



2011 Prospecting and Sampling Program

On

Frontline Gold's Red Lake Projects

Red Lake Mining Division

Goodall and Skinner Townships
Shabumeni Lake and Little Shabumeni Lake Areas

52 N/02 & 07

Prepared By:



April 9th, 2012

James Seals, H. BA
Steven Siemieniuk, H. BSc

Abstract

Clark Exploration Consulting of Thunder Bay, Ontario, was contracted by Frontline Gold of Toronto, Ontario, to conduct a surface exploration program on their Red Lake Project. Between May and August, 2011 a prospecting, sampling and trenching program was carried out on the various claim groups that make up Frontline's Red Lake Project by employees of Clark Exploration Consulting and the help of one local prospector.

The Red Lake Project is located approximately 80 kilometres east-northeast of the town of Red Lake, Ontario. The Project consists of five separate claim blocks (properties) each consisting of contiguous, unpatented mining claims for a grand total of 349 units covering 5,584 hectares. The properties are known as Confederation Lake (9 units), Shabumeni Lake (256 units), Shabumeni River (15 units), Skinner (39 units) and Woman River (30 units).

The focus of the 2011 exploration program was to follow up on prospective gold occurrences on the Skinner property identified in 2010 by Frontline Gold and follow up on known gold and copper occurrences on the Shabumeni Lake property identified by Frontline Gold in 2007 and 2010. Prospecting was also carried out on the Woman River and Shabumeni River properties in an attempt to locate new gold showings.

The 2011 work program saw a line-cutting and a ground magnetometer survey performed on the Skinner property in May. During this time, three other members of the work crew spent time prospecting and locating historical trenches. The second phase of work on the Skinner property consisted of trenching, washing and channel sampling on five trenches. Of the 20 channel samples taken two samples returned assays running between 100-500 ppb Au and of 25 grab samples, sample 079043 ran 22.79 g/t Au.

Grab sampling on the Skinner property returned the best results of the program with 3 samples assaying in the multi-gram range. Sample 194182 assayed 19.71 g/t Au, sample 194200 assayed 13.59 g/t Au and sample 194180 ran 6.83 g/t Au. Sample 194183 assayed at 900 ppb Au. The prospecting program revealed a series of historical trenches, with the two highest values coming from rusty quartz veins containing chalcopyrite and arsenopyrite in the same trench on the NE portion of claim 4254145.

A total of 6 samples were taken on the Woman River property. While mineralization was noted in the form of chalcopyrite and arsenopyrite, no significant gold values were obtained with only 2 samples registering gold values just over detection limit. While the 2010 surface program was successful in locating prospective mineralization, only a few samples off of the Skinner property contained significant gold values.

It is the belief of the author that the Skinner and Shabumeni Lake properties remain highly prospective for gold mineralization and that the Woman River claim block remains underexplored. Various recommendations are made for each property.

Table of Contents

ABSTRACT	I
TABLE OF CONTENTS	III
1.0 INTRODUCTION.....	1
2.0 PROPERTY DESCRIPTION	1
3.0 GEOLOGICAL SETTING	6
3.1 REGIONAL GEOLOGY.....	6
3.2 PROPERTY GEOLOGY.....	9
3.2.1 <i>Confederation Lake Property</i>	9
3.2.2 <i>Shabumeni Lake Property</i>	9
3.2.3 <i>Shabumeni River Property</i>	12
3.2.4 <i>Skinner Property</i>	12
3.2.5 <i>Woman River Property</i>	12
4.0 EXPLORATION HISTORY	13
4.1 CONFEDERATION LAKE PROPERTY.....	13
4.2 SHABUMENI LAKE PROPERTY.....	13
4.2 SHABUMENI RIVER PROPERTY	16
4.3 SKINNER PROPERTY.....	16
4.4 WOMAN RIVER.....	17
5.0 2011 EXPLORATION PROGRAM	18
5.1 SHABUMENI LAKE.....	18
5.2 SKINNER.....	19
5.3 WOMAN RIVER.....	19
5.4 SHABUMENI RIVER	20
6.0 CONCLUSIONS AND RECOMMENDATIONS	21
6.1 SHABUMENI LAKE.....	21
6.2 SKINNER.....	21
6.3 WOMAN RIVER.....	21
6.4 SHABUMENI RIVER	21
7.0 REFERENCES.....	22
APPENDICES.....	24
APPENDIX A.....	25
SAMPLE DESCRIPTIONS	25
APPENDIX B.....	40
DAILY LOG	40
APPENDIX C	56
ASSAY CERTIFICATES	56
APPENDIX D	67
2011 FIELD MAPS.....	67

List of Figures

FIGURE 1: SHABUMENI PROJECT LOCATION MAP.....	2
FIGURE 2: SHABUMENI PROJECT INDIVIDUAL PROPERTIES.....	5
FIGURE 3: REGIONAL GEOLOGY OF THE BIRCH-UCHI GREENSTONE BELT SHOWING THE LOCATIONS OF THE 5 INDIVIDUAL PROPERTIES MAKING UP THE SHABUMENI PROJECT (HIGHLIGHTED IN RED) (KLEINBOECK AND CLARK, 2007).....	7

FIGURE 4: PROPERTY GEOLOGY OF THE SHABUMENI LAKE PROPERTY (KLEINBOECK AND CLARK, 2007) 10

FIGURE 5: MAP SHOWING THE LOCATION OF THE DEFORMATION ZONES (SWAIN LAKE TRENDING SW-NE; GRACE LAKE TRENDING ~E-W) AND GOLD SHOWINGS ON THE SOUTHERN PORTION OF THE SHABUMENI LAKE PROPERTY. BOUNDARY OF THE SHABUMENI LAKE PROPERTY NOT SHOWN – SEE FIG. 4. (KLATT ET AL., 2003) 11

List of Tables

TABLE 1: FRONTLINE GOLD CLAIM DETAILS. 2

TABLE 2: TABLE OF LITHOLOGIES (AFTER JOHNS, 1979) 8

1.0 Introduction

Clark Exploration Consulting of Thunder Bay, Ontario, was contracted by Frontline Gold of Toronto, Ontario, to conduct a surface exploration program on their Red Lake Project. Between May and August, 2011 a prospecting, sampling and trenching program was carried out on the various claim groups that make up Frontline's Red Lake Project by employees of Clark Exploration Consulting and the help of one local prospector.

The Red Lake Project is located approximately 80 kilometres east-northeast of the town of Red Lake, Ontario. The Project consists of five separate claim blocks (properties) each consisting of contiguous, unpatented mining claims for a grand total of 349 units covering 5,584 hectares. The properties are known as Confederation Lake (9 units), Shabumeni Lake (256 units), Shabumeni River (15 units), Skinner (39 units) and Woman River (30 units).

The focus of the 2011 exploration program was to follow up on prospective gold occurrences on the Skinner property identified in 2010 by Frontline Gold and follow up on known gold and copper occurrences on the Shabumeni Lake property identified by Frontline Gold in 2007 and 2010. Prospecting was also carried out on the Woman River and Shabumeni River properties in an attempt to locate new gold showings.

2.0 Property Description

The Red Lake Projects are located approximately 80 km east-northeast of Red Lake, Ontario (Figure 1). They are referred to in the image (Figure 1) as the Shabumeni Lake Project as this image was used from a 2010 report in which the projects were collectively referred to as the Shabumeni Lake Project.

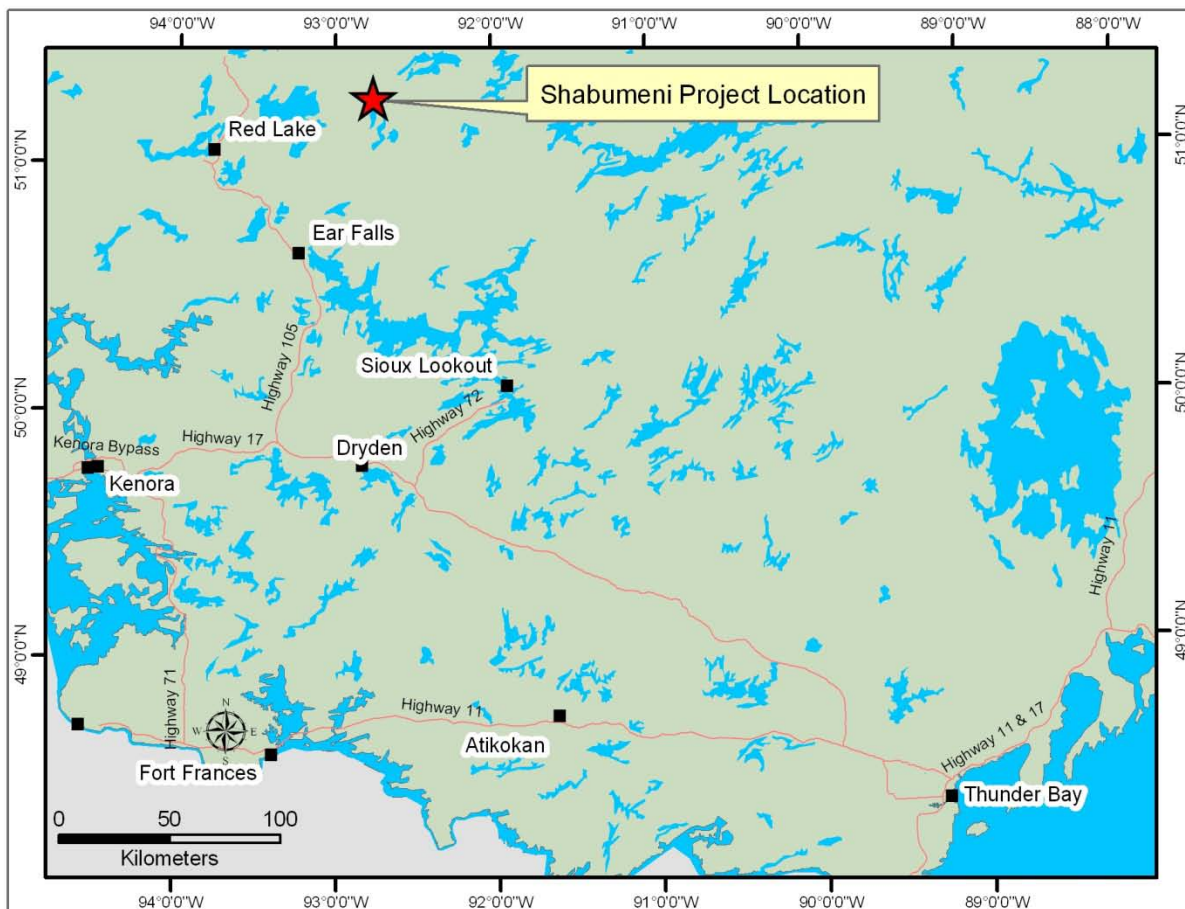


Figure 1: Shabumeni Project location map.

The Red Lake Project consists of 5 separate claim blocks (properties) each consisting of contiguous, unpatented mining claims for a grand total of 349 units covering 5,584 hectares. The properties are known as Confederation Lake (9 units), Shabumeni Lake (256 units), Shabumeni River (15 units), Skinner (39 units) and Woman River (30 units) (Table 1, Fig. 2).

Table 1: Frontline Gold claim details.

Project	Township/Area	Claim Number	Recording Date	Claim Due Date	Work Required	Total Applied	Total Reserve
Confederation Lake	GOODALL	1248644	2002-Apr-08	2016-Apr-08	\$3,600	\$43,200	\$10,802
Shabumeni Lake	SHABUMENI LAKE AREA	4207408	2006-Sep-26	2012-Sep-26	\$6,000	\$24,000	\$0
Shabumeni Lake	SHABUMENI LAKE AREA	1248661	2002-Apr-08	2012-Apr-09	\$12,800	\$44,800	\$83
Shabumeni Lake	SHABUMENI LAKE AREA	1248663	2002-Apr-08	2012-Apr-09	\$12,800	\$44,800	\$0
Shabumeni Lake	SHABUMENI LAKE AREA	1248665	2002-Apr-08	2012-Apr-09	\$12,000	\$42,000	\$0

Project	Township/Area	Claim Number	Recording Date	Claim Due Date	Work Required	Total Applied	Total Reserve
Shabumeni Lake	SHABUMENI LAKE AREA	1248666	2002-Apr-08	2012-Apr-09	\$2,400	\$8,400	\$0
Shabumeni Lake	SHABUMENI LAKE AREA	1248667	2002-Apr-08	2012-Apr-09	\$12,000	\$42,000	\$0
Shabumeni Lake	SHABUMENI LAKE AREA	4219831	2007-May-31	2012-Apr-09	\$800	\$1,600	\$0
Shabumeni Lake	SHABUMENI LAKE AREA	4219846	2007-May-31	2012-Apr-09	\$6,400	\$12,800	\$0
Shabumeni Lake	SHABUMENI LAKE AREA	4219848	2007-May-31	2012-Apr-09	\$6,400	\$12,800	\$0
Shabumeni Lake	SHABUMENI LAKE AREA	4219849	2007-May-31	2012-Apr-09	\$6,400	\$12,800	\$0
Shabumeni Lake	SHABUMENI LAKE AREA	4219850	2007-May-31	2012-Apr-09	\$6,400	\$12,800	\$335
Shabumeni Lake	SHABUMENI LAKE AREA	4219855	2007-May-31	2012-Apr-09	\$1,600	\$3,200	\$0
Shabumeni Lake	SHABUMENI LAKE AREA	4219856	2007-May-31	2012-Apr-09	\$6,400	\$12,800	\$83
Shabumeni Lake	SHABUMENI LAKE AREA	4219876	2007-May-31	2012-Apr-09	\$4,800	\$9,600	\$0
Shabumeni Lake	SHABUMENI LAKE AREA	4219879	2007-May-31	2012-Apr-09	\$2,553	\$16,647	\$83
Shabumeni Lake	SHABUMENI LAKE AREA	4219898	2007-May-31	2012-Apr-09	\$2,400	\$4,800	\$0
Shabumeni Lake	SHABUMENI LAKE AREA	4222413	2007-Aug-23	2012-Apr-09	\$6,400	\$12,800	\$0
Shabumeni Lake	SHABUMENI LAKE AREA	4211605	2006-Jul-27	2012-Apr-09	\$6,400	\$19,200	\$0
Shabumeni Lake	SHABUMENI LAKE AREA	4211606	2006-Jul-27	2012-Apr-09	\$6,400	\$19,200	\$0
Shabumeni Lake	SHABUMENI LAKE AREA	4211607	2006-Jul-27	2012-Apr-09	\$6,400	\$19,200	\$0
Shabumeni Lake	SHABUMENI LAKE AREA	1247895	2003-Jul-28	2016-Jul-28	\$2,400	\$26,400	\$701
Shabumeni River	LITTLE SHABUMENI LAKE AREA	1248641	2002-Apr-08	2012-Apr-09	\$11,192	\$46,408	\$0
Skinner	SKINNER	4254144	2010-Apr-12	2012-Apr-12	\$6,400	\$0	\$0
Skinner	SKINNER	4254145	2010-Apr-12	2012-Apr-12	\$6,400	\$0	\$190
Skinner	SKINNER	4219847	2007-May-31	2012-Apr-09	\$3,200	\$6,400	\$200
Woman River	GOODALL	1248647	2002-Apr-08	2012-Apr-09	\$12,000	\$42,000	\$165
Woman River	GOODALL	1248648	2002-Apr-08	2012-Apr-09	\$12,000	\$42,000	\$893

Each property can be accessed by:

Confederation Lake: Float or ski equipped plane, boat

Shabumeni Lake: Float or ski equipped plane, +/- boat

Shabumeni River: Float or ski equipped plane

Skinner: Logging road

Women River: Float or ski equipped plane, boat

Exploration crews can be accommodated at the fishing resorts that are accessible via secondary roads leading northeast off highway 105 at Ear Falls. Some of these resorts provide flight services and boat rentals.

Lakes cover approximately 10-35% of the properties. Topography is generally gentle with elevations ranging from 400 to 440 meters above sea level. A mixed forest of mostly spruce, balsam, poplar and birch covers the claims, with swampy vegetation in low-lying areas and local areas of forest blow-down.

Temperatures range from highs of 35° C in summer to lows of -30° C in winter, with snow cover between November and May. The best season for exploration is between June and October, although in lake covered or swampy areas exploration activities such as geophysical surveys and diamond drilling might best be conducted after winter freeze up.

The Red Lake district, population 4,700, is located at the end of Highway #105 which is 175 km north of Kenora on the Trans-Canada highway. The town is serviced by regular air flights from Thunder Bay and Winnipeg, 7 days a week. The local population includes skilled tradesmen and experienced underground miners. All necessary supplies are available locally or in Winnipeg and Thunder Bay.

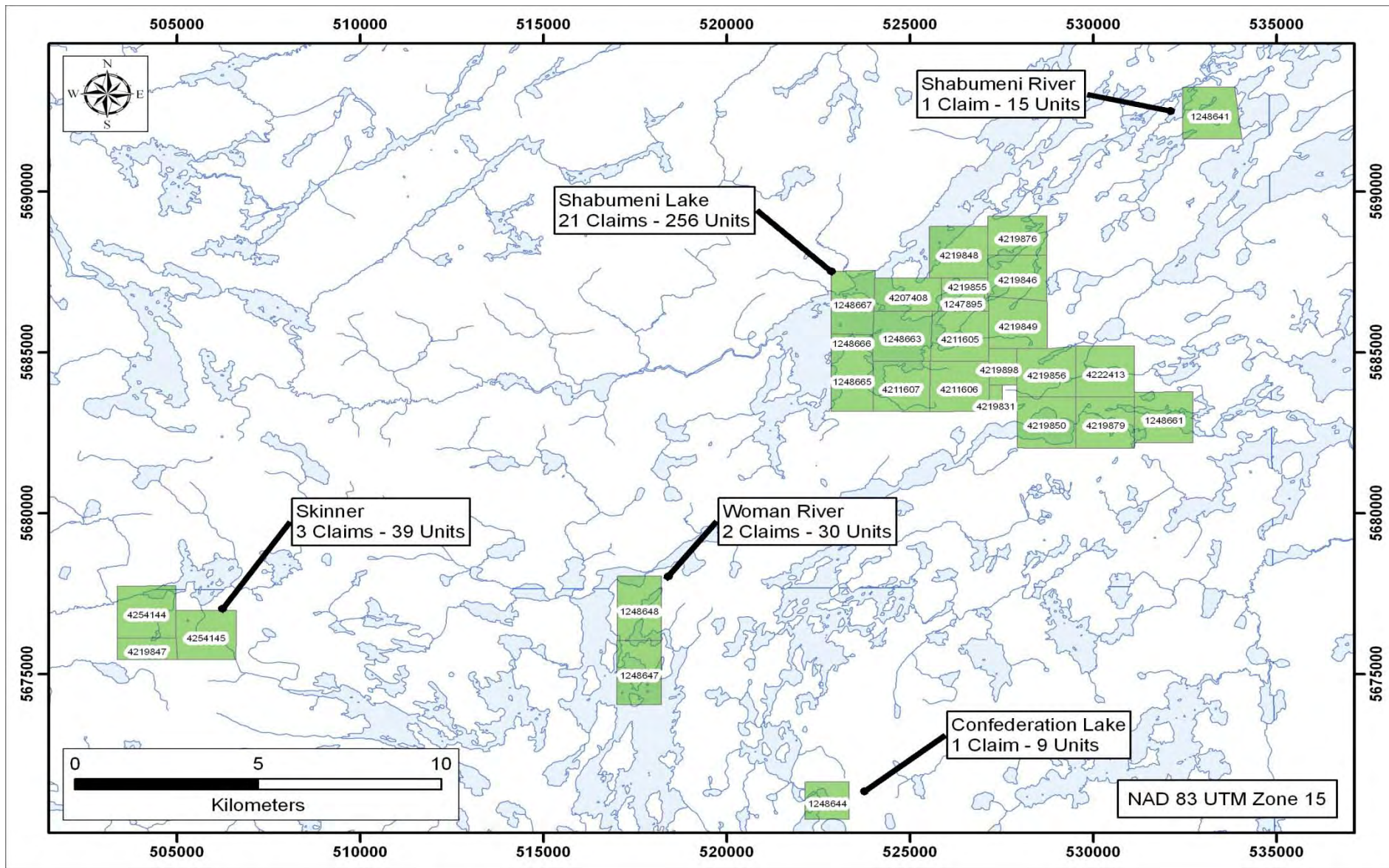


Figure 2: Shabumeni Project individual properties.

3.0 Geological Setting

3.1 Regional Geology

The Shabumeni Properties lie within the Archean Birch-Uchi Greenstone Belt of the western Uchi Subprovince of NW Ontario (Fig. 3). This belt records a stratigraphic history that spanned approximately 290 Ma, involving repeated episodes of rifting, and associated depositional and magmatic phases. Unconformity-bounded sequences of mafic to felsic volcanic strata and primarily clastic sedimentary strata accumulated between ca. 2992 Ma and 2700 Ma upon a complex extensional architecture, which largely formed the template upon which later compressional structures were superimposed.

Supracrustal strata in the belt have been subdivided into 3 volcano-sedimentary mega-cycles (Stott & Corfu 1992, Thurston 1985) each comprising variably mafic to felsic volcanic strata and subordinate clastic sedimentary strata. From oldest to youngest these mega-cycles are comprise the following assemblages:

- The Balmer Assemblage (2987 Ma) is primarily an Fe-tholeiitic sequence of mafic volcanic strata, with minor interbeds of banded iron formation. The distribution of this assemblage is restricted to the extreme western edge of the Birch-Uchi Belt immediately adjacent to the Trout Lake Batholith.
- The Woman Assemblage (2858 Ma) is also primarily an Fe-tholeiitic sequence of mafic volcanic strata, with minor interbeds of banded chemical sediments and pyritic siltstones and shales. This assemblage is unconformable or paraconformable on the Balmer assemblage and occurs along the western edge of the Birch-Uchi Belt stratigraphically above the Balmer Assemblage.
- The Confederation Lake Assemblage (2750-2700Ma) is by far the most aerially extensive assemblage in the belt. It is comprises an assemblage of intermediate to felsic flows and pyroclastic strata, which are unconformably overlain by conglomeratic to argillaceous rift-related sediments. The Confederation Lake Assemblage also has minor interbeds or banded iron formation.

See Table 2 below for the table of lithologies relating to the Birch-Uchi Greenstone Belt.

At least 3 phases of regional deformation affected the area resulting in the widespread development of folds, axial planar fabrics, and ductile shear zones. D1 deformation involved NW-SE shortening, the development of NE to N-striking folds and faults. Evidence for this D1 event is best preserved in the southern part of the belt in the Confederation Lakes area. D2 deformation involved NE-SW to N-S shortening and the development of ~E-W to WNWSE striking regional folds, faults and fabrics. This event is manifested to varying degrees throughout the belt from the Casummit Lake area in the north to the Slate Lake area in the south. D3 deformation appears to have involved renewed E-W shortening and is restricted to the northern part of the belt in the

Mink Lake/Casummit Lake area. This shortening event resulted in the buckling of the regional S2 foliation into N-S folds. This event was accompanied by N-S striking S3 crenulation cleavage and ENE plunging F3 fold development.

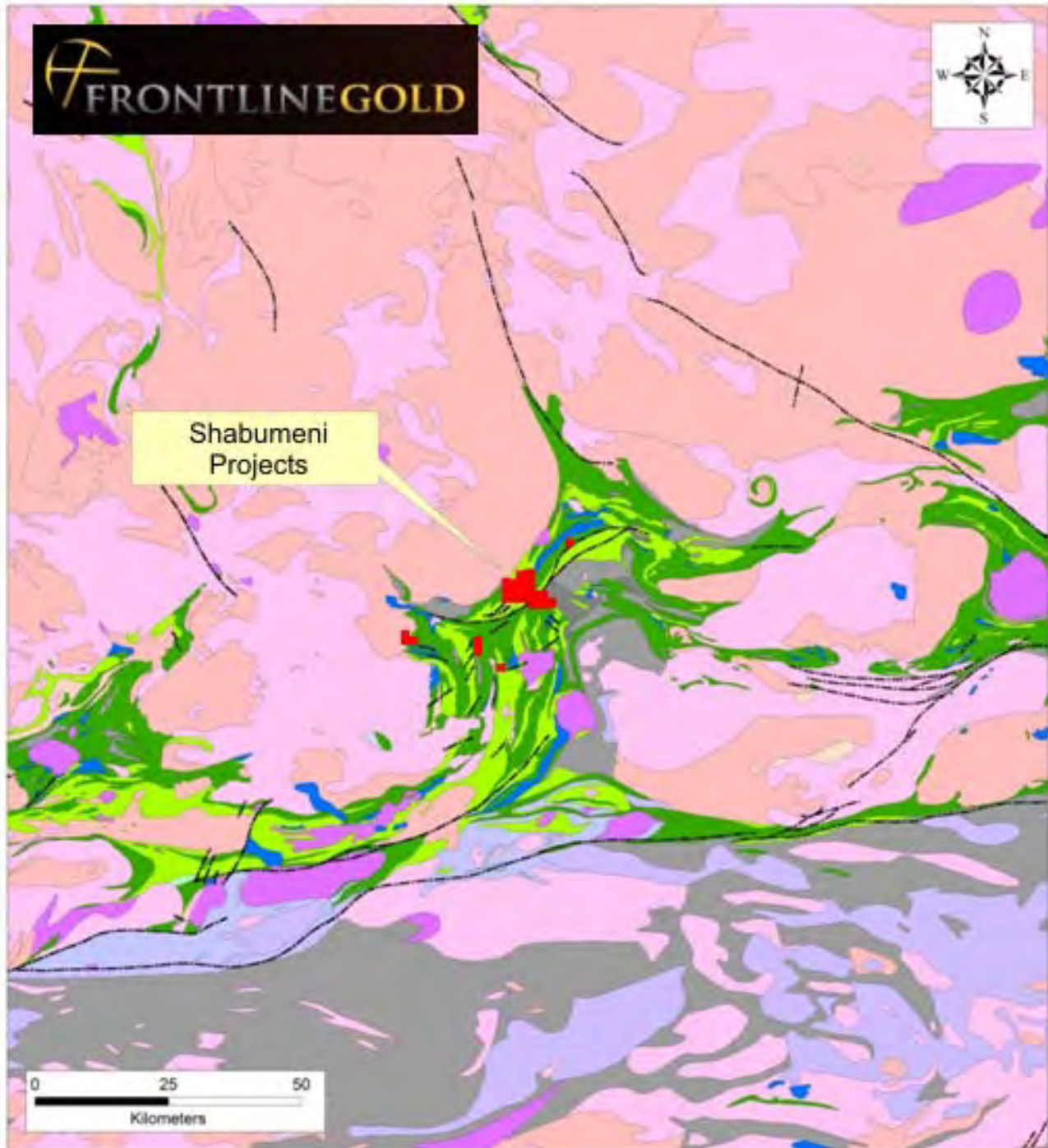


Figure 3: Regional geology of the Birch-Uchi Greenstone Belt showing the locations of the 5 individual properties making up the Shabumeni Project (highlighted in red) (Kleinboeck and Clark, 2007).

Table 2: Table of Lithologies (after Johns, 1979)

Phanerozoic

Cenozoic

Quaternary

Recent

Swamp, stream, and lacustrine deposits

Pleistocene

Till, clay, sand, and gravel

Unconformity

Precambrian

Early Precambrian

Felsic to Intermediate Intrusive Rocks

Hornblende and biotite diorite, syenodiorite, hornblende and biotite trondhjemite, quartz diorite, hornblende and biotite quartz monzonite to granodiorite, and pink pegmatite

Intrusive Contact

Metamorphosed Felsic to Intermediate Intrusive Rocks

Quartz-feldspar porphyry, feldspar porphyry, mafic feldspar porphyry, and felsite

Intrusive Contact

Metamorphosed Mafic and Ultramafic Rocks

Gabbro, diorite, quartz diorite, quartz gabbro, porphyritic gabbro, serpentized peridotite, serpentized dunite, and pyroxenite

Intrusive Contact

Metasediments

Chemical Metasediments

Oxide- and sulphide-facies iron formation

Clastic Metasediments

Wacke, slate, argillite, arenites, arkose, conglomerate, reworked tuff, siltstone, quartz-wacke, quartz arenites

Metavolcanics

Felsic Metavolcanics

Flow tuff, lapillistone, lapilli tuff, tuff-breccia, thin bedded flow

Intermediate Metavolcanics

Flow tuff, pyroclastic breccia, lapilli-tuff, tuff-breccia, spherulitic flow, amygdaloidal and porphyritic flow, autoclastic breccia, flow layered flow

Mafic Metavolcanics

Porphyritic, glomeroporphyritic, amygdaloidal, massive, and pillowed flows with pillow breccia and coarse-grained centres; pyroclastic rock, autoclastic breccia, variolitic flow, hyaloclastic breccia, hyaloclastite, carbonatized flow, lapilli tuff.

3.2 Property Geology

3.2.1 Confederation Lake Property

With not much activity having been performed on the property it has been noted that pillow basalt is located in outcrop by Gold Crest Minerals, and that massive mafic to intermediate metavolcanics have also been mapped on the property by the OGS (P0592, M2498).

3.2.2 Shabumeni Lake Property

The northern portion of the property is underlain mainly by volcanic flows and pyroclastics. The northern portion of the property near the gold showings are underlain intermediate pyroclastics overlain in the southeast by mafic pillowed and massive flows and agglomerates. . A narrow horizon of north trending carbonaceous argillite on the large peninsula has been the exploration target in the past. These volcanic rocks are intruded in areas by gabbroic plutons with quartz monzonite cores.

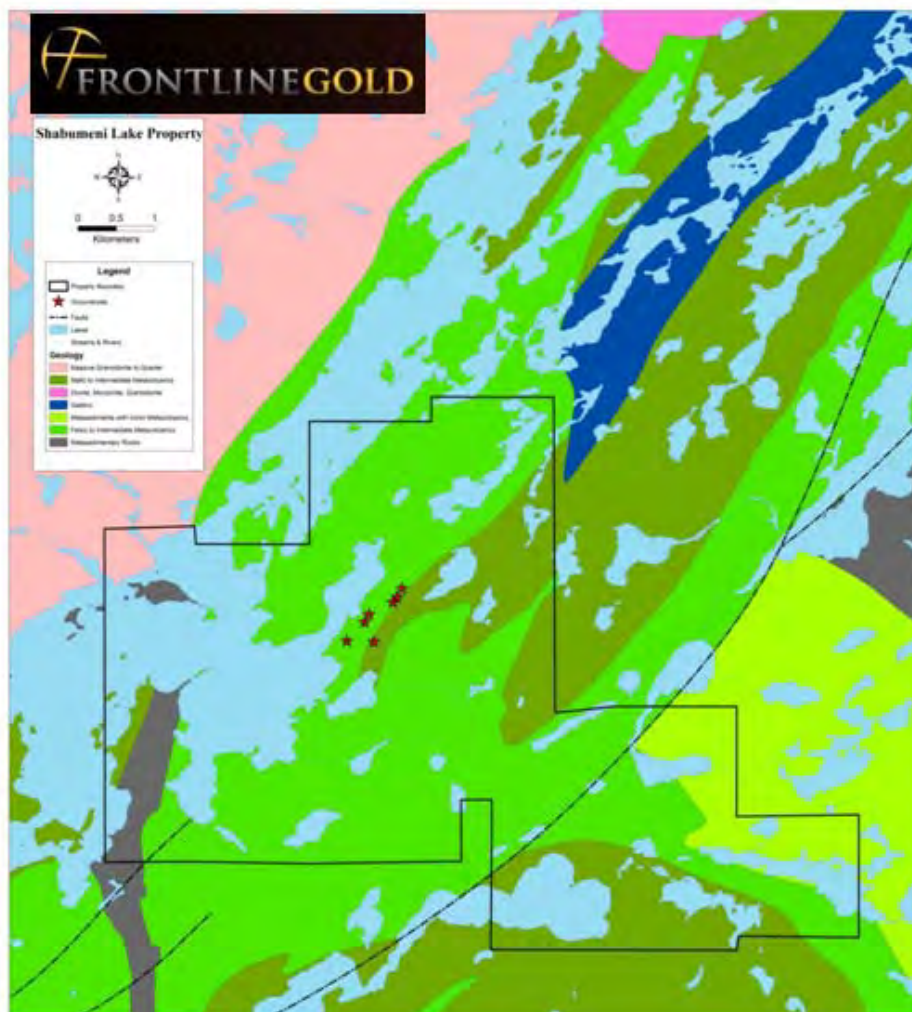


Figure 4: Property Geology of the Shabumeni Lake Property (Kleinboeck and Clark, 2007)

The southern portion of the property is reported to be underlain by dacitic to rhyodacitic tuffs with minor amounts of dacitic agglomerate and massive rhyolitic, rhyodacitic and dacitic lavas (Fig. 5). This southern section of the property covers a portion of a deformation zone that forms an easterly splay off of the regional northeast trending Swain Lake Deformation Zone. The name of Grace Lake Deformation Zone is applied to this east to southeasterly trending deformation zone (Thurston et al., 1981). Both the Swain Lake and Grace Lake Deformation Zones are considered to be strike-slip fault zones. In general, to the north and northeast of the Grace Lake Deformation Zone lies a thick sequence of predominantly clastic metasediments consisting of polymictic conglomerate, greywacke, siltstone, phyllite and magnetite iron formation. To the south of the Grace Lake Deformation Zone lies a package of metavolcanics consisting of pillow basalt, intermediate volcanoclastics and felsic volcanoclastics. There also exists the intermediate to felsic Swain East stock trending SE/NW. The Grace Lake Deformation Zone is host to three gold occurrences within the property boundary: North, South, and Bobarris (Fig. 5).

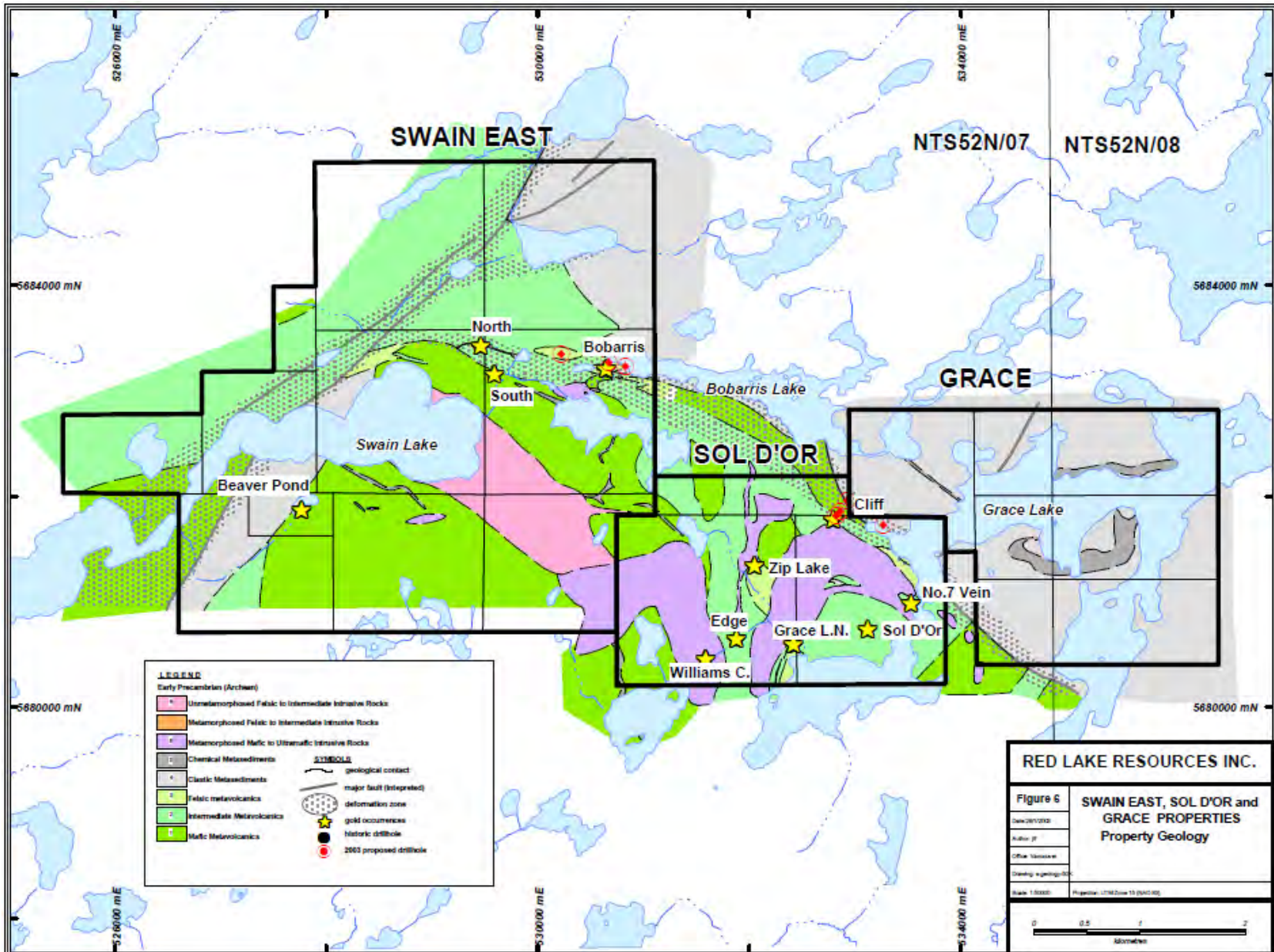


Figure 5: Map showing the location of the deformation zones (Swain Lake trending SW-NE; Grace Lake trending ~E-W) and gold showings on the southern portion of the Shabumeni Lake Property. Boundary of the Shabumeni Lake Property not shown – See Fig. 4. (Klatt et al., 2003)

3.2.3 *Shabumeni River Property*

The Shabumeni River Property is mapped as being underlain by the same lithological horizons as that which passes through the Shabumeni Lake Property. Rocks on the property trend northeasterly with intermediate to felsic metavolcanic breccia/tuff breccia (pyroclastic and/or volcanoclastic) mapped in the southeastern corner of the property along with quartz-carbonate veining containing auriferous pyrite (Stone, 1994). Stone (1998) maps this area of with quartz-carbonate veining containing auriferous pyrite as a fault zone/mylonite zone. This unit is then shown to be overlain by a thin section of pillowed mafic metavolcanics that young to the northwest. These pillowed mafic metavolcanics are overlain by a thin unit of intermediate to felsic metavolcanic tuff/lapilli tuff (pyroclastic and/or volcanoclastic) and those, in turn, are overlain by pillowed mafic metavolcanics that young to the northwest. The northwest corner of the property is mapped as a metagabbro.

3.2.4 *Skinner Property*

Thurston and Bartlett (1981) along with Stone (1998) show the property sitting on the contact between massive and pillowed mafic volcanics and a granodiorite-granite intrusion. Mapping by Fronteer in 2002 located several small outcrops on the eastern side of the property of mafic volcanics.

3.2.5 *Woman River Property*

The Woman River Property is underlain by massive and pillowed mafic metavolcanics, intermediate tuffs +/- tuff breccia +/- spherulitic flows and minor clastic metasediments (pebble/cobble conglomerates and wacke's) (Thurston, 1984).

4.0 Exploration History

4.1 Confederation Lake Property

1988: Gold Crest Minerals Inc. completed a geophysical and geological survey that covered a small portion of the western portion of this block as part of a larger property.

2003: Jilbey Gold Exploration conducted a ground magnetometer, MMI soil sampling and regional till sampling over a large area containing many claim blocks. The Woman River Property was one of the claim blocks investigated during the 2003 program.

4.2 Shabumeni Lake Property

The Shabumeni Lake Property can be divided into a north and south portion when examining the history of exploration.

The exploration on the **south** portion of the claims can be summarized as:

1966: Dome Exploration completed a series of 6 (1908 feet) drill holes that tested a electromagnetic anomaly that trends north south up the peninsula. Assays of the drilling were low but visible gold was noted in a ½ inch quartz carbonate veinlet.

1975-78: McIntyre Mines Limited completed magnetic, electromagnetic and geology surveys and one diamond drill hole on the peninsula area (similar area to Dome)

1987: Dome Exploration went back and completed one hole under the area of the reported visible gold.

2003: Jilbey Gold Exploration Ltd. completed airborne magnetic and electromagnetic surveys followed up by ground magnetic, soils and rock sampling and mobile metal ion (MMI) soil geochemistry.

2005: Jammin Rock Resources completed an airborne Electromagnetic and magnetic survey over the entire property.

2007: Merrex Gold Inc. completed line cutting (40km), geological mapping, prospecting, trenching, and sampling program focusing on the northern half of the property. During this program a new zone was discovered on the eastern shore of Swain Lake during a one day prospecting venture. A total of 8 samples were taken with 5 samples returning anomalous gold values, 2 of which assayed 4.12 g/t Au and 2.38 g/t.

2010: Frontline Gold Corporation completed a prospecting and sampling program. This program was designed to prospect specific kimberlite targets as defined by

Jilbey Gold Exploration in 2003. Though the kimberlite targets did not turn up any prospective float or outcrop, 21 samples were taken and assayed for Au. The best sample (sample # 194047) assayed at 580 ppb Au. Historical trenches, pits and drillcore were located during this time.

The exploration on the **north** portion of the claims can be summarized as:

Original trenches on quartz sulfides veins completed by unknown operators.

1969: Falconbridge Nickel completed an electromagnetic survey.

1981: Minorex Ltd. staked the northern portion of the property. Geological mapping, magnetic and VLF-EM surveys and assaying were completed and series of eight gold bearing quartz vein zones discovered.

Zone 1 (Main Zone): Composed of four veins with strike length of 280 feet. Veins are sub parallel in a 15 foot wide zone. Vein #3 was best vein with a 104 foot length, 1.62 feet wide averaging 0.12 ounces gold per ton and 0.28 ounces silver per ton.

Zone 2: Thirteen grabs assayed nil to 0.30 ounces gold per ton.

Zone 3: Eight samples nil to 0.02 ounces gold per ton.

Zone 4 (Iceberg): 2 inch to 2 foot quartz veins in a 7 foot shear. Thirteen grabs assayed nil to 0.16 ounces gold per ton.

Zone 5 (Snake): 3 – 5 inch quartz veins at the contact along a gabbro dike. Four assays range nil to 0.65 ounces gold per ton.

Zone 6 (Clap): Quartz veins up to 4 inches in mafic volcanics. Ten samples trace to 0.44 ounces gold per ton.

Zone 7: A series of 2-8 inch quartz veins in the quartz monzonite core of a gabbro intrusion. Fours grab samples assayed nil to 0.23 ounces gold per ton.

Zone 8: At the south end of a gabbro stock a four inch wide quartz lens assayed 0.22 ounces gold per ton.

1987: Marilyn Resources Inc. completed induced polarization, VLF-EM and magnetic surveys over the area defined by Minorex Ltd.. A four hole diamond drill program (~1200 feet) evaluated the two showings and the strike extensions. The program was completed concurrently and the author believed that the holes could have been better targeted if the geophysics was available before drilling.

JG 87-1 intersected 0.4 ounces gold per ton over 3.5 feet and 0.10 ounces gold over 3.0 feet under the Main Zone

JG 87-2 intersected 0.05 ounces gold per ton over 4.0 feet 50 feet north of JG 87-1

JG 87-3 intersected 0.03 ounces gold per ton over 4.0 feet beneath the Iceberg Zone.

JG 87-4 was forecasted to have stopped short of the anomaly.

1990: A. Hagar (Milestone Resources) completed 19 holes in the area of the various gold showings. These holes targeted various IP targets and the known showings. 5 holes under the Main zone, 8 beneath the Clap zone and 1 under the Snake zone.

Hole 1: IP target, 0.30 ounces gold per ton over 1.5 feet.

Hole 6: IP target, 0.04 ounces gold per ton over 4.7 feet.

Hole 11: IP target, 0.06 ounces gold per ton over 1.0 feet.

Hole 13: Main zone, 0.08 ounces gold per ton over 2.3 feet in a quartz vein.

Hole 14: Main zone, 0.12 and 0.10 ounces gold per ton over 1.2. and 2.0 foot quartz veins respectively.

Hole 15: Main zone, 0.08 ounces gold per ton over 1.5 feet in a quartz vein.

Hole 16: Main zone, 6.16 ounces gold per ton over 1.0 feet in a quartz vein.

Hole 19: Snake zone, 0.12 ounces gold per ton over 1.4 feet in a chlorite shear with 10% pyrite.

2003: Jilbey Gold Exploration completed surface sampling on some of the known gold showings as well as completed MMI and ground magnetic surveys to evaluate airborne magnetic anomalies for kimberlite potential.

2006: Merrex Gold Inc. completed surface sampling and humus sampling over some of the known gold occurrences. Two historic showings were grab sampled on the Shabumeni property. The gold results (13 grab samples) from a 70 metre strike length of the east showing included 3 samples ranging from 59 to 387 ppb, 4 samples ranging from 1308 to 2788 ppb, 3 samples ranging from 4456 to 7474 ppb and 3 samples ranging from 22184 to 30395 ppb. The gold results (6 grab samples) from the west showing ranged from 101 to 1259 ppb's. Sampling of the west showing was limited to 20 metres.

2007: Merrex Gold Inc. completed line cutting (40km), geological mapping, prospecting, trenching, and sampling program focusing on the northern half of the property. A total of 39 grab samples, 221 channel samples, 23 ICP, and 43 humus samples were collected during the program. The program succeeded in returning anomalous gold values from both previously known and unknown mineral occurrences on the property. Prospecting was focused on locating the historical showings, and re-sampling them, as well as to follow and expose the quartz veins for potential mineralization along strike. The most encouraging result was 73.6 g/t Au taken from the Bullwinkle Zone.

4.2 Shabumeni River Property

1986: Watts, Griffis and McQuat contracted out Aerodat Limited to fly a helicopter based magnetic, electromagnetic, and VLF-EM survey. No further geophysical work was suggested, while drilling was suggested on a narrow magnetic trend along the northwest boundary and on cross-cutting structures within that area.

2003: Jilbey Gold Exploration conducted a ground magnetometer, MMI soil sampling and regional till sampling over a large area containing many claim blocks. The Shabumeni River Property was one of the claim blocks investigated during the 2003 program.

4.3 Skinner Property

2002: Fronteer Development Corporation investigated what is now claim 4219847 as part of a much larger block situated between the Skinner and Woman River Properties. A series of small outcroppings of mafic metavolcanic rock were mapped in the southwestern portion of the claim indicating one sample being taken returning no gold values.

2003: Jilbey Gold Exploration conducted a ground magnetometer, MMI soil sampling and regional till sampling over a large area containing many claim blocks. The Skinner Property was one of the claim blocks investigated during the 2003 program.

2008: Merrex Gold Inc. conducted a prospecting and humus sampling program on the Skinner property. While a total of 14 rock and 98 humus samples were taken, no significant values were returned.

2010: Frontline Gold Corporation completed a prospecting and mapping program during the summer of 2010. Historic pits and trenches were located in the area. Prospecting returned three samples assaying in the multi-gram range, with the

two highest values coming from a trench containing a rusty quartz+sulphide (chalcopyrite+arsenopyrite) vein.

4.4 Woman River

2003: Jilbey Gold Exploration conducted a ground magnetometer, MMI soil sampling and regional till sampling over a large area containing many claim blocks. The Woman River Property was one of the claim blocks investigated during the 2003 program.

2010: Frontline Gold Corporation completed a prospecting program on the Woman River property. Six samples were taken with only two of these samples registering gold values just over detection limit.

5.0 2011 Exploration Program

Clark Exploration Consulting of Thunder Bay, Ontario was contracted by Frontline Gold of Bedford, Nova Scotia to conduct a surface exploration program on their Shabumeni Project. Between May and August, 2011 a prospecting, sampling and trenching program was carried out on Frontline Gold's Shabumeni Project by employees of Clark Exploration Consulting with the help of one local prospector.

The Shabumeni Project is located approximately 80 kilometres east-northeast of the town of Red Lake, Ontario. The Project consists of 5 separate claim blocks (properties) each consisting of contiguous, unpatented mining claims for a grand total of 349 units covering 5,584 hectares. The properties are known as Confederation Lake (9 units), Shabumeni Lake (256 units), Shabumeni River (15 units), Skinner (39 units) and Woman River (30 units).

The focus of the 2011 exploration program was to follow up on prospective gold and copper occurrences found on the Skinner property identified in 2010 by Frontline Gold and follow up on known gold and copper occurrences on the Shabumeni Lake property identified by Frontline Gold in 2007 and 2010. Prospecting was also carried out on the Woman River and Shabumeni River properties in an attempt to locate new gold showings.

Sample Descriptions can be found in Appendix A along with assay values and certificates found in Appendix C. All samples were sent to Accurassy in Thunder Bay, Ontario.

A daily prospecting log can be found in Appendix B, and field maps found in Appendix D.

5.1 Shabumeni Lake

The 2011 exploration program for the Shabumeni Lake claims was conducted in two phases. The first phase of the program was conducted from June -July, 2011.

Areas of interest from the 2007 and 2010 work programs were visited briefly to become familiar with the rocks on the property and area with the remainder of this initial phase spent prospecting and mapping the area around the northeastern end of Swain Lake.

Four known gold and copper showings from previous work were revisited in the area (North Showing, South Showing, Bobarris and the Rand Showing). These four areas were re-sampled and hand trenching was started on the North and South showings.

The best sample from the North Showing was sample Z079077 that assayed 18.37 ppm Au and 8330 ppm Cu hosted in a quartz+carbonate+magnetite+ sulphide (pyrite+chalcopyrite+/-pyrrhotite) vein.

Sample highlights from the South Showing include sample #Z079082, that assayed 0.8 ppm Au and 43798 ppm Cu and sample #Z079115 that assayed 1.18 ppm Au and 9566 ppm Cu. Both samples were hosted in massive sulphide type mineralization.

The second phase of the 2011 exploration consisted of exposing the North and South showings with hand excavation and the use of high-pressure hose. After these two areas were exposed and washed, channel sampling was completed to try and get an extent of the Au and Cu mineralization present. 20 channel samples were taken on the North Showing perpendicular to strike and nine channel samples taken on the South Showing along with nine more grab samples taken from recently exposed areas. Upon completion of channel sampling these two showings, mapping of the trenches was completed (Appendix D).

5.2 Skinner

The 2011 exploration program on the Skinner claim consisted of two separate phases. The initial phase consisted of a ground magnetometer survey along with mapping and prospecting along a cut grid of 30 kilometers of cut lines. The ground magnetometer survey covered 25.5 kilometers. This phase was conducted from May 17th to May 22nd. During this initial phase the historic trenches found during the 2010 exploration program were revisited and sampled. Prospecting along the rest of the grid did not yield any new showings or historic trenches. A total of 13 samples were taken during this phase with sample #920303 assaying 14.62 g/t Au.

The second phase on the Skinner property consisted of trenching, channel sampling and trench mapping of five historic trenches. This phase was conducted from June 12th to June 20th. An older style Hitachi excavator with a two yard bucket was brought in by R+W Timber of Ear Falls, Ontario to do the majority of the trenching work. After these areas were exposed a high pressure pump and hose was used to wash away the remaining overburden. Due to time constraints channel sampling was only conducted on Trench #1. A total of 20 channel samples were taken with only two samples over 200 ppb Au. Channel sampling was conducted perpendicular to strike trying to assess the gold content across the entirety of the newly exposed outcrop.

Trench maps of Trenches 1, 2, 3, 4 and 5 can be seen in Appendix D.

Grab samples were taken from the four remaining trenches, with the best assay results coming from Trench #3. Samples #079043 assayed 22.79 g/t Au and was hosted in a rusty quartz+sulphide vein/infilled shear zone.

5.3 Woman River

A total of 6 samples were taken on the Woman River property on the first day. While good mineralization was noted in the form of chalcopyrite and arsenopyrite, no

significant gold values were obtained with only 2 samples registering gold values just over detection limit.

5.4 Shabumeni River

A two day prospecting and was spent on the property and three samples were collected and sent away for assay. Traverses were conducted along the eastern edge of the claim. Mineralization was noted in the form of pyrite plus minor chalcopyrite within milky white quartz veins. Access to the property was gained by float plane.

6.0 Conclusions and Recommendations

While the 2011 surface program was successful in locating prospective mineralization and known Au and Cu showings, only a few samples off of the Skinner and Shabumeni Lake properties contained significant gold values. It is the belief of the author that the Skinner and Shabumeni Lake properties remain highly prospective for gold mineralization, and that the Woman River and Shabumeni River claim block remains underexplored.

6.1 Shabumeni Lake

With the focus of the 2011 work program being to locate and hand trench/strip the known showings on the southern part of the claim block, the area in the vicinity of the Grace Lake deformation zone remains highly prospective. The next phase should involve re-establishing the grid in the southern claims (along the northeastern shore of Swain Lake) and conduct a ground geophysics program to establish control and help define targets followed lastly by drilling. It is believed that the Grace Lake Deformation Zone is underexplored and has potential to host significant gold mineralization.

6.2 Skinner

This field season saw significant gold assays returned from historical trenches on the property. The Skinner property also sits within 2 kilometers of the historical Bathurst Lake Gold Mine which produced ~300 oz of Au during the late 1920's. The Skinner property sits within similar geology to the Bathurst Lake Gold Mine as well as in a favourable location for lode gold mineralization (mafic volcanics +/- mafic-ultramafic intrusives along the contact with a granitic intrusion). Due to the proximity of the Skinner Property to a logging road, extending the exposure of Trench #3 along strike is recommended. If warranted, a 500 meter diamond drill program to examine gold mineralization at depth across the gold bearing structure in Trench #3.

6.3 Woman River

While the Woman River did not return many samples with significant gold values it does sit in a favourable geological position. It is the feeling of the author that this area remains underexplored. More prospecting and mapping needs to be done to and get a better understanding of the local geology. With the availability of water throughout the two claims, it would be beneficial to hand trench/strip areas of interest and wash these with a high pressure hose. A data compilation for the property is warranted to determine future recommendations.

6.4 Shabumeni River

7.0 References

- Assessment Files Housed in the Red Lake Resident Geologist Office, Red Lake or accessed via www.geologyontario.mndm.gov.on.ca
- Beakhouse, G.P., Forsyth, D.M., Scott, K.V., and Wallace, H. (1989) Precambrian Geology of the Western Birch Lake Area, Southern Half, District of Kenora (Patricia Portion); Ontario Geological Survey, Map P.3118.
- Clark, G. 2007 (2006) Prospecting Report on Merrex Gold Inc.'s Claims.
- Devaney, J.R. (2001) Stratigraphy of epiclastic and volcanoclastic facies units, northern Birch-Uchi greenstone belt, Uchi Subprovince; Ontario Geological Survey, Open File Report 6030, 49p.
- Klatt, H., Stammers, M. and Fingler, J. (2003) Technical Report On The Birch Lake Project ; Swain East, Sol D'or, Grace and Mink Properties; Red Lake Mining Division Northwestern Ontario, Canada. NTS 52n/7, 52n/8; for Red Lake Resources Ltd.
- Furse, G.D. (1934) Ontario Department of Mines Annual Report, Volume 42, Part 6, p.42-45.
- Hodges, D. and Lutz, J.A. (1989) Summary Report of the Geology and Geochemistry of the Grace Lake Claims, Hodgson Option (Sol D'Or), Falconbridge Ltd.(Kidd Creek), AFRI file 52N07SE0006.
- Hodgson, R. (1992) Geological Report on the Swain Lake Gold/Base Metal Prospect. Assessment files of the Resident Geologist's office, Red Lake, Ontario.
- Hodgson, R. (1996) Report on the 1995 Field Program on the Swain Lake Property, Shabumeni Lake Area, Northwestern Ontario. Assessment files of the Resident Geologist's office, Red Lake, Ontario.
- Johns, G.W. (1979) Geology of Honeywell and McNaughton Townships, District of Kenora, Patricia Portion; Ontario Geological Survey Report 177, 60p. Accompanied by Map 2404.
- Kleinboeck, J. and Clark, G.J. (2007) Exploration Report on 2007 Surface Exploration Report On Merrex Gold Inc.'s Shabumeni Lake Property, Red Lake District, Ontario.
- Ontario Geological Survey (1991) Ontario Airborne Magnetic and Electromagnetic surveys, Archean and Proterozoic Greenstone Belts, Uchi-Bruce Lakes Area, ERLIS dataset 1026, Ministry of Northern Development and Mines, 1991.

- Parker, J.R. and Atkinson, B.T. (1992) Gold occurrences, prospects and past-producing mines of the Birch-Confederation Lakes area; Ontario Geological Survey, Open File Report 5835, 332p.
- Stott, G.M. and F. Corfu (1992) Uchi Subprovince, Chapter 6 *in* Geology of Ontario, Special Volume 4, Part 1, pp. 145 – 238; Ontario Ministry of Northern Development and Mines.
- Stone, D. and Crawford, J. (1994) Precambrian geology, Shabumeni Lake area; Ontario Geological Survey, Preliminary Map P.3285, scale 1:50,000.
- Stone, D. (1998) Precambrian geology, Trout Lake area; Ontario Geological Survey, Map P.3383, scale 1:250,000.
- Thurston, P.C. (1984) Confederation Lake; Ontario Geological Survey Map M.2498, Precambrian Geology Series, scale 1:50,000, geology 1975-6.
- Thurston, P.C., and Bartlett, J.R. (1981) Birch Lake Sheet, Kenora District; Ontario Geological Survey Preliminary Map P.2386, scale 1:126,720.
- Thurston, P.C., Jackson, M.C. and Pirie, I. (1981) Geology of the Birch Lake Area, Kenora District (Patricia Portion); Ontario Geological Survey Preliminary Map P.2387, scale 1:50,000.
- Thurston, P.C. (1985) Physical Volcanology and Stratigraphy of the Confederation Lake Area, District of Kenora (Patricia Portion); Ontario Geological Survey, Report 236, 117p. Accompanied by Map 2498.
- Thurston, P.C. and Paktunc, D. (1985) Pakwash Lake Sheet, Western Uchi Subprovince Stratigraphy (Troutlake River area), Kenora District (Patricia Portion); Ontario Geological Survey, Preliminary Map P.2858, scale 1:50 000

Appendices

Appendix A
Sample Descriptions

SKINNER								
Sample ID	Property	Datum	UTM ZONE	Easting	Northing	Sample Type	Sample Description	Name
I920301	Skinner	NAD83	15	506091	5676211	Grab – Outcrop	Grey to dark grey rock, Intense Fe-oxide staining on weathered surface. Appears to be intensely silicified. 2 cm to 6 cm wide qtz+sulphide vein. Quartz is a bluish, clear, vitreous type with sulphides (chalcopyrite +pyrite) hosted along vein contacts.	Altered mafic metavolcanic
I920302	Skinner	NAD83	15	506038	5676250	Grab – Outcrop	Greenish, dark grey. Fine-grained to aphanitic. Non-magnetic. Silicified, carbonatized, sheared?? mafic meta-volcanic. Weathered surface is highly oxidized.	Altered mafic metavolcanic
I920303	Skinner	NAD83	15	506220	5676569	Grab – Outcrop	Appears to be a "sugary" milky, white qtz rich rock with intense Fe-oxide staining along weathered surface and fractures. Intense sulphidization, giving the qtz a greyish blue hue to it.	Qtz-rich aplite???
I920304	Skinner	NAD83	15	505670	5675836	Grab – Float?	1cm to 2.5 cm inch qtz vein hosted in a fine grained to aphanitic groundmass. Intensely chloritized groundmass. Qtz vein is milky white w/ 3-5% sulphides (chalco).	Chloritized mafic metavolcanic
I920305	Skinner	NAD83	15	506164	5676020	Grab – Outcrop	Greenish, dark grey. Fine-grained to aphanitic. Non-magnetic. Silicified, very minor carbonate alteration. 1-1.5 cm wide qtz vein, no sulphides within vein. Sulphides dissem in mafic meta-volcanic host. Weathered surface is highly oxidized.	Altered mafic metavolcanic
I920306	Skinner	NAD83	15	506588	5676497	Grab – Outcrop	Sheared mafic metavolcanic rock. Non-magnetic (other than the pyrrhotite) intensely silicified, carbonatized. Host rock is greenish in color and aphanitic. Qtz+carb+sulphide vein approx 1 cm wide.	Sheared mafic metavolcanic
I920307	Skinner	NAD83	15	506588	5676497	Grab – Outcrop	Sheared mafic metavolcanic rock. Non-magnetic intensely silicified, carbonatized. Host rock is greenish in color and aphanitic. Intense Fe-Oxide staining with sulphides occurring mostly as fine grained disseminations. No veining	Sheared mafic metavolcanic
I920308	Skinner	NAD83	15	504895	5675925	Grab - Outcrop	Greenish grey in color with wispy lenses of a cream buff colored variety (possibly more silicified??) slightly sheared mafic metavolcanic rock. Aphanitic groundmass. Minor 1-2 mm qtz veinlets with or without sulphides.	Mafic metavolcanic
I920309	Skinner	NAD83	15	506216	5675921	Grab – Outcrop	Fine grained to aphanitic, greenish grey in color. Moderately silicified and carbonatized. 2 cm wide milky white qtz vein.	Mafic metavolcanic
I920310	Skinner	NAD83	15	506096	5676218	Grab – Outcrop	Appears to be a "sugary" milky, white qtz rich rock with intense Fe-oxide staining along weathered surface and fractures. Bands of green chlorite?? No sulphides.	Aplite??
I920311	Skinner	NAD83	15	505954	5676186	Grab – Outcrop	Greenish dark grey in color, very fine-grained to aphanitic, slightly sheared mafic metavolcanic rock. Well foliated w/ disseminated sulphides in bands. Non-magnetic.	Mafic metavolcanic
I920312	Skinner	NAD83	15	506100	5676392	Grab – Float	Piece of milky white qtz approx 10 cm x 5 cm x 5 cm. Zones with moderate amounts of Fe-Oxide staining.	Qtz
I920313	Skinner	NAD83	15	506187	5676495	Grab – Outcrop	Fine grained to aphanitic, greenish grey in color. Moderately silicified and carbonatized. See euhedral, vuggy qtz style veining with a "box work" type texture, possibly weathering away of carbonate??	Mafic metavolcanic
WOMAN RIVER								
Sample ID	Property	Datum	UTM ZONE	Easting	Northing	Sample Type	Sample Description	Name
Z 079001	Woman River	NAD83	15	518208	5676146	Grab – Outcrop	Intense Fe-oxide staining on weathered surface and fresh surface. Host rock is greenish grey in color with aphanitic groundmass, silicified and carbonatized. Sulphides appear to be pyrite and chalcopyrite +/- arsenopyrite (??) and approx 8%. Non-magnetic.	Mafic metavolcanic

Z 079002	Woman River	NAD83	15	518208	567146	Grab – Outcrop	Qtz-infilled shear zone/breccia. Milky white qtz infilling, some areas of remnant euhedral qtz crystals, suggestive of open-space filling. Chlorite and minor carb along vein contact/breccia contacts with host rock. Host rock is mafic metavolcanics described above. No visible sulphides	Qtz infilled breccia
Z 079003	Woman River	NAD83	15	517211	5675563	Grab – Float??	Host is dark greenish grey w/ aphanitic groundmass. Intensely oxide stained, w/ blue-green staining (due to chalcopryrite), silicified and carbonatized. Sulphides approx 12-15% in areas with chalcopryrite+pyrite+arsenopyrite	Altered mafic metavolcanic
Z 079004	Woman River	NAD83	15	517677	5674908	Grab – Outcrop	Host is highly sheared intermediate volcanic, fractures quite easily so difficult to grab a proper piece. Appears to be small 8-10 inch wide zone with increased sulphides. Up to 10%. Arsenopyrite+Pyrite+/-chalcopryrite??	Sheard intermediate metavolcanic
Z 079005	Woman River	NAD83	15	517749	5675009	Grab – Outcrop	Intensely sheared intermediate (??) metavolcanic that is very sulphide rich. On weathered surface, it appears intensely Fe-Oxide stained, on fresh surface, dominantly sulphides occurring as blebs, veins, and disseminations. Pyrite+Arsenopyrite+/-Chalcopryrite.	Sheard intermediate metavolcanic
Z 079006	Woman River	NAD83	15	517202	5675911	Grab – Outcrop	Intensely sheared intermediate (??) metavolcanic that is sulphide rich. On weathered surface, it appears intensely Fe-Oxide stained, on fresh surface, dominantly sulphides occurring as blebs, veins, and disseminations. Pyrite+Arsenopyrite+/-chalcopryrite. Also appears to be brecciated with silica+carb infilling	Sheard intermediate metavolcanic
Z 079007	Woman River	NAD83	15	517169	5675908	Grab – Outcrop	Intensely sheared intermediate (??) metavolcanic that is sulphide rich. On weathered surface, it appears intensely Fe-Oxide stained, on fresh surface, dominantly sulphides occurring as blebs, veins, and disseminations. Pyrite+Arsenopyrite+/-chalcopryrite. Sulphides up to 15%.	Sheared intermediate metavolcanic
Z 079008	Woman River	NAD83	15	518096	5675492	Grab – Outcrop	Greyish, blue green in color w/ aphanitic groundmass, non-magnetic. Almost a sulphide vein breccia, with arsenopyrite veins/veinlets up to 4 mm and minor intergrown chalcopryrite. Host is silicified with localized areas of carbonatization. In outcrop, also see a 10 cm x 10 cm carbonate breccia.	Sheared intermediate metavolcanic??
Z 079009	Woman River	NAD83	15	517045	5675560	Grab – Outcrop	Qtz vein along lakeshore, hosted within intermediate metavolcanics. Vein is up 8 inches wide, with vuggy, euhedral to subhedral qtz crystals present. Can also see colloform banding present, suggestive of open-space filling. Very minor amount of chalcopryrite present but host rock (intermediate metavolcanic) is enriched with chalco+arsenopyrite to about 3-5%. Sample includes both qtz vein along with host rock.	Epithermal type qtz vein hosted within intermediate metavolcanic
Z 079010	Woman River	NAD83	15	517157	5675628	Grab – Outcrop	Milky white qtz vein hosted within intermediate metavolcanics. Vein is up to 3-5 inches wide, with vuggy euhedral to subhedral qtz crystals present. Also colloform banding present. Very similar to above sample with increased chl+carbontate along contact with host rock.	Epithermal type qtz vein hosted within intermediate metavolcanic
Z 079011	Woman River	NAD83	15	517270	5676283	Grab – Outcrop	Dark to blue grey in color, aphanitic groundmass. Moderately silicified. Crosscut by parallel to subparallel veinlets of 1-2mm wide hard black mineral (tourm???) w/ slight increase in sulphides along these. Sulphides approx 1-2% chalco+/-arseno??. Also evidence of vuggy qtz veining on surface. Possibly silicified intermediate metavolcanic?	Silicified intermediate metavolcanic
Z 079012	Woman River	NAD83	15	517878	5676276	Grab – Outcrop	Sample consists of qtz+carbonate vein altered wall rock. Wall rock appears to be silica flooded and carbonatized along w/ increase in cl and sulphides near contact. Host appears to be altered intermediate metavolcanic rock?? Sulphides approx 7-9% and include chalcopryrite+arsenopyrite +/-pyrite.	Vein contact altered intermediate metavolcanic

Z 079013	Woman River	NAD83	15	517945	5676368	Grab – Outcrop	Intense Fe-oxide staining on weathered surface and fresh surface. Host rock is greenish grey in color with aphanitic groundmass, silicified and carbonatized. Sulphides appear to be chalcopyrite +/- arsenopyrite (??) and approx 5-7%. Non-magnetic. Sulphides concentrated along "gossan rind".	Silicified intermediate metavolcanic
Z 079014	Woman River	NAD83	15	518138	5675390	Grab-Outcrop	Green-grey fine grained, heavy iron oxide staining, strongly magnetic black mineral in sulphide accumulations, arseno/chalcopyrite in accumulations and throughout sample (~20%), sulphide veins 1-3mm. Minor carbonate veins ~1mm.	Sulphidized intermediate Metavolcanic
Z 079015	Woman River	NAD83	15	517085	5675197		Fine grained to aphanitic. Brownish grey in color. Sheared up intermediate to mafic metavolcanic? Has a "fibrous" texture, with an almost talcose/greasy feel to it. Very finely disseminated sulphides. Too fine grain to tell but appear to be silverish in color (steely pyrite or arsenopyrite?)	Sheared intermediate metavolcanic
SKINNER TRENCH								
Z 079016	Skinner	NAD83	15	506082	5676212	Chanell Line#1 Start	Shear Zone-Fe-Oxide and/ or Fe-carb staining present on weathered surface. Sulphides range from 10-12% along line. Pyr+Arsenopyrite+Chalcopyrite+/-pyrrhotite. Minor milky-white "sugary" qtz veins, some glassy dark grey "smoky" qtz veins.	Qtz+carb+sulphide infilled shear zone.
Z 079017	Skinner	NAD83	15			LINE #1	Shear Zone-Fe-Oxide and/ or Fe-carb staining present on weathered surface. Sulphides range from 10-12% along line. Pyr+Arsenopyrite+Chalcopyrite+/-pyrrhotite. Minor milky-white "sugary" qtz veins, some glassy dark grey "smoky" qtz veins.	Qtz+carb+sulphide infilled shear zone.
Z 079018	Skinner	NAD83	15			LINE #1	Shear Zone-Fe-Oxide and/ or Fe-carb staining present on weathered surface. Sulphides range from 10-12% along line. Pyr+Arsenopyrite+Chalcopyrite+/-pyrrhotite. Minor milky-white "sugary" qtz veins, some glassy dark grey "smoky" qtz veins.	Qtz+carb+sulphide infilled shear zone.
Z 079019	Skinner	NAD83	15			LINE #1	Shear Zone-Fe-Oxide and/ or Fe-carb staining present on weathered surface. Sulphides range from 10-12% along line. Pyr+Arsenopyrite+Chalcopyrite+/-pyrrhotite. Minor milky-white "sugary" qtz veins, some glassy dark grey "smoky" qtz veins.	Qtz+carb+sulphide infilled shear zone.
Z 079020	Skinner	NAD83	15	506085	5676212	Channel Line#2 Start	Shear Zone-Fe-Oxide and/ or Fe-carb staining present on weathered surface. Sulphides range from 10-12% along line. Pyr+Arsenopyrite+Chalcopyrite+/-pyrrhotite. Minor milky-white "sugary" qtz veins, some glassy dark grey "smoky" qtz veins.	Qtz+carb+sulphide infilled shear zone.
Z 079021	Skinner	NAD83	15			LINE #2	Shear Zone-Fe-Oxide and/ or Fe-carb staining present on weathered surface. Sulphides range from 10-12% along line. Pyr+Arsenopyrite+Chalcopyrite+/-pyrrhotite. Minor milky-white "sugary" qtz veins, some glassy dark grey "smoky" qtz veins.	Qtz+carb+sulphide infilled shear zone.
Z 079022	Skinner	NAD83	15			LINE #2	Shear Zone-Fe-Oxide and/ or Fe-carb staining present on weathered surface. Sulphides range from 10-12% along line. Pyr+Arsenopyrite+Chalcopyrite+/-pyrrhotite. Minor milky-white "sugary" qtz veins, some glassy dark grey "smoky" qtz veins.	Qtz+carb+sulphide infilled shear zone.
Z 079023	Skinner	NAD83	15	506096	5676219	Channel Line#3 Start	Shear Zone-Fe-Oxide and/ or Fe-carb staining present on weathered surface. Sulphides range from 10-12% along line. Pyr+Arsenopyrite+Chalcopyrite+/-pyrrhotite. Minor milky-white "sugary" qtz veins, some glassy dark grey "smoky" qtz veins.	Sheared Mafic metavolcanic
Z 079024	Skinner	NAD83	15			LINE #3	Shear Zone-Fe-Oxide and/ or Fe-carb staining present on weathered surface. Sulphides range from 10-12% along line. Pyr+Arsenopyrite+Chalcopyrite+/-pyrrhotite. Minor milky-white "sugary" qtz veins, some glassy dark grey "smoky" qtz veins.	Sheared Mafic metavolcanic

Z 079025	Skinner	NAD83	15			LINE #3	Shear Zone-Fe-Oxide and/ or Fe-carb staining present on weathered surface. Sulphides range from 10-12% along line. Pyr+Arsenopyrite+Chalcopyrite+/-pyrrhotite. Minor milky-white "sugary" qtz veins, some glassy dark grey "smoky" qtz veins.	Sheared Mafic metavolcanic
Z 079026	Skinner	NAD83	15			LINE #3	Contact of moderately altered mafic metavolcanic w/ large volcanic clast???? Clast is not altered and appear that the shears go around this less altered unit. Or possibly "clast" caught within shear.	Contact of sheared mafic metavolcanic and less altered mafic metavolcanic
Z 079027	Skinner	NAD83	15			LINE #3	Shear Zone-Fe-Oxide and/ or Fe-carb staining present on weathered surface. Sulphides range from 10-12% along line. Pyr+Arsenopyrite+Chalcopyrite+/-pyrrhotite. Minor milky-white "sugary" qtz veins, some glassy dark grey "smoky" qtz veins.	Sheared mafic metavolcanic
Z 079028	Skinner	NAD83	15			LINE #3	Shear Zone-Fe-Oxide and/ or Fe-carb staining present on weathered surface. Sulphides range from 10-12% along line. Pyr+Arsenopyrite+Chalcopyrite+/-pyrrhotite. Minor milky-white "sugary" qtz veins, some glassy dark grey "smoky" qtz veins.	Sheared mafic metavolcanic
Z 079029	Skinner	NAD83	15			LINE #3	This sample cut across the above described unit (intensely sheared) going through to another "clast" of less altered mafic metavolcanic material.	Contact of sheared mafic metavolcanic and less altered mafic metavolcanic
Z 079030	Skinner	NAD83	15			LINE #3	Shear Zone-Fe-Oxide and/ or Fe-carb staining present on weathered surface. Sulphides range from 10-12% along line. Pyr+Arsenopyrite+Chalcopyrite+/-pyrrhotite. Minor milky-white "sugary" qtz veins, some glassy dark grey "smoky" qtz veins.	Sheared mafic metavolcanic
Z 079031	Skinner	NAD83	15			LINE #3	Shear Zone-Fe-Oxide and/ or Fe-carb staining present on weathered surface. Sulphides range from 10-12% along line. Pyr+Arsenopyrite+Chalcopyrite+/-pyrrhotite. Minor milky-white "sugary" qtz veins, some glassy dark grey "smoky" qtz veins.	Sheared mafic metavolcanic
Z 079032	Skinner	NAD83	15	506098	5676212	Channel Line#4 Start	Shear Zone-Fe-Oxide and/ or Fe-carb staining present on weathered surface. Sulphides range from 10-12% along line. Pyr+Arsenopyrite+Chalcopyrite+/-pyrrhotite. Minor milky-white "sugary" qtz veins, some glassy dark grey "smoky" qtz veins.	Sheared mafic metavolcanic
Z 079033	Skinner	NAD83	15			LINE #4	Shear Zone-Fe-Oxide and/ or Fe-carb staining present on weathered surface. Sulphides range from 10-12% along line. Pyr+Arsenopyrite+Chalcopyrite+/-pyrrhotite. Minor milky-white "sugary" qtz veins, some glassy dark grey "smoky" qtz veins.	Sheared mafic metavolcanic
Z 079034	Skinner	NAD83	15			LINE #4	Shear Zone-Fe-Oxide and/ or Fe-carb staining present on weathered surface. Sulphides range from 10-12% along line. Pyr+Arsenopyrite+Chalcopyrite+/-pyrrhotite. Minor milky-white "sugary" qtz veins, some glassy dark grey "smoky" qtz veins.	Sheared mafic metavolcanic
Z 079035	Skinner	NAD83	15	506103	567208	Channel Line#5 Start	Shear Zone-Fe-Oxide and/ or Fe-carb staining present on weathered surface. Sulphides range from 10-12% along line. Pyr+Arsenopyrite+Chalcopyrite+/-pyrrhotite. Minor milky-white "sugary" qtz veins, some glassy dark grey "smoky" qtz veins.	Sheared mafic metavolcanic
Z 079036	Skinner	NAD83	15	506097	5676212	Grab – Trench#1	VERY intensely sheared, intense Fe-Oxide and/or Fe-Carb staining, sulphides approx 10% w/ Arsenopyrite+chalcopyrite+pyrrhotite. Qtz is milky white "sugary" in appearance. Possibly recrystallized qtz??	Qtz+sulphide infilled shear zone.
Z 079037	Skinner	NAD83	15	506087	5676204	Grab – Trench#1	VERY intensely sheared, intense Fe-Oxide and/or Fe-Carb staining, sulphides approx 10% w/ Arsenopyrite+chalcopyrite+pyrrhotite. Qtz is milky white "sugary" in appearance. Possibly recrystallized qtz??	Qtz+sulphide infilled shear zone.
Z 079038	Skinner	NAD83	15	506088	5676205	Grab – Trench#1	Intensely sheared mafic metavolcanic. Slight Fe-oxide and/or Fe-carb staining. Sulphides approx 10%, occurring as blebs and fine-grained disseminations. Arsenopyrite+chalcopyrite.	Sheared Mafic metavolcanic

Z 079039	Skinner	NAD83	15	506048	5676270	Grab – Trench#2	Located at the northern edge of trench#2. Unit is highly fractured, intensely sheared and intense Fe-Ox and/or Fe-Carb stained on weathered surface. Up to 9mm wide sulphide veinlets w/ pyr+arsenopyrite+/- chalcopyrite. Unit is silica flooded and appears to be altered/sheared mafic metavolcanics. Slightly magnetic.	Intensely sheared mafic metavolcanics
Z 079040	Skinner	NAD83	15	506054	5676276	Grab – Trench#2	Highly sheared, intensely altered zone. Sulphides vary from 5-15% (pyr+arsenopyrite+/-chalcopyrite). Unit is very crumbly and Fe-Oxide stained to a point where the protolith is unrecognizable.	Intensely weathered, sheared sulphide-rich rock.
Z 079041	Skinner	NAD83	15	506051	5676276	Grab – Trench#2	Quartz vein hosted in mafic metavolcanics. Vein up to 12 cm wide. Milky white quartz, some glassy, vitreous quartz, intense chloritization along vein contacts, with some chalcopyrite forming along contacts as well. Sulphides are 1-3% and include only visible chalcopyrite.	Quartz vein
Z 079042	Skinner	NAD83	15	506224	5676562	Grab – Trench#3	Highly sheared, mafic metavolcanics. Very well foliated w/ alternating bands of milky white "sugary" qtz+sulphide and altered mafic metavolcanics. Sulphides approx 5%, occurring as fine grained disseminations and masses. Bands up to 5 mm wide.	Sheared Mafic metavolcanic
Z 079043	Skinner	NAD83	15	506227	5676560	Grab – Trench#3	Highly sheared, intensely Fe-ox/Fe-carb?? stained, sulphides 7-10% w/ arseno+chalco. Hosted in milky white/"sugary" qtz veins, sulphides also form some 2-4 mm wide bands, where sulphides increase to 20%. Sulphides occur as blebs and disseminations. Also bands rich w/ a lime-green mica?? Possibly a Chromium-rich mica/fuschite?	Sugary qtz+sulphide infilled Shear zone
Z 079044	Skinner	NAD83	15	506052	5676261	Grab – Trench#2	Qtz vein within shear zone in metavolcanic, minor shear zone. Qtz is blue-gray, not massive, vuggy text, no visible mineralization.	Qtz vein
Z 079045	Skinner	NAD83	15	506041	5676247	Grab – Trench #5	Qtz vein adjacent to shear zone in slightly bleached, visibly altered pillowed metavolcanics. Mineralized, chalcopyrite with minor chlorite. Qtz has blue gray hue, up to 30 cm wide but generally 9 cm wide.	
Z 079046	Skinner	NAD83	15	506217	5676562	Grab – Trench #3	Heavily rusted quartz filled shear zone/fracture. Qtz is a light gray with greenish hues. Heavily chloritized, contains sulphides, strongly foliated. Weathered surface is extremely rusted.	Quartz infilled shear zone
Z 079047	Skinner	NAD83	15	506223	5676566	Grab – Trench#3	Chalky, sugary white qtz, abundant pyrrhotite, up to 30% on some surfaces. Slightly less rusted weathered surface. Trace chalcopyrite, minor chlorite, weakly foliated.	Qtz vein
SHABUEMENI LAKE								
Sample ID	Property	Datum	UTM ZONE	Easting	Northing	Sample Type	Sample Description	Name
Z 079048	Shabumeni Lake	NAD83	15	529463	5683418	Grab – NS	Greenish dark grey in color, aphanitic groundmass, intensely Fe-Oxide and/or Fe-Carb staining on weathered surface. Very magnetic. Sulphides approx 5-7%. Disseminated and semi massive to massive in places. Dominantly pyrrhotite+pyrite+/- chalcopyrite (or pyrite weathering?) Some euhedral pyrite. Moderate to strong carbonate flooding. Weak to moderate foliation defined by shear bands??	Sheared Mafic metavolcanic
Z 079049	Shabumeni Lake	NAD83	15	529464	5683419	Grab- NS	Greenish dark grey in color, aphanitic groundmass. Very magnetic. Sulphides approx 3%. More strung out, not disseminated. Dominantly pyrite+pyrrhotite+/- chalcopyrite (or pyrite weathering?) Some euhedral pyrite. Moderate to weak carbonate flooding. More magnetic, wispy lenses of magnetite-rich zones.	Sheared Mafic metavolcanic

Z 079050	Shabumeni Lake	NAD83	15	529983	5683556	Grab – Outcrop RS#1	Creamy to pink in color, potassic alteration??, weak to moderate carbonate flooding, dominantly along shear planes/foliation planes?? Non-magnetic, fissile in outcrop. Ankerite (weathering??)+pyrite. Sulphides approx 15, Possibly felsic ?? pyroclastic tuff protolith?? Sericite rich. Moderately sheared. Sample has mm to cm scale qtz veins in it.	Sericite schist
Z 079051	Shabumeni Lake	NAD83	15	529978	5683553	Grab – Outcrop RS#2	Cream to salmon color, more massive zone. Cm scale zones of 25% pyrite and disseminated sulphides. Qtz whisps crosscut/perpendicular to foliation, cm-scale. Non-magnetic, weakly foliated, weak carb alteration along fractured surfaces, weak ankerite?? Rusty, soft weathering, sericite-rich layers between qtz veins. Moderate to strong quartz flooding.	
Z 079052	Shabumeni Lake	NAD83	15	529978	5683554	Grab – Outcrop RS#3	Cream to salmon color, more massive zone. Cm scale zones of 25% pyrite and disseminated sulphides. Qtz whisps crosscut/perpendicular to foliation, cm-scale. Non-magnetic, moderately foliated, weak carb alteration along fractured surfaces, weak ankerite?? Rusty, soft weathering, sericite-rich layers between qtz veins. Moderate to strong quartz flooding.	
Z 079053	Shabumeni Lake	NAD83	15	529979	5683555	Grab-Outcrop RS#4	Cream to salmon color, more massive zone. Patchy zones of pyrite and disseminated sulphides up to 7-8%. Qtz whisps crosscut/perpendicular to foliation, cm-scale. Non-magnetic, moderately foliated, weak carb alteration along fractured surfaces, weak ankerite?? Rusty, soft weathering, sericite-rich layers between qtz veins. Moderate to strong quartz flooding. Mm-scale veinlets of of whispy lenses of tourmaline?? Minor chlorite. CM scale of qtz and Fe-Carb. Moderately foliated.	
Z 079054	Shabumeni Lake	NAD83	15	529979	5683556	Grab – Outcrop RS#5	Creamy to pink in color, potassic alteration??, weak carbonate flooding, dominantly along shear planes/foliation planes?? Non-magnetic, fissile in outcrop. Ankerite (weathering??)+pyrite. Sulphides approx 2%, Possibly felsic ?? pyroclastic tuff protolith?? Sericite rich. Moderate to strongly sheared. Sample has mm scale qtz veins in it. Bands of sericite rich material.	
Z 079055	Shabumeni Lake	NAD83	15	529979	5683555	Grab – Outcrop RS#6	Cream to salmon color, more massive zone. Trace to 2% pyrite, occurring as euhedral blebs. . Qtz whisps crosscut/perpendicular to foliation, cm-scale. Non-magnetic, moderately foliated, weak to no carb alteration along fractured surfaces, weak ankerite?? Rusty, soft weathering, sericite-rich layers between qtz veins. Moderate to strong quartz flooding. Mm-scale veinlets of of whispy lenses of tourmaline?? Minor chlorite. CM scale of qtz and Fe-Carb. Moderately foliated. Along vein contacts see chlorite?? or Tourmaline?	
Z 079056	Shabumeni Lake	NAD83	15	529979	5683554	Grab – Outcrop RS#7	Moderate to strong foliation. Creamy to pink in color, potassic alteration??, weak to none carbonate flooding, Non-magnetic, fissile in outcrop. Ankerite (weathering??)+pyrite. Sulphides approx 1%, Fine grained pyrite. Possibly felsic ?? pyroclastic tuff protolith?? Sericite rich. Moderate to strongly sheared. Sample has mm scale qtz veins in it. Bands of sericite rich material.	
Z 079057	Shabumeni Lake	NAD83	15	529980	5683555	Grab – Outcrop RS#8	Moderate to strong foliation. Creamy to pink in color, potassic alteration??, little to no carbonate flooding, Non-magnetic, fissile in outcrop. Ankerite (weathering??)+pyrite. Sulphides approx 1-2%, Fine grained pyrite. Possibly felsic ?? pyroclastic tuff protolith?? Sericite rich. Moderate to strongly sheared. Sample has mm scale qtz veins in it. Bands of sericite rich material.	

Z 079058	Shabumeni Lake	NAD83	15	529981	5683555	Grab – Outcrop RS#9	Creamy to pink in color, potassic alteration??, weak to moderate carbonate flooding, dominantly along shera planes/foliation planes?? Non-magnetic, fissile in outcrop. Ankerite (weathering??)+pyrite. Sulphides approx 2%, Possibly felsic ?? pyroclastic tuff protolith?? Sericite rich. Moderately sheared. Sample has mm to cm scale qtz veins in it.	
Z 079059	Shabumeni Lake	NAD83	15	529980	5683556	Grab – Outcrop RS#10	Creamy to pink in color, potassic alteration??, moderate to strong carbonate flooding, dominantly along shera planes/foliation planes?? Non-magnetic, fissile in outcrop. Ankerite (weathering??)+pyrite. Sulphides approx 1% occurring as fine-grained euhedral cubes. Sericite rich. Moderately sheared. Sample has mm to cm scale qtz veins in it.	
Z 079060	Shabumeni Lake	NAD83	15	529980	5683556	Grab – Outcrop RS#11	Greenish light grey, torquise in color. Mm scale ankerite veins, silica rich, sericite rich bands w/in the silica flooded planes. Trace sulphides, finely disseminated pyrite??	
Z 079061	Shabumeni Lake	NAD83	15	529981	5683557	Grab – Outcrop RS#12	4 cm wide quartz carbonate infilled shear zone. Ankerite weathering on surface. Sulphides up to 5% in places, along vein contact get increase in chlorite and sericite Deformed veins, boudinaged, weakly carbonate altered.	
Z 079062	Shabumeni Lake	NAD83	15	529981	5683558	Grab – Outcrop RS#13	Intenesely sheared sericite schist. Trace to 2-3% sulphides along some surfaces, occurring as euhedral fine grained cubes. Minor rusting on weathered surface. Mm scale ankerite vein. 60 cm wide section representing most intensely sheared along sample width. Crumbles to a fine, dusty powder.	
Z 079063	Shabumeni Lake	NAD83	15	529982	5683558	Grab – Outcrop RS#14	4-5 cm wide quartz carbonate infilled shear zone. Ankerite weathering on surface. Sulphides up to 1-3% in places, sulphides occurring as fine-grained disseminations, along vein contact get increase in chlorite and sericite Deformed veins, boudinaged, weak to moderate carbonate flooded. Chl+sericite define foliation planes, moderate foliation.	
Z 079064	Shabumeni Lake	NAD83	15	529981	5683559	Grab – Outcrop RS#15	Intenesely sheared sericite schist. 3-5% sulphides along some surfaces, occurring as euhedral fine grained weathered cubes. Minor rusting on weathered surface. Mm scale ankerite vein. 60 cm wide section representing most intensely sheared along sample width. Crumbles to a fine, dusty powder. Fissile in outcrop.	
Z 079065	Shabumeni Lake	NAD83	15	529981	5683560	Grab – Outcrop RS#16	Moderate to strong carbonate alteration, ankerite rimmed folded, cm-scale quartz veins anastomozing through it. Chlorite occurring along vein contacts, chlorite+sericite schist. 3% pyrite throughout sample. Potassic alteration within veins???	
Z 079066	Shabumeni Lake	NAD83	15	529981	5683561	Grab – Outcrop RS#17	Greenish medium grey in color. Moderate to strongly foliated, strong carbonate flooding, foliation defined by chlorite. Wallrock. Gradational outwards to massive. Trace to nil sulphides.	Chlorite schist
Z 079067	Shabumeni Lake	NAD83	15	529943	5683545	Grab – Outcrop	Structural measurement 278/86 degrees folation. Greenish medium grey in color. Moderate to strongly foliated, strong carbonate flooding, foliation defined by chlorite. Modertae to strong silica flooding giving it a "cherty" appearance. Sulphides trace to nil. Sericite+chlorite between silica-rich layers.	
Z 079068	Shabumeni Lake	NAD83	15	529312	5683471	Blasted trench/outcrop??	Milky white qtz vein with variable thickness, 1-10 cm in width, strongly chloritized. Within vein contact and wallrock, moderate to strong carbonate flooding in qtz vein, possibly some ankerite? Veins crosscutting qtz veins and incorporated within qtz vein.	Qtz vein

Z 079069	Shabumeni Lake	NAD83	15	530635	5683201	Grab – Outcrop	Hosted in Bobarris Pit. Rock is aphanitic, tannish buff in color, almost "cherty" in places. Very weak magnetism magnetite or pyrrhotite?. Sulphides 5-6% with arsenopyrite+/-pyrite. Strongly silica-flooded. Fissile in nature but still coherent.	Silica flooded ? Sericite schist
Z 079070	Shabumeni Lake	NAD83	15	529629	5683330	Grab – Outcrop	Meta-BIF. Dark grey to black in color. Containing cherty, banded magnetite rich layers. Deformed qtz veins up to 1 cm with sulphides. Sulphides pyrite+chalcopyrite+/-pyrrhotite(?), occurring as fine-grained disseminations and stringers up to 3-5 mm of pure sulphides. Weathered surfaces can be quite rusty. Carbonate flooding locally strong, possibly well-foliated (or seeing bedding planes??). Some very Fe-oxide rich "pockets" within the rock. Strongly magnetic	Meta-BIF
Z 079071	Shabumeni Lake	NAD83	15	530635	5683201	Grab – Outcrop	Hosted in Bobarris Pit. Rock is aphanitic, tannish buff in color, intensely oxidized on weathered surface. Very fissile in nature, crumbles to dusty bits. Can see evident quartz-rich elongated pods?? that host the sulphides. Sulphides up to 3% in these pods, occurring as fine-grained disseminations, mostly arsenopyrite+pyrite. Non-magnetic.	Sericite schist
Z 079072	Shabumeni Lake	NAD83	15	530000	5683433	Grab – Outcrop	Dark greenish grey in color, very well-foliated. Sulphides are coarse grained (up to 1cm) euhedral cubes occurring along foliation planes. Possibly some "chalcopyrite disease" where the pyrite being exsolved to chalcopyrite? Weakly magnetic.	Sheared mafic metavolcanic
Z 079073	Shabumeni Lake	NAD83	15	531124	5682695	Float	Green in color, aphanitic. Intensely chloritized w/ euhedral pyrite cubes up to 5 mm, hosted within foliation planes. Also, some blebby pyrite+/-chalcopyrite. 2 cm wide qtz+carb+pyrite vein going through host rock. Wall rock is an intensely foliated on one side of vein and only moderately to weakly foliated on other side of vein (not sure what is HW and FW because its float). Sulphides 3-5% w, majority being in host rock. Also carb concentrated along fracture surfaces and vein contact.	Qtz vein hosted in mafic metavolcanic
Z 079074	Shabumeni Lake	NAD83	15	528992	5683394	Grab – Outcrop	Black to dark grey in color. Intense Fe-Oxide staining on weathered surface. Localized intense carbonatization. Get very magnetic zones, almost appearing as BIF clasts or deformed jasper nodules. Intense to moderate epidote flooding. Qtz is milky white and hosts sulphides, appears as deformed vein clasts. Sulphides approx 1% and occur as fine-grained disseminations.	Meta-BIF??
Z 079075	Shabumeni Lake	NAD83	15	523892	5684398	Grab – Outcrop	Outcrop along ridge/cliff face. Host rock is very fine-grained, greenish grey in color, very well foliated. Within host rock is a 5-6 cm wide, black aphanitic vein?? that is VERY magnetic w/ abundance of sulphides. Approx 12-15% sulphides through this vein w/ pyrite+chalcopyrite+/-arsenopyrite. Within outcrop get wispy lenses of this type of material. Chl+carb veinlets crosscutting everything (mm scale).	Mafic metavolcanic w/ BIF vein??Layer??
Z 079076	Shabumeni Lake	NAD83	15	529463	5683418	Grab – Outcrop	Side of cliff on N. Showing. Intense Fe-Oxide/Fe-carb? Staining on weathered surface. Host rock appears to be a mafic metavolcanic that has been silica flooded and sulphidized. Sulphide approx 7-8%, occurring as disseminations, blebs and veinlets within the quartz+carb veins. Sulphides include Pyrite+chalcopyrite+/-pyrrhotite. Very magnetic.	Sheared Mafic metavolcanic
Z 079077	Shabumeni Lake	NAD83	15	529452	5683433	Grab – Outcrop	Taken from small blast pit @ North Showing. Qtz+Carb+magnetite??+sulphide vein, Qtz is milky white with chl concentrated along vein contact with mafic metavolcanic host???. Sulphides 8-10% w/ pyrite+chalcopyrite+/-pyrrhotite?? Sulphides occurring as massive blebs along vein contacts and fine grain disseminations.	Shear hosted qtz+carb+mgt+sulphide vein.

Z 079078	Shabumeni Lake	NAD83	15	529323	5683454	Grab – Outcrop	Small shear zone found by overturning some moss. Intensely Fe-Oxide staining. Host appears to be a mafic metavolcanic. Lots of silicification and sulphidization. Very magnetic. Up to 25-30% sulphides occurring as massive growths. Sulphides include pyrite+pyrrhotite. Silica flooded. Fe-Oxide stained vein zone is 7 cm wide.	Silica flooded, sulphide enriched shear.
Z 079079	Shabumeni Lake	NAD83	15	529390	5683383	Grab – Outcrop	Heavily Fe-Oxide stained on weathered surface. Part of the sample is well foliated and Qtz flooded. Along foliation planes have increased sulphides to 5%. Appears to be Pyrite+chalcopyrite. Very weakly magnetic.	Qtz flooded mafic metavolcanic.
Z 079080	Shabumeni Lake	NAD83	15	529654	5683294	Grab – Outcrop	Rock appears to be a mafic metavolcanic rock that is well foliated, that is crosscut by numerous mm scale Qtz+carb+ankerite veins. Sulphides approx 1-2%, including pyrite+/-chalcopyrite+/-arsenopyrite. Occurring as fine-grained disseminations.	Well foliated mafic metavolcanic
Z 079081	Shabumeni Lake	NAD83	15	529452	5683433	Grab – Outcrop	Weathered surface appears moderately Fe-Oxide stained. Fresh surface appears to be greenish grey in color, aphanitic groundmass. Well foliated w/ chl defining foliation planes. Rock is VERY magnetic, minor Qtz+carb veins up to 1cm wide w/ mm scale ankerite veinlets crosscutting everything. Sulphides approx 1-3% w/ pyrite+/-chalcopyrite+/-arsenopyrite.	Well foliated mafic metavolcanic
Z 079082	Shabumeni Lake	NAD83	15	529596	5683166	Grab – Outcrop	Very intense Fe-Oxide stained, sulphide enriched. Chalcopyrite+pyrite+/-pyrrhotite?? sample was taken from the South showing shear zone. Sulphides up to 25% in places. Malachite plus minor azurite present on fractured surfaces. Appears to be hosted in a sheared mafic metavolcanic.	Sheared Mafic metavolcanic
Z 079083	Shabumeni Lake	NAD83	15	529582	5683177	Grab – Outcrop	Very intense Fe-Oxide stained, sulphide enriched. Chalcopyrite+pyrite+/-pyrrhotite?? sample was taken from the South showing shear zone. Sulphides up to 15% in places. Occurring as massive chalc and pyrite. Possibly some bornite?? Malachite plus minor azurite present on fractured surfaces. Appears to be hosted in a sheared mafic metavolcanic.	Sheared Mafic metavolcanic
Z 079084	Shabumeni Lake	NAD83	15	529452	5683438	Channel	Sample is 100 cm long. Well foliated (Striking 275 degrees). Fine-grained, aphanitic, greenish grey in color. Minor mm scale Qtz+carb veins, pervasive carb flooding. Moderately magnetic, minor disseminated sulphides occurring near mm scale vein contacts. Pyrite+/-pyrrhotite?? Also high vein density of mm-cm scale chl+/-epidote?? veins defining foliation. <1% sulphides. Minor Fe-Ox staining on weathered surface.	Well foliated mafic metavolcanic
Z 079085	Shabumeni Lake	NAD83	15	529453	5683437	Channel	Sample is 100 cm long. Well foliated (Striking 275 degrees). Fine-grained, aphanitic, greenish grey in color. Minor mm scale Qtz+carb veins, also mm scale ankerite veins, pervasive carb flooding. Moderately magnetic, minor disseminated sulphides occurring near mm scale vein contacts. Pyrite+/-pyrrhotite?? Also high vein density of mm-cm scale chl+/-epidote?? veins defining foliation. <1% sulphides. Minor Fe-Ox staining on weathered surface.	Well foliated mafic metavolcanic
Z 079086	Shabumeni Lake	NAD83	15	529453	5683436	Channel	Sample is 80 cm long. Well foliated. Fine-grained, aphanitic, greenish grey in color. Minor mm scale Qtz+carb veins, also mm scale ankerite veins, pervasive carb flooding. Moderately magnetic, minor disseminated sulphides occurring near mm scale vein contacts. Pyrite+/-pyrrhotite?? Also high vein density of mm-cm scale chl+/-epidote?? veins defining foliation. <1% sulphides. Minor Fe-Ox staining on weathered surface. .5 cm Qtz+carb+sulphide vein (pyrite only)	Well foliated mafic metavolcanic

Z 079087	Shabumeni Lake	NAD83	15	529450	5683440	Channel	Sample is 40 cm long. Intense Fe-Oxide and/or Fe-Carb staining on weathered surface. Disseminated sulphides increase to 3-5%, hosted along foliation planes. Down strike of this sample, this small vein becomes larger qtz+carb+magnetite+sulphide. Can see wispy lenses of magnetite+chalcopyrite, pyrite seems to be dominate along foliation planes.	Fe-Oxide stained qtz+carb+mgt+sulphide vein
Z 079088	Shabumeni Lake	NAD83	15	529450	5683436	Channel	Sample is 100 cm long. Well foliated (Striking 275 degrees). Fine-grained, aphanitic, greenish grey in color. Minor mm scale qtz+carb veins, also mm scale ankerite veins. , pervasive carb flooding. Moderately magnetic, minor disseminated sulphides occurring near mm scale vein contacts. Pyr+/-pyrrhotite?? Also high vein density of mm-cm scale chl+/-epidote?? veins defining foliation. ≤1% sulphides. Minor Fe-Ox staining on weathered surface.	Well foliated mafic metavolcanic
Z 079089	Shabumeni Lake	NAD83	15	529450	5683434	Channel	Sample is 100 cm long. Well foliated (Striking 275 degrees). Fine-grained, aphanitic, greenish grey in color. Minor mm scale qtz+carb veins, also mm scale ankerite veins. , pervasive carb flooding. Moderately magnetic, minor disseminated sulphides occurring near mm scale vein contacts. Pyr+/-pyrrhotite?? Also high vein density of mm-cm scale chl+/-epidote?? veins defining foliation. 1-3% sulphides. Minor Fe-Ox staining on weathered surface.	Well foliated mafic metavolcanic
Z 079090	Shabumeni Lake	NAD83	15	529449	5683431	Channel	Sample is 100 cm long. Increased Fe-Oxide and/or Fe-Carb staining on weathered surface. Disseminated sulphides increase to 3-5%, hosted along foliation planes. Can see wispy lenses of magnetite+chalcopyrite, pyrite seems to be dominate along foliation planes.	Well foliated mafic metavolcanic
Z 079091	Shabumeni Lake	NAD83	15	529449	5683433	Channel	Sample is 100 cm long. Moderate Fe-Oxide and/or Fe-Carb staining on weathered surface. Disseminated sulphides approximately 1-2%. hosted along foliation planes. Sulphides include pyr+/-chalcopyrite. Increase in carb and silica flooding.	Well foliated mafic metavolcanic
Z 079092	Shabumeni Lake	NAD83	15	529449	5683432	Channel	Sample is 100 cm long. Moderate Fe-Oxide and/or Fe-Carb staining on weathered surface. Disseminated sulphides approximately 1-2%. hosted along foliation planes. Sulphides include pyr+/-chalcopyrite. Increase in carb and silica flooding.	Well foliated mafic metavolcanic
Z 079093	Shabumeni Lake	NAD83	15	529449	5683432	Channel	Increase in mm scale qtz+carb+magnetite+sulphide vein density. Some wispy lenses of mgt+chalco+/-pyrite+malachite veins up to 1cm in width. Sulphides 20-25% in these cm wide veins (2 throughout 100 cm section), entire sample is 5-7%. Sample is 100 cm channel.	Well foliated mafic metavolcanic
Z 079094	Shabumeni Lake	NAD83	15	529448	5683429	Channel	Sample is 100 cm long. Well foliated. Fine-grained, aphanitic, greenish grey in color. Minor mm scale qtz+carb veins, also mm scale mgt wispy lenses/ veins. Pervasive carb flooding. Moderately magnetic, minor disseminated sulphides occurring near mm scale vein contacts. Pyr+/-pyrrhotite?? Also high vein density of mm-cm scale chl+/-epidote?? veins defining foliation. ≤1% sulphides. Minor Fe-Ox staining on weathered surface.	Well foliated mafic metavolcanic
Z 079095	Shabumeni Lake	NAD83	15	529450	5683429	Channel	Sample is 100 cm long. Well foliated. Fine-grained, aphanitic, greenish grey in color. Minor mm scale qtz+carb veins, also mm scale mgt wispy lenses/ veins. Pervasive carb flooding. Moderately magnetic, minor disseminated sulphides occurring near mm scale vein contacts. Pyr+/-pyrrhotite?? Also high vein density of mm-cm scale chl+/-epidote?? veins defining foliation. ≤1% sulphides. Major Fe-Ox staining on weathered surface, appearing more weathered than rest of outcrop.	Well foliated mafic metavolcanic

Z 079096	Shabumeni Lake	NAD83	15	529458	5683445	Channel	Hosted in heavily Fe-Oxide stained Banded Iron Formation (BIF). Sample is 100 cm long. The jasper-rich red layers are brecciated with angular clastes of red material. Sulphide rich bands interlayered within host. Sulphides 7-8% including euhedral pyrite cubes along with fine-grained disseminated pyrite+minor chalcopyrite. Sample is 100 cm long.	Meta-BIF
Z 079097	Shabumeni Lake	NAD83	15	529454	5683444	Channel	Hosted in green, aphanitic material with 5-8cm wide BIF layers/veins/whispy lenses. Also 6cm wide QF porphy w/ plag phenocrysts up to 1cm. Very well foliated w/ some "jasper" eyes w/in foliation planes. Sulphides ≤1%. Sample is 100cm long.	Well foliated mafic metavolcanic???
Z 079098	Shabumeni Lake	NAD83	15	529453	5683440	Channel	Weathered surface appears quite bleached compared to rest of outcrop. Almost a tannish buff color on surface. Very well foliated porphyritic mafic metavolcanic???. Crosscut by mm scale qtz+cabr+Fe-Carb veins. Sulphides associated with these veins, 1-2% sulphides (pyrite). Non-magnetic. Sample is 100cm long.	Well foliated porphyritic mafic metavolcanic
Z 079099	Shabumeni Lake	NAD83	15	529455	5683439	Channel	20 cm win unit described above (#Z079098), along with contact of #Z079097. Green unit has BIF bands up to 6cm. Green unit crosscut by numerous mm scale qtz+carb veinlets. Some elongate plag phenocrysts along foliation planes. The BIF layers are sulphide enriched up to 5% occurring as fine grained disseminations and euhedral cubes.	
Z 079100	Shabumeni Lake	NAD83	15	529456	5683444	Channel	Hosted within green unit with minor mgt/BIF layers as well as a 6cm wide brecciated cherty(?) black (hard 6-7 on Moh's scale), aphanitic material. Contacts are chlorite rich and well foliated (vein is not). No visible sulphides in black aphanitic vein but slight enrichment along contacts and within interspersed qtz veins crosscutting black material.	Mafic metavolcanic
Z 079101	Shabumeni Lake	NAD83	15	529457	5683442	Channel	Sample is 100 cm long. Well foliated. Fine-grained, aphanitic, greenish grey in color. Minor mm scale qtz+carb veins, also mm scale ankerite veins. , pervasive carb flooding. Moderately magnetic, minor disseminated sulphides occurring near mm scale vein contacts. Pyr+/-pyrrhotite?? Also high vein density of mm-cm scale chl+/-epidote?? veins defining foliation. ≤1% sulphides. Minor Fe-Ox staining on weathered surface.	well foliated mafic metavolcanic
Z 079102	Shabumeni Lake	NAD83	15	529457	5683440	Channel	Sample is 100 cm long. Well foliated. Fine-grained, aphanitic, greenish grey in color. Minor mm scale qtz+carb veins, also mm scale ankerite veins. , pervasive carb flooding. Moderately magnetic, minor disseminated sulphides occurring near mm scale vein contacts. Pyr+/-pyrrhotite?? Also high vein density of mm-cm scale chl+/-epidote?? veins defining foliation. ≤1% sulphides. Minor Fe-Ox staining on weathered surface.	well foliated mafic metavolcanic
Z 079103	Shabumeni Lake	NAD83	15	529456	5683439	Channel	Sample is 100 cm long. Well foliated. Fine-grained, aphanitic, greenish grey in color. Minor mm scale qtz+carb veins, also mm scale ankerite veins. , pervasive carb flooding. Moderately magnetic, minor disseminated sulphides occurring near mm scale vein contacts. Pyr+/-pyrrhotite?? Also high vein density of mm-cm scale chl+/-epidote?? veins defining foliation. ≤1% sulphides. Minor Fe-Ox staining on weathered surface. Also slight bleaching on weathered surface as compared to rest of outcrop.	well foliated mafic metavolcanic

Z 079104	Shabumeni Lake	NAD83	15	529573	5683164	Channel	Sample is 50cm long. Sample crossing S. Showing fault that is intensely Fe-Oxide stained on surface. Host rock is greenish dark grey in color, aphanitic groundmass w/ numerous crosscutting epidote mm scale veinlets, no preferred orientation of these epidote veinlets. Host appears to be epidote and silica flooded giving it a greenish-buff color. Sulphides occur as fine grained disseminations @3-5%. Pyr+chalcopyrite.	Epidote flooded unfoliated mafic metavolcanics
Z 079105	Shabumeni Lake	NAD83	15	529573	5683165	Channel	Sample is 100 cm long. Less intense Fe-Oxide staining on weathered surface. Epidote flooding slightly decreased as well. Getting 1-2 mm diameter spheres of epidote??, almost phenocrysts??. At center of these spheres, seem to get nodules of pyr+/-chalcopyrite, 5-7% sulphides throughout sample w/ pyrite+chalcopyrite, Host is unfoliated mafic metavolcanic.	Epidote flooded unfoliated mafic metavolcanics
Z 079106	Shabumeni Lake	NAD83	15	529573	5683167	Channel	Sample is 100 cm long. Less intense Fe-Oxide staining on weathered surface. Epidote flooding slightly decreased as well. Getting 1-2 mm diameter spheres of epidote??, almost phenocrysts??. At center of these spheres, seem to get nodules of pyr+/-chalcopyrite, 5-7% sulphides throughout sample w/ pyrite+chalcopyrite, Host is unfoliated mafic metavolcanic.	Epidote flooded unfoliated mafic metavolcanics
Z 079107	Shabumeni Lake	NAD83	15	529573	5683166	Channel	Sample is 100 cm long. Less intense Fe-Oxide staining on weathered surface. Epidote flooding slightly decreased as well. Getting 1-2 mm diameter spheres of epidote??, almost phenocrysts??. At center of these spheres, seem to get nodules of pyr+/-chalcopyrite, Increased sulphides to 10% throughout sample w/ pyrite+chalcopyrite, Host is unfoliated mafic metavolcanic. ON surface, can see remnant qtz+chl?? veins. Seem to be weathered away but were parallel to the outcrop surface.	Epidote flooded unfoliated mafic metavolcanics
Z 079108	Shabumeni Lake	NAD83	15	529575	5683171	Channel	Weathered surface is a tannish green color with high epidote+qtz vein density. Veins are mm scale. Host is dark greenish grey with epidote and qtz+chl veinlets crosscutting unit. Sulphides occur as fine-grained disseminations and masses. Sulphides 3-5% with pyr≥chalcopyrite. Sulphides concentrated within epidote veins and qtz+chl veins. Sample is 100 cm long.	Epidote flooded unfoliated mafic metavolcanics
Z 079109	Shabumeni Lake	NAD83	15	529575	5683172	Channel	Weathered surface is a tannish green color with high epidote+qtz vein density. Veins are mm scale. Host is dark greenish grey with epidote and qtz+chl veinlets crosscutting unit. Sulphides occur as fine-grained disseminations and masses. Sulphides 3-5% with pyr≥chalcopyrite. Sulphides concentrated within epidote veins and qtz+chl veins. Intense Fe-oxid stained pockets with increased sulphides near northern portion of sample. Sample is 100 cm long.	Epidote flooded unfoliated mafic metavolcanics
Z 079110	Shabumeni Lake	NAD83	15	529579	5683172	Channel	Weathered surface is a tannish green color with high epidote+qtz vein density. Veins are mm scale. Host is dark greenish grey with epidote and qtz+chl veinlets crosscutting unit. Sulphides occur as fine-grained disseminations and masses. Sulphides 3-5% with pyr≥chalcopyrite. Sulphides concentrated within epidote veins and qtz+chl veins. Sample is 100 cm long.	Epidote flooded unfoliated mafic metavolcanics

Z 079111	Shabumeni Lake	NAD83	15	529575	5683180	Channel	Weathered surface is a tannish green color with high epidote+qtz vein density. Veins are mm scale. Host is dark greenish grey with epidote and qtz+chl veinlets crosscutting unit. Sulphides occur as fine-grained disseminations and masses. Sulphides 3-5% with pyr±chalcopyrite. Sulphides concentrated within epidote veins and qtz+chl veins. Last 10 cm of sample start seeing increased sulphide stringers, Sulphides include pyrite+/-chalcopyrite. Can see increased Fe-oxide staining on surface. Sample is 100 cm long.	Epidote flooded unfoliated mafic metavolcanics
Z 079112	Shabumeni Lake	NAD83	15	529579	5683180	Channel	On weathered surface, intense Fe-Oxide staining and a darker green in color. Becomes well foliated, possibly sheared?? Start to see sulphide stringers on cm-scale. Massive sulphides w/ chalcopyrite+pyrite. Up to 15-20% in first 50 cm. Grading into the tannish buff, epidote flooded unfoliated mafic metavolcanics in last 50cm of sample. Sample is 100 cm long.	Contact w/ well foliated mafic mx and unfoliated mafic mx.
Z 079113	Shabumeni Lake	NAD83	15	529584	5683469	Grab – Outcrop		
Z 079114	Shabumeni Lake	NAD83	15	529581	5683169	Grab – Outcrop	Further along S. Showing fault. Weathered surface is intensely Fe-Oxide stained. Host is mafic metavolcanic w/ intense epidote flooding. Sulphides disseminated throughout. Up to 5-7%. Including chalcopyrite+pyrite. Some remnant qtz from vein??	Sulphidized mafic metavolcanic.
Z 079115	Shabumeni Lake	NAD83	15	529578	5683164	Grab – Outcrop	Two veins/faults converge w/ blowout of sulphides. Very intense Fe-oxide staining, sulphides in spots up to 25%, occurring as massive growths w/ chalcopyrite+pyrite. Some malachite present. Host is mafic metavolcanic.	Sulphidized mafic metavolcanic.
Z 079116	Shabumeni Lake	NAD83	15	529578	5683164	Grab – Outcrop	On surface, intensely Fe-Oxide staining, along S. Showing fault. Get rusty "knob" w/ chalcopyrite+pyrite. Host is mafic metavolcanic (unfoliated). Intense epidote flooding in mm scale veinlets. Sulphides 5-7% but has pockets up to 15%. Sulphides include chalcopyrite+pyrite+/-arsenopyrite.	Sulphidized mafic metavolcanic
Z 079117	Shabumeni Lake	NAD83	15	529576	5683164	Grab – Outcrop	On surface, intensely Fe-Oxide staining, along S. Showing fault. Get rusty "knob" w/ chalcopyrite+malachite+pyrite. Host is mafic metavolcanic (unfoliated). Intense epidote flooding in mm scale veinlets. Sulphides 5-7% but has pockets up to 15%. Sulphides include chalcopyrite+pyrite+/-arsenopyrite.	Sulphidized mafic metavolcanic
Z 079118	Shabumeni Lake	NAD83	15	529584	5683165	Grab – Outcrop	Sample pulled from "little step" surface. At depth and along side of outcrop can see an epidote+qtz+carb+sulphide vein. Sulphides vary from 5-12% depending on proximity to vein. Get increased effervescence w/ HCL in vein. Sulphides include Chalcopyrite+pyrite+arsenopyrite. Non-magnetic.	Sulphidized mafic metavolcanic
Z 079119	Shabumeni Lake	NAD83	15	529582	5683181	Grab – Outcrop	Intense Fe-Oxide staining, malachite on weathered surface. Host appears to be mafic metavolcanic protolith w/ intense epidote flooding, carb flooding (intense effervescence w/ Hcl). Visible sulphides include pyrite+chalcopyrite @1-3%. Intense Fe-oxide staining suggests more sulphides. Non-magnetic.	epidote flooded unfoliated mafic metavolcanics
Z 079120	Shabumeni Lake	NAD83	15	529338	5683463	Grab – Outcrop	Appears to be a sericite schist w/ a 10cm wide qtz+brecciated jasper/BIF. Cannot sample BIF (need quickcut saw). Sample appears to be mafic metavolcanic protolith, that has been sheared to sericite schist w/ Fe-oxide wispy lenses. Sulphides approximately 1%, occurring as fine-grained pyrite disseminations.	Sericite schist
Z 079121	Shabumeni Lake	NAD83	15	529341	5683462	Grab – Outcrop	Sample appears to be mafic metavolcanic protolith, that has been sheared to sericite schist w/ Fe-oxide wispy lenses. Sulphides approximately 1%, occurring as fine-grained pyrite disseminations.	Sericite schist

Z 079122	Shabumeni Lake	NAD83	15	529341	5683463	Grab – Outcrop	Intensely Fe-Oxide stained schist. Fe-oxide producing a glossy sheen on weathered surface. Sulphides 1%, occurring as fine-grained pyrite disseminations.	Sericite schist
Z 079123	Shabumeni Lake	NAD83	15	529342	5683465	Grab – Outcrop	Unit is highly sheared, black, aphanitic material w/ euhedral pyrite cubes. Cubes 1-2mm @5-7%. Intense Fe-Oxide staining on surface. Very magnetic.	Meta-bif
Z 079124	Shabumeni Lake	NAD83	15	529326	5683460	Grab – Outcrop	Sample is a sericite schist w/ Fe-Oxide staining on weathered surface. Fissile in nature. IN contact w/ qtz_sulphide pocket.	Sericite schist
Z 079125	Shabumeni Lake	NAD83	15	529330	5683459	Grab – Outcrop	Intensely Fe-Oxide staining. Host appears to be a mafic metavolcanic. Lots of silicification and sulphidization. Very magnetic. Up to 25-30% sulphides occurring as massive growths. Sulphides include pyrite+pyrrhotite. Silica flooded. Fe-Oxide stained vein zone is 7 cm wide.	Sulphide rich shear zone.
Z 079126	Shabumeni Lake	NAD83	15	529976	5683549	Grab – Outcrop	Qtz infilling shear within sericite schist host. Some tourmaline(?) infilling as well. Minor to intense (locally) Fe-Carb staining. Qtz veins up to 1cm but most mm scale. Fissile in nature. Sulphides up to 1%, pyrite only.	Sericite schist
SHABUEMENI RIVER								
Sample ID	Property	Datum	UTM ZONE	Easting	Northing	Sample Type	Sample Description	Name
Z079127	Shabumeni River	NAD83	15	533733	5692348	Grab – Outcrop	Boudinaged qtz vein/intensely silicified mafic to intermediate metavolcanics. Host appears silicified and slightly carbonated. Disseminated euhedral pyrite cubes, up to 3% in sample. Non-magnetic.	Qtz vein with mafic-intermediate metavolcanics.
Z079128	Shabumeni River	NAD83	15	533436	5692395	Float	Well-foliated mafic-metavolcanics with 1-3% pyrite. Pyrite occurring as coarse-grained euhedral crystals concentrated along foliation planes.	Foliated mafic metavolcanics
Z079129	Shabumeni River	NAD83	15	533461	5692420	Grab – Outcrop	Well-foliated mafic-metavolcanics with 1-3% pyrite. Pyrite occurring as coarse-grained euhedral crystals concentrated along foliation planes. The well-foliated material associated with 3-5 cm wide milky white qtz vein. Qtz vein is barren. Vein contacts with increased carb+chlorite+sulphides (pyrite+ minor chalcopyrite??).	Foliated mafic metavolcanics

Appendix B

Daily Log

SKINNER DAILY LOGS

May 17, 2011

Weather was quite nice, not a cloud in the sky.. The morning was 18° (Celsius) with a high during the day of 29° (Celsius). The morning was spent getting organized, familiar with the area and overviewing the Magnetometer (Rover) and the Base Station unit. Once out to the property, we got the base station unit set up and collecting data. The rover unit was set up and once again, we spent some time getting used to the machine and making sure we were on the same page. The rest of the morning was spent completing two lines with the rover (Lines XXXXX, northernmost lines). While walking the lines, it is apparent that there is very little outcrop in the area. The lines are approximately 1700 meters and take 35-45 minutes apiece. The topography is varying with some minor highs and a few swamps/creeks crossing the lines. After lunch, two more lines were completed and the rover unit and base station units were packed up and back to camp to complete the uploading and downloading of data onto the computer. Four lines (6,800 meters) were completed with some mapping. No samples taken. Two guys spent entire day on the northern portion of grid.

May 18, 2011

The weather held out and was once again just gorgeous. The high reached 30° (Celsius) with very little cloud cover. The morning was again spent organizing and getting everybody up to speed as we had two more join the crew. After getting everything set up, we began on the fifth line (from N to S) and completed this line with no trouble. At the next line, the starting location was not able to be found, so the decision was made to skip to the next line. This line was completed and two lines of mag were done today. The rest of the crew spent mapping and prospecting the area around lines (5,7,8????). The locations of the old historic trenches were found and two samples were collected. Further work needs to be done to get a good understanding of what is going on geologically. One other sample was collected along the grid get assayed. There was a bit of disorganization today with people getting split up and not setting a time to be out of the bush. With that being said, nobody got hurt or lost so there was nothing to worry about at that end.

The base station was then shut down for the evening. It seems that there were some problems with setup (something must've been dislodged or knocked off) as we only had 25 seconds worth of readings for the entire day.

Three samples collected (for assay) and two lines of mag were completed in north-central part of grid.

May 19, 2011

Weather was again beautiful. High of 26° (Celsius) and sun for the morning. Around 2 pm the clouds started rolling in. Two and a half lines were finished by Mg Survey. Two lines were mapped and an historic pit and trench were found close to just north of line 7620 (appear to be in lake according to map). Samples were collected in each of the historic workings and these areas were mapped into the grid. The mag survey was halted by a small 100 meter wide lake in the east-central portion of the grid. Eight samples were collected for both assaying and representative samples of various outcrops within the grid.

May 20, 2011

Morning started with medium to heavy rains so the decision was made to go into town and get supplies and fuel up the vehicles. Once back, the weather cleared up and allowed for 1.5 lines to be completed with the mag survey. While walking the lines, the first bear of the season was spotted trotting along the trail ahead. Nothing came of it. Most of the day was spent traversing swamps. After the half of line was completed (ending at west side of lake), the trench and pit were visited to discuss the areas and the geology. On a side note, a GPS unit was lost in the field but was found after a bit of searching.

May 21, 2011

Good start to the morning. Were able to get out in the field early and get an early start. Once out in the field, we were able to complete four line of the mag survey and mapping. It was a long day with a lot of walking but it was the right decision as the weather was predicted to get worse in the next few days. The weather was cloudy and a high of 18° (Celsius) today. The other crew decided to prospect the western claim of the property and see what kind of access they could find. An ATV trail was found and could be very beneficial to future work on the western claim.

May 22, 2011

Late start to the morning as the weather had become rainy and cloudy. We decided to get out to the property and hope that we could find a one to two hour window of decent weather to finish the last line. Once we got out to the property, we slowly got the mag unit set up and waited. We took a chance and luckily, the rain did not come as expected. The last line was finished. The rest of the day was spent organizing the data and packing for the trip back to Thunder Bay to drop off samples, gear and the quad.

June 12, 2011

Arrived in camp late last night and had an early morning to get onto the property. The goal of the day was to arrive early to get a trail flagged in for the excavator. The trail was flagged, although, there were a few small areas of concern due to muskeg swamp. The plan with the trail, included a straight path to the northernmost trenches, and cut due south to go past all of the areas to be trenched. By getting the road to the southernmost trench, the hope would be able to get ATV's down to the lake to help with the transport of the water pumps. Sufficient water was found on the eastern/southeastern portion of the claim. The excavator showed up at 3 pm and was unloaded quickly. The decision was made to wait until the the morning to begin crashing a trail into the areas to be trenched. The day was spent on claim #4254145.

June 13, 2011

The excavator began pushing the new road in and worked its way slowly down the trail, making it about 300 meters the first day. A new trail was blazed to avoid the swampy areas but made for a bit longer of a road. The trenches were reviewed and re-examined by another geologist to ensure that these areas were worth the trouble to trench/strip. The weather was quite nice, with partly cloudy skies and around 15 degrees Celsius.

June 14, 2011

The road was completed today at 2pm. Some work was needed with chainsaws to help clean up the path to get the ATV's into the southernmost trench. Once the road was cleaned up, pumps and hose were brought in to be set up. The stripping of Trench #1 was started and some bedrock was exposed but not washed. Another warm day with no rain.

June 15, 2011

An early morning out to the property. It was learned that a fire ban had been put in place that restricted bush work to noon. The excavator needed to be shut down by noon so an early morning start helped get a lot accomplished with the shortened day. Trench 1 was near completion by noon but could not be completed. Washing began on Trench 1, the exposure was very interesting with different shear zones being present, with lenses (??)/ clasts (??) of less altered material. More work needs to be done to expose the trench, with a lot of washing also needed. There was a bit of rain during the evening.

June 16, 2011

The fire ban was lifted today and allowed for a complete day of using the excavator. Trenching was completed on trenches 1 and 2. Work was started on a small quartz vein but it was decided to cancel the trenching/stripping of this area due to lack of outcrop. The excavator was walked up to the northernmost trench to begin working on it the next morning. Trench 1 was washed to an extent where sampling and a rough map could be started. Sampling was discussed to ensure that the stripped zone would be thoroughly sampled and getting different portions of the shear zone/zones(?). Hoses were laid out to Trench 2 and washing was started but not completed. Weather was very nice, partly cloudy with a slight breeze from the SW.

June 17, 2011

The fire ban was put back on so the excavator was limited until noon again. With two remaining trenches to be stripped, the goal was to have the excavator parked by the road by the end of the day. Washing was completed on trench 2, with a lot of shovelling and spraying needed. Trench 3 was stripped rather quickly and more stripping was avoided to keep the road in useable condition. Trench 3 had two samples taken from the area that ran 14 grams/ton gold and 20 grams/ton gold during the past two years so it was important to get decent exposure of this area. The area was trenched perpendicular to the dominant structural features, in hopes that a cross sectional view would help determine the extent of mineralization and give a better understanding of the geology on an outcrop scale. After completing trench 3, the excavator was moved 20 meters to the northwest and began stripping of trench 4. This was a historical trench and the goal was to expose why it had been an area of interest historically. Unfortunately, with the fire ban and lack of economically interesting bedrock, the trenching was cut short and the excavator was moved out to the road before noon.

June 18, 2011

The morning was spent running hose up to trench 3 and washing was started. Due to the lack of drainage, a lot of shovelling was needed and the waste pump needed to be

hauled up before too long. Washing took longer than it should due to the highly fractured nature of this outcrop. Washing on trench 4 was also started, to get an idea of how much work would be needed the following day. The day was cut short due to rain and thunder.

June 19, 2011

Late start this morning due to heavy rains. Once the rain stopped, the washing was completed on trenches 3 and 4. The cleanup process was started but was delayed due to a piece breaking on the trailer, making the trailer unusable until the right tool was found. The hoses were rolled up and the hauling of gear back out to the main road was started but was limited because of the lack of the trailer. Samples were laid out on trench #1 so they could be mapped in and channel sampled the next day.

June 20, 2011

The morning was spent channel sampling on trench #1. There were approximately 20 channel samples taken on trench #1 to ensure that the area was sampled sufficiently. There were also grab and chip samples taken from trenches 2 and 3. After this was completed the area was cleaned up and began hauling the rest of the gear out including the pumps, lengths of hose and personal gear. It was a long day because of the amount of samples and the amount of gear that needed to be taken out and reloaded on the truck trailer. Once the gear was loaded, it was back to camp to get the cabin cleaned up and organized for departure the next day.

August 15, 2011

Very warm today, approximately 24 degrees Celsius with a humidex of 32 degrees Celsius. Partly cloudy with minimal breeze. Early start to the day, left Kabeelo's by 7:30 am. Everything was charged and packed up the night before to help speed things up this morning. Drive to the claims was quite slow due to the amount of traffic on the road. Set up the Base station in small gravel pit located on the east side of the Joyce Lake Road. Completed the six most northern lines today. The decision was made to end the day a bit early as the weather was very hot. Once back to camp, data was uploaded to the computers from the base station and the rover unit. Once the data was uploaded and reviewed, it was sent to the office for further work.

The decision was made to redo the magnetometer survey because of the quality of the data from the first survey. It is thought that a helicopter aeromag survey in the area, could've effected the data that we had gathered.

August 16, 2011

Another good start to the day. On our way to the property by 7:30 am. Weather was very cloudy with thunderstorm and tornado warnings for Ear Falls and the surrounding area. The hope was to get out there early enough and try and get something done. Able to get everything set up and complete two lines, or 3.4 km's worth of lines. By the time we had completed the second line, the bush was soaked along with all of the gear. The decision was made to call it a day due to the amount of lightning. The drive back to camp was quite slow as there were a fair number of trees that had been knocked over during the storm.

August 17, 2011

Had an early start from camp. The goal was to finish the survey so that meant seven lines and having to walk out back to the road. The weather was very cloudy in the morning but soon cleared up. High winds were a bit of concern as we could hear trees snapping and falling over in the area. The seven southernmost lines were completed. It was quite difficult as the first two lines of the day went through a lake in the east central portion of the claim and had to stop the survey, walk around to continue the survey. The southernmost lines were quite difficult due to a large muskeg swamp that is in the southwestern portion of the grid. Once back to camp, the data from the machines was uploaded to the computers and sent away for interpretation.

WOMAN RIVER DAILY LOGS

May 25, 2011

The weather was gorgeous today. Not a cloud in sky and a slight breeze out of the north to keep things cool. The high was around 23° (Celsius). The morning was spent organizing gear and getting our heads wrapped around the area. The lake is quite large with a lot of bays, peninsulas and islands so it is very easy to get turned around in. The goal was to get an idea of the extent of the property and to check access to different areas. The first traverse was taken in the early afternoon to get on a ridge on the western edge of Dog Lake. The trail from Woman Lake to Dog Lake was found (after discussing it with the lodge owner) and taken to gain quick access to this ridge. Caution was used when traversing this area due to some of the cliff edges in excess of 30 meters. After the traverse was completed, a boat ride was taken to see if we could get a boat into Dog Lake through a small creek on the eastern portion of the lake (just east of the edge of the claims. At this time, the shoreline was kept in close sight to see if we could find potential areas to park the boat and for future work. The stream was found and we were able to get the boat through into Dog Lake. Figuring out that we can get in there will save a lot of time in the future and allow for quicker access to these areas.

May 26, 2011

The weather was gorgeous again today. Partly cloudy skies with a slight breeze out of the north. The plan for the day was to drive the boat into Dog Lake and try to get to the southern end of Skipper Lake. Once into Dog Lake, a claim post was found and noted, along with some shoreline outcrop on the eastern edge of the claim boundary. This location provided two samples as there was a small shear zone located with a sulphide-rich footwall (??) zone approximately one meter wide. The decision was made to check the opposite shoreline to see if it continued on strike. The shear zone was not found but an exposure was found along the way exposing a picture worthy outcrop of pillowed basalts. Once up to the northern end of Dog Lake, a traverse was started to Skipper Lake. The traverse went along the eastern shore, around the southern edge of the lake and along the southwestern portion of the lake. Very little outcrop was found but there was some exposure along the lake shore.

May 27, 2011

The morning started out partly cloudy with a strong wind out of the south. A quick boat ride was made to get to the northern edge of Claim # 1248658 and the goal of the day was to explore the northern end of Skipper Lake. A quick traverse into the lake, yielded very little outcrop/exposure. Once on the lake, the edge is a bit swampy so we stayed on the ridge surrounding the lake. These ridges/cliffs provided some glimpses of outcrop but still a lot of stripping had to be done to remove the moss and overburden. With the ridges/cliffs, the group had to proceed with caution as there were some areas of concern. A trail was found back to Woman Lake that increased the pace of travel considerably and will be used in the future for quick access to the north end of Skipper Lake.

May 28, 2011

The day started with a bit of rain and wind so the decision was made to delay the start of the day. The goal of the day was to traverse the southern peninsula on the western edge of Claim # 1248647. This was only a short boat ride from camp so if the weather got any worse, we could get out of there quickly and safely. Once out on the peninsula, the three of us went separate ways to try and cover as much ground as possibly and as thoroughly as possible. Many samples were taken for hand specimens and for future assay work. One of the more exciting samples of the day was found by S. Quedent and featured >10% sulphides (most notably chalcopyrite). The day was called a bit short as the rain got heavier and there is a lot of organizational work that needed to be done at camp.

May 29, 2011

The weather was nice, approximately 20° (Celsius), partly cloudy with a slight breeze from the north. The goal of the day was to first visit the sample location from S. Quedent sulphide-rich rock and secondly, traverse a ridge on the eastern portion of the southern claim (Claim # 1248647). Access was gained by going to the northeastern end of a narrow bay on Woman Lake and work out way onto the ridge and work south/southwest and loop around near the shore. Very little outcrop was found along the top of the ridge but occasional outcrops were found. When near the lakeshore, the outcrops increased and formed cliffs up to 20 meters high down to the water. Caution was used when traversing this area as one could quickly find themselves on the edge of one of these cliffs. Also, explored was an island to the south of the ridge, that appears to be an extension of the ridge. Two locations were found that were enriched in sulphides, one being a small 8-10 inch wide shear zone, hosted within intermediate metavolcanics. This was found on the southwestern shore of the island. Another sulphide rich zone was found to the northwest of this spot and sampled accordingly.

May 30, 2011

The morning started out with a wind from the north at 7 am with partly cloudy skies and looking like a good day to be outside. By 9 am, the wind was coming from the south bringing in some rain and looked like thunder storms. The decision was made to stay close to camp and try to get a quick traverse done that was missed during the week. The traverse was successful in covering some ground and getting some samples. By this time (approx. 1 pm), the wind had increased and started to rain a bit more. One more quick traverse was done on an island on the southern end of the Claim #2348647.

There was little outcrop on the interior of the island, with most being found on or near the lakeshore. The decision was made to return to camp after this quick traverse of the island. As far as the weather goes, the wind started in the morning from the north, then from the south, from the east and finally from the north again in the evening. Needless to say, the weather did not improve throughout the day.

May 31, 2011

The day was spent at camp due to high winds and rain. Most of the day was spent organizing the assay samples along with getting the project database up to date. Time was also spent trying to figure out the traverse for June 1.

June 1, 2011

Another cold and wet day. The rain wasn't nearly as bad so decided to try and get a traverse done on the east side of Dog Lake and Skipper Lake. The trip up to the north end of Dog Lake was fairly quick as we have figured out how to get the boat through the stream quickly. The first traverse was started from the north end of Dog Lake and went along the ridge running along the eastern shore of Skipper Lake. A few samples were taken in this area but most of the area was mafic-intermediate metavolcanics along with some gabbroic outcrops found. After lunch the boat was moved down Dog Lake to an area that has a lot of outcrop along the water. A traverse was planned along the water along with exploring the ridge along the northeast shore of Dog Lake. More samples were taken and some mapping of the area was done.

June 2, 2011

The day was spent at camp again due to weather. Luckily, we had finished up what we wanted to the day before so today was spent organizing notes, samples and the project database. Camp was also broken down and packed up to leave the following day for Thunder Bay.

SHABUMENI LAKE CLAIMS

June 28, 2011

We left Thunder bay at 8:30 am (eastern) and had to make a few stops along the way for various last minute items. We arrived at Kay Air Base at 2:00pm (central). After quickly unloading the trucks and loading the plane we took off from Lac Suel. Arrived in camp around 3:45 pm after a 60 mile flight that took 35 minutes or so. After unloading the plane, camp was set up, maps pulled out and spent a bit of time trying to get situated. We decided to go check out the "100 ft waterfall" at the northeastern part of the lake.

June 29, 2011

Morning was spent compiling some data, organizing camp and figuring out a game plan for the project and day. Later in the afternoon, a trip was attempted to a peninsula on the western boundary of the property in an attempt to see some rocks and check out some old MDI reports. Unfortunately, the wind was a bit too much and the waves were a bit too big to attempt this trip as we had to go directly upwind to get to this point. The decision was made to try and find the old 2007 camp and area in which they focussed much of their work program on for that summer. After finding the camp, we poked

around for a bit but thought it would be better to come back with a game plan instead of this blind wandering that we were doing.

June 30, 2011

The guy for internet was coming to camp to set up the hardware for the satellite internet. We took advantage of the plane and tried to go up for a reconnaissance flight around the property and to the Shabumeni River claim to see what kind of trip we had to get up there later in the program. The rest of the day was spent compiling data. Having Steve around to upload ArcGIS and the master files onto our computer allowed us to really take a good look at the data compilation that had taken place. Today was a day to sort out these files and figure out what was important and what was not.

July 1, 2011

Data compilation and checked out the portage to Shabumeni River. This needed to be checked out to figure out what we will need to bring across the portage in the future. We found five boats with paddles on the other side of the portage.

July 2, 2011

Weather was absolutely gorgeous today. Around 75 degrees (F), partly cloudy and a strong breeze from the west. In the morning we took a boat ride down to the peninsula where the 2007 work program focussed on. Once we found the baselines, we were able to locate the historical trenches and stripped zones (2007). Working our way from the northwest to southeast, we started at the "Main" trench, getting familiar with the rocks and seeing what type of rocks assayed economic values. The sulphide-rich (Pyrite+Arsenopyrite+/-chalcopyrite) seemed to be running the highest. The second trench was the "Snake" trench and there was a possible continuation of the same or very similar qtz+carb+sulphide infilled shear zone, trending roughly similar to the "Main" trench. At this point, Lloyd had finished the baseline and joined the walk-through of this peninsula. The next trench was the "Iceberg", which is a qtz+carb+sulphide infilled shear zone, hosted in a sheared gabbro. The textures in this trench/stripped zone were very interesting with differential weathering in the gabbro, giving it a "wavy" appearance. The next stop was the "Bullwinkle" sample, this sample ran around 2 ounces/ton in 2007. The hope was to see what this was and hopefully, find more. The sample was located and was a bit disappointing as it was not as exciting as we were hoping. The sample seemed to consist of 5-8 cm wide qtz+sulphide vein. The sulphides included pyrite+arsenopyrite+/-chalcopyrite but only about 5-6% (as compared to 15% in the "Main" trench. Lots of samples were collected, if only for representative samples for camp. The boat ride back to camp was a bit precarious as the wind seemed to increase and getting around some of the points was a bit difficult.

July 3, 2011

Weather was perfect. Approximately 75 degrees fahrenheit, partly cloudy with a slight breeze from the west. Decided to go down to Swain East to get an idea of how long it took to get down there and do a quick traverse and try and find the North and South showings. Along the boat ride from across Shabumeni Lake, L. Quedent stopped and showed us pictographs along the shoreline. Very interesting but he did not know how old they were. After reaching the eastern shore of Swain Lake, a tieline was found and

traversed to gain quick access and cover some ground. Nothing of interest was found but gave us a very good idea of what to expect later in the project. Some claim posts were found and some other baselines/tie lines were GPS'ed in so we could use the old lines if need be. No samples taken but a fair bit of ground was covered for the day.

July 4, /2011

Weather was very warm and humid without a breeze of any kind. With the non-existent wind, the trip was made over to the “western peninsula” and the western portion of the claims. The plan was to boat near the shore and find a place with decent exposure to begin traversing. The amount of blowdown on this peninsula was incredible. It took a very long time to traverse only a short distance. One sample for assay was collected and it was a sulphide enriched cherty, highly magnetic vein hosted within intermediate to mafic metavolcanics. There was very little exposure but from what we saw, there was an interesting mix of metaseds, metavolcanics and possibly some intrusive (qtz monzonite to qtz monzogabbro) rocks in a small area. Very difficult area to traverse in with limited exposure. According to previous reports, the western side of the peninsula is a dominantly, flat-lying area with sand and boulders overburden.

July 5, 2011

Camp day. We had another geologist fly into camp this morning at 11:00 am. The rest of the day was spent organizing camp, putting away groceries and getting the new geologist up to speed with the project. Some new maps were brought up and studied a bit closer. With the new person up here, more ground will be able to be covered along with a fresh set of eyes to look at and interpret the rocks.

July 6, 2011

Weather started off a bit hazy, once we got in the boat and drove out on the lake, the smell of forest fire was quite strong. The trip across Shabumeni Lake went fast due to lack of wind. Portaged to Swain Post where we picked up a rental boat and boated the 8.7 km down to the eastern edge of the lake. Once the portage was found, we hiked that into Canoe Lake and found a canoe to take across the lake. Once across the lake, the portage to Bobarris Lake was taken, where a boat, paddles and a motor (no gas) were found. Lunch was spent on the water, looking at the outcrop along the lakeshore. The goal of the day was to find the Bobarris pit showing. This was found quickly during the traverse. Very interesting rock type, as it appears to be an intensely sheared, silicified metasediment?? Sulphides were approximately 6% and included arsenopyrite and pyrite. The rest of the day was spent traversing the area and a lot of discussion was had trying to figure out what the dominant rock types were. The weather started to turn a bit dark and cloudy so we thought it would be the best option to begin the journey back to camp. Round trip was approximately 41 kilometers. We got back to camp just in time, as the rain and storms started.

July 7, 2011

Weather was very warm today, high of 28 degrees celsius with a slight breeze from the west. Sunny with a few clouds. The goal of the day was to take a look at the North Showing, South Showing, and the “Rand Showing” from a 1998 report. Two groups split up and went separate ways in hopes of finding the showings. The South

Showing was found early in the morning and time was spent examining the blasted trench as well as the surrounding area in search of drill holes, other historic pits/trenches and to familiarize ourselves with the rock type. Samples were collected for possible assay and for representative samples for camp. Also found, were "Winky" drill core remnants. Nothing was labelled and was haphazardly left lying on the ground. It is thought, these were done in 1966 by Asarco but since the core is not in order or complete, it is of little use. After this, the groups split and went their separate way. The group going to the Rand Showing had little luck as the traverse seemed to be dominated by swamp and very little outcrop. The other group, looking for the North Showing had similar luck but the showing could not be found. Along the traverse, there was an old diamond drill hole found and drill core lying in the bush. Unfortunately, the hole was not labelled. A lot of ground was covered by both groups but the findings were a bit disappointing as the North Showing and Rand Showing were not found. The day was called at late afternoon due to an approaching thunderstorm.

July 8, 2011

Another very warm day. High of 28 degrees celsius with slight breeze from east. The goal of the day was to spend more time at the Bobarris Pit and surrounding area to try and get a lateral extent on the shear zone as well as explore some known occurrences on Canoe Lake. Once again, two groups were formed, one being sent to Bobarris and the other to Canoe Lake. The traversing in the Bobarris region did not uncover a great deal of new information due to the amount of overburden making it difficult to find exposure. Interestingly enough, a small outcrop near where the boat is cached (200 meters east), there is a small outcrop of very similar looking material. . More time needs to be spent to either physically expose the area or, if it warrants, the use of heavy machinery in the future. The group on Canoe Lake was able to locate past samples and get a look at what type of rocks were running. Unfortunately, the outcrop has only minor exposure and the area is covered in glacial till and a variety of different boulder types were found. With that being said, it is difficult to determine what past samplers had tested, whether it was outcrop or float.

July 9, 2011

Rain day. Rain in the morning and calling for thunderstorms in the afternoon. The original plan would have been to head down and search for the North Showing. With the rain and predicted forecast, the decision was made for a camp day. Time was spent on data compilation and organizing notes and samples. Also, a primary objectives list was made up for the rest of this phase of the work program.

July 10, 2011

Weather was very nice, approximately 17 degrees Celsius with a slight breeze from the southwest. The goal of the day was to find the north showing that has been eluding us. Both groups worked together in a sweeping pattern to try and find this location. Two historic trenches were found in the morning. Both were covered with overburden and had very little float in them but with a bit of work, some measurements were taken along with samples. In the afternoon, the North Showing was found and time was spent taking measurements and collecting samples in this locality. It is a large knob of mafic metavolcanic origin with two similar sheared lenses of material at the base and along

the top of the outcrop. One other sample was collected by luck, when an area was cleared at random chance and the underlying rock was an intensely sheared mafic metavolcanic rock enriched with sulphides. This spot was a small portion of the larger outcrop/ridge and this ridge/outcrop had a very well defined foliation, or an underdeveloped shearing type texture. Most of the day was spent at this location to collect rep samples, write down previous workers samples and take measurements to get some type of attitude of this showing and how it fits into the larger scale, property geology.

July 11, 2011

Weather was overcast with a strong wind from the northwest. Approximately 15 degrees celsius today. Two groups were formed and went to different parts of the Swain East property. The first group went near the winter road (western side of the Swain East property) to prospect the area that was sampled in 1989 by Noranda. After reading their report, samples returned anomalous values but nothing of significant value was found during that time. The goal was to try and cover some ground and get an idea of what was going on geologically. A few samples were found that look very interesting. The second group was also on the Swain East property and the goal was to find the "Rand Showing" on the northeastern side of the pond/swamp north of Swain Lake. A traverse was chosen to go around the pond on the western side and skirt the swamp shoreline going around to the north. Most of this area was swamp but a piece of high ground was found with a bit of outcrop. The Rand Showing was not found but some very interesting quartz+carb+sulphide infilled sheared material was found and sampled. In contact with this was a sericitic schist that was sampled. The rest of the traverse was uninteresting until a small outcrop of exposed banded iron formation was found. This outcrop was exposed under a fallen tree and had up to 10% sulphides in areas. The day was called about 4pm when the rain started and wind increased. The boat ride across Shabumeni Lake was quite wet and overall, pretty miserable with the northwest wind.

July 12, 2011

Very nice day, plane around 11 am this morning. New geologist on the property bringing maps, food and supplies. The day was spent getting everything put away and getting the new person up to speed on what we have completed and show rocks from the different areas. After this, time was spent looking at the new printed maps to try and figure out some areas of interest.

July 13, 2011

Weather was very bad. Strong winds and rains today with a few scattered thunderstorms. Spent the day at camp again, spend some time organizing data and getting tracklogs, waypoints and samples into ARCGIS. It was a good day because we were able to spend some time to figure out how to use the program and organize data within it.

July 14, 2011

The weather was very warm, hovered around 20 degrees Celsius, with a slight breeze from the northwest. The plan for today was to show the areas of interest that were

found the previous weeks to the new arrival. Once down on the Swain East claims, a traverse was started to try and hit the different showings and get a plan of attack for future work. The North Showing was visited and sampled in some different areas to try and get a lateral extension of the two different (historically) gold-bearing shear zones. There was discussion of possibly trenching/stripping the zone to get more exposure and taking some channel samples across the width of the outcrop for future work. The next location visited was the "Rand Showing". This location was examined in much closer detail than the work done previously by our group. With another geologist on the property, it was good to have another opinion as to what to do and move the location forward. Due to the difficulty getting to this location, it was decided that a small sampling program would take place. 17 samples were taken at different intervals along the showing (it was exposed along the side of a ridge and swamp) for 30 meters. Sample locations were GPS'ed in using an "average" waypoint to try and reduce the amount of error for each reading. After this was completed, the group traversed to the South Showing. One small historic trench was found near the South Showing but little time was spent there due to the fact that time was running out for the day. There was discussion as to how and improve the understanding of the area, as it has been historically worked since 1966. Once again, a few more samples were taken and possibly some trenching/stripping of the area for future work was discussed in detail.

July 15, 2011

One geologist left this afternoon. The morning was spent describing samples and figuring out what we can do with the rest of the time to really take this project to the next level while staying within the budget for the claims. The best way to do this, is to try and expose some areas of interest by hand and the use of high pressure hose (phase #2). It was a good day because it gave us a solid game plan and goal in mind for the rest of the project. The good thing about the trenching is that we will be the first ones to see these outcrops in full. Hopefully, from this, we'll be able to get a better idea what is going on at the outcrop scale and try and correlate that to the property scale.

July 16, 2011

Weather was very warm and humid. The day was between 20-23 degrees Celsius, very humid and little to no wind. Needless to say, the primary objective of the day was to stay hydrated while working.

The trip was made down to the North Showing to begin stripping the area by hand so that during the next phase of the project, we'd have a head start to the washing and stripping of the area. As warm as it was, a lot of progress was made with the removal of a few small trees and the stripping of moss to increase the exposure of the outcrop. Work was done until it was decided that there was little to be done without the use of the high pressure hose that will be brought in for the second phase of the project.

July 17, 2011

The day was spent in camp organizing samples and preparing the camp for departure. Cleaning and packing away camp was a big concern as the lodge owner was planning on spending a week up here. Samples were described and were prepared for the plane trip out of camp and the trip back to Thunder Bay. Some items were left to be stored at camp so we would have room for more gear for the next trip.

July 18, 2011

The plan was to be picked up at 8am this morning but due to the amount of smoke in the air, our flight did not arrive until the afternoon. The trip back to Thunder Bay was made with no major problems.

July 22, 2011

Two groups leaving for Shabumeni Lake today. One group leaving at 6:30 am with lengths of hose and the water pump and another group leaving Thunder Bay at 9:30 am. The purpose of this is to drop off the hose and water pump off at the Woman Lake Lodge pickup spot on the South Bay Road to boat the necessary supplies to the eastern end of Swain Lake. The second group is bringing personal gear and planning on meeting at the float base for the departure. Get into camp around 2:30 pm and get everything organized and ready for tomorrow.

July 23, 2011

Get an early start to the morning and the hose had been boated up from Woman Lake earlier in the morning. The goal of the day was to get lengths of hose laid out to the North Showing and get the pump set up. Start washing by 12:30 pm. Very good start to the day. With the speed at which everything got set up, it was decided that more overburden should be removed from the northwest corner of the trench. This was started and almost completed today. The day was called at 4pm to get back to camp at a decent hour.

July 24, 2011

Late start to the day as the weather was rainy and foggy. Get out of camp around 11 am. A bit of boat troubles as we are renting boats from the Swain Post camp. Due to the late start, it was decided to send one group prospecting in the general vicinity of the North Showing and another group to run hose to the South Showing and continue hand clearing of the overburden. The South Showing will be more difficult to get a decent amount of exposure on.

July 25, 2011

Weather was again cloudy and rainy. Channel samples were laid out on the North Showing and cutting was a bit delayed to a bent hose connection on the channel saw. After the cutting was completed, samples were described and 20 channel samples were planned and taken along the North Showing to try and get a representative sampling of the area. The goal is to try and determine the extent of gold mineralization on strike with the historic known gold showing.

July 26, 2011

Very nice day, warm with a nice breeze out of the southwest. Channel sampling was completed at the North Showing and all samples were bagged and taken down to the boats. The rest of the day was spent moving gear from the North Showing to the South Showing and making sure all samples were out of the bush.

July 27, 2011

Another nice day. Hand trenching was continued at the South Showing. Due to the amount of overburden, five guys spent most of the morning digging and removing overburden from the area. Around lunch time, the hose was turned on to try and speed up the process. By the end of the day, washing was nearly completed with only the historic South Showing needed to be cleared of debris that had been washed into it.

July 28, 2011

Day was spent at camp due to high winds and rain. The winds were of concern due to the long boat trip over to the Swain Post portage. With the weather being as bad as it was, time was spent at camp getting everything organized in the project database as well as look over some of the historic reports of the area.

July 29, 2011

The weather had cleared up today so the trip was made to the Swain East property. Washing of the South Showing was completed today as well as the laying out of channel samples. Some discussion was had as to how to lay out the samples properly because there are two dominant structural features. A fault striking approximately N-S and an vein system striking roughly E-W. It was decided to run channels through both of these structural features.

July 30, 2011

Another nice day. Partly cloudy with a nice breeze from the SW. Channel sampling was completed by 1:45 pm. The cleared area was washed one last time and then everything was packed up. Once the samples were bagged and described, the hose was rolled up and put away. The rolling of hose went quickly with everybody working on it. With everything down at the beach, it will make for a quicker clean up at the end of the project. Nine channel samples and seven more grab samples were taken from the South Showing.

July 31, 2011

Three of the five guys left this morning to get back to Thunder Bay. The other group (two guys) spent the day finishing up at the South Showing. The samples were finished and taken back to the shore. After this was completed, there was some time spent following up on the prospecting from 07/24/2011. The goal from this was to expose a mineralized banded iron formation (BIF) that was found and try and get a representative sample perpendicular to strike of the unit. Approx 3m x 3m was exposed by hand and 5 grab samples were taken.

August 1, 2011

Very warm and humid today. The morning was spent on a traverse up to the Rand Showing. The goal of this was to expose (by hand) this area a bit better and make a cross sectional map of the showing. Two more samples were taken in this area and a map was made, showing the intensity of shearing and sample locations. After this was completed, everything was loaded into the boats and taken down to Woman Lake Lodge. The fire hose, pump and gear was taken down here so that they could haul it out to the road using a bigger and faster boat.

August 2, 2011

Today was spent at camp to get everything cleaned up and ready to be flown out on

August 3, 2011. Time was spent organizing the project database along with cleaning the camp up for the next guests.

August 4, 2011

Fly out from camp at 9 am and get everything loaded into the trucks. Luckily, our third guy has grabbed all of the gear from the boat landing on South Bay Road and brought it into town, saving a trip back out there. Drove back to Thunder Bay with minimal problems.

August 12, 2011

The 15 km boat ride from Woman Lake Lodge was made to the east end of Swain Lake to finish up the mapping of the North Showing. Two people went to the showing to map the trench. Sample locations were also GPS'ed in to try and increase the accuracy (using an average as compared to a single point) of the locations. The weather was nice and three moose (a cow with two calves) were seen in creek connecting Swain Lake to Graveyard Lake.

August 13, 2011

Another trip was made to the east end of Swain Lake to map the South Showing. Most of the day was spent trying to get an idea of the alteration intensity and put these into the map. The trench outline went much quicker, as we were more prepared today. After this was completed, the trip was made back to camp and final drafts of both the North Showing map and the South Showing map were completed.

Appendix C
Assay Certificates



1046 Gorham Street Tel: (807) 626-1630 www.accurassay.com
 Thunder Bay, ON Fax: (807) 622-7571 assay@accurassay.com
 Canada P7B 5X5

Wednesday, August 10, 2011

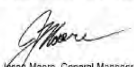
Certificate of Analysis

Clark Consulting
 1000 Alloy Dr.
 Thunder Bay, ON, CAN
 P7A6G5
 Ph#: (807) 622-3284
 Fax#: (807) 622-4156
 Email: gjclark@tbaytel.net

Date Received: 06/06/2011
 Date Completed: 06/20/2011
 Job #: 201142092
 Reference: Frontline-Skinner Phase 1
 Sample #: 13

Acc #	Client ID	Au ppm	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Li ppm	Mg %	Mn ppm	Mo ppm	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Sn ppm	Sr ppm	Ti ppm	Tl ppm	V ppm	W ppm	Y ppm	Zn ppm
142170	1920301	0.014	<1	1.09	2	69	<2	1	0.43	<4	11	76	95	4.11	0.30	<1	0.74	284	<1	43	160	<1	<5	5	<10	73	1248	<2	58	<10	7	37
142171	1920302	0.022	<1	3.96	5	130	<2	<1	5.07	<4	36	155	202	5.66	0.19	3	2.07	1202	<1	83	315	<1	5	6	<10	112	4076	<2	210	<10	22	131
142172	1920303	14.622	2	<0.01	3	5	<2	1	0.10	<4	33	20	256	2.61	0.11	<1	0.38	<100	<1	65	<100	<1	<5	7	<10	52	315	9	11	<10	5	12
142173	1920304	0.014	2	1.67	10	1	<2	<1	>10.00	<4	36	6	394	6.34	0.35	3	1.86	2704	<1	31	189	50	<5	6	<10	451	1739	9	136	<10	22	176
142174	1920305	0.008	<1	3.44	11	16	<2	2	4.91	<4	41	9	275	7.86	0.31	<1	2.05	1181	<1	33	306	<1	5	5	<10	84	4508	<2	339	<10	23	77
142175	1920306	0.025	1	2.58	20	29	<2	<1	4.96	<4	68	159	596	6.31	0.16	9	1.72	1180	<1	153	291	<1	6	<5	<10	94	4727	<2	225	<10	11	101
142176	1920307	0.049	2	3.12	27	5	<2	<1	5.07	<4	71	177	1096	6.87	<0.01	9	1.73	1188	<1	153	330	<1	6	7	<10	121	5107	<2	280	<10	16	122
142177	1920308	0.006	<1	4.26	13	<1	<2	<1	6.76	<4	52	159	160	7.79	<0.01	1	2.81	1506	<1	99	330	<1	6	5	<10	130	5098	<2	280	<10	24	100
142178	1920309	<0.005	<1	0.84	10	37	<2	<1	1.95	<4	27	287	26	2.87	<0.01	5	1.41	665	<1	106	114	<1	<5	<5	<10	77	1361	8	100	<10	8	37
142179	1920310	0.017	<1	<0.01	4	69	<2	<1	0.04	<4	2	29	20	1.33	<0.01	<1	0.37	<100	<1	24	<100	<1	<5	5	<10	55	458	11	16	<10	4	10
142180D	1920310	0.006	<1	<0.01	3	68	<2	<1	0.03	<4	2	29	19	1.32	0.20	<1	0.39	<100	<1	25	<100	<1	<5	8	<10	53	443	7	16	<10	5	10
142181	1920311	<0.005	<1	2.91	5	32	<2	<1	6.78	<4	51	435	72	7.01	0.36	<1	3.62	1201	<1	136	330	<1	6	<5	<10	201	4889	22	229	<10	19	83
142182	1920312	0.006	<1	<0.01	4	3	<2	1	0.07	<4	2	29	77	0.30	<0.01	<1	0.32	<100	3	30	<100	<1	<5	5	<10	63	142	6	3	<10	4	249
142183	1920313	0.012	<1	3.04	7	27	<2	<1	3.97	<4	50	27	63	9.84	<0.01	11	1.73	1495	3	34	835	<1	5	<5	<10	184	8857	<2	262	<10	26	140

PROCEDURE CODES: ALP2, ALFA2, ALMA1

Certified By: 
 Jason Moore, General Manager

The results included on this report relate only to the items tested
 The Certificate of Analysis should not be reproduced except in full,
 without the written approval of the laboratory



1046 Gorham Street
Thunder Bay, ON
Canada P7B 5X5

Tel: (807) 626-1630
Fax: (807) 622-7571

www.accurassay.com
assay@accurassay.com

Wednesday, August 10, 2011

Certificate of Analysis

Clark Consulting
1000 Alloy Dr.
Thunder Bay, ON, CAN
P7A6G5
Ph#: (807) 622-3284
Fax#: (807) 622-4156
Email: gjclark@tbaytel.net

Date Received: 06/06/2011
Date Completed: 06/16/2011
Job #: 201142091
Reference: Frontline-WomanRiver Phase 1
Sample #: 14

Acc #	Client ID	Au ppm	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Li ppm	Mg %	Mn ppm	Mo ppm	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Sn ppm	Sr ppm	Ti ppm	Tl ppm	V ppm	W ppm	Y ppm	Zn ppm
142155	Z079001	0.016	<1	9.92	28	59	3	3	>10.00	8	95	265	275	20.86	0.13	18	5.28	2924	7	274	541	<1	10	6	41	240	8753	7	430	<10	25	469
142156	Z079002	<0.005	<1	1.85	17	41	<2	<1	8.35	<4	20	51	54	2.83	0.09	9	1.39	508	<1	53	126	<1	<5	12	<10	118	1512	<2	69	<10	11	37
142157	Z079003	0.197	8	1.98	12	9	<2	51	4.26	<4	46	120	6450	6.71	<0.01	<1	0.79	833	39	145	478	<1	10	14	<10	232	4588	<2	168	37	15	51
142158	Z079004	0.014	<1	4.08	28	<1	<2	<1	5.36	5	35	252	177	13.47	0.39	9	2.88	2624	<1	102	236	2	6	<5	<10	51	2042	13	179	<10	30	79
142159	Z079005	0.085	1	<0.01	94	<1	2	1	3.19	6	36	35	62	15.17	<0.01	<1	0.45	495	9	68	423	47	34	<5	<10	277	1436	<2	55	<10	8	73
142160	Z079006	0.007	<1	4.07	10	424	<2	<1	1.43	<4	37	198	56	3.77	0.11	4	1.13	388	<1	138	102	<1	<5	6	<10	112	2792	<2	200	<10	5	53
142161	Z079007	0.066	<1	4.36	4	99	<2	1	2.00	<4	35	162	18	5.97	0.18	3	2.01	722	<1	182	308	<1	<5	6	<10	95	3727	2	154	<10	9	63
142162	Z079008	0.012	<1	3.83	8	8	<2	<1	3.86	<4	65	261	117	5.83	0.35	2	2.59	1055	<1	208	269	<1	<5	7	<10	120	4200	<2	173	<10	12	99
142163	Z079009	<0.005	<1	2.92	6	88	<2	<1	2.23	<4	53	105	70	6.44	0.45	<1	2.45	1139	<1	130	287	<1	<5	<5	<10	85	3547	<2	149	<10	14	88
142164	Z079010	0.009	<1	3.04	10	<1	<2	<1	3.83	<4	26	156	3	3.93	0.46	<1	2.35	1361	<1	89	182	<1	<5	11	<10	172	1973	<2	125	<10	12	48
142165D	Z079010	<0.005	<1	3.32	6	<1	<2	1	3.91	<4	25	155	1	3.91	0.27	<1	2.38	1361	<1	89	179	<1	<5	8	<10	174	1946	17	125	<10	12	48
142166	Z079011	0.038	<1	1.60	6	292	<2	<1	0.54	<4	12	32	11	3.10	<0.01	<1	0.59	1006	<1	31	331	<1	<5	<5	<10	76	3166	<2	42	<10	55	51
142167	Z079012	0.006	<1	5.74	9	<1	<2	1	6.87	<4	52	262	256	7.08	<0.01	6	3.02	1327	<1	91	279	<1	<5	5	<10	169	4229	7	209	<10	16	79
142168	Z079013	0.035	<1	3.90	13	20	<2	1	8.14	<4	54	181	103	7.16	<0.01	5	1.40	2299	<1	144	248	<1	<5	<5	<10	178	3981	20	187	<10	13	69
142169	Z079014	0.190	<1	3.82	5	4	<2	<1	6.19	<4	53	213	95	7.82	0.02	<1	2.30	1113	<1	161	236	<1	7	8	<10	146	3397	12	177	<10	12	168

PROCEDURE CODES: ALP2, ALFA2, ALMA1

Certified By:  Jason Moore, General Manager

The results included on this report relate only to the items tested
The Certificate of Analysis should not be reproduced except in full,
without the written approval of the laboratory



1046 Gorham Street Tel: (807) 626-1630 www accurassay.com
 Thunder Bay, ON Fax: (807) 622-7571 assay@accurassay.com
 Canada P7B 5X5

Wednesday, July 13, 2011

Certificate of Analysis

Clark Consulting
 1000 Alloy Dr.
 Thunder Bay, ON, CAN
 P7A6G5
 Ph#: (807) 622-3284
 Fax#: (807) 622-4156
 Email: gjclark@tbaytel.net

Date Received: 06/27/2011
 Date Completed: 07/11/2011
 Job #: 201142377
 Reference: Frontline-Skinner Phase 2
 Sample #: 29

Acc #	Client ID	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Li ppm	Mg %	Mn ppm	Mo ppm	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Sn ppm	Sr ppm	Ti ppm	Tl ppm	V ppm	W ppm	Y ppm	Zn ppm
156997	Z079015	7	1	4.89	67	20	<2	<1	4.68	6	38	317	92	7.98	0.23	10	3.54	1638	<1	102	267	14	8	40	11	117	422	8	233	<10	9	96
156998	Z079016	38	<1	3.03	3	357	<2	<1	2.56	6	48	117	392	7.41	0.05	<1	1.23	594	2	123	297	13	7	41	12	140	2982	2	115	16	19	115
156999	Z079017	18	<1	2.40	2	346	<2	<1	3.81	4	26	191	146	5.75	0.23	<1	2.37	1301	<1	83	262	11	5	22	13	120	4852	2	179	<10	18	119
157000	Z079018	30	<1	2.83	<2	372	<2	<1	4.28	5	29	154	191	7.23	0.16	<1	1.94	1185	<1	71	395	15	8	37	13	172	4821	3	160	13	18	99
157001	Z079019	50	1	1.34	4	494	<2	<1	1.37	4	44	86	401	6.04	<0.01	<1	0.83	421	1	98	280	18	<5	34	12	137	2403	<2	86	<10	11	58
157002	Z079020	24	<1	4.42	3	186	<2	<1	5.53	6	43	189	251	6.81	0.24	<1	2.23	1088	<1	97	329	18	<5	31	11	192	5308	2	273	10	22	216
157003	Z079021	20	1	2.22	2	324	<2	<1	2.14	6	33	158	291	7.02	0.06	<1	1.45	820	2	66	296	20	<5	21	13	153	4063	<2	181	<10	14	232
157004	Z079022	11	1	2.19	2	70	<2	<1	1.26	12	119	232	385	13.53	<0.01	<1	1.92	1080	12	265	274	44	6	5	11	149	3552	<2	149	12	20	574
157005	Z079023	11	<1	2.03	<2	115	<2	<1	1.89	4	31	98	134	5.13	0.16	<1	1.58	721	<1	68	358	12	<5	36	10	136	4035	<2	137	<10	20	175
157006	Z079024	<5	<1	2.80	<2	69	<2	<1	3.77	5	42	150	166	6.71	0.08	<1	2.07	939	<1	114	372	14	<5	30	10	157	4051	3	143	<10	25	172
157007D	Z079024	<5	<1	1.75	2	59	<2	<1	3.62	5	41	147	163	6.58	0.07	<1	1.98	914	<1	116	360	14	<5	39	12	144	3816	<2	140	<10	23	165
157008	Z079025	7	<1	1.47	<2	58	<2	<1	3.29	7	44	110	278	9.11	0.04	<1	1.86	838	2	98	319	21	<5	20	13	140	3411	<2	120	10	20	228
157009	Z079026	<5	<1	0.46	4	<1	<2	<1	6.85	8	59	498	277	9.74	0.04	<1	3.58	1586	<1	142	276	19	6	15	14	161	5764	<2	208	10	19	194
157010	Z079027	<5	<1	2.38	4	63	<2	<1	1.50	6	30	130	187	6.98	0.10	<1	1.70	869	<1	58	415	16	<5	27	<10	152	4521	<2	163	<10	20	163
157011	Z079028	83	<1	3.13	<2	52	<2	<1	4.15	8	58	190	357	9.20	0.14	<1	2.68	1216	<1	113	406	18	6	30	11	186	5471	5	197	14	24	510
157012	Z079029	12	<1	<0.01	17	40	<2	<1	7.42	7	47	659	67	9.82	<0.01	<1	4.87	1842	<1	148	308	12	<5	12	10	145	5941	9	252	<10	16	158
157013	Z079030	212	<1	1.89	<2	132	<2	<1	2.21	7	28	107	205	9.44	0.11	<1	1.82	824	3	68	252	21	<5	33	12	134	3486	3	127	<10	14	98
157014	Z079031	15	<1	1.26	6	85	<2	<1	5.76	7	39	266	89	9.99	0.19	<1	3.86	1622	<1	68	402	15	<5	8	12	179	6852	<2	229	<10	19	147
157015	Z079032	305	1	2.74	9	133	<2	<1	4.27	8	56	160	533	10.08	0.21	<1	3.45	1358	<1	120	392	14	7	37	15	142	5761	6	193	<10	21	136
157016	Z079033	21	<1	0.15	4	30	<2	<1	2.29	5	29	89	281	7.05	0.04	<1	1.86	819	<1	86	219	9	<5	28	12	137	1425	<2	76	<10	12	95

PROCEDURE CODES: ALP2, ALFA2, ALMA1

Certified By: Denise Desmarais, Laboratory Manager

The results included on this report relate only to the items tested
 The Certificate of Analysis should not be reproduced except in full,
 without the written approval of the laboratory



1046 Gorham Street Tel: (807) 626-1630 www accurassay.com
 Thunder Bay, ON Fax: (807) 622-7571 assay@accurassay.com
 Canada P7B 5X5

Wednesday, July 13, 2011

Certificate of Analysis

Clark Consulting
 1000 Alloy Dr.
 Thunder Bay, ON, CAN
 P7A6G5
 Ph#: (807) 622-3284
 Fax#: (807) 622-4156
 Email: gjclark@tbaytel.net

Date Received: 06/27/2011
 Date Completed: 07/11/2011
 Job #: 201142377
 Reference: Frontline-Skinner Phase 2
 Sample #: 29

Acc #	Client ID	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Li ppm	Mg %	Mn ppm	Mo ppm	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Sn ppm	Sr ppm	Ti ppm	Tl ppm	V ppm	W ppm	Y ppm	Zn ppm
157017	Z079034	64	<1	<0.01	3	90	<2	<1	2.77	5	35	148	360	6.85	<0.01	<1	1.48	708	<1	95	231	15	<5	33	12	158	3674	<2	125	<10	14	69
157018D	Z079034	60	<1	1.29	<2	115	<2	<1	3.27	5	36	165	378	7.23	<0.01	<1	1.56	761	<1	101	253	15	5	25	12	184	3812	<2	136	<10	15	74
157019	Z079035	44	<1	<0.01	<2	184	<2	<1	2.74	11	49	174	396	14.65	<0.01	<1	1.90	946	6	126	270	19	<5	<5	15	113	3615	2	143	13	12	102
157020	Z079036	124	1	2.20	4	276	<2	<1	3.39	4	30	189	850	4.89	0.08	<1	1.97	859	<1	79	249	9	<5	32	12	167	4763	<2	141	<10	17	95
157021	Z079037	19	<1	0.47	3	96	<2	<1	0.55	5	27	90	205	6.66	0.13	<1	1.58	543	2	65	231	15	<5	28	11	79	2961	4	93	<10	13	93
157022	Z079038	14	<1	<0.01	54	30	<2	<1	7.17	7	56	656	56	8.99	<0.01	<1	5.36	1766	<1	205	281	13	<5	<5	<10	75	5099	2	220	<10	17	158
157023	Z079039	10	<1	1.29	<2	4	<2	<1	1.05	9	132	177	850	11.31	<0.01	<1	1.30	452	4	253	329	34	5	11	14	73	3057	<2	128	<10	19	94
157024	Z079040	12	<1	0.31	<2	367	<2	<1	0.95	5	7	204	115	7.28	0.10	<1	0.81	390	<1	27	226	15	<5	26	12	93	2522	<2	95	<10	10	72
157025	Z079041	6	<1	<0.01	<2	<1	<2	<1	1.51	<4	4	50	13	0.79	0.09	<1	0.45	344	<1	49	<100	10	5	37	<10	59	378	<2	18	31	5	43
157026	Z079042	14383	<1	0.55	3	38	<2	<1	1.36	6	75	118	349	8.43	<0.01	<1	1.38	549	<1	132	337	19	6	18	13	103	3017	<2	145	36	13	46
157027	Z079043	22796	1	<0.01	12	98	<2	2	<0.01	<4	4	86	21	2.48	0.14	<1	0.52	147	1	95	<100	62	<5	27	<10	63	740	<2	31	40	5	35

PROCEDURE CODES: ALP2, ALFA2, ALMA1

Certified By: Cheryl Demaree, P.Eng., Laboratory Manager

The results included on this report relate only to the items tested
 The Certificate of Analysis should not be reproduced except in full,
 without the written approval of the laboratory



1046 Gorham Street Tel: (807) 626-1630 www accurassay.com
 Thunder Bay, ON Fax: (807) 622-7571 assay@accurassay.com
 Canada P7B 5X5

Wednesday, August 3, 2011

Certificate of Analysis

Clark Consulting
 1000 Alloy Dr.
 Thunder Bay, ON, CAN
 P7A6G5
 Ph#: (807) 622-3284
 Fax#: (807) 622-4156
 Email: gjclark@tbaytel.net

Date Received: 07/19/2011
 Date Completed: 08/02/2011
 Job #: 201142691
 Reference: Frontline-Shabumeni Lk Phase 1
 Sample #: 17

Acc #	Client ID	Au ppm	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Li ppm	Mg %	Mn ppm	Mo ppm	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Sn ppm	Sr ppm	Ti ppm	Tl ppm	V ppm	W ppm	Y ppm	Zn ppm
175754	Z079048	0.103	<1	4.61	135	114	<2	20	4.64	13	128	23	882	9.47	0.43	16	1.38	1081	29	33	777	17	<5	5	<10	430	485	12	151	<10	10	84
175755	Z079049	8.339	<1	5.16	287	55	<2	34	1.97	15	107	124	1484	10.47	1.09	44	2.79	701	38	33	670	19	7	8	<10	204	591	9	205	<10	12	114
175756	Z079066	NS																														
175757	Z079067	0.110	<1	2.93	4	384	<2	7	0.73	<4	5	108	13	2.05	0.79	<1	0.56	425	5	7	676	13	<5	8	<10	242	462	<2	32	<10	5	58
175758	Z079068	0.010	<1	1.72	10	56	<2	6	4.57	<4	5	343	7	2.27	0.96	8	0.48	1013	7	10	156	7	5	5	<10	256	219	11	32	<10	8	31
175759	Z079069	1.180	<1	2.39	8000	63	<2	7	1.59	<4	8	309	35	1.93	0.73	<1	0.60	350	4	20	361	9	13	8	<10	398	154	3	10	<10	3	32
175760	Z079071	1.237	<1	2.62	2587	399	<2	8	0.49	<4	10	250	22	2.36	0.64	<1	0.46	439	3	39	459	9	8	14	<10	294	229	<2	57	<10	3	59
175761	Z079072	0.015	<1	3.44	31	82	<2	16	0.31	17	13	83	36	12.15	0.64	107	1.34	798	22	25	647	24	6	<5	<10	126	308	5	79	<10	5	92
175762	Z079073	0.011	<1	3.22	19	342	<2	10	1.02	6	16	294	77	3.54	0.88	<1	0.89	537	10	28	701	13	<5	8	<10	227	1099	2	80	<10	6	146
175763	Z079074	0.040	<1	0.86	109	45	<2	<1	3.29	6	61	266	193	4.74	0.95	5	0.42	600	10	28	352	8	12	9	<10	345	1297	2	41	<10	8	20
175764D	Z079074	0.050	<1	1.09	107	52	<2	6	3.24	6	59	253	189	4.67	0.85	3	0.41	586	11	27	345	13	12	15	<10	341	1280	<2	40	<10	8	19
175765	Z079075	0.016	<1	5.65	<2	175	<2	17	2.01	15	26	195	104	10.73	0.95	15	2.67	875	23	39	724	19	7	<5	<10	194	2486	2	111	<10	16	132
175766	Z079076	0.575	<1	5.24	296	112	<2	42	4.24	21	162	55	4950	14.81	0.41	22	1.75	1024	59	65	685	21	6	7	<10	354	557	<2	178	<10	11	123
175767	Z079077	18.371	55	1.18	134	178	<2	431	1.65	14	77	166	8330	10.72	0.88	4	0.66	377	34	51	213	59	7	10	<10	197	291	7	71	17	4	83
175768	Z079080	0.008	<1	2.85	45	217	<2	21	3.33	16	30	44	165	11.77	0.87	11	1.04	1373	20	2	2324	20	<5	<5	<10	350	639	<2	75	<10	12	96
175769	Z079081	0.107	<1	3.70	15	350	<2	15	3.79	7	27	177	74	5.15	0.92	6	1.51	1492	9	78	880	7	<5	7	<10	254	455	<2	138	<10	7	76
175770	Z079082	0.799	53	3.58	394	56	3	30	5.73	28	489	81	43798	13.86	0.67	<1	1.06	1418	40	226	867	24	10	26	<10	268	1155	<2	48	42	6	688
175771	Z079083	1.106	37	3.52	435	47	2	26	6.01	23	479	323	30632	13.58	0.46	<1	1.05	1322	31	201	195	15	9	22	<10	300	2843	<2	133	37	8	361

PROCEDURE CODES: ALP2, ALFA2, ALMA1

Certified By: Jessa Moore, General Manager

The results included on this report relate only to the items tested
 The Certificate of Analysis should not be reproduced except in full,
 without the written approval of the laboratory



1046 Gorham Street Tel: (807) 626-1630 www.accurassay.com
 Thunder Bay, ON Fax: (807) 622-7571 assay@accurassay.com
 Canada P7B 5X5

Tuesday, August 9, 2011

Certificate of Analysis

Clark Consulting
 1000 Alloy Dr.
 Thunder Bay, ON, CAN
 P7A6G5
 Ph#: (807) 622-3284
 Fax#: (807) 622-4156
 Email: gjclark@tbaytel.net

Date Received: 07/19/2011
 Date Completed: 07/29/2011
 Job #: 201142692
 Reference: Frontline-Shabumeni Lk Phase 1
 Sample #: 19

Acc #	Client ID	Au ppm	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Li ppm	Mg %	Mn ppm	Mo ppm	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Sn ppm	Sr ppm	Ti ppm	Tl ppm	V ppm	W ppm	Y ppm	Zn ppm
175772	Z079050	0.561	<1	4.20	57	128	<2	3	1.13	<4	6	280	16	2.04	0.17	1	0.44	356	3	12	585	6	<5	19	<10	138	221	<2	30	<10	8	41
175773	Z079051	0.696	<1	3.16	81	42	<2	<1	0.80	<4	6	395	18	1.81	0.04	<1	0.38	282	3	13	429	8	<5	10	<10	136	133	<2	20	10	6	33
175774	Z079052	1.258	1	2.69	197	99	<2	12	3.48	<4	12	227	25	3.63	0.09	1	1.25	735	<1	20	482	11	<5	6	<10	184	212	3	38	10	8	70
175775	Z079053	2.006	1	2.41	179	111	<2	<1	3.66	<4	13	423	21	3.78	0.14	2	1.33	795	<1	25	515	11	<5	<5	<10	181	230	<2	52	<10	8	80
175776	Z079054	1.243	1	5.16	183	162	<2	32	<0.01	<4	2	128	25	2.27	0.08	<1	0.23	<100	15	4	778	7	<5	16	<10	116	288	<2	53	<10	7	33
175777	Z079055	0.531	1	3.57	88	119	<2	31	0.26	<4	5	318	9	1.73	0.05	<1	0.27	169	12	11	591	8	<5	12	<10	96	229	<2	37	<10	6	30
175778	Z079056	0.921	<1	4.13	165	192	<2	38	0.24	<4	5	140	13	2.12	0.03	1	0.31	279	8	6	688	7	<5	13	<10	100	321	<2	39	<10	7	46
175779	Z079057	0.941	1	5.22	119	195	<2	23	0.05	<4	4	148	18	1.77	0.10	2	0.26	<100	12	6	594	9	<5	20	<10	115	327	<2	47	<10	7	33
175780	Z079058	0.638	1	4.14	84	152	<2	22	0.54	<4	4	251	16	1.79	<0.01	2	0.37	166	7	10	554	7	<5	15	<10	115	278	<2	39	<10	7	41
175781	Z079059	1.049	2	5.70	135	207	<2	50	0.66	<4	5	289	30	2.05	0.19	5	0.40	193	11	10	641	8	7	18	<10	144	355	<2	48	<10	8	43
175782D	Z079059	0.909	2	5.87	140	236	<2	35	0.70	<4	5	299	31	2.13	0.21	6	0.40	199	14	12	647	8	<5	19	<10	164	396	<2	52	<10	7	43
175783	Z079060	0.139	<1	5.19	57	173	<2	23	2.02	<4	6	206	4	2.27	0.25	4	0.83	425	<1	8	675	6	<5	19	<10	183	304	<2	36	<10	8	54
175784	Z079061	2.017	1	3.57	255	131	<2	17	2.32	<4	15	491	23	3.70	0.20	3	0.78	771	6	32	480	11	<5	14	<10	182	295	4	55	16	8	72
175785	Z079062	1.696	<1	4.10	350	203	<2	8	4.92	<4	30	165	41	6.30	0.28	11	2.02	983	<1	57	916	12	<5	10	<10	229	454	<2	116	<10	9	124
175786	Z079063	0.845	<1	2.62	108	112	<2	17	5.04	<4	8	373	14	3.02	0.33	4	1.44	747	<1	22	385	11	<5	11	<10	250	261	7	44	<10	8	74
175787	Z079064	0.508	<1	3.89	223	225	<2	12	4.79	<4	24	202	17	5.80	0.22	16	2.17	954	<1	51	899	17	<5	13	<10	243	473	10	115	<10	9	161
175788	Z079065	1.669	<1	1.61	193	163	<2	<1	4.01	<4	16	251	22	3.84	0.01	4	1.40	711	<1	36	654	11	<5	<5	<10	202	328	14	65	<10	7	82
175789	Z079066	0.054	<1	3.63	39	186	<2	6	3.01	<4	25	142	8	6.23	0.06	39	2.87	795	<1	64	1027	9	<5	6	<10	200	398	13	103	<10	7	125
175790	Z079070	0.311	<1	0.24	13	<1	<2	10	0.62	4	16	225	164	17.30	<0.01	14	1.21	635	40	12	651	27	<5	<5	<10	41	913	8	31	24	8	109
175791	Z079078	0.103	1	<0.01	85	<1	<2	17	0.57	<4	20	373	397	11.34	<0.01	2	0.31	552	69	17	364	19	<5	<5	<10	40	<100	2	18	<10	4	51

PROCEDURE CODES: ALP2, ALFA2, ALMA1

Certified By: 
 Jason Moore, General Manager

The results included on this report relate only to the items tested
 The Certificate of Analysis should not be reproduced except in full,
 without the written approval of the laboratory



1046 Gorham Street Tel: (807) 626-1630 www accurassay.com
 Thunder Bay, ON Fax: (807) 622-7571 assay@accurassay.com
 Canada P7B 5X5

Friday, August 19, 2011

Certificate of Analysis

Clark Consulting
 1000 Alloy Dr.
 Thunder Bay, ON, CAN
 P7A6G5
 Ph#: (807) 622-3284
 Fax#: (807) 622-4156
 Email: gjclark@tbaytel.net

Date Received: 08/04/2011
 Date Completed: 08/18/2011
 Job #: 201142884
 Reference: Frontline-Shabumeni Lk-Trenching
 Sample #: 43

Acc #	Client ID	Au ppm	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Li ppm	Mg %	Mn ppm	Mo ppm	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Sn ppm	Sr ppm	Ti ppm	Tl ppm	V ppm	W ppm	Y ppm	Zn ppm
189114	Z079084	0.010	<1	0.72	5	175	2	5	2.12	<4	12	10	21	6.06	<0.01	22	0.92	884	3	15	875	12	5	<5	<10	221	485	<2	53	<10	20	78
189115	Z079085	0.037	<1	1.87	8	215	2	13	2.55	<4	30	5	39	9.55	<0.01	35	1.20	1391	2	12	1340	16	6	<5	<10	237	659	<2	94	<10	19	106
189116	Z079086	0.081	<1	0.98	8	289	2	20	1.00	<4	14	11	15	6.65	<0.01	14	0.67	700	5	12	1036	13	6	<5	<10	159	558	<2	36	<10	18	66
189117	Z079087	0.323	<1	1.04	18	285	2	30	1.95	<4	25	10	1362	8.43	<0.01	27	0.91	949	5	12	1982	20	<5	<5	<10	217	666	6	42	<10	17	101
189118	Z079088	0.125	<1	0.79	7	231	2	17	1.14	<4	14	11	213	6.64	<0.01	14	0.78	666	<1	13	1674	12	6	<5	<10	192	516	<2	32	<10	20	65
189119	Z079089	<0.005	<1	3.79	14	78	<2	25	2.85	<4	36	143	107	6.83	<0.01	48	2.50	1042	<1	46	1493	15	5	<5	<10	381	428	<2	163	<10	12	88
189120	Z079090	0.005	<1	3.19	16	816	<2	29	4.38	<4	31	164	51	5.82	<0.01	41	2.59	1175	<1	49	1481	18	5	8	<10	492	387	3	179	<10	12	72
189121	Z079091	0.018	<1	3.46	14	373	<2	20	2.42	<4	37	91	264	6.29	<0.01	35	2.14	791	<1	39	1406	13	5	6	<10	431	390	<2	141	<10	11	81
189122	Z079092	0.006	<1	3.72	18	199	<2	20	2.12	<4	29	82	97	5.75	<0.01	36	2.14	744	<1	38	1416	11	5	<5	<10	427	345	<2	158	<10	11	76
189123	Z079093	0.048	<1	4.32	28	59	<2	35	2.78	<4	44	66	315	7.98	<0.01	43	2.32	1055	<1	33	1490	18	<5	<5	<10	394	491	<2	133	<10	15	105
189124D	Z079093	0.071	<1	3.90	24	63	<2	29	2.55	<4	42	62	296	7.56	<0.01	38	2.06	1006	<1	33	1411	18	<5	5	<10	387	460	<2	128	<10	13	99
189125	Z079094	0.018	<1	2.66	10	78	<2	19	2.21	<4	31	5	71	8.84	<0.01	26	1.40	1050	<1	11	1275	16	6	<5	<10	314	544	<2	121	<10	17	91
189126	Z079095	<0.005	<1	2.80	14	46	<2	30	2.53	<4	31	79	95	7.67	<0.01	30	2.03	1039	<1	50	1681	14	5	<5	<10	339	535	<2	106	<10	18	99
189127	Z079096	0.022	<1	2.48	201	86	2	30	1.56	5	33	137	123	14.23	<0.01	59	2.75	1075	1	101	1182	26	8	<5	<10	197	456	<2	172	<10	9	118
189128	Z079097	<0.005	<1	3.05	15	9	2	21	1.64	<4	46	106	108	10.76	<0.01	85	3.49	1245	<1	119	683	15	5	<5	<10	192	442	<2	139	<10	8	142
189129	Z079098	<0.005	<1	0.25	9	385	<2	6	0.20	<4	7	15	50	1.91	<0.01	<1	0.60	237	<1	19	387	1	<5	11	<10	135	360	<2	39	<10	5	29
189130	Z079099	<0.005	<1	2.27	10	101	<2	25	1.96	<4	33	84	67	9.81	<0.01	58	2.86	1170	<1	90	703	14	5	<5	<10	212	408	<2	130	<10	8	112
189131	Z079100	0.007	<1	2.27	12	46	<2	22	3.11	<4	37	137	212	7.91	<0.01	60	3.02	1288	<1	101	1085	14	5	<5	<10	289	334	<2	116	<10	11	126
189132	Z079101	<0.005	<1	1.72	10	87	<2	29	0.95	<4	44	20	72	9.39	<0.01	46	2.31	1280	<1	39	921	14	7	<5	<10	126	404	<2	245	<10	13	187
189133	Z079102	0.006	<1	1.77	10	102	<2	17	3.19	<4	32	38	80	6.89	<0.01	34	1.84	1449	<1	22	1109	13	5	7	<10	263	405	<2	131	<10	18	160

PROCEDURE CODES: ALP2, ALFA2, ALMA1

Certified By: 
 Jason Moore, General Manager

The results included on this report relate only to the items tested
 The Certificate of Analysis should not be reproduced except in full,
 without the written approval of the laboratory



1046 Gorham Street Tel: (807) 626-1630 www.accurassay.com
 Thunder Bay, ON Fax: (807) 622-7571 assay@accurassay.com
 Canada P7B 5X5

Friday, August 19, 2011


Certificate of Analysis

Clark Consulting
 1000 Alloy Dr.
 Thunder Bay, ON, CAN
 P7A6G5
 Ph#: (807) 622-3284
 Fax#: (807) 622-4156
 Email: gjclark@tbaytel.net

Date Received: 08/04/2011
 Date Completed: 08/18/2011
 Job #: 201142884
 Reference: Frontline-Shabumeni Lk-Trenching
 Sample #: 43

Acc #	Client ID	Au ppm	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Li ppm	Mg %	Mn ppm	Mo ppm	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Sn ppm	Sr ppm	Ti ppm	Tl ppm	V ppm	W ppm	Y ppm	Zn ppm
189134	Z079103	0.006	<1	1.03	5	164	<2	11	0.77	<4	7	15	14	4.31	<0.01	11	0.96	596	<1	14	629	7	5	6	<10	133	445	<2	23	<10	34	76
189135D	Z079103	0.006	<1	0.41	5	132	<2	15	0.74	<4	7	11	14	4.39	<0.01	10	0.96	597	<1	14	625	7	<5	<5	<10	126	346	<2	22	<10	32	76
189136	Z079104	0.040	<1	2.01	78	<1	<2	17	5.91	<4	119	208	3678	8.55	<0.01	<1	2.48	1289	75	177	345	19	6	<5	<10	188	3182	2	121	23	12	92
189137	Z079105	0.105	<1	2.76	55	<1	2	26	7.90	<4	89	164	3275	9.34	<0.01	<1	1.91	1411	96	153	377	17	10	<5	<10	344	2683	<2	116	75	12	82
189138	Z079106	0.112	<1	3.30	50	30	<2	28	5.83	4	114	219	3462	9.79	<0.01	<1	1.75	1311	82	192	272	17	<5	<5	<10	269	3240	<2	139	73	12	91
189139	Z079107	0.076	<1	1.64	36	<1	<2	25	5.34	4	104	199	3019	9.70	<0.01	<1	1.67	1381	41	200	259	17	5	<5	<10	196	2943	<2	128	88	10	98
189140	Z079108	0.030	<1	2.35	22	<1	<2	25	5.17	<4	79	212	386	10.14	<0.01	2	2.20	1466	4	228	205	15	6	<5	<10	154	3057	<2	135	<10	10	95
189141	Z079109	0.011	<1	2.09	26	<1	<2	21	5.72	<4	65	203	699	8.71	<0.01	<1	2.32	1441	10	225	196	14	5	<5	<10	178	3049	<2	131	<10	10	93
189142	Z079110	0.012	<1	0.97	16	<1	<2	17	4.59	<4	62	195	481	8.61	<0.01	<1	2.54	1404	<1	189	174	14	6	<5	<10	119	2765	<2	117	<10	10	93
189143	Z079111	0.018	<1	1.96	54	<1	<2	22	5.75	<4	69	208	755	7.93	<0.01	<1	2.61	1217	<1	209	185	13	5	<5	<10	160	2976	<2	129	<10	10	93
189144	Z079112	0.388	26	<0.01	151	<1	2	36	6.33	8	233	53	21860	11.18	<0.01	<1	1.82	1914	23	169	907	19	6	16	<10	157	1445	<2	61	147	9	325
189145	Z079113	0.195	9	1.66	87	<1	3	28	5.14	4	152	198	10244	8.98	<0.01	<1	1.55	1275	86	133	266	15	6	<5	<10	227	2786	<2	160	142	11	166
189146D	Z079113	0.193	10	1.70	92	<1	3	33	5.07	5	153	199	10400	8.97	<0.01	<1	1.55	1275	87	134	266	18	7	6	<10	227	2799	<2	160	145	11	163
189147	Z079114	0.056	<1	2.60	39	<1	2	23	4.67	4	92	226	4508	10.65	<0.01	<1	1.76	1857	7	249	242	22	8	<5	<10	227	3296	<2	122	47	11	125
189148	Z079115	1.183	24	2.36	324	<1	2	31	6.91	5	135	179	9566	10.76	<0.01	<1	2.03	1322	48	156	713	23	8	8	<10	333	3023	<2	136	14	13	131
189149	Z079116	0.093	6	2.13	254	<1	2	35	5.37	4	95	164	2562	10.51	<0.01	<1	2.24	1628	435	134	634	20	<5	<5	<10	207	2837	<2	116	21	11	123
189150	Z079117	0.044	<1	3.01	26	<1	<2	34	5.80	4	85	222	2045	9.46	<0.01	2	1.82	1324	17	159	249	18	6	<5	<10	246	3170	<2	137	37	14	112
189151	Z079118	0.076	<1	3.20	110	<1	2	27	6.40	4	148	225	4145	9.49	<0.01	1	1.80	1622	597	242	255	15	6	7	<10	275	3327	<2	145	131	12	107
189152	Z079119	0.842	26	1.90	411	<1	2	30	7.71	5	90	178	4916	10.65	<0.01	<1	1.71	1419	46	158	282	23	12	7	<10	446	2636	<2	111	115	15	171
189153	Z079120	0.005	<1	2.72	37	93	<2	22	4.44	<4	37	125	68	8.78	<0.01	50	2.56	1335	<1	111	639	15	5	<5	<10	215	457	<2	160	<10	10	109

PROCEDURE CODES: ALP2, ALFA2, ALMA1

Certified By: 
 Jason Moore, General Manager

The results included on this report relate only to the items tested
 The Certificate of Analysis should not be reproduced except in full,
 without the written approval of the laboratory



1046 Gorham Street Tel: (807) 626-1630 www accurassay.com
 Thunder Bay, ON Fax: (807) 622-7571 assay@accurassay.com
 Canada P7B 5X5

Friday, August 19, 2011

Certificate of Analysis

Clark Consulting
 1000 Alloy Dr.
 Thunder Bay, ON, CAN
 P7A6G5
 Ph#: (807) 622-3284
 Fax#: (807) 622-4156
 Email: gjclark@tbaytel.net

Date Received: 08/04/2011
 Date Completed: 08/18/2011
 Job #: 201142884
 Reference: Frontline-Shabumeni Lk-Trenching
 Sample #: 43

Acc #	Client ID	Au ppm	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Li ppm	Mg %	Mn ppm	Mo ppm	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Sn ppm	Sr ppm	Ti ppm	Tl ppm	V ppm	W ppm	Y ppm	Zn ppm
189154	Z079121	0.015	<1	0.75	169	70	<2	23	3.48	6	30	99	311	10.42	<0.01	39	1.88	1103	4	83	514	118	7	<5	16	192	371	<2	127	13	9	922
189155	Z079122	0.130	<1	<0.01	113	<1	2	30	<0.01	7	7	22	149	21.22	<0.01	<1	0.42	439	45	16	661	46	8	<5	<10	61	170	3	32	15	5	66
189156	Z079123	0.087	<1	<0.01	75	<1	2	29	<0.01	5	21	35	170	15.21	<0.01	13	0.71	431	8	21	739	24	6	<5	<10	49	200	<2	59	<10	5	76
189157D	Z079123	0.087	<1	<0.01	69	<1	<2	47	<0.01	5	23	35	176	15.64	<0.01	12	0.76	442	7	21	763	25	8	<5	<10	45	204	<2	61	<10	5	72
189158	Z079124	0.018	<1	1.09	42	196	<2	14	5.28	<4	33	269	37	5.87	<0.01	11	2.39	1211	<1	159	950	11	5	5	<10	260	493	3	108	<10	12	61
189159	Z079125	0.172	<1	<0.01	145	<1	<2	34	3.36	4	42	34	727	12.23	<0.01	18	1.21	911	12	80	358	22	18	11	<10	168	185	<2	38	<10	7	66
189160	Z079126	0.759	<1	1.54	84	151	<2	15	<0.01	<4	2	26	18	1.81	<0.01	<1	0.23	<100	<1	31	504	6	<5	17	<10	125	419	<2	75	<10	6	26

PROCEDURE CODES: ALP2, ALFA2, ALMA1

Certified By: 
 Jason Moore General Manager

The results included on this report relate only to the items tested
 The Certificate of Analysis should not be reproduced except in full,
 without the written approval of the laboratory

Friday, September 23, 2011

Certificate of Analysis

Clark Consulting
1000 Alloy Dr.
Thunder Bay, ON, CAN
P7A6G5
Ph#: (807) 622-3284
Fax#: (807) 622-4156
Email: gjclark@tbaytel.net

Date Received: 09/02/2011
Date Completed: 09/23/2011
Job #: 201143249
Reference: Frontline-Shabumeni River
Sample #: 3

Acc #	Client ID	Au ppb	Au oz/t	Au g/t (ppm)
217197	Z079127	<5	<0.001	<0.005
217198	Z079128	<5	<0.001	<0.005
217199	Z079129	<5	<0.001	<0.005
217200 Dup	Z079129	<5	<0.001	<0.005

PROCEDURE CODES: ALP2, ALFA2, ALMA1

Certified By: 
Clark Consulting is a Laboratory Accredited

The results included on this report relate only to the items tested
The Certificate of Analysis should not be reproduced except in full,
without the written approval of the laboratory

Appendix D
2011 Field Maps








* Maps can be found in map pockets following this report

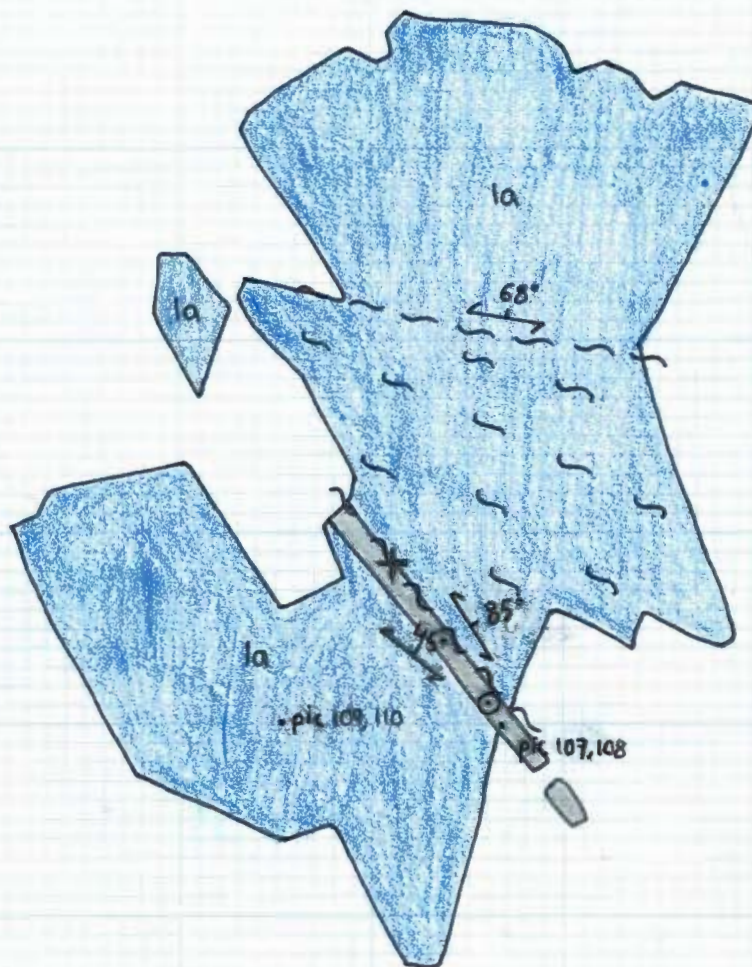


FRONTLINE GOLD
SKINNER
TRENCH #5

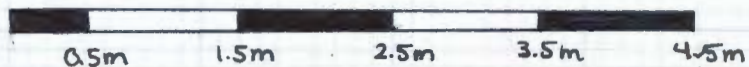


LEGEND:

-  Shear Zone
-  Contact
-  Foliation
-  Grab Samples
-  Pictures
-  Quartz Vein
-  Mafic Metavolcanics - la

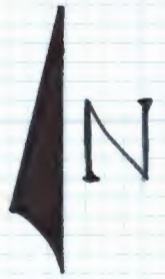


SCALE 1:50



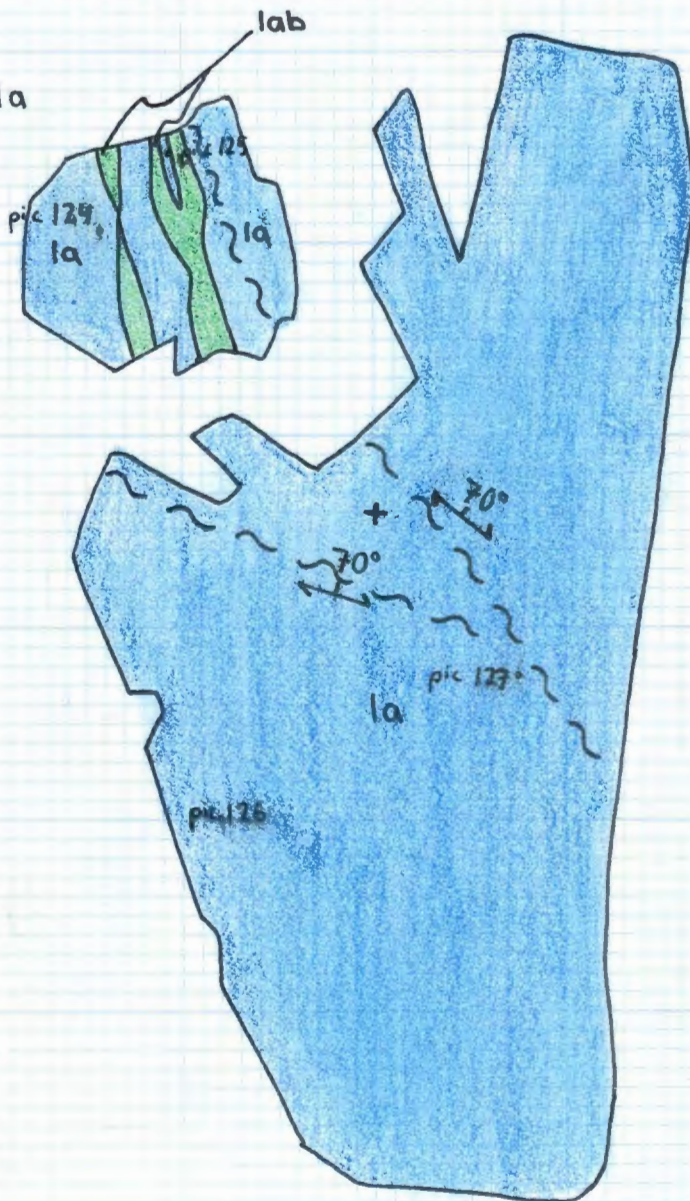
Mapped by
Curniss McGoldrick
Christian Carl
June 23rd, 2011

FRONTLINE GOLD
SKINNER
TRENCH #4



LEGEND:

- ✓ Shear Zone
- Contact
- ↗ Foliation
- Picture
- Mafic Metavolcanics - la
- Bleached Mafic Metavolcanics - lab



SCALE 1:50



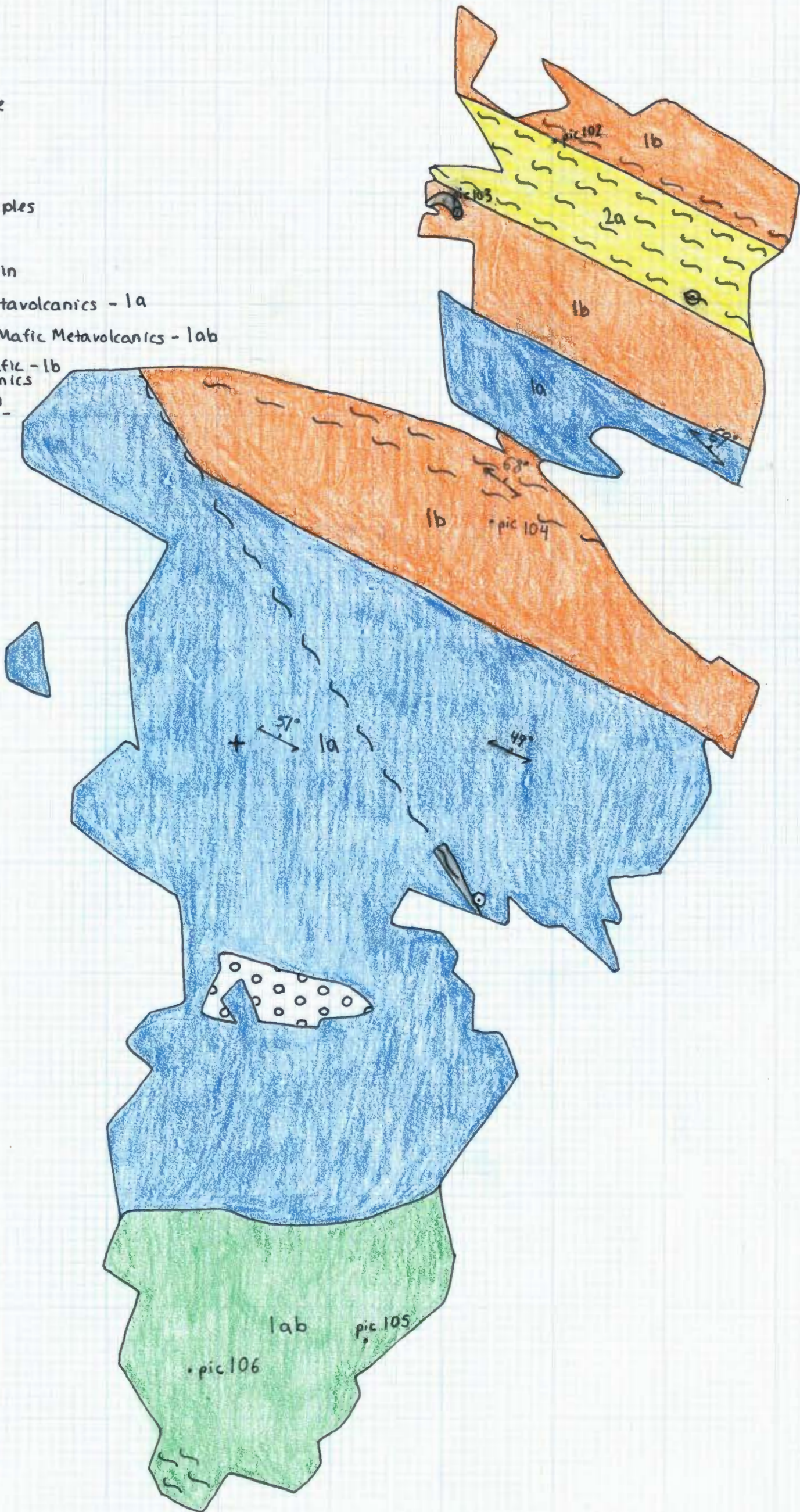
Mapped by
Curniss McGoldrick
Christian Carl
June 24th, 2011

FRONTLINE GOLD
SKINNER
TRENCH #2



LEGEND:

- shear zone
- Contact
- Foliation
- Grab Samples
- pictures
- Quartz Vein
- Mafic Metavolcanics - 1a
- Bleached Mafic Metavolcanics - 1ab
- Altered Mafic - 1b Metavolcanics
- Quartz-Rich Shear Zone - 2a
- Overburden

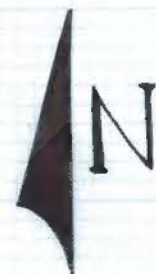


SCALE 1:50



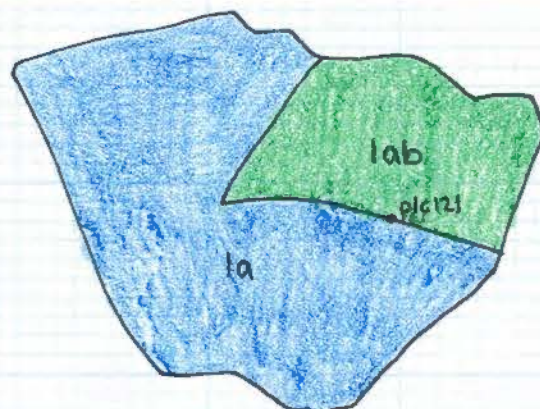
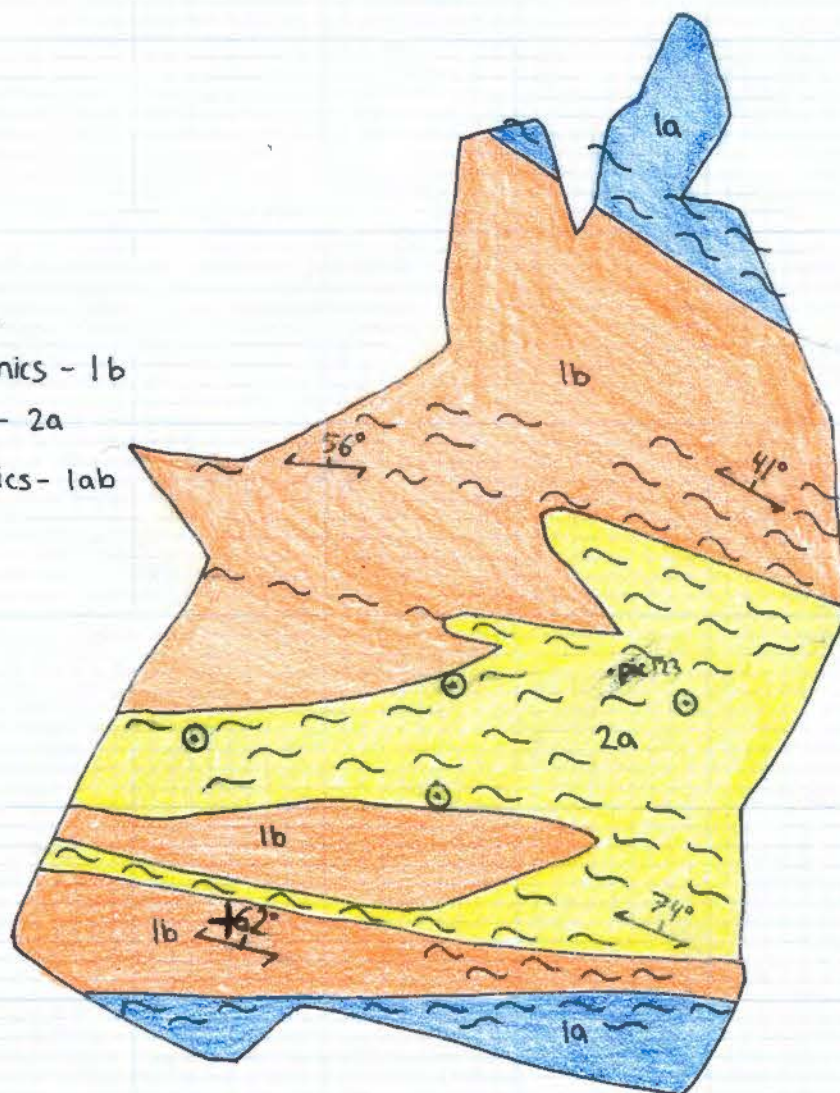
Mapped by
Christian Carl
Curniss McGoldrick
June 23rd, 2011

FRONTLINE GOLD
SKINNER
TRENCH # 3



LEGEND:

- ✓ Shear Zone
- Contact
- ↘ Foliation
- ⊙ Grab Samples
- Pictures
- Mafic Metavolcanics - 1a
- Altered Mafic Metavolcanics - 1b
- Quartz-Rich Shear Zone - 2a
- Bleached Mafic Metavolcanics - 1ab

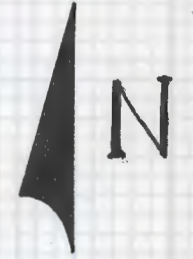


SCALE 1:50

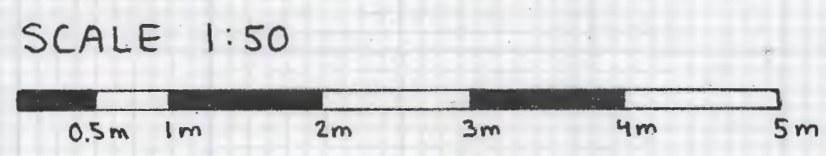
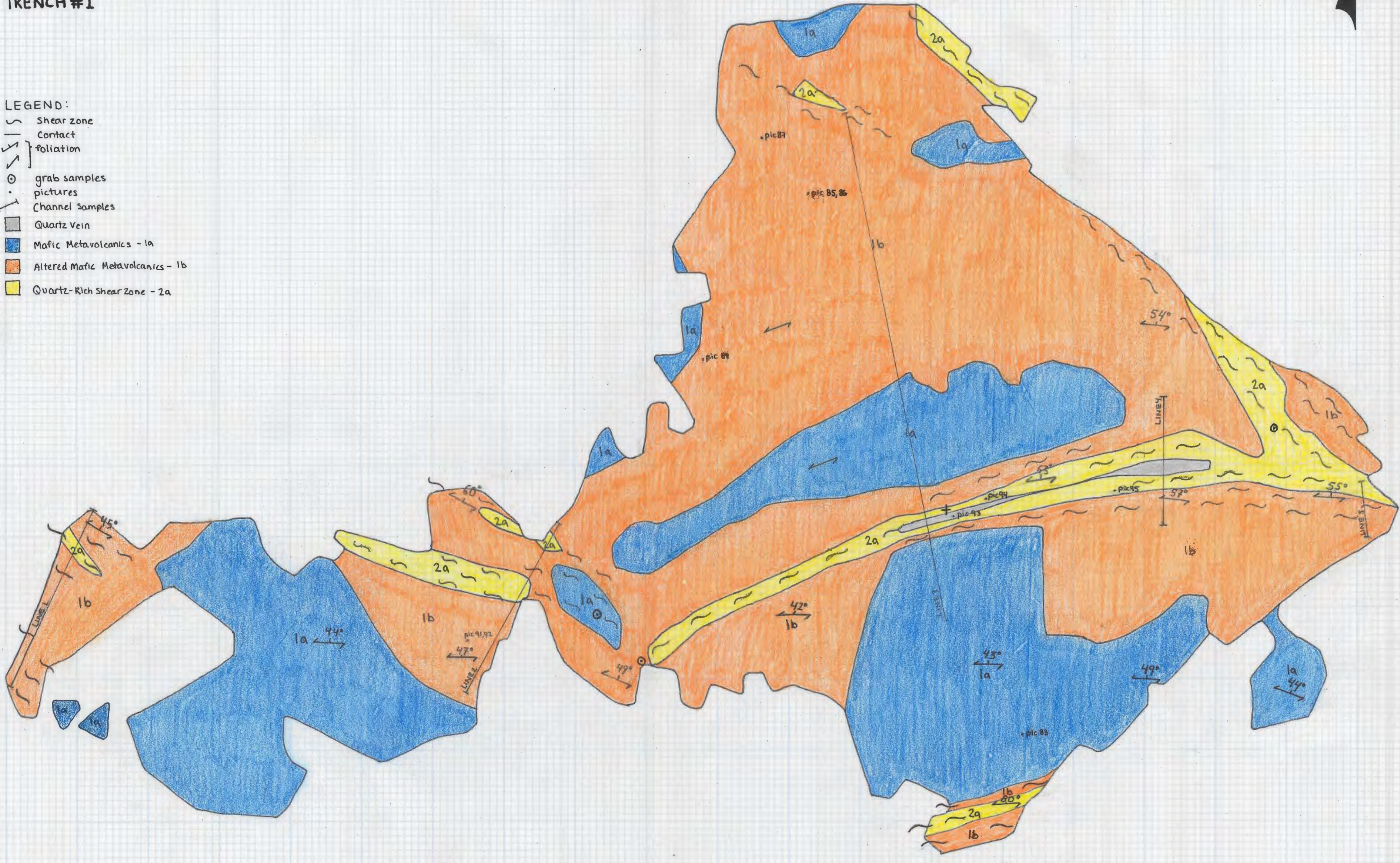


Mapped by
Curniss McGoldrick
Christian Carl
June 24th, 2011

**FRONTLINE GOLD
SKINNER
TRENCH #1**



- LEGEND:**
- Shear zone
 - Contact
 - foliation
 - grab samples
 - pictures
 - Channel samples
 - Quartz Vein
 - Mafic Metavolcanics - 1a
 - Altered Mafic Metavolcanics - 1b
 - Quartz-Rich Shear Zone - 2a



Mapped by
Curniss McGoldrick
Christian Carl
June 22nd, 2011

529000

529250

529500

529750

5683750

5683750

5683500

5683500

5683250

5683250

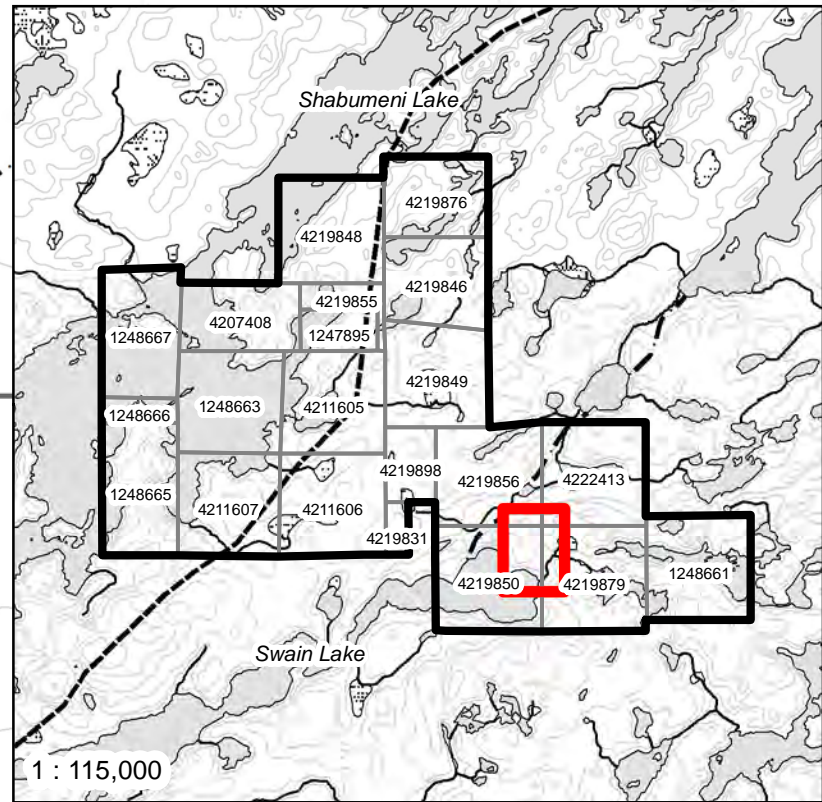
5683000

5683000

5682750

5682750

Frontline Gold Shabumeni Lake Property South Showing - Trench Location



Trench Location



4219850

4219879

Swain Lake



Meters
1 : 5,000

NAD 82 UTM Zone 15
Mapped 08/13/2011
By : J. Seals and B. Clark

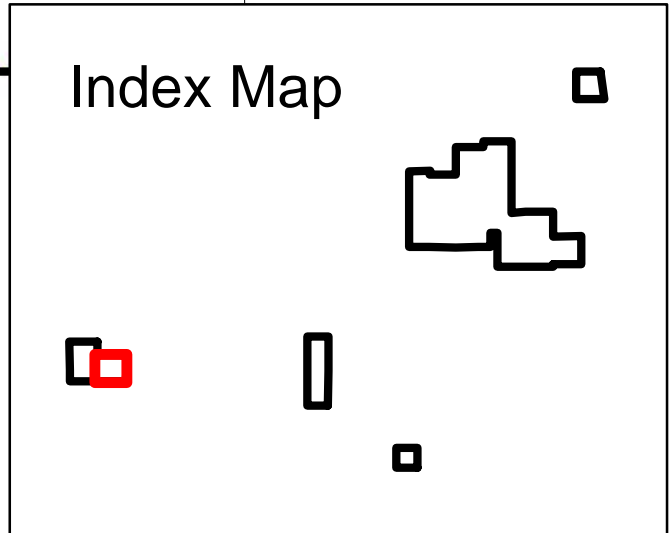
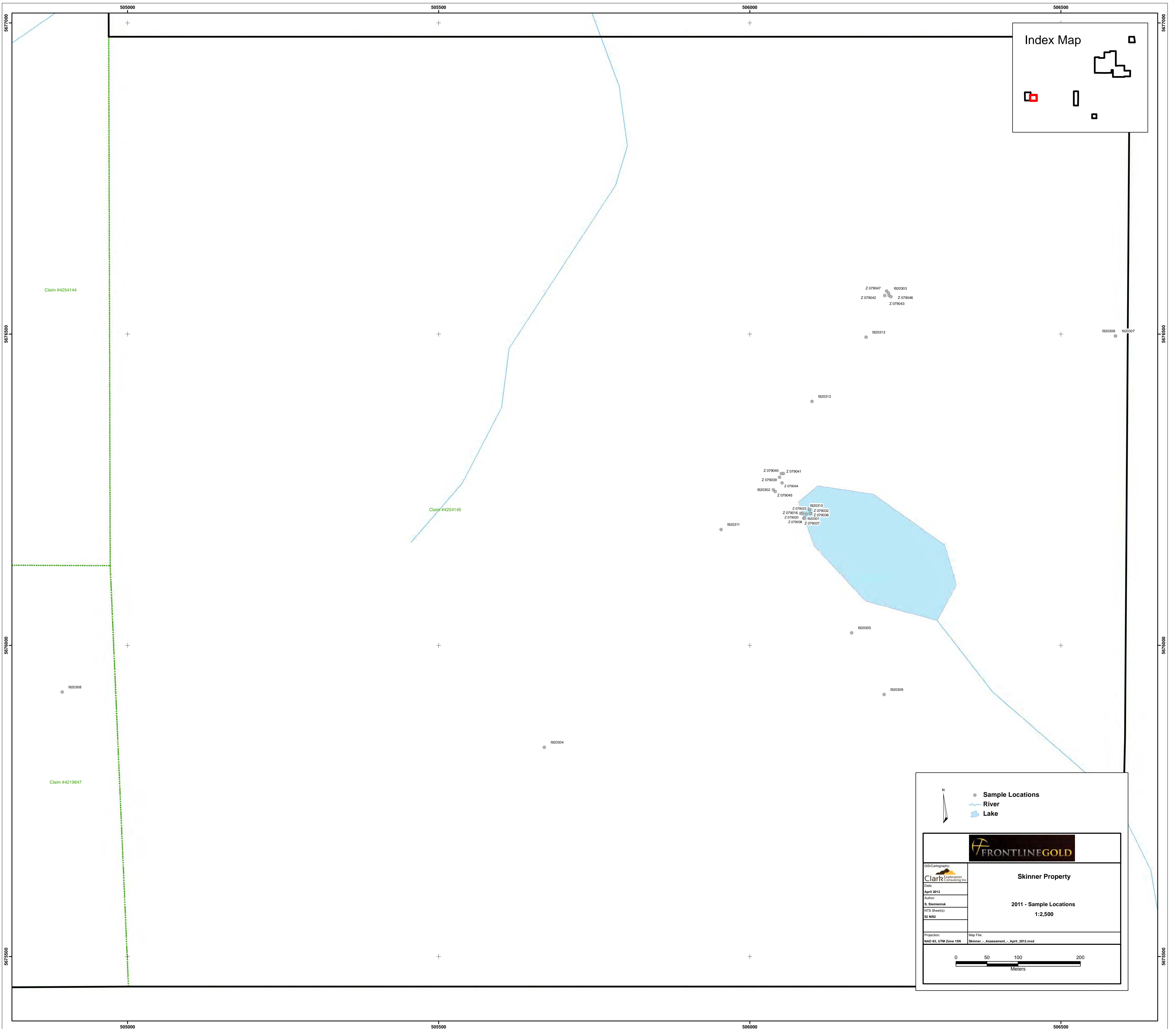
- Contour
- Trail
- Power line
- River
- Lake
- Wetland
- Mining Claim
- Property Boundary

529000

529250

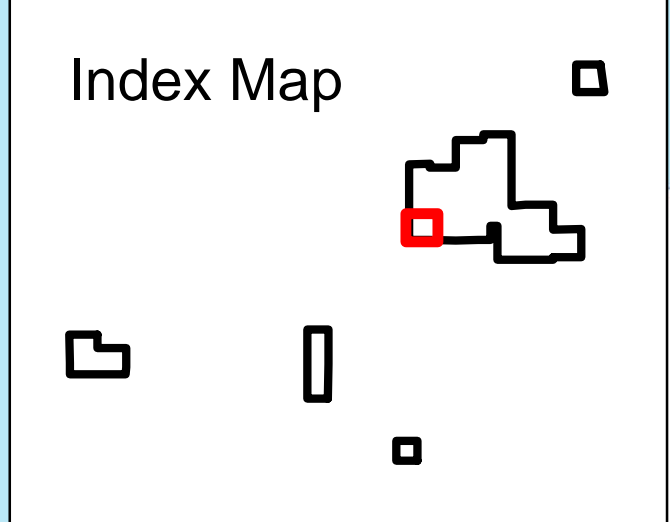
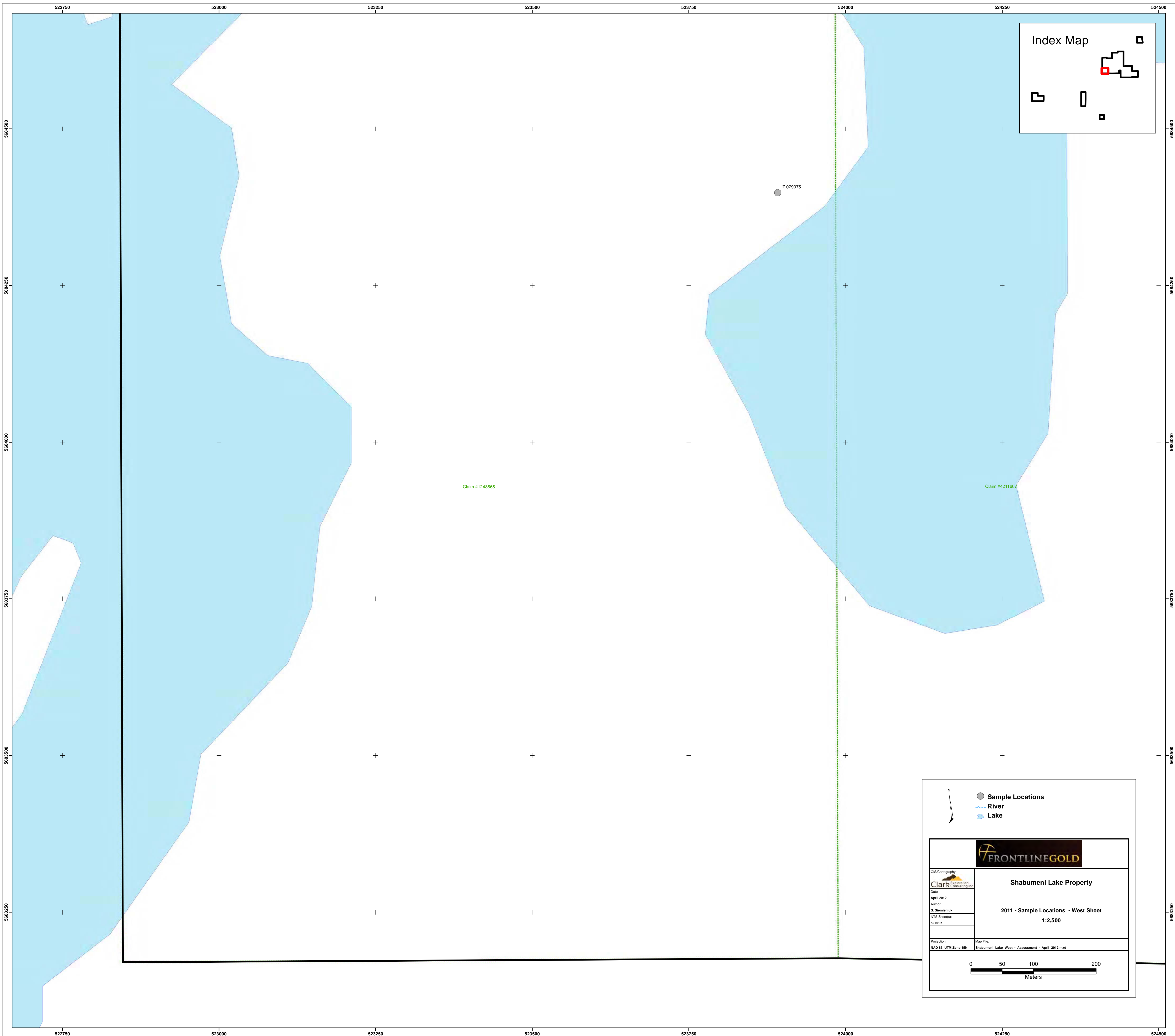
529500

529750

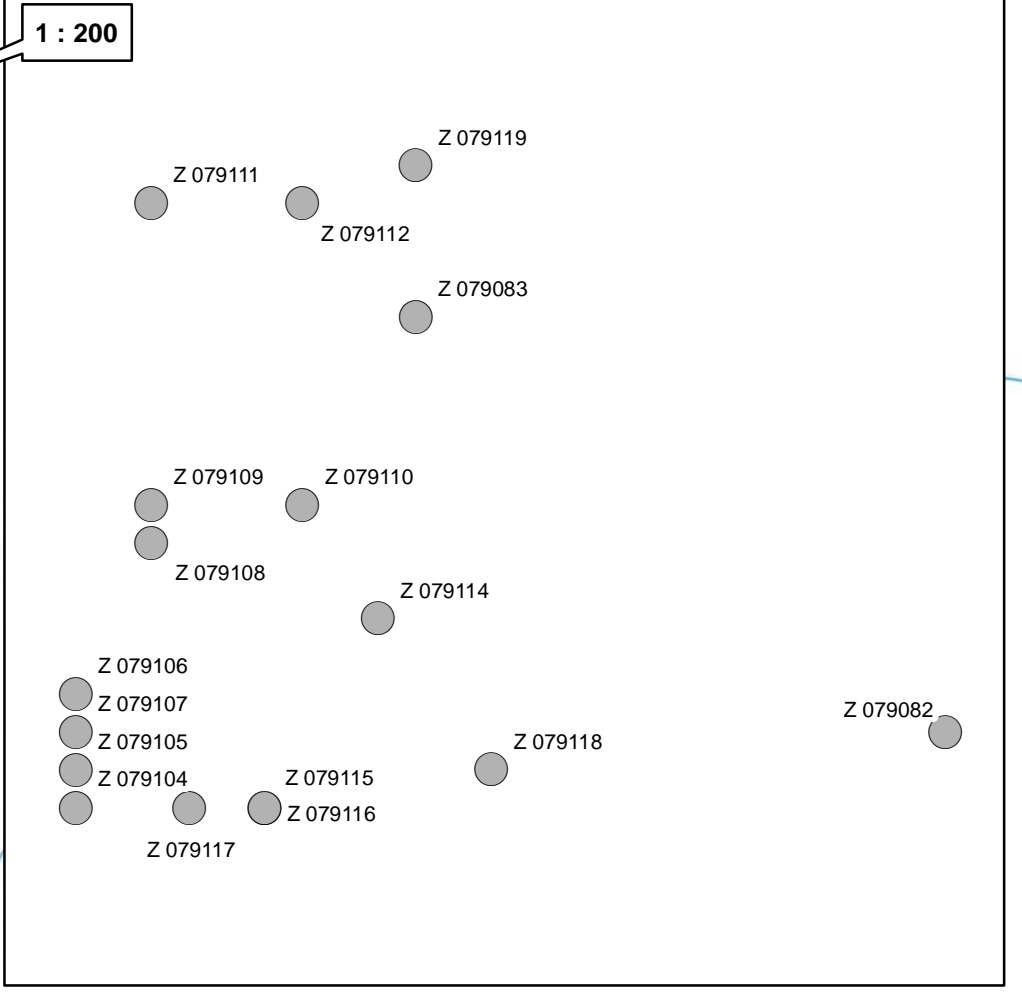
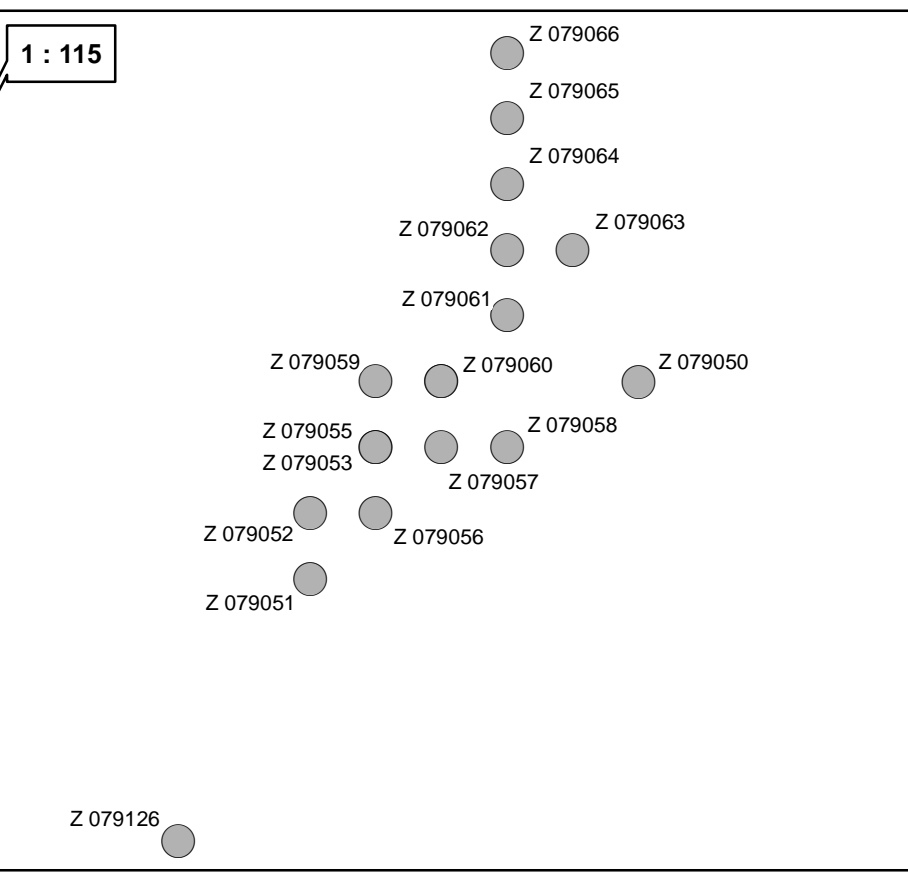
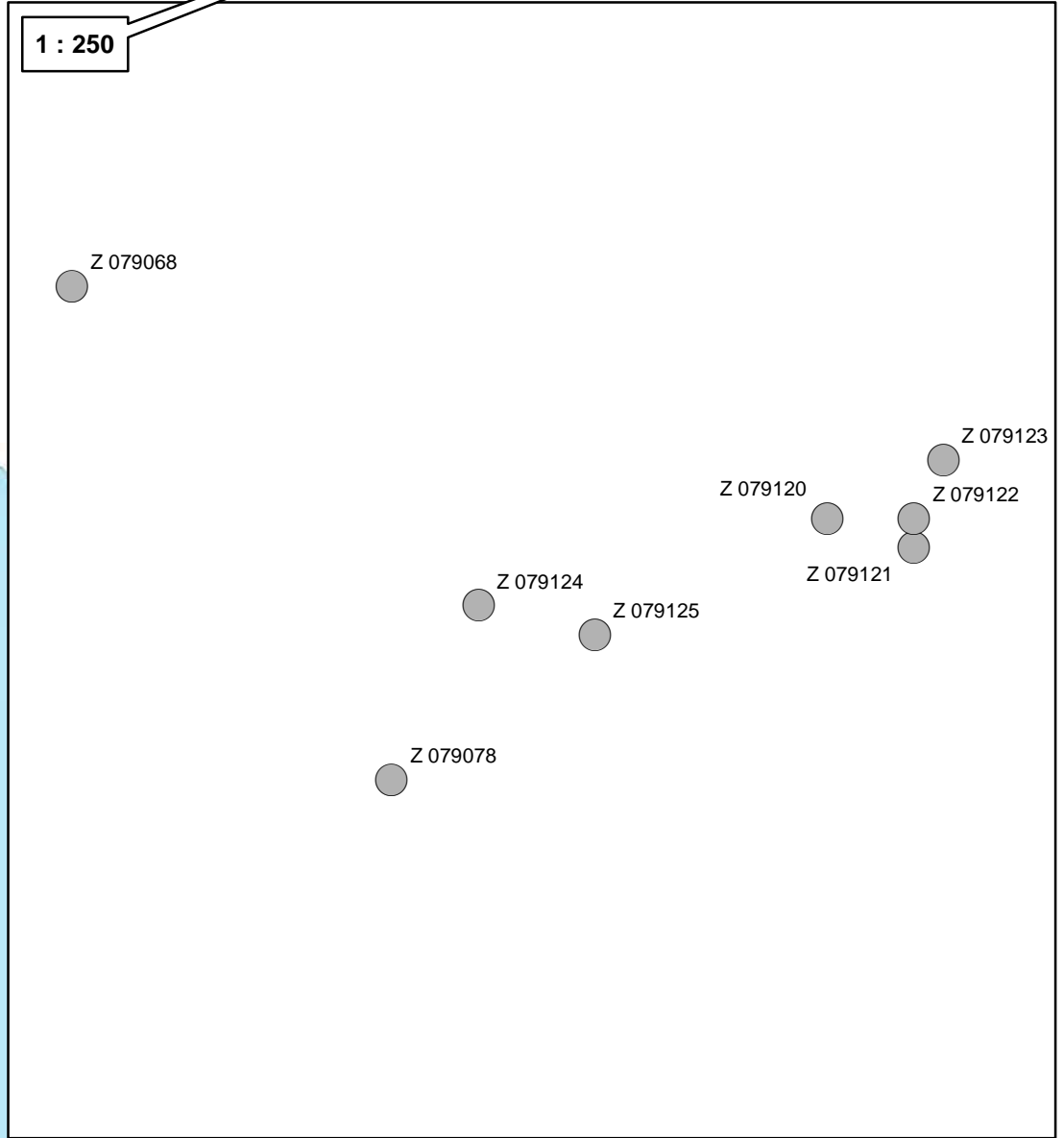
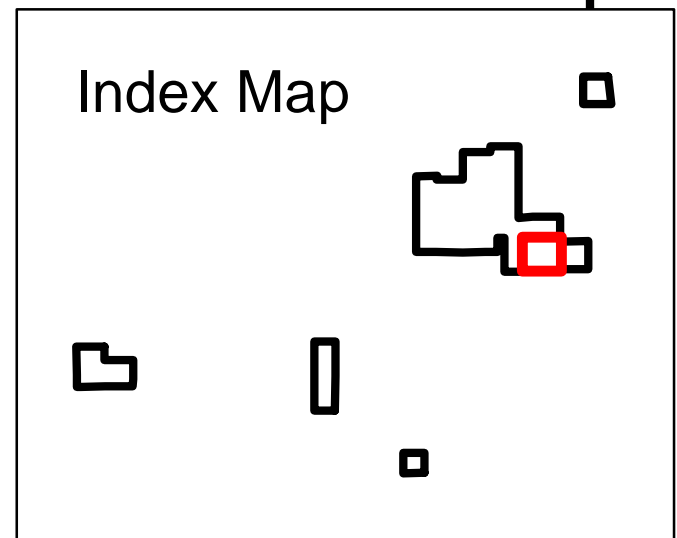
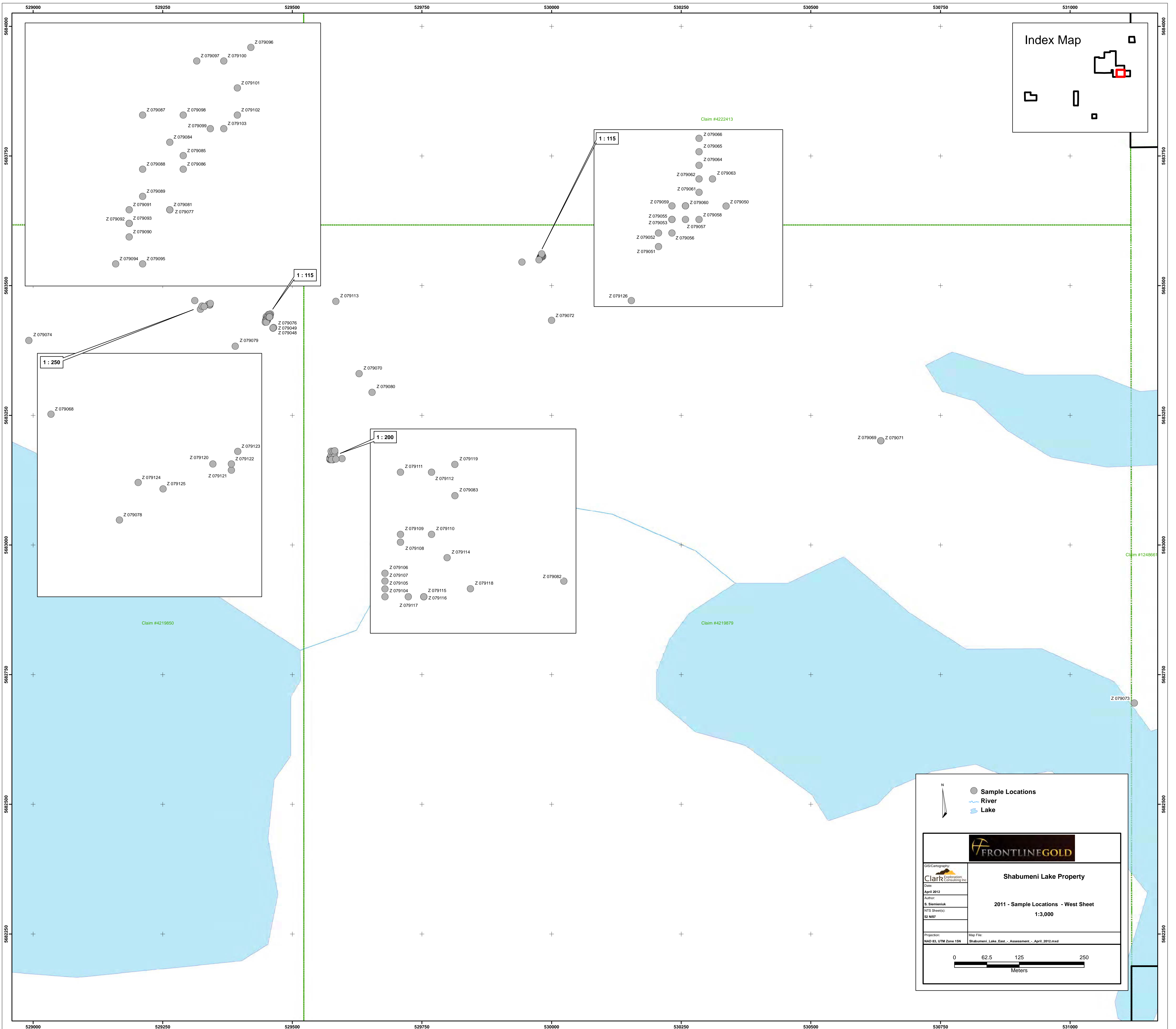


GIS-Cartography: Date: April 2012 Author: S. Siemieniuk NTS Sheet(s): S2 N02	Skinner Property 2011 - Sample Locations 1:2,500
Projection: NAD 83, UTM Zone 15N	Map File: Skinner - Assessment - April, 2012.mxd

- Sample Locations
- River
- Lake



		<ul style="list-style-type: none"> Sample Locations River Lake
<small>GIS-Cartography:</small> 		Shabumeni Lake Property
<small>Date:</small> April 2012		2011 - Sample Locations - West Sheet
<small>Author:</small> S. Siemieniuk		1:2,500
<small>NTS Sheet(s):</small> S2 NW7		
<small>Projection:</small> NAD 83, UTM Zone 15N		<small>Map File:</small> Shabumeni_Lake_West_Assessment_April_2012.mxd



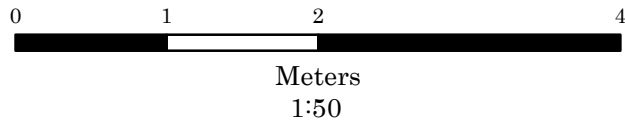
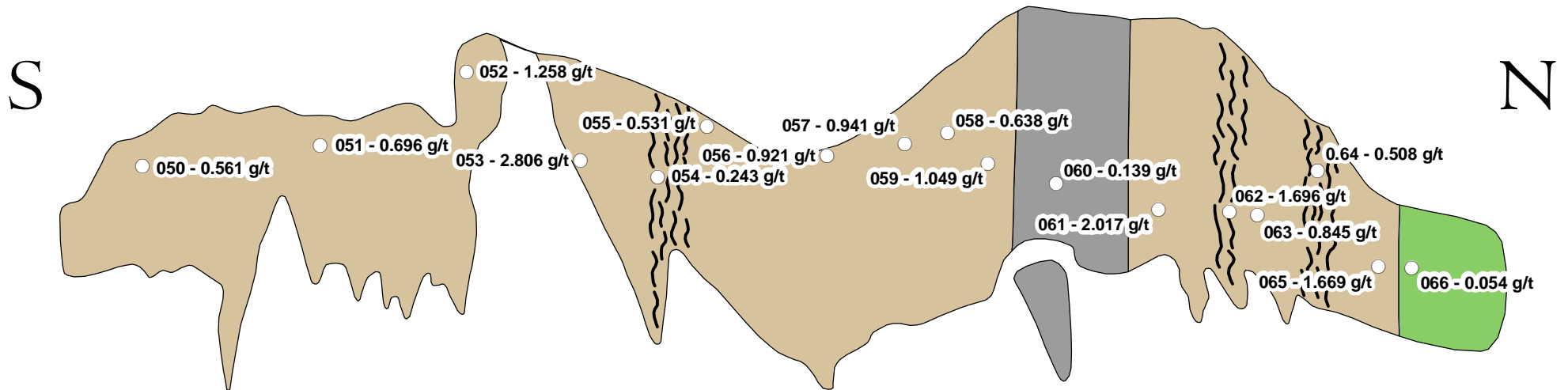
- Sample Locations
- River
- Lake

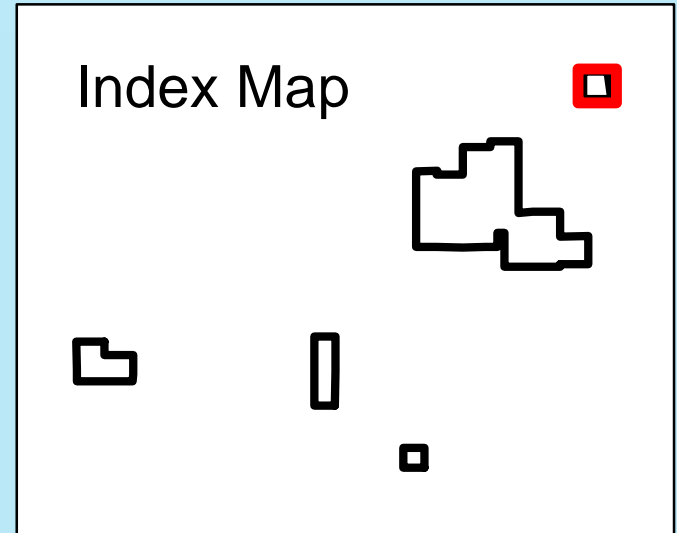
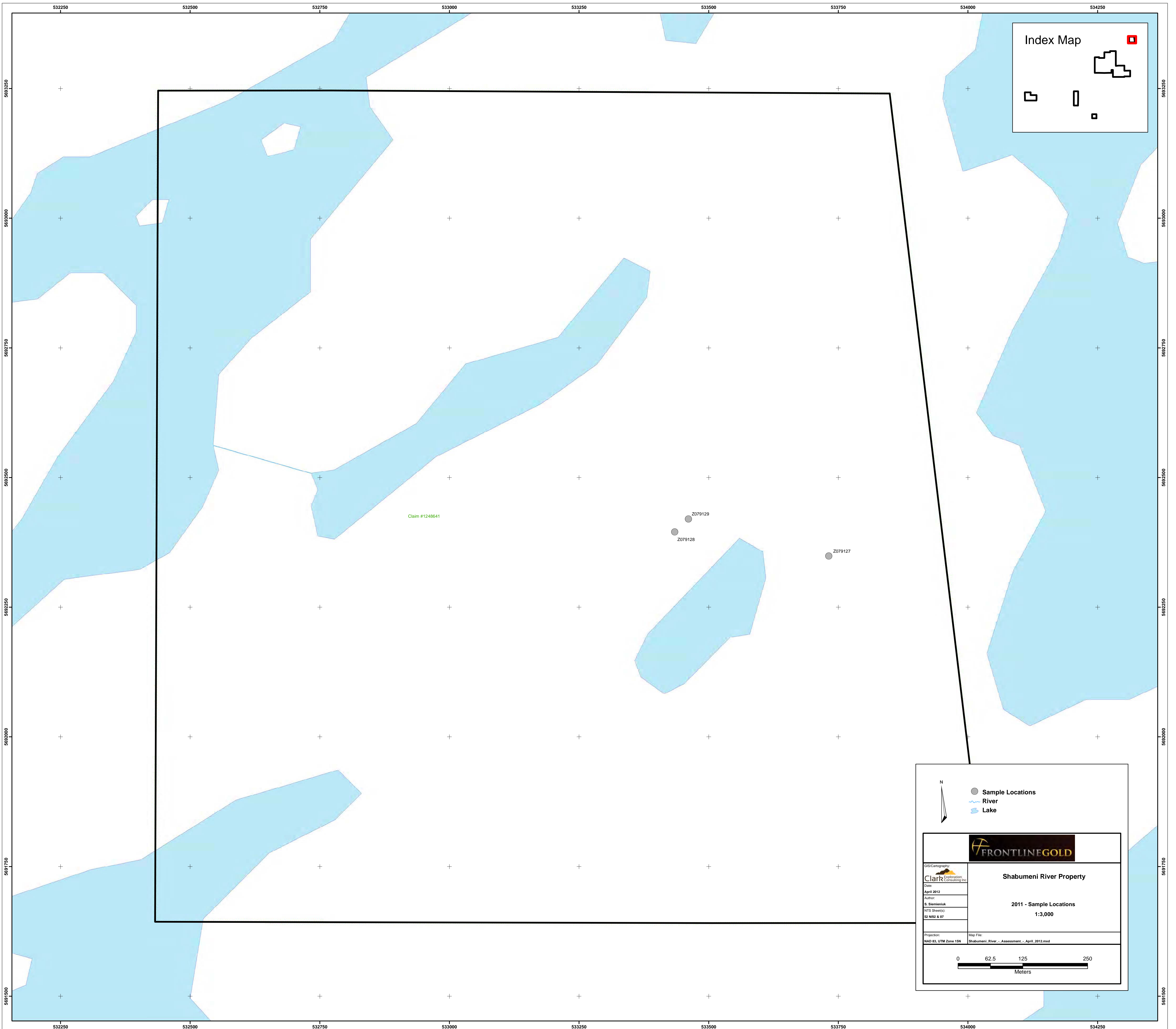
GIS-Cartography: Date: April 2012 Author: S. Siemieniuk NTS Sheet(s): S2 N07	Shabumeni Lake Property 2011 - Sample Locations - West Sheet 1:3,000
Projection: NAD 83, UTM Zone 15N	Map File: Shabumeni_Lake_East_Assessment_April_2012.mxd

Cross Section of Rand Showing - July 2011

Frontline Gold Corp. - Shabumeni Lake Property

- Sample Location - (g/t) Grams per Tonne Au
- ~ Intense Shearing
- Greenish-grey coloured mafic metavolcanic wall rock containing abundant chlorite and strong carbonate flooding. 0.054 g/t Au.
- Light grey moderately foliated schist composed primarily of ankerite, silica and sericite with trace sulphides. 0.139 g/t Au.
- Moderate to strongly foliated quartz-carbonate rich sericite schist containing occasional ankerite and up to 25% sulfides. Au values range from 0.508 to 2.017 g/t.





		<ul style="list-style-type: none"> ● Sample Locations — River ■ Lake
<small>GIS-Cartography:</small> 	Shabumeni River Property	
<small>Date:</small> April 2012	2011 - Sample Locations	
<small>Author:</small> S. Siemieniuk	1:3,000	
<small>NTS Sheets:</small> S2 NW2 & 07	<small>Projection:</small> NAD 83, UTM Zone 15N	
<small>Map File:</small> Shabumeni_River_-_Assessment_-_April_2012.mxd		

This page has been intentionally left blank.