



41116NW0016 17 SCHOLES

010

DIAMOND DRILLING

TOWNSHIP: SCHOLES

REPORT NO: 17

WORK PERFORMED FOR: Noramco Mining Corp.

RECORDED HOLDER: Same as Above [xx]
: Other []

<u>Claim No.</u>	<u>Hole No.</u>	<u>Footage</u>	<u>Date</u>	<u>Note</u>
S 482963	ELK 88-08	506'	Feb/88	(1)
S 470270	ELK 88-09	497'	Feb/88	(1)

2 DDH 1003'

Notes: (1) #W8807.137, filed in Dec/88

NORAMCO MINING CORPORATION

DIAMOND DRILL LOG

Hole No: ELK 88-08

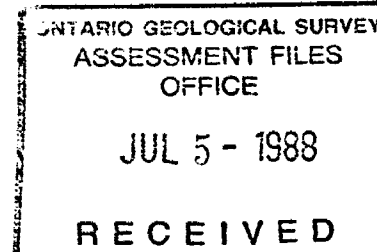
Property: Golden Rose Mine	Coordinates: 180+00E, 9+00N	Drill Company: MacKenzie Drilling
Township: Afton	Azimuth: 043°	Date Started: February 5, 1988
Location: Eastern Tailings Pond	Dip: -45°	Date Completed: February 9, 1988
Core Size: BQ	Length: 506'	Logged By: J. McAuley <i>Phk Brown for J. McAuley</i>
Casing: 0 - 15.0'	Core Location: Golden Rose Mine	Date Logged: February 11, 1988
Overburden: 0 - 15.0'		Checked By: J. McAuley May 24 1988

Acid Dip Tests

1. Collar -45° 506 -49°

Purpose This hole was collared in the same location as ELK 88-07 and oriented 043° north in order to intersect the iron formation sequence at its magnetically highest signature.

Conclusions Mineralization: 312.7 - 315.1; 63662 ● 770 ppb



From (ft)	To (ft)		Sample No.	From (ft)	To (ft)	Width (ft)	Au (ppb)	Au (oz/t)	Ag (ppm)	Zn (ppm)
		cont'd								
		4) sulphide and is 3 - 5%.								
		4) 409.0 - 433.1' chert-pyrite iron formation (sulphide facies I.F. ?) interbedded with some black graphitic mudstone with pyrite nodules and pyrrhotite. These nodules are common and reach 5 - 10%, but, average 1 - 3%.								
433.1	441.5	BLACK GRAPHITIC MUDSTONE WITH PYRITE AND PYRRHOTITE NODULES AND LENSES								
		This unit is well bedded and pyrrhotite predominates over pyrite. A narrow band of felsic volcanics ?? is also present.								
441.5	506.0	MAFIC VOLCANICS								
		Massive, pervasively chloritized, fine to medium grained volcanics are present. Minor pyrrhotite and chalcopyrite are present.								

E.O.H.

NORAMCO MINING CORPORATION

DIAMOND DRILL LOG

Hole No: ELK 88-08

From (ft)	To (ft)	Rock Type/Description	Sample No.	From (ft)	To (ft)	Width (ft)	Au (ppb)	Au (oz/t)	Ag (ppm)	Zn (ppm)
0	15.0	OVERBURDEN								
15.0	48.8	<p>ALTERED (CHLORITIZED) QUARTZ PORPHYRY</p> <p>Very mottled dark green with pale yellow-green and orangish patches. Very blocky, broken core throughout.</p> <p>Composition: Predominantly pervasively chloritized felsic porphyry which, where fresher, consists of a very fine grained to aphanitic quartzo-feldspathic groundmass with 0.5mm to 3mm quartz 'eyes'. Patches of pale yellow-green sericitic alteration are also present.</p> <p>Fractures 30 - 60° CAX-very broken and blocky core throughout with lower contact 15° CAX.</p> <p>Veins: hairline to 5mm black chloritic fracture fills (CAX variable) make up 1 - 2% of unit.</p> <p>Alteration 1) Dark gray-green pervasive chloritization very strongly alters 50% of the porphyry and slightly to moderately alters the rest.</p> <p>2) Pale yellowish green sericitic alteration also variably alters the porphyry. Sericite most frequently occurs as halos of alteration surrounding chlorite fracture fills.</p> <p>Mineralization: trace chalcopyrite.</p> <p>Magnetism: non-magnetic.</p> <p>- altered (chloritized and sericitized) quartz 'eye' porphyry.</p> <p>Pyrite approximately 1% in chloritic fracture fills.</p>	63651	45.7	48.0	2.3	<5			

From (ft)	To (ft)		Sample No.	From (ft)	To (ft)	Width (ft)	Au (ppb)	Au (oz/t)	Ag (ppm)	Zn (ppm)
		cont'd								
		- altered (sericitized and chloritized) quartz 'eye' porphyry with some mafic clots (<1% pyrrhotite).	63652	68.2	69.7	1.5	5			
69.7	176.8	NIPISSING DIABASE (OR MAFIC VOLCANICS) WITH XENOLITHS OF ALTERED QUARTZ PORPHYRY								
		- Similar to main unit from 48.8 to 58.7', very mottled dark gray-black to gray-green with orangish to pale yellow-green patches. Composition: generally, 90:10 mafic unit:porphyry xenoliths and locally (123 - 144.5') 40:60 mafic unit: porphyry xenoliths. Fractures 40 - 45° CAX. Veins: rare friable, vuggy quartz + calcite + chlorite + pyrite + trace chalcopyrite fracture fills (CAX 65°) make up <<1%. Alteration: Mottled zones of pervasive-type chloritization and sericitization most notably occur in the zones of altered porphyry xenoliths and contaminations. The mafic unit also locally has a baked (slightly silicified) appearance. Mineralization: pyrrhotite, pyrite and chalcopyrite all appear to be genetically related. Pyrrhotite (2-3% locally to 7%), pyrite (1-2% locally to 3%) and chalcopyrite (trace to 2%) are present. Sulphides appear to have textures indicative of magnetite segregation. (ie. fine disseminations, 'floating' blebs, interstitial late segregations and weakly developed net texture). Comments mentioned for the unit from 48.8 - 58.7' also apply here. Subunit 1): 123 - 144.5' a hybrid or very mixed zone of abundant contoured porphyry xenoliths in the Nipissing diabase (or mafic volcanic) unit. - Nipissing diabase (?) very rich in pyrrhotite (as disseminations to net textured submassive aggregates) pyrite as aggregates to cubes with nodular appearance and	63653	88.6	92.5	3.9	85		0.1	

From (ft)	To (ft)		Sample No.	From (ft)	To (ft)	Width (ft)	Au (ppb)	Au (oz/t)	Ag (ppm)	Zn (ppm)
		cont'd								
		concentrically surrounded by black hornblende or augite and chalcopyrite (as disseminations closely associated with pyrrhotite). Pyrrhotite makes up 5%, pyrite 2 - 3%, and chalcopyrite 1 - 2%. Subunit 2) 145 - 176.8' consists of very fine grained to fine grained Nipissing diabase with rare porphyritic quartz crystals and is completely devoid of quartz 'eye' porphyry xenoliths. Sulphides are very rare (<<1%) through the subunit.								
176.8	184.5	SILICIFIED AND CHLORTIZED GRADATIONAL CONTACT ZONE Gray-white and light to dark gray with green patches. Composition: This is a contaminated zone consisting of silicified Nipissing diabase and recrystallized (baked) siliceous (chert) iron formation with patches and fracture fills of chlorite and grunerite (?) and stringers with coarse (to 5mm) crystals of calcite. The silicified zones are moderately brecciated with in-filling chlorite and grunulite (?). Comments: This is the contact zone where the overlying diabase sill flowed ovetop of the magnetite-chert iron formation 'baking' the brecciated top of the iron formation unit, remobilizing chlorite and gunerite into fracture fills and surrounding breccia fragments. - recrystallized siliceous (cherty) iron formation with fracture fills of chlorite and grunerite (?).								
184.5	296.9	MAGNETITE-GRAY CHERT IRON FORMATION WITH PATCHES OF CHLORITE AND GRUNERITE Alternating light gray and gray-white with sub-metallic gray-black bands and bands and patches of green.	63654	178.3	181.0	2.7	185		0.6	

From (ft) To (ft)

Sample No. From (ft) To (ft) Width (ft) Au (ppb) Au (oz/t) Ag (ppm) Zn (ppm)

cont'd

Composition: 1) very fine grained finely disseminated chert beds (some may have some argillaceous material). 1 - 10 cm thickness (average 3 - 4 cm) make up 40% of unit.

2) very fine grained and very magnetite-rich magnetite beds 1 - 2 mm to 8 cm (average 1 - 2 cm) make up 30% of unit.

3) bands/beds of medium grained chlorite and/or grunerite \pm pyrrhotite \pm pyrite \pm trace andradite (3 mm - 40 cm, average 5 - 10 cm) make up 30% of unit.

Bedding: well-bedded angle is quite consistent throughout, CAX 35 - 40°. Fractures 30 - 50° CAX, F/M 1 - 3 very weak.

Veins: 1) fracture-fills of chlorite and/or grunerite \pm pyrrhotite \pm pyrite \pm rare chalcopyrite and traces of andradite garnet.

CAX is variable; fractures fills appear to be mobilized from chlorite/grunerite rich bands/beds.

2) Rare hairline quartz stringers are present (<<1% of unit) and up to 1 cm veins are also noted in places.

Mineralization: Pyrrhotite (1-2%), pyrite (1-2%), and chalcopyrite (trace to 1%) are present. Andradite garnets are strongly associated with the chlorite and/or grunerite bands and trace amounts are notable below 220'. Pyrrhotite forms thin trails paralleling bedding in chlorite and grunerite bands or beds. (syngenetic or selective pyrrhotization?). Pyrite occurs as disseminations and trails in fracture fills and also as small (to 2 cm) aggregates; generally pyrite becomes more abundant over pyrrhotite

From (ft) To (ft)

Sample No. From (ft) To (ft) Width (ft) Au (ppb) Au (oz/t) Ag (ppm) Zn (ppm)

cont'd

downhole; also within individual chlorite ± grunerite rich bands/beds there is a transition from pyrite to pyrrhotite-rich zones. Chalcopyrite occurs as rare trace disseminations strongly associated with pyrite and pyrrhotite.

Subunits 1) 184.5 - 198.0 ' abundant patches of green chlorite and lesser grunerite in brecciated chert (magnetite-poor) iron formation.

2) 247 - 257' small scale folding (soft sediment or tectonic deformation?) and finely laminated chert beds are parallel to subparallel to C.A.

- chlorite and grunerite bands with pyrrhotite 63655 198.7 200.5 1.8 50 0.7 13

4 - 5% and rare chalcopyrite and pyrite in magnetite-chert iron formation. 63656 213.0 215.2 2.2 15 0.6 7

- similar to 63655, pyrrhotite approximately 7-10%, chalcopyrite <1%; pyrrhotite forms trails paralleling bedding.

- grunerite-rich bands in magnetite-chert iron formation. This zone is pyrite-rich with much lesser pyrrhotite and rare chalcopyrite. Pyrite 63657 229.0 232.8 3.8 15 0.6 7

(3%), pyrrhotite (1%) and chalcopyrite (<1%) occur and rare andradite is present.

- Chlorite-rich band/beds in magnetite-chert iron formation. Pyrite is replaced by pyrrhotite downhole; 63658 245.0 247.0 2.0 30 0.7 8

trace chalcopyrite, pyrite (3 - 5%) and pyrrhotite (3 - 5%) occur. Pyrite and pyrrhotite are finely disseminated and as thin trails.

- Similar to 63658 pyrite is replaced by predo- 63659 270.6 272.6 2.0 10

minant pyrrhotite downhole.

Bedding: CAX 35° ● 240'; 0-50° ● 249'; 70° ● 267';

60° ● 280'; 0-45° ● 295'.

- 2 small 2 cm patches of cream coloured ankerite 63660 289.6 291.0 1.4 60 0.2 9

with minor andradite in pyritic and pyrrhotitic magnetite-chert iron formation.

From (ft)	To (ft)		Sample No.	From (ft)	To (ft)	Width (ft)	Au (ppb)	Au (oz/t)	Ag (ppm)	Zn (ppm)
296.9	307.0	<p>MAGNETITE-CHERT IRON FORMATION WITH SOME JASPER BEDS Alternating light gray and gray-white beds with submetallic beds and lesser red-brown beds with creamy-tan and green patches. Composition: 1) Finely laminated very fine grained chert blebs 60%. 2) Magnetite beds very fine grained approximately 30%. 3) Jasper beds. 4) Creamy-tan coloured fine grained (5%) ankeritic (?) alteration (3 - 4)% Bedding: 30° and 50° CAX. Veins: Very minor stringer quartz ± carbonate and a 1 cm quartz vein at 305.5' make up <1% of unit. CAX is variable; one quartz vein has andradite in it. 2) irregular millimetric chlorite ± grunerite ± pyrite alteration. In a few places selective pyritization of beds (2 - 4% of unit) occur. Ankerite alteration has affected some of the jasper beds. (1 - 2)% Mineralization: pyrite (approximately 1 - 2%) occurs as finely disseminated trails associated with the chloritic ± gruneritic alteration; locally selective trails parallel thin beds. Andradite in trace amounts occurs in a quartz vein and also possibly finely disseminated in ankeritic alteration. Pyrrhotite (1 - 2%) is similar in occurrence to pyrite and trace chalcopyrite. - several bands of selective ankeritization of jasper beds (?) and 1 cm quartz + chlorite vein (pyrite 1%, pyrrhotite 2 - 3%; chalcopyrite trace).</p>	63661	303.5	305.8	2.3	<5		0.2	6

From To
(ft) (ft)

Sample From To Width Au Au Ag Zn
No. (ft) (ft) (ft) (ppb) (oz/t) (ppm) (ppm)

cont'd

2) Very fine grained magnetite-bearing beds are few and <5 cm thickness; many sections have few magnetite beds and those present are not particularly rich in magnetite; (10 - 15%).

3) Stockwork network of stringer quartz occurs. Some sections have more abundant stringers (eg. approximately 320 - 365') and make up approximately 10% of unit.

Bedding: quite variable throughout this unit, several sections folded and subparallel C.A.; 50° CAX @ 312'; 40 - 45° CAX @ 345 - 365'; 0 - 20° CAX @ 332'; 20 - 25° CAX @ 345 - 365'. Fracture 45° CAX, F/M 1 - 3 very weak.

Veins: 1) A complex stockwork of hairline millimetric to 5 cm veins of buff-white quartz stringers is present. Stringer quartz surrounds brecciated iron formation fragments and 'flooding' of quartz has caused stoping (fragmentation) of iron formation beds and transport of iron formation fragments. CAX is completely variable and makes up approximately 10% of unit.

2) Grunerite ± chlorite + garnet (± ankerite) ± pyrite/pyrrhotite as irregular fracture fills and bands; locally 5 - 7% generally 2 - 4%; they appear to be genetically related to the stockwork quartz network.

Alteration: Quartz flooding and grunerite ± chlorite + andradite + ankerite + pyrite/pyrrhotite injections as described above.

Mineralization: Pyrite/pyrrhotite occur as disseminations in grunerite fracture-fills; pyrite and pyrrhotite are 1 - 3% and <<1% chalcopyrite is also present

From To
(ft) (ft)

Sample From To Width Au Au Ag Zn
No. (ft) (ft) (ft) (ppb) (oz/t) (ppm) (ppm)

cont'd

3) rare magnetite beds and a few black argillaceous beds (excluding the 2 main argillite interbeds) 5%
4) chlorite bands/beds and pyrite (present mainly from 409.0 - 422.0') approximate 5% of iron formation.

Graphitic black argillite (mudstone) interbeds

1) graphitic black argillaceous material 85 - 90%.
2) pyrite and rare pyrrhotite as fine squiggly trail and as some what vuggy fracture fills (5 - 10)%.

Bedding: 40° CAX, contacts cherty iron formation with black argillite 40° CAX at 413'; 50° CAX at 414.1' ? at 425'; 30° CAX at 427.3'.

Veins: 1) Minor saccharoidal textured buff-white quartz veins; at around 430' chert or saccharoidal quartz vein.

2) chlorite + pyrite/pyrrhotite bands and thin fracture fills present to 425'.

Alteration: Chlorite + pyrite/pyrrhotite in fracture fills and patches.

Mineralization: Pyrite and pyrrhotite are associated with chlorite bands and fracture fills to 425'; below 422' pyrite occurs by itself in vuggy fracture fills and in irregular tectonized appearing trails and aggregates.

pyrite to 425' 1 - 2% pyrite below 425' 5 - 10%
pyrrhotite to 425' 3 - 4% pyrrhotite below 425' <<1%
chalcopyrite to 425' trace chalcopyrite below 425' trace

<p>- Smoky gray coloured chert iron formation with pyrite and pyrrhotite trails and interbedded graphitic black argillite with abundant trails paralleling bedding and lesser pyrrhotite (pyrite 3 - 4%; pyrrhotite 1%). - Pyrrhotite-rich zone in chert iron formation.</p>	<p>63668 63669</p>	<p>413.0 420.9</p>	<p>415.0 422.9</p>	<p>2.0 2.0</p>	<p>15 5</p>
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From (ft) To (ft)

Sample No. From (ft) To (ft) Width (ft) Au (ppb) Au (oz/t) Ag (ppm) Zn (ppm)

cont'd

cream coloured bed of chert or possibly felsic volcanics.

- 10 cm massive pyrrhotite bed/band in argillite with highly pyritic argillite below - tarnished pyrites and trace chalcopyrite.

63671 433.1 433.9 0.8 45

- black argillite with pyrite (2 - 3%) pyrrhotite (2 - 3%) and chalcopyrite (trace) and orangy-brown pyritic sandstone/siltstone and creamy chert or felsic volcanics.

63672 439.0 441.5 2.5 15

441.5 506.0

MAFIC VOLCANICS

Massive dark gray-green

Composition: 1) Pervasively chloritized pyroxenes approximately 65 - 70%.

2) Tiny pale green saussuritized plagioclase 25 - 30%.

Fine to medium grained volcanics.

Fractures: 75° CAX, F/M 1 - 3 very weak.

Veins: Rare millimetric quartz + calcite stringers.

Alteration: Pervasive chloritization of pyroxenes and saussuritization of plagioclase (greenschist metamorphism).

Mineralization: Pyrrhotite occurs as trails and interstitial segregations throughout (generally 1%). Locally, at 448', a 20 cm wide band with approximately 30% pyrrhotite and at 446.5' segregations of chalcopyrite are present and locally reach 3 - 4%.

E.O.H.

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DIAMOND DRILL LOG

Hole No: ELK 88-09

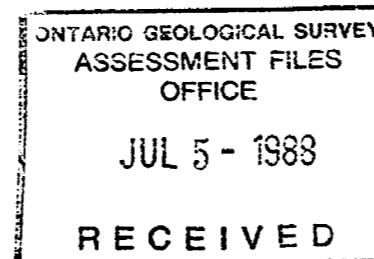
Property: Golden Rose Mine	Coordinates: 172+30E, 6+50N	Drill Company: MacKenzie Drilling
Township: Afton	Azimuth: 328°	Date Started: February 10, 1988
Location: Eastern Tailings Pond	Dip: -45°	Date Completed: February 13, 1988
Core Size: BQ	Length: 497'	Logged By: <i>P.A.R. Brown</i> J. McAuley <i>for</i>
Casing: 0 - 12'	Core Location: Golden Rose Mine	Date Logged: February 18-23, 1988
Overburden: 0 - 13'		Checked By: J. McAuley May 26, 1988

Acid Dip Tests

1. Collar -45° 497' -51°

Purpose This inclined (-45°) hole was drilled to the northwest (328°) in order to transect a zone characterized by an interfingering (?) signature of magnetically moderate high contours. A hole drilled in this zone would determine the present or absence of iron formation.

Conclusions No Significant Intersections



NORAMCO MINING CORPORATION

DIAMOND DRILL LOG

Hole No: ELK 88-09

From (ft)	To (ft)	Rock Type/Description	Sample No.	From (ft)	To (ft)	Width (ft)	Au (ppb)	Au (oz/t)	Ag (ppm)	Zn (ppm)
0	13.0	OVERBURDEN Cased to 12'. Boulders at top of hole.								
13.0	292.0	NIPISSING DIABASE (OR MAFIC VOLCANICS) WITH XENOLITHS OF QUARTZ PORPHYRY Dark gray black to gray-green with mottled patches of pale orange to orangy brown with pale green and apple green. Composition: Diabase is very fine grained, holocrystalline consisting of an igneous interlocking texture and slightly porphyritic (porphyritic pyroxenes). 1) very fine grained pyroxenes approximately 70% 2) very fine grained plagioclase approximately 25% 3) interstitial segregations of pyrrhotite and rare quartz. Quartz 'eye' porphyry xenoliths 1) Variable altered quartz-feldspartic groundmass 60 - 70%. 2) Quartz eyes 15 - 30% (quartz sometime completely replaced by chlorite). Fractures: 40° to 50° CAX, F/M 3 - 6 weak. Veins: 1) rare millimetric quartz-calcite stringers (average width 1 - 2 mm, 30 - 50° CAX) make up <<1% of unit. 2) pyrite and pyrrhotite in places form thin fracture fills. Alteration: 1) Chloritization of the pyroxenes in the diabase is variable and can be noted by increased green colouration on core, however, on fresh split core little can be noted. Of importance when comparing with the mafic volcanics, chloritization of the diabase								

From To
(ft) (ft)

Sample From To Width Au Au Ag Zn
No. (ft) (ft) (ft) (ppb) (oz/t) (ppm) (ppm)

cont'd

has not affected the igneous texture of the rock. The mafic volcanics have a weakly developed penetrative schistosity. Saussuritization of plagioclase is present in the diabase.

The quartz 'eye' porphyry xenoliths are variably, slightly to strongly altered. Alteration consists of chloritization and/or sericitization and where the porphyry is orangy-brown, hematization of the quartzo-feldspastic groundmass has occurred.

Mineralization: Pyrrhotite (1%) locally reaches 2 - 3% as irregular interstitial disseminations (where pyrrhotite is more abundant it has a slight net texture). Also it occurs as thin irregular fracture fills and as segregations with pyrite and/or chalcopyrite.

Pyrite (<<1%) as rare fracture fills also occurs as granular cubes in pyrrhotite segregations.

Chalcopyrite occurs in trace amounts as segregations to fine disseminations associated with pyrrhotite.

- pyrrhotite disseminated in slightly porphyritic 63673 37.4 39.4 2.0 5

Nipissing diabase (pyrrhotite 2 - 3%).

Comments: From 74 to 77' are several ophitic textures - large (to 2.0 cm) porphyritic augite crystals enclose interstitial saussuritized plagioclase and segregations of pyrrhotite.

Subunit 1) 87.3 - 97.7' Variable chloritized quartz 'eye' porphyry xenolith in Nipissing diabase. Mottled orange and orangy-brown with dark green patches. Numerous small spots to large patches of dark green chloritic alteration.

Fracture fills to veins of chlorite with broad alteration halos of chlorite are also present.

Chloritization has pervasively affected about 20 - 25% of the quartz 'eye' porphyry xenolith.

Where chloritization is strong chlorite replaces quartz eyes.

From To
(ft) (ft)

Sample From To Width Au Au Ag Zn
No. (ft) (ft) (ft) (ppb) (oz/t) (ppm) (ppm)

- Mottled, chloritized quartz 'eye' porphyry. Subunit 2) 97.7 - 123.0' Intensely altered (chloritized) and 'baked' quartz 'eye' porphyry xenolith in Nipissing diabase. Extremely mottled dark green and dark brownish (to slightly orangish) gray with pale orange patches. This section of porphyry xenolith is extremely chloritized throughout and sections have a 'baked' (very fine grained to aphanitic brownish gray sections) appearance. Alteration: Extreme chloritization and baking of the porphyry affects 90% of this subunit.

63674 92.2 94.5 5

- Extremely 'baked' (brownish to slightly purplish gray) altered quartz 'eye' porphyry.

63675 110.5 112.7 <5

Subunit 3) 123.0 - 154.4' Nipissing diabase is contaminated with numerous xenoliths of variably chloritized quartz 'eye' porphyry. Very mottled dark gray-green with pale orange to dark orange-brown patches.

Nipissing diabase: porphyry xenoliths, 50:50. Alteration: 1) chloritization of pyroxenes in diabase.

2) mottled chloritization of porphyry xenoliths.

3) pale yellowish sericitization of portions of the porphyry xenoliths.

4) orangy-brown hematization.

(hematite coating in the very fine grain quartz feldspathic groundmass of some of the porphyry xenoliths).

From (ft) To (ft)

Sample No. From (ft) To (ft) Width (ft) Au (ppb) Au (oz/t) Ag (ppm) Zn (ppm)

cont'd

Subunit 4) 154.4 - 234.0' Nipissing diabase with contaminations and xenoliths of gray-green with mottled patches of lighter greenish-gray and orange. Nipissing diabase: porphyry xenoliths 60-70:30-40. Igneous layering at 174.5 to 175.5' (CAX 45°) and a slight trachytic alignment of plagioclase. Slightly coarser grained sections have a sub-ophitic texture (eg. 165 - 166').

Numerous sections of gray-green quartz porphyry may be compositionally intermediate porphyry (dacite) or intensely altered orange quartz 'eye' porphyry. These gray zone are in many places difficult to differentiate from diabase.

Alteration: intense pervasive chloritization of the porphyry. Chloritization makes the porphyry appear gray and intermediate in composition (dacitic) and also make differentiation with diabase difficult in places.

- Altered (dacitic) chloritized porphyry.

63676 219.7 221.7 2.0 <5

Subunit 5) 234.0 - 269.0' Altered (gray-green with orange) and baked quartz 'eye' porphyry (similar to above subunit with very little Nipissing diabase). Mottled light to medium gray-green to orangish.

Composition: 1) Pervasively chloritized and baked quartz 'eye' porphyry 95%.

2) Chloritized narrow Nipissing dykes. (several to 3 cm wide from 264 - 269') with porphyry fragments. Dykes contact 30° CAX to 50° CAX and make up <5% of this subunit.

Alteration: Intense pervasive chloritization gives the altered porphyry a gray-green coloration through-

From (ft)	To (ft)	Sample No.	From (ft)	To (ft)	Width (ft)	Au (ppb)	Au (oz/t)	Ag (ppm)	Zn (ppm)
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cont'd

out much of this subunit. Baking of the porphyry by the Nipissing diabase gives the porphyry a very indurated appearance (hardened crytocrystalline appearance). 262 - 269' is increasingly silicified. Subunit 6) 269 - 274.5' Chloritized Nipissing diabase with minor less than 5 cm xenoliths of porphyry and a 1 cm quartz vein pervasively chloritized massive diabase as per previous description.

Subunit 7) 274.5 - 292' Silicified Nipissing diabase.

Composition: Moderately to locally strongly silicified Nipissing diabase locally contaminated by porphyry.

At 283.5' is a 15 cm band of pegmatite (granitized porphyry?). A 5 cm quartz vein (in silicified diabase) occurs at 278'.

- Strongly silicified Nipissing diabase with <<1% pyrite.

63677	280.2	283.0	2.8	15
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292.0 342.9

NIPISSING DIABASE (SLIGHTLY PORPHYRITIC)

Dark gray to gray-green, massive.

Composition: 1) Slightly to moderately chloritized pyroxenes are slightly porphyritic (augite grains 2 - 3 mm size) and make up 60 - 65% of unit.

2) Fine specks and laths of saussuritized plagioclase make up 30% of unit.

The combination of tiny laths of plagioclase surrounded by a mesostasis of augitic pyroxenes produces a subophitic texture. Massive, monotonous, subophitic textures of the fine rock and layering 0-5° CAX

● 299 - 301'; 40° CAX ● 310') characterize the diabase.

From (ft)	To (ft)	Sample No.	From (ft)	To (ft)	Width (ft)	Au (ppb)	Au (oz/t)	Ag (ppm)	Zn (ppm)
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cont'd

Alteration: 1) Pervasive slight to moderate chloritization of pyroxenes.

2) Saussuritization of plagioclase.

Mineralization: Rare traces of disseminated pyrite occur.

342.9 385.0

NIPISSING DIABASE WITH MINOR MYLONITIZED (?) QUARTZ PORPHYRY

Medium to dark gray to gray-green with narrow pale orange bands.

Composition: 1) Massive fine grained to very fine grained pyroxenes 60 - 70% (chloritized).

2) Very fine grained plagioclase (saussuritized) approximately 30%.

Porphyry xenoliths (<5% of unit) occur as narrow 5-10 cm bands most of which are mylonitized with ribbon quartz and finely laminated banding.

Some sections of the diabase are slightly silicified and xenoliths of porphyry are also silicified.

Mylonitic banding (60 - 65° CAX @ 343.4', 346', 360.3' 365') are present in porphyry xenoliths.

Alteration: 1) Pervasive moderate chloritization of pyroxenes.

2) Saussuritization of tiny plagioclase grains in diabase.

3) Slight to moderate silicification of sections of diabase and xenolithic bands of porphyry.

Mineralization: <1% pyrrhotite occurs as up to 5 mm bands in the diabase (?) and as up to 1.5 cm segregations of pyrrhotite and also as disseminations.

Pyrite: Traces of pyrite are associated with pyrrhotite as disseminations.

Chalcopyrite: Rare traces of chalcopyrite are present as disseminations associated with pyrrhotite; several zones with sulphides close to porphyry xenoliths.

From (Ft)	To (ft)	Sample No.	From (ft)	To (ft)	Width (ft)	Au (ppb)	Au (oz/t)	Ag (ppm)	Zn (ppm)
--------------	------------	---------------	--------------	------------	---------------	-------------	--------------	-------------	-------------

cont'd

Comments: very broken blocky core 371.5 - 373'.

385.0 437.6

MAFIC VOLCANICS (OR NIPISSING DIABASE)

Massive dark gray-green to dark green.

Composition: 1) chloritized (pervasively)
pyroxenes 60 - 70%.

2) pale green altered plagioclase (30%).

Vanolites occur at 401.9 - 411.6' and are made up of
sporadic 2 - 3% variolites in this zone. Flow
banding (?) 40° CAX.

Veins: 1) 411.6 - 419' abundant pinching and
swelling quartz and pinkish carbonate (ferroan
dolomite) stringers possibly parallel flow
banding (in-filling of quenching fractures?).

Quartz-carbonate stringers make up 5 to 7%
of this section and elsewhere <<1% of this unit.

Alteration: Pervasive chloritization of pyroxenes.

Plagioclase are pervasively altered to saussurite.

Mineralization: Rare segregations and disseminations
of pyrrhotite and pyrite.

Comments: Pervasive chloritization megascopically
obliterates pyroxene grains. The presence of quartz
and pinkish carbonate (ferroan dolomite) stringers
and more convincingly the local presence of variolites
and flow banding all suggest that this unit is mafic
volcanic and not Nipissing diabase.

Subunit 1) 401.9 - 411.6' Variolitic mafic volcanics
(2 - 3% variolites) with roundish variolites 1 mm to
1 cm size (average 2 - 3 mm) sporadically distributed
and locally slightly more concentrated.

From (ft)	To (ft)	Sample No.	From (ft)	To (ft)	Width (ft)	Au (ppb)	Au (oz/t)	Ag (ppm)	Zn (ppm)
--------------	------------	---------------	--------------	------------	---------------	-------------	--------------	-------------	-------------

cont'd

Subunit 2) 411.6 - 419' Abundant pinching and swelling quartz and ferroan dolomite stringers in mafic volcanic (in-filling of quench(?) fractures) stringers (5 - 7%) most are subparallel to flow banding.

- 2 quartz and ferroan dolomite veins in mafic volcanics (whole sample taken).

63678	415.0	415.8	0.8	5
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437.6 497.0

MAFIC VOLCANICS (PILLOWED?) WITH SEVERAL CHERTY INTERBEDS

Massive to banded dark gray-green with cream to light orangish bands.

Composition: 1) very fine grained to fine to medium grained pervasively chloritized pyroxenes 60 - 70%.

2) very fine grained altered plagioclase approximately 30%.

Locally abundant well banded/bedded chert and/or felsic volcanic interbeds (approximately 5% of unit).

Flow banding and chert bedding - 50° CAX @ 439', 35° CAX @ 449', 65° CAX @ 454', 55° CAX @ 483', 40° CAX @ 487'.

Fractures: 45 - 55° CAX, F/M 3 - 6 weak.

Veins: Rare millimetric quartz + carbonate stringers <<1%.

Alteration: 1) Pervasive chloritization of pyroxenes obliterate grains.

2) Saussuritization of plagioclase.

Mineralization: Pyrrhotite (1 - 2%) usually is concentrated as irregular aggregates (up to 5 cm) and lenseoid bands (paralleling flow banding).

Traces of pyrite also locally associated with pyrrhotite.

E.O.H.



Name and Address of Recorded Holder: Elk
Norameco Mining Corporation
1275 Main St W North Bay Ont P1B2W7

Prospector's Licence No.: T-4825

Summary of Work Performance and Distribution of Credits

Total Work Days Cr. claimed	Mining Claim			Mining Claim			Mining Claim		
	Prefix	Number	Work Days Cr.	Prefix	Number	Work Days Cr.	Prefix	Number	Work Days Cr.
<u>1003 ft</u>		<u>See list attached.</u>							

for Performance of the following work. (Check one only)

Manual Work

Shaft Sinking Drifting or other Lateral Work.

Compressed Air, other Power driven or mechanical equip.

Power Stripping

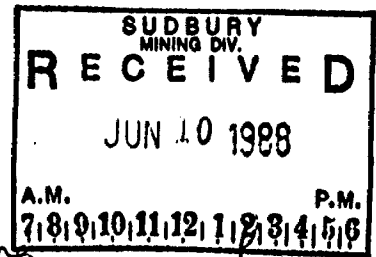
Diamond or other Core drilling

Land Survey

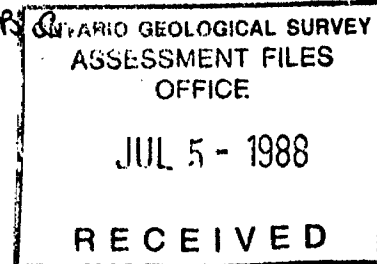
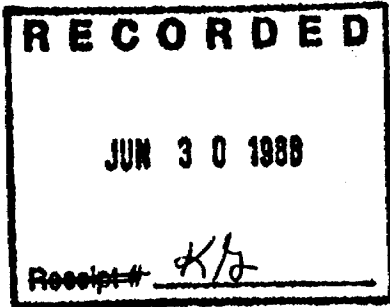
All the work was performed on Mining Claim(s): S 492963, 470270

Required Information eg: type of equipment, Names, Addresses, etc. (See Table Below)

EIK-88-08 506 ft Feb 5-9 /88
EIK-88-09 497 ft. Feb 10-13 /88
1003 ft.



B.G. core drilled by MacKenzie Drilling
Box 1054
Westbank BC
VOH 2A0.



Date of Report: June 9/88 Recorded Holder or Agent (Signature): M. Dubois

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying: Norameco Explorations Inc 1275 Main St W North Bay Ont P1B2W7

Date Certified: June 9, 1988 Certified by (Signature): M. Dubois

Table of Information/Attachments Required by the Mining Recorder

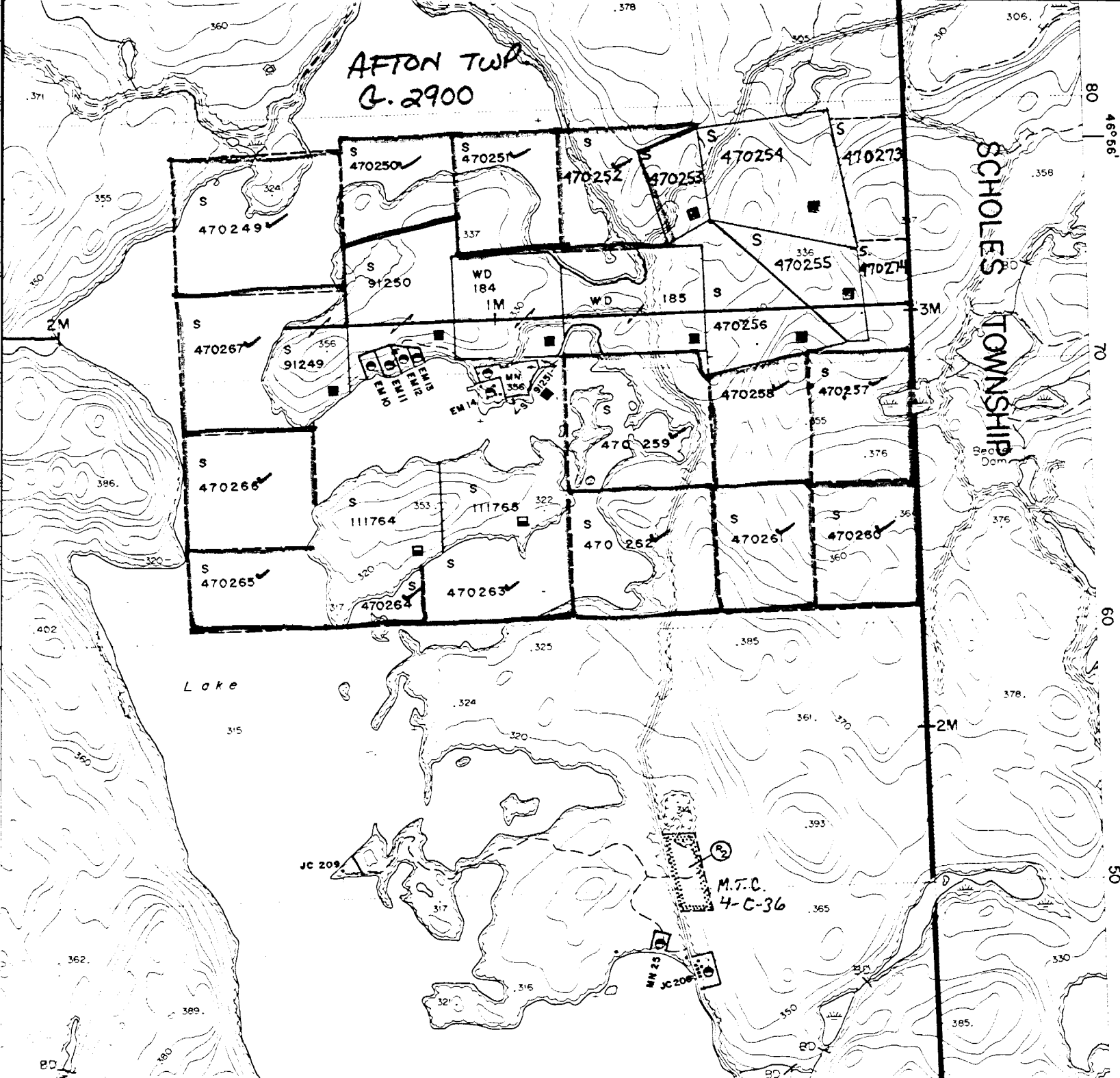
Type of Work	Specific Information per type	Other Information (Common to 2 or more types)	Attachments
Manual Work	Nil	Names and addresses of men who performed manual work/operated equipment, together with dates and hours of employment.	Work Sketch: these are required to show the location and extent of work in relation to the nearest claim post.
Shaft Sinking, Drifting or other Lateral Work			
Compressed air, other power driven or mechanical equip.	Type of equipment	Names and addresses of owner or operator together with dates when drilling/stripping done.	
Power Stripping	Type of equipment and amount expended. Note: Proof of actual cost must be submitted within 30 days of recording.		
Diamond or other core drilling	Signed core log showing; footage, diameter of core, number and angles of holes.	Nil	Work Sketch (as above) in duplicate
Land Survey	Name and address of Ontario land surveyor.		Nil

EMERALD LAKE CLAIMS

CLAIM_NO	DUE	CLAIM_NO	DUE
S 470249	40	S 470268	24.75
S 470250	40	S 470269	24.75
S 470251	39	S 470270	24.75
S 470252	40	S 470271	24.75
S 470253	0	S 470272	24.75
S 470254	0	S 470273	24.75
S 470255	0	S 470274	24.75
S 470256	0	S 470275	24.75
S 470257	40	S 470276	24.75
S 470258	40	S 470277	24.75
S 470259	40	S 470278	24.75
S 470260	40	S 482959	24.75
S 470261	40	S 482960	24.75
S 470262	40	S 482961	24.75
S 470263	40	S 482962	24.75
S 470264	40	S 482963	24.75
S 470265	40		
S 470266	40		
S 470267	40		

34

Diamond or other core drilling	Signed core log showing: footage, diameter of core, number and angles of holes.	above) in duplicate
Land Survey	Name and address of Ontario land surveyor.	Nil
		Nil



- Township, Meridian, Baseline
- Road allowance; surveyed
- shoreline
- Lot/Concession; surveyed
- surveyed
- Parcel; surveyed
- unsurveyed
- Right-of-way; road
- railway
- utility
- Reservation
- Cliff, Pit, Pile
- Contour
- Interpolated
- Approximate
- Depression
- Control point (horizontal)
- Flooded land
- Mine head frame
- Pipeline (above ground)
- Railway; single track
- double track
- abandoned
- Road; highway, county, township
- access
- trail, bush
- Shoreline (original)
- Transmission line
- Wooded area

DISPOSITION O

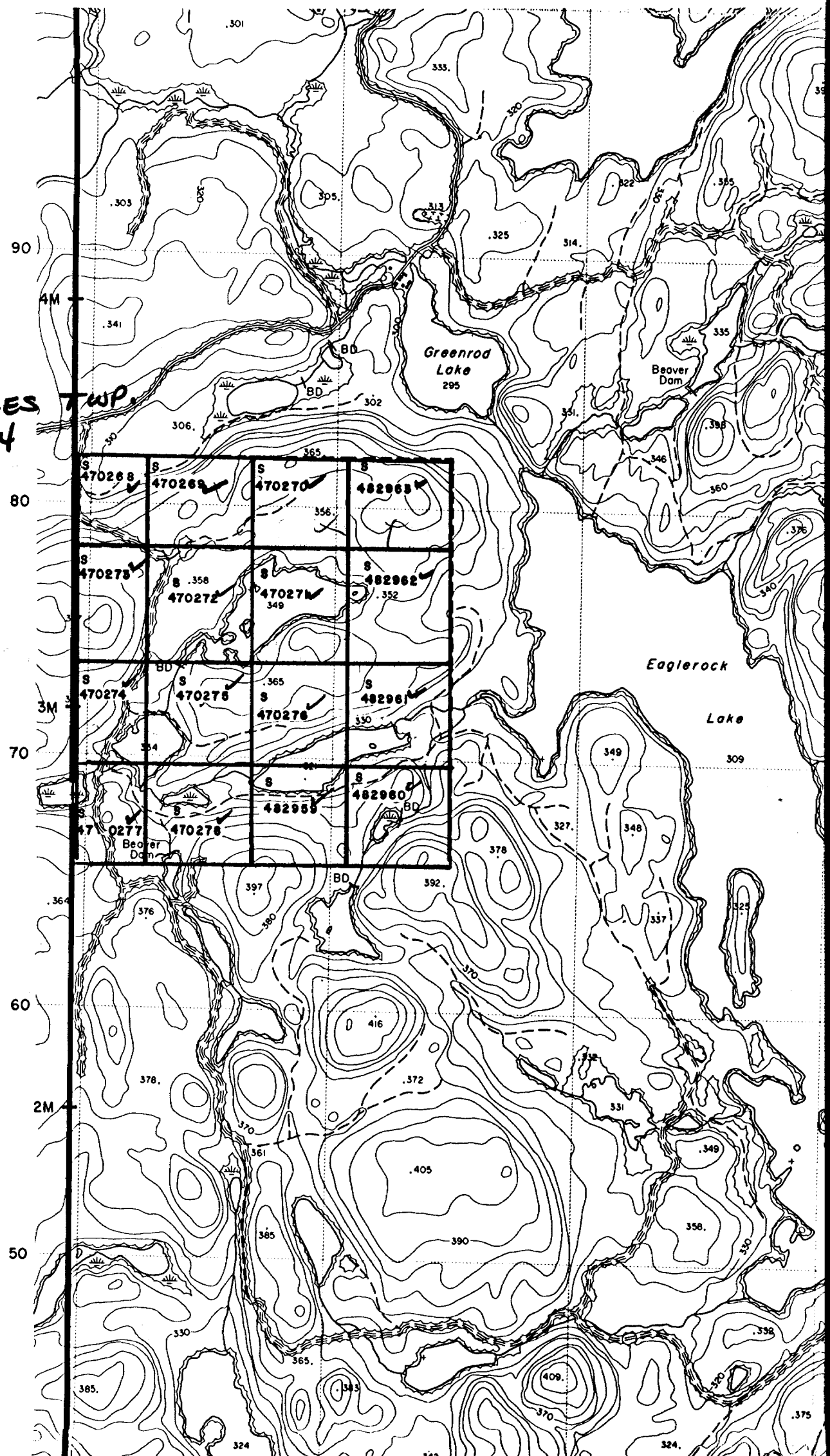
10

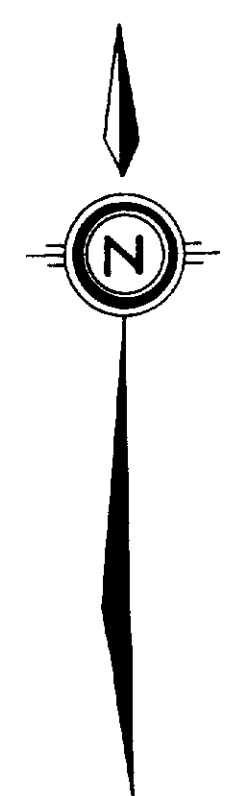
DN

No 6540

SCHOLES TWP.
G. 2834

AFTON TWP.





GREENROD LAKE



LEGEND

- INCLINED DIAMOND DRILL HOLE (1988 PROGRAM)
- MAGNETIC HIGH FEATURES (GAMMAS)
- EM CONDUCTORS
- INTERPRETED FAULTS

- GEOLOGICAL LEGEND**
- 7 GOWGANDA FORMATION
 - 6 DIABASE
 - 5 PORPHYRY
 - 4 NORTH VOLCANIC COMPLEX
 - 3 CHERTY TUFF
 - 2 IRON FORMATION
 - 1 SOUTH VOLCANIC COMPLEX

UNITARIO GEOLOGICAL SURVEY
ASSESSMENT FILES
OFFICE
JUL 5 - 1988
RECEIVED

FIGURE 2

COMPANY NAME	EMERALD LAKE RESOURCES
PROPERTY NAME	EASTERN TAILINGS POND PROPERTY
COMPILATION	
DATE	MAY 1988
SCALE	1" = 200'
BY	WBM

