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Grass Roots Prospecting Report  
for the  
West Lake Mining Claims

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June 1, 2023

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## Preamble

A technical report applied to grass roots prospecting assessment work that is required as part of an assessment work report submission pursuant to the Mining Act, R.S.O. 1990, C. M.14 and the Assessment Work Regulation (O. Reg. 65/18). This technical report includes a detailed explanation of the geoscience work done, maps or plans, where required and details of the expenses claimed for the work, together with supporting receipts, invoices and other documents for those expenses.

## Abbreviations Used

Table 1: Initials and abbreviations used in this report.

<b>SRO</b>	Surface Rights Owner
<b>MLAS</b>	Mining Land Administration System
<b>ATV</b>	All Terrain Vehicle
<b>DDH</b>	Diamond Drill Hole
<b>IP</b>	Induced Polarization
<b>VLF</b>	Very Low Frequency
<b>EM</b>	Electromagnetic
<b>GPS</b>	Global Positioning System

## 1. Claims

Mining Division: **Sudbury**

Township: **Louise** (MNDM# G-4076)

Cell Numbers:

**522463 522464 663216 663217 663218 663246 663247 663248**

## 2. Coordinate System

All maps displayed in: UTM NAD83 17N

### 3. Location and Access

Access to the property claim blocks is by taking Highway 55 from Sudbury, Ontario for 30.3 km to west of the town of Walden. Then South onto Panache Lake Road (Regional Road 10) for a distance of 7.2 km, north on Grassy Lake Road for .95 km, and finally, 1.9 km on Tower Road (a gravel road), until it ends at West Lake. The claims are accessed from foot from this point on. Figure 1: View of a 1:50,000 scale key map showing the cell claims in which the grass roots prospecting was done in relation to townships, major highways, First Nation lands, mining claims and bodies of water. Full sized map in Appendix A.

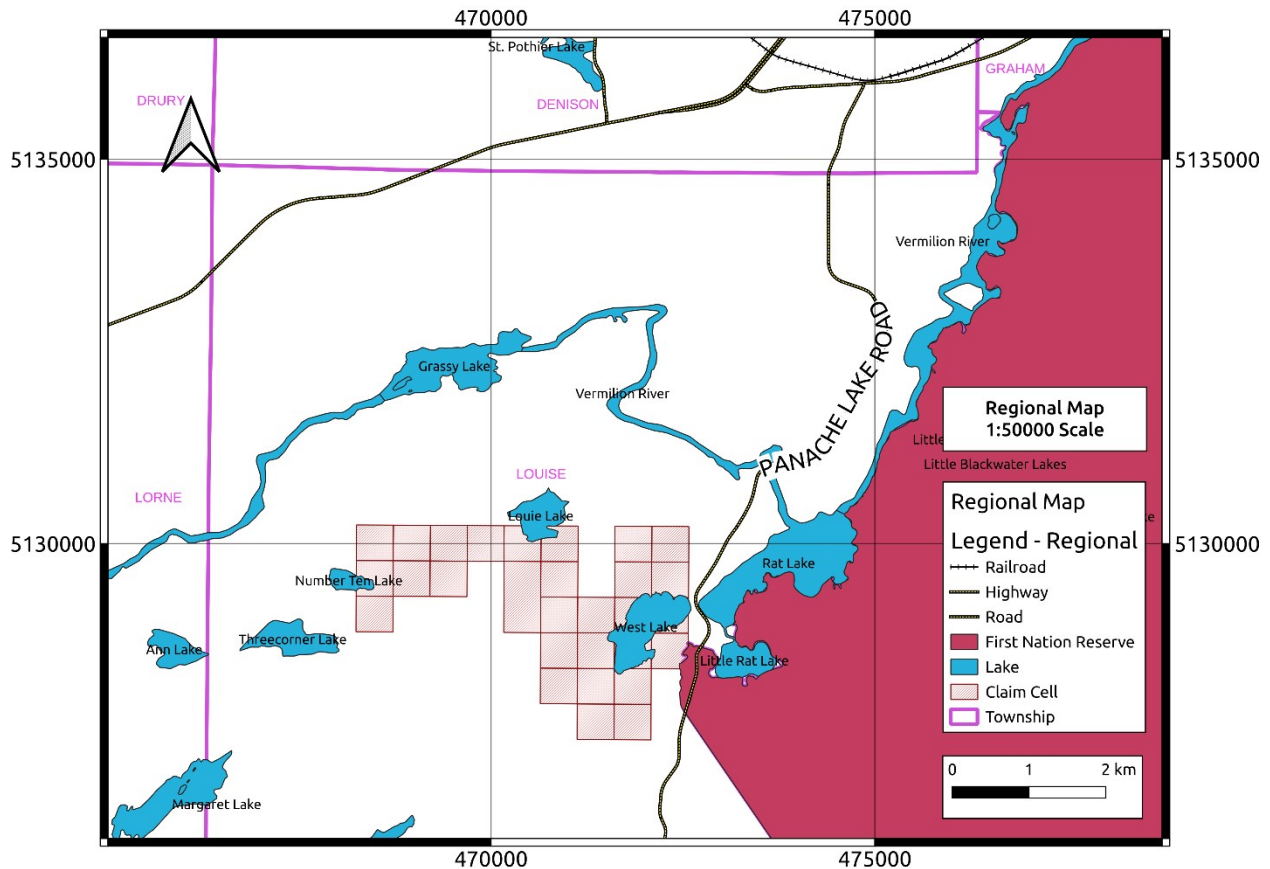


Figure 1: View of a 1:50,000 scale key map showing the cell claims in which the grass roots prospecting was done in relation to townships, major highways, First Nation lands, mining claims and bodies of water. Full sized map in Appendix A.

## 4. Personnel

Table 2: Complete list of all personnel participating in grass roots exploration activities.

First Name	Last Name	Phone	Email	Days Worked
Ben	Haavisto	705-918-1281	bhaavisto1@gmail.com	2
Aaron	Haavisto	705-207-5764	aaron.haavisto@gmail.com	2
Christopher	Mancuso	204-962-0359	cmancuso@laurentian.ca	2
John	Morgan	705-698-2053	john.morgan@imscanada.com	2
Kandice	Morgan	343-542-1315	k.morgan88@hotmail.com	2
Travis	Morgan	705-919-7824	simplydeaf@gmail.com	2
Robert	Palkovits	705-929-9173	rob@minexpgeo.ca	1

## 5. Regional and Property Geology

The West Lake property is located in the Southern Province of the Canadian Shield, near the Grenville Front to the south and the Sudbury basin to the north, and is underlain by Precambrian age rocks of the Nipissing Magmatic Province. This province is part of the Proterozoic Huronian Superground and stretches nearly 450 kilometres east-west and 350 kilometres north-south (Lightfoot and Naldrett, 1996). Gabbroic, tholeiitic, intrusive rocks collectively known as Nipissing Diabase cover more than 20% of this region and are intruding a sequence of quartzites arkoses and greywackes of the Mississaugi, Lorraine and Bruce formation. Nipissing Diabase intrusions created undulating sills, cone sheets or lopoliths, and dykes between Cobalt and Sault Ste. Marie and are likely the remains of an eroded Continental Flood Basalt system that occurred between 2206 Ma and 2223 Ma (Corfu and Andrews, 1986; Lightfoot et al., 1986).

Moreover, Nipissing Diabase intrusions are suggestive of an extensional environment favorable for the formation of significant concentrations of magmatic sulphide minerals rich in Cu-Ni-PGE (Jobin-Bevans, 2016). The Nipissing Diabase and the sills and intrusions that hold the rich Ni-Cu-PGE deposits in Noril'sk, Russia, share numerous geochemical and structural similarities (Lightfoot and Naldrett, 1996).

Additionally, this area host the best exposed bodies of fenite in Canada: The Nemag Lake and Kusk lake bodies. Each is approximately 0.5 km in diameter and irregularly shaped. They occur 5 km apart in the quartzites of the Mississagi Formation of the Huronian Supergroup, and consist of brecciated quartzite fragments cemented and extensively replaced by aegirine, riebeckite, and alkali feldspar. Carbonites associated with fenitisation emplace into extensional settings and range in age from Archean to recent. The fenitisation-type halos near West Lake are associated alkaline silicate igneous rocks and are prospective for rare earth elements (REE).

At property scale, the east-west Espanola Fault, dominates the length of the grid and is visible in outcrop along the length of the West Lake property. It is the area's primary structural feature and there are many splays that run north-east, the most notable of which being the break through tower mountain to Louie Lake.

## 6. Prior Work

- 1987 BP resources collected airborne magnetic and VLF data with a 125 m nominal line spacing (Report 2.11050).
- 1997 Ralph Huggins, P.Geol retained Timmins Geophysics to perform line cutting followed by magnetic and IP surveys.
- 1998 Ken Germundson PhD, P.Geol performed geochemical assays. Results reveal anomalous levels Pt, Pd, Ni and Cu elements.
- 2009 Ralph Huggins, P.Geol submits plan for further IP and EM prospecting (max/min). Data or results not recovered.
- 2018 BH reserves first claim cells in the West Lake property and grass roots prospecting begins (see previous reports).
- 2019 BH stakes 10 claims on property.
- 2021 BH stakes 6 claims on property.
- 2022 BH stakes 2 claims on property.
- 2023 BH transfers 9 staked claims on property from AH.

## 7. Description of Exploration Activities

### 7.1 Overview

In the May of 2023, the West Lake claims were explored two separate times. The activities of each day are detailed below with individual maps and tables. A 1:15000 scale map encompassing all activities is included in Appendix B.

### 7.2 Logs

#### 7.2.1 May 6, 2023

- 08:00 Aaron H. departs Sudbury, ON, to pick up Chris M. in Sudbury, ON
- 08:15 Aaron H. and Chris M. depart Sudbury, ON, for Whitefish, ON.
- 09:00 Aaron H. and Chris M. arrive at Whitefish and meet Ben H., John M., and Travis M. at Whitefish Residential Lot.
- 10:00 Aaron H., Chris M., Ben H., John M., and Travis M. drive to parking spot on Tower Road (A0). Meet Kandice M. to form complete crew.
- 10:22 Ben H. travels by quad while John M. shuttles Aaron H., Chris M., and Travis M. by Argo.
- 10:50 Arrive at Historical Pit (A1). John M. returns to parking spot to pick up Kandice M.



- 11:20 Sample AH230506-01 (A2). Gabbro with ~ 1% sulphide blebs (pyrite and chalcopyrite) ++ weathered ++ FeO
- 11:45 Aaron H., Ben H., Chris M., and Travis M. walk south to outcrop (A3). Fine grained gabbro that transitions to coarse grained gabbro with quartz infiltration. Minerology: Fine to coarse grain phenocryst and some Sericite. No magnetic minerals.
- 12:00 John M. and Kandice M. return to historical pit.
- 12:04 Crew rejoins at Historical pit and splits into two groups.

Aaron H., Ben H., Chris M., and Kandice M.

- 13:07 Aaron H., Ben H., Chris M., and Kandice M. descend hillside and reach shore of West Lake inlet on 663217. Hillside is too steep for equipment. Explore rock piles and several potential crevasses to walk up. Exposed rock piles have fallen from face of hill. Noted as Nipissing Diabase per geological map. Rock significantly jointed.
- 13:15 Rest
- 14:00 Ascend hill and follow rock outcrop at ridge of hill while returning to Historical Pit. Identified the formations as fine grained gabbro/metagabbro that aligns with the local historical geological mapping.

John M. and Travis M.

- 12:34 John M. and Travis M. walk North
- 12:48 Rock Outcrop (A4) – marked to return on next visit
- 13:31 Old cleared trail (A5)
- 14:02 Begin returning to historical pit.

Whole Crew

- 15:00 Aaron H. Lunch at Historical Pit
- 15:30 Start packing up gear.
- 15:45 Arrive at parking spot (A6). Load Argo and quad on trailer.
- 16:00 Crew departs to Whitefish Residential Lot to unload.
- 16:50 Aaron H. and Christopher M. departs Whitefish Residential Lot to Sudbury, ON.
- 17:50 Aaron H. and Christopher M. arrive in Sudbury, ON.

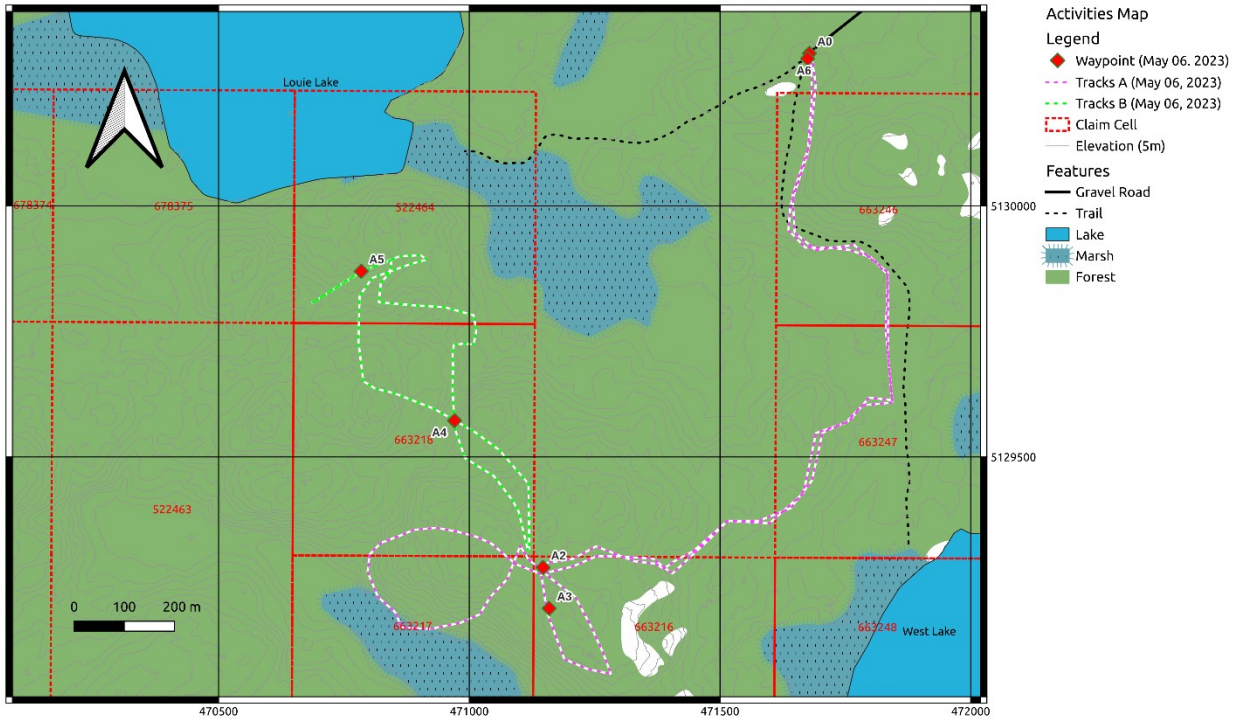


Figure 2: Map centered on area of all activities of grass roots exploration on May 6, 2023 as listed in Table 3. Bodies of water, forest cover and marsh extents compiled from interpretations of aerial photography, satellite imagery and field logs. Clear areas represent exposed bedrock.

Table 3: Waypoints added from grass roots exploration on May 6, 2023. Collected on Magellan eXplorist 310 GPS unit. Points displayed in Figure 2.

Time	Code	Comment
2023-05-06 10:00:06	A0	Parking at entrance to claims
2023-05-06 10:48:42	A1	Historical pit; vehicle stopping area
2023-05-06 11:20:23	A2	Sample 1; Gabbro; sulphide blebs
2023-05-06 11:46:21	A3	Outcrop; fine and coarse grained gabbro
2023-05-06 12:48:28	A4	Outcrop - marked to return on next visit
2023-05-06 13:31:39	A5	Old Cleared Trail
2023-05-06 14:44:17	A6	Parking at entrance to claims

### 7.2.2 May 22, 2023

- 07:58 Aaron H. departs Sudbury, ON, to pick up Chris M. in Sudbury, ON
- 08:13 Aaron H. and Chris M. departs Sudbury, ON, for Whitefish, ON.
- 08:44 Aaron H. and Chris M. arrive at Whitefish and meet Ben H., John M., Travis M., and Robert P. at Whitefish Residential Lot.
- 09:20 Leave Residence

- 09:34 Aaron H., Chris M., Ben H., John M., and Robert P. drive to parking spot on Tower Road (B0). Meet Kandice M. to form complete crew. Ben H. travels by quad while Aaron H. shuttles with Argo. John M. and Robert P. begin walking on trail.
- 10:18 Aaron H. drops Chris M., Kandice M. and Travis M. at pit. Aaron H. returns to pickup John M. and Robert P and drops them off in Claim 663216 to look at outcrops and historical work.
- 10:45 Aaron H. back at pit (B1). Aaron H., Ben H., Chris M., Kandice M., and Travis M. proceed West.
- 11:26 Rock Outcrop and Chris M. Sample 1 (B3); fine-grained gabbro; FeO +
- 12:00 Proceed West on foot.
- 12:26 Rock Outcrop, Chris M. Sample 2 (B4); coarse grained gabbro unremarkable for sulphides or oxides.
- 12:48 Rock Outcrop; Mineralogy fine to coarse grained gabbro - unremarkable, trace hematite. No sulphides, no magnetic minerals
- 12:59 Crossed old trail to fire tower (B5)
- 13:04 Rock Outcrop; Mineralogy fine to coarse grained gabbro - unremarkable, trace hematite. No sulphides, no magnetic minerals
- 13:08 Chris M. takes Measurements (B6); took structural strike and dip along planes of shear zone. Quartz veinlets throughout < 5mm width
- 13:55 Return to Argo and Quad. (B7)
- 14:27 Aaron H., Ben H., and Christopher M., meet John M. and Robert P. at base off trail and head to Parking by the Lake (B8). Kandice M. and Travis M. depart.
- 14:32 Claim 663248 High water (B9); inaccessible beyond end of road at lakeshore. Metasediment - Relict bedding tilted southward. Massive bedding younging south (?)
- 15:00 Arrive at parking spot (B10). Load Argo and quad on trailer. Crew departs to Sudbury, ON.
- 16:53 Aaron H. and Christopher M. arrive in Sudbury, ON.

John M. and Robert P.

- 10:42 Rock Outcrop
- 11:00 Rock Outcrop
- 11:05 Historical Pit Showing
- 14:24 At Base of Trail
- 14:27 Parking Spot

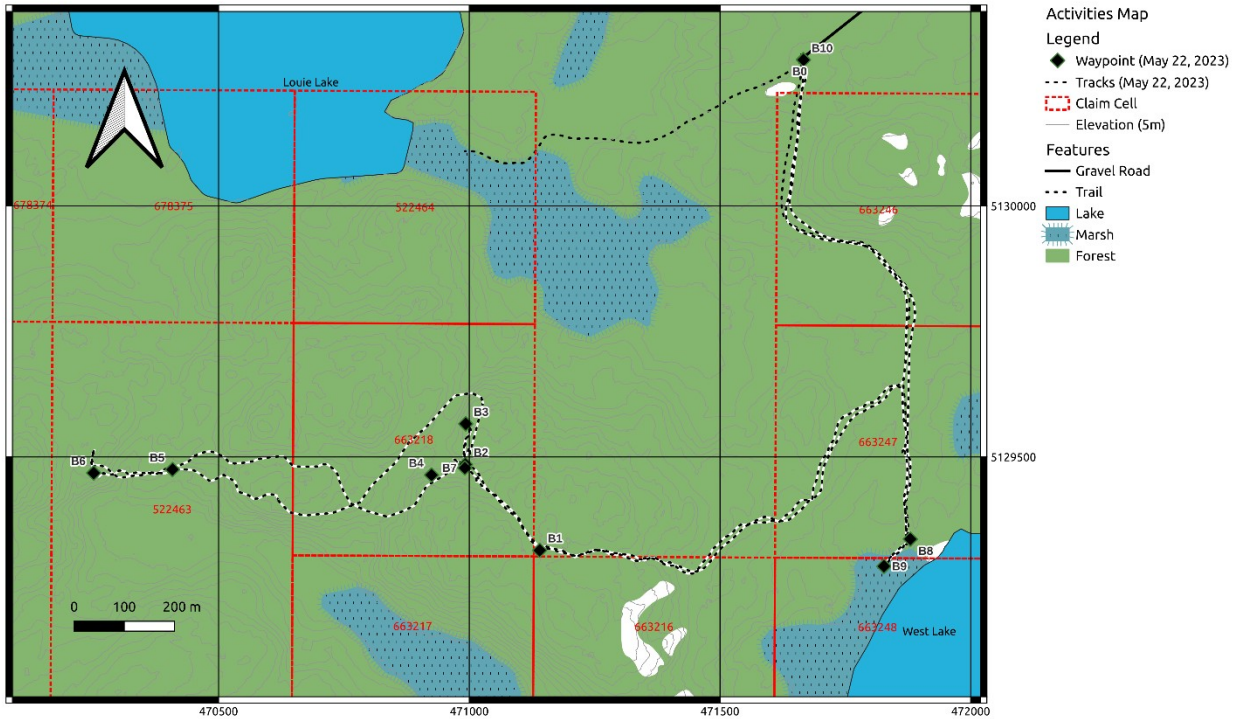


Figure 3: Map centered on area of all activities of grass roots exploration on May 22, 2023 as listed in Table 4. Bodies of water, forest cover and marsh extents compiled from interpretations of aerial photography, satellite imagery and field logs. Clear areas represent exposed bedrock.

Table 4: Waypoints added from grass roots exploration on May 22, 2023. Collected on Magellan eXplorist 310 GPS unit. Points displayed in Figure 3.

Time	Code	Comment
2023-05-22 09:41:21	B0	Parking at entrance to claims
2023-05-22 10:17:50	B1	Ore Showing
2023-05-22 11:09:31	B2	Outcrop; stopped to remove tree
2023-05-22 11:28:46	B3	Outcrop; steep cliff; fine-grained gabbro;sample 1
2023-05-22 12:26:11	B4	Outcrop; coarse grained gabbro;sample 2
2023-05-22 12:47:17	B5	Crossed old trail to fire tower
2023-05-22 13:08:19	B6	Fault; strike 205; dip 80 R
2023-05-22 13:55:12	B7	Vehicle stopping area
2023-05-22 14:27:43	B8	Parking at lake
2023-05-22 14:32:03	B9	Outcrop; shore; metasediments
2023-05-22 14:44:17	B10	Parking at entrance to claims

## 8. Rock samples collected

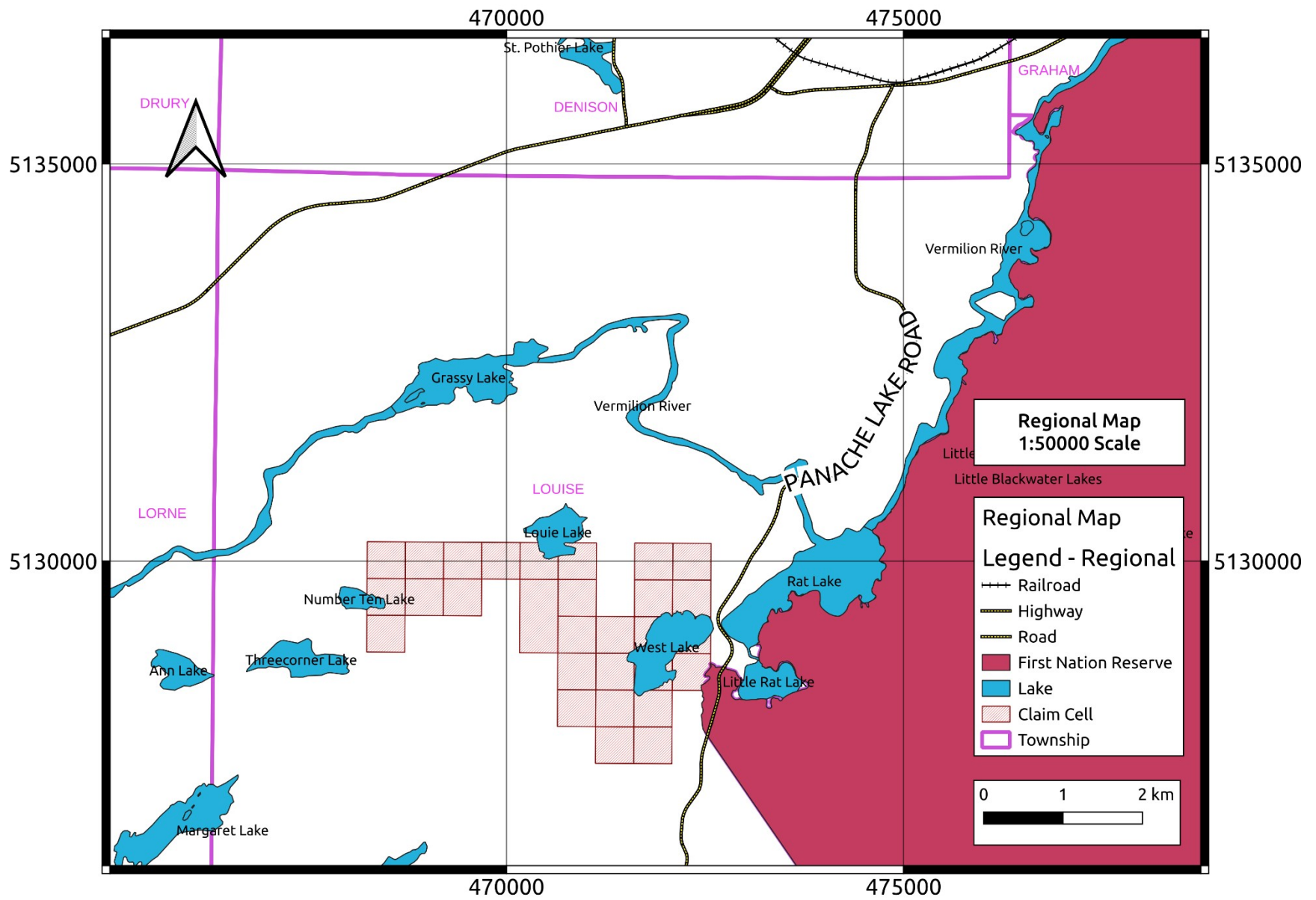
Hand samples were collected from unweathered faces of outcrops by removing them with a rock hammer. These were sealed in labelled polyethylene bags. Care was taken not to contaminate the samples with precious metals from jewellery.

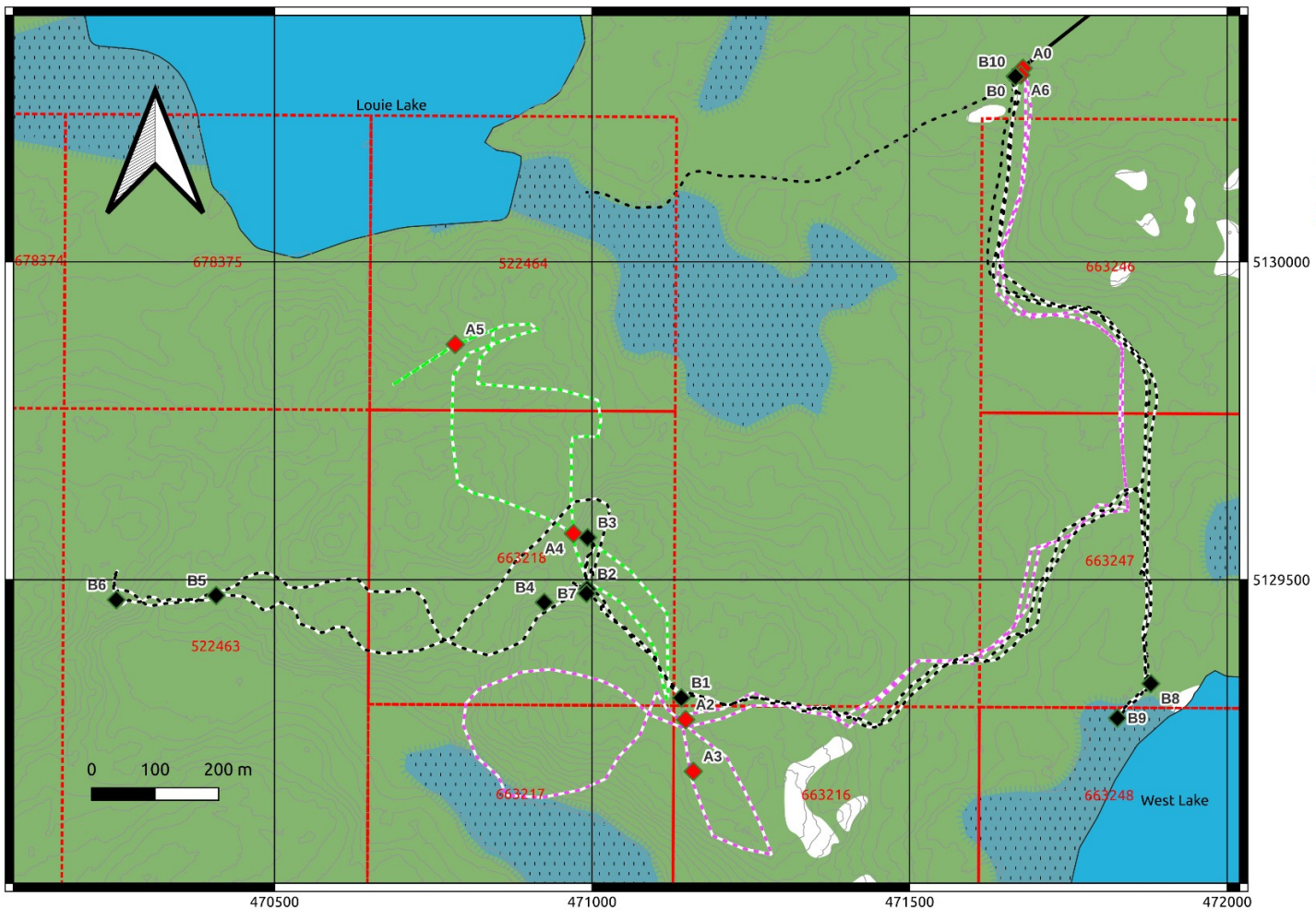
Table 5: Rock samples collected as part of grass roots prospecting of the West Lake claims. Codes are those listed in Tables 3 and 4.

ID	X	Y	Date	Time	Code	Comment
AH Sample 1	471147	5129279	May 6, 2023	11:20:23	A2	Gabbro; sulphide blebs
CM Sample 1	470992	5129566	May 22, 2023	11:28:46	B3	Gabbro
CM Sample 2	470924	5129464	May 22, 2023	12:26:11	B4	Gabbro

## References

- Corfu, F., and A. Andrews, 1986, Au–pb age for mineralized nipissing diabase, gowganda, ontario: Canadian Journal of Earth Sciences, 23, 107–109.
- Jobin-Bevans, L., 2016, Geochemical data related to a study of platinum group element mineralization in nipissing gabbro intrusions and the river valley intrusion, sudbury region, southern province: Ontario Geological Survey, Miscellaneous Release—Data, 336.
- Lightfoot, P., D. Conrod, A. Naldrett, and N. Evensen, 1986, Petrologic, chemical, isotopic, and economic potential studies of the nipissing diabase: Ontario Geological Survey Miscellaneous Paper, 130, 87–106.
- Lightfoot, P., and A. Naldrett, 1996, Petrology and geochemistry of the nipissing gabbro: Exploration strategies for ni, cu and pge in a large igneous province: Ontario Geological Survey Study 58, 80.







Log of Activities May 6, 2023 and May 22, 2023 for Claims  
552463, 552464, 663216, 663217, 663218, 663246, 663247,  
and 663248

May 6, 2023:

- Crew left home at 8:00
- Arrive at parking area at 10:00
- Crew performs grassroots prospecting over various claims as outlined in report
- Arrived at parking site at 15:45
- Per geologist's report, grab sample was taken and cataloged to review for further analysis. Several sites were assessed for geology as noted in technical report.
- Arrive back in Sudbury at 17:50

Claim for this date is \$350 per person per day  $\$350 \times 6$  is **\$2100**

May 22, 2023:

- Crew left home at 7:58
- Arrive at Whitefish at 8:44. Discuss plan for the day
- Arrive at parking area at 9:34
- Accessed claims by Argo and quad
- Crew performs grassroots prospecting over various claims as outlined in geologist's report. Two party members perform assessments for interest by junior mining exploration company. Their time was predominantly spent assessing the historical pit area and nearby features.
- Per geologist's report, grab samples were taken and cataloged to review for further analysis. Several sites were assessed for geology as noted in technical report.
- Travelled to southerly claim 663248 but minimal access was possible. Geological features noted based on what was accessible
- Arrived back at parking area at 15:00
- Arrive back in Sudbury at 16:53

Claim for this date is \$350 per person per day  $\$350 \times 5$  is **\$1750**

**Total for all dates is  $\$2100 + \$1750 = \$3850$**

**NOTE: No claim for the undocumented assessment around the Historical Pit by the junior mining exploration representatives is being made in this submission.**

Additionally, no claim is made for mileage or equipment usage.

Mileage for May 6, 2023:

Start: 83762

End: 83855

Total: 92.8km

Mileage for May 22, 2023:

Start: 84438

End: 85527

Total: 88.5km