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LAND SELECTION UNIT 34 (BETTLES & TANANA QUADRANGLES): REFERENCES, DGGS SAMPLE LOCATIONS, GEOCHEMICAL AND MAJOR OXIDE DATA

by

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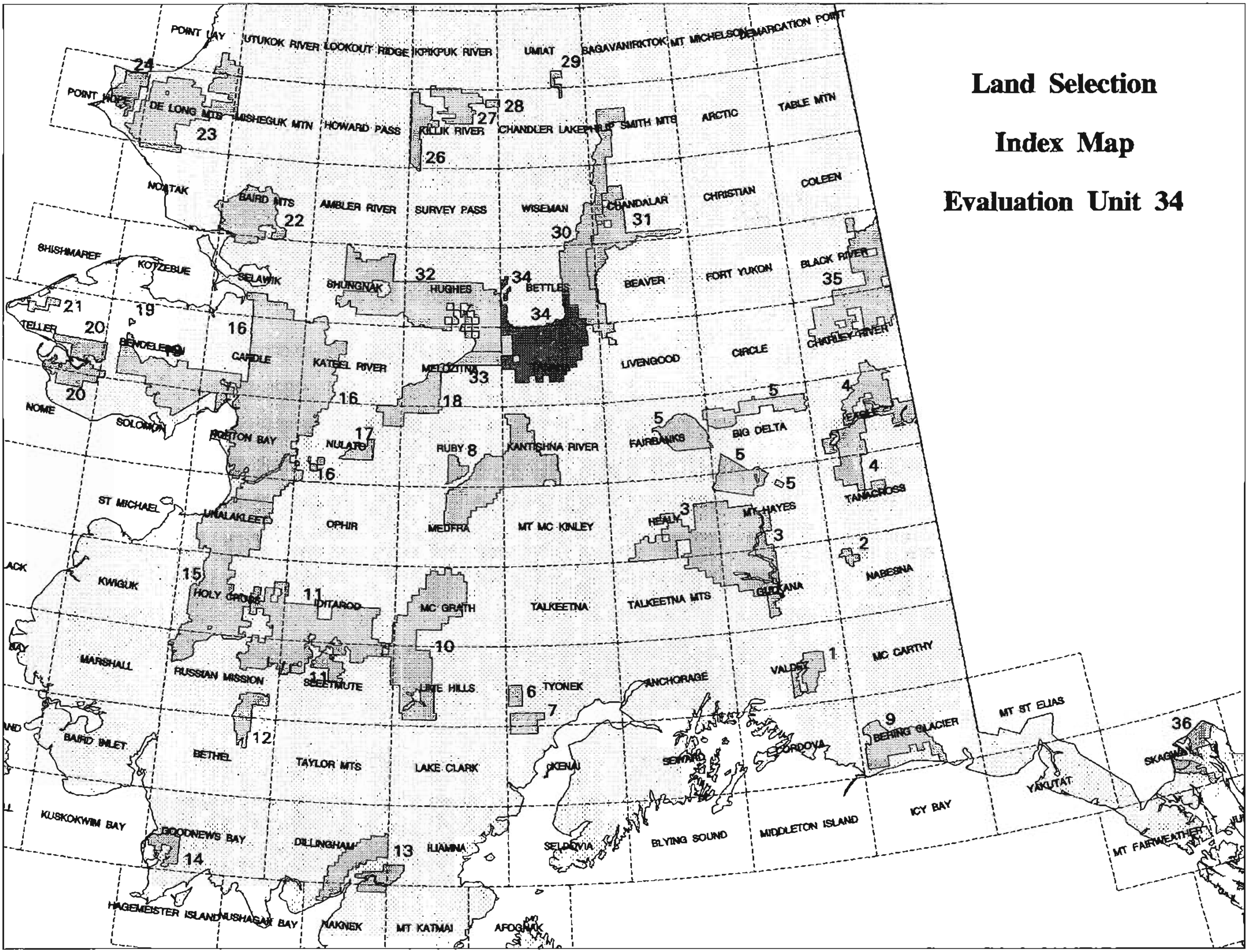
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LAND SELECTION UNIT 34 (BETTLES & TANANA QUADRANGLES): REFERENCES, DGGS SAMPLE LOCATIONS, GEOCHEMICAL & MAJOR OXIDE DATA

Land Selection Unit 34 encompasses 2,311,000 acres in the Bettles and Tanana quadrangles. The authors spent about two weeks in 1992 doing helicopter-supported field work in Unit 34, 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 will also be 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.

Unit 34 is underlain by several different rock packages. The oldest consists of Precambrian-Paleozoic schist, quartzite, marble, greenstone and chert, and crops out from southwest to northeast across the center of the evaluation unit. Paralleling this package are two belts of Permian-Jurassic basalt, gabbro, tuff, and ultramafic rock. In the northwest portion of the unit, Cretaceous sedimentary rocks crop out. These are overlain and/or interlayered with Tertiary-Cretaceous dacite and andesite volcanic flows and tuffs. Several large granitic bodies intrude the schist belt, and include the Sithylemenkat, Hot Springs, and Ray Mountains plutons. In the Tozitna River basin, Tertiary sedimentary rocks crop out along the river banks.

The large plutonic bodies are all compositionally similar to tin-bearing granitic systems; tin prospects are known in the Sithylemenkat pluton. The large size of the plutons suggests deep erosion however, which may have resulted in tin placer deposits in streams which drain the plutons. In addition to tin, a history of mining claims in the western part of the Ray Mountains pluton suggests potential for granitic uranium vein deposits associated with the plutonic bodies.

The ultramafic rocks in the Permian-Jurassic belts are known to contain anomalously high concentrations of chromite (Foley and McDermott, 1983), and samples collected by DGGS also contained anomalous Pt and Pd.

Morelock Creek, in the southeastern portion of evaluation unit 34, has a history of Au and Sn placer production (Thomas and Wright, 1948; Chapman and others, 1963). However, lode sources have not been recognized.

Samples collected by DGGS are briefly described in Table 1. Table 2 reports results of trace element analyses from rock samples collected because of their anomalous alteration or possible mineralization. The asterisks beside element labels in the left-hand column indicates the analytical procedure for that element which we feel is the more reliable. Table 3 reports results of pan concentrate analyses. These samples were collected using a standardized procedure, screening material from a hole in the streambed to fill a pan twice, and panned down to the heavies. 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 the major oxide samples, using the plot developed by Streckeisen and LeMaitre (1979).

The Au discriminant scores presented on the major oxide table are a reflection of how similar the sampled rocks from Unit 34 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 34 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.

QUAD	STATION	GC No.	PC No.	MO No.	DESCRIPTION	LONGITUDE	LATITUDE
BET A-2	92DNS205	4241			Aphanitic dk. green dense um w/ chromite	-150.915	66.248
BET A-2	92DNS206	4243			Pervasive blk. veins	-150.917	66.245
BET A-2	92DNS206			4242	Bt. tonalite dike in um	-151.204	66.021
BET A-2	92DNS207				Um suite	-150.916	66.242
BET A-2	92DNS208	4244			Massive chromite pod	-150.908	66.244
BET A-2	92DNS212				Schist	-150.844	66.078
BET A-2	92Ha212				Bt granodiorite	-150.844	66.078
BET A-3	92DNS200	4236			Coarse-gr. bt granite w/ chl. alt.	-151.201	66.028
BET A-3	92DNS201			4237	V. coarse-gr. bt granite-Sithylemenkat Pl.	-151.204	66.021
BET A-3	92DNS201	4238			Aplitic dike, sparse sulfide	-151.204	66.021
BET A-3	92DNS202	4239			Green alt. zone in granite	-151.209	66.022
BET A-3	92DNS203			4240	Porphyritic fine-gr. bt granite	-151.204	66.021
BET A-3	92DNS209				Um	-151.014	66.232
BET A-3	92DNS210	4245			Green, greenish-blue fracture-fill in um	-151.004	66.237
BET A-3	92DNS211				Peridotite	-151.005	66.249
BET A-3	92Ha201	2960			Fe-stained granite, brown vitreous mineral	-151.146	66.027
BET A-3	92Ha202	2961			Tourmaline two-mica granite	-151.134	66.035
BET A-3	92Ha213	2498			Chromite in dunite/wehrlite	-151.003	66.249
BET A-3	92MW401	4501			Tourmaline vein, Sithylemenkat	-151.146	66.026
BET A-3	92MW402	4502			Fine-gr. bt granite w/possible cass.	-151.147	66.025
BET A-3	92MW403	4503			Chloritized granite	-151.146	66.024
BET A-3	92MW404				Bt granite	-151.014	66.232
BET B-2	92DNS214				Gabbro	-150.93	66.272
BET B-2	92Ha203				Dunite w/cpx veins	-150.881	66.27
BET B-2	92Ha204				Opx & cpx	-150.881	66.27
BET B-2	92Ha205	2962			Chromite in dunite	-150.889	66.269
BET B-2	92Ha205b	2963			Red wxing spots in dunite	-150.889	66.269
BET B-2	92Ha206				Hornblendite(?) dike	-150.896	66.268
BET B-2	92Ha207	2964			Chalcedony, jasper, limonite stain	-150.905	66.268
BET B-2	92Ha208a	2965			Chromite stringers in dunite	-150.919	66.269
BET B-2	92Ha208b	2966			Dike of px & plag	-150.919	66.269
BET B-2	92Ha209	2497			Disseminated chromite, veins	-150.928	66.27
BET B-2	92Ha209	2496			Massive chromite veins in dunite	-150.928	66.27
BET B-2	92Ha210				Serpentinite	-150.93	66.272

QUAD	STATION	GC No.	PC No.	MO No.	DESCRIPTION	LONGITUDE	LATITUDE
BET B–2	92Ha211				Purple–green grundge rock	–150.93	66.272
BET B–2	92MW405	4504			Qtz jasper vein in dunite	–150.879	66.271
BET B–2	92MW406	4505			Micrveined aphanitic rubble in um	–150.874	66.273
BET B–2	92MW407	4506			Chromite	–150.874	66.274
BET B–2	92MW408	4507			Pyroxene vein material	–150.873	66.277
BET B–2	92MW409	4508			Qtz/jasper boxwork vein	–150.878	66.281
BET B–2	92MW410	4509			Chromite schlieren	–150.888	66.285
BET B–2	92MW411	4510			Orange limonitic granite gruss	–150.897	66.301
BET B–3	92DNS213	4246			White chalcedony float	–151.001	66.253
TAN B–2	92Ha260	4100			N. of 260 – Qtz vein in schist	–150.966	65.485
TAN B–2	92Ha260	4099			N. of 260 – Qtz vein in schist	–150.964	65.482
TAN B–3	92DNS215			4248	Med.–gr. bt granite w/porph. ksp on Yukon River	–151.137	65.298
TAN B–3	92Ha214	2499			Qtz vein w/gossan, cavities, vugs	–151.359	65.377
TAN B–3	92Ha215	2500			Qtz vein, gossan	–151.364	65.374
TAN B–3	92Ha216				Blk. phyllitic/graphitic schist	–151.372	65.371
TAN B–3	92Ha217				Qtz near contact intrusive/schist	–151.372	65.371
TAN B–3	92Ha218				Diabase	–151.372	65.371
TAN B–3	92Ha219	2989			Limonitic, white mica bleached rock	–151.384	65.365
TAN B–3	92Ha220	2990			Qtz vein w/gossan in graphitic schist	–151.383	65.361
TAN B–3	92Ha221	2991			Qtz vein w/gossan in graphitic schist	–151.384	65.355
TAN B–3	92Ha222		2992		Maggie Ck. minimal fines & blk sand	–151.375	65.331
TAN B–3	92Ha262		4102		Morelock Ck, Blk shiny heavies. Fast creek	–151.297	65.3
TAN B–3	92MW412	4514			Gossanous musc–qtz–schist	–151.3	65.33
TAN B–3	92MW412	4513			Calcite gossan adj. to diabase dike	–151.3	65.33
TAN B–3	92MW412	4511			Calcite colluvium adj. to diabase dike	–151.3	65.33
TAN B–3	92MW412	4512			Qtz & chlorite(?)	–151.3	65.33
TAN B–3	92MW413	4515			Pyrite in greenstone	–151.299	65.331
TAN B–3	92MW414	4516			Qtz vein, breccia & Fe–ox	–151.297	65.335
TAN B–3	92MW415	4517			Qtz–carb. vein	–151.294	65.337
TAN B–3	92MW415	4518			Ankerite fracture–fill in fol. alt'd. diabase(?)	–151.294	65.337
TAN B–3	92MW416	4519			Qtz vein in fol. diabase	–151.292	65.34
TAN B–3	92MW417	4520			Vuggy qtz in dol. marble	–151.271	65.357
TAN B–3	92MW418	4521			Gossanous calc. semischist & qtz	–151.272	65.358
TAN B–3	92MW456				Calc shl musc qtz feld schist	–151.004	65.498

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QUAD	STATION	GC No.	PC No.	MO No.	DESCRIPTION	LONGITUDE	LATITUDE
TAN B-3	92MW457				Bt chl musc qtz feld greenschist-diabase	-151.004	65.498
TAN B-3	92MW458				Dolomite	-151.004	65.498
TAN B-3	92MW460	4571			Composite qtz veins & silic. greenstone	-151.284	65.307
TAN B-3	92MW460	4570			Qtz veins, composite sample	-151.284	65.307
TAN B-3	92MW461	4572			Sparsely pyritic qtzite	-151.174	65.325
TAN B-3	92MW462	4573			Limonite-stained brecciated fractures in qtzite	-151.173	65.322
TAN B-3	92RE01				Schist	-151.292	65.373
TAN B-3	92RE02	4167			Qtz veins in chlorite schist	-151.284	65.373
TAN B-3	92RE03	4168			Qtz veins in bt schist	-151.276	65.373
TAN B-3	92RE04	4169			Qtz w/mica flakes	-151.275	65.366
TAN B-3	92RE05				Blk. schist	-151.281	65.348
TAN B-3	92RE06	4170			Qtz vein w/wxed cubes (py?)	-151.295	65.338
TAN B-3	92RE2042	4153			Calcareous bt schist	-151.367	65.302
TAN B-3	92RE2043	4154			Schist	-151.364	65.303
TAN B-3	92RE2044	4162			Qtz veins in schist	-151.363	65.305
TAN B-3	92RE2045	4163			Qtz veins in qtz mica schist	-151.352	65.309
TAN B-3	92RE2046	4164			Qtz veins in qtz mica schist	-151.352	65.311
TAN B-6	92Ha223			2993	Qtz monzonite	-152.855	65.488
TAN B-6	92Ha224			2994	Granite	-152.82	65.47
TAN B-6	92Ha225a				Three phases of intrusive		
TAN B-6	92Ha225b	2995			Fluorite, limonite in brecciated qtz monzonite	-152.823	65.471
TAN B-6	92Ha225b	2996			Fluorite, limonite in qtz monzonite	-152.823	65.471
TAN B-6	92Ha225c	2997			Fe-stained blk. grundge	-152.821	65.471
TAN B-6	92Ha225c	2998			Heavily Fe-stained rock	-152.821	65.471
TAN B-6	92Ha225c	2999			Fe-stained monzonite	-152.821	65.471
TAN B-6	92MW419				Monzo-granite	-152.855	65.488
TAN B-6	92MW420	4522			Bt granite w/ smokey qtz phenos	-152.86	65.486
TAN B-6	92MW421				(92Ha225)Fl-bearing chl. breccia	-152.82	65.47
TAN B-6	92RE010				Qtz bt schist	-152.855	65.488
TAN B-6	92RE011				Qtz monzonite	-152.735	65.493
TAN B-6	92RE012				Contact btwn. schist & qtz monzonite	-152.735	65.493
TAN B-6	92RE013				Qtz monzonite	-152.735	65.493
TAN B-6	92RE014				Qtz bt(?) schist	-152.735	65.493
TAN B-6	92RE015				Contact btwn. schist & qtz monzonite	-152.855	65.488

LAND SELECTION UNIT 34

QUAD	STATION	GC No.	PC No.	MO No.	DESCRIPTION	LONGITUDE	LATITUDE
TAN B-6	92RE016				Mafic layers in meta. rx.	-152.735	65.493
TAN B-6	92RE017				Bt clots in schist	-152.855	65.488
TAN B-6	92RE018				Mafic layer in schist	-152.735	65.493
TAN B-6	92RE019				Bt schist	-152.855	65.488
TAN B-6	92RE021	4171			Coarse qtz bt float	-152.742	65.494
TAN B-6	92RE022				V. coarse bt qtz monzonite	-152.735	65.493
TAN B-6	92RE023				Contact btwn. schist & qtz monzonite	-152.735	65.493
TAN C-2	92Ha261		4101		Canyon Ck, Abundant blk. sands, py	-150.964	65.529
TAN C-2	92Ha261	4569			Qtz veins, limonitic stain in gray phyllite	-150.964	65.529
TAN C-2	92Ha261	4568			Qtz veins, limonitic stain in gray phyllite	-150.964	65.529
TAN C-2	92Ha261	4567			Qtz veins/lenses above phyllite	-150.964	65.529
TAN C-2	92MW424				Tertiary gravel, coal	-151.41	65.542
TAN C-2	92MW425	4523			Pyritic felsite dike	-150.705	65.618
TAN C-2	92MW425	4525			Felsite dike	-150.706	65.618
TAN C-2	92MW425	4524			Pyritic felsite dike	-150.705	65.618
TAN C-2	92RE2036				Diabase	-150.9	65.576
TAN C-2	92RE2037				Basalt	-150.9	65.576
TAN C-2	92RE2038				Diabase	-150.9	65.576
TAN C-2	92RE2039	4161			Qtz veins in slate(?)	-150.981	65.543
TAN C-2	92RE2040				Qtz veins in slate(?)	-150.9	65.576
TAN C-2	92RE2041				Qtz veins in slate(?)	-150.9	65.576
TAN C-3	92Ha227		4073		Below Tert. gravel, 1 speck Au	-151.41	65.542
TAN C-3	92Ha256		4093		Spooky Valley - good blk. sands, hem(?), bt	-151.196	65.726
TAN C-3	92Ha257	4096			V. gossanous, brecciated granite	-151.169	65.718
TAN C-3	92Ha257	4094			Aplite dike	-151.17	65.718
TAN C-3	92Ha257	4095			Brecciated qtz & granite	-151.17	65.718
TAN C-3	92Ha258	4097			Qtz in gossan zone	-151.172	65.712
TAN C-3	92Ha259	4098			Brecciated granite, Fe-stain	-151.172	65.711
TAN C-3	92MW423				Tertiary gravel		
TAN C-3	92MW450	4551			Hematitic coarse-gr. porph. bt granite	-151.18	65.725
TAN C-3	92MW450	4552			Specular hematite	-151.18	65.725
TAN C-3	92MW450	4092			Spooky Valley-brecciated qtz, hem, ep in granite	-151.179	65.725
TAN C-3	92MW451	4554			Clay altered granite porph in sheared vein	-151.187	65.729
TAN C-3	92MW451	4558			Hematite-rich float	-151.187	65.729

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QUAD	STATION	GC No.	PC No.	MO No.	DESCRIPTION	LONGITUDE	LATITUDE
TAN C–3	92MW451	4559			Dk. blk. fine–gr. massive chlorite(?)	–151.187	65.729
TAN C–3	92MW451	4555			Altered granite porph.	–151.187	65.729
TAN C–3	92MW451	4560			Qtz vein	–151.187	65.729
TAN C–3	92MW451	4557			Clay altered bt granite porph.	–151.187	65.729
TAN C–3	92MW451	4556			Hematitic bt granite porph.	–151.187	65.729
TAN C–3	92MW451	4553			Hematitic porph. bt granite	–151.187	65.729
TAN C–3	92MW451	4565			Hematitic coarse–gr. bt granite porph.	–151.187	65.729
TAN C–3	92MW452	4561			Hematite–rich granite	–151.171	65.747
TAN C–3	92MW453	4562			Hematite altered bt granite porph.	–151.175	65.745
TAN C–3	92MW454	4563			Hematite altered bt granite porph.	–151.18	65.743
TAN C–3	92MW455	4564			Hematite altered bt granite porph.	–151.201	65.74
TAN C–3	92MW459	4566			Blk. metallic mineral, fractures in qtzite	–151.012	65.506
TAN C–3	92RE2034	4158			Earthy hematite float, Spooky Valley	–151.21	65.739
TAN C–3	92RE2034b	4159			Blk. fine–gr. w/ qtz veins	–151.211	65.739
TAN C–3	92RE2035	4160			Qtz & ksp inclusion	–151.245	65.718
TAN C–4	92Ha226		4072		Below Tert. gravel, not abundant blk. sands	–151.54	65.51
TAN C–4	92Ha246		4083		Bandanna Ck, granite, coarse blk. sands	–151.862	65.732
TAN C–4	92Ha263	4103			McQuesten Hot Springs: white sinter, Fe–stained	–151.668	65.654
TAN C–4	92Ha263		4104		McQuesten Hot Springs, top of gravel/cobble bar	–151.668	65.654
TAN C–4	92MW422				Tertiary gravel	–151.543	65.505
TAN C–4	92MW442	4543			Coarse–gr. porph. bt granite, minor musc, tourm.	–151.905	65.744
TAN C–4	92MW443	4544			Aplite dike	–151.909	65.742
TAN C–4	92RE2025				Ray Mountains granite	–151.862	65.749
TAN C–4	92RE2026	4165			Med–gr. 2 mica granite	–151.867	65.74
TAN C–4	92RE2027	4166			Tourmaline(?) bt granitic	–151.868	65.738
TAN C–4	92RE2031	4156			Musc bt granite	–151.785	65.746
TAN C–4	92RE2032				Coarse–gr. muscovite	–151.791	65.745
TAN C–4	92RE2033	4157			Musc bt granite	–151.803	65.745
TAN D–2	92DNS216	4249			Siliceous veins in diabase	–150.649	65.772
TAN D–2	92DNS217				Basalt, minor chert	–150.544	65.796
TAN D–2	92DNS218				Basalt w/ Mn stain	–150.544	65.796
TAN D–2	92DNS219				Float in Dreamland Cr.	–150.544	65.796
TAN D–2	92MW463				Chert	–150.659	65.775
TAN D–2	92MW464				Basalt	–150.659	65.775

LAND SELECTION UNIT 34

QUAD	STATION	GC No.	PC No.	MO No.	DESCRIPTION	LONGITUDE	LATITUDE
TAN D-4	92Ha244		4081		Between ultramafic ridges; chr, mt, gt, ol, sph	-151.872	65.973
TAN D-4	92Ha247			4084	Granite	-151.861	65.786
TAN D-4	92Ha248	4085			Vein qtz, coarse-gr. granite	-151.792	65.79
TAN D-4	92Ha248	4105			Vein qtz, coarse-gr. granite	-151.791	65.79
TAN D-4	92Ha249	4086			Qtz veining, greisen-like, tourmaline	-151.792	65.788
TAN D-4	92Ha250	4087			Coarse pegmatitic tourmaline	-151.795	65.787
TAN D-4	92Ha251				Tourmaline veins in granite	-151.789	65.786
TAN D-4	92Ha252	4088			Gruss, red-stained granite	-151.794	65.786
TAN D-4	92Ha253		4089		Granite, not abundant heavies	-151.815	65.766
TAN D-4	92Ha254		4090		Granite, coarse tourmaline	-151.825	65.792
TAN D-4	92Ha255		4091		Blk. sands & white heavies, speck cpy	-151.717	65.808
TAN D-4	92MW437	4537			Chromite schlieren in lherzolite	-151.841	65.975
TAN D-4	92MW438	4538			Serpentinous, slickensided gabbro	-151.85	65.966
TAN D-4	92MW438	4540			Chromite pod in lherzolite	-151.847	65.967
TAN D-4	92MW438	4574			Chromite pod	-151.795	65.784
TAN D-4	92MW439				Chromite stringers	-151.848	65.967
TAN D-4	92MW440				Olivine clinopyroxenite	-150.659	65.775
TAN D-4	92MW441			4542	Bt granite	-151.88	65.767
TAN D-4	92MW441	4541			Coarse-gr. porph. bt granite chips, drill core	-151.88	65.767
TAN D-4	92MW444				Fine-gr. musc. granite	-151.871	65.787
TAN D-4	92MW445	4545			Blk. fracture-fill in musc. granite	-151.865	65.787
TAN D-4	92MW446			4546	Fine-gr. porph. two-mica granite near linear	-151.861	65.786
TAN D-4	92MW447	4547			Qtz tourmaline vein float	-151.795	65.784
TAN D-4	92MW447	4548			Tourmaline in coarse-gr. porph. granite	-151.795	65.784
TAN D-4	92MW448			4549	Coarse-gr. bt-musc granite, porph, minor tourm.	-151.782	65.801
TAN D-4	92MW449		4550		Stream sediment	-151.633	65.84
TAN D-4	92RE2020				Black fine-gr. um	-151.873	65.969
TAN D-4	92RE2021				Med-gr. um(?)	-151.873	65.969
TAN D-4	92RE2022				Serpentine(?)	-151.873	65.969
TAN D-4	92RE2023				Dunite	-151.873	65.969
TAN D-4	92RE2024				Chromite	-151.873	65.969
TAN D-4	92RE2028				Linears in bt granite	-151.88	65.767
TAN D-4	92RE2029				Bt tourm. granite	-151.88	65.767
TAN D-4	92RE2030	4155			Fine-gr. granite below linear	-151.855	65.755

LAND SELECTION UNIT 34

QUAD	STATION	GC No.	PC No.	MO No.	DESCRIPTION	LONGITUDE	LATITUDE
TAN D–5	92Ha228	4074			Dunite w/ cpxite veinlets, chromite	–152.399	65.874
TAN D–5	92Ha229				Wehrlite	–152.401	65.874
TAN D–5	92Ha230				Boxwork, chalcedonic material in dunite	–152.401	65.874
TAN D–5	92Ha231	4075			Dunite(?) w/ maroon blebs	–152.42	65.873
TAN D–5	92Ha232	4076			Chromite, 25ft x 100yd zone	–152.422	65.874
TAN D–5	92Ha233	4077			Chromite in dunite	–152.428	65.88
TAN D–5	92Ha234	4078			Whte chalcedony w/brown, blk minerals	–152.423	65.887
TAN D–5	92Ha235a				V. fine–gr. gabbro/andesite	–152.186	65.894
TAN D–5	92Ha235b				Waterlain tuff	–152.186	65.894
TAN D–5	92Ha236a				Med–gr. gabbro	–152.186	65.894
TAN D–5	92Ha236b				White tuff		
TAN D–5	92Ha237				Coarse–gr. gabbro	–152.186	65.894
TAN D–5	92Ha238				Lt. green fine–gr. tuff	–152.186	65.894
TAN D–5	92Ha239				Red chert, some creme chert	–152.186	65.894
TAN D–5	92Ha240				Green welded tuff	–152.186	65.894
TAN D–5	92Ha241				Blk. silc. mudstone	–152.186	65.894
TAN D–5	92Ha242	4079			Silicic mudstone or waterlain tuff	–152.241	65.887
TAN D–5	92Ha243	4080			Volcanic, minor sulfides	–152.243	65.888
TAN D–5	92Ha245		4082		Abundant blk. sands, ultramafic	–152.463	65.873
TAN D–5	92MW426			4527	Dunite(?)	–152.336	65.88
TAN D–5	92MW426			4526	Clinopyroxenite	–152.312	65.887
TAN D–5	92MW427	4528			Chromite	–152.349	65.881
TAN D–5	92MW428	4530			White chalcedony	–152.352	65.882
TAN D–5	92MW428			4529	Lherzolite	–152.352	65.882
TAN D–5	92MW429	4531			Chromite	–152.364	65.886
TAN D–5	92MW429	4532			Gossan in lherzolite	–152.364	65.886
TAN D–5	92MW430				Olivine websterite	–152.378	65.889
TAN D–5	92MW431				Basalt	–152.186	65.894
TAN D–5	92MW432			4533	Diabase	–152.186	65.894
TAN D–5	92MW433	4534			Chert	–152.19	65.898
TAN D–5	92MW434			4535	Diabase	–150.659	65.775
TAN D–5	92MW435			4536	Clinopyroxenite	–150.659	65.775
TAN D–5	92MW436				Gabbro	–150.659	65.775
TAN D–5	92RE2009				Gray–red bedded chert	–152.262	65.881

LAND SELECTION UNIT 34

QUAD	STATION	GC No.	PC No.	MO No.	DESCRIPTION	LONGITUDE	LATITUDE
TAN D–5	92RE201				Aphanitic black um w/blk. veins	–152.312	65.887
TAN D–5	92RE2010				Red chert	–152.262	65.881
TAN D–5	92RE2011				Andesite	–152.262	65.881
TAN D–5	92RE2012				Brecciated limestone w/calcite veins	–152.262	65.881
TAN D–5	92RE2013				Bluish green massive chert(?)	–152.262	65.881
TAN D–5	92RE2014				Limestone w/worm burrows	–152.259	65.879
TAN D–5	92RE2015				Red chert	–152.262	65.881
TAN D–5	92RE2016				Chert & basalt	–152.262	65.881
TAN D–5	92RE2017				Black olivine basalt	–152.262	65.881
TAN D–5	92RE2018				Calcite veined olivine basalt(?)	–152.262	65.881
TAN D–5	92RE202				Chlorite breccia (float)	–152.312	65.887
TAN D–5	92RE203				Um	–152.312	65.887
TAN D–5	92RE204				Black fine–gr. w/chlorite	–152.312	65.887
TAN D–5	92RE205	4172			Chromite layers in blk. fine–gr. um	–152.307	65.889
TAN D–5	92RE206				Chl. serp. vein float	–152.297	65.889
TAN D–5	92RE207				Black aphanitic um(?)	–152.297	65.889
TAN D–5	92RE208				Green bladed xls w/chromite layers	–152.259	65.879
TAN D–5	92RE208b	4173			Qtz matrix–supported breccia	–152.284	65.887

LAND SELECTION UNIT 34 – TRACE ELEMENT ANALYSES (Analyses by Bondar–Clegg)

	METHOD	UNITS	L.LIMIT	U.LIMIT	2496	2497	2498	2499	2500	2960	2961	2962	2963	2964	2965
F	SPION	PPM	20	20000						177	151				
K	ICP	PCT	0.01	10	0.07	0.05	0.14	0.32	0.36	1.06	0.97	0.09	0.29	0.06	0.28
U	INAA	PPM	0.5	2000	−0.5	−0.5	−0.5	0.8	0.6	10	11	−0.5	−0.5	−0.5	−0.5
V	AA	PPM	1	2000						−9	−9				
V	ICP	PPM	2	2000	429	365	64	32	61	−2	−2	243	11	−2	541
W	ICP	PPM	20	2000	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20
W*	INAA	PPM	2	30000	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2
Y	ICP	PPM	5	2000	−5	−5	−5	−5	−5	26	5	−5	−5	−5	24
AG*	ICP	PPM	0.5	50	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5
Ag	INAA	PPM	5	300	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5
Ag	FA	OPT	0.02	9166											
Al	ICP	PCT	0.01	10	3.61	3.66	0.61	1.4	1.13	4.12	2.35	2.03	0.82	0.12	6.43
As	ICP	PPM	5	2000	−5	−5	10	−5	55	−5	41	−5	−5	29	22
As*	INAA	PPM	1	10000	2	3	−1	9	36	10	17	−1	−1	−1	1
Au	INAA	PPB	5	10000	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5
Ba	ICP	PPM	5	2000	40	15	21	75	91	35	16	16	38	17	35
Ba*	INAA	PPM	100	20000	−100	−100	−100	−100	100	−100	−100	−100	−100	−100	−100
Bi	AA	PPM	1	2000	2	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1
Bi*	ICP	PPM	5	2000	−5	−5	31	−5	12	−5	−5	−5	17	−5	25
Br	INAA	PPM	1	30000	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1
CA	ICP	PCT	0.01	10	0.04	0.04	0.08	0.47	7.38	0.13	0.32	0.13	0.11	0.01	3.35
Cd*	ICP	PPM	2	2000	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2
Cd	INAA	PPM	10	2000	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10
Ce	INAA	PPM	10	30000	−65	110	−10	19	34	110	16	−26	−10	−10	−10
Co*	ICP	PPM	1	20000	179	168	124	14	17	2	−1	151	111	10	96
Co	INAA	PPM	10	20000	360	320	210	21	23	−10	−10	260	190	15	170
CR*	ICP	PPM	2	20000	20000	20000	10503	349	140	26	32	20000	4793	326	121
Cr**	INAA	PPM	50	30000	30000	30000	30000	310	130	−50	−50	30000	11600	460	200
Cs	INAA	PPM	1	10000	−1	−1	−1	2	4	23	14	−1	−1	−1	−1
Cu	ICP	PPM	1	20000	31	32	45	50	5	8	3	8	2	3	5
Eu	INAA	PPM	2	30000	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2
Fe	ICP	PCT	0.01	10	10	10	7.06	2.42	4.31	0.4	0.55	9.78	5.01	0.45	7.28
Fe*	INAA	PCT	0.5	10	10	10	10	3	6.1	0.5	1.1	10	8.9	0.6	10
GA	ICP	PPM	10	2000	107	69	10	−10	−10	13	−10	45	−10	−10	20
Hf	INAA	PPM	2	30000	−2	−2	−2	−2	−2	7	4	−2	−2	−2	−2
Ir*	INAA	PPB	100	1000	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100
LA	ICP	PPM	5	2000	24	−5	−5	7	9	50	−5	−5	−5	−5	−5
La*	INAA	PPM	5	30000	−5	−5	−5	7	10	69	6	−5	−5	−5	10
Li	ICP	PPM	2	2000	5	−2	−2	12	−2	19	33	−2	−2	2	4
Lu	INAA	PPM	0.5	2000	0.9	1.2	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	1
MG	ICP	PCT	0.01	10	10	10	10	0.44	1.54	0.03	0.01	10	10	0.83	10
Mn	ICP	PPM	5	20000	1276	1191	877	312	1541	192	122	1126	771	71	444
Mo*	ICP	PPM	1	20000	39	14	5	−1	5	3	2	4	8	3	5
Mo	INAA	PPM	2	30000	−4	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2
NA*	ICP	PCT	0.01	10	0.18	0.14	0.35	0.06	0.06	2.92	2.9	0.23	0.66	0.13	1
Na*	INAA	PCT	0.05	10	0.27	0.24	0.26	0.05	0.06	3.1	3.5	0.21	0.27	−0.05	0.86
Nb	ICP	PPM	5	2000	−5	−5	−5	−5	−5	23	19	−5	−5	−5	−5
Ni*	ICP	PPM	1	20000	1848	1766	1884	46	53	2	4	1526	1596	206	178
Ni	INAA	PPM	20	30000	3050	2930	2690	58	73	24	−20	2000	2230	260	230
Pb*	AA	PPM	2	10000	3	3	4	6	8	40	14	4	5	−2	4

LAND SELECTION UNIT 34 – TRACE ELEMENT ANALYSES (Analyses by Bondar–Clegg)

	METHOD	UNITS	L.LIMIT	U.LIMIT	2496	2497	2498	2499	2500	2960	2961	2962	2963	2964	2965
Pb	ICP	PPM	2	10000	48	9	12	15	13	100	68	24	16	2	16
PD	FADCP	PPB	1	10000	43	40	42	-9	-9	-9	-9	34	39	38	34
PT	FADCP	PPB	5	10000	16	8	28	-9	-9	-9	-9	22	15	15	12
Rb	INAA	PPM	10	10000	-10	-10	-10	36	52	630	590	-10	-10	-10	-10
SB	ICP	PPM	5	2000	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
Sb*	INAA	PPM	0.2	9999	0.7	0.6	-0.2	1.2	1	0.3	0.3	-0.2	-0.2	-0.2	1.1
Sc	INAA	PPM	0.5	2000	11	10	6.2	4.4	6	2.1	2.7	7	4.6	1.3	125
Se	INAA	PPM	10	30000	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Sm	INAA	PPM	0.2	2000	-0.2	-0.2	-0.2	1.7	3	6.9	2.6	-0.2	-0.2	-0.2	4.7
SN*	ICP	PPM	20	2000	31	-20	-20	-20	-20	-20	-20	-20	24	-20	36
Sn	INAA	PPM	200	30000	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200
Sn**	XRF	PPM	1	10000	-9	-9	-9	15	9	16	21	-9	-9	-9	-9
Sr	ICP	PPM	1	2000	31	7	4	12	58	26	11	3	7	1	21
Ta	ICP	PPM	5	2000	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100
Ta*	INAA	PPM	1	2000	-1	-1	-1	-1	-1	6	5	-1	-1	-1	-1
Tb	INAA	PPM	1	30000	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1
Te	ICP	PPM	25	2000	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25
Te	INAA	PPM	20	2000	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20
Th	INAA	PPM	0.5	3000	8	5.7	-0.5	3.3	2.7	55.6	37	4.4	-0.5	-0.5	-0.5
Ti	ICP	PCT	0.01	10	0.09	0.06	-0.01	0.1	0.16	0.03	0.03	0.05	-0.01	-0.01	0.92
Yb	INAA	PPM	5	2000	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	6
ZN*	ICP	PPM	2	20000	408	386	108	47	51	15	22	225	58	8	31
Zn	INAA	PPM	200	30000	760	620	-200	-200	-200	-200	-200	430	-200	-200	780
Zr	ICP	PPM	5	2000	-5	-5	-5	8	-5	77	46	-5	16	-5	-5
Zr*	INAA	PPM	500	10000	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500
UDNC	INAA	PPM	0.5	2000											
S_Tot	LECO	PCT	0.02	100											

LAND SELECTION UNIT 34 – TRACE ELEMENT ANALYSES (Analyses by Bondar–Clegg)

	2988	2989	2990	2991	2995	2996	2997	2998	2999	4074	4075	4076	4077	4078	4079	4080
F					13667											-9
K	0.18	0.34	-0.01	0.59	0.48	0.78	1.44	0.66	0.69	0.17	0.1	-0.01	0.14	0.01	1.16	0.38
U	-0.5	-0.5	-0.5	2.8	28	39	45	27	32	-0.5	-0.5	-1.4	-0.5	-0.5	3.7	-0.5
V					-9											194
V	96	131	-2	71	-2	-2	-2	-2	28	19	11	284	86	-2	88	274
W	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20
W*	-2	-2	-2	3	5	9	13	7	6	-2	-2	-2	-2	-2	-2	-2
Y	-5	-5	-5	7	43	34	55	18	39	-5	-5	-5	-5	-5	8	9
AG*	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	1.2	5.2	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
Ag	-5	-5	-5	-5	-5	-5	-5	13	-5	-5	-5	-5	-5	-5	-5	-5
Ag																
Al	1.37	4.52	0.1	5.59	2.01	2.14	2.69	1.82	3.83	0.53	0.3	4.02	1.54	0.03	2.98	5.24
As	19	262	172	28	-5	17	385	7	60	14	27	-5	-5	10	74	23
As*	1	261	228	28	2	2	565	16	5	-1	-1	-1	-1	-1	77	2
Au	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	30	-5
Ba	25	37	7	136	76	86	82	91	348	23	13	9	16	97	2000	1071
Ba*	-100	-100	-100	170	-100	-100	-100	-100	280	-100	-100	-100	-100	140	20000	1500
Bi	-1	-1	-1	-1	-1	-1	16	48	-1	-1	-1	-1	-1	-1	-1	-1
Bi*	21	10	-5	-5	-5	-5	18	30	-5	25	24	-5	16	-5	-5	17
Br	-1	8	3	-1	-1	-1	23	-1	-1	-1	-1	-1	-1	-1	2	-1
CA	0.23	4.25	0.03	0.11	1.29	0.17	0.09	0.12	0.28	0.15	0.08	0.16	0.08	0.01	0.05	5.36
Cd*	-2	-2	-2	-2	-2	-2	-2	-2	5.2	-2	-2	-2	-2	-2	-2	-2
Cd	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Ce	-10	-10	-10	72	35	61	77	31	-10	-10	-10	-150	-10	-10	32	20
Co*	148	44	-1	52	5	-1	20	1	6	124	157	174	117	5	8	47
Co	220	71	-10	79	-10	-10	24	-10	-10	190	250	520	200	-10	12	78
CR*	18321	635	52	72	20	17	25	12	49	3623	517	20000	20000	465	144	151
Cr**	30000	1400	-50	79	-50	-50	-50	-50	-50	14000	4500	30000	30000	490	140	230
Cs	-1	1	-1	3	4	9	9	6	5	-1	-1	-1	-1	-1	-1	-1
Cu	8	28	7	49	3	27	43	7	29	6	5	7	9	1	38	97
Eu	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	3
Fe	8.42	6.17	0.5	9.86	7.68	2.08	10	4.66	3.27	6.17	9.93	10	6.66	0.16	5.55	7.75
Fe*	10	8.8	0.6	10	10	3.7	10	7.3	5.2	10	10	10	10	-0.5	7.4	10
GA	26	-10	-10	12	18	10	36	20	14	-10	11	155	25	-10	-10	17
Hf	-2	-2	-2	4	6	7	10	7	9	-2	-2	-2	-2	-2	6	4
Ir*	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100
LA	-5	-5	-5	19	9	9	-5	-5	32	-5	-5	-5	-5	-5	11	5
La*	-5	-5	-5	29	26	22	37	17	7	-5	-5	-5	-5	-5	14	13
Li	-2	64	-2	49	59	20	95	36	27	-2	-2	-2	-2	-2	5	15
Lu	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	3	-0.5	-0.5	-0.5	-0.5	2.6	-0.5	-0.5	-0.5	0.5
MG	10	6.92	0.08	1.44	0.03	0.02	0.02	0.05	0.04	10	10	10	10	0.78	0.58	4.79
Mn	1160	1160	39	863	5389	2547	8275	2124	1645	943	1469	1175	949	139	93	1162
Mo*	10	-1	-1	4	-1	2	5	3	34	9	5	11	7	4	8	6
Mo	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-11	-2	-2	10	-2
NA*	0.43	1.12	0.03	0.52	0.87	2.36	1.34	2.67	3.31	0.41	0.24	0.02	0.34	0.02	0.38	2.96
Na*	0.25	1.2	-0.05	0.39	0.9	2.9	1.5	3.2	4	0.26	0.24	0.24	0.23	-0.05	0.31	3.6
Nb	-5	-5	-5	9	51	66	77	66	77	-5	-5	-5	-5	-5	7	14
Ni*	1617	374	6	105	3	3	1	2	32	2262	614	1255	1916	110	76	67
Ni	2060	500	-20	150	-20	-20	-20	-20	-20	2870	970	3050	2450	140	93	110
Pb*	4	7	6	9	99	619	575	277	55	6	5	2	4	-2	10	11

LAND SELECTION UNIT 34 – TRACE ELEMENT ANALYSES (Analyses by Bondar–Clegg)

	2988	2989	2990	2991	2995	2996	2997	2998	2999	4074	4075	4076	4077	4078	4079	4080
Pb	23	18	10	19	102	586	586	290	99	34	13	19	22	4	22	21
PD	36	−9	−9	−9	−9	−9	−9	−9	−9	31	38	31	33	33	−9	−9
PT	6	−9	−9	−9	−9	−9	−9	−9	−9	7	23	9	11	9	−9	−9
Rb	−10	34	−10	78	380	910	530	430	350	−10	−10	−26	−10	−10	50	−10
SB	−5	−5	−5	10	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5
Sb*	0.3	5.8	0.4	0.9	0.4	0.3	0.9	0.4	0.3	−0.2	−0.2	−0.2	−0.2	−0.2	13	0.5
Sc	6.4	34	−0.5	18	3.7	3	5.3	4.4	3.7	4.8	6.6	18	5.9	−0.5	7.7	49
Se	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−33	−10	−10	−10	−10
Sm	−0.2	1.1	−0.2	6.8	10	11	18	6	5.3	−0.2	−0.2	−0.2	−0.2	−0.2	2.6	5.7
SN*	37	25	−20	22	26	−20	26	37	26	21	21	−20	33	−20	−20	34
Sn	−200	−200	−200	−200	−200	−200	−200	−200	−200	−200	−200	−200	−200	−200	−200	−200
Sn**	−9	6	11	9	49	23	200	75	70	−9	−9	−9	−9	−9	−9	−5
Sr	6	123	3	26	19	49	24	27	95	7	3	2	3	2	84	420
Ta	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100
Ta*	−1	−1	−1	−1	9	18	19	12	15	−1	−1	−1	−1	−1	−1	2
Tb	−1	−1	−1	1	2	3	5	2	1	−1	−1	−1	−1	−1	−1	−1
Te	−25	−25	−25	−25	−26	−25	−26	−25	−26	−25	−25	−25	−26	−25	−25	−25
Te	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−46	−20	−20	−20	−20
Th	0.7	0.7	−0.5	8.5	40	65.9	73	61.1	58	0.7	−0.5	14	1.5	−0.5	3.3	1.1
Tl	0.04	0.16	−0.01	0.26	0.02	0.03	0.02	0.03	0.09	−0.01	−0.01	0.11	0.02	−0.01	0.29	1.03
Yb	−5	−5	−5	−5	6	10	27	8	8	−5	−5	−5	−6	−5	−5	−5
ZN*	164	68	27	186	420	621	757	404	241	64	83	248	101	8	64	107
Zn	230	260	−200	320	530	1200	1300	630	470	−200	−200	510	−200	−200	−200	600
Zr	−5	−6	−5	59	69	84	96	78	97	6	−5	−5	−5	−5	48	31
Zr*	−500	−500	−500	−500	−500	−500	−500	−500	−500	−500	−500	960	−500	−500	−500	−500
UDNC																
S_Tot																

LAND SELECTION UNIT 34 – TRACE ELEMENT ANALYSES (Analyses by Bondar–Clegg)

	4085	4086	4087	4088	4092	4094	4095	4096	4097	4098	4099	4100	4103	4105	4153	4154
F																
K	0.59	1.51	0.9	0.79	0.77	0.47	0.59	0.93	0.17	2.21	0.13	0.06	0.94	0.69	0.67	1.15
U	17	8.1	2.3	8.4	40	3.8	13	10	2.1	14	−0.5	−0.5	6	7.3	2.8	4.2
V																
V	7	−2	5	6	26	6	25	23	13	36	10	−2	17	6	84	155
W	−20	−20	−20	−20	35	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20
W*	11	−2	−2	4	110	−2	7	7	−2	3	−2	−2	4	6	9	4
Y	−5	−5	7	7	9	5	15	16	−5	11	−5	−5	25	−5	7	−5
AG*	50	1	−0.5	−0.5	6	−0.5	−0.5	−0.5	9.1	2.9	−0.5	−0.5	−0.5	20.1	−0.5	−0.5
Ag	170	−5	−5	−5	10	−5	−5	−5	12	−5	−5	−5	−5	28	−5	−5
Ag	3.15															
Al	1.83	1.11	2.28	2.38	2.34	2.12	2.66	2.66	0.42	3.84	0.59	0.29	6.28	2.06	2.39	4
As	30	25	31	36	39	−5	33	46	15	57	27	16	16	27	23	108
As*	1	−1	−1	−1	11	2	6	7	1	13	2	19	1	2	20	132
Au	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5
Ba	176	83	93	164	45	153	220	518	30	506	37	9	678	97	230	407
Ba*	200	−100	170	250	−100	200	350	720	−100	790	−100	−100	1000	110	280	630
Bi	286	277	82	−1	51	−1	−1	−1	24	−1	−1	−1	−1	33	−1	−1
Bi*	219	214	68	−5	52	−5	−5	−5	18	7	−5	−5	−5	33	−5	−5
Br	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	3
CA	0.06	0.05	0.18	0.2	0.04	0.03	0.11	0.06	0.02	0.09	−0.01	−0.01	0.72	0.08	0.03	0.05
Cd*	2.5	−2	−2	−2	−2	−2	−2	−2	−2	3.9	−2	2.4	−2	−2	−2	−2
Cd	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10
Ce	27	33	19	94	280	71	57	360	11	120	21	−10	110	36	100	140
Co*	2	2	3	2	−1	−1	4	4	−1	7	4	2	3	−1	27	18
Co	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	38	27
CR*	34	17	21	22	30	29	38	15	18	45	25	19	14	18	73	154
Cr**	−50	−50	−50	−50	−50	−50	−50	−50	−50	−50	−50	−50	−50	−50	94	220
Cs	29	6	9	17	3	4	9	5	−1	8	−1	−1	5	21	5	21
Cu	226	7	3	1	6	2	4	2	−1	18	10	9	2	205	16	50
Eu	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	2	2
Fe	0.96	0.35	0.9	0.85	9.64	0.53	2.43	2.49	0.41	1.45	1.06	0.54	1.64	0.67	4.66	5.27
Fe*	1.5	0.6	1.3	1.5	10	0.8	3.6	4.1	0.6	2.2	1.5	0.7	2.6	1.4	6.3	7.7
GA	−10	−10	16	13	25	−10	−10	16	−10	16	−10	−10	13	−10	10	18
Hf	−2	2	−2	5	15	−2	8	13	−2	10	−2	−2	7	3	6	8
Ir*	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100
LA	−5	−5	7	21	75	21	13	92	−5	38	10	−5	34	6	23	9
La*	13	13	10	43	140	26	32	140	5	59	9	−5	47	11	39	65
Li	77	10	20	63	17	86	44	6	7	9	4	2	26	61	11	24
Lu	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	0.6
MG	0.13	0.02	0.11	0.08	0.04	0.1	0.11	0.06	0.01	0.07	0.11	0.11	0.26	0.1	0.16	0.45
Mn	516	54	199	237	176	34	71	530	69	394	44	41	408	402	4708	295
Mo*	15	1	3	3	7	−1	2	4	−1	30	2	−1	2	2	−1	3
Mo	17	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2
NA*	0.19	1.12	1.61	2.33	0.13	0.1	0.14	2.68	0.03	2.29	0.05	0.03	2.83	0.52	0.23	0.3
Na*	0.16	1.2	1.7	2.8	−0.05	0.05	0.06	3.1	−0.05	2.2	−0.05	−0.05	2.6	0.5	0.16	0.18
Nb	10	−5	−5	16	21	5	15	15	−5	13	−5	−5	17	13	7	13
Ni*	4	−1	2	2	6	1	1	4	−1	21	7	3	3	2	76	58
Ni	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	96	69
Pb*	6745	50	10	12	1771	30	105	25	128	994	9	7	16	809	9	31

LAND SELECTION UNIT 34 – TRACE ELEMENT ANALYSES (Analyses by Bondar–Clegg)

	4085	4086	4087	4088	4092	4094	4095	4096	4097	4098	4099	4100	4103	4105	4153	4154
Pb	8657	83	34	51	2134	36	107	35	164	983	11	12	44	778	25	40
PD	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
PT	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
Rb	770	340	560	620	180	230	360	590	41	830	15	-10	370	570	83	280
SB	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
Sb*	0.3	-0.2	-0.2	-0.2	1	0.7	0.7	0.4	0.2	0.9	-0.2	-0.2	-0.2	-0.2	1.9	3.9
Sc	1.5	-0.5	1.7	3.6	7	1.8	7.5	6.5	-0.5	4.4	1.8	-0.5	11	2.7	11	22
Se	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Sm	2	2.6	2.5	7.1	12	3.2	7.6	15	0.6	7.7	1.4	0.3	7.2	2.1	7.6	10
SN*	54	-20	-20	-20	110	-20	-20	-20	-20	-20	-20	-20	-20	50	26	-20
Sn	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200
Sn**	60	8	17	19	110	6	19	12	19	11	8	13	19	48	12	7
Sr	8	7	25	41	14	17	24	84	3	100	6	2	126	12	16	13
Ta	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100
Ta*	2	-1	2	5	2	-1	2	2	-1	3	-1	-1	2	3	3	2
Tb	-1	-1	-1	-1	1	-1	1	2	-1	1	-1	-1	1	-1	1	1
Te	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25
Te	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20
Th	17	10	7.1	28	50.8	17	31	60.8	1.7	41	3.9	0.6	32	23	12	18
Tl	0.07	-0.01	0.04	0.11	0.28	0.07	0.25	0.24	0.01	0.19	0.04	0.01	0.14	0.09	0.76	0.83
Yb	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
ZN*	609	26	65	46	269	47	186	30	82	5306	26	20	84	306	297	104
Zn	910	-200	-200	-200	490	-200	280	-200	-200	5200	-200	-200	-200	470	460	-200
Zr	30	25	23	39	62	17	40	60	-5	44	-5	-5	32	39	-5	58
Zr*	-500	-500	-500	-500	650	-500	-500	-500	-500	-500	-500	-500	520	-500	-500	680
UDNC																
S_Tot																

LAND SELECTION UNIT 34 – TRACE ELEMENT ANALYSES (Analyses by Bondar–Clegg)

	4155	4156	4157	4158a	4158b	4159	4160	4161	4162	4163	4164	4165	4166	4167	4168	4169
F																
K	1.32	1.76	2	0.69	0.77	0.92	1.29	0.08	0.15	0.25	0.31	2.07	2.24	0.61	1.09	0.31
U	9	5.5	2.6	5.6	9.1	4.9	6.3	1.7	0.5	−0.5	−0.5	2.2	3.9	1.9	2.2	−0.5
V																
V	−2	9	−2	18	20	32	19	24	14	12	10	3	−2	39	157	17
W	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20
W*	6	5	10	26	25	12	2	−2	−2	−2	−2	7	4	−2	−2	−2
Y	−5	7	−5	5	11	8	11	−5	−5	−5	−5	−5	−5	−5	−5	−5
AG*	−0.5	−0.5	−0.5	0.8	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5
Ag	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5
Ag																
Al	3.05	4.16	2.47	1.62	3.46	4.08	4.3	0.23	0.56	0.74	0.85	2.55	3.34	2.28	4.41	0.75
As	17	15	−5	33	−5	−5	39	42	35	27	26	36	−5	22	13	24
As*	−1	−1	2	5	7	−1	−1	24	8	12	4	1	−1	7	2	46
Au	−5	−5	−5	−5	−5	−5	−5	6	−5	−5	−5	−5	−5	−5	7	−5
Ba	18	262	19	23	73	52	288	2000	43	158	165	63	34	127	290	259
Ba*	−100	420	−100	−100	−100	−100	370	4600	−100	210	180	−100	−100	180	470	360
Bi	13	−1	23	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1
Bi*	5	−5	16	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5
Br	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1
CA	0.2	0.38	0.12	0.03	0.08	0.08	0.22	−0.01	7.84	0.02	0.02	0.18	0.15	0.05	0.16	−0.01
Cd*	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2
Cd	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10
Ce	−10	110	15	170	230	150	160	−10	−10	11	−10	32	−10	41	63	−10
Co*	−1	2	1	2	2	12	4	−1	11	4	−1	−1	−1	10	31	−1
Co	−10	−10	−10	−10	−10	15	−10	−10	11	−10	−10	−10	−10	15	49	−10
CR*	10	12	6	10	7	10	17	29	16	30	32	9	7	77	130	30
Cr**	−50	−50	−50	−50	−50	−50	−50	−50	−50	−50	−50	−50	−50	110	190	−50
Cs	13	25	17	6	9	22	6	−1	2	−1	1	17	9	4	14	1
Cu	−1	2	1	2	3	2	1	31	41	15	3	1	2	51	4	39
Eu	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2
Fe	0.24	1.04	0.51	1.19	1.53	9.37	2.92	1.09	1.31	0.64	0.69	0.53	0.41	2.5	6.05	1.21
Fe*	−0.5	1.5	1	2	2.9	10	4	1.5	1.7	0.9	0.9	1.3	0.7	3.5	9.2	1.7
GA	12	11	18	−10	−10	22	14	−10	−10	−10	−10	14	−10	−10	−10	−10
Hf	−2	5	−2	7	9	7	8	−2	−2	−2	−2	−2	2	3	4	−2
Ir*	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100
LA	−5	22	−5	14	40	11	9	−5	−5	−5	−5	−5	−5	12	10	−5
La*	−5	43	−5	64	86	67	35	−5	−5	−5	−5	12	−5	18	28	−5
Li	37	91	80	63	52	81	33	−2	2	3	2	86	17	17	44	12
Lu	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5
MG	0.02	0.15	0.03	0.03	0.06	0.28	0.29	0.01	0.15	0.05	0.05	0.07	0.01	0.63	0.73	0.07
Mn	264	224	120	101	100	4274	879	17	1501	843	594	165	162	750	444	53
Mo*	1	3	3	4	4	2	4	3	−1	2	−1	2	−1	3	2	3
Mo	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2
NA*	3.68	2.53	2.46	0.11	0.16	0.24	2.37	0.03	0.05	0.04	0.04	2.34	3.3	0.12	0.33	0.03
Na*	3.4	2.6	2.9	−0.05	0.07	0.09	2.7	−0.05	−0.05	−0.05	−0.05	2.5	2.9	−0.05	0.21	−0.05
Nb	20	18	22	10	13	10	16	−5	−5	−5	−5	18	22	−5	9	−5
Ni*	2	3	1	−1	1	3	2	5	17	11	8	2	1	34	60	4
Ni	−20	−20	−20	−20	−20	−20	−20	−20	−20	20	−20	−20	−20	50	97	−20
Pb*	6	8	6	41	32	39	11	6	18	9	4	5	4	11	4	336

LAND SELECTION UNIT 34 – TRACE ELEMENT ANALYSES (Analyses by Bondar–Clegg)

	4155	4156	4157	4158a	4158b	4159	4160	4161	4162	4163	4164	4165	4166	4167	4168	4169
Pb	15	42	16	44	40	36	37	6	15	9	6	31	24	15	10	340
PD	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
PT	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
Rb	620	700	660	250	300	760	440	-10	16	26	23	580	520	63	150	36
SB	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
Sb*	-0.2	-0.2	-0.2	1.2	1.2	0.9	-0.2	3.2	2.9	0.9	0.6	-0.2	-0.2	1.3	4.4	1.3
Sc	1.9	3.3	5.3	5	5.8	6.3	5.8	1	3.2	3.1	2.5	4.2	0.6	7.5	26	2.5
Se	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Sm	0.9	9.1	1.4	6.9	8.5	8.7	4.6	0.5	0.6	0.6	0.4	2.5	0.8	3.4	3.5	0.5
SN*	-20	24	-20	-20	-20	66	23	-20	-20	-20	-20	28	-20	-20	-20	-20
Sn	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200
Sn**	18	23	22	16	13	43	22	6	-5	16	-5	23	17	8	6	-9
Sr	15	62	8	3	9	4	68	45	214	7	6	18	12	4	24	3
Ta	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100
Ta*	7	5	6	1	2	1	3	-1	-1	-1	-1	4	11	-1	-1	-1
Tb	-1	-1	-1	-1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
Te	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25
Ta	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20
Th	4.7	29	3.4	36	50	28	39	1	1	1.2	0.9	9.4	2.6	5.6	6.4	0.7
Tl	0.02	0.15	0.05	0.15	0.19	0.13	0.17	0.02	0.02	0.04	0.04	0.06	0.01	0.17	0.38	0.04
Yb	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
ZN*	19	55	28	64	127	503	131	26	29	22	25	28	33	61	146	151
Zn	-200	-200	-200	-200	-200	760	260	-200	-200	-200	-200	-200	-200	-200	300	200
Zr	10	50	9	25	41	25	66	-5	-5	-5	-5	13	18	19	31	-5
Zr*	-500	530	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500
UDNC																
S_Tot																

LAND SELECTION UNIT 34 – TRACE ELEMENT ANALYSES (Analyses by Bondar–Clegg)

	4170	4171	4172	4173	4236	4238	4239	4240	4241	4243	4244	4245	4246	4249	4501	4502
F																
K	0.11	0.07	0.08	0.02	1.03	1.98	0.69	1.35	0.1	0.06	0.01	0.09	0.01	0.24	0.77	1.23
U	−0.5	22	−0.5	−0.5	3.9	14	3.8	8	−0.5	3.1	1.4	−0.5	−0.5	−0.5	15	12
V																
V	5	−2	14	9	23	15	24	−2	−2	20	270	16	−2	285	2	−2
W	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20
W*	−2	5	−2	−2	−2	7	−2	16	−2	2	−2	−2	−2	−2	13	−2
Y	−5	−5	−5	−5	7	6	6	50	−5	−5	−5	−5	−5	−5	31	32
AG*	−0.5	1.6	−0.5	−0.5	0.6	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	0.8	−0.5
Ag	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5
Ag																
Al	0.7	0.58	0.35	0.2	3.55	2.74	2.49	3.5	0.22	0.22	3.78	0.39	0.05	5.6	4.74	5.35
As	11	−5	26	32	−5	67	16	−5	18	8	184	47	12	12	27	30
As*	6	3	−1	−1	−1	15	−1	2	2	6	312	2	1	−1	9	12
Au	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5
Ba	30	65	12	9	297	51	228	24	15	17	8	18	−5	190	55	22
Ba*	−100	−100	−100	−100	460	−100	290	−100	−100	−100	−100	−100	−100	250	−100	−100
Bi	−1	6	−1	−1	8	−1	−1	−1	−1	−1	−1	−1	−1	−1	6	−1
Bi*	−5	7	23	8	−5	−5	−5	−5	27	20	9	23	−5	−5	−5	−5
Br	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	9	−1	−1	−1	−1	−1
CA	0.02	0.02	0.09	0.07	0.23	0.13	0.77	0.38	0.06	0.02	0.02	0.11	0.01	9.15	0.15	0.4
Cd*	−2	−2	−2	−2	−2	3.3	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2
Cd	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10
Ce	−10	−10	−10	−10	190	52	120	94	−10	−10	−94	−10	−10	15	−10	39
Co*	1	−1	104	33	2	4	3	−1	109	132	252	95	5	36	1	2
Co	−10	−10	170	49	−10	−10	−10	−10	170	230	420	170	−10	53	−10	−10
CR*	69	36	5184	682	27	25	17	14	1343	4711	20000	1511	455	121	53	17
Cr**	−50	−50	17000	1300	−50	−50	−50	−50	4800	12700	30000	5800	890	160	50	−50
Cs	−1	−1	−1	−1	9	27	8	84	−1	−1	−1	−1	1	−1	8	23
Cu	7	10	14	10	4	27	5	2	3	3	−1	5	1	14	32	10
Eu	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2
Fe	1.41	1.17	5.41	1.94	1.99	0.27	0.84	0.67	4.96	6.69	10	5.47	0.35	5.83	4.46	0.32
Fe*	1.9	1.6	8.7	3	3.1	0.6	1.1	1	7.7	10	10	10	−0.5	8.3	5	−0.5
GA	−10	−10	10	−10	10	−10	−10	−10	−10	−10	119	−10	−10	16	15	−10
Hf	−2	−2	−2	−2	6	8	4	4	−2	−2	−2	−2	−2	3	7	8
Ir*	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100
LA	−5	−5	−5	−5	13	21	35	22	−5	−5	−5	−5	−5	−5	8	11
La*	−5	−5	−5	−5	36	19	59	36	−5	−5	−5	−5	−5	7	10	12
Li	8	25	−2	−2	48	27	79	228	−2	5	6	−2	−2	6	25	17
Lu	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	1.9	−0.5	−0.5	3.3	−0.5	−0.5	−0.5	0.7	0.5
MG	0.19	0.04	10	8.5	0.39	0.02	0.09	0.02	10	10	10	10	1.15	9.58	0.09	0.04
Mn	95	4684	786	298	625	31	236	231	764	788	2592	711	42	882	390	90
Mo*	2	3	3	3	4	23	3	3	3	2	16	3	2	1	5	1
Mo	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−7	−2	−2	−2	3	−2
NA*	0.04	0.03	0.2	0.03	1.28	2.34	0.82	2.43	0.24	0.14	0.03	0.23	0.02	1.47	0.72	2.8
Na*	−0.05	−0.05	0.27	0.11	1.5	2.6	0.8	2.7	0.27	0.23	0.12	0.25	−0.05	1.7	0.59	2.8
Nb	−5	−5	−5	−5	12	12	8	25	−5	−5	−5	−5	−5	6	24	33
Ni*	12	5	2225	700	14	23	7	2	2333	3150	1211	2200	161	113	5	4
Ni	−20	−20	3160	1100	24	−20	−20	−20	3110	4080	1500	3100	190	140	−20	−20
Pb*	87	1695	5	6	83	61	17	13	4	3	14	3	−2	3	77	23

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	4170	4171	4172	4173	4236	4238	4239	4240	4241	4243	4244	4245	4246	4249	4501	4502
Pb	98	1596	31	15	107	104	90	72	14	17	54	16	12	8	96	103
PD	-9	-9	-9	-9	-9	-9	-9	-9	33	-9	33	-9	-9	-9	-9	-9
PT	-9	-9	22	-9	-9	-9	-9	-9	26	-9	15	-9	-9	-9	-9	-9
Rb	-10	24	-10	-10	410	880	280	1190	-10	-10	-22	-10	-10	-10	230	870
SB	-5	-5	-5	-5	-5	-5	-5	-5	7	-5	-5	-5	-5	-5	-5	-5
Sb*	0.7	0.6	-0.2	-0.2	0.2	0.5	0.2	0.3	0.3	1.1	63.6	0.2	0.3	-0.2	0.9	0.3
Sc	2.5	2	4.3	4.3	4.9	1.2	2.5	2.5	3.3	5.5	7.4	10	0.9	31	2.4	1.9
Se	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-23	-10	-10	-10	-10	-10
Sm	0.8	0.2	-0.2	-0.2	4.7	1.6	6.4	12	-0.2	0.3	0.6	-0.2	-0.2	2.3	3.1	4.9
SN*	-20	-20	26	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	175	-20
Sn	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	1300	-200
Sn**	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	17
Sr	3	12	2	-1	89	34	88	13	3	2	2	2	-1	203	33	11
Ta	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100
Ta*	-1	-1	-1	-1	2	2	1	8	-1	-1	-1	-1	-1	-1	11	5
Tb	-1	-1	-1	-1	-1	-1	-1	2	-1	-1	-1	-1	-1	-1	-1	-1
Te	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25
Te	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-53	-20	-20	-20	-20	-20
Th	-0.5	1.1	-0.5	-0.5	48	41	29	74.5	-0.5	0.7	8.8	-0.5	-0.5	1.5	30	56.2
Tl	-0.01	-0.01	-0.01	-0.01	0.16	0.03	0.11	0.03	-0.01	-0.01	0.08	-0.01	-0.01	0.52	0.04	0.02
Yb	-5	-5	-5	-5	-5	-5	-5	10	-5	-5	-5	-5	-5	-5	7	-5
ZN*	42	667	80	23	282	21	30	19	52	81	2943	60	14	57	132	11
Zn	-200	1000	-200	-200	370	-200	-200	-200	-200	-200	3200	-200	-200	-200	-200	-200
Zr	-5	-5	-5	-5	47	61	32	80	-5	-5	-5	-5	-5	11	62	109
Zr*	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500
UDNC																
S_Tot																

LAND SELECTION UNIT 34 – TRACE ELEMENT ANALYSES (Analyses by Bondar–Clegg)

	4503	4504	4505	4506	4507	4508	4509	4510	4511	4512	4513	4514	4515	4516	4517	4518
F																
K	1.22	0.02	0.12	0.01	0.13	0.01	0.09	1.44	0.64	0.31	0.63	0.2	0.04	−0.01	0.11	0.59
U	20	−0.5	−0.5	−0.5	−0.6	−0.5	−0.6	14	0.7	−0.5	−0.5	2.9	1.6	−0.5	−0.5	−0.5
V																
V	8	−2	19	222	43	17	187	2	131	62	164	28	17	2	21	146
W	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20
W*	25	−2	−2	−2	−2	−2	−2	5	−2	−2	−2	−2	−2	−2	−2	−2
Y	9	−5	−5	−5	−5	−5	−5	34	7	−5	6	−5	−5	−5	−5	−5
AG*	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.6	−0.5	−0.5
Ag	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5
Ag																
Al	4.95	0.08	0.46	2.88	0.71	0.05	2.5	6.53	4.71	4.1	4.89	1.36	1.53	0.08	0.66	4.56
As	−5	15	41	−5	25	26	−5	35	32	41	19	160	20	25	42	66
As*	1	−1	23	2	2	−1	2	6	23	4	29	181	50	50	16	61
Au	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	30	−5	−5	−5	−6
Ba	191	13	23	7	18	28	21	135	163	102	189	48	13	24	21	91
Ba*	230	−100	−100	−100	−100	−100	−100	110	210	120	230	−100	−100	−100	−100	120
Bi	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	4	−1	−1	−1	−1
Bi*	−5	−5	19	−5	42	−5	26	−5	20	6	7	−5	−5	−5	−5	17
Br	−1	−1	−1	−1	−1	−1	−1	−1	2	−1	2	5	−1	−1	1	1
CA	0.05	0.01	0.04	0.04	3.93	0.03	0.17	0.44	10	1.8	10	0.05	0.05	0.02	4.8	10
Cd*	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2
Cd	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10
Ce	97	−10	−10	110	−10	−10	30	200	−10	−10	−10	33	29	−10	−10	−10
Co*	3	6	127	165	105	15	159	−1	21	14	31	19	40	3	4	23
Co	−10	−10	200	330	140	13	260	−10	33	18	45	28	49	−10	−10	30
CR*	19	61	2092	20000	7533	286	20000	225	272	163	210	38	33	55	37	140
Cr**	−50	87	6230	30000	17100	590	30000	200	380	250	380	−50	−50	−50	−60	180
Cs	27	−1	−1	−1	−1	−1	−1	18	5	2	2	−1	−1	−1	−1	2
Cu	200	3	9	1	6	19	7	3	38	8	51	162	68	117	4	34
Eu	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2
Fe	7.4	0.35	8.78	10	5.45	0.4	9.62	0.94	5.13	2.84	6.42	10	10	2.8	2.44	6.51
Fe*	10	−0.5	10	10	7.1	0.7	10	1.5	6	4	6.3	10	10	3.2	3.2	6.6
GA	15	−10	−10	86	11	−10	42	14	−10	−10	10	−10	−10	−10	−10	−10
Hf	4	−2	−2	−2	−2	−2	−2	8	−2	−2	−2	14	11	−2	−2	−2
Ir*	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100
LA	14	−5	−5	−5	−5	19	−5	74	−5	−5	−5	8	7	−5	−8	−5
La*	35	−5	−5	−5	−5	−5	−5	91	−5	−5	−8	12	12	−8	−5	−5
Li	97	−2	−2	−2	3	4	−2	26	47	45	61	19	16	4	5	40
Lu	−0.5	−0.5	−0.6	1.4	−0.5	−0.5	−0.6	−0.5	−0.5	−0.5	−0.5	−0.5	−0.6	−0.5	−0.5	−0.5
MG	0.08	0.48	10	10	10	1.45	10	0.12	1.79	1.09	2.19	0.05	0.76	0.03	1.61	3.99
Mn	3208	103	1133	1285	911	99	1171	546	1092	519	1302	127	102	194	709	1416
Mo*	5	−1	5	8	5	24	7	9	−1	5	3	−1	−1	1	−1	4
Mo	−2	−2	−2	−5	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2
NA*	0.25	0.03	0.28	0.05	0.34	0.02	0.23	2.73	0.28	1.22	0.29	0.08	0.11	0.03	0.15	0.99
Na*	0.1	−0.05	0.26	0.19	0.29	−0.05	0.28	2.7	0.08	1.2	0.1	0.08	−0.05	−0.05	0.16	1
Nb	13	−5	−5	−5	−5	−5	−5	16	−5	−5	−5	−5	5	−5	−5	−5
Ni*	3	86	2260	1379	2133	145	1977	12	58	38	75	43	150	9	13	58
Ni	−20	120	3400	1900	2720	180	2900	−20	85	40	100	57	170	−20	−20	77
Pb*	1290	3	8	5	6	−2	6	14	7	8	6	80	13	5	8	7

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	4503	4504	4505	4506	4507	4508	4509	4510	4511	4512	4513	4514	4515	4516	4517	4518
Pb	1246	10	26	37	26	33	36	66	21	14	18	121	26	5	19	19
PD	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
PT	-9	-9	12	20	29	16	20	24	-9	-9	-9	-9	-9	-9	-9	-9
Rb	630	-10	-10	-10	-10	-10	-10	600	65	19	45	16	-10	-10	14	53
SB	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	28	11	-5	-5	-5	-5
Sb*	1	-0.2	1	0.9	0.3	-0.2	0.4	0.6	9.1	2	13	6.3	1.3	0.9	0.5	3
Sc	1.9	-0.5	6.2	8.1	18	0.5	7.4	2.7	32	13	39	3.5	2.2	0.9	8.5	37
Se	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Sm	4.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	13	1.6	0.6	1.6	3.4	3.8	-0.2	0.8	1.7
SN*	155	-20	-20	-20	22	-20	-20	-20	-20	-20	-20	21	-20	-20	-20	-20
Sn	640	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200
Sn**	650	-9	-9	-9	-9	-9	-9	-9	10	6	6	8	11	9	6	10
Sr	5	-1	4	2	7	19	6	56	173	16	79	6	2	1	37	96
Ta	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100
Ta*	2	-1	-1	-1	-1	-1	-1	2	-1	-1	-1	-1	-1	-1	-1	-1
Tb	-1	-1	-1	-1	-1	-1	-1	2	-1	-1	-1	-1	-1	-1	-1	-1
Te	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25
Te	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20
Th	60.6	-0.5	-0.5	9	-0.5	-0.5	3.1	41	1	-0.6	1.7	6.1	5.8	-0.5	-0.5	1
Ti	0.09	-0.01	-0.01	0.09	0.02	-0.01	0.05	0.08	0.16	0.05	0.24	0.14	0.09	-0.01	0.01	0.17
Yb	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
ZN*	4819	18	96	413	56	8	219	68	49	28	65	34	23	17	27	68
Zn	4900	-200	-200	650	-200	-200	420	-200	-200	-200	-200	-200	-200	-200	-200	220
Zr	46	-5	-5	-5	-5	-5	-5	69	-5	-5	-5	29	26	-5	-5	-5
Zr*	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500
UDNC																
S_Tot																

LAND SELECTION UNIT 34 – TRACE ELEMENT ANALYSES (Analyses by Bondar–Clegg)

	4519	4520	4521	4522	4523	4524	4525	4528	4530	4531	4532	4534	4537	4538	4539	4540
F																
K	0.04	0.03	0.06	3.31	0.82	0.89	1.04	−0.01	0.01	0.01	0.01	0.34	0.01	0.06	0.96	0.02
U	−0.5	−0.5	−0.5	52.3	8.9	9	10	−1	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	1.1	−1.1
V																
V	−2	−2	62	−2	169	173	194	331	6	120	16	14	199	−2	123	226
W	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20
W*	−2	−2	−2	15	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2
Y	−5	−5	−5	79	9	10	11	−5	−5	−5	−5	−5	−5	−5	21	−5
AG*	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5
Ag	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5
Ag																
Al	0.2	0.16	1.81	4.01	5.07	5.31	5.66	3.23	0.04	1.42	0.19	1.33	2.17	0.23	6.69	3.33
As	23	−5	173	51	28	37	10	−5	29	−5	9	16	−5	−5	−5	−5
As*	8	3	190	9	1	1	−1	1	−1	−1	1	1	−1	−1	2	4
Au	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5
Ba	10	24	25	15	125	129	124	7	32	6	12	639	9	12	563	−5
Ba*	−100	−100	−100	−100	1700	2400	2000	−100	−100	−100	−100	1000	−100	−100	770	−100
Bi	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1
Bi*	−5	−5	22	−5	−5	−5	−5	−5	−5	−5	−5	−5	6	15	5	14
Br	−1	−1	3	−1	−1	−1	−1	−5	−1	−1	−1	−1	−1	−1	−1	−3
CA	0.1	1.75	9.28	0.39	0.64	0.37	0.43	0.24	0.01	0.1	0.01	0.34	0.03	0.04	6.22	0.02
Cd*	−2	−2	−2	−2	−2	−2	−2	−2	2.3	−2	−2	−2	−2	−2	−2	−2
Cd	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10
Ce	−10	−10	−10	34	29	26	18	−95	−10	−37	−10	15	−41	−10	64	−99
Co*	2	−1	46	−1	6	5	7	190	7	122	170	6	172	122	34	166
Co	−10	−10	63	−10	−10	12	−10	330	−10	210	250	−10	230	190	46	300
CR*	37	23	912	26	62	49	72	20000	64	20000	4996	243	20000	1663	673	20000
Cr**	−50	−50	2800	−50	79	54	74	30000	160	30000	8600	320	30000	4700	1200	30000
Cs	−1	−1	−1	19	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1
Cu	1	1	54	2	114	39	55	3	12	6	13	19	−1	2	25	−1
Eu	−2	−2	−2	−2	−2	2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2
Fe	0.24	0.38	5.6	0.62	4.58	4.79	5.63	10	0.35	7.14	10	1.2	9.93	8.26	7.46	9.25
Fe*	−0.5	0.5	8.2	1	5.9	6.2	7.2	10	0.5	10	10	1.4	10	9.4	10	10
GA	−10	−10	−10	11	−10	−10	11	137	−10	48	−10	−10	80	−10	16	133
Hf	−2	−2	−2	9	3	4	3	−2	−2	−2	−2	−2	−2	−2	8	−2
Ir*	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100
LA	−5	−5	−5	11	−5	−5	−5	−5	10	−5	−5	−5	−5	−5	14	−5
La*	−5	−5	−5	16	13	12	11	−5	−5	−5	−5	6	−5	−5	26	−5
Li	−2	−2	12	93	6	7	6	−2	2	−2	−2	9	−2	−2	11	−2
Lu	−0.5	−0.5	−0.5	1.3	−0.5	−0.5	−0.5	1.6	−0.5	−0.5	−0.5	−0.5	0.6	−0.5	0.7	2.1
MG	0.03	0.81	10	0.05	0.8	0.7	0.67	10	0.6	10	1.13	0.5	10	10	3.44	10
Mn	59	287	1534	226	434	468	273	1208	139	880	1476	2464	1175	830	1206	940
Mo*	3	2	4	9	20	6	20	11	18	7	9	3	10	4	4	16
Mo	−2	−2	−2	8	19	12	19	−8	−2	−2	−2	−2	−2	−2	−2	−8
NA*	0.05	0.03	0.13	2.54	4.31	4.75	4.57	0.03	0.03	0.06	0.02	0.27	0.03	0.16	2.17	0.05
Na*	−0.05	−0.05	0.14	2.7	4.5	4.8	4.7	0.17	−0.05	0.17	−0.05	0.32	0.15	0.28	2.5	0.16
Nb	−5	−5	−5	66	9	6	9	−5	−5	−5	−5	−5	−5	−5	16	−5
Ni*	3	2	533	3	25	17	20	945	123	1696	2313	47	1976	1248	110	1053
Ni	−20	−20	810	−20	31	31	30	1400	150	2170	2780	45	2150	1800	160	1700
Pb*	3	−2	5	7	4	4	5	−2	−2	−2	3	4	−2	−2	4	−2

LAND SELECTION UNIT 34 – TRACE ELEMENT ANALYSES (Analyses by Bondar–Clegg)

	4519	4520	4521	4522	4523	4524	4525	4526	4530	4531	4532	4534	4537	4538	4539	4540
Pb	19	16	18	29	9	6	15	34	16	27	18	15	31	23	7	35
PD	−9	−9	−9	−9	−9	−9	−9	−9	−9	−9	−9	−9	−9	−9	−9	−9
PT	−9	−9	−9	−9	−9	−9	−9	22	14	15	11	10	29	22	−9	29
Rb	−10	−10	−10	1340	14	33	33	−10	−10	−10	−10	18	−10	−10	68	−10
SB	−5	−5	−5	−6	21	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5
Sb*	0.4	0.5	10	−0.2	1.3	1.1	1.2	−0.2	−0.2	−0.2	−0.2	0.3	−0.2	−0.2	−0.2	0.2
Sc	0.6	−0.5	15	2.5	19	20	22	6.4	0.6	5.2	7.1	4.1	4.9	4.3	27	6.6
Se	−10	−10	−10	−10	−10	−10	−10	−21	−10	−10	−10	−10	−10	−10	−10	−22
Sm	−0.2	0.3	0.6	11	3	2.9	3.1	−0.2	−0.2	−0.2	0.3	1.4	−0.2	−0.2	7.9	−0.2
SN*	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	30	34	−20
Sn	−200	−200	−200	−200	−200	−200	−200	−200	−200	−200	−200	−200	−200	−200	−200	−200
Sn**	−9	−9	−9	18	−9	−9	−9	−9	−9	−9	−9	−9	−9	−9	−9	−9
Sr	2	8	239	7	69	75	79	1	11	3	1	25	1	2	393	1
Ta	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100
Ta*	−1	−1	−1	22	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	1	−1
Tb	−1	−1	−1	3	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	1	−1
Te	−25	−25	−25	−25	−25	−25	−25	−25	−25	−26	−25	−25	−25	−25	−25	−25
Te	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20
Th	−0.5	−0.5	−0.5	42	3.1	3.2	3.4	6.5	−0.5	5.1	−0.5	1.4	4	−0.5	3.8	6.4
Ti	−0.01	−0.01	0.02	0.01	0.39	0.4	0.41	0.09	−0.01	0.03	−0.01	0.06	0.06	−0.01	1.03	0.09
Yb	−5	−5	−5	13	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	6	−5
ZN*	11	8	51	15	18	23	19	295	8	136	78	50	232	47	119	256
Zn	−200	−200	−200	−200	−200	−200	−200	−200	−200	230	−200	−200	280	−200	380	−200
Zr	−5	−5	−5	81	70	79	78	−5	−5	−5	−5	14	−5	−5	159	−5
Zr*	−500	−500	−500	−500	−500	−500	−500	−500	−500	−500	−500	−500	−500	−500	−500	−800
UDNC																
S_Tot																

LAND SELECTION UNIT 34 – TRACE ELEMENT ANALYSES (Analyses by Bondar–Clegg)

	4543	4545	4547	4548	4551	4552	4553	4554	4555	4556	4557	4558	4559	4560	4561	4562
F																
K	0.92	0.96	0.03	1.01	0.59	0.72	0.63	1.22	1	0.91	1.91	0.67	0.66	0.77	0.8	1
U	10	52.3	6.9	8.1	23	7.9	8.4	8.6	6.6	5.1	6.4	3.9	4.8	6.9	17	15
V																
V	−2	−2	−2	3	24	22	21	20	26	16	18	10	25	15	13	9
W	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20
W*	−2	6	4	6	46	47	17	6	35	14	5	16	16	6	24	37
Y	8	6	12	6	9	9	20	13	12	6	15	7	−5	12	17	11
AG*	−0.5	−0.5	−0.5	−0.5	4.6	2	−0.5	−0.5	−0.5	−0.5	−0.5	1.9	−0.5	−0.5	−0.5	−0.5
Ag	−5	−5	−5	−5	9	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5
Ag																
Al	3.9	2.3	0.36	2.73	2.95	3.96	4.09	3.21	4.27	1.74	3.69	2.62	3.57	2.65	3.35	4.06
As	−5	7	−5	−5	17	13	29	16	16	6	8	23	−5	33	49	22
As*	−1	−1	−1	5	8	4	3	3	2	−1	3	2	1	6	8	16
Au	−5	−6	−5	−5	−5	−5	−5	−6	−5	−6	−5	−5	−5	−6	−5	−6
Ba	47	34	−5	157	50	64	69	352	59	53	346	110	63	141	69	96
Ba*	−100	−100	−100	240	−100	−100	−100	550	−100	−100	510	140	−100	210	−100	−100
Bi	−1	−1	62	35	47	24	−1	−1	−1	−1	−1	−1	−1	−1	9	20
Bi*	−5	−5	73	20	25	14	−5	−6	−5	−5	−5	−5	−5	−5	21	12
Br	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1	−1
CA	0.51	0.13	0.32	0.14	0.05	0.07	0.11	0.13	0.12	0.05	0.14	0.05	0.08	0.13	0.05	0.03
Cd*	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2
Cd	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10
Ce	98	−10	52	50	240	140	220	150	210	180	230	87	120	130	160	130
Co*	2	−1	−1	2	2	3	5	4	−1	−1	4	2	7	−1	2	1
Co	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	11	−10	−10	−10
CR*	736	398	62	50	38	37	19	21	22	29	17	19	14	18	20	13
Cr**	560	470	−50	−50	−50	−50	−50	−50	−50	−50	−50	−50	−50	−50	−50	−50
Cs	8	9	−1	9	3	6	6	10	9	8	8	9	22	9	14	21
Cu	−1	2	−1	20	3	3	2	2	3	2	2	2	2	1	4	6
Eu	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2
Fe	0.39	0.26	0.24	1.17	10	4.37	2.27	0.98	4.55	1.22	0.56	1.08	7.71	1.33	4.04	6.86
Fe*	0.7	−0.5	−0.5	1.9	10	5.5	3.3	1.3	8	1.9	1	1.6	10	1.7	5.1	8.5
GA	−10	−10	−10	10	13	11	−10	−10	12	11	−10	−10	18	−10	16	−10
Hf	3	4	4	3	11	8	9	7	10	5	9	4	7	6	8	5
Ir*	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100
LA	16	−5	18	9	64	30	43	31	37	30	30	22	5	29	26	24
La*	39	−5	20	19	120	63	79	52	94	69	71	36	63	61	49	62
Li	21	14	8	23	14	38	37	20	25	36	16	51	59	23	35	19
Lu	0.7	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	0.6	−0.5	−0.5	−0.5	−0.5	−0.5
MG	0.07	0.04	0.03	0.1	0.06	0.09	0.09	0.12	0.17	0.07	0.05	0.08	0.24	0.1	0.07	0.04
Mn	148	266	98	219	202	138	148	149	113	51	73	110	3104	147	349	368
Mo*	2	4	−1	3	13	5	4	3	4	4	4	−1	2	2	5	3
Mo	−2	−2	−2	−2	7	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2	−2
NA*	2.27	3.36	0.06	1.65	0.14	0.16	0.16	0.17	0.18	0.11	0.28	0.14	0.19	0.1	0.19	0.19
Na*	3	4.2	0.05	1.8	−0.05	0.05	−0.05	0.12	0.06	−0.05	0.25	0.09	0.07	0.05	0.14	0.08
Nb	11	41	−5	13	15	14	18	11	17	11	16	7	14	8	17	13
Ni*	7	4	2	1	2	2	3	1	2	−1	2	−1	4	−1	4	4
Ni	−20	21	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20
Pb*	6	9	−2	11	1026	317	43	20	24	15	20	46	45	62	64	48

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	4543	4545	4547	4548	4551	4552	4553	4554	4555	4556	4557	4558	4559	4560	4561	4562
Pb	36	33	9	39	1474	425	56	30	27	18	41	53	63	86	93	61
PD	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
PT	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
Rb	490	690	-10	470	200	290	240	450	600	460	450	350	830	320	610	810
SB	-5	-5	-5	-6	-5	-6	-5	-5	-5	-6	-5	-5	-5	-6	-5	-8
Sb*	-0.2	-0.2	-0.2	-0.2	0.7	0.8	0.7	0.3	0.9	0.7	0.2	2.3	0.7	0.5	0.9	0.6
Sc	2.1	1.9	-0.5	3.7	7.3	5.7	6.3	4.7	6.7	4.5	6.7	3.5	6.6	3.6	4.2	4.2
Se	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Sm	6.1	2.8	4.7	4	11	7.2	6.9	7.7	13	6.3	8.5	4.1	6.6	8	5.2	9.1
SN*	-20	28	-20	-20	81	24	-20	21	-20	-20	-20	-20	72	-20	72	108
Sn	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200
Sn**	-9	-9	10	12	42	23	10	15	20	9	9	12	60	13	40	60
Sr	42	11	1	27	23	13	6	27	7	4	37	13	3	11	7	13
Ta	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100
Ta*	3	22	-1	4	2	2	2	2	2	2	2	-1	2	1	3	3
Tb	2	-1	-1	-1	1	-1	2	-1	2	1	1	-1	-1	1	2	1
Te	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25
Te	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20
Th	36	7.4	17	16	41	30	36	29	46	31	47	20	32	38	61.5	56.4
Tl	0.05	0.01	-0.01	0.07	0.2	0.2	0.22	0.17	0.24	0.17	0.22	0.1	0.17	0.13	0.09	0.06
Yb	6	-5	-6	-5	-5	-5	-5	-6	-5	-5	-5	-5	-5	-5	-5	-5
ZN*	20	14	17	85	1278	573	231	31	24	15	35	86	500	82	51	75
Zn	-200	-200	-200	200	1900	770	300	-200	-200	-200	-200	-200	690	-200	-200	-200
Zr	15	20	-5	27	48	37	42	41	54	31	38	22	34	53	104	87
Zr*	-500	-500	-500	-500	-500	-500	510	-500	-500	-500	-500	-500	-500	-500	-500	-500
UDNC																
S_Tot																

LAND SELECTION UNIT 34 – TRACE ELEMENT ANALYSES (Analyses by Bondar–Clegg)

	4563	4564	4565	4566	4567	4568	4569	4570	4571	4572	4573	4574	4526	4527	4529	4533
F																
K	0.61	0.84	0.8	0.54	0.24	0.17	0.19	0.24	0.75	0.36	0.1	0.05	−9	−9	−9	−9
U	16	5.2	43	5	1.4	1.5	1.4	−0.5	0.8	1	0.6	−0.5				
V																
V	8	20	113	64	28	45	20	111	206	13	−2	267	−9	−9	−9	−9
W	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−20	−9	−9	−9	−9
W*	38	12	61	−2	−2	−2	−2	−2	−2	−2	−2	−2				
Y	15	14	8	5	−5	5	10	−5	8	−6	−5	−5	−9	−9	−9	−9
AG*	−0.5	−0.5	15.9	0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−9	−9	−9	−9
Ag	−5	−5	22	−5	−5	−5	−5	−5	−5	−5	−5	−5				
Ag																
Al	3.61	3.59	2.66	1.14	1.19	1.18	0.94	1.69	3.48	1.01	0.39	3.2	−9	−9	−9	−9
As	21	41	−5	51	24	48	17	74	42	6	690	−5	−9	−9	−9	−9
As*	6	7	8	24	5	4	5	41	44	15	967	2				
Au	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5	−5				
Ba	77	235	48	1643	360	372	327	140	295	51	28	12	−9	−9	−9	−9
Ba*	−100	350	−100	2400	3000	1600	790	160	410	−100	−100	−100				
Bi	−1	−1	78	−1	−1	−1	−1	−1	−1	−1	−1	−1				
Bi*	−5	−5	72	25	−5	−5	−5	−5	15	−5	−5	9	−9	−9	−9	−9
Br	−1	−1	−1	−1	−1	−1	−1	1	−1	−1	17	−1				
CA	0.02	0.1	0.04	0.09	0.68	10	9.03	4.95	7.41	0.06	0.04	0.06	−9	−9	−9	−9
Cd*	−2	−2	−2	16.5	−2	−2	−2	−2	−2	−2	−2	−2	−9	−9	−9	−9
Cd	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10	−10				
Ce	160	170	160	20	12	30	28	−10	23	36	23	−45				
Co*	2	5	2	187	3	11	4	16	34	5	4	194	−9	−9	−9	−9
Co	−10	−10	−10	250	−10	14	−10	23	42	−10	−10	220				
CR*	15	21	25	33	34	187	26	91	226	29	22	20000	−9	−9	−9	−9
Cr**	−50	−50	−50	−50	−50	290	−50	110	320	−50	−50	30000				
Cs	19	10	3	3	2	1	2	1	2	−1	−1	−1				
Cu	11	11	6	33	36	41	17	142	79	6	30	−1	−9	−9	−9	−9
Eu	−2	−2	−2	−2	−2	2	−2	−2	−2	−2	−2	−2				
Fe	4.98	1.39	7.99	1.49	1.2	0.94	0.98	4.24	6.47	2.76	4.97	10	−9	−9	−9	−9
Fe*	5.6	2.1	10	1.6	1.7	1.4	1.5	5.1	8	3.2	6.7	10				
GA	−10	−10	−10	58	−10	−10	−10	−10	−10	−10	−10	118	−9	−9	−9	−9
Hf	4	7	7	−2	−2	−2	−2	−2	3	5	3	−2				
Ir*	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100	−100				
LA	40	30	33	9	−5	10	6	−5	7	15	7	−5	−9	−9	−9	−9
La*	64	51	80	12	7	14	9	−5	10	16	9	−5				
Li	30	40	24	10	14	15	17	10	16	−2	−2	2	−9	−9	−9	−9
Lu	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	−0.5	0.6	−0.5	−0.5	1.3				
MG	0.04	0.14	0.05	0.09	0.37	0.35	0.2	1.34	2.54	0.04	0.02	10	−9	−9	−9	−9
Mn	405	387	201	20000	1379	436	1000	908	1415	31	109	1446	−9	−9	−9	−9
Mo*	7	11	10	22	2	−1	−1	4	4	2	2	12	−9	−9	−9	−9
Mo	−2	−2	−2	20	−2	−2	−2	−2	−2	−2	−2	−2				
NA*	0.15	0.31	0.15	0.04	0.08	0.27	0.07	0.16	0.29	0.04	0.02	0.13	−9	−9	−9	−9
Na*	0.06	0.18	−0.05	−0.05	0.1	0.39	0.09	0.2	0.25	−0.05	−0.05	0.17				
Nb	16	12	11	−5	−5	−5	−5	−5	7	−5	−5	−5	−9	−9	−9	−9
Ni*	2	10	6	178	22	50	22	49	111	7	9	1613	−9	−9	−9	−9
Ni	−20	−20	−20	240	29	61	−20	52	150	−20	−20	1800				
Pb*	52	29	1700	15	17	5	6	13	30	−2	7	−2				

LAND SELECTION UNIT 34 – TRACE ELEMENT ANALYSES (Analyses by Bondar–Clegg)

	4563	4564	4565	4566	4567	4568	4569	4570	4571	4572	4573	4574	4526	4527	4529	4533
Pb	79	38	1947	41	24	13	7	23	49	10	20	13	-9	-9	-9	-9
PD	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9				
PT	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	28	17	25	19	18
Rb	580	480	180	67	31	21	26	16	63	27	-10	18				
SB	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-9	-9	-9	-9
Sb*	0.8	1	1	8.5	0.4	0.4	0.6	2.5	3.5	0.3	-0.2	-0.2				
Sc	2.9	4.4	6.1	4.2	4.4	4	4.4	13	27	2.5	0.7	3.7				
Se	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10				
Sm	10	7.5	7.2	2.9	2	3.7	3.5	1.6	3.4	4	1.4	-0.2				
SN*	100	26	63	-20	-20	-20	-20	-20	-20	-20	-20	-20	-9	-9	-9	-9
Sn	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200				
Sn**	200	22	41	11	10	9	7	10	17	10	12	-9	-9	-9	-9	-9
Sr	13	20	15	794	99	481	349	47	113	11	2	3	-9	-9	-9	-9
Ta	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-9	-9	-9	-9
Ta*	3	2	2	-1	-1	-1	-1	-1	-1	-1	-1	-1				
Tb	2	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1				
Te	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-9	-9	-9	-9
Te	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20				
Th	58.1	42	31	2.4	2	3	3.4	0.7	1.8	2.7	0.6	5.3				
Tl	0.09	0.14	0.15	0.08	0.06	0.06	0.04	0.23	0.54	0.1	0.02	0.08	-9	-9	-9	-9
Yb	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5				
ZN*	57	57	1229	1117	57	67	28	168	110	11	13	383	-9	-9	-9	-9
Zn	-200	-200	1800	1700	-200	-200	-200	250	280	-200	-200	510				
Zr	98	79	34	27	11	14	7	-5	-5	6	-5	-5	-9	-9	-9	-9
Zr*	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500				
UDNC													-9	-9	-9	-9
S_Tot													-0.02	0.02	0.04	0.02

LAND SELECTION UNIT 34 – TRACE ELEMENT ANALYSES (Analyses by Bondar–Clegg)

	4535	4536	4541	4542	4544	4546	4549
F							
K	0.73	0.12	−9	−9	−9	−9	−9
U							
V							
V	291	124	−9	−9	−9	−9	−9
W	−20	−20	−9	−9	−9	−9	−9
W*							
Y	8	−5	−9	−9	−9	−9	−9
AG*	1.9	1.1	−9	−9	−9	−9	−9
Ag							
Ag							
Al	3.35	1.16	−9	−9	−9	−9	−9
As	82	73	−9	−9	−9	−9	−9
As*							
Au							
Ba	420	34	−9	−9	−9	−9	−9
Ba*							
Bi							
Bi*	74	70	−9	−9	−9	−9	−9
Br							
CA	3.86	10	−9	−9	−9	−9	−9
Cd*	−2	−2	−9	−9	−9	−9	−9
Cd							
Ce							
Co*	41	52	−9	−9	−9	−9	−9
Co							
CR*	269	2091	−9	−9	−9	−9	−9
Cr**							
Cs							
Cu	131	11	−9	−9	−9	−9	−9
Eu							
Fe	5.3	2.92	−9	−9	−9	−9	−9
Fe*							
GA	46	44	−9	−9	−9	−9	−9
Hf							
Ir*							
LA	10	−5	−9	−9	−9	−9	−9
La*							
Li	8	−2	−9	−9	−9	−9	−9
Lu							
MG	2.27	9.9	−9	−9	−9	−9	−9
Mn	1033	691	−9	−9	−9	−9	−9
Mo*	11	7	−9	−9	−9	−9	−9
Mo							
NA*	2.13	0.42	−9	−9	−9	−9	−9
Na*							
Nb	15	5	−9	−9	−9	−9	−9
Ni*	123	391	−9	−9	−9	−9	−9
Ni							
Pb*							

LAND SELECTION UNIT 34 – TRACE ELEMENT ANALYSES (Analyses by Bondar–Clegg)

	4535	4536	4541	4542	4544	4546	4549
Pb	29	26	-9	-9	-9	-9	-9
PD							
PT	24	19	-9	-9	-9	-9	-9
Rb							
SB	35	52	-9	-9	-9	-9	-9
Sb*							
Sc							
Se							
Sm							
SN*	64	66	-9	-9	-9	-9	-9
Sn							
Sn**	-9	-9	-9	-9	-9	12	14
Sr	208	26	-9	-9	-9	-9	-9
Ta	-100	-100	-9	-9	-9	-9	-9
Ta*							
Tb							
Te	-25	-25	-9	-9	-9	-9	-9
Tu							
Th							
Tl	0.72	0.06	-9	-9	-9	-9	-9
Yb							
ZN*	93	30	-9	-9	-9	-9	-9
Zn							
Zr	52	6	-9	-9	-9	-9	-9
Zr*							
UDNC	-9	-9	11	5.9	10	-9	-9
S_Tot	0.11	-0.02	-9	-9	-9	-9	-9

LAND SELECTION UNIT 34 PAN CONCENTRATES (Analyses by Bondar–Clegg)

	METHOD	UNITS	L.LIMIT	U.LIMIT	4550	2992	4072	4073	4081	4082	4083	4089	4090
K	ICP	PCT	0.01	10	1.19	0.47	0.26	0.31	0.49	0.32	1.02	0.77	1.22
U	INAA	PPM	0.5	2000	11	2.7	−0.5	2.1	96.3	80.6	27	18	171
V	AA	PPM	1	2000								13	
V	ICP	PPM	2	2000	83	148	372	811	212	568	39	24	287
W	ICP	PPM	20	2000	−20	172	−20	−20	240	68	237	116	515
W*	INAA	PPM	2	30000	7	4190	3	60	669	269	583	767	771
Y	ICP	PPM	5	2000	21	10	14	12	286	154	92	44	311
AG*	ICP	PPM	0.5	50	1.2	1.4	3	9.1	−0.5	8.7	5	0.7	3.8
Ag	INAA	PPM	5	300	−5	−5	−5	−5	−30	−16	−12	−5	−40
Al	ICP	PCT	0.01	10	3.41	3.66	3.11	2.42	2.61	6.42	3.08	2.54	2.66
As	ICP	PPM	5	2000	78	187	91	78	−5	64	67	41	91
As*	INAA	PPM	1	10000	8	99	11	7	31	7	5	6	5
Au	INAA	PPB	5	10000	10	−18	−5	3390	−25	48	−11	−5	52
Ba	ICP	PPM	5	2000	550	324	2000	912	2000	135	657	179	224
Ba*	INAA	PPM	100	20000	740	400	20000	820	4100	−220	470	270	−590
Bi	AA	PPM	1	2000	−1	23	−1	−1	30	−1	7	46	12
Bi*	ICP	PPM	5	2000	32	82	84	155	−5	158	87	66	49
Br	INAA	PPM	1	30000	−1	12	−1	−1	2	−2	−1	−1	3
CA	ICP	PCT	0.01	10	0.72	0.2	3.22	5.46	2.12	2.95	0.98	0.46	0.58
Cd*	ICP	PPM	2	2000	−2	−2	−2	−2	−2	−2	−2	−2	−2
Cd	INAA	PPM	10	2000	−10	−26	−10	−10	−37	38	−10	−10	−52
Ce	INAA	PPM	10	30000	170	210	96	78	2870	700	530	170	4860
Co*	ICP	PPM	1	20000	8	27	15	18	15	203	−1	4	−1
Co	INAA	PPM	10	20000	12	30	26	64	78	620	25	−10	−46
CR*	ICP	PPM	2	20000	111	174	188	1593	19633	20000	812	1016	107
Cr**	INAA	PPM	50	30000	120	270	350	2700	25600	30000	880	1300	−270
Cs	INAA	PPM	1	10000	13	7	1	−1	−4	−2	7	7	9
Cu	ICP	PPM	1	20000	16	71	62	66	40	30	28	12	56
Eu	INAA	PPM	2	30000	−2	−2	5	2	−18	9	−6	−2	−26
Fe	ICP	PCT	0.01	10	2.25	8.42	7.8	10	10	10	6.82	2.04	10
Fe*	INAA	PCT	0.5	10	3	10	10	10	10	10	7.5	2.5	10
GA	ICP	PPM	10	2000	31	47	46	98	71	295	64	31	153
Hf	INAA	PPM	2	30000	25	29	26	11	309	394	53	32	205
Ir*	INAA	PPB	100	1000	−100	−100	−100	−100	−250	−100	−100	−100	−340
LA	ICP	PPM	5	2000	67	44	31	34	1356	106	168	66	1800
La*	INAA	PPM	5	30000	80	100	55	40	1690	240	250	94	2400
Li	ICP	PPM	2	2000	40	40	11	8	17	11	36	27	34
Lu	INAA	PPM	0.5	2000	−0.5	1.6	−0.5	0.7	20	15	2.8	2.4	21
MG	ICP	PCT	0.01	10	0.56	0.99	1.49	2.44	0.87	4.74	0.13	0.12	0.07
Mn	ICP	PPM	5	20000	371	914	1822	4122	13069	5869	5994	1593	11830
Mo*	ICP	PPM	1	20000	8	7	5	14	6	27	7	3	14
Mo	INAA	PPM	2	30000	−2	12	6	−2	−10	−10	−2	−2	−14
NA*	ICP	PCT	0.01	10	1.43	0.7	0.48	0.63	0.65	0.51	1.75	2.27	1.41
Na*	INAA	PCT	0.05	10	1.5	0.75	0.47	0.41	0.36	0.91	1.9	2.6	1.3
Nb	ICP	PPM	5	2000	23	10	17	65	498	200	214	27	817
Ni*	ICP	PPM	1	20000	22	67	60	121	81	395	12	9	21
Ni	INAA	PPM	20	30000	−20	−49	−20	130	−200	960	−72	−20	−260
Pb*	AA	PPM	2	10000	16	32	11	12	15	5	9	8	21
Pb	ICP	PPM	2	10000	46	64	43	55	29	86	45	29	110
PD	FADCP	PPB	1	10000	−9	−9	−9	−9	18	8	−9	−9	−9
PT	FADCP	PPB	5	10000	−9	−9	−9	−9	77	25	−9	−9	−9
Rb	INAA	PPM	10	10000	250	190	21	−20	−110	−54	240	310	−170
SB	ICP	PPM	5	2000	31	39	13	45	−5	357	35	8	56
Sb*	INAA	PPM	0.2	9999	0.9	1	1.5	0.8	−0.4	1.1	−0.2	−0.2	−0.5
Sc	INAA	PPM	0.5	2000	8.8	17	23	60.7	58.8	70.9	18	5.8	29
Se	INAA	PPM	10	30000	−10	−24	87	−10	−93	−52	−42	−10	−120
Sm	INAA	PPM	0.2	2000	12	19	10	8.6	201	93.6	40.4	16	288
SN*	ICP	PPM	20	2000	47	58	77	231	184	194	136	32	264
Sn	INAA	PPM	200	30000	−200	8700	−200	−200	4700	−880	−570	−200	−1600
Sn**	XRF	PPM	1	10000	−9	9500	−9	−9	−9	−9	140	270	53
Sr	ICP	PPM	1	2000	130	40	294	107	101	42	50	49	33
Ta	ICP	PPM	5	2000	−100	−100	−100	−100	−100	−100	−100	−100	−100
Ta*	INAA	PPM	1	2000	4	−1	2	6	236	87	95	32	273
Tb	INAA	PPM	1	30000	2	2	1	2	28	13	8	4	43
Te	ICP	PPM	25	2000	−25	37	46	92	−25	111	43	−25	115

LAND SELECTION UNIT 34 PAN CONCENTRATES (Analyses by Bondar–Clegg)

	METHOD	UNITS	L.LIMIT	U.LIMIT	4550	2992	4072	4073	4081	4082	4083	4089	4090
Ta	INAA	PPM	20	2000	−20	−120	−63	−20	−220	−140	−89	−45	340
Th	INAA	PPM	0.5	3000	45	20	4.1	7.6	778	95	145	53.9	1610
Ti	ICP	PCT	0.01	10	0.4	0.49	1.68	6.15	6.39	2.49	3.59	0.95	5.64
Yb	INAA	PPM	5	2000	−5	−5	−5	−5	120	76	26	20	140
ZN*	ICP	PPM	2	20000	75	134	107	140	304	721	111	54	182
Zn	INAA	PPM	200	30000	270	230	390	290	2100	2800	340	−200	−1700
Zr	ICP	PPM	5	2000	182	80	−5	−5	434	533	105	141	670
Zr*	INAA	PPM	500	10000	−500	3100	−500	−500	7700	10000	2100	−500	−5800

LAND SELECTION UNIT 34 PAN CONCENTRATES (Analyses by Bondar–Clegg)

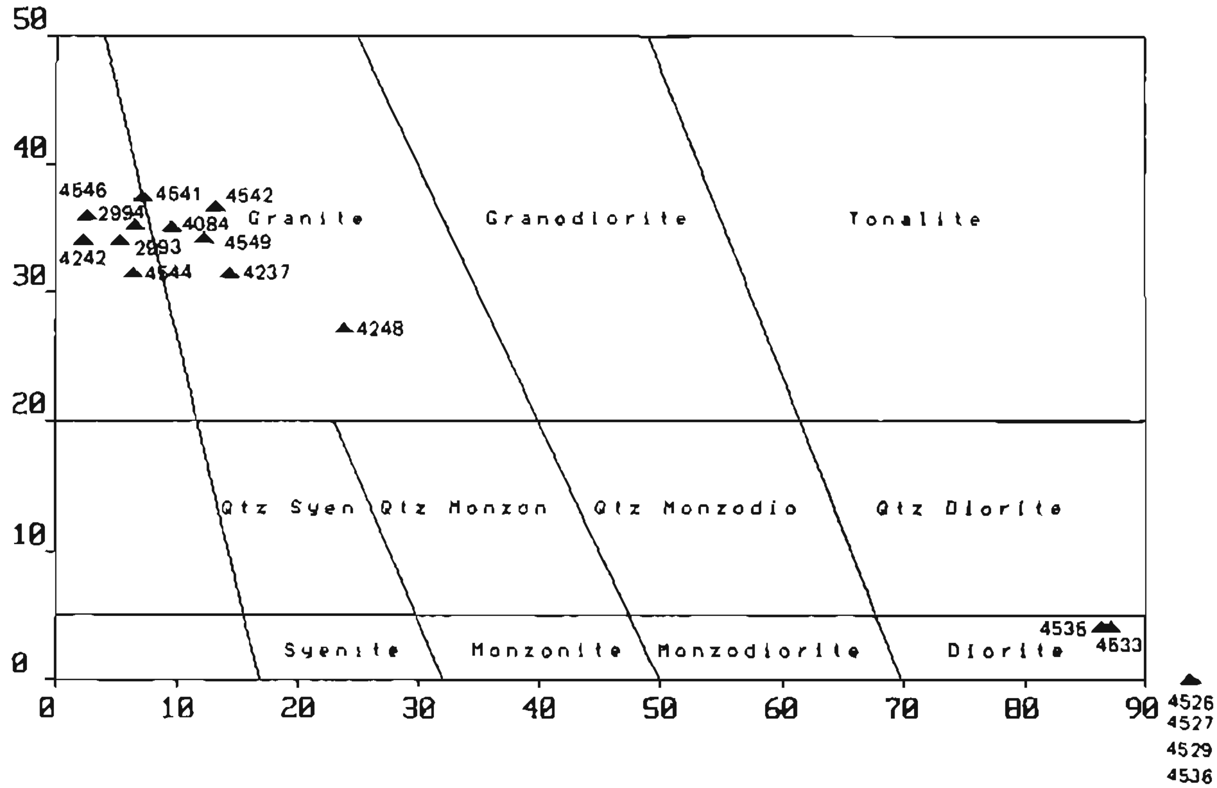
	4091	4093	4101	4102	4104
K	0.57	0.6	0.59	0.79	0.82
U	33	71.2	4.3	4.9	10
V					70
V	30	133	274	311	123
W	470	32	−20	−20	−20
W*	783	200	14	64	54
Y	77	280	15	30	49
AG*	1.1	−0.5	2.6	3.4	2.6
Ag	−5	−12	−5	−5	−5
Al	3.19	3.03	3.06	4.15	5.53
As	56	34	141	238	170
As*	2	4	64	204	56
Au	−11	−5	19	410	−5
Ba	217	176	39	367	593
Ba*	250	−230	20000	960	840
Bi	12	44	−1	49	−1
Bi*	35	32	83	104	77
Br	−1	−1	1	7	3
CA	0.51	1.4	1.34	1.7	3.22
Cd*	−2	−2	−2	−2	−2
Cd	−10	−10	−10	−10	−10
Ce	920	760	270	360	250
Co*	−1	2	50	49	30
Co	−10	16	67	75	44
CR*	206	37	197	262	109
Cr**	320	−50	320	340	170
Cs	8	7	5	5	6
Cu	14	23	119	117	51
Eu	−7	−6	−2	6	3
Fe	2.7	8.01	10	10	10
Fe*	4.3	10	10	10	10
GA	40	35	52	57	64
Hf	62	214	16	17	13
Ir*	−100	−100	−100	−100	−100
LA	317	281	13	109	81
La*	400	460	140	160	120
Li	28	40	23	24	41
Lu	1.9	9.2	−0.5	2	1.7
MG	0.1	0.22	1.25	1.59	1.61
Mn	2216	3109	1344	3440	3922
Mo*	1	14	14	13	11
Mo	−2	−4	−2	−2	−2
NA*	1.47	1.34	0.49	0.61	0.71
Na*	1.5	1.5	0.53	0.48	0.8
Nb	150	118	29	36	38
Ni*	7	14	149	147	58
Ni	−66	−72	170	150	−20
Pb*	8	30	42	511	30
Pb	46	44	66	526	73
PD	−9	−9	−9	−9	−9
PT	−9	−9	−9	−9	−9
Rb	310	360	95	73	140
SB	12	−5	59	72	71
Sb*	−0.2	0.4	12	26.8	1.6
Sc	8.6	30	18	23	30
Se	−26	−35	25	−10	−10
Sm	48	89.7	20.5	31.8	15
SN*	79	113	81	105	94
Sn	−500	2200	−200	14000	−200
Sn**	200	1600	140	9100	20
Sr	81	84	60	58	182
Ta	−100	−100	−100	−100	−100
Ta*	45	89	2	2	4
Tb	6	17	2	4	2
Te	28	−26	71	45	66

LAND SELECTION UNIT 34 PAN CONCENTRATES (Analyses by Bondar-Clegg)

	4091	4093	4101	4102	4104
Te	-140	-94	-20	-20	-20
Th	231	338	17	38	30
Ti	1.56	2.13	0.78	0.88	1.08
Yb	19	62	-5	13	15
ZN*	51	85	202	190	115
Zn	-690	900	380	260	300
Zr	328	905	25	40	26
Zr*	3300	7600	-500	-500	-500

LAND SELECTION UNIT 34 MAJOR OXIDES & CIPW NORMS (Analyzed by Bondar-Clegg)

MAJOR OXIDE ANALYSES																					
	METHOD	UNITS	L.LIMIT	U.LIMIT	2993	2994	4084	4237	4242	4248	4526	4527	4529	4533	4535	4536	4541	4542	4544	4546	4549
SiO2	ICP	PCT	0.01	100	73.31	74.04	75.18	72.04	74	69.31	51.13	36.22	33.66	51.11	50	48	74.99	73.73	75.06	73.88	72.32
TiO2	ICP	PCT	0.01	100	0.15	0.06	0.13	0.37	0.07	0.44	0.04	-0.01	-0.01	1.23	1.21	0.14	0.12	0.25	0.05	0.07	0.27
Al2O3	ICP	PCT	0.01	100	14.83	12.99	13.57	13.67	13.04	15.76	0.85	0.36	0.62	13.08	13.76	3.77	12.98	13.41	13.42	13.14	14.15
Fe2O3	ICP	PCT	0.01	100	1.29	4.52	1.19	2.54	1.04	2.74	4.07	14.15	9.85	9.48	10.16	5.64	1.18	1.7	0.43	0.61	1.93
FeO	TITRE	PCT	0.05	100	1.29	0.77	0.77	1.29	0.55	2.06	2.64	4.89	3.47	7.2	7.14	3.22	0.39	0.74	0.51	0.26	1.03
MnO	ICP	PCT	0.01	100	0.05	0.06	0.05	0.04	0.04	0.05	0.1	0.21	0.14	0.16	0.16	0.11	0.05	0.05	-0.01	0.03	0.04
MgO	ICP	PCT	0.01	100	0.31	0.03	0.14	0.54	1.54	0.89	22.98	41.51	42.04	8.79	8.36	22.79	0.32	0.32	0.09	0.05	0.47
Na2O	ICP	PCT	0.01	100	3.2	3.34	3.22	2.63	2.93	3.26	0.11	0.02	0.02	2.85	3.01	0.2	3.17	3.02	3.27	3.41	2.91
K2O	ICP	PCT	0.05	100	5.51	5.23	5.38	6.14	5.94	5.07	-0.05	-0.05	-0.05	0.52	0.59	-0.05	5.06	4.99	6.19	5.14	5.42
CaO	ICP	PCT	0.01	100	0.71	0.45	0.79	1.43	0.23	2.3	19.24	0.16	0.13	10.41	8.92	16.9	0.6	1.07	0.63	0.28	1.19
P2O5	ICP	PCT	0.03	100	0.25	-0.03	0.07	0.15	0.04	0.3	-0.03	-0.03	-0.03	0.1	0.11	-0.03	0.09	0.12	0.08	0.08	0.21
LOI	GRAV	PCT	0.05	100	0.92	0.35	0.59	0.54	1.54	0.35	1.14	7.4	12.24	2.06	2.99	1.93	1.05	0.79	0.35	0.59	0.58
SUM		PCT			101.8	101.8	101.0	101.3	100.9	102.5	102.2	104.8	102.0	106.9	106.4	102.6	100	100.1	100.0	97.54	100.5
Cr	ICP	PPM	10	10000	11	-10	-10	-10	-10	-10	4475	2156	6172	578	353	4021	-10	-10	-10	-10	-10
Ba	XRF	PPM	15	20000	340	50	180	670	100	1400	-20	50	30	720	480	90	140	1200	40	70	440
Nb	XRF	PPM	5	10000	24	111	19	16	35	15	-5	-5	-5	6	11	-5	25	20	7	26	22
Rb	XRF	PPM	1	10000	609	737	-1	-1	394	250	3	-1	-1	12	8	1	522	347	434	579	383
Sr	XRF	PPM	1	2000	86	26	23	211	23	44	8	25	1	266	263	28	51	263	26	21	132
Y	XRF	PPM	1	20000	18	73	39	37	41	23	1	1	2	24	23	4	36	19	62	42	23
Zr	XRF	PPM	1	20000	92	144	108	231	117	234	12	18	24	94	97	18	94	177	56	78	155
CIPW NORMS																					
Quartz					31.52	33.07	33.80	29.53	31.69	24.59	0.00	0.00	0.00	2.04	2.12	0.00	36.00	34.83	30.91	34.94	32.00
Corundum					2.88	1.00	1.18	0.45	1.48	1.42	0.00	0.04	0.39	0.00	0.00	0.00	1.43	1.39	0.39	1.70	1.84
Orthoclase					32.27	30.46	31.66	35.99	35.31	29.32	0.00	0.00	0.00	2.93	3.37	0.00	30.25	29.67	36.70	31.35	32.05
Albite					26.84	27.86	27.13	22.08	24.94	27.00	0.92	0.17	0.19	22.98	24.63	1.68	27.13	25.72	27.76	29.79	24.64
Anorthite					1.87	2.20	3.45	6.07	0.89	9.25	1.81	0.81	0.72	20.36	21.55	9.32	2.42	4.55	2.61	0.90	4.54
Diopside					0.00	0.00	0.00	0.00	0.00	0.00	72.28	0.00	0.00	22.34	16.22	57.64	0.00	0.00	0.00	0.00	0.00
Hypersthene					1.90	0.07	0.66	1.33	3.97	3.04	6.17	16.48	6.98	13.80	15.41	4.67	0.81	0.80	0.73	0.13	1.17
Olivine					0.00	0.00	0.00	0.00	0.00	0.00	12.92	62.76	76.75	0.00	0.00	18.31	0.00	0.00	0.00	0.00	0.00
Magnetite					1.85	2.47	1.72	3.19	1.52	3.89	5.84	16.87	12.95	13.10	14.24	8.12	1.09	1.84	0.63	0.76	2.67
Hematite					0.00	2.75	0.00	0.32	0.00	0.00	0.00	2.88	2.03	0.00	0.00	0.00	0.45	0.45	0.00	0.11	0.09
Ilmenite					0.28	0.11	0.25	0.70	0.13	0.82	0.08	0.00	0.00	2.23	2.22	0.26	0.23	0.48	0.10	0.14	0.51
Apatite					0.57	0.00	0.16	0.35	0.09	0.68	0.00	0.00	0.00	0.22	0.25	0.00	0.21	0.28	0.19	0.19	0.49
SUM					100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
AU DISCRIMINANT					0.00	na	0.00	0.00	0.00	0.00	100.00	na	na	0.12	0.00	100.00	0.00	0.00	0.00	0.00	0.00



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