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42C13SE0062 63.5872 WHITE LAKE (NORTH)

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REPORT
ON
1990 PROSPECTING PROGRAM
OF
DANIEL AND GERRARD CARROLL

THUNDER BAY MINING DIVISION
HEMLO AREA, ONTARIO

October 30, 1990
Toronto, Ontario

E. A. Gallo, B.Sc., F.G.A.C.
Gallo Exploration Services Inc.

OP90-3164817

INTRODUCTION

Mr. Daniel Carroll of 190 MacDonald Ave., Sault Ste. Marie, Ontario P6B 1H5 (Ph. 705-256-7622) holds 26 claims in three groups in the Hemlo area of Ontario. The properties have been termed the Spruce Bay, Graphite, and Patio Lake Groups. The Spruce Bay Group is a copper-zinc prospect with significant potential for gold. The Graphite Group is a gold prospect with significant potential for copper and zinc. The Patio Lake Group is primarily a gold prospect.

During the 1990 field season, Mr. Carroll and his prospecting partner, Mr. Gerrard Carroll, completed a program of basic prospecting, overburden stripping, rock trenching, and sampling on each of the three properties.

This Report provides details of the work performed, discusses the results obtained, and makes recommendations regarding further work.



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TABLE OF CONTENTS

INTRODUCTION	i.
LOCATION AND ACCESS	1.
CLAIMS DATA	3.
GENERAL GEOLOGY	3.
WORK COMPLETED DURING 1990 PROSPECTING PROGRAM	3.
RESULTS OF 1990 PROSPECTING PROGRAM	5.
CONCLUSIONS	10.
RECOMMENDATIONS	11.

LIST OF TABLES

I - SAMPLE DESCRIPTIONS AND ASSAY RESULTS	6.
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LIST OF FIGURES

I - GENERAL LOCATION SKETCH	2.
II - OMNR CLAIM PLAN G-622	Pocket
III - OMNR CLAIM PLAN G-623	Pocket
IV - PLAN OF STRIPPING AND TRENCHING	Pocket
V - LOCATION OF SOIL AND ROCK SAMPLES	9.

LIST OF APPENDICES

I - ASSAY CERTIFICATES	12.
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LOCATION AND ACCESS

All 3 properties are situated at the east end of the Hemlo-Heron Bay greenstone belt, in the area around White Lake. Figure I shows the general location of the 3 properties.

The Spruce Bay Group and the Graphite Group lie on the west and east sides of White Lake, respectively. Their locations are shown on Figure II, OMNR Claim Plan G-622, Area of White Lake (North Part).

The Spruce Bay Group is easily reached by boat on White Lake. From the public boat launching facility on the west shore of the lake, north of Trans Canada Highway 17, one travels northwards through The Narrows and then northwestwards for a total distance of 11.3 kilometers (7 miles) to Spruce Bay on the west side of White Lake. A cut trail leads westwards from the shore of Spruce Bay for 0.5 kilometers (0.3 mile) to the north-east tip of a small, un-named lake where the work was done.

The Graphite Group is also easily reached by boat on White Lake. From the same boat landing, one travels northwards through The Narrows, then northeastwards for a total distance of 5.6 kilometers (3.5 miles) to the first large bay north of Crab Rocks on the east side of the lake. One then walks eastwards along the shore of this bay for 0.6 kilometer (0.4 mile) to a cut trail which continues eastwards for a further 0.3 kilometer (0.2 mile) to the work site. A second work site on the Graphite Group is also reached by boat. From the same landing one travels northwards through The Narrows to the east shore of the lake opposite Crab Rocks, where a witness post stands prominently. A trail from this post leads southeastwards for about 50 meters (165 feet) to the work site.

The Patio Lake Group is located on the west side of Patio Lake as shown on Figure III, OMNR Claim Plan G-623, Area of White Lake (South Part).

FIGURE I



LOCATION SKETCH

SPRUCE BAY, GRAPHITE, and PATIO LAKE CLAIM GROUPS

DANIEL and GERRARD CARROLL

SAULT STE. MARIE, ONTARIO

Approximate Scale: 1:10,500,000 or 1"=167 Miles

Date: October 30, 1990

The Patio Lake Group is reached by a good walking trail which leads northwestwards from the North Regan Road at its junction with Highway 17. After travelling about 1.8 kilometers (1.1 miles), the latter portion under a power line, the trail leads to the south end of a long, narrow lake, locally known as Finger Lake. One can either boat northwards up this lake, or walk along its east shore, for about 1.5 kilometers (0.9 mile) to a cut trail which leads northeastwards for 120 meters (400 feet), and a further 300 meters (1,000 feet), to the 2 work sites.

CLAIMS DATA

The Spruce Bay Group consists of 4 contiguous claims numbered TB 1097947 - 50, inclusive.

The Graphite Group consists of 16 contiguous claims numbered TB 1097889 - 96, inclusive, and TB 1098352 - 59, inclusive.

The Patio Lake Group consists of 4 contiguous claims numbered TB 1098581 - 84, inclusive.

The 3 claim groups are shown outlined in red on Figures II and III.

GENERAL GEOLOGY

The 3 properties are underlain by generally NW-SE trending Archean clastic metasediments, with minor interbedded volcanoclastics and mafic metavolcanics. Archean feldspar porphyritic rocks and diabase dikes intrude this assemblage. This geologic environment appears to be generally similar to that at Hemlo, where Muir (1984) describes the gold mineralization as occurring in Archean volcanoclastic rocks where they undergo a facies change to clastic metasediments. Muir goes on to say that quartz-feldspar porphyry bodies and diabase dikes, also Archean in age, intrude this sequence. The mineralization itself is described as consisting primarily of pyrite, gold, and molybdenite, with associated sericite alteration and local green mica.

WORK COMPLETED DURING 1990 PROSPECTING PROGRAM

The 1990 work program consisted mainly of basic prospecting and rock trenching. Overburden was stripped from outcrop areas of interest, and access trails were cut to the mineralized showings.

Basic prospecting commenced in mid May, and was initiated on the Patio Lake Group. The technique employed was to systematically run traverse lines, generally at right angles to the strike of the strata, at varying intervals averaging about 60 meters (200 feet). The pace and compass method was utilized. A total of approximately 300 samples were collected during the course of prospecting.

Prospecting on the Spruce Bay Group commenced September 2, 1990. Four man-days were spent prospecting, during which time approximately 5 kilometers (3 miles) of cumulative, pace-and-compass lines were traversed.

Prospecting commenced on the Graphite Group on August 5, 1990. Twenty man-days were spent prospecting this property, during which time a total of 50 kilometers (30 miles) of lines were traversed.

Prospecting on the Patio Lake property was initiated May 15. Four man-days were spent prospecting the Patio Lake Group, during which time approximately 5 kilometers (3 miles) of lines were traversed.

During the prospecting portion of the field work, known mineralized zones of interest were re-located on each claim group, and new zones of mineralization were found. Access trails were cut, brushed out, and flagged to these sites to facilitate the carrying of tools, equipment and materials to them. A total of 7 man-days were spent cutting 0.7, 0.6, and 0.3 kilometer (0.4, 0.4 and 0.2 mile) of access trails to the Spruce Bay, Graphite, and Patio Lake Groups, respectively.

After the access trails were cut, hand stripping of overburden from the mineralized zones commenced. Two man-days were spent removing moss, soil, roots and gravel from the Spruce Bay mineralized showings. Fourteen man-days, and two man-days were spent removing overburden from the Graphite Group and Patio Lake Group showings, respectively. The locations and extent of the overburden stripping operations are shown on Figure IV.

Following the stripping of overburden from the main showing (Area of Trenches 1, 2, and 3) on the Graphite Group, a high-pressure water pump was used to clean the rock surface, to permit detailed geological mapping and selection of rock trenching sites. A Honda water pump, model WH20X, with a capacity of 500 litres (106 Imperial gallons) per minute was utilized, together with standard 3.75 cm (1½ inches) diameter fire hose. Three man-days were spent washing on the Graphite Group.

Rock trenching was performed on all 3 claim groups. A Pionjar combination drill-breaker, model 120, with a maximum drilling

depth capability of 6 meters (20 feet) was used. Holes of approximately 3.8 cm (1½ inches) diameter were drilled, to depths of 1.2 meters (4 feet). The holes were loaded with 20 cm. (8 inches) long sticks of 75% forcite dynamite and blasted. A total of 3 cases (approximately 480 sticks) of dynamite were used, plus about 20 Magna-pacs. Figure IV shows the locations and sizes of the rock trenches.

On the Spruce Bay Group, approximately 72 holes for a total length of 88 meters (290 feet) were drilled to excavate 8 separate trenches in 4 different areas. Ten man-days were spent drilling, blasting, hand mucking, and sampling these trenches.

Approximately 120 holes for 146 meters (480 feet) were drilled to excavate 4 separate trenches in 2 different areas on the Graphite Group. Forty man-days were spent in this endeavor.

Two rock trenches were blasted on the Patio Lake Group, each in a different area. Twelve man-days were spent drilling 49 holes for a total length of 60 meters (197 feet).

After the rock trenches were blasted, they were mucked out by hand, washed down, geologically mapped, and sampled. The results of the geological mapping and sampling are shown on Figure IV. Grab samples of typical mineralization, and character samples of the rock types were collected. Only the samples of mineralization were sent for assay. A total of 66 samples were collected from the rock trenches, of which 43 were sent for assay. Table I gives descriptions and assay results for these samples.

RESULTS OF 1990 PROSPECTING PROGRAM

The results of the prospecting work performed on the Spruce Bay Group indicate that the rusty zone previously located is the result of oxidation of disseminated pyrite in Archean metasediments. The pyrite mineralization appears to occur across an area 80 meters (260 feet) long and 50 meters (165 feet) wide, although outcrop exposure is sparse. Pyrite content averages about 2%, with local concentrations of up to 10%. Up to 5% pyrrhotite and 2% chalcopyrite may also be present. The metasediments consist mainly of metagreywacke, with minor interbedded meta-arkose. A graphitic shear zone 0.5 meter (1.6 feet) in width is present in meta-arkose at the east end of the rusty zone. The metasediments strike generally east-west, and dip steeply to the south. Felsite dikes up to 0.5 meter (1.6 feet) in width, and aplite stringers up to 15 cm. (6 inches) wide cut randomly through the metasediments. Numerous irregular aplite threads and stringers form a stockwork zone in and around Trenches 2 and 3.

TABLE I
SAMPLE DESCRIPTIONS AND ASSAY RESULTS

SAMPLE NO.	DESCRIPTION	Au		Ag ppm	Cu ppm	Zn ppm	Ni ppm	OTHER
		ppb	oz/ton					
SPRUCE BAY GROUP								
TRENCH 1								
SB-1	-	-	Tr	1.8	700	800	-	-
SB-2	(SE of Trench 1)	-	0.002	-	960	154	-	-
25	Meta-Arkose	-	-	-	-	-	-	-
26	Metagreywacke. Minor Narrow Conformable Quartz Stringers	-	-	-	-	-	-	-
27	Meta-Arkose. Minor Disseminated Pyrite.	30	-	0.8	-	-	-	-
28	Graphitic Schist. 10% Coarse Disseminated Pyrite in conformable seams.	12	-	1.0	-	-	-	-
TRENCH 2								
SB-3	-	-	0.002	-	700	5,400	680	-
SB-4	-	-	0.008	1.8	580	350	-	-
SB-99	-	11	-	-	685	-	490	11 ppb Pt 8 ppb Pd
SB-100	-	6,850	(0.20)	79 (2.30 oz/ton)	550	-	226	-
30	Metagreywacke.	-	-	-	-	-	-	-
31	Metagreywacke. 1-2% disseminated pyrite	12	-	1.5	-	-	-	-
32	Metagreywacke. 2-3% disseminated pyrite	18	-	0.2	-	-	-	-
33	Meta-arkose. 1-2% disseminated pyrite.	15	-	0.1	-	-	-	-
TRENCH 4								
34	Metagreywacke. 3-5% coarse disseminated pyrrhotite. Composite of 3 samples - 1 from each rock trench.	11	-	0.4	-	-	-	-
35	Metagreywacke. 2-3% disseminated pyrrhotite.	-	-	-	-	-	-	-
36	Metagabbro. Trace disseminated pyrite	-	-	-	-	-	-	-
GRAPHITE GROUP								
TRENCH 1								
BP-50	-	-	Tr	2.0	2,120	616	54	-
TK-2	-	-	0.004	1.8	238	97	880	-
TK-4	-	-	0.002	1.6	2,100	310	254	-
1	Metagreywacke. Garnetiferous, local quartz stringers.	-	-	-	-	-	-	-
2	Feldspar Porphyry dike, gneissic	-	-	-	-	-	-	-
3	Feldspar Porphyry dike, gneissic	-	-	-	-	-	-	-
4	Meta-arkose. Minor quartz stringers.	-	-	-	-	-	-	-
5	Quartz vein, glassy.	10	-	3.5	-	-	-	-
6	Graphitic Schist, slickensided. 5-7% Pyrrhotite, 1-2% Chalcopyrite.	15	-	4.2	504	2,465	-	-
7	Graphitic Schist, slickensided. 8-10% Pyrrhotite.	16	-	4.2	482	1,825	-	-
TRENCH 2								
G-1	-	-	Tr	-	340	4,540	800	-
G-2	-	-	Tr	-	240	396	90	-
TB-1	-	-	Tr	2.0	6,400	2,800	520	6 ppm Mo
8	Feldspar Porphyry dike, gneissic.	-	-	-	-	-	-	-
9	Graphitic Schist, slickensided. 12-15% Pyrrhotite, 1% sphalerite, 1% chalcopyrite, 1% pyrite.	18	-	1.5	561	1,445	-	-
10	Graphitic Schist, slickensided. 3-5% Pyrrhotite, 2-3% Chalcopyrite.	15	-	0.3	265	4,196	-	-
11	Graphitic Schist, slickensided. 5-7% Pyrrhotite, 2-3% Sphalerite, 1-2% Chalcopyrite.	15	-	8.0	340	6,856	-	-
12	Graphitic Schist, slickensided. 15-20% Pyrrhotite.	11	-	2.5	-	-	-	-
13	Graphitic Schist, slickensided. Composite of 6 grabs.	13	-	1.2	-	-	-	-
14	Graphitic Schist, slickensided. 3-5% Pyrrhotite.	-	-	-	-	-	-	-
15	Graphitic Schist, slickensided, siliceous. 5-7% Pyrrhotite.	-	-	-	-	-	-	-
16	Metagreywacke, with 2.5 cm (1") quartz stringer carrying 3-5% sphalerite.	8	-	0.5	81	144	-	-
TRENCH 3								
TB-3	-	-	Tr	1.4	70	166	226	3 ppm Mo
TB-5	-	-	0.002	1.6	980	-	238	3 ppm Mo
17	Meta-arkose. 1% disseminated pyrite in conformable seams.	18	-	0.2	-	-	-	-
TRENCH 4								
18	Meta-arkose. 3-5% disseminated pyrite in conformable seams.	10	-	0.2	-	-	-	-
19	Meta-arkose. 1% disseminated pyrite. Occasional chlorite spots.	15	-	0.1	-	-	-	-
20	Metagreywacke. 20-25% coarse pyrite, disseminated and in conformable seams.	11	-	0.9	-	-	-	-
21	Metagreywacke. 8-10% coarse pyrite, disseminated and in conformable seams. Few glassy quartz stringers.	12	-	0.8	-	-	-	-
22	Metagreywacke. 3-5% coarse disseminated pyrite. 5 cm (2") glassy quartz stringer.	20	-	0.6	-	-	-	-
23	Quartz vein, glassy. 10 cm (4") wide. 1-2% disseminated pyrite.	22	-	0.1	-	-	-	-
24	Meta-arkose. 2-3% disseminated pyrite in conformable seams.	-	-	-	-	-	-	-
PATIO LAKE GROUP								
TRENCH 1								
PH-1	-	-	Tr	-	162	-	-	-
PH-3	-	-	Tr	-	-	-	-	-
PL-20	-	-	0.002	-	-	-	-	49 ppm Mo
37	Meta-arkose.	-	-	-	-	-	-	-
38	Metagreywacke.	-	-	-	-	-	-	-
39	Felsite dike with quartz stringer.	-	-	-	-	-	-	-
40	Talc Schist. 1-2% disseminated molybdenite.	-	-	-	-	-	-	-
41	Talc Schist. 5-7% disseminated molybdenite.	-	-	-	-	-	-	-
TRENCH 2								
PH-2	-	-	0.002	-	-	-	-	-
PL-21	-	-	Tr	1.2	-	-	-	-
PL-22	-	-	Tr	-	-	-	-	3,840 ppm Mo
42	Pegmatite. Mineralogically zoned. 5-7% molybdenite, 1-2% coarse pyrite.	-	-	-	-	-	-	-
43	Pegmatite. Mineralogically zoned. 1-2% molybdenite, 7-10% coarse pyrite.	-	-	-	-	-	-	-
44	Pegmatite. Mineralogically zoned. 7-10% molybdenite, 2-3% coarse pyrite.	-	-	-	-	-	-	-
45	Pegmatite. Mineralogically zoned. 15-20% molybdenite, 5-7% coarse pyrite.	-	-	-	-	-	-	-
46	Pegmatite. Mineralogically zoned. 7-10% molybdenite.	-	-	-	-	-	-	-
REPORTED HIGH GOLD AREA								
W-1	Soil Sample.	8	-	-	-	-	-	-
W-2	Soil Sample.	3	-	-	-	-	-	-
W-3	Soil Sample.	4	-	-	-	-	-	-
W-4	Soil Sample.	14	-	-	-	-	-	-
W-5	Rock Sample.	-	Tr	-	-	-	-	-
W-6	Rock Sample.	-	Tr	-	-	-	-	-

Metagabbro occurs at the northwest end of the rusty zone, in the area around Trench 4. Eighteen samples were collected from the Spruce Bay trenches, and 13 of the 18 were sent for assaying. The highest assay obtained was from sample DC-SB-100. It returned values of 6,850 ppb (parts per billion) Au, equivalent to 0.20 oz. per ton, and 79 ppm (parts per million) Ag, equivalent to 2.30 oz. per ton. Other samples returned up to 5,400 ppm Zn (0.54%), 960 ppm Cu (0.10%), 680 ppm Ni (0.07%), 11 ppb Pt, and 8 ppb Pd.

The results of the prospecting work completed on the Graphite Group indicate that the main graphitic shear zone (Trenches 1, 2, and 3) formerly located extends in a general north-south direction for a strike length of at least 1.2 kilometers (0.7 mile). The width of the zone appears to be well in excess of 10 meters (33 feet), and could be much greater. The zone dips 80° to the west, and lies conformably within Archean metasediments consisting mainly of metagreywacke with minor interbedded meta-arkose. Feldspar porphyry dikes and sills up to 0.5 meter (1.6 feet) in width intrude the metasediments. The graphitic zone and the meta-arkose beds carry disseminated sulphides, often concentrated in narrow, conformable seams. The sulphides consist primarily of pyrrhotite, locally forming up to 25% of the rock. Pyrite, sphalerite, and chalcopyrite are also present, locally in concentrations of up to 5%, 5%, and 3%, respectively. Quartz stringers and patches up to 15 cm. (6 inches) wide cut through the metasediments. The graphitic shear zone is slickensided. Twenty-five samples were collected from the 3 trenches blasted into the main showing on the Graphite Group. Eighteen of these samples were submitted for assaying. The best sample, TK-2, returned a value of 0.004 oz. Au per ton. Other samples returned up to 8 ppm Ag (equivalent to 0.23 oz per ton), 6,400 ppm Cu (0.64%), 6,854 ppm Zn (0.69%), 880 ppm Ni (0.09%), and 6 ppm Mo.

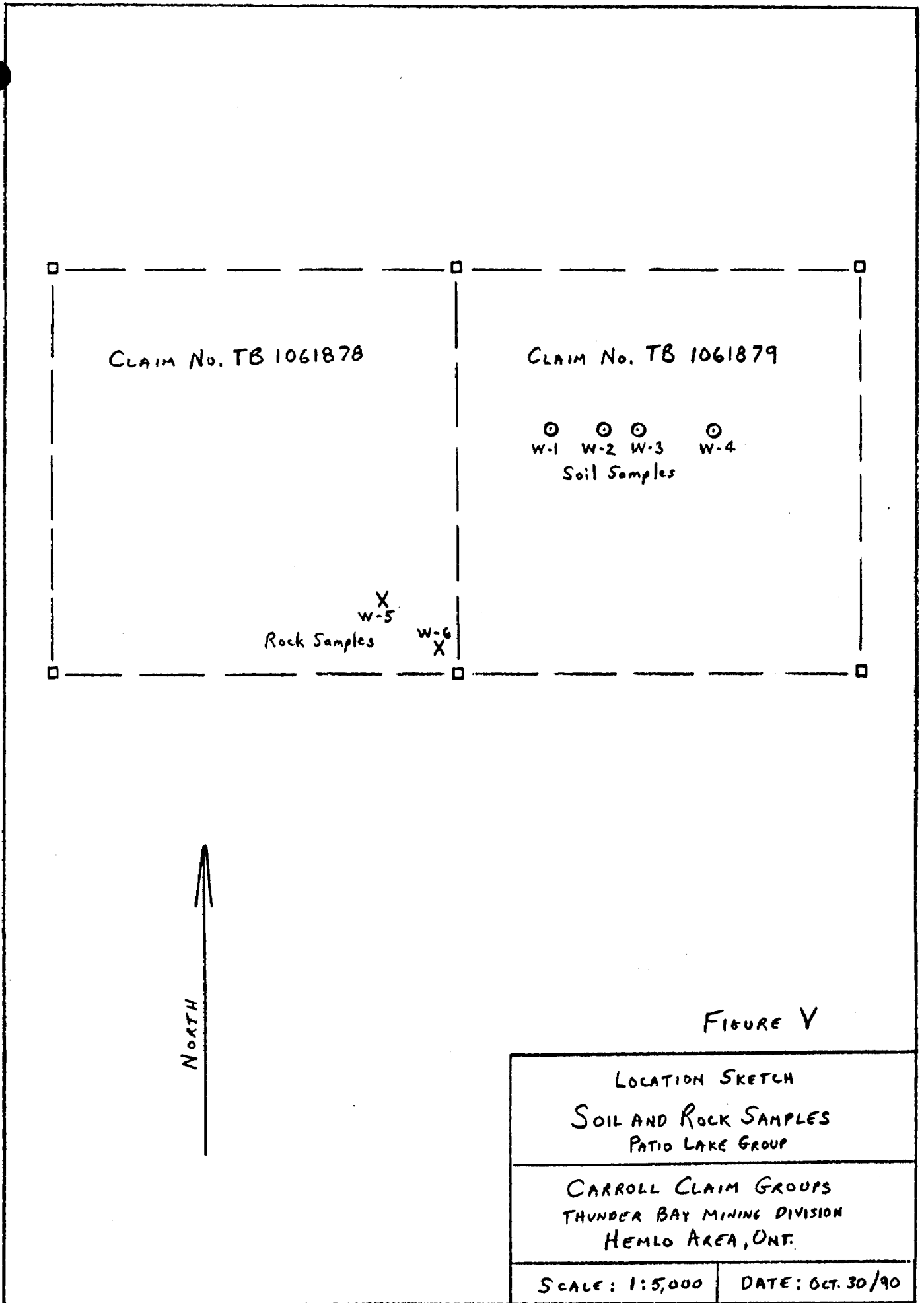
The basic prospecting performed on the Graphite Group resulted in the discovery of a new zone of sulphide mineralization, this one located on claim TB 1098358, about 0.8 km. (0.5 mile) southwest of the main showing, at what appears to be a higher stratigraphic level. The results of the work completed on this new showing indicate that the rocks are north-south trending Archean metasediments which consist mainly of metagreywacke with minor interbedded meta-arkose. Locally the meta-arkose contains chloritic spots. The beds dip steeply to the west. Up to 25% pyrite occurs locally disseminated in the metasediments, often concentrated in narrow, conformable seams. Most of the pyrite is fine grained, but some may be coarse. A graphitic shear zone 0.2 meter (0.6 foot) wide occurs as part of the metagreywacke sequence. Several narrow glassy quartz stringers up to 10 cm (4 inches) wide, and carrying up to 2% disseminated pyrite, cut through the metasediments. Seven samples were collected

from the trench blasted into this zone (Trench 4), and 6 of them were analysed for Au and Ag content. The gold values ranged from 10-22 ppb, and the silver from 0.1-0.9 ppm. Although these values are slightly elevated compared to normal background values in most Archean greenstone belts, they are well within the range of background values at Hemlo.

The results of the prospecting work undertaken on the Patio Lake Group indicate that Archean metagreywacke occurs in the immediate vicinity of the 2 high gold values reported earlier by others. This metagreywacke was found to be featureless, and similar in most respects to other metagreywackes in the Hemlo area. No mineralization was found, nor were any secondary processes evident such as shearing, quartz veining, or intrusive activity. Four soil samples and two rock samples collected from the immediate area of the reported high gold values were submitted for analysis of gold content. Their locations are shown on Figure V. The soils returned only low values in gold, ranging from 3 to 14 ppb, while both rocks returned trace amounts of gold. These values were not considered encouraging, and, with the uninteresting geological environment encountered, efforts were re-directed to a known molybdenite occurrence elsewhere on the claim group.

The molybdenite was found to occur in a pegmatite sill cutting Archean metasediments. The sill trends north-south and dips steeply to the east. The pegmatite is mineralogically zoned, with quartz, feldspar, muscovite mica and molybdenite forming concordant, alternate layers. The sill averages 2 meters (6.5 feet) in width, and extends along strike for at least 60 meters (200 feet). The molybdenite layers vary in thickness to a maximum of 5 cms. (2 inches), and locally may comprise up to 3% of the pegmatite sill. Spectacular samples of massive molybdenite can be hand picked from the occurrence. Eight samples were collected from this site, and 3 of them were sent for assaying. One sample, PL-22, returned 3,840 ppm Mo (0.4%), another sample, PH-2, returned 0.002 oz Au per ton.

Further prospecting on this property resulted in the discovery of a second molybdenite occurrence, this one in a narrow bed of rusty, talcy meta-arkose located about 120 meters (400 feet) to the southwest. The meta-arkose bed is 10 cms. (4 inches) wide, and is a minor interbed within an Archean meta-sedimentary sequence consisting mainly of metagreywacke. The beds strike generally north-south, and dip steeply to the east. Up to 7% disseminated molybdenite is locally present. A gabbroic intrusive occurs to the north nearby. Narrow felsite dikes and quartz stringers, up to 5 cms. (2 inches) thick, cut the metasediments. Eight samples were collected from this trench, and 3 of them were sent for assaying. The highest values obtained were 0.002 oz Au per ton, and 49 ppm Mo, from sample PL-20.



CONCLUSIONS

The prospecting program completed on the rusty zone on the Spruce Bay Group found that it was caused by weathering of disseminated pyrite. Concentrations of up to 10% pyrite were found to occur across a broad area within Archean metasediments. Up to 5% pyrrhotite and 2% chalcopyrite are locally present. A narrow graphitic shear, felsite dikes, and an aplitic stockworks are also present. Samples of the pyritic metasediments returned interesting values of up to 6,850 ppb Au (0.20 oz/ton), 79 ppm Ag (2.30 oz/ton), 5,400 ppm Zn (0.54%), 960 ppm Cu (0.10%), and 680 ppm Ni (0.07%). Further work is warranted on this prospect.

The prospecting program completed on the Graphite Group found that pyrite, chalcopyrite, sphalerite, and pyrrhotite mineralization occurs in the graphitic shear zone. The zone itself is quite large, extending for a length of at least 1.2 kms (0.7 mile) and a width of at least 10 meters (33 feet). The zone occurs within Archean metasediments. Feldspar porphyry dikes and sills intrude the metasediments. Samples of the mineralized graphite zone returned interesting values of up to 0.004 oz Au per ton, 8 ppm Ag (0.23 oz/ton), 6,400 ppm Cu (0.64%), 6,854 ppm Zn (0.69%), and 880 ppm Ni (0.09%). Further work is also warranted on this prospect.

A second graphitic shear zone discovered on the Graphite Group was also found to occur within Archean metasediments. Up to 25% disseminated pyrite occurs locally within the metasediments and the graphite. Narrow glassy quartz stringers cut through the metasediments. The samples collected from this showing returned only background values in gold. No further work appears to be warranted on this showing at this time.

The prospecting program completed on the reported high gold values on the Patio Lake Group found only relatively uninteresting Archean metasediments at the site. Four soil and 2 rock samples collected from the site returned only background values in gold. No further work is warranted at this site.

Elsewhere on the Patio Lake Group, two molybdenite occurrences were located and evaluated. At one site, the molybdenite occurs as narrow, massive seams within a mineralogically zoned pegmatite sill. The sill is 2 meters (6.5 feet) wide, and extends for a length of at least 60 meters (200 feet). Samples of the sill returned up to 3,840 ppm Mo (0.4%). The molybdenite content of the pegmatite sill is interesting, however the size potential of the sill itself appears to be limited. No further work is warranted on this showing at this time. Although this showing does not appear to be of economic interest, it remains academically interesting because of its ability to yield high grade specimens of massive molybdenite.

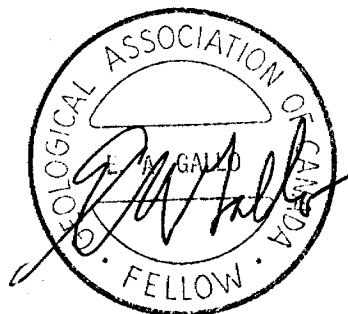
The second molybdenite occurrence is in Archean metasediments. The bed that hosts the molybdenite is narrow, only 10 cms. (4 inches) wide, and is talcy. The size potential of this molybdenite occurrence appears to be extremely limited. No further work is warranted on this showing.

RECOMMENDATIONS

It is recommended that additional work be performed over the rusty zone on the Spruce Bay Group where interesting values in Au, Ag, Zn, and Cu were obtained. Further basic prospecting, including overburden stripping and rock trenching should be undertaken. As well, a small grid centred over the zone, with line spacing no more than 50 meters (165 feet) should be cut, followed by Max-Min HLEM and magnetic geophysical surveys, detailed geological mapping, and sampling.

It is further recommended that additional work be performed over the main graphite showing on the Graphite Group where interesting values in Cu, Zn, Au, and Ag have been obtained. This additional work should consist initially of further basic prospecting, including overburden stripping, rock trenching, and line cutting for control. This should be followed by Max-Min HLEM and magnetic geophysical surveys, detailed geological mapping, and sampling.

No further work is recommended on the second graphite showing found on the Graphite Group, or on the Patio Lake Group.



October 30, 1990
Toronto, Ontario

E. A. Gallo, B.Sc., F.G.A.C.
Gallo Exploration Services Inc.

APPENDIX I

ASSAY CERTIFICATES

Bell-White Analytical Laboratories Ltd. - 0476
- 0703
- 0703b

OGS Geoscience Laboratory - 0150-90

Assayers Ontario Laboratories - GA-164-01/1196
- GA-164-02/1196



Ontario

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Ontario
Geological
Survey

77 Grenville Street
11th Floor
Toronto, Ontario
M7A 1W4
Telephone 965-1337

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Laboratories
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Issued to:

MR. T. LEAHY
GEOLOGIST
875 QUEEN STREET E.
SAULT STE. MARIE. ONT.
P6A 2B3

FURTHER TO CERTIFICATE # 0150-90

SAMPLE NUMBER	GOLD Au ppb	COPPER Cu ppm	NICKEL Ni ppm	PLATINUM Pt ppb	PALLADIUM Pd ppb
DC-SB-100	6850	550	226	-	-
DC-SB-99	11	685	490	11	8
GL-90-FLRD-1	365	-	-	<1	<1
GL-90-FLRD-2	5	-	-	<1	3
GL-90-HG	60	-	-	-	-

This is an interim report for sample entered in your name on
AUG.31,1990; additional work will follow as soon as possible.

Fees recived: DEPT.

Peter Lightfoot
Acting Chief

OCT.9,1990



Ontario

Ministry of
Northern Development
and Mines

Ontario
Geological
Survey

77 Grenville Street
11th Floor
Toronto, Ontario
M7A 1W4
Telephone 965-1337

Geoscience
Laboratories
Report

Issued to: MR. T. LEAHY
GEOLOGIST
875 QUEEN STREET E.
SAULT STE. MARIE, ONTARIO
P6A 2B3

0150-90

SAMPLE NUMBER	SILVER Ag ppm
DC-SB-100	79

This completes all analytical work for samples entered in your name on AUG. 31, 1990.

Fees Received: DEPT.

Peter Lightfoot
Acting Chief

OCT. 9, 1990

Except by special permission reproduction of these results must include any qualifying remarks made by this ministry with reference to any sample.



ASSAYERS ONTARIO LABORATORIES

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FAX (416) 239-4012

Certificate of Analysis

Certificate No. GA-164-01/1196 Date: October 23, 1990
Received 23 Samples of Rock
Submitted by Gallo Exploration Services Inc. Att'n: Mr. E.A. Gallo

Sample No.	Au ppb	Ag ppm	Cu ppm	Zn ppm
5	10	3.5		
6	15	4.2	504	2465
7	16	4.1	482	1825
9	18	1.5	561	1445
10	15	.3	265	4196
11	15	8.0	340	6854
12	11	2.5		
13	13	1.2		
16	8	.5	81	144
17	18	.2		
18	10	.2		
19	15	.1		
20	11	.9		

ASSAYERS ONTARIO LABORATORIES

Per J. van Engelen
J. van Engelen Mgr.



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FAX (416) 239-4012

Certificate of Analysis

Certificate No. GA-164-02 /1196

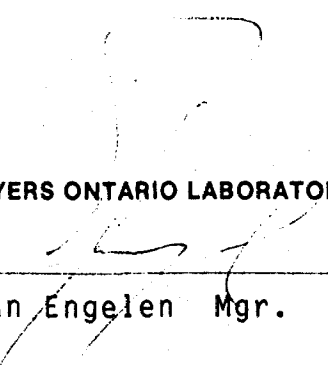
Date: October 23, 1990

Received 23 Samples of _____

Submitted by _____

Sample No.	Au ppb	Ag ppm
21	12	.8
22	20	.6
23	22	.1
27	30	.8
28	12	1.0
29	14	.5
31	12	1.5
32	18	.2
33	15	.1
34	11	.4

ASSAYERS ONTARIO LABORATORIES

Per 
J. van Engelen Mgr.



BELL - WHITE ANALYTICAL LABORATORIES LTD.

P.O. BOX 187,
POJ 1KO

HAILEYBURY, ONTARIO

TEL: 672-3107
FAX: (705) 672-5843

Certificate of Analysis

NO.

0476

DATE:

JULY 20, 1990

SAMPLE(S) OF:

Rock (12)

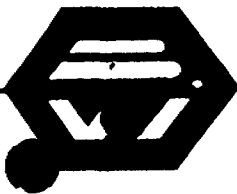
RECEIVED:

July 1990

SAMPLE(S) FROM:

Mr. Daniel Carroll

Sample #	Oz. Gold	Au ppb	Cu ppm	Zn ppm	Ni ppm
G-1	Trace		340	4540	800
G-2	Trace		240	396	90
PH-1	Trace		162		
PH-2	0.002				
PH-3	Trace				
SB-1	Trace		960	154	
W-1		8			
W-2		3			
W-3		4			
W-4		14			
W-5	Trace				
W-6	Trace				



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POJ 1K0

HAILEYBURY, ONTARIO

TEL: 672-3107
FAX: (705) 672-5843

Certificate of Analysis

NO. 0703

DATE: September 11, 1990

SAMPLE(S) OF: 13

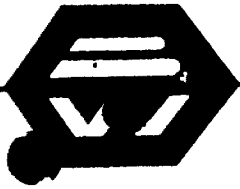
RECEIVED: September 1990

SAMPLE(S) FROM:

Daniel Carroll

Sample #	Oz. Gold	Ag ppm	Cu ppm	Zn ppm	Ni ppm
PL # 20	0.002				
21	Trace	1.2			
22	Trace				
SB # 1	Trace	1.8	700	800	
2	0.002				
3	0.002		700	5400	680
4	0.008	1.8	580	350	
BP # 50	Trace	2.0	2120	616	54
TB # I	Trace	2.0	6400	2800	520
3	Trace	1.4	70	166	226
5	0.002	1.6	980		238
TK # 2	0.004	1.8	238	97	880
4	0.002	1.6	2100	310	254

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FAX: (705) 672-5843

Certificate of Analysis

NO. 0703b

DATE: September 11, 1990

SAMPLE(S) OF: 5

RECEIVED: September 1990

SAMPLE(S) FROM: Daniel Carroll

Sample #	Mo ppm
PL # 20	49
22	3840
TB # 1	6
3	3
5	3

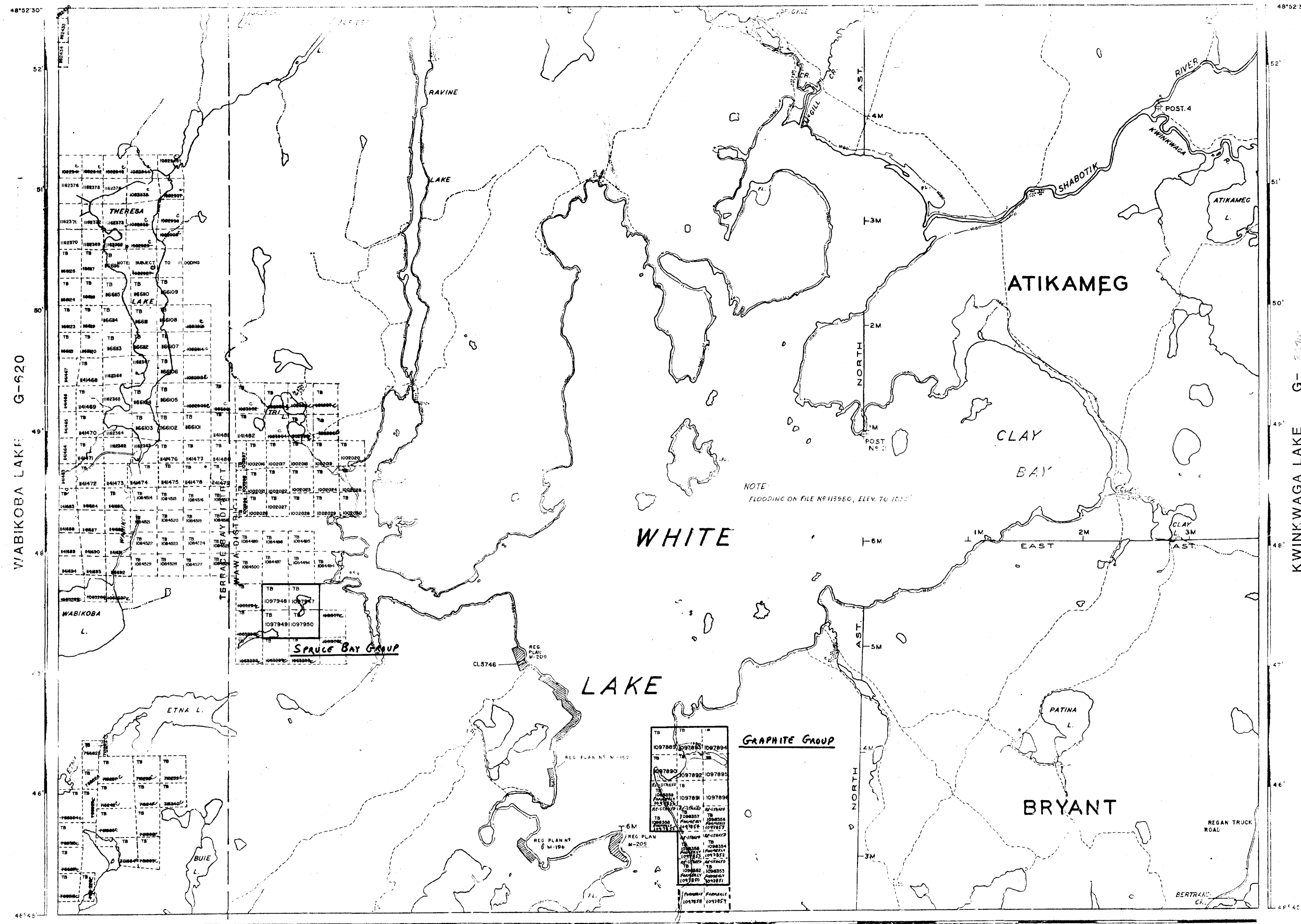
BELL-WHITE ANALYTICAL LABORATORIES LTD.

ACCORDANCE WITH LONG ESTABLISHED NORTH AMERICAN CUSTOM UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THIS SHEET HAVE NOT BEEN ASSAYED BY THE METHOD DESCRIBED IN THE ASSAY REPORT BY THE LAB.

AREAS WITHDRAWN FROM DISPOSITION
S.C. RIGHTS, E.G. MINING RIGHTS

THERESA LAKE SUBJECT TO FLOODING TO ELEVATION G.S.C.
323.75 METRES. ORDER OF MINING LANDS COMMISSIONER
JUNE 7, 1985 FILE: 469360

FLOODING RIGHTS ON WHITE LAKE AND RAVINE LAKE TO
CONFORM ELEVATION 1000.
M.E.P.C. OF ONTARIO, 26th FEB. 1952. File: H3980.



TOPOGRAPHY
LAKES, RIVERS, ETC. FROM FOREST RESOURCES
INVENTORY SHEET NO. 487853.

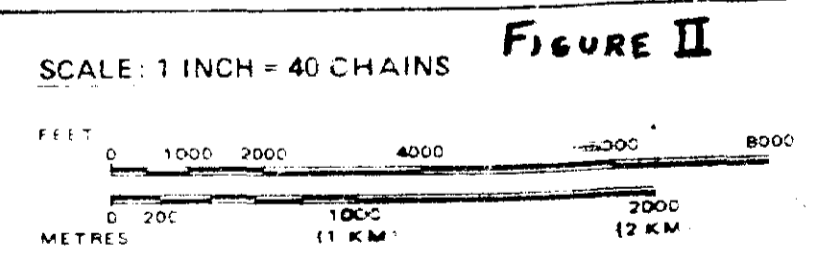
LEGEND

- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES: TOWNSHIPS, BASE LINES, ETC.
- LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES: LOT LINES
- PARCEL BOUNDARY
- MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OR COMPOSITE PLAN
- RESERVATIONS
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES
- TRANSVERSE MONUMENT

DISPOSITION OF CROWN LANDS

- | TYPE OF DOCUMENT | SYMBOL |
|--------------------------------|--------|
| PATENT, SURFACE RIGHTS ONLY | ○ |
| " " SURFACE RIGHTS ONLY | ○ |
| " " MINING RIGHTS ONLY | ○ |
| LEASE, SURFACE & MINING RIGHTS | ○ |
| " " SURFACE RIGHTS ONLY | ○ |
| " " MINING RIGHTS ONLY | ○ |
| LICENCE OF OCCUPATION | ○ |
| ORDER-IN-COUNCIL | ○ |
| RESERVATION | ○ |
| CANCELLED | ○ |
| SAND & GRAVEL | ○ |

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 303, SEC. 63, SUBSEC. 1



AREA

WHITE LAKE (north part)

M.N.R. ADMINISTRATIVE DISTRICT

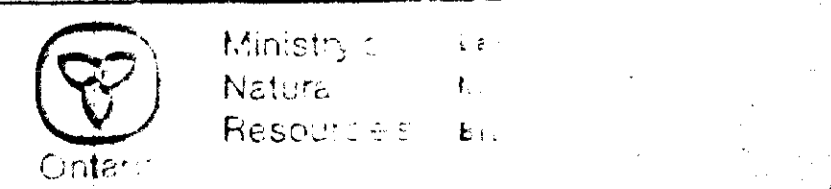
TERRACE BAY / WAWA

MINING DIVISION

THUNDER BAY / SAULT STE. MARIE

LAND TITLES / REGISTRY DIVISION

THUNDER BAY



December 6, 1987
FEBRUARY, 1988

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOP.



AREAS WITHDRAWN FROM DISPOSITION

- M.R.O. - MINING RIGHTS ONLY
- S.R.O. - SURFACE RIGHTS ONLY
- M.+S. - MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File
CROWN RESERVE			S.R.O.	163076.1
DEC. 36/80	W.7/81	1/4/71	S.R.O.	188546
DEC. 36/80	W.8/81	1/4/81	S.R.O.	188547
DEC. 36/80	W.7/82	5/4/82	S.R.O.	181546
DEC. 36/80	W.10/82	7/4/82	S.R.O.	163006.1
DEC. 36/80	W.50/86	2/15/86	M.+S.	163006.1

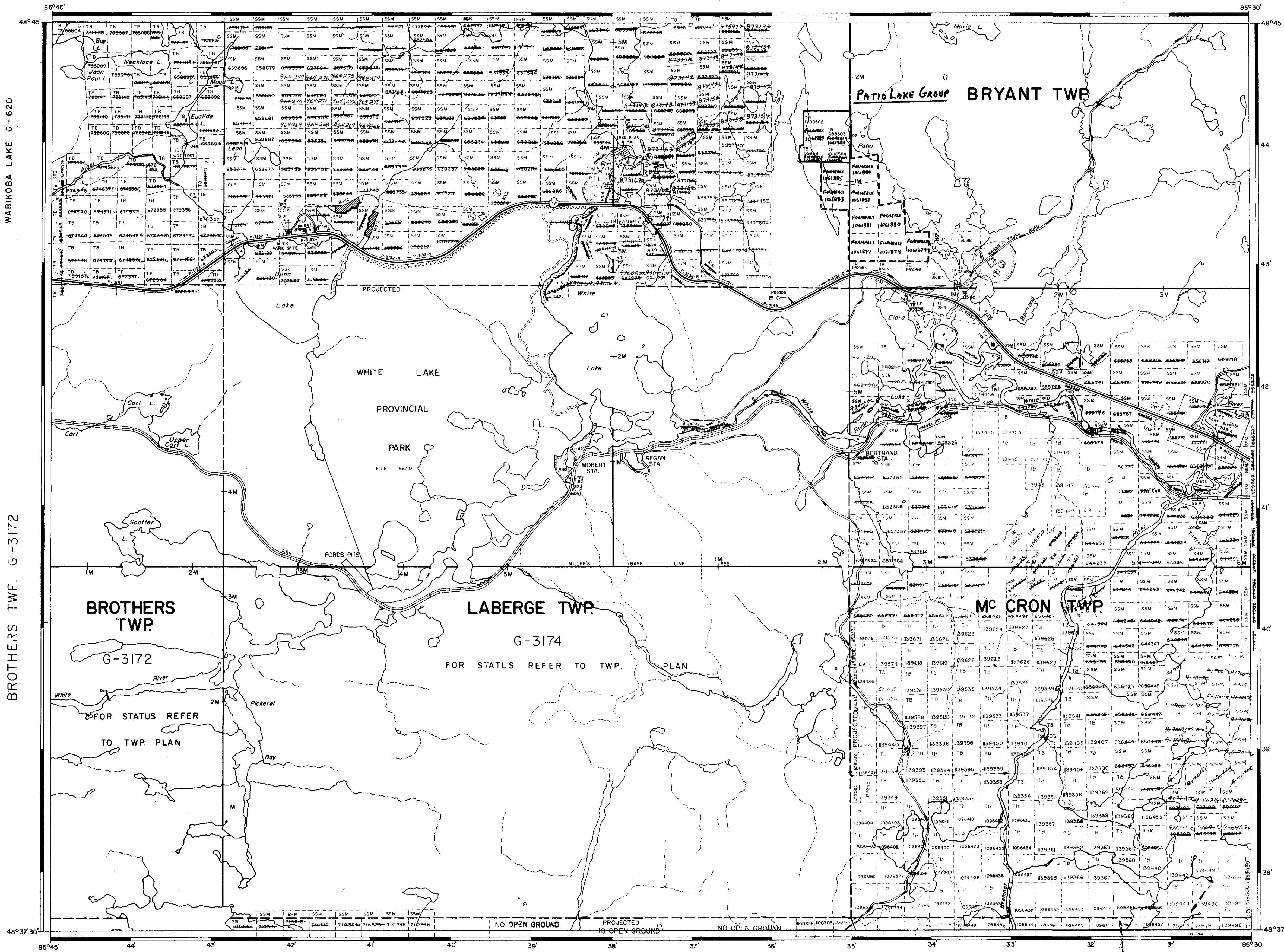
SAND and GRAVEL

GRAVEL	FILE 124874
M.T.C. GRAVEL PIT No. 177	
M.T.C. GRAVEL PIT No. 361	
M.T.C. GRAVEL PIT No. 361	
M.T.C. GRAVEL PIT No. 436	
M.T.C. GRAVEL PIT No. 545	
M.T.C. GRAVEL PIT No. 476	
M.T.C. GRAVEL PIT No. 296	
M.T.C. GRAVEL PIT No. 295	
M.T.C. GRAVEL PIT No. 294	
M.T.C. GRAVEL PIT No. 293	
M.T.C. GRAVEL PIT No. 292	
M.T.C. GRAVEL PIT No. 291	
M.T.C. GRAVEL PIT No. 290	

FLOODING RIGHTS ON WHITE RIVER AND WHITE LAKE TO CONTOUR ELEVATION 1050' TO ONT. HYDRO.

ALL MINING CLAIMS AROUND WHITE RIVER AND CONNECTING LAKES ARE SUBJECT TO SEC. 41 OF THE MINING ACT (R.S.O. 1970) FILE 13890.

WHITE LAKE AREA NORTH PART G-622



THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO TAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDS, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

LEGEND

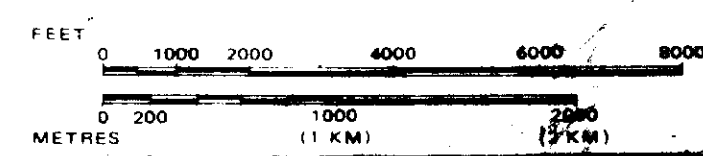
- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES: TOWNSHIPS, BASE LINES, ETC.
- LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES: LOT LINES
- PARCEL BOUNDARY
- MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OR COMPOSITE PLAN
- RESERVATIONS
- ORIGINAL SHORELINE
- MARSH OR MUSKIEG
- MINES
- TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" SURFACE RIGHTS ONLY	○
" MINING RIGHTS ONLY	○
LEASE, SURFACE & MINING RIGHTS	■
" SURFACE RIGHTS ONLY	■
" MINING RIGHTS ONLY	■
LICENCE OF OCCUPATION	○
ORDER-IN-COUNCIL	OC
RESERVATION	○
CANCELLED	○
SAND & GRAVEL	○

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 300, SEC. 63, SUBSEC. 1.

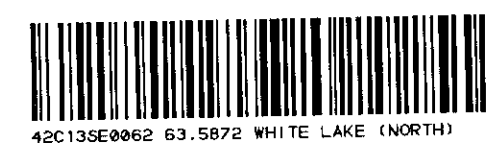
SCALE: 1 INCH = 40 CHAINS

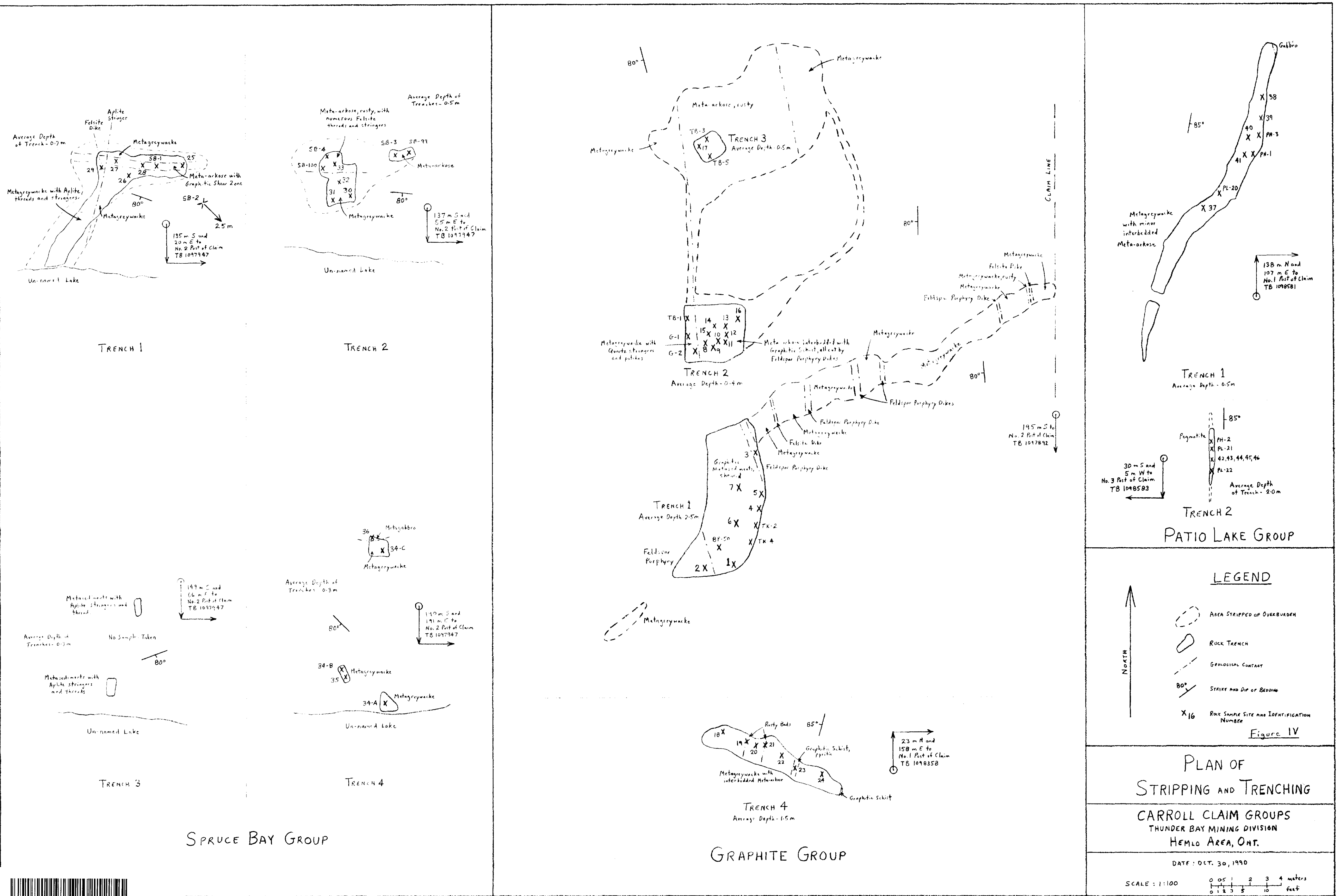


AREA **WHITE LAKE**
 (SOUTH PART)
 M.N.R. ADMINISTRATIVE DISTRICT
TERRACE BAY/WAWA
 MINING DIVISION
THUNDER BAY/
 LAND TITLES / REGISTRY DIVISION
THUNDER BAY

Ministry of Natural Resources
 Land Management Branch

Date: _____
 Number: **G-623**





LEGEND

- AREA STRIPPED OF OVERBURDEN
- ROCK TRENCH
- GEOLOGICAL CONTACT
- STRIKE AND DIP OF BEDDING
- ROCK SAMPLE SITE AND IDENTIFICATION NUMBER

Figure IV

**PLAN OF
STRIPPING AND TRENCHING
CARROLL CLAIM GROUPS
THUNDER BAY MINING DIVISION
HEMLO AREA, ONT.**

DATE: OCT. 30, 1990
SCALE: 1:100

0 0.5 1 2 3 4 meters
0 1 2 3 4 feet

