63.5243

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SUMMARY REPORT ON THE 1987/88 WORK PROGRAM

AND

RECOMMENDATIONS FOR 1988 SUMMER WORK PROGRAM

ON THE ROBELE JOINT VENTURE

THORNELOE AND BRISTOL TOWNSHIPS
PORCUPINE MINING DIVISION

NTS: 42A/5,6

FOR

ESSO MINERALS CANADA
A DIVISION OF ESSO RESOURCES CANADA LTD.

AND

TOROGOLD RESOURCES INC.

April, 1988
Timmins, Ontario
Disk.127

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SUMMARY AND RECOMMENDATIONS

The 1987-88 exploration program on the Robele Joint Venture property in Thorneloe and Bristol Townships held by Torogold Resources and Esso Resources Canada Limited was completed in mid-February, 1988. A total of $600.000.00 was spent on geophysics (linecutting and magnetometer surveys) and 4,270 m (14,004 feet) of diamond drilling (Appendix D). The geophysical surveys were carried out by Exsics Exploration Ltd. of Timmins during June-August, 1987 and the drilling was completed by Longyear Drilling Co. of North Bay from October, 1987 to February, 1988.

Three areas were proposed for drill testing: 1) magnetic highs defined by magnetometer survey, north half, Thorneloe East Group, 2) East strike extension of the No. 1 shear, 3) the Discovery Zone, Thorneloe East Group (see Map 1).

Two holes were drilled on the northern magnetic highs. Both intersected moderately magnetic porphyry complexes which were not altered and contained no encouraging gold values. The stepout holes on the No. 1 shear confirmed that the zone of deformation and shearing has a minimum strike length of 3500 meters. The strong alteration related to gold mineralization is more restricted in extent to the area within the No. 1 shear which hosts the Porphyry Complex (Map 2). Seven holes were drilled in the Discovery Zone in order to better define the structural controls on the mineralization. The results from these holes, along with data from previous drill programs, suggest that there is a mineralization control striking 110 degrees and dipping 40 to 45 degrees to the south.

The Porphyry Complex hosting the gold mineralization is still open to depth. The strike length of this body is approximately 500 meters and it may have a moderate to steep easterly plunge.

A total of 2,250 meters of diamond drilling is proposed for the next phase of the exploration program. Of this, 1,750 meters is slated for the Discovery Zone to test the depth potential and the attitude of the gold mineralization. The remaining 500 meters will be drilled on the Thorneloe West Property to test a magnetic high similar to the high over the Discovery Zone and also to test the west strike extent of the three shears. The total proposed budget is $207,000.00 (Appendix C).

INTRODUCTION

This report summarizes the results of the most recent exploration program on a group of claims in Thorneloe and Bristol Townships held in joint venture by Esso Resources Canada Limited and Torogold Resources Inc.

The land holdings of the Joint Venture consist of 210 claims in seven contiguous groups in the north half of Thorneloe Township and the south half of Bristol Township (see Appendix A for detailed group breakdown and claim status). The center of the property is located 20 kilometers southwest of the city of Timmins and is easily accessible by two major highways (Hwy 144 and Hwy 101).

Since the staking of the original claims in April, 1984, the property has undergone several major exploration programs which have included geology, geophysics (IP and magnetometer) and diamond drilling. To date, a total of 8,304 meters (27,238 feet) of diamond drilling has been completed. The latest drill program, which ran from October, 1987 to mid-February, 1988, consisted of 4,269 meters (14,004 feet) in 23 drill holes (Table 1). This diamond drilling constituted the major portion of a $600,000 program which also included nearly 200 line kilometers of linecutting and magnetometer surveys along with minor IP and resistivity surveys.

PROPERTY GEOLOGY

Most of the property is underlain by a thick sequence of metasediments which are interpreted to be part of the Temiskaming Group of metasedimentary rocks. Three rock types dominate this group: argillite (including graphitic argillite), arenite and conglomerate. A brief description follows:

1. Argillite: Fine-grained to very fine-grained, moderately soft, thinly bedded, dark grey to black to various shades of green depending on the amount of sericite present. The unaltered rock may contain up to 1% coarse cubic pyrite and minor amounts of calcite. More altered argillite may contain up to 5% fine disseminated pyrite and locally trace to 1% fine arsenopyrite needles. This rock type constitutes 80% of the metasedimentary sequence.

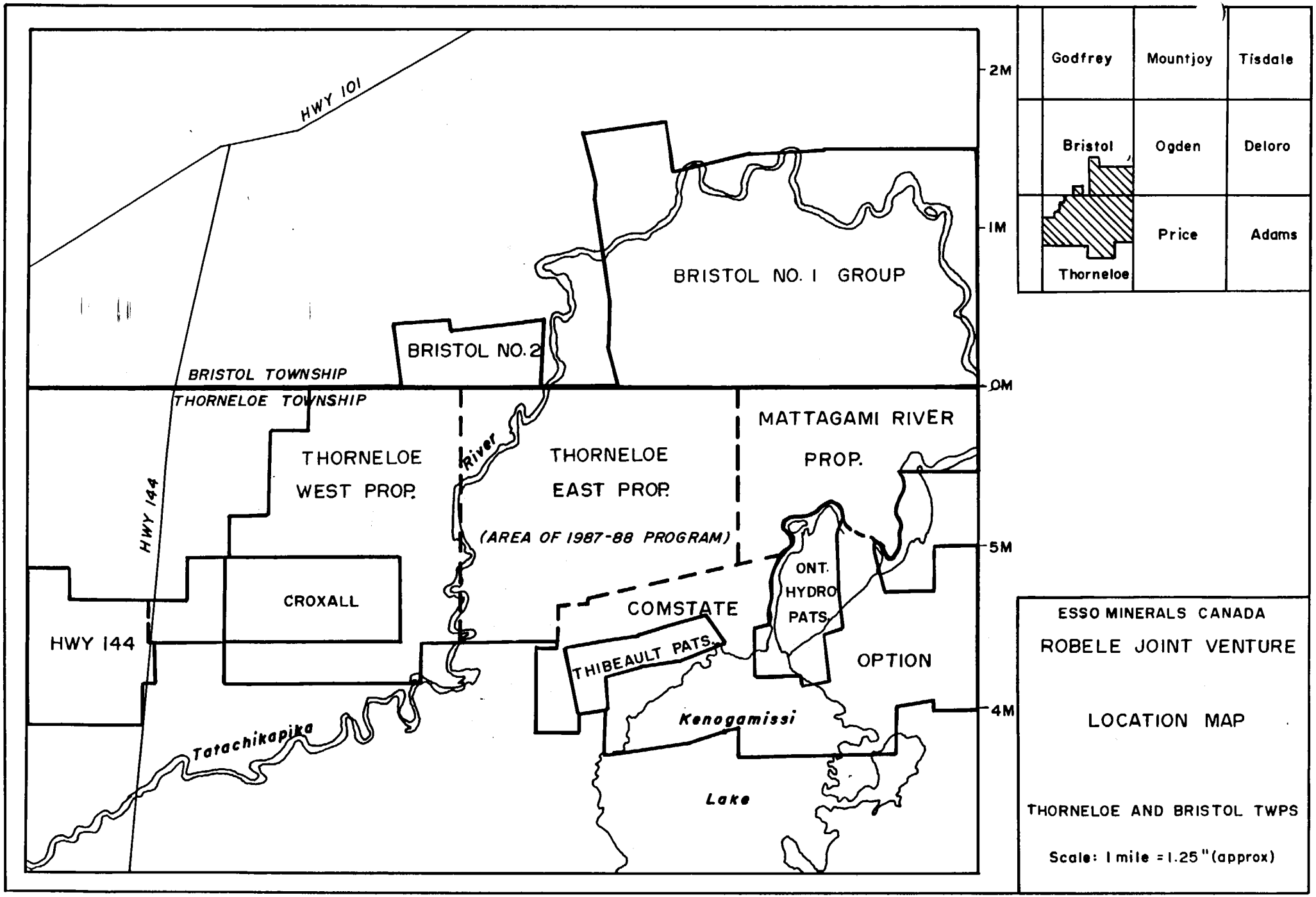
TABLE 1

DRILL HOLE SUMMARIES

HOLE NO.	LOCATION	DIP	AZUMITH	LENGTH
T-1	L 1680E, 3+25S	-45.00	180.00	198.17
T-2	L 1680E, 1+50S	-45.00	180.00	227.20
T-3	L 2400E, 2+75N	-45.00	180.00	78.05
T-4	L 2400E, 5+20N	-45.00	180.00	304.87
T-5	L 2160E, 4+25N	-45.00	180.00	234.20
T-6	L 3360E, 5+65N	-45.00	180.00	203.00
T-7	L 3360E, 4+50N	-45.00	180.00	248.70
T-8	L 5160E, 15+25N	-45.00	180.00	170.00
T-9	L 3840E, 2+50N	-45.00	180.00	251.76
T-10	L 3480E, 1+00N	-45.00	0.00	446.84
T-11	L 3600E, 3+75N	-45.00	180.00	462.20
T-12	L 3600E, 3+25N	-50.00	180.00	123.40
T-13	3540E, 3+50N	-50.00	160.00	154.23
T-14	3575E, 3+65N	-45.00	180.00	145.08
T-15	3640E, 3+25N	-45.00	180.00	160.32
T-16	3640E, 3+75N	-45.00	180.00	148.13
T-17	L 3600E, 4+25N	-50.00	180.00	230.43
T-18	L 3840E, 3+50N	-45.00	180.00	248.18
T-19	L 3780E, 325N	-45.00	180.00	303.96
T-20	L 3960E, 325N	-45.00	180.00	315.85
T-21	L 4080E, 2+75N	-45.00	180.00	300.91
T-22	L 4200E, 2+25N	-45.00	180.00	252.13
T-23	L 4320E, 2+25N	-45.00	180.00	215.55
T-24	L 4260E, 0+50N	-45.00	0.00	282.62
T-25	L 4440E, 2+00N	-45.00	180.00	181.46
T-26	L 4560E, 3+00N	-45.00	180.00	337.50
T-27	L 4560E, 1+75N	-45.00	0.00	233.84
T-28	3630E, 3+25N	-45.00	180.00	96.65
T-29	3360E, 3+25N	-65.00	180.00	148.78
T-30	L 3660E, 3+30N	-57.00	180.00	185.06
T-31	L 3660E, 3+30N	-45.00	180.00	145.43
T-32	L 3300E, 4+75N	-45.00	180.00	233.84
T-33	L 3300E, 4+60N	-45.00	0.00	145.43
T-34	L 4620E, 10+75N	-45.00	180.00	137.50
T-35	L 5940E, 9+00N	-45.00	180.00	204.88
T-36	L13W, 14+25N*	-45.00	180.00	197.26
T-37	L 13W, 13+50N*	-45.00	180.00	111.89
T-38	1350W, 1335N*	-45.00	180.00	41.16
T-39	3620E, 2+90N	-85.00	180.00	75.30
T-40	3615E, 2+70N	-85.00	180.00	62.50
T-41	3580E, 2+80N	90.00		60.06
				8304.33

* Comstate Grid

	METERS	FEET
FEBRUARY-MARCH, 1985 (DH T-1 to T-5 incl.)	1042.49	3419.37
DECEMBER, 1985 (DH T-8)	170.00	557.60
NOV. 1986 to FEB 1987 (T-6,7 & T-9 to T-18 incl)	2822.27	9257.05
OCT 1987 to FEB 1988 (DHT-19 to T-41 incl)	4269.57	14004.18
TOTAL TO DATE	8304.33	27238.19


HWY 101
BRISTOL NO. 1 GROUP
BRISTOL NO. 2
BRISTOL TOWNSHIP
THORNELOE TOWNSHIP
HWY 144
THORNELOE WEST PROP.
River
THORNELOE EAST PROP.
MATTAGAMI RIVER PROP.
(AREA OF 1987-88 PROGRAM)
CROXALL
COMSTATE
ONT. HYDRO PATS.
THIBEAULT PATS.
OPTION
HWY 144
Kenogamissi
Lake
Tatachikapika
2M
1M
0M
5M
4M
Godfrey
Mountjoy
Tisdale
Bristol
Ogden
Deloro
Price
Adams
Thorneloe
ESSO MINERALS CANADA
ROBELE JOINT VENTURE
LOCATION MAP
THORNELOE AND BRISTOL TWPS
Scale: 1 mile = 1.25" (approx)

2. Arenite: Medium to dark grey, beds vary in thickness from a few centimeters to greater than 1 meter. Generally fine to medium grained with minor coarse and very coarse-grained beds. Individual beds are usually well sorted except where there is grading to conglomerate, where the beds are poorly sorted. Individual grains are sub-rounded to rounded and are predominantly quartz. Sub-rounded feldspar grains may also be present as well as subangular rock fragments, both particle types making up less than 5% of the rock by volume. Matrix to the grains is usually siliceous and locally carbonatized (calcite, and ankerite within the shear zones). Up to 1% subhedral cubic pyrite may be present in the unaltered rock.

3. Conglomerate: Usually polymictic. Clasts are quartz, mafic volcanic rock (now altered to sericite or chlorite) fine grained sediments, felsic to intermediate porphyritic volcanic rock (sometimes exhibiting trachytic texture), and minor felsic porphyritic intrusives. Often very poorly sorted, with clasts ranging in size from a few millimeters to greater than 5 centimeters. Matrix is usually argillaceous and normally chloritic. Within the alteration zones, the matrix is sericitic and siliceous, as are the clasts. Unaltered conglomerate contains trace to 1% pyrite. while the altered rock may contain up to 20% fine disseminated pyrite.

The most significant rock type in terms of gold mineralization is quartz-feldspar porphyry, which occurs as thin dykes or small stocks elongated subparallel to regional foliation. These intrusions usually consist of several types of porphyry (see legend on drill sections), probably reflecting the changing composition of the source magma.

The more significant types of porphyry that are at least spatially associated with gold mineralization are quartz-feldspar porphyry (variation is foliated QFP), legend codes 2A and 2I; quartz porphyry, legend code 2B; pyritic porphyry, legend code 2E; red magnetite bearing quartz feldspar porphyry, legend code 3A, and to a lesser degree, 2D and 2H.

The quartz porphyry (2B) is probably late and is represented mainly by a set of narrow dykes trending 045 degrees and dipping vertically.

Red magnetite-bearing porphyry forms the host rock for the gold mineralization. A more accurate term would be Porphyry Complex, as a number of individual units are present within the boundaries of the porphyry (see Map 3, back pocket). These are described briefly below.

Units of the Porphyry Complex, Discovery Zone

1. Red Magnetite-Bearing Porphyry (3A): Light to medium orange-red colour, fine grained to aphanitic. Very little porphyritic texture remains due to intense sericitization and silicification. (In thin section a few highly altered remnant feldspar phenocrysts may be present). Occurs both massive and well foliated, usually dipping steeply to the north. Unit may contain up to 2% euhedral magnetite grains 1-2 millimeters in size. Pyrite is present as coarse cubes and fine disseminations and locally may partially or totally replace magnetite. Specular hematite is also present in minor amounts. Sericite and/or quartz-filled fractures randomly cut the unit. Contacts with the other units in the complex vary from sharp with quartz carbonate sericite schist to gradational with the intense silica-carbonate flooding.

2. Intense Silica-Carbonate Flooding (3C): Aphanitic, very hard. Colour varies from buff grey to reddish-brown to dark purple. Intensely crackle fractured, with some fractures filled with quartz and/or pyrite. Pyrite also occurs as fine disseminations in amounts up to 15%. The rock is not magnetic and rarely hosts significant gold values. Contacts with the red magnetite-bearing porphyry are gradational and contacts with the quartz carbonate sericite schist are usually sharp.

3. Quartz-Carbonate-Sericite-Schist (3B): Well banded. Bands are 1-3 cm thick and consist of alternating quartz, ankerite, quartz-pyrite and sericite. Colour is usually grey to grey-green. Pyrite content for the unit is usually 10-15%. Individual quartz-pyrite bands may contain up to 50% pyrite. Contacts are usually sharp. This unit comprises crack seal quartz veins separated by sericitic fractures and hosts or is spatially related to nearly 70% of the significant gold values.

4. Sericite Schist: Boundary rock to the Porphyry complex. Very sericitic, highly deformed, may contain 2-3% fine disseminated pyrite. Colour is bright green and rock is often cut by late barren quartz veins. Unit varies in thickness from 5 to 20 meters.

STRUCTURE

The Porphyry Complex is characterized by at least two foliations and one or possibly two sets of folds. The F foliation is the regional one and it strikes 110 degrees and dips 75 to 85 degrees to the north. The F foliation is near horizontal with a dip of 10 degrees to the north or south.

The axial plane of the first set of folds strikes ENE, dips steeply north and plunges steeply east. A second set of drag folds, evident in the drill core, have axial planes that dip steeply to the northeast, plunge to the southeast and may reflect the regional folding. A second set of open folds may also be present within the Porphyry Complex, having an axial plane that dips 40 to 50 degrees to the south (see Map 3) and an unknown plunge. Evidence of the structural complexity of the area is visible in outcrops along the Tatachikapika River, 600 meters west of the Discovery Zone.

SUMMARY OF PREVIOUS EXPLORATION PROGRAMS

The original Thorneloe claims (now part of the Thorneloe West Group) were staked as part of a grass roots exploration program to explore the western extension of the Destor-Porcupine Fault System which had received little exploration attention to that date. As the exploration program advanced the results confirmed that the property was located on the north side of the Destor-Porcupine Fault system in Temiskaming or Porcupine Group metasedimentary rock (Pyke, 1982).

A set of at least three sub-parallel shears trending 110 degrees and dipping steeply to the north were defined by the first three diamond drilling programs (Map 1, back pocket). The 1985 drilling defined a wide shear zone on the west side of the Tatachikapika River which contained highly anomalous gold values, the best of which was 420 ppb over 42 meters. This particular part of the shear was characterized by a moderately strong IP anomaly.

The November, 1986 to February, 1987 program extended the strike length of the shearing to the east and indicated the presence of at least two separate shears. During the course of this drilling a highly altered magnetite/ pyrite-bearing quartz feldspar porphyry complex was located (Discovery Zone, 1986-87 on Map 1). Economic gold values over mineable widths were intersected within the Porphyry Complex (MacPherson, 1987), which was located entirely within the most northerly shear (now called the No. 1 shear). The porphyry body had a minimum strike length of 250 meters, a width of 30 to 40 meters and was open to depth. No. 2 shear, located 100 meters to the south, contained moderate gold values associated with arsenopyrite in very sericitic fine-grained metasedimentary rocks. The strike length of the system of shearing had been extended to 1700 meters as a result of this drill program. Intersections in the 2 to 4 grams/metric tonne range over widths varying from 5 to 20 meters were intersected in parts of the porphyry complex. These sections also contained shorter intervals of much higher grade material (7 to 9 g/t) (MacPherson, 1987, Appendix 3).

PURPOSE OF THE 1987-88 EXPLORATION PROGRAM

The program was divided into two phases. The first phase was designed to explore the potential of other parts of the joint venture area. Approximately 200 line kilometers of linecutting and magnetometer surveys were carried out over the summer months. Several magnetic anomalies detected during this survey were drill tested during the winter.

The second phase of the program was designed to drill test the easterly strike extension of the zones of shearing using stepout drill holes 200-300 meters in length spaced at 120 meter intervals. Several drill holes were also planned for the Discovery Zone, in an attempt to establish the controls on the mineralization.

RESULTS OF THE PROGRAM

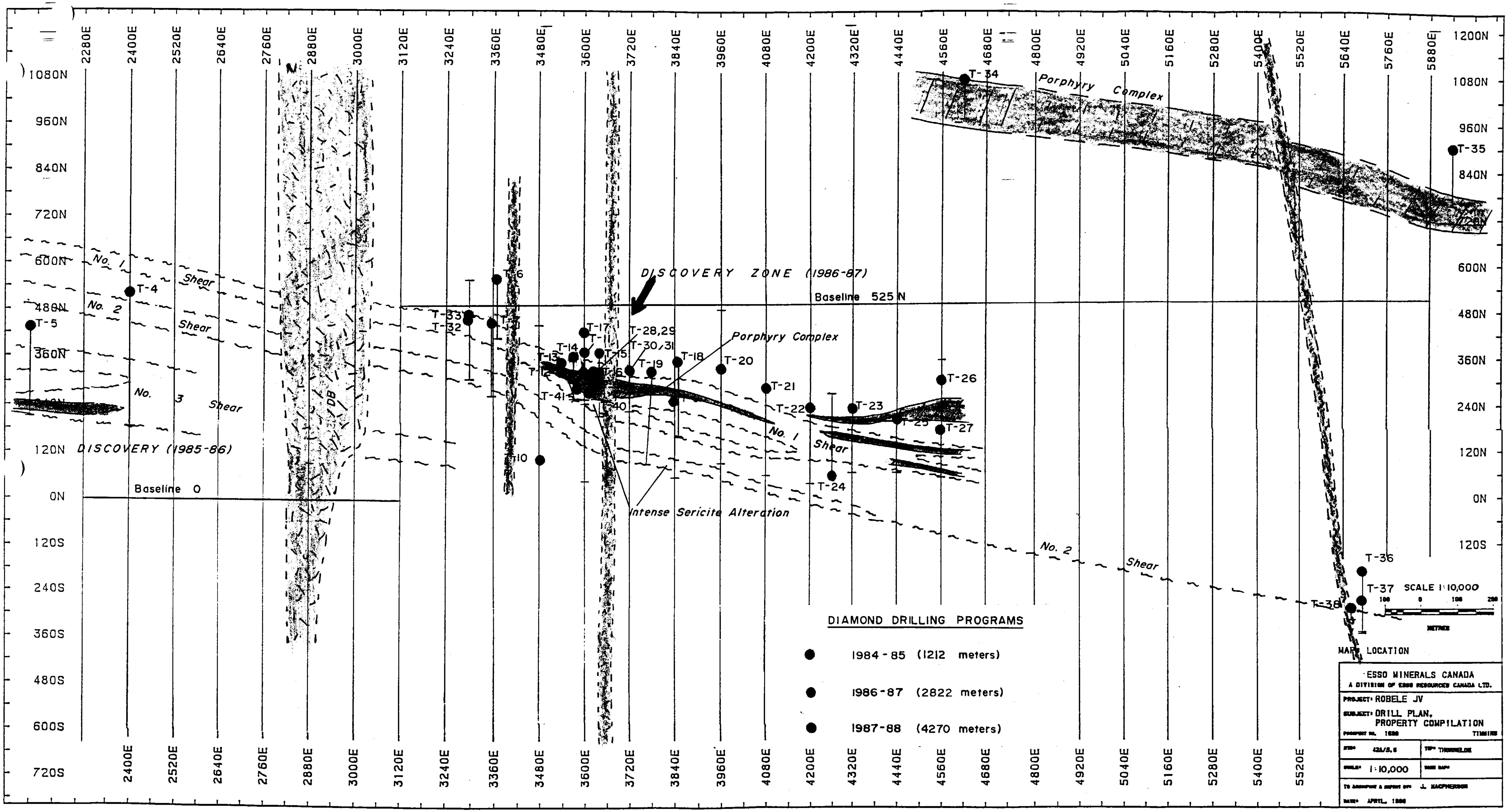
1. THORNELOE EAST GROUP, NORTH HALF

Several magnetic highs were located during the magnetometer survey. These were aligned along a 110 degree trend and had an individual strike length of 60-240 meters. The trend they defined extended for 3000 meters across the north half of the Thorneloe East Grid. These magnetic highs exhibited characteristics in terms of amplitude and size that were similar to the magnetic high present over the Discovery Zone (Porphyry Complex). As a result, these magnetic highs were thought to represent magnetite- bearing porphyries.

Two holes, T-34 and T-35 (see Appendices G and H for logs and sections) were drilled on the magnetic trend. Both holes intersected a magnetic porphyry complex, containing trace to 1% magnetite and 5% fine disseminated pyrite over a few meters. There was no shearing and alteration in these holes.

2. SOUTHEAST PART OF THORNELOE EAST GRID

A second east-west magnetic high trend was defined by the magnetometer survey along the border between the Thorneloe East Group and the Comstate Option, centered on L 5940 E, 3+00 S (Esso Grid: see Drill Plan and Compilation, Page 9). This feature was cut by three north-south trending Matachewan diabase dykes and had a strike length of 600 meters. Holes T-36, 37 and 38 were drilled on this magnetic trend. In this case, the feature was not explained by drilling, although T-37 and T-38 did intersect 10-15 meters of moderate sericite alteration associated with quartz porphyry dykes and quartz veins. The mineralization was similar to that encountered in Comstate Hole #3, 800 meters to the west, and returned only anomalous gold values.


DISCOVERY ZONE (1986-87)
Baseline 525 N
Baseline 0
DISCOVERY (1985-86)
Porphyry Complex
Intense Sericite Alteration
No. 1 Shear
No. 2 Shear
No. 3 Shear
DB
T-4
T-5
T-6
T-10
T-12
T-13
T-14
T-15
T-16
T-17
T-18
T-19
T-20
T-21
T-22
T-23
T-24
T-25
T-26
T-27
T-28,29
T-30,31
T-32
T-33
T-34
T-35
T-36
T-37
T-38
T-40
T-41
DIAMOND DRILLING PROGRAMS
1984-85 (1212 meters)
1986-87 (2822 meters)
1987-88 (4270 meters)
SCALE 1:10,000
METRES
MAP LOCATION
ESSO MINERALS CANADA
A DIVISION OF ESSO RESOURCES CANADA LTD.
PROJECT: ROBELE JV
SUBJECT: DRILL PLAN, PROPERTY COMPILATION
TIMMINS
1:10,000
J. MACPHERSON
APRIL, 1988

3. STEPOUT DRILLING, NO. 1 AND NO. 2 SHEARS

The majority of the drilling (2424 meters) consisted of holes drilled on 120 meter intervals east of the Discovery Zone to determine the potential of the shear zones along strike.

Hole T-21, located on L 4080 E, was the most easterly hole to contain significant gold values related to the magnetic Porphyry Complex. East of this hole (shown on Map 2), drilling confirmed that the shearing continues, but the degree of alteration, reflected most notably by the presence of sericite, decreases away from the Porphyry Complex (Map 2). The shears still hosted anomalous gold values, but there were no economic gold intersections in Holes T-22 to T-27. The drilling did confirm that the shear zones continue for a significant distance to the east of the Discovery Zone, thus extending the strike length of the gold-bearing structure to 3500 meters.

Several smaller bodies of weakly to moderately magnetic quartz and/or feldspar porphyry were intersected in the section drilling near the east end of the drilling pattern (Map 2). These were similar in appearance to the porphyry in the Discovery Zone, except they were less altered and deformed and contained only anomalous gold values

4. DISCOVERY ZONE

A total of seven holes were drilled in the Discovery Zone in an attempt to determine the attitude of the controls on the gold mineralization. Four were inclined 2 hole fans drilled to the south at -45 and -60 degrees (DH T-28 to T-31). The last three holes (T-39, 40, 41) in the program were short vertical holes drilled to test the attitude of three of the higher grade intersections. These holes are described in the logs and sections in Appendices G and H.

Holes T-28 and T-29, drilled west of the diabase (see Map 2, back pocket) intersected numerous gold values in the 2 to 5 g/t range (0.06 to .15 oz/ton) over widths varying from 1 to 3 meters (3.3 to 10 feet). The best results in these holes (and in the program) were obtained in DH T-28, which returned a value of 122.20 g/t over 0.60 meters (3.56 oz/ton over 2 feet). This section contained 9 sites of visible gold. The host rock is highly silicified and sericitic red magnetic porphyry. The visible gold occurs in and mantling coarse subhedral magnetite and is also present as free flakes and pinheads.

Holes T-39, 40 and 41 were vertical holes, and again all three returned multiple intersections in the 2 to 5 g/t range (.06 to .15 oz/ton) over widths of 1.5 to 3.9 meters (4.95 to 12.8 feet).

INTERPRETATION OF RESULTS

Discovery Zone

The main area of interest on the property to date is the "Discovery Zone", located between L 3500 and L 4080 E. Economic gold values are present in a 25 to 40 meter wide highly altered and deformed quartz-feldspar porphyry complex occuring entirely within a wide shear zone trending 110 degrees and dipping steeply to the north.

Gold occurs with pyrite and/or magnetite in several rock types within the Porphyry Complex. In order of importance, gold occurrences are in: 1) Quartz carbonate sericite schist, 2) Red Magnetite-bearing Porphyry, 3) Sericitic Boundary Shear, 4) Weakly altered argillite, 5) Pyritic quartz veinlets, 6) other host rocks (Figure 1). When values with a Grade x Width value of greater than 7 are selected, quartz- sericite carbonate schist and red magnetic porphyry are by far the most important host rocks for gold mineralization (Figure 2). Despite the fact that the quartz carbonate sericite schist is the dominant host rock type for gold, in most cases, drilling over or under a particularly good intersection did not indicate that the gold zone was of sub-vertical orientation.

In drill holes with economic values, there were long sections of the core that assayed better than 1.0 g/tonne (.044 oz/ton). These are listed below:

Hole No.	Assay (g/t)	Assay (oz/ton)	From (m)	To (m)	Length (m)	Length (ft)
T-11	1.54	.045	129.3	157.28	27.98	91.77
T-12	4.21	.123	65.84	74.76	8.92	29.25
T-15	3.98	.116	79.22	88.79	9.57	31.39
T-18	6.10	.178	221.28	227.38	3.79	12.43
T-19	1.33	.039	105.20	112.76	7.56	24.80
T-20	1.19	.035	187.91	194.70	6.79	22.27
T-28	4.77	.139	77.64	85.30	7.66	25.12
T-29	1.79	.052	55.61	61.90	6.29	20.63
	1.69	.049	141.60	148.74	7.14	23.42
T-31	1.17	.034	110.95	116.31	5.36	17.58
T-39	1.48	.043	61.25	68.25	7.00	22.96
T-40	1.17	.034	37.00	46.00	9.00	29.52
T-41	1.69	.049	35.86	44.15	8.29	27.27

The graph in Figure 3 shows the location of all significant gold intersections in a volume defined by elevation vs. northing, over a strike length of 500 meters (L3580E to L4080E). This plot indicates that there is a definite trend of gold values towards the origin, or, in

FIGURE 1

SIGNIFICANT GOLD INTERSECTIONS

ACCORDING TO ROCK TYPE

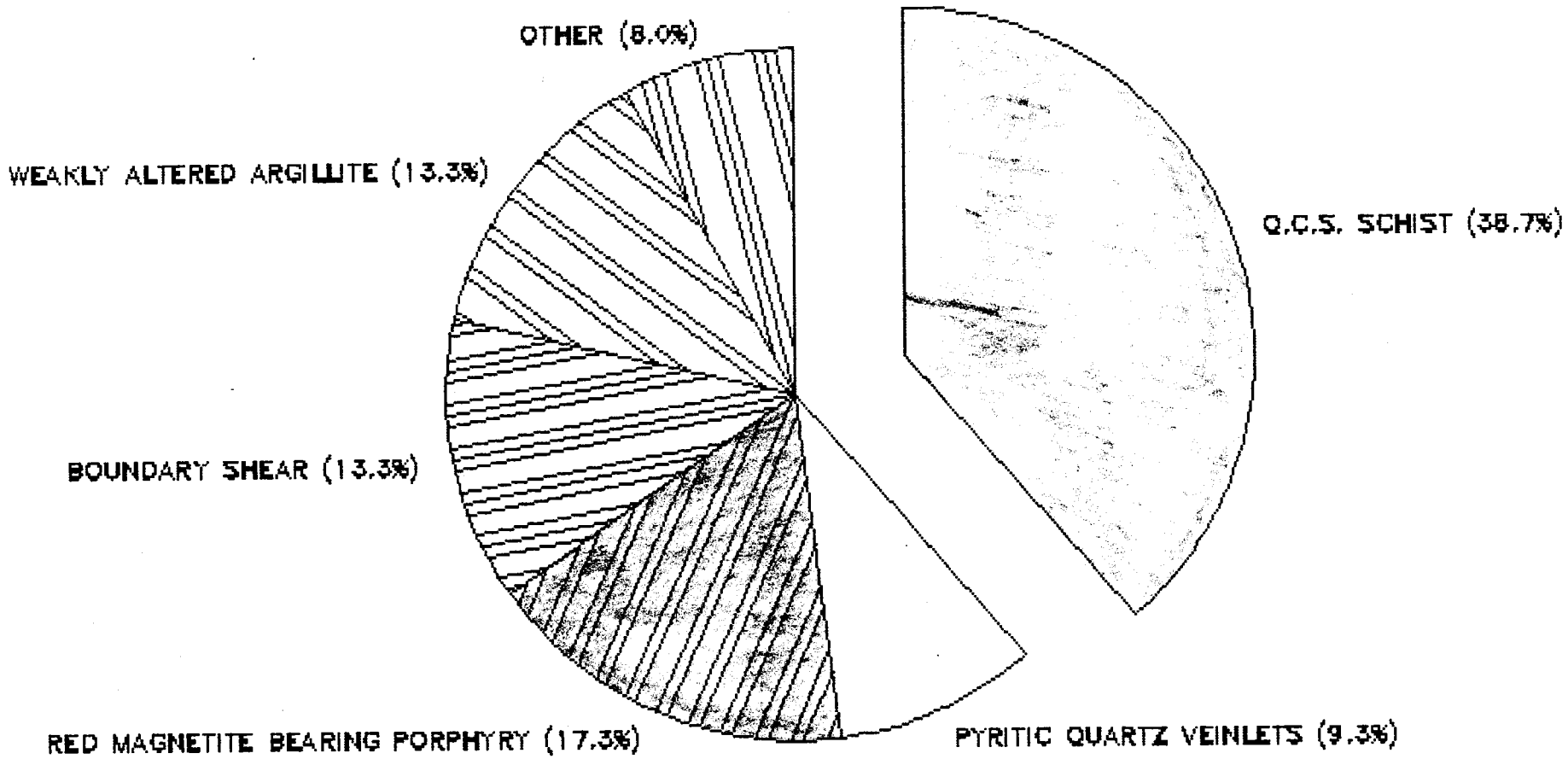


FIGURE 2

SIGNIFICANT GOLD INTERSECTIONS

BY ROCK TYPE, >7.0 G-M

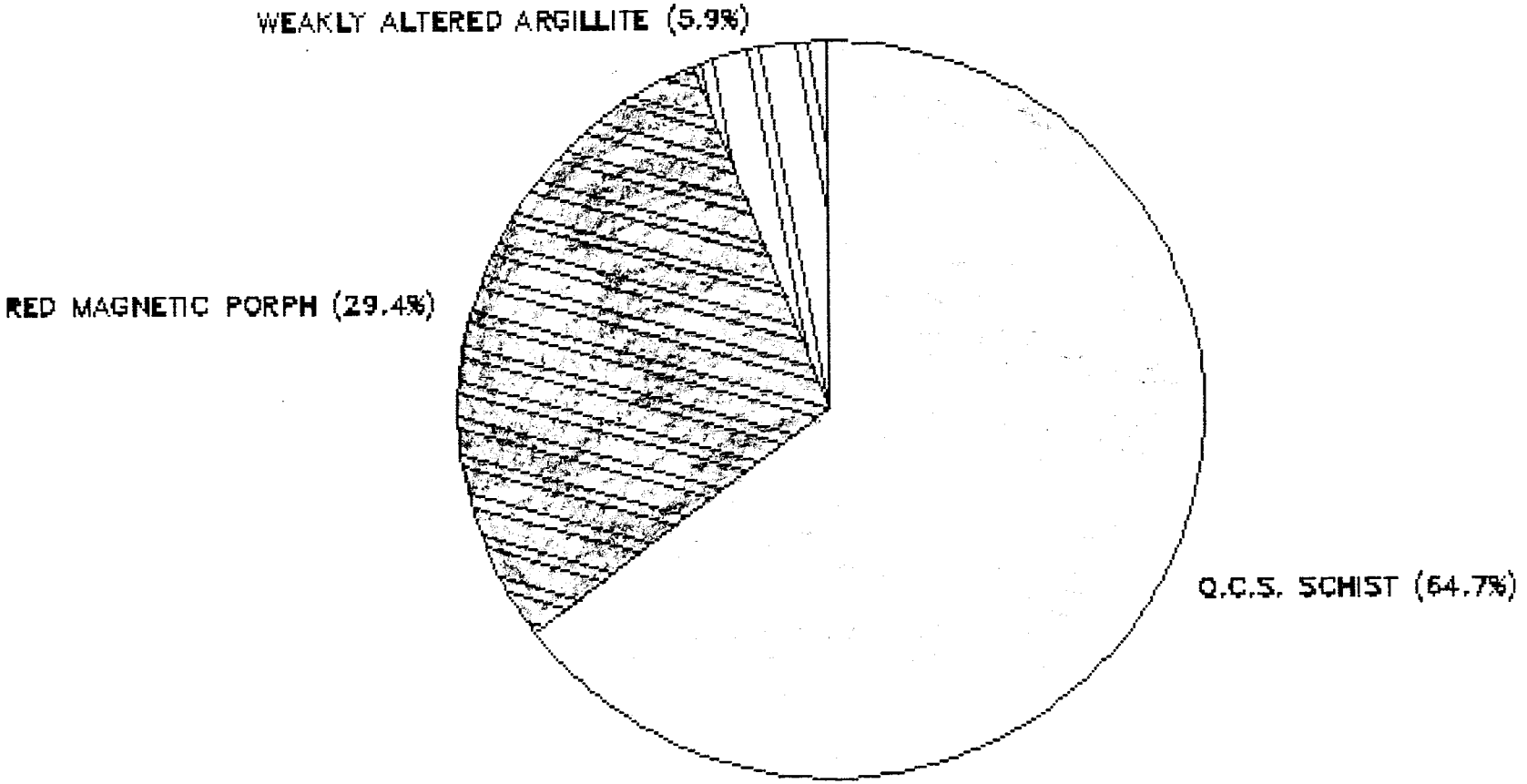
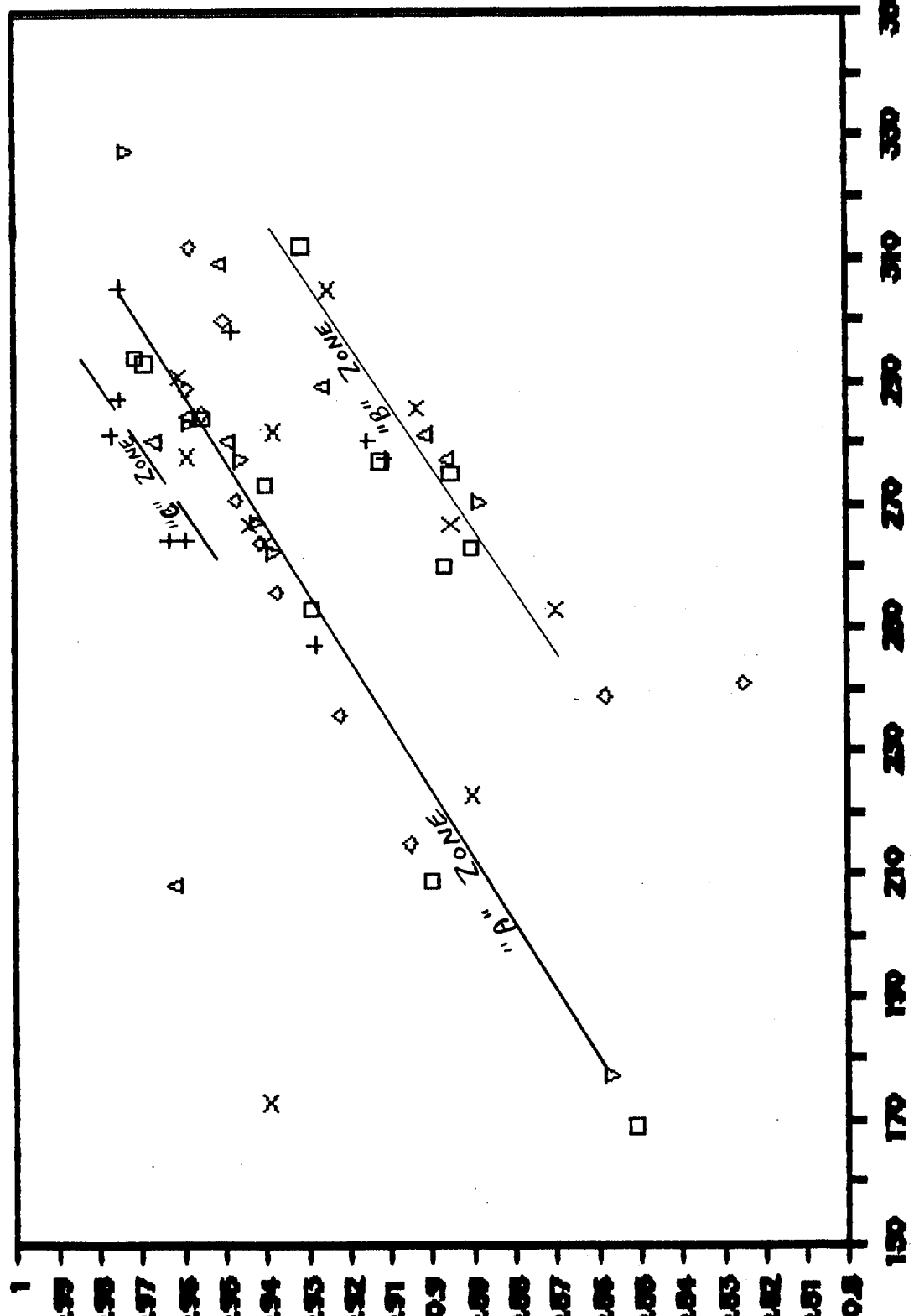


FIGURE 3


GRAPH D7: VERTICAL SECTION LOOKING WEST
ALL G x W VALUES
ELEVATION (meters)
(thousands)
NORTHINGS (meters)
ZONE "G"
ZONE "B"
ZONE "A"
▽ > 10 g-m
X 6-10 g-m
Δ 5-6 g-m
◊ 4-5 g-m
+ 3-4 g-m
□ 2-3 g-m

terms of the ground grid, towards the south. The average dip appears to be between 40 and 45 degrees. This trend, along with the extensive core lengths of significant gold values above, suggests the existence of a structural control on mineralization trending 110 degrees and dipping 40-45 degrees to the southwest. Therefore, the majority of the drilling, even though intersecting the regional foliation nearly at right angles, appears to have been subparallel to this structural control.

Table 2 lists all gold intersections and their relative position to a reference plane which strikes 110 degrees and dips 43 degrees to the south. These data clearly shows the existence of two, and possibly three, zones of gold mineralization.

Zone "A" is located -3 to +3 meters from the reference plane and is the most significant economically. Table 3 lists all the values in this zone, and an average grade and width of the significant gold intersections (G x W values > 7.0) is given as 6.48 g/t over 2.51 meters (.189 oz/ton over 8.2 feet). Current strike length is 240 meters and the deepest intersection is 70 meters vertically below the surface. This zone is still open in both strike directions as well as down dip.

Zone "B" is located -33 to -39 meters (north) from the reference plane. The average grade and width of this zone, (based on G x W values greater than 7.0) is 4.21 g/t over 2.68 meters (.123 oz/ton over 8.8 feet) (Table 4). The strike length is approximately 240 meters and the deepest intersection is 143 meters below surface. Strike and down-dip extensions have not been closed off.

Zone "C" is 9 to 18 meters from the reference plane and contains low gold values over narrow widths (Table 5). Further drilling is required to determine the economic potential of this zone.

The three gold zones defined to date are shown graphically in Figure 4. The cluster of values between 30 and 100 meters down-dip (x-axis) is a function of the mainly shallow drilling completed to date, leaving potential for defining further subparallel zones at depth.

OTHER PORPHYRY BODIES

The magnetic porphyry present in the north half of the Thorneloe East Group does not host significant gold values. It lacks most of the characteristics of the porphyry complex in the Discovery Zone, the most notable being alteration and shearing.

TABLE 2

G x W VALUES, LONGTITUDINAL SECTION, DISCOVERY ZONE

HOLE #	ASSAY (g/mt)	WIDTH (m)	G x W (g-m)	HEIGHT DOWN DIP	ADJ TO REF 1000	PERP DISTANCE	EASTING (m)	ZONE
T-18	4.15	1.50	6.23	95.0	905	-61	3840	
T-30	1.70	1.40	2.38	95	905	-50	3720	
T-29	8.20	0.98	8.04	141	859	-47	3630	
T-29	1.90	1.45	2.76	118	882	-41	3630	
T-29	3.29	2.98	9.81	114	886	-39	3630	B
T-11	2.31	2.05	4.73	167.0	833	-38	3600	B
T-11	1.27	1.55	1.97	105.0	895	-37	3600	B
T-11	2.38	2.30	5.47	107.0	893	-37	3600	B
T-11	1.64	3.05	5.00	111.5	888.5	-37	3600	B
T-11	1.51	1.62	2.45	117.5	882.5	-37	3600	B
T-11	1.11	2.31	2.56	121.0	879	-37	3600	B
T-11	3.34	3.05	10.19	126.0	874	-37	3600	B
T-11	1.26	1.45	1.83	92.0	908	-36	3600	B
T-11	4.80	2.00	9.60	101.5	898.5	-36	3600	B
T-18	6.15	3.05	18.76	142.0	858	-36	3840	B
T-11	1.45	1.47	2.13	63.0	937	-35	3600	B
T-11	3.48	2.30	8.02	73.0	927	-35	3600	B
T-18	2.09	1.30	2.72	151.0	849	-35	3840	B
T-29	2.23	1.52	3.39	95	905	-34	3630	B
T-29	4.09	0.75	3.07	92.0	908	-33	3630	B
T-19	7.66	0.53	4.06	73.0	927	-32	3780	
T-19	14.50	0.31	4.50	80.0	920	-32	3780	
T-19	4.99	0.95	4.74	110.0	890	-30	3780	
T-19	4.03	0.72	2.90	114.0	886	-29	3780	
T-13	1.19	1.53	1.82	129.0	871	-27	3569	
T-31	1.04	1.14	1.19	56	944	-26	3720	
T-31	4.29	0.91	3.90	85	915	-26	3720	
T-31	2.19	0.80	1.75	107	893	-25	3720	
T-13	1.82	1.50	2.73	106.0	894	-21	3564	
T-29	4.43	0.87	3.85	54.0	946	-20	3630	
T-29	6.27	0.67	4.20	53.0	947	-19	3630	
T-13	4.21	1.20	5.09	89.0	911	-17	3561	
T-39	3.78	2.39	9.05	72	928	-16	3620	
T-14	1.82	3.18	5.78	60.0	940	-13	3570	
T-13	3.00	1.66	4.98	58.0	942	-12	3553	
T-14	0.69	2.05	1.42	94.0	906	-11	3570	
T-14	0.73	1.50	1.16	121.0	879	-10	3570	
T-13	2.45	3.59	8.79	34.0	966	-5	3545	
T-39	1.41	1.60	2.26	63	937	-4	3620	
T-28	14.63	1.68	24.59	80.0	920	-3	3630	A
T-28	3.09	2.33	7.20	84.0	916	-3	3630	A
T-28	3.28	1.50	4.92	96.0	904	-3	3630	A
T-15	1.41	1.50	2.12	39.0	961	-2	3640	A
T-15	1.05	1.55	1.63	53.0	947	-2	3640	A
T-28	5.52	1.80	9.93	65.0	935	-2	3630	A
T-15	3.38	1.30	4.39	73.0	927	-2	3640	A
T-15	5.32	1.54	8.19	77.0	923	-2	3640	A
T-15	7.92	3.19	25.27	85.0	915	-2	3640	A
T-15	1.35	1.76	2.38	98.0	902	-2	3640	A
T-15	1.13	1.50	1.70	153.0	847	-2	3640	A

G x W VALUES, LONGTITUDINAL SECTION, DISCOVERY ZONE

HOLE #	ASSAY (g/mt)	WIDTH (m)	G x W (g-m)	HEIGHT DOWN DIP	ADJ TO REF 1000	PERP DISTANCE	EASTING (m)	ZONE
T-28	1.52	1.55	2.34	44.0	956	-1	3630	A
T-12	1.44	1.57	2.26	87.0	913	-1	3600	A
T-12	0.77	3.05	2.36	110.0	890	-1	3600	A
T-9	3.85	1.53	5.97	55.5	944.5	0	3840	A
T-39	4.73	1.11	5.25	60	940	0	3620	A
T-12	10.45	2.78	29.05	80.0	920	0	3600	A
T-40	1.11	1.50	1.67	92	908	0	3615	A
T-12	7.20	0.64	4.61	67.0	933	1	3600	A
T-12	3.18	1.76	5.60	75.0	925	1	3600	A
T-12	2.16	4.10	8.84	58.5	941.5	2	3600	A
T-12	1.87	2.23	4.16	62.0	938	2	3600	A
T-9	0.92	1.54	1.42	83.5	916.5	2	3840	A
T-40	5.94	0.73	4.34	89	911	2	3615	A
T-9	3.25	2.51	8.15	101.0	899	4	3840	A
T-12	1.81	2.14	3.87	36.0	964	5	3600	
T-9	1.03	1.75	1.80	157.0	843	9	3840	C
T-9	0.80	1.55	1.24	163.0	837	10	3840	C
T-39	2.10	1.47	3.09	47	953	11	3620	C
T-40	3.10	1.00	3.10	79	921	11	3615	C
T-41	2.94	3.90	11.47	74	926	13	3580	C
T-40	3.13	1.18	3.69	74	926	15	3615	C
T-9	1.02	1.30	1.33	225.0	775	15	3840	C
T-9	0.75	1.35	1.01	230.0	770	16	3840	C
T-41	3.12	1.92	6.01	70	930	18	3580	C
T-41	2.22	1.35	3.00	63	937	26	3580	

Note: The heading "PERP. DISTANCE" is the distance the drill hole intersection lies at right angles to the plane of reference, which dips 43 degrees to the south. Clusters of values within a range of 3 to 6 meters of each other are interpreted to be part of the same "zone".

TABLE 3

SIGNIFICANT GOLD INTERSECTIONS, "A" ZONE

AVG. WIDTH: 2.51
AVG GRADE: 6.48
AVG GxW: 16.29

calculations on G x W values greater than 7.0

HOLE #	ASSAY (g/mt)	WIDTH (m)	G x W (g-m)	HEIGHT DOWN DIP	ADJ TO REF 1000	PERP DISTANCE	EASTING (m)
T-12	10.45	2.78	29.05	80.0	920	0	3600
T-15	7.92	3.19	25.27	85.0	915	-2	3640
T-28	14.63	1.68	24.59	80.0	920	-3	3630
T-28	5.52	1.80	9.93	65.0	935	-2	3630
T-12	2.16	4.10	8.84	58.5	941.5	2	3600
T-15	5.32	1.54	8.19	77.0	923	-2	3640
T-9	3.25	2.51	8.15	101.0	899	4	3840
T-28	3.09	2.33	7.20	84.0	916	-3	3630
T-9	3.85	1.53	5.97	55.5	944.5	0	3840
T-12	3.18	1.76	5.60	75.0	925	1	3600
T-39	4.73	1.11	5.25	60	940	0	3620
T-28	3.28	1.50	4.92	96.0	904	-3	3630
T-12	7.20	0.64	4.61	67.0	933	1	3600
T-15	3.38	1.30	4.39	73.0	927	-2	3640
T-40	5.94	0.73	4.34	89	911	2	3615
T-12	1.87	2.23	4.16	62.0	938	2	3600
T-15	1.35	1.76	2.38	98.0	902	-2	3640
T-12	0.77	3.05	2.36	110.0	890	-1	3600
T-28	1.52	1.55	2.34	44.0	956	-1	3630
T-12	1.44	1.57	2.26	87.0	913	-1	3600
T-15	1.41	1.50	2.12	39.0	961	-2	3640
T-15	1.13	1.50	1.70	153.0	847	-2	3640
T-40	1.11	1.50	1.67	92	908	0	3615
T-15	1.05	1.55	1.63	53.0	947	-2	3640
T-9	0.92	1.54	1.42	83.5	916.5	2	3840

values sorted according to descending grade x width

TABLE 4

SIGNIFICANT GOLD INTERSECTIONS, "B" ZONE

AVG. WIDTH: 2.68
AVG GRADE: 4.21
AVG GxW: 11.28

calculations on G x W values greater than 7.0

HOLE #	ASSAY (g/mt)	WIDTH (m)	G x W (g-m)	HEIGHT DOWN DIP	ADJ TO REF 1000	PERP DISTANCE	EASTING (m)
T-18	6.15	3.05	18.76	142.0	858	-36	3840
T-11	3.34	3.05	10.19	126.0	874	-37	3600
T-29	3.29	2.98	9.81	114	886	-39	3630
T-11	4.80	2.00	9.60	101.5	898.5	-36	3600
T-11	3.48	2.30	8.02	73.0	927	-35	3600
T-11	2.38	2.30	5.47	107.0	893	-37	3600
T-11	1.64	3.05	5.00	111.5	888.5	-37	3600
T-11	2.31	2.05	4.73	167.0	833	-38	3600
T-29	2.23	1.52	3.39	95	905	-34	3630
T-29	4.09	0.75	3.07	92.0	908	-33	3630
T-18	2.09	1.30	2.72	151.0	849	-35	3840
T-11	1.11	2.31	2.56	121.0	879	-37	3600
T-11	1.51	1.62	2.45	117.5	882.5	-37	3600
T-11	1.45	1.47	2.13	63.0	937	-35	3600
T-11	1.27	1.55	1.97	105.0	895	-37	3600
T-11	1.26	1.45	1.83	92.0	908	-36	3600

values sorted according to descending grade x width

TABLE 5

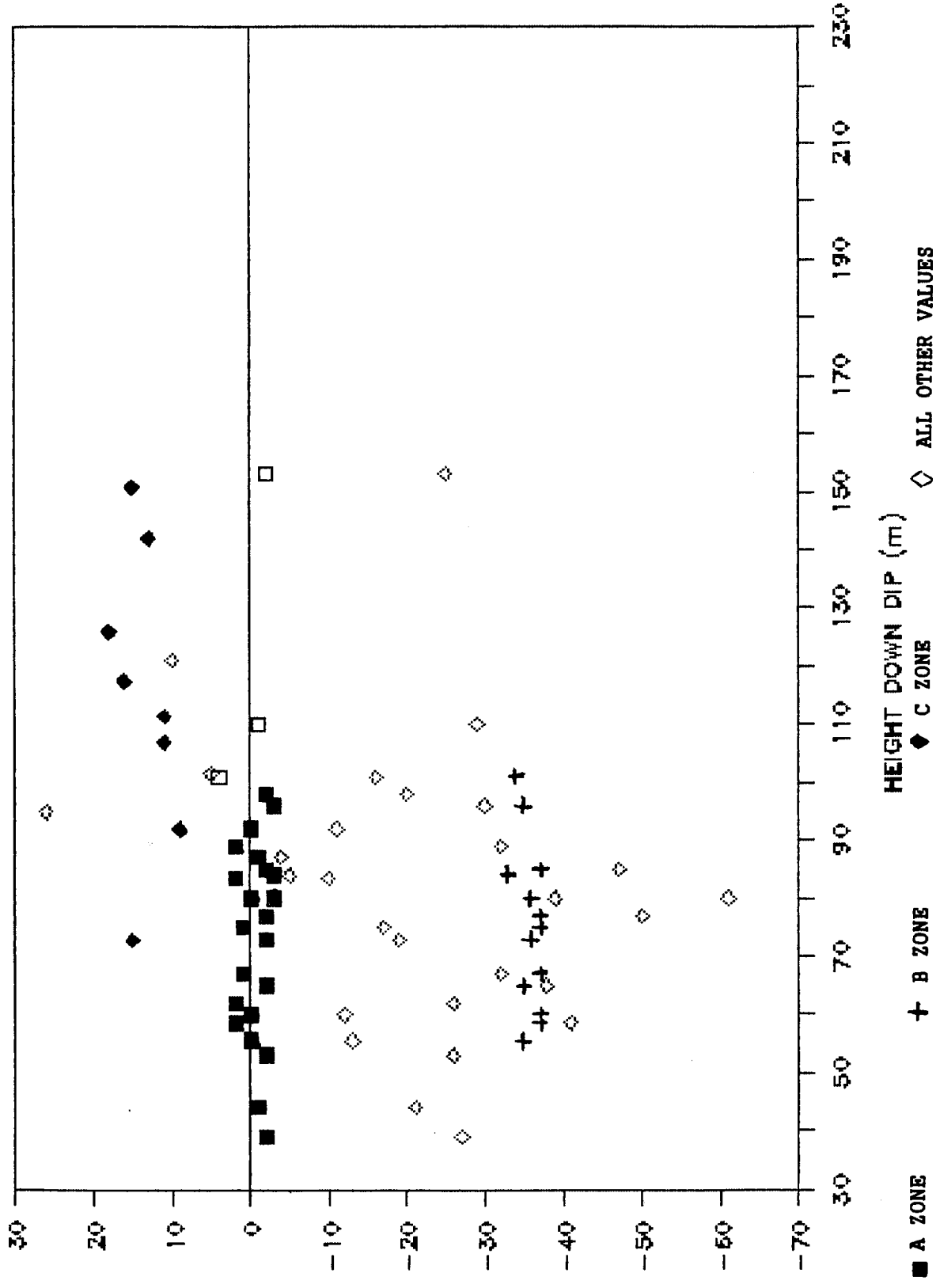
SIGNIFICANT GOLD INTERSECTIONS, "C" ZONE

AVG. WIDTH: 1.89 calculations on G x W values
AVG GRADE: 2.89 greater than 3.0
AVG GxW: 5.47

HOLE #	ASSAY (g/mt)	WIDTH (m)	G x W (g-m)	HEIGHT DOWN DIP	ADJ TO REF 1000	PERP DISTANCE	EASTING (m)
T-41	2.94	3.90	11.47	74	926	13	3580
T-41	3.12	1.92	6.01	70	930	18	3580
T-40	3.13	1.18	3.69	74	926	15	3615
T-40	3.10	1.00	3.10	79	921	11	3615
T-39	2.10	1.47	3.09	47	953	11	3620
T-9	1.03	1.75	1.80	157.0	843	9	3840
T-9	1.02	1.30	1.33	225.0	775	15	3840
T-9	0.80	1.55	1.24	163.0	837	10	3840
T-9	0.75	1.35	1.01	230.0	770	16	3840

values sorted according to descending grade x width

FIGURE 4


HEIGHT DOWN DIP VS PERP DIST TO PLANE
PIERCE POINTS OF G x W VALUES
PERP DISTANCE TO PLANE (m)
30
20
10
0
-10
-20
-30
-40
-50
-60
-70
30
50
70
90
110
130
150
170
190
210
230
HEIGHT DOWN DIP (m)
A ZONE
B ZONE
C ZONE
ALL OTHER VALUES

The same is true to a slightly lesser degree for the small porphyry dykes on the holes drilled just south of the Esso/Comstate boundary. These porphyries do have minor associated sericite alteration, but lack the intensity of shearing and alteration present in the Discovery Zone. The gold values associated with the porphyries reflect this, and rarely exceed 1 g/t over narrow widths.

EAST STRIKE OF NO. 1 AND NO. 2 SHEARS

The stepout drilling to the east of the Discovery Zone (DH T-22 to T-27 inclusive) did not locate any other significant gold-bearing structures. The intensity of alteration and shearing lessens towards the east and as a result the potential for locating significant gold values is low. Several small bodies of red magnetic porphyry (legend symbol 3A) were located but these were generally only weakly altered and deformed, and hosted slightly anomalous gold values

PROPOSAL FOR 1988 SUMMER EXPLORATION PROGRAM

More drilling is needed on the Discovery Zone to test the attitude of the mineralization as well as the depth potential of the Porphyry Complex host. Nine holes are recommended for drilling in the Discovery Zone. They should be drilled in three "fans" of three holes each at -45, -60 and -75 degrees to the north. This will allow for testing of the mineralization control (110/40-45S) as well as the depth potential, using the steepest of the three holes in each fan setup (Table 6).

A further 500 meters of drilling is recommended for the West Thorneloe Group. Two holes would be drilled in this phase of the program. The first of these would be drilled to the north from the setup of hole T-4, as that hole collared in intense sericite alteration. Proposed length is 250 meters. The second hole is recommended to test a magnetic high trending at 065 degrees. It has magnetic characteristics similar to the magnetic high present over the Discovery Zone. Also this magnetic high may lie on the westerly strike extension of the No. 1 shear, producing the same type and intensity of alteration and gold mineralization found in the Discovery Zone.

Helicopter mobilization of the drill across the Tatachikapika River is recommended for the summer program. Support for the drill would then be available by skidder through the river or by boat with truck connections by bush road and paved highway to Timmins. Total cost for the program including helicopter time, analytical and staff time is estimated at $207,000.00.

TABLE 6

PROPOSED DRILLING, 1988 SUMMER PROGRAM

HOLE #	COLLAR NORTHING (m)	COLLAR EASTING (m)	DIP	AZUMITH	LENGTH (m)	PROJECTED INTERSECTIONS: A ZONE ELEVATION (m)	A ZONE DIST DOWN PLANE	A ZONE NORTHING (m)	A ZONE DIST DOWN HOLE	B ZONE ELEVATION (m)	B ZONE DIST DOWN PLANE	B ZONE NORTHING (m)	B ZONE DIST DOWN HOLE
T-42	250	3590	-45	0	120	960	63	293	60	931	109	318	97
T-43	250	3590	-60	0	200	947	80	280	61	913	129	298	100
T-44	250	3590	-75	0	300	929	98	261	68	893	158	277	111
T-45	250	3635	-45	0	110	965	50	285	49	938	89	312	87
T-46	250	3635	-60	0	130	957	68	276	50	923	115	295	89
T-47	250	3635	-75	0	320	947	78	265	55	905	140	275	99
T-48	150	3820	-45	0	150	947	76	203	74	922	116	229	111
T-49	150	3820	-60	0	110	936	96	187	76	936	145	207	114
T-50	150	3820	-75	0	300	920	119	168	84	880	180	178	125
T-51	400	2400	-45	0	250	Purpose: to test shearing & alteration north of the collar of DH T-4							
T-52	1125	1920	-45	180	250	Purpose: to test magnetic high cut by west extension of the No. 1 Shear (magnetic high is similar in intensity and shape to the one defining							

TOTAL METERS PROPOSED: 2240.00
PROJECTED COST PER METER: 65.00

TOTAL: 145,600.0

APPENDIX

A

APPENDIX A

HIGHWAY 144

CLAIM #	DUE DATE		CLAIM #	DUE DATE	
792829	April 2, 1989	*	892796	Feb. 6, 1989	+
796737	April 2, 1989	*	892797	Feb. 6, 1989	+
796738	April 2, 1989	*	892798	Feb. 6, 1989	+
796739	April 2, 1989	*	892799	Feb. 6, 1989	+
892793	Feb. 6, 1989	+	892800	Feb. 6, 1989	+

T O T A L: 10

* 40 days magnetometer and linecutting filed February 3rd, 1988. Additional credits, if approved, will not offset next due date.

+ 40 days magnetometer and linecutting filed February 3rd, 1988. Additional credits, if approved will change due date to February 6, 1990.

WEST THORNELOE GROUP

CLAIM #	DUE DATE		CLAIM #	DUE DATE	
796729	April 2, 1990	*	923647	Dec. 31, 1992	*
796730	April 2, 1990	*	923648	Dec. 31, 1992	*
796731	April 2, 1990	*	923650	Dec. 31, 1992	*
796732	April 2, 1990	*	930782	Dec. 31, 1990	
796733	April 2, 1990	*	930783	Dec. 31, 1990	
796734	April 2, 1989	*	930786	Dec. 31, 1990	
796740	April 2, 1989		956080	Feb. 12, 1992	
805191	June 1, 1990	*	956081	Feb. 12, 1992	
805192	June 1, 1990	*	956082	Feb. 12, 1992	
805193	June 1, 1990	*	956206	Feb. 12, 1992	
834158	Dec. 4, 1989		956207	Feb. 12, 1992	
834159	Dec. 4, 1989		956208	Feb. 12, 1992	
834367	Dec. 19, 1989		956209	Feb. 12, 1992	
834368	Dec. 19, 1989		1029035	Arpil 6, 1989	
834369	Dec. 19, 1989		1029036	Arpil 6, 1989	
923646	Dec. 31, 1992	*	1029037	Arpil 6, 1989	
			1029038	Arpil 6, 1989	
			1029039	Arpil 6, 1989	
			1033819	Arpil 6, 1989	
			1033820	Arpil 6, 1989	

T O T A L: 36

* 200 days credit, ready for lease at due date.

THORNELOE EAST GRID

CLAIM #	DUE DATE		CLAIM #	DUE DATE	
838437	April 9, 1989		956095	Feb. 12, 1993	*
838438	April 9, 1989		956096	Feb. 12, 1993	*
838439	April 9, 1989		956097	Feb. 12, 1992	
838440	April 9, 1989		956098	Feb. 12, 1992	
838441	April 9, 1989		956099	Feb. 12, 1992	
383442	April 9, 1989		956100	Feb. 12, 1992	
838443	April 9, 1989		956216	Feb. 12, 1992	
838444	April 9, 1989		956217	Feb. 12, 1992	
838445	April 9, 1989		956218	Feb. 12, 1993	*
838446	April 9, 1989		956219	Feb. 12, 1992	*
838447	April 9, 1989		956226	Feb. 12, 1992	
838448	April 9, 1989		956227	Feb. 12, 1992	
930784	Dec. 31, 1990		956228	Feb. 12, 1992	
930785	Dec. 31, 1990		956229	Feb. 12, 1992	
956076	Feb. 12, 1992		956230	Feb. 12, 1992	
956077	Feb. 12, 1992		956231	Feb. 12, 1993	*
956078	Feb. 12, 1993	*	956201	Feb. 12, 1992	
956079	Feb. 12, 1993	*	995645	Feb. 12, 1992	
956092	Feb. 12, 1993	*	995646	Feb. 12, 1992	
956093	Feb. 12, 1993	*			

* 200 days credit, ready for lease at due date

1033821	April 6, 1989
1033822	April 6, 1989
1033823	April 6, 1989
1033824	April 6, 1989

T O T A L: 44

MATTAGAMI RIVER GROUP

CLAIM #	DUE DATE	CLAIM #	DUE DATE
923601	May 12, 1991	923611	May 12, 1991
923602	May 12, 1991	923612	May 12, 1991
923603	May 12, 1991	923613	May 12, 1991
923604	May 12, 1991	923614	May 12, 1991
923605	May 12, 1991	923615	May 12, 1991
923606	May 12, 1991	923616	May 12, 1991
923607	May 12, 1991	923617	May 12, 1991
923608	May 12, 1991	923618	May 12, 1991
923609	May 12, 1991	892792	Feb. 6, 1989
923610	May 12, 1991		

T O T A L: 19

NOTE: All claims currently have 40 days linecutting and magnetometer survey filed for assessment credit approved. Upon receipt of this approval, the due dates will remain unchanged except for 892792, which will have a new due date of February 6, 1990.

BRI. L #1 GROUP

CLAIM #	DUE DATE	CLAIM #	DUE DATE	
952796	Feb. 6, 1989	952824	Feb. 6, 1989	
952797	Feb. 6, 1989	952825	Feb. 6, 1989	
952798	Feb. 6, 1989	955374	Feb. 6, 1989	
952799	Feb. 6, 1989	955375	Feb. 6, 1989	
952800	Feb. 6, 1989	955376	Feb. 6, 1989	
952801	Feb. 6, 1989	955377	Feb. 6, 1989	
952802	Feb. 6, 1989	955378	Feb. 6, 1989	
952803	Feb. 6, 1989	955379	Feb. 6, 1989	
952804	Feb. 6, 1989	955380	Feb. 6, 1989	
952805	Feb. 6, 1989	955381	Feb. 6, 1989	
952806	Feb. 6, 1989	955382	Feb. 6, 1989	
952807	Feb. 6, 1989	955383	Feb. 6, 1989	
952808	Feb. 6, 1989	955384	Feb. 6, 1989	
952809	Feb. 6, 1989	955385	Feb. 6, 1989	
952810	Feb. 6, 1989	955386	Feb. 6, 1989	*
952811	Feb. 6, 1989	955387	Feb. 6, 1989	*
952812	Feb. 6, 1989	955388	Feb. 6, 1989	*
952813	Feb. 6, 1989	955389	Feb. 6, 1989	*
952814	Feb. 6, 1989	955390	Feb. 6, 1989	*
952815	Feb. 6, 1989	955391	Feb. 6, 1989	*
952816	Feb. 6, 1989	955392	Feb. 6, 1989	*
952817	Feb. 6, 1989	955393	Feb. 6, 1989	*
952818	Feb. 6, 1989	955394	Feb. 6, 1989	*
952819	Feb. 6, 1989	955395	Feb. 6, 1989	*
952820	Feb. 6, 1989	955396	Feb. 6, 1989	
952821	Feb. 6, 1989	955397	Feb. 6, 1989	
952822	Feb. 6, 1989	955398	Feb. 6, 1989	
952823	Feb. 6, 1989			

* 40 days linecutting and magnetics submitted February 3, 1988.
If approved, the new due date will be February 3, 1989

BRISTOL #2 GROUP

CLAIM #	DUE DATE	
923649	MAY 26/89	*
930787	MAY 26/89	*
930788	MAY 26/89	*
930789	MAY 26/89	*
930790	MAY 26/89	*
930791	MAY 26/89	*

* 40 days linecutting and magnetics submitted Feb. 3, 1988
Upon approval, the due date will be May 26, 1990

COMSTATE OPTION

CLAIM #	DUE DATE	CLAIM #	DUE DATE
568441	July 29, 1987 *	871713	Oct. 22, 1989
568443	Oct. 30, 1987 *	871714	Oct. 22, 1989
568444	July 29, 1988 *	871715	Oct. 22, 1989
568445	Jan. 29, 1988 *	871716	Nov. 4, 1990
594919	Jan. 20, 1988 *	871717	Nov. 4, 1990
595029	Dec. 4, 1987 *	901590	Apr. 14, 1990
595030	Dec. 4, 1987 *	901591	Apr. 14, 1990
595031	Dec. 4, 1987 *	901592	Apr. 14, 1990
595032	Dec. 4, 1987 *	901593	Apr. 14, 1990
595997	Jan. 20, 1988 *	933333	Jul. 11, 1990
595998	Jan. 20, 1988 *	933334	Jul. 11, 1990
595999	Jan. 20, 1988 *	946108	Jul. 14, 1990
596000	Jan. 20, 1988 *	946109	Jul. 14, 1990
804618	Jul. 13, 1990 +	946110	Jul. 14, 1990
804619	Jul. 13, 1990 +	946111	Jul. 14, 1990
832256	Nov. 15, 1989	946112	Jul. 14, 1990
832701	Nov. 15, 1989	946113	Jul. 14, 1990
871712	Oct. 22, 1989	946114	Jul. 14, 1990
		946115	Jul. 14, 1990

T O T A L: 37

* 200 days credit as of due date shown, currently under extension of time to prepare for lease.

+ 200 days credit, ready for lease as of due date.

APPENDIX

B

APPENDIX B

BREAKDOWN OF EXPENDITURES, MARCH/87 TO APRIL/88

STAFF		
MacPherson:	$28,865.00	
Verville:	5,090.00	
Wilson:	4,948.00	
Casual	10,940.00	
	49,843.00	$49,843.00
DRILLING		
Longyear Inc.		374,868.95
GEOPHYSICS		
Exsics Exploration	60,767.00	
Geoprobe	1,500.00	
Dighem	5,000.00	
	67,267.00	67.267.00
ANALYTICAL		
Min-En Labs		15,927.50
MISCELLANEOUS		
Truck Rental	5,498.00	
LogII Rental	3,600.00	
Staking	11,050.00	
Expense Account	2,948.72	
Saw Blades	3,761.43	
Core Boxes	5,000.00	
Gas	1,200.00	
Janwil Petrographics	342.80	
Dam Repair	3,000.00	
	27,302.95	27,302.95
T O T A L		$544,307.40
10% DSS		54,430.74
G R A N D T O T A L		$598,738.14

APPENDIX C

APPENDIX C

PROPOSED BUDGET, 1988 SUMMER PROGRAM

STAFF:		
J. MacPherson 3 months @ $3675/month	$11,025.00	
J. Pirie 5 days @ $435/day	2,175.00	
	13,200.00	13,200.00
EQUIPMENT RENTALS:		
Truck: 2 months @ $1000/month	2,000.00	
Gas : 2 months @ $250/month	500.00	
LogII: 4 months @ $600/month	2,400.00	
	4,900.00	4,900.00
DIAMOND DRILLING:		
1. Helicopter-support Mob/Demob 10 hrs X $600/hr (incl. fuel)	6,000.00	
2. Drilling-Local Contractor, $65/meter, 2250 m X $65/m	146,250.00	
3. Analytical Est. $17/sample incl. labour saw blades and assays $17 X 800 samples	13,600.00	
4. Core Boxes 1000 trays @ $4/tray	4,000.00	
total	169,850.00	
S U B T O T A L		$187,950.00
10% DSS		18,795.00
T O T A L		$206,745.00

APPENDIX D

APPENDIX D

SIGNIFICANT INTERSECTIONS, 1987-88 PROGRAM

HOLE	FROM (m)	TO (m)	WIDTH (m)	AU (g/t)	FROM (ft)	TO (ft)	WIDTH (ft)	AU oz/ton
T-19	105.20	112.76	7.56	1.33	345.06	369.85	24.80	0.039
incl.	110.02	110.55	0.53	7.66	360.86	362.6	1.74	0.223
	117.12	117.43	0.31	14.5	384.15	385.17	1.02	0.423
	146.85	147.80	0.95	4.99	481.66	484.78	3.12	0.146
	151.68	152.40	0.72	4.03	497.51	499.87	2.36	0.118
	230.26	234.50	4.24	1.93	755.25	769.16	13.91	0.056
T-20	187.91	194.70	6.79	1.19	616.34	638.61	22.27	0.035
T-21	180.95	181.97	1.02	12.4	593.51	596.86	3.35	0.362
	241.90	243.40	1.50	2.69	793.43	798.43	4.92	0.078
T-28	54.50	54.83	0.33	2.22	178.76	179.84	1.08	0.065
	64.08	65.88	1.80	5.52	210.18	216.09	5.90	0.161
	79.16	85.30	6.14	14.00 (uncut)	259.64	279.78	20.14	0.408
incl. *	80.24	80.84	0.60	122.20 (uncut)	263.18	265.15	1.97	3.560
or	79.16	85.30	6.14	5.41 (cut)	259.64	279.78	20.14	0.158
incl. *	80.24	80.84	0.60	34.29 (cut)	263.18	265.15	1.97	1.000
	95.12	96.62	1.50	3.28	311.99	316.91	4.92	0.096
T-31	55.61	58.00	2.39	3.42	182.40	190.24	7.84	0.10
	97.40	100.75	3.35	2.32	319.47	330.46	10.99	0.07
	118.45	121.43	3.98	3.29	388.51	398.00	9.77	0.10
	147.13	148.74	1.61	5.97	482.59	487.88	5.28	0.17
	110.95	112.73	1.88	2.92	363.91	369.75	6.17	0.09
T-32	62.60	63.90	1.30	2.70	205.33	209.59	4.26	0.079
T-39	40.11	41.22	1.12	4.73	131.56	135.20	3.67	0.138
	62.61	65.00	2.39	3.78	205.36	213.20	7.84	0.110
T-40	38.32	39.50	1.18	3.13	125.69	129.56	3.87	0.091
	45.00	46.00	1.00	3.10	147.60	150.88	3.28	0.090
T-41	31.98	33.07	1.09	4.21	104.89	108.47	3.58	0.123
	38.75	43.15	4.40	2.14	127.10	141.53	14.43	0.062

APPENDIX

E

APPENDIX E

REFERENCES

Choudry, A.G.
1982: Precambrian Geology of Thorneloe Township, Cochrane District; Ontario Geological Survey, Map P.2502, Geological Series-Preliminary Map, Scale 1:15,840 or 1 inch to 1/4 mile. Geology 1981

Ferguson, S.A.
Geology of Bristol Township, District of Cochrane, Ontario Department of Mines Annual Report, 1957, Volume 66, Part 7. Accompanied by Map 1957-7, 1 inch = 1000 feet.

MacPherson, J.A.
1987: Summary of Drilling, November, 1986 to February 1987, In House Report on the Esso Resources/Robele Resources Joint Venture Property in Thorneloe Township.

Pyke, D.R.
1982: Geology of the Timmins Area, District of Cochrane, Ontario Geological Survey Report 219, 141p. Accompanied by Map 2455, Scale 1:50,000, 3 Charts and 1 Sheet Microfiche.

APPENDIX F

APPENDIX F

STATEMENT OF QUALIFICATIONS

I, Joseph A. MacPherson, do certify the following:

1. I am a graduate of Laurentian University in Sudbury, Ontario, and hold an Honours Bachelor of Science degree in Geology.

2. I have been practising my profession continuously since graduation in 1980.

3. I have no personal monetary or stock interest in any of the properties which are discussed in this report.

Date: April 20, 1988

Signed: J. A. MacPherson

DH T-9

Core size:	BQ	Azimuth:	180	Grid:	Detail #3, West Half
Drilled by:	J.T. THOMAS D.D.	Dip:	-45	Purpose:	Test east extension of Au zone
				Claim:	956078
Started:	Dec. 6/86				
Finished:	Dec. 9/87	Depth Az Dip		Northing:	2+50N
		91.46	-37.5	Easting:	L 3840E
Logged by:	J. MacPherson	182.92	-38.0	Elevation:	
Date logged:	Dec. 12/86	251.76	-36.5		
System:				Length:	251.76m

J. MacPherson

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
.00 28.35	OVERBURDEN									
28.35 46.30	1A: ARGILLITE									
	20% 10 To 40 cm thick arenite beds in this section as well. Argillite is black, fine grained and thinly bedded. Arenite is grey, medium grained and weakly locally siliceous. 10% quartz ankerite veinlets with trace to 2% fine pyrite. Lower contacts of the arenite are broken and assimilated into the underlying argillite bed for a distance of 5 to 10 cm.	2102	30.76	32.31	1.55	.01				
		2103	32.31	33.81	1.50	.01				
		2104	33.81	35.36	1.55	.01				
		2105	35.36	36.86	1.50	.01				
		2106	36.86	38.40	1.54	.02				
		2107	38.40	39.90	1.50	.01				
		2108	39.90	41.45	1.55	.01				
		2109	41.45	42.95	1.50	.01				
		2110	42.95	44.50	1.55	.01				
		2112	46.00	47.55	1.55	.02				
	28.35 30.76 Trace to 1% fine disseminated pyrite.	2101	28.35	30.76	2.41	.24				
	44.50 46.00 5 cm quartz ankerite vein with 5% disseminated pyrite.	2111	44.50	46.00	1.50	.18				
46.30 70.00	1A: ARGILLITE									
	Very similar to section above except for local patchy sericite and silica alteration.	2113	47.55	49.05	1.50	.48				
		2114	49.05	50.60	1.55	.01				
		2115	50.60	52.10	1.50	.01	N	W	N	
	53.64 55.14 In section from 46.3 to 70.0 metres, there may be up to 15% fine disseminated pyrite in 2 to 5 cm quartz veins.	2116	52.10	53.64	1.54	.17	N	W	N	
		2117	53.64	55.14	1.50	.03				
		2119	56.69	58.19	1.50	.03	N	W	N	
		2120	58.19	59.74	1.55	.01	N	W	N	
	55.14 56.69 20% pyrite in 1 cm wide bedding parallel seams.	2118	55.14	56.69	1.55	3.85	W	W	W	
		2121	59.74	61.24	1.50	.04	N	W	N	
		2122	61.24	62.79	1.55	.01	N	W	N	
		2123	62.79	64.29	1.50	.01	N	W	N	
		2124	64.29	65.84	1.55	.02	N	W	N	
		2125	65.84	67.34	1.50	.20	N	W	N	
		2126	67.34	68.88	1.54	.03				

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
		2127	68.88	70.00	1.12	.01				
70.00 81.20	1A: ARGILLITE									
	Thinly bedded at 30 degrees to the core axis. A few 1 cm thick beds of pyrite.	2128	70.00	71.93	1.93	.01				
		2129	71.93	74.98	3.05	.01				
		2130	74.98	78.03	3.05	.01				
		2131	78.03	81.20	3.17	.13	M	W	M	
81.20 90.22	1A: ARGILLITE									
	Numerous interbeds of cherty material and 10% quartz ankerite veins up to 30 cm wide.	2132	81.20	82.58	1.38	.04	M	W	M	
		2134	84.12	85.50	1.38	.02	M	W	M	
		2136	87.17	88.92	1.75	.03	W	W	W	
	82.58 84.12 Speck of chalcopyrite at edge of thin quartz stringer.	2133	82.58	84.12	1.54	.92	M	W	M	
	85.50 86.17 3 to 5% pyrite in thin quartz ankerite stringers with chloritic margins.	2135	85.50	86.17	.67	.01	W	W	W	
	88.92 90.22 1 to 2% very fine pyrite.	2137	88.92	90.22	1.30	.01	W	W	W	
90.22 98.90	1F: CONGLOMERATE									
	Moderately deformed with clasts stretched at 45 to 55 degrees to the core axis. Clast supported. Matrix is very fine grained quartz and ankerite with a few fuchsite streaks. Fragments are variably silicified and consist of 75% chert and 25% soft sediments. Many clasts are rimmed by chlorite.	2140	94.80	96.32	1.52	.01	M	W	M	
		2141	96.32	97.23	.91	.21	M	W	M	
		2142	97.23	98.90	1.67	.20	M	W	M	
	From 93.5 to 94.8 metres, the conglomerate contains 1% fine disseminated euhedral magnetite in the matrix. This is accompanied by an increase in the pyrite and fuchsite content.									
	90.22 93.50 Trace to 2% pyrite in matrix of conglomerate.	2138	90.22	93.50	3.28	.02	M	W	M	
	93.50 94.80 1 to 2% magnetite, 1 to 5% pyrite.	2139	93.50	94.80	1.30	.01	M	W	M	
98.90 102.41	3C: INTENSE SILICA-CARBONATE FLOODING									
	Unit is actually conglomerate but it is highly altered and pyritic. Clasts have been selectively sericitized or silicified depending on their original composition.									
	98.90 100.40 2 to 10% pyrite in	2143	98.90	100.40	1.50	.81	I	W	I	

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	conglomerate matrix.									
	100.40 102.41 10% fine disseminated pyrite in matrix of conglomerate.	2144	100.40	102.41	2.01	3.43	I	M	I	
102.41 123.85	1A: ARGILLITE									
	Fine grained, thinly bedded. Moderately altered. 1 to 3% quartz ankerite stringers, 2% fine disseminated pyrite.	2145	102.41	103.91	1.50	2.52	S	M	S	
		2146	103.91	105.46	1.55	.15	W	M	W	
		2147	105.46	106.96	1.50	.08	W	M	W	
		2148	106.96	108.51	1.55	.01	W	M	W	
		2149	108.51	110.01	1.50	.01	W	M	W	
		2150	110.01	111.56	1.55	.01	W	M	W	
		2151	111.56	113.06	1.50	.01	W	M	W	
		2152	113.06	114.60	1.54	.02	W	M	W	
		2153	114.60	116.10	1.50	.01	W	M	W	
		2154	116.10	117.65	1.55	.05	W	M	W	
		2155	117.65	119.15	1.50	.01	W	M	W	
		2156	119.15	120.70	1.55	.01	W	M	W	
		2157	120.70	122.20	1.50	.04	W	M	W	
		2158	122.20	123.85	1.65	.02	W	W	W	
123.85 137.84	1B: ARGILLITE WITH GRAPHITIC SLIPS									
	Unaltered. Numerous graphitic slips in this thinly bedded unit. At 124.5 metres there is thin graphitic fault gouge. Section contains several 1 to 3 metre zones of quartz carbonate veining with sericitic inclusions and haloes.	2160	127.00	128.25	1.25	.01	N	W	N	
		2161	131.95	134.44	2.49	.01	N	W	N	
		2162	134.44	138.99	4.55	.06	N	W	W	
	125.50 126.00 20 to 30% quartz ankerite veining with 5 to 15% pyrite in the veins.	2159	125.50	126.00	.50	.03	N	W	N	
137.84 179.21	1A: ARGILLITE									
	Sharp upper contact. Unit is moderately sericitic and contains trace to locally 3% fine disseminated pyrite.	2163	138.99	142.04	3.05	.04	N	W	W	
		2164	142.04	145.08	3.04	.03	N	W	W	
		2165	145.08	146.58	1.50	.01	N	W	W	
		2167	148.13	149.63	1.50	.01	N	W	W	
	146.58 148.13 Trace arsenopyrite.	2166	146.58	148.13	1.55	.15	N	W	W	
	155.53 157.28 5% pyrite over 40 cm from 156.2 to 156.8 metres.	2168	149.63	151.18	1.55	.17	N	W	W	
		2169	151.18	152.68	1.50	.06	N	W	W	
		2170	152.68	154.23	1.55	.04	N	W	W	
	166.42 167.92 5% pyrite from 166.9 to 167.3 metres.	2171	154.23	155.53	1.30	.53	W	W	W	
		2173	157.28	158.78	1.50	.50	N	W	W	
		2174	158.78	160.32	1.54	.05	N	W	W	
		2175	160.32	161.82	1.50	.02	N	W	W	
		2176	161.82	163.37	1.55	.80	N	W	W	
		2177	163.37	164.87	1.50	.27	N	W	W	

Interval (m)	Description
179.21 181.40	1E: LITHIC ARENITE Medium grained, light grey. Numerous quartzo-feldspathic clasts 1 to 5mm in size are set in a very fine grained quartz sericite ankerite matrix.
181.40 183.71	1A: ARGILLITE Moderately sericitic, interbedded with fine grained siltstone.
183.71 185.11	1E: LITHIC ARENITE Medium grained, moderately to strongly silicified. Sharp upper contact at 30 degrees to the core axis.
185.11 200.90	3E: MODERATE SERICITE SCHIST (+/- QTZ) Variably silicified, moderate to strongly sericitized. 188.66 189.26 4A: QUARTZ-CARBONATE VEIN 199.95 200.90 2 to 10% very fine disseminated pyrite.
200.90 206.24	2G: SILICIFIED PORPHYRY (QUARTZ &/OR FELDSPAR) Highly silicified, locally well crackle fractured. Upper contact is at 0 to 10 degrees to the core axis and the lower contact is at 45 degrees to the core axis. Quartz and feldspar phenocrysts are shattered and partially replaced by secondary quartz and ankerite. Numerous sericitic slips at 40 to 60 degrees to the core axis. 202.80 203.30 4A: QUARTZ-CARBONATE VEIN 203.0. Broken, very sericitic,

Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
2178	164.87	166.42	1.55	.18	W	W	W	
2180	167.92	169.47	1.55	.17	M	W	W	
2181	169.47	170.97	1.50	.01	M	W	W	
2182	170.97	172.52	1.55	.19	M	W	W	
2183	172.52	174.02	1.50	.02	M	W	W	
2184	174.02	175.56	1.54	.06	M	W	W	
2185	175.56	177.06	1.50	.01	M	W	W	
2186	177.06	179.21	2.15	.01	M	W	W	

Interval (m)	Description	Sample No.	Interval (m)	Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	possible fault gouge, contains 10% arsenopyrite needles. 202.00 202.80 1 to 5% fine disseminated pyrite, 1% small arsenopyrite needles. 202.80 203.30 1 to 5% pyrite and 15% fine arsenopyrite in 2 cm fault gouge at 203 metres. 204.80 206.24 5 to 30% pyrite locally over 5 cm, 1% chalcopyrite.								
206.24 210.60	3F: STRONG SERICITE SCHIST (+/- QTZ) Strongly sericitic, 25% chlorite blebs parallel to the strong foliation at 10 degrees to the core axis. 1% fuchstic fragments. 206.24 207.59 1 to 3% cubic pyrite.								
210.60 212.44	3E: MODERATE SERICITE SCHIST (+/- QTZ) Sericitic, thinly bedded, 2% disseminated pyrite.								
212.44 215.69	3F: STRONG SERICITE SCHIST (+/- QTZ) Similar to section from 206.24 to 210.60.								
215.69 221.28	1D: SILTSTONE Light grey green, beds are 80 to 150 cm thick.								
221.28 239.45	1A: ARGILLITE Thinly bedded with local streaky sericite. 5% black quartz ankerite veinlets. Bedding contacts are at 50 degrees to the core axis. 236.52 238.02 Average is 2% fine disseminated cubic pyrite, locally trace arsenopyrite in the black quartz ankerite veinlets.								
239.45 243.42	1E: LITHIC ARENITE Thickly bedded, 10% mafic fragments. Grain size decreases down the hole.								

Interval (m)	Description	Sample No.	Interval (m)	Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
243.42 251.76	1A: ARGILLITE Weakly altered, thinly bedded. 1 to 3% thin quartz carbonate stringers with 1% pyrite. 251.76 End Of Hole. 243.42 245.67 Less than 1% fine cubic pyrite.								

DH-11

Core size: BQ
Drilled by: J.T. THOMAS D.D.

Started: NOV. 28/86
Finished: DEC. 5/86

Logged by: J. MACPHERSON
Date logged: DEC.6/86
System:

Azimuth: 180
Dip: -50

Depth	Az	Dip
91.46		-46.0
182.92		-44.5
274.39		-42.0
365.85		-44.5
462.20		-39.0

Grid: DETAIL #3, WEST HALF
Purpose: Cross section IP and mag high zone
Claim: 956079

Northing: 3+75N
Easting: L 3600E
Elevation:

Length: 462.20m

J. Macpherson

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
.00 24.58	OVERBURDEN									
24.58 60.60	1A: ARGILLITE Fine grained to very fine grained, variably sericitized, locally quartz carbonate veined. Thinly bedded, locally slumped or folded. Moderately strong crenulation cleavage at 70 degrees to the core axis and bedding attitudes vary from 0 to 80 degrees to the core axis. 24.58 26.90 Highly deformed, very sericitic. 30.85 30.90 Fault zone, broken core. 30.70 33.75 4A: QUARTZ-CARBONATE VEIN. Minor chlorite in vein. Very sericitic margins. 41.40 41.70 Broken core, minor quartz vein. Possible fault zone. 24.58 26.21 1% pyrite, locally up to 5% pyrite in areas of narrow quartz carbonate veining.	4923	26.21	27.71	1.50	.01	M	W	W	
		4924	27.71	29.26	1.55	.01	M	W	W	
		4925	29.26	30.80	1.54	.02	M	W	W	
		4926	30.80	32.31	1.51	.04	M	W	W	
		4927	32.31	33.81	1.50	.01	M	W	W	
		4928	33.81	35.36	1.55	.01	M	W	W	
		4929	35.36	36.86	1.50	.01	M	W	W	
		4930	36.86	38.40	1.54	.01	M	W	W	
		4931	38.40	39.90	1.50	.02	M	W	W	
		4932	39.90	41.45	1.55	.01	M	W	W	
		4933	41.45	42.95	1.50	.03	M	W	W	
		4934	42.95	44.45	1.50	.02	M	W	W	
		4935	44.45	46.00	1.55	.01	M	W	W	
		4936	46.00	47.55	1.55	.01	M	W	W	
		3201	47.55	49.10	1.55	.01	W	W	W	
		3202	49.10	50.60	1.50	.01	W	W	W	
		4922	24.58	26.21	1.63	.01	M	W	W	
		3203	50.60	52.10	1.50	.01	W	W	W	
		3204	52.10	53.64	1.54	.01	W	W	W	
		3205	53.64	55.14	1.50	.02	W	W	W	
		3206	55.14	56.69	1.55	.03	W	W	W	
		3207	56.69	58.10	1.41	.01	W	W	W	
		3208	58.10	59.74	1.64	.01	W	W	W	
		3209	59.74	60.60	.86	.02	W	W	W	
60.60 61.50	1E: LITHIC ARENITE Medium grained, clasts are sub-rounded quartz feldspar set in a quartz ankerite sericite matrix. 20% cubic pyrite in matrix. Rare fuchsite	4938	61.35	62.79	1.44	.02	W	W	W	

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	fragment.									
	60.60 61.35 2% pyrite in 1 cm quartz veinlet.	4937	60.60	61.35	.75	.01	M	W	W	
61.50 81.08	3B: MODERATE SERICITE SCHIST (+/- QTZ)									
	Similar to 24.58 to 60.6, except this section is more sericitic and pyritic. Contains 1 to 2% thin quartz ankerite stringers. Colour is light buff to grey 62.1 62.85. 60% narrow pyritic quartz stringers in sericitic argillite. Below 66 metres, the argillite becomes interbedded with thin siltstone beds which are weakly silicified and contain trace pyrite.	4939	62.79	64.29	1.50	.04	W	W	W	
		4940	64.29	65.84	1.55	.03	W	W	W	
		4941	65.84	67.34	1.50	.01	W	W	W	
		4942	67.34	68.88	1.54	.01	W	W	W	
		4943	68.88	70.38	1.50	.01	W	M	W	
		4944	70.38	71.93	1.55	.01	W	M	W	
		4945	71.93	73.43	1.50	.01	W	M	W	
		4946	73.43	75.08	1.65	.02	W	M	W	
		4947	75.08	76.58	1.50	.01	W	M	W	
		4948	76.58	78.03	1.45	.10	W	M	W	
	72.05 73.45 4A: QUARTZ-CARBONATE VEIN. Minor chlorite, sericitic margins.	4949	78.03	79.50	1.47	.42	M	S	W	
		4950	79.50	81.08	1.58	.01	M	S	W	
	76.55 76.9. Breccia. Possibly tectonic. Unit consists of poorly sorted quartz feldspar sericite ankerite clasts in a fine grained chloritic matrix. Fine dusting and the occasional cube of pyrite are present. Clasts have similar composition and vary in size from.5 to 3cm. Sharp upper contact lost core is marked by a 1 cm quartz vein with very sericitic margins.									
81.08 90.80	1A: ARGILLITE									
	Moderately chloritic. Contains up to 5% pyrite associated with silica replacements or narrow quartz veinlets.	3210	81.08	82.58	1.50	.04	M	S	W	
		3211	82.58	84.12	1.54	.26	M	S	W	
		3212	84.12	85.62	1.50	.19	M	S	W	
		3213	85.62	87.17	1.55	.22	M	M	W	
		3214	87.17	88.67	1.50	.01	M	M	W	
		3215	88.67	90.22	1.55	.01	M	M	W	
		3216	90.22	91.80	1.58	.28	W	M	W	
90.80 93.27	3B: QUARTZ-SERICITE-CARBONATE SCHIST									
	Thinly banded at 60 degrees to the core axis. Last 1.5 meters contains 5% disseminated pyrite.	3217	91.80	93.27	1.47	1.45	M	M	W	
93.27 101.65	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY									

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	Section is highly variable in composition and alteration intensity. General description would be as follows:. Weakly banded to massive cherty sediments which take on a light red hue and become moderately magnetic below 93.5 metres. Numerous chloritic stringers oriented sub-parallel to bedding in upper 5 metres of section. Average pyrite content is 1 to 3% and average magnetite content is 1 to 2%. The highest magnetite concentrations occur in the deeper red sections. Locally the rock is moderately to heavily crackle fractured and these fracture may contain up to 40% very fine disseminated pyrite.	4951	93.27	94.77	1.50	.34	M	M	M	
		4953	96.32	97.82	1.50	.01	M	M	M	
		4954	97.82	99.36	1.54	.01	M	M	M	
		4955	99.36	101.65	2.29	.01	M	M	M	
	93.4 93.6. Fault zone. Rusty, broken core. Red brown colour, locally bleached grey-white.									
	94.77 96.32 Trace to 1% pyrite, locally 2% pyrite in bleached sections.	4952	94.77	96.32	1.55	.62	M	M	M	
101.65 102.45	3C: INTENSE SILICA-CARBONATE FLOODING									
	Heavy crackle fracture, several quartz carbonate stringers.									
	101.65 102.45 15% disseminated pyrite in silicified arenite and narrow quartz carbonate veinlets.	4956	101.65	102.45	.80	7.45	S	W	S	
102.45 105.00	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY									
	As per description of unit from 93, 27 to 101.65 meters.	4957	102.45	103.95	1.50	1.37	S	W	S	
		4958	103.95	105.46	1.51	.02	M	M	M	
105.00 119.00	3B: QUARTZ-SERICITE-CARBONATE SCHIST									
	This unit consists of alternating bands of chlorite-rich and quartz-carbonate rich material. Where chlorite is present, magnetite is absent or present in very minor amounts compared to the quartz carbonate altered sections.	4960	106.96	108.51	1.55	.01	M	M	M	
		4961	108.51	110.01	1.50	.01	M	M	M	
		4962	110.01	111.56	1.55	.19	M	M	M	
		4963	111.56	113.06	1.50	.04	M	M	M	
		4964	113.06	114.60	1.54	.01	M	M	M	
		4965	114.60	116.10	1.50	.02	M	M	M	
		4966	116.10	117.65	1.55	.01	M	M	M	
	105.46 106.96 Locally 5% disseminated pyrite and trace to 1% magnetite.	4959	105.46	106.96	1.50	.21	M	M	M	
	117.65 119.35 3 to 10% pyrite in bleached and red stained arenite.	4967	117.65	119.35	1.70	.12	M	M	M	

Interval (m)	Description	Sample No.	Interval (m)	Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
119.00 136.74	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY								
	At 120 metres, the unit is very thinly banded at 65 degrees to the core axis.	4968	119.35 120.70	1.35	.03	M	M	M	
		4969	120.70 122.15	1.45	1.26	M	M	M	
	130.54 131.3. Fault zone. Broken core, 2% fine disseminated pyrite.	4972	125.30 126.80	1.50	.01	M	M	M	
		4973	126.80 127.85	1.05	.01	M	M	M	
	122.15 123.75 Section contains 5 cm quartz vein and 5 to 10% pyrite in heavy crackle fracture.	4970	122.15 123.75	1.60	.30	M	M	M	
		4975	129.30 131.30	2.00	4.80	S	W	S	
		4976	131.80 132.89	1.09	.58	M	M	M	
	123.75 125.30 Local strong crackle fracture with 10% pyrite.	4971	123.75 125.30	1.55	.03	M	M	M	
		4977	132.89 134.44	1.55	1.27	M	W	M	
	127.85 129.30 3 to 5% pyrite as stringers and disseminations in silicified cherty unit.	4974	127.85 129.30	1.45	.65	M	M	M	
		4978	134.44 136.74	2.30	2.38	S	W	M	
136.74 146.70	3B: MODERATE SERICITE SCHIST (+/- QTZ)								
	The alteration intensity gradually decreases to very minor sericite by the end of this section. Minor interbedded red hematitic alteration with trace magnetite grains.	3219	138.99 142.04	3.05	1.64	S	W	M	
		3220	142.04 145.08	3.04	.02	S	W	M	
		3221	145.08 146.70	1.62	1.51	M	M	M	
	136.74 138.99 Avg pyrite is 7 to 10% and locally it may reach 30% in and near narrow bedding parallel quartz veins.	3218	136.74 138.99	2.25	.34	S	W	M	
146.70 189.00	1A: ARGILLITE								
	Moderately chloritic, very little alteration. Thinly bedded but highly deformed. Strong crenulation cleavage at 70 to 90 degrees to the core axis. Local minor thin beds of red hematitic alteration are present and these are very weakly magnetic. There are also several cherty beds with semi-massive pyrite.	3222	146.70 148.13	1.43	.42	M	M	M	
		3223	148.13 151.18	3.05	1.11	M	M	M	
		3224	151.18 154.23	3.05	3.34	M	M	M	
		3225	154.23 157.28	3.05	1.00	M	M	M	
		3226	157.28 160.32	3.04	.03	W	M	W	
		3227	160.32 163.37	3.05	.28	W	M	W	
		3228	163.37 166.42	3.05	.07	M	M	W	
		4777	166.42 169.47	3.05	.02	M	M	W	
		4778	169.47 172.52	3.05	.01	M	M	W	
		4779	172.52 175.57	3.05	.01	M	M	W	
		4780	175.57 178.62	3.05	.01	M	M	W	
		4781	178.62 181.67	3.05	.01	M	M	W	
		4782	181.67 184.72	3.05	.12	M	M	W	
		4783	184.72 186.21	1.49	.01	M	M	W	
		3229	186.21 187.76	1.55	.01	W	W	M	
		3230	187.76 189.00	1.24	.01	W	W	M	
189.00 194.85	1B: LITHIC ARENITE								

Interval (m)	Description	Sample No.	Interval (m)	Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	Fine grained. Feldspar clasts are altered to ankerite. Chloritic matrix. Thickly bedded. Becomes weakly altered last 1 metre.	3231	189.00 190.80	1.80	.01	W	W	M	
		3232	190.80 193.85	3.05	.01	W	W	M	
		3233	193.85 194.85	1.00	.01	W	W	M	
194.85 201.70	1D: SILTSTONE								
	Interbedded with argillite. Top 2 metres weakly altered. Siltstone appears to be broken and the more argillaceous beds flow around the broken fragments of the siltstone. The angles to the core axis are highly variable. A few graphitic slips are present.	4784	196.90 198.40	1.50	.01	M	M	M	
		4785	198.40 199.90	1.50	.04	M	M	M	
		4786	199.90 201.70	1.80	.02	M	M	M	
	194.85 196.90 1 to 3% fine disseminated pyrite in conglomerate.	3234	194.85 196.90	2.05	2.31	W	W	M	
201.70 208.50	1F: CONGLOMERATE								
	Moderately altered, weakly pyritic (1 to 2%). Alteration contacts correspond with bedding contact. Clasts are mainly subrounded quartzo-feldspathic set in a sericite quartz matrix. Unit is clast-supported. Very sharp lower bedding contact corresponding with end of weak alteration.	3235	201.70 203.20	1.50	.01	W	W	M	
		3236	203.20 204.70	1.50	.04	W	W	M	
		3237	204.70 206.60	1.90	.11	W	W	M	
		3238	206.60 208.50	1.90	.05	W	W	M	
208.50 214.50	1B: ARGILLITE WITH GRAPHITIC SLIPS								
	Black, fine grained, contains 1 to 2% cubic pyrite. Heavily veined with crenulated quartz ankerite veins from 208.5 to 211.5 metres. These veins contain 1 to 10% pyrite as masses. Numerous graphitic slips in and around the veins.	4980	210.00 211.50	1.50	.12	W	M	M	
	208.50 210.00 30% pyritic quartz veins in section of graphitic argillite.	4979	208.50 210.00	1.50	.19	W	W	M	
214.50 215.50	1D: SILTSTONE								
	Weakly altered, contains 3% quartz ankerite veinlets.								
	214.50 215.50 3% pyrite in quartz ankerite veinlet in altered siltstone.	4981	214.50 215.50	1.00	.01	M	M	M	
215.50 261.50	1B: ARGILLITE WITH GRAPHITIC SLIPS								

Interval (m)	Description	Sample No.	Interval (m)	Length (m)	Au (g/t)	ALTERATION % MIL	SER	CARB	% PY
	Interbedded with fine grained light grey silst.	4982	220.25 222.80	2.55	.07	M	W	M	
	220.25 222.80 4A: QUARTZ-CARBONATE VEIN. Chloritic margins.	3239	222.80 224.33	1.53	.07	M	W	M	
		3240	224.33 227.38	3.05	.02	M	W	M	
		3241	227.38 230.43	3.05	.01	M	W	M	
	Below the veins, light grey fine grained siltstone is dominant. It is weakly sericitic and contains 10% quartz ankerite stringers.	4983	257.40 258.40	1.00	.01	M	W	W	
		4984	258.40 259.25	.85	.14	W	M	W	
		4985	259.85 261.50	1.65	.04	W	M	W	
	230.43 234.18 From 215.5 to 234.8 the pyrite appears sedimentary in nature.	3242	230.43 234.18	3.75	.02	M	W	M	
	234.18 235.00 1 to 3% pyrite.	3243	234.18 235.00	.82	.15	M	M	M	
261.50 294.15	1A: ARGILLITE Locally sericitic, becoming more so down the hole. 2% pyrite.								
294.15 344.00	3E: MODERATE SERICITE SCHIST (+/- QTZ) Alteration intensity increases here and 3 to 5% black quartz ankerite stringers are present with up to 5% pyrite contained in these stringers. These stringers are bedding parallel but occasionally may crosscut the bedding.	3244	294.64 295.94	1.30	.09	W	W	W	
		3246	297.48 298.98	1.50	.09	W	W	W	
		3247	298.98 300.53	1.55	.01	W	W	W	
		3248	300.53 302.03	1.50	.03	W	W	W	
		3249	302.03 303.58	1.55	.01	W	W	W	
		3250	303.58 305.08	1.50	.20	W	W	W	
		3251	305.08 306.63	1.55	.12	W	W	W	
	295.94 297.48 In section from 294 to 315 metres, there is 1 to 2% disseminated pyrite in argillite and trace pyrite in black quartz ankerite stringers.	3245	295.94 297.48	1.54	.01	W	W	W	
		3252	306.63 308.13	1.50	.04	W	W	W	
		3253	308.13 309.68	1.55	.01	W	W	W	
		3254	309.68 311.18	1.50	.08	W	W	W	
		3255	311.18 312.72	1.54	.03	W	W	W	
		3256	312.72 314.22	1.50	.05	W	W	W	
		3257	314.22 315.77	1.55	.04	W	W	W	
		3258	315.77 317.27	1.50	.01	W	W	W	
		3259	317.27 318.82	1.55	.01	W	W	W	
		3260	318.82 320.32	1.50	.01	W	W	W	
		3261	320.32 321.87	1.55	.01	W	W	W	
		3262	321.87 323.37	1.50	.02	W	W	W	
		3263	323.37 324.92	1.55	.95	W	W	W	
		3264	324.92 326.42	1.50	.01	W	W	W	
		3265	326.42 327.96	1.54	.03	W	W	W	
		3266	327.96 329.46	1.50	.07	W	W	W	
	329.46 331.01 2% pyrite.	3268	331.01 332.56	1.55	.01	W	W	W	
		3269	332.56 334.06	1.50	.01	W	W	W	
		3270	334.06 335.56	1.50	.01	W	W	W	
		3271	335.56 337.11	1.55	.02	W	W	W	
		3272	337.11 338.66	1.55	.01	W	W	W	
		3273	338.66 340.16	1.50	.01	W	W	W	
		3274	340.16 341.66	1.50	.01	W	W	W	
		3275	341.66 343.20	1.54	.01	W	W	W	

Interval (m)	Description

Sample No.	Interval (m)	Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
3276	343.20	344.00	.80	.03	W	W	W

344.00 352.05 1E: LITHIC ARENITE
Weakly altered. Ankerite replaces clasts which are up to 2mm in diam.

352.05 355.19 1A: ARGILLITE
Fine grained, black, thinly bedded. 2 to 5% pyrite in bedding parallel seams 2 to 5 mm wide. 1% black quartz ankerite stringers. Bedding attitudes are at 45 degrees to the core axis and crenulation cleavage is at 70 degrees to the core axis.
352.05 353.30 2 to 4% pyrite in bedding parallel stringers.

355.19 386.82 1E: LITHIC ARENITE
Moderately silicified, fine grained to medium grained, hard. Clasts replaced by quartz and ankerite, sericitic matrix. Bedding at 45 degrees to the core axis.
357.84 359.34 From 356.34 to 377.62 metres, there are numerous.5 to 2cm wide bedding parallel stringers of quartz and ankerite with 20% pyrite.
359.34 361.00 Section contains up to 15% quartz ankerite stringers, as described above.
364.00 366.98 Avg pyrite content is 10%, locally 25% in and near heavier concentrations of black qyz ankerite veinlets.
374.58 376.12 From 375.5 to 378.47 metres there is 2 to 4% coarse arsenopyrite needles, 5 to 10% pyrite.
385.88 387.38 1% fine disseminated pyrite, 5% thin quartz veinlets.

386.82 388.80 1E: LITHIC ARENITE
Medium to fine grained, weakly silicified.

388.80 392.72 3E: MODERATE SERICITE SCHIST (+/- QTZ)

Interval (m)	Description	Sample No.	Interval (m)	Length (m)	Au (g/t)	ALTERATION SER	CARB	% PY
	Sericitic, fine grained, thinly bedded, black. 5% black quartz ankerite stringers parallel to bedding. Bedding is at 40 degrees to the core axis. 388.92 390.42 Black quartz ankerite stringers contain 20% pyrite and trace to 1% arsenopyrite.							
392.72 394.90	1E: LITHIC ARENITE Medium to fine grained, moderately silicified, a few 1.5 cm veinlets. 393.47 395.02 Up to 2% fine disseminated pyrite.							
394.90 400.60	3E: MODERATE SERICITE SCHIST (+/- QTZ) Moderately sericitic, fine grained, thinly bedded, beds are at 45 degrees to the core axis. 399.57 401.12 Pyrite content incresing down the hole to 3 to 5%.							
400.60 407.00	1E: LITHIC ARENITE Medium to fine grained, weakly silicified. Bedding is at 50 degrees to the core axis. 405.66 407.21 5% disseminated pyrite from 407 to 414 metres.							
407.00 423.85	3E: MODERATE SERICITE SCHIST (+/- QTZ) Moderately sericitic, weakly silicified. Several quartz carbonate veinlets up to 8 cm wide carry trace pyrite. Bedding is at 60 degrees to the core axis and decreases to 0 degrees near the end of the section.							
423.85 430.43	1E: LITHIC ARENITE Weakly silicified, ankerite rich. Medium grey, hard, trace pyrite. 423.95 425.50 1 to 2% disseminated pyrite, weakly silicified. Up to 10% pyrite in very narrow quartz carbonate veinlets.							

Interval (m)	Description	Sample No.	Interval (m)	Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
430.43 438.12	1A: ARGILLITE Fine grained, thinly bedded, dark grey to black. 5% thin quartz ankerite veinlets parallel to bedding. Bedding is at 50 degrees to the core axis. 434.64 436.19 Minor green carbonate present in narrow quartz carbonate veinlets from 433.72 to 433.8 metres.								
438.12 441.03	1B: LITHIC ARENITE Medium to fine grained, grey, hard. Weakly altered, 2% thin grey quartz ankerite veinlets at varying orientations to the core axis.								
441.03 448.13	1A: ARGILLITE Moderately sericitic, fine grained, thinly bedded. Up to 10% fine arsenopyrite needles noted at 446.2 metres.								
448.13 462.20	1B: LITHIC ARENITE Medium to fine grained, medium grey in colour, moderately hard. Moderately ankeritic, weakly sericitic. Bedding is at 45 degrees to the core axis. 1% pyrite, trace arsenopyrite needles. 462.20 End Of Hole.								

DH T-12

Core size: BQ
Drilled by: J.T. THOMAS D.D.

Started: Dec. 14/86
Finished: DEC.16/86

Logged by: J. MACPHERSON
Date logged: DEC. 18/86
System:

Azimuth: 180
Dip: -50

Depth	Az	Dip
123.40		-48.0

Grid: Detail #3, West Half
Purpose: To test up-dip extension of gold intersection in T-1
Claim: 956076

Northing: 3+25 N
Easting: L 3600E
Elevation:

Length: 123.75m

J. MacPherson

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
.00 25.60	OVERBURDEN									
25.60 43.65	3E: MODERATE SERICITE SCHIST (+/- QTZ)									
	Thinly bedded and locally highly deformed and brecciated. Strong crenulation cleavage at 90 degrees to the core axis.	4758	27.52	29.66	2.14	1.81	W	S	M	
		4759	29.66	31.65	1.99	.03	W	S	M	
		4761	32.31	33.86	1.55	.01	W	M	M	
		4762	33.86	35.36	1.50	.04	W	M	M	
		4763	35.36	36.80	1.44	.13	W	M	M	
		4764	36.80	38.30	1.50	.02	W	M	M	
		4765	38.30	39.75	1.45	.03	W	M	M	
		4766	39.75	40.65	.90	.01	W	M	M	
		4767	40.65	41.20	.55	.01	W	M	M	
		4768	41.20	42.05	.85	.05	M	W	M	
		4769	42.05	42.75	.70	.02	M	W	M	
	25.60 27.52 Sediment breccia. Highly deformed, moderately sericitic, soft, greenish black. Unit consists of angular fragments of cherty sediment in sericite carbonate matrix.									
	29.66 33.86 Medium to dark green bands interbedded with light grey hard bands with 3 to 5% pyrite. Possible quartz carbonate sericite schist.	4770	42.75	43.65	.90	.06	M	W	M	
	40.65 41.20 4A: QUARTZ-CARBONATE VEIN. Chlorite in vein and margins.									
	25.60 27.52 Average 1% pyrite as fine disseminations or small cubes.	4757	25.60	27.52	1.92	.19	W	S	M	
	31.65 32.31 Quartz ankerite veinlet with 3 to 7% fine pyrite.	4760	31.65	32.31	.66	.01	W	M	M	
43.65 46.70	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY									
	Contains 1 to 5% fine euhedral magnetite grains set in a fine grained quartz ankerite hematite matrix. Colour varies from orange red to light	4771	43.65	45.20	1.55	.32	M	M	M	
		4772	45.20	46.70	1.50	.03	M	M	M	

Interval (m)		Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
		grey buff. In the latter sections magnetite is absent and there is a substantial increase in the amount of pyrite to near 20% on the average. Core angles vary from 30 to 45 degrees where banding is present.									
		43.65 45.20 Grey buff, very hard, 10% pyrite.									
46.70	48.65	3C: INTENSE SILICA-CARBONATE FLOODING Local semi-massive pyrite, very heavy alteration.									
		46.70 48.65 Locally 15% pyrite over 5 cm, several massive pyrite bands sub-parallel to the core axis.	4773	46.70	48.65	1.95	.33	S	W	M	
48.65	51.52	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY Typical red hematitic alteration with 1 to 2% euhedral magnetite and 3% pyrite.	4774	48.65	51.52	2.87	1.28	S	W	M	
51.52	52.75	3C: INTENSE SILICA-CARBONATE FLOODING Grey white, near complete magnetite destruction and 10% pyrite on the average.									
		51.52 52.75 Heavy sulphides - up to 30% over a few centimeters, average is 10%.	4775	51.52	52.75	1.23	4.20	S	W	S	
52.75	53.85	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY 1 to 2% euhedral magnetite, 3% fine disseminated pyrite.									
		52.75 53.85 Section contains a 2 cm quartz vein with 40% pyrite.	4776	52.75	53.85	1.10	.15	M	W	S	
53.85	54.45	3C: INTENSE SILICA-CARBONATE FLOODING Hilghly altered, buff colour, 10% pyrite.									
		53.85 54.45 10 to 15% disseminated pyrite.	4787	53.85	54.45	.60	4.22	S	M	S	
54.45	67.60	3A: RED MAGNETITE-BEARING ARENITE OR									

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	QUARTZ-FELDSPAR PORPHYRY									
	Red brown, 1% magnetite and 3 to 5% fine disseminated pyrite in a very siliceous matrix. A few narrow zones of quartz carbonate replacement usually 10 cm wide or less.	4689	56.08	57.65	1.57	.02	S	M	S	
		4793	57.65	59.10	1.45	.01	S	M	S	
		4797	62.79	64.34	1.55	.03	M	M	M	
		4798	64.34	65.84	1.50	.01	M	M	M	
		4799	65.84	67.60	1.76	3.18	S	M	S	
	54.45 56.08 1 to 5% magnetite, 3 to 5% fine disseminated pyrite.	4788	54.45	56.08	1.63	1.00	S	M	S	
	59.10 59.74 Average 10 to 15% fine disseminated pyrite.	4794	59.10	59.74	.64	7.20	S	M	S	
	59.74 61.00 Average 5 to 8% fine disseminated pyrite.	4795	59.74	61.00	1.26	.25	S	M	S	
	61.00 62.79 Average 1 to 3% euhedral magnetite grains, 3 to 5% fine disseminated pyrite.	4796	61.00	62.79	1.79	.27	S	M	S	
67.60 71.89	3B: QUARTZ-SERICITE-CARBONATE SCHIST									
	Moderately sericitic with thin bands of quartz carbonate alternating with sericite and carbonate rich bands. Unit also carries 15% banded pyrite.									
	67.60 69.48 Average 2 to 3% fine disseminated pyrite.	4800	67.60	69.48	1.88	.23	W	M	S	
	69.48 70.50 25 to 30% fine disseminated pyrite, also banded pyrite	2201	69.48	70.50	1.02	.27	W	S	S	
	70.50 71.15 10 to 15% pyrite.	2202	70.50	71.15	.65	.43	W	S	S	
	71.15 71.98 20 to 30% banded pyrite.	2203	71.15	71.98	.83	6.48	W	S	S	
71.89 73.74	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY									
	Typical red hematitic alteration with 1% euhedral magnetite and 5% fine disseminated pyrite.									
	71.98 73.74 50% pyrite in thin quartz carbonate replacements 1 to 3 cm wide at 60 degrees to the core axis.	2204	71.98	73.74	1.76	13.80	M	S	S	
73.74 90.57	3C: INTENSE SILICA-CARBONATE FLOODING									
	Varies in colour from light brown to grey. Weakly banded at 50 degrees to the core axis. Cut by several narrow quartz carbonate veinlets with 3 to 5% fine disseminated pyrite.	2206	74.76	76.18	1.42	.07	S	W	S	
		2207	76.18	78.03	1.85	.06	S	W	S	
		2210	81.08	82.40	1.32	.01	M	W	M	
		2212	83.85	85.47	1.62	.05	M	W	M	
		2213	85.47	87.17	1.70	.02	M	W	M	
	73.74 74.76 5% pyrite.	2205	73.74	74.76	1.02	1.31	S	W	S	
	78.03 79.60 3 to 5% fine disseminated pyrite.	2208	78.03	79.60	1.57	1.44	S	W	S	
		2215	88.90	90.57	1.67	.06	M	W	M	
	79.60 81.08 1% magnetite and 3 to 5%	2209	79.60	81.08	1.48	.01	M	W	S	

...terval (m)	----------Description----------	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	fine disseminated pyrite.									
	82.40 83.85 2% euhedral magnetite and 3% fine disseminated pyrite.	2211	82.40	83.85	1.45	.01	M	W	M	
	87.17 88.80 2% magnetite and 3% fine disseminated pyrite.	2214	87.17	88.80	1.63	.04	M	W	M	
90.57 95.66	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY									
	Red colour fading out towards the end of the section coincident with smaller amount of euhedral magnetite. Pyrite concentration varies from 2 to 10% locally over a few centimeters where there has been some weak silica carbonate replacement.	2217	90.98	92.10	1.12	.02	S	W	M	
		2218	92.10	93.27	1.17	.22	M	W	M	
		2219	93.27	94.47	1.20	.01	M	W	M	
		2220	94.47	95.66	1.19	.01	M	W	M	
	90.57 90.98 Light brown quartz crackle with 10 to 15% fine disseminated pyrite	2216	90.57	90.98	.41	.21	S	W	M	
95.66 114.60	3E: MODERATE SERICITE SCHIST (+/- QTZ)									
	Weakly sericitic, thinly bedded, black, very fine grained. Crenulation cleavage is at 85 degrees to the core axis. A few quartz veins up to 25 centimeters thick are present. These have sericitic margins and contain trace amounts of pyrite.	3149	95.66	97.50	1.84	.21	W	W	W	
		3150	97.50	99.36	1.86	.06	W	W	W	
		3151	99.36	100.91	1.55	.60	W	W	W	
		3152	100.91	102.41	1.50	.69	W	W	W	
		3153	102.41	103.96	1.55	.85	W	W	W	
		3154	103.96	105.46	1.50	.02	W	W	W	
		3155	105.46	107.01	1.55	.04				
		3156	107.01	108.51	1.50	.10				
		3157	108.51	110.06	1.55	.03				
		3158	110.06	111.56	1.50	.01				
		3159	111.56	113.10	1.54	.01				
		3160	113.10	114.60	1.50	.02				
114.60 123.75	1E: LITHIC ARENITE									
	Medium to fine grained, grey, bedding is at 35 degrees to the core axis, moderately hard. 5% quartz ankerite veining.	3162	116.10	117.65	1.55	.03				
		3163	117.65	119.15	1.50	.06				
		3164	119.15	120.70	1.55	.04				
		3165	120.70	122.20	1.50	.08				
	123.75 End Of Hole.	3166	122.20	123.75	1.55	.02				
	114.60 116.10 1% disseminated pyrite.	3161	114.60	116.10	1.50	.01				

DH T-13

Core size:
Drilled by: J.T. THOMAS D.D.

Started: Dec. 16/86
Finished: Dec. 19/86

Logged by: J. MacPherson
Date logged: Dec. 19/86
System:

Azimuth: 160
Dip: -50

Depth	Az	Dip
91.46		-48.0

Grid: Detail #3 Grid, West Half
Purpose: To test Red Zone
Claim: 956079

Northing: 350 N
Easting: 3540 E
Elevation:

Length: 154.23m

J. MacPherson

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
.00 23.16	OVERBURDEN									
23.16 28.86	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY 1 to 3% fine grained euhedral magnetite in a fine grained siliceous orange red matrix. Minor bedding parallel quartz stringers. Bedding is highly deformed at low angles to the core axis.	2222	24.35	25.15	.80	.01	W	N	W	
		2223	25.15	26.95	1.80	.01	W	N	W	
		2224	26.95	28.86	1.91	.13	W	N	W	
	23.16 24.35 Trace to 1% fine disseminated pyrite.	2221	23.16	24.35	1.19	.20	W	N	W	
28.86 29.26	4A: QUARTZ-CARBONATE VEIN Vein contains 20% chlorite at margins and as inclusions.	2225	28.86	30.05	1.19	.01	W	N	W	
29.26 32.31	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY Typical red hematitic alteration interbedded with minor chloritic argillite. Section is moderately to highly altered and intensity of alteration is increasing down the hole.									
	30.05 32.31 1% pyrite.	2226	30.05	32.31	2.26	1.02	W	N	M	
32.31 32.71	4A: QUARTZ-CARBONATE VEIN Sheared contacts. Marks the beginning of moderate to intense silica carbonate alteration.									
	32.31 33.81 2 to 5% pyrite.	2227	32.31	33.81	1.50	.74	M	N	M	

Interval (m)		Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
32.71	38.65	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY									
		Medium orange red colour, up to 2% euhedral magnetite locally. Sections 20 to 100 cm wide contain 5:10 fine disseminated pyrite. Best concentrations of pyrite occur where the magnetite is absent.	2228	33.81	35.90	2.09	1.41	M	M	M	
		35.90 37.40 5 to 10% fine disseminated pyrite, locally in masses.	2229	35.90	37.40	1.50	3.90	M	M	M	
		37.40 38.65 2% pyrite.	2230	37.40	38.65	1.25	.05	M	M	M	
38.65	48.00	3C: INTENSE SILICA-CARBONATE FLOODING									
		Colour is buff grey to yellow. Finely banded at 0 to 20 degrees to the core axis. Top 20 cm is blue grey quartz with 10% very fine pyrite. Trace fuchsitic fragments are present. Bands are highly deformed and exhibit moderate crenulation cleavage at right angles to the core axis. Bottom three metres of this unit contains interbeds of a fine grained chloritic unit, also highly deformed with bedding angles at 20 degrees to the core axis.	2231	38.65	40.10	1.45	.03	M	M	M	
			2232	40.10	41.20	1.10	.01	S	M	S	
			2026	41.20	44.50	3.30	.05	S	M	S	
			2027	44.50	47.55	3.05	.22	S	M	S	
			2028	47.55	50.20	2.65	.49	S	M	S	
48.00	50.20	4A: QUARTZ-CARBONATE VEIN									
		Quartz ankerite chlorite vein with numerous inclusions of sericitic sediments.									
50.20	52.05	3C: INTENSE SILICA-CARBONATE FLOODING									
		Blue grey quartz fracture fillings and flooding throughout the section, locally brecciated. 10% Crackle fracture, 5 to 15% fine pyrite as disseminations and fracture fillings.									
		50.20 52.05 5 to 15% fine pyrite as disseminations and fracture fillings.	2233	50.20	52.05	1.85	.18	I	M	I	
52.05	53.80	3B: QUARTZ-SERICITE-CARBONATE SCHIST									
		Well banded at 70 degrees to the core axis. Consists of alternating bands of									

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	sericite carbonate, silica carbonate, and pyrite usually less then 1 cm wide. Bands are locally deformed and bedding angles may decrease locally to 20 degrees to the core axis.									
	52.05 53.80 Average 3% pyrite , varies fron 2 to 10%.	2234	52.05	53.80	1.75	.40	S	M	S	
53.80 61.79	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY									
	Typical red hematitic alteration, with last 2 metres interbedded with fine grained chloritic sediments. Section is moderately to intensely altered. Where present, bedding is at 50 degrees to the core axis.	2236	55.30	56.70	1.40	.02	M	M	M	
		2237	56.70	57.55	.85	.04	M	M	M	
		2239	57.95	58.84	.89	1.08	M	M	M	
		2240	58.84	59.74	.90	.40	M	M	M	
		2241	59.74	60.35	.61	1.70	M	M	M	
		2242	60.35	60.55	.20	.77	S	M	M	
	53.80 55.30 Average 3 to 7% fine disseminated pyrite.	2235	53.80	55.30	1.50	.02	M	M	M	
		2243	60.55	61.79	1.24	.06	I	M	I	
	57.55 57.95 At 57.4 metres there is a 2 cm band of semi-massive pyrite.	2238	57.55	57.95	.40	1.15	M	M	M	
61.79 63.45	4A: QUARTZ-CARBONATE VEIN									
	Brecciated quartz ankerite pyrite vein. Upper contact at 10 degrees to the core axis, lower contact at 60 degrees to the core axis. Vein show signs of numerous re-openings and remobilizations giving rise to an excellent crack-seal texture. Pyrite occurs as masses and fracture fillings in the vein. Average pyrite content is 30%, but this may increase to 60% over 15 to 20 cm of heavily fractured vein material. Interior fracture fillings of tourmaline or graphite are visible.	2244	61.79	63.45	1.66	3.00	I	M	I	
63.45 66.00	1A: ARGILLITE									
	Brecciated and intensely silicified. Weakly banded at 60 degrees to the core axis. Chloritic. Banding disappears at 64.0 metres. From this point to the end of the section the unit is a quartz ankerite pyrite breccia.	2245	63.45	64.00	.55	.17	I	M	I	
		2246	64.00	65.00	1.00	.19	I	M	I	
		2247	65.00	66.05	1.05	.21	I	M	I	

Interval (m)		Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
66.05	67.60	3B: QUARTZ-SERICITE-CARBONATE SCHIST Well banded. Numerous bedding parallel quartz ankerite stringers containing 2 to 5% fine pyrite. Also contains numerous chloritic blebs making up 5% of the rock. Final 10 cm of section is intensely silicified and pyritic.	2248	66.05	67.60	1.55	.47	S	M	S	
67.60	70.08	4A: QUARTZ-CARBONATE VEIN Probable brecciated quartz ankerite vein similar to that from 61.79 63.45 metres. Local good crackle fracture +/- chloritic stringers. Upper and lower contacts are at 60 degrees to the core axis. Last 70 cm is a late pink quartz calcite vein with sharp contacts andesite inclusions of moderately pyritic wallrock.	2250	68.30	69.40	1.10	1.22	S	W	S	
			2251	69.40	70.08	.68	.43	S	W	S	
		67.60 68.30 5 to 15% pyrite as cubes andesite masses.	2249	67.60	68.30	.70	.38	S	W	S	
70.08	72.75	3B: QUARTZ-SERICITE-CARBONATE SCHIST Weakly to moderately banded at 60 to 70 degrees to the core axis. Locally heavy silicification and brecciation. Lower contact brecciated but sharp at 70 degrees to the core axis.	2252	70.08	70.90	.82	.98	S	W	S	
			2253	70.90	72.45	1.55	.81	I	W	I	
			2254	72.45	72.75	.30	1.00	I	W	I	
72.75	73.80	3C: INTENSE SILICA-CARBONATE FLOODING Locally sericitic and siliceous with 30% silica ankerite crackle fracture. Bottom 30 cm is very siliceous and contains 25% quartz veins with 25% pyrite.									
		72.75 73.80 20% pyrite in quartz vein.	2255	72.75	73.80	1.05	.38	I	M	I	
73.80	77.00	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY Very minor magnetite only but still has the orange red colour. Pyrite content averages 5 to 7% but may increase to 30% over short intervals of silica carbonate flooding.	2256	73.80	74.51	.71	.36	I	M	I	
			2257	74.51	74.98	.47	.27	I	M	I	
			2258	74.98	75.76	.78	.21	I	M	I	
		75.76 77.00 3 to 7% pyrite as cubes and blebs.	2259	75.76	77.00	1.24	.19	S	W	M	

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
77.00 78.83	4A: QUARTZ-CARBONATE VEIN Light pink hue, weakly chloritic, minor sericitic in margins and in some inclusions. Upper contact is at 15 degrees to the core axis.	2260	77.00	78.83	1.83	.04	S	W	M	
78.83 88.55	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY Magnetite present in amounts up to 5%. Variably pyritic and weakly banded at 65 degrees to the core axis. Colur fades to a pale grey green by the end of the section and the magnetite disappears.	2261	78.83	80.78	1.95	.01	M	W	M	
		2262	80.78	82.40	1.62	.01	M	W	M	
		2263	82.40	84.12	1.72	.02	M	W	M	
		2265	86.60	88.55	1.95	.03	M	W	M	
	84.12 86.60 Trace to 2% pyrite.	2264	84.12	86.60	2.48	.01	M	W	M	
88.55 96.50	3E: MODERATE SERICITE SCHIST (+/- QTZ) Moderately sericitic and siliceous. Pale green, fine grained, thinly bedded at 55 degrees to the core axis. Average pyrite content is 3 to 5% pyrite.	2266	88.55	91.10	2.55	.22	M	W	M	
		2267	91.10	91.70	.60	.45	W	S	M	
		2268	91.70	93.27	1.57	.01	W	S	M	
		2269	93.27	93.85	.58	.01	W	S	M	
		2270	93.85	96.50	2.65	.23	W	S	M	
96.50 97.70	3B: QUARTZ-SERICITE-CARBONATE SCHIST Grey buff colour weakly banded, colour is pale green grey. Rock is moderately hard and contains up to 5% fine disseminated pyrite.									
	96.50 97.70 5% fine disseminated pyrite	2271	96.50	97.70	1.20	4.24	W	S	M	
97.70 105.20	3E: MODERATE SERICITE SCHIST (+/- QTZ) Same as section from 88.55 to 96.50 metres.	2272	97.70	99.36	1.66	.02	W	S	M	
		2273	99.36	101.55	2.19	.03	W	S	M	
		2274	101.55	102.70	1.15	.01	W	S	M	
		2275	102.70	104.20	1.50	.01	W	S	M	
		2276	104.20	105.20	1.00	.01	M	W	M	
105.20 106.30	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY Pale orange red colour, 1 to 2% fine euhedral magnetite, 2% fine disseminated pyrite.	2277	105.20	106.30	1.10	.01	W	S	M	

Interval (m)	Description	Sample No.	Interval (m)	Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
106.30 117.60	3B: QUARTZ-SERICITE-CARBONATE SCHIST Strongly sericitic, well banded, hard. Locally very deformed with bands running sub-parallel to the core axis. Becoming more chloritic down the hole.	2278	106.30 107.80	1.50	.01	W	S	M	
		2279	107.80 109.35	1.55	.01	W	S	M	
		2280	109.35 110.85	1.50	.03	W	S	M	
		2281	110.85 112.10	1.25	.01	W	S	S	
		2282	112.10 113.10	1.00	.20	W	M	M	
		3190	113.10 114.60	1.50	.07	M	S	S	
		3191	114.60 116.10	1.50	1.82	M	S	S	
		3192	116.10 117.60	1.50	.04	M	M	M	
117.60 130.00	1E: LITHIC ARENITE Fine grained to medium grained, chloritic stringers and bedding parallel seams. Very weak sericitic alteration. Gradational down the hole to conglomerate.	3193	117.60 119.20	1.60	.01	W	W	W	
		3194	119.20 120.70	1.50	.01	M	W	W	
		3195	120.70 122.20	1.50	.02	M	W	W	
		3196	122.20 123.75	1.55	.01	M	W	W	
		3197	123.75 125.25	1.50	.01	M	W	W	
		3198	125.25 126.80	1.55	.01	M	W	W	
		3199	126.80 128.30	1.50	.02	M	W	W	
		3200	128.30 129.84	1.54	.01	M	W	W	
		2001	129.84 131.44	1.60	.02	M	W	W	
130.00 138.70	1F: CONGLOMERATE Matrix supported (mainly chlorite and minor sericite). Clasts vary in size from 1 to 3 cm and consist of predominantly argillite and siltstone with minor chert and possible porphyry clasts. Below 135 metres, the conglomerate become weakly sericite altered but this fades out again at the lower contact.	2002	131.44 132.99	1.55	.01	M	W	W	
		2003	132.99 134.49	1.50	.01	M	W	W	
		2004	134.49 135.94	1.45	.01	M	W	W	
		2005	135.94 137.44	1.50	.03	M	W	W	
		2006	137.44 138.99	1.55	1.19	M	M	W	
138.70 140.50	1A: ARGILLITE Weakly sericitic, fine grained, medium grey black in colour, trace pyrite.	2007	138.99 140.50	1.51	.04	M	M	W	
140.50 140.80	4A: QUARTZ-CARBONATE VEIN Quartz ankerite veins mark an abrup end to the alteration system.	3181	140.50 142.03	1.53	.01	M	M	M	
140.80 154.23	1B: ARGILLITE WITH GRAPHITIC SLIPS 1 to 2% cubic pyrite. Graphite on bedding planes. Unaltered. 154.23 End Of Hole.	3182	142.03 143.53	1.50	.02				
		3183	143.53 145.08	1.55	.01				
		3184	145.08 146.58	1.50	.01				
		3185	146.58 148.13	1.55	.01				

erval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
		3186	148.13	149.63	1.50	.02				
		3187	149.63	151.18	1.55	.01				
		3188	151.18	152.68	1.50	.01				
		3189	152.68	154.23	1.55	.01				

DHT-14

Esso Minerals Canada - Robele JV (Ont 88)

Hole: T-14

Core size: BQ
Drilled by: J.T. THOMAS D.D.

Started: Dec.19/86
Finished: Dec. 21/86

Logged by: J. MacPherson
Date logged: Dec. 22/86
System:

Azimuth: 180
Dip: -45

Depth	Az	Dip
70.12		-40.0
145.12		-39.5

Grid: Detail Grid, West Half
Purpose: Test W extension of Au zone
Claim: 956079

Northing: 365 N
Easting: 3630 E
Elevation:

Length: 145.08m

J. MacPherson

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
.00 24.39	OVERBURDEN									
24.39 66.24	3F: STRONG SERICITE SCHIST (+/- QTZ) Generally thinly bedded with occasional thicker bed of siltstone. Very sericitic and moderately ankeritic. Locally silicified and contains up to 1% fine pyrite in thin quartz ankerite veinlets.	2008	24.39	26.21	1.82	.05	W	S	M	
		2009	26.21	29.26	3.05	.03	W	S	M	
		4791	29.26	32.31	3.05	.01	W	S	M	
		2021	32.31	35.36	3.05	.02	W	S	M	
		4790	35.36	38.41	3.05	.02	W	S	M	
		2022	38.41	41.46	3.05	.05	W	S	M	
		2026	41.46	44.51	3.05	.05	W	S	M	
		2027	44.51	47.55	3.04	.22	W	S	M	
		2028	47.55	50.60	3.05	.49	W	S	M	
		4792	50.60	53.65	3.05	.01	W	S	M	
		2023	53.65	56.70	3.05	.04	M	S	M	
		2024	56.70	59.75	3.05	.16	M	S	M	
		2025	59.75	62.79	3.04	.01	M	S	M	
		2283	62.79	66.24	3.45	.01	M	S	M	
59.95 62.75	4A: QUARTZ-CARBONATE VEIN. Contains numerous sericitic inclusions.									
66.24 79.90	3B: QUARTZ-SERICITE-CARBONATE SCHIST Moderately to well banded, locally intensely silica and carbonate altered and brecciated. 66.24 69.59. More siliceous with 30 to 40% fine disseminated pyrite. 5% thin quartz veins oriented sub-parallel to the core axis. Strong crenulation cleavage at 60 degrees to the core axis. 71.12 71.94. 20% banded pyrite. 71.94 73.94 Moderately siliceous, locally brecciated, 2 to 10% pyrite over 10 cm. 73.94 75.12 Crack seal vein at shallow	2284	66.24	66.75	.51	.03	M	S	M	
		2286	68.12	69.59	1.47	.20	S	W	S	
		2290	69.59	71.12	1.53	.04	S	W	S	
		2292	71.94	73.94	2.00	1.05	S	W	S	
		2294	75.12	77.63	2.51	.66	S	W	S	
		2296	79.10	79.90	.80	.03	S	W	S	

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	angle to the core axis.									
	77.63 79.10 Intense silicification containing up to 40% fine disseminated pyrite.									
	66.75 68.12 20% quartz ankerite veinlets with 10% pyrite.	2285	66.75	68.12	1.37	.28	M	S	M	
	71.12 71.94 20% pyrite in bands.	2291	71.12	71.94	.82	.60	S	W	S	
	73.94 75.12 20 to 30% pyrite in narrow crack seal vein sub-parallel to the core axis.	2293	73.94	75.12	1.18	3.12	S	W	S	
	77.63 79.10 40% pyrite locally over 15 cm.	2295	77.63	79.10	1.47	.37	S	W	S	
79.90 103.50	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY									
	Orange red colour. Contains up to 3% fine grained euhedral magnetite grains. Usually massive, but may show local weak banding at 60 degrees to the core axis.	2297	79.90	81.08	1.18	.01	W	M	M	
		2298	81.08	82.58	1.50	.22	W	M	M	
		2299	82.58	84.12	1.54	.80	W	M	M	
		2300	84.12	85.62	1.50	.06	W	M	M	
		2029	85.62	87.17	1.55	.01	W	M	M	
		2030	87.17	88.67	1.50	.20	W	M	M	
		2031	88.67	90.22	1.55	.02	W	M	M	
		2032	90.22	91.72	1.50	.14	W	M	M	
		2033	91.72	93.27	1.55	.01	W	M	M	
		2034	93.27	94.77	1.50	.01	W	M	W	
		2035	94.77	96.32	1.55	.01	W	M	W	
		2036	96.32	97.82	1.50	.02	W	M	W	
		2037	97.82	99.37	1.55	.03	W	M	W	
		2038	99.37	100.87	1.50	.04	W	M	W	
		2039	100.87	102.41	1.54	.01	M	M	M	
		2040	102.41	103.50	1.09	.01	M	M	M	
103.50 107.00	3C: INTENSE SILICA-CARBONATE FLOODING									
	Silica carbonate alteration is patchy but strong where present. Locally banded at 70 degrees to the core axis.	2042	103.80	104.86	1.06	.03	S	W	S	
		2043	104.86	106.12	1.26	.13	S	W	S	
		2044	106.12	107.00	.88	.10	S	W	S	
	103.50 103.80 20% pyrite in banded silicified section.	2041	103.50	103.80	.30	.07	S	W	S	
107.00 109.05	4A: QUARTZ-CARBONATE VEIN									
	5% Sericitic inclusions, 3% chloritic fracture fillings. Gradational upper contact, sharp lower contact.									
	107.00 109.05 1% pyrite in quartz ankerite vein.	2045	107.00	109.05	2.05	.69	S	W	S	

Interval (m)	Description	Sample No.	Interval (m)	Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
109.05 116.45	3C: INTENSE SILICA-CARBONATE FLOODING Local blue grey colour. Crackle fractured with 5 to 10% disseminated pyrite in fractures.	2046	109.05 110.00	.95	.01	S	W	S	
		2047	110.00 111.56	1.56	.01	I	M	S	
		2048	111.56 113.06	1.50	.01	S	M	S	
		2049	113.06 114.60	1.54	.01	S	M	S	
		2050	114.60 116.45	1.85	.01	S	M	S	
116.45 120.45	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY Wklt altered, light orange red colour, trace pyrite.	2051	116.45 118.25	1.80	.02	S	M	S	
		2052	118.25 119.80	1.55	.02	S	M	W	
		2053	119.80 120.45	.65	.01	S	M	W	
120.45 121.25	3C: INTENSE SILICA-CARBONATE FLOODING 10% Pyrite in quartz crackle veins.	2054	120.45 121.25	.80	.02	S	M	W	
121.25 128.30	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY Locally weakly crackle fractured with 5 to 10% fine disseminated pyrite. Trace to 1% fine euhedral magnetite.	2055	121.25 122.75	1.50	.02	S	M	W	
		2056	122.75 123.75	1.00	.02	S	M	W	
		2057	123.75 125.25	1.50	.02	S	M	W	
		2058	125.25 126.80	1.55	.03	S	M	W	
		2059	126.80 128.30	1.50	.01	W	W	W	
128.30 145.08	3E: MODERATE SERICITE SCHIST (+/- QTZ) Locally weakly altered. Thinly bedded, black with local greenish tinge. Deformed over short intervals. Average angle to the core axis is 60 degrees. Weakly chloritic over the last 5 metres 145.08 End Of Hole.	2010	128.30 129.84	1.54	.02	W	W	W	
		2011	129.84 131.34	1.50	.16	W	W	W	
		2012	131.34 132.89	1.55	.10	W	W	W	
		2013	132.89 134.39	1.50	.06	W	W	W	
		2014	134.39 135.94	1.55	.73	W	W	W	
		2015	135.94 137.44	1.50	.55				
		2016	137.44 138.99	1.55	.01				
		2017	138.99 140.49	1.50	.05				
		2018	140.49 142.04	1.55	.15				
		2019	142.04 143.54	1.50	.04				
		2020	143.54 145.08	1.54	.10				

DHT-15

Core size: BQ
Drilled by: J.T. THOMAS D.D.

Started: Jan. 18/87
Finished: Jan. 21/87

Logged by: J.MacPherson
Date logged: Jan. 21/87
System:

Azimuth: 180
Dip: -45

Depth Az Dip

Grid: Detail Grid #3, West Half
Purpose: To test west extension of Au zone
Claim: 956078, 956079

Northing: 3+25N
Easting: L 3640E
Elevation:

Length: 160.32m

J. MacPherson

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
.00 32.30	OVERBURDEN									
32.30 53.70	3F: STRONG SERICITE SCHIST (+/- QTZ) Strongly sericite altered, thinly bedded, fine grained, greenish black. Consists of parallel bands of quartz rich and sericite rich beds oriented at 60 degrees to the core axis. Unit is soft and contains less than 1% fine disseminated to cubic pyrite. Towards the end of the section alteration fades to moderate.	2301	32.31	33.40	1.09	.65	M	S	M	
		2302	33.40	34.44	1.04	1.40	M	S	M	
		2303	34.44	35.75	1.31	.57	M	S	M	
		2304	35.75	37.19	1.44	1.01	M	S	M	
		2305	37.19	38.40	1.21	.14	M	S	M	
		2306	38.40	39.90	1.50	.04	M	S	M	
		2307	39.90	41.45	1.55	.18	M	S	M	
		2308	41.45	42.95	1.50	1.41	M	S	M	
		2309	42.95	44.50	1.55	.23	M	S	M	
		2310	44.50	46.00	1.50	.02	M	S	M	
		2311	46.00	47.55	1.55	.01	M	S	M	
		2312	47.55	49.05	1.50	.01	M	S	M	
		2313	49.05	50.60	1.55	.01	M	S	M	
		2314	50.60	52.40	1.80	.05	M	S	M	
		2315	52.40	53.70	1.30	.72	M	S	M	
53.70 69.20	1A: ARGILLITE Weakly carbonate and sericite altered with a strong foliation at 90 degrees to the core axis. Beds are oriented at 15 degrees to the core axis.	2316	53.70	55.14	1.44	.03	M	S	M	
		2317	55.14	56.69	1.55	1.05	M	S	M	
		2318	56.69	58.39	1.70	.01	M	S	M	
		2319	58.39	60.02	1.63	.01	M	S	M	
		2320	60.02	61.15	1.13	.01	M	W	M	
		2321	61.15	61.46	.31	.01	M	W	M	
		2322	61.46	61.96	.50	.02	M	W	M	
		2323	61.96	62.98	1.02	.01	M	W	M	
		2324	62.98	63.77	.79	.01	M	W	M	
		2325	63.77	65.30	1.53	.01	M	W	M	
		2326	65.30	66.70	1.40	.02	M	W	M	
		2327	66.70	68.00	1.30	.01	M	W	M	
		2328	68.00	69.20	1.20	.05	M	W	M	

Interval (m)		Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
69.20	70.10	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY Gradational contact with overlying unit and lower contact is same. Unit contains 1 to 2% euhedral magnetite as foliation parallel streaks and discrete grains and trace pyrite.	2329	69.20	70.10	.90	.03	M	W	M	
70.10	71.73	1E: LITHIC ARENITE Thickly bedded, weakly altered, fine grained. Patchy orange alteration.	2330	70.10	71.73	1.63	.01	M	S	S	
71.73	74.86	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY Light orange red colour, trace pyrite, 1% magnetite.	2331	71.73	73.48	1.75	.14	M	M	M	
			2332	73.48	74.86	1.38	.09	W	M	S	
74.86	76.16	3B: QUARTZ-SERICITE-CARBONATE SCHIST Strongly altered, banded at 60 degrees to the core axis with numerous quartz carbonate stringers oriented parallel to the core axis. Locally quartz phyric, especially near the lower contact. Pyrite up to 20% in thin 1 cm bands.	2333	74.86	76.16	1.30	3.38	S	S	I	
76.16	77.00	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY Top 25 cm contains up to 5% euhedral magnetite and this decreases down the hole as patchy quartz carbonate replacements become more prominent. Pyrite content increases along with the alteration intensity. Unit contains numerous dark quartz carbonate stringers oriented at 65 degrees to the core axis.	2334	76.16	77.00	.84	.12	M	W	S	
77.00	77.72	3C: INTENSE SILICA-CARBONATE FLOODING Moderate to heavy carckle fracture. Colour is bluish purple and contains a few narrow quartz ankerite stringers with 2% pyrite oriented at 0 to 5	2335	77.00	77.72	.72	.83	I	W	S	

Interval (m)		Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
		degrees to the core axis.									
77.72	80.76	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY									
		Well banded at 60 degrees to the core axis. Orange red colour is present only where there is appreciable amount of euhedral magnetite present. Orange red colur is broken by patches of quartz carbonate flooding accompanied. With 5 to 15% fine disseminated pyrite.	2336	77.72	79.22	1.50	.03	S	W	S	
			2337	79.22	80.76	1.54	5.32	S	W	S	
80.76	85.60	3C: INTENSE SILICA-CARBONATE FLOODING									
		Heavy bluish purple crackle fracture. Locally very pyritic to 30%, trace magnetite. Unit contains 20% irregular quartz ankerite stringers.	2338	80.76	81.90	1.14	.96	I	M	I	
			2339	81.90	82.71	.81	1.22	I	M	I	
			2340	82.71	84.13	1.42	.49	I	M	I	
			2341	84.13	85.60	1.47	1.28	M	W	M	
85.60	88.79	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY									
		Light orange red colour, trace to 1% magnetite, 5 to 20% fine disseminated pyrite in areas of intense quartz carbonate crackle fracture. 87.89 88.79. Fault zone. Badly broken. Local 5 cm patches of very pyritic red hematitic alteration whicj is variably altered by quartz and ankerite flooding.	2342	85.60	87.89	2.29	7.70	M	W	M	
			2343	87.89	88.79	.90	8.49	M	W	M	
88.79	95.35	1E: LITHIC ARENITE									
		Moderate carbonate alteration, grey with light red tinge, weakly magnetic, 3 to 5% fine disseminated pyrite.	2344	88.79	90.22	1.43	.07	M	W	M	
			2345	90.22	91.39	1.17	.03	M	W	M	
			2346	91.39	93.90	2.51	.02	W	W	W	
			2347	93.90	95.35	1.45	.05	W	W	W	
95.35	95.82	3C: INTENSE SILICA-CARBONATE FLOODING									
		Heavy quartz carbonate crackle fracture. 1 15 cm quartz vein with 10% pyrite.	2348	95.35	95.82	.47	.01	S	W	S	
95.82	114.83	1E: LITHIC ARENITE									
		Fine grained to medium grained, dark	2349	95.82	97.05	1.23	.01	W	M	M	

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	grey with a light green tinge. Pyrite content variable up to 10%. Usually thickly bedded except towards the lower contact where the beds become thinner and there is a 10% component of argillite.	2350	97.05	98.05	1.00	.01	W	M	M	
		2351	98.05	99.10	1.05	.01	W	W	M	
		2352	99.10	100.86	1.76	1.35	W	M	W	
		2353	100.86	102.41	1.55	1.01	W	M	W	
		2354	102.41	103.91	1.50	.41	W	M	W	
		2355	103.91	105.46	1.55	.50	W	M	W	
		2356	105.46	106.96	1.50	.46	W	M	W	
		2357	106.96	108.51	1.55	.01	W	M	W	
		2358	108.51	109.25	.74	.01	W	M	W	
		2359	109.25	111.56	2.31	.01	W	M	W	
		2360	111.56	112.50	.94	.02	M	M	W	
		2361	112.50	114.83	2.33	.03	M	M	W	
114.83 131.05	3E: MODERATE SERICITE SCHIST (+/- QTZ) Fine grained, thinly bedded. Interbedded with thin arenite beds for top 2 metres. Locally strongly deformed and weakly sericitic. Towards the bottom of the section the unit is interbedded with thin conglomerate beds.	2362	114.83	116.15	1.32	.01	M	M	W	
		2363	116.15	117.85	1.70	.26	M	M	W	
		2364	117.85	119.20	1.35	.01	M	M	W	
		2365	119.20	120.70	1.50	.02	M	M	W	
		2366	120.70	122.25	1.55	.01	M	M	W	
		2367	122.25	123.75	1.50	.01	M	M	W	
		2368	123.75	125.25	1.50	.01	M	M	W	
		2369	125.25	126.80	1.55	.02	M	M	W	
		2370	126.80	128.30	1.50	.01	M	M	W	
		2371	128.30	129.84	1.54	.01	M	W	W	
		2372	129.84	131.05	1.21	.01	M	M	W	
131.05 135.30	1F: CONGLOMERATE Clast supported, poorly sorted. Clasts are sub-rounded and vary in size from a few mm to greater than 3 cm. There are three types of clasts. The first and most dominant is quartzo-feldspathic. Next are sericite chlorite replacements of original mafic clasts. The third are a deep green, very chloritic and are stretched parallel to foliation which is at 65 degrees to the core axis. Below 132.7 metres the quartzo-feldspathic clasts take on a slight reddish tinge and the unit is weakly magnetic.	2373	131.05	132.89	1.84	.01	M	M	W	
		2374	132.89	134.42	1.53	.01	W	W	W	
		2375	134.42	135.30	.88	.02	W	W	W	
135.30 143.50	1E: LITHIC ARENITE Massive, thickly bedded, medium grained, dark grey with weak greenish tinge.	2376	135.30	137.44	2.14	.01	W	W	W	
		2377	137.44	138.99	1.55	.01	W	W	W	
		2378	138.99	140.49	1.50	.01	M	W	W	

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
		2379	140.49	142.04	1.55	.01	N	W	W	
		2380	142.04	143.50	1.46	.03	N	W	W	
143.50 152.68	1A: ARGILLITE									
	Unit is gradational with overlying section and contains 10% conglomerate beds, as per description above.	2381	143.50	145.08	1.58	.75	N	W	W	
		2382	145.08	146.58	1.50	.01	N	W	W	
		2383	146.58	148.13	1.55	.20	N	W	W	
		2384	148.13	149.63	1.50	.46	N	M	M	
		2385	149.63	151.18	1.55	.01	N	W	W	
		2386	151.18	152.68	1.50	.01	N	W	W	
152.68 156.73	1B: ARGILLITE WITH GRAPHITIC SLIPS									
	Graphite on bedding planes. Unit is thinly bedded, fine grained, black and contains less than 1% cubic pyrite. Unaltered.	2387	152.68	154.23	1.55	.21	N	W	W	
		2388	154.23	155.73	1.50	1.13	N	M	M	
		2389	155.73	156.73	1.00	.04	N	M	M	
156.73 160.32	1A: ARGILLITE									
	As per description of section from 143.50 to 152.68 metres.	2390	156.73	157.28	.55	.01	N	M	M	
		2391	157.28	158.78	1.50	.02	N	W	W	
	End Of Hole.	2392	158.78	160.32	1.54	.01	N	W	W	

DHT-16

Core size: BQ
Drilled by: Longyear Drilling

Started: Jan. 22/87
Finished: Jan. 24/87

Logged by: J. MacPherson
Date logged: Jan. 25/87
System:

Azimuth: 180
Dip: -45

Depth Az Dip

Grid: Detail - 3. West Half
Purpose: Test down dip of Au zone in T-15
Claim: 956078, 956079

Northing: 3+75 N
Easting: L 3640E
Elevation:

Length: 148.[illegible]

J. MacPherson

Interval (m)		Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
.00	35.55	OVERBURDEN									
35.55	41.90	1A: ARGILLITE 30% arenite, 20% siltstone beds. Dark grey, unaltered and contains trace pyrite. Beds are oriented at 80 degrees to the core axis.									
41.90	43.48	4A: QUARTZ-CARBONATE VEIN Zone of quartz stringers with numerous sericitic inclusions and sericite margins.	2401	41.90	43.48	1.58	.01	M	W	W	
43.48	61.90	3E: MODERATE SERICITE SCHIST (+/- QTZ) Weakly to moderately altered, thinly bedded, grey with green tinge. Locally beds are highly deformed dip parallel to the core axis. Minor red staining in interbedded arenite beds. Atln is strongest at the top and bottom. Of the section. End of section is marked by a zone of quartz ankerite sericite stringers, similar to section from 41.90 43.48 0.	2402	43.48	45.08	1.60	.01	M	W	W	
			2403	45.08	46.63	1.55	.01	M	W	W	
			2404	46.63	48.13	1.50	.01	M	W	W	
			2405	48.13	49.63	1.50	.01	M	W	W	
			2406	49.63	51.13	1.50	.01	W	M	M	
			2407	51.13	52.42	1.29	.01	W	M	M	
			2408	52.42	53.54	1.12	.01	W	M	M	
			2409	53.54	55.04	1.50	.01	M	M	M	
			2410	55.04	56.70	1.66	.01	M	M	M	
			2411	56.70	58.20	1.50	.01	M	M	M	
			2412	58.20	59.70	1.50	.01	M	M	M	
			2413	59.70	61.90	2.20	.01	M	M	M	
61.90	75.50	1E: LITHIC ARENITE Interbedded with thinly bedded argillite. Are component slightly dominant. Unaltered except for very									

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	weak sericitization of argillite beds.									
75.50 78.20	4A: QUARTZ-CARBONATE VEIN Mostly shear zone, with 10% quartz ankerite veinlets. Very sericitic and soft.	2414	75.50	78.20	2.70	.01	M	M	W	
78.20 108.70	3F: STRONG SERICITE SCHIST (+/- QTZ) Moderately to locally highly altered. Well foliated at 60 degrees to the core axis. Beds are deformed and average angle to the core axis is less than 10 degrees. Towards the end of the section there is a 15% arenite. Component. This contains magnetite and has developed a light red tinge where magnetite is present. Occasional fuchsitic fragment is present in this unit as well.	2415	78.20	79.60	1.40	.01	M	M	M	
		2416	79.60	81.10	1.50	.01	M	S	S	
		2417	81.10	82.60	1.50	.01	M	S	S	
		2418	82.60	84.10	1.50	.01	M	I	S	
		2419	84.10	85.60	1.50	.01	M	I	S	
		2420	85.60	87.10	1.50	.59	M	I	S	
		2421	87.10	88.70	1.60	.20	M	I	S	
		2422	88.70	90.20	1.50	.23	M	I	S	
		2423	90.20	91.70	1.50	.04	M	I	S	
		2424	91.70	93.20	1.50	.01	M	I	S	
		2425	93.20	94.70	1.50	.01	M	I	S	
		2426	94.70	96.30	1.60	n/a	S	S		
		2427	96.30	97.80	1.50	.01	M	S	S	
		2428	97.80	99.36	1.56	.01	M	S	S	
		2429	99.36	100.90	1.54	.01	M	S	S	
		2430	100.90	101.55	.65	.33	W	S	S	
		2431	101.55	102.60	1.05	.01	W	S	S	
		2432	102.60	104.10	1.50	.01	W	S	S	
		2433	104.10	105.40	1.30	.01	W	S	S	
		2434	105.40	106.75	1.35	.01	W	S	S	
		2435	106.75	108.70	1.95	.01	W	S	S	
108.70 127.80	3E: MODERATE SERICITE SCHIST (+/- QTZ) Less altered than above, trace pyrite, no magnetite, moderate deformation and beds are oriented at 70 degrees to the core axis.	2436	108.70	111.50	2.80	.04	W	M	M	
		2437	111.50	114.60	3.10	.05	W	W	W	
		2438	114.60	117.60	3.00	.01	M	W	W	
		2439	117.60	120.60	3.00	.02	M	W	W	
		2440	120.60	123.70	3.10	.02	M	M	M	
		2441	123.70	126.70	3.00	.02	M	M	M	
127.80 148.13	5A: DIABASE DYKE Very fine grained, chill margin contains epidote. Black, fine grained and weakly magnetic further down the hole. Contains the odd small country rock inclusion. 148.13 End Of Hole.									

DH T-17

Core size:	BQ	Azimuth:	180	Grid:	Detail #3, West Half
Drilled by:	J.T. THOMAS D.D.	Dip:	-50	Purpose:	To test down dip extension of Au zone
				Claim:	956079
Started:	Jan. 24/86				
Finished:	Jan. 29/87	Depth Az Dip		Northing:	4+25 N
		75.00	-43.5	Easting:	L 3600E
Logged by:	J. MACPHERSON	151.20	-40.0	Elevation:	
Date logged:	Jan. 30/87	227.40	-37.5		
System:				Length:	230.43m

J. MacPherson

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
.00 30.30	OVERBURDEN									
30.30 35.05	1E: LITHIC ARENITE									
	Fine grained, medium grey colour, thickly bedded, rare argillaceous interbed, massive. Cut by.5% thin black quartz ankerite stringers. Locally stained reddish brown and may contain up to 2% bright cubic pyrite.	2445	33.20	35.05	1.85	.01	N	W	W	
	30.30 31.70 2% bright cubic pyrite.	2443	30.30	31.70	1.40	.01	N	W	W	
	31.70 33.20 1% cubic pyrite.	2444	31.70	33.20	1.50	.01	N	W	W	
35.05 88.60	1E: LITHIC ARENITE									
	As above, except unit has a 20% argillaceous component. Several quartz veinlets containing 30 to 50% pyrite cut the unit at angles less than 45 degrees. These exhibit a 2 to 5 cm alteration halo of carbonate. Bedding contacts are at 60 degrees to the core axis and foliation is at 0 degrees to the core axis. Below 50 metres, the argillite component increases to 40% and sericite alteration is stronger. Locally the argillite beds are slumped 10 to 40 degrees to the core axis and this deformation increases towards the end of the section.	2446	35.05	35.70	.65	.01	N	W	W	
		2447	35.70	37.20	1.50	.01	N	W	W	
		2448	37.20	38.00	.80	.01	N	W	W	
		2449	38.00	39.70	1.70	.01	N	W	W	
		2450	39.70	40.10	.40	.01	N	W	W	
		2451	40.10	41.30	1.20	.01	N	W	W	
		2452	41.30	42.60	1.30	.01	N	W	W	
		2453	42.60	44.00	1.40	.01	N	W	W	
		2454	44.00	45.50	1.50	.01	N	W	W	
		2455	45.50	46.00	.50	.01	N	W	W	
		2456	46.00	47.00	1.00	.01	N	W	W	
		2457	47.00	48.00	1.00	.01	N	W	W	
		2458	48.00	49.30	1.30	.01	N	W	W	
		2459	49.30	50.30	1.00	.01	N	W	W	
		2460	50.30	51.30	1.00	.01	N	W	W	
		2461	51.30	52.00	.70	.01	N	W	W	
		2462	52.00	53.34	1.34	.02	N	W	W	
		2463	53.34	54.80	1.46	.01	N	W	W	
		2464	54.80	56.39	1.59	.01	N	W	W	
		2465	56.39	57.91	1.52	.01	N	W	W	

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
		2466	57.91	59.74	1.83	.01	W	W	W	
		2467	59.74	60.96	1.22	.01	W	W	W	
		2468	60.96	62.46	1.50	.01	W	W	W	
		2469	62.46	64.00	1.54	.01	W	W	W	
		2470	64.00	65.60	1.60	.01	W	W	W	
		2471	65.60	67.06	1.46	.01	W	W	W	
		2472	67.06	68.56	1.50	.01	W	W	W	
		2473	68.56	70.06	1.50	.01	W	W	W	
		2474	70.06	71.32	1.26	.01	W	W	W	
		2475	71.32	72.82	1.50	.01	W	W	W	
		2476	72.82	74.07	1.25	.01	W	W	W	
88.60 92.80	4A: QUARTZ-CARBONATE VEIN									
	A series of quartz ankerite veins make up this section. Typically they have sericitic margins and inclusions. The sericitic sections may contain up to 10% pyrite.	2478	90.60	92.80	2.20	.01	S	S	S	
	88.60 90.60 Black quartz ankerite veinlets with 10% fine pyrite.	2477	88.60	90.60	2.00	.02	M	S	M	
92.80 99.00	3E: MODERATE SERICITE SCHIST (+/- QTZ)									
	Fine grained, thinly bedded, black. Locally the beds are highly deformed and contain numerous sericitic slips.	2480	94.37	96.37	2.00	.01	M	M	M	
		2481	96.37	97.87	1.50	.01	M	M	M	
		2482	97.87	99.00	1.13	.01	M	M	M	
	92.80 94.37 Trace to 2% fine disseminated pyrite.	2479	92.80	94.37	1.57	.01	M	M	M	
99.00 110.10	1E: LITHIC ARENITE									
	Very fine grained, variably altered. 10% argillaceous beds, highly deformed.	2483	99.00	100.86	1.86	.01	W	S	M	
		2485	101.80	103.20	1.40	.01	M	M	M	
	100.86 101.80 From 101.0 to 101.4 there is 5 to 8% pyrite as cubes and masses.	2484	100.86	101.80	.94	.01	M	M	M	
		2486	103.20	104.70	1.50	.01	M	M	M	
		2487	104.70	106.10	1.40	.01	M	M	M	
		2488	106.10	107.40	1.30	.01	M	M	M	
		2489	107.40	108.51	1.11	.01	M	M	M	
		2490	108.51	110.10	1.59	.01	W	M	M	
110.10 134.19	3E: MODERATE SERICITE SCHIST (+/- QTZ)									
	Moderately sericitic, highly deformed. Foliation is at 50 degrees to the core axis and is bedding parallel.	2492	111.60	113.10	1.50	.01	W	M	M	
		2493	113.10	114.60	1.50	.01	M	M	M	
		2494	114.60	116.15	1.55	.01	M	M	M	
	128.30 128.70 4A: QUARTZ-CARBONATE VEIN. Trace pyrite in margins.	2495	116.15	117.65	1.50	.01	M	M	M	
		2496	117.65	119.15	1.50	.01	M	M	M	
		2497	119.15	120.70	1.55	.01	M	M	M	
	110.10 111.60 Average is 1% pyrite,	2491	110.10	111.60	1.50	.01	W	M	M	

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	may reach 2 to 3% over 20 cm locally.	2498	120.70	122.20	1.50	.01	M	M	M	
		2499	122.20	123.75	1.55	.01	M	M	M	
		2500	123.75	125.25	1.50	.01	M	M	M	
		2393	125.25	126.80	1.55	.01	M	M	M	
		2394	126.80	128.30	1.50	.01	M	M	M	
		2395	128.30	129.84	1.54	.01	M	M	M	
		2396	129.84	131.40	1.56	.01	M	M	M	
		2397	131.40	132.89	1.49	.01	M	M	M	
		2398	132.89	134.19	1.30	.01	M	M	M	
134.19 135.40	1E: LITHIC ARENITE									
	Medium to coarse grained. Subrounded to rounded carbonate altered clasts in a carbonate sericite matrix. Numerous sericitic stringers.	2399	134.19	135.40	1.21	.01	W	M	M	
135.40 136.30	4A: QUARTZ-CARBONATE VEIN									
	Numerous sericite inclusions with 1% pyrite. Lower contact is broken and sericitic alteration is much stronger below the vein.	2400	135.40	136.30	.90	.02	M	S	S	
136.30 148.30	3B: QUARTZ-SERICITE-CARBONATE SCHIST									
	20% Free quartz, 60% sericite, 20% ankerite. Very fissile in sericitic sections. Very well banded.	2061	137.60	138.99	1.39	.01	M	S	S	
		2062	138.99	140.50	1.51	.01	M	S	S	
		2063	140.50	142.04	1.54	.01	M	S	S	
	136.30 137.60 5% fine pyrite disseminated throughout the section. Several.5 cm thick semi-massive bands of pyrite.	2060	136.30	137.60	1.30	.01	M	S	S	
		2064	142.04	143.50	1.46	.01	M	S	S	
		2065	143.50	145.08	1.58	.01	M	S	S	
		2066	145.08	146.50	1.42	.01	M	M	M	
		2067	146.50	148.30	1.80	.01	M	M	M	
148.30 148.60	3C: INTENSE SILICA-CARBONATE FLOODING									
	Very heavy silica carbonate replacement, numerous thin quartz crackle veinlets. Upper and lower contacts are at 65 degrees to the core axis.									
	148.30 148.60 10% pyrite in intense silica carbonate crackle fracture.	2068	148.30	148.60	.30	1.22	I	M	I	
148.60 152.10	3B: QUARTZ-SERICITE-CARBONATE SCHIST									
	Not as sericitic as section from 136.3 to 148.3. Well foliated with splashes of buff grey carbonate alteration.	2070	150.10	152.10	2.00	.06	W	S	I	

Interval (m)	Description	Sample No.	Interval (m)	Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	MV
	148.60 150.10 1% pyrite.	2069	148.60 150.10	1.50	.03	W	S	M	
152.10 154.94	3B: QUARTZ-SERICITE-CARBONATE SCHIST Shear zone. Very fissile and sericitic. 80 cm of sericitic fault breccia at bottom of section.								
	152.10 154.13 3% fine disseminated pyrite in quartz carbonate fracture fillings.	2071	152.10 154.13	2.03	.04	W	M	S	
	154.13 154.94 3% fine pyrite in and surrounding clasts.	2072	154.13 154.94	.81	.02	M	M	M	
154.94 157.90	1A: ARGILLITE Moderately chloritic, thinly bedded, not nearly as altered as previous sections.	2073	154.94 156.50	1.56	.10	M	W	W	
	156.50 157.90 3 to 5% cubic pyrite.	2074	156.50 157.90	1.40	.03	M	W	W	
157.90 160.07	3B: QUARTZ-SERICITE-CARBONATE SCHIST Pale buff green in colour, well foliated. Contains 1% stringers that are filled with a black hard mineral and may be tourmaline. Trace pyrite , 1% angular fuchsitic fragments.								
	157.90 158.55 3% fine to medium grained pyrite.	2075	157.90 158.55	.65	.04	W	S	M	
	158.55 160.07 Trace pyrite.	2076	158.55 160.07	1.52	.01	W	I	I	
160.07 160.50	3C: INTENSE SILICA-CARBONATE FLOODING Faintly banded at 65 degrees to the core axis, very hard. Sharp upper and lower contacts.								
	160.07 160.50 20% fine cubic pyrite.	2077	160.07 160.50	.43	.02	I	S	S	
160.50 162.75	3B: QUARTZ-SERICITE-CARBONATE SCHIST Top 1 metre is chloritic and this grades to a good qcss which is banded at 65 degrees to the core axis.	2078	160.50 161.80	1.30	.01	I	W	S	
	161.80 162.75 5% cubic pyrite.	2079	161.80 162.75	.95	.03	S	W	S	
162.75 165.52	4A: QUARTZ-CARBONATE VEIN Massive, with a few sericitic inclusions and very sericitic margins.	2080	162.75 165.52	2.77	.01	I	W	M	

Interval (m)	Description	Sample No.	Interval (m)	Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
165.52 166.87	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY Well foliated, orange red in colour, very hard, fine grained. Contains 1% disseminated euhedral magnetite grains. Chloritic shear at top of section. 165.52 166.87 1% magnetite, 1% pyrite.	2081	165.52 166.87	1.35	.03	I	M	M	
166.87 171.82	3C: INTENSE SILICA-CARBONATE FLOODING Variable intensity of flooding, occasional hint of orange red colour of the typical red hematitic alteration and contains up to 25% very fine disseminated pyrite in purple coloured very hard silicified zones. Sharp upper and lower contact with the foliated red hematitic alteration.	2085	169.70 171.82	2.12	.18	I	M	I	
	166.87 167.50 3 to 5% fine disseminated pyrite.	2082	166.87 167.50	.63	.68	I	S	S	
	167.50 168.20 Average is 10% pyrite, locally 20% over 15 cm.	2083	167.50 168.20	.70	.23	I	M	I	
	168.20 169.70 5% disseminated pyrite.	2084	168.20 169.70	1.50	.07	I	M	I	
171.82 173.65	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY Well foliated, orange red colour. Contains 1% disseminated euhedral magnetite grains and 3% fine disseminated pyrite in thin fractures. 171.82 173.65 3% fine cubic pyrite.	2086	171.82 173.65	1.83	.16	M	M	M	
173.65 175.40	3B: QUARTZ-SERICITE-CARBONATE SCHIST Grey green, moderately soft, fissile, trace chloritic stringers. 173.65 175.40 3% cubic pyrite occuring as clusters in more siliceous sections.	2087	173.65 175.40	1.75	.09	M	W	M	
175.40 176.26	3C: INTENSE SILICA-CARBONATE FLOODING Not as intense as earlier sections, weakly foliated, a few euhedral magnetite grains are still visible. 175.40 176.26 5 to 10% pyrite as fracture fillings and masses in highly	2088	175.40 176.26	.86	.01	M	W	M	

Interval (m)	Description	Sample No.	Interval (m)	Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	silicified sections.								
176.26 182.00	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY								
	Orange red, moderately foliated at 65 degrees to the core axis, local chloritic stringers. A few zones of qcss minor quartz carbonate flooding, although less intense than those described above.	2094	180.35 180.85	.50	.02	M	M	M	
		2095	180.85 182.00	1.15	.02	M	M	M	
	176.26 177.16.5% Magnetite and 2% fine disseminated pyrite.	2089	176.26 177.16	.90	.10	I	M	S	
	177.16 177.86 5% cubic pyrite.	2090	177.16 177.86	.70	.02	S	M	S	
	177.86 178.67 2% magnetite and 1% fine disseminated pyrite.	2091	177.86 178.67	.81	.01	M	M	M	
	178.67 179.05 7% pyrite in 15 cm section of heavy crackle fracture.	2092	178.67 179.05	.38	.19	M	M	M	
	179.05 180.35 Trace magnetite and 1% pyrite.	2093	179.05 180.35	1.30	.10	M	M	M	
182.00 184.75	3C: INTENSE SILICA-CARBONATE FLOODING								
	Colour is orange purple. This may be a transition zone between the red hematitic alteration and the true quartz carbonate crackle pyrite content decreases down the hole from 5% to 1%.								
	182.00 182.80 5 to 10% pyrite.	2096	182.00 182.80	.80	.39	M	W	M	
	182.80 184.75 5% pyrite more finely disseminated than above section.	2097	182.80 184.75	1.95	.02	M	M	M	
184.75 186.85	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY								
	Typical orange red colour, local 5 to 20 cm areas of silica carbonate flooding, 1% euhedral magnetite, 2% pyrite.								
	184.75 185.65 2% pyrite, 1% magnetite.	2098	184.75 185.65	.90	.01	M	M	M	
	185.65 186.20 20% pyrite in 3 cm wide zones of complete silica replacements.	2099	185.65 186.20	.55	.42	M	M	M	
	186.20 186.85 1% magnetite, 4% pyrite.	2100	186.20 186.85	.65	.24	M	M	M	
186.85 187.60	4A: QUARTZ-CARBONATE VEIN								
	Chloritic inclusions and margins, no pyrite.								
	186.85 187.60 Trace pyrite in vein.	2501	186.85 187.60	.75	.51	M	M	M	

Interval (m)	Description	Sample No.	Interval (m)	Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
187.60 193.45	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY								
	Variable section in alteration and compostion. Some remnant textures visible in the last 1 metre of the section. Massive to very weakly foliated at 60 degrees to the core axis. Colour varies from orange red to light buff grey. The last 1 metre contains 20% rectilinear clasts of possible chert. These clasts exhibit faint banding paeallel to the long axis of the clast. The long axis of the clasts vary in length from.5 cm to 2 cm and the long axis is oriented parallel to the foliation. There are also subrnd mafic clasts which have ragged edges and are weakly chloritic.	2503	187.60 189.26	1.66	.02	M	M	M	
		2505	192.55 193.45	.90	.10	M	M	M	
	189.26 190.60 Trace to 2% pyrite, trace magnetite.	2502	189.26 190.60	1.34	.01	M	M	M	
	190.60 192.55 Trace to 1% fine pyrite in narrow quartz carbonate stringers.	2504	190.60 192.55	1.95	.40	M	M	M	
193.45 194.75	3C: INTENSE SILICA-CARBONATE FLOODING								
	Colour is purple blue. Unit is massive and fractured at all angles. Upper and lower contacts are gradational.								
	193.45 194.75 Trace cubic pyrite in 2 to 4 mm quartz carbonate stringers.	2506	193.45 194.75	1.30	.12	S	M	M	
194.75 197.33	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY								
	Magnetite content varies from.5 to 1% and pyrite varies from 1 to 3%. Weakly foliated at 70 degrees to the core axis	2508	196.00 197.33	1.33	.01	S	W	M	
	194.75 196.00 Trace to 1% magnetite, trace pyrite.	2507	194.75 196.00	1.25	.04	S	M	M	
197.33 197.90	3C: INTENSE SILICA-CARBONATE FLOODING								
	Weak crackle fracture, no magnetite.								
	197.33 197.90 Trace magnetite, 7% fine disseminated pyrite.	2509	197.33 197.90	.57	1.53	M	W	M	
197.90 201.50	3A: RED MAGNETITE-BEARING ARENITE OR								

Interval (m)	Description	Sample No.	Interval (m)	Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	QUARTZ-FELDSPAR PORPHYRY								
	1% Magnetite, which drops to 0 as colour changes from orange red to buff grey down the section. Gradational upper and lower contacts.	2513	200.85 201.50	.65	.20	M	M	M	
	197.90 199.45 1% magnetite, 2 to 3% fine cubic pyrite.	2510	197.90 199.45	1.55	.07	M	W	M	
	199.45 199.95 5% pyrite, up to 20% pyrite in intense silica altered sections.	2511	199.45 199.95	.50	.02	M	W	M	
	199.95 200.85 1% magnetite, 2% fine disseminated pyrite.	2512	199.95 200.85	.90	.21	M	M	M	
201.50 202.15	3B: QUARTZ-SERICITE-CARBONATE SCHIST								
	Very finely banded at 45 degrees to the core axis. Consists of alternating bands of silica and ankerite, sericitic and carbonate, and pyrite. Average bed thickness is 1 cm. Rare fuchsite fragment visible. 5% 1 to 2 cm foliation parallel quartz veinlets.								
	201.50 202.15 3% pyrite, up to 10% pyrite over 10 cm of heavy quartz carbonate crackle.	2514	201.50 202.15	.65	.08	M	M	M	
202.15 214.00	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY								
	Variable section, very similar to 187.6 to 193.45 metres.	2515	202.15 203.85	1.70	.01	M	W	M	
		2519	206.66 207.22	.56	.01	M	M	M	
	203.85 205.20 Trace magnetite, 1% pyrite.	2516	203.85 205.20	1.35	.03	M	W	M	
		2521	209.68 210.30	.62	.02	M	M	M	
	205.20 206.10 5 to 10% pyrite in narrow quartz chlorite fracture fillings.	2517	205.20 206.10	.90	.01	S	M	S	
		2522	210.30 211.16	.86	.01	M	M	M	
		2524	212.14 214.00	1.86	.80	M	M	M	
	206.10 206.66 15 to 20% pyrite in 20 cm zones of intense silica carbonate flooding.	2518	206.10 206.66	.56	.02	S	M	S	
	207.22 209.68 Trace magnetite, 2 to 3% fine disseminated pyrite.	2520	207.22 209.68	2.46	.01	M	M	M	
	211.16 212.14 10% fine disseminated pyrite, trace magnetite.	2523	211.16 212.14	.98	.01	M	M	M	
214.00 218.50	3B: QUARTZ-SERICITE-CARBONATE SCHIST								
	Moderately well banded, description is the same as the section from 201.5 to 202.15 metres. Variable deformed and chloritic, with the alteration								

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	intensity decreasing down the hole.									
	214.00 214.80 Average is 10% pyrite and section contains up to 25% pyrite over 10 to 30 cm.	2525	214.00	214.80	.80	.04	M	M	M	
	214.80 215.90 1 to 3% disseminated pyrite.	2526	214.80	215.90	1.10	1.50	M	M	M	
	215.90 217.60 2% disseminated pyrite.	2527	215.90	217.60	1.70	1.13	M	M	M	
	217.60 218.50 2% pyrite. Bottom 20 cm contains 20% pyrite.	2528	217.60	218.50	.90	.14	M	M	M	
218.50 230.43	3E: MODERATE SERICITE SCHIST (+/- QTZ)									
	Weakly altered, thinly bedded, fine grained. Minor chlorite as veinlets. Several weak zones of quartz carbonate flooding with minor pyrite are visible. Well foliated at 60 degrees to the core axis.	2529	218.50	220.00	1.50	.50	M	M	M	
		2530	220.00	221.28	1.28	n/a	M	M	M	
		2531	221.28	222.78	1.50	.15	M	M	M	
		2532	222.78	224.37	1.59	.02	M	M	M	
		2533	224.37	225.83	1.46	.01	M	M	M	
		2534	225.83	227.33	1.50	.05	M	M	M	
		2535	227.33	228.83	1.50	.01	M	M	M	
	230.43 End Of Hole.	2536	228.83	230.43	1.60	.01	M	M	M	

DH T-18

Core size: BQ
Drilled by: J.T. THOMAS D.D.

Started: Jan. 31/87
Finished: Feb. 2/87

Logged by: J. MacPherson
Date logged: Feb. 5/87
System:

Azimuth: 180
Dip: -45

Depth	Az	Dip
77.70		-40.0
154.30		-39.0
245.70		-34.0

Grid: Detail #3, West Half
Purpose: test east strike extension of Au zone
Claim: 956078

Northing: 3+50N
Easting: L 3840E
Elevation:

Length: 248.18m

J. MacPherson

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
.00 54.75	OVERBURDEN									
54.75 64.72	1D: SILTSTONE Fine grained, thinly bedded, medium to dark grey, occasional sericitic slip. Beds are deformed and the angle to the core axis is 20 degrees. A few locally more sericitic areas have 5% associated fine cubic pyrite. 54.75 56.38 15% pyrite from 54.75 to 64.72 metres.	2538	56.38	57.88	1.50	.02				
		2539	57.88	59.10	1.22	.01				
		2540	59.10	60.60	1.50	.01				
		2541	60.60	61.18	.58	.02				
		2542	61.18	63.68	2.50	.01				
		2543	63.68	64.72	1.04	.02				
		2537	54.75	56.38	1.63	.02				
64.72 72.83	4A: QUARTZ-CARBONATE VEIN Several veins of varying width make up this zone. They have sericitic margins and inclusions. 68.58 70.48 Trace pyrite.	2544	64.72	66.72	2.00	.01	W	W	W	
		2545	66.72	68.18	1.46	.01	W	W	W	
		2546	68.18	68.58	.40	.01	W	W	W	
		2547	68.58	70.48	1.90	.01	W	W	W	
		2548	70.48	72.83	2.35	.01	W	W	W	
72.83 79.40	1A: ARGILLITE Well foliated, weakly sericitic. Cut by 1% fine cubic pyrite.	2549	72.83	74.67	1.84	.01	M	W	W	
		2550	74.67	76.17	1.50	.02	M	W	W	
		2551	76.17	77.72	1.55	.01	M	W	W	
		2552	77.72	79.40	1.68	.01	M	W	W	
79.40 110.00	3E: MODERATE SERICITE SCHIST (+/- QTZ) Similar to section from 79.4 to 86.16 metres except more sericitic. Also a few 20 to 40 cm wide zones of strong silica carbonate alteration are present. Alteration intensity	2553	79.40	80.77	1.37	.01	M	M	W	
		2554	80.77	82.27	1.50	.01	M	M	W	
		2555	82.27	83.82	1.55	.01	M	M	W	
		2556	83.82	85.32	1.50	.01	M	M	W	
		2557	85.32	86.16	.84	.01	M	M	W	

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL		CARB	% PY
	generally increases down the hole.	2558	86.16	88.36	2.20	.04	M	W	W	
		2559	88.36	89.91	1.55	.01	M	W	W	
		2560	89.91	91.30	1.39	.01	M	W	W	
		2561	91.30	92.55	1.25	.01	M	W	W	
		2562	92.55	94.50	1.95	.01	M	M	W	
		2563	94.50	96.00	1.50	.01	M	M	W	
		2564	96.00	97.55	1.55	.01	M	M	W	
		2565	97.55	99.46	1.91	.01	M	M	W	
		2566	99.46	100.54	1.08	.01	M	M	W	
		2567	100.54	101.60	1.06	.01	M	M	W	
		2568	101.60	103.10	1.50	.01	M	M	W	
		2569	103.10	104.65	1.55	.01	M	W	W	
		2570	104.65	107.00	2.35	.01	M	W	W	
		2571	107.00	108.50	1.50	.21	M	M	W	
		2572	108.50	110.00	1.50	.03	M	M	W	
110.00 111.15	1E: LITHIC ARENITE Moderately silicified with 10% fine disseminated pyrite.	2573	110.00	111.15	1.15	.02	M	W	M	
111.15 124.70	3E: MODERATE SERICITE SCHIST (+/- QTZ) Increasing sericitic alteration down the hole through this section with patchy silicification accompanied by an increase in pyrite %. Locally the unit is well foliated at 70 degrees to the core axis. 116.15 117.80 1% cubic pyrite.	2574	111.15	113.05	1.90	.01	M	M	M	
		2575	113.05	114.60	1.55	.01	M	M	M	
		2576	114.60	116.15	1.55	.02	M	M	M	
		2578	117.80	119.30	1.50	.05	M	S	S	
		2579	119.30	120.70	1.40	.40	M	S	S	
		2580	120.70	122.20	1.50	.04	M	S	S	
		2577	116.15	117.80	1.65	.01	M	M	M	
		2581	122.20	123.70	1.50	.20	M	S	S	
		2582	123.70	124.70	1.00	.06	W	S	S	
124.70 128.25	1E: LITHIC ARENITE Fine grained, thickly bedded, light to medium grey colour. Abrupt upper and lower contacts with sericitic argillite. This contact is coincidental with increased silica alteration. Unit contains 3 to 5% well rounded quartz clasts and a few fuchsitic clasts. 5% thin black quartz ankerite stringers oriented sub-parallel to the core axis. Matrix of unit is fine grained and is composed of quartz and ankerite. 126.20 128.25 3% cubic pyrite.	2583	124.70	126.20	1.50	.32	M	M	S	
		2584	126.20	128.25	2.05	.22	M	M	S	

Interval (m)	Description	Sample No.	Interval (m)	Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
128.25 144.95	3P: STRONG SERICITE SCHIST (+/- QTZ) Moderately to locally strongly altered, thinly bedded argillite with 10% thickly bedded siltstone. From 130 to 135 metres, rock is highly sericitized and ankeritic. 136.24 137.30 4A: QUARTZ-CARBONATE VEIN 129.40 131.34 From 128.5 to 135.1 there is trace to 2% fine disseminated pyrite. 137.30 138.98 20% fine disseminated pyrite over 10 cm intervals.	2585	128.25 129.40	1.15	.08	W	M	S	
		2587	131.34 132.89	1.55	.05	M	S	S	
		2588	132.89 134.39	1.50	.04	M	S	S	
		2589	134.39 135.10	.71	.03	M	M	M	
		2590	135.10 137.30	2.20	.63	W	M	M	
		2592	138.98 140.48	1.50	.86	W	M	M	
		2586	129.40 131.34	1.94	.03	M	M	S	
		2593	140.48 142.03	1.55	.03	M	W	W	
		2594	142.03 143.53	1.50	.01	M	W	W	
		2591	137.30 138.98	1.68	.61	W	M	M	
		2595	143.53 144.95	1.42	.01	M	W	W	
144.95 147.45	1E: LITHIC ARENITE Highly silicified. Contains 1% fuchsite fragments with ragged edges. Also there are 3% large fragments greater than 2 cm in diameter. Unit is locally intensely altered by silica and ankerite. 144.95 146.40 Fine disseminated pyrite up to 20% over 10 cm. Average for section is 10% pyrite. 146.40 147.45 20% pyrite in 10 cm bands	2596	144.95 146.40	1.45	.10	S	M	M	
		2597	146.40 147.45	1.05	1.09	S	M	S	
147.45 149.23	1E: LITHIC ARENITE Similar to 144.95 to 147.45 except the upper contact marks the beginning of moderate to strong sericite alteration. Also there is 1 to 2% chloritic clasts along with the fuchsite clasts.	2598	147.45 149.23	1.78	.93	M	M	M	
149.23 149.95	1A: ARGILLITE Thinly bedded, numerous chlorite and silica bands parallel to bedding.	2599	149.23 149.95	.72	.21	M	W	M	
149.95 150.89	2H: COARSE-GRAINED (HEMATITIC) PORPHYRY Much weaker in terms of buff alteration within the typical red zone, but rock is still very hard. Colour is a deep burgundy and unit contains 3% cherty clasts which are elongated sub-parallel to a weak foliation which is at 60 degrees to								

Interval (m)	Description	Sample No.	Interval (m)	Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	the core axis. Unit is weakly magnetic and contains 1% cubic pyrite.								
	149.95 150.89 1% cubic pyrite.	2600	149.95 150.89	.94	.07	M	W	M	
150.89 154.50	1B: LITHIC ARENITE								
	Medium to light grey with local reddish tinges, thickly bedded, medium to coarse grained. Minor interbeds of fine grained to medium grained siltstone. A few chloritic bands are also present in the unit parallel to bedding.	2602	152.40 153.40	1.00	.01	W	M	M	
		2603	153.40 154.50	1.10	.03	M	M	M	
	150.89 152.40 2 to 4% fine disseminated pyrite.	2601	150.89 152.40	1.51	.02	W	M	M	
154.50 161.65	2H: COARSE-GRAINED (HEMATITIC) PORPHYRY								
	Similar to 149.95 to 150.89 metres. Red colour and increased alteration correspond to upper and lower contacts. Unit is magnetic, although there is no visible magnetite grains as in other parts of the red hematitic alteration intersected in earlier holes to the east. The presence of 3 to 5% 1 to 2 cm long cherty clasts also distinguishes this part of the red hematitic alteration from others.	2605	156.00 157.70	1.70	.14	M	M	M	
		2606	157.70 157.84	.14	.02	M	M	M	
		2607	157.84 158.42	.58	.01	M	W	M	
		2608	158.42 158.85	.43	.22	M	W	M	
		2610	160.32 161.65	1.33	.01	S	M	M	
	154.50 156.00 10% very fine disseminated pyrite distributed evenly throughout section.	2604	154.50 156.00	1.50	.37	M	M	M	
	158.85 160.32 5% fine disseminated pyrite.	2609	158.85 160.32	1.47	.06	M	W	M	
161.65 162.35	1A: ARGILLITE								
	Chloritic, thinly banded, very weak alteration, trace pyrite.	2611	161.65 162.35	.70	.02	M	M	S	
162.35 165.40	2H: COARSE-GRAINED (HEMATITIC) PORPHYRY								
	Same as section from 154.5 to 161.65.	2613	163.80 165.40	1.60	.18	M	M	S	
	162.35 163.80 5 to 8% fine disseminated cubic pyrite, weakly magnetic.	2612	162.35 163.80	1.45	.11	M	M	S	

Interval (m)	Description	Sample No.	Interval (m)	Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
165.40 181.40	1A: ARGILLITE Upper contact marks abrupt end to red hematitic alteration. Unit is thinly bedded, fine grained and weakly chloritic. Spotty silicified areas occur within the unit and there is a 20% arenite component. Bedding is at 60 degrees to the core axis. 165.40 166.42 1 to 2% fine disseminated pyrite.	2615	166.42 167.92	1.50	4.15	W	W	M	
		2616	167.92 169.47	1.55	.20	W	W	M	
		2617	169.47 170.97	1.50	.21	M	W	M	
		2618	170.97 172.51	1.54	.02	M	W	M	
		2619	172.51 174.01	1.50	.11	M	M	M	
		2620	174.01 175.56	1.55	.03	M	M	M	
		2621	175.56 177.06	1.50	.02	M	M	W	
		2614	165.40 166.42	1.02	.59	M	M	S	
		2622	177.06 178.61	1.55	.04	M	M	W	
		2623	178.61 180.11	1.50	.01	M	W	W	
		2624	180.11 181.40	1.29	.12	W	M	M	
181.40 193.00	1C: ARGILLITE WITH SEMI-MASSIVE BANDS OF PYRITE Fine grained argillite with varying percentage of quartz and pyrite bands which may be diagenetic. Pyrite occurs semi-massive with quartz gangue. There are sharp contacts with py-poor argillite and whole section is weakly sericite altered. 181.40 182.36 Top 20 cm is quartz carbonate flooded with 20% fine disseminated pyrite.	2625	181.40 182.36	.96	2.14	W	M	M	
	182.36 183.80 2% quartz veins, 5% pyrite in 1 cm thick bands.	2626	182.36 183.80	1.44	.20	W	M	M	
	183.80 185.25 1 seam semi-massive pyrite.	2627	183.80 185.25	1.45	.06	W	M	M	
	185.25 187.56 30% pyrite, 5% quartz in bands up to 6 cm wide.	2628	185.25 187.56	2.31	.39	W	M	M	
	187.56 188.36 30% pyrite, 5% quartz in bands up to 6 cm wide.	2629	187.56 188.36	.80	.31	W	M	M	
	188.36 189.40 3% pyrite, 5% quartz.	2630	188.36 189.40	1.04	.08	W	M	M	
	189.40 191.10 15%py, 5% quartz as bands up to 1.5 cm wide.	2631	189.40 191.10	1.70	.05	W	M	M	
	191.10 193.00 10 to 15% pyrite, 2 to 3% quartz in bands.	2632	191.10 193.00	1.90	.15	W	M	M	
193.00 195.50	1A: ARGILLITE Interbedded with siltstone. Section is thinly bedded and very weakly altered. Foliation is parallel to bedding at 60 degrees to the core axis. 193.00 195.50 Blebs of pyrite, amounts less than 1%.	2633	193.00 195.50	2.50	.01	W	M	M	

Interval (m)	Description	Sample No.	Interval (m)	Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
195.50 197.00	1C: ARGILLITE WITH SEMI-MASSIVE BANDS OF PYRITE Same as section from 181.4 to 193.0.	2634	195.50 197.00	1.50	.03	W	M	M	
197.00 221.28	1A: ARGILLITE Variable section with average 15% arenite beds. Argillite is thinly bedded, fine grained and weakly to selectively strongly altered. Arenite is grey, fine grained to medium grained and locally siliceous.	2635	197.00 198.50	1.50	.04	W	M	M	
		2636	198.50 199.95	1.45	.02	W	M	M	
		2637	199.95 200.46	.51	.01	W	M	M	
		2638	200.46 200.95	.49	.15	W	M	M	
		2639	200.95 201.50	.55	.02	W	M	W	
		2640	201.50 202.95	1.45	.21	M	M	W	
		2641	202.95 203.80	.85	.03	M	M	W	
		2642	203.80 204.65	.85	.03	M	M	W	
		2643	204.65 205.95	1.30	.04	W	W	W	
		2644	205.95 206.44	.49	.20	W	W	W	
		2645	206.44 207.13	.69	.02	W	W	W	
		2646	207.13 208.50	1.37	.02	W	W	W	
		2647	208.50 209.50	1.00	.29	W	W	W	
		2648	209.50 211.00	1.50	.01	M	M	M	
		2649	211.00 212.14	1.14	.02	M	M	M	
		2650	212.14 213.64	1.50	.01	M	M	M	
		2651	213.64 215.19	1.55	.01	M	M	M	
		2652	215.19 216.69	1.50	.01	M	M	M	
		2653	216.69 218.24	1.55	.01	M	M	M	
		2654	218.24 219.74	1.50	.01	M	S	M	
		2655	219.74 221.28	1.54	.03	S	W	S	
221.28 227.38	3C: INTENSE SILICA-CARBONATE FLOODING Fairly abrupt upper contact, gradational lower contact with less altered sediments. Zone is very siliceous and ankeritic and contains up to 40% very fine disseminated pyrite over 30 to 50 cm. Numerous sericitic slips at 30 degrees to the core axis. Silica carbonate replacement is near total in the areas of highest pyrite content. Unit exhibits a weak foliation sub-parallel to the core axis. Also there are 10% thin quartz ankerite veinlets which are oriented parallel to this foliation. 1% fuchsite fragments also present in this unit.	2656	221.28 222.78	1.50	1.22	I	S	I	
		2659	225.83 227.38	1.55	1.62	S	M	S	
	222.78 224.33 20 to 30% very fine disseminated pyrite.	2657	222.78 224.33	1.55	8.99	I	S	I	
	224.33 225.83 20% fine disseminated pyrite.	2658	224.33 225.83	1.50	3.22	I	S	I	

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
227.38 236.52	3E: MODERATE SERICITE SCHIST (+/- QTZ)									
	Alteration intensity decreases down the hole away from previous section. Unit is thinly bedded and fine grained. Sericite alteration weakens down the hole and takes on the form of bedding parallel stringers.	2660	227.38	228.88	1.50	.17	M	M	M	
		2661	228.88	230.42	1.54	.18	M	W	W	
		2662	230.42	232.92	2.50	.55	M	W	W	
		2663	232.92	233.48	.56	.02	M	W	W	
		2664	233.48	234.78	1.30	2.09	M	W	W	
		2665	234.78	236.52	1.74	.01	M	W	W	
236.52 246.17	1B: ARGILLITE WITH GRAPHITIC SLIPS									
	Numerous graphitic slips in thinly bedded argillite, 1 to 2% cubic pyrite. Weak foliation sub-parallel to bedding.	3502	236.52	238.18	1.66	.01	M	W	W	
		3503	238.18	239.38	1.20	.03	M	W	W	
		3504	239.38	240.50	1.12	.04	M	W	W	
		3505	240.50	241.90	1.40	.02	M	W	W	
		3506	241.90	243.52	1.62	.02	M	W	W	
		3507	243.52	244.83	1.31	.03	M	W	W	
		3508	244.83	246.17	1.34	.02	M	M	W	
246.17 248.18	1A: ARGILLITE									
	Moderately sericite altered argillite, intensity apparently increasing down the hole. 1 to 2% cubic pyrite, 2 to 10% thin quartz ankerite stringers at random orientations in the unit.	3509	246.17	247.15	.98	.04	M	M	M	
	248.18 End Of Hole.									
	247.15 248.18 2% fine cubic pyrite.	3510	247.15	248.18	1.03	.61	M	M	M	

DH T-28

Core size:
Drilled by: Longyear Drilling Co.

Started: December 4/87
Finished: December 5/87

Logged by: J. MacPherson
Date logged: December 7/87
System:

Azimuth: 180
Dip: -45

Depth	Az	Dip
127.13		-45.0

Grid: Detail 3W
Purpose: test down plunge ext of gold zone
Claim: 956079

Northing: 3+25N
Easting: L 3630 E
Elevation:

Length: 96.62m

J. MacPherson

Interval (m)	Description	Sample No.	Interval (m)	Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
.00 28.04	OVERBURDEN								
28.04 30.00	3E: MODERATE SERICITE SCHIST (+/- QTZ) Very sericitic, thinly banded/bedded at 60 degrees to the core axis. Strong crenulation cleavage at 90 degrees to the core axis. Colour is greenish grey and the rock is moderately soft. Trace pyrite.	5880	28.04 30.00	1.96	n/a	W	S	M	TR
30.00 30.36	2B: QUARTZ PORPHYRY Upper contact is deformed at 30 degrees to the core axis and the lower contact is sharp at 85 degrees to the core axis. 30% deformed and shattered quartz phenocrysts are set in a quartz carbonate sericite matrix. Weak foliation at 80 degrees to the core axis in the form of sericitic stringers. 1% fine grained cubic pyrite and trace to 1% coarse grained arsenopyrite. Colour is light grey with greenish tinge.	5881	30.00 30.36	.36	.16	S	M	M	1
30.36 31.50	3E: MODERATE SERICITE SCHIST (+/- QTZ) Similar to section from 28.04 to 30.00 metres. More deformed and there are local euhedral pods of quartz and arsenopyrite present. These make up less than 1% of the rock.	5882	30.36 31.50	1.14	.57	W	S	M	TR

Interval (m)		Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
31.50	32.73	2B: QUARTZ PORPHYRY Similar to previous dyke. 30% subhedral quartz phenocrysts in a quartz carbonate sericite matrix. Trace pyrite, rare arsenopyrite grains. Sharp upper and lower contact. Colour is light grey and rock is hard.	5883	31.50	32.73	1.23	.04	S	M	M	TR
32.73	33.25	3F: STRONG SERICITE SCHIST (+/- QTZ) Very sericitic, trace arsenopyrite and pyrite.	5884	32.73	33.25	.52	.06	M	S	M	TR
33.25	35.35	2B: QUARTZ PORPHYRY More sericitic than previous dykes. Colour is light greenish grey and the rock is moderately hard. 1 to 2% very fine disseminated pyrite throughout.	5885	33.25	35.35	2.10	.02	M	S	M	2
35.35	36.35	4A: QUARTZ-CARBONATE VEIN Zone of quartz veining. Wallrock is only weakly sericitic and chloritic. Vein material make up about 20% of the section. Pyrite content in inclusion in the vein is 2 to 3%.	5886	35.35	36.35	1.00	.19	M	W	W	1
36.35	38.53	1F: CONGLOMERATE Matrix supported. Clasts are mainly siliceous and sericitic. They are subhedral, often stretched very highly altered. Matrix of the dyke is quartz, carbonate and sericite. Colour is medium grey green. The rock is cloudy, making grain edges indistinct. Matrix contains at least 10% fine disseminated cubic pyrite, especially to 37.30 metres. This section also contains trace fuchsitic fragments and minor tourmaline as thin fracture fillings. The section from 37.30 metres is well banded at 65 degrees to the core axis and contains 5% pyrite as thin banding parallel stringers and occasional disseminations.	5887 5888	36.35 37.30	37.30 38.53	.95 1.23	.17 .20	S M	S M	S S	10 3

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
38.53 50.33	1A: ARGILLITE									
	Thinly bedded at 75 degrees to the core axis. Locally moderately deformed and slumped. Colour varies from light to dark green and locally black depending on the degree of alteration. Generally the degree of alteration as well as the pyrite content decreases towards the end of the section. The last 4 metres is chloritic and contains only trace pyrite.	5893	44.81	46.31	1.50	.17	W	W	W	2
		5894	46.31	47.85	1.54	.36	W	W	W	2
		5895	47.85	49.35	1.50	.03	W	W	W	2
		5896	49.35	50.33	.98	.04	W	W	W	2
	38.53 39.73 2 zones of quartz carbonate sericite schist with 5% pyrite.	5889	38.53	39.73	1.20	.21	W	M	M	3
	39.73 41.76 20 cm quartz carbonate sericite schist with 5% pyrite.	5890	39.73	41.76	2.03	.18	W	M	M	2-3
	41.76 43.26 Pyrite in thin bedding parallel bands and fine disseminations.	5891	41.76	43.26	1.50	.20	W	W	W	2-3
	43.26 44.81 Pyrite in several bands of quartz carbonate sericite.	5892	43.26	44.81	1.55	1.52	W	W	W	2-3
50.33 60.04	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY									
	Typical red hematitic alteration with 1 to 2% disseminated euhedral magnetite and occasional magnetite fracture filling. Locally magnetite is replaced with cubic pyrite. Pyrite also occurs in thin bands oriented at 70 degrees to the core axis and also in splashes of quartz carbonate replacements.	5899	52.00	53.30	1.30	.19	M	W	M	2
		5903	55.69	56.93	1.24	.21	M	W	M	3
	50.33 50.95 1 to 2% magnetite, local magnetite replacement by pyrite.	5897	50.33	50.95	.62	.07	M	W	M	3-5
	50.95 52.00 Dark green colour, less pyrite and magnetite, 15 cm pink quartz carbonate veinlet.	5898	50.95	52.00	1.05	.06	W	M	W	2
	53.30 54.50 2 to 3% magnetite, a little more silicified, several quartz carbonate patches over 20 cm core length.	5900	53.30	54.50	1.20	.43	M	M	M	3
	54.50 54.83 Light purple tinge, less magnetite, more disseminated pyrite.	5901	54.50	54.83	.33	2.22	S	M	S	5
	54.83 55.69 Magnetite occurs as fracture fillings and euhedral grains. Weak quartz carbonate crackle fracture.	5902	54.83	55.69	.86	.14	M-S	M	S	3
	56.93 58.13 Several bands of quartz carbonate pyrite up to 3 cm wide.	5904	56.93	58.13	1.20	.21	S	M	S	5
	58.13 59.41 Pyrite occurs semi-massive	5905	58.13	59.41	1.28	.07	M	M	M	3

Interval (m)	Description	Sample No.	Interval (m)	Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	in quartz carbonate patches.								
	59.41 60.04 Red colour fades here and there and is up to 5% magnetite as fracture fillings in the first 30 cm.	5906	59.41	60.04	.63	.14	S	M	M	2
60.04 65.88	3B: QUARTZ-SERICITE-CARBONATE SCHIST									
	Variable section dominated by quartz carbonate sericite schist. 25% of section is fine grained weakly altered lithic arenite. Pyrite content for the section is 3 to 5% with most of the pyrite restricted to the intense quartz carbonate sericite schist or banded quartz carbonate sericite section. Banding is present at 55 degrees to the core axis. Section is not magnetic except for a short section of red hematitic alteration between 62.70 and 63.09 metres.	5914	65.48	66.73	1.25	.41	M	M	M	3
	60.04 60.58 Grey green. Pyrite occurs as disseminated cubes. 10 cm fine grained quartz porphyry dyke in this section.	5907	60.04	60.58	.54	.37	M	M	M	5
	60.58 61.20 Dark green chloritic lithic arenite, weakly siliceous.	5908	60.58	61.20	.62	.38	W	W	W	1
	61.20 61.80 Banded quartz carbonate sericite section. Local semi-massive pyrite, thin tourmaline stringers.	5909	61.20	61.80	.60	.11	S	M	M	5
	61.80 62.70 Grey green, a few chloritic fracture fillings, local weak deformation.	5910	61.80	62.70	.90	.23	M	M	M	2-3
	62.70 63.09 Red hematitic alteration, weakly magnetic, 2% cubic pyrite replacing magnetite. Light red colour, gradational contacts.	5911	62.70	63.09	.39	.38	M	W	M	2
	63.09 64.08 Quartz carbonate sericite schist, well banded at 60 degrees to the core axis. Strongest portion is at top of the section and it contains thin tourmaline fracture fillings.	5912	63.09	64.08	.99	.62	S	M	M	3-5
	64.08 65.88 Strong quartz carbonate sericite schist, well banded quartz carbonate sericite tourmaline pyrite. Light greenish grey, hard.	5913	64.08	65.88	1.80	5.52	S	S	S	5
65.88 66.73	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY									
	Light reddish orange, massive to									

Interval (m)		Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
		weakly banded at 75 degrees to the core axis. 2% euhedral magnetite grains, 2 to 5% pyrite. Pyrite occurs replacing magnetite, as discrete cubes and as masses in thin bands oriented at 75 degrees to the core axis. These bands host most of the pyrite and vary in width from.1 to 1 cm. Contacts with overlying and underlying units are gradational.									
66.73	68.97	3C: INTENSE SILICA-CARBONATE FLOODING Colour is dark purple to red to locally light brown. Weakly magnetic throughout. 15% randomly oriented quartz veins. 1% euhedral magnetite grains are present in the less altered parts of the unit. Pyrite occurs mainly in and near the quartz veins. Sharp upper contact, lower contact marked by a 10 cm quartz vein. Magnetite also occurs as thin fracture fillings.									
		66.73 67.83 Several seams of magnetite and hematite, strong crackle fracture.	5915	66.73	67.83	1.10	.37	I	M	S	2-3
		67.83 68.97 The quartz vein at the end of this section contains 3% euhedral magnetite grains and 5% disseminated pyrite.	5916	67.83	68.97	1.14	.22	I	M	S	2
68.97	74.20	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY Colour varies from light reddish orange to purple. Moderately magnetic throughout. 2% euhedral magnetite and 2 to 3% fine disseminated pyrite in the unit. Pyrite occurs also as masses with quartz carbonate pods randomly scattered throughout the unit. Well banded at 65 degrees to the core axis. Colour lightens towards the lower contact. 5% randomly oriented late quartz veining.	5917	68.97	70.60	1.63	.07	M	M	M	1
			5918	70.60	72.23	1.63	.09	M	M	M	1
		72.23 73.63 5% late purple quartz carbonate crackle with 1% pyrite.	5919	72.23	73.63	1.40	.70	S	M	M	1-2
		73.63 74.20 Banded quartz carbonate sericite pyrite makes up less than 5% of this section.	5920	73.63	74.20	.57	.05	M-S	M-S	M	3-5

Interval (m)		Description	Sample No.	Interval (m)		Length (m)	Au g/t	ALTERATION SIL	SER	CARB	% PY
74.20	76.33	2I: FOLIATED QUARTZ (FELDSPAR) PORPHYRY (+/- FUCHSITE) Light greyish green, well foliated at 60 degrees to the core axis. Sharp contacts with red hematitic alteration on either side. Trace fuchsitic fragments. 2% disseminated cubic pyrite	5921	74.20	75.28	1.08	.19	S	S	M	2
			5922	75.28	76.33	1.05	.18	S	S	M	2
76.33	77.64	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY Typical red hematitic alteration. Well banded at 60 degrees to the core axis. 1 to 2% euhedral magnetite, 1 to 2% fine disseminated pyrite. Last 15 cm contains quartz vein with tourmaline fracture fillings and 5% fine disseminated pyrite.	5923	76.33	77.64	1.31	.81	M	M	M	1
77.64	78.53	3C: INTENSE SILICA-CARBONATE FLOODING 7 to 10% disseminated cubic pyrite, very siliceous. Well banded at 60 degrees to the core axis. 1% tourmaline fracture filling. Colour is light greyish green, unit is very hard. 15% quartz pyrite veining.	5924	77.64	78.53	.89	1.69	S	S	S	7
78.53	79.16	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY Very dark red, weakly magnetic, trace euhedral magnetite, 10% pyrite as magnetite replacements and fracture fillings. Gradational contacts with quartz carbonate flooding uphole and possible quartz porphyry dyke down the hole.	5925	78.53	79.16	.63	.50	S	S	S	10
79.16	80.24	2I: FOLIATED QUARTZ (FELDSPAR) PORPHYRY (+/- FUCHSITE) Light greyish green, hard. Only a few quartz phenocrysts visible, trace fuchsitic streaks. Both contacts marked by thin quartz veins. Trace pyrite only in this unit.	5926	79.16	80.24	1.08	3.72	M	S	M	TR

Interval (m)		Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
80.24	80.84	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY Light red with grey sections. Grey areas are silica carbonate flooding with 5% disseminated and fracture filling pyrite. 80.24 80.84 9 sites of visible gold in this section associated with silicified red hematitic alteration.	5927	80.24	80.84	.60	122.20	S	M	M	5
80.84	83.42	3B: QUARTZ-SERICITE-CARBONATE SCHIST Highly variable section of porphyry dyke, red hematitic alteration, and quartz carbonate sericite schist. Local quartz carbonate flooding with pyrite, a few pyritic bands in the red hematitic alteration. 80.84 81.60 30 cm quartz carbonate chlorite sericite vein at top of this section. Fractures in the vein are filled with pyrite.	5928	80.84	81.60	.76	1.12	S	M	M	3
		81.60 82.06 Thin porphyry dyke with silicified and sericitic wallrock. Pyrite occurs as cubes and fracture fillings.	5929	81.60	82.06	.46	1.90	I	S	S	3
		82.06 82.47 Silicified red hematitic alteration. Magnetite locally replaced by pyrite.	5930	82.06	82.47	.41	1.04	M	M	M	3
		82.47 83.42 Quartz carbonate flooding, minor porphyry. Locally very pyritic over 10 to 20 cm.	5931	82.47	83.42	.95	2.60	S	S	S	5
83.42	85.93	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY Reddish orange, hard, massive. Numerous chloritic fractures. Minor local quartz carbonate flooding with accompanying pyritization.	5932	83.42	84.80	1.38	3.43	M	M	M	2-3
		84.80 85.30 More chloritic stringers, less magnetite.	5933	84.80	85.30	.50	1.52	W	W	W	1
		85.30 85.93 Fault zone, broken, rusty core.	5934	85.30	85.93	.63	.37	M	W	W	TR
85.93	96.62	1A: ARGILLITE Locally highly deformed and slumped sub-parallel to the core axis. Colour	NS	85.93	89.00	3.07	n/a	M	M	W	TR
			5935	89.00	90.65	1.65	.19	M	W	M	3

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	varies from light to dark green. The unit is moderately chloritic. Trace pyrite except for sections described below.	NS	90.65	95.12	4.47	n/a	M	W	W	TR
	89.00 90.65 40 cm brecciated quartz vein in this section. Lower contact contains 20% banded pyrite over 15 cm. Quartz vein is pure white with numerous grey fractures which may be fault gouge.									
	96.62 End Of Hole.									
	95.12 96.62 Numerous thin pyritic bands and patches.	5936	95.12	96.62	1.50	3.28	W	W	W	2

DH T-29

Esso Minerals Canada - Robele JV (Ont 88)

Hole: T-29
Page: 1

Core size: BQ
Drilled by: Longyear Drilling Co.
Started: December 4/87
Finished: December 6/87
Logged by: J. MacPherson
Date logged: December 7/87
System:

Azimuth: 180
Dip: -65

Depth	Az	Dip
92.46		-61.0
148.78		-58.0

Grid: Detail 3W
Purpose: test plunge of Au zone
Claim: 956079

Northing: 3+25N
Easting: 36+30E
Elevation:

Length: 148.74m

J. MacPherson

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
.00 22.00	OVERBURDEN									
22.00 32.05	1A: ARGILLITE									
	25% Lithic arenite in this section. Thinly bedded, locally highly deformed. Common bedding angle is 60 to 70 degrees to the core axis. Colour is light grey green with patchy light sericitic sections. Alteration intensity is low but increases gradually down the hole. The first 1.4 metres is highly sericitized, broken and deformed. There is trace pyrite in this section in thin bedding parallel quartz ankerite stringers 2 to 4 cm thick.	5937	22.00	24.00	2.00	.04	W	W	M	1
		NS	24.00	32.05	8.05	n/a	M	W	W	TR
32.05 40.65	3E: MODERATE SERICITE SCHIST (+/- QTZ)									
	Very sericitic, thinly bedded, light green to locally grey, moderately deformed. Several thin zones of pyritic porphyry and/or quartz carbonate sericite schist are present in the zone. Contacts with these units are usually sharp and may be marked by a thin quartz stringer. The sericitic sediments contain trace to 1% disseminated cubic pyrite. The pyritic porphyry or quartz carbonate sericite schist may contain up to 5% fine disseminated pyrite.	5938	32.05	33.50	1.45	.06	W	S	M	TR
		5939	33.50	35.00	1.50	.04	W	S	M	TR
		5940	35.00	36.30	1.30	.05	W	S	M	1
	36.30 37.30 Less deformed, approaching quartz carbonate sericite schist.	5941	36.30	37.30	1.00	.03	W	S	M	1

Interval (m)		Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
		37.30 38.90 Two thin porphyry dykes, quartz carbonate sericite schist at contacts of the dykes.	5942	37.30	38.90	1.60	.66	M	S	M	2-3
		38.90 40.65 Trace to 1% arsenopyrite, very sericitic towards the lower contact.	5943	38.90	40.65	1.75	.22	W	S	M	1
40.65	42.00	3B: QUARTZ-SERICITE-CARBONATE SCHIST Very thinly banded at 65 degrees to the core axis. Colour is light grey green and rock is moderately hard. 2% pyrite, trace arsenopyrite.	5944	40.65	42.00	1.35	.08	W	M-S	M	2
42.00	43.00	2B: QUARTZ PORPHYRY Fine grained, massive, sericitic with 15% deformed quartz phenocrysts. Colour is light grey green. 1 to 2% fine disseminated pyrite in top 20 cm. Remainder of dyke contains trace pyrite.	5945	42.00	43.00	1.00	.05	M	S	M	1
43.00	43.95	3B: QUARTZ-SERICITE-CARBONATE SCHIST Well banded at 55 degrees to the core axis. Pyrite occurs in these bands, especially from 43.40 to 43.60 metres. Colour varies from dark grey where pyrite is more dominant to light grey green.	5946 5947	43.00 43.40	43.40 43.95	.40 .55	.03 .56	W M	S S	M M	1 2-3
43.95	45.70	1E: LITHIC ARENITE Chloritic, medium to dark green, medium grained. Moderately deformed. Strong crenulation cleavage at 80 degrees to the core axis. Trace pyrite.	NS	43.95	45.70	1.75	n/a	M	W	W	TR
45.70	47.65	1A: ARGILLITE Chloritic, thinly bedded, trace pyrite, moderately deformed, well bedded at 55 degrees to the core axis.	NS	45.70	47.65	1.95	n/a	M	W	W	TR
47.65	48.94	3B: QUARTZ-SERICITE-CARBONATE SCHIST Moderately altered, well banded at 65 degrees to the core axis. Trace pyrite, trace fuchsitic streaks.	5948	47.65	48.94	1.29	.17	W	M	M	TR

Interval (m)		Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
48.94	49.85	1A: ARGILLITE Chloritic, thinly bedded, fine grained to medium grained, trace pyrite, trace quartz tourmaline stringers.	5949	48.94	49.85	.91	.21	N	W	W	TR
49.85	52.30	3B: QUARTZ-SERICITE-CARBONATE SCHIST Weakly to moderately altered. Well banded at 60 degrees to the core axis. 1 to 2% fine disseminated pyrite, trace fuchsitic streaks. Trace tourmaline fracture fillings.	5950	49.85	50.90	1.05	.58	M	M	M	2
			5951	50.90	52.30	1.40	.22	M	M	M	2
52.30	53.28	4A: QUARTZ-CARBONATE VEIN Zone of quartz veining. Veins are quartz carbonate, white in colour. They contain numerous sericitic inclusions and the wallrock between veins is pyritic.	5952	52.30	53.28	.98	.39	S	S	S	2
53.28	58.00	3B: QUARTZ-SERICITE-CARBONATE SCHIST Fine grained, thinly banded at 60 degrees to the core axis. Unit consists of alternating fine quartz carbonate sericite pyrite bands. Colour is light greenish grey.	5953	53.28	54.77	1.49	.11	S	M	M	3-5
			5956	56.28	57.13	.85	.15	M	M	M	2
		54.77 55.61 More chloritic here, less quartz carbonate and pyrite.	5954	54.77	55.61	.84	.17	W	M	M	2
		55.61 56.28 2 to 10 cm sections of quartz carbonate sericite schist.	5955	55.61	56.28	.67	6.27	M	M	M	2
		57.13 58.00 Minor quartz carbonate tourmaline veining.	5957	57.13	58.00	.87	4.43	S	S	S	2-3
58.00	96.26	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY Light reddish orange to locally buff grey. Thin quartz carbonate stringers or bands may be filled with fine grained cubic pyrite. These stringers make up less than 1% of the unit. Note: assay intervals are based on colour changes which are directly related to the degree of quartz carbonate flooding and pyrite content.	5982	86.01	86.42	.41	.20	I	S	S	10
			5984	87.05	87.61	.56	1.22	I	S	S	15
			5985	87.61	88.34	.73	.72	S	S	S	7
			5988	90.15	92.03	1.88	.02	S	M	M	1
		86.01 86.42 This section contains a 5									

Interval (m)	Description	Sample No.	Interval (m)	Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	cm quartz carbonate tourmaline vein with banded pyrite. Pyrite content for the vein is 40%, tourmaline makes up 5% of the vein. Contact is at about 30 degrees to the core axis there is a weak pyritic halo for 15 cm on either side of the vein where there is complete magnetite destruction.								
87.05 87.61	4A: QUARTZ-CARBONATE VEIN a 3 cm quartz carbonate (feldspar?) veinlet is surrounded by a 20 cm banded quartz carbonate tourmaline pyrite halo. Section also contains several sites of chalcopyrite. Pyrite content for the section is about 15%.								
87.61 88.34	In this section the red hematitic alteration has a yellow tinge and there is complete replacement of the magnetite by pyrite. As distance from the quartz vein with the pyritic halo increases, the degree of of replacement of magnetite by pyrite increases.								
58.00 58.45	Light reddish orange, well banded at 65 degrees to the core axis, pyrite occurs in siliceous bands and replacing magnetite.	5958	58.00	58.45	.45	.70	S	M	M	5
58.45 59.40	Mainly dark greenish brown, weakly magnetic, pyrite found only in one light red area with thin random quartz stringers.	5959	58.45	59.40	.95	.21	M	W	M	1
59.40 60.02	Medium red colour, pyrite in siliceous bands, also replacing magnetite, 2% euhedral magnetite, trace tourmaline fracture fillings.	5960	59.40	60.02	.62	.20	S	M	M	2-3
60.02 61.15	Colour is light orange. 2 to 10 cm zones of silica carbonate flooding contain 5 to 7% pyrite and account for most of the pyrite content.	5961	60.02	61.15	1.13	.52	S	M	S	3

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	PY
	61.15 61.90 Slightly darker than previous section. 2 to 3% fine grained euhedral magnetite, trace to 1% fine grained pyrite. Occasional pyritic quartz carbonate patch is present.	5962	61.15	61.90	.75	2.37	S	M	M	2
	61.90 63.49 Dark purple to brown, massive, more magnetic but less magnetite visible. Weak quartz carbonate crackle fracture with little pyrite.	5963	61.90	63.49	1.59	.10	M-S	M	M	1-2
	63.49 65.00 Section has greenish tinge and is less magnetic than previous sections.	5964	63.49	65.00	1.51	.16	M	W	M	1
	65.00 65.67 Medium to dark greenish brown, a few chloritic stringers, weakly magnetic.	5965	65.00	65.67	.67	.07	M	W	M	1
	65.67 67.07 Possible quartz porphyry dyke. Colour is light orange, very hard, trace to 1% fine disseminated cubic pyrite.	5966	65.67	67.07	1.40	.14	M-S	M	M-S	1
	67.07 68.47 Well foliated at 55 degrees to the core axis. Very few magnetite replacements by pyrite.	5967	67.07	68.47	1.40	.13	S	M	M	1
	68.47 69.84 Similar to previous section except that pyrite replaces magnetite and is also present in quartz carbonate patches.	5968	68.47	69.84	1.37	.20	S	M	M	2
	69.84 71.24 Purple, well banded at 55 degrees to the core axis. Pyrite mainly in core axis parallel quartz veins. Sharp colour contrast to units above and below.	5969	69.84	71.24	1.40	.17	S	W	M	1
	71.24 72.67 Light reddish orange, 1% euhedral magnetite. Pyrite occurs replacing magnetite, as individual cubes and in quartz carbonate patches and veinlets.	5970	71.24	72.67	1.43	.19	S	M	M	3
	72.67 73.80 Patchy purple and light reddish orange. 1% euhedral magnetite grains in the lighter coloured unit, although both colours are magnetic.	5971	72.67	73.80	1.13	.21	S	W	M	TR
	73.80 74.81 Light reddish orange, pyrite in patches of quartz carbonate replacements.	5972	73.80	74.81	1.01	.16	M	W	M	1
	74.81 75.28 Light greyish red, pyrite in silicified section occurs in fractures with magnetite and specular hematite.	5973	74.81	75.28	.47	.24	I	M	S	10
	75.28 76.42 Variable section, purple quartz carbonate crackle fracture	5974	75.28	76.42	1.14	.03	S	W	M	3-5

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	contains 5% pyrite along fractures.									
	76.42 77.46 Magnetite occurs as fracture filling and euhedral cubes. Pyrite occurs as magnetite replacements and in thin stringers with chlorite.	5975	76.42	77.46	1.04	.19	S	M	M	2
	77.46 79.09 Numerous chloritic stringers. Fault zone at 78.3 metres. 1% euhedral magnetite.	5976	77.46	79.09	1.63	.01	M	M	M	1
	79.09 79.92 First 25 cm is pyritic porphyry dyke with 20% cubic pyrite. Below dyke pyrite replaces magnetite and also occurs in silica carbonate patches.	5977	79.09	79.92	.83	.03	S-I	M	S	7
	79.92 81.38 2 to 3% euhedral magnetite, patchy purple colour, pyrite replaces magnetite, also occurs in narrow quartz carbonate veinlets.	5978	79.92	81.38	1.46	.02	S	M	M	2
	81.38 82.74 Top 20 cm contains magnetite filled fractures sub-parallel to the core axis. 2% euhedral magnetite throughout the section. Colour is light reddish orange	5979	81.38	82.74	1.36	.01	S	M	M	2
	82.74 83.91 Series of late quartz veins with sericitic margins intruding red hematitic alteration.	5980	82.74	83.91	1.17	.03	S	S	M	2
	83.91 86.01 Light reddish orange, 2 to 3% euhedral magnetite, pyrite replaces magnetite rarely, pyrite more commonly in thin quartz carbonate tourmaline stringers.	5981	83.91	86.01	2.10	.04	M	M	M	2
	86.42 87.05 Well banded at 45 degrees to the core axis. 2 to 3% euhedral magnetite. Tourmaline stringers near lower contact.	5983	86.42	87.05	.63	.03	S	M	M	1
	88.34 89.42 Partial quartz carbonate replacement and moderate crackle fracture with fracture filling pyrite.	5986	88.34	89.42	1.08	1.12	I	S	S	5
	89.42 90.15 Massive section with purple quartz carbonate flooding and pyrite fracture fillings.	5987	89.42	90.15	.73	.03	I	S	S	3-5
	92.03 93.35 Light purple crackle fracture, 3% cubic pyrite, rare euhedral magnetite grains. Core broken.	5989	92.03	93.35	1.32	.04	I	S	S	3
	93.35 95.07 Light orange colour, 1% magnetite, pyrite occurs in quartz carbonate pods as masses or cubes. Wavy texture, siliceous pods are discontinuous.	5990	93.35	95.07	1.72	.06	S	S	S	5
	95.07 96.26 Similar to previous	5991	95.07	96.26	1.19	.03	S	S	S	3

Interval (m)	Description	Sample No.	Interval (m)	Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% Sx
	section. Section is massive and contains cubic pyrite replacements of magnetite as well as pyrite in silica carbonate patches.								
96.26 99.23	3B: QUARTZ-SERICITE-CARBONATE SCHIST								
	Variable texture and colour, cut by at least two 10 to 20 cm quartz porphyry dykes. Pyrite occurs as individual cubes and as 1 to 3 cm bands with sericite and quartz carbonate.	5993	97.40	98.15	.75	4.09	S	I	S	7
	96.26 97.40 Light green, very sericitic, mainly cubic pyrite with a few discontinuous quartz carbonate pyrite patches.	5992	96.26	97.40	1.14	.61	S	I	S	5-7
	98.15 99.23 Dark grey, well banded at 40 to 50 degrees to the core axis. Very pyritic with 2 to 3% thin tourmaline fracture fillings parallel to banding.	5994	98.15	99.23	1.08	1.23	I	S	S	15
99.23 110.42	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY								
	Typical red hematitic alteration with 1 to 3% euhedral magnetite. Colour varies from light reddish orange to dark purple with local areas of buff coloured quartz carbonate flooding. Pyrite occurs as magnetite replacements, individual cubes and also as thin fracture fillings with quartz and carbonate. Total pyrite content for this section is 3%.									
	99.23 100.75 Light reddish orange, 3% small euhedral magnetite grains, little replacement by pyrite.	5995	99.23	100.75	1.52	2.23	M	M	M	1
	100.75 101.32 Buff grey to red. Magnetite content less here and pyrite replaces magnetite as well as in thin siliceous fractures and patches.	5996	100.75	101.32	.57	.13	S	M	M	3
	101.32 102.13 2 to 3% magnetite, red colour.	5997	101.32	102.13	.81	.02	M	M	M	1
	102.13 103.54 Colour is very light red with buff tinge. Local weak crackle fracture. Pyrite replaces magnetite and also occurs in thin random quartz carbonate stringers.	5998	102.13	103.54	1.41	.03	S	M	S	3
	103.54 104.47 Section contains a 15 cm	5999	103.54	104.47	.93	.07	I	S	S	5

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	quartz porphyry dyke with 20% pyrite. Rest of section contains 3% pyrite as magnetite replacements and fracture fillings.									
	104.47 106.57 Colour is light orange red. 1 to 2% fine grained euhedral magnetite. Pyrite in fractures. 1% tourmaline stringers.	6000	104.47	106.57	2.10	.02	S	M	M	2-3
	106.57 107.82 3 to 5% euhedral magnetite, pyrite in siliceous patches and rarely replaces magnetite.	6001	106.57	107.82	1.25	.02	S	M	M	2
	107.82 108.91 Magnetite occurs as cubes and also as massive fracture filings. Colour is dark brownish red.	6002	107.82	108.91	1.09	.01	M	M	M	1
	108.91 110.42 Patchy silica pyrite replacements, trace tourmaline stringers, 1 to 2% euhedral magnetite.	6003	108.91	110.42	1.51	1.11	M	M	M	2
110.42 117.33	2A: QUARTZ FELDSPAR PORPHYRY									
	Differs from most other porphyry dykes in two ways. Phenocrysts are mainly feldspar making up 10 to 40% of the dyke and in some locations taking in a light pink tinge. Secondly the matrix of the dyke is mafic and quite chloritic. Contacts of the dyke are slumped sub-parallel to the core axis. The core of the dyke is medium grained to coarse grained. Pink tinged sections are slightly magnetic and occasionally there are a few magnetite grains visible. Contacts with the red hematitic alteration both above and below are gradational. Fine grained disseminated cubic pyrite.	NS 6004 6005	110.42 114.42 116.00	114.42 116.00 117.33	4.00 1.58 1.33	n/a .03 .02	W W W	W W W	W W W	1 1-2 1-2
117.33 125.75	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY									
	Colour varies from light reddish green to dark green. 1 to 2% magnetite throughout the section. 2% pyrite as single cubes and masses within small silica carbonate patches.									
	117.33 118.45 Dark green chloritic matrix.	6006	117.33	118.45	1.12	.04	M	M	M	1
	118.45 120.20 Typical red hematitic alteration with 2% euhedral magnetite, pyrite as magnetite replacements and	6007	118.45	120.20	1.75	3.14	S	M	M	1-2

Interval (m)	Description	Sample No.	Interval (m)	Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	fracture fillings.								
	120.20 121.43 Very sericitic, trace magnetite, well foliated at 55 degrees to the core axis. Pyrite in bands or silica carbonate patches. Occasional quartz phenocrysts visible.	6008	120.20 121.43	1.23	3.51	M	I	S	3
	121.43 123.00 Foliation is parallel to the core axis. 1% euhedral magnetite, pyrite occurs as magnetite replacements, colour is light reddish orange.	6009	121.43 123.00	1.57	.71	S	S	S	2
	123.00 123.40 Colour is light buff orange, foliation is sub-parallel to the core axis. Magnetite absent from this section.	6010	123.00 123.40	.40	.95	I	S	S	1
	123.40 124.30 Light buff orange, 2% euhedral magnetite grains and fracture fillings.	6011	123.40 124.30	.90	.98	S	S	S	1
	124.30 125.75 Buff coloured towards the end of the section and the degree or pyrite replacement of the magnetite increases.	6012	124.30 125.75	1.45	1.90	S	S	S	2-3
125.75 127.75	4A: QUARTZ-CARBONATE VEIN								
	Quartz vein network cutting highly altered red hematitic alteration. Numerous inclusions of sericitized red hematitic alteration. Wallrock to the veins is also very sericitic. Trace pyrite in veins. Locally magnetite is replaced by pyrite.	6013	125.75 126.75	1.00	.36	S	S	S	1
		6014	126.75 127.75	1.00	.02	S	S	S	1
127.75 132.19	1B: LITHIC ARENITE								
	Locally red stained. Medium grained to coarse grained, commonly with a dark green chloritic matrix. Local buff quartz carbonate alteration. A few magnetite grains, trace to 1% pyrite. Clasts are mainly quartzo-feldpathic and are subrounded to angular, well sorted.	6015	127.75 129.15	1.40	.18	W	W	W	TR
	129.15 130.43 2 sections of buff quartz carbonate flooding with minor pyrite.	6016	129.15 130.43	1.28	.03	M	M	W	2
	130.43 131.50 Dark green, chloritic matrix, patchy red colour.	6017	130.43 131.50	1.07	.17	W	W	W	TR
	131.50 132.19 Banded buff quartz carbonate sub-parallel to the core axis	6018	131.50 132.19	.69	.03	M	M	W	TR

Interval (m)	Description	Sample No.	Interval (m)	Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
132.19 135.55	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY Highly variable section. Colour varies from buff grey to orange. Magnetite content varies in proportion with the colour with the most magnetite present in the orange section. Buff section may contain up to 5% pyrite as fine disseminations or fracture fillings. Weak banding at 50 degrees to the core axis. Contacts are fairly sharp.								
132.19 132.85	Colour is grey brown. 1% fine grained euhedral magnetite, banded at 45 degrees to the core axis. Pyrite occurs as fracture fillings.	6019	132.19 132.85	.66	.02	S	S	M	3
132.85 133.25	Possible well bedded argillite, moderate crenulation cleavage at 80 degrees to the core axis	6020	132.85 133.25	.40	.02	W	W	W	TR
133.25 134.85	Buff grey to purple, weakly banded at 55 degrees to the core axis. Trace to 1% euhedral magnetite, pyrite occurs disseminated and concentrated in buff grey carbonate bands.	6021	133.25 134.85	1.60	.18	S	S	M	2-3
134.85 135.55	Light reddish orange. 2% euhedral magnetite. Pyrite replaces magnetite and is also in thin quartz carbonate bands. Lower contacts sharp.	6022	134.85 135.55	.70	.07	S	S	S	3
135.55 137.55	3B: QUARTZ-SERICITE-CARBONATE SCHIST Thinly banded/bedded at 50 degrees to the core axis. Unit is variable in colour and pyrite content with the greatest pyrite content contained in the buff grey quartz carbonate bands. Pyrite is also disseminated evenly throughout the rest of the section.								
135.55 136.40	Banded quartz carbonate sericite pyrite.	6023	135.55 136.40	.85	.13	S	S	S	7
136.40 137.55	Strong crenulation cleavage at 80 degrees to the core axis. Moderate to strong deformation.	6024	136.40 137.55	1.15	.24	M	M	M	3-5
137.55 148.74	1A: ARGILLITE Mixture of chloritic argillite, sericitic argillite, thin boudanaged	6025	137.55 138.25	.70	1.10	M	W	W	2
		6027	140.05 141.60	1.55	.11	M	W	W	1-2

Interval (m)	Description	Sample No.	Interval (m)	Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	quartz veinlets and banded pyrite. This section looks very similar to the unit in hole T-11 located just south of the red hematitic alteration. Colour can best be described as alternating greenish black and siliceous (white) bands. These are locally stle deformed and slumped sub-parallel to the core axis. Pyrite bands are interbedded sporadically with these bands throughout the section. Overall pyrite content is 3 to 5%. Minor amounts of red hematitic alteration are also present.	6028	141.60 143.00	1.40	1.38	M	W	W	1
	148.74 End Of Hole.								
138.25 140.04	Several 1 cm bands of massive pyrite with quartz and carbonate. 5% quartz veining.	6026	138.25 140.04	1.79	.39	W	M	M	3-5
143.00 143.69	Narrow band of red hematitic alteration, 5 cm of quartz carbonate pyrite schist. 10% quartz veining.	6029	143.00 143.69	.69	.42	W	M	M	3
143.69 145.11	1 thin zone of quartz carbonate pyrite banding, 3 to 5% quartz veining.	6030	143.69 145.11	1.42	.02	W	W	W	2
145.11 146.00	10% quartz veining.	6031	145.11 146.00	.89	.03	W	M	M	1-2
146.00 147.13	Interbedded red hematitic alteration and banded quartz and argillite, minor banded pyrite.	6032	146.00 147.13	1.13	.14	M	M	M	2
147.13 148.11	30% buff banded quartz carbonate pyrite. Minor quartz veining.	6033	147.13 148.11	.98	8.20	M	M	M	3-5
148.11 148.74	15% quartz veining, minor banded pyrite.	6034	148.11 148.74	.63	2.50	W	W	W	1

DH T-39

Core size: BQ
Drilled by:

Started: Feb. 12/88
Finished: Feb. 13/88

Logged by: J. MacPherson
Date logged: Feb. 18/88
System:

Azimuth: 180
Dip: -85

Depth	Az	Dip
75.28		-82.0

Grid: Detail 3E
Purpose: test Au zone
Claim: 956079

Northing: 2+90N
Easting: 3620E
Elevation:

Length: 75.28m

J. MacPherson

Interval (m)	Description	Sample No.	Interval (m)	Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
.00 18.28	OVERBURDEN								
18.28 28.76	3D: QUARTZ CHLORITE CARBONATE SCHIST Highly deformed, weakly sericite altered. Unit consists of alternating thin bands of quartz, chlorite and carbonate rich bands. Minor quartz carbonate sericite schist up to 20 cm wide is interbedded with the main unit. These sections usually contain more pyrite in narrow bands varying in width from.5 to 2 cm. The bands are highly crenulated and the angles with the core axis vary from 0 to 45 degrees. There is a strong crenulation cleavage at 75 degrees to the core axis. These often open up into sericitic fractures. The pyrite content of the quartz chlorite carbonate schist is less than 1% but the interbedded quartz carbonate sericite schist may contain up to 5% fine disseminated banded pyrite. Generally, the angles of the banding to the core axis increase towards the lower contact with the quartz carbonate sericite schist. Note that only the intercalated pyritic quartz carbonate sericite schist has been sampled in this section.	NS	24.66	25.15	.49	n/a	M-W	W	W	TR
		NS	27.90	28.76	.86	n/a	W	W-M	W	TR
18.28 20.42	Strong crenulation cleavage developed at 70 to 90 degrees to the core axis especially in the intercalated quartz carbonate sericite	NS	18.28	20.42	2.14	n/a	M-W	W	W	TR

erval (m)	----------Description----------	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	schist.									
	20.42 21.05 Moderately sharp contacts, numerous sericitic stringers at 10 to 20 degrees to the core axis. Trace disseminated pyrite. Strong crenulation cleavage at 70 degrees to the core axis.	6256	20.42	21.05	.63	.42	M	S-I	S	TR
	21.05 23.19 Mainly quartz chlorite carbonate schist with very minor interbedded quartz carbonate sericite schist.	MS	21.05	23.19	2.14	n/a	M-W	W	W	TR
	23.19 24.66 Mainly quartz carbonate sericite schist with 15% quartz veining. Locally well banded with some bands moderately pyrite rich (10%). Numerous bright green sericitic fractures.	6257	23.19	24.66	1.47	2.10	W-M	S	M	2
	25.15 25.78 Thinly banded quartz carbonate sericite schist with trace euhedral magnetite grains, light orange tint to the rock where magnetite is present.	6258	25.15	25.78	.63	.01	W	S	M	1
	25.78 26.28 Becoming more sericitic towards the lower contact.	MS	25.78	26.28	.50	n/a	W	M	W	TR
	26.28 27.90 More intercalated quartz carbonate sericite schist in this section with 2 to 3% banded pyrite.	6259	26.28	27.90	1.62	.01	W-M	M	M	1
28.76 31.20	3B: QUARTZ-SERICITE-CARBONATE SCHIST Characterized by shallow angles to the core axis and a medium to light green colour caused by numerous sericitic fractures oriented from 30 to 60 degrees to the core axis. Minor chlorite present but this disappears towards the lower contact and the unit becomes mainly quartz, sericite and pyrite. Lower contact sharp, upper contact gradational. Unit consists of alternating quartz and sericite carbonate rich bands, locally highly deformed and slumped sub-parallel to the core axis. The subhorizontal crenulation cleavage noted in the previous section is not present. Local semi-massive banded pyrite, especially near the lower contact. This lower contact is marked by a 5 cm quartz tourmaline veinlet which consists of									

Interval (m)	Description	Sample No.	Interval (m)	Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	40% quartz, 55% tourmaline and minor pyrite and anhydrite. The lower contact of this vein marks the beginning of the red hematitic alteration and this contact is oriented at 70 degrees to the core axis.								
	28.76 30.45 Trace magnetite grains.	6260	28.76	30.45	1.69	.83	M-S	M	1
	30.45 31.20 Fracture fillings at 60 degrees to the core axis of sericite and minor tourmaline. Lower contact is 5 cm quartz tourmaline veinlet.	6261	30.45	31.20	.75	.01	S	S-I	S	2
31.20 41.22	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY								
	Highly variable in colour, magnetite content and pyrite content. Colour varies from a light orange red to reddish green to dark green and purple. All of these colours are magnetic but only the orange red colour and more rarely the red green colour contain euhedral magnetite. Average magnetite content of this section is 2%. The magnetite appears to be late as it is disseminated evenly throughout the core and actually can be seen to overprint the strong crenulation cleavage and foliation which can still be vaguely seen at various locations throughout the core.	6265	34.15	35.66	1.51	.01	M	M	M	TR-1
		6266	35.66	36.90	1.24	.02	M	M	M	TR
		6267	36.90	38.70	1.80	.03	S	S	S	1
		6268	38.70	40.10	1.40	.10	S	S	S	1-2
		6269	40.11	41.22	1.11	4.73	S	S	S	5
	There are many different subtle variations in the core and the sample interval will usually reflect this. Larger sample intervals are used in areas where there is little magnetite remobilization and quartz pyrite replacements.								
	32.63 36.90 Colour is generally reddish green to dark green with minor variations. Magnetic throughout, but magnetite grains only occasionally visible. Minor remobilized magnetite along fractures sub-parallel to the core axis. Minor local pyrite. More or less massive with								

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	local weak foliation.									
	36.69 40.11. In this section the reddish green section fades out and the core resumes its normal orange red colour. Moderate foliation at 30 to 40 degrees to the core axis. Section contains 1 to 2% subhedral magnetite aligned parallel to foliation in fractures, usually mantled by quartz. Towards the end of this section, the magnetite becomes gradually replaced by pyrite, but the quartz mantling remains. The amount of vein quartz also increases towards the lower contact. Magnetite and pyrite bearing fractures are oriented at less than 20 degrees to the core axis.									
	40.1 41.22. Zone of higher pyrite content. Pyrite at the top and bottom of this zone pyrite gradually replaces magnetite but still retains the quartz mantle. The central part of this section is silica flooded and contains no magnetite. Pyrite is present in amounts of up to 15%. It is usually fine grained and concentrated more in the sericitic portions of this siliceous core.									
	31.20 32.00 Colour is orange red. Magnetite disseminated evenly throughout the section. Most of pyrite is in top 25 cm in and is mantled by quartz. Strong foliation at 50 degrees to the core axis.	6262	31.20	32.00	.80	.02	S	M-S	M-S	1-2
	32.00 32.63 Colour is light reddish green, less than 1% magnetite, strong crenulation cleavage at 70 degrees to the core axis. Sharp contacts.	6263	32.00	32.63	.63	.01	M-S	S-I	M-S	TR-1
	32.63 34.15 Minor remobilized magnetite	6264	32.63	34.15	1.52	.01	M	M	M	TR
41.22 42.80	3C: INTENSE SILICA-CARBONATE FLOODING Colour is variable from purple to light reddish orange. Rock is very hard and is cut by numerous randomly oriented quartz carbonate crackle fractures. 2% pyrite in this unit. Upper and lower contacts are marked by 2 to 3 cm quartz veinlets with	6270	41.22	42.80	1.58	.71	S-I	S	S	5

Interval (m)	Description	Sample No.	Interval (m)	Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	pyritic margins. Last 30 cm of section is less crackle fractured and may contain up to 7% very fine disseminated pyrite.								
42.80 52.46	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY								
	Local minor quartz carbonate crackle fracture. 3% pyrite for first 20 cm, pyrite content averages 2% for rest of section. Colour is light orange red and there is 1 to 2% disseminated euhedral magnetite throughout. Local replacement of magnetite by pyrite and quartz. Moderate to strong foliation at 20 to 40 degrees to the core axis.	6271	42.80	43.19	.39	.01	S	S	S	3
	46.4 46.92. Medium purple colour, hard, weakly magnetic, quartz chlorite stockworks restricted to this interval. 1% pyrite in earlier quartz fracture fillings.	6275	46.40	46.92	.52	.05	S	M	M-S	1-2
	46.92 48.82. Typical orange red hematitic alteration. Weakly foliated at 40 degrees to the core axis. 1 to 2% disseminated euhedral magnetite, 1% disseminated pyrite.	6276	46.92	47.65	.73	.01	M-S	M-S	M-S	1
	48.82 49.39. Silicified and crackle fractured red hematitic alteration. Colour is grey with light pink tinge. Where silicification is most intense the rock is not magnetic and is massive. When the foliation returns the magnetite does as well and the colour changes to the more typical orange red. 1 to 2% disseminated pyrite, 1% late chloritic fractures at 55 degrees to the core axis.	6277	47.65	48.35	.70	.01	M-S	M-S	M-S	3
	49.39 50.08. Typical red hematitic alteration, as described in the section from 48.35 to 48.82 meters. 2% disseminated euhedral magnetite, 1 to 2% disseminated pyrite.	6278	48.35	48.82	.47	.02	M-S	M-S	M-S	1
	50.08 50.86. Two zones of intensely silicified red hematitic alteration with chloritic boundary fractures are present in this section. A quartz stringer running sub-parallel to the core axis is 1 cm wide and contains 60% semi-massive pyrite. This veinlet	6279	48.82	49.39	.57	.22	S-I	M	S	1-2
		6280	49.39	50.08	.69	.03	M-S	M-S	M-S	1-2
		6281	50.08	50.86	.78	.02	S-I	S	S	2-3
		6282	50.86	51.47	.61	.01	M	M-S	M	TR
		6283	51.47	52.46	.99	.09	M	M-S	M	1-3

erval (m)	----------Description----------	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	is present for the first 25 cm of the section. A second weaker quartz flood 15 cm wide is present at the bottom of this section. It contains 2% fine disseminated pyrite.									
	50.86 51.47. Typical red hematitic alteration. Trace to 1% fine disseminated euhedral magnetite, trace cubic pyrite, well foliated at 40 degrees to the core axis.									
	50.86 52.46. Transition zone between typical red hematitic alteration and quartz carbonate sericite schist. More sericitic than the red hematitic alteration, there is also minor chlorite in the matrix of this weakly fod rock. The foliation is at 40 to 45 degrees to the core axis. Trace to 1% magnetite present, 1 to 3% pyrite also present as magnetite replacements and in this discontinuous stringer sub-parallel to the foliation.									
	43.19 44.30 1% disseminated euhedral pyrite.	6272	43.19	44.30	1.11	.01	S	S	S	1-2
	44.30 44.80 1 cm quartz ankerite veinlet sub-parallel to core axis with coarse anhedral magnetite and masses of pyrite in and near the veinlet.	6273	44.30	44.80	.50	.01	S	S	S	2-3
	44.80 46.40 Typical red hematitic alteration with a 12 cm quartz ankerite veinlet with trace pyrite and very thin pyritic margins cutting the unit.	6274	44.80	46.40	1.60	1.41	S	S	S	2
52.46 54.05	3B: QUARTZ-SERICITE-CARBONATE SCHIST Colour varies from light grey green to dark green where chlorite is present. It is very well foliated at 25 degrees to the core axis. Bands consist of alternating quartz, carbonate, pyrite and towards the end, chlorite with pyrite occuring in all three bands in amounts up to 7% locally. Average for this section is 3 to 5% pyrite. The more chloritic parts of this section appear to have the most pyrite.									
	52.46 52.90 Sericite dominated schist.	6284	52.46	52.90	.44	.03	S	S	S	2-3
	52.90 53.60 Chlorite dominated schist.	6285	52.90	53.60	.70	.16	S	M	S	5-7

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	53.60 54.05 Sericite dominated shcist.	6286	53.60	54.05	.45	.04	S	S	S	3
54.05 56.05	3D: QUARTZ CHLORITE CARBONATE SCHIST Moderately chloritic, colour is dark green with occasional red patch with trace magnetite grains. Foliation variable from 10 to 30 degrees to the core axis. Fairly sharp upper and lower contacts.	6287	54.05	56.05	2.00	.01	M	M	M	1
56.05 58.33	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY Colour is different than the typical red hematitic alteration. This is a light orange, contains less magnetite and seems to have more sericite in the matrix of the rock as well as in narrow random fractures. Pyrite content is generally quite low and in places pyrite can be seen replacing magnetite with siliceous mantles around the replacement. Local greenish chloritic patches. Weak foliation for the first 1 meter. After this point the rock becomes much more massive looking.									
	56.05 57.00 Foliated portion of this unit.	6288	56.05	57.00	.95	.02	M-S	S	M-S	TR
	57.00 58.33 Massive light orange colour	6289	57.00	58.33	1.33	.03	M-S	S	M-S	1
58.33 59.73	3D: QUARTZ CHLORITE CARBONATE SCHIST Dark grey to black, siliceous, well banded at 40 degrees to the core axis. Minor sericite as bands and rare cross-cutting fracture fillings. 5% quartz as bands. Minor tourmaline also as bands, most notably at 59.03 meters, where it is the margin to a pyritic quartz veinlet. A very weak crenulation cleavage may be present at 90 degrees to the core axis. Pyrite is present as clots and small masses throughout the section, except in the more siliceous parts , where it is much finer grained and disseminated evenly throughout.	6290	58.33	59.73	1.40	.21	M	M	M	2-3

Interval (m)		Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
59.73	61.25	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY Light orange red with sericitic light green upper margins. This margin is 50 cm long and is massive to weakly foliated at 30 degrees to the core axis. It contains numerous chloritic and tourmaline filled fractures oriented at 30 degrees to the core axis and is not magnetic. Below 60.4 meters the rock is more typical of the red hematitic alteration and it is weakly foliated at 35 degrees to the core axis and contains 1% fine disseminated euhedral magnetite with pyrite locally replacing the magnetite. Minor tourmaline fractures. Sharp lower contact.	6292	60.40	61.25	.85	.01	M-S	M-S	M-S	1-2
		59.73 60.40 Bleached margin of red hematitic alteration.	6291	59.73	60.40	.67	.02	S	S	S	1
61.25	62.61	3D: QUARTZ CHLORITE CARBONATE SCHIST More accurate description for this unit would be a quartz chlorite sericite carbonate schist, with the chlorite and sericite being present in more or less equal amounts throughout the section. Unit is very well banded at 30 to 40 degrees to the core axis. It consists of alternating bands of each of the minerals mentioned above. All of these bands host abundant pyrite with perhaps the siliceous and ankeritic bands carrying a bit more pyrite. Pyrite occurs semi-massive in some bands and gives the overall section a pyrite content of at least 10%. Colour is the unit is variable from dark grey green to light grey locally. Lower contact to this unit is marked by a chloritic fracture at 45 degrees to the core axis.	6293	61.25	62.61	1.36	.32	S	S	S	10
62.61	63.95	3B: QUARTZ-SERICITE-CARBONATE SCHIST Well banded at 30 degrees to the core axis. Similar to previous section except that there is no chlorite.	6294	62.61	63.95	1.34	2.66	S-I	S	S	5

Interval (m)		Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
		Pyrite is present in amounts up to 5% as part of the bands and also as fracture fillings that are sub-parallel to the core axis. Lower contact gradational, upper contact marked by a 15 cm zone of banding parallel quartz tourmaline pyrite stringers.									
63.95	65.00	2G: SILICIFIED PORPHYRY (QUARTZ &/OR FELDSPAR)									
		Possible a dyke, but due to the intense silicification, only a few shadowy phenocrysts are visible. Massive, with a few pyritic fractures, but pyrite is also disseminated in the dyke in minor amounts.	6295	63.95	65.00	1.05	5.22	S-I	M	S	5
65.00	71.02	3C: INTENSE SILICA-CARBONATE FLOODING									
		Very hard, colour is medium to dark purple with minor variations. Pyrite is present in varying amounts throughout this unit. Not magnetic, locally massive to weakly foliated. Very intense silicification in this unit.	6298	66.85	68.25	1.40	.19	I	M	S	3-5
		65.00 66.14 Purple, massive, very hard, pyrite is disseminated evenly throughout.	6296	65.00	66.14	1.14	.44	I	M	S	2-3
		66.14 66.85 Light grey purple, numerous random fractures filled with pyrite, which is also disseminated throughout the section. Also, 2 cm quartz vein with massive pyrite.	6297	66.14	66.85	.71	.18	I	M	S	7
		68.25 68.95 Weakly magnetic in red section at top. Very well banded below this, colour is greyish purple. Below this there is a 3 cm banded quartz tourmaline pyrite veinlet.	6299	68.25	68.95	.70	.11	I	S	S	3
		68.95 69.58 Contains a relatively unsilicified inclusion of red hematitic alteration wiht 2% euhedral magnetite, 1% pyrite.	6300	68.95	69.58	.63	.01	S-I	S	S	2
		69.58 71.02 Variable section, generally purple with several light orange sections with pyrite in fractures sub-parallel to the core axis	6301	69.58	71.02	1.44	.03	I	M	M	3-5

Interval (m)		Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
71.02	75.28	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY									
		Typical orange red colour. Variation in the magnetite and pyrite content are present throughout the section. Average magnetite content is 1%, average pyrite content is 1 to 2%.	6302	71.02	71.82	.80	.28	S	S	S	1
		71.02 71.82. Matrix appears silicified and the magnetite grains are smaller than usual (less than 2 mm in diameter). Several thin quartz pyrite bands at 50 degrees to the core axis. These are less than 1 cm wide.	6303	71.82	72.23	.41	.96	S	S-I	S	3
		71.82 72.23. 12 cm quartz vein with lower wallrock sericitic and pyritic for 20 cm. No pyrite in vein. Contacts are at 60 degrees to the core axis.	6304	72.23	72.75	.52	.18	S	S	S	5
		72.23 72.75. Orange red colour, 1% disseminated euhedral magnetite grains. Several patches and poorly formed veins of quartz pyrite. These are wispy in nature but are very pyritic (up to 35% py). By volume, these make up about 5% of the rock.	6305	72.75	74.15	1.40	.04	M-S	M-S	M-S	TR-1
		72.75 74.15. Typical red hematitic alteration, with the magnetite here alighed parallel to foliation which is at 10 to 20 degrees to the core axis. Minor pyrite, moderate sericite in the matrix.	6406	74.15	75.28	1.13	.22	S	S	S	5
		74.15 75.28. Wispy quartz pyrite veinlets and patches become evident again in this section. Here they make up nearly 10% of the rock by volume. Where the contacts are more or less regular, they are oriented at an average of 40 to 50 degrees to the core axis, but this is highly variable.									
		75.28 End Of Hole.									

DH T-40

Core size: BQ
Drilled by: Longyear Drilling Co.

Started: Feb. 13/88
Finished: Feb. 14/88

Logged by: J. MacPherson
Date logged: Feb. 22/88
System:

	Azimuth:	180
	Dip:	-85
Depth	Az	Dip
64.40		-84.0

Grid: Detail 3E
Purpose: test Au zone
Claim: 956079

Northing: 2+70N
Easting: 3615E
Elevation:

Length: 64.40m

J. MacPherson

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
.00 21.33	OVERBURDEN									
21.33 23.46	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY									
	Foliated at 0 to 45 degrees to the core axis. Angles to the core axis generally increasing towards the end of the section. 1% euhedral magnetite grains set in a fine grained siliceous orange red matrix. 2% pyrite as magnetite replacements and thin fracture fillings along with quartz. 1% late quartz carbonate veining at 30 degrees to the core axis. 50 cm section of purple quartz carbonate flooding is present in the central part of this section. It contains 5% pyrite as poorly formed cubes (probably mag replacements) and also in thin siliceous fractures at 45 degrees to the core axis.	6307	21.33	22.23	.90	.04	M-S	M-S	M-S	2
		6309	22.60	23.46	.86	.03	M-S	M-S	M-S	2
	22.23 22.60 Quartz carbonate flooding.	6308	22.23	22.60	.37	.02	S-I	S	S	5
23.46 27.03	2I: FOLIATED QUARTZ (FELDSPAR) PORPHYRY (+/- FUCHSITE)									
	Very well foliated at 20 to 30 degrees to the core axis. Bands consist of alternating sericite and quartz carbonate. Minor tourmaline stringers sub-parallel to the foliation. A few rounded quartz and feldspar phenocrysts are present. The feldspars are quite large and may									

Interval (m)	Description	Sample No.	Interval (m)	Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	reach diameters of 1.5 cm. The foliation appears to flow around these remnant feldspars. They make up less than 2% of the rock. This unit may also be called coarse-grained hematitic porphyry. Colour is greyish brown with several zones of purple quartz carbonate flooding which contains significantly higher pyrite. The quartz carbonate flooding areas may host up to 7% very fine disseminated pyrite while the foliated dyke may carry less than 1% pyrite. Samples of the flood areas have been split out of the foliated dyke. The foliated dyke also contains 1% fuchsitic streaks which are often oriented sub-parallel to the foliation.								
	23.46 24.75 Section contains 30 cm of pyritic quartz carbonate flooding.	6310	23.46	24.75	1.29	.41	S	S	S	3-5
	24.75 25.75 Well foliated dyke, foliation becomes less prominent towards the lower contact.	6311	24.75	25.75	1.00	.16	M	S	M-S	1
	25.75 27.03 Weakly foliated, numerous discontinuous pyritic stringers sub-parallel to the core axis.	6312	25.75	27.03	1.28	.05	S	S	S	1-2
27.03 28.18	2H: COARSE-GRAINED (HEMATITIC) PORPHYRY 5% Large subhedral feldspar grains, hematized. The matrix of this highly altered dyke is dark grey brown with local greenish tinges. Trace fuchsitic streaks. Numerous sericitic fractures sub-parallel to the core axis. This unit is fairly massive with weakly foliated contacts. 1 to 2% pyrite overall.	6313	27.03	28.18	1.15	.01	S	S	S	1-2
28.18 29.07	2I: FOLIATED QUARTZ (FELDSPAR) PORPHYRY (+/- FUCHSITE) May be a border phase of the coarse hematitic dyke above. Numerous sericitic stringers with trace pyrite at 0 to 15 degrees to the core axis.	6314	28.18	29.07	.89	.01	M-S	M-S	M-S	TR
29.07 29.56	3C: INTENSE SILICA-CARBONATE FLOODING									

Interval (m)		Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
		Dark purplish brown, massive, vry hard. 5% pyrite as fine disseminations and also with sericite in thin fractures sub-parallel to the core axis.	6315	29.07	29.56	.49	.01	S-I	S	S	5
29.56	30.80	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY Typical orange red colour. 2% euhedral magnetite grains. Massive with 5% late quartz ankerite stringers randomly cutting the core. 1 1cm ankerite pyrite veinlet sub-parallel to the core axis at 30.30 meters. This veinlet contains 40% coarse cubic pyrite. 29.56 30.80 Almost all the pyrite for this section is in the quartz ankerite veinlet described above.	6316	29.56	30.80	1.24	.01	M-S	M-S	M-S	1-2
30.80	32.65	3C: INTENSE SILICA-CARBONATE FLOODING Dark purple, weakly foliated sub-parallel to the core axis. Hard, moderately magnetic although there are no magnetite grains visible. 1% pyrite from 30.80 to 31.75 meters. 5% pyrite from 31.75 to 32.65 meters. The pyrite in this latter section is part of the quartz carbonate flood zone which is light brown in colour and is cut by a series of thin quartz ankerite pyrite veinlets oriented sub-parallel to the core axis. This veining makes up 10% of the rock by volume. 31.75 32.65 Core axis parallel quartz ankerite pyrite veinlets.	6317	30.80	31.75	.95	.02	I	S	S	1
			6318	31.75	32.65	.90	.01	I	S	S	5-7
32.65	33.27	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY Typical orange red colour, 2% disseminated euhedral magnetite, trace pyrite, mainly in 1 quartz ankerite stringer sub-parallel to the core axis.	6319	32.65	33.27	.62	.01	M-S	M-S	M-S	TR-1
33.27	35.10	3C: INTENSE SILICA-CARBONATE FLOODING Section is actually interbedded red	6320	33.27	35.10	1.83	.01	S	S	S	1

Interval (m)		Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
		hematitic alteration and purple quartz carbonate flooding. Banding is sub-parallel to the core axis and consists of alternating orange red bands with 1 to 2% magnetite and purple material with trace euhedral magnetite. 1% pyrite overall, but pyrite content is increasing down the hole.									
35.10	39.50	3C: INTENSE SILICA-CARBONATE FLOODING Highly variable section but generally massive, medium to dark purple, very hard, locally very weakly magnetic. Pyrite content variable from 2 to 10% over short intervals.									
		35.10 35.71 Section is weakly foliated at 20 to 30 degrees to the core axis. Pyrite is disseminated evenly throughout.	6321	35.10	35.71	.61	.03	S	S	S	1-2
		35.71 37.00 Most pyritic section. Pyrite occurs in quartz veinlets oriented sub-parallel to the core axis. Intense alteration is splotchy brown and purple.	6322	35.71	37.00	1.29	.93	I	S	S	5-7
		37.00 37.87 Well foliated at 25 degrees to the core axis. Pyrite is disseminated evenly throughout this section.	6323	37.00	37.87	.87	1.23	I	S	S	3
		37.87 38.32 Light brown colour. Massive. Pyrite occurs massive in fractures, sometimes with chlorite.	6324	37.87	38.32	.45	.64	I	S	S	5-7
		38.32 39.50 Some remnant red hematitic alteration present with 1% euhedral magnetite. Last 20 cm is light orange with several light grey wispy quartz veinlets with 10% pyrite in these veinlets.	6325	38.32	39.50	1.18	3.13	S-I	S	S	2-3
39.50	40.90	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY Typical orange red colour, massive, with 2% fine disseminated euhedral magnetite grains. Pyrite locally partically replaces magnetite and also occrs as masses with quartz. Total pyrite content 1 to 2%.	6326	39.50	40.90	1.40	.30	M-S	M-S	M-S	1-2

Interval (m)		Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
40.90	44.20	4A: QUARTZ-CARBONATE VEIN White quartz ankerite vein with light pink tinge locally. Upper contact is at 50 degrees to the core axis, lower contact is irregular. Vein contains numerous inclusions and stringers of tourmaline which hosts wispy pyrite along with sericite. From 41.80 to 42.05 meters the vein contains large very sericitic wallrock inclusions, often rimmed with tourmaline.	6327	40.90	42.50	1.60	.55	I	M	M	TR-1
			6328	42.50	44.20	1.70	.21	I	M	M	TR-1
44.20	45.00	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY Light orange red, strong foliation at 50 degrees to the core axis decreases away from the contact with the quartz vein. 1% subhedral magnetite grains, 1% pyrite, usually in fractures with chlorite.	6329	44.20	45.00	.80	.86	M-S	M-S	M-S	1
45.00	48.50	3C: INTENSE SILICA-CARBONATE FLOODING Massive to locally weakly foliated at 20 to 30 degrees to the core axis. Colour varies from deep purle to light grey brown. Local splotchy silicification is present. Pyrite content generally 2% or less. Section is cut by 2% late chloritic fractures, with or without pyrite.									
		45.00 46.00 Foliated at 60 degrees to the core axis at the upper contact. Massive after 10 cm. Pyrite occurs finely disseminated as well as in thin chloritic fractures.	6330	45.00	46.00	1.00	3.10	I	M	M	2
		46.00 47.00 Light greyish brown, pyrite is disseminated throughout.	6331	46.00	47.00	1.00	.39	I	M-S	M	2-3
		47.00 48.00 Purple colour is dominant, pyrite is disseminated evenly throughout.	6332	47.00	48.00	1.00	.45	I	S	S	1-2
		48.00 48.50 Purple colour fades to orange red by the end of the section and euhedral magnetite reappears as well. 1 to 2% pyrite in fractures.	6333	48.00	48.50	.50	.31	S-I	M-S	M-S	1-2
48.50	52.73	3A: RED MAGNETITE-BEARING ARENITE OR									

...erval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	QUARTZ-FELDSPAR PORPHYRY Orange red colour with minor variations. 1% subhedral magnetite grains, disseminated evenly throughout. Massive to very weakly foliated at 20 degrees to the core axis. Towards the end of the section there is an increase in the number of chloritic fractures to an average of 5 to 10% of the rock by volume. These are generally oriented sub-parallel to the core axis but may occur at other orientations as well. Last 40 cm is strongly quartz flooded and the colour is purple.	6334	48.50	50.00	1.50	.01	M-S	M-S	M-S	1
	50.00 51.50 3 to 5% chloritic fractures	6335	50.00	51.50	1.50	.61	S	M-S	S	1-2
	51.50 52.73 Increase in quartz carbonate flooding and % of chloritic fractures.	6336	51.50	52.73	1.23	.09	S-I	S	S	2-3
52.73 55.50	3C: INTENSE SILICA-CARBONATE FLOODING Differs from other sections of quartz carbonate flooding. The purple colour is absent to very minor with the dominant colour being ligh greyish yellow with local green tinges. Also the unit is cut by 15% quartz chlorite stringers which offset the earlier features by 10 to 20 cm. This can be seen in a narrow quartz pyrite veinlet at 53.60 meters, which is offset 10 cm down the hole. These chloritic fractures may have partially remobilized the quartz pyrite material as well.	6340	54.59	55.50	.91	.03	I	S	S	2
	52.73 53.45 Light reddish purple. Weakly foliated sub-parallel to the core axis.	6337	52.73	53.45	.72	.11	S	S	S	TR
	53.45 54.08 Section contains 4 cm quartz pyrite veinlet offset by later quartz chlorite veinlet.	6338	53.45	54.08	.63	.06	I	S	S	3
	54.08 54.59 Pyrite occurs disseminated throughout and also in early quartz carbonate veinlets and in the late quartz chlorite veinlets as well.	6339	54.08	54.59	.51	.02	I	S	S	2-3
55.50 64.40	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY									

Interval (m)	Description	Sample No.	Interval		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	Variable shades of orange red, less chloritic fractures than previous section. Massive to very weakly foliated sub-parallel to the core axis. 3 to 5% late chloritic fractures sub-parallel to the core axis. 1 to 2% subhedral magnetite. Locally partially replaced by pyrite. Pyrite also found disseminated in quartz ankerite stringers. Last 2 meters shows slight increase in the number of chloritic fractures sub-parallel to the core axis, resulting in some minor broken core. 64.40 End Of Hole.	6345	60.30	61.80	1.50	.02	M-S	M-S	M-S	1
		6346	61.80	63.30	1.50	1.11	M-S	M-S	M-S	1
		6347	63.30	64.40	1.10	.41	S-M	S-M	S-M	1
55.50 56.60	Light yellowish red matrix. Magnetite altered to pyrite and red hematite. 2% wispy wtz veinlets	6341	55.50	56.60	1.10	.01	S	S	S	2-3
56.60 58.10	1% late chloritic fractures	6342	56.60	58.10	1.50	.20	M-S	M-S	M-S	1-2
58.10 58.83	5 cm quartz ankerite veinlets have brecciated the orange wallrock. Pyrite occurs in the veinlet as fine disseminations.	6343	58.10	58.83	.73	5.94	I	S	S	3-5
58.83 60.30	Typical red hematitic alteration.	6344	58.83	60.30	1.47	.03	M-S	M-S	M-S	1

DH T-41

Core size: BQ
Drilled by: Longyear Drilling Co.

Started: Feb. 14/88
Finished: Feb. 15/88

Logged by: J. MacPherson
Date logged: Feb. 22/88
System:

Azimuth: 0
Dip: -90

Depth	Az	Dip
60.05		-85.0

Grid: Detail Grid 3E
Purpose: test Au zone
Claim: 956079

Northing: 2+80N
Easting: 35+80E
Elevation:

Length: 62.22m

J. MacPherson

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
.00 21.42	OVERBURDEN									
21.42 29.62	3B: QUARTZ-SERICITE-CARBONATE SCHIST May contain up to 5% chlorite as part of the bands. Very well banded essentially parallel to the core axis, although locally the angles may increase to 20 degrees to the core axis. Bands are thin, usually less than 1 cm thick, and are composed of quartz carbonate, sericite or chlorite. Minor tourmaline may be present as a border phase to very subtle quartz carbonate pyrite veinlets which usually intrude parallel to banding. These veins may be up to 5 cm wide in true width and may carry up to 20% fine disseminated pyrite. They most often occur in clusters over a 1 to 2 meter core length. Outside of these veins, the pyrite content of the quartz carbonate sericite schist is 1%. The pyrite occurs disseminated as cubes. A weak crenulation cleavage is present at 70 to 90 degrees to the core axis and often kinks the bands of the quartz carbonate sericite schist.									
21.42 22.70	Colour changes from dark green to light green and the rock becomes more massive below 22.5 meters.	MS	21.42	22.70	1.28	n/a	M	M-S	M	TR-1
22.70 24.05	Section contains a 40 cm section of thin quartz carbonate pyrite veinlets.	6348	22.70	24.05	1.35	2.22	M-S	S	M-S	3

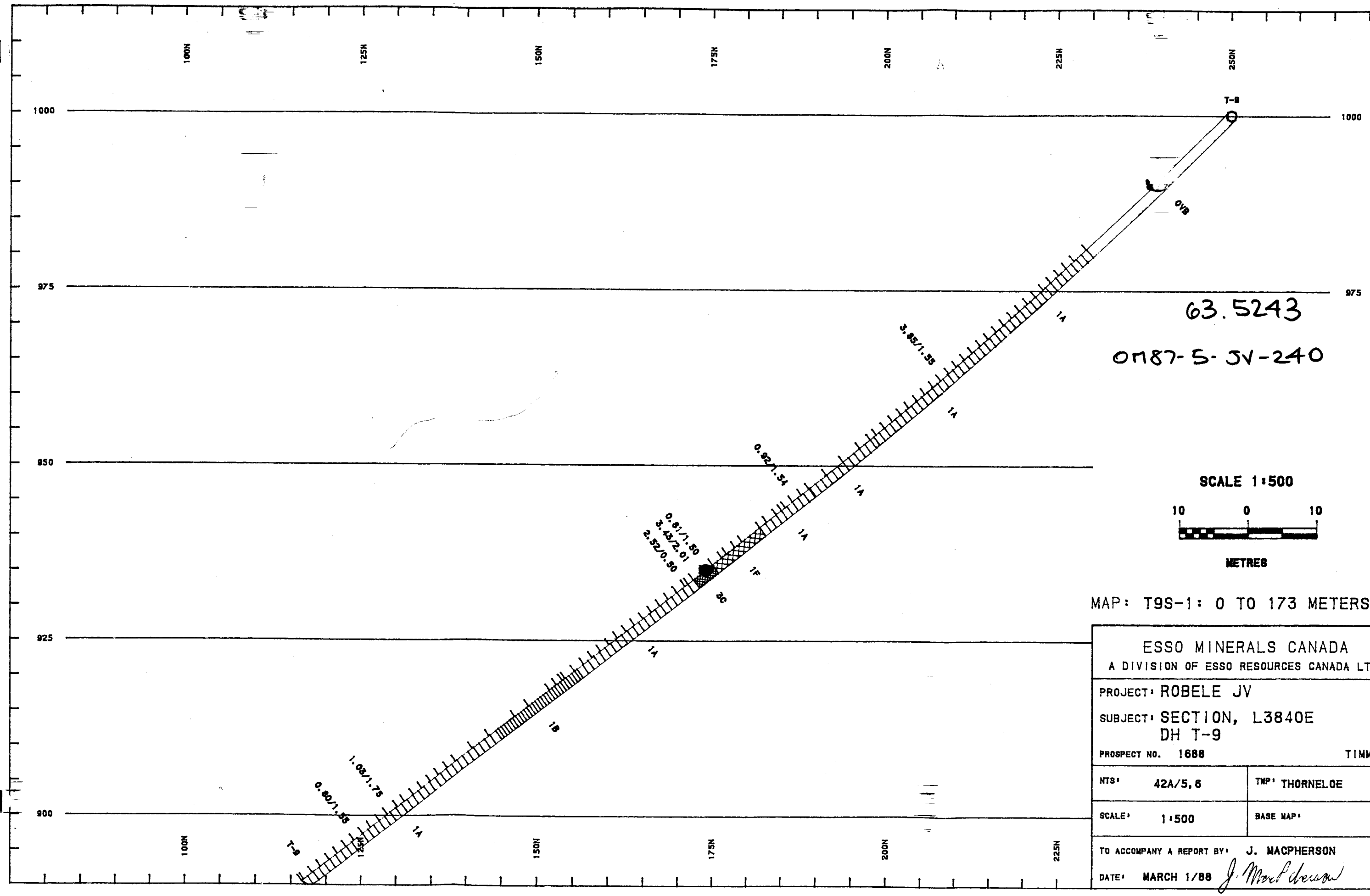
Interval (m)		Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
		24.05 28.80 Locally chloritic with accompanying colour change to dark green.	MS	24.05	28.80	4.75	n/a	M	M-S	M	TR-1
		28.80 29.62 10 cm wispy quartz veinlet sub-parallel to the core axis near the top of this section.	6349	28.80	29.62	.82	.02	M	M-S	M-S	1-2
29.62	30.18	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY Well foliated sub-parallel to the core axis. Strongly sericitic. Colour is typical light orange red, with 1% subhedral magnetite grains. Locally the magnetite is replaced by pyrite and/or hematite.	6350	29.62	30.18	.56	.03	M-S	S	S	2
30.18	30.84	3B: QUARTZ-SERICITE-CARBONATE SCHIST Thinly banded, less chloritic than previous section. Several very thin wispy quartz carbonate veinlets with fine pyrite as bands within these veinlets. Again these veinlets often have thin border fractures filled with tourmaline. Colour is medium greenish grey.	6351	30.18	30.84	.66	.04	M	S	M-S	2-3
30.84	31.98	4A: QUARTZ-CARBONATE VEIN Zone of late quartz ankerite veining. The veins are 5 to 20 wide and make up about 30% of the core length. They have very sericitic wallrock which may contain 1 to 2% fine disseminated pyrite.	6352	30.84	31.98	1.14	.18	S	S-I	S	1-2
31.98	33.07	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY Very thinly banded from 0 to 30 degrees to the core axis. 1 to 2% fine grained subhedral magnetite is evenly disseminated throughout this unit. Pyrite occurs as magnetite replacements and also in thin quartz ankerite tourmaline stringers sub-parallel to the strong banding. Contacts are sharp with quartz veins.	6353	31.98	33.07	1.09	4.21	M	M	M	1

Interval (m)		Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
33.07	33.90	2I: FOLIATED QUARTZ (FELDSPAR) PORPHYRY (+/- FUCHSITE) Pyritic banding parallel veinlets are wider and more frequent. These sections are light greyish green and again are usually bordered by thin tourmaline fractures. Average angle of banding to the core axis is 20 degrees. Remnant quartz and feldspar phenocrysts are visible in the more massive sections of this unit, suggesting that it may have been originally a porphyry dyke. Contacts are indistinct due to the intensity of alteration.	6354	33.07	33.90	.83	1.71	S	S	S	3-5
33.90	35.86	3D: QUARTZ CHLORITE CARBONATE SCHIST Quite sericitic as well, but chlorite appears to dominate. Well banded sub-parallel to the core axis. In the intervals from 34.50 to 35.05 meters there is another 10 cm quartz carbonate pyrite veinlet with tourmaline borders. This veinlet contains at least 5% banded and disseminated pyrite.	6355	33.90	34.50	.60	.75	M	M-S	M	1-2
			6356	34.50	35.05	.55	.38	S	S	S	5
			6357	35.05	35.86	.81	.06	M	M-S	M	1-2
35.86	37.10	2I: FOLIATED QUARTZ (FELDSPAR) PORPHYRY (+/- FUCHSITE) Similar to previous highly altered and foliated porphyry dyke. Quartz tourmaline fracture fillings at both contacts. Average pyrite content for this section is 7%. Pyrite occurs mainly disseminated but also in minor amounts in several thin quartz ankerite stringers sub-parallel to the banding.	6358	35.86	37.10	1.24	1.63	S	S	S	7
37.10	38.75	3D: QUARTZ CHLORITE CARBONATE SCHIST Dark green, hard, with 2% disseminated cubic pyrite. Well banded sub-parallel to the core axis.	6359	37.10	38.75	1.65	.19	M-S	M	M-S	2
38.75	49.51	3B: QUARTZ-SERICITE-CARBONATE SCHIST									

Interval (m)		Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
55.80	56.20	3B: QUARTZ-SERICITE-CARBONATE SCHIST Grey, well banded at 45 degrees to the core axis. 10% banded pyrite in this section.	6381	55.80	56.20	.40	1.73	S	S	S	10
56.20	60.04	3C: INTENSE SILICA-CARBONATE FLOODING Banded to 57.40 meters. Below this point the core is massive, greyish purple and very hard. 1 to 2% disseminated pyrite.	6384	58.80	60.04	1.24	.17	I	M	S	1-2
		56.20 57.40 Well banded, becoming massive towards the end of this section. 30 cm of rusty core indicates possible fault zone.	6382	56.20	57.40	1.20	.58	S	M	M	2-3
		57.40 58.80 Massive quartz carbonate flooding. Pyrite is disseminated evenly throughout.	6383	57.40	58.80	1.40	.02	I	M	S	1-2
60.04	62.22	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY Typical orange red colour, well foliated at 10 to 20 degrees to the core axis. 2% subhedral pyrite aligned parallel to the foliation. Pyrite replacements of magnetite are rare. At 62.15 meters there is 5 cm of quartz with 10% pyrite in the quartz. 62.22 End Of Hole.	6385	60.04	61.00	.96	.01	M-S	M-S	M-S	1
		61.00 62.22 Section contains 5 cm of quartz pyrite.	6386	61.00	62.22	1.22	.01	M-S	M-S	M-S	1-2

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	This unit is termed a quartz carbonate sericite schist but may be a very highly altered porphyry dyke, as there are locations within the unit where there appears to be remnant phenocrysts. However, the banded nature of the unit indicates that whatever the original rock was, it has been so highly altered as to be unrecognizable. To 40.65 meters, the rock is medium grey and consists of alternating bands of quartz carbonate and sericite with pyrite also in bands and disseminated. Total pyrite content for this section is 2 to 3% with local amounts to 5% over 50 cm. From 40.65 to 42.40 meters the rock remains banded, but sericite is the dominant mineral, forming much thicker bands. In these sericitic bands, pyrite occurs mantled by quartz. These may originally have been phenocrysts or possibly magnetite grains. The pyrite content of this section is 7 to 10%. It occurs disseminated replacing phenocrysts or magnetite and also semi-massive in quartz carbonate veinlets parallel to banding. Below 42.40 meters the rock regains the banded grey colour and the pyrite content drops to 2 to 3%.	6360	38.75	39.25	.50	3.82	S	S	S	3
		6374	47.85	48.34	.49	1.01	S	S	S	5
		6375	48.34	48.85	.51	.60	S	S	S	5-7
39.25 39.75	2 cm quartz tourmaline veinlet with 10% disseminated pyrite and very pyritic wallrock. More disseminated pyrite in the wallrock now	6361	39.25	39.75	.50	4.10	S	S	S	5-7
39.75 40.20	Disseminated coarse and fine pyrite in the matrix of this unit.	6362	39.75	40.20	.45	3.12	S	S	S	3-5
40.20 40.65	2 quartz tourmaline stringers parallel to the core axis.	6363	40.20	40.65	.45	3.34	S	S	S	5
40.65 41.00	Contact with sericite rich portion of the quartz carbonate sericite schist. Several clots of semi-massive pyrite present.	6364	40.65	41.00	.35	1.72	S	I	S	5-7
41.00 41.50	Banded pyrite is sub-parallel to the core axis and runs for 10 to 15 cm down the core before cutting out.	6365	41.00	41.50	.50	1.91	S	I	S	5-7
41.50 42.40	The most pyritic and siliceous of this unit. Numerous thin pyritic bands sub-parallel to the core	6366	41.50	42.40	.90	2.03	S-I	I	S	7-10

Interval (m)	Description	Sample No.	Interval (m)		Length (m)	Au (g/t)	ALTERATION SIL	SER	CARB	% PY
	axis as well as disseminated as cubes.									
	42.40 43.15 Well banded grey quartz carbonate sericite schist. 1 cm tourmaline stringer at lower contact.	6367	42.40	43.15	.75	1.60	S-I	S	S	10
	43.15 44.15 Massive. May be a highly altered porphyry dyke.	6368	43.15	44.15	1.00	.24	S-I	M-S	M-S	3-5
	44.15 45.33 15 to 20% very fine disseminated pyrite for first 0.90 meters. Rest of section contains 3 to 5% fine disseminated pyrite.	6369	44.15	45.33	1.18	.29	S-I	S	S	10
	45.33 46.16 Well banded quartz carbonate sericite schist, light grey. Locally the pyrite content is high enough to partially obscure the banding	6370	45.33	46.16	.83	.72	S-I	S	S	7-10
	46.16 46.66 Sericitic bands dominate here.	6371	46.16	46.66	.50	.86	S	I	S	5
	46.66 47.24 Banded sub-parallel to the core axis. Local massive pyrite bands 1 to 2 cm wide down the core axis. True width of bands is probably less than 1 cm.	6372	46.66	47.24	.58	.36	S	S	S	5
	47.24 47.85 A little more sericitic, local bands of grey banded quartz carbonate sericite schist carry up to 20% fine disseminated pyrite over 10 cm	6373	47.24	47.85	.61	.30	S	S	S	5-7
	48.85 49.51 A few chloritic stringers.	6376	48.85	49.51	.66	.45	S	S	S	3-5
49.51 51.22	3A: RED MAGNETITE-BEARING ARENITE OR QUARTZ-FELDSPAR PORPHYRY									
	Typical light orange red colour interbedded with dark grey very pyritic bands. Pyrite content for the section is 7 to 10%. Bands are sub-parallel to the core axis. Last 30 cm is weakly banded at 30 degrees to the core axis and contains 1 to 2% fine disseminated euhedral magnetite.	6377	49.51	51.22	1.71	.40	S	S	S	7-10
51.22 55.80	2I: FOLIATED QUARTZ (FELDSPAR) PORPHYRY (+/- FUCHSITE)									
	Light greenish grey, highly sericitized, moderately silicified.	6378	51.22	52.72	1.50	.16	M	S	S	1
	Banded, but not nearly as intensely as the previous quartz carbonate sericite schist. Bands are light orange but are not magnetic. Pyrite content is 1 to 2% throughout the section.	6379	52.72	54.20	1.48	.58	M	S	S	1
		6380	54.20	55.80	1.60	.23	M	S	S	1



63.5243

0187-5-SV-240

SCALE 1:500

10 0 10

METRES

MAP: T9S-1: 0 TO 173 METERS

ESSO MINERALS CANADA
A DIVISION OF ESSO RESOURCES CANADA LTD.

PROJECT: ROBELE JV

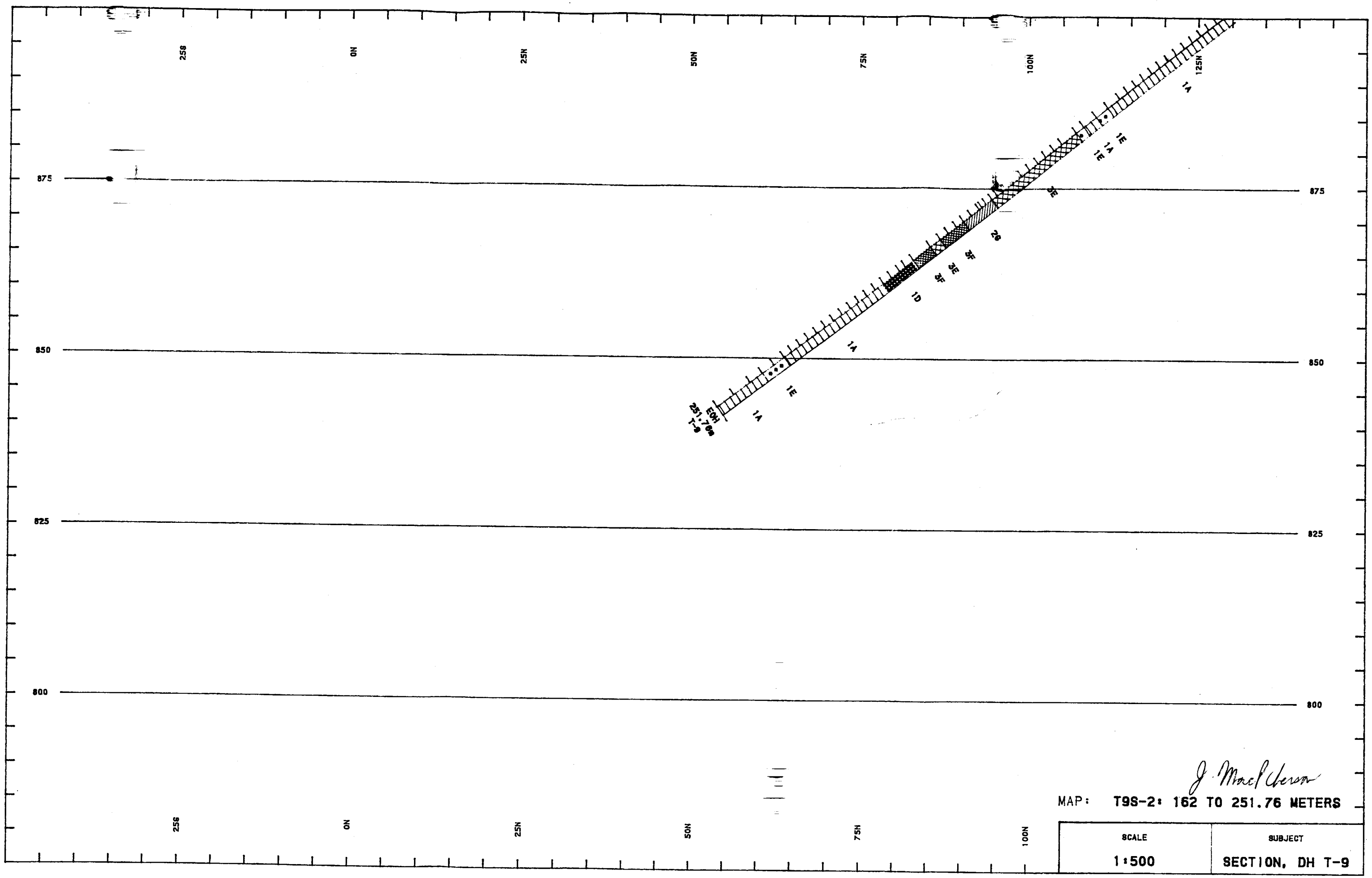
SUBJECT: SECTION, L3840E
DH T-9

PROSPECT NO. 1688 TIMMINS

NTS: 42A/5,6	TWP: THORNELOE
SCALE: 1:500	BASE MAP:

TO ACCOMPANY A REPORT BY: J. MACPHERSON

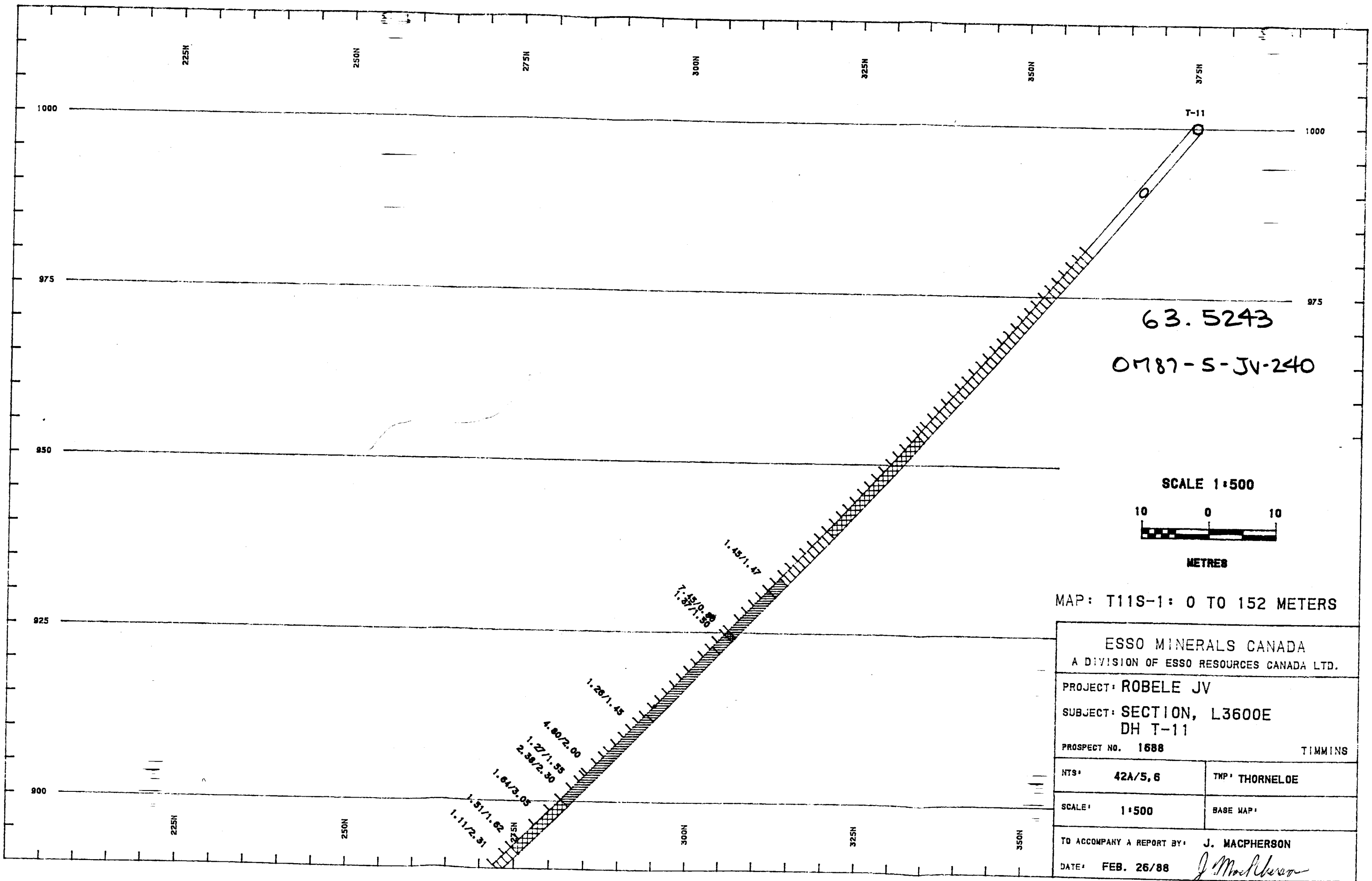
DATE: MARCH 1/88 J. MacPherson



J. MacPherson

MAP: T9S-2: 162 TO 251.76 METERS

SCALE	SUBJECT
1:500	SECTION, DH T-9



63.5243

OM87-5-JV-240

SCALE 1:500

10 0 10

METRES

MAP: T11S-1: 0 TO 152 METERS

ESSO MINERALS CANADA
A DIVISION OF ESSO RESOURCES CANADA LTD.

PROJECT: ROBELE JV

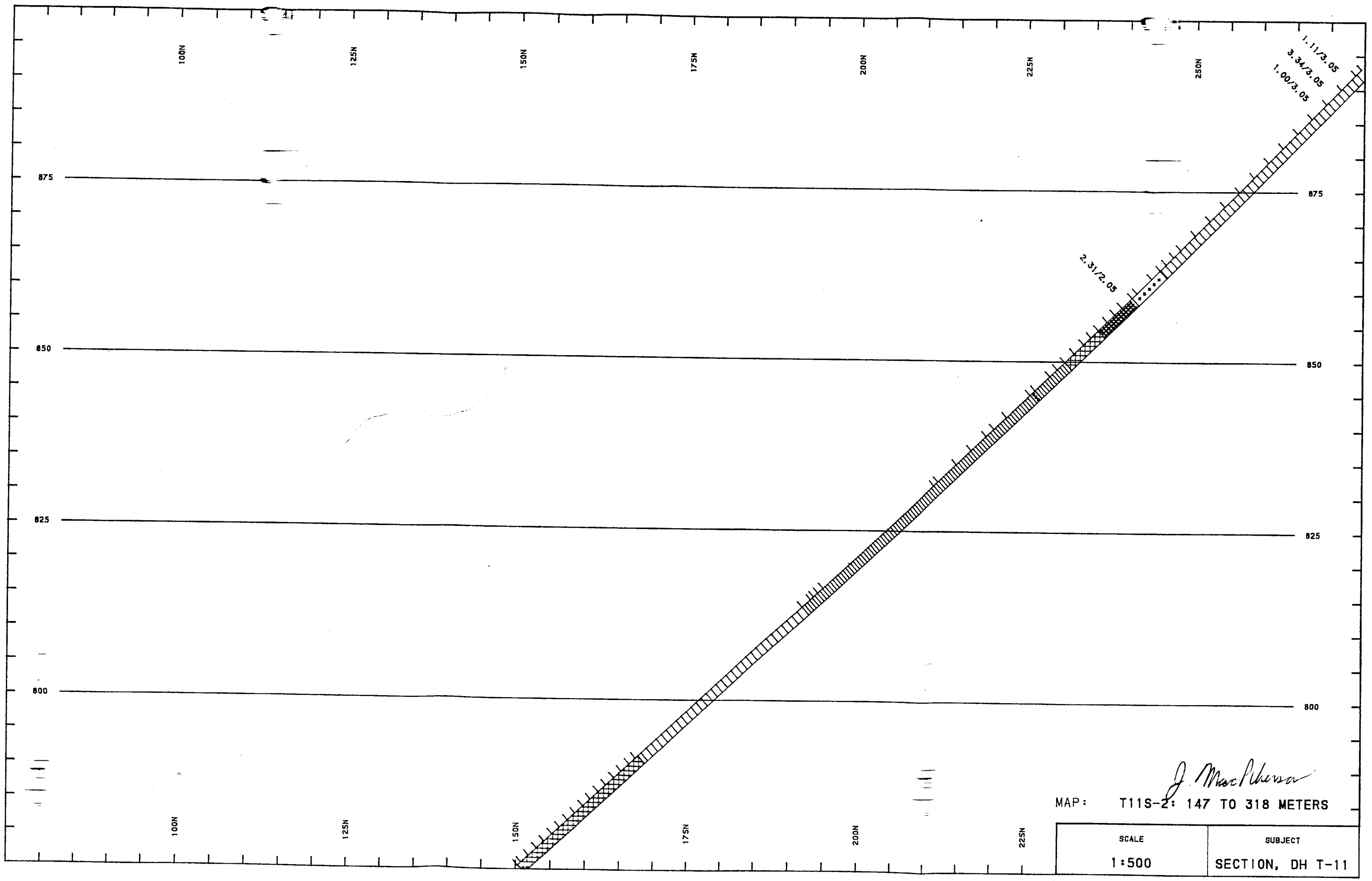
SUBJECT: SECTION, L3600E
DH T-11

PROSPECT NO. 1688 TIMMINS

NTS: 42A/5,6	TWP: THORNELOE
SCALE: 1:500	BASE MAP:

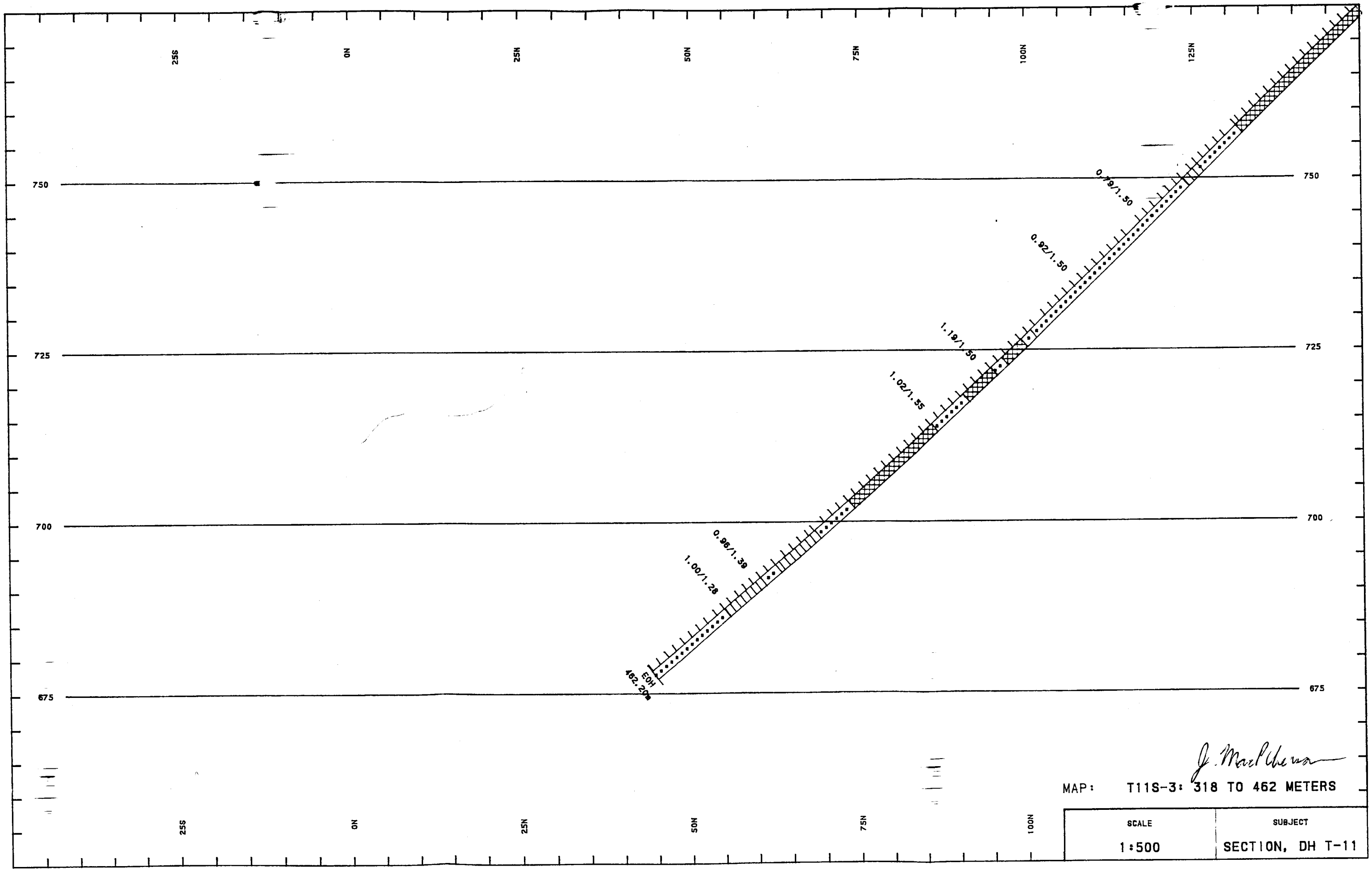
TO ACCOMPANY A REPORT BY: J. MACPHERSON

DATE: FEB. 26/88 J. MacPherson



MAP: T11S-2: 147 TO 318 METERS

SCALE	SUBJECT
1:500	SECTION, DH T-11



J. Marchewa

MAP: T11S-3: 318 TO 462 METERS

SCALE	SUBJECT
1:500	SECTION, DH T-11

LEGEND

0 Overburden

PORCUPINE OR TEMISKAMING GROUP SEDIMENTS

1A: Argillite
1B: Argillite with graphitic slips
1C: Argillite with semi-massive py bands
1D: Siltstone
1E: Lithic arenite
1F: Conglomerate

FELSIC INTRUSIVES

2A: Quartz-feldspar porphyry
2B: Quartz Porphyry
2C: Crowded Feldspar (Hornblende) Porphyry
2D: Hematitic Porphyry (may be magnetic)
2E: Pyritic Porphyry
2F: Grey, Grey-Green Porphyry
2G: Silicified Porphyry (Quartz and/or Feldspar)
2H: Coarse-grained (hematitic) porphyry
2I: Foliated grey quartz (feldspar) porphyry

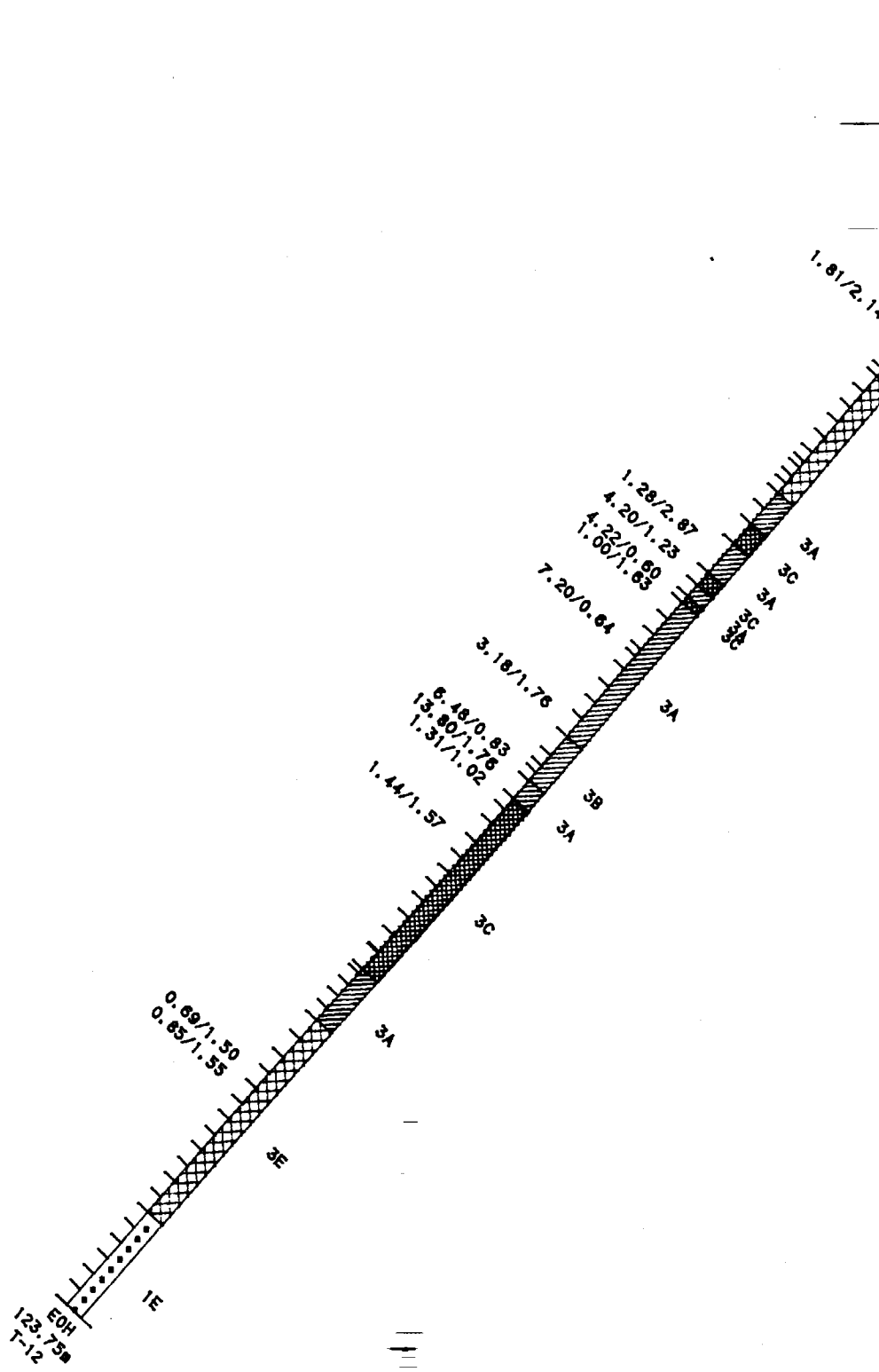
3A: Red Magnetite-bearing 1E or 2A
3B: Quartz-carbonate-sericite schist
3C: Intense silica-carbonate bleeding
3D: Quartz chlorite carbonate schist
3E: Moderate sericite schist (+/- qtz)
3F: Strong sericite schist (+/- qtz)
4A: Quartz-carbonate vein

MAFIC INTRUSIVES

d 5A: Diabase dyke
6A: Diorite dyke or stock

Assays in g/mt. Values > .68 g/mt shown. Red values > 6.8 g/mt

Note: 2D to 2G may be altered versions of 2A-D and 2H-I



63.5243

OM87-5-JV-240

SCALE 1:500

10 0 10

METRES

MAP: T12S: 0 TO 123.75 METERS

ESSO MINERALS CANADA
A DIVISION OF ESSO RESOURCES CANADA LTD.

PROJECT: ROBELE JV

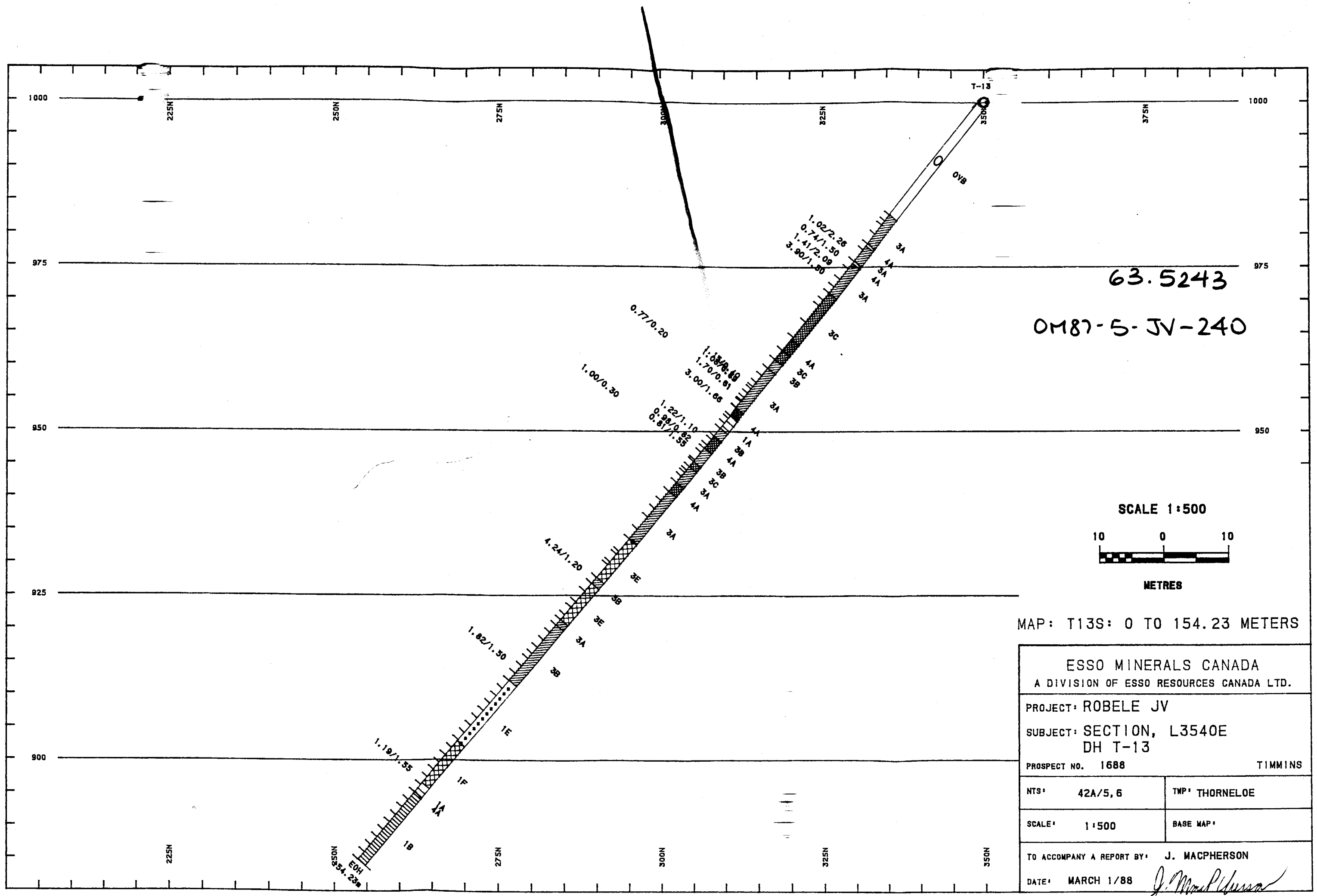
SUBJECT: SECTION, L3600E
DH T-12

PROSPECT NO. 1688 TIMMINS

NTS: 42A/5,6	TWP: THORNELOE
SCALE: 1:500	BASE MAP:

TO ACCOMPANY A REPORT BY: J. MACPHERSON

DATE: MARCH 1/88 J. MacPherson



SCALE 1:500

10 0 10

METRES

MAP: T13S: 0 TO 154.23 METERS

ESSO MINERALS CANADA
A DIVISION OF ESSO RESOURCES CANADA LTD.

PROJECT: ROBELE JV

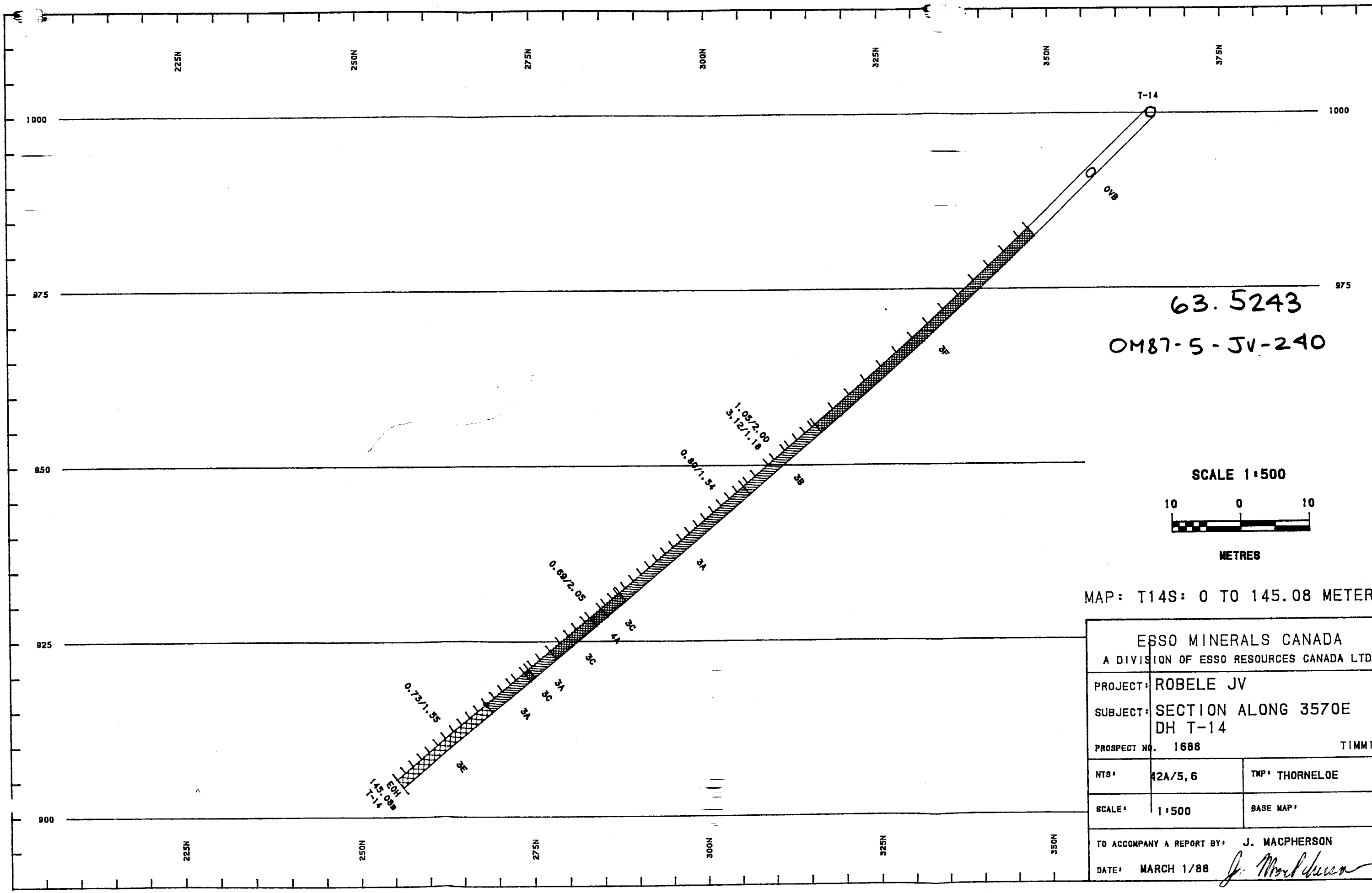
SUBJECT: SECTION, L3540E
DH T-13

PROSPECT NO. 1688 TIMMINS

NTS: 42A/5,6	TWP: THORNELOE
SCALE: 1:500	BASE MAP:

TO ACCOMPANY A REPORT BY: J. MACPHERSON

DATE: MARCH 1/88 J. MacPherson



63.5243

OM87-5-JV-240

SCALE 1:500

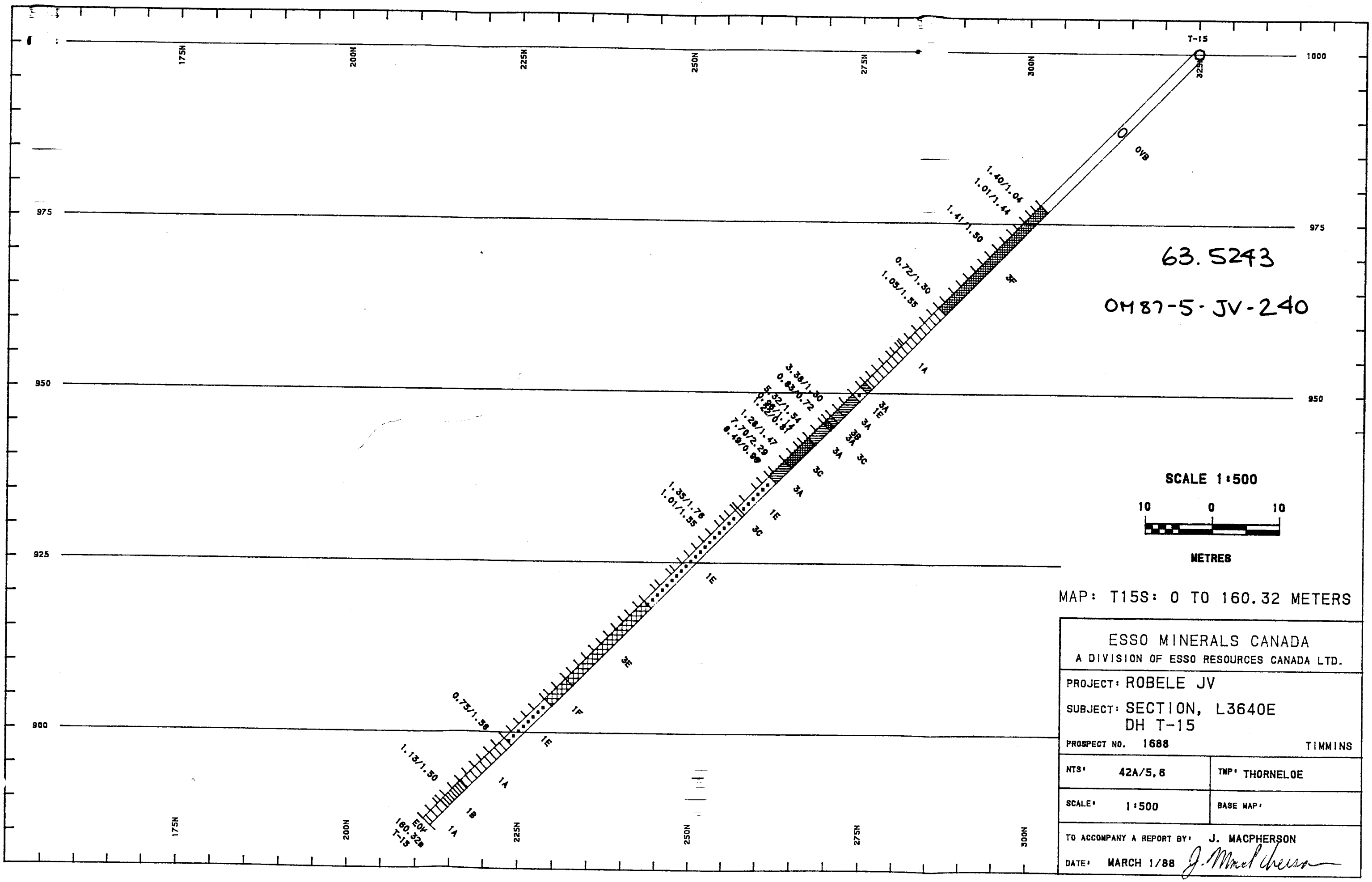
10 0 10

METRES

MAP: T14S: 0 TO 145.08 METERS

ESSO MINERALS CANADA
A DIVISION OF ESSO RESOURCES CANADA LTD.

PROJECT: ROBELE JV		
SUBJECT: SECTION ALONG 3570E DH T-14		
PROSPECT NO. 1688		TIMMINS
NTS: 42A/5,6		TWP: THORNELOE
SCALE: 1:500		BASE MAP:
TO ACCOMPANY A REPORT BY: J. MACPHERSON		
DATE: MARCH 1/88		



63.5243

OM87-5-JV-240

SCALE 1:500

10 0 10

METRES

MAP: T15S: 0 TO 160.32 METERS

ESSO MINERALS CANADA
A DIVISION OF ESSO RESOURCES CANADA LTD.

PROJECT: ROBELE JV

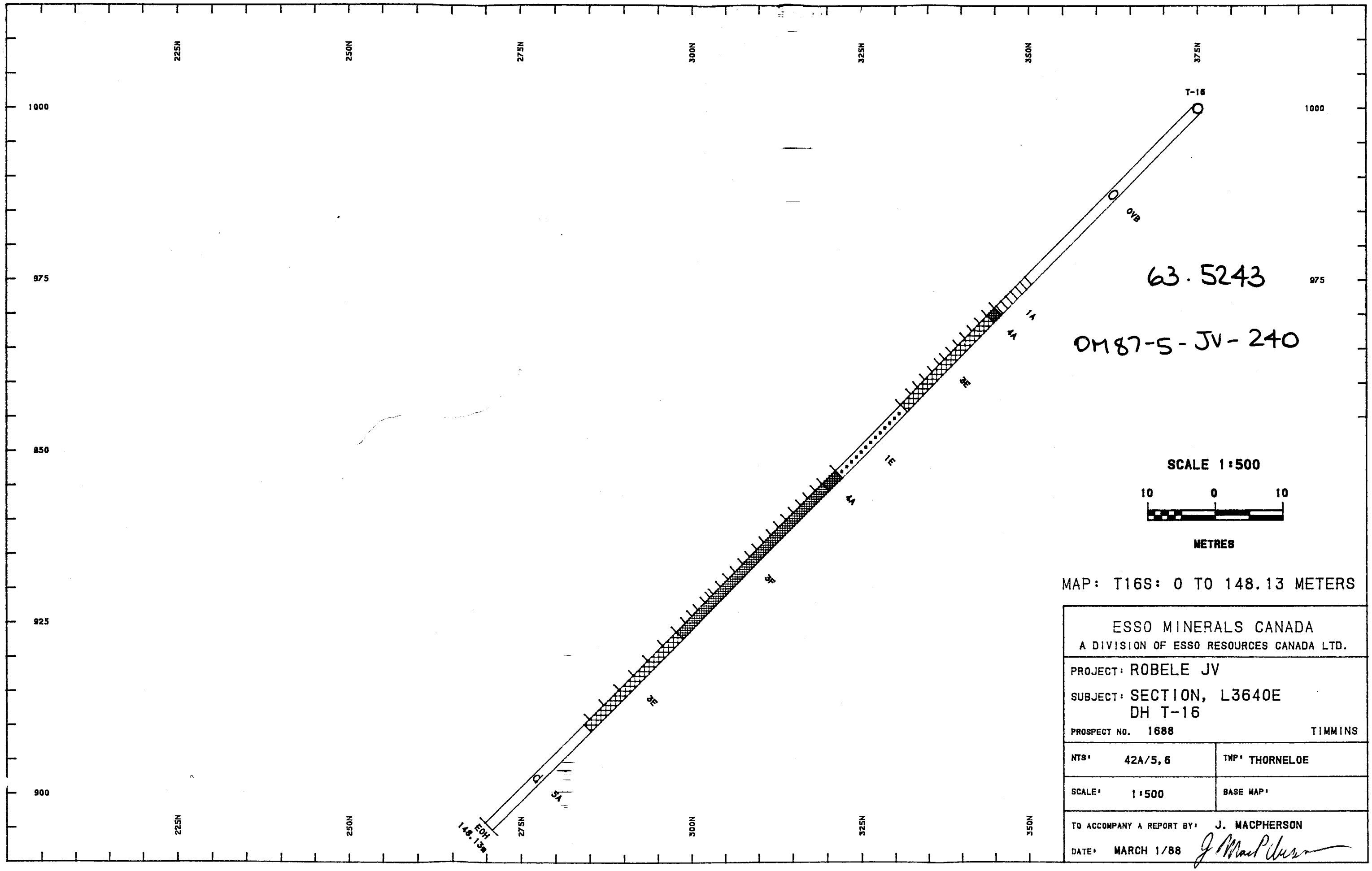
SUBJECT: SECTION, L3640E
DH T-15

PROSPECT NO. 1688 TIMMINS

NTS: 42A/5,6	TWP: THORNELOE
SCALE: 1:500	BASE MAP:

TO ACCOMPANY A REPORT BY: J. MACPHERSON

DATE: MARCH 1/88 J. MacPherson



63.5243

OM87-5-JV-240

SCALE 1:500

10 0 10

METRES

MAP: T16S: 0 TO 148.13 METERS

ESSO MINERALS CANADA
A DIVISION OF ESSO RESOURCES CANADA LTD.

PROJECT: ROBELE JV

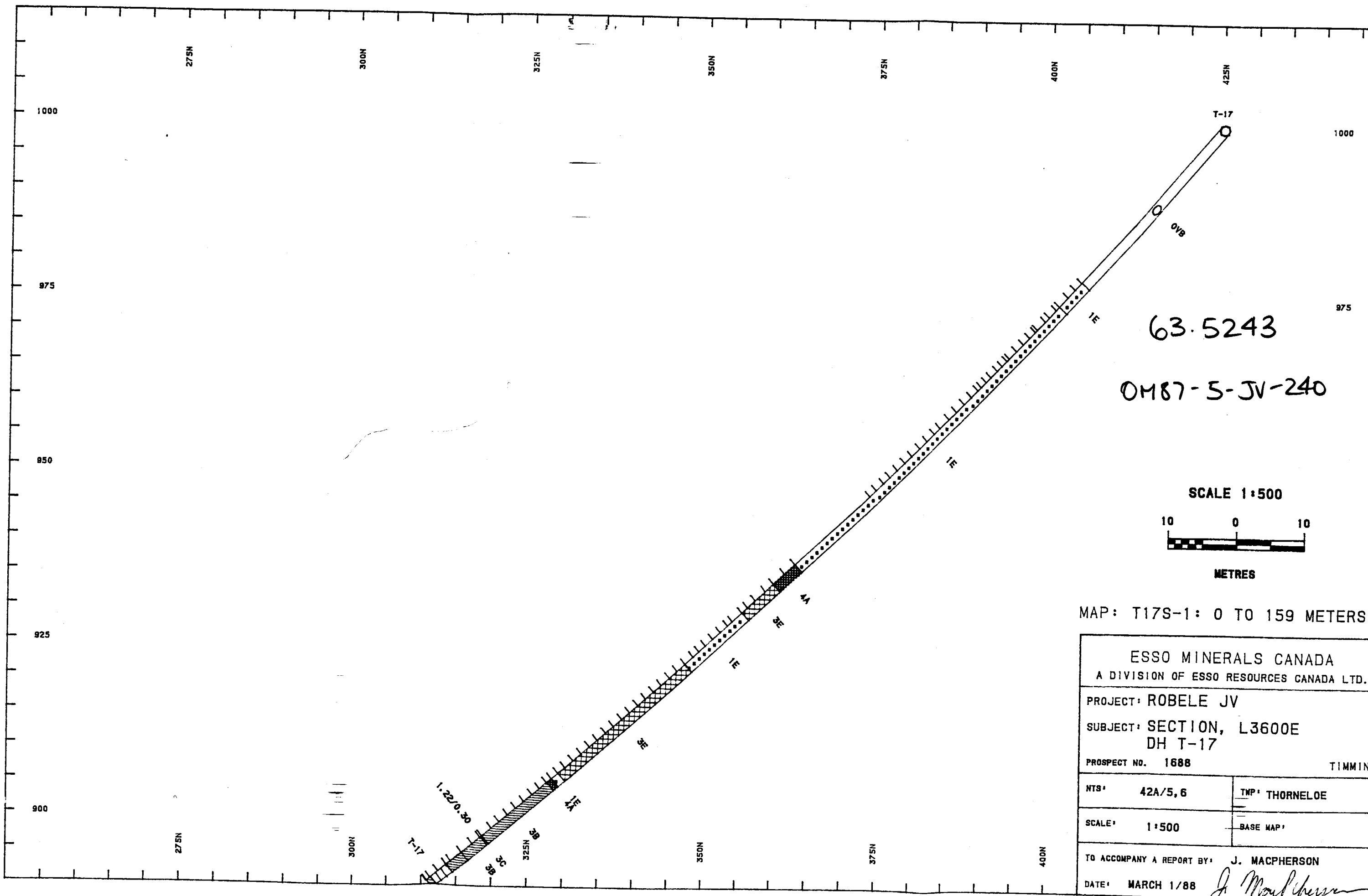
SUBJECT: SECTION, L3640E
DH T-16

PROSPECT NO. 1688 TIMMINS

NTS: 42A/5,6	TWP: THORNELOE
SCALE: 1:500	BASE MAP:

TO ACCOMPANY A REPORT BY: J. MACPHERSON

DATE: MARCH 1/88 J. MacPherson



63.5243

OM87-5-JV-240

SCALE 1:500

10 0 10

METRES

MAP: T17S-1: 0 TO 159 METERS

ESSO MINERALS CANADA
A DIVISION OF ESSO RESOURCES CANADA LTD.

PROJECT: ROBELE JV

SUBJECT: SECTION, L3600E
DH T-17

PROSPECT NO. 1688 TIMMINS

NTS: 42A/5,6	TWP: THORNELOE
SCALE: 1:500	BASE MAP:

TO ACCOMPANY A REPORT BY: J. MACPHERSON

DATE: MARCH 1/88 J. MacPherson

LEGEND

O Overburden

PORCUPINE OR TEMISKAMING GROUP SEDIMENTS

1A: Argillite
1B: Argillite with graphitic slips
1C: Argillite with semi-massive py bands
1D: Siltstone
1E: Lithic arenite
1F: Conglomerate

FELSIC INTRUSIVES

2A: Quartz-feldspar porphyry
2B: Quartz Porphyry
2C: Crowded Feldspar (Hornblende) Porphyry
2D: Hematitic Porphyry (may be magnetic)
2E: Pyritic Porphyry
2F: Grey, Grey-Green Porphyry
2G: Silicified Porphyry (Quartz and/or Feldspar)
2H: Coarse-grained (hematitic) porphyry
2I: Felfated grey quartz (feldspar) porphyry

3A: Red Magnetite-bearing 1E or 2A
3B: Quartz-carbonate-sericite schist
3C: Intense silica-carbonate flooding
3D: Quartz chlorite carbonate schist
3E: Moderate sericite schist (+/- qtz)
3F: Strong sericite schist (+/- qtz)
4A: Quartz-carbonate vein

MAFIC INTRUSIVES

d
5A: Diabase dyke
6A: Diorite dyke or stock

Assays in g/mt. Values > .68 g/mt shown. Red values > 6.8 g/mt

Note: 2D to 2G may be altered versions of 2A-D and 2H-I

150N 175N 200N 225N 250N 275N 300N

875 850 825 800

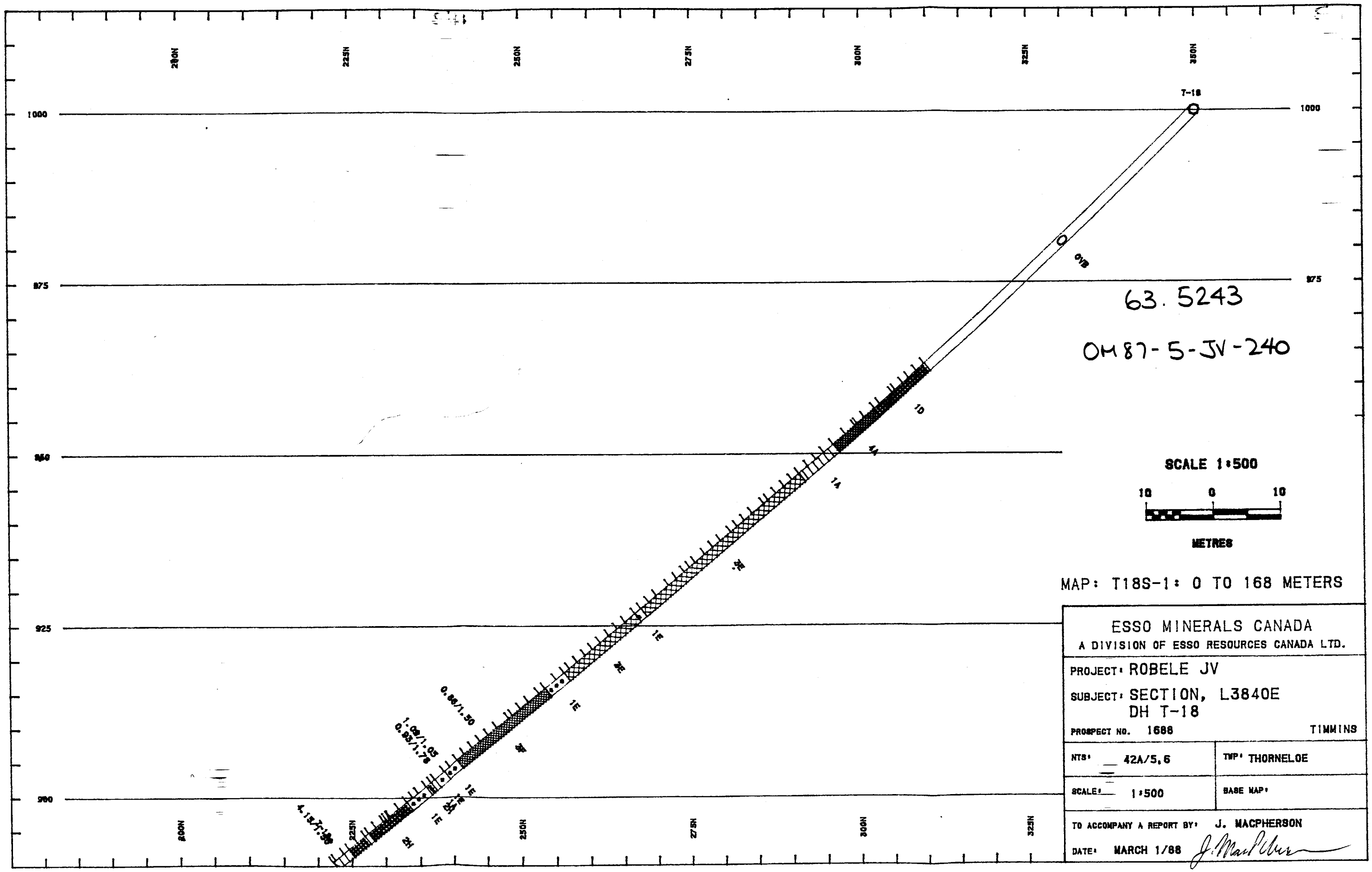
0.68/0.63
1.53/0.57
0.80/1.86
1.50/1.10
1.13/1.70
230.43m
EOH
T-17

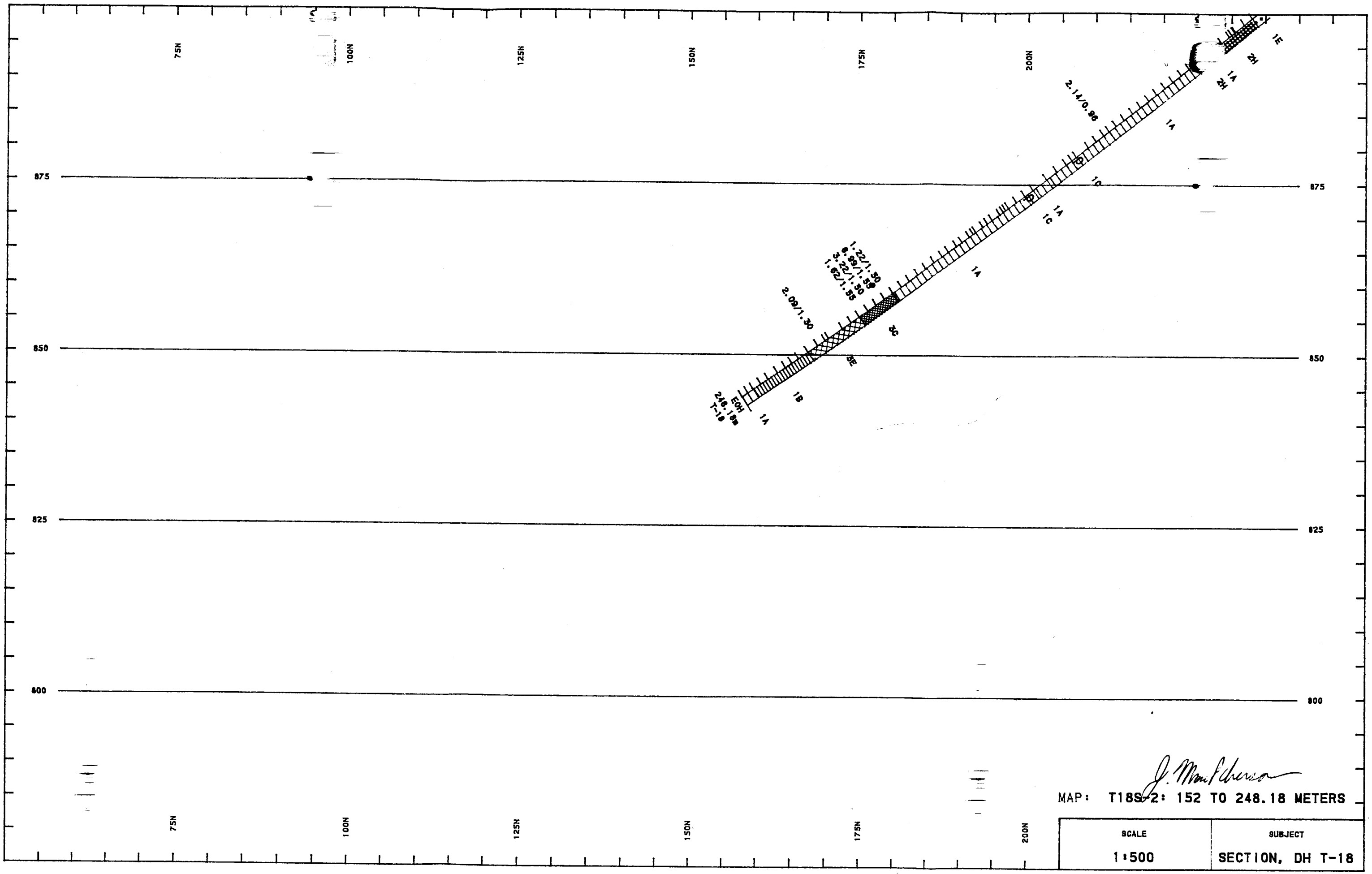
1A 1C 3B 3C 3B 4A 3A 3C 3A 3B 3C 3A 4A 3A 3C 3A 3C 3A 3B 3A 3B 3E

J. MacAdams

MAP: T17S-2: 143 TO 230.43 METERS

SCALE	SUBJECT
1:500	SECTION, DH T-17


200N
225N
250N
275N
300N
325N
350N
T-18
1000
975
950
925
900
875
63.5243
OM87-5-JV-240
0.98/1.50
1.08/1.05
0.93/1.76
4.15/5.19
1D
4A
1A
3E
1E
2E
3E
1E
1E
2H
1E
2E
SCALE 1:500
10 0 10
METRES
MAP: T18S-1: 0 TO 168 METERS
ESSO MINERALS CANADA
A DIVISION OF ESSO RESOURCES CANADA LTD.
PROJECT: ROBELE JV
SUBJECT: SECTION, L3840E
DH T-18
PROSPECT NO. 1688
TIMMINS
NTS: 42A/5,6
TWP: THORNELOE
SCALE: 1:500
BASE MAP:
TO ACCOMPANY A REPORT BY: J. MACPHERSON
DATE: MARCH 1/88

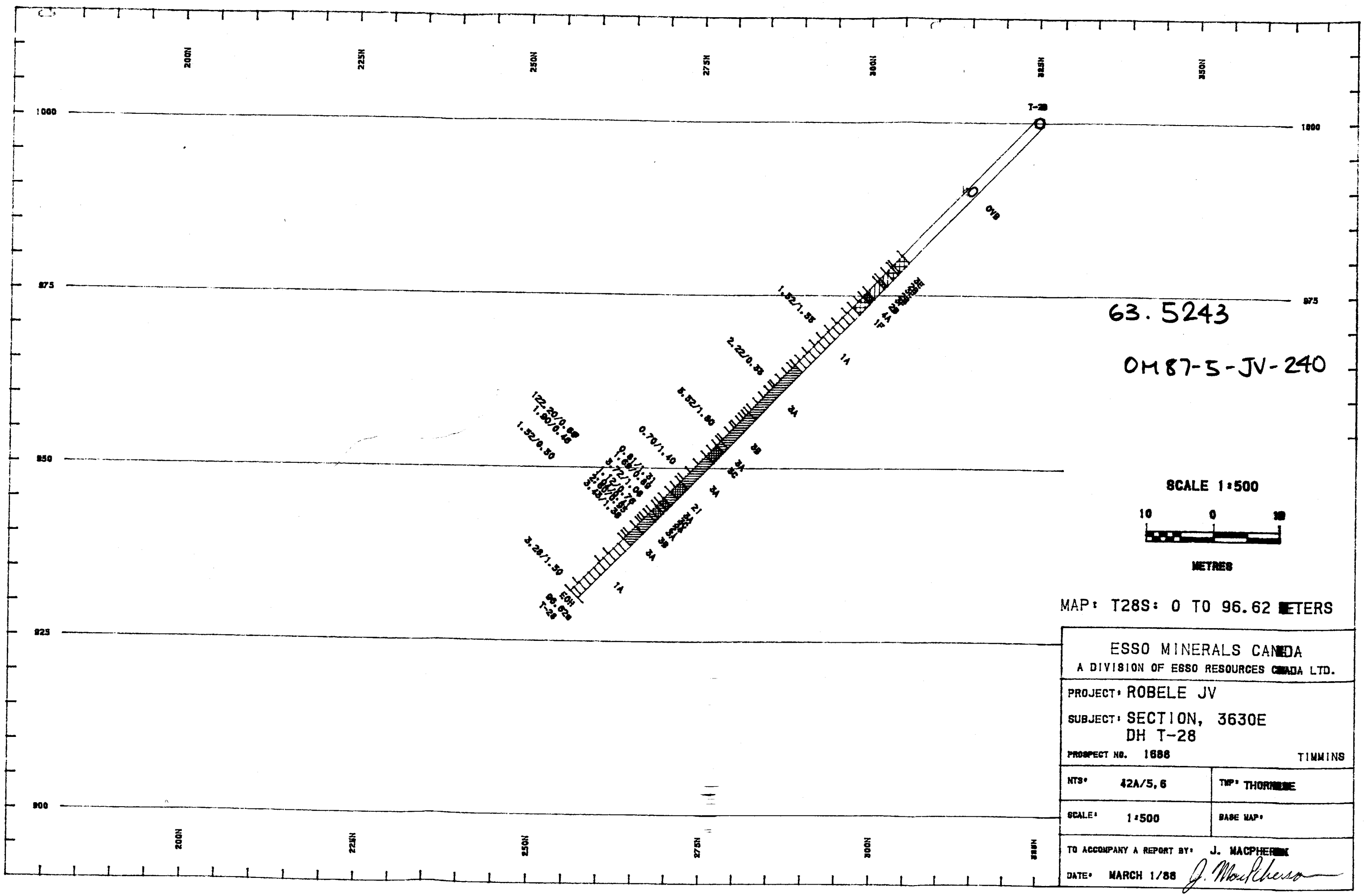


MAP: T18S-2: 152 TO 248.18 METERS

SCALE	SUBJECT
1:500	SECTION, DH T-18

63.5243

OM87-5-JV-240



SCALE 1:500

10 0 10

METRES

MAP: T28S: 0 TO 96.62 METERS

ESSO MINERALS CANADA
A DIVISION OF ESSO RESOURCES CANADA LTD.

PROJECT: ROBELE JV

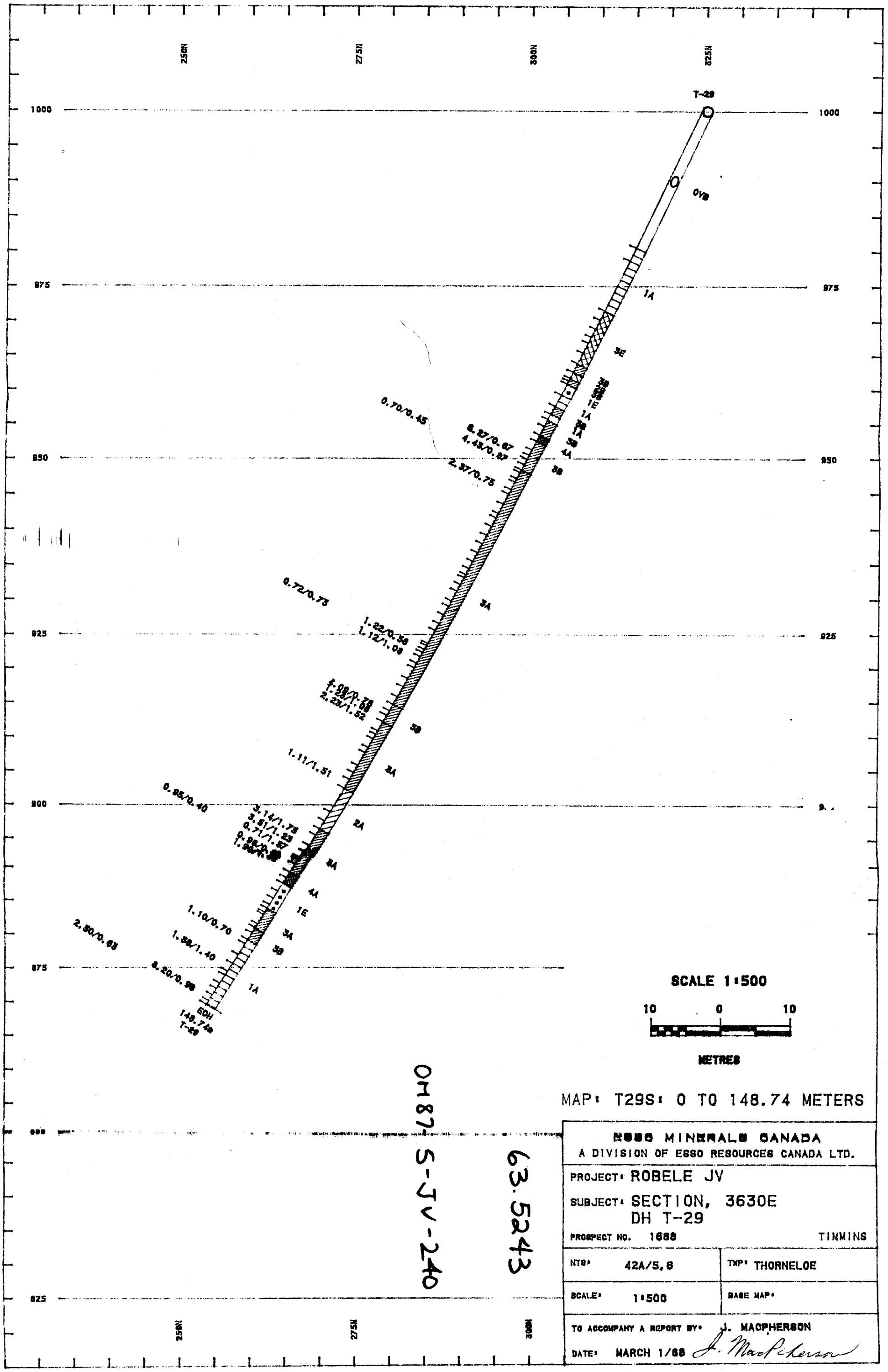
SUBJECT: SECTION, 3630E
DH T-28

PROSPECT NO. 1688 TIMMINS

NTS: 42A/5, 6	TWP: THORNLOE
SCALE: 1:500	BASE MAP:

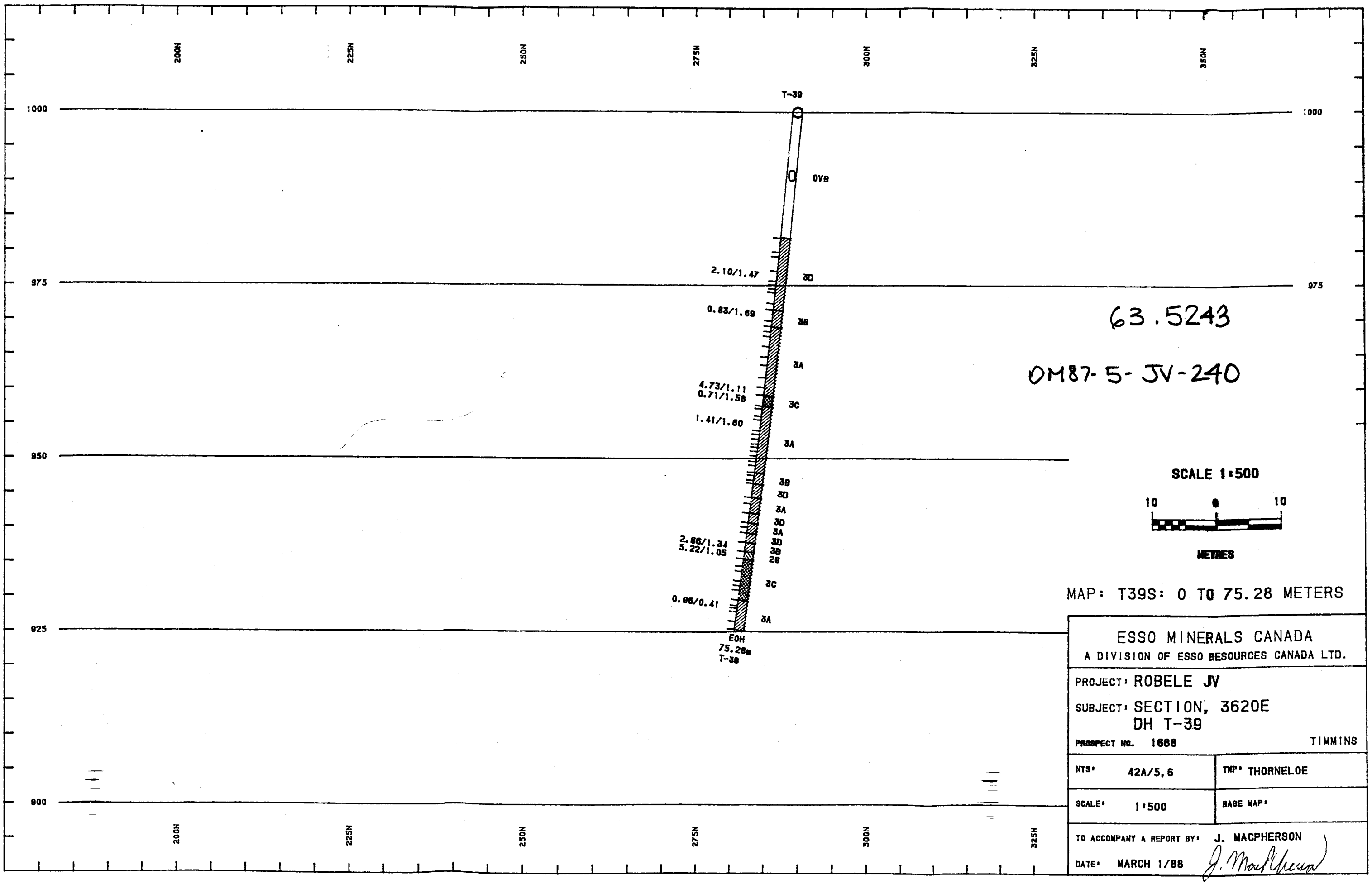
TO ACCOMPANY A REPORT BY: J. MACPHERSON

DATE: MARCH 1/88 J. MacPherson



OM87-5-JV-240

63.5243



63.5243

OM87-5-JV-240

SCALE 1:500

10 0 10

METRES

MAP: T39S: 0 TO 75.28 METERS

ESSO MINERALS CANADA
A DIVISION OF ESSO RESOURCES CANADA LTD.

PROJECT: ROBELE JV

SUBJECT: SECTION, 3620E
DH T-39

PROSPECT NO. 1688 TIMMINS

NTS: 42A/5,6	TWP: THORNELOE
SCALE: 1:500	BASE MAP:

TO ACCOMPANY A REPORT BY: J. MACPHERSON

DATE: MARCH 1/88 J. MacPherson

200N 225N 250N 275N 300N 325N 350N

1000 975 950 925 900

T-40

OVB

3A
21
2H
2C
3A
3C
3A
3C
3C
3A
4A
3A
3C
3A
3C
3A

0.93/1.29
1.28/0.87
3.13/1.18
0.86/0.80
3.16/1.88
5.94/0.73
1.11/1.50

EOH
64.40m
T-40

63.5243

OM87-5-JV-240

SCALE 1:500

10 0 10

METRES

MAP: T40S: 0 TO 64.40 METERS

ESSO MINERALS CANADA
A DIVISION OF ESSO RESOURCES CANADA LTD.

PROJECT: ROBELE JV

SUBJECT: SECTION, 3615E
DH T-40

PROSPECT NO. 1688 TIMMINS

NTS: 42A/5,6	TWP: THORNELOE
SCALE: 1:500	BASE MAP:

TO ACCOMPANY A REPORT BY: J. MACPHERSON

DATE: MARCH 1/88

J. MacPherson

LEGEND

0 Overburden

PORCUPINE OR TEMISKAMING GROUP SEDIMENTS

1A: Argillite
1B: Argillite with graphitic slips
1C: Argillite with semi-massive py bands
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FELSIC INTRUSIVES

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2C: Crowded Feldspar (Hornblende) Porphyry
2D: Hematitic Porphyry (may be magnetic)
2E: Pyritic Porphyry
2F: Grey, Grey-Green Porphyry
2G: Silicified Porphyry (Quartz and/or Feldspar)
2H: Coarse-grained (hematitic) porphyry
2I: Foliated grey quartz (feldspar) porphyry

3A: Red Magnetite-bearing 1E or 2A
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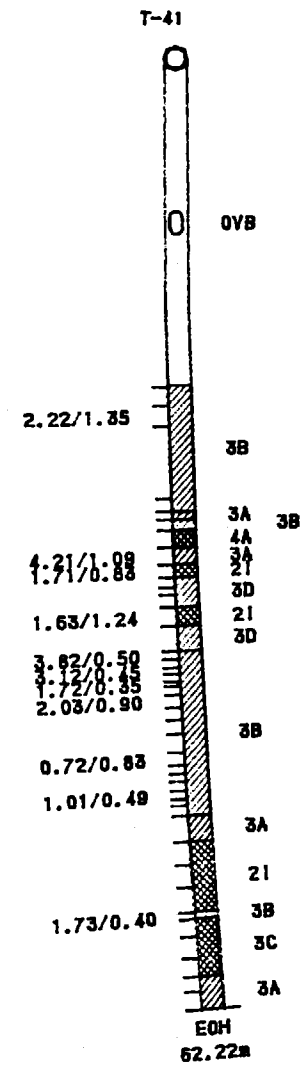
3F: Strong sericite schist (+/- qtz)
4A: Quartz-carbonate vein

MAFIC INTRUSIVES

d 5A: Diabase dyke
6A: Diorite dyke or stock

Assays in g/mt. Values > .68 g/mt shown. Red values > 6.8 g/mt

Note: 2D to 2G may be altered versions of 2A-D and 2H-I



63.5243

0M87-5-JV-240

SCALE 1:500

10 0 10

METRES

MAP: T41S: 0 TO 62.22 METERS

ESSO MINERALS CANADA
A DIVISION OF ESSO RESOURCES CANADA LTD.

PROJECT: ROBELE JV

SUBJECT: SECTION, 3580E
DH T-41

PROSPECT NO. 1688 TIMMINS

NTS: 42A/5,6	TWP: THORNELOE
SCALE: 1:500	BASE MAP:

TO ACCOMPANY A REPORT BY: J. MACPHERSON

DATE: MARCH, 1988

J. MacPherson

(1)

#63.5243

900

OM87-5-JV-240

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):

(1) diamond drilling logs → see Toronto diamond drilling file #29 Thorneloe Twp. R.O.W. #14/87.
holes # T-7
T-10
by: J. MacPherson Nov/86

(2) diamond drilling logs → see Toronto diamond drilling file #31 Thorneloe Twp. R.O.W. #341/87.
holes #T-19
T-21 to 27 inclusive
by: J. MacPherson Oct-Dec/87

(3) diamond drilling log → see Toronto diamond drilling file #30 Thorneloe Tp. R.O.W. #318/87
hole #T-20
by: J MacPherson Oct/87

P.T.O. →

#63.5243

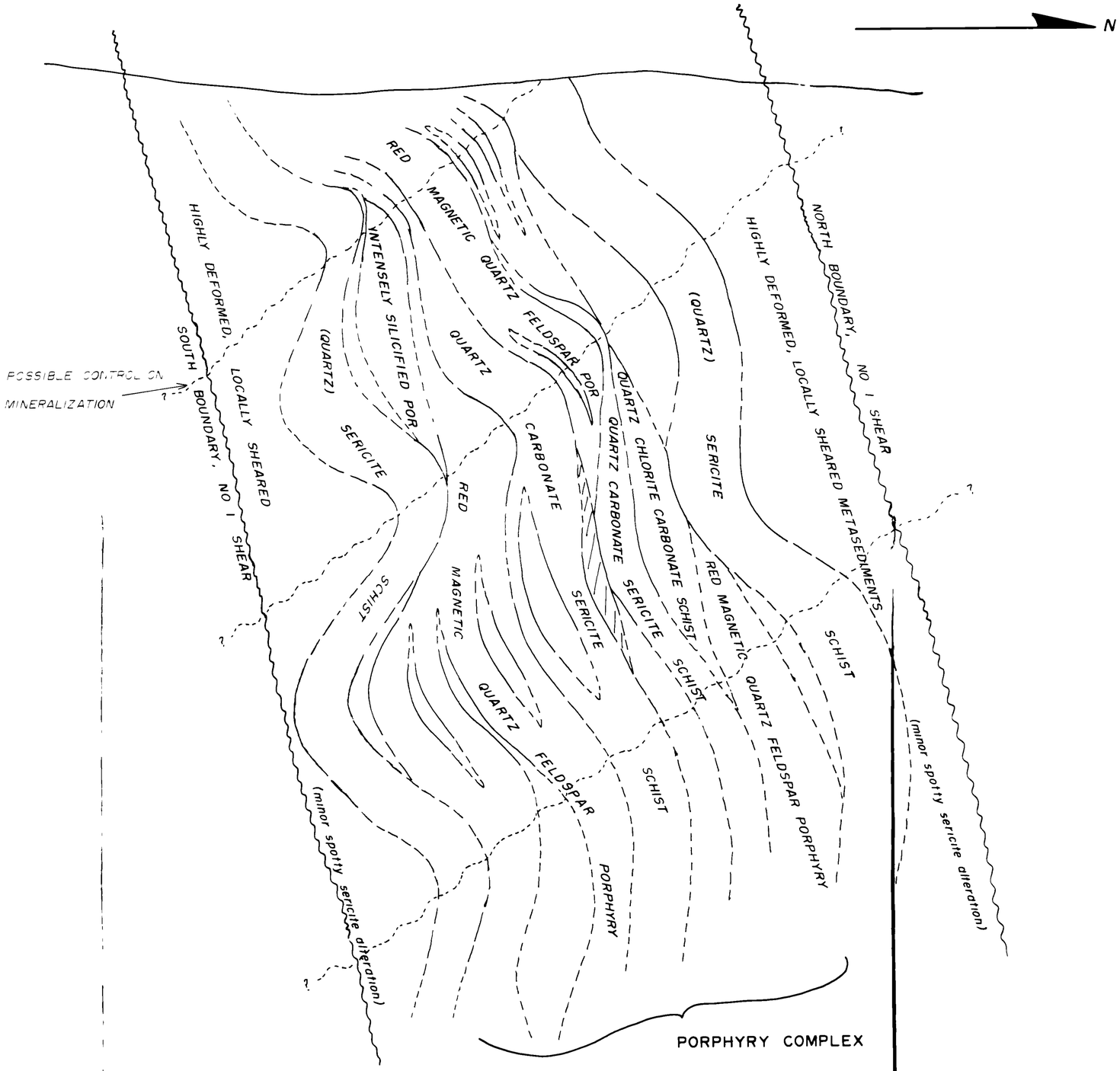
OM87-5-JV-240

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):

(4) diamond drilling logs → see Toronto diamond drilling file #34
T-30
T-31
by: J. MacPherson Oct-Dec/87 Thorne Ioe
R.O.W. #W8906.402

(5) diamond drilling log → see Toronto diamond drilling file #32
T-32
by: J. MacPherson Dec/87 Thorne Ioe
R.O.W. #W8806.179

(6) diamond drilling logs → see Toronto diamond drilling file #33
T-33 to 38
by: J. MacPherson Thorne Ioe
Jan-Feb/88 R.O.W. #W8806.181



NOTES

1 Gold values occur in all rock types within the Porphyry Complex. However, nearly 65% of the significant gold values are at least spatially associated with quartz carbonate sericite schist

2 A second foliation (not shown on this figure) is also present It's orientation is near horizontal

(meters)
25 20 15 10 5 0 25 50
SCALE 1:500

63.5243

ESSO MINERALS CANADA

A DIVISION OF ESSO RESOURCES CANADA LIMITED

PROSPECT ROBELE JOINT VENTURE

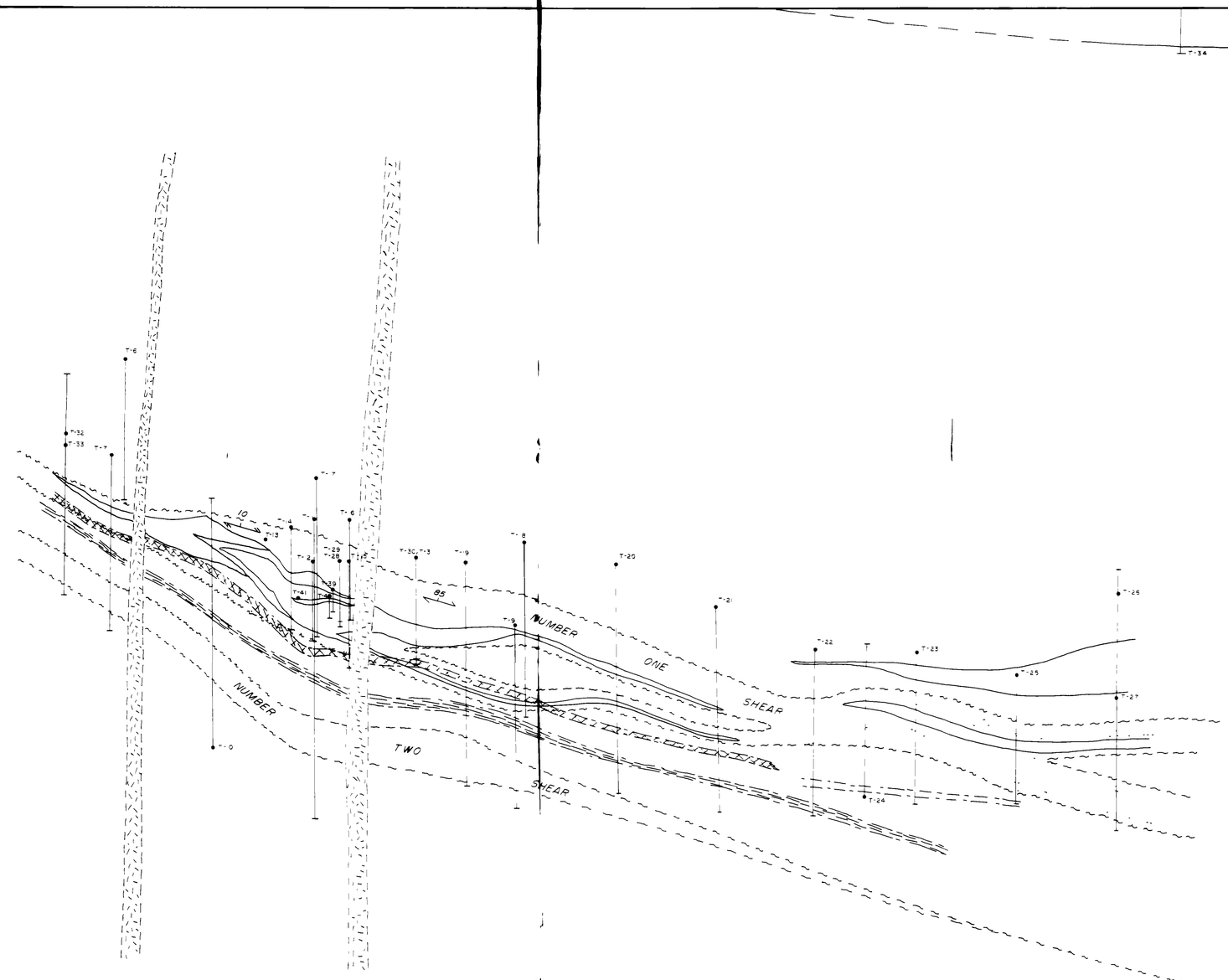
SUBJECT DISCOVERY ZONE J.A. Matheson
IDEALIZED CROSS SECTION
LOOKING WEST

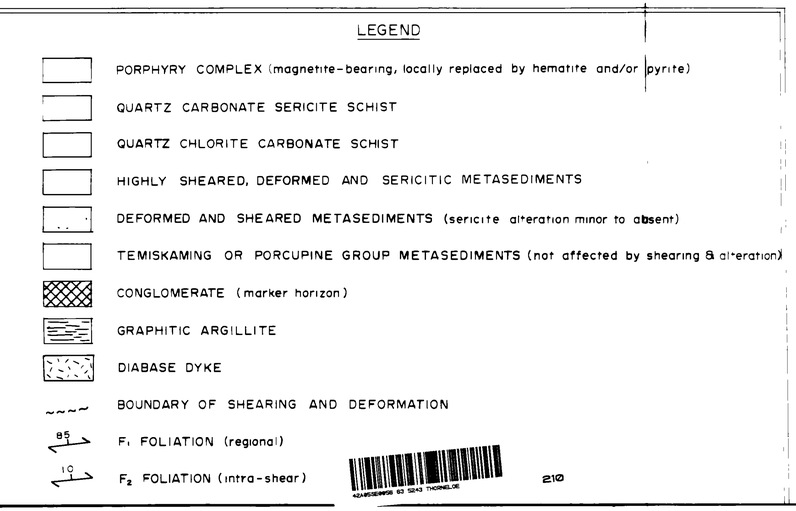
SURVEY BY JMP	FILE NO 688	DWG NO 3
DRAWN BY JMP	SCALE 500 , cm = 5 meters	
REVISED BY	NTS 42A/5,6	DATE MARCH, 1988

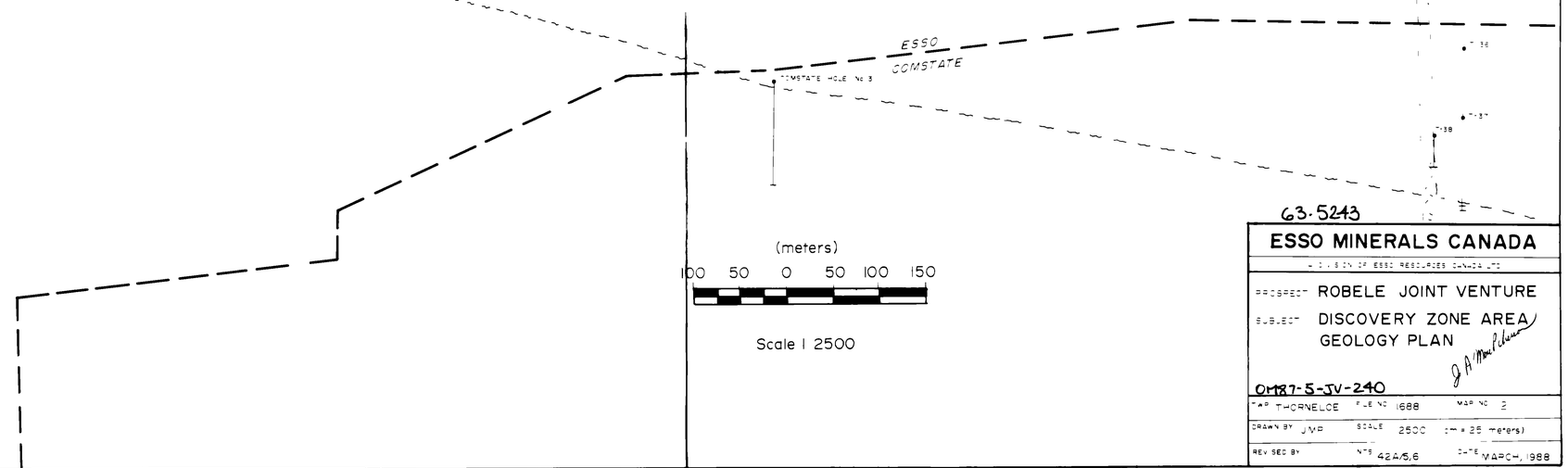
OM87-5-JV-240

42A05SE0056 63.5243 THORNELOE

200







63-5213

ESSO MINERALS CANADA

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PROSPECT ROBELE JOINT VENTURE

SUBJECT DISCOVERY ZONE AREA GEOLOGY PLAN

OM87-5-JV-240

MAP THORNELOE	FILE NO 1688	MAP NO 2	
DRAWN BY JMP	SCALE 2500	cm = 25 meters)	
REV SEC BY	NTS 42A/5,6	DATE MARCH, 1988	

METAVOLCANICS
TEMISKAMING GROUP METASEDIMENTS

MAGNETIC HIGH (1200-2000 gammas)
(possible magnetite-bearing porphyry or mafic intrusion)

MAGNETIC HIGH (300-400 gammas)
(interpreted as representing magnetite-bearing porphyry)

CROXALL NORTH THORNELOE CLAIM GROUP

TISDALE GROUP AND/OR PORCUPINE

HWY 144

985 DISCOVERY

GOLD VALUES ASSOCIATED WITH 5-15% DISSEMINATED PYRITE & ARSENOPYRITE IN ALTERED AND SHEARED ARENITE AND PORPHYRY

ESSO T-4

ESSO T-5

NO 3 SHEAR

SHEAR ZONE (interpreted from magnetic data)

CROXALL CENTRAL CLAIM GROUP

HIGHWAY 144 GROUP

THORNELOE WEST GROUP

PORCUPINE AND OR

TISDALE GROUP ULTRAMAFIC FLOWS AND/OR INTRUSIONS

FAULT

PORCUPINE RIVER

DESTOR DELORO GROUP

FELSIC TO INTERMEDIATE I.F.

CALC-ALKALIC I.F.

I.F.

TATACHIKAPIKA

BRISTOL NO. 1 GROUP
THORNELOE EAST GROUP

THORNELOE WEST GROUP
THORNELOE EAST GROUP

BRISTOL TOWNSHIP
THORNELOE TOWNSHIP

BRISTOL NO. 2 GROUP
THORNELOE EAST GROUP

N

MAGNETIC HIGH
(drill confirmed as a magnetite-bearing porphyry complex)

ESSO T-34

ESSO T-35

TATACHIKAPIKA RIVER

MAGNETIC HIGH
Discovery Zone, 1956-57
(highly altered and sheared magnetite-bearing porphyry complex)
GOLD VALUES ASSOCIATED WITH COARSE REMOBILIZED MAGNETITE, AND SHEARED PYRITIC QUARTZ CARBONATE VEINS

NO.1 SHEAR

NO. 2 SHEAR

ESSO T-36

Comstate Hole 3

THORNELOE EAST GROUP

COMSTATE OPTION

ZONE

THIBEAULT SHOWING

THIBEAULT PATENTS

TEMISKAMING GROUP METASEDIMENTS

METAVOLCANICS

I.F.

KENOGAMISSI LAKE

63.5243

ESSO MINERALS CANADA

A DIVISION OF ESSO RESOURCES CANADA LIMITED

PROSPECT ROBELE JOINT VENTURE

SUBJECT PROPERTY COMPILATION
EAST AND WEST
THORNELOE GROUPS

TWP THORNELOE	FILE NO 1688	MAP NO
DRAWN BY JMP	SCALE 1:5000 (1cm = 50 meters)	
REVISED BY	NTS 42A/5,6	DATE MARCH, 1988

42A05SE0056 63.5243 THORNELOE

220

OM87-5-JV-240