



**GEOLOGICAL SURVEY OF CANADA**

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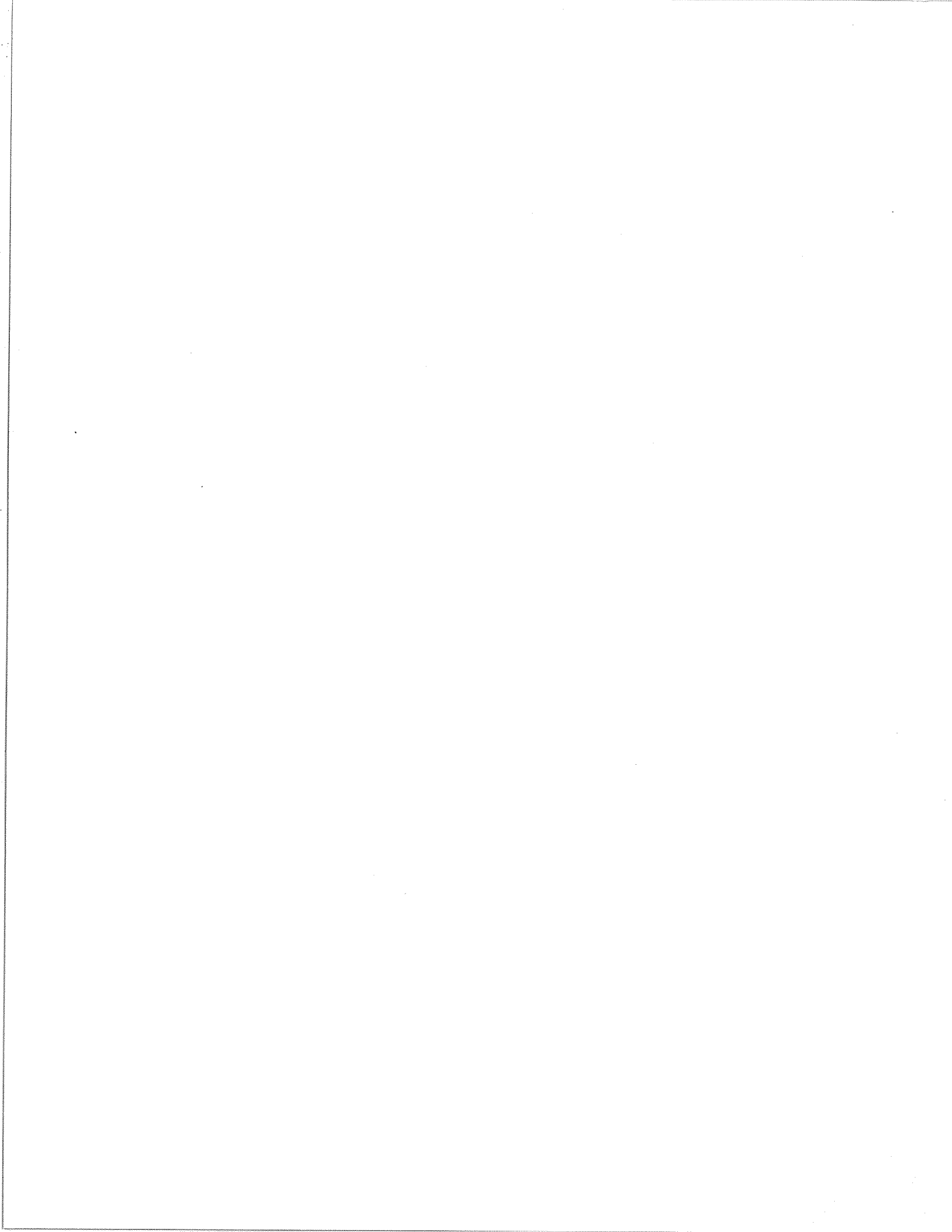
**Till geochemistry, Lac de Gras,  
District of Mackenzie,  
Northwest Territories (NTS 76D)**

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**B. Ward, L. Dredge, D. Kerr**

**1994**





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Till geochemistry, Lac de Gras,  
District of Mackenzie, Northwest Territories  
(NTS 76 D)

*A contribution to Slave Province  
National Mapping Program*

B. Ward, L. Dredge, and D. Kerr

*Terrain Sciences Division  
Geological Survey of Canada  
601 Booth St., Ottawa K1A 0E8*

1994

This open file report releases data sets relating to till geochemistry in the Lac de Gras area (NTS 76 D). As part of the Slave NATMAP (National mapping) program, Terrain Sciences Division of the Geological Survey of Canada began field mapping and sampling of Quaternary sediments in 1993, following a brief reconnaissance survey in 1992. Open File 2680 (1993) is the first surficial geology map published for the area. A total of two hundred and nine 1-kg samples were taken, twenty-six of these in 1992. These samples were collected and analyzed to characterize the composition of the glacial materials and to establish regional background concentrations of various elements. Till from mud boils was the most common sample material but a small number of fine grained esker sediment samples, indicated with a S in the data release, were also collected. Elements, sample size fractions, analytical methods and detection limits are listed below. As part of this study, approximately 80 10-kg samples were also collected for kimberlite indicator mineral analysis; these data will be released as a separate open file.

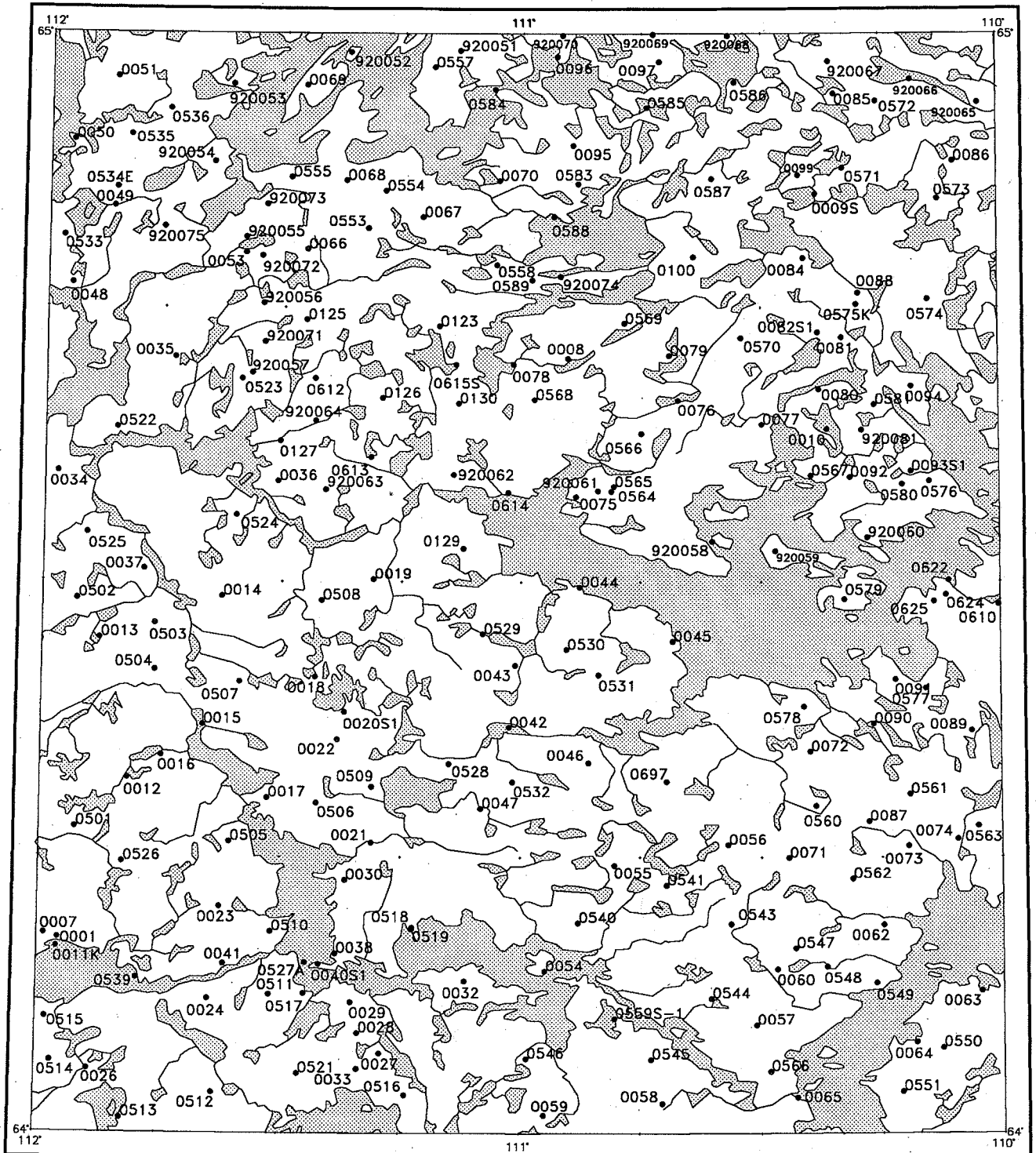
ELEMENT	Fraction	Detection Level	Method	ELEMENT	Fraction	Detection Level	Method
Ag	<63µm	5 ppm	INAA	Lu	<63µm	0.05 ppm	INAA
Ag	<2µm	0.2ppm	ICP-AES	Mg	<2µm	0.01 %	ICP-AES
Al	<2µm	0.01%	ICP-AES	Mn	<2µm	5 ppm	ICP-AES
As	<63µm	0.5 ppm	INAA	Mo	<63µm	1 ppm	INAA
As	<2µm	2 ppm	ICP-AES	Mo	<2µm	1 ppm	ICP-AES
Au	<63µm	2 ppb	INAA	Na	<63µm	0.01 %	INAA
Ba	<63µm	50 ppm	INAA	Na	<2µm	0.01 %	ICP-AES
Ba	<2µm	10 ppm	ICP-AES	Nd	<63µm	5 ppm	INAA
Be	<2µm	0.5 ppm	ICP-AES	Ni	<63µm	20 ppm	INAA
Bi	<2µm	2 ppm	ICP-AES	Ni	<2µm	1 ppm	ICP-AES
Br	<63µm	0.5 ppm	INAA	Pb	<2µm	2 ppm	ICP-AES
Ca	<63µm	1 %	INAA	Rb	<63µm	5 ppm	INAA
Ca	<2µm	0.01 %	ICP-AES	Sb	<63µm	0.1 ppm	INAA
Cd	<2µm	0.5 ppm	ICP-AES	Sb	<2µm	2 ppm	ICP-AES
Ce	<63µm	3 ppm	INAA	Sc	<63µm	0.1 ppm	INAA
Co	<63µm	1 ppm	INAA	Sc	<2µm	1 ppm	ICP-AES
Co	<2µm	1 ppm	ICP-AES	Se	<63µm	5 ppm	INAA
Cr	<63µm	5 ppm	INAA	Sm	<63µm	0.1 ppm	INAA
Cr	<2µm	1 ppm	ICP-AES	Sn	<63µm	100 ppm	INAA
Cs	<63µm	1 ppm	INAA	Sr	<63µm	500 ppm	INAA
Cu	<2µm	1 ppm	ICP-AES	Sr	<2µm	1 ppm	ICP-AES
Eu	<63µm	0.2 ppm	INAA	Ta	<63µm	0.5 ppm	INAA
Fe	<63µm	0.01 %	INAA	Tb	<63µm	0.5 ppm	INAA
Fe	<2µm	0.01 %	ICP-AES	Th	<63µm	0.2 ppm	INAA
Ga	<2µm	10 ppm	ICP-AES	Ti	<2µm	0.01 %	ICP-AES
Hf	<63µm	1 ppm	INAA	U	<63µm	0.5 ppm	INAA
Hg	<63µm	1 ppm	INAA	V	<2µm	1 ppm	ICP-AES
Hg	<2µm	1 ppm	ICP-AES	W	<63µm	1 ppm	INAA
Ir	<63µm	5 ppm	INAA	Yb	<63µm	0.2 ppm	INAA
K	<2µm	0.01 %	ICP-AES	Zn	<63µm	50 ppm	INAA
La	<63µm	0.5 ppm	INAA	Zn	<2µm	2 ppm	ICP-AES
La	<2µm	10 ppm	ICP-AES				

Sample locations in UTM coordinates (Table 1) were determined in the field using a computerized global positioning system (GPS). Till samples were collected from depths of about 0.5m from hand dug pits. This depth corresponds to a position well below the soil layer, but above the summer frost table.

Till samples were centrifuged and decanted at the Terrain Sciences Sedimentology Laboratory, Geological Survey of Canada, to obtain the <2  $\mu\text{m}$  (clay) fraction, which was sent to Chemex Labs, Mississauga. These clay-size separates were analyzed for thirty-two trace and minor elements by inductively coupled plasma and atomic emission spectroscopy (ICP-AES) after leaching with an aqua-regia solution. Aqua-regia digestion may be incomplete for aluminum, barium, beryllium, calcium, chromium, gallium, lanthanum, magnesium, potassium, scandium, sodium, strontium, thallium, titanium, and tungsten. Geochemical analyses are reported in Table 2, including data for duplicate samples and one laboratory standard. In all samples, thallium, uranium and tungsten concentrations were below the detection limit of 10 ppm, and thus were not included in the table. In addition, phosphorous concentrations were not listed since they were all very high with many exceeding maximum detection limits, likely resulting from contamination during processing

The < 63  $\mu\text{m}$  (silt and clay) fraction of the till was prepared by dry sieving in the Terrain Sciences Sedimentology Laboratory, Geological Survey of Canada, and sent to Actlabs, Ancaster, for irradiation and analysis using instrumental neutron activation analysis (INAA) on approximately 30 gm aliquots. Geochemical results for thirty-five elements are presented in Table 3, including data for duplicate samples and one laboratory standard. The 26 samples taken in 1992 were not analyzed using this technique.

Digital copies of this report can be obtained from Geological Survey of Canada publications, Ottawa (613-995-3268).



**SAMPLE LOCATIONS**  
**LAC DE GRAS AREA**



UTM Projection  
 Zone 12

### 1. Sample Locations

Sample	Zone	Easting	Northing	Sample	Zone	Easting	Northing
93BCW0001	12	453500	7116760	93BCW0050	12	454968	7197649
93BCW0007	12	452120	7117220	93BCW0051	12	459339	7204055
93BCW0008	12	504631	7175262	93BCW0053	12	472255	7186120
93BCW0010	12	530495	7168200	93BCW0054	12	502539	7113171
93BCW0012	12	460471	7132889	93BCW0055	12	509516	7123864
93BCW0013	12	457670	7147078	93BCW0056	12	520871	7126022
93BCW0014	12	469951	7151195	93BCW0057	12	523832	7107778
93BCW0015	12	468018	7138236	93BCW0058	12	514482	7099807
93BCW0016	12	463884	7135153	93BCW0059	12	502510	7098613
93BCW0017	12	474488	7130799	93BCW0062	12	536541	7118043
93BCW0018	12	479268	7142996	93BCW0063	12	546472	7111492
93BCW0019	12	485116	7152847	93BCW0064	12	539938	7106199
93BCW0021	12	484943	7126190	93BCW0065	12	527991	7100516
93BCW0022	12	481500	7136620	93BCW0066	12	478381	7186429
93BCW0023	12	469724	7119788	93BCW0067	12	489987	7189651
93BCW0024	12	468556	7110494	93BCW0068	12	482243	7193409
93BCW0026	12	456500	7103500	93BCW0069	12	478227	7203070
93BCW0027	12	485830	7104849	93BCW0070	12	497669	7193342
93BCW0028	12	483573	7106896	93BCW0071	12	526970	7124742
93BCW0029	12	482909	7110014	93BCW0072	12	529060	7135503
93BCW0030	12	482289	7122395	93BCW0073	12	538988	7126074
93BCW0031	12	495172	7122057	93BCW0074	12	543980	7126835
93BCW0032	12	494418	7112165	93BCW0075	12	505476	7161180
93BCW0033	12	483552	7103289	93BCW0077	12	523959	7168606
93BCW0034	12	453413	7163994	93BCW0078	12	499166	7174632
93BCW0035	12	465228	7175533	93BCW0079	12	514742	7175565
93BCW0036	12	475496	7162836	93BCW0080	12	529663	7172222
93BCW0037	12	462121	7154042	93BCW0081	12	531914	7177533
93BCW0038	12	481328	7114974	93BCW0082	12	529527	7178018
93BCW0041	12	470124	7114028	93BCW0084	12	528022	7185577
93BCW0042	12	498852	7137846	93BCW0085	12	530930	7202290
93BCW0043	12	499473	7144106	93BCW0086	12	542970	7195602
93BCW0044	12	505921	7152038	93BCW0087	12	535009	7128512
93BCW0045	12	515247	7146571	93BCW0088	12	533554	7182067
93BCW0046	12	506887	7134239	93BCW0089	12	545310	7137809
93BCW0047	12	496024	7129652	93BCW0090	12	535410	7138386
93BCW0048	12	454853	7183156	93BCW0091	12	537574	7142900
93BCW0049	12	459071	7190937				

# 1. Sample Locations

Sample	Zone	Easting	Northing	Sample	Zone	Easting	Northing
93BCW0092	12	532830	7163319	93DU0527A	12	478298	7114092
93BCW0093	12	538944	7163975	93DU0528	12	492798	7134130
93BCW0094	12	538932	7172641	93DU0529	12	496174	7147297
93BCW0095	12	505031	7196888	93DU0530	12	504628	7145727
93BCW0096	12	503382	7205910	93DU0531	12	507866	7143167
93BCW0097	12	513545	7205417	93DU0532	12	499222	7132307
93BCW0099	12	527418	7193992	93DU0533	12	453996	7187969
93BCW0100	12	517063	7185619	93DU0535	12	460726	7198154
93BCW0123	12	491684	7178534	93DU0536	12	464634	7200761
93BCW0125	12	478342	7179249	93DU0538	12	465795	7183056
93BCW0126	12	485953	7171239	93DU0539	12	461390	7112680
93BCW0127	12	475723	7166913	93DU0540	12	505875	7118041
93BCW0128	12	448266	7158786	93DU0541	12	514757	7121860
93BCW0129	12	494177	7155948	93DU0543	12	521211	7117987
93BCW0130	12	493649	7170682	93DU0544	12	519292	7110433
93DU0501	12	455201	7127994	93DU0545	12	513317	7104243
93DU0502	12	455384	7151066	93DU0546	12	500712	7104307
93DU0503	12	463236	7148510	93DU0547	12	527711	7115594
93DU0504	12	463233	7143819	93DU0548	12	530874	7113772
93DU0505	12	470695	7126403	93DU0549	12	535860	7112180
93DU0506	12	479401	7130251	93DU0550	12	542630	7105664
93DU0507	12	471724	7142548	93DU0551	12	538587	7101194
93DU0508	12	479900	7150721	93DU0553	12	484465	7188509
93DU0509	12	484972	7131834	93DU0554	12	486224	7192327
93DU0510	12	474843	7117235	93DU0555	12	476757	7193754
93DU0511	12	474712	7110871	93DU0557	12	491080	7204867
93DU0512	12	469023	7101002	93DU0558	12	497450	7184760
93DU0513	12	459831	7098518	93DU0559S1	12	509599	7108358
93DU0514	12	452793	7104345	93DU0559S2	12	509599	7108358
93DU0515	12	452271	7108760	93DU0559S6	12	509599	7108358
93DU0516	12	488396	7100625	93DU0560	12	529677	7130041
93DU0517	12	478183	7110956	93DU0561	12	539115	7131304
93DU0518	12	489081	7117576	93DU0562	12	533400	7122662
93DU0519	12	489081	7117423	93DU0563	12	546035	7128204
93DU0521	12	477564	7102890	93DU0564	12	509001	7161730
93DU0522	12	459400	7168416	93DU0565	12	509250	7162214
93DU0523	12	471896	7173280	93DU0566	12	525273	7103122
93DU0524	12	471339	7159432	93DU0567	12	528902	7163430
93DU0525	12	456366	7157751	93DU0568	12	501284	7171052
93DU0526	12	459954	7124435	93DU0569	12	510260	7178840



### 1. Sample Locations

Sample	Zone	Easting	Northing	Sample	Zone	Easting	Northing
93DU0570	12	521826	7177395	93DU0585	12	512318	7200739
93DU0571	12	531867	7194758	93DU0586	12	520977	7203367
93DU0572	12	535164	7201576	93DU0587	12	518840	7193573
93DU0573	12	541433	7191766	93DU0588	12	503175	7189649
93DU0574	12	540511	7181511	93DU0589	12	501009	7183216
93DU0576	12	540793	7163011	93DU0611	12	485672	7180496
93DU0577	12	540602	7142042	93DU0613	12	484798	7165234
93DU0578	12	528401	7140072	93DU0614	12	498649	7161589
93DU0579	12	532383	7150941	93DU0622	12	542852	7152993
93DU0580	12	538088	7162650	93DU0624	12	542600	7151500
93DU0581	12	535240	7170734	93DU0625	12	541380	7150830
93DU0583	12	505571	7193008	93DU0697	12	514732	7132391
92DDA0051	12	493637	7206521	92DDA0064	12	479236	7168937
92DDA0052	12	482594	7206390	92DDA0065	12	545405	7201570
92DDA0053	12	470933	7203222	92DDA0066	12	538599	7203832
92DDA0054	12	469093	7195352	92DDA0067	12	530380	7205563
92DDA0055	12	472280	7187685	92DDA0068	12	520300	7208119
92DDA0056	12	474057	7180964	92DDA0069	12	512917	7208204
92DDA0057	12	472908	7173883	92DDA0070	12	503923	7208083
92DDA0058	12	519110	7156719	92DDA0071	12	474184	7177019
92DDA0059	12	525414	7155784	92DDA0072	12	473901	7185790
92DDA0060	12	534631	7157221	92DDA0073	12	474356	7191014
92DDA0061	12	507663	7161784	92DDA0074	12	503880	7183577
92DDA0062	12	493141	7163430	92DDA0075	12	464103	7188804
92DDA0063	12	480240	7161939	92DDA0081	12	533988	7168139

2. ICP-AES (<2 μm)

Sample	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm
Detection limit:	0.2	0.01	2	10	0.5	2	0.01	0.5	1	1	1	0.01	10	1
92DDA0051	<0.2	4.20	40	190	<0.5	<2	0.17	<5	25	143	135	5.83	<10	<1
92DDA0052	0.2	2.43	18	100	<0.5	<2	0.16	<5	16	76	41	3.33	<10	<1
92DDA0053	0.2	2.64	20	110	<0.5	<2	0.23	<5	18	73	49	3.36	<10	<1
92DDA0054	0.2	3.19	10	100	<0.5	<2	0.11	<5	13	75	56	3.72	<10	<1
92DDA0055	<0.2	2.24	24	100	<0.5	<2	0.14	<5	12	62	48	2.41	<10	<1
92DDA0056	<0.2	2.95	34	120	<0.5	<2	0.11	<5	27	84	99	3.37	<10	<1
92DDA0057	<0.2	4.28	32	210	0.5	<2	0.13	<5	31	155	104	5.58	<10	1
92DDA0058	0.4	5.01	48	200	0.5	<2	0.16	<5	36	127	114	5.08	<10	<1
92DDA0059	<0.2	3.96	24	270	<0.5	<2	0.18	<5	33	151	116	5.68	<10	<1
92DDA0060	0.2	4.90	50	190	<0.5	<2	0.10	<5	27	149	113	6.57	<10	<1
92DDA0061	0.2	4.98	114	240	<0.5	<2	0.07	<5	36	180	212	7.30	<10	<1
92DDA0062	0.2	2.44	50	160	<0.5	<2	0.09	<5	14	82	87	3.17	<10	<1
92DDA0063	<0.2	3.60	58	180	<0.5	<2	0.11	<5	24	109	121	4.20	<10	<1
92DDA0064	<0.2	3.96	24	120	<0.5	<2	0.10	<5	18	104	60	4.64	<10	<1
92DDA0065	0.2	4.47	48	200	1.0	<2	0.13	<5	32	150	122	5.89	<10	<1
92DDA0066	<0.2	3.76	38	200	1.0	<2	0.14	<5	27	131	104	4.99	<10	<1
92DDA0067	0.2	3.78	20	140	0.5	<2	0.10	<5	18	149	80	4.42	<10	<1
92DDA0068	<0.2	3.38	42	150	<0.5	<2	0.12	<5	22	105	115	4.20	<10	<1
92DDA0069	<0.2	4.43	36	190	<0.5	<2	0.14	<5	27	141	106	5.87	<10	<1
92DDA0070	<0.2	3.38	26	150	<0.5	<2	0.16	<5	24	93	95	4.15	<10	<1
92DDA0071	0.2	3.38	24	110	<0.5	<2	0.11	<5	17	77	68	3.65	<10	1
92DDA0072	0.2	2.67	38	60	0.5	<2	0.06	<5	8	57	109	2.62	<10	1
92DDA0073	<0.2	4.82	48	180	<0.5	<2	0.12	<5	35	142	175	6.06	<10	<1
92DDA0074	<0.2	4.00	60	140	<0.5	<2	0.10	<5	29	121	82	5.30	<10	<1
92DDA0075	0.2	3.71	20	120	<0.5	<2	0.10	<5	15	109	71	4.25	<10	<1
92DDA0081	<0.2	3.68	24	170	0.5	<2	0.17	<5	24	109	72	4.56	<10	<1
93BCW0001	0.2	2.87	68	120	<0.5	<2	0.30	<5	23	76	151	3.69	10	1
93BCW0007	0.4	4.80	78	130	<0.5	<2	0.25	<5	33	101	189	5.08	30	<1
93BCW0008	<0.2	4.79	20	250	<0.5	<2	0.27	<5	32	149	96	6.05	30	<1
93BCW0010	<0.2	4.62	44	140	<0.5	<2	0.08	<5	29	125	130	6.71	20	<1
93BCW0012	<0.2	2.51	82	120	<0.5	2	0.25	<5	19	69	105	3.18	10	<1
93BCW0013	0.2	5.43	134	160	<0.5	<2	0.15	<5	47	122	244	5.86	20	1

2. ICP-AES (<2 μm)

Sample	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	V ppm	Zn ppm
Detection limit	0.01	10	0.01	5	1	0.01	1	2	2	1	1	0.01	1	2
92DDA0051	1.13	30	1.77	505	3	2.99	90	20	<2	12	13	0.02	101	152
92DDA0052	0.45	20	0.91	260	1	>5.00	38	8	<2	6	10	0.03	58	76
92DDA0053	0.57	30	0.99	325	1	>5.00	41	16	<2	7	14	0.03	57	84
92DDA0054	0.44	30	0.80	275	4	>5.00	29	20	<2	7	12	0.09	69	70
92DDA0055	0.46	10	0.70	205	1	>5.00	34	8	<2	5	10	0.02	41	60
92DDA0056	0.57	20	1.01	335	3	>5.00	77	16	<2	7	9	0.03	52	86
92DDA0057	1.00	60	2.01	460	4	1.40	93	26	<2	12	15	0.03	92	128
92DDA0058	0.70	20	1.40	535	3	1.01	81	14	<2	10	10	0.14	79	126
92DDA0059	1.24	30	2.06	590	2	0.79	93	16	<2	13	13	0.15	98	148
92DDA0060	0.79	20	1.54	435	3	0.87	75	14	<2	12	11	0.15	117	122
92DDA0061	1.20	20	2.01	510	7	1.97	106	18	<2	15	7	0.06	113	146
92DDA0062	0.64	10	0.89	240	3	>5.00	38	6	<2	7	9	0.04	55	62
92DDA0063	0.76	20	1.24	375	3	>5.00	70	8	<2	9	8	0.04	65	84
92DDA0064	0.43	20	1.04	295	4	4.85	49	14	<2	8	8	0.02	76	86
92DDA0065	1.09	20	1.80	565	3	2.18	86	16	<2	13	10	0.07	99	154
92DDA0066	1.10	20	1.61	505	3	>5.00	79	12	<2	12	10	0.03	90	140
92DDA0067	0.59	30	1.48	265	1	4.16	55	10	<2	12	10	0.06	93	96
92DDA0068	0.74	20	1.18	330	3	>5.00	60	14	<2	10	10	0.03	75	112
92DDA0069	0.97	20	1.67	445	3	2.70	87	12	<2	12	11	0.02	106	136
92DDA0070	0.74	20	1.24	405	3	4.82	51	14	<2	8	12	0.02	67	110
92DDA0071	0.58	20	0.94	290	3	>5.00	49	20	<2	6	8	0.04	55	108
92DDA0072	0.29	10	0.50	135	4	>5.00	29	10	<2	4	7	0.01	37	50
92DDA0073	0.86	20	1.64	455	5	2.75	92	16	<2	11	11	0.07	103	154
92DDA0074	0.47	20	1.39	345	4	1.72	75	8	<2	8	9	0.08	85	110
92DDA0075	0.48	20	1.03	245	3	>5.00	42	8	<2	8	9	0.12	72	86
92DDA0081	0.95	30	1.47	470	1	2.25	67	14	<2	10	13	0.02	83	128
93BCW0001	0.49	30	1.05	430	2	3.05	59	8	2	7	12	0.01	66	92
93BCW0007	0.48	40	1.12	465	1	2.23	80	12	<2	10	17	0.06	86	86
93BCW0008	1.20	60	2.66	685	<1	1.78	79	10	<2	11	24	0.02	124	150
93BCW0010	0.69	20	1.38	385	3	2.34	83	16	<2	9	10	0.02	133	132
93BCW0012	0.52	30	0.96	295	1	3.98	48	8	4	6	14	0.04	51	70
93BCW0013	0.59	40	1.35	675	8	1.75	107	28	<2	11	10	0.06	89	182

2. ICP-AES (<2 µm)

Sample	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm
93BCW0014	0.8	5.52	102	140	<0.5	<2	0.12	<5	33	116	155	4.80	20	1
93BCW0015	<0.2	4.50	122	150	<0.5	<2	0.21	<5	35	126	199	5.43	20	1
93BCW0016	<0.2	5.70	88	130	<0.5	<2	0.15	<5	22	119	145	5.36	20	<1
93BCW0017	<0.2	3.48	76	150	<0.5	<2	0.29	<5	29	123	194	4.74	20	1
93BCW0018	<0.2	4.65	118	210	<0.5	<2	0.19	<5	30	145	181	6.37	20	<1
93BCW0019	<0.2	5.09	90	250	<0.5	<2	0.17	<5	28	175	206	6.74	20	1
93BCW0021	<0.2	4.92	86	160	<0.5	<2	0.26	<5	36	130	167	5.67	20	<1
93BCW0022	<0.2	4.82	66	200	<0.5	<2	0.31	<5	33	131	112	5.05	10	1
93BCW0023	0.2	6.20	104	120	<0.5	<2	0.17	<5	34	131	218	6.71	20	<1
93BCW0024	0.2	6.03	120	140	<0.5	<2	0.22	<5	42	126	206	5.58	30	2
93BCW0026	<0.2	7.07	46	180	<0.5	<2	0.15	<5	28	155	166	6.69	30	<1
93BCW0027	<0.2	4.06	126	160	<0.5	<2	0.23	<5	45	104	162	4.44	10	<1
93BCW0028	<0.2	3.99	50	160	<0.5	<2	0.29	<5	27	112	174	4.40	20	1
93BCW0029	<0.2	5.01	70	170	<0.5	<2	0.24	<5	38	137	196	5.47	20	<1
93BCW0030	<0.2	4.48	90	180	<0.5	<2	0.30	<5	39	124	184	5.32	20	<1
93BCW0031	<0.2	3.53	64	150	<0.5	<2	0.24	<5	32	92	92	3.86	10	<1
93BCW0032	<0.2	4.47	60	190	<0.5	<2	0.30	<5	30	129	191	5.39	20	<1
93BCW0033	<0.2	4.85	62	150	<0.5	<2	0.20	<5	25	125	160	5.67	20	<1
93BCW0034	<0.2	3.96	12	140	<0.5	<2	0.32	<5	25	109	214	5.09	20	<1
93BCW0035	<0.2	4.72	1	210	<0.5	<2	0.19	<5	26	170	124	6.27	20	<1
93BCW0036	<0.2	5.86	48	260	<0.5	<2	0.20	<5	47	193	209	7.18	20	<1
93BCW0037	<0.2	5.26	90	170	<0.5	<2	0.23	<5	28	138	189	6.37	20	3
93BCW0038	0.2	5.05	98	140	<0.5	<2	0.25	<5	42	128	194	5.67	20	<1
93BCW0041	<0.2	5.47	22	60	<0.5	<2	0.11	<5	9	71	46	4.15	10	<1
93BCW0042	0.2	1.99	52	100	<0.5	<2	0.20	<5	16	65	82	2.87	10	<1
93BCW0043	<0.2	5.13	92	170	<0.5	<2	0.18	<5	41	123	178	5.26	10	<1
93BCW0044	<0.2	4.17	64	170	<0.5	<2	0.24	<5	24	127	141	5.54	10	<1
93BCW0045	<0.2	4.39	114	140	<0.5	<2	0.15	<5	57	108	237	4.88	10	<1
93BCW0046	<0.2	4.84	74	220	<0.5	<2	0.19	<5	40	151	203	6.03	20	1
93BCW0047	<0.2	4.05	56	190	<0.5	<2	0.25	<5	30	128	173	5.28	20	2
93BCW0048	<0.2	4.23	26	160	<0.5	<2	0.26	<5	29	115	111	5.02	20	<1
93BCW0049	<0.2	4.68	22	210	<0.5	<2	0.21	<5	32	135	126	5.59	20	<1
93BCW0050	0.2	3.72	40	160	<0.5	<2	0.26	<5	24	102	91	4.83	20	2
93BCW0051	<0.2	3.38	20	170	<0.5	<2	0.31	<5	25	103	88	4.88	20	<1
93BCW0053	0.2	1.66	26	120	<0.5	2	0.12	<5	11	41	65	1.99	10	1

2. ICP-AES (<2 µm)

Sample	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	V ppm	Zn ppm
93BCW0014	0.57	30	1.18	440	4	2.20	86	22	<2	10	9	0.07	73	104
93BCW0015	0.71	40	1.53	520	3	0.62	89	20	<2	11	11	0.15	92	134
93BCW0016	0.42	30	1.13	295	4	0.44	67	12	<2	10	11	0.17	88	82
93BCW0017	0.81	50	1.52	440	2	0.62	95	14	<2	11	14	0.11	81	154
93BCW0018	0.73	40	1.56	440	7	1.02	94	20	2	12	18	0.10	107	110
93BCW0019	1.00	30	1.90	470	6	0.49	104	14	<2	13	18	0.20	119	134
93BCW0021	0.62	40	1.50	510	4	0.46	105	16	<2	11	16	0.17	98	122
93BCW0022	0.79	30	1.59	495	2	0.31	91	14	<2	11	18	0.21	93	110
93BCW0023	0.38	30	1.23	410	3	0.61	105	20	<2	11	14	0.22	115	96
93BCW0024	0.38	40	1.35	500	1	0.64	123	18	2	13	17	0.19	95	92
93BCW0026	0.58	30	1.42	370	3	0.67	76	12	<2	15	14	0.12	120	98
93BCW0027	0.58	30	1.20	650	1	1.58	83	14	<2	9	13	0.04	66	92
93BCW0028	0.69	30	1.48	460	<1	0.46	89	12	<2	11	16	0.13	77	100
93BCW0029	0.71	30	1.60	490	1	0.42	117	10	<2	13	14	0.17	94	128
93BCW0030	0.79	40	1.46	490	2	0.88	112	16	8	11	21	0.15	90	118
93BCW0031	0.57	30	1.21	415	1	1.74	77	14	<2	8	14	0.02	61	96
93BCW0032	0.77	30	1.62	480	2	0.66	88	10	<2	12	17	0.11	97	200
93BCW0033	0.52	40	1.34	375	2	0.54	81	12	<2	11	13	0.18	102	92
93BCW0034	0.93	70	1.58	550	6	0.95	85	42	<2	12	14	0.08	93	134
93BCW0035	1.39	50	2.40	565	2	0.40	94	26	<2	14	12	0.25	116	176
93BCW0036	1.18	30	2.26	760	6	0.48	133	22	<2	16	14	0.19	133	192
93BCW0037	0.82	50	1.66	510	3	0.53	96	28	4	13	16	0.19	110	118
93BCW0038	0.51	40	1.19	535	2	0.69	111	14	<2	11	17	0.17	99	106
93BCW0041	0.15	30	0.62	200	2	1.35	22	8	<2	3	13	0.08	75	54
93BCW0042	0.35	30	0.83	275	2	0.55	36	6	<2	4	14	0.03	44	70
93BCW0043	0.63	30	1.42	485	3	0.99	108	14	<2	10	13	0.12	79	116
93BCW0044	0.63	30	1.54	425	3	1.14	78	8	<2	10	13	0.10	91	122
93BCW0045	0.57	30	1.34	720	2	1.33	127	16	<2	8	10	0.07	68	132
93BCW0046	1.02	30	1.78	500	2	0.47	116	14	<2	13	12	0.16	103	146
93BCW0047	0.86	40	1.61	505	6	0.70	79	16	<2	12	17	0.05	94	130
93BCW0048	0.53	40	1.48	540	3	1.50	72	12	<2	10	19	0.03	86	100
93BCW0049	1.27	40	1.99	510	1	1.17	88	14	<2	12	15	0.03	109	160
93BCW0050	0.63	40	1.39	440	2	3.51	72	18	4	11	20	0.01	92	114
93BCW0051	0.82	60	1.66	530	1	0.99	59	18	<2	11	21	0.05	87	132
93BCW0053	0.27	30	0.54	175	1	2.87	28	12	<2	3	16	0.01	34	40

2. ICP-AES (<2 μm)

Sample	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm
93BCW0054	<0.2	3.92	50	110	<0.5	<2	0.15	<5	17	99	86	4.18	10	2
93BCW0055	0.4	4.97	118	170	<0.5	<2	0.29	<5	40	128	217	5.72	20	<1
93BCW0056	0.2	4.11	68	280	<0.5	<2	0.25	<5	27	102	150	4.90	20	<1
93BCW0057	<0.2	5.26	44	170	<0.5	<2	0.13	<5	31	160	165	6.82	20	1
93BCW0058	<0.2	3.43	120	310	<0.5	<2	0.24	<5	27	111	206	5.15	20	<1
93BCW0059	<0.2	4.26	114	200	<0.5	<2	0.22	<5	25	119	200	5.39	20	1
93BCW0062	<0.2	2.75	38	120	<0.5	<2	0.19	<5	15	81	119	3.51	10	1
93BCW0063	<0.2	3.63	108	150	<0.5	<2	0.29	<5	24	82	200	4.31	10	<1
93BCW0064	<0.2	3.79	82	190	<0.5	<2	0.31	<5	23	118	156	4.77	20	<1
93BCW0065	<0.2	4.85	60	190	<0.5	<2	0.25	<5	46	128	196	5.48	20	<1
93BCW0066	<0.2	5.10	90	230	<0.5	<2	0.20	<5	32	176	182	6.65	20	2
93BCW0067	<0.2	5.16	52	200	<0.5	<2	0.19	<5	37	170	194	7.08	20	<1
93BCW0068	<0.2	3.85	16	220	<0.5	<2	0.22	<5	29	131	145	5.39	20	1
93BCW0069	<0.2	5.15	18	190	<0.5	<2	0.26	<5	38	122	142	5.66	20	<1
93BCW0070	<0.2	5.06	20	240	<0.5	<2	0.23	<5	48	134	167	5.60	20	<1
93BCW0071	<0.2	4.67	72	200	<0.5	<2	0.24	<5	24	125	157	5.12	20	<1
93BCW0072	<0.2	3.93	102	180	<0.5	<2	0.22	<5	30	128	175	5.40	20	<1
93BCW0073	<0.2	4.04	46	130	<0.5	<2	0.26	<5	27	82	88	3.95	10	<1
93BCW0074	<0.2	3.79	92	220	<0.5	<2	0.17	<5	26	132	149	5.26	10	1
93BCW0075	<0.2	4.41	146	240	<0.5	<2	0.14	<5	42	146	212	6.28	20	<1
93BCW0077	<0.2	4.17	38	180	<0.5	<2	0.14	<5	38	115	93	5.26	20	<1
93BCW0078	<0.2	5.38	66	190	<0.5	<2	0.15	<5	49	159	161	6.80	30	<1
93BCW0079	<0.2	5.87	44	280	<0.5	<2	0.15	<5	34	162	128	6.59	30	1
93BCW0080	<0.2	4.66	16	210	<0.5	<2	0.18	<5	26	135	115	6.22	30	<1
93BCW0081	<0.2	4.37	32	240	<0.5	<2	0.22	<5	28	156	110	6.16	20	<1
93BCW0082	<0.2	6.38	38	370	<0.5	2	0.26	<5	38	139	155	5.44	20	1
93BCW0084	<0.2	6.53	1	410	<0.5	2	0.39	<5	32	146	206	5.46	30	2
93BCW0085	<0.2	4.72	40	210	<0.5	<2	0.26	<5	44	148	156	6.33	20	<1
93BCW0086	<0.2	5.59	64	330	<0.5	<2	0.24	<5	30	194	149	7.47	30	1
93BCW0087	<0.2	5.09	34	180	<0.5	<2	0.21	<5	42	116	70	5.44	20	<1
93BCW0088	<0.2	4.44	22	220	<0.5	<2	0.26	<5	24	128	70	6.03	30	<1
93BCW0089	<0.2	5.04	32	200	<0.5	<2	0.20	<5	19	137	124	5.73	20	<1
93BCW0090	<0.2	3.53	78	170	<0.5	<2	0.27	<5	34	108	136	4.94	20	<1
93BCW0091	<0.2	4.22	20	160	<0.5	<2	0.28	<5	25	136	117	5.51	20	<1
93BCW0092	<0.2	4.04	34	240	<0.5	<2	0.23	<5	34	144	109	5.51	20	<1

2. ICP-AES (<2 μm)

Sample	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	V ppm	Zn ppm
93BCW0054	0.40	20	0.77	285	2	2.10	44	8	<2	7	10	0.08	63	72
93BCW0055	0.64	40	1.48	495	3	1.18	116	14	<2	11	18	0.04	87	104
93BCW0056	0.70	80	1.35	440	2	2.58	65	28	4	9	35	0.03	81	94
93BCW0057	0.70	30	1.70	440	7	0.60	102	20	<2	13	10	0.18	128	130
93BCW0058	0.91	70	1.43	430	3	1.86	69	30	<2	10	37	0.02	79	106
93BCW0059	0.75	30	1.45	430	5	1.99	79	18	4	11	14	0.03	90	100
93BCW0062	0.46	20	0.90	275	3	1.33	49	8	<2	7	11	0.06	62	64
93BCW0063	0.50	40	0.93	390	3	1.04	57	12	<2	8	28	0.09	61	74
93BCW0064	0.87	30	1.59	445	<1	0.55	77	8	<2	11	17	0.08	82	108
93BCW0065	0.72	30	1.56	560	3	0.53	131	14	<2	11	15	0.15	94	124
93BCW0066	1.16	40	2.22	515	3	0.98	100	18	2	13	15	0.04	127	170
93BCW0067	1.08	30	2.21	480	3	0.59	140	18	<2	13	14	0.16	122	188
93BCW0068	1.19	30	1.94	515	2	0.77	86	12	<2	13	13	0.07	100	172
93BCW0069	0.84	40	1.86	640	2	0.58	83	20	<2	11	17	0.17	104	142
93BCW0070	1.02	20	1.92	880	2	0.76	105	18	<2	11	15	0.05	101	188
93BCW0071	0.77	30	1.47	465	2	1.28	73	10	<2	11	17	0.02	88	98
93BCW0072	0.88	20	1.64	400	2	1.34	100	12	<2	11	14	0.03	84	108
93BCW0073	0.53	30	0.93	650	3	1.68	57	16	4	7	15	0.10	59	88
93BCW0074	1.08	20	1.62	430	3	1.63	82	10	<2	11	11	0.06	93	118
93BCW0075	1.05	20	1.84	605	4	2.03	106	18	<2	12	10	0.01	104	144
93BCW0077	0.73	20	1.25	1100	4	1.78	75	20	<2	9	12	0.04	99	118
93BCW0078	0.78	30	1.80	655	5	0.53	106	20	<2	13	13	0.17	137	160
93BCW0079	1.38	30	2.16	705	2	0.37	97	18	<2	13	15	0.27	119	186
93BCW0080	1.33	30	1.96	590	1	0.44	75	14	<2	14	14	0.22	113	220
93BCW0081	1.34	30	2.20	625	1	0.40	90	16	<2	14	14	0.21	112	168
93BCW0082	1.53	20	1.78	720	1	1.38	116	18	<20	11	44	0.24	98	130
93BCW0084	2.03	30	2.05	575	3	1.32	102	22	<20	12	59	0.26	100	148
93BCW0085	0.93	30	2.04	605	1	0.59	115	16	<2	12	18	0.12	117	176
93BCW0086	1.75	30	2.54	680	3	0.41	108	18	<2	19	17	0.28	150	220
93BCW0087	0.95	20	2.29	730	1	0.76	68	24	<2	9	13	0.07	82	158
93BCW0088	1.43	30	2.01	610	<1	0.48	60	16	<2	14	16	0.19	104	178
93BCW0089	0.82	20	1.50	375	3	0.47	61	12	<2	12	14	0.20	108	108
93BCW0090	0.86	20	1.40	530	2	0.70	77	16	<2	10	14	0.09	78	118
93BCW0091	0.78	30	1.70	480	3	0.50	67	10	<2	11	17	0.17	105	138
93BCW0092	1.13	20	1.95	650	<1	0.45	87	8	<2	13	13	0.14	103	172

2. ICP-AES (<2 µm)

Sample	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm
93BCW0093	<0.2	5.73	78	240	<0.5	<2	0.17	<5	57	141	217	6.09	20	<1
93BCW0094	<0.2	4.27	24	190	<0.5	<2	0.27	<5	26	147	94	6.08	30	<1
93BCW0095	<0.2	3.72	14	200	<0.5	<2	0.29	<5	25	122	89	5.36	30	<1
93BCW0096	<0.2	6.07	24	310	<0.5	<2	0.37	<5	41	99	172	5.01	20	1
93BCW0097	<0.2	5.54	74	270	<0.5	<2	0.24	<5	35	185	194	7.59	30	<1
93BCW0099	<0.2	5.13	36	330	<0.5	<2	0.28	<5	30	181	136	6.86	30	<1
93BCW0100	<0.2	4.34	16	140	<0.5	<2	0.20	<5	23	100	53	5.19	20	<1
93BCW0123	<0.2	4.80	50	210	<0.5	<2	0.21	<5	37	149	190	6.50	30	<1
93BCW0125	<0.2	5.90	50	220	<0.5	<2	0.17	<5	40	168	156	7.06	40	<1
93BCW0126	<0.2	5.15	52	240	<0.5	<2	0.15	<5	33	177	166	6.88	30	<1
93BCW0127	<0.2	5.87	88	210	<0.5	<2	0.15	<5	37	156	199	6.70	30	<1
93BCW0128	<0.2	5.22	110	210	<0.5	<2	0.20	<5	36	143	197	6.29	30	<1
93BCW0129	<0.2	4.49	64	250	<0.5	<2	0.15	<5	40	299	191	6.18	30	<1
93BCW0130	<0.2	5.16	74	260	<0.5	<2	0.14	<5	34	187	202	7.09	30	<1
93DU0501	<0.2	5.41	126	130	<0.5	<2	0.21	<5	28	98	175	5.08	20	<1
93DU0502	0.4	5.36	62	90	<0.5	<2	0.15	<5	13	92	103	5.05	30	<1
93DU0503	0.2	3.62	66	130	<0.5	<2	0.26	<5	21	97	126	4.27	20	<1
93DU0504	<0.2	4.64	102	170	<0.5	<2	0.26	<5	33	118	144	4.76	20	<1
93DU0505	<0.2	4.63	126	150	<0.5	<2	0.27	<5	39	122	209	5.42	30	<1
93DU0506	0.2	3.54	80	120	<0.5	<2	0.20	<5	23	102	168	4.78	20	<1
93DU0507	<0.2	4.60	128	160	<0.5	<2	0.21	<5	31	116	187	5.29	30	<1
93DU0508	<0.2	4.94	98	180	<0.5	<2	0.17	<5	23	129	166	5.39	20	<1
93DU0509	<0.2	4.28	44	200	<0.5	<2	0.30	<5	27	135	136	5.32	20	<1
93DU0510	<0.2	4.76	54	130	<0.5	<2	0.20	<5	21	120	120	5.19	20	<1
93DU0511	0.2	5.77	64	150	<0.5	<2	0.21	<5	24	120	138	5.48	20	<1
93DU0512	<0.2	4.18	50	220	<0.5	<2	0.30	<5	37	135	192	5.23	20	<1
93DU0513	0.2	6.41	66	170	<0.5	<2	0.19	<5	32	117	215	6.04	30	<1
93DU0514	<0.2	5.31	72	220	<0.5	<2	0.28	<5	28	137	179	5.72	30	1
93DU0515	0.2	4.05	66	310	<0.5	<2	0.61	<5	25	96	138	4.50	20	<1
93DU0516	<0.2	3.30	72	220	<0.5	<2	0.48	<5	27	110	130	4.57	20	<1
93DU0517	0.2	3.40	72	150	<0.5	<2	0.38	<5	41	101	136	4.17	<10	<1
93DU0518	0.2	4.05	72	170	<0.5	<2	0.24	<5	24	112	148	4.57	<10	<1
93DU0519	0.2	4.81	62	180	<0.5	<2	0.28	<5	29	116	132	4.85	<10	2
93DU0521	0.2	5.18	50	100	<0.5	<2	0.14	<5	12	116	99	4.95	<10	<1
93DU0522	<0.2	5.63	88	140	<0.5	<2	0.13	<5	35	131	139	6.20	<10	<1



2. ICP-AES (<2 μm)

Sample	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	V ppm	Zn ppm
93BCW0093	0.94	20	1.64	785	9	1.28	122	24	<2	12	16	0.15	93	118
93BCW0094	1.00	30	2.04	615	<1	0.45	78	8	<2	14	15	0.19	112	144
93BCW0095	1.22	30	1.91	585	1	0.32	61	14	<2	12	16	0.23	102	172
93BCW0096	1.78	30	1.69	565	4	1.74	98	28	<24	10	55	0.20	88	160
93BCW0097	1.40	30	2.34	740	2	0.50	113	16	<2	18	17	0.23	148	200
93BCW0099	1.66	30	2.47	705	<1	0.40	100	12	<2	17	20	0.22	135	188
93BCW0100	0.54	30	1.14	420	1	0.69	45	14	<2	9	20	0.11	99	88
93BCW0123	0.99	40	2.04	655	2	0.56	108	14	<2	14	17	0.06	111	158
93BCW0125	1.00	40	2.07	645	6	0.48	115	20	<2	13	14	0.22	135	158
93BCW0126	1.23	30	2.06	495	2	0.39	107	12	<2	15	14	0.20	130	148
93BCW0127	0.84	30	1.63	420	10	0.53	116	18	<2	13	12	0.20	121	122
93BCW0128	0.91	30	1.75	565	6	0.65	111	28	2	12	14	0.14	101	154
93BCW0129	0.98	20	2.05	340	2	0.66	355	12	<2	10	11	0.15	125	98
93BCW0130	1.35	20	2.26	500	5	0.42	129	8	<2	16	11	0.20	140	192
93DU0501	0.37	40	0.98	390	2	1.85	72	8	4	10	14	0.07	75	74
93DU0502	0.29	60	0.72	220	3	1.56	39	16	<2	8	12	0.16	82	62
93DU0503	0.60	50	1.20	385	1	0.83	64	16	<2	9	17	0.10	68	84
93DU0504	0.70	30	1.37	420	1	0.73	85	18	<2	10	18	0.14	79	104
93DU0505	0.53	40	1.28	480	2	0.78	110	16	<2	11	18	0.17	91	108
93DU0506	0.45	40	1.04	330	1	1.49	64	10	<2	8	13	0.09	74	74
93DU0507	0.78	50	1.44	445	2	0.92	86	34	2	11	15	0.12	77	112
93DU0508	0.69	30	1.36	350	2	0.54	72	10	<2	10	16	0.15	84	94
93DU0509	0.81	40	1.70	500	2	0.97	74	12	<2	13	21	0.11	96	114
93DU0510	0.46	30	1.19	305	2	0.53	65	12	<2	9	14	0.18	86	94
93DU0511	0.40	30	1.19	330	1	0.88	79	6	<2	10	16	0.18	100	130
93DU0512	1.00	40	1.74	540	1	0.67	101	12	<2	12	18	0.11	93	164
93DU0513	0.64	50	1.35	530	3	0.88	75	18	<2	13	19	0.19	97	104
93DU0514	0.79	40	1.60	520	3	0.63	77	8	2	13	20	0.13	101	146
93DU0515	0.54	60	1.38	500	1	3.82	73	10	<2	11	48	0.03	83	124
93DU0516	0.77	40	1.49	420	1	1.13	103	8	2	10	24	0.08	82	116
93DU0517	0.66	40	1.34	560	1	0.62	97	12	<2	9	17	0.13	79	108
93DU0518	0.59	30	1.27	395	2	0.87	71	12	2	9	17	0.14	84	90
93DU0519	0.66	30	1.27	465	2	0.82	79	12	6	9	21	0.17	86	92
93DU0521	0.26	20	0.76	190	3	2.06	37	12	<2	8	12	0.04	103	60
93DU0522	0.47	20	1.13	510	6	2.46	86	18	<2	9	13	0.04	104	130

2. ICP-AES (<2 µm)

Sample	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm
93DU0523	<0.2	5.37	36	200	<0.5	<2	0.13	<5	44	193	129	5.96	<10	<1
93DU0524	0.2	4.83	48	190	<0.5	<2	0.24	<5	30	130	131	4.97	<10	<1
93DU0525	0.2	4.15	50	120	<0.5	<2	0.26	<5	19	91	109	4.25	<10	<1
93DU0526	0.2	4.06	102	170	<0.5	<2	0.38	<5	28	112	183	4.65	<10	1
93DU0527A	<0.2	3.60	34	250	<0.5	<2	0.37	<5	25	135	114	5.09	<10	<1
93DU0528	0.2	4.23	92	140	<0.5	<2	0.24	<5	25	105	210	4.92	<10	<1
93DU0529	<0.2	4.01	70	190	<0.5	<2	0.27	<5	35	123	144	4.88	<10	<1
93DU0530	0.2	4.99	116	190	<0.5	<2	0.25	<5	24	127	162	5.50	<10	<1
93DU0531	0.2	4.19	74	140	<0.5	<2	0.23	<5	24	108	169	5.05	<10	<1
93DU0532	0.2	4.80	154	180	0.5	<2	0.26	<5	33	119	246	5.37	<10	<1
93DU0533	<0.2	5.52	42	230	0.5	<2	0.16	<5	32	184	162	7.23	<10	<1
93DU0535	0.8	4.01	8	130	<0.5	<2	0.20	<5	16	104	72	5.19	<10	<1
93DU0536	0.2	5.07	14	170	<0.5	<2	0.19	<5	30	100	75	5.19	<10	<1
93DU0538	<0.2	5.29	64	180	<0.5	<2	0.17	<5	37	149	176	6.89	<10	<1
93DU0539	<0.2	4.28	18	270	<0.5	<2	0.45	<5	29	149	126	6.07	<10	<1
93DU0540	0.2	4.16	64	180	<0.5	<2	0.32	<5	25	110	114	4.49	<10	<1
93DU0541	0.2	4.63	44	200	<0.5	<2	0.29	<5	33	139	180	5.45	<10	<1
93DU0543	0.4	3.44	78	170	<0.5	<2	0.29	0.5	27	102	142	4.51	<10	<1
93DU0544	0.2	4.74	42	170	<0.5	<2	0.27	<5	24	115	133	5.20	<10	<1
93DU0545	<0.2	4.92	90	270	<0.5	<2	0.25	<5	46	157	208	6.03	<10	<1
93DU0546	0.2	3.66	86	200	<0.5	<2	0.33	<5	36	110	155	4.69	<10	<1
93DU0547	0.4	3.15	52	120	<0.5	<2	0.21	<5	19	82	105	3.92	<10	<1
93DU0548	0.2	3.61	76	180	<0.5	<2	0.31	<5	22	100	149	4.68	<10	<1
93DU0549	<0.2	4.22	94	190	<0.5	<2	0.26	<5	37	120	288	5.52	<10	<1
93DU0550	0.2	5.11	50	210	<0.5	<2	0.27	<5	32	126	167	5.14	<10	<1
93DU0551	0.2	3.26	82	180	<0.5	<2	0.40	<5	20	94	116	4.17	<10	<1
93DU0553	<0.2	5.34	32	250	<0.5	<2	0.25	<5	31	170	163	7.06	<10	<1
93DU0554	<0.2	3.02	8	180	<0.5	<2	0.33	<5	22	100	91	4.25	<10	<1
93DU0555	0.2	4.05	38	160	0.5	<2	0.25	<5	33	100	116	4.29	<10	<1
93DU0557	0.2	5.22	30	210	<0.5	<2	0.23	0.5	44	129	150	5.98	<10	<1
93DU0558	<0.2	4.94	100	230	<0.5	<2	0.22	<5	43	134	185	5.95	<10	<1
93DU0559S1	<0.2	3.74	48	250	<0.5	<2	0.34	<5	22	118	148	4.82	<10	<1
93DU0559S2	0.2	4.21	10	260	<0.5	<2	0.41	<5	37	147	324	4.88	<10	<1
93DU0559S6	0.4	3.62	6	260	<0.5	<2	0.48	0.5	31	120	218	4.35	<10	<1
93DU0560	<0.2	3.46	64	140	<0.5	<2	0.29	<5	23	99	135	4.49	<10	<1

2. ICP-AES (<2 µm)

Sample	K %	La ppm	Mg %	Min ppm	Mo ppm	Na %	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	V ppm	Zn ppm
93DU0523	1.04	50	2.04	730	4	1.06	105	28	<2	13	12	0.08	107	132
93DU0524	0.80	30	1.49	430	3	0.46	88	16	<2	11	18	0.18	88	102
93DU0525	0.51	40	1.09	355	2	0.77	52	18	<2	8	17	0.13	72	82
93DU0526	0.72	30	1.57	470	<1	0.44	86	10	<2	10	19	0.17	81	108
93DU0527A	1.01	30	1.90	445	1	2.34	76	12	<2	11	21	0.01	97	126
93DU0528	0.56	40	1.19	350	3	1.21	85	12	<2	9	15	0.11	79	112
93DU0529	0.84	30	1.66	495	1	0.98	97	16	<2	10	15	0.06	84	132
93DU0530	0.77	30	1.41	420	3	0.75	70	14	2	11	19	0.16	87	98
93DU0531	0.49	30	1.10	360	3	1.26	71	14	<2	9	16	0.13	82	74
93DU0532	0.73	40	1.36	395	1	0.89	102	20	<2	10	24	0.14	79	100
93DU0533	1.13	30	2.07	460	6	0.54	100	18	2	16	15	0.24	150	164
93DU0535	0.52	40	1.32	285	1	0.70	45	16	<2	9	14	0.17	112	108
93DU0536	0.69	60	1.28	1015	3	0.70	53	38	<2	10	15	0.18	96	116
93DU0538	0.73	40	1.66	505	8	0.55	100	20	<2	12	14	0.21	125	136
93DU0539	1.25	40	2.47	575	<1	0.56	107	6	<2	14	24	0.12	117	208
93DU0540	0.73	30	1.37	405	1	0.64	70	14	<2	10	21	0.14	78	112
93DU0541	0.97	40	1.69	550	1	0.59	101	14	<2	14	17	0.20	104	158
93DU0543	0.73	40	1.37	410	1	0.73	68	14	<2	10	17	0.09	74	98
93DU0544	0.61	30	1.36	400	2	0.70	68	6	<2	10	19	0.16	91	92
93DU0545	1.22	40	1.89	590	2	0.41	131	10	<2	15	16	0.22	110	156
93DU0546	0.75	50	1.38	435	2	1.06	104	12	<2	10	20	0.07	79	102
93DU0547	0.43	20	1.01	295	3	0.27	62	6	<2	8	13	0.13	73	78
93DU0548	0.63	40	1.31	380	2	1.03	72	12	<2	9	23	0.09	80	96
93DU0549	0.82	40	1.45	665	6	0.66	110	14	<2	11	16	0.15	88	108
93DU0550	0.78	30	1.59	460	1	0.92	96	12	<2	12	16	0.11	94	116
93DU0551	0.65	40	1.33	390	<1	0.81	64	10	<2	9	22	0.09	73	84
93DU0553	1.26	40	2.39	645	2	0.48	93	10	<2	16	19	0.26	146	196
93DU0554	0.94	40	1.54	445	1	0.71	55	4	<2	10	19	0.07	82	192
93DU0555	0.67	30	1.25	460	3	1.44	72	12	<2	8	16	0.07	78	114
93DU0557	0.85	30	1.84	690	1	0.33	93	16	<2	12	16	0.23	109	152
93DU0558	0.88	40	1.74	565	4	0.92	112	18	<2	11	18	0.10	102	136
93DU0559S1	0.90	50	1.79	465	1	1.37	59	10	<2	11	21	0.02	91	174
93DU0559S2	1.20	60	2.20	455	1	0.68	101	18	<2	15	25	0.12	105	168
93DU0559S6	1.03	100	1.82	405	2	1.71	85	36	<2	13	47	0.02	92	126
93DU0560	0.59	40	1.19	360	2	1.28	72	8	<2	9	18	0.04	76	86

2. ICP-AES (<2 µm)

Sample	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm
93DU0561	<0.2	3.53	46	140	<0.5	<2	0.25	<5	20	88	127	4.04	<10	<1
93DU0562	<0.2	3.46	20	170	<0.5	<2	0.27	0.5	19	105	104	4.12	<10	<1
93DU0563	<0.2	3.97	30	140	<0.5	<2	0.29	0.5	24	105	102	4.75	<10	<1
93DU0564	<0.2	5.14	114	240	<0.5	<2	0.11	<5	49	181	221	7.52	<10	<1
93DU0565	<0.2	6.09	152	310	<0.5	<2	0.11	<5	40	191	315	7.92	<10	1
93DU0566	<0.2	4.83	22	230	<0.5	<2	0.16	<5	49	133	141	5.86	<10	<1
93DU0567	<0.2	3.48	8	170	<0.5	<2	0.27	<5	23	117	80	4.94	<10	<1
93DU0568	<0.2	4.37	58	180	<0.5	<2	0.16	<5	46	111	110	5.08	<10	<1
93DU0569	<0.2	4.56	1	320	<0.5	<2	0.30	<5	27	172	94	6.11	<10	<1
93DU0570	<0.2	4.55	42	250	<0.5	<2	0.30	<5	43	149	236	5.30	<10	2
93DU0571	<0.2	4.70	24	230	<0.5	<2	0.21	<5	27	150	103	6.18	<10	<1
93DU0572	<0.2	4.90	42	230	<0.5	<2	0.23	<5	27	159	133	6.35	<10	<1
93DU0573	<0.2	4.94	34	250	<0.5	<2	0.24	<5	29	168	125	6.72	<10	<1
93DU0574	0.2	4.82	18	140	<0.5	<2	0.24	<5	24	91	61	5.16	<10	<1
93DU0576	<0.2	4.66	58	470	<0.5	<2	0.23	<5	26	233	127	6.43	<10	<1
93DU0577	<0.2	4.51	42	190	<0.5	<2	0.28	<5	27	127	203	5.60	<10	<1
93DU0578	<0.2	3.42	72	150	<0.5	<2	0.25	<5	24	108	92	4.35	<10	<1
93DU0579	<0.2	4.47	34	230	<0.5	<2	0.23	<5	29	139	100	5.30	<10	<1
93DU0580	<0.2	4.61	44	220	<0.5	<2	0.16	<5	30	148	112	6.05	<10	<1
93DU0581	<0.2	4.48	32	240	<0.5	<2	0.28	<5	27	150	83	6.06	<10	<1
93DU0583	<0.2	3.23	6	130	<0.5	<2	0.25	<5	19	77	66	3.95	<10	<1
93DU0585	<0.2	3.41	4	180	<0.5	<2	0.29	<5	23	96	66	4.52	<10	<1
93DU0586	<0.2	4.11	14	230	<0.5	<2	0.23	<5	26	130	136	5.67	<10	<1
93DU0587	<0.2	4.95	28	270	<0.5	<2	0.25	<5	30	172	127	6.75	<10	<1
93DU0588	0.2	4.06	24	150	0.5	<2	0.27	<5	48	115	302	4.30	<10	<1
93DU0589	<0.2	4.84	1	320	<0.5	<2	0.36	<5	35	155	108	5.92	<10	<1
93DU0611	<0.2	5.97	42	290	1.0	<2	0.21	<5	38	163	168	6.26	<10	<1
93DU0613	<0.2	5.77	100	300	<0.5	<2	0.16	<5	38	181	224	7.06	<10	<1
93DU0614	0.2	4.56	96	170	<0.5	<2	0.18	<5	28	140	203	6.22	<10	<1
93DU0622	<0.2	5.02	84	250	<0.5	<2	0.17	<5	41	179	168	6.90	<10	<1
93DU0624	<0.2	5.48	46	260	1.5	<2	0.15	0.5	33	181	172	6.67	<10	<1
93DU0625	<0.2	4.44	60	230	0.5	<2	0.22	<5	38	138	127	5.71	<10	<1
93DU0697	0.2	4.74	38	240	1.0	2	0.38	0.5	29	112	104	4.11	20	<1
93DU0502dup	<0.2	5.27	76	90	<0.5	<2	0.14	<5	15	86	102	4.70	20	<1
93DU0533dup	0.2	5.56	40	230	<0.5	<2	0.17	<5	35	182	158	6.90	30	<1

2. ICP-AES (<2 µm)

Sample	K %	La ppm	Mg %	Min ppm	Mo ppm	Na %	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	V ppm	Zn ppm
93DU0561	0.54	30	1.03	335	2	0.78	59	6	<2	8	14	0.11	63	74
93DU0562	0.70	30	1.30	360	<1	0.69	59	6	<2	9	15	0.12	73	88
93DU0563	0.58	30	1.20	410	1	0.97	65	14	<2	9	16	0.09	87	88
93DU0564	1.16	20	2.13	595	6	0.71	166	14	<2	14	9	0.17	122	158
93DU0565	1.51	30	2.34	615	5	0.55	169	16	4	17	13	0.21	129	206
93DU0566	1.17	30	1.75	855	2	0.83	109	22	<2	11	13	0.08	99	178
93DU0567	1.10	30	1.74	590	<1	0.60	68	6	<2	11	19	0.12	89	132
93DU0568	0.83	20	1.39	580	2	0.63	94	18	<2	9	10	0.15	83	128
93DU0569	1.70	40	2.68	640	<1	0.47	83	4	<2	15	19	0.31	127	170
93DU0570	1.24	40	2.25	650	2	0.44	125	18	4	12	20	0.24	104	158
93DU0571	1.14	20	2.09	575	1	0.39	77	14	<2	14	14	0.26	122	160
93DU0572	0.99	30	1.92	495	2	0.70	82	14	<2	16	17	0.22	131	158
93DU0573	1.31	30	2.23	675	2	0.45	88	16	<2	16	16	0.28	129	186
93DU0574	0.69	30	1.41	420	<1	0.71	51	14	<2	9	14	0.16	83	124
93DU0576	1.14	20	3.91	435	<1	0.84	253	6	<2	15	34	0.22	134	150
93DU0577	0.85	40	1.50	435	4	0.90	84	14	<2	12	17	0.13	95	120
93DU0578	0.65	30	1.37	395	1	0.61	71	8	<2	9	13	0.12	70	100
93DU0579	0.95	30	1.62	480	2	0.62	79	14	<2	13	14	0.21	102	110
93DU0580	0.75	20	1.58	450	2	0.70	78	12	<2	12	12	0.19	120	118
93DU0581	1.17	30	2.22	645	1	0.35	81	16	2	14	18	0.21	111	158
93DU0583	0.52	40	1.09	400	2	1.58	44	12	<2	6	16	0.03	73	98
93DU0585	0.75	40	1.54	465	<1	0.77	52	10	<2	9	18	0.10	86	124
93DU0586	1.15	30	1.88	535	1	0.36	68	14	<2	13	15	0.24	106	182
93DU0587	1.48	30	2.35	695	<1	0.43	90	12	<2	16	16	0.25	134	188
93DU0588	0.71	40	1.44	590	1	0.96	102	28	<2	9	17	0.09	72	198
93DU0589	1.35	70	2.92	715	<1	1.12	80	10	<2	10	34	0.06	120	150
93DU0611	1.24	30	1.94	535	6	0.69	107	18	<2	13	23	0.25	114	134
93DU0613	1.24	30	2.01	595	6	1.07	110	16	<2	15	14	0.06	123	138
93DU0614	0.66	20	1.46	365	4	0.83	92	8	<2	11	14	0.15	110	138
93DU0622	1.02	20	2.06	605	3	0.54	117	16	2	15	13	0.21	139	182
93DU0624	0.97	20	1.85	515	1	0.50	106	12	<2	17	13	0.18	133	154
93DU0625	0.96	20	1.65	555	3	0.63	82	16	2	12	15	0.19	110	142
93DU0697	0.99	20	1.42	500	1	0.76	74	12	6	10	43	0.16	81	90
93DU0502dup	0.28	50	0.73	220	6	1.55	38	28	<2	8	11	0.12	83	52
93DU0533dup	1.15	30	2.15	455	8	0.52	100	24	8	16	15	0.23	150	152

2. ICP-AES (<2 µm)

Sample	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm
93DU0547dup	<0.2	3.08	58	110	<0.5	<2	0.21	<5	17	83	102	3.70	10	<1
93DU0565dup	<0.2	6.00	120	310	<0.5	<2	0.12	0.5	42	185	296	7.32	20	<1
93DU579dup	<0.2	4.72	38	250	<0.5	<2	0.30	0.5	30	137	98	4.96	20	<1
lab standard	<0.2	3.24	34	100	0.5	<2	0.08	<5	16	41	75	3.60	10	<1
93DU0594dup	<0.2	6.37	80	510	<0.5	<2	0.19	<5	43	234	299	7.54	30	<1
93DU0607dup	<0.2	4.35	60	210	<0.5	<2	0.37	<5	25	121	119	4.89	20	<1
93DU0624dup	<0.2	6.18	50	290	<0.5	<2	0.18	0.5	35	195	181	6.72	30	<1
93DU0638dup	<0.2	4.15	12	230	<0.5	6	0.40	<5	28	155	101	5.20	20	<1
93DU0650dup	<0.2	4.29	120	150	<0.5	<2	0.26	0.5	36	130	192	7.04	20	<1
93DU0663dup	<0.2	3.84	54	200	<0.5	<2	0.30	0.5	30	113	117	4.56	20	<1
93DU0677dup	<0.2	4.53	24	200	<0.5	<2	0.37	<5	35	124	160	5.22	20	<1
lab standard	<0.2	3.24	32	100	<0.5	<2	0.08	<5	15	42	75	3.58	10	<1
93DU0687dup	<0.2	4.95	36	190	<0.5	<2	0.25	<5	27	129	140	5.93	30	<1
93DU0704dup	<0.2	4.93	32	200	<0.5	2	0.31	<5	36	138	156	5.21	20	<1
93BCW0016dup	0.2	5.97	76	150	<0.5	<2	0.22	0.5	22	117	144	5.05	20	<1
93BCW0028dup	<0.2	4.14	58	170	<0.5	<2	0.36	<5	28	115	171	4.26	20	<1
93BCW0046dup	<0.2	5.06	86	240	<0.5	<2	0.24	<5	43	151	206	5.88	20	<1
93BCW0068dup	<0.2	3.96	16	230	<0.5	<2	0.28	0.5	30	130	143	5.13	20	<1
93BCW0081dup	<0.2	4.63	26	250	<0.5	2	0.26	<5	31	159	113	5.94	20	<1
lab standard	<0.2	3.29	30	100	<0.5	2	0.08	0.5	15	42	72	3.43	10	<1
93BCW0095dup	<0.2	3.97	30	220	<0.5	2	0.36	<5	26	124	92	5.23	20	<1
93BCW0106dup	<0.2	6.10	76	410	<0.5	<2	0.19	0.5	37	224	233	7.26	30	<1
93BCW0122dup	0.2	4.50	10	220	<0.5	<2	0.31	0.5	36	157	154	5.78	20	<1
93BCW0139dup	0.2	5.21	126	340	<0.5	<2	0.17	<5	46	203	229	7.54	20	<1
93BCW0153dup	0.2	4.89	60	280	<0.5	<2	0.24	0.5	40	183	185	7.18	20	<1
93BCW0161dup	0.2	4.59	72	200	<0.5	<2	0.31	<5	28	160	177	6.97	20	<1
lab standard	0.2	3.21	20	100	<0.5	<2	0.08	0.5	16	41	75	3.65	10	<1
93BCW0178dup	<0.2	5.24	72	240	<0.5	<2	0.38	0.5	37	153	216	7.81	20	<1
93BCW0199dup	<0.2	5.19	82	280	<0.5	<2	0.33	<5	36	191	187	7.42	20	<1

2. ICP-AES (<2 µm)

Sample	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	V ppm	Zn ppm
93DU0547dup	0.44	20	1.01	290	4	0.26	59	4	2	8	12	0.13	72	70
93DU0565dup	1.56	20	2.33	595	6	0.55	159	28	6	17	14	0.19	127	184
93DU0579dup	1.07	30	1.63	475	2	0.69	76	18	8	13	26	0.15	103	98
lab standard	0.34	30	0.86	845	<1	0.01	36	24	2	8	9	0.09	49	114
93DU0594dup	2.12	20	2.87	730	4	0.52	162	22	4	21	20	0.25	159	226
93DU0607dup	0.86	30	1.66	440	1	0.61	69	14	4	11	28	0.15	91	104
93DU0624dup	1.08	20	2.04	545	3	0.50	110	22	8	18	16	0.19	144	150
93DU0638dup	1.35	30	2.11	610	2	0.42	74	14	8	14	21	0.23	111	136
93DU0650dup	0.50	30	1.39	555	4	0.81	106	22	8	11	16	0.13	127	110
93DU0663dup	0.84	20	1.50	430	2	0.65	73	18	4	10	16	0.17	86	132
93DU0677dup	0.76	40	1.76	610	5	0.47	82	16	4	11	22	0.21	102	112
lab standard	0.34	30	0.86	835	<1	0.01	36	30	4	8	9	0.09	49	106
93DU0687dup	0.44	40	1.25	355	3	0.66	88	14	<2	12	20	0.17	112	94
93DU0704dup	0.87	30	1.90	680	4	0.42	79	22	6	11	18	0.21	99	132
93BCW0016dup	0.51	30	1.20	310	4	0.48	66	24	8	11	20	0.19	94	72
93BCW0028dup	0.78	30	1.54	475	<1	0.48	83	12	4	12	20	0.15	83	92
93BCW0046dup	1.12	30	1.88	520	3	0.52	114	22	8	14	15	0.19	111	138
93BCW0068dup	1.25	30	1.98	515	2	0.81	82	18	6	13	17	0.08	101	160
93BCW0081dup	1.36	20	2.28	635	1	0.41	90	16	6	15	17	0.23	118	158
lab standard	0.37	30	0.83	795	<1	0.01	33	26	4	8	9	0.09	48	102
93BCW0095dup	1.28	30	2.02	600	2	0.34	61	18	8	13	20	0.24	108	164
93BCW0106dup	1.91	20	2.64	675	3	0.42	139	30	2	21	17	0.24	153	186
93BCW0122dup	1.16	30	2.18	755	2	0.37	87	18	2	14	17	0.24	114	148
93BCW0139dup	1.46	20	2.59	715	8	0.40	130	20	6	17	10	0.25	143	236
93BCW0153dup	1.33	30	2.41	785	2	0.42	104	20	6	16	16	0.25	137	168
93BCW0161dup	1.19	30	2.28	590	2	0.50	96	20	6	14	16	0.21	119	170
lab standard	0.33	30	0.85	845	<1	0.01	36	20	4	8	9	0.09	48	106
93BCW0178dup	1.04	30	2.53	860	3	0.40	122	8	4	15	22	0.18	118	160
93BCW0199dup	1.44	30	2.51	760	3	0.45	111	16	4	18	19	0.25	141	170

3. INAA (<63µm)

Sample	Au ppb	Ag ppm	As ppm	Ba ppm	Br ppm	Ca %	Co ppm	Cr ppm	Cs ppm	Fe %	Hf ppm	Hg ppm	Ir ppm	Mo ppm
Detection limit	2	5	0.5	50	0.5	1	1	5	1	0.01	1	1	5	1
93BCW0001	<2	<5	7.9	520	2.3	2	6	46	2	1.73	8	<1	<5	<1
93BCW0007	9	<5	8.1	380	2.5	2	5	37	2	1.46	7	<1	<5	<1
93BCW0008	4	<5	2.8	660	0.3	2	11	74	4	2.58	10	<1	<5	<1
93BCW0010	<2	<5	8.8	460	4.4	<1	10	78	4	2.45	8	<1	<5	<1
93BCW0012	6	<5	11.0	320	2.1	3	5	43	2	1.46	8	<1	<5	3
93BCW0013	3	<5	20.0	380	4.0	2	8	54	2	1.88	7	<1	<5	<1
93BCW0014	<2	<5	13.0	510	3.4	<1	6	50	2	1.51	5	<1	<5	<1
93BCW0015	6	<5	12.0	300	2.7	<1	6	51	2	1.53	6	<1	<5	<1
93BCW0016	4	<5	10.0	370	3.5	1	6	47	2	1.56	7	<1	<5	<1
93BCW0017	9	<5	9.7	350	1.9	<1	7	53	2	1.46	7	<1	<5	<1
93BCW0018	7	<5	9.6	610	2.0	<1	7	69	2	1.92	6	<1	<5	<1
93BCW0019	<2	<5	11.0	460	1.9	<1	6	78	3	1.99	6	<1	<5	<1
93BCW0021	<2	<5	8.8	460	2.4	<1	6	49	2	1.48	7	<1	<5	<1
93BCW0022	4	<5	8.6	520	2.0	<1	8	58	2	1.72	7	<1	<5	<1
93BCW0023	7	<5	10.0	470	2.9	1	6	49	2	1.54	6	<1	<5	<1
93BCW0024	4	<5	12.0	410	2.4	<1	7	49	2	1.45	7	<1	<5	<1
93BCW0026	<2	<5	6.1	420	3.1	2	6	44	2	1.34	6	<1	<5	<1
93BCW0027	<2	<5	9.9	390	2.0	2	4	33	1	1.04	5	<1	<5	<1
93BCW0028	<2	<5	6.7	380	1.7	2	5	37	2	1.21	5	<1	<5	<1
93BCW0030	5	<5	8.4	370	2.4	<1	5	47	2	1.31	6	<1	<5	<1
93BCW0031	5	<5	9.7	480	2.4	<1	4	34	1	1.15	6	<1	<5	<1
93BCW0032	4	<5	6.2	410	2.0	1	5	41	2	1.32	7	<1	<5	<1
93BCW0033	4	<5	7.0	510	2.2	<1	6	54	2	1.63	7	<1	<5	<1
93BCW0034	2	<5	2.3	400	1.7	2	5	39	2	1.42	7	<1	<5	<1
93BCW0035	<2	<5	2.8	620	2.4	<1	9	80	3	2.23	8	<1	<5	<1
93BCW0036	<2	<5	9.8	600	2.5	2	11	99	4	2.55	6	<1	<5	<1
93BCW0037	<2	<5	5.8	470	2.5	<1	5	49	2	1.51	8	<1	<5	<1
93BCW0038	<2	<5	7.3	430	2.2	1	6	41	2	1.23	6	<1	<5	<1
93BCW0041	<2	<5	3.0	420	5.5	<1	4	41	1	1.27	5	<1	<5	<1
93BCW0042	5	<5	9.0	390	2.3	<1	5	40	1	1.28	7	<1	<5	<1
93BCW0043	<2	<5	13.0	370	3.5	1	6	40	2	1.3	6	<1	<5	<1
93BCW0044	5	<5	8.2	450	2.1	<1	6	56	2	1.82	7	<1	<5	<1
93BCW0045	5	<5	16.0	390	2.6	2	7	42	2	1.39	6	<1	<5	<1
93BCW0046	7	<5	12.0	420	2.2	2	7	55	2	1.67	5	<1	<5	<1



3. INAA (<63µm)

Sample	Na %	Ni ppm	Rb ppm	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm	Th ppm	U ppm	W ppm	Zn ppm	La ppm
Detection limit	0.01	20	5	0.1	0.1	5	100	500	0.5	0.2	0.5	1	50	0.5
93BCW0001	2.41	<35	31	<1	6.9	<3	<100	<500	<0.5	9.9	3.6	<1	<50	34
93BCW0007	2.16	<31	10	0.2	5.7	<3	<100	<500	<0.5	9.1	2.8	<1	<50	31
93BCW0008	2.04	<37	89	<1	10.0	<3	<100	<500	1.6	17.0	5.7	<1	<50	57
93BCW0010	1.59	160	71	<1	8.6	<3	<100	<500	<0.5	11.0	4.9	3	<50	37
93BCW0012	2.08	<30	40	<1	5.8	<3	<100	<500	<0.5	11.0	2.6	<1	<50	38
93BCW0013	2.17	<32	69	0.2	7.2	<3	<100	<500	<0.5	16.0	5.3	<1	112	43
93BCW0014	2.09	170	55	<1	6.3	<3	<100	<500	<0.5	13.0	3.6	<1	<50	31
93BCW0015	2.01	<30	83	<1	6.1	<3	<100	<500	2.3	12.0	3.7	<1	<50	34
93BCW0016	2.03	<31	43	0.3	6.0	<3	<100	<500	<0.5	11.0	3.8	<1	<50	33
93BCW0017	2.26	<31	52	<1	5.8	<3	<100	<500	<0.5	9.7	3.1	<1	<50	36
93BCW0018	2.07	<31	69	0.4	7.9	<3	<100	<500	<0.5	9.7	3.3	<1	<50	32
93BCW0019	2.28	<25	73	0.3	8.2	<3	<100	<500	1.5	10.0	2.9	<1	<50	37
93BCW0021	2.12	<24	49	<1	5.8	<3	<100	<500	1.2	9.5	3.2	<1	<50	36
93BCW0022	1.99	<26	60	<1	7.0	<3	<100	<500	<0.5	8.6	3.5	<1	<50	29
93BCW0023	2.03	<24	53	<1	5.8	<3	<100	<500	<0.5	9.4	2.7	<1	<50	32
93BCW0024	2.17	<25	27	<1	5.9	<3	<100	<500	1.8	9.9	2.5	<1	<50	34
93BCW0026	2.01	<22	50	<1	5.5	<3	<100	<500	<0.5	8.7	2.1	2	<50	28
93BCW0027	2.00	<21	32	0.2	3.9	<3	<100	<500	1.6	7.9	2	<1	<50	27
93BCW0028	2.12	120	43	<1	5.2	<3	<100	<500	<0.5	7.6	2.4	2	<50	30
93BCW0030	2.25	<24	37	0.2	5.3	<3	<100	<500	<0.5	9.0	2.6	<1	57	33
93BCW0031	2.16	<22	49	<1	4.3	<3	<100	<500	<0.5	8.4	2.5	<1	<50	30
93BCW0032	2.24	<21	42	0.2	5.6	<3	<100	<500	1.2	9.8	3.1	<1	<50	37
93BCW0033	2.21	<22	55	0.2	6.6	<3	<100	<500	0.7	11.0	3.2	<1	<50	42
93BCW0034	2.21	<20	73	<1	6.3	<3	<100	<500	1.7	18.0	6.5	<1	<50	39
93BCW0035	2.12	<25	120	<1	9.6	<3	<100	<500	1.4	28.0	12	<1	92	50
93BCW0036	2.31	<25	74	0.2	11.0	<3	<100	<500	<0.5	14.0	6.5	<1	<50	41
93BCW0037	2.34	<21	65	<1	6.5	<3	<100	<500	<0.5	17.0	6.1	<1	<50	45
93BCW0038	2.06	<20	41	0.2	5.0	<3	<100	<500	<0.5	8.1	3	<1	<50	32
93BCW0041	2.05	<20	29	0.2	5.4	<3	<100	<500	1.1	6.6	1.9	<1	<50	23
93BCW0042	2.33	<21	47	<1	5.2	<3	<100	<500	1.0	11.0	2.9	<1	<50	40
93BCW0043	2.23	<20	39	<1	5.3	<3	<100	<500	<0.5	8.6	2.1	4	70	31
93BCW0044	2.22	<21	47	<1	7.5	<3	<100	<500	1.3	12.0	3.5	<1	<50	46
93BCW0045	2.16	<20	44	0.2	5.3	<3	<100	<500	<0.5	9.2	2.7	<1	<50	35
93BCW0046	2.11	<20	56	<1	6.7	<3	<100	<500	<0.5	8.5	3	2	<50	35

3. INAA (<63µm)

Sample	Ce ppm	Nd ppm	Sm ppm	Eu ppm	Tb ppm	Yb ppm	Lu ppm	Mass gm
Detection limit	3	5	0.1	0.2	0.5	0.2	0.05	
93BCW0001	64	29	4.9	1.3	<0.5	2.1	0.32	32.36
93BCW0007	57	26	4.5	1.3	<0.5	1.8	0.31	38.46
93BCW0008	110	43	8.0	1.6	1.2	2.6	0.37	31.12
93BCW0010	71	31	5.0	1.1	0.6	2.0	0.31	31.05
93BCW0012	72	28	5.3	1.3	<0.5	2.1	0.34	39.53
93BCW0013	81	31	5.6	1.3	0.9	2.3	0.35	36.87
93BCW0014	61	22	4.3	1.1	<0.5	1.8	0.31	36.37
93BCW0015	61	22	4.2	1.1	<0.5	2.0	0.27	38.93
93BCW0016	66	20	4.7	1.1	0.7	1.8	0.27	37.6
93BCW0017	67	27	5.0	1.3	<0.5	2.1	0.29	37.93
93BCW0018	61	23	4.4	1.0	<0.5	1.9	0.28	37.09
93BCW0019	65	27	4.9	1.3	<0.5	1.8	0.31	37.8
93BCW0021	63	26	4.8	1.1	0.8	2.0	0.30	37.27
93BCW0022	56	23	4.1	1.1	<0.5	1.8	0.24	31.53
93BCW0023	59	26	4.4	1.1	<0.5	1.9	0.28	35.88
93BCW0024	65	24	4.7	1.1	0.7	1.8	0.29	35.57
93BCW0026	53	23	4.1	1.1	<0.5	1.6	0.25	38.47
93BCW0027	50	19	3.8	1.0	0.5	1.4	0.26	43.05
93BCW0028	52	20	4.1	1.1	0.5	1.6	0.26	38.48
93BCW0030	63	25	4.6	1.2	<0.5	1.8	0.30	36.94
93BCW0031	52	17	4.1	1.1	<0.5	1.7	0.27	40.3
93BCW0032	65	29	5.0	1.2	0.7	1.9	0.32	38.21
93BCW0033	75	32	5.5	1.3	0.7	2.2	0.34	35.09
93BCW0034	64	24	4.4	0.9	<0.5	2.3	0.36	39.91
93BCW0035	84	30	5.4	1.0	<0.5	2.0	0.38	30.59
93BCW0036	74	33	5.2	1.3	0.7	2.2	0.32	32.47
93BCW0037	79	27	5.5	1.2	0.8	2.4	0.36	37.98
93BCW0038	59	22	4.3	1.0	<0.5	1.7	0.27	40.85
93BCW0041	41	18	3.1	0.9	<0.5	1.4	0.24	33.63
93BCW0042	70	28	5.3	1.2	0.6	2.0	0.27	37.24
93BCW0043	57	21	4.3	1.0	<0.5	1.8	0.26	40.18
93BCW0044	82	35	6.1	1.4	0.7	2.3	0.33	36.4
93BCW0045	64	24	4.6	1.1	0.6	1.7	0.24	39.43
93BCW0046	64	28	4.8	1.2	<0.5	1.8	0.27	34.99

3. INAA (<63µm)

Sample	Au ppb	Ag ppm	As ppm	Ba ppm	Br ppm	Ca %	Co ppm	Cr ppm	Cs ppm	Fe %	Hf ppm	Hg ppm	Ir ppm	Mo ppm
93BCW0047	4	<5	8.2	440	1.9	2	5	42	2	1.29	5	<1	<5	<1
93BCW0048	<2	<5	6.6	570	3.6	1	9	88	3	2.38	8	<1	<5	<1
93BCW0049	<2	<5	3.0	540	0.3	1	7	51	2	1.8	7	<1	<5	<1
93BCW0050	3	<5	3.6	540	0.9	<1	6	44	2	1.78	9	<1	<5	<1
93BCW0051	<2	<5	2.9	530	0.3	<1	5	39	2	1.51	7	<1	<5	<1
93BCW0053	<2	<5	2.9	440	2.3	1	6	51	2	1.68	9	<1	<5	<1
93BCW0054	3	<5	6.7	530	3.2	1	5	49	2	1.57	7	<1	<5	<1
93BCW0055	2	<5	4.3	510	1.9	1	6	44	2	1.46	7	<1	<5	<1
93BCW0056	5	<5	6.0	310	1.9	1	3	25	1	0.86	5	<1	<5	<1
93BCW0057	<2	<5	9.2	470	2.2	2	5	41	2	1.29	5	<1	<5	<1
93BCW0058	5	<5	11.0	420	1.4	<1	4	46	2	1.37	5	<1	<5	<1
93BCW0059	5	<5	8.2	440	1.8	2	4	42	1	1.24	6	<1	<5	<1
93BCW0062	3	<5	4.4	470	1.9	2	4	37	2	1.23	6	<1	<5	<1
93BCW0063	<2	<5	7.8	410	2.3	1	3	35	1	1.16	7	<1	<5	<1
93BCW0064	4	<5	7.6	390	0.3	1	3	34	2	1	5	<1	<5	<1
93BCW0065	11	<5	10.0	510	2.3	1	9	56	2	1.65	7	<1	<5	<1
93BCW0066	3	<5	7.9	530	2.3	<1	6	61	2	1.71	6	<1	<5	<1
93BCW0067	2	<5	10.0	520	0.3	1	9	79	4	2.34	7	<1	<5	<1
93BCW0068	5	<5	3.2	550	0.3	2	6	48	3	1.67	8	<1	<5	<1
93BCW0072	4	<5	10.0	390	1.9	<1	4	34	2	1.12	5	<1	<5	<1
93BCW0073	2	<5	5.5	460	2.5	1	5	37	2	1.26	6	<1	<5	<1
93BCW0074	<2	<5	7.6	420	1.8	1	5	44	2	1.25	6	<1	<5	<1
93BCW0075	<2	<5	19.0	520	2.3	<1	9	85	3	2.27	4	<1	<5	<1
93BCW0077	4	<5	4.1	610	4.3	<1	9	68	5	1.97	7	<1	<5	<1
93BCW0078	4	<5	7.0	590	2.8	<1	10	82	4	2.25	7	<1	<5	<1
93BCW0079	4	<5	9.4	540	4.4	1	11	83	9	2.57	6	<1	<5	<1
93BCW0080	5	<5	4.6	690	3.0	<1	8	60	4	2.02	8	<1	<5	<1
93BCW0081	<2	<5	6.7	640	2.6	<1	10	80	4	2.31	7	<1	<5	<1
93BCW0082	4	<5	6.7	510	0.3	1	6	54	2	1.56	7	<1	<5	<1
93BCW0084	3	<5	1.8	440	2.2	<1	3	37	3	1.15	7	<1	<5	<1
93BCW0085	4	<5	10.0	590	0.3	2	10	77	4	2.32	6	<1	<5	<1
93BCW0086	4	<5	15.0	570	0.3	<1	14	100	7	3.02	6	<1	<5	4
93BCW0087	<2	<5	6.2	400	3.1	<1	8	42	3	1.73	6	<1	<5	<1
93BCW0088	<2	<5	3.2	530	0.3	2	5	44	3	1.65	9	<1	<5	<1

3. INAA (<63µm)

Sample	Na %	Ni ppm	Rb ppm	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm	Th ppm	U ppm	W ppm	Zn ppm	La ppm
93BCW0047	2.08	<20	32	<.1	5.4	<3	<100	<500	<0.5	8.6	2.7	<1	<50	32
93BCW0048	1.94	<22	81	0.2	10.0	<3	<100	<500	<0.5	17.0	5.2	<1	70	41
93BCW0049	2.12	<20	70	<.1	7.5	<3	<100	<500	<0.5	15.0	4.2	<1	<50	41
93BCW0050	2.22	<20	59	<.1	7.1	<3	<100	<500	<0.5	15.0	4.3	<1	<50	43
93BCW0051	2.09	<20	68	0.2	6.0	<3	<100	<500	<0.5	16.0	4.1	1	<50	40
93BCW0053	1.92	<20	54	<.1	7.3	<3	<100	<500	<0.5	14.0	4.5	<1	<50	47
93BCW0054	2.16	<20	65	0.2	6.2	<3	<100	<500	<0.5	9.5	3.3	1	<50	34
93BCW0055	2.07	<20	63	<.1	6.1	<3	<100	<500	<0.5	11.0	3.3	<1	<50	40
93BCW0056	2.21	<20	24	<.1	3.6	<3	<100	<500	<0.5	9.6	2.8	<1	<50	35
93BCW0057	2.24	<20	42	0.2	5.1	<3	<100	<500	<0.5	8.2	2.9	<1	<50	30
93BCW0058	2.37	<20	53	<.1	5.8	<3	<100	<500	<0.5	8.1	2.3	<1	<50	31
93BCW0059	2.29	<20	39	0.2	5.3	<3	<100	<500	0.8	9.6	3.1	2	<50	36
93BCW0062	2.23	<20	58	<.1	5.0	<3	<100	<500	1.0	11.0	3.3	<1	<50	41
93BCW0063	2.29	<20	49	<.1	4.5	<3	<100	<500	1.0	11.0	2.7	<1	<50	42
93BCW0064	2.15	<20	43	<.1	4.0	<3	<100	<500	<0.5	8.6	2.4	<1	<50	32
93BCW0065	2.00	<20	59	<.1	6.7	<3	<100	<500	<0.5	11.0	4.1	<1	60	44
93BCW0066	2.18	92	78	0.2	7.5	<3	<100	<500	1.2	12.0	3.6	<1	56	36
93BCW0067	2.01	<20	89	0.2	9.7	<3	<100	<500	<0.5	13.0	5.2	<1	59	40
93BCW0068	2.17	<20	68	<.1	7.1	<3	<100	<500	<0.5	12.0	4.5	<1	<50	38
93BCW0072	2.15	<20	49	<.1	4.3	<3	<100	<500	<0.5	8.8	2.4	<1	<50	31
93BCW0073	2.06	81	64	<.1	4.9	<3	<100	<500	1.1	8.1	2.3	<1	<50	31
93BCW0074	2.28	<20	45	<.1	5.4	<3	<100	<500	<0.5	9.9	3.2	<1	<50	36
93BCW0075	2.08	<20	57	<.1	9.3	<3	<100	<500	<0.5	8.8	2.6	<1	75	35
93BCW0077	2.12	<20	100	0.2	8.4	<3	<100	<500	1.5	15.0	7.1	<1	65	45
93BCW0078	2.12	<20	72	<.1	10.0	<3	<100	<500	<0.5	12.0	4.2	1	83	44
93BCW0079	1.91	<20	130	0.2	10.0	<3	<100	<500	1.9	14.0	8.4	6	73	39
93BCW0080	1.82	<30	99	<.1	8.2	<3	<100	<500	1.5	19.0	6	<1	64	50
93BCW0081	1.84	<33	100	<.1	9.5	<3	<100	<500	<0.5	14.0	6	<1	71	41
93BCW0082	1.84	<26	61	<.1	6.2	<3	<100	<500	<0.5	12.0	3.6	<1	<50	38
93BCW0084	1.86	<23	83	<.1	4.9	<3	<100	<500	<0.5	16.0	5.4	<1	<50	36
93BCW0085	1.80	<29	73	<.1	9.4	<3	<100	<500	<0.5	8.4	2.2	<1	86	29
93BCW0086	1.76	<34	110	<.1	11.0	<3	<100	<500	<0.5	12.0	7.2	5	103	35
93BCW0087	1.74	<26	98	<.1	6.3	<3	<100	<500	<0.5	15.0	5.9	<1	<50	32
93BCW0088	1.82	<27	82	<.1	6.8	<3	<100	<500	<0.5	22.0	8.5	<1	61	47

3. INAA (<63µm)

Sample	Ce ppm	Nd ppm	Sm ppm	Eu ppm	Tb ppm	Yb ppm	Lu ppm	Mass gm
93BCW0047	57	22	4.3	1.1	<0.5	1.7	0.27	39.32
93BCW0048	75	27	5.4	1.2	0.6	2.0	0.31	28.04
93BCW0049	74	27	5.4	1.1	0.6	1.8	0.26	33.94
93BCW0050	78	31	5.7	1.2	0.6	2.0	0.30	36.17
93BCW0051	69	26	5.0	0.9	0.7	1.9	0.28	35.67
93BCW0053	85	38	6.4	1.3	<0.5	2.3	0.34	33.83
93BCW0054	61	24	4.5	1.2	0.6	1.8	0.28	32.85
93BCW0055	69	30	5.2	1.2	0.5	1.9	0.29	37.97
93BCW0056	61	24	4.7	1.1	<0.5	1.8	0.27	41.3
93BCW0057	55	20	4.1	1.1	0.7	1.7	0.27	36.06
93BCW0058	56	23	4.2	1.1	<0.5	1.7	0.26	38.51
93BCW0059	65	25	4.9	1.2	0.6	1.8	0.31	35.8
93BCW0062	72	32	5.6	1.2	0.6	2.1	0.30	35.94
93BCW0063	74	32	5.5	1.2	0.7	2.0	0.31	40.37
93BCW0064	57	23	4.3	1.0	<0.5	1.6	0.25	41.16
93BCW0065	78	30	5.8	1.3	0.7	2.2	0.32	31.84
93BCW0066	65	25	5.0	1.1	0.6	1.7	0.27	33.43
93BCW0067	72	30	5.7	1.2	0.7	1.9	0.28	32.07
93BCW0068	70	32	5.7	1.1	0.6	1.9	0.28	31.56
93BCW0072	55	22	4.3	1.0	0.5	1.6	0.25	38.53
93BCW0073	55	22	4.1	1.0	<0.5	1.7	0.26	40.63
93BCW0074	66	24	5.0	1.2	0.6	2.0	0.29	33.3
93BCW0075	63	26	4.8	1.3	0.6	1.5	0.26	34.77
93BCW0077	83	34	6.5	1.2	0.8	2.2	0.29	28.24
93BCW0078	80	35	5.9	1.3	0.7	2.2	0.33	29.4
93BCW0079	74	33	5.9	1.1	0.8	1.6	0.30	26.7
93BCW0080	99	49	7.3	1.2	1.1	2.0	0.29	31.77
93BCW0081	79	34	6.2	1.3	<0.5	1.9	0.28	28.53
93BCW0082	73	32	5.5	1.1	<0.5	1.9	0.32	37.85
93BCW0084	72	31	5.8	0.9	0.6	1.5	0.22	42.65
93BCW0085	60	22	4.5	1.2	<0.5	1.7	0.28	33.66
93BCW0086	66	31	5.0	1.2	<0.5	1.5	0.32	27.3
93BCW0087	65	29	5.3	0.9	<0.5	1.6	0.22	35.8
93BCW0088	92	41	7.9	1.1	<0.5	1.7	0.27	34.2

3. INAA (<63µm)

Sample	Au ppb	Ag ppm	As ppm	Ba ppm	Br ppm	Ca %	Co ppm	Cr ppm	Cs ppm	Fe %	Hf ppm	Hg ppm	Ir ppm	Mo ppm
93BCW0089	26	<5	4.7	350	0.3	<1	5	56	2	1.59	7	<1	<5	<1
93BCW0090	7	<5	9.4	540	2.8	1	6	39	2	1.25	7	<1	<5	<1
93BCW0091	5	<5	5.3	540	0.3	<1	6	56	3	1.58	7	<1	<5	<1
93BCW0092	<2	<5	12.0	530	2.2	2	12	88	4	2.56	7	<1	<5	<1
93BCW0093	5	<5	7.8	440	0.3	2	6	52	2	1.66	9	<1	<5	<1
93BCW0094	5	<5	5.0	660	1.9	<1	8	75	3	2.23	7	<1	5	<1
93BCW0095	4	<5	2.5	570	0.3	2	7	54	3	1.85	7	<1	<5	<1
93BCW0096	<2	<5	4.4	560	3.7	2	6	41	2	1.87	8	<1	<5	2
93BCW0097	<2	<5	14.0	580	0.3	2	12	95	4	2.97	8	<1	<5	<1
93BCW0099	5	<5	12.0	690	0.3	2	13	100	5	3	7	<1	<5	<1
93BCW0100	2	<5	3.5	510	3.1	2	7	58	4	1.93	8	<1	<5	<1
93BCW0123	6	<5	12.0	570	2.2	<1	10	97	3	2.55	7	<1	<5	<1
93BCW0125	<2	<5	6.5	530	3.1	<1	9	90	3	2.25	8	<1	<5	<1
93BCW0126	4	<5	7.0	470	1.9	<1	7	79	3	2.14	8	<1	<5	<1
93BCW0127	<2	<5	15.0	530	5.2	1	10	87	3	2.38	7	<1	<5	<1
93BCW0128	4	<5	11.0	400	2.5	2	5	48	1	1.51	6	<1	<5	<1
93BCW0129	7	<5	6.6	500	3.5	1	10	100	5	1.95	6	<1	<5	<1
93BCW0130	5	<5	16.0	620	1.9	2	13	140	5	3.31	5	<1	<5	<1
93DU0501	16	<5	11.0	410	2.7	2	6	42	1	1.55	7	<1	<5	<1
93DU0502	<2	<5	7.3	400	4.7	<1	3	41	1	1.33	6	<1	<5	<1
93DU0503	5	<5	9.5	420	1.8	<1	4	40	2	1.25	6	<1	<5	<1
93DU0504	5	<5	13.0	340	1.9	2	6	40	2	1.46	7	<1	<5	<1
93DU0505	7	<5	13.0	540	2.2	1	7	53	2	1.61	8	<1	<5	<1
93DU0506	4	<5	10.0	490	2.6	1	5	40	1	1.32	7	<1	<5	<1
93DU0507	5	<5	12.0	400	2.7	2	4	42	2	1.46	7	<1	<5	<1
93DU0508	<2	<5	13.0	390	3.4	1	5	53	2	1.61	7	<1	<5	<1
93DU0509	3	<5	6.0	520	1.4	2	5	48	2	1.42	7	<1	<5	<1
93DU0510	<2	<5	8.0	440	3.2	1	4	46	2	1.38	7	<1	<5	<1
93DU0511	5	<5	5.9	400	3.6	<1	5	44	2	1.37	6	<1	<5	<1
93DU0512	6	<5	7.4	420	1.5	1	6	50	1	1.41	6	<1	<5	<1
93DU0513	<2	<5	6.4	420	3.2	2	5	42	1	1.38	6	<1	<5	<1
93DU0514	6	<5	6.9	520	2.0	<1	6	61	2	1.7	9	<1	<5	<1
93DU0515	<2	<5	6.4	420	2.1	2	6	49	2	1.67	7	<1	<5	<1
93DU0516	4	<5	6.7	390	1.9	1	5	46	1	1.31	6	<1	<5	<1
93DU0517	4	<5	7.9	460	1.8	2	6	40	2	1.41	7	<1	<5	<1

3. INAA (<63µm)

Sample	Na %	Ni ppm	Rb ppm	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm	Th ppm	U ppm	W ppm	Zn ppm	La ppm
93BCW0089	1.90	130	55	<.1	7.1	<3	<100	<500	<0.5	13.0	3.6	<1	<50	44
93BCW0090	2.02	<25	39	<.1	4.9	<3	<100	<500	1.1	12.0	3.3	<1	<50	41
93BCW0091	1.91	<27	60	0.3	6.9	<3	<100	<500	<0.5	11.0	3.9	<1	64	40
93BCW0092	2.12	<27	77	<.1	10.0	<3	<100	<500	<0.5	12.0	3.7	<1	71	41
93BCW0093	2.29	<23	44	<.1	6.6	<3	<100	<500	<0.5	18.0	4.8	<1	67	67
93BCW0094	2.07	<25	86	<.1	9.2	<3	<100	<500	<0.5	13.0	4.8	<1	67	39
93BCW0095	2.11	<23	86	<.1	7.5	<3	<100	<500	<0.5	12.0	5	<1	68	36
93BCW0096	2.31	<23	88	<.1	6.8	<3	<100	<500	<0.5	17.0	3.6	<1	57	46
93BCW0097	2.00	<27	81	<.1	11.0	<3	<100	<500	1.6	11.0	4.6	<1	79	38
93BCW0099	1.96	<29	98	0.2	11.0	<3	<100	<500	<0.5	11.0	6.6	<1	82	36
93BCW0100	2.01	<24	86	0.2	7.9	<3	<100	<500	1.7	14.0	5.4	<1	70	38
93BCW0123	2.08	<20	76	0.2	11.0	<3	<100	<500	0.8	13.0	4.7	<1	90	48
93BCW0125	2.03	<20	72	0.2	9.7	<3	<100	<500	1.3	18.0	4.6	<1	<50	49
93BCW0126	2.04	<20	56	<.1	9.3	<3	<100	<500	<0.5	17.0	4.6	<1	69	57
93BCW0127	2.17	<20	67	1.9	9.5	<3	<100	<500	1.5	16.0	4.9	5	62	42
93BCW0128	2.37	<20	48	0.3	6.0	<3	<100	<500	<0.5	13.0	3.3	3	<50	39
93BCW0129	2.21	<20	50	0.4	8.3	<3	<100	<500	0.9	10.0	2.7	<1	51	40
93BCW0130	2.09	<21	86	0.3	14.0	<3	<100	<500	<0.5	10.0	3.4	<1	105	40
93DU0501	2.20	<24	20	0.2	6.1	<3	<100	<500	<0.5	9.4	2.4	<1	<50	34
93DU0502	2.05	<20	50	0.025	5.1	<3	<100	<500	<0.5	13.0	3.6	2	<50	34
93DU0503	2.22	<21	59	0.025	5.2	<3	<100	<500	1.2	15.0	4.2	<1	<50	35
93DU0504	2.15	<21	76	0.025	5.5	<3	<100	<500	<0.5	13.0	3.3	<1	<50	33
93DU0505	2.44	<22	60	<.1	6.6	<3	<100	<500	<0.5	11.0	3.6	<1	<50	40
93DU0506	2.52	<22	35	0.025	5.4	<3	<100	<500	<0.5	9.9	2.9	<1	<50	35
93DU0507	2.50	<21	53	0.025	5.7	<3	<100	<500	1.3	17.0	6.5	<1	<50	38
93DU0508	2.37	<21	52	0.025	6.2	<3	<100	<500	<0.5	12.0	3.2	<1	<50	37
93DU0509	2.25	85	54	0.2	6.3	<3	<100	<500	<0.5	9.1	2.9	<1	<50	35
93DU0510	2.49	<21	53	0.025	5.7	<3	<100	<500	<0.5	10.0	2.8	<1	63	33
93DU0511	2.17	<20	62	0.025	5.6	<3	<100	<500	<0.5	9.3	2.6	<1	<50	32
93DU0512	2.31	<20	65	0.025	6.0	<3	<100	<500	<0.5	9.1	2.6	<1	<50	37
93DU0513	2.38	<20	63	0.025	5.7	<3	<100	<500	1.0	9.6	3	<1	<50	35
93DU0514	2.55	<24	58	0.025	7.2	<3	<100	<500	<0.5	15.0	4.4	<1	<50	57
93DU0515	2.41	<20	50	0.2	7.1	<3	<100	<500	<0.5	8.2	2.5	<1	<50	31
93DU0516	2.56	<20	63	<.1	5.5	<3	<100	<500	<0.5	8.5	2.4	2	<50	33
93DU0517	2.43	<20	51	0.025	5.7	<3	<100	<500	<0.5	10.0	3.3	<1	<50	41

3. INAA (<63µm)

Sample	Ce ppm	Nd ppm	Sm ppm	Eu ppm	Tb ppm	Yb ppm	Lu ppm	Mass gm
93BCW0089	81	32	6.1	1.4	1.2	2.3	0.35	32.92
93BCW0090	80	28	5.8	1.3	<0.5	2.3	0.33	39.6
93BCW0091	75	31	5.5	1.2	0.9	2.1	0.32	33.57
93BCW0092	78	34	5.7	1.3	<0.5	2.2	0.34	31.88
93BCW0093	120	51	8.7	1.8	1.0	3.0	0.43	40.08
93BCW0094	72	32	5.9	1.2	0.8	2.1	0.33	33.3
93BCW0095	71	26	5.4	1.2	0.7	1.6	0.27	34.15
93BCW0096	90	37	6.5	1.4	<0.5	1.8	0.26	37.42
93BCW0097	75	32	5.4	1.4	<0.5	2.2	0.32	31.46
93BCW0099	70	29	5.2	1.3	<0.5	1.9	0.28	26.73
93BCW0100	75	29	5.9	1.2	<0.5	2.0	0.26	32.46
93BCW0123	87	40	6.6	1.4	0.7	2.3	0.33	34.1
93BCW0125	91	36	6.2	1.3	0.7	2.3	0.36	31.95
93BCW0126	100	43	7.5	1.5	0.9	2.9	0.43	33.76
93BCW0127	78	30	5.4	1.3	0.8	2.2	0.38	33.93
93BCW0128	70	26	5.0	1.3	0.6	1.9	0.28	41.56
93BCW0129	77	33	5.4	1.4	0.6	2.1	0.32	32.2
93BCW0130	74	34	5.4	1.4	0.6	2.0	0.29	27.9
93DU0501	66	27	4.8	1.2	0.7	2.0	0.31	31.79
93DU0502	59	19	3.9	1.0	<0.5	1.6	0.25	39.64
93DU0503	61	24	4.3	1.1	0.6	1.8	0.28	37.84
93DU0504	58	22	4.1	1.0	0.5	1.7	0.26	38.54
93DU0505	73	29	5.5	1.3	0.6	2.2	0.32	31.77
93DU0506	68	26	4.9	1.2	<0.5	2.0	0.28	31.25
93DU0507	69	28	4.8	1.2	<0.5	2.0	0.32	31.48
93DU0508	68	25	5.1	1.3	0.6	1.9	0.29	32.28
93DU0509	63	27	4.9	1.1	0.5	2.1	0.30	36.63
93DU0510	61	27	4.6	1.2	<0.5	1.9	0.28	30.78
93DU0511	56	21	4.4	1.1	0.6	1.8	0.26	36.62
93DU0512	64	25	5.0	1.2	0.7	2.0	0.29	33.52
93DU0513	63	25	4.7	1.2	0.8	1.9	0.30	35.22
93DU0514	110	42	7.9	1.6	1.0	2.7	0.44	26.63
93DU0515	53	23	4.3	1.1	0.6	1.9	0.31	33.28
93DU0516	59	25	4.7	1.2	0.6	1.8	0.29	32.51
93DU0517	73	31	5.5	1.3	<0.5	2.2	0.34	32.89



3. INAA (<63µm)

Sample	Au ppb	Ag ppm	As ppm	Ba ppm	Br ppm	Ca %	Co ppm	Cr ppm	Cs ppm	Fe %	Hf ppm	Hg ppm	Ir ppm	Mo ppm
93DU0518	7	<5	7.3	440	2.5	1	5	44	2	1.36	8	<1	<5	<1
93DU0519	5	<5	5.4	410	2.5	1	4	37	2	1.31	7	<1	<5	<1
93DU0521	4	<5	5.9	490	4.1	1	4	44	2	1.36	7	<1	<5	<1
93DU0522	4	<5	14.0	450	4.7	2	9	66	2	2.09	7	<1	<5	<1
93DU0523	<2	<5	9.3	560	3.1	<1	12	100	3	2.64	7	<1	<5	<1
93DU0524	2	<5	8.1	350	3.1	2	7	53	2	1.55	6	<1	<5	<1
93DU0525	<2	<5	6.3	540	2.8	1	4	44	2	1.37	6	<1	<5	<1
93DU0526	7	<5	17.0	380	2.3	2	6	50	2	1.64	7	<1	<5	<1
93DU0528	3	<5	10.0	360	2.7	1	5	39	1	1.37	7	<1	<5	<1
93DU0529	8	<5	16.0	430	2.2	2	8	60	2	1.93	9	<1	<5	<1
93DU0530	10	<5	13.0	460	2.9	1	5	47	2	1.51	6	<1	<5	<1
93DU0531	3	<5	8.2	440	3.1	2	5	46	2	1.43	6	<1	<5	<1
93DU0532	10	<5	9.9	370	2.7	1	4	34	1	1.11	6	1	<5	<1
93DU0533	3	<5	5.8	530	2.9	<1	10	90	4	2.61	8	<1	<5	<1
93DU0535	3	<5	1.7	480	2.1	1	4	35	2	1.41	8	<1	<5	<1
93DU0536	2	<5	2.6	500	3.2	1	6	37	2	1.65	8	<1	<5	<1
93DU0538	<2	<5	8.0	600	3.0	1	9	80	3	2.29	8	<1	<5	<1
93DU0539	8	<5	5.9	410	1.5	1	5	38	2	1.31	7	<1	<5	<1
93DU0540	<2	<5	7.4	420	2.3	1	4	34	2	1.14	6	<1	<5	<1
93DU0541	6	<5	5.4	480	1.7	2	5	40	2	1.24	6	<1	<5	<1
93DU0543	7	<5	6.9	420	2.4	1	4	31	1	1.13	6	<1	<5	<1
93DU0544	3	<5	5.6	450	2.8	<1	5	43	2	1.3	6	<1	<5	<1
93DU0545	5	<5	9.4	420	1.8	1	7	47	2	1.38	6	<1	<5	<1
93DU0546	5	<5	7.6	410	1.6	1	4	43	1	1.18	6	<1	<5	<1
93DU0547	5	<5	6.1	490	1.3	1	5	43	2	1.31	7	<1	<5	<1
93DU0548	2	<5	7.7	430	1.6	2	4	41	2	1.28	6	<1	<5	<1
93DU0549	2	<5	6.7	440	1.7	1	4	41	2	1.23	6	<1	<5	<1
93DU0550	3	<5	5.9	440	2.8	2	4	37	2	1.28	6	<1	<5	<1
93DU0551	3	<5	8.0	430	1.5	1	3	35	2	1.14	6	<1	<5	<1
93DU0553	3	<5	7.3	580	2.1	1	10	80	3	2.51	7	<1	<5	<1
93DU0554	<2	<5	4.7	590	0.3	2	6	56	2	2.06	9	<1	<5	<1
93DU0555	<2	<5	4.7	640	2.8	2	6	41	2	1.6	8	<1	<5	<1
93DU0557	4	<5	10.0	740	3.7	1	14	100	4	2.88	7	<1	<5	<1
93DU0558	<2	<5	14.0	560	3.5	<1	12	84	4	2.3	8	<1	<5	<1
93DU0559S1	<2	<5	3.1	470	1.6	<1	4	41	2	1.13	6	<1	<5	<1

3. INAA (<63µm)

Sample	Na %	Ni ppm	Rb ppm	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm	Th ppm	U ppm	W ppm	Zn ppm	La ppm
93DU0518	2.42	<20	50	0.025	5.7	<3	<100	<500	0.9	13.0	3.1	<1	<50	47
93DU0519	2.22	<20	56	0.025	5.2	<3	<100	<500	0.8	10.0	2.8	<1	<50	37
93DU0521	2.52	<20	66	0.025	6.0	<3	<100	<500	<0.5	11.0	3	<1	<50	40
93DU0522	2.23	80	63	0.2	7.8	<3	<100	<500	<0.5	15.0	3.6	<1	<50	38
93DU0523	2.38	<21	100	0.025	12.0	<3	<100	<500	1.9	23.0	6.8	<1	51	49
93DU0524	2.65	<20	53	0.2	6.6	<3	<100	<500	0.8	12.0	4	<1	<50	37
93DU0525	2.64	<20	59	0.2	6.0	<3	<100	<500	1.3	14.0	4	<1	<50	34
93DU0526	2.45	<20	53	0.2	6.6	<3	<100	<500	<0.5	10.0	3	<1	<50	36
93DU0528	2.36	<20	41	<1	5.5	<3	<100	<500	0.9	11.0	2.7	<1	<50	44
93DU0529	2.33	<20	57	0.2	7.9	<3	<100	<500	1.0	16.0	4.7	<1	<50	59
93DU0530	2.38	<20	61	0.025	6.2	<3	<100	<500	<0.5	9.5	2.5	<1	<50	34
93DU0531	2.24	<20	42	0.025	5.9	<3	<100	<500	0.7	9.7	2.4	<1	<50	36
93DU0532	2.32	<20	40	0.025	4.5	<3	<100	<500	<0.5	9.3	2.6	<1	<50	34
93DU0533	2.19	<20	91	0.025	11.0	<3	<100	<500	0.9	18.0	5.7	1	56	47
93DU0535	2.33	<20	66	0.025	6.0	<3	<100	<500	0.8	14.0	3.7	<1	<50	41
93DU0536	2.19	<20	79	0.025	6.4	<3	<100	<500	0.8	20.0	6.2	<1	<50	45
93DU0538	2.27	<20	83	0.2	9.9	<3	<100	<500	0.9	17.0	4.9	2	60	48
93DU0539	2.39	<20	42	<1	5.1	<3	<100	<500	<0.5	9.6	2.6	<1	<50	34
93DU0540	2.35	<20	50	0.025	4.6	<3	<100	<500	<0.5	9.3	2.7	<1	<50	33
93DU0541	2.33	<20	62	0.025	5.2	<3	<100	<500	<0.5	9.4	2.9	<1	<50	37
93DU0543	2.44	<20	53	0.025	4.4	<3	<100	<500	<0.5	9.7	2.9	<1	<50	35
93DU0544	2.23	<20	51	0.025	5.2	<3	<100	<500	<0.5	8.2	2.6	<1	<50	29
93DU0545	2.37	<20	50	<1	5.8	<3	<100	<500	<0.5	9.5	3	<1	<50	37
93DU0546	2.33	<20	51	0.025	5.0	<3	<100	<500	0.9	8.3	2.3	<1	<50	32
93DU0547	2.36	<20	65	<1	5.6	<3	<100	<500	<0.5	11.0	3.8	<1	<50	43
93DU0548	2.27	<20	55	0.025	5.1	<3	<100	<500	<0.5	9.1	3.3	<1	<50	38
93DU0549	2.30	<20	69	0.025	5.2	<3	<100	<500	<0.5	11.0	3.8	<1	<50	43
93DU0550	2.31	<20	57	0.025	4.8	<3	<100	<500	<0.5	9.0	2.6	<1	52	35
93DU0551	2.46	<20	53	0.025	4.3	<3	<100	<500	0.9	9.9	2.5	1	<50	38
93DU0553	2.16	<20	82	0.2	10.0	<3	<100	<500	<0.5	13.0	5.5	<1	51	44
93DU0554	2.57	<26	78	0.025	8.2	<3	<100	<500	<0.5	15.0	6.2	<1	71	46
93DU0555	2.47	<23	72	0.025	6.4	<3	<100	<500	1.6	14.0	4.1	<1	<50	37
93DU0557	2.12	<27	72	0.3	11.0	<3	<100	<500	<0.5	11.0	3.1	<1	<50	37
93DU0558	2.17	<26	74	<1	9.4	<3	<100	<500	<0.5	12.0	5.3	<1	<50	38
93DU0559S1	2.40	<21	63	0.025	4.9	<3	<100	<500	1.4	8.3	2.8	<1	54	32

3. INAA (<63µm)

Sample	Ce ppm	Nd ppm	Sm ppm	Eu ppm	Tb ppm	Yb ppm	Lu ppm	Mass gm
93DU0518	84	34	6.4	1.4	0.7	2.3	0.37	30.93
93DU0519	67	26	5.1	1.1	0.6	1.8	0.30	33.61
93DU0521	70	29	5.3	1.3	0.6	2.0	0.31	30.02
93DU0522	71	27	5.0	1.1	0.6	2.1	0.34	31.32
93DU0523	82	33	5.6	1.2	<0.5	2.2	0.37	27.27
93DU0524	65	26	4.8	1.3	0.6	2.0	0.30	32.23
93DU0525	59	21	4.2	1.1	<0.5	2.0	0.29	30.98
93DU0526	65	25	5.1	1.1	0.7	2.1	0.32	32.73
93DU0528	76	28	5.8	1.3	0.7	2.2	0.31	33.19
93DU0529	100	43	7.7	1.5	0.8	2.7	0.41	32.23
93DU0530	61	24	4.7	1.2	0.7	1.7	0.26	32.18
93DU0531	63	26	4.9	1.1	<0.5	1.9	0.28	31.95
93DU0532	61	24	4.7	1.1	0.5	1.9	0.27	36.23
93DU0533	82	33	6.2	1.2	0.8	2.0	0.31	28.89
93DU0535	75	34	5.6	1.0	0.6	1.7	0.27	30.16
93DU0536	75	28	5.4	1.1	<0.5	1.9	0.31	31.28
93DU0538	86	34	6.3	1.3	0.7	2.1	0.31	29.22
93DU0539	59	23	4.6	1.2	0.5	1.8	0.26	36.09
93DU0540	60	23	4.6	1.1	0.6	1.7	0.28	34.25
93DU0541	63	26	5.0	1.1	<0.5	1.9	0.29	31.51
93DU0543	63	25	4.8	1.2	0.6	1.6	0.27	30.41
93DU0544	51	21	4.0	1.0	0.6	1.6	0.23	33.18
93DU0545	67	28	5.2	1.3	0.6	1.8	0.27	27.11
93DU0546	55	21	4.3	1.1	<0.5	1.7	0.28	32.4
93DU0547	77	30	5.7	1.3	0.6	2.0	0.31	31.67
93DU0548	68	30	5.1	1.1	<0.5	1.9	0.28	31.17
93DU0549	76	29	5.9	1.3	0.7	2.2	0.30	31.55
93DU0550	63	25	4.7	1.2	0.6	1.8	0.26	34
93DU0551	68	29	5.2	1.2	0.7	2.0	0.27	30.33
93DU0553	82	34	6.2	1.3	0.8	2.0	0.32	24.22
93DU0554	86	38	6.8	1.5	<0.5	2.1	0.36	29.25
93DU0555	69	28	5.4	1.2	0.6	1.6	0.29	34.58
93DU0557	74	31	5.2	1.3	0.8	1.9	0.29	27.45
93DU0558	74	28	5.9	1.2	0.9	1.9	0.29	26.76
93DU0559S1	58	27	4.5	1.2	0.6	1.7	0.25	35.83

3. INAA (<63µm)

Sample	Au ppb	Ag ppm	As ppm	Ba ppm	Br ppm	Ca %	Co ppm	Cr ppm	Cs ppm	Fe %	Hf ppm	Hg ppm	Ir ppm	Mo ppm
93DU0559S2	6	<5	7.5	500	2.0	<1	5	59	3	1.68	6	<1	<5	<1
93DU0559S6	4	<5	3.1	440	1.6	<1	6	45	2	1.29	6	<1	<5	<1
93DU0560	43	<5	7.0	490	2.4	1	4	45	2	1.28	7	<1	<5	<1
93DU0561	6	<5	9.4	480	2.9	1	5	49	2	1.47	8	<1	<5	<1
93DU0562	6	<5	10.0	580	2.5	2	6	59	3	1.59	7	<1	<5	<1
93DU0563	7	<5	6.9	510	2.8	2	5	44	2	1.38	7	<1	<5	<1
93DU0564	9	<5	19.0	680	4.1	1	14	120	4	3.09	5	<1	<5	<1
93DU0565	5	<5	25.0	610	2.5	1	14	120	5	2.99	6	<1	<5	<1
93DU0566	8	<5	9.5	620	6.5	1	13	90	8	2.57	7	<1	<5	<1
93DU0567	<2	<5	3.6	560	1.4	2	11	84	7	2.68	6	<1	<5	<1
93DU0568	<2	<5	16.0	650	3.0	<1	18	100	7	2.7	7	<1	<5	<1
93DU0569	5	<5	2.4	600	2.1	<1	10	73	5	2.42	9	<1	<5	<1
93DU0570	<2	<5	9.8	630	3.5	1	14	90	6	2.72	6	<1	<5	<1
93DU0571	5	<5	7.2	570	2.2	1	10	75	4	2.44	7	<1	<5	<1
93DU0572	2	<5	5.9	580	0.3	<1	7	67	4	2.2	8	<1	<5	<1
93DU0573	<2	<5	9.4	660	2.6	1	11	91	5	2.8	7	<1	<5	<1
93DU0574	<2	<5	4.5	590	4.3	<1	8	53	4	2.05	7	<1	<5	<1
93DU0576	<2	<5	8.5	630	4.2	2	10	110	4	2.48	7	<1	<5	<1
93DU0577	3	<5	7.8	520	2.4	<1	6	50	2	1.69	8	<1	<5	<1
93DU0578	9	<5	11.0	480	2.5	1	5	49	2	1.41	7	<1	<5	<1
93DU0579	5	<5	8.7	450	2.4	1	6	45	2	1.34	6	<1	<5	<1
93DU0580	3	<5	12.0	620	4.0	<1	10	87	4	2.42	7	<1	<5	<1
93DU0581	<2	<5	6.8	690	2.1	2	11	90	5	2.84	7	<1	<5	<1
93DU0583	<2	<5	1.4	530	2.1	2	5	42	3	1.64	9	<1	<5	<1
93DU0585	4	<5	3.0	550	0.3	1	7	60	3	2.08	9	<1	<5	<1
93DU0586	2	<5	7.1	610	2.1	1	11	77	6	2.82	7	<1	<5	<1
93DU0587	<2	<5	10.0	670	1.8	1	11	85	4	2.79	7	<1	<5	<1
93DU0588	18	<5	5.9	680	5.5	2	9	57	5	2.47	11	<1	<5	<1
93DU0589	4	<5	3.4	590	2.7	2	11	71	3	2.51	9	<1	<5	<1
93DU0611	<2	<5	8.7	600	3.4	<1	10	94	3	2.46	6	<1	<5	<1
93DU0613	5	<5	13.0	560	2.6	2	9	94	4	2.34	6	<1	<5	<1
93DU0614	<2	<5	13.0	560	5.2	<1	9	84	3	2.21	6	<1	<5	<1
93DU0622	5	<5	9.6	560	1.9	<1	12	100	4	2.6	7	<1	<5	<1
93DU0624	<2	<5	11.0	630	2.8	2	11	110	5	2.79	7	<1	<5	<1
93DU0625	<2	<5	7.5	490	2.6	2	8	63	2	1.86	7	<1	<5	<1

3. INAA (<63µm)

Sample	Na %	Ni ppm	Rb ppm	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm	Th ppm	U ppm	W ppm	Zn ppm	La ppm
93DU0559S2	2.46	<24	78	0.025	6.9	<3	<100	<500	<0.5	8.5	3.1	<1	<50	35
93DU0559S6	2.32	<21	49	0.025	5.3	<3	<100	<500	<0.5	10.0	3.4	<1	<50	34
93DU0560	2.32	<22	49	0.025	5.4	<3	<100	<500	<0.5	12.0	3.9	<1	<50	43
93DU0561	2.47	<23	55	0.025	6.0	<3	<100	<500	<0.5	13.0	3.2	<1	<50	46
93DU0562	2.37	<22	66	0.025	6.4	<3	<100	<500	<0.5	11.0	3.4	<1	<50	38
93DU0563	2.38	<22	65	0.3	5.7	<3	<100	<500	<0.5	11.0	5	1	<50	40
93DU0564	2.18	<23	74	0.025	13.0	<3	<100	<500	<0.5	11.0	3.2	3	112	41
93DU0565	2.09	<22	80	0.025	12.0	<3	<100	<500	<0.5	11.0	4.9	1	<50	41
93DU0566	2.01	<23	120	0.2	11.0	<3	<100	<500	1.3	17.0	5.9	<1	79	50
93DU0567	1.84	<21	91	0.025	11.0	<3	<100	<500	<0.5	12.0	5.7	<1	81	39
93DU0568	1.87	<21	110	0.025	12.0	<3	<100	<500	1.2	14.0	5.4	<1	94	44
93DU0569	2.20	110	90	0.025	9.8	<3	<100	<500	2.2	16.0	6.3	<1	<50	47
93DU0570	2.01	<22	120	0.3	10.0	<3	<100	<500	1.7	17.0	5.8	4	93	40
93DU0571	1.94	<20	90	0.025	9.6	<3	<100	<500	1.0	11.0	5.4	<1	61	34
93DU0572	2.07	<20	65	0.2	9.1	<3	<100	<500	0.8	11.0	5	<1	82	37
93DU0573	1.95	<20	90	0.025	11.0	<3	<100	<500	2.1	13.0	7.6	<1	89	42
93DU0574	2.08	<20	100	0.025	8.0	<3	<100	<500	1.4	17.0	6.7	<1	68	37
93DU0576	2.06	100	71	0.2	10.0	<3	<100	<500	<0.5	10.0	2.6	<1	54	40
93DU0577	2.39	<20	62	0.025	6.8	<3	<100	<500	1.3	14.0	3.6	<1	<50	48
93DU0578	2.44	<20	48	0.025	5.6	<3	<100	<500	<0.5	12.0	2.8	1	50	42
93DU0579	2.18	<20	51	0.025	5.5	<3	<100	<500	<0.5	9.8	2.8	<1	<50	34
93DU0580	2.12	<20	59	0.2	9.8	<3	<100	<500	0.8	11.0	3.1	<1	76	40
93DU0581	2.22	<20	120	0.3	11.0	<3	<100	<500	<0.5	15.0	7.2	<1	95	41
93DU0583	2.25	<20	74	0.025	6.8	<3	<100	<500	0.8	15.0	5.4	<1	<50	44
93DU0585	2.22	<20	85	0.025	8.5	<3	<100	<500	1.5	13.0	4.5	<1	59	45
93DU0586	2.14	96	120	0.3	11.0	<3	<100	<500	1.7	14.0	8	<1	82	41
93DU0587	2.15	<20	68	0.3	11.0	<3	<100	<500	1.0	12.0	5.9	3	75	37
93DU0588	2.99	<27	110	0.3	8.9	<3	<100	<500	<0.5	24.0	8.9	<1	85	54
93DU0589	2.29	<20	89	0.3	9.4	<3	<100	<500	<0.5	15.0	4.6	<1	70	47
93DU0611	2.09	<20	83	<1	11.0	<3	<100	<500	<0.5	13.0	4.6	<1	70	38
93DU0613	2.58	<20	62	0.2	9.8	<3	<100	<500	1.3	12.0	4.1	<1	<50	45
93DU0614	2.42	<20	68	<1	9.1	<3	<100	<500	<0.5	11.0	2.6	<1	58	41
93DU0622	2.07	<20	76	0.025	11.0	<3	<100	<500	1.4	12.0	4	<1	62	44
93DU0624	1.99	<20	77	0.2	12.0	<3	<100	<500	<0.5	11.0	4.4	<1	102	44
93DU0625	2.23	<20	58	0.025	7.5	<3	<100	<500	<0.5	11.0	3.3	<1	<50	39

3. INAA (<63µm)

Sample	Ce ppm	Nd ppm	Sm ppm	Eu ppm	Tb ppm	Yb ppm	Lu ppm	Mass gm
93DU0559S2	62	29	4.9	1.3	0.6	1.9	0.29	31.34
93DU0559S6	70	36	5.4	1.3	0.7	1.7	0.27	34.76
93DU0560	81	33	6.0	1.4	0.9	2.4	0.35	32.88
93DU0561	88	36	6.6	1.4	<0.5	2.6	0.37	33.4
93DU0562	69	30	5.3	1.3	0.7	2.0	0.30	35.75
93DU0563	78	35	5.7	1.3	0.8	2.1	0.35	35.14
93DU0564	77	33	5.6	1.4	0.8	2.0	0.30	27.91
93DU0565	75	33	5.6	1.4	<0.5	2.1	0.30	29.26
93DU0566	96	39	6.7	1.4	0.8	1.9	0.32	24.61
93DU0567	75	30	5.3	1.0	0.8	1.8	0.33	26.56
93DU0568	83	35	6.0	1.3	0.9	2.0	0.30	27.35
93DU0569	88	35	7.0	1.4	0.7	2.2	0.33	26.71
93DU0570	83	33	6.4	1.2	0.7	1.8	0.25	25
93DU0571	66	25	5.0	1.1	0.6	1.7	0.25	29.05
93DU0572	67	28	5.2	1.3	0.7	2.0	0.30	31.94
93DU0573	79	34	6.1	1.4	0.6	2.0	0.31	29.76
93DU0574	73	32	6.3	1.0	0.8	1.5	0.26	29.52
93DU0576	71	31	5.3	1.3	0.6	2.2	0.30	33.18
93DU0577	87	35	6.6	1.4	0.8	2.3	0.36	34.05
93DU0578	76	29	5.7	1.3	<0.5	2.0	0.30	34.99
93DU0579	62	27	4.8	1.2	0.7	2.1	0.28	36.37
93DU0580	73	32	5.4	1.3	0.7	2.2	0.32	31.45
93DU0581	78	34	6.3	1.3	0.8	2.0	0.33	26.99
93DU0583	82	38	6.7	1.2	0.8	2.0	0.35	33.02
93DU0585	84	33	6.5	1.3	0.9	2.2	0.33	30.33
93DU0586	79	35	6.0	1.3	0.7	2.0	0.28	30.72
93DU0587	70	28	5.3	1.2	0.7	1.9	0.28	31.27
93DU0588	110	44	9.0	1.6	1.1	2.1	0.36	17
93DU0589	88	40	6.7	1.4	0.7	2.0	0.32	28.56
93DU0611	69	27	5.2	1.2	0.6	1.8	0.26	30.95
93DU0613	82	31	6.1	1.6	0.8	2.2	0.31	31.55
93DU0614	75	27	5.7	1.4	0.6	2.1	0.33	30.4
93DU0622	80	36	6.0	1.5	0.7	2.5	0.39	32.78
93DU0624	80	34	6.1	1.5	0.8	2.4	0.38	29.44
93DU0625	73	28	5.3	1.2	0.6	2.0	0.31	38.69

3. INAA (<63µm)

Sample	Au ppb	Ag ppm	As ppm	Ba ppm	Br ppm	Ca %	Co ppm	Cr ppm	Cs ppm	Fe %	Hf ppm	Hg ppm	Ir ppm	Mo ppm
93DU0697	2	<5	7.0	540	3.5	1	6	54	3	1.76	6	<1	<5	<1
93BCW0001dup	4	<5	6.9	510	2.3	1	5	40	1	1.64	7	<1	<5	<1
93BCW0022dup	<2	<5	8.5	600	2.4	<1	7	54	3	1.87	7	<1	<5	<1
lab standard	204	<5	7.8	630	2.2	<1	9	56	0.5	2.6	8	<1	<5	<1
93BCW0042dup	5	<5	10.0	500	2.4	2	4	37	1	1.46	8	<1	<5	<1
93BCW0053dup	4	<5	2.0	640	2.2	1	6	57	2	1.99	10	<1	<5	<1
93BCW0054dup	9	<5	6.7	500	3.2	<1	4	44	1	1.52	7	1	<5	<1
93BCW0082dup	4	<5	7.1	600	3.1	2	7	57	2	1.86	7	<1	<5	<1
93BCW0091dup	<2	<5	3.7	540	2.1	2	5	55	2	1.76	8	<1	<5	<1
93BCW0103dup	5	<5	16.0	590	0.3	2	10	79	3	2.51	7	<1	<5	<1
lab standard	196	<5	7.4	570	2.6	<1	8	52	0.5	2.42	7	<1	<5	1
93BCW0115dup	8	<5	19.0	600	3.7	2	6	47	2	1.79	6	<1	<5	1
93BCW0131dup	<2	<5	5.8	400	0.3	2	4	38	2	1.28	6	<1	<5	<1
93BCW0141dup	<2	<5	2.3	690	1.8	2	5	55	2	1.75	6	<1	<5	<1
93BCW0154dup	<2	<5	20.0	680	0.3	<1	12	87	3	3.02	6	<1	<5	2
93BCW0187dup	5	<5	5.4	660	3.0	<1	6	48	2	1.59	7	<1	<5	<1
93BCW0183dup	4	<5	3.4	550	0.3	1	4	45	2	1.38	7	<1	<5	<1
93DU0501dup	<2	<5	12.0	510	2.9	2	6	47	1	1.69	8	<1	<5	2
93DU0521dup	<2	<5	4.6	540	4.0	2	4	45	2	1.28	7	<1	<5	<1
93DU0532dup	3	<5	11.0	250	2.3	<1	4	38	2	1.15	7	<1	<5	<1
93DU0542dup	5	<5	7.1	350	2.6	2	3	32	2	1.09	6	<1	<5	<1
93DU0560dup	<2	<5	6.4	390	2.7	<1	6	43	2	1.38	7	<1	<5	<1
93DU0577dup	9	<5	8.0	350	0.3	1	5	54	3	1.63	8	<1	<5	<1
lab standard	171	<5	7.7	580	3.0	1	9	61	2	2.45	8	<1	<5	<1
93DU0578dup	40	<5	9.9	520	2.9	1	5	47	2	1.25	6	<1	<5	<1
93DU0598dup	<2	<5	9.7	380	2.7	<1	4	44	2	1.42	7	<1	<5	<1
93DU0636dup	<2	<5	1.3	580	2.9	<1	4	39	4	1.44	7	<1	<5	<1
93DU0654dup	5	<5	15.0	510	1.9	1	9	72	2	2.29	7	<1	<5	<1
lab standard	188	<5	7.5	610	2.2	1	9	63	2	2.48	8	<1	<5	<1
93DU0676dup	<2	<5	2.6	580	2.4	2	8	59	2	2.09	7	<1	<5	<1
93DU0679dup	<2	<5	4.2	430	1.1	2	6	48	2	1.44	6	<1	<5	<1
93DU0683dup	<2	<5	5.5	450	1.5	<1	6	46	2	1.39	6	<1	<5	<1
93DU0684dup	5	<5	3.9	580	2.2	2	6	54	2	1.58	7	<1	<5	<1
93DU0703dup	2	<5	9.0	640	0.3	2	9	88	3	2.59	6	<1	<5	<1
lab standard	166	<5	6.6	570	2.2	<1	9	54	0.5	2.27	6	<1	<5	<1

3. INAA (<63µm)

Sample	Na %	Ni ppm	Rb ppm	Sb ppm	Sc ppm	Se ppm	Sn ppm	Sr ppm	Ta ppm	Th ppm	U ppm	W ppm	Zn ppm	La ppm
93DU0697	2.10	<20	63	0.025	7.4	<3	<100	<500	<0.5	9.7	4.2	<1	<50	34
93BCW0001dup	2.16	<20	29	<1	6.6	<3	<100	670	<0.5	8.1	2.7	<1	<50	31
93BCW0022dup	1.97	<20	71	<1	7.6	<3	<100	<500	<0.5	8.0	3.2	<1	<50	29
lab standard	2.05	<20	55	3.2	11.0	<3	<100	<500	<0.5	6.3	1	<1	<50	29
93BCW0042dup	2.31	120	35	0.2	5.6	<3	<100	630	1.1	10.0	3.4	<1	<50	39
93BCW0053dup	2.01	<20	47	0.2	8.4	<3	<100	<500	1.9	14.0	4.7	<1	58	49
93BCW0054dup	1.98	<20	43	<1	5.9	<3	<100	<500	<0.5	8.8	2.4	<1	<50	31
93BCW0082dup	1.97	<20	63	0.2	7.3	<3	<100	<500	1.0	12.0	3.8	2	<50	39
93BCW0091dup	1.95	72	79	0.2	7.2	<3	<100	<500	<0.5	10.0	3.4	<1	<50	39
93BCW0103dup	1.71	<20	57	<1	10.0	<3	<100	<500	0.8	8.6	5.3	<1	76	33
lab standard	1.91	<20	59	2.9	10.0	<3	<100	<500	<0.5	5.7	1.2	<1	<50	26
93BCW0115dup	2.06	<20	59	0.2	6.2	<3	<100	<500	<0.5	8.5	2.3	<1	<50	30
93BCW0131dup	2.06	<20	48	<1	5.2	<3	<100	<500	<0.5	9.2	2.7	<1	<50	31
93BCW0141dup	1.82	<20	98	<1	7.2	<3	<100	<500	0.9	6.4	1.6	<1	<50	26
93BCW0154dup	1.65	<20	59	0.4	11.0	<3	<100	<500	<0.5	7.1	1.9	<1	100	26
93BCW0187dup	2.03	<20	73	<1	6.5	<3	<100	<500	<0.5	8.4	2.7	<1	62	30
93BCW0183dup	2.01	<20	62	<1	5.9	<3	<100	<500	<0.5	8.2	2.1	<1	57	33
93DU0501dup	2.29	160	7	0.025	6.5	<3	<100	<500	<0.5	10.0	2.9	<1	111	36
93DU0521dup	2.29	<31	7	0.025	5.4	<3	<100	<500	<0.5	11.0	2.9	<1	<50	37
93DU0532dup	2.36	<31	63	0.025	4.6	<3	<100	<500	<0.5	10.0	3.3	2	<50	35
93DU0542dup	2.34	<31	41	0.025	4.3	<3	<100	<500	<0.5	9.9	3.1	<1	<50	33
93DU0560dup	2.44	<32	78	0.025	5.6	<3	<100	<500	<0.5	12.0	3.8	<1	<50	45
93DU0577dup	2.37	<33	64	0.025	6.8	<3	<100	<500	<0.5	12.0	4	<1	<50	46
lab standard	2.03	<31	70	3	11.0	<3	<100	<500	<0.5	6.5	2.5	<1	68	29
93DU0578dup	2.24	<30	46	0.025	5.0	<3	<100	<500	<0.5	11.0	2.9	<1	<50	37
93DU0598dup	2.36	<31	56	0.025	5.3	<3	<100	<500	<0.5	11.0	3.3	<1	<50	39
93DU0636dup	2.18	<30	130	0.025	6.1	<3	<100	<500	1.9	8.0	3.9	<1	87	23
93DU0654dup	2.00	<31	81	0.2	9.0	<3	<100	<500	<0.5	7.1	2.9	<1	61	28
lab standard	2.16	<26	54	3.3	11.0	<3	<100	<500	<0.5	6.5	1.6	<1	<50	31
93DU0676dup	2.04	<24	62	0.025	7.8	<3	<100	<500	1.0	6.7	2.4	<1	<50	27
93DU0679dup	2.21	<23	81	0.025	6.0	<3	<100	<500	<0.5	7.1	2.3	<1	<50	27
93DU0683dup	2.17	<23	47	0.025	5.7	<3	<100	<500	1.1	8.0	3.2	<1	63	31
93DU0684dup	2.14	<24	48	0.025	6.5	<3	<100	<500	<0.5	8.3	3.1	<1	<50	34
93DU0703dup	2.00	<24	49	0.025	9.9	<3	<100	<500	<0.5	7.6	2.8	1	<50	29
lab standard	2.05	<24	42	3	10.0	<3	<100	<500	<0.5	5.7	1.2	<1	52	27



3. INAA (<63µm)

Sample	Ce ppm	Nd ppm	Sm ppm	Eu ppm	Tb ppm	Yb ppm	Lu ppm	Mass gm
93DU0697	75	30	5.9	1.4	0.5	1.8	0.32	34
93BCW0001dup	68	24	4.9	1.2	<0.5	1.9	0.34	33.11
93BCW0022dup	63	22	4.6	1.2	0.5	2.0	0.32	31.28
lab standard	58	24	4.6	1.4	0.7	2.2	0.36	33.45
93BCW0042dup	85	37	6.0	1.4	0.8	2.2	0.36	30.87
93BCW0053dup	110	45	7.7	1.6	0.9	2.7	0.37	32.14
93BCW0054dup	65	26	4.7	1.1	<0.5	1.8	0.31	33.86
93BCW0082dup	89	32	6.4	1.4	<0.5	2.1	0.32	32.04
93BCW0091dup	84	33	6.0	1.4	<0.5	2.2	0.38	33.16
93BCW0103dup	71	31	5.3	1.3	<0.5	1.8	0.36	27.22
lab standard	55	25	4.1	1.2	0.5	2.0	0.35	35.46
93BCW0115dup	68	24	4.9	1.3	0.6	1.8	0.29	31.58
93BCW0131dup	70	27	5.1	1.2	<0.5	2.0	0.29	30.86
93BCW0141dup	57	22	4.1	1.1	0.5	1.8	0.30	27.8
93BCW0154dup	58	23	4.1	1.2	<0.5	1.8	0.29	31.37
93BCW0187dup	67	25	4.8	1.2	0.6	1.9	0.33	32.11
93BCW0183dup	69	30	5.0	1.2	0.6	2.0	0.35	32.57
93DU0501dup	69	23	5.1	1.2	0.8	2.4	0.31	31.4
93DU0521dup	68	27	5.0	1.3	0.9	2.0	0.31	32.24
93DU0532dup	68	23	5.0	1.3	0.5	1.9	0.27	33.5
93DU0542dup	63	25	4.7	1.2	<0.5	1.7	0.26	31.7
93DU0560dup	85	34	6.2	1.4	<0.5	2.2	0.34	32.18
93DU0577dup	85	38	6.4	1.4	<0.5	1.9	0.35	31.89
lab standard	49	24	4.0	1.3	<0.5	2.0	0.31	33.43
93DU0578dup	71	28	5.2	1.2	0.7	1.8	0.30	33.73
93DU0598dup	74	28	5.4	1.2	<0.5	1.9	0.28	34.96
93DU0636dup	43	18	3.2	0.9	<0.5	1.6	0.23	32.96
93DU0654dup	50	20	3.9	1.1	0.6	1.9	0.25	31.24
lab standard	55	21	4.3	1.2	<0.5	2.2	0.30	30.99
93DU0676dup	53	19	3.9	1.1	<0.5	1.8	0.27	31.73
93DU0679dup	50	22	3.9	1.1	<0.5	1.7	0.26	32.54
93DU0683dup	54	22	4.2	1.1	0.7	1.9	0.28	32.11
93DU0684dup	61	26	4.5	1.2	<0.5	1.9	0.28	32.34
93DU0703dup	56	21	4.3	1.1	<0.5	1.8	0.29	32.03
lab standard	46	15	3.8	1.1	0.9	1.9	0.28	33.14

