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GEOLOGICAL AND WORK REPORT
ON THE
BARR ACCESS ROAD - EISEN LAKE CREEK PROJECT
COLEMAN TOWNSHIP
COBALT AREA, ONTARIO

FOR

GINO CHITARONI

AND

MINISTRY OF NORTHERN DEVELOPMENT AND MINES

LARDER LAKE MINING DIVISION

AUTHOR

GINO CHITARONI, B.Sc.

Dual 2.13762

DATE

NOVEMBER 30, 1990

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RESULTS

The 1990 exploration program was successful in locating three potentially lean areas within the Nipissing Diabase Sill (250 feet or less). Some sections within these lean areas exhibit extensive fracturing containing iron sulphides and minor quartz; an assay of these such deposits ran 0.011 oz/ton Gold.

Fault structure arrangements like that of Graben and Horst relationships have appeared to control the existence of lean sections within the Nipissing Diabase.

Lastly, sand and gravel deposits are abundant in their occurence chiefly to the east and northeast regions of the map area. Also sand deposits can be found in substantial quantities underlying the Evan's Swamp. These deposits mainly occur as eskers or outwash land forms, and have been economically exploited in the past.

CONCLUSIONS

The lener sections of the Nipissing Diabase Sill provide good target areas for future exploration programs concentrating on Base-Metals, Gold and Silver potential in rock formations below the lower contact of the sill. The possibility exists in finding the Keewatin volcanic pile and the Interflow Sedimentary "Iron Formations" below the lower contact of the Nipissing Diabase Sill. As demonstrated in the Cobalt "Silver" Mining Camp the most favourable economic environment would be that of the Keewatin Interflow Sediments. A recently discovered Ontario Geological Survey UTEM EM deep-seated anomaly trending near Eisen Lake may well prove the area capable of hosting these types of formations.

Gold indications in sections of the lower Nipissing Diabase and the very potential for nearby Interflow Sedimentary "Iron Formations" give the area credibility for economic potential.

Finally, sand and gravel deposits in the area are economically viable for aggregate extraction.

RECOMMENDATIONS

A future exploration program could include the following steps:

1) Follow-up geological mapping program to continue up into Eisen Lake area.

2) A detailed sampling program for Gold directed to testing the quartz-pyrite selvages of the lower lean sections of the Nipissing Diabase Sill.

3) A geophysical survey specifically targeted on the lean sections of the Nipissing Diabase and the Evan's Swamp could be implemented to search for potential anomalies reflecting Interflow "Iron Formation" Sediments or Sulpide Zones.

   Another survey could be used to detect fault structures and contacts, essentially over the same areas covered by the previous survey.

4) A short diamond drill program could be employed to depth-determine the supposed lean/thin sections of the Nipissing Diabase Sill.

   The Holes could be put down vertically at 400 feet or 130 metres per hole to reach the lower contact.

INTRODUCTION

Location (Figure 1)

The Eisen Lake Creek Property is located in the Township of Coleman of northeastern Ontario approximately 15 km southwest of the Town of Cobalt and 5 km west of Highway 11.

Access

The property can be easily reached by paved road, Highway 11, the 5 km west from Highway 11 via the all-weather gravel Portage Bay Road directly to the claim group; and/or by the Barr Access Road that splinters off the Portage Bay Road to the north area of the same claim group.

Topography

The property is of moderate relief where the surface is of a gently undulating landscape.

Vegetative cover consists of a mixed forest consisting mainly, in order, poplar, spruce, balsam, birch, and jackpine also cedar and maple.

Water-bodies, including Eisen Lake, make up approximately 15% of the claim group's land area.

Low-lying areas make up about 30% of the property and chiefly associated with Eisen Lake and the Eisen Lake Creek. Vegetation in low-lying areas are of a mixed nature tag alders, cedar - spruce, peat msukegs with some tamarack tree species.

Property Description

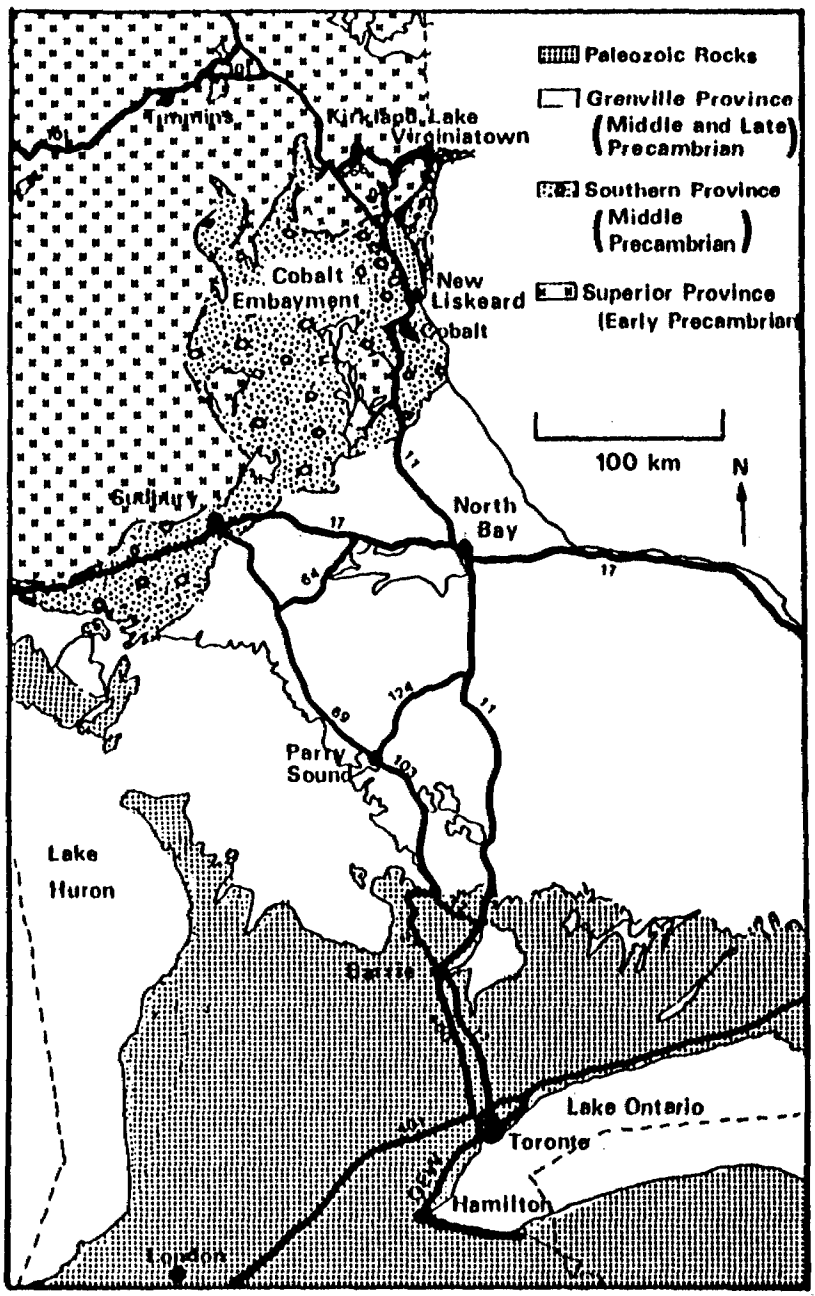
The Eisen Lake Creek Property comprises of a block of 25 contiguous unpatented mining claims for 980 acres.

These claims border open ground to the north, east, south and southwest; patented round (5-20 acre claims to the southeast; and Agnico-Eagle Mines to the west.

At present, the property is held by the recorded claim holder, Gino Chitaroni. The following is a list of claims forming the above property along with their status.

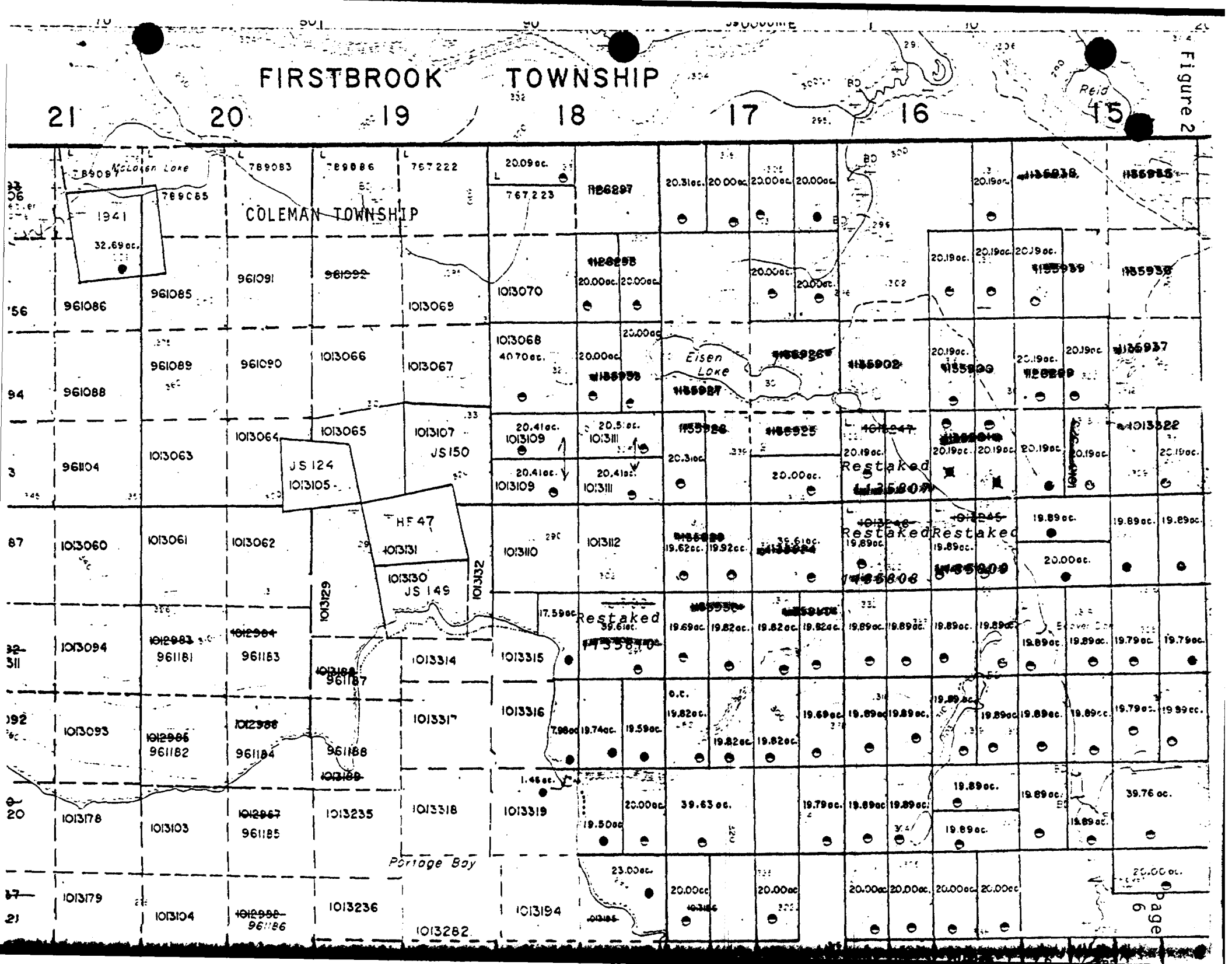
CLAIMS DATA (Figure 2)

	Township	Claim No.	Area (in acres)	Recorded Date
1)	Coleman	1135924	40	Jan. 31, 1990
2)	Coleman	1135925	40	Jan. 31, 1990
3)	Coleman	1135926	40	Jan. 31, 1990
4)	Coleman	1135927	40	Jan. 31, 1990
5)	Coleman	1135928	40	Jan. 31, 1990



Owsiaki and Lovell, 1984 (Modified after Pye, E.G. et al, 1972)

Figure 1 Location and Regional Geology


FIRSTBROOK TOWNSHIP
21
20
19
18
17
16
15
COLEMAN TOWNSHIP
McLaren Lake
Eisen Lake
Portage Bay
Reid L.
1941
32.69ac.
JS 124
1013105
HF 47
1013131
1013130
JS 149
JS150
Restaked
961091
961085
961086
961089
961090
961088
961104
1013063
1013064
1013065
1013066
1013067
1013069
1013070
1013068
40.70ac.
1013107
1013109
1013111
1013110
1013112
1013060
1013061
1013062
1013094
961181
961183
961187
1013314
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1013104
961186
1013236
1013282
1013194
1013129
1013132
20.09ac.
767223
1186297
20.31ac.
20.00ac.
20.19ac.
20.41ac.
20.5ac.
19.62ac.
19.92ac.
35.61ac.
19.89ac.
17.59ac.
39.6ac.
19.69ac.
19.82ac.
19.74ac.
19.59ac.
7.98ac.
1.46ac.
39.63ac.
19.79ac.
19.50ac.
23.00ac.
39.76ac.
Figure 2
Page 6

	Township	Claim No.	Area (in acres)	Recorded Date
6)	Coleman	1135929	40	Jan. 31, 1990
7)	Coleman	1135930	40	Mar. 23, 1990
8)	Coleman	1135935	40	Feb. 15, 1990
9)	Coleman	1135936	40	Feb. 15, 1990
10)	Coleman	1135937	40	Feb. 15, 1990
11)	Coleman	1135938	40	Feb. 15, 1990
12)	Coleman	1135939	40	Feb. 15, 1990
13)	Coleman	1135809*	40	Nov. 1, 1990
14)	Coleman	1135808*	40	Nov. 1, 1990
15)	Coleman	1135807*	40	Nov. 1, 1990
16)	Coleman	1126297	40	Jan. 11, 1990
17)	Coleman	1126298	40	Jan. 11, 1990
18)	Coleman	1126299	40	Jan. 11, 1990
19)	Coleman	1135900	40	Jan. 11, 1990
20)	Coleman	1135901	40	Jan. 11, 1990
21)	Coleman	1135902	40	Jan. 11, 1990
22)	Coleman	1135903	40	Jan. 31, 1990
23)	Coleman	1135999	40	Mar. 23, 1990
24)	Coleman	1013322	40	Jan. 11, 1990
25)	Coleman	1013323	40	Jan. 11, 1990

* These claims were originally staked under claim #'s 1013245, 10103246 & 1013247 but were restaked as time elapsed before report was completed.

PREVIOUS WORK

The property has not, to the knowledge of writer, undergone production. There has been considerable surface prospecting including numerous shafts, pits and trenches most of which not recorded as work. During the 1990 field season, a large forest operation was situated on the claim group. The land bared by the deforestation exposed an incredible amount of old surface workings on the claim group and its adjacent areas.

The following information is a two-fold complilation of the history of the Eisen Lake Creek Project area. The first compilation is recent history from 1987-1990 and the second is of a deeper historical perspective.

PREVIOUS WORK

PORTAGE BAY - BAY LAKE AREA

Recent years 1987 - 1990

Agnico-Eagle Mines (TSE) - Legacy Exploration agreement announcement for Spring 1991, $500,000 diamond drill program to search for potential deep-seated Base metal deposits -- Northern Miner newpaper Fall 1990.

Terraquest (Aero-geophysics contractor) fly claims south and west of Portage Bay (pers. comm.)...Mike Calles and Leo Owsiaki, Resident Geologist - Cobalt, Ontario. The writer believes these claims belong jointly to Winslow Gold and Northwind Ventures and the balance in Mike Calles' charge -- Total approximately 142. Winslow Gold (VSE) acquired 25% in 57 claims April 1990 and Northwind Ventures (VSE) acquired 25% in 57 claims April 1990 (Kittson and Coleman Townships) - Canadian Mines Handbook 1990-91.

Gold Par/(VSE) 12 claims Coleman Township, Fall 1989 - Canadian Mines Handbook 1990-91.

Quote Resources (VSE) approximately 15 claims (480 ac.) Firstbrook and Coleman Townships, Fall 1989 linecutting and geophysics - Canadian Mines Handbook 1990-91.

Carmel Resources (VSE) option 40 claims mainly in Coleman Township but also in Firstbrook.

T & H Resources Ltd. (TSE) 20 claims Firstbrook Township diamond drilled 1983-84 - Canadian Mines Handbook 1990-91.

Bethlehem Resources (VSE) 22 claims report 1988 geochemical and geological survery mainly Coleman Twp. but also in Firstbrook Twp.

Agnico-Eagle Mines (TSE) 68 claims approximately, Coleman Twp., Diamond Drilling and geophysics, Fall 1989, now in partnership with Legacy Explorations Ltd. (COATS).

Ralph Benner has in the past drilled on his claims in Firstbrook and Coleman Twps. and as recently as Spring 1990 (personal communications with writer).

Moreover, the annual report for the Cobalt Resident Geologist's District (1989) indicated that Agnico-Eagle Mines work in the vicinity included "...589 m of diamond drilling in four holes on one of these conductors" (UTEM survey anomalies). The holes intersected the unconformity at a relatively shallow depth and revealed the presence of Keewatin felsic metavolcanic rocks carrying disseminated pyrrhotite-chalcopyrite mineralization, interbanded with two varieties of interflow metasedimentary rocks."

The annual report also indicated the purpose of Quote Resources' work was to follow-up the UTEM deep-pulse electromagnetic survey by the Ontario Geological Survey.

Lastly, the report showed that Ralph Benner with Denison Mines Ltd. completed 1610 m of diamond drilling in two holes on its Firstbrook Township property. "Both holes intersected a fairly consistent sequence of extremely silicified Keewatin metabasalts interbanded with cherts and tuffaceous, sedimentary rocks." "...diseminated pyrrhotite-chalcopyrite mineralization occurred over significant widths in both silicified metabasalts and cherts."

Roy Silver Mines 100 ac. Coleman Township mining rights to John Moses and George Monteith of Willingdon Res. Ltd. (COATS) 1988? (personal communication)...no recent work.

Ontario Geological Survey 1987-1988 line cutting and line surveying for a Geophysical Research Project culiminating in a UTEM Electro-Magnetic Contour Map and Profiles which resulted in several noteable anomalies. Also, a Gravity Survey/Map and an Elevation Survey Map followed. Other methods were to be tried but funding was withdrawn from the project and thus could not be completed (pers. comm. Leo Owsiaki - Resident Geologist, Cobalt). (* see geological claim map)

Immediate Property Area Work History (Prior to 1987)

1. Agnico-Eagle Mines Ltd. (assess. files)

* Eisen Lake Project, Coleman Township yr. 1982
  14 claims Lots 16, 17, 18 & 19 in Concession 6.

* Report by Head Geologist, Brian Thorniley, he makes note that a "...zone of weakness is defined along the central portion of the claim group by the long axis of Eisen Lake and possibly reflects the strike pattern of an underlying interflow sedimentary horizon of Keewatin age." The emphasis was placed on silver exploration.

* Diamond Drilling Program followed up a geological survey.
  - Hole on claim # S-599577, 1268' length vertical depth in diabase 920' or 1148.5' hole length, 120.5' hole length in Huronian seds., 10' OB; -60° dip. Two basic intrusive dykes in Hur. seds.
  - Hole on claim # S-599580, 1198' hole length; 32' OB; 1176' Hur. seds. at -60° dip.
  - Two holes on claim # S-599581
    1st. collared on outcrop Nip. Diabase at -45 3/4°, hole length 364' 0.0 - 247' Nip. Diabase. 247-364' Hur. seds.

    2nd. hole 470' hole length at -58° dip
    0.0 - 8.0' OB
    8.0 - 240' Nip. Dia.
    240'- 470' Hur. Seds.

2. Imperial Cobalt Mines or "Evan's Mine" (assess. files)

* Thomson notes visit 1948 claim #371
* Location: east of Eisen Lake Creek and just south of the Portage Bay Road.
* Thomson observed two parallel veins in Nip. Diabase (fine-grained nature of Diabase noted) - east vein and west vein; west vein open cut excavated at surface 1904-1908 14.61 tons of Cobalt ore. Cobalt arsenides in Carbonate vein found in mine dump also some chalcopyrite.

3. Ranworth Exploration Ltd. (Armex-Cobalt Property) (assess. files) 1980 Program.

* Claim #473623 two Diamond Drill holes just north of Portage Bay Rd. and Evan's Mine.
  - 1st. hole 22' casing; hole length 128' at -45° dip
    22.0 - 128.0' Nip Dia.
    at 43.0' 1" qtz, cpy & py.
  - 2nd. hole 22' casing; hole length 122' at -45° dip.
    22.0 - 122' Nip Dia.
    at 118.0' fractured cpy & py on slips.
* Claim #371 Evan's Mine

  1st. hole 12' casing depth 134.0'
  at -45° dip.
  at 80-82' fractured irregular cpy stringers & py
  at 88.4' 1" calcite vein cpy.
  at 134.0' broke into open stope.

  2nd. hole 12' casing depth 59'
  at -45° dip
  at 59' broke into stope.

* Claim #473624 Off of the Portage Bay Rd. south, west of Eisen Lake Creek.
  - hole length 1254.0' at -60° dip.
    0.0 - 22.0' casing
    22.0 - 984.5' Nip. Dia.
    984.5-1254.0' Cobalt Series seds. bedded greywacke.
    at 91' 6" breccia calcite & cpy
    at 702-703.5' fractured 2" qtz, cpy and specularite.
    at 925.3' 1/8" qtz & calcite stringer and cpy.
    at 984.5' pink calcite & cpy.

4. Roy Silver Mines (assess. files)

* Loon Lake area just south of Portage Bay Rd.
* Two shafts 1300' apart on same vein structure; claim #1150 shaft 50' deep, claim #1169 shaft

100' deep, total claim acreage is 100 acres.

* Vein contains 1" - 12" Cobalt stringers together at 11.30% Co - no silver.

* Roy Silver Mines became Tiara Mines when? recently acquired by George Monteith and John Moses - both of Winteroad Resources and Willingdon Res.

Other Related Information

(a) Ontario Geological Survey Report #237 (1985)"Firstbrook and parts of surrounding Townships Area District of Temiskaming"; this report emphasizes economic settings conducive to silver-cobalt mineralization, which is proven by the Cobalt Mining Camp to east of the map area, and potential strataform and volcanogenic base-metal deposits.

The most interesting area at the time of the report is the Lapierre Occurence of base-metal mineralization on the only evident Archean Keewatin aged volcanic rock inlier in the area.

Companies/properties also mentioned of relevance are (1) Silverbucke Mines Ltd. magnetometor survey search for "Keewatin Iron Formations", (2) McKinnon Mine 152 ft. shaft and Diamond Drilling, (3) Harmon Occurence - Diamond Drilling, (4) Colebucke Mines Ltd. - Diamond Drilling, ground magnetometer, surveying, and geological surveying, (5) Dotsee Mine - shaft and mine development 210 ft. Cobalt produced minor Ag, Bismuth noted.

Major Aeromagnetic Anomaly p.32 report #237 OGS (1985).

(b) More recent Ontario Geological Survey work by Peter Born (pers. comm. Resident Geological Office Staff) showed occurences of Gold, Cobalt and Base-Metals in mapping of Kittson, southern Coleman Twp., Gillies Limit and Brigstocke Townships, particularily on the western shore of Portage Bay, at the Cobalt-Kittson Mine (580 ft.) Au 0.08 and 0.20 oz/ton assays, Kitt Lake (Shaft-Davis) and the Edison Mine.

(c) Many other relevant reports are contained at the Cobalt Resident Geologist's Office in Cobalt - the writer recommends such work done by Smyk's (1986) analysis of Keewatin Interflow Sediments; Rainbird (1985) "Firstbrook Member Potential for Base-Metals"; Kim (1979) "Base-Metal Potential in Coleman Member"; Colvine (1983) Mossman and Harron (1984) Long (1984) "Gold Enrichment Lorrain Formation - Cobalt Basin"; and Patterson (1979) "Metallogenetic Relationships of Base-Metal Occurences in the Cobalt Area"; and Debra Conrod's work on the Nipissing Diabase is also very noteworthy.

Also, a great many more reports exist for Ag - Co mineralization -- most noteable names are: Miller, Knight, Thomson, Lovell, Jambor, and so on.

(d) Overburden and Gravel/Aggregates potential is described by M.A. Roed (1979) "Northern Ontario Engineering Geology Terrain Study 90" -- Haileybury Area and corresponding map.

GEOLOGY

Regional Geology (Figure 1 and Table 1)

The Cobalt area is situated within the Southern structural Province while being wedged between the Superior and Grenville structural Provinces. (figure 1) Generally, the area is covered by the Proterozoic sedimentary strata of the Huronian Super-group which unconformably rests on Early Precambrain basement rocks. Thick intrusive Keweenawan Nipissing Diabase sheets are found widespread throughout the Cobalt area cutting all older rock formations.

The dominant structural feature of the Cobalt area is the Temiskaming Rift "Graben" Valley Fault system which forms Lake Temiskaming, the Ottawa River and its adjacent associated water systems.

Local Geology

The Barr Access Road - Eisen Lake Creek claims have predominantly surface exposures of the Nipissing Diabase sill. There is limited exposures of the Huronian Lorrain Formation Quartzites/Arkoses; and there is one small outcrop exposure of a Olivine Diabase Dike in the claim area.

The dominant structural feature is the Eisen Lake Fault which first extends westward through the claim block then veers south forming the Evan's swamp.

The overburden material of the area is characterized by the Pleistocene and Recent deposits of Organic Terrain, Hummocky Morraine and Glaciofluvial terrain-sand and gravel.

TABLE 1: Geological Column for the Cobalt Region

EON	TIME AND ROCK UNITS			
PHANEROZOIC	Cenozoic Era	Recent		Soil, lake and stream deposits
		Pleistocene		Glacial sand, gravel, bedded clay
	unconformity			
	Paleozoic Era	Middle Silurian		Upper Thornloe Fm. Lower Thornloe Fm.
		Lower Silurian	Wabi Gp.	Evanturel Creek Fm. Cabot Head Fm. Manitoulin Fm.
		Middle & Upper Ordovician	Liskeard Gp.	Dawson Point Fm. Farr Fm. Bucke Fm. Guiges Fm.
	unconformity			
PROTEROZOIC	(Keweenawan)		Olivine and quartz diabase dykes	
	intrusive contact			
			Nipissing diabase sheets	
	intrusive contact			
	(Huronian)	Cobalt Group	Lorrain Formation	Arkose, quartzite
			Gowganda Formation Firstbrook Member	Mainly bedded argillite
			Coleman Member	Conglomerate, greywacke, quartzite, arkose
	Kenoran Orogeny, 2490 m.y.			
ARCHEAN	(Matachewan)		Dykes of diabase, minor lamprophyre	
	intrusive contact			
	(Algoman)		Large salic intrusions, Lorrain Granite, Round Lake Batholith	
	intrusive contact			
	(Haileyburian)		Minor dykes and sills of mafic rocks; lamprophyre, serpentinite	
	intrusive contact			
	(Timiskaming)		Mainly greywacke and conglomerate	
	unconformity			
	(Keewatin)		Mainly intermediate to mafic flows; some pyroclastic and acid volcanics, minor interflow sediments with chert, sulphides; iron formation; schist.	

(after Russell, 1983 & Jambor, 1971a)

Owsiaki and Lovell, 1984

The 1990 Geology and Work Program

The program uncovered over 30 shafts and numerous pits and trenches. No economic quantities or significant concentrations of minerals were encountered, yet, minor iron sulphides were evidenced throughout the area. Narrow vein structures containing small concentrations of pyrite smaltite, chalcopyrite and pyrrhotite were found as remnants in muck-piles. Some shear zones and small fracture/breaks were noticed but no real significant shear zones of interest were encountered.

The undulating escarpment and adjacent low-lying areas within the map grid area indicate the possible presence of numerous fault lines. Several of these areas show prominent drop-off ridges and trough impressions.

Finally, substantial amounts of kome, esker and outwash-sand and gravel deposits exists predominantly to east and northeast regions of the map area but also underlying the Organic Terrain of the Evan's Swamp. These deposits have excellent economic potential for aggregate extraction.

The program was successful in finding areas of lean thickness within the 1,000-1,200 foot thick Nipissing Diabase sill/sheet intrusion. In one certain area, claim #1135999, showed a visible change in the sill that resembled a "Horst"-fault relationship. (see figure). The writer postulates the Diabase to be at least 250' in thickness or less in the leanest section characterized on surface as a fine-grained rock well fractured containing quartz/pyritized-iron gossanized selvages. One such selvage fracture assayed 0.011 oz/ton Gold. This type of mineralization in the writer's opinion should be followed up in more detail.

Another lean section of Nipissing Diabase was found to exist on either side of the Evan's Swamp/Eisen Lake Creek Fault. In this location the rock leaned more to a medium grain texture, yet still fine grained. The writer speculates a finer grained texture Diabase would be found under the Evan's Swamp. The fault relationship here could very well be either a "Gruben" or "horst" system. (see figure).

Rocks containing fine-grained Nipissing Diabase can be found in a broad arc forming, possibly, a contact with the younger Huronian Lorrain Formation quartz/arkoses east near Loon Lake.

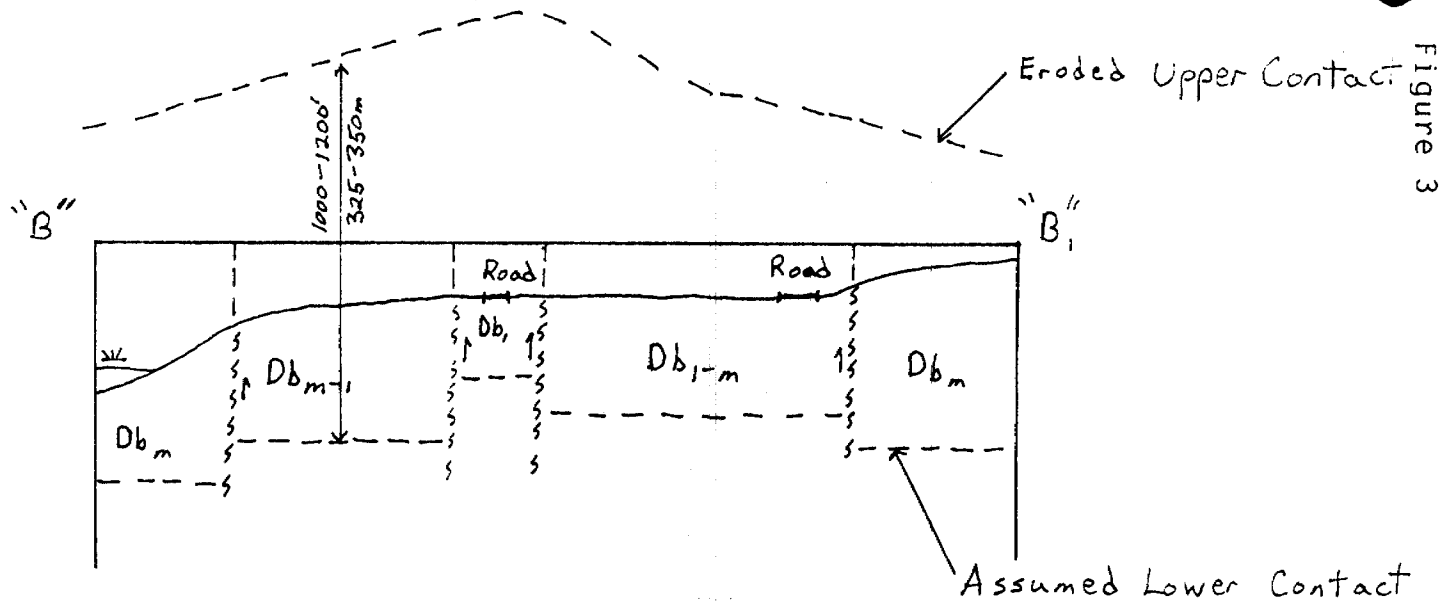
It should be mentioned that erosion has played a great part in reducing the over thickness of the Nipissing Diabase Sill. The extremity of erosion in local sections of the map area may be highly dependent on the local topography influenced by fault relationships and/or basement geography.

These three areas in this geological survey all warrant further investigation as the are: (a) well fractured, (b) mineralized (mainly with pyrite), (c) shown to have possible "Gold" associations, (d) close to the lower contact of the Nipissing Diabase.

The lower contact of the Nipissing Diabase deserves special attention, in that, other economically bearing rock formations may lie below. Huronian shales/slates of the Firstbrook formation have been known to occur below the Nipissing Diabase in the Evan's Swamp area; however, the Keewatin volcanic pile may be present in any one of the three areas. Of economic interest for Base-Metals, Silver and Gold, Keewatin volcanics would probably prove to be most favourable environment for deposition.

The recent discovery of a large deep-seated anomaly west of Eisen Lake appears to be that of Graphitic-Sulphidic Interflow Sediment; if this is so, the trend of this anomoly does run along the strike of the Eisen Lake fault which also forms the Evan's Swamp.

Figure 3



CROSS-SECTION #1

Eroded "Horst" Relationship

Huronian Firstbrook Shales/Slates
and/or
Keewatin Volcanic Pile - Sequence

Legend

Nipissing Diabase Sill

Db_1	fine grained
Db_{1-m}	fine to medium grained
Db_{m-1}	medium to fine grained
Db_m	medium grained

Observer Looking North

* Refer to "Geology and Claim Map"

Scale

Vertical 1:7,500
Horizontal 1:5,000

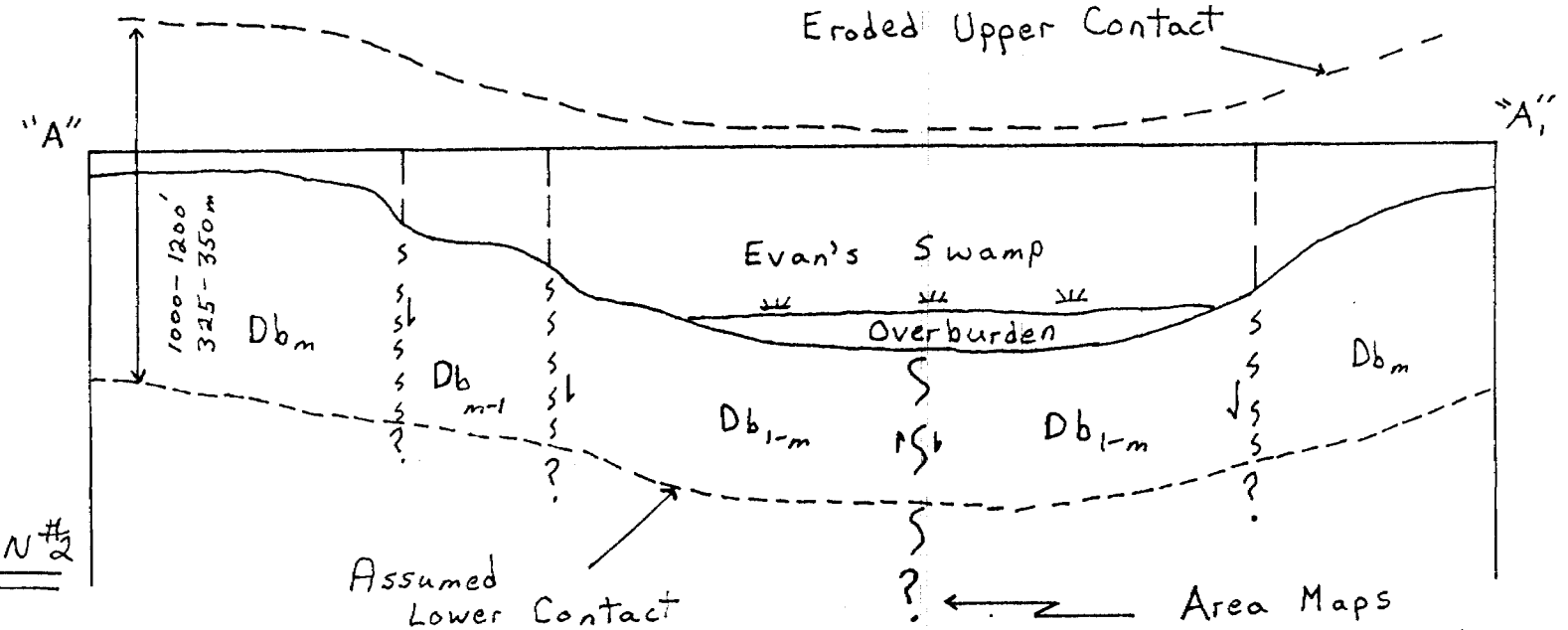


Figure 4

CROSS-SECTION #2

Eroded "Graben" Relationship

Huronian Firstbrook Shales/slates and/or Keewatin Volcanic Pile - Sequence possible Interflow sediment?

Observer Looking North - Northwest

Legend

Nipissing Diabase Sill

Db_1	Fine grained
Db_{1-m}	fine to medium grained
Db_{m-1}	medium to fine grained
Db_m	medium grained

* Refer to "Geology and Claim Map"

Scale

Vertical 1: 7,500

Horizontal 1: 5,000

OPAP GRANT #512
FINAL SUBMISSSION AND REPORT

Date: November 30, 1990.

Name: Gino Chitaroni

Individuals involved in the application: Gino Chitaroni

Project Changes:
1) Assay costs covered by coupons
2) Less Mechanical stripping needed
3) Manual labour and stripping - three individuals author included
4) Gas Costs
5) Administration and reporting costs
6) Rental (pump) and miscellaneous e.g. photography costs
7) More work for author than expected

Geology: See maps included

Work Done: Geological mapping, prospecting, mechanical and manual stripping and theoretical contrasts and comparisons analysis.

Results and Recommendations:

PROJECT #1 Bass Lake - Highway 11B Junction Base-metal Property (see map area "C")

Results
(1) Poor assay results - quartz veins-sweats and shears.
(2) Poor assay results from surface expression of uncovered anomaly; but expected.
(3) Successful in finding the surface expression of the anomaly discovered by St. Joe's Geophysical Exploration 1980 program; width 120-130' by approx. 800 '.

Recommendations
(1) Uncover other known anomalies discovered by St. Joe's through stripping and geological mapping (8 in total one other not detected - powerline interference).
(2) Drill anomaly discovered to depth of 500' vertical minimum.
(3) Geologically map virgin areas in claim areas not undertaken and in future run a geophysical survey over areas not covered. One must refer to St. Joe's work.

Objective (1) To Promote base-metal potential and Silver as a major by-product.

(2) To probe base-metal concentrations at depth in the anomalies/interflow sediments.

(3) To promote bulk mining method high tonnage at low grades.

PROJECT #2 Barr Access Road - Eisen Lake Creek Project (see map area 'A' & 'B')

Results (1) Poor assay results; however, pyrite-Gossan stringers in lower Nipissing Diabase indicate anomalous gold values.

(2) Found possibly two areas within the Nipissing Diabase which is quite a bit thinner than expected; therefore, lower contact in close proximity - either due to faulting and/or Keewatin basement dome/arch expression. This is valuable information for future diamond drill programs.

Recommendations (1) Follow-up with a geological survery and geophysical methods to detect faults, and the basement geology. Concentrate work on thin Nipissing Diabase cover.

Objective (1) Promote base-metal potential through search for interflow sediments and Silver-Co-Ni Arsenide/Carbonate Veins.

(2) Promote gold through anomalous values encountered.

Daily Log See Government forms.

List of Expenditures See Government forms.

AREA 'A' CLAIM AREA # 1135999

GENERAL COMMENTS:

1) Rock type of the area is Nipissing Diabase (Sill) with the presence of Pleistocene deposits -- Boulder-clays overburden 6" - 5' with 2' average.

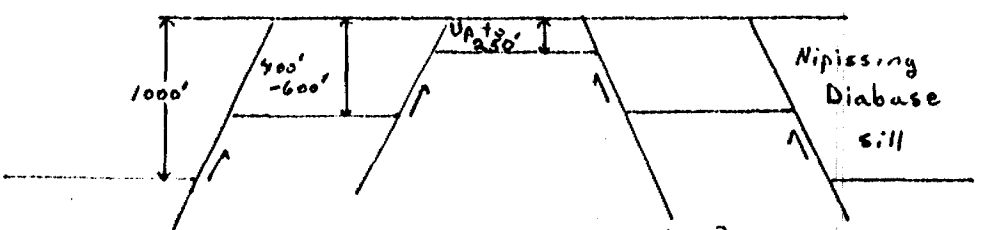
2) Numerous old workings: pits, shafts, muckpiles and trenches.

3) Roads and deforestation work preceded the mechanical stripping program.

4) No economic quantities of metals found.

5) All outcrops shown have been subjugated to mechanical and manual stripping.

6) An area of interest is the possibility of a thin or lean section in the Nipissing Diabase Sill because of faulting 'Horst' type?



Huronian Firstbreak slates?
or
Keewatin Volcanics?

7) Keewatin volcanics would be the most desirable rock type from an economic standpoint - for Base-Metals (Cu Pb Zn), Gold and Silver. Therefore, when considering possible rock types below the Nipissing Diabase Sill, Keewatin volcanics are the most favoured environment as seen in the Cobalt mining camp 10 km. to the northeast.

AREA 'A' CLAIM AREA # 1135999 (continued)

8) The Nipissing Diabase in the thin outlined area is well fractured (mainly joint patterns) with quartz and mineralized with pyrite and 'Fe' gossan. When not mineralized a chlorite selvage is present.

An assay reflected 0.011 oz/ton gold with minor amounts of copper.

9) The balance of the work is embodied in a report and map to be submitted as assessment work.

AREA 'B' CLAIM AREA # 1135809
formerly #1013245 (restaked)

GENERAL COMMENTS:

1) Rock type of the area is Nipissing Diabase with the presence of Pleistocene deposits -- namely sand.

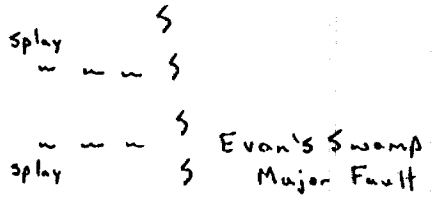
2) Numerous old workings: shafts, pits, muckpiles and trenches - found.

3) Road construction and deforestation basically unrelated to stripping program but proved a definite asset.

4) Upon examination no economic quantities of metals were found except for maybe sand as an aggregate.

5) In the stripped area "highlighted" by an outlined box the shaft was pumped to almost dry approximately 6 feet deep. No real evidence of vein in blasted bedrock just an altered (small) shear 2-4" in width. The muckpile however had evidence of a 1" quartz-calcite vein in medium-fine grained Nipisssing Diabase rock. Pyrite and Chalcopyrite well noticeable in the shaft's muckpile associated with the vein material. Minor Cobalt bloom was found in the trench from muckpile remnants.

6) It is quite possible the Evan's Swamp low lying area is an expression of a fault extension of the Eisen Lake Fault? plus there seems to be splay faults (low lying areas) leading into it. Example:



7) The Evan's Swamp area also seems to be underlain by Pleistocene sand deposits. In most cases the muskeg/peat moss cover ranges from 6" - 2' but may be deeper in the centre to 4 -16'?

8) The Nipissing Diabase in this area is chiefly of a medium grained texture bordering on fine grained near the edge of the Evan's Swamp while topographically higher areas are med-coarse grained. In any case, the lower half and middle sections of the Nipissing Diabase Sill are represented here. Thus, the lower

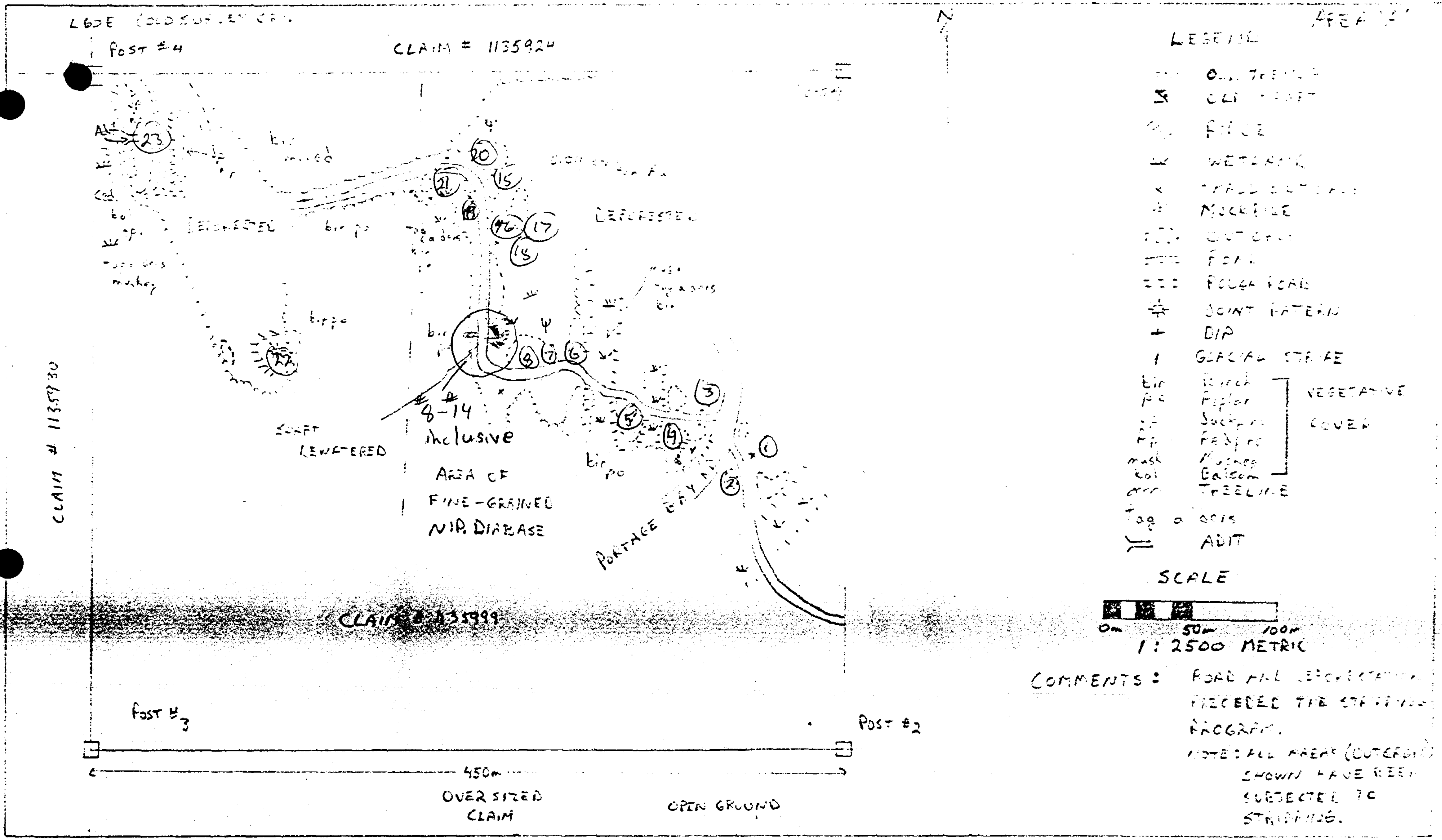
AREA 'B' CLAIM AREA # 1135809 (continued)

contact is from 250' to 600' at depth. Below the Sill's lower contact is the writer's main interest.

9) Rock types postulated to being underneath the Nip. Sill are Huronian Slates or Keewatin Volcanics, from an economic point of view the later would be of most interest for Base-Metals, Au, & Ag.

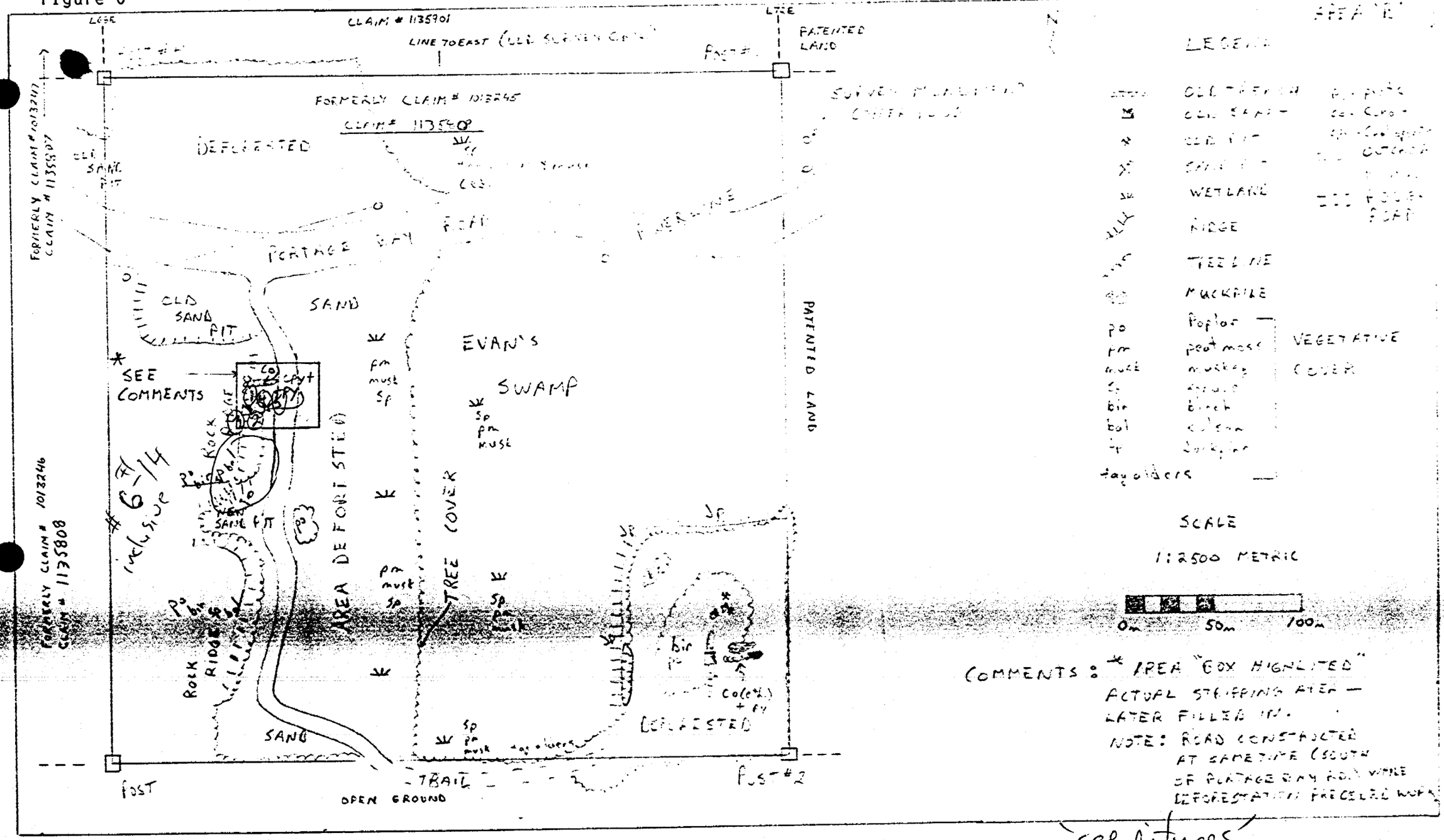
10) For more detailed information the balance of the work is embodied in a report and map to be submitted as assessment work.

Figure 5



CLAIM # 1135924
Post #4
CLAIM # 1135930
LEGEND
DIP
ADIT
VEGETATIVE
COVER
SCALE
0m
50m
100m
1 : 2500 METRIC
8-14
inclusive
AREA OF
FINE-GRAINED
NIP. DIABASE
PORTAGE BAY
Post #3
Post #2
450m
OVERSIZED
CLAIM
OPEN GROUND
COMMENTS :

Figure 6

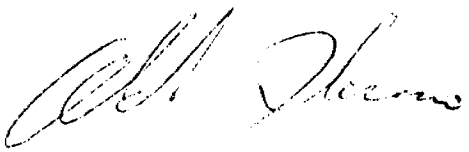

CLAIM # 1135901
LINE 70 EAST (OLD SURVEY LINE)
POST #1
POST #2
PATENTED LAND
FORMERLY CLAIM # 1013211
CLAIM # 1135907
FORMERLY CLAIM # 1013246
CLAIM # 1135808
FORMERLY CLAIM # 1013245
CLAIM # 1135909
DEFORESTED
OLD SAND PIT
PORTAGE BAY ROAD
SAND
EVAN'S SWAMP
SEE COMMENTS
ROCK OUTCROP
AREA DEFORESTED
TREE COVER
ROCK RIDGE
SAND
TRAIL
OPEN GROUND
SURVEY MARKER
CENTRE LINE
AREA "B"
LEGEND
OLD TRENCH
CLEAR CUT
OLD PIT
SAND PIT
WETLAND
RIDGE
TREE LINE
MUCKPILE
Poplar
peat moss
muskeg
spruce
birch
balsam
larch
deciduous
VEGETATIVE COVER
SCALE
1:2500 METRIC
0m
50m
100m
COMMENTS: * AREA "BOX HIGHLITED" ACTUAL STRIPPING AREA — LATER FILLED IN.
NOTE: ROAD CONSTRUCTED AT SAME TIME (SOUTH OF PORTAGE BAY ROAD) WHILE DEFORESTATION PARCELS WORKED
see pictures

Aldo Floreani

Bulldozer services:

August 13, 1990	....	4 hours 30 minutes
August 14	....	1 hour 30 minutes
August 15	....	2 hours
August 16	....	2 hours
August 21	....	3 hours
August 22	....	1 hour 30 minutes
August 23	....	4 hours
August 28	....	1 hour 30 minutes
August 30	....	1 hour 30 minutes
September 1	....	4 hours
September 2	....	2 hours
September 9	....	1 hour 30 minutes
September 17	....	2 hours
September 21	....	2 hours
September 29	....	1 hour

TOTAL HOURS .... 34 hours @ $50 per hour = $1700.00



1962 INTERNATIONAL CRAWLER TRACTOR BULLDOZER
MODEL TD9, SERIES B

1961 WHEEL TRACTOR BACKHOE CASE
MODEL W3

1972 WISCONSIN TILT TANDEM FLOAT

List of Equipment Used on Job

ALEX'S 5-TON TRUCK USED TO TOW TRAILER

STATEMENT

DATE SEPT. 20 19 90

GINO CHITARONI
COBALT

DATE	DETAILS	DEBIT	CREDIT	BALANCE
	PUMP RENTAL			
	2 DAYS @ $50/DAY			100 00
	AUG. 25/90			
	& SEPT. 3/90			
	Paid			
	Albert Chitaroni			

D0101

STATEMENT

DATE Nov 28 19 90

Gino Chitaroni

Cobalt

DATE	DETAILS	DEBIT	CREDIT	BALANCE
	Stenographic services & supplies			
	July 16 - 1 hr. @ $10			10 00
	Nov. 15 - 7 16 - 7 19 - 4 20 - 1 21 - 3 22 - 7 23 - 2 26 - 7 27 - 4 28 - 4	52 hrs. @ $10		520 00
	Supplies: 30 photocopies 8½"x14" @ 40¢			12 00
	2 typing ribbons @ $5.95			11 90
	3 correction tapes @ $2.50			5 00
	2 pkgs. paper @ $9.99			19 98
	500 photocopies @ 15¢			75 00
				$653 88
	Carol Chitaroni			

Pd. Nov 30/90.

GINO CHITARONI'S DAILY LOG

Day	Hours	Project Area	Date	Work Performed
1	6	Office	May 4,1990	Permit application
2	2	Office	June 14	Permit extension
3	6	Bass Lake	July 16	Prospecting/work set-up
4	6	ditto	July 17	ditto
5	6	ditto	July 18	Prospecting/MNR inspection
6	3	MNR office	July 23	Trip to Temagami to MNR office
7	6	Bass Lake	July 31	Prospecting/Manual labour/Supervision
8	6	ditto	Aug. 1	ditto ditto ditto
9	6	ditto	Aug. 2	ditto ditto ditto
10	6	ditto	Aug. 3	ditto ditto ditto
11	6	ditto	Aug. 4	ditto ditto ditto
12	6	ditto	Aug. 6	ditto ditto ditto
13	6	ditto	Aug. 7	ditto ditto ditto
14	6	ditto	Aug. 8	ditto ditto ditto/inspection with Elaine Basa-Res.Geo.
15	6	ditto	Aug. 9	ditto ditto ditto
16	6	ditto	Aug. 10	ditto ditto ditto
17	6	ditto	Aug. 11	ditto ditto ditto
18	6	Eisen Lake & Bass Lake	Aug. 13	ditto ditto ditto/work set-up
19	6	ditto ditto	Aug. 14	ditto ditto ditto
20	6	ditto ditto	Aug. 15	ditto ditto ditto/photographs
21	6	ditto	Aug. 16	Prospecting/Manual labour/Supervision
22	6	Eisen Lake Creek	Aug. 17	ditto ditto ditto
23	6	ditto	Aug. 18	ditto ditto ditto
24	6	ditto	Aug. 20	ditto ditto ditto
25	8	ditto & Bass Lake	Aug. 21	ditto ditto " / MNR inspection/pump shaft
26	6	Eisen Lake Creek	Aug. 22	Prospecting/Manual labour/Supervision
27	6	ditto	Aug. 23	ditto ditto ditto
28	6	ditto	Aug. 24	ditto ditto ditto
29	6	ditto	Aug. 25	ditto ditto ditto
30	6	ditto	Aug. 27	ditto ditto ditto
31	6	ditto	Aug. 28	ditto ditto ditto
32	6	ditto	Aug. 29	ditto ditto ditto
33	6	ditto	Aug. 30	ditto ditto ditto
34	6	ditto	Aug. 31	ditto ditto ditto

GINO CHITARONI'S DAILY LOG (continued)

Day	Hours	Project Area	Date	Work Performed
35	6	Eisen Lake Creek	Sept. 1, 1990	Prospecting/ Manual Labour / Supervision
36	6	ditto	Sept. 2	ditto ditto ditto
37	8	ditto	Sept. 3	ditto ditto ditto /pumped shaft
38	6	ditto	Sept. 4	ditto ditto ditto/Elaine Basa visit
39	6	ditto	Sept. 5	ditto ditto ditto
40	6	ditto	Sept. 8	ditto ditto ditto
41	6	ditto	Sept. 9	ditto ditto ditto
42	6	ditto	Sept.10	ditto ditto ditto
43	6	ditto	Sept.11	ditto ditto ditto
44	6	ditto	Sept.12	ditto ditto ditto
45	6	ditto	Sept.13	ditto ditto ditto
46	8	ditto /office	Sept.17	ditto ditto ditto/paper work
47	8	ditto ditto	Sept.18	ditto ditto ditto ditto
48	4	ditto	Sept.19	Clean-up
49	4	ditto	Sept.20	ditto
50	4	ditto	Sept.21	ditto
51	3	ditto	Sept.24	ditto
52	3	ditto	Sept.25	ditto
53	1	ditto	Sept.26	ditto
54	3	Bass Lake	Sept.27	ditto / and photographs
55	8	Eisen Lake Creek	Sept.28	Mapping and prospecting
56	8	ditto	Sept.29	Mapping
57	4	Bass Lake	Oct. 1	Prospecting/Manual labour/Supervision
58	6	ditto	Oct. 2	ditto ditto ditto
59	4	ditto	Oct. 3	ditto ditto ditto
60	4	ditto	Oct. 4	ditto ditto ditto
61	4	ditto	Oct. 5	ditto ditto ditto
62	4	ditto	Oct. 6	ditto ditto ditto
63	4	ditto	Oct. 7	ditto ditto ditto
64	6	ditto	Oct. 8	ditto ditto ditto
65	4	Bass Lake	Oct. 9	ditto ditto ditto
66	4	ditto	Oct. 10	ditto ditto ditto
67	4	ditto	Oct. 11	ditto ditto ditto
68	8	Timmins	Oct. 12	Trip to Timmins to Placer Dome
69	8	Bass Lake	Oct. 14	Mapping
70	4	ditto	Oct. 15	Prospecting/Manual labour/Supervision
71	4	ditto	Oct. 16	ditto ditto ditto
72	4	ditto	Oct. 17	Clean up
73	4	ditto	Oct. 18	ditto
74	2	ditto	Oct. 19	ditto
75	8	Eisen Lake Creek	Oct. 22	Mapping
76	8	ditto	Oct. 23	Mapping
77	8	ditto	Oct. 24	Mapping

GINO CHITARONI'S DAILY LOG (continued)

Day	Hours	Project Area	Date	Work Performed
78	8	Eisen Lake Creek	Oct. 25, 1990	Mapping
79		ditto	Oct. 26	Restaking three expired claims
80	8	Bass Lake	Oct. 30	Mapping
81	3	Kirkland Lake trip	Nov. 1	Trip to Kirkland Lake - mining recorder office
82	8	Bass Lake	Nov. 2	Mapping
83	8	Eisen Lake Creek	Nov. 3	Mapping
84	8	ditto	Nov. 4	"
85	8	Office	Nov. 5	Report(s) and Administration/Organization
86	8	"	Nov. 6	ditto ditto ditto
87	8	"	Nov. 7	ditto ditto ditto
88	8	"	Nov. 8	ditto ditto ditto
89	8	"	Nov. 9	ditto ditto ditto
90	4	"	Nov. 10	ditto ditto ditto
91	2	"	Nov. 11	ditto ditto ditto
92	8	"	Nov. 12	ditto ditto ditto
93	8	"	Nov. 13	ditto ditto ditto
94	8	"	Nov. 14	ditto ditto ditto
95	8	"	Nov. 15	ditto ditto ditto
96	8	"	Nov. 16	ditto ditto ditto
97	8	"	Nov. 19	ditto ditto ditto
98	8	"	Nov. 20	ditto ditto ditto

Note: Reports consist of two assessment reports, two mechanical work reports, and the OPAP report.

LOG FOR MANUAL LABOUR

Date	Project Area	Days	Hours	BARRY STEWART
July 31-Aug. 2/90	Bass Lake	3	8/day	
Aug. 6-Aug. 9	Bass Lake	4	8/day	
Aug. 13-Aug.16	Bass Lake	4	8/day	
Aug. 21	Bass Lake	1	8/day	
Aug. 20,22,23	Eisen Lake Creek	3	8/day	
Aug. 27-Aug.30	Eisen Lake Creek	4	8/day	
Sept. 1 & 2	Eisen Lake Creek	2	8/day	
	Total	21 days	168 hrs. @	$5.00 /hr. = $840.00

				MIKE KEON
July 31-Aug. 2/90	Bass Lake	3	8/day	
Aug. 6-Aug. 9	Bass Lake	4	8/day	
Aug. 13-Aug.16	Bass Lake	4	8/day	
Aug. 21	Bass Lake	1	8/day	
Aug. 20, 22, 23	Eisen Lake	3	8/day	
Aug. 27-Aug.30	Eisen Lake	4	8/day	
Sept. 4, 5	Eisen Lake	2	8/day	
Sept.10-13	Eisen Lake	4	8/day	
Sept.17-20	Eisen Lake	4	8/day	
Oct. 1-4, 9&10	Eisen Lake	6	8/day	
	Total	35 days	280 hrs. @	$5.00 /hr. = $1,400.00

SUMMARY for BARRY STEWART and MIKE KEON

Duties:
- -clear brush and cut out access
- -manually strip-off outcrops and dig out crevasses
- -sweep/clean off outcrops
- -carry equipment
- -daily clean-up

Equipment: Industrial broom and regular broom, pick, two-shovels, rake, two chain saws, garden hoe and an axe.

Note: All trips to Lands and Titles and Resident Geologist offices in Haileybury and Cobalt respectfully included in these days listed.

ASSAYS COURTESY OF ELAINE BASA
STAFF GEOLOGIST, COBALT RESIDENT GEOLOGIST OFFICE
MINISTRY OF NORTHERN DEVELOPMENT AND MINES

(1) Sample: EMB - 90- 13 (chip) *see geological map.

Rock Description: Medium-grained quartz diabase heavily altered/sheared.

Location: Claim #1135809 rock bridge between two shallow shafts; adjacent muckpiles exhibit pyrite, cobalt bloom, smaltite?

Results: Cu - 0.006%
Pb - <0.001%
Zn - 0.009%
Ag - trace
Au - 0.004 oz/ton

(2) Sample: EMP - 90 - 14 (chip) *see geological map.

Rock Description: Medium grained to fine grained diabase with abundant quartz sweats with locally abundant pyrite with gossan. Pyrite 1/16" - 1/8" width.

Location: Claim #1135999 stripped off outcrop

Results: Cu - 0.028%
Pb - <0.001%
Zn - 0.008%
Ag - trace
Au - 0.011 oz/ton

The following assays sampled by the author:

(3) Sample: #1A (grab) *see geological map
Report # CB 11541

Rock Description: 3/4" - 1" remnant calcite-quartz vein structure in muckpile near shaft; showed visible pyrite and chalcopyrite minor cobalt bloom in fine-medium grained diabase.

Location: Claim #1135809 muckpile

Results: Cu - 0.305% Co - 0.077% Cr 0.002%
Ni - 0.019% Pb - 0.011% Zn 0.005%
Ag - trace
Au - nil

EMB-90-13

Medium grained quartz diabase from trench (shaft) on Evans property

.006 % Cu .009 % Zn
<.001 % Pb
.004 oz/ton Au tr Ag

EMB-90-14

Medium grained to fine grained diabase with abundant quartz veinlets with locally disseminated pyrite. (Portage Bay Road).

.023 % Cu .006 % Zn
<.001 % Pb
.011 oz/ton Au tr Ag.

Ministry of
Northern Development
and Mines
Ontario

Temiskaming
Testing
Laboratories

P.O. Box 799
Presley St.
Cobalt, Ontario
P0J 1C0
(705) 679-8313

Report Number
OB-[illegible]541

Laboratory Report

Date Oct. 17, 1990

Issued To: Mr. Gino Chitaroni, P.O. Box 271, Cobalt, Ont. P0J 1C0

Sample Number	Gold Oz. Per Ton	Silver Oz. Per Ton	T1 Pkg. Cu%	Ni%	Co%	Pb%	Cr%
~~#1A~~	~~Nil~~	~~Trace~~	~~0.305~~	~~0.019~~	~~0.077~~	~~0.011~~	~~0.002~~
1B		Nil	0.018	0.011	0.006	0.001	0.018

Sample Number	Zn%
~~1A~~	~~0.005~~
1B	0.009

Fees Received Charged 7 coupons card #1068

L. Owsiacki
Manager (Acting)

CERTIFICATE OF QUALIFICATIONS

I, Gino P. Chitaroni, B.Sc. of Cobalt, Ontario, hereby certify as follows:

1. I am a graduate of the Haileybury School of Mines, Northern College, Ontario, and hold a Technologist's Diploma in Mining Engineering (1985). In addition, I am a graduate of Lake Superior State University, Sault Ste. Marie, Michigan, U.S.A. and hold a Bachelor of Science Degree in Geology (1988).

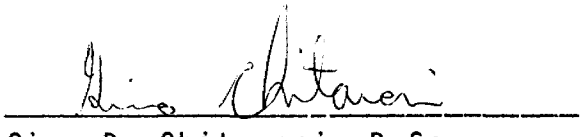
2. I have actively engaged in mining, propecting and mineral exploration work and studies for eight years in Ontario and Quebec.

3. This report is based upon my personal physical examination and investigation of the property and its relevant maps and documents pertaining to the Barr Access Road - Eisen Lake Creek Project. To the best of my knowledge and ability, all information on the above and within the report, is factual, correct and true.

4. I am the recorded claim holder and owner of the property.

5. I hereby consent to the inclusion of my name and report as deemed necessary for any purpose of financial accountability, government inspection and fact finding, and for use in the property's promotion to the mining sector.

Dated at COBALT, ONTARIO this 30th day of November, 1990



Gino P. Chitaroni, B.Sc.
Geologist/Prospector

REFERENCES

General:

Cobalt Resident Geologist's Office - Assessment Files and Office Staff; special thanks to Elaine Basa, Leo Owsiaki, and Mr. Robert Thomson's work.

Temiskaming Testing Laboratory, Cobalt, Ontario.

Studies:

Conrod, D. M., 1988

"Petrology, Geochemistry, and Platinum Group Element Potential of the Portage Bay, Cross Lake, Bonanza Lake, Nipissing Intrusions of Northern Ontario".

Johns, G. W., 1985

Ontario Geological Survey Report 237 "Geology of the Firstbrook and Parts of Surrounding Townships Area - District of Timiskaming".

Owsiaki, et al, 1989

"Annual Report for the Cobalt Resident Geologist's District 1989" - Reprinted from Ontario Geological Survey Miscellaneous Paper 147.

Owsiaki, L., and Lovell, H., 1984

"Field Trip 4 Geology, Silver, and Gold Deposits: Cobalt and Kirkland Lake".

Roed, M. A., 1979

"Northern Ontario Engineering Geology Terrain Study 90 - Haileybury Area", Districts of Nipissing and Timiskaming; Ontario Geological Survey.

For work report # 9108.00137.

Ministry of Northern Development and Mines
Ontario

Temiskaming Testing Laboratories

P.O. Box 799
Presley St.
Cobalt, Ontario
P0J 1C0
(705) 679-8313

Report Number
CB 11541

Laboratory Report

Date Oct. 17, 1990

Issued To: Mr. Gino Chitaroni, P.O. Box 271, Cobalt, Ont. P0J 1C0

Sample Number	Gold Oz. Per Ton	Silver Oz. Per Ton	T1 Pkg. Cu%	Ni%	Co%	Pb%	Cr%
#1A	Nil	Trace	0.305	0.019	0.077	0.011	0.002
1B		Nil	0.018	0.011	0.006	0.001	0.018

Sample Number	Zn%
1A	0.005
1B	0.009

RECEIVED
LARDER LAKE
MINING DIVISION
MAR 28 1991
TIME 10:47 am

Fees Received Charged 7 coupons card #1068

Noted claim # 1135809
Au+Ag 17.75
T; 20.00
Total $ 37.75

L. Owsiacki
Manager (Acting)

Ministry of Northern Development and Mines
Ontario

Temiskaming Testing Laboratories

P.O. Box 799
Presley St.
Cobalt, Ontario
P0J 1C0
(705) 679-8313

Report Number
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Sample Number	Gold Oz. Per Ton	Silver Oz. Per Ton	T1 Pkg. Cu%	Ni%	Co%	Pb%	Cr%
#1A	Nil	Trace	0.305	0.019	0.077	0.011	0.002
1B		Nil	0.018	0.011	0.006	0.001	0.018

	Zn%
1A	0.005
1B	0.009

RECEIVED
LARDER LAKE
MINING DIVISION
MAR 28 1991
TIME [redacted]

Fees Received Charged 7 coupons card #1068

Re Log Claim # 1135809

L. Owsiacki
Manager (Acting)

Ministry of Northern Development and Mines

Ontario

WORK

DOCUMENT No. W9108.00137

2.13763

31M05NW0023 2.13763 COLEMAN

900

Mining Act

Report of Work (Expenditures, Subsection 77(19))

Type of Work Performed	Mining Division	Township or Area
Assaying	Larder Lake	Coleman

Recorded Holder	Prospector's Licence No.
Gino Chitaroni 2.13763	K21713

Address	Telephone No.
Portage Bay Rd. P.O Box 271 Cobalt Ont P0J1C0	705-679-5946 or 5931

Work Performed By: Same As Above

Name and Address of Author (of Submission): Same As Above

Date When Work was Performed — From: 04 (Day) 05 (Mo.) 90 (Yr.) To: 28 (Day) 11 (Mo.) 90 (Yr.)

All the work was performed on Mining Claim(s): Indicate no. of days performed on each claim. *See Note No. 1 on reverse side

Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days
1135809	252										

Instructions
Total days credits may be distributed at claim holder's choice. Enter number of days credits per claim in the expenditure days credit column (below).

Calculation of Expenditure Days Credits: Total Expenditures $ 37.75 ÷ 15 = Total Days Credits 2.52

Total Number of Mining Claims Covered by this Report of Work: 1

Mining Claims (List in numerical sequence). If space is insufficient, attach schedules with required information

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.	Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.	Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.	Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
L	1135999	2.52									

RECEIVED
MAY 16 1991
MINING LANDS SECTION

Total Number of Days Performed	Total Number of Days Claimed	Total Number of Days to be Claimed at a Future Date
2.52	2.52	—

Certification of Beneficial Interest *See Note No. 2 on reverse side

I hereby certify that, at the time the work was performed, the claims covered in this report of work were recorded in the current recorded holder's name or held under a beneficial interest by the current recorded holder.

Date: March 23, 1991

Recorded Holder or Agent (Signature): Gino Chitaroni

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 Address of Person Certifying: Gino Chitaroni Portage Bay Rd Cobalt Ont. P.O. Box 271 P0J1C0

Telephone No. 705-679-5946 or 5931

Date: March 23, 1991

Certified By (Signature): Gino Chitaroni

Received Stamp: RECEIVED LARDER LAKE MINING DIVISION MAR 28 1991

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
2.52	Mar 28/91	for
	Date Approved as Recorded: May 31/91	Provincial Manager, Mining Lands: Ron C. Gashinski

TIME 10:47 am

0878 (89/06)

Ministry of Northern Development and Mines

Ontario

Technical Assessment Work Credits

File: 2.13763

Date: April 23/91

Mining Recorder's Report of Work No.: W.9108.00089

Recorded Holder: Gino Chitaroni

Township or Area: Coleman Township

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	L.1013322-323 1126299 1135808-809 1135901 1135999 1135935-939 incl.
Electromagnetic ____ days	
Magnetometer ____ days	
Radiometric ____ days	
Induced polarization ____ days	
Other ____ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological 20 days	
Geochemical ____ days	
Men days ☐ Airborne ☐	
Special provision ☒ Ground ☐	
☐ Credits have been reduced because of partial coverage of claims.	
☐ Credits have been reduced because of corrections to work dates and figures of applicant.	

Special credits under section 77 (16) for the following mining claims

10 days credit under geology for: L.1135807, L.1135924 L.1135929-930.

Note: Credits reduced due to partial coverage.

No credits have been allowed for the following mining claims

☐ not sufficiently covered by the survey ☐ insufficient technical data filed

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geological - 40; Geochemical - 40; Section 77(19) - 60.

Ministry of Northern Development and Mines

Ontario

Technical Assessment Work Credits

File: 2.13763

Date: April 23/91

Mining Recorder's Report of Work No.: W.9108.00090

[redacted]

Recorded Holder: Gino Chitaroni

Township or Area: Coleman

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic _____ days	
Magnetometer _____ days	
Radiometric _____ days	
Induced polarization _____ days	
Other _____ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological _____ days	
Geochemical _____ days	
Man days ☐ Airborne ☐	
Special provision ☐ Ground ☐	
☐ Credits have been reduced because of partial coverage of claims.	
☐ Credits have been reduced because of corrections to work dates and figures of applicant.	

Special credits under section 77 (16) for the following mining claims

No credits have been allowed for the following mining claims

☒ not sufficiently covered by the survey ☐ insufficient technical data filed

L.1135900
L.1135927-928.

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geological - 40; Geochemical - 40; Section 77(19) - 60.

Ministry of Northern Development and Mines

Ontario

M. L.

Mining Act

DOCUMENT No. W 9108.00099

Report of Work
(Geophysical, Geological and Geochemical Surveys)

Instructions
- Please type or print.
- Refer to Section 77, the Mining Act for assessment work requirements and maximum credits allowed per survey type.
- If number of mining claims traversed exceeds space on this form, attach a list.
- Technical Reports and maps in duplicate should be submitted to Mining Lands Section, Mineral Development and Lands Branch.

Type of Survey(s)	Mining Division	Township or Area
Geological	Larder Lake	Coleman

Recorded Holder(s): Gino Chitaroni — 2.13763

Prospector's Licence No.: K21713

Address: Portage Bay Rd., P.O. Box 271, Cobalt, Ont.

Telephone No.: 705-679-5946 or 5931

Survey Company: —

Name and Address of Author (of Geo-Technical Report): Same as Above

Date of Survey (from & to): 04 05 90 (Day, Mo., Yr.) — 28 11 90

Credits Requested per Each Claim in Columns at right

		Days per Claim
Special Provisions For first survey: Enter 40 days. (This includes line cutting) For each additional survey: using the same grid: Enter 20 days (for each)	Geophysical	
	- Electromagnetic	
	- Magnetometer	
	- Other	
	Geological	20
	Geochemical	
Man Days Complete reverse side and enter total(s) here	Geophysical	Days per Claim
	- Electromagnetic	
	- Magnetometer	
	- Other	
	Geological	
	Geochemical	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.		Days per Claim
	Electromagnetic	
	Magnetometer	
	Other	

Total miles flown over claim(s).

Date: March 6 1991 — Recorded Holder or Agent (Signature): Gino Chitaroni

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Mining Claim Prefix	Mining Claim Number	Mining Claim Prefix	Mining Claim Number
L	1013322				
	1013323				
	1126299				
	1135807				
	1135808				
	1135809				
	1135901				
	1135924				
	1135929				
	1135930				
	1135999				
	1135935				
	1135936				
	1135937				
	1135938				
	1135939				

RECEIVED
MAR 19 1991
MINING LANDS SECTION

Total Number of mining claims covered by this report of work: 16

Certification Verifying Report of Work

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

Name and Address of Person Certifying: Gino Chitaroni, Portage Bay Rd. Box 271 Cobalt Ont.

Telephone No.	Date	Certified By (Signature)
705-679-5946 or 5931	March 6, 1991	Gino Chitaroni

POSICO

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
320	Mar. 6/91	for J. Bettinger
	Date Approved as Recorded	Provincial Manager, Mining Lands
	"SEE REVISED WORK STATEMENT"	

Received Stamp: RECEIVED 91 MAR 6 PM 3 57 LARDER LAKE MINING DIVISION

1362 (89/06)

Assessment Work Breakdown

Man Days are based on eight (8) hour Technical or Line-cutting days. Technical days include work performed by consultants, draftsmen, etc..

Type of Survey Geological

68.8 hrs ÷ 8

Technical Days				Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
8.6	X	7	=	60.2	+	—	=	60.2	÷	3	=	20

Type of Survey

Technical Days				Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
	X	7	=		+		=		÷		=	

Type of Survey

Technical Days				Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
	X	7	=		+		=		÷		=	

Type of Survey

Technical Days				Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
	X	7	=		+		=		÷		=	

Ministry of Northern Development and Mines

Ontario

DOCUMENT No. W 9108.00090

Mining Act

Report of Work
(Geophysical, Geological and Geochemical Surveys)

Instructions
- Please type or print.
- Refer to Section 77, the Mining Act for assessment work requirements and maximum credits allowed per survey type.
- If number of mining claims traversed exceeds space on this form, attach a list.
- Technical Reports and maps in duplicate should be submitted to Mining Lands Section, Mineral Development and Lands Branch.

Type of Survey(s)	Mining Division	Township or Area
Geological	Larder Lake	Coleman

Recorded Holder(s): Gino Chitaroni — 2.13763 — Prospector's Licence No.: K21713

Address: Portage Bay Rd., Box 271, Cobalt Ont. — Telephone No.: 705-679-5946/5931

Survey Company: —

Name and Address of Author (of Geo-Technical Report): Same As Above

Date of Survey (from & to): 04 05 90 (Day | Mo. | Yr.) — 28 11 90 (Day | Mo. | Yr.)

Credits Requested per Each Claim in Columns at right

		Days per Claim
Special Provisions For first survey: Enter 40 days. (This includes line cutting) For each additional survey: using the same grid: Enter 20 days (for each)	Geophysical	
	- Electromagnetic	
	- Magnetometer	
	- Other	
	Geological	
	Geochemical	
Man Days Complete reverse side and enter total(s) here	Geophysical	Days per Claim
	- Electromagnetic	
	- Magnetometer	
	- Other	
	Geological	20
	Geochemical	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.		Days per Claim
	Electromagnetic	
	Magnetometer	
	Other	

Total miles flown over claim(s).

Date: March 6, 1991 — Recorded Holder or Agent (Signature): Gino Chitaroni

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Mining Claim Prefix	Mining Claim Number	Mining Claim Prefix	Mining Claim Number
L	1135900				
	1135927				
	1135928				

RECEIVED
MAR 19 1991
MINING LANDS SECTION

Total number of mining claims covered by this report of work: 3

Certification Verifying Report of Work

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

Name and Address of Person Certifying: Gino Chitaroni, Portage Bay Rd., Box 271, Cobalt Ont.

Telephone No.	Date	Certified By (Signature)
POJICO 705-679-5946 or 5931	March 6, 1991	Gino Chitaroni

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
60	Mar 6/91	
	Date Approved as Recorded	Provincial Manager, Mining Lands
	"SEE REVISED WORK STATEMENT"	

Received Stamp: RECEIVED 91 MAR 6 PM 3 57 MINING DIVISION LARDER LAKE

1362 (89/06)

Ontario

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

Mining Lands Section
4th Floor, 159 Cedar Street
Sudbury, Ontario
P3E 6A5

Telephone: (705) 670-7264
Fax: (705) 670-7262

Your File: W.9108.00089,90
Our File 2.13763

May 22, 1991

Mining Recorder
Ministry of Northern Development
and Mines
4 Government Road, East
Kirkland Lake, Ontario
P2N 1A2

Dear Sir/Madam:

RE: Notice of Intent dated April 22, 1991 for Geological Survey on mining claims L.1013322 et al in the Township of Coleman.

The assessment work credits, as listed with the above-mentioned Notice of Intent have been approved as of the above date.

Please inform the recorded holder of these mining claims and so indicate on your records.

Yours sincerely,

Ron. C. Gashinski,
Provincial Manager, Mining Lands
Mines & Minerals Division

CDS/jl

cc: Gino Chitaroni
Cobalt, Ontario

Resident Geologist
Cobalt, Ontario

Assessment File Office
Toronto, Ontario

Target Geological Services

TGS

GEOLOGIST - MINING TECHNOLOGIST - PROSPECTOR
P.O. Box 271, Cobalt, Ontario, Canada P0J 1C0

GINO CHITARONI, B.Sc. (705) 679-5946

March 12, 1991.

Mining Lands Division,
Att'n: Mr. Larry Stoliker,
Ministry of Northern Development and Mines,
4th. floor, 159 Cedar Street,
Sudbury, Ontario P3E 6A5

Re: Three Geological Assessment Reports on Unpatented Claims, Coleman Township, Ontario.

Dear Sir;

According to mine recording staff in Kirkland Lake, they brought to my attention that I did not indicate line spacing or mapping method in my 1990 geological programs. I would like to rectify the situation by giving you the information you need to complete my files.

The "McLaren Creek Project" was traversed by pace and compass at 100m intervals using an intact UTEM survey grid by the OGS. The line spacing of the grid was 200m and coincided the claim lines which were every 400m. Therefore, I simply split the difference between the grid lines.

"The Barr Access Road - Eisen Lake Creek Project" was covered the same way with the same grid.

However, whenever there was mass deforestation or mechanical stripping these areas then received greater scrutiny for obvious reasons.

The final project in question was the "Bass Lake Road - Highway 11-B Junction Base-Metal Project". Three claims were covered in great detail by pace and compass at an interval of the magnitude of approximately 50m. These claims were profoundly influenced by mechanical stripping, aggregate extraction (gravel pit) and road development. There was no survey grid in use.

I hope this information meets the ministry's standards. Lastly, I'd like to mention that several other prospectors are willing to come in with me on my properties for the 1991 OPAP grant season. Most of these projects are diamond drill oriented, so, I would like very much to keep them in good standing.

Thank you very much for your patience.

Respectfully yours,

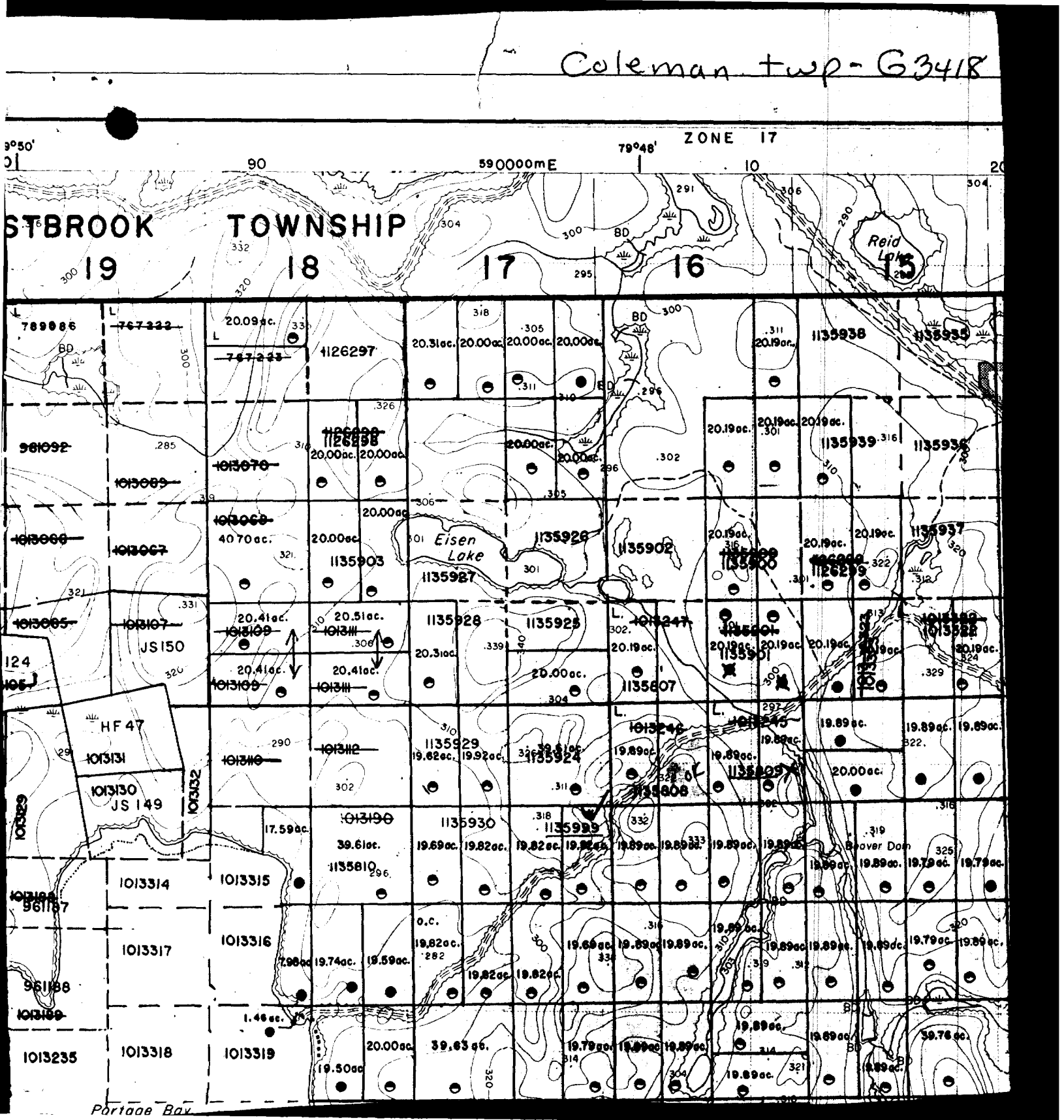
Gino Chitaroni.

/cc

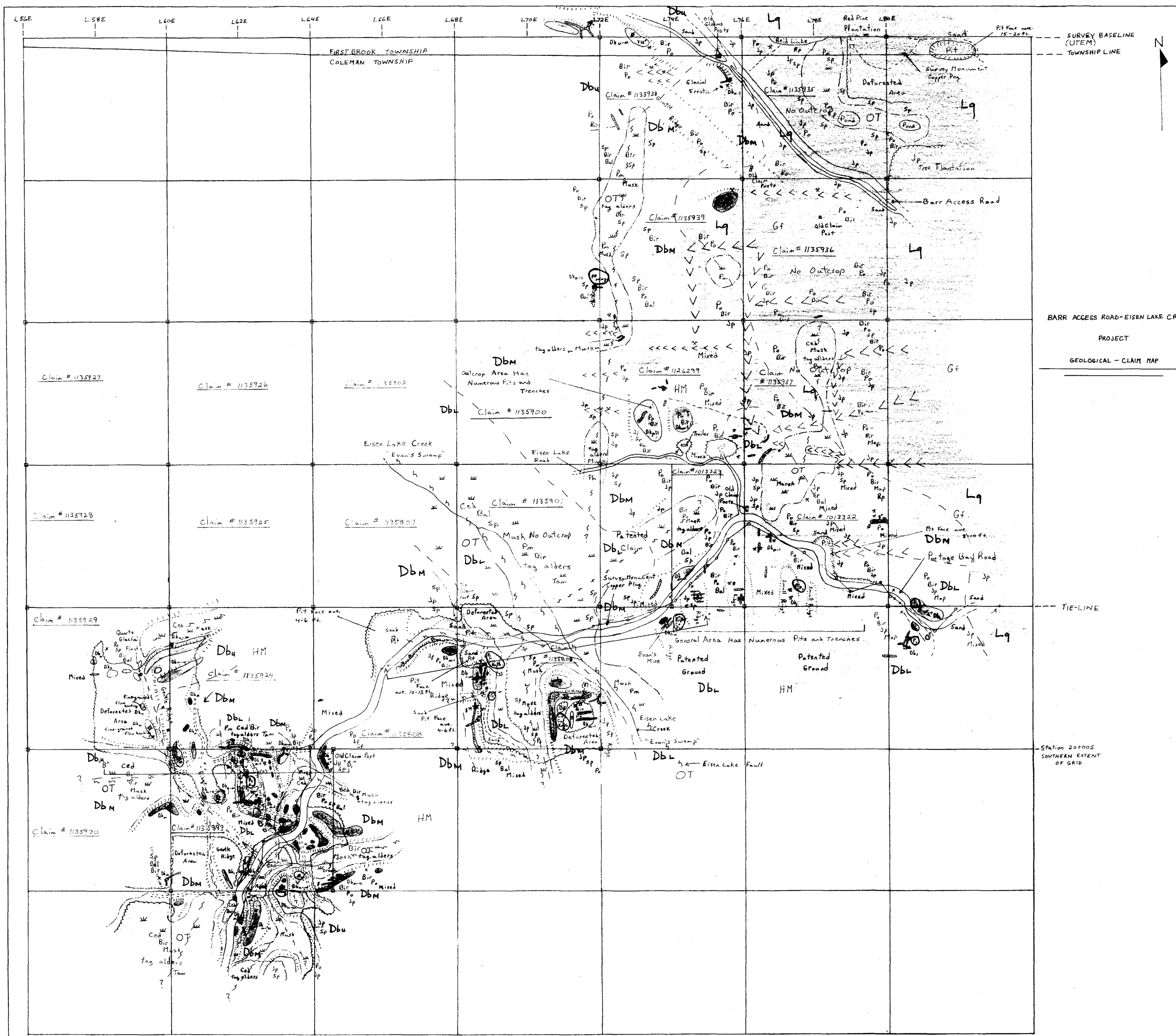
Copy to:

Mining Recorder
Larder Lake Mining Division

Coleman twp - G3418



BARR TOWNSHIP
FIRSTBROOK TOWNSHIP
BUCKE TOWNSHIP
LORRAIN TOWNSHIP
GILLIES LIMIT TOWNSHIP
KITTSON TOWNSHIP
BRIGSTOCKE TOWNSHIP
FOR STATUS OF LANDS REFER TO KITTSON TOWNSHIP MAP
LATCHFORD
AREA ANNEXED TO THE TOWN OF LATCHFORD
COBALT
LOT 19
2.13763
Ministry of Natural Resources
Ministry of Northern Development and Mines
Ontario
INDEX TO LAND DISPOSITION
PLAN
G-3418
TOWNSHIP
COLEMAN
M.N.R. ADMINISTRATIVE DISTRICT
TEMAGAMI
MINING DIVISION
LARDER LAKE
LAND TITLES/REGISTRY DIVISION
TIMISKAMING
"THIS MAP SHOWS THE APPROXIMATE LOCATION OF THE BOUNDARIES OF THE AREA WHICH IS THE SUBJECT OF CURRENT LITIGATION. THE EXACT LOCATION WILL BE SHOWN FOLLOWING CONFIRMATION BY THE PARTIES TO THE ACTION."
Scale 1:20 000
Contour Interval 10 Metres
Map base and land disposition drafting by Surveys and Mapping Branch, Ministry of Natural Resources.
The disposition of land, location of lot fabric and parcel boundaries on this index was compiled for administrative purposes only.
SYMBOLS
Boundary
Township, Meridian, Baseline
Road allowance; surveyed
shoreline
Lot/Concession; surveyed
unsurveyed
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 OF CROWN LANDS
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
Cancelled
Reservation
Sand & Gravel
AREAS WITHDRAWN FROM DISPOSITION
MRO - Mining Rights Only
SRO - Surface Rights Only
M + S - Mining and Surface Rights
TOWNSHIP SUBJECT TO FORESTRY OPERATIONS
NOTES
NOTICE OF FORESTRY ACTIVITY
THIS TOWNSHIP / AREA FALLS WITHIN THE LATCHFORD MANAGEMENT UNIT AND MAY BE SUBJECT TO FORESTRY OPERATIONS. THE MNR UNIT FORESTER FOR THIS AREA CAN BE CONTACTED AT:
P.O. BOX 38
LAKESHORE DRIVE
TEMAGAMI, ONT.
P0H 2H0
DATE OF ISSUE
APR 15 1991
LARDER LAKE
MINING RECORDER'S OFFICE
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 DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.
geology reference-COBALT
RESIDENT GEO.
ZONE 17
200



BARR ACCESS ROAD-EISEN LAKE CREEK

PROJECT

GEOLOGICAL – CLAIM MAP

2.13763

LEGEND

–GENERAL–

- Gravel Road
- Cart Trail
- Rough Road
- Creek

–MINING SYMBOLS–

- Pit
- Shaft
- Trench
- Adit
- Muckpile
- Old Claim Post or Claim Post
- Metal Survey Monument

– GEOLOGICAL STRUCTURAL TERMS–

- Outcrop
- Small Outcrop
- Ridge Face
- Fault
- Contact ASSUMED
- Glacial Striations
- Esker / Moraine
- Bedding – Inclined Dip
- Horizontal Jointing
- Vertical Jointing
- Inclined Jointing

–FOREST SYMBOLS–

Jp	Jackpine		Forest/Tree Line
Rp	Redpine		Wetland / Lowland Boundary
Po	Poplar		Wetland, Swamp, Marsh
Sp	Spruce	Bal	Balsam
Bir	Birch	Map	Maple
Tam	Tamarack	Pm	Peat Moss
Ced	Cedar	Musk	Muskeg
Mixed	Mixed Forest Cover	tag alders	Small Tree Growth

–MINERALOGICAL TERMS–

Erythr	Erythrite (Cobalt Bloom)	Py	Pyrite
Co	Smaltite – Cobaltite (Cobalt)	Cu	Copper (Chalcopyrite)
mag	Magnetite	qV	Quartz Vein
	Mineral Occurrence	po	Pyrrhotite
		(1)	Sample Location

GEOLOGICAL LEGEND

PHANEROZOIC (a)

CENOZOIC

QUATERNARY

PLEISTOCENE AND RECENT

- OT — ORGANIC TERRAIN (peat, marsh, wetland + underlying sand)
- HM — HUMMOCKY MORRAINE (boulder, stone, gravel, sand, clay, organics)
- Gf — GLACIOFLUVIAL (kames and eskers – sand/gravel)

PROTEROZOIC (b)

KEWEENAWAN

MAFIC INTRUSIVE ROCK

- ☐ o — OLIVINE DIABASE DIKE

MAFIC INTRUSIVE ROCK

NIPISSING DIABASE SILL/SHEET

- Dbu — UPPER NIPISSING DIABASE
- DbM — MIDDLE NIPISSING DIABASE
- DbL — LOWER NIPISSING DIABASE

HURONIAN SUPERGROUP

COBALT GROUP

- Lq — LORRAIN FORMATION QUARTZITE

NIPISSING DIABASE

(textural – breakdown)

Coarse grained	Db_c
Coarse – medium grained	Db_{c-m}
Medium – coarse grained	Db_{m-c}
Medium – fined grained	Db_{m-f}
Fine – medium grained	Db_{f-m}
Fine grained	Db_f

(a) Represented by light-shaded areas on map

(b) Bedrock geology is coded in dark colours

1 : 5,000

METRIC SCALE

100 50 0 100 200 300 400 Metres

GINO CHITARONI

210