

Assessment Report for  
Prospecting  
in the Kenora Gold Project Area

Jaffray Township,  
Kenora Mining Division  
Ontario, Canada

Performed by  
Pleson Geoscience on behalf of  
Canstar Resources Inc.

Work Performed on  
Mining Claims  
4253190 and 4253191

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# **1.0 Introduction**

## 1.1 - Purpose

This report has been produced to meet the requirements for filing Assessment Work under the Ontario Mining Act. This report covers the prospecting work performed on the property in October and November 2015. The report includes the results of a prospecting program on the Kenora Gold Project by Pleson Geoscience on behalf of Canstar Resources Inc. in the Kenora Mining District, Ontario.

## 1.2 - Prospecting Overview

The prospecting program was designed to confirm historic showings outlined in the OGS Mineral Deposits Inventory and find new prospective gold showings. The program was also designed to evaluate historic gold showings related to the identified SGH (Soil Sampling performed in August 2015) anomalies. The author was on the property through the duration of the sampling program. The work was performed between the dates of October 30<sup>th</sup> 2015 to November 5<sup>th</sup> 2015.

## **2.0 Accessibility, Geography and Climate**

### 2.1 - Accessibility

The Kenora Gold Project covers 3 separate blocks totaling 182 units while staking program is underway to form a contiguous mining property. The project is located from the eastern city limits of Kenora to Black Sturgeon Lake in the northeast and Haycock Lake in the east (Figure 1). The TransCanada Highway's #17A and #17B cut through the property and provide the bulk of the access. Highway 671 to Grassy Narrows I.R. provides access to the northern property boundary.

An intense network of snowmobile and quad trails allows easy access to 90% of the claims while some surveys areas are best accessed by canoe on Black Sturgeon Lake and Island Lake. The CP mainline railway transects through the central portion of the property as well as both natural gas and hydro transmission lines.

### 2.2 - Climate and Geography

The climate on the Kenora Gold Project mirrors that of Kenora. A portion of the property surrounds the city airport where Environment Canada monitors the weather conditions. The 30 year temperature range is  $-56.7^{\circ}\text{C}$  to  $35.8^{\circ}\text{C}$ . The average annual precipitation for Kenora is 662cm, with a higher density of precipitation in the spring.

The Kenora Gold Project is typical of the Canadian Shield, with large competent outcrops surrounded by lakes and swamps. Modest topographic relief is exhibited throughout the property due to the density of intrusive bodies. Mature coniferous forests cover the majority of the property, with sporadic young regeneration of deciduous due to past logging operations.



Figure 1 –Kenora Gold Project Location

### 3.0 PROPERTY DESCRIPTION

The Kenora Gold Project is currently made up of 41 mining claims comprised of 397 units. This consists of a 5955-hectare area. The current claims exist in the Haycock, Jaffray and Kirkup Townships of the Kenora Mining District. Table 1 summarizes the claims and those involved in the current prospecting program. Figure 2 outlines the current project area along with the outlined prospecting areas. Appendix I outlines the present option agreement between the current claim owners and Canstar Resources, including the full names and addresses of all proponents.

Claims	Due Date	Units	Work Required (\$)	Record Holder	Client #
K 4253190	Dec-04-2015	13	5197	Brian Fowler, Terrance Reimer and Anthony Worona	133247, 411175, 411244
K 4253191	Dec-04-2015	7	2506	Brian Fowler	133247, 411175, 411244

Table 1 – Summary of the Kenora Gold Project Claim Ownership

Prospecting occurred on unpatented mining claims shaded yellow in Table 1.



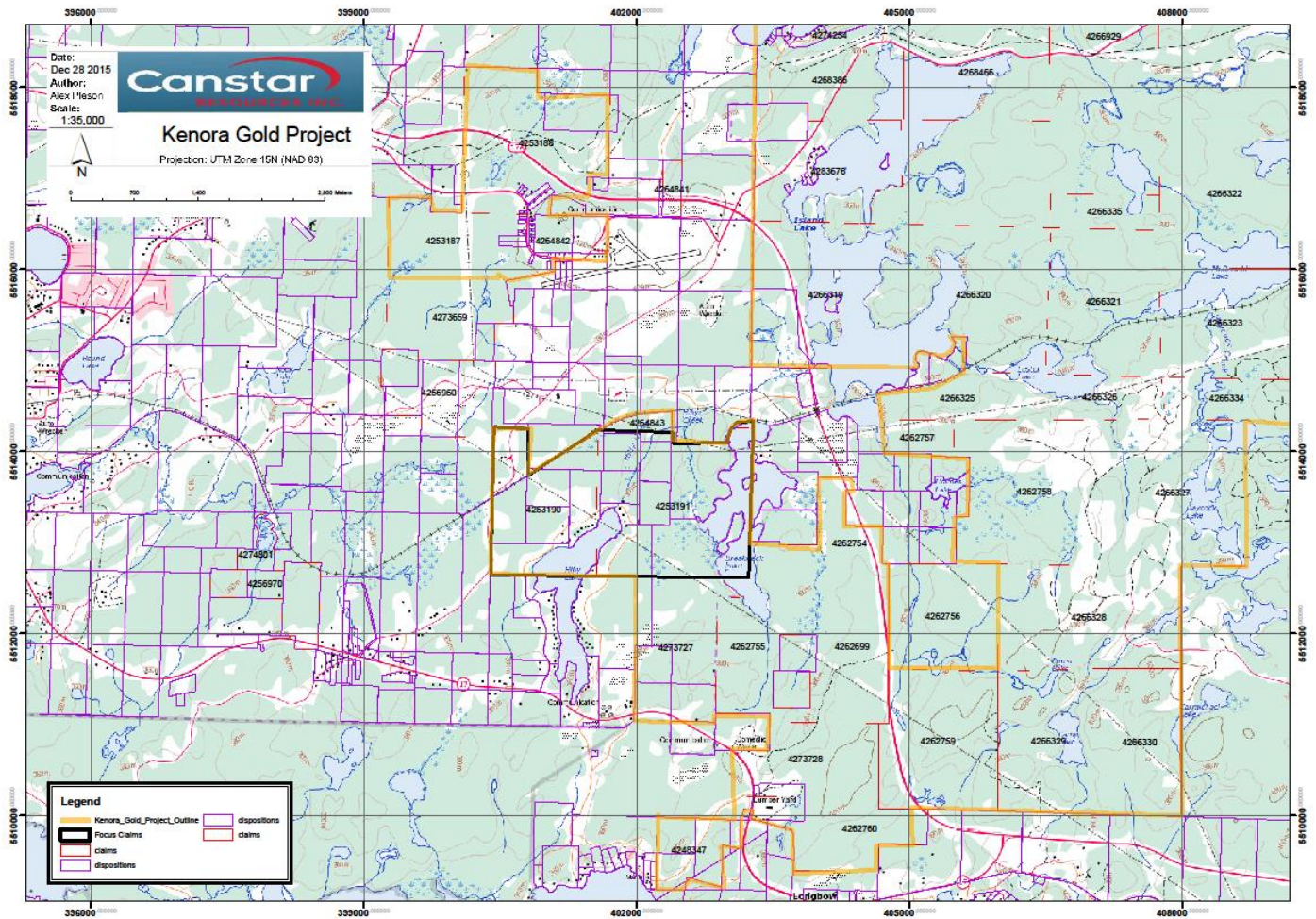


Figure 2 –Kenora Gold Project Area and Focus Claims



## 4.0 GEOLOGICAL SETTING

### 4.1 - Regional Geology

The Kenora Gold Project is situated in the Wabigoon Subprovince of the Superior Province. This subprovince consists mainly of Archean metavolcanic and metasedimentary rock sequences intruded by larger granitoid plutons, mainly granodiorite to granite in composition. Mafic volcanic rocks form ~90% of the sequence in the Kenora area, typically tholeiitic mafic flows. Felsic-metavolcanic and metasedimentary units comprise the remainder of the volcanic-sedimentary lithologies. These units typically exhibit evidence of at least greenschist facies of metamorphism. Regional deformation tends to trend in the east/northeast direction. Major structures in the area also exhibit similar orientations. (Breaks et al., 1978).

This portion of the east trending Wabigoon Subprovince is typically referred to as the Western Wabigoon Terrane (WWT) and lies to the south of the Winnipeg River Terrane (WRT) and to the north of the Quetico Terrane (QT). The WRT and QT are typically high-grade metamorphic terranes consisting of plutonic and metasedimentary assemblages. (Percival and Easton, 2007). The general geology of the project area can be seen in Figure 2.

### 4.2 – Local Geology

The property is dominated by a large quartz diorite intrusion that extends past the eastern boundary of the mining claims on contact to a tonalite pluton. The western contact of the quartz diorite consists of interlayered mafic and felsic metavolcanic rocks. Minor quartz monzonite intrusions bound the metavolcanic rocks in the north. Intrusive mafic-intermediate rocks (diorite to gabbro) are also mapped along a northeast trending contact to the felsic and mafic metavolcanic rocks. Gold mineralization is typically observed at or near the contacts of the metavolcanic units and the quartz diorite. (Breaks et al., 1978).

Large regional faults and mineral foliations are mapped by *King 1983* and typically have northeast strikes. The shearzones on the property exhibit the same overall trend. Gold mineralization is typically associated near the boundaries of the major shearzones that have been previously mapped on the property (Canstar Internal Report, 2014).

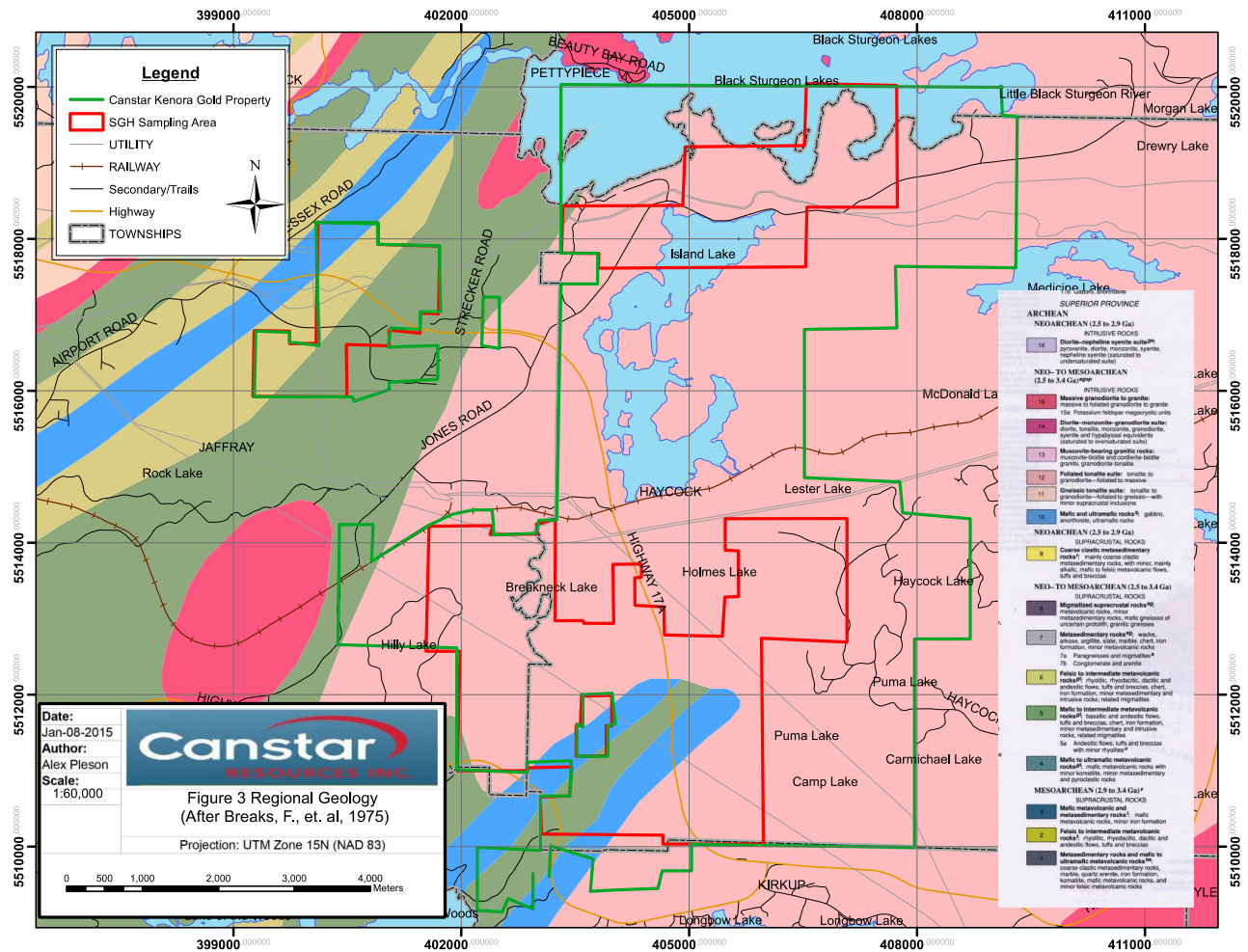


Figure 3 – Regional Geology

## 5.0 PREVIOUS EXPLORATION

### 5.1 – Historic Work

Gold mineralization was observed in the project area as early as 1894. Previous gold and silver production occurred at the Scramble Mine located ~200 meters east of claim 4253187 although no production data is available. Various other shafts are located throughout the property with no verified production data. The area lay dormant until 1984 when various exploration companies picked up surrounding properties and commenced work. Notable exploration activities include prospecting, drilling and trenching near the eastern shores of Breakneck Lake and the southern shores of Black Sturgeon Lake. These activities developed small potential showings and provided further development of the Sweden occurrence (UTM 15N 405385 E 5516597 N), the Roseman occurrence (UTM 15N 402401 5511464), Westin occurrence (UTM 15N 403265 5511444), the Norway occurrence (UTM 15N 404624 E 5513774 N), the Princess occurrence (UTM 15N 403541 E 5518122 N), Triumph (15N 404170 5511566), Rajah (15N 400601 5516928) and the Black Sturgeon occurrence (UTM 15N 404762 E 5518278N). These occurrences represent high-grade gold showings, which were explored and mined near the start of the 20<sup>th</sup> century.

### 5.2 – Canstar Resources Inc. Exploration Activities

In the summer of 2014 Canstar conducted a small reconnaissance mapping program including sampling. The project was developed to locate various structures that have the potential for gold mineralization. The project also intended to re-examine historic occurrences and evaluate their economic potential. Of approximately 108 samples, 25 samples yielded high-grade gold mineralization near or in shearzones. This prompted the design of a SGH soil survey to test the continuity of the gold bearing structures across the property. Canstar also completed a SGH soil-sampling program in August-September 2014. A subsequent prospecting campaign in April and May 2015 was completed to evaluate these findings and lead to the discovery of new showings near the history Rajah, Roseman, Westin and Triumph occurrences. This program was extremely successful in locating new showings and confirming the potential of the historic showings. The highlight of the campaign was discovering a **68 g/t** sample in a near mineralized shearzone east of the Triumph Showing and a **9.8 g/t** sample from a shearzone at the Westin occurrence which originally was thought to only consist of high-grade Au in quartz veins.

## **6.0 KENORA GOLD PROJECT PROSPECTING PROGRAM**

### 6.1 – Prospecting Program Goals

The main goal of the August Prospecting Program was to evaluate the known showing Hilly Lake North/Eschweiller (15U 401811 5513548) located on claim 4253191 and delineate any prospective structures/mineralization to the NE and SW of the showing located on claim 4253190 and 4253191. This was to be accomplished by clearing the original showings (mining location), grab sampling any interesting areas and channel sampling across the structure.

### 6.2 – Prospecting Program Overview

Pleson Geoscience of Nipigon, ON was contracted to carry out the prospecting. Alex Pleson (Nipigon, ON), Mike Goodman, Phil Houghton, Brad Evans and Ted Cox (Beardmore, ON) carried out the prospecting on October 30<sup>th</sup> and 31<sup>st</sup> 2015, November 1<sup>st</sup>, 3<sup>rd</sup> and 4<sup>th</sup> 2015. A total of 6 channel samples and 4 grab samples were collected in the focus areas during this time.

The majority of the time spent exploring focused on clearing the original Hilly Lake Showing, removing overburden by shovel and clearing debris from both shafts. The shafts and adjacent outcrops were then prospected, grab sampled and channel sampled. This provided the basis to select areas ~0.5 to 1 km to the east and west to determine if the Hilly Lake Structural Trend can produce some favourable results to warrant further exploration (Winter 2016 ground geophysics survey and Spring 2016 Trenching/Mapping campaign).

The program was definitely a success as the sampling intersected 5.03 g/t Au over 4.5 meters, with a 1.59 g/t Au intersection 900 meters long strike to the east. This will be examined further in Section 7.

# 7.0 PROSPECTING LOCATIONS AND TRAVERSES

## 7.1 - Locations

The focus claims were divided into 2 areas for exploration, *The Main Hilly Lake Showing (Eschweiler Occurrence)* and the East and West regions of the structural trend (Figure 4). These areas were chosen based off of historic showings from OGS maps P2618 Kenora East and P2830 Bigstone Bay North and anomalous results from the Spring 2015 Prospecting and Summer 2014 Soil Sampling campaigns.

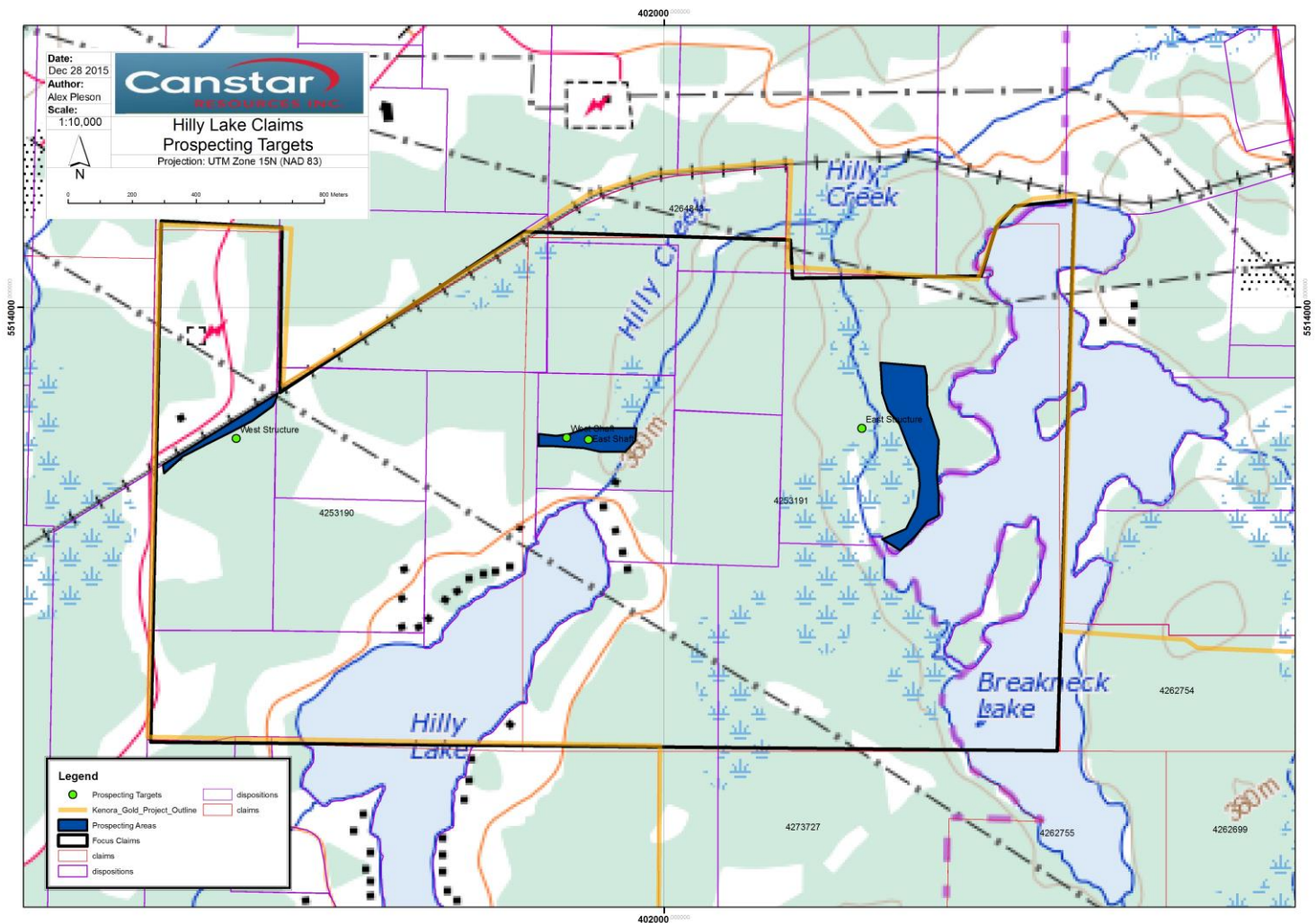


Figure 4 – Prospecting Areas and Targets

## 7.2 –Sampling and Outcrop Locations from Prospecting

### 7.2.1 –Hilly Lake Shafts/Eschweiler Occurrence and Hilly Lake East

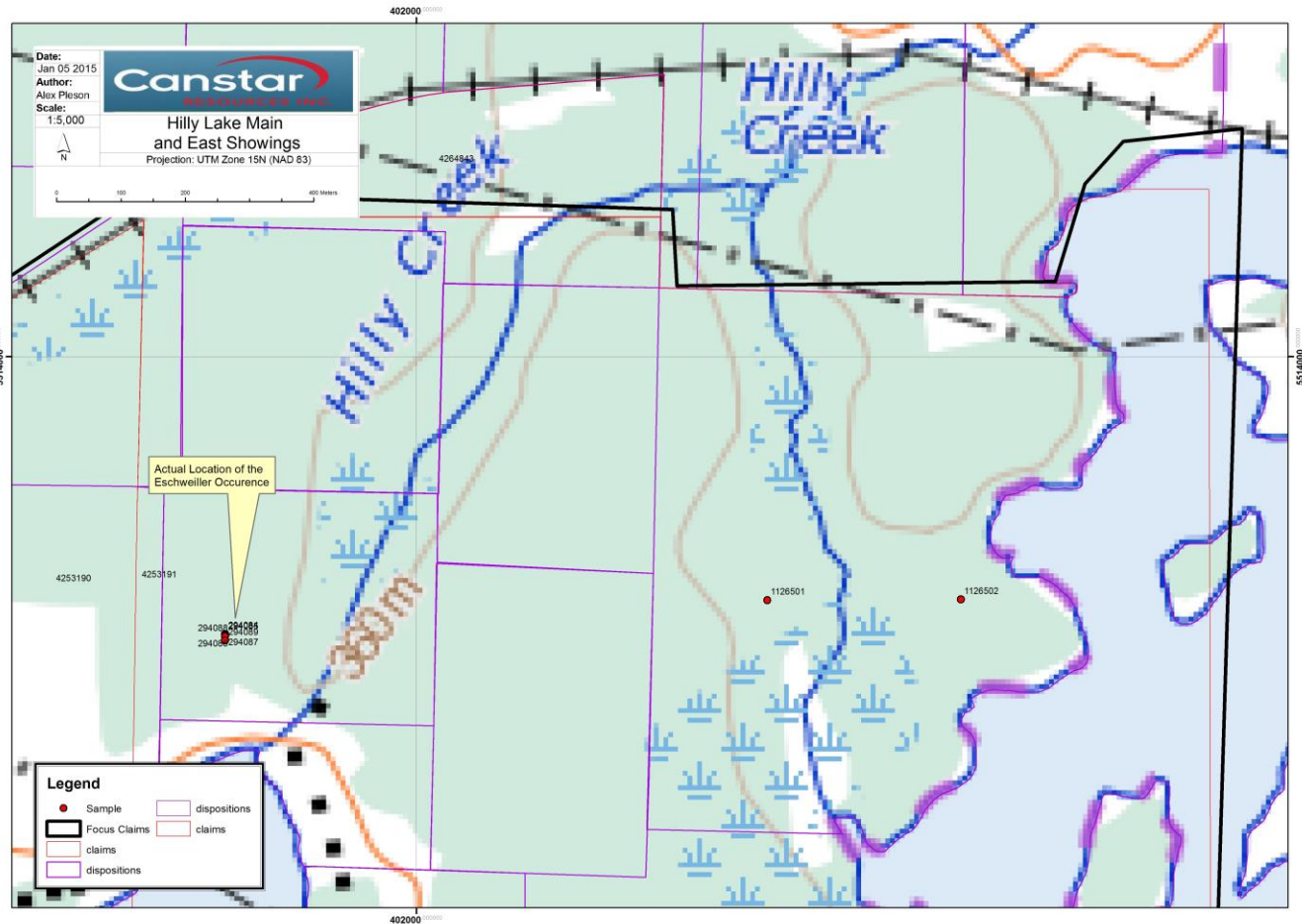


Figure 5a – Hilly Lake Main and East Prospecting (Sample IDs overlap due to scale, see Fig 5b for clear list of Sample IDs)



## 7.2.2 – Hilly Lake Main and West Prospecting

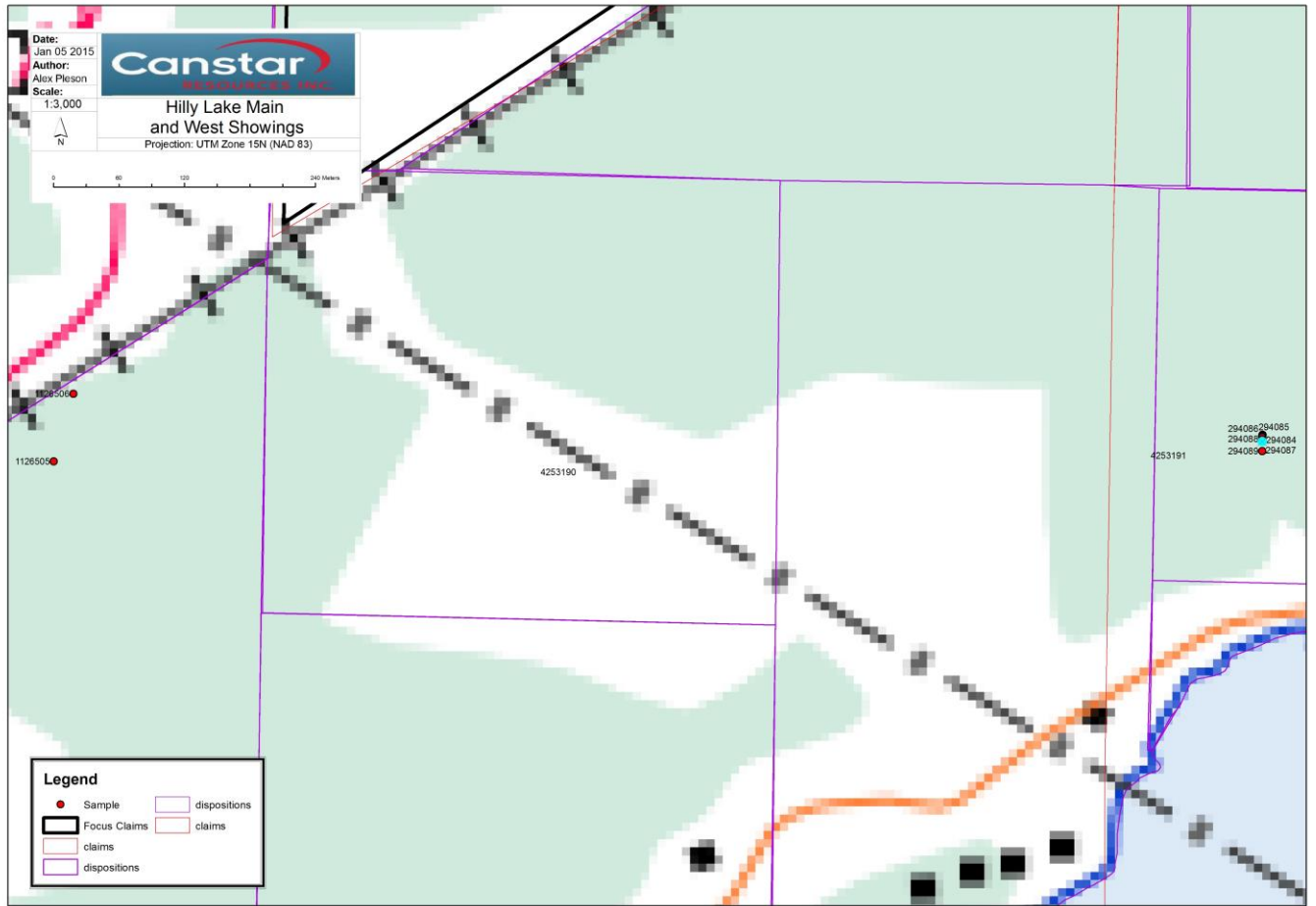


Figure 5b – Hilly Lake Main and West Prospecting



## 7.3 – Discoveries

The hand stripping of the outcrops and old shafts lead to the discovery of a mineralized zone ~5 meters perpendicular to the strike of the Hilly Lake Structural Trend (082°/85°) just east of the #2 shaft of the Eschweiller Occurrence. The prospectors trenched the zone by shovel and geo-tool to expose the zone and the author laid out a 4.5 meter section to be channel sampled. Due to the hardness of the diorite, only portion of the trench was cut as the blade wore out. The remainder was selectively chipped by means of hammer and chisel. These 6 samples and 4 others from the property were submitted to the lab for gold and a trace element geochemistry analysis package.

The outcome from the analysis revealed 5.03 g/t Au over the 4.5 meters sampled at the main showing (Figure 6a). This represents a highly significant find and warrants further exploration. The results are shown in Figure 6 a, b and c. Another significant discovery was sighted in the eastern portion of the claims, on claim 4253191, where a 1.59 g/t Au grab sample was found (Figure 6b). This shows that there is gold mineralization along this trend for potential 900 meters to the east. However, these results are just the beginning of what should be a proper investigation into the gold mineralization at Hilly Lake.

No significant discoveries were sighted in the western portion of the property (Figure 6c), which was also the conclusion of work done in the spring of 2015. However, there is one historic showing to the north of the Hilly Lake West sampling that was not evaluated. This was due to the surface rights being held by an unknown individual and the presence of “No Trespassing” signs. Further work must be done in order to gain permission to access the historic Wimor Occurrence.

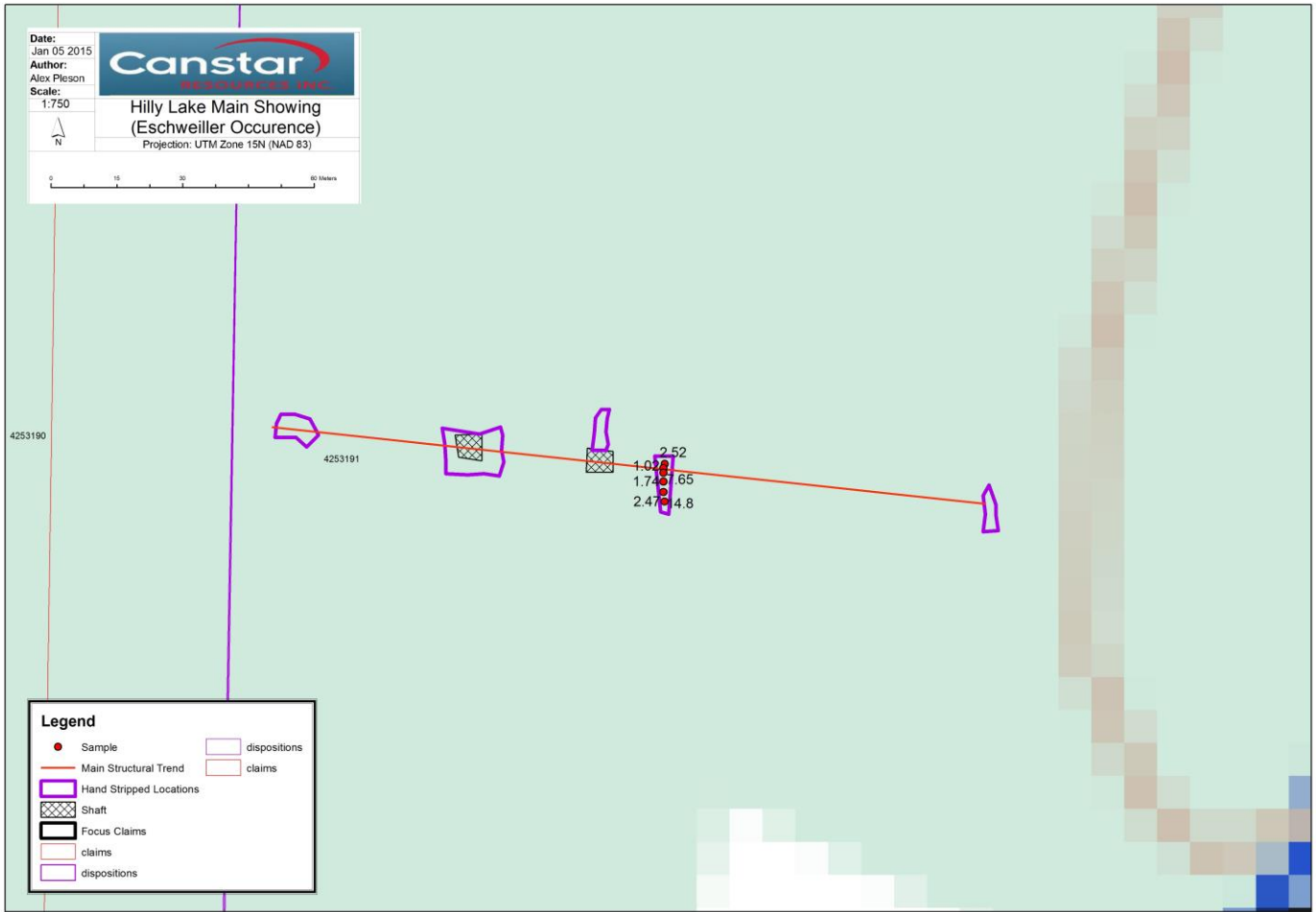


Figure 6a – Hilly Lake Main Showing Findings

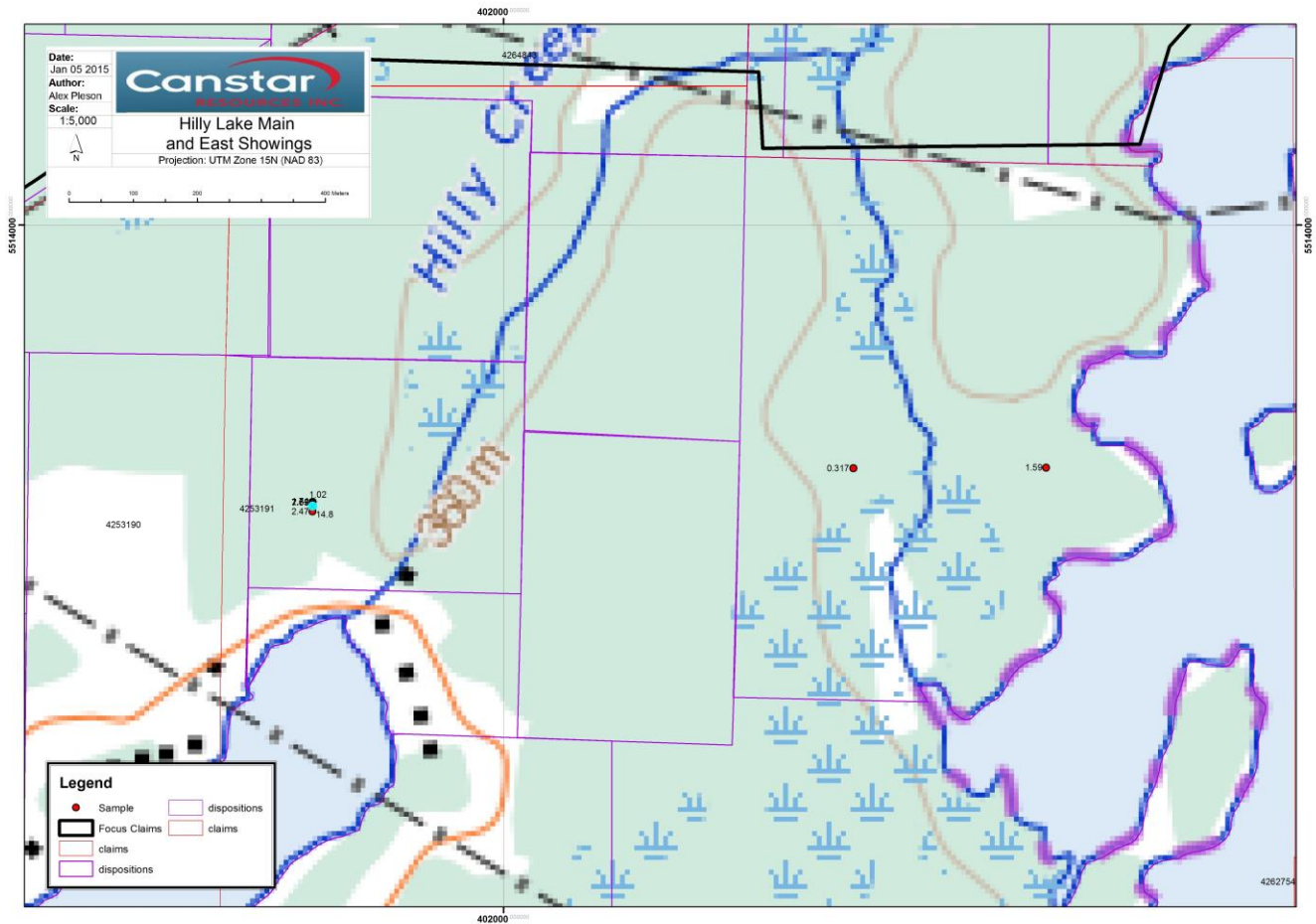


Figure 6b – Hilly Lake Main and East Findings

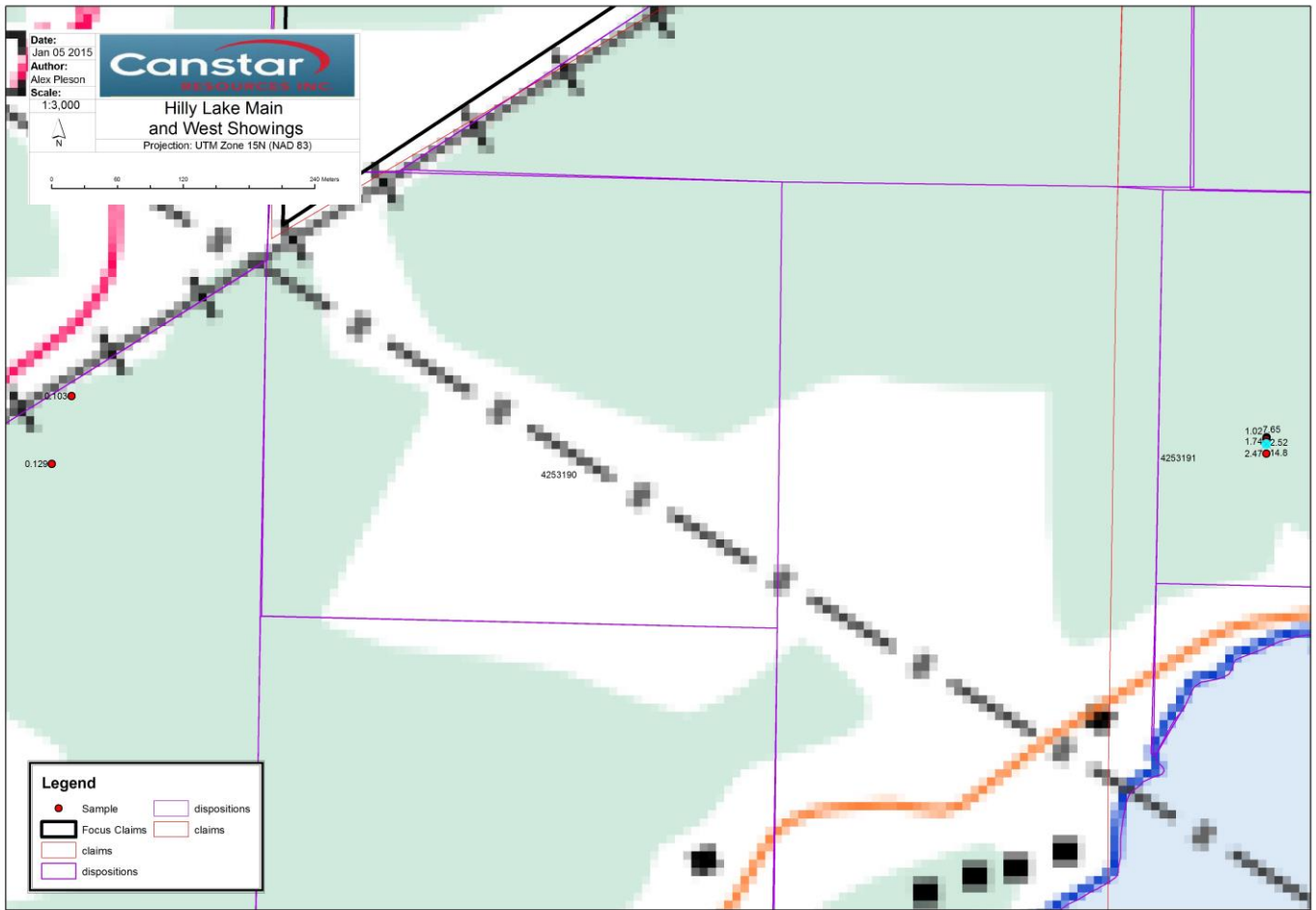


Figure 6c – Hilly Lake Main and West Findings

## **8.0 PROSPECTING FINDINGS**

The 5 days of prospecting the Hilly Lake claims (4253190 and 4253191) can be considered a success. There were 10 samples taken in the project area, in which 7 samples ran over 1.0 g/t Au. The channel/select-chip samples taken from the main showing calculate to 5.03 g/t Au over 4.5 meters. This significant finding shows the deformation of the Hilly Lake Structural Zone can produce economic grades and widths of gold mineralization. This warrants further exploration on the main showing as to expand the size of the trenched/exposed areas and search for similar mineralized structures along the trend. There should be no less than 4 days designated to prospecting the identified trend (082°/85°) to delineate the potential for gold mineralization in this geological setting.

Emphasis should be placed on geological mapping and channel sampling of the main showing (Eschweiller Occurrence) as this will provide the basic understanding of the mineralization, which will help to further target areas for prospecting along the Hilly Lake Structural Trend.

## REFERENCES

King, H. L., 1983, Precambrian Geology of the Kenora-Keewatin Area, Eastern Part, Kenora District, Ontario Geological Survey, Map P 2618, Preliminary Map

Percival, J., Easton, R., 2007, Geology of the Canadian Shield: An Update, Geological Survey of Canada, Open File 5511, Natural Resources Canada

Sutherland, D., 2014, SGH Report for Canstar Resources – Kenora SGH Survey, December 18<sup>th</sup>, 2014, Internal Publication, Activation Laboratories Ltd., A14-06865



## **Statement of Qualifications**

Alex Pleson, Exploration Consultant

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I, Alex Pleson, do hereby certify that:

- 1: I am a licensed Ontario Prospector
- 2: I have been working in the mineral exploration field since 2008
- 3: I received my H.BSc in geology from Lakehead University
- 4: I am responsible for the preparation of this assessment report
- 5: I hold no interest in the company or property this reports refers to
- 6: I have been involved with the Kenora Gold Project since August 13<sup>th</sup> 2014

Dated the 8<sup>th</sup> day of January 2016

Alex Pleson, Exploration Consultant  
Pleson Geoscience



# Appendices

Appendix I – Option Agreement and Agent Letter

See attachment

Appendix II – Assay Certificate and Sample Coordinates

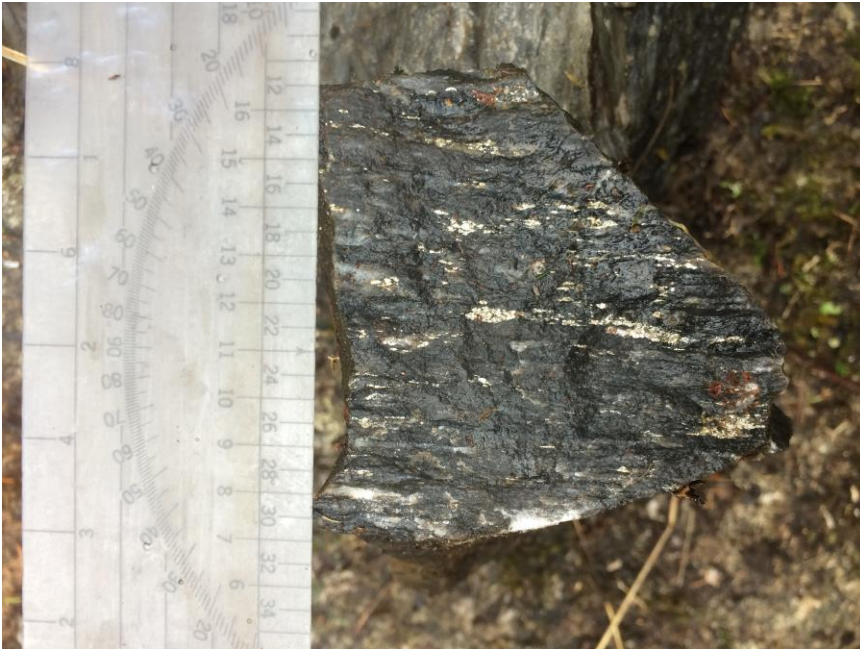
See attached Certificate

See attached Prospecting Sample Description and Location Page

Appendix III – Prospecting Pictures



*Altered Diorite from North-side of Hilly Lake Structural Zone (Eschweiller Occurrence)*



*Altered Diorite from same trench as channel/select-chip samples were taken from (Eschweiller Occurrence)*





*Mike Goodman (in back), Ted Cox (front) and Gunner taking a break from stripping the main zone at the Eschweiller Occurrence*

# Appendix IV – Prospecting Logs

See attached PDF as well for Prospecting Log

Date	Claim(s)	Log	Log
Oct-30-15	4253191	All- Parted near private road leading to Eschweiler Occurrence, Occurrence is actually located 120 meters at 290° from the MDJ/WANES file UTM coordinates. Brad, Ted, Phil and Mike began to examine both #1 and EschK shafts, large amount of blast quartz located around the old shafts, numerous drill collars are located by each shaft, overburden is low, area has been stripped before. Both Shafts have fence but are partly knocked down. (we stood the fence back up once we finished examining the waste/ore pile). I (Alex) started to traverse the main structure/shear/quartz veins at 082, and located multiple area for the guys to begin showelling as only moss/horse sand fills the old trenches. Worked the entire day exposing the mainzone and clearing the #2 shaft as to get a cross-sectional view of the shaft, Shaft #2 is filled with water ~1m down from surface, Shaft #1 is dry and you can stand on side, partly collapsed, old-timers were definitely only high-grading the main orange-milky white veins	
Oct-31-15	4253191	All- worked on continuing to expose the outcrops at the main Eschweiler occurrence, I continued to explore for other favourable zones east towards the Creek, finished the day by starting to cut 4-5meter channel across the main structural zone, very favourable mineralization intersected, strong sulphide alteration in wallrock, will continue the sample in the next day	
Nov-1-15	4253191 4253190	Ted-Brad - entered the claim via Jones Rd, walked the tracks towards the projected location of the Hilly Lake Structural Trend, prospected here and took 2 samples, very low rock exposure mainly swampy lowlands. Proceed back to truck and then tried to gain access to the Winsor Occurrence, you can see an old-cut face ~90meters off of Jones road which appear to be rusty Mn/Fe/Ox with strong quartz veining, however the entire occurrence seems to be on private land that is posted, will try to arrange access for the future exploration project	Mike-Alex-Phil accessed 4253191 from hydroline, east of creek via Hilly Lake Road, Mike and Phil walked towards eastern boundary of property on Breakneck lake, prospected the shoreline and found what may be the outcrop of the hilly lake structural zone, 2 samples were collected, at this point the HLSZ is only 90cm wide, although the creek to the south may indeed be the zone and this is merely a splay of the larger main zone. Alex walked with Mike and Phil but when we encountered a house I walked NW to the creek above Hilly Lake and tried to locate the Hilly Lake structural zone but the entire area from the hilly lake north creek to the first creek west of Breakneck Lake is largely covered by an tiller or other poorly sorted sand deposit, tried to follow up on SGI anomalies but no outcrop found
Nov-3-15	4253191 4253190	Spent the morning finishing up prospecting in the eastern and western flanks of the property as per task day after Halloween.	In the afternoon- all returned to Main showing to hopefully find VG for companies pre-release, Mike continue to cut samples and Phil, Ted and Phil opened up last trench east of channel sample where only a small quartz vein (see strike) from main showing was found, either the zone pinches out here or the zone is more south towards the creek. Brad hauled water for the saw from Hilly Creek as it was too dangerous to through pump intake into Shaft#2
Nov-4-15	4253191	Used last blade on saw, Mike and Phil chiseled the remainder of sample out while Brad and Ted exposed and old trench to the far east of the "historic trenching program". Alex recorded some structure of the main stock-work system and the deformation of the diorite-quartz/diorite wallrock.	
Nov-5-15		Travel Day	