

FINAL SUBMISSION
NELSON ROAD AND SPRUCE RIVER ROAD PROPERTIES
OPAP REGISTRATION NO. OP92-424

NTS 52A-10 AND 52H-6

WILLIAM HAYNE

OCTOBER 1992



010C

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FINAL SUBMISSION NELSON ROAD AND SPRUCE RIVER ROAD PROPERTIES OPAP REGISTRATION NO. OP92-424

DATE: OCT. 14, 1992

NAME: SPRUCE RIVER ROAD PROJECT

INDIVIDUAL WHO APPLIED FOR ASSISTANCE FOR THIS PROJECT: WILLIAM HAYNE

<u>LOCATION AND ACCESS</u>: The Spruce River Road property is located along highway 527 approximately 100 km. north of Thunder Bay Ontario. The claims straddle Highway 527 at the 68 mile mark north of its junction with Trans Canada Highway 17.

Two old logging roads on the property provide access to most of the claims.A road west of the highway provides access to claims near Nault Lake.A road extending east from the highway provides walking access to the south-eastern part of the property.

CHANGES TO PROPOSED PROJECT: Funds were diverted to this project after discouraging results were obtained from the Nelson Road Project.

<u>LAND STATUS</u>: The property consists of 25 contiguous claims wholly owned by William Hayne of Thunder Bay Ontario. The claims are shown on the Wabikon Lake claim map (G-773 Fig.4). A complete listing of the claims is as follows:

тв	1077557 1077558	TI	3 1082317 1082318 1082319 1082320
ТВ	1080772 1080773 1080774 1080775 1080776 1080777		1082321 1082322 1082323 1082324 1082325 1082326
тв	1081013	TF	3 1085079
тв	1081371 1081372 1081373 1081374 1081375		

EXPLORATION HISTORY: A brief summarization of exploration in the area and on the property is listed below: 1963:Disseminated chalcopyrite was noted in a rock cut during construction of what was to be Highway 527 by Abitibi Pulp and Paper Co.Bulldozer and trenching was carried out within a few hundred feet of the discovery.

1964:McIntyre Mines completed an IP survey over the immediate area of the showing.

1964:Fred Koosel drilled 3 holes on the southwest side of Wabikon Lake.Brecciated limestone and Sibley Sandstone were intersected.

1965:Steeprock Iron Mines carried out geological mapping, magnetic and geochemical surveys within the present property boundaries. Minor disseminated chalcopyrite was located.

1970:Phelps Dodge drilled five holes testing E.M. targets located on the northern part of the property. Altered felsic volcanic and intrusive rocks were intersected. Minor chalcopyrite was noted but no assays are reported in the drill logs.

1972:Mineral Resources International carried out ground E.M. and bulldozer trenching near Whistle Lake.Massive pyrite and pyrrhotite were exposed and one drill hole tested the zone.The sulphides were assayed for copper and gold but no economic values were encountered.

1974:Hanna Mining worked two claim groups located 1.5 km. north and 5 km. east of the present property. Ground E.M. and magnetic surveys, geological mapping and diamond drilling were carried out. Numerous E.M. anomalies were located within interbedded felsic to mafic volcanic units. A total of nine drill holes tested E.M. targets on the two claim groups. Minor chalcopyrite and sphalerite was noted in the drill logs but no assays are given.

1975:Phelps Dodge drilled four holes in a felsic volcanic sequence north of the present property boundary. Sulphides were intersected in all the holes. Hole number 150-1 intersected 10.0 feet of 0.17% Zn.

1981: W. Hayne held the property and encountered significant gold values. The original showing yielded Au assays as high as 1.59 oz. per ton from grab samples. A 2.5 foot chip sample gave values of 0.21 oz. Au per ton, 0.14 oz. Ag per ton and 0.44% Cu.

1988:Mingold Resources Inc. optioned the property from William Hayne.VLF E.M., magnetic, geochemical surveys, geological mapping and diamond drilling (6 holes, 592 m.) were carried out. Three drill holes tested narrow gold bearing shear zones exposed in rock cuts located along Highway 527. The best intersection was 919 ppb Au/0.25 m. Two drill holes tested VLF E.M. targets but no significant mineralization was encountered.

1988-92:Cumberland Resources staked large blocks of claims north of and adjacent to the property. An airborne E.M. survey was flown and the claims are presently in good standing.

REGIONAL GEOLOGY: V.G. Milne of the ODM carried out reconnaissance mapping over a large area north and west of the Hayne property (G.R. No.25,1964). Milne located the Garden Lake and Heaven Lake volcanic belts in a region predominantly underlain by Archean dioritic-granitic gneisses and Proterozoic diabase.

Sage of the O.G.S. remapped a large part of the area including the Hayne property (Map P.963). Exposed volcanic rocks in the property area, he concluded, are folded remnants of the Heaven Lake Belt. Sage outlined an east-west trending unit of felsic tuffs and agglomerates north of the claim group. Massive quartz porphyry and massive or pillowed mafic volcanics are exposed on the property south of this succession. Outliers of Keeweenawan Diabase locally overlie the Archean rocks. Most of the Archean rocks are masked by this diabase east of the property.

PROPERTY GEOLOGY: Mafic flows intruded by irregular quartz feldspar dykes are the dominant rock types underlying the property. A Proterozoic diabase sill overlies the Archean rocks near the intersection of the north and west property boundaries. Two north trending diabase dykes are exposed near the north and south property boundaries.

Nelson (1990) describes the lithological units as follows:"The fine to medium grained mafic flows are predominantly massive to locally pillowed. One exposure exhibiting a variolitic texture was observed on the east side of the highway just north of the Highway Showing. It contains 10% 5 mm to 3 cm scale variolites set in a fine grained mafic matrix. Some volcanics in the northern parts of the property appear intermediate to felsic and exhibit a banded (tuffaceous?) appearance. The massive medium grained to coarse grained, creamy beige quartz feldspar porphyry contains 40% anhedral feldspar phenocrysts up to 2 cm in diameter and 40% pale blue 2 mm to 1 cm scale quartz eyes set in a fine grained siliceous groundmass. The diabase is massive, medium to coarse grained and weakly magnetic with a distinctive brown weathering rind.

Local shearing related to volcanic-porphyry contacts trends 060 to 090 degrees and dips 60 to 70 degrees to the north. Quartz veining is minor, erratic and quite narrow. Except for local minor fine grained incipient pyrite within the volcanic flows and quartz feldspar porphyry, sulphide mineralization appears restricted to gossanous shear zones along the highway road cut."

WORK DONE: Work on the property included extensive prospecting of the property between June and October 1992. A total of 37 grab samples were obtained for assaying (Appendix). The locations of the samples are shown on the attached map (Map) 5). Manual trenching using grubhoe and pick was completed in three locations on the property as shown in Figure 6.

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CONCLUSIONS, RESULTS AND RECOMMENDATIONS : Economic mineralization is associated with local shear zones predominantly within massive mafic flows. The shear zones contain up to 50% pyrrhotite and chalcopyrite with lesser amounts of pyrite. The highest gold occur when chalcopyrite is the predominant sulphide. Alteration minerals such as chlorite and biotite almost totally replace other silicate minerals where shearing is intense and sulphide content is high. Near the main showing shearing trends 060 to 095 degrees azimuth and dips at shallow angles of 045 to 065 degrees to the north. To date significant assays in gold, copper and silver have been obtained from grab samples taken from rock exposed by manual trenching done by the owner of the property.(see Table No.1)

The next phase of work should include a short drill program to test the main showing at a vertical depth of approximately 50 feet. Two holes are recommended (50 foot separation) to test for continuity of mineralization along strike.

<u>DAILY LOG:</u> A daily summary of work completed on the project is included in the application. Photocopies of the field daily journal are also included in the appendix of this report.

<u>LIST OF EXPENDITURES</u>: Expenditures are itemized on the final submission form.

TABLE 1

GRAB SAMPLE ASSAYS

SAMPLE NO.	ZN(ppm)	AU(ppb)	CU(ppm)	AG(ppm)	HG(ppm)
173101	NA	315	NA	13.6	NA
173102	NA	25	NA	NA	NA
173103	NA	18110	NA	12.0	NA
173104	NA	NA	4656	7.2	NA
173105	NA	1384	NA	NA	NA
173106	NA	56	NA	4.0	NA
173107	NA	20700	>10000	18.4	NA
173108	NA	62	NA	4.8	NA
173109	NA	250	NA	NA	NA
173110	NA	33	NA	NA	NA
173111	NA	104	NA	NA	NA
173116	NA	<5	NA	1.6	NA
173117	NA	5	NA	NA	NA
173118	NA	19	NA	NA	NA
173119	NA	16	928	2.0	NA
173120	NA	<5	NA	NA	NA
173121	NA	41	5312	5.2	NA
173122	NA	56	NA	NA	NA
173123	NA	6	NA	1.2	NA
173124	NA	NA	NA	NA	20
173125	NA	39	NA	1.2	NA
173126	NA	31	NA	NA	NA
173127	NA	7	NA	NA	NA

TABLE 1 (CONT'D)

GRAB SAMPLE ASSAYS

CAMBLE NO	7N / n n m)	311/nnh\	CII/nnm)	3.C(nnm)	IIC (nnm)
SAMPLE NO.	ZN(ppm)	AU(ppb)	CU(ppm)	AG(ppm)	HG(ppm)
173128	NA	<5	NA	NA	NA
173129	58	NA	NA	NA	NA
173130	NA	<5	NA	4.0	NA
173131	NA	31	NA	NA	NA
173132	NA	10990	NA	NA	NA
173133	NA	55840	NA	NA	NA
173134	NA	499	NA	NA	NA
173135	NA	98	NA	NA	NA
173136	NA	9	NA	NA	NA
173139	NA	2139	NA	NA	NA
173140	NA	1895	NA	=NA 3-2	NA
173141	NA	301	NA	NA 4.8	NA
173142	NA	NA	2736	NA	NA
173143	ir A	5	NA	NA	NA
NOTE: NA- No	t assayed.		· •		_I V A
173144	NA	52	N A	2	
•	A: 4	25	IV A)	NA
173145	NA	J. J	2 4	1	

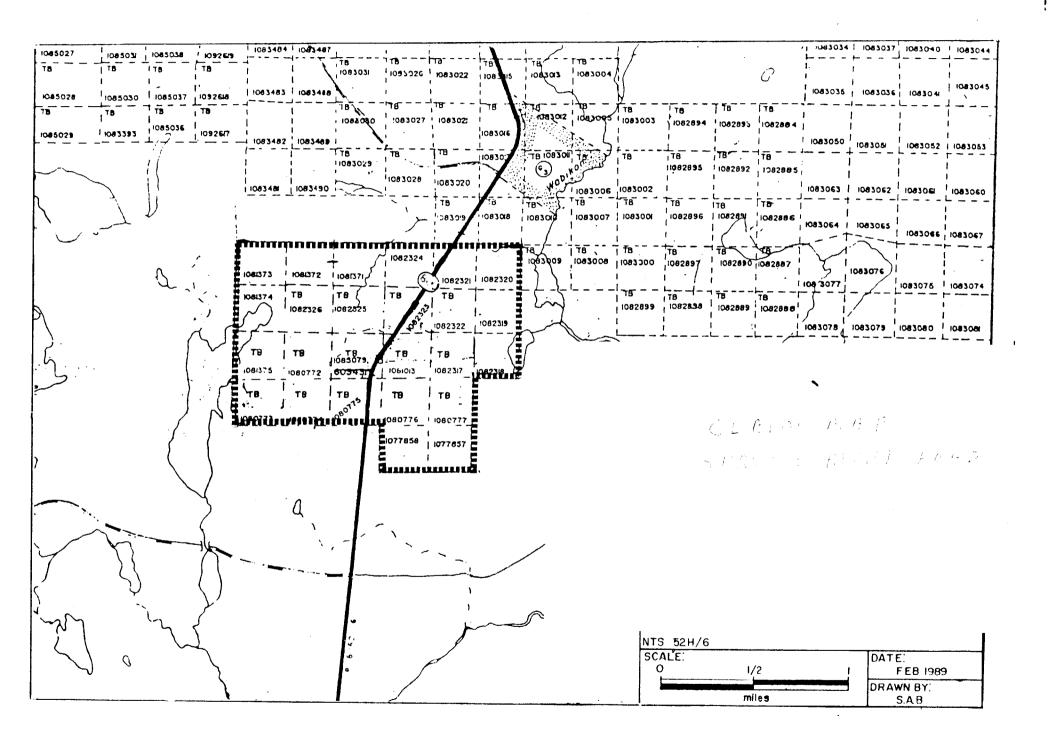
REFERENCES

Milne, V.G. 1964: Ontario Department of Mines Geological Report No. 25, Garden Lake Area, accompanied by maps 2058 East Half and West Half.

Nelson, B. 1990: Nault Property Assessment Report, 1989-90 Program, Geological Mapping, Geochemical Sampling and Diamond Drilling, Wabikon Lake Area, Thunder Bay Mining Division, NTS 52H/6; for Mingold Resources Inc.

Sage, R.P. et al 1974: Operation Ignace-Armstrong-Obonga Lake-Lac Des Isles Sheet, Dist. of Thunder Bay, Ontario Division of Mines, Preliminary Map P.963.

Scott, J.F. 1986: Precambrian Geology of Macgregor Township, East Half, District of Thunder Bay; Ontario Geological Survey Map P.2985 Geological Series-Preliminary Map, scale 1:15,840. Geology 1984, 1985.



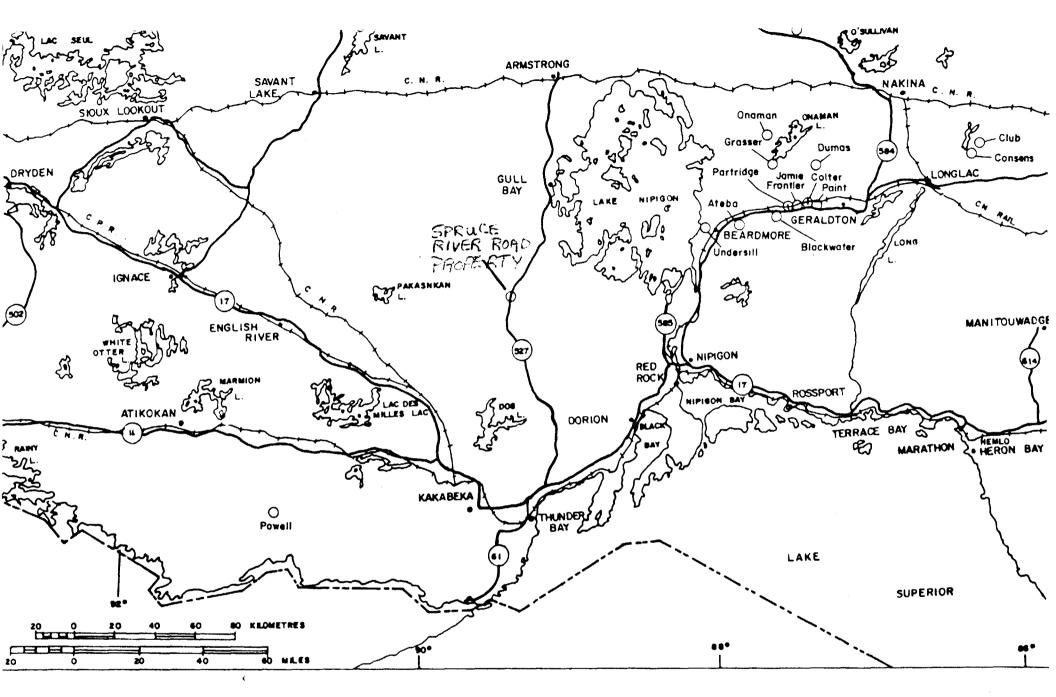


FIGURE 3

LOCATION MAR

SPRUCE FIVER ROAD

TECFERRY





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FINAL SUBMISSION NELSON ROAD AND SPRUCE RIVER ROAD PROPERTIES OPAP REGISTRATION NO. OP92-424

DATE: OCT. 14, 1992

NAME: NELSON ROAD PROJECT

INDIVIDUAL WHO APPLIED FOR ASSISTANCE FOR THIS PROJECT: WILLIAM HAYNE

LOCATION AND ACCESS: The Nelson Road Property is located along Trans Canada Highway 17 approximately 40 km. northeast of Thunder Bay, Ontario, in MacGregor Township. The property is cut by the Canadian Pacific Railway. Nelson Road and an old quarry road provide access to portions of the property.

CHANGES TO PROPOSED PROJECT: Funds were diverted to the Spruce River Road Project after discouraging results were obtained in the drill program on this property.

LAND STATUS: The property consists of one unpatented mining claim (TB 1080200) wholly owned by William Hayne of Thunder Bay. The claim is shown on the MacGregor Township claim sheet (G-672 Fig.2)

EXPLORATION HISTORY: The area has previously been explored mainly for silver and amethyst. Scott of the Thunder Bay Resident Geologists office in 1986 reported assays of up to 1.06 oz./ton Au from two mineralized zones near Highway 11-17. A claim was staked by D. Thibault covering the two zones and subsequently optioned to Esso Minerals Canada. An additional seven claims were staked surrounding the optioned claim and geological mapping, grab sampling and soil geochemical surveys carried out.

GEOLOGY: The property is underlain by three major lithotypes: felsic to intermediate metavolcanic rocks and associated metasediments, gabbro and Proterozoic rocks (taconite and chert carbonate rocks) from the Gunflint Formation. Lamprophyre and granite dykes intrude the volcanic and sedimentary rocks near the main showing.

WORK DONE: A drill program was carried out consisting of one 118 foot hole to test the main mineralized zone at a vertical depth of approximately 60 feet. A limited amount of prospecting was carried out around the main showing prior to the drill program. A drill log, drill plan, section and assay results are included in Appendix of this report.

RESULTS AND RECOMMENDATIONS: No. 1 hole intersected intermediate volcanic flows of dacite composition intruded by feldspar phyric dykes. Sparsely disseminated pyrite is seen throughout the hole. A zone of buff brown sericite alteration with up to 60% carbonate and 20% pyrite was intersected from 96.0-109.0 feet. All zones of

significant sulphide mineralization were sampled for Au assay. Assay results were discouraging, the best sample yielded 0.01 oz/ton Au. No further work was recommended and the remaining portion of the grant funds was diverted to the Spruce River Road Project with approval from the Mineral Development Section of MNDM.

<u>DAILY LOG</u>: A daily summary of work completed on the project is included in the application.

LIST OF EXPENDITURES: Expenditures are itemized on the final submission form.

DIAMOND DRILL LOG

HOLE NO.:	. 1	INCLINATION: -48 DEG.	
DRILLED B	Y: TERRAPH	BEARING: 200 DEG. AZ.	
DATE STAR	TED: JULY	1,1992	DEPTH: 118 FEET
DATE COMP	LETED: JU	LY 7,1992	LOGGED BY: PAUL NIELSEN
CORE SIZE	: E 1"DIA.		CLAIM: TB1080200
LOCATION:	TB1080200		OF NO. 4 POST CLAIM
FROM			RIPTION
0.0	5.0	CASING	
5.0	32.8	diameter, grey bla tinge, in part p phenocrysts up to 2 by numerous nar	grained approx. 0.1 mm ck rock with faint green orphyritic with feldspar mm. in diameter; crosscut row carbonate veinlets; disseminated pyrite (1-2%)
32.8	41.0		with feldspar phenocrysts , fine grained biotite rich
41.0	48.5	INTERMEDIATE FLOW ((as previously desc carbonate pyrite ve	
48.5	57.0	FELDSPAR PORPHYRY D (as from 32.8-41.0)	
57.0	66.8	INTERMEDIATE FLOW (Finer grained th carbonate veining	an previously described;

Dril:	l log cont			_
~~~~~~		HOLE NO.: 1	PAGE:	2
FROM	то	DESCRIPTION		
		disseminated pyrite at 30 degrees axis.	to	core
66.8	68.2	FELDSPAR PORPHYRY DYKE		
68.2	118.0	INTERMEDIATE FLOW (DACITE) Ubiquitous fine pyrite throughout 88.3-91.0 numerous carbonate veinlets mm. thick with finely disseminated pyrity 96.0-109.0 intense buff brown alteration with 30-60 % carbonate and a pyrity 20 % pyrite.	te seri	

118.0

END OF HOLE

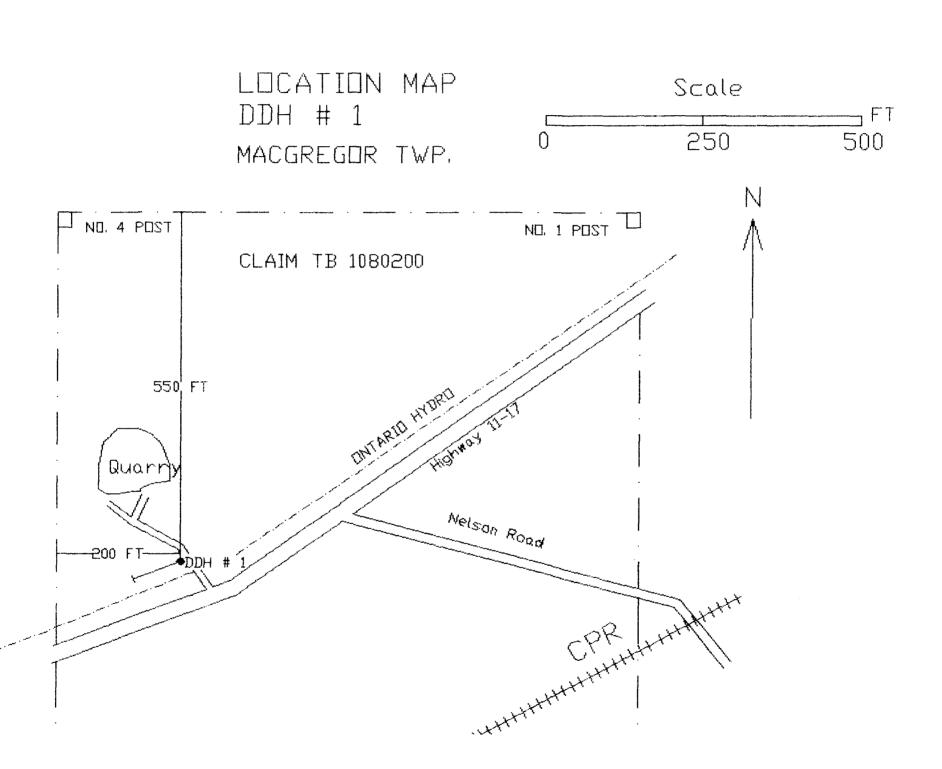
NOTE: Core stored at Bill Richardson residence in Pass Lake

Oct. 18/92

DDH NO.: 1

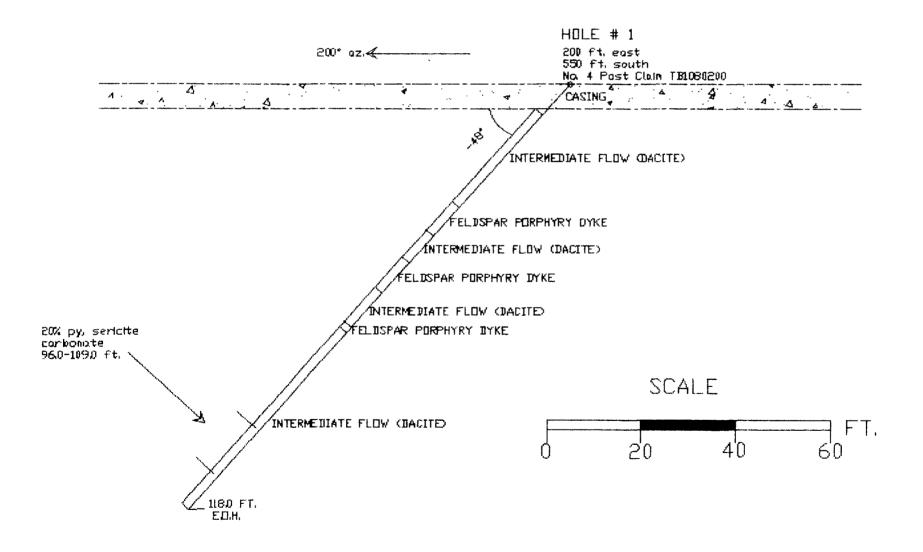
SAMPLE NO.	FROM	TO (FT.)	AU (PPB)	AG (PPM)
173115	33.0	38.0	<5	0.4
173114	48.5	53.5	<5	0.4
173113	53.5	57.0	<5	0.8
173112	83.3	91.0	90	2.4
96-101	96.0	101.0	532	2.4
173137	103.0	105.0	0.01 oz./t	NA
106-110	106.0	110.0	96	1.6

NA-not assayed

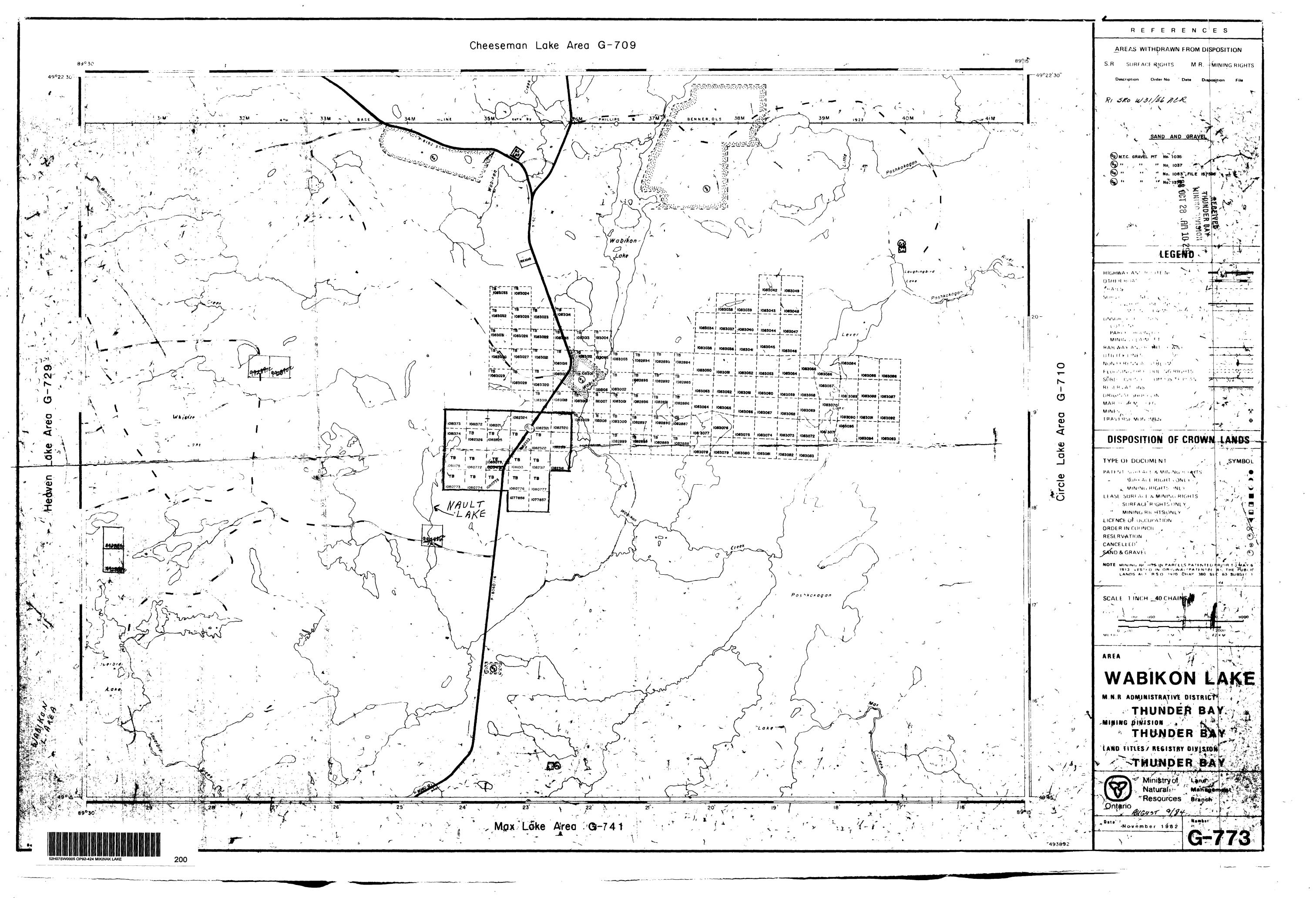


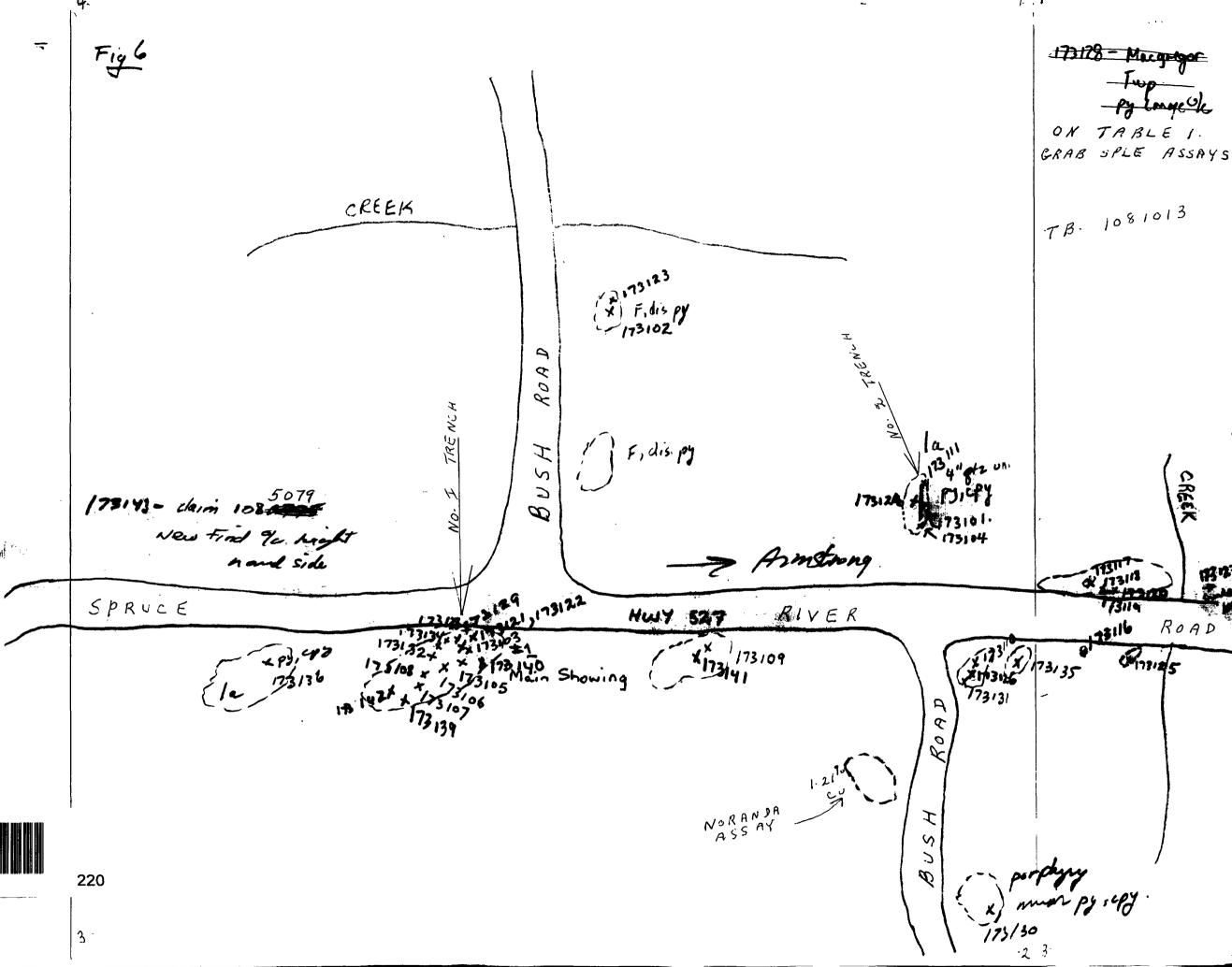
# HAYNE PROPERTY-NELSON ROAD AREA

SECTION: 200 DEG. AZ. HOLE NO.: 1 CLAIM NO.: TB1080200



Area North of This Line is "NORTH OF MACORFOOR AREA, G-672" 58B Loke 1 6218811 Bil 1188127  $\mathbf{10}$ 504 0 O 0 22Z 0 1Z 0 O'Connor Pt. com P. D. William Knobel Pt.





52H07SW0005 OP92-424 MIKINAK LAKE

N. TB 1085079 NORANDA ASSAY 1.2190 CU. GREEN STOR OUTC OUTCROP (MAFIC) ROAD (MAFIC) TB 1081013 2.3