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**Report on the 2016-2017  
Geology and Petrology Program,  
Red Lake Extension (RLX) Property**

**Red Lake Mining Division, Ontario**

**50° 59' N, 93° 30' W**

**NTS 52K14**

For

**Tri Origin Exploration Ltd.**

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Aurora, Ontario

L4G 0H8

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**March 22, 2017**

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# Introduction and Property Description

This report reviews the results of a program of major and trace element analyses and onsite geological investigations at Red Lake Extension (RLX) property of Tri Origin Exploration Ltd.

The Red Lake Extension Property (RLX) lies within Willans, Ranger, Otter Lake and South of Otter Lake Townships in the Red Lake Mining Division, north-western Ontario. The property is located approximately 25 kilometres southeast of Red Lake with vehicle access via the Chukuni River forestry road which connects to Highway 105 (Figure 1)



Figure 1: Property Location

The RLX property consists of 62 unpatented mining claims comprised of 859 units covering an area of approximately 13,210 ha (figure 2). All of the claims are in one contiguous block and are 100% owned by Tri Origin Exploration Ltd. Claims are in good standing until at least March 29, 2017 Applications for extensions were filed for several claims in order for more time to be allowed for completion of proposed field programs. Updates are pending from the Ministry of Northern Development and Mines and all claims should be in good standing until September 4, 2017. The property consists of the following claims:

ClaimNumber	Township / Area	Claim Due Date
3005003	OTTER LAKE AREA	2018-Feb-10
3005066	OTTER LAKE AREA	2018-Feb-10
3005069	OTTER LAKE AREA	2018-Feb-10
4204611	OTTER LAKE AREA	2017-Mar-29
4222921	OTTER LAKE AREA	2017-Sep-04
4222922	OTTER LAKE AREA	2017-Sep-04
4222923	OTTER LAKE AREA	2017-Sep-04
4222924	OTTER LAKE AREA	2017-Sep-04
4222925	OTTER LAKE AREA	2017-Sep-04
4222926	OTTER LAKE AREA	2017-Sep-04
4222927	OTTER LAKE AREA	2017-Sep-04
4272650	OTTER LAKE AREA	2017-Sep-04
4272651	OTTER LAKE AREA	2017-Sep-04
4272652	OTTER LAKE AREA	2017-Sep-04
4272653	OTTER LAKE AREA	2017-Sep-04
4272654	OTTER LAKE AREA	2017-Sep-04
4272655	OTTER LAKE AREA	2017-Sep-04
4272656	OTTER LAKE AREA	2017-Sep-04
4272657	OTTER LAKE AREA	2017-Sep-04
3005068	RANGER	2017-Nov-10
3005028	SOUTH OF OTTER LAKE AREA	2017-Nov-10
3005029	SOUTH OF OTTER LAKE AREA	2017-Nov-10
3005030	SOUTH OF OTTER LAKE AREA	2017-Nov-10
3005031	SOUTH OF OTTER LAKE AREA	2017-Nov-10
3005032,	SOUTH OF OTTER LAKE AREA	2017-Nov-10
3005033	SOUTH OF OTTER LAKE AREA	2017-Nov-10
3005034	SOUTH OF OTTER LAKE AREA	2017-Nov-10
3005035	SOUTH OF OTTER LAKE AREA	2017-Nov-10
3005036	SOUTH OF OTTER LAKE AREA	2017-Nov-10
3005037	SOUTH OF OTTER LAKE AREA	2017-Nov-10
3005038	SOUTH OF OTTER LAKE AREA	2017-Nov-10
3005039	SOUTH OF OTTER LAKE AREA	2017-Nov-10
3005041	SOUTH OF OTTER LAKE AREA	2018-Feb-10
3005043	SOUTH OF OTTER LAKE AREA	2017-Nov-10
3005045	SOUTH OF OTTER LAKE AREA	2017-Nov-10
3005047	SOUTH OF OTTER LAKE AREA	2017-Nov-10
4222928	SOUTH OF OTTER LAKE AREA	2017-Sep-04
4222929	SOUTH OF OTTER LAKE AREA	2017-Sep-04

4222930	SOUTH OF OTTER LAKE AREA	2017-Sep-04
3005040	WILLANS	2018-Feb-10
3005042	WILLANS	2017-Nov-10
3005044	WILLANS	2017-Nov-10
3005046	WILLANS	2017-Nov-10
3005048	WILLANS	2018-Feb-10
3005049	WILLANS	2018-Feb-10
3005050	WILLANS	2018-Feb-10
3005051	WILLANS	2017-Nov-10
3005053	WILLANS	2017-Nov-10
3005054	WILLANS	2017-Nov-10
3005055	WILLANS	2017-Nov-10
3005056	WILLANS	2017-Nov-10
3005057	WILLANS	2017-Nov-10
3005058	WILLANS	2017-Nov-10
3005059	WILLANS	2017-Nov-10
3005060	WILLANS	2018-Feb-10
3005061	WILLANS	2018-Feb-10
3005062	WILLANS	2018-Feb-10
3005064	WILLANS	2018-Feb-10
3005065	WILLANS	2018-Feb-10
4204613	WILLANS	2017-Mar-29
4222885	WILLANS	2018-Feb-25

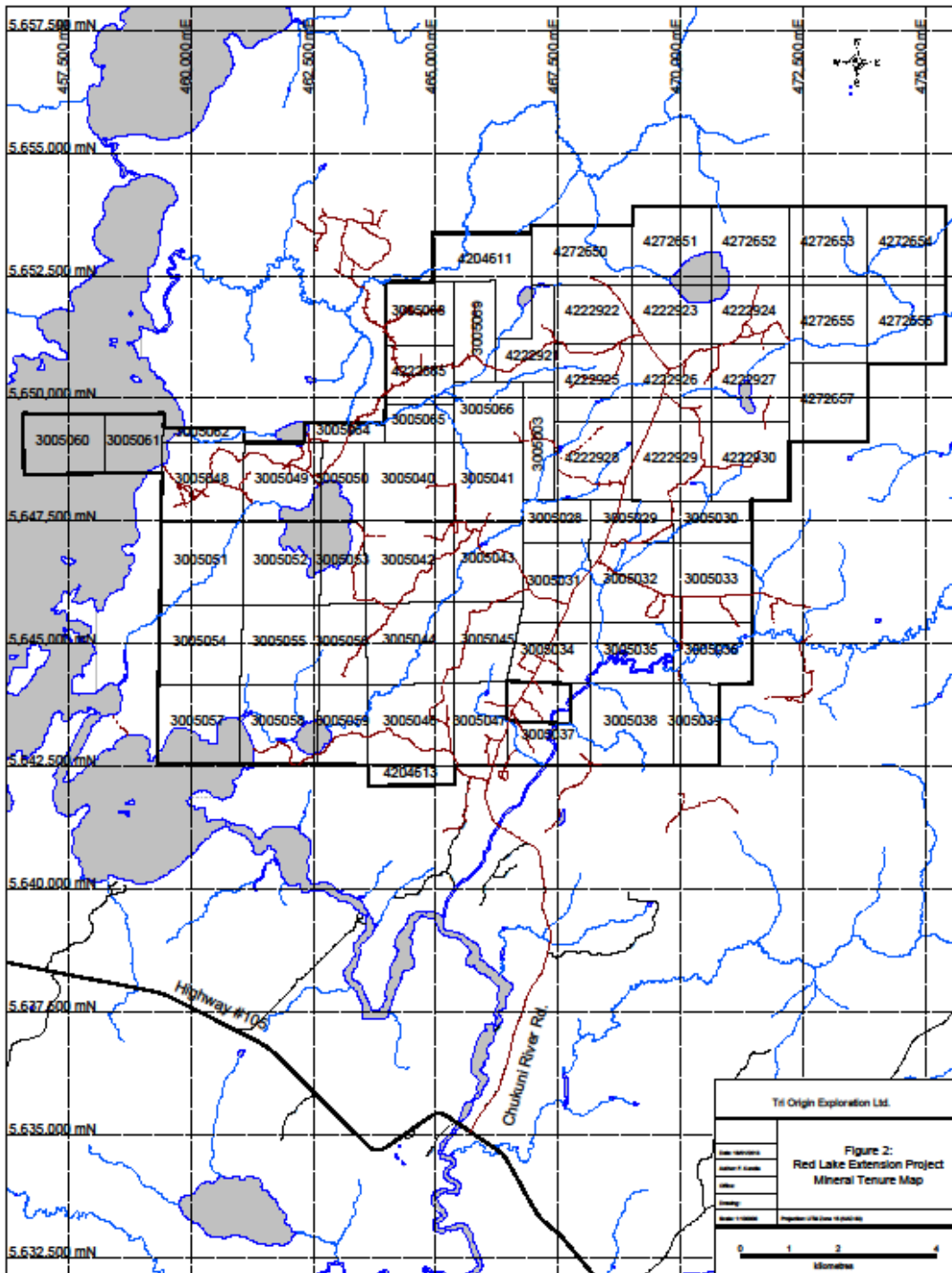


Figure 2: Property Location and Claims



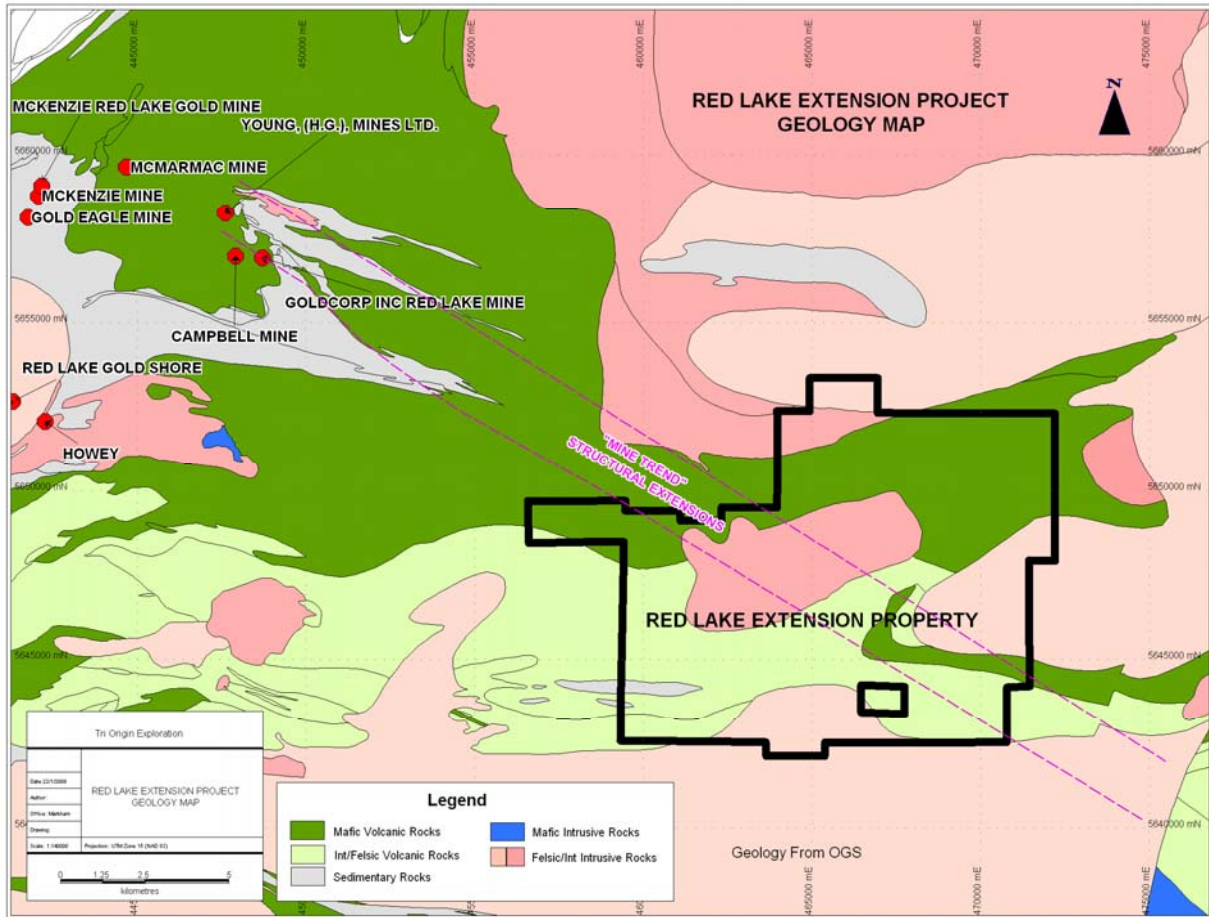
## Regional and Property Geology

The Red Lake Extension project lies in the Red Lake greenstone belt, (Figure 3) within the Uchi Subprovince of the Archean aged Superior province. The Red Lake/Birch-Uchi greenstone belts form a continuous 200 km long arcuate belt of volcanic and sedimentary rocks surrounding the Trout Lake batholith (Thurston and Paktunc, 1985). The Red Lake greenstone belt is situated to the west of the property and the Birch-Uchi belt lies to the east. The Red Lake Extension property lies in the south-eastern portion of the Red Lake belt and in part also covers the western extension of the Birch-Uchi belt, within the segment south of the Trout Lake batholith that connects the two belts.

Rocks of these greenstone belts are fault bounded to the south with the English River gneiss complex and the north is in intrusive contact with the Berens River Batholith complex. The Red Lake/Birch-Uchi greenstone belt consists of three major volcanic assemblages: the Balmer, Woman and Confederation. The Balmer Assemblage hosts all the major gold deposits in the Red Lake area. It consists mainly of tholeiitic mafic volcanic flows, sills and sub-volcanic intrusions, with lesser abundance of interflow mafic and intermediate volcanoclastic rock, iron formation, rhyolitic flows and associated pyroclastic rock and clastic sedimentary rock. The supracrustals rocks have been intruded by a number of intrusive bodies including serpentinitized peridotite, gabbro, diabase, and small felsic dykes and stocks, eg; Dome and Mackenzie stocks.

Geological understanding of the RLX property is based on mapping conducted by the Ontario Geological Survey in the late 1970s (Pirie 1980, Pirie and Kita 1979) and recent work conducted by Tri Origin. OGS mapping indicates predominately overburden cover with a few scattered outcrops of mafic volcanic and intrusive rock plus minor felsic to intermediate volcanic and intercalated clastic sedimentary rock. The RLX property covers ten kilometers along the extension of the Cochenour-Gullrock Lake Deformation Zone and includes Balmer-type volcanic assemblages which host the majority of the gold production in the Red Lake camp. At its southern part, rocks of the Confederation Assemblage are exposed.

The purpose of the current work is to determine if a combination of major element geochemical analyses combined with visual examination of outcrop and drill core samples is sufficient to distinguish between rocks of the Balmer and Confederation assemblages.



**Figure 2: Regional Geology**

## Previous Exploration

Past exploration work on the property is described in Compilation Report of Previous Exploration and a Proposed Exploration Program on the Red Lake Extension Property by Kenneth Guy, P.Geo, and filed on SEDAR, May 2003.

An extensive amount of previous exploration has been conducted within the Red Lake greenstone belt northeast of the RLX property. This work has not been summarized in this report. Exploration work completed in the vicinity of the currently held claims includes the following:

## **Regional Exploration significant to RLX Property**

- 1959-62 Canico flew regional AEM and magnetic surveys but did not perform any work on the area of the Tri Origin RLX property.
- Hudson Bay Mining and Smelting flew the area as well in the 1970's and conducted follow-up on various claim groups, none of which correspond directly to the Tri Origin property. This resulted in the discovery of a base metal occurrence to the south of the property.
- 1976-1983 - Selco completed extensive base metal exploration throughout the area performing small ground geophysical surveys and airborne EM and Mag in the 1970's. The airborne data was not submitted for assessment. Follow-up drilling resulted in discovery of the various Dixie base metal occurrences south east of the RLX property.
- 1978 Red Lake and 1991 Birch-Uchi-Confederation Lakes regional airborne magnetic and EM surveys were flown for the Ontario Geological Survey.
- 1989 - Regional airborne magnetic and EM surveys flown by Noranda Mining and Exploration Ltd.
- Geological mapping by the OGS in the RLX project area and surrounding areas.
- Selco and Noranda explored several properties within the local area, including properties adjacent to the Tri Origin properties, in particular the claims immediately southeast of the property where extensive diamond drilling was conducted on a base metal occurrences.

## **Exploration on the RLX Property Previous to Tri Origin**

- Intermittent exploration has been conducted to the immediate north of the property by Inco, Selco, Cochenour-Willians, New Dickenson and Placer Dome. Geophysics, drilling and trenching for Au/Ag and base metals were carried out in predominately mafic volcanic rocks.
- In 1976 Selco completed 2 grids in the southwest quadrant of the property. HLEM and mag Surveys were completed and 1 weak out-of-phase anomaly was detected. No further work was recorded and no rock outcrop was noted in the vicinity of the grid.
- The 6 claim window in the south half of the property (located within RLX claim 3005037) presently owned by G. Campbell covers a small AEM anomaly and was explored and drilled by Selco and Inco in the 70's. The original Selco hole intersected 1.2' of 0.96% Cu, 3.22% Zn and 0.16 oz/t Ag.

- OGS conducted a Red Lake airborne survey in 1978. There were no significant anomalies on the RLX block but staking at the time of the survey included claim to the north of the RLX property to cover a discreet magnetic anomaly with coincident 3 to 5 channel AEM anomalies.
- In 1979 OGS map P2214 was completed by Pirie and Kita who mapped Willans Township. Very few outcrops were located on the RLX property with mafic volcanic rocks noted to the north and intermediate and felsic volcanic and intrusive rocks noted to the south

## **Exploration on RLX Property by Tri Origin**

Since 2003, Tri Origin Exploration has conducted field work on the Red Lake Extension property. Early work in 2003 and 2004 consisted of data compilation, geological investigation, line cutting, walking magnetic survey, humus soil geochemistry survey, induced polarization (IP) surveys, a limited overburden drilling geochemistry survey, and diamond drilling

Results showed the presence of elevated Au values in humus and in drilled overburden samples coincident with areas of ground IP chargeability anomalies. During 2005 work on the property consisted of geological mapping and prospecting, litho-geochemistry sampling, percussion drilling, and soil sampling for pH and mobile metal ion analysis. In late summer 2005 the company completed three diamond drill holes totalling 520 metres on the property. Additional line cutting and IP geophysical surveying was also completed.

In 2006, six diamond drill holes totalling 927.7 metres of NQ core were completed by Tri Origin on the RLX property to test IP anomalies of interest and gold in humus geochemical targets. Results yielded no significant gold-bearing mineralization. A Rotasonic Drilling Program, targeting gold and VMS Mineralization was conducted by ODM Ltd for Tri Origin from June to July 2007. 23 holes totalling 267.8 metres were drilled and results obtained from drilling reported in June – July, 2007.

In 2008, Tri Origin Exploration Ltd. conducted a program of geochemical sampling, ground and airborne geophysics and diamond drilling. Eight drill holes totalling 1322.6 m were completed on the north-central area of the property. 1914 humus and mineral soil samples were collected from across the property. A spectral IP/Resistivity survey was conducted by Clearview Geophysics of Brampton, Ontario, and the entire property was surveyed by a heliborne EM/Mag system by Geotech Ltd.

In 2009 a program of humus and soil geochemistry was conducted along with a diamond drilling program. 807 geochemical samples were collected from selected areas of the property to augment the soil sampling from previous years. In the summer of 2009, six drill holes totalling 914 m were completed on the RLX property.

During 2010 Tri Origin returned to the property to expand on the humus and soil sampling of previous years taking a further 1782 soil and humus samples. Geological mapping was also completed.

During 2011 Tri Origin completed a 839m five hole diamond drill program. Upon completion of the drill program geological mapping and a geochemical survey were completed. 256 soil and 46 humus samples were collected to extend lines that were sampled in previous years.

During the 2012 summer field season Tri Origin completed a cut grid on the north-western portion of the property. The grid consisted of a 3.4 kilometer east-west base line with 21.75 kilometers of north-south cross lines picketed at 25 metre intervals. An induced polarization survey was completed on the cut lines. Tri Origin also completed a summer outcrop mapping and sampling program to produce a property-wide geological map. 70 samples were collected for gold and multi-element analysis and 24 samples were collected for whole rock analysis. Soil geochemical sampling was also conducted to extend and infill previous surveys. A total of 963 humus and 364 mineral soil samples were collected from selected areas on the property.

During the late fall of 2012, six drill holes totalling 818.5 m were completed on the RLX property.

In 2013 Tri Origin conducted a program of 21.1 kilometres of line cutting and ground magnetic surveying at three small grids located at the east and northeast part of the property. A total of 20.5 kilometers of Induced Polarization surveying was also completed at these grids.

## **Results of Whole Rock Major and Trace Element Analyses**

### **Sampling, Analytical and Plotting Procedures**

A total of 72 rock samples were analysed for major element oxides by SGS Laboratories of Lakefield, Ontario. A total of 42 samples were collected from outcrop during previous geological mapping programs conducted by Tri Origin. A total of 30 samples were collected from diamond drill holes completed by Tri Origin. All of these samples were analysed for major elements and 18 of these samples were analysed for trace elements (Rb, Sr, Y, Zr, Nd, Ba, & As). Analyses were conducted by SGS during different time periods and Appendix A lists the sampling and analytical procedures used for each batch of samples. Appendix B lists details of sample locations, field nomenclature and results of whole rock major and trace element analyses. Certificates of Analyses are included in Appendix C.

Samples were taken from various locations across the property however two areas were focussed on. The first was at the western part of the property, north and west of Willans Lake. Field work and drilling conducted by Tri Origin in this area indicated that rocks of the upper part of the Balmer Assemblage similar to those

that occur near the Red Lake Mine occur at this part of the property. Secondly, a grouping of samples was collected at the west central part of the property. Field work and a limited amount of drilling conducted by Tri Origin indicated that rocks of the upper Balmer Assemblage reoccur at this part of the property. Figure 4 is a plan map locating samples analysed for major elements.

In addition, widely-spaced samples were collected from the southern part of the property. These samples were believed to be from Confederation Assemblage rocks.

The sample data was compiled and reformatted into a spreadsheet for importing into and plotting using the program IgPet (Appendix D). Certain values (FeO, Mg#, and An%) were calculated for use with IgPet (as per the formulas in [http://www.d.umn.edu/~mille066/Teaching/5310\\_09/ILb.2-Geochemistry.pdf](http://www.d.umn.edu/~mille066/Teaching/5310_09/ILb.2-Geochemistry.pdf), and converted to mole % as per molecular weights in <http://ruby.colorado.edu/~smyth/G3010/PS08Excel.pdf>). Several oxides were also converted to metals (CaO x 0.7146 → Ca; Cr<sub>2</sub>O<sub>3</sub> x 0.684202 → Cr; Fe<sub>2</sub>O<sub>3</sub> x 0.699433 → Fe; K<sub>2</sub>O x 0.830147 → K; MgO x 0.603036 → Mg; MnO x 0.774457 → Mn; P<sub>2</sub>O<sub>5</sub> x 0.436421 → P; SiO<sub>2</sub> x 0.467439 → Si; TiO<sub>2</sub> x 0.599508 → Ti; V<sub>2</sub>O<sub>5</sub> x 0.560166 → V ; according to factors from <http://www.geol.umd.edu/~piccoli/probe/molweight.html>).

A Kcode value was used for certain plots and represents rock samples of specific lithologies as identified in the field (no reference to location).

Kcode #	Rock Type
2	Archean mafic volcanics
3	Archean intermediate volcanics
4	Archean felsic volcanics
6	Archean sedimentary/interflow sedimentary rocks
10	Archean gabbro/mafic intrusions
12	Archean granitoids

Two additional tables were created for further discrimination diagrams:

- 1) **RLX\_Oxide and Trace data-felsic volcanics only - IgPet.xls** – includes all analyses described as felsic in the field and includes analyses of rocks described as “intermediate” in the field with greater than 60% SiO<sub>2</sub>. One sample was described as felsic in the field but had less than 60% SiO<sub>2</sub>.
- 2) **RLX\_Oxide and Trace data-mafic volcanics only - IgPet.xls** – includes all analyses described as mafic in the field and includes analyses of rocks described as “intermediate” in the field with less than or equal to 60% SiO<sub>2</sub>.

The excel files were then converted to tab-delimited .txt files for importing to IgPet. Upon importing into IgPet, the file "**RLX\_Oxide and Trace data - IgPet.txt**" was normalized to 100% on a volatile-free basis, and the following diagrams were made:

- 1) Rock Type: Alkalies vs SiO<sub>2</sub> (Cox, Bell, & Pankhurst, 1979)
- 2) Irvine Baragar: AFM diagram for tholeiitic vs calc-alkaline
- 3) Rock Type: FeO-MgO vs SiO<sub>2</sub> (Miyashiro 1974)
- 4) Rock Type: Zr/Ti vs Nb/Y (Pearce 1996 after Winchester and Floyd)
- 5) Rock Type: SiO<sub>2</sub> vs Zr/TiO<sub>2</sub> (Winchester & Floyd 1977)

The file "**RLX\_Oxide and Trace data-felsic volcanics only - IgPet.txt**" was also imported, normalized to 100% on volatile-free basis, and used to generate the diagram: Zr/Y vs SiO<sub>2</sub>.

## **Project Rational**

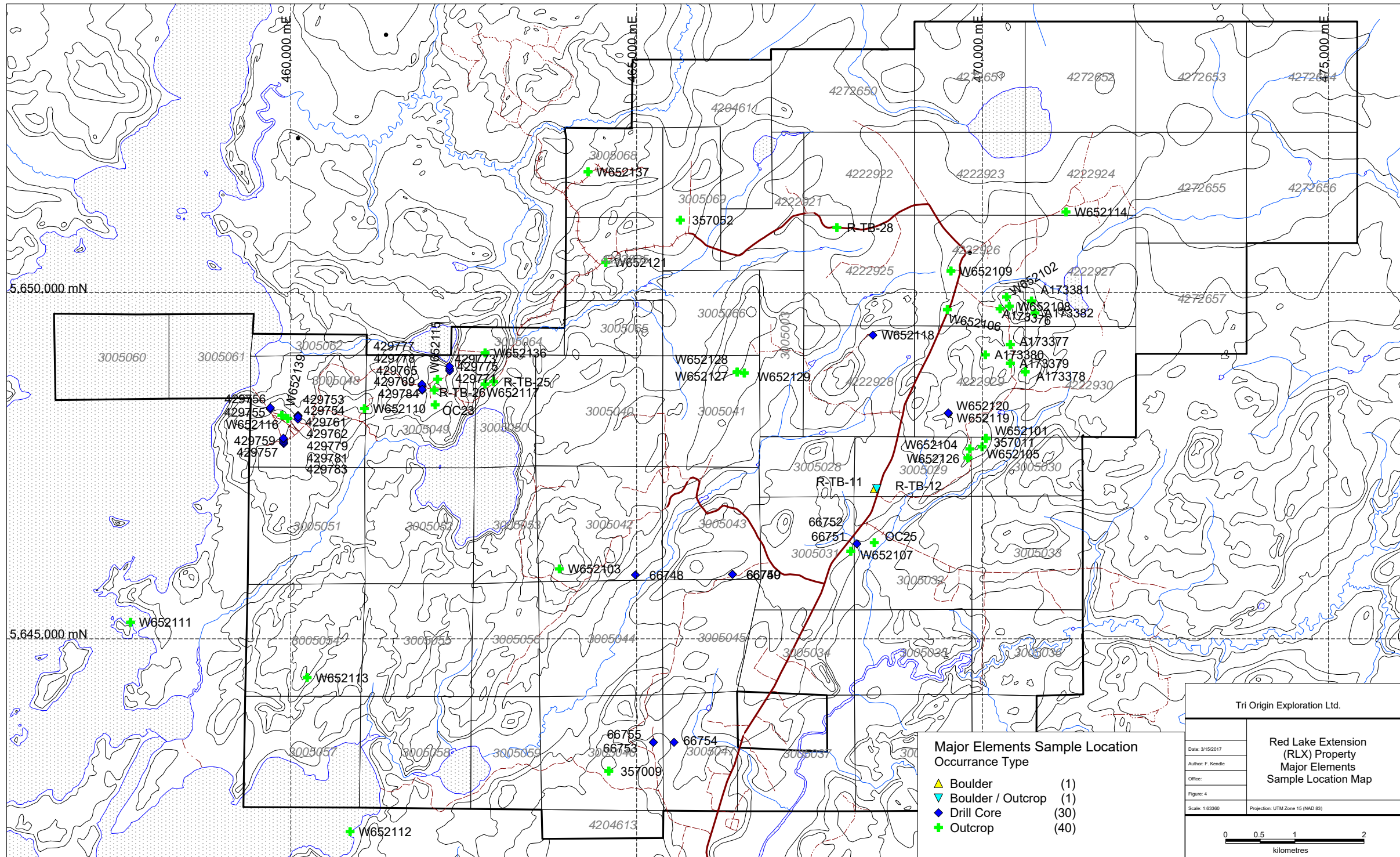
The Red Lake District hosts a number of significant gold deposits which collectively have produced over 20 million ounces of gold. These deposits are located within the Balmer Assemblage of volcanic rocks and usually hosted by mafic volcanic and interflow units. More importantly, the majority of these deposits and all of the large gold deposits are hosted within the stratigraphically upper part of the Balmer Assemblage in association with "upper Balmer" felsic volcanic rock. Work conducted by the Geological Survey of Canada and the Ontario Geological survey indicates that the upper part of the Balmer Assemblage is marked by a regional unconformity and overlain by the younger Confederation Assemblage. Gold deposits at Red Lake have not been found in the Confederation Assemblage.

The RLX property overlies rocks of both the Balmer and Confederation Assemblages. Therefore, it is important to determine the extent of Balmer and Confederation rocks at the RLX property and to locate the contact between the two Assemblages as accurately as possible. In particular, a better understanding of the distribution of upper Balmer rocks is important in planning and conducting additional exploration at the property. For this report, samples were assessed through geochemical means and by field examination of drill core and outcrop in areas where interpretation of previous field mapping indicated that upper Balmer rocks might be present.

## **Results of Geochemical Discrimination Diagrams**

Whole rock major element analyses were plotted on a variety of geochemical discrimination diagrams to; determine their petrographic affinities, to verify and compare to the classifications made during field mapping and to compare the RLX samples to rocks of the Red Lake District. Discrimination diagrams where all samples are plotted are illustrated on Figures 5 to 9.





Tri Origin Exploration Ltd.	
Date: 3/15/2017	<b>Red Lake Extension (RLX) Property Major Elements Sample Location Map</b>
Author: F. Kende	
Office:	
Figure: 4	
Scale: 1:63380	Projection: UTM Zone 15 (NAD 83)

**Major Elements Sample Location Occurrence Type**

▲ Boulder	(1)
▼ Boulder / Outcrop	(1)
◆ Drill Core	(30)
✚ Outcrop	(40)



Major Element Oxide & Select Trace Element Discrimination Diagrams

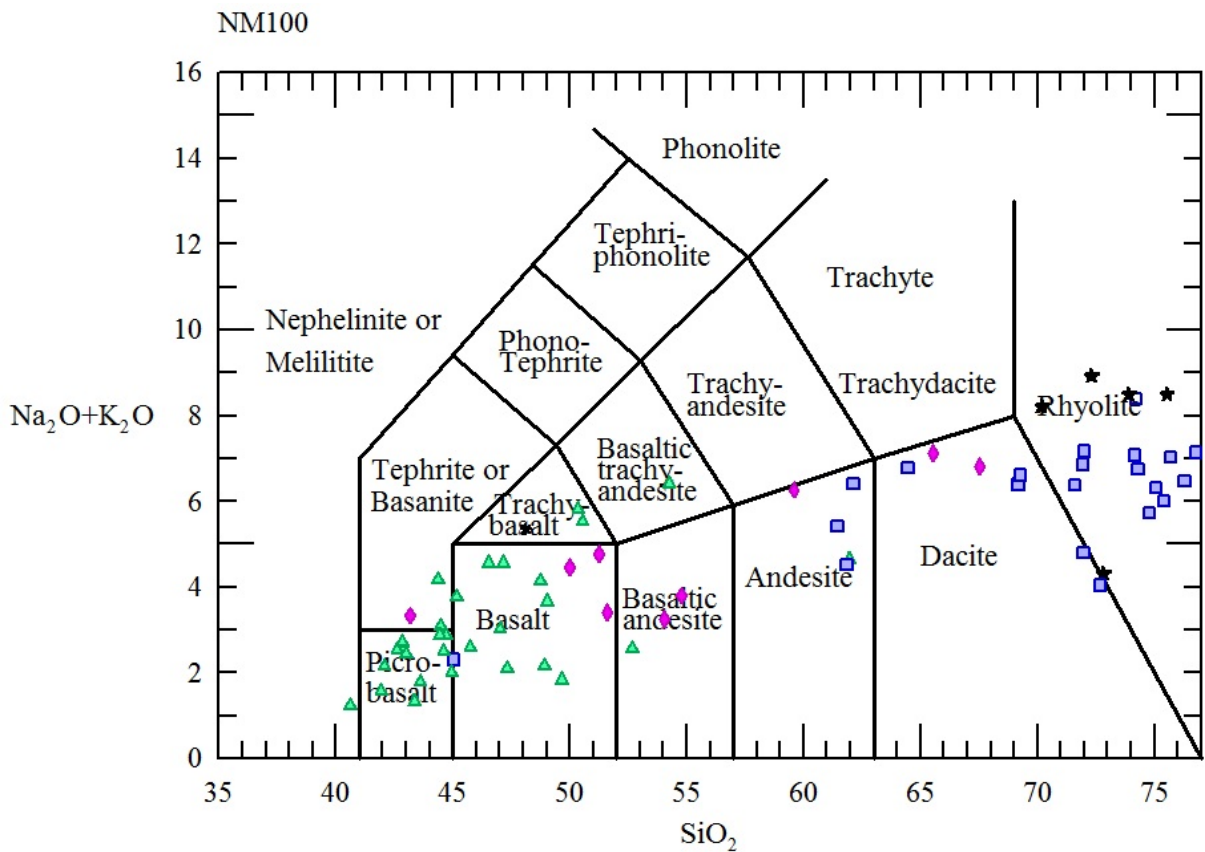


Figure 5: Na<sub>2</sub>O+K<sub>2</sub>O versus SiO<sub>2</sub>

Samples plotted based on Na<sub>2</sub>O+K<sub>2</sub>O versus SiO<sub>2</sub> (figure 5) range from rhyolite to basalt with a few samples tending toward ultramafic in composition. In

general, the samples fall into two compositional clusters; rhyolite and basalt. Four samples mapped as felsic lie near the andesite-dacite border. Trace element data is only available for 11 mafic rock samples and 7 felsic rock samples. The basalt and rhyolite clusters are apparent on a plot of SiO<sub>2</sub> vs Zr/ TiO<sub>2</sub> (figure 6). On a plot of Zr/TiO<sub>2</sub> vs Nb/Y (figure 7) the mafic samples remain clustered in a basaltic field however the felsic samples are more dispersed and follow a trend from more basic to evolved.

All samples with less than 63% silica plot well within the tholeiitic field on a plot of FeO\*/MgO vs SiO<sub>2</sub> (figure 8). On a ternary AFM diagram (figure 9) mafic rocks exhibit a cluster in the iron-rich tholeiitic field. Felsic rocks show a noticeable tholeiitic to calc-alkaline trend. Upon comparison with published analyses in the paper "Geology of the Madsen and Starratt-Olsen Area", Gold 86 Excursions Handbook; mafic volcanic rocks from the vicinity of Madsen Gold Deposit area were found to plot similarly on an AFM diagram. Figure 11 illustrates the location of mafic volcanic rock sample.

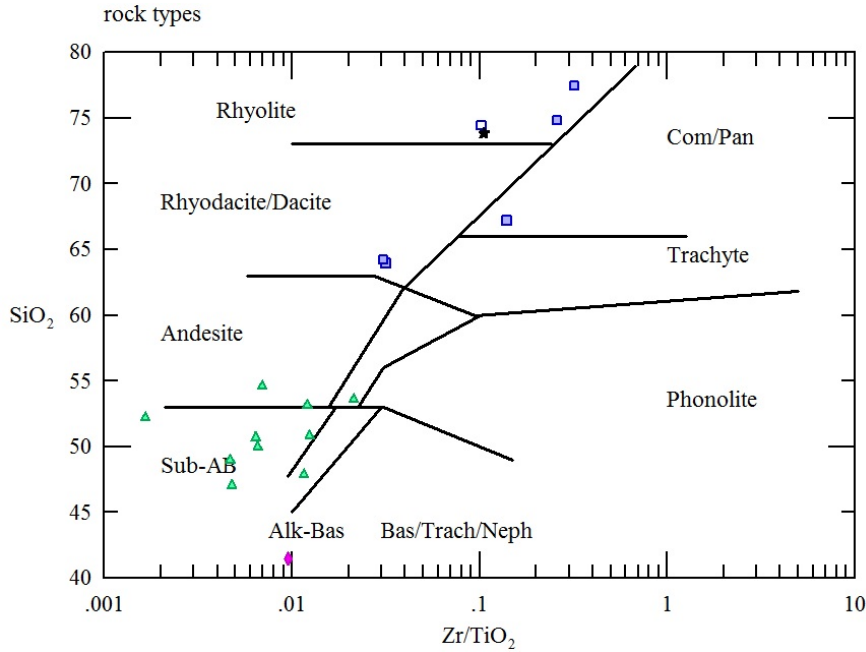


Figure 6: SiO<sub>2</sub> versus Zr/TiO<sub>2</sub>

Winchester and Floyd 1977

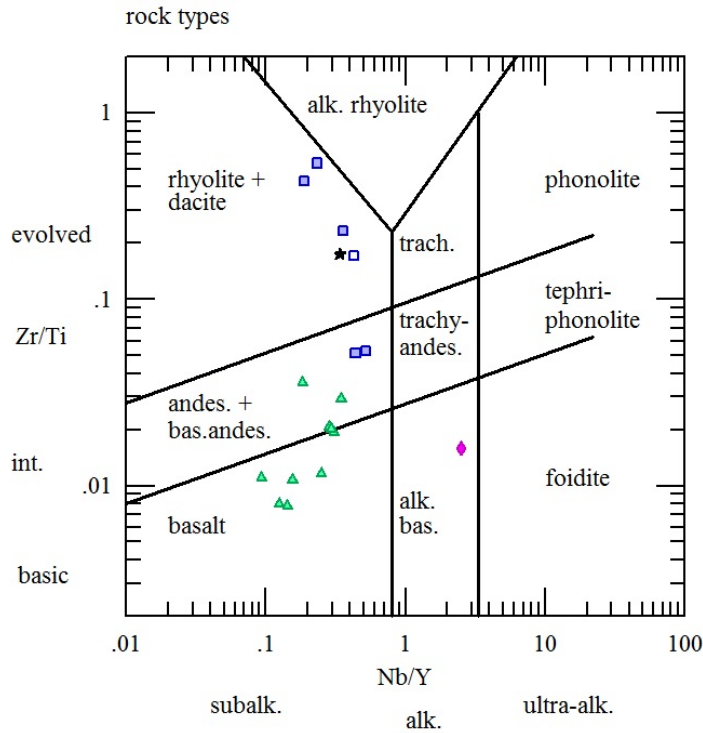


Figure 7: Zr/Ti versus Nb/Y

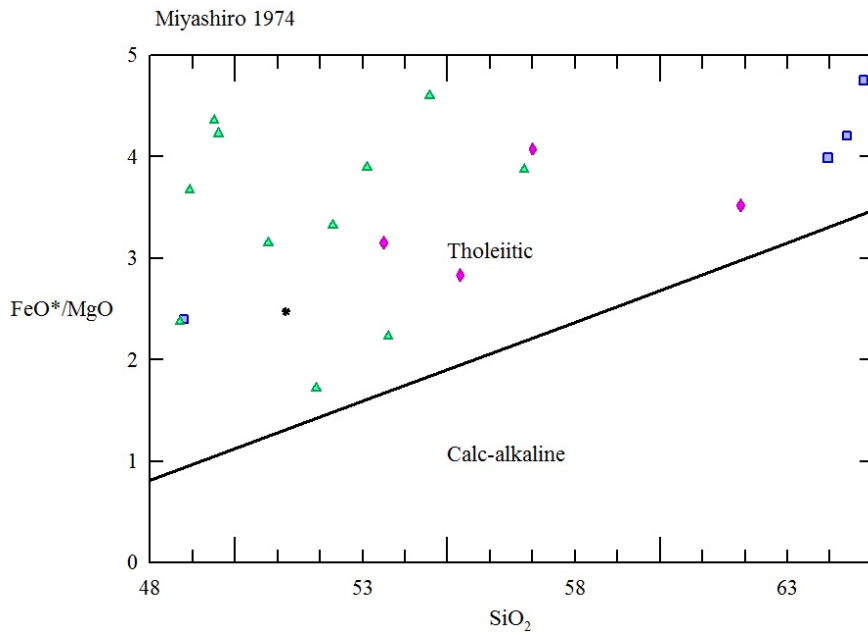


Figure 8: FeO\*/MgO versus SiO<sub>2</sub>

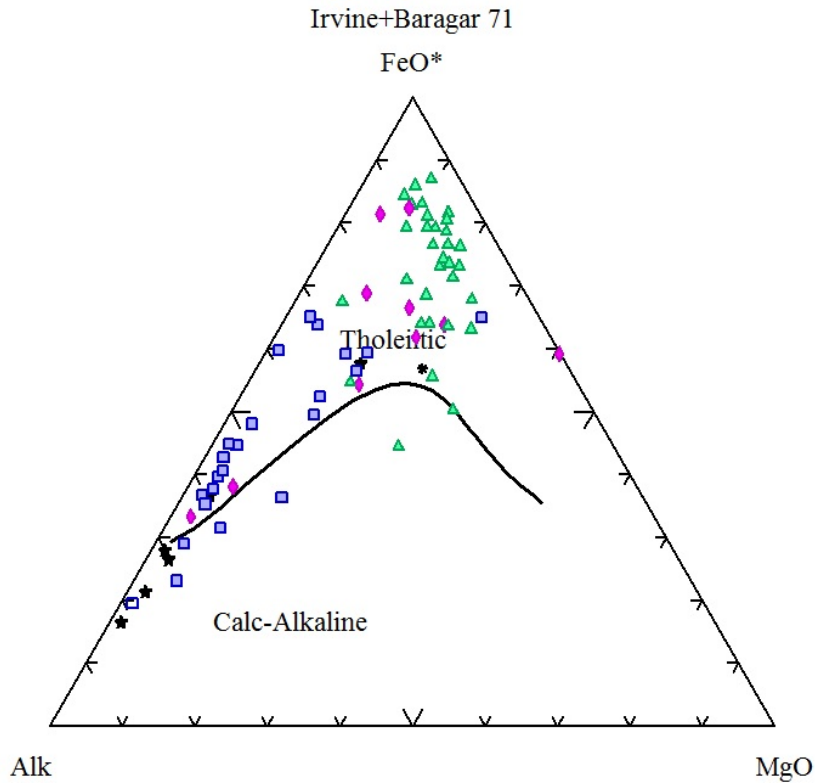


Figure 9: Alk-FeO\*-MgO (AFM)

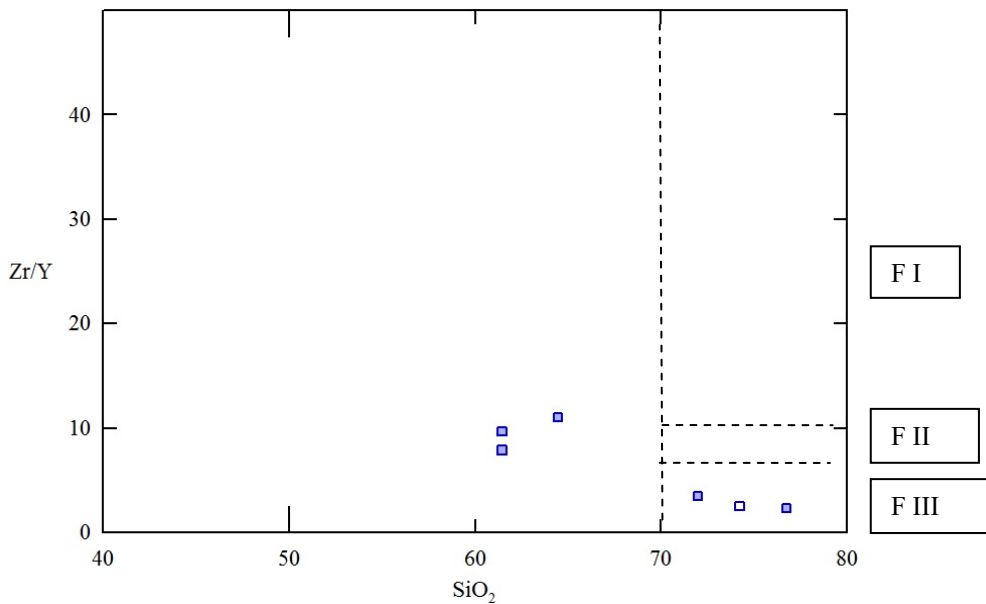
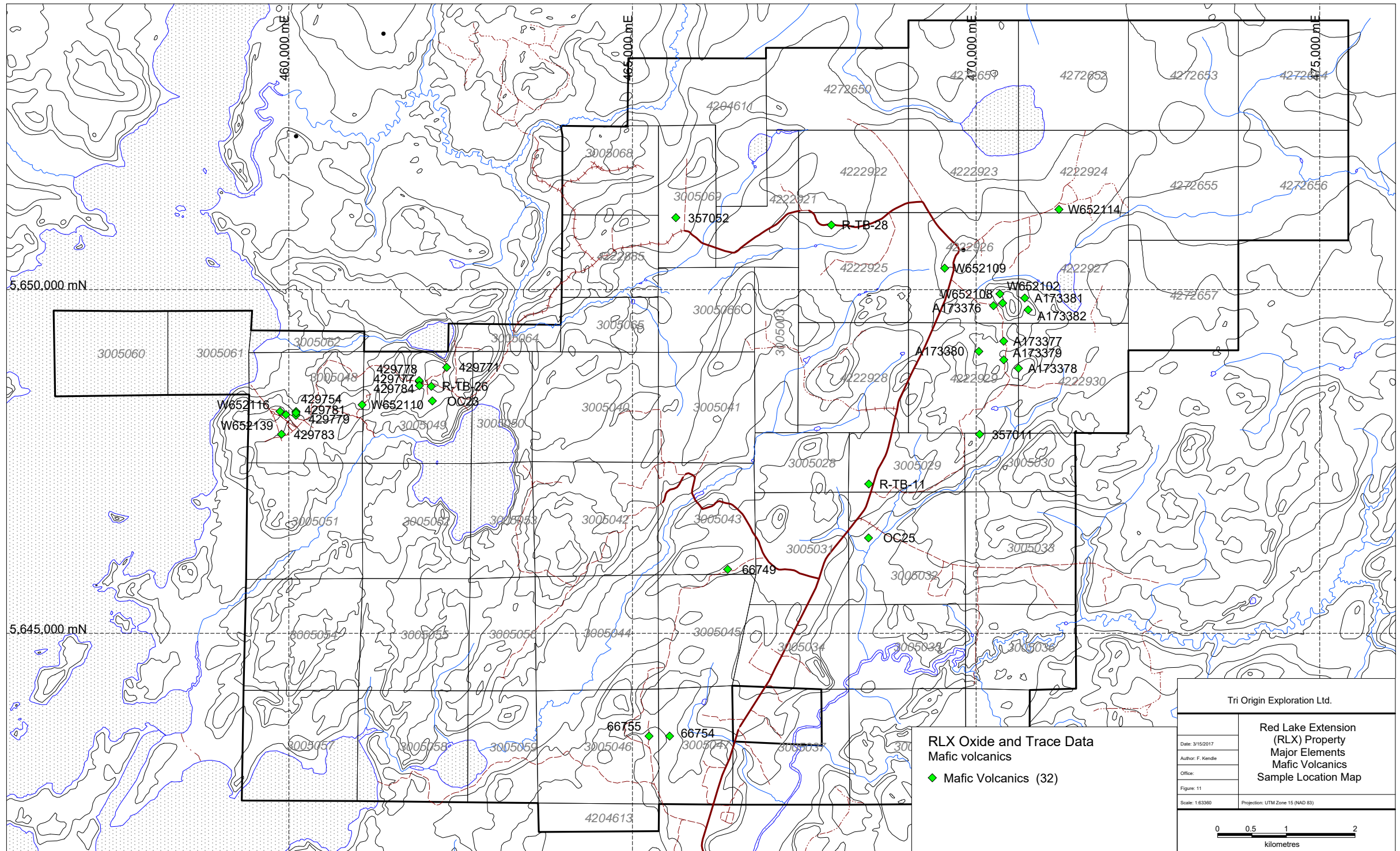
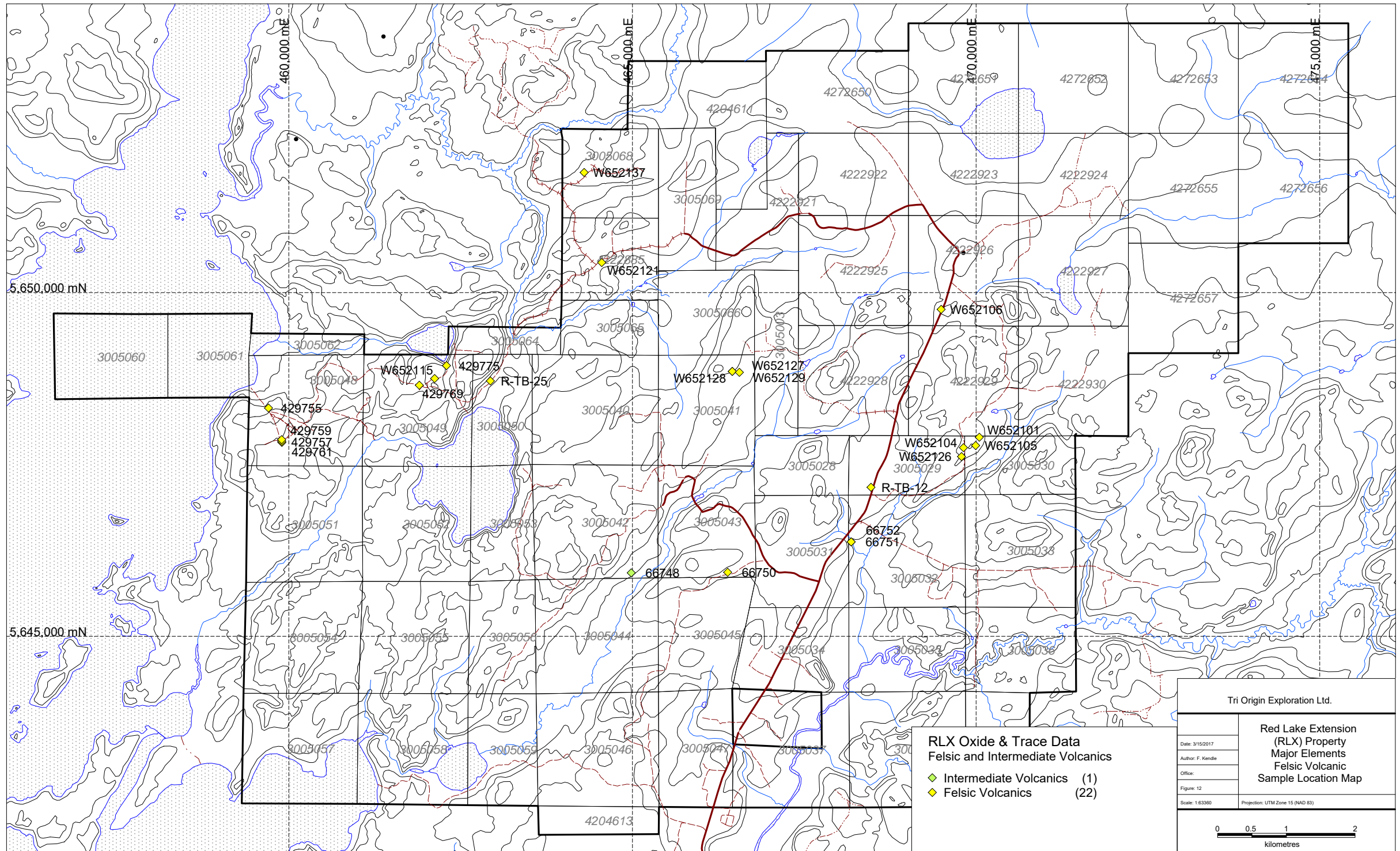


Figure 10: Zr/Y versus SiO<sub>2</sub>

Only 6 samples with greater than 60% silica have trace element data available and only 3 of these have SiO<sub>2</sub> content greater than 70%. These are plotted on a Zr/Y versus SiO<sub>2</sub> diagram (Figure 10). Three of these samples plot as F3 rhyolite although additional geochemical discrimination is required to confirm







Tri Origin Exploration Ltd.	
<b>Red Lake Extension (RLX) Property Major Elements Felsic Volcanic Sample Location Map</b>	
Date: 3/15/2017	
Author: F. Kendie	
Office:	
Figure: 12	
Scale: 1:63380	Projection: UTM Zone 15 (NAD 83)

**RLX Oxide & Trace Data  
Felsic and Intermediate Volcanics**

- ◆ Intermediate Volcanics (1)
- ◆ Felsic Volcanics (22)

this. The other 3 samples have a higher Zr/Y ratio however their silica content is too low to classify them as rhyolite. Figure 12 illustrates the location of felsic volcanic rock samples. Dacite-rhyolite samples from Red Lake plotted by Sanborn (2000) suggest that Balmer felsic rocks span the F1, F2 and F3 ranges whereas Confederation samples tend to cluster more toward the F3 range. Five of the six Tri Origin samples are located within the south central part of the property which has been interpreted in the field as being underlain by Confederation Assemblage rocks. This is confirmed by the Zr/Y versus SiO<sub>2</sub> plot for two of the samples. The single sample located at the northwest part of the property is interpreted to be a felsic rock from the Balmer Assemblage. More geochemical analyses of trace elements are required in this area.

## Field Review

The RLX property was visited May 23 to May 26, 2016. The morning of May 24 was spent at the OGS core facility south of Red Lake followed by a property visit to selected outcrops at RLX. May 25<sup>th</sup> was spent at outcrops with a return visit to the core facility in the afternoon. The primary purpose of the field work was to examine and compare outcrop and drill core samples to the results of geochemical analyses. The secondary purpose of the field work was to compare rock classification made during field mapping and core logging and correct geological maps if required. Overall, the objective was to determine what additional geochemical analyses combined with field mapping was required to better distinguish between rocks of the Balmer and Confederation Assemblages.

Initial field nomenclature and core logging which classified samples as felsic, intermediate and mafic volcanic and felsic or mafic intrusive was generally confirmed by geochemistry. Rocks classified as sedimentary were more variable. One of the samples (357009) is clearly sedimentary in appearance and its geochemical signature indicates that it is probably silicate facies iron formation. One drill core sample from Red-Ex #1 (66753) is syenitic in appearance and major element geochemistry indicates that this rock is more alkaline in composition. Samples R-TB-12 and R-TB-25 originally logged as felsic volcanic were confirmed by their geochemical character. Most other core samples originally logged as felsic to intermediate had geochemical signatures confirming the original logging (66748, 66750, 66751, 66752 and 66753).

Mafic volcanic rock identified geochemically as tholeiitic had a relatively consistent and recognisable visual appearance in outcrop and drill core. These rocks are dark green, fine-grained and generally contain amphibole laths of 1 millimetre in length. These rocks show varying degrees of calc-silicate alteration. Geochemistry, drill core and outcrop review indicate that these rocks are part of the Balmer Sequence and the samples from northeast of Willans Lake are believed to correlate with samples at the east central part of the property which have also been interpreted to be part of the Balmer Assemblage.

Felsic volcanic rock identified geochemically as tholeiitic also had a relatively consistent and recognisable visual appearance in outcrop and drill core. Felsic rock is generally white to light green in colour and fine grained to aphanitic. Some samples contain fine (~1 to 2 millimetre) clear quartz phenocrysts but this is not distinguishable by SiO<sub>2</sub> content in geochemical analyses.

Felsic volcanic rock identified geochemically as calc alkaline was less consistent in its visual appearance in outcrop and drill core. It ranges from a cream to buff and light green colour and is fine grained to aphanitic. It is difficult to confidently distinguish between tholeiitic and calc-alkaline end members of felsic volcanic rock.

The spread in geochemical characteristics of felsic samples may be a result of primary evolution of magmas, some samples being from the Balmer Assemblage and some from the Confederation Assemblage or the result of alteration. The spread in geochemical characteristics of mafic samples is thought to be a result of only two of these factors, either samples being from the Balmer Assemblage and some from the Confederation Assemblage or the result of alteration.

## **Conclusions**

Based upon geochemical analyses, examination of hand and drill core samples and field visits on the property aided by the compilation of previous mapping and airborne and ground magnetic survey data; the following conclusions can be made;

1. Where sampled, mafic volcanic rock is high-iron tholeiitic in composition however magnesium-rich varieties also occur. Additional sampling especially at the south of the property is required to further differentiate between Balmer and Confederation Assemblages.
2. Felsic rocks exhibit a tholeiitic to calc-alkaline trend. The differentiation between Balmer and Confederation is achievable however best done through trace element analyses. Additional sampling is required.
3. Field classification of mafic and felsic rock through outcrop mapping and core logging is consistent with geochemical analyses. It may be possible to do preliminary visual identification of Balmer rocks versus Confederation rocks however geochemical verification is required.
4. Based upon magnetic patterns from regional airborne surveys, the Cochenour-Gullrock Lake Deformation Zone and a structurally dislocated segment of the Balmer Group, mafic volcanic rocks appears to trend directly from the Goldcorp Red Lake Mine Property into the northwestern portion of the Red Lake Extension Property. From there, these rocks appear to trend in an easterly direction.
5. High magnesium tholeiitic mafic volcanic rocks similar in composition to those at Red Lake are found on the property. In particular, samples R-TB-26 and 28 from the northwestern portion of the property possess a near



ultramafic appearance and composition. In general, whole rock compositions of the hand and drill core samples from the northwestern and central parts of the property plot similarly in AFM diagrams to mafic volcanic rocks of the Madsen area. The location of these samples is consistent with the projected trend of the Cochenour-Gullrock Lake Deformation Zone.

6. Mafic volcanic rocks in core and outcrop are observed to possess calcite carbonatization in the form of veinlets, fracture fillings and disseminations similar to published descriptions of the distal alteration to gold bearing rocks in the Red Lake Gold Camp. This style of alteration is evident in major element geochemical analyses.
7. Based on the whole rock analysis of samples, mafic volcanic rocks contain from 1.04 to 3.81%  $K_2O$  similar to that found in the Madsen area.
8. Towards the southern margin of the property the geological domain appears to change. Metamorphism appears to increase based on the observation of greater amounts gneissic rock types, particularly in the vicinity of drill hole Red-Ex #1. This area is west and along strike from the Moose Creek property where drilling has intersected Cu-Zn mineralization hosted by metamorphosed felsic volcanic rocks. In addition, a syenitic intrusive is found in this locality. Rocks of the Confederation Assemblage are interpreted to underlie the majority of the southern part of the property.

## **Recommendations**

The main recommendations are;

- Conduct additional, systematic sampling of mafic and felsic volcanic rocks across the north central, central and southern parts of the property.
- All samples should be analysed for major and trace elements including rare-earth elements.
- Conduct a detailed literature review to plot all available analytical results from Balmer and Confederation rocks at Red Lake.
- Use the resulting determinate diagrams to plot RLX samples and delineate the boundary between the Balmer and Confederation Assemblages at RLX.
- Conduct all further exploration at areas determined to be underlain by rocks from the upper part of the Balmer Assemblage especially in areas where felsic volcanic rocks occur.

## Personnel

Frank Kendle	Project Geologist Tri Origin Exploration Ltd. Project Supervision	Queensville, Ontario
Meghan Hewton	Geologist Tri Origin Exploration Ltd.	Goodwood, Ontario
Robert Valliant	Geologist Tri Origin Exploration Ltd.	Uxbridge, Ontario

## References

Ontario Government Assessment Files

OGS publication (1986); Geology of the Madsen and Starratt-Olsen Area, Gold 86 Excursions Handbook;

Kenneth Guy (2003); Previous Exploration and a Proposed Exploration Program on the Red Lake Extension Property, Ontario

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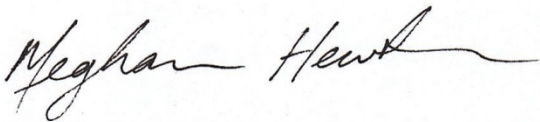
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## STATEMENT OF QUALIFICATIONS

I, Meghan Hewton, of 17 Tindall Lane, Goodwood, Ontario, L0C 1A0, do hereby certify that:

1. I am a consulting geologist contracted by Tri Origin Exploration Ltd.
2. I graduated with a Master's of Science (Geology) from Simon Fraser University in 2012, and a Bachelor of Science (Honours Environmental Geosciences) from the University of Western Ontario in 2010.
3. Hold a GIT (Geoscientist-in-Training) membership with the Association of Professional Geoscientists of Ontario (membership number 10384).
4. I have worked as a geologist for a total of four years.
5. I am responsible for the technical report titled "Report on the 2016-2017 Geology and Petrology Program, Red Lake Extension (RLX) Property".
6. My knowledge of the property as described herein was obtained by field work and literature review.
7. I have no direct interest, nor do I expect to receive any interest in the mining claims that comprise the Red Lake Extension Property within the townships of Otter Lake, South of Otter Lake, Ranger and Willans.
8. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.
9. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated this 22<sup>nd</sup> day of March, 2017.



Meghan Hewton, MSc, GIT

## STATEMENT OF QUALIFICATIONS


I, **Frank Kendle**, of 20648 Leslie St., Queensville, Ontario, L0G 1R0, do hereby certify that:

1. I am a consulting geologist.
2. I graduated with a Bachelor of Science (Geology), from Mount Allison University, in 1988.
3. I have worked as a geologist for a total of 29 years since my graduation from university.
4. I am responsible for the technical report titled "Report on the 2016-2017 Geology and Petrology Program, Red Lake Extension (RLX) Property"
5. My knowledge of the property as described herein was obtained by fieldwork.
6. I have no direct interest, nor do I expect to receive any interest in the mining claims that comprise the Red Lake Extension Property within the townships of Otter Lake, South of Otter Lake, Ranger and Willans.
7. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.
8. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated this 22<sup>nd</sup> day of March, 2017.



FRANK R. KENDLE

	<b>Minerals Services</b> <b>Geochemistry</b> <b>Lakefield Laboratory</b>	Revision <b>2.7</b> Doc Type <b>Method Summary</b> Method No: <b>GO/GC/GT_XR</b> Code <b>F76V</b> Service <b>Testing</b> Issued Date <b>23/Sep/2014</b>
<i>Minerals Services</i>	<b>Preparation and Determination of Major Element Oxides, LOI and Rare Earth Oxides by Borate Fusion and Xray Fluorescence Spectrometry</b> [SiO <sub>2</sub> , Al <sub>2</sub> O <sub>3</sub> , Fe <sub>2</sub> O <sub>3</sub> , MgO, CaO, Na <sub>2</sub> O, K <sub>2</sub> O, P <sub>2</sub> O <sub>5</sub> , MnO, TiO <sub>2</sub> , Cr <sub>2</sub> O <sub>3</sub> ; V <sub>2</sub> O <sub>5</sub> ; LOI; additions BaO; Ce <sub>2</sub> O <sub>3</sub> ; Nd <sub>2</sub> O <sub>3</sub> , La <sub>2</sub> O <sub>3</sub> ; Pr <sub>2</sub> O <sub>3</sub> , Sm <sub>2</sub> O <sub>3</sub> ; Nb <sub>2</sub> O <sub>5</sub> , ThO <sub>2</sub> , Ta <sub>2</sub> O <sub>5</sub> ; SnO <sub>2</sub> ; SrO; ZrO <sub>2</sub> ; HfO <sub>2</sub> ; Y <sub>2</sub> O <sub>3</sub> ; WO <sub>3</sub> ; U <sub>3</sub> O <sub>8</sub> ; Co; Ni ; XRF]	Approved by <b>K. Patel</b>

**1. Parameter(s) measured, unit(s):**

Silicon Dioxide (SiO<sub>2</sub>), Aluminum Oxide (Al<sub>2</sub>O<sub>3</sub>), Iron(III) Oxide (Fe<sub>2</sub>O<sub>3</sub>), Magnesium Oxide (MgO), Calcium Oxide (CaO), Sodium Oxide (Na<sub>2</sub>O), Potassium Oxide (K<sub>2</sub>O), Phosphorus Pentoxide (P<sub>2</sub>O<sub>5</sub>), Manganese Oxide (MnO), Titanium Dioxide (TiO<sub>2</sub>), Chromium (III) Oxide (Cr<sub>2</sub>O<sub>3</sub>), Vanadium Oxide (V<sub>2</sub>O<sub>5</sub>), LOI, in %  
Barium Oxide (BaO), Cerium (III) Oxide (Ce<sub>2</sub>O<sub>3</sub>), Neodymium Oxide (Nd<sub>2</sub>O<sub>3</sub>), Lanthanum Oxide (La<sub>2</sub>O<sub>3</sub>), Praseodymium Oxide (Pr<sub>2</sub>O<sub>3</sub>), Samarium Oxide (Sm<sub>2</sub>O<sub>3</sub>), Niobium Pentoxide (Nb<sub>2</sub>O<sub>5</sub>), Thorium Dioxide (ThO<sub>2</sub>), Tantalum Pentoxide (Ta<sub>2</sub>O<sub>5</sub>), Tin Dioxide (SnO<sub>2</sub>) Uranium Oxide (U<sub>3</sub>O<sub>8</sub>), Cobalt (Co), Nickel (Ni), Strontium Oxide (SrO), Zirconium Dioxide (ZrO<sub>2</sub>), Hafnium Oxide (HfO<sub>2</sub>), Yttrium Oxide (Y<sub>2</sub>O<sub>3</sub>), Tungsten Trioxide (WO<sub>3</sub>) in % can be added as additions

**2. Typical sample size:**

0.2 to 0.5g

**3. Type of sample applicable (media):**

Rocks, oxide ores, concentrates and catalysts

**4. Sample preparation technique used:**

Samples are crushed and pulverized according to client specified instructions or default preparation procedures. This method is used to report, in percentage, the whole rock suite (SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, Fe<sub>2</sub>O<sub>3</sub>, MgO, CaO, Na<sub>2</sub>O, K<sub>2</sub>O, P<sub>2</sub>O<sub>5</sub>, MnO, TiO<sub>2</sub>, Cr<sub>2</sub>O<sub>3</sub>, V<sub>2</sub>O<sub>5</sub>). Sample preparation entails the formation of a homogenous glass disk by the fusion of the sample and a lithium tetraborate/lithium metaborate mixture. The LOI is determined separately and gravimetrically at 1000°C.

**5. Method of analysis used:**

The prepared disks are analyzed by wavelength dispersion X-ray fluorescence (WD-XRF). The LOI is included in the matrix correction calculations, which are performed by the XRF software.

**6. Data reduction by:**

Computer, on line, data fed to Laboratory Information Management System with secure audit trail.

**7. Figures of Merit:**

This method has been fully validated for the range of samples typically analyzed. Method validation includes the use of reference materials, replicates, duplicates and blanks to calculate accuracy, precision, linearity, range, limit of detection, reporting limit, specificity and measurement uncertainty.

Element	Report Limit %
SiO2	0.01
Al2O3	0.01
MgO	0.01
Na2O	0.01
K2O	0.01
CaO	0.01
P2O5	0.01
TiO2	0.01
Cr2O3	0.01
V2O5	0.01
Fe2O3	0.01
MnO	0.01
LOI	-10

\*upper limit for all elements is 100%. A negative LOI indicates a gain on ignition

**8. Quality control:**

Quality control materials include method blanks, duplicates and reference materials and are randomly inserted with the frequency set according to method protocols at ~14% for exploration and ore grade analysis and 20% for process control analysis. Quality control materials will also include BRM (Barren reference materials, or preparations blanks) and replicates if samples have been taken through the sample reduction process. Party quality samples are assayed in duplicate, umpire quality samples are in triplicate. Calibration materials that cover the range upon method set-up; calibration check performed daily.

**9. Accreditation:**

The Standards Council of Canada has accredited this test in conformance with the requirements of ISO/IEC 17025. See [www.palcan.scc.ca](http://www.palcan.scc.ca) for scope of accreditation.

Note: Scopes of accreditation are site specific, please check with the local representative.

## Major Elements Compilation Data Set

Sample_ID	RLX_Legend_Code	Northing	Easting	Elevation	UTM_and_Zone	SiO2_pct	Al2O3_pct	Fe2O3_pct	MgO_pct	CaO_pct	Na2O_pct	K2O_pct	TiO2_pct	P2O5_pct	MnO_pct	Cr2O3_pct	V2O5_pct	LOI_pct	Sum_pct
W652110	Vm6	5648326	461066	0	Nad83 Zone 15	58.7	12.4	14.9	2.13	6.31	1.94	0.9	1.65	0.27	0.33	< 0.01	0.01	0.42	100
W652111	Sm2	5645238	457685	0	Nad83 Zone 15	61.9	14.4	6.5	3.32	4.73	4.4	2.11	0.77	0.39	0.13	0.01	0.02	0.86	99.6
W652127	Vf	5648853	466452	0	Nad83 Zone 15	78.4	12.5	1.21	0.56	0.58	5.19	1.48	0.26	0.03	0.01	< 0.01	< 0.01	0.65	100.9
W652128	Vf	5648853	466452	0	Nad83 Zone 15	71.1	12.7	4.68	1.99	1.42	3.13	3.44	0.37	0.13	0.04	< 0.01	0.01	0.66	99.7
W652129	Vf	5648840	466555	0	Nad83 Zone 15	75.6	11.9	2.36	1.61	1.75	3.17	2.62	0.14	0.01	0.04	< 0.01	< 0.01	0.52	99.7
W652112	l1	5642214	460858	0	Nad83 Zone 15	71.8	14.6	2.88	0.52	1.4	3.75	4.66	0.27	0.1	0.04	< 0.01	< 0.01	0.55	100.6
W652102	Sm1	5649939	470347	0	Nad83 Zone 15	65.8	15.8	7.11	1.25	4.61	2.71	2.22	0.67	0.19	0.14	< 0.01	0.02	0.7	101.2
W652103	lf1	5646009.021	463883.5813	0	Nad83 Zone 15	78.2	11.3	1.39	0.17	0.97	4.18	2.09	0.1	0.01	0.02	< 0.01	< 0.01	0.84	99.3



## Major Elements Compilation Data Set

Sample_ID	Method_of_analysis	Labrotory	Code	Certificate_#	Rb	Sr	Y	Zr	Nb	Ba	As	Year	Geologist	Type	Size	Rock_Type	Rock_Code
W652110	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02913-JUL12								2012	Canam	Outcrop	15x5m	Basalt	2b
W652111	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02913-JUL12								2012	Canam	Outcrop	20x20m	Meta sediment	6, 12a
W652127	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02186-AUG12								2012	Canam	Outcrop		Felsic Tuff	4a
W652128	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02186-AUG12								2012	Canam	Outcrop		Felsic Tuff	4a
W652129	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02186-AUG12								2012	Canam	Outcrop	20x5m	FelsicTuff	4a,12a
W652112	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02913-JUL12								2012	Carlin Lentz	Outcrop	on water	granite	12a
W652102	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02913-JUL12								2012	Lydia Calhoun	Outcrop		Mafic Volcanic	2b
W652103	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02913-JUL12								2012	Lydia Calhoun	Outcrop	(see Pete's trace)	Granodiorite to granite	12a / 11a

## Major Elements Compilation Data Set

Sample_ID	Texture	Mineralogy	Alteration	Grain_Size	Description
W652110	Moderate/strong foliation 90/38?	Minor Bo	Minor Chl +/- Epidote?	Fg	Blue, Deformed Pillowed Basalt (tops unknown). Minor shearing in feld veinlets (2-4cm). In contact with small Feld/Bo rich intrusion.
W652111	Moderate foliation 074/85	5% cg Bo		Fg	Blue/green, Mafic Volcanic?- Recrystallized texture. No reaction to K-Fe acid. Preferential weathered surface, non magnetic. In contact with granite (40cm) // to S1.+ minor quartz vein.
W652127					Whole rock from RLXMDK12008. Int-felsic Tuff
W652128					Whole rock from RLXMDK12008. Int-felsic Tuff
W652129					Felsic Tuff Whole rock # W652129
W652112				medium grained/porphyritic (or seriate)	Medium grained pink granite in direct contact with a porphyritic to seriate pink granite concentric features present
W652102	Pillows?		biotite, silica		Dark grey green, possible pillow structures.
W652103		magnetite, qtz, plagioclase (decreases to NW), biotite, kfspar (increases to NW)		~1mm, coarser to NW (2mm)	

## Major Elements Compilation Data Set

Sample_ID	RLX_Legend_Code	Northing	Easting	Elevation	UTM_and_Zone	SiO2_pct	Al2O3_pct	Fe2O3_pct	MgO_pct	CaO_pct	Na2O_pct	K2O_pct	TiO2_pct	P2O5_pct	MnO_pct	Cr2O3_pct	V2O5_pct	LOI_pct	Sum_pct
W652117	lf2	5648680.168	462808.1583	0	Nad83 Zone 15	74.8	11.7	5.04	2.2	0.06	0.22	4.23	0.22	0.02	0.15	0.04	< 0.01	1.69	100.4
W652114	Vm1	5651167	471206	0	Nad83 Zone 15	46.4	15.1	13.8	6.01	15.2	1.55	0.18	1.02	0.08	0.23	0.03	0.06	1.44	101.1
W652109	Vm2	5650313	469542	0	Nad83 Zone 15	50.9	15.9	12.8	4.46	8.58	3.02	1.96	0.91	0.31	0.31	0.02	0.04	1.81	101
W652126	Tf	5647614	469788	0	Nad83 Zone 15	64.8	15.7	5.34	2.02	3.71	4.83	1.85	1.27	0.41	0.08	0.01	0.03	1.07	101.2
W652105	Tf	5647774	469993	0	Nad83 Zone 15	64.4	14.7	5.87	2.51	5.61	2.69	2.01	1.16	0.35	0.1	0.01	0.02	0.69	100.2
W652113	lf1	5644440.35	460237.49	0	Nad83 Zone 15	76.8	13.9	0.97	0.17	0.32	4.14	4.51	0.06	0.02	0.02	< 0.01	< 0.01	0.5	101.3
W652115	Vf3	5648750	462121	404	Nad83 Zone 15	75.3	11.7	2.36	0.31	0.76	4.04	2.95	0.12	0.02	0.04	< 0.01	< 0.01	0.75	98.3
W652116	Vm1	5648229	459873	404	Nad83 Zone 15	50.3	12.8	19.3	3.64	10.3	1.22	0.33	1.83	0.25	0.57	< 0.01	0.05	0.33	100.9

## Major Elements Compilation Data Set

Sample_ID	Method_of_analysis	Labrotory	Code	Certificate_#	Rb	Sr	Y	Zr	Nb	Ba	As	Year	Geologist	Type	Size	Rock_Type	Rock_Code
W652117	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02913-JUL12								2012	Lydia Calhoun	Outcrop	8x8m	Granodiorite	11a
W652114	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02913-JUL12								2012	F. Kendle	Outcrop	1m x 6m	Mafic Volcanic	2a
W652109	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02913-JUL12								2012	Canam	Outcrop	250x90m	Basalt	2b
W652126	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02186-AUG12								2012	AGuest	Outcrop	outlined	volcaniclastic/tuff	4b
W652105	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02913-JUL12								2012	AGuest	Outcrop	80mx15	FV/tuff	4b
W652113	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02913-JUL12								2012	F. Kendle	Outcrop	Large 50m x 20m	Granite	12a
W652115	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02913-JUL12								2011	F. Kendle	Outcrop		Felsic Volcanic	4d
W652116	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02913-JUL12								2011	F. Kendle	Outcrop	5m x 2m	Mafic Volcanic	2a

## Major Elements Compilation Data Set

Sample_ID	Texture	Mineralogy	Alteration	Grain_Size	Description
W652117		kspar varies from 15% to 1%, qtz, plag, bt, magnetite in kspar poor areas		Medium to fine	Grey to dark grey fresh surface.
W652114	Massive	chlorite, amphibole	epidote +/- carbonate	vfg	small 1m x 6m x 1m high o/c subcrop? Of very fine grained, dark green to black mafic volcanic. Minor skarn (epidote +/- carbonate) alteration. Aphanitic matrix of dark green (chlorite) to black (amphibole) minerals. Non magnetic.
W652109	Possible Pillows	Minor Bo, Silica	Tr. Chl+- Epidote?	Fg	Mostly fg. Mafic volcanic(Basalt+- Pillows?Minor Bo, Silica) Moderately foliated 090/60. Contains minor Qtz stringers/veinlets mostly // to S-1 and minor N/S trends. All barren. Intruded by less than 1% pink granite intrusion
W652126	Phenocrysts present in some parts, not in others, possible flowbanding?			fine grained	Outcrop runs N-S, visible from road, phenocrysts (<1cm in width, low to no magnetic, 3 photos taken,
W652105	foliated,			Fine grained	cross cutting features? Amphiboles present, granitic veins,black-grey in colour, 3 samples taken (a,b,c), 4 photos taken
W652113	Massive			fg	Large rounded outcrop at top of topographic high in middle of drumlin. Fine to medium grained pink granite. Locally magnetic, weakly foliated (erratic). Local xenoliths (RLX12Fk009).
W652115				fg	Same as RLXFK11014 fg felsic volcanic intruded by mafic dyke. fg pink aphanitic matrix with 5% 2-4mm phenocrysts of grey translucent qtz. quartz phenocrysts have +ve weathering. massive in appearance no foliation or fabric. matrix is comprised primarily
W652116					Massive, dark green, mafic volcanic (amphibolite) locally minor qtz veining. Some fractured surfaces are Fe stained. 1% poorly formed reddish brown garnets.

## Major Elements Compilation Data Set

Sample_ID	RLX_Legend_Code	Northing	Easting	Elevation	UTM_and_Zone	SiO2_pct	Al2O3_pct	Fe2O3_pct	MgO_pct	CaO_pct	Na2O_pct	K2O_pct	TiO2_pct	P2O5_pct	MnO_pct	Cr2O3_pct	V2O5_pct	LOI_pct	Sum_pct
W652107	Sm2	5646265	468095	0	Nad83 Zone 15	54.7	19.6	8.91	2.16	7.15	3.64	1.45	1.49	0.12	0.32	0.05	0.08	0.78	100.4
W652104	Tf1	5647744	469816	0	Nad83 Zone 15	73.2	13.3	3.62	0.53	1.5	3.29	3.22	0.48	0.09	0.08	< 0.01	< 0.01	1.12	100.4
W652101	Tf1	5647895	470047	0	Nad83 Zone 15	73	13.4	3.33	0.47	1.02	3.87	3.09	0.48	0.07	0.07	< 0.01	< 0.01	0.74	99.6
W652106	Vf	5649756	469491	0	Nad83 Zone 15	48.8	18.7	11.4	8.55	7.47	2.42	0.08	1.37	0.11	0.26	0.05	0.07	0.83	100.1
W652108	Vm	5649805	470386	0	Nad83 Zone 15	45	13.6	14.7	4.57	18.3	1.07	0.3	0.99	0.08	0.37	0.04	0.05	1.43	100.5
W652121	Vm	5650437.524	464553.2542	0	Nad83 Zone 15	72.6	14.8	2.33	0.45	1.23	5.22	2.01	0.23	0.06	0.04	< 0.01	< 0.01	1.59	100.6
W652136		5649131	462810	0	Nad83 Zone 15	59.6	12.6	13.7	1.46	4.54	2.92	1.21	1.24	0.35	0.21	< 0.01	< 0.01	0.38	98.1
W652137		5651747	464297	0	Nad83 Zone 15	70.1	16.2	1.93	0.86	3.49	4.65	2.04	0.26	0.08	0.03	< 0.01	< 0.01	0.34	100

Major Elements Compilation Data Set

Sample_ID	Method_of_analysis	Labrotory	Code	Certificate_#	Rb	Sr	Y	Zr	Nb	Ba	As	Year	Geologist	Type	Size	Rock_Type	Rock_Code
W652107	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02913-JUL12								2012	AGuest	Outcrop	5x2m	Metased?	6
W652104	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02913-JUL12								2012	AGuest	Outcrop	12x2	volcaniclastic?	4b
W652101	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02913-JUL12								2012	AGuest	Outcrop	2x2m	felsic volcanic/tuff?	4b
W652106	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02913-JUL12								2012	AGuest	Outcrop	3x3	FV	4
W652108	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02913-JUL12								2012	AGuest	Outcrop	2x1m	MV	2
W652121	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02913-JUL12								2012	AGuest	Outcrop		MV/FV	2f / 4b
W652136	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02185-AUG12								2011	Brad Redden	Outcrop		Meta-wacke	6b
W652137	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02185-AUG12								2011	Brad Redden	Outcrop	5x5m	Tuff, Lapilli Tuff	4b

Major Elements Compilation Data Set

Sample_ID	Texture	Mineralogy	Alteration	Grain_Size	Description
W652107	foliated				Light grey to black metased with granitic veins present crosscutting foliation, minor sulfides present at the contact, vegetation is spruce, sample taken 1104003, 2 photos taken
W652104	Phenocrysts(qtz), foliated, granitic vein, quartz eyes, hematite alteration	Qtz, biotite, plag, qtz	Hematite?	Fine grained	Photo taken, sample taken, sample taken with same name as the outcrop
W652101	Fine grained, foliated, Grading?	60% qtz, 20% mica, 15 % plag/kspar	Biotite?	Fine grained	Qtz veins,
W652106				Fine grained	folded qtz veins, ~ 10m from road, sample taken, photo taken
W652108	massive			fine grained	
W652121	tuff		iron carbonate/bt	fine grained	in the rock quarry on the EW road sample taken with frank near contact of mafic and felsic volcanic sulfide staining and bt alteration
W652136					Outcrop is on north side of small clearing mostly uncover by road. a cut line cross east end of outcrop. similar to RLXBR11026. crossbedding of ripple marks are locally in 10cm thick bed, where cutline crosses, outcrop.
W652137		60% <5mm qtz, 20% ,5mm feldspars, 20% <2mm biotite			White & pink, strongly foliated qtz rich, felsic, mg, porphyroblastic, weakl gneissic gneiss. weak banding. Foliation gneissic texture trends 076/74. Medium grey dykes intersect foliation at a low angle (070/64)



## Major Elements Compilation Data Set

Sample_ID	RLX_Legend_Code	Northing	Easting	Elevation	UTM_and_Zone	SiO2_pct	Al2O3_pct	Fe2O3_pct	MgO_pct	CaO_pct	Na2O_pct	K2O_pct	TiO2_pct	P2O5_pct	MnO_pct	Cr2O3_pct	V2O5_pct	LOI_pct	Sum_pct
W652118	Sm	5649386.981	468415	365.3385334	Nad83 Zone 15	66	18.5	2.08	0.31	4.13	5.53	1.63	0.63	0.19	0.03	0.01	0.01	0.95	100
W652119	Sm	5648256.729	469505	375.5704445	Nad83 Zone 15	57	16.7	7.43	3.28	9.97	0.53	2.9	0.97	0.58	0.12	< 0.01	0.02	1.4	100.8
W652120	Sm	5648262.353	469505	368.8675556	Nad83 Zone 15	67.6	16.1	2.59	0.76	3.23	5.01	1.81	0.68	0.2	0.04	< 0.01	0.01	1.08	99
429753	lf3	5648218.995	460105.1906	276.9654619	Nad83 Zone 15	72	13.7	1.86	0.39	1.02	3.13	5.75	0.16	0.04	0.03	< 0.01	< 0.01	0.97	99
429754	Vm1	5648227.97	460105.8811	264.3466714	Nad83 Zone 15	54.5	12.4	18.5	3.39	6.48	3.32	0.18	1.65	0.27	0.42	< 0.01	0.02	0.2	101.3
429755	Vf1a	5648319.867	459704.8734	339.2962819	Nad83 Zone 15	75.4	12.1	2.46	0.38	1.57	3.5	2.85	0.13	0	0.08	< 0.01	< 0.01	0.74	99.2
429756	Vm5	5648338.994	459705.4861	313.9124687	Nad83 Zone 15	49.9	12.4	19.1	3.49	7.94	2.49	1.36	2.85	0.5	0.27	< 0.01	0.04	0.48	100.8
429757	Vf1a	5647820.461	459899	362.2061711	Nad83 Zone 15	76.5	11.9	3.45	0.32	0.74	3.48	3.82	0.14	0.01	0.03	< 0.01	< 0.01	0.65	101

## Major Elements Compilation Data Set

Sample_ID	Method_of_analysis	Labrotory	Code	Certificate_#	Rb	Sr	Y	Zr	Nb	Ba	As	Year	Geologist	Type	Size	Rock_Type	Rock_Code
W652118	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02938-JUL12								2012	F. Kendle	Drill Core	0.5m		
W652119	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02938-JUL12								2012	F. Kendle	Drill Core	0.5m		
W652120	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02938-JUL12								2012	F. Kendle	Drill Core	0.5m		
429753	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02938-JUL12								2011	Brad Redden	Drill Core	0.5m	Litho, Granitic dyke	
429754	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02938-JUL12								2011	Brad Redden	Drill Core	0.5m	Litho, Massive Mafics	
429755	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02938-JUL12								2011	Brad Redden	Drill Core	0.5m	grey foliated felsic	
429756	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02938-JUL12								2011	Brad Redden	Drill Core	0.5m	meta sediment	
429757	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02938-JUL12								2011	Brad Redden	Drill Core	0.5m	orange foliated felsic	

Major Elements Compilation Data Set

Sample_ID	Texture	Mineralogy	Alteration	Grain_Size	Description
W652118					
W652119					
W652120					
429753					
429754					
429755					
429756					
429757					

## Major Elements Compilation Data Set

Sample_ID	RLX_Legend_Code	Northing	Easting	Elevation	UTM_and_Zone	SiO2_pct	Al2O3_pct	Fe2O3_pct	MgO_pct	CaO_pct	Na2O_pct	K2O_pct	TiO2_pct	P2O5_pct	MnO_pct	Cr2O3_pct	V2O5_pct	LOI_pct	Sum_pct
429759	Vf1b	5647836.831	459898.4873	338.331008	Nad83 Zone 15	75.9	11.9	4.82	0.69	2.64	3.05	1.17	0.25	0.02	0.11	< 0.01	< 0.01	0.71	101.3
429761	Vf4	5647860.735	459896.7739	302.532197	Nad83 Zone 15	77.8	11.4	2.37	0.41	1.34	1.84	4.77	0.12	0	0.03	< 0.01	< 0.01	0.77	100.9
429762	Tm1	5647887.702	459894.8409	262.1463518	Nad83 Zone 15	53.5	17.1	8.83	5.04	9.63	3.43	1.34	0.73	0.11	0.21	0.03	0.03	0.81	100.8
429765	Vm1	5648593.389	461900	377.3063158	Nad83 Zone 15	51.2	16.8	8.94	6.5	8.68	3.5	2.21	0.84	0.43	0.14	0.02	0.03	1.1	100.4
429769	Vf1a	5648651.397	461899.0901	302.4605594	Nad83 Zone 15	75.5	11.2	2.61	0.29	2.24	3.27	2.74	0.11	0	0.06	< 0.01	< 0.01	1.35	99.4
429771	Vf1b	5648870.139	462298	377.8079021	Nad83 Zone 15	51.9	21.5	4.98	5.21	8.38	5	0.98	0.96	0.05	0.12	< 0.01	0.04	1.1	100.2
429773	Vm1	5648898.688	462297.4304	336.5583647	Nad83 Zone 15	55.3	15.7	9.45	6	8.41	2.7	0.95	0.78	0.11	0.16	0.03	0.04	1	100.7
429775	Tf3	5648936.761	462294.8513	281.5414315	Nad83 Zone 15	74.9	12.3	2.76	0.43	1.1	3.72	3.09	0.17	0.02	0.1	< 0.01	< 0.01	1.07	99.6

## Major Elements Compilation Data Set

Sample_ID	Method_of_analysis	Labrotory	Code	Certificate_#	Rb	Sr	Y	Zr	Nb	Ba	As	Year	Geologist	Type	Size	Rock_Type	Rock_Code
429759	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02938-JUL12								2011	Brad Redden	Drill Core	0.5m	dark grey foliated felsic	
429761	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02938-JUL12								2011	Brad Redden	Drill Core	0.5m	grey foliated felsics	
429762	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02938-JUL12								2011	Brad Redden	Drill Core	0.5m	meta sediment	
429765	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02938-JUL12								2011	Brad Redden	Drill Core	0.5m	Mafic Dyke?	
429769	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02938-JUL12								2011	Brad Redden	Drill Core	0.5m	magnetic foliated felsic with minor tourmaline? alteration	
429771	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02938-JUL12								2011	Brad Redden	Drill Core	0.5m	Porphyritic mafic flow?	
429773	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02938-JUL12								2011	Brad Redden	Drill Core	0.5m	meta sediment	
429775	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02938-JUL12								2011	Brad Redden	Drill Core	0.5m	1 m foliated felsics bounded by interbedded in metasedimant.	

Major Elements Compilation Data Set

Sample_ID	Texture	Mineralogy	Alteration	Grain_Size	Description
429759					
429761					
429762					
429765					
429769					
429771					
429773					
429775					

## Major Elements Compilation Data Set

Sample_ID	RLX_Legend_Code	Northing	Easting	Elevation	UTM_and_Zone	SiO2_pct	Al2O3_pct	Fe2O3_pct	MgO_pct	CaO_pct	Na2O_pct	K2O_pct	TiO2_pct	P2O5_pct	MnO_pct	Cr2O3_pct	V2O5_pct	LOI_pct	Sum_pct
429777	Cif2	5648662.745	461898.8438	288.3490973	Nad83 Zone 15	49.5	12.4	19.4	4.11	8.97	2.66	0.33	1.77	0.23	0.74	< 0.01	0.05	0.21	100.4
429778	Cif2	5648678.618	461896.4274	269.8044891	Nad83 Zone 15	55.4	12.4	17.6	2.75	6.4	1.58	0.87	1.62	0.26	0.33	< 0.01	0.01	0.59	99.8
429779	Vm2	5648172.981	460103.164	343.7468994	Nad83 Zone 15	52.3	17.4	9.34	5.06	10.1	2.9	1.53	0.76	0.14	0.24	0.03	0.03	0.87	100.7
429781	Vm1	5648206.619	460104.3974	294.5866372	Nad83 Zone 15	56.8	18.5	6.52	3.03	6.68	6.13	0.58	0.96	0.12	0.12	0.04	0.04	0.53	100.1
429783	Vm	5647897.478	459893.6696	248.0682318	Nad83 Zone 15	49.6	13.6	14.4	6.13	11.1	2.81	0.64	1.3	0.11	0.32	< 0.01	0.07	0.66	100.7
429784	Vm4	5648604.041	461900	362.0946624	Nad83 Zone 15	51.2	13.6	17.4	4.45	8.99	2.7	0.15	1.87	0.17	0.3	< 0.01	0.08	0.35	101.3
357009		5643088	464597	0	Nad83 Zone 15	41.49	3.26	19.7	24.32	6.03	0	0.05	0.93	0.06	0.27	0.18		3.95	100.3
357011		5647896	470051	0	Nad83 Zone 15	53.6	13.05	9.27	7.49	7.88	2.48	3.39	0.85	0.41	0.15	0.06		1.15	100

## Major Elements Compilation Data Set

Sample_ID	Method_of_analysis	Labrotory	Code	Certificate_#	Rb	Sr	Y	Zr	Nb	Ba	As	Year	Geologist	Type	Size	Rock_Type	Rock_Code
429777	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02938-JUL12								2011	Brad Redden	Drill Core	0.5m	Massive Mafics, Skarn type alteration	
429778	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02938-JUL12								2011	Brad Redden	Drill Core	0.5m	Massive Mafics, Skarn type alteration	
429779	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02938-JUL12								2011	Brad Redden	Drill Core	0.5m	Massive Mafics	
429781	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02938-JUL12								2011	Brad Redden	Drill Core	0.5m	Massive Mafics, possibly sediment?	
429783	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02938-JUL12								2011	Brad Redden	Drill Core	0.5m	Massive Mafics	
429784	Majors by Borate Fused Disc / XRF Al2O3, CaO, Cr2O3, K2O, MgO, MnO, Na2O, P2O5, Fe2O3, SiO2, TiO2, LOI Lower reporting limit: 0.01%	SGS	XRF76C	CA02938-JUL12								2011	Brad Redden	Drill Core	0.5m	Massive Mafics, possibly sediment?	
357009	Detection Major elements <0.01% Detection limit trce elements 2ppm (Ba 20ppm)	SGS	XRF77	80097	2	58	2	89	5	69		2004	Stares Geochem	Outcrop		Sediment (BIF-sil)	
357011	Detection Major elements <0.01% Detection limit trce elements 2ppm (Ba 20ppm)	SGS	XRF77	80097	92	644	60	181	11	900		2004	Stares Geochem	Outcrop		Calckaline	



## Major Elements Compilation Data Set

Sample_ID	Texture	Mineralogy	Alteration	Grain_Size	Description
429777					
429778					
429779					
429781					
429783					
429784					
357009					
357011					

## Major Elements Compilation Data Set

Sample_ID	RLX_Legend_Code	Northing	Easting	Elevation	UTM_and_Zone	SiO2_pct	Al2O3_pct	Fe2O3_pct	MgO_pct	CaO_pct	Na2O_pct	K2O_pct	TiO2_pct	P2O5_pct	MnO_pct	Cr2O3_pct	V2O5_pct	LOI_pct	Sum_pct
357052	Vm	5651048	465631	0	Nad83 Zone 15	48.93	14.62	12.77	6.26	12.61	1.89	0.29	0.92	0.08	0.21	0.04		1.5	100.2
OC23	Vm	5648381	462088	0	Nad83 Zone 15	50.69	13.03	16.7	3.59	7.98	3.81	0.42	1.78	0.25	0.65	0.01		0.3	99.27
OC25	Vm	5646389	468434	0	Nad83 Zone 15	54.58	13.1	12.58	4.92	11.42	1.67	0.34	0.92	0.11	0.19	0.02		0.7	100.6
66748	lf	5645922.999	464982.9997	0	Nad83 Zone 15	74.45	13.86	1.16	0.18	1.08	3.73	4.68	0.12	0.02	0.04	0.03		0.45	99.94
66749		5645931	466385	0	Nad83 Zone 15	5.02	12.73	8.44	9.24	7.38	3.11	2.71	0.74	0.28	0.14	0.11		0.95	100
66750	lf	5645930.997	466384.9994	0	Nad83 Zone 15	67.21	15.2	6.1	0.31	2.83	6.13	0.95	0.44	0.05	0.1	0.03		0.8	100.3
66751	lf	5646372.997	468182.9975	0	Nad83 Zone 15	63.96	15.45	6.03	2.72	4.5	4.06	1.59	0.64	0.18	0.08	0.02		0.7	100
66752		5646372.997	468182.9975	0	Nad83 Zone 15	64.22	15.41	6.32	2.17	4.71	3.97	1.7	0.64	0.18	0.1	0.02		0.9	100.5
66753		5643505.001	465241.0039	0	Nad83 Zone 15	73.85	13.66	1.32	0.28	1.04	3.49	5	0.15	0.02	0.03	0.02		0.3	99.3
66754		5643505	465541	0	Nad83 Zone 15	50.78	15.39	11.16	6.37	8.96	3.86	1.04	0.87	0.15	0.18	0.02		1	99.89

## Major Elements Compilation Data Set

Sample_ID	Method_of_analysis	Labrotory	Code	Certificate_#	Rb	Sr	Y	Zr	Nb	Ba	As	Year	Geologist	Type	Size	Rock_Type	Rock_Code
357052	Detection Major elements <0.01% Detection limiit trce elements 2ppm (Ba 20ppm)	SGS	XRF77	80097	12	192	21	43	3	127		2004	Stares Geochem	Outcrop		Tholeiite	
OC23	Detection Major elements <0.01% Detection limiit trce elements 2ppm (Ba 20ppm)	SGS	XRF77	80097	10	155	45	114	7	161		2004	Ken Guy	Outcrop		Tholeiite	
OC25	Detection Major elements <0.01% Detection limiit trce elements 2ppm (Ba 20ppm)	SGS	XRF77	80097	3	323	20	64	5	102		2004	Ken Guy	Outcrop		Tholeiite	
66748	Detection Major elements <0.01% Detection limiit trce elements 2ppm (Ba 20ppm)	SGS	XRF77	76920	318	144	49	123	21	490	<3	2004	Redex ddh 2 at 95.5 - 95.8m	Drill Core		Int Felsic	
66749	Detection Major elements <0.01% Detection limiit trce elements 2ppm (Ba 20ppm)	SGS	XRF77	76920	84	708	23	129	8	525	<3	2004	Redex ddh 3 at 141.4 - 141.7m	Drill Core		Calckaline	
66750	Detection Major elements <0.01% Detection limiit trce elements 2ppm (Ba 20ppm)	SGS	XRF77	76920	21	370	56	617	20	547	3	2004	Redex ddh 3 at 163.2 - 163.5m	Drill Core		Int Felsic	
66751	Detection Major elements <0.01% Detection limiit trce elements 2ppm (Ba 20ppm)	SGS	XRF77	76920	36	314	21	203	11	465	<3	2004	Redex ddh 4 at 140.2 - 140.5m	Drill Core		Int Felsic	
66752	Detection Major elements <0.01% Detection limiit trce elements 2ppm (Ba 20ppm)	SGS	XRF77	76920	49	287	25	197	11	502	<3	2004	Redex ddh 4 at 103.4 - 103.7m	Drill Core		Int Felsic	
66753	Detection Major elements <0.01% Detection limiit trce elements 2ppm (Ba 20ppm)	SGS	XRF77	76920	273	142	62	158	21	533	<3	2004	Redex ddh 1 at 57.2 - 57.5m	Drill Core		Syenite	
66754	Detection Major elements <0.01% Detection limiit trce elements 2ppm (Ba 20ppm)	SGS	XRF77	76920	25	586	35	108	10	149	<3	2004	Redex ddh 1 at 66.4 - 66.7m	Drill Core		Calckaline	

Major Elements Compilation Data Set

Sample_ID	Texture	Mineralogy	Alteration	Grain_Size	Description
357052					
OC23					
OC25					
66748					
66749					
66750					
66751					
66752					
66753					
66754					

## Major Elements Compilation Data Set

Sample_ID	RLX_Legend_Code	Northing	Easting	Elevation	UTM_and_Zone	SiO2_pct	Al2O3_pct	Fe2O3_pct	MgO_pct	CaO_pct	Na2O_pct	K2O_pct	TiO2_pct	P2O5_pct	MnO_pct	Cr2O3_pct	V2O5_pct	LOI_pct	Sum_pct
66755		5643505	465241	0	Nad83 Zone 15	47.87	14.86	11.95	7.82	9.54	2.82	1.67	1.2	0.38	0.16	0.04		0.95	99.41
R-TB-11	Vm	5647173	468439	0	Nad83 Zone 15	53.11	16.24	10.86	5.02	9.18	1.53	2.43	0.81	0.16	0.26	0.03	0.3	100	100
R-TB-12	Vf	5647167	468471	0	Nad83 Zone 15	77.45	11.8	1.73	0.43	0.72	4.29	2.91	0.12	0.005	0.02	0.02	0.15	99.79	99.79
R-TB-25	Vf	5648715	462933	0	Nad83 Zone 15	74.8	11.25	5.74	0.55	1.68	3.82	1.16	0.23	0.01	0.06	0.02	0.15	99.64	99.64
R-TB-26	Vm	5648594	462074	0	Nad83 Zone 15	49.94	12.93	16.93	4.74	8.11	2.89	0.31	1.81	0.18	0.26	0.01	0.2	98.37	98.37
R-TB-28	Vm	5650941	467894	0	Nad83 Zone 15	47.05	14.65	14.12	4.82	13.43	2.67	0.28	1.09	0.09	0.28	0.03	0.5	99.05	99.05
A173376		5649767	470254	0	Nad83 Zone 15	47.7	13.1	17.8	6.26	9.97	2.31	0.14	1.56	0.07	0.24	0.01		0.57	99.8
A173377		5649251	470401	0	Nad83 Zone 15	48.7	18.5	9.32	7.06	11.1	2.48	0.27	1.22	0.09	0.19	0.05		1.08	100.1
A173378		5648857	470617	0	Nad83 Zone 15	49.8	13.5	18.2	5.9	7.48	1.58	0.46	2.23	0.21	0.27	0.01		0.45	100.2
A173379		5648980	470402	0	Nad83 Zone 15	46.3	16.1	13.1	8.44	10.3	2.56	0.18	0.84	0.06	0.2	0.04		1.55	99.8
A173380		5649102	470040	0	Nad83 Zone 15	49.5	13.7	15.3	6.32	9.8	2.92	0.29	0.98	0.09	0.24	0.02		0.77	100.1
A173381		5649879	470708	0	Nad83 Zone 15	47.6	15.8	13.7	6.91	11.7	2.7	0.32	1.04	0.08	0.22	0.03		0.66	100.8
A173382		5649707	470758	0	Nad83 Zone 15	47.6	15.9	13.5	6.06	12.7	2.56	0.13	1.03	0.08	0.28	0.04		0.62	100.5

Major Elements Compilation Data Set

Sample_ID	Method_of_analysis	Labortory	Code	Certificate_#	Rb	Sr	Y	Zr	Nb	Ba	As	Year	Geologist	Type	Size	Rock_Type	Rock_Code
66755	Detection Major elements <0.01% Detection limiit trce elements 2ppm (Ba 20ppm)	SGS	XRF77	76920	58	542	26	139	8	419	<3	2004	Redex ddh 1 at 152.5 - 152.8m	Drill Core		Calckaline	
R-TB-11	Detection Major elements <0.01% Detection limiit trce elements 2ppm (Ba 20ppm)	SGS	XRF77	80874	45	250	17	98	5	523		2004	T. Boyd	Boulder		Tholeiite	
R-TB-12	Detection Major elements <0.01% Detection limiit trce elements 2ppm (Ba 20ppm)	SGS	XRF77	80874	68	99	166	386	39	377		2004	T. Boyd	Boulder / Outcrop		Felsic Vol	
R-TB-25	Detection Major elements <0.01% Detection limiit trce elements 2ppm (Ba 20ppm)	SGS	XRF77	80874	42	98	170	596	32	483		2004	T. Boyd	Outcrop		Felsic Vol	
R-TB-26	Detection Major elements <0.01% Detection limiit trce elements 2ppm (Ba 20ppm)	SGS	XRF77	80874	3	171	43	119	4	131		2004	T. Boyd	Outcrop		Tholeiite	
R-TB-28	Detection Major elements <0.01% Detection limiit trce elements 2ppm (Ba 20ppm)	SGS	XRF77	80874	3	140	24	52	3	94		2004	T. Boyd	Outcrop		Tholeiite	
A173376	Detection Major elements <0.01%	SGS	XRF76Z	TO106594								2009	S. Dubois	Outcrop			
A173377	Detection Major elements <0.01%	SGS	XRF76Z	TO106594								2009	S. Dubois	Outcrop			
A173378	Detection Major elements <0.01%	SGS	XRF76Z	TO106594								2009	S. Dubois	Outcrop			
A173379	Detection Major elements <0.01%	SGS	XRF76Z	TO106594								2009	S. Dubois	Outcrop			
A173380	Detection Major elements <0.01%	SGS	XRF76Z	TO106594								2009	S. Dubois	Outcrop			
A173381	Detection Major elements <0.01%	SGS	XRF76Z	TO106594								2009	S. Dubois	Outcrop			
A173382	Detection Major elements <0.01%	SGS	XRF76Z	TO106594								2009	S. Dubois	Outcrop			

Major Elements Compilation Data Set

Sample_ID	Texture	Mineralogy	Alteration	Grain_Size	Description
66755					
R-TB-11					rusty banded mafic sediment/silicate facies iron formation, silicified with diss py
R-TB-12					felsic volcanic, highly siliceous, angular, unaltered
R-TB-25					layered mafic volcanic / sediment, amphibole and plag. phenocrysts cut by felsic dykes, layers at 072 AZ subvertical
R-TB-26					mafic volcanic flow, black with sinoidal textures, variolites?, trending 115 AZ, subvertical
R-TB-28					banded mafic sediments, silicate facies iron formation?, trending 078 AZ, 80 dip N.
A173376					
A173377					
A173378					
A173379					
A173380					
A173381					
A173382					



## CERTIFICATE OF ANALYSIS

Work Order: 076920

To: **Tri-Origin Exploration Ltd.**  
Attn: **Robert Valliant**

Date: 16/04/04

3 Centre Street, Suite 206  
MARKHAM  
ONTARIO, L3P 3P9

Copy 1 to

P.O. No.	RED LAKE EXT.
Project No.	15 Core
No. of Samples	02/04/04
Date Submitted	Cover Sheet plus
Report Comprises	Pages 1 to 4

**Distribution of unused material:**

**Pulps:** Discarded After 90 Days Unless Instructed!!!  
**Rejects:** Discarded After 90 Days Unless Instructed!!!

Certified By

  
Tim Elliott, Operations Manager

ISO 9002 REGISTERED

ISO 17025 Accredited for Specific Tests. SCC No. 456

Report Footer:

L.N.R.	= Listed not received	I.S.	= Insufficient Sample
n.a.	= Not applicable		= No result
*INF	= Composition of this sample makes detection impossible by this method		
<i>M</i> after a result denotes ppb to ppm conversion, % denotes ppm to % conversion			

Subject to SGS General Terms and Conditions





Work Order: 076920

Date: 16/04/04

FINAL

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Element. Method. Det.Lim. Units.	Au FAA313 5 ppb
66746	<5
66747	9
66756	10
66757	<5
66758	<5
66759	9
66760	10
66748	n.a.
66749	n.a.
66750	n.a.
66751	n.a.
66752	n.a.
66753	n.a.
66754	n.a.
66755	n.a.
*Dup 66746	<5
*Dup 66753	n.a.
*Blk BLANK	<5
*Std AUOII	1620



Work Order: 076920

Date: 16/04/04

FINAL

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Element. Method. Det.Lim. Units.	SiO2 XRF77 0.01 %	Al2O3 XRF77 0.01 %	CaO XRF77 0.01 %	MgO XRF77 0.01 %	Na2O XRF77 0.01 %	K2O XRF77 0.01 %	Fe2O3 XRF77 0.01 %	MnO XRF77 0.01 %	TiO2 XRF77 0.01 %	P2O5 XRF77 0.01 %	Cr2O3 XRF77 0.01 %	LOI XRF77 0.01 %	Sum XRF77 0.01 %	Rb XRF77 2 ppm	Sr XRF77 2 ppm	Y XRF77 2 ppm
*Std XRAL04	48.71	14.85	11.00	11.71	1.33	0.43	9.25	0.16	0.38	0.03	0.06	2.40	100.3	13	108	10
66746	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
66747	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
66756	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
66757	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
66758	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
66759	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
66760	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
66748	74.45	13.86	1.08	0.18	3.73	4.68	1.16	0.04	0.12	0.02	0.03	0.45	99.94	318	144	49
66749	54.02	12.73	7.38	9.24	3.11	2.71	8.44	0.14	0.74	0.28	0.11	0.95	100.0	84	708	23
66750	67.21	15.20	2.83	0.31	6.13	0.95	6.10	0.10	0.44	0.05	0.03	0.80	100.3	21	370	56
66751	63.96	15.45	4.50	2.72	4.06	1.59	6.03	0.08	0.64	0.18	0.02	0.70	100.0	36	314	21
66752	64.22	15.41	4.71	2.17	3.97	1.70	6.32	0.10	0.64	0.18	0.02	0.90	100.5	49	287	25
66753	73.85	13.66	1.04	0.28	3.49	5.00	1.32	0.03	0.15	0.02	0.02	0.30	99.30	273	142	62
66754	50.78	15.39	8.96	6.37	3.86	1.04	11.16	0.18	0.87	0.15	0.02	1.00	99.89	25	586	35
66755	47.87	14.86	9.54	7.82	2.82	1.67	11.95	0.16	1.20	0.38	0.04	0.95	99.41	58	542	26
*Dup 66746	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
*Dup 66753	73.72	13.70	1.04	0.28	3.49	5.01	1.31	0.03	0.15	0.02	0.02	0.30	99.20	275	143	61



Work Order: 076920

Date: 16/04/04

FINAL

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Element.	Zr	Nb	Ba
Method.	XRF77	XRF77	XRF77
Det.Lim.	2	2	20
Units.	ppm	ppm	ppm
*Std XRAL04	32	2	81
66746	n.a.	n.a.	n.a.
66747	n.a.	n.a.	n.a.
66756	n.a.	n.a.	n.a.
66757	n.a.	n.a.	n.a.
66758	n.a.	n.a.	n.a.
66759	n.a.	n.a.	n.a.
66760	n.a.	n.a.	n.a.
66748	123	21	490
66749	129	8	525
66750	617	20	547
66751	203	11	465
66752	197	11	502
66753	158	21	533
66754	108	10	149
66755	139	8	419
*Dup 66746	n.a.	n.a.	n.a.
*Dup 66753	158	21	532



Work Order: 076920

Date: 16/04/04

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Element. Method. Det.Lim. Units.	As ICP12B 3 ppm
66746	n.a.
66747	n.a.
66756	n.a.
66757	n.a.
66758	n.a.
66759	n.a.
66760	n.a.
66748	<3
66749	<3
66750	3
66751	<3
66752	<3
66753	<3
66754	<3
66755	<3
*Dup 66746	n.a.
*Dup 66753	<3
*Blk BLANK	<3
*Std XRAL01A	1100



## CERTIFICATE OF ANALYSIS

Work Order: 080097

To: Tri-Origin Exploration Ltd.  
Attn: Robert Valliant

Date: 27/09/04

3 Centre Street, Suite 206  
MARKHAM  
ONTARIO, L3P 3P9

Copy 1 to

P.O. No.	:	
Project No.	:	RED LK EXTENSION
No. of Samples	:	5 Rock
Date Submitted	:	17/09/04
Report Comprises	:	Cover Sheet plus
	:	Pages 1 to 2

### Distribution of unused material:

**Pulps:** Discarded After 90 Days Unless Instructed!!!

**Rejects:** Discarded After 90 Days Unless Instructed!!!

Certified By

  
\_\_\_\_\_  
Tim Elliott, Operations Manager

ISO 9002 REGISTERED

ISO 17025 Accredited for Specific Tests. SCC No. 456

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable = No result  
\*INF = Composition of this sample makes detection impossible by this method  
*M* after a result denotes ppb to ppm conversion, % denotes ppm to % conversion

Subject to SGS General Terms and Conditions



Work Order: 080097

Date: 27/09/04

FINAL

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Element. Method. Det.Lim. Units.	SiO2 XRF77 0.01 %	Al2O3 XRF77 0.01 %	CaO XRF77 0.01 %	MgO XRF77 0.01 %	Na2O XRF77 0.01 %	K2O XRF77 0.01 %	Fe2O3 XRF77 0.01 %	MnO XRF77 0.01 %	TiO2 XRF77 0.01 %	P2O5 XRF77 0.01 %	Cr2O3 XRF77 0.01 %	LOI XRF77 0.01 %	Sum XRF77 0.01 %	Rb XRF77 2 ppm	Sr XRF77 2 ppm	Y XRF77 2 ppm
*Std XRAL04	48.64	14.85	11.00	11.71	1.33	0.43	9.24	0.16	0.38	0.03	0.06	2.25	100.1	13	108	9
357009	41.49	3.26	6.03	24.32	<0.01	0.05	19.70	0.27	0.93	0.06	0.18	3.95	100.3	2	58	2
357011	53.60	13.05	7.88	0.337.49 25.2.48	25.2.48	3.39	0.479.27 22.63	0.15	0.85	0.41	0.06	1.15	100.0	92	644	60
357052	48.93	14.62	12.61	0.376.26 1.89	1.89	0.29	0.612.77 21.270.21	0.21	0.92	0.08	0.04	1.50	100.2	12	192	21
OC23	50.69	13.03	7.98	0.153.59 3.81	3.81	0.42	0.3716.70 24520.65	20.65	1.78	0.25	0.01	0.30	99.27	10	155	45
OC25	54.58	13.10	11.42	0.354.92 1.67	1.67	0.34	0.6412.58 19.51	0.19	0.92	0.11	0.02	0.70	100.6	3	323	20
*Dup 357009	41.58	3.24	6.03	24.33	<0.01	0.05	19.79	0.27	0.93	0.06	0.18	3.85	100.3	<2	59	3



Work Order: 080097

Date: 27/09/04

FINAL

Page 2 of 2

Element.	Zr	Nb	Ba
Method.	XRF77	XRF77	XRF77
Det.Lim.	2	2	20
Units.	ppm	ppm	ppm
*Std XRAL04	31	2	83
357009	89	5	69
357011	181	11	900
357052	43	3	127
OC23	114	7	161
OC25	64	5	102
*Dup 357009	87	6	69



# CERTIFICATE OF ANALYSIS

Work Order: 080874

To: **Tri-Origin Exploration Ltd.**  
Attn: **Robert Valliant**

Date : 17/11/04

3 Centre Street, Suite 206  
MARKHAM  
ONTARIO, L3P 3P9

Copy 1 to

P.O. No.	:	RED LAKE EXT.
Project No.	:	5
No. of Samples	:	Rock
Date Submitted	:	01/11/04
Report Comprises	:	Cover Sheet plus
	:	Pages 1 to 2

**Distribution of unused material:**

**Pulps:** Discarded After 90 Days Unless Instructed!!!  
**Rejects:** Discarded After 90 Days Unless Instructed!!!

Certified By

  
\_\_\_\_\_  
Tim Elliott, Operations Manager

ISO 9002 REGISTERED

ISO 17025 Accredited for Specific Tests. SCC No. 456

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion

Subject to SGS General Terms and Conditions





Work Order: 080874

Date: 17/11/04

FINAL

Page 1 of 2

Element.	SiO2	Al2O3	CaO	MgO	Na2O	K2O	Fe2O3	MnO	TiO2	P2O5	Cr2O3	LOI	Sum	Rb	Sr	Y
Method.	XRF77	XRF77	XRF77	XRF77	XRF77	XRF77	XRF77	XRF77	XRF77	XRF77	XRF77	XRF77	XRF77	XRF77	XRF77	XRF77
Det.Lim.	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	2	2	2
Units.	%	%	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm
*Std XRAL04	48.66	14.86	11.01	11.67	1.34	0.43	9.23	0.16	0.38	0.03	0.06	2.10	99.96	15	106	9
R-TB-11	53.11	16.24	9.18	5.02	1.53	2.43	10.86	0.26	0.81	0.16	0.03	0.30	100.0	45	250	17
R-TB-12	77.45	11.80	0.72	0.43	4.29	2.91	1.73	0.02	0.12	<0.01	0.02	0.15	99.79	68	99	166
R-TB-25	74.80	11.25	1.68	0.55	3.82	1.16	5.74	0.06	0.23	0.01	0.02	0.15	99.64	42	98	170
R-TB-26	49.94	12.93	8.11	4.74	2.89	0.31	16.93	0.26	1.81	0.18	0.01	0.20	98.37	3	171	43
R-TB-28	47.05	14.65	13.43	4.82	2.67	0.28	14.12	0.28	1.09	0.09	0.03	0.50	99.05	3	140	24
*Dup R-TB-11	53.01	16.24	9.19	5.00	1.53	2.42	10.83	0.26	0.81	0.16	0.03	0.40	100.0	47	249	18



Work Order: 080874

Date: 17/11/04

FINAL

Page 2 of 2

Element.	Zr	Nb	Ba
Method.	XRF77	XRF77	XRF77
Det.Lim.	2	2	20
Units.	ppm	ppm	ppm
*Std XRAL04	31	2	84
R-TB-11	98	5	523
R-TB-12	386	39	377
R-TB-25	596	32	483
R-TB-26	119	4	131
R-TB-28	52	3	94
*Dup R-TB-11	100	6	522



ANALYTE	V2O5	Sum	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr
METHOD	GO_XRF76	GO_XRF76	GE_ICP40B	GE_ICP40B	GE_ICP40B	GE_ICP40B	GE_ICP40B	GE_ICP40B	GE_ICP40B	GE_ICP40B	GE_ICP40B	GE_ICP40B
DETECTION	0.01	0	2	0.01	30	1	0.5	5	0.01	1	1	1
UNITS	%	%	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
W652139	0.07	100	<2	7.26	<30	224	<0.5	<5	6.93	<1	36	61
REP-W6521			<2	7.26	<30	226	<0.5	<5	7.12	<1	35	60

ANALYTE	Cu	Fe	K	La	Li	Mg	Mn	Mo	Na	Ni	P	Pb
METHOD	GE_ICP40B	GE_ICP40B	GE_ICP40B	GE_ICP40B	GE_ICP40B	GE_ICP40B	GE_ICP40B	GE_ICP40B	GE_ICP40B	GE_ICP40B	GE_ICP40B	GE_ICP40B
DETECTION	0.5	0.01	0.01	0.5	1	0.01	2	1	0.01	1	0.01	2
UNITS	ppm	%	%	ppm	ppm	%	ppm	ppm	%	ppm	%	ppm
W652139	70.2	8.96	0.25	7	12	2.49	2900	<1	1.46	24	0.05	<2
REP-W6521	70.1	9.06	0.25	7	12	2.51	2950	3	1.48	23	0.05	<2

ANALYTE	S	Sb	Sc	Sn	Sr	Ti	V	W	Y	Zn	Zr	WtKg
METHOD	GE_ICP40B	GE_ICP40B	GE_ICP40B	GE_ICP40B	GE_ICP40B	GE_ICP40B	GE_ICP40B	GE_ICP40B	GE_ICP40B	GE_ICP40B	GE_ICP40B	G_WGH79
DETECTION	0.01	5	0.5	10	0.5	0.01	2	10	0.5	1	0.5	0.001
UNITS	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	kg
W652139	0.13	<5	47.5	<10	109	0.82	371	<10	28.7	95	25.5	0.763
REP-W6521	0.14	12	46.8	<10	111	0.83	363	<10	29.1	98	26.3	



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**Tri Orgin Exploration Ltd**  
Attn : Robert Valliant/Frank Kendle

125 Don Hillock Dr Unit #18  
Aurora, ON  
L4G 0H8, Canada

Phone: 905-727-1779  
Fax:905-727-8779

August-23-12

**Date Rec. :** 03 August 2012  
**LR Report :** CA02185-AUG12  
**Client Ref :** RL1202617

# CERTIFICATE OF ANALYSIS

## Final Report

Sample ID	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	Cr2O3 %	V2O5 %	LOI %	Sum %
1: W652136	59.6	12.6	13.7	1.46	4.54	2.92	1.21	1.24	0.35	0.21	< 0.01	< 0.01	0.38	98.1
2: W652137	70.1	16.2	1.93	0.86	3.49	4.65	2.04	0.26	0.08	0.03	< 0.01	< 0.01	0.34	100.0

Control Quality Analysis - not suitable for commercial exchange

**Debbie Waldon**  
Project Coordinator,  
Minerals Services, Analytical

**Email:** rvalliant@triorigin.com; fkendle@triorigin.com

Online LIMS



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August-23-12

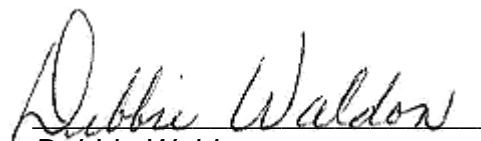
**Date Rec. :** 03 August 2012  
**LR Report :** CA02186-AUG12  
**Client Ref :** RL1202590

# CERTIFICATE OF ANALYSIS

## Final Report

Sample ID	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	Cr2O3 %	V2O5 %	LOI %	Sum %
1: 652126	64.8	15.7	5.34	2.02	3.71	4.83	1.85	1.27	0.41	0.08	0.01	0.03	1.07	101.2
2: 652127	78.4	12.5	1.21	0.56	0.58	5.19	1.48	0.26	0.03	0.01	< 0.01	< 0.01	0.65	100.9
3: 652128	71.1	12.7	4.68	1.99	1.42	3.13	3.44	0.37	0.13	0.04	< 0.01	0.01	0.66	99.7
4: 652129	75.6	11.9	2.36	1.61	1.75	3.17	2.62	0.14	0.01	0.04	< 0.01	< 0.01	0.52	99.7

Control Quality Analysis - not suitable for commercial exchange

  
Debbie Waldon  
Project Coordinator,  
Minerals Services, Analytical

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August-10-12

**Date Rec. :** 18 July 2012  
**LR Report :** CA02913-JUL12  
**Client Ref :** RL1202435

# CERTIFICATE OF ANALYSIS

## Final Report

Sample ID	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	Cr2O3 %	V2O5 %	LOI %	Sum %
1: W652101	73.0	13.4	3.33	0.47	1.02	3.87	3.09	0.48	0.07	0.07	< 0.01	< 0.01	0.74	99.6
2: W652102	65.8	15.8	7.11	1.25	4.61	2.71	2.22	0.67	0.19	0.14	< 0.01	0.02	0.70	101.2
3: W652103	78.2	11.3	1.39	0.17	0.97	4.18	2.09	0.10	0.01	0.02	< 0.01	< 0.01	0.84	99.3
4: W652104	73.2	13.3	3.62	0.53	1.50	3.29	3.22	0.48	0.09	0.08	< 0.01	< 0.01	1.12	100.4
5: W652105	64.4	14.7	5.87	2.51	5.61	2.69	2.01	1.16	0.35	0.10	0.01	0.02	0.69	100.2
6: W652106	48.8	18.7	11.4	8.55	7.47	2.42	0.08	1.37	0.11	0.26	0.05	0.07	0.83	100.1
7: W652107	54.7	19.6	8.91	2.16	7.15	3.64	1.45	1.49	0.12	0.32	0.05	0.08	0.78	100.4
8: W652108	45.0	13.6	14.7	4.57	18.3	1.07	0.30	0.99	0.08	0.37	0.04	0.05	1.43	100.5
9: W652109	50.9	15.9	12.8	4.46	8.58	3.02	1.96	0.91	0.31	0.31	0.02	0.04	1.81	101.0
10: W652110	58.7	12.4	14.9	2.13	6.31	1.94	0.90	1.65	0.27	0.33	< 0.01	0.01	0.42	100.0
11: W652111	61.9	14.4	6.50	3.32	4.73	4.40	2.11	0.77	0.39	0.13	0.01	0.02	0.86	99.6
12: W652112	71.8	14.6	2.88	0.52	1.40	3.75	4.66	0.27	0.10	0.04	< 0.01	< 0.01	0.55	100.6
13: W652113	76.8	13.9	0.97	0.17	0.32	4.14	4.51	0.06	0.02	0.02	< 0.01	< 0.01	0.50	101.3
14: W652114	46.4	15.1	13.8	6.01	15.2	1.55	0.18	1.02	0.08	0.23	0.03	0.06	1.44	101.1
15: W652115	75.3	11.7	2.36	0.31	0.76	4.04	2.95	0.12	0.02	0.04	< 0.01	< 0.01	0.75	98.3
16: W652116	50.3	12.8	19.3	3.64	10.3	1.22	0.33	1.83	0.25	0.57	< 0.01	0.05	0.33	100.9

OnLine LIMS



**SGS Canada Inc.**

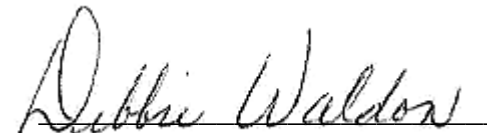
P.O. Box 4300 - 185 Concession St.  
Lakefield - Ontario - KOL 2H0  
Phone: 705-652-2000 FAX: 705-652-6365

**LR Report :**

**CA02913-JUL12**

Sample ID	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	Cr2O3 %	V2O5 %	LOI %	Sum %
17: W652117	74.8	11.7	5.04	2.20	0.06	0.22	4.23	0.22	0.02	0.15	0.04	< 0.01	1.69	100.4
18: W652121	72.6	14.8	2.33	0.45	1.23	5.22	2.01	0.23	0.06	0.04	< 0.01	< 0.01	1.59	100.6

Control Quality Analysis - not suitable for commercial exchange

  
 Debbie Waldon  
 Project Coordinator,  
 Minerals Services, Analytical

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August-13-12

**Date Rec. :** 18 July 2012  
**LR Report :** CA02938-JUL12  
**Client Ref :** RL1202434

# CERTIFICATE OF ANALYSIS

## Final Report

Sample ID	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	Cr2O3 %	V2O5 %	LOI %	Sum %
1: 429753	72.0	13.7	1.86	0.39	1.02	3.13	5.75	0.16	0.04	0.03	< 0.01	< 0.01	0.97	99.0
2: 429754	54.5	12.4	18.5	3.39	6.48	3.32	0.18	1.65	0.27	0.42	< 0.01	0.02	0.20	101.3
3: 429755	75.4	12.1	2.46	0.38	1.57	3.50	2.85	0.13	< 0.01	0.08	< 0.01	< 0.01	0.74	99.2
4: 429756	49.9	12.4	19.1	3.49	7.94	2.49	1.36	2.85	0.50	0.27	< 0.01	0.04	0.48	100.8
5: 429757	76.5	11.9	3.45	0.32	0.74	3.48	3.82	0.14	0.01	0.03	< 0.01	< 0.01	0.65	101.0
6: 429759	75.9	11.9	4.82	0.69	2.64	3.05	1.17	0.25	0.02	0.11	< 0.01	< 0.01	0.71	101.3
7: 429761	77.8	11.4	2.37	0.41	1.34	1.84	4.77	0.12	< 0.01	0.03	< 0.01	< 0.01	0.77	100.9
8: 429762	53.5	17.1	8.83	5.04	9.63	3.43	1.34	0.73	0.11	0.21	0.03	0.03	0.81	100.8
9: 429765	51.2	16.8	8.94	6.50	8.68	3.50	2.21	0.84	0.43	0.14	0.02	0.03	1.10	100.4
10: 429769	75.5	11.2	2.61	0.29	2.24	3.27	2.74	0.11	< 0.01	0.06	< 0.01	< 0.01	1.35	99.4
11: 429771	51.9	21.5	4.98	5.21	8.38	5.00	0.98	0.96	0.05	0.12	< 0.01	0.04	1.10	100.2
12: 429773	55.3	15.7	9.45	6.00	8.41	2.70	0.95	0.78	0.11	0.16	0.03	0.04	1.00	100.7
13: 429775	74.9	12.3	2.76	0.43	1.10	3.72	3.09	0.17	0.02	0.10	< 0.01	< 0.01	1.07	99.6
14: 429777	49.5	12.4	19.4	4.11	8.97	2.66	0.33	1.77	0.23	0.74	< 0.01	0.05	0.21	100.4
15: 429778	55.4	12.4	17.6	2.75	6.40	1.58	0.87	1.62	0.26	0.33	< 0.01	0.01	0.59	99.8
16: 429779	52.3	17.4	9.34	5.06	10.1	2.90	1.53	0.76	0.14	0.24	0.03	0.03	0.87	100.7

OnLine LIMS



SGS Canada Inc.

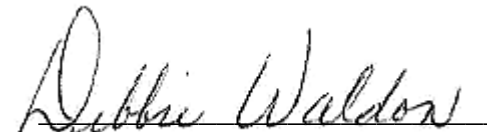
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Lakefield - Ontario - KOL 2H0  
Phone: 705-652-2000 FAX: 705-652-6365

LR Report :

CA02938-JUL12

Sample ID	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	Cr2O3 %	V2O5 %	LOI %	Sum %
17: 429781	56.8	18.5	6.52	3.03	6.68	6.13	0.58	0.96	0.12	0.12	0.04	0.04	0.53	100.1
18: 429783	49.6	13.6	14.4	6.13	11.1	2.81	0.64	1.30	0.11	0.32	< 0.01	0.07	0.66	100.7
19: 429784	51.2	13.6	17.4	4.45	8.99	2.70	0.15	1.87	0.17	0.30	< 0.01	0.08	0.35	101.3
20: W6521118	66.0	18.5	2.08	0.31	4.13	5.53	1.63	0.63	0.19	0.03	0.01	0.01	0.95	100.0
21: W6521119	57.0	16.7	7.43	3.28	9.97	0.53	2.90	0.97	0.58	0.12	< 0.01	0.02	1.40	100.8
22: W6521120	67.6	16.1	2.59	0.76	3.23	5.01	1.81	0.68	0.20	0.04	< 0.01	0.01	1.08	99.0

Control Quality Analysis - not suitable for commercial exchange

  
 Debbie Waldon  
 Project Coordinator,  
 Minerals Services, Analytical

Email: rvalliant@triorigin.com/fkendle@triorigin.com

## Appendix D - Reformatted geochemical data for IgPet plotting

Sample	Jcode	Kcode	Lcode	SiO2	Al2O3	Fe2O3	FeO	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	V2O5	LOI	SUM	Mg#
W652110	2			58.7	12.4	14.9	13.41	2.13	6.31	1.94	0.9	1.65	0.27	0.33	< 0.01	0.01	0.42	100	22.07
W652111	6			61.9	14.4	6.5	5.85	3.32	4.73	4.4	2.11	0.77	0.39	0.13	0.01	0.02	0.86	99.6	50.02
W652127	4			78.4	12.5	1.21	1.09	0.56	0.58	5.19	1.48	0.26	0.03	0.01	< 0.01	< 0.01	0.65	100.9	47.30
W652128	4			71.1	12.7	4.68	4.21	1.99	1.42	3.13	3.44	0.37	0.13	0.04	< 0.01	0.01	0.66	99.7	44.95
W652129	4			75.6	11.9	2.36	2.12	1.61	1.75	3.17	2.62	0.14	0.01	0.04	< 0.01	< 0.01	0.52	99.7	56.48
W652112	12			71.8	14.6	2.88	2.59	0.52	1.4	3.75	4.66	0.27	0.1	0.04	< 0.01	< 0.01	0.55	100.6	25.39
W652102	2			65.8	15.8	7.11	6.40	1.25	4.61	2.71	2.22	0.67	0.19	0.14	< 0.01	0.02	0.7	101.2	24.72
W652103	12			78.2	11.3	1.39	1.25	0.17	0.97	4.18	2.09	0.1	0.01	0.02	< 0.01	< 0.01	0.84	99.3	18.47
W652117	12			74.8	11.7	5.04	4.53	2.2	0.06	0.22	4.23	0.22	0.02	0.15	0.04	< 0.01	1.69	100.4	44.50
W652114	2			46.4	15.1	13.8	12.42	6.01	15.2	1.55	0.18	1.02	0.08	0.23	0.03	0.06	1.44	101.1	44.24
W652109	2			50.9	15.9	12.8	11.52	4.46	8.58	3.02	1.96	0.91	0.31	0.31	0.02	0.04	1.81	101	38.65
W652126	4			64.8	15.7	5.34	4.80	2.02	3.71	4.83	1.85	1.27	0.41	0.08	0.01	0.03	1.07	101.2	40.43
W652105	4			64.4	14.7	5.87	5.28	2.51	5.61	2.69	2.01	1.16	0.35	0.1	0.01	0.02	0.69	100.2	43.24
W652113	12			76.8	13.9	0.97	0.87	0.17	0.32	4.14	4.51	0.06	0.02	0.02	< 0.01	< 0.01	0.5	101.3	23.66
W652115	4			75.3	11.7	2.36	2.12	0.31	0.76	4.04	2.95	0.12	0.02	0.04	< 0.01	< 0.01	0.75	98.3	18.75
W652116	2			50.3	12.8	19.3	17.37	3.64	10.3	1.22	0.33	1.83	0.25	0.57	< 0.01	0.05	0.33	100.9	24.76
W652107	6			54.7	19.6	8.91	8.02	2.16	7.15	3.64	1.45	1.49	0.12	0.32	0.05	0.08	0.78	100.4	29.59
W652104	4			73.2	13.3	3.62	3.26	0.53	1.5	3.29	3.22	0.48	0.09	0.08	< 0.01	< 0.01	1.12	100.4	20.14
W652101	4			73	13.4	3.33	3.00	0.47	1.02	3.87	3.09	0.48	0.07	0.07	< 0.01	< 0.01	0.74	99.6	19.46
W652106	4			48.8	18.7	11.4	10.26	8.55	7.47	2.42	0.08	1.37	0.11	0.26	0.05	0.07	0.83	100.1	56.08
W652108	2			45	13.6	14.7	13.23	4.57	18.3	1.07	0.3	0.99	0.08	0.37	0.04	0.05	1.43	100.5	34.48
W652121	4			72.6	14.8	2.33	2.10	0.45	1.23	5.22	2.01	0.23	0.06	0.04	< 0.01	< 0.01	1.59	100.6	24.53
W652136	6			59.6	12.6	13.7	12.33	1.46	4.54	2.92	1.21	1.24	0.35	0.21	< 0.01	< 0.01	0.38	98.1	15.14
W652137	4			70.1	16.2	1.93	1.74	0.86	3.49	4.65	2.04	0.26	0.08	0.03	< 0.01	< 0.01	0.34	100	42.59
W652118	6			66	18.5	2.08	1.87	0.31	4.13	5.53	1.63	0.63	0.19	0.03	0.01	0.01	0.95	100	19.80
W652119	6			57	16.7	7.43	6.69	3.28	9.97	0.53	2.9	0.97	0.58	0.12	< 0.01	0.02	1.4	100.8	42.11
W652120	6			67.6	16.1	2.59	2.33	0.76	3.23	5.01	1.81	0.68	0.2	0.04	< 0.01	0.01	1.08	99	32.49
429753	12			72	13.7	1.86	1.67	0.39	1.02	3.13	5.75	0.16	0.04	0.03	< 0.01	< 0.01	0.97	99	25.50
429754	2			54.5	12.4	18.5	16.65	3.39	6.48	3.32	0.18	1.65	0.27	0.42	< 0.01	0.02	0.2	101.3	22.94
429755	4			75.4	12.1	2.46	2.21	0.38	1.57	3.5	2.85	0.13	0	0.08	< 0.01	< 0.01	0.74	99.2	19.99
429756	6			49.9	12.4	19.1	17.19	3.49	7.94	2.49	1.36	2.85	0.5	0.27	< 0.01	0.04	0.48	100.8	22.73
429757	4			76.5	11.9	3.45	3.10	0.32	0.74	3.48	3.82	0.14	0.01	0.03	< 0.01	< 0.01	0.65	101	12.94
429759	4			75.9	11.9	4.82	4.34	0.69	2.64	3.05	1.17	0.25	0.02	0.11	< 0.01	< 0.01	0.71	101.3	18.60

## Appendix D - Reformatted geochemical data for IgPet plotting

Sample	Jcode	Kcode	Lcode	SiO2	Al2O3	Fe2O3	FeO	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	V2O5	LOI	SUM	Mg#
429761	4			77.8	11.4	2.37	2.13	0.41	1.34	1.84	4.77	0.12	0	0.03	< 0.01	< 0.01	0.77	100.9	21.57
429762	6			53.5	17.1	8.83	7.95	5.04	9.63	3.43	1.34	0.73	0.11	0.21	0.03	0.03	0.81	100.8	47.47
429765	10			51.2	16.8	8.94	8.04	6.5	8.68	3.5	2.21	0.84	0.43	0.14	0.02	0.03	1.1	100.4	53.41
429769	4			75.5	11.2	2.61	2.35	0.29	2.24	3.27	2.74	0.11	0	0.06	< 0.01	< 0.01	1.35	99.4	14.86
429771	2			51.9	21.5	4.98	4.48	5.21	8.38	5	0.98	0.96	0.05	0.12	< 0.01	0.04	1.1	100.2	62.08
429773	6			55.3	15.7	9.45	8.50	6	8.41	2.7	0.95	0.78	0.11	0.16	0.03	0.04	1	100.7	49.74
429775	4			74.9	12.3	2.76	2.48	0.43	1.1	3.72	3.09	0.17	0.02	0.1	< 0.01	< 0.01	1.07	99.6	19.48
429777	2			49.5	12.4	19.4	17.46	4.11	8.97	2.66	0.33	1.77	0.23	0.74	< 0.01	0.05	0.21	100.4	24.69
429778	2			55.4	12.4	17.6	15.84	2.75	6.4	1.58	0.87	1.62	0.26	0.33	< 0.01	0.01	0.59	99.8	19.42
429779	2			52.3	17.4	9.34	8.40	5.06	10.1	2.9	1.53	0.76	0.14	0.24	0.03	0.03	0.87	100.7	45.44
429781	2			56.8	18.5	6.52	5.87	3.03	6.68	6.13	0.58	0.96	0.12	0.12	0.04	0.04	0.53	100.1	41.59
429783	2			49.6	13.6	14.4	12.96	6.13	11.1	2.81	0.64	1.3	0.11	0.32	< 0.01	0.07	0.66	100.7	39.40
429784	2			51.2	13.6	17.4	15.66	4.45	8.99	2.7	0.15	1.87	0.17	0.3	< 0.01	0.08	0.35	101.3	28.02
357009	6			41.49	3.26	19.7	17.73	24.32	6.03	0	0.05	0.93	0.06	0.27	0.18		3.95	100.3	65.20
357011	2			53.6	13.05	9.27	8.34	7.49	7.88	2.48	3.39	0.85	0.41	0.15	0.06		1.15	100	55.00
357052	2			48.93	14.62	12.77	11.49	6.26	12.61	1.89	0.29	0.92	0.08	0.21	0.04		1.5	100.2	42.51
OC23	2			50.69	13.03	16.7	15.03	3.59	7.98	3.81	0.42	1.78	0.25	0.65	0.01		0.3	99.27	24.43
OC25	2			54.58	13.1	12.58	11.32	4.92	11.42	1.67	0.34	0.92	0.11	0.19	0.02		0.7	100.6	36.96
66748	3			74.45	13.86	1.16	1.04	0.18	1.08	3.73	4.68	0.12	0.02	0.04	0.03		0.45	99.94	18.83
66749	2			5.02	12.73	8.44	7.59	9.24	7.38	3.11	2.71	0.74	0.28	0.14	0.11		0.95	100	62.01
66750	4			67.21	15.2	6.1	5.49	0.31	2.83	6.13	0.95	0.44	0.05	0.1	0.03		0.8	100.3	7.03
66751	4			63.96	15.45	6.03	5.43	2.72	4.5	4.06	1.59	0.64	0.18	0.08	0.02		0.7	100	40.08
66752	4			64.22	15.41	6.32	5.69	2.17	4.71	3.97	1.7	0.64	0.18	0.1	0.02		0.9	100.5	33.68
66753	12			73.85	13.66	1.32	1.19	0.28	1.04	3.49	5	0.15	0.02	0.03	0.02		0.3	99.3	23.83
66754	2			50.78	15.39	11.16	10.04	6.37	8.96	3.86	1.04	0.87	0.15	0.18	0.02		1	99.89	45.65
66755	2			47.87	14.86	11.95	10.75	7.82	9.54	2.82	1.67	1.2	0.38	0.16	0.04		0.95	99.41	48.99
R-TB-11	2			53.11	16.24	10.86	9.77	5.02	9.18	1.53	2.43	0.81	0.16	0.26	0.03	0.3	100	100	40.36
R-TB-12	4			77.45	11.8	1.73	1.56	0.43	0.72	4.29	2.91	0.12	0.005	0.02	0.02	0.15	99.8	99.79	26.64
R-TB-25	4			74.8	11.25	5.74	5.16	0.55	1.68	3.82	1.16	0.23	0.01	0.06	0.02	0.15	99.6	99.64	12.25
R-TB-26	2			49.94	12.93	16.93	15.23	4.74	8.11	2.89	0.31	1.81	0.18	0.26	0.01	0.2	98.4	98.37	28.93
R-TB-28	2			47.05	14.65	14.12	12.71	4.82	13.43	2.67	0.28	1.09	0.09	0.28	0.03	0.5	99.1	99.05	33.12
A173376	2			47.7	13.1	17.8	16.02	6.26	9.97	2.31	0.14	1.56	0.07	0.24	0.01		0.57	99.8	33.73
A173377	2			48.7	18.5	9.32	8.39	7.06	11.1	2.48	0.27	1.22	0.09	0.19	0.05		1.08	100.1	52.24

Appendix D - Reformatted geochemical data for IgPet plotting

Sample	Jcode	Kcode	Lcode	SiO2	Al2O3	Fe2O3	FeO	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	V2O5	LOI	SUM	Mg#
A173378	2			49.8	13.5	18.2	16.38	5.9	7.48	1.58	0.46	2.23	0.21	0.27	0.01		0.45	100.2	31.84
A173379	2			46.3	16.1	13.1	11.79	8.44	10.3	2.56	0.18	0.84	0.06	0.2	0.04		1.55	99.8	48.09
A173380	2			49.5	13.7	15.3	13.77	6.32	9.8	2.92	0.29	0.98	0.09	0.24	0.02		0.77	100.1	37.21
A173381	2			47.6	15.8	13.7	12.33	6.91	11.7	2.7	0.32	1.04	0.08	0.22	0.03		0.66	100.8	41.94
A173382	2			47.6	15.9	13.5	12.15	6.06	12.7	2.56	0.13	1.03	0.08	0.28	0.04		0.62	100.5	39.08
W652139	2			52.2	13.7	14	12.60	4.31	10.5	2.01	0.29	1.54	0.13	0.39	<0.01	0.07	0.91	100	30.51

## Appendix D - Reformatted geochemical data for IgPet plotting

Sample	An%	Si	Al	Fe	Mg	Ca	Na	K	Ti	P	Mn	Cr	V	Rb	Sr	Y	Zr	Nb	Ba	As
W652110	73.40	27.4	6.56	10.42	1.284	4.509	1.439	0.747	0.989	0.118	0.256	0.0000005	0.006							
W652111	47.43	28.9	7.62	4.546	2.002	3.38	3.264	1.752	0.462	0.17	0.101	0.0068420	0.011							
W652127	9.40	36.65	6.62	0.846	0.338	0.414	3.85	1.229	0.156	0.013	0.008	0.0000005	5E-07							
W652128	22.37	33.23	6.72	3.273	1.2	1.015	2.322	2.856	0.222	0.057	0.031	0.0000005	0.006							
W652129	28.09	35.34	6.30	1.651	0.971	1.251	2.352	2.175	0.084	0.004	0.031	0.0000005	5E-07							
W652112	18.24	33.56	7.73	2.014	0.314	1	2.782	3.868	0.162	0.044	0.031	0.0000005	5E-07							
W652102	54.54	30.76	8.36	4.973	0.754	3.294	2.01	1.843	0.402	0.083	0.108	0.0000005	0.011							
W652103	15.94	36.55	5.98	0.972	0.103	0.693	3.101	1.735	0.06	0.004	0.015	0.0000005	5E-07							
W652117	2.06	34.96	6.19	3.525	1.327	0.043	0.163	3.512	0.132	0.009	0.116	0.0273681	5E-07							
W652114	90.84	21.69	7.99	9.652	3.624	10.86	1.15	0.149	0.611	0.035	0.178	0.0205261	0.034							
W652109	68.16	23.79	8.42	8.953	2.69	6.131	2.24	1.627	0.546	0.135	0.24	0.0136840	0.022							
W652126	39.81	30.29	8.31	3.735	1.218	2.651	3.583	1.536	0.761	0.179	0.062	0.0068420	0.017							
W652105	59.89	30.1	7.78	4.106	1.514	4.009	1.996	1.669	0.695	0.153	0.077	0.0068420	0.011							
W652113	4.55	35.9	7.36	0.678	0.103	0.229	3.071	3.744	0.036	0.009	0.015	0.0000005	5E-07							
W652115	11.90	35.2	6.19	1.651	0.187	0.543	2.997	2.449	0.072	0.009	0.031	0.0000005	5E-07							
W652116	88.50	23.51	6.77	13.5	2.195	7.36	0.905	0.274	1.097	0.109	0.441	0.0000005	0.028							
W652107	62.41	25.57	10.37	6.232	1.303	5.109	2.7	1.204	0.893	0.052	0.248	0.0342101	0.045							
W652104	22.55	34.22	7.04	2.532	0.32	1.072	2.441	2.673	0.288	0.039	0.062	0.0000005	5E-07							
W652101	15.37	34.12	7.09	2.329	0.283	0.729	2.871	2.565	0.288	0.031	0.054	0.0000005	5E-07							
W652106	76.51	22.81	9.90	7.974	5.156	5.338	1.795	0.066	0.821	0.048	0.201	0.0342101	0.039							
W652108	93.89	21.03	7.20	10.28	2.756	13.08	0.794	0.249	0.594	0.035	0.287	0.0273681	0.028							
W652121	16.59	33.94	7.83	1.63	0.271	0.879	3.872	1.669	0.138	0.026	0.031	0.0000005	5E-07							
W652136	56.31	27.86	6.67	9.582	0.88	3.244	2.166	1.004	0.743	0.153	0.163	0.0000005	5E-07							
W652137	38.00	32.77	8.57	1.35	0.519	2.494	3.45	1.693	0.156	0.035	0.023	0.0000005	5E-07							
W652118	39.81	30.85	9.79	1.455	0.187	2.951	4.102	1.353	0.378	0.083	0.023	0.0068420	0.006							
W652119	80.19	26.64	8.84	5.197	1.978	7.125	0.393	2.407	0.582	0.253	0.093	0.0000005	0.011							
W652120	35.37	31.6	8.52	1.812	0.458	2.308	3.717	1.503	0.408	0.087	0.031	0.0000005	0.006							
429753	12.95	33.66	7.25	1.301	0.235	0.729	2.322	4.773	0.096	0.017	0.023	0.0000005	5E-07							
429754	66.79	25.48	6.56	12.94	2.044	4.631	2.463	0.149	0.989	0.118	0.325	0.0000005	0.011							
429755	23.08	35.24	6.40	1.721	0.229	1.122	2.596	2.366	0.078	0	0.062	0.0000005	5E-07							
429756	70.84	23.33	6.56	13.36	2.105	5.674	1.847	1.129	1.709	0.218	0.209	0.0000005	0.022							
429757	11.13	35.76	6.30	2.413	0.193	0.529	2.582	3.171	0.084	0.004	0.023	0.0000005	5E-07							
429759	41.84	35.48	6.30	3.371	0.416	1.887	2.263	0.971	0.15	0.009	0.085	0.0000005	5E-07							

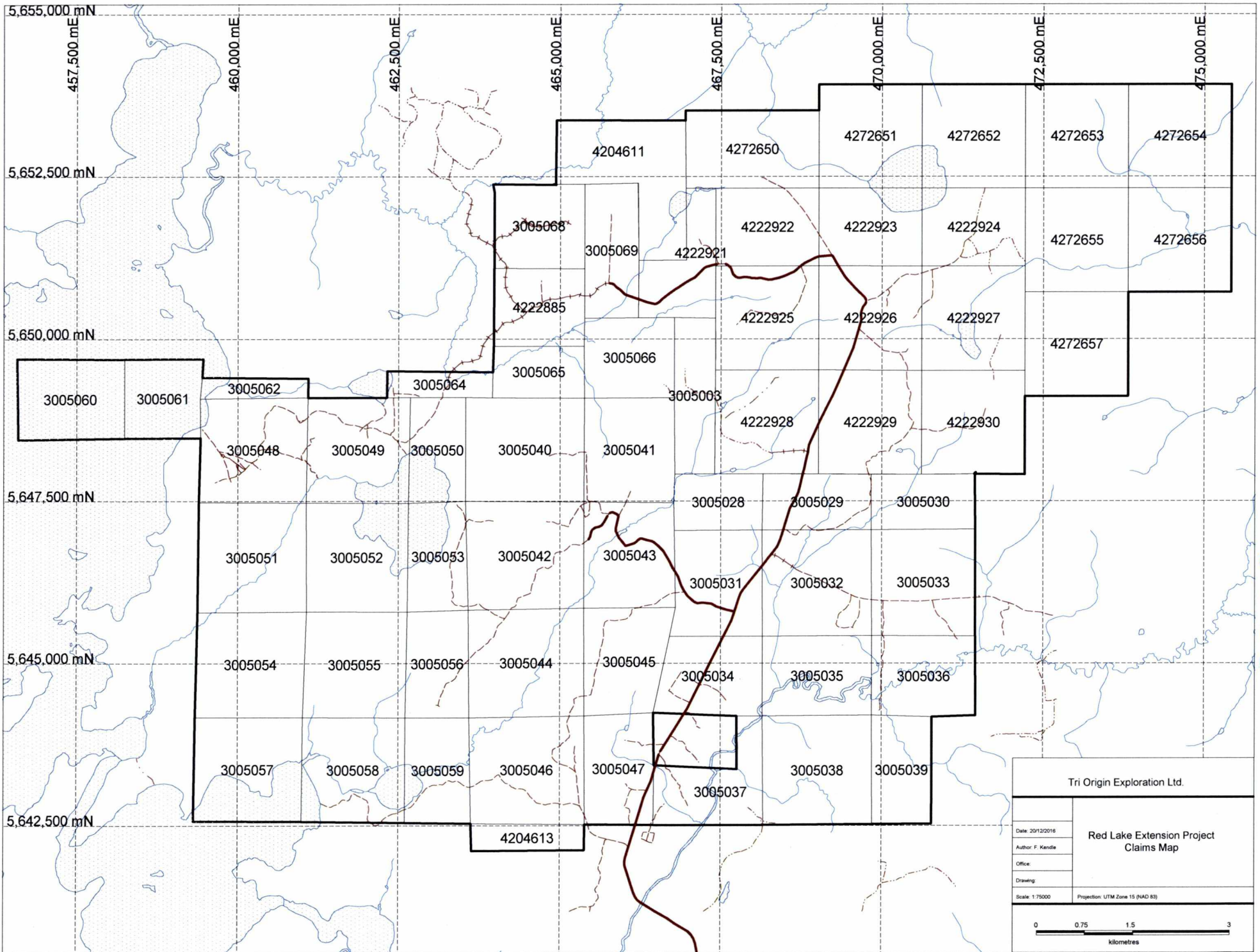


Appendix D - Reformatted geochemical data for IgPet plotting

Sample	An%	Si	Al	Fe	Mg	Ca	Na	K	Ti	P	Mn	Cr	V	Rb	Sr	Y	Zr	Nb	Ba	As
429761	20.94	36.37	6.03	1.658	0.247	0.958	1.365	3.96	0.072	0	0.023	0.0000005	5E-07							
429762	69.86	25.01	9.05	6.176	3.039	6.882	2.545	1.112	0.438	0.048	0.163	0.0205261	0.017							
429765	64.21	23.93	8.89	6.253	3.92	6.203	2.596	1.835	0.504	0.188	0.108	0.0136840	0.017							
429769	30.92	35.29	5.93	1.826	0.175	1.601	2.426	2.275	0.066	0	0.046	0.0000005	5E-07							
429771	60.86	24.26	11.38	3.483	3.142	5.988	3.709	0.814	0.576	0.022	0.093	0.0000005	0.022							
429773	72.36	25.85	8.31	6.61	3.618	6.01	2.003	0.789	0.468	0.048	0.124	0.0205261	0.022							
429775	16.17	35.01	6.51	1.93	0.259	0.786	2.76	2.565	0.102	0.009	0.077	0.0000005	5E-07							
429777	76.61	23.14	6.56	13.57	2.478	6.41	1.973	0.274	1.061	0.1	0.573	0.0000005	0.028							
429778	75.19	25.9	6.56	12.31	1.658	4.573	1.172	0.722	0.971	0.113	0.256	0.0000005	0.006							
429779	72.49	24.45	9.21	6.533	3.051	7.217	2.151	1.27	0.456	0.061	0.186	0.0205261	0.017							
429781	51.88	26.55	9.79	4.56	1.827	4.774	4.548	0.481	0.576	0.052	0.093	0.0273681	0.022							
429783	78.10	23.18	7.20	10.07	3.697	7.932	2.085	0.531	0.779	0.048	0.248	0.0000005	0.039							
429784	77.19	23.93	7.20	12.17	2.684	6.424	2.003	0.125	1.121	0.074	0.232	0.0000005	0.045							
357009	99.40	19.39	1.73	13.78	14.67	4.309	0	0.042	0.558	0.026	0.209	0.1231564	0	2	58	2	89	5	69	
357011	62.07	25.05	6.91	6.484	4.517	5.631	1.84	2.814	0.51	0.179	0.116	0.0410521	0	92	644	60	181	11	900	
357052	86.32	22.87	7.74	8.932	3.775	9.011	1.402	0.241	0.552	0.035	0.163	0.0273681	0	12	192	21	43	3	127	
OC23	67.11	23.69	6.90	11.68	2.165	5.703	2.826	0.349	1.067	0.109	0.503	0.0068420	0	10	155	45	114	7	161	
OC25	86.19	25.51	6.93	8.799	2.967	8.161	1.239	0.282	0.552	0.048	0.147	0.0136840	0	3	323	20	64	5	102	
66748	13.40	34.8	7.34	0.811	0.109	0.772	2.767	3.885	0.072	0.009	0.031	0.0205261	0	318	144	49	123	21	490	<3
66749	59.87	2.347	6.74	5.903	5.572	5.274	2.307	2.25	0.444	0.122	0.108	0.0752622	0	84	708	23	129	8	525	<3
66750	30.29	31.42	8.04	4.267	0.187	2.022	4.548	0.789	0.264	0.022	0.077	0.0205261	0	21	370	56	617	20	547	3
66751	47.22	29.9	8.18	4.218	1.64	3.216	3.012	1.32	0.384	0.079	0.062	0.0136840	0	36	314	21	203	11	465	<3
66752	48.36	30.02	8.16	4.42	1.309	3.366	2.945	1.411	0.384	0.079	0.077	0.0136840	0	49	287	25	197	11	502	<3
66753	12.87	34.52	7.23	0.923	0.169	0.743	2.589	4.151	0.09	0.009	0.023	0.0136840	0	273	142	62	158	21	533	<3
66754	66.86	23.74	8.15	7.806	3.841	6.403	2.864	0.863	0.522	0.065	0.139	0.0136840	0	25	586	35	108	10	149	<3
66755	70.83	22.38	7.86	8.358	4.716	6.817	2.092	1.386	0.719	0.166	0.124	0.0273681	0	58	542	26	139	8	419	<3
R-TB-11	73.69	24.83	8.60	7.596	3.027	6.56	1.135	2.017	0.486	0.07	0.201	0.0205261	0.168	45	250	17	98	5	523	
R-TB-12	10.31	36.2	6.25	1.21	0.259	0.515	3.183	2.416	0.072	0.002	0.015	0.0136840	0.084	68	99	166	386	39	377	
R-TB-25	27.15	34.96	5.95	4.015	0.332	1.201	2.834	0.963	0.138	0.004	0.046	0.0136840	0.084	42	98	170	596	32	483	
R-TB-26	73.10	23.34	6.84	11.84	2.858	5.795	2.144	0.257	1.085	0.079	0.201	0.0068420	0.112	3	171	43	119	4	131	
R-TB-28	82.99	21.99	7.75	9.876	2.907	9.597	1.981	0.232	0.653	0.039	0.217	0.0205261	0.28	3	140	24	52	3	94	
A173376	81.22	22.3	6.93	12.45	3.775	7.125	1.714	0.116	0.935	0.031	0.186	0.0068420	0							
A173377	81.21	22.76	9.79	6.519	4.257	7.932	1.84	0.224	0.731	0.039	0.147	0.0342101	0							

Appendix D - Reformatted geochemical data for IgPet plotting

Sample	An%	Si	Al	Fe	Mg	Ca	Na	K	Ti	P	Mn	Cr	V	Rb	Sr	Y	Zr	Nb	Ba	As
A173378	80.12	23.28	7.14	12.73	3.558	5.345	1.172	0.382	1.337	0.092	0.209	0.0068420	0							
A173379	79.98	21.64	8.52	9.163	5.09	7.36	1.899	0.149	0.504	0.026	0.155	0.0273681	0							
A173380	76.52	23.14	7.25	10.7	3.811	7.003	2.166	0.241	0.588	0.039	0.186	0.0136840	0							
A173381	80.57	22.25	8.36	9.582	4.167	8.361	2.003	0.266	0.623	0.035	0.17	0.0205261	0							
A173382	83.32	22.25	8.42	9.442	3.654	9.075	1.899	0.108	0.617	0.035	0.217	0.0273681	0							
W652139	83.06	24.4	7.25	9.792	2.599	7.503	1.491	0.241	0.923	0.057	0.302	0.0000005	0.039		109	29	26		224	<30



2-57651

Tri Origin Exploration Ltd.	
Date: 2012/2016	Red Lake Extension Project Claims Map
Author: F. Kendle	
Office:	
Drawing:	
Scale: 1:75000	Projection: UTM Zone 15 (NAD 83)