RECEIVED
JUN - 2 2011
MINING RECORDER
WATSON LAKE, YT
Government of Yukon

Geological Report

on the

Ting Claims (1-28)

at

the Ting REE Property
(NTS Mapsheets 095C/12)
Yukon Territory

Property Centroid:	341468 / 6715044	zone 10
Camp Location:	342205 / 6715960	

from

July 14, 2010 to July 21, 2010

for

Harsbo Minerals Ltd.

095355

by

Allison Aurora Brand, M.Sc.

Mackevoy Geosciences Ltd.

May 31, 2011

Watson Lake
Mining District

TABLE OF CONTENTS

Costs associated with this report have been approved in the amount of $ 14,000.00 for assessment credit under Certificate of Work No. QL26594

Mining Recorder
Watson Lake Mining District

List of Figures

List of Tables

1. Introduction

The Ting Property (NTS mapsheet 095C/12; UTM Zone 10 341468 / 6715044) is located in the Watson Lake Mining District of southern Yukon, northeast of the Toobally Lakes area. It consists of 28 contiguous mineral claims, with an additional 28 claims under the same name added later in 2010. The Ting claims, also known as the Ting property, were staked to cover an alkaline intrusive unit known as the Ting Intrusion with work in 2010 to assess its rare earth element potential. The Ting project is focused on REE mineralization that has been described as occurring in multi-phase syenite intrusions forming an alkaline complex in metasediments. Exploration and academic studies in the late 1970's and early 1980's were focused on base-metal exploration on the property, which was never drill-tested. Rare earth minerals such as rinkite and eudialyte were discovered by C. Harrison of St. Joseph Exploration during this stage of exploration. This rare earth element mineralogy was described in his subsequent M.Sc. (1982) thesis work, were he identified the rocks as agpaites.

The fieldwork of 2010 was undertaken by Mackevoy Geosciences Ltd. for Harsbo Minerals Ltd. to re-evaluate Ting for its REE potential. Field work was conducted by a 2 person crew from July 15 to July 20 (6 days, 12 person-days). The program was led by A. Brand (M.Sc.) and L.Groat (Ph.D.) provided research support without pay, Logistical support was provided by D. Turner, (M.Sc., P.Geo.), B. Quist (B.Sc.) and M. Burns (B.Sc.).

Results from this fieldwork are promising with highly favourable geology and anomalous assays for REEs (to 0.16 wt.% Rare Earth + Yttrium Oxides) with high HREO/TREO ratios (to 15.05 %). The presence of rare earth element mineralization was confirmed. Additional exploration and assessment of the REE mineralization is recommended. Fieldwork should comprise systematic sampling of the main intrusion and surrounding hornfelsed host rocks as well as a sill nearby. Parallel academic studies are also advised due to the specialized and complex nature of the mineralization observed.

2. Location and Accessibility

The project is located in southeast Yukon Territory (60 km from the B.C. border, see Fig. 1), and lies south of the Logan Mountains on the Liard Plateau (Douglas 1972). It is accessible via helicopter from Watson Lake airport (170 km to Ting), the Alaska Highway (gravel pit ~90 km from Watson Lake by truck, 105 km to Ting by air), or from the Smith River airstrip (65 km to Ting), which is itself accessed via a road extending off the Alaska Highway. Just to the south of the Ting claims are two claim blocks: the Trani (6 km southwest, owned by Archer, Cathro, and Associates, Ltd. staked in 2006) and the Banditos claims (18 km southeast, owned by True North Gems Inc., discovered in 2004). A Minfile occurrence is noted for the Ting (095C 053) at 60° 31' 58" N / 125° 53' 1" W, which falls in the Jackpine Lake NTS mapsheet (95C/12). The core twenty-eight claims were staked by Allison Brand in June 2010 (see Fig. 2, Table 1).

The Ting property physiography is described by J.C. Harrison in his 1982 M.Sc. thesis (University of Toronto) on the Ting Creek intrusive:

"The area…is characterized by rolling spruce forested hills, deeply incised valleys, and a few bare knobs above the 1200 metre tree line. Most of the hills underlain by intrusive were burnt over in the last ten years…But, blowdown, slash, immature pine, and high brush is typical of older brush areas. Streams in the…drainage basin are rapid and boulder choked…outcrop is common on ridgecrests and along steep valley walls. Talus slopes and cliffs are present in several areas."

A recent visit to the property for staking purposes indicates there are no recent fires since the thesis was written and undergrowth is common in the old burn areas (see Fig. 3). Lower areas are quite swampy and limit helicopter access points; clearing of pads is recommended for ground work. Total relief is 300 m and local cliff relief is 100-200 m.

Fig. 1. Ting Claims Location Map.

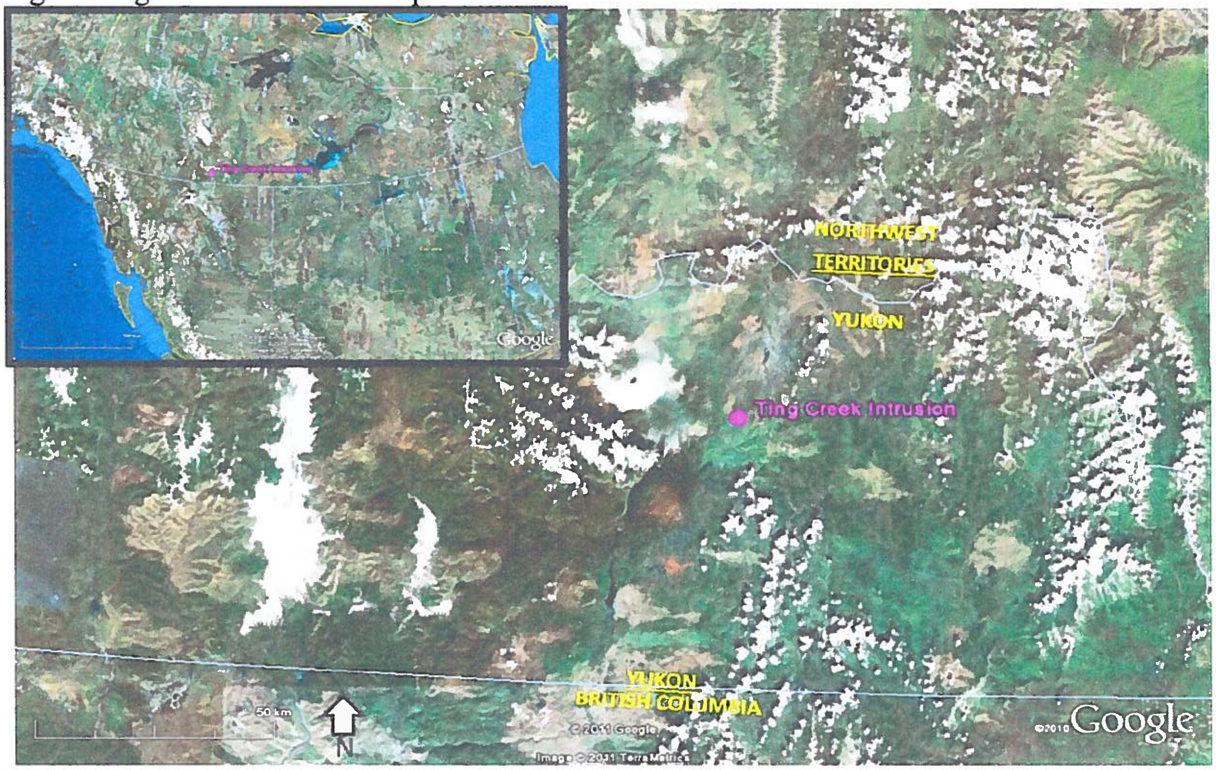


Fig. 2. Ting Property Claim Map.

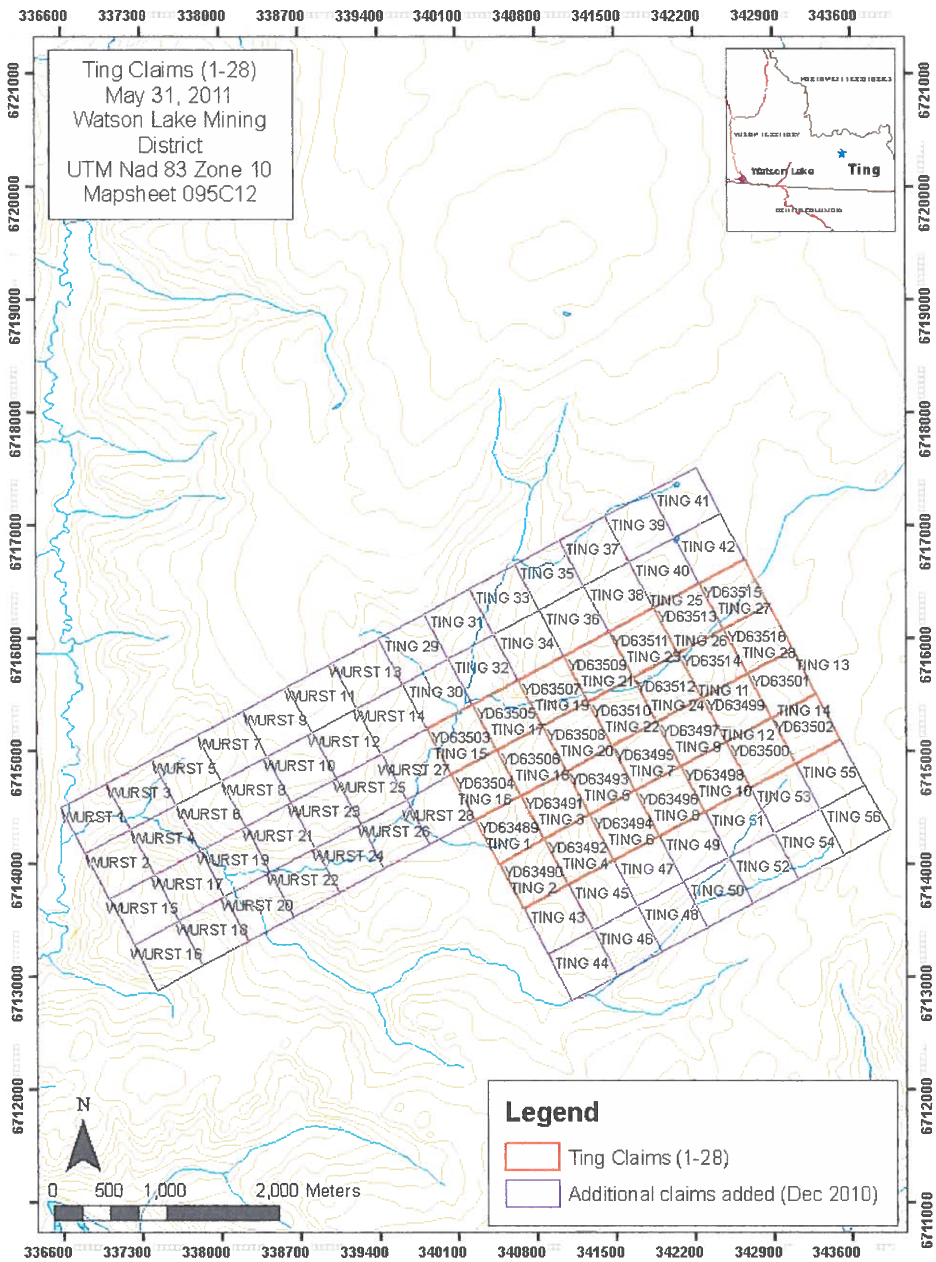


Fig. 3. Photo of Ting Creek and cliffs (looking East) on the Ting Claims.

Table 1. Claim information of core Ting claim block held by Harsbo Minerals.

Claim Name	Grant Number	Post 1		Post 2	
		Easting	Northing	Easting	Northing
TING 1	YD63489	340475	6713949	340879	6714165
TING 2	YD63490	340475	6713949	340879	6714165
TING 3	YD63491	340879	6714165	341283	6714380
TING 4	YD63492	340879	6714165	341283	6714380
TING 5	YD63493	341283	6714380	341687	6714596
TING 6	YD63494	341283	6714380	341687	6714596
TING 7	YD63495	341687	6714596	342091	6714812
TING 8	YD63496	341687	6714596	342091	6714812
TING 9	YD63497	342091	6714812	342495	6715028
TING 10	YD63498	342091	6714812	342495	6715028
TING 11	YD63499	342495	6715028	342899	6715244
TING 12	YD63500	342495	6715028	342899	6715244
TING 13	YD63501	342899	6715244	343304	6715460
TING 14	YD63502	342899	6715244	343304	6715460
TING 15	YD63503	340043	6714757	340447	6714973
TING 16	YD63504	340043	6714757	340447	6714973
TING 17	YD63505	340447	6714973	340851	6715189
TING 18	YD63506	340447	6714973	340851	6715189
TING 19	YD63507	340851	6715189	341255	6715404
TING 20	YD63508	340851	6715189	341255	6715404
TING 21	YD63509	341255	6715404	341661	6715616
TING 22	YD63510	341255	6715404	341661	6715616
TING 23	YD63511	341661	6715616	342065	6715832
TING 24	YD63512	341661	6715616	342065	6715832
TING 25	YD63513	342065	6715832	342469	6716048
TING 26	YD63514	342065	6715832	342469	6716048
TING 27	YD63515	342469	6716048	342873	6716264
TING 28	YD63516	342469	6716048	342873	6716264

*Data from Mining Recorder Website, May 20, 2011.

3. Property History

Preliminary examination of the Ting Creek alkaline intrusion was conducted by the Geological Survey of Canada (GSC) in 1945, 1957, and 1972. This resulted in a 1:250,000 scale geological map classified as Map 1380A, LaBiche River (Harrison, 1979, 1980).

Mineralization at Ting was discovered in June 1977 by J.C. Harrison, while he was working for St. Joseph Explorations Ltd. The original Ting claims were first staked in July 1978 by St Joseph on the basis of its base metal potential, and the company conducted three weeks of mapping, geochemistry (246 samples) and radiometric surveys in 1978 (which identified boundaries between intrusive units and sedimentary host rocks). This was followed by horizontal loop electromagnetic (HLEM), VLF Electromagnetic, proton magnetometer and induced polarization surveys (IP), as well as additional geochemistry surveys (123 samples) in 1979. Due to recorded anomalies in the scintillometer surveys, contacts between the early syenite/foyaite and the tinguaite/other dykes were determined (Harrison, 1979). The results of the surveys also found a 2.5 by 65 meter vein (located on L.97/100 + 75E) containing sulphate and phosphate minerals in the extreme northwest corner of the intrusion (Harrison, 1980). Geophysical surveys indicated that the western part of the intrusion has prominent graphitic shale units underlying it and alongside it (Harrison, 1980).

St Joseph changed its name to Sulpetro Minerals Ltd. in 1981. Several assessment reports (#090481 by J.C. Harrison, #090640 by J.C. Harrison) were submitted in 1978/79 and 1979/80 by St. Joseph, as well as a summary of field work activities in the Yukon Geology and Exploration report (p.131, 1979-80) and in a Mineral Industry report (p. 50, 1979). J.C. Harrison would go on to complete his M.Sc. thesis on the Ting (see below).

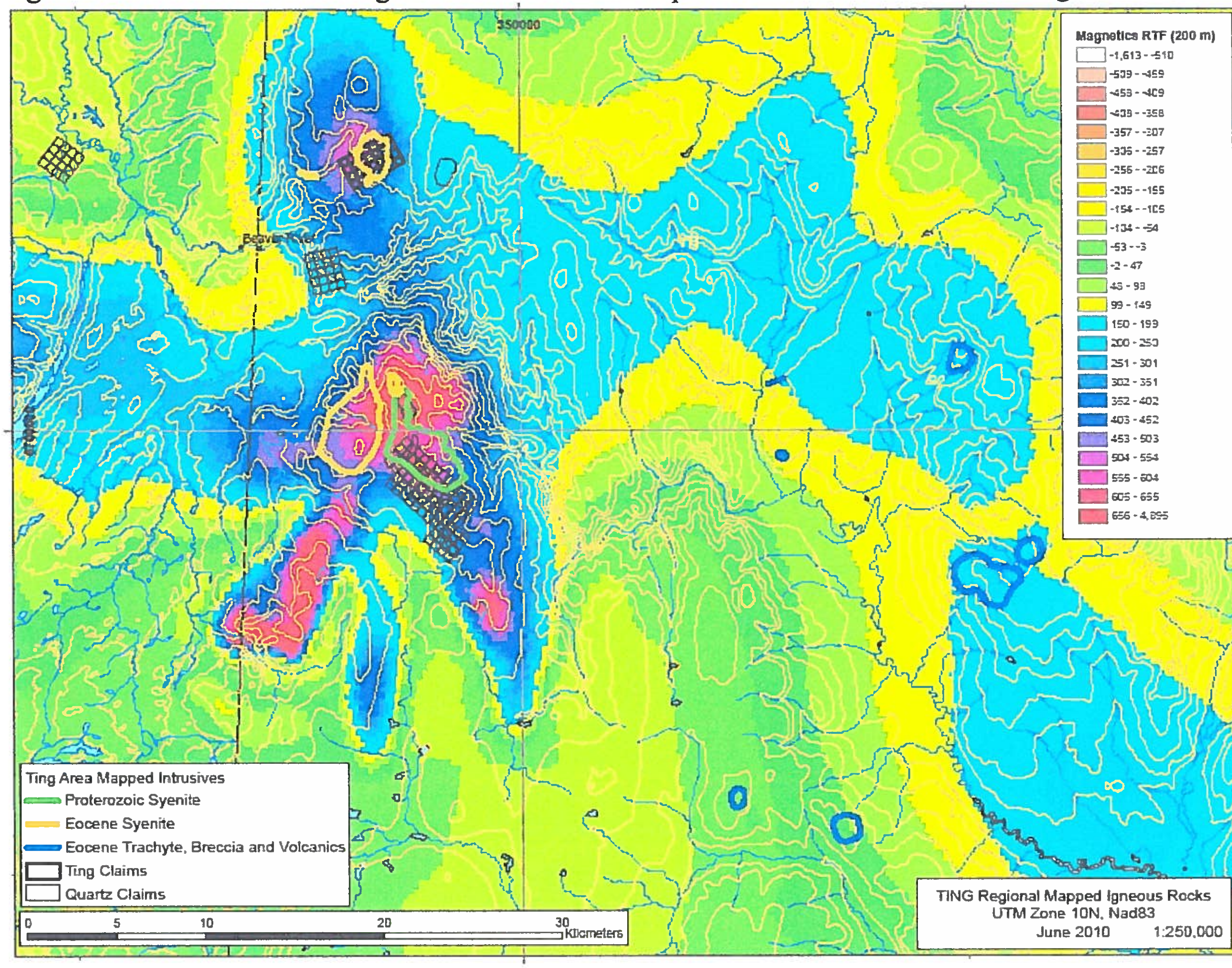
It was restaked as the 'Dia' claims 1-6 in October 1993 by A. Harmon. Since then the claims lapsed and the area was restaked by Allison Brand in early June 2010 (Ting 1-28; YD63489 through YD63516, see Table 1).

The most extensive geological research was an unpublished Master of Science (M.Sc.) thesis in the early 1980's (Harrison, 1982), which identified the rocks as agpaites. Detailed mapping, sampling, geochemical assaying and mineral chemistry (pyroxene) were completed on samples from the vicinity of the modern Ting 1-28 claims as part of the thesis. No mineral chemistry was conducted on potentially REE-bearing minerals, and no REE's were analyzed in the geochemical assaying. The other 'trachyte' plugs immediately to the south are unstaked and have no obvious work history associated with them. Subsequent to 1982, all of the samples Harrison used in his thesis were lost.

Harrison (1982) provided more detail about the Ting Creek intrusion through detailed mapping, petrography, and whole rock geochemistry of seventy-five samples. Geological mapping revealed the regional stratigraphy of the area plus the unique ring-shaped structure of the intrusion (Harrison, 1982). Petrography, whole rock and pyroxene chemistry of the samples showed that the Ting Creek intrusion is made up of five separate magmatic suites and each of the suites was injected as a distinct magmatic event, through one feeder pipe, with the order of emplacement being phonolite igneous breccias → quartz syenite →titanite nepheline syenite →leucocratic nepheline syenite and tinguaite → foyaite and tinguaite →segregation veins→ tuff breccias (Harrison, 1982). Based on these five magmatic suites, and nine phases of igneous activity and mineral assemblages, Harrison (1982) distinguished 23 mappable units.

No government Regional Geochemical Survey (RGS) data exists for the NTS mapsheet 095C. Regional airborne magnetic data were released in 1999 (GSC OF3199). Fig. 4 shows the total residual field of regional magnetic data that shows the pronounced and roughly circular anomalies of the Eocene intrusives. Some of these anomalies represent known outcrop of Eocene igneous rocks at surface while others have not been explored. Several intrusive bodies have been mapped in the area, but so far no geochemical data has been released to group them with either Eocene alkaline rocks or Cretaceous granitic rocks.

Fig. 4. Total residual field magnetics for the 095C map sheet in detail around the Ting.



4. Regional Geology

Several regions in the vicinity of the 95C NTS mapsheet have been recently mapped by Yukon Geological Survey, notably the Pool Creek area (Allen and Pigage 2000). A stratigraphic summary of this region was also completed in 2006 by the same group of geologists (Pigage 2006). This area (95C/5) lies just to the south of the Ting property. The current geological map in use is the Geological Survey of Canada's open file 5018, for the NTS sheet 095C, however a new mapsheet for this area was completed for 2011 [Pigage, L., Abbott, G., Roots, C., 2011. Coal River (NTS 95D): A New Bedrock Geology Map in southwest Yukon; YGS Open File 2011-1]. Figure 5 shows part of the former map; the Ting claims are situated in the stratigraphic unit 'Esy' near the center of Figure 6 (detail), and is marked by crossed hammers labeled '053' (referring to the Minfile occurrence).

The most significant regional information pertaining to the Ting property is the existence of a set of alkalic intrusives thought to be part of the Laramide tectono-thermal event, defined to have occurred between 75 and 35 Ma (Douglas 1977). The Laramide orogeny was also the apex of tectonic activity in the Rocky Mountains (a period of imbricate thrust faulting and concentric flexural slip folding). The Ting Creek intrusion was dated by Harrison (1982) at 53.1 +/-1.8 m.y, via K-Ar dating of biotite separates from one of the nine intrusive phases he identified, specifically a "rinkolite foyaite" (other intrusions in the area are inferred to be of similar age but have not been dated). The Ting Creek intrusion and others in the vicinity such as the "Brush Creek" tinguaite sheet and the Pool Creek syenite, are thought to be part this generation of alkalic igneous rocks in the Cordillera, which include the Copeland Mountain nepheline syenite in the Shushwap metamorphic complex (regionally associated with carbonatite and carbonatite gneiss; Currie 1976), the Perry River gneisses, the Goosly Lake stocks, the Marron Formation, and the Coryell Intrusions south of Penticton. They are characterized as mafic to intermediate in composition, mildly to moderately alkalic, and miaskitic (meaning the alkali/alumina ratio is < 1, whereas agpaitic refers to rocks with a ratio >1; both rock types have a characteristic elemental signature). All of these intrusions are located within the Intermontane Belt, but occur east of the main zone of calc-alkaline volcanic and plutonic activity.

Fig. 5. Excerpts from the regional maps combined (GSC and YGS).

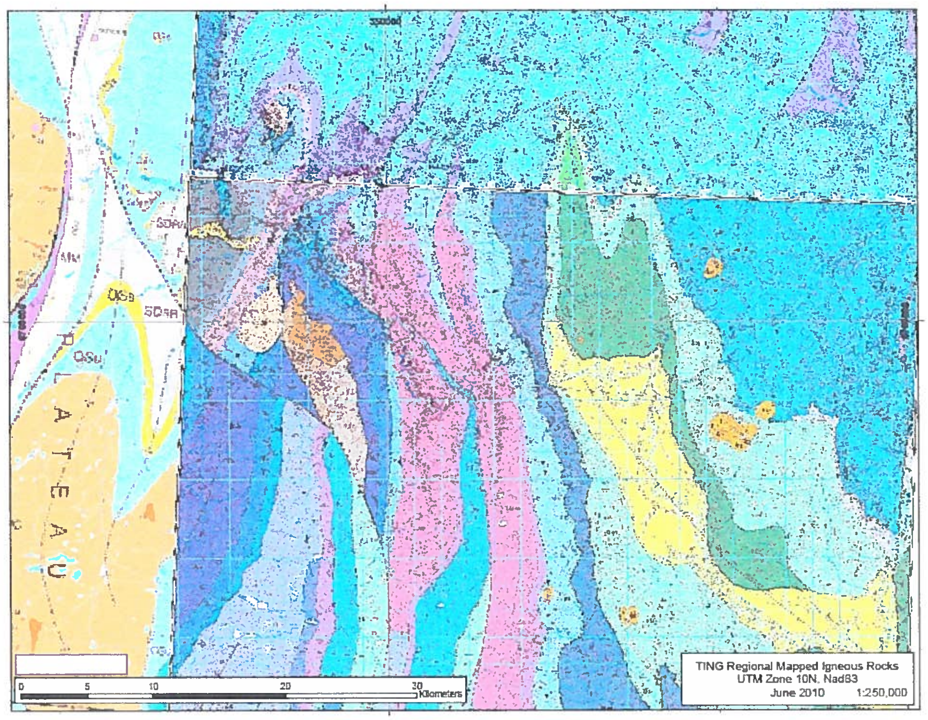
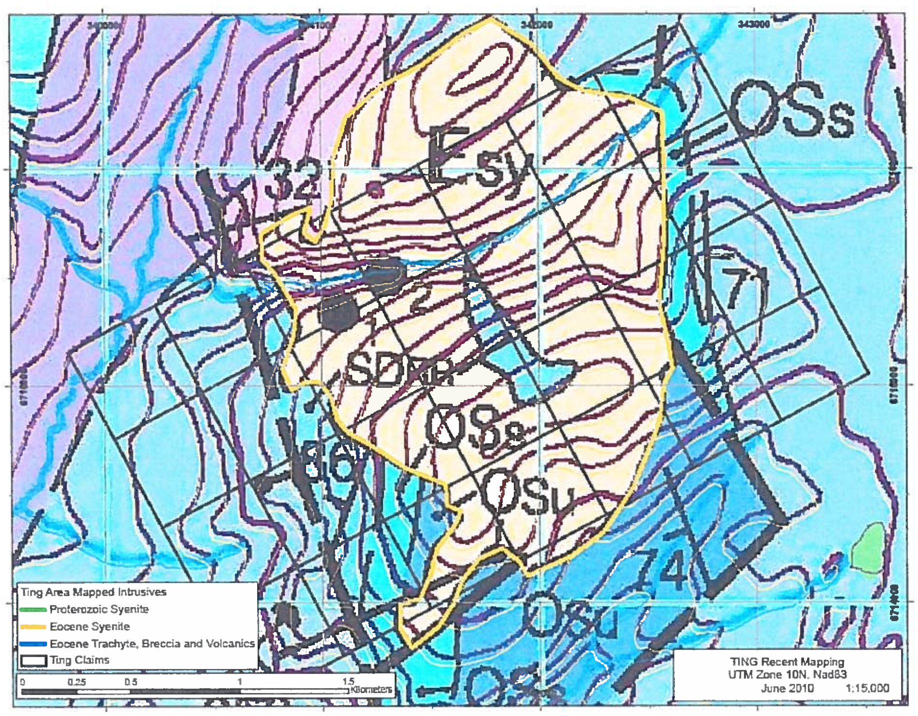


Fig. 6. An excerpt (zoomed) from the regional geology; GSC OF 5018 - NTS mapsheet 95C. The mining symbol with '053' represents the Minfile occurrence; Esy refers to the Ting Creek intrusion.



While the distal association of alkalic volcanism to an active volcanic arc and zone of subduction is long recognized in, for example Japan and the Peruvian Andes, it appears the Ting Creek Intrusion and other alkalic intrusions in the area are well outside and east of the Laramide volcanic arc.

The Ting Creek intrusion and the Pool Creek syenite both appear to have been emplaced along what was the northern edge of the carbonate platform (consisting of the Mattson Formation shales, Sunblood Formation carbonates and dolomites, and the Road River calico-turbidites and mudstones), which may also be the southern limit of the Selwyn basin as it existed in the Middle to late Ordivician. It is possible that this was an active tectonic hinge zone that may have coincided with an area of repeated dip slip faulting. Several fault sets have been distinguished in the area; a north-trending set parallel to fold axes likely related to steep, east and west dipping Laramide thrusts; and a second set which strikes northeast and dips southeast. The most significant expression of this set is the Beaver River fault (minor faults sharing this attitude have been mapped in the vicinity of the Ting plug).

5. Property Geology

The Ting Creek intrusion and current surrounding claim area was mapped in detail by J. Christopher Harrison for his M.Sc. thesis at the University of Toronto in 1982 (see Figs. 7, 8, and 9). He identified five magmatic suites through geochemistry and pyroxene mineral chemistry, as well as detailed mapping; nine distinct alkaline intrusive phases were defined (see Fig. 10). The later phases have been described as being 'agpaitic', a term which is described below in reference to its economic potential. Injection of the alkaline igneous phases is influenced by existing stratigraphic and fault relationships, and some phases resemble conical dikes and sills. Petrologically, these rocks follow a fairly typical alkaline complex evolutionary trend, beginning with quartz or sphene-nepheline syenites and associated breccias, to leucocratic nepheline syenite, to foyaites, tinguaites, and 'segregation veins', followed by a final breccia phase. The intrusive complex itself is locally intruding both the Middle Ordovician Sunblood Formation (carbonates and dolomites) and the Devono-Mississippian Road River Formation (calico-turbidites and mudstones). Locally, the sedimentary rocks lie in an upright anticline (north striking) with faulted (along strike) southwest and northeast limbs; this creates a horst oriented on the anticlinal axis. The cartoon in Harrison (1982) depicting the injection of the various phases indicates this structure influenced the emplacement geometry of some of the igneous phases (see Fig. 11). The K-Ar age of the Ting Creek intrusion has been reported as 53.1 Ma (Harrison, 1982), and 54.1 ± 9 Ma, 53.0 ± 1.8 Ma, and 52.4 ± 1.8 Ma (Stevens *et al.,* 1982). In the Yukon Minfile report, it is noted that galena, sphalerite and molybdenum occur in veins that are associated with radioactive zones in the contact zone of an intrusion. The pluton is a zoned, cone-shaped, highly fractured, syenite body of Tertiary age which intrudes Paleozoic shale and carbonate rocks. Both intrusive and extrusive phases are present. The main zone is 2.5 m wide and 65 m long in brecciated sandstone and is strongly oxidized. A chip sample assayed 4.6% Pb, 0.3% Zn and 65.7 g/t Ag. There is no mention of REE mineralization in the Minfile report, likely because this property was staked only for its base metal potential, and the only commodities listed are Pb, Ag, Zn, Th, Mo, and U.

Fig. 7. Geological map (detailed) from Harrison (1982).

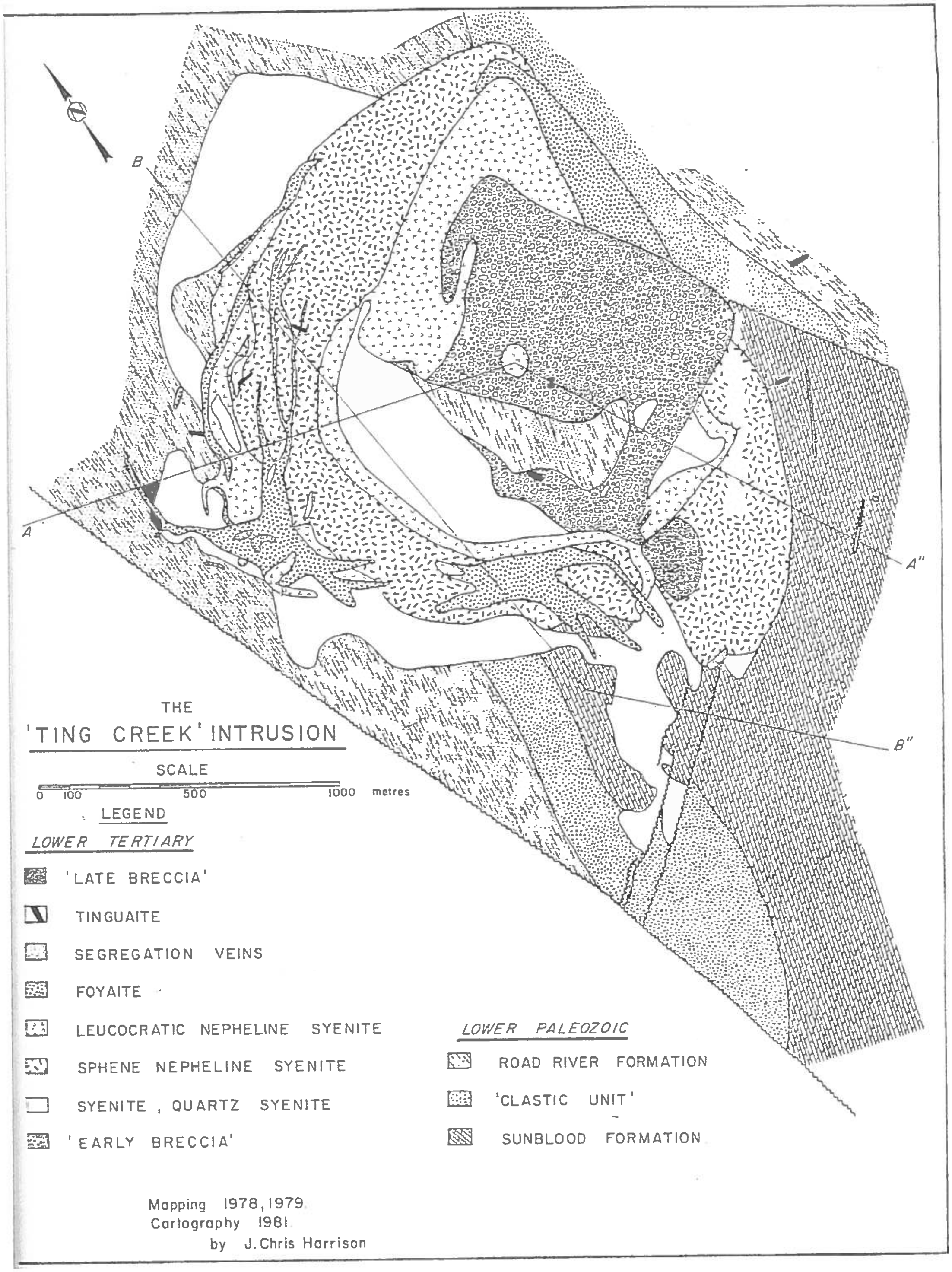


Fig. 8. Geological cross-sections to accompany the previous Figure.

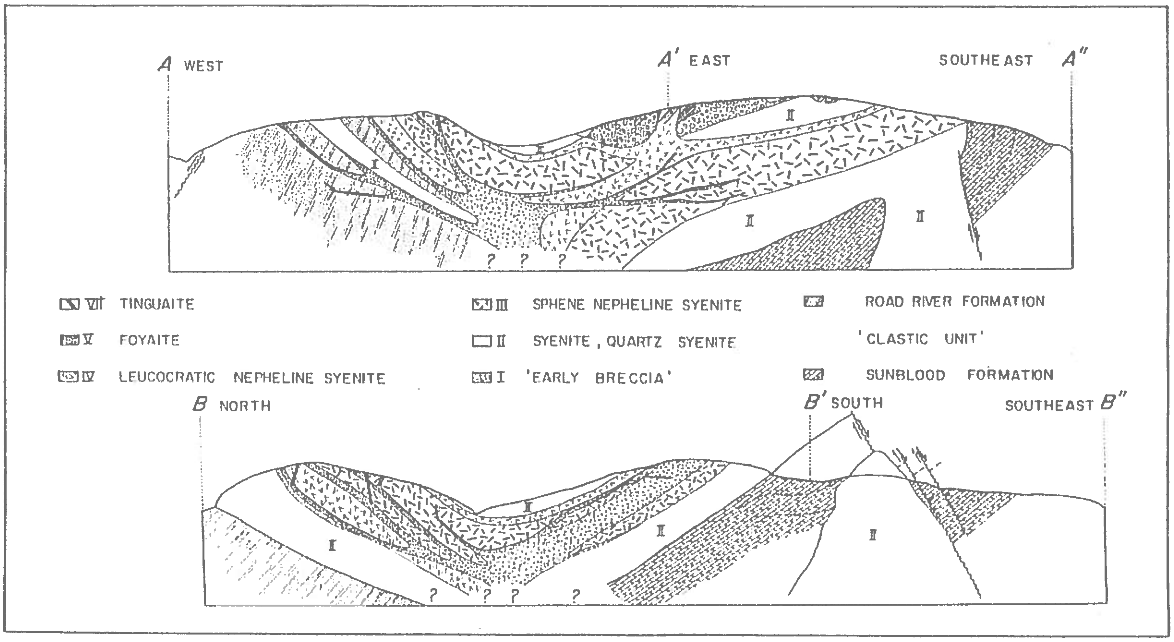


Fig.3 Schematic sections through the 'Ting Creek" Intrusion . Lines of section are located on Maps 3 and 4.

Fig. 9. Claim outline (of original 28 claims) and detailed mapping with topography of the Ting claims.

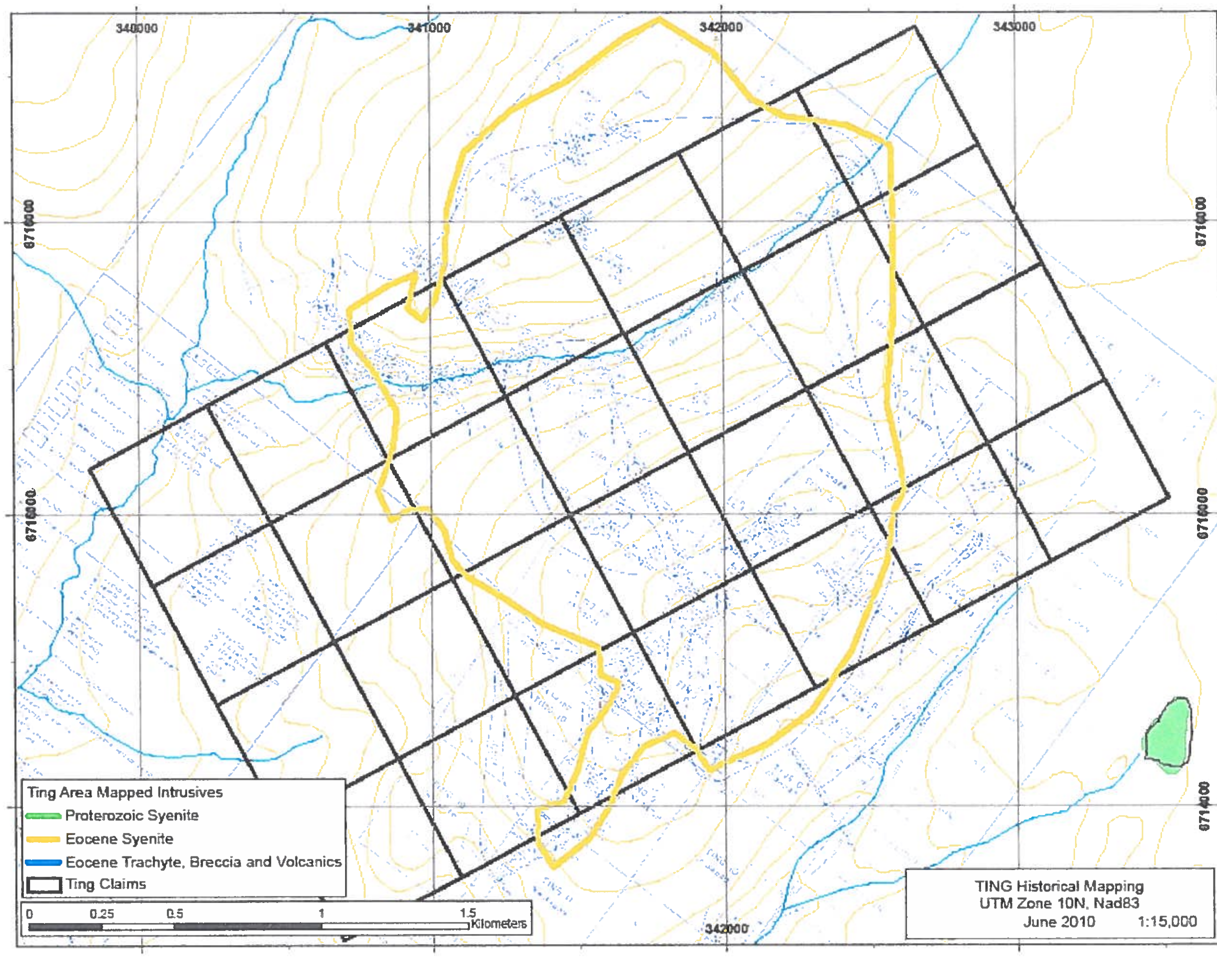
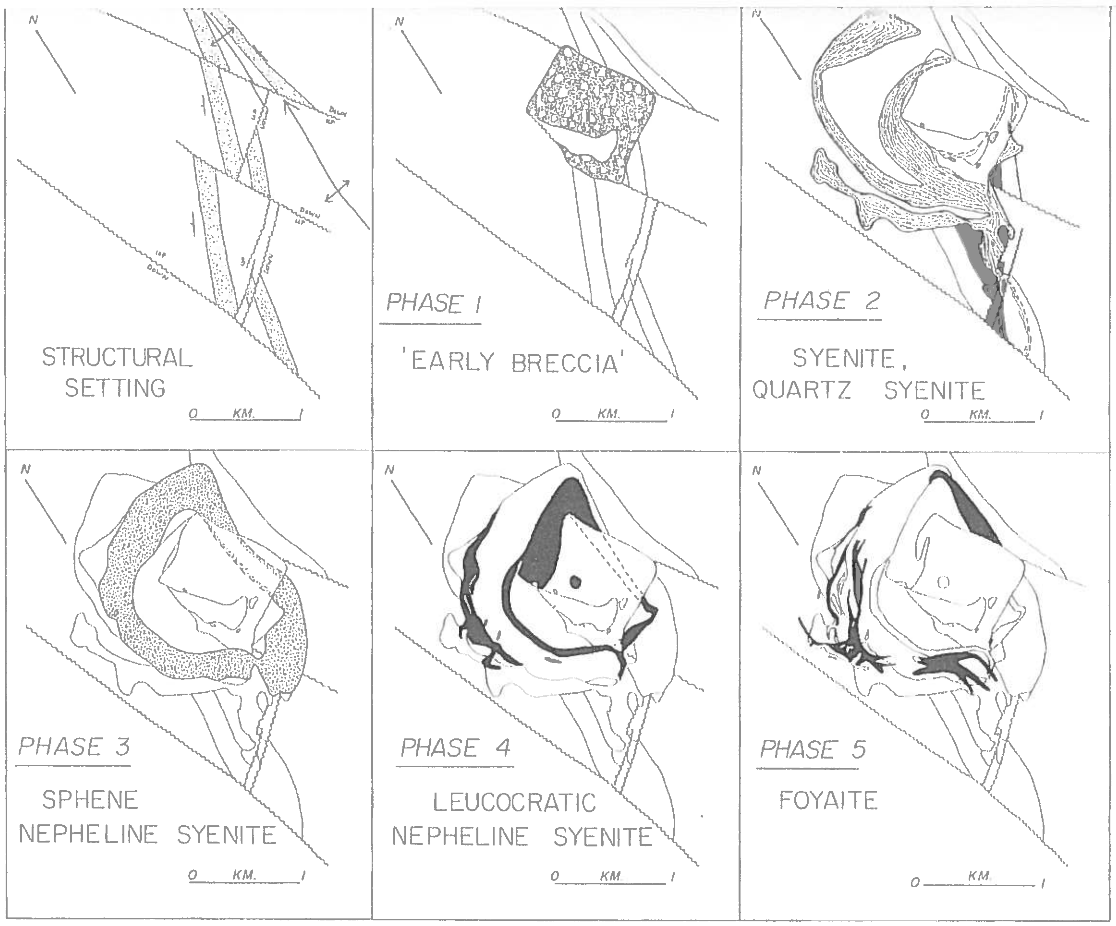


Fig. 10. Intrusive phases identified by Harrison, 1982.

Magmatic phases of the "Ting Creek" Intrusion

Phase IX	Phyllic, argillic, hematitic, and jarositic alteration and Pb-Ag vein mineralization, along northeast striking fault sets.
Phase VIII	Tuff breccia diatreme intrusion, and peripheral collapse brecciation of roof pendants.
Phase VI	Zoned dykes and layered segregation sills. Coincident injection of aegirine tinguaite dykelets. (Phase VII)
Phase V	Intrusion of three foyaite dyke swarms along cone fractures within earlier phase cone sheets.
	Coincident injection of aegirine augite tinguaite dykes at foyaite dyke terminations. (Phase VII)
Phase IV	From a single feeder, injection of two sills of leucocratic nepheline syenite above and below the phase III cone sheet.
	Coincident steam eruptions and injection of ferrosalite tinguaite, sheets and sills ("Brush Creek" tinguaite) (Phase VII)
Phase III	Injection of one main sphene nepheline syenite cone sheet.
Phase II	Dyke-like intrusion of syenite along northeast fault sets, and injection of two syenite cone sheets.
	Second brecciaion involving sedimentary wall rocks, and fragments of the first brecciation.
Phase I	Active gas streaming and first brecciation involving phonolite syenite, and mafic syenite.
	Extrusion of phonolite through north and northeast striking fissures.

Fig. 11. Cartoon of Ting intrusive emplacement form Harrison (1982).



6. Current Mineral Exploration

6.1 Prospecting and sampling

The Ting Project was designed to follow up historical reports of REE mineralization in the Ting area and REE minerals identified during academic studies of the Ting intrusive by C. Harrison. Prospecting of all 28 claims was conducted over the course of the field program.

A variety of samples were taken based on geological affinity and hand sample mineralogy. Samples originated largely from outcrops thought to coincide with original sample locations from Harrison' s investigation (1982). A total of 29 samples were submitted for geochemical analysis. The location details are given here whereas the discussion of the results is found later in the geochemistry section.

Figure 12 shows the sample locations, which were largely obtained along the main creek on the property, and on one (north) hill. Table 2 lists sample locations with UTM coordinates. Table 3 lists summarized descriptions of the samples collected.

Fig. 12. Sample Location Map

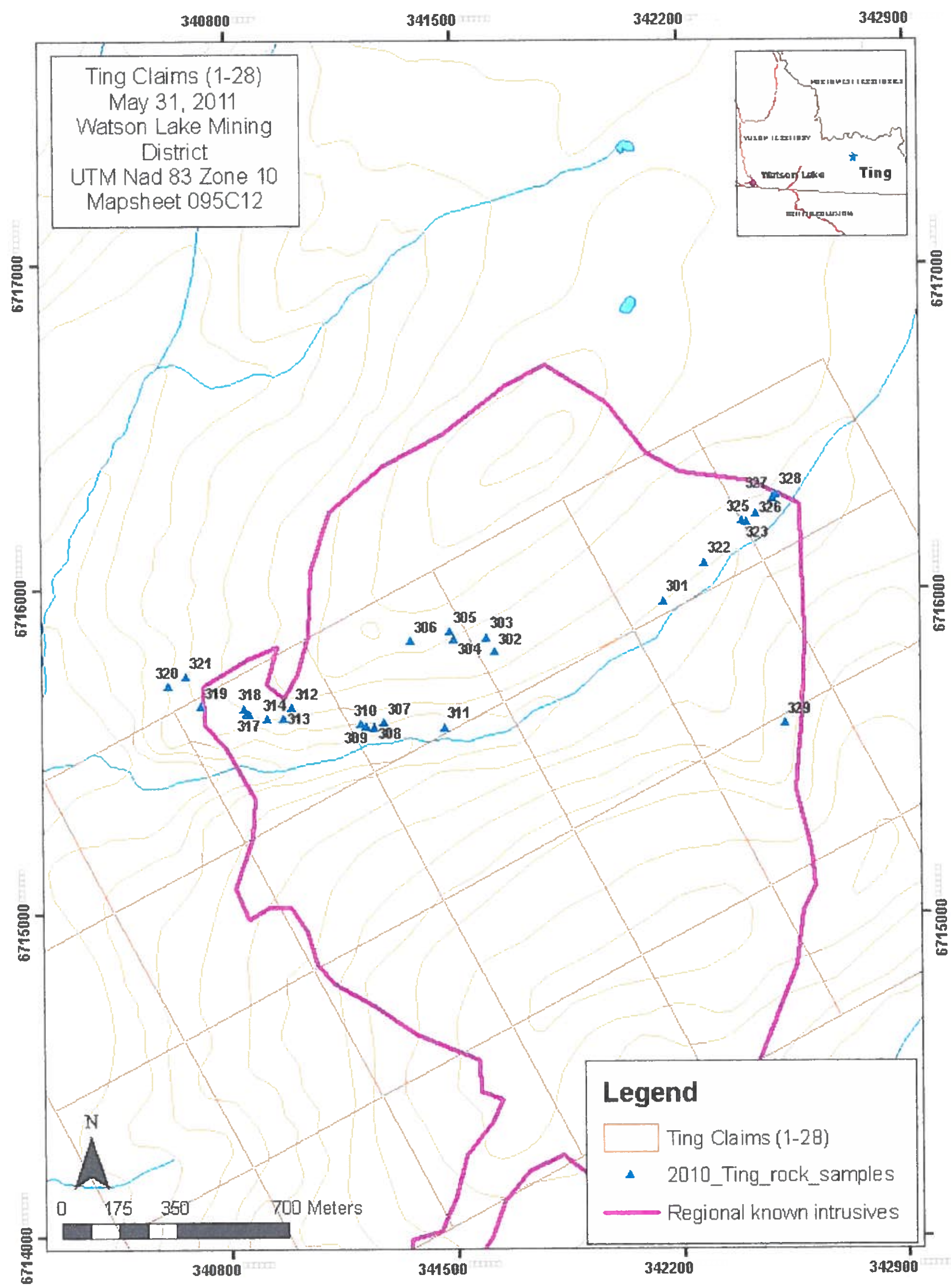


Table 2. Sample Locations (UTM Zone 10, Nad 83)

Sample ID	Easting	Northing	Sample ID	Easting	Northing
300	342159	6715974	316	340862	6715620
301	342149	6715964	317	340865	6715618
302	341629	6715810	318	340851	6715634
303	341602	6715852	319	340719	6715639
304	341501	6715848	320	340617	6715702
305	341487	6715870	321	340670	6715733
306	341366	6715842	322	342276	6716083
307	341282	6715589	323	342396	6716209
308	341253	6715573	325	342407	6716208
309	341227	6715579	326	342436	6716232
310	341214	6715585	327	342489	6716280
311	341470	6715575	328	342498	6716292
312	340998	6715636	329	342522	6715586
313	340975	6715604	314	340921	6715602
315	340868	6715618			

Table 3. Descriptions of rock samples collected at the Ting property.

Sample	Final Classification
300	Phonolite
301	Alkali quartz syenite
302	Foyaite
303	Rinkolite foyaite
304	Alkali syenite porphyry
305	Tuff breccia
307	Alkali syenite
308	Titanite poor nepheline syenite
309	Titanite poor nepheline syenite
310	Titanite nepheline syenite
311	Alkali syenite
312	Titanite nepheline syenite
313	Tinguaite
314	Foyaite
315	Foyaite
316	Foyaite
317	Syenite
318	Aegirine-augite nepheline syenite
319	Foyaite
320	Alkali syenite
321	Alkali syenite
322	Segregation vein
323	Alkali syenite
324	Nepheline poor syenite with scapolite
325	Foyaite
326	Foyaite
327	Foyaite
328	Titanite poor nepheline syenite
329	Foyaite

6.2 Geochemistry of REE Mineralization

Twenty-nine rock samples were submitted to ALS Chemex of Vancouver for geochemical assay. Samples were shipped by Mackevoy Geosciences staff from Whitehorse. Samples were received in July and data was delivered by Chemex in September. The analytical package chosen was MEMS81, which is described as a 38-element ICP MS technique with a fusion preparation to ensure complete dissolution of refractory minerals. This package also delivers a full suite of REE elements. Rock samples were crushed to 2 mm and then pulverized to 75 um. Silt samples were dried and screened to 180 um.

Samples collected represent grab samples from locally sourced float or outcrop. The collection of samples was based on geological affinity and hand sample mineralogy. The total rare earth oxides (TREO + Y) and the heavy rare earth oxides total rare earth oxides (HREO/TREO) ratio was calculated for each sample. The input values were the heavy rare earth elements (HREO), europium to lutetium plus yttrium, and the light rare earth elements (LREO), lanthanum to samarium, in parts per million. The results are summarized in Tables 4 and 5. The TREO + Y reveal which samples are enriched and depleted in total rare earth elements and the HREO/TREO ratio reveals which samples are enriched and depleted in heavy rare earth elements.

Table 4. TREO + Y for each of the 29 samples

Order	Sample	TREO+Y (wt %)
1	303	0.16144
2	305	0.13250
3	319	0.08758
4	309	0.08022
5	312	0.07918
6	308	0.07491
7	310	0.07477
8	320	0.06844
9	304	0.06595
10	302	0.06462
11	311	0.06348
12	318	0.06319
13	329	0.06132
14	327	0.06103
15	307	0.06022
16	324	0.05998
17	316	0.05939
18	328	0.05761
19	300	0.05646
20	301	0.05064
21	317	0.04481
22	323	0.04250
23	315	0.04078
24	313	0.04017
25	326	0.03504
26	322	0.03297
27	314	0.02826
28	325	0.02780
29	321	0.02497

Table 5. HREO/TREO ratio for each of the 29 samples

Order	Sample	HREO/TREO (%)	Rock Name	Magmatic Suite (Number – Name)
1	317	15.0460	Syenite	N/A
2	314	13.3806	Foyaite	4 - Foyaite
3	323	13.0778	Alkali syenite	1 - Syenite/ Quartz syenite
4	303	11.7676	Rinkolite foyaite	3 - Leucocratic nepheline syenite
5	321	10.7253	Aegirine-augite nepheline syenite	3 - Leucocratic nepheline syenite
6	327	10.5631	Foyaite	4 - Foyaite
7	325	10.3480	Foyaite	4 - Foyaite
8	329	10.1918	Alkali syenite	1 - Syenite/ Quartz syenite
9	310	9.7888	Titanite nepheline syenite	3 - Titanite nepheline syenite
10	315	9.5971	Foyaite	4 - Foyaite
11	308	9.0977	Titanite poor nepheline syenite	3 - Leucocratic nepheline syenite
12	322	9.0672	Segregation vein	5 - Segregation Vein
13	301	9.0188	Alkali quartz syenite	2 - Syenite/ Quartz syenite
14	300	8.9718	Phonolite	Pre-magmatic - Early Breccia
15	324	8.8596	Nepheline poor syenite with scapolite	1 - Syenite/ Quartz syenite
16	312	8.7118	Titanite nepheline syenite	2 - Titanite nepheline syenite
17	326	8.5469	Foyaite	4 - Foyaite
18	320	7.8125	Alkali syenite	1 - Syenite/ Quartz syenite
19	313	7.6998	Tinguaite	5 - Tinguaite
20	309	7.7409	Titanite poor nepheline syenite	3 - Leucocratic nepheline syenite
21	302	7.5720	Foyaite	4 - Foyaite
22	305	7.2006	Titanite nepheline syenite	2 - Titanite nepheline syenite
23	316	7.0824	Foyaite	4 - Foyaite
24	318	7.0240	Aegirine-augite nepheline syenite	3 - Leucocratic nepheline syenite
25	307	6.8232	Alkali syenite	1 - Syenite/ Quartz syenite
26	319	6.5418	Foyaite	4 - Foyaite
27	328	6.4028	Titanite poor nepheline syenite	3 - Leucocratic nepheline syenite
28	311	6.1944	Alkali syenite	1 - Syenite/ Quartz syenite
29	304	5.8646	Alkali syenite porphyry	1 - Syenite/ Quartz syenite

Assay results from the reconnaissance sampling and prospecting program at Ting are reasonably promising. Samples 303 and 305 contain the most TREO + Y (0.16% and 0.15%, respectively), whereas samples 317, 314 and 323 contain the most heavy rare earth elements (15.05, 13.38, 13.08, respectively). Figure 13 shows the sample locations with TREO+Y contents in graduated level symbology. The magmatic suite and rock units that are the most enriched in rare earth elements are, therefore, the foyaites and a tuff breccia. Foyaites are thought to represent the fourth magmatic suite that was emplaced within the Ting Creek intrusion (Harrison, 1982). Rock units most depleted in rare earth elements are the syenites/quartz syenites, which were thought to be emplaced first.

The HREO/TREO ratios in the preliminary Ting samples are reasonably high, but slightly lower compared to other REE deposits such as the Nechalacho rare earth element deposit located at Thor Lake, Northwest Territories, which has HREO/TREO ratios that range from 14% to 20%, with the largest being 20.72% (Avalon, 2011). However, these values reflect the HREO/TREO ratios at a depth of approximately 100 meters (Avalon, 2011). A similar situation may be occurring at the Ting property, where rare earth elements could be more abundant at depth. Figure 14 shows the HREO/TREO ratios for the samples spatially, with graduated level symbology.

Fig. 13. TREO+Y values for 2010 rock samples.

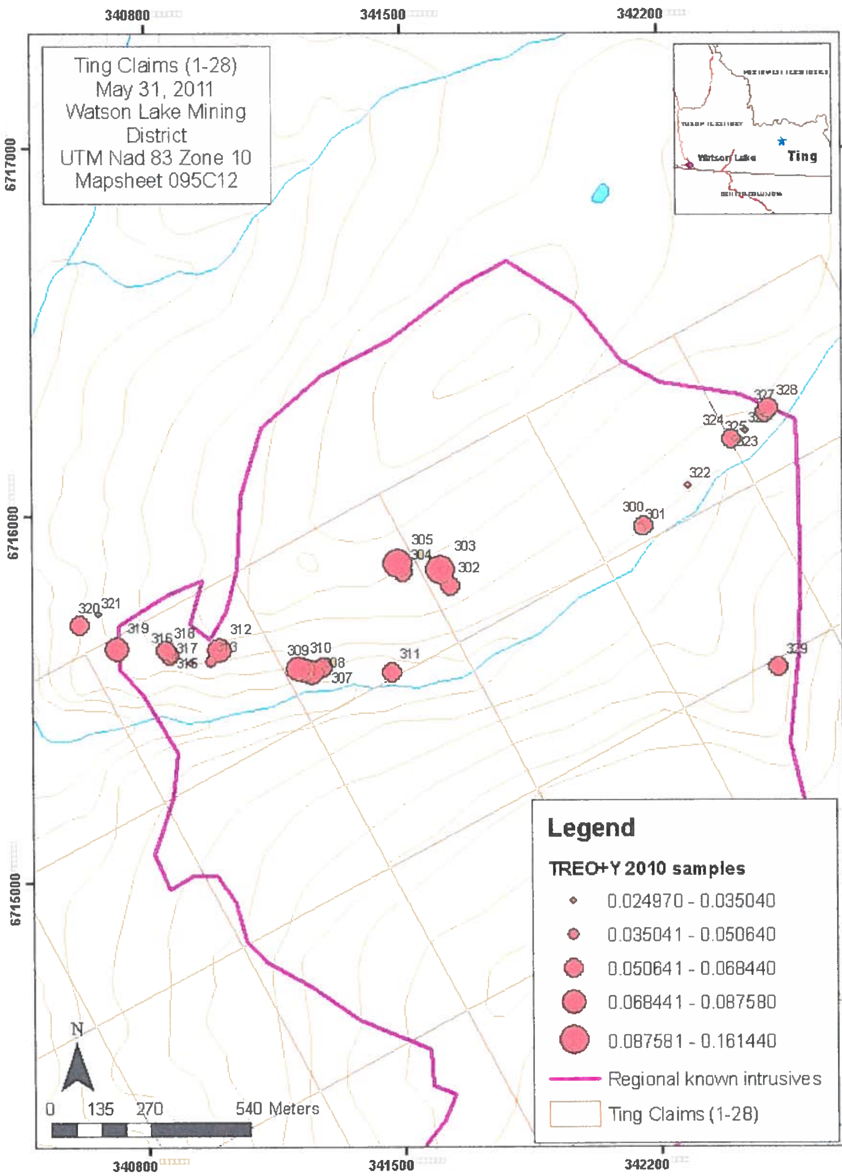
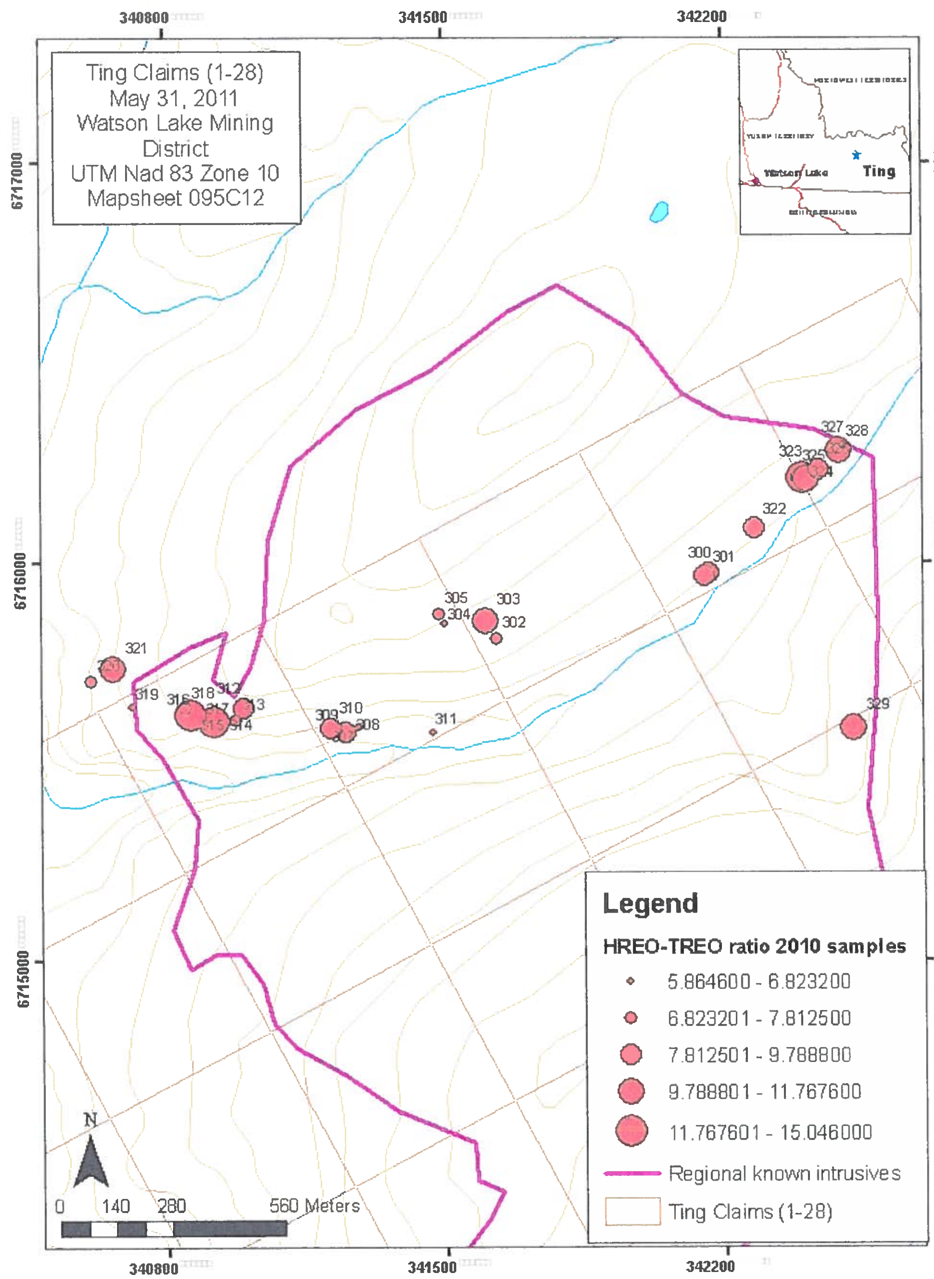


Fig. 14. HREO/TREO ratios for 2010 rock samples.



Zirconium (Zr) content of the rocks is slightly elevated, with values ranging up to 1,520 ppm (detection limit) but averaging 773 ppm. Uranium (U) contents are low, averaging 19 ppm and reaching 67 ppm. Thorium (Th) contents are also low, averaging 84 ppm and reaching 165 ppm. Zirconium, Th, and U do not show obvious correlations with TREE content or with HREO/TREO ratios, but more samples would be needed to confirm this (Fig. 15.).

Barium (Ba) concentrations are quite variable and range from below detection limit (to 3 ppm) to well above detection limit (3,390 ppm), but average 577 ppm (Fig. 16). No obvious correlation exists between Ba and TREE content, as might be expected in some carbonatite related REE systems. However, this may be due to the geological variety of sampled material. Hafnium (Hf) concentrations correlate very well with Zr. This suggests that it is locked in with the main Zr mineral, zircon. Two samples were slightly elevated in Mo; 309 had 13 ppm while 317 had 24 ppm Mo.

Other possible economic metals such as Ag, Cu, Pb, Zn, Ni, Nb, Ta and W do not show appreciable concentrations. Again, the trends seen in this dataset are preliminary, as only a small sample suite of intrusive rocks were collected, due to limited time and dense vegetation, which made progress around the property difficult without significant helicopter support. Extensive sampling of all rock types, including host rocks, is required to better assess the strength and geochemical nature of mineralization at the Ting Property.

Fig. 15. Weak correlation of TREO+Y and Th content (ppm).

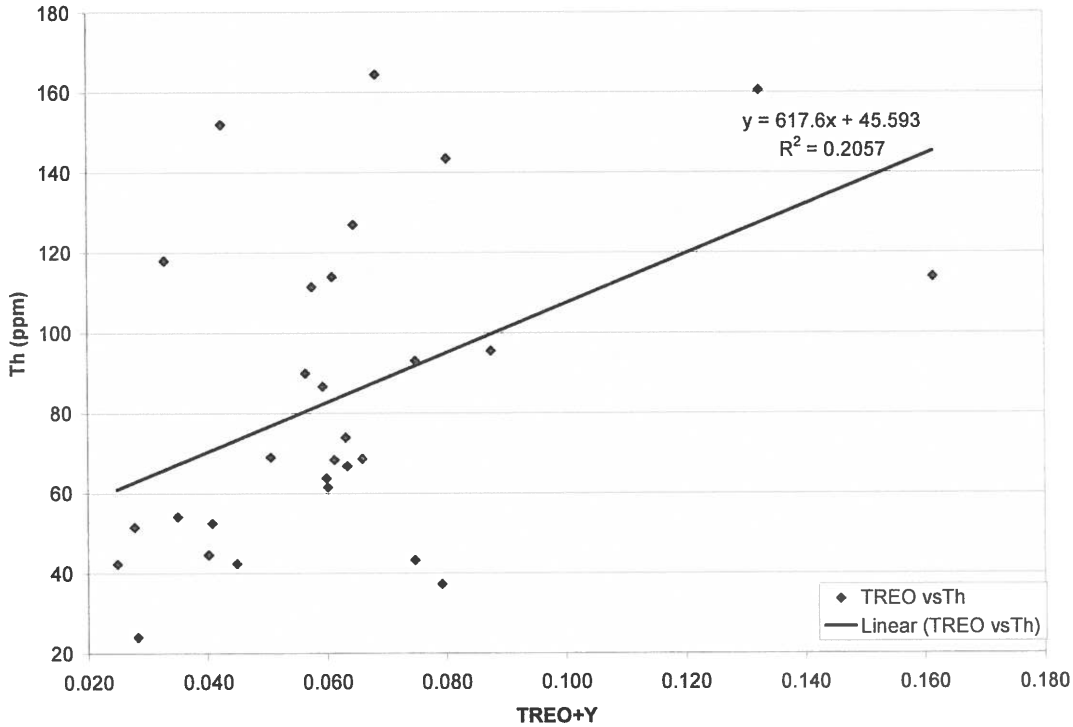
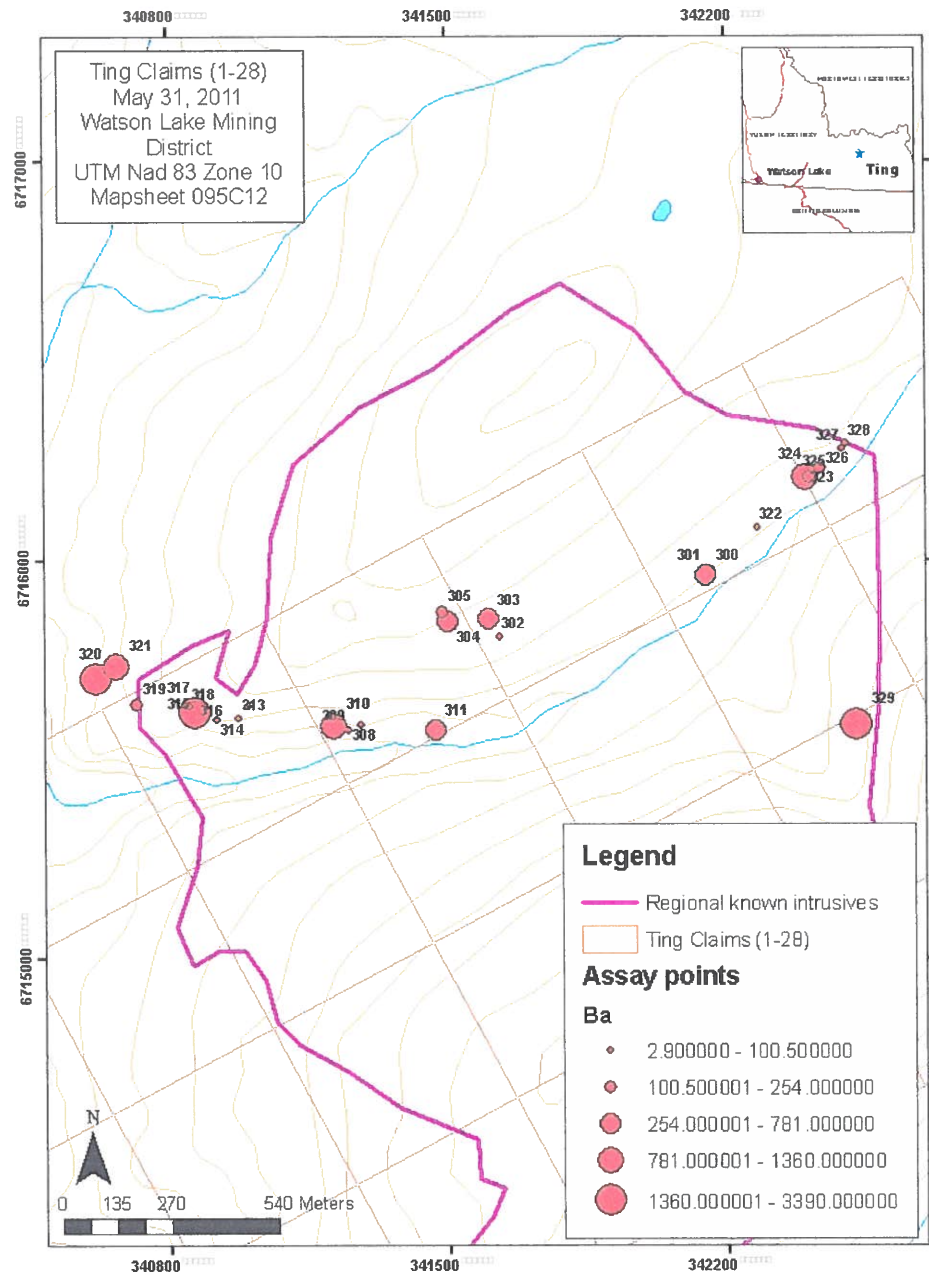


Fig. 16. Ba concentrations at the Ting property.



7. Conclusions and Recommendations

Results from preliminary work in 2010 warrant further exploration on the Ting Project. Assay results of REE (up to 0.16 wt. % TREO+Y), and relatively high HREO/TREO ratios (up to 15.05) make this underexplored target attractive for additional discoveries. Prospecting and initial mineralogical and geochemical investigations confirmed the existence of rare earth element minerals. Mineral hosts for rare earth elements have been determined to include eudialyte, rinkite, britholite and possibly monazite, xenotime, and zircon.

The following are recommended to better assess the mineralization present at the Ting Property:

- Investigate / prospect:
  - the remainder of the Ting intrusion, including the south hill and steep cliffs along the creek
  - the periphery of the intrusive complex
  - a possible sill to the west of the original claims
- Systematically conduct:
  - a magnetometer survey of the Ting Property, possibly with VLF collection to determine presence and location of fault structures
  - sampling of host rocks in addition to intrusive unit rocks
  - a soil survey across the property
  - a silt survey including various points along all drainages around the peripheries of the Ting Property
- Conduct additional mineralogical and petrographic studies for all styles of mineralization.

The execution of these recommendations will lead to a greater understanding of the geological settings, overall surficial grade distribution, and mineralogical characteristics of the Ting. This will provide the necessary framework from which to make decisions on the nature of more comprehensive exploration, such as trenching, diamond drilling and airborne geophysical surveys. If the program were conducted early enough in Yukon's exploration season (e.g., late May to late June) it would be feasible to return in late summer (late August) for additional field work such as trenching and enhanced sampling/mapping/prospecting programs.

Statement of Qualifications

I, Allison Brand, graduated from The University of British Columbia in 2006 with a B.Sc. in geology (Honours) and in 2009 with an M.Sc. in Geology. I have practiced my profession as a geologist since 2006 and have worked on mineral exploration projects throughout Canada.

Allison Brand, M.Sc.

Statement of Expenditures

	Total
Field Wages (1 senior geologist @ $500 / day, 1 senior geologist @ $0 / day)	$ 3,000.00
Report Writing and Interpretation (3 days @ 500 / day))	$ 1,500.00
Helicopter	$ 9,583.88
Heli Fuel	$ 1,176.88
Truck Rental	$ 785.80
Truck Fuel	$ 93.26
Daily Field Expenses (@$100 / person-day)	$ 1,200.00
Shipping	235.70
Assays – ALS (MEMS-81)	$ 1,504.57
Total Cost	$ 17,880.09

References

Avalon Rare Metals, 2011, Thor Lake Project, http://avalonraremetals.com/projects/thor_lake/thor_lake_intro (March 7, 2011)

Cecile, M.P., Morrow, D.W. and Williams, G.K. 1997, Early Paleozoic (Cambrian to Early Devonian) tectonic framework, Canadian Cordillera. Bulletin of Canadian Petroleum Geology, v. 45, p. 54-74.

Hansen, V.L., Goodge, J.W., Keep, M. and Oliver, D.H., 1993, Asymmetric rift interpretation of the western North American margin. Geology 21, 1067-1070.

Harrison, J.C., 1979, Geological, geochemical and radiometric report on the Ting claims, Yukon. Assessment report 090481.

Harrison, J.C., 1980, Report of trenching and geophysics on the Ting claims, Yukon. Assessment report 090640.

Harrison, J.C., 1982, Petrology of the 'Ting Creek' Alkalic Intrusion, southeast Yukon, Master Thesis, University of Toronto, p.309. Mindat, 2011, Britholite, Crancrinite, Nepheline, Rinkite, http://www.mindat.org/ (March, 2011)

Pell, J., 1984, Carbonatities, Nephiline syenites, Kimberlites and related rocks; In British Columbia, Ministry of Energy Mines and Petroleum Resources, Bulletin 88, p.131.

Pigage, L.C., 2007, Preliminary bedrock geology for NTS 95D/6 (Otter Creek area), southeast Yukon. In Yukon Exploration and Geology 2007, D.S. Emond, L.R. Blackburn, R.P. Hill and L.H. Weston (eds.), Yukon geology Survey, p. 237-255.

Pigage, L.C. and Mortensen, J.K. , 2004, Superimposed Neoproterozoic and Early Tertiary alkaline magmatism in the La Biche River area, southeast Yukon Territory. Bulletin of Canadian Petroleum Geology 52, 325-342.

Sørensen H., 2001, The Ilímaussaq alkaline complex, South Greenland: status of mineralogical research with new results. Gology of Greenland Survey Bulletin 190, p.23.

Stevens, R.D., Delabio, R.N., and Lachance, G.R., 1982, Age determinations and geological studies, K-Ar isotopic ages, report 15, Geological Survey of Canada, paper 81-2, p.23

Annual Report Paper, Stratigraphy summary for southeast Yukon (NTS 95D/8 and 95C/5), L.C. Pigage, 2006, YGS/DIAND. In: Yukon Exploration and Geology 2005

Open File, 2000-11, Geological Map of Pool Creek (NTS 95C/5), Southeastern Yukon (1:50 000 Scale), Tammy L. Allen and Lee C. Pigage, 2000

Assay Certificates

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

ALS Minerals

To: UNIVERSITY OF BRITISH COLUMBIA
DEPARTMENT OF EARTH & OCEAN SCIENCES
6339 STORES RD
VANCOUVER BC V6T 1Z4

Finalized Date: 6- SEP- 2010
Account: HAT

CERTIFICATE VA10114580

Project:
P.O. No.:
This report is for 29 Rock samples submitted to our lab in Vancouver, BC, Canada on 17- AUG- 2010.
The following have access to data associated with this certificate:

LEE GROAT		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
PUL- QC	Pulverizing QC Test
LOG- 22	Sample login - Rcd w/o BarCode
CRU- 31	Fine crushing - 70% <2mm
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME- ICP06	Whole Rock Package - ICP- AES	ICP- AES
OA- GRA05	Loss on Ignition at 1000C	WST- SEQ
ME- MS81	38 element fusion ICP- MS	ICP- MS
TOT- ICP06	Total Calculation for ICP06	ICP- AES

To: UNIVERSITY OF BRITISH COLUMBIA
ATTN: LEE GROAT
DEPARTMENT OF EARTH & OCEAN SCIENCES
6339 STORES RD
VANCOUVER BC V6T 1Z4

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:
Colin Ramshaw, Vancouver Laboratory Manager

ALS Minerals

ALS Canada Ltd.

2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: UNIVERSITY OF BRITISH COLUMBIA
DEPARTMENT OF EARTH & OCEAN SCIENCES
6339 STORES RD
VANCOUVER BC V6T 1Z4

Finalized Date: 6- SEP- 2010
Account: HAT

CERTIFICATE OF ANALYSIS VA10114580

Sample Description / Method	WEI- 21	ME- MS81	ME- MS81	ME- MS81	ME- MS81	ME- MS81	ME- MS81	ME- MS81	ME- MS81	ME- MS81	ME- MS81	ME- MS81	ME- MS81	ME- MS81	ME- MS81
Analyte	Recvd Wt.	Ag	Ba	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Ga	Gd	Hf	Ho
Units	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
LOR	0.02	1	0.5	0.5	0.5	10	0.01	5	0.05	0.03	0.03	0.1	0.05	0.2	0.01
10- AAB- 0300	0.30	<1	254	216	2.1	20	16.00	<5	3.66	2.76	1.12	28.9	5.55	14.9	0.84
10- AAB- 0301	0.86	<1	490	195.0	1.6	<10	1.93	<5	3.72	2.22	1.20	24.7	6.70	10.5	0.74
10- AAB- 0302	0.48	<1	90.2	245	0.7	10	15.60	<5	3.13	2.86	0.58	39.4	4.56	25.2	0.76
10- AAB- 0303	0.38	<1	781	610	3.0	<10	10.50	<5	14.40	10.70	3.20	34.4	17.55	14.9	3.32
10- AAB- 0304	0.24	<1	518	279	1.5	10	3.17	<5	3.10	1.81	1.13	24.3	6.66	8.0	0.59
10- AAB- 0305	0.38	<1	136.5	520	2.4	<10	9.67	<5	8.17	4.78	1.63	27.2	14.95	15.4	1.64
10- AAB- 0307	0.82	<1	57.0	239	1.1	10	7.30	<5	3.23	2.17	0.74	25.7	6.02	8.7	0.69
10- AAB- 0308	0.46	<1	22.4	290	0.9	<10	10.60	<5	4.92	3.73	0.92	27.3	7.93	16.8	1.13
10- AAB- 0309	0.50	<1	35.4	311	0.8	10	15.30	<5	4.46	3.53	0.57	31.6	6.67	19.2	1.00
10- AAB- 0310	0.58	<1	1320	282	7.1	20	7.51	7	6.10	3.53	2.67	23.2	10.15	10.3	1.20
10- AAB- 0311	0.62	<1	658	255	1.7	10	3.14	<5	3.09	1.98	1.25	24.4	6.75	10.1	0.59
10- AAB- 0312	0.22	<1	60.9	314	1.6	10	4.94	<5	5.89	3.43	2.04	20.6	10.00	9.7	1.19
10- AAB- 0313	0.66	<1	44.7	157.5	0.7	<10	6.05	<5	2.13	1.67	0.60	25.0	3.53	7.9	0.48
10- AAB- 0314	0.70	<1	12.5	107.0	0.6	10	5.75	<5	2.57	2.27	0.39	35.5	2.49	12.4	0.62
10- AAB- 0315	0.38	<1	2.9	156.5	<0.5	<10	4.77	<5	2.53	2.25	0.42	31.0	3.13	10.2	0.64
10- AAB- 0316	0.32	<1	144.5	234	0.6	10	13.95	<5	2.73	2.36	0.51	29.7	4.17	15.1	0.65
10- AAB- 0317	0.36	<1	3390	161.0	7.2	50	2.22	26	5.47	3.38	1.19	19.8	8.14	10.4	1.13
10- AAB- 0318	0.38	<1	59.2	243	<0.5	10	5.66	<5	3.00	2.50	0.48	29.1	4.75	21.5	0.72
10- AAB- 0319	0.46	<1	130.5	351	1.0	<10	4.95	<5	4.83	3.06	0.93	25.3	8.56	12.3	0.99
10- AAB- 0320	0.32	<1	2480	278	0.7	10	6.32	13	4.04	3.00	0.68	25.9	6.04	19.6	0.91
10- AAB- 0321	0.74	<1	1215	98.7	<0.5	<10	4.46	<5	2.16	1.45	0.94	23.9	3.16	8.0	0.45
10- AAB- 0322	0.54	<1	91.1	123.5	1.1	10	2.01	<5	2.11	1.83	0.48	35.2	3.06	14.5	0.51
10- AAB- 0323	0.28	<1	155.5	148.5	0.5	<10	135.5	<5	3.32	3.12	0.58	43.9	3.22	29.7	0.85
10- AAB- 0324	0.28	<1	1360	229	2.5	10	10.70	<5	4.08	2.77	1.43	26.5	6.27	14.6	0.86
10- AAB- 0325	0.20	<1	188.5	104.0	0.5	<10	6.34	<5	1.83	1.70	0.35	33.5	2.30	12.8	0.46
10- AAB- 0326	0.62	<1	202	134.5	0.5	10	6.37	<5	2.14	1.71	0.50	31.9	2.89	12.1	0.48
10- AAB- 0327	0.96	<1	35.4	229	0.8	<10	14.70	<5	4.37	3.65	0.70	42.3	5.21	29.2	1.03
10- AAB- 0328	0.28	<1	100.5	228	<0.5	10	8.58	<5	2.45	2.06	0.46	24.5	4.01	12.6	0.58
10- AAB- 0329	0.36	<1	2690	240	2.3	<10	73.3	<5	4.82	3.23	1.75	25.2	7.24	15.8	1.04

ALS Minerals

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: UNIVERSITY OF BRITISH COLUMBIA
DEPARTMENT OF EARTH & OCEAN SCIENCES
6339 STORES RD
VANCOUVER BC V6T 1Z4

Finalized Date: 6- SEP- 2010
Account: HAT

CERTIFICATE OF ANALYSIS VA10114580

Sample Description	Method	ME- MS81	ME- MS81	ME- MS81	ME- MS81	ME- MS81	ME- MS81	ME- MS81	ME- MS81	ME- MS81	ME- MS81	ME- MS81	ME- MS81	ME- MS81	ME- MS81	ME- MS81
	Analyte	La	Lu	Mo	Nb	Nd	Ni	Pb	Pr	Rb	Sm	Sn	Sr	Ta	Tb	Th
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	0.5	0.01	2	0.2	0.1	5	5	0.03	0.2	0.03	1	0.1	0.1	0.01	0.05
10- AAB- 0300		153.5	0.52	8	252	45.7	<5	65	18.05	289	5.57	3	224	12.6	0.69	89.9
10- AAB- 0301		119.5	0.36	3	149.0	53.0	9	17	18.30	242	7.70	3	247	8.4	0.78	69.0
10- AAB- 0302		209	0.68	5	455	35.2	<5	49	16.95	438	3.72	4	65.8	21.4	0.54	127.0
10- AAB- 0303		409	1.34	4	262	128.5	<5	25	52.0	532	16.85	4	592	10.8	2.38	114.0
10- AAB- 0304		160.0	0.29	3	122.0	61.6	<5	29	21.9	258	7.72	3	220	6.9	0.68	68.6
10- AAB- 0305		342	0.67	7	343	125.0	<5	34	47.6	315	15.50	5	126.5	22.1	1.67	160.5
10- AAB- 0307		161.0	0.38	3	173.0	52.6	<5	22	20.3	282	6.25	2	55.1	10.3	0.65	61.5
10- AAB- 0308		195.0	0.73	5	421	63.7	<5	37	24.9	275	7.87	3	17.5	16.5	0.93	93.0
10- AAB- 0309		238	0.68	13	382	53.2	<5	51	23.4	365	6.27	3	36.5	14.3	0.81	143.5
10- AAB- 0310		172.5	0.50	6	243	82.6	9	26	27.8	286	11.25	2	919	16.0	1.25	43.2
10- AAB- 0311		161.0	0.32	2	116.5	62.5	<5	19	22.5	255	7.54	1	304	6.1	0.68	66.8
10- AAB- 0312		175.5	0.42	3	297	85.9	<5	21	31.5	169.0	10.45	3	47.4	23.1	1.16	37.3
10- AAB- 0313		112.0	0.39	3	178.0	30.8	<5	18	12.55	271	3.42	1	40.4	6.6	0.38	44.6
10- AAB- 0314		73.5	0.50	4	302	18.2	<5	14	8.09	356	2.20	2	6.5	6.8	0.39	24.1
10- AAB- 0315		122.0	0.46	2	114.0	22.7	<5	17	11.00	351	2.54	2	4.2	4.2	0.39	52.5
10- AAB- 0316		182.5	0.53	5	277	34.8	<5	36	16.45	355	3.36	2	80.9	10.9	0.50	86.6
10- AAB- 0317		68.5	0.51	24	148.0	66.1	48	7	19.80	237	9.88	1	268	9.2	1.08	42.5
10- AAB- 0318		199.5	0.54	2	204	37.6	<5	20	17.70	294	3.78	3	19.9	9.0	0.51	73.9
10- AAB- 0319		234	0.52	2	302	74.9	<5	47	30.6	248	8.45	3	27.3	21.2	0.93	95.5
10- AAB- 0320		185.5	0.64	2	367	48.2	<5	22	21.5	353	5.51	3	194.0	13.4	0.71	164.5
10- AAB- 0321		54.0	0.26	5	154.5	25.2	<5	32	8.89	376	3.58	1	96.0	10.5	0.41	42.3
10- AAB- 0322		95.8	0.43	3	215	24.1	<5	25	9.58	279	2.99	4	36.9	9.1	0.37	118.0
10- AAB- 0323		130.5	0.78	2	337	22.8	<5	75	10.55	422	3.00	5	110.0	14.5	0.48	152.0
10- AAB- 0324		158.0	0.57	5	250	53.4	<5	32	19.90	311	6.49	3	725	11.8	0.75	63.8
10- AAB- 0325		82.4	0.43	7	254	16.8	<5	27	7.61	326	1.99	2	94.2	9.9	0.29	51.5
10- AAB- 0326		102.5	0.38	5	196.0	23.5	<5	25	10.35	326	2.73	2	133.5	9.7	0.38	54.1
10- AAB- 0327		177.0	0.84	5	424	38.4	<5	55	16.95	465	4.66	6	34.4	19.6	0.69	114.0
10- AAB- 0328		179.5	0.43	6	196.5	33.4	<5	32	16.15	325	3.23	2	20.9	4.8	0.45	111.5
10- AAB- 0329		143.0	0.54	6	251	58.6	<5	90	20.9	497	7.80	5	402	13.5	0.91	68.3

ALS Minerals

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: UNIVERSITY OF BRITISH COLUMBIA
DEPARTMENT OF EARTH & OCEAN SCIENCES
6339 STORES RD
VANCOUVER BC V6T 1Z4

Finalized Date: 6- SEP- 2010
Account: HAT

CERTIFICATE OF ANALYSIS VA10114580

Sample Description	ME- MS81	ME- MS81	ME- MS81	ME- MS81	ME- MS81	ME- MS81	ME- MS81	ME- MS81	ME- MS81	ME- ICP06	ME- ICP06	ME- ICP06	ME- ICP06	ME- ICP06	ME- ICP06
Method / Analyte	Tl	Tm	U	V	W	Y	Yb	Zn	Zr	SiO2	Al2O3	Fe2O3	CaO	MgO	Na2O
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%	%	%
LOR	0.5	0.01	0.05	5	1	0.5	0.03	5	2	0.01	0.01	0.01	0.01	0.01	0.01
10- AAB- 0300	<0.5	0.45	13.70	18	11	23.6	2.95	105	806	56.6	20.3	3.17	1.22	0.30	8.79
10- AAB- 0301	<0.5	0.31	14.30	14	4	19.8	2.20	39	563	64.0	17.40	2.56	1.10	0.29	6.46
10- AAB- 0302	<0.5	0.50	40.8	<5	11	23.4	3.83	138	1360	54.9	21.8	2.89	0.64	0.12	10.60
10- AAB- 0303	<0.5	1.60	15.90	21	4	93.0	9.49	125	733	55.0	19.40	5.00	1.59	0.39	9.64
10- AAB- 0304	0.5	0.25	5.82	18	8	16.0	1.76	49	460	65.4	17.15	2.51	1.00	0.32	6.50
10- AAB- 0305	<0.5	0.67	21.8	17	11	41.0	4.23	201	781	59.1	18.15	4.56	2.21	0.46	5.91
10- AAB- 0307	0.5	0.33	7.08	8	4	17.8	2.27	78	473	63.1	18.75	2.68	0.94	0.16	6.96
10- AAB- 0308	<0.5	0.61	15.75	7	10	31.6	4.25	95	906	60.4	19.35	2.82	0.88	0.14	8.32
10- AAB- 0309	<0.5	0.58	21.3	<5	19	29.2	4.19	124	1045	58.2	21.2	2.96	0.67	0.06	9.15
10- AAB- 0310	<0.5	0.49	13.95	48	4	31.7	3.28	121	562	56.5	17.95	4.87	2.99	1.18	6.62
10- AAB- 0311	<0.5	0.28	5.32	15	4	16.0	1.92	46	595	64.3	17.45	2.90	1.12	0.28	6.36
10- AAB- 0312	<0.5	0.46	6.47	27	3	29.9	2.82	90	470	58.6	18.70	3.78	1.56	0.32	6.98
10- AAB- 0313	<0.5	0.29	6.53	9	3	14.2	2.16	70	453	57.6	21.0	2.33	0.86	0.20	9.54
10- AAB- 0314	<0.5	0.40	4.44	<5	6	19.0	2.81	46	707	56.8	21.9	2.59	0.65	0.04	10.55
10- AAB- 0315	<0.5	0.39	10.85	<5	4	19.5	2.79	61	572	57.2	22.5	2.55	0.75	0.05	10.45
10- AAB- 0316	<0.5	0.43	66.5	<5	9	20.2	2.96	117	872	57.6	20.9	3.10	1.54	0.10	8.84
10- AAB- 0317	<0.5	0.50	11.55	158	26	31.2	3.32	35	510	67.5	15.80	2.05	2.03	0.92	5.56
10- AAB- 0318	<0.5	0.44	13.80	<5	11	20.9	3.16	70	1105	58.5	21.2	2.49	0.91	0.10	8.07
10- AAB- 0319	<0.5	0.42	33.2	6	2	24.7	2.86	126	579	60.0	19.55	3.10	1.17	0.21	7.62
10- AAB- 0320	<0.5	0.52	20.1	<5	11	24.4	3.70	49	902	63.4	19.15	1.60	1.54	0.11	6.24
10- AAB- 0321	<0.5	0.21	17.30	9	5	11.8	1.49	39	378	64.7	18.75	0.92	0.62	0.06	5.81
10- AAB- 0322	0.5	0.34	23.0	6	8	13.4	2.53	79	770	64.3	16.75	3.05	0.42	0.11	7.51
10- AAB- 0323	1.3	0.61	35.6	6	11	28.7	4.52	175	1520	57.8	21.9	2.65	0.15	0.09	7.60
10- AAB- 0324	<0.5	0.45	14.05	15	5	23.9	3.24	112	773	57.4	19.55	4.39	1.62	0.54	8.13
10- AAB- 0325	<0.5	0.32	15.50	<5	6	14.0	2.34	66	726	57.3	22.8	1.68	0.39	0.05	10.30
10- AAB- 0326	<0.5	0.28	16.70	<5	5	14.0	2.23	74	658	57.7	22.4	2.05	0.62	0.08	10.15
10- AAB- 0327	<0.5	0.66	42.9	<5	13	31.7	4.81	147	1510	56.5	20.7	3.69	1.07	0.11	10.10
10- AAB- 0328	<0.5	0.33	16.45	<5	12	17.5	2.44	76	748	58.2	20.7	2.16	0.73	0.10	8.82
10- AAB- 0329	2.3	0.51	14.30	27	27	28.4	3.52	217	889	58.5	19.75	3.68	0.58	0.54	5.08

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: UNIVERSITY OF BRITISH COLUMBIA
DEPARTMENT OF EARTH & OCEAN SCIENCES
6339 STORES RD
VANCOUVER BC V6T 1Z4

Finalized Date: 6- SEP- 2010
Account: HAT

CERTIFICATE OF ANALYSIS VA10114580

Sample Description	Method / Analyte / Units / LOR	ME- ICP06 K2O % 0.01	ME- ICP06 Cr2O3 % 0.01	ME- ICP06 TiO2 % 0.01	ME- ICP06 MnO % 0.01	ME- ICP06 P2O5 % 0.01	ME- ICP06 SrO % 0.01	ME- ICP06 BaO % 0.01	OA- GRA05 LOI % 0.01	TOT- ICP06 Total % 0.01
10- AAB- 0300		5.54	<0.01	0.38	0.13	0.06	0.03	0.03	2.20	98.8
10- AAB- 0301		5.65	<0.01	0.38	0.07	0.06	0.03	0.06	1.19	99.3
10- AAB- 0302		5.21	<0.01	0.18	0.19	0.01	0.01	0.01	2.87	99.4
10- AAB- 0303		5.45	<0.01	0.37	0.23	0.16	0.07	0.09	1.50	98.9
10- AAB- 0304		5.56	<0.01	0.40	0.06	0.07	0.03	0.06	1.00	100.0
10- AAB- 0305		6.33	<0.01	0.66	0.25	0.04	0.02	0.02	1.97	99.7
10- AAB- 0307		5.79	<0.01	0.31	0.11	0.02	0.01	0.01	0.30	99.1
10- AAB- 0308		5.72	<0.01	0.29	0.13	0.01	<0.01	<0.01	1.28	99.3
10- AAB- 0309		5.69	<0.01	0.19	0.15	0.01	<0.01	<0.01	0.80	99.1
10- AAB- 0310		6.28	<0.01	0.90	0.18	0.29	0.11	0.15	0.60	98.6
10- AAB- 0311		5.77	<0.01	0.38	0.08	0.07	0.04	0.07	0.59	99.4
10- AAB- 0312		5.97	<0.01	0.92	0.12	0.07	0.01	0.01	1.20	98.2
10- AAB- 0313		6.07	<0.01	0.27	0.12	0.04	0.01	<0.01	0.79	98.8
10- AAB- 0314		5.38	<0.01	0.14	0.10	<0.01	<0.01	<0.01	0.89	99.0
10- AAB- 0315		5.65	<0.01	0.13	0.12	<0.01	<0.01	<0.01	1.40	101.0
10- AAB- 0316		5.64	<0.01	0.18	0.17	0.01	0.01	0.02	2.26	100.5
10- AAB- 0317		4.21	0.01	0.67	0.01	0.30	0.03	0.40	1.19	100.5
10- AAB- 0318		5.86	<0.01	0.16	0.14	<0.01	<0.01	0.01	2.88	100.5
10- AAB- 0319		5.97	<0.01	0.40	0.16	0.03	<0.01	0.01	1.50	99.7
10- AAB- 0320		6.52	<0.01	0.23	0.05	<0.01	0.02	0.30	0.99	100.0
10- AAB- 0321		7.58	<0.01	0.14	0.06	0.01	0.01	0.14	0.30	99.1
10- AAB- 0322		4.42	<0.01	0.18	0.09	0.01	<0.01	0.01	0.10	97.0
10- AAB- 0323		5.42	<0.01	0.14	0.15	<0.01	0.01	0.02	4.54	100.5
10- AAB- 0324		5.51	<0.01	0.41	0.20	0.19	0.09	0.16	1.58	99.8
10- AAB- 0325		5.69	<0.01	0.08	0.09	0.01	0.01	0.02	0.29	98.7
10- AAB- 0326		5.69	<0.01	0.14	0.11	0.03	0.02	0.02	1.28	100.5
10- AAB- 0327		5.32	<0.01	0.21	0.23	<0.01	0.01	<0.01	1.10	99.0
10- AAB- 0328		6.35	<0.01	0.13	0.12	0.01	<0.01	0.01	1.97	99.3
10- AAB- 0329		7.08	<0.01	0.62	0.19	0.13	0.05	0.33	2.20	98.7