

Trenching, Geophysical and Geological Report

- on the -

Lara Property

Victoria Mining Division, British Columbia

Latitude: $48^{\circ} 53' N$ Longitude: $123^{\circ} 52' W$

N.T.S. 92B/13W

- for -

ABERFORD RESOURCES LTD.,

300 - 5th Avenue S.W.,

Calgary, Alberta

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

11,123

Prepared by;

G. BELIK AND ASSOCIATES LTD.,

664 Sunvalley Drive,

Kamloops, B. C.

Gary D. Belik, M. Sc.,

March 22, 1983

Part 1
of 4

TABLE OF CONTENTS

	<u>Page No.</u>
SUMMARY	2.
INTRODUCTION	4.
LOCATION AND ACCESSIBILITY	4.
CLAIMS	5.
PHYSIOGRAPHY AND VEGETATION	7.
GENERAL GEOLOGICAL SETTING	7.
PROPERTY GEOLOGY	10.
Sicker Group	11.
Myra Formation;	
Intermediate to Basic Volcanics	11.
Felsic Volcanics	12.
Sediments	14.
Dykes and Sills	14.
Volcanic - Sediment - Sill Unit	15.
Nanaimo Group	16.
Structure	16.
Mineralization	17.
Road Showing	18.
Trench 82-19 Showing	19.
Trench 82-4 Showing	19.
Trench 82-10 Showing	20.
V.L.F. - ELECTROMAGNETIC SURVEY	21.
Presentation of Results	22.
Discussion of Results	23.
East Grid Area	23.
West Grid Area	26.

TABLE OF CONTENTS (Continued)

	Page No.
PROTON MAGNETIC SURVEY	28.
Procedure	28.
Presentation of Results	29.
Discussion of Results	29.
TRENCHING	30.
CONCLUSIONS AND RECOMMENDATIONS	40.
REFERENCES	41.

Figures:

1017-1 : Location Map	1.
1017-2 : Claim Map	6.
1017-3 : Geological Plan (East Grid)	Pocket
1017-4 : Geological Plan (West Grid)	Pocket
1017-5 : VLF -E.M. Survey (East Grid)	Pocket
1017-6 : VLF-E.M. Survey (West Grid)	Pocket
1017-7 : Magnetic Plan (East Grid)	Pocket
1017-8 : Magnetic Plan (West Grid)	Pocket
1017-9 : Geology and Sample Locations; Trench #4	33.
1017-10 : Geology and Sample Locations; Trench #9	34.
1017-11 : Geology and Sample Locations: Trench #10	35.
1017-12 : Geology and Sample Locations: Trench #11, 12 & 13	36.
1017-13 : Geology and Sample Locations: Trench #16 & 17	37.
1017-14 : Geology and Sample Locations: Trench #18	38.
1017-15 : Geology and Sample Locations: Trench #19	39.

TABLE OF CONTENTS (Continued)

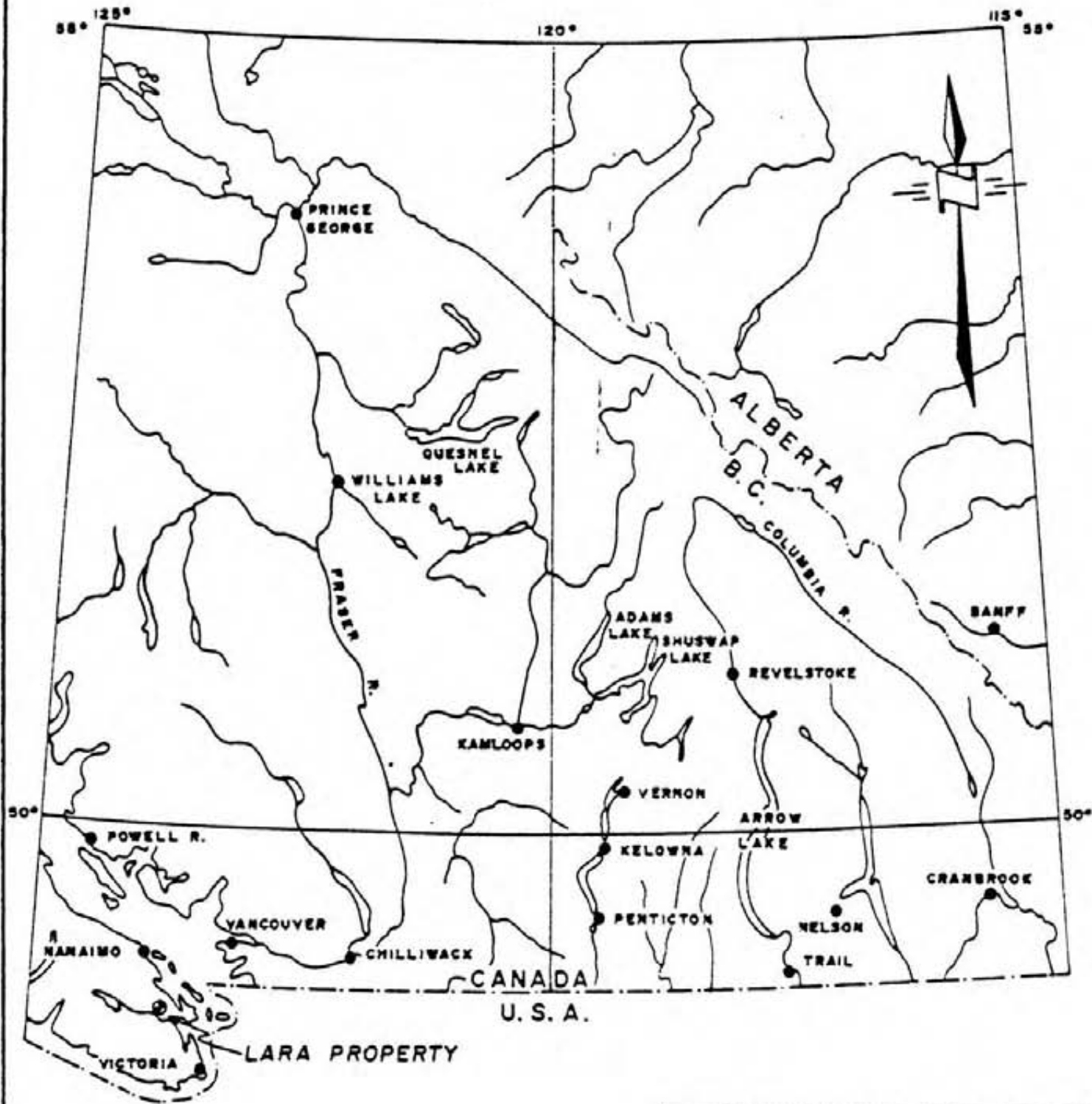
Page No.

Tables:

Table 1 - Summary of 1982 Trenching Results	31 and 32
---	-----------

Appendices:

I - Assay Certificates	
II - V.L.F. - E.M. Data	
III - Statement of Expenditures	
IV - Statement of Qualifications: G. D. Belik.	



ABERFORD RESOURCES LTD.

LOCATION MAP

LARA PROPERTY

VICTORIA MINING DIVISION, BRITISH COLUMBIA

Date: December, 1982.

Scale: 1" = 64 Miles

SUMMARY

The Lara Property is predominantly underlain by steeply dipping, strongly deformed basaltic to rhyolitic volcanic rocks of the Paleozoic Sicker Group. This sequence, which includes narrow interbeds of volcanoclastic sediment, chert and grey to black slate, is intruded by dykes and sills of intermediate to basic composition.

The Lara Property has a good potential for hosting massive sulphide deposits similar to those at Buttle Lake and the Tyee/Lenora deposit near Mt. Sicker. The western boundary of the property is within 2 kms of the Tyee/Lenora deposit and the claim area is underlain by the same sequence of felsic volcanic rocks which are intimately associated with these deposits.

The results of preliminary exploration programs carried out in 1981 and 1982 have been encouraging. Numerous geophysical and geochemical targets have been defined. Trenching, which has been carried out within some of the anomaly areas, has located several massive sulphide - type showings within or in close proximity to felsic volcanic units. Although the showings discovered to date are very small they demonstrate that 'ore - forming' processes were operative within the claim area. Thus assuming local, favourable geological conditions, larger deposits might also be expected to occur.

Further work is warranted. The next phase of exploration should include additional trenching to evaluate the remaining untested geophysical and geochemical anomalies and in order to test areas along the projected strike of the known showings. Following the trenching program, the main showings should be tested at depth by drilling.

INTRODUCTION

The Lara Property, consisting of the Fang, Silver 1 - 2, Solly and T.L. claims, is situated on Vancouver Island, B. C., approximately 16 kms northwest of the city of Duncan. A program consisting of detailed geological mapping, trenching, a magnetic survey totalling 45.7 kms, 37.6 kms of VLF-E.M. and 23.0 kms of I.P./Resistivity, was carried out on the property during the period October 7 to December 4, 1982. Work was supervised by G. Belik and Associates Ltd., 664 Sunvalley Drive, Kamloops, B. C.

This report discusses the geological setting of the property and describes the results of the trenching program and V.L.F.-Electromagnetic and Magnetic surveys. The soil survey, which was carried out under the direction of Mr. Berry Smee, geochemist for Aberford Resources, is discussed separately in a report by Mr. Smee. The results of the I.P./Resistivity survey are detailed in a report by Phoenix Geophysics Ltd.

LOCATION AND ACCESSIBILITY

The Lara Property is located in the Victoria Mining Division, B.C., approximately 15 kms northwest of the city of Duncan (N.T.S. 93B/13W). The claim area extends northwesterly from the Chemainus River to Chipman Creek, a distance of about 10 kms. The center of the claim group is situated at geographic co-ordinates $48^{\circ}52'30''$ North Latitude and $123^{\circ}52'$ West Longitude.

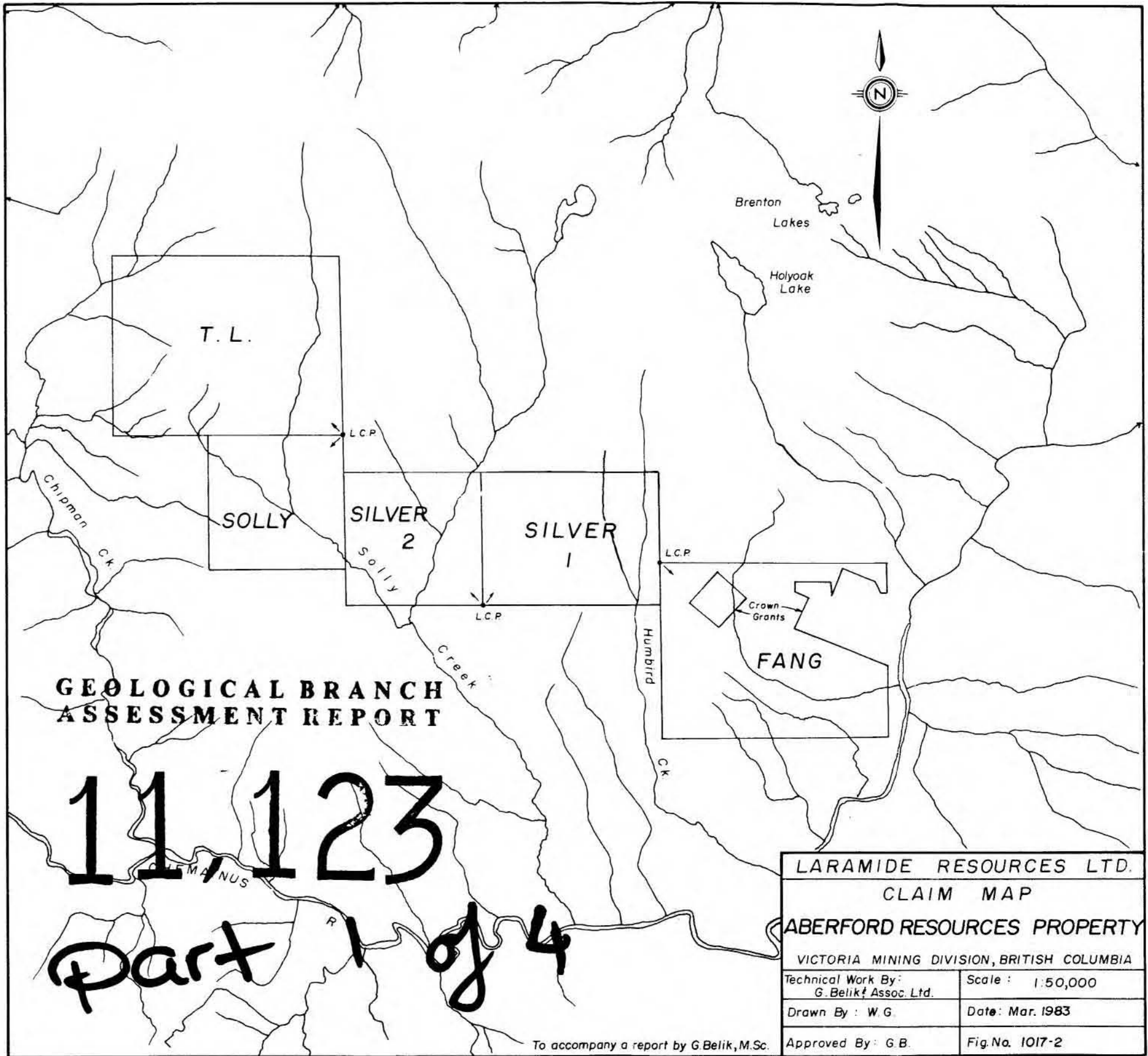
The eastern part of the claim group is traversed by a network of old logging roads which connect onto the MacMillan Bloedel, Chemainus River access road. A cleared power line right-of-way provides 4-wheel drive access to the western part of the claim group.

CLAIMS

The property is comprised of 5 contiguous claims totalling 70 units as detailed below:

<u>Mining Division</u>	<u>Claim Name</u>	<u>Units</u>	<u>Record No.</u>	<u>Date Recorded</u>
Victoria	Fang	20	534	May 8, 1981
"	Silver 1	9	535	May 8, 1981
"	Silver 2	12	536	May 8, 1981
"	Solly	9	537	May 8, 1981
"	T.L.	20	538	May 8, 1981

The above claims are held by Aberford Resources Ltd.,
300 - 5th Avenue S.W., Calgary, Alberta through an option agreement with
Laramide Resources Ltd., 904 - 675 West Hastings Street, Vancouver, B. C.



To accompany a report by G. Belik, M.Sc.

PHYSIOGRAPHY AND VEGETATION

The Lara Property is situated along the southern flanks of Coronation Mountain, Mt. Hall and Mt. Brenton. Elevation of the property ranges from 160 meters to 960 meters. Relief generally is moderate with a relatively uniform southerly slope over most of the property. The eastern end of the property, immediately west of the Chemainus River, is steep with local precipitous bluffs.

Most of the property has been logged over the past 40 years. Vegetation now consists of dense stands of second growth spruce, fir, balsam and cedar.

GENERAL GEOLOGICAL SETTING

The Lara Property is underlain, for the most part, by rocks of the Paleozoic Sicker Group. The Sicker Group is a complex package of volcanic and sedimentary strata which underlies extensive areas of south and central Vancouver Island. The lithological characteristics of the group indicate formation within an 'island arc' environment in which volcanism was episodic, basic to felsic in composition and often of an explosive nature. The group is strongly deformed (schistose varieties predominate) and has been regionally metamorphosed (Lower to Middle Greenschist Facies).

Muller (1980), has subdivided the Sicker Group into three formations which include, in order of increasing age:

Buttle Lake Formation: mainly limestone; locally interbedded with calcareous siltstone and chert.

Myra Formation: basic to felsic tuffs, breccias and flows; thinly bedded to massive argillite, siltstone and chert.

Nitinat Formation: basaltic lavas which are locally pillowed or agglomeratic; minor mafic tuff.

Within the region of the claim area Muller has also mapped a sequence of thinly bedded to massive argillite, siltstone and chert with interlayered sills of diabase. This sequence, termed the Sediment-Sill Unit, is thought to form a transitional zone between the Myra and Buttle Lake Formations.

The Sicker Group is host to several massive sulphide deposits including Westmin's Buttle Lake deposits and the Tyee/Lenora deposit near Duncan. These deposits are intimately associated with felsic volcanic rocks and show a close spacial relationship to centers of venting within the volcanic pile.

Westmin's Buttle Lake Mine has been operating since 1967 at a rate of about 300,000 tonnes per year. The total ore mined to date exceeds 4,000,000 tons at an average grade of 0.06 oz. gold, 3.0 oz. silver, 1.6 percent copper, 1.0 percent lead and 7.5 percent zinc.

Current reserves, including the newly discovered Deep Price Zone, probably exceed 18,000,000 tonnes. The mineralization at Buttle Lake consists of massive, banded, pyrite-pyrrhotite-chalcopyrite ore and banded barite-sphalerite-galena-chalcopyrite ore and generally occurs as conformable lenses within a sequence of felsic tuffs and flows. The barite ores contain significant precious metal values and locally are underlain by siliceous stockwork ore. Coarse felsic fragmental units are located in close proximity to some of the ore lenses.

The Tyee/Lenora Deposit is situated on the west flank of Mt. Sicker, about 2 kms southeast of the Lara Property. This deposit consists of two parallel, steeply dipping ore lenses about 50 meters apart. These lenses are conformably enclosed within a narrow band (150 meters \pm) of cherty tuff and graphitic schist which occur within rhyolitic tuffs and flows. An area of felsic fragmentals occurs about 500 meters southwest of the ore zones.

The Mt. Sicker ore consists of two types which include:

1. Barite Ore (indistinguishable from Myra Zone ore at Western): - consisting of a fine-grained mixture of pyrite, chalcopyrite, sphalerite and galena in a gangue of barite, calcite and quartz. A finely laminated or banded appearance produced by layers of chalcopyrite and pyrite alternating with layers of sphalerite is characteristic of much of the ore.

2. Siliceous Ore: - consisting of massive quartz uniformly mineralized with chalcopyrite (10%) and minor galena and sphalerite. Siliceous ore occurs as lenticular masses within Barite Ore and may be analagous to the "Siliceous" or "Yellow" ore zones of Kuroko Deposits.

The Mt. Sicker deposits were discovered in the late 1800's and produced 253,000 tons of copper-gold ore between 1898 and 1909 at an average recovered grade of 0.14 oz. Au, 2.92 oz. Ag and 3.77 percent Cu. The ores also contain about 7% to 8% Zn which was not recovered because of the lack of demand for the zinc at that time. Most of this production was from the south ore zone which has a continuous length of more than 670 meters and an average width of 6 meters. Ore was mined over a vertical extent of about 70 meters. Below the level of mining lower grade (unspecified) ore was encountered which was found to extend to a depth of 300 meters below the level of mining on the Tyee claim. To the west the ore horizon grades into siliceous zones heavily impregnated with pyrite. The zone was not extensively explored to the east.

Sicker Group

Myra Formation

Within the area mapped, the Myra Formation consists predominantly of felsic volcanics. The most widespread lithologies are light green to white, schistose, feldspar and quartz - feldspar crystal and lapilli tuffs.

Felsic units occur interbedded with andesitic to basaltic tuffs, flows and agglomerate. Narrow beds of chert, graphitic slate and volcanic wacke locally are evident.

Intermediate to Basic Volcanics

Intermediate to basic volcanics have been mapped as Units 1a to 1d. Unit 1a, the most widespread lithology, consists of andesitic crystal and lapilli tuffs. The crystal tuffs contain 10% - 30% shattered feldspars, up to 3 mm in size, within a well foliated, medium to dark green, aphanitic to fine-grained groundmass. Crystal tuffs locally grade into lapilli tuff. The coarser fragmental texture of the lapilli tuff often is difficult to recognize.

Andesitic to basaltic agglomerate, mapped as Unit 1b, occurs interbedded with fine-grained felsic tuffs along the bed of Solly Creek 150 m to 300 m north of the 10N base line. The agglomerate is dark green and contains abundant subrounded to well-rounded 'bombs' a few cm to 10 cm in size. The agglomerate appears to grade laterally into the tuffs of Unit 1a.

From here it appears to extend westerly, in close proximity to the Nanaimo/Sicker contact, across Silver Creek to Solly Creek where it is overlain(?) by agglomerates of Unit 1b. Unit 2a has also been mapped within a large dacitic tuff horizon in the southeast corner of the T.L. claim.

Pale green to white, rhyolitic, quartz-eye, crystal and lapilli tuffs, mapped as Unit 2b, outcrop along the northern edge of the West Grid Area. Although similar to Unit 2a, Unit 2b is clearly of pyroclastic origin and locally displays well preserved lapilli and fragmental crystal textures. Lapilli tuff consists of 40% to 80% coarse, angular to rounded feldspar fragments and quartz eyes, up to 1 cm in size, in a foliated, finely crystalline, granular, quartz-feldspar-sericite groundmass. Locally, lapilli - size, angular to rounded, dense rhyolite fragments are evident.

Crystal tuffs are similar to lapilli tuffs but are finer grained and lack volcanic fragments.

Unit 2c consists of rhyolitic dust tuffs and fine crystal tuffs. These tuffs form pale green to white, very fine grained siliceous schists which generally display subtle compositional banding. Widely scattered, small quartz eyes, 1 mm to 2 mm in size, locally are evident.

Unit 2d consists of lustrous quartz-sericite schist. This unit is similar to Unit 2c but is distinguished from it by a stronger, more penetrative foliation. The unit locally contains small quartz eyes.

Coarse crystal tuff and lapilli tuff of dacite to ryodacitic composition have been mapped as Unit 2e. These tuffs, which are a pale to light green color, are texturally very similar to Unit 2b. Large quartz eyes are present but not abundant.

Fine to coarse - grained, dacitic, feldspar crystal tuffs (unit 2f) are abundant through the central part of the West Grid Area. This unit contains 20% - 60% shattered feldspar phenocrysts, 1 mm to 3 mm in size, within a green, foliated, aphanitic to fine granular feldspar - chlorite - sericite groundmass. Highly sheared varieties form lustrous sericite - chlorite schist.

Sediments

Within the area mapped the Myra Formation contains only minor sedimentary interbeds. These sediments include green volcanic sandstone and lithic wacke (Unit 3a) and dark grey to black slate, grey tuffaceous slate and chert (Unit 3b).

Black, possibly graphitic, slate was noted at three localities. This unit is exposed in Trench 16 and outcrops near the north end of line 58W and in a road cut west of line 74W. In the road cut, the slate, which is highly contorted, occurs within rhyolitic lapilli tuffs and contains lenses of grey, pyritic, cherty tuffite. On line 58W the slate unit is hosted by quartz-sericite schist and in trench 16, slate occurs interbedded with chlorite schist.

Dykes and Sills

In the vicinity of the road showing, the Sicker schists are cut by discontinuous, altered, feldspar porphyry dykes. These dykes, which appear to post-date the main period of deformation, contain 5% to 15%, small feldspar phenocrysts within a dark green, finely crystalline, chloritized groundmass. The dykes locally display finer grained, possibly 'chilled' margins.

A large diorite/gabbro sill is poorly exposed across the northern end of the East Grid Area. Similar sills were noted in Silver Creek and in trench 82-10. At these latter locations the margins of the sills are highly sheared and merge gradationally with the enclosing Sicker Schists. The central part of the sills, which are only weakly deformed, consist of medium to coarsely crystalline mafic - rich diorite and gabbro.

Volcanic - Sediment - Sill Unit

Unit 5, which has been designated the Volcanic - Sedimentary - Sill Unit, extends along the north edge of the T.L. claim and underlies the southwest corner of the Solly claim. Within the area mapped this unit includes weakly deformed andesitic tuffs and flows, green lithic wacke and diorite.

Unit 5 corresponds to Muller's Sediment - Sill Unit. This sequence, which is inferred, by Muller, to form a transitional zone between the Myra and Butte Lake Formations, is characterized, regionally, by chert, argillite and siltstone with interlayered sills of diabase.

Within the region of the Lara Property this sequence also includes andesitic volcanics. Because of this volcanic component, at least within the area of Lara Property, this unit has been redesignated as the Volcanic - Sedimentary - Sill Unit in this report.

Nanaimo Group

Black, thinly bedded to massive siltstones and shale and minor conglomerate of the Cretaceous Nanaimo Group are in fault contact with the Sicker schists along the south edge of the Fang, Silver 1 and Silver 2 claims. The westward extension of these sediments is cut off by a northwest-trending fault.

Regionally, the Nanaimo Group includes a thick basal conglomerate unit. About 2 kms west of the T.L. claim, remnants of this unit, unconformably overlying Sicker schists, are evident.

Structure

Small scale structures, which include a foliation, lineations and folds are developed within Units 1 to 3. The most prominent small scale structure is a penetrative crenulation foliation (S_1). This foliation, which is defined by the alignment of micas, has a relatively uniform northwesterly strike with vertical to steep northeasterly dips. Rare southwesterly dips were noted.

Lineations evident include a lineation defined by the intersection of S_1 and bedding, elongation of clasts and a wrinkle lineation on S_1 surfaces. These linear structures, designated L_1 , strike northwest and are approximately horizontal.

Small scale subsoclinal folds are evident although rare. These folds display transposition along S_1 , have attenuated limbs and are upright with axial planes parallel to S_1 and fold axes parallel to L_1 .

Mineralization

Within the area of the Lara Property, the volcanics of the Myra Formation contain conformable, tabular zones of disseminated pyrite up to 100 meters wide. Mineralization of this type often occurs peripheral to many felsic volcanic - related massive sulphide deposits including the Tye/Lenora deposit near Mt. Sicker and some of the Buttle Lake deposits.

On the Lara Property, pyrite within the pyritic horizons generally is fine grained and occurs evenly disseminated in amounts ranging from 2% - 20%. Pods and lenses of massive pyrite locally are evident.

The inferred distribution of the pyritic horizons within the area mapped is shown on Maps 1017-3 and 1017-4. These zones, which are poorly exposed, have been delineated for the most part by Induced Polarization and VLF - Electromagnetic surveys.

Small massive sulphide-type showings have been discovered in the central part of the Silver 2 claim and in the northwest corner of the Solly claim. These showings, which are associated with felsic volcanics, appear to be hosted within 2 separate pyritic horizons. Pyritic schists peripheral to the showings generally contain anomalous concentrations of copper, lead and zinc and locally barium, gold and silver.

Trench 82-19 Showing

Trench 82-19 is located along the projected strike of the road showing about 200 meters to the northwest. This trench, which is about 50 m long, exposed pyritic felsic tuffs with one narrow interbed of chlorite schist. Near the south end of the trench a small lense of massive sulphide, approximately 10 cm wide, was exposed. This lense, which contained 70% - 75% crudely banded sulphides (black sphalerite, pyrite and chalcopyrite) in a siliceous gangue, assayed 3.46% Cu, 0.62% Pb, 10.83% Zn, 8.93 oz Ag per tonne and 0.005 oz Au per tonne.

Rock chip samples were taken over most of the exposed length of the trench. Highly anomalous values in gold, silver, copper, lead and zinc were obtained (see Fig. 1017-15). Gold values were especially surprising and yield a weighted average of 742 ppb along the 25.4 meters of trench sampled.

Trench 82-4 Showing

Trench 82TR-4 is situated about 30 m east of line 68W between stations 15-50N and 16-00N. This trench, which tested a VLF-E.M. anomaly, exposed two pyritic zones within sericite - chlorite and chlorite - sericite schists. The southern zone, which is about 12 m wide, occurs directly above(?) a dark green chloritic schist unit. Adjacent to the chlorite schist, a 5 meter-wide section of the southern pyritic zone geochemically assayed about 0.5% Cu. This section is strongly pyritic and contains abundant pods and laminations of semi-massive to massive pyrite.

This section also contains 2 conformable bands of highly siliceous semi-massive sulphide, 30 cm to 40 cm wide. The southern band, which was better exposed, assayed 2.25% Cu.

Trench 82-10 Showing

Trench 82-10 tested the same VLF anomaly as trench 82-4, 200 meters to the northwest. This trench exposed a strongly pyritic zone, 9 meters wide, very similar to the pyritic zone exposed near the south end of trench 82-4. As in trench 82-4, this pyritic zone occurs adjacent to a dark green chloritic schist unit.

The pyritic schists in trench 82-10 contain a band of highly siliceous semi-massive sulphide, 30 cm wide. Although this band contains less copper it is virtually identical to the siliceous massive sulphide beds exposed in trench 82-4.

VLF - ELECTROMAGNETIC SURVEY

In total, 37.6 line - kilometers of grid was surveyed by V.L.F.-E.M. The station interval was 25 meters.

The electromagnetic survey was carried out utilizing a Saber Model 27 VLF-E.M. receiver manufactured by Saber Electronic Instruments Ltd., 4245 E. Hastings Street, Vancouver, B. C. This instrument measures the relative strength and dip of electromagnetic fields transmitted by radio stations in the 15 - 25 KH_2 range. These 'primary fields' are horizontal but can be disrupted by the presence of electrical conductors and by local topographic relief. Disruptions caused by conductors are caused by 'secondary fields' which are induced by the primary field. The tilt of the secondary field can be obtained by measuring the angle of null (minimum signal) in a vertical plane, normal to the wave front of the primary field.

The relative strength and magnitude of the secondary field caused by a conductor can be affected by many factors which include:

1. Conductivity of the conductor.
2. Width of the conductor.
3. Length of the conductor.
4. Depth of the conductor.
5. Orientation of the conductor relative to the transmitter station.
6. Frequency of the transmitter.

For tabular, elongate bodies maximum coupling and hence the strongest secondary electromagnetic field is obtained when the conductor is aligned normal to the primary wave (ie. conductor points to the transmitting station). There is virtually no coupling when conductors are aligned parallel to the primary field.

Local topographic relief can also cause a tilting of the primary field and lead to anomalous responses along ridge crests or along a sharp break-in-slope. In theory topographic anomalies can be eliminated by a lack of a corresponding increase in field strength values which generally are associated with bedrock conductors. However, this is not always the case and care must be taken when interpreting V.L.F. anomalies within areas of moderate to steep topographic relief.

Presentation of Results

For this survey the transmitting station utilized is located at Seattle, Washington (24.8 KH₂). The dip angles and relative field strength values obtained during the survey are listed in Appendix II. Drawings 1017-5 and 1017-6 are contour maps of the filtered dip angles for the East Grid Area and West Grid Area respectively and show definite (solid), probably (long dash) and possible (short dash) conductor axes.

The filtering technique utilized was developed by D. C. Fraser (Geophysics, V.34, No. 6, P. 958-967: 1969).

Briefly summarized, this technique converts anomalous cross-overs and inflections into positive values by a simple mathematical treatment of the dip angle data. This technique overcomes the difficulty, in many cases, of interpreting profiles and enables the data to be plotted in plan form with conductor areas defined by contours.

Discussion of Results

Numerous anomalies were defined within the survey area. Based on the general magnitude of anomalous inflections and on corresponding field strength values conductors have been categorized as definite, probably and possible. A few anomalies appear to be caused solely by changes in topography and are indicated as such on maps 1017-5 and 1017-6.

Conductors identified within the area surveyed, which have been numbered 1 through 28 on maps 1017-5 and 1017-6, are discussed separately below.

East Grid Area

Conductors 1 & 2 - Conductor 1, which extends across the south edge of the East Grid area, between lines 24W and 34W, and conductor 2, which occurs along the projected strike of conductor 1 to the southeast, correspond closely to the inferred contact between the shales and siltstones of the Nanaimo Group to the south and the Sicker schists to the north.

Results of the I.P./Resistivity survey suggest that this contact is not a discrete conductive zone but rather a major resistivity boundary; resistivities south of conductors 1 & 2 are about an order of magnitude lower than resistivities north of conductors 1 & 2

Conductors 3, 4, 5, 6 & 7 - Conductors 3 to 7 correlate with a wide strong I.P. anomaly which was traced easterly through the central part of the East Grid area to Humbird Creek. This anomaly appears to reflect a strongly pyritic horizon (in part confirmed by trenching) which is stratigraphically centered about 250 meters north of the road showing. Conductors delineated within this zone occur as a series of en-echelon segments. These segments may define areas of higher sulphide concentrations.

Conductors 8, 9 & 10 - Conductors 8, 9 & 10 occur east of Humbird Creek, along the projected strike of the pyritic horizons associated with conductors 3 to 7. Pyritic felsic tuffs outcrop in close proximity to the trace of the conductors.

Conductor 11 - Conductor 11 is an apparent single-line conductor which was defined on line 48W about 150 meters north of the Nanaimo/Sicker contact. The area of the conductor is concealed by overburden.

Conductors 12 & 13 - The trace of conductor 12 across Silver Creek coincides with a zone of strongly pyritic rhyolitic tuffs. Along the right bank of Silver Creek, in the vicinity of two old adits, this zone contains small lenses of massive pyrite.

Conductor 13 may be a northwest continuation of Conductor 12. Pyritic, felsic tuffs, similar to those exposed in Silver Creek, outcrop along the western end of this zone.

Conductor 14 - Conductor 14 extends from line 42W, 5N to line 36W, 2+80N. This conductor, which is concealed by overburden, is locally associated with soils anomalous in copper and occurs along the projected strike of the road showing.

Conductor 15 - This possible bedrock conductor is situated east of Humbird Creek (line 22W) at about the same stratigraphic level as conductor 14. The area is heavily drift covered.

Conductors 16 & 17 - The trace of conductors 16 and 17 correspond to the inferred southern contact of the large diorite/gabbro sill which underlies the northern part of the East Grid Area.

Conductor 18 - Conductor 18 appears to occur within the diorite/gabbro sill. If of bedrock origin, this conductor probably reflects a fault or shear zone.

Conductor 19 - Conductor 19 is characterized by a very broad cross-over with elevated field strength values. If of bedrock origin, this conductor could mark the northern boundary of the diorite/gabbro sill.

West Grid Area

The northwestern extension of several conductors in the southern part of the West Grid area could not be delineated because of interference from a major power line which crosses the southwest corner of the grid area (follows the power-line road noted on Map 1017-6).

Conductor 3 - This conductor extends from the East Grid area through the West Grid area. In the West Grid Area the conductor is weak and poorly defined between lines 52W and 58W and sharp and well defined west of line 58W.

Conductor 3 was trenched on line 60W (TR82-11 & 12), in the vicinity of line 66W (TR82-4) and on line 68W (TR82-10). All these trenches exposed pyritic schists. Trenches 82-4 and 82-10, as previously noted, also exposed narrow lenses of siliceous massive sulphide with appreciable copper.

Conductor 20 - Conductor 20 was traced from the south end of line 58W to line 64W, 10+50N. The southeast end of the conductor parallels Solly Creek.

The trace of conductor 20 approximates the inferred contact between the Myra Formation and the Volcanic - Sedimentary - Sill Unit.¹ The nature of this contact is uncertain although a fault is suspected.

Conductor 21 - This zone occurs just south of, and parallel to conductor 3. It is characterized by sharp, strong cross - overs with high, corresponding, field strength values.

The source of conductor 21 has not been established. The anomaly was trenched on lines 58W and 64W, to a depth of 6 m, without reaching bedrock.

Conductor 22 - Conductor 22, which is sharp and well defined, extends across the grid area about 400 m north of conductor 3. Trench 82-18, which tested the east end of the conductor, exposed highly pyritic, altered, andesitic tuffs. Trenches in the central part of the conductor failed to reach bedrock.

Conductor 23 - Conductor 23 was traced from line 58W, 21N to line 68W, 25N. The strongest cross-over was on line 62W centered at about 22-50N. This area was trenched without reaching bedrock. Trench 82-16, which is located east of line 58W, did reach bedrock and exposed black slate interbedded with chlorite schist.

Conductor 24 - Conductor 24 arcs across the northern part of the grid area. The conductor appears to be stronger west of line 64W.

Conductor 25 - This zone, which extends west from the north end of line 58W to about line 62W, is weak and poorly defined.

Conductors 26 & 27 - These anomalies, which are of uncertain origin, are characterized by broad cross - overs with strong corresponding field strength values. Outcrops in the vicinity of the anomalies are predominantly coarse rhyolitic tuffs.

Conductor 28 - A possible bedrock conductor was detected at the north end of lines 66W and 70W. The trace of this zone approximates the inferred contact between the Myra Formation to the south and the Volcanic - Sedimentary - Sill Unit to the north.

PROTON MAGNETIC SURVEY

A magnetic survey was carried out over most of the Grid area utilizing a GeoMetrics 'Unimag', portable, proton magnetometer (Model G-830). The Unimag measures the total intensity of the earth's magnetic field over a range of 20,000 to 100,000 gammas with an accuracy of ± 10 gammas.

Procedure

For the magnetic survey, readings were taken at 25 meter intervals along lines 8W to 70W inclusive. Where gradients were steep readings were taken at 12.5 meter intervals. In total, 45.7 line-kms¹ of grid were surveyed.

Prior to beginning the survey the magnetometer was tuned to the local magnetic field (60,000 gammas). During the course of the survey,

a base station magnetometer was established within the grid area in order to correct for diurnal variation.

Presentation of Results

The results of the magnetic survey are presented in Maps 1017-7 (East Grid) and 1017-8 (West Grid) at a scale of 1:5000. Isomagnetic contours are drawn at an interval of 200 gammas.

Discussion of Results

Magnetic relief within the surveyed area varies from a low of 56,030 gammas to a high of 57,000 gammas. Salient features of the observed magnetic pattern are:

1. In general, magnetic relief within the surveyed area is low with a relatively uniform background of between 56,300 gammas and 56,500 gammas.
2. There is poor correlation between the observed magnetic pattern and the underlying bedrock geology.
3. Areas of relative mag 'highs' and relative mag 'lows' have a poor line-to-line correlation.

TRENCHING

During the 1982 program several geophysical anomalies were trenched. In total 19 trenches and test pits were completed utilizing a Bantam C266 excavator-type backhoe owned by Tidewater Marine Contracting Ltd., of Duncan, B. C. This machine is capable of reaching depths of up to 6.5 meters.

The location of the trenches and test pits, their depth, targets tested and bedrock types, where exposed, are summarized in Table 1. Trenches where bedrock was reached are illustrated in plan form in Figures 1017-9 to 1017-15, inclusive.

TABLE 1

SUMMARY OF 1982 TRENCHING RESULTS, LARA PROJECT

<u>Trench</u>	<u>Grid Co-Ordinates</u>	<u>Depth</u>	<u>Length</u>	<u>Target Tested</u>	<u>Bedrock</u>	<u>Mineralization</u>
82-1	64+00W; 12+65N	6.0m	6.0m	Conductor 21	Not reached	--
82-2	64+00W; 12+40N	6.5m	6.0m	Conductor 21	Not reached	--
82-3	65+00W; 13+00N	6.5m	6.0m	Conductor 21	Not reached	--
82-4	65+65W; 15+75N	1.5m-4.0m	49m	Conductor 3, I.P. Anomaly F	Chlorite schist, Sericite-Chlorite Schist Chlorite-Sericite Schist	Cu-bearing pyritic schists with sac- cuses of silice- ous massive sulphide.
82-5	64+00W; 19+10N	6.0m	6.0m	Conductor 22	Not reached	--
82-6	64+00W; 19+30N	6.0m	6.0m	Conductor 22	Not reached	--
82-7	62+00W; 22+30N	6.0m	6.0m	Conductor 23	Not reached	--
82-8	62+00W; 22+55N	6.0m	6.0m	Conductor 23	Not reached	--
82-9	68+00W; 26+50N	3.5m	31m	Conductor 24 I.P. Anomaly B	Chlorite Schist, Dacite Crystal Tuff Rhyolite	4.0m zone of strongly pyritic (10%) schist
82-10	68+00W; 16+75N	1.5m-2.5m	48m	Conductor 3 I.P. Anomaly F	Chlorite Schist, Dacite Crystal Tuff Rhyolite Cl-Se schist Gabbro/Diorite	Similar to TR82-4
82-11	60+00W; 11+80N	2.5m	23m	Conductor 3 I.P. Anomaly F	Chlorite Schist	Disseminated Pyrite
82-12	60+00W; 12+25N	1.5m	22m	Conductor 3 I.P. Anomaly F	Rhyolite, Qtz-Se-Cl Schist	Disseminated Pyrite
82-13	60+00W; 12+75N	0.5m-1.5m	36m	Conductor 3	Sericite Schist Dacite Crystal Tuff	Disseminated Pyrite (up to 1%)

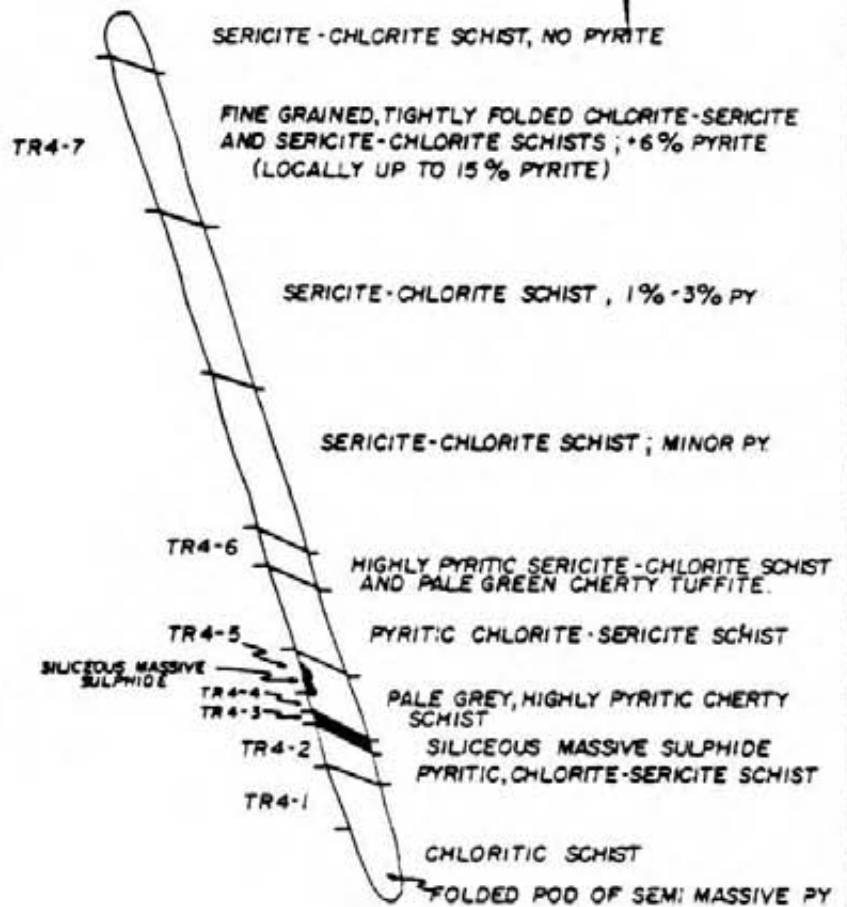
TABLE 1 (Continued)

<u>Trench</u>	<u>Grid Co-Ordinates</u>	<u>Depth</u>	<u>Length</u>	<u>Target Tested</u>	<u>Bedrock</u>	<u>Mineralization</u>
82-14	58100W; 8180N	6m	6m	Conductor 21 I.P. Anomaly G	No bedrock	--
82-15	58100W; 9100N	6m	6m	Conductor 21 I.P. Anomaly G	No bedrock	--
82-16	57130W; 21110W	1m	24m	Conductor 23 I.P. Anomaly B	Sericite Schist Chlorite Schist Black Slate	--
82-17	57160W; 20170N	0.5m-4m	19m	Conductor	Chlorite Schist, Dacite Crystal Tuff (Faulted Contact)	--
82-18	57100W; 15180N	1m	34m	Conductor 22 I.P. Anomaly D	Altered Andesite Chlorite Schist	Strongly pyritic
82-19	32100W; 0175N	1m-2.5m	50m	I.P. Anomaly H	Mainly Felstic Tuffs	Strongly pyritic schists with small massive sulphide lenses

M 99 T

16+00 N

15+50 N



SAMPLE NO	Cu(ppm)	Pb(ppm)	Zn(ppm)	Ag(ppm)	Au(ppb)	Ba(ppm)
TR4-1	316	24	365	2.0	5	1370
TR4-2	4400	2	124	2.8	30	2350
TR4-3	2.25%	<0.01%	0.06%	0.24oz	0.002oz	0.08%
TR4-4	4670	6	70	2.6	80	1170
TR4-5	0.73%	<0.01%	0.02%	0.12oz	0.002oz	0.17%
TR4-6	111	5	37	0.4	30	1660
TR4-7	92	2	66	0.2	10	2010

ABERFORD RESOURCES LTD.
 GEOLOGY & SAMPLE LOCATIONS
 TRENCH # 4
 LARA PROJECT

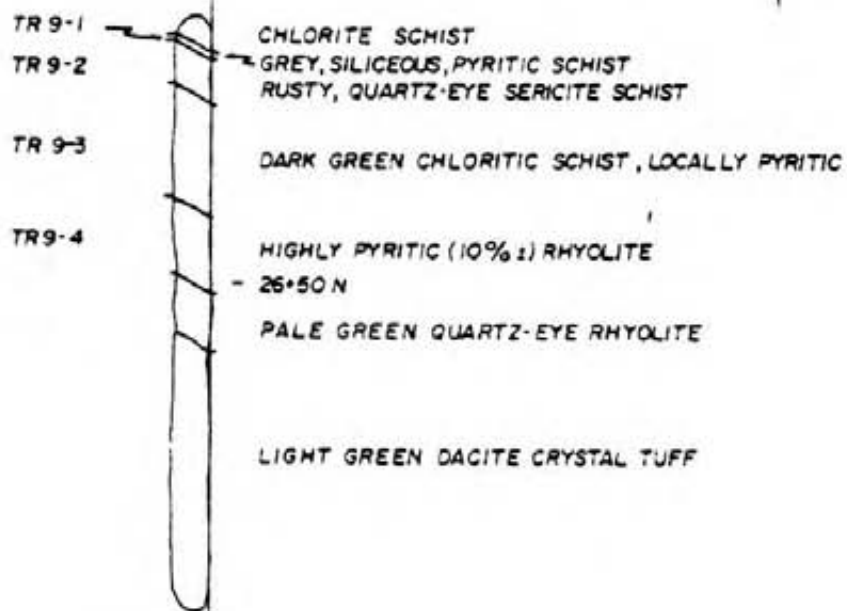
Tech Work By
 G. Belik and Assoc. Ltd.

Scale
 1:400 0 5m 0

App'd By G. B.

Fig. No. 1017-9

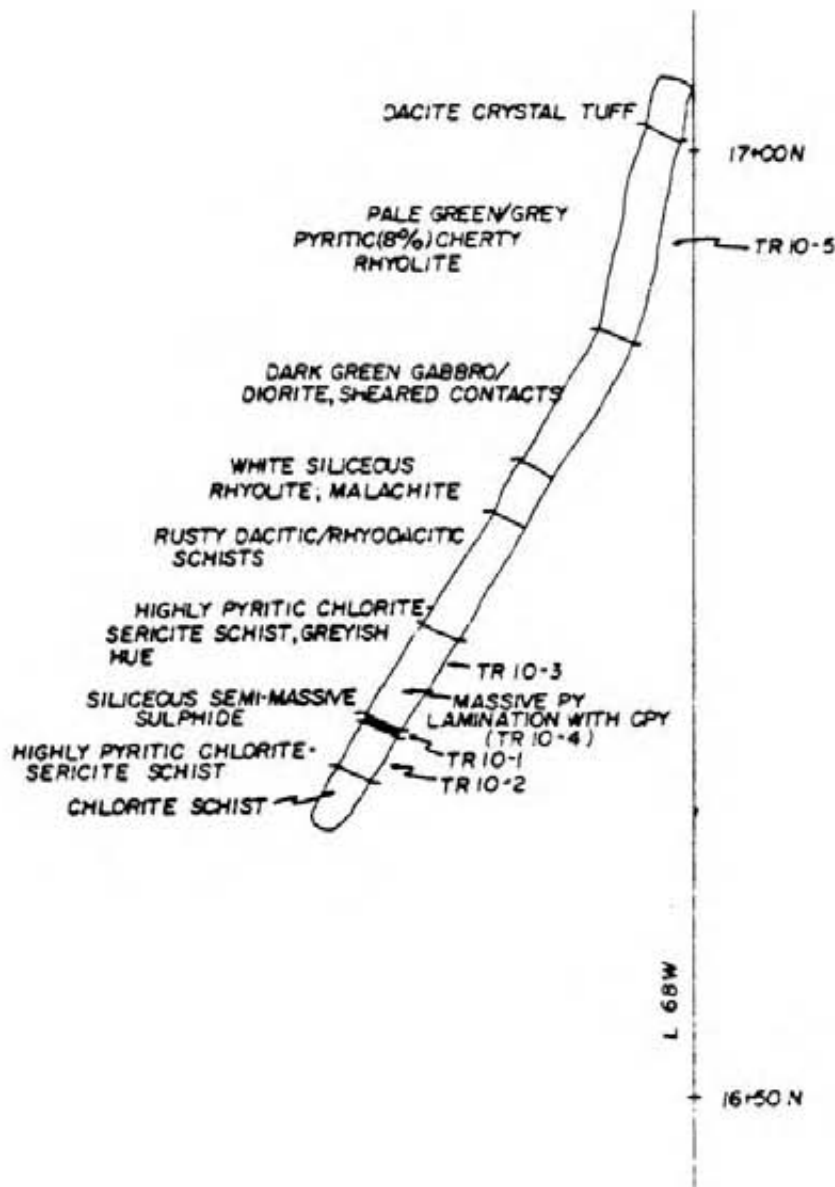
To accompany a report by G. Belik, M.Sc.



TRENCH NO	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
TR 9-1	42	5	9	0.2	5	930
" 2	29	2	14	0.2	<5	1050
" 3	33	3	36	0.4	<5	30
" 4	18	19	32	0.4	5	1640

ABERFORD RESOURCES LTD.
GEOLOGY & SAMPLE LOCATIONS
TRENCH # 9
LARA PROJECT

Tech. Work By G. Belik and Assoc. Ltd.	Scale 1:4000 0 5m 0
App'd By: G. S. [Signature]	Fig. No. 1017-10



TRENCH NO	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
TR 10-1	3600	7	64	1.4	40	310
" 2	288	4	49	0.2	5	2960
" 3	520	4	132	0.2	15	2000
" 4	16,070	3	100	5.8	165	2300
" 5	181	2	108	0.4	10	1700

ABERFORD RESOURCES LTD.
 GEOLOGY & SAMPLE LOCATIONS
 TRENCH # 10
 LARA PROJECT

Tech Work By G Bell and Assoc. Ltd
 Scale 1:4000
 3m G
 App'd By G B
 Fig No. 1017-11

To accompany a report by G Bell, M.Sc.

TRENCH #13



13+00N

LIGHT GREEN DACITE
CRYSTAL TUFF

HIGHLY SCHISTOSE PALE
GREEN/GREY SERICITE
SCHIST, LOCALLY PYRITIC

TR 13-1

PALE GREY, FINE GRAINED
SERICITE SCHIST; STRONGLY
PYRITIC (+10%)



SAMPLE NO	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
TR 11-1	660	2	241	0.2	10	2230
" 2	123	3	85	0.2	15	1860
" 3	181	2	70	0.2	10	1800
TR 13-1	40	250	160	0.9	110	2330

160+00N

12+50N

TRENCH #12

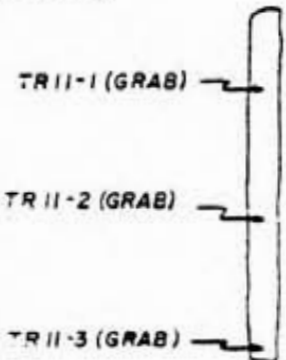


VERY FINE GRAINED WHITE
SILICEOUS RHYOLITE, 2%-5% PYRITE

PYRITIC QUARTZ-SERICITE-CHLORITE
SCHIST

WHITE RHYOLITE, ± PYRITE

TRENCH #11



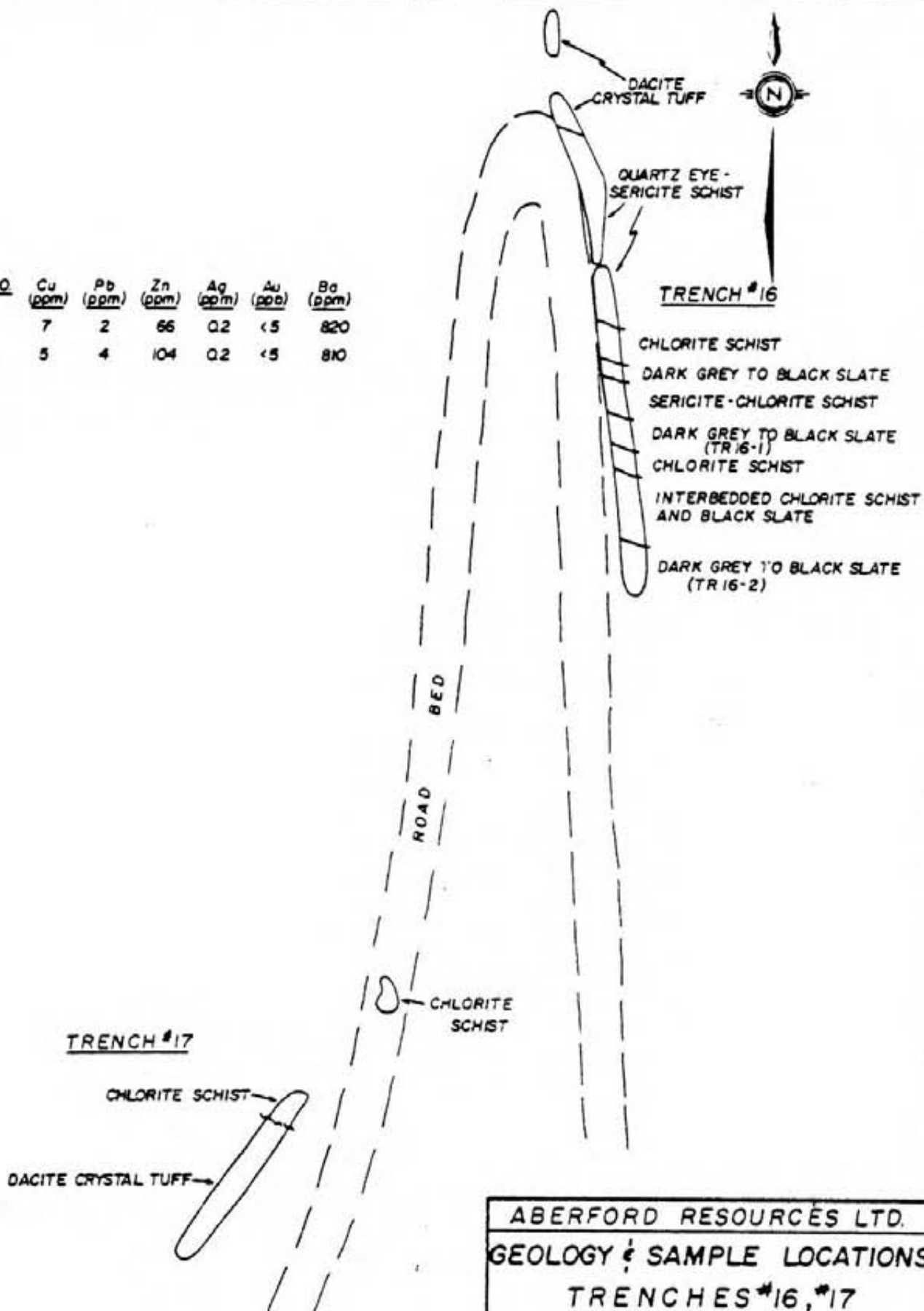
12+00N

PYRITIC CHLORITE SCHIST,
HEAVY GOSSAN SOUTH HALF
OF TRENCH

ABERFORD RESOURCES LTD.
GEOLOGY & SAMPLE LOCATIONS
TRENCHES #11, #12, #13
LARA PROJECT

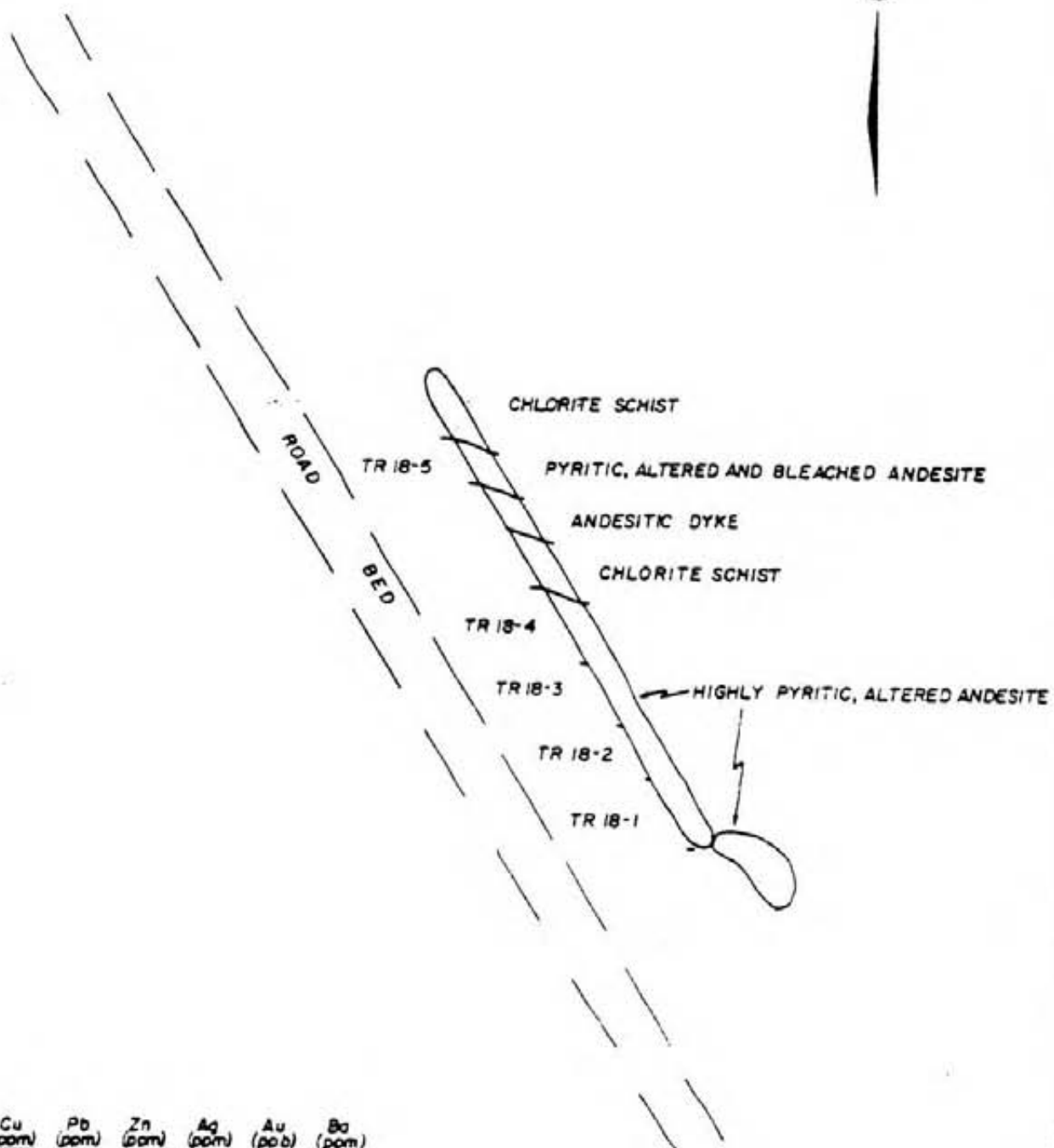
Tech Work By G. Bell and Assoc. Ltd. Scale 1:500 0 5m 10
App'd By G. B. [Signature] Fig No. 1017-12

<u>SAMPLE NO</u>	<u>Cu</u> (ppm)	<u>Pb</u> (ppm)	<u>Zn</u> (ppm)	<u>Ag</u> (ppm)	<u>Au</u> (ppb)	<u>Ba</u> (ppm)
TR 16-1	7	2	66	0.2	<5	820
" 2	5	4	104	0.2	<5	810



ABERFORD RESOURCES LTD.
 GEOLOGY & SAMPLE LOCATIONS
 TRENCHES #16, #17
 LARA PROJECT

Tech. Work By G. Bell and Assoc. Ltd. Scale 1:400 0 5m 0
 App'd By G B [Signature] Fig No. 1017-13

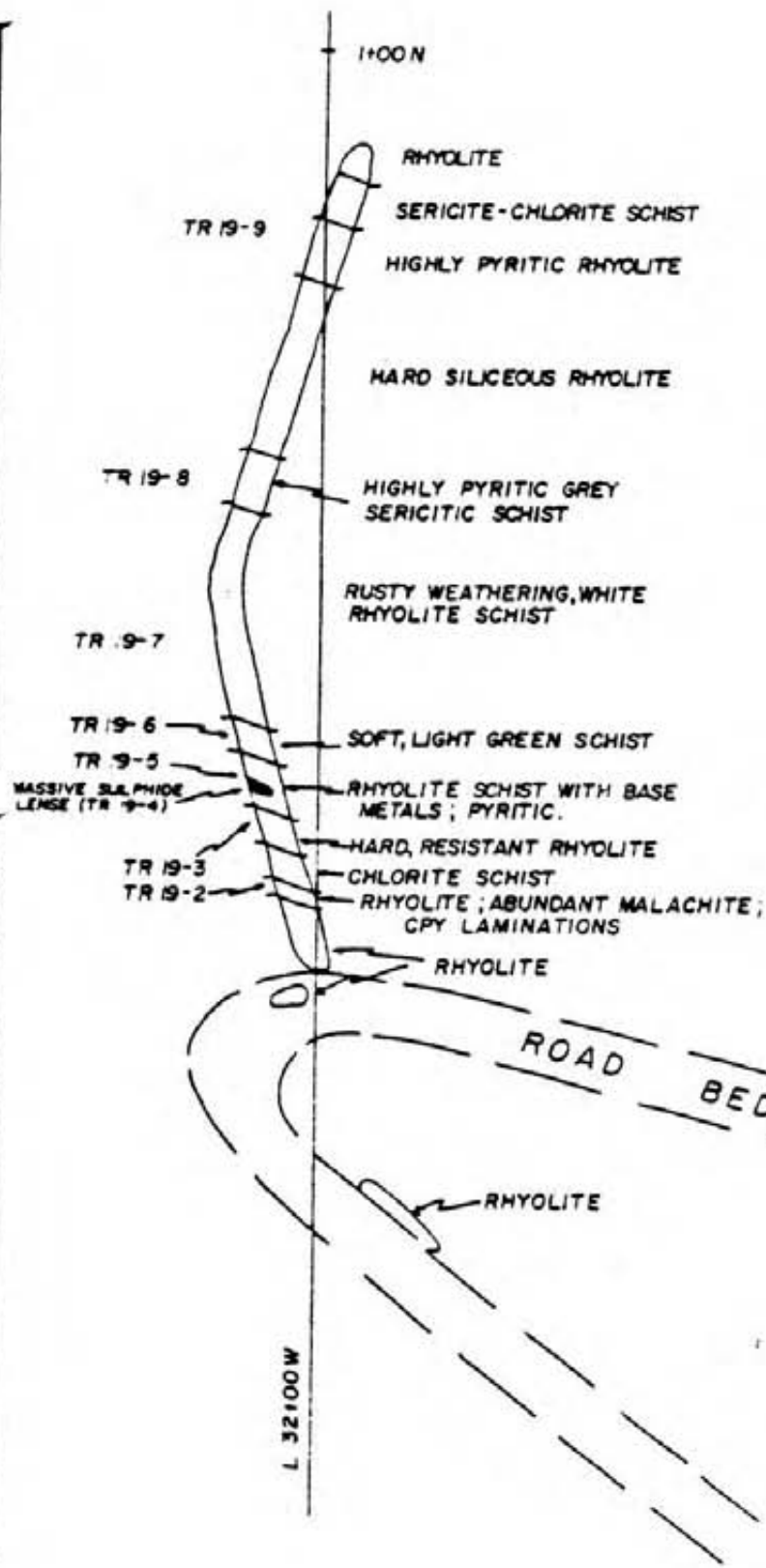


TRENCH NO	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
TR 18-1	68	4	62	0.2	<5	600
" 2	56	4	61	0.2	<5	960
" 3	77	4	60	0.4	15	370
" 4	21	2	45	0.2	5	460
" 5	191	3	26	0.2	10	880

ABERFORD RESOURCES LTD.
 GEOLOGY & SAMPLE LOCATIONS
 TRENCH # 18
 LARA PROJECT

Tech. Work By: G. Belik and Assoc. Ltd.
 Scale: 1:400
 App'd By: G. B. [Signature]
 Fig No. IC17-14

To accompany a report by G. Belik, M.Sc.



SAMPLE NO	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ag (ppm)	Au (ppb)	Ba (ppm)
TR 19-1	2000	7	440	12.0	170	3790
" 2	3800	9	1340	20.0	985	3340
" 3	127	300	286	1.8	175	5040
" 4	346%	0.62%	0.85%	8.93oz	0.005oz	0.08%
" 5	136	565	550	4.6	2100	4740
" 6	119	239	119	1.4	150	5020
" 7	84	159	177	4.2	735	4460
" 8	377	38	38	3.0	115	2300
" 9	139	380	340	2.8	135	2090

NOTE:
 TR 19-1 SELECTED SAMPLE FROM INTERVAL TR 19-2
 TR 19-5 DOES NOT INCLUDE MATERIAL FROM TR 19-4

ABERFORD RESOURCES LTD.
 GEOLOGY & SAMPLE LOCATIONS
 TRENCH #19
 LARA PROJECT

Tech. Work By G. Beik and Assoc. Ltd. Scale 1:4000 5m 0
 App'd By G. B. [Signature] Fig No. 1017-15

REFERENCES

- Belik, G.D.
1981: Trenching, Geophysical and Geochemical Report on the Mt. Sicker Property; unpublished company report
- Clapp, C.H.
1913: Geol. of the Victoria and Saanich map-area, Vancouver Island, B.C. Geol. Survey of Canada, Memoir 36.
- Clapp, C.H.
1917: Sooke and Duncan map-area, Vancouver Island; Geol. Survey of Canada, Memoir 96.
- Muller, J.E. and Carson, D.J.T.
1969: Geol. and Mineral Deposits of Alberni map-area, B.C. (92F); Geol. Survey of Canada, Paper 68-50
- Muller, J.E.
1975: Victoria map-area, B.C. (92B); Geol. Survey of Canada; Paper 75-1A, P.21 - 26
- 1981: Geol. Victoria Map-Area, Vancouver Island and Gulf Islands, B.C. (1:100,000);
- 1981: The Paleozoic Sicker Group of Vancouver Island, B.C.; Geol. Survey of Canada, Paper 79-30.
- Stevenson, J.S.
1945: Geol. of the Twin "J" Mine; in Transactions, Cdn. Inst. of Mining and Met., Vol. XLVIII, pp. 294-308

APPENDIX I

Assay Certificates

Bondar-Clegg & Company Ltd.
 130 Pemberton Ave.
 North Vancouver, B.C.
 Canada V7P 2R2
 Phone: (604) 983-0881
 Telex: 94-332667



BONDAR-CLEGG

**Geochemical
 Lab Report**

COPIES: 100-4014

FROM: ASBESTOS RESOURCES LTD.
 DATE: 17-DEC-92 PROJECT: HQAE 31/92

SUBMITTED BY: NONE

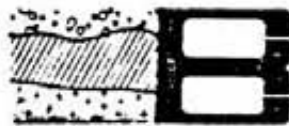
ELEMENT	DETECTION LIMIT	EXTRACTION	METHOD	SIZE FRACTION	SAMPLE TYPE	SAMPLE PREPARATION
As	1 ppm	HNO3-HCl HOT EXTR	Atomic Absorption	-100	OTHER	CRUSH/PULVERIZE +100
Pb	2 ppm	HNO3-HCl HOT EXTR	Atomic Absorption	-100		RETENTION OF REJECTS
Cr	1 ppm	HNO3-HCl HOT EXTR	Atomic Absorption	-100		DRY, RETAIN +100
As	1 ppm	HNO3-HCl HOT EXTR	Atomic Absorption	-100		RETENTION OF REJECTS
As	5 ppm	AQUA REGIA	Fine Assay: AA	-100		PULVERIZING
As	20 ppm		X-RAY FLUORESCENCE	-100		

ANALYST: G. DELIK & ASSOCIATES LTD.

CLIENT: ASBESTOS RESOURCES LTD.

G. DELIK & ASSOCIATES LTD.

COPIES:



SP1071 100-1014 PROJECT: VONE 331E

PAGE 1

ANAL UNIT	ELEMENT UNITS	Ca ppm	Fe ppm	Zn ppm	As ppm	Se ppm	Notes
1	TR-213	84	10	70			1300
	TR-212	123	4	27			1010
3	TR-44	157	5	71			910
4	TR-45	305	3	45			370
	TR-210	70	5	75			1110
5	TR-74	157	5	94			2140
	TR-75	140	4	97			2040
	TR-213	101	4	70			1760
2	TR-1013	300	3	24			1180
9	TR-18-31	135	5	28			1270
7	TR-4-1	314	24	365	0.0	5	1370
6	TR-4-2	4400	4	124	0.8	70	2250
	TR-4-4	4670	5	70	2.1	50	1470
	TR-4-3	101	5	27	0.4	75	1560
8	TR-4-7	32	2	55	0.2	10	2010
11	TR-2-1	40	3	9	0.2	5	920
	TR-2-2	29	3	14	0.2	15	1300
4	TR-2-3	25	3	7.5	0.4	12	30
	TR-2-4	13	19	22	0.4	5	1540
	TR-2-5	2350	7	54	1.4	40	310
1	TR-10-2	239	4	49	0.2	5	2950
	TR-10-1	501	4	132	0.2	15	2100
3	TR-10-4	16070	5	170	5.9	145	2710
11	TR-10-5	181	4	102	0.4	10	1700
1	TR-10-3	540	5	241	0.2	10	2000
1	TR-11-1	113	4	25	0.1	15	1550
	TR-11-3	191	5	70	0.2	10	1500
	TR-11-2	41	150	14.0	0.9	110	2000
2	TR-12-1	-	4	15	0.2	4	500
1	TR-12-2	0	4	124	0.1	5	210
1	TR-13-1	62	4	10	0.1	7	370
1	TR-13-2	5.5	4	14	0.2	15	240
1	TR-13-3	77	4	10	0.1	5	370
1	TR-13-4	24	10	45	0.2	7	450
5	TR-13-5	74	4	23	0.2	10	390
1	TR-14-1	2500	7	44	1.00	10	2500
2	TR-14-2	2510	5	124	0.1	100	2540
	TR-14-3	107	10	204	1.0	175	2140
	TR-14-4	114	100	55	4.0	210	1740
4	TR-14-5	144	100	110	1.4	150	2000



CLIENT: 100-1014 RESULTS: NONE GIVEN

PAGE 2

SAMPLE NUMBER	ELEMENT UNITS	Ca	Fe	Mg	Mn	Pb	Zn	NOTED
		ppm	ppm	ppm	ppm	ppm	ppm	
1 TS-17-7		24	122	127	4.2	705	4460	
1 TS-17-8		377	39	39	3.3	115	2000	
1 TS-17-9		109	320	710	2.8	105	2090	
1 L604 16-10N		30	54	15			950	
1 L604 16-50N		26	12	47			700	
2 L604 17-00N		26	33	37			1090	
2 L604 17-50N		21	17	17			1080	
2 L604 18-00N		29	15	51			920	
2 L604 18-50N		21	17	55			1210	
2 L604 19-00N		18	15	37			500	
1 L604 19-50N		40	51	33			140	
3 L604 20-00N		34	7	37			960	
1 L604 20-50N		37	10	14			1120	
3 L604 21-00N		33	10	33			1230	
3 L604 21-50N		22	11	37			700	
1 L604 22-10N		31	8	37			1370	
1 L604 22-50N		10	7	26			1270	
1 L604 23-00N		35	10	36			1100	
1 L604 23-50N		41	18	17			1230	
2 L604 24-00N		31	13	33			910	
1 L604 24-50N		22	17	37			1020	
3 L604 25-00N		24	14	12			1040	
3 L604 25-50N		24	20	11			760	
1 L604 26-00N		22	26	26			780	
1 L604 26-50N		27	21	21			370	
3 L604 27-00N		21	17	11			1020	
1 L604 28-00N		22	13	14			1000	
3 L604 28-50N		47	13	17			990	
1 L604 29-00N		18	14	16			940	
3 L604 29-50N		21	26	31			700	
3 L604 30-00N		12	21	11			590	
3 L604 30-50N		28	47	37			710	

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
Nanaimo, Vancouver, B.C.
Inland V.P. 282
Phone: (604) 983-0681
Fax: (604) 983-0687



BONDAR-CLEGG

Certificate
of Analysis

REPORT: 402-4014 PROJECT: HOME GIVEN

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Hg OPT	As OPT	Cd POT	Pb POT	Zn POT	Se POT	NOTES
9 TR-4-3		0.002	0.04	2.24	10.01	3.46	0.09	
9 TR-4-5		0.002	0.12	0.73	10.31	0.02	0.17	
9 TR-17-1		0.105	0.93	3.46	0.62	10.85	0.09	

APPENDIX II

V.L.F. - E.M. Data

VLF - EM SURVEY

PROJECT 1000 PAGE _____

GRID _____ DATE _____

LINE 12 W OPERATOR S. P. ...

SOURCE STATION 1000

STATION	OUT PHASE	IN PHASE	FRASER FILTER	REMARKS
	2	1	7	
1000	3	2	-2	Good S. ...
	42	-2	-5	1000 M.O.P.
	47	-3	-3	
	48	2	-1	6.00.00
1000	45	+1	+1	
	46	0	0	
	49	0	0	
	50	0	0	
7000	52	2	2	
	53	2	2	
	54	-1	-1	
	56	-1	-2	
	57	-1	-7	
2000	58	-6	-11	
	47	-5	-5	
	48	0	-1	
	55	-1	-4	
7000	56	-3	-10	
	56	-7	-20	
	50	+13	-23	
	51	-10	-17	

VLF - EM SURVEY

PROJECT 1000 PAGE _____

GRID _____ DATE _____

LINE 12 W OPERATOR S. P. ...

SOURCE STATION 1000

STATION	OUT PHASE	IN PHASE	FRASER FILTER	REMARKS
	2	1	7	
	3	2	-2	
	30	-1	-1	
P.L.	42	-1	-3	
	43			
	44			
	45			
	46			
	47			
	48			
	49			
	50			
	51			
	52			
	53			
	54			
	55			
	56			
	57			
	58			
	59			
	60			
	61			
	62			
	63			
	64			
	65			
	66			
	67			
	68			
	69			
	70			
	71			
	72			
	73			
	74			
	75			
	76			
	77			
	78			
	79			
	80			
	81			
	82			
	83			
	84			
	85			
	86			
	87			
	88			
	89			
	90			
	91			
	92			
	93			
	94			
	95			
	96			
	97			
	98			
	99			
	100			

VLF - EM SURVEY

PROJECT 1000 PAGE _____

GRID _____ DATE _____

LINE 14 W OPERATOR S. P. ...

SOURCE STATION 1000

STATION	OUT PHASE	IN PHASE	FRASER FILTER	REMARKS
1000				
2000	44	62	8	
	44	61	10	
	46	62	11	
	45	63	12	
3000	48	65	15	
	47	64	12	
	49	65	12	
	47	62	15	
7000	48	68	17	
	49	67	19	
	49	69	8	
	48	70	18	
6000	45	71	7	
	46	72	2	
	47	67	1	
	41	69	6	
5000	43	70	13	

VLF - EM SURVEY

PROJECT 1000 PAGE _____

GRID _____ DATE _____

LINE 14 W OPERATOR S. P. ...

SOURCE STATION 1000

STATION	OUT PHASE	IN PHASE	FRASER FILTER	REMARKS
1000				
	48	56	16	
	48	57	15	
3000	47	57	17	
	46	58	17	
	47	58	17	
	47	59	16	
6000	49	56	20	
	48	46	21	
	46	47	21	
	41	49	21	
7000	41	47	22	
	41	47	19	
	47	45	15	
	49	46	13	
8000	43	43	22	
	42	42	25	
	41	43	23	
	41	43	21	
	41	41	16	

VLF - EM SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE _____ OPERATOR _____

SOURCE STATION					
STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
200's	47	-7	-17	0	
	47	-12	-17	0	
	49	-9	-17	0	
	49	-9	-14	-	
200's	48	-2	-10	-	
	48	-2	-6	-	
	48	-2	-6	-	
	48	-2	-2	-	
400's	47	0	0	0	
	47	0	0	0	
	47	0	0	2	
	47	0	-2	3	
200's	45	-2	-3	-	
	45	-1	0	-	
	45	+1	+2	-	
	47	+1	2	-	
200's	47	+2	3	-	
	47	+2	13	-	
	47	+2	17	5	
	47	+2	8	8	
1400's	47	+2	5	6	

VLF - EM SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE _____ OPERATOR _____

SOURCE STATION					
STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS

VLF - EM SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE _____ OPERATOR _____

SOURCE STATION					
STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
	40	20	19	-	
	40	50	14	-	
	49	53	20	-	
400's	40	50	24	-	
	43	58	26	3	
	45	62	21	6	
	48	65	20	-	
200's	41	59	24	0	
	41	62	24	12	
	41	61	12	1	
	42	61	7	-	
200's	45	57	14	-	
	47	50	22	-	
	40	50	23	6	
	40	60	16	17	
1000's	41	50	12	5	
	44	57	3	4	
	41	50	5	4	
	40	50	4	17	
200's	42	60	4	11	

VLF - EM SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE _____ OPERATOR _____

SOURCE STATION					
STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
	43	48	18	4	Less ~
	49	510	27	-	Read 76 ~
	47	512	27	-	
400's	47	514	20	-	
	40	516	20	7	
	57	518	27	14	
	55	519	12	11	
200's	55	57	12	7	
	59	58	2	5	
	40	50	0	4	
	47	50	5	8	
200's	43	0	1	-	
	42	+1	7	-	
	41	+6	16	-	
	40	+10	20	-	
200's	42	+12	20	-	
	44	+10	21	0	
	41	+11	20	7	
	47	+9	7	1	
	41	+7	7	1	

VLF - EM SURVEY

PROJECT LARA PAGE _____

GRID _____ DATE Oct 13

LINE 19W OPERATOR G. PELL

SOURCE STATION LEAVE

STATION	OUT PHASE	IN PHASE	FRASER FILTER	REMARKS
1000'	42	+6		
	41	+5	11	
	42	+4	9	3
	42	+4	8	2
	42	+3	7	1
900'	42	+3	7	-
	40	+4	8	-
	38	+4	11	-
	34	+7	16	-
800'	38	+9	17	1
	37	+8	15	2
	40	+7	15	-
	40	+8	19	-
700'	38	+10	20	-
	40	+10	19	1
	40	+9	19	-
	41	+10	21	-
600'	41	+11	23	-
	42	+12	24	-
	43	+12	24	0
	44	+12	24	0
500'	45	+12	24	0
			24	-

REMARKS: ROAD +15 S

VLF - EM SURVEY

PROJECT LARA PAGE _____

GRID _____ DATE Oct 14/80

LINE 20W OPERATOR G. PELL

SOURCE STATION _____

STATION	OUT PHASE	IN PHASE	FRASER FILTER	REMARKS
1000'	38	+8		
	38	+8	17	
	39	+9	18	1
	39	+9	16	4
	40	+7	14	0
900'	40	+7	16	-
	40	+7	17	-
	39	+10	17	-
	40	+7	15	-
800'	41	+6	13	-
	39	+7	15	-
	38	+8	17	-
	37	+9	19	-
700'	38	+10	20	0
	38	+8	19	1
	38	+9	19	-
	37	+10	20	-
600'	37	+10	21	0
	38	+10	20	0
	38	+10	20	-
	40	+9	21	-
500'	38	+9	23	-

REMARKS: ST OFF 200m
ROAD 1015 S
STATION 1015 S

VLF - EM SURVEY

PROJECT LARA PAGE _____

GRID _____ DATE Oct 19/80

LINE 20W OPERATOR G. PELL

SOURCE STATION _____

STATION	OUT PHASE	IN PHASE	FRASER FILTER	REMARKS
2.1	48	+10	19	3
	48	+9	12	5
	50	+9	14	15
	54	+5	3	18
1000'	52	+2	-4	7
	54	-2	-4	5
	51	-2	-1	-
	50	+1	+6	-
900'	57	+5	+15	-
	58	+3	20	-
	58	+14	32	-
	57	+15	41	-
800'	57	+23	45	1
	42	+22	40	13
	47	+8	32	12
	52	+4	27	5
700'	50	+7	27	9
	47	+10	27	2
	52	+3	25	4
	52	+10	27	1
600'	51	+11	24	-

VLF - EM SURVEY

PROJECT LARA PAGE _____

GRID _____ DATE Oct 19/80

LINE 20W OPERATOR G. PELL

SOURCE STATION _____

STATION	OUT PHASE	IN PHASE	FRASER FILTER	REMARKS
600'	46	+10	20	
	45	+10	21	-
	47	+11	25	-
	47	+12	24	0
400'	43	+12	23	1
	42	+11	23	-
	45	+12	24	0
	47	+12	28	-
300'	46	+11	25	-
	47	+14	29	-
	47	+15	31	-
	47	+16	31	2
200'	50	+15	28	8
	51	+17	25	12
	55	+13	16	11
	52	+16	17	1
100'	48	+8	15	-
	48	+7	23	-
	44	+14	21	-
	45	+17	25	4
50'	50	+11	24	-

REMARKS: ROAD AT 500 S

VERTICAL LOOP E.M. SURVEY

PROPERTY _____
E.M. UNIT & OPERATOR _____

Table with columns: DATE, PAGE, LINE, STN., TILT L.P., TILT H.P., REMARKS. Contains handwritten data for a vertical loop EM survey.

VLF - EM SURVEY

PROJECT LARA PAGE _____
GRID _____ DATE Oct 19/02
LINE 24 W OPERATOR G. BULL

Table with columns: SOURCE STATION, STATION, QTY PHASE, IN PHASE, FRASER FILTER, REMARKS. Contains handwritten data for a VLF-EM survey, including 'ROAD SW'S' and 'CREEK' notes.

VERTICAL LOOP E.M. SURVEY

PROPERTY _____
E.M. UNIT & OPERATOR _____

Table with columns: DATE, PAGE, LINE, STN., TILT L.P., TILT H.P., REMARKS. Contains handwritten data for a vertical loop EM survey.

VLF - EM SURVEY

PROJECT LARA PAGE _____
GRID _____ DATE Oct 19/02
LINE 26 W OPERATOR G. BULL

Table with columns: SOURCE STATION, STATION, QTY PHASE, IN PHASE, FRASER FILTER, REMARKS. Contains handwritten data for a VLF-EM survey, including 'SEATTLE' as a source station.

VLF - EM SURVEY

PROJECT LARA PAGE _____
 GRID _____ DATE Oct 22/02
 LINE 78W OPERATOR L. BELL

SOURCE STATION <u>Seattle</u>				
STATION	OUT PHASE	IN PHASE	FRASER FILTER	REMARKS
B.L	45	+8	17	
	43	+9	17	1
	45	+8	16	0
	46	+8	17	-
1000W	47	+9	18	2
	48	+9	15	10
	52	+6	8	13
	54	+2	2	7
2000W	47	0	1	-
	45	+1	4	-
	42	+3	10	-
	43	+7	17	-
3000W	41	+10	23	-
	42	+13	27	1
	48	+14	22	15
	51	+8	12	13
4000W	50	+4	9	1
	48	+5	11	-
	48	+6	15	-
	47	+9	20	-
5000W	49	+11	22	9

VLF - EM SURVEY

PROJECT LARA PAGE _____
 GRID _____ DATE _____
 LINE 40 W OPERATOR L. BELL

SOURCE STATION				
STATION	OUT PHASE	IN PHASE	FRASER FILTER	REMARKS
B.L	42	+5	11	
	42	+8	12	-
	42	+6	13	-
	43	+7	15	-
1000W	44	+8	16	1
	50	+8	14	2
	55	+6	12	2
	53	+6	12	3
2000W	54	+6	9	10
	57	+3	2	15
	57	-1	-6	10
	51	-5	-8	-
3000W	45	-3	-2	-
	43	+1	7	-
	43	+6	16	-
	46	+10	21	-
4000W	48	+11	17	9
	54	+6	12	4
	57	+6	13	-
	48	+7	15	-
5000W	49	+8	18	-

VLF - EM SURVEY

PROJECT LARA PAGE _____
 GRID _____ DATE _____
 LINE 42W OPERATOR L. BELL

SOURCE STATION				
STATION	OUT PHASE	IN PHASE	FRASER FILTER	REMARKS
B.L				
	45	+3	6	
1000W	45	+3	7	-
	48	+4	9	-
	45	+5	10	-
	46	+5	12	-
2000W	45	+7	15	-
	45	+8	17	2
	49	+9	13	15
	52	+4	2	19
3000W	50	-2	-6	11
	47	-4	-9	5
	43	-5	-11	0
	41	-6	-9	-
4000W	38	-3	0	-
	37	+3	12	-
	38	+9	17	2
	45	+8	10	14
5000W	47	+2	3	5

VLF - EM SURVEY

PROJECT LARA PAGE _____
 GRID 6 DATE _____
 LINE 44 W OPERATOR L. BELL

SOURCE STATION				
STATION	OUT PHASE	IN PHASE	FRASER FILTER	REMARKS
B.L				
1000W				
2000W	54	+6	12	
	55	+6	15	-
	57	+9	17	3
	62	+8	12	13
3000W	67	+4	4	16
	67	0	-4	10
	58	-4	-6	1
	52	-2	-5	-
4000W	44	-3	-1	-
	42	+2	6	-
	42	+4	13	-
	45	+9	19	-
5000W	51	+10	16	-

VLF - EM SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE _____ OPERATOR _____

SOURCE STATION

STATION	OUT PHASE	IN PHASE	FRASER FILTER		REMARKS
	49	+11	21	12	
	54	+10	18	7	
	55	+8	14	9	
6:00AM	58	+6	9	9	
	62	+3	5	4	
	60	+2	5	-	
	57	+3	7	-	
7:00AM	55	+4	8	-	
	55	+4	8	-	
	56	+4	9	-	
	53	+5	12	-	
8:00AM	53	+7	14	8	
	57	+7	14	-	OUTCROP ANALYSIS TUBE ON LEFT
	52	+7	16	-	
	52	+7	20	-	
9:00AM	50	+11	22	-	
	52	+11	21	1	
	53	+10	21	0	
	50	+11	21		
10:00AM	53	+10			

VLF - EM SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE _____ OPERATOR _____

SOURCE STATION

STATION	OUT PHASE	IN PHASE	FRASER FILTER		REMARKS
	50	+10	20	-	
	50	+10	22	-	
	50	+12	24	1	
6:00AM	54	+12	21	6	
	56	+9	18	6	
	58	+9	15	10	
	62	+8	8	12	
7:00AM	59	+2	3	4	
	56	+1	4	-	
	54	+3	8	-	
	53	+5	10	-	
8:00AM	54	+5	12	-	
	54	+5	9	0	
	54	+4	10	-	
	52	+6	13	-	
9:00AM	52	+7	15	-	
	53	+8	15	1	
	53	+7	14	5	
	56	+7	10		
10:00AM	56	+3			RIDGE

VLF - EM SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE _____ OPERATOR _____

SOURCE STATION

STATION	OUT PHASE	IN PHASE	FRASER FILTER		REMARKS
	43	+1	5	-	
	42	+4	10	-	
	38	+6	18	-	
6:00AM	42	+10	20	-	
	43	+10	18	5	
	44	+8	15	6	
	48	+7	12	8	
7:00AM	53	+5	7	10	
	58	+2	2	5	
	53	0	2	-	STEEP N. SLOPE
	45	+2	6	-	
8:00AM	50	+4	10	-	
	57	+6	9	8	
	58	+3	2	15	
	57	-1	-6	10	RIDGE
9:00AM	50	-5	-8		
	50	-3			END LINE
10:00AM					

VLF - EM SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE _____ OPERATOR _____

SOURCE STATION

STATION	OUT PHASE	IN PHASE	FRASER FILTER		REMARKS
	54	+6	15	-	
	57	+7	18	-	
	50	+7	16	2	VERY STEEP SOUTH SLOPE
6:00AM	52	+7	16	-	
	52	+7	20	-	
	52	+11	23	-	
	48	+12	23	4	
7:00AM	48	+11	17	9	STEEP to S. SLOPE
	56	+8	14	11	
	58	+6	8	13	
	57	+2	1	8	
8:00AM	53	-1	0	8	
	50	+1	6	-	
	50	+5	7	5	
	56	+2	1	11	
9:00AM	55	-1	-4	5	
	50	-3	-4		
	48	-1			
	58				
10:00AM					

VLF - EM SURVEY

PROJECT LARA PAGE _____
 GRID _____ DATE _____
 LINE 46 W OPERATOR _____

SOURCE STATION				
STATION	OUT PHASE	IN PHASE	FRASER FILTER	REMARKS
2500L	63	0	0	
	60	0		
3000L	62	-3	-3 89	
	60	-6	-9 10	
	58	-7	-13 5	
	60	-7	-14 6	
4000L	57	-12	-19 14	
	50	-16	-28 7	
	45	-10	-26 -	Slope 5 slope
	44	-5	-45 -	
5000L	46	-3	-8 -	
	43	-6	-9 -	
	37	0	-6 -	
	38	+5	5 -	
	38	+5	9 -	
6000L	42	+4	12 -	
	42	+8	20 -	
	44	+12	21 2	
	48	+9	18 6	
7000L	48	+9	15 9	
	52	+6	9 10	
	52	+3	5 6	

VLF - EM SURVEY

PROJECT LARA PAGE _____
 GRID _____ DATE Nov 8/92
 LINE L 48W OPERATOR _____

SOURCE STATION				
STATION	OUT PHASE	IN PHASE	FRASER FILTER	REMARKS
B.L	25	+1		
1000L				
2000L	35	+1	1	
	37	0	3 -	
	30	+3	9 -	
	31	+8	12 -	
3000L	30	+6	14 2	
	29	+8	18 -	
	30	+10	20 -	
	30	+10	18 6	
4000L	33	+8	14 8	
	37	+6	10 0	
	32	+4	14 -	
	30	+8	21 0-	
5000L	32	+12	26 0	

VLF - EM SURVEY

PROJECT LARA PAGE _____
 GRID _____ DATE Nov 8/92
 LINE 50 W OPERATOR C. BELL

SOURCE STATION				
STATION	OUT PHASE	IN PHASE	FRASER FILTER	REMARKS
B.L				
1000L				
2000L				
	30	+4	+9	
	30	+5	+10 -	
3000L	32	+5	+10 -	
	34	+5	12 -	
	38	+3	14 -	
	38	+7	13 3	
4000L	41	+6	11 7	
	40	+5	6 9	
	42	+1	2 0	
	37	+1	6 -	
	37	+1		

VLF - EM SURVEY

PROJECT LARA PAGE _____
 GRID _____ DATE Nov 8/92
 LINE 52W OPERATOR C. BELL

SOURCE STATION				
STATION	OUT PHASE	IN PHASE	FRASER FILTER	REMARKS
3000L				
4000L	29	+7	17	
	30	+10	20 1	
	32	+10	16 13	
	34	+6	7 11	
5000L	37	+1	5 -	
	28	+4	11 -	
	28	+7	16 -	
	30	+9	17 -	
6000L	32	+10	24 -	ROAD BRUSH
	33	+14	27 -	
	35	+3	25 4	
	37	+12	23 4	
7000L	38	+11	21 3	
	40	+10	20 2	
	41	+10	17 3	
	43	+9	17 3	
8000L	42	+8	16 -	

VLF - EM SURVEY

PROJECT _____ PAGE _____
 GRID _____ DATE _____
 LINE _____ OPERATOR _____

SOURCE STATION					
STATION	OUT PHASE	IN PHASE	FRASER FILTER		REMARKS
	53	+2	3	4	
8100M	55	+1	1	3	
	55	0	0	1	
	52	0	0	-	
	48	0	1	-	
9100M	48	+1	2	-	
	50	+1	2	-	
	48	+1	4	-	
	49	+3	9		
10100M	52	+6			

VLF - EM SURVEY

PROJECT _____ PAGE _____
 GRID _____ DATE _____
 LINE _____ OPERATOR _____

SOURCE STATION					
STATION	OUT PHASE	IN PHASE	FRASER FILTER		REMARKS
	35	14	28	12	
	40	+8	14	8/12	
	42	+5	9	8/9	
6100M	44	+4	5	6/8	
	44	+1	1	6/6	
	45	0	-1	4	
	45	-1	-3	1	
7100M	47	-2	-2	1	ROAD 6000M
	46	0	-4	5	
	42	-4	-7	0	
	40	-3	-4	-	
8100M	40	-1	2	-	
	42	+3	6	-	
	53	+3	3	7	
	53	0	-1	4	
9100M	53	-1	-1	-	ROAD 8000M
	51	0	5	-	
	47	+5	14	-	CLAIM POST 30' SW STEEP 2 100M 42+30M
	50	+9	18	-	CLAIM LINE
10100M	53	+9	20		10+00M
	53	+11			

VLF - EM SURVEY

PROJECT _____ PAGE _____
 GRID _____ DATE _____
 LINE _____ OPERATOR _____

SOURCE STATION					
STATION	OUT PHASE	IN PHASE	FRASER FILTER		REMARKS
	22	+8	22	-	
	26	+14	31	-	
	26	+17	26	-	
6100M	38	+19	41	0	
	42	+22	41	4	
	46	+19	38	7	
	47	+18	34	8	
7100M	45	+16	29	8	
	47	+13	26	1	
	48	+13	28	-	
	50	+15	29	5	
8100M	53	+14	23	14	
	57	+9	15	10	
	57	+6	13	-	
	53	+7	16	-	
9100M	55	+9	12	4	
	62	+3	4	8	
	58	+1	2	2	
	58	+1	2	4	
10100M	57	+1			

VLF - EM SURVEY

PROJECT _____ PAGE _____
 GRID _____ DATE _____
 LINE _____ OPERATOR _____

SOURCE STATION					
STATION	OUT PHASE	IN PHASE	FRASER FILTER		REMARKS
	42	+8	14	2	
	42	+6	14	-	
	41	+9	17	-	
7100M	45	+7	18	-	ROAD 9100M
	45	+9	18	2	
	45	+9	16	9	
	50	+7	9		
10100M	46	+2			

VLF - EM SURVEY

PROJECT LARA PAGE _____
 GRID _____ DATE Nov 8
 LINE LS4 W OPERATOR G.B.

SOURCE STATION				
STATION	OUT OF PHASE	IN PHASE	FRASER FILTER	REMARKS
	35	+1		
3100N				
	35	+1	2	
	35	+1	4	
4100N	33	+3	7	
	31	+4	9	
	31	+5	11	
	32	+6	12	
5100N	30	+6	11	
	32	+5	13	
	33	+8	18	
	33	+10	22	
6100N	33	+12	22	4
	35	+10	18	5
	35	+8	17	0
	33	+9	18	
7100N	33	+9	19	
	33	+10	20	1
	33	+10	18	6

VLF - EM SURVEY

PROJECT LARA PAGE _____
 GRID _____ DATE Nov 8/02
 LINE LS6 W OPERATOR C.B.

SOURCE STATION				
STATION	OUT OF PHASE	IN PHASE	FRASER FILTER	REMARKS
5100N	40	+5	11	
	39	+6	14	
	38	+8	12	5
	38	+4	9	1
6100N	34	+5	11	
	34	+6	13	
	35	+7	15	
	35	+8	19	6
7100N	35	+6	9	7
	35	+3	7	
	33	+4	10	
	32	+6	14	
8100N	32	+2	17	
	33	+9	18	
	33	+9	18	2
	34	+9	16	6
9100N	35	+7	12	6
	35	+5	10	4
	34	+5	8	5
	36	+3	5	
10100N	37	+2		

RNG 7130 N

VLF - EM SURVEY

PROJECT LARA PAGE _____
 GRID _____ DATE Nov 17
 LINE CSW OPERATOR G.B.

SOURCE STATION				
STATION	OUT OF PHASE	IN PHASE	FRASER FILTER	REMARKS
3100N	45	+14	34	(u)
3200N	52	+20	32	14 (u)
	56	+12	20	20 (u)
	54	+8	12	12 (u)
	55	+4	8	4 (u)
6100N	52	+4	8	0
	52	+4	8	0
	49	+4	8	1
	48	+4	7	3
7100N	50	+3	5	4
	46	+2	3	4
	48	+1	1	-
	40	0	7	-
8100N	37	+17	13	-
	35	+13	26	-
	35	+21	46	-
	42	+25	41	21
9100N	51	+16	25	24
	50	+9	17	6
	48	+8	19	-
	48	+11	23	-
10100N	50	+12	23	?

VLF - EM SURVEY

PROJECT LARA PAGE _____
 GRID _____ DATE Nov 17/02
 LINE SWW OPERATOR G.B.

SOURCE STATION				
STATION	OUT OF PHASE	IN PHASE	FRASER FILTER	REMARKS
	61	+8	12	14
	65	14	5	10
16100N	64	+1	2	1
	60	+1	4	-
	56	+3	8	-
	57	+5	9	0
17100N	56	+4	8	3
	56	+4	6	5
	55	+2	3	2
	56	+1	4	-
18100N	52	+3	6	-
	53	+3	6	-
	51	+3	8	-
	49	+5	9	0
19100N	50	+4	8	-
	49	+4	10	-
	49	+6	14	-
	48	+8	15	-
20100N	50	+10	23	-
	50	+12	25	0
	47	+13	22	11

ANG FIRST RUN 16100N

22m To Center Road

VLF - EM SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE _____ OPERATOR _____

SOURCE STATION

STATION	OUT PHASE		FRASER FILTER		REMARKS
	OUT PHASE	IN PHASE	FRASER FILTER	FRASER FILTER	
	25	+8	14	3	
Brook	34	+6	15	-	
	35	9	21	-	
	34	+12	25	1	
	35	+13	20	10	
9 foot	37	7	15	1	
	36	8	19	-	
	37	11	21	1	
	35	10	18		
Adrian	35	8			

VLF - EM SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE _____ OPERATOR _____

SOURCE STATION

STATION	OUT PHASE		FRASER FILTER		REMARKS
	OUT PHASE	IN PHASE	FRASER FILTER	FRASER FILTER	

VLF - EM SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE _____ OPERATOR _____

SOURCE STATION

STATION	OUT PHASE		FRASER FILTER		REMARKS
	OUT PHASE	IN PHASE	FRASER FILTER	FRASER FILTER	
	53	+11	23	7	
	54	+12	20	9	
	57	+8	14	10	
11 foot	56	+6	10	5	
	54	+4	9	-	
	54	+5	11	-	
	52	+6	11	1	
12 foot	53	+5	10	-	
	51	+5	12	-	
	48	+7	15	-	
	49	+11	20	3	
13 foot	50	+9	15	3	
	48	+6	17	-	
	48	+11	20	-	
	50	+9	17	-	
14 foot	52	+10	21	-	
	49	+11	23	-	
	51	+12	27	3	
	53	+15	30	1	
15 foot	55	+15	26	11	
	60	+11	19	14	

VLF - EM SURVEY ¹⁰³/₉₀

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE _____ OPERATOR _____

SOURCE STATION

STATION	OUT PHASE		FRASER FILTER		REMARKS
	OUT PHASE	IN PHASE	FRASER FILTER	FRASER FILTER	
	52	+9	14	13	
21 foot	53	+5	9	11	
	64	+4	3	11	
	57	-1	-2	2	
	50	-1	1	-	
22 foot	47	+2	5	-	
	43	+3	7	-	
	44	+4	10	-	
	44	+8	10	3	
23 foot	47	+4	7	5	
	47	+2	5	3	
	48	+2	4	1	
24 foot	43	+2	5	-	
	42	+3	8	-	
	43	+5	15	-	
	45	+10	18	10	
25 foot	48	0	5		
	45	+5			

VLF - EM SURVEY

PROJECT LARA PAGE _____
 GRID _____ DATE Apr 10/82
 LINE 60 W OPERATOR E.B.

SOURCE STATION					
STATION	OUT PHASE	IN PHASE	FRASER FILTER		REMARKS
6000W					
6100W					
6200W					
6300W					
6400W					
6500W	57	+4			(M)
6600W	58	+3	7		(N)
6700W	63	+2	5	6	
6800W	68	-1	1	11	
6900W	67	-5		-6 13	
7000W	66	-7		-12 11	
7100W	65	-10		-17 10	
7200W	53	-12		-22 7	
7300W	50	-12		-24 -	
7400W	45	-8		-20 -	Silty CR Duff
7500W	40	-1		-9 -	
			3	-	
			13	-	
			23	-	

VLF - EM SURVEY

PROJECT LARA PAGE _____
 GRID _____ DATE Apr 12/82
 LINE 60W OPERATOR E.B.

SOURCE STATION					
STATION	OUT PHASE	IN PHASE	FRASER FILTER		REMARKS
	23	+4			
				13	
	29	+7		23 -	
	30	+18		31 -	
10000W	72	+17		37 -	
	36	+22		37 7	
	42	+17		20 11	
	40	+13		26 0	
11000W	40	+13		30 -	
	37	+17		37 -	
	42	+20		31 19	
	52	+8		18 19	
12000W	47	+8		12 8	
	50	+5		10 4	
	49	+5		8 6	
	53	+3		4 4	
13000W	49	+1		4 -	
	47	+3		9 -	
	45	+6		14 -	
	46	+8		17 -	
14000W	45	+9		18 -	
	44	+9		19 -	

VLF - EM SURVEY

PROJECT LARA PAGE _____
 GRID _____ DATE Apr 10/82
 LINE 6000 W OPERATOR CB

SOURCE STATION					
STATION	OUT PHASE	IN PHASE	FRASER FILTER		REMARKS
	48	+7	13	1	
20000W	50	+6	11	0	
	45	+5	13	-	
	47	+8	16	-	
	53	+8	16	1	
21000W	54	+8	15	-	(N)
	50	+7	17	-	(N)
	52	+10	17	10	
	62	+7	7	17	
22000W	65	0	0	3	
	60	0	4	-	
	54	+4	9	-	
	58	+5	13	-	
23000W	60	+8	17	-	
	63	+8	17	4	
	67	+8	13	9	
	70	+5	9	7	
24000W	67	+7	6	2	
	65	+3	6	-	
	63	+3	10	-	
	57	+7			

VLF - EM SURVEY

PROJECT LARA PAGE _____
 GRID _____ DATE Apr 7/82
 LINE 6200 W OPERATOR CB

SOURCE STATION					
STATION	OUT PHASE	IN PHASE	FRASER FILTER		REMARKS
6500W	45	-1		-5	
	47	-4		-14 16	
7000W	50	-10		-21 5	
	45	-11		-19 -	
	44	-8		-12 -	
	46	-4		-6 -	
8000W	47	-2		-3 -	
	48	-1		-4 5	
	48	-3		-8 8	
	49	-5		-12 9	
9000W	50	-7		-17 10	
	53	-10		-22 8	
	49	-12		-25 2	
	44	-13		-24 -	
10000W	40	-11		-16 -	
	38	-5		-8 -	
	37	-3		-3 -	
	35	0		5 -	
11000W	37	+5		12 -	
	39	+7		17 -	
	39	+10		17 9	

VLF - EM SURVEY

PROJECT LARA PAGE _____
 GRID _____ DATE _____
 LINE 62W OPERATOR CR

SOURCE STATION

STATION	OUT PHASE	IN PHASE	FRASER FILTER		REMARKS
1700M	61	+12			
1800M	67	+8	20	16	
	72	0	8	22	
	69	-2	-2	10	
1800M	68	0	-2	0	
1	70	-2	-2	6	
	67	-6	-8	10	
	62	-6	-12	2	270 110
1900M	58	-4	-10	-	100 27
	55	0	-4	-	121 70
	53	+2	2	-	
	50	+2	4	-	
2000M	53	+1	3	-	
	53	+4	5	-	
	52	+7	11	-	R41 B20 20x25
	52	+8	15	-	238° FOR 29M
2100M	48	+3	21	-	254° " 90M
	52	+15	28	-	225° 121M
	50	+17	34	-	AT 51° 18.50N
	38	+18	37	0	LN 64
2200M	67	+16	34	10	
			27	14	

VLF - EM SURVEY

PROJECT LARA PAGE _____
 GRID _____ DATE Nov 11
 LINE 62W OPERATOR CR

SOURCE STATION

STATION	OUT PHASE	IN PHASE	FRASER FILTER		REMARKS
	68	+6			
	73	+6	12	-	
2800M	75	+4	10	-	
	79	-1	7	16	
	80	-5	-6	14	
	77	-6	-11	4	
2900M	73	-4	-10	3	
	72	-10	-14	9	
	68	-9	-19	10	
	63	-15	-24	-	
3000M	57	-12	-27	-	BETWEEN 607
					260 AT
					2900M
					235M

VLF - EM SURVEY

PROJECT LARA PAGE _____
 GRID _____ DATE Nov 10/62
 LINE 64W OPERATOR CR

SOURCE STATION

STATION	OUT PHASE	IN PHASE	FRASER FILTER		REMARKS
1000M	40	+1	2		
	42	+1	1	7	
	45	0	-5	15	
	50	-5	-14	11	
1100M	49	-9	-16	-	
	45	-7	-7	-	
	42	0	+4	-	
	40	+4	+19	-	
1200M	42	+15	+32	4	
	48	+17	115	35	
	67	-2	-3	16	
	55	-1	-1	1	
1300M	55	0	-4	0	
	49	-4	-1	-	
	50	-1	+1	-	
	50	+2	+10	-	
1400M	50	+8	+23	-	
	52	+14	+20	16	
	65	+11	+6	32	
	65	-5	-7	8	
1500M	58	-2	-2	-	

VLF - EM SURVEY

PROJECT LARA PAGE _____
 GRID _____ DATE _____
 LINE 64W OPERATOR CR

SOURCE STATION

STATION	OUT PHASE	IN PHASE	FRASER FILTER		REMARKS
	42	+3	+10	-	
	43	+7	+14	-	
2000M	44	+7	+15	1	
	45	+6	+17	-	
	44	+2	+17	-	
	43	+9	+20	-	
2200M	40	+10	+21	-	
	44	+11	+27	-	
	40	+16	33	-	
	49	+17	30	14	
2300M	53	+13	19	12	
	57	+6	12	7	
	46	+6	16	-	
	50	+10	20	-	
2400M	52	+10	21	-	
	51	+11	23	-	
	52	+12	23	1	
	57	+11	22	-	
2500M	55	+8	24	-	
	58	+13	+26	1	
	62	+13	+27	12	

VLF - EM SURVEY

PROJECT _____ PAGE _____
 GRID _____ DATE _____
 LINE _____ OPERATOR _____

SOURCE STATION

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
	73	+11			
	78	+4	15	23	
	75	0	4	17	
237004	69	-2	-2	0	
	65	-2	-4	3	
	66	-3	-5	1	
	65	-2	-5	-	
241004	59	-1	-3	-	Rail Bed 241004
	53	+1	0	-	
	59	+1	2	-	Rail Bed 241004
	67	+2	3	-	
251004	68	+4	6	-	
	68	+5	9	0	
	72	+1	6	8	
	68	0	1	2	
261004	63	+4	4	-	
	63	+9	13	-	
	63	+10	17	-	
	72	+6	16	7	
271004	75	+6	12	7	
	73	+3	9	3	
			-9	-	

VLF - EM SURVEY

PROJECT _____ PAGE _____
 GRID _____ DATE _____
 LINE _____ OPERATOR _____

SOURCE STATION

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS

VLF - EM SURVEY

PROJECT _____ PAGE _____
 GRID _____ DATE _____
 LINE _____ OPERATOR _____

SOURCE STATION

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
	58	0	+1	-	
	55	+1	+1	0	
	53	0	+1	-	
11004	50	+1	+6	-	
	47	+5	+11	-	
	47	+6	+16	-	
	47	+10	+21	-	
17004	50	+11	+26	-	
	50	+15	+27	0	
	53	+12	+26	-	
	50	+14	+34	-	
18004	58	+20	+37	2	
	54	+17	+32	9	
	53	+15	+28	12	Road 18+50
	55	+13	+20	18	
12004	58	+7	+10	16	✓
	57	+3	+4	12	
	54	+1	-2	11	
	52	-3	-7	8	
20004	50	-4	-6	6	
	44	-2	+1	-	

VLF - EM SURVEY

PROJECT _____ PAGE _____
 GRID _____ DATE _____
 LINE _____ OPERATOR _____

SOURCE STATION

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
	68	+10	+14	18	
261004	68	+4	+5	11	✓
	62	+1	+3	-	
	58	+2	+9	-	
	57	+2	+15	-	
27004	66	+8	+20	-	
	53	+12	+25	?	
	72	+11	+17	8	CREEK
	60	+6	+11	8	FLAT
28004	60	+5	+9	6	
	60	+4	+5	8	
	60	+1	+1	6	
	60	0	-1	4	
291004	66	-1	-5	12	
	67	-4	-13	11	
	62	-9	-16	4	CREST OF HILL
	60	-7	-17	4	NEAR SLOPE
20004	58	-10	-20		
	56	-10			

VLF - EM SURVEY

PROJECT LARA PAGE _____
 GRID _____ DATE Nov 10/82
 LINE 66 100 W OPERATOR CB

SOURCE STATION					
STATION	OUT PHASE	IN PHASE	FRASER FILTER		REMARKS
12000					Road 12000
					Power Line house
	27	24			Null
					"
12000					"
					"
	48	+12			"
			23		
14100	42	+11	17	15	✓
	47	+6	8	15	
	52	+2	2	4	
	48	0	4	-	
15000	44	+4	13	-	
	44	+9	22	-	
	46	+13	25	10	
	58	+12	12	29	✓
16100	58	0	-4	20	
	53	-4	-8	3	Road 16135N
	52	-4	-7	0	
	47	-3	-8	-	
17000	40	-5	-5	-	

VLF - EM SURVEY

PROJECT LARA PAGE _____
 GRID _____ DATE Nov 10/82
 LINE 66 W OPERATOR CB

SOURCE STATION					
STATION	OUT PHASE	IN PHASE	FRASER FILTER		REMARKS
	47	+10			
	43	+7	17	5	
23000	45	+8	15	0	Tree
	42	+9	17	-	
	40	+14	23	-	
	42	+13	27	-	
			26	4	
24100	45	+13	27	-	
	43	+14	31	-	
	45	+17	33	5	
	51	+16	26	14	
25000	54	+10	19	5	
	52	+9	21	-	
	47	+12	26	-	
	45	+14	30	-	
26000	47	+16	23	0	
	50	+17	30	12	?
	53	+13	21	11	
	53	+8	19	-	
27000	54	+11	22	-	
	54	+11	22	0	
	54	+11	22	2	

VLF - EM SURVEY

PROJECT LARA PAGE _____
 GRID _____ DATE Nov 10/82
 LINE 66 W OPERATOR CB

SOURCE STATION					
STATION	OUT PHASE	IN PHASE	FRASER FILTER		REMARKS
17000	51	-6	-7	-	
	53	-1	-1	-	
27000	52	0	0	-	
	53	0	1	-	
24000	55	+1	1	1	
	58	0	0	6	
	58	0	-5	7	
	58	-5	-7		
35000	48	-2			

VLF - EM SURVEY

PROJECT LARA PAGE _____
 GRID _____ DATE Nov 9/82
 LINE 68 W OPERATOR CB

SOURCE STATION					
STATION	OUT PHASE	IN PHASE	FRASER FILTER		REMARKS
18000					
	57	+8			
19000	57	+7	17	-	Road 19050N
	52	+11	20	-	TR 165°
			20	1	
	57	+7	17	6	
	54	+10	20	-	
20000	56	+14	20	-	
	57	+16	25	7	
	67	+9	12	15	
	65	+4	10	-	
21000	61	+6	14	-	
	58	+8	17	-	
	59	+7	18	-	
	60	+9	13	0	
22000	59	+7	18	0	
	57	+9	18	-	
	57	+7	19	0	
	60	+10	18	2	buried
23000	58	+9			

VLF - EM SURVEY

PROJECT _____ PAGE _____
 GRID _____ DATE Nov 9/02
 LINE 68w OPERATOR G.P.

SOURCE STATION

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
	55	+11	21	1	
	58	+10	22	-	
27000	58	+12	22	4	
	65	+10	18	8	
	64	+8	14	8	
	65	+6	10		
30000	62	+4			

VLF - EM SURVEY

PROJECT LARA PAGE _____
 GRID _____ DATE Nov 13/02
 LINE 69w OPERATOR G.B.

SOURCE STATION

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
20000	54	+8	16		POWER LE NOISE
	60	+8	21	-	"
	55	+13	23	0	"
	62	+10	21	3	"
21000	58	+11	20	6	
	55	+9	15	6	
	54	+6	14	3	
	53	+8	12	-	
22000	53	+7	15	-	ROAD 22+07 W
	43	+8	17	-	
	45	+9	20	-	
	45	+11	23	-	
23000	47	+12	24	-	
	50	+12	24	1	
	48	+12	23	1	
	48	+11	23	-	
24000	47	+12	25	-	
	51	+13	24	-	
	51	+11	26	-	
	50	+15	31	-	
25000	48	+16	33	0	

VLF - EM SURVEY

PROJECT LARA PAGE _____
 GRID _____ DATE Nov 9/02
 LINE 70w OPERATOR G.P.

SOURCE STATION

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
21000					P. Line 76+80 W ROAD 17+05
	41	+9	19		
	41	+10	21	1	
	45	+11	18	8	
22000	47	+7	13	3	
	43	+6	15	-	
	40	+9	20	-	
	42	+11	25	-	
23000	43	+14	25	3	
	48	+11	22	2	
	48	+11	23	-	
	48	+12	24	0	ROAD 23+75 W TR 125°
24000	48	+12	23	0	
	47	+11	24	-	
	48	+13	26	-	
	47	+13	26	0	
25000	48	+13	26	0	
	43	+13	26	-	
	42	+13	29	-	
	42	+16	33	-	

VLF - EM SURVEY

PROJECT LARA PAGE _____
 GRID _____ DATE _____
 LINE 70w OPERATOR _____

SOURCE STATION

STATION	OUT OF PHASE	IN PHASE	FRASER FILTER		REMARKS
	62	+8	3	10	
	58	0	0	2	
32000	60	0	1	-	
	56	+1	3	-	
	52	+2	2	3	
	58	0	0	-	
33000	57	0	3	-	
	54	+3	9	-	
	53	+6	15	-	
	53	+9	21	-	
34000	59	+12	21	4	
	63	+9	17	2	
	64	+8	17	-	
	60	+11	26	-	
35000	53	+15	30	2	
	62	+15	24	10	
	65	+9	20	2	
	62	+11	23		
36000	62	+11			

VLF - EM SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE _____ OPERATOR _____

SOURCE STATION

STATION	OUT PHASE	IN PHASE	FRASER FILTER	REMARKS

VLF - EM SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE _____ OPERATOR _____

SOURCE STATION

STATION	OUT PHASE	IN PHASE	FRASER FILTER	REMARKS	
	47	+17	31	7	Indication above
	48	+18	26	6	✓
	48	+12	25	8	✓
2400m	45	+17	26	-	" 26 7 6 4"
	46	+17	26	2	
	50	+17	24	13	
	52	+11	18	21	
2500m	47	+12	3	12	
	45	+1	1	0	
	35	0	3	-	
	40	+3	7	-	
2800m	42	+6	11	-	
	38	+5	16	-	OUTLAP DENSE
	57	+11	23	-	
	42	+12	26	-	
2900m	42	+14	27	2	
	46	+13	24	8	
	48	+11	17	8	
	50	+8	16		CREG; Out RESOLVE
3000m	48	+8			

VLF - EM SURVEY

PROJECT _____ PAGE _____

GRID _____ DATE _____

LINE _____ OPERATOR _____

SOURCE STATION

STATION	OUT PHASE	IN PHASE	FRASER FILTER	REMARKS
	47	+18		
	47	+18	36	2
	48	+15	33	2
			34	-
2700m	50	+19	40	2
	55	+21	32	20
	66	+11	30	22
	69	+9	10	18
2800m	75	+1	2	6
	62	+1	4	-
	74	+3	5	-
	57	+2	5	-
2900m	57	+3	7	-
	57	+4	7	8
	57	+3	7	-
	52	+4	8	-
3000m	50	+4	9	-
	52	+5	9	0
	55	+4	9	-
	50	+5	12	-
	57	+7	14	-

VLF - EM SURVEY

PROJECT 6001 PAGE _____

GRID _____ DATE Nov 20

LINE 74W OPERATOR G.P.

SOURCE STATION

STATION	OUT PHASE	IN PHASE	FRASER FILTER	REMARKS
ZENON	48	+21		
	50	+18	33	6
2700m	53	+16	33	0
	55	+17	34	0
	59	+17	23	6
	63	+16	28	13
2800m	65	+12	20	14
	60	+2	14	11
	60	+4	9	11
	60	+3	8	9
2900m	60	0	0	2
	58	0	1	-
	60	+1	1	0
	55	0	1	-
3000m	58	+1	3	-
	57	+2	3	0
	58	+1	3	-
	56	+2	4	2
3100m	58	+2	1	8
	63	-1	-4	
3150m	61	-3		

Statement of Expenditures

A. LABOUR:

G. Belik, M. Sc. (Oct. 7 - 24, Nov. 3 - Dec. 4, 1982)
-50 days at \$250.00/day \$12,500.

B. Dawson, line-cutter, (Oct. 8 - Dec. 4, 1982)
-58 days at \$110.00/day 6,380.

R. Henderson, line-cutter, (Oct. 9 - Nov. 17, 1982)
-40 days at \$140.00/day 5,600

L. Novai, assistant (Oct. 29 - Nov. 1, 1982)
-3.5 days at \$80.00/day 280.

P. Nicholson, assistant, (Nov. 2 - 14, 1982)
-11.5 days at \$80.00/day 920.

R. Orchard, assistant, (Nov. 16-24, 1982)
-8.0 days at \$80.00/day 640.

W. Gruenwald, (Drafting)
-116 hours at \$20.00/hr. 2,320.

\$28,640.

B. TRUCK RENTAL:

2 vehicles - including gas, maintenance, insurance
and mileage; 4,707.24

C. FOOD AND ACCOMMODATION:

including Aberford & Phoenix Crews; 10,936.89

D. FIELD SUPPLIES:

1,005.80

Continued