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Report on the 2012 Drill Program

Sky Lake Property, Pickle Lake, Ontario

Patricia Mining Division, Ontario

51° 14’ N, 90° 39’ W

NTS 52O07SE, 52O02NE, 52O02NW

FOR

TRI ORIGIN EXPLORATION LTD.

125 Don Hillock Dr., Unit 18
Aurora, Ontario
L4G 0H8

Martin King, P.Geo.
December 17, 2012

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APPENDICES

1.0 INTRODUCTION AND PROPERTY DESCRIPTION

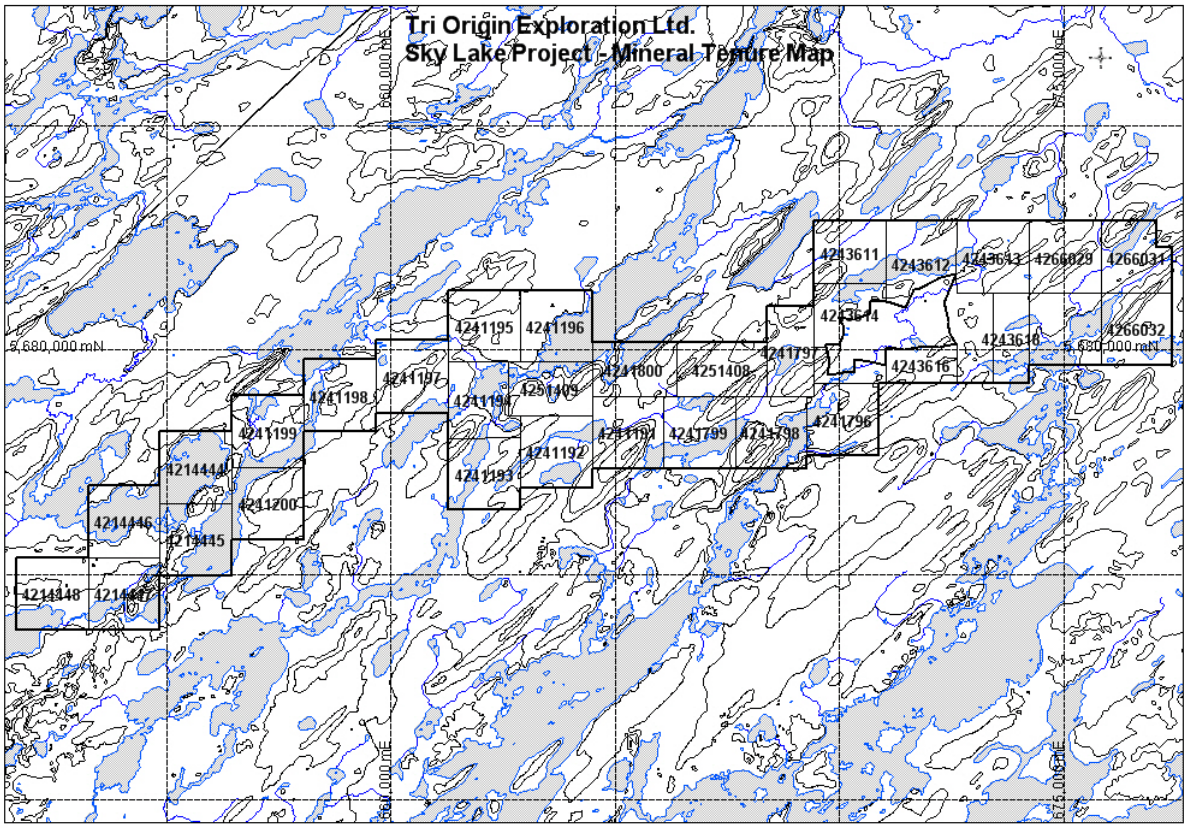
In December of 2012 Tri Origin Exploration completed a drill program on Tri Origin's Sky Lake Gold property in northwestern Ontario. The program took place between November 21st and December 6th, 2012 and consisted of seven drill holes totalling 1,180 m which were located to test several Induced Polarization (IP anomalies) outlined in a survey completed in October of 2011. The drilling was carried out over three claims (4241796, 4241797, 4241798) all wholly owned by Tri Origin Exploration.

The Sky Lake property lies within the four mapping districts of Duffell Lake, Caley Lake, Matapesatakun Bay Area and Little Ochig Lake in the Patricia Mining Division in northern Ontario. The property is located approximately 25 kilometres southwest of the town of Pickle Lake within the Pickle Lake greenstone belt (Figure 1). The seven drill holes are located to the north of Matapesatakun Bay, an embayment of St. Josephs Lake (Figure 4).

All of the Sky Lake property claims are in one contiguous block with 24 owned 100% by Tri Origin, 8 claims under an option agreement with Kitrinor Metals Inc. and 2 claims held under option agreement with Manicouagan Minerals. The claims cover a prospective area of over 79 square kilometres (7905 hectares) (Figure 2). The claims are listed in Appendix A.

FIGURE 1: Property Location

FIGURE 2: Mineral Tenure Map



2.0 REGIONAL GEOLOGY

2.1 Physiography and Vegetation

Drainage of the property area is southward via Matapesatakun Creek from Bancroft Lake to Lake St. Joseph, 1,227ft. (374 m) above sea level. Maximum relief is in the order of 115ft. (35m) with the highest elevations on southwest trending drumlins in the southwestern portions of the property. Most of the area is overburden covered with low swamps and boulder tills which probably average less than 20 feet in thickness. Outcrop is more common in the central portion of the property.

2.2 Regional Geology and Economic Mineralization (Jolliffe, 1996)

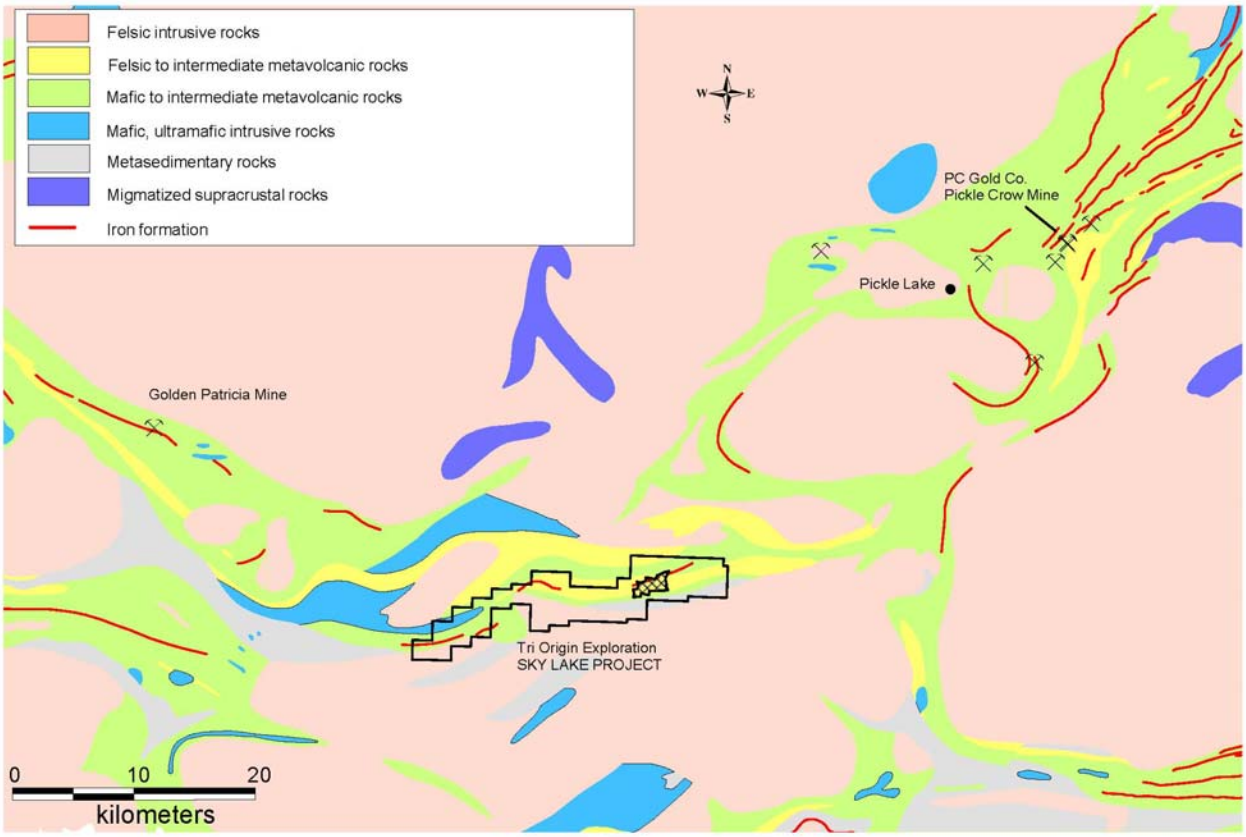
The property is located within the Uchi Subprovince, a part of the Superior Province in the Canadian Shield. The area is characterized by several arcuate, highly deformed and coalescing greenstone belts, consisting of predominantly mafic to intermediate volcanic flows, which have been intruded by numerous granitic to ultramafic intrusive bodies. The metamorphic grade ranges from greenschist to amphibolite facies. The volcanics host subordinate amounts of felsic to mafic pyroclastics, sediments and iron formation. Felsic quartz-feldspar porphyry dykes are commonly found in all lithologies (Figure 3).

Historically, gold production in the Pickle Lake area has been from structurally controlled vein type deposits or sulphide replacement bodies spatially associated with, or contained within, bands of Algoman (chert-magnetite) iron formation. The most important of these were the former producing Pickle Crow and Central Patricia mines (operated from 1935 to 1966 and 1934 to 1951, respectively) which collectively producing 2,068,020 ounces of gold from 4,966,820 tons of ore for an average grade of 0.416 ounces of gold per ton.

The Golden Patricia Mine of Barrick Gold Inc. (approx. 70,000 ounces gold per year) is located about 25 miles west-northwest of the property. The gold mineralization occurs in a quartz vein in a shear zone which cuts through a mafic metavolcanic succession.

Ultramafic rocks host copper-nickel mineralization at the former producing Thierry Mine, seven miles northwest of Pickle Lake, with mined ore and mineral reserves totaling 14,000,000 tons grading 1.6 % copper and 0.2% nickel.

FIGURE 3: Regional Geology



3.0 PROPERTY GEOLOGY

The central portion of the property in proximity to patent claims not owned by Tri Origin is the area of most abundant outcrop. The area is underlain by a west-southwest trending, vertical to steeply south-dipping assemblage of metavolcanic and metasediments with minor intrusive rocks. The northern 1/3 is dominated by mafic volcanics, mainly massive flows with some pillowed flows and tuffs, along with minor chemical sediments (oxide facies iron formation) and felsic volcanics. A diabase intrusive in the north-central area has been roughly outlined by limited outcrop exposure and previous magnetometer survey. Feldspar porphyry dykes and sills

outcrop locally and granitic intrusives have been intersected in drilling. South of the thick northern mafic volcanic unit are intermittently exposed fine grained clastic metasediments (mainly argillite, siltstone) and felsic volcanics. The central area is underlain predominately by an assemblage of intermediate volcanic and volcaniclastic rocks as well as minor intercalated fine grained clastic metasediments and felsic volcanics. The intermediate volcanic rocks and the iron formation host several historically significant gold zones on the property. On surface the intermediate volcanics hosting the gold zones are characterized by a biotite-calcite matrix and a scalloped weathering pattern. Primary textures are unclear but possible lapilli have been noted locally.

4.0 PREVIOUS WORK

Previous work completed on the claims optioned from Manicouagan Minerals Inc. involved limited geological mapping which returned grab samples containing 1.03g/t Au in an iron formation and 1.37g/t Au in silicified mafic metavocanics (MDI52O02NE00005) on Claim group 4251408. Several short diamond drill holes as indicated by Ontario assessment files were also completed on the claim groups. Four diamond drill holes were completed on claim 4251409 highlighted by an intersection of 1.4g/t Au in magnetic ironstone (MDI52O02NE00007) by Bond Gold in 1990.

Previous work on the remainder of the Sky Lake Property involved numerous phases of exploration activity as described below.

The first recorded discovery of gold in the Dempster-Pickle Lake belt was made in 1954 by prospector Ben Ohman near Bancroft Lake (Scratch, 1984).

During 1953-54 the property was optioned to Hasaga Gold Mines Ltd., who performed geological mapping, trenching and diamond drilling. The diamond drill program consisted of 87 drill holes combining to a total length of 6365.8 m. The drill program outlined numerous interesting gold intersections.

In 1960, 28 claims were surveyed and patented over the gold occurrences. They are referred to as the Koval claims and were held by Lac Minerals and have since passed to Barrick Gold Corporation. Lac completed line cutting, geological mapping and magnetic and IP geophysical surveys as well a diamond drilling. In 1996, Moss Resources drilled a total of 808.3m in eight BQ diamond drill holes.

During 1969, Newconex Canadian Exploration conducted ground electromagnetic and geological surveys on their "Ed" claim block at the western end of Tri Origin's present-day claim block. They delineated zones of pyrite.

Other companies have carried out exploration work on the ground both east and west of the Koval claims.

- Union Minerie Exploration and Mining Corporation Ltd. conducted extensive airborne and ground geophysical surveys and 4465 m of diamond drilling in 1971-1972. One of these holes was collared on the Kitrinor property, but all the rest of the work was done to the north and east of the claims which are the subject of the present report. There is no record of any samples having been assayed from that hole.

- In 1983-84 Moss Resources Ltd. conducted geological mapping and magnetic, VLF-EM and IP geophysical surveys as well as rock and humus geochemistry. This was followed by a 20 hole, 1522.78 m diamond drill program.

- From July 1 – August 22, 1984 Golden Maverick Resources conducted reconnaissance geological mapping and rock and humus geochemistry. A total of 53 rock samples and 572 humus samples were collected and analyzed for Au, Ag, As, Sb, Mo and Ba. They also carried out limited drilling between 1984 and 1988.

- In September 1988 Bond Gold mapped the area they referred to as the Caley Lake claim block, to the west of the patented Koval claims, and drilled three holes in October of that year.

4.1 Previous Work by Tri Origin Exploration Ltd.

- In November and December of 2009 Tri Origin Exploration contracted Aeroquest to complete 1303.38 line-km of helicopter time domain electromagnetic and magnetics on the Sky Lake property.

- In July 2010 Tri Origin Exploration Ltd. completed a mineral soil and humus survey over sections of the claim group which were determined by interpreting the VTEM data from the Aeroquest survey flown in 2009. Preliminary line cutting of the Sky lake grid was completed in the fall of 2010.

- In the summer of 2011 Tri Origin Exploration Ltd. completed a mineral soil and humus sample survey on two claims optioned from Manicouagan Minerals Inc. A total of 109 humus and 292 mineral samples were collected.

- In November 2011 Tri Origin Exploration completed cutting the Sky Lake grid which consisted of 45.2 line kilometers. Tri Origin also staked additional contiguous claims to the east of the property.

- In October of 2011 a detailed ground geophysical program was completed by Exsics Exploration Limited for Tri Origin Exploration Ltd on the Sky Lake grid. The geophysical survey was comprised of a Total Field Magnetic survey in conjunction with an Induced Polarization (IP) survey.

- In July and August of 2012 Tri Origin Exploration Ltd. completed a mineral soil and humus sample survey on portions of the property. A total of 346 humus and 433 mineral samples were collected.

5.0 2012 DIAMOND DRILL PROGRAM

Havenman Brothers of Kakabeka Falls set up camp for the drill program and Tri Origin Exploration retained Rugged Aviation of Thunder Bay to carry out the helicopter supported Sky Lake drilling. Rugged Aviation mobilized to Pickle Lake in mid November 2012.

Targets were selected to test a number of Induced Polarization anomalies defined during an IP survey carried out in October of 2011. Targeting was also prioritized based on humus and shallow soil geochemical results from previous sampling programs. Drill hole collar locations are listed in Table 1 and the Sky Lake 2012 drill plan is appended (Figure 4).

TABLE 1
Drill Collar Locations

Hole ID	Collar Easting	Collar Northing	Elevation	Depth	UTM/Zone	Azimuth	/Dip
SL-12-01	670200	5679210	383	200	NAD83/15	360	-55
SL-12-02	669200	5679955	385	153	NAD83/15	360	-55
SL-12-03	669200	5679694	396	162	NAD83/15	360	-55
SL-12-04	668900	5679430	397	180	NAD83/15	360	-55
SL-12-05	668900	5679302	401	160	NAD83/15	360	-50
SL-12-06	668700	5678774	389	174	NAD83/15	360	-50
SL-12-07	668700	5678581	380	151	NAD83/15	180	-45

Drilling commenced with hole SL-12-01 on November 21, 2012. Core recovery was excellent, with very little core going unrecovered. However, thicker than anticipated overburden, principally glacial till and boulder deposits, resulted in some loss of casing.

Recovered drill core was boxed, and then removed and stored at a temporary facility at Pickle lake Airport prior to being shipped to Red lake for logging, cutting and sampling. Drill logs are included in Appendix B. Samples were taken from mineralized and altered intervals and were submitted to the SGS laboratory facility in Red Lake for analysis for gold. Gold analysis was conducted using fire assay with an atomic absorption finish. Multi-element analysis was completed using multi-acid digestion and Induced Coupled Plasma Emission Spectrometry (ICP). The Sky Lake drill core is currently stored at the Ontario government core storage facility located south of Red Lake.

Assay certificates are compiled in Appendix C and analytical procedures are included in Appendix D.

Drill Hole SL-12-01

SL-12-01 is located on Line 102E at station 92+10N of the Sky Lake cut grid. The hole at UTM coordinates 670200E, 5679210N, is collared in an area coinciding with a strong IP and coincident Total Magnetic Intensity anomaly located towards the northern limit of the line 102E. SL-12-01 is drilled north into the target with collar location at azimuth 360° and dip -55°. The bedrock is interpreted to dip steeply, up to 80°, to the south. Mineralization consisting of disseminated to semi-massive pyrrhotite is intersected throughout the predominantly tuffaceous sequence cored in SL-12-01. The better developed pyrrhotite mineralization is intersected over the interval between 130.6 to140.5 m down hole. It consists of disseminations and stringers, generally aligned in the S1 foliation and locally developed semi-massive pyrrhotite (40% Po) extending up to 70% Po in parts of the section. The pyrrhotite, although often appearing to be non magnetic, is considered to be present in sufficient quantity to explain, for the greater part, the strong IP response and anomaly defined on this part of Line 102E.

SL-12-01 collared in intercalated intermediate tuffs and sediments, moderately foliated with minor biotite alteration extending to 32.8 m down hole. There is negligible overburden at this locality. At 32.8 m the hole cuts an extensive suite of felsic volcanic flows and underlying felsic tuffs extending to 102.4 m. This sequence is locally silicified with associated sericitic alteration and weak biotite alteration (along the S1 fabric). From 53.1 m there is a slight increase in disseminated pyrite mineralization and a slightly greater increase in fine grained pyrrhotite mineralization. Below 102.4 m a mafic tuff sequence is intersected extending to the bottom of the hole. Mineralized mafic tuff, with lesser intervals of mafic flows, contain 5-7% Po as disseminations and stringers and locally semi massive Po (40-70%) within the interval from 130.6 to 140.5 m. A total of 78 samples for a total length of 69.5 m were taken for assay. Sample 652653, the deepest in the hole (191.2 to 192.2 m) returned the highest gold value of 240 ppb Au. Sample 652653 was from chlorite altered mafic tuff with weak biotite alteration adjacent to the zone of the semi massive pyrrhotite. A section of the drill hole is shown in figure 5 (appended).

Drill Hole SL-12-02

SL-12-02 is located on Line 92E, 1,250 m northwest of SL-12-01, at station 99+54N on the cut grid. It was drilled to test a strong end of line IP chargeability and Total Magnetic Intensity anomaly towards the northern extent of Line 92E. SL-12-02 was at azimuth 360° and dip -55˚ at UTM coordinates 669200E and 5679955N. The hole collared in an area of moderate to deep glacial overburden deposited on a sequence of mafic to intermediate volcanic tuffs extending to 87.4 m down hole. Disseminated sulphides with up to 3% Po and trace to 1% pyrite were intersected between 50 to 63.6 m down hole and may contribute to the IP response targeted with SL-12-02.

SL-12-02 penetrated 11.3 m of overburden. Mafic to intermediate tuffs with minor flows extend to 87.4 m below where a series of more mafic massive flows are encountered. A strong to moderate S1 foliation (at between 40 to53˚ to the LCA) is observed cutting all lithologies. The more intermediate lithologies exhibit weak chloritization, some ankerite localised in fine bands and weak biotite development. The lower mafic massive flows also contain weakly developed chlorite and ankerite. Sulphide mineralization noted from 50 to 63.6 m down hole also contains weak sericitic alteration. A total of 12 samples, mostly covering the weak sulphide mineralized zone, were taken for assay with two samples, 652685 and 652691, each returning 110 ppb Au. Sample 652685 was from the zone containing up to 3% Po with associated sericitic alteration. Sample 652691 was taken, lower in the section, below the main pyrrhotite mineralization also in chlorite altered mafic to intermediate tuffs. Overall, the cored section is very weakly mineralized. A section of the drill hole is shown in figure 6 (appended).

Drill Hole SL-12-03

SL-12-03 is also located on Line 92E at station 96+95N, 273 m south of SL-12-02 at UTM coordinates 669200E, 5679694N. It was planned to test a broad but weaker chargeability anomaly and a magnetic low. The hole is collared at azimuth 360° and dip -55˚. The stratigraphy is similar to SL-12-02 with more intermediate tuffs and massive flows in the upper part of the hole and a greater abundance of mafic lithologies towards the base (mafic tuffs and

flows as well as a series of thin mafic dykes). However, unlike SL-12-02, there are little to no sulphide minerals present thus making the broad anomaly more difficult to explain.

SL-12-03 penetrated 18 m of overburden, interpreted as predominantly glacial till at the flank of a drumlin, before coring a series of intermediate tuff and flows with a sedimentary package from 33.50 to 44.40 m. The sediments contain some quart flooding towards the base of the interval (42.03 to 42.36 m). Alteration consists of weak chloritization with associated carbonate alteration (some ankerite). There is some localized weak sericitic alteration. Below 91.95 m there is a predominance of mafic tuff and mafic dykes containing trace amounts of pyrite and pyrrhotite between 91.95 and 130 m. The mafic rocks are very weakly magnetic. A selection of six samples were taken for assay from the various lithologies intersected in SL-12-03 (covered by the number series 652678-652682). Five of the six samples contain weakly anomalous gold. Sample 652678 and 652679 were taken from the sediments and intermediate tuffs respectively. Sample 652678 covers the narrow quartz flooded sediment zone. A section of the drill hole is shown in figure 7 (appended).

Drill Hole SL-12-04

SL-12-04 is located 400 m southwest of SL-12-03 on Line 89E at station 95+30N. The hole was collared at azimuth 360°, dip -55˚ at UTM coordinates 668900E, 5679430N. SL-12-04 was planned to test a broad low order magnetic anomaly and chargeability high possibly reflecting disseminated sulphide mineralization. Weak sulphide mineralization (Py and Po) intersected over a broad zone extending from 70.35 to approximately 122 m is considered sufficient to explain the targeted broad IP anomaly. Unlike the previously described holes SL-12-04 contains several zones with quartz and silica flooding and an overall stronger hydrothermal signature and generally more abundant sulphides.

SL-12-04 penetrated 18 m of glacial overburden and cut a series of mafic tuffs and flows to 54 m depth. Below 54 m to about 109 m intermediate volcanics tuff and flows predominate. Metasedimentary rocks extend to 144 m down hole and intermediate tuffs dominated the lower section to base of hole at 180 m. Sulphide stringers, principally pyrite are intersected in a narrow

interval between 63.40 to 64.55 m. Quartz veining, generally parallel to the S1 foliation and occupying the interval from 70.35 to 89.75 m locally contain up to 5% pyrite and 2% Po as sulphide stringers. However, there is no anomalous gold associated with the sulphides. A silicified zone with grey quartz (117.05 to 123.45 m) within the metasediments, containing up to 3% pyrite with associated sericitic alteration returned anomalous gold assays the highest being from sample 652735 which returned 260 ppb Au. The weakly anomalous zone extends from 117.05 to 119.7 m and there is very weak gold extending to 122.7 m all within the silicified sediments. A section of drill hole is shown in figure 8 (appended).

Drill Hole SL-12-05

SL-12-05 is located on Line 89E, 123 m south of SL-12-04 at station 93+07N and 800 m north of Matapesatakun Bay. It was collared at azimuth 360°, dip -50˚ at UTM coordinates 668900E, 5679307N to test a strong IP anomaly indicative of sulphides. SL-12-05 intersected several quartz-rich alteration zones with associated disseminated and stringer sulphides of up to 3% pyrrhotite and 2% pyrite located in several altered metasedimentary sections is considered sufficient to explain the IP anomaly. The quartz-rich alteration appears better developed in the sedimentary stratigraphy intersected through most of the lower parts of SL-12-05.

SL-12-05 penetrated substantial glacial till and boulders (35.30 m) before coring weakly metamorphosed fine grained sediments – shales and siltstones with minor interbedded tuffaceous material. There is weak chlorite development. The hole progressed to cut a very restricted intermediate volcanic interval (45.67 to 47.75 m) and a predominantly metasedimentary sequence extending to the base of hole at 160 m. The sedimentary sequence contains a number of weakly mineralized zones with up to 2% of both pyrrhotite and pyrite and occasional trace chalcopyrite. The interval from 51.35 to 68.75 m contains 1-2 mm pyrite and pyrrhotite bands with minor grey quartz and silicification. The interval from 81.5 to 101.48m contains abundant (up to 30%) grey quartz and silicification in weakly tectonized argillaceous sediments. There is some locally developed chlorite and sericitization associated with the silicification. Weakly magnetic pyrrhotite is the dominant sulphide, up to 3%. There is up to 2% pyrite in parts of the altered sedimentary section.

Below 47.75 m SL-12-05 is sediment dominated. Very abundant S1 parallel grey quartz and silica veins and boudins are intersected over a 12.2 m interval (129.70 to 141.9 m). Occasional patchy pyrrhotite is associated with the silica. The entire interval is partly silicified. Veining is at 42 to 47˚ to core axis. There is trace chalcopyrite. There is significant chlorite associated with the veining from 132.4 to 137.0 m. Three samples only were taken in this section (132.35 to 135.0 m). The three samples returned the best gold grades of the 2012 Sky Lake program. The highest value is 970 ppb Au (134.0 to 135.0 m). It is recommended to sample the entire lower drill hole section from 103.25 m to end of hole. There is potential for a wide, low-grade mineralized zone in the metasedimentary interval intersected in SL-12-05. A total of twenty samples only were taken at various horizons throughout the cored section, focusing on the more altered material.

A second alteration zone consisting of silicified sediments, quartz-flooded with sericite extends from 151.85m to the base of hole at 160 m. Some higher metamorphic grade material contains fine garnets (1 mm) and dark green chlorite with biotite and some staurolite. A section of drill hole is shown in figure 8 (appended).

Drill Hole SL-12-06

SL-12-06 is located 300 m north of Matapesatakun Bay on Line 87 of the cut grid (Figure 4) at station 87+74N. It was collared at UTM coordinates 668700, 5678774N with azimuth 360°, dip -50˚ to test an apparent strong conductor (Figure 5) extending north in section to 89+00N.

SL-12-06 penetrated 10.9 m of fluvioglacial sediments and cored an alternating sequence of intermediate and mafic tuffs and volcanic flows. The metasediments intersected in previous holes are largely absent. Chlorite alteration is weakly developed throughout the volcanic package. A zone containing some sericitization extends from 108.2 to 153.0 m. The hole is mostly devoid of sulphides with the exception of very restricted zones at 15.5 to 16.3 m; 36.20 to 37.6 m and 94.45 to 96.55 m. Overall the hole is unmineralized and largely only weakly altered. A total of 26 samples for a total non continuous interval of 16.7 m between 43.2 to146.8 m were

taken (covered by the sample series 625695-652720). No sample returned any gold value exceeding 5 ppb Au. A section of drill hole is shown in figure 9 (appended).

Drill Hole SL-12-07

SL-12-07 is located 193 m south of SL-12-06 on gridline 87E at a location close to the lake shore (Figure 4). Geological mapping along the Matapesatakun Bay shore identified a series of metamorphosed sediments at a slightly higher metamorphic grade than rocks observed elsewhere on the property (lower amphibolite facies?) and an in-situ, but rotated, boulder containing a 0.80 m quartz band or S1 parallel quartz vein?. The southern part of Line 87E contains a strong 'end of line' IP anomaly. SL-12-07, the last hole of the 2102 program, was planned to test this IP anomaly by drilling south under the lake. The regional dip of 80˚ south was considered suitable for such a drill test. SL-12-07 was drilled at a dip of -45˚, azimuth 180° from a collar at UTM 668700E, 5678581N.

SL-12-07 penetrated 9.7 m of overburden and cored a mixed sequence of intermediate tuff and sediments extending to 110 m. Below 110 m several narrow mafic tuff units are intercalated with the metasediments, many tuff 'bands' □1 m and several □0.15 m. The mafic tuff horizons exhibit a slightly higher metamorphic grade commonly containing biotite and 1mm garnets. The lower metasediment and thin bedded mafic tuff sequence is intruded by a number of late Quartz Feldspar Porphyry dykes from 133.15 m. The argillic sediments and fine siltstones from 145.4 m contain some discontinuous white/cloudy grey quartz bands with some associated pyrite and minor pyrrhotite (up to 4% Py). The quartz and narrow sulphide veinlets are orientated in the S1 fabric at approximately 32˚ to the long core axis. There is a slight increase in silicification and some minor sericite alteration associated with the silicification. The hole terminated at 151 m. Detailed logging indicates an increase in alteration and abundance of quartz/silica down hole from 145.4 m to the TD depth of 151.0 m.

A total of 11 samples (9.10 m of core) were taken for assay (samples 652760 to 652770). This includes a 5.8 m continuous section from 145.4 m to end of hole. No gold values exceeding 15 ppb were reported. A section of drill hole is shown in figure 10 (appended).

6.0 RECOMMENDATIONS AND CONSLUSIONS

The highest assay values encountered during this program were from drill hole SL-12-05. A one metre interval of 970 ppb Au (134.0 to 135.0 m) was encountered in silicified sediment with an abundance of chlorite dominated veining. It is recommended to sample the entire lower drill hole section from 103.25 m to end of hole. There is potential for a wide, low-grade mineralized zone in the metasediments intersected in SL-12-05

Significantly more BW casing was used in the 2012 Sky Lake drill program than anticipated. Substantial fluvioglacial deposits define many of the NE-SW trending ridges on the property with till thicknesses of up to 20 m. It proved impossible to remove casing from SL-12-03 (15 m), SL-12-04 (18 m) and SL-12-05 (30 m). For the other holes casing was removed upon completion of the hole in a manner such that the overburden would collapse into the hole.

All drill sites were marked with a stake and labelled with a metal tag identifying the drill hole. All sites were restored back to a clean condition to minimize any impacts on the surrounding environment.

7.0 PERSONNEL

Tri Origin Exploration

Frank Kendle	Senior Geologist Tri Origin Exploration	Queensville, Ontario
Martin King	Senior Geologist	Guelph, Ontario
Matthew Spencer	Geologist	St. Catharines, Ontario

8.0 STATEMENT OF QUALIFICATIONS

CERTIFICATE

To accompany the geological report dated December 17, 2012 entitled “Summary of Diamond Drilling carried out by Tri Origin Exploration Ltd. on the Sky Lake Property, Winter 2012

I, **Martin A. King**, do hereby certify that:

1. I reside at 68 Ridgewood Avenue, Guelph, Ontario, Canada N1H 6C5.

2. I am a graduate from the National University of Ireland (Galway) with an Honors B. Sc. Degree in Geology with Applied Mathematical Science (1987) and I have practiced my profession continuously since that time.

3. I am a Professional Geologist in good standing (P. Geo) as a member of the Institute of Geologists of Ireland (Membership No. 121) since 2000. The IGI is affiliated with the IMM and other international Professional bodies. I am also a member of the European Federation of Geologists (EurGeol No. 320).

4. I am an independent Geological Consultant.

5. I have worked in the exploration and mining industry in various parts the world specializing initially in Carbonate-hosted base metal deposits, later Achaean gold and for the past seven years in epithermal silver and gold exploration in Latin America, mainly Mexico.

6. I have read the definition of “qualified person” set out in NI 43-101 and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101.

7. I have visited the Sky Lake Property in 2012 and during November and December of that year I participated in a diamond drilling exploration program to test several Induced Polarization (``IP``) geophysical exploration targets on the property.

8. I have no personal knowledge as of the date of this certificate of any material fact or change, which is not reflected in this report.

9. Neither I, nor any affiliated entity of mine, is at present, or under an agreement, arrangement or understanding expects to become, an insider, associate, affiliated entity or employee of Tri Origin Exploration Ltd., or any associated or affiliated entities.

10. Neither I, nor any affiliated entity of mine own, directly or indirectly, nor expect to receive, any interest in the properties or securities of Tri Origin Exploration Ltd., or any associated or affiliated companies.

11. Neither I, nor any affiliated entity of mine, have earned the majority of our income during the preceding three years from Tri Origin Exploration Ltd., or any associated or affiliated companies.

Martin A. King, B.Sc., P. Geo., December 30, 2012

9.0 REFERENCES

Jolliffe, T.S. 1996. Report on Diamond Drilling, Koval Property, Patricia Mining Division, Northwestern Ontario for Moss Resources, Inc. 90pp. AFRI 52O02NE001.

Scratch, R, 1984. Report on Reconnaissance Geologic Mapping and Humus Sampling of the Golden Maverick Resources Corporation – Bancroft Lake Project currently under option to Kennco Explorations (Canada) Ltd. 87pp. AFRI 52O08SW0019.

FIGURES

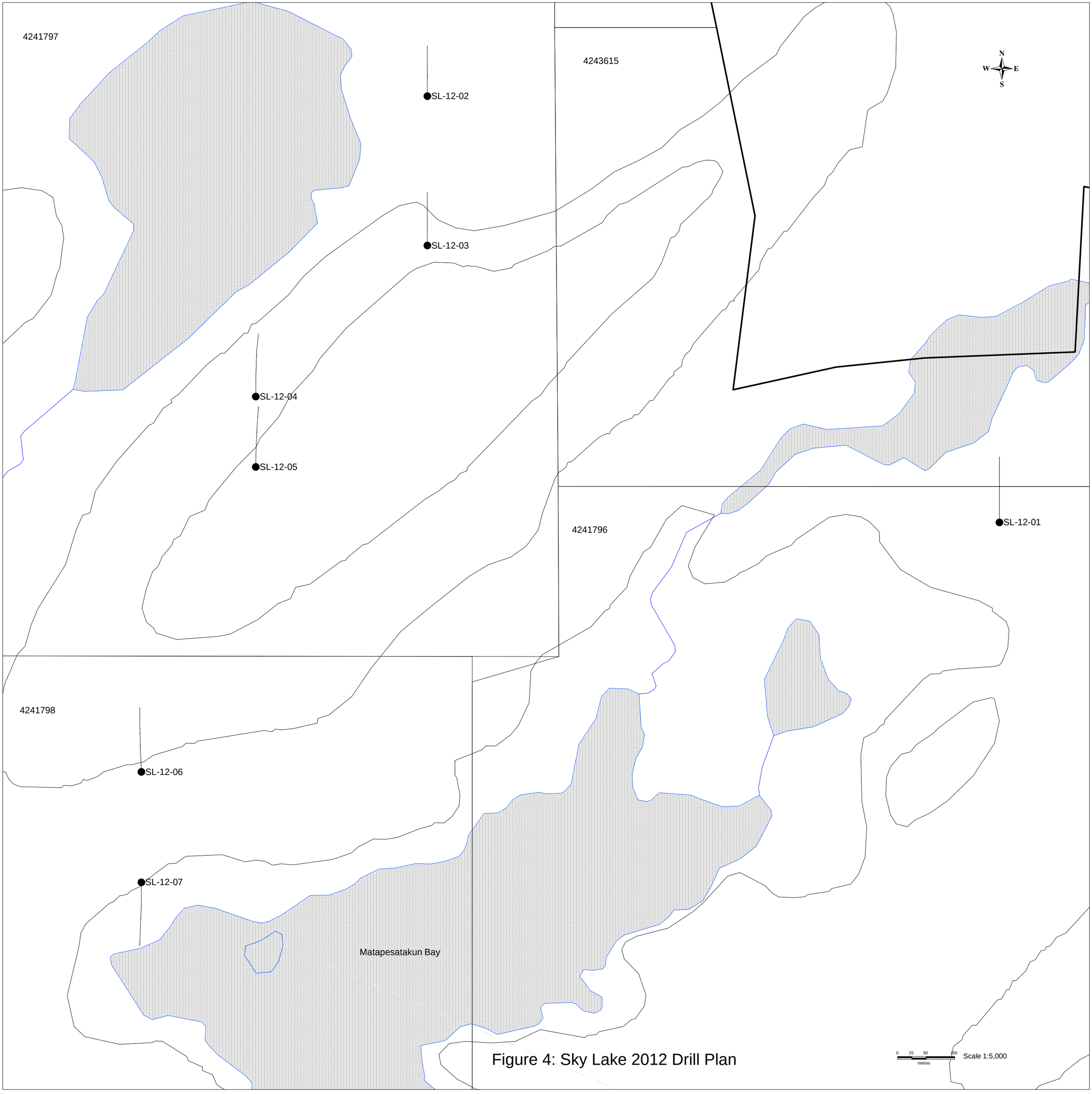
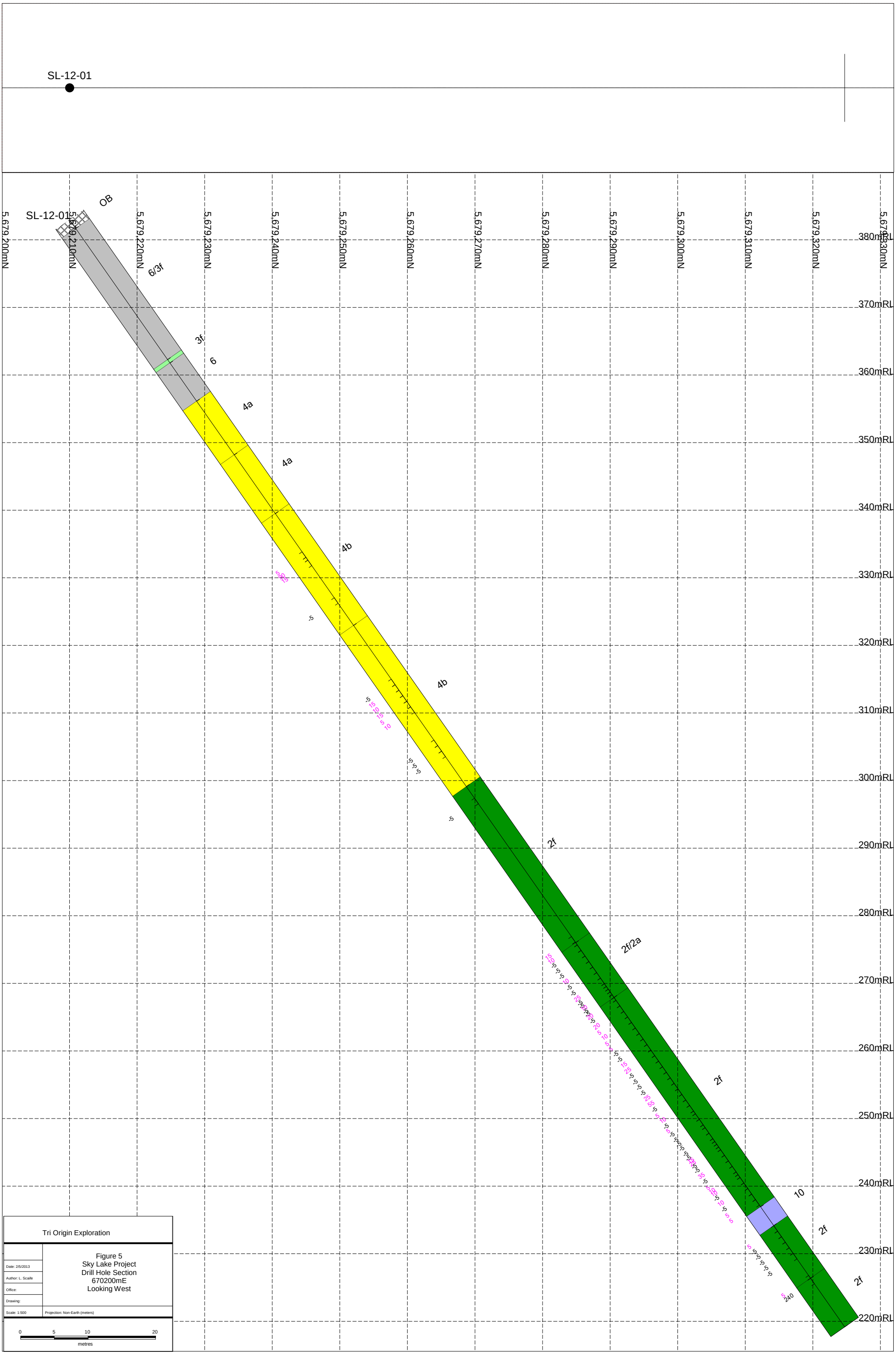


Figure 4: Sky Lake 2012 Drill Plan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SL-12-01
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5,679,230mN
5,679,240mN
5,679,250mN
5,679,260mN
5,679,270mN
5,679,280mN
5,679,290mN
5,679,300mN
5,679,310mN
5,679,320mN
5,679,330mN
380mRL
370mRL
360mRL
350mRL
340mRL
330mRL
320mRL
310mRL
300mRL
290mRL
280mRL
270mRL
260mRL
250mRL
240mRL
230mRL
220mRL
Tri Origin Exploration
Figure 5
Sky Lake Project
Drill Hole Section
670200mE
Looking West
Date: 2/5/2013
Author: L. Scaife
Office:
Drawing:
Scale: 1:500
Projection: Non-Earth (meters)
0
5
10
20
metres

SL-12-02

5,679,930mN
5,679,940mN
5,679,950mN
5,679,960mN
5,679,970mN
5,679,980mN
5,679,990mN
5,680,000mN
5,680,010mN
5,680,020mN
5,680,030mN
5,680,040mN
5,680,050mN

390mRL
380mRL
370mRL
360mRL
350mRL
340mRL
330mRL
320mRL
310mRL
300mRL
290mRL
280mRL
270mRL
260mRL
250mRL
240mRL
230mRL

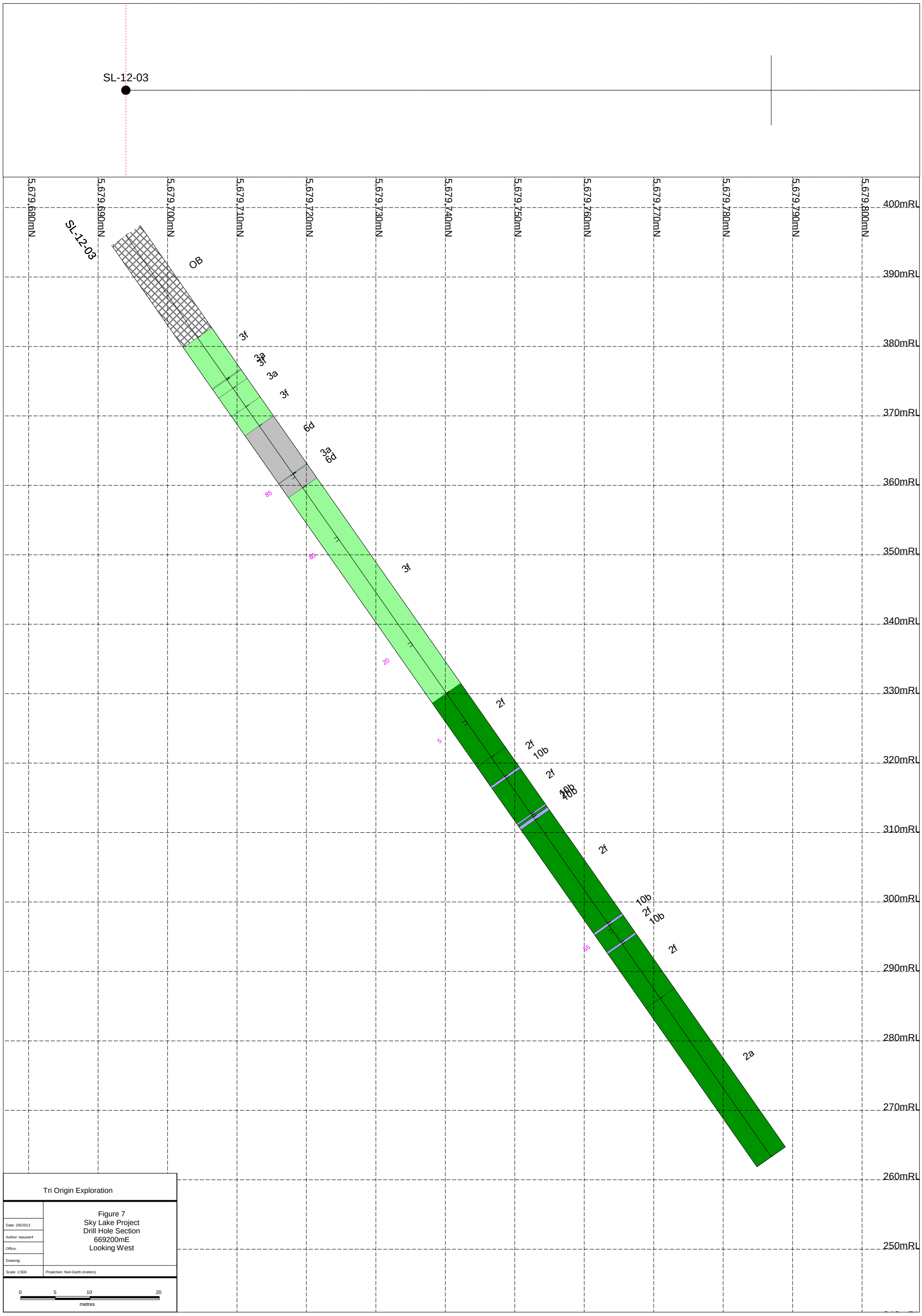
OB
3a
10a
3a
3f
3f
2f
2a
2a
10b
2a

Tri Origin Exploration

Figure 6
Sky Lake Project
Drill Hole Section
669200mE
Looking West

Date: 2/6/2013
Author:L.Scaife
Office:
Drawing:
Scale: 1:500
Projection: Non-Earth (meters)

0 5 10 20
metres



Tri Origin Exploration

Figure 7
Sky Lake Project
Drill Hole Section
669200mE
Looking West

Date: 2/6/2013
Author: toeuser4
Office:
Drawing:
Scale: 1:500
Projection: Non-Earth (meters)

0 5 10 20
metres

420mRL 410mRL 400mRL 390mRL 380mRL 370mRL 360mRL 350mRL 340mRL 330mRL 320mRL 310mRL 300mRL 290mRL 280mRL 270mRL 260mRL 250mRL

5,679,540mN
5,679,530mN
5,679,520mN
5,679,510mN
5,679,500mN
5,679,490mN
5,679,480mN
5,679,470mN
5,679,460mN
5,679,450mN
5,679,440mN
5,679,430mN
5,679,420mN
5,679,410mN
5,679,400mN
5,679,390mN
5,679,380mN
5,679,370mN
5,679,360mN
5,679,350mN
5,679,340mN
5,679,330mN
5,679,320mN
5,679,310mN
5,679,300mN

SL-12-04

SL-12-05

SL-12-04

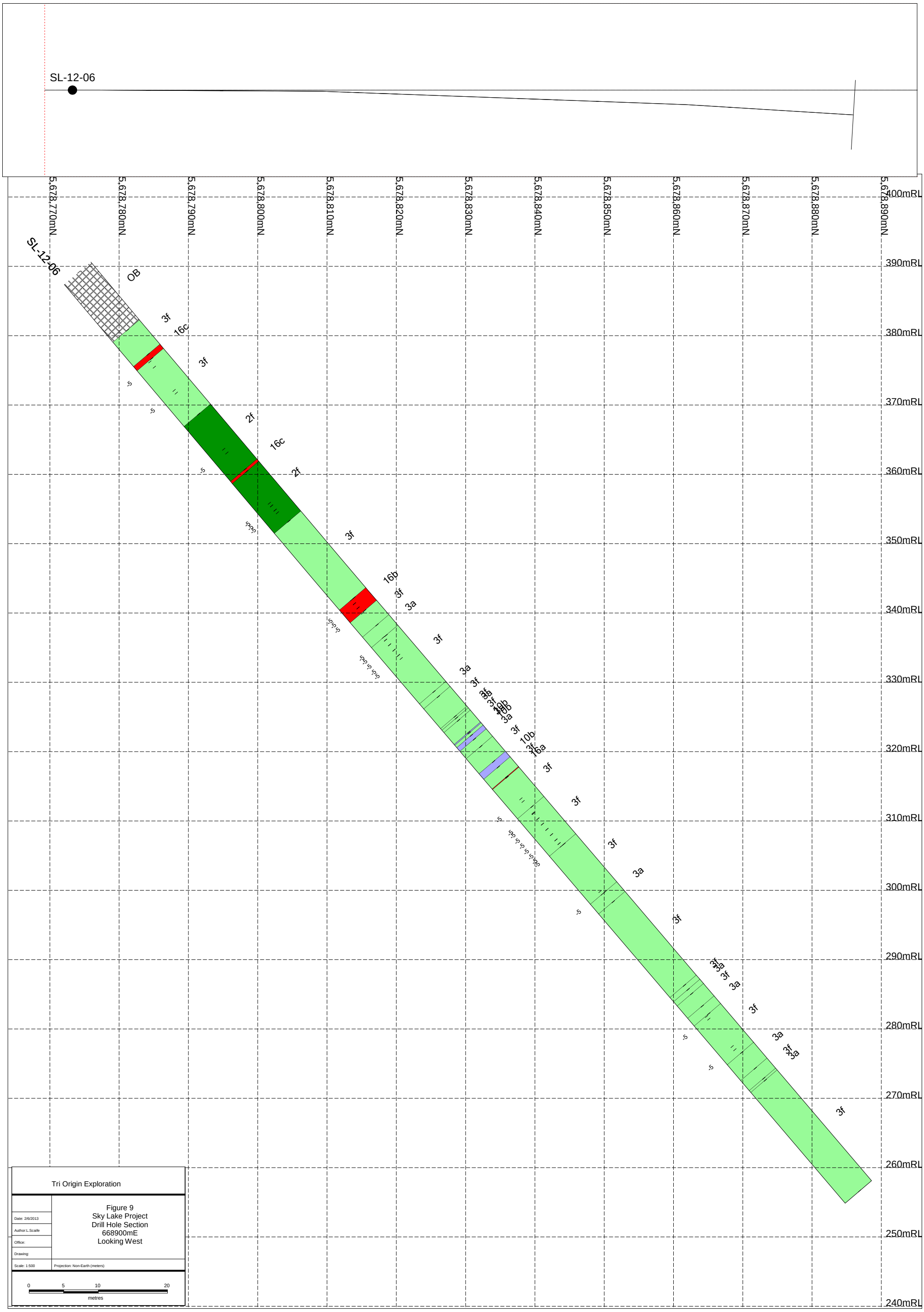
SL-12-05

Tri Origin Exploration

Figure 8
Sky Lake Property
Drill Hole Section
668900mE
Looking West

Date: 20220310
Author: L.Scaife
Office:
Drawing:
Scale: 1:500
Projection: NAD83 (metric)

0 5 10 20 metres


SL-12-06
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5,678,820mN
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5,678,840mN
5,678,850mN
5,678,860mN
5,678,870mN
5,678,880mN
5,678,890mN
400mRL
390mRL
380mRL
370mRL
360mRL
350mRL
340mRL
330mRL
320mRL
310mRL
300mRL
290mRL
280mRL
270mRL
260mRL
250mRL
240mRL
SL-12-06
OB
3f
16c
3f
2f
16c
2f
3f
16b
3f
3a
3f
3a
3f
10b
16a
3f
3f
3f
3a
3f
3f
3a
3f
3a
3f
3a
3f
Tri Origin Exploration
Figure 9
Sky Lake Project
Drill Hole Section
668900mE
Looking West
Date: 2/6/2013
Author:L.Scaife
Office:
Drawing:
Scale: 1:500
Projection: Non-Earth (meters)
0
5
10
20
metres

SL-12-07

5,678,470mN
5,678,480mN
5,678,490mN
5,678,500mN
5,678,510mN
5,678,520mN
5,678,530mN
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5,678,550mN
5,678,560mN
5,678,570mN
5,678,580mN
5,678,590mN

400mRL
390mRL
380mRL
370mRL
360mRL
350mRL
340mRL
330mRL
320mRL
310mRL
300mRL
290mRL
280mRL
270mRL

SL-12-07

OB
6d
3f
4a
15
5
10
15a
3a
13b

Tri Origin Exploration

Figure 10
Sky Lake Project
Drill Hole Section
668700mE
Looking West

Date: 2/6/2013
Author:L.Scaife
Office:
Drawing:
Scale: 1:500
Projection: Non-Earth (meters)

0 5 10 20
metres

APPENDIX A

LIST OF CLAIMS

APPENDIX A – LIST OF CLAIMS

Claim Number	Township/Area	Ownership
4214444	Duffell Lake	Tri Origin Exploration Ltd.
4214445	Duffell Lake	Tri Origin Exploration Ltd.
4214446	Duffell Lake	Tri Origin Exploration Ltd.
4214447	Duffell Lake	Tri Origin Exploration Ltd.
4214448	Duffell Lake	Tri Origin Exploration Ltd.
4241191	Matapesatakun Bay	Tri Origin Exploration Ltd.
4241192	Matapesatakun Bay	Tri Origin Exploration Ltd.
4241193	Matapesatakun Bay	Tri Origin Exploration Ltd.
4241194	Matapesatakun Bay	Tri Origin Exploration Ltd.
4241195	Caley Lake	Tri Origin Exploration Ltd.
4241196	Caley Lake	Tri Origin Exploration Ltd.
4241197	Caley Lake	Tri Origin Exploration Ltd.
4241198	Matapesatakun Bay	Tri Origin Exploration Ltd.
4241199	Matapesatakun Bay	Tri Origin Exploration Ltd.
4241200	Matapesatakun Bay	Tri Origin Exploration Ltd.
4241796	Matapesatakun Bay	Tri Origin Exploration Ltd.
4241797	Caley Lake	Tri Origin Exploration Ltd.
4241798	Matapesatakun Bay	Tri Origin Exploration Ltd.
4241799	Matapesatakun Bay	Tri Origin Exploration Ltd.
4241800	Matapesatakun Bay	Tri Origin Exploration Ltd.
4243611	Caley Lake	Kitrinor Metals Inc.
4243612	Caley Lake	Kitrinor Metals Inc.
4243613	Caley Lake	Kitrinor Metals Inc.
4243614	Caley Lake	Kitrinor Metals Inc.
4243615	Matapesatakun Bay	Kitrinor Metals Inc.

4243616	Caley Lake	Kitrinor Metals Inc.
4243617	Caley Lake	Kitrinor Metals Inc.
4243618	Matapesatakun Bay	Kitrinor Metals Inc.
4251408	Matapesatakun Bay	Manicouagan Minerals Inc.
4251409	Matapesatakun Bay	Manicouagan Minerals Inc.
4266029	Little Ochig Lake	Tri Origin Exploration Ltd.
4266030	Little Ochig Lake	Tri Origin Exploration Ltd.
4266031	Little Ochig Lake	Tri Origin Exploration Ltd.
4266032	Little Ochig Lake	Tri Origin Exploration Ltd.

APPENDIX B

SKY LAKE DRILL LOGS

Hole ID:	Claim No.	Township	Nad83 Zone 15 Location			Direction	Dip	Length (m)	Overburden Depth (m)	Date Started	Date Finished	Drill Company	Core Size	Logged By	Date Log Completed	Core Location
			East	North	Elevation											
SL-12-01	4241796	Matapesatakum Bay	670200	5679210	383	360	-55	200	1.6	November 21, 2012	November 22, 2012	Rugged Aviation	BTW	Frank Kendle	November 29, 2012	Red Lake core library

	Primary Unit		Secondary Unit		Tertiary Unit					Alteration				Magnetic
Hole	From	To (m)	From	To (m)	From	To (m)	Code	Name	Description		Py	Po	Cpy	(0-5 (weak to strong)
SL-12-01	0.0	1.6					OB	Casing						
	1.6	25.3					6/3f	Sediments / Intermediate Tuff	Moderately foliated (along S0?) 50% fine grained, banded light grey, dark grey sediments and 50% moderate green-brown intermediate tuffs. Beds / bandings are predominately <1cm but can be up to 15cm wide. Locally there appears to be minor actinolite alteration. Locally in the darker green bands usually asscociated with the actinolite 10-20% 1-4mm dusty rose diffuse garnets. Foliation / bedding is consistant at 35º to CA. Small medium grained mafic dyke at 6.1-6.4m Upper contact is irregular lower contact is 65º to CA.	Locally weak Ac +/- Gt				0
SL-12-01	25.3	25.9					3f	Intermediate Lapilli Tuff	Medium grained, dark brown-green, weakly foliated lapilli tuff. 10% 2mm-2cm fine grained grey clasts slightly stretched along Foliation. Foliation parralels bedding.	Weak pervasive biotite alteration.				0
SL-12-01	25.9	32.8					6	Sediments	Fine grained, light grey, weakly foliated, finely bedded/ banded sediments with minor amounts of intermediate tuff light grey brown - green in colour. Beds are usually <1cm in size but can be up to 4cm wide. Occassionally there appears to be slump textures in some of the beds, possible shear?. <1% 1-2cm quartz veinlets.					0
SL-12-01	32.8	42.5					4a	Felsic Volcanic Flow	Fine grained, light grey, very weakly foliated massive felsic flow? Matrix is fine grained, aphanitic quartz rich with locally < 2% <2mm feldspar phenocrysts. Locally biotite +/- muscovite along S1 foliation. Foliation is constant at ~ 40º to CA. Locally minor silicification which often has a bleaching effect on the rock. <5% 1-2cm quartz veinlets.	Local silicification throughout, local weak pervasive seicite alteration. 35.9-36.4m minor quartz vein with monerate silicification.				0
SL-12-01	42.5	53.1					4a	Felsic Volcanic Flow	Fine grained, very light grey, very homgeneous, weakly foliated massive felsic flow. Matrix is very fine grained aphanitic. Weak biotite as very fine wisps along S1 foliation.	Locally weak sericite alteration? Weak biotite as fine wisps along S1 foliation.				0
SL-12-01	53.1	73.3					4b	Felsic Crystal Tuff / Felsic Tuff.	Light grey to white. Very fine grained, weakly foliated, locally banded in appearance felsic crystal tuffs (70%) and felsic tuffs (30%). Crystall tuffs have 5% 1mm feldspar crystals and 1% subronded to oval shaped quartz crystals. Matrix is fine grained, aphanitic, silica rich and sugar in appearance. Weak pervasive biotite alteration throughout. Weak pervasive sericite/muscovite alteration throughout locally moderate to strong. 60.0-60.85m Strong biotite actinolite alteration (possible mafic dyke). 61.7-62.1, 68.3-72.5 Moderate locally strong sericite muscovite alteration.	Locally moderate to strong Sericite alteration. Pervasive weak sericite alteration throughout. Weak biotite alteration throughout primarily along S1 foliation.	Locally very trace very fg py, po	Locally very trace very fg py, po		0
SL-12-01	73.3	102.4					4b	Felsic Tuff / Felsic Crystal Tuff.	Light to medium grey, very fine grained, weakly foliated, locally banded in appearance felsic tuffs (80%) with minor felsic crystal tuffs (20%). Matrix is fine grained aphanitic, silica rich and sugary in appearance. Very similar to above but less crystal tuff and less alteration. Possible small interbeds of sediments? Locally weak biotite alteration along S1 foliation. Local silicification giving it a bleached appearance. < 2% < 4cm quartz veins very irregular in shape and mottled in appearance.	Locally weak Biotite along S1 Foliation. Local weak silicification throughout creating a bleached appearance.	84-88.5m very fine grained trace py / po. Locally throughout very trace very fine grained py.	84-88.5m very fine grained trace py / po.		1
SL-12-01	102.4	130.6					2f	Mafic Tuff	Medium grey-green occassional slight blueish tint), fine grained weakly foliated mafic tuff. Matrix is fine grained sugary in appearance comprised of 60% dark minerals (biotite, amphibole) and 40% white minerals (feldspar, ankarite? and minor quartz). Minor interbedded felsic tuffs from 102.4 to 109m. Foliation is somewhat erratic but consistent between 35 and 45º to CA.	Local silicification associated with the interbedded felsic tuffs. Local carbonate alteration as <2mm diffuse white clots. Minor <2mm light pink diffuse garnets, amount increasing with depth. Local chlorite and biotite alteration along S1 foliation.	Trace disseminated py locally throughout.	Very rare locally stinger po along S1 foliation.		1

	Primary Unit		Secondary Unit		Tertiary Unit					Alteration				Magnetic
Hole	From	To (m)	From	To (m)	From	To (m)	Code	Name	Description		Py	Po	Cpy	(0-5 (weak to strong)
SL-12-01	130.6	140.5					2f / 2a	Mafic Tuff / Mafic Flow? (Mineralized)	Very similar to above unit. Becoming slightly darker green in colour and possibly slightly more massive? weakly foliated, foliation is slightly erratic but is consistently 30-35º to CA. Fine grained aphanitic, sugary in appearance matrix comprised of 65% dark minerals (amphibole, biotite, chlorite) and 35% light coloured minerals (feldspar, carbonate, +/- quartz). This interval is mineralized with 5-7% very fine grained pyrrhotite as disseminations and stringers. Locally it can be semi-massive with 50% pyrrhotite and minor pyrite. The majority of the pyrrhotite is non-magnetic. 138.5-140.2m Semi massive pyrrhotite overall 40% pyrrhotite with minor pyrite.	Chlorite +/- biotite throughtout primarily along S1 foliation. Chlorite often has black slickenside appearance on S1 foliation often with smeared py.	Trace disseminated py locally throughout.	5-7% often \non-magnetic po as fine dessemination s, stringers and locally semi-massive. 138.5-140.2 Semi massive po (overall 40% locally up to 70%).		2
SL-12-01	140.5	191.2					2f	Mafic Tuff	Medium grey-green with a slight blueish tint, fine grained weakly foliated mafic tuff. Matrix is fine grained sugary in appearance comprised of 60% dark minerals (biotite, amphibole) and 40% white minerals (feldspar, ankarite? and minor quartz). Foliation is somewhat erratic but consistent between 35 and 45º to CA. 140.5-161.2m is often quartz flooded with 5% mottled grey white erratic quartz veins and unit is locally silicified due to veining veining often disrupts foliation. 140.5-163.4m trace very fine grained po +/- py disseminated along S1 foliation usually associated with silicification, locally up to 5%. Po is predominately non-magnetic. 163.4-176.5m Overall 15-20% very fine grained disseminated po +/- py predominately along S1 foliation. Po is predominately non magnetic. Sulphides locally can be up to 40% and can have a anatimozing network texture. Rarely they occur as stringers croscutting foliation. Rare cp associated with py. Rare fg asicular (needle like) silver grey mineral. 181.7-191.2m Less mineralization then previously trace po +/- py locally up to 3% as fine disseminations along S1 foliation. 191-191.1 20% po.	Chlorite +/- biotite throughtout primarily along S1 foliation. Chlorite often has black slickenside appearance on S1 foliation often with smeared py.				
SL-12-01			178.3	181.7			10	Mafic Dyke	Very fine grained aphanitic mafic dyke, comprised of amphibole, biotie and feldspar. Contacts are sharp but irregular and cross cut foliation.					
SL-12-01	191.2	200					2f	Mafic Volcanic Tuff	Fine grained medium green with white (carbonate) and mauve (biotite) bands along the S1 foliation. This unit appears to have very little alteration or mineralization except 191.2-192.2m 2% disseminated py along S1 foliation. Typical chlorite rich meta-volcanic. Probably a tuff.					

		S1	S2	Vn	Intr Contacts	Bedding	Fract	Note: all measurements are calculated from Bottom of core.
Hole	Depth (m)	Dip	Dip	Dip	Dip	Dip	Dip	Description
SL-12-01	4.9					35		
SL-12-01	6.4				65			small mafic dyke - lower contact.
SL-12-01	10.9					35		
SL-12-01	16.9					35		
SL-12-01	25.9					38		
SL-12-01	34.9	38						
SL-12-01	39.5	42						
SL-12-01	47.1	40						
SL-12-01	51.4	36						
SL-12-01	53.2	36						
SL-12-01	57.4	36						
SL-12-01	60				30			small mafic dyke? upper contact.
SL-12-01	60.85				45			small mafic dyke? lower contact.
SL-12-01	61.9	40						
SL-12-01	66.5	35						
SL-12-01	68.2	40						
SL-12-01	74.9	32						
SL-12-01	79.8	32						
SL-12-01	84.5	40						
SL-12-01	88.8	55						
SL-12-01	93.5	35						
SL-12-01	102.3	37						
SL-12-01	110.4	40						
SL-12-01	119.5	35						
SL-12-01	123.5	45						
SL-12-01	128.5	35						
SL-12-01	128.2	30						
SL-12-01	131.3	37						
SL-12-01	134.3	35						
SL-12-01	137.3	35						
SL-12-01	140.3	30						
SL-12-01	142.5	30						
SL-12-01	148.9	30						
SL-12-01	152.3	35						
SL-12-01	158.3	30						
SL-12-01	164.3	35						
SL-12-01	168.6	30						
SL-12-01	174.5	30						
SL-12-01	178.3				30			small mafic dyke upper contact is irregular and cross cuts foliation.
SL-12-01	182.2	40						
SL-12-01	188.2	37						
SL-12-01	194.4	40						
SL-12-01	197.4	30						

						ANALYTE	Wt	Au	Au	Au	Certificate # for Au
						METHOD	WGH79	FAA313	FAA313	FAA313	
						DETECTION	0.01	5	0.01	0.001	
Hole #	Sample #	From	To	Interval	Comment	UNITS	kg	ppb	g/t	oz/t	
SL-12-01	W652576	83.00	84.00	1.00	tr vfg diss py		-5	-0.01	-0.001	1.7	RL1204008
	W652577	84.00	85.00	1.00	tr vfg diss py		1.70	15	0.02	<0.001	RL1204008
	W652578	85.00	86.00	1.00	tr vfg diss py		1.60	10	0.01	<0.001	RL1204008
	W652579	86.00	87.00	1.00	tr vfg diss py		1.80	15	0.01	<0.001	RL1204008
	W652580	87.00	88.00	1.00	tr vfg diss py		1.90	5	<0.01	<0.001	RL1204008
	W652581	88.00	89.00	1.00	tr vfg diss py		1.80	10	<0.01	<0.001	RL1204008
	W652582	60.00	61.00	1.00	Bo-Ac alteration		1.70	5	<0.01	<0.001	RL1204008
	W652583	61.00	61.50	0.50	Sericite muscovite altn		0.80	90	0.09	0.003	RL1204008
	W652584	61.50	62.50	1.00	Sericite muscovite altn		1.60	15	0.02	<0.001	RL1204008
	W652585	68.30	69.30	1.00	Sericite muscovite altn		1.60	<5	<0.01	<0.001	RL1204008
	W652586	94.00	95.00	1.00	tr vfg diss py		1.80	<5	<0.01	<0.001	RL1204008
	W652587	95.00	96.00	1.00	tr vfg diss py (minor qtz vein)		1.60	<5	<0.01	<0.001	RL1204008
	W652588	96.00	97.00	1.00	tr vfg diss py		1.70	<5	<0.01	<0.001	RL1204008
	W652589	104.50	105.50	1.00	tr vfg diss py, po, small qtz-carb vein		1.70	<5	<0.01	<0.001	RL1204008
	W652590	129.50	130.50	1.00			1.80	15	0.02	<0.001	RL1204008
	W652591	130.50	131.00	0.50			1.00	10	0.01	<0.001	RL1204008
	W652592	131.00	132.00	1.00			1.80	<5	<0.01	<0.001	RL1204008
	W652593	132.00	133.00	1.00			1.80	<5	<0.01	<0.001	RL1204008
	W652594	133.00	134.00	1.00			1.80	<5	<0.01	<0.001	RL1204008
	W652595	134.00	135.00	1.00			1.70	10	<0.01	<0.001	RL1204008
	W652596	135.00	136.00	1.00			1.80	<5	<0.01	<0.001	RL1204008
	W652597	136.00	137.00	1.00			1.90	<5	<0.01	<0.001	RL1204008
	W652598	137.00	138.00	1.00			1.80	25	0.02	<0.001	RL1204008
	W652599	138.00	138.50	0.50			0.90	<5	<0.01	<0.001	RL1204008
	W652600	138.50	139.00	0.50			0.90	<5	<0.01	<0.001	RL1204008
	W652601	139.00	139.50	0.50			1.00	10	<0.01	<0.001	RL1204008
	W652602	139.50	140.00	0.50			0.90	<5	<0.01	<0.001	RL1204008
	W652603	140.00	140.50	0.50			0.90	<5	<0.01	<0.001	RL1204008
	W652604	140.50	141.00	0.50			0.80	20	0.02	<0.001	RL1204008
	W652605	141.00	142.00	1.00			1.70	<5	<0.01	<0.001	RL1204008
	W652606	142.00	143.00	1.00			1.70	20	0.02	<0.001	RL1204008
	W652607	143.00	144.00	1.00			1.50	5	<0.01	<0.001	RL1204008
	W652608	144.00	145.00	1.00			1.70	10	<0.01	<0.001	RL1204008

						ANALYTE	Wt	Au	Au	Au	Certificate # for Au
						METHOD	WGH79	FAA313	FAA313	FAA313	
						DETECTION	0.01	5	0.01	0.001	
Hole #	Sample #	From	To	Interval	Comment	UNITS	kg	ppb	g/t	oz/t	
	W652609	145.00	146.00	1.00			1.90	5	<0.01	<0.001	RL1204008
	W652610	146.00	147.00	1.00			1.70	5	<0.01	<0.001	RL1204008
	W652611	147.00	148.00	1.00			1.80	<5	<0.01	<0.001	RL1204008
	W652612	148.00	149.00	1.00			1.80	<5	<0.01	<0.001	RL1204008
	W652613	149.00	150.00	1.00			1.90	15	0.02	<0.001	RL1204008
	W652614	150.00	151.00	1.00			1.70	25	0.02	<0.001	RL1204008
	W652615	151.00	152.00	1.00			1.90	<5	<0.01	<0.001	RL1204008
	W652616	152.00	153.00	1.00			1.80	<5	<0.01	<0.001	RL1204008
	W652617	153.00	154.00	1.00			1.70	<5	<0.01	<0.001	RL1204008
	W652618	154.00	155.00	1.00			1.80	<5	<0.01	<0.001	RL1204008
	W652619	155.00	156.00	1.00			1.70	25	0.02	<0.001	RL1204008
	W652620	156.00	157.00	1.00			1.80	55	0.06	0.002	RL1204008
	W652621	157.00	158.00	1.00			1.60	<5	<0.01	<0.001	RL1204008
	W652622	158.00	159.00	1.00			1.70	5	<0.01	<0.001	RL1204008
	W652623	159.00	160.00	1.00			1.70	10	<0.01	<0.001	RL1204008
	W652624	160.00	161.00	1.00			1.80	<5	<0.01	<0.001	RL1204008
	W652625	161.00	161.50	0.50			0.90	5	<0.01	<0.001	RL1204008
	W652626	161.50	162.50	1.00			1.80	<5	<0.01	<0.001	RL1204008
	W652627	162.50	163.50	1.00			1.70	<5	<0.01	<0.001	RL1204008
	W652628	163.50	164.00	0.50			0.90	<5	<0.01	<0.001	RL1204008
	W652629	164.00	165.00	1.00			1.70	<5	<0.01	<0.001	RL1204008
	W652630	165.00	166.00	1.00			1.80	<5	<0.01	<0.001	RL1204008
	W652631	166.00	166.50	0.50			0.90	<5	<0.01	<0.001	RL1204008
	W652632	166.50	167.00	0.50			1.00	15	0.02	<0.001	RL1204008
	W652633	167.00	167.50	0.50			0.90	25	0.02	<0.001	RL1204008
	W652634	167.50	168.00	0.50			0.90	<5	<0.01	<0.001	RL1204008
	W652635	168.00	169.00	1.00			1.90	<5	<0.01	<0.001	RL1204008
	W652636	169.00	170.00	1.00			1.80	35	0.03	<0.001	RL1204008
	W652637	170.00	171.00	1.00			1.60	<5	<0.01	<0.001	RL1204008
	W652638	171.00	172.00	1.00			1.80	5	<0.01	<0.001	RL1204008
	W652639	172.00	172.50	0.50			0.90	10	<0.01	<0.001	RL1204008
	W652640	172.50	173.00	0.50			0.90	10	<0.01	<0.001	RL1204008
	W652641	173.00	174.00	1.00			2.00	<5	<0.01	<0.001	RL1204008

						ANALYTE	Wt	Au	Au	Au	Certificate # for Au
						METHOD	WGH79	FAA313	FAA313	FAA313	
						DETECTION	0.01	5	0.01	0.001	
Hole #	Sample #	From	To	Interval	Comment	UNITS	kg	ppb	g/t	oz/t	
	W652642	174.00	175.00	1.00			1.70	10	<0.01	<0.001	RL1204008
	W652643	175.00	176.00	1.00			2.00	<5	<0.01	<0.001	RL1204008
	W652644	176.00	177.00	1.00			1.80	5	<0.01	<0.001	RL1204008
	W652645	177.00	178.00	1.00			1.80	5	<0.01	<0.001	RL1204008
	W652646	181.70	182.70	1.00			1.80	5	<0.01	<0.001	RL1204008
	W652647	182.70	183.70	1.00			1.70	<5	<0.01	<0.001	RL1204008
	W652648	183.70	184.70	1.00			1.80	<5	<0.01	<0.001	RL1204008
	W652649	184.70	185.70	1.00			1.80	<5	<0.01	<0.001	RL1204008
	W652650	185.70	186.70	1.00			1.70	<5	<0.01	<0.001	RL1204008
	W652651	186.70	187.70	1.00			2.00	<5	<0.01	<0.001	RL1204008
	W652652	190.70	191.20	0.50			0.90	5	<0.01	<0.001	RL1204008
	W652653	191.20	192.20	1.00			1.90	240	0.24	0.007	RL1204008

Survey name	Depth (m)	Azimuth (uncorrected)	Azimuth (corrected)	Dip	Mag.Str.	Mag.Dip
Ranger						
Ranger						
Ranger						

Photo #	Description
SL-12-01-0001	

Hole ID:	Claim No.	Township	Nad83 Zone 15 Location			Direction	Dip	Length (m)	Overburden Depth (m)	Date Started	Date Finished	Drill Company	Core Size	Logged By	Date Log Completed	Core Location
			East	North	Elevation											
SL-12-02	4241797	Caley Lake	669200	5679955	385	360	-55	153	11.3	November 23, 2012	November 24, 2012	Rugged Aviation	BTW	Matthew Spencer	December 8, 2012	Red Lake core library

	Primary Unit		Secondary Unit		Tertiary Unit					Alteration				Magnetic	Misc
Hole	From	To (m)	From	To (m)	From	To (m)	Code	Name	Description		Py	Po	with shar	(0-5 (weak to strong)	
SL-12-02	0.0	11.3					OB	Casing	Overburden						
SL-12-02	11.3	58					3a	Mafic-Intermediate m	Dark-grey to grey, FG to V. FG, massive. ~80% mf-int massive flow and ~20% possible tuff. Difficult to break out tuff and flow units due to colour and foliation similarities, displaying a blending effect. Common back and forth between darker chl rich and lighter less chl rich flows, seems to be grading back and forth. S1 mod-strong foliation @ ~49deg TCA. @ 38.20-39.18m, Dark phorphoritic white MG phenocryst possible Diorite/Gabbro dyke/intrusion. Tuff units are FG-MG, display chl rich and less chl rich textures with all containing ankerite and minor calcite alt. Late ank/cal vnts observed. Very weakly mag.	chl/ank/cal				1	
SL-12-02			38.2	39.18			10a	Diorite/Gabbro							
SL-12-02	58	63.6					3f	Mafic-Intermediate T	Dark-grey to grey, FG- V.FG, massive. Very similar to before except with the appearace of trace amounts of py and po min. ~80% Tuff and ~20% Flow. S1 foliation @ ~52deg TCA. @ 59.10-60.00m, ~tr-1% py and ~tr-3% po stringers and grains observed in dark chl rich mafic tuff units all going with S1 foliation, within and next to thin bands of ankerite with OP sericite. Very trace amounts of py and po observed outside this zone. Late ank/cal vnts observed. Very weakly mag.	chl/ank/ser	tr-1%	tr-3%		1	
SL-12-02	63.6	72.6					3f	Mafic-Intermediate T	Dark-grey to grey, FG-V.FG, massive. Similar again to before except with the presence of biotite. ~90% Tuff, ~10% Flow. Appearance of very common thin mm-cm sized bands of biotite with much less chl, possibly intermediate dominated tuff. ~70% bands of bt throughout. Common this bands of ankerite. S1 foliation @ ~53deg TCA. Localized very trace amounts of py and po traces and thin stringers observed all going with S1 foliation. Very weakly mag.	Bt/ank/chl	tr	tr		1	
SL-12-02	72.6	87.4					2f	Mafic-Intermediate T	Dark Grey-green to grey, FG-V.FG. Large drop in biotite to traces thorughout. Large increase in chl. Most of section seems to be tuff units with minor possible flows. Very traces amounts of pyrite observed. Very weakly mag.	Chl/ank/chl	tr			1	
SL-12-02	87.4	100.9					2a	Mafic Massive Flow	Peppered Dark grey and white-grey, FG, massive. Peppered white-grey ankerite and dark grey chl. All residual grains have been altered to chl and ankerite. Weak-moderate S1 Foliation @ ~48deg TCA. Likely a mafic massive volcanic flow, well shaped phorphoritic chl altered subhedral crystals within a white-grey ankerite matrix. Possibily may be either gabbro/diorite as well. A couple white qtz-carb veins observed, no min. Unit xcut by thin ankerite filled vnts. Very weakly mag.	chl/ank				1	
SL-12-02	100.9	153					2a	Mafic Massive Flow	Peppered Dark grey and white-grey, MG, massive. Exact same as before except with a change in grain size to all MG throughout. Mafic dyke observed with sharp contacts. Localized large cm sized patches of solid forest green chl observed. Very weakly mag.	chl/ank				1	
SL-12-02			103.85	104.15			10b	Mafic Dyke							
SL-12-02									EOH						

		S1	**S2**	**Vn**	**Intr Contacts**	**Bedding**	**Fract**	Note: all measurements are calculated from Bottom of core.
Hole	Depth (m)	Dip	Dip	Dip	Dip	Dip	Dip	Description
SL-12-02	20	49						Foliation in mf-int flow
SL-12-02	38	49						Foliation in mf-int flow
SL-12-02	39.18				60			Bottom contact of Diroite/Gabbro
SL-12-02	62	52						Foliation in mf-int flow
SL-12-02	71	53						Foliation in Mf-Int Tuff
SL-12-02	90	48						Foliation in mafic flow
SL-12-02	104.15	53						Bottom contact of dyke
SL-12-02	120	48						Foliation in mafic flow

						ANALYTE	Wt	Au	Au	Au	Certificate # for Au
						METHOD	WGH79	FAA313	FAA313	FAA313	
						DETECTION	0.01	5	0.01	0.001	
Hole #	Sample #	From	To	Interval	Comment	UNITS	kg	ppb	g/t	oz/t	
SL-12-02	652683	58.50	59.00	0.50	tr py		0.80	<5	<0.01	<0.001	RL1204105
SL-12-02	652684	59.00	59.50	0.50	tr-1% py, tr-3% po		0.90	<5	<0.01	<0.001	RL1204105
SL-12-02	652685	59.50	60.00	0.50	tr-1% py, tr-3% po		1.00	110	0.11	0.003	RL1204105
SL-12-02	652686	60.00	61.00	1.00	tr py		1.60	<5	<0.01	<0.001	RL1204105
SL-12-02	652687	61.00	62.00	1.00	tr py		1.70	<5	<0.01	<0.001	RL1204105
SL-12-02	652688	62.00	63.00	1.00	tr py		1.60	<5	<0.01	<0.001	RL1204105
SL-12-02	652689	63.00	64.00	1.00	tr py		1.70	<5	<0.01	<0.001	RL1204105
SL-12-02	652690	64.00	65.00	1.00	tr py		1.70	<5	<0.01	<0.001	RL1204105
SL-12-02	652691	65.00	66.00	1.00	tr py		1.80	110	0.11	0.003	RL1204105
SL-12-02	652692	71.70	72.30	0.60	tr py		1.00	<5	<0.01	<0.001	RL1204105
SL-12-02	652693	75.70	76.70	1.00	tr py		1.70	<5	<0.01	<0.001	RL1204105
SL-12-02	652694	76.70	77.70	1.00	tr py		1.90	<5	<0.01	<0.001	RL1204105

Survey name	Depth (m)	Azimuth (uncorrected)	Azimuth (corrected)	Dip	Mag.Str.	Mag.Dip
Ranger		NO SURVEY				
Ranger						
Ranger						

Photo #	Description
SL-12-02-0001	

Hole ID:	Claim No.	Township	Nad83 Zone 15 Location			Direction	Dip	Length (m)	Overburden Depth (m)	Date Started	Date Finished	Drill Company	Core Size	Logged By	Date Log Completed	Core Location
			East	North	Elevation											
SL-12-03	4241797	Caley Lake	669200	5679694	396	360	-55	162	18	November 25, 2012	November 26, 2012	Rugged Aviation	BTW	Matthew Spencer		Red Lake

	Primary Unit		Secondary Unit		Tertiary Unit					Alteration				Magnetic
Hole	From	To (m)	From	To (m)	From	To (m)	Code	Name	Description		Py	Po	Cpy	(0-5 (weak to strong)
SL-12-03	0.0	18.0					OB	Casing	Overburden					
SL-12-03	18	33.5					3f	Intermediate Tuff	~75% Dark grey and white banded int. tuff, ~25% dark grey Int. massive flow or possible dykes(?), homogenous, FG. Int. tuff: thin mm sized bands of dark grey biotite and white-grey ankerite alt, rare banding with forest-green chl. Some mm sized rounded swirls of carb alt observed. S1 mod-strong foliation @ ~42deg TCA. Two dykes or flows observed with <1mm sized chloritized amph. or pyx, and <1mm sub-rounded grains of white carb, lineration of chl grains at base @ S1. Very weakly mag.	bt/carb, minor chl				1
SL-12-03			25.25	25.4			3a	Intermediate Massive Flow						
SL-12-03			26.9	30.15										
SL-12-03	33.5	44.4					6d	Meta-Siltstone	Dark-grey to blue.and white-grey bands, homogenous, Very FG. Dark-grey to blue mm-cm sized bands of very FG siltstone, with interbedded mm sized thin layers of carb (ankerite?) and with isolated intermized <1mm V. Siltstone is weak-mod silicified. FG thin beds of biotite in rare areas. Isolated areas of possible intermixed tuff in some areas. Int. massive flow observed with foliation @ S1 and with lightly yellowish-white sericite alt. White-grey Q\qtz vein or flooding qtz observed after flow @ 42.03-42.36m with sharp irregular contacts, no min. Very weakly mag.	Carb, minor ser, bt				1
SL-12-03			41.9	42			3a	Intermediate Massive Flow						
SL-12-03	44.4	80.5					3f	Intermediate Tuff	Dark-grey and white-grey banding, V. FG. Mm-cm sized thin bands of dark-grey V.FG biotite with rare forest green chl in a few areas, interbedded with grey-white mm-cm sized carb with some of the bands in sections displaying a mod intermixed silica alt. S1 @ ~45deg TCA. Large sections of back and forth dominant bt or carb banding. White-grey qtz-carb vein @ 52.05-52.30m @ S1 with no min. Small white-grey qtz vn @ 71.75-71.80m with trace py along edges. Very weakly mag.	Bt, carb, si, mi	Trace			1
SL-12-03	80.5	91.75					2f	Intermediate-Mafic Tuff	Forest green and white-gray banding, V. FG. Possible grading to mafic tuff. Similar to before but now with bands of dominant chl with some bands with intermixed biotite. Still few thin bands of biotite thorughout but mainly bands of chl. Grainy darker chl grains in much of the chl bands. Same thin carb bands as before. @ 85.50-85.55m white0grey qtz vn with py in edges, diss trace py around the vn in the mf tuff going with S1. S1 @ ~45deg TCA. Very weakly mag.	Chl,carb,bt				1
SL-12-03	91.75	130					2f	Mafic Tuff	Forest green, white-grey bands, FG. Similar to before except with near loss of the biotite, only occuring in small rare patchy areas. Near loss of silica alt in carb bads as well. S1 foliation @ 44deg TCA. Patch of med gr garnets @ 18.90-19.30m. Common mm-cm sized brecciated qtz vnts, most with no min. Trace cpy observed in qtz vn @ 122.30m in small qtz vn. Very small patches of trace po observed in some sections of mf tuff. Four FG and MG mafic dykes (possible flows?) observed with sharp contacts, no foliation. Very weakly mag.	chl/carb, minor bt/si		Trace	Trace	1
SL-12-03			95.16	95.49			10b	Mafic Dyke						
SL-12-03			101.7	101.94			10b	Mafic Dyke						
SL-12-03			102.3	102.77			10b	Mafic Dyke						
SL-12-03			121	121.3			10b	Mafic Dyke						
SL-12-03			124.3	124.6			10b	Mafic Dyke						

	Primary Unit		Secondary Unit		Tertiary Unit					Alteration				Magnetic
Hole	From	To (m)	From	To (m)	From	To (m)	Code	Name	Description		Py	Po	Cpy	(0-5 (weak to strong)
SL-12-03	124.6	134.15					2f	Meta-Mafic Tuff	Dark-grey to blue, Very FG, Silicified. Possible contact metamorphosed mafic tuff(?) from underlying mafic flow/intrusion(?). Unit is now moderate-strongly silicified with barely visible interbedded units from before. Localized dark chl vnts. S1 foliation @ ~50deg TCA. Broken lower contact. Very weakly mag.	si/chl				1
SL-12-03	134.2	162					2a	Mafic Massive Flow	Dark-grey to grey and patchy pitacho green, MG, massive, homogenous. Medium grained chloritized <1mm-3mm sized subeuhedral crystals throughout. Patchy bleby mm-cm sized areas of ept alt surrounding the chl grains thorughout. Localized mm sized ankerite vnts. Very weakly mag.	chl/ept				
SL-12-03									EOH					

		S1	**S2**	**Vn**	**Intr Contacts**	**Bedding**	**Fract**	Note: all measurements are calculated from Bottom of core.
Hole	Depth (m)	Dip	Dip	Dip	Dip	Dip	Dip	Description
SL-12-03	24.00	42						Foliation in int. tuff
SL-12-03	30.15				42			Bottom Int. flow contact
SL-12-03	40.00	38						Foliation in meta-siltstone
SL-12-03	41.90				38			Bottom Int. flow contact
SL-12-03	60.00	45						Foliation in int. tuff
SL-12-03	87.00	45						Foliation in Intermediate-Mafic Tuff
SL-12-03	115.00	44						Foliation in Mafic Tuff
SL-12-03	130.00	50						Foliation in Meta-Mafic Tuff

						ANALYTE	Wt	Au	Au	Au	Certificate # for Au
						METHOD	WGH79	FAA313	FAA313	FAA313	
						DETECTION	0.01	5	0.01	0.001	
Hole #	Sample #	From	To	Interval	Comment	UNITS	kg	ppb	g/t	oz/t	
SL-12-03	652678	42.00	42.50	0.50	qtz vn, no min		0.80	85	0.09	0.003	RL1204105
SL-12-03	652679	53.00	53.50	0.50	qtz vn, no min		0.80	80	0.08	0.002	RL1204105
SL-12-03	652680	71.50	72.00	0.50	qtz vn, tr py		0.70	20	0.02	<0.001	RL1204105
SL-12-03	652681	85.30	85.80	0.50	qtz vn, tr py		0.90	5	<0.01	<0.001	RL1204105
SL-12-03	652682	121.90	122.40	0.50	qtz vn, tr cpy		0.90	55	0.06	0.002	RL1204105

Survey name	Depth (m)	Azimuth (uncorrected)	Azimuth (corrected)	Dip	Mag.Str.	Mag.Dip
Ranger		No Survey Data				
Ranger						
Ranger						

Photo #	Description
SL-12-03-0001	
SL-12-03-0002	
SL-12-03-0003	
SL-12-03-0004	
SL-12-03-0005	
SL-12-03-0006	
SL-12-03-0007	
SL-12-03-0008	
SL-12-03-0009	

Hole ID:	Claim No.	Township	Nad83 Zone 15 Location			Direction	Dip	Length (m)	Overburden Depth (m)	Date Started	Date Finished	Drill Company	Core Size	Logged By	Date Log Completed	Core Location
			East	North	Elevation											
SL-12-04	4241797	Caley Lake	668900	5679430	397	360	-55	180	18	November 27, 2012	November 28, 2012	Rugged Aviation	BTW	Martin King	December 10, 2012	Red Lake

	Primary Unit		Secondary Unit		Tertiary Unit									Magnetic
Hole	From	To (m)	From	To (m)	From	To (m)	Code	Name	Description	Alteration	Py	Po	Cpy	(0-5 (weak to strong)
SL-12-04	0.00	18.00					OB	Casing	Overburden					
SL-12-04	18.00	39.65					2f	Mafic Tuff	Strongly foliated, green to light green, grey fine-grained Mafic Tuff. Entire section contains fine, 1-2mm chlorite bands aligned in the foliation. Minor carbonate dispersed throughout the foliation - calcite and trace ankerite. Occ. V. dark , 1-2cm mafic bands. Strong foliation (S1) predominently @ 38º to LCA. Occ. wispy, irreg. sericite band below 24m. Rare qtz. veinlets broadly parallel to foliation, occ. with a pink color. More 'mottled" chlorite towards base. Very weakly magnetic.	chl/ser/ank				
SL-12-04			33.75	35.35			10a	Mafic Intrusive/dyke	Fine-med. Crystalline dioritic dyke. Bk. Non foliated. Abundant fine, 1-2mm hornblende crystals. Broadly parallel to S1 Foliation. Finely diss. Py. 1-2%. Very wealky magnetic.	chl	2			
SL-12-04	39.65	54.00					2f	Mafic Tuff	More mafic tuffaceous interval with some mafic flow features. Increased chloritie. More dk. Gn. Fine-med. Crystalline. Mostly non-foliated. Slight increase in biotite. Some massive intervals. Irreg. QV or qtz. Flooding over the interval 40.30-40.75m. Broadly parallel to S1 foliation. No sulphides assoc. with Qtz. Slight increase in foliation down interval. 45-45.30m: quartz-silica injected zone with 3-4% Py. and fine hydrothermal Bx.clasts predom. Chlorite. Some diss. py. 51.20-51.60m: Diss. Py (5%) in very mafic zone with crystalline Chl. and some Bi. all part of mafic (2f) material.	chl/bi		5		
SL-12-04			47.15	47.65			2a	Mafic Flow	Massive, dk. Gn. Mafic material. Chloritic. Less foliated.					
SL-12-04	54.00	59.90					3f/2f	Intermediate-Mafic Tuff	Medium grey, mod. foliated, pred. intermidiate tuff. Some 1-2mm chlorite bands. Some foliation-parallel, <5mm Qtz.-carbonate veinlets and diffuse boudins. Tuffaceous material predom. Fine-grained. 55.05-55.15m: WQ Vein. No sulphides. Appears late.Lr. Ctc. @ 38º to LCA.	Chl				
SL-12-04	59.90	66.50					2f	Mafic Tuffs	Pred. mafic tuffaceous material. Intensely foliated. Qtz-carb. Veinlets in foliation, occ. Boudined in S1 and lenticular, mainly to 62.75m. Some sulphide stringer zones, occ. With associated qtz. Stringers. Minor Chl. 66.00-66.20m: WQV zone with Py and Po (2-3%). Po in foliation in HW to vein. 66.20-66.50m: Finely disseminated sulphides (5%) Py and Po comb.		3			
SL-12-04			63.40	64.00			16c	Sulphide Stringer Zone	up to 4% Py along foliation.		4			
SL-12-04			64.30	64.55			16c	Qtz, stringers with tr. Py.	1% Py.		1			
SL-12-04			64.55	65.30				Mafic Flow						
SL-12-04	66.50	109.00					3f	Intermediate Tuff	Pred. intermediate tuffs, lacking chl. and other more mafic minerals. Fine-med. Grained, light-grey colored, occ. Blueish color. Strong F1 foliation @ 40º to LCA throughout. Occ. Tr. Py. along foliation (<0.5%). 70.35-70.65m: Diffuse White/grey QV with 2-3% Py, broadly parallel to S1 Foliation. Contains a number of sulphide stringer zones, notably 75.10-81.45m. The lower part of this section contains occasional sulphide stringers, all paralel to the foliation.		3			
SL-12-04			70.35	70.65			15a	QV with sulphides	Pyrite, coarse late and fine Py. Some tarnished Py. V. minor Cpy. Trace SbS? Some coarse muscovite-like selvedges (Scheelite? Silliminite?).		1		0.2	
SL-12-04														
SL-12-04			75.10	81.45			16c	Sulphide Stringer zone						
SL-12-04					75.25	75.45	15a	Qtz + Sulphides	Qtz. Flooded zone with minor (3%) sulphides, pred. Py.					

	Primary Unit		Secondary Unit		Tertiary Unit					Alteration				Magnetic
Hole	From	To (m)	From	To (m)	From	To (m)	Code	Name	Description		Py	Po	Cpy	(0-5 (weak to strong)
SL-12-04					76.10	76.20		QV + Sulphides	Narrow QV. Bk to Dk with diffuse inclusions. 1-2% Po, 1% Py.					
SL-12-04			81.60	81.85			15a	Qtz + Sulphide Zone	Parallel to S1 Foliation. Diffuse white-glassy qtz. With coarse (late) and finer sulphides, principally Py, some Po and trace Cpy observed. 5% Py. Weakly magnetic.		5	1	0.3	
SL-12-04			89.55	89.75			15a/ 16c	QV + Sulphides	QV and sulphides. 2% Py, 2% Po. Broadly parallel to foliation.		2	2		
SL-12-04					98.50	98.95	15a	QV + Sulphides	QV and sulphides. 2% Py, 2% Po. Broadly parallel to foliation. Includes better QV 98.85-98.95m. Weakly magnetic.		2	2		
SL-12-04			105.75	111.60					Silicification (80%). Some sericite	Sil				
SL-12-04	109.00	109.20					3a	Intermediate flow	Intermediate Flow. Some lapilli observed.					
SL-12-04	109.20	112.40					6b	Meta wackes	Predominently a sedimentary sequence. Dk. Gy. Fine wackes with some intermediate tuff bands (<0.5m).					
SL-12-04	112.40	113.20					3f	Intermediate tuff	Medium-grained , bedded intermediate lapilli tuff.					
SL-12-04	113.20	144.00					6d	Meta Sediments	Mostly banded, black, fine-grained sediments varying from fine-grained wackes to black fissile siltstones and shales. Occasional thin tuffs. Expect bedding parallel to foliation? @ 40˚ to LCA. Abundant 1-2mm Po bands, occ. Py, aligned parallel to S1 and Bedding.		1	2		
SL-12-04			117.05	118.75			15a	QV zone	Several quartz injected sections into fine-grained bk. Shales and mudstones. Much irregular lobate/lenticular quartz. Abundant fine fragmental quartz with sub-rounded qtz. class. Minor pyrite. Zone mostly silicified.	Sil				
SL-12-04			118.75	121.32			6	Sericite altered seds.	Green, light green, sericite-altered fine-grained wackes. Mottled due to dk. Gy. Silica zones containing 2-3% Py. Entire interval mod. Silicified (Quartz-sericite alteration). Clean lower contact @ 38˚ to LCA.	Sil/Ser/Py	3			
SL-12-04			121.32	123.45				Qtz. injected seds.	weakly silicified, qtz-injected bk dk gy sediments - shales/mudstones.	sil	1			
SL-12-04					122.30	122.60	15a	Quartz Vein	Fragmented grey qtz. Looks like a shattered exhalative also? in bk. mud matrix?	sil	2	2		
SL-12-04			130.85	131.37			2f	Mafic tuff	Fine mafic tuff interval. Some sediment. Fine biotite aligned in S1					
SL-12-04					134.60	144.00	6	Meta sediments	Silicified sediments (80%) and fractured accordingly. Grey, massive					
SL-12-04					142.00	144.00	6	Meta sediments	Chlorite alteration, some biotite alteration of fine mafic units.					
SL-12-04	144.00	145.15					3f	Intermediate tuffs	Banded intermediate tuffs. Several cycles of med-grained lapilli tuff unit - 2 to 3 cm. Best developed tuff bands from 144-144.70m with occ. 1-2mm Po bands parallel to S1 schistosity.					
SL-12-04			144.00	144.55				Alteration	Well-developed banded more mafic material. Contains coarse crystalline mafic minerals including elongate dark green staurolite laths <8mm.	staurolite				
SL-12-04	145.15	148.35					6	Meta sediments	Dense, bk, fine-grained wackes and bk shales. Occasionally banded. Trace 1-2mm py grains. Weak chloritization, occ. Biotite alteration					
SL-12-04	148.35	153.80					6/3f	Tuffaceous sediments	Fine-grained sediments and intermediate tuffs. 60% tuffaceous material. Green-grey.					
SL-12-04	153.80	168.80					3f	Intermediate tuff	Pred. Banded intermediate Tuff with minor bk, very fine grained shales. Fine-med-grained grey tuffaceous sediments. Occasional <1cm bedding-parallel unmineralized WQ bands.					
SL-12-04	168.80	172.90					6/3f	Tuffaceous sediments	Pred. Banded tuffaceous sediments. Intermediate. Fine-grained, Bk. X-cut by multiple bedding parallel WQ bands, <15mm.					
SL-12-04	172.90	180.00					3f/6	Intermediate	More massive tuffaceous sediments. Fine grained, wealky foliated.					
SL-12-04									TD: 180m					

		S1	**S2**	**Vn**	**Intr Contacts**	**Bedding**	**Fract**	Note: all measurements are calculated from Bottom of core.
Hole	Depth (m)	Dip	Dip	Dip	Dip	Dip	Dip	Description
SL-12-04								
SL-12-04	24.00	38						Foliation of mf tuff
SL-12-04	27.70			37				Sericite veinlet, 5mm
SL-12-04	35.36					34		Lower contact of mafic dyke
SL-12-04	39.65					30		Lower contact to mafic tuff unit. 3cm QV at contact.
SL-12-04	39.70			33				Lower contact of narrow WQ vein
SL-12-04	47.65					27		Lr. Ctc. of mafic flow
SL-12-04	54.00	44						S1 Foliation towards base if section
SL-12-04	55.90	40						S1 Foliation towards base if section
SL-12-04	64.00	40						Foliation with sulphide stringers.
SL-12-04	65.30					47		Lower ctc. of mafic flow
SL-12-04	70.65			34				Lower QV contact.
SL-12-04	76.20			50				Lower QV contact.
SL-12-04	81.85	44						Foliation at lower part of QV zone.
SL-12-04	89.75	38						Foliation at lower part of QV zone.
SL-12-04	98.95	38						Lower QV contact.
SL-12-04	109.20	38						Lr. Ctc. Of intermediate flow
SL-12-04	112.30	37						
SL-12-04	118.75			38				General Qtz band dip
SL-12-04	121.32				38			Base of Sericite-altered seds.
SL-12-04	123.45					40		
SL-12-04	131.37	43						S1 in Mafic tuff band
SL-12-04	145.15	38						
SL-12-04	172.70					40		Base of Tuffaceous sed unit.
SL-12-04								

						ANALYTE	Wt	Au	Au	Au	Certificate # for Au
						METHOD	WGH79	FAA313	FAA313	FAA313	
						DETECTION	0.01	5	0.01	0.001	
Hole #	Sample #	From	To	Interval	Comment	UNITS	kg	ppb	g/t	oz/t	
SL-12-04	W652721	44.90	45.40	0.50	Qtz and tr Py		0.80	<5	<0.01	<0.001	RL1204130
SL-12-04	W652722	63.40	64.10	0.70			1.30	<5	<0.01	<0.001	RL1204130
SL-12-04	W652723	64.10	64.60	0.50	Qtz and Py veins		0.80	80	0.08	0.002	RL1204130
SL-12-04	W652724	64.60	66.00	1.40	Mafic Flow. Diss.py		2.30	<5	<0.01	<0.001	RL1204130
SL-12-04	W652725	66.00	66.50	0.50			0.90	105	0.11	0.003	RL1204130
SL-12-04	W652726	70.30	70.80	0.50	WQV.		0.90	<5	<0.01	<0.001	RL1204130
SL-12-04	W652727	75.10	76.00	0.40			1.60	<5	<0.01	<0.001	RL1204130
SL-12-04	W652728	76.00	76.50	0.50	QV + Foliated 3f		0.80	<5	<0.01	<0.001	RL1204130
SL-12-04	W652729	78.10	79.40	1.30			2.00	<5	<0.01	<0.001	RL1204130
SL-12-04	W652730	79.40	80.50	1.10	Sulphide stringers		2.10	<5	<0.01	<0.001	RL1204130
SL-12-04	W652731	80.50	81.00	0.50			0.70	<5	<0.01	<0.001	RL1204130
SL-12-04	W652732	81.00	81.50	0.50			1.00	<5	<0.01	<0.001	RL1204130
SL-12-04	W652733	89.40	89.90	0.50	QV + Sulphide Stringers		0.80	<5	<0.01	<0.001	RL1204130
SL-12-04	W652734	98.50	99.00	0.50			0.80	<5	<0.01	<0.001	RL1204130
SL-12-04	W652735	117.05	117.95	0.90			1.50	260	0.26	0.008	RL1204130
SL-12-04	W652736	117.95	118.70	0.75			1.30	120	0.12	0.004	RL1204130
SL-12-04	W652737	118.70	119.70	1.00			1.60	150	0.15	0.004	RL1204130
SL-12-04	W652738	119.70	120.70	1.00			1.70	15	0.01	<0.001	RL1204130
SL-12-04	W652739	120.70	121.35	0.65			1.00	25	0.02	<0.001	RL1204130
SL-12-04	W652740	121.35	122.20	0.85			1.40	45	0.05	0.001	RL1204130
SL-12-04	W652741	122.20	122.70	0.50			2.00	25	0.03	<0.001	RL1204130

						ANALYTE	Wt	Au	Au	Au	Certificate # for Au
						METHOD	WGH79	FAA313	FAA313	FAA313	
						DETECTION	0.01	5	0.01	0.001	
Hole #	Sample #	From	To	Interval	Comment	UNITS	kg	ppb	g/t	oz/t	

Survey name	Depth (m)	Azimuth (uncorrected)	Azimuth (corrected)	Dip	Mag.Str.	Mag.Dip
Ranger	20	3.4		-54.3	56800	76.4
Ranger	90	5.2		-52.5	56850	76.1
Ranger	180	9.2		-48.6	56760	76.1

Photo #	Description
SL-12-04	

Hole ID:	Claim No.	Township	Nad83 Zone 15 Location			Direction	Dip	Length (m)	Overburden Depth (m)	Date Started	Date Finished	Drill Company	Core Size	Logged By	Date Log Completed	Core Location
			East	North	Elevation											
SL-12-05	4241797	Caley Lake	668900	5679307	401	360	-50	160	35.5	November 30, 2012	December 2, 2012	Rugged Aviation	BTW	Martin King	December 13, 2012	Red Lake

	Primary Unit		Secondary Unit		Tertiary Unit					Alteration				Magnetic	Misc
Hole	From	To (m)	From	To (m)	From	To (m)	Code	Name	Description		Py	Po	Cpy	(0-5 (weak to strong)	
SL-12-05	0.00	35.30					OB	Overburden	Overburden. Mostly till and boulders lower in interval. Hole on Esker						
SL-12-05	35.30	45.67					6b	Sediments	Fine-grained, grey, weakly metamorphosed wakes. Occur banded dark and light material. Mostly unaltered. Some smeared Pie and Po on joints and Si cleavage surfaces. Occ. Fine-grained intermediate tuffaceous input, up to 5%, exhibiting weak chloritization. S1 foliation mod-strong throughout seds and enhanced in tuffaceous material.	chl	2.0	2.0		1	
SL-12-05	45.67	45.97					3c	Intermediate Flow	Intermediate variolitic flow. Fine-med grained. Biotite aligned as elongate crystals or `clasts` in S1 foliation. Some chlorite replacement of biotite grains.	chl/bi					
SL-12-05	45.97	47.25					6b	meta wakes	Fine-grained sediments, predominantly wakes. Occ. banded as above with fine 1mm chl. Crystals. Some light-green tuff bands <5mm.						
SL-12-05			46.70	47.00			16c		`Wispy` sulphide bands parallel to cleavage/bedding. Pred. Po, with minor Py and trace Cpy. Weakly magnetic.		1.0	2.0	0.2		
SL-12-05	47.25	47.75					3c	Intermediate Flow	Intermediate variolitic flow. Med green color. Abundant elongate biotite crystals, up to 5mm, aligned in the schistosity. Predominantly a fine grained volcanic rock. V. Fine disseminated py.						
SL-12-05	47.75	49.75					6b	meta wakes	Fine-grained, occ. Banded grey wakes. Occ. Minor intermediate tuffaceous material input not exceeding 5%. Feint biotite alteration of the tuffaceous material in mod. S1 foliation.						
SL-12-05			49.45	49.75			6b		Quartz-sericite band/shear. Tectonized and silica intruded. Some breccia. Yellow-green color (sericite). `Healed` minor fault zone/fluid conduit. Tr. Cpy diss. in sericite altered sediment. Upp. Ctc. @ 30˚ and Lr. Ctc @ 38˚ to LCA.				0.3		
SL-12-05	49.75	68.75					6b	greywackes, shales	Pred. Fine-grained wakes. Overall increase in carbonaceous material. Distinct fine banding of wakes. Minor ankerite. Increase in bk. Mudstone down interval. Increase in narrow Po bands (1-5mm), unevenly distributed through the lower part of the section. Occ. irregular 1-3cm grey quartz veins or foliation parallel bands. Trace Po marginal to same. Some very fine sediments (mudstones).						
SL-12-05			51.35	51.50			15a	Quartz Vein Set	Grey quartz. Lr. Ctc. @40˚. Multi-phase qtz/silica zone. Non-sulphide.						
SL-12-05			51.50	52.50			6b		20% silicification of sediments.						
SL-12-05			53.85	54.50			16c	Sulphide bands	3-4% pyrrhotite along S1 cleavage consisting of several 1mm bands			4.0			
SL-12-05			57.45	57.60			16c	Sulphide bands	2-3mm Po bands, all @ 36˚ to LCA.			2.0			
SL-12-05			58.30	58.60			16c	Sulphide bands	Banded Po, up to 2%. Weakly magnetic.			2.0			
SL-12-05			60.20	60.45			16c	Sulphide bands	Banded Po, up to 3%., weakly magnetic. All in the bk mudstones						
SL-12-05			60.45	68.75			16c		Irregularly distributed Po bands, 1-5mm, in bk. Mudstone. Includes a 1cm band @ 64.80m @ 35˚ to LCA.						
SL-12-05	68.75	77.80					6d	Black Argillite	90% Bk. Argillite/mudstone. Fine argillaceous material. Weakly metamorphosed. Very little wacke/siltstone input. Slight increase in fine grey siltstone towards base of interval. Occ. 1-2mm Po bands aligned in cleavage. Lr. Contact with intermediate flow is 34˚.			1.0			
SL-12-05	77.80	79.55					3a	Intermediate Flow	Intermediate massive flow with distinct Crystal Tuff textures. . Bk.Dk. Gy. Med grained. Biotite crystal overgrowths throughout consisting of 1-3mm grains. Weak chloritization.						
SL-12-05	79.55	89.60					6	Sediments	Pred. Fine-grained sediments. Alternating shales and fine siltstones. Bk. Mudstones. Some homogenous bk argillaceous mudstone. Charcoal grey fine-grained wackes forming distinct bands. Occ. Fine 1-2mm Po bands parallel to the S1 fabric/bedding.			2.0			
SL-12-05			81.50	81.90			15a		Some 1-2cm WQ bands with trace Po.						
SL-12-05	89.60	103.25					6	Metasediments	Argillite dominated sequence. Slight increase in siltstone bands throughout. Bk. Unaltered mudstone. Minor (1%) Po distributed along cleavage planes. Increase in grey quartz bands + Po, tr Py, rare Cpy down section			2.0			
SL-12-05			89.80	89.90			15a	Quartz Vein	Grey QV. With 4% Po. 30˚ to LCA						
SL-12-05			91.00	91.10			15a	QV	Gy. Quartz with minor Py. Sheared with 3% Pc			3.0			
SL-12-05			92.40	92.55			15a	Qtz zone	Healed tectonized (sheared) zone with 15% grey quartz, 2% Po. Bk. Groundmass. Trace Asp. Zone @ 30˚ to LCA	sil		2.0			

	Primary Unit		Secondary Unit		Tertiary Unit					Alteration				Magnetic	Misc
Hole	From	To (m)	From	To (m)	From	To (m)	Code	Name	Description		Py	Po	Cpy	(0-5 (weak to strong)	
SL-12-05			93.25	93.85			6		Tectonized zone. Some grey qtz. Gouge. Slightly silicified. Contains 2% Po, 7% chlorite in `shear`.	chl/sil	2.0	2.0			
SL-12-05			94.10	94.25			15a	Qtz zone	15 cm saccharoidal grey qtz-rich material (like outcrop on Lake Shore!). Fine Bk mineral dispersed throughout grey quartz. Dk Gn chlorite selvedges. Po wisps (2-3%).	sil					
SL-12-05			96.00	97.15			15a	Qtz zone	Several narrow, diffuse gy qtz veinlets with Po on cleavage planes/fabric/bedding. <1cm chlorite dominated mafic bands. 3-4% Po. Trace Aspy at lower part of interval. Several 1-2mm Po bands on cleavage planes outside of the grey qtz injected intervals.	Chl				1	
SL-12-05					96.00	101.30	16b		Overall interval with 2-3% Po. 5% silicification of argillaceous material. Post silica fracturing. Weakly graphitic. Weakly tectonized.	Sil					
SL-12-05			101.30	101.48			15a	Qtz zone	Gy-dk gy glassy QV with pale green-gy chlorite and sericite component. Trace Py, no Po. Upp contact @ 43˚; Lower ctc @ 38˚.	chl	1.0				
SL-12-05			101.48	102.70			6d		Bk. Argillite/altered shale. Mod graphitic. 1-2mm Po orientated on cleavage planes, bands up to 7mm. Entire unit weakly silicified. Base of zone @ 35˚ to LCA.						
SL-12-05			102.70	103.25			6		Silicified sediments (80%) in sheared zone. Some grey quartz. Sericite bands. Trace Cpy and rare Aspy. Lr. Contact @ 37˚ to LCA. Minor chloritization.	Chl			0.5	1	
SL-12-05	103.25	107.43					6d	Metasediments	Pred. Bk. Argillaceous sediments but with an increase in siltstone down section. 70% silicificied with fine hairline fracturing of sil seds. Cross cut by a series of irregular gy-blue qtz, generally parallel to bedding/S1 fabric. Green-grey chlorite and a minor sericite associated with the quartz. Trace Py with Qtz Tr. cpy from 106.50m. Vein structures @ 33˚ to LCA.	Sil/Chl.	0.5		0.2	0	
SL-12-05	107.43	109.25					10b	Diabase? Dyke	Fine-med crystalline. Bk to Dk. Gy. 5% diss. Py. as 1-2mm euhedral to subhedral grains. Dyke intruded into the seds. Sediments in HW and FW slightly silicified fine siltstones/wackes, some shale.	Sil (margins)	1.0				
SL-12-05	109.25	113.35					6d	Metasediments	Sediments with up to 80% bk argillitized mudstones. Up to 80% silicified giving a massive appearance. Trace Po. Occ. 1-2cm barren Qtz/silica vein.			0.5			
SL-12-05			113.00	113.35					100% silicified ``cooked`` shales.	silicification					
SL-12-05	113.35	115.05					13a	Quartz Feldspar Porphyry	Grey, light gy. Colored. Abundant anhedral quartz `augens`. Intrusive cross-cut by a series of 1mm foliation-parallel qtz veinlets.					0	
SL-12-05	115.05	144.25					6d	Metasediments	Predominantly mudstones (argillites). Fine grained, dense, Bk. Increase in siltstone banding down interval (from 130m). Bedding parallel fabric (S1), generally @ 38˚ to LCA. Some weal chloritization.	Chl				0	
SL-12-05					129.70	141.90	6d/15a		Very abundant S1 parallel grey qtz and silica veins and boudins, extended with the fabric. Occ. Patchy Po associated with the silica. Entire interval partly silicified. Veining @ 42-47˚ to LCA. Tr. Cpy at 133.50m. Chlorite associated with the veining from 132.40-137.00m.						
SL-12-05	144.25	145.00					10	Mafic Intrusive - Porphyry?	Dark, melanocratic med crystalline, containing irregular biotite crystals aligned in the fabric (S1). Trace Po			0.5			
SL-12-05			144.50	144.55			15a	Quartz Vein	Grey QV in Dyke @ 35˚ to LCA.						
SL-12-05	145.00	160.00					6	Metasediments	Sedimentary sequence. Slight increase in siltstone/silty material. Dk gy colored. Increase in metamorphic grade and silicification towards EOH?						
SL-12-05			145.00	148.30			6/15a		Mod sheared, tectonized, graphitic zone containing irregular qtz veining and lenses all parallel to the foliation/bedding. 15% chlorite through the interval. Some localized silicification, <20%.	Chl/sil					
SL-12-05			151.85	152.25			15a	QV Zone	Irregular grey qtz injected into foliation; all with 2% assoc. Po. Some patchy Chl. Tr. Cpy	Chl		2.0	0.3	2	
SL-12-05					153.05	153.10	15a	Breccia	Bx zone. Micro Bx. Sub-angular clasts; tectonic?						
SL-12-05			153.45	153.95			15a	QV Zone	Another grey QV injection zone in sediments. Tr. Cpy. Up to 1% Po mainly marginal to the siliceous material. Lr. Ctc @ 38˚ to LCA.				1.0		
SL-12-05			156.20	160.00			6	Metasediments	Increase in silicification of sediments (15%). Apparent increase in the metamorphic grade. Some 1-2mm subhedral garnets and biotite-chlorite alteration in bands parallel to the schistosity. Rock appears more `cooked`.	sil/chl/Bi					

	Primary Unit		Secondary Unit		Tertiary Unit					Alteration				Magnetic	Misc
Hole	From	To (m)	From	To (m)	From	To (m)	Code	Name	Description		Py	Po	Cpy	(0-5 (weak to strong)	
SL-12-05			156.20	156.55			15a	Qtz. alt zone	Qtz-Sil zone with minor sericite, parallel to foliation. Gy qtz injected (as above). 1% Po. Tr Cpy. Lr. Ctc @ 36˚ to LCA	sil/ser		1.0	0.2		
SL-12-05			157.25	157.65			15a	Qtz. alt zone	Gy. Qtz. sil zone, all parallel to S1. Up to 2% Po. Tr. Cpy. Lr. Ctc @ 35˚ to LCA.	sil		2.0	0.2		
SL-12-05			159.00	159.10			6	Alt. Zone	20% silicificied. 2-3mm garnets in foliation. Increase in phyllosilicates towards base.	Sil/Bi					
SL-12-05															
SL-12-05								TD: 160m							

		S1	**S2**	**Vn**	**Intr Contacts**	**Bedding**	**Fract**	Note: all measurements are calculated from Bottom of core.
Hole	Depth (m)	Dip	Dip	Dip	Dip	Dip	Dip	Description
SL-12-05	45.67	38						Lr sediments contact.
SL-12-05	45.97					30		Lr flow contact
SL-12-05	47.75	30						Lr sediments contact.
SL-12-05	49.75	38						Lr. Qtz-ser alt ctc.
SL-12-05	57.60			36				Sulphide bands dip
SL-12-05	64.80			35				Sulphide bands dip
SL-12-05								
SL-12-05	77.80	34						Lr Ctc of argillites with Intermediate flow.
SL-12-05	79.55	40						Lr. Intermediate massive flow contact
SL-12-05	89.90			30				QV dip
SL-12-05	92.55			30				QV dip
SL-12-05	101.48			38				Lr. QV dip
SL-12-05	102.70	35						Lr. Graphitic shale contact.
SL-12-05	107.43	38						Lr. Contact of seds with Dyke.
SL-12-05	113.35	28						Lr ctc of silicified shales
SL-12-05	115.05				31			Lr. Intrusive contact.
SL-12-05	145.00				30			Lr. Intrusive contact.
SL-12-05	152.25			38				Lower vein contact dip.
SL-12-05	153.95			38				Lower QV zone contact.
SL-12-05	156.55			36				Lower QV zone contact.
SL-12-05	157.65			35				Lower QV zone contact.

						ANALYTE	Wt	Au	Au	Au	Certificate # for Au
						METHOD	WGH79	FAA313	FAA313	FAA313	
						DETECTION	0.01	5	0.01	0.001	
Hole #	Sample #	From	To	Interval	Comment	UNITS	kg	ppb	g/t	oz/t	
SL-12-05	652742	49.35	49.85	0.50		W652742	10	0.01	<0.001	0.8	RL1204142
SL-12-05	652743	90.90	91.40	0.50		W652743	10	<0.01	<0.001	1	RL1204142
SL-12-05	652744	92.20	92.70	0.50		W652744	<5	<0.01	<0.001	0.9	RL1204142
SL-12-05	652745	93.25	93.90	0.65		W652745	60	0.06	0.002	1.1	RL1204142
SL-12-05	652746	93.90	94.50	0.60		W652746	20	0.02	<0.001	1	RL1204142
SL-12-05	652747	96.00	97.15	1.15		W652747	20	0.02	<0.001	2	RL1204142
SL-12-05	652748	101.15	101.65	0.50		W652748	45	0.04	0.001	0.9	RL1204142
SL-12-05	652749	101.65	102.65	1.00		W652749	275	0.27	0.008	1.7	RL1204142
SL-12-05	652750	102.65	103.25	0.60		W652750	40	0.04	0.001	1	RL1204142
SL-12-05	652751	132.35	133.00	0.65		W652751	395	0.39	0.011	1.1	RL1204142
SL-12-05	652752	133.00	134.00	1.00		W652752	220	0.22	0.006	1.7	RL1204142
SL-12-05	652753	134.00	135.00	1.00		W652753	970	0.97	0.028	1.7	RL1204142
SL-12-05	652754	151.80	152.30	0.50		W652754	65	0.06	0.002	0.8	RL1204142
SL-12-05	652755	153.45	153.95	0.50		W652755	140	0.14	0.004	0.9	RL1204142
SL-12-05	652756	156.20	156.70	0.50		W652756	50	0.05	0.002	0.9	RL1204142
SL-12-05	652757	156.70	157.20	0.50		W652757	95	0.1	0.003	0.8	RL1204142
SL-12-05	652758	157.20	157.70	0.50		W652758	25	0.03	<0.001	0.8	RL1204142
SL-12-05	652759	159.00	160.00	1.00		W652759	160	0.16	0.005	1.6	RL1204142
SL-12-05	652771	103.25	103.80	0.55		W652771	5	<0.01	<0.001	0.9	RL1204168
SL-12-05	652772	103.80	104.50	0.70		W652772	10	0.01	<0.001	1.4	RL1204168

Survey name	Depth (m)	Azimuth (uncorrected)	Azimuth (corrected)	Dip	Mag.Str.	Mag.Dip
Ranger	40	5.1		-49.8	56740	71.2
Ranger	80	6		-48.5	56710	71.3
Ranger	160	7.5		-47.1	56690	71.1

Photo #	Description
SL-12-05-0001	

Hole ID:	Claim No.	Township	Nad83 Zone 15 Location			Direction	Dip	Length (m)	Overburden Depth (m)	Date Started	Date Finished	Drill Company	Core Size	Logged By	Date Log Completed	Core Location
			East	North	Elevation											
SL-12-06	4241798	Matapesatakum Bay	668700	5678774	389	360	-50	174	11	December 2, 2012	December 4, 2012	Rugged Aviation	BTW	Matthew Spencer	December 10, 2012	Red Lake core library

	Primary Unit		Secondary Unit		Tertiary Unit					Alteration				Magnetic	Misc
Hole	From	To (m)	From	To (m)	From	To (m)	Code	Name	Description		Py	Po	Cpy	(0-5 (weak to strong)	
SL-12-06	0.0	10.9					OB	Casing	Overburden						
SL-12-06	10.9	26.8					3f	Intermediate-Mafic Tuff	Light grey-dark grey and forest green bands, V.FG-FG. Entire unit made up of mm-2cm sized of lt grey, dk grey and forest green chl banding. Strong-intense S1 foliation @ ~38deg TCA. Unit seems to be mainly intermediate with occasional chl bands throughout, small sections of darker more mafic tuff rare. Localied bands of FG biotite throughout. Common thin mm sized bands of ankerite thorughout. Py min observed @ 15.50-16.30m and @ 22.10m as FG py imbedded within thin 0.5cm wide ankerite filled bands, ~tr-1% py. Very Weakly mag.	chl/ank/bt	tr-1%			1	
SL-12-06			15.5	16.3			16c	Stringer Sulphide							
SL-12-06	26.8	47					2f	Mafic Tuff	Dark grey-light grey, forest green chl banding, V.FG-FG. Seeing a increase in chl and large increase in biotite, dominant darker bands, therefore more mafic looking tuff. Common ankerite banding along with thin stretched blebs of ankerite. Common mm-cm sized bands of FG biotite throughout occuring mainly next to the bands of chl, some mixtures of chl and bt. S1 mod-intense foliation @ ~37deg TCA. Py min observed @ 37.20-37.60m with tr-1% py located within thin mm-0.5cm wide ankerite, chl and bt filled banding. Localied trace po observed thorughout. Rare mm sized subangular pink garnets observed in chl. Very weakly mag.	chl/bt/ank	tr-1%	trace		1	
SL-12-06			37.2	37.6			16c	Stringer Sulphide							
SL-12-06	47	84					3f	Intermediate-Mafic Tuff	Light grey-dark grey, forest green bands, V.FG-FG. Back into dominantly intermediate tuff with increased lighter grey banding. Large decrease in biotite and slight decrease in chl. Mod-intense S1 foliation @ ~38deg TCA. Rare trace amounts of po min observed thorughout and @ 61.50-63.90 and 68.60-72.60m with tr-1% diss and as stringeers of po located within patches and bands of chl and minor ankerite. Late ankerite filled vnts observed xcutting everything. Minor calcite observed in some banding. Rare patchy bands of epidoite observed. 2 dark grey phorphyritc Intermediate(?) flows observed with mm sized white phenocrysts and sharp contacts. Very weakly mag.	chl/ank/bt, minor ept		tr-1%		1	
SL-12-06			61.5	63.9			16b	Dissiminated Sulphide							
SL-12-06			66.64	68.63			3a	Intermediate Flow							
SL-12-06			79.3	80.25			3a	Intermediate Flow							
SL-12-06	84	101.1					3f	Intermediate-Mafic Tuff	Light grey-dark grey, forest green bands, V.FG-FG. Similar to before except with the presence of possible intermediate flows(?). Bands of chl, rare bands of bt. S1 moderate-intense foliation @ ~43deg TCA. Flows are FG with phorphoritic MG biotites which are alligned with S1 foliation. Large sections of the Tuff display varying amounts of sericite alt, with grainy grains going with S1 foliation. Forest green dykes with phorphoritic MG biotites alligned with S1 foliation observed. Trace amounts of po observed throughout within chl banding. Semi-massive ~80% po @ 95.45-95.55m. Very weakly mag.	Chl/ser/ank/bt		Trace		1	
SL-12-06			84.3	84.75			3a	Intermediate Flow							
SL-12-06			87	87.15			10b	Mafic Dyke							
SL-12-06			87.15	87.6			3a	Intermediate Flow							
SL-12-06			87.6	88.3			10b	Mafic Dyke							
SL-12-06			88.3	89.7			3a	Intermediate Flow							
SL-12-06			92.55	93.6			10b	Mafic Dyke							
SL-12-06			95.45	95.55			16a	Semi-massive Sulphide							

	Primary Unit		Secondary Unit		Tertiary Unit					Alteration				Magnetic	Misc
Hole	From	To (m)	From	To (m)	From	To (m)	Code	Name	Description		Py	Po	Cpy	(0-5 (weak to strong)	
SL-12-06	101.1	108.2					3f	Intermediate-Mafic Tuff	Dark grey, black, forest green bands, V.FG-FG. Sharp change in colouration to all dark throughout. Proabably still the Int-mf tuff as before except with greater alt from increased fluid influx. S1 foliation @ ~39deg TCA. Mm-cm sized black FG biotite and forest green chl bands thorughout all going with S1 foliation. Thin graniy bands of ankerite common. Very weak amounts of red hem observed on ank bands. Localized silicifed bands. Rare trace amounts of weak hem observed OP some ank. Po observed thorughout zone tiny mm sized stringers going with S1 foliation. Broken core, fault zone with fault gouge @ 106.80-107.75m Very weakly mag.	chl/bt/ank/ minor hem		Trace		1	
SL-12-06	108.2	135					3f	Intermediate-Mafic Tuff	Light grey-Blue-grey, forest green bands, V.FG-FG. Back into regular Int-mf tuff from before, near loss of the dark tuff, and black biotite bands. S1 foliation @ ~40deg TCA. Common grainy sericite alt. Less bands of chl now from before. Common thin grainy ankerite bands. Small S-type shear @ 122.60m. Sliver of flow observed as described before, concentration of trace Po and 1-2% aresopyrite and black FG biotite near upper contact. Very traces amounts of Po stringers through all of section going with S1 foliation. Very Weakly mag.	ser/ank/chl, minor bt		Trace		1	
SL-12-06			117.3	119.15			3a	Intermediate Flow							
SL-12-06	135	153					3f	Intermediate-Mafic Tuff	Light Grey-dark grey, forest green bands, V.FG-FG. Simialr to before except with loss of the bluish-grey coloured banding and an increase in mm-cm sized chl banding and the presence of biotite banding again. Silicified bands observed with trace Po. Common sections of intermediate flows. S1 foliation @ ~28deg TCA. Common grainy sericite alt going with S1 foliation. FG-MG phorphoritic flows observed. Trace amounts of stringers of Po still common in tuff going with S1 foliation. Very weakly mag.	ser/chl/ank/bt		Trace		1	
SL-12-06			135.8	136.6			3a	Intermediate Flow							
SL-12-06			138.95	140.4			3a	Intermediate Flow							
SL-12-06			147.75	150.75			3a	Intermediate Flow							
SL-12-06			152.65	152.3			3a	Intermediate Flow							
SL-12-06	153	174					3f	Intermedate-Mafic Tuff/Flow	Light-grey-dark grey, black and forest green banding, V.FG-FG. Similar to before except with a large increase in flows, ~50% flows, ~50% Tuff. S1 @ ~42deg TCA. Very trace amounts of Po observed going with S1 foliation. Some tuff banding seems mildly silicified. Black thin mm sized bands of biotite observed. Very weakly mag.	chl/bt/ank		Trace		1	
SL-12-06									EOH						

		S1	**S2**	**Vn**	**Intr Contacts**	**Bedding**	**Fract**	Note: all measurements are calculated from Bottom of core.
Hole	Depth (m)	Dip	Dip	Dip	Dip	Dip	Dip	Description
SL-12-06	20.00	38						Foliation in Int-mf tuff
SL-12-06	40.00	37						Foliation in Mafic tuff
SL-12-06	58.00	38						Foliation in Int-mf tuff
SL-12-06	68.63				36			Bottom contact of mafic dyke
SL-12-06	80.25				46			Bottom contact of mafic dyke
SL-12-06	90.00	43						Foliation in Int-mf tuff
SL-12-06	84.75				40			Bottom Contact
SL-12-06	87.15				39			Bottom Contact
SL-12-06	87.60				20			Bottom Contact
SL-12-06	88.30				34			Bottom Contact
SL-12-06	89.70				44			Bottom Contact
SL-12-06	93.60				49			Bottom Contact
SL-12-06	93.60							Fault Gouge, unknown orientation
SL-12-06	105.00	39						Foliation in Int-mf tuff
SL-12-06	107.00							Fault Gouge, unknown orientation
SL-12-06	119.15				28			Bottom int flow contact
SL-12-06	122.60		40					Small meso shear: S-Type
SL-12-06	130.00	40						Foliation in Int-mf tuff
SL-12-06	160.00	42						Foliation in Int-mf tuff

						ANALYTE	Wt	Au	Au	Au	Certificate # for Au
						METHOD	WGH79	FAA313	FAA313	FAA313	
						DETECTION	0.01	5	0.01	0.001	
Hole #	Sample #	From	To	Interval	Comment	UNITS	kg	ppb	g/t	oz/t	
SL-12-06	652695	16.50	17.50	1.00	tr-1% py		1.70	<5	<0.001	<0.001	RL1204122
SL-12-06	652696	21.90	22.40	0.50	tr-1% py		1.10	<5	<0.001	<0.001	RL1204122
SL-12-06	652697	33.00	33.70	0.70	tr-1% py		1.10	<5	<0.001	<0.001	RL1204122
SL-12-06	652698	43.20	43.70	0.50	tr-1% py		0.80	<5	<0.001	<0.001	RL1204122
SL-12-06	652699	43.70	44.50	0.80	py in fracture		1.20	<5	<0.001	<0.001	RL1204122
SL-12-06	652700	44.50	45.00	0.50	tr-1% po		0.90	<5	<0.001	<0.001	RL1204122
SL-12-06	652701	61.50	62.20	0.70	tr-1% po		1.10	<5	<0.001	<0.001	RL1204122
SL-12-06	652702	62.20	63.00	0.80	tr-1% po		1.40	<5	<0.001	<0.001	RL1204122
SL-12-06	652703	63.00	64.00	1.00	tr-1% po		1.70	<5	<0.001	<0.001	RL1204122
SL-12-06	652704	68.60	69.10	0.50	tr-1% po		0.80	<5	<0.001	<0.001	RL1204122
SL-12-06	652705	69.10	70.00	0.90	tr-1% po		1.50	<5	<0.001	<0.001	RL1204122
SL-12-06	652706	70.00	71.00	1.00	tr-1% po		1.70	<5	<0.001	<0.001	RL1204122
SL-12-06	652707	71.00	72.00	1.00	tr-1% po		1.70	<5	<0.001	<0.001	RL1204122
SL-12-06	652708	72.00	72.60	0.60	tr-1% po		0.90	<5	<0.001	<0.001	RL1204122
SL-12-06	652709	99.20	99.70	0.50	80% po		0.80	<5	<0.001	<0.001	RL1204122
SL-12-06	652710	101.90	102.00	0.10	tr-1% po		1.50	<5	<0.001	<0.001	RL1204122
SL-12-06	652711	102.00	103.00	1.00	tr-1% po		1.70	<5	<0.001	<0.001	RL1204122
SL-12-06	652712	103.00	104.00	1.00	tr-1% po		1.70	<5	<0.001	<0.001	RL1204122
SL-12-06	652713	104.00	105.00	1.00	tr-1% po		1.70	<5	<0.001	<0.001	RL1204122
SL-12-06	652714	105.00	106.00	1.00	tr-1% po		1.90	<5	<0.001	<0.001	RL1204122
SL-12-06	652715	106.00	107.00	1.00	tr-1% po		1.30	<5	<0.001	<0.001	RL1204122
SL-12-06	652716	107.00	107.70	0.70	tr-1% po		0.60	<5	<0.001	<0.001	RL1204122
SL-12-06	652717	107.70	108.20	0.50	tr-1% po		0.90	<5	<0.001	<0.001	RL1204122
SL-12-06	652718	116.80	117.30	0.50	tr-1% po, arseno		0.80	<5	<0.001	<0.001	RL1204122
SL-12-06	652719	140.50	141.00	0.50	tr-1% po, silica		0.90	<5	<0.001	<0.001	RL1204122
SL-12-06	652720	146.20	146.80	0.60	tr-1% po, silica		0.80	<5	<0.001	<0.001	RL1204122
				16.70							

Survey name	Depth (m)	Azimuth (uncorrected)	Azimuth (corrected)	Dip	Mag.Str.	Mag.Dip
Ranger	12	0.3		-49.8	56940	75.9
Ranger	100	2.1		-49.5	57300	76.4
Ranger	174	3.5		-49.5	57190	76.2

Photo #	Description
SL-12-06-001	Py Stringers in Int-mf tuff
SL-12-06-002	Py Stringers in Int-mf tuff

Hole ID:	Claim No.	Township	Nad83 Zone 15 Location			Direction	Dip	Length (m)	Overburden Depth (m)	Date Started	Date Finished	Drill Company	Core Size	Logged By	Date Log Completed	Core Location
			East	North	Elevation											
SL-12-07	4241798	Matapesatakum Bay	668700	5678581	380	180	-45	151	10	December 5, 2012	December 6, 2012	Rugged Aviation	BTW	Martin King	December 13, 2012	Red Lake core library

	Primary Unit		Secondary Unit		Tertiary Unit					Alteration				Magnetic	Misc
Hole	From	To (m)	From	To (m)	From	To (m)	Code	Name	Description		Py	Po	Cpy	(0-5 (weak to strong)	
SL-12-07	0.00	9.70					OB	Casing	Overburden						
SL-12-07	9.70	11.00					3f	Intermediate tuff	Fine to medium grained Intermediate tuff. Gy-purple. Some argillite interbanding from 10.75m.						
SL-12-07	11.00	16.00					6d	Metasediments	80% mudstones and 20% siltstones. Contains very narrow tuffaceous bands (<1cm). Lr. Ctc. @36˚ to LCA.						
SL-12-07			12.50	13.00			6d		Several 1mm py bands in fissile shale/argillite.						
SL-12-07	16.00	16.50					3f	Intermediate tuff	Tuffaceous unit (60%) and black mudstones. Lr. Ctc @ 29˚ to LCA.						
SL-12-07	16.50	18.10					6d	Argillite	Shale-dominated mudstone. Py developed as segregarions along cleavage						
SL-12-07	18.10	21.20					6d	Metasediments	50% altered mudstone and 50% poorly developed banded intermediate tuff						
SL-12-07	21.20	32.70					6d	Metasediments	Mixed shaley sediments with more tuffaceous cycles. Unaltered						
SL-12-07	32.70	33.45					3f	Intermediate tuff	Intermediate tuff. Strongly foliated @ 35˚ to LCA. Some crystal tuff . Attenuated, boudined white, wealky ankeritic tuff bands.						
SL-12-07	33.45	49.10					6d	Metasediments	Predominantly sedimentary sequence. Some interbanded tuffaceous material. Fine-medium grained. Essentially unaltered.						
SL-12-07	49.10	56.80					4a	Felsic Tuff?	Predominantly a crystal tuff with some interbanded sediments - siltstones and black shales. This unit contains well-developed ``Blue Quartz Eyes`` No Po. Trace Py over the interval 56.70-59.20m.		0.5				
SL-12-07	56.80	63.50					6d	Metasediments	Argillite dominated sediments. Some 1mm py banding along cleavage planes						
SL-12-07			62.75	63.45				Silica alteration	Irregular `blue-grey` colored silica blebs and boudins with 1% Py		1				
SL-12-07	63.50	64.70					3f	Intermediate tuff	or crystal tuff. Lr. Ctc. @36˚.						
SL-12-07	64.70	74.97					6d	Argillite	Homogenous bk argillite/shale. Contains 1mm Py bands on cleavage planes. Lr ctc @ 30˚ to LCA.						
SL-12-07	74.97	75.00					3f	Intermediate tuff	Green intermediate tuff band. Unaltered.						
SL-12-07	75.00	99.60					6d	Metasediments	Bk. Shales/argillites. NO tuffaceous material. Some Py on cleavage planes. Strongly graphitic over many sections. Lr. Ctc @ 60˚ to LCA.						
SL-12-07					81.15	81.17	15a	Qtz	Qtz band @ 47˚ to LCA						
SL-12-07					84.45	84.60	15a	Qtz	Cloudy white quartz band. Lr. Ctc @ 5C˚ to LCA. Po wisps at margins. Some chlorite inclusions.			0.5			
SL-12-07			85.00	86.50			6d		Strongly graphitic shales						
SL-12-07					86.16	86.20	15a		Cloudy white quartz band with Po at margins			0.5		0	
SL-12-07	99.60	100.90					3a	Intermediate flow	Contains significant biotite and some diss. Py. Lr. Ctc is a small fault @5C˚ to LCA						
SL-12-07	100.90	105.87					6d	Metasediments	80% black argillites (mudstones) with interlayered fine tuffaceous material and wacke. Contains up to 3? Po on cleavage planes. Entire unit weakly graphitic. 2cm grey QV @ 104.15m.						
SL-12-07	105.87	107.50					3a	Intermediate flow	Fine grained. There is a gradational contact with the underlying sediments. Lr. Ctc @ 48˚ to LCA.						
SL-12-07	107.50	110.00					6d	Metasediments	Bk. Predominantly argillaceous sediments. 2-3% Po as wisps aligned on cleavage planes.						
SL-12-07	110.00	110.23					2f	Mafic Tuff	Altered tuff. Increase in metamorphic grade with chlorite and pink garnets ≤ 2mm). Up to 5% Po	Chl		5.0			
SL-12-07	110.23	110.60					3f	Intermediate tuff	Fine-grained, dk. Gy. Some biotite, up to 5%. Lr. Ctc @ 47˚ to LCA.						
SL-12-07	110.60	110.75					6d	Metasediments	Weaky metamorphosed black shales and mudstones (argillites).						
SL-12-07	110.75	110.85					2f	Mafic Tuff	Green mafic tuff unit. Chloritized. Banded. Contains 0.5mm garnets in fine bands at upper contact. Lower ctc @ 35˚ to LCA.	chl					
SL-12-07	110.85	111.03					6d	Metasediments	Weaky metamorphosed black shales and mudstones (argillites). Lr. Ctc @ 43˚ to LCA.						
SL-12-07	111.03	111.43					3f	Intermediate tuff	Fine grained tuff unit. Unaltered. Lr. Ctc @38˚ to LCA.						
SL-12-07	111.43	111.47					2f	Mafic Tuff	Green mafic tuff unit. Chloritized. Banded. Contains 0.5mm garnets in fine bands at upper contact. Lower ctc @ 40˚ to LCA.	chl					
SL-12-07	111.47	113.90					6d	Metasediments	Argillaceous sediments. 5% tuffaceous material. Up to 1% Po. Weakly magnetic.			1.0			
SL-12-07					113.27	113.32	15a	QV	Grey Qtz band with 2% Pc						
SL-12-07	113.90	113.95					2f	Mafic Tuff	Mafic Tuff band. Green. Banded. Contains v fine garnets<0.5mm. Minor Py and Po. Lr. Ctc @ 39˚ to LCA.	chl	0.5	0.5			

	Primary Unit		Secondary Unit		Tertiary Unit					Alteration				Magnetic	Misc
Hole	From	To (m)	From	To (m)	From	To (m)	Code	Name	Description		Py	Po	Cpy	(0-5 (weak to strong)	
SL-12-07	113.95	114.25					6d	Metasediments	Black shales with 10% fine wacke. Unaltered.						
SL-12-07	114.25	115.15					3f	Intermediate tuff	Fine grained, gy. Poorly banded. Contains some fine 1mm Po bands			1.0			
SL-12-07	115.15	115.82					6d	Metasediments	Black shales with 10% fine wacke. Unaltered.						
SL-12-07	115.82	115.92					2f	Mafic Tuff	Another mafic tuff band. Contains chlorite and garnets (<1mm) and up to 5% Po ocurring parallel to the S1 schistosity/cleavage. Lr. Ctc is 42°. Weaky developed cleavage.	chl		1.0			
SL-12-07	115.92	116.25					6d	Metasediments	Black shales with 10% fine wacke. Unaltered.						
SL-12-07	116.25	116.40					2f	Mafic Tuff	Mafic Tuff Band. All garnet-chlorite altered. Perfect dev. Garnets<1mm. Pale green chlorite alteration. Lr. Ctc @ 44° to LCA.	Chl					
SL-12-07	116.40	116.75					6d	Metasediments	Carbonaceous black shales and mudstones. Lr. Ctc @ 45° to LCA.						
SL-12-07	116.75	116.82					2f	Mafic Tuff	Green mafic tuff band. Chlorite and fine green garnets<1mm.	Chl					
SL-12-07	116.82	117.20					6d	Metasediments	Black shales/argillites. Weakly graphitic.	Graphitic					
SL-12-07	117.20	117.30					2f	Mafic Tuff	Green mafic tuff band. Chlorite and fine green garnets<1mm.						
SL-12-07	117.30	117.95					3f	Intermediate tuff	Fine grained intermediate tuff. Unaltered. Lr. Ctc @39° to LCA. Grey-green.						
SL-12-07	117.95	118.00					2f	Mafic Tuff	Green mafic tuff band. Chlorite and fine green garnets<1mm.						
SL-12-07	118.00	131.05					6d	Metasediments	Bk. Dk. Gy. 75% Fine grained mudstone/argillite. 25% fine wackes and siltstones. Essentially unaltered.						
SL-12-07	131.05	131.20						Mafic Tuff	Pred. Mafic tuffaceous unit. Weakly chloritized.	Chl					
SL-12-07	131.20	132.80					6d	Metasediments	Black shales/argillites. Weakly graphitic.						
SL-12-07	132.80	132.95					3f	Intermediate tuff	Gy. Med-grained, diffuse texture. Unaltered. Lr. Ctc. @ 30°.						
SL-12-07	132.95	133.00					2f	Mafic Tuff	Fine-grained mafic tuff. Dk. Green. Fine, 1mm biotite crystals aligned in S1. The unit contains poorly developed `Blue Quartz` augens elongate in the fabric. Lr. Ctc @ 37°	sil					
SL-12-07	133.00	133.10					12b	Felsic Dyke	Felsic dyke. Qtz. diorite. Leucocratic. Non-qtz porphyry. Lr ctc @ 30°						
SL-12-07	133.10	133.15					2f	Mafic Tuff	Fine-grained mafic tuff. Dk. Green. Fine, 1mm biotite crystals aligned in S1. Lr. Ctc @ 30° to LCA. Unaltered.						
SL-12-07	133.15	134.60					13a	Quartz Feldspar Porphyry	Late intrusive, Dyke? Well-developed euhedral feldspar phenocrysts (<10mm). Grey, light grey. Leucodratic. Weal fabric, Some fine diss biotite. Le ctc @ 32° to LCA.						
SL-12-07	134.60	135.25					2f	Mafic Tuff	as above. Lr ctc @35°						
SL-12-07	135.25	136.50					13b	Feldspar Porphyry	Massive dyke. Increase in mafic minerall, minor biotite. Anhedral feldspars. Lr ctc @ 35° to LCA						
SL-12-07	136.50	138.00					6d	Metasediments	Sediments: argillites with minor mafic tuff component. Lr ctc @ 35° to LCA.						
SL-12-07					137.50	137.62			Quartz-sericite alteration. Bright green coilored. Trace chlorite	qtz/ser/chl					
SL-12-07	138.00	138.05					2t	Mafic Tuff	Green, dk green tuff. Bi and hornblende. Lr ctc @ 30° to LCA	chl					
SL-12-07	138.05	139.45					6d	Metasediments	Bk argillic seds. Lr ctc @ 36°						
SL-12-07	139.45	139.50					13b	Feldspar Porphyry	as above. Lr ctc @ 38° to LCA.						
SL-12-07	139.50	141.35					2f	Mafic Tuff	mafic or crystal tuff. Large, up to 5mm elongate olive-green biotite phenocrysts. Coarse crystalline version og material at 133.10m, etc. Lr. Ctc @ 30°						
SL-12-07	141.35	142.50					6d	Metasediments	85% shale and 15% wackes. Pyrite on cleavage planes. Lr. Ctc @ 35°		1.0				
SL-12-07	142.50	145.40					13b	Feldspar Porphyry	as above. 10% biotite. Lr. Ctc 35°						
SL-12-07	145.40	151.00					6d	Metasediments	Pred fine grained sediments. Banded. 65% mudstone with minor fine-grained wacke. Occasionally more mafic tuffaceous sections<10cm. There is an increase in WQ veining/banding towards the lower part of this sed sequence and an increase in shearing in the more argillaceous material.		0.5				
SL-12-07					145.40	145.55	16		Py and Po on cleavage planes @ 30°						
SL-12-07															
SL-12-07			145.55	145.65			13b	Feldspar Porphyry	as above						
SL-12-07					148.65	148.70	15a		Quartz banding with up to 4% Py. Some chlorite banding.	chl/sil	0.5				
SL-12-07					149.05	149.70	15a		Set of white/cloudy qtz `veins` orientated in S1 fabric. Minor Py (2%) and trace Po. Minor carbonate. Veining @ 32° to LCA.		2.0	0.5		0	
SL-12-07					145.90	150.02	15a		White/cloudy Qtz.band. 2% Po. Marginal to QV. Associated sericite alteration. Chlorite inclusions. Tr. Cpy. Lr. Ctc @ 34° to LCA.	ser/chl			0.2	1	

	Primary Unit		Secondary Unit		Tertiary Unit					Alteration				Magnetic	Misc
Hole	From	To (m)	From	To (m)	From	To (m)	Code	Name	Description		Py	Po	Cpy	(0-5 (weak to strong)	
									TD: 151m, 5:30pm, Dec. 6, 2012						
									Indications are that the core is getting better mineralized downhole as observed in last 5m section? Deeper drilling required to target below lake??						

		S1	S2	Vn	Intr Contacts	Bedding	Fract	Note: all measurements are calculated from Bottom of core.
Hole	Depth (m)	Dip	Dip	Dip	Dip	Dip	Dip	Description
SL-12-07	11.00				36			Lr. Ctc.of Intermediate tuff
SL-12-07	16.00				36			
SL-12-07	18.10	30						Argillite cleavage, commonly with Pyrite.
SL-12-07	21.20				35			Lr. Argillite ctc.
SL-12-07	25.00	30						Steepening cleavage.
SL-12-07	56.80				53			Lr. Tuff ctc.
SL-12-07	64.70				36			Lt. Tuff ctc.
SL-12-07	74.97	30						Cleavage in Bk. Argillite controlling 1mm Py bands.
SL-12-07	75.00	30						
SL-12-07	99.60				60			Lr ctc og graphitic seds
SL-12-07	100.90						56	Lr. Contact is a small fault.
SL-12-07	107.50				48			Lr. contact with sediments.
SL-12-07	110.60				47			Lr. Contact with bk argillaceous sediments.
SL-12-07	110.85				35			Lr. Mafic band contact.
SL-12-07	111.03				43			Lr. Ctc of bk shales/argillites
SL-12-07	111.43				38			Tuff lower contact.
SL-12-07	111.47				40			Lr. Ctc of Metamorphosed Mafic Tuff band.
SL-12-07	113.90							
SL-12-07	115.92				42			Lr. Ctc of Mafic Band
SL-12-07	116.75				45			
SL-12-07	118.00				38			Lr. Tuff band contact.
SL-12-07	131.05				41			Lr. Sediment contact.
SL-12-07	131.20				40			Contact with seds.
SL-12-07	132.80	33			33			
SL-12-07	132.95				30			Lr. Tuff contact with seds.
SL-12-07	133.10				30			Lower dyke contact.
SL-12-07	133.15				30			Mafic tuff lower ctc.
SL-12-07	134.60				32			QFP lower ctc.
SL-12-07	136.50				35			Lower dyke contact.
SL-12-07	138.00				35			Lr. Sediment contact.
SL-12-07	138.05				36			Mafic tuff lower ctc.
SL-12-07	139.45				36			Lr. Sediment contact.
SL-12-07	139.50				38			Lower dyke contact.
SL-12-07	141.35				30			Mafic tuff lower ctc.
SL-12-07	142.50	38			39			Lr sed contact
SL-12-07	145.40				35			Lr FP contact
SL-12-07	145.55	36						Cleavage with Py and Po
SL-12-07	149.70			32				Qtz banding
SL-12-07	150.02			34				Qtz banding

						ANALYTE	Wt	Au	Au	Au	Certificate # for Au
						METHOD	WGH79	FAA313	FAA313	FAA313	
						DETECTION	0.01	5	0.01	0.001	
Hole #	Sample #	From	To	Interval	Comment	UNITS	kg	ppb	g/t	oz/t	
SL-12-07	652760	62.75	63.45	0.70		W652760	15	0.02	<0.001	1.3	RL1204168
SL-12-07	652761	84.40	85.00	0.60		W652761	<5	<0.01	<0.001	1	RL1204168
SL-12-07	652762	85.00	86.00	1.00		W652762	10	0.01	<0.001	1.3	RL1204168
SL-12-07	652763	88.00	89.00	1.00		W652763	5	<0.01	<0.001	1.3	RL1204168
SL-12-07	652764	145.40	146.35	0.95		W652764	5	<0.01	<0.001	1.7	RL1204168
SL-12-07	652765	146.35	147.35	1.00		W652765	15	0.02	<0.001	1.9	RL1204168
SL-12-07	652766	147.35	148.60	1.25		W652766	15	0.01	<0.001	2.2	RL1204168
SL-12-07	652767	148.60	149.05	0.45		W652767	10	0.01	<0.001	0.9	RL1204168
SL-12-07	652768	149.05	149.70	0.65		W652768	10	<0.01	<0.001	0.9	RL1204168
SL-12-07	652769	149.70	150.20	0.50		W652769	5	<0.01	<0.001	0.9	RL1204168
SL-12-07	652770	150.20	151.20	1.00		W652770	10	0.01	<0.001	1.5	RL1204168

Survey name	Depth (m)	Azimuth (uncorrected)	Azimuth (corrected)	Dip	Mag.Str.	Mag.Dip
Ranger	20	183.0		-44.3	56910	76.7
Ranger	75	185.6		-42.9	56990	76.5
Ranger	150	185.4		-41.0	56890	76.2

Photo #	Description
SL-12-07-0001	

APPENDIX C

ASSAY CERTIFICATES

APPENDIX D

ASSAY PROCEDURES

FAA313 : The Determination of Gold by Fire Assay and Flame Atomic Absorption – Trace Grade

1. **Parameter(s) measured, unit(s):**
   Gold (Au): ppb

2. **Typical sample size:**
   30.0 g

3. **Type of sample applicable (media):**
   Crushed and pulverized rocks.

4. **Sample preparation technique used:**
   Crushed and pulverized rock sample are weighed and mixed with flux and fused using lead oxide at 1100°C, followed by cupellation of the resulting lead button (Dore bead). The bead is digested using 1:1 HNO_3 and HCl and the resulting solution is submitted for analysis.

5. **Method of analysis used:**
   The digested sample solution is analyzed by Flame Atomic Absorption Spectrometer (AAS), Samples are analyzed against known calibration materials to provide quantitative analysis of the original sample

6. **Data reduction by:**
   The results are exported via computer, on line, data fed to the SGS Laboratory Information Management System (SLIM) with secure audit trail.

7. **Figures of Merit:**

Element	Reporting Limit (ppb)
Au	5.0

8. **Quality control:**
   Instrument calibration is performed for each batch or work order and calibration checks are analyzed within each analytical run. Quality control materials include method blanks, replicates, duplicates and reference materials and are randomly inserted with the frequency set according to method protocols at ~14%.
   Quality assurance measures of precision and accuracy are verified statistically using SLIM control charts with set criteria for data acceptance. Data that fails is subject to investigation and repeated as necessary