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Work Assessment Report

# **Prospect Lake Property**

Coldwell

Thunder Bay District

Ontario

NTS 42 D/15

Assembled by: John Florek

Date: October 03, 2017

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## Summary:

A prospecting program was developed to understand the nature of the exhalative horizon to the west of the 2016 program.

The prospecting was to accomplish a single task: Look for rock samples along the western portion of the property (Claim 4240826) along the exhalative horizon, and see how the geology expresses in the vicinity.

Previous work done by the author looked at the location and geological setting of an identified exhalative unit that occurs at the boundary between sediments and mafic volcanics. This exhalative unit already demonstrated significant base metal occurrences along strike.

In addition to this prospecting, attempts were made to find historical claim geophysical lines and assign a GPS coordinate for future reference.

## Introduction:

John Florek has 100% interest in the Prospect Lake Property located in Coldwell Area of the Thunder Bay District, Ontario, within the Schreiber Greenstone Belt. The Property consists of eighteen (2) claims (24 claim units). **Table 1** and **Figure 1 and 2** show the location of the group of claims.

| <b>Prospect Lake Property</b> |                              |
|-------------------------------|------------------------------|
| <b>Claim Number</b>           | <b>Number of Claim Units</b> |
| 4240826                       | 12                           |
| 4240816                       | 12                           |
|                               |                              |
| <b>Table 1: Claims</b>        |                              |

The Prospect Lake property is located 6.5 kilometres north of the TransCanada Highway, between Marathon and Terrance Bay, Ontario. The property is accessible by ATV trail, canoe, and forest trail to the southeastern area of claim 4240816. All of the claim area is very remote and most of the areas are only accessible by walking through the boreal forest.

## Regional Geology

The property occurs within the Wawa Subprovince of the Superior Province. It is within the late Archean Schreiber-Hemlo greenstone belt, i.e., 2.80-2.68 Ga. It is composed of supracrustal lithotectonic assemblages of ultramafic to tholeiitic basalt ocean plateau sequences, tholeiitic to calc-alkaline volcanic arc sequences, and siliciclastic turbidites, collectively intruded by arc granitoids (Polet et.al. 1998.)

## Property Geology

The property lies along the north limb of a regional antiform, which is located in the Archean Schreiber portion of the greenstone belt. Mafic and Intermediate volcanics are overlain by chert, shale, sulphide iron formation, and related sedimentary rocks. The belt consists of variably metamorphosed



metavolcanic and metasedimentary units. **Figure 4** shows the property geology; taken from Walker 1967.

## Historical Work Performed

Several previous companies have worked the property and the information is contained in the assessment files located at the MNDM. Brief synopses below of work performed on these properties are contained in these reports. A lot of the reports describe more regional surveys over the general area, but the list below is confined to the claims in this report.

1981: Gulf?

1983: Coronet Resources: Aerodat Ltd airborne geophysical surveys, geological survey, geochemical survey (42D15SW0082,70).

1983: Teck Exploration: Geophysics (42D15SW0090)

1986: Lionel Martin: Linecutting, Trenching, Geochemistry, Geological Mapping, Geochemistry, Geophysics, and Diamond Drilling (42D15SW0061)

1986-1987: Eldor Resources (optioned from Cunningham): Diamond Drilling, Soil Sampling, Litho geochemistry (42D15SW0064, 56\_b, 58)

1989: Cameco / Zenmac Zinc Ltd: Diamond Drilling (42D15SW0054,56)

1990: Cunningham: Whole Rock Analysis (42D15SW0051), *references Gulf work?*

2005: Phoenix Matachewan Mines: Litho geochemistry, Airborne Magnetics, VTEM (42D15SW0061, 2025, 20003043)

2006-2008: Galahad Minerals: Drilling

2012: Wayne Richards: Prospecting and bedrock sampling (20010244)

2015: John Florek: Prospecting, Mapping, Line cutting

2016: John Florek: Soil Sampling (multielement), Rock Sampling(XRF), Linecutting, Prospecting.

2017: John Florek: Prospecting Claim 4240826

## Work Program

The main goal was to prospect and to assess locations of possible VMS potential associated with exhalative rocks which trend through the claims; specifically gold-rich VMS. Claim 4240826 was the focus, due to elevated gold and historical sulphide occurrences. Also, a visual of the geology of the western portion of the claim group was required to assess the potential for targeting.

A review of the historical work was performed on the property prior to field work. Attempts were made to put pertinent historical information into a GIS format, so that precise areas could be located since all established surface grids are now somewhat overgrown.

This exhalative horizon is known to be composed of chert, iron oxide and sulphide facies iron formation, and locally intercalated graphitic schists. This horizon has significant untested strike length and is one of the most continuous and thickest exhalite horizons in the greenstone belt shown on Walker's (1953) geological map. The prospecting was done between known lithogeochemistry done by Phoenix Matachewan Mines, to hopefully identify new showings or unknown rock types. Lateral to this horizon, just off the claims is a diamond drillhole intercept that contained 8.6% Zn over 10 meters.

Many rock samples were examined, and three rock samples were collected for future analysis. These samples were also taken as specimens for visuals and understanding/promoting model development.

PLR01: A) Graphitic,Sulphide,Schist B) Pyrite Mineralized Basalt.

PLR02: Intermediate Feldspar Phyric Tuff with Pyrite. 110°/70°S.

In addition to prospecting, a search was conducted to find old geophysical grids. This way they could be tied into the known GIS coordinates.

## **Recommendations**

Further investigations of these occurrences are warranted. It is suggest that the following be accomplished:

- Follow-up with more aggressive prospecting and sampling.
- The reestablishment of overgrown trails to provide better access. Access was extremely difficult.
- Additional evaluation of the historical geochemical dataset.

## **References**

Polat, R. Kerrich, and D.A. Wyman (1998). The late Archean Schreiber–Hemlo and White River–Dayohessarah greenstone belts, Superior Province: collages of oceanic plateaus, oceanic arcs, and subduction–accretion complexes. *Tectonophysics*, v. 289, Issue 4. pp. 295-326.

Walker, J.W.R., 1967, *Geology of the Jackfish Middleton Area*, Ontario Department of Mines, 41p.

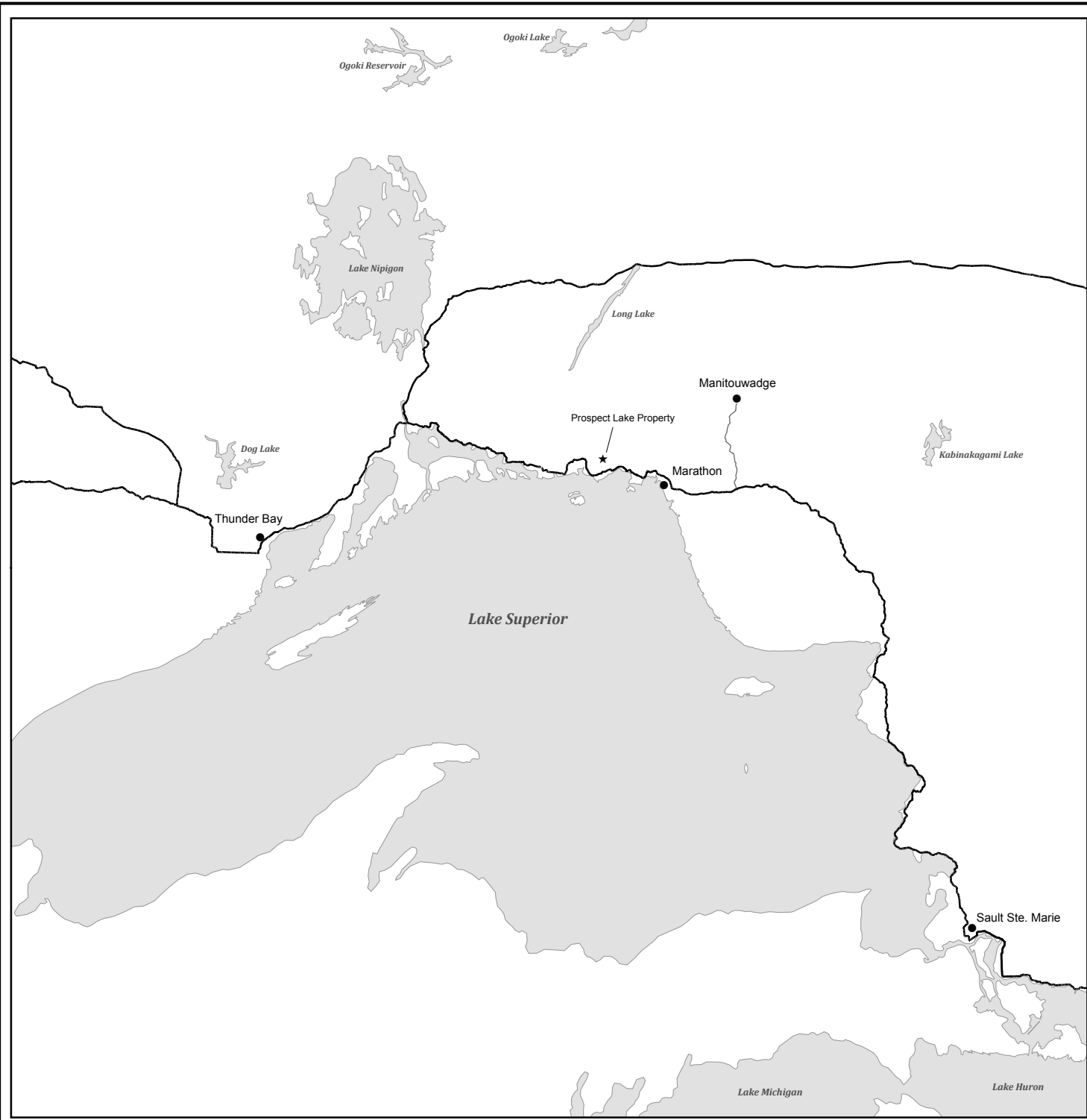
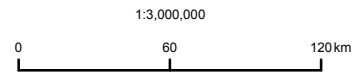


Figure 1.  
Northwestern Ontario Location Map  
Prospect Lake Property

|           |                        |
|-----------|------------------------|
| ★         | Prospect Lake Property |
| ●         | Communities            |
| — (thick) | Trans Canada Highway   |
| — (thin)  | Hwy 614                |
| ■ (grey)  | Water                  |



Produced by Florek Consulting Services under licence from Ontario Ministry of Natural Resources, Copyright (c) Queens Printer 2011. Vector Base Data supplied by the MNR. UTM Projection, NAD83, Zone 16



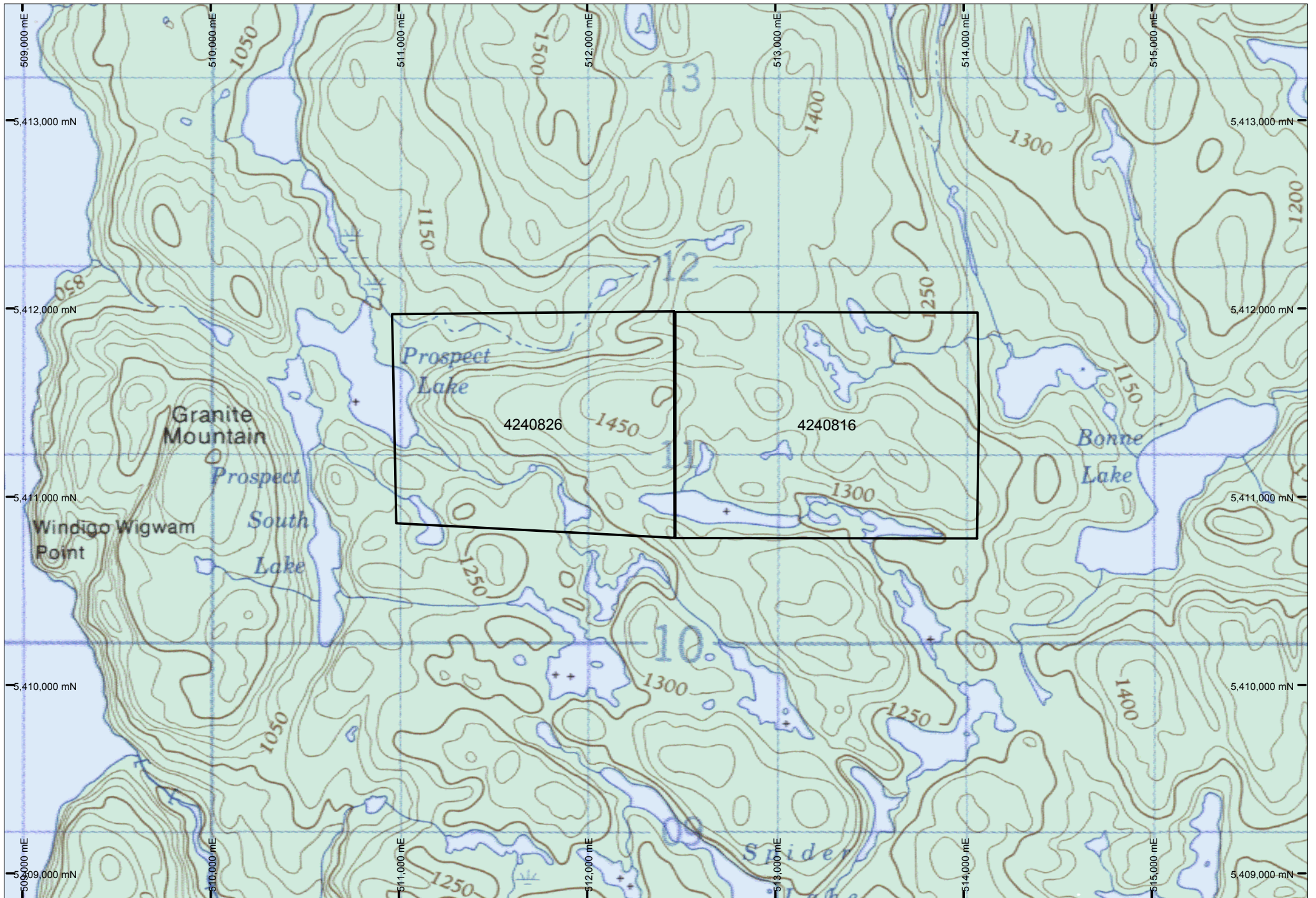


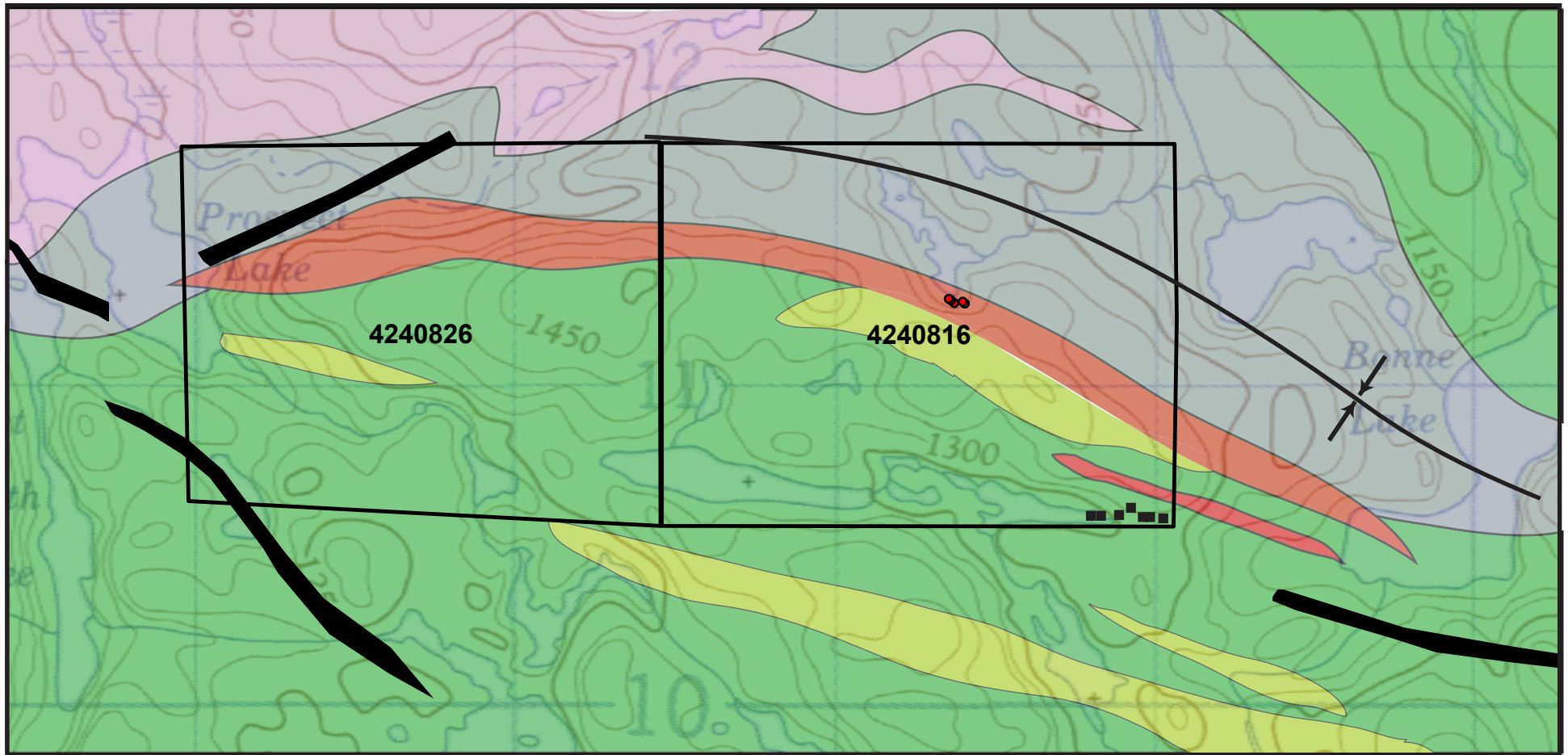
Figure 2: Claim Map (1 : 25,000)







# Prospect Lake Geology



## Prospect Lake Property Geology










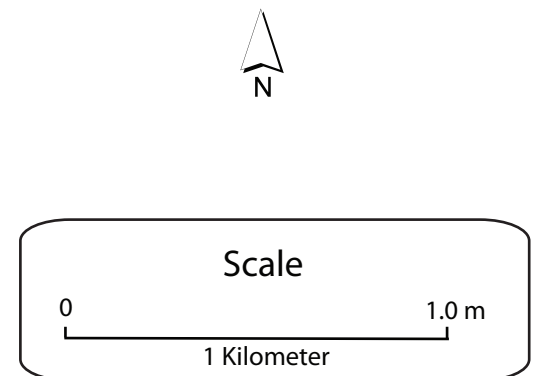
- |   |  |
|---|--|
|  Intrusive |  Mafic Volcanics        |
|  Exhalite  |  Diabase Dikes          |
|  Sediments |  Intermediate Volcanics |
|  FeFm      |  XRF Rock Samples       |
|   |  Soil Samples           |

Figure 4: Geology After J.W.R. Walker 1953



# **Appendix A**

**Bozema Lake Claims 4240826**

|                        | MOB             |               | DEMOB         |         |
|------------------------|-----------------|---------------|---------------|---------|
|                        | September-30-17 | October-01-17 | October-02-17 | October |
| Boat and Motor         | 200             | 200           | 200           |         |
| Mob/Demob (Camp setup) | 450             |               | 450           |         |
| Prospecting            |                 | 900           |               |         |
| Truck                  | 60              |               | 60            |         |
| Perdiem                | 70              | 70            | 70            |         |
| Report Writing/Figures |                 |               |               | 2700    |
|                        | 780             | 1170          | 780           | 2700    |

**Total Costs**      \$5,430.00

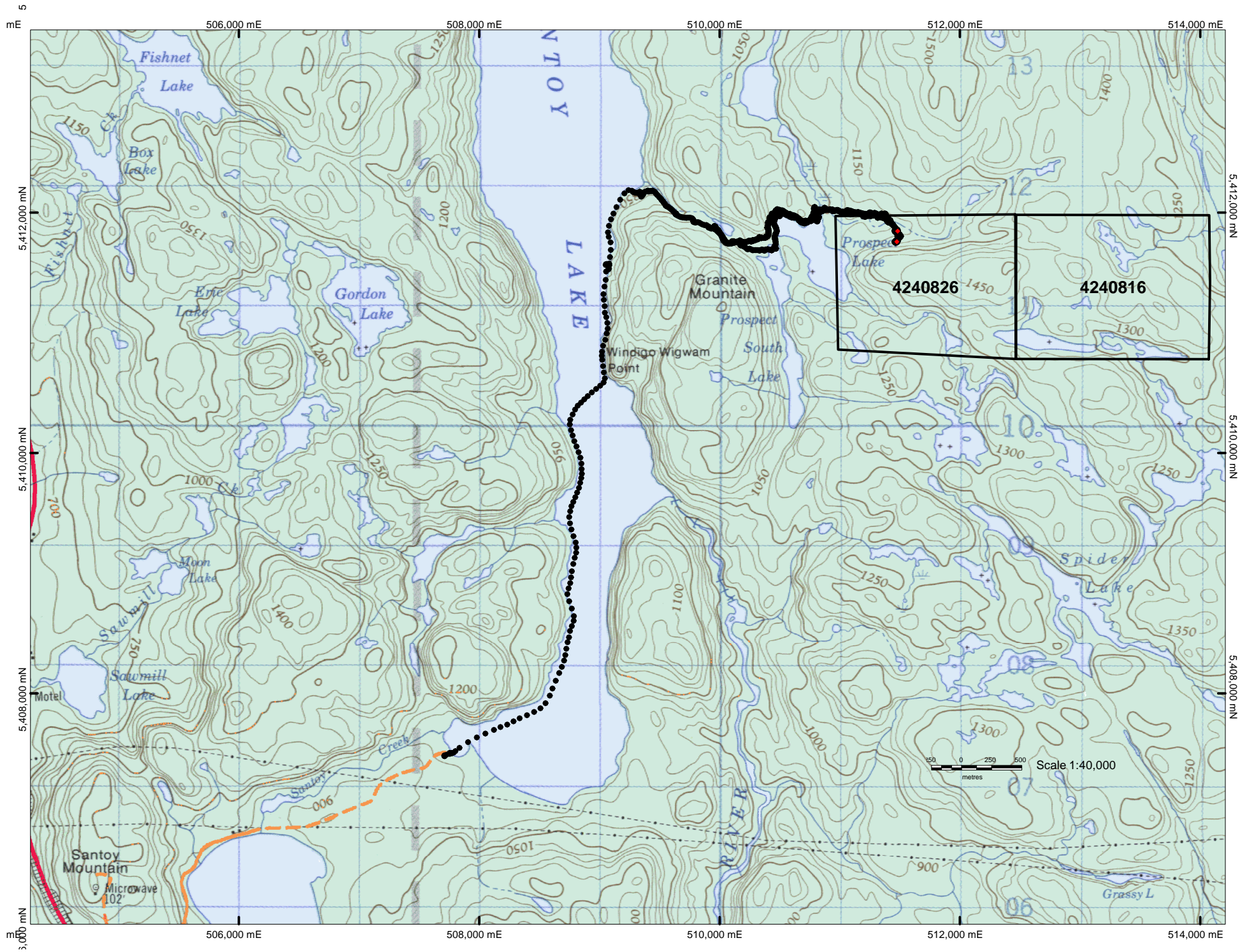
| Description                                    | Quantity | units   | cost/unit          | Total             |                      |
|--|----------|---------|--------------------|-------------------|----------------------|
| Trail Establishment, Access Route (Emergency)  | 0        | day     | \$900.00           | \$0.00            | Work Costs           |
| Sampling, Prospecting (P.Geo, M.Sc Geologist)  | 1        | day     | \$900.00           | \$900.00          | Work Costs           |
| Mob/Demob (Equipment, Emergency Shelter Setup) | 1        | LumpSum | \$900.00           | \$900.00          | Associated Costs     |
| Report Writing                                 | 2        | day     | \$900.00           | \$1,800.00        | Associated Costs     |
| Figures  | 1        | day     | \$900.00           | \$900.00          | Associated Costs     |
| Boat and Motor                                 | 3        | day     | \$200.00           | \$600.00          | Transportation Costs |
| Truck Mileage                                  | 200      | km      | \$0.60             | \$120.00          | Transportation Costs |
| Perdiem  | 3        | day     | \$70.00            | \$210.00          | Food and Lodging     |
|  |          |         | <b>Total Costs</b> | <b>\$5,430.00</b> |                      |

*Electronic Assessment Categories*

|                      |                   |
|----------------------|-------------------|
| Work Costs           | \$900.00          |
| Associated Costs     | \$3,600.00        |
| Transportation Costs | \$720.00          |
| Food and Lodging     | \$210.00          |
| <b>Total Costs</b>   | <b>\$5,430.00</b> |



## **Appendix B**



John FLOREK

Prospect Lake

Sept 01, 2017

Pic PLR01 - Graphitic Fe-Form (stream bed)  
Mineralized Basalts (stream bed)  
5,411,844 mN 511,482 mE

Pic PLR02 - Intermediate tuffs, feldspars phenocrysts.  
Py mineralization 1-2%

No rock dips to south (see pic)

5,411,757 mN

511,474 mE



70° 1100  
5

GPS Pic - Rock hammer and quartz boulder beneath root-free.





PLR01

Stream Bed in vicinity

Mineralized Basalt (Mineralized),  
Graphitic Schist (Mineralized)







Strike and Dip of Unit

PLR02

Rusty Intermediate Felsic Tuffs





## Exhalative Horizon Outcropping on Santoy Lake



Historic Grid Marker Location  
48°51'35.9968" LAT  
86°50'38.528" LONG



## **Appendix C**