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REPORT ON THE
DORATHA MORTON PROPERTY

Doratha Morton (Lot 253), Percy (Lot 299)
Eva (Lot 254), Doratha Morton Fraction (Lot 300)
Banker (Lot 291), Chimnang (Lot 319)
Comox Fraction (Lot 297), Douglas (Lot 320)
Maggie May (Lot 322)

Vancouver Mining Division
NTS 92K/11

Prepared for

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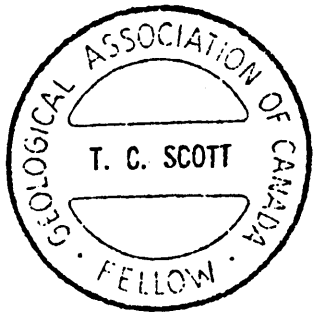

REPORT ON THE DORATHA MORTON PROPERTY

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SUMMARY

The Doratha Morton Property is located on the west side of Phillips Arm, two kilometers southwest of Fanny Bay, 57 kilometers north of Campbell River, and approximately 220 kilometers northwest of Vancouver, British Columbia. It straddles an east-west col between two fjords sculpted by Pleistocene glaciation. The moderate to steep north- and east-facing slopes display rock bluffs and incised creeks, typical of coastal topography. Elevations on the property range from 580 to 1100 meters above sea level.

The Doratha Morton property comprises eight contiguous and one detached Crown granted mineral claims. These cover a total area of 352.18 acres or 142.53 hectares.

Lode gold-quartz-sulphide deposits were discovered in the vicinity of Cardero Channel in the late 1890s. By late 1898, the Doratha Morton Mine was placed in production near Fanny Bay on the west side of Phillips Arm. Ore taken from several adits at an elevation of 2600 feet (792 meters) was conveyed down to a stamp mill and cyanide vat-leach plant at the shoreline on a 1.25-mile (2.0 kilometer) tramline. The mine was in operation from December 1898 until October 1899. The property lay dormant until 1925 when, under new ownership, new workings were added and sampled. During the years 1933 to 1936, the mine was reconditioned and the #3, #100 and #250 adits were driven. During this period, some ore was shipped, but no large ore shoots were developed. Production records indicate that from approximately 10,424 tons of ore treated or shippped, 4,514 ounces of gold and 10,455 ounces of silver were recovered. The bulk of this production occured during the first year of operation.

In 1983, Signet Resources Inc. of Vancouver, British Columbia acquired nine Crown granted mineral claims which covered the Doratha Morton Mine, adjacent ground, and the mill site at the shoreline. From 1983 to the present, Signet Resourcs Inc. has spent approximately $558,000 on exploration and development of the Doratha Morton Property. Work done to date by Signet Resources Inc. includes three kilometers of road building, 1293 meters of diamond drilling, surveying of roads and workings, trenching, geochemical surveys, and extensive sampling of underground and surface workings.

The Doratha Morton Property, underlain by granitoid and metamorphic elements of the western Cordillera's Coast Plutonic Complex, straddles a northwesterly-trending, sheared contact between dioritic rock to the southwest and metamorphic rocks to the northeast. This shear zone dips approximately 75° to the southwest and locally truncates the contact. It has been traced or inferred from the Alexandra through the Julie-Enid and Doratha Morton, and on to the Commonwealth properties, a distance of 6.5 kilometers.

On the Doratha Morton, the shear zone has been detected over a strike length of 900 meters and may exceed 30 meters in width (Figure 5). Fault dislocations and the intrusion of numerous dykes complicate the geology of the property. Historical gold production has been derived from sheared, pyritic quartz veins and lenses up to 3 meters in width, which commonly occur within the shear zone.

Recent investigations concentrated on delineating extensions of gold mineralization detected underground and on new surface showings near the camp 800 meters to the northwest. Diamond drilling in 1984 revealed that a 27-meter section of Level #1 East, which grades 0.390 ounces gold per ton across 1.3 meters, may extend to the southeast an additional 30 meters. In 1986, hand trenching in the vicinity of Line 6+00W - 0+25S exposed a 13-meter long segment of quartz vein contained within the shear zone. Channel samples returned assays of up to 0.216 ounces gold per ton across 0.64 meter.

The results of a soil geochemical survey and a VLF-EM orientation survey show a positive correlation with the trace of the auriferous shear zone on the property. The continued application of these surveys will help to optimize trenching and drilling programs conducted in search of gold mineralization within the shear zone.

In summary, the work performed on the Doratha Morton Property since 1983 has shown that gold mineralization extends well beyond the limits of old underground workings, and that additional work is warranted in order to properly assess the economic significance of the prospect. Initially, a three-staged program of development is recommended. The Stage I program, for 1987, is to

include geological mapping, geochemical and geophysical surveys, trenching and sampling, and prospecting at an estimated cost of $115,000. The Stage II program is to include 600 meters (2000 feet) of BQ diamond drilling to delineate the southeasterly extension of mineralization located at the face of Level No.1 East at an estimated cost of $112,000. A Stage III program, to be contingent upon encouraging results being received from the Stage I work, is to include 600 meters (2000 feet) of BQ diamond drilling at an estimated cost of $107,500.

1.0 INTRODUCTION

This report is prepared at the request of New Signet Resources Inc. Field examinations of the Doratha Morton Property were carried out by the writer between November 1985 and January 1986, at which time Signet conducted a diamond drilling program. A brief investigation of the underground workings took place at this time. The property was again visited by the writer between November 15 and 21, 1986 in order to examine a new showing and start relogging old drill core. Unfortunately, snow cover during both visits permitted only a cursory investigation of surface workings.

This report is based on the results of work performed by the writer during the above periods, on geotechnical data acquired by previous operators and on several published and unpublished maps, reports and correspondence which pertain to the property. This report summarizes this information and recommends an exploration program designed to delineate gold occurrences located within the property boundaries.

The writer would like especially to acknowledge the contributions of Mr. C. R. Harris, P.Eng., as much of this report is based on the results of his work. The writer also acknowledges Bow Valley Industries Ltd. for making available data collected on their behalf during regional investigations in the area.

2.0 LOCATION AND ACCESS

The Doratha Morton Property is located on the west side of Phillips Arm, two kilometers southwest of Fanny Bay, 57 kilometers north of Campbell River, and approximately 220 kilometers northwest of Vancouver, British Columbia (Figure 1). The geographic coordinates of the property are 50°30.8' north longitude and 125°25' west longitude. The 1:50,000 scale map reference for this area is Phillips River, NTS 92K/11.

Access to the property is by power boat or float plane to Picton Point, thence by 4-wheel drive vehicle on logging roads to a recently constructed mine road which leads to the camp and work areas. Currently, however, the mine

road, starting approximately 1.2 kilometers south of the claim group, is impassible with wheeled vehicles.

The most convenient access to the property is by charter helicopter directly from Campbell River to a helipad adjacent to the camp. This, however, may be impeded occasionally by inclement conditions.

The camp is situated on the south side of a col near the eastern boundary of Lot 319 at an elevation of 730 meters above sea level (Figure 2). It comprises two plywood-frame cabins, a storage shed, and a roofed drill-core shack. Unfortunately, fresh running water cannot be obtained at the camp by gravity. The installation of a small pump and head tank would solve this inconvenience. Firewood for camp heat is plentiful.

The underground workings are located 450 to 750 meters east of the camp. The seven portals range in elevation from 705 to 765 meters. Easy access on foot or on trail bike is afforded by the system of mine roads between the camp and most parts of the property.

3.0 PHYSIOGRAPHY

The property straddles an east-west col between two fjords sculpted by Pleistocene glaciation. The moderate to steep north- and east-facing slopes display rock bluffs and incised creeks, typical of coastal topography. Elevations on the property range from 580 to 1100 meters above sea level.

With the exception of areas adjacent to the underground workings and the tram-line right of way, the slopes are covered with a stand of mature virgin timber; predominantly hemlock, western cedar and yellow cypress with minor Douglas fir and scrub pine. Moss, huckleberry and fern are dominant in the relatively open ground below the forest canopy, while thick underbrush, including alder, salmonberry and devils club, is common adjacent to water courses.

Wildlife, although common, is not plentiful. Indigenous bird life includes raven, crow, stellar jay and whiskey jack, while the animal population includes squirrel, martin, coast deer and black bear.

The close proximity to the sea shore has a moderating influence on the climatic condition of the sub-alpine environment. The mean daily temperature for January and July are 0° to -5C and 18° to 20°C respectively. The number of days with measurable precipitation for the same periods are 18 to 21 days and 6 to 9 days, with a mean annual precipitation of 150 to 250 centimeters. Even though the snow pack between November and February can exceed two meters, a mild winter would permit year-round exploration activity.

4.0 PROPERTY DEFINITION

The Doratha Morton property comprises eight contiguous and one detached Crown granted mineral claims. These cover a total area of 352.18 acres or 142.53 hectares (Figure 2).

Table 1

LIST OF CLAIMS

Lot	Name	Area (acres)
253	Doratha Morton	51.65
254	Eva	42.14
291	Banker	41.75
297	Comox Fraction	19.85
299	Percy	49.52
300	Doratha Morton Frction	23.30
319	Chimnang	51.30
320	Douglas	48.74
322	Maggie May	24.00
		352.18

Lot 322, the Maggie May claim, is 1.4 kilometers north-northeast of the contiguous claims, and covers the old mill site at tide water. Lot 253, the Doratha Morton claim, covers most of the underground workings and has surface rights attached. No claim posts have yet been located, but the claim boundaries can be re-established from the old legal survey notes. Several adjoining Crown granted claims are held in good standing as are the more recently located mineral claims which surround the property.

5.0 HISTORY AND PRODUCTION

Lode gold-quartz-sulphide deposits were discovered in the vicinity of Cardero Channel in the late 1890s. By late 1898, the Doratha Morton Mine was placed in production near Fanny Bay on the west side of Phillips Arm. Ore taken from several adits at an elevation of 2600 feet (792 meters) was conveyed down to a stamp mill and cyanide vat-leach plant at the shoreline on a 1.25-mile (2.0 kilometer) tramline. The mine was in operation from December 1898 until October 1899, when ore above the #1 Level was considered to be mined out and operations ceased. The onset of the Boer War, however, appears to have been a contributing factor in the abrupt closing.

The property lay dormant until 1925 when, under new ownership, new workings were added and sampled. During the years 1933 to 1936, the mine was reconditioned and the #3, #100 and #250 adits were driven. Some ore was shipped, but no large ore shoots were developed.

The Alexandra, Enid-Julie and Commonwealth properties located on the same structure, adjacent to the Doratha Morton, were also prospected and partly developed during the years 1897 to 1939 (Figure 3).

Production records from the Doratha Morton Mine are incomplete, but the following is noted in British Columbia Ministry of Mines reports:

Table 2
HISTORICAL PRODUCTION DATA

Year	Tons	Gold	Silver
1898/99	10,385	4,434 ounces	10,222 ounces
1925	2.6 1.4	0.53 oz/ton 1.05 oz/ton	1.42 oz/ton 1.16 oz/ton
1933	30 to 40 (say 35)	1.56 to 2.89 oz/ton	6 to 7 oz/ton
Approximate Totals	10,424	4,514 ounces	10,455 ounces

The Alexandra Mine, 3.5 kilometers to the east, was also a small producer with a recorded production of 1915 tons grading 0.404 ounces gold per ton.

In 1983, Signet Resources Inc. of Vancouver, British Columbia acquired nine Crown granted mineral claims which covered the Doratha Morton Mine, adjacent ground, and the mill site at the shoreline. From 1983 to the present, Signet Resources Inc. has spent approximately $558,000 on exploration and development of the Doratha Morton Property. Currently, most of the ground adjacent to the Doratha Morton Property is actively being explored by other companies.

Table 3 summarizes the work carried out on the Doratha Morton Property to date. Figure 4 shows the location of workings with respect to the property boundaries.

Table 3

SUMMARY OF DEVELOPMENT WORK ON THE DORATHA MORTON PROPERTY

Year	Operator	Development
1898-99	Fairfield Exploration Syndicate, London, Eng.	No.1 East Adit, 144' (44m), East Drift with crosscuts, 300' (91.5m), West Drift, 220' (67m); No.2 Adit & drifts, 135' (41.5m); No.3 Adit, 650' (198m), Drifts & crosscuts, 120' (59m); No.4 Adit, 210' (64m); No.5 Shaft, 15' (4.5m); Stopes, 10,385 tons to crusher; Tramway, Stampmill, Cyanide Vat Leach Plant.
1924-26	Glasord Mining Corp. Vancouver	Acquired title to property; constructed cabins, bunkhouses, cookhouse and trails; No.5 Adit started, 75' (23m); reconditioned and sampled old workings; shipped 4 tons of ore.
1933-34	Hercules Consolidated Mining, Smelting and Power Corp. Vancouver	Acquired property; reconditioned camp; open cuts at surface along strike; 250 Adit & Drift, 170' (124.5m); 100 Adit, 47' (14.5m); Marble Adit (at sea level), 409' (124.5m); shipped 30-40 tons ore from old No.2 Adit.
1935	Santiago Mines Ltd. (under lease from HCMS&P)	Limited work.
1936	HCMS& P.	Development ceased.
1983	Signet Resources Inc. Vancouver	Acquired property; located & opened old workings; mapping & sampling. Note: 3800m of grid lines cut by Bute Joint Venture.
1984		4-wheel drive road access surveyed & constructed from logging road to camp & 250 Adit, approx 5100' (1550m); camp constructed; workings & trails surveyed & mapped; prospecting; workings sampled; geochemical orientation survey; surface diamond drilling, 1955' (596m) in 5 holes.
1985		Road construction, 4000' (1490m); prospecting; trenching with backhoe; mapping & sampling; underground diamond drilling, 1269' (387m) in 5 holes; surface diamond drilling, 259.4m in 4 holes.
1986		Surface diamond drilling, 438.1m in 6 holes; soil geochemistry survey; prospecting, hand trenching & sampling; relogging of 1984 surface & 1985 underground drill core.

6.0 REGIONAL GEOLOGY

The Doratha Morton Property is underlain by granitoid and metamorphic elements of the western Cordillera's Coast Plutonic Complex (Figure 5). In the vicinity of the Cardero Sound, a long narrow belt of metamorphic rocks accentuate the northwesterly-elongated plutons of predominantly quartz diorite, granodiorite and diorite. The metamorphic rocks include schists, amphibolites, metavolcanics and quartzitic to calcareous metasediments. Locally, diopside, wollastonite and garnet skarn have developed in the latter. The metamorphic rocks are believed to be Triassic or older, while the intrusive rocks are probably Triassic to Cretaceous in age.

The persistent bands of steeply dipping metasedimentary and metavolcanic rocks are thought to represent fault slices or grabens along which horsts of plutonic rock were thrust upward (Roddick). The bounding shear zones are commonly reduced to foliations and obliterated by synplutonic recrystallizations and the intrusion of later dykes.

This geological environment hosts several auriferous quartz-sulphide prospects in the vicinity of the Doratha Morton Property as shown in Figure 5.

7.0 LOCAL GEOLOGY

The Doratha Morton Property straddles a northwesterly-trending, sheared contact between dioritic rock to the southwest and metamorphic rocks to the northeast. This shear zone dips approximately 75^{o} to the southwest and locally truncates the contact. It has been traced or inferred from the Alexandra through the Julie-Enid and Doratha Morton, and on to the Commonwealth properties, a distance of 6.5 kilometers (Figure 3).

On the Doratha Morton, the shear zone has been detected over a strike length of 900 meters and may exceed 30 meters in width. Fault dislocations and the intrusion of numerous dykes complicate the geology of the property.

Historical gold production has been derived from sheared, pyritic quartz veins and lenses up to 3 meters in width, which commonly occur within the shear zone. Only generalized geology is shown on Figures 6(a) and 6(b) as the detailed distribution of the geological elements is poorly understood.

7.1 LITHOLOGIES, ALTERATION AND STRUCTURE

The property is underlain by a sequence of intercalated limestone, calcareous sediments, and minor andesitic tuffs and breccias. The northwesterly-trending beds, although in contact with plutonic rocks to the southeast, generally display a moderate, southwesterly dip.

These volcanics and sediments have undergone considerable contact metasomatism as evidenced by diopside-garnet-wollastonite skarn development and pervasive epidotization. The zone of shearing within these rocks is characterized by pervasive bleaching, sericitization and silicification. The latter occurs as conformable veins, 0.5 to 3.0 meters wide, and crosscutting stringers generally less than 0.5 centimeter. A strong, northeasterly-striking and steeply southwest-dipping foliation, accompanied by the above alteration, gives the rocks which have been influenced by the regional shearing the appearance of a quartz-sericite schist.

The main intrusive body on the property is of dioritic composition, and has a fine- to medium-grained, equigranular texture. This rock displays both fault and intrusive contacts which are subparallel to the bedded rocks to the northeast. Numerous dykes ranging in composition from andesitic through to dacite, and including quartz and quartz-feldspar porphyries, cut across both the diorite and metamorphic rocks. These dykes are commonly steeply dipping, and are generally normal to the contact and foliation. They may occasionally form conformable sills. The alteration of the intrusive rocks is usually displayed as a bleached, sericitic envelope around dry and quartz-filled fractures. Epidote is prominent, especially in andesitic dykes. Mafic minerals are often chloritized.

The northwesterly trend of the main contact, bedding and shear zone occasionally displays left-lateral offset, where crossed by faults and andesite dykes. Observed displacements are generally small.

7.2 MINERALIZATION

Pyrite is the dominant sulphide mineral found on the property. It occurs with quartz as disseminated patches and seams, parallel to the foliation within the silicified shear zone, as fracture coatings within both granitic and metamorphic rocks, and as disseminations and whisps within areas of skarn development. The pyrite concentration seldom rises above 5%. Trace amounts of galena, sphalerite and chalcopyrite often accompany pyrite, especially in crosscutting stringers. Telurium has been detected in assays and realgar has been noted on fractures in drill core.

Gold values appear to have a positive correlation with concentrations of pyrite within or adjacent to quartz veins. Free gold has seldom been observed.

8.0 DESCRIPTION OF WORKINGS

8.1 UNDERGROUND WORKINGS & ASSAYS

The underground workings were surveyed, mapped and sampled by Mr. C. R. Harris, P.Eng. during 1983 and 1984. As the writer has spent a limited time in the workings area, the following is excerpted from Mr. Harris' report of September 5, 1985.

> "The general arrangement of the old underground workings is shown on Figure 2B. The main mine level #1 (El.2450) consists of a 145' crosscut, portal now caved, with drifts 360' to the east and 150' to the west. Access to the drifts is gained by the west

drift surface breakout. The geology is complicated by post mineral dykes and vein offsets as well as a low angle fault bottoming in the old production stope. The main vein was stoped to surface over a length of 150 feet and another small stope to the east was mined to about 50' height. The old timbering and chutes are badly decayed and the areas unsafe to work in.

"The most important vein section is from the east drift face back for 90' which averages 40" width with 0.390 oz/ton gold. The best assay obtained in this section was at Sta. 14+34' giving 39" of 1.470 oz/ton gold and 4.14 oz/ton silver. Between this area and the main stope the vein branches and is cut by post mineral dykes but sampling shows that there may be some lower grade material available.

"In the west portion of #1 Level the vein appears to have been offset and cut off by low angle faulting. Some material was mined but grade was erratic and quantities limited by the lack of backs. However, assays as high as 2.270 oz/ton gold in narrow mineralized sections of the vein and to 0.540 oz/ton gold in wide sections make it imperative that this area be tested at depth. A lower grade vein in the footwall and a short but higher grade vein in the hangingwall add to the potential of this area.

"The #3 Tunnel (El. 2260) was driven below the #1 Level as a crosscut for 540 feet and was apparently intended as both a haulage and production level. A quartz vein is cut at 485 feet and drifted on for 120 feet. Sampling shows the vein to be continuous and up to 60" wide but generally of low grade although a narrow hangingwall seam at the west end has assayed 2.10 oz/ton gold over 2 inches.

"The #4 Tunnel (El. 2394) was driven as a crosscut between the #1 and #3 Levels. This tunnel intersected a vein at 205 feet and the vein has blasted but not excavated consequently little information can be gained until the area is cleared. Assays from this section returned only low values but it is not known if the vein showing is the main vein or the footwall lower grade vein noted in the #1 Crosscut above.

"Above and to the southeast of the #1 Level a short shaft (El. 2623) explores a pod of pyrite in altered sediments of the shear footwall but sampling gave only low assays. Below this (El. 2500) the #5 Adit was driven part way to the shear but abandoned before its objectives.

"180 feet west of the #1 Portal the #100 Adit was driven for 30 feet along a 24" to 36" vein carrying low gold values although a 24" section near the face assayed 0.137 oz/ton gold. The objective of this tunnel appears to have been to explore below a surface trench, now caved, carrying high grade sulphide ore. A grab sample from a small stockpile from this trench assayed 1.155 oz/ton gold. However, the adit did not reach below this trench. It is not yet known if this vein represents an offset of the main vein or a separate vein further into the shear.

"The #2 Tunnel (El. 2462) was collared 325 feet westerly along the hillside from the #1 Level. This explored some 80' along a fault on the south wall. The first 40 feet of tunnel is caved and it is from this section that small shipments of high-grade are reported during the 1930s. The back section of the tunnel can be entered by climbing down the caved material. A drift round above the caved area near surface assayed as high as 3.36 oz/ton gold across a 12 inch section of vein and 0.583 oz/ton gold across 36 inches of mixed quartz and shear.

"The #250 Tunnel (El. 2409) was driven as a crosscut for 145 feet and intersected quartz veining at 50' and 130'. The vein at 130' appears to be the same as the high grade vein in the #3 Tunnel and was drifted on for 25' toward the #2 Tunnel where it is cut by a diorite dyke. Assays are generally low but a section by the dyke showed 12" of 0.598 oz/ton gold. Selected samples from the dump have assayed as high as 4.28 oz/ton gold and 16.90 oz/ton silver for high sulphide material. The furthest vein also returned only low values but a 6" footwall section assayed 0.162 oz/ton gold."

A plan of the original underground workings (circa 1946) is shown in Figure 7.

Although the sampling was extensive, only the more significant assays are reported on Figures 6(a) and 6(b).

8.2 SURFACE WORKINGS & ASSAYS

The surface workings include hand trenches, roads and backhoe trenches. Sampling of these has detected a locus of auriferous quartz veins within the shear zone over a strike length of 900 meters. The more significant assay results are shown on Figures 6(a) and 6(b).

8.3 DIAMOND DRILLING & ASSAYS

Three phases of diamond drilling have been carried out on the property to date. The 1984 surface drilling comprised 596 meters of BQ core-size in five holes (DDH5-1 to -5), from two sites in the vicinity of the underground workings. Holes 5-1 and 5-2, drilled from the No.5 Portal, intersected the shear approximately 73 meters below No.1 East Level. These holes showed little veining or mineralization and were stopped before crossing the shear zone.

Holes -3, -4 and -5 were drilled from the #5 Shaft area to intersect the main vein southeast of the end of the #1 Level. Important intersections for these holes were:

Table 4

SIGNIFICANT INTERSECTIONS, DDH5-3, -4, -5

Hole	From (m)	To (m)	Length (m)	Gold (oz/t)	Silver (oz/t)
DDH5-3	35.0	36.6	1.6	0.106	0.23
DDH5-4	44.2	45.6	1.4	1.178	2.25
DDH5-5	79.9	82.9	3.0	0.118	0.40
	95.1	98.1	3.0	0.104	0.36

These results indicate the original vein structure may extend in excess of 30 meters to the southeast of and to a depth of approximately 35 meters below the No.1 East workings.

In 1985, an underground drill program comprised 387 meters of AQ core-size in five holes (DDH3-1 to -5), from a site within the No.3 Adit. These holes penetrate the shear zone area above and below the No.3 Level, but quartz veining is nearly absent. Pyrite content is low, as are assays for gold.

The diamond drill summaries for the 1984 surface and 1985 underground programs are shown on Figure 6(a).

A second surface drilling program was conducted during the winter of 1985/86 to test the distribution of anomalous gold values returned from samples taken in the vicinity of Trenches R12 and R14. Although several assays returned values of greater than 0.1 ounce gold per ton, including a quartz vein in DDH SM 85-2 grading 0.757 ounces gold per ton over 1.6 meters, continuity between intersections has been impeded by the presence of a crosscutting dyke swarm which commonly comprises 50% of

the drill core. The drilling did, however, confirm a geological environment and stratigraphy similar to that of the underground workings, 550 meters to the east.

9.0 GEOCHEMISTRY

During 1986, Signet Resources carried out a soil geochemical survey to the west of the underground workings. The plot of results (Figure 8) reveals a narrow, northwest-trending area, depleted in silver and flanked on both sides by areas of silver enrichment (Spearing).

The distribution of gold values is erratic across the grid and does not permit contouring. In the vicinity of Line 5+50W, however, the anomalous values generally occur between the silver highs, and are nearly coincident with the trace of a shear zone revealed by surface trenching. The anomalous gold values are commonly in the 20 to 50 ppb range, but occasionally exceed 100 ppb. The highest value returned is 1400 ppb, a sample from Station 6+25W, 0+50S.

10.0 GEOPHYSICS

In 1983, a VLF-EM orientation survey was conducted over three lines in the vicinity of the '100' and '250' adits by the Bute Joint Venture as part of a regional investigation of the area. Fraser-filtered results indicate a strong anomaly that coincides with auriferous structures noted in the workings. The continued use of this geophysical technique may facilitate the extrapolation of vein structures across areas untested by trenching, and may also facilitate interpretation of geochemical and structural data.

11.0 DISCUSSION AND CONCLUSIONS

Surface, underground and diamond drill investigations carried out on the Doratha Morton Property has revealed the presence of auriferous quartz veins laying within a shear zone, parallelling the contact between dioritic plutons and metasomatized sediments and volcanics. This shear zone, although intermittently exposed, appears to be in excess of 900 meters in length.

Most work to date has been concentrated around the underground workings on the eastern portion of the property. Recent sampling has indicated that the last 27 meters of the No.1 East Drift grades 0.390 ounces gold per ton over an average width of 1.0 meter (Harris, 1984). The 1984 surface drilling has indicated that the auriferous structure continues to at least 30 meters beyond the face, and to a depth of at least 40 meters below the No.1 Level. This zone of mineralization appears to be open to the east and to depth.

More recent work has centered on the area adjacent to the camp where significant gold values have been returned from trench sampling and diamond drilling, with values in the same order of magnitude as those adjacent to the underground workings. Although the diamond drill core indicates a geological environment similar to the underground workings, it is uncertain if this zone represents the continuation of the Doratha Morton Ledge, offset by faulting, or a portion of the Stringer Ledge as shown on Figure 3.

The complex geology of the property is typical of contacts between plutons and metasedimentary/volcanic rocks within the Coast Plutonic Complex. As a result, more detailed geological mapping is required to accurately portray the geology of known auriferous systems and the economic potential of the Doratha Morton Property.

In conclusion, the Doratha Morton Property warrants further development.

12.0 RECOMMENDATIONS

In order to more fully understand the distribution of gold-bearing mineralization and its economic importance, a three-staged program of development of the Doratha Morton Property is recommended for the 1987 field season. The surface work should be done during the summer months to facilitate mapping and sampling. (Refer to Appendix A for cost estimates.)

The **Stage I** program should include:

Geology

- detailed geological mapping of all accessible underground workings, trenches, roadcuts and unexplored areas of the property;
- continuation of relogging of 1984 and 1985 diamond drill core;
- petrographic studies to aid geological mapping and interpretation.

Geochemistry and Prospecting

- prospect unexplored areas of the property;
- extend soil geochemical survey coverage to the north and west of the present coverage adjacent to the camp;
- geochemical sampling for Au, Ag, As, Pb and Cu.

Geophysics

- conduct a VLF-EM survey over the present grid area and, if effective in delineating structures and lithologies relating to the distribution of gold mineralization, continue the survey to the west.

Trenching and Sampling

- using a backhoe or excavator, construct crosscutting trenches to expose the auriferous shear zone from east of the underground workings to west of the current surface exposures and geochemical anomalies; improvements to the mine roads should be made at this time to facilitate the later mobilization of drilling equipment.
- map and sample exposed bedrock.

Progress Report

- o prepare report containing results and interpretation of work as described above.

The estimated cost of Stage I is $115,000.

The **Stage II** program should include a 600-meter diamond drill program designed to explore the easterly extension of auriferous mineralization detected by detailed sampling of the last 27 meters of Level No.1 East and by the 1984 diamond drill program in the vicinity of the No.5 Adit and Shaft. This work should not necessarily be contingent on Stage I results, as the target area is already reasonably well defined. A report which assesses the results of all data collected on the Doratha Morton Property should be prepared at the completion of Stage II, or, if the Stage III program is to be pursued, upon completion of Stage III.

The estimated cost of Stage II is $112,000.

The **Stage III** work program should comprise a 600-meter diamond drill program to test to depth the auriferous structures located in the camp area. This work, however, should be contingent upon results of Stage I work in this area.

The estimated cost of Stage III is $107,500.

T. Cameron Scott, B.Sc., F.G.A.C.

Vancouver, British Columbia
March 31, 1987

Tgn#2:pab

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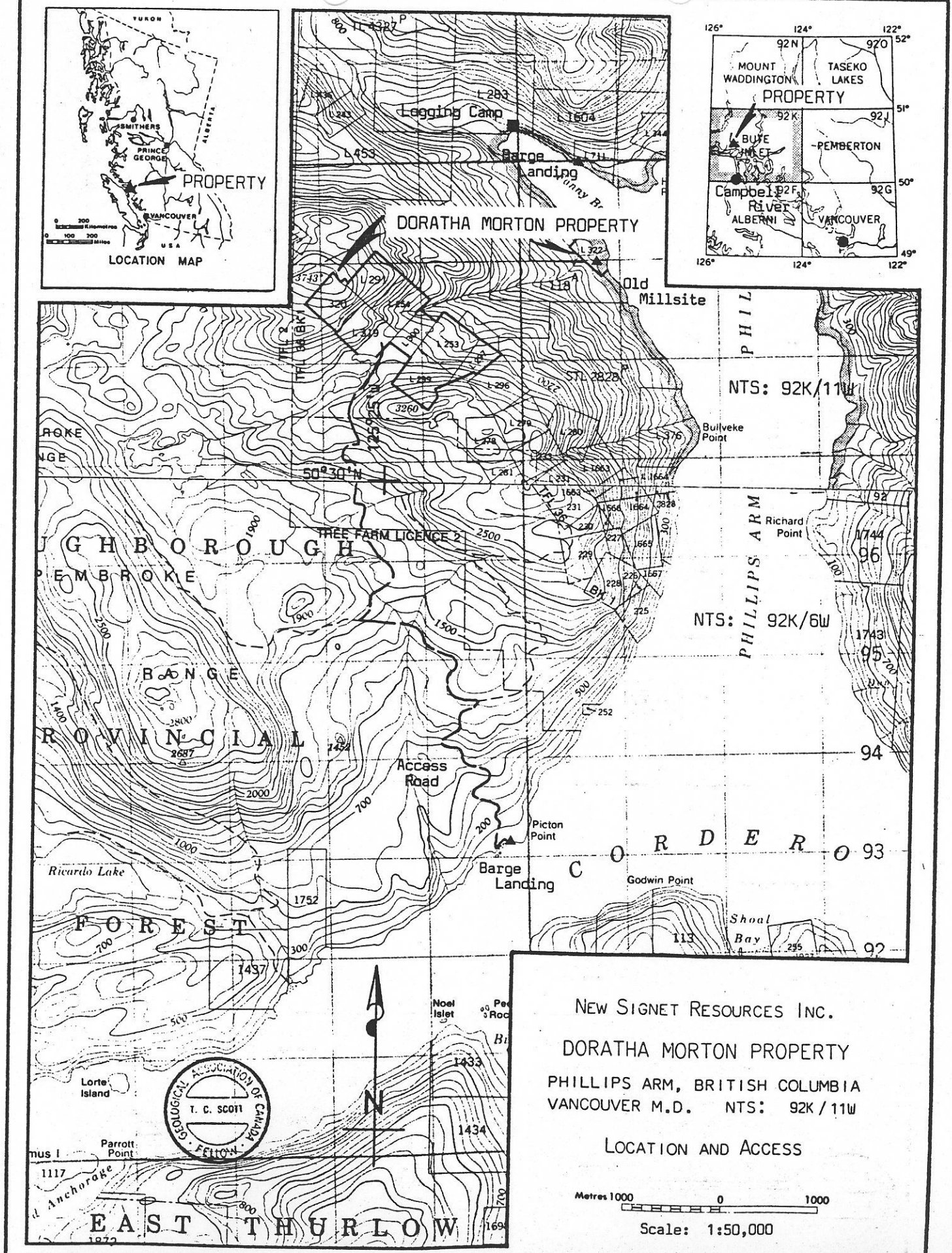


NEW SIGNET RESOURCES INC.

DORATHA MORTON PROPERTY

PHILLIPS ARM, BRITISH COLUMBIA
VANCOUVER M.D. NTS: 92K / 11W

LOCATION AND ACCESS

Metres 1000 0 1000

Scale: 1:50,000

T.C. Scott, B.Sc., FGAC

March, 1987

Fig. 1

STATEMENT OF QUALIFICATIONS

I, T. CAMERON SCOTT, of 2505 West 1st Avenue in the City of Vancouver, Province of British Columbia, DO HEREBY CERTIFY:

1. THAT I am a self-employed Consulting Geologist with offices at Suite 900, 850 West Hastings Street in the City of Vancouver, Province of British Columbia;

2. THAT I am a graduate of the University of British Columbia where I did obtain my Bachelor of Science degree in Geology;

3. THAT I am a Fellow of the Geological Association of Canada;

4. THAT my primary employment since 1963 has been in the field of mineral exploration, mainly as Field and Project Geologist;

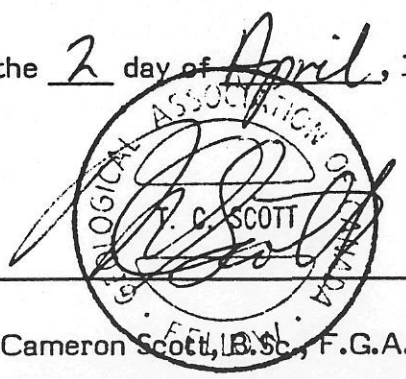
5. THAT my experience has covered a wide range of geological environments and has allowed considerable familiarization with geophysical and geochemical techniques;

6. THAT this report is based on data supplied by New Signet Resources Inc., on literature and documentation available for public inspection, and on data collected by me during my work on the property in the periods November 1985 to January 1986 and November 15 to 21, 1986;

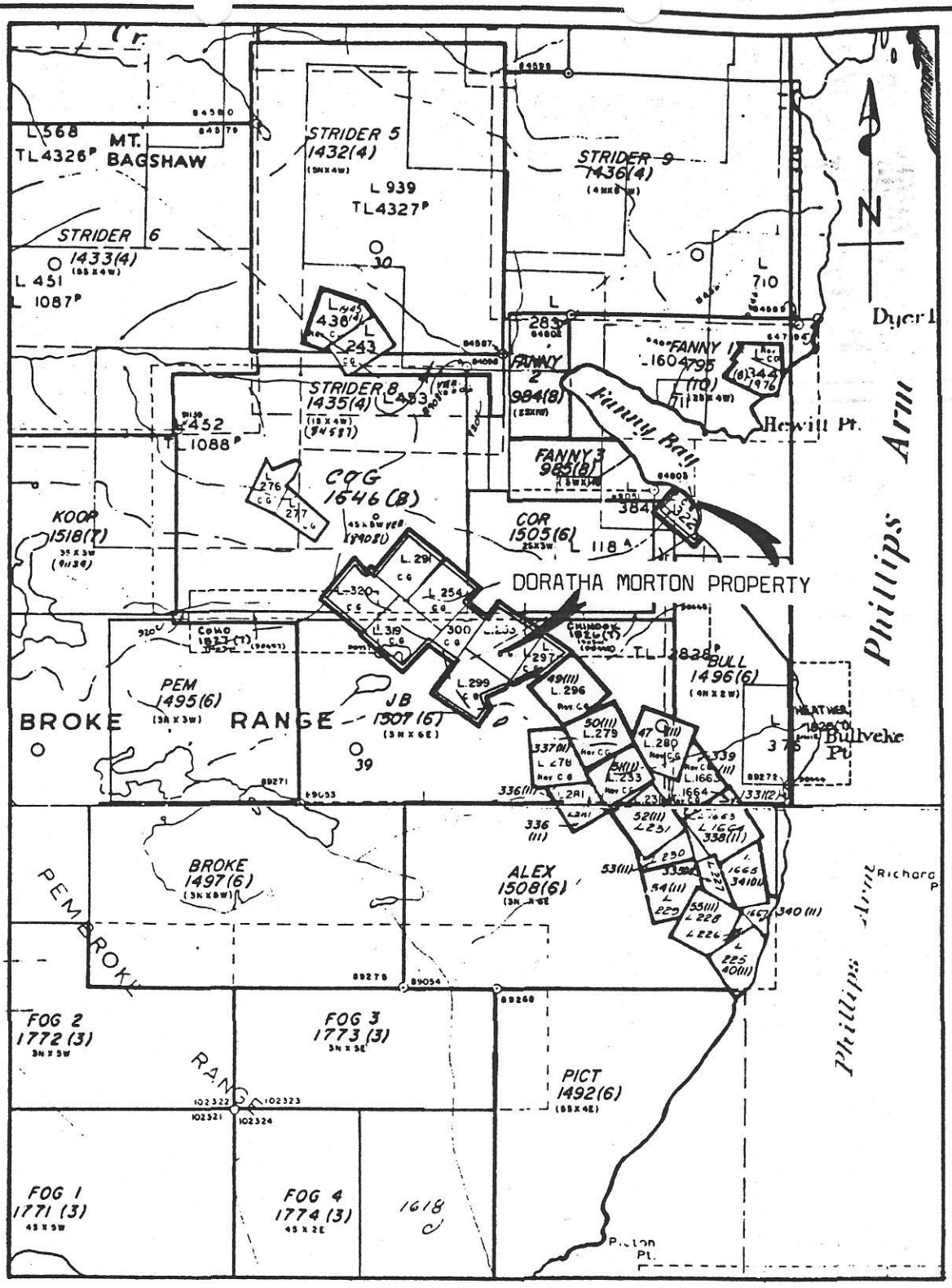
7. THAT I have no interest in the Doratha Morton Property or in the securities of New Signet Resources Inc., nor do I expect to receive any.

I consent to the use by New Signet Resources Inc. of this report in a Prospectus or Statement of Material Facts or any other such document as may be required by the Vancouver Stock Exchange or the Office of the Superintendent of Brokers for British Columbia.

DATED at Vancouver, British Columbia, this the 2 day of April, 1987.



T. Cameron Scott, B.Sc., F.G.A.C.



MAP REF.: B.C. M92K/6W
86.09.05

Metres
1000 0 1000
Scale: 1:50,000

NEW SIGNET RESOURCES INC.

DORATHA MORTON PROPERTY

PHILLIPS ARM, BRITISH COLUMBIA
VANCOUVER M.D. NTS: 92K / 6W

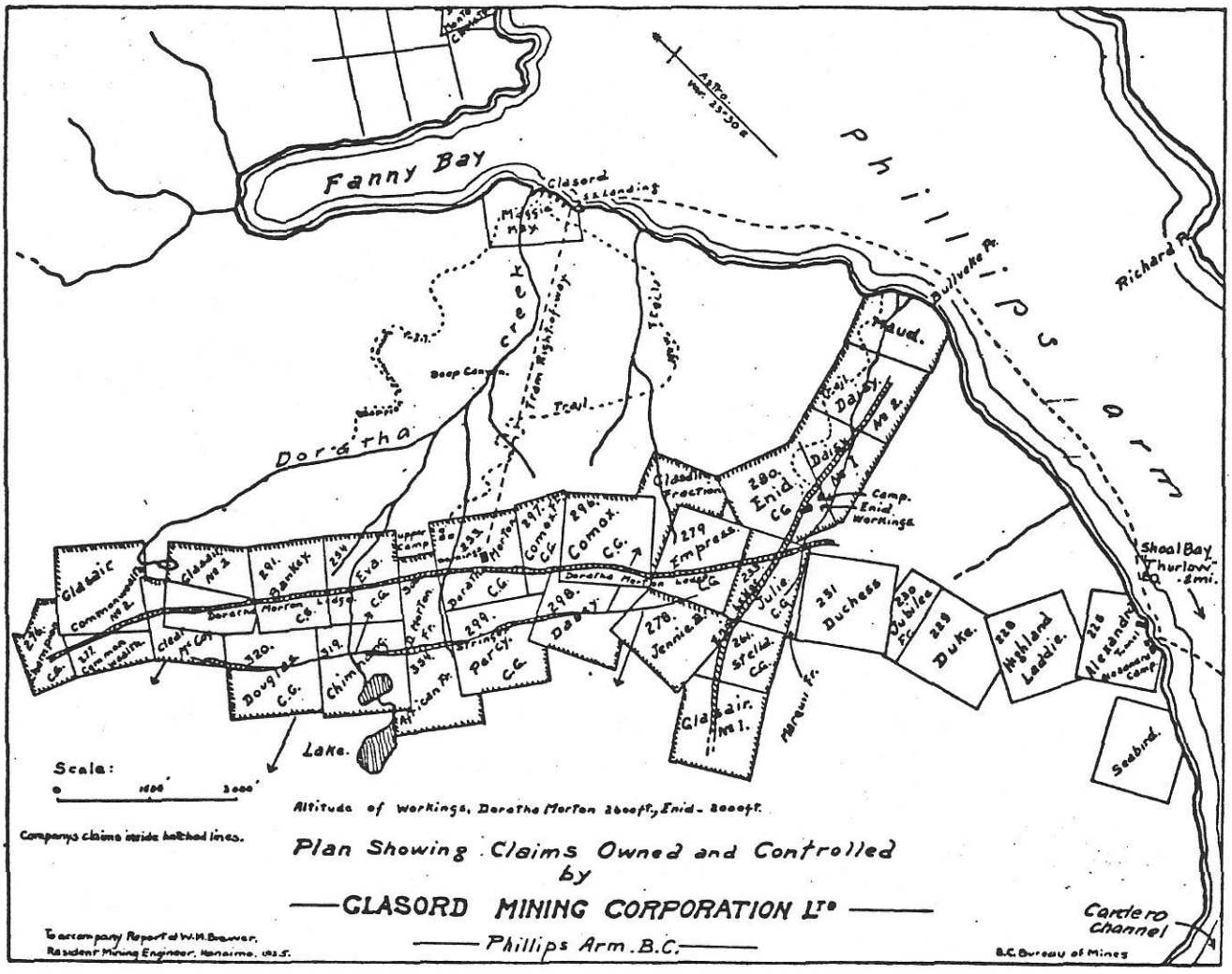
CLAIM MAP

GEOLOGICAL ASSOCIATION OF CANADA · T. C. SCOTT · FELLOW ·

T.C.Scott, B.Sc., FGAC

March, 1987

Fig. 2



NEW SIGNET RESOURCES INC.

DORATHA MORTON PROPERTY

CLAIM HOLDINGS
AND
QUARTZ LEDGES

CIRCA: 1925

GEOLOGICAL ASSOCIATION OF CANADA
T. C. SCOTT
FELLOW

T.C. Scott, B.Sc., FGAC

March, 1987

Fig. 3

CONTINUED NEXT PAGE

LEGEND

- DRILL HOLE
- PROPERTY BOUNDARY
- ROAD
- UNDERGROUND WORKING
- TRENCH

CONTOURS IN METRES

100 0 200

TO ACCOMPANY REPORT BY: T.C. SCOTT BSc. FGAC.

NEW SIGNET RESOURCES INC.

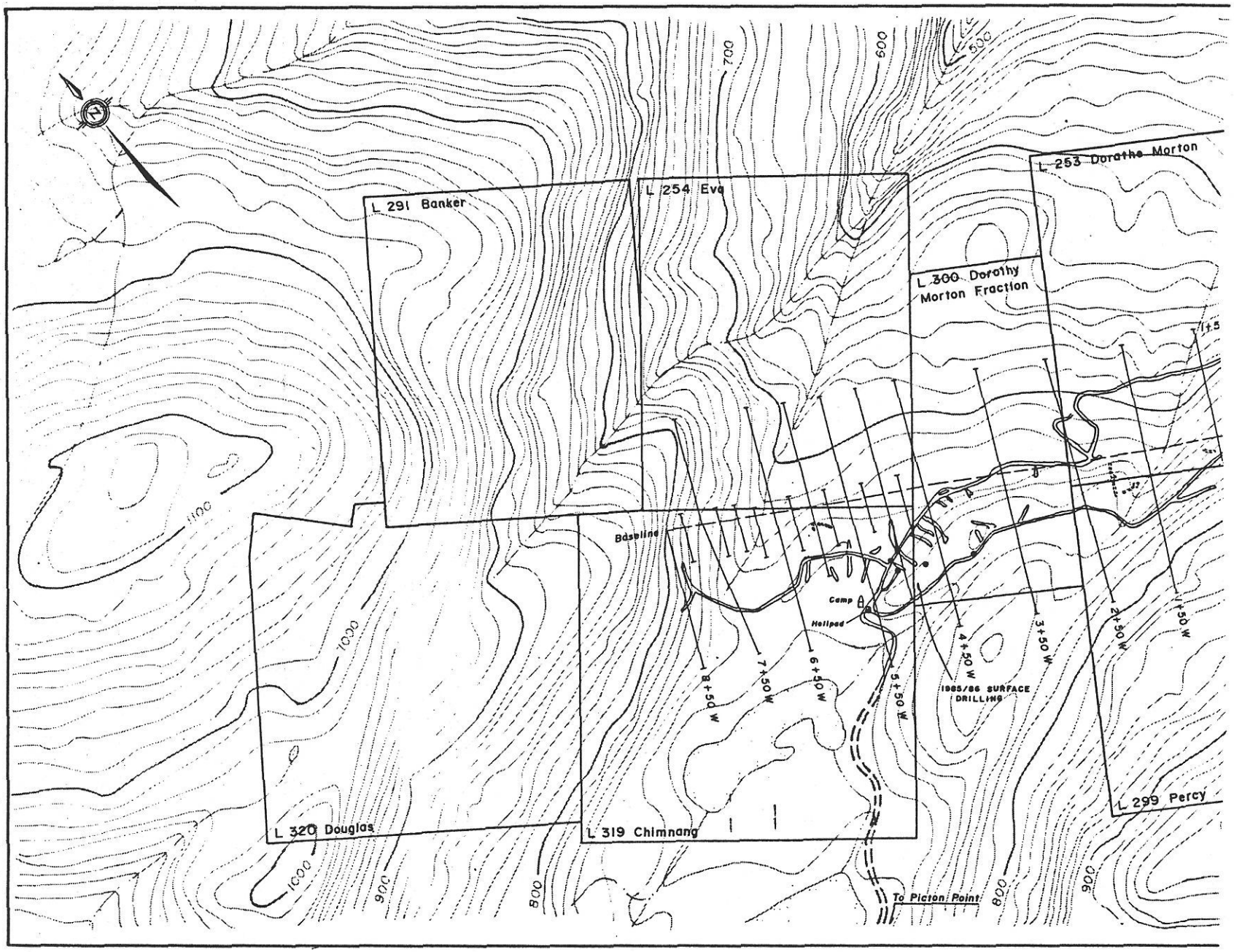
DORATHA MORTON PROPERTY

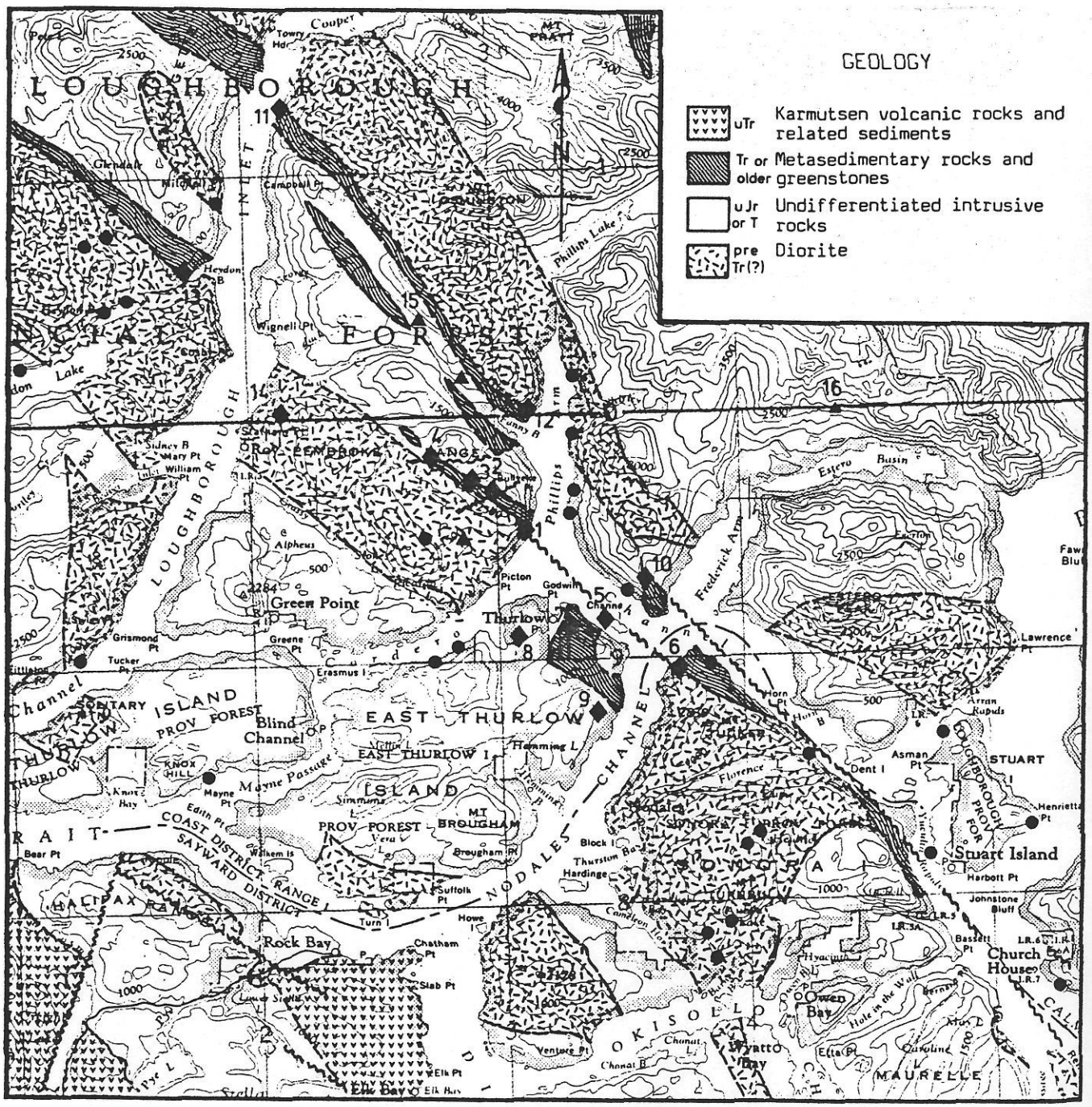
PHILLIPS ARM

VANCOUVER M.D., B.C.

PLAN OF PROPERTY & WORKINGS

SCALE:	DATE:	N.T.S.	FIGURE:	DRAFTED BY:
1:5000	MAR. 87	92 K/11 W	4	B.D.S.


L 291 Banker
L 254 Eva
L 253 Dorothe Morton
L 300 Dorothy Morton Fraction
L 320 Douglas
L 319 Chimnang
L 299 Percy
Baseline
Camp
Helipad
1985/86 SURFACE DRILLING
To Picton Point
700
600
500
1100
1000
900
800
1+50 W
2+50 W
3+50 W
4+50 W
5+50 W
6+50 W
7+50 W
8+50 W



(Geology After: G.S.C. Open File 480, and Cathro and Carne 1983)

MINERAL OCCURENCES

- ◆ Gold showing or past producer
- ▲ Molybdenum occurrence
- ● Pyrite occurrence

1 Alexandria
2 Enid-Julie
3 Doratha Morton
4 Champion/Commonwealth
5 Channe Island
6 Sonora
7 Douglas Pine
8 White Pine
9 Thurlow
10 Bluebells
11 Cuba Silver
12 Monte Cristo/Amethyst
13 Heydon Bay
14 Loughborough
15 Ace
16 Colossus

Scale: 1:250,000

NEW SIGNET RESOURCES INC.

DORATHA MORTON PROPERTY

REGIONAL GEOLOGY AND MINERAL OCCURRENCES

GEOLOGICAL ASSOCIATION OF CANADA · T. C. SCOTT · FELLOW

T.C. Scott, B.SC., FGAC

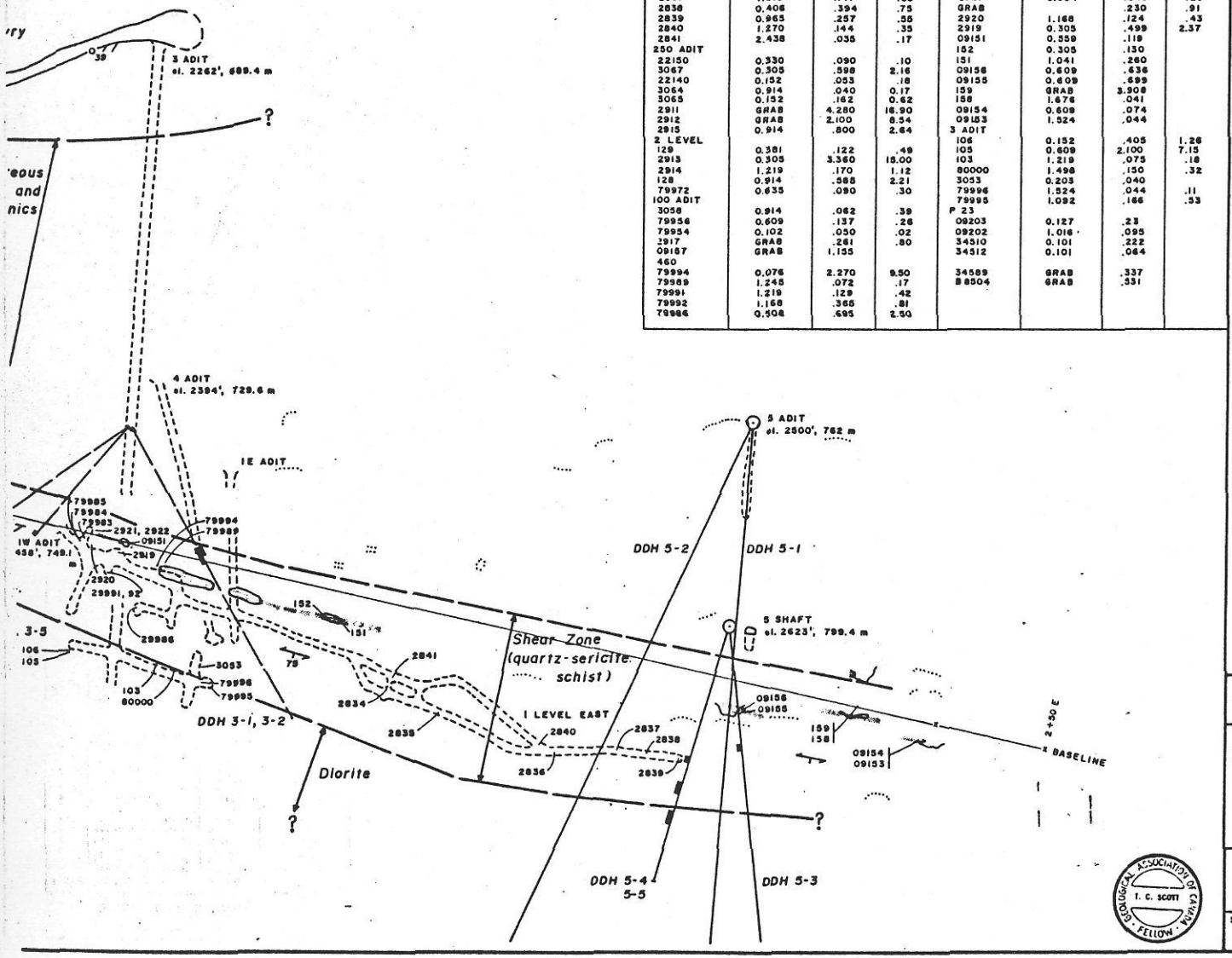
March, 1987

Fig. 5

CONTINUED NEXT PAGE

SIGNIFICANT ASSAYS - SURFACE AND UNDERGROUND

SAMPLE No.	WIDTH - m	Au oz/T	Ag oz/T	SAMPLE No.	WIDTH - m	Au oz/T	Ag oz/T
1 LEVEL EAST				1 W ADIT			
2834	0.762	.114	.36	79985	0.305	.042	.20
2835	1.112	.227	.56	79984	0.914	.118	.63
2836	0.991	1.470	4.14	79983	1.600	.069	.13
2837	1.016	.141	.35	2921	0.864	.040	.20
2838	0.406	.394	.75	GRAB		.230	.91
2839	0.965	.257	.56	2920	1.166	.124	.43
2840	1.270	.144	.35	2919	0.305	.499	2.37
2841	2.438	.035	.17	09151	0.558	.118	
250 ADIT				152	0.305	.130	
22150	0.330	.090	.10	151	1.041	.260	
3067	0.305	.598	2.16	09156	0.609	.636	
22140	0.152	.053	.18	09155	0.609	.699	
3064	0.914	.040	0.17	159	GRAB	3.908	
3065	0.152	.162	0.62	158	1.676	.041	
2911	GRAB	4.280	16.90	09154	0.608	.074	
2912	GRAB	2.100	8.54	09153	1.524	.044	
2915	0.914	.800	2.64	3 ADIT			
2 LEVEL				106	0.152	.405	1.26
129	0.381	.122	.49	105	0.609	2.100	7.15
2913	0.305	3.360	15.00	103	1.219	.075	.18
2914	1.219	.170	1.12	80000	1.498	.150	.32
128	0.914	.588	2.21	3053	0.203	.040	
79972	0.635	.090	.30	79996	1.524	.044	.11
100 ADIT				79995	1.092	.166	.53
3058	0.914	.062	.39	P 23			
79956	0.609	.137	.26	09203	0.127	.23	
79954	0.102	.050	.02	09202	1.016	.095	
2917	GRAB	.261	.80	34510	0.101	.222	
09157	GRAB	1.155		34512	0.101	.084	
460							
79994	0.076	2.270	9.50	34589	GRAB	.337	
79989	1.245	.072	.17	B 8504	GRAB	.531	
79991	1.219	.129	.42				
79992	1.168	.366	.81				
79986	0.508	.695	2.50				



LEGEND

- SURFACE TRACE OF QUARTZ VEINS
- 79985 — SAMPLE No. & LOCATION
- Gb — GRAB SAMPLE
- SURFACE DRILLING
- UNDERGROUND DRILLING
- TRENCH
- o SURVEY STATION
- UNDERGROUND WORKING
- ROAD
- CREEK
- PIT
- STOPE, BREAKOUT
- OUTCROP, CONTACT

20 0 40
METRES

TO ACCOMPANY REPORT BY: T.C. SCOTT, BSc. FGAC.

NEW SIGNET RESOURCES INC.

DORATHA MORTON PROPERTY

PHILLIPS ARM

VANCOUVER M.D., B.C.

PLAN OF UNDERGROUND WORKINGS, DIAMOND DRILLING, TRENCHING, ASSAY RESULTS AND GENERALIZED GEOLOGY

SCALE:	DATE:	N.T.S.	FIGURE:	DRAFTED BY:
1:1,000	MAR. 87	92 K/11W	6a	B. D. S.

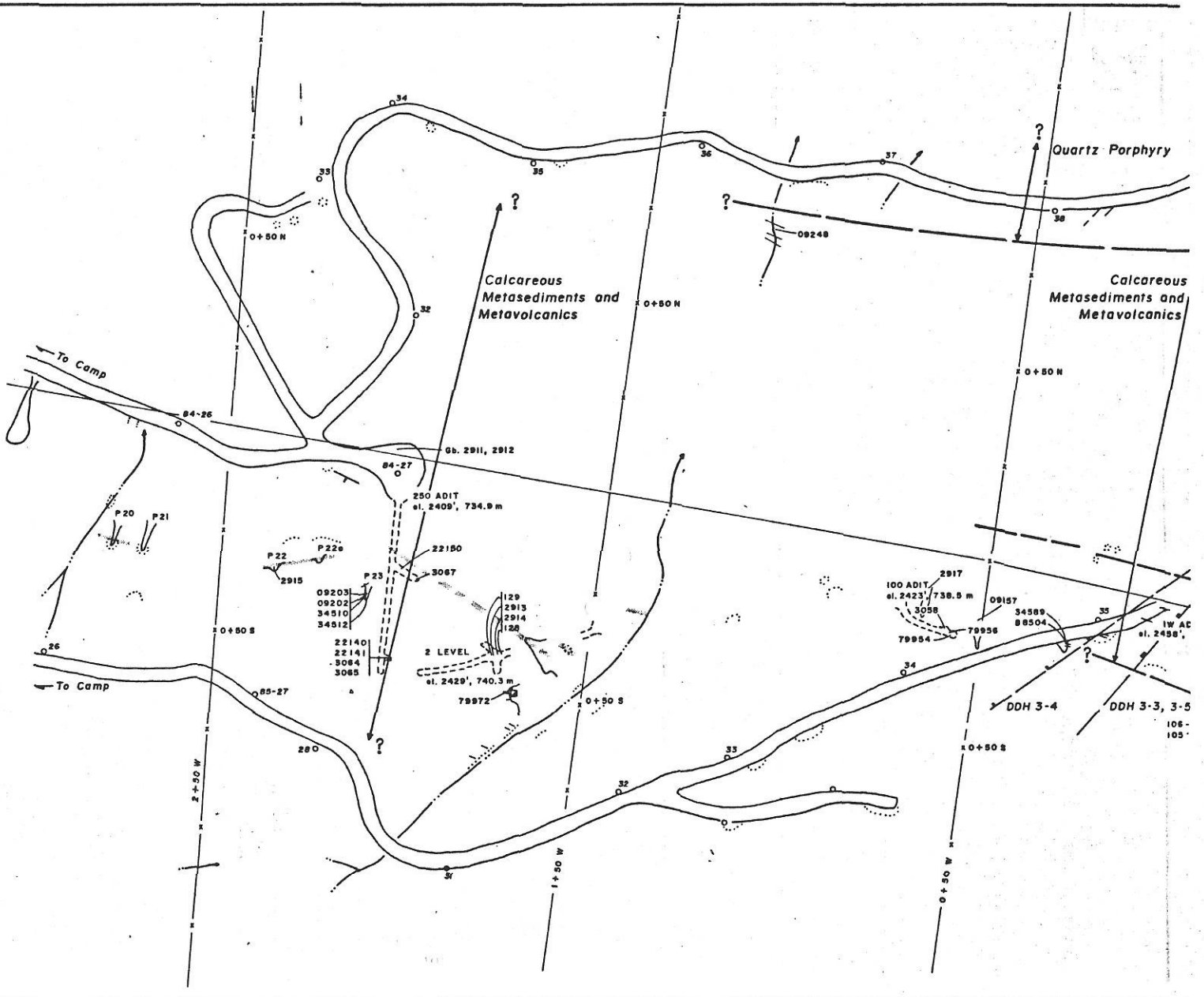
GEOLOGICAL ASSOCIATION OF CANADA · T. C. SCOTT · FELLOW

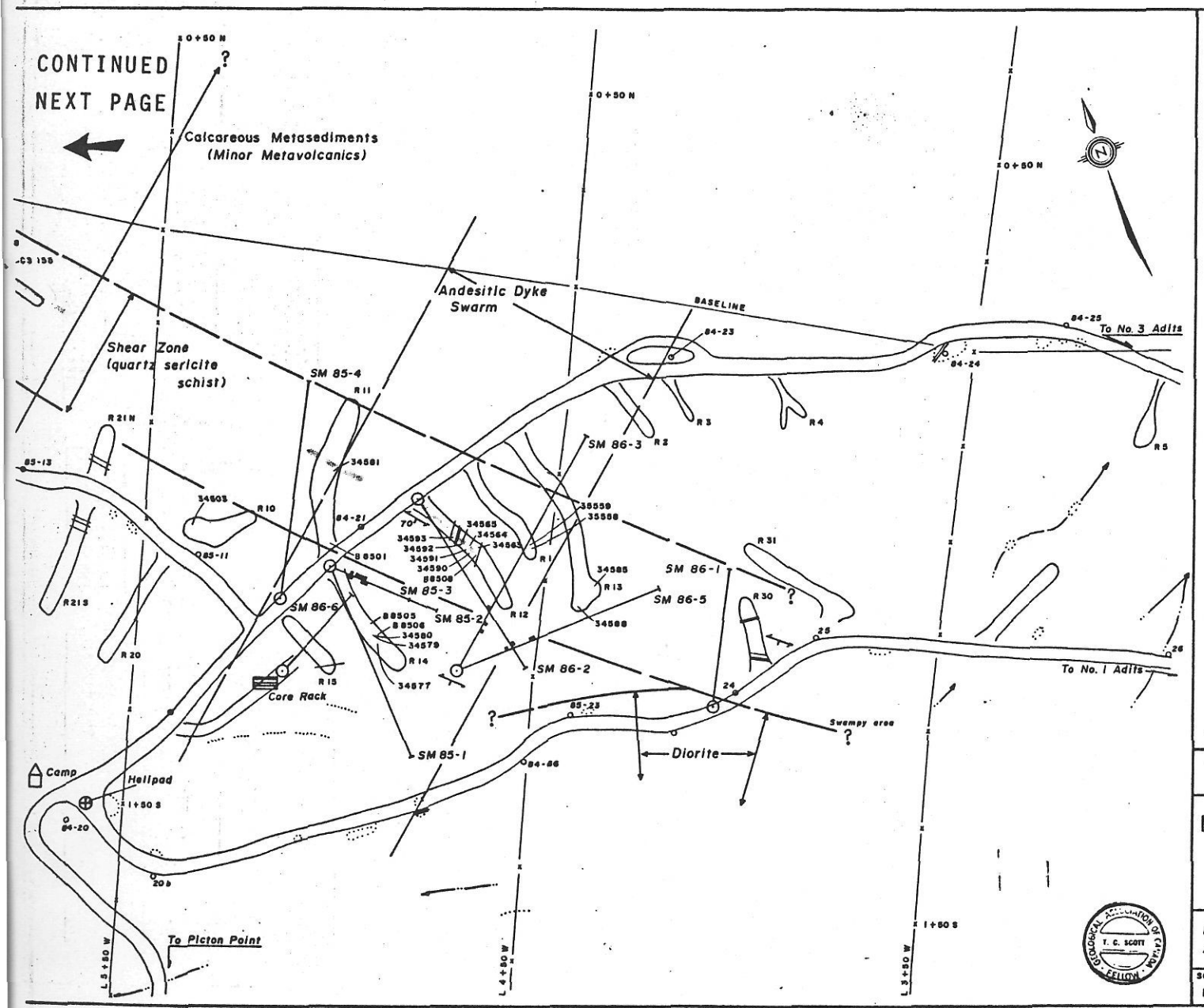
DRILL HOLE SUMMARY

HOLE	AZIMUTH	DIP	LENGTH (m)
3-1	35° to left of tunnel	horizontal	85.3
3-2	35° to left of tunnel	up at 27°	70.1
3-3	35° to right of tunnel	horizontal	76.2
3-4	49° to right of tunnel	horizontal	92.0
3-5	35° to right of tunnel	up at 29°	63.1
5-1	205°	-40°	158.5
5-2	225°	-40°	157.5
5-3	195°	-40°	100.6
5-4	220°	-40°	88.6
5-5	220°	-60°	109.7

SIGNIFICANT ASSAYS

HOLE	DEPTH of INTERSECTION - m	LENGTH (m)	Au oz/ton	Ag oz/ton
3-1	33.5	3.0	0.012	0.06
3-2	36.6	3.0	0.012	0.07
3-3	34.4	0.6	0.011	0.01
3-4	56.4	0.6	0.013	0.01
	69.5	0.9	0.011	0.01
	86.9	0.2	0.012	0.01
3-5	54.9	0.6	0.017	0.02
	55.5	0.7	0.012	0.01
5-3	35.0	1.52	0.106	0.23
5-4	44.2	1.37	1.178	2.25
5-5	79.9	3.0	0.118	0.40
	95.1	3.0	0.104	0.36





LEGEND

- SURFACE TRACE OF QUARTZ VEINS
- DRILL HOLE
- SURVEY STATION
- ROAD
- CREEK
- PIT
- TRENCH
- STOPE, BREAKOUT
- OUTCROP, CONTACT

20 0 40
METRES

TO ACCOMPANY REPORT BY: T.C. SCOTT, BSc. FGAC.

NEW SIGNET RESOURCES INC.

DORATHA MORTON PROPERTY

PHILLIPS ARM

VANCOUVER M.D., B.C.

PLAN OF DIAMOND DRILLING, TRENCHING, ASSAY RESULTS AND GENERALIZED GEOLOGY

SCALE:	DATE:	N.T.S.	FIGURE:	DRAFTED BY:
1:1,000	MAR. 87	92 K/11W	6 b	B. D. S.

SIGNIFICANT ASSAYS-SURFACE

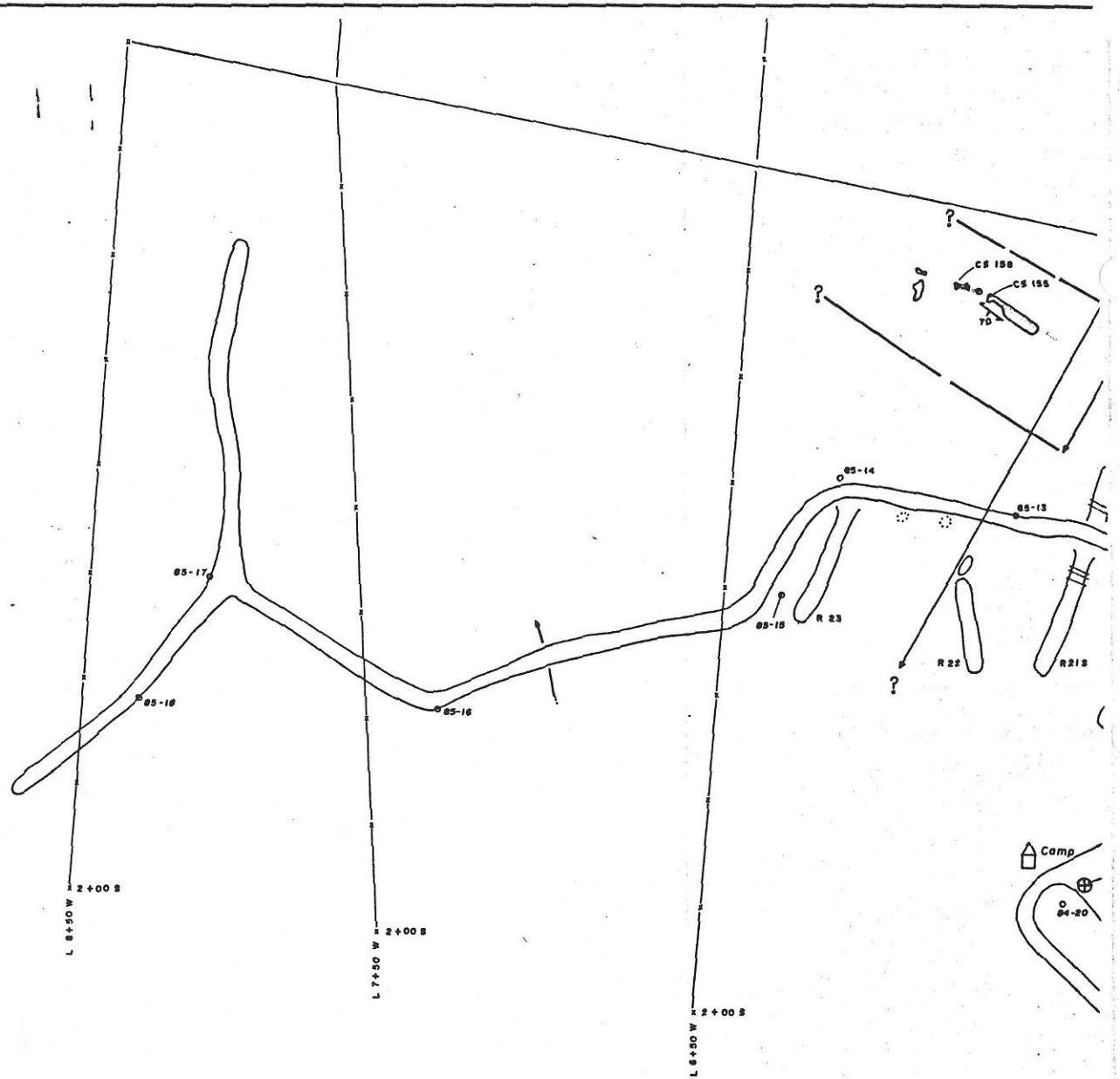
SAMPLE No.	WIDTH (m)	Au oz/T	Ag oz/T
CS 158	0.762	0.193	0.62
CS 155	0.686	0.216	0.51
R 1			
34559	0.914	.026	
34558	0.914	.020	
R 10			
34503	0.508	0.062	
R 11			
B 8501	0.305	.170	
34581	0.152	.048	
R 12			
34593	1.219	.041	
34592	2.133	.124	
34591	2.438	.046	
34590	2.133	.287	
B 8508	GRAB	.251	
34565	1.524	.111	
34564	3.048	.222	
34563	1.371	.416	
R 13			
34585	0.152	.048	
34586	1.524	.085	
R 14			
B 8505	1.829	1.230	
B 8506	1.219	.528	
34580	0.305	.585	
34578	0.457	.332	
34577	0.203	.206	

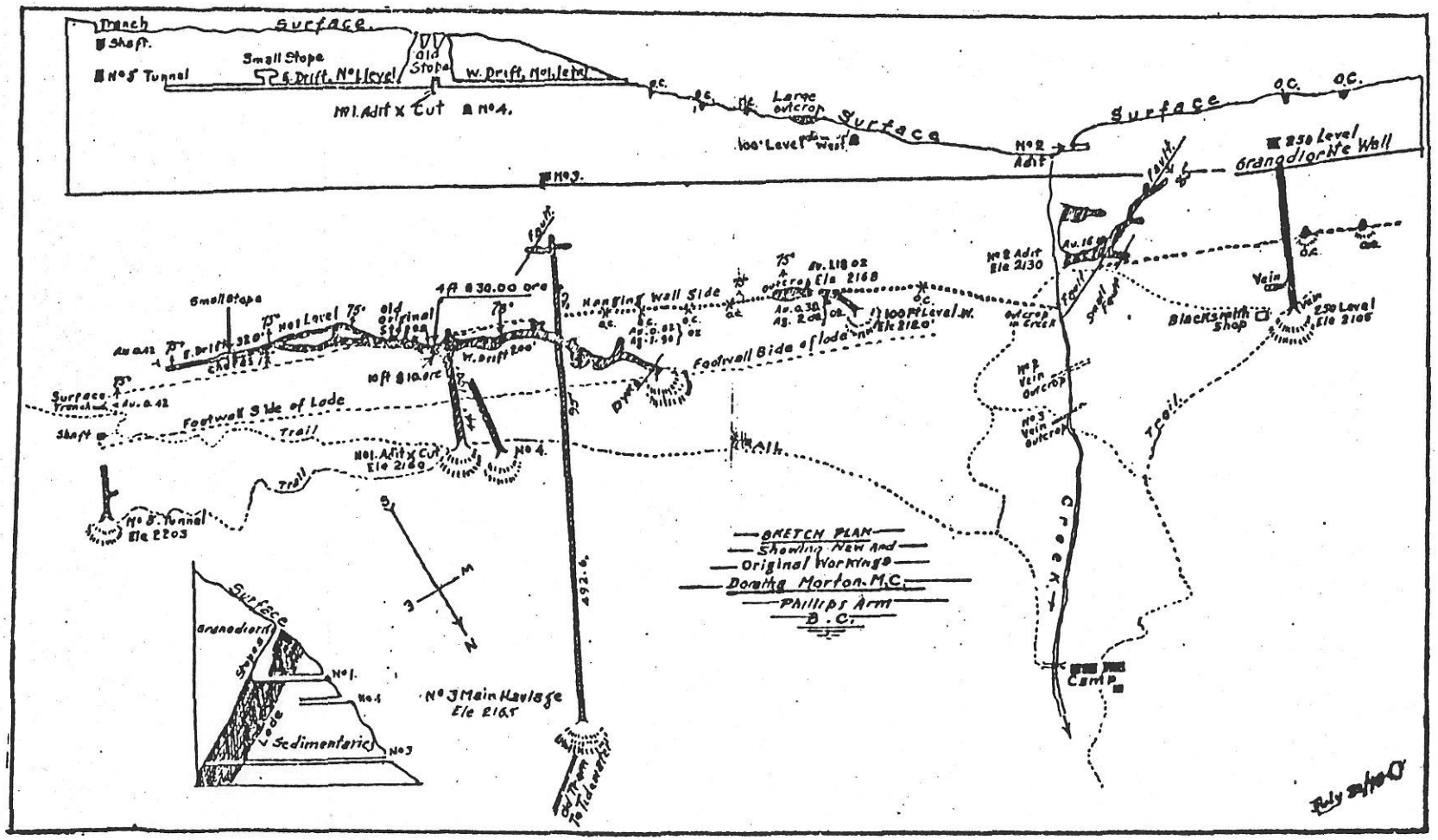
DRILL HOLE SUMMARY

HOLE	AZIMUTH	DIP	LENGTH (m)
SM 85-1	180°	-45°	76.5
SM 85-2	135°	-45°	50.3
SM 85-3	135°	-65°	56.4
SM 85-4	030°	-45°	78.2
SM 86-1	030°	-45°	53.3
SM 86-2	170°	-50°	83.3
SM 86-3	051°	-45°	99.0
SM 86-4	051°	-70°	54.6
SM 86-5	090°	-45°	80.8
SM 86-6	085°	-60°	87.1

SIGNIFICANT ASSAYS - DRILLING

HOLE	DEPTH of INTERSECTION (m)	LENGTH (m)	Au oz/ton
SM 85-2	16.6	1.60	0.757
SM 85-3	19.8	0.95	0.191
	23.4	1.05	0.201
	26.0	0.90	0.149
	28.5	0.95	0.188
SM 86-2	65.5	0.80	0.149
SM 86-3	17.3	0.25	0.229
SM 86-4	53.8	0.45	0.280
SM 86-5	19.4	0.40	0.528
	29.5	1.05	0.110





Plan of underground workings "Doratha Morton" mine, Phillips Arm, British Columbia.

NEW SIGNET RESOURCES INC.

DORATHA MORTON PROPERTY

PLAN OF UNDERGROUND WORKINGS
CIRCA: 1936

GEOLOGICAL ASSOCIATION OF CANADA · T. C. SCOTT · FELLOW ·

T.C. Scott, B.Sc., FGAC

March, 1987

Fig. 7

CONTINUED NEXT PAGE

LEGEND

- X — Au VALUE > 14.5 ppb
- Ag CONTOUR, 0.80, 1.25 ppm, 1.95 ppm
- DRILL HOLE
- PROPERTY BOUNDARY
- ROAD
- UNDERGROUND WORKING
- TRENCH

CONTOURS IN METRES

100 0 200

TO ACCOMPANY REPORT BY: T.C. SCOTT BSc. FGAC.

NEW SIGNET RESOURCES INC.

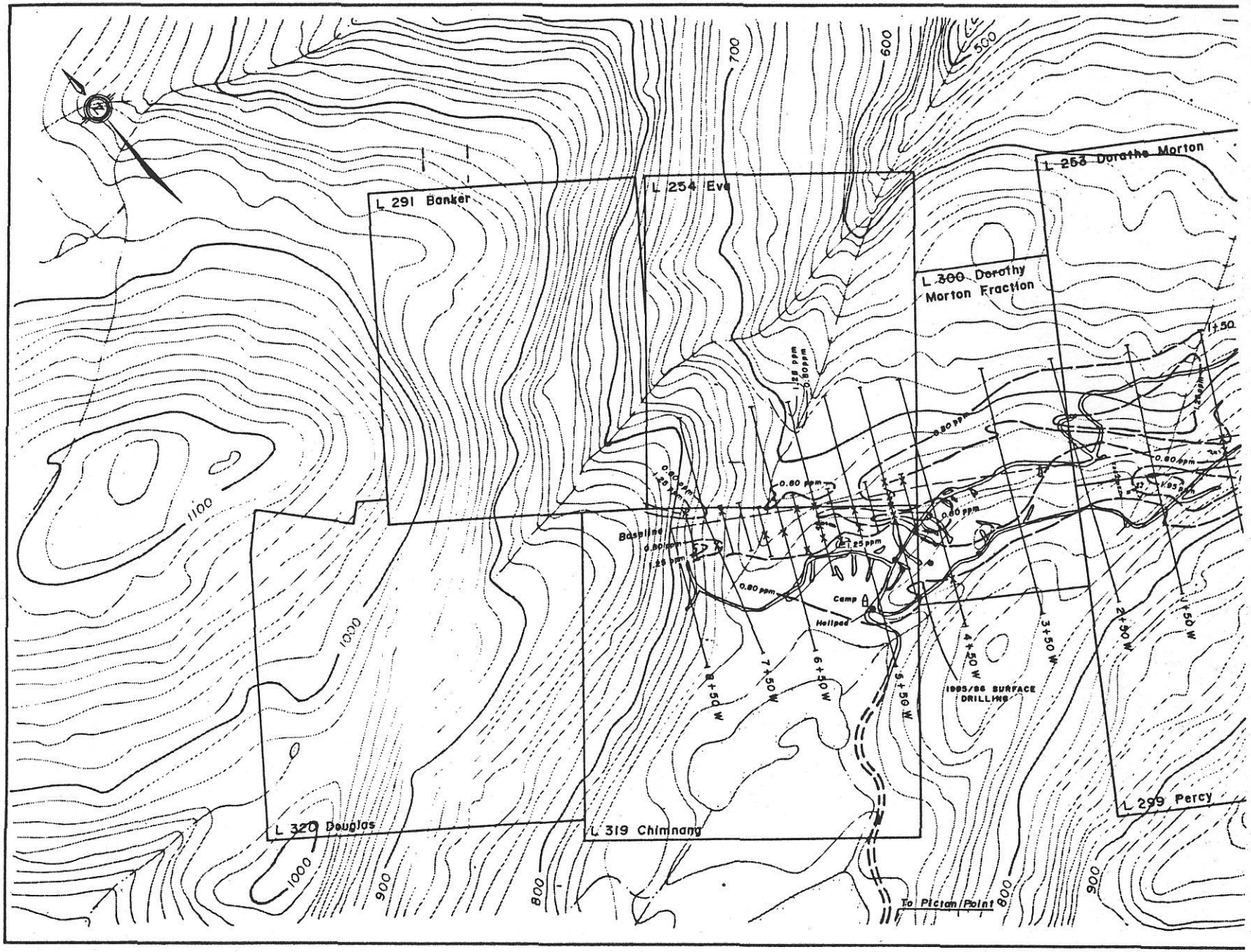
DORATHA MORTON PROPERTY

PHILLIPS ARM

VANCOUVER M.D., B.C.

SOIL GEOCHEMISTRY

SCALE:	DATE:	N.T.S.	FIGURE:	DRAFTED BY:
1:5000	MAR. 87	92 K/11 W	8	B.D.S.


L 291 Banker
L 254 Eva
L 253 Dorothe Morton
L 300 Dorothy Morton Fraction
L 320 Douglas
L 319 Chimnang
L 299 Percy
Baseline
Camp
Helipad
1995/96 SURFACE DRILLING
To Pictou Point
0.80 ppm
1.25 ppm
1.28 ppm
0.60 ppm
700
600
500
1100
1000
900
800
1+50
2+50 W
3+50 W
4+50 W
5+50 W
6+50 W
7+50 W
8+50 W