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**LAND SELECTION UNIT 16 (SELAWIK, CANDLE, NORTON BAY, UNALAKLEET,
KATEEL RIVER, AND NULATO QUADRANGLES): REFERENCES, DGGS SAMPLE
LOCATIONS, GEOCHEMICAL AND MAJOR OXIDE DATA**

by

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KATEEL RIVER AND NULATO QUADRANGLES): REFERENCES, DGGS
SAMPLES LOCATIONS, GEOCHEMICAL AND MAJOR OXIDE DATA**

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Evaluation Unit 16



**LAND SELECTION UNIT 16 (SELAWIK, CANDLE, NORTON BAY,
UNALAKLEET, KATEEL RIVER AND NULATO QUADRANGLES):
REFERENCES, DGGS SAMPLE LOCATIONS,
GEOCHEMICAL & MAJOR OXIDE DATA**

Land Selection Unit 16 encompasses 7,120,000 acres in west-central Alaska. The authors did helicopter-supported field work in Unit 16 during 1991, collecting samples to help in the mineral resource evaluation process. The analytical results from these samples are presented in this report, and the references used in the evaluation process are listed. These data are also available on disk, by quadrangle, as part of the DGGS Public-Data File 93-37 series. NURE data were also used in the evaluative process, and maps of DGGS' statistical treatment of the NURE data will be available by quadrangle as part of the Public-Data File 93-38 series.

The Unit is underlain by Jurassic to Cretaceous volcanic rocks of the Koyukuk terrane and overlapping mid-Cretaceous clastic rocks of the Yukon-Koyukuk basin. Both are intruded and overlain by Cretaceous and Tertiary plutonic and volcanic rocks. Locally, Quaternary basalt overlies the older units.

In the northern portion of Unit 16, the Selawik Hills plutonic complex contains a potassic series of syenite, monzonite, quartz monzonite and granite, and an ultrapotassic series of feldspathoid-bearing syenites. The ultrapotassic series is favorable for uranium and rare earth element mineralization, as are altered zones with high radiogenic anomalies in the potassic series. The potassic series is compositionally favorable for hosting gold, though no anomalies are known. However it is thought likely that gold and heavy mineral placer deposits are present around the plutonic complex, both in recent alluvium and in underlying Tertiary sediments. The Tertiary sediments, north of the Selawik Hills, are also favorable for sediment-hosted uranium deposits.

Although not part of Unit 16, samples were collected from the Granite Mountain area in the Candle quadrangle. Granite Mountain is comprised of a suite including syenite, monzonite, quartz monzonite, and feldspathoid-bearing syenites. This suite is very similar to that of the Selawik Hills, and the Granite Mountain data are useful for comparison of the two igneous complexes.

In the Jurassic and Cretaceous volcanic and clastic rocks in the middle portion of the evaluation unit, there is low to moderate potential for gold placer deposits, and mineralization related to possible unexposed plutonic rocks.

In the Ungalik River area, there is present and historic gold placer activity. This area is considered highly favorable for continued production, not only along the present Ungalik River channel, but in a broader region where air photo interpretation indicates the presence of paleochannels due to ancient sea level changes. Beach and paleobeach placers are also possible. Mineralization related to felsic intrusive activity in the ridge west of the

Ungalik River is considered highly favorable at the southern end of the ridge, and less favorable further north.

A previously unreported occurrence of stockwork vein mineralization related to the Poison Creek volcanic field is considered to have good potential for an epithermal mineral deposit.

Coal is known to occur locally in the Cretaceous clastic rock unit. However, no extensive deposits are known within the selection area, and potential is considered low. There is also coal reported in Tertiary sediments underlying the basin north of Selawik Hills. It is probably not high grade, and if thick beds are present, they are buried.

Samples collected by DGGS in 1991 are briefly described in Table 1. Corresponding sample locations are shown on the 1:250,000 scale sheets. Tables 2a (northern part, including Selawik Hills and Granite Mountain) and 2b (southern part, including Ungalik River, Christmas Mountain, and Poison Creek areas) report results of trace element analyses from rock samples collected because of their anomalous alteration and/or possible mineralization. The asterisks beside the element labels in the left-hand column indicate the analytical procedure for that element that we feel is the more reliable, when more than procedure was used. Table 3 reports results of pan concentrate analyses. These include both stream and beach samples, as indicated in Table 1. Table 4 reports major oxide analyses from samples that were collected to be representative of fresh unaltered igneous rocks. CIPW norms were calculated using the UAF/PETCAL program, with oxide values normalized on an anhydrous basis. Figure 1 shows the compositional spread of major oxide samples from the southern part of Unit 16, using the plot of Streckeis and Le Maitre (1979).

The Au discriminant scores presented on the major oxide table are a reflection of how similar the sampled rocks from Unit 16 are to other systems that formed gold deposits around the world. The score is based on the discriminant functions developed by Newberry and Burns (1989) and discussed in detail by Burns and others (1991). The discriminant functions statistically compare the composition of an unaltered Unit 16 plutonic rock to major-oxide compositions of unaltered plutonic rocks associated with gold deposits worldwide.

The discriminant score is a number between 0 and 100; a score of 100 indicates that the composition of the sample is indistinguishable from those of gold-associated plutons; a score of 0 indicates the opposite. The score is not directly proportional to the amount of gold present and does not indicate that there is gold at the sample site, but it is a good estimate of whether the sample belongs to a plutonic system that had the capability of depositing some gold.

Some important limitations that must be considered in the interpretation of the scores are:

- 1) Only analyses from relatively unaltered rocks can be used.
- 2) Rocks from porphyry Cu-Mo deposits (because of alteration) and aplites will both typically have a low discriminant score, even though they may be from systems that are related to gold.

- 3) Discriminant scores are not given for alkalic (nepheline-normative) rocks, but these rocks may be related to gold.
- 4) A small percentage of plutonic rocks may appear to be related to gold systems when they are not.
- 5) Since gold deposits appear to be concentrated in the country rock just above a pluton or in the uppermost part of a pluton, and the areal extent of plutonic exposure generally increases with depth of a given pluton, a large, deeply eroded pluton would be less likely to host gold even if the pluton had a highly favorable score.

Burns, L.E., Newberry, R.J., and Solie, D.N., 1991, Quartz normative plutonic rocks of interior Alaska and their favorability for association with gold: Ak. Division of Geological and Geophysical Surveys Report of Investigations 91-3, 71 p., 2 sheets.

Newberry, R.J. and Burns, L.E., 1989, The probabilistic estimation of gold resources in the Circle - Fairbanks - Kantishna area: Ak. Div. of Geological and Geophysical Surveys Public-Data File 89-9, 32 p., 1 sheet.

Streckeisen, A. and Le Maitre, R.W., 1979, A chemical approximation to the modal QAPF classification of the igneous rocks; N. Jb. Miner. Abh., v.136, p.169-206.

LAND SELECTION UNIT 16 SAMPLES

QUAD	STATION	GEOCHEM	MAJOR OXIDE	PAN CON	ROCK DESCRIPTION	LATITUDE			LONGITUDE		
						Degree	Minute	Second	Degree	Minute	Second
KR C-5	91MW41			2478	Porphyritic andesite dike	65	44	36.837	158	10	1.0271
KR C-5	91DNS108			2204	Medium-gr. granite	65	44	37.574	158	9	56.1
KR C-5	91DNS108	2205			Granite w/propylitic alteration, <1% sulfide	65	44	37.574	158	9	56.1
KR C-5	91DNS108			2206	Medium-gr. granite	65	44	37.574	158	9	56.1
CAN B-3	91DNS84	2178			Calcite veins in sandstone	65	27	5.0105	160	16	33.586
CAN B-3	91DNS83	2177			Medium-grained calcareous sandstone	65	26	54.449	160	12	49.684
CAN B-3	91DNS82	2176			Calcite-quartz veins in calcareous sandstone	65	27	15.222	160	11	43.964
CAN B-3	91DNS81	2175			Calcite-quartz veins, brecciated calc. sandstone	65	27	31.262	160	10	12.123
CAN B-5	91DNS63			2161	Granite Mtn: nepheline syenite	65	24	5.0685	161	16	38.859
CAN B-5	91DNS63			2162	Granite Mtn: borolanite	65	24	5.0685	161	16	38.859
CAN B-5	91DNS63	2163			Granite Mtn: borolanite	65	24	5.0685	161	16	38.859
CAN B-5	91DNS63	2164			Granite Mtn: juvite	65	24	5.0685	161	16	38.859
CAN B-5	91DNS63			2165	Granite Mtn: Fluorite-bearing syenite	65	24	5.0685	161	16	38.859
CAN B-5	91RN219			2295	Duplicate of 2187-Granite Mtn: leucocratic syenite	65	26	45.106	161	16	41.379
CAN B-5	91RN219			2187	Duplicate of 2295-Granite Mtn: leucocratic syenite	65	26	45.106	161	16	41.379
CAN B-5	91RN218			2294	Granite Mtn: medium-grained monzonite	65	25	11.69	161	14	20.068
CAN B-5	91TS1	2323			Granite Mtn: Aphanitic nepheline syenite	65	24	5.1215	161	16	39.109
CAN B-5	2159			2159	Granite Mtn: pan from placer stream	65	23	45.216	161	18	20.925
CAN C-3	91GL231		91GL231		Granite Mtn: quartz monzonite	65	26	46.797	161	8	20.745
CAN C-3	91SL112		91SL112		Granite Mtn: hornblende biotite quartz monzonite	65	25	5.7783	161	10	3.1092
CAN C-3	91SL113		91SL113		Granite Mtn: hornblende granite	65	25	9.6835	161	7	47.216
CAN C-3	91SL117		91SL117		Granite Mtn: syenite	65	25	53.107	161	14	53.059
CAN C-3	91KC335		91KC335		Granite Mtn: pink, coarse-grained alk-feld granite	65	23	44.273	161	11	5.3633
CAN C-3	91KC340		91KC340		Granite Mtn: pyroxene monzonite	65	26	0.91452	161	14	1.3362
CAN C-3	91DNS87	2180			Fine-grained ss w/veinlets, sulfosalts(?)	65	32	25.212	160	26	17.137
CAN C-3	91MW23	2273			Siltstone, fine-grained sandstone	65	32	24.114	160	26	20.773
CAN C-3	91MW21	2266			Feldspathic sandstone	65	33	33.986	160	16	21.056
CAN C-3	91Ha76	2188			Duplicate of 2095-siltstone w/ quartz veins	65	33	26.322	160	23	52.537
CAN C-3	91Ha76	2094			Calcareous siltstone w/calcite veining	65	33	26.322	160	23	52.537
CAN C-3	91Ha76	2095			Duplicate of 2188-siltstone w/ quartz veins	65	33	26.322	160	23	52.537
CAN C-3	91Ha75	2093			Dark aphanitic rock w/pyrite	65	33	21.931	160	23	24.335
CAN C-3	91Ha73	2092			Fe-stained chloritic hornfels w/calcite veining	65	33	33.898	160	21	56.501
CAN C-3	91Ha72	2087			Hornfels, calcite veining	65	33	26.136	160	21	9.5442
CAN C-3	2267	2267			Sandstone	65	34	6.9134	160	15	11.178
CAN C-3	2268	2268			Calcareous sandstone	65	34	5.1919	160	15	22.625
CAN C-3	2269	2269			Contorted quartz veinlets in feldspathic sandstone	65	34	5.3421	160	15	40.743
CAN C-3	2270	2270			Polythitic conglomerate/pebble dike(?)	65	34	10.478	160	16	26.302
CAN C-3	2271	2271			Quartz microveinlets in sheared siltstone	65	34	13.142	160	16	4.5401
CAN C-3	2272	2272			Pebble-cobble conglomerate	65	34	25.203	160	16	43.452
SEL A-2	91DNS89			2181	Fine-grained quartz monzonite	66	7	12.617	159	48	49.493
SEL A-2	91DNS90	2182			Pegmatitic granite dike in quartz monzonite	66	7	58.926	159	48	58.651
SEL A-2	91DNS90			2183	Aplite dike in quartz monzonite	66	7	58.926	159	48	58.651
SEL A-2	91DNS56	2036			Aplite w/pyrite	66	9	21.278	159	48	35.947
SEL A-2	91DNS57	2037			Alkali-feldspar syenite w/dk. green veining	66	9	28.025	159	48	52.683
SEL A-2	91DNS59	2038			Altered, orange-wxng syenite	66	9	35.005	159	49	50.18

LAND SELECTION UNIT 16 SAMPLES

QUAD	STATION	GEOCHEM	MAJOR OXIDE	PAN CON	ROCK DESCRIPTION	LATITUDE			LONGITUDE		
						Degree	Minute	Second	Degree	Minute	Second
SEL A-2	91DNS60a	2039			Fine-gr. yellowish orange feldspathic intrusive	66	9	33.855	159	49	59.047
SEL A-2	91DNS62	2040			Pink-orange-wxng porphyritic syenite	66	9	30.977	159	50	23.847
SEL A-2	91RN214		2288		Nepheline syenite	66	11	9.9237	159	46	32.51
SEL A-2	91RN214	2289			Nepheline syenite	66	11	9.9237	159	46	32.51
SEL A-2	91RN215		2290		Hunt Ck: gt-bearing nepheline syenite	66	11	12.531	159	46	5.101
SEL A-2	91RN215	2291			Hunt Ck: gt-bearing nepheline syenite	66	11	12.531	159	46	5.101
SEL A-2	91RN215	2292			Altered nepheline syenite	66	11	12.531	159	46	5.101
SEL A-2	91RN216	2293			Pegmatoid pod	66	11	13.263	159	45	53.389
SEL A-2	91RN211	2285			Fe-stained breccia	66	9	24.651	159	48	46.243
SEL A-2	91RN212	2286			Aplite w/quartz veinlets, minor Fe-staining	66	9	31.076	159	49	18.022
SEL A-2	91RN213	2287			Lamprophyre dike(?)	66	9	32.154	159	49	39.24
SEL A-2	91Ha77			2096	Pans below Tertiary gravel, near basalt	66	9	37.186	159	56	59.116
SEL A-2	91Ha78			2097	Pans w/sy, mz, basalt, vein qtz	66	8	23.943	159	57	34.944
SEL A-2	91Ha65			2080	Pans w/sy, volc. Green sands	66	10	24.47	159	44	29.946
SEL A-2	91Ha65	2081			Fine-grained syenite w/pyrite	66	10	24.47	159	44	29.946
SEL A-2	91TS28		2315		Coarse-grained syenite	66	11	11.903	159	49	41.588
SEL A-2	91MW24	2275			Quartz microveinlets in syenite near contact	66	10	3.9392	159	44	24.142
SEL A-2	91MW24	2277			Black metallic mineral	66	10	3.9392	159	44	24.142
SEL A-2	2150	2150			Lamprophyre	66	9	34.901	159	49	50.437
SEL A-2	2158		2158		Diabase dike(?) in syenite	66	10	44.509	159	48	17.965
SEL A-2	2156		2156		Medium-grained syenite	66	10	27.033	159	48	37.591
SEL A-2	2155	2155			Red-brown-wxng syenite porphyry	66	10	22.46	159	48	35.131
SEL A-3	91DNS73	2171			V. coarse-gr. granite dike	66	4	13.29	160	18	47.102
SEL A-3	91DNS76		2172		Gneissic syenite, color index about 40	66	8	3.1863	160	22	53.412
SEL A-3	91DNS77	2173			Leucocratic dike in gneissic syenite	66	8	20.793	160	22	57.493
SEL A-3	91DNS78	2174			Limonitic, Fe-stained rubble, brown veinlets	66	8	31.963	160	22	49.155
SEL A-3	91MW18		2260		Mafic nepheline syenite	66	6	55.033	160	23	10.769
SEL A-3	91MW20	2262			Blue fracture-coatings on pyroxenite	66	6	53.446	160	24	32.912
SEL A-3	91MW20	2264			Pyroxenite	66	6	53.446	160	24	32.912
SEL A-3	91MW20	2265			Syenite dikes	66	6	53.446	160	24	32.912
SEL A-3	91Ha68			2084	Pans w/basalt, gneissic syenite	66	3	32.731	160	24	39.096
SEL A-3	91Ha69			2085	Pans in gneissic syenite	66	9	59.997	160	21	26.279
SEL A-3	91Ha70			2086	Pans in large boulders	66	9	18.257	160	17	19.285
SEL A-3	91TS17	2313			Limonitic foliated felsite	66	6	17.411	160	24	42.806
SEL A-3	91TS17	2314			Limonitic felsite w/pyrite	66	6	17.411	160	24	42.806
SEL A-4	91DNS50	2031			Red fracture coating, calcareous metavolcanic	66	8	57.094	160	40	31.426
SEL A-4	91DNS50	2032			Calc-silicate metamorphic, iron sulfides	66	8	57.094	160	40	31.426
SEL A-4	91DNS51	2033			Limonitic aplite dike, sparse sulfides	66	8	57.351	160	40	17.005
SEL A-4	91DNS53		2184		Duplicate of 2035-hb alkali-feldspar syenite	66	9	4.7428	160	40	0.77259
SEL A-4	91DNS53	2034			Chlorite veinlets in felsite	66	9	4.7428	160	40	0.77259
SEL A-4	91DNS53		2035		Duplicate of 2184-hb alkali-feldspar syenite	66	9	4.7428	160	40	0.77259
SEL A-4	91DNS46	2030			Dark green aphanitic dike, possible sulfosalts	66	7	4.4655	160	36	35.568
SEL A-4	91DNS68	2168			Brecciated quartz monzonite	66	6	14.49	160	35	42.924
SEL A-4	91DNS69	2169			Brecciated monzonite w/dull gray veinlets, limonite	66	5	32.759	160	35	17.404
SEL A-4	91DNS71	2170			Brecciated fine-grained syenite	66	5	6.8166	160	36	18.909

LAND SELECTION UNIT 16 SAMPLES

QUAD	STATION	GEOCHEM	MAJOR OXIDE	PAN CON	ROCK DESCRIPTION	LATITUDE			LONGITUDE		
						Degree	Minute	Second	Degree	Minute	Second
SEL A-4	91RN233	2307			Biotite cpxite, abundant sphene	66	9	54.918	160	36	53.246
SEL A-4	91RN232	2306			Fine-grained leucocratic nepheline syenite	66	9	54.278	160	36	29.027
SEL A-4	91RN230	2303			Fine-grained syenite w/ interstitial calcite	66	9	42.234	160	34	54.133
SEL A-4	91RN230	2304			Biotite garnet nepheline syenite	66	9	42.234	160	34	54.133
SEL A-4	91RN230	2305			Biotite garnet nepheline syenite	66	9	42.234	160	34	54.133
SEL A-4	91RN208	2284			Kspar pegmatite dike in schistose rocks, Fe oxide	66	9	34.459	160	34	34.205
SEL A-4	91RN222	2190			Duplicate of 2299-chlorite-cemented sy. breccia	66	7	55.199	160	38	47.913
SEL A-4	91RN222	2299			Duplicate of 2190-chlorite-cemented sy. breccia	66	7	55.199	160	38	47.913
SEL A-4	91RN222	2300			Fe-stained breccia	66	7	55.199	160	38	47.913
SEL A-4	91RN222	2301			Fine-grained leucocratic dike	66	7	55.199	160	38	47.913
SEL A-4	91RN223	2302			Mafic pegmatite w/nepheline(?)	66	7	53.999	160	38	48.1
SEL A-4	91RN205	2283			Fine-grained chloritized syenite w/ qtz veinlets	66	7	11.493	160	36	31.428
SEL A-4	91RN204	2282			Chlorite greisen zone	66	7	4.3095	160	36	35.826
SEL A-4	91RN203			2281	Fluorite-bearing coarse-grained syenite	66	7	2.07	160	36	35.448
SEL A-4	91Ha67			2083	Harvey Ck: pans w/nepheline syenite	66	1	51.759	160	38	37.023
SEL A-4	91Ha66			2082	Pans in syenite pegmatite alluvium	66	8	56.712	160	39	22.543
SEL A-4	91Ha64			2079	Pans in syenite and metamorphic alluvium	66	8	11.155	160	36	6.5016
SEL A-4	91Ha63			2078	Pans in syenite alluvium	66	7	58.988	160	38	15.35
SEL A-4	91Ha62	2077			Fluorite-bearing intrusive	66	7	26.389	160	36	35.489
SEL A-4	91MW13			2254	Nepheline syenite porphyry	66	4	40.619	160	30	2.1731
SEL A-4	91MW6	2145			Felsic syenite	66	7	19.866	160	37	46.51
SEL A-4	91MW6	2146			Trachytoid syenite	66	7	19.866	160	37	46.51
SEL A-4	91MW5	2142			Quartz syenite greisen	66	7	1.8975	160	37	40.517
SEL A-4	91MW4	2141			Duplicate of 2194-pegmatoid in syenite	66	7	26.336	160	36	35.104
SEL A-4	91MW4	2194			Duplicate of 2141-pegmatoid in syenite	66	7	26.336	160	36	35.104
SEL A-4	91MW3	2139			Fluorite in melanocratic syenite	66	7	4.6739	160	36	35.696
SEL A-4	2140	2140			Black metallic fracture-coating in chloritic syenite	66	7	11.177	160	36	25.641
SEL A-4	2144	2144			Trachytoid syenite w/fluorite	66	7	13.198	160	37	41.513
SEL A-4	2147	2147			Chloritized brecciated coarse-grained syenite	66	7	26.218	160	37	43.019
SEL B-3	91DNS67	2167			Sphene-rich syenite	66	18	5.2519	160	18	46.312
SEL B-3	91DNS44	2029			Fluorite-bearing melanocratic alkali-feldspar syenite	66	17	57.281	160	27	32.786
SEL B-3	91DNS66	2166			Fine-grained lt. pink dike in syenite	66	17	30.753	160	27	38.269
SEL B-3	91RN220	2192			Duplicate of 2298-coarse-grained nepheline syenite	66	20	15.49	160	23	15.321
SEL B-3	91RN220	2296			Coarse-grained nephelinite	66	20	15.49	160	23	15.321
SEL B-3	91RN220			2297	Nepheline syenite	66	20	15.49	160	23	15.321
SEL B-3	91RN220	2298			Duplicate of 2192-coarse-grained nepheline syenite	66	20	15.49	160	23	15.321
SEL B-3	91Ha61			2076	Melanocratic syenite w/fluorite	66	17	57.338	160	27	31.882
SEL B-3	91MW11	2160			Nephelinite, anomalous cps	66	20	10.621	160	22	25.931
SEL B-3	91MW11	2251			Syenite, anomalous cps	66	20	10.621	160	22	25.931
SEL B-3	91MW1			2138	Leucocratic alkali-feldspar syenite	66	17	57.229	160	27	32.784
NB A-1	91DNS30	2023			Felsic tuff	64	6	34.227	159	1	10.317
NB A-1	91DNS33	2024			Quartz stockwork breccia	64	4	30.093	159	0	33.401
NB A-4	91DNS10			2011	Beach sands	64	4	12.835	160	56	28.628
NB A-4	91DNS9			2010	Beach sands, 1 fleck gold	64	0	24.293	160	54	3.9675
NB A-4	91DNS9	2009			Quartz veins in sandstone	64	0	24.293	160	54	3.9675

LAND SELECTION UNIT 16 SAMPLES

QUAD	STATION	GEOCHEM	MAJOR OXIDE	PAN CON	ROCK DESCRIPTION	LATITUDE		LONGITUDE			
						Degree	Minute	Second	Degree	Minute	Second
NB B-2	91DNS41	2027			Carbonate veins in seds near felsite	64	29	15.401	159	40	5.4595
NB B-2	91DNS41	2028			Felsite intrusive	64	29	15.401	159	40	5.4595
NB B-2	91DNS37	2089			Calcareous sandstone above contact w/intrusive	64	24	33.808	159	45	59.758
NB B-2	91DNS38	2091			Felsic intrusive	64	24	39.666	159	46	22.688
NB B-2	91DNS38	2090			Hornfelsed calcareous sandstone at base of intrusive	64	24	39.666	159	46	22.688
NB B-2	91BT413	2113			Quartz-carbonate vein in coarse-grained sandstone	64	27	59.601	159	43	59.187
NB B-2	91JK178	2041			Veined calcareous sandstone near intrusive	64	23	31.035	159	48	36.684
NB B-2	91JK178	2042			Veined calcareous sandstone near intrusive	64	23	31.035	159	48	36.684
NB B-2	91JK179	2043			Dacitic dike w/sulfide	64	23	5.6235	159	49	4.478
NB B-2	91Ha60	2075			Felsic dike	64	22	45.479	159	49	50.227
NB C-4	91DNS13			2015	Beach sands	64	42	10.684	160	47	0.92115
NB C-4	91DNS12			2014	Beach sands	64	39	33.916	160	47	23.824
NB C-4	91DNS2	2003			Quartz-rich vein w/massive sulfide from tailings	64	32	43.377	160	44	10.612
NB C-4	91DNS2	2004			Quartz breccia w/sulfide	64	32	43.377	160	44	10.612
NB C-4	91DNS1	2002			Altered felsite dike	64	32	58.247	160	45	28.163
NB C-4	91DNS16			2016	Felsic dike/plug	64	32	29.594	160	46	42.178
NB C-4	91DNS11	2012			Skarn from tailings	64	32	11.188	160	49	14.02
NB C-4	91DNS6	2008			Altered felsic intrusive in hornfels	64	33	18.732	160	35	5.8821
NB C-4	91DNS5	2007			Hornfels w/pyrite, sulfides	64	33	22.11	160	34	49.741
NB C-4	91DNS4			2006	Cpx biotite diorite	64	33	37.411	160	34	21.916
NB C-4	91DNS3			2005	Cpx biotite diorite	64	33	41.609	160	33	47.692
NB C-4	91BT409	2112			Medium-gr. syenite clast in volcanic agglomerate	64	34	11.793	160	43	51.807
NB C-4	91BT397			2108	Pan from dredge tailings, 1 fleck gold	64	32	45.396	160	44	12.071
NB C-4	91BT399	2109			Fine-grained biotite quartz monzonite	64	33	53.327	160	33	39.279
NB C-4	91BT403	2111			Ksperr granite porphyry dike w/sulfides	64	34	11.39	160	34	34.551
NB C-4	91BT401	2110			Ferricrete-stained mudstone, thin carbonate layers	64	34	9.9409	160	32	22.768
NB C-4	91JK162	2026			Biotite quartz diorite	64	33	57.534	160	33	20.942
NB C-4	91Ha55			2074	Pan, 1 fleck gold	64	32	57.281	160	45	32.866
NUL A-6	91DNS29	2022			Felsic tuff	64	6	45.276	158	59	10.103
NUL A-6	91DNS28	2021			Felsic tuff	64	5	41.3	158	58	20.841
NUL A-6	91BT425	2117			Vuggy aphanitic dacite/rhyolite	64	5	25.214	158	56	17.828
NUL A-6	91BT427			91BT427	Basalt	64	4	52.547	158	56	38.321
NUL A-6	91BT431	2118			Sinter	64	4	23.198	158	57	32.195
NUL A-6	91BT431	2119			Sinter	64	4	23.198	158	57	32.195
NUL A-6	91BT422			91BT422	Basaltic andesite	64	4	30.316	158	49	11.104
NUL A-6	91BT419	2114			Quartz stockwork, ferrigenous gossan in sandstone	64	4	56.182	158	46	3.3034
NUL A-6	91BT419	2115			Quartz stockwork, breccia, gossan in seds	64	4	56.182	158	46	3.3034
NUL A-6	91BT420	2116			Quartz stockwork in sandstone	64	5	14.15	158	45	14.562
UNA	91DNS24			2020	Beach sand	63	33	49.015	161	3	33.836
UNA	91DNS22			2019	Beach sand	63	27	18.503	161	26	37.407
UNA	91DNS21			2018	Klikitarik River	63	24	3.1352	161	28	9.974
UNA	91DNS21	2017			Mafic boulder w/spherical clots	63	24	3.1352	161	28	9.974

LAND SELECTION UNIT 16 – NORTHERN PART – ROCK ANALYSES (Analyses by Bondar–Clegg)

	<u>METHOD</u>	<u>UNITS</u>	<u>L.LIMIT</u>	<u>U.LIMIT</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>
Ag*	ICP	PPM	0.5	50	0.8	-0.5	-0.5	-0.5	-0.5	-0.5
Ag	INAA	PPM	5	100	-5	-5	-5	-5	-5	-5
Al	ICP	PCT	0.01	10	3.68	3.75	5.62	3.65	3.23	3.06
As	ICP	PPM	5	2000	-5	19	24	16	37	-5
As*	INAA	PPM	1	10000	19	7	27	27	12	3
Au	INAA	PPB	5	10000	-5	-5	-11	-5	-5	-5
Ba	ICP	PPM	5	2000	2000	2000	1990	880	344	602
Ba*	INAA	PPM	100	20000	5100	3900	2100	810	340	600
Bi	AA	PPM	1	2000	-1	2	-1	-1	-1	3
Br	INAA	PPM	1	1000	-1	-1	20	119	2	-1
Ca	ICP	PCT	0.01	10	7.38	3.24	5.19	5.41	0.17	0.29
Cd*	ICP	PPM	2	2000	-2	-2	-2	-2	-2	-2
Cd	INAA	PPM	10	2000	-10	-10	-10	-10	-10	-10
Ce	INAA	PPM	10	10000	540	550	530	350	26	120
Co*	ICP	PPM	1	20000	18	16	23	17	1	3
Co	INAA	PPM	10	20000	23	21	22	-10	-10	-10
Cr*	ICP	PPM	2	20000	16	37	89	23	2	-2
Cr*	INAA	PPM	50	20000	69	170	200	-50	-50	-50
Cs	INAA	PPM	1	10000	24	6	726	187	27	6
Cu	ICP	PPM	1	20000	12	-1	-1	47	2	6
Eu	INAA	PPM	2	2000	4	5	-2	3	-2	-2
F	SPlon	PPM	20	20000	3240	-9	-9	1052	-9	100
Fe	ICP	PCT	0.01	10	6.47	3.53	4.81	2.07	0.24	0.9
Fe*	INAA	PCT	0.5	10	9	5.5	6.7	3.1	-0.5	1.2
Ga	ICP	PPM	10	2000	23	20	19	18	24	20
Hf	INAA	PPM	2	2000	26	17	-2	6	6	9
Ir	INAA	PPB	100	1000	-100	-100	-100	-100	-100	-100
K	ICP	PCT	0.01	10	1.68	2.68	3.66	2.42	2.31	3.03
La	ICP	PPM	5	2000	98	81	146	59	-5	11
La*	INAA	PPM	5	10000	180	200	200	130	-5	33
Li	ICP	PPM	2	2000	26	11	143	26	3	18
Lu	INAA	PPM	0.5	2000	7	6.2	4.2	4.7	1.6	1.2
Mg	ICP	PCT	0.01	10	1.62	1.25	3.26	1.09	0.02	0.1
Mn	ICP	PPM	5	20000	1679	855	1040	493	21	343
Mo*	ICP	PPM	1	20000	-1	-1	-1	-1	-1	-1
Mo	INAA	PPM	2	20000	-2	-2	-2	-4	3	3
Na*	ICP	PCT	0.01	10	2.11	3.43	2.61	4.42	3.31	4.45
Na*	INAA	PCT	0.05	10	1.8	3.7	2.5	4.9	3.5	4.9
Nb	ICP	PPM	5	2000	85	78	72	50	25	18
Ni*	ICP	PPM	1	20000	2	10	59	3	-1	-1
Ni	INAA	PPM	20	20000	-20	-20	130	-46	-20	-20
Pb	AA	PPM	2	10000	28	65	24	22	30	120
Pd	DCP	PPB	1	5000	-9	-9	-9	-9	-9	-9
Pt	DCP	PPB	5	5000	-9	-9	-9	-9	-9	-9
Rb	INAA	PPM	10	10000	380	270	800	240	500	350
Sb	ICP	PPM	5	2000	-5	-5	-5	12	-5	-5
Sb*	INAA	PPM	0.2	5000	7.8	8.2	15	27.3	14	5.1
Sc	INAA	PPM	0.5	2000	13	8.4	16	7.1	-0.5	1.3
Se	INAA	PPM	10	2000	-10	-10	-10	-10	-10	-10
Sm	INAA	PPM	0.2	2000	30	24.2	24	18	-0.6	2.7

LAND SELECTION UNIT 16 – NORTHERN PART – ROCK ANALYSES (Analyses by Bondar–Clegg)

	<u>METHOD</u>	<u>UNITS</u>	<u>L.LIMIT</u>	<u>U.LIMIT</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>
Sn*	ICP	PPM	20	2000	-20	20	-20	30	-20	-20
Sn	INAA	PPM	200	20000	-200	-200	-200	-200	-200	-200
Sr	ICP	PPM	1	2000	988	1324	1201	1102	137	228
Ta	ICP	PPM	5	2000	12	-5	11	-5	-5	-5
Ta*	INAA	PPM	1	2000	9	7	3	4	2	1
Tb	INAA	PPM	1	2000	3	2	2	2	-1	-1
Te	ICP	PPM	25	2000	-25	-25	-25	-25	-25	-25
Te	INAA	PPM	20	2000	-20	-20	-20	-20	-20	-20
Th	INAA	PPM	0.5	2000	106	160	116	172	36	89.9
Ti	ICP	PCT	0.01	10	0.86	0.51	0.58	0.4	0.04	0.11
U	INAA	PPM	0.5	2000	49	50.5	40	57.7	27	17
V	ICP	PPM	2	2000	214	120	146	104	-2	20
W	ICP	PPM	20	2000	-20	-20	-20	-20	-20	-20
W*	INAA	PPM	2	2000	-2	-2	-2	3	-2	-2
Y	ICP	PPM	5	2000	43	34	34	25	-5	-5
Yb	INAA	PPM	5	2000	-5	-5	-5	-5	-5	-5
Zn*	ICP	PPM	2	20000	328	123	97	23	9	71
Zn	INAA	PPM	200	20000	440	360	-200	-200	-200	-200
Zr	ICP	PPM	5	2000	608	461	411	228	79	105
Zr*	INAA	PPM	500	10000	570	530	670	870	-500	-500

LAND SELECTION UNIT 16 – NORTHERN PART – ROCK ANALYSES (Analyses by Bondar–Clegg)

	<u>2036</u>	<u>2037</u>	<u>2038</u>	<u>2039</u>	<u>2040</u>	<u>2077</u>	<u>2081</u>	<u>2087</u>	<u>2092</u>	<u>2093</u>
Ag*	0.6	-0.5	-0.5	-0.5	0.7	-0.5	-0.5	1.4	-0.5	-0.5
Ag	-5	-5	-5	-5	-5	-5	5	-5	5	-5
Al	3.15	3.97	3.41	3.57	3.49	3.59	3.56	4.31	4.93	5.13
As	-5	-5	-5	-5	81	42	25	85	63	84
As*	2	3	10	6	6	6	16	8	6	14
Au	85	120	-5	-5	-5	-5	-5	-5	-5	-5
Ba	1100	1239	1208	519	798	1539	546	71	1009	713
Ba*	1500	1600	1200	480	980	1800	670	-100	1200	790
Bi	-1	2	-1	-1	-1	3	-1	-1	-1	-1
Br	-1	-1	-1	1	-1	-1	-1	-1	-1	-1
Ca	0.03	2.07	0.2	0.11	0.27	0.61	0.63	4.81	2.79	3.12
Cd*	-2	6.5	-2	-2	-2	-2	-2	-2	-2	-2
Cd	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Ce	68	400	310	57	340	71	94	25	76	52
Co*	-1	9	7	3	9	3	6	25	20	22
Co	-10	-10	-10	-10	11	-10	-10	39	22	23
Cr*	-2	27	3	-2	58	5	9	12	35	65
Cr**	-50	100	-50	-50	83	-50	-50	-50	65	150
Cs	2	4	17	17	6	10	3	2	9	10
Cu	-1	64	8	-1	19	11	-1	23	54	38
Eu	-2	4	-2	-2	-2	-2	-2	-2	2	-2
F	-9	846	349	805	714	-9	-9	-9	-9	-9
Fe	0.81	3.33	2.3	0.71	2.88	2.2	1.17	4.49	4.38	4.53
Fe*	0.8	4.9	3.2	1	4.2	3.5	1.7	7.3	5.9	6.4
Ga	11	17	21	24	22	26	14	41	23	20
Hf	4	12	11	6	14	-2	6	-2	3	3
Ir	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100
K	3.09	2.85	4.9	3.56	2.49	5.01	1.56	0.23	2.52	1.55
La	13	74	30	-5	32	22	32	6	15	10
La*	23	140	71	11	92	40	39	9	26	23
Li	2	15	11	216	23	51	5	9	24	18
Lu	0.7	2.3	2.3	1.1	2.5	1	0.6	0.9	0.8	1.1
Mg	0.03	1.06	0.09	0.19	0.77	0.19	0.29	1.3	1.5	1.92
Mn	6	1006	483	165	421	422	755	1810	888	794
Mo*	6	-1	-1	-1	23	11	13	8	9	4
Mo	67	-2	-2	-2	-2	-2	7	-2	-2	-2
Na*	2.27	3.48	3.11	2.6	3.06	2.5	3.52	4.06	3	3.26
Na*	2.4	4	3.2	2.8	3.3	2.7	3.9	4.5	3.1	3.4
Nb	14	50	46	33	42	24	18	22	25	21
Ni*	-1	4	-1	-1	26	-1	-1	16	21	28
Ni	-20	-20	-20	-20	-20	-20	-20	-20	-20	46
Pb	15	201	38	22	25	192	16	7	7	13
Pd	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
Pt	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
Rb	320	240	540	770	470	600	140	-10	150	100
Sb	-5	-5	-5	-5	11	26	17	20	32	14
Sb*	5.5	2.8	4.7	3.2	4.6	7.8	3.9	1.8	2.1	3.1
Sc	0.8	5.7	3.5	1	7.2	0.6	2.6	33	15	23
Se	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Sm	3	19	4.7	0.6	10	1.3	3.4	4.4	5.8	5.1

LAND SELECTION UNIT 16 – NORTHERN PART – ROCK ANALYSES (Analyses by Bondar–Clegg)

	<u>2036</u>	<u>2037</u>	<u>2038</u>	<u>2039</u>	<u>2040</u>	<u>2077</u>	<u>2081</u>	<u>2087</u>	<u>2092</u>	<u>2093</u>
Sn*	-20	-20	-20	-20	-20	-20	-20	36	31	-20
Sn	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200
Sr	57	827	606	420	369	1169	141	175	557	485
Ta	-5	-5	43	-5	173	255	133	158	33	194
Ta*	1	3	3	2	3	-1	2	-1	-1	-1
Tb	-1	1	-1	-1	1	-1	-1	1	-1	-1
Te	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25
Te	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20
Th	15	82.6	97.2	35	75.9	32	40	1.8	7.3	14
Ti	0.06	0.36	0.28	0.12	0.45	0.15	0.13	0.74	0.5	0.53
U	2.7	20	27	13	22	15	7.6	1.2	4.4	6.9
V	2	95	64	31	65	49	35	333	150	189
W	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20
W*	8	12	5	8	6	2	10	-2	-2	-2
Y	-5	23	9	-5	19	-5	9	19	16	15
Yb	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
Zn*	-2	1038	71	21	74	136	36	81	66	65
Zn	-200	1500	-200	-200	-200	-200	-200	240	-200	-200
Zr	57	161	171	121	342	53	105	56	77	89
Zr*	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500

LAND SELECTION UNIT 16 – NORTHERN PART – ROCK ANALYSES (Analyses by Bondar–Clegg)

	<u>2094</u>	<u>2095</u>	<u>2139</u>	<u>2140</u>	<u>2141</u>	<u>2142</u>	<u>2144</u>	<u>2145</u>	<u>2146</u>	<u>2147</u>
Ag*	-0.5	-0.5	1.1	-0.5	0.9	-0.5	-0.5	-0.5	0.7	-0.5
Ag	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
Al	5.25	5.37	5.09	2.68	3.83	3.91	4.64	3.46	4.52	3.46
As	58	38	91	30	44	59	34	18	109	-5
As*	6	8	5	2	7	4	12	1	6	5
Au	-5	-5	-5	-5	25	-5	-5	-5	-5	-5
Ba	1017	509	2000	167	1203	949	2000	273	2000	1640
Ba*	1100	570	11200	220	-4300	1000	2700	200	2900	2000
Bi	-1	-1	-1	-1	2	2	-1	4	-1	-1
Br	-1	-1	-1	-1	3	-1	-1	-1	1	-1
Ca	4.4	4.18	4.17	0.04	0.62	0.7	3.01	0.37	3.05	0.39
Cd*	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
Cd	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Ce	45	68	930	-10	180	280	530	62	380	370
Co*	21	19	13	-1	5	2	10	-1	7	5
Co	22	25	-10	-10	-10	-10	18	-10	10	-10
Cr*	97	66	20	5	7	12	31	6	38	16
Cr**	190	92	100	-50	-50	-50	-50	-50	120	54
Cs	1	-1	4	6	8	10	8	4	10	8
Cu	88	65	83	-1	5	3	26	1	15	5
Eu	-2	-2	7	-2	-2	-2	-2	-2	-2	-2
F	-9	-9	2906	-9	415	220	2481	121	1414	923
Fe	4.61	4.78	4.38	0.31	1.16	2.04	4.16	0.54	2.95	1.99
Fe*	5.9	6.6	6.6	-0.5	1.1	2.1	6	0.8	4.3	3.3
Ga	23	24	35	31	30	21	20	28	33	16
Hf	3	2	17	-2	160	15	10	11	9	14
Ir	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100
K	1.34	0.6	3.48	1.33	3.13	2.06	3.41	1.59	3.48	2.25
La	9	12	193	-5	33	59	108	16	78	63
La*	15	22	320	-5	61	95	200	25	140	130
Li	13	11	33	4	22	9	102	6	14	43
Lu	0.6	-0.5	11	-0.5	-6.8	2.1	2.2	2.7	2.6	2.9
Mg	2.01	1.81	0.72	0.01	0.16	0.38	0.99	0.02	1.02	0.68
Mn	1101	1330	782	56	372	334	1085	185	597	539
Mo*	6	4	8	2	3	5	4	3	72	16
Mo	-2	-2	-2	-2	-33	-2	-2	-2	-2	-2
Na*	3.28	3.77	3.88	5.56	3.04	2.88	2.36	5.47	2.94	3.03
Na*	3.2	3.9	4.4	6.73	2.6	3	2.3	5.96	3.1	3.6
Nb	22	17	47	-5	57	47	86	25	49	32
Ni*	33	19	5	-1	-1	1	7	-1	21	3
Ni	-20	-20	-20	-20	36	-20	-20	-20	-20	-20
Pb	12	13	16	7	157	30	40	177	25	64
Pd	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
Pt	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
Rb	25	-10	180	150	390	410	540	210	470	310
Sb	21	10	32	14	12	14	9	9	37	-5
Sb*	3	2.6	3.9	2.7	5.7	1.4	1.1	1.1	1.1	1.7
Sc	21	24	5.5	-0.5	1.1	2.9	6.1	0.7	6.1	3.3
Se	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Sm	4.7	5.6	51.9	0.4	22.6	10	20	1	16	12

LAND SELECTION UNIT 16 – NORTHERN PART – ROCK ANALYSES (Analyses by Bondar–Clegg)

	<u>2094</u>	<u>2095</u>	<u>2139</u>	<u>2140</u>	<u>2141</u>	<u>2142</u>	<u>2144</u>	<u>2145</u>	<u>2146</u>	<u>2147</u>
Sn*	22	-20	39	-20	-20	-20	-20	-20	32	-20
Sn	-200	-200	-200	-200	-530	-200	-200	-200	-200	-200
Sr	701	550	2000	72	1492	418	2000	204	1224	532
Ta	238	193	193	99	163	195	163	205	254	212
Ta*	-1	-1	6	-1	12	3	4	3	5	3
Tb	-1	-1	6	-1	-1	-1	2	-1	1	1
Te	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25
Te	-20	-20	-20	-20	-87	-20	-20	-20	-20	-20
Th	3.4	5.4	209	2.4	760	72.7	110	60.9	119	98.7
Ti	0.53	0.49	0.58	0.02	0.13	0.31	0.47	0.04	0.4	0.26
U	2.1	2.9	110	1.7	1210	22	20	32	27	28
V	193	221	189	7	32	23	116	10	96	47
W	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20
W*	-2	-2	-2	-2	-9	-2	-2	-2	4	-2
Y	13	14	101	-5	20	16	21	5	21	17
Yb	-5	-5	10	-5	-5	-5	-5	-5	-5	-5
Zn*	76	74	72	25	105	56	140	115	75	75
Zn	-200	210	-200	-200	-200	-200	-200	-200	270	-200
Zr	68	82	544	10	2000	254	363	90	68	64
Zr*	-500	-500	-500	-500	-9	-500	-500	510	-500	-500

LAND SELECTION UNIT 16 – NORTHERN PART – ROCK ANALYSES (Analyses by Bondar–Clegg)

	<u>2150</u>	<u>2155</u>	<u>2160</u>	<u>2163</u>	<u>2164</u>	<u>2166</u>	<u>2167</u>	<u>2168</u>	<u>2169</u>	<u>2170</u>
Ag*	-0.5	-0.5	1.1	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
Ag	-5	-5	-5	-5	-5	-5	-5	-5	-5	6
Al	5.04	7.35	4.47	4.32	4.92	4.4	4.41	4.07	4.24	3.7
As	12	29	48	47	30	14	20	-5	5	54
As*	5	13	9	10	26	7	8	5	4	7
Au	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
Ba	731	2000	2000	285	747	1337	1681	293	254	959
Ba*	900	2300	19200	-290	-610	1500	2100	110	150	1100
Bi	2	2	-1	-1	5	-1	-1	-1	3	4
Br	-1	-1	-1	-1	-1	1	1	-1	-1	-1
Ca	1.18	3.12	3.1	1.22	1.42	1.06	3.71	0.1	0.06	0.24
Cd*	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
Cd	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Ce	370	460	280	210	190	140	430	81	85	200
Co*	61	13	10	3	4	4	11	3	2	3
Co	81	13	15	-10	-10	-10	15	-10	-10	-10
Cr*	629	81	14	10	9	8	37	12	12	7
Cr*	1600	120	-50	-50	-50	-50	67	-50	-50	57
Cs	185	143	30	39	114	31	10	11	14	10
Cu	5	30	49	3	2	9	10	-1	-1	49
Eu	-2	4	5	-2	-2	-2	2	-2	-2	-2
F	6780	676	1062	2275	3705	192	1995	-9	286	-9
Fe	7.2	3.85	3.57	1.23	1.34	1.42	3.49	1.7	1.3	2.03
Fe*	10	4.8	5.1	1.6	1.9	1.6	5	2.2	1.6	2.5
Ga	20	16	23	27	33	20	16	15	14	19
Hf	-2	11	17	13	16	7	17	5	6	7
Ir	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100
K	2.89	4.4	5.85	4.19	4.37	4.27	3.54	1.23	0.83	2.3
La	249	142	39	49	44	27	85	26	32	76
La*	270	150	77	110	110	50	160	30	37	97
Li	133	57	20	21	55	8	23	54	49	26
Lu	1.3	3.2	3.4	6.2	14	2.7	2	3.1	1.7	1.4
Mg	7.87	1.58	0.58	0.06	0.16	0.2	1.13	0.07	0.03	0.04
Mn	1612	847	730	353	650	272	792	45	54	585
Mo*	10	5	6	7	4	3	3	2	2	4
Mo	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
Na*	0.42	2	1.2	4.77	5.16	3.02	2.78	0.19	0.19	3.02
Na*	0.22	1.9	1.1	5.69	5.81	3.2	2.9	0.08	0.07	3.2
Nb	44	77	60	38	75	34	66	24	24	33
Ni*	448	26	2	-1	-1	-1	14	-1	-1	1
Ni	560	-20	-20	-20	-20	-20	-20	-20	-20	-20
Pb	18	95	14	69	281	17	20	86	18	154
Pd	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
Pt	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
Rb	850	530	370	590	660	640	420	230	160	300
Sb	14	-5	14	26	7	15	-5	21	15	28
Sb*	2.8	3	1.6	2.2	3.2	2.9	1.8	20.1	18	3.1
Sc	33	8.8	7.4	0.9	1.1	1.9	7.6	3.2	1.8	2.3
Se	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Sm	14	20	22.5	1.3	-4.4	5.4	18	4	4	13

LAND SELECTION UNIT 16 – NORTHERN PART – ROCK ANALYSES (Analyses by Bondar–Clegg)

	<u>2150</u>	<u>2155</u>	<u>2160</u>	<u>2163</u>	<u>2164</u>	<u>2166</u>	<u>2167</u>	<u>2168</u>	<u>2169</u>	<u>2170</u>
Sn*	25	-20	28	-20	-20	-20	-20	-20	-20	-20
Sn	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200
Sr	54	995	1478	404	571	462	769	63	70	402
Ta	193	244	141	192	171	245	149	134	182	142
Ta*	-1	4	5	1	3	2	6	1	1	2
Tb	2	2	2	-1	-1	-1	1	-1	-1	1
Te	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25
Te	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20
Th	34	107	73.1	116	129	58.7	74.2	33	43	66.3
Ti	0.45	0.5	0.7	0.09	0.13	0.2	0.54	0.16	0.16	0.2
U	10	38	37	95.8	198	37	18	43	20	11
V	193	116	159	26	27	30	78	36	25	36
W	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20
W*	4	-2	-2	-2	-2	4	-2	8	5	5
Y	45	40	26	-5	-5	12	31	12	11	21
Yb	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
Zn*	172	91	58	62	131	24	77	38	18	68
Zn	220	-200	-200	-200	-200	-200	-200	-200	-200	280
Zr	77	646	548	167	344	175	135	92	121	119
Zr*	-500	-500	-500	-500	710	-500	550	-500	-500	-500

LAND SELECTION UNIT 16 – NORTHERN PART – ROCK ANALYSES (Analyses by Bondar–Clegg)

	<u>2171</u>	<u>2173</u>	<u>2174</u>	<u>2175</u>	<u>2176</u>	<u>2177</u>	<u>2178</u>	<u>2180</u>	<u>2182</u>	<u>2188</u>
Ag*	-0.5	-0.5	0.8	0.9	0.8	-0.5	-0.5	-0.5	-0.5	-0.5
Ag	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
Al	3.39	4.43	4.27	1.91	2.52	3.8	1.47	3.76	3.53	4.82
As	9	21	66	63	52	34	-5	8	28	10
As*	1	10	14	7	32	8	8	6	-1	5
Au	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
Ba	849	2000	1897	205	169	397	167	921	765	1663
Ba*	1100	2500	2400	200	250	430	140	980	980	1900
Bi	-1	-1	-1	2	2	2	2	-1	-1	2
Br	-1	-1	1	-1	-1	-1	-1	-1	-1	-1
Ca	0.43	0.99	0.38	10	10	10	10	0.45	0.67	3.44
Cd*	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
Cd	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Ce	56	59	380	28	31	69	77	64	31	68
Co*	4	5	11	8	10	12	5	9	2	18
Co	-10	-10	16	-10	-10	12	-10	-10	-10	24
Cr*	10	17	27	29	33	58	19	42	5	49
Cr**	-50	-50	65	-50	-50	89	-50	83	-50	110
Cs	14	23	25	2	1	4	2	7	2	1
Cu	7	12	36	9	15	14	6	16	-1	59
Eu	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
F	52	102	-9	-9	-9	-9	-9	-9	-9	-9
Fe	0.75	0.67	3.26	2.1	2.68	2.45	1.41	2.69	0.54	4.29
Fe*	1.2	0.6	5	2.8	3.1	3.1	1.7	3.6	0.7	5.4
Ga	13	14	25	21	13	15	-10	10	14	13
Hf	-2	-2	9	-2	-2	4	-2	6	3	6
Ir	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100
K	2.81	4.83	3.31	0.47	0.39	1.03	0.45	2.33	2.2	1.22
La	15	15	60	14	13	27	25	9	7	9
La*	17	24	140	12	13	26	24	24	13	23
Li	6	3	42	16	55	21	12	16	3	20
Lu	-0.5	-0.5	2.1	-0.5	0.6	0.6	-0.5	0.8	-0.5	0.9
Mg	0.09	0.35	0.13	2.05	1.29	2.18	0.55	0.76	0.06	1.66
Mn	121	155	242	501	689	685	923	403	63	1097
Mo*	58	14	8	5	3	4	-1	3	3	3
Mo	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
Na*	2.16	2.89	0.4	0.1	0.44	0.9	0.08	2.72	2.23	3.5
Na*	2.4	3.1	0.27	0.08	0.39	0.77	0.06	2.9	2.4	3.1
Nb	14	10	37	25	30	33	25	16	13	23
Ni*	1	8	14	25	17	22	7	12	-1	21
Ni	-20	-20	-20	44	-20	-20	-20	-20	-20	-20
Pb	10	15	45	18	15	15	10	23	5	21
Pd	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
Pt	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
Rb	340	700	380	28	24	82	42	250	270	49
Sb	7	5	9	21	25	17	15	-5	12	7
Sb*	1.4	1.6	4.4	1.8	11	1.6	1.3	1.6	0.7	3.3
Sc	1.1	2.4	11	5.1	6.3	9.1	4.2	10	0.6	16
Se	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Sm	3.1	2.4	17	3.6	3.3	4.5	5.2	3.5	1.3	5.7

LAND SELECTION UNIT 16 – NORTHERN PART – ROCK ANALYSES (Analyses by Bondar–Clegg)

	<u>2171</u>	<u>2173</u>	<u>2174</u>	<u>2175</u>	<u>2176</u>	<u>2177</u>	<u>2178</u>	<u>2180</u>	<u>2182</u>	<u>2188</u>
Sn*	-20	-20	-20	21	21	25	-20	-20	-20	-20
Sn	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200
Sr	395	703	568	549	723	497	1264	300	351	559
Ta	192	192	232	273	60	166	161	141	204	189
Ta*	1	-1	3	-1	-1	-1	-1	2	-1	-1
Tb	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
Te	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25
Te	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20
Th	11	14	95.3	4.7	5.5	11	5	24	23	11
Ti	0.1	0.04	0.55	0.12	0.17	0.31	0.1	0.35	0.05	0.45
U	2	6	20	1.3	1.7	3.5	1.7	7	4.7	6.2
V	12	27	148	49	66	86	50	79	9	148
W	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20
W*	-2	4	9	-2	-2	-2	-2	4	-2	2
Y	9	-5	19	17	15	16	19	8	6	13
Yb	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
Zn*	27	29	82	73	56	60	19	70	19	103
Zn	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200
Zr	18	20	250	27	43	70	28	66	32	127
Zr*	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500

LAND SELECTION UNIT 16 – NORTHERN PART – ROCK ANALYSES (Analyses by Bondar–Clegg)

	<u>2189</u>	<u>2190</u>	<u>2192</u>	<u>2193</u>	<u>2194</u>	<u>2195</u>	<u>2251</u>	<u>2262</u>	<u>2264</u>	<u>2265</u>
Ag*	-0.5	-0.5	1.5	1	-0.5	1	-0.5	-0.5	1.5	-0.5
Ag	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
Al	6.03	3.79	5.71	5.96	4.82	6.34	6.03	3.96	2.73	3.84
As	-5	45	103	54	36	105	117	-5	117	6
As*	1	16	12	2	7	1	25	5	12	2
Au	-5	-5	-5	-5	29	-5	-5	-5	-5	-5
Ba	670	1264	1833	710	1238	745	2000	1489	802	732
Ba*	930	1800	2300	780	-4600	840	6600	1900	770	1000
Bi	-1	-1	2	-1	-1	3	-1	-1	-1	-1
Br	-1	-1	-1	-1	-3	-1	-1	-1	1	-1
Ca	6.03	2.5	5	6.38	1.02	6.35	3.6	3.82	10	0.57
Cd*	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
Cd	-10	-10	-10	-10	-12	-10	-10	-10	-10	-10
Ce	89	390	640	100	160	96	1140	330	870	33
Co*	33	10	9	34	4	32	3	22	44	4
Co	47	18	-10	38	-10	40	-10	23	59	-10
Cr*	141	56	10	150	11	147	7	52	81	8
Cr*	250	100	-50	300	-50	330	130	110	200	-50
Cs	2	10	190	2	6	3	266	5	3	5
Cu	28	12	42	33	5	31	7	20	65	77
Eu	-2	-2	5	2	-2	-2	9	3	5	-2
F	-9	1575	1040	-9	187	-9	1745	-9	-9	106
Fe	6.69	3.03	3.92	6.78	1.14	6.86	1.27	4.18	9.16	1.5
Fe*	10	4.2	5.1	9.2	1.1	9.5	2.1	5.8	10	2.3
Ga	12	22	30	30	18	42	19	13	43	19
Hf	6	10	24	5	180	9	-2	7	19	-2
Ir	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100
K	1.12	2.78	5.04	1.15	5.45	1.18	5.03	1.6	1.14	2.12
La	16	60	158	21	39	20	365	51	273	7
La*	24	140	220	27	51	25	460	110	290	14
Li	13	28	27	12	16	13	10	9	26	12
Lu	1	2.2	6	1.1	-8.6	1.7	2.8	1	2.5	-0.5
Mg	3.36	1.18	0.31	3.19	0.12	3.43	0.18	1.82	5.17	0.26
Mn	1225	727	801	1245	361	1255	229	724	1789	187
Mo*	2	4	6	24	8	14	6	5	8	3
Mo	-2	-2	-2	-2	-33	-2	-2	-2	-2	-2
Na*	2.23	2.71	1	2.22	3.26	2.32	1.38	3.32	1.44	3.51
Na*	2	3.1	1	2.1	2.4	2.2	1.5	3.5	1.5	4.1
Nb	33	44	29	35	76	56	15	26	48	10
Ni*	75	28	-1	80	-1	80	-1	22	47	-1
Ni	110	-20	-20	65	-20	-20	-20	-20	100	-20
Pb	6	38	10	5	204	8	12	5	15	3
Pd	-9	-9	-9	-9	-9	-9	-9	-9	5	-9
Pt	-9	-9	-9	-9	-9	-9	-9	-9	12	-9
Rb	49	490	1250	63	420	58	1140	230	100	400
Sb	9	19	20	33	12	35	19	-5	31	14
Sb*	1.3	1.4	1.2	0.7	2.7	2.2	2.2	1.6	1.9	1.2
Sc	25	7.1	8.6	26	0.9	26	2	13	36	1.3
Se	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Sm	8.1	15	43.5	8.9	24	8.6	51.7	19	54	2.7

	<u>2189</u>	<u>2190</u>	<u>2192</u>	<u>2193</u>	<u>2194</u>	<u>2195</u>	<u>2251</u>	<u>2262</u>	<u>2264</u>	<u>2265</u>
Sn*	-20	28	22	-20	-20	39	-20	-20	77	-20
Sn	-200	-200	-200	-200	-590	-200	-200	-200	-200	-200
Sr	407	697	736	428	1654	433	1406	946	1149	332
Ta	254	270	222	267	287	197	192	167	160	185
Ta*	2	3	2	-1	12	1	2	2	3	-1
Tb	-1	2	4	2	-1	2	5	2	5	-1
Te	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25
Te	-20	-20	-20	-20	-93	-20	-20	-20	-20	-20
Th	3.5	63.8	126	4.8	834	9.1	134	35	92.9	6.4
Tl	1.11	0.41	0.52	1.14	0.14	1.16	0.06	0.41	1.11	0.05
U	1.3	19	65.4	1.9	1290	10	30	7.2	20	1.7
V	144	68	210	158	37	156	54	152	349	33
W	-20	-20	-20	128	42	-20	-20	-20	-20	-20
W*	-2	-2	-2	-2	-16	-2	-2	2	-2	-2
Y	27	23	62	30	20	31	58	18	59	-5
Yb	6	-5	-5	5	-5	6	-5	-5	-5	-5
Zn*	111	110	66	112	123	106	26	59	136	10
Zn	-200	-200	-200	260	-200	210	-200	-200	-200	-200
Zr	182	177	826	181	1667	263	96	155	441	38
Zr*	-500	-500	580	-500	-9	-500	-500	-500	660	-500

LAND SELECTION UNIT 16 – NORTHERN PART – ROCK ANALYSES (Analyses by Bondar–Clegg)

	<u>2266</u>	<u>2267</u>	<u>2268</u>	<u>2269</u>	<u>2270</u>	<u>2271</u>	<u>2272</u>	<u>2273</u>	<u>2275</u>	<u>2277</u>
Ag*	-0.5	-0.5	0.7	-0.5	-0.5	0.7	-0.5	0.6	-0.5	-0.5
Ag	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
Al	4.98	4.91	4.31	4.83	5.07	5.23	5.22	5.63	3.17	2.84
As	29	63	82	22	-5	73	43	77	22	-5
As*	21	16	15	8	14	12	7	13	3	3
Au	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
Ba	744	741	513	806	1070	742	1012	808	514	487
Ba*	900	750	550	830	1300	800	1300	910	520	520
Bi	2	2	2	-1	-1	-1	-1	2	-1	2
Br	-1	-1	2	1	-1	-1	-1	1	-1	-1
Ca	0.78	3.53	6.68	1.95	2.77	1.68	3.87	1.13	0.12	0.09
Cd*	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
Cd	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Ce	93	85	92	110	80	120	74	99	30	96
Co*	19	17	12	22	19	20	22	16	2	5
Co	29	23	13	30	26	21	30	17	-10	-10
Cr*	74	75	65	64	102	67	133	57	9	31
Cr*	100	110	100	110	150	56	230	97	-50	-50
Cs	9	7	6	8	5	12	4	9	8	8
Cu	51	41	17	49	43	56	36	35	4	24
Eu	-2	-2	-2	-2	-2	-2	2	-2	-2	-2
F	-9	-9	-9	-9	-9	-9	390	-9	-9	-9
Fe	5	4.41	3.37	4.61	4.29	4.59	4.2	3.85	0.45	10
Fe*	7.1	6.1	4.3	6.3	6.4	6.5	6.2	4.8	0.9	10
Ga	14	14	30	15	13	31	15	26	11	-10
Hf	5	6	4	4	5	7	5	7	3	4
Ir	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100
K	1.44	1.3	1.42	1.23	0.96	1.66	1.27	1.72	1.57	2.76
La	13	18	25	16	10	20	11	25	8	19
La*	35	33	31	35	24	42	23	35	10	23
Li	27	27	33	42	24	29	24	20	4	12
Lu	1.2	0.8	0.9	1.1	0.8	1.4	1.1	0.9	0.5	-0.5
Mg	1.75	1.74	2.28	1.73	1.67	1.71	1.98	1.23	0.04	0.21
Mn	790	841	1399	930	945	845	749	749	132	671
Mo*	2	5	8	1	3	9	2	70	16	16
Mo	-2	-2	-2	-2	-2	-2	-2	-2	9	7
Na*	2.73	2.33	1.16	2.29	3	2.51	3.04	2.98	2.71	0.55
Na*	2.8	2.3	1	2.3	3.2	2.6	3.2	3.1	2.7	0.46
Nb	20	25	28	23	18	27	16	26	11	16
Ni*	36	35	36	36	41	37	52	28	-1	13
Ni	62	-20	52	-20	-20	-20	68	67	-20	31
Pb	22	21	18	30	16	28	15	20	14	407
Pd	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
Pt	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
Rb	86	99	110	100	44	90	86	190	290	230
Sb	-5	-5	29	7	6	13	12	21	11	23
Sb*	2.6	2.9	2.6	2	3.1	3.3	3.4	2	2	7
Sc	21	19	11	19	21	22	19	14	0.6	3
Se	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Sm	6.4	6.3	5.2	6.5	6.1	7.6	5.5	5.9	0.5	3

LAND SELECTION UNIT 16 – NORTHERN PART – ROCK ANALYSES (Analyses by Bondar–Clegg)

	<u>2266</u>	<u>2267</u>	<u>2268</u>	<u>2269</u>	<u>2270</u>	<u>2271</u>	<u>2272</u>	<u>2273</u>	<u>2275</u>	<u>2277</u>
Sn*	-20	-20	43	-20	-20	29	-20	23	-20	25
Sn	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200
Sr	259	331	246	435	569	336	468	389	113	160
Ta	205	220	196	199	171	267	161	176	184	173
Ta*	-1	-1	1	-1	-1	-1	-1	1	-1	-1
Tb	-1	1	-1	-1	-1	-1	-1	-1	-1	-1
Te	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25
Te	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20
Th	19	17	14	21	11	23	10	23	27	15
Ti	0.65	0.6	0.4	0.58	0.58	0.6	0.48	0.53	0.04	0.13
U	8	6.6	4.9	7.9	4.3	9.5	4.2	7	5.9	4.5
V	169	159	110	150	169	165	158	128	10	92
W	-20	-20	-20	-20	-20	-20	-20	-20	-20	71
W*	2	4	3	4	-2	4	-2	-2	3	110
Y	15	17	14	16	14	18	13	19	-5	8
Yb	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
Zn*	86	81	79	76	76	84	66	83	16	265
Zn	-200	290	-200	-200	-200	-200	230	-200	-200	290
Zr	118	103	87	122	97	118	91	96	67	41
Zr*	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500

LAND SELECTION UNIT 16 – NORTHERN PART – ROCK ANALYSES (Analyses by Bondar–Clegg)

	<u>2282</u>	<u>2283</u>	<u>2284</u>	<u>2285</u>	<u>2286</u>	<u>2287</u>	<u>2289</u>	<u>2291</u>	<u>2292</u>	<u>2293</u>
Ag*	-0.5	-0.5	-0.5	1	-0.5	0.5	0.7	-0.5	-0.5	-0.5
Ag	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
Al	4.43	4.26	3.86	5.43	3.69	6.47	5.16	5.15	4.99	6.4
As	34	62	29	63	19	53	72	57	80	36
As*	10	2	1	5	-1	13	13	7	9	8
Au	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
Ba	1974	449	894	2000	898	2000	1045	164	512	1049
Ba*	2100	330	1100	3300	1100	2900	1400	-100	530	1100
Bi	2	3	-1	2	-1	4	3	-1	-1	-1
Br	1	-1	-1	-1	-1	2	-1	-1	-1	-1
Ca	3.49	0.13	0.11	3.32	0.17	3.14	2.55	1.3	0.16	1.37
Cd*	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
Cd	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Ce	360	150	38	530	23	430	390	420	360	420
Co*	15	2	2	18	-1	30	10	2	4	3
Co	-10	-10	-10	24	-10	32	-10	-10	-10	-10
Cr*	62	6	6	80	6	151	31	5	15	13
Cr*	-50	-50	-50	130	-50	350	55	-50	-50	-50
Cs	30	3	9	21	11	37	176	31	25	78
Cu	25	1	6	238	3	72	7	6	9	13
Eu	-2	-2	-2	3	-2	4	-2	-2	-2	2
F	1212	157	35	-9	167	2975	1885	715	414	714
Fe	3.53	0.83	0.3	5.58	0.51	4.78	3.03	1.61	1.65	2.54
Fe*	4.4	1.2	-0.5	7.8	0.8	6.4	4.3	2.8	2.2	3.4
Ga	16	24	15	31	10	24	23	20	23	17
Hf	8	8	-2	10	2	8	7	11	9	7
Ir	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100
K	3.32	1.67	3.05	4.64	2.19	3.35	4.34	4.47	5.43	3.73
La	71	42	9	135	-5	109	82	106	110	95
La*	120	58	12	170	-5	140	160	170	150	130
Li	35	6	-2	73	5	52	52	24	120	36
Lu	1.6	2.7	0.7	1.2	-0.5	1.2	1.9	3.3	1.7	1.2
Mg	1.28	0.05	-0.01	1.38	0.04	3.2	0.69	0.12	0.2	0.34
Mn	967	76	64	3624	51	1033	983	472	157	588
Mo*	2	7	6	8	3	5	7	4	5	69
Mo	-2	-2	5	-2	-2	-2	-2	-2	-2	-2
Na*	3.4	5.49	1.72	0.69	2.87	2.23	2.9	3.75	2.16	2.42
Na*	3.4	6.02	1.9	0.56	3	2.1	3.2	4.5	2.1	2.5
Nb	56	24	13	30	14	50	79	41	63	94
Ni*	20	-1	-1	33	-1	62	11	-1	-1	4
Ni	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20
Pb	32	35	6	138	15	62	50	39	28	24
Pd	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
Pt	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
Rb	350	140	660	830	460	540	480	560	620	520
Sb	-5	14	5	23	7	22	-5	17	18	16
Sb*	1.4	0.7	0.7	8.1	2.8	2.5	1.6	3.2	2	1
Sc	7	1.7	0.7	21	0.6	22	5.5	1.5	2	2
Se	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Sm	14	0.5	1.9	28.7	0.3	19	13	12	10	21.3

	<u>2282</u>	<u>2283</u>	<u>2284</u>	<u>2285</u>	<u>2286</u>	<u>2287</u>	<u>2289</u>	<u>2291</u>	<u>2292</u>	<u>2293</u>
Sn*	-20	-20	-20	31	-20	21	21	-20	-20	-20
Sn	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200
Sr	1066	322	279	747	297	1215	1032	429	755	1457
Ta	199	213	181	141	160	285	182	161	170	111
Ta*	4	-1	-1	-1	-1	2	6	4	4	8
Tb	1	-1	-1	2	-1	1	1	2	1	2
Te	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25
Te	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20
Th	78.2	106	75.5	27	20	66	95.2	186	155	49
Tl	0.42	0.1	0.04	0.69	0.07	0.59	0.4	0.21	0.29	0.54
U	18	31	3.9	9.3	4	18	23	34	16	11
V	103	18	4	204	9	189	87	48	70	90
W	-20	-20	-20	90	-20	-20	-20	-20	-20	-20
W*	-2	-2	-2	99	3	6	17	-2	6	18
Y	21	6	7	31	-5	23	15	33	25	28
Yb	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
Zn*	100	23	98	124	15	173	90	35	51	79
Zn	-200	-200	-200	290	-200	280	220	-200	-200	-200
Zr	257	163	28	73	75	315	495	344	364	259
Zr*	-500	-500	-500	-500	-500	-500	530	-500	-500	-500

LAND SELECTION UNIT 16 – NORTHERN PART – ROCK ANALYSES (Analyses by Bondar–Clegg)

	<u>2296</u>	<u>2298</u>	<u>2299</u>	<u>2300</u>	<u>2301</u>	<u>2303</u>	<u>2304</u>	<u>2305</u>	<u>2306</u>	<u>2307</u>
Ag*	1.9	-0.5	-0.5	1.1	-0.5	-0.5	-0.5	1	-0.5	-0.5
Ag	6	-5	5	-5	-5	-5	-5	-5	-5	8
Al	4.81	4.86	4.09	4.72	3.97	4.31	6.47	5.94	5.18	2.61
As	77	52	66	73	30	40	-5	47	62	6
As*	3	20	13	11	3	-1	-1	-1	1	12
Au	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
Ba	2000	2000	1598	1291	270	1158	2000	2000	1567	433
Ba*	4300	3300	1700	1400	280	1300	5100	5300	1900	260
Bi	2	-1	-1	-1	-1	-1	-1	-1	-1	2
Br	-1	2	1	1	1	-1	1	-1	-1	-1
Ca	2.76	6.77	2.74	0.49	0.32	0.14	5.02	5.27	1.03	10
Cd*	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
Cd	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Ce	520	1030	370	230	16	17	440	420	120	950
Co*	2	7	11	8	-1	-1	9	11	3	39
Co	-10	-10	-10	15	-10	-10	-10	-10	-10	49
Cr*	9	11	67	49	6	4	8	9	7	183
Cr*	93	110	140	71	-50	-50	51	-50	-50	320
Cs	110	161	12	12	8	9	45	44	11	24
Cu	30	44	12	18	9	-1	28	28	-1	14
Eu	6	10	-2	-2	-2	-2	4	3	-2	5
F	761	1822	1614	634	444	25	800	871	122	1920
Fe	1.85	4.4	3.13	3.36	0.24	0.28	3.33	3.46	1.4	7.31
Fe*	2.3	6.2	3.6	4.5	-0.5	-0.5	3.8	4.3	1.7	8.8
Ga	32	23	24	25	24	14	15	24	24	15
Hf	10	25	10	8	-2	-2	8	9	8	10
Ir	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100
K	6.49	4.44	2.29	2.23	2.54	5.25	5.12	5.38	5.3	1.38
La	56	269	93	61	5	-5	111	93	24	369
La*	130	390	140	76	6	8	140	130	39	360
Li	7	29	25	29	6	-2	23	27	4	18
Lu	1.3	6.7	1.8	1.5	0.6	-0.5	2.4	2.7	0.7	2.2
Mg	0.24	0.27	1.16	0.21	-0.01	0.01	0.35	0.33	0.21	5.36
Mn	329	924	742	387	138	53	634	670	416	1907
Mo*	20	8	7	6	6	4	2	6	5	2
Mo	-2	-2	-2	-2	4	-2	-2	-2	-2	-2
Na*	1.17	1.07	3.03	0.9	5.16	2.55	1.89	1.94	1.94	1.53
Na*	1.1	1	3	0.85	5.65	2.5	1.8	1.8	2	1.4
Nb	103	21	49	57	11	11	27	40	27	30
Ni*	2	-1	31	18	-1	-1	-1	-1	-1	46
Ni	-20	-20	-20	-20	-20	-20	-20	-20	-20	-54
Pb	6	12	48	52	67	4	4	5	5	14
Pd	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
Pt	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
Rb	1230	900	440	350	240	550	930	960	520	200
Sb	24	11	-5	23	11	26	-5	24	21	-5
Sb*	2.7	1.2	1	2.5	1.7	1	1	0.6	0.8	0.9
Sc	5.1	9.2	6.4	6.2	-0.5	-0.5	3.2	3.2	5.1	35
Se	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Sm	46.3	55.5	15	8.3	0.5	1	27.1	27	10	47.2

LAND SELECTION UNIT 16 – NORTHERN PART – ROCK ANALYSES (Analyses by Bondar–Clegg)

	<u>2296</u>	<u>2298</u>	<u>2299</u>	<u>2300</u>	<u>2301</u>	<u>2303</u>	<u>2304</u>	<u>2305</u>	<u>2306</u>	<u>2307</u>
Sn*	47	-20	21	24	-20	-20	-20	27	-20	-20
Sn	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200
Sr	543	1140	945	1057	134	118	925	1029	496	867
Ta	192	234	244	254	165	162	169	188	110	243
Ta*	14	2	3	2	-1	-1	2	3	2	2
Tb	4	5	2	-1	-1	-1	3	3	-1	4
Te	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25
Te	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20
Th	29	198	51.8	71.5	5.4	2.6	43	41	19	141
Ti	1.58	0.28	0.46	0.47	0.02	0.04	0.43	0.49	0.24	0.64
U	10	74.3	17	17	11	-0.5	24	24	6.6	25
V	110	250	78	77	6	7	156	176	38	250
W	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20
W*	-2	-2	-2	5	-2	-2	-2	-2	-2	-2
Y	36	78	27	22	-5	-5	47	43	14	61
Yb	-5	-5	-5	-5	-5	-5	-5	5	-5	-5
Zn*	27	61	98	92	12	8	27	27	29	118
Zn	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200
Zr	292	745	183	281	39	20	352	391	126	411
Zr*	720	-500	-500	-500	-500	-500	-500	520	-500	-500

LAND SELECTION UNIT 16 – NORTHERN PART – ROCK ANALYSES (Analyses by Bondar–Clegg)

	<u>2313</u>	<u>2314</u>	<u>2323</u>
Ag*	-0.5	-0.5	-0.5
Ag	-5	-5	6
Al	4.21	4.22	5.24
As	12	14	58
As*	3	2	8
Au	-5	-5	-5
Ba	2000	1027	80
Ba*	4100	1200	-100
Bi	-1	-1	-1
Br	-1	1	-1
Ca	0.12	0.19	0.83
Cd*	-2	-2	-2
Cd	-10	-10	-10
Ce	72	110	170
Co*	2	5	1
Co	-10	-10	-10
Cr*	5	8	7
Cr*	-50	-50	-50
Cs	45	66	21
Cu	30	108	-1
Eu	-2	-2	-2
F	143	631	3178
Fe	1.07	1.56	1.04
Fe*	1.6	2.3	1.2
Ga	15	14	30
Hf	-2	-2	5
Ir	-100	-100	-100
K	5.35	4.93	3.4
La	10	21	55
La*	20	38	80
Li	98	103	13
Lu	-0.5	-0.5	4.2
Mg	0.05	0.07	0.03
Mn	71	159	211
Mo*	4	4	12
Mo	-2	-2	-2
Na*	0.26	0.26	5.01
Na*	0.12	0.09	6.22
Nb	18	15	21
Ni*	-1	14	-1
Ni	-20	-20	-20
Pb	4	13	38
Pd	-9	-9	-9
Pt	-9	-9	-9
Rb	1570	1580	530
Sb	-5	8	10
Sb*	0.2	0.4	1.5
Sc	0.7	2.5	0.6
Se	-10	-10	-10
Sm	3	4.3	-1.5

	<u>2313</u>	<u>2314</u>	<u>2323</u>
Sn*	–20	20	–20
Sn	–200	–200	–200
Sr	409	317	154
Ta	161	162	182
Ta*	1	–1	–1
Tb	–1	–1	–1
Te	–25	–25	–25
Te	–20	–20	–20
Th	8.6	13	117
Tl	0.18	0.22	0.06
U	2.3	3.1	62.3
V	49	51	17
W	–20	–20	–20
W*	3	2	–2
Y	–5	–5	–5
Yb	–5	–5	–5
Zn*	14	24	61
Zn	–200	–200	–200
Zr	52	40	48
Zr*	–500	–500	–500

LAND SELECTION UNIT 16 – SOUTHERN PART – ROCK ANALYSES (Analyses by Bondar–Clegg)

	<u>METHOD</u>	<u>UNIT</u>	<u>L.LIMIT</u>	<u>U.LIMIT</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2012</u>	<u>2017</u>
Ag*	ICP	PPM	0.5	50	-0.5	1.7	2.3	0.7	0.8	-0.5	1.4	1.7
Ag	INAA	PPM	5	100	-5	-5	-24	-5	-5	-5	-5	-5
Al	ICP	PCT	0.01	10	5.46	0.26	0.57	5.99	5.46	2.08	1.02	7.49
As	ICP	PPM	5	2000	12	-5	501	96	208	33	710	103
As*	INAA	PPM	1	10000	14	5	-1470	25	172	5	959	4
Au	INAA	PPB	5	10000	22	10	-160	11	-5	-5	53	-5
Ba	ICP	PPM	5	2000	1087	107	412	233	1195	243	45	189
Ba*	INAA	PPM	100	20000	1400	7800	-1100	2000	1600	340	-100	170
Bi	AA	PPM	1	2000	-1	13	-1	-1	-1	-1	3	-1
Br	INAA	PPM	1	1000	-1	-1	-234	2	-1	-1	3	-1
Ca	ICP	PCT	0.01	10	0.95	0.02	0.08	4.75	0.2	6.06	10	7.33
Cd*	ICP	PPM	2	2000	-2	-2	-2	-2	-2	-2	-2	-2
Cd	INAA	PPM	10	2000	-10	-10	-150	-10	-10	-10	-10	-10
Ce	INAA	PPM	10	10000	73	-10	-190	120	120	20	-10	24
Co*	ICP	PPM	1	20000	7	-1	-1	20	8	7	5	51
Co	INAA	PPM	10	20000	14	-10	-28	32	-10	-10	-10	66
Cr*	ICP	PPM	2	20000	39	22	14	46	48	35	17	142
Cr**	INAA	PPM	50	20000	-50	-50	-650	-50	-50	62	92	310
Cs	INAA	PPM	1	10000	2	-1	-5	10	7	1	3	-1
Cu	ICP	PPM	1	20000	105	67	12	214	121	12	14	73
Eu	INAA	PPM	2	2000	-2	-2	-18	-2	-2	-2	-2	-2
Fe	ICP	PCT	0.01	10	2.11	10	0.46	4.61	2.26	1.41	4.83	8.97
Fe*	INAA	PCT	0.5	10	1.9	9.1	1.6	4.7	2.6	1.3	4.9	9.1
Ga	ICP	PPM	10	2000	17	-10	-10	31	24	13	29	47
Hf	INAA	PPM	2	2000	4	5	-20	4	5	2	-2	3
Ir	INAA	PPB	100	1000	-100	-100	-720	-100	-100	-100	-100	-100
K	ICP	PCT	0.01	10	1.77	-0.01	0.07	1.68	2.7	0.44	0.34	0.85
La	ICP	PPM	5	2000	21	-5	-5	28	34	11	15	13
La*	INAA	PPM	5	10000	35	5	-5	58	62	10	14	14
Li	ICP	PPM	2	2000	9	37	118	18	36	24	4	6
Lu	INAA	PPM	0.5	2000	-0.5	-0.5	-12	-0.5	-0.5	-0.5	-0.5	-0.5
Mg	ICP	PCT	0.01	10	0.93	0.03	0.03	2.27	0.42	0.59	2.86	5.35
Mn	ICP	PPM	5	20000	181	24	152	817	58	829	1564	1750
Mo*	ICP	PPM	1	20000	2	2	-1	5	6	1	-1	8
Mo	INAA	PPM	2	20000	-2	-2	-31	-2	3	-2	-2	-2
Na*	ICP	PCT	0.01	10	3.84	-0.01	-0.01	3.07	0.23	0.57	-0.01	2.84
Na*	INAA	PCT	0.05	10	2.5	-0.05	2.6	2.4	0.17	0.52	-0.05	2.1
Nb	ICP	PPM	5	2000	12	7	-5	15	10	6	15	31
Ni*	ICP	PPM	1	20000	20	3	4	36	23	14	11	150
Ni	INAA	PPM	20	20000	23	-20	-150	-20	-20	-20	-20	150
Pb	AA	PPM	2	10000	7	28	7	14	32	5	8	-2
Rb	INAA	PPM	10	10000	190	-10	-140	150	370	32	58	-10
Sb	ICP	PPM	5	2000	-5	-5	250	32	14	9	16	21
Sb*	INAA	PPM	0.2	5000	5.4	4.3	5000	37.8	13	4.8	8	1.6
Sc	INAA	PPM	0.5	2000	4.3	2.9	-2.1	11	4.9	3.7	3	22
Se	INAA	PPM	10	2000	-10	-10	-110	-10	-10	-10	-10	-10
Sm	INAA	PPM	0.2	2000	4.3	1.7	-0.4	9.2	5.9	2.1	3	5.1
Sn*	ICP	PPM	20	2000	-20	-20	-20	31	-20	-20	23	39
Sn	INAA	PPM	200	20000	-200	-200	-3600	-200	-200	-200	-200	-200
Sr	ICP	PPM	1	2000	609	12	23	1182	127	743	111	467

LAND SELECTION UNIT 16 – SOUTHERN PART – ROCK ANALYSES (Analyses by Bondar–Clegg)

	<u>METHOD</u>	<u>UNIT</u>	<u>L.LIMIT</u>	<u>U.LIMIT</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2012</u>	<u>2017</u>
Ta	ICP	PPM	5	2000	-5	-5	-5	-5	-5	-5	-5	-5
Ta*	INAA	PPM	1	2000	2	-1	-4	2	-1	-1	-1	2
Tb	INAA	PPM	1	2000	-1	-1	-2	-1	-1	-1	-1	-1
Te	ICP	PPM	25	2000	-25	-25	-25	-25	-25	-25	-25	28
Te	INAA	PPM	20	2000	-20	-20	-410	-20	-20	-20	-20	-20
Th	INAA	PPM	0.5	2000	24	5.1	-7.9	14	22	1.9	1.4	2
Tl	ICP	PCT	0.01	10	0.2	0.06	-0.01	0.36	0.18	0.1	0.05	1.12
U	INAA	PPM	0.5	2000	5.8	3.6	-7.5	4.5	6	0.9	0.6	0.9
V	ICP	PPM	2	2000	52	-2	-2	148	68	33	46	189
W	ICP	PPM	20	2000	-20	-20	-20	-20	-20	-20	-20	-20
W*	INAA	PPM	2	2000	3	-2	-39	3	7	-2	-2	-2
Y	ICP	PPM	5	2000	6	18	-5	14	8	10	12	17
Yb	INAA	PPM	5	2000	-5	-5	-130	-5	-5	-5	-5	-5
Zn*	ICP	PPM	2	20000	36	5	10	60	44	23	-2	102
Zn	INAA	PPM	200	20000	-200	-200	-840	-200	-200	-200	-200	-200
Zr	ICP	PPM	5	2000	34	87	-5	20	158	18	9	53
Zr*	INAA	PPM	500	10000	-500	-500	-3800	-500	-500	-500	-500	-500

LAND SELECTION UNIT 16 – SOUTHERN PART – ROCK ANALYSES (Analyses by Bondar–Clegg)

	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2041</u>	<u>2042</u>	<u>2043</u>
Ag*	-0.5	0.5	-0.5	0.9	1.5	0.9	0.9	-0.5	0.9	1.6	0.9
Ag	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
Al	4.46	4.06	4	1.56	6.64	7.12	0.59	4.92	5.47	5.95	6.3
As	39	38	43	62	97	70	20	39	51	90	81
As*	6	2	2	61	2	3	3	-1	11	15	10
Au	-5	-5	-5	180	-5	-5	-5	-5	-5	-5	6
Ba	1419	1273	1281	232	688	2000	2000	1160	353	318	505
Ba*	1500	1500	1400	170	780	5700	3200	1200	300	380	620
Bi	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
Br	-1	-1	-1	4	-1	-1	-1	-1	-1	-1	-1
Ca	0.53	0.59	0.49	0.02	6.19	7.29	10	0.78	6.89	6.38	5.79
Cd*	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
Cd	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Ce	78	75	58	-10	58	210	43	120	41	52	38
Co*	-1	2	3	-1	29	26	4	2	13	18	19
Co	-10	-10	-10	-10	40	34	-10	-10	14	19	15
Cr*	8	6	12	33	107	87	14	7	96	90	88
Cr**	-50	52	-50	85	220	160	-50	-50	180	170	130
Cs	3	-1	3	2	2	6	-1	-1	3	2	2
Cu	6	8	15	32	34	83	12	13	29	26	48
Eu	-2	-2	-2	-2	-2	3	-2	-2	-2	-2	-2
Fe	0.61	0.97	1.17	4.07	7.26	5.18	4.35	1.27	4.19	4.26	4.44
Fe*	0.5	1.4	1.4	3.8	7.2	5.6	4.4	1.4	4.1	4.4	3.7
Ga	17	17	16	-10	39	27	23	20	25	33	28
Hf	6	6	4	-2	6	-2	-2	3	2	5	-2
Ir	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100
K	2.27	1.08	2.35	0.54	1.11	2.31	0.12	1.81	1.28	0.79	1.66
La	34	26	32	5	18	72	26	52	16	19	15
La*	45	39	32	-5	22	94	24	70	21	25	21
Li	7	27	28	128	13	14	7	35	31	51	24
Lu	-0.5	-0.5	-0.5	-0.5	0.7	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
Mg	0.15	0.1	0.15	0.07	3.17	3.07	1.57	0.13	2.08	2.67	1.54
Mn	108	183	148	67	1150	1040	1715	223	623	645	690
Mo*	1	3	21	9	10	6	3	3	2	4	4
Mo	-2	-2	-2	8	-2	-2	-2	-2	-2	-2	-2
Na*	3.19	3.12	2.88	-0.01	2.5	2.75	0.02	3.82	1.94	2.79	3.19
Na*	2.5	2.7	2.4	-0.05	2	2	0.07	3.1	1.4	2	1.9
Nb	12	12	12	-5	22	14	15	11	13	14	13
Ni*	3	4	10	18	76	49	13	3	38	44	31
Ni	-20	-20	-20	29	60	52	-20	-20	-20	46	47
Pb	-2	-2	-2	139	-2	4	3	7	6	6	38
Rb	170	97	130	28	40	120	-10	70	82	29	88
Sb	-5	-5	-5	14	16	7	9	-5	5	17	9
Sb*	3.4	2.5	1.4	108	1	0.8	0.6	0.6	1.3	2.1	2
Sc	2.5	2.4	3.1	2.7	22	14	2.2	2.2	12	11	12
Se	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Sm	3.4	3.3	2.6	1	7.5	14	2.9	5.1	3.9	4.7	5
Sn*	-20	-20	-20	-20	24	30	-20	-20	25	33	35
Sn	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200
Sr	121	149	131	14	403	2000	448	280	867	431	300

LAND SELECTION UNIT 16 – SOUTHERN PART – ROCK ANALYSES (Analyses by Bondar–Clegg)

	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2041</u>	<u>2042</u>	<u>2043</u>
Ta	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
Ta*	3	3	2	-1	1	-1	-1	1	-1	-1	-1
Tb	-1	-1	-1	-1	1	1	-1	-1	-1	-1	-1
Te	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25
Te	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20
Th	20	18	18	2	3.8	3.5	0.9	28	6.9	7.8	7.8
Tl	0.17	0.18	0.2	0.07	1.01	0.41	0.03	0.14	0.37	0.42	0.42
U	6	4.9	4.8	0.8	1.5	0.9	-0.5	7.4	2.9	3	2.8
V	10	12	29	30	140	211	42	27	131	143	153
W	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20
W*	3	3	-2	-2	-2	-2	-2	-2	-2	-2	4
Y	10	10	10	-5	24	14	9	7	12	12	13
Yb	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
Zn*	27	28	57	140	96	70	15	20	59	44	85
Zn	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200
Zr	74	137	120	8	107	32	-5	54	50	55	58
Zr*	-500	-500	650	-500	-500	-500	-500	910	-500	-500	-500

LAND SELECTION UNIT 16 – SOUTHERN PART – ROCK ANALYSES (Analyses by Bondar–Clegg)

	<u>2075</u>	<u>2089</u>	<u>2090</u>	<u>2091</u>	<u>2109</u>	<u>2110</u>	<u>2111</u>	<u>2112</u>	<u>2113</u>	<u>2114</u>	<u>2115</u>
Ag*	-0.5	-0.5	-0.5	-0.5	-0.5	0.6	-0.5	0.8	0.5	16	7.3
Ag	8	-5	-5	5	-5	-5	-5	-5	-5	16	10
Al	6.7	7.53	5.11	5.34	6.68	5.62	5.22	6.35	0.28	1.09	1.67
As	10	15	30	28	60	46	16	69	-5	383	116
As*	3	7	16	3	14	22	18	31	-1	444	147
Au	-5	-5	-5	-5	-5	8	-5	-5	-5	55	25
Ba	2000	477	751	1436	175	276	2000	2000	38	405	367
Ba*	6100	550	970	1500	5200	620	4800	3000	-100	380	380
Bi	-1	-1	-1	-1	-1	-1	-1	-1	6	-1	-1
Br	-1	-1	-1	-1	-1	10	-1	-1	-1	2	-1
Ca	1.28	3.83	10	0.22	4.42	10	0.18	2.85	10	0.27	0.04
Cd*	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
Cd	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Ce	180	45	39	150	160	50	190	270	19	-10	-10
Co*	3	21	13	4	12	20	10	4	5	-1	2
Co	-10	19	14	-10	12	23	14	-10	-10	-10	-10
Cr*	6	128	90	6	20	53	40	7	119	56	47
Cr**	-50	190	130	-50	-50	80	65	75	-50	-50	84
Cs	3	1	5	4	4	5	2	4	-1	-1	1
Cu	6	36	26	5	118	53	21	17	9	118	113
Eu	-2	-2	-2	-2	2	-2	-2	-2	-2	-2	-2
Fe	1.58	5.51	2.62	1.61	3.7	4.08	3.98	2.15	0.34	1.79	2.76
Fe*	1.6	5.2	2.6	1.9	4.6	4.4	4.6	2	-0.5	1.8	2.6
Ga	20	18	15	19	22	24	17	25	14	-10	-10
Hf	6	2	4	6	4	2	7	14	-2	-2	3
Ir	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100
K	3.25	1.25	1.77	2.75	1.62	1.37	4.76	5.11	0.03	0.49	0.59
La	90	18	24	49	37	29	38	98	8	5	8
La*	130	22	27	67	87	30	95	140	7	-5	9
Li	18	32	32	23	20	30	26	14	-2	95	58
Lu	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
Mg	0.19	3.26	2.04	0.16	0.47	2.1	0.85	0.25	0.19	0.06	0.28
Mn	513	899	1916	357	122	1687	597	738	2900	50	372
Mo*	2	-1	-1	-1	10	4	-1	3	8	3	-1
Mo	-2	-2	-2	-2	10	4	-2	-2	-2	-2	-2
Na*	3.66	3.14	1.17	3.23	4.1	1.63	3	4.12	0.02	-0.01	-0.01
Na*	2.2	2.1	0.82	2.4	3.3	1.1	2.5	3.4	0.07	-0.05	-0.05
Nb	18	11	10	14	15	13	12	27	6	-5	-5
Ni*	3	55	40	6	16	37	15	3	73	18	7
Ni	-20	57	47	-20	-20	29	-20	-20	-20	-20	-20
Pb	19	14	8	20	8	9	60	213	-2	29	16
Rb	170	62	110	150	66	91	320	270	-10	48	52
Sb	-5	-5	-5	-5	10	-5	-5	6	-5	-5	5
Sb*	3.1	1.1	1.3	4	1.3	3.1	4.8	3	-0.2	18	11
Sc	1.8	16	11	1.9	3.1	15	7.9	1.8	2	2.2	3.9
Se	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Sm	9.3	4.8	4.5	4.9	6.8	5	17	19	2.7	1.1	1.8
Sn*	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20
Sn	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200
Sr	1116	250	454	152	2000	326	555	1089	2000	34	18

LAND SELECTION UNIT 16 – SOUTHERN PART – ROCK ANALYSES (Analyses by Bondar–Clegg)

	<u>2075</u>	<u>2089</u>	<u>2090</u>	<u>2091</u>	<u>2109</u>	<u>2110</u>	<u>2111</u>	<u>2112</u>	<u>2113</u>	<u>2114</u>	<u>2115</u>
Ta	~5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
Ta*	2	2	~1	-1	-1	~1	1	2	-1	-1	-1
Tb	1	-1	-1	-1	-1	-1	2	2	-1	-1	~1
Te	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25
Tb	-20	-20	-20	-20	-20	~20	-20	-20	-20	-20	-20
Th	46	6.7	7	37	11	11	52.3	160	0.8	2	1.6
Tl	0.13	0.52	0.36	0.14	0.25	0.32	0.37	0.15	0.02	0.07	0.1
U	7.4	1.9	3.3	7	2.6	5.2	14	43	-0.5	-0.5	-0.5
V	29	184	113	30	96	151	130	61	35	32	52
W	~20	-20	-20	-20	-20	46	-20	~20	-20	-20	-20
W*	-2	-2	-2	-2	-2	-2	7	8	-2	-2	-2
Y	12	18	17	7	-5	16	20	28	5	-5	-5
Yb	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
Zn*	72	91	48	91	27	39	83	78	-2	9	14
Zn	-200	-200	-200	~200	-200	-200	300	-200	-200	-200	-200
Zr	109	62	47	85	-5	63	184	362	-5	-5	11
Zr*	-500	-500	-500	-500	-500	-500	-500	1400	-500	-500	-500

LAND SELECTION UNIT 16 – SOUTHERN PART – ROCK ANALYSES (Analyses by Bondar–Clegg)

	<u>2116</u>	<u>2117</u>	<u>2118</u>	<u>2119</u>	<u>2120</u>
Ag*	1.9	0.8	-0.5	-0.5	1.9
Ag	-5	-5	-5	-5	6
Al	0.84	4.48	3.44	3.67	7.23
As	2000	70	38	38	61
As*	2880	18	9	12	24
Au	310	-5	-5	9	8
Ba	551	1430	306	321	688
Ba*	390	1500	270	310	880
Bi	-1	-1	-1	-1	-1
Br	14	-1	-1	-1	-1
Ca	0.03	0.55	0.13	0.13	6.54
Cd*	-2	-2	-2	-2	-2
Cd	-10	-10	-10	-10	-10
Ce	52	93	39	38	50
Co*	-1	2	-1	-1	30
Co	-10	-10	-10	-10	30
Cr*	37	7	5	5	185
Cr**	-130	-50	-50	-50	280
Cs	1	2	5	4	1
Cu	98	7	3	4	37
Eu	-2	-2	-2	-2	-2
Fe	1.67	0.8	0.16	0.13	7.62
Fe*	1.4	0.8	-0.5	-0.5	7
Ga	-10	18	13	15	44
Hf	-2	8	2	3	4
Ir	-100	-100	-100	-100	-100
K	0.49	2.38	2.96	3.77	1.19
La	7	36	15	16	17
La*	6	48	18	22	23
Li	121	13	21	18	15
Lu	-0.5	-0.5	-0.5	-0.5	0.5
Mg	0.08	0.05	0.02	0.02	3.26
Mn	25	61	74	52	1207
Mo*	-1	3	-1	-1	11
Mo	7	-2	3	-2	-2
Na*	-0.01	3.59	1.86	1.95	2.73
Na*	-0.05	2.9	1.4	1.5	1.9
Nb	-5	13	11	13	26
Ni*	3	2	-1	2	111
Ni	-20	-20	-20	25	45
Pb	7	4	4	3	5
Rb	32	200	170	240	-10
Sb	18	-5	-5	-5	16
Sb*	76.4	1.5	5.6	6	3.6
Sc	1.5	3.7	1.4	1.9	23
Se	-10	-10	-10	-10	-10
Sm	2.1	5.1	2.3	2.6	7.7
Sn*	-20	-20	-20	-20	32
Sn	-730	-200	-200	-200	-200
Sr	55	130	12	12	422

LAND SELECTION UNIT 16 – SOUTHERN PART – ROCK ANALYSES (Analyses by Bondar–Clegg)

	<u>2116</u>	<u>2117</u>	<u>2118</u>	<u>2119</u>	<u>2120</u>
Ta	-5	-5	-5	-5	-5
Ta*	-1	1	2	2	1
Tb	-1	-1	-1	-1	2
Te	-25	-25	-25	-25	-25
Te	-69	-20	-20	-20	-20
Th	-1.4	19	16	17	3.7
Tl	0.05	0.17	0.04	0.04	1.09
U	-0.5	6	4.5	5.2	1.5
V	23	13	-2	-2	150
W	-20	-20	-20	-20	-20
W*	-2	-2	-2	-2	-2
Y	-5	15	13	14	24
Yb	-5	-5	-5	-5	-5
Zn*	9	51	7	5	121
Zn	-200	-200	-200	-200	-200
Zr	-5	170	46	47	114
Zr*	-500	-500	-500	-500	-500

LAND SELECTION UNIT 16 PAN CONCENTRATE ANALYSES (Analyses by Bondar–Clegg)

	<u>METHOD</u>	<u>UNITS</u>	<u>L.LIMIT</u>	<u>U.LIMIT</u>	<u>2010</u>	<u>2011</u>	<u>2014</u>	<u>2015</u>	<u>2018</u>	<u>2019</u>
Ag*	ICP	PPM	0.5	50	0.8	-0.5	0.8	-0.5	1	-0.5
Ag	INAA	PPM	5	100	-5	-5	-5	-5	-5	-5
Al	ICP	PCT	0.01	10	4.28	3.46	3.29	3.11	4.13	5.74
As	ICP	PPM	5	2000	30	36	61	-5	108	55
As*	INAA	PPM	1	10000	12	9	12	14	11	5
Au	INAA	PPB	5	10000	230	6	190	-5	130	-5
Ba	ICP	PPM	5	2000	1047	377	1070	759	189	371
Ba*	INAA	PPM	100	20000	1000	400	1300	830	170	430
Bi	AA	PPM	1	2000	2	-1	4	2	-1	-1
Br	INAA	PPM	1	1000	2	3	2	2	4	7
Ca	ICP	PCT	0.01	10	1.02	1.47	2.83	4.9	3.92	4.79
Cd*	ICP	PPM	2	2000	-2	-2	-2	-2	-2	-2
Cd	INAA	PPM	10	2000	-10	-10	-10	-10	-10	-10
Ce	INAA	PPM	10	10000	42	53	110	230	35	79
Co*	ICP	PPM	1	20000	13	9	8	9	36	29
Co	INAA	PPM	10	20000	14	11	11	15	45	44
Cr*	ICP	PPM	2	20000	166	199	321	1632	475	108
Cr**	INAA	PPM	50	20000	280	400	720	2700	650	160
Cs	INAA	PPM	1	10000	2	2	3	2	-1	-1
Cu	ICP	PPM	1	20000	25	16	11	12	20	38
Eu	INAA	PPM	2	2000	-2	-2	-2	3	-2	2
Fe	ICP	PCT	0.01	10	3.21	2.33	2.7	4.51	5.81	6.44
Fe*	INAA	PCT	0.5	10	3.3	2.6	3.2	5.1	7.3	8.9
Ga	ICP	PPM	10	2000	16	12	16	-10	28	29
Hf	INAA	PPM	2	2000	8	8	19	54	4	6
Ir	INAA	PPB	100	1000	-100	-100	-100	-100	-100	-100
K	ICP	PCT	0.01	10	0.85	0.6	0.79	0.89	0.5	1.02
La	ICP	PPM	5	2000	14	17	30	81	12	27
La*	INAA	PPM	5	10000	22	24	41	79	12	38
Li	ICP	PPM	2	2000	34	24	21	18	8	7
Lu	INAA	PPM	0.5	2000	-0.5	-0.5	0.7	1.5	-0.5	0.5
Mg	ICP	PCT	0.01	10	0.89	0.77	1.12	1.58	4.31	3.4
Mn	ICP	PPM	5	20000	492	432	501	1079	1155	1156
Mo*	ICP	PPM	1	20000	9	3	5	2	9	7
Mo	INAA	PPM	2	20000	2	4	3	-2	4	9
Na*	ICP	PCT	0.01	10	1.98	1.67	1.7	1.31	1.4	3.11
Na*	INAA	PCT	0.05	10	1.5	1.6	1.8	1.2	1.3	3.3
Nb	ICP	PPM	5	2000	11	9	9	15	26	68
Ni*	ICP	PPM	1	20000	33	21	16	19	182	91
Ni	INAA	PPM	20	20000	28	-20	-20	29	200	110
Pb	AA	PPM	2	10000	33	8	8	7	25	3
Pd	DCP	PPB	1	5000	5	3	2	2	2	-1
Pt	DCP	PPB	5	5000	15	7	7	-5	22	5
Rb	INAA	PPM	10	10000	56	45	66	25	12	40
Sb	ICP	PPM	5	2000	15	19	29	19	28	24
Sb*	INAA	PPM	0.2	5000	1.2	0.7	1.6	1.9	0.6	0.6
Sc	INAA	PPM	0.5	2000	8.9	8.5	9.4	14	21	22
Se	INAA	PPM	10	2000	-10	-10	-10	-10	-10	-10
Sm	INAA	PPM	0.2	2000	3.7	3.5	11	23.9	3.3	8.1
Sn*	ICP	PPM	20	2000	40	-20	-20	-20	21	-20

LAND SELECTION UNIT 16 PAN CONCENTRATE ANALYSES (Analyses by Bondar–Clegg)

	<u>METHOD</u>	<u>UNITS</u>	<u>L.LIMIT</u>	<u>U.LIMIT</u>	<u>2010</u>	<u>2011</u>	<u>2014</u>	<u>2015</u>	<u>2018</u>	<u>2019</u>
Sn	INAA	PPM	200	20000	~200	~200	~200	~200	~200	~200
Sn**	XRF	PPM	5	10000	24	~5	~5	~5	~5	7
Sr	ICP	PPM	1	2000	214	199	296	267	194	825
Ta	ICP	PPM	5	2000	~5	~5	~5	~5	~5	~5
Ta*	INAA	PPM	1	2000	~1	~1	1	2	1	5
Tb	INAA	PPM	1	2000	~1	~1	1	2	~1	2
Te	ICP	PPM	25	2000	~25	~25	~25	~25	~25	~25
Te	INAA	PPM	20	2000	~20	~20	~20	~20	~20	~20
Th	INAA	PPM	0.5	2000	5.7	5.9	13	22	4.6	6.4
Ti	ICP	PCT	0.01	10	0.37	0.32	0.37	0.73	0.78	1.38
U	INAA	PPM	0.5	2000	2.1	2.2	5.5	11	2.6	3
V	ICP	PPM	2	2000	90	72	90	166	142	176
W	ICP	PPM	20	2000	~20	~20	~20	~20	~20	~20
W*	INAA	PPM	2	2000	~2	~2	3	3	~2	~2
Y	ICP	PPM	5	2000	10	10	19	41	11	18
Yb	INAA	PPM	5	2000	~5	~5	~5	8	~5	~5
Zn*	ICP	PPM	2	20000	108	56	45	58	101	76
Zn	INAA	PPM	200	20000	~200	~200	~200	~200	~200	~200
Zr	ICP	PPM	5	2000	56	46	114	259	63	162
Zr*	INAA	PPM	500	10000	~500	600	1200	2700	~500	860

LAND SELECTION UNIT 16 PAN CONCENTRATE ANALYSES (Analyses by Bondar–Clegg)

	<u>2020</u>	<u>2074</u>	<u>2078</u>	<u>2079</u>	<u>2080</u>	<u>2082</u>	<u>2083</u>	<u>2084</u>	<u>2085</u>	<u>2086</u>
Ag*	0.6	-0.5	-0.5	-0.5	-0.5	-0.5	5.9	-0.5	-0.5	-0.5
Ag	-5	-5	-5	-5	-5	-5	10	-5	-5	-5
Al	3.51	4.8	3.17	3.37	2.69	3.59	2.3	4.06	4.19	3.72
As	77	94	23	13	13	-5	-5	16	-5	39
As*	11	72	13	8	31	8	11	5	8	8
Au	11	4830	-14	-5	2130	578	21	9	8	-5
Ba	281	913	575	513	1064	523	283	1240	796	841
Ba*	300	1000	-1900	-1100	-750	-1600	-2200	1400	720	910
Bi	2	4	3	-1	4	8	-1	-1	-1	-1
Br	2	2	-1	1	2	2	-1	2	3	3
Ca	1.03	2.45	6.8	4.4	2.86	5.04	6.84	8.26	8.05	8.64
Cd*	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
Cd	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Ce	67	280	1420	800	730	800	1160	390	390	340
Co*	51	12	15	23	17	19	-1	26	31	29
Co	57	17	25	43	26	34	14	38	38	41
Cr*	274	155	124	183	1031	135	161	78	139	140
Cr**	420	290	280	250	1500	160	300	130	290	200
Cs	2	5	5	2	5	3	-1	6	5	3
Cu	28	60	20	14	19	8	15	11	19	19
Eu	-2	2	12	5	5	7	13	3	2	2
Fe	6.24	6.35	10	10	10	10	10	7.4	8.1	6.53
Fe*	7.6	8.1	10	10	10	10	10	10	10	8.7
Ga	28	22	22	49	24	15	19	18	17	29
Hf	5	26	362	140	541	180	1020	27	24	17
Ir	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100
K	0.74	0.94	1.23	0.96	0.67	1.09	0.8	1.65	1.31	1.26
La	28	104	451	240	340	231	354	143	150	131
La*	30	150	507	310	350	270	350	150	160	130
Li	27	21	40	18	9	25	15	22	28	28
Lu	-0.5	1.1	9.2	5.4	8	8.1	20	1.2	1.5	1
Mg	5.48	1.09	1.71	1.48	0.63	1.67	0.64	3.6	4.08	4.52
Mn	872	599	1615	2020	853	2096	1308	1513	1622	1359
Mo*	4	7	70	20	10	9	13	5	5	5
Mo	-2	4	-21	-11	-7	-17	-19	-2	-2	-2
Na*	0.98	1.28	1.41	0.99	0.95	1.12	0.88	1.54	1.47	1.47
Na*	0.87	1.2	1.2	0.68	0.83	0.78	0.58	1.4	1.3	1.3
Nb	19	25	226	151	48	213	448	90	64	55
Ni*	339	60	33	36	38	27	12	33	46	50
Ni	360	59	-67	-20	-20	-20	-49	-20	37	45
Pb	12	152	36	25	64	28	18	7	7	8
Pd	-1	1	3	-1	-1	2	14	-1	4	2
Pt	8	5	12	-5	39	22	19	-5	-5	6
Rb	54	100	130	28	110	56	52	150	100	85
Sb	31	32	-5	39	28	22	5	18	7	20
Sb*	1.4	20.9	2.7	1.7	9.2	1.1	1.6	0.5	0.9	1.6
Sc	13	13	20	30	15	26	19	26	32	32
Se	-10	-10	-30	-10	-10	-10	-26	-10	-10	-10
Sm	5.2	15	105	66.5	42.5	60.1	113	32.6	30.8	28.6
Sn*	35	51	-20	46	22	-20	30	-20	-20	33

LAND SELECTION UNIT 16 PAN CONCENTRATE ANALYSES (Analyses by Bondar–Clegg)

	<u>2020</u>	<u>2074</u>	<u>2078</u>	<u>2079</u>	<u>2080</u>	<u>2082</u>	<u>2083</u>	<u>2084</u>	<u>2085</u>	<u>2086</u>
Sn	-200	-200	-510	-200	-200	-200	-510	-200	-200	-200
Sn**	-5	88	50	30	36	42	63	17	18	13
Sr	108	237	480	285	260	339	269	766	531	534
Ta	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
Ta*	-1	2	43	21	15	20	39	4	4	3
Tb	-1	1	13	8	6	8	15	3	3	3
Te	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25
Te	-20	-20	-67	-20	-20	-53	-68	-20	-20	-20
Th	7.2	24	921	483	445	710	1190	81.2	140	64.3
Ti	0.44	0.46	2.05	1.74	1.06	1.84	3.22	0.97	0.84	0.74
U	2.4	14	687	406	255	575	750	30	52.9	25
V	103	201	465	779	697	719	605	281	276	238
W	-20	210	-20	-20	42	-20	106	-20	-20	-20
W*	-2	215	12	11	110	13	120	-2	-2	2
Y	9	26	209	128	121	139	344	51	56	48
Yb	-5	-5	11	10	23	-5	34	-5	-5	-5
Zn*	97	67	218	304	220	315	129	123	126	114
Zn	-200	-200	-450	310	220	280	-200	210	-200	-200
Zr	53	133	1425	512	784	1129	2000	572	410	406
Zr*	-500	1600	10000	8300	10000	10000	10000	1600	1600	1200

LAND SELECTION UNIT 16 PAN CONCENTRATE ANALYSES (Analyses by Bondar–Clegg)

	<u>2096</u>	<u>2097</u>	<u>2108</u>	<u>2159</u>
Ag*	-0.5	-0.5	-0.5	-0.5
Ag	-5	-5	-5	-5
Al	3.44	3.24	4.64	4.02
As	-5	23	93	-5
As*	7	4	22	8
Au	2650	450	16	15
Ba	225	469	1125	689
Ba*	-430	-430	1200	560
Bi	-1	-1	-1	-1
Br	-1	-1	-1	2
Ca	4.05	3.41	1.67	9.54
Cd*	-2	-2	-2	-2
Cd	-10	-10	-10	-10
Ce	690	370	89	550
Co*	20	10	15	25
Co	41	11	17	33
Cr*	4364	222	257	136
Cr**	6650	330	410	210
Cs	1	1	4	3
Cu	13	16	33	16
Eu	7	5	-2	9
Fe	10	10	4.63	7.88
Fe*	10	10	5.2	10
Ga	18	41	20	22
Hf	150	130	6	30
Ir	-100	-100	-100	-100
K	0.62	1.15	1.03	1.43
La	248	100	19	145
La*	280	100	39	160
Li	11	9	32	33
Lu	6.2	6.1	0.5	2.6
Mg	1.32	0.89	1.35	3.21
Mn	3506	1397	702	2080
Mo*	3	9	14	5
Mo	-5	-2	-2	-2
Na*	0.89	1.46	2.19	1.58
Na*	0.65	1.1	2	1.2
Nb	87	109	26	98
Ni*	40	25	36	36
Ni	-20	52	29	30
Pb	17	8	17	8
Pd	9		2	3
Pt	-5	51	-5	-5
Rb	-22	73	81	54
Sb	30	29	35	-5
Sb*	2.5	2.3	2.5	2.2
Sc	40	14	16	25
Se	-10	-10	-10	-10
Sm	60.4	46.5	7.3	57.2
Sn*	-20	30	-20	-20

LAND SELECTION UNIT 16 PAN CONCENTRATE ANALYSES (Analyses by Bondar-Clegg)

	<u>2096</u>	<u>2097</u>	<u>2108</u>	<u>2159</u>
Sn	-200	-200	-200	-200
Sn**	40		5	16
Sr	170	257	340	637
Ta	-5	-5	-5	-5
Ta*	18	29	-1	9
Tb	7	8	-1	7
Te	-25	-25	-25	-25
Te	-20	-20	-20	-20
Th	263	138	13	63.2
Ti	1.69	1.2	0.43	1.25
U	146	137	4.5	33
V	340	188	159	285
W	-20	-20	-20	-20
W*	6	32	-2	-2
Y	132	253	16	118
Yb	21	31	-5	10
Zn*	206	104	75	140
Zn	-200	-200	-200	-200
Zr	838	358	114	602
Zr*	9800	7300	-500	1500

LAND SELECTION UNIT 16 MAJOR OXIDES AND NORMS (Analyses by XRAL)

MAJOR OXIDE ANALYSES							
Sample No	2035	2076	2138	2156	2158	2161	2162
Location	Sel.Hill	Sel.Lake	Sel.Lake	HuntCr	HuntCr	GraniteMtn	GraniteMtn
SiO ₂	56.10	50.00	66.10	56.50	52.10	54.50	55.30
Al ₂ O ₃	15.30	15.80	15.70	22.40	15.90	17.80	20.70
CaO	6.31	6.77	2.03	1.31	6.62	6.04	3.29
MgO	2.63	2.98	1.13	0.30	4.14	1.94	0.75
Na ₂ O	3.30	2.14	5.45	7.40	3.39	3.63	5.90
K ₂ O	7.00	9.18	5.26	8.15	6.88	6.65	7.53
Fe ₂ O ₃	2.73	5.33	0.95	1.17	2.65	2.86	2.24
FeO	3.00	2.60	0.90	0.50	3.60	2.50	0.90
Fe ₂ O ₃ *	6.06	8.22	1.95	1.72	6.65	5.64	3.24
MnO	0.13	0.17	0.04	0.06	0.13	0.13	0.08
TiO ₂	0.84	0.98	0.45	0.21	0.95	0.62	0.33
P ₂ O ₅	0.49	0.65	0.13	0.03	0.45	0.30	0.10
LOI	0.54	1.00	0.62	1.23	1.08	1.47	1.16
Cr	14	<10	19	<10	118	14	11
Rb	364	371	239	423	342	249	347
Sr	1320	1460	616	597	1570	2310	1250
Y	51	38	39	28	46	38	31
Zr	507	676	344	553	474	252	425
Nb	38	11	29	40	46	26	12
Ba	2500	6720	1960	221	2410	2940	917
F%	0.200	0.300	0.083	0.120	0.240	0.160	0.100
Sum, as oxides	99.30	99.00	99.20	99.50	98.90	99.40	98.70
CIPW NORMS							
Quartz	0.00	0.00	10.08	0.00	0.00	0.00	0.00
Corundum	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Orthoclase	42.28	49.26	31.67	49.13	41.99	40.52	45.82
Albite	23.86	0.00	46.99	18.54	10.99	22.06	19.93
Anorthite	6.40	6.62	2.90	3.91	8.11	13.03	7.99
Leucite	0.00	5.41	0.00	0.00	0.00	0.00	0.00
Nepheline	2.54	10.15	0.00	24.56	10.10	5.21	17.05
Acmite	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wollastonite	0.00	1.03	0.00	0.17	0.00	0.00	1.18
Diopside	17.88	16.57	5.10	1.64	18.21	12.67	4.15
Hypersthene	0.00	0.00	0.69	0.00	0.00	0.00	0.00
Olivine	0.21	0.00	0.00	0.00	3.69	0.30	0.00
Magnetite	4.05	6.31	1.40	1.22	3.97	4.28	2.27
Hematite	0.00	1.17	0.00	0.35	0.00	0.00	0.74
Ilmenite	1.63	1.93	0.87	0.41	1.86	1.21	0.65
Apatite	1.16	1.56	0.31	0.07	1.08	0.72	0.24

LAND SELECTION UNIT 16 MAJOR OXIDES AND NORMS (Analyses by XRAL)

MAJOR OXIDE ANALYSES							
Sample No	2165	2172	2181	2183	2184	2187	2254
Location	GraniteMtn	Sel.Hill	Sel.Hill	Sel.Hill	Sel.Hill	GraniteMtn	Sel.Hill
SiO ₂	56.50	54.30	73.10	74.30	56.40	60.20	52.40
Al ₂ O ₃	23.10	16.30	14.00	13.80	15.70	20.60	16.20
CaO	1.61	5.93	1.42	1.06	5.94	2.81	7.86
MgO	0.37	3.13	0.38	0.21	2.42	0.57	3.55
Na ₂ O	9.09	3.47	3.89	3.91	3.43	4.61	4.77
K ₂ O	5.55	5.92	4.65	5.15	7.17	7.31	2.73
Fe ₂ O ₃	0.57	2.40	0.76	0.56	2.47	0.60	3.42
FeO	0.60	4.10	0.30	0.20	2.70	0.50	4.20
Fe ₂ O ₃ *	1.24	6.95	1.09	0.78	5.47	1.16	8.08
MnO	0.06	0.10	0.03	0.02	0.12	0.02	0.19
TiO ₂	0.18	0.91	0.19	0.12	0.79	0.20	1.14
P ₂ O ₅	0.05	0.51	0.04	0.03	0.45	0.05	0.80
LOI	1.00	0.47	0.23	0.23	0.54	0.62	0.54
Cr	<10	25	11	12	<10	<10	<10
Rb	387	214	247	264	385	262	124
Sr	655	1840	644	461	1390	3320	2530
Y	34	50	<10	13	42	<10	57
Zr	1900	283	122	115	478	50	318
Nb	101	35	22	26	42	15	41
Ba	573	3770	1920	997	2560	2520	2090
F%	0.460	0.220	0.023	0.005	0.190	0.027	0.470
Sum, as oxides	99.20	98.70	99.40	99.80	99.00	98.90	98.90
CIPW NORMS							
Quartz	0.00	0.00	29.55	29.58	0.00	0.00	0.00
Corundum	0.00	0.00	0.08	0.00	0.00	0.12	0.00
Orthoclase	33.58	36.04	27.82	30.63	43.42	44.32	16.59
Albite	31.61	26.84	33.33	33.30	24.20	37.96	37.62
Anorthite	5.98	11.76	6.87	4.93	6.42	13.97	15.14
Leucite	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nepheline	25.53	1.85	0.00	0.00	3.00	1.12	2.10
Acmite	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wollastonite	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Diopside	1.51	12.27	0.00	0.13	16.61	0.00	15.74
Hypersthene	0.00	0.00	0.96	0.47	0.00	0.00	0.00
Olivine	0.48	4.67	0.00	0.00	0.09	1.12	3.59
Magnetite	0.85	3.59	0.52	0.36	3.67	0.89	5.10
Hematite	0.00	0.00	0.41	0.31	0.00	0.00	0.00
Ilmenite	0.35	1.78	0.37	0.23	1.54	0.39	2.23
Apatite	0.12	1.22	0.09	0.07	1.07	0.12	1.91

LAND SELECTION UNIT 16 MAJOR OXIDES AND NORMS (Analyses by XRAL)

MAJOR OXIDE ANALYSES							
Sample No	2260	2281	2288	2290	2294	2295	2297
Location	Sel.Hill	Sel.Hill	HuntCr	HuntCr	GraniteMtn	GraniteMtn	Sel.Lake
SiO ₂	46.70	52.50	55.70	56.50	59.50	61.10	52.30
Al ₂ O ₃	10.40	15.20	18.60	21.00	18.50	19.70	17.80
CaO	15.50	6.81	3.08	1.78	4.69	2.17	3.87
MgO	6.24	2.23	1.46	0.45	1.60	0.52	1.49
Na ₂ O	3.18	4.92	4.33	5.81	5.41	4.01	0.95
K ₂ O	3.22	6.15	8.27	9.05	4.72	9.00	14.00
Fe ₂ O ₃	6.44	3.60	1.91	1.50	1.80	0.74	3.02
FeO	4.20	2.60	2.30	0.90	1.20	0.70	1.90
Fe ₂ O ₃ *	11.10	6.49	4.46	2.50	3.13	1.52	5.13
MnO	0.20	0.12	0.12	0.07	0.08	0.03	0.09
TiO ₂	1.04	1.11	0.72	0.49	0.49	0.32	0.86
P ₂ O ₅	1.03	0.35	0.20	0.05	0.18	0.05	0.25
LOI	0.70	0.77	1.08	1.08	0.16	0.47	0.70
Cr	123	14	19	<10	29	<10	<10
Rb	146	128	378	369	160	301	800
Sr	1340	3380	1380	722	2330	2680	1130
Y	32	62	23	61	29	27	41
Zr	457	462	506	433	164	65	343
Nb	18	71	86	54	26	19	24
Ba	438	12100	1360	306	3280	1330	6730
F%	0.160	0.460	0.200	0.089	0.060	0.032	0.078
Sum, as oxides	99.60	98.50	98.50	99.00	99.20	99.40	98.50
CIPW NORMS							
Quartz	0.00	0.00	0.00	0.00	0.15	0.00	0.00
Corundum	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Orthoclase	19.39	38.02	50.54	54.79	28.41	54.08	38.82
Albite	5.09	20.43	20.12	15.93	46.63	31.24	0.00
Anorthite	4.68	1.28	7.13	4.60	12.48	9.33	3.06
Leucite	0.00	0.00	0.00	0.00	0.00	0.00	36.76
Nepheline	12.09	12.53	9.63	18.65	0.00	1.77	4.51
Acmite	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wollastonite	8.64	6.33	0.00	0.39	0.00	0.00	1.87
Diopside	36.16	12.91	5.92	2.48	7.81	1.02	8.29
Hypersthene	0.00	0.00	0.00	0.00	0.49	0.00	0.00
Olivine	0.00	0.00	1.91	0.00	0.00	0.74	0.00
Magnetite	9.51	5.46	2.86	1.75	2.66	1.09	4.07
Hematite	0.00	0.00	0.00	0.33	0.00	0.00	0.33
Ilmenite	2.01	2.21	1.41	0.95	0.95	0.62	1.69
Apatite	2.43	0.85	0.48	0.12	0.43	0.12	0.60

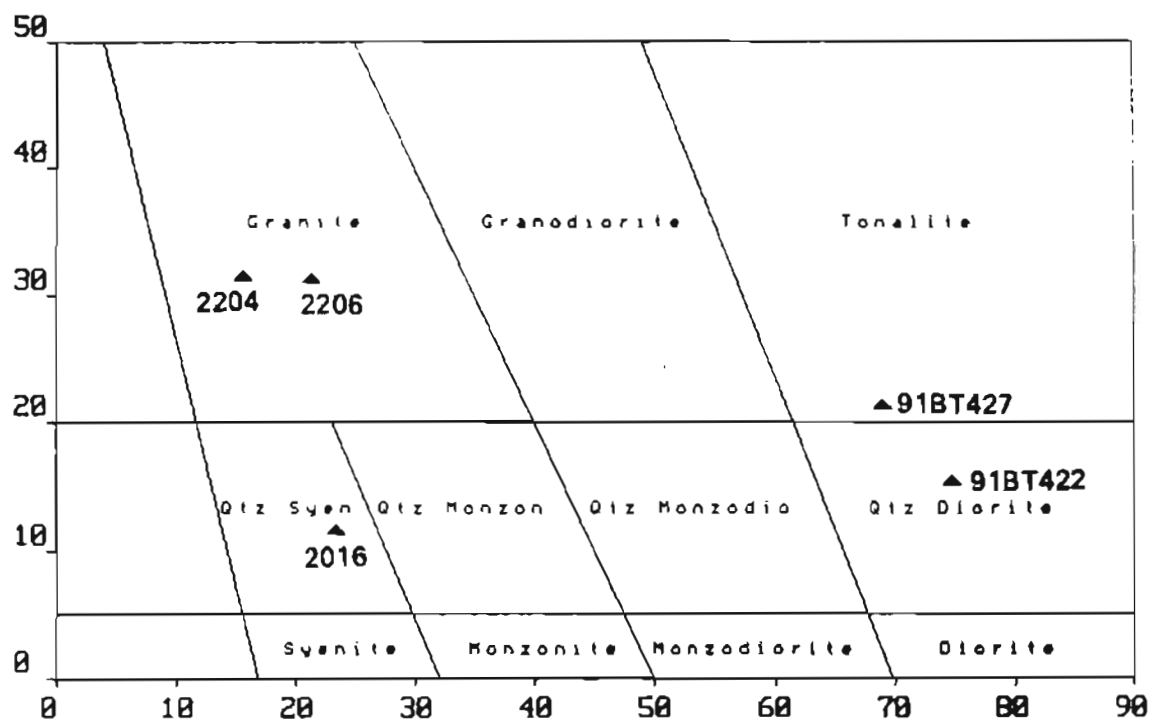
LAND SELECTION UNIT 16 MAJOR OXIDES AND NORMS (Analyses by XRAL)

MAJOR OXIDE ANALYSES							
Sample No	2315	91KC335	91KC340	91SL112	91SL113	91SL117b	91GL231
Location	HuntCr	GraniteMtn	GraniteMtn	GraniteMtn	GraniteMtn	GraniteMtn	GraniteMtn
SiO ₂	54.80	66.70	60.10	68.70	67.70	52.70	65.20
Al ₂ O ₃	20.60	17.10	17.60	16.70	16.90	15.00	17.10
CaO	2.22	0.88	5.39	2.51	2.49	8.56	2.90
MgO	1.11	0.22	1.41	0.60	0.73	1.82	0.97
Na ₂ O	4.26	3.65	5.27	5.24	5.06	2.70	4.83
K ₂ O	10.30	8.55	4.65	3.62	3.90	5.71	4.88
Fe ₂ O ₃	1.73	0.90	2.07	0.99	1.25	5.50	1.48
FeO	1.10	0.20	1.50	0.60	0.60	2.40	1.00
Fe ₂ O ₃ *	2.95	1.12	3.73	1.66	1.92	8.16	3.08
MnO	0.06	0.02	0.10	0.05	0.05	0.23	0.06
TiO ₂	0.53	0.18	0.53	0.27	0.32	1.03	0.38
P ₂ O ₅	0.14	0.10	0.23	0.07	0.09	0.34	0.12
LOI	1.23	0.54	0.23	0.39	0.39	1.16	0.54
Cr	<10	<10	12	<10	10	<10	10
Rb	427	310	109	166	196	168	190
Sr	2560	1280	2330	1100	1010	2290	1210
Y	30	<10	24	<10	<10	165	44
Zr	256	28	76	168	192	474	253
Nb	54	<10	22	<10	<10	46	13
Ba	2530	3090	2930	1820	1730	3900	2050
F%	0.092	0.018	0.030	0.045	0.060	0.094	0.082
Sum, as oxides	98.90	99.60	99.90	100.20	99.90	98.20	100.00
CIPW NORMS							
Quartz	0.00	10.99	1.66	18.56	17.34	1.21	11.85
Corundum	0.00	0.49	0.00	0.00	0.04	0.00	0.00
Orthoclase	62.84	51.29	27.80	21.53	23.26	35.15	29.15
Albite	5.20	31.35	45.12	44.63	43.21	23.80	41.32
Anorthite	6.88	3.77	10.76	11.43	11.87	12.44	10.68
Leucite	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nepheline	17.35	0.00	0.00	0.00	0.00	0.00	0.00
Acmite	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wollastonite	0.00	0.00	1.73	0.00	0.00	6.85	0.00
Diopside	2.76	0.00	8.37	0.50	0.00	10.19	2.40
Hypersthene	0.00	0.56	0.00	1.27	1.84	0.00	1.43
Olivine	1.10	0.00	0.00	0.00	0.00	0.00	0.00
Magnetite	2.28	0.19	3.02	1.33	1.20	5.73	2.17
Hematite	0.22	0.78	0.00	0.08	0.44	1.78	0.00
Ilmenite	1.04	0.35	1.01	0.51	0.60	2.04	0.72
Apatite	0.34	0.24	0.54	0.16	0.21	0.82	0.28

LAND SELECTION UNIT 16 MAJOR OXIDES AND NORMS (Analyses by XRAL)

MAJOR OXIDE ANALYSES								
Sample No	2005	2006	2016	91BT422	91BT427	2478	2204	2206
Location	XmasMtn	XmasMtn	Ungalik	PoisonCk	PoisonCk	KateelR	KateelR	KateelR
SiO ₂	41.30	48.70	66.20	57.10	61.60	47.00	74.30	74.30
Al ₂ O ₃	14.90	16.80	16.60	17.80	16.70	18.10	13.50	13.90
CaO	14.00	9.28	2.56	7.45	5.36	8.54	0.99	1.31
MgO	9.04	5.79	1.43	3.45	2.05	6.39	0.48	0.50
Na ₂ O	1.14	3.13	5.68	3.37	3.96	3.59	4.32	4.45
K ₂ O	2.35	3.92	4.16	1.62	1.71	1.49	4.18	3.81
Fe ₂ O ₃	5.61	4.10	0.29	4.05	2.43	3.20	0.56	0.67
FeO	5.40	4.40	1.20	2.00	2.70	5.50	0.60	0.50
Fe ₂ O ₃ *	11.60	8.98	1.62	6.27	5.43	9.30	1.11	1.22
MnO	0.14	0.16	0.06	0.11	0.13	0.18	0.05	0.05
TiO ₂	1.49	0.97	0.48	0.90	0.88	0.88	0.19	0.19
P ₂ O ₅	1.72	1.04	0.19	0.21	0.37	0.18	0.05	0.05
LOI	1.70	0.93	0.93	1.62	2.00	4.62	0.70	0.62
Cr	190.00	69.00	24.00	27.00	<10	47.00	18.00	17.00
Rb	74.00	121.00	117.00	65.00	79.00	37.00	96.00	83.00
Sr	3240.00	3080.00	772.00	602.00	521.00	452.00	249.00	288.00
Y	30.00	12.00	<10	<10	31.00	<10	<10	31.00
Zr	54.00	156.00	201.00	165.00	232.00	43.00	82.00	71.00
Nb	10.00	20.00	10.00	21.00	27.00	17.00	<10	13.00
Ba	5070.00	2830.00	1830.00	1030.00	1320.00	399.00	1030.00	1010.00
F%	—	—	—	—	—	—	—	—
Sum, as oxides	100.40	100.40	100.30	100.10	100.40	100.40	100.00	100.60
CIPW NORMS								
Quartz	0.00	0.00	10.55	12.53	18.43	0.00	30.65	30.44
Corundum	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.19
Orthoclase	14.30	23.57	24.87	9.76	10.32	9.26	24.92	22.58
Albite	1.59	16.98	48.62	29.08	34.23	26.80	36.88	37.75
Anorthite	29.46	20.57	7.60	29.22	23.23	30.38	4.63	6.19
Leucite	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nepheline	4.52	5.40	0.00	0.00	0.00	2.80	0.00	0.00
Acmite	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wollastonite	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Diopside	24.08	15.41	3.21	5.50	1.17	10.43	0.00	0.00
Hypersthene	0.00	0.00	3.36	6.21	6.43	0.00	1.44	1.39
Olivine	10.66	7.71	0.00	0.00	0.00	13.26	0.00	0.00
Magnetite	8.38	6.05	0.43	4.28	3.60	4.88	0.82	0.97
Hematite	0.00	0.00	0.00	1.18	0.00	0.00	0.00	0.00
Ilmenite	2.92	1.87	0.92	1.74	1.71	1.76	0.36	0.36
Apatite	4.10	2.45	0.45	0.50	0.88	0.44	0.12	0.12

Normative Mineral Ratios



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