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**2022 SURFACE PROSPECTING REPORT**

**NYM LAKE PROJECT**

**2758145 Ontario Ltd., Allan George Onchulenko and Peter Strafford Gehrels**

**Lake Pickerel Area**

**THUNDER BAY SOUTH MINING DIVISION**

Completed by: Simon Dolega, MSc, GIT (ON)  
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October 17, 2022

## Summary

This report summarizes the 2022 Surface Prospecting Program on the Nym Lake Property located 23km southwest of Atikokan near Nym Lake. One day of fieldwork was conducted on August 25, 2022. 10 samples were collected with the total expenditure of \$5,210. Currently claims are held by 2758145 Ontario Ltd. (50%), Allan George Onchulenko (25%) and Peter Strafford Gehrels (25%).

The Nym Lake Property occurs within the northern boundary of the Quetico Subprovince, south of the Quetico Fault. Lithologies on the property include turbiditic metasediments, abundant granite pegmatites and the Nym Lake Intrusion, a mafic-ultramafic intrusion with documented anomalous PGE mineralization. Historic work has not been completed on the granite pegmatites within the area.

10 samples were collected on the property including: 4 granite pegmatites samples, 3 bulk K-feldspar samples, 2 bulk muscovite samples and a gabbro. Anomalous Li, Cs, Ta and Nb assays were associated with the bulk muscovite samples (up to 540ppm Li, 161ppm Cs, 80.7ppm Ta and 302.8ppm Nb). Elevated Li, Cs, Ta, and Nb indicate fertile granites and a potential for Li-bearing pegmatite mineralization. Recommendations include mapping the pegmatites within the property, increase the number of samples for assay and use the data to geochemical vector the property for Li mineralization.

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## 1.0 Property Description and Location

### 1.1 Location and Access

The Nym Lake Property is located approximately 185km west of the city of Thunder Bay on Highway 11 then south on a gravel road 6km towards Nym Lake (Figure 1.1). The project is approximately 23km southwest from Atikokan, the closest town centre. The property is in the Thunder Bay South Mining District within the Pickerel Lake Area.

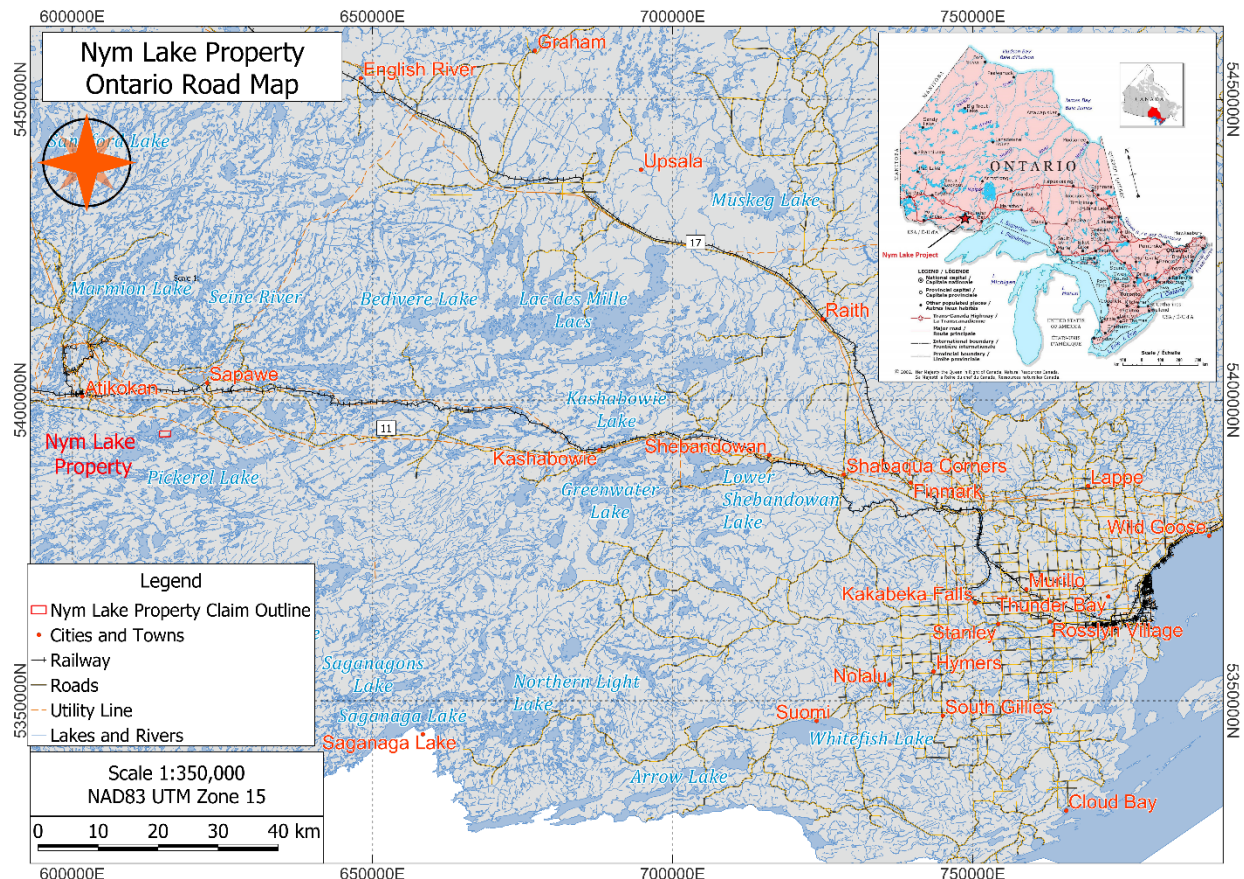


Figure 1.1: Map showing the location of the Nym Lake Property in relationship to Thunder Bay. Ontario map from Her Majesty the Queen in Right of Canada, Natural Resources Canada, (2002).

From Atikokan, the Nym Lake property was accessed by driving south on Highway 11B South for 3.2km and then turning left (east) onto Highway 11. After about 12km, a right turn was taken onto Nickelby Road. Nickelby Road cannot be accessed by truck, so ATVs were used to drive from the highway to the Nym Lake Claims (about 6km).

### 1.2 Physiography

The Nym Lake Property is situated in the Severn Upland subregion, within the James Region of the Canadian Shield (Douglas, 1972; Bone, 2003). The Severn Upland consists of crystalline Archean rock with low lying, undulating to rolling hills (Mollard and Mollard, 1980). Locally surfaces vary from bare exposed rock to thin, patchy boulder-rich to sandy glacial till deposits to muskeg swamps (Mollard and Mollard, 1980). Relief is commonly less than 45m and greatest near the Quetico Lake and Pickerel Lake

areas, exceeding 60m (Mollard and Mollard, 1980). Lakes cover less than one third of the area (Mollard and Mollard, 1980).

### 1.3 Claim Status

The Nym Lake Project consists of a total of 8 single cell mining claims spanning approximately 171 ha (Figure 1.2). The claims are owned by 2758145 Ontario Ltd. (50%), Allan George Onchulenko (25%) and Peter Strafford Gehrels (25%) (Table 1.1). At the date of this report, all claims are active and in good standing.

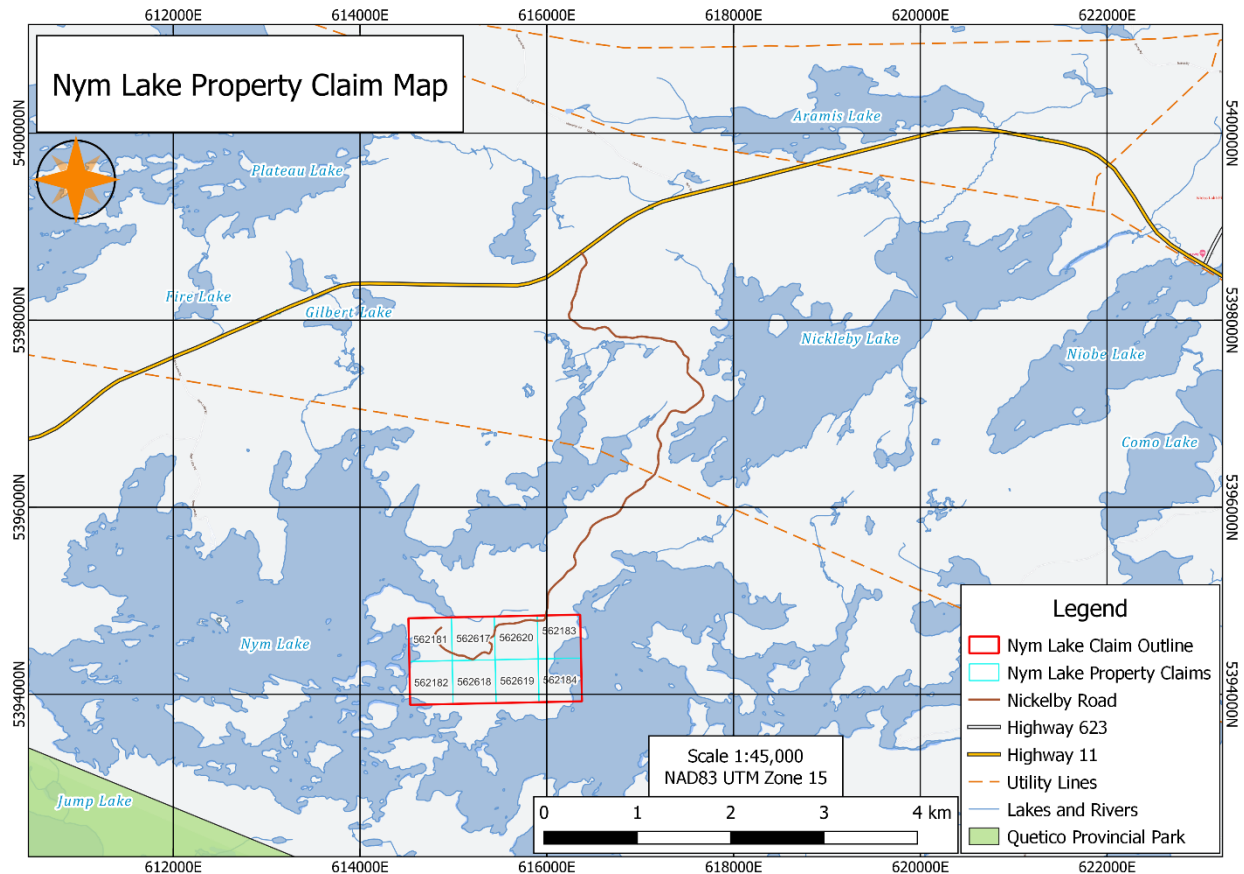


Figure 1.2: Map of the Nym Lake Claims owned by 2758145 Ontario Ltd., Allan George Onchulenko and Peter Strafford Gehrels.

Table 1.1 List of active claims within the Nym Lake Property owned by 2758145 Ontario Ltd., Allan George Onchulenko and Peter Strafford Gehrels

Claim Number	Anniversary	Township Name/Area
562182	2022-10-21	Pickerel Lake Area
562181	2022-10-21	Pickerel Lake Area
562183	2022-10-21	Pickerel Lake Area
562184	2022-10-21	Pickerel Lake Area
562617	2022-10-24	Pickerel Lake Area
562618	2022-10-24	Pickerel Lake Area
562619	2022-10-24	Pickerel Lake Area
562620	2022-10-24	Pickerel Lake Area

## 2.0 History

**1999** – Anomalous Pt/Pd mineralization discovered by Michael and Steve Stares within ultramafic intrusive rocks near Nym Lake (Duess, 2002)

**1999** – Band-Ore Resources optioned property and conducted various geologic work including: geologic mapping, prospecting, lines cutting, IP and magnetic survey and 3 DDH totalling 276m. Grab sample best assays: 2988ppb Pt+Pd, 4510ppm Cu, 861ppm Ni and 309ppb Au. Best Drill Intercepts: 655ppb Pt+Pd for 1.3m; 609ppb Pt+Pd for 1.1m (Duess, 2002)

**2004** – Band-Ore Resources conducted a 4-day prospecting and sampling program. Best Assays: 0.33g/t Pt and 0.25g/t Pd (Duess, 2004)

**2013** – Ben Kuzmich conducted a sampling and prospecting program followed by a 6.5-foot BQ drill hole using a Shaw Portable drill along the main mineralized zone. Best grab sample assays: on sample returned 918ppb Pt, 567ppb Pd, 21ppb Au and 0.3% Cu; another sample returned 584ppb Pt, 701ppb Pd, 130ppb Au and 0.199% Cu. Best drill intercept: 0.5% g/t Pt+Pd, 0.38% Cu for 5ft (Kuzmich, 2013)

## 3.0 Geology and Mineralization

### 3.1 Regional Geology

The Nym Lake Property is situated within the Quetico subprovince of the Superior Province. The Quetico subprovince is predominately a metasedimentary belt, with localized migmatite and granite, metamorphosed from lower greenschist to upper amphibolite facies with localized granulite facies metamorphism (e.g. Percival et al. 2012). It is bounded to the north by the Marmion Terrane, separated by the Quetico Fault and bounded to the south by the Wawa-Abitibi Terrane (Percival et al., 2012) Both the Marmion and Wawa-Abitibi terranes are granite-greenstone belts (Percival et al., 2012).

The Nym Lake Intrusion is part of a series of mafic-ultramafic intrusions located along the northern boundary of the Quetico subprovince, south of the Quetico Fault (Pettigrew and Hattori, 2006). The intrusions have distinct magnetic anomalies and can be clearly seen from regional airborne magnetic survey maps relative to the metasedimentary units (Duess, 2002). These series of intrusions range from 3m to 3300m in length, range from diorite to peridotite in composition and host disseminated sulphide mineralization with significant Cu, Ni, Pt, Pd values with lesser Au, Co and Rh (MacTavish, 1999). The Nym Lake Intrusion is believed to be a single mafic-ultramafic intrusion composed of mostly gabbro with peridotite phases (Kuzmich, 2013).

### 3.2 Property Geology and Mineralization

The Nym Lake Property is mostly composed of metasedimentary turbiditic sequences, with abundant felsic pegmatitic intrusive rocks and the Nym Lake Intrusion (Duess, 2002). The turbidite sequences are composed of well banded mudstone and siltstone and the felsic intrusive rocks are white to light grey feldspar rich pegmatites (Duess, 2002). The Nym Lake intrusion is a medium- to coarse-grained, hornblende-rich gabbro to peridotite and pyroxenite (Duess, 2002). PGE mineralization is restricted to ultramafic units and sulphide-magnetite bearing mafic phases that contain pyrrhotite and chalcopyrite (Kuzmich, 2013). Exploration for lithium within the felsic pegmatites has not been completed on the property.



## 4.0 2022 Surface Prospecting Program

### 4.1 Sampling Locations and Methodology

The prospecting and sampling program at the Nym Lake Property was conducted on August 25, 2022. The purpose of the program was to determine if the pegmatites on the property had the potential to host lithium mineralization. Samples were collected by prospectors Jason Wolf and Trevor Lavack, and helpers Tony Bruyere, Jared Bjorkman and Devon Price.

Samples were taken at prospective areas within the property (Figure 4.1). Four types of samples were collected: bulk K-feldspar samples, bulk muscovite samples, pegmatite samples and a gabbro. Bulk K-feldspar and bulk muscovite samples were samples of just K-feldspar and muscovite, respectively of the granite pegmatite. The geochemistry of these bulk sample minerals could be used as an exploration tool for vectoring Li-Cs-Ta pegmatites (Selway et al., 2005). Pegmatite samples were whole rock samples of granite pegmatite without separation of mineral phases. 1-5kg samples were collected and placed in labeled sample bags. Rock descriptions were noted by hand. A Garmin GPSMAP® 65s Multi-Band GPS Handheld with Sensors was used to obtain accurate sample location stations. Two standards, OREAS 147 (a blend of spodumene with granodiorite from Greenbushes Mine in Western Australia, Sn oxide ore from Doradilla Project in New South Wales and Nb concentrate from Catalão's niobium mine in Goiás, Brazil), OREAS 753 (RC drill chip samples from the Grants lithium pegmatite within the Bynoe Pegmatite Field in Northern Territory Australia) and a blank OREAS 22h (quartz sand with 0.5% iron oxide) were inserted every 10 on the 10s for dispatch. Appendix I contains photographs of the field samples.

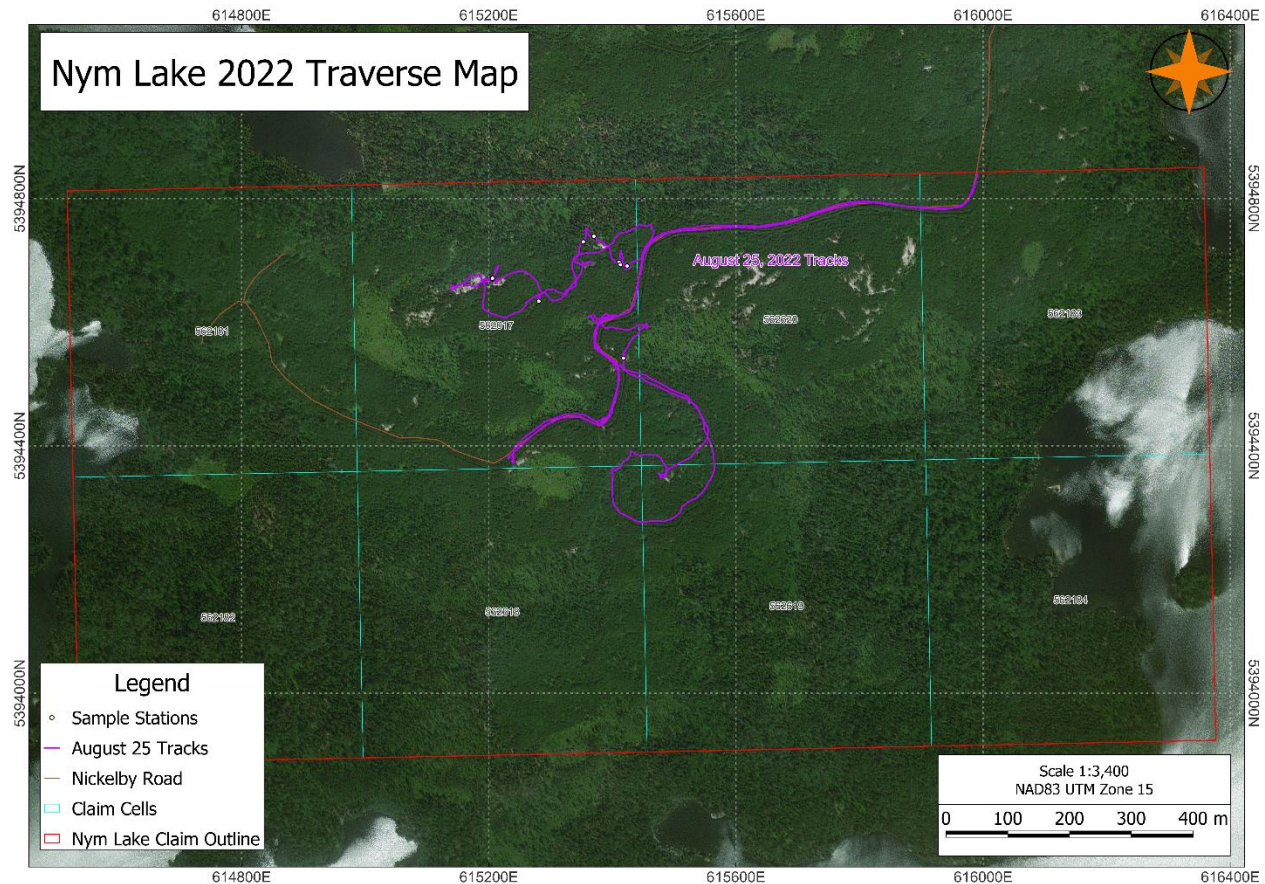


Figure 4.1: Traverse map of the August 25, 2022 field day.

#### 4.2 Assay Methodology

10 Samples from the Nym Lake property along with 76 samples collected from other properties were shipped to Activation Laboratories Ltd. in Thunder Bay, Ontario for sample preparation and analysis. Assay preparation was accomplished by crushing the rock to a 2mm particle size, mechanically splitting the sample to 250g, and then pulverizing the sample to 105µm. Samples were analyzed using the Aodium Peroxide Fusion ICP-OES + ICP-MS containing 55 elements (Al, As, B, Ba, Be Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Ge, Hf, Ho, In, K, La, Li, Mg, Mn, Mo, Nb, Nd, Ni, Pb, Pr, Rb, S, Sb, Se, Si, Sm, Sn, Sr, Ta, Tb, Te, Th, Ti, Tl, Tm, U, V, W, Y, Yb, Zn). Appendix II contains the assay certificates.

#### 4.3 Results

All samples were collected from 1 claim block (Table 4.1). One day was spent clearing trails, accessing the property and prospecting for pegmatites (Table 4.2). A total for 10 samples were collected. 4 samples were taken of granite pegmatite, 3 samples were taken of just bulk K-feldspar from granite pegmatites, 2 samples were taken of just bulk muscovite from granite pegmatites and 1 sample was taken of gabbro (Table 4.3).

Table 4.1: Location and claim block associated with rock samples collected during the field program.

Project Area	Assay Samples Within Claim	Township / Area	Tenure ID	Anniversary Date	Claim Holder
Nym Lake	B418737-B418739; B418741-B418746; B418801	Pickereel Lake Area	562617	2022-10-24	(25) Allan George Onchulenko, (25) Peter Stafford Gehrels, (50) 2758145 Ontario Ltd.

Table 4.2 Daily log on the Nym Lake property.

Date	Objective	Log
25-Aug-22	Access and Prospecting	Spent the day clearing trail and prospecting the Nym Lake Claims assessing the potential for pegmatites. Looked for fractionation samples of feldspars and muscovite on numerous dykes. Sampled a 20-30m wide mafic intrusive that did not appear to have any historic sampling.

Assay bubble maps of lithium (Figure 4.2), caesium (Figure 4.3) and tantalum (Figure 4.4) can be seen below. 3 samples (2 bulk muscovite and a pegmatite sample) yielded anomalous (>100ppm) Li assays, including a bulk muscovite sample with 520ppm Li. Note that the gabbro has elevated lithium values of 64ppm Li. The same 3 samples yielded anomalous (>50ppm) Cs assays, including a bulk muscovite sample of 161ppm Cs. Anomalous (>50ppm) Ta were only observed in the bulk muscovite samples, with the highest Ta assay of 80.7ppm. The two bulk muscovite samples also have high Nb content, 285.7ppm and 302.8ppm.

Table 4.3: Sample descriptions with associated assay values.

Sample ID	UTM E	UTM N	Elev	Sample Type	Sample Descriptions	Li (ppm)	Rb (ppm)	Cs (ppm)	Ta (ppm)	Nb (ppm)	K <sub>2</sub> O (%)
B418737	615424	5394691	439	Bulk Muscovite	30-40m dyke striking 120, sample of silver muscovite for fractionation	294	1680	58.2	50.7	302.8	9.79
B418738	615411	5394697	436	Bulk K-Feldspar	Sample in same dyke, white k-feldspar for fractionation	< 15	1480	40.7	0.9	< 2.4	11.9
B418739	615413	5394693	434	Pegmatite	Sample at contact of previous dyke in Metasedimentary	331	425	108	0.4	6.3	2.5
B418741	615370	5394739	434	Bulk K-Feldspar	30m dyke striking 100, sample of beige K-feldspar for fractionation	< 15	1120	19.5	< 0.2	< 2.4	11.8
B418742	615353	5394730	431	Pegmatite	Sample in same dyke as previous sample, consists of K-feldspar with minor perthitic veining, fine grain green muscovite, disseminated fine grain black oxides	< 15	658	15.8	2.3	13.5	8.5
B418743	615206	5394671	445	Pegmatite	Sample in 60-70 m dyke outcropping at 070 no visible contact, sample consists of white K-feldspar with black tourmaline on fractures, fine to medium grain black oxides, minor yellow-silver muscovite	31	189	12.4	2.5	6.8	2.27
B418744	615206	5394670	446	Bulk Muscovite	Sample is of silver-yellow muscovite for fractionation	520	1580	161	80.7	285.7	9.47
B418745	615206	5394671	445	Bulk K-Feldspar	Sample is of beige K-feldspar for fractionation	< 15	732	42.8	0.5	< 2.4	9.45
B418746	615418	5394542	439	Pegmatite	10m dyke with no exposed contacts outcropping at 070, aplitic sugary albite with fine grain green muscovite and possible black oxides	22	312	9.9	2	17.3	5.5
B418801	615281	5394634	438	Gabbro	20-30m mafic intrusive striking 040, moderate chlorite alteration, moderate silica, fine grain pyrite	64	34.8	5.6	0.6	9.1	1.47

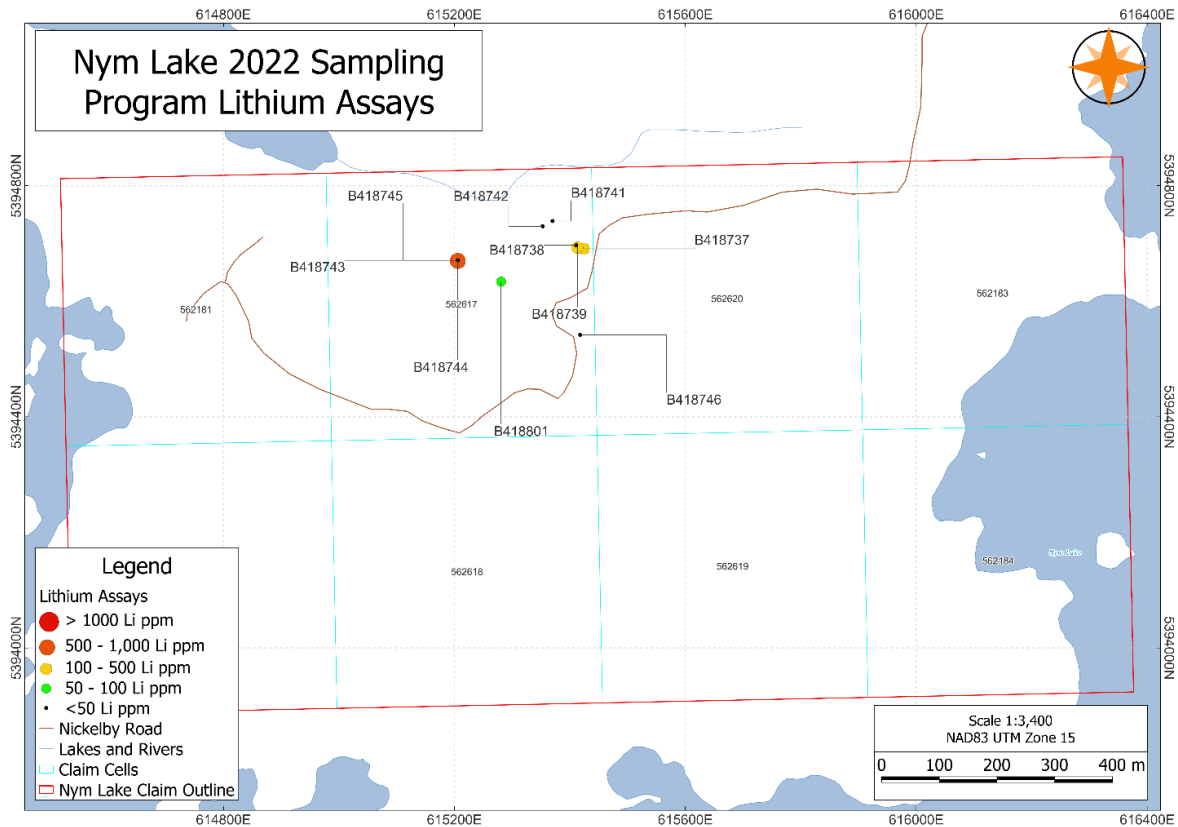


Figure 4.2. Assay bubble map of the Nym Lake property with sample locations and associated Li assays.

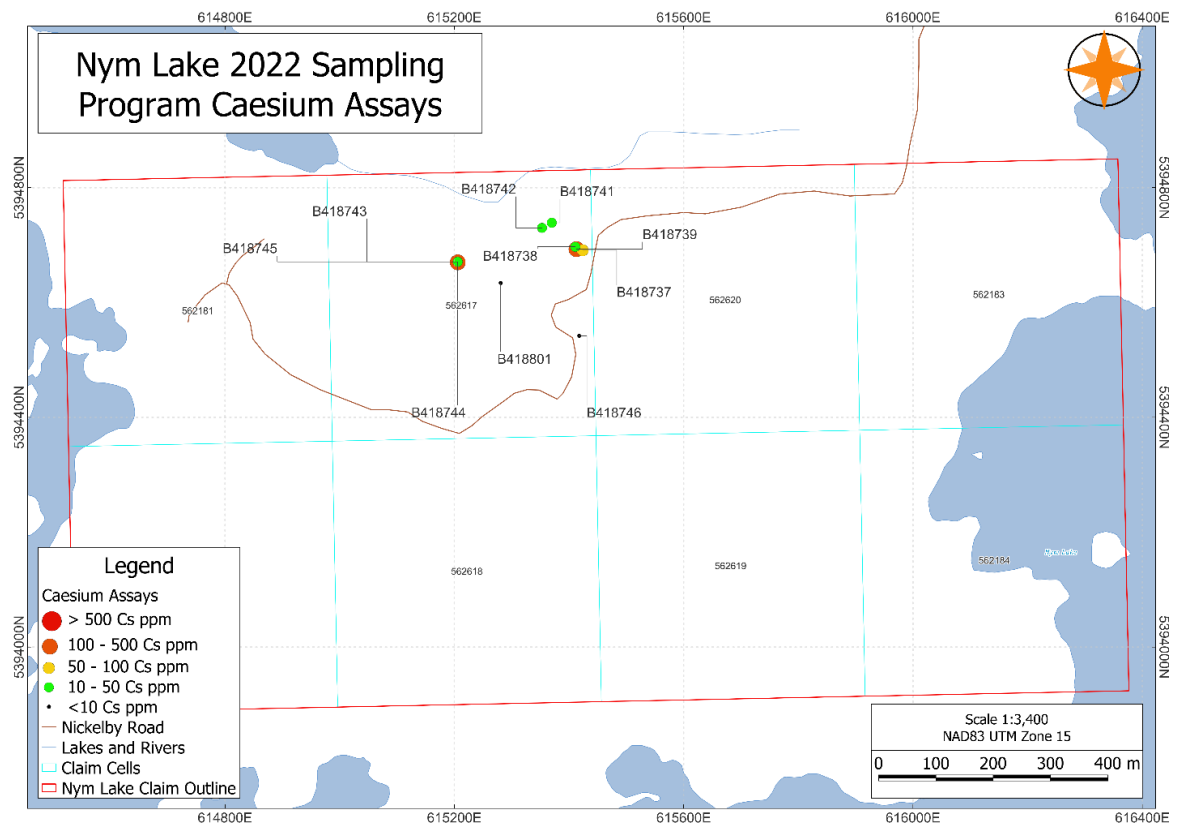


Figure 4.3 Assay bubble map of the Nym Lake property with sample locations and associated Cs assays.

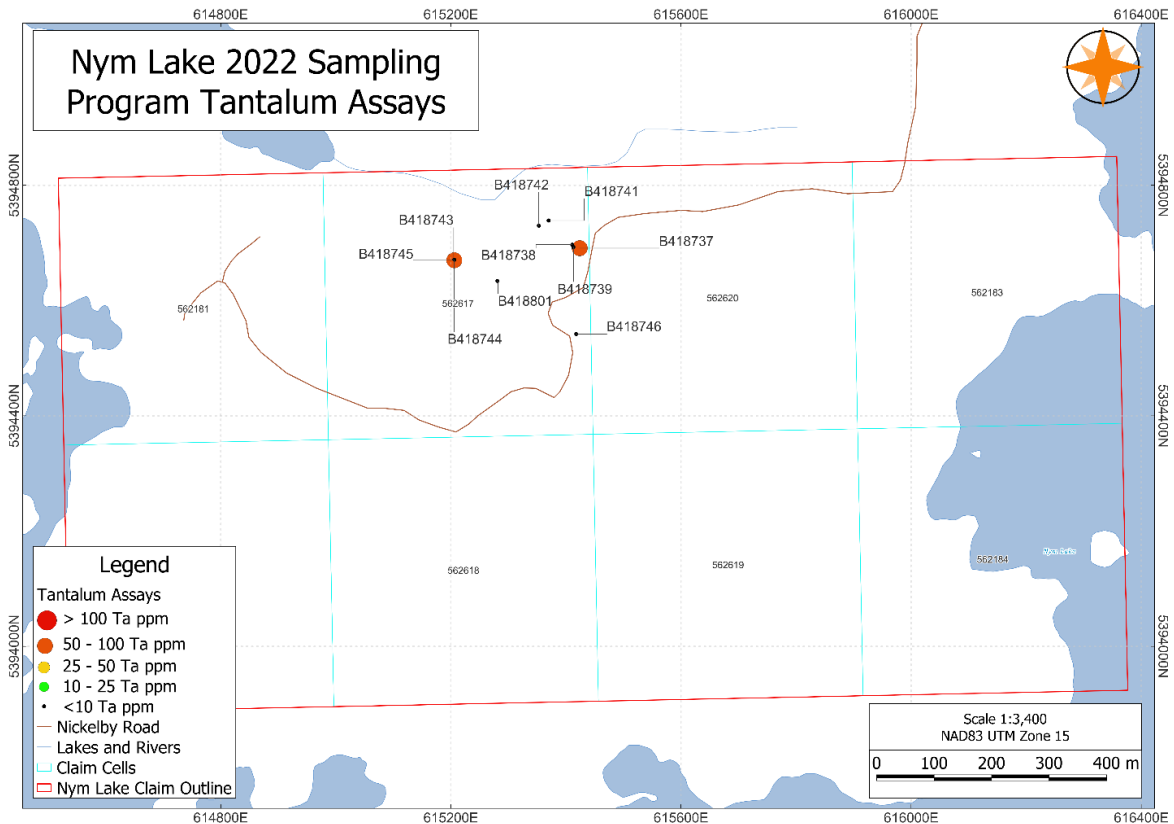


Figure 4.4 Assay bubble map of the Nym Lake property with sample locations and associated Ta assays.

## 5.0 Conclusions and Recommendations

The high levels of Li, Cs and Ta in the bulk muscovite samples on the property indicate that the muscovite may have been derived from a fertile granite (Breaks et al., 2003). Average Li concentrations in worldwide gabbro are around 17ppm Li (Horstman, 1956) and the gabbro sampled on the Nym Lake property is 64ppm Li. Both these results indicate that there is a potential for lithium-bearing pegmatites within the area.

The one-day field program indicated a potential for Li-bearing pegmatites in the region. Additional sampling, geological mapping and geochemical vectoring is recommended to further evaluate the potential for Li-bearing pegmatites on the Nym Lake Property.

## 6.0 Expenditures

Table 6.1 Total expenditures for the summer 2022 prospecting program at the Nym Lake Property.

Activity	Units			Cost Per Unit			Total	Percentage
Assays (Preparation and Analysis)	10	samples	@	\$85.68	/sample	=	856.80	13%
2 Prospectors	1	day	@	\$875.00	/day	=	875.00	14%
3 Helpers	1	day	@	\$975.00	/day	=	975.00	15%
Report Writing Geologist	40	hours	@	\$70.63	/hour	=	2,825.00	44%
Quad Rental	3	quads	@	\$125.00	/day	=	375.00	6%
Hotel Accomidations	1	room	@	\$150.00	/night	=	150.00	2%
Truck Rental	3	trucks	@	\$75.00	/day	=	225.00	4%
Fuel						=	70.24	1%
Saw Rental	1	saw	@	50	/day	=	50.00	1%
Total							6,402.04	100%

Table 6.2 Expenditure per claim number

Claim Number	Number of Samples	Cost Per Sample	Total
562617	10	\$640.20	\$6,402.04
<b>Total</b>	<b>10</b>	<b>\$640.20</b>	<b>\$6,402.04</b>



## 7.0 References

- Bone, R. M. (2003). *The regional geography of Canada*. Don Mills, Ont: Oxford University Press.
- Breaks, F.W., Selway, J.B. and Tindle, A.G. (2003). Fertile peraluminous granites and related rare element mineralization in pegmatites, Superior Province, northwest and northeast Ontario: Operation Treasure Hunt; Ontario Geological Survey, Open File Report 6099, 179p.
- Douglas, R.J.W. (Scientific Editor) (1972). *Geology and Economic Minerals of Canada*. Geological Survey of Canada.
- Duess, R. I. (2002). Geological Report for the Nym Lake Property, Band-Ore Resources Ltd. Assessment Report. 58p.
- Duess, R. I. (2004). Summary Report for the Nym Lake Property, Band-Ore Resources Ltd. Assessment Report. 30p.
- Horstman E. L. (1957). The distribution of lithium, rubidium, and caesium in igneous and sedimentary rocks. *Geochimica et Cosmochimica Acta*, 12, p. 1-28p.
- Kuzmich B. (2013). Nym Lake Pt-Pd Prospecting Report. Assessment Report. 24p.
- MacTavish, A.D. 1999. The mafic-ultramafic intrusions of the Atikokan–Quetico area, northwestern Ontario; Ontario Geological Survey, Open File Report 5997, 127p.
- Mollard, D.G., and Mollard, J.D. (1980). Marmion Lake Area (NTS 52B/NW), District of Rainy River; Ontario Geological Survey, Northern Ontario Engineering Geology Terrain Study 55, 28 p. Accompanied by Maps 5073 and 5104, scale 1:100000
- Percival, J.A., Skulski, T., Sanborn-Barrie, M., Stott, G.M., Leclair, A.D., Corkery, M.T., and Boily, M. (2012). Geology and tectonic evolution of the Superior Province, Canada. Chapter 6 In *Tectonic Styles in Canada: The LITHOPROBE Perspective*. Edited by J.A. Percival, F.A. Cook, and R.M. Clowes. Geological Association of Canada, Special Paper 49, p. 321–378.
- Pettigrew N. T., and Hattori K. H. (2006). The Quetico Intrusions of Western Superior Province: Neo-Archean examples of Alaskan/Ural-type mafic–ultramafic intrusions. *Precambrian Research*, 149, p. 21-42
- Selway J.B., Breaks F.W., and Tindle A.G. (2005). A Review of Rare-Element (Li-Cs-Ta) Pegmatite Exploration Techniques for the Superior Province, Canada, and Large Worldwide Tantalum Deposits. *Exploration and Mining Geology*, 14, p. 1-30.

## 8.0 Statement of Qualifications

I, Simon Dolega, of the city of Thunder Bay, in the province of Ontario, hereby certify:

- 1) I am currently employed with the geological consulting company Bayside Geoscience Inc.
- 2) I am an active, registered Geologist in Training with the Professional Geologist of Ontario (Membership #10816).
- 3) I am a graduate of Lakehead University, Thunder Bay, Ontario with an Honours Bachelor of Science (Geology) degree in May 2014 and a Master of Science (Geology) degree in August 2018.
- 4) I have been employed by Bayside Geoscience Inc. since October 2018, after completion of my master's degree in August 2018.
- 5) I have been employed as a contract Geologist in Training with Bayside Geoscience Inc. from October 2018 to March 2021 and a Staff Project Geologist in Training with Bayside Geoscience Inc. since April 2021.
- 6) I am currently providing geological services to Allan Onchulenko through Bayside Geoscience Inc.
- 7) I have no interest, either directly or indirectly, in the subject property.
- 8) Permission is granted by Allan Onchulenko to submit this report dated October 17th, 2022, for assessment purposes.

October 17, 2022



Simon Dolega  
Geologist in Training  
Bayside Geoscience



Appendix I  
Sample Photos





Figure A.1: Sample photo B418737.



Figure A.2: Sample photo B418738.





Figure A.3: Sample photo B418739.



Figure A.4: Sample photo B418741.





Figure A.5: Sample photo B418742.



Figure A.6: Sample photo B418743.





Figure A.7: Sample photo B418744



Figure A.8: Sample photo B416745.





Figure A.9: Sample photo B418746.

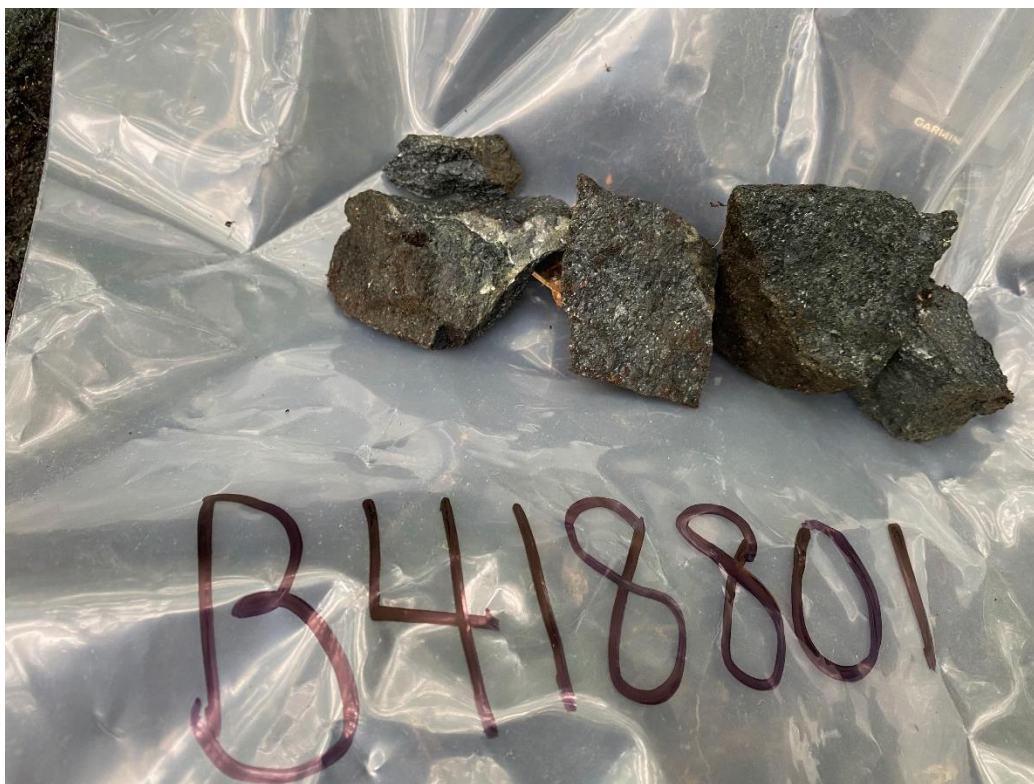


Figure A.10: Sample photo B418801.

**Appendix II**  
**Certificates of Analyses**





Report No.: A22-12631  
 Report Date: 27-Sep-22  
 Date Submitted: 02-Sep-22  
 Your Reference: White Willow

Grid Metals Corp.  
 304-3333 Yonge St  
 Toronto Ontario M4N 2M1  
 Canada

ATTN: Robin Dunbar

### CERTIFICATE OF ANALYSIS

86 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
UT-7-Grid	QOP Sodium Peroxide (Sodium Peroxide Fusion ICPOES + ICPMS)	2022-09-11 15:42:08

REPORT A22-12631

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:



LabID: 206

ACTIVATION LABORATORIES LTD.  
 41 Bitem Street Ancaster, Ontario, Canada, L9G 4V5  
 TELEPHONE +905-645-9611 or +1 888 228-5227 FAX +1 905-645-9613  
 E-MAIL [Activation@actlabs.com](mailto:Activation@actlabs.com) ACTLABS GROUP WEBSITE [www.actlabs.com](http://www.actlabs.com)

CERTIFIED BY:

Mark Vanderpeest  
 Quality Control Coordinator

Results

Activation Laboratories Ltd.

Report: A22-12631

Analyte Symbol	Al2O3	As	B	Ba	Be	Bi	CaO	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe2O3(T)	Ga	Gd	Ge	Ho	Hf	In
Unit Symbol	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	5	10	3	3	2	0.01	2	0.8	0.2	30	0.1	2	0.3	0.1	0.1	0.01	0.2	0.1	0.7	0.2	10	0.2
Method Code	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2
B418737	33.20	< 5	30	6	15	< 2	< 0.01	< 2	< 0.8	0.6	< 30	58.2	< 2	< 0.3	< 0.1	< 0.1	4.52	210	< 0.1	2.7	< 0.2	< 10	< 0.2
B418738	18.67	< 5	10	12	4	< 2	< 0.01	< 2	< 0.8	0.3	< 30	40.7	< 2	< 0.3	< 0.1	< 0.1	0.38	28.1	< 0.1	2.8	< 0.2	< 10	< 0.2
B418739	15.15	< 5	20	469	9	< 2	2.40	< 2	44.7	19.4	170	108	12	1.8	1.1	0.9	6.67	18.2	2.6	2.1	0.4	< 10	< 0.2
B418740	9.55	47	40	1960	32	13	1.49	< 2	1120	6.8	100	246	309	9.0	2.7	10.9	4.73	16.9	19.1	5.7	1.3	10	2.8
B418741	18.88	< 5	< 10	6	< 3	< 2	< 0.01	< 2	< 0.8	0.4	< 30	19.5	< 2	< 0.3	< 0.1	< 0.1	0.38	27.7	< 0.1	2.1	< 0.2	< 10	< 0.2
B418742	15.55	< 5	10	13	< 3	< 2	0.02	< 2	0.9	0.4	30	15.8	< 2	0.3	< 0.1	< 0.1	0.94	29.5	0.3	2.0	< 0.2	< 10	< 0.2
B418743	16.15	< 5	10	11	8	4	0.42	< 2	4.2	0.5	30	12.4	2	5.2	2.4	< 0.1	2.11	31.5	2.8	2.8	0.9	< 10	< 0.2
B418744	32.87	< 5	40	3	15	< 2	< 0.01	< 2	< 0.8	0.3	< 30	161	< 2	0.4	0.1	< 0.1	3.55	209	0.2	2.5	< 0.2	< 10	0.3
B418745	15.10	< 5	20	13	3	4	0.05	< 2	1.0	0.3	< 30	42.8	2	0.3	0.1	< 0.1	0.48	23.4	0.3	2.8	< 0.2	< 10	< 0.2
B418746	13.00	< 5	20	10	< 3	< 2	0.10	< 2	2.3	0.4	30	9.9	10	1.1	0.6	< 0.1	1.23	38.3	1.0	1.4	0.2	< 10	< 0.2

Results

Activation Laboratories Ltd.

Report: A22-12631

Analyte Symbol	Al2O3	As	B	Ba	Be	Bi	CaO	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe2O3(T)	Ga	Gd	Ge	Ho	Hf	In
Unit Symbol	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	5	10	3	3	2	0.01	2	0.8	0.2	30	0.1	2	0.3	0.1	0.1	0.01	0.2	0.1	0.7	0.2	10	0.2
Method Code	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2
B418801	12.85	< 5	10	391	< 3	< 2	10.47	< 2	38.4	69.4	350	5.6	122	4.3	1.9	2.1	12.29	14.7	6.7	2.2	0.8	< 10	< 0.2

Analyte Symbol	K2O	La	Li	MgO	Mn	Mo	Nb	Nd	Ni	Pb	Pr	Rb	SiO2	Sb	Se	Si	Sm	Sn	Sr	Ta	Tb	Te	Th
Unit Symbol	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.4	15	0.01	3	1	2.4	0.4	10	0.8	0.1	0.4	0.01	2	8	0.01	0.1	0.5	3	0.2	0.1	6	0.1
Method Code	FUS- Na2O2	FUS- MS- Na2O2	FUS- Na2O2	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2
B418737	9.79	< 0.4	294	0.49	223	2	302.8	< 0.4	10	4.0	< 0.1	1680	45.09	< 2	10	21.1	< 0.1	434	12	50.7	< 0.1	< 6	0.1
B418738	11.87	< 0.4	< 15	0.01	34	4	< 2.4	< 0.4	10	26.0	< 0.1	1480	66.63	< 2	< 8	> 30.0	< 0.1	2.4	17	0.9	< 0.1	< 6	< 0.1
B418739	2.50	24.6	331	2.55	698	2	6.3	19.3	70	12.8	5.1	425	66.17	< 2	< 8	> 30.0	3.4	16.8	342	0.4	0.4	< 6	7.4
B418740	2.05	726	2350	0.90	398	11	1166.1	372	30	31.4	117	1190	77.19	11	26	> 30.0	47.4	635	288	13.2	2.5	< 6	95.8
B418741	11.78	< 0.4	< 15	< 0.01	40	3	< 2.4	< 0.4	< 10	38.2	< 0.1	1120	67.10	< 2	< 8	> 30.0	0.2	2.3	15	< 0.2	< 0.1	< 6	< 0.1
B418742	8.50	< 0.4	< 15	0.04	110	3	13.5	< 0.4	< 10	27.6	< 0.1	658	73.07	< 2	< 8	> 30.0	0.2	26.4	14	2.3	< 0.1	< 6	0.6
B418743	2.27	2.0	31	0.06	2280	3	6.8	1.7	< 10	15.7	0.6	189	71.49	4	< 8	> 30.0	1.4	6.3	20	2.5	0.8	< 6	5.2
B418744	9.47	< 0.4	520	0.39	169	3	285.7	< 0.4	< 10	10.6	< 0.1	1580	45.76	< 2	< 8	21.4	0.2	256	10	80.7	< 0.1	< 6	1.1
B418745	9.45	0.5	< 15	< 0.01	49	3	< 2.4	0.5	< 10	34.0	0.1	732	72.57	< 2	< 8	> 30.0	0.2	1.8	19	0.5	< 0.1	< 6	0.7
B418746	5.50	0.9	22	0.08	82	3	17.3	1.1	< 10	26.5	0.3	312	77.59	< 2	< 8	> 30.0	0.6	21.2	17	2.0	0.2	< 6	2.6

Results

Activation Laboratories Ltd.

Report: A22-12631

Analyte Symbol	K2O	La	Li	MgO	Mn	Mo	Nb	Nd	Ni	Pb	Pr	Rb	SiO2	Sb	Se	Si	Sr	Sn	Sr	Ta	Tb	Te	Th
Unit Symbol	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.4	15	0.01	3	1	2.4	0.4	10	0.8	0.1	0.4	0.01	2	8	0.01	0.1	0.5	3	0.2	0.1	6	0.1
Method Code	FUS- Na2O2	FUS- MS- Na2O2	FUS- Na2O2	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2
B418801	1.47	14.6	64	12.65	989	2	9.1	32.9	90	6.5	6.2	34.8	43.87	< 2	9	20.5	8.2	3.2	485	0.6	0.8	< 6	2.5

Analyte Symbol	TiO2	Ti	Tm	U	V	W	Y	Yb	Zn
Unit Symbol	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.1	0.1	0.1	5	0.7	0.1	0.1	30
Method Code	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2
[Redacted]									
B418737	0.06	7.8	< 0.1	0.2	74	18.2	0.2	< 0.1	160
B418738	< 0.01	9.0	< 0.1	0.1	< 5	2.7	0.1	0.1	< 30
B418739	0.57	2.8	0.2	12.8	111	1.4	11.1	0.9	110
B418740	0.81	10.9	0.3	15.4	67	6.9	28.1	1.7	140
B418741	< 0.01	7.1	< 0.1	0.8	< 5	1.0	0.7	< 0.1	< 30
B418742	< 0.01	3.5	< 0.1	0.9	< 5	2.5	1.2	0.1	< 30
B418743	< 0.01	1.1	0.4	2.8	< 5	1.6	32.0	2.7	50
B418744	0.05	6.6	< 0.1	0.9	6	24.1	1.7	0.2	140
B418745	< 0.01	4.6	< 0.1	0.8	< 5	2.5	1.4	0.1	< 30
B418746	< 0.01	1.6	< 0.1	3.0	< 5	3.8	6.7	0.5	30
[Redacted]									

Analyte Symbol	TiO2	Ti	Tm	U	V	W	Y	Yb	Zn
Unit Symbol	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.1	0.1	0.1	5	0.7	0.1	0.1	30
Method Code	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2
B418801	1.74	0.2	0.3	0.7	510	29.5	18.7	1.5	90

Analyte Symbol	Al2O3	As	B	Ba	Be	Bi	CaO	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe2O3(T)	Ga	Gd	Ge	Ho	Hf	In
Unit Symbol	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	5	10	3	3	2	0.01	2	0.8	0.2	30	0.1	2	0.3	0.1	0.1	0.01	0.2	0.1	0.7	0.2	10	0.2
Method Code	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2
PTM-1a Meas		2360								> 5000			> 10000										
PTM-1a Cert		2200								20500.00			249600.00										
NIST 696 Meas	54.06						< 0.01				320						8.59						
NIST 696 Cert	54.5						0.0180				321.0						8.70						
Oreas 74a (Fusion) Meas	2.18	56								579	1830		1250										
Oreas 74a (Fusion) Cert	2.21	50								581	1800.00		1240.00										
OREAS 101a (Fusion) Meas									1390	48.0			436	31.4	18.7	9.1			39.2			6.8	
OREAS 101a (Fusion) Cert									1400	48.8			434	33.3	19.5	8.06			43.4			6.46	
NCS DC86315 Meas	14.74						0.71										0.62						
NCS DC86315 Cert	14.58						0.71										0.68						
NCS DC86304 Meas	18.95						0.11					1740					0.29						
NCS DC86304 Cert	19.12						0.076					1680					0.301						
NCS DC86314 Meas	24.51						0.03					2910					0.26						
NCS DC86314 Cert	24.53						0.063					2830					0.30						
NCS DC86313 Meas						> 5000																	
NCS DC86313 Cert						10880																	
CZN-4 Meas		386						2640		96.7			4150										
CZN-4 Cert		356.0000						2604.0000		93.5			4030.0000										
Lithium Tetraborate FX-LT 100 lot#220610B Meas			> 10000																				
Lithium Tetraborate FX-LT 100 lot#220610B Cert			255700																				
OREAS 922 (Peroxide Fusion) Meas				490		13			83.6	21.8	120	7.8	2440	5.6	3.2	1.4		25.2	7.3		1.1	< 10	0.4
OREAS 922 (Peroxide Fusion) Cert				481		11			88.0	20.9	90	7.5	2220	5.75	3.38	1.52		21.2	6.94		1.20	5.93	0.3
OREAS 621 (Peroxide Fusion) Meas		87		2590	< 3	4		282	55.0	30.0	80	3.3	3760					26.8					1.8
OREAS 621 (Peroxide Fusion) Cert		85		2610	2	4		295	52.0	31.4	50	3.6	3680					26.5					1.9
CCU-1e Meas		1160						76		313			> 10000										
CCU-1e Cert		1010						74.2		301			229000										
OREAS 680 (Peroxide Fusion)		121		663		< 2		9	38.4	333	2190	4.1	9340	2.7	1.8	1.3		17.0	3.9		0.6		



Analyte Symbol	Al2O3	As	B	Ba	Be	Bi	CaO	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe2O3(T)	Ga	Gd	Ge	Ho	Hf	In	
Unit Symbol	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	
Lower Limit	0.01	5	10	3	3	2	0.01	2	0.8	0.2	30	0.1	2	0.3	0.1	0.1	0.01	0.2	0.1	0.7	0.2	10	0.2	
Method Code	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	
Meas																								
OREAS 680 (Peroxide Fusion) Cert		120			649		1.66		8.18	38.7	334	2140	3.94	9040	3.07	1.74	1.30		16.5	3.77		0.580		
OREAS 139 (Peroxide Fusion) Meas																								
OREAS 139 (Peroxide Fusion) Cert																								
OREAS 624 (Peroxide Fusion) Meas		131			1050		21		135	32.4	284		1.4	> 10000					25.0				4.3	
OREAS 624 (Peroxide Fusion) Cert		115			1070		21.3		133	32.9	273		1.32	30800					22.1				4.14	
OREAS 124 (Peroxide Fusion) Meas					1060	< 3			47.9		70			2.6	1.7	1.4		9.7	4.1		0.6	< 10		
OREAS 124 (Peroxide Fusion) Cert					1020	1.83			47.6		51.0			2.82	1.60	1.15		10.5	3.47		0.580	6.22		
AMIS 0346 (Peroxide Fusion) Meas																								
AMIS 0346 (Peroxide Fusion) Cert																								
NCS DC73520 Meas	5.23						18.04																	
NCS DC73520 Cert	5.20						18.13																	
OREAS 148 (Peroxide Fusion) Meas						43																		
OREAS 148 (Peroxide Fusion) Cert						39																		
B418741 Orig	18.68	< 5	< 10		6	3	< 2	< 0.01	< 2	< 0.8	0.4	30	19.6	< 2	< 0.3	< 0.1	< 0.1	0.38	26.5	0.1	2.1	< 0.2	< 10	< 0.2
B418741 Dup	19.09	< 5	10		6	< 3	< 2	0.07	< 2	< 0.8	0.3	< 30	19.5	< 2	< 0.3	< 0.1	< 0.1	0.38	29.0	< 0.1	2.2	< 0.2	< 10	< 0.2

Analyte Symbol	Al2O3	As	B	Ba	Be	Bi	CaO	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe2O3(T)	Ga	Gd	Ge	Ho	Hf	In
Unit Symbol	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	5	10	3	3	2	0.01	2	0.8	0.2	30	0.1	2	0.3	0.1	0.1	0.01	0.2	0.1	0.7	0.2	10	0.2
Method Code	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2
Method Blank	< 0.01						< 0.01										< 0.01						
Method Blank	< 0.01						< 0.01										< 0.01						
Method Blank	< 0.01	< 5	< 10	< 3	< 3	< 2	< 0.01	< 2	< 0.8	< 0.2	< 30	< 0.1	< 2	< 0.3	< 0.1	< 0.1	< 0.01	< 0.2	0.1	< 0.7	< 0.2	< 10	< 0.2
Method Blank		< 5	< 10	< 3	< 3	< 2		< 2	< 0.8	< 0.2	< 30	< 0.1	< 2	< 0.3	< 0.1	< 0.1		< 0.2	< 0.1	< 0.7	< 0.2	< 10	< 0.2
Method Blank	< 0.01	< 5	< 10	< 3	< 3	< 2	0.06	< 2	< 0.8	< 0.2	< 30	< 0.1	< 2	< 0.3	< 0.1	< 0.1	< 0.01	0.5	< 0.1	< 0.7	< 0.2	< 10	< 0.2
Method Blank		< 5	10	< 3	< 3	< 2		< 2	< 0.8	< 0.2	< 30	0.1	< 2	< 0.3	< 0.1	< 0.1		0.5	< 0.1	< 0.7	< 0.2	< 10	< 0.2
Method Blank	< 0.01						< 0.01										< 0.01						
Method Blank	< 0.01	< 5	< 10	< 3	< 3	< 2	< 0.01	< 2	< 0.8	< 0.2	< 30	0.2	< 2	< 0.3	< 0.1	< 0.1	< 0.01	< 0.2	< 0.1	< 0.7	< 0.2	< 10	< 0.2

Analyte Symbol	K2O	La	Li	MgO	Mn	Mo	Nb	Nd	Ni	Pb	Pr	Rb	SiO2	Sb	Se	Si	Sm	Sn	Sr	Ta	Tb	Te	Th
Unit Symbol	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.4	15	0.01	3	1	2.4	0.4	10	0.8	0.1	0.4	0.01	2	8	0.01	0.1	0.5	3	0.2	0.1	6	0.1
Method Code	FUS- Na2O2	FUS- MS- Na2O2	FUS- Na2O2	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2
PTM-1a Meas									> 10000														
PTM-1a Cert									474400														
NIST 696 Meas	0.02			0.01									3.75										
NIST 696 Cert	0.00900			0.0120									3.79										
Oreas 74a (Fusion) Meas				28.38					> 10000				32.14			15.0							
Oreas 74a (Fusion) Cert				27.9					32400.				32.4			15.14							
OREAS 101a (Fusion) Meas		830			945	21		399			129						50.4				6.0		36.8
OREAS 101a (Fusion) Cert		816			964	22		403			134						48.8				5.92		36.6
NCS DC86315 Meas	4.07			0.09									73.05										
NCS DC86315 Cert	4.11			0.093									72.34										
NCS DC86304 Meas	4.98		> 10000	0.03								> 5000	64.95					110					
NCS DC86304 Cert	4.80		10600.	0.036								6730	64.64					97.1					
NCS DC86314 Meas	7.69		> 10000	0.02								> 5000	54.24					149					
NCS DC86314 Cert	7.75		18100.	0.027								11400	53.92					152					
NCS DC86313 Meas																							
NCS DC86313 Cert																							
CZN-4 Meas										1760						98	0.28						
CZN-4 Cert										1861.0						86.7	0.295						
Lithium Tetraborate FX-LT 100 lot#220610B Meas			> 10000																				
Lithium Tetraborate FX-LT 100 lot#220610B Cert			82100																				
OREAS 922 (Peroxide Fusion) Meas		47.6	32		892		16.2	39.8	50	73.7	10.2	169				> 30.0	7.2	13.0	66	1.8	0.9		17.5
OREAS 922 (Peroxide Fusion) Cert		45.6	29		880		15.2	38.9	40	64.0	10.6	167				30.51	7.31	10.0	58.0	1.3	1.02		17.7
OREAS 621 (Peroxide Fusion) Meas		28.8			551	18	10.3	23.5		> 5000	6.3	87.5		138		28.4			108				8.8
OREAS 621 (Peroxide Fusion) Cert		26.1			554	14	10.4	24.2		13300	6.64	89.0		146		28.1			101				8.6
CCU-1e Meas					98					> 5000			3.19	110									57
CCU-1e Cert					96.0					7030			3.13	104									61.8
OREAS 680 (Peroxide Fusion) Meas		18.5	< 15		1240		5.9	19.9	> 10000	2490	5.0	75.9		19		20.1	4.5		410		0.6		6.4

Analyte Symbol	K2O	La	Li	MgO	Mn	Mo	Nb	Nd	Ni	Pb	Pr	Rb	SiO2	Sb	Se	Si	Sm	Sn	Sr	Ta	Tb	Te	Th
Unit Symbol	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.4	15	0.01	3	1	2.4	0.4	10	0.8	0.1	0.4	0.01	2	8	0.01	0.1	0.5	3	0.2	0.1	6	0.1
Method Code	FUS- Na2O2	FUS- MS- Na2O2	FUS- Na2O2	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2
OREAS 680 (Peroxide Fusion) Cert		18.6	14.5		1240		5.09	20.8	21500	2580	4.99	76.0		19.7		20.6	4.26		420		0.550		6.73
OREAS 139 (Peroxide Fusion) Meas			42													16.5							
OREAS 139 (Peroxide Fusion) Cert			40.4													16.34							
OREAS 624 (Peroxide Fusion) Meas		17.9	< 15		672	18	6.0	16.3		> 5000	3.7	36.9		70		19.8			51				4.3
OREAS 624 (Peroxide Fusion) Cert		17.3	10.3		660	17.8	5.78	16.8		6120	4.27	33.0		72.0		20.5			47.6				4.12
OREAS 124 (Peroxide Fusion) Meas		21.6			676			21.4			5.7	83.4				> 30.0	4.2				0.5		5.7
OREAS 124 (Peroxide Fusion) Cert		21.6			700			20.8			5.39	86.0				38.2	4.21				0.480		5.74
AMIS 0346 (Peroxide Fusion) Meas																							
AMIS 0346 (Peroxide Fusion) Cert																							
NCS DC73520 Meas	0.70			4.34									59.28										
NCS DC73520 Cert	0.66			4.37									57.47										
OREAS 148 (Peroxide Fusion) Meas			4680													> 30.0							
OREAS 148 (Peroxide Fusion) Cert			4760													36.0							
B418741 Orig	11.56	< 0.4	< 15	0.01	39	3	< 2.4	< 0.4	< 10	39.0	< 0.1	1110	66.35	< 2	12	> 30.0	0.2	2.7	14	< 0.2	< 0.1	< 6	< 0.1
B418741 Dup	12.01	0.4	< 15	< 0.01	41	3	< 2.4	< 0.4	< 10	37.4	< 0.1	1120	67.86	< 2	< 8	> 30.0	0.2	1.9	16	0.5	< 0.1	< 6	< 0.1

Analyte Symbol	K2O	La	Li	MgO	Mn	Mo	Nb	Nd	Ni	Pb	Pr	Rb	SiO2	Sb	Se	Si	Sr	Sn	Sr	Ta	Tb	Te	Th
Unit Symbol	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.4	15	0.01	3	1	2.4	0.4	10	0.8	0.1	0.4	0.01	2	8	0.01	0.1	0.5	3	0.2	0.1	6	0.1
Method Code	FUS- Na2O2	FUS- MS- Na2O2	FUS- Na2O2	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2
Method Blank	< 0.01	< 0.4	< 15	< 0.01	< 3	3	< 2.4	< 0.4	< 10	6.4	< 0.1	0.6	< 0.01	< 2	< 8	< 0.01	< 0.1	< 0.5	10	0.8	< 0.1	< 6	< 0.1
Method Blank		< 0.4			< 3	3	< 2.4	< 0.4	< 10	5.3	< 0.1	0.7		< 2	< 8		< 0.1	< 0.5	10	0.6	< 0.1	< 6	< 0.1
Method Blank	< 0.01	< 0.4	< 15	< 0.01	< 3	6	< 2.4	< 0.4	< 10	6.1	< 0.1	0.5	< 0.01	< 2	< 8	< 0.01	< 0.1	4.5	11	0.5	< 0.1	< 6	< 0.1
Method Blank		< 0.4			< 3	4	< 2.4	< 0.4	< 10	6.2	< 0.1	0.7		< 2	< 8		< 0.1	< 0.5	12	0.3	< 0.1	< 6	< 0.1
Method Blank	0.02		< 15	< 0.01									0.04			0.02							
Method Blank	< 0.01	< 0.4	< 15	< 0.01	< 3	4	< 2.4	< 0.4	< 10	7.8	< 0.1	0.6	< 0.01	< 2	< 8	< 0.01	< 0.1	3.9	10	1.1	< 0.1	< 6	< 0.1

Analyte Symbol	TiO2	Ti	Tm	U	V	W	Y	Yb	Zn
Unit Symbol	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.1	0.1	0.1	5	0.7	0.1	0.1	30
Method Code	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2
PTM-1a Meas									
PTM-1a Cert									
NIST 696 Meas	2.57					383			
NIST 696 Cert	2.64					403.00 00			
Oreas 74a (Fusion) Meas									
Oreas 74a (Fusion) Cert									
OREAS 101a (Fusion) Meas			2.8	421	83		175	16.5	
OREAS 101a (Fusion) Cert			2.90	422	83		183	17.5	
NCS DC86315 Meas	0.04								
NCS DC86315 Cert	0.039								
NCS DC86304 Meas	0.02						44.7		
NCS DC86304 Cert	0.028						43.7		
NCS DC86314 Meas	0.03						74.2		
NCS DC86314 Cert	0.029						79.0		
NCS DC86313 Meas									
NCS DC86313 Cert									
CZN-4 Meas									> 10000
CZN-4 Cert									550700 .00
Lithium Tetraborate FX-LT 100 lot#220610B Meas									
Lithium Tetraborate FX-LT 100 lot#220610B Cert									
OREAS 922 (Peroxide Fusion) Meas		0.8	0.6	3.5	100		31.9	3.1	330
OREAS 922 (Peroxide Fusion) Cert		0.9	0.510	3.6	92.0		31.1	3.17	280
OREAS 621 (Peroxide Fusion) Meas		1.9		2.8	39	3.7	12.7	1.1	> 10000
OREAS 621 (Peroxide Fusion) Cert		2.0		3.0	36.3	2.6	13.9	1.03	52200
CCU-1e Meas		2.4							> 10000
CCU-1e Cert		2.69							30200
OREAS 680 (Peroxide Fusion) Meas				1.6	239		15.6	1.6	2300

Analyte Symbol	TiO2	Ti	Tm	U	V	W	Y	Yb	Zn
Unit Symbol	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.1	0.1	0.1	5	0.7	0.1	0.1	30
Method Code	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2
OREAS 680 (Peroxide Fusion) Cert				1.55	224		16.2	1.52	2320
OREAS 139 (Peroxide Fusion) Meas									
OREAS 139 (Peroxide Fusion) Cert									
OREAS 624 (Peroxide Fusion) Meas		1.0		1.3	35	5.2	16.2	2.1	> 10000
OREAS 624 (Peroxide Fusion) Cert		0.940		1.34	43.3	4.58	17.3	1.94	24100
OREAS 124 (Peroxide Fusion) Meas			0.2	1850	25		14.3	1.7	
OREAS 124 (Peroxide Fusion) Cert			0.220	1790	23.3		14.2	1.63	
AMIS 0346 (Peroxide Fusion) Meas					2890				
AMIS 0346 (Peroxide Fusion) Cert					2700				
NCS DC73520 Meas									
NCS DC73520 Cert									
OREAS 148 (Peroxide Fusion) Meas									
OREAS 148 (Peroxide Fusion) Cert									
B418741 Orig	< 0.01	7.1	< 0.1	0.8	< 5	0.7	0.8	0.1	< 30
B418741 Dup	< 0.01	7.2	< 0.1	0.8	< 5	1.3	0.7	< 0.1	< 30

Analyte Symbol	TiO2	Ti	Tm	U	V	W	Y	Yb	Zn
Unit Symbol	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.1	0.1	0.1	5	0.7	0.1	0.1	30
Method Code	FUS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2	FUS- MS- Na2O2
Method Blank	< 0.01								
Method Blank	< 0.01								
Method Blank	< 0.01	< 0.1	< 0.1	< 0.1	< 5	1.5	< 0.1	< 0.1	< 30
Method Blank		< 0.1	< 0.1	< 0.1	< 5	1.2	< 0.1	< 0.1	< 30
Method Blank	< 0.01	< 0.1	< 0.1	0.2	< 5	1.5	< 0.1	< 0.1	< 30
Method Blank		< 0.1	< 0.1	0.1	< 5	1.0	< 0.1	< 0.1	< 30
Method Blank	< 0.01								
Method Blank	< 0.01	< 0.1	< 0.1	< 0.1	< 5	0.8	< 0.1	< 0.1	< 30