APPENDIX C - WHOLE ROCK GEOCHEMISTRY

Table C1. Analyses for volcanic rocks in the undivided Vampire-Narchilla unit. All coordinates are NAD83 datum, zone 9. (See analytical notes at the end of the table.)

Sample		07LP044A	07LP044B	07LP055
Station		07LP044	07LP044	07LP055
Rock		flow	flow	diabase
Unit		PЄVN-v	PЄVN-v	PЄVN-v
UTM E		594608	594608	594412
UTM N		6706355	6706355	6714284
SiO_2 (%)	FUS XRF	47.14	46.93	44.27
Al_2O_3 (%)	FUS XRF	16.90	16.62	16.79
FeO (%)	TITR	NA	NA	NA
Fe_2O_3 (%)	DIFF	NA	NA	NA
Fe_2O_3* (%)	FUS XRF	10.61	10.50	12.50
MnO (%)	FUS XRF	0.204	0.213	0.253
MgO (%)	FUS XRF	2.63	2.61	3.71
CaO (%)	FUS XRF	5.93	6.36	8.57
Na_2O (%)	FUS XRF	4.86	4.84	3.68
K_2O (%)	FUS XRF	2.18	2.18	2.20
TiO_2 (%)	FUS XRF	2.07	2.06	2.74
P_2O_5 (%)	FUS XRF	1.25	1.23	1.91
L.O.I. (%)		5.81	6.11	3.00
Total (%)		**99.58**	**99.65**	**99.62**
Au (ppb)	INAA	NA	NA	NA
As (ppm)	INAA	NA	NA	NA
Br (ppm)	INAA	NA	NA	NA
Cr (ppm)	INAA	NA	NA	NA
Ir (ppm)	INAA	NA	NA	NA
Sc (ppm)	INAA	1.164	1.304	1.395
Se (ppm)	INAA	NA	NA	NA
Sb (ppm)	INAA	NA	NA	NA
Sc (ppm)	FUS ICP	NA	NA	NA
Be (ppm)	FUS ICP	NA	NA	NA
V (ppm)	FUS ICP-MS	56	97	56
Cr (ppm)	FUS ICP-MS	-20	-20	-20
Co (ppm)	FUS ICP-MS	13	12	18
Ni (ppm)	FUS ICP-MS	-20	-20	-20
Cu (ppm)	FUS ICP-MS	-10	-10	20
Zn (ppm)	FUS ICP-MS	90	80	170
Ga (ppm)	FUS ICP-MS	21	20	19
Ge (ppm)	FUS ICP-MS	1.6	1.4	1.5
As (ppm)	FUS ICP-MS	-5	-5	11
Rb (ppm)	FUS ICP-MS	43	41	34
Sr (ppm)	FUS ICP-MS	296	307	2320
Y (ppm)	FUS ICP-MS	46.6	46.9	44.5
Zr (ppm)	FUS ICP-MS	103	73	24

Sample		09TOA006
Station		09TOA006
Rock		diabase
Unit		PЄVN-v
UTM E		594385
UTM N		6714232
SiO_2 (%)	FUS ICP	45.61
Al_2O_3 (%)	FUS ICP	16.25
FeO (%)	TITR	7.10
Fe_2O_3 (%)	DIFF	4.06
Fe_2O_3* (%)	FUS ICP	11.95
MnO (%)	FUS ICP	0.222
MgO (%)	FUS ICP	3.53
CaO (%)	FUS ICP	7.43
Na_2O (%)	FUS ICP	3.5
K_2O (%)	FUS ICP	2.71
TiO_2 (%)	FUS ICP	2.816
P_2O_5 (%)	FUS ICP	1.94
L.O.I. (%)		2.31
Total (%)		**97.48**
Au (ppb)	INAA	-2
As (ppm)	INAA	-0.5
Br (ppm)	INAA	-0.5
Cr (ppm)	INAA	-5
Ir (ppm)	INAA	-5
Sc (ppm)	INAA	7.0
Se (ppm)	INAA	-3
Sb (ppm)	INAA	0.3
Sc (ppm)	FUS ICP	8
Be (ppm)	FUS ICP	2
V (ppm)	FUS ICP	115
Cr (ppm)	FUS ICP-MS	-20
Co (ppm)	FUS ICP-MS	17
Ni (ppm)	FUS ICP-MS	-20
Cu (ppm)	FUS ICP-MS	-10
Zn (ppm)	FUS ICP-MS	110
Ga (ppm)	FUS ICP-MS	18
Ge (ppm)	FUS ICP-MS	1.6
As (ppm)	FUS ICP-MS	-5
Rb (ppm)	FUS ICP-MS	41
Sr (ppm)	FUS ICP	2106
Y (ppm)	FUS ICP-MS	43.1
Zr (ppm)	FUS ICP-MS	401

Table C1, *continued*. Analyses for volcanic rocks in the undivided Vampire-Narchilla unit. All coordinates are NAD83 datum, zone 9. (See analytical notes at the end of the table.)

Sample		07LP044A	07LP044B	07LP055
Station		07LP044	07LP044	07LP055
Nb (ppm)	FUS ICP-MS	113	111	80
Mo (ppm)	FUS ICP-MS	-2	-2	3
Ag (ppm)	FUS ICP-MS	-0.5	-0.5	-0.5
In (ppm)	FUS ICP-MS	-0.1	-0.1	-0.1
Sn (ppm)	FUS ICP-MS	7	2	2
Sb (ppm)	FUS ICP-MS	3.1	1.2	-0.2
Cs (ppm)	FUS ICP-MS	1.0	0.8	1.0
Ba (ppm)	FUS ICP-MS	828	826	974
La (ppm)	FUS ICP-MS	105	102	88.1
Ce (ppm)	FUS ICP-MS	211	206	187
Pr (ppm)	FUS ICP-MS	27.1	26.9	25.3
Nd (ppm)	FUS ICP-MS	93.7	91.9	90.8
Sm (ppm)	FUS ICP-MS	15.80	15.60	15.90
Eu (ppm)	FUS ICP-MS	4.82	4.81	5.16
Gd (ppm)	FUS ICP-MS	13.10	12.90	13.50
Tb (ppm)	FUS ICP-MS	1.83	1.80	1.86
Dy (ppm)	FUS ICP-MS	9.20	9.17	8.96
Ho (ppm)	FUS ICP-MS	1.65	1.63	1.61
Er (ppm)	FUS ICP-MS	4.51	4.48	4.25
Tm (ppm)	FUS ICP-MS	0.616	0.613	0.575
Yb (ppm)	FUS ICP-MS	3.82	3.74	3.37
Lu (ppm)	FUS ICP-MS	0.552	0.530	0.480
Hf (ppm)	FUS ICP-MS	2.8	1.9	0.6
Ta (ppm)	FUS ICP-MS	8.60	8.51	5.99
W (ppm)	FUS ICP-MS	1.1	1.0	1.1
Tl (ppm)	FUS ICP-MS	0.12	0.12	0.14
Pb (ppm)	FUS ICP-MS	-5	-5	6
Bi (ppm)	FUS ICP-MS	0.2	0.1	0.2
Th (ppm)	FUS ICP-MS	12.30	12.00	10.00
U (ppm)	FUS ICP-MS	2.76	2.73	4.10

Sample		09TOA006
Station		09TOA006
Nb (ppm)	FUS ICP-MS	115
Mo (ppm)	FUS ICP-MS	-2
Ag (ppm)	FUS ICP-MS	1.1
In (ppm)	FUS ICP-MS	-0.1
Sn (ppm)	FUS ICP-MS	2
Sb (ppm)	FUS ICP-MS	0.5
Cs (ppm)	FUS ICP-MS	1.0
Ba (ppm)	FUS ICP	1095
La (ppm)	FUS ICP-MS	94.7
Ce (ppm)	FUS ICP-MS	209
Pr (ppm)	FUS ICP-MS	25.0
Nd (ppm)	FUS ICP-MS	101
Sm (ppm)	FUS ICP-MS	17.8
Eu (ppm)	FUS ICP-MS	4.98
Gd (ppm)	FUS ICP-MS	13.8
Tb (ppm)	FUS ICP-MS	1.56
Dy (ppm)	FUS ICP-MS	9.22
Ho (ppm)	FUS ICP-MS	1.64
Er (ppm)	FUS ICP-MS	4.31
Tm (ppm)	FUS ICP-MS	0.557
Yb (ppm)	FUS ICP-MS	3.39
Lu (ppm)	FUS ICP-MS	0.514
Hf (ppm)	FUS ICP-MS	7.8
Ta (ppm)	FUS ICP-MS	7.93
W (ppm)	FUS ICP-MS	0.7
Tl (ppm)	FUS ICP-MS	0.06
Pb (ppm)	FUS ICP-MS	5
Bi (ppm)	FUS ICP-MS	-0.1
Th (ppm)	FUS ICP-MS	7.73
U (ppm)	FUS ICP-MS	1.76

* Total iron reported as Fe_2O_3.

Notes:

Samples were analyzed at Activation Laboratories Ltd., Ancaster, Ontario, Canada.
Major oxides and most minor elements were determined by X-Ray Fluorescence (XRF) on a fusion sample containing a lithium metaborate/tetraborate flux, in 2007.
Those determined by Inductively Coupled Plasma (ICP) were performed in 2009, also on a fusion sample.
FeO was determined by titration.
Au, As, Br, Cr, Ir, Sc, Se, Sb were determined by Instrumental Neutron Activation Analysis (INAA).
Trace elements and REE were analyzed by ICP-Mass Spectrometry (MS) or ICP on a fusion sample.
An elemental abundance below the detection limit is shown as a negative value.
NA = not analyzed

Table C2a. Analyses of dikes and volcanic rocks within the Toobally and Crow formations (2003). All coordinates are NAD83 datum, zone 9. (See analytical notes at the end of the table.)

Sample		**03LP003**	**03LP004**	**03LP010**	**03LP017**	**03LP021**	**03LP023**	**03LP028**	**03LP028%**	**03LP029**
Station		**03LP003**	**03LP004**	**03LP010**	**03LP017**	**03LP021**	**03LP023**	**03LP028**	**03LP028**	**03LP029**
Rock		**altered dyke/ sill**	**dyke/sill**	**altered dyke/ sill**	**altered dyke/ sill**	**dyke/sill**	**altered breccia**	**lapilli tuff**	**lapilli tuff**	**lapilli tuff**
Unit		**Þt**	**Þt**	**Þt**	**Þt**	**Þt**	**€Oc-v**	**€Oc-v**	**€Oc-v**	**€Oc-v**
UTM E		**649 516**	**649 441**	**649 320**	**650 123**	**647 628**	**647 538**	**647 053**	**647 053**	**646 909**
UTM N		**6 698 177**	**6 698 146**	**6 694 834**	**6 698 395**	**6 697 581**	**6 697 584**	**6 697 555**	**6 697 555**	**6 697 722**
SiO_2 (%)	FUS ICP	31.79	45.35	34.74	52.62	42.08	36.67	47.45		51.12
Al_2O_3 (%)	FUS ICP	13.45	15.26	14.98	14.85	14.68	10.18	14.62		12.90
$Fe_2O_3^*$ (%)	FUS ICP	11.55	11.24	10.61	10.59	15.01	15.90	11.39		10.11
MnO (%)	FUS ICP	0.183	0.184	0.125	0.045	0.176	0.230	0.162		0.209
MgO (%)	FUS ICP	8.04	7.57	3.72	2.26	4.65	4.66	8.55		8.55
CaO (%)	FUS ICP	8.57	8.72	12.15	1.95	8.23	7.99	6.21		6.54
Na_2O (%)	FUS ICP	1.62	2.41	2.91	0.16	2.88	0.12	3.87		3.10
K_2O (%)	FUS ICP	2.00	2.07	1.45	2.71	0.47	1.43	0.63		0.76
TiO_2 (%)	FUS ICP	1.438	1.672	2.067	2.753	3.369	2.461	1.596		1.824
P_2O_5 (%)	FUS ICP	0.31	0.32	0.20	0.34	0.37	0.43	0.18		0.25
L.O.I. (%)		19.68	4.31	15.64	10.88	6.92	18.56	4.35		3.34
Total (%)		**98.63**	**99.11**	**98.59**	**99.16**	**98.84**	**98.63**	**99.01**		**98.70**
Ba (ppm)	FUS ICP	389	814	268	260	337	92	326		295
Sr (ppm)	FUS ICP	198	257	526	52	698	76	380		732
Y (ppm)	FUS ICP	21	27	21	22	24	27	16		18
Sc (ppm)	FUS ICP	31	34	30	32	20	16	31		29
Zr (ppm)	FUS ICP	83	95	97	201	177	159	105		122
Be (ppm)	FUS ICP	2	1	1	2	2	1	1		1
V (ppm)	FUS ICP	226	258	249	272	270	178	193		156
V (ppm)	FUS ICP-MS	211	247	237	249	257	162	178	181	143
Cr (ppm)	FUS ICP-MS	314	271	528	254	-20	-20	279	291	250
Co (ppm)	FUS ICP-MS	39	38	52	69	47	26	45	45	34
Ni (ppm)	FUS ICP-MS	100	80	198	103	52	25	130	136	69
Cu (ppm)	FUS ICP-MS	-10	51	317	635	28	13	60	69	-10
Zn (ppm)	FUS ICP-MS	62	91	80	67	125	42	83	112	122
Ga (ppm)	FUS ICP-MS	14	16	18	17	20	14	15	15	15
Ge (ppm)	FUS ICP-MS	2	2	2	3	2	2	1	2	2
As (ppm)	FUS ICP-MS	-5	12	115	60	-5	21	-5	-5	-5
Rb (ppm)	FUS ICP-MS	50	27	54	69	14	36	10	10	13
Sr (ppm)	FUS ICP-MS	196	249	503	51	735	75	378	387	746
Y (ppm)	FUS ICP-MS	20	23	18	23	26	24	17	17	20
Zr (ppm)	FUS ICP-MS	87	105	110	210	200	172	110	112	133
Nb (ppm)	FUS ICP-MS	35	38	23	48	38	29	27	27	28
Mo (ppm)	FUS ICP-MS	3	>100	>100	2	2	>100	-2	-2	-2
Ag (ppm)	FUS ICP-MS	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
In (ppm)	FUS ICP-MS	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
Sn (ppm)	FUS ICP-MS	-1	-1	1	2	2	1	1	2	1
Sb (ppm)	FUS ICP-MS	-0.5	-0.5	-0.5	1.5	0.7	1.9	-0.5	0.7	-0.5
Cs (ppm)	FUS ICP-MS	7.8	3.3	3.1	4.1	2.2	1.4	0.8	0.8	-0.5
Ba (ppm)	FUS ICP-MS	396	828	275	264	362	95	336	340	313

Table C2a, *continued*. Analyses of dikes and volcanic rocks within the Toobally and Crow formations (2003). All coordinates are NAD83 datum, zone 9. (See analytical notes at the end of the table.)

Sample		03LP003	03LP004	03LP010	03LP017	03LP021	03LP023	03LP028	03LP028%	03LP029
Station		03LP003	03LP004	03LP010	03LP017	03LP021	03LP023	03LP028	03LP028	03LP029
La (ppm)	FUS ICP-MS	29.9	31.4	15.7	23.6	34.1	21.6	14.9	15.6	25.3
Ce (ppm)	FUS ICP-MS	59.9	62.5	33.8	49.8	73.2	46.3	32.8	34.3	50.4
Pr (ppm)	FUS ICP-MS	6.53	6.86	4.12	5.58	8.19	5.45	3.92	4.02	5.64
Nd (ppm)	FUS ICP-MS	27.9	28.8	19.5	24.5	35.6	24.6	18.0	18.1	25.3
Sm (ppm)	FUS ICP-MS	5	5.6	4.4	4.9	6.8	6.0	3.9	3.9	5.0
Eu (ppm)	FUS ICP-MS	1.88	2.10	1.29	1.53	2.83	2.15	1.73	1.71	2.17
Gd (ppm)	FUS ICP-MS	5	5.8	4.6	5.4	6.8	6.5	4.3	4.2	5.3
Tb (ppm)	FUS ICP-MS	0.8	0.9	0.7	0.9	1.1	1.0	0.7	0.7	0.8
Dy (ppm)	FUS ICP-MS	4.1	4.7	3.8	5.0	5.5	5.0	3.6	3.6	4.3
Ho (ppm)	FUS ICP-MS	0.8	0.9	0.7	0.9	1.0	0.9	0.7	0.7	0.8
Er (ppm)	FUS ICP-MS	2.3	2.7	2.0	2.7	2.9	2.7	1.9	1.9	2.1
Tm (ppm)	FUS ICP-MS	0.32	0.36	0.27	0.39	0.38	0.36	0.26	0.26	0.28
Yb (ppm)	FUS ICP-MS	1.8	2.1	1.5	2.2	2.3	2.2	1.5	1.5	1.7
Lu (ppm)	FUS ICP-MS	0.3	0.32	0.23	0.33	0.34	0.33	0.23	0.23	0.25
Hf (ppm)	FUS ICP-MS	2.3	2.7	3.2	5.5	5.1	4.4	2.9	2.9	3.5
Ta (ppm)	FUS ICP-MS	1.9	2.2	1.3	3.2	2.3	1.8	1.7	1.5	1.6
W (ppm)	FUS ICP-MS	1	-1	-1	2	-1	-1	-1	-1	-1
Tl (ppm)	FUS ICP-MS	0.2	0.2	0.2	0.3	-0.1	0.3	-0.1	-0.1	-0.1
Pb (ppm)	FUS ICP-MS	-5	10	18	-5	7	14	-5	10	9
Bi (ppm)	FUS ICP-MS	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
Th (ppm)	FUS ICP-MS	2.6	3.1	1.6	5.2	4.0	3.6	1.6	1.6	2.4
U (ppm)	FUS ICP-MS	0.7	0.8	0.4	1.4	0.9	0.8	0.4	0.4	0.6

* Total iron reported as Fe_2O_3.
% Replicate analysis.

Notes:

Samples were analyzed at Activation Laboratories Ltd., Ancaster, Ontario, Canada.
Samples were crushed and then pulverized in a ceramic mill.
Major and minor elements were determined by Inductively Coupled Plasma (ICP) on a fusion sample.
Trace elements and REE were analyzed by ICP-Mass Spectrometry (MS) on a fusion sample.
An elemental abundance below the detection limit is shown as a negative value.
Upper detection limits are indicated with > upper limit.
NA = not analyzed

Table C2b(i). Analyses of dikes and volcanic rocks within the Crow Formation (2004-2005). All coordinates are NAD83 datum, zone 9. (See analytical notes at the end of the table.)

Sample		05LP005-1	05LP008	04LP017	04LP018-1	04LP018-2	04LP052-1	04LP052-2	04LP052-3	04LP067(1)
Station		05LP005	05LP008	04LP017	04LP018	04LP018	04LP052	04LP052	04LP052	04LP067
Rock		flow	flow	volcani-clastic	flow	flow	flow	flow	flow	flow
Unit		ЄOc-v	ЄOc-v	ЄOc-v	ЄOc-v	ЄOc-v	ЄOc-v	ЄOc-v	ЄOc-v	ЄOc-v
UTM E		653 170	650 376	647 676	647 392	647 392	648 485	648 485	648 485	647 299
UTM N		6 702 526	6 698 707	6 689 077	6 688 779	6 688 779	6 701 937	6 701 937	6 701 937	6 688 532
SiO_2 (%)	FUS XRF	47.37	27.87	41.18	47.94	54.73	48.08	43.57	47.46	47.38
Al_2O_3 (%)	FUS XRF	18.8	11.97	13.72	11.53	10.51	14.64	17.51	15.89	15.21
Cr_2O_3 (%)	FUS XRF	0.03	0.06	-0.01	-0.01	0.18	0.05	0.06	0.10	-0.01
$Fe_2O_3^*$ (%)	FUS XRF	12.13	12.22	10.03	9.91	11.96	11.73	10.30	10.89	12.34
MnO (%)	FUS XRF	0.156	0.213	0.167	0.168	0.024	0.182	0.233	0.186	0.193
MgO (%)	FUS XRF	6.65	7.44	4.34	4.90	13.81	7.58	11.91	10.03	4.32
CaO (%)	FUS XRF	0.91	16.04	8.68	7.52	0.43	4.80	5.23	3.00	4.44
Na_2O (%)	FUS XRF	4.96	1.91	0.10	2.55	0.03	4.26	2.76	3.45	4.63
K_2O (%)	FUS XRF	0.34	0.08	3.67	0.91	0.02	1.62	1.39	2.86	0.57
TiO_2 (%)	FUS XRF	2.56	2.1	3.60	2.23	1.15	1.33	1.50	1.37	2.85
P_2O_5 (%)	FUS XRF	0.28	0.27	1.12	0.50	0.11	0.44	0.48	0.44	0.62
L.O.I. (%)		5.75	19.39	13.90	11.93	7.30	5.62	5.37	4.17	7.77
Total (%)		**99.94**	**99.56**	**100.50**	**100.08**	**100.25**	**100.33**	**100.32**	**99.85**	**100.31**
Sc (ppm)	INAA	33.4	34.8	10.9	12.8	18.0	16.7	20.2	17.6	15.4
V (ppm)	FUS ICP-MS	257	235	190	133	138	109	140	122	149
Cr (ppm)	FUS ICP-MS	180	310	29	-20	1,140	299	374	338	-20
Co (ppm)	FUS ICP-MS	14	33	23	46	73	33	42	41	41
Ni (ppm)	FUS ICP-MS	50	140	-20	113	449	162	199	188	-20
Cu (ppm)	FUS ICP-MS	50	60	12	33	-10	-10	-10	12	24
Zn (ppm)	FUS ICP-MS	90	150	42	-30	64	61	116	101	39
Ga (ppm)	FUS ICP-MS	21	15	21	14	12	16	22	19	16
Ge (ppm)	FUS ICP-MS	1.5	1.3	1.7	1.0	1.4	1.0	2.0	1.4	1.1
As (ppm)	FUS ICP-MS	-5	-5	-5	-5	-5	-5	-5	-5	-5
Rb (ppm)	FUS ICP-MS	8	2	116	19	-1	15	21	37	10
Sr (ppm)	FUS ICP-MS	254	180	422	73	25	175	647	259	52
Y (ppm)	FUS ICP-MS	21.3	19	38.4	20.4	10.0	23.6	30.1	27.1	21.9
Zr (ppm)	FUS ICP-MS	135	113	413	156	54	179	202	210	167
Nb (ppm)	FUS ICP-MS	22.5	17.7	137	32.4	11.9	86.7	99.1	106	34.1
Mo (ppm)	FUS ICP-MS	-2	-2	-2	-2	-2	-2	-2	-2	-2
Ag (ppm)	FUS ICP-MS	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
In (ppm)	FUS ICP-MS	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Sn (ppm)	FUS ICP-MS	-1	-1	1	-1	-1	-1	-1	3	-1
Sb (ppm)	FUS ICP-MS	0.7	1	-0.2	-0.2	-0.2	-0.2	-0.2	0.2	-0.2
Cs (ppm)	FUS ICP-MS	1.4	0.1	3.2	1.5	0.1	0.2	0.5	0.5	0.7
Ba (ppm)	FUS ICP-MS	151	23	673	128	5	415	765	946	50
La (ppm)	FUS ICP-MS	20	6.28	159	12.3	5.66	49.8	64.4	66.2	23.4
Ce (ppm)	FUS ICP-MS	48.7	16.4	294	26.9	12.5	98.7	121	123	51.7
Pr (ppm)	FUS ICP-MS	6.21	2.35	32.0	3.31	1.46	9.97	12.4	12.3	6.23
Nd (ppm)	FUS ICP-MS	25.9	11.3	117	16.6	6.26	36.7	44.9	42.8	26.8
Sm (ppm)	FUS ICP-MS	5.62	3.31	18.8	5.46	1.46	6.55	8.02	7.34	7.29

Table C2b(i), *continued*. Analyses of dikes and volcanic rocks within the Crow Formation (2004-2005). All coordinates are NAD83 datum, zone 9. (See analytical notes at the end of the table.)

Sample		05LP005-1	05LP008	04LP017	04LP018-1	04LP018-2	04LP052-1	04LP052-2	04LP052-3	04LP067(1)
Station		05LP005	05LP008	04LP017	04LP018	04LP018	04LP052	04LP052	04LP052	04LP067
Eu (ppm)	FUS ICP-MS	2.44	1.46	5.61	2.10	0.484	2.24	3.24	2.61	2.83
Gd (ppm)	FUS ICP-MS	5.71	4	14.2	5.86	1.77	5.67	6.67	6.02	7.53
Tb (ppm)	FUS ICP-MS	0.88	0.69	1.91	0.88	0.34	0.91	1.05	0.98	1.12
Dy (ppm)	FUS ICP-MS	4.67	4.09	9.00	4.51	2.12	5.00	5.84	5.44	5.43
Ho (ppm)	FUS ICP-MS	0.86	0.72	1.45	0.77	0.41	0.94	1.09	0.99	0.89
Er (ppm)	FUS ICP-MS	2.32	1.83	3.73	2.07	1.08	2.73	3.04	2.79	2.30
Tm (ppm)	FUS ICP-MS	0.306	0.244	0.497	0.283	0.142	0.383	0.423	0.391	0.294
Yb (ppm)	FUS ICP-MS	1.77	1.37	2.92	1.67	0.81	2.27	2.62	2.48	1.72
Lu (ppm)	FUS ICP-MS	0.234	0.171	0.401	0.237	0.110	0.329	0.376	0.360	0.233
Hf (ppm)	FUS ICP-MS	3.5	2.9	9.5	3.8	1.5	4.1	4.3	4.4	4.4
Ta (ppm)	FUS ICP-MS	1.62	1.26	8.77	1.75	0.59	4.68	4.88	5.23	2.22
W (ppm)	FUS ICP-MS	-0.5	-0.5	1.7	0.9	-0.5	-0.5	-0.5	0.6	4.2
Tl (ppm)	FUS ICP-MS	0.1	0.05	0.82	0.17	-0.05	0.21	0.18	0.30	0.09
Pb (ppm)	FUS ICP-MS	-5	-5	10	-5	-5	6	9	9	-5
Bi (ppm)	FUS ICP-MS	-0.1	-0.1	2.7	1.4	0.9	1.5	2.1	1.5	0.6
Th (ppm)	FUS ICP-MS	1.96	1.68	14.8	2.04	0.88	6.89	7.32	7.67	2.56
U (ppm)	FUS ICP-MS	0.53	0.39	4.67	0.63	0.24	1.82	1.84	2.50	0.74

Table C2b(ii). Analyses of dikes and volcanic rocks within the Crow Formation (2004-2005). All coordinates are NAD83 datum, zone 9. (See analytical notes at the end of the table.)

Sample		**04LP067(2)**	**05LP037**	**05LP060**	**05LP064**	**05LP047**	**05LP047A**	**04LP030**	**04LP058**	**04LP062**
Station		**04LP067**	**05LP037**	**05LP060**	**05LP064**	**05LP047**	**05LP047**	**04LP030**	**04LP058**	**04LP062**
Rock		**flow**	**flow**	**flow?**	**flow**	**dyke/sill?**	**dyke/sill?**	**volcani-clastic**	**flow**	**flow**
Unit		ЄOc-v	ЄOc-v	ЄOc-v	ЄOc-v	ЄOc-v	ЄOc-v	ЄOc-v	ЄOc-v	ЄOc-v
UTM E		**647 299**	**646 474**	**648 589**	**648 671**	**643 488**	**643 488**	**640 489**	**638 839**	**639 536**
UTM N		**6 688 532**	**6 698 311**	**6 701 885**	**6 703 655**	**6 698 498**	**6 698 498**	**6 698 856**	**6 706 551**	**6 708 455**
SiO_2 (%)	FUS XRF	47.35	45.47	40.32	43.22	46.59	46.20	48.40	49.69	46.67
Al_2O_3 (%)	FUS XRF	15.16	14.66	12.84	13.76	16.70	16.68	14.07	15.89	14.26
Cr_2O_3 (%)	FUS XRF	-0.01	0.05	0.10	0.07	0.01	0.05	0.04	0.01	-0.01
Fe_2O_3* (%)	FUS XRF	12.38	11.29	13.63	14.21	11.33	11.40	11.54	10.83	14.61
MnO (%)	FUS XRF	0.193	0.118	0.132	0.216	0.158	0.163	0.166	0.138	0.136
MgO (%)	FUS XRF	4.28	9.38	8.85	11.59	5.15	5.18	7.64	6.14	5.02
CaO (%)	FUS XRF	4.43	5.04	8.34	5.74	10.67	10.66	8.78	4.41	6.28
Na_2O (%)	FUS XRF	4.66	4.14	0.69	2.89	2.33	2.47	1.87	4.69	4.61
K_2O (%)	FUS XRF	0.57	0.39	2.55	0.84	1.40	1.30	2.28	2.14	1.40
TiO_2 (%)	FUS XRF	2.84	1.75	1.73	1.78	2.26	2.22	2.42	2.86	3.91
P_2O_5 (%)	FUS XRF	0.61	0.42	0.32	0.44	0.33	0.33	0.32	0.44	0.65
L.O.I. (%)		7.77	7.21	10.03	4.53	2.14	2.52	2.83	3.15	2.19
Total (%)		**100.23**	**99.92**	**99.53**	**99.29**	**99.07**	**99.17**	**100.36**	**100.39**	**99.73**
Sc (ppm)	INAA		20.4	28.2	27.9	29.0	29.2	27.9	26.8	29.5
V (ppm)	FUS ICP-MS		116	164	163	209	222	255	247	314
Cr (ppm)	FUS ICP-MS		270	440	380	70	80	238	57	-20
Co (ppm)	FUS ICP-MS		33	37	47	31	31	42	40	34
Ni (ppm)	FUS ICP-MS		140	230	190	30	30	125	35	-20
Cu (ppm)	FUS ICP-MS		-10	-10	-10	50	50	74	68	13
Zn (ppm)	FUS ICP-MS		70	70	90	60	70	86	110	83
Ga (ppm)	FUS ICP-MS		16	15	14	18	18	19	20	20
Ge (ppm)	FUS ICP-MS		1.2	1.1	1.2	1.3	1.3	1.5	0.9	1.5
As (ppm)	FUS ICP-MS		-5	-5	-5	6	-5	-5	-5	-5
Rb (ppm)	FUS ICP-MS		8	64	12	27	25	35	23	15
Sr (ppm)	FUS ICP-MS		91	81	291	385	395	241	70	245
Y (ppm)	FUS ICP-MS		23.9	19.5	22.2	22.7	22.3	26.1	25.9	31.1
Zr (ppm)	FUS ICP-MS		145	101	120	180	177	176	245	186
Nb (ppm)	FUS ICP-MS		43.5	25.4	34.9	28.0	27.4	31.2	45.1	39.0
Mo (ppm)	FUS ICP-MS		-2	-2	-2	-2	-2	-2	2	-2
Ag (ppm)	FUS ICP-MS		-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
In (ppm)	FUS ICP-MS		-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Sn (ppm)	FUS ICP-MS		-1	-1	-1	-1	-1	-1	-1	-1
Sb (ppm)	FUS ICP-MS		1.1	0.9	0.9	0.9	0.8	-0.2	-0.2	-0.2
Cs (ppm)	FUS ICP-MS		0.2	2.1	0.7	0.3	0.2	0.4	0.3	0.4
Ba (ppm)	FUS ICP-MS		40	168	371	249	227	288	147	193
La (ppm)	FUS ICP-MS		29.7	19.5	28.8	24.4	23.7	25.9	24.1	33.0
Ce (ppm)	FUS ICP-MS		60.4	42.8	60.6	56.7	52.9	56.7	57.4	75.7
Pr (ppm)	FUS ICP-MS		7.11	5.50	7.26	7.13	6.63	6.72	7.01	9.09
Nd (ppm)	FUS ICP-MS		28.0	22.4	28.7	28.3	26.7	28.0	28.0	38.6
Sm (ppm)	FUS ICP-MS		5.74	4.79	5.71	6.05	5.74	6.38	5.88	8.36

Table C2b(ii), *continued.* Analyses of dikes and volcanic rocks within the Crow Formation (2004-2005). All coordinates are NAD83 datum, zone 9. (See analytical notes at the end of the table.)

Sample		04LP067(2)	05LP037	05LP060	05LP064	05LP047	05LP047A	04LP030	04LP058	04LP062
Station		04LP067	05LP037	05LP060	05LP064	05LP047	05LP047	04LP030	04LP058	04LP062
Eu (ppm)	FUS ICP-MS		2.04	1.69	1.90	2.08	2.01	2.10	1.53	3.00
Gd (ppm)	FUS ICP-MS		5.61	4.72	5.50	5.56	5.39	6.15	5.54	8.44
Tb (ppm)	FUS ICP-MS		0.85	0.71	0.78	0.86	0.82	1.00	0.92	1.32
Dy (ppm)	FUS ICP-MS		4.73	3.91	4.37	4.71	4.68	5.51	5.19	6.88
Ho (ppm)	FUS ICP-MS		0.90	0.72	0.84	0.89	0.89	1.02	1.02	1.25
Er (ppm)	FUS ICP-MS		2.50	2.07	2.42	2.33	2.45	2.84	2.94	3.34
Tm (ppm)	FUS ICP-MS		0.349	0.280	0.333	0.328	0.336	0.383	0.418	0.453
Yb (ppm)	FUS ICP-MS		2.11	1.59	1.96	2.00	1.97	2.23	2.56	2.69
Lu (ppm)	FUS ICP-MS		0.299	0.223	0.287	0.294	0.270	0.314	0.367	0.358
Hf (ppm)	FUS ICP-MS		3.3	2.6	2.8	4.5	4.3	4.7	6.2	5.2
Ta (ppm)	FUS ICP-MS		2.47	1.51	2.18	1.96	1.91	1.87	2.57	2.46
W (ppm)	FUS ICP-MS		-0.5	-0.5	-0.5	-0.5	1.2	-0.5	1.1	1.1
Tl (ppm)	FUS ICP-MS		-0.05	0.20	0.06	0.09	0.09	0.18	0.10	0.10
Pb (ppm)	FUS ICP-MS		6	7	-5	-5	-5	-5	-5	6
Bi (ppm)	FUS ICP-MS		-0.1	-0.1	-0.1	-0.1	-0.1	0.6	0.5	1.0
Th (ppm)	FUS ICP-MS		4.79	2.52	3.47	3.36	2.95	2.52	4.44	2.89
U (ppm)	FUS ICP-MS		1.14	0.48	0.67	0.80	0.72	0.62	0.80	0.72

* Total iron reported as Fe_2O_3.

Notes:

Samples were analyzed at Activation Laboratories Ltd., Ancaster, Ontario, Canada.
Samples were crushed and then pulverized in a ceramic mill. Major oxides and most minor elements were determined by X-Ray Fluorescence (XRF) on a fusion sample. Sc was analyzed using Instrumental Neutron Activation Analysis (INAA). Trace elements and REE were analyzed by ICP-Mass Spectrometry (MS) at research detection limits on a fusion sample containing a lithium metaborate/tetraborate flux. An elemental abundance below the detection limit is shown as a negative value. NA = not analyzed

Table C2c. Analyses of volcanic rocks within the Crow Formation (2009-2010). All coordinates are NAD83 datum, zone 9. (See analytical notes at the end of the table.)

Sample		**09TOA141E**	**09TOA149**	**09LP082-1**	**09LP083-2**	**10TOA024**
Station		**09TOA141**	**09TOA149**	**09LP082**	**09LP083**	**10TOA024**
Rock		**flow**	**flow**	**flow**	**tuff**	**flow**
Unit		**ЄOc-v**	**ЄOc-v**	**ЄOc-v**	**ЄOc-v**	**ЄOc-v**
UTM E		**633 677**	**640 254**	**632 218**	**633 122**	**637 550**
UTM N		**6 715 218**	**6 718 980**	**6 762 262**	**6 761 980**	**6 718 719**
SiO_2 (%)	FUS ICP	60.26	45.03	42.37	46.04	69.39
Al_2O_3 (%)	FUS ICP	16.06	13.38	17.08	20.31	12.85
FeO (%)	TITR	1.31	5.43	6.35	3.90	1.11
Fe_2O_3 (%)	DIFF	6.79	5.34	3.20	3.25	2.72
Fe_2O_3* (%)	FUS ICP	8.25	11.37	10.26	7.58	3.95
MnO (%)	FUS ICP	0.015	0.164	0.084	0.139	0.050
MgO (%)	FUS ICP	1.81	5.33	6.84	6.06	3.16
CaO (%)	FUS ICP	0.13	8.49	6.58	4.16	0.50
Na_2O (%)	FUS ICP	0.58	4.29	3.09	3.19	0.65
K_2O (%)	FUS ICP	7.68	0.19	2.43	3.79	4.48
TiO_2 (%)	FUS ICP	0.589	2.609	2.03	1.56	0.44
P_2O_5 (%)	FUS ICP	0.08	0.33	0.30	0.21	0.34
L.O.I. (%)		2.99	8.26	8.60	6.41	2.75
Total (%)		**98.43**	**99.45**	**99.69**	**99.45**	**98.54**
Au (ppb)	INAA	-2	-2	-2	-2	NA
As (ppm)	INAA	-0.5	-0.5	-0.5	4.1	NA
Br (ppm)	INAA	-0.5	-0.5	-0.5	-0.5	NA
Cr (ppm)	INAA	-5	43	221	56	NA
Ir (ppm)	INAA	-5	-5	-5	-5	NA
Sc (ppm)	INAA	22.6	29.0	28.9	20.4	NA
Se (ppm)	INAA	-3	-3	-3	-3	NA
Sb (ppm)	INAA	0.3	-0.2	0.2	0.5	NA
Sc (ppm)	FUS ICP	24	33	32	22	9
Be (ppm)	FUS ICP	4	1	1	1.0	3
V (ppm)	FUS ICP	84	338	285	208	44
Cr (ppm)	FUS ICP-MS	-20	50	210	50	-20
Co (ppm)	FUS ICP-MS	4	34	37	28	15
Ni (ppm)	FUS ICP-MS	-20	40	70	30	-20
Cu (ppm)	FUS ICP-MS	-10	110	-10	30	-10
Zn (ppm)	FUS ICP-MS	40	150	100	120	50
Ga (ppm)	FUS ICP-MS	27	17	18	18	24
Ge (ppm)	FUS ICP-MS	1.9	2.0	1.1	0.9	2.0
As (ppm)	FUS ICP-MS	-5	-5	-5	5	-5
Rb (ppm)	FUS ICP-MS	143	3	37	67	126
Sr (ppm)	FUS ICP	21	133	108	102	15
Y (ppm)	FUS ICP-MS	51.7	26.2	20.8	14.9	51.4
Zr (ppm)	FUS ICP-MS	817	190	144	111	143

Table C2c, *continued*. Analyses of volcanic rocks within the Crow Formation (2009-2010). All coordinates are NAD83 datum, zone 9. (See analytical notes at the end of the table.)

Sample		09TOA141E	09TOA149	09LP082-1	09LP083-2	10TOA024
Station		09TOA141	09TOA149	09LP082	09LP083	10TOA024
Nb (ppm)	FUS ICP-MS	108	36.2	26	23.4	51.9
Mo (ppm)	FUS ICP-MS	-2	-2	-2	-2	-2
Ag (ppm)	FUS ICP-MS	2.4	0.5	-0.5	-0.5	-0.5
In (ppm)	FUS ICP-MS	-0.1	-0.1	-0.1	-0.1	-0.1
Sn (ppm)	FUS ICP-MS	6	2	1	-1	9
Sb (ppm)	FUS ICP-MS	-0.2	-0.2	-0.2	0.3	-0.2
Cs (ppm)	FUS ICP-MS	3.6	0.3	5.0	2.1	2.5
Ba (ppm)	FUS ICP	628	43	204	288	289
La (ppm)	FUS ICP-MS	91.5	23.3	19.0	15.7	41.0
Ce (ppm)	FUS ICP-MS	195	53.1	42	34.5	88.1
Pr (ppm)	FUS ICP-MS	21.10	6.57	5.14	4.16	10.1
Nd (ppm)	FUS ICP-MS	77.9	28.0	22	17.1	38.4
Sm (ppm)	FUS ICP-MS	13.6	6.53	5.0	3.76	9.40
Eu (ppm)	FUS ICP-MS	3.26	2.08	1.44	1.33	1.140
Gd (ppm)	FUS ICP-MS	10.5	6.19	4.88	3.53	9.79
Tb (ppm)	FUS ICP-MS	1.70	0.96	0.78	0.56	1.68
Dy (ppm)	FUS ICP-MS	9.81	5.32	4.32	3.06	9.93
Ho (ppm)	FUS ICP-MS	1.98	0.96	0.77	0.58	1.91
Er (ppm)	FUS ICP-MS	5.74	2.57	2.11	1.56	5.43
Tm (ppm)	FUS ICP-MS	0.877	0.352	0.302	0.226	0.813
Yb (ppm)	FUS ICP-MS	6.07	2.19	1.85	1.39	5.25
Lu (ppm)	FUS ICP-MS	1.02	0.331	0.275	0.200	0.820
Hf (ppm)	FUS ICP-MS	17.0	4.2	3.2	2.5	4.3
Ta (ppm)	FUS ICP-MS	7.47	2.72	1.91	1.69	4.49
W (ppm)	FUS ICP-MS	-0.5	-0.5	-0.5	-0.5	-0.5
Tl (ppm)	FUS ICP-MS	0.18	-0.05	-0.05	0.09	0.32
Pb (ppm)	FUS ICP-MS	6	20	-5	7	-5
Bi (ppm)	FUS ICP-MS	-0.1	-0.1	-0.1	-0.1	-0.1
Th (ppm)	FUS ICP-MS	21.0	2.89	2.6	2.28	20.40
U (ppm)	FUS ICP-MS	2.75	0.74	0.66	0.48	4.57

* Total iron reported as Fe_2O_3.

Notes:

Samples were analyzed at Activation Laboratories Ltd., Ancaster, Ontario, Canada.
Samples were crushed and then pulverized in a mild steel mill.
Major elemental oxides and most minor elements were determined by Inductively Coupled Plasma (ICP) on a fusion sample.
FeO was determined by titration.
Au, As, Br, Cr, Ir, Sc, Se and Sb were determined by Instrumental Neutron Activation Analysis (INAA).
Trace elements and REE were analyzed by ICP-Mass Spectrometry (MS) at research detection limits on a fusion sample containing a lithium metaborate/tetraborate flux.
An elemental abundance below the detection limit is shown as a negative value.
NA = not analyzed

Table C3. Analyses for volcanic rocks of the Rabbitkettle Formation. All coordinates are NAD83 datum, zone 9. (See analytical notes at the end of the table.)

Sample		J96-10 155.7m	J96-11 36.8m	07LP032
Station		drill hole	drill hole	07LP032
Rock		flow/sill?	flow/sill?	flow
Unit		ЄOR-v	ЄOR-v	ЄOR-v
Easting		590 910	590 870	591 303
Northing		6 698 779	6 699 220	6 698 365
SiO_2 (%)	FUS XRF	44.31	43.44	43.97
Al_2O_3 (%)	FUS XRF	14.43	14.58	14.49
FeO (%)	TITR	NA	NA	NA
Fe_2O_3 (%)	DIFF	NA	NA	NA
Fe_2O_3* (%)	FUS XRF	13.26	13.15	12.92
MnO (%)	FUS XRF	0.193	0.199	0.185
MgO (%)	FUS XRF	8.80	8.18	8.30
CaO (%)	FUS XRF	8.07	8.84	8.85
Na_2O (%)	FUS XRF	2.54	2.35	2.68
K_2O (%)	FUS XRF	0.92	1.83	0.64
TiO_2 (%)	FUS XRF	2.88	2.90	2.92
P_2O_5 (%)	FUS XRF	0.53	0.52	0.52
Cr_2O_3 (%)	FUS XRF	0.02	0.02	0.02
L.O.I. (%)		4.46	3.31	4.25
Total (%)		**100.41**	**99.32**	**99.75**
Au (ppb)	INAA	NA	NA	NA
As (ppm)	INAA	NA	NA	NA
Br (ppm)	INAA	NA	NA	NA
Cr (ppm)	INAA	NA	NA	NA
Ir (ppm)	INAA	NA	NA	NA
Sc (ppm)	INAA	26.5	26.7	26.8
Se (ppm)	INAA	NA	NA	NA
Sb (ppm)	INAA	NA	NA	NA
Sc (ppm)	FUS ICP	NA	NA	NA
Be (ppm)	FUS ICP	NA	NA	NA
V (ppm)	FUS ICP-MS	254	261	264
Cr (ppm)	FUS ICP-MS	280	280	270
Co (ppm)	FUS ICP-MS	48	48	47
Ni (ppm)	FUS ICP-MS	140	140	140
Cu (ppm)	FUS ICP-MS	70	70	50
Zn (ppm)	FUS ICP-MS	140	110	140
Ga (ppm)	FUS ICP-MS	20	19	20
Ge (ppm)	FUS ICP-MS	1.6	1.4	1.4
As (ppm)	FUS ICP-MS	-5	-5	-5

Sample		09LP003-3	09LP049-2	09RAS050D	09TOA161	09TOA165	09RAS168B extra
Station		09LP003-3	09LP049	09RAS050	09TOA161	09TOA165	09RAS168
Rock		altered flow	flow	sill	flow	flow	flow
Unit		ЄOR-v	ЄOR-v	ЄOR-v	ЄOR-v	ЄOR-v	ЄOR-v
Easting		582 955	569 574	572 762	613 430	612 912	609 000
Northing		6 709 689	6 722 949	6 749 796	6 753 492	6 739 782	6 727 200
SiO_2 (%)	FUS ICP	55.99	48.36	48.34	49.10	45.84	43.62
Al_2O_3 (%)	FUS ICP	16.82	16.04	12.67	12.58	15.26	14.39
FeO (%)	TITR	4.51	6.19	6.59	8.10	6.41	9.40
Fe_2O_3 (%))	DIFF	0.81	4.25	5.70	0.76	3.61	2.10
Fe_2O_3* (%)	FUS ICP	5.82	11.13	13.02	9.76	10.73	12.55
MnO (%)	FUS ICP	0.098	0.156	0.176	0.154	0.133	0.158
MgO (%)	FUS ICP	6.29	5.75	5.56	8.91	6.76	9.50
CaO (%)	FUS ICP	2.47	8.49	5.07	7.24	9.40	8.94
Na_2O (%)	FUS ICP	4.92	2.93	3.53	3.93	2.00	1.96
K_2O (%)	FUS ICP	1.19	0.87	0.11	1.04	3.16	1.62
TiO_2 (%)	FUS ICP	0.669	2.326	3.254	1.129	3.076	2.292
P_2O_5 (%)	FUS ICP	0.15	0.66	0.41	0.17	0.58	0.34
Cr_2O_3 (%)	FUS ICP	NA	NA	NA	NA	NA	NA
L.O.I. (%)		5.08	2.79	7.90	4.45	3.12	4.17
Total (%)		**99.49**	**99.51**	**100.10**	**98.47**	**100.10**	**99.55**
Au (ppb)	INAA	-2	-2	-2	-2	-2	-2
As (ppm)	INAA	4.2	-0.5	11.8	-0.5	-0.5	2.2
Br (ppm)	INAA	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
Cr (ppm)	INAA	107	107	42	337	346	491
Ir (ppm)	INAA	-5	-5	-5	-5	-5	-5
Sc (ppm)	INAA	16.1	24.6	28.2	20.1	27.4	31.6
Se (ppm)	INAA	-3	-3	-3	-3	-3	-3
Sb (ppm)	INAA	-0.2	-0.2	0.8	0.5	0.2	0.5
Sc (ppm)	FUS ICP	19	28	31	22	31	36
Be (ppm)	FUS ICP	2	2	1	-1	-1	-1
V (ppm)	FUS ICP	148	247	426	179	312	305
Cr (ppm)	FUS ICP-MS	120	110	40	350	320	470
Co (ppm)	FUS ICP-MS	17	32	46	45	41	54
Ni (ppm)	FUS ICP-MS	50	-20	-20	240	130	240
Cu (ppm)	FUS ICP-MS	30	10	60	50	30	70
Zn (ppm)	FUS ICP-MS	50	110	130	90	60	90
Ga (ppm)	FUS ICP-MS	16	18	19	15	16	21
Ge (ppm)	FUS ICP-MS	1.8	1.6	2.1	1.4	1.5	1.5
As (ppm)	FUS ICP-MS	8	-5	13	-5	-5	-5

Table C3, *continued*. Analyses for volcanic rocks of the Rabbitkettle Formation. All coordinates are NAD83 datum, zone 9. (See analytical notes at the end of the table.)

Sample		J96-10 155.7m	J96-11 36.8m	07LP032
Station		drill hole	drill hole	07LP032
Rb (ppm)	FUS ICP-MS	20	32	9
Sr (ppm)	FUS ICP-MS	615	827	855
Y (ppm)	FUS ICP-MS	30.6	30.7	30.6
Zr (ppm)	FUS ICP-MS	272	271	271
Nb (ppm)	FUS ICP-MS	55.9	56.2	56.9
Mo (ppm)	FUS ICP-MS	2	-2	-2
Ag (ppm)	FUS ICP-MS	0.9	0.6	< 0.5
In (ppm)	FUS ICP-MS	-0.1	-0.1	-0.1
Sn (ppm)	FUS ICP-MS	2	2	3
Sb (ppm)	FUS ICP-MS	3.9	-0.2	-0.2
Cs (ppm)	FUS ICP-MS	2.3	1.7	1.0
Ba (ppm)	FUS ICP-MS	982	1080	1130
La (ppm)	FUS ICP-MS	47.8	46.6	45.3
Ce (ppm)	FUS ICP-MS	95.5	93.6	92.4
Pr (ppm)	FUS ICP-MS	11.9	11.8	12.1
Nd (ppm)	FUS ICP-MS	43.7	42.4	42.6
Sm (ppm)	FUS ICP-MS	8.65	8.26	8.39
Eu (ppm)	FUS ICP-MS	2.66	2.68	2.52
Gd (ppm)	FUS ICP-MS	7.64	7.65	7.68
Tb (ppm)	FUS ICP-MS	1.19	1.16	1.17
Dy (ppm)	FUS ICP-MS	6.09	5.93	6.01
Ho (ppm)	FUS ICP-MS	1.10	1.09	1.06
Er (ppm)	FUS ICP-MS	3.05	2.96	2.93
Tm (ppm)	FUS ICP-MS	0.413	0.400	0.399
Yb (ppm)	FUS ICP-MS	2.46	2.46	2.46
Lu (ppm)	FUS ICP-MS	0.381	0.365	0.362
Hf (ppm)	FUS ICP-MS	6.3	6.3	6.3
Ta (ppm)	FUS ICP-MS	4.35	4.27	4.29
W (ppm)	FUS ICP-MS	0.8	0.7	0.8
Tl (ppm)	FUS ICP-MS	0.12	0.08	0.06
Pb (ppm)	FUS ICP-MS	5	-5	7

Sample		09LP003-3	09LP049-2	09RAS050D	09TOA161	09TOA165	09RAS168B extra
Station		09LP003-3	09LP049	09RAS050	09TOA161	09TOA165	09RAS168
Rb (ppm)	FUS ICP-MS	30	15	<1	13	47	17
Sr (ppm)	FUS ICP	177	531	436	267	772	367
Y (ppm)	FUS ICP-MS	18.0	38.8	32.1	16.3	21.3	23.5
Zr (ppm)	FUS ICP-MS	131	252	222	101	147	192
Nb (ppm)	FUS ICP-MS	9.9	21.1	43.6	14.3	37.0	44.8
Mo (ppm)	FUS ICP-MS	-2	-2	-2	-2	-2	-2
Ag (ppm)	FUS ICP-MS	-0.5	0.7	0.6	-0.5	-0.5	0.6
In (ppm)	FUS ICP-MS	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Sn (ppm)	FUS ICP-MS	1	2	2	-1	1	1
Sb (ppm)	FUS ICP-MS	-0.2	-0.2	0.9	-0.2	-0.2	0.4
Cs (ppm)	FUS ICP-MS	1.7	1.8	1.7	2.9	2.9	1.7
Ba (ppm)	FUS ICP	650	551	435	601	2951	1597
La (ppm)	FUS ICP-MS	27.7	32.0	28.1	52.6	32.2	30.7
Ce (ppm)	FUS ICP-MS	54.7	74.5	62.9	90.0	74.9	64.6
Pr (ppm)	FUS ICP-MS	5.92	9.36	7.77	9.05	9.17	7.55
Nd (ppm)	FUS ICP-MS	22.4	39.2	33.2	31.3	38.0	31.0
Sm (ppm)	FUS ICP-MS	4.23	8.65	7.61	4.48	7.76	6.53
Eu (ppm)	FUS ICP-MS	0.810	2.30	2.27	1.41	2.21	1.82
Gd (ppm)	FUS ICP-MS	3.49	7.97	7.23	4.04	6.69	6.12
Tb (ppm)	FUS ICP-MS	0.55	1.29	1.11	0.60	0.91	0.91
Dy (ppm)	FUS ICP-MS	3.22	7.40	6.21	3.26	4.68	4.91
Ho (ppm)	FUS ICP-MS	0.65	1.41	1.14	0.62	0.84	0.90
Er (ppm)	FUS ICP-MS	1.93	4.00	3.26	1.70	2.14	2.40
Tm (ppm)	FUS ICP-MS	0.289	0.596	0.460	0.246	0.278	0.333
Yb (ppm)	FUS ICP-MS	1.95	3.85	2.87	1.50	1.63	2.02
Lu (ppm)	FUS ICP-MS	0.319	0.613	0.422	0.231	0.238	0.296
Hf (ppm)	FUS ICP-MS	3.0	4.9	4.9	2.1	3.3	4.3
Ta (ppm)	FUS ICP-MS	0.82	1.35	3.18	0.63	2.79	3.18
W (ppm)	FUS ICP-MS	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
Tl (ppm)	FUS ICP-MS	0.09	-0.05	-0.05	-0.05	0.10	-0.05
Pb (ppm)	FUS ICP-MS	28	6	-5	6	-5	-5

Table C3, *continued*. Analyses for volcanic rocks of the Rabbitkettle Formation. All coordinates are NAD83 datum, zone 9. (See analytical notes at the end of the table.)

Sample		J96-10 155.7m	J96-11 36.8m	07LP032
Station		drill hole	drill hole	07LP032
Bi (ppm)	FUS ICP-MS	0.1	-0.1	0.2
Th (ppm)	FUS ICP-MS	7.29	6.83	6.99
U (ppm)	FUS ICP-MS	1.87	1.67	1.68

Sample		09LP003-3	09LP049-2	09RAS050D	09TOA161	09TOA165	09RAS168B extra
Station		09LP003-3	09LP049	09RAS050	09TOA161	09TOA165	09RAS168
Bi (ppm)	FUS ICP-MS	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Th (ppm)	FUS ICP-MS	8.15	3.36	4.30	2.82	6.81	4.08
U (ppm)	FUS ICP-MS	1.98	0.7	1.04	0.85	0.66	1.04

* Total iron reported as Fe_2O_3.

Notes:

Samples were analyzed at Activation Laboratories Ltd., Ancaster, Ontario, Canada.
Samples were crushed and then pulverized in a mild steel mill.
Major oxides and most minor elements were determined by X-Ray Fluorescence (XRF) on a fusion sample containing a lithium metaborate/tetraborate flux, in 2007.
Those determined by Inductively Coupled Plasma (ICP) were performed in 2009, also on a fusion sample.
FeO was determined by titration.
Au, As, Br, Cr, Ir, Sc, Se, Sb were determined by Instrumental Neutron Activation Analysis (INAA).
Trace elements and REE were analyzed by ICP-Mass Spectrometry (MS) or ICP on a fusion sample.
An elemental abundance below the detection limit is shown as a negative value.
NA = not analyzed

Table C4. Analyses of volcanic rocks within the Sunblood Formation. All coordinates are NAD83 datum, zone 9.

Sample		**09LP072**	**09MBKL01**
Station		**09LP072**	**09MBKL001**
Rock		**flow**	**flow**
Unit		**OSu-v**	**OSu-v**
UTM E		**621 003**	**626 074**
UTM N		**6 684 592**	**6 705 020**
SiO_2 (%)	FUS ICP	48.73	48.28
Al_2O_3 (%)	FUS ICP	14.98	15.07
FeO (%)	TITR	5.80	10.20
Fe_2O_3 (%)	DIFF	2.11	0.73
Fe_2O_3* (%)	FUS ICP	8.56	12.07
MnO (%)	FUS ICP	0.066	0.097
MgO (%)	FUS ICP	8.15	8.94
CaO (%)	FUS ICP	4.73	4.29
Na_2O (%)	FUS ICP	0.71	2.44
K_2O (%)	FUS ICP	5.2	2.1
TiO_2 (%)	FUS ICP	1.608	2.407
P_2O_5 (%)	FUS ICP	0.27	0.28
L.O.I. (%)		7.20	2.09
Total (%)		**100.20**	**98.05**
Au (ppb)	INAA	-2	-2
As (ppm)	INAA	1.6	-0.5
Br (ppm)	INAA	-0.5	-0.5
Cr (ppm)	INAA	348	69
Ir (ppm)	INAA	-5	-5
Sc (ppm)	INAA	23.6	32.5
Se (ppm)	INAA	-3	-3
Sb (ppm)	INAA	-0.2	-0.2
Sc (ppm)	FUS ICP	25	35
Be (ppm)	FUS ICP	-1	1
V (ppm)	FUS ICP	226	307
Cr (ppm)	FUS ICP-MS	310	70
Co (ppm)	FUS ICP-MS	55	42
Ni (ppm)	FUS ICP-MS	160	40
Cu (ppm)	FUS ICP-MS	100	70
Zn (ppm)	FUS ICP-MS	60	90
Ga (ppm)	FUS ICP-MS	17	19
Ge (ppm)	FUS ICP-MS	0.8	1.2
As (ppm)	FUS ICP-MS	-5	-5
Rb (ppm)	FUS ICP-MS	40	32
Sr (ppm)	FUS ICP	123	197
Y (ppm)	FUS ICP-MS	20.2	23.6
Zr (ppm)	FUS ICP-MS	130	190
Nb (ppm)	FUS ICP-MS	29.9	34.6
Mo (ppm)	FUS ICP-MS	-2	-2
Ag (ppm)	FUS ICP-MS	-0.5	0.6
In (ppm)	FUS ICP-MS	-0.1	-0.1
Sn (ppm)	FUS ICP-MS	1	2
Sb (ppm)	FUS ICP-MS	-0.2	-0.2
Cs (ppm)	FUS ICP-MS	3.2	4.2
Ba (ppm)	FUS ICP	517	875
La (ppm)	FUS ICP-MS	18.0	18.6
Ce (ppm)	FUS ICP-MS	38.9	46.2
Pr (ppm)	FUS ICP-MS	4.68	5.98
Nd (ppm)	FUS ICP-MS	19.4	26.5
Sm (ppm)	FUS ICP-MS	4.68	6.26
Eu (ppm)	FUS ICP-MS	0.996	1.74
Gd (ppm)	FUS ICP-MS	4.55	5.75
Tb (ppm)	FUS ICP-MS	0.74	0.88
Dy (ppm)	FUS ICP-MS	4.26	4.92
Ho (ppm)	FUS ICP-MS	0.81	0.90
Er (ppm)	FUS ICP-MS	2.20	2.41
Tm (ppm)	FUS ICP-MS	0.318	0.317
Yb (ppm)	FUS ICP-MS	1.96	2.01
Lu (ppm)	FUS ICP-MS	0.304	0.298
Hf (ppm)	FUS ICP-MS	3.1	4.2
Ta (ppm)	FUS ICP-MS	2.06	2.60
W (ppm)	FUS ICP-MS	0.9	-0.5
Tl (ppm)	FUS ICP-MS	0.49	0.21
Pb (ppm)	FUS ICP-MS	-5	-5
Bi (ppm)	FUS ICP-MS	-0.1	-0.1
Th (ppm)	FUS ICP-MS	5.0	3.55
U (ppm)	FUS ICP-MS	0.95	0.90

continued...

* Total iron reported as Fe_2O_3.

Notes:

Samples were analyzed at Activation Laboratories Ltd., Ancaster, Ontario, Canada.
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Major oxides and most minor elements were determined by X-Ray Fluorescence (XRF) on a fusion sample containing a lithium metaborate/tetraborate flux, in 2007.
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NA = not analyzed