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PACIFIC IRON ORE CORPORATION

Suite 1 – 1546 Pine Portage Road

Kenora, Ontario P9N 2K2

WITCH BAY PROPERTY GEOLOGY REPORT

CODE TOWNSHIP (G-1326)

Kenora Mining Division – 10 – Ontario

Map Reference: 52E/09SE

413260m E, 5495970m N

Prepared By

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Technical Mining Engineer

March 22, 2019

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PACIFIC IRON ORE CORPORATION

-WITCH BAY PROPERTY-

GEOLOGY REPORT

Code Township (G.1326)

NTS 52 E/09 SE

NAD 83, Zone 15

413260m E, 5495970m N

Kenora Mining Division – 10 – Ontario

Project/Property: Witch Bay – 1934 (Olympia – 1970)

Mineral Commodities: Gold, Copper, Silver

Mining Claim Cells: The original legacy claim K4260010 is converted to 17 mining claim cells – 116789, 179068, 195493, 232940, 261618, 298979 and boundary claims 116790, 121071, 121072, 160211, 195494, 214168, 232941, 269579, 281678, 328749 and 340610.

Claim Ownership Status: 100% Pacific Iron Ore Corporation (Client #406253)

Date of Field Surveys: May 18th to 22nd, 2018

Location: Code Township (G-1326)

Latitude: 49 deg 36.634 min W **Longitude:** 94 deg 11.962 min N

Resident Geologist District: Kenora – 10

Access: The property is accessed by Hwy # 17 and south down Hwy # 71 to the signed Witch Bay Road turn off @ GPS 415727 m E, 5500590 m N. Travel south down the Witch Bay/Wendigo

Mine turn off @ 414537m E, 5496746m N. At this junction drive southward to the entrance road @ 413917m E, 5496084m N to the mine shafts and clearing on the south side of Kite Lake @ 413260m E, 5495970m N.

The mine property is about 28km southeast of the City of Kenora - Fig. 1: Regional Map.

Vegetation:

The vegetation is a mixture of jack pine; spruce; hemlock; poplar; white birch, and low bush juniper, alder and Manitoba maple. A second phase of logging is presently being conducted in the general vicinity.

Summary of Exploration Mining History:

The Witch Bay Mine was discovered in the early 1930's, just south of the shore of Kite Lake. The Ontario Government reported gold assays from 8.2 to 29.5 g of gold per mt across a 0.33 m wide quartz vein in a narrow shear zone. The strike length of the easterly trending zone is approximately 240m. Sulphides of pyrite, pyrrhotite and chalcopyrite are present.

Within the immediate area are an additional 2 past producing gold mines, the "Wendigo and Triggs".

1/. Approximately 2.5km to the southwest is the site of the past producing Wendigo Gold-Copper Mine. This was the second largest gold producer in in North Western Ontario next to the St. Anthony Gold Mine. The Wendigo was in operation between 1899 to 1943 producing 67,000 oz of gold, 14,760 oz of silver and 1,866,246 lb of copper from a milled 206,504 tons. The average oz gold grade of the milled ore was 0.33. (MNDM Mineral Deposit File: MD15E09SE0003)

2/. About 2.8km to the east lays the Triggs mine site. In 1897 to 1900, the Company sank 2 shafts and performed surface work. Within 2 quartz veins in shear zones, assays have returned gold values of over 1.0 opt. (MNDM Mineral Deposit File: 152E0900034)

Regional/Area Geology: Fig. 3: Regional Geology Map

The Witch Bay property lies in the "Gibi Lake Area" which comprises the eastern part of the Lake of the Woods Metavolcanic-Metasedimentary Belt within the western part of the Wabigoon Sub-province of the Superior Province.

The geological belt consists generally of easterly to north-easterly isoclinally folded met-volcanics and meta-sediments intruded by mafic to ultramafic and intermediate to felsic intrusions. An example is the gold-copper mineralization at the Wendigo Mine associate with folded, differentiated and ultramafic to mafic intrusions and extrusions. The Mine development lies on the outside of the south limb of a large "S" fold structure.

The vast majority of the various rock units have been metamorphosed from the greenschist to lower amphibolite.

These ultramafic to mafic units were later intruded by granite; example, the Dryberry Batholith which deformed and re-oriented the earlier developed isoclinal and anticlinal folds.

The area's major shearing/faulting is east and north-easterly with minor sets striking north-westerly.

Area's Exploration History:

Historically, the area was prospected for gold during the late 1800's continuing into the early 1930's. This resulted in 4 gold discoveries: the Stella is 2.2 kilometres to the west, Triggs, Wendigo and Witch Bay mines. Considerable trenching and underground work was performed at all the noted sites. The Wendigo Mine was the only gold-copper producer in the area.

After the former years of prospecting and mine development; exploration activities in the area has been sporadic. Work consisted of additional pitting, trenching, geological mapping, drilling, assays and geophysics.

Witch Bay Mine History:

The Witch Bay Gold Mine (1934) is situated about 30m south of Kite Lake. The main showing consists of a lenticular mass of white quartz occupying a shear zone in basalts. The exposed zone has a length of about 280 feet striking 085 degree azimuth and dipping 45 to 70 degrees to the south. The surface width of the quartz bearing zone is +/- 0.5 m. Three shafts were sunk on the vein system starting with No. 1 on the west, followed by No. 2 and 3 on the east. No. 2 had the best gold encouragement. A mill plant was installed but work was discontinued in the winter of 1935.

South of this quartz bearing fault is a well pronounced rusty shear zone in basalt striking 060 degrees azimuth dipping 57 to 80 degrees north-west. The No. 4 shaft was developed at the south end.

Between 1950 and '53, Rexora Mining Corp. Ltd conducted prospecting, 344 m of diamond drilling from 10 holes, trenching, sampling and a bulk sample. In 1970 Olympia Mines Inc performed 152m of drilling from 3 holes. Dome Exploration Canada Ltd (1972-74) carried out an airborne Mag and EM geophysical of the area. In 1984, Mistango Consolidated and Goldstreet Resources Ltd carried out an additional airborne geophysical survey followed in 1985 with geological mapping, ground VLF EM survey and 2 drill holes totalling 170m. Reported stripping, trenching and sampling in 1990-92. 2002, G.E. Pogson conducted sampling. In 2011 Pacific Iron Ore Corporation carried out prospecting and sampling. Nuinsco Resouces Inc in 2011 optioned Pacific Iron's claim; however, with the takeover by NuGold the option was dropped due to financial reasons.

As a note, Canadian Nickel Company Ltd (Fort Knox Resources) in 1987 performed geological mapping, rock assaying and geophysical work north of the Witch Bay Mine.

Field Survey:

Five geological field days were spent in traversing Pacific Iron Ore Corporation's (PIOC) Witch Bay Property. The date of the property evaluation was from May 18th to May 22nd, 2018.

Three geological units of Archean Precambrian age dominate the property, as follows:

- 1/. The northern portion of the property is occupied by the intrusive Dryberry Batholith. The intrusive body is biotitic, medium grained, equigranular and pink to red in colour.
- 2/. South of the inter-fingering Dryberry Batholith is the north-easterly striking gabbroic unit with a thin veneer of peridotite which underlies the gabbro's eastern flank. The gabbro is massive, equigranular, medium to coarse grained and green to dark green in colour.
- 3/. Underlying the peridotite are basalts. These basalts consist of massive porphyritic (plagioclase crystals) flows and pillows. They are dark green to green ad fine grained. These volcanic rocks comprise the majority of the property of the south-easterly portion of the property.

The bedding contacts strike +/- 050 degrees azimuth and dip about 70-80 degrees facing south-east. In most cases, the individual contacts are marked by an escarpment.

On re-examining # 2 shaft at the Witch Bay Mine, the shaft is collared on an east trending +/- 1.5m wide shear in basalt. The quartz-calcite vein lenses are fractured and annealed with sulphides of chalcopyrite, pyrite and pyrrhotite.

Field Diary:

The geological field review on the Witch Bay Property started on the following dates:

1/. Friday, May 18th, 2018 - The weather was cool about 4 degrees C, light rain and cloudy. I left Kenora at 10 am arriving and parking at the Witch Bay Mine site (GPS 413260m E, 5495970m N) shortly before 11 am. Proceed west to the claim line and adjoining claim posts @ 413089mE, 5495993m N. At this point walked north to PIOC's claim post #4 @ 413031m E, 5496486m N noting the geology. Walked south-east noting outcrops to 413145m E, 5496388m N. Turned south-west and traverse back to the western claim boundary @ 413038m E, 5496303m N. Proceeded south down the line to the road. From that point I walked to a 4x3x3m deep prospecting pit on a 090 degree azimuth narrow sheared gabbro, dipping 75 degrees south. This 20 to 30 mm quartz-calcite veinlet contained 2-3% pyrite, pyrrhotite and chalcopyrite. Previously assayed - sample #57903 - returned 1.375 ppm Gold. After the re-examination of the site returned to the vehicle arriving back at Kenora @ 5 pm. Seven (7.0) hours of time plus 94 km of travel.

2/. Saturday, May 19th, 2018 – The weather was warm around 20 degrees C, sunny with erratic clouds. Left Kenora at 8 am arriving and drive to Mine entrance road and parked @ 413819m E, 5496041m N. Walked west to the Mine stopping particularly @ 413449m E, 5495929m N. The interest at this stop is a low valley area overburden trending +/- 220 degrees azimuth. Still proceeding west stopped at a pit on the north side of the road @ 313320m E, 5495968m N. This pit is the obvious extent of early stripping east from the # 2 shaft along the shear zone. Walked back to the vehicle which was sitting on sheared mafic volcanics. From this point walked east across the Witch Bay/Wendigo Road to mafic outcrop @ 414280m E, 5496075m N which strikes 045 degrees. The next stop was in a valley @ 414282m E, 5496069m N with similar strike trend. The next stop on top of a large mafic outcrop @ 414379mE, 5496046m N. Still traveling easterly came to an escarpment @ 414471m E, 5496007n N. The cliff is trending about 040 degrees. From this point, traversed northerly to stop @ 414470m E, 5496232m N, on same mafic outcrop. Turned west and proceed back into the valley bottom @414420m E, 5496241m N. The next station on top of earlier noted mafic outcrop @ 414382m E, 5496252m N. Walked down into a low area @ 414182m E, 5496244m N. To the north-east is a small tear drop lake. After clearing this site continued to the stated road @ 414125m E, 54962300m N. From this point walked south to the parked vehicle. Returned to Kenora by 8:30 pm. Twelve and a half hours (12.5 hours) of time plus 92 km of travel.

3/. Sunday, May 20th, 2018 – The weather was warm about 20 degrees C, sunny with odd

clouds. Left Kenora at 8:30 am driving and stopping across from # 3 claim post @ 412988m E, 5495119m N on the Witch Bay/Wendigo Road. Walked east following the claim line stopping at the Hook Lake southerly flowing creek – 4133654m E, 5495062m N. Continued east along boundary line coming upon the north side of small circular mafic outcrop @ 413926m E, 5495039m N. Further east crossing over another mafic outcrop ending on the west edge of a low swampy area @ 414373m E, 5495038m N. At this point turned around and walked back to the vehicle. This line is bush thick slowing the pace of travel. Drove back to Kenora arriving at 6:00 pm. Nine and a half hours (9.5 hours) of time plus 96 km of vehicle travel.

4/. Monday, May 21st, 2018 – The day's weather was quite similar to the previous day. Left Kenora at 8:30 am and returned to the location of the # 3 claim post on the east side of the Witch Bay/Wendigo Road. Following the blazed claim line north stopped on top of a small pimple of a circular mafic outcrop topped by dead tree blowdown – 413000m E, 5495343m N. Narrow valleys are on both sides of this outcrop. The noted direction of the narrow valley strikes north-easterly. Still heading north stopping @ 413002m E, 5495496m N on mafic outcrop. Turning east traversed to a narrow valley @ 413104m E, 5495473m N. This is the same linear feature which heads north easterly to the Witch Bay Mine Road as noted on the Saturday stop. Still heading east crossing over mafic outcrop came to the Witch Bay/Wendigo Road @ 413413m E, 5495501m N. From this spot waked about 600m back to the vehicle noting bedrock along the way. Returned to Kenora by 5:30 pm. Nine hours (9 hours) of time plus 97 km of vehicle travel.

5/. Tuesday, May 22nd, 2018 – The day was quite warm around mid-20 degrees C sunny with the odd cloud. Left Kenora at 9:00 pm and drove to the # 1 claim post. After parking, walked south down the power line following original claim boundary stopping @ 414702m E, 5496310m N. (As a note, a quartz sample was found bearing gold by a staff member from the MNM Kenora Resident office in 2017.) Still proceeding south entered a low wet area with south flowing stream. This is the take off point for the continuation of the claim line across Hook Lake. At this station headed west through a low wet area hitting mafic outcrop @ 414653m E, 5495929m N. Still on a westerly course stopped @ 414516m E, 5495953m N at the ravine and edge of previously noted outcrop escarpment noted on the above Saturday traverse. Following the first encountered outcrop north-easterly came out on the west side of the power line @414683m E, 5496403m N. The fault zone continuous on into the adjoining property. From this point waked about 400m back to the vehicle. Returned to Kenora arriving by 5:30 pm. Eight and half hours (8.5 hours) of time plus 89 travel kilometres.

Over the five (5) days of field surveys, the total number of hours is 46.5. The sum of vehicle travel is 468 kilometres.

Comments:

The sole purpose of the field examination was to identify shear/fault structures on the Witch Bay property. All the known gold occurrences and past producing mines, in the surrounding area, are associated with shears. They have a common identity of being narrow to moderate wide zones. Enveloped within the shears are sporadic/erratic pods of thin (- +/- 0.6m wide) of remnant quartz veins and veinlets. In all cases, the quartz has been ground up and annealed with sulphides of pyrite, pyrrhotite and chalcopyrite along with significant inclusion of gold. In numerous cases, the gold is visible assaying well into the high ounce range.

Conclusion:

- 1/. At the moment, gold discoveries in this area are associated shear/fault zones.
- 2/. The source of the gold and copper is unknown; however, there may be an association between the Wendigo peridotite sill to the southwest and the Dryberry Batholith Intrusion on the north. The interaction between the systems may have resulted in the remobilization of the metals along stress zones. Also, the intrusive south flank of the Dryberry may be more flat lying and the volcanics a veneer. This is a suggested field of study.
- 3/. The shears are brittle zones and indicate at least secondary movement. The direction of their movements are not clear.

Recommendations:

Since, the property has been reviewed by standard exploration methods, the explorers have come up short. Also, we know the association between gold and shear structures. Also, we know the zones appear in valleys and are overburden covered.

Therefore, I highly recommend a soil/botany chemistry project which is comprised of short grid linear pattern that straddles the width and length of the shear zones. If I am correct, this method of exploration should be successful in delineating gold anomalies, the prime target of economics.

Alasdair J.M. Mowat
Technical Mining Engineer

March 22nd, 2019



Fig. 2: PIOC's Witch Bay Claim Group

Notes:

52E09G206	52E09G207	52E09G208	52E09G209	52E09G210	234212 52E09G211	341904 52E09G212	290317 52E09G213	122373 52E09G214	290316 52E09G215	52E09G216		
179703 52E09G226	160861 52E09G227	160860 52E09G228	52E09G229	52E09G230	290319 52E09G231	122374 52E09G232	290318 52E09G233	234213 52E09G234	161498 52E09G235	52E09G236		
52E09G246	101505 167566 179704 52E09G247	269579 195545 341252 52E09G248	340610 52E09G249	121072 52E09G250	52E09G251 161500 121071	52E09G252 214168 161499	52E09G253 196252 101745	52E09G254 259547 PAT-52105 101744	52E09G255 203462 52E09G256	322342		
234247 52E09G266	52E09G267 214984 167567	52E09G268 166285 328749	232940 52E09G269	298979 52E09G270	52E09G271 341905 281678	234214 52E09G272	52E09G273 282991 101718	52E09G274 117214 196265	52E09G275 211555 PAT-6685 PAT-40364	266244		
PAT-6673	52E09G286	52E09G287	116790 52E09G288	CODE 179068 52E09G289	116789 52E09G290	232941 52E09G291	52E09G292	52E09G293	PAT-40175 PAT-40176 337308	PAT-40363 161176 52E09G295	130496	
PAT-17039	539397	52E09G306	52E09G307	195494 52E09G308	261618 52E09G309	195493 52E09G310	160211 52E09G311	52E09G312	213184 52E09G313	250414 52E09G314	176332 52E09G315	195199
PAT-17062 PAT-17042 PAT-17064	52E09G326	52E09G327	52E09G328	52E09G329	52E09G330 PAT-45540	PAT-5578 PAT-5576 52E09G331	PAT-5576 52E09G332	PAT-45539 52E09G333 PAT-45538	194526 52E09G334	213185 52E09G335	309684	
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52E09G366	52E09G367	52E09G368	52E09G369	52E09G370	52E09G371	52E09G372	52E09G373	52E09G374	52E09G375	52E09G376		

Legend

Provincial Grid Cell

- Available
- Pending
- Unavailable

Mining Claim

Mining Lease

- Surface Rights Only
- Mining Rights Only
- Surface and Mining Rights

Mining Licence of Occupation

- Surface Rights Only
- Mining Rights Only
- Surface and Mining Rights

Mining Patent

- Surface Rights Only
- Mining Rights Only
- Surface and Mining Rights

Mining Division

MNDM Townships and Areas

Alienation

- Withdrawal
- Notice

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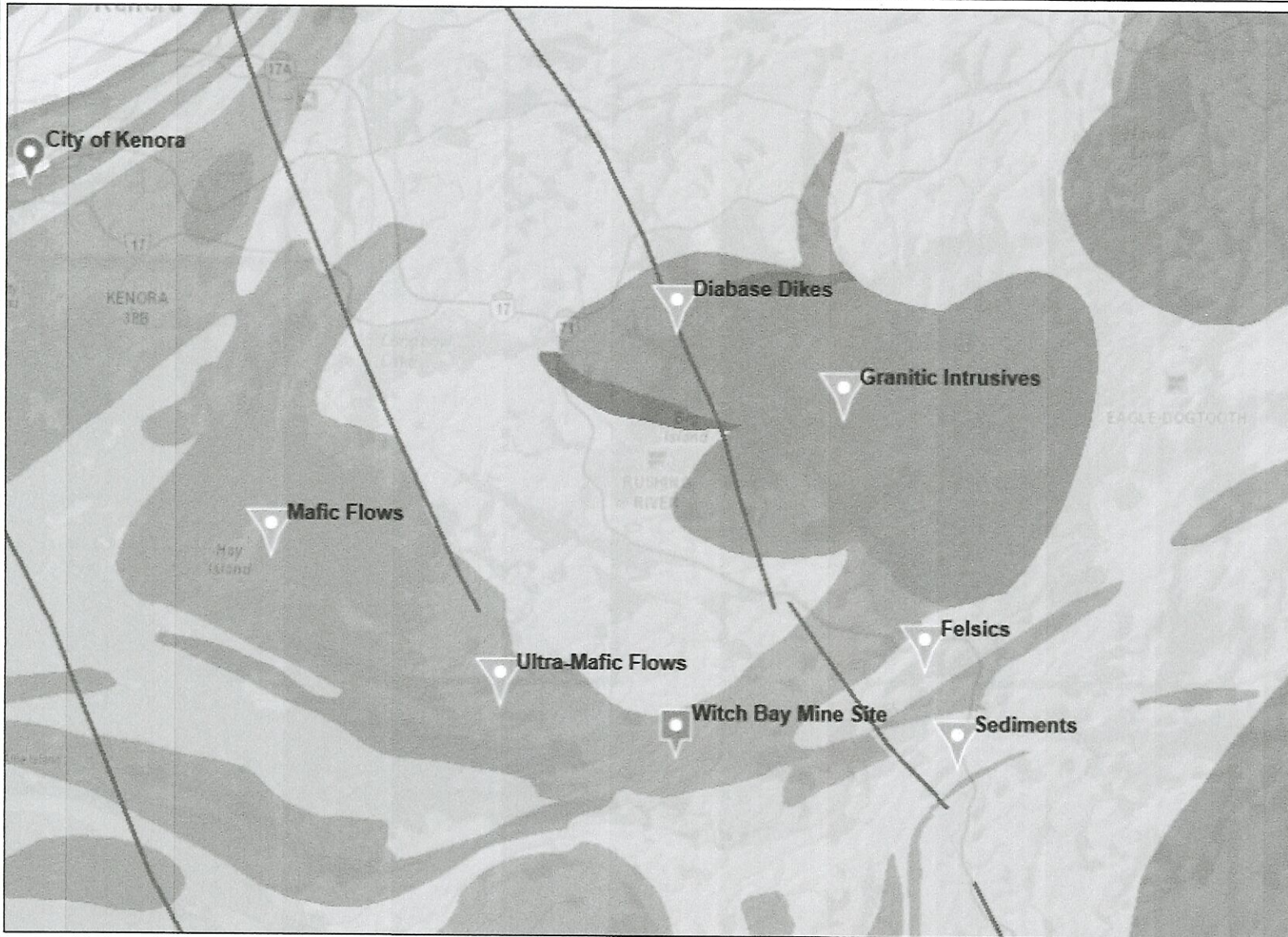
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Legend

Dikes Lines

- unknown
- 37
- 37a
- G37a
- G37b
- 34
- G34a
- G34
- 34a
- 34b
- G34b
- 34c
- G34c
- 34d
- 34e
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- G26d
- 26e
- 23a
- G23a
- 23b

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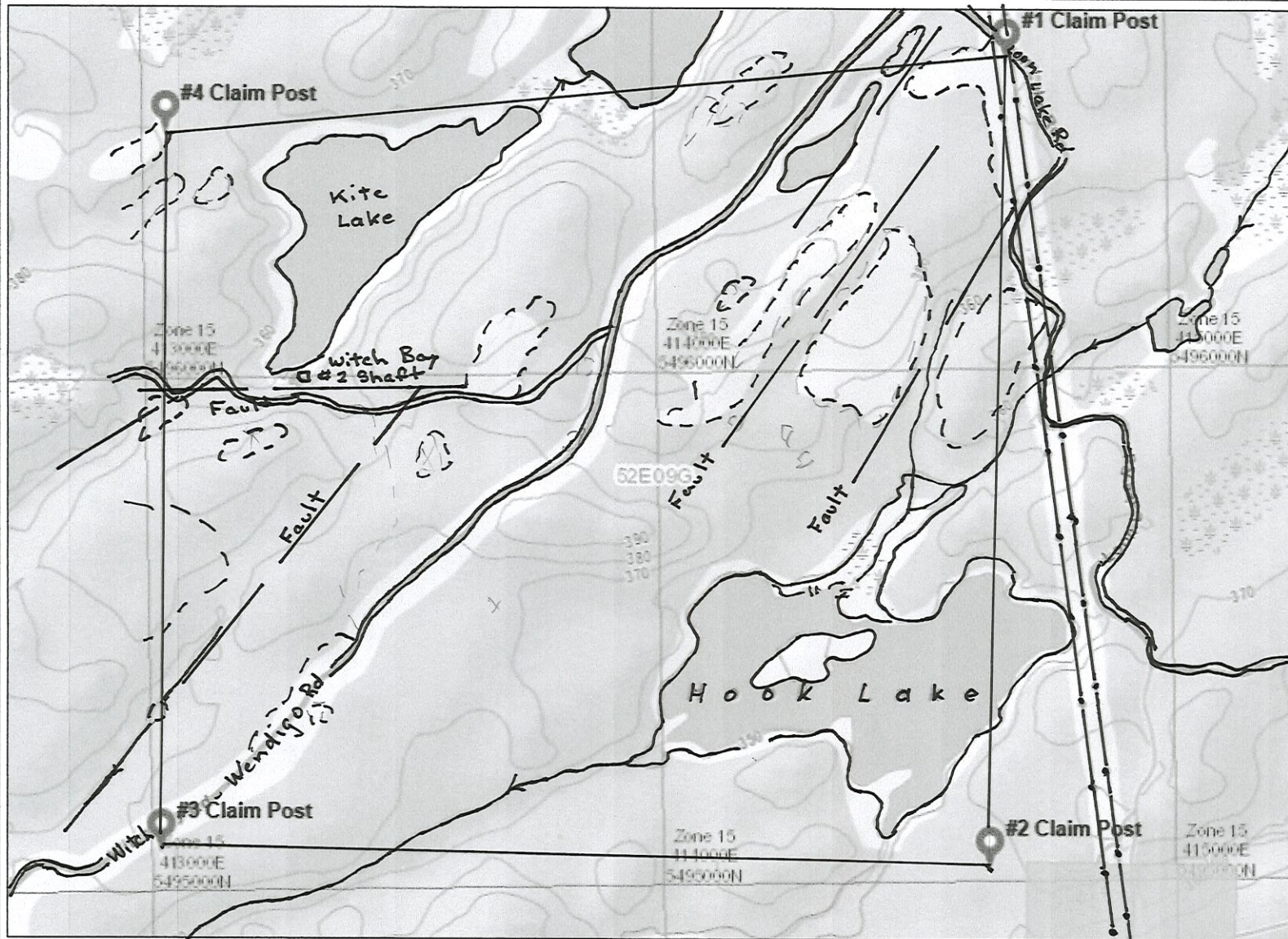
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Legend

- Provincial Grid Group
- Non-Mining Land Tenure
 - Patent, Surface Rights Only
 - Patent, Mining Rights Only
 - Patent, Surface and Mining Right
 - Lease, Surface Rights Only
 - Lease, Mining Rights Only
 - Lease, Surface and Mining Rights
 - Water Power Lease Agreement
 - Licence of Occupation, Surface Rights Only
 - Licence of Occupation, Surface and Mining Rights
 - Order-in-Council
- UTM Grid Labels 1K
 - UTM Grid 1K
 - Indian Reserve
 - Federal Land Other
 - CLUPA Protected Area - Far North



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