Takara Resources Inc.
Castle Silver Property
Gowganda, Ontario, Canada
NI 43-101 Technical Report

Respectfully submitted to:
Takara Resources Inc.
Gold Bullion Development Corp.

Effective Date:
July 9th 2015
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1- Summary

This report has been prepared by GoldMinds Geoservices Inc. for Castle Silver Mines Inc./ Gold Bullion Development Corp & Takara resources Inc.
This property is located in Haultain and Nicol Townships in the main historic Gowganda Silver Mining Camp. Castle Silver Mines Inc.'s Gowganda silver property consists of a total of 34 mining leases and 2 licenses of occupation totalling 564.41 hectares straddling Haultain and Nicol Townships east of the village of Gowganda, in the Larder Lake mining district with 16 Claims totalling 2,637.56 hectares also straddling Haultain and Nicol Townships east of the village of Gowganda.

The Gowganda area is near the northwestern edge of the Cobalt Plain of the Southern Structural Province of the Canadian Shield. The Early Precambrian rocks exposed represent inliers in the Middle Precambrian cover with the exception of the metavolcanic assemblage exposed inside the Miller Lake diabase basin. The rocks of the area are readily divisible into four major units as follows:

- Late gabbroic rocks (Nipissing Diabase and later dikes);
- Cobalt Group Sedimentary rocks;
- Granitic intrusive rocks;
- Metavolcanics rocks with associated intrusive and sedimentary rocks including iron formation.

Vein deposits of the Gowganda region are epigenetic and contain important amounts of silver, nickel, cobalt and bismuth in predominantly arsenide, sulpharsenide, and native forms. Distribution of the silver-cobalt veins in the Cobalt district is controlled by the contact between the Nipissing diabase sheets and the rocks of the Cobalt Group (Gowganda Formation). The veins occur in the diabase and in the sedimentary rocks within about 200 m of their contact with the diabase. They dip steeply, extend horizontally as much as 1,000 m and vertically as much as 120 m, and are as wide as 1.2 m. Arsenides, sulpharsenides and antimonides of nickel, cobalt, and iron in various proportions, as well as large amounts of native silver, are the principal metallic constituents of the ore. Carbonates (dolomite, calcite), quartz, and chlorite are typical gangue minerals. Distribution of the veins is structurally controlled by regional fault systems and by the contact zones between the sill-like bodies of Nipissing diabase and the Huronian sedimentary rocks, and less commonly between the Nipissíng diabase and Archean rocks.

Exploration and production in the Gowganda mining camp covers more than a century. Mineralization is directly related to the Nipissing sill and the work carried out to-date shows that the veins are narrow and discontinuous. Following the discovery of native silver deposits in the Cobalt area in 1903, prospectors began searching for other areas of Nipissing Diabase with which the silver deposits are spatially and genetically related.

Castle Silver Mines Inc. owned by Gold Bullion Development Corp did exploration works from 2011 to 2014. Over the years, they completed drilling, geophysics, hyperspectral image analysis of core, geochemistry (MMI), stripping and mapping.

Numerous strong calcite veins and vein systems were drilled many of which were independent of the historic mine workings. Many of these have minor to significant sulphides, commonly chalcopyrite, galena and/or sphalerite. Base metal minerals were generally more prevalent than

secondary pyrite. In non-ore grade intersections, wall rock Ag, Cu, Pb, Zn, Co, Au mineralization is as significant as equivalent vein values. Both indicate the veins were part of the overall mineralizing system.

The best intersection encountered is from hole CA1108 at 563.54-566.63 m. Total pulp metallic assays were performed on a half split-core sample of the entire length of the mineralized section. The pulp metallic assays rendered an uncut weighted average grade of 6,476 Ag g/t, 0.14% Co, 0.03% Ni over 3.09 m. This interval includes 40,944 Ag g/t, 0.91% Co, 0.12% Ni over 0.45 m located at 564.34-564.79m.The bulk of the silver is in a 7 cm (true width) calcite-Co-Ag vein at 28◦ to the core axis from 564.64-564.77 m. Leaf silver was common in the wall rock in the reported interval.

A weak Cu-Au hematite overprint is locally developed. In hole CA1107 from 134.20- 227.54 m the gold-copper-hematite overprint grades 1.95 Ag g/t, 0.049 Au g/t, 0.03% Cu over 93.34m. Copper-gold-hematite overprints all rock types and appears to be spatially and genetically related to the fault at 127.72-133.49 m. A drill hole to test this zone is recommended 50 metres below CA1107.

Some of those samples were later sent to SGS laboratory for control analyses. SGS Control Quality Data shows an important difference between the two tests with samples that have a high concentration of silver whereby SGS control samples came out higher. Otherwise, the results for silver and cobalt are acceptable.

Photonic Knowledge recommends using the high values of the results from the Archean Sediments mineral spectrum to highlight the zones susceptible of bearing silver mineralization.

From historical information, screen analyses shows that silver was concentred in the coarser fractions. By taking out the small particles (less than 325 mesh), 12.3% of the silver was rejected.

Castle Silver Mines Inc./ Gold bullion Development Corp. have completed significant rehabilitation and protection of the site. Those actions, along with a community information session, have helped them to have a good relationship with the community.

The MMI geochemical survey shows potential for mineralization in gold, silver, base metals. The channel sampling has shown potential mineralization in gold and copper at surface.

The property merits additional exploration work based on the drill results, MMI, trench works and the favourable geological context from surface to 350 meters depth based on what we know at the moment.

The budget estimate of the work proposed for the next phase of exploration to develop Silver, Gold and base metal mineralization on the property is presented in two steps and as follows:

Phase 1

Step 1

• Follow-up on existing anomalies of the MMI with trenching

• Exploration with MMI in specific areas having potential

• Higher density MMI on areas of new anomalies of the MMI

• Follow-up on the new anomalies of the MMI with trenching

• Geology, assaying, management and report

A limited budget of $45,000 with $6,000 in MMI, $5,000 in prospecting and the remaining $34,000 in trenching sampling and report to achieve these tasks is proposed.

Should the program proves to be positives with findings, then finance to proceed with additional works on the findings and the Step 2 proposed program.

ESTIMATED TOTAL STEP 1 PROGRAM $45,000

Step 2 tributary of positive findings and financing after Step 1 works

• Drill two Wedges in the hole which has intersected the silver vein $25,000

• Data acquisition for scanning and organizing the mine
E-files, mine plans and sections, preparation of an integrated GIS $100,000

• Down-the-hole geophysics $200,000

• Diamond drilling, 5,000 m $1,000,000
(including sampling, assaying, geologist support, @ $200/m)

• LIDAR SURVEY of the property $50,000

• Geophysical ground IP survey $200,000

• Geology, MMI, Trenching, management and technical report $125,000

• Surveyor $50,000

ESTIMATED TOTAL STEP 2 PROGRAM $1,750,000

2- Introduction

Mr. Chris Hopkins president of Takara Resources Inc., contracted GoldMinds Geoservices Inc. (GMG) to produce a 43-101 technical report on the Castle silver property at Gowganda for the purpose of a transaction between Gold Bullion Development Corp/Castle Silver Mines Inc. & Takara Resources Inc.

This property is located in Haultain and Nicol Townships in the main historic Gowganda Silver Mining Camp. The objective of this report is to summarize the overall geological work undertaken until recently on the property.

Claude Duplessis, senior engineer at GoldMinds Geoservices Inc. office located in Québec city, Québec has prepared this updated technical report and for that purpose, made a property visit to the Castle Silver Property site on April 17th 2012 and May 21st 2015. More details are provided in section 12.1 of this report. Claude Duplessis also fulfills the requirements to be a Qualified Person in compliance with the 43-101 regulation.

To produce this report, GoldMinds Geoservices Inc. obtained information from Doug Robinson, project geological engineer on the Castle property as well as Elaine Baša, geologist with Grupo Moje Limited. In addition to specific technical information, public information was incorporated into this report to complete the information and thanks them for their collaboration.

3- Reliance on Other Experts

This report has been prepared by GoldMinds Geoservices Inc. for Takara Resources Inc & Gold Bullion Development Corp/Castle Silver Mines Inc. The information, conclusions, opinions and estimates contained herein are based on:

• Information available to GoldMinds Geoservices Inc. at the time of preparation of this report;

• Assumptions and conditions as set forth in this report;

• Data, reports and opinions supplied by Castle Silver Mines Inc. / Gold Bullion Development Corp, its consultants and from public sources.

For the purpose of this report, there was no reliance on other experts except for the detailed property ownership legal documents in the property description section which was provided by Gold Bullion Development Corp Paralegal.

The author verified the Claims and Mining lease ownership on the Ministry of Northern Development & Mines of Ontario's website, and they are deemed to be active and in good standing for the purpose of this report.

4- Property Description and Location

4.1 Property Location

The property is located in the province of Ontario south of Timmins & Matachewan. (Figure 1 & Figure 2). The Castle property, the focus of which is the Castle Mine's No.3 shaft located on Claim RSC101 in Haultain Twp in the main historic Gowganda Silver Mining Camp. The No.3 Shaft and workings are part of the former producing Castle-Trethewey Mine. The claims and mining leases are all secured.

To the extent known at the moment, there are no significant factors or risks that may affect access, title or right or ability to perform work on the property more than normal regulations.

Figure 1: Project Location Map

Figure 2: Regional Location Map

4.2 Property Description

Castle Silver Mines Inc.'s Gowganda silver property consists of a total of 34 mining leases and 2 licenses of occupation totalling 564.41 hectares with 16 Claims totalling 2,637.56 hectares straddling Haultain and Nicol Townships east of the village of Gowganda, in the Larder Lake mining district. There are three mine shafts numbered one, two and three with respective depths of 149, 140 and 259 metres with infrastructure and access to power. Not all 3 shafts are on current Castle Silver Mines Inc. property. The Everett shaft is located on the lease to the west of the lease holding Castle No.3 Shaft. Everett and Castle mine workings are connected. Claims and mining leases map are on Figure 4.

The mine site is located approximately 2.7 km north of the highway 560 (UTM zone 17 519449E 5280663N). This territory is included in the NTS 41P10 topographical map.

Gold Bullion acquired the Castle property pursuant to a purchase and sale agreement with Milner Consolidated Silver Mines Ltd, dated December 2, 2006 (Milner Agreement). The purchase price paid by Gold Bullion for the Castle Silver Mine property was $25,000. In addition, commencing two years from the effective date of the Milner Agreement, Gold Bullion is required to make additional payments to Milner Consolidated in the form of royalties on all future production from the Castle Silver mine property, subject to a minimum annual payment of $15,000. To the author's knowledge, payments have been made every November since then. The royalty payable by Gold Bullion is determined by reference to sale revenues, calculated and payable quarterly as set out in the Milner Agreement.

Specifically, the royalty for each "Silver Sale", that is a sale or other disposition of product containing silver, is an amount equal to the product of the "Royalty Rate" and the "Sale Revenues", as those terms are defined in the Milner Agreement, with respect to such "Silver Sale". The "Royalty Rate" with respect to each "Silver Sale" is based on a sliding scale, from a low of 3% if the "Official Price" applicable to such "Silver Sale" is US$15 per troy ounce or less, to a maximum of 5% if the "Official Price" applicable to such "Silver Sale" is greater than US$30 per troy ounce. "Sale Revenues" with respect to any "Silver Sale" means all revenues from such sale, less refining and insurance charges only. The royalty for each sale of diamonds or other precious metals is a 5% gross overriding royalty from such sale. The royalty for any other sale is 5% of all revenues from such sale, less smelting and refining charges, penalties and the cost of transportation of the applicable product from the concentrating facility to the smelter refinery."

These are the amounts that Castle Silver Mines has undertaken to pay directly to Milner.

Castle Silver Mines Inc (the Corporation) was incorporated on March 10, 2011 pursuant to the Canada Business Corporation Act. It was constituted with the intention of taking over the silver assets and exploration activities currently carried on by Gold Bullion. The property to be transferred by Gold Bullion to the Corporation comprises Gold Bullion's sole silver exploration property and after such transfer, Gold Bullion does not intend to be directly involved in silver exploration.

The Corporation and Gold Bullion have entered into a Purchase and Sale Agreement dated as of August 12, 2011 with respect to the Castle Silver Mine property. The Purchase and Sale Agreement provides, among other things, that:

(i) the deemed purchase price for the Castle Silver Mine property is $2,925,000, payable by the Corporation through the issuance on the closing date of

9,750,000 common shares to Gold Bullion at a deemed price of $0.30 per share;

(ii) the closing of the acquisition of the Castle Silver Mine property took place on November 14, 2011. ;

(iii) the Corporation will pay to Milner Consolidated Silver Mines Ltd. the royalties, if any, contemplated by the Milner Agreement for and on behalf of Gold Bullion and otherwise perform in accordance with their terms all of the obligations of Gold Bullion under the Milner Agreement;

(iv) the Corporation will indemnify Gold Bullion against any claim made by Milner Consolidated Silver Mines Ltd. against Gold Bullion in connection with the Milner Agreement.

The location of the claims & mining leases boundaries are shown in Figure 4 & 5 and Table 1 & 2 show their status.

As per following public release: *VANCOUVER, April 13, 2015 /CNW/ - Gold Bullion Development Corp. (TSXV: GBB) (OTCPINK: GBBFF) (the "Company" or "Gold Bullion") is pleased to announce that, further to the Company's press release of March 11, 2015, Gold Bullion and Takara Resources Inc. ("Takara") (TSX.V: TKK) have entered into a definitive purchase and sale agreement (the "**Agreement**") for Takara to acquire certain properties of Gold Bullion situated in Ontario, through the acquisition of Gold Bullion's wholly-owned subsidiary, Castle Silver Mines Inc. ("**CSM**")(the "**Transaction**"). CSM currently owns a 100% interest in the 3,300-hectare Castle Silver Mine property, a past producer located near the northern Ontario community of Gowganda and 85km northwest of the historic Cobalt silver mining camp.*

Under the terms of the Agreement, Takara will acquire all of the issued and outstanding common shares of CSM from Gold Bullion in exchange for 10,000,000 units of Takara issued in equal stages of 2,500,000 units over a 4-year period (each unit consists of one common share in the capital of Takara and one common share purchase warrant exercisable at $0.10, expiring one year from the date of issuance of the units). Gold Bullion proposes, subject to regulatory and TSX Venture Exchange approval, to distribute the units to shareholders of Gold Bullion. In addition, Gold Bullion shall be entitled to have two nominees appointed to the board of directors of Takara.

Pursuant to existing agreements currently in place, (1) Gold Bullion will retain the right to earn a 1% NSR on all CSM properties, which NSR will be distributed to shareholders of Gold Bullion in the form of dividends, payable in cash; (2) 2% of all direct costs incurred on exploration on the Castle Silver Mine property is payable to the Matachewan First Nation; and (3) the Castle Silver Mine property is subject to a sliding scale royalty on silver production payable to a previous vendor, which will start from 3% when the price of silver is US$15 or lower per troy ounce and up to 5% when the price of silver is greater than US$30 per troy ounce and a 5% gross overriding royalty on the sale of products derived from the property with a minimum annual payment of $15,000 in the form of royalties on all future production from the property.

Pursuant to the terms of the Agreement, Takara intends to complete a non-brokered private placement of up to 6,000,000 units (each, a "PP Unit") at a price of $0.05 per PP Unit for aggregate gross proceeds of up to $300,000. Each PP Unit is proposed to consist of one common share in the capital of the Company (each, a "Common Share") and one Common

Share purchase warrant (each, a "Warrant"). Each Warrant will be exercisable to acquire a Common Share at a price of $0.10 per Common Share for a period of two years from the date of issuance of the PP Units. The proceeds from the private placement are expected to be used for ongoing operations and working capital purposes.

Further, pursuant to the terms of the Agreement, Takara will settle approximately $40,000 of management fees owed to current officers of Takara through the issuance of Common Shares at a price of $0.05 per Common Share, subject to TSX Venture Exchange approval.

During the early stage of exploration currently being conducted on the Property, survey of the claims and mining leases boundaries was done. Exploration work permits were required and were received under the Mining Act to conduct the exploration programs being proposed or just completed. If the Company undertakes work activities closer than 60 metres from a watercourse, makes improvements to the access trail, or expands proposed stripping trenching activities to include the collection of a bulk sample, additional permits may be required. Under the Occupational Health and Safety Act & Regulation for Mine and Mining Plants, notification of diamond drilling must be provided to the Ministry of Labour prior to commencement of work.

There are no directly own environmental liabilities to which the property is subject. However Gold Bullion Development Corp has made significant efforts to reclaim, slope, fill openings and fence and secure shaft entrance (as shown on following Figure 3) on the property for the benefit of all stakeholders.

Figure 3 Examples of the secured historical openings by Gold Bullion Development Corp

Other than First Nation national land claims after Supreme Court Ruling (Roger William-Tsilhqot'in case of Mid 2014), the author does not see significant factors or risks that may affect access to the property and perform works.

Figure 4: Claims and Mining leases map – Castle Silver Mines property

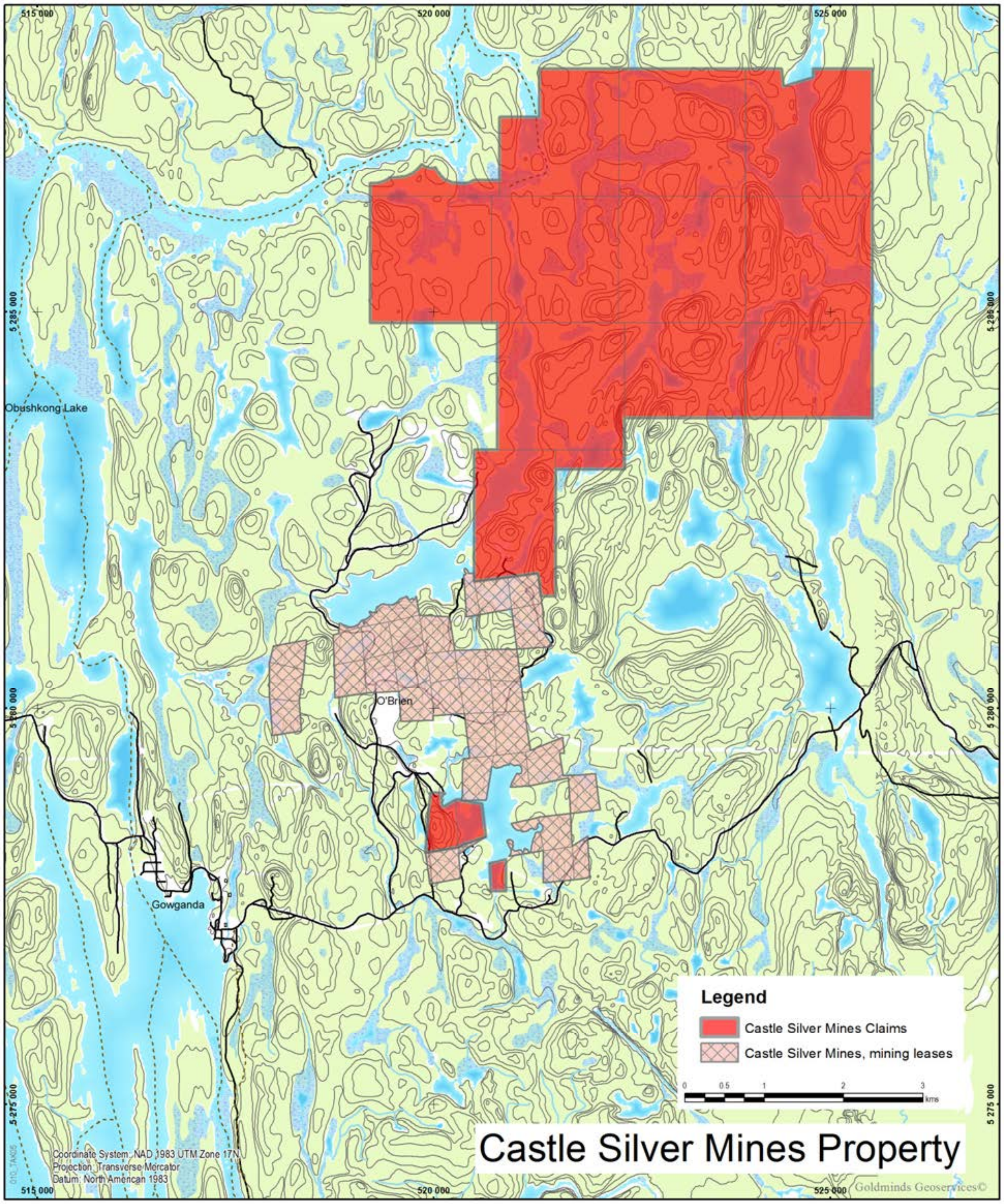


Table 1: Mining Leases Status

Mining Lease Status							
Claim Number	Township	Lease #	Parcel #	Surface (ha)	Expiry Date	Status	Type
LM106 (MR1117)	HAULTAIN	19712	3657LT	15.54	2021-Mar-31 *	Active	Lease
RSC102 (MR1055)	HAULTAIN	19713	3658LT	16.778	2021-Mar-31 *	Active	Lease
TC458 (GG3652)	NICOL	19572	4298LT	8.66	2017-Jun-30	Active	Lease
LM105 (GG6196)	HAULTAIN	19573	4297LT	15.985	2017-Mar-31	Active	Lease
GG3879 part	NICOL	19676	3492LT	0.554	2020-Mar-31	Active	Lease
HS350	HAULTAIN	19683	3404LT	15.864	2020-Mar-31	Active	Lease
HS352	HAULTAIN	19684	3405LT	13.152	2020-Mar-31	Active	Lease
HS353	HAULTAIN	19685	3406LT	15.054	2020-Mar-31	Active	Lease
HS354	HAULTAIN	19681	3407LT	17.037	2020-Mar-31	Active	Lease
HS355	HAULTAIN	19680	3408LT	20.679	2020-Mar-31	Active	Lease
HS357	HAULTAIN	19679	3410LT	15.297	2020-Mar-31	Active	Lease
HS363	NICOL	19677	3416LT	15.702	2020-Mar-31	Active	Lease
HS364	HAULTAIN	19673	3417LT	15.864	2020-Mar-31	Active	Lease
HS365	HAULTAIN	19682	3418LT	17.321	2020-Mar-31	Active	Lease
HS366	HAULTAIN	19674	3419LT	8.62	2020-Mar-31	Active	Lease
HS367	HAULTAIN	19675	3420LT	16.268	2020-Mar-31	Active	Lease
HS368	HAULTAIN	19678	3421LT	15.661	2020-Mar-31	Active	Lease
HS369	HAULTAIN	19672	3422LT	20.113	2020-Mar-31	Active	Lease
HS356	NICOL	19701	3409LT	21.732	2020-Sep-30	Active	Lease
HS358	NICOL	19702	3411LT	10.603	2020-Sep-30	Active	Lease
HS359	NICOL	19703	3412LT	19.627	2020-Sep-30	Active	Lease
HS360	NICOL	19704	3413LT	17.199	2020-Sep-30	Active	Lease
HS361	NICOL	19705	3414LT	15.378	2020-Sep-30	Active	Lease
HS362	NICOL	19694	3415LT	6.556	2020-Sep-30	Active	Lease
LM107	HAULTAIN	19696	3399LT	15.054	2020-Sep-30	Active	Lease
LM108	HAULTAIN	19697	3400LT	16.268	2020-Sep-30	Active	Lease
LM109	HAULTAIN	19698	3401LT	12.909	2020-Sep-30	Active	Lease
LM110	HAULTAIN	19699	3402LT	15.459	2020-Sep-30	Active	Lease
LM111	NICOL	19709	3403LT	18.98	2020-Sep-30	Active	Lease
RSC100	HAULTAIN	19707	3394LT	17.928	2020-Sep-30	Active	Lease
RSC101	HAULTAIN	19708	4082LT	16.556	2020-Sep-30	Active	Lease
RSC104	HAULTAIN	19706	3396LT	16.794	2020-Sep-30	Active	Lease
RSC105	NICOL	19695	3397LT	15.054	2020-Sep-30	Active	Lease
RSC99	HAULTAIN	19700	4325LT	18.64	2020-Sep-30	Active	Lease
MLO657	NICOL			45.325	no expiry	Active	Lic. of Occupation
MLO1379	NICOL			0.202	no expiry	Active	Lic. of Occupation
TOTAL				**564.413**			

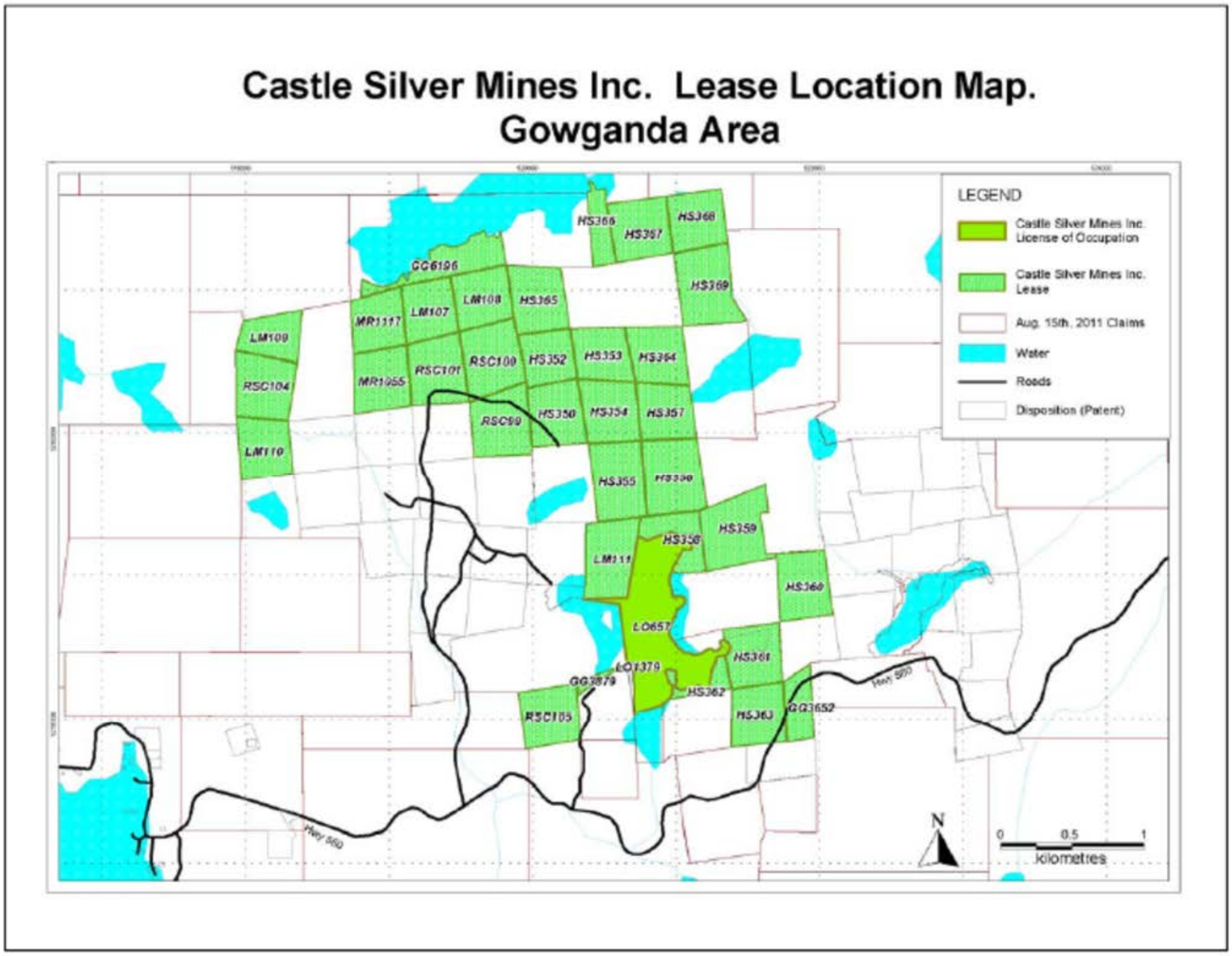
http://www.mci.mndm.gov.on.ca/Claims/clm_mmen.cfm

Table 2: Mining Claims Status of Castle Silver Mines Inc.

Township/Area	Claim Number	Recording Date	Claim Due Date	Status	Percent Option	Work Required	area_hectares
NICOL	4263351	2013-Apr-11	2015-Oct-25	A	100%	$400	17.109445
NICOL	4263352	2013-Apr-11	2015-Oct-25	A	100%	$800	23.728284
HAULTAIN	4263360	2013-Apr-25	2015-Oct-25	A	100%	$800	38.077293
HAULTAIN	4263444	2013-Mar-25	2015-Oct-25	A	100%	$ 5,600	168.772571
HAULTAIN	4263445	2013-Mar-25	2015-Oct-25	A	100%	$400	20.593196
HAULTAIN	4263446	2013-Mar-25	2015-Oct-25	A	100%	$ 6,400	256.73254
HAULTAIN	4263447	2013-Mar-25	2015-Oct-25	A	100%	$ 4,800	183.108294
HAULTAIN	4263448	2013-Mar-25	2015-Oct-25	A	100%	$ 4,800	192.044636
HAULTAIN	4263449	2013-Mar-25	2015-Oct-25	A	100%	$ 6,000	255.999823
HAULTAIN	4263580	2013-Mar-25	2015-Oct-25	A	100%	$ 6,400	256.310003
HAULTAIN	4263581	2013-Mar-25	2015-Oct-25	A	100%	$ 6,400	255.999577
HAULTAIN	4263583	2013-Mar-25	2015-Oct-25	A	100%	$ 6,400	245.169703
HAULTAIN	4263584	2013-Mar-25	2015-Oct-25	A	100%	$ 5,600	210.366745
HAULTAIN	4263585	2013-Mar-25	2015-Oct-25	A	100%	$ 6,400	256.326853
HAULTAIN	4263586	2013-Mar-25	2015-Oct-25	A	100%	$ 6,000	250.012566
NICOL	4263587	2013-Dec-04	2015-Dec-04	A	100%	$400	7.207293
							2638.

The author have accessed to email exchange from Mr. Doug Robison and the MNDN representative regarding assessment work report to submit for credit renewal and it is in progress at the moment of writing this report.

Figure 5: Location of Mining Lease and License of Occupation



5- Accessibility, Climate, Local Resources, Infrastructure and Physiography

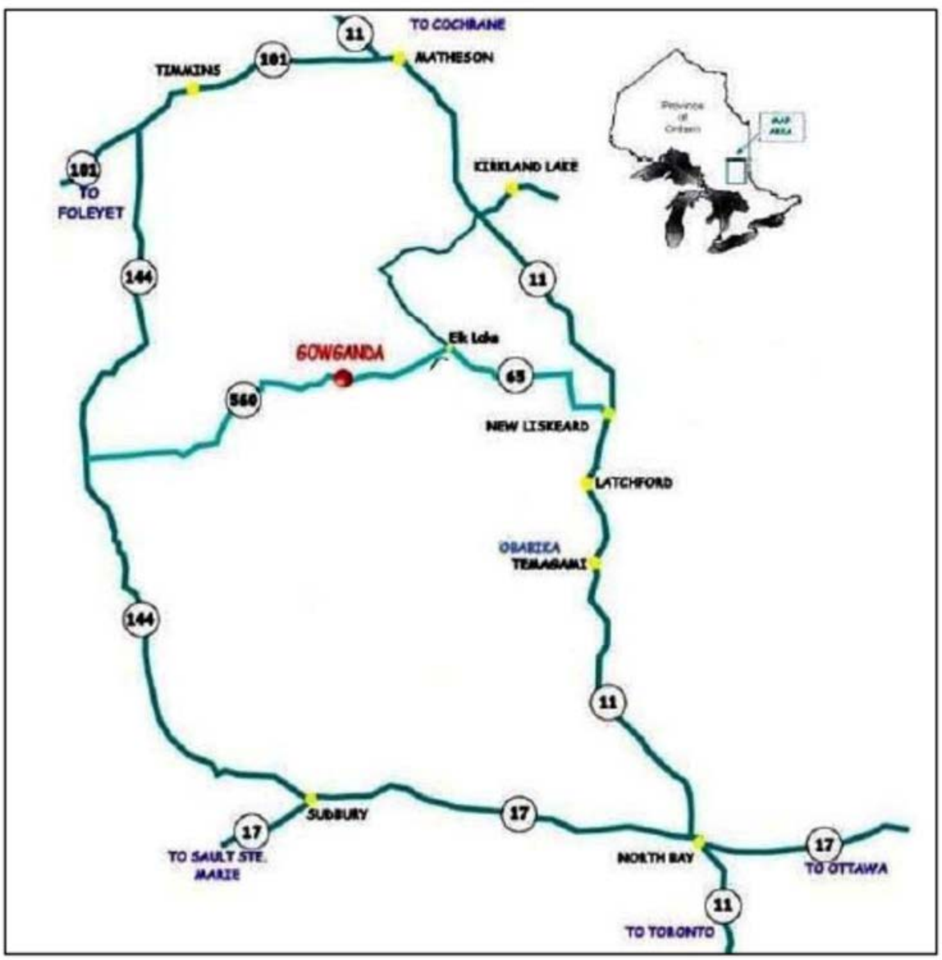
5.1 Property Access

Access to the Castle Silver Property from Elk Lake is via Hwy 560 west for approximately 36 km. Elk Lake is accessible from either New Liskeard to the east along Hwy 65W or from Kirkland Lake to the northeast via Hwy 66 west to Matachewan, then Hwy 65 south to Elk Lake. The mine road, located at approximately 3 km east of Gowganda, turns off from Hwy 560 at a point described as UTM zone 17 T 519515E 5277459N. The mine site is located approximately 2.7 km north of the highway (UTM zone 17 519449E 5280663N).

This territory is included in the NTS 41P10 topographical map. Access to the various properties can be readily gained by secondary roads that extend northward from Highway 560.

The location of the access roads is shown on Figure 6.

Figure 6 : Access Roads - Gowganda and Castle Silver Property



5.2 Physiography and Climate

The area is one of moderate relief with an average of 385m and the maximum being attained just to the west of Flatstone Lake where a ridge of Nipissing Diabase reaches an elevation of 460 m (1,500 feet) above sea level. North-trending hills of similar elevation, and formed of Gowganda Formation rocks, occur in western Milner Township. These two examples illustrate, in part, the generalization that areas underlain by Middle Precambrian rocks are more rugged than those underlain by Early Precambrian rocks. In the latter, hills are lower and more rounded.

All of the drainage in the map-area belongs to the Montreal River system. The main tributaries of the Montreal River are Wapus Creek, Miller Creek, and Calcite Creek, all of which join the Montreal River north. The forest cover consists mainly of spruce, poplar, birch, cedar, balsam fir and jack pine.

The area experiences four main seasons: spring, summer, fall and winter. Spring conditions occur between the months of April and June and consist of warming temperatures that see freezing conditions at night, and melting conditions in the daytime resulting in melt water run-off of the winter snowpack.

Summer brings on extended periods of warmer temperatures with variable amounts of precipitation in the form of rainfall. When rainfall is scarce, extreme fire conditions can result in orders from the Ministry of Natural Resources to cease many forms of bush work. Precipitation in the fall typically increases as temperatures drop below zero in the evenings resulting in the accumulation of snow as early as late October. Temperatures in the winter average -25 degrees centigrade with an average snow pack of 1m (the average is normal). Comparatively, Gowganda typically receives less snowfall than locations further south, due to colder and dryer conditions and lack of lake effect snow.

The field exploration operating season is possible on a full year basis, however due to additional costs associated with road maintenance and reduced efficiency of field work in winter, the best exploration time covers 8 Months from April to November. These limits varies from one year to another and depends of the snow cover and thaw periods.

5.3 Infrastructure

Gowganda has a thriving tourist industry with numerous tourist camps catering mainly to hunters, fishermen and mining exploration crews.

Gowganda is an unincorporated community located on the shores of Gowganda Lake in the Timiskaming District. Services available include meals and lodgings, outfitting, and purchase of basic supplies including fuel. The town was founded after a major discovery of silver was made following the discoveries in Cobalt and Elk Lake in 1908. By 1910, 7 silver mines were in operation in Gowganda and the population of the town had reached approximately 5,000. A fire destroyed most of the community in 1911. The last silver mine closed in 1972, with the exception of a short period of silver production from the Castle Mine in most of the 1980's (1979-1988). Since then the population has dwindled. Current population is approximately 100. Many unused structures remain in Gowanda that could be utilized for accommodations and or office space.

6- History

This chapter covers the history related to the Castle Trethewey No.2 and No.3 and Everett properties (McIlwaine 1978).

6.1 Introduction

Following the discovery of native silver deposits in the Cobalt area in 1903, prospectors began searching for other areas of Nipissing Diabase with which the silver deposits are spatially and genetically related. Several satellite camps quickly became important in the search for, and production of, native silver.

The first ore production of the Gowganda camp came from the Bartlett claims west of Gowganda Lake in Milner Township. By 1910, several properties in this area and around the Miller Lake basin were shipping ore. The village of Gowganda was built around the north end of Gowganda Lake. Gowganda had a post-office, bank, hotels, tourist camps, grocery stores and gas stations (Moore 1955).

6.2 Castle Trethewey No. 2 and No. 3

According to Sergiades (1968) this property was held in 1917 by the Castle Mining Company Limited and then in 1918 by the Trethewey Silver Cobalt Mining Company Limited. It would appear that these two companies amalgamated in 1922 to form Castle Trethewey Mines Limited. The property was in production from 1920 to 1931 and produced a total of 6,461,021 ounces of silver.

Operations began on this portion of the company's holdings in the fall of 1919. A series of veins were located by trenching near the west line of the claim. The veins were continuations of fractures that were worked several years previously on claim R.S.C. 102 by the Miller Lake and Everett mines. They struck approximately 120°/85° SW. At surface, the silver deposit consisted of a series of closely spaced calcite and quartz veins over a width of 0.45 m (18 inches). In sinking No.2 shaft, the veins were found, at times, to unite into fewer and wider veins. A width of 0.13 m (five inches) of high-grade ore was occasionally encountered. The broken ore was passed over picking tables and the high-grade ore, together with silver-bearing wall rock, gave a grade of shipping ore of approximately 1,000 ounces per short ton. Exploratory work in the vicinity of this ore shoot did not reveal any further ore, although a number of strong calcite veins were located. In the spring of 1920, a prospector discovered a high-grade vein in the Archean volcanic rocks near the contact with the underlying diabase. An open-cut was subsequently mined showing a shoot 9 m (30 feet) in length. Oxidation extended down several feet and a number of bags of loose fragments of silver, up to 0.38 m (15 inches) in length, were bagged. Solid ore, when first encountered, showed a width of 0.08 m (three inches) of silver, arsenides, and calcite. To develop the ore, a vertical shaft (No.3) was started in the fall of 1920. The contact with the diabase was reached at a depth of 9 m (30 feet) and was difficult to define as the diabase was a fine-grained hornblende diabase.

Following the early operations, No.3 shaft (vertical) was gradually deepened and by 1925, a number of veins were developed to the 107 m (350 feet) level. New veins were encountered in the Nipissing diabase to the east and northeast of the shaft. The connecting veins were filling-and-replacement deposits along intersecting fractures. The veins had a dip dependent on the attitude of the overlying contact. Above the workings at No.3 shaft, the diabase-greenstone contact rose to the west and north, the contact at the surface being represented by a broad curve. The columnar jointing planes in several directions were at right angles to the contact and since the fracturing followed in part the columnar jointing planes, the dip of veins was dependent on the contact. The principal directions of veins were, roughly, northeast and northwest, the strike and dip varying along the length. The dips varied from northeast to northwest. Important veins like No.4 and No.10 intersected at several levels. In one place, three veins, Nos. 5, 10, and 13, intersected at a point where the curving joint planes were prominent. Several strong faults were encountered in the workings. One fault, No.6, was roughly parallel with the contact, and most of the ore already found, was located above the fault. The veins themselves showed only minor faulting, up to a few feet. The ore occurred as shoots along the veins and these varied in length up to 91 m (300 feet). They consisted of high-grade veins and wall rock impregnated with leaf silver. The veins were commonly from 0.05 to 0.13 m (two to five inches) in width. The shoots in the No.3 shaft workings occurred within 122 m (400 feet) of the contact, which dipped on an average of 30°E. In addition to calcite and quartz as gangue minerals, a light greenish-coloured secondary hornblende occurred prominently in certain veins, e.g. No.5 vein. Between the Castle No.2 and No.3 shafts, the contact continued to the west at the same dip.

During 1925, much trenching was done on surface and a number of veins carrying native silver and arsenides were located. One of these occurred in the Keewatin on the southern part of claim R.S.C. 101.

Mining continued until 1931 by which time the shaft had reached a depth of 259 m (850 feet) with a total of 11 levels (Sergiades 1968). Diamond drilling was started by Siscoe Mines Limited in 1970 to explore the workings of the No.3 shaft.

Agnico-Eagle Mines Ltd leased the property in 1979 and used an existing adit to gain access to the 70 foot level of the No.3 shaft workings to allow production while the shaft was being rehabilitated. All ore was trucked to Agnico-Eagle's Cobalt mill for processing. Underground exploration continued at a relatively high rate in an effort to find new reserves, but was unsuccessful with the average price of silver in 1988 at only US$6.53 per ounce. Operations ran until the end of June 1988, at which time, the mine was closed due primarily to low silver prices. Total footage drilled amounted to 4,200 m. The property was no longer in operation by March 1989.
The silver recovered during this timeframe came to 3,041,353 ounces silver. Therefore, the metals recovered to date total 9,502,374 ounces silver and 299,847 pounds cobalt.

The next table shows the production numbers of the Castle Trethewey Mine held in 1969 by McIntyre Porcupine Mines Ltd under lease to United Siscoe Mines Ltd.

Table 3 : Castle Trethewey Mine Production

Year	Ore and Conc	Cobalt	Silver
	Tons Shipped	Pounds	Ounces
1920	45	254	48,373
1921	30	-	33,952
1922	9	1,530	40,098
1923	44	5,295	146,981
1924	163	15,994	544,575
1925	346	32,708	961,950
1926	313	32,443	979,890
1927	312	32,536	932,806
1928	310	33,557	800,968
1929	272	34,453	879,505
1930	238	47,125	723,226
1931	144	63,952	368,697
Total	**2,226**	**299,847**	**6,461,021**

6.3 Everett Property

The Everett property, formerly held by Everett Mines Limited, at one time consisted of four claims as follows: LM105, LM106, RSC102, and RSC103. The workings in the old mine are confined to the western rim of the Miller Lake basin on RSC101 and RSC102.

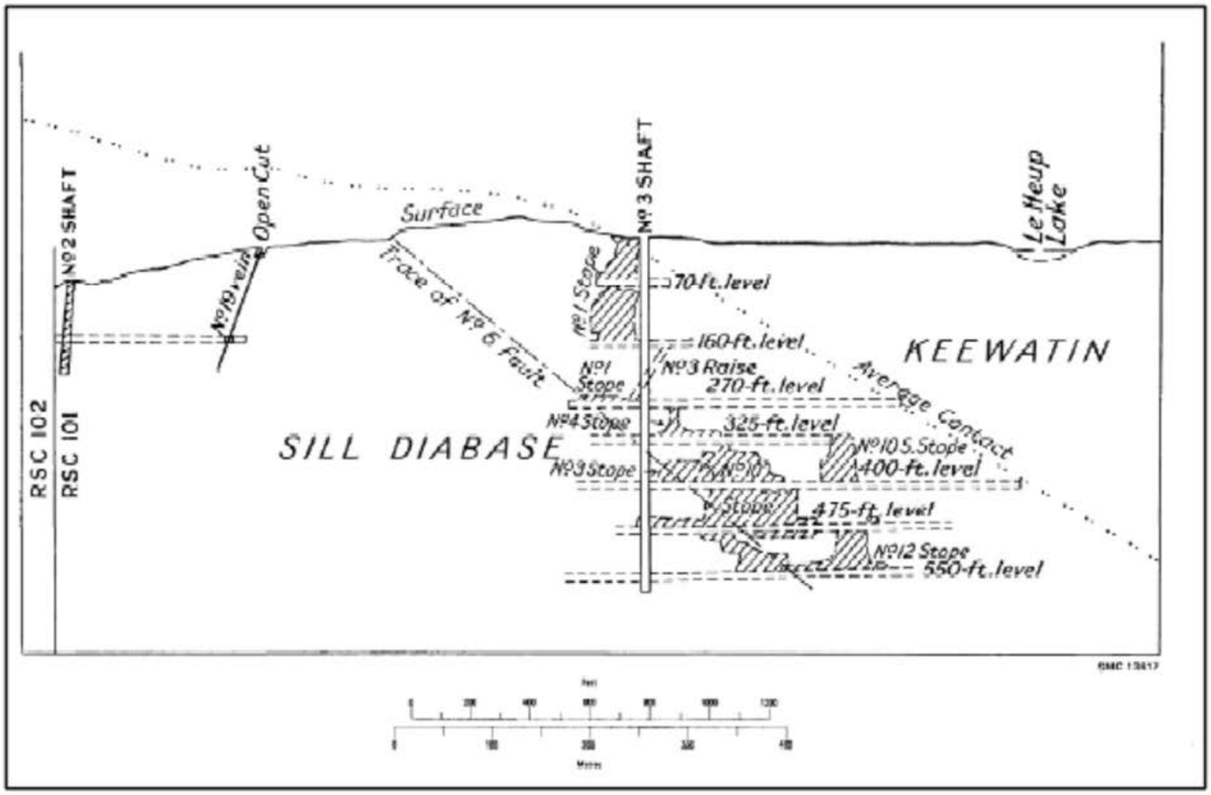
The property has been described by Burrows (1926) as follows:

This property, lying to the west of R.S.C. 101, was operated some years ago by the Miller Lake and Everett Mines, Limited, and 8.35 short tons of silver ore were shipped in 1910. The ore was taken from a long open-cut on a series of silver-bearing veins striking with an azimuth of 350° The ore was hand-sorted, and there are a few tons of mill rock on the dump at present, where fragments of diabase frequently show scales of native silver. Fissuring is pronounced on claims R.S.C. 101 and 102 in the vicinity of the north and south centre line. The property was operated again in 1924, and further shipment of 1.5 short tons of silver ore was made. The latter shipment yielded 3,461 ounces of silver.

According to Sergiades (1968) the underground workings were developed from the adjacent Castle No.2 Shaft under lease. They extended the workings northwest on to the Everett ground on the 49 m (160 feet) level. Here further work included 9 m (30 feet) of crosscutting in 1922 and in 1924 a winze was sunk for 35 m (105 feet) below the level with 122 m (401 feet) of development work here in 1924.

Figure 7 is a longitudinal section showing the Castle 2 and 3 shafts, and the open cut representing the old Everett Shaft.

Figure 7 : Longitudinal Section of the Castle 2 and 3 shafts



From McIlwaine 1978

7- Geological Setting and Mineralization

Rocks of this region are part of the Superior Structural Province Figure 8 represents the geology of Kirkland Lake District. The property is in the southern portion of the geological province in a sedimentary basin.

7.1 Regional Geology

The Gowganda area is near the northwestern edge of the Cobalt Plain of the Southern Structural Province of the Canadian Shield. The Early Precambrian rocks exposed represent inliers in the Middle Precambrian cover with the exception of the metavolcanic assemblage exposed inside the Miller Lake diabase basin. The rocks of the area are readily divisible into four major units as follows:

- Late gabbroic rocks (Nipissing Diabase and later dikes);
- Cobalt Group Sedimentary rocks;
- Granitic intrusive rocks;
- Metavolcanics rocks with associated intrusive and sedimentary rocks including iron formation.

Table 4 presents the Stratigraphic Units in more details and Figure 9 shows the geology of the property and its surroundings in Figure 8. The main exposures of mafic metavolcanics are in south-central Van Hise Township, in southwest and central Haultain Township, within the Miller Lake diabase basin, which straddles the Haultain-Nicol township boundary, and northeast of Wilson Lake in central Nicol Township. Felsic metavolcanics underlie a "horseshoe"-shaped area in northwest Nicol Township. Sulphide facies iron formation is associated with this unit. Granitic rocks are also exposed in central Nicol Township, north of Wilson Lake. North-trending Matachewan-type diabase dikes are ubiquitous throughout the metavolcanic and granitic rocks. Non-conformably overlying the Early Precambrian basement rocks are relatively flat-lying Middle Precambrian clastic sedimentary rocks of the Cobalt Group, which is part of the Huronian Supergroup (Robertson et al. 1969).

Figure 8 : Geology of the Kirkland Lake District and property location

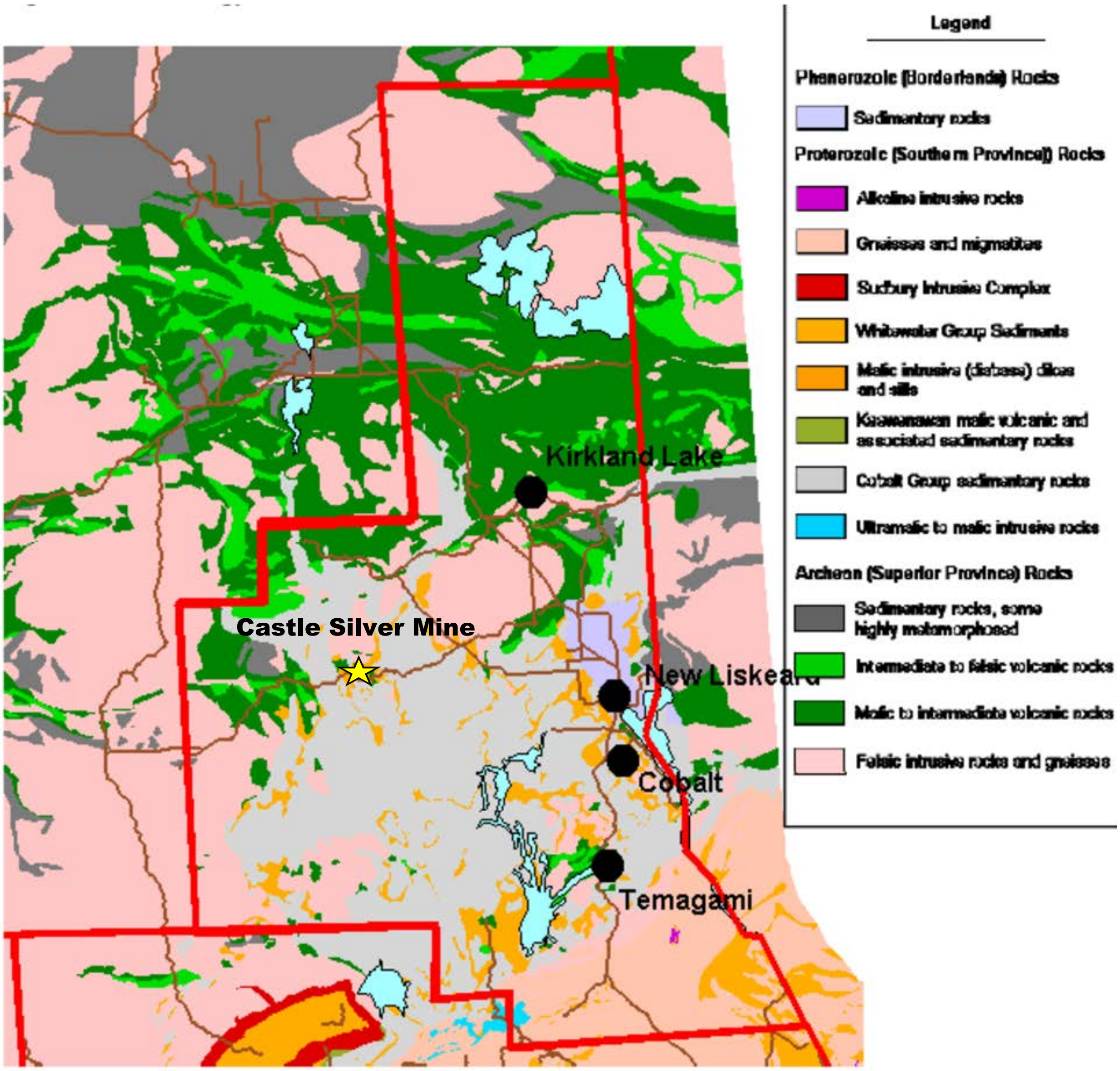


Table 4 : Stratigraphy for the Gowganda Lake and the Miller Lake Silver Area

CENEZOIC
QUARTERNARY
RECENT
Swamp, lake, stream deposits
PLEISTOCENE
Glacial deposits
UNCONFORMITY

PRECAMBRIAN

LATE PRECAMBRIAN (?)
MAFIC INTRUSIVE ROCKS
Olivine diabase, porphyritic olivine diabase, diabase
INTRUSIVE CONTACT
MIDDLE PRECAMBRIAN (APHEBIAN)
MAFIC INTRUSIVE ROCKS (NIPISSING DIABASE)
Pyroxene gabbro, amphibole gabbro, granophyre
INTRUSIVE CONTACT
HURONIAN SUPERGROUP
COBALT GROUP
Lorrain Formation
Micaceous sandstone, feldspathic sandstone, greywacke, quartzose sandstone, ferruginous sandstone conglomerate

Gowganda Formation
Firstbrook Member
Laminated argillite, quartzite

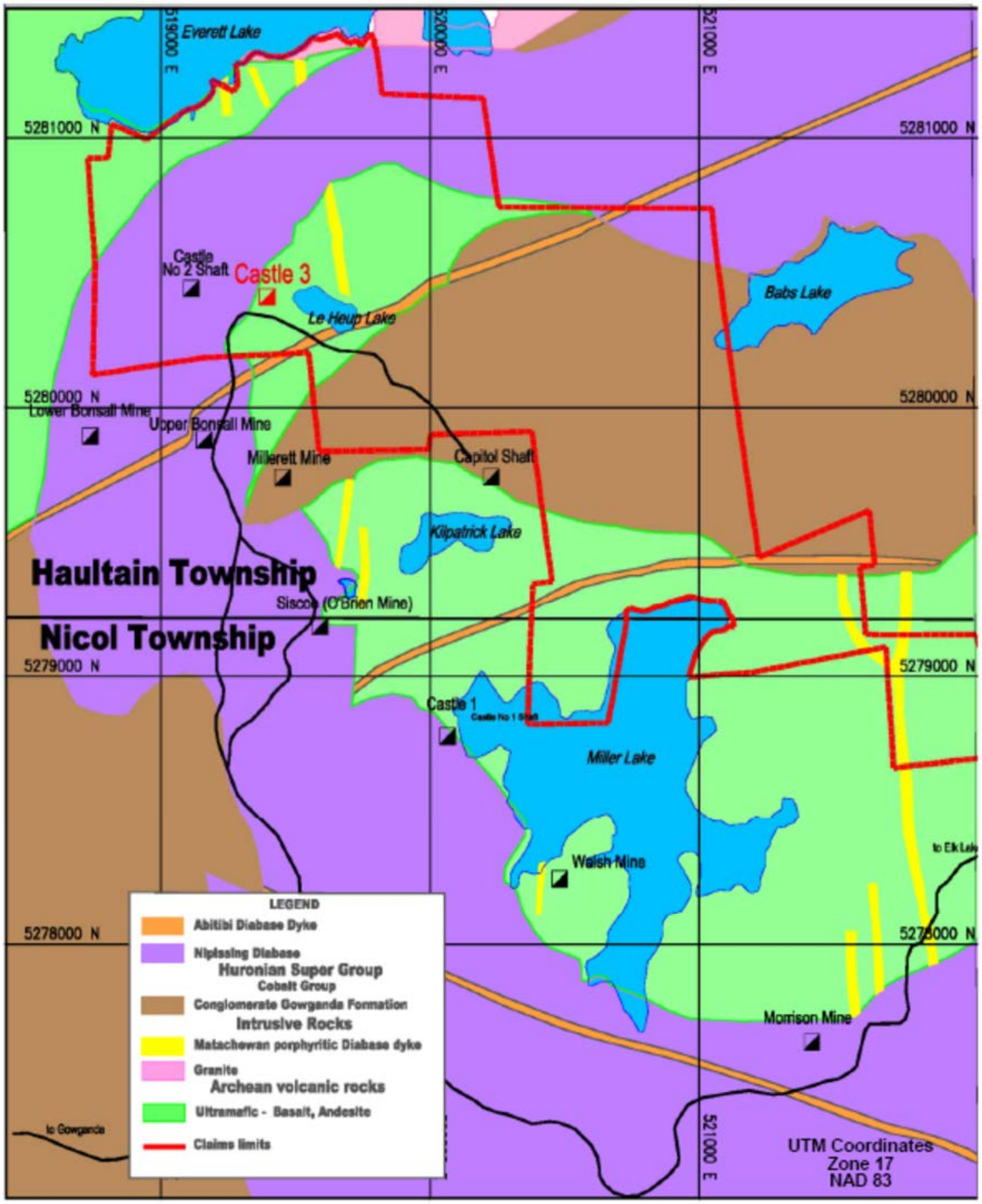
Coleman Member
Feldspathic greywacke, feldspathic sandstone, arkose, conglomerate, ferruginous sandstone, breccia, argillite, siltstone, protoquartzite, lithic greywacke
UNCONFORMITY

EARLY PRECAMBRIAN

MAFIC INTRUSIVE ROCKS (MATACHEWAN DIABASE)
Diabase, porphyritic diabase
INTRUSIVE CONTACT
FELSIC INTRUSIVE ROCKS
Trondhjemite, porphyritic trondhjemite, quartz diorite, syenodiorite, contaminated zone, pegmatite dikes, feldspar porphyry dikes
INTRUSIVE CONTACT
MAFIC AND ULTRAMAFIC INTRUSIVE ROCKS
Metagabbro, serpentinized dunite
INTRUSIVE CONTACT
FELSIC METAVOLCANICS
Dacite, porphyritic dacite, tuff
MAFIC TO INTERMEDIATE METAVOLCANICS
Basalt, andesite, amphibolite, layered amphibolite, gabbroic flows, amygdaloidal basalt, pillow lava, pyroclastic rocks, andesite porphyry, schists, sedimentary rocks

From : McIlwaine 1978

Figure 9 : Geology of the Property and its Surroundings



Cutting only the Huronian and older rocks are several basin and tabular-shaped gabbroic intrusions of Nipissing Diabase. Late Precambrian quartz diabase and olivine diabase dikes are the youngest rocks in the area.

7.1.1 Early Precambrian – Ultramafic, Mafic and Intermediate Metavolcanics

This unit of Early Precambrian rocks has been mapped as the oldest in the area and is composed mainly of fine-grained flows of basaltic composition with local coarse-grained facies and pyroclastics. The rocks have been metamorphosed mainly under greenschist facies conditions but amphibolite facies conditions prevail locally. A narrow belt of layered amphibolite separates quartz diorite from albite trondhjemite in central Haultain Township. The foliation in the rocks, however, suggests that all of the larger areas, at least, and some, if not all, of the smaller areas were at one time part of the same belt. The foliation also suggests that a large fold possibly displaced, in part, by faulting, is present within the metavolcanics. On the basis of colour index, the metavolcanics are believed to be mainly basaltic in composition. They are massive to weakly foliated, fine grained, dark greenish grey to almost black and locally have a mottled appearance. Massive amphibolites are associated with the metavolcanics and foliated amphibolite forms a narrow belt in north-central Haultain Township. Pyroclastic units, lavas with poorly preserved pillows, and amygdaloidal lavas occur locally in the metavolcanics. Narrow sedimentary units, composed mainly of quartzite, also occur.

7.1.2 Middle Precambrian (Aphebian) – Huronian Supergroup, Cobalt Group

Following the igneous activity of the Early Precambrian a period of uplift, basin formation and erosion occurred, resulting in the deposition of rocks of the Huronian Supergroup (Robertson et al. 1969); of this Supergroup, only rocks of the Cobalt Group are present.

The Cobalt Group in the Gowganda area is subdivided as follows:

- Gowganda Formation which is made up mainly of:
    - Coleman Member □ conglomerate, siltstone, feldspathic sandstones and greywackes;
    - Firstbrook Member □ laminated argillite.
- The Lorrain Formation made up of pale green to white to pale pink feldspathic sandstones.

Gowganda Formation – Coleman Member

The Coleman Member of the Gowganda Formation is present in the western half of Nicol Township where it is repeated, owing to faulting and, in part, rests non-conformably on Early Precambrian rocks. Exposures also occur within the Miller Lake basin and along the margins of the north-trending "tail" of the diabase basin. The thickness of the Coleman Member is difficult to determine because of faulting, disruption from diabase intrusions and incomplete sections.

The Coleman Member of the Gowganda Formation is lithologically heterogeneous and is composed of numerous clastic rock types, including feldspathic greywacke, arkose, feldspathic sandstone, ferruginous sandstones, argillite and siltstone, conglomerate, and breccia.

Gowganda Formation – Firstbrook Member

The Firstbrook Member is very limited in areal extent. The sequence in Nicol Township is estimated to be about 25 m (80 feet) thick and there is a similar thickness exposed in Milner Township.

The Firstbrook is a unit of laminated argillite with alternating graded laminae which are various shades of dark red, green and grey. This member conformably overlies the Coleman Member and is gradational into the overlying Lorrain Formation. The laminae are generally regular and undisturbed and range from about 0.5 to 4 mm and average about 1 mm. The laminae are graded with the quartz being more coarse grained in the green and finer grained in the red. The grains are also more closely packed in the red laminae. A higher concentration of hematite in the red laminae gives them their colour. The magnetite in these laminae is finer grained. The concentration of hematite in the red laminae is variable and is locally gradational into green laminae.

Lorrain Formation

Lorrain Formation rocks underlie most of southeastern Nicol Township and are preserved in down-faulted blocks along the Gowganda Lake-Obushkong Lake zones. With an assumed mean dip of 10 degrees there is an estimated 900 m (3,000 feet) in the southeastern part of Nicol Township.

The Lorrain Formation is composed of a variety of fine-grained quartzose sandstones which are generally arkosic at the base, becoming less feldspathic towards the top and grading to orthoquartzite. Feldspathic sandstone is the most common in this area.

7.1.3 Massive Intrusive Rocks - Nipissing Diabase

From an economic point of view the gabbroic rocks of the Nipissing Diabase (Miller 1910) sheets are the most important in the area. Very early in the history of the Timiskaming silver area, it was recognized that these rocks held a close spatial relationship with the rich silver deposits and the prospecting for diabase became intensive. For many years, many geologists considered the areas of Nipissing Diabase to be remnants of a former continuous sheet which extended across the region (Burrows 1926; Campbell 1930). More recently, however, geologists have suggested that the Nipissing Diabase is actually made up of numerous gabbroic intrusions (Moore 1955; Hester 1967; McIlwaine 1971; Card et al. 1970).

Most of the diabase bodies in the area have a strong northerly orientation indicating that the dominant north-trending fault activity which controlled intrusion of Matachewan dikes and, in part, influenced Gowganda Formation deposition, was still active during intrusion of the Nipissing Diabase. Limited evidence, however, suggests an easterly dip which is probably steep. The evidence includes the occurrence of aplite dikes along the eastern contact; aplite dikes, where they occur, are generally at or near the top of a diabase body.

Granophyre commonly occurs near the top of diabase bodies. The central part of the body is underlain by the Gowganda Formation and the outer contacts of the rims apparently dip away from the basin forming arch structures.

7.2 Alteration

The host rocks of the deposits were affected by several phases of alteration. Intrusion of the diabase sheets was accompanied by contact metasomatic alteration of the country rocks and by deuteric alteration of the diabase itself. A specific kind of contact alteration is the spotted chloritic alteration, which developed in the vicinity of the Nipissing diabase prior to ore formation. It is characterized by the occurrence of chlorite-rich spots, which are surrounded by chlorite-deficient aureoles and affected many of the rocks intruded by the diabase.

The most prominent alteration was, however, associated with formation of the ore veins. Its effects depended upon the composition of the rocks involved. The alteration of diabase resulted in:

(i) replacement of pyroxene by actinolite and some chlorite;
(ii) retrogression of plagioclase to muscovite, epidote, and albite;
(iii) replacement of ilmenite and magnetite by leucoxene and titanite.

The hydrothermal wall rock alteration along the ore veins is developed in narrow zones, typically a few centimetres wide, the most distinct alteration zones are developed in the diabase and consist of two or three layers. The first (inner) layer, immediately adjacent to the veins, contains albite, chlorite, and anatase; the second layer has calcite, epidote, and small amounts of muscovite; and the third (outer) layer comprises increased amounts of muscovite.

7.3 Mineralization

The description of the regional mineralization presented below is indicative of the mineralization found on the property.

The deposits in this region are associated with:

• Aphebian rocks of the Cobalt Group (Coleman Member of the Gowganda Formation), which consist of conglomerate, quartzite, and greywacke as well as with major sill-like bodies of Nipissing diabase;

• Archean mafic, intermediate lavas, intercalated pyroclastic and sedimentary rocks. Locally the Archean rocks have been intruded by felsite dykes and quartz and feldspar porphyry bodies. The Archean and Aphebian sequences have been intruded by minor quartz diabase dykes, which are younger than the diabase sills. The deposits contain different mineral assemblages:

• A base metal sulphide assemblage, which is confined to the wall rock of Archean metasedimentary and metavolcanic rocks and Cobalt Group sediments;

• A base metal vein assemblage including chalcopyrite, sphalerite and galena beyond (outside) the arsenide assemblage;

• The arsenide silver-cobalt assemblage, which occurs prevailingly at and near the contacts between the Nipissing diabase and the sedimentary rocks of the Cobalt Group, and is present to a lesser extent along contacts between the diabase and the Archean rocks;

• A late stage sulphide and sulphosalt assemblage, which is in part distributed along the margins of silver-arsenide veins, where these have apparently been reopened. Silver mineralization is shown in Figure 10 while Figure 11 presents the typical pinkish cobalt oxidation.

Figure 10 : Sample with native silver from Castle

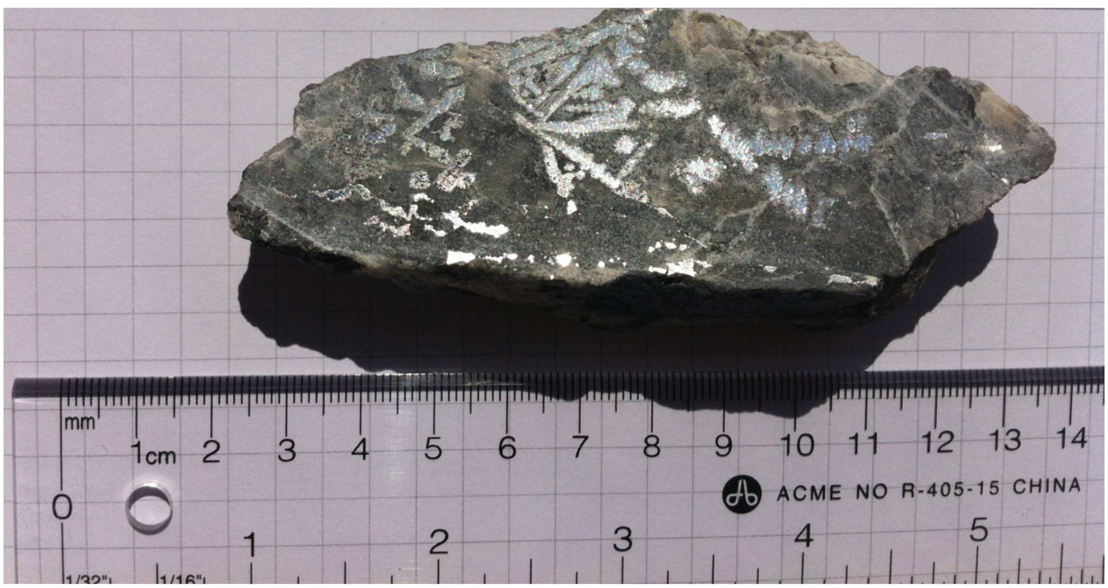
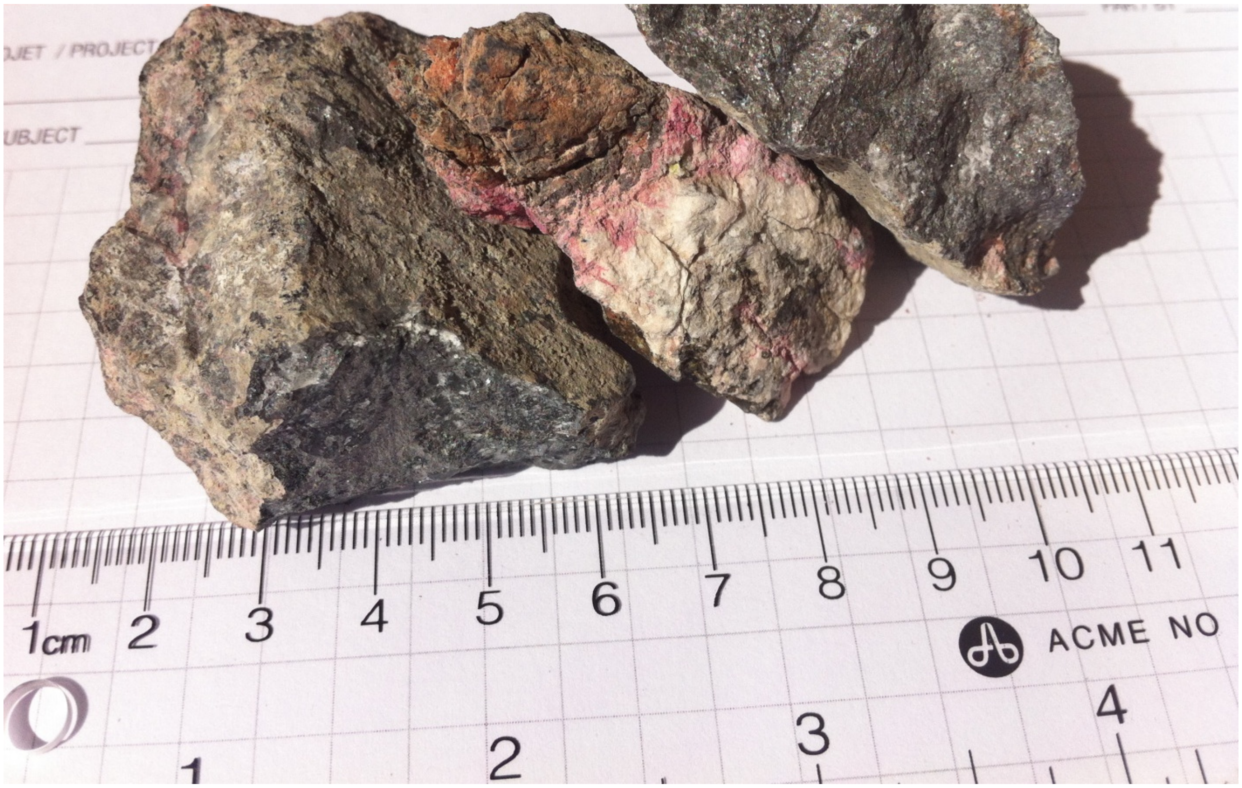


Figure 11 : Samples of typical cobalt mineralization from Castle



Distribution of the silver-cobalt veins in the Cobalt district is controlled by the contact between the Nipissing diabase sheets and the rocks of the Cobalt Group (Gowganda Formation). The veins occur in the diabase and in the sedimentary rocks within about 200 m of their contact with the diabase. They dip steeply, extend horizontally as much as 1,000 m and vertically as much as 120 m, and are as wide as 1.2 m. A typical deposit consists of a few short anastomosing veins of variable thickness from a few centimetres to two or three decimetres. The metallic minerals occur in irregular lenses of high grade ore surrounded by aureoles of low grade material. Arsenides, sulpharsenides and antimonides of nickel, cobalt, and iron in various proportions, as well as large amounts of native silver, are the principal metallic constituents of the ore. Carbonates (dolomite, calcite), quartz, and chlorite are typical gangue minerals.

The ore vein minerals occur in masses, lenses, veinlets, and disseminations with or without associated gangue minerals. They are present in distinct mineral assemblages, such as nickel-arsenide, nickel-cobalt-arsenide, cobalt-arsenide, cobalt-iron-arsenide, iron-arsenide, sulphide, and oxide. The nickel-arsenide assemblage is localized in many cases at the periphery of major veins, but also occurs in various places in small veins. The nickel-cobalt-arsenide assemblage occupies a transitional position between the nickel-arsenide and cobalt-arsenide assemblages. Much of the best sliver ore is associated with this assemblage. The cobalt-arsenide assemblage occurs generally in the main parts of the veins. The cobalt-iron-arsenide assemblage occurs in various textural forms, such as intergrowths disseminations, dendrites, rosettes and monocrystals. However, this assemblage is less common than the preceding ones minerals of the iron-arsenide assemblage tend to be concentrated at the ends of the veins. They are commonly accompanied by native bismuth, galena and marcasite.

The sulphide assemblages typically contain chalcopyrite and tetrahedrite. They occur in some of the main carbonate veins, usually in the peripheral portions of highly mineralized ore sections.

The arsenide silver-cobalt vein deposits occur in their classic form in the Cobalt area, Ontario. They are localized in areas affected by basinal subsidence and rifting, and are spatially related to regional fault systems and closely associated with intrusions of mafic rocks. Distribution of the veins is structurally controlled by regional fault systems and by the contact zones between the sill-like bodies of Nipissing diabase and the Huronian sedimentary rocks, and less commonly between the Nipissíng diabase and Archean rocks.

The silver-nickel-cobalt-arsenide mineral concentrations occur in short (generally less than 100 m), steeply dipping veins at the contacts between diabase, Huronian sedimentary, Archean metasedimentary and metavolcanic rocks. The vein gangue is calcite and dolomite. Alteration haloes are developed in the wall rocks along the veins as narrow (less than 10 cm) zones of calcite, chlorite, epidote, K-feldspar, muscovite and anatase. Chlorite occurs locally in spots, 1 to 5 mm in diameter.

7.4 Local Geology

The drilling campaign allowed identification and differentiation of lithologies. A preliminary list of lithologies intercepted with descriptions is tabulated below. (Source from Mr. Doug Robinson)

Intrusive rocks

Abitibi Diabase

Abitibi diabase intrusives are steeply dipping, east-northeast trending dikes that post-date the silver-cobalt vein mineralization

Nipissing Diabase

Granophyric Diabase: Granophyric diabase is distinguished by having generally more than 35% granophyric minerals and textures. This granophyric mineralogy is commonly pink but can be gray to white. The granophyric diabase phase appears to be a water-rich intrusive phase and appears to be the product of advanced differentiation of the intrusive.

Coarse Grained Diabase: Diabase is classified as coarse-grained if the groundmass minerals are larger than 4 mm. Minor to significant granophyric mineralogy occurs interstitial to clinopyroxene and plagioclase. Except in varied textured diabase, 2-4 mm groundmass textures are minor.

Varied-textured Diabase: Varied-textured diabase consists of a prominent mixture of fine-grained and coarse-grained phases with distinct, random boundaries. These consist of patches and bands of fine-grained, dark green, one-pyroxene diabase and coarse-grained diabase. 2-4 cm groundmass textures are common. The coarse-grained phases appear more felsic and generally have lower specific gravity relative to the heavier, fine-grained phases which appear to be more mafic.

Fine Grained Diabase: Diabase is classified as fine-grained if the groundmass minerals are 2 mm or smaller. This sub-unit includes both: one or two pyroxene diabases. This sub-unit is important because the distinction between Mg-rich orthopyroxene (hypersthene) and Fe-rich clinopyroxene is commonly difficult.

Two Pyroxene Diabase: The fine-grained diabase is classified as two-pyroxene diabase if orthopyroxene (hypersthene) is identified. The orthopyroxene tends to be the coarsest mineral and is commonly a pale amber color, in contrast to the dark green clinopyroxene.

The distinction between Mg-rich orthopyroxene (hypersthene) and Fe-rich clinopyroxene is commonly difficult. When the orthopyroxene is easily identified, the grain edges are typically obscured by grinding relics from drilling, indistinct grain boundaries in broken core, translucent grain edges and partial alteration of the pyroxenes. These problems commonly make the description of grain size and percentage of the two pyroxenes difficult. For this reason the description of grain size and percentage of the orthopyroxene in drill logs are tentative and support the findings of specific gravity and possibly whole rock geochemistry and petrographic work.

One-pyroxene Diabase: Fine-grained diabase with clean pyroxene is classified as one-pyroxene diabase if no hypersthene is identified.

Transitional Diabase: Transitional phase is gradational, grading from very finegrained to 1 mm crystalline diabase that tends to be less than 20 m thick towards the upper and lower contacts. The pyroxene can tend to be somewhat acicular compared to the more equant pyroxene of the fine-grained phase. The transitional phase at the upper and lower contacts appears to be similar.

Chilled Diabase: Diabase appearing at the upper and lower contacts tends to be aphanitic to nearly aphanitic grading to very fine-grained over a few tens of cm. The upper and lower chill margins of the diabase have a similar appearance. The absence of phenocrysts to less than 2% extremely fine, dark green pyroxene phenocrysts indicate the diabase was a hot intrusive. The apparent lack of alteration of the host rock indicates the diabase was intruded as a dry intrusive. This is in contrast to the granophyric diabase phase which appears to be a water-rich intrusive phase.

Huronian Sediments (Proterozoic)

Argillites: Extremely fine-grained sediments in which the mineral grains are not apparent. This sub-unit includes massive, thin-bedded and thick-bedded sediments. These tend to be moderately soft.

Siltstones: Very fine-grained sediments in which the mineral grains can be perceived with hand lens. Siltstones include massive, thin-bedded and thick-bedded sediments. These tend to be hard.

Sandstones: Sediments in which the mineral grains are apparent without hand lens. Includes massive, thin-bedded and thick-bedded sediments. These tend to be hard.

Diamictite: Sediments consisting of a chaotic mixture of argillite to sand-sized grains, commonly with a few grit-, pebble- to boulder-sized clasts. These can be massive to bedded. These commonly grade into argillite, siltstones and sandstone. If the unit has apparent weak to moderate sorting the unit is logged as argillite, siltstone and sandstone according to the dominant grain size. These range from soft to hard.

Conglomerate - Clast-supported conglomerates tend to be thin sub-units units with sharp to gradational contacts (over a few decimetres). The groundmass between clasts tends to be sandy. Clasts tend to be well-rounded with granitic clasts dominant. Low in the stratigraphic section, the proportion of Archean rocks tends to increase. Within a few tens of metres of the Archean unconformity, locally-derived clasts are commonly identifiable. High in the stratigraphic section, Proterozoic clasts are common, ranging from angular breccia to rounded clasts.

Conglomerate - General: This sub-unit generally has more than 10% boulder-sized clasts. Historically, sediments with prominent pebble to boulder size clasts are classified as conglomerate; even when the boulder-sized clasts are less than 1% of the rocks. When clasts are less than a few percent of a sub-unit, the clasts appear to be exotic dropstones and should not be used to classify the sediment as conglomerate.

Matachewan Intrusives

Matachewan diabase: Matachewan diabase intrusives are near vertical, North-trending dikes. Locally, up to 5% distinctive 1-4 cm, pale gray to pale green feldspar phenocrysts and aggregates are locally present. If the distinctive feldspar porphyry textures are absent, other field relationships, including magnetic signature are required to distinguish between Matachewan and Nipissing diabase.

Archean Lithologies

Undifferentiated Archean Dikes:

Felsic Intrusives: North of the property a trondhjemite is the dominant rock type.

Quartz Feldspar Porphyry: Feldspar porphyry is logged as quartz-feldspar porphyry if quartz grains were identified. Quartz-feldspar porphyry tends to be up to 30% pale grey phenocrysts up to 3 mm with a few apparent quartz phenocrysts in a very hard grey groundmass.

Feldspar Porphyry: Feldspar porphyry, mafic porphyry and quartz-feldspar porphyry appear to form a prominent suite of dikes dominated by feldspar porphyry, common hornblende porphyry and a few quartz-feldspar porphyry dikes. These appear to be similar to the dike systems associated with gold occurrences in the Gowganda – Shining Tree area. Feldspar porphyry tends to be up to 30% pale grey phenocrysts up to 3 mm in a very hard grey groundmass.

Mafic Porphyry: Mafic porphyry tends to exhibit as dikes with a dark greenish-red groundmass with or without phenocrysts. It is very hard.

Undifferentiated Archean rocks:

Sediments-Tuffs: The sediments tend to be well-bedded and deformed, commonly with a strong deformation fabric. The sediments include a wide range of sediment types including Magnetite Iron Formation and feldspar crystal tuffs. In strongly-deformed rocks, the distinction between feldspar crystal tuff and feldspar porphyry dike can be difficult. The distinction between sediments and mafic and ultramafic rock is also difficult in these deformed rocks. Additional work could reclassify some of the deformed rocks.

Iron Formation: Magnetite Iron Formation with minor to significant magnetite content is common. Some banded, dark green, strongly-magnetic rock logged as Iron Formation, appears to be sheared, mafic-ultramafic rock. Specific gravity measurements, hardness and whole rock geochemistry may be useful in the classification of these questionable units. Heavy, strongly-magnetic units may tend to be mafic-ultramafic rocks.

Mafic and Ultramafic Volcanics and Intrusives: Mafic and ultramafic volcanics and intrusives appear to be a suite of related rocks. The thicker units appear to be differentiated in place or at the magmatic source. Many differentiation textures and trends were identified. Sulphides were a significant component of some of these units. The logs differentiate these as mafic and ultramafic intrusives and flows. A combination of logging, specific gravity measurements and litho geochemistry are required to confirm the tentative log identifications of these units, particularly in the strongly-deformed units.

Deformation Zones: Deformation zones consisting of moderately to strongly foliated rock are tentatively identified as similar to deformation zones in the gold camps of Northeastern Ontario and were noted in the rock descriptions of the logs.

8- Deposit Types

Vein deposits of the Gowganda region are epigenetic and contain important amounts of silver, nickel, cobalt and bismuth in predominantly arsenide, sulpharsenide, and native forms.

The host rocks include Precambrian metasedimentary and metavolcanic rocks, which are, as a rule, intruded by dykes and sills of diabase. The metallic minerals occur in veins and sheeted veins (or vein sets) commonly with or fracture fillings in stockworks and/or as impregnations in the wall rocks. These minerals are usually associated with carbonate and/or quartz gangue. The wall rocks adjacent to the veins are commonly hydrothermally altered.

Silver, with associated nickel-cobalt-iron arsenides, has been the only productive type of mineralization in the area. Most of the known occurrences in the area are hosted by Nipissing Diabase and less commonly by Gowganda Formation and Early Precambrian meta-volcanics.

The latest results of trenching have highlighted gold mineralisation which for now cannot be compared to a deposit type at this stage but are highly hydrothermal related.

9- Exploration

These numbers represent the numbers as close as possible to exploration investments:

Castle Silver Mines Inc. spent a total of about $1,860,500 in exploration work on the Castle Silver Property, most of which was spent in 2011. The main expenses are $1,041,000 for drilling, $235,400 for technical services and related expenses, and $131,080 for the Titan-24 survey.

In 2012, the main expenses are $ 43,832 for geology, $16,726 for assays and testing, $109,220 for management and engineering and $123,808 for other expenses (facility, equipment, personnel, licensing, taxes and permits).

In 2013 the main expenses are $173,455 for geology &, Geochemistry MMI, $45,703 for management and engineering and $56,427 for other expenses (facility, equipment, personnel, licensing, taxes and permits) and $222,671 voluntary rehabilitation (screening at Everett and Castle No.1 and Castle No.3 and re-sloping at Everett and Castle No.3).

In 2014, the main expenses are $100,858 for geology,$119,203 for trenching and voluntary rehab (re-sloping and backfilling Castle No.1) & Channelling $3,656 for assays and testing, $28,300 for management and engineering and $28,283 for other expenses (facility, equipment, personnel, licensing, taxes and permits).

9.1 Geophysics

At the request of Castle Silver Mines Inc., Quantec Geoscience Limited carried out a Titan-24 DC-IP and MT survey over the Castle Silver property during 7 days in early March 2011. The survey consisted of two Titan-24 DC-IP and MT lines (3 single spreads). A total of 7.2 line kilometres (9.5 line kilometres including current extensions) data were acquired with 100 m station spacing and line intervals of approximately 300 m. The grid azimuth of the survey area was 305° and 310° true North with a local magnetic declination of 12° west.

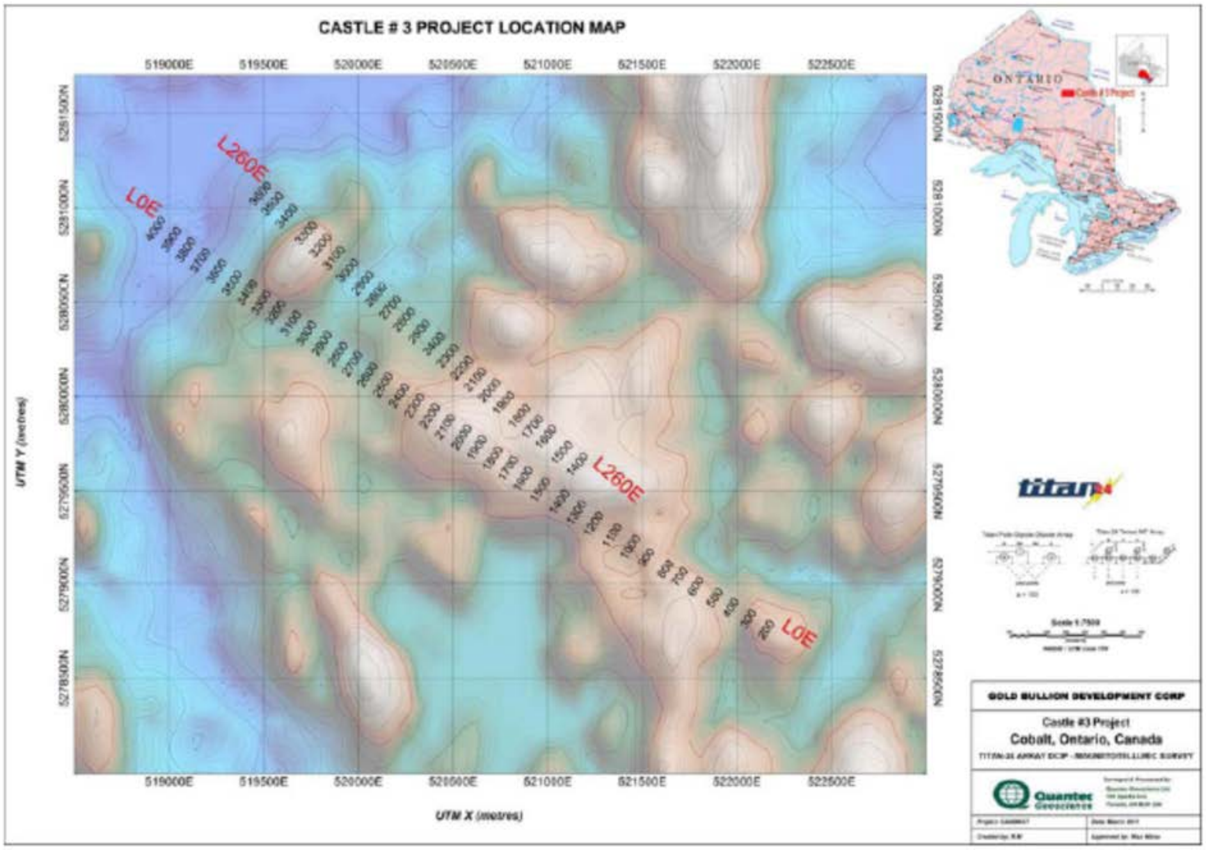
The exploration objective was to:

• Detect structures related to the emplacement of silver mineralization for future exploration drilling of the property;

• Provide the following benefits:
  - o Detect and delineate zones of silver veins and related wall rock sulphides to depths of at least 500 m with IP Chargeability and DC Resistivity;
  - o Discriminate large, potentially greater tonnage targets from small noneconomic targets;
  - o Complement near surface information for integrated drill targeting.

The Titan-24 survey has successfully identified at least 8 geophysical anomalies in the DC/IP and MT inversion models with potential of silver mineralization for future exploration drilling of the property. The anomalous zones were resolved from near surface to more than a 500 m depth (Quantec Geoscience 2011). The Figure 12 illustrates the surveyed location map.

Figure 12 : Surveyed Location Map



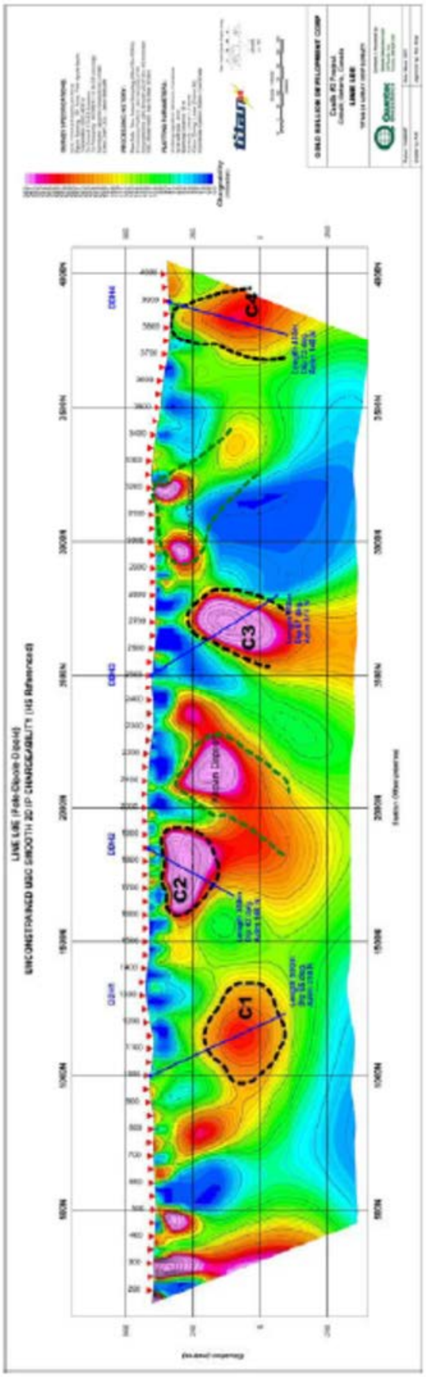
Results for Line L0E

Line L0E was an approximately 3.8 km long profile with 100 m dipole spacing and of a NW-SE orientation. Figures 13 & 14 (from top to bottom) display results of the IP chargeability (dc ref), DC resistivity and MT Resistivity (PWM) along line L0E to a depth of 1,500 m for MT section and approximately 750 m for DC and IP sections which intersect a number of structural features and identify four anomalous zones (C1, C2, C3 and C4). These anomalous zones show moderate to strong IP and low DC resistivity responses. The MT section further resolves the extents of anomalous zone C4 and is marked as anomalous zone MT1 at the northern most of the line.

A deeper MT response (MT1), which is mapped below the stations 3750N and 3900N extends to depth of more than 1,300 m, shows low resistivity (<500 ohm-m), with a vertical to sub-vertical northward dipping trend and confirms the deeper extents of C4 DC resistivity anomaly.

A second known deposit is also marked between stations 2950N and 3400N. The known Castle # 3 exploration and production information was extracted from the geological sketch provided by Castle Silver Mines Inc. The identified anomalous zones and known areas show very similar resistivity and chargeability distribution over the line extents, which make those anomalous zones interesting for future testing.

Figure 13 : Interpreted Results of the 2D IP Chargeability Using HS Reference (top) and DC Resistivity (bottom) Inversion Models Along Line L0E



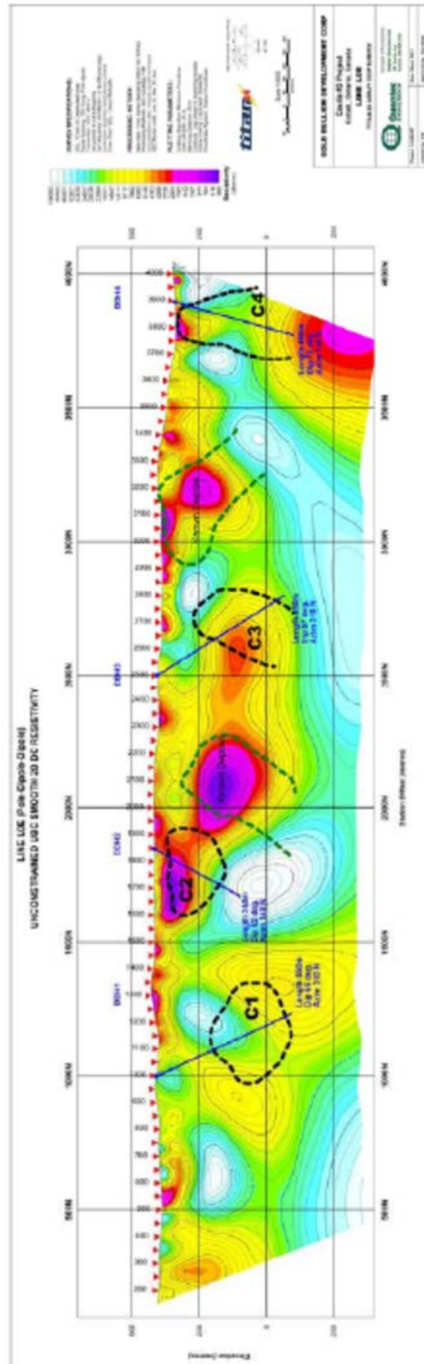
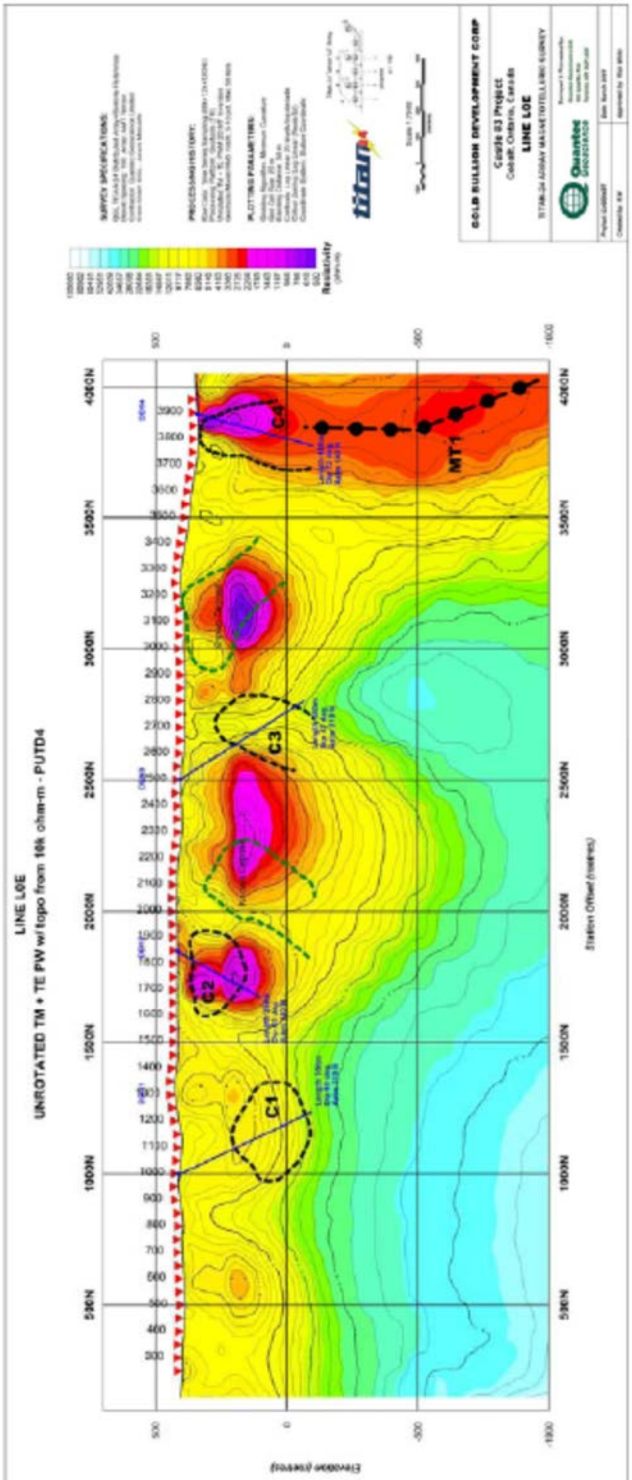


Figure 14 : Interpreted Results of the 2D MT Resistivity Inversion Model Along Line L0E



Results for Line L260E

Figures 15, 16 & 17 display results of the IP chargeability (hs ref), DC and MT resistivity along line L260E to a depth of 1,500 m for MT section and approximately 750 m for DCIP sections. Line L260E is the second line to the east of L0E with an average offset of approximately 350 m with a total length of 2.4 km, which intersects a number of structural features and identifies four anomalous zones (C5, C6, C7 and C8). These anomalous zones show strong to moderate IP chargeability and moderate to low DC resistivity responses. The MT section further resolves the extents of C5 anomalous zone at greater depth and is marked as anomalous zone MT2.

MT response (MT21) shows moderate resistivity in the range of 5 kilo ohm-m to 10 kilo ohm-m, with a vertical structure, which extends from surface to a depth of approximately 1,300 m and confirms the depth extension of C5 anomaly.

Figure 15 : Interpreted Results of the 2D IP Chargeability Using HS Reference Inversion Model Along Line L260E

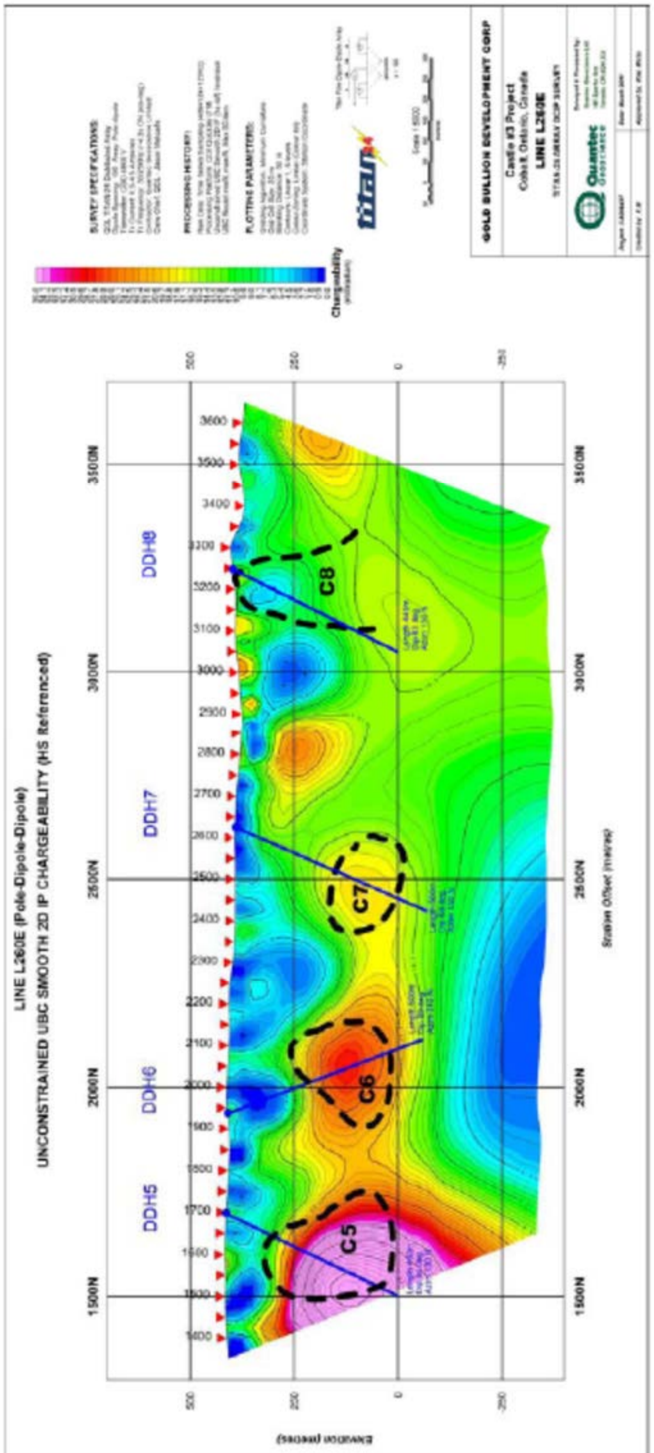


Figure 16 : Interpreted Results of the 2D IP Chargeability Using DC Reference Inversion Model Along Line L260E

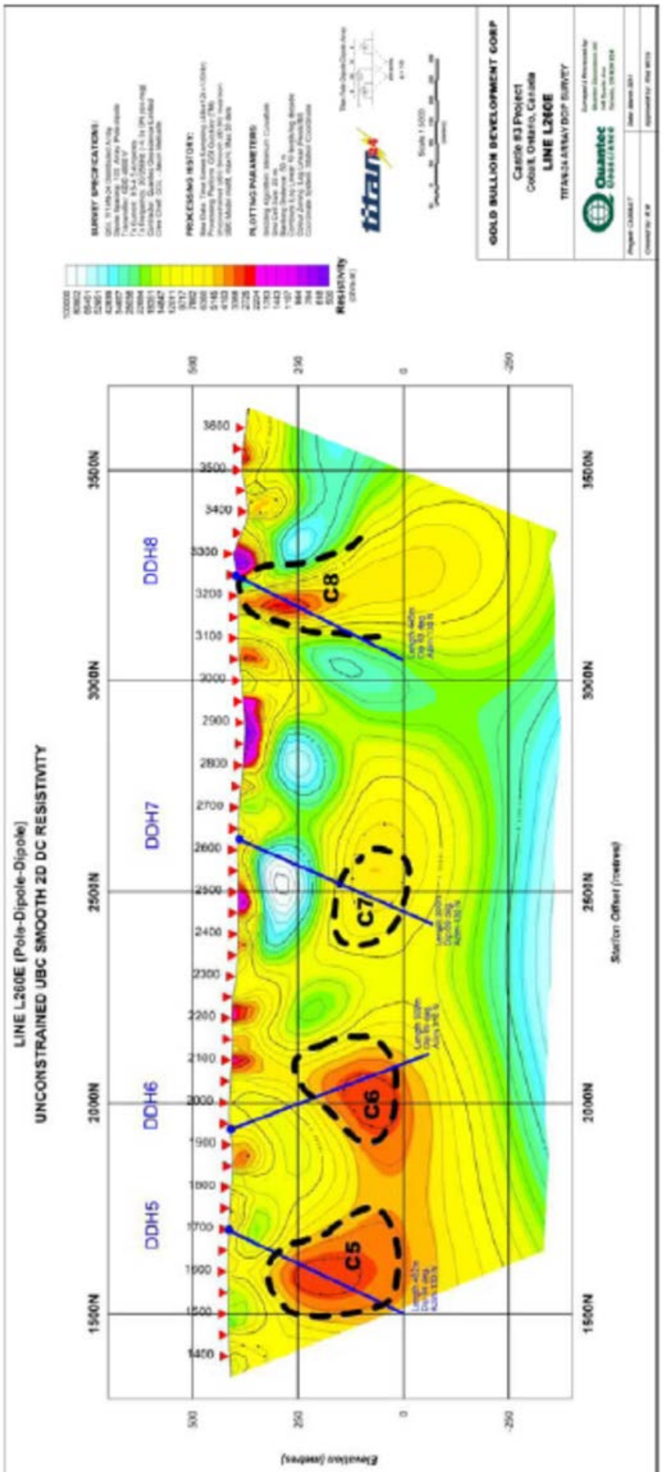
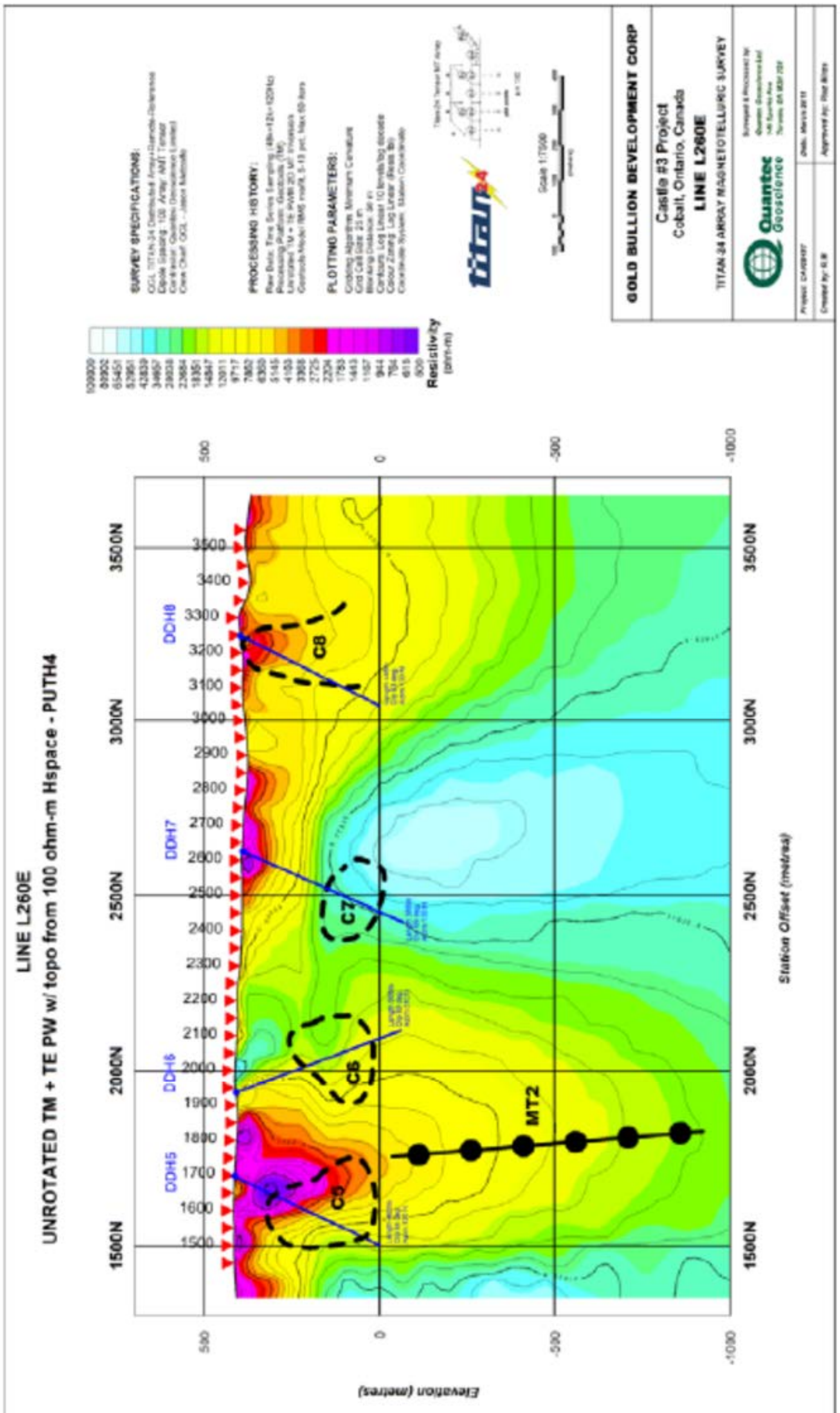


Figure 17 : Interpreted Results of the 2D MT Resistivity Inversion Model Along Line L260E



9.2 Stripping, mapping and MMI

9.2.1 Tony's Northland Enterprise

In April-May 2012, vein tracing was conducted by Tony's Northland Enterprise under the supervision of Doug Robinson.

Connections were made at a mineralized vein near the adit opening with a Garrett Scentry T-50 tracing instrument. The resulting survey was plotted as vein tracing plots showing the anomaly and supporting measurements (Figure 18 : Castle Vein Tracing (1 cm = 5 m)). The red and blue lines identify the structure and anomalies identified in stripping described below.

9.2.2 Stripping and Mapping

The stripping and mapping was supervised by Doug Robinson in 2012

Connections were made at two specified mineralized structures with a Garrett Scentry T-50 tracing instrument. The signals within 25 m of the transmitter were masked. Also, the surface connections were poor relative to the good connection to the main vein underground. However, Tony's Northland Enterprise affirms that the signals described in both surveys came from a conductive vein system.

Two anomalies identified in this survey were stripped and proved to be buried wires. These stripped areas were minor (<3x3 metres) and the surface material returned to original surface contours. These false anomalies were noted on the surface plan. The initial survey identified an east trending complex anomaly. Stripping in this area indicates this part of the initial anomaly may have resulted in part from a historic buried hydro line buried by Agnico activities.

The northeast-trending structures appear to be the strong anomaly structure that was detected in the previous study. These structures appear to have conducted much fluid as shown by the thermal induced jointing.

The figures below are the vein tracing from underground connection and surface mapping with location of anomalies from surface connections. The potential vein structures are marked in red and the new anomalies marked in blue. The new anomalies appear to top about 6 feet below surface based on the horizontal offset of the anomalies relative to the cause structure. Also, a best estimate of overlap was made in these maps.

The Figure 18 is a survey made in May 2012 and Figure 19**Error! Reference source not found.** is the stripping map shown at 75% density overprinting 25% density of the vein tracing survey. These were the best fit of the data as measured by GPS "Garmin Rino 530HCX"as measured during the vein tracing survey and during the mapping.

The two maps were located by GPS with +/- 3-4 metres.

In this study, no attempt was made to connect to the underground vein.

Figure 18 : Castle Vein Tracing (1 cm = 5 m)

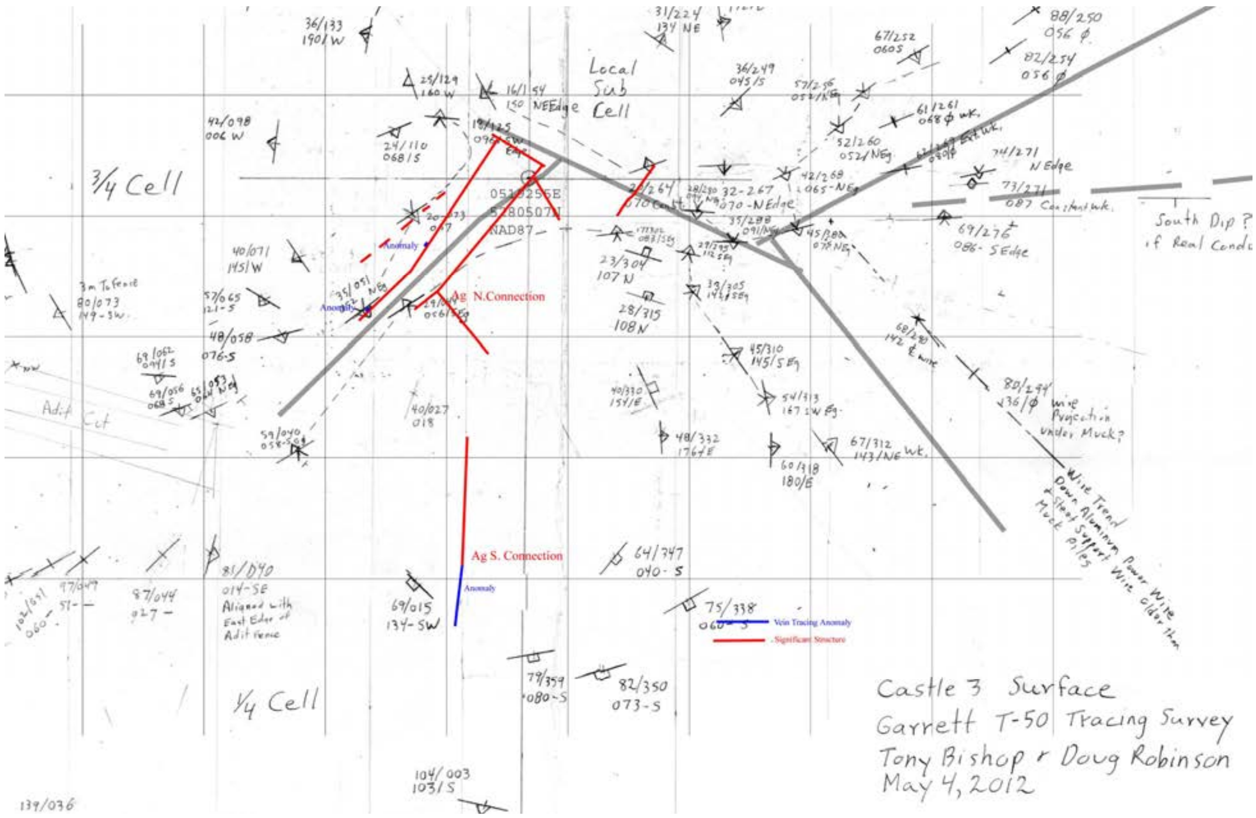
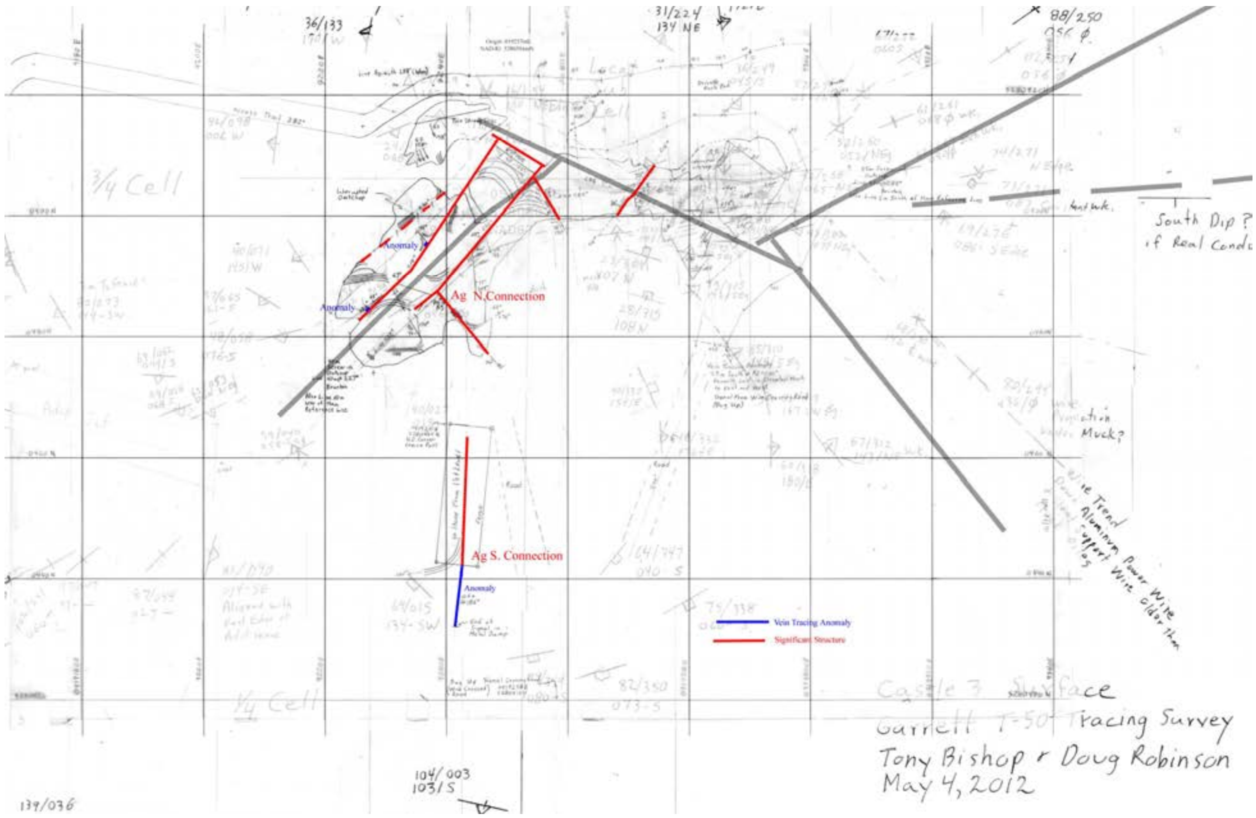


Figure 19 : Castle Vein Tracing - 75% Stripping (1 cm = 5 m)



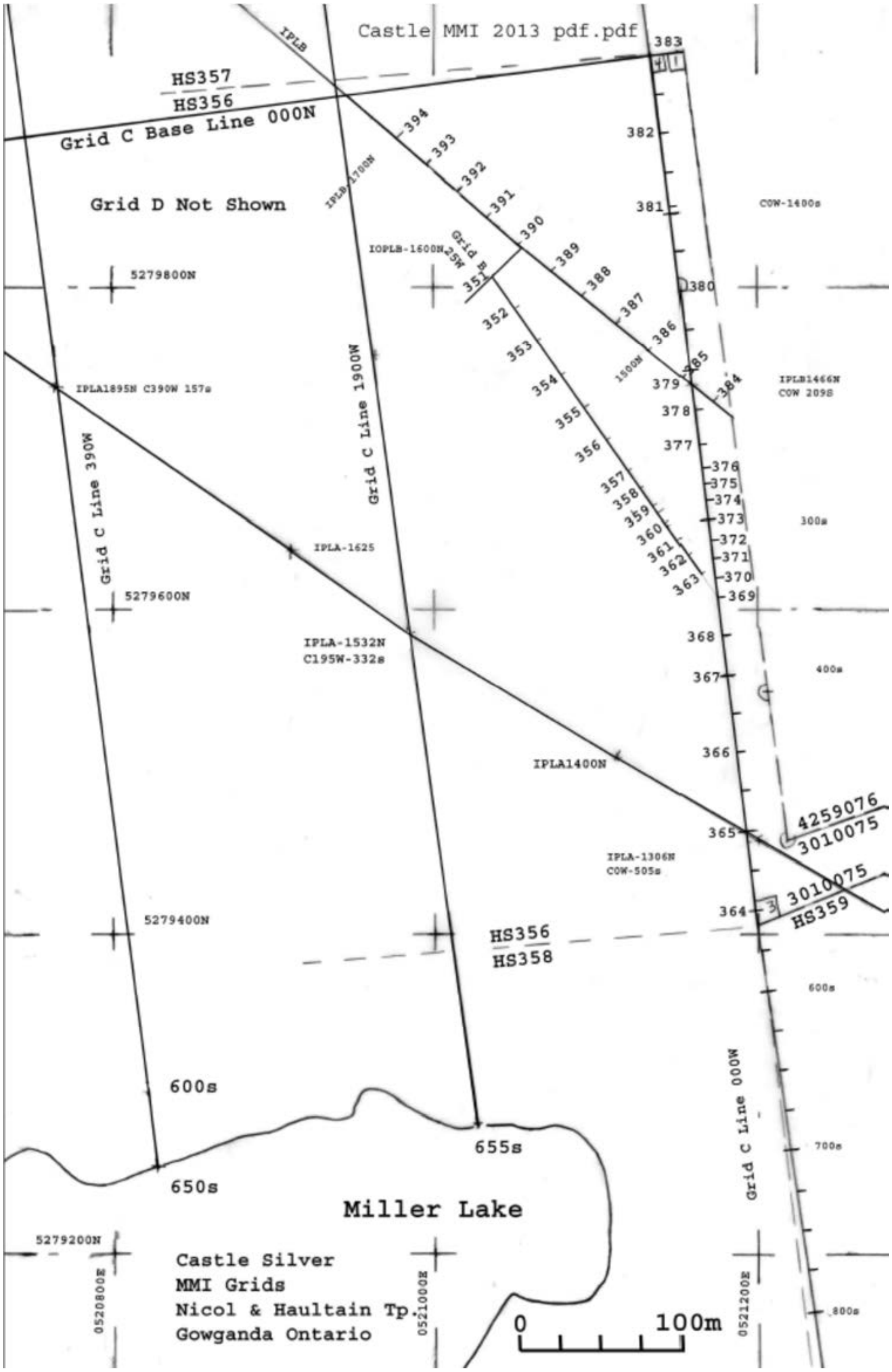
9.2.3 Geochemistry Metal Mobile Ions (MMI)

Orientation survey took place in 2013, while the effective Metal Mobile Ion (MMI) geochemistry survey took place in 2014.

Samples were collected on lines at 12.5 metre intervals and at 6.25m in specific sectors. 345 samples were taken in this program.

Sampling protocol and details of the investigation is presented in the following table.

Figure 20: Location of the grid lines



Castle Property: Haultain and Nicol Tp. Larder Lake Mining Division
Samples collected October 22, 23, 24, 27, 29, 30 & 31 and November 1, 2, 3, 6, 7 & 14, 2014 by Douglas Robinson and Betty Robinson
This is a follow-up phase of MMI sampling to locate and identify MMI responses from Au mineralization (and it's associated Carbonate alteration) in Archean Sediments and from deep Ag-Co-Ni vein mineralization in Nipissing Diabase
A default sample spacing 12.5 meter sample interval is used.
Locally; the sample interval was reduced to a 6.25 meter for better resolution in priority areas
Each individual sample was bagged in double zippered Ziploc freezer bag (**inner bag**). The inner bag was then bagged in a similar double zippered Ziploc freezer bag (**outer bag**). The air was expelled from both the inner and outer bags at the time of sampling.
Waterproof commercial sample tags with the number in bold text were inserted in the inner sample bag with the number facing out. The numeric sample number was hand written in felt pen on the outside of the inner sample bag.
Waterproof commercial sample tags with the number in bold text were inserted in the outer sample bag with the number facing out. The numeric sample number was hand written in felt pen on the outside of the inner sample bag.
All completed samples had all least three legible sample numbers visible from the exterior.
Organic depth is believed to be a function of surface elevation and the elevation of humus interface with mineral soil. It is variable over very short distances.
Soil "A" horizon is generally commonly present in deciduous forest and deciduous clear cuts . The organic layers were dominantly black humus with organics material in various degrees of decomposition.
Field notes focused on the organic-mineral soil interface and sample depth. Some auxiliary notes taken
Cobbles and boulders were universally present in the sandy salty soils. No distinction was made between cobbles and boulders. Boulders and cobbles ranged from sub angular to well rounded.
Soil logged as sand generally has a prominent gritty texture when rubbed between the fingers.
Soil logged as silt generally a weakly discernable granular texture when rubbed between the fingers.
Soil logged as clay generally no discernable grain texture when rubbed between the fingers.
All sandy salty soils are frequently friable/weakly cohesive and became disaggregated when placed in the sample bags.
Directly below the organic-mineral soil interface the sample medium tended to be variable from ole to hole and
The soil auger was ideally suited for a 15 cm sample length, an ideal amount for analysis.
The soil auger was excellent to acquire a sample in the second entry into the hole.
On removing the auger from the second entry into the hole some cave from the sides of the hole was commonly recognized as mixed, loose material that was conspicuous as form to the sample. This foreign material was discarded prior to removing the sample from the auger.
2x2 inch square commercial pickets from were established at 25 meter intervals to supplement the original pickets.
In the original field notes of line 585W and 682.5 W all medium brown samples were logged as medium brown. These included medium rusty brown samples and earthy brown samples.
The sample bags will be opened and the medium brown color will be described with better resolution. Samples
Soils collected in areas of deep overburden tended to be consistent on soil profile including soil color and oxidation state. Only the horizon depths appeared to differ significantly from sample to sample.
Shallow soils in outcrop areas, particularly over flat sub-crop tended to be inconsistent in texture, color and oxidation state.
It appears the sub-crop surface prevents draining of the soil, resulting in various degrees of water saturation and a fluctuating water table resulting in alternating oxidation and reduction of the soils.
The colour of soils in outcrop areas tended to not match an orderly classification. The oxidation state of the soil may have to be determined from the MMI signature of the soil
The final determination of marginal oxidized/reduced sample description will depend on the analysis of the metals most sensitive to oxidation/reduction.
The deep soils appear to be glacial tiles consisting of a chaotic mix of boulders, pebbles, sand and silt sized

Table 5 : MMI sampling protocol

Sampling picture (stake on the line), typical Auger sample, typical hole in the ground followed by samples in the bags are shown in figures below.

Figure 21: Geochem – MMI sampling pictures

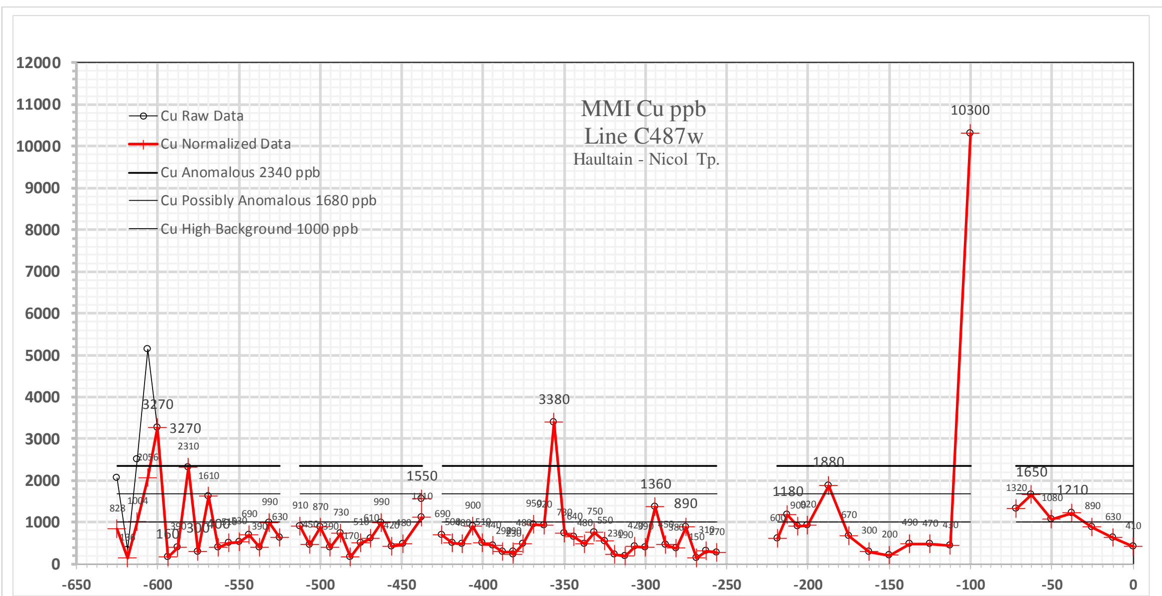
Table 5: Example of sampling program log

							O = Oxidized sample			
							R = Reduced sample			
Sample Number	Line	Interval		Depth Organics cm	Sample Interval cm	Soil Type		Sample Description	Sample Number	
								Samples E5278262- 291 taken October 22, 2014		
E5278262	Grid C Line 585W	**0**	s	4	14-29	Sandy silt & Boulders	O	0-4 cm black organics and litter, 4-10 cm grey, 10-29 medium brown. Flat, balsam fir	E5278262	22-oct-14
E5278263	Grid C Line 585W	**12,5**	s	3	13-28	Sandy silt & Boulders	O	0-3 black organics, 3-8 pale grey, 8-27 Brown. From among boulders. Flat. Maple balsam fir.	E5278263	22-oct-14
E5278264	Grid C Line 585W	**25**	s	2	13-28	Sandy silt & Boulders	O	0-2 black organics, 2-27 Red. From among boulders. Flat Maple, balsam fir.	E5278264	22-oct-14
E5278265	Grid C Line 585W	**37,5**	s	5	15-30	Sandy silt & Boulders	**R ?**	0-5 black organics, 5-12 grey, 12-30 yellow-brown. From among boulders. Wet. Flat. Maple, balsam fir.	E5278265	22-oct-14
E5278266	Grid C Line 585W	**50**	s	10	20-35	Sandy silt & Boulders	O	0-10 black organics, 10-35 medium brown. Water in hole. Sample among boulders. Maple, balsam fir. Flat.	E5278266	22-oct-14
E5278267	Grid C Line 585W	**62,5**	s	5	25-30	Sandy silt & Boulders	O	0-5 black organics, 5-10 dominantly brown and yellow. 10-25 mixed grey to grey-brown, 25-30 medium brown. Near mine muck on edge of road. Balsam fir, poplar. 6m N of centre of road. Flat	E5278267	22-oct-14
E5278268	Grid C Line 585W	**75**	s	15	25-40	Sandy silt & Boulders	O	0-15 black organics, 15-40 medium brown. Br, poplar. Slope NE.	E5278268	22-oct-14
E5278269	Grid C Line 585W	**87,5**	s	5	15-30	Sandy silt & Boulders	O	0-5 black organics, 5-30 medium brown. Flat.	E5278269	22-oct-14
E5278270	Grid C Line 585W	**100**	s	2	12-27	Sandy silt & Boulders	O	0-2 black organics, 2-4 grey-brown, 4-27 medium brown. Clear cut balsam fir, maple, poplar. Slope S.	E5278270	22-oct-14
E5278271	Grid C Line 585W	**112,5**	s	2	12-27	Sandy silt & Boulders	O	0-2 black organics, 2-4 grey, 4-27 medium brown. Clear cut balsam fir, poplar, maple. Slope S.	E5278271	22-oct-14

Table 6: Typical MMI datasheet

1									Rx1.61		R x 0.50		R x 1.00	R x 1.00	R x 0.40		R x 64		R x 1.00	R x 1.00		R x 1.09		R x 0.83		R x 0.62		R x 1.00	Rock 1.00	Rx0.50		Rx0.36	
2				Certificate		METHOD			GE_MMI_M		GE_MMI_M		GE_MMI_M	E_MMI_M	E_MMI_M		GE_MMI_M		GE_MMI_M	E_MMI_M	E_MMI_M	E_MMI_M		GE_MMI_M		GE_MMI_M		GE_MMI_M	E_MMI_M	GE_MMI_M		GE_MMI_M	
3						DETECTION			1		0,1		5	100	10		5		5	10	1	5		3		1		1	20	2		1	
4						UNITS			ppb		ppb		ppb	ppb	ppb		ppb		ppb	ppb	ppb	ppb		ppb		ppb		ppb	ppb	ppb		ppb	
5									Ag	Ag Norm	Au	Au Norm	Co	Cr	Cu	Cu Norm	Mo	Mo Norm	Ni	Pb	Pt	Rb		Ti		U		W	Zn	Ce		Nd	
6	0	-585	cW	260		E5278262	O	Sand	9	9	0,1	0,1	39	0	500	500	0	0	112	380	0	76	76	695	695	6	6	0	310	165	165	101	101
7	-12,5	-585	cW	260		E5278263	O	Sand	6	6	0,0	0,0	105	0	210	210	0	0	277	560	0	57	57	1020	1020	5	5	0	90	92	92	66	66
8	-25	-585	cW	260		E5278264	O	Sand	7	7	0,0	0,0	89	0	830	830	0	0	182	450	0	89	89	1080	1080	4	4	0	240	92	92	59	59
9	-37,5	-585	cW	260		E5278265	O?	Sand	4	4	0,1	0,1	41	0	1140	1140	0	0	86	250	0	38	38	324	324	9	9	0	50	215	215	137	137
10	-50	-585	cW	260		E5278266	O	Sand	7	7	0,2	0,2	97	100	1030	1030	5	5	112	810	0	69	69	1410	1410	10	10	0	100	246	246	165	165
11	-62,5	-585	cW	260		E5278267	O	Sand	6	6	0,1	0,1	48	0	730	730	0	0	179	50	0	38	38	1960	1960	4	4	0	50	68	68	35	35
12	-75	-585	cW	260		E5278268	O	Sand	5	5	0,3	0,3	99	200	960	960	6	6	160	630	0	55	55	1640	1640	10	10	0	140	315	315	240	240
13	-87,5	-585	cW	260		E5278269	O	Sand	5	5	0,1	0,1	38	0	530	530	0	0	100	340	0	63	63	208	208	4	4	0	90	145	145	132	132
14	-100	-585	cW	260		E5278270	O	Sand	10	10	0,2	0,2	51	100	580	580	0	0	226	1050	0	44	44	1030	1030	11	11	0	220	286	286	156	156
15	-112,5	-585	cW	260		E5278271	O	Sand	13	13	0,0	0,0	61	0	220	220	0	0	230	480	0	64	64	743	743	5	5	0	70	120	120	89	89
16	-125	-585	cW	260		E5278272	O	Sand	12	12	0,2	0,2	62	0	360	360	0	0	195	350	0	67	67	1020	1020	7	7	0	80	216	216	166	166
17	-137,5	-585	cW	260		E5278273	O	Sand	13	13	0,1	0,1	20	100	240	240	5	5	73	200	0	77	77	3620	3620	6	6	0	100	246	246	163	163
18	-150	-585	cW	260		E5278274	O	Sand	7	7	0,0	0,0	92	0	390	390	0	0	324	890	0	117	117	1380	1380	6	6	0	230	58	58	40	40
19	-162,5	-585	cW	260		E5278275	O	Sand	15	15	0,0	0,0	60	0	320	320	0	0	201	360	0	85	85	777	777	8	8	0	270	290	290	171	171
20	-175	-585	cW	260		E5278276	O	Sand	29	29	0,0	0,0	99	100	400	400	0	0	277	520	0	114	114	940	940	9	9	0	200	201	201	103	103
21	-187,5	-585	cW	260		E5278277	O	Sand	10	10	0,0	0,0	80	0	420	420	0	0	246	570	0	173	173	1200	1200	5	5	0	680	98	98	54	54
22	-200	-585	cW	260		E5278278	O	Sand	12	12	0,0	0,0	178	400	890	890	0	0	525	750	0	88	88	4320	4320	7	7	0	380	136	136	53	53
23	-212,5	-585	cW	260		E5278279	O	Sand	10	10	0,0	0,0	56	0	360	360	0	0	197	410	0	54	54	394	394	3	3	0	280	60	60	37	37
24	-225	-585	cW	260		E5278280	O	Sand	23	23	0,0	0,0	95	100	670	670	0	0	241	530	0	119	119	828	828	8	8	0	200	259	259	123	123
25	-237,5	-585	cW	260		E5278281	O	Sand	12	12	0,0	0,0	159	0	270	270	0	0	287	360	0	57	57	1690	1690	3	3	0	390	46	46	30	30
26	-250	-585	cW	260		E5278282	O	Sand	13	13	0,0	0,0	161	0	480	480	5	5	394	380	0	87	87	2480	2480	4	4	0	200	66	66	44	44
27	-262,5	-585	cW	260		E5278283	O	Sand	13	13	0,2	0,2	127	200	260	260	10	10	297	410	0	74	74	4990	4990	6	6	0	540	105	105	60	60
28	-277	-585	cW	260		E5278284	O	Sand	10	10	0,0	0,0	112	0	360	360	0	0	318	410	0	109	109	531	531	5	5	0	1600	104	104	67	67
29	292	-585	cW	260		E5278285	O	Sand	8	8	0,0	0,0	161	0	390	390	0	0	371	570	0	62	62	1750	1750	5	5	0	2510	36	36	26	26
30	-300	-585	cW	260		E5278286	O	Sand	13	13	0,0	0,0	112	100	590	590	6	6	263	340	0	111	111	3410	3410	6	6	0	910	64	64	42	42
31	-312,5	-585	cW	260		E5278287	O	Sand	38	38	0,1	0,1	606	0	750	750	9	9	355	330	0	58	58	299	299	13	13	0	1920	158	158	132	132
32	-325	-585	cW	260		E5278288	R	Sand	21	33,8	0,1	0,05	2380	0	1520	608	21	13,4	391	50	0	125	136,3	316	262,3	15	9,3	0	1410	232	116,0	179	64,4
33	-337,5	-585	cW	260		E5278289	O	Sand	18	18	0,6	0,6	359	200	340	340	11	11	440	460	0	74	74	3930	3930	4	4	0	3220	155	155	80	80
34	-350	-585	cW	260		E5278290	R	Sand	22	35,4	0,2	0,10	295	0	870	348	11	7,0	197	100	0	76	82,8	764	634,1	11	6,8	0	1990	316	158,0	127	45,7
35	-364	-585	cW	260		E5278291	O	Sand	10	10	0,1	0,1	119	200	450	450	6	6	348	350	0	110	110	4340	4340	5	5	0	1000	176	176	111	111

Figure 22: Example of Line C487w – Graph of Copper

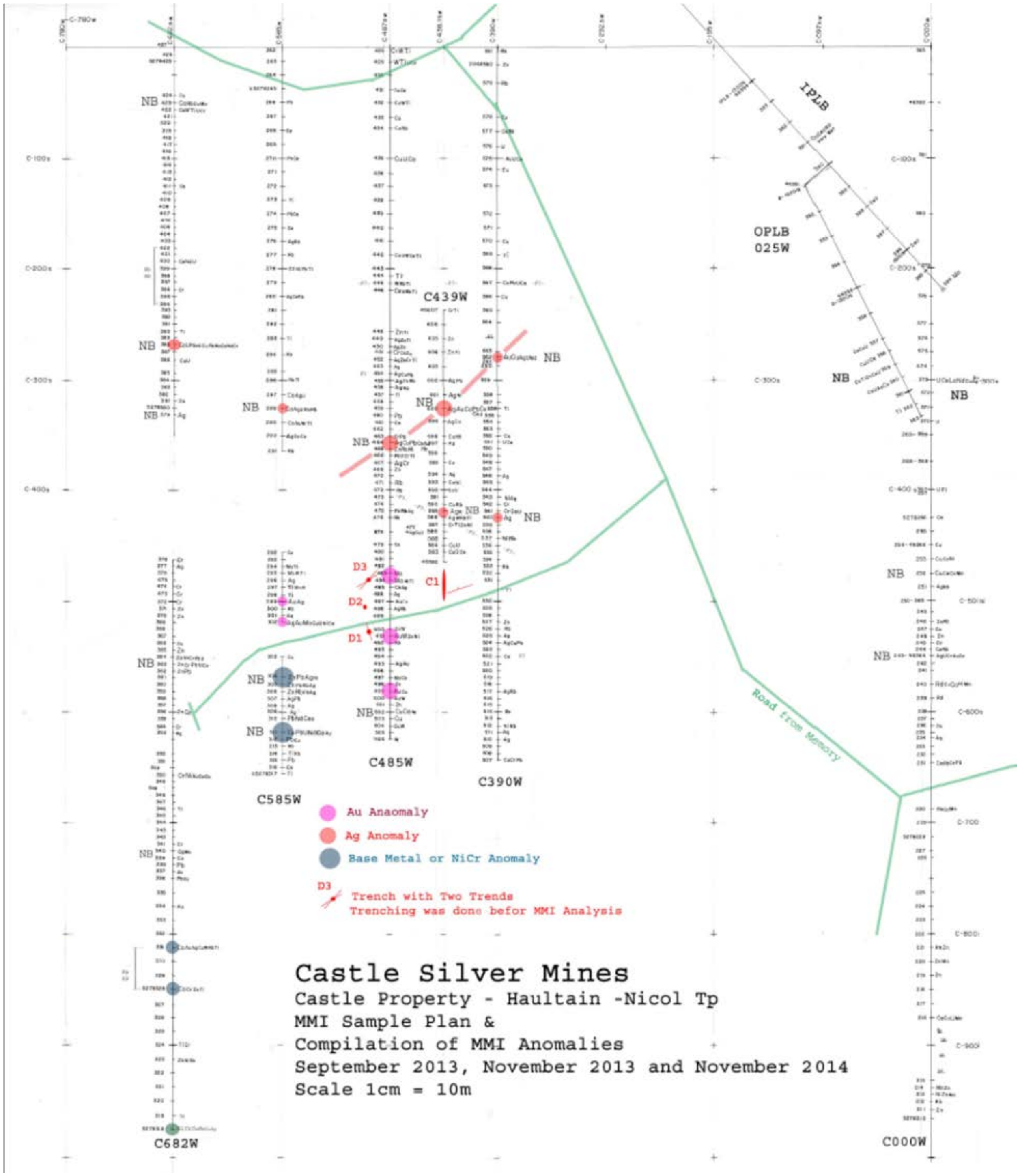


Castle Silver Mines Inc. - Grid C

Raw Data (Black Circles) - Normalized to Oxidized Equivalent (Red Markers)

The program has allowed to highlight Ag, Au and base metals anomalies which deserves additional work. The following figure present the compilation which highlights the targets.

Figure 23: Compilation map MMI



Recommendations from Mr. Doug Robison about the MMI on the property are:

The MMI anomalies should be prioritized and confirmed by resampling the key samples and running an anomaly definition line 25 meters to each side of the anomaly. The standard 6.5 meter spacing interval should be used. When the anomaly is confirmed and the most favourable location in the anomaly identified the surface should be trenched if trenching is viable. In no circumstance should the soil profile be disturbed outside the area the area that has been tested at a 6.25 meter interval along 25 meter spaced lines. This disturbance includes stripping/trenching and the soil placement area besides the trenching.
If MMI is proven to be a reliable exploration tool the company cannot afford to lose the opportunity to use this MMI tool in the high mineral potential area.
If trenching/stripping is impractical drilling is the alternative.
If MMI is proven to be an effective exploration tool the eventual objective should be to eventually blanket the entire property with MMI lines at 50 meter spacing using a 6.25 meter. (6.25/50m program)
MMI is essentially a one-time opportunity in a high mineral potential area due to the fact invasive exploration destroys the opportunity to use MMI in the future.
It is probably impractical and too expensive to blanket the entire property in one program. A phased program is favoured for two reasons.

A phased program allows for an effective growing curve to maximize the effectiveness of MMI sampling. Secondly a dense program using a 6.25/25m sample density allows for a focused and effective program that will progressively deal with the high priority area first and work out from there.

9.2.5 Stripping & channel samples 2014

A total of four (4) trenches were done in December 2014. The following figure presents the working conditions and the rock saw channel sampling.

Figure 24: winter trenching program

The 4 trenches are labelled C1, D1, D2 and D3 and are presented on the following map.

Figure 25: Trench location 2014 – Q4

The four (4) following figures present the mapping and results of each trench.

Figure 26: Map of Trench C1

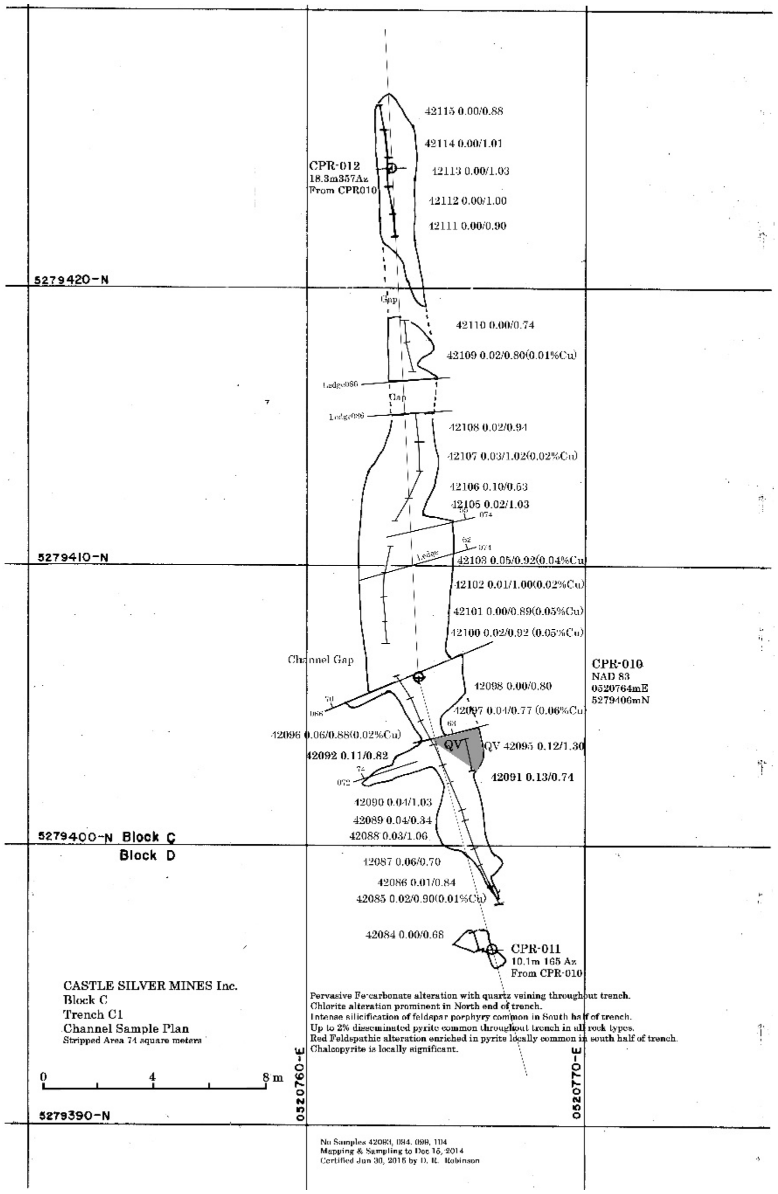


Figure 27: Map of Trench D1

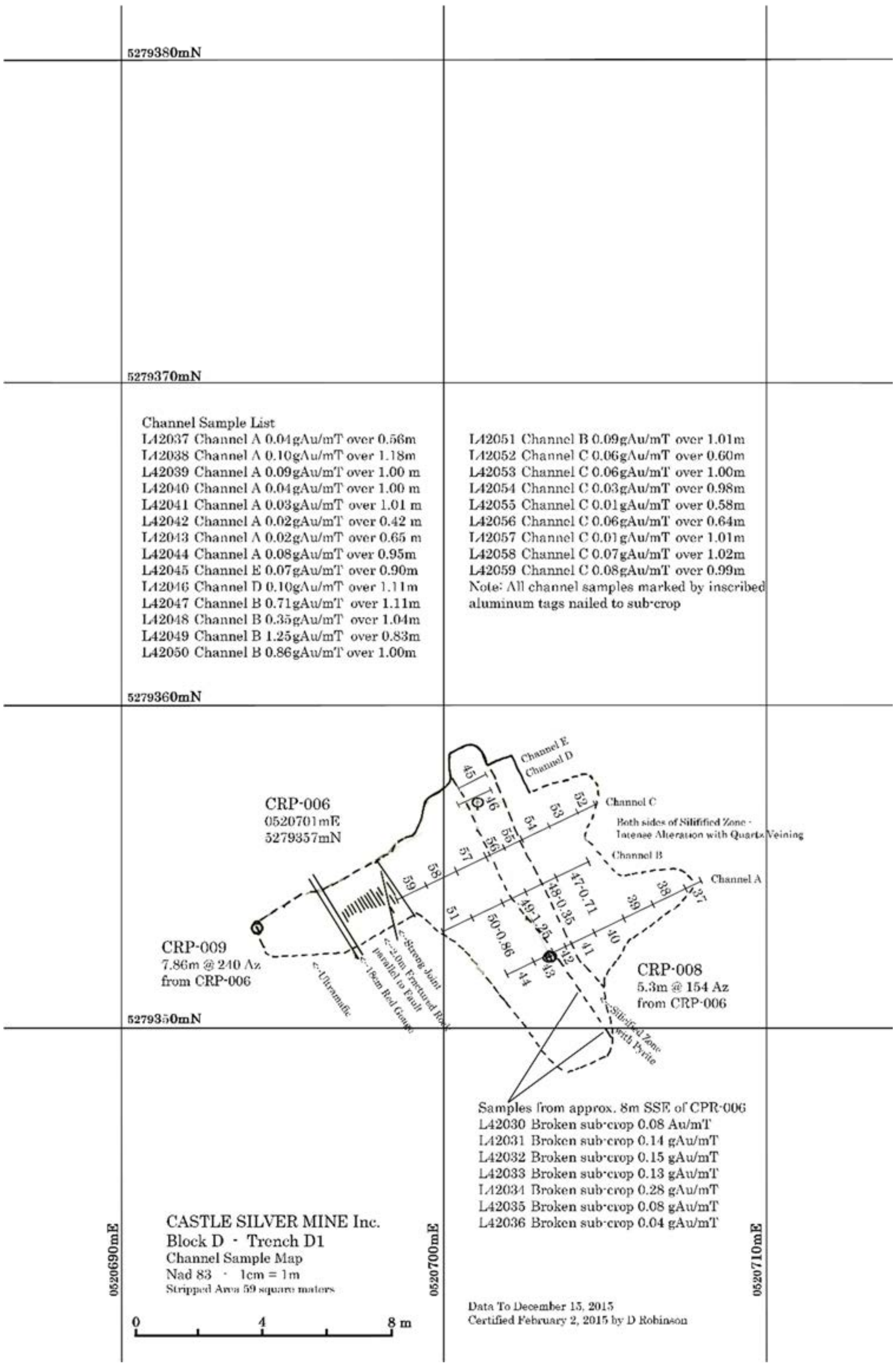


Figure 27: Map of Trench D2

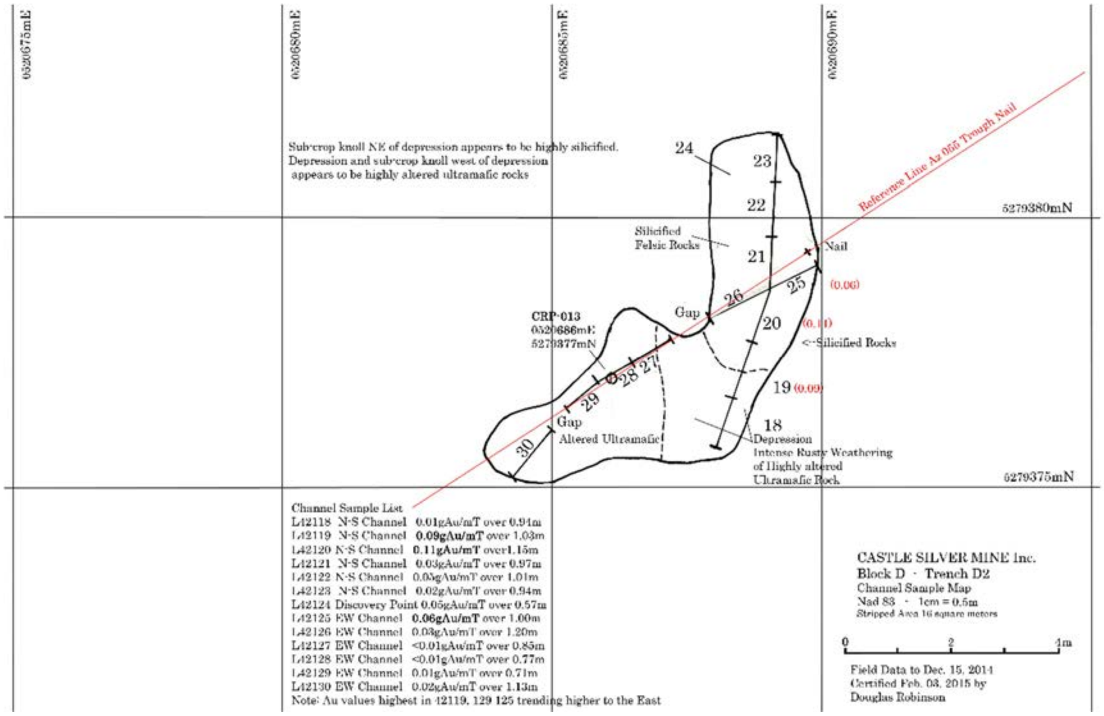
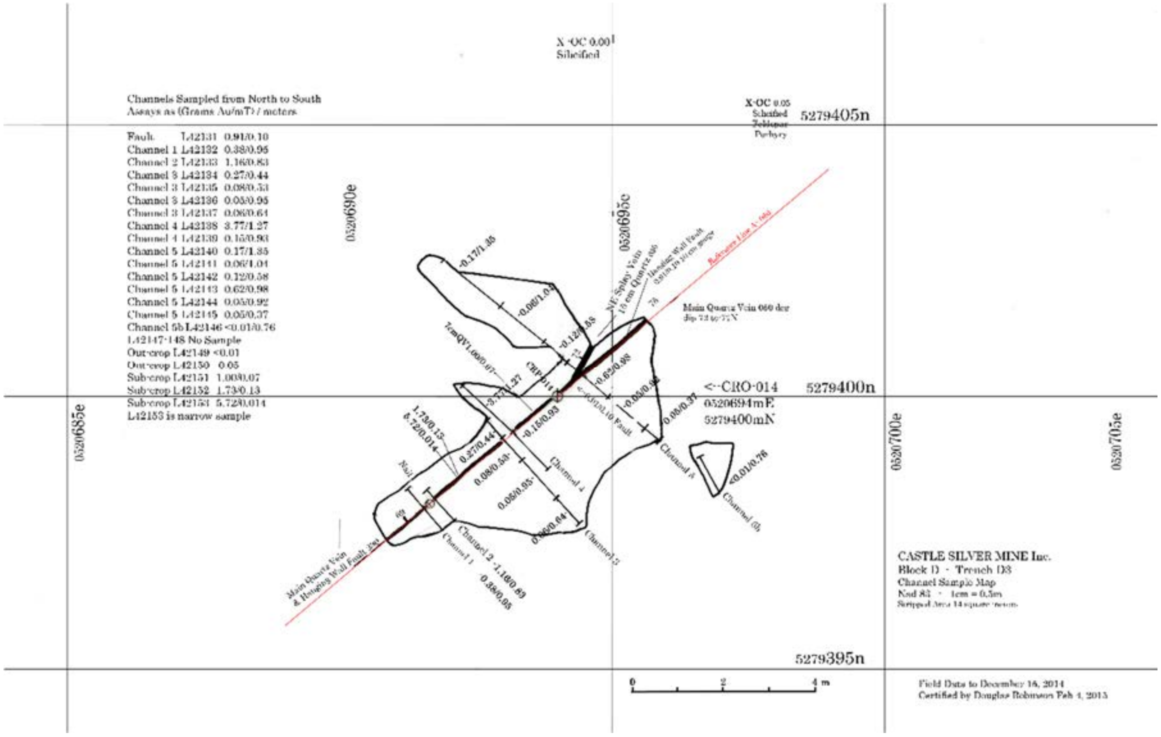


Figure 28: Map of Trench D3



Significant results were obtained in the MMI survey as well as in the trenches. The structures on surface may not represent the Silver and Cobalt mineralization at depth but clearly shows that the property has potential for gold, silver, cobalt and even copper.

The work to date has been done in a professional manner and can be relied upon.

10- Drilling

10.1 Drilling

A total of 6842.38 m of diamond drilling was carried out between February and July 2011. A total of twelve holes, NQ size core, were drilled. Mr Douglas Robinson, P Eng, is the geologist responsible for this project. Landdrill International Inc provided one drill rig, VD50 hydraulic, 24 hours per day, seven days a week for the duration of the program.

Facilities for core logging have been installed on the property. There are two 40 feet containers: one is for the core logging and the second is divided into sections to accommodate sawing, generator and storage, and restrooms. Adjacent to the logging containers, there are core racks to store the boxes. The core logging containers and the racks are within a secured fenced area.

Diamond drilling was intended to develop a detailed classification of lithologies and sublithologies, with the specific objective of intersecting mineralization within Archean rocks and the diabase, based upon information from the IP survey.

Each drill hole location was spotted and set up with a small pocket GPS a Garmin (rino530Cx) using averaging mode. Front sight alignment of three wooden pickets was performed using a Brunton Compass on a tripod. A magnetic declination of 11° west was used by Doug Robinson. Elsewhere, this report used 12° west. Some maps give 11°20min west.

As the holes progressed, measurements in the hole were carried out with a Reflex to allow orientation of the hole in 3D. Some Reflex measurements were repeated on the completion of the hole. The hole coordinates were measured again with a pocket GPS a number of times to obtain a better precision. All metal casings (except for hole CA11-02) were left in place and casing cap installed. The hole number was stamped onto the top end of each casing cap.

Table 8 outlines the location of the 12 diamond drill holes done in 2011 and Figure 29 identifies the location of these holes (in blue) and the IP lines (in red). Figure 31 is a schematic cross section along the IP line 0E, looking south-west. This figure 30 shows recent drill holes completed in 2011 and the relationship with the Nipissing diabase. No historical drilling was integrated.

Table 7 : Location of Diamond Drill Holes

Hole ID	Easting_UTM17	Northing_UTM17	Elevation	Length	Azimuth	Dip
CA1101	519512	5280566	398	437,06	347	-45
CA1102	519483	5280545	387	25,38	227	-45
CA1103	519736	5280677	414	625,94	175	-58
CA1104	519745	5280681	418	442,46	356	-45
CA1105	519951	5280772	396	240,26	310	-45
CA1106	519951	5280772	396	254,50	310	-57
CA1107	520903	5280331	427	906,28	180	-50
CA1108	520914	5279950	415	596,41	134	-50
CA1109	520913	5279953	415	645,00	308	-49
CA1110	520307	5280046	398	803,22	122	-46
CA1111	520308	5280038	398	842,79	302	-45
CA1112	520190	5280125	401	1023,08	122	-43

Figure 29 : Location of the Diamond Drill Holes

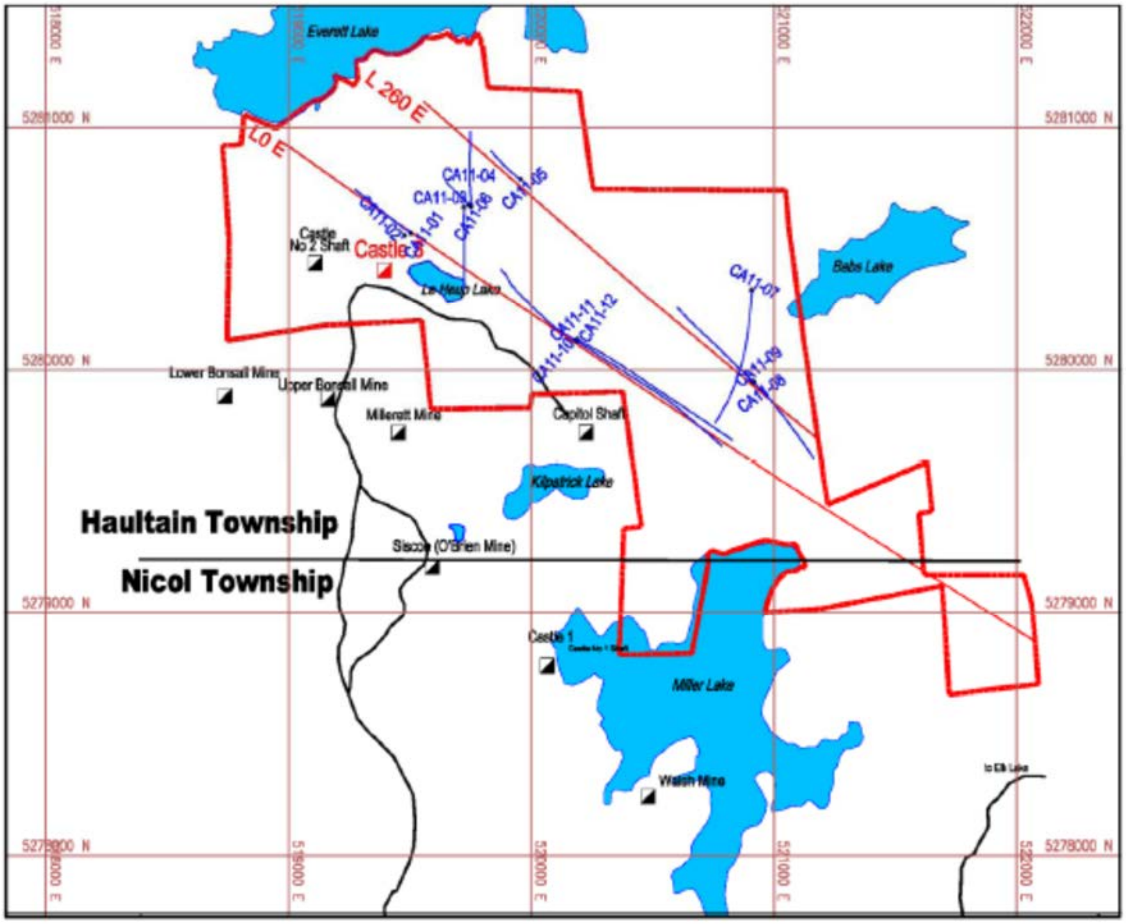


Figure 30 : Location of the Diamond Drill Collars

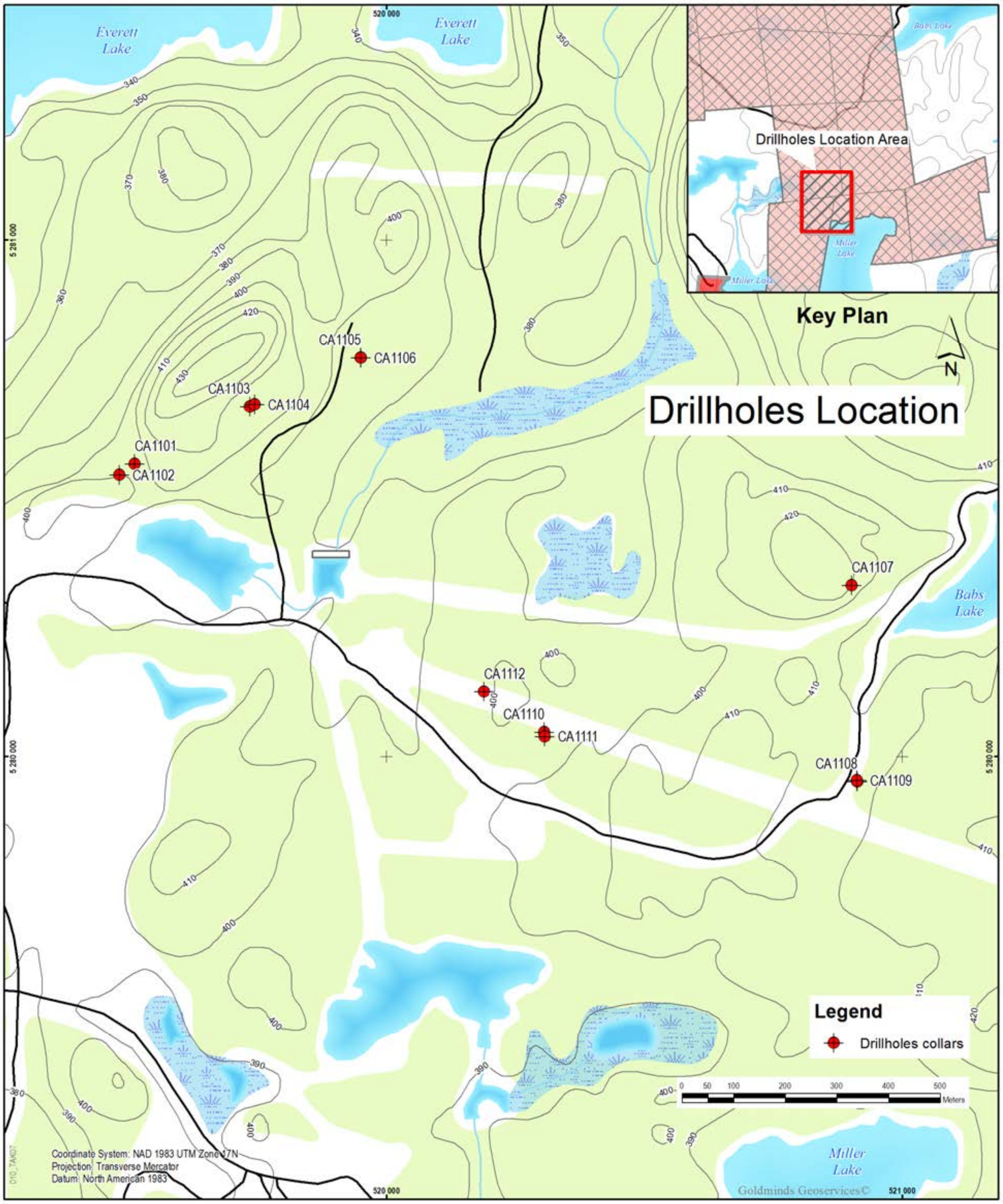
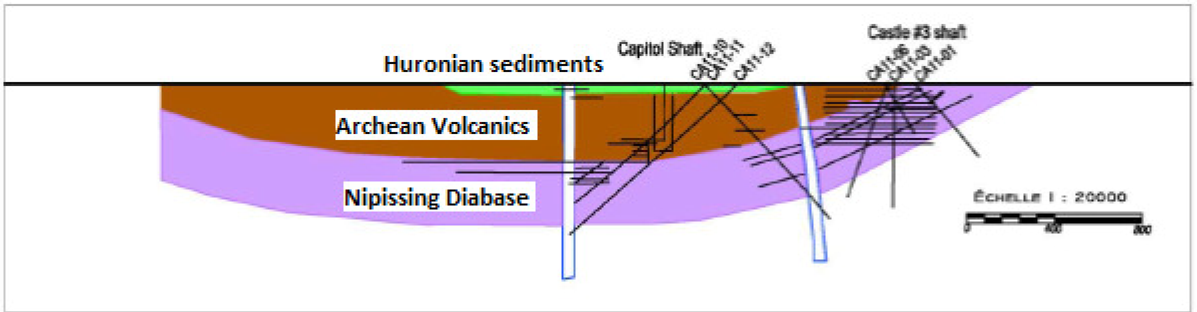


Figure 31 : Schematic Cross Section along IP line 0E (looking SW)



10.2 Drill program results

From the drilling campaign, here are the best intercepts, summarized in Table 8.

Table 8 : Best Intercepts Received to Date

Hole	Sample	From	to	Length	Au ppb	Pt ppb	Pd ppb	Ag ppm	As ppm	Co ppm	Cu ppm	Pb ppm	Zn ppm
CA11-03	44253	573	573,9	0,9	12	0	0	12,2	736	521	3255	15504	22982
CA11-03	44254	573,9	575	1,1	7	0	0	5	68	74	1209	2468	2468
CA11-04	44356	214,83	215,83	1	76	0	0	2,49	107	91	13782	17	59
CA11-04	44450	393,07	393,86	0,79	9	<15	<10	10,17	871	130	1149	4382	7795
CA11-04	44454	412	412,14	0,14	21	0	0	5	425	244	236	7024	17999
CA11-05	44465	37,15	37,73	0,58	<5	0	0	1,24	5	17	5609	11	20
CA11-07	44593	132,07	132,29	0,22	139	0	0	1,59	3	212	8494	4	108
CA11-07	44659	211,52	211,72	0,2	5	0	0	3,48	<2	38	6931	10	46
CA11-07	44873	841,21	842,29	1,08	<5	0	0	9	45	13	318	3954	1660
CA11-07	44874	842,29	843,32	1,03	6	29	<10	18	94	23	342	10053	13049
CA11-07	44876	843,32	843,97	0,65	<5	0	0	9	103	20	286	4439	4691
CA11-08	45119	379,72	380,41	0,69	367	34	16	12	37	90	3635	104	691
CA11-08	45182	563,54	564,34	0,8	<5	<15	<10	386,3	684	160	322	153	343
CA11-08	45183	564,34	564,79	0,45	<5	<15	210	947,8	51862	9107	453	39	282
CA11-08	45184	564,79	565,68	0,89	8	<15	12	269,3	155	57	340	50	280
CA11-08	45184	564,79	565,68	0,89	<5	<15	<10	168,3	101	91	360	50	300
CA11-08	45185	565,68	566,28	0,6	8	24	15	311,2	121	47	450	28	299
CA11-08	45186	566,28	566,63	0,35	6	45	11	220,2	103	40	316	24	285
CA11-09	45290	343,47	343,59	0,12	560	<15	<10	19,32	20746	14455	4631	1598	475
CA11-09	45298	350,17	351,44	1,27	287	16	11	10,46	16	96	191	121	50

The veins are intersected at angles and the sample length are believed to be 25 to 50% of the true width. Additional information is required to define the exact true width of these intersections.

These samples have been analysed by total metallics procedures based on high silver concentration in a calcite cobalt arsenic vein. The Table 9 presents the results obtained for this test.

Table 9 : Total Metallics Analyses

Hole	From	to	length	Sample	Total Ag ppm
CA11-08	563,54	564,34	0,8	45182	1069
CA11-08	564,34	564,79	0,45	45183	40944
CA11-08	564,79	565,68	0,89	45184	515
CA11-08	565,68	566,28	0,6	45185	311
CA11-08	566,28	566,63	0,35	45186	248

The veins are intersected at angles and the sample length are believed to be 25 to 50% of the true width. Additional information is required to define the exact true width of these intersections.

The best intersection encountered is hole CA1108 at 563.54-566.63 m. Total pulp metallic assays were performed on a half split-core sample of the entire length of the mineralized section. The pulp metallic assays rendered an uncut weighted average grade of 6,476 Ag g/t, 0.14% Co, 0.03% Ni over 3.09 m. This interval includes 40,944 Ag g/t, 0.91% Co, 0.12% Ni over 0.45 m located at 564.34-564.79m.The bulk of the silver is in a 7 cm (true width) calcite-Co-Ag vein at 28o to the core axis from 564.64-564.77 m. Leaf silver was common in the wall rock in the reported interval.

11- Sample Preparation, Analyses and Security

11.1 Sampling Method and Approach

The core boxes were closed at the drill site and brought to the core shack where they were labelled. All the core boxes are properly stored on racks in a secured fenced area adjacent to the core shack.

Meticulous measurements were made along the whole length of the core and a mark was made at every metre. The wood marker blocks were generally within 20 cm of the marks, and the blocks were not displaced. The final hole length was determined by the core measurement and not by the reported length of the drill rods.

The core logging was done rigorously in order to properly identify the different lithologies. The veins were consistently logged, recording the core angle, the true vein thickness, the core length of the vein measured between the midpoints of the upper and lower vein contacts, the vein mineralogy, the vein textures and the associated alteration.

No measurements of RQD were done. Brief descriptions of range of joints spacing, the dominant joint spacing and the most frequent core angles of joints were recorded over intervals of similar ground conditions. The lost core was determined from the detailed measurement of recovered core and accounted for in the logs. This was performed to assure all sample lengths were accurate. Sample intervals do not overlap the intervals described as lost core. Core recovery was very good, generally greater than 98%.

All sample lengths are measure to the nearest cm. The default sample length was exactly one row of core as placed in the core box by the drillers. This procedure was selected because it renders precise and verifiable sample intervals for future identification and logging. With the samples starting and ending at the box ends, the core can be precisely and accurately identified. Where the selection of core for sampling differed from the default, the selection was based on criteria such as lithology, mineral components and specific gravity.

The sample length was generally 0.5-1.50 m with a few samples extending beyond this range to 0.09 to 2.2 m.

The geological implication of sample selection required frequent deviation from the default 1.40 -1.50 m sample location between the row ends.

The core was sawn with one half placed in a durable plastic sample bag. The other half of the core was returned in order to the core box with the metre marks, sample interval meterage numbers and logging markings turned to the bottom. Three-part sample tickets, taken from sample books with unique sequential ticket numbers, were used to number and label sampling intervals and subsequently bagged samples. One portion of the sample ticket remained in the sample book and hole number and the distance were properly indicated. One portion was stapled at the beginning of each sampling interval in the core tray. The third portion was inserted by the core splitter/sampler into a 40 x 60 cm durable plastic sample bag with the split core sample. The sample number was also written on the sample bag which was properly stapled several times. For transportation, the individual bagged samples were put into a large white shipping bag supplied by the assayer. The sample numbers and the company name were printed on each bag in large block numbers and letters. Excluding the first and last shipping bag , the first sample number in each bag ended with the numeral “1” and the last sample number ended with the numeral ‘0”. This was done to assist in the sorting, storage, handling of the shipment. The bags were closed using the appropriate colour coded electrical tape.

After sawing and bagging all the core samples were stored in the locked core splitting container until pickup by Manitoulin Transport. The core was loaded by Gold Bullion's core splitter and the transport driver. The first shipment was transported directly to Accurassay, an independent laboratory located in Timmins. Accurassay’s methods are accredited to ISO 17025 by the Standards Council of Canada (SCC). Some of those samples were sent afterwards to SGS laboratory for control analyses at Lakefield and Missisauga Ontario.This laboratory is also a Certified Laboratory ISO/IEC 17025 and is independent from Takara & Gold Buillion.

11.2 Analysis and Security

The method for assaying was determined by the mineralization. Analysis for silver by fire assay, AA finish was the default procedure that was used for all silver analyses.

Although silver analysis by ICP is part of the ICP package, they were not used in this report. The laboratory advised that silver values by ICP are impacted by matrix effects and are not as reliable as default fire assays.

It was deemed that Au, Pt, Pd assays were not required for all samples selected for Silver analysis. Silver and Cobalt are the primary exploration target.

Gold analyses were required as a potential IOCG (Iron Oxide Copper Gold ore deposits) signature consisting of Iron oxide and Cu mineralization overprinting the property was recognized in logging. Samples were analyzed for gold where deformation zones of intense shearing were recognized in the core.

Requests for platinum and palladium analyses were based on the fact that Nipissing diabase intrusives in Northeastern Ontario are known to host a differentiated horizon enriched in gold, platinum and palladium.

Suites of ultramafic rocks within sulphide-bearing and graphitic host rocks including oxide Iron Formation are a major part of the Archean stratigraphy. This package has important significance to the evolution of nickel- platinum-palladium deposits.

Whole rock samples were selected and used in conjunction with SG measurements to identity and differentiate rock types and alteration signature of the various events including mineralizing events. The whole rock analysis targeted the least altered rock to identify the rock units and differentiate sub-units. Uniform sections within identifiable alteration were selected to determine the mineralizing and alteration processes and changes.

Specific gravity was measured in the core shack by taking wet and dry measurements using a commercial balance This procedure was used in the logging process to assist the identification of rock types, to certify that unit distinctions were real geological features, to verify the validity of apparent alteration and to characterize alteration.

The pulps and rejects are stored on Gold Bullion Development Corp.'s Granada property, south of Rouyn-Noranda, Quebec. These are stored separately from the company's other exploration pulps and rejects.

It is the author's opinion that the aspects of sample preparation and security are adequate.

Figure 32 : Accurassay Laboratories Procedures

Lab Code	Aliquot	Description
ALPG1	30	Au Pt Pd by Fire Assay (FA) with an AAS finish using a 30g assay.
ALPM5	~1000	Ag by Pulp Metallic analysis. This procedure uses approximately 1000 g of material that is crushed and pulverized, then sieved through a 200 mesh screen. Two Ag Fire Assays are performed on the minus material using a 30g assay with an AAS finish. All of the plus 200 mesh material is also analyzed using a Ag Fire Assay with an AAS finish. The final report is a weighted average calculation.
ALMA1	0.25	ICP analysis; including Ag, were systematically performed on the original pulp ICP Ag values are reported in the diamond drill logs or in reporting of silver values. ICP values for As, Cu, Co, Ni, Pb and Zn are reported in logs and reported in company records as ICP values. The ICP process is a Multi Element Scan (34 elements ranging from Ag to Zn) by Multi Acid digestion (HClO4, HF, HNO3, HCl) with an ICP-OES finish using ¼ g assay.
ALAgMA2	2.5	Ag by multi acid digestion (HClO4, HF, HNO3, HCl) with an AAS finish using a 2 ½ g assay. This procedure is automatically used when the initial ICP grade of Ag exceeds 100 g/t (ppm).
ALAgMA1	0.25	Ag by multi acid digestion (HClO4, HF, HNO3, HCl) with an AAS finish using a ¼ g assay.
ALUMA1	0.25	Uranium analysis by Multi Acid digestion (HClO4, HF, HNO3, HCl) with an ICP-OES finish using ¼ g assay.
ALWR1	0.25	Whole Rock analysis (Major Oxides) by Lithiummetaborate fusion with an ICP-OES finish using a ¼ g assay.

12- Data Verification

12.1 Property Visit 2012 & Visit 2015

Claude Duplessis went to visit the site of Castle Silver Mine on April 17th 2012. He took a look at the core shack, visited the sites and inspected the openings. At a meeting with Mr. Doug Robinson, the same day, Mr.Robinson explained the methods used to work, showed the principal lithologies and some good mineralized intersections.

Figure 33 : Property Visit 2012

During the site visit the core organization and typical lithologies were reviewed. It was also possible to have a quick look at the entrance of the adit where cobalt mineralization was evidenced by the pinkish alteration.

Another site visit took place on May 21st of 2015 where meeting first took place in Swastika at Doug's Robison office, where a day was used to revised the latest work done on the property, the day after a field visit at Castle was done to review additional rehabilitation work, stripping areas, MMI sampling stations were also examined as well as channel samples in the trenches.

12.2 Data information

The Table 10 presents the information on the samples from the drilling campaign used also for the SGS control data quality.

Table 10 : Data on samples used for the drilling campaign and the SGS quality control

Sample	Hole	From	To	Length (m)
44253	CA11-03	573.00	573.90	0.90
44254	CA11-03	573.90	575.00	1.10
44356	CA11-04	214.83	215.83	1.00
44450	CA11-04	393.07	393.86	0.79
44465	CA11-05	37.15	37.73	0.58
44873	CA11-07	841.21	842.29	1.08
44874	CA11-07	842.29	843.32	1.03
44876	CA11-07	843.32	843.97	0.65
45119	CA11-08	379.72	380.41	0.69
45182	CA11-08	563.54	564.34	0.80
45183	CA11-08	564.34	564.79	0.45
45184	CA11-08	564.79	565.68	0.89
45185	CA11-08	565.68	566.28	0.60
45186	CA11-08	566.28	566.63	0.35
45290	CA11-09	343.47	343.59	0.12
45298	CA11-09	350.17	351.44	1.27

The veins are intersected at angles and the sample length are believed to be 50 to 75% of the true width. Additional information is required to define the exact true width of these intersections.

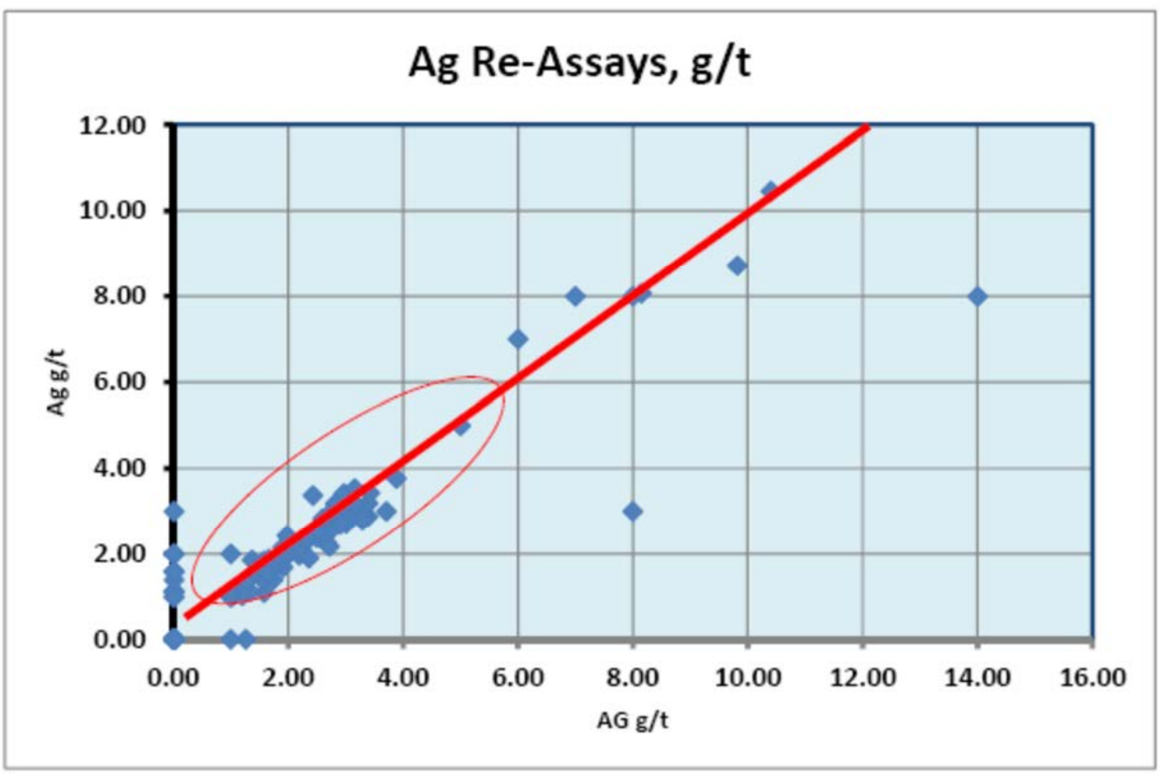
Figure 34 : Massive silver vein in the witness core

12.3 QAQC

12.3.1 Drilling campaign re-assay

For the test made for the drilling campaign, standard procedures provided for assay checks on every tenth sample. The Figure 35 shows the original assay versus the check assay results for the 164 silver analyses.

Figure 35 : Drilling campaign re-assays made every 10 samples



When the grade of silver is low (< 10 ppm), the drilling campaign and the SGS control campaign have roughly the same result. Those results are not included in the Table 12 and Table 13.

The standard deviation and the difference between the two assays for the same sample is very important when the grade is bigger, which suggest nugget effect of silver measurement. Except for the higher grade samples, most of the results have an acceptable margin of error.

Blanks and standards

For the holes CA11-01 and CA11-03, a standard sample was introduced at the beginning and at the end of each hole. For holes CA11-04 to CA11-11, each sample ending in 00, 25, 50 and 75 was an assay standard. The standards were scattered throughout the assay shipments in an array to assure silver, gold, cobalt and nickel represented at various concentrations.

Table 11 presents a list of the certified values for the standards used and statistical analysis based on those standards.

Each shipment to the assay laboratory included a blank sample consisting of white marble. A total of nine blanks were inserted as the first sample of each shipment. The results were mostly below detection level. There were 3 silver values between 1 and 2 ppm – and one gold value of 0.013 ppm.

Standards are summarized in the following table. It is difficult to judge the quality of the analysis due to the high number of standards used and low number of samples of each standard. However, we consider the results to be adequate for the purpose of this exploration work program.

Table 11 : Statistical Analysis of Standards Used

Oreas76a								
	ppm	95% Confidence Interval						
Material	Certified Value	Low	High	number	average	minimum	maximum	unacceptable
Au ppm	41	38	44	12	43.7	39.3	54	1
Pt ppm	701	683	719	10	701	676	724	1
Pd ppm	403	396	410	10	404	393	417	0
Oreas 68a								
	ppm	95% Confidence Interval						
Material	Certified Value	Low	High	number	average	minimum	maximum	unacceptable
Au ppm	3,89	3,82	3,95	8	3,54	2,35	3,97	5
Ag ppm	42,9	42,1	43,7	8	37,756	33,72	44,41	5
Oreas 132b								
	Recommended Values (ppm)							
Material	Fusion	4 Acid	Aqua Regia	number	average	minimum	maximum	unacceptable
Ag ppm	61	60,7	60,3	8	58,49	51,62	62,6	2
Oreas 132a								
	Recommended Values (ppm)							
Material	Fusion	4 Acid	Aqua Regia	number	average	minimum	maximum	unacceptable
Ag ppm	58	57	55,6	9	55,37	43,7	61	2
Oreas163								
		5% Window						
Material	Certified Value	Low	High	number	average	minimum	maximum	unacceptable
Ag ppm	5	5	5	9	3,99	2	6,18	8
Oreas 67a								
	ppm	95% Confidence Interval						
Material	Certified Value	Low	High	number	average	minimum	maximum	unacceptable
Au ppm	2,238	2,193	2,282	7	2,14	2,039	2,21	3
Ag ppm	33,6	32,6	34,6	7	31,26	25,9	36,49	3*

12.3.2 SGS Control quality

The test sign does not indicate a bias between the two analyses. The SGS control data are taken as reference. Two assays per sample were done by SGS for check assay.

Table 12 : Statistical Analysis of the drilling campaign and the SGS control campaign for Ag

Sample	Average	Min	Max	Standard Deviation
44253	11,33	10,90	12,20	0,597
44450	11,14	10,00	12,30	1,226
44873	8,97	5,00	12,60	3,033
44874	14,40	12,00	18,00	2,728
44876	8,94	5,00	11,10	2,748
45119	12,50	12,00	13,20	0,600
45182	299,32	210,00	386,26	100,266
45183	6228,19	947,75	11528,00	6097,200
45184	192,60	134,00	269,30	60,713
45185	224,54	138,00	311,16	99,928
45186	177,05	132,00	220,21	49,740
45290	20,01	18,00	23,00	2,125

Table 13 : Statistical Analysis between the drilling campaign and the SGS Control for Ag

Sample	Drilling campaign			SGS Control campaign			Difference average
	Average	min	max	Average	min	max	
44253	11,60	11,00	12,20	11,05	10,90	11,20	5,0%
44450	10,09	10,00	10,17	12,20	12,10	12,30	-17,3%
44873	7,39	5,00	9,82	12,15	11,70	12,60	-39,2%
44874	15,00	12,00	18,00	13,80	12,60	15,00	8,7%
44876	7,07	5,00	9,14	10,80	10,50	11,10	-34,5%
45119	12,00	12,00	12,00	13,00	12,80	13,20	-7,7%
45182	386,13	386,00	386,26	212,50	210,00	215,00	81,7%
45183	947,88	947,75	948,00	11508,50	11489,00	11528,00	-91,8%
45184	218,64	168,00	269,30	140,50	134,00	147,00	55,6%
45185	311,08	311,00	311,16	138,00	138,00	138,00	125,4%
45186	220,11	220,00	220,21	134,00	132,00	136,00	64,3%
45290	18,66	6,00	10,46	21,35	19,70	23,00	-12,6%

For the cobalt, on the sixteen sample of SGS Control campaign, nine of them are under the limit of detection (< 100 ppm). When these samples are not considered, the results have an acceptable margin of error, even for the high grade of cobalt.

Table 14 : Statistical Analysis between the drilling campaign and the SGS Control for Co

Sample	Drilling campaign		SGS Control		Difference average
	Average	# sample	Average	# sample	
44253	521,00	1	650,00	2	-19,8%
44450	130,00	1	100,00	2	30,0%
45119	90,00	1	100,00	1	-10,0%
45182	160,00	1	200,00	2	-20,0%
45183	9107,00	1	10400,00	2	-12,4%
45290	14455,00	1	14100,00	2	2,5%
45298	102,50	2	100,00	2	2,5%

Note about adequacy of the data used in the technical report: In my quality of Qualified Person, I declare the data to be useful and reliable in the preparation of this technical report. It is possible to find the information, come back to it, repeat the results, retrieve and see the sample location in the field. The data in this technical report is adequate and not misleading for the disclosure of this technical report.

12.3.3 Photonic Knowledge

Photonic Knowledge used hyperspectral analysis of the cores. These samples are representative of the lithology, mineralization or alterations. At the laboratories, samples, cuttings and/or sized fraction powders, are analysed through SEM (scanning electron microscopy) and EDX (energy-dispersive X-ray spectroscopy).

Table 15 : Sample selected by Photonic Knowledge for spectral-library development and mineralogical characterisationSamples selected by Photonic Knowledge for spectral-library development and mineralogical characterisation shows the good intercept's sample chosen for further analyses with Photonic Knowledge and Figure 36 a photo of the rock sample.

Table 15 : Sample selected by Photonic Knowledge for spectral-library development and mineralogical characterisation

PK Lab #	Hole	From (m)	To (m)	Description
426	CA11-08	564.5		High grade Ag, green chlorite and calcite silver vein
427	CA11-08	565.68	566.28	Mid grade Ag, green chlorite
428	CA11-08	564.79	565.68	"Low grade"Ag, green chlorite
429	CA11-08	566.63		"Sterile"
430	CA11-08	568.85		Calcite breccia and green chlorite
431	CA11-08			Steril rock with talc vein
432	CA11-07	211.17		Calcite breccia with red minerals
437	CA11-08			Black and green chlorite with disseminated chalcopyrite

Figure 36 : Selected Sample for the Size-fractions Preparation and SEM/EDX Mineralogy

Mineralogical results from SEM and EDX observations are summarised in Table 16, with the fraction size, andTable 17Figure 30 with rock chips samples.

Table 16 : Mineralogy observed by SEM and EDX in the different size-fractions of samples

Sample #	Fraction Size	Mineralogy Observations
426	<2	Calcite
426	>100	Silver
426	>100	Calcite
426	>100	Covellite Sb
426	>100	Global -O -Ca
426	>100	Global fraction chemistry
426	>100	Skutterudite
426	<2	Silver
426	<2	Bornite
426	<2	Covellite
426	<2	Global fraction chemistry
426	<2	Skutterudite
426	20	
426	20-40	Ag As
426	20-40	Ag on skutterudite
426	20-40	Ag
426	20-40	Ag
426	20-40	Ag
426	20-40	Calcite
426	20-40	Skutterudite
426	20-40	Skutterudite
428	<2	Arsenopyrite CoNi
428	<2	Global fraction chemistry
428	<2	Uranium Phase
428	20-40	Biotite
428	20-40	Chalcopyrite
428	20-40	Chlorite
428	20-40	Diopside
428	20-40	Global fraction chemistry
428	20-40	Ilmenite
428	20-40	Magnetite
428	20-40	Pyrite
428	40-100	Global fraction chemistry
428	40-100	Hornblende
428	40-100	Ilmenite
428	40-100	Ilmenite
428	40-100	Titaniferous Magnetite
428	40-100	Orthose

Sample #	Fraction Size	Mineralogy Observations
429	40-100	Diopside
429	40-100	Feldspath K
429	40-100	Global fraction chemistry
429	40-100	Ilmenite
429	40-100	Magnetite
432	40-100	Pyrite
437	10-100	Galene

Table 17 : Mineralogy observed by SEM and EDX in rock chips of samples by Photonik Knowledge

Sample #	Mineralogy Observation
427	EDX Chemical Mapping
427a	Chalcopyrite Ag
427a	Chlorite
427a	Diopside
427a	Pyrite
427a	Sphalerite Ag
427b	Ilmenite
427b	Magnetite
427c	Chlorite
427c	Pyrite
427c	Skutterudite
428a	Chalcopyrite
428a	Chlorite
428a	Muscovite
429a	Skutterudite on Pyrite
429b	Chalcopyrite

The main objective of the performed work was to calibrate and use the Core Mapper™ to accurately map the presence of silver in the Castle Silver Mine project. The Core Mapper™ successfully identified and mapped two useful mineral spectra related to the mineralization of the Castle Silver Mine geological setting.

In boreholes CA-11- 01, 04, 07, and 08 correlations occur where silver assay results allow the establishment of an objective reference frame to evaluate Core Mapper™ performances for the Castle Silver Mine project. Core Mapper™ data fill sampling gaps resulting from discretional sampling. Core Mapper™ data suggest that silver anomalies reside in unsampled intervals from boreholes CA-11- 01, 04, 07, and 08 as well as in boreholes 02, 03, 05, 06, 09, 10 and 12. We recommend sampling the anomalous interval for silver in order to establish the predictability of the current libraries. In the situation where the current libraries demonstrate positive prediction capabilities, we can consider the current library ready for industrial deployment. Otherwise, fine tuning may be required before industrial or phase II deployment.
Photonic recommend using the high values of the results from the Archean Sediments mineral spectrum to highlight the zones susceptible of bearing silver mineralization. Alternatively, the Feldspar Porphyry mineral spectrum also seems to be well correlated with most types of silver mineralization, but not all types.

13- Mineral Processing and Metallurgical Testing

No tests were carried on the material obtained in the recent drilling campaign.

Historical information from the Ontario Ministry of Mines archives states:

Some metallurgical testing has been done on adjacent properties of Castle Silver Mines by Witteck Development in 1987 for Sandy K Tailings. The following text summarizes the study.

Screen analyses shows that Silver was concentred in the coarser fractions. By taking out the small particles (less than 325 mesh), 12.3% of the silver was rejected.

Silver extraction is dependent of the fineness of the grind. Indeed, using cyanidation without grinding extracted 69.4% of the silver, but grinding to 80%-145 microns upgraded the result to 78.8%. This grind size would be the minimum required. Grinding to 80%-90 microns increased the extraction of silver to 87.0%.

The reagent consumptions profiled were: $Ca(OH)_2$ at 2.1lb/ton and NaCN at 0.5 lb/ton. Silver extraction was not significantly decreased when the pH was increased, but more work needed to be done to optimize the reaction.

14- Mineral Resource Estimates

This section doesn't apply to the current report. There are no mineral resources.

15- Mineral Reserve Estimates

This section doesn’t apply to the current report.

16- Mining Methods

This section doesn't apply to the current report.

17- Recovery Methods

This section doesn’t apply to the current report.

18- Project Infrastructure

This section doesn't apply to the current report.

19- Market Studies and Contracts

This section doesn't apply to the current report.

20- Environmental Studies, Permitting and Social or Community Impact

This section doesn't apply to the current report.

21- Capital and Operating Costs

This section doesn't apply to the current report.

22- Economic Analysis

This section doesn't apply to the current report.

23- Adjacent Properties

This chapter describes properties adjacent to the group of claims owned by Castle Silver Mines Inc. (McIlwaine 1978) and history of various property around the Castle Mine.

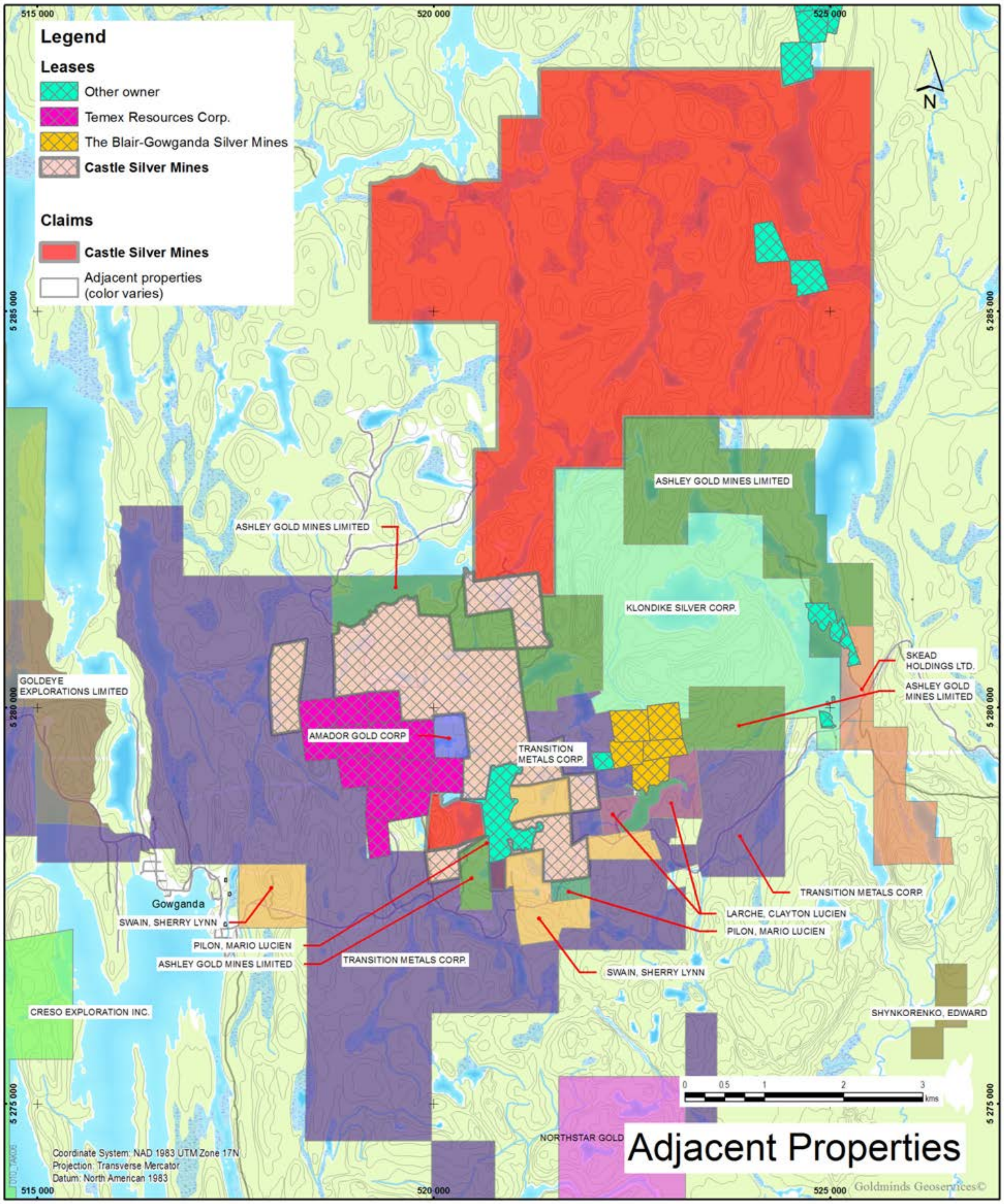
The information that follows on the adjacent properties has not been verified by the Qualified Person and this information is not necessarily indicative of the mineralization on the property that is the subject of the technical report.

This report presents the information on Castle Mine and may not reflect the most up to date information of adjacent properties from other owners and can be used as indicative but not as formal NI 43-101 statement on the other properties.

23.1 Current situation

Figure 37 shows the present owners of the adjacent properties.

Figure 37 : Present owners of the adjacent properties



23.2 Bonsall Mine

This property was operated by Siscoe Metals of Ontario Limited, a wholly owned subsidiary of United Siscoe Mines Limited. In 1969, the property in Haultain Township was composed of seven surveyed claims numbered RSC82 to RSC87 and RSC95. These surveyed claims included the old Bonsall and Millerett mines. To the north, west and southwest was a block of 33 un-surveyed claims, 18 of which were in Nicol Township. These claims are referred to as the Roy-Ten group.

The Bonsall property was among the earliest operated at Gowganda. It included eight claims: R.S.C. 82 to 89 inclusive, situated northwest of Miller Lake. The first work was done on claims 82 and 83, on veins carrying native silver discovered by Percy Bonsall in 1908. Most of the silver and smaltite showed in a narrow vein, averaging about 0.02 m (one inch), with an azimuth of 340°, which was traced for 30 m (100 feet) by trenching. The surface of the vein was much oxidized, showing crystallized silver in black, with cobalt and nickel decomposition products. A shaft was sunk on the vein to a depth of 8 m (25 feet) and a drift run northward. A main shaft was later sunk on a cross-vein striking nearly east and varied from 0.025 to 0.10 m (1 to four 4 inches) in width. This vein intersected the previously described vein 9 m (30 feet) east of the shaft. A drift at the 8 m (25 feet) level was made along the vein for 18 m (60 feet) and on the narrower vein for 12 m (40 feet). The main shaft was continued to a depth of 38 m (125 feet) with a northsouth drift of 18 m (60 feet) in a faulted zone on the 23 m (75 feet) level and 57 m (186 feet) of drifting and crosscutting on the 36 m (120 feet) level.

The property was re-opened several years later by the Miller Lake O'Brien interests, who did considerable work at the lower level. A strong north-south fault, dipping 45°E and showing about 4 m (12 feet) in width of fractured diabase, was encountered 14 m (45 feet) east of the shaft. This fault was also crossed at 18 m (60 feet) in the shaft and would reach the surface in the bed of Miller creek. To the east of the fault, the east and west vein was drifted on for 40 m (130 feet). The vein carried calcite with some quartz containing copper pyrites, galena and a little native silver. A second vein, 53 m (175 feet) southeast of this vein, was drifted on for 8 m (26 feet). It showed low assay values in silver.

From March to July, 1920, the workings at the various shafts were dewatered and the veins sampled at several levels. At the No.1 main shaft, the work at the 37 m (120 feet) level consisted in extending the drift on the main vein for 22 m (71 feet) and on the south vein for 33 m (108 feet), with 7 m (23 feet) of crosscutting. At the 23 m (75-feet) level a crosscut was made eastward 10 m (33 feet) to the vein and 25 m (83 feet) of drifting was done in a northeast direction. A raise was made at the intersection of the vein to the 8 m (25 feet) level. This level was also connected with the open-cut.

From these operations a quantity of silver ore was hand-sorted, bagged and shipped to Cobalt. In addition to the operations at the main shaft, some work was done on the east side of the property, on claim R.S.C. 84. Two shafts were sunk by the early operators on silver-bearing calcite veins. The east shaft, 18 m (60 feet) deep with some lateral workings, was too wet for operating and a second shaft was sunk to the 30 m (100 feet) level on a narrow calcite vein, 0.02 or 0.04 m (an inch or two) in width, which showed a few segregations of silver and smaltite. The drift at the 30 m (100 feet) level, 22 m (74 feet) in length, showed the vein to carry a little silver and smaltite, similar to that on the surface. Several veins occurred at surface, but little work was done. The property was equipped with a plant at the western workings, consisting of two 50 hp boilers, a straightline compressor and a hoist. A plant at the eastern workings was destroyed by a forest fire. The property was purchased by the owners of the Miller Lake O'Brien mine. Very little additional work, beyond trenching on the northeast claim, was done. A north-south vein in the Keewatin on the Castle property was traced southward on to the Bonsall claim (Burrows 1926).

In 1965 the owners initiated a program of exploration in the Bonsall Mine area. A new shaft was sunk near the boundary of RSC82 and RSC83. The shaft was down 42 m (139 feet) by the end of the year. An ultimate depth of 156 m (511 feet) was reached with levels established at 70, 106, and 152 m (230, 350, and 500 feet) (Siscoe Metals of Ontario, Annual Report 1966). During this same year, four separate ore shoots of "medium-to high-grade" ore were worked on. The only recorded production came in 1967 and 1968 as shown in Table 19 no new ore was found in 1967 from underground exploration, but surface diamond drilling encountered ore some 450 m (1,500 feet) north of the shaft. All of the ore mined from this area was at the lower contact of the Nipissing Diabase from along an axis which plunges gently to the southeast (Siscoe Metals of Ontario, Annual Report 1969). New ore was not encountered along this axis and underground operations were suspended in 1969.

In 1987, Sandy K Mines Limited refurbished an existing adit and in February 1988, completed 152.4 m of drifting, 33.5 m of raising and 6,096 m of underground diamond drilling to investigate known areas of silver mineralization. Although results were encouraging, operations were subsequently suspended. In November 1988, the company started a 1,219 m underground drilling program to test vein structures, and completed 61 m of additional drifting (MNDM 1989).

In 1989, NLX Resources Inc. contracted Derry, Mitchener, Booth, and Wahl Limited to carry out 762 m of diamond drilling at the Sandy K Mines Limited Bonsall Mine property in Haultain Township. The surface drilling program was intended to intersect extensions of the Millerett No. I and No. 7 silver and cobalt-arsenide-bearing calcite veins, which were otherwise inaccessible from the underground workings (MNDM 1990).

Table 18 shows the production numbers of the Bonsall Mine held in 1969 by United Siscoe Mines Ltd (Sergiades 1968).

Table 18 : Bonsall Mine Production

Year	Ore and Concentrate	Silver
	Tons Shipped	Ounces
1910	4	7,840
1920	13	2,566
1967	4,193	131,450
1968	5,904	114,527
Total	**10,114**	**256,383**

23.3 Millerett Mine

Claim RSC95 was originally referred to, in 1908, as the Blackburn claim. A little later it was known as the Millerett since in 1909 the property was taken over by the Millerett Silver Mining Company (Sergiades 1968). In 1913, the ground was held by the Miller Lake O'Brien Company and finally by Siscoe Metals of Ontario Limited in 1945. Production from the mine was all in the early years (Table 20). The claim was underlain by Early Precambrian mafic volcanic rocks, conglomerate and feldspathic greywacke of the Gowganda Formation. Intruding these older rocks was the Nipissing Diabase with the upper contact of the Miller Lake basin crossing the claim. According to Sergiades (1968) there were two known principal veins. The main vein was striking northwest and was in the conglomerate, and No. 7 was stricking east in the diabase. The veins were calcite and were about 5 cm (2 inches) wide with "five leaflets" of silver which impregnated the host rock for a distance of up to 60 cm (2 feet) from the veins. After silver was discovered in 1908, development started the following year. An adit was driven 77 m (253 feet) for development of the main vein. From this adit, a crosscut was driven west for 46 m (150 feet). No.1 shaft was put down 25 m (83 feet) with a level at 21 m (70 feet) which was driven 88 m (290 feet) to the southwest and 46 m (150 feet) to the northeast. In 1914 and 1915, No. 10 shaft was sunk for 39 m (127 feet) in the southcentral part of the claim with levels established at 18 m (60 feet) and 39 m (127 feet).

Thereafter, Siscoe carried out diamond drilling and put a raise up from the 137 m (450 feet) level of their main workings to the 91 m (300 feet) sublevel of the main Millerett workings. From there, 24.4 m (80 feet) of raising and crosscutting was done to some high-grade ore.

Table 19 shows the production figures of the Millerett Mine held in 1969 by United Siscoe Mines Ltd (Sergiades 1968).

Table 19 : Millerett Mine Production

Year	Ore and Concentrate	Cobalt	Silver
	Tons Shipped	Pounds	Ounces
1910	347	5,000	322,000
1911	53	-	130,687
1912	192	-	159,135
Total	**592**	**5,000**	**611,822**

23.4 Capitol Mine

The Capitol is on claim HS351. Work was done on claim H.S. 351, formerly called the Symmes-Young. A strong, mineralized north-south vein, carrying iron-cobalt-nickel arsenides, was discovered in 1908 and exposed by trenching for 213 m (700 feet) on this and the adjoining claim to the north. In places there were several parallel veins, from 0.025 to 0.08 m (1 to 3 inches) in width, exposed in trenches. A shaft was sunk 13 m (44 feet) on the vein at a point where the width was 0.3 m (12 inches). At a depth of 9 m (30 feet), there were several veins exposed in a width of 0.38 m (15 inches). To explore the property, the Capitol management proposed to sink a shaft into the underlying diabase sill. The shaft, located 18 m (60 feet) west of the vein, passed through 33 m (110 feet) of sediments of the Cobalt series which overlaid Keewatin greenstone. At a depth of 250 m (819 feet), where sinking was discontinued, the formation was Keewatin greenstone. At the 244 m (800 feet) level, crosscuts 83 m (273 feet) east and 55 m (182 feet) west were made. Further work, by diamond-drilling from this horizon, located the contact with the sill diabase at 316 m (1,039 feet) from the surface (Burrows 1926).

In an amalgamation of Capitol Silver Mines Limited and Trethewey Silver Cobalt Mines Limited, the new company of Castle-Trethewey Mines Limited was formed in 1929. Operations closed in 1931 but attempts to operate the mine were renewed in 1948 when work was commenced in the Capitol workings. The property was taken over in 1959 by McIntyre Porcupine Mines Limited. The mine was closed because of a lack of ore in 1966. In 1967 United Siscoe Mines Limited took a long-term lease on all of McIntyre's Gowganda area property with the idea of re-examining the old workings for additional ore. This was met with success as the Siscoe Annual Report indicated that 55 percent of the 1969 production came from the Capitol workings which were connected through underground development to the Siscoe No.6 shaft area.

From the shaft, a drift 457 m (1,500 feet) long was driven with an azimuth of 250o to the diabase, on the 244 m (800 feet) level. A winze was sunk from the 244 m (800 feet) level to the 343 m (1,125 feet) level and from this level an inclined haulage way was sunk to the 434 m (1,425 feet) level, the deepest in Gowganda. The dip of the sill, which averaged 16oE for the workings, was becoming nearly flat, indicating that the bottom of the Miller Lake basin was being approached. Many faults were encountered, some several hundred feet in length. They dipped 35-45^{o}E and were much steeper than the upper contact of the sill. The veins were mainly in the hanging wall sides of these faults. Vein No. 133 on the 365 m (1,200 feet) level had a very productive shoot about 76 m (250 feet) long and of similar height, which produced over 800,000 ounces of silver. High-grade ore was found during the summer of 1954 in a continuation of the rich vein described as occurring on the 365 m (1,200 feet) level of the Siscoe mine (Moore 1955).

Table 20 shows the production figures of the Capitol Mine held in 1969 by McIntyre Porcupine Mines Ltd and leased to United Siscoe Mines Ltd (Sergiades 1968).

Table 20 : Capitol Mine Production

Year	Ore and Conc	Cobalt	Silver	Nickel
	Tons Shipped	Pounds	Ounces	Pounds
1951	180	14,894	480,214	-
1952	258	12,181	731,172	-
1953	455	25,638	1,011,730	-
1954	794	29,637	992,017	-
1955	638	24,450	775,663	-
1956	513	31,362	885,845	4,657
1957	491	20,569	657,403	4,638
1958	547	22,055	684,005	3,667
1959	563	27,303	1,026,218	5,312
1960	643	-	1,419,258	-
1961	500	-	1,008,669	-
1962	640	-	879,052	-
1964	1,701	-	217,410	-
1966	-	-	-	-
Total	**7,923**	**209,474**	**10,837,181**	**18,826**

23.5 Miller Lake O'Brien Mine

In 1969, the property of United Siscoe Mines Limited was operated by Siscoe Metals of Ontario Limited which in 1972 was a wholly owned subsidiary of United Siscoe. The company's property was composed of three blocks of claims. The first group was a block of seven surveyed claims numbered RSC88 to RSC94, on which the famous Miller Lake O'Brien mine was located. The second was the O'Connell Group of un-surveyed claims. Finally, the Roy-Ten Group was part of a block which overlapped into Haultain Township.

The most important claims in this group were RSC90 and RSC91 which in 1908 were known as the Gates claims. In 1909, the property was held by the Miller Lake Mining Company and finally in 1910 was taken over by the M.J. O'Brien interests. Later in that year, Clifford Sifton bought a one-third interest in the mine for $312,000 which was what O'Brien paid for it (Young and Young 1967). A few months prior to the first ore shipment in 1910, Sifton relinquished his interest in the mine for $310,000 and in so doing lost a great deal of money (Young and Young 1967).

The Miller Lake O'Brien mine included a group of claims to the northwest of Miller Lake. They were formerly the Gates claims, on which discoveries of native silver and smaltite were made in

1908. Later the Millerett mine was purchased by the Miller Lake O'Brien Company. The first development was done on veins with a general north and south strike, lying near the line between claims R.S.C. 90 and R.S.C. 91. Of these, the most important were known as No. 2 vein system, which produced most of the ore in the early years of the mine. Development showed the veins of this system to dip steeply to the west, with the pitch of the ore shoots to the south. Of this system, the foot wall veins have been the most productive. The ore shoot in the hanging-wall veins did not extend to the 43 m (140 feet) level, whereas the foot-wall ore body continued nearly to the 107 m (350 feet) level. Each of these series carried two or more veins, which were sufficiently close together, where the ore shoots occurred, to allow mining in one stope. The veins were generally from 0.05 to 0.13 m (2 to 5 inches) wide and in the ore shoot individual veins were not always productive, but where one was barren, a parallel vein would carry the high grade ore. Very little ore was taken from this system above the 18 m (60 feet) level. The greater proportion of the silver values was confined to the veins themselves, there being only a small impregnation of the wall rock. Strong east and west faults dipping 30o north were encountered in the workings on No. 2 system. In developing this vein system a series of cross-veins was encountered south of the shaft, on the 76 m (250 feet) level, having an east and west strike. This series of veins was known as the cross-system and dips to the south at a high angle. An ore-shoot was found on the 76 m (250 feet) level and was stoped a short distance above the 43 m (140 feet) level. It was followed down below the 122 m (400 feet) level with decreasing length along the drifts.

The latest discovered ore system was known as the "Flynn". The first ore was encountered on the 107 m (350 feet) level. A long east and west drift had crossed a very pronounced north and south fault, dipping 50º east, and a northerly cross-cut had intersected No. 6 vein, which was followed to a second fault, striking east and west and dipping 30 to 40o north. Ore was found in No.6 vein above this fault. From this discovery the development was extended to a number of veins, the principal of which are No. 6, No. 7N, No. 7 NW, etc. On stoping No. 6 above the 107 m (350 feet) level it was found to join No. 7 NW, producing the greatest width of high-grade found in the mine, where one portion of the vein was three feet wide of high-grade silver, smaltite and calcite. Later, in drifting on No. 7 vein on the 107 m (350 feet) level, portions of it were of highgrade ore two feet wide. In this rich section of the "Flynn" system the stope was about 4 m (14 feet) in width, in places of high-grade veins and mill rock. Development in this part of the mine threw light on the ore relationships. The workings showed that the high-grade values did not extend into the Keewatin, while the veins themselves became more indefinite, branching into stringers carrying galena, copper pyrites and other common minerals. The contact as determined at a few points in different parts of the mine dipped from 30 to 80o (with the sill diabase below the Keewatin greenstone), gradually flattening.

One vein, No. 7 NW, was observed to have been faulted about 0.9 m (3 feet). In this vein the east and west fault was not the lower boundary of the ore since ore was being stoped from it on the 122 m (400 feet) level below the fault. The ore occurred in the diabase below the Keewatin greenstone, while the main ore-shoots pitched to the north, being controlled by the Keewatin-diabase contact and the east and west fault, the ore not necessarily coming close to the contact. In developing vein No. 7 N. which carried the principal ore body, an inclined winze (870W) was carried from the 107 m (350 feet) level to the 160 m (525 feet) level, and the ore from this and other veins was developed from the several levels. Development at this mine on R.S.C. 90 and 91 showed all the ore to be in the diabase. The early workings at No. 2 vein system were in the diabase, but outcropped at the surface, where only a small portion of the sill had been eroded. Later work being in the diabase below the Keewatin, it was determined that silver ore occurred at greater depth from surface, depending roughly on the Keewatin-diabase contact. The silver occurred in the upper portion of the diabase sill in proximity to the contact. The ore was partially dependent on faulting conditions (Burrows 1920).

During 1920, operations were continued on the series of veins in the Flynn system. The new No. 16 vein was discovered about 8 m (25 feet) west of the north part of the main No.7 N vein. The No.16 vein, carrying native silver, was drifted on for 43 m (140 feet) on the 140 m (460 feet) level. This vein lay above the strong north-south fault, which dipped 50o E and neither the ore shoot in this vein, nor in the No.7 NW, was located below the fault. Further work was done on vein No.7 NE, in which ore was found on the 160 m (525 feet) level below the prominent east-west fault, called the ore fault, which in several veins terminated the downward extensions of ore shoots.

Further exploratory work was done in 1924 on a series of veins lying to the south of the Flynn system, resulting in the finding of further ore shoots on which more recent development work was done. The veins occurred in a connecting system of fractures which, in part, followed the curved columnar jointing of the diabase. The most important ore shoot on the 160 m (525 feet) level was No. 73, where for a length of 64 m (210 feet) the ore was high grade. It consisted of from one to three veins up to 0.15 m (6 inches) in width. In one part of the stope, three veins occurred, showing considerable leaf silver in the wall rock, in a width of 5 m (18 feet). The high-grade veins consisted of calcite and a little quartz, with native silver and iron-cobalt-nickel arsenides.

Exploratory work along veins continued at the 160 m (525 feet) level from the diabase into the Keewatin, but no ore shoots were indicated in the greenstone. Development was continued by means of a winze on vein No. 71 to the 178 m (585 feet) level and ore of similar character to that on the 160 m (525 feet) level was drifted on for 91 m (300 feet) on the downward extension of No. 73. The winze was continued to the 198 m (650 feet) level with rich ore showing for 63 m (206 feet) on vein No. 71, while vein No. 72 had not yet been cut on this level. In the latest work on the 198 m (650 feet) level, a cross-vein, No. 79, containing high-grade ore, and a third high-grade vein, No. 80, branching from it, were encountered; the latter parallels No. 71. In addition to veins carrying silver, several containing cobalt-bearing minerals were encountered on different levels. Such minerals as copper pyrites, iron pyrites, galena, sphalerite, native bismuth, niccolite and argentite occurred in the veins (Burrows 1926).

The property was kept in production until 1939. Leasing operations were carried on from 1940 to 1944 (Sergiades 1968). In 1945 the property was taken over by Siscoe Metals of Ontario Limited and continuous production was maintained. Since taking over the property, Siscoe Metals of Ontario Limited kept up a continuing and intensive program of exploration and to a very large degree this met with success as they kept production up close to 1,000,000 ounces every year since 1954.

Table 21 shows the production figures of the Miller Lake O'Brien Mine (Sergiades 1968 and ODM Statistics).

Table 21 : Miller Lake O'Brien Mine Production

Year	Ore and Conc	Cobalt	Silver	Nickel	Copper
	Tons Shipped	Pounds	Ounces	Pounds	Pounds
1910	31	-	91,730		
1911	135	-	338,000		
1912	112	-	354,252		
1913	167	-	469,923		
1914	114	-	369,544		
1915	110	-	242,229		
1916	171	-	360,670		
1917	350	-	1,050,149		
1918	160	26,994	631,671		
1919	184	27,404	708,872		
1920	115	14,982	376,417		
1921	103	9,187	224,340		
1922	76	6,948	130,553		
1923	24	2,199	12,844		
1924	26	2,154	50,021		
1925	150	7,226	347,909		
1926	33	3,007	70,764		
1927	260	15,768	588,216		
1928	285	26,303	876,461		
1929	359	35,880	1,197,634		
1930	358	52,005	1,188,390		
1931	350	38,411	1,289,742		
1932	530	72,081	1,374,660		

Year	Ore and Conc	Cobalt	Silver	Nickel	Copper
	Tons Shipped	Pounds	Ounces	Pounds	Pounds
1933	366	40,729	1,244,812		
1934	270	32,273	1,039,565		
1935	214	20,818	800,669		
1936	234	24,241	637,411		
1937	201	20,818	521,633		
1938	196	15,457	501,821		
1939	200	19,185	498,043		
1942	69	7,194	191,526		
1943	60	5,205	172,693		
1944	71	9,000	250,676		
1945	11	1,185	44,585		
1947	-	-	94,301		
1948	507	-	183,163		
1949	723	6,000	626,254		
1950	1,182	18,470	836,047		
1951	1,247	23,115	879,506		
1952	1,454	20,369	1,047,037		
1953	871	13,400	640,100		
1954	1,542	17,500	1,097,563		
1955	1,073	24,917	1,039,162		
1956	787	17,036	722,236		
1957	963	17,040	903,177	2,997	19,610
1958-69	10,230	90,729	14,412,865	10,251	53,276
Total	**22,471**	**785,700**	**40,736,585**	**13,248**	**72,886**

23.6 Transition Metals – Haultain - Gold

The Transition Metals Haultain property to the West has recently shown interesting gold mineralization paving the way to possible gold occurrence on the Castle Silver Property.

Extract from Transition Metals' web site:

New gold discovery made in 2010, <1km from paved highway, in the heart of the historic Gowganda silver camp (~125 km south of Timmins, Ontario)

- *100% owned by Transition Metals*
- *Geological setting of the property has similarities to that of Kirkland Lake, 75 km to the northeast, which has produced ~40 Moz of gold*
- *Widespread gold mineralized system over a strike length of 1.25 km, with visible gold at surface. Full extent of this system, and its economic potential, have not fully been established*
- *Highlights include: 97 g/t gold over 40 cm (channel sample); 2.4 g/t over 7.1 m and 82.5 g/t over 0.4 m (drill program, within 35 m of surface)*

Additional information can be found in their technical report of June 2014.

24- Other Relevant Data and Information

Castle Silver Mines completed significant rehabilitation and protection of the site. As shown in Figure 38 and 39, fences have been installed around all the portal of the old mine adit entrance. Also, a container was inserted into the portal as support and to block the access to the mine workings. Some of the openings discovered while working have now been fenced with Frost fencing. Most of the old waste piles have been levelled. These actions, along with a Community Information session have helped Castle Silver Mines to have good relationship with the community.

Figure 38 : Rehabilitation and protection of the adit entrance

Figure 39 : Rehabilitation and increased safety of the site observed by the QP

25- Interpretation and Conclusions

Exploration and production in the Gowganda mining camp covers more than a century. Mineralization is directly related to the Nipissing sill and the work carried out to date shows that the veins are narrow and discontinuous.

Operations in the 1980's produced 3,041,353 oz Ag and closed in 1988 only due to very low silver prices. Therefore, Castle Mine Shafts Nos. 2 and 3 still offer a strong potential of discovery.

A Titan-24 survey, carried out in March 2011, has successfully identified at least 8 geophysical anomalies in the DC/IP and MT inversion models with potential of silver mineralization for future exploration drilling of the property. The anomalous zones were identified from near surface to more than a 500 m depth.

After 6842.38 m of drilling, in the first half of 2011, a number of conclusions have been identified.

Numerous strong calcite veins and vein systems were drilled and many of these were independent of the historic mine workings. Many of these have minor to significant sulphides, commonly chalcopyrite, galena and/or sphalerite. Base metal minerals were generally more prevalent than secondary pyrite. In non-economic grade intersections, wall rock Ag, Cu, Pb, Zn, Co, Au mineralization is as significant as equivalent vein values. Both indicate the veins were part of the overall mineralizing system.

The written description records the true width of the veins measured perpendicular to the vein walls. The reported true width of the vein, not the core length is a key factor in evaluation of the vein strength. Intersections are commonly vein systems. The cumulative true width of all the veins, a vein, or vein system is the key indicator of vein dilation. Ten x 2 cm veins have the same dilation as a single 20 cm vein. The vein strength is a combination of the cumulative vein dilation, silver and indicator elements including Co, Ni, As, Cu, Pb Zn grade and alteration features. The degree of alteration is part of the target prioritization process but can be misleading as ore veins can have weak to non-apparent alteration.

The best intersection encountered is hole CA1108 at 563.54-566.63 m. Total pulp metallic assays were performed on a half split-core sample of the entire length of the mineralized section. The pulp metallic assays rendered an uncut weighted average grade of 6,476 Ag g/t, 0.14% Co, 0.03% Ni over 3.09 m. This interval includes 40,944 Ag g/t, 0.91% Co, 0.12% Ni over 0.45 m located at 564.34-564.79m.The bulk of the silver is in a 7 cm (true width) calcite-Co-Ag vein at 28_o to the core axis from 564.64-564.77 m. Leaf silver was common in the wall rock in the reported interval.

Six holes crossed the complete stratigraphic section of the shallow dipping Nipissing diabase. The apparent thickness varied from 230 m in paired holes CA11-03 and CA1104 to 365 m in CA1107. The Nipissing diabase is considered the dominant feature controlling the emplacement of silver deposits. The Nipissing diabase commonly has stratigraphy well defined by a progressive increase in iron-rich clinopyroxene at the expense of magnesium-rich orthopyroxene. The bottom and top parts of the diabase are a two-pyroxene intrusive hosting both orthopyroxene and clinopyroxene. The central one-pyroxene diabase is dominated by clinopyroxene and plagioclase. The intrusive was more mafic than expected with the two-pyroxene diabase dominating at the expense of varied textured diabase, coarse-grained diabase and granophyric diabase. This mafic signature indicates the diabase may have crystallized at a hotter temperature with a longer cooling history than some other diabase intrusives in the nearby silver mining camps. This could result in genetic implication relating to the various silver mining camps.

The drilling identified a widespread, visually-apparent sulphide mineralizing event consisting of sphalerite and galena (plus/minus chalcopyrite) overprinting all rock types including Huronian sediments and Matachewan diabase dike. The overprint is apparent in the calcite vein in the diabase. ICP analysis indicates this overprint, although not visually apparent, is present in the Nipissing diabase host well beyond the some of the veins.

A weak Cu-Au hematite overprint is locally developed. In hole CA1107 from 134.20- 227.54 m the gold-copper-hematite overprint grades 1.95 Ag g/t, 0.049 Au g/t, 0.03% Cu over 93.34m. Copper-gold-hematite overprints all rock types and appears to be spatially and genetically related to the fault 127.72-133.49 m. A drill hole to test this zone is recommended 50 metres below CA1107.

Low, but geochemically significant Au, Pt, Pd values are present in various rock types, particularly in and near ultramafic rocks. These low values are erratic, and the proportion of Pt relative to Pd is highly variable, possibly due to a remobilizing mineralizing event related to the diabase. In hole CA1107, 34 samples totaling 33.30 m over a 56.32 m core interval at 557.75-614.07 m have a weighted average of 0.014 Au g/t over 56.32 m. This gold appears to be a primary stratigraphic feature of the diabase. Geostatistics of the Pt, Pd and Au assays including a detailed examination of the Pt, Pd standards could assist to distinguish noise and validate geochemical signatures.

The MMI survey has shown potential mineralization of gold, silver and base metals based on anomalies which are structurally aligned.

The last trench program has identified gold mineralization and copper occurrences showing the property deserves additional exploration work.

26- Recommendations

The recommendations are based on the following considerations:

Historic exploration in the Gowganda – Elk Lake area has focused on the upper third of the Nipissing diabase sill. Consequently, most of the resulting historic production from the Gowganda area has been mined from this horizon. An estimated 75% or more of the silver mined from all the Nipissing diabase between Gowganda and South Lorrain has been mined from outside this horizon.

Base metal mineralization in the Archean rocks may be absent or the typical unit of sediment – exhalite containing the base metals (± silver or gold) may remain to be discovered, and MMI and trenches have shown the property may contain this mineralization. Recommendations are from the geological team and the QP.

Therefore, recommendations are as follows:

A portion of Quantec Geoscience's proposed work could be undertaken, including:

- Review and re-interpret all the available geophysical, geological and geochemical data in the vicinity of the priority target areas prior to drilling;

- Evaluate and re-interpret the existing conventional surface geophysical data;

- Survey more lines in both Northeast and Southwest parallel of the existing lines with tighter spacing.

Holes with good mineralized intersections should be considered for an in-holegeophysical orientation study to allow testing possibly a 25 – 50 m radius around drillholes.

Further diamond drilling should be done to continue the work begun once existing assay data and geophysical data has been interpreted and incorporated with compiled historic data.

Phase two exploration should identify and prioritize the intersections of the 2011 drill program follow-up drill targets. Each hole should generally target the vein at the most probable strike/dip location 25 m from the previous intersection. Oriented core drilling is imperative to effectively identify the drilling orientation to drill each target. This drilling should be restricted to one hole per target in the first pass. The vein strength, as discussed previously, should be the highest prioritizing factor in target selection. The exception is targets defined by high priority down the hole or surface geophysics targets.

For the initial single holes, a drill spacing of 25 m from original intersection is optimum to test the veins within 200 metres of surface and the sill margins. These include the veins intersected in holesCA1101, CA1104, CA1105 and CA1106. A drill spacing of 50 metres should be considered for the deeper targets below 200 metres depth. Down-the-hole geophysics work may impact these hole separation as paired holes are preferred for some geophysics programs.

The core should be logged using oriented core. The calculated strike and dip of the veins intersected should be entered into the text of the log during the logging process. All vein intervals should be reported as core lengths for the computer plot of the vein location.

Further follow-up down-the-hole EM and IP is the next follow-up work required at this location. Following completion of the geophysical work, one or more directional wedges are recommended to drill confirm the orientation and grade of the vein. Follow-up drilling of CA1108 will require production of oriented core.

Information and data should be better managed in order to make it simpler and easier to understand and use for compilation and data processing via computer softwares.

The insertion of blanks and standards should be carried out at more random intervals than it has been done to date. A number of them should also be put in after significant mineralization. The types of standards used should be better selected in order to better fit with the material to be assayed.

The drill hole collars should be surveyed at implementation and at completion by certified surveyors for location and also a reflex survey for azimuths and Dips.

The budget estimate of the work proposed for the next phase of exploration to develop Silver, Gold and base metal mineralization on the property is presented in two steps and as follows:

Phase 1

Step 1

• Follow-up on existing anomalies of the MMI with trenching

• Exploration with MMI in specific areas having potential

• Higher density MMI on areas of new anomalies of the MMI

• Follow-up on the new anomalies of the MMI with trenching

• Geology, assaying, management and report

A limited budget of $45,000 with $6,000 in MMI, $5,000 in prospecting and the remaining $34,000 in trenching sampling and report to achieve these tasks is proposed.

Should the program proves to be positives with findings, then finance to proceed with additional works on the findings and the Step 2 proposed program.

ESTIMATED TOTAL STEP 1 PROGRAM $45,000

Step 2 tributary of positive findings and financing after Step 1 works

• Drill two Wedges in the hole which has intersected the silver vein $25,000

• Data acquisition for scanning and organizing the mine
E-files, mine plans and sections, preparation of an integrated GIS $100,000

• Down-the-hole geophysics $200,000

• Diamond drilling, 5,000 m $1,000,000
(including sampling, assaying, geologist support, @ $200/m)

• LIDAR SURVEY of the property $50,000

• Geophysical ground IP survey $200,000

• Geology, MMI, Trenching, management and technical report $125,000

• Surveyor $50,000

ESTIMATED TOTAL STEP 2 PROGRAM $1,750,000

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Certificate of Qualified Person

I, Claude Duplessis PEO, do herby certify that:

1. I am a senior engineer with GoldMinds Geoservices Inc with an office at 2999 Chemin Ste-Foy, Quebec, Quebec, Canada, G1X 1P7;

2. This certificate is to accompany the Report entitled: "Takara Resources Inc., Castle Silver Property, Gowganda, Ontario, Canada . Technical Report NI 43-101" dated August 21st 2015.

3. I am a graduate from the University of Quebec in Chicoutimi, Quebec in 1988 with a B.Sc.A in geological engineering and I have practiced my profession continuously since that time, I am a registered member of the Professional Engineer of Ontario(Registration Number 10222741). I am a registered member of the Ordre des ingénieurs du Québec (Registration Number 45523). I am also a registered engineer in the province of Alberta (Registration Number M77963). I have worked as an engineer for a total of 27 years since my graduation. My relevant experience for the purpose of the Technical Report is: Over 25 years of consulting in the field of Mineral Resource estimation, orebody modeling, mineral resource auditing and geotechnical engineering. I have specific experience in exploration, modelling and estimation of silver, gold resources in various places and geological context in the world.

4. I did the personal inspection of the Castle Silver Property on April 17th 2012 and May 21st 2015.

5. I am responsible for the whole report of: " Takara Resources Inc., Castle Silver Property, Gowganda, Ontario, Canada . Technical Report NI 43-101" dated August 21st 2015".

6. I am an independent "qualified person" within the meaning of National Instrument 43-101 – Standards of Disclosure for Mineral Projects of the Canadian Securities Administrators. I have had no prior involvement with the property that is the subject of this technical report. I certify that there is no circumstance that could interfere with my judgment regarding the preparation of this technical report. I certify that, at the effective date of the report, to the best of my knowledge, information, and belief, the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

7. I have read NI 43-101 and Form 43-101F1 and have prepared and read the report entitled: Takara Resources Inc., Castle Silver Property, Gowganda, Ontario, Canada . Technical Report NI 43-101" dated August 21st 2015 for Takara Resources Inc. & Gold Bullion Development Corporation in compliance with NI 43-101 and Form 43-101F1.

Signed at Quebec, Quebec this August 21st, 2015

Claude Duplessis Eng. PEO # 10222741