824472

FINAL REPORT

on the

1988 DIAMOND DRILL PROGRAM

CANA 2-25 CLAIMS

NTS: 82M/4

Operator:
Esso Minerals Canada
A Division of Esso Resources Canada Limited
1600 - 409 Granville Street
Vancouver, B.C. V6C 1T2

Owner:
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by:
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January, 1989

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1.0 INTRODUCTION

Four diamond drill holes (479.7m) were drilled on the Cana claim group during 1988. The target is a precious-metal-rich volcanogenic massive sulphide similar to, and occurring in the same stratigraphy as, the Minnova/Rea Gold Samatosum and Rea deposits. These deposits occur at a major volcanic-sediment contact which has good continuity along-strike and well-defined stratigraphy. The 1988 drilling on the Cana property encountered lithologies which are similar to those that occur around the deposits, although the stratigraphy on the property and its relationship to the Rea stratigraphy are still not known.

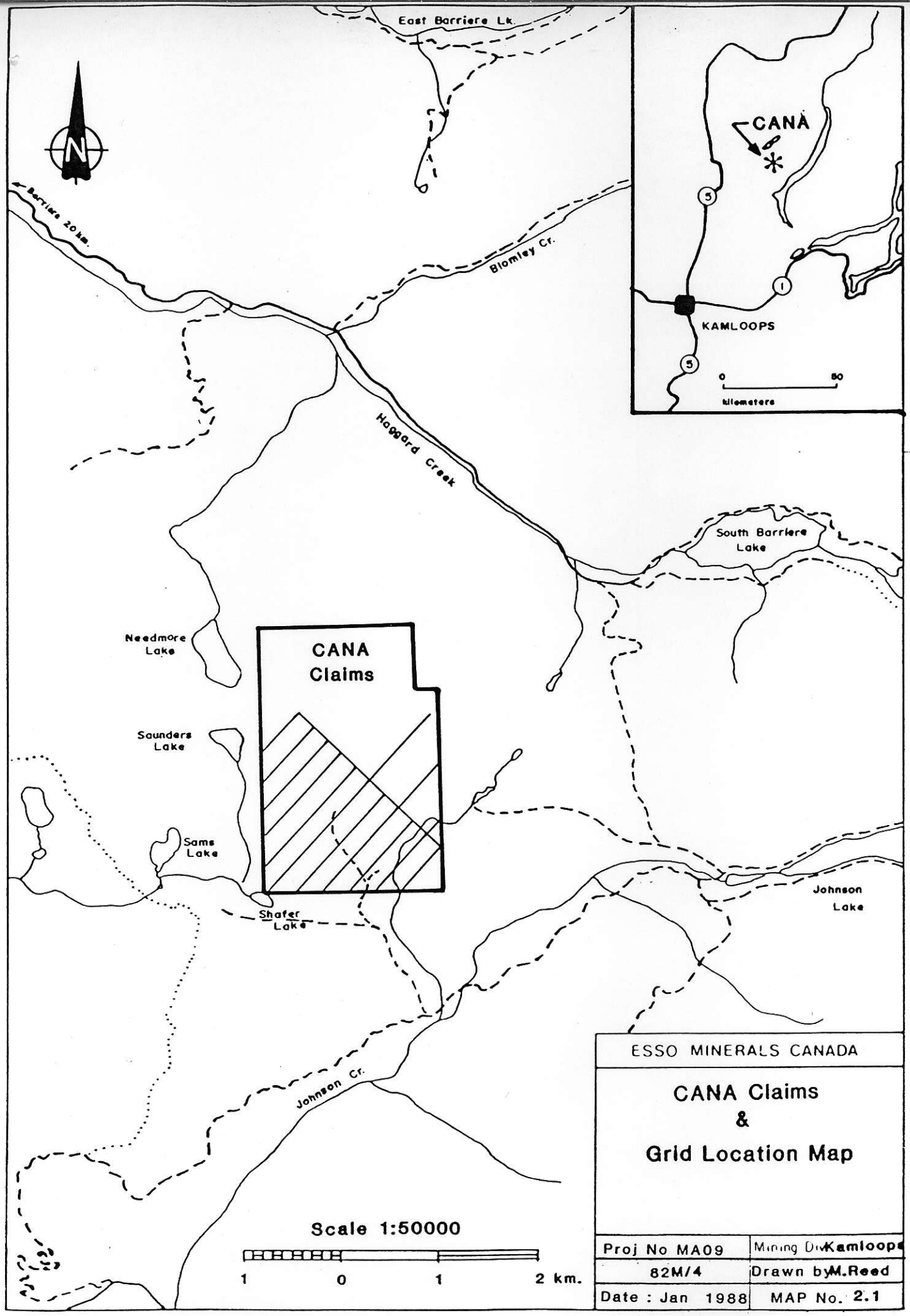
2.0 LOCATION AND ACCESS

The Cana 2-25 (two post) mineral claims lie in the vicinity of Adams Lake, some 60km northeast of Kamloops, B.C. (Fig.2.1).

The claims are located in rolling plateau country on the north flank of the Johnson Creek valley, 4km west of Johnson Lake.

Access to the claims is via the Johnson Lake logging road that branches from the Samatosum haulage road at kilometre 5. The Samatosum road joins the main Adams West logging road at kilometre 20 and follows the west shore of Adams Lake south to merge with the Scotch Creek Road and eventually the Trans-Canada Highway at Squilax, 4km east of Chase.

Alternate access is via the Silverspray Falls Road that joins the Agate Bay Road in Sinmax Valley and leads to Highway 5, 2km south of Barriere.



ESSO MINERALS CANADA

CANA Claims & Grid Location Map

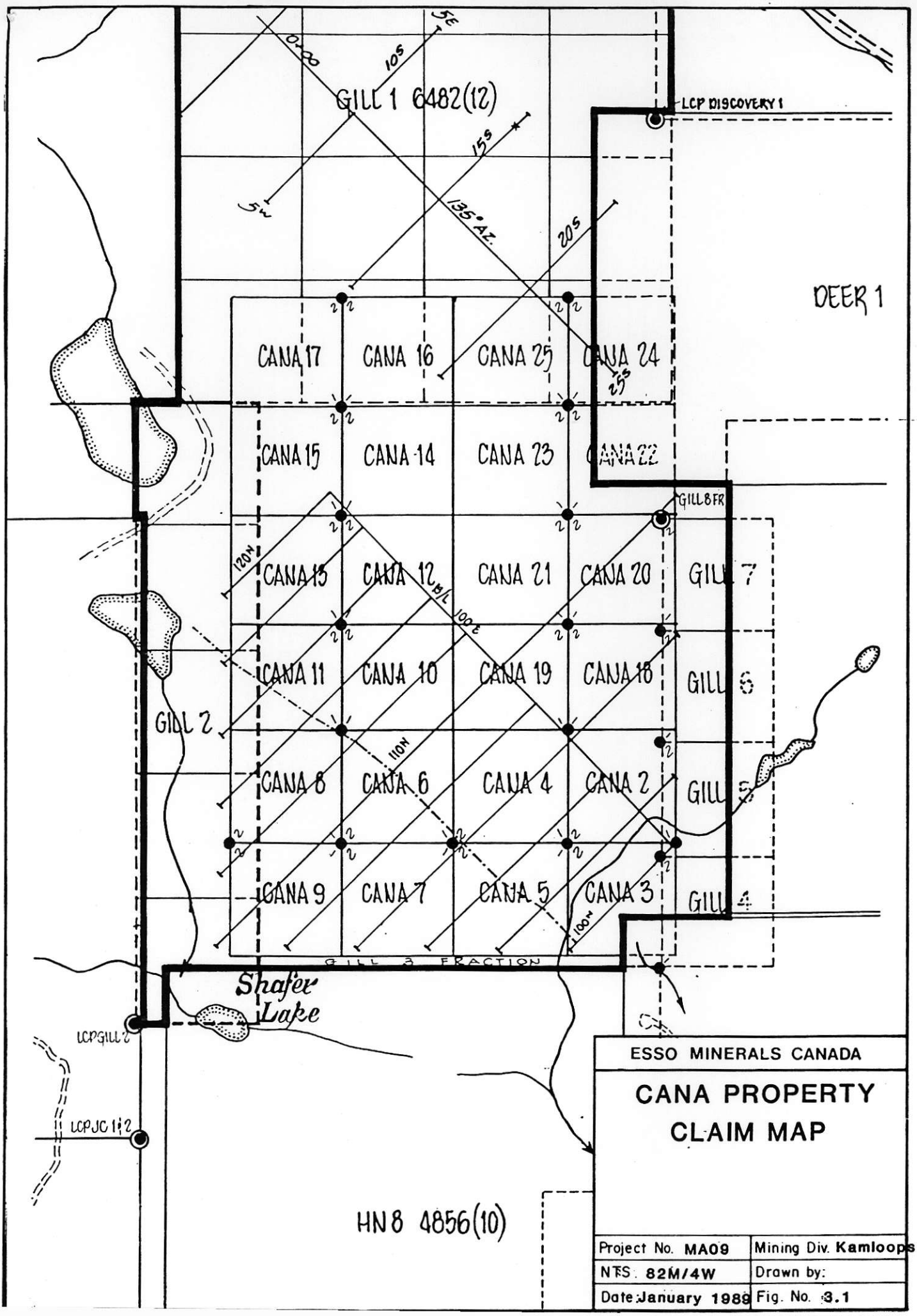
Proj No MA09	Mining Div Kamloops
82M/4	Drawn by M.Reed
Date : Jan 1988	MAP No. 2.1

3.0 OWNERSHIP AND CLAIMS

The Cana 2-25 claims (Fig. 3.1) are owned by Shamrock Resources Inc. (formerly Yucana Resources Inc.) of Vancouver, B.C. The claims are currently operated by Esso Minerals Canada under an option agreement signed on December, 23, 1985. The claims were initially recorded on November 4, 1983. Claim data is presented in Table 3.1 below:

TABLE 3.1: CANA CLAIM DATA

CLAIM	RECORD No.	UNITS	EXPIRY DATE
Cana 2	4889	1	04-11-1997
Cana 3	4890	1	04-11-1997
Cana 4	4891	1	04-11-1997
Cana 5	4892	1	04-11-1997
Cana 6	4893	1	04-11-1997
Cana 7	4894	1	04-11-1997
Cana 8	4895	1	04-11-1997
Cana 9	4896	1	04-11-1997
Cana 10	4897	1	04-11-1997
Cana 11	4898	1	04-11-1997
Cana 12	4899	1	04-11-1997
Cana 13	4900	1	04-11-1997
Cana 14	4901	1	04-11-1997
Cana 15	4902	1	04-11-1997
Cana 16	4903	1	04-11-1997
Cana 17	4904	1	04-11-1997
Cana 18	4905	1	04-11-1997
Cana 19	4906	1	04-11-1997
Cana 20	4907	1	04-11-1997
Cana 21	4908	1	04-11-1997
Cana 22	4909	1	04-11-1997
Cana 23	4910	1	04-11-1997
Cana 24	4911	1	04-11-1997
Cana 25	4912	1	04-11-1997
	TOTAL	26 UNITS	



ESSO MINERALS CANADA

CANA PROPERTY CLAIM MAP

Project No. MA09	Mining Div. Kamloops
NTS: 82M/4W	Drawn by:
Date: January 1989	Fig. No. 3.1

4.0 PROPERTY HISTORY

Prior to the Esso Minerals Canada option agreement, a control grid had been established on the property by Yucana Resources Ltd. No survey work was carried out.

In 1986 Esso Minerals Canada conducted a soil geochemical survey, a Fixed-Source GENIE EM survey and prospected the grid area. No outcrops were found. Results of the GENIE survey have been documented in a report by Marr and Doborzynski (Assessment Report, December, 1986).

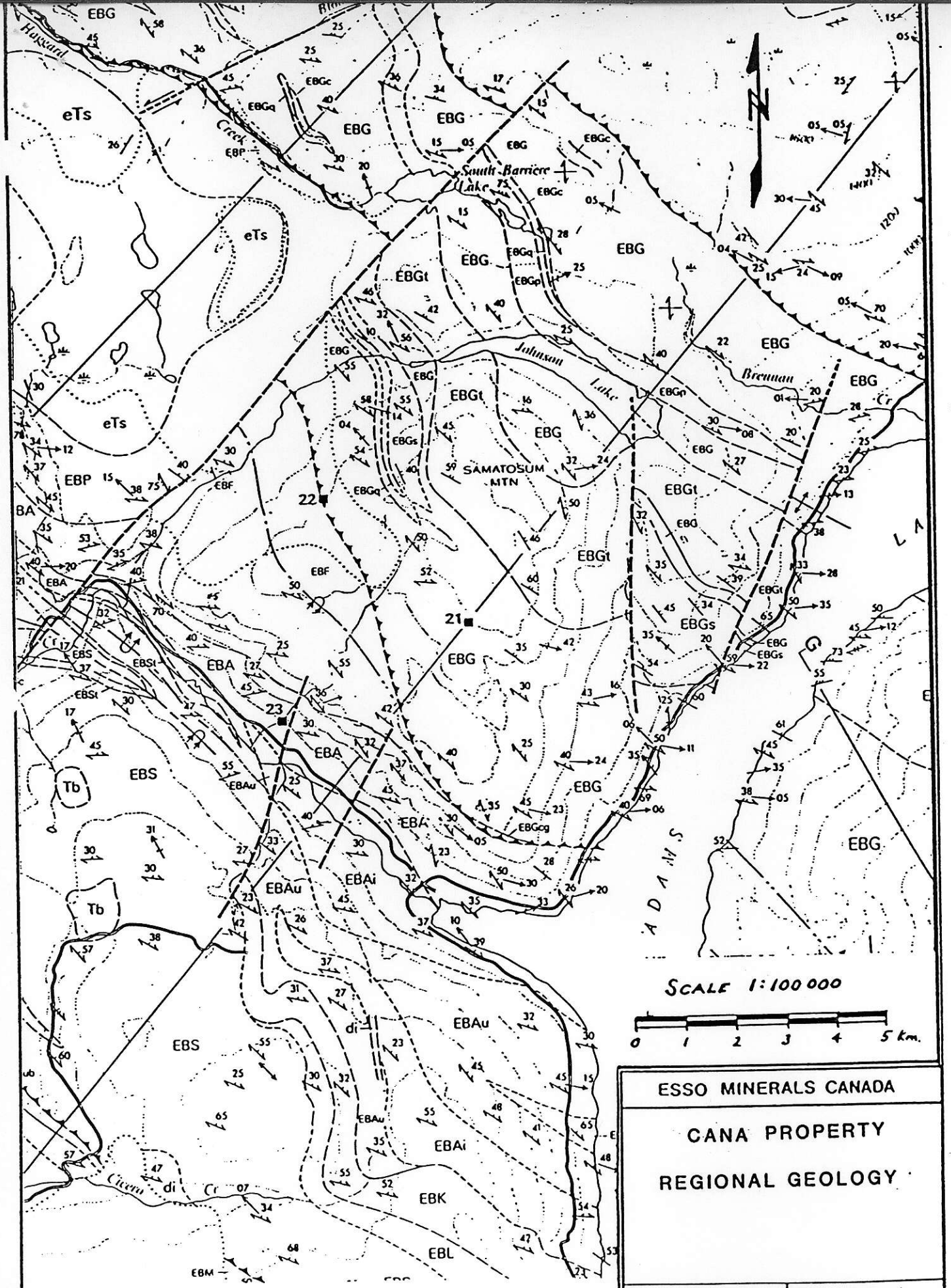
Based on the results of the 1986 surveys, four NQ diamond drill holes totalling 474.3m were drilled in the spring of 1987. The results of this initial drill phase, combined with further surface work during the summer of 1987, led to a second phase of drilling in the fall of 1987. Nine holes totalling 1124m were drilled in this second phase. The results of this work were presented in a report by Carmichael and Heberlein (Cana Final Report, 1988).

No further work was done on the property until August of 1988 when the drilling described in this report was undertaken.

5.0 GEOLOGY

5.1 Regional Geology (Fig. 5.1)

The sequence investigated in this area is part of the Eagle Bay Formation, a diverse and structurally complex Devono-Mississippian assemblage of sediments and volcanics which is known to outcrop from Clearwater to Shuswap Lake and hosts several volcanogenic-type prospects.



NOTE: GEOLOGY IS TAKEN FROM B.C.M.E.M.P.R. PRELIMINARY MAP No. 56 COMPILED BY PAUL SCHIARIZZA & V.A. PRETO.

ESSO MINERALS CANADA

CANA PROPERTY

REGIONAL GEOLOGY

Project No.	Mining Div. Kamloops
NTS. 82M/4W	Drawn by:
Date: Jan. 1989	Fig. No. 5.1

UPPER TRIASSIC AND LOWER JURASSIC NICOLA GROUP (?)

UPPER TRIASSIC OR LOWER JURASSIC

| kJv | ALKALIC PORPHYRY BRECCIA

UPPER TRIASSIC

| kl | DARK GREY LIMESTONE

DEVONIAN TO PERMIAN

ALLOCHTHONOUS INTERNALLY IMBRICATED OCEANIC ASSEMBLAGE

FENNELL FORMATION

UPPER STRUCTURAL DIVISION

| uFb | GREY AND GREEN PILLOWED AND MASSIVE METABASALT, MINOR AMOUNTS OF BASALTIC BRECCIA, TUFF, DIABASE, GABBRO, AND CHERT

| uFc | GREY AND GREEN BEDDED CHERT

LOWER STRUCTURAL DIVISION

| lFc | GREY AND GREEN BEDDED CHERT, CHERTY ARGILLITE, SLATE, AND PHYLLITE

| lFb | GREY AND GREEN PILLOWED AND MASSIVE METABASALT, MINOR AMOUNTS OF BASALTIC BRECCIA AND TUFF

| lFg | GABBRO, DIORITE, DIABASE

| lFp | LIGHT TO MEDIUM GREY QUARTZ-FELDSPAR PORPHYRY RHYOLITE

| lFs | LIGHT TO DARK GREY SANDSTONE, SILTSTONE, SLATE, PHYLLITE, AND QUARTZITE; MINOR AMOUNTS OF LIMESTONE AND CHERT; IN PLACES INCLUDES GREY TO GREEN QUARTZOSE AND FELDSPATHIC PHYLLITE (METATUFF)

| lFcg | INTRAFORMATIONAL CONGLOMERATE; CLASTS DERIVED EXCLUSIVELY FROM FENNELL FORMATION LITHOLOGIES

| lFu | UNDIVIDED, MAINLY lFc, lFg, and lFb, BUT MAY INCLUDE ANY OR ALL OF ABOVE ROCK TYPES

DEVONO-MISSISSIPPIAN AND OLDER PARAUTOCHTHONOUS ROCKS (EBP TO SOQ)

EAGLE BAY FORMATION (EBP TO EBGl)

MISSISSIPPIAN

| EBP | DARK GREY PHYLLITE AND SLATE WITH INTERBEDDED SILTSTONE, SANDSTONE, AND GRIT; MINOR AMOUNTS OF CONGLOMERATE, LIMESTONE, AND METATUFF; EBPl–LIMESTONE; EBPv–METAVOLCANIC BRECCIA AND TUFF

DEVONIAN AND/OR MISSISSIPPIAN

| EBF | LIGHT TO MEDIUM GREY, RUSTY WEATHERING FELDSPATHIC PHYLLITE AND FRAGMENTAL PHYLLITE DERIVED FROM INTERMEDIATE TO FELSIC TUFF AND VOLCANIC BRECCIA; MINOR AMOUNTS OF DARK GREY PHYLLITE AND SILTSTONE; EBFq–LIGHT GREY MASSIVE "CHERTY QUARTZITE" (SILICEOUS EXHALITE ?)

DEVONIAN

| EBA | LIGHT SILVERY GREY TO MEDIUM GREENISH GREY SERICITE–QUARTZ PHYLLITE AND SERICITE–CHLORITE–QUARTZ PHYLLITE DERIVED FROM FELSIC TO INTERMEDIATE VOLCANIC AND VOLCANICLASTIC ROCKS INCLUDING PYRITIC, FELDSPATHIC, AND COARSELY FRAGMENTAL VARIETIES. LESSER AMOUNTS OF DARK GREY PHYLLITE, SILTSTONE, AND GREEN CHLORITIC PHYLLITE. INCLUDES BIOTITE–FELDSPAR–QUARTZ SCHIST AND GNEISS, BIOTITE–QUARTZ HORNFELS AND AMPHIBOLITE ADJACENT TO BALOY BATHOLITH. EBAf–FELDSPAR PORPHYRY, FELDSPATHIC PHYLLITE, PYRITIC SERICITE–FELDSPAR–QUARTZ PHYLLITE, METAVOLCANIC BRECCIA. EBAs–SERICITIC QUARTZO–FELDSPATHIC SCHIST AND GNEISS DERIVED FROM FELSIC INTRUSIVE ROCKS. EBAu–UNDIVIDED EBA and EBAs

DEVONIAN (?) AND/OR OLDER (?) (UNITS EBU TO EBGl)

| EBU | LIGHT TO DARK GREEN CHLORITIC PHYLLITE, DARK GREY PHYLLITE AND SILTSTONE, LIMESTONE, QUARTZITE

| EBM | GREY AND GREEN VESICULAR AND PILLOWED METABASALT, GREENSTONE, CHLORITE SCHIST; MINOR AMOUNTS OF BEDDED CHERT, SILICEOUS PHYLLITE AND FINE-GRAINED QUARTZITE

| EBS | BANDED LIGHT GREY AND GREEN ACTINOLITE–QUARTZ SCHIST AND EPIDOTE–ACTINOLITE–QUARTZ ROCK; LESSER AMOUNTS OF GARNET–EPIDOTE SCHIST, CHLORITIC SCHIST AND SERICITE–

DEVONIAN (?) AND/OR OLDER (?) (CONTINUED)

| EBL | CALCAREOUS BLACK PHYLLITE, DARK GREY LIMESTONE AND ARGILLACEOUS LIMESTONE

| EBS | GREY AND GREEN PHYLLITIC SANDSTONE AND GRIT, PHYLLITE, AND QUARTZITE; LESSER AMOUNTS OF LIMESTONE, DOLOSTONE, GREEN CHLORITIC PHYLLITE, SERICITE–QUARTZ PHYLLITE, AND FELDSPATHIC SERICITE–QUARTZ PHYLLITE; EBSl–LIGHT GREY TO WHITE QUARTZITE, EBSc–LIMESTONE, DOLOSTONE, MARBLE; EBSg–GREENSTONE, PILLOWED METABASALT, CHLORITIC PHYLLITE, EBSgo–CONGLOMERATE, EBSm–GREY PHYLLITE AND SILTSTONE, EBSs–SIDERITE–SERICITE–QUARTZ PHYLLITE AND FELDSPATHIC PHYLLITE (METATUFF), EBSs–PYRITIC SERICITE–QUARTZ PHYLLITE AND CHLORITOID–SERICITE–QUARTZ PHYLLITE

| EBG | MEDIUM TO DARK GREEN CALCAREOUS CHLORITE SCHIST AND FRAGMENTAL SCHIST DERIVED LARGELY FROM MAFIC TO INTERMEDIATE VOLCANIC AND VOLCANICLASTIC ROCKS; LESSER AMOUNTS OF LIMESTONE AND DOLOSTONE; MINOR AMOUNTS OF QUARTZITE, GREY PHYLLITE, AND SERICITE QUARTZ PHYLLITE. EBGc–LIMESTONE, DOLOSTONE, MARBLE; EBGt–TSHINAKIN LIMESTONE MEMBER–MASSIVE, LIGHT GREY FINELY CRYSTALLINE LIMESTONE AND DOLOSTONE EBGs–DARK TO LIGHT GREY SILICEOUS AMIANTH GRAPHITIC PHYLLITE, CALCAREOUS PHYLLITE, LIMESTONE, CALC–SILICATE, CHERTY QUARTZITE, MINOR AMOUNTS OF GREEN CHLORITIC PHYLLITE AND SERICITE–QUARTZ PHYLLITE, EBGq–LIGHT TO MEDIUM GREY QUARTZITE, EBGp–DARK GREY PHYLLITE, CALCAREOUS PHYLLITE AND LIMESTONE, MINOR AMOUNTS OF RUSTY WEATHERING CARBONATE–SERICITE–QUARTZ PHYLLITE (METATUFF ?), EBGgo–POLYMICTIC CONGLOMERATE

SHAKLEM CREEK–DEADFALL CREEK SUCCESSION (SOQ)

LOWER CAMBRIAN (?) AND/OR NEOPROTEROZOIC (?)

| SOQ | LIGHT TO DARK GREY QUARTZITE, MICACEOUS QUARTZITE, GRIT, AND PHYLLITE; LESSER AMOUNTS OF CALCAREOUS PHYLLITE, CARBONATE, AND GREEN CHLORITIC SCHIST. NORTHEASTERN EXPOSURES INCLUDE STAUROLITE–GARNET–MICA SCHIST, CALC–SILICATE SCHIST, AND AMPHIBOLITE

TERTIARY OR QUATERNARY

| Tb | OLIVINE BASALT

MIOCENE OR PLIOCENE

| mTb | PLATEAU LAVA OLIVINE BASALT

EOCENE

KAMLOOPS GROUP

| eTs | SKULL HILL FORMATION AND RELATED ROCKS; ANDESITE AND BASALT; INCLUDES MINOR AMOUNTS OF MUDSTONE AND SHALE IN THE VICINITY OF ALEX AND HAGGARD CREEKS

| eTc | CHU CHUA FORMATION SANDSTONE, SHALE, CONGLOMERATE, COAL

CRETACEOUS OR TERTIARY

| qp | QUARTZ–FELDSPAR PORPHYRY

CRETACEOUS

BALOY BATHOLITH, RAFT BATHOLITH, AND RELATED ROCKS

| Kg | GRANITE AND GRANODIORITE

AGE UNKNOWN

| di | FOLIATED DIORITE, QUARTZ DIORITE AND GABBRO

| ub | SERPENTINITE

LATE DEVONIAN

| Dgn | GRANITE AND GRANODIORITE ORTHOGNEISS (DPM INCLUDES SILLIMANITE–BEARING PARAGNEISS)

LEGEND FOR FIGURE 5.1

LEGEND FOR FIGURE

SYMBOLS

GEOLOGICAL CONTACT: DEFINED, APPROXIMATE, ASSUMED

BEDDING: TOP KNOWN: INCLINED, OVERTURNED

BEDDING: TOP UNKNOWN: HORIZONTAL, INCLINED, VERTICAL

FACING DIRECTION OF PILLOWED BASALT: INCLINED, OVERTURNED

SYNMETAMORPHIC SLATY CLEAVAGE, SCHISTOSITY, OR GNEISSOSITY: HORIZONTAL, INCLINED, VERTICAL

MINERAL LINEATION

POSTMETAMORPHIC CRENULATION CLEAVAGE: INCLINED, VERTICAL

CRENULATION LINEATION

MESOSCOPIC FOLD AXIS: SYNMETAMORPHIC, POSTMETAMORPHIC, LATE KINK

AXIAL TRACE OF SYNMETAMORPHIC FOLD: OVERTURNED ANTICLINE, OVERTURNED SYNCLINE; ESTABLISHED, INFERRED

AXIAL TRACE OF POSTMETAMORPHIC FOLD: ANTIFORM, SYNFORM

LATER (SYN OR POSTMETAMORPHISM) WEST TO SOUTHWESTERLY DIRECTED THRUST FAULT, TEETH ON UPPER PLATE: DEFINED, APPROXIMATE, ASSUMED

EARLY (?) FOLDING AND METAMORPHISM) EASTERLY DIRECTED THRUST FAULT; TEETH ON UPPER PLATE: DEFINED, APPROXIMATE, ASSUMED

FAULT, DOT ON DOWNTHROWN SIDE, ARROWS INDICATE SENSE OF STRIKE SLIP MOVEMENT: DEFINED, APPROXIMATE, ASSUMED

CONODONT FOSSIL LOCALITY: MISSISSIPPIAN, PENNSYLVANIAN, PERMIAN

LOCATION OF RADIOMETRICALLY DATED SAMPLE (U/Pb ON ZIRCONS AND Rb/Sr WHOLE ROCK) INDICATE A DEVONIAN AGE FOR UNIT EBA AND FOR UNIT Fp

MINERAL OCCURRENCE

LIMIT OF GEOLOGICAL MAPPING OR OUTCROP

LINE OF GEOLOGICAL CROSS-SECTION

TOPOGRAPHICAL CONTOUR (200-METRE INTERVAL)

The primary exploration targets in the area occur at contacts between mafic volcanic rocks and sediments. These contacts mark the stratigraphic top of a thick sequence consisting predominantly of mafic volcanics. Lithologies seen at these contacts include chert, felsic and intermediate volcanics, sericitic tuff, pyritic siltite and massive sulphide.

Much of the area between Johnson Creek and Haggard Creek is capped by an outlier of Tertiary basalt. This basalt covers much of the Cana claims but is absent over most of the southern area.

The Quaternary geology indicates that the area was one of glacial outwash. Consequently, it is covered by a variety of glacial deposits which create difficult exploration conditions on some parts of the property.

5.2 Property Geology (Fig. 5.2)

Investigation of the property geology has been greatly hampered by the complete absence of bedrock outcrops. All geological data has been collected from diamond drill holes or inferred from geophysical data.

The rocks that occur in drill core have been divided into two units based on lithology and inferred stratigraphic position. No definitive facing directions have been identified in the drill core and the structural orientation (tops up or down) of the rocks is unknown. The unit numbers do not imply any age relationships, but serve only to differentiate units based on lithological changes.

Brief lithological descriptions of the units are given below.

Unit 1: Interbedded Graphitic Argillite, Mafic Tuff and Chert

This unit tends to be quite heterogeneous in composition. The various sub-units are interbedded on a 0.5m to 25m scale and frequently occur mixed, rather than as separate beds. Carbonate (dolomite) is the main alteration mineral in the volcanics with sericite and pyrite secondary. Black, graphitic chert and argillite, along with depositional chert breccias, make up the sedimentary component of this unit. The cherts show local ribbon-banding and may carry up to 60% coarse, granoblastic pyrite.

Unit 2: Sericitic Tuff and Chert

Intensely sericitic intermediate to felsic tuffs are interbedded with grey to blue-grey chert and minor graphitic argillite. The chert is locally ribbon-banded and carries significant pyrite in places as well as traces of arsenopyrite, galena and sphalerite.

6.0 1989 DRILLING

6.1 General

This report documents the results of four diamond drill holes (479.7m) which were completed on the Cana property between August 1st and August 10th, 1988.

The 1988 drill hole locations are shown in Figure 5.2, collar data is as follows:

TABLE 5.1: DRILL HOLE DATA

HOLE	NORTHING	EASTING	ELEV.	AZM	DIP	LENGTH
C88014	105+00	93+58	1175m	225°	-50°	102.7m
C88015	106+36	98+58	1195m	225°	-50°	133.2m
C88016	106+00	90+00	1160m	225°	-50°	135.3m
C88017	116+00	95+25	1180m	225°	-50°	108.5m
					TOTAL	479.7m

Drilling was performed by Frontier Drilling Ltd. of Kelowna, B.C. using a skid-mounted, Longyear Super 38 diamond drill and NQ diameter rods. Drill road construction was done by the drilling company with a D-6 Cat. Direct charges from the drilling company totalled $52.49/metre. No significant drill-related technical problems were encountered in any of the holes.

The holes were logged at the company core storage facility in Sinmax Valley by R.G. Carmichael. Selected core samples were split and sampled by D. Wilkinson and sent to Acme Analytical Laboratories in Vancouver, B.C. for assay.

6.2 Results

Results and interpretation of the drilling are as follows:

DDH C88014 (Fig. 6.1)

This hole was drilled to intersect the structural upper contact of a thick sericitic tuff unit that was discovered in the 1987 drill program.

The hole encountered 12.8m of overburden underlain by a 0.9m of highly pyritic (30%) chert. From the base of the chert (13.7m) to 65.8m the hole penetrated an interbedded sequence of ribbon- banded, graphitic cherts and silicified mafic volcanics.

The sericitic tuff target was intersected at 65.8m and continued to the end of the hole at 102.7m. The structural upper contact with the mafic volcanic rocks was found to be conformable and gradational over a 20m interval.

DDH C88015 (Fig. 6.2)

This hole was collared 500m to the north of C88014 to intersect the structural upper contact of a second sericitic tuff and chert unit located by the 1987 drilling.

The hole penetrated 18.7m of overburden and went into an interbedded sequence of ribbon-banded cherts and argillites (18.7 to 70.6m). This interval also contained sporadic tuffaceous sections. A fault zone from 69.2 to 70.6m marks the target horizon. Below this the sericitic tuffs contain no significant mineralization.

DDH C88016 (Fig 6.3)

This hole was drilled close to the southern claim boundary to test the structural lower contact of a sericitic tuff and chert sequence located by the 1987 drilling.

The hole penetrated 32.9m of overburden underlain by intensely carbonatized (40 - 50% carbonate) mafic volcanics (32.9 to 102.7m). In this unit most primary textures have been obliterated by the alteration; however, remnant fragments have been noted.

Beneath the mafic volcanic, the hole intersected a sedimentary unit dominated by dark grey to black, interbedded chert and argillite. The contact with the overlying volcanic unit appears to be gradational and conformable. The hole stopped in the chert-argillite unit at 135.3m.

The target contact was not intersected and no significant mineralization was found.

DDH C88017 (Fig. 6.4)

This hole was drilled in the northwest part of the claims to test a coincident GENIE EM and soil Pb-Zn anomaly.

The hole penetrated 24.3m of overburden and went into a massive, coarse-grained olivine gabbro to a total depth of 108.5m where the hole was stopped.

The geophysical and geochemical targets were not explained, but are clearly not related to the target stratigraphy.

6.3 Interpretation

The lithologies intersected in diamond drill holes on the Cana claims are similar to those seen in drill holes which intersect the Rea and Silver zones to the southeast, although there are some significant differences.

The stratigraphy which defines the Rea zone is well known and appears to be fairly predictable along strike. The mineralized zone lies between a thick pile of variably altered mafic volcanics and a very distinct sedimentary package consisting of graphitic argillites, coarse wackes and chert-pebble conglomerate. The mineralized stratigraphy is marked by interbedded sericitic tuff, black to grey locally ribbon-banded chert, felsic and intermediate tuff, and graphitic argillite. Also present is a conspicuous pyritic siltite marker unit known as the "muddy tuff".

The Cana drilling has identified several of these lithologies (Fig. 5.2) and the stratigraphic relationship of the units to each other has been tentatively established, however correlation with the Rea and Silver zone stratigraphy is uncertain.

Two cross sections (Figs. 6.5 and 6.6) have been prepared from the drilling data. These sections demonstrate the relationships of the units and also indicate the intensity of the structural deformation on the property.

Geological Cross Section A-A' (Fig. 6.5)

This section demonstrates the intense deformation of the rocks on the Cana property. The proposed isoclinal folds are consistent with the regional deformation style.

Although the lithologies that occur across this section are similar to those that occur on the Rea and Silver zones, the stratigraphy here appears to be quite different.

One important difference is that the mafic volcanics on this section appear to lie stratigraphically above the interbedded sericitic tuffs and cherts, whereas at the Rea Zone they lie below. The absence of a distinct sedimentary sequence equivalent to the Rea Zone hanging wall sediments is another important difference.

This section also demonstrates a close relationship between geophysical conductors and graphitic argillite.

Geological Cross Section B-B' (Fig. 6.6)

This section again suggests that the rocks on the Cana property are tightly folded and faulted. The stratigraphy is complex and does not match that of the Rea and Silver zones.

An interpretation of the bedrock geology in the immediate vicinity of the drill holes was constructed using surface projections of the geology from the drill sections. The geological interpretation indicates a strike azimuth of 152 degrees which is consistent with the strike observed along the Rea and Silver zones to the southwest. The holes indicate a moderate to steep northeasterly dip with some variation in individual holes.

No definitive facing directions have yet been obtained. Foliation is strongly developed and, in most places, is parallel to compositional layering. In other

areas foliation is normal to compositional layering, indicating a strong degree of folding.

The rocks seen in the Cana drill holes do not represent the Rea or Silver zones as they are known to the southeast, although they are similar in some respects. A distinct mafic volcanic/sediment contact has not been found on the Cana claims. This discrepancy may be due to a change in the character of the zones along strike (ie. a thickening of the contact lithologies), but may also be an indication that these zones have not yet been identified on the Cana property.

7.0 RECOMMENDATIONS

No further surface work is recommended for the Cana claims. The area has been adequately covered by soil sampling and geophysics, and the thick overburden makes the validity of this data questionable.

Six diamond drill holes totalling 1,000m are recommended in order to determine if the favourable volcanic/sediment contact (the Rea or Silver zone) is present on the Cana property.

TABLE 7.1 - PROPOSED DRILL HOLE DATA

HOLE	NORTHING	EASTING	AZM.	DIP	LENGTH
A	10700	8800	225°	-45°	150m
B	10900	8700	225°	-45°	150m
C	10600	10025	225°	-45°	175m
D	10600	10200	225°	-45°	175m
E	10600	10375	225°	-45°	175m
F	10600	10550	225°	-45°	175m

Two of these holes (A, B) are proposed to test the stratigraphy in the southwest corner of the property. An outcrop of chert pebble conglomerate which typifies the Rea Zone hanging wall sediments occurs about 800m south of the southern claim boundary. The location of this outcrop suggests that the Rea Zone may underlie this area of the property. The presence of a weak soil geochemical anomaly strengthens this target.

The remaining four proposed holes are located to the northeast of the area which has been drilled in the past two

years. These holes are intended to provide information about the stratigraphy in this area. No geochemical anomalies were detected in this area; however, this is likely a result of deep overburden.

7.1 Proposed Budget

DRILLING (including mob/demob, core boxes and acid tests)		
1000m @ $60.00/metre	$60,000.00	
		$60,000.00
ANALYTICAL		
30 element ICP analyses + Au		
60 samples @ $20.00	$ 1,200.00	
		$ 1,200.00
LABOUR		
Core logging		
8 mandays @ $175.00/day	$ 1,400.00	
Splitting/casual:		
8 mandays @ $90.00/day	$ 720.00	
Supervision - 4 days x $404/day	$ 1,560.00	
Drafting/secretarial	$ 780.00	
Report writing		
10 days @ $175.00/day	$ 1,750.00	
		$ 6,210.00
LOGISTICS		
Accommodation:		
- 20 mandays @ $50.00/day	$ 1,000.00	
Vehicles (including fuel etc.)		
- 0.6 mo @ $1500/mo	$ 900.00	
	$ 1,900.00	
		$ 1,900.00
MISCELLANEOUS		
Supplies/freight/computer	$ 1,500.00	
		$ 1,500.00
	SUB-TOTAL	**$70,810.00**
DIRECT SUPPORT SERVICES (10%)		$ 7,080.00
	TOTAL	**$77,890.00**

8.0 REFERENCES

Marr, J.M. and Doborzynski, Z.B., 1986:
Assessment Report, Cana 2-25 Claims, December 1986

Carmichael, R.G. and Heberlein, D.R.,1988:
Assessment Report, Cana 2-25 Claims, October, 1988

APPENDIX I

ASSAY SHEETS

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: Core AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: AUG 16 1988 DATE REPORT MAILED: Aug 23/88 ASSAYER. C. Leong. D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

ESSO MINERALS CANADA LTD. PROJECT 109 File # 88-3626

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPB
C16 06400645	6	107	19	101	.5	225	33	896	18.67	130	5	ND	2	30	6	8	2	12	5.16	.018	2	31	2.83	16	.01	2	.13	.02	.04	1	24
C14 01280137	1	128	77	76	.6	143	48	24	11.34	828	5	ND	2	19	2	14	2	15	.34	.255	2	29	.02	12	.01	9	.76	.02	.14	1	26
C14 01370148	1	155	83	69	1.0	43	5	50	15.04	471	5	ND	3	18	3	17	2	7	.42	.209	2	11	.01	14	.01	13	.23	.01	.03	1	17
C14 04840493	1	70	313	666	4.6	52	7	38	12.72	4122	5	ND	3	16	5	157	2	6	.13	.072	2	9	.07	12	.01	8	.32	.01	.06	1	116
C14 05100515	1	234	332	170	7.5	44	6	55	13.83	4083	5	ND	3	15	2	322	2	6	.15	.081	2	7	.03	17	.01	9	.29	.01	.06	1	135

APPENDIX II

DIAMOND DRILL LOGS

ESSO Minerals Canada
CANA
DRILLHOLE/TRAVERSE : C88014

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 JECT IDEN    : CANA           START DATE      : 88/ 8/10       COMPLETION DATE :                GEOLOGGED BY : RGC + RGC
COLLAR NORTHING: 10505.00      COLLAR EASTING : 9328.00         COLLAR ELEVATION: 1176.00        GRID AZIMUTH : 315.00
                                TOTAL LENGTH   : 102.70           CORE/HOLE SIZE : NQ

           SURVEY FLAG      SURVEY POINT     FORESIGHT      AZIMUTH      VERTICAL ANGLE      NORTHING      EASTING
                              LOCATION                     (DEGREES)       (DEGREES)

               000             0.00                          225.00          -50.00

R HED                            This hole was drilled between C86004 and C87012 to intersect
R HED                            the structural upper contact of the thick sericitic tuff and
R HED                            chert unit seen in C87012 and C87013.

  F   - I N T E R V A L -   CORE      %     TYPI- QAL  TEX-  GRAIN FRAC-       STRUCTUR-1 ALTERATION MINS  ORE-TYPE MINS
K  L (UNITS = FT)           RECOV-    M ROCK FYING MIN TURES CHARACS TURE               M  M  M  M  M ANY M  M  M ANY
E  A                         ERY      I      TM TM MAT TX TX F C % M          T ID STK DIP  A  A  A  A  A MIN A  A  A MIN
Y  G    F R O M  -  T O     (FT.1)    X TYPE  1  2 QM1  1  2 F F C P  # TK    1   AZM  RT QZ BI CY CB MG XX PY CP GL YY   SUMM
- --- -----.--    -----.--  ----.- -- - ---- -- -- --- -- -- - - - - -- -- -  - -- --- --- -- -- -- -- -- -- -- -- -- --   - -
K  F                        ROCK   FOR EN RT     TM QM2 TX TX S R S O DIP F   T ID STK DIP KF MU CL EP HE HA PR MO SL HA
E  L                        QUAL   MEM  V  Q LC- 3        3  4 O N H / SHL I   2   AZM  RT     H  H  H  H  H  H  H  H
Y  G                        DESIG  AGE       COL            R D P C           STRUCTUR-2        A  A  A  A  A  A  A  A


P OVB    0.00       12.80               OVER                          P
  OVB    0.00       12.80        Casing.

P        12.80      14.80     100.0      PYCH PY MS PY3 GB WF          P    FO      70    $1              G3
L                              50.0           BR AK MS1                                   $1
R        12.80      14.80        Grey-black chert with 30% coarse granoblastic pyrite.  The
R        12.80      14.80        structural lower contact is faulted.
R        12.80      13.70        A pyritic silicified volcanic with 20% sheeted orange ankerite.
R        12.80      13.70        Original textures are obscured by the intense alteration.
N        12.80      13.70             X SIVL QZ PY QZ5 WF PA           N             P5 $2              G3
L                                             OA AK PY3 $T                                $1

P        14.80      45.90      95.0      RBAC GR PY GR1 RB FD          P             83            DO D.       GR
L                               .0            1A QZ PY. CH          9                 $=            P=          $1
R        14.80      45.90        A dark grey to black locally silicified ribbon-banded graphitic
R        14.80      45.90        argillite.  5% pervasive dolomite is noted along with 5%
R        14.80      45.90        sheeted yellow sericite.  RQD is zero over this interval and
R        14.80      45.90        the core is very rubbly.  Although scattered 'cherty' sections
R        14.80      45.90        are noted, the majority of silica present is a result of
R        14.80      45.90        veining and silicificaiton.
R        20.30      21.90        A dark grey ribbon-banded chert with 10-% quartz stringers.
N        20.30      21.90             X RBCH QZ    QZ1 RB <<           N             <1
L                                             3A

P        45.90      65.80     100.0      RBCH GR PY GR1 RB CH          P             <=              !1         GR
L                                             3A MS PY1             8                 0*                        $1
 )       45.90      65.80        Grey to black ribbon-banded chert.  The most conspicuous
         45.90      65.80        feature of this chert is the presence of well-developed bands
R        45.90      65.80        (1-5mm thick) which are, for the most part, folded and
R        45.90      65.80        convoluted to give a distinct ribbon-banded texture.  10%
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ESSO Minerals Canada

CANA

DRILLHOLE/TRAVERSE : C88014 (CONTINUED)

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  F   - I N T E R V A L -   CORE      %      TYPI- QAL  TEX-  GRAIN FRAC-      STRUCTUR-1 ALTERATION MINS  ORE-TYPE MINS
K  L (UNITS = FT)           RECOV-    M ROCK FYING MIN TURES CHARACS TURE                H  H  H  H  H ANY H  H  H ANY
E  A                         ERY      I      TM TM MAT TX TX F C % M       T ID STK DIP  A  A  A  A  A MIN A  A  A MIN
Y  G   F R O M  -  T O      (FT.1)    X TYPE  1  2 QM1  1  2 F F C P  # TK  1    AZM  RT QZ BI CY CB MG XX PY CP GL YY  SUMM
- --- -----.--   -----.--   ----.- -- - ---- -- -- --- -- -- - - - - -- -- - - -- --- --- -- -- -- -- -- -- -- -- -- --  - -
K  F                        ROCK  FOR EN RT    TM QM2 TX TX S R S O DIP F   T ID STK DIP KF MU CL EP HE HA PR MO SL HA
E  L                        QUAL  MEM  V  Q LC- 3      3  4 O N H / SML I   2    AZM  RT       H  H  H  H  H  H  H  H
Y  G                        DESIG AGE       COL          R D P C           STRUCTUR-2          A  A  A  A  A  A  A  A

R       45.90      65.80        graphite is sheeted between these bands and dusty pyrite is
R       45.90      65.80        occasionally seen in between bands, suggesting it is primary.
R       45.90      65.80        Over short intervals (eg. 56.2-56.7m), these bands show only
R       45.90      65.80        minor deformation and are essentially planar.  The graphite
R       45.90      65.80        content increases with depth.
R       45.90      47.30        Extremely fine-grained dusty pyrite forms much (20%) of the
R       45.90      47.30        matrix of this depositional chert breccia.  Recrystallization
R       45.90      47.30        has resulted in an overprinted granoblastic texture to the
R       45.90      47.30        pyrite.  10% sheeted yellow sericite is also noted in this
R       45.90      47.30        section and graphite is more abundandt than in most of the PGI
R       45.90      47.30        (20%).*
N       45.90      47.30             X CHBR PY GR PY2 FR BR     3 7      N                      !2       GR
                                            1A MS GR2       1    0                 $1                   P2
)       48.40      49.30        A beautifully preserved pyritic depositional chert breccia.
R       48.40      49.30        This is similar to 45.9 - 47.3m but without the graphite or
R       48.40      49.30        sericite, and with 30% dusty pyrite.  Angular chert fragments
R       48.40      49.30        sit in a pyrite matrix.  The overall impression is of chert
R       48.40      49.30        fragments deposited within a pyritic mud.
N       48.40      49.30             X CHBR PY    PY3 FR BR              N                      !3
L                                           BR
R SMP   51.10      51.20        A 10cm section of dusty and granoblastic pyrite in chert with
R SMP   51.10      51.20        abundant white, late-stage silica.
N SMP   51.10      51.20             X SMPY PY QZ PY5 GB CG              N             P5       G5
L                                           BR    QZ5

P       65.80      88.20               SECH MS PY MS1 RB CH              P    FO      75 <)     D*
L                                           2A    PY* << $T                        $1
R       65.80      88.20        Black and grey ribbon-banded chert with 10% sheeted yellow
R       65.80      88.20        sericite.  Compositional bands (1-5mm) are tightly folded and
R       65.80      88.20        have been sheared along foliation surfaces. Sericite content
R       65.80      88.20        increases down-hole.

P       88.20     100.60   100.0       SECH MS PY MS2 $T FO              P                      W)
L                                           YA    PY)                              $2
R       88.20     100.60        This is a yellow-grey siliceous rock with 20% sheeted yellow
R       88.20     100.60        sericite and 1-5% wispy pyrite.  Ribbon-banded textures are
R       88.20     100.60        locally observed but are not characteristic.  This is similar
R       88.20     100.60        to the last interval but contains more sericite and pyrite and
)       88.20     100.60        no black chert.

P      100.60     102.70   100.0       RBCH PY DO PY* RB                 P                   DO D*
L                                           1A    DO*                                         O*
R      100.60     102.70        Black and dark grey ribbon-banded chert.
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ESSO Minerals Canada

CANA

DRILLHOLE/TRAVERSE : C88015 (CONTINUED)

K	F L A G	- INTERVAL - (UNITS = FT) FROM - TO	CORE RECOV-ERY (FT.1)	% M ROCK I X	TYPE	TYPIFYING 1	TYPIFYING 2	QAL MIN MAT QM1	TEXTURES 1 TX	TEXTURES 2 TX	GRAIN CHARACS F	C	% M	FRACTURE P	# TK	STRUCTUR-1 T	ID	STK AZM	DIP RT	ALTERATION H A QZ	H A BI	H A CY	H A CB	H A MG	MINS H A XX	ORE-TYPE MINS H A PY	H A CP	H A GL	MINS H A YY	SUMM
K	F L G		ROCK QUAL DESIG	FOR MEM AGE	EN V	RT Q	LC-COL	TM QM2 3	TX 3	TX 4	S O N H R D P C	R	S O	DIP / SML	F I	T 2	ID	STK AZM	DIP RT	KF	MU	CL H A	EP H A	HE H A	HA H A	PR H A	MO H A	SL H A	HA H A	
																STRUCTUR-2														
R		57.00	70.60					70cm thick occur in this chaotically deformed unit. For the																						
R		57.00	70.60					most part, chert and argillite are interlaminated (1-10mm).																						
R		57.00	70.60					These laminations have been intensely folded and, in places,																						
R		57.00	70.60					brecciated. No tuffaceous input is noted and granoblastic																						
R		57.00	70.60					pyrite (.3%) is rarely seen. The structural lower contact is																						
R		57.00	70.60					faulted.																						
R		57.70	58.00					20% dusty pyrite is noted in this interval.																						
N		57.70	58.00		X	RBAC	PY	PY2						N											!2				
L							1A																						
R		59.60	60.00					A clean, grey chert with minor dolomite and pyrite.																						
N		59.60	60.00		X	CHER	DO PY	DO-	WF					N		CU		40						DO <-				
L							5A	PY-																	<-				
)		60.10	60.50					A clean, grey chert with minor dolomite and pyrite.																						
N		60.10	60.50		X	CHER	DO PY	DO-	WF					N											DO <-				
L							5A	PY-																	<-				
N		60.70	61.40		X	CHER	QZ DO	QZ1	<<	RB				N					<1						DO +-				
L							5A	PY DO-																	+-				
R		69.20	70.60					Graphitic fault gouge with sections of massive graphite.																						
N		69.20	70.60		6	GOUG	GR	GR8	F/					N															GR	
L							NN																						N8	
P		70.60	80.40	100.0		SETF	MS	MS4	$T	<<				P																
L				50.0			7Y		HO											$4										
R		70.60	80.40					A distinct, yellow-colored, sericitic tuff. No graphite or																						
R		70.60	80.40					clastic input is present. The rock has a slight pink tinge.																						
R		70.60	80.40					The stuctural lower contact is gradational over 1m.																						
P		80.40	121.10			IBAT	GR MS	GR2	RB	IB				P											D.			GR	
L							YN	MS2	IL	WF										$2								$2	
R		80.40	121.10					This is a mixed and heterogeneous interval of graphitic																						
R		80.40	121.10					argillite, sericitic tuff and minor chert. Argillite and tuff																						
R		80.40	121.10					are both interlaminated (1-10mm) and interbedded (3-6m).																						
R		81.30	82.20					Black, graphitic laminated chert.																						
N		81.30	82.20		X	GRCH	GR PY	GR1	LM					N											D*			GR	
L							NN	PY*																				$1	
R		88.80	90.50					Yellow sericitic tuff.																						
N		88.80	90.50		X	SETF	MS PY	MS4	WF	$T				N		CL		45							D.				
·							7Y	PY.	WB											$4										
)		100.70	106.80					Yellow sericitic tuff.																						
N		100.70	106.80		X	SETF	MS PY	MS4	WF	$T				N											D.				
L							7Y	PY.	WB											$4										
P		121.10	133.20			SETF	MS PY	MS4	$T	WB				P											D.				
L							7Y	PY.	WF	HO										$4										

ESSO Minerals Canada

CANA

DRILLHOLE/TRAVERSE : C88015 (CONTINUED)

K	F L A G	- INTERVAL - FROM - TO (UNITS = FT)	CORE RECOV-ERY (FT.1)	% M I X	ROCK TYPE	TYPI-FYING TM 1	TH 2	QAL MIN MAT QM1	TEX-TURES TX 1	TX 2	GRAIN CHARACS F F	C	% P	H #	FRAC-TURE TK	STRUCTUR-1 T	ID	STK AZM	DIP RT	ALTERATION MINS H A QZ	H A BI	H A CY	H A CB	H A MG	ANY MIN H A XX	H A PY	H A CP	H A GL	ANY MIN H A YY	SUMM
K	F		ROCK QUAL DESIG	FOR MEM AGE	EN V	RT Q	LC-COL	TM 3	QM2	TX 3	TX 4	S O R	R N D	S H P	O / C	DIP SML	F I	STRUCTUR-2 T	ID	STK AZM	DIP RT	KF H A	MU H A	CL H A	EP H A	HE H A	HA H A	PR H A	MO H A	SL H A	HA H A	
R		121.10 133.20																												
R		121.10 133.20																												

This intensely sericitized yellow volcanic contains no clastic input. It is the same as the sericitic tuffs noted above.

ESSO Minerals Canada
CANA

DRILLHOLE/TRAVERSE : C88016

PROJECT IDEN : CANA | START DATE : 88/ 8/11 | COMPLETION DATE : | GEOLOGGED BY : RGC + RGC
COLLAR NORTHING: 10600.00 | COLLAR EASTING : 9000.00 | COLLAR ELEVATION: 1175.00 | GRID AZIMUTH : 315.00
TOTAL LENGTH : 135.30 | CORE/HOLE SIZE : NQ

SURVEY FLAG	SURVEY POINT LOCATION	FORESIGHT	AZIMUTH (DEGREES)	VERTICAL ANGLE (DEGREES)	NORTHING	EASTING
000	0.00		225.00	-50.00		

R HED This hole was drilled near the southern boundary of the
R HED Cana property to test for the presence of the Rea Zone.

K	L	- INTERVAL - (UNITS = FT) FROM - TO	CORE RECOVERY (FT.1)	% M I X	ROCK TYPE	TYPIFYING MINERALS 1	2	QAL MAT QM1	TEXTURES 1	2	GRAIN CHARACS F	C	% M	FRACTURE # TK	STRUCTUR-1 T	ID	STK AZM	DIP RT	ALTERATION MINS H QZ	H BI	H CY	H CB	H MG	ANY MIN XX	H PY	H CP	H GL	ANY MIN YY	ORE-TYPE MINS SUMM
K	F		ROCK QUAL DESIG	FOR MEM AGE	EN V	RT Q	LC- COL	TM 3	QM2	TX 3	TX 4	S O R	R N D	S H P	O / C	DIP SML	F I	T 2	ID	STK AZM	DIP RT	KF H	MU H	CL H	EP H	HE H	HA H	PR H	MO H	SL H	HA H
E	L																													
Y	G																	STRUCTUR-2				A	A	A	A	A	A	A	A
	OVB	0.00	32.90			OVER									P														
	OVB	0.00	32.90			Casing.																							
P		32.90	102.70	100.0		MVCB	CA	MS	CA2	HO	SP				P				<<	$2		P2		DO	<*			GM
L				60.0			OT	AK	GM*	<<										$1				<1				O*
R		32.90	102.70			This is a homogeneous, intensely carbonatized mafic or																							
R		32.90	102.70			intermediate volcanic. Original textures are seen only																							
R		32.90	102.70			sporadically and suggest this may be an ash tuff. Two of the																							
R		32.90	102.70			most conspicuous features of this unit are its unique orange-																							
R		32.90	102.70			tan color and the presence of 0.3% green mica which forms																							
R		32.90	102.70			visually distinct, emerald-green spots (1-3mm). A diffuse HCl																							
R		32.90	102.70			reaction is noted due to abundant (20%) pervasive calcite.																							
R		32.90	102.70			Foliation is poorly developed at best and dolomite and quartz-																							
R		32.90	102.70			dolomite veins are a common feature. Pyrite stringers (0.3%)																							
R		32.90	102.70			are noted.																							
R		56.80	58.40			A khaki colored ash tuff. This interval is fine grained and																							
R		56.80	58.40			entirely homogeneous with the exception of 3% quartz stringers.																							
R		56.80	58.40			10% pervasive calcite is noted.																							
N		56.80	58.40			X	ASTF	CA		CA1	<<	FG			N				<+			P1							
L								KK																					
R	V/	64.10	64.30			A pyritic (40%) carbonate-quartz vein. Large (to 4cm)																							
R	V/	64.10	64.30			granoblasts of pyrite occur in an intergrown, patchy calcite-																							
R	V/	64.10	64.30			dolomite-quartz vein with colliform textures.																							
N	V/	64.10	64.30			X	CBVN	CA	PY	CA5	GB	PA			N				Q1			Q5		DO	G4			
L								BR	DO	PY4	MT	CL													Q2				
R		101.20	102.70			A dirty grey, silicified volcanic. Carbonate is absent. This																							
	)	101.20	102.70			may represent a transitional lithology between the structurally																							
R		101.20	102.70			overlying volcanics and the underlying chert and argillite.																							
N		101.20	102.70			X	MVSI	QZ	PY	QZ3					N				P3						D1			
L								2A		PY1																			
P		102.70	135.30	84.0		CHER	GR	PY	GR1	LM	IB				P				<-						!(			GR

ESSO Minerals Canada

CANA

DRILLHOLE/TRAVERSE : C88016 (CONTINUED)

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  F  - I N T E R V A L -  CORE      %     TYPI- QAL  TEX-  GRAIN FRAC-      STRUCTUR-1 ALTERATION MINS  ORE-TYPE MINS
K L (UNITS = FT)          RECOV-    M ROCK FYING MIN TURES CHARACS TURE                H  H  H  H  H ANY H  H  H ANY
E A                        ERY      I      TM TM MAT TX TX F C % M         T ID STK DIP  A  A  A  A  A MIN A  A  A MIN
Y G  F R O M  -  T O      (FT.1)    X TYPE  1  2 QM1  1  2 F F C P  # TK   1   AZM  RT QZ BI CY CB MG XX PY CP GL YY  SUMM
- --- -----.--  -----.--  ----.- -- - ---- -- -- --- -- -- - - - - -- -- - - -- --- --- -- -- -- -- -- -- -- -- -- --  - -
K F                       ROCK   FOR EN RT    TM QM2 TX TX S R S O DIP F   T ID STK DIP KF MU CL EP HE HA PR MO SL HA
E L                       QUAL   MEM  V  Q LC- 3      3  4 O N H / SML I   2   AZM  RT        H  H  H  H  H  H  H  H
Y G                       DESIG  AGE      COL              R D P C          STRUCTUR-2         A  A  A  A  A  A  A  A

L                           5.0           2A QZ PY1 <<           7                                             $1
R      102.70    135.30        Dark grey to black laminated (5-10mm) chert with minor
R      102.70    135.30        interbedded graphitic argillite.
R      102.70    114.00        Recovery over this section of faulted black, graphitic chert is
R      102.70    114.00        44%.
N      102.70    114.00    44.0     X GRCH GR    GR3 F/ LM             N                                       GR
L                                         NN                                                                   P3
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ESSO Minerals Canada

CANA

DRILLHOLE/TRAVERSE : C88017

PROJECT IDEN : CANA	START DATE : 88/10/25	COMPLETION DATE :	GEOLOGGED BY : + 315
COLLAR NORTHING: 525.00	COLLAR EASTING : 80.00	COLLAR ELEVATION:	GRID AZIMUTH :
	TOTAL LENGTH : 108.50	CORE/HOLE SIZE : 813	

SURVEY FLAG	SURVEY POINT LOCATION	FORESIGHT	AZIMUTH (DEGREES)	VERTICAL ANGLE (DEGREES)	NORTHING	EASTING
000	0.0		225.00	-50.00		

K E Y	F L A G	- INTERVAL - FROM	- TO	CORE RECOVERY (FT.1)	% M I X	ROCK TYPE	TYPIFYING MIN 1	TYPIFYING MIN 2	QAL MIN MAT	TEXTURES TX 1	TEXTURES TX 2	GRAIN CHARACS F	GRAIN CHARACS C	GRAIN CHARACS %	FRACTURE M	STRUCTUR-1 T	STRUCTUR-1 ID	STRUCTUR-1 STK AZM	STRUCTUR-1 DIP RT	ALTERATION MINS H A QZ	ALTERATION MINS H A BI	ALTERATION MINS H A CY	ALTERATION MINS H A CB	ALTERATION MINS H A MG	ALTERATION MINS H A ANY MIN	ORE-TYPE MINS H A XX	ORE-TYPE MINS H A PY	ORE-TYPE MINS H A CP	ORE-TYPE MINS H A GL	ORE-TYPE MINS H A YY	ORE-TYPE MINS H A ANY MIN	SUMM
K	F			ROCK QUAL DESIG	FOR MEM AGE	EN V	RT Q	QM2 LC-COL 3		TX 3	TX 4	S O R D	R N P	S H C	O /	DIP SML	F I	T 2	ID	STK AZM	DIP RT	KF	MU	CL	EP	HE	HA	PR	MO	SL	HA		
R	OVB	0.0	24.3					OVER								P		P															
R	OVB	0.0	24.3	Casing.																													
P		24.3	108.5					BASL OL MG		CG HO						P P		F R		25		< .										
L								GNP F			L																						
R		24.3	108.5	Coarse grained Tertiary basalt. This unit is very homogeneous																													
R		24.3	108.5	and represents a massive, coarse grained flow or sub-volcanic																													
R		24.3	108.5	intrusive. This DDH terminates within this unit at 84.2m.																													

GEOLOG ROCK CODES

LINE	ROCK CODE	ROCK DESCRIPTION	SYMBOL NUMBER	VALUE
1	AGGL	Agglomerate		0.00
2	AGLM	Agglomerate	1005	0.00
3	AKMT	Ankeritized mafic tuff		0.00
4	AKPH	Ankeritic phyllite	405	0.00
5	AKSS	Ankerite sericite schist	405	0.00
6	AN#F	Andesite flow	1015	0.00
7	ANDS	Andesite Flow		0.00
8	ANTF	Andesite, tuff	1011	0.00
9	ARGL	Argillite	1005	0.00
10	ARGR	Graphitic argillite		0.00
11	ARSL	Argillite, with siltstone	1024	0.00
12	ARSN	Argillite, with sandstone	1025	0.00
13	ASHT	Ash tuff	408	0.00
14	ASTF	Ash tuff - Alternate form		0.00
15	BASL	Basalt	1034	0.00
16	BRAR	Argillite breccia		0.00
17	BRDI	Diorite breccia/Intrusive Brec		0.00
18	BRFA	Breccia - fault		0.00
19	BRHM	Breccia, homolithic (polymicti	1068	0.00
20	BRHT	Breccia, heterolithic	1067	0.00
21	BRQC	Breccia, quartz-carbonate	1065	0.00
22	BRQD	Qz-Dol Vein Breccia		0.00
23	BRSX	Breccia, sulphide	1075	0.00
24	BRVC	Breccia, volcaniclastic	1080	0.00
25	BRXX	Breccia, general	1051	0.00
26	BS#F	Basalt flow	1078	0.00
27	CARB	Massive Carbonate		0.00
28	CASE	Casing		0.00
29	CAVN	Calcite vein		0.00
30	CBEX	Carbonate exhalite		0.00
31	CBVN	Carbonate vein		0.00
32	CDPH	Chlorite dolomite phyllite	403	0.00
33	CDSH	Chlorite dolomite schist.		0.00
34	CGCP	Conglomerate, chert pebble	1107	0.00
35	CHAR	Cherty argillite		0.00
36	CHBR	Chert breccia	208	0.00
37	CHER	Massive chert	222	0.00
38	CHTF	Cherty Tuff		0.00
39	CLPH	Chlorite phyllite		0.00
40	CLSH	Chlorite Schist		0.00
41	CLTF	Chloritic tuff		0.00
42	CONG	Conglomerate		0.00
43	CSQS	Chlorite sericite qz schist	406	0.00
44	CSSH	Chlorite sericite schist	400	0.00
45	DIOR	Diorite		0.00
46	DOBR	DOLOMITE BRECCIA		0.00
47	DOLM	Massive Dolomite		0.00
48	DOVN	Dolomite vein		0.00
49	DQVN	Dolomite quartz vein		0.00
50	DSSH	Dolomite sericite schist	401	0.00
51	FAUL	Fault (zone)	1154	0.00
52	FETF	Mixed felsic tuffs		0.00
53	FLBR	Fault breccia		0.00
54	FQXT	Feldspar qz crystal ash tuff		0.00
55	FXTF	Feldspar crystal tuff		0.00
56	GOUG	Gouge zone - Fault	303	0.00

GEOLOG ROCK CODES

LINE	ROCK CODE	ROCK DESCRIPTION	SYMBOL NUMBER	VALUE
57	GRCH	Graphitic chert		0.00
58	GSCH	Greenschist	1181	0.00
59	GSTN	Greenstone	1182	0.00
60	GWAC	Graywacke	1184	0.00
61	GWTF	Wacke tuff	1186	0.00
62	HORN	Hornfels		0.00
63	IATF	Intermediate ash tuff		0.00
64	IBAT	INTERBEDDED ARGILLITE/TUFF		
65	IBAW	Interbeded argillite/wacke		0.00
66	IBCA	Interbedded chert/argillite		0.00
67	IFXT	Int. feldspar crystal tuff		0.00
68	ILTF	Intermediate Lapilli tuff		0.00
69	INAT	Intermediate ash tuff		0.00
70	INTF	Intermediate tuff		0.00
71	IXTF	Intermediate Crystal Tuff		0.00
72	LAPL	Lapillistone	1212	0.00
73	LATF	Lithic ash tuff		0.00
74	LBCH	Lensoïd Banded Chert		0.00
75	LBFV	Lensoid banded felsic volcanic		0.00
76	LIMS	Limestone	1210	0.00
77	LLAT	Lapilli bearing ash tuff		0.00
78	LLTF	Felsic Lapilli Tuff		0.00
79	LMST	Limestone		0.00
80	LOST	Lost core	1208	0.00
81	LWAC	Lithic Wacke		0.00
82	MAFV	Mafic Volcanic-General		0.00
83	MATF	Mafic Ash Tuff		0.00
84	MFBR	Mafic (Flow-Top) Breccia		0.00
85	MFDK	Mafic dyke		0.00
86	MFFL	Mafic Flow		0.00
87	MFTF	Mafic Tuff		0.00
88	MFVC	Mafic Volcaniclastic		0.00
89	MLAT	Mafic Lapilli Bearing Ash Tuff		0.00
90	MLTF	Mafic Lapilli Tuff		0.00
91	MSBA	Massive Barite		0.00
92	MSPY	Massive Pyrite	331	0.00
93	MSSU	Massive Sulphates	1233	0.00
94	MSSX	Massive Sulphides	1234	0.00
95	MTSD	Metasediments, general	1239	0.00
96	MVCB	Carbonatized mafic volcanic		0.00
97	MVSI	SILICIFIED MAFIC VOLCANIC		
98	MXLT	Mafic crystal lithic tuff		0.00
99	MXTF	Mafic crystal tuff		0.00
100	OVER	Overburden	407	0.00
101	PEB.	Pebbles, overburden	1267	0.00
102	PHYL	Phyllite	1290	0.00
103	PQVN	Pyrite quartz vein	233	0.00
104	PSLT	Pyritic siltite		0.00
105	PYAR	Pyritic argillite		0.00
106	PYCH	Pyritic chert		0.00
107	PYST	Pyritic siltite (Muddy Tuff)		0.00
108	PYTF	Pyritic Tuff		0.00
109	PYVN	Pyrite vein		0.00
110	PYWA	Pyritic wacke		0.00
111	QAVN	Quartz ankerite vein		0.00
112	QCVN	Quartz calcite vein	301	0.00

GEOLOG ROCK CODES

LINE	ROCK CODE	ROCK DESCRIPTION	SYMBOL NUMBER	VALUE
113	QDVN	Quartz dolomite vein	301	0.00
114	QITF	Quartz Eye Bearing Tuff		0.00
115	QSSH	Quartz sericite schist	404	0.00
116	QTZT	Quartzite		0.00
117	QXTF	Quartz crystal tuff		0.00
118	QZBR	Quartz Vein Breccia		0.00
119	QZPH	Quartz phyllite	1301	0.00
120	QZVN	Quartz vein, alternative form	1294	0.00
121	QZWK	Quartz Wacke		0.00
122	RBAC	RIBBON-BANDED ARGILLITE/CHERT		
123	RBCH	Ribbon banded chert		0.00
124	RHYL	Rhyolite, massive		0.00
125	SAND	Sandstone	1328	0.00
126	SCH#	Schist	1325	0.00
127	SCHS	Schist, alternative form	1335	0.00
128	SDSH	Sericite dolomite schist		0.00
129	SECH	Sericitic chert	223	0.00
130	SESH	Sericite schist	319	0.00
131	SETF	Sericitic tuff		0.00
132	SEWA	Sericitic wacke		0.00
133	SHAL	Shale	1335	0.00
134	SHER	Shear zone		0.00
135	SILT	Siltstone	1333	0.00
136	SIVL	SILICIFIED VOLCANIC		
137	SLAT	Slate	1343	0.00
138	SMPY	Semi-massive pyrite	127	0.00
139	SMSX	Semi-massive sulphides - Gen	127	0.00
140	STWK	Stockwork zone	321	0.00
141	SULF	Sulphide	1349	0.00
142	TFBR	Tuff Breccia		0.00
143	TFLP	Tuff, lapilli	1383	0.00
144	TFWL	Tuff, welded	1387	0.00
145	TFXL	Tuff, crystal lapilli	1370	0.00
146	TFXT	Tuff, crystal	1374	0.00
147	TILL	Glacial till (unconsolidated)		0.00
148	TUFF	Tuff	1378	0.00
149	VEIN	Vein	1397	0.00
150	XATF	Crystal ash tuff		0.00
151	XLAT	Crystal lithic ash tuff		0.00

GEOLOG LC-SCALE: LIGHTNESS-COLOR CODES

LINE	LC CODE	LC CODE DESCRIPTION	SYMBOL NUMBER	VALUE
1	"	Clear Field	0	0.00
2	1A	Darkest Grey	0	0.00
3	1B	Darkest Blue	0	0.00
4	1G	Darkest Green	0	0.00
5	1O	Darkest Orange	0	0.00
6	1R	Darkest Red	0	0.00
7	1T	Darkest Tan	0	0.00
8	1U	Darkest Brown	0	0.00
9	2A	Very Dark Grey	0	0.00
10	2B	Very Dark Blue	0	0.00
11	2G	Very Dark Green	0	0.00
12	2O	Very Dark Orange	0	0.00
13	2R	Very Dark Red	0	0.00
14	2T	Very Dark Tan	0	0.00
15	2U	Very Dark Brown	0	0.00
16	2Y	Very Dark Yellow	0	0.00
17	3A	Darker Grey	0	0.00
18	3B	Darker Blue	0	0.00
19	3G	Darker Green	0	0.00
20	3O	Darker Orange	0	0.00
21	3R	Darker Red	0	0.00
22	3T	Darker Tan	0	0.00
23	3U	Darker Brown	0	0.00
24	3Y	Darker Yellow	0	0.00
25	4A	Dark Grey	0	0.00
26	4B	Dark Blue	0	0.00
27	4G	Dark Green	0	0.00
28	4O	Dark Orange	0	0.00
29	4R	Dark Red	0	0.00
30	4T	Dark Tan	0	0.00
31	4U	Dark Brown	0	0.00
32	4Y	Dark Yellow	0	0.00
33	5A	Medium Grey	0	0.00
34	5B	Medium Blue	0	0.00
35	5G	Medium Green	0	0.00
36	5O	Medium Orange	0	0.00
37	5R	Medium Red	0	0.00
38	5T	Medium Tan	0	0.00
39	5U	Medium Brown	0	0.00
40	5Y	Medium Yellow	0	0.00
41	6A	Lighter Grey	0	0.00
42	6B	Lighter Blue	0	0.00
43	6G	Lighter Green	0	0.00
44	6O	Lighter Orange	0	0.00
45	6R	Lighter Red	0	0.00
46	6T	Lighter Tan	0	0.00
47	6U	Lighter Brown	0	0.00
48	6Y	Lighter Yellow	0	0.00
49	7A	Light Grey	0	0.00
50	7B	Light Blue	0	0.00
51	7G	Light Green	0	0.00
52	7O	Light Orange	0	0.00
53	7R	Light Red	0	0.00
54	7T	Light Tan	0	0.00
55	7U	Light Brown	0	0.00
56	7Y	Light Yellow	0	0.00

GEOLOG LC-SCALE: LIGHTNESS-COLOR CODES

LINE	LC CODE	LC CODE DESCRIPTION	SYMBOL	NUMBER	VALUE
57	8A	Pale Grey		0	0.00
58	8B	Pale Blue		0	0.00
59	8G	Pale Green		0	0.00
60	8O	Pale Orange		0	0.00
61	8R	Pale Red		0	0.00
62	8T	Pale Tan		0	0.00
63	8U	Pale Brown		0	0.00
64	8Y	Pale Yellow		0	0.00
65	9A	Palest Grey		0	0.00
66	9B	Palest Blue		0	0.00
67	9G	Palest Green		0	0.00
68	9O	Palest Orange		0	0.00
69	9R	Palest Red		0	0.00
70	9T	Palest Tan		0	0.00
71	9U	Palest Brown		0	0.00
72	9Y	Palest Yellow		0	0.00
73	AB	Grey-blue			
74	AU	Grey-brown		0	0.00
75	AY	Grey-yellow			
76	BR	Brassy (as in pyrite)		0	0.00
77	BW	Black and white		0	0.00
78	BZ	Bronze			
79	GA	Greenish grey		0	0.00
80	GN	Green-black			
81	GU	Greenish-brown			
82	KK	KHAKI			
83	NN	Black		0	0.00
84	NW	Black and white			
85	OA	Orange grey			
86	OG	Orange-green			
87	OT	ORANGE TAN			
88	OU	Orange-brown		0	0.00
89	OY	Orange-yellow			
90	TA	Tan grey		0	0.00
91	UA	Bgrey-brown		0	0.00
92	WW	White		0	0.00
93	YA	Yellow-grey		0	0.00
94	YG	Yellow-green		0	0.00
95	YN	YELLOW AND BLACK			
96	YT	Yellow-tan		0	0.00
97	YU	Yellow-brown		0	0.00

GEOLOG TEXTURE CODES

LINE	TEXTURE CODE	TEXTURE DESCRIPTION	SYMBOL NUMBER	VALUE
1	"	Clear Field	0	0.00
2	$T	Sheeted	0	0.00
3	<<	Microveined	0	0.00
4	>>	Macroveined	0	0.00
5	A*	Amygdaloidal	0	0.00
6	AP	Aphanitic	0	0.00
7	AR	Argillaceous	0	0.00
8	BD	Bedded	0	0.00
9	BN	Banded	0	0.00
10	BO	Boudinaged	0	0.00
11	BR	Brecciated	0	0.00
12	BT	Botryoidal	0	0.00
13	CG	Coarse grained	0	0.00
14	CH	Chaotic textured	0	0.00
15	CK	Cockscomb texture in veins	0	0.00
16	CL	Colloform	0	0.00
17	CO	Convoluted (bedding)		
18	CS	Closed-structured	0	0.00
19	CT	Clastic	0	0.00
20	DF	Drag-folded	0	0.00
21	EL	Elongated fragments	0	0.00
22	EQ	Equigranular	0	0.00
23	EU	Euhedral crystals	0	0.00
24	F$	Fissile	0	0.00
25	F/	FAULTED		
26	FB	Flow banded	0	0.00
27	FD	Folded	0	0.00
28	FG	Fine grained	0	0.00
29	FO	Foliated	0	0.00
30	FR	Fragmental	0	0.00
31	FT	Faulted	0	0.00
32	GB	Granoblastic	0	0.00
33	GG	Fault gouge	0	0.00
34	GL	Granulose	0	0.00
35	GN	Granular	0	0.00
36	GY	Greasy, sectile	0	0.00
37	HO	Homogeneous	0	0.00
38	HT	Heterogeneous	0	0.00
39	IB	Interbedded	0	0.00
40	IG	Intergrown	0	0.00
41	IL	INTERLAMINATED		
42	IN	Interstitial mineralization	0	0.00
43	KB	Kink banded	0	0.00
44	LB	Lensoid banded	0	0.00
45	LM	Laminated	0	0.00
46	LN	Lenticular	0	0.00
47	MF	Moderately well foliated	0	0.00
48	MG	Medium grained	0	0.00
49	MT	Mottled	0	0.00
50	MX	Massive	0	0.00
51	NB	Nebulous	0	0.00
52	ND	Nodular	0	0.00
53	OO	Oolitic/nodular (<5MM)	0	0.00
54	OS	Open-structured	0	0.00
55	PA	Patchy	0	0.00
56	PB	Porphyroblastic	0	0.00

GEOLOG TEXTURE CODES

LINE	TEXTURE CODE	TEXTURE DESCRIPTION	SYMBOL NUMBER	VALUE
57	PF	Ptygmatically folded	0	0.00
58	PH	Phyllitic	0	0.00
59	PI	Pisolitic, pea-like	0	0.00
60	PL	Pillowed (flow)		0.00
61	PM	Polymictic	0	0.00
62	PP	Pprphyritic	0	0.00
63	RB	Ribbon-like, banded	0	0.00
64	RT	Reticulate veined	0	0.00
65	RW	Reworked	0	0.00
66	RX	Recrystallized	0	0.00
67	SA	Sandy	0	0.00
68	SC	Schistose	0	0.00
69	SH	Shattered	0	0.00
70	SL	Slaty	0	0.00
71	SM	Semi-massive	0	0.00
72	SP	Spotted	0	0.00
73	SW	Stockworked	0	0.00
74	TF	TUFFACEOUS	0	0.00
75	VG	Vuggy	0	0.00
76	VS	Vesicular	0	0.00
77	VV	Veined	0	0.00
78	WB	Wispy banded	0	0.00
79	WF	Weakly foliated	0	0.00
80	WL	Welded	0	0.00
81	XA	Crystal aggregates	0	0.00
82	XB	Cross-bedded	0	0.00
83	XC	Cross-cutting	0	0.00
84	XF	Cross fractured.	0	0.00

GEOLOG TYPIFYING MINERALS

LINE	MINERAL CODE	MINERAL DESCRIPTION	SYMBOL	NUMBER	VALUE
1	"	Clear Field		0	0.00
2	AB	Albite		0	0.00
3	AH	Anhydrite		0	0.00
4	AK	Ankerite		0	0.00
5	AL	Alunite		0	0.00
6	AS	Arsenopyrite		0	0.00
7	AX	Amphibole, general		0	0.00
8	AZ	Azurite		0	0.00
9	BA	Barite		0	0.00
10	BI	Biotite		0	0.00
11	BK	Biotite : hornblende		0	0.00
12	BL	BI>HB		0	0.00
13	BM	BI=HB		0	0.00
14	BN	BI<HB		0	0.00
15	C<	CY<MU		0	0.00
16	C=	CY=MU		0	0.00
17	C>	CY>MU		0	0.00
18	CA	Calcite		0	0.00
19	CB	Carbonates, general		0	0.00
20	CD	Chloritoid		0	0.00
21	CE	Cerussite		0	0.00
22	CI	Cuprite		0	0.00
23	CL	Chlorite		0	0.00
24	CP	Chalcopyrite		0	0.00
25	CY	Clay		0	0.00
26	D:	Dolomite : calcite		0	0.00
27	D<	DO<CA		0	0.00
28	D=	DO=CA		0	0.00
29	D>	DO>CA		0	0.00
30	DO	Dolomite		0	0.00
31	EP	Epidote		0	0.00
32	FL	Fluorite		0	0.00
33	FM	Fluoromica		0	0.00
34	FU	Fuchsite		0	0.00
35	FX	Feldspar, general		0	0.00
36	G:	Galena : sphalerite		0	0.00
37	G<	GL<SL		0	0.00
38	G=	GL=SL		0	0.00
39	G>	GL>SL		0	0.00
40	GD	Gold		0	0.00
41	GL	Galena		0	0.00
42	GM	GREEN MICA			
43	GO	Goethite		0	0.00
44	GR	Graphite		0	0.00
45	GY	Gypsum		0	0.00
46	H:	Hematite : magnetite		0	0.00
47	H<	HE<MG		0	0.00
48	H=	HE=MG		0	0.00
49	H>	HE>MG		0	0.00
50	HB	Hornblende		0	0.00
51	JA	Jarosite		0	0.00
52	KF	K-spar, orthoclase		0	0.00
53	LI	Limonite		0	0.00
54	M:	Malachite : azurite		0	0.00
55	M<	MC<AZ		0	0.00
56	M=	MC=AZ		0	0.00

GEOLOG TYPIFYING MINERALS

LINE	MINERAL CODE	MINERAL DESCRIPTION	SYMBOL	NUMBER	VALUE
57	M>	MC>AZ		0	0.00
58	MA	Magnesite		0	0.00
59	MC	Malachite		0	0.00
60	MG	Magnetite		0	0.00
61	MI	Micas, general		0	0.00
62	MS	Muscovite-sericite		0	0.00
63	MU	Muscovite		0	0.00
64	OL	OLIVINE			
65	PF	Plagioclase feldspar		0	0.00
66	PL	Pyrolusite		0	0.00
67	PP	Pyrophyllite		0	0.00
68	PR	Pyrrhotite		0	0.00
69	PY	Pyrite		0	0.00
70	QZ	Quartz		0	0.00
71	RC	Rhodochrosite		0	0.00
72	RN	Rhodonite		0	0.00
73	SD	Siderite		0	0.00
74	SF	Sericite-fluorite assemblage		0	0.00
75	SL	Sphalerite		0	0.00
76	SS	Silver & sulphosalts		0	0.00
77	SU	Sulphates, general		0	0.00
78	SV	Silver		0	0.00
79	SX	Sulphides, general		0	0.00
80	TA	Talc		0	0.00
81	TN	Tennantite		0	0.00
82	TT	Tetrahedrite		0	0.00
83	TX	TT & TN,undif		0	0.00
84	ZI	Zircon		0	0.00

GEOLOG HOW-SCALE

LINE	HOW CODE	HOW DESCRIPTION	SYMBOL NUMBER	VALUE
1	!	SOOTY, DUSTY (VERY FINE GRND.)		0.00
2	"	Clear Field	0	0.00
3	#	Breccia fillings	0	0.00
4	$	Sheeting	0	0.00
5	&	Bands	0	0.00
6	)	CL/MG replaces MF	0	0.00
7	*	Clasts	0	0.00
8	+	Within quartz vein	0	0.00
9	0	Fresh,primary rock	0	0.00
10	1	A, minor > and/or scat. Crysta	0	0.00
11	2	Macroveins and Veins	0	0.00
12	3	Veins, Spots or Patches	0	0.00
13	4	Veins, and/or occas. Envelopes	0	0.00
14	5	Veins, and/or abundant Envelop	0	0.00
15	6	P or D Less Than <, S, and E	0	0.00
16	7	P or D Equal To <, S, and E	0	0.00
17	8	P or D Greater Than <, S and E	0	0.00
18	9	P or D; V, <, S and E	0	0.00
19	<	Microveins, fracture fillings	0	0.00
20	=.	MS/CY replaces FX	0	0.00
21	>	Macroveins	0	0.00
22	A	A, cavity fillings	0	0.00
23	B	Blebs	0	0.00
24	C	Coatings & encrustations	0	0.00
25	D	Disseminations, scat. crystals	0	0.00
26	E	Envelopes	0	0.00
27	F	Framework crystals	0	0.00
28	G	Granoblastic	0	0.00
29	H	Replaced phenocrysts	0	0.00
30	I	Eyes,augen	0	0.00
31	J	Interstitial	0	0.00
32	K	Stockwork	0	0.00
33	L	Laminations/bedded	0	0.00
34	M	Massive	0	0.00
35	N	Nodules	0	0.00
36	O	Spots	0	0.00
37	P	Pervasive	0	0.00
38	Q	Patches, as in quilts	0	0.00
39	R	Aggregates (Crystal)	0	0.00
40	S	Selvages	0	0.00
41	T	Stainings, as in tarnish	0	0.00
42	U	Eu-hedral crystals	0	0.00
43	V	Veins	0	0.00
44	W	Whisps	0	0.00
45	X	K and/or $, M and/or L	0	0.00
46	Y	Dalmationite	0	0.00
47	Z	Massive,Laminated/Bedded	0	0.00
48	^	Within clasts or lapilli		0.00

GEOLOG G-SCALE

LINE	CODE	DESCRIPTION	SYMBOL	NUMBER	VALUE
1	"	Clear Field		0	0.00
2	(	.05 to <.2		0	0.10
3	)	.5 to < 2		0	1.00
4	*	.2 to <.5		0	0.30
5	+	2 to < 3		0	2.50
6	-	.02 to <.05		0	0.03
7	.	Trace = <.02		0	0.01
8	/	Est. Impossible		0	0.07
9	0	Nil, Absent		0	0.00
10	1	7 to <15		0	10.00
11	2	15 to <25		0	20.00
12	3	25 to <35		0	30.00
13	4	35 to <45		0	40.00
14	5	45 to <55		0	50.00
15	6	55 to <65		0	60.00
16	7	65 to <75		0	70.00
17	8	75 to <85		0	80.00
18	9	85 to 99		0	90.00
19	=	3 to < 7		0	5.00
20	?	Poss. Present		0	0.00
21	X	Essentially 100%		0	00.00

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APPENDIX III

STATEMENT OF COSTS

STATEMENT OF COSTS

		TOTAL
GEOLOGY		
Labour	$ 14,863.52	
Supplies	$ 711.66	
Reproduction	$ 114.20	
Drafting	$ 612.50	
Misc.	$ 41.98	
		$ 16,343.86
DRILLING		
478m @ $52.49/m	$ 25,088.53	
Core Storage	$ 107.16	
Assays	$ 203.79	
		$ 25,399.48
LOGISTICS		
Telephone	$ 38.91	
Freight	$ 31.67	
Labour	$ 22.58	
Vehicles, Fuel, Maint.	$ 1,159.98	
Accommodation	$ 535.61	
Expenses	$ 767.02	
Supplies	$ 484.50	
Miscellaneous	$ 75.18	
		$ 3,115.45
LAND RETENTION COSTS		
Gov't. Payments		$ 2,160.00
SUBTOTAL		$ 47,018.79
DIRECT SUPPORT SERVICES (10%)		$ 4,701.88
TOTAL		$ 51,720.67