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REPORT ON STRIPPING AND TRENCHING  
ON THE SAXTON LAKE, TOPBOOT LAKE AND  
SYLVANITE PROJECTS, SWAYZE AND DENYES  
TOWNSHIPS, PORCUPINE MINING DISTRICT,  
ONTARIO, NOVEMBER 1987 THROUGH MARCH 1988.

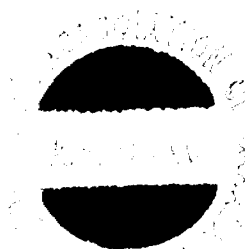
FOR: CAN-MAC EXPLORATION LTD.

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## INTRODUCTION:

In November, 1987 a stripping and trenching program was initiated by Can-Mac Exploration Ltd. on their Saxton Lake and Topboot lake properties, Swayze and Denyes Townships, Ontario. An additional property, referred to as the Sylvanite Prospect, was not stripped because of a reduction in budget and the loss of cool temperatures required to maintain winter road access. The Swayze area has again become of significant interest to the exploration community because it is underlain by the Swayze-Deloro metavolcanic-metasedimentary belt which is part of the Abitibi Greenstone Belt. The latter greenstone belt hosts several famous mining camps and "world class" mineral deposits. The Swayze area also contains several small past producing mines, including the Jerome, Orofino, Rundle and Kenty Mines.

The Saxton Lake property was investigated because of its favourable regional and local geological setting for gold mineralization. The property was also of interest because of a 2.5 Km long, semi-continuous max-min conductor, several areas with elevated magnetic anomalies and anomalous gold concentrations up to 3130 ppb.

The Topboot Lake property was also of interest because of its favourable regional and local geological setting. Two auriferous zones had previously been investigated on the property and had yielded assays up to 1.336 ozs. Au/ton (41.6 grams Au/tonne) (Abernathy, Feb., 1987). An induced polarization survey indicated several additional bedrock anomalies which were thought to be favourable localities for follow-up examination.

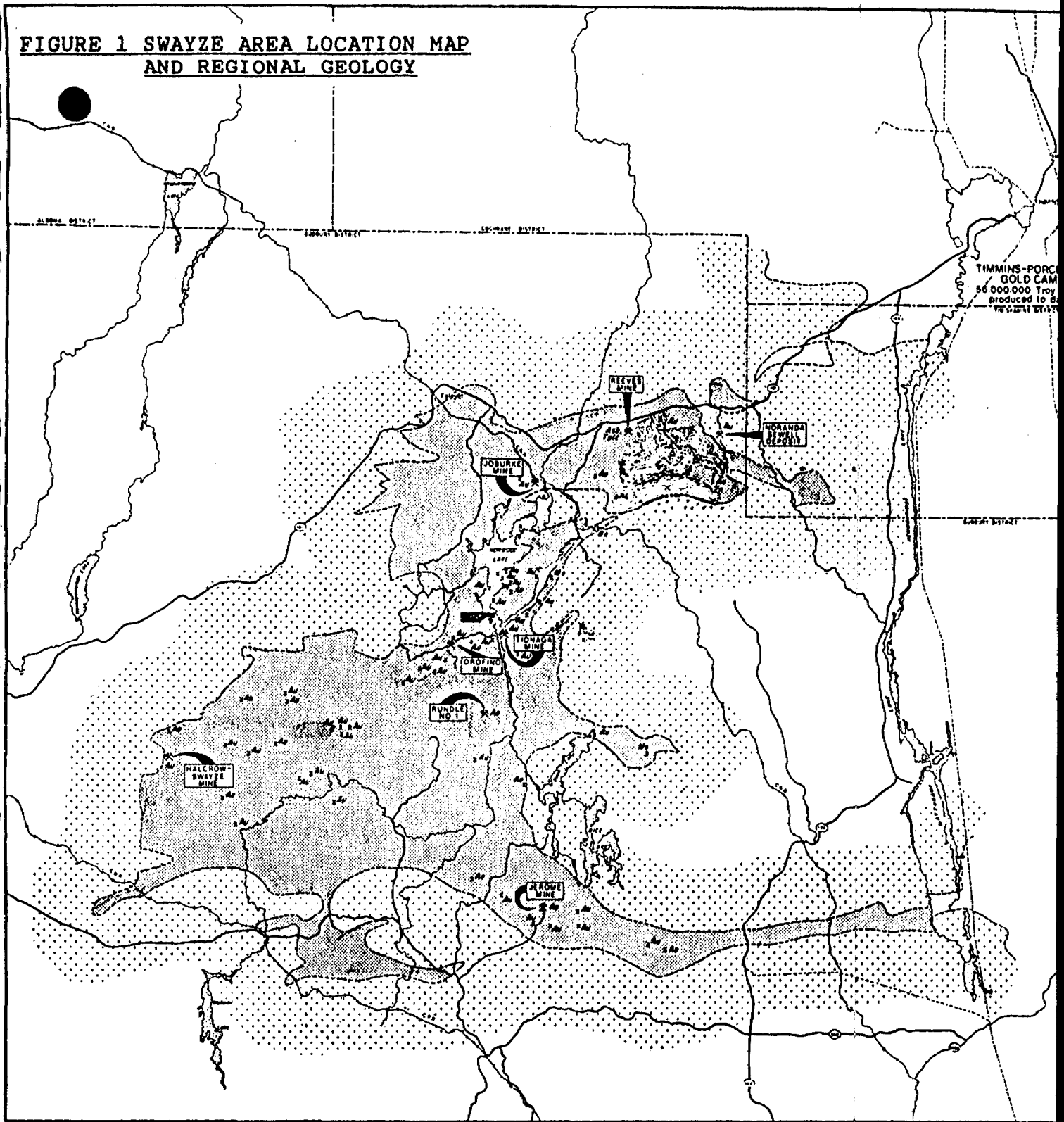
The Sylvanite Prospect, although not investigated as part of this program, is hosted by similar geology with quartz-carbonate veins apparently previously yielding assays up to 2.41 ozs. Au/ton (74.96 grams Au/tonne) (Abernathy, Mar., 1987).

## PROPERTIES, LOCATION AND ACCESS:















The claim groups discussed in this report are referred to as the "Saxton Lake", "Topboot Lake" and "Sylvanite Prospect" properties. They are held by Glen Auden Resources Ltd., subject to an option agreement with Can-Mac Exploration Ltd. Can-Mac can earn a 50 % equity interest in the claims by making expenditures totalling 2,000,000 dollars over a 4 year period.

The Saxton Lake, Topboot Lake and Sylvanite properties are within the "Swayze Gold District" of the Porcupine Mining District, Ontario (Figure 1). The Swayze Gold District is an approximately 74 Km long by 26 Km wide, east-trending area underlain by the Swayze-Deloro metavolcanic-metasedimentary belt. The district is between the communities of Chapleau to the west, Timmins to the east and Foleyet on its north boundary.

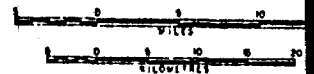
**FIGURE 1 SWAYZE AREA LOCATION MAP AND REGIONAL GEOLOGY**



**LEGEND**

- |   |                                       |  |                 |
|---|---------------------------------------|--|-----------------|
|  | Swayze Volcano-Sedimentary Assemblage |   | Gold Deposit    |
|  | Granitic-Migmatitic Rocks             |   | Gold Occurrence |
|  | Gold                                  |   | Molybdenum      |
|  | Zinc                                  |   | Asbestos        |
|  | Barite                                |   | Talc            |
|  | Highway / Road                        |  | Railroad        |
|  |                                       |  | Powerline       |

SCALE 1:250,000



**SWAYZE GREENSTONE BELT  
GOLD PROPERTIES**

The Saxton Lake property consists of 32 unpatented, contiguous claims, located in Swayze Township (Figure 2). They are located at approximately 82 degrees, 40 minutes longitude and 47 degrees, 50 minutes latitude. The claims are registered under the numbers 932054-069 and 932077-092, inclusive. According to records maintained by Robert S. Middleton Exploration Services Inc., as of Dec. 1987, the claims were in good standing until the dates indicated in table 1.

The Saxton Lake claims are accessed by a winter road transecting the long axis of the claims. The winter road is an extension of a secondary timber haulage road, maintained by the Foleyet Timber Co. Ltd. The secondary road extends west from the main haulage road, approximately 60 Km south of Hwy. 101. The main haulage road extends south from Highway 101, approximately 1 Km west of the Mooseland Resort, between Timmins and Foleyet. The winter road will likely be upgraded this summer by the Foleyet Timber Co. Ltd., in order to access timber on the Saxton Lake claims.

The Topboot Lake property consists of 42 unpatented, contiguous claims, straddling the boundary between Swayze and Denyes Townships (Figure 3). They are located at approximately 82 degrees, 43.75 minutes longitude and 47 degrees, 49 minutes latitude. The claims are registered under the numbers 866466-475, 930726 & 727, 931809-812, 931819-821, 1027201-203, 932196-200, and 932501-515, inclusive. According to records maintained by Robert S. Middleton Exploration Services Inc., as of Dec., 1987, the claims were in good standing until the dates indicated in table 1.

The Topboot Lake claims are accessed by an extension of the winter road constructed on the Saxton Lake claims. During the spring, summer and autumn the claims can be accessed along this road using all terrain vehicles (ATC's). The claims can also be accessed by float equipped fixed wing aircraft or rotary aircraft, which can be chartered from the Ivanhoe Lake airbase, or in Ramsey or Timmins.

The Sylvanite Prospect consists of 76 unpatented, contiguous claims, in Denyes Township (Figure 4). They are located at approximately 82 degrees, 49.75 minutes longitude and 47 degrees, 48.8 minutes latitude. The claims are numbered 931813-818 and 1026241-310, inclusive. According to records maintained by Robert S. Middleton Exploration Services Inc., as of Dec., 1987, the claims were in good standing until the dates indicated in table 1.

The Sylvanite claims are accessed by float or ski equipped fixed wing aircraft, or by rotary aircraft, which can be chartered from the Ivanhoe Lake airbase or from Timmins or Ramsey.

TABLE 1

Record#	CLAIM_NO	DUE DATE	HOLDER	PROPERTY
103	932054	06/12/89	GLEN AUDEN	RESOURCES SAXTON LAKE
104	932055	06/12/89	GLEN AUDEN	RESOURCES SAXTON LAKE
105	932056	06/12/88	GLEN AUDEN	RESOURCES SAXTON LAKE
106	932057	06/12/88	GLEN AUDEN	RESOURCES SAXTON LAKE
107	932058	06/12/89	GLEN AUDEN	RESOURCES SAXTON LAKE
108	932059	06/12/89	GLEN AUDEN	RESOURCES SAXTON LAKE
109	932060	06/12/89	GLEN AUDEN	RESOURCES SAXTON LAKE
110	932061	06/12/89	GLEN AUDEN	RESOURCES SAXTON LAKE
111	932062	06/12/89	GLEN AUDEN	RESOURCES SAXTON LAKE
112	932063	06/30/88	GLEN AUDEN	RESOURCES SAXTON LAKE
113	932064	06/12/88	GLEN AUDEN	RESOURCES SAXTON LAKE
114	932065	06/12/89	GLEN AUDEN	RESOURCES SAXTON LAKE
115	932066	06/12/89	GLEN AUDEN	RESOURCES SAXTON LAKE
116	932067	06/12/89	GLEN AUDEN	RESOURCES SAXTON LAKE
117	932068	06/12/89	GLEN AUDEN	RESOURCES SAXTON LAKE
118	932069	06/12/89	GLEN AUDEN	RESOURCES SAXTON LAKE
119	932077	06/12/89	GLEN AUDEN	RESOURCES SAXTON LAKE
120	932078	06/12/88	GLEN AUDEN	RESOURCES SAXTON LAKE
121	932079	06/12/89	GLEN AUDEN	RESOURCES SAXTON LAKE
122	932080	06/12/89	GLEN AUDEN	RESOURCES SAXTON LAKE
123	932081	06/12/88	GLEN AUDEN	RESOURCES SAXTON LAKE
124	932082	06/30/88	GLEN AUDEN	RESOURCES SAXTON LAKE
125	932083	06/12/88	GLEN AUDEN	RESOURCES SAXTON LAKE
126	932084	06/12/89	GLEN AUDEN	RESOURCES SAXTON LAKE
127	932085	06/30/88	GLEN AUDEN	RESOURCES SAXTON LAKE
128	932086	06/12/89	GLEN AUDEN	RESOURCES SAXTON LAKE
129	932087	06/30/88	GLEN AUDEN	RESOURCES SAXTON LAKE
130	932088	06/12/88	GLEN AUDEN	RESOURCES SAXTON LAKE
131	932089	06/12/88	GLEN AUDEN	RESOURCES SAXTON LAKE
132	932090	06/12/88	GLEN AUDEN	RESOURCES SAXTON LAKE
133	932091	06/12/88	GLEN AUDEN	RESOURCES SAXTON LAKE
134	932092	06/12/89	GLEN AUDEN	RESOURCES SAXTON LAKE

**FIGURE 2 SAXTON LAKE CLAIM GROUP**

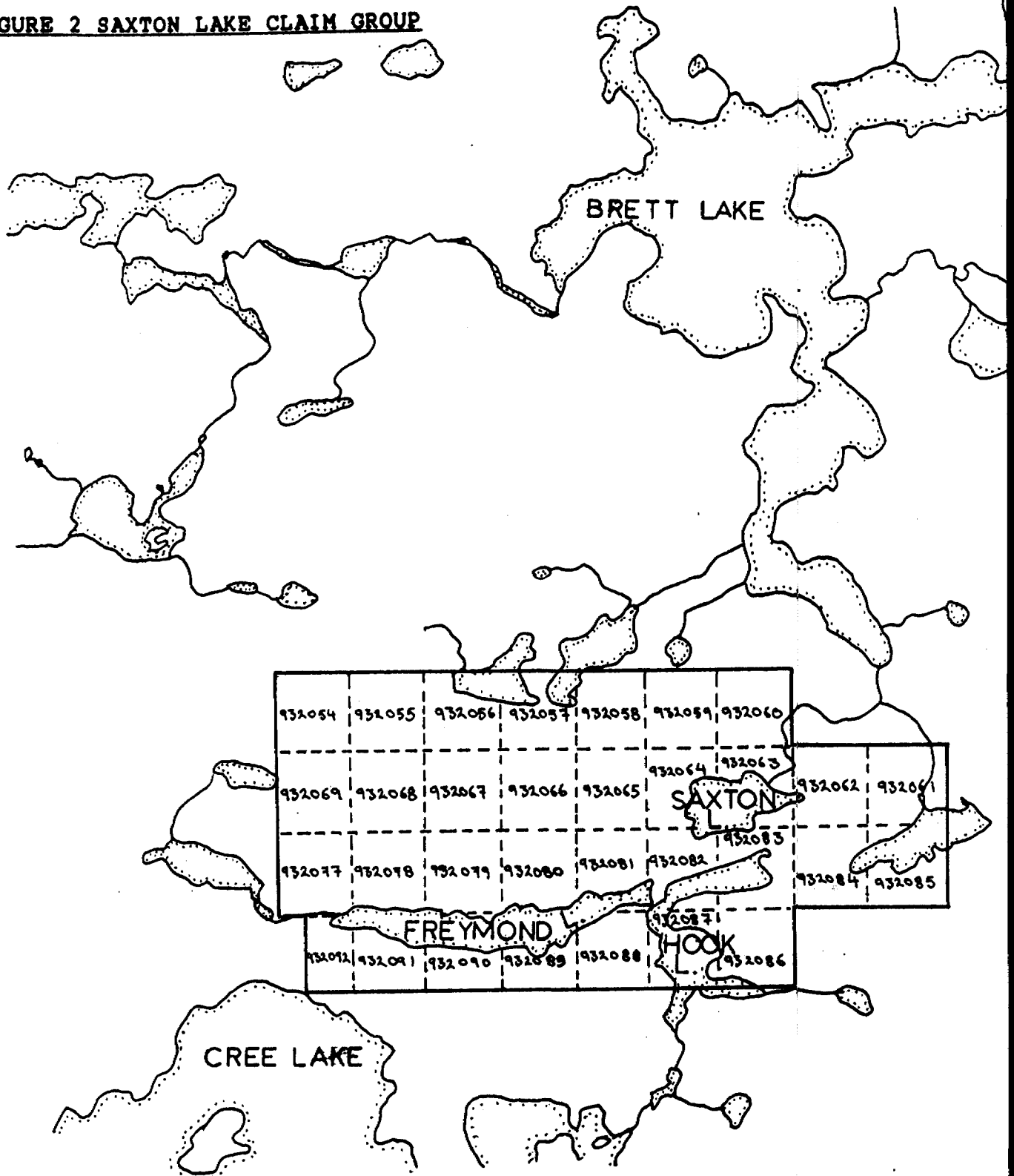


TABLE 1 CONTINUED

Record#	CLAIM_NO	DUE DATE	HOLDER	RESOURCES	PROPERTY	LAKE	GROUP
81	866466	06/12/88	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
82	866467	06/12/88	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
83	866468	06/12/89	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
84	866469	06/12/89	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
85	866470	06/12/89	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
86	866471	06/12/88	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
87	866472	06/12/89	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
88	866473	06/12/88	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
89	866474	06/12/88	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
90	866475	06/12/88	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
91	930726	06/12/88	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
92	930727	06/12/88	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
93	931809	06/12/88	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
94	931810	06/12/88	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
95	931811	06/12/88	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
96	931812	06/12/88	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
97	931819	06/12/88	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
98	931820	06/12/88	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
99	931821	06/12/88	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
100	1027201	11/13/88	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
101	1027202	11/13/88	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
102	1027203	11/13/88	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
135	932196	06/12/88	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
136	932197	06/12/88	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
137	932198	06/12/88	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
138	932199	06/12/88	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
139	932200	06/12/89	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
140	932501	06/12/89	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
141	932502	06/12/89	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
142	932503	06/12/90	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
143	932504	06/12/89	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
144	932505	06/12/90	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
145	932506	06/12/89	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
146	932507	06/12/88	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
147	932508	06/12/88	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
148	932509	06/12/88	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
149	932510	06/12/88	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
150	932511	06/12/88	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
151	932512	06/12/88	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
152	932513	06/12/88	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
153	932514	06/12/88	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP
154	932515	06/12/88	GLEN AUDEN	RESOURCES	TOPBOOT	LAKE	GROUP



**FIGURE 3 TOPBOOT LAKE CLAIM GROUP**

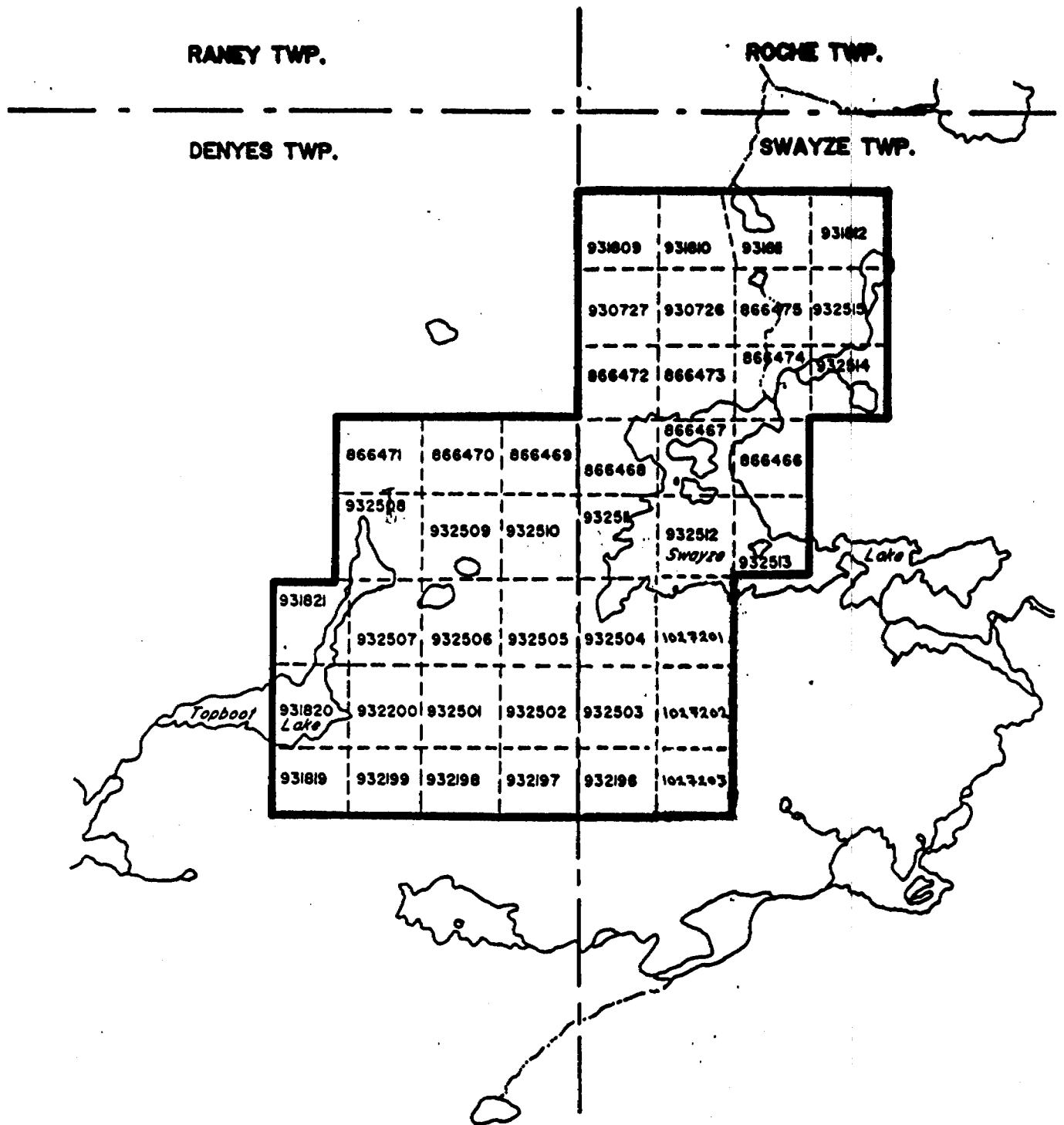
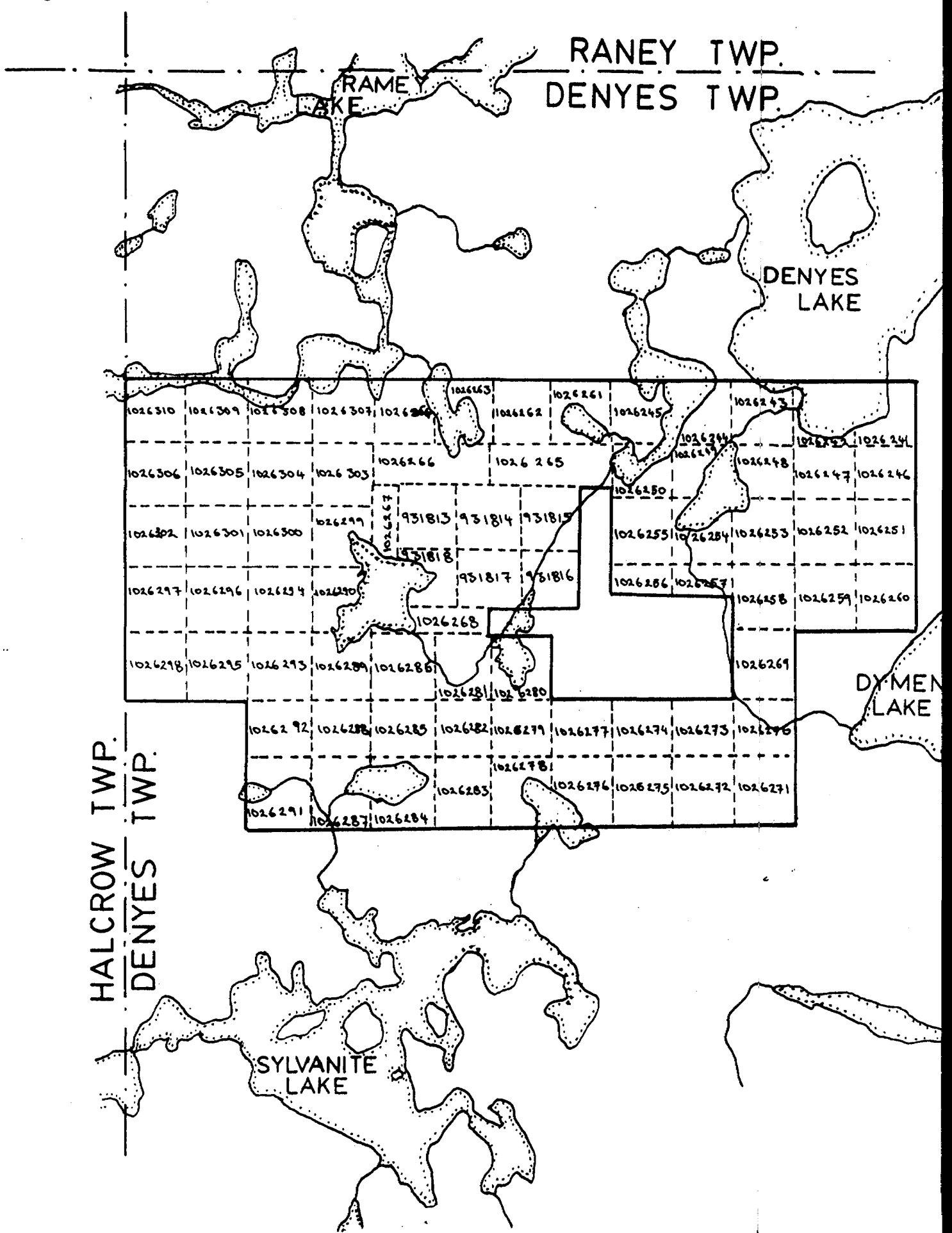


FIGURE 4 SYLVANITE PROSPECT CLAIM GROUP





### SWAYZE AND DENYES TOWNSHIP EXPLORATION HISTORY AND PREVIOUS WORK:

The earliest known work in Swayze and Denyes Townships, was reconnaissance mapping by the Ontario Bureau of Mines along the Woman, Groundhog and Ivanhoe rivers (Parks, 1900).

The Swayze area saw little activity until 1931 when J.G. and J.L. Kenty made a gold discovery in Swayze Township near Brett Lake. In 1932 the Ontario Department of Mines conducted further reconnaissance mapping in the township and in 1933 development work commenced at the "Kenty Mine" (Furse, 1932 ; Donavon, 1965, 1968). Two vertical shafts were sunk to a depth of 500 feet and 5000 feet of lateral development work was done at levels 125 feet apart (Donavon, 1965). In 1934 work was suspended on the property because gold values were too erratic (ibid).

In 1962 & 63 Flint Rock Mines Ltd. drilled 34 holes in "highly sheared and fractured basic volcanic rocks", on the northeast shore of Cree Lake (ibid).

The only other significant work conducted in the area, on properties other than the Can-Mac/Glen Auden holdings, was mapping by the Ontario Department of Mines in Swayze and Dore townships, and the Halcrow-Ridout Lakes Area (Donavon, 1965, 1968). The area was also investigated as part of a regionally extensive mapping program of the "Chapleau Area" by Thurston et al (1977).

#### Saxton Lake

Little work was recorded on the current Saxton Lake claims before their acquisition by Glen Auden Resources Ltd. However, the writer observed several trenches on the property of which there are no records. The claims were covered by an Ontario Geological Survey sponsored airborne E.M. and aeromagnetic survey, flown by Questor Surveys Ltd. The survey indicated an east-trending conductor centered near Saxton Lake (Abernathy, Nov. 1987; O.G.S., 1982).

Most of the current Saxton Lake property was part of a block of 581 claims staked by Canico Ltd. and Golden Hope Resources Ltd., in Swayze, Denyes, and Dore townships (Canico, 1984). Canico carried out airborne E.M., magnetic and radiometric surveys in 1982 (Krause 1982). The airborne surveys were followed-up by linecutting, ground magnetometer and geological mapping over the entire property. Selective I.P. and diamond drilling were carried out in areas not part of the current Saxton Lake claims. Mapping on the Canico/Golden Hope claims by Bell (1983), identified a "cherty interflow sediment" on the north shore of Freymond Lake which returned an assay of 1.65 ppm Au.

The current Saxton Lake claims were staked by Robert Abernathy in 1986, who later optioned them to Glen Auden Resources Ltd.

Glen Auden cut a grid over the entire property, carried out magnetometer and max-min geophysical surveys, and geological mapping and sampling (Hodges, 1987; Abernathy, Nov.a 1987). Hodges (1987) noted a "moderately strong", east-trending max-min conductor centered near Saxton Lake, and a strong magnetic anomaly 200 M south of the conductor. Abernathy (Nov.a 1987) tentatively identified the magnetic anomaly as an ultramafic intrusion and identified a deformation zone north of Freymond Lake where Bell (1983) had previously obtained anomalous gold concentrations. Abernathy (Nov.a 1987) also took several samples which contained anomalous gold and other trace element concentrations. One sample was of particular interest as it contained 3130 ppb Au and was collected near the conductor.

#### Topboot Lake

The current Topboot Lake claims have been periodically explored since the discovery of the Kenty Mine in 1931. In 1932 J.E. Derrough made a gold discovery on the property and staked 8 claims. The discovery was hosted in quartz-carbonate veins with pyrite, chalcopyrite and traces of galena, which he traced in trenches over a strike length of 220 feet. Rickaby (1934) examined the discovery for the Ontario Department of Mines and described the veins as in lenses up to 6 feet wide adjacent to a lamprhyre dyke. He obtained gold grades up to 2.22 ozs. Au/ton over 8 inches and a 56 inch section which averaged 0.24 ozs. Au/ton. In 1932-33 the property was acquired by Kirkland Hudson Bay Gold Mines Ltd., who drilled a series of short holes totalling 2,000 feet. The results apparently did not warrant further work and the option was dropped.

Prospecting, trenching and blasting were periodically carried out on the current Topboot Lake property over 10 years (Abernathy, Feb. 1987). Several airborne E.M. and aeromagnetic surveys were also flown in the area including 2 sponsored by the Ontario and Canadian governments (O.D.M.-G.S.C. 1963a/b).

In 1975 and 76 George Mangotich of Englehart, Ontario staked 21 claims around the Derrough occurrence. During the currency of his claims V.L.F., E.M. and magnetometer geophysical surveys were conducted and geological mapping (George, 1977). In addition, a 170 foot hole was drilled north of Topboot Lake. The hole apparently intersected rhyolite; chert; graphite with 1/4 to 1 inch wide quartz-carbonate veinlets; diabase; and quartz-sericite-feldspar schist with quartz-carbonate-tourmaline-pyrite stringers (ibid). No assays were given.

In 1983 Norminex Ltd. staked 3 claims over the Derrough occurrence and conducted a magnetometer survey and geological mapping (Winter, 1983; Davies, 1984). Re-sampling of the Derrough vein yielded assays up to 1.65 ozs. Au/ton over 24 inches (ibid).

Parts of the current Topboot Lake claim group were among the

previously mentioned 581 group of claims staked in 1983 by Canico Ltd. and Golden Hope Resources.

The current Topboot Lake group of claims was staked in 1986 by Robert Abernathy, who later optioned them to Glen Auden Resources Ltd. Glen Auden carried out geological mapping and sampling, lithogeochemistry, I.P. and magnetometer surveys (Abernathy, Feb., Aug., Sept. 1987; Abernathy and Hodges, Dec. 1987). Re-sampling of the Derrough and # 2 veins initially yielded assays up to 1.369 ozs. Au/ton (42.58 grams Au/tonne) and 0.189 ozs. Au/ton (6.5 grams Au/tonne), respectively (Abernathy, Feb. 1987). The later lithogeochemistry survey achieved grades in the Derrough and # 2 vein up to > 30,000 ppb Au and 19,400 ppb Au, respectively (Abernathy, Aug. and Sept. 1987). Additional areas of anomalous gold concentrations were also identified in the survey, including an old trench at the southeast corner of the property (2,450 ppb Au), and proximal to the dominant northeast trending swamps or linears (up to 2,100 ppb Au) (ibid). Abernathy (Aug. 1987) interpreted these linears as faults which were locally intruded by diabase. Results achieved by Abernathy also indicate anomalous concentrations of Ag, W, Ba and locally Cu, Pb, As, Zn and Sb in the veins, and in rocks marginal to the linears.

The magnetometer survey conducted by Hodges (1987), identified several distinct magnetic lows corresponding to the aforementioned linears and were attributed to dykes. The survey also identified several positive magnetic anomalies.

The I.P. survey conducted for Glen Auden Resources Ltd., identified numerous discontinuous and continuous conductors. Abernathy and Hodges (Dec. 1987) mention 2 particularly strong anomalies at the north ends of grid lines 1+00E and 1+00W which were interpreted as graphite. Several weak, narrow anomalies were also noted adjacent to a northeast-trending linear near the known gold occurrences. Other I.P. anomalies are centered at 0+50 M S on line 4+00W and over the Derrough occurrence. These anomalies are attributed to bedrock sulphides.

The Topboot Lake claims were optioned to Can-Mac Exploration Ltd. in 1987. Can-Mac conducted a 1,228 foot diamond drill program in October and November, supervised by Robert S Middleton Exploration Services Inc. (Abernathy, Nov. 1987). Four holes were drilled into linears near the # 2 vein and a fifth hole could not be anchored and had to be abandoned. The holes encountered zones of intense carbonate, sericite, chlorite and pyrite alteration and returned assays up to 0.08 ozs. Au/ton (2.7 grams Au/tonne) (ibid).

#### Sylvanite Prospect

The Sylvanite Prospect has also been periodically explored since the discovery of the Kenty Mine in 1931. In 1932 & 33

Sylvanite Gold Mines staked 18 claims which are now part of the current Can-Mac/Glen Auden property. Trenching on what is now claim 931816, encountered a 200 foot long zone of porphyry dykes and quartz-carbonate-pyrite veins in bedded tuffs (Rickaby, 1934). The claims were optioned in 1934 by Erie Canadian Mines Ltd., who carried out geological mapping and channel sampled the trenches (Harris, Flanagan and Green 1932-34). High grade assays were achieved up to 2.41 ozs. Au/ton over an 8 foot width (high assays were cut to 5 ozs. Au/ton). Widths were attained up to 10.4 feet averaging 1.86 ozs Au/ton. Abernathy (Mar. 1987) states that 5 short diamond drill holes were recommended by Erie, although there is no evidence that the holes were drilled.

In 1940 Sylvanite Gold Mines Ltd. confirmed the earlier Erie results and extended the trenches to 300 feet (ibid).

In 1972 Falconbridge Nickel Mines Ltd. staked 6 claims over the Sylvanite Prospect, conducted geological mapping and re-sampled the old trenches (Kelly, 1973). Thirtyfive chip samples taken from the trenches failed to confirm the earlier high grade results, although an 8.5 foot section averaged 0.20 ozs. Au/ton. Consequently, the claims were allowed to let lapse.

In 1981 Manville Canada Inc. re-staked the Sylvanite prospect, cut a grid, carried out radiometric and geological surveys, and re-sampled the old trenches (Eveleigh, 1984). Assays were reportedly achieved up to 0.20 ozs. Au/ton over 5 feet.

Parts of the current Can-Mac/Glen Auden claims were part of the Canico/Golden Hope block of 581 claims in Swayze, Denyes and Dore Townships (Canico, 1984). Parts were also covered by several government sponsored airborne geophysical surveys (O.D.M.-G.S.C. 1963a/b)

In 1986 6 claims were staked over the Sylvanite Prospect by Robert Abernathy, who subsequently optioned them to Glen Auden Resources Ltd. Glen Auden cut a grid, conducted geological mapping and magnetometer surveys, and re-sampled the old trenches (Abernathy, Mar. 1987). Grab samples of rocks collected from the trenches yielded assays up to 0.321 ozs. Au/ton and the magnetometer survey was useful in determining the contacts between lithologies. Since the completion of these surveys an additional 70 claims were staked and the entire block of claims optioned to Can-Mac Exploration Ltd.

#### REGIONAL GEOLOGY:

The Saxton Lake, Topboot Lake and Sylvanite Prospect are within the Swayze-Deloro metavolcanic-metasedimentary belt, which is part of the Abitibi Subprovince of the Superior Structural Province of the Canadian Shield (Thurston et al, 1977). The Swayze-Deloro belt is an east-trending belt of Archean

metavolcanic and metasedimentary rocks, 74 Km long by 26 Km wide (ibid). The belt is bound by granitic terrain on all sides except to the northwest where it is truncated by the Kapuskasing Structural Zone. The margins of the belt are dominated by mafic to intermediate meta-volcanics which are succeeded by meta-sediments and local mafic to ultramafic intrusions towards the centre (ibid). Several centres of Early Precambrian felsic meta-volcanics, and related continental-rise volcanoclastic meta-sediments and sub-volcanic porphyritic intrusions are scattered along the length of the complex (ibid).

The south part of the Swayze-Deloro Belt is bordered by granitoid intrusions with quartz monzonite or granodiorite compositions (ibid). Conversely, the north part of the belt is bordered by metamorphosed intrusions with trondhjemite or granodiorite compositions.

The Kapuskasing Structural Zone is comprised of high grade (granulite and almandine-amphibolite facies) metasediments and mafic intrusions, which are separated from the Swayze-Deloro belt by a fault zone of ubiquitous mylonitization and recrystallization (ibid).

Diabase is apparently not common in the Swayze-Deloro belt but locally occurs with a northeasterly trend (Donavon, 1965).

Lamprophyre dykes are the youngest rocks in the area and have been postulated as young as Mesozoic in age (Thurston et al, 1977).

Metamorphism in the Swayze-Deloro belt is predominantly greenschist facies but increases to amphibolite facies near granitoid intrusions and migmatite complexes (ibid).

Rocks of the Swayze-Deloro belt generally have east-trending foliations at low angles to bedding and flow banding (ibid). Foliations are typically defined by the alignment of platy or elongate minerals. Schistosity is well developed in areas of intense metamorphism or shearing. A secondary lineation is commonly well developed and plunges steeply in the eastern part of the Swayze-Deloro belt but is more shallow (20 to 60 degrees) further west in the Halcrow-Ridout Lakes area (ibid). Jointing is common throughout the area. An east-trending shear zone is noted in Grenlaw Township on the north shore of Ridout Lake and major faults trending north-northwest are reportedly common (ibid).

#### METHODOLOGY:

The stripping and trenching program by Can-Mac Exploration Ltd., was conducted from a temporary trailer camp. The camp was erected on the main Foleyet Timber haulage road, adjacent to a



small lake north of Bayley Lake. Stripping was contracted through Noron Exploration Services of Barry's Bay, Ontario. Noron subcontracted the heavy equipment work to Cam Roy Construction Ltd. of Sudbury, Ontario, who provided a D-7 bulldozer, and Linkbelt and Komatsu back hoes. Personnel for the project included a geologist, a foreman, 3 heavy equipment operators, a cook and up to 3 labourers.

A winter road was constructed from the terminus of a secondary timber haulage road, maintained by the Foleyet Timber Co. Ltd. The road transects the Saxton Lake claims along their long axis. It continues past the Saxton Lake claims on a westerly trend before heading north to the Topboot Lake claims, between Topboot and Swayze Lakes.

Areas thought to be favourable targets for gold mineralization were cross-sectioned or followed with trenches. Typically, an area 15 to 25 M wide by up to 1 Km long was cleared of vegetation with the bulldozer. Back hoes subsequently dug 5 to 10 M wide trenches down to bedrock. Debris was piled on one side of the trenches and a service road constructed on the other. The service road provided access to the trenches for 4 wheel drive trucks and a compressor towed by a skidder. The compressor was used to remove any remaining debris on the bedrock with a blow pipe and also to power drills used for blasting. The geologist then mapped and sampled the exposed bedrock. Maps were prepared at 1:1,000 and 1:2,500 scales. Channel or grab samples were collected at a maximum interval of 10 M and sent to Swastika Analytical Laboratories in Swastika, Ontario; for Au and locally Ag, Pt, Pd and multi-element analyses. An additional 8 samples of B horizon inorganic soil, and humus were collected for a limited soil orientation survey of the Topboot Lake claims.

#### WORK PERFORMED:

##### Saxton Lake

Work performed on the Saxton Lake claims included the construction of winter roads, minor grid-line mapping, prospecting, and stripping and trenching. Winter roads constructed on the Saxton Lake claims total 4.25 line kilometres and are located as shown in figure 5.

An unusual lack of pervasive snow cover during the last week of November and the first week of December, enabled the writer to conduct cursory grid-line geological mapping and sampling when not occupied with the stripping and trenching program. The grid-lines mapped included 8+00W, 33+00W and parts of lines 27+00W, 30+00W and 31+00W. The lack of snow also enabled Noron Exploration Services to evaluate the terrain for stripping, and conduct prospecting and sampling along grid-lines.

Stripping and trenching were carried out on the Saxton Lake claims according to the dimensions listed in table 2, and as shown in figures 5-10. The term "Stripping", as applied in this report, refers to an area cleared of vegetation, snow and topsoil with the bulldozer. The term "Trenching", as applied in this report, refers to an area dug down to bedrock with the back hoe. Some of the areas stripped were not trenched because of a reduction in budget, or a change in strategy resulting from improved knowledge of the property geology. In addition, 3 smaller trenches were not mapped and sampled because of budget considerations and because they were of lower priority than trenches yet to be dug on the Topboot Lake claims.

TABLE 2

TRENCH DIMENSION	SQUARE METERS	TRENCHED	MAPPED	TARGET
06+25W 20M X 440M	8800 SQ. M	YES	YES	MAX-MIN CONDUCTOR ALTERATION ZONE DEFORMATION ZONE
14+75W 20M X 900M	18000 SQ. M	YES	YES	MAX-MIN CONDUCTOR ALTERATION ZONE DEFORMATION ZONE 3130 PPB Au ASSAY
17+75W 20M X 575M	11500 SQ. M	YES	YES	MAX-MIN CONDUCTOR MAGNETIC ANOMALY ALTERATION ZONE DEFORMATION ZONE
27+25W 20M X 980M	19600 SQ. M	ONLY 300M	NO	MAX-MIN CONDUCTOR MAGNETIC ANOMALY PORPHYRY DYKES 2 ALTERATION AND DEFORMATION ZONES
29+50W 20M X 160M	3200 SQ. M	YES	YES	KOMATIITES MAGNETIC ANOMALY
32+50W 20M X 145M	2900 SQ. M	YES	NO	MAX-MIN CONDUCTOR KOMATIITES DEFORMATION ZONE
33+50W 20M X 980M -NORTH	19600 SQ. M	YES	YES	STRATIGRAPHY MAGNETIC ANOMALY 2 ALTERATION AND DEFORMATION ZONES
33+50W 20M X 125M -SOUTH	2500 SQ. M	YES	NO	MAX-MIN CONDUCTOR STRATIGRAPHY ALTERATION ZONE DEFORMATION ZONE

Topboot Lake

Work performed on the Topboot Lake claims included the construction of winter roads, stripping and trenching. Winter roads constructed on the Topboot Lake claims totalled 2.225 line kilometres. All areas stripped on the Topboot Lake claims were also trenched and mapped except for the south half of trench 02+25W. The areas on the Topboot Lake claims covered by the stripping and trenching program are listed in table 3, and as shown in figures 11-15.

TABLE 3

TRENCH	DIMENSIONS	SQUARE METRES	TARGET
DERRAUGH	25M X 510M	12750 SQ. M	DERRAUGH VEIN WITH ASSAYS UP TO 1.336 OZS. Au/TON 2 EAST-TRENDING I.P. ANOMALIES 2 LINEAR DEPRESSIONS
NORTH-CROSS	20M X 275M	5500 SQ. M	CROSS-SECTION DERRAUGH VEIN EAST-TRENDING I.P. ANOMALY
SOUTH-CROSS	20M X 235M	4700 SQ. M	CROSS-SECTION DERRAUGH VEIN EAST-TRENDING I.P. ANOMALY
03+75W	20M X 140M	2800 SQ. M	I.P. ANOMALY
02+25W	20M X 215M	4300 SQ. M	I.P. ANOMALY
01+25W	20M X 275M	5500 SQ. M	# 2 VEIN WITH ASSAYS UP TO 19,400 PPB Au I.P. ANOMALY LINEAR DEPRESSION
NORTH-2 VEIN	20M X 35M	700 SQ. M	# 2 VEIN
MIDDLE-2 VEIN	20M X 40M	800 SQ. M	# 2 VEIN
SOUTH-2 VEIN	20M X 40M	800 SQ. M	# 2 VEIN
00+75E-NORTH	20M X 245M	4900 SQ. M	I.P. ANOMALY STRATIGRAPHY
00+75E-SOUTH	20M X 325M	6500 SQ. M	3 I.P. ANOMALIES 2 LINEAR DEPRESSIONS STRATIGRAPHY

In addition to winter roads constructed on the Saxton Lake and Topboot Lake claims, a total of 4.975 line kilometres of roads were constructed on claims not part of the Can-Mac/Glen Auden joint venture.

**RESULTS:**

Saxton Lake

As a result of the stripping and trenching program on the Saxton Lake claims, the stratigraphy described by Bell (1983) and Abernathy (Nov. a 1987), was essentially confirmed. The geology is comprised of a diverse assemblage of east-trending metavolcanics and metasediments exhibiting variable intensities of hydrothermal alteration and deformation. They are also cut by ultramafic, intermediate-porphyrific, diabase and lamprophyre intrusions.

Ultramafic rocks consisting of komatiitic flows were encountered in a 100 to 300 M thick sequence south of Freymond Lake, and another 50 to 100 M thick sequence east of Hook Lake. Both sequences have coincident magnetic anomalies with readings up to 62,025 gammas (Hodges, Jul. 1987). They are typically massive to weakly foliated, medium green rocks, commonly exhibiting diagnostic spinefex texture. Spinefex-textures are comprised of 2 mm to 5 cm skeletal pyroxene crystals in a random orientation. Komatiites contain an abundance of Fe-Mg minerals and thus explain the coincident magnetic anomalies.

A 50 M wide, fine- to medium-grained, massive, dark green rock was encountered on the west side of the property, approximately 400 M north of Freymond Lake. The rock is difficult to differentiate from adjacent mafic metavolcanics in the field, but has a distinct coincident east-trending, discontinuous magnetic anomaly with readings up to 62,448 gammas. The rock locally contains up to 10 % disseminated pyrite and pyrrhotite along its contacts. Although the rock has a gabbroic appearance, it has an ultramafic chemical signature according to Abernathy (1987 pers. com.), and is thus interpreted as an ultramafic dyke or sill. Its ultramafic composition and abundance of disseminated pyrrhotite explains the associated magnetic anomaly.

Mafic metavolcanic rocks were encountered on the Saxton Lake claims in a 200 to 300 M wide sequence bisecting the long axis of the claims, a greater than 50 M wide sequence along the south claim boundary, and a 300 M wide sequence east of Hook Lake. They are predominantly massive to weakly foliated, dark green, chloritic rocks, locally occurring as pillowed flows.

Mafic metavolcanics in the west-central parts of the claims were mapped by Abernathy (Nov. a 1987), as significantly thinning eastward from 500 M west of Saxton Lake. However, chlorite +/- sericite schists were encountered in trenches 06+25W and 14+75W which are interpreted by the writer as the east lateral extension of these mafic metavolcanic rocks.

The west side of the south contact of the mafic metavolcanics bisecting the claims, is characterized by a 100 M wide deformation and alteration zone trending east-northeast towards

Saxton Lake. Massive and pillowed flows are extensively and locally intensely sheared, as indicated by the development of a strong penetrative fabric (schistosity) with sericitization and chloritization, flattening of pillows up to 5:1, conjugate tension gash development, and flattening and extension of clasts in the plane of schistosity. Schistosities strike at an azimuth of 50 to 90 degrees and dip vertically to 50 degrees north. Clast bearing rocks are peculiar as they locally contain only 1 pyritic, cherty clast type with a bright pink unidentified alteration. Clasts are up to 50 cm long, flattened in the plane of schistosity and extended along a steeply plunging lineation. Because the clasts locally form continuous to discontinuous laminations they may be of tectonic derivation. However, they grade southwards into apparent metavolcaniclastic rocks with 2 or 3 clast types.

Felsic to intermediate metavolcanic and/or metavolcaniclastic rocks occur in a sequence up to 600 M wide along the north part of the property, and a sequence up to 300 M wide north of Freymond Lake. The latter sequence is commonly interdigitated with rocks interpreted as metasediments. The felsic to intermediate rocks are massive, light to medium green, plagioclase porphyritic flows or intrusions in the northeast part of the property. These rocks grade southwards into massive to weakly foliated, light green quartz-plagioclase-muscovite +/- chlorite schist and then to sericite schist.

An extensive and locally intensive deformation and alteration zone occurs along the south boundary of the northern felsic to intermediate sequence. The zone is 100 M wide on the west side of the property and thickens to 400 M wide in the east near Saxton Lake. The zone trends east-southeast and apparently intersects the previously described deformation and alteration zone in mafic rocks, east of Saxton Lake. The zone is characterized by a strong schistosity striking at an azimuth of 90 to 110 degrees and dips vertically to 65 degrees north. It is also characterized by en-echelon and conjugate fractures and joints, a steeply west plunging lineation, quartz-carbonate veining, and the local development of tectonic (mylonitic) fabrics. One such fabric is the development of lozenge-shaped tectonic clasts, flattened in the plane of schistosity and extended along a steeply west plunging lineation. Deformation is also characterized by fine anastomosing chloritic shears commonly containing epidote, carbonate and locally a green-coloured mica. The rocks are also locally intensely fractured and have a beige or pink siliceous alteration. The siliceous pink alteration may be alkali feldspar or hematization, although the pink colouration is also common in less siliceous carbonatized rocks. Pyritization is ubiquitous in the altered rocks and gives them a limonitic and/or hematitic gossanous surface exposure.

Meta-sediments are in a 50 to 100 M wide sequence between the more northerly situated mafic and felsic metavolcanic rocks, and a 50 to 100 M wide sequence 100 M north of Freymond Lake. The more northerly sequence is comprised of massive to finely laminated and locally slatey quartz-plagioclase-biotite +/- muscovite schist. They are locally interlaminated with graphitic (carbonaceous) schist layers up to 35 M wide at the south contact of the north deformation and alteration zone. The carbonaceous layers are coincident and thus explain the 2.5 Km long, east-trending, discontinuous conductor centered near Saxton Lake.

The southern metasediment is comprised of medium to dark grey, massive to laminated quartz-plagioclase-biotite +/- muscovite schist and meta-conglomerate. Meta-conglomerate contains rounded porphyry, granitoid and black lithic clasts in a quartz-plagioclase-biotite +/- muscovite schist matrix. Clasts are between 4 mm and 75 cm long and locally have an unidentified pink alteration. The metaconglomerate is locally deformed, as indicated by a schistose fabric, flattening of clasts in the plane of schistosity and their extension along the lineation.

Intermediate porphyritic dykes and/or sills, 1 to 25 M thick, intrude the metavolcanic and metasedimentary rocks parallel to the schistosity. At least 3 types of porphyritic intrusions are recognized. The most common type contains 1 to 3 mm plagioclase phenocrysts in a light to medium green/grey, massive groundmass. A second variety contains sericitic plagioclase phenocrysts in a light green/grey, weakly to intensely foliated groundmass. These latter porphyritic intrusions cut the afore-mentioned deformation zones and are interpreted as alteration products of the previously described porphyry type. Because both porphyry types occur in the deformation and alteration zones they are interpreted to have been emplaced synchronous with the deformation. A third porphyry type intrudes mafic and ultramafic rocks south of Freymond Lake. They contain 2 to 3 mm plagioclase phenocrysts in a light grey groundmass with biotite flecks.

Late intrusive rocks on the Saxton Lake claims include diabase and lamprophyre dykes and sills. Diabase dykes are 10 to 20 M wide, dark green/grey rocks with an apparent northwest trend. They exhibit diagnostic diabasic texture consisting of randomly oriented euhedral plagioclase crystals and interstitial pyroxene. Lamprophyre dykes or sills are approximately 1 M thick and comprised of 0.5 to 2 mm long hornblende and/or biotite phenocrysts in a fine-grained, brown groundmass.

A total of 365 samples of rock were collected on the Saxton Lake claims. Trenches were sampled at a maximum interval of 10 M with additional samples taken of rocks thought to be favourable hosts for gold mineralization. Grab samples were also collected from the few grid-line mapping traverses, and the prospecting

traverses conducted by Noron. Only 16 of these samples were considered anomalous, having gold concentrations equal to or greater than 20 ppb. Only 1 sample of 320 ppb Au (re-checked at 400 ppb Au) was thought to be significantly anomalous. An additional 3 samples were subsequently taken around this "significantly anomalous" sample which returned less than 10 ppb Au. The higher gold analyses achieved by Bell (1983) of 1.65 ppm Au, and Abernathy (Nov. a 1987) of 3130 ppb Au, could not be duplicated. Similarly, of the 83 samples analyzed for Ag, and 5 samples analyzed for Pt and Pd, only background or slightly anomalous concentrations were obtained.

#### Topboot Lake

The stripping and trenching program on the Topboot Lake claims was restricted to the 10 claims in the southeast corner of the property. The program resulted in the recognition of a complex structural control to the auriferous quartz-carbonate veins. In addition, a different interpretation of the felsic to intermediate host rocks than that presented by Abernathy (Feb., Aug., Sept. 1987) is postulated. Mafic rocks mapped northeast of the known auriferous veins by Abernathy (Feb., Aug., Sept. 1987) were not examined as part of this program.

The dominant rock type mapped on the Topboot Lake claims, is a massive to intensely foliated, light to medium green/grey rock with 1 to 4 mm euhedral plagioclase phenocrysts. The rock is typically massive and well jointed except where it is proximal to quartz-carbonate veins, I.P. anomalies or the linear depressions mentioned by Abernathy (Feb., Aug., Sept., Nov. b 1987) and Abernathy and Hodges (Dec. 1987). In these localities the rock is weakly to intensely foliated and sheared, plagioclase phenocrysts are weakly to intensely sericitic, and the groundmass is sericitic and chloritic and may contain carbonate, pyrite, epidote or graphite. Adjacent to the Derragh, # 2 and # 3 vein systems, the rock is microbrecciated and locally mylonitic and/or brecciated and has a beige or pink siliceous and carbonate alteration. Fracture filling and disseminated pyrite and locally chalcopyrite are also common. This porphyritic rock type was mapped by Abernathy (Feb., Aug., Sept. 1987) as a diverse assemblage of felsic ash, lapilli and crystal tuffs. However, it is the writers opinion that the whole felsic to intermediate assemblage is likely a sheared intermediate porphyritic intrusion, or at least a porphyritic volcanic flow. This interpretation is based on the rocks homogeneity and massive well jointed fabric in less deformed and altered localities. Laminae fabrics are only encountered where the rock is deformed and altered.

A medium-grained, light green rock composed of sericitic plagioclase, a chloritic Fe-Mg mineral (possibly hornblende) and minor quartz was locally observed in the Derragh North- and South-Cross trenches. It has both sharp and gradational contacts

with the adjacent porphyritic rocks and is therefore interpreted as having had a diorite intrusive protolith. Abernathy (Feb., Aug., Sept., Nov. 1987) also describes altered, coarser-grained diabase or diorite dykes cutting felsic tuffs with sharp contacts and underlying the linear depressions. These dykes may be a later intrusive phase of the porphyritic rock type or separate intrusions. They may have been emplaced and then subsequently altered in faults represented on the surface by the linear depressions.

One M thick, dark green/grey rocks with 2 mm hornblende phenocrysts and sharp contacts, were encountered in 2 localities on the Topboot Lake claims. They are considered to be mafic or lamprophyre dykes or sills. One of these intrusions located near the # 2 vein system, intrudes porphyry along its schistosity, and has conjugate quartz-carbonate filled tension gashes. The tension gashes trend at an azimuth of 160 degrees, parallel to the trend of the Derrough and # 2 vein systems.

A peculiar rock was observed in several localities in the north part of trench 00+75E. The rock is composed of laminar graphitic schist, marginal to sheared plagioclase porphyritic rocks containing up to 5 cm long, worm-like, elongate clasts of massive pyrite and graphite. Adjacent rocks locally have a mylonitic fabric consisting of 5 mm lozenge-shaped clasts in an anastomosing matrix with up to 20 % pyrite. The rock is clearly deformed although it is not clear if the rock sheared because of a less competent graphite precursor or if the graphite is an alteration associated with the shearing.

In the more northerly trenches, foliations, schistositities and shearing predominantly trend at azimuths of 100 to 120 degrees, and dip north at 60 to 80 degrees. Conversely, in all other trenches foliations, schistositities and shearing predominantly trend at azimuths of 50 to 70 degrees, and dip north at 50 to 75 degrees. Fractures and veins occur in many orientations, although proximal to and within the Derrough, # 2 and # 3 vein systems, they are most common with trends at or near an azimuth of 160 degrees.

The Derrough vein system is located at 6+50 M S on L 1+00 W and is exposed in the Derrough trench between the North- and South-Cross trenches. The Derrough vein system consists of a large vein up to 1.3 M wide and smaller parallel and stockwork veins and veinlets over widths up to 6 M. The larger vein has sharp to irregular contacts and was encountered over a strike length of 100 M. However, veins and/or their adjacent siliceous alteration were discontinuously traced trending at an azimuth of 160 degrees over a strike length of 200 M. The Derrough vein system remains undelineated in both directions. The dip of the vein system could not be determined as both steeply west and east dips were measured. Veins are comprised of milky-white quartz and



carbonate with dendritic, hairline, yellow/brown carbonate filled fractures. They contain up to 5 % fracture filling and disseminated pyrite and chalcopyrite. Chalcopyrite is commonly oxidized to malachite. A locally observed unidentified dendritic black mineral was initially considered to be calcocite or graphite. However, samples taken from these localities are not significantly copper enriched suggesting it is the latter mineral.

The Derrough vein system was channel (chip) sampled along sections spaced 15 M apart (Figure 16). Channel samples were 1 M long in the most favourable areas for gold mineralization, and 1 to 3 M long in less altered rocks. Grab samples were collected at up to 10 M intervals in the least favourable areas, along the Derrough, North- and South-Cross trenches. Metal concentrations in the channel samples were obtained up to 52,460 ppb Au (1.68 ozs. Au/ton), 8.4 ppm Ag and 3,490 ppm Cu, with locally anomalous V, Cr, Pb, B, Ba, As, Bi, Mo and S. Gold, silver and copper values exhibited a distinct positive correlation. Highly anomalous gold concentrations were checked up to 4 times and found to be consistent. Two of the 15 M spaced cross-sections contain ore-grade gold concentrations over a significant width. At 045 M north of 0+00, the Derrough vein system averaged 14.4 grams Au/tonne (0.42 ozs. Au/ton) over a 3 M width (using the best values for each sample). At 060 M north of 0+00, the Derrough vein system averaged 17.1 grams Au/tonne (0.56 ozs. Au/ton) over a 4 M width, and 34.6 grams Au/tonne (1.11 ozs. Au ton) over a 2 M width. A minimum gold concentration of 1.4 grams Au/tonne (0.044 ozs. Au/ton) in 1 M channel samples was achieved over a strike length of 60 M. In addition, it should be noted that 3 of the cross-sections spaced 15 M apart, were not sampled, including the 2 located immediately south of 045 N which returned ore-grade gold concentrations.

The North- and South-Cross trenches and the south end of the Derrough trench also intersected 2- weak to strong, continuous I.P. anomalies. The anomalies were identified as areas of moderate to intense shearing with fracture filling and disseminated pyrite. The stronger of the 2 anomalies, located at approximately 5+00 M S on lines 1+00E to 4+00W, returned a significant gold concentration of 900 ppb Au (Figure 16). However, only 30 ppb Au was obtained in the rocks collected nearby. The weaker of the 2 anomalies, located at 7+50 M S on lines 0+00 to 4+00W, returned no significant gold concentrations in the South-Cross trench. However, a 50 M interval in the Derrough trench had 6 contiguous samples with anomalous gold concentrations between 100 and 340 ppb.

The # 2 vein system is located at 2+00 M S on line 1+00 W and is exposed in the N2V, M2V and S2V trenches. The # 2 vein system was traced at an azimuth of 160 degrees over a strike length of 60 M and remains undelineated in both directions. A large quartz-

carbonate vein up to 1.1 M wide is bordered by smaller veins and stockwork veinlets over widths up to 5 M. The veins have sharp to irregular contacts dipping steeply in both directions. The # 2 vein system is mineralogically similar to the Derrrough vein system except that minor amounts of galena were also observed.

The # 2 vein system was channel sampled along the trenches, at 1 M intervals in the most favourable rocks for gold mineralization, and 1 to 3 M in less favourable rocks. The gold values achieved were less encouraging than samples previously taken by Abernathy and the samples collected from the Derrrough occurrence. Gold concentrations were only obtained up to 1,030 ppb in the N2V trench, 1,130 ppb in the S2V trench and 280 ppb in the M2V trench (Figure 16). Two-2 M sections in the S2V and N2V trenches averaged 1,005 ppb Au (0.029 ozs Au/ton) and 890 ppb Au (0.026 ozs. Au/ton), respectively. The # 2 vein system also contains locally anomalous concentrations of As, B, Ba, Bi, Zn, Mo and S.

A third vein system, henceforth referred to as the # 3 vein, was discovered on the Topboot Lake claims in a trench located at 03+75W. The trench was initially dug to identify a strong I.P. anomaly located at 50 M S on line 04+00W. The # 3 vein is a stockwork quartz-carbonate-pyrite vein system with associated siliceous, carbonate, sericite and chlorite alterations in the adjacent porphyritic host rocks. The veins are near a zone of intense chloritic shearing with discontinuous seams of fracture filling pyrite. This nearby sulphide occurrence is believed to be the source of the I.P. anomaly. Only small stockwork veins and veinlets were encountered in trench 03+75W, similar to those adjacent to the larger Derrrough and # 2 veins. Consequently, it is possible that the trench only skirted the side of a larger vein system similar to the Derrrough and # 2 veins.

Grab samples of rocks collected from the # 3 vein, contained up to 490 ppb Au (Figure 16). Rocks collected either side of this higher analysis returned anomalous values of 50 and 30 ppb Au.

The # 3 vein is located 200 M sinistrally offset and the opposite side of a northeasterly-trending linear depression, from the # 2 vein. These linear depressions have already been interpreted as faults by the writer and by Abernathy (Feb., Aug., Sept., Nov. 1987). Similarly, the # 2 vein is located 100 M sinistrally offset and the opposite side of another northeasterly-trending linear depression, from the projected north extension of the Derrrough vein. All 3 vein systems are structurally and mineralogically similar. They are interpreted to have been derived from tensional, conjugate fractures to a northeasterly-trending shear zone. Shearing is believed to be most intense and focussed through the northeasterly-trending linear depressions. If this interpretation is correct, all 3 occurrences may be part of the same vein system, attributed to

and later offset by the same sinistral shear zone. In addition, if this interpretation is correct, all future work in areas underlain by the porphyritic rocks should be conducted in an east-west orientation. However, rocks behave differently during deformation because of differences in their composition and/or fabric. Therefore, this condition may not be applicable for the mafic rocks underlying the north claims of the property.

A limited soil orientation survey was conducted on the Topboot Lake property to test the effectiveness of sampling the A1 (humus) and B (illuviated) soil horizons for gold and copper accumulation. A total of 8 samples were collected, including 4 samples from each of the A1 and B horizons. Three samples of each horizon were collected proximal to known gold occurrences and 1 of each in an area known to be barren of gold. These localities were 5 M east of the Derragh vein at 045 M N, 3 M west of the Derragh vein at 100 M N, overlying the # 2 vein at 5 M north of trench S2V and at 50 M W in the South-Cross trench, respectively. The results indicated that sampling the humus is very effective for gold as they contained 450, 45, 65 and 5 ppb, respectively. Humus is only locally effective for copper as samples contained 17, 25, 88 and 18 ppm, respectively. The B soil horizon is ineffective for both gold and copper as they contained; 15, nil, nil and nil ppb Au; and 14, 10, 21 and 7 ppm Cu, respectively.

#### CONCLUSIONS AND RECOMMENDATIONS:

Based on the results achieved in this and previous exploration programs, further work is recommended on the Saxton Lake, Topboot Lake and Sylvanite prospects.

#### Saxton Lake

Although little encouragement was achieved on the Saxton Lake claims from the analyses, the geology and in particular the deformation and alteration warrants closer examination. In addition, some of the trenches, namely 27+25W, 32+50W and the north and south parts of trench 33+50W were not mapped or sampled. Although trenching was extensive it was not possible in areas covered by swamps or lakes. In particular, the Max-Min conductor is partially overlain by swamp, and Freymond and Hook Lakes are beside the southern deformation and alteration zone. Saxton Lake overlies the intersection of the 2 deformation and alteration zones. The Saxton Lake claims cannot be confidently dismissed without investigating these omissions.

1) The trenches not examined because of a reduction in budget or a change in priorities, should be mapped and sampled in the 1988 field season. This can be accomplished inexpensively by a geologist without the need for a compressor or drill. A minimum budget of 2,000 dollars will be required to accomplish this task.

2) Reconnaissance mapping and sampling in the 1988 field season

should also be conducted along the trends of the 2 deformation and alteration zones both on and off of the Saxton Lake claims. A minimum budget of 3,000 dollars will be required for this mapping.

3) I.P. should be considered in a few traverses over Saxton, Freymond and Hook Lakes. A few reconnaissance lines between trenches should also be considered. Another I.P. traverse should be run on line 15+00W in order to cover the 150 M gap in trench 14+75W because of swamp. This line will also be useful to correlate I.P. response to sulphide occurrences already identified in trench 14+75W. Recommended lines for the I.P. survey are as follows:

L 06+00W 6+00S to 2+00N = 800 M  
L 10+00W 9+25S to 8+25N = 1750 M  
L 15+00W 5+00S to 6+50N = 1150 M  
L 21+00W 8+75S to 5+50N = 1425 M  
L 24+00W 8+50S to 5+75N = 1475 M  
L 28+00W 8+25S to 8+00N = 1625 M  
L 30+00W 8+75S to 8+00N = 1675 M  
Total line kilometres 9900 M

The I.P. survey can only be conducted during the winter and is considered a lower priority in comparison to the additional work required on the Topboot Lake and Sylvanite prospects. The I.P. survey will require a minimum budget of 20,000 dollars.

#### Topboot Lake

A great deal of encouragement was achieved as a result of the stripping and trenching program on the Topboot Lake property. Ore-grade gold concentrations over significant widths were achieved in the Derrrough vein system and sub-ore grade concentrations were returned from the # 2 and # 3 vein systems. Several other promising localities with anomalous gold concentrations were either discovered or known from previous surveys. These include the southeast corner of claim 932196, the I.P. anomaly located at the south end of the Derrrough trench, the I.P. anomaly in the North-Cross trench and several localities marginal to the linear depressions.

1) A brief (1 or 2 day) reconnaissance mapping program should be conducted on the north part of the Topboot Lake property. The purpose of this program would be to establish the best direction to run grid lines. At this time additional soil orientation samples should be taken. A minimum budget of 2,000 dollars will be required to accomplish this mapping.

2) A metric grid should be cut on the remainder of the property with lines 100 M apart and pickets at 25 M intervals. The grid will require a minimum budget of 10,000 dollars.

3) Soils should be collected on the base and tie lines of the existing grid and along the lines of the grid yet to be cut. The soil horizon sampled should be humus and should be collected at an interval not exceeding 25 M. A greater sample density may be required depending on the results of additional orientation samples. The soil survey will require a minimum budget of 20,000 dollars

4) Geological mapping should be conducted along the base and tie lines of the existing grid, along the projected trend of the known vein systems, along the linear depressions and along the lines of the new grid. A minimum budget of 15,000 dollars will be required for the geological mapping.

5) A magnetometer geophysical survey should be conducted over the new grid and I.P. in areas thought to be favourable as a result of the mapping. The magnetometer part of the geophysics will require a minimum budget of 10,000 dollars.

6) Stripping and trenching should be continued in order to delineate the Derrrough and # 2 veins and further excavate the # 3 vein. The Derrrough trench should also be cleaned along the trend of the Derrrough vein and the remainder of the 15 M cross-sections channel sampled. Trenches should be considered to investigate the 2450 ppb Au sample at the southeast corner of the property and the gold anomalies in the North-Cross trench and the south end of the Derrrough trench. East-trending reconnaissance trenches should also be considered. The stripping and trenching will require at least 50,000 dollars.

7) A preliminary approximately 2,000 foot diamond drill program is recommended to test the Derrrough and # 2 vein systems. The diamond drill program will require a minimum budget of 60,000 dollars. However, further drilling may be warranted depending on the results of early holes. The holes should be drilled according to the following specifications.

HOLE	COLLAR	AZIMUTH	DIP	LENGTH	TARGET
T.L.-88-1	1+20 W & 6+50 S	070	045	100 M	DERRAUGH VEIN BENEATH 045 N CROSS-SECTION
T.L.-88-2	0+80 W & 6+70 S	250	045	100 M	DERRAUGH VEIN BENEATH 045 N CROSS-SECTION AND ESTABLISH VEIN DIP
T.L.-88-3	1+25 W & 6+65 S	070	045	50 M	DERRAUGH VEIN BENEATH 030 N CROSS-SECTION
T.L.-88-4	1+15 W & 6+35 S	070	045	50 M	DERRAUGH VEIN BENEATH 060 N CROSS-SECTION
T.L.-88-5	1+15 W & 6+35 S	070	060	75 M	DERRAUGH VEIN BENEATH 060 N CROSS-SECTION
T.L.-88-6	1+40 W & 1+65 S	070	045	100 M	# 2 VEIN BETWEEN N2V AND M2V TRENCHES

T.L.-88-7 1+00 W 250 045 100 M # 2 VEIN BETWEEN N2V AND  
& 1+80 S M2V TRENCHES AND  
ESTABLISH VEIN DIP

HOLES WILL BE DRILLED FROM THE OPPOSITE DIRECTION IF DIPS ARE  
DETERMINED TO BE EASTERLY

Sylvanite Prospect

Although the Sylvanite prospect has not been examined by the writer, high gold assays obtained by previous workers warrants re-examination. Seventy claims have also been staked in addition to the original 6 and require preliminary examination.

1) An airborne V.L.F., aeromagnetic and radiometric survey should be considered as an inexpensive method of obtaining the necessary assessment credits to maintain the claims in good standing. The survey may also be useful in outlining preliminary exploration targets other than the known gold occurrences. Because the area has already been covered by previous airborne surveys along north-south flight lines, east-west flight lines should be considered for the current survey. This survey will cost a minimum of 7,500 dollars.

2) A 1 or 2 day field examination should be conducted on the Sylvanite claims in order to examine the old trenches and take a limited number of samples. The geology of the claims distal to the known occurrences should also be examined in order to determine the best orientation for a grid. A minimum budget of 4,000 dollars will be required to accomplish this task.

3) A metric grid should be cut over the 70 most recently staked claims with lines 100 M apart and pickets at 25 M intervals. The grid will require a minimum budget of 25,000 dollars.

4) The grid should be mapped and sampled which will require a minimum budget of 20,000 dollars.

5) Stripping and trenching should be conducted over the known occurrence in an attempt to extend the veins. The winter road constructed to access the Topboot Lake claims will therefore have to be extended to the Sylvanite claims. The road extension, stripping and trenching will require a minimum budget of 50,000 dollars.

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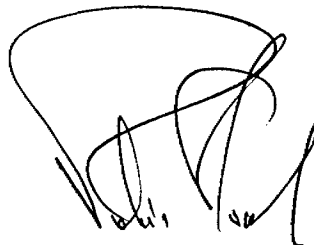
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CERTIFICATE

I, Robin E. Goad, M.Sc., F.G.A.C., of 163 Pine Valley Dr., Unit 55, London, Ontario, certify as follows concerning my report entitled Report on Stripping and Trenching on the Saxton Lake, Topboot Lake and Sylvanite Projects, Swayze and Denyes Townships, Porcupine Mining District, Ontario. November 1987 Through March 1988., for Can-Mac Exploration Limited, dated April 1988.

- 1) That I am a member in good standing of the following professional organizations.
  - a) Geological Association of Canada.
  - b) Geological Society of America.
  - c) Canadian Institute of Mining and Metallurgy.
  - d) Prospectors and Developers Association of Canada.
- 2) That I am a graduate of the Department of Geology, University of Western Ontario, London, Ontario, with an M.Sc. in geology, obtained in 1987 and a bachelors obtained in 1981.
- 3) That I have been gainfully employed in the exploration and mining industry and practising my profession for more than 11 years.
- 4) That this report is a product of:
  - a) A 4 month Stripping and Trenching program conducted on the Saxton Lake and Topboot Lake project sites.
  - b) Data obtained from Can-Mac Exploration, Geological Engineering Services and Robert S. Middleton Exploration Services Inc.
  - c) Data obtained from the government assessment offices in Timmins, Ontario.
  - d) Discussions with colleagues who are actively working in the area.
- 5) That I have no direct or indirect interest in the properties and securities of Can-Mac Exploration Limited, except for 5,000 common shares purchased on the open market.

Dated this 20 th day of April, 1988.



Robin E. Goad, M.Sc., F.G.A.C.  
Geological Engineering Services,  
North Bay, Ontario.



41015SE0039 63.5205 SWAYZE

900

























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OM87-5-L-302

THIS SUBMITTAL CONSISTED OF VARIOUS REPORTS, SOME OF WHICH HAVE BEEN CULLED FROM THIS FILE. THE CULLED MATERIAL HAD BEEN PREVIOUSLY SUBMITTED UNDER THE FOLLOWING RECORD SERIES (THE DOCUMENTS CAN BE VIEWED IN THESE SERIES):

Report on stripping & trenching	→ see Toronto file
Assays for this report	#2.11548
	R.O.W # W8906.052

SYMBOLS

	= FOLIATION OR SCHISTOSITY	Qtz = QUARTZ VEINS
	= PRINCIPAL SHEAR DIRECTION	Carb = CARBONATE
	= BEDDING	Ser = SERICITE
	= VEIN TREND WITH DIP DETERMINED	Chl = CHLORITE
	= VEIN TREND WITH DIP UNDETERMINED	Ep = EPIDOTE
	= TENSION GASH, CONJUGATE OR EN-ECHELON FRACTURE DIRECTION WITH DIP DETERMINED	Grn = GREEN MICA
	= TENSION GASH, CONJUGATE OR EN-ECHELON FRACTURE DIRECTION WITH DIP UNDETERMINED	Pink = UNIDENTIFIED PINK ALTERATION
	= JOINTS WITH DIP DETERMINED	LIM = LIMONITIC AND/OR HEMATITIC SURFACE EXPOSURE
	= JOINTS WITH DIP UNDETERMINED	Sil = SILICIFIED
	= CONTACT DETERMINED	Py = PYRITE
	= CONTACT PROJECTED	Cpy = CHALCOPYRITE
	= PILLOWS WITH DIP DETERMINED	Po = PYRRHOTITE
	= PILLOWS WITH DIP UNDETERMINED	Mt = MAGNETITE
	= PILLOWS WITH DIP UNDETERMINED	Graph = GRAPHITE
	= LOCALLY EXTENSIVE SHEARING	
	= LINEATION	
	= SWAMP	
	= OUTLINE OF AREA STRIPPED	
	= OUTLINE OF AREA TRENCHED	
	= PART OF TRENCH OVERLAIN BY WATER	
	= OLD TRENCH	
	= BEAVER DAM	
	= OLD TRENCH	
	= GLACIAL STRIAE DIRECTION	

## ROCK TYPES

### 6 DIABASE INTRUSIONS

### 5 METASEDIMENTS

- a) Massive to moderately well laminated, fine-grained quartz-feldspar-biotite schist +/- muscovite +/- chlorite.
- b) Well laminated, fine-grained, argillaceous &/or calcareous quartz-feldspar-chlorite schist.
- c) Well laminated, fine-grained carbonaceous (graphitic) schist.
- d) Massive to moderately well laminated metaconglomerate containing 4 mm to 75 cm granitoid &/or porphyry &/or black lithic clasts in a fine-grained quartz-feldspar-biotite schist groundmass.
- e) Well laminated, fine-grained, slaty quartz-feldspar-muscovite-biotite schist.

### 4 INTERMEDIATE PORPHYRITIC INTRUSIONS

- a) White, euhedral 1 to 3 mm plagioclase phenocrysts in a massive fine-grained light to medium green/gray quartz-plagioclase-muscovite +/- chlorite groundmass.
- b) Sericitic, 1 to 3 mm plagioclase phenocrysts in a weakly to intensely foliated, fine-grained and locally weakly altered quartz-plagioclase-muscovite schist groundmass. Alteration minerals may include sericite, chlorite, carbonate, pyrite, an unidentified pink alteration and quartz.
- c) White, euhedral plagioclase phenocrysts in a fine-grained, light gray quartz-plagioclase-muscovite schist groundmass with biotite flecks.
- d) Intensely altered porphyry with faint, sericitic plagioclase phenocrysts or with phenocrysts completely altered to sericite &/or carbonate. Rock may also contain quartz-carbonate +/- sulphide veins and veinlets. Alteration minerals include quartz, carbonate, chlorite, sericite, epidote, green mica, graphite, pyrite, chalcopyrite malachite and galena.

### 3 FELSIC METAVOLCANICS

- a) Massive to weakly foliated, light to medium green, fine-grained quartz-plagioclase-muscovite schist.
- b) Moderately to intensely foliated, light green, fine-grained quartz-plagioclase-muscovite schist to sericite schist.
- c) Well foliated, altered, fractured &/or microbrecciated &/or brecciated &/or sheared and locally mylonitic quartz-plagioclase-muscovite schist. Alteration minerals include sericite, chlorite, quartz, alkali feldspar, epidote, green mica, carbonate, hematite/limonite, graphite pyrite and chalcopyrite.
- d) Moderately to intensely foliated, light green, fine-grained quartz-plagioclase-muscovite schist with lapilli-sized

clasts.

- e) Moderately to intensely foliated, light green, fine-grained quartz-plagioclase-muscovite schist with apparent tectonic clasts.

## 2 MAFIC METAVOLCANICS

- a) Massive to weakly foliated, dark green/gray chloritic amphibolite flows.
- b) Well foliated, medium to dark green chlorite +/- plagioclase schist.
- c) Well foliated and altered chlorite +/- plagioclase schist with sericite, carbonate, hematite and sulphide alteration minerals.
- d) Massive to weakly foliated, pillowed dark green/gray chloritic amphibolite flows.
- e) 2 d) with pillow breccia.
- f) Massive, dark green, fine- to medium-grained gabbro.

## 1 ULTRAMAFIC ROCKS

- a) Massive to weakly foliated, dark green pyroxene spinofex komatiitic flows.
- b) 2 a) with pillows.
- c) Massive to weakly foliated, fine- to medium-grained, dark green peridotite intrusions.

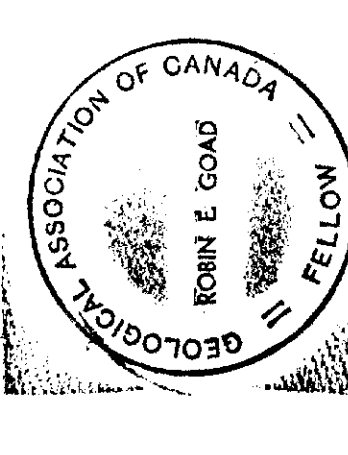


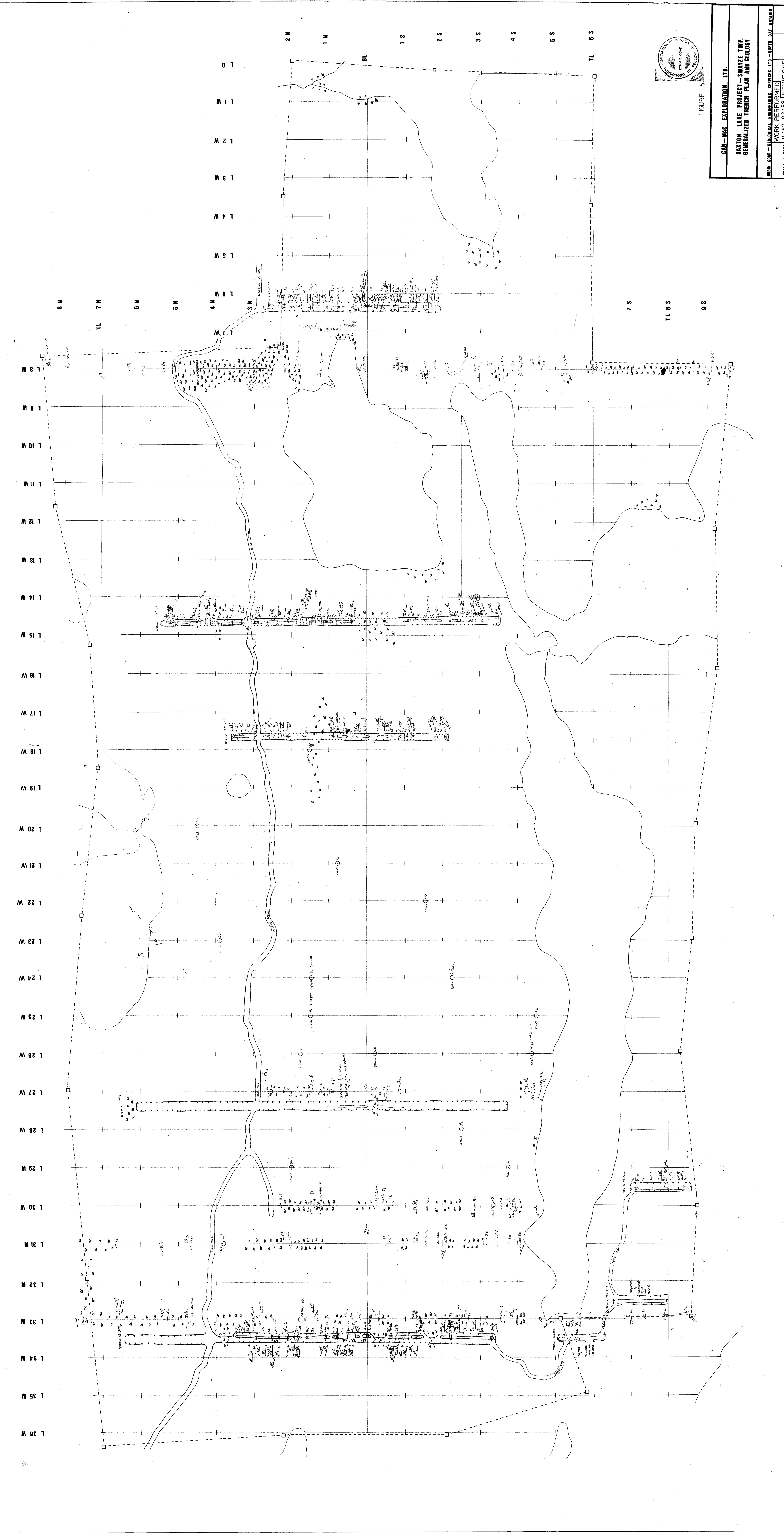
FIGURE 5

CAN-MAC EXPLORATION LTD.  
 SUTTON LAKE PROJECT - SWAYZE TWP.  
 GENERALIZED TRENCH PLAN AND GEOLOGY

JOHN BOAD - GEOLOGICAL ENGINEERING SERVICES LTD. - NORTH BAY, ONTARIO  
 WORK PERFORMED  
 SCALE - 1:25000, 11/87-03/88 (REVISIONS)

63-5025

0117-5-1-302



6300

ACCESS ROAD  
FOLEYET TIMBER MANAGEMENT ROAD

TRENCH 6+25W

LINE 6 W  
225 m N

Light to med. grn well foliated Qtz - Plag-musc schist with locally intense Ser. &/or Pyrite in pervasive Sil &/or Pk. Abundant fine int. Ser & Py filled fractures sub-parallel to the plane of schistosity. local diss. & fracture filling Py & Cpy. local pinking lim. - surface exposure.

Med. to light grn well laminated Qtz Plag Musc schist with local pinking chlorite locally sericitic, Grt, Py, Lim. Massive to surface Qtz Plag Musc schist with fine-grained cherty interbeds (1-3 cm thick) local areas of 3c typ. with Qtz-Carb (lim) sericitic sub-parallel to schistosity. Local Qtz eyes. local tr. Py. Local Grn mica. Chl & Ser. filled fractures.

locally intensely sheared with crenulation cleavage Qtz - Plag - Ser - Chl & Carb schist local to patches of pink sericitic and musc. fine limonite alteration. Pk. lim surface exposure. Tr. Py. Sericitic and foliation sub-parallel to schistosity. local pinking, radiating matrix graphite? basal med. grn. common suggesting a more musc. protolith or meta-sediment.

Well foliated to sheared altered Qtz - Plag - Musc. schist with intense sericitization & pervasive to patchy pink alteration along 3c the schistosity. Sheared areas commonly have a crenulation cleavage. Abundant chlorite and sericite & Carb along fractures sub-parallel to the schistosity. local bedding of Qtz & Carb & Py veinlets in plane of schistosity. Tr. diss. & fracture filling fine Py. Pink alteration may be locally from surface oxidation but is also locally associated with silicification & may be feldspathic.

Flattened and extended clasts (40%) up to 20 cm long (flattened 2:10:1). Clasts contain 30% pink or sericitic plagioclase clasts are in a dark grn chloritic groundmass (anastomosing). Dark gray to black well foliated Qtz - Plag - Biot. schist with locally abundant graphite. 3c/e along the schistosity. local lim gossan along schistosity.

Massive to moderately foliated, dark grn. 2a/b chlorite matrix etc.

Dark gray to black Qtz - Plag - Biot.

Well foliated dark gr. chlorite schist

Clasts along a shallowly east plunging zone. Clasts are lense-shaped and up to 5 cm long (up to 60% angular to rounded) occur in a dark grn chloritic groundmass.

75-80°  
175°

75-80°  
75°  
175°

70°  
175-180°  
175-70°

75-80°

170-80°  
170-70°  
165°

170-80°  
170-70°  
165°

170-80°  
170-70°  
165°

170-80°  
170-70°  
165°

185°

170°  
175°  
170°  
165°

170°  
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170°  
165°

78°  
72°  
170°  
165°

200 m N

100 m N

0+00

100 m S

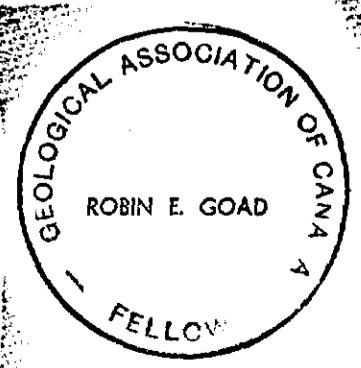
200 m S

300 m S

FIGURE 6

ENGINEERING SERVICES  
NORTH BAY, ONT.  
ROBIN E. GOAD, M.Sc., F.G.A.C.

REVISION	CAN-MAC EXPLORATION LTD.		
	TITLE SAXTON LAKE-SWAYZE TWP.		
	TRENCH 6+25W-DETAILED PLAN		
	JAN., 1988	1:1000	BY REG. & F.W.T.





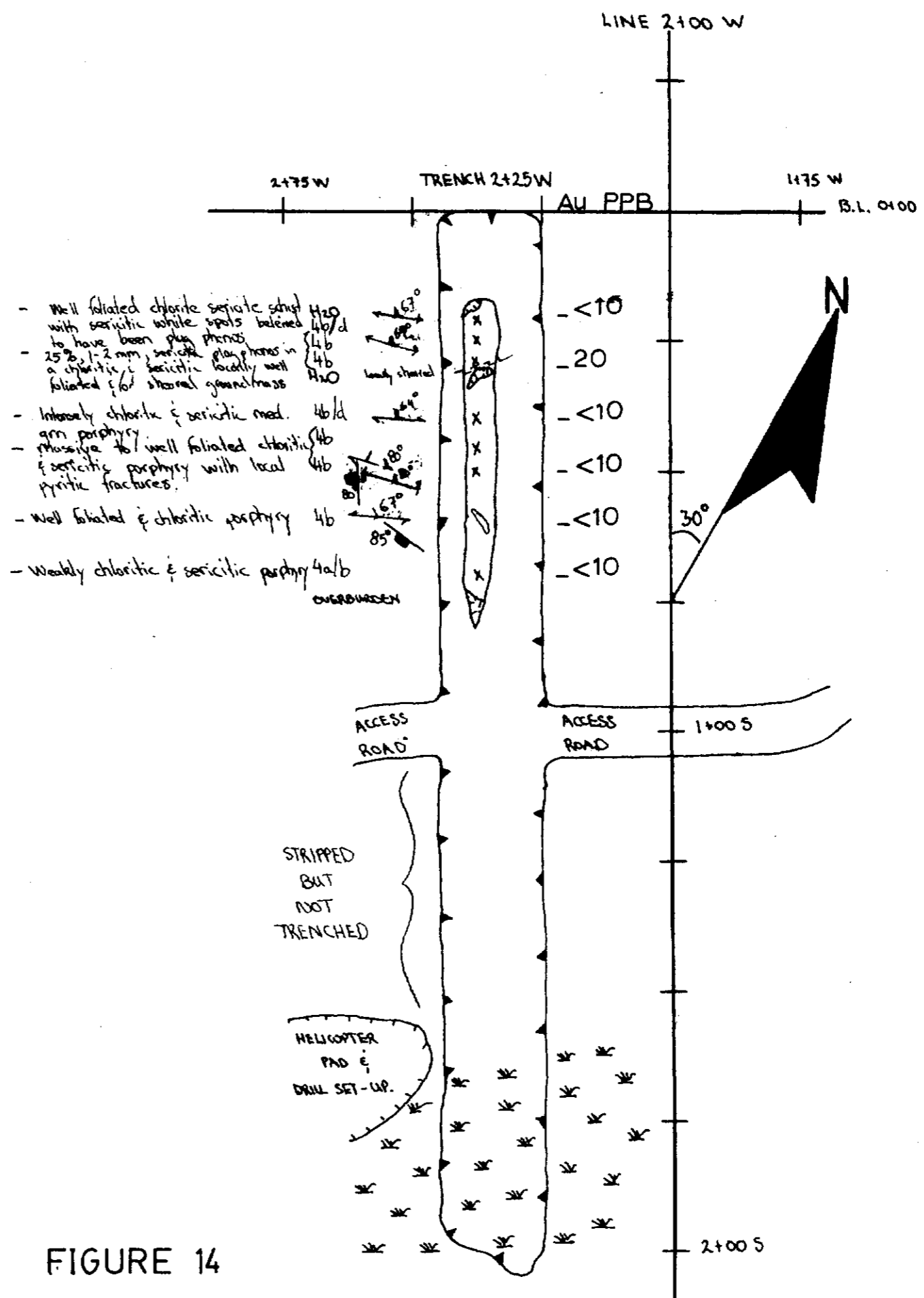


FIGURE 14

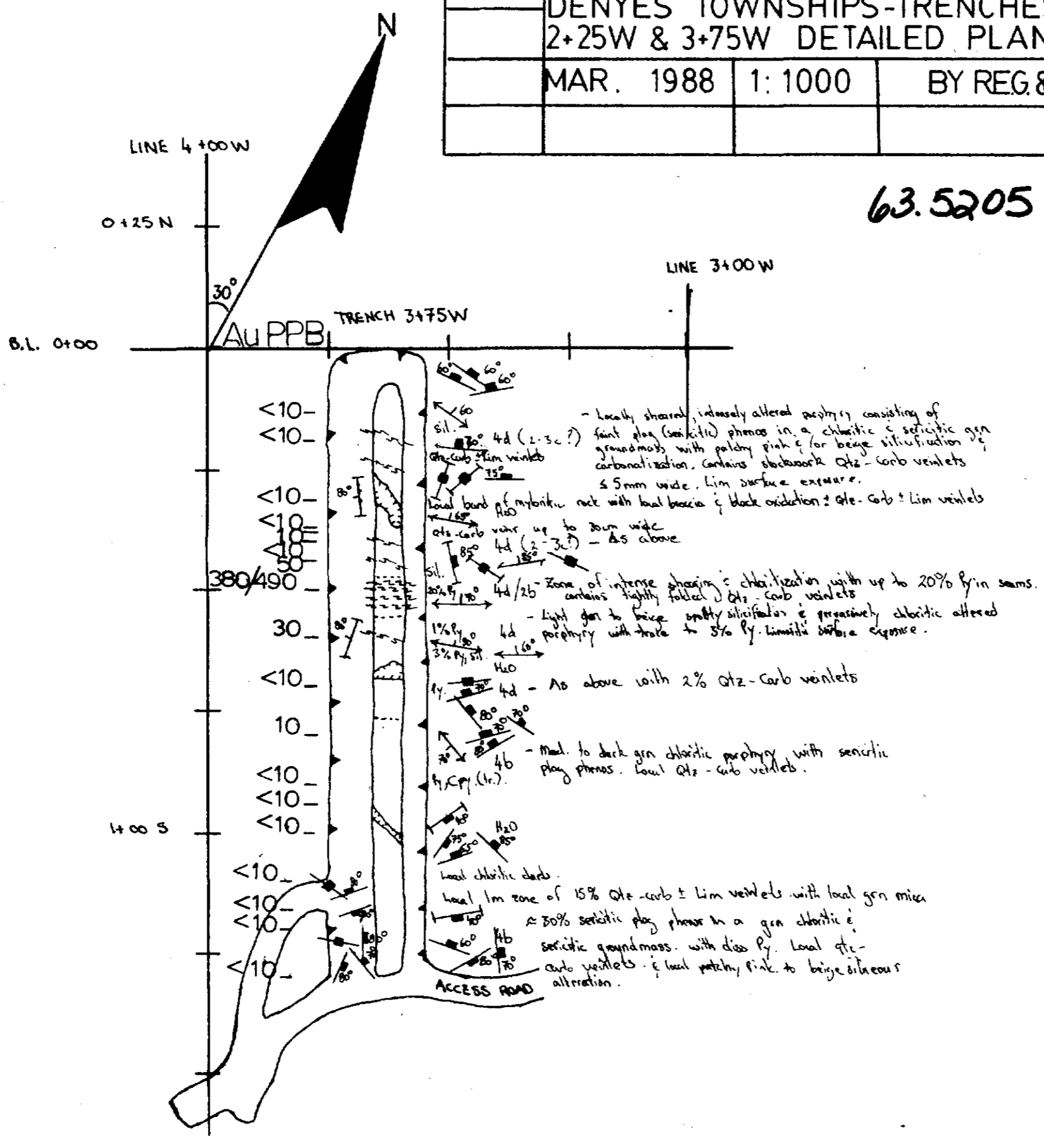
NOTE: This trench was not cleaned to bedrock with compressed air, only the areas designated with an "X" were mapped.

GEOLOGICAL ENGINEERING SERVICES		
NORTH BAY, ONT.		
ROBIN E. GOAD, M.Sc., F.G.A.C.		
REVISION	CAN-MAC EXPLORATION LTD.	
	TITLE TOPBOOT LAKE-SWAYZE AND DENYES TOWNSHIPS-TRENCHES 2+25W & 3+75W DETAILED PLANS	
	MAR. 1988	1:1000 BY REG.&F.W.T.

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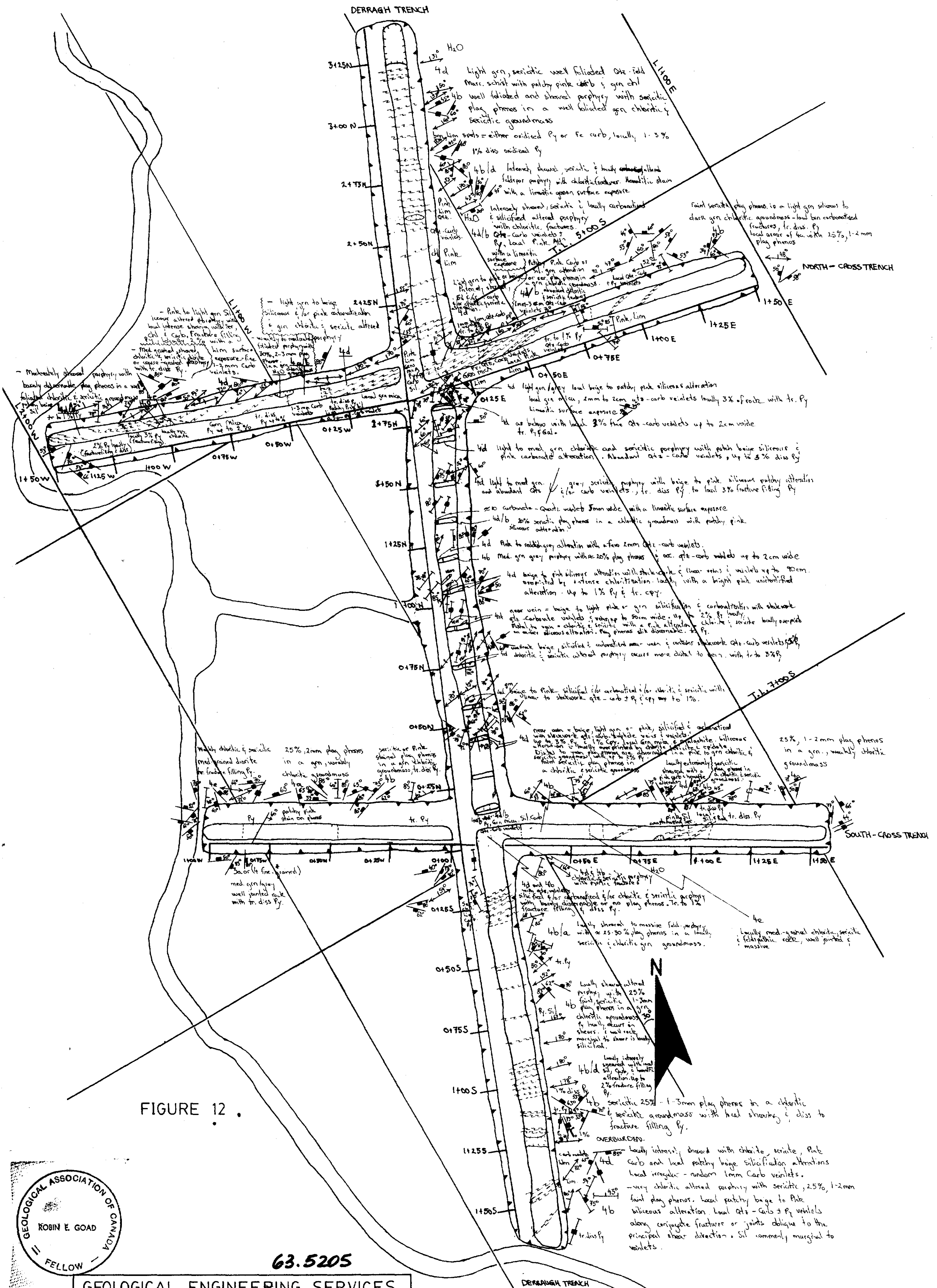


FIGURE 12



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GEOLOGICAL ENGINEERING SERVICES NORTH BAY, ONT. ROBIN E. GOAD, M.Sc., F.G.A.C.	
REVISION	CAN-MAC EXPLORATION LTD
TITLE TOPBOOT LAKE-SWAYZE AND DENYES TWPS-DERRAGH, NORTH & SOUTH-CROSS TRENCHES	
FEB & MAR. 1988 1:1000 BY REG & F.W.T	



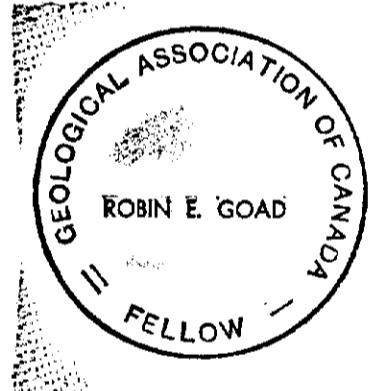
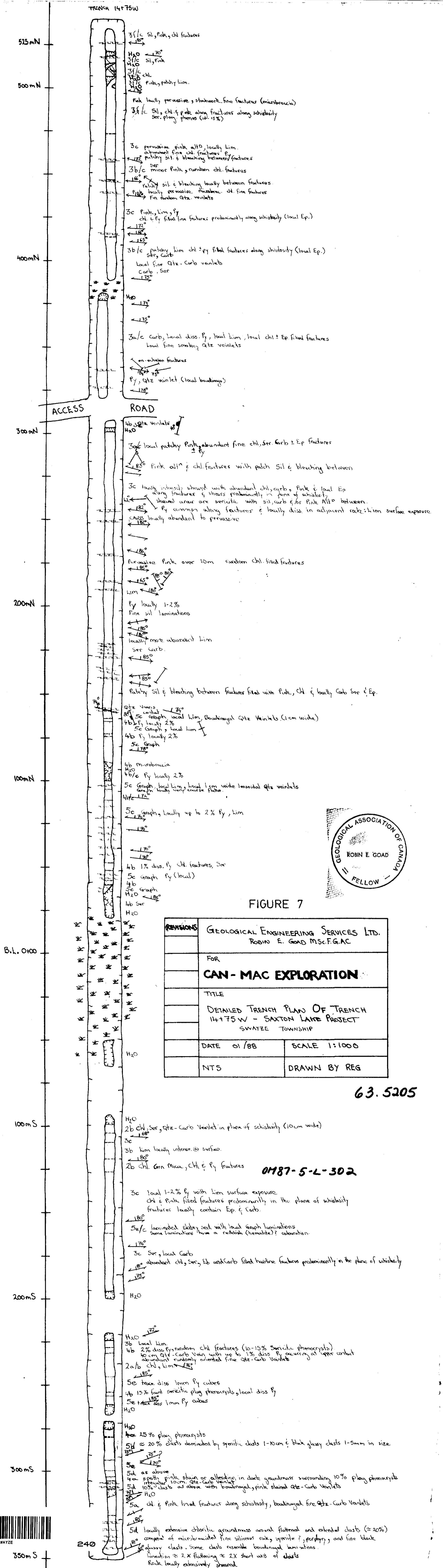


FIGURE 7

REVISIONS	GEOLOGICAL ENGINEERING SERVICES LTD. ROBIN E. GOAD M.Sc.F.G.A.C.	
	FOR	
	<b>CAN-MAC EXPLORATION</b>	
	TITLE	
	DETAILED TRENCH PLAN OF TRENCH 14+75W - SAXTON LAKE PROJECT SWAYZE TOWNSHIP	
	DATE 01/88	SCALE 1:1000
	NTS	DRAWN BY REG

63.5205

0187-5-L-302



350m S

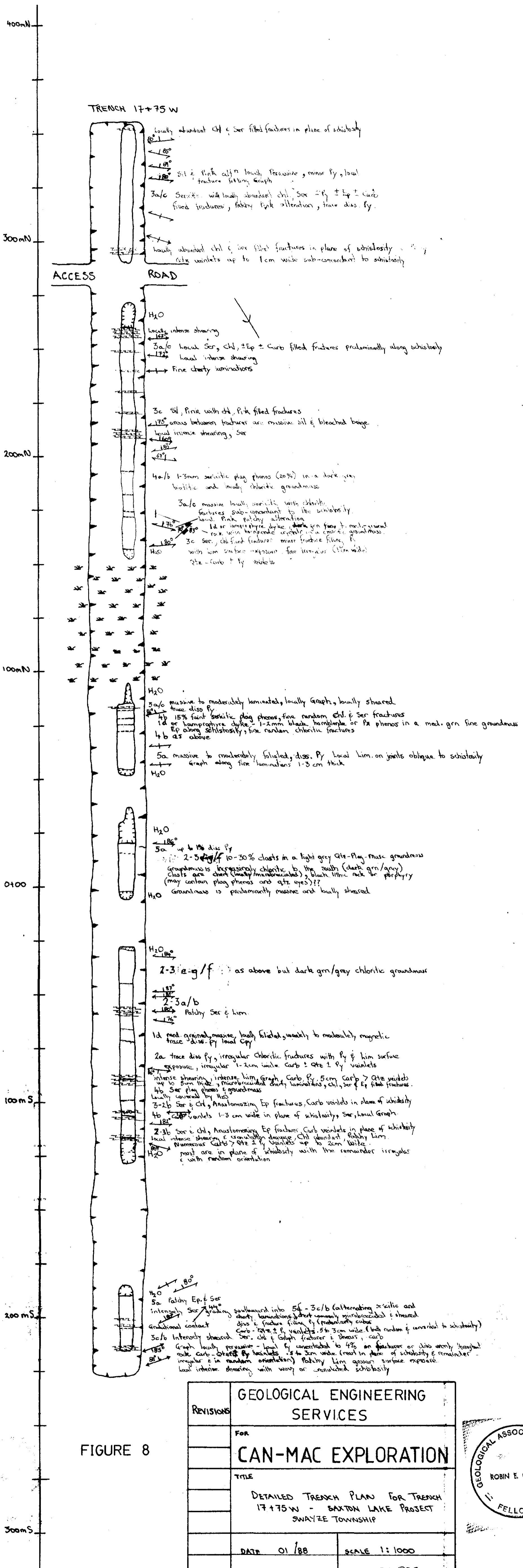
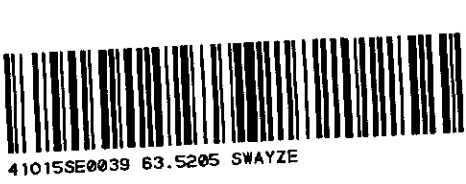
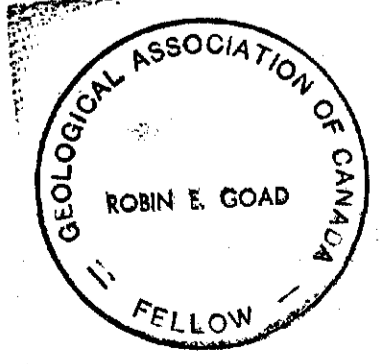


FIGURE 8

GEOLOGICAL ENGINEERING SERVICES	
REVISIONS	For
	<b>CAN-MAC EXPLORATION</b>
	TITLE
	DETAILED TRENCH PLAN FOR TRENCH 17+75 W - SEXTON LAKE PROJECT SWAYZE TOWNSHIP
DATE 01/88	SCALE 1:1000
NTS	DRAWN BY REG.

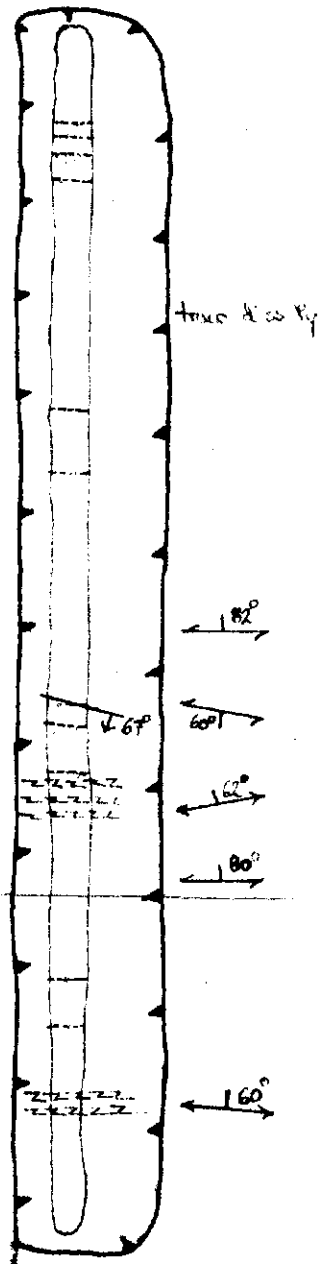


LINE 30W

TRENCH 29+50 W

700m S

800m S



1a dark grn with patches of lighter  
grn, massive with local skeletal spinifex  
texture local diss Py  
4a 2-4mm Plag phenos in a grn chloritic groundmass  
1a as above  
2f or 6 dark grn/gray rock with fine euhedral plag  
grains, matrix microcrystalline pyrite  
1a as above

2f or 6

1a as above

4a as above

1a as above

4c 10-15% plag phenos in a light grey  
groundmass. Phenos are 2-3mm  
heavily intensely sheared and sericitic  
local kinks & fracture filling Py (trace)

2f or 6 chlorite, fine grained

4c as above

FIGURE 9



GEOLOGICAL ENGINEERING SERVICES  
NORTH BAY, ONT.  
ROBIN E. GOAD, M.Sc., F.G.A.C.

REVISION	CAN-MAC EXPLORATION LTD.		
TITLE	SAXTON LAKE-SWAYZE TWP. TRENCH 29+50W DETAILED PLAN		
	JAN, 1988	1:1000	BY RE.G.

63.5205



41015SE0039 63.5205 SWAYZE

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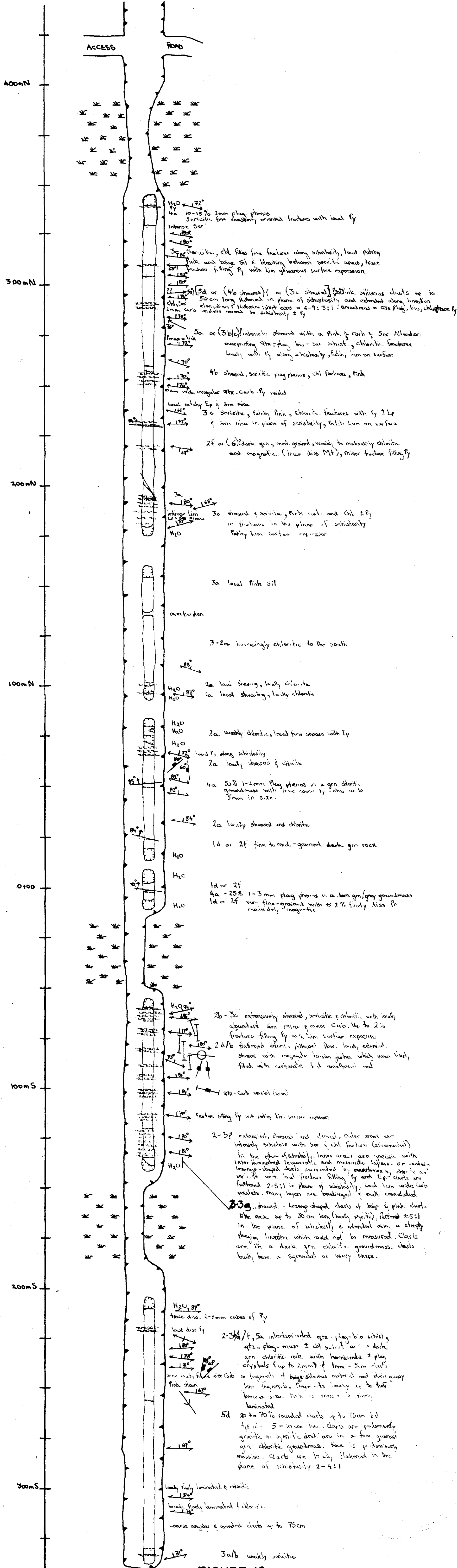
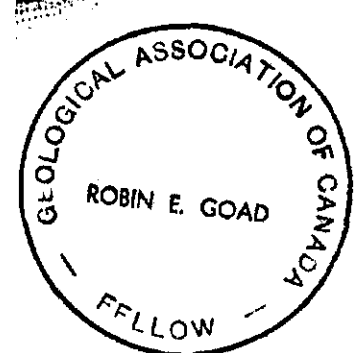


FIGURE 10

GEOLOGICAL ENGINEERING SERVICES		
NORTH BAY, ONT.		
ROBIN E. GOAD M.Sc. F.G.A.C.		
CAN-MAC EXPLORATION LTD		
DETAILED PLAN OF TRENCH		
33+50 W-SAXTON LAKE PROJECT		
02/88	1:1000	DRAWN:REG
N.T.S.		



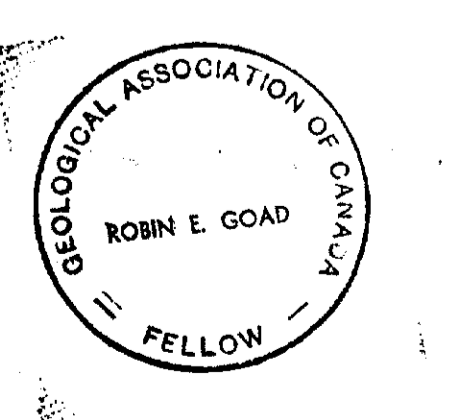
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FIGURE 11

GEOLOGICAL ENGINEERING SERVICES	
NORTH BAY, ONT.	
ROBIN E. GOAD M.Sc. F.G.A.C.	
REVISION	CAN-MAC EXPLORATION LTD
TITLE	TRENCH PLAN OF TOPBOOT
	PROJECT-SWAYZE & DENYES TMS
MARCH/88	1:2500
NTS:	REG.



63.5205

- Massive relatively un-altered feldspar porphyry with 20% 1-3 mm plagioclase in a med. to dark grey groundmass. Local weak grn chloritization marginal to plagioclase - Local 1mm carb veinlets
- 1m wide mafic (possibly lamprophyre) dyke or sill. Rock weathers brn with fresh surfaces grn, containing 25% mafic (hornblende?) phenocrysts, tr. disc. Py. 2cm wide oblique qtz filled tension gashes.
- locally intensely sheared & sericitic porphyry with faint sericitic plagioclase in a well foliated sericitic & chloritic groundmass.

- Well foliated qtz - plagioclase schist, intensely sheared & altered with layers of beige silicification, tr. fracture filling disc. Py. sericitic plagioclase faint but still locally discernable
- Well foliated altered feldspar porphyry, containing 25% sericitic 1-2mm plagioclase in a grn chloritic & sericitic groundmass, fracture filling Py local 1-2 mm qtz-carb veinlets, & cherty laminations.
- Massive to well foliated (locally sheared) intensely altered (hydrothermal) porphyry with areas (local) of less altered 4b. Alteration includes patchy beige silicification, light to dark grn chloritization & sericitization, patchy carb (commonly pink), local Epidote, & Py with a lim surface exposure. Plagioclase are partially to totally sericitized & only locally clearly discernable. Local qtz &/or carb veinlets

TRENCH N2V FOOTNOTE:

- Large 1.3 m wide milky white qtz & yellow/brn carb vein located between 3E.4m E of the west end of the trench. Vein contains tr. Py, Coy & malachite. Veins E. contact is @ N160°E/vert & parallel to the measured trend of the vein between the 3E.2V trenches. W. contact is more irregular @ N145°E/vert. Country rock adjacent main vein is chlorite-sericitic which 4d with patchy beige silicification & local graphite, epidote, carbonate & grn mica. Contains large veins up to 50 cm wide & stockwork veinlets of qtz-carb ± sulphide from 10 to 10cm wide. Veins (smaller) trend from N145°-N160° near the larger vein & parallel shearing @ N52°E/65°N to N70°E away from the main vein.
- Alteration is less intense away from the veins and the rock is chloritic & sericitic with sericitic plagioclase.

TRENCH M2V FOOTNOTE:

- large 1m wide milky white qtz & yellow brn carb & Py, Coy & malachite vein @ 3m E. of E. boundary of trench 1E.25m W. (25m W. of line 1+00 W). Vein trends N150°E/85°E. Adjacent country rock is chloritic & sericitic with patchy beige silicification. Numerous smaller veins occur adjacent the larger vein. Country rock is locally cataclastic along the shear direction comprising siliceous brown sheared 1-5mm clasts or phenocrysts surrounded by anastomosing platy mineral.

TRENCH S2V FOOTNOTE:

- large 1m wide main vein @ 2m W of 0+00 (E. side of old service Road) (or ≈ 25m W of Line 100 W). vein = milky white qtz with yellow-brn carb & Py, malachite & Coy & tr. galena. E. contact of vein = N165°E/65°W; W. contact = N160°E/160°E/70°W. Country rock is altered (silicified &/or chloritic & sericitic) porphyry with patchy carb. Plagioclase are commonly easily discernable. Smaller veins radiate from main vein away from it until they parallel the shear direction @ ≈ N60°E/65°N

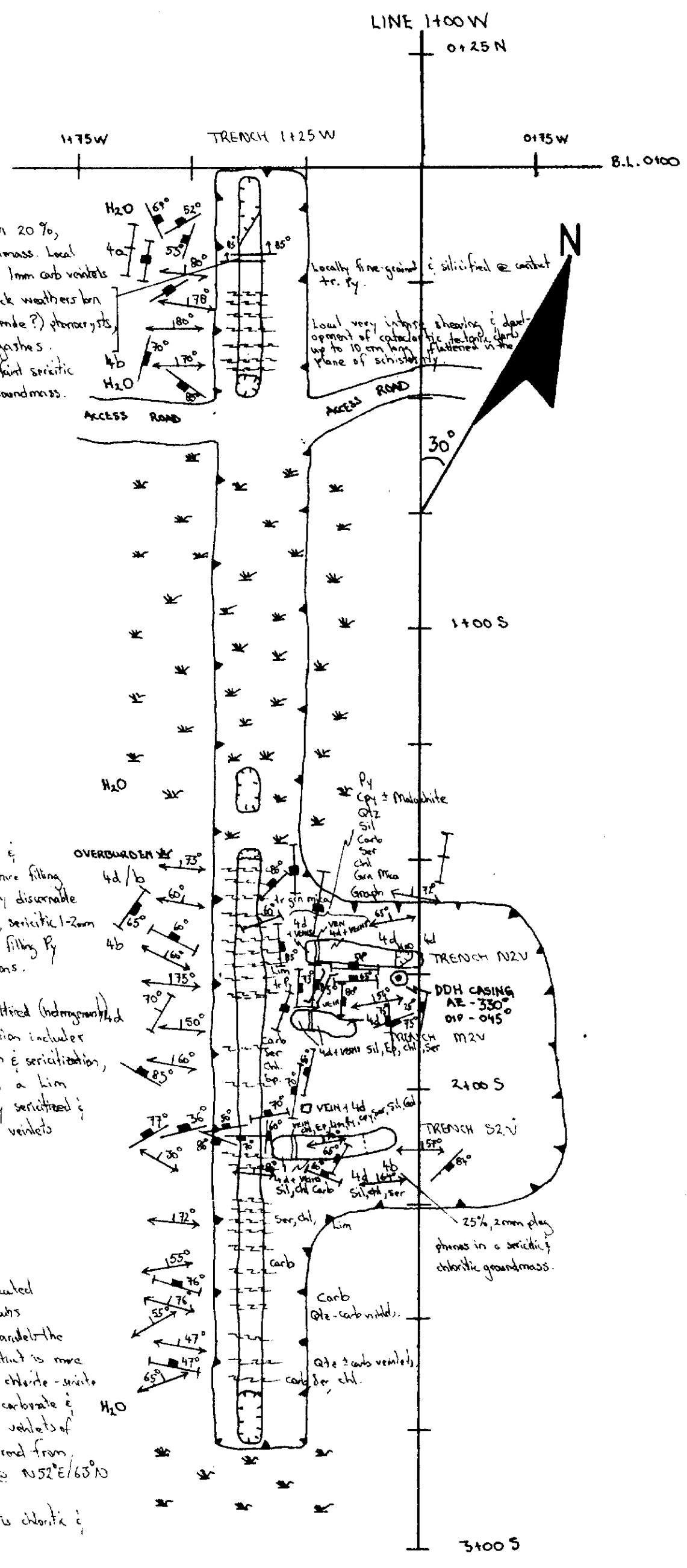
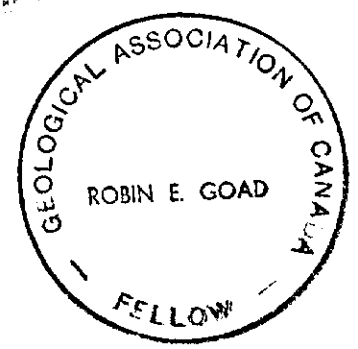


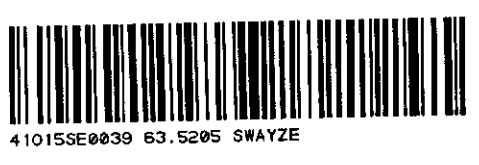
FIGURE 13

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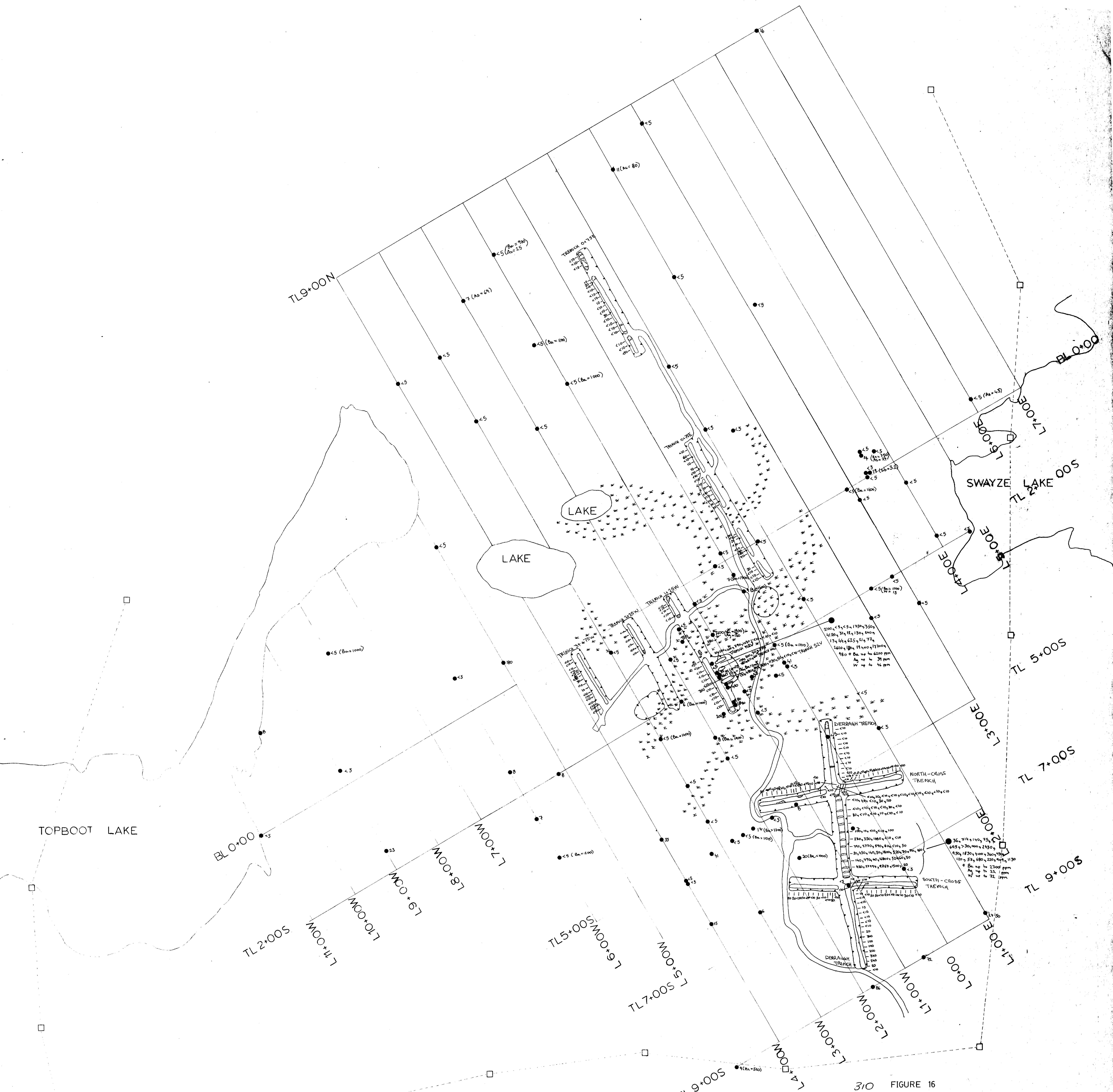
GEOLOGICAL ENGINEERING SERVICES NORTH BAY, ONT. ROBIN E. GOAD, M.Sc., F.G.A.C.		
REVISION	CAN-MAC EXPLORATION LTD.	
	TITLE TOPBOOT LAKE-SWAYZE AND DENYES TWPS.-TRENCHES 1+25W, N2V, M2V & S2V DETAILED PLAN	
	FEB., 1988	1:1000 BY REG.

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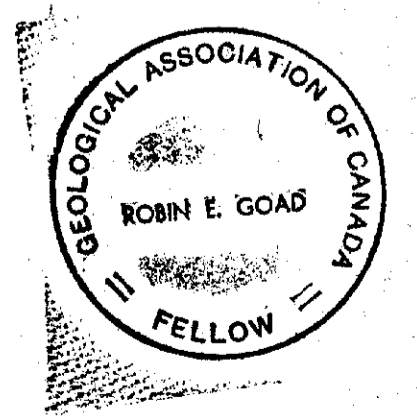




• SAMPLES COLLECTED BY ABERNATHY (SEPTEMBER, 1987)  
 - SAMPLES COLLECTED IN 1988

310 FIGURE 16

GEOLOGICAL ENGINEERING SERVICES		
NORTH BAY, ONT.		
ROBIN E. GOAD M.Sc. F.G.A.C.		
REVISION	CAN-MAC EXPLORATION LTD	
TITLE	TOPBOOT LAKE-SWAYZE TWP. Au ASSAY COMPILATION MAP	
MARCH/88	1:2500	DRAWN BY
NTS:		REG.



63.5205

