Love Cove Group
HS12-207	Welded, moderately foliated rhyolitic tuff.	Love Cove Group
HS12-228B	Plagioclase porphyritic intermediate flow	Love Cove Group
HS12-228C	Plagioclase porphyritic intermediate lapilli tuff	Love Cove Group
HS09-096A	Strongly altered and foliated Qtz-alunite(?) sericite schist	Marystown Group
HS09-097	Quartz-vein breccia with altered felsic volcanic clasts	Marystown Group
HS09-098	Fine-grained, schistose pale-green rusty pyritic plagioclase phyric intermediate volcanic, locally cut by white opaque quartz veins with 10% Py	Marystown Group
HS09-099	Altered fine-grained intermediate rock which is brecciated and laminated reddish jasper or chalcedonic layers	Marystown Group
HS09-102	Quartz-kspar porphyritic, moderately foliated, felsic tuff with rare intermediate volcanic fragments	Marystown Group
HS09-123A	Generally massive, but local wispy bedded locally amygdaloidal basaltic andesite	Marystown Group
HS09-125	A strange mixed rock of basaltic matrix with beige-pink diffuse clasts of aphyric and altered pyritic felsic volcanic	Marystown Group
HS09-129A	Chlorite porphyroblastic, massive and brecciated dacite	Marystown Group
HS09-132	Weakly foliated, plagioclase porphyritic medium green intermediate volcanic	Marystown Group
HS09-133A	White-tan weathering, aphyric to Qtz-Kspar porphyritic (<3mm) felsic tuff	Marystown Group
HS09-135	Moderate to strongly foliated, hematitic sericite-plagioclase schist	Marystown Group
HS09-140	Contact between massive cherty quartz breccia horizon and an intensely foliated pyritic sericite schist in its structural hanging wall	Marystown Group
HS09-141	Intensely foliated quartz-pyrophyllite-pyrite schist	Marystown Group
HS09-142	Fissile and rusty, sulpherous white-yellow colored pyrophyllite schist	Marystown Group
HS09-142	Fissile and rusty, sulpherous white-yellow colored pyrophyllite schist	Marystown Group
HS09-143B	Specularite-quartz veins cut the orange rhyolite host	Marystown Group
HS09-143C	Altered, pyrophyllite schist zones in the less altered rhyolite	Marystown Group
HS09-144	Medium-grained quartz-kspar porphyritic rhyolite tuff	Marystown Group
HS09-145	Medium-grained quartz-kspar porphyritic rhyolite tuff	Marystown Group

Appendix E - Major- and Trace-element data; various samples (Sandeman)

SampleNum	Description	Group
HS09-147	Medium-green, moderately foliated, epidote altered plagioclase porphyritic basaltic andesite	Marystown Group
HS09-150	Quartz-kspar porphyritic (<2mm) sericite schist, moderately to strongly foliated with sparse felsic-intermediate volcanic clasts	Marystown Group
HS09-152	Bleached and epidote altered, qtz veined package of Pl-phyric basaltic andesite and basaltic andesite agglomerates	Marystown Group
HS09-155	Moderate to weakly foliated basaltic agglomerate	Marystown Group
HS09-158	Weakly altered hornblende (chlorite) porphyritic basaltic andesite	Marystown Group
HS09-163	Fine-medium grained, quartz-kspar porphyritic rhyolite tuff	Marystown Group
HS09-164A	Intensely foliated and altered pyrophyllite-quartz schist that is likely a felsic volcanic protolith	Marystown Group
HS09-173	Weakly altered quartz-feldspar dacite	Marystown Group
HS09-175A	Pyrophyllite-quartz schist	Marystown Group
HS09-175A	Pyrophyllite-quartz schist	Marystown Group
HS09-175B	Cherty quartz breccia in contact with schist	Marystown Group
HS12-031	Mod-well foliated andesitic-dacitic breccia, crenulations of mod-str developed fabric.	Marystown Group
HS12-032	Pl. porph green fresh, mauve-beige tan weathered epidote altered basaltic andesite to andesite with epidote alt., bleached felsic clasts.	Marystown Group
HS12-035	Mod- well developed anastam. cleavage in a chloritic, epidote altered or epidotized basaltic andesite.	Marystown Group
HS12-038	Massive plagioclase phyric dacite.	Marystown Group
HS12-049	Sericitic, chloritic, dasitic plagioclase porhyritic lapilli tuff.	Marystown Group
HS12-050	Epidotized chl & alb schist	Marystown Group
HS12-058	Kspar & epidotized plagioclase phyric silicic volcanic or porphyry. Sparse clasts of reddish siltstone or possible aphyric basalt may suggest a volcanic origin.	Marystown Group
HS12-070	Mod-strong foli. generally massive, but locally cm-scale layered intermediate metavolcanic basalt or basaltic andesite sand-siltstones.	Marystown Group
HS12-073	Weakly foliated basaltic breccia with abundant epidote amygdales & epidotized fragments in the breccia.	Marystown Group
HS12-076	Wk-mod fol. grey-green fresh, weakly plagioclase porphyritic & locally epidotized basalt.	Marystown Group
HS12-078	Weakly plagioclase phyric basalt with some silty-sandy inter flow seds.	Marystown Group
HS12-080	Felsic, qtz , kspar metavolcanic but clearly a lithic lapilli tuff with a few sparse mafic metavolcanic lithic clasts.	Marystown Group
HS12-086	Weakly foliated basaltic breccia reddish but then quickly back into strongly foliated, altered, mineralized, quartz-veined felsic volcanic	Marystown Group
HS12-213A	Deep purple-red, plagioclase porphyritic, chalcedonic qtz+ calcite amygdaloidal basaltic andesite to basalt.	Marystown Group

Appendix E - Major- and Trace-element data; various samples (Sandeman)

SampleNum	Description	Group
HS12-213B	Deep purple-red, plagioclase porphyritic, chalcedonic qtz+ calcite amygdaloidal basaltic andesite to basalt.	Marystown Group
HS12-214	Massive chacedony-calcite amygdaloidal basalt.	Marystown Group
HS12-217	Greeny-grey, massive moderately foliated chl + sericite intermediate metavolcanic. (dacite-basaltic andesite.)	Marystown Group
HS12-218	Fine grained, moderately foliated, green-grey intermediate metavolcanic (chl porphy. BA)	Marystown Group
HS12-222	Plagioclase porphyritic rhyodacitic tio dacitic lapilli tuff	Marystown Group
MTR-002	Pyrophyllite schist	Marystown Group
MTR-003B	Altered basaltic andesite	Marystown Group
MTR-004A	Lazulite-bearing felsic volcanic	Marystown Group
BE10-008	Fine-grained basaltic dyke cuts sedimentary rocks of Musgrave Town Group in quarry at end of Thorburn Lake access road.	Musgravetown Group
HS12-209	Fine-med grained, weakly tweaked & rubbly, quartz monzonite to locally syenogranite with biotite+hornblende. Biotite is chloritized, kspars reddened and rock is only weakly magnetic. Lots of dissem. Epidote & minor epidote veins.	Undefined
HS12-212A	Colloform pyrite+chl+epi qtz vein with wall rock host	Undefined
HS12-212B	Epidote altered medium-grained (chl(bt)) syenogranite locally cut by <40cm wide ca 210 degrees trending approx. 80 degrees dipping qtz veins with strong chl+ ep alt in adjacent wall rock syenogranite as well as abundant chloritized + ep altered syenogranite fragments in a qtz breccia.	Undefined

Appendix E - Major- and Trace-element data; various samples (Sandeman)

SampleNum	Rock Type		SiO2	Al2O3	Fe2O3(T)	Fe2O3	FeO	MnO	MgO	CaO
		Units	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%
		Detection Limit	0.01	0.01	0.01	0.01	0.01	0.001	0.01	0.01
		Analysis Method	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj
HS12-087	Quartz-sericite schist		70.98	12.87	7.51	3.46	3.65	0.020	0.31	0.06
LH10-1	Quartz vein		94.31	3.08	0.11	0.04	0.06	0.013	0.06	0.03
947073A	Rhyolite		68.21	14.61	3.03	1.51	1.37	0.092	0.97	2.79
947073B	Rhyolite		66.28	14.78	4.11	1.56	2.30	0.143	1.49	3.18
HS09-085B	Qtz-hematite breccia		77.22	4.38	15.29	15.23	0.06	0.009	-0.01	0.02
HS09-086	Crystal tuff		67.70	14.86	4.12	1.25	2.59	0.114	1.73	2.54
HS09-091	Altered felsic volcanic		71.01	14.94	3.48	2.07	1.27	0.016	0.37	0.02
HS10-107	Sericite-schist		78.98	11.32	1.47	1.01	0.42	0.016	0.04	0.01
HS12-207	Rhyolitic tuff		74.91	12.81	1.53	0.55	0.88	0.078	0.36	0.81
HS12-228B	Felsic tuff		66.85	14.47	3.88	1.17	2.44	0.149	1.60	3.19
HS12-228C	Plagioclase porphyritic lapilli tuff		46.55	15.12	13.48	3.76	8.75	0.228	6.55	8.77
HS09-096A	Altered felsic volcanic		92.08	3.07	1.02	0.13	0.80	0.002	-0.01	-0.01
HS09-097	Quartz breccia		92.11	1.77	1.03	-99	-99	0.003	0.02	0.04
HS09-098	Intermediate volcanic		61.37	16.30	5.38	3.06	2.09	0.042	3.30	3.03
HS09-099	Intermediate volcanic		93.24	1.29	2.73	0.34	2.15	0.009	0.14	0.04
HS09-102	Rhyolitic tuff		71.15	14.68	2.00	1.03	0.87	0.080	0.58	1.04
HS09-123A	Basaltic andesite		53.65	15.75	10.32	2.25	7.26	0.184	3.76	5.35
HS09-125	Basaltic andesite		53.47	17.64	8.88	4.57	3.87	0.151	2.53	7.72
HS09-129A	Dacite		70.94	10.59	3.71	1.24	2.22	0.045	0.90	3.24
HS09-132	Basaltic andesite		51.01	19.27	9.52	4.59	4.44	0.188	3.88	7.37
HS09-133A	Felsic volcanic		74.44	13.19	1.68	0.83	0.77	0.077	0.37	0.86
HS09-135	Intermediate tuff		67.14	16.32	4.61	4.50	0.10	0.141	0.16	1.06
HS09-140	Sericite-schist		56.66	15.79	8.78	5.51	2.94	0.138	3.61	4.05
HS09-141	Pyrophyllite schist		83.69	6.80	0.16	-99	-99	0.002	0.03	0.03
HS09-142	Pyrophyllite schist		73.25	14.51	4.70	-99	-99	0.003	-0.01	-0.01
HS09-142	Pyrophyllite schist		73.68	14.80	5.18	2.89	2.06	0.004	0.02	0.03
HS09-143B	Specularite-quartz veins		91.50	0.52	4.13	4.03	0.09	0.002	-0.01	-0.01
HS09-143C	Pyrophyllite schist		77.92	12.77	0.12	-99	-99	-0.001	-0.01	0.18
HS09-144	Felsic volcanic		71.80	14.92	2.42	1.45	0.87	0.087	0.65	1.05
HS09-145	Felsic volcanic		70.59	14.26	2.44	-99	-99	0.072	0.62	1.11

Appendix E - Major- and Trace-element data; various samples (Sandeman)

SampleNum	Rock Type		SiO2	Al2O3	Fe2O3(T)	Fe2O3	FeO	MnO	MgO	CaO
		Units	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%
		Detection Limit	0.01	0.01	0.01	0.01	0.01	0.001	0.01	0.01
		Analysis Method	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj
HS09-147	Basaltic andesite		68.12	13.85	4.74	2.87	1.69	0.132	2.40	0.64
HS09-150	Felsic volcanic		72.59	14.57	2.73	1.57	1.04	0.075	0.78	0.75
HS09-152	Basaltic andesite		58.08	15.64	6.39	1.24	4.64	0.163	2.77	4.27
HS09-155	Basaltic agglomerate		56.53	15.74	9.14	5.54	3.24	0.140	2.64	6.02
HS09-158	Basaltic andesite		49.52	16.56	10.39	4.06	5.70	0.162	5.98	7.72
HS09-163	Rhyolite		70.10	14.64	2.61	2.01	0.55	0.074	0.61	1.19
HS09-164A	Pyrophyllite-quartz schist		76.69	5.42	5.98	1.31	4.20	0.003	-0.01	0.09
HS09-173	Dacite		72.05	14.98	2.33	1.87	0.42	0.100	0.68	1.60
HS09-175A	Pyrophyllite-quartz schist		67.77	24.15	0.20	0.13	0.06	0.009	0.02	0.07
HS09-175A	Pyrophyllite-quartz schist		64.94	25.17	0.17	0.03	0.13	-0.001	0.02	0.05
HS09-175B	quartz breccia		96.34	1.00	0.04	-99	-99	-0.001	-0.01	-0.01
HS12-031	Dacite breccia		72.99	12.12	2.40	0.22	1.96	0.042	0.66	0.90
HS12-032	Basaltic andesite		58.55	16.44	6.62	3.08	3.18	0.172	2.91	4.92
HS12-035	Basaltic andesite		54.16	15.95	10.27	2.37	7.11	0.220	3.53	5.64
HS12-038	Dacite		50.49	17.31	10.05	2.72	6.60	0.163	5.84	8.92
HS12-049	Dacite		60.30	15.79	5.89	4.49	1.26	0.134	1.79	3.39
HS12-050	Andesite		54.14	15.40	8.78	4.70	3.68	0.160	5.51	9.44
HS12-058	Dacite		66.23	14.29	5.11	2.90	1.99	0.122	1.27	2.84
HS12-070	Basaltic andesite		60.43	16.18	6.57	3.63	2.64	0.122	2.28	4.39
HS12-073	Chlorite schist		54.62	19.50	9.63	3.99	5.07	0.109	1.82	5.09
HS12-076	Basalt		56.62	14.70	10.72	7.23	3.14	0.179	3.30	4.47
HS12-078	Basaltic andesite		56.34	19.94	8.49	7.84	0.58	0.122	1.67	3.69
HS12-080	Rhyolitic tuff		67.75	14.30	2.91	0.70	1.99	0.098	0.94	3.09
HS12-086	Altered felsic volcanic		82.01	7.41	2.93	-99	-99	0.017	0.40	0.35
HS12-213A	Basaltic andesite		44.73	16.77	13.26	9.11	3.73	0.300	3.12	11.80

Appendix E - Major- and Trace-element data; various samples (Sandeman)

SampleNum	Rock Type		SiO2	Al2O3	Fe2O3(T)	Fe2O3	FeO	MnO	MgO	CaO
		Units	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%
		Detection Limit	0.01	0.01	0.01	0.01	0.01	0.001	0.01	0.01
		Analysis Method	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj
HS12-213B	Basalt		48.03	18.61	10.47	4.41	5.45	0.170	4.11	8.90
HS12-214	Basalt		51.08	20.30	7.72	2.82	4.41	0.144	2.44	7.49
HS12-217	Dacite-basaltic andesite		57.94	16.50	6.06	2.57	3.14	0.203	3.00	4.00
HS12-218	Intermediate volcanic		52.48	17.26	10.09	4.84	4.73	0.177	4.94	6.62
HS12-222	Felsic tuff		66.52	15.20	3.61	1.41	1.98	0.095	1.12	3.69
MTR-002	Pyrophyllite schist		74.06	12.62	2.39	0.72	1.51	0.048	1.38	0.03
MTR-003B	Altered basaltic andesite		75.93	14.12	1.27	0.27	0.90	0.031	0.77	0.22
MTR-004A	Lazulite-bearing felsic volcanic		66.33	15.04	4.97	2.16	2.53	0.129	1.63	3.60
BE10-008	Basaltic dyke		47.94	16.60	9.54	5.14	3.97	0.293	5.69	6.52
HS12-209	Altered monzonite		64.38	15.40	4.89	2.15	2.47	0.122	1.49	2.64
HS12-212A	Quartz veined Monzonite		68.28	14.06	3.81	0.68	2.82	0.111	0.88	1.10
HS12-212B	Altered monzonite		77.98	9.97	3.24	0.09	2.83	0.064	0.55	0.29

Appendix E - Major- and Trace-element data; various samples (Sandeman)

SampleNum	Na2O	K2O	TiO2	P2O5	LOI	CO2	Au	Ag	As	Ba	Be	Bi
	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	ppb	ppm	ppm	ppm	ppm	ppm
	0.01	0.01	0.001	0.001	0.01	0.01	1, 2	0.05, 0.1	0.5	1	0.1	0.1, 0.4
	GS Maj	GS Maj	GS Maj	GS Maj	Grav	COUL	BQ INAA	GS Tr ES	BQ INAA	GS Tr ES	GS Tr ES	GS Tr MS
HS12-087	0.23	1.77	0.301	0.094	4.56	-99	173	0.30	4.6	720	0.6	-0.4
LH10-1	0.02	1.89	0.005	0.002	0.57	-99	510	1.74	9.2	21	673	-0.4
947073A	4.61	1.85	0.404	0.091	0.96	-99	-1	0.08	3.7	593	1.7	-0.4
947073B	4.27	2.31	0.513	0.101	1.40	-99	-1	0.12	1.9	661	1.7	-0.4
HS09-085B	-0.01	-0.01	0.801	0.065	1.55	-99	-1	-0.05	3.3	1544	-0.1	1.9
HS09-086	3.11	2.94	0.516	0.130	0.96	-99	-1	-0.05	-0.5	334	3.4	0.3
HS09-091	1.53	3.33	0.451	0.015	3.22	-99	-1	0.07	1.8	961	3.1	0.1
HS10-107	3.96	1.53	0.188	0.016	1.32	-99	-1	0.05	1.1	474	1.5	-0.1
HS12-207	4.46	3.16	0.224	0.043	0.70	-99	-1	-0.05	1.4	771	1.5	-0.4
HS12-228B	3.49	2.36	0.652	0.147	3.74	-99	-1	-99	0.9	565	1.8	-0.4
HS12-228C	3.27	0.32	2.776	0.345	2.98	-99	-1	-99	5.1	124	0.9	-0.4
HS09-096A	-0.01	-0.01	0.597	0.012	1.38	-99	-1	-0.05	2.6	116	-0.1	0.2
HS09-097	0.32	0.47	0.888	0.073	0.87	0.04	9	-0.10	3.3	73	-0.1	-0.1
HS09-098	3.55	1.16	0.800	0.256	4.12	0.02	3	-0.10	3.2	498	1.2	-0.1
HS09-099	-0.01	-0.01	1.102	0.064	0.93	-99	-1	-0.05	4.2	135	0.1	0.3
HS09-102	4.81	2.90	0.359	0.078	1.40	0.32	-2	-0.10	0.6	1038	1.6	-0.1
HS09-123A	4.24	1.48	1.251	0.290	3.31	1.00	-99	-0.10	-99	478	0.8	-0.1
HS09-125	2.38	1.44	1.155	0.240	2.89	-99	-1	0.08	2.0	422	1.1	-0.1
HS09-129A	0.04	3.74	0.468	0.515	4.10	-99	193	0.14	-0.5	2929	3.2	0.2
HS09-132	3.77	1.39	0.952	0.189	2.06	0.09	-99	-0.10	-99	420	0.4	-0.1
HS09-133A	5.07	2.00	0.232	0.045	0.83	-99	-1	-0.05	0.6	786	1.4	0.1
HS09-135	7.43	1.13	0.407	0.052	1.01	-99	-1	-0.05	2.9	568	2.3	-0.1
HS09-140	0.33	2.37	0.780	0.195	6.18	0.72	-2	-0.10	7.2	415	1.1	-0.1
HS09-141	0.07	0.04	0.763	0.019	1.67	0.02	-2	-0.10	0.9	6	-0.1	0.2
HS09-142	0.08	0.22	0.818	0.071	5.16	0.04	-2	-0.10	1.2	87	0.1	-0.1
HS09-142	0.04	0.26	0.916	0.053	5.32	-99	-1	-99	2.1	99	0.4	-0.4
HS09-143B	-0.01	0.05	0.887	-0.001	0.36	0.05	2	-0.10	0.9	300	-0.1	-0.1
HS09-143C	0.07	0.07	1.093	0.506	3.53	-0.01	-2	-0.10	3.5	474	-0.1	6.8
HS09-144	4.48	3.35	0.376	0.090	1.25	0.03	-2	-0.10	-0.5	1033	1.6	-0.1
HS09-145	4.32	3.62	0.378	0.075	1.24	-99	-1	-0.05	6.2	987	1.6	0.1

Appendix E - Major- and Trace-element data; various samples (Sandeman)

SampleNum	Na2O	K2O	TiO2	P2O5	LOI	CO2	Au	Ag	As	Ba	Be	Bi
	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	ppb	ppm	ppm	ppm	ppm	ppm
	0.01	0.01	0.001	0.001	0.01	0.01	1, 2	0.05, 0.1	0.5	1	0.1	0.1, 0.4
	GS Maj	GS Maj	GS Maj	GS Maj	Grav	COUL	BQ INAA	GS Tr ES	BQ INAA	GS Tr ES	GS Tr ES	GS Tr MS
HS09-147	0.36	3.73	0.695	0.170	4.27	-0.01	-99	-0.10	-99	829	1.2	-0.1
HS09-150	3.94	3.06	0.339	0.096	1.91	0.28	-2	-0.10	1.5	611	2.0	-0.1
HS09-152	1.37	3.02	0.926	0.269	5.75	-99	-1	0.07	2.6	455	1.3	0.2
HS09-155	3.51	0.61	0.989	0.190	2.51	-99	-1	0.12	-0.5	124	0.8	0.1
HS09-158	3.87	1.45	1.244	0.403	2.80	0.04	-99	-0.10	-99	467	0.5	-0.1
HS09-163	4.69	3.25	0.372	0.068	1.10	-99	-1	-0.05	0.9	821	1.5	-0.1
HS09-164A	0.18	0.69	0.713	0.198	8.54	-99	-1	0.21	4.5	442	-0.1	0.3
HS09-173	4.28	2.10	0.381	0.053	1.50	-99	-1	-0.05	1.3	701	1.7	-0.1
HS09-175A	-0.01	0.35	0.757	0.098	4.95	-99	-1	-0.05	3.4	166	0.3	0.2
HS09-175A	-0.01	0.32	0.754	0.089	5.59	-99	-1	-0.05	3.7	154	0.2	0.3
HS09-175B	-0.01	0.14	0.680	-0.001	0.27	-99	2	0.08	1.1	101	-0.1	-0.1
HS12-031	3.69	2.65	0.173	0.021	2.96	-99	-1	-0.05	0.8	1745	3.0	-0.4
HS12-032	4.75	1.32	0.941	0.261	2.92	-99	-1	0.16	3.0	464	1.2	-0.4
HS12-035	4.93	1.19	1.255	0.304	2.18	-99	-1	0.28	1.2	367	1.2	-0.4
HS12-038	2.84	1.07	0.952	0.192	3.07	-99	-1	0.12	2.2	300	0.7	-0.4
HS12-049	3.60	2.39	0.709	0.221	3.85	-99	-1	0.08	2.4	1076	1.4	-0.4
HS12-050	3.56	0.70	0.774	0.137	2.33	-99	-1	-0.05	3.6	269	0.7	-0.4
HS12-058	5.11	1.09	0.747	0.167	1.41	-99	-99	-0.05	-99	308	1.4	-0.4
HS12-070	3.92	2.25	0.954	0.273	2.26	-99	-99	-0.05	-99	718	1.3	0.5
HS12-073	1.49	1.57	1.209	0.181	4.47	-99	-1	0.22	4.0	233	0.6	-0.4
HS12-076	4.77	0.19	1.261	0.333	2.21	-99	-1	0.10	3.8	40	0.7	0.4
HS12-078	2.61	2.73	0.992	0.141	2.75	-99	-1	-0.05	2.2	857	1.4	-0.4
HS12-080	3.52	2.25	0.389	0.088	3.37	-99	-1	0.07	1.0	576	1.4	0.5
HS12-086	0.09	1.90	0.319	0.068	2.56	-99	73	3.73	40.0	237	0.7	-0.4
HS12-213A	2.58	0.41	1.147	0.288	5.58	-99	-1	0.10	4.0	299	0.8	-0.4

Appendix E - Major- and Trace-element data; various samples (Sandeman)

SampleNum	Na2O	K2O	TiO2	P2O5	LOI	CO2	Au	Ag	As	Ba	Be	Bi
	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	ppb	ppm	ppm	ppm	ppm	ppm
	0.01	0.01	0.001	0.001	0.01	0.01	1, 2	0.05, 0.1	0.5	1	0.1	0.1, 0.4
	GS Maj	GS Maj	GS Maj	GS Maj	Grav	COUL	BQ INAA	GS Tr ES	BQ INAA	GS Tr ES	GS Tr ES	GS Tr MS
HS12-213B	3.66	0.24	0.970	0.194	4.18	-99	-1	0.13	3.5	100	0.6	-0.4
HS12-214	2.96	2.10	1.061	0.235	4.50	-99	-1	0.10	4.6	722	0.8	-0.4
HS12-217	4.72	0.70	0.852	0.213	3.41	-99	-1	-99	4.7	252	1.2	-0.4
HS12-218	3.81	0.53	1.152	0.269	3.41	-99	-1	-99	1.9	411	0.8	-0.4
HS12-222	4.06	1.57	0.462	0.109	2.84	-99	-1	-99	-0.5	600	1.3	-0.4
MTR-002	0.06	3.97	0.373	0.027	3.21	-99	7	0.75	1.0	447	1.7	1.0
MTR-003B	0.08	4.62	0.258	0.014	2.61	-99	-1	0.08	7.8	822	1.6	-0.1
MTR-004A	4.03	1.60	0.590	0.113	1.85	-99	-1	-0.05	2.1	332	1.1	-0.1
BE10-008	4.60	0.87	1.337	0.229	5.30	-99	-1	0.06	2.5	561	1.4	0.1
HS12-209	4.10	3.22	0.548	0.146	2.33	-99	-1	-0.05	2.0	688	1.8	-0.4
HS12-212A	2.81	4.30	0.446	0.121	3.00	-99	-1	-99	5.9	928	1.4	-0.4
HS12-212B	1.15	3.51	0.344	0.093	2.26	-99	63	2.55	78.8	661	1.1	-0.4

Appendix E - Major- and Trace-element data; various samples (Sandeman)

SampleNum	Br	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	F
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	1	0.2	0.1	1	1	0.1, 0.5	1	0.1	0.1	0.05	10
	BQ INAA	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr ES	GS Tr MS	GS Tr ES	GS Tr MS	GS Tr MS	GS Tr MS	ISE
HS12-087	-1	-0.2	59.7	11	-99	0.7	871	3.1	2.0	0.75	-99
LH10-1	-1	-0.2	9.1	1	-99	1.4	3	0.6	0.3	0.06	-99
947073A	-1	0.3	62.1	6	-99	-0.5	15	5.0	2.8	1.44	-99
947073B	-1	-0.2	54.0	9	-99	1.2	9	4.5	2.8	1.32	-99
HS09-085B	-1	-0.2	14.0	1	19	0.3	5	4.1	3.7	0.48	-99
HS09-086	-1	-0.2	34.3	10	43	7.8	35	2.8	2.1	0.69	-99
HS09-091	-1	-0.2	64.3	1	1	2.3	3	7.0	4.5	2.10	-99
HS10-107	-1	-0.2	103	2	1	1.7	2	9.2	5.4	1.85	-99
HS12-207	-1	-0.2	60.2	2	-99	1.2	5	3.5	2.2	0.95	-99
HS12-228B	-1	-0.2	88.0	7	-99	1.1	15	7.7	4.5	2.15	-99
HS12-228C	-1	-0.2	41.7	44	-99	-0.5	59	7.6	4.1	2.44	-99
HS09-096A	-1	-0.2	3.0	-1	-1	-0.1	3	0.5	0.4	-0.05	-99
HS09-097	-1	-0.2	17.1	4	2	0.4	42	2.0	1.3	0.25	42
HS09-098	-1	0.3	66.5	12	11	2.4	19	4.9	2.8	1.43	151
HS09-099	-1	-0.2	13.8	1	12	-0.1	12	0.5	0.3	0.21	-99
HS09-102	1	-0.2	60.6	2	1	2.5	-1	2.8	1.7	0.92	198
HS09-123A	-99	0.2	47.3	26	5	1.4	33	4.4	2.5	1.44	193
HS09-125	-1	-0.2	35.5	17	8	5.3	69	3.6	2.0	1.10	-99
HS09-129A	-1	-0.2	285	16	12	0.4	9	5.2	1.8	4.98	-99
HS09-132	-99	0.3	18.9	29	6	1.7	95	3.1	1.8	1.03	179
HS09-133A	-1	-0.2	42.3	3	2	1.1	3	2.5	1.8	0.52	-99
HS09-135	-1	-0.2	49.8	1	1	1.1	3	6.3	3.8	2.01	-99
HS09-140	1	0.2	53.1	4	10	2.9	17	4.4	2.5	1.37	255
HS09-141	1	-99	20.5	-1	2	-0.1	13	1.5	1.2	0.39	220
HS09-142	-1	0.1	38.8	7	3	-0.1	9	4.6	2.8	1.01	1052
HS09-142	-1	-0.2	39.6	8	-99	-0.5	13	6.7	4.0	1.25	-99
HS09-143B	-1	-0.2	1.2	-1	7	-0.1	1	0.9	0.7	0.03	26
HS09-143C	-1	-0.2	118	-1	45	-0.1	10	2.0	1.0	1.32	327
HS09-144	-1	-0.2	65.3	3	1	3.5	7	3.2	2.0	1.06	220
HS09-145	-1	-0.2	49.0	3	2	1.7	5	2.4	1.7	0.82	-99

Appendix E - Major- and Trace-element data; various samples (Sandeman)

SampleNum	Br	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	F
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	1	0.2	0.1	1	1	0.1, 0.5	1	0.1	0.1	0.05	10
	BQ INAA	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr ES	GS Tr MS	GS Tr ES	GS Tr MS	GS Tr MS	GS Tr MS	ISE
HS09-147	-99	0.3	49.7	15	13	4.2	33	3.4	1.9	2.06	813
HS09-150	1	-0.2	65.2	3	2	3.5	1	3.2	2.0	1.03	255
HS09-152	-1	-0.2	52.8	10	7	3.9	23	4.5	2.6	1.39	-99
HS09-155	-1	-0.2	31.3	19	23	0.9	89	3.2	1.7	1.14	-99
HS09-158	-99	0.2	36.3	35	121	2.3	33	3.9	2.1	1.43	145
HS09-163	-1	-0.2	54.2	3	2	1.5	3	2.6	1.7	1.04	-99
HS09-164A	-1	-0.2	74.3	12	3	0.3	77	3.2	2.1	2.41	-99
HS09-173	-1	-0.2	49.7	2	4	3.2	3	2.4	1.4	0.87	-99
HS09-175A	-1	-0.2	78.9	-1	4	0.2	4	1.2	0.8	0.92	-99
HS09-175A	-1	-0.2	85.4	-1	2	0.3	4	1.1	0.7	0.95	-99
HS09-175B	-1	-0.2	4.4	-1	1	0.3	21	0.4	0.4	0.09	-99
HS12-031	-1	-0.2	134	2	-99	0.8	4	16.2	10.1	2.33	-99
HS12-032	-1	-0.2	62.2	14	-99	-0.5	7	4.9	2.8	1.54	-99
HS12-035	-1	-0.2	47.5	29	-99	0.5	50	4.7	2.7	1.70	-99
HS12-038	-1	-0.2	26.7	38	-99	2.6	68	3.1	1.7	1.18	-99
HS12-049	-1	-0.2	64.6	11	-99	1.5	19	5.0	2.9	1.71	-99
HS12-050	-1	-0.2	27.6	31	-99	0.7	13	2.7	1.6	1.09	-99
HS12-058	-99	-0.2	58.1	8	-99	2.2	4	6.5	3.9	1.55	-99
HS12-070	-99	-0.2	62.2	13	-99	2.3	22	5.3	3.1	1.69	-99
HS12-073	-1	-0.2	23.6	10	-99	5.5	31	3.1	1.8	0.95	-99
HS12-076	-1	-0.2	45.0	27	-99	0.5	10	4.7	2.6	1.45	-99
HS12-078	-1	-0.2	51.7	18	-99	5.3	12	5.8	3.5	1.56	-99
HS12-080	-1	-0.2	52.9	5	-99	3.5	25	3.1	1.9	1.03	-99
HS12-086	-1	0.5	22.3	7	-99	0.8	14	2.1	1.3	0.63	-99
HS12-213A	-1	-0.2	26.4	37	-99	0.6	90	4.8	2.9	1.34	-99

Appendix E - Major- and Trace-element data; various samples (Sandeman)

SampleNum	Br	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	F
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	1	0.2	0.1	1	1	0.1, 0.5	1	0.1	0.1	0.05	10
	BQ INAA	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr ES	GS Tr MS	GS Tr ES	GS Tr MS	GS Tr MS	GS Tr MS	ISE
HS12-213B	-1	-0.2	20.5	48	-99	0.7	58	3.3	2.0	1.20	-99
HS12-214	-1	-0.2	42.6	20	-99	10.3	93	3.6	2.2	1.46	-99
HS12-217	-1	-0.2	55.2	20	-99	2.3	14	4.5	2.6	1.42	-99
HS12-218	-1	-0.2	40.8	30	-99	0.9	56	4.0	2.3	1.41	-99
HS12-222	-1	-0.2	59.6	8	-99	1.2	10	3.1	1.9	1.13	-99
MTR-002	-1	-0.2	17.6	2	3	2.9	11	2.9	2.0	0.50	-99
MTR-003B	-1	-0.2	34.5	1	4	4.1	3	2.4	1.5	0.77	-99
MTR-004A	-1	-0.2	46.9	8	13	1.2	5	5.4	3.6	1.25	-99
BE10-008	-1	-0.2	18.0	28	126	1.5	60	3.7	1.9	1.15	-99
HS12-209	1	-0.2	65.5	10	-99	4.2	24	5.2	3.1	1.51	-99
HS12-212A	1	-0.2	61.6	6	-99	4.6	4	3.7	2.4	1.14	-99
HS12-212B	-1	-0.2	44.0	9	-99	4.6	13	3.0	1.7	0.74	-99

Appendix E - Major- and Trace-element data; various samples (Sandeman)

SampleNum	Fe	Ga	Ge	Gd	Hf	Ho	In	La	Li	Lu	Mn
	wt.%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.01	1	0.5	0.1	0.2	0.1	0.1, 0.2	0.5	0.1	0.05	1
	GS Tr ES	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr ES	ICP-MS	GS Tr ES
HS12-087	5.40	11	4.3	0.5	3.2	0.6	-0.2	32.2	6.3	0.33	183
LH10-1	-0.10	18	2.8	0.1	0.4	0.1	-0.2	3.9	338	-0.05	107
947073A	2.20	18	3.3	0.8	5.3	0.9	-0.2	31.3	8.0	0.45	716
947073B	2.90	18	2.0	0.7	4.9	0.9	-0.2	26.0	12.1	0.44	1022
HS09-085B	6.58	20	3.5	1.8	4.8	1.0	0.3	7.8	2.9	0.56	44
HS09-086	2.88	16	2.3	2.9	4.8	0.5	-0.1	15.6	54.7	0.32	831
HS09-091	2.44	19	3.7	6.8	7.5	1.3	-0.1	28.2	11.2	0.70	134
HS10-107	1.02	18	5.5	9.2	7.5	1.7	-0.1	47.7	1.0	0.81	137
HS12-207	1.00	14	1.7	0.6	3.3	0.7	-0.2	32.5	7.1	0.40	691
HS12-228B	2.60	19	3.3	1.3	6.4	1.5	-99	42.3	28.2	0.69	1130
HS12-228C	10.00	24	3.6	1.3	5.7	1.5	-99	17.6	36.7	0.53	1583
HS09-096A	0.72	3	-0.5	0.3	2.7	0.1	-0.1	1.6	-0.1	0.07	24
HS09-097	0.78	2	0.8	1.4	4.8	0.4	-0.1	9.7	0.3	0.22	12
HS09-098	3.77	19	1.1	5.2	5.6	1.0	-0.1	33.2	40.7	0.45	317
HS09-099	1.92	2	1.8	0.8	3.0	0.1	-0.1	6.3	5.2	0.07	75
HS09-102	1.50	14	1.1	2.9	5.2	0.6	-0.1	33.3	10.9	0.31	650
HS09-123A	7.14	18	0.9	4.9	3.5	0.9	-0.1	22.0	17.8	0.36	1344
HS09-125	6.15	18	2.7	4.2	3.0	0.7	-0.1	16.5	16.7	0.27	1046
HS09-129A	2.59	26	7.3	13.3	4.3	0.7	-0.1	117	9.9	0.14	336
HS09-132	6.66	22	1.6	3.2	1.7	0.6	-0.1	7.9	14.4	0.25	1359
HS09-133A	1.05	11	1.2	2.7	2.2	0.4	-0.1	23.0	3.9	0.26	555
HS09-135	2.44	16	4.8	6.2	7.6	1.3	-0.1	28.7	4.0	0.53	1023
HS09-140	6.18	20	1.1	4.7	5.3	0.8	-0.1	27.3	41.0	0.38	1044
HS09-141	0.14	9	-0.5	1.1	4.7	0.4	-0.1	11.7	0.8	0.23	-1
HS09-142	3.29	16	1.2	3.5	4.2	1.0	-0.1	19.4	0.9	0.40	24
HS09-142	3.20	15	2.0	1.0	4.4	1.4	-99	19.7	-0.1	0.53	29
HS09-143B	2.49	1	-0.5	0.3	3.6	0.2	-0.1	0.6	0.7	0.15	21
HS09-143C	0.03	21	1.1	3.9	4	0.3	-0.1	53.3	1.5	0.18	-1
HS09-144	1.73	17	1.0	3.3	5.2	0.7	-0.1	36.5	8.7	0.36	690
HS09-145	1.50	13	1.5	2.7	3.9	0.5	-0.1	25.3	9.9	0.26	528

Appendix E - Major- and Trace-element data; various samples (Sandeman)

SampleNum	Fe	Ga	Ge	Gd	Hf	Ho	In	La	Li	Lu	Mn
	wt.%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.01	1	0.5	0.1	0.2	0.1	0.1, 0.2	0.5	0.1	0.05	1
	GS Tr ES	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr ES	ICP-MS	GS Tr ES
HS09-147	3.37	17	1.0	4.0	4.8	0.6	-0.1	24.1	16.4	0.30	1048
HS09-150	1.94	17	1.0	3.3	5.6	0.7	-0.1	36.4	16.0	0.36	608
HS09-152	4.43	16	2.2	5.7	4.9	0.9	-0.1	24.8	44.4	0.40	1159
HS09-155	6.12	15	2.9	3.7	2.4	0.6	-0.1	14.3	27.1	0.24	944
HS09-158	7.19	17	1.3	4.3	2.5	0.8	-0.1	16.1	29.8	0.31	1181
HS09-163	1.57	16	2.9	3.3	4.7	0.5	-0.1	28.5	8.2	0.31	538
HS09-164A	4.17	8	3.8	7.0	4.2	0.6	-0.1	34.0	-0.1	0.37	27
HS09-173	1.44	14	2.3	2.7	4.2	0.5	-0.1	27.0	9.3	0.25	730
HS09-175A	0.12	29	2.0	2.5	5.6	0.2	-0.1	43.6	4.8	0.15	4
HS09-175A	0.10	30	2.0	3.1	5.9	0.2	-0.1	48.0	7.9	0.18	2
HS09-175B	0.05	1	0.6	0.5	3.4	0.1	-0.1	2.4	0.1	0.07	6
HS12-031	1.80	26	3.9	2.5	10.4	3.3	-0.2	63.5	4.5	1.45	375
HS12-032	4.90	20	4.4	0.8	5.3	0.9	-0.2	31.3	24.3	0.41	1399
HS12-035	7.90	20	4.0	0.8	4.5	0.9	-0.2	23.2	15.6	0.37	1754
HS12-038	8.00	19	2.7	0.5	2.5	0.6	-0.2	12.1	23.9	0.25	1283
HS12-049	3.80	18	3.6	0.8	5.1	0.9	-0.2	33.6	21.5	0.43	1123
HS12-050	6.70	18	3.5	0.5	2.2	0.5	-0.2	15.0	17.5	0.21	1257
HS12-058	-99	17	3.5	1.0	5.5	1.3	-0.2	28.2	15.7	0.56	1020
HS12-070	-99	21	3.0	0.9	5.6	1.0	-0.2	29.9	14.9	0.44	984
HS12-073	6.30	19	2.6	0.4	2.6	0.6	-0.2	11.7	45.9	0.26	895
HS12-076	8.70	16	4.5	0.8	4.4	0.9	-0.2	20.8	26.4	0.37	1453
HS12-078	6.60	21	4.2	1.0	5.0	1.2	-0.2	32.1	24.4	0.47	997
HS12-080	2.10	15	1.4	0.5	5.0	0.6	-0.2	29.6	16.7	0.32	817
HS12-086	2.00	11	1.5	0.3	2.0	0.4	-0.2	12.3	5.5	0.16	154
HS12-213A	10.40	22	5.4	0.8	2.6	0.9	-0.2	12.2	60.9	0.40	2363

Appendix E - Major- and Trace-element data; various samples (Sandeman)

SampleNum	Fe	Ga	Ge	Gd	Hf	Ho	In	La	Li	Lu	Mn
	wt.%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.01	1	0.5	0.1	0.2	0.1	0.1, 0.2	0.5	0.1	0.05	1
	GS Tr ES	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr ES	ICP-MS	GS Tr ES
HS12-213B	8.30	19	3.3	0.6	1.8	0.7	-0.2	8.4	53.8	0.29	1360
HS12-214	6.20	20	3.3	0.6	2.7	0.7	-0.2	22.3	39.5	0.29	1170
HS12-217	4.70	21	3.4	0.8	5.4	0.9	-99	27.9	31.9	0.38	1511
HS12-218	7.30	21	2.6	0.7	3.6	0.7	-99	19.1	24.2	0.32	1252
HS12-222	2.40	17	3.2	0.5	5.0	0.6	-99	32.7	15.3	0.32	750
MTR-002	1.82	15	1.7	2.1	4.7	0.7	0.2	10.1	5.4	0.30	415
MTR-003B	0.91	14	1.5	2.7	4.6	0.5	-0.1	21.0	9.3	0.21	237
MTR-004A	3.81	18	2.3	5.4	4.6	1.2	0.1	23.1	12.7	0.42	932
BE10-008	6.72	13	3.0	3.1	2.2	0.7	-0.1	7.3	38.2	0.27	2007
HS12-209	3.50	18	3.2	0.8	6.1	1.0	-0.2	31.9	35.7	0.44	1048
HS12-212A	2.70	18	3.7	0.7	5.9	0.7	-99	31.6	15.6	0.35	900
HS12-212B	2.10	12	1.9	0.5	4.4	0.5	-0.2	21.5	18.0	0.27	571

Appendix E - Major- and Trace-element data; various samples (Sandeman)

SampleNum	Mo	Na	Nb	Nd	Ni	P	Pb	Pr	Rb	S	Sb
	ppm	wt.%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	wt.%	ppm
	1, 2	0.02, 0.05	1	0.1	1	1	1	0.05	2	0.01	0.1
	BQ INAA	BQ INAA	GS Tr MS	GS Tr MS	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr MS	GS Tr ES	IR	BQ INAA
HS12-087	70	0.20	10	21.7	12	-99	92	6.25	49	-99	0.5
LH10-1	-1	-0.05	2	3.3	-1	-99	-1	0.92	187	-99	55.3
947073A	3	3.40	10	27.9	8	-99	8	7.19	59	-99	0.1
947073B	2	3.10	9	25.0	13	-99	8	6.40	69	-99	0.1
HS09-085B	2	-0.05	12	5.9	5	81	24	1.51	5	-99	22.1
HS09-086	-1	2.50	14	13.0	28	566	13	3.68	144	-99	-0.1
HS09-091	3	1.10	13	30.6	-1	52	22	8.09	73	-99	0.6
HS10-107	-1	2.90	16	51.6	-1	46	4	12.79	40	-99	0.3
HS12-207	-1	3.10	10	24.9	4	-99	7	6.74	87	-99	0.2
HS12-228B	-1	2.50	14	43.0	9	-99	5	10.7	109	-99	0.4
HS12-228C	-1	2.60	16	27.7	34	-99	-1	6.0	11	-99	0.7
HS09-096A	-1	-0.05	6	1.0	-1	71	1	0.42	4	-99	3.4
HS09-097	32	0.04	11	6.5	1	335	50	1.75	15	0.57	0.4
HS09-098	-1	2.38	9	29.1	4	1071	2	7.36	35	2.69	0.9
HS09-099	2	-0.05	6	6.1	-1	295	-1	1.76	6	-99	18.7
HS09-102	-1	3.29	10	21.1	-1	388	-1	6.16	76	-0.01	0.2
HS09-123A	-1	-99	6	23.7	3	1352	-1	5.7	38	0.01	0.8
HS09-125	-1	2.00	5	19.4	13	1017	-1	4.40	45	-99	0.3
HS09-129A	-1	0.09	4	141	19	2078	-1	36.92	65	-99	-0.1
HS09-132	-1	-99	3	12.0	5	868	-1	2.47	35	0.02	0.8
HS09-133A	-1	3.60	5	16.7	-1	212	5	4.42	44	-99	0.2
HS09-135	-1	5.17	9	30.6	-1	241	7	7.22	31	-99	0.3
HS09-140	-1	0.31	9	25.1	1	882	34	6.05	70	2.25	0.9
HS09-141	7	0.04	9	6.5	-1	91	7	1.95	-2	0.16	2.0
HS09-142	-2	0.08	8	18.0	1	341	-1	4.39	10	3.61	1.1
HS09-142	-1	0.06	7	20.3	8	-99	5	4.9	9	-99	1.6
HS09-143B	-1	-0.02	8	0.5	-1	57	1	0.11	-2	0.02	1.6
HS09-143C	10	0.07	7	40.3	-1	2081	92	12.4	2	0.28	2.9
HS09-144	-1	2.92	9	23.4	-1	404	-1	6.77	86	0.02	0.2
HS09-145	-1	1.00	6	19.4	-1	343	6	5.37	83	-99	0.5

Appendix E - Major- and Trace-element data; various samples (Sandeman)

SampleNum	Mo	Na	Nb	Nd	Ni	P	Pb	Pr	Rb	S	Sb
	ppm	wt.%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	wt.%	ppm
	1, 2	0.02, 0.05	1	0.1	1	1	1	0.05	2	0.01	0.1
	BQ INAA	BQ INAA	GS Tr MS	GS Tr MS	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr MS	GS Tr ES	IR	BQ INAA
HS09-147	3	-99	9	22.9	5	742	2	5.64	111	2.43	1.8
HS09-150	-1	2.54	10	24.4	-1	420	-1	6.77	105	0.05	0.3
HS09-152	-1	2.70	8	26.9	7	1126	-1	6.63	91	-99	0.5
HS09-155	-1	3.00	4	17.5	13	776	-1	4.12	27	-99	0.2
HS09-158	-1	-99	5	20.7	59	1775	-1	4.6	47	0.01	1.5
HS09-163	-1	3.30	8	22.5	-1	315	11	5.63	80	-99	0.2
HS09-164A	46	0.15	7	41.8	6	486	16	9.48	6	-99	0.5
HS09-173	-1	2.90	9	20.0	-1	248	13	5.53	66	-99	0.4
HS09-175A	29	0.10	9	30.6	-1	429	19	8.39	17	-99	3.6
HS09-175A	34	0.10	10	33.6	-1	393	27	9.17	11	-99	4.1
HS09-175B	39	-0.05	7	2.0	-1	20	89	0.62	8	-99	1.7
HS12-031	-1	2.80	67	67.7	4	-99	2	16.52	56	-99	5.4
HS12-032	-1	3.80	9	30.6	12	-99	12	7.60	53	-99	0.5
HS12-035	-1	3.80	13	26.0	16	-99	-1	5.98	35	-99	0.4
HS12-038	-1	2.30	11	15.8	55	-99	-1	3.50	38	-99	0.2
HS12-049	-1	2.50	13	32.2	9	-99	8	7.61	74	-99	0.3
HS12-050	-1	2.70	4	14.7	69	-99	4	3.48	23	-99	0.5
HS12-058	-99	-99	14	29.3	8	-99	7	7.09	39	-99	-99
HS12-070	-99	-99	15	30.8	12	-99	3	7.62	59	-99	-99
HS12-073	-1	1.10	14	13.5	27	-99	-1	2.99	70	-99	0.9
HS12-076	-1	3.90	14	25.2	22	-99	16	5.86	13	-99	0.8
HS12-078	-1	2.10	11	30.8	25	-99	10	7.54	71	-99	0.1
HS12-080	-1	2.50	17	21.1	6	-99	11	5.84	68	-99	0.3
HS12-086	1000	0.08	3	11.1	8	-99	56	2.75	82	-99	5.9
HS12-213A	-1	2.10	4	18.0	39	-99	-1	3.61	18	-99	0.3

Appendix E - Major- and Trace-element data; various samples (Sandeman)

SampleNum	Mo	Na	Nb	Nd	Ni	P	Pb	Pr	Rb	S	Sb
	ppm	wt.%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	wt.%	ppm
	1, 2	0.02, 0.05	1	0.1	1	1	1	0.05	2	0.01	0.1
	BQ INAA	BQ INAA	GS Tr MS	GS Tr MS	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr MS	GS Tr ES	IR	BQ INAA
HS12-213B	-1	3.00	3	13.7	35	-99	-1	2.89	8	-99	0.5
HS12-214	-1	2.40	10	22.3	14	-99	-1	5.39	68	-99	0.3
HS12-217	-1	3.70	9	27.3	15	-99	3	6.8	25	-99	0.7
HS12-218	-1	3.00	5	22.7	30	-99	-1	5.3	14	-99	0.3
HS12-222	-1	2.90	10	23.2	7	-99	10	6.2	69	-99	0.7
MTR-002	6	0.11	9	8.1	1	145	69	2.04	157	-99	0.4
MTR-003B	-1	0.12	8	14.5	-1	86	7	3.77	178	-99	0.4
MTR-004A	-1	2.80	9	23.7	7	480	2	5.74	62	-99	0.7
BE10-008	-1	3.40	6	12.2	68	945	-1	2.56	32	-99	0.1
HS12-209	-1	3.00	14	31.8	9	-99	10	7.90	92	-99	1.0
HS12-212A	-1	2.10	12	27.8	5	-99	5	7.2	140	-99	0.7
HS12-212B	3	0.77	11	18.9	5	-99	42	4.88	125	-99	4.0

Appendix E - Major- and Trace-element data; various samples (Sandeman)

SampleNum	Sc	Se	Sm	Sn	Sr	Ta	Tb	Ti	Th	Tl	Tm
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.1	1, 5	0.1	1	2	0.5	0.1	1	0.1	0.05, 0.1	0.05
	GS Tr ES	BQ INAA	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr ES	GS Tr MS	GS Tr MS	GS Tr MS
HS12-087	10.1	6	3.4	13	116	0.8	2.8	661	14.8	-0.10	0.30
LH10-1	-0.1	-1	1.0	1	23	-0.5	0.7	22	0.5	-0.10	-0.05
947073A	8.8	-1	5.0	3	291	0.9	5.1	2749	7.1	-0.10	0.41
947073B	11.8	-1	5.0	1	279	0.7	4.5	3084	6.4	-0.10	0.40
HS09-085B	2.5	-1	1.4	15	316	0.8	0.5	555	4.8	-0.10	0.53
HS09-086	12.6	-1	2.6	2	100	1.7	0.5	3374	5.9	-0.10	0.30
HS09-091	10.6	-1	7.3	2	91	1.5	1.0	580	6.9	-0.10	0.69
HS10-107	5.2	-1	10.9	2	64	1.0	1.3	432	7.2	-0.10	0.71
HS12-207	4.7	-1	4.4	1	130	1.1	3.6	1554	8.1	-0.10	0.35
HS12-228B	16.1	-1	9.1	3	179	0.9	8.2	4181	10.3	-0.10	0.62
HS12-228C	46.5	-1	7.3	2	562	1.1	8.0	16365	1.2	-0.10	0.56
HS09-096A	2.5	1	-0.1	10	13	-0.5	0.1	243	0.9	-0.10	-0.05
HS09-097	5.4	-5	1.4	6	14	0.6	0.3	6594	3.8	-0.05	0.21
HS09-098	16.5	-5	6.1	1	599	0.6	0.8	5304	9.8	0.16	0.45
HS09-099	1.9	-1	1.2	3	14	-0.5	0.1	955	1.5	-0.10	-0.05
HS09-102	4.8	-5	3.6	1	248	0.6	0.5	2551	10.3	0.35	0.27
HS09-123A	30.4	-99	5.4	1	375	0.3	0.8	8218	4.6	0.08	0.40
HS09-125	24.4	-1	4.3	1	382	-0.5	0.6	7404	3.2	-0.10	0.27
HS09-129A	6.1	-1	21.1	1	202	1.0	1.3	1052	6.7	-0.10	0.17
HS09-132	28.7	-99	3.1	-1	537	0.1	0.5	5801	0.8	0.10	0.27
HS09-133A	4.1	-1	2.9	-1	162	-0.5	0.5	1435	8.8	-0.10	0.23
HS09-135	16.1	-1	6.5	2	155	-0.5	1.0	2512	6.3	-0.10	0.56
HS09-140	16.1	-5	5.2	5	208	0.5	0.8	5243	8.7	0.51	0.39
HS09-141	10.1	-5	1.2	3	31	0.6	0.2	2414	5.3	-0.05	0.21
HS09-142	19.1	-5	3.9	5	46	0.4	0.7	4138	5.6	-0.05	0.43
HS09-142	22.1	3	4.5	2	47	-0.5	5.2	4039	5.5	0.11	0.52
HS09-143B	4.0	-5	0.1	2	17	0.5	0.1	1051	1.1	-0.05	0.13
HS09-143C	8.5	-5	5.6	11	1950	0.4	0.5	4614	11.5	-0.05	0.16
HS09-144	5.0	-5	4.2	1	189	0.7	0.5	2683	11.6	0.48	0.34
HS09-145	5.0	-1	3.8	1	131	-0.5	0.4	2166	9.0	-0.10	0.20

Appendix E - Major- and Trace-element data; various samples (Sandeman)

SampleNum	Sc	Se	Sm	Sn	Sr	Ta	Tb	Ti	Th	Tl	Tm
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.1	1, 5	0.1	1	2	0.5	0.1	1	0.1	0.05, 0.1	0.05
	GS Tr ES	BQ INAA	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr ES	GS Tr MS	GS Tr MS	GS Tr MS
HS09-147	13.5	-99	4.9	1	20	0.5	0.6	4478	8.6	0.83	0.30
HS09-150	8.0	-5	4.4	1	196	0.7	0.5	2316	11.7	0.51	0.34
HS09-152	16.7	-1	5.7	2	80	0.7	0.8	5806	7.3	-0.10	0.37
HS09-155	26.8	-1	3.9	1	534	-0.5	0.5	6138	2.4	-0.10	0.24
HS09-158	28.4	-99	4.6	-1	448	0.2	0.7	7326	1.6	0.14	0.32
HS09-163	5.1	-1	3.5	1	230	-0.5	0.4	2083	9.9	-0.10	0.26
HS09-164A	6.8	-1	9.1	1	329	-0.5	0.8	349	7.0	-0.10	0.33
HS09-173	5.5	-1	3.6	-1	364	0.8	0.3	2153	9.0	-0.10	0.22
HS09-175A	2.5	-1	5.4	4	97	-0.5	0.2	2442	12.0	-0.10	0.12
HS09-175A	2.2	-1	5.2	6	105	0.5	0.2	187	13.1	-0.10	0.13
HS09-175B	1.1	-1	0.4	6	24	-0.5	0.1	651	2.7	-0.10	0.06
HS12-031	2.4	-1	14.7	6	197	4.7	15.4	1016	13.5	-0.10	1.47
HS12-032	20.9	-1	5.9	1	303	0.9	5.4	5907	7.9	-0.10	0.38
HS12-035	37.2	-1	6.0	2	349	0.8	5.4	7883	4.6	-0.10	0.38
HS12-038	33.9	-1	3.7	1	533	0.6	3.5	5855	2.1	-0.10	0.25
HS12-049	17.5	-1	6.4	2	348	0.9	5.8	4446	8.7	-0.10	0.41
HS12-050	32.8	-1	3.4	1	462	-0.5	3.2	4726	2.4	-0.10	0.22
HS12-058	21.5	-99	6.4	2	184	1.1	6.6	4782	8.9	-0.10	0.59
HS12-070	21.8	-99	6.0	2	368	0.8	5.8	5991	8.1	-0.10	0.40
HS12-073	36.5	-1	3.0	2	314	-0.5	3.0	7732	1.2	-0.10	0.25
HS12-076	39.5	-1	5.8	1	318	-0.5	5.5	8075	4.1	-0.10	0.36
HS12-078	31.4	-1	5.8	2	333	0.6	6.9	5645	6.5	-0.10	0.48
HS12-080	7.9	-1	3.7	1	235	1.0	3.4	2445	8.9	-0.10	0.29
HS12-086	9.5	1	2.1	1	14	0.8	2.3	2120	2.6	-0.10	0.18
HS12-213A	37.0	-1	4.3	1	981	0.5	5.0	7200	1.1	-0.10	0.40

Appendix E - Major- and Trace-element data; various samples (Sandeman)

SampleNum	Sc	Se	Sm	Sn	Sr	Ta	Tb	Ti	Th	Tl	Tm
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.1	1, 5	0.1	1	2	0.5	0.1	1	0.1	0.05, 0.1	0.05
	GS Tr ES	BQ INAA	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr ES	GS Tr MS	GS Tr MS	GS Tr MS
HS12-213B	31.3	-1	3.6	1	935	-0.5	3.6	5774	0.5	-0.10	0.26
HS12-214	28.7	-1	4.5	1	625	0.6	4.3	6775	5.4	-0.10	0.30
HS12-217	19.9	-1	5.1	2	417	0.9	4.9	5702	7.7	-0.10	0.35
HS12-218	30.3	-1	4.9	1	413	-0.5	4.5	7023	3.7	-0.10	0.29
HS12-222	9.5	-1	4.4	2	521	0.6	3.8	2928	10.7	-0.10	0.28
MTR-002	8.4	-1	1.8	3	8	1.2	0.3	1446	6.2	0.86	0.38
MTR-003B	7.2	-1	2.8	2	15	1.0	0.3	1272	3.0	0.11	0.28
MTR-004A	18.9	-1	5.0	2	156	0.8	0.8	3912	5.9	-0.10	0.55
BE10-008	31.6	-1	2.9	1	173	-0.5	0.5	8415	0.6	-0.10	0.28
HS12-209	14.7	-1	6.4	2	386	1.4	5.7	3609	10.6	-0.10	0.42
HS12-212A	9.2	-1	5.4	1	78	1.1	4.4	2883	11.3	-0.10	0.30
HS12-212B	8.7	-1	4.0	1	43	1.0	3.0	2337	10.1	-0.10	0.24

Appendix E - Major- and Trace-element data; various samples (Sandeman)

SampleNum	U	V	W	Y	Yb	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.05	5	0.5, 1	1	0.1	1	1
	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr ES	GS Tr ES
HS12-087	1.72	53	2.3	17	2.2	158	110
LH10-1	0.07	8	8.8	3	0.2	14	8
947073A	1.68	50	-1.0	28	3.2	44	181
947073B	1.60	67	-1.0	25	3.0	68	182
HS09-085B	1.74	117	3.5	27	4.0	6	191
HS09-086	1.51	67	1.9	18	2.1	56	167
HS09-091	1.83	9	1.7	37	4.7	136	331
HS10-107	1.75	6	11.9	45	5.5	31	300
HS12-207	2.00	24	1.8	21	2.6	41	107
HS12-228B	2.19	59	2.5	40	4.3	79	211
HS12-228C	0.40	432	1.6	38	3.7	106	204
HS09-096A	0.61	30	1.6	3	0.4	2	102
HS09-097	1.20	27	0.7	11	1.4	5	191
HS09-098	2.57	132	-0.5	26	3.0	88	211
HS09-099	0.31	51	1.9	2	0.4	5	136
HS09-102	2.48	31	-0.5	16	2.0	47	217
HS09-123A	1.19	281	2.0	24	2.6	98	150
HS09-125	0.67	198	-1.0	18	1.9	82	141
HS09-129A	0.42	71	5.2	19	1.2	43	316
HS09-132	0.25	236	-0.5	17	1.8	64	63
HS09-133A	1.79	10	-1.0	15	1.5	39	99
HS09-135	1.35	6	-1.0	32	3.7	97	339
HS09-140	2.21	129	-0.5	24	2.6	299	216
HS09-141	1.51	88	1.0	9	1.5	2	194
HS09-142	1.61	138	-0.5	28	2.7	6	171
HS09-142	1.46	138	-1.0	41	3.4	6	188
HS09-143B	1.12	120	0.7	7	1.0	4	152
HS09-143C	1.77	122	2.4	7	1.1	4	171
HS09-144	2.65	28	1.4	19	2.3	56	204
HS09-145	1.88	21	-1.0	14	1.7	44	190

Appendix E - Major- and Trace-element data; various samples (Sandeman)

SampleNum	U	V	W	Y	Yb	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.05	5	0.5, 1	1	0.1	1	1
	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr ES	GS Tr ES
HS09-147	2.50	101	1.2	18	2.0	81	189
HS09-150	2.65	28	-0.5	20	2.3	58	176
HS09-152	1.71	125	-1.0	25	2.8	81	206
HS09-155	0.68	194	-1.0	16	1.7	68	104
HS09-158	0.42	223	-0.5	19	2.1	83	109
HS09-163	2.13	27	-1.0	14	2.0	44	174
HS09-164A	2.53	60	-1.0	15	2.3	4	184
HS09-173	1.94	25	3.2	14	1.7	43	190
HS09-175A	1.22	58	3.8	5	0.9	3	247
HS09-175A	1.36	64	3.5	6	1.0	1	237
HS09-175B	1.23	16	2.1	3	0.5	-1	158
HS12-031	4.43	9	1.6	86	10.1	114	314
HS12-032	1.77	169	1.9	25	3.0	89	206
HS12-035	1.10	291	4.5	25	2.5	99	145
HS12-038	0.50	276	2.1	16	1.8	87	81
HS12-049	2.03	101	1.7	26	3.0	80	203
HS12-050	0.58	257	5.6	15	1.4	80	79
HS12-058	1.88	59	1.6	35	3.9	79	189
HS12-070	1.87	142	1.0	27	2.8	81	210
HS12-073	0.30	296	1.8	17	1.6	90	81
HS12-076	0.82	262	-1.0	24	2.6	125	146
HS12-078	1.61	124	1.3	48	3.1	69	168
HS12-080	1.85	48	1.6	19	2.0	52	192
HS12-086	0.76	106	3.4	12	1.1	46	75
HS12-213A	0.46	286	1.4	27	2.7	110	88

Appendix E - Major- and Trace-element data; various samples (Sandeman)

SampleNum	U	V	W	Y	Yb	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.05	5	0.5, 1	1	0.1	1	1
	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr ES	GS Tr ES
HS12-213B	0.20	229	-1.0	18	1.8	85	64
HS12-214	1.02	236	1.0	19	1.9	69	103
HS12-217	1.82	144	3.5	24	2.4	83	202
HS12-218	0.81	267	-1.0	22	2.1	91	136
HS12-222	2.35	90	3.4	18	2.1	55	187
MTR-002	1.52	26	5.9	17	2.2	139	165
MTR-003B	1.06	19	4.1	14	1.7	19	149
MTR-004A	1.33	67	2.6	31	3.3	61	170
BE10-008	0.29	272	-1.0	17	1.9	79	98
HS12-209	2.13	76	1.3	28	3.0	72	214
HS12-212A	2.39	30	2.2	21	2.3	52	220
HS12-212B	2.15	29	2.4	15	1.8	47	162

Appendix F - Major-element GSNL ICP-ES standards and duplicates

LabNum	SampleNum		SiO2	Al2O3	Fe2O3T	Fe2O3	FeO	MnO	MgO	CaO	Na2O
		Unit	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%
		Detection Limit	0.01	0.01	0.01	0.01	0.01	0.001	0.01	0.01	0.01
		Analysis Method	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj
Standards											
7740420	MAG-1		51.83	16.52	7.16	-99	-99	0.102	3.06	1.39	3.94
7740440	GD-2		76.63	12.45	0.76	-99	-99	0.020	0.11	0.09	3.56
7740460	BCR-1		53.77	13.24	13.37	-99	-99	0.189	3.45	6.82	3.30
7740480	GA-1		52.32	16.05	8.92	-99	-99	0.159	5.70	8.23	2.74
7740500	DR-N		53.03	17.81	9.64	-99	-99	0.220	4.33	6.96	2.99
7740520	SY-2		59.13	11.88	6.30	0.68	5.06	0.316	2.62	7.91	4.24
7740540	MA-N		65.56	17.43	0.45	-99	-99	0.037	0.03	0.58	5.82
7740560	VS-N		54.57	12.86	3.95	-99	-99	0.099	4.15	4.22	5.98
7740580	FK-N		64.76	18.55	0.07	-99	-99	0.002	-0.01	0.09	2.47
7740600	RH-1		73.54	13.68	2.76	-99	-99	0.044	0.85	0.28	7.17
7740620	STM-1		58.78	18.35	5.22	-99	-99	0.220	0.08	1.12	8.93
7740640	MRG-1		39.42	8.59	17.72	-99	-99	0.177	13.70	14.37	0.43
7740660	SDC-1		65.37	15.49	6.96	-99	-99	0.115	1.69	1.42	1.87
7740680	BS-1		53.56	15.01	7.84	-99	-99	0.095	5.99	4.49	6.43
7740860	C		65.93	15.83	7.04	-99	-99	0.121	1.72	1.45	2.07
Duplicates											
7740428	GS-11-10		71.31	11.63	1.91	0.23	1.51	-0.001	-0.01	0.08	1.22
7740430	7740428	Duplicate	71.73	11.20	1.73	-99	-99	-0.001	-0.01	0.08	1.18
7740447	GS-11-179		72.17	16.35	3.84	2.76	0.97	0.002	0.04	0.20	0.07
7740450	7740447	Duplicate	70.59	16.94	4.49	3.21	1.14	0.002	0.03	0.20	0.07
7740466	GS-11-29		82.26	13.57	0.22	-99	-99	-0.001	-0.01	0.06	0.01
7740470	7740466	Duplicate	82.11	13.18	0.21	-99	-99	-0.001	-0.01	0.07	0.03
7740487	GS-11-13		56.92	17.46	7.67	2.66	4.50	0.183	1.53	5.53	5.61
7740490	7740487	Duplicate	57.87	17.67	7.72	2.88	4.35	0.183	1.58	5.47	5.67
7740506	GS-11-27		76.84	13.10	7.26	2.38	4.40	0.019	0.08	0.02	0.19
7740510	7740506	Duplicate	75.34	13.28	7.02	2.08	4.45	0.019	0.07	0.02	0.20
7740524	GS-11-185		47.50	19.32	10.01	2.92	6.38	0.212	8.16	3.04	3.87
7740530	7740524	Duplicate	48.30	18.95	9.80	2.99	6.13	0.208	8.00	2.83	3.77
7740546	GS-11-299		54.50	12.68	5.93	0.16	5.20	0.130	0.67	8.47	3.78
7740550	7740546	Duplicate	54.46	12.95	6.23	0.61	5.06	0.133	0.66	8.08	3.87
7740562	GS-11-429		72.49	10.28	6.19	2.03	3.75	0.070	1.03	0.55	3.56
7740570	7740562	Duplicate	72.63	9.77	5.91	1.50	3.97	0.070	1.03	0.53	3.47
7740583	GS-11-258		77.86	12.85	0.92	0.67	0.23	0.020	0.22	1.37	4.56
7740590	7740583	Duplicate	76.58	13.34	1.04	0.82	0.20	0.023	0.26	1.53	4.33
7740604	GS-11-291		75.93	13.14	2.10	0.69	1.27	0.018	0.62	0.09	-0.01
7740610	7740604	Duplicate	75.86	13.40	2.24	0.96	1.15	0.018	0.62	0.08	-0.01
7740625	GS-11-415		84.32	6.49	2.28	1.72	0.50	0.094	0.26	0.09	-0.01
7740630	7740625	Duplicate	83.85	6.40	2.21	1.54	0.60	0.087	0.25	0.09	-0.01

Appendix F - Major-element GSNL ICP-ES standards and duplicates

LabNum	SampleNum		SiO2	Al2O3	Fe2O3T	Fe2O3	FeO	MnO	MgO	CaO	Na2O
		Unit	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%	wt.%
		Detection Limit	0.01	0.01	0.01	0.01	0.01	0.001	0.01	0.01	0.01
		Analysis Method	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj
7740641	GS-11-470		77.72	9.54	2.85	-99	-99	0.025	-0.01	1.05	3.12
7740650	7740641	Duplicate	78.01	9.39	2.81	0.02	2.52	0.028	-0.01	1.15	3.05
7740663	GS-11-270		80.19	9.07	3.05	-99	-99	0.026	0.72	0.14	0.15
7740670	7740663	Duplicate	83.41	7.68	2.96	-99	-99	0.024	0.67	0.13	0.10
7740684	GS-11-385		72.46	13.05	4.55	4.54	0.01	0.086	0.02	0.46	4.87
7740690	7740684	Duplicate	71.03	12.89	4.41	4.37	0.04	0.076	0.01	0.39	4.83

Appendix F - Major-element GSNL ICP-ES standards and duplicates

LabNum	SampleNum		K2O	TiO2	P2O5	Cr	Zr	Ba	LOI	Total	Remarks
		Unit	wt.%	wt.%	wt.%	ppm	ppm	ppm	wt.%	wt.%	
		Detection Limit	0.01	0.001	0.001	100	1	1	0.01		
		Analysis Method	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	Grav		
Standards											
7740420	MAG-1		3.54	0.733	0.162	-100	122	505			
7740440	GD-2		5.32	0.064	0.006	-100	62	667			
7740460	BCR-1		1.66	2.217	0.357	-100	175	682			
7740480	GA-1		1.08	0.785	0.152	118	76	401			
7740500	DR-N		1.69	1.074	0.226	-100	137	392			
7740520	SY-2		4.36	0.136	0.421	-100	275	516			
7740540	MA-N		3.10	0.014	1.426	-100	27	41			
7740560	VS-N		7.77	1.042	0.004	651	692	943			
7740580	FK-N		12.73	0.008	0.005	-100	-1	200			
7740600	RH-1		0.75	0.285	0.043	-100	241	284			
7740620	STM-1		4.17	0.133	0.148	-100	1224	589			
7740640	MRG-1		0.18	3.799	0.056	423	101	48			
7740660	SDC-1		3.20	0.989	0.139	-100	282	646			
7740680	BS-1		0.10	1.157	0.254	-100	112	148			
7740860	C		3.30	1.002	0.145	58	314	646			
Duplicates											
7740428	GS-11-10		1.46	0.466	0.199	-100	172	446	12.34	100.59	
7740430	7740428	Duplicate	1.37	0.459	0.194	-100	150	443	12.09	100.00	
7740447	GS-11-179		1.53	1.023	0.322	-100	204	728	4.68	100.23	
7740450	7740447	Duplicate	1.51	1.046	0.341	-100	212	528	5.06	100.29	
7740466	GS-11-29		0.03	0.385	0.061	-100	174	10	2.95	99.54	
7740470	7740466	Duplicate	0.03	0.370	0.067	-100	158	8	2.92	98.98	
7740487	GS-11-13		0.23	1.134	0.185	-100	124	85	3.31	99.76	
7740490	7740487	Duplicate	0.23	1.156	0.174	-100	125	86	3.27	101.00	
7740506	GS-11-27		0.43	0.362	0.073	-100	150	76	2.05	100.42	
7740510	7740506	Duplicate	0.43	0.364	0.071	-100	157	76	2.07	98.88	
7740524	GS-11-185		0.58	1.112	0.192	-100	85	394	5.42	99.40	
7740530	7740524	Duplicate	0.60	1.145	0.199	-100	87	402	5.42	99.23	
7740546	GS-11-299		0.73	0.865	0.381	147	116	184	8.31	96.46	Repeated
7740550	7740546	Duplicate	0.70	0.919	0.409	158	117	196	8.39	96.81	Repeated
7740562	GS-11-429		1.78	0.464	0.154	-100	139	365	3.21	99.78	
7740570	7740562	Duplicate	1.71	0.447	0.141	-100	131	356	2.98	98.69	
7740583	GS-11-258		1.31	0.037	-0.001	-100	94	364	1.14	100.28	
7740590	7740583	Duplicate	1.47	0.042	-0.001	-100	98	415	1.13	99.74	
7740604	GS-11-291		4.08	0.374	0.047	-100	172	572	3.20	99.42	
7740610	7740604	Duplicate	4.17	0.386	0.040	-100	178	585	3.14	99.78	
7740625	GS-11-415		4.71	0.205	0.011	-100	319	94	0.61	98.89	
7740630	7740625	Duplicate	4.75	0.200	0.010	-100	308	93	0.57	98.22	

Appendix F - Major-element GSNL ICP-ES standards and duplicates

LabNum	SampleNum		K2O	TiO2	P2O5	Cr	Zr	Ba	LOI	Total	Remarks
		Unit	wt.%	wt.%	wt.%	ppm	ppm	ppm	wt.%	wt.%	
		Detection Limit	0.01	0.001	0.001	100	1	1	0.01		
		Analysis Method	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	Grav		
7740641	GS-11-470		2.55	0.196	-0.001	-100	832	110	1.46	98.50	
7740650	7740641	Duplicate	2.48	0.194	-0.001	-100	820	107	1.25	98.36	
7740663	GS-11-270		1.76	0.504	0.022	-100	156	362	2.82	98.46	
7740670	7740663	Duplicate	1.51	0.464	0.021	-100	146	309	2.60	99.56	
7740684	GS-11-385		4.31	0.368	0.017	-100	940	104	0.37	100.55	
7740690	7740684	Duplicate	4.20	0.371	0.013	-100	876	103	0.31	98.53	

Appendix G - Trace-element GSNL ICP-ES standards and duplicates

LabNum	SampleNum		As	Ba	Be	Cd	Ce	Co	Cr	Cu	Dy	Fe	La	Li	Mn	Mo	Nb
		Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
Standards		Detection Limit	2	1	0.1	0.1	1	1	1	1	0.1	0.01	1	0.1	1	1	1
		Analysis Method	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr ES
7740420	SY-4		-2	330	2.7	-0.1	120	2	9	4	17.4	4.31	58	36.6	788	-1	13
7740440	WGB-1		-2	812	0.3	0.2	22	27	262	93	2.8	4.58	6	46.2	959	-1	5
7740460	SY-4		2	340	2.7	0.1	124	2	9	4	18.2	4.28	59	36.6	778	-1	13
7740480	WGB-1		-2	846	0.3	0.2	22	27	258	94	2.7	4.68	6	47.8	942	-1	5
7740500	SY-4		-2	335	2.6	-0.1	127	2	8	4	18.8	4.40	57	38.8	774	-1	11
7740520	WGB-1		-2	815	0.3	-0.1	22	27	262	92	3.0	4.59	6	46.2	938	-1	5
7740540	SY-4		-2	354	2.7	-0.1	131	2	9	5	19.1	4.75	59	38.1	820	-1	11
7740560	WGB-1		-2	842	0.4	-0.1	27	27	271	91	3.1	4.57	6	46.8	979	-1	5
7740580	SY-4		-2	340	2.7	-0.1	123	2	8	4	18.7	4.36	59	37.4	810	-1	13
7740600	WGB-1		-2	826	0.3	-0.1	27	27	267	96	3.0	4.48	6	45.1	986	-1	5
7740620	SY-4		-2	344	2.7	-0.1	125	2	9	4	18.7	4.37	60	37.7	790	-1	13
7740640	WGB-1		-2	811	0.4	-0.1	27	28	248	94	2.7	4.60	6	45.5	1002	-1	5
7740660	SY-4		-2	334	2.6	-0.1	119	2	9	5	17.4	4.21	57	36.0	767	-1	12
7740680	WGB-1		2	846	0.3	0.2	23	27	256	94	3.0	4.66	6	47.9	958	-1	5
Duplicates																	
7740428	GS-11-10		14	406	0.2	-0.1	49	1	2	4	0.8	1.33	29	-0.1	12	9	-1
7740430	7740428	Duplicate	12	414	0.2	-0.1	49	1	2	3	0.8	1.18	29	-0.1	10	8	-1
7740447	GS-11-179		-2	384	0.4	-0.1	46	1	3	4	1.9	2.51	23	0.7	16	-1	1
7740450	7740447	Duplicate	-2	384	0.4	-0.1	43	2	4	3	1.8	3.02	22	0.8	19	-1	-1
7740466	GS-11-29		-2	11	0.2	-0.1	11	-1	1	13	0.3	0.12	7	2.6	10	3	2
7740470	7740466	Duplicate	-2	9	0.2	-0.1	10	1	1	13	0.4	0.12	6	2.6	10	3	3
7740487	GS-11-13		6	86	1.4	0.1	36	14	1	13	5.0	5.42	13	11.2	1314	1	5
7740490	7740487	Duplicate	5	82	1.3	-0.1	33	14	-1	12	5.1	5.27	13	11.2	1279	1	4
7740506	GS-11-27		5	79	0.5	-0.1	81	3	2	13	0.3	5.00	31	1.6	151	10	-1
7740510	7740506	Duplicate	4	80	0.5	-0.1	81	3	2	13	0.2	4.92	32	1.8	150	9	-1
7740524	GS-11-185		3	390	0.9	-0.1	36	22	90	25	4.2	7.02	10	44.7	1472	-1	3
7740530	7740524	Duplicate	3	400	1.0	-0.1	37	23	83	25	4.3	6.85	11	44.0	1450	-1	3
7740546	GS-11-299		18	88	1.1	0.7	49	36	131	44	4.1	4.26	19	15.6	981	64	4
7740550	7740546	Duplicate	21	91	1.2	0.7	52	40	143	42	4.2	4.36	20	15.8	1001	69	5
7740562	GS-11-429		2	44	1.2	-0.1	33	13	10	65	3.0	4.37	12	2.7	530	16	6
7740570	7740562	Duplicate	2	45	1.1	-0.1	30	13	10	59	3.0	4.15	11	2.7	526	16	5
7740583	GS-11-258		2	370	3.6	-0.1	31	-1	1	6	5.5	0.68	14	0.9	164	-1	33
7740590	7740583	Duplicate	2	411	3.7	-0.1	31	-1	1	6	5.6	0.71	14	0.9	177	-1	35
7740604	GS-11-291		5	62	1.7	1.7	34	5	-1	34	4.2	1.56	16	7.3	145	-1	6
7740610	7740604	Duplicate	6	62	1.8	2.0	36	5	-1	36	4.3	1.62	17	7.8	143	-1	6
7740625	GS-11-415		-2	101	2.8	0.1	66	3	20	63	8.4	1.49	27	58.0	755	69	15
7740630	7740625	Duplicate	-2	98	2.8	0.2	66	3	18	62	8.5	1.57	28	56.7	715	73	15
7740641	GS-11-470		4	109	5.0	1.8	136	2	-1	153	13.8	2.02	71	-0.1	197	-1	68
7740650	7740641	Duplicate	5	112	5.2	2.0	130	2	-1	159	15.0	2.02	75	-0.1	204	-1	70
7740663	GS-11-270		75	330	1.2	0.2	21	7	7	14	2.0	2.21	11	7.0	199	35	7
7740670	7740663	Duplicate	76	334	1.2	0.1	22	7	7	12	2.2	2.29	11	7.3	203	35	7
7740684	GS-11-385		8	103	2.7	0.1	122	4	1	-1	11.9	3.08	58	0.5	616	-1	26
7740690	7740684	Duplicate	8	106	2.9	0.1	124	4	1	-1	13.1	3.17	59	0.5	592	-1	27

Appendix G - Trace-element GSNL ICP-ES standards and duplicates

LabNum	SampleNum		Ni	P	Pb	Rb	Sc	Sr	Ti	V	Y	Zn
		Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Standards		Detection Limit	1	1	1	2	0.1	1	1	1	1	1
		Analysis Method	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr ES
7740420	SY-4		10	499	2	52	0.9	1252	1697	4	114	92
7740440	WGB-1		62	315	2	22	43.8	118	5069	220	14	35
7740460	SY-4		9	508	3	55	0.9	1228	1735	4	120	95
7740480	WGB-1		62	322	1	24	43.9	118	5241	216	15	38
7740500	SY-4		9	472	2	63	0.9	1237	1730	5	126	95
7740520	WGB-1		58	321	-1	24	43.8	117	5106	221	15	35
7740540	SY-4		10	520	3	68	0.9	1294	1631	6	128	98
7740560	WGB-1		63	334	1	26	44.2	118	5418	224	15	35
7740580	SY-4		10	519	4	57	0.9	1283	1759	5	123	93
7740600	WGB-1		63	328	2	25	44.0	119	5294	215	15	37
7740620	SY-4		10	522	4	57	0.9	1243	1782	5	123	94
7740640	WGB-1		64	335	2	24	44.6	121	5102	219	15	36
7740660	SY-4		8	519	2	49	0.8	1234	1668	5	118	90
7740680	WGB-1		61	322	2	23	43.9	120	5183	226	15	36
Duplicates												
7740428	GS-11-10		-1	778	19	11	6.0	535	246	42	6	4
7740430	7740428	Duplicate	-1	791	19	11	5.7	551	290	40	5	3
7740447	GS-11-179		-1	904	66	33	10.3	259	877	59	8	8
7740450	7740447	Duplicate	-1	784	59	33	10.9	227	785	59	8	7
7740466	GS-11-29		-1	281	5	8	0.7	18	522	13	1	12
7740470	7740466	Duplicate	-1	312	5	6	0.7	17	770	14	1	13
7740487	GS-11-13		6	765	4	18	29.1	300	6954	115	28	75
7740490	7740487	Duplicate	7	671	3	19	29.2	287	6973	114	28	76
7740506	GS-11-27		6	308	13	19	2.9	70	176	35	2	44
7740510	7740506	Duplicate	5	312	12	15	2.9	73	257	35	2	43
7740524	GS-11-185		38	777	-1	29	37.6	366	6594	255	19	161
7740530	7740524	Duplicate	37	792	-1	28	37.5	349	6972	264	19	161
7740546	GS-11-299		39	1618	37	28	16.6	216	4464	109	22	51
7740550	7740546	Duplicate	42	1721	38	25	17.9	228	6049	115	22	55
7740562	GS-11-429		7	664	1062	53	12.4	40	3201	72	18	80
7740570	7740562	Duplicate	7	614	1005	51	12.2	38	3086	71	18	77
7740583	GS-11-258		-1	14	3	44	1.1	491	234	3	35	34
7740590	7740583	Duplicate	-1	15	3	47	1.2	509	251	3	37	35
7740604	GS-11-291		-1	200	396	83	8.6	39	2404	13	30	167
7740610	7740604	Duplicate	-1	184	410	86	8.9	40	2530	13	31	178
7740625	GS-11-415		3	66	222	379	2.9	31	1341	10	44	150
7740630	7740625	Duplicate	3	64	236	384	2.9	31	1292	10	45	152
7740641	GS-11-470		-1	20	392	47	-0.1	116	1292	8	90	203
7740650	7740641	Duplicate	-1	20	406	45	-0.1	124	1357	7	97	209
7740663	GS-11-270		2	103	15	50	9.8	81	2793	47	14	76
7740670	7740663	Duplicate	3	105	16	56	9.9	83	2879	47	14	78
7740684	GS-11-385		2	71	13	96	3.1	30	2486	-1	62	84
7740690	7740684	Duplicate	2	69	14	99	3.2	32	2622	-1	69	93

Appendix H - Trace-element GSNL ICP-MS standards and duplicates

LabNum	SampleNum		V	Co	Ga	Ge	As	Sr	Y	Nb	Mo	In	Sn	Cs	La	Ce	Pr
		Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		Detection Limit	5	1	1	1	5	2	1	1	2	0.2	1	0.5	0.5	0.1	0.05
		Analysis Method	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS
Standards																	
7740860	SDC-1		113	20	24	4	-5	191	38	20	-2	0.2	3	1.4	45.9	94.3	11.18
7740420	SDC-1		105	19	24	5	-5	186	39	19	-2	-0.2	3	1.3	43.4	92.9	10.93
7740640	SDC-1		104	19	24	3	15	178	36	20	-2	-0.2	4	0.5	42.0	88.7	10.42
7740440	STM-1		-5	1	40	4	-5	723	43	264	6	-0.2	6	-0.5	153.1	267.3	26.08
7740660	STM-1		-5	5	40	5	6	745	44	274	6	-0.2	8	-0.5	158.2	275.6	26.83
7740460	DR-N		222	40	21	3	-5	403	25	9	-2	-0.2	2	1.2	21.0	44.9	5.61
7740680	DR-N		208	38	18	4	6	386	24	9	-2	-0.2	2	1.4	20.5	43.8	5.61
7740480	MAG-1		153	27	24	5	7	152	27	16	-2	-0.2	4	1.1	44.7	90.5	10.49
7740500	BIR-1		341	57	16	4	-5	115	15	1	-2	-0.2	1	-0.5	0.7	1.9	0.38
7740520	W-2		290	49	20	3	-5	209	21	8	-2	-0.2	2	-0.5	11.3	24.1	3.23
7740560	G-2		38	6	27	3	13	475	9	13	-2	-0.2	2	-0.5	88.3	161.3	16.26
7740540	RGM-1		14	3	17	2	-5	108	22	9	3	-0.2	5	4.0	24.0	46.6	5.36
7740580	BHVO-1		350	48	24	5	10	425	26	20	2	-0.2	3	-0.5	16.8	39.7	5.64
7740600	QLO-1		58	10	20	3	-5	354	23	12	3	-0.2	4	0.9	29.1	53.2	6.34
7740620	AGV-1		137	17	25	3	-5	725	19	16	3	-0.2	5	0.6	41.2	75.4	9.09
Duplicates																	
7740428	GS-11-10		55	4	12	2	-5	531	20	8	10	-0.2	1	-0.5	30.5	57.1	6.14
7740430	7740428	Duplicate	50	2	11	2	6	534	17	7	9	-0.2	2	-0.5	30.1	56.0	5.93
7740447	GS-11-179		102	1	20	2	-5	382	19	11	2	-0.2	4	-0.5	30.3	60.9	7.35
7740450	7740447	Duplicate	92	1	18	2	-5	369	20	11	-2	-0.2	4	-0.5	27.4	58.7	7.13
7740466	GS-11-29		42	2	2	1	-5	17	2	10	4	-0.2	9	-0.5	7.8	11.0	1.10
7740470	7740466	Duplicate	41	1	3	2	-5	19	2	10	4	-0.2	10	-0.5	8.9	11.7	1.18
7740487	GS-11-13		133	14	21	3	-5	282	27	8	3	-0.2	2	-0.5	14.5	29.7	3.98
7740490	7740487	Duplicate	121	14	20	3	7	276	26	6	2	-0.2	2	-0.5	13.0	28.6	3.82
7740506	GS-11-27		39	10	15	5	-5	75	5	11	11	-0.2	20	-0.5	33.5	82.2	10.05
7740510	7740506	Duplicate	39	10	16	4	6	75	5	10	10	-0.2	21	-0.5	33.0	80.5	10.20
7740524	GS-11-185		283	18	15	3	7	350	19	5	2	-0.2	1	-0.5	15.0	27.2	3.86
7740530	7740524	Duplicate	273	20	17	3	-5	342	19	4	-2	-0.2	1	-0.5	11.6	28.2	3.96
7740546	GS-11-299		123	40	11	3	13	204	21	6	70	-0.2	2	-0.5	20.5	45.2	5.56
7740550	7740546	Duplicate	117	40	10	3	13	202	21	6	71	-0.2	1	-0.5	20.4	45.3	5.72
7740562	GS-11-429		78	12	13	3	-5	40	18	8	17	-0.2	3	-0.5	13.1	26.0	3.12
7740570	7740562	Duplicate	77	12	12	2	6	37	18	8	19	-0.2	2	-0.5	10.7	23.4	3.00
7740583	GS-11-258		7	1	14	2	-5	439	34	33	-2	-0.2	5	1.7	13.8	30.5	3.84
7740590	7740583	Duplicate	10	3	17	2	-5	482	37	36	-2	-0.2	7	2.0	14.0	30.9	3.79
7740604	GS-11-291		19	3	21	2	-5	43	30	8	-2	-0.2	2	1.3	20.8	44.1	5.45
7740610	7740604	Duplicate	34	4	22	2	7	41	29	10	5	-0.2	7	1.0	21.9	41.9	5.26
7740625	GS-11-415		28	4	13	3	-5	32	54	20	71	-0.2	11	0.9	28.7	68.3	7.85
7740630	7740625	Duplicate	26	3	14	2	-5	27	49	14	71	-0.2	8	1.2	30.0	66.2	8.11
7740641	GS-11-470		14	2	26	4	8	104	85	65	2	-0.2	5	-0.5	67.8	138.4	16.50
7740650	7740641	Duplicate	8	-1	26	4	12	108	85	65	-2	-0.2	6	-0.5	67.3	138.7	17.01
7740663	GS-11-270		56	5	11	3	38	75	14	4	36	-0.2	1	0.8	12.0	21.1	2.65
7740670	7740663	Duplicate	53	4	11	2	57	70	13	8	35	-0.2	1	0.7	11.8	21.5	2.55
7740684	GS-11-385		6	1	22	5	7	27	86	28	-2	-0.2	5	0.5	53.6	120.9	15.06
7740690	7740684	Duplicate	9	-1	25	5	18	30	98	32	-2	-0.2	6	0.6	59.7	133.9	16.80

Appendix H - Trace-element GSNL ICP-MS standards and duplicates

LabNum	SampleNum		Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	W	Tl
		Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		Detection Limit	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.05	0.1	0.05	0.2	0.5	1	0.1
		Analysis Method	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS
Standards																	
7740860	SDC-1		43.1	8.8	1.16	1.8	7.80	7.1	1.5	4.3	0.62	4.6	0.66	9.0	1.5	1.9	-0.1
7740420	SDC-1		43.5	8.6	1.73	1.2	7.95	7.1	1.4	4.3	0.67	4.3	0.65	8.1	1.3	1.3	-0.1
7740640	SDC-1		41.2	7.8	1.50	1.1	7.64	6.6	1.3	4.1	0.60	4.2	0.60	8.0	1.6	1.6	0.1
7740440	STM-1		82.3	12.5	3.57	1.5	10.83	8.3	1.4	4.2	0.61	4.3	0.61	27.1	19.1	3.9	-0.1
7740660	STM-1		85.1	12.7	3.70	1.6	11.06	8.6	1.5	4.6	0.65	4.3	0.66	27.7	21.3	3.9	-0.1
7740460	DR-N		23.9	5.2	1.50	0.8	5.47	4.9	0.9	2.8	0.39	2.6	0.39	3.3	1.0	146	-0.1
7740680	DR-N		22.1	4.5	1.36	0.8	5.06	4.6	0.8	2.7	0.36	2.5	0.35	3.1	1.1	142	-0.1
7740480	MAG-1		40.9	7.9	1.56	1.0	7.13	5.3	1.0	3.0	0.39	2.8	0.39	3.8	1.4	1.9	-0.1
7740500	BIR-1		2.3	1.1	0.54	0.4	1.98	2.7	0.6	1.8	0.26	1.6	0.25	0.6	-0.5	-1.0	-0.1
7740520	W-2		14.2	3.5	1.23	0.7	3.96	4.1	0.8	2.4	0.31	2.3	0.33	2.7	0.8	-1.0	-0.1
7740560	G-2		52.7	7.7	1.35	0.5	4.98	2.2	0.4	0.9	0.12	0.7	0.09	8.2	1.0	-1.0	0.1
7740540	RGM-1		20.1	3.9	0.63	0.6	3.94	3.8	0.8	2.5	0.33	2.5	0.40	6.0	1.1	1.8	-0.1
7740580	BHVO-1		26.4	6.7	2.14	1.0	6.61	5.7	1.0	2.7	0.33	2.1	0.28	4.3	1.4	1.1	-0.1
7740600	QLO-1		24.0	4.5	1.42	0.7	4.76	4.2	0.8	2.5	0.37	2.6	0.40	4.8	1.2	-1.0	-0.1
7740620	AGV-1		34.5	6.7	1.84	0.7	5.40	3.8	0.7	2.0	0.30	1.9	0.29	5.4	1.5	-1.0	-0.1
Duplicates																	
7740428	GS-11-10		23.5	4.0	1.12	0.5	3.89	3.8	0.8	2.5	0.36	2.4	0.35	4.1	0.7	1.6	-0.1
7740430	7740428	Duplicate	23.1	4.5	1.12	0.5	3.80	3.5	0.6	2.1	0.29	2.1	0.30	3.8	0.6	1.4	-0.1
7740447	GS-11-179		29.5	6.0	1.34	0.6	4.94	3.5	0.7	2.4	0.33	2.5	0.39	5.4	1.0	1.5	-0.1
7740450	7740447	Duplicate	28.5	6.0	1.43	0.6	4.54	3.6	0.7	2.5	0.38	2.6	0.41	5.2	0.8	-1.0	-0.1
7740466	GS-11-29		4.0	0.7	0.16	-0.1	0.63	0.5	-0.1	0.2	-0.05	0.3	0.09	4.3	0.8	2.2	-0.1
7740470	7740466	Duplicate	4.5	0.7	0.17	-0.1	0.67	0.5	-0.1	0.3	-0.05	0.4	0.09	4.4	1.3	3.9	-0.1
7740487	GS-11-13		17.9	4.9	1.60	0.8	5.16	5.2	1.0	3.1	0.44	3.0	0.43	3.5	0.9	2.7	-0.1
7740490	7740487	Duplicate	17.1	4.9	1.61	0.8	4.90	5.1	1.0	3.1	0.43	3.0	0.42	3.5	0.6	1.6	-0.1
7740506	GS-11-27		38.3	4.8	0.99	0.2	2.41	1.1	0.2	0.6	0.10	0.8	0.15	4.0	0.9	2.0	-0.1
7740510	7740506	Duplicate	38.1	4.5	0.92	0.2	2.63	1.1	0.2	0.7	0.13	0.9	0.16	4.4	0.7	1.6	-0.1
7740524	GS-11-185		17.3	4.0	1.17	0.7	4.40	4.2	1.0	2.3	0.27	2.0	0.29	2.2	-0.5	1.8	-0.1
7740530	7740524	Duplicate	17.8	4.3	1.39	0.7	4.67	4.3	0.8	2.4	0.31	2.2	0.30	2.4	-0.5	-1.0	-0.1
7740546	GS-11-299		25.2	5.4	1.54	0.7	4.93	3.9	0.8	2.1	0.30	1.9	0.29	2.7	0.5	1.0	-0.1
7740550	7740546	Duplicate	24.9	4.9	1.60	0.7	5.30	4.0	0.8	2.2	0.31	2.0	0.29	2.8	-0.5	-1.0	-0.1
7740562	GS-11-429		13.0	2.6	0.74	0.5	2.91	3.3	0.7	2.3	0.34	2.4	0.40	4.1	1.0	1.3	0.4
7740570	7740562	Duplicate	12.4	2.7	0.66	0.5	2.92	3.2	0.7	2.1	0.31	2.3	0.38	3.6	1.2	2.0	0.3
7740583	GS-11-258		15.1	4.4	0.36	0.9	4.64	6.1	1.2	4.0	0.63	4.4	0.62	4.3	2.9	-1.0	-0.1
7740590	7740583	Duplicate	15.9	4.6	0.25	0.9	4.82	6.3	1.2	4.0	0.65	4.5	0.68	4.6	3.3	-1.0	-0.1
7740604	GS-11-291		21.4	5.1	1.17	0.7	4.51	5.3	1.1	3.5	0.51	3.7	0.55	5.1	1.0	-1.0	-0.1
7740610	7740604	Duplicate	21.6	4.6	1.12	0.8	4.58	5.2	1.0	3.4	0.52	3.5	0.59	4.8	1.2	1.0	0.4
7740625	GS-11-415		33.5	8.0	0.97	1.7	9.22	10.2	2.0	5.9	0.89	6.0	0.84	7.8	2.6	18.9	1.2
7740630	7740625	Duplicate	34.2	8.7	0.95	1.6	9.02	10.1	2.0	6.0	0.82	5.9	0.87	8.0	1.5	17.6	0.1
7740641	GS-11-470		66.7	14.0	1.34	2.2	14.23	14.2	3.0	10.4	1.68	12.4	1.89	21.0	5.3	1.4	-0.1
7740650	7740641	Duplicate	67.0	14.3	1.22	2.3	14.16	14.5	3.1	10.6	1.71	12.6	1.92	21.0	5.0	1.4	0.1
7740663	GS-11-270		10.3	2.2	0.64	0.4	2.01	2.3	0.4	1.8	0.27	2.0	0.28	3.3	1.1	5.8	-0.1
7740670	7740663	Duplicate	10.5	1.9	0.72	0.3	2.20	2.1	0.4	1.6	0.22	1.6	0.28	3.2	1.2	5.9	0.2
7740684	GS-11-385		62.4	13.4	2.19	2.5	14.50	15.5	3.2	10.3	1.51	11.3	1.77	17.8	2.1	1.6	-0.1
7740690	7740684	Duplicate	70.8	15.5	2.49	2.8	17.33	17.4	3.4	11.1	1.59	12.0	1.92	19.9	2.2	1.7	-0.1

Appendix H - Trace-element GSNL ICP-MS standards and duplicates

LabNum	SampleNum		Bi	Th	U
		Units	ppm	ppm	ppm
		Detection Limit	0.4	0.1	0.1
		Analysis Method	GS Tr MS	GS Tr MS	GS Tr MS
Standards					
7740860	SDC-1		-0.4	11.9	2.9
7740420	SDC-1		-0.4	11.5	2.8
7740640	SDC-1		-0.4	11.3	2.7
7740440	STM-1		-0.4	28.5	8.2
7740660	STM-1		-0.4	30.7	8.3
7740460	DR-N		-0.4	4.3	1.4
7740680	DR-N		-0.4	4.4	1.4
7740480	MAG-1		-0.4	11.9	2.7
7740500	BIR-1		-0.4	-0.1	-0.1
7740520	W-2		-0.4	2.1	0.5
7740560	G-2		-0.4	24.0	1.9
7740540	RGM-1		-0.4	14.5	5.5
7740580	BHVO-1		-0.4	1.2	0.4
7740600	QLO-1		-0.4	4.8	1.9
7740620	AGV-1		-0.4	6.8	2.0
Duplicates					
7740428	GS-11-10		-0.4	11.2	2.6
7740430	7740428	Duplicate	-0.4	10.7	2.5
7740447	GS-11-179		-0.4	8.2	1.8
7740450	7740447	Duplicate	-0.4	8.2	1.9
7740466	GS-11-29		-0.4	4.4	0.8
7740470	7740466	Duplicate	-0.4	4.7	0.8
7740487	GS-11-13		-0.4	3.2	0.8
7740490	7740487	Duplicate	-0.4	3.2	0.7
7740506	GS-11-27		-0.4	24.1	1.0
7740510	7740506	Duplicate	-0.4	23.8	1.0
7740524	GS-11-185		-0.4	1.2	0.3
7740530	7740524	Duplicate	-0.4	1.3	0.3
7740546	GS-11-299		-0.4	2.2	1.6
7740550	7740546	Duplicate	-0.4	2.2	1.7
7740562	GS-11-429		-0.4	3.7	0.8
7740570	7740562	Duplicate	-0.4	3.5	0.8
7740583	GS-11-258		-0.4	8.7	2.3
7740590	7740583	Duplicate	-0.4	9.2	2.3
7740604	GS-11-291		-0.4	5.8	2.1
7740610	7740604	Duplicate	-0.4	5.6	2.0
7740625	GS-11-415		-0.4	6.3	1.7
7740630	7740625	Duplicate	-0.4	6.0	1.6
7740641	GS-11-470		-0.4	24.9	5.8
7740650	7740641	Duplicate	-0.4	25.4	5.9
7740663	GS-11-270		-0.4	5.8	1.4
7740670	7740663	Duplicate	-0.4	5.7	1.4
7740684	GS-11-385		-0.4	12.9	3.5
7740690	7740684	Duplicate	-0.4	14.2	3.9

Appendix I - Trace-element Actlabs (Au + 23) standards and duplicates

Labnum	SampleNum		Au	Ag	As	Cd	Cu	Mn	Mo	Ni	Pb	Zn
		Units	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		Detection Limit	5	0.2	2	0.5	1	2	2	1	2	1
		Analysis Method	AL INAA	AL INAA	AL INAA	AL ICP-ES	AL ICP-ES	AL ICP-ES	AL ICP-ES	AL ICP-ES	AL ICP-ES	AL ICP-ES
Standards												
7740480	WGB-1		-5	-0.2	-2	-0.5	98	245		42	5	19
7740600	SY-4		-5	-0.2	-2	-0.5	5	727		1	-2	55
7740620	WGB-1		-5	-0.2	-2	-0.5	92	241		42	5	17
7740640	SY-4		10	-0.2	-2	-0.5	3	735		3	-2	55
7740660	WGB-1		-5	-0.2	-2	-0.5	96	242		42	5	17
7740720	WPR-1		61	0.7	-2	-0.5	1640	789	-2	2730	3	58
7740760	WMG-1		113	2.7	9	0.5	6170	304	-2	2580	9	78
7740780	TDB-1		-5	0.3	5	-0.5	341	506	-2	27	12	104
7740820	WPR-1		43	0.7	-2	-0.5	1660	806	-2	2760	4	61
7740700	WMG-1		129	2.9	7	-0.5	6550	313	-2	2680	10	76
Duplicates												
7740466	GS-11-29		37	-0.2	3	-0.5	12	7		-1	3	10
7740470	7740466	duplicate	33	-0.2	3	-0.5	11	7		-1	3	8
7740604	GS-11-291		48	1.0	8	2.6	40	46		-1	425	188
7740610	7740604	duplicate	47	0.9	8	2.9	39	46		-1	419	193
7740625	GS-11-415		-5	1.1	-2	-0.5	71	759		2	212	182
7740630	7740625	duplicate	-5	1.1	-2	-0.5	70	729		3	228	186
7740641	GS-11-470		-5	0.3	2	3	179	150		-1	401	219
7740650	7740641	duplicate	-5	0.4	5	8	176	163		-1	597	538
7740784	GS-12-309		-5	-0.2	-2	-0.5	2	6	-2	-1	-2	2
7740790	7740784	duplicate	-5	-0.2	-2	-0.5	2	5	-2	-1	-2	2
7740724	GS-12-101		-5	-0.2	4	-0.5	5	271	-2	-1	246	47
7740730	7740724	duplicate	-5	-0.2	8	-0.5	6	276	3	-1	303	64
7740761	GS-12-210		-5	-0.2	9	-0.5	2	-2	9	-1	5	4
7740770	7740761	duplicate	-5	-0.2	10	-0.5	2	-2	10	-1	6	1
7740807	GS-12-362		-5	-0.2	97	-0.5	13	58	-2	-1	10	14
7740810	7740807	duplicate	-5	-0.2	85	-0.5	12	66	-2	-1	11	17
7740784	GS-12-309		-5	-0.2	-2	-0.5	2	6	-2	-1	-2	2
7740790	7740784	duplicate	-5	-0.2	-2	-0.5	2	5	-2	-1	-2	2

Appendix I - Trace-element Actlabs (Au + 23) standards and duplicates

Labnum	SampleNum		Ba	Bi	Ca	Cs	Fe	Ga	Ge	Hg	K	Na	Sb
		Units	ppm	ppm	%	ppm	%	ppm	ppm	ppm	%	%	ppm
		Detection Limit	1	0.1	0.01	0.05	0.02	1	0.1	1	0.01	0.01	0.2
		Analysis Method	AL INAA	AL ICP-MS	AL ICP-ES	AL INAA	AL INAA	AL ICP-MS	AL ICP-MS	AL INAA	AL ICP-ES	AL INAA	AL INAA
Standards													
7740480	WGB-1		32	-0.1	4.56	0.28	4.25	9	-0.1	-1	0.04	1.50	2.5
7740600	SY-4		188	-0.1	3.58	1.39	4.20	18	0.1	-1	0.69	5.22	-0.2
7740620	WGB-1		32	-0.1	4.51	0.28	4.37	8	-0.1	-1	0.05	1.55	2.3
7740640	SY-4		192	0.2	3.64	1.41	4.02	16	0.1	-1	0.70	4.92	-0.2
7740660	WGB-1		32	-0.1	4.56	0.27	4.42	8	-0.1	-1	0.05	1.51	2.3
7740720	WPR-1		17	0.2	0.34	0.60	9.59	3	0.3	-1	0.07	0.04	0.9
7740760	WMG-1		12	0.3	2.31	0.36	11.00	7	0.3	-1	0.02	0.12	1.9
7740780	TDB-1		51	-0.1	2.29	0.39	10.80	12	0.1	-1	0.25	1.72	0.9
7740820	WPR-1		17	0.2	0.34	0.60	9.94	3	0.3	-1	0.07	0.03	0.5
7740700	WMG-1		12	0.3	2.12	0.36	10.90	8	0.3	-1	0.02	0.13	1.3
Duplicates													
7740466	GS-11-29		6	-0.1	0.06	-0.05	0.18	-1	-0.1	-1	-0.01	0.04	0.4
7740470	7740466	duplicate	5	-0.1	0.06	-0.05	0.20	-1	0.1	-1	-0.01	-0.01	0.7
7740604	GS-11-291		12	0.2	0.07	0.44	1.64	2	-0.1	-1	0.39	0.09	0.7
7740610	7740604	duplicate	14	0.2	0.07	0.45	1.54	2	-0.1	-1	0.39	0.09	0.6
7740625	GS-11-415		17	15.7	0.06	0.59	1.49	4	-0.1	-1	0.18	0.08	0.9
7740630	7740625	duplicate	15	20.1	0.06	0.56	1.58	4	-0.1	-1	0.17	0.08	0.7
7740641	GS-11-470		18	0.4	0.54	0.13	1.90	8	0.3	-1	0.09	2.44	0.4
7740650	7740641	duplicate	18	0.3	0.59	0.21	2.09	8	0.3	-1	0.09	2.34	0.7
7740784	GS-12-309		74	-0.1	-0.01	0.17	0.18	-1	-0.1	-1	0.19	0.12	0.3
7740790	7740784	duplicate	50	-0.1	-0.01	0.19	0.25	-1	-0.1	-1	0.16	0.13	0.2
7740724	GS-12-101		21	0.2	0.05	0.19	1.55	4	-0.1	-1	0.06	3.66	0.5
7740730	7740724	duplicate	19	0.2	0.05	0.22	1.70	4	-0.1	-1	0.05	3.79	0.8
7740761	GS-12-210		72	12.9	-0.01	-0.05	0.24	3	-0.1	-1	0.10	0.34	1.9
7740770	7740761	duplicate	75	12.5	-0.01	-0.05	0.32	3	-0.1	-1	0.10	0.33	2.2
7740807	GS-12-362		113	-0.1	0.20	0.29	1.43	3	-0.1	-1	0.54	2.86	0.9
7740810	7740807	duplicate	139	-0.1	0.27	0.30	1.42	2	-0.1	-1	0.37	2.89	0.9
7740784	GS-12-309		74	-0.1	-0.01	0.17	0.18	-1	-0.1	-1	0.19	0.12	0.3
7740790	7740784	duplicate	50	-0.1	-0.01	0.19	0.25	-1	-0.1	-1	0.16	0.13	0.2

Appendix I - Trace-element Actlabs (Au + 23) standards and duplicates

Labnum	SampleNum		S	Se	Te	Tl	W	Mass	Hg
		Units	%	ppm	ppm	ppm	ppm	g	ppb
		Detection Limit	0.001	0.1	0.1	0.1	4		5
		Analysis Method	AL ICP-ES	AL ICP-MS	AL ICP-MS	AL ICP-MS	AL INAA		AL 1G
Standards									
7740480	WGB-1		0.019	0.6	-0.1	-0.1	-4	30.0	
7740600	SY-4		0.011	2.1	-0.1	0.2	-4	30.0	
7740620	WGB-1		0.019	0.3	-0.1	-0.1	-4	30.0	
7740640	SY-4		0.011	2.2	0.4	0.2	-4	30.0	
7740660	WGB-1		0.018	0.2	-0.1	-0.1	-4	30.0	6
7740720	WPR-1		0.838	4.2	0.5	-0.1	-4	26.5	
7740760	WMG-1		2.669	15.2	2.2	-0.1	-4	28.3	
7740780	TDB-1		0.029	0.4	0.2	-0.1	-4	27.5	
7740820	WPR-1		0.852	4.1	0.6	-0.1	-4	28.0	
7740700	WMG-1		2.756	17.3	1.6	-0.1	-4	28.1	
Duplicates									
7740466	GS-11-29		0.004	0.3	-0.1	-0.1	-4	23.0	
7740470	7740466	duplicate	0.004	0.2	-0.1	-0.1	-4	24.0	
7740604	GS-11-291		1.527	3.7	1.3	-0.1	-4	25.0	
7740610	7740604	duplicate	1.540	3.8	1.2	-0.1	-4	29.0	
7740625	GS-11-415		0.008	0.8	0.2	0.3	18	28.0	
7740630	7740625	duplicate	0.008	0.7	0.1	0.2	17	29.0	
7740641	GS-11-470		1.007	4.6	0.6	-0.1	-4	28.0	
7740650	7740641	duplicate	1.010	6.0	0.5	-0.1	-4	29.0	
7740784	GS-12-309		0.008	-0.1	0.2	-0.1	-4	24.6	
7740790	7740784	duplicate	0.007	-0.1	0.3	-0.1	-4	25.6	
7740724	GS-12-101		0.099	0.6	0.2	-0.1	-4	28.9	
7740730	7740724	duplicate	0.070	0.8	-0.1	-0.1	-4	27.6	
7740761	GS-12-210		0.266	3.3	16.4	-0.1	-4	27.8	
7740770	7740761	duplicate	0.278	3.4	17.8	-0.1	-4	27.1	
7740807	GS-12-362		0.610	-0.1	0.1	0.6	-4	24.3	
7740810	7740807	duplicate	0.596	-0.1	0.2	0.5	-4	21.0	
7740784	GS-12-309		0.008	-0.1	0.2	-0.1	-4	24.6	
7740790	7740784	duplicate	0.007	-0.1	0.3	-0.1	-4	25.6	

Appendix J - Trace-element Actlabs (Au + 63) standards and duplicates

Labnum	SampleNum		Au	Ag	Cu	Cd	Mo	Pb	Ni
		Units	ppb	ppm	ppm	ppm	ppm	ppm	ppm
		Detection Limit	2	0.05	0.2	0.1	1	0.5	0.5
		Analysis Method	AL INAA	AL INAA/ICP	AL INAA/ICP	AL INAA/ICP	AL TD-ICP	AL TD-ICP	AL INAA/ICP
Standard									
7740440	SY-4		-2	-0.05	4.0	-0.1	2	8.1	7.8
Duplicates									
7740428	GS-11-10		5	-0.05	4.2	-0.1	9	18.6	0.9
7740430		duplicate	-2	-0.05	4.3	-0.1	8	19.2	1.0
7740447	GS-11-179		6	-0.05	4.5	0.1	1	98.6	1.3
7740450		duplicate	-2	-0.05	2.9	0.1	-1	108	0.6
7740663	GS-11-270		58	0.26	13.4	-0.1	38	19.6	3.2
7740670		duplicate	49	-0.05	13.4	-0.1	39	18.3	3.4

Appendix J - Trace-element Actlabs (Au + 63) standards and duplicates

Labnum	SampleNum		Zn	S	Al	As	Ba	Be	Bi	Br
		Units	ppm	%	%	ppm	ppm	ppm	ppm	ppm
		Detection Limit	0.5	0.01	0.01	0.5	1	0.1	0.1	0.5
		Analysis Method	AL INAA/ICP	AL TD-ICP	AL TD-ICP	AL INAA	AL INAA/ICP	AL TD-ICP	AL TD-ICP	AL INAA
Standard										
7740440	SY-4		91.0	0.04	7.15	-0.5	269	2.5	-0.1	198
Duplicates										
7740428	GS-11-10		2.0	4.05	3.81	16.2	57	0.2	0.7	-0.5
7740430		duplicate	1.6	4.22	4.27	13.1	78	0.2	0.8	-0.5
7740447	GS-11-179		12.4	0.68	6.18	2.8	1240	0.3	0.4	-0.5
7740450		duplicate	10.9	0.80	5.76	2.0	730	0.8	0.5	-0.5
7740663	GS-11-270		66.1	1.31	3.54	84.5	281	1.2	0.2	-0.5
7740670		duplicate	65.7	1.62	3.26	85.9	258	1.0	0.2	-0.5

Appendix J - Trace-element Actlabs (Au + 63) standards and duplicates

Labnum	SampleNum		Ca	Co	Cr	Cs	Fe	Hf	Ga	Ge
		Units	%	ppm	ppm	ppm	%	ppm	ppm	ppm
		Detection Limit	0.01	0.1	1	0.05	0.01	1	0.1	0.1
		Analysis Method	AL TD-ICP	AL INAA/ICP	AL INAA/ICP	AL INAA/ICP	AL INAA	AL INAA	AL TD-MS	AL TD-MS
Standard										
7740440	SY-4		5.81	2.3	8	1.71	3.77	8	28.8	-0.1
Duplicates										
7740428	GS-11-10		0.09	1.8	4	0.73	1.37	5	8.9	-0.1
7740430		duplicate	0.08	2.1	2	0.74	1.16	4	8.7	-0.1
7740447	GS-11-179		0.17	0.6	6	0.92	3.04	7	18.2	0.2
7740450		duplicate	0.17	0.9	8	0.95	3.37	7	15.4	0.2
7740663	GS-11-270		0.17	3.5	10	3.06	2.17	5	10.0	-0.1
7740670		duplicate	0.24	3.6	8	2.78	2.25	5	8.8	-0.1

Appendix J - Trace-element Actlabs (Au + 63) standards and duplicates

Labnum	SampleNum		Hg	In	Ir	K	Li	Mg	Mn	Na	Nb
		Units	ppm	ppm	ppb	%	ppm	%	ppm	%	ppm
		Detection Limit	1	0.1	5	0.01	0.5	0.01	1	0.01	0.1
		Analysis Method	AL INAA	AL TD-MS	AL INAA	AL TD-ICP	AL TD-MS	AL TD-ICP	AL TD-ICP	AL INAA	AL TD-MS
Standard											
7740440	SY-4		-1	-0.1	-5	1.83	34.6	0.28	763	4.95	10.2
Duplicates											
7740428	GS-11-10		-1	-0.1	-5	1.32	-0.5	0.01	18	0.96	5.6
7740430		duplicate	-1	-0.1	-5	1.22	-0.5	-0.01	9	0.92	5.2
7740447	GS-11-179		-1	-0.1	-5	1.36	1.2	0.03	8	0.09	6.3
7740450		duplicate	-1	-0.1	-5	1.30	1.5	0.03	13	0.10	6.6
7740663	GS-11-270		-1	-0.1	-5	2.25	6.9	0.44	216	0.41	6.3
7740670		duplicate	-1	-0.1	-5	1.40	6.2	0.45	202	0.36	5.6

Appendix J - Trace-element Actlabs (Au + 63) standards and duplicates

Labnum	SampleNum		P	Rb	Re	Sb	Sc	Se	Sn	Sr
		Units	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		Detection Limit	0.001	0.2	0.001	0.1	0.1	0.1	1	0.2
		Analysis Method	AL TD-ICP	AL INAA/ICP	AL TD-MS	AL INAA	AL INAA	AL INAA/ICP	AL TD-MS	AL TD-MS
Standard										
7740440	SY-4		0.050	41.4	0.001	-0.1	0.9	1.0	6	978
Duplicates										
7740428	GS-11-10		0.087	6.0	0.003	1.7	5.7	4.9	-1	357
7740430		duplicate	0.090	5.8	0.003	1.7	5.4	4.7	-1	417
7740447	GS-11-179		0.128	33.4	0.002	0.4	16.4	5.1	3	334
7740450		duplicate	0.114	38.7	0.002	0.5	16.4	5.7	2	388
7740663	GS-11-270		0.011	43.6	0.007	3.5	10.1	16.0	1	61.4
7740670		duplicate	0.009	45.9	0.016	3.4	9.6	13.5	-1	55.1

Appendix J - Trace-element Actlabs (Au + 63) standards and duplicates

Labnum	SampleNum		Ta	Te	Ti	Th	Tl	U	V	W
		Units	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
		Detection Limit	0.1	0.1	0.01	0.1	0.05	0.1	2	1
		Analysis Method	AL INAA/ICP	AL TD-MS	AL TD-ICP	AL INAA/ICP	AL TD-MS	AL INAA/ICP	AL TD-ICP	AL INAA
Standard										
7740440	SY-4		0.5	-0.1	0.17	1.2	0.23	0.5	8	-1
Duplicates										
7740428	GS-11-10		0.4	2.1	0.29	14.5	0.24	2.1	52	-1
7740430		duplicate	0.3	1.5	0.27	14.4	0.22	2.4	49	-1
7740447	GS-11-179		0.2	0.2	0.53	13.6	0.58	1.8	98	-1
7740450		duplicate	-0.1	0.4	0.56	12.8	0.71	2.2	105	-1
7740663	GS-11-270		0.3	0.9	0.33	7.5	0.39	1.2	55	7
7740670		duplicate	0.3	0.7	0.32	8.2	0.38	1.3	50	7

Appendix J - Trace-element Actlabs (Au + 63) standards and duplicates

Labnum	SampleNum		Y	Zr	La	La	Ce	Pr	Nd	Sm	Eu	Gd
		Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		Detection Limit	0.1	1	0.1	0.5	3	0.1	5	0.1	0.2	0.1
		Analysis Method	AL TD-MS	AL TD-MS	TD-MS	AL INAA	AL INAA	AL TD-MS	AL INAA	AL INAA	AL INAA	AL TD-MS
Standard												
7740440	SY-4		84.7	106	43.8	51.2	91	11.7	33	11.2	1.2	10.0
Duplicates												
7740428	GS-11-10		5.3	93	18.0	30.4	62	4.4	34	4.6	1.1	2.2
7740430		duplicate	6.7	89	23.3	28.7	61	5.5	37	4.4	1.0	2.7
7740447	GS-11-179		9.7	156	25.9	35.1	85	6.8	48	6.9	1.8	4.0
7740450		duplicate	10.5	210	30.1	35.5	79	7.5	54	6.6	1.7	4.7
7740663	GS-11-270		10.9	128	7.5	11.8	28	1.9	14	2.4	0.8	1.6
7740670		duplicate	11.9	116	10.7	14.0	36	2.7	14	2.8	0.7	1.9

Appendix J - Trace-element Actlabs (Au + 63) standards and duplicates

Labnum	SampleNum		Dy	Tb	Ho	Er	Tm	Yb	Lu	Mass
		Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g
		Detection Limit	0.1	0.5	0.1	0.1	0.1	0.2	0.05	
		Analysis Method	AL TD-MS	AL INAA	AL TD-MS	AL TD-MS	AL TD-MS	AL INAA	AL INAA	
Standard										
7740440	SY-4		15.6	2.3	3.5	11.4	1.8	15	1.92	29.69
Duplicates										
7740428	GS-11-10		1.2	-0.5	0.2	0.7	0.1	1.7	0.35	28.88
7740430		duplicate	1.6	-0.5	0.3	0.9	0.2	2.1	0.37	30.22
7740447	GS-11-179		2.6	-0.5	0.4	1.0	0.2	2.7	0.64	15.51
7740450		duplicate	3.0	-0.5	0.5	1.1	0.2	2.8	0.54	20.05
7740663	GS-11-270		1.9	-0.5	0.4	1.3	0.2	2.1	0.43	26.73
7740670		duplicate	2.1	-0.5	0.5	1.5	0.2	2.1	0.45	22.93

Appendix K - Trace-element Becquerel (INAA) standards and duplicates

Labnum	SampleNum		Wt	Sb	As	Ba	Br	Ce	Cs	Cr	Co	Eu
		Units	g	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		Detection Limit		0.1	0.5	50	1	3	0.5	10	2,4,5	0.5
		Analysis Method		BQ INAA	BQ INAA	BQ INAA	BQ INAA	BQ INAA	BQ INAA	BQ INAA	BQ INAA	BQ INAA
Standards												
7740419	SY-4		22.11	-0.1	-0.5	330	216	110	1.3	24	4	2.2
7740460	SY-4		30.00	-0.1	-0.5	330	220	110	1.6	-10	-5	1.8
7740500	SY-4		29.08	-0.1	-0.5	330	218	130	1.7	11	-4	1.8
7740540	SY-4		27.95	-0.1	-0.5	360	224	130	1.5	19	3	2.6
7740580	SY-4		33.28	-0.1	-0.5	350	221	120	1.7	16	-4	1.7
7740560	WGB-1		28.08	2.2	2.0	880	-1	12	-0.5	310	28	0.9
7740800	WGB-1		29.38	2.0	1.5	780	-1	18	-0.5	330	29	1.3
Duplicates												
7740487	GS-11-13		27.41	1.0	6.5	78	-1	24	-0.5	-10	6	1.0
7740490	7740487	duplicate	26.28	1.0	6.4	71	-1	23	-0.5	-10	7	1.1
7740546	GS-11-299		22.98	-0.1	21.0	190	-1	42	0.9	150	38	1.1
7740550	7740546	duplicate	20.49	0.1	23.0	190	-1	42	0.6	160	39	1.1
7740562	GS-11-429		26.26	0.1	2.6	360	-1	21	-0.5	-10	10	0.7
7740570	7740562	duplicate	25.75	0.1	2.6	360	-1	16	-0.5	12	10	0.7

Appendix K - Trace-element Becquerel (INAA) standards and duplicates

Labnum	SampleNum		Au	Hf	Fe	La	Lu	Mo	Rb	Sm	Sc	Se
		Units	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		Detection Limit	1	1	0.1	1	0.05	1	5	0.1	0.1	1
		Analysis Method	BQ INAA	BQ INAA	BQ INAA	BQ INAA	BQ INAA	BQ INAA	BQ INAA	BQ INAA	BQ INAA	BQ INAA
Standards												
7740419	SY-4		-1	11	4.1	55	2.0	-1	50	12.5	1.0	-1
7740460	SY-4		-1	11	4.2	57	1.9	-1	55	12.6	1.1	-1
7740500	SY-4		-1	11	4.3	58	2.2	-1	51	12.7	1.1	-1
7740540	SY-4		-1	12	4.5	59	2.2	-1	52	13.1	1.1	-1
7740580	SY-4		-1	12	4.3	59	2.2	-1	51	13.0	1.3	-1
7740560	WGB-1		2	2	4.6	8	0.18	-1	18	2.6	40.9	-1
7740800	WGB-1		1	2	5.1	8	0.24	-1	19	2.5	45.9	-1
Duplicates												
7740487	GS-11-13		-1	4	4.9	12	0.35	-1	9	4.3	24.5	-1
7740490	7740487	duplicate	1	4	4.9	12	0.39	-1	11	4.2	24.7	-1
7740546	GS-11-299		8	3	4.0	19	0.23	69	21	4.9	15.7	-1
7740550	7740546	duplicate	10	3	4.0	19	0.26	76	19	4.9	15.9	2
7740562	GS-11-429		10	4	4.2	11	0.35	17	50	2.7	10.8	3
7740570	7740562	duplicate	9	4	3.8	10	0.34	18	48	2.6	10.4	3

Appendix K - Trace-element Becquerel (INAA) standards and duplicates

Labnum	SampleNum		Na	Ta	Tb	Th	W	U	Yb	Zr
		Units	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
		Detection Limit	0.05	0.2	0.5	0.1	1	0.1	0.5	100
		Analysis Method	BQ INAA	BQ INAA	BQ INAA	BQ INAA	BQ INAA	BQ INAA	BQ INAA	BQ INAA
Standards										
7740419	SY-4		4.90	1.0	2.7	1.0	-1	0.8	14	390
7740460	SY-4		5.02	1.1	2.8	0.8	-1	0.9	14	440
7740500	SY-4		5.14	0.7	2.7	0.9	-1	0.9	15	500
7740540	SY-4		5.28	1.0	2.7	0.9	-1	0.9	16	470
7740580	SY-4		5.21	1.1	2.8	0.9	-1	0.8	15	530
7740560	WGB-1		1.60	0.4	-0.5	1.0	1	0.6	1.6	-100
7740800	WGB-1		1.80	0.4	-0.5	1.0	1	0.7	1.6	-100
Duplicates										
7740487	GS-11-13		3.70	0.4	0.8	3.2	-1	0.8	2.5	130
7740490	7740487	duplicate	3.80	0.3	0.7	3.1	1	0.8	2.4	-100
7740546	GS-11-299		2.70	0.4	0.6	2.0	-1	1.7	1.9	-100
7740550	7740546	duplicate	2.70	0.2	0.7	2.1	-1	1.7	1.9	-100
7740562	GS-11-429		2.60	0.5	0.5	3.6	-1	0.9	2.1	170
7740570	7740562	duplicate	2.40	0.4	-0.5	3.5	-1	0.9	2.2	160

Appendix L - Major and Trace Element Standards and Duplicates for Appendix E

Standards										
LabNum	SampleNum	Rock Type	SiO2_pct	Al2O3_pct	Fe2O3T_pct	MgO_pct	CaO_pct	Na2O_pct	K2O_pct	TiO2_pct
Detection Limit			0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.001
Analysis Method			GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj
8940440	AGV-1	Reference Material	58.56	16.62	6.65	1.45	4.83	4.23	2.81	1.026
8940660	AGV-1	Reference Material	59.86	17.20	6.80	1.52	4.92	4.31	2.94	1.049
8940140	AND-1	Reference Material	49.08	15.71	6.86	6.09	6.50	2.82	2.22	0.934
8940420	AND-1	Reference Material	49.59	15.37	6.83	6.08	6.46	2.67	2.05	0.917
8940700	BHVO-1	Reference Material	49.62	13.68	12.29	7.31	11.21	2.23	0.53	2.773
8940380	BS-1	Reference Material	55.41	15.06	7.81	5.98	4.66	6.21	0.03	1.166
8940540	DR-N	Reference Material	52.55	17.51	9.60	4.28	6.96	2.95	1.44	1.052
8940680	DR-N	Reference Material	52.91	17.45	9.64	4.30	6.97	2.91	1.68	1.056
8940120	FK-N	Reference Material	64.28	18.73	0.15	0.40	0.10	2.42	12.73	0.003
8940400	G-2	Reference Material	68.30	15.09	2.66	0.71	1.91	4.04	4.34	0.494
8940180	GD-1	Reference Material	72.18	14.31	2.20	0.62	1.48	4.16	3.39	0.232
8940460	GD-1	Reference Material	71.89	14.38	2.30	0.59	1.51	4.31	3.33	0.239
8940220	GD-2	Reference Material	75.95	12.44	0.73	0.19	0.11	3.22	5.36	0.059
8940560	MAG-1	Reference Material	50.66	16.11	7.10	3.05	1.41	3.93	3.27	0.711
8940720	QLO-1	Reference Material	64.80	16.17	4.31	1.01	3.20	4.18	3.61	0.605
8940640	SDC-1	Reference Material	64.99	15.48	6.93	1.68	1.41	2.02	3.18	0.969
8940760	SDC-1	Reference Material	64.58	15.77	6.91	1.68	1.44	2.07	3.25	0.979
8940200	STM-1	Reference Material	58.25	18.11	5.20	0.12	1.10	7.60	4.16	0.130
8940520	STM-1	Reference Material	59.60	18.45	5.33	0.09	1.15	9.01	3.77	0.132
8940740	STM-1	Reference Material	58.92	18.26	5.10	0.10	1.11	8.89	4.27	0.130
8940160	VS-N	Reference Material	55.09	13.24	3.96	4.38	4.28	5.95	8.06	1.066

Appendix L - Major and Trace Element Standards and Duplicates for Appendix E

Standards								
LabNum	SampleNum	Rock Type	MnO_pct	P2O5_pct	Cr_ppm	Zr_ppm	Ba_ppm	LOI_pct
Detection Limit			0.001	0.001	1, 100	1	1	0.01
Analysis Method			GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	Grav
8940440	AGV-1	Reference Material	0.097	0.489	-100	213	1228	-99
8940660	AGV-1	Reference Material	0.099	0.507	9	217	1265	-99
8940140	AND-1	Reference Material	0.112	0.190	399	146	317	-0.01
8940420	AND-1	Reference Material	0.112	0.186	400	134	312	-99
8940700	BHVO-1	Reference Material	0.180	0.267	264	163	132	-99
8940380	BS-1	Reference Material	0.097	0.253	-100	110	145	-99
8940540	DR-N	Reference Material	0.222	0.227	29	128	393	-99
8940680	DR-N	Reference Material	0.218	0.224	30	125	386	-99
8940120	FK-N	Reference Material	0.003	0.012	-100	-1	199	2.79
8940400	G-2	Reference Material	0.032	0.128	-100	310	1899	-99
8940180	GD-1	Reference Material	0.085	0.081	-100	109	1048	-0.01
8940460	GD-1	Reference Material	0.087	0.074	-100	140	1034	-99
8940220	GD-2	Reference Material	0.022	0.014	-100	64	670	-0.01
8940560	MAG-1	Reference Material	0.102	0.161	92	120	498	-99
8940720	QLO-1	Reference Material	0.095	0.256	-1	175	1437	-99
8940640	SDC-1	Reference Material	0.116	0.141	57	316	652	-99
8940760	SDC-1	Reference Material	0.119	0.144	57	307	658	-99
8940200	STM-1	Reference Material	0.227	0.153	-100	1202	588	-0.01
8940520	STM-1	Reference Material	0.223	0.155	-1	1218	600	-99
8940740	STM-1	Reference Material	0.218	0.151	-1	1186	594	-99
8940160	VS-N	Reference Material	0.103	0.018	626	695	970	-0.01

Appendix L - Major and Trace Element Standards and Duplicates for Appendix E

LabNum	SampleNum	Rock Type	As_ppm	Ba_ppm	Be_ppm	Cd_ppm	Ce_ppm	Co_ppm	Cr_ppm	Cu_ppm	Dy_ppm
Detection Limit			2	1	0.1	0.1	1	1	1	1	1
Analysis Method			GS Tr ES	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr ES
8940120	SY-4	Reference Material	5	334	2.8	-0.1	124	3	9	3	19
8940160	SY-4	Reference Material	4	344	2.8	-0.1	125	3	8	4	19
8940200	SY-4	Reference Material	5	334	2.7	-0.1	118	3	7	3	19
8940380	SY-4	Reference Material	-2	338	2.6	-0.1	123	2	8	4	18
8940420	SY-4	Reference Material	-2	361	2.7	-0.1	127	2	9	5	19
8940460	SY-4	Reference Material	-2	386	2.9	-0.1	135	2	9	6	21
8940520	SY-4	Reference Material	-99	-99	2.6	-99	-99	-99	-99	5	-99
8940560	SY-4	Reference Material	-99	-99	2.6	-99	-99	-99	-99	5	-99
8940660	SY-4	Reference Material	-2	-99	2.5	-99	-99	-99	-99	6	-99
8940720	SY-4	Reference Material	-2	-99	2.4	-99	-99	-99	-99	6	-99
8940760	SY-4	Reference Material	-2	-99	2.5	-99	-99	-99	-99	6	-99
8940140	WGB-1	Reference Material	4	805	0.2	-0.1	16	29	284	90	3
8940180	WGB-1	Reference Material	4	836	0.2	-0.1	17	30	284	89	2
8940220	WGB-1	Reference Material	6	797	0.2	-0.1	17	29	267	92	2
8940400	WGB-1	Reference Material	-2	765	0.3	0.1	25	26	258	91	3
8940440	WGB-1	Reference Material	-2	865	0.4	0.1	26	28	272	99	3
8940540	WGB-1	Reference Material	-99	-99	0.3	-99	-99	-99	-99	104	-99
8940640	WGB-1	Reference Material	-2	-99	0.3	-99	-99	-99	-99	91	-99
8940680	WGB-1	Reference Material	-2	-99	0.3	-99	-99	-99	-99	89	-99
8940700	WGB-1	Reference Material	-2	-99	0.3	-99	-99	-99	-99	92	-99
8940740	WGB-1	Reference Material	-2	-99	0.3	-99	-99	-99	-99	90	-99

Appendix L - Major and Trace Element Standards and Duplicates for Appendix E

LabNum	SampleNum	Rock Type	Fe_pct	La_ppm	Li _ppm	Mn_ppm	Mo_ppm	Nb_ppm	Ni _ppm	P_ppm	Pb _ppm
Detection Limit			0.01	1	0.1	1	1	1	1	1	1
Analysis Method			GS Tr ES	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr ES
8940120	SY-4	Reference Material	4.41	60	37.3	851	1	13	4	592	-1
8940160	SY-4	Reference Material	4.42	60	37.8	833	-1	13	4	628	-1
8940200	SY-4	Reference Material	4.32	57	36.9	826	-1	13	4	600	-1
8940380	SY-4	Reference Material	4.33	57	36.5	770	-1	13	9	496	4
8940420	SY-4	Reference Material	4.52	59	39.2	792	-1	13	9	512	4
8940460	SY-4	Reference Material	4.97	63	43.8	789	-1	14	9	539	4
8940520	SY-4	Reference Material	-99	-99	37.4	789	-99	-99	12	-99	3
8940560	SY-4	Reference Material	-99	-99	36.0	770	-99	-99	12	-99	4
8940660	SY-4	Reference Material	-99	-99	36.9	788	-99	-99	12	-99	3
8940720	SY-4	Reference Material	-99	-99	35.8	812	-99	-99	11	-99	3
8940760	SY-4	Reference Material	-99	-99	36.3	818	-99	-99	12	-99	3
8940140	WGB-1	Reference Material	4.58	8	45.1	1046	1	7	59	381	-1
8940180	WGB-1	Reference Material	4.62	8	46.2	1029	-1	8	62	389	-1
8940220	WGB-1	Reference Material	4.59	8	45.3	958	-1	8	56	345	-1
8940400	WGB-1	Reference Material	4.28	5	42.9	951	-1	5	61	322	2
8940440	WGB-1	Reference Material	4.74	6	48.2	984	-1	5	64	335	2
8940540	WGB-1	Reference Material	-99	-99	44.6	1104	-99	-99	76	-99	2
8940640	WGB-1	Reference Material	-99	-99	44.5	972	-99	-99	61	-99	3
8940680	WGB-1	Reference Material	-99	-99	43.0	953	-99	-99	60	-99	4
8940700	WGB-1	Reference Material	-99	-99	43.7	1001	-99	-99	57	-99	2
8940740	WGB-1	Reference Material	-99	-99	43.9	981	-99	-99	55	-99	2

Appendix L - Major and Trace Element Standards and Duplicates for Appendix E

LabNum	SampleNum	Rock Type	Rb_ppm	Sc_ppm	Sr_ppm	Ti_ppm	V_ppm	Y_ppm	Zn _ppm
Detection Limit			**1**	**0.1**	**1**	**1**	**1**	**1**	**1**
Analysis Method			**GS Tr ES**	**GS Tr ES**	**GS Tr ES**	**GS Tr ES**	**GS Tr ES**	**GS Tr ES**	**GS Tr ES**
8940120	SY-4	Reference Material	56	1.0	1101	1830	2	127	97
8940160	SY-4	Reference Material	60	1.0	1142	1822	-1	126	98
8940200	SY-4	Reference Material	60	1.1	1101	1813	-1	123	96
8940380	SY-4	Reference Material	55	1.0	1246	1624	5	120	88
8940420	SY-4	Reference Material	62	1.0	1316	1655	6	120	87
8940460	SY-4	Reference Material	61	1.1	1400	1847	6	131	101
8940520	SY-4	Reference Material	51	1.0	-99	1744	-99	-99	93
8940560	SY-4	Reference Material	47	1.0	-99	1677	-99	-99	91
8940660	SY-4	Reference Material	53	0.9	-99	1799	-99	-99	94
8940720	SY-4	Reference Material	53	0.9	-99	1676	-99	-99	91
8940760	SY-4	Reference Material	55	0.9	-99	1732	-99	-99	95
8940140	WGB-1	Reference Material	22	43.3	116	5514	221	15	39
8940180	WGB-1	Reference Material	24	44.2	118	5519	222	15	40
8940220	WGB-1	Reference Material	28	42.9	114	5211	214	14	39
8940400	WGB-1	Reference Material	23	43.4	117	4796	213	14	34
8940440	WGB-1	Reference Material	27	45.6	122	5349	231	15	37
8940540	WGB-1	Reference Material	23	50.0	-99	5021	-99	-99	36
8940640	WGB-1	Reference Material	22	43.3	-99	5384	-99	-99	36
8940680	WGB-1	Reference Material	17	42.2	-99	5233	-99	-99	35
8940700	WGB-1	Reference Material	18	43.7	-99	5121	-99	-99	36
8940740	WGB-1	Reference Material	21	43.2	-99	4987	-99	-99	35

Appendix L - Major and Trace Element Standards and Duplicates for Appendix E

LabNum	SampleNum	Rock Type	V_ppm	Cr_ppm	Co_ppm	Ni _ppm	Ga_ppm	Ge_ppm	As_ppm	Rb_ppm	Sr_ppm
Detection Limit			5	20	1	20	1	0.5	5	1	2
Analysis Method			GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS
8940420	AGV-1	Reference Material	145	-20	18	-99	24	3.3	-5	70	730
8940660	AGV-1	Reference Material	123	-99	14	-99	23	3.4	-99	-99	634
8940700	BHVO-1	Reference Material	332	-99	46	-99	22	3.9	-99	-99	400
8940540	DR-N	Reference Material	229	-99	41	-99	21	3.4	27	-99	407
8940680	DR-N	Reference Material	221	-99	43	-99	21	2.9	-99	-99	387
8940400	G-2	Reference Material	38	-20	5	-99	29	3.0	-5	170	517
8940560	MAG-1	Reference Material	156	-99	55	-99	27	4.3	11	-99	152
8940380	QLO-1	Reference Material	49	-20	8	-99	18	2.9	-5	65	334
8940720	QLO-1	Reference Material	52	-99	6	-99	17	2.2	-99	-99	317
8940440	SDC-1	Reference Material	90	71	20	-99	27	4.9	-5	125	200
8940640	SDC-1	Reference Material	92	-99	16	-99	23	5.0	-99	-99	167
8940760	SDC-1	Reference Material	112	-99	19	-99	27	4.5	-99	-99	197
8940460	STM-1	Reference Material	-5	-20	1	-99	44	5.9	7	113	715
8940520	STM-1	Reference Material	6	-99	1	-99	41	5.4	17	-99	732
8940740	STM-1	Reference Material	5	-99	1	-99	42	5.3	-99	-99	728
8940120	SY-4	Reference Material	5	-20	1	-20	36	1.3	-5	52	1230
8940160	SY-4	Reference Material	-5	-20	1	-20	34	1.4	-5	51	1180
8940200	SY-4	Reference Material	-5	-20	-1	-20	38	1.3	-5	48	1160
8940140	WGB-1	Reference Material	202	250	24	70	11	2.1	-5	15	112
8940180	WGB-1	Reference Material	238	290	26	80	12	2.1	-5	16	115
8940220	WGB-1	Reference Material	201	250	24	70	10	1.9	-5	16	110

Appendix L - Major and Trace Element Standards and Duplicates for Appendix E

LabNum	SampleNum	Rock Type	Y_ppm	Nb_ppm	Zr_ppm	Cu_ppm	Zn _ppm	Mo_ppm	Ag_ppm	Sb_ppm	Cd_ppm
Detection Limit			1	1	1	10	30	2	0.5	0.2	0.2
Analysis Method			GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS
8940420	AGV-1	Reference Material	20	19	-99	-99	-99	5	-99	-99	-0.2
8940660	AGV-1	Reference Material	17	13	-99	-99	-99	3	-99	-99	-0.2
8940700	BHVO-1	Reference Material	25	17	-99	-99	-99	-2	-99	-99	-0.2
8940540	DR-N	Reference Material	26	8	-99	-99	-99	2	-99	-99	-0.2
8940680	DR-N	Reference Material	25	7	-99	-99	-99	2	-99	-99	0.5
8940400	G-2	Reference Material	10	18	-99	-99	-99	3	-99	-99	-0.2
8940560	MAG-1	Reference Material	28	16	-99	-99	-99	2	-99	-99	0.8
8940380	QLO-1	Reference Material	21	10	-99	-99	-99	3	-99	-99	-0.2
8940720	QLO-1	Reference Material	21	9	-99	-99	-99	-2	-99	-99	-0.2
8940440	SDC-1	Reference Material	41	23	-99	-99	-99	3	-99	-99	-0.2
8940640	SDC-1	Reference Material	34	17	-99	-99	-99	-2	-99	-99	-0.2
8940760	SDC-1	Reference Material	41	17	-99	-99	-99	-2	-99	-99	-0.2
8940460	STM-1	Reference Material	42	258	-99	-99	-99	6	-99	-99	0.3
8940520	STM-1	Reference Material	43	264	-99	-99	-99	6	-99	-99	0.7
8940740	STM-1	Reference Material	42	234	-99	-99	-99	7	-99	-99	0.7
8940120	SY-4	Reference Material	123	16	575	-10	110	-2	1.2	-0.2	-99
8940160	SY-4	Reference Material	122	14	604	-10	90	-2	1.1	0.4	-99
8940200	SY-4	Reference Material	116	16	594	-10	110	-2	2.1	1.4	-99
8940140	WGB-1	Reference Material	14	6	56	100	50	-2	-0.5	3.3	-99
8940180	WGB-1	Reference Material	15	7	64	120	40	-2	-0.5	4.3	-99
8940220	WGB-1	Reference Material	14	5	57	100	-30	-2	-0.5	3.3	-99

Appendix L - Major and Trace Element Standards and Duplicates for Appendix E

LabNum	SampleNum	Rock Type	In_ppm	Sn_ppm	Cs_ppm	Ba_ppm	La_ppm	Ce_ppm	Pr_ppm	Nd_ppm	Sm_ppm
Detection Limit			0.1,0.2	1	0.5	3	0.5	0.1	0.05	0.1	0.1
Analysis Method			GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS
8940420	AGV-1	Reference Material	0.2	5	1.4	1294	47.2	76.0	8.94	33.4	6.3
8940660	AGV-1	Reference Material	-99	6	1.1	-99	38.3	67.7	8.31	31.5	5.8
8940700	BHVO-1	Reference Material	-99	2	-0.5	-99	16.2	38.4	5.41	25.8	6.2
8940540	DR-N	Reference Material	-0.2	2	1.4	-99	21.7	45.5	5.58	23.5	5.3
8940680	DR-N	Reference Material	-99	2	6.0	-99	22.4	45.2	5.66	23.8	5.4
8940400	G-2	Reference Material	-0.1	2	1.6	1969	93.0	169	17.10	56.2	7.5
8940560	MAG-1	Reference Material	-0.2	5	3.6	-99	45.9	91.5	10.66	41.7	8.0
8940380	QLO-1	Reference Material	-0.1	8	1.5	1343	26.3	48.6	5.59	22.7	4.4
8940720	QLO-1	Reference Material	-99	2	1.5	-99	27.0	47.3	5.55	22.0	4.2
8940440	SDC-1	Reference Material	0.2	4	3.7	686	46.2	97.7	11.46	45.6	9.3
8940640	SDC-1	Reference Material	-99	3	3.7	-99	39.8	83.5	10.05	39.1	7.9
8940760	SDC-1	Reference Material	-99	3	4.4	-99	46.6	98.1	11.61	45.7	9.1
8940460	STM-1	Reference Material	-0.1	8	1.5	591	149.0	258	25.36	80.3	12.3
8940520	STM-1	Reference Material	-0.2	8	-0.5	-99	151.6	264	25.59	82.3	12.5
8940740	STM-1	Reference Material	-99	8	1.6	-99	154.5	269	26.44	83.6	12.3
8940120	SY-4	Reference Material	-0.1	8	1.5	365	59.5	123	15.80	60.3	12.5
8940160	SY-4	Reference Material	-0.1	9	1.5	386	61.7	125	16.00	61.1	13.1
8940200	SY-4	Reference Material	-0.1	8	1.4	340	60.8	125	14.40	56.3	12.9
8940140	WGB-1	Reference Material	-0.1	4	-0.5	907	7.8	16.0	2.23	9.9	2.5
8940180	WGB-1	Reference Material	-0.1	5	-0.5	862	8.6	17.5	2.13	9.8	2.5
8940220	WGB-1	Reference Material	-0.1	4	-0.5	867	7.3	15.0	1.97	8.6	2.3

Appendix L - Major and Trace Element Standards and Duplicates for Appendix E

LabNum	SampleNum	Rock Type	Eu_ppm	Gd_ppm	Tb_ppm	Dy_ppm	Ho_ppm	Er_ppm	Tm_ppm	Yb_ppm	Lu_ppm
Detection Limit			**0.05**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.05**	**0.1**	**0.05**
Analysis Method			**GS Tr MS**	**GS Tr MS**	**GS Tr MS**	**GS Tr MS**	**GS Tr MS**	**GS Tr MS**	**GS Tr MS**	**GS Tr MS**	**GS Tr MS**
8940420	AGV-1	Reference Material	1.88	5.2	0.8	3.9	0.8	2.0	0.40	2.0	0.37
8940660	AGV-1	Reference Material	1.58	0.7	4.7	3.6	0.6	1.8	0.23	1.7	0.25
8940700	BHVO-1	Reference Material	2.05	1.0	6.5	5.5	1.0	2.5	0.29	2.0	0.31
8940540	DR-N	Reference Material	1.41	0.8	5.2	4.8	1.0	2.8	0.36	2.5	0.39
8940680	DR-N	Reference Material	1.44	0.8	5.2	4.9	1.0	2.8	0.37	2.6	0.37
8940400	G-2	Reference Material	1.60	4.3	0.5	2.3	0.4	1.0	0.13	0.7	0.10
8940560	MAG-1	Reference Material	1.59	1.0	6.6	5.7	1.1	3.0	0.42	2.8	0.42
8940380	QLO-1	Reference Material	1.30	4.2	0.6	4.0	0.8	2.4	0.36	2.4	0.35
8940720	QLO-1	Reference Material	1.31	0.6	4.0	3.8	0.7	2.2	0.32	2.3	0.32
8940440	SDC-1	Reference Material	1.76	8.0	1.1	7.4	1.6	4.6	0.78	4.6	0.63
8940640	SDC-1	Reference Material	1.53	1.1	6.7	6.2	1.3	4.0	0.59	3.9	0.59
8940760	SDC-1	Reference Material	1.79	1.2	7.9	7.1	1.5	4.6	0.69	4.7	0.70
8940460	STM-1	Reference Material	3.51	9.7	1.3	7.8	1.5	4.3	0.62	4.4	0.51
8940520	STM-1	Reference Material	3.64	1.5	9.3	8.3	1.4	4.3	0.60	4.5	0.63
8940740	STM-1	Reference Material	3.59	1.6	9.9	8.3	1.5	4.5	0.64	4.5	0.65
8940120	SY-4	Reference Material	1.96	15.9	2.9	19.4	4.5	14.5	2.28	14.8	2.16
8940160	SY-4	Reference Material	2.09	16.6	3.0	20.0	4.5	15.0	2.48	15.7	2.28
8940200	SY-4	Reference Material	1.93	13.8	2.9	19.2	4.3	14.3	2.48	16.0	2.18
8940140	WGB-1	Reference Material	1.16	3.1	0.5	2.8	0.5	1.5	0.21	1.3	0.20
8940180	WGB-1	Reference Material	1.17	2.8	0.5	2.7	0.5	1.5	0.23	1.4	0.20
8940220	WGB-1	Reference Material	1.08	2.5	0.4	2.5	0.5	1.4	0.20	1.3	0.19

Appendix L - Major and Trace Element Standards and Duplicates for Appendix E

LabNum	SampleNum	Rock Type	Hf_ppm	Ta_ppm	W_ppm	Tl_ppm	Pb _ppm	Bi_ppm	Th_ppm	U_ppm
Detection Limit			0.2	0.5	0.5, 1	0.1	5	0.1, 0.4	0.1	0.05
Analysis Method			GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS
8940420	AGV-1	Reference Material	5.4	1.6	6	0.1	29	0.1	6.5	2.04
8940660	AGV-1	Reference Material	4.9	0.6	-1	0.2	-99	-0.4	6.2	1.90
8940700	BHVO-1	Reference Material	4.5	0.8	-1	-0.1	-99	-0.4	1.2	0.50
8940540	DR-N	Reference Material	4.2	1.2	145	0.1	-99	-0.4	4.8	1.61
8940680	DR-N	Reference Material	3.3	0.5	143	0.3	-99	-0.4	4.7	1.59
8940400	G-2	Reference Material	8.5	1.6	8	-0.1	25	-0.1	24.4	2.09
8940560	MAG-1	Reference Material	3.7	1.4	2	-0.1	-99	-0.4	12.5	2.90
8940380	QLO-1	Reference Material	4.7	0.9	2	-0.1	22	-0.1	4.5	1.81
8940720	QLO-1	Reference Material	4.3	0.6	-1	-0.1	-99	-0.4	4.5	1.70
8940440	SDC-1	Reference Material	8.4	2.0	8	0.1	20	-0.1	12.0	3.25
8940640	SDC-1	Reference Material	7.9	1.2	-1	0.3	-99	-0.4	10.7	2.87
8940760	SDC-1	Reference Material	9.2	0.9	-1	0.4	-99	-0.4	12.9	3.13
8940460	STM-1	Reference Material	27.2	19.3	4	-0.1	18	-0.1	28.3	7.95
8940520	STM-1	Reference Material	26.2	20.1	5	-0.1	-99	-0.4	29.2	8.12
8940740	STM-1	Reference Material	28.7	18.2	6	0.1	-99	-0.4	30.3	8.57
8940120	SY-4	Reference Material	9.7	0.9	0.7	0.1	10	-0.1	1.3	0.75
8940160	SY-4	Reference Material	10.2	0.9	7.7	0.2	11	-0.1	1.3	0.80
8940200	SY-4	Reference Material	11.0	0.8	-0.5	0.2	11	-0.1	1.3	0.85
8940140	WGB-1	Reference Material	1.4	0.4	0.8	0.2	7	-0.1	1.1	0.74
8940180	WGB-1	Reference Material	1.7	0.3	1.5	0.3	8	-0.1	1.4	0.87
8940220	WGB-1	Reference Material	1.3	0.3	-0.5	0.2	8	-0.1	1.1	0.67

Appendix L - Major and Trace Element Standards and Duplicates for Appendix E

LabNum	SampleNum	Rock Type	Wt	Sb_ppm	As_ppm	Ba_ppm	Br_ppm	Ce_ppm	Cs_ppm	Cr_ppm
Detection Limit				0.1	0.5	50	1	3	0.5	10
Analysis Method			**BQ INAA**	**BQ INAA**	**BQ INAA**	**BQ INAA**	**BQ INAA**	**BQ INAA**	**BQ INAA**	**BQ INAA**
8940400	SY-4	Reference Material	15.16	-0.1	-0.5	340	225	140	1.3	14
8940440	SY-4	Reference Material	11.07	-0.1	-0.5	320	216	120	1.2	15
8940640	SY-4	Reference Material	16.10	0.2	-0.5	320	218	120	1.3	21
8940680	SY-4	Reference Material	16.57	0.2	-0.5	310	218	120	1.6	14
8940120	WGB-1	Reference Material	5.61	2.2	2.0	770	-1	17	0.6	320
8940140	WGB-1	Reference Material	6.96	2.1	0.7	740	-1	17	0.9	310
8940160	WGB-1	Reference Material	6.35	2.2	1.7	760	-1	14	-0.5	300
8940220	WGB-1	Reference Material	6.20	2.3	2.6	770	-1	18	-0.5	310
8940380	WGB-1	Reference Material	15.69	2.1	1.8	800	-1	12	-0.5	280
8940420	WGB-1	Reference Material	15.45	2.2	1.6	810	-1	11	-0.5	230
8940460	WGB-1	Reference Material	15.38	2.2	1.6	820	-1	16	-0.5	280
8940660	WGB-1	Reference Material	22.42	2.4	1.9	840	-1	13	-0.5	300

Appendix L - Major and Trace Element Standards and Duplicates for Appendix E

LabNum	SampleNum	Rock Type	Co_ppm	Eu_ppm	Au_ppb	Hf_ppm	Fe_pct	La_ppm	Lu_ppm	Mo_ppm
Detection Limit			2,4,5	1	1, 2	1	0.1	1	0.2	1
Analysis Method			**BQ INAA**	**BQ INAA**	**BQ INAA**	**BQ INAA**	**BQ INAA**	**BQ INAA**	**BQ INAA**	**BQ INAA**
8940400	SY-4	Reference Material	-4	2	-1	12	4.4	58	2.1	-1
8940440	SY-4	Reference Material	-5	2	-1	11	4.2	53	2.0	-1
8940640	SY-4	Reference Material	-5	2	-1	10	4.3	55	2.0	-1
8940680	SY-4	Reference Material	-2	2	-1	12	4.5	57	2.3	-1
8940120	WGB-1	Reference Material	29	-1	-2	-1	4.3	7	-0.2	-1
8940140	WGB-1	Reference Material	31	-1	-2	3	4.5	7	-0.2	-1
8940160	WGB-1	Reference Material	28	2	-2	-1	4.7	8	-0.2	-1
8940220	WGB-1	Reference Material	28	-1	12	2	4.5	9	0.2	-1
8940380	WGB-1	Reference Material	26	1	2	2	4.3	7	0.2	-1
8940420	WGB-1	Reference Material	25	1	2	1	3.9	7	0.2	-1
8940460	WGB-1	Reference Material	27	1	2	2	4.4	7	0.2	-1
8940660	WGB-1	Reference Material	27	1	2	2	4.6	8	0.2	-1

Appendix L - Major and Trace Element Standards and Duplicates for Appendix E

LabNum	SampleNum	Rock Type	Rb_ppm	Sm_ppm	Sc_ppm	Se_ppm	Na_pct	Ta_ppm	Tb_ppm	Th_ppm
Detection Limit			10,13	0.1	0.2	1, 5	0.05	**0.5**	**0.5**	**0.3**
Analysis Method			**BQ INAA**	**BQ INAA**	**BQ INAA**	**BQ INAA**	**BQ INAA**	**BQ INAA**	**BQ INAA**	**BQ INAA**
8940400	SY-4	Reference Material	49	12.9	1.2	-1	5.18	1.0	2.7	1.1
8940440	SY-4	Reference Material	46	12.5	1.1	-1	4.90	1.0	2.6	1.4
8940640	SY-4	Reference Material	42	12.7	1.1	-1	5.00	1.2	2.7	1.1
8940680	SY-4	Reference Material	46	12.5	1.2	-1	5.28	0.9	2.3	1.2
8940120	WGB-1	Reference Material	12	2.5	38.4	-5	1.60	0.8	-0.5	0.9
8940140	WGB-1	Reference Material	-13	2.5	40.3	-5	1.60	0.5	-0.5	1.5
8940160	WGB-1	Reference Material	18	2.5	40.5	-5	1.50	-0.5	-0.5	1.1
8940220	WGB-1	Reference Material	-10	2.5	42.4	-5	1.70	-0.5	-0.5	1.0
8940380	WGB-1	Reference Material	18	2.5	36.6	-1	1.50	0.4	-0.5	1.0
8940420	WGB-1	Reference Material	16	2.5	31.2	-1	1.40	0.4	-0.5	1.0
8940460	WGB-1	Reference Material	18	2.5	37.1	-1	1.50	0.4	-0.5	1.0
8940660	WGB-1	Reference Material	17	2.5	40.1	-1	1.70	0.3	-0.5	1.1

Appendix L - Major and Trace Element Standards and Duplicates for Appendix E

LabNum	SampleNum	Rock Type	W_ppm	U_ppm	Yb_ppm	Zr_ppm
Detection Limit			**1, 2**	**0.1**	**2**	**100**
Analysis Method			**BQ INAA**	**BQ INAA**	**BQ INAA**	**BQ INAA**
8940400	SY-4	Reference Material	-1	0.8	16	490
8940440	SY-4	Reference Material	-1	0.6	15	410
8940640	SY-4	Reference Material	-1	0.9	15	560
8940680	SY-4	Reference Material	-1	0.9	16	540
8940120	WGB-1	Reference Material	-1	0.7	-2	-200
8940140	WGB-1	Reference Material	2	0.7	-2	-200
8940160	WGB-1	Reference Material	-1	0.6	-2	-200
8940220	WGB-1	Reference Material	-2	0.9	-2	-200
8940380	WGB-1	Reference Material	2	0.7	1	-100
8940420	WGB-1	Reference Material	2	0.9	1	-100
8940460	WGB-1	Reference Material	1	0.8	1	-100
8940660	WGB-1	Reference Material	1	0.9	2	-100

Appendix L - Major and Trace Element Standards and Duplicates for Appendix E

LabNum	SampleNum	Rock Type	Ag_ppm	
Detection Limit			**0.1**	
Analysis Method			**GS Tr ES**	
8940120	AND-1	Reference Material	-0.1	
8940220	BS-1	Reference Material	-0.1	
8940380	CH-2	Reference Material	12.2	
8940420	CH-2	Reference Material	15.8	
8940460	CH-2	Reference Material	14.1	
8940540	CH-2	Reference Material	14.3	
8940140	GA-1	Reference Material	-0.1	
8940160	GD-1	Reference Material	-0.1	
8940180	GD-2	Reference Material	-0.1	
8940200	RH-1	Reference Material	-0.1	
8940400	SU-1A	Reference Material	1.7	
8940440	SU-1A	Reference Material	2.3	
8940520	SU-1A	Reference Material	1.8	
8940560	SU-1A	Reference Material	2.0	
LabNum	**SampleNum**	**Rock Type**	**F_ppm**	
Detection Limit			**10**	
Analysis Method			**ISE**	
8940160	GD-1	Reference Material	240	
8940220	GD-1	Reference Material	178	
8940120	GD-2	Reference Material	12	
8940180	GD-2	Reference Material	25	
8940140	RH-1	Reference Material	113	
8940200	RH-1	Reference Material	77	
LabNum	**SampleNum**	**Rock Type**	**CO2_pct**	**Total S_pct**
Detection Limit			**0.01**	**0.01**
Analysis Method			**COUL**	**IR**
-99	SY-4	Reference Material	3.33	0.02
-99	SY-4	Reference Material	3.28	0.02
-99	SY-4	Reference Material	3.46	0.04
-99	WGB-1	Reference Material	1.66	0.04
-99	WGB-1	Reference Material	1.68	0.01
-99	WGB-1	Reference Material	1.65	0.05

Appendix L - Major and Trace Element Standards and Duplicates for Appendix E

Duplicates										
LabNum	SampleNum	SiO2_pct	Al2O3_pct	Fe2O3T_pct	Fe2O3_pct	FeO_pct	MgO_pct	CaO_pct	Na2O_pct	K2O_pct
Detection Limit		0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Analysis Method		GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj	GS Maj
8940186	HS09-132	51.01	19.27	9.52	4.59	4.44	3.88	7.37	3.77	1.39
8940190	HS09-132dup	50.94	19.19	9.39	4.44	4.46	3.79	7.30	3.76	1.40
8940195	HS09-150	72.59	14.57	2.73	1.57	1.04	0.78	0.75	3.94	3.06
8940210	HS09-150dup	71.35	14.72	2.63	1.46	1.06	0.80	0.72	3.90	3.01
8940401	HS09-091	71.01	14.94	3.48	2.07	1.27	0.37	0.02	1.53	3.33
8940410	HS09-091dup	71.65	15.13	3.52	2.10	1.28	0.37	0.02	1.56	3.37
8940415	HS09-175A	67.77	24.15	0.20	0.13	0.06	0.02	0.07	-0.01	0.35
8940430	HS09-175Adup	68.99	24.31	0.19	0.13	0.06	-0.01	0.06	-0.01	0.27
8940455	MTR-002	74.06	12.62	2.39	0.72	1.51	1.38	0.03	0.06	3.97
8940470	MTR-002dup	74.84	12.34	2.49	0.83	1.49	1.41	0.03	0.05	3.89
8940539	HS12-032	58.55	16.44	6.62	3.08	3.18	2.91	4.92	4.75	1.32
8940550	HS12-032dup	57.82	16.53	6.36	2.75	3.25	2.86	4.85	4.94	1.60

Appendix L - Major and Trace Element Standards and Duplicates for Appendix E

Duplicates										
LabNum	SampleNum	TiO2_pct	MnO_pct	P2O5_pct	LOI_pct	F_ppm	CO2_pct	Total S_pct	Ag_ppm	As_ppm
Detection Limit		0.001	0.001	0.001	0.01	10	0.01	0.01	0.05. 0.1	0.5
Analysis Method		GS Maj	GS Maj	GS Maj	Grav	ISE	COUL	IR	GS Tr ES	BQ INAA
8940186	HS09-132	0.952	0.188	0.189	2.06	179	0.09	0.02	-0.1	-99
8940190	HS09-132dup	0.953	0.185	0.188	2.01	166	0.10	0.02	-0.1	-99
8940195	HS09-150	0.339	0.075	0.096	1.91	255	0.28	0.05	-0.1	1.5
8940210	HS09-150dup	0.341	0.074	0.087	1.78	240	0.28	0.01	-0.1	-99
8940401	HS09-091	0.451	0.016	0.015	3.22	-99	-99	-99	0.07	1.8
8940410	HS09-091dup	0.482	0.017	0.016	3.24	-99	-99	-99	0.09	1.8
8940415	HS09-175A	0.757	0.009	0.098	4.95	-99	-99	-99	-0.05	3.4
8940430	HS09-175Adup	0.761	-0.001	0.094	4.96	-99	-99	-99	-0.05	3.3
8940455	MTR-002	0.373	0.048	0.027	3.21	-99	-99	-99	0.75	1.0
8940470	MTR-002dup	0.367	0.047	0.027	3.25	-99	-99	-99	0.74	0.9
8940539	HS12-032	0.941	0.172	0.261	2.92	-99	-99	-99	0.16	3.0
8940550	HS12-032dup	0.890	0.170	0.263	3.36	-99	-99	-99	0.15	2.8

Appendix L - Major and Trace Element Standards and Duplicates for Appendix E

Duplicates										
LabNum	SampleNum	Au_ppb	Ba_ppm	Be_ppm	Br_ppm	Bi_ppm	Ce_ppm	Cd_ppm	Cs_ppm	Co_ppm
Detection Limit		1, 2	1	0.1	1	0.1, 0.4	0.1	0.2	0.5	1
Analysis Method		BQ INAA	GS Tr ES	GS Tr ES	BQ INAA	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS
8940186	HS09-132	-99	420	0.4	-99	-0.1	18.9	0.3	1.7	29
8940190	HS09-132dup	-99	393	0.3	-99	-0.1	21.8	0.3	2.0	32
8940195	HS09-150	-2	611	2.0	1	-0.1	65.2	-0.2	3.5	3
8940210	HS09-150dup	-99	633	2.0	-99	-0.1	60.5	-0.2	5.0	3
8940401	HS09-091	-1	961	3.1	-1	0.1	64.3	-0.2	2.3	1
8940410	HS09-091dup	-1	978	3.2	-1	0.1	68.4	-0.2	2.4	1
8940415	HS09-175A	-1	166	0.3	-1	0.2	78.9	-0.2	0.2	-1
8940430	HS09-175Adup	-1	168	0.1	-1	0.3	85.2	-0.2	0.5	1
8940455	MTR-002	7	447	1.7	-1	1.0	17.6	-0.2	2.9	2
8940470	MTR-002dup	8	442	1.7	-1	0.7	17.9	-0.2	2.9	1
8940539	HS12-032	-1	464	1.2	-1	-0.4	62.2	-0.2	-0.5	14
8940550	HS12-032dup	-1	479	1.2	-1	-0.4	61.5	-0.2	1.5	14

Appendix L - Major and Trace Element Standards and Duplicates for Appendix E

Duplicates										
LabNum	SampleNum	Cr_ppm	Cu_ppm	Dy_ppm	Eu_ppm	Er_ppm	Fe_pct	Ga_ppm	Ge_ppm	Gd_ppm
Detection Limit		1	1	0.1	0.05	0.1	0.01	1	0.5	0.1
Analysis Method		GS Tr ES	GS Tr ES	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr ES	GS Tr MS	GS Tr MS	GS Tr MS
8940186	HS09-132	6	95	3.1	1.03	1.8	6.66	22	1.6	3.2
8940190	HS09-132dup	6	97	3.5	1.14	1.9	6.69	24	1.7	3.4
8940195	HS09-150	2	1	3.2	1.03	2.0	1.94	17	1.0	3.3
8940210	HS09-150dup	2	1	4.5	1.31	2.8	1.91	18	1.5	4.8
8940401	HS09-091	1	3	7.0	2.10	4.5	2.44	19	3.7	6.8
8940410	HS09-091dup	1	3	7.5	2.10	4.8	2.47	19	1.8	7.5
8940415	HS09-175A	4	4	1.2	0.92	0.8	0.12	29	2.0	2.5
8940430	HS09-175Adup	4	4	1.3	1.01	0.8	0.12	36	2.6	2.8
8940455	MTR-002	3	11	2.9	0.50	2.0	1.82	15	1.7	2.1
8940470	MTR-002dup	2	11	2.7	0.36	2.0	1.79	14	1.7	2.2
8940539	HS12-032	-99	7	4.9	1.54	2.8	4.90	20	4.4	0.8
8940550	HS12-032dup	-99	8	4.8	1.62	2.9	4.90	20	2.7	0.8

Appendix L - Major and Trace Element Standards and Duplicates for Appendix E

Duplicates										
LabNum	SampleNum	Hf_ppm	Ho_ppm	In_ppm	La_ppm	Li_ppm	Lu_ppm	Mn_ppm	Mo_ppm	Na_pct
Detection Limit		0.2	0.1	0.1, 0.2	0.5	0.1	0.05	1	1	0.02
Analysis Method		GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr ES	GS Tr MS	GS Tr ES	BQ INAA	BQ INAA
8940186	HS09-132	1.7	0.6	-0.1	7.9	14.4	0.25	1359	-1	-99
8940190	HS09-132dup	2.2	0.7	-0.1	9.5	14.4	0.29	1369	-1	-99
8940195	HS09-150	5.6	0.7	-0.1	36.4	16.0	0.36	608	-1	2.54
8940210	HS09-150dup	4.7	0.9	-0.1	38.7	15.8	0.44	567	-1	-99
8940401	HS09-091	7.5	1.3	-0.1	28.2	11.2	0.70	134	3	1.10
8940410	HS09-091dup	7.8	1.5	0.1	31.1	11.4	0.77	136	3	1.10
8940415	HS09-175A	5.6	0.2	-0.1	43.6	4.8	0.15	4	29	0.10
8940430	HS09-175Adup	6.0	0.3	-0.1	47.2	4.2	0.20	1	28	0.10
8940455	MTR-002	4.7	0.7	0.2	10.1	5.4	0.30	415	6	0.11
8940470	MTR-002dup	4.3	0.6	-0.1	9.8	5.4	0.19	368	6	0.10
8940539	HS12-032	5.3	0.9	-0.2	31.3	24.3	0.41	1399	-1	3.80
8940550	HS12-032dup	5.5	1.0	-0.2	32.0	24.2	0.41	1390	-1	3.70

Appendix L - Major and Trace Element Standards and Duplicates for Appendix E

Duplicates										
LabNum	SampleNum	Nb_ppm	Nd_ppm	Ni_ppm	P_ppm	Pb_ppm	Pr_ppm	Rb_ppm	Sb_ppm	Sc_ppm
Detection Limit		1	0.1	1	1	1	0.05	1	0.1	0.1
Analysis Method		GS Tr MS	GS Tr MS	GS Tr ES	GS Tr ES	GS Tr ES	GS Tr MS	GS Tr ES	BQ INAA	GS Tr ES
8940186	HS09-132	2.5	12.0	5	868	-1	2.47	35	0.8	28.7
8940190	HS09-132dup	3.3	13.4	5	880	-1	2.85	39	1.8	29.0
8940195	HS09-150	10.3	24.4	-1	420	-1	6.77	105	0.3	8.0
8940210	HS09-150dup	10.1	28.2	-1	371	-1	7.58	99	1.0	7.7
8940401	HS09-091	12.7	30.6	-1	52	22	8.09	73	0.6	10.6
8940410	HS09-091dup	12.6	35.2	-1	52	22	8.50	77	0.5	10.8
8940415	HS09-175A	9.3	30.6	-1	429	19	8.39	17	3.6	2.5
8940430	HS09-175Adup	13.0	33.6	-1	426	20	9.52	12	3.3	2.9
8940455	MTR-002	9.1	8.1	1	145	69	2.04	157	0.4	8.4
8940470	MTR-002dup	7.5	7.9	-1	135	64	2.13	154	0.4	7.8
8940539	HS12-032	8.8	30.6	12	-99	12	7.60	53	0.5	20.9
8940550	HS12-032dup	20.9	29.4	12	-99	12	7.41	53	0.4	20.7

Appendix L - Major and Trace Element Standards and Duplicates for Appendix E

Duplicates										
LabNum	SampleNum	Se_ppm	Sm_ppm	Sn_ppm	Sr_ppm	Ta_ppm	Tb_ppm	Ti_ppm	Th_ppm	Tl_ppm
Detection Limit		1, 5	0.1	1	2	0.5	0.1	1	0.1	0.1
Analysis Method		BQ INAA	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr ES	GS Tr MS	GS Tr MS
8940186	HS09-132	-99	3.1	-1	537	0.1	0.5	5801	0.8	0.1
8940190	HS09-132dup	-99	3.5	1	578	0.2	0.6	5870	1.0	0.1
8940195	HS09-150	-5	4.4	1	196	0.7	0.5	2316	11.7	0.5
8940210	HS09-150dup	-99	5.6	2	129	0.8	0.8	2284	11.5	0.4
8940401	HS09-091	-1	7.3	2	91	1.5	1.0	580	6.9	-0.1
8940410	HS09-091dup	-1	7.7	2	98	0.9	1.1	572	7.5	-0.1
8940415	HS09-175A	-1	5.4	4	97	-0.5	0.2	2442	12.0	-0.1
8940430	HS09-175Adup	-1	5.5	6	107	1.5	0.2	2386	13.1	-0.1
8940455	MTR-002	-1	1.8	3	8	1.2	0.3	1446	6.2	0.9
8940470	MTR-002dup	-1	1.7	3	10	0.8	0.3	1272	6.0	0.8
8940539	HS12-032	-1	5.9	1	303	0.9	5.4	5907	7.9	-0.1
8940550	HS12-032dup	-1	6.1	2	309	1.2	5.6	5761	7.9	0.1

Appendix L - Major and Trace Element Standards and Duplicates for Appendix E

Duplicates									
LabNum	SampleNum	Tm_ppm	U_ppm	V_ppm	W_ppm	Y_ppm	Yb_ppm	Zn_ppm	Zr_ppm
Detection Limit		0.05	0.05	5	0.5, 1	1	0.1	1	1
Analysis Method		GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr MS	GS Tr ES	GS Tr ES
8940186	HS09-132	0.27	0.25	236	-0.5	16.5	1.8	64	63
8940190	HS09-132dup	0.31	0.38	250	-0.5	18.1	2.0	66	66
8940195	HS09-150	0.34	2.65	28	-0.5	20.1	2.3	58	176
8940210	HS09-150dup	0.46	2.05	19	2.2	25.2	3.1	56	173
8940401	HS09-091	0.69	1.83	9	2	37.3	4.7	136	331
8940410	HS09-091dup	0.72	1.97	8	-1	38.5	4.8	137	342
8940415	HS09-175A	0.12	1.22	58	4	5.3	0.9	3	247
8940430	HS09-175Adup	0.15	1.50	66	9	6.0	1.2	2	249
8940455	MTR-002	0.38	1.52	26	6	17.4	2.2	139	165
8940470	MTR-002dup	0.28	1.44	23	2	16.6	2.1	132	165
8940539	HS12-032	0.38	1.77	169	2	25.2	3.0	89	206
8940550	HS12-032dup	0.41	1.73	169	3	26.1	2.8	90	203

Appendix M - List of Abbreviated Terms Used in the Release

Code	Explanation
-99	Sample was not analyzed for that element
AL	Activation Laboratories Ltd. (Actlabs)
AL 1G	Activation Laboratories Cold Vapour Hg FIMS
AL ICP-ES	Activation Laboratories ICP Emission Spectrometry; utilizes Aqua Regia digestion
AL ICP-MS	Activation Laboratories ICP Mass Spectrometry; utilizes Aqua Regia digestion
AL INAA/ICP	Activation Laboratories Ultratrace 3 total digestions INAA/ICP Analysis
AL TD-ICP	Activation Laboratories ICP Emission Spectrometry; utilizes multi-acid digestion
Al TD-MS	Activation Laboratories ICP Mass Spectrometry; utilizes multi-acid digestion
Au + 23	Activation Laboratories Aqua Regia-ICP, ICP-MS, INAA package
Au + 34	Becquerel Laboratories INAA package
Au + 63	Activation Laboratories Ultratrace 3 package
BQ	Becquerel Laboratories Ltd.
COUL	Coulometry
FIMS	Flow Injection Mercury System
GS	Geological Survey of Newfoundland and Labrador
GS Maj	GS major element package; lithium metaborate fusion followed by a multi-acid digestion, analysis by ICP-OES
GS Tr ES	Geological Survey of Newfoundland and Labrador ICP Optical Emission Spectrometry; four acid digestion (HF, HClO4, HNO3 and HCl), analysis by ICP-OES
GS Tr MS	Geological Survey of Newfoundland and Labrador ICP Mass Spectrometry; four acid digestion (HF, HClO4, HNO3 and HCl), analysis by ICP-MS
ICP	Inductively Coupled Plasma
INAA	Instrumental Neutron Activation Analysis; various sources
IR	Infrared spectroscopy
ISE	Ion Specific Electrode
N/A	Not avaliable
ppb	Parts per billion
ppm	Parts per million
TD	Total Dissolution
Grav	Gravimetric
wt %	Weight percent