

GEOPHYSICAL
ASSESSMENT REPORT

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORTS

DATE RECEIVED
AUG 14 1995

on the

L CLAIM GROUP
CLINTON AREA

KAMLOOPS AND CLINTON MINING DIVISIONS

by

MURRAY S. MORRISON, B.Sc.

CLAIMS: L 1-14, J 2-4 (17 units)

LOCATION: The L Claim Group is situated on Hart Ridge,
12 km southeast of Clinton, B.C.

Lat. 51°00'; Long. 121°30';

N.T.S.: 92-P-3W & 4E

92-I-13E & 14W

OWNER: M. S. Morrison

OPERATOR: M. S. Morrison

DATE STARTED: March 30, 1995

DATE COMPLETED: May 8, 1995

FILMED

GEOLOGICAL BRANCH
ASSESSMENT REPORT

Kelowna, B.C.

July 31, 1995

24,004

TABLE OF CONTENTS

	<u>PAGE</u>
Summary	1
Introduction	4
Location and Access	7
Physical Features and Climate	8
Claim Status	9
History	10
Regional Geology	12
Property Geology	13
VLF-EM Survey - 1995	15
Grid	15
Program	15
Results	16
Discussion	18
Conclusions and Recommendations	20
References	22
Appendix A Statement of Qualifications	24
Appendix B Statement of Expenditures	25

ILLUSTRATIONS

Figure 1	Location Map (British Columbia)	3
Figure 2	Claims and Access, L Property	6
Map L-95-1	VLF-EM Ground Survey	in pocket
	In-Phase and Field Strength Basic Data	
	L 9-14 Mineral Claims	
Map L-95-2	VLF-EM Ground Survey	in pocket
	Fraser Filtered Data	
	L 9-14 Mineral Claims	

SUMMARY

The L Claim Group, owned by the writer, is located on Hart Ridge, immediately north of Highway 97, 23 km northwest of Cache Creek, B.C. The property, comprised of 17 mineral claims, covers a succession of Premian Age Cache Creek Group metasediments that strike northwest and dip moderately to steeply southwest.

Immediately north of the highway a large (700 metre by 50 metre) interbed of mafic tuff has been selectively replaced by quartz, carbonate and mariposite. Locally, the replacement zone has been disrupted by faulting and mended with late quartz, ankerite and dolomite veinlets. The rock contains anomalous values of arsenic (up to 1155 parts per million) and antimony (up to 16 ppm).

Two kilometres northwest of the Highway Showing a drill hole drilled by Cordilleran Engineering on the Paw/Ranger mineral claims of Peyto Oil Ltd. in 1973 returned 15 grams of gold per ton from a 3 metre intersection of quartz-carbonate replaced rock. A program of follow-up drilling conducted by Cordilleran Engineering in 1974 failed to locate the gold-bearing quartz-carbonate unit in three widely-spaced drill holes drilled between the 1973 discovery hole and the Highway Showing.

A review of the 1973 and 74 data by the writer in 1985 suggested that the 1974 follow-up drill holes may have all been drilled too far to the east to intercept the gold-bearing unit. In February of 1985 a VLF-EM 16 survey was conducted by the writer in an attempt to trace graphitic argillite units of the Cache Creek Group across the drift covered J property in the vicinity of the previous drilling.

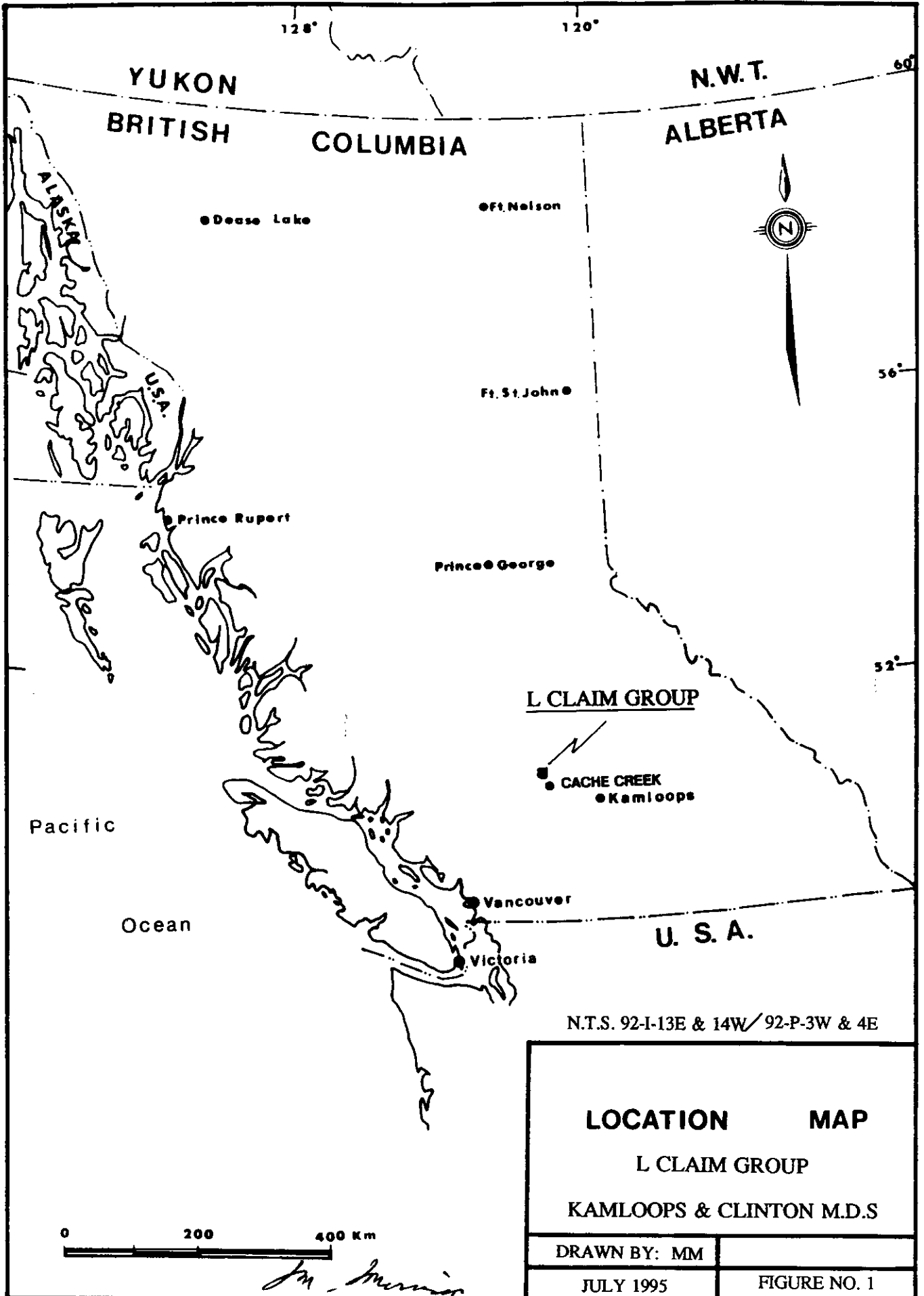
Later in 1985, Esso Minerals optioned the property to conduct a diamond drilling program in the immediate vicinity of the 1973 gold discovery (Percussion Drill Hole 73-7). A total of 186.5 metres were drilled in three vertical diamond drill holes and one of the drill holes, DDH85-1, of 68.3 metres length, "twinned" PDH73-7.

SUMMARY continued

The twinned drill hole, DDH85-1, returned 430 parts per billion gold over 2.4 metres from 44.8 to 47.2 metres (presumably the same zone intercepted in PDH 73-7). The core recoveries were not good (35%) for DDH 85-1 and no sludge was collected for assaying, and therefore, the test was not conclusive in this writer's opinion. The other two diamond drill holes, DDH85-2&3 were drilled 50 metres northwest and 50 metres southeast of DdH 85-1, respectively. These two drill holes returned negligible amounts of gold and Esso Minerals terminated their option.

The success of the 1985 VLF-EM survey in tracing graphitic argillite beds across the property lead to a decision to expand the VLF-EM survey further to the northwest this year.

Several conductors have been identified, and Conductor G has been interpreted to represent a graphitic argillite bed which lies immediately below the ankeritic gold zone discovered in 1973. A 700 metre segment of Conductor G located in the vicinity of PDHs 73-7 & 8 of the 1973 drilling program has been selected as a high priority exploration target and it is recommended that a series of low-cost Reverse Circulation Percussion Drill holes be drilled into Conductor G in an attempt to locate an extension of the 1973 ankeritic gold zone.



INTRODUCTION

This report, written for government assessment work requirements, discusses the results of a ground VLF-EM survey conducted over the L 9-14 mineral claims by the writer during March-May, 1995.

The L Claim Group is comprised of 17 contiguous 2-post mineral claims owned by the writer, M. Morrison, of Kelowna, B.C.

The property, located 23 km northwest of Cache Creek, B.C., covers a gossanous zone that is clearly visible on bluffs north of Highway #97, 1 1/2 km west of the Loon Lake road junction. The original mineral claims were staked in 1982 to cover the gossanous zone. Further mineral claims have been added to the north over the past 13 years, and the property now extends 4 km to the top of Hart Ridge.

The gossanous zone near the highway, called the Highway Showing throughout this report, is comprised of weathered ankerite. Anderite, quartz and mariposite replace highly disrupted tuffaceous beds of Permian Age Cache Creek Group rocks at this showing. Similarly replaced rocks were discovered below deep overburden 2 km to the northwest during a 1973 percussion drilling program conducted by Cordilleran Engineering. This second zone returned an impressive assay of 15 g/tonne gold over 3 metres during the 1973 program (Sanguinetti, 1974).

Cordilleran Engineering speculated that the two ankeritic zones might be connected and in 1974 they drilled three percussion drill holes between the two zones. The gold horizon was not found, however, and the property was allowed to lapse. (This writer believes that the 1974 drilling may have been conducted slightly too far to the east to intercept the ankeritic gold zone).

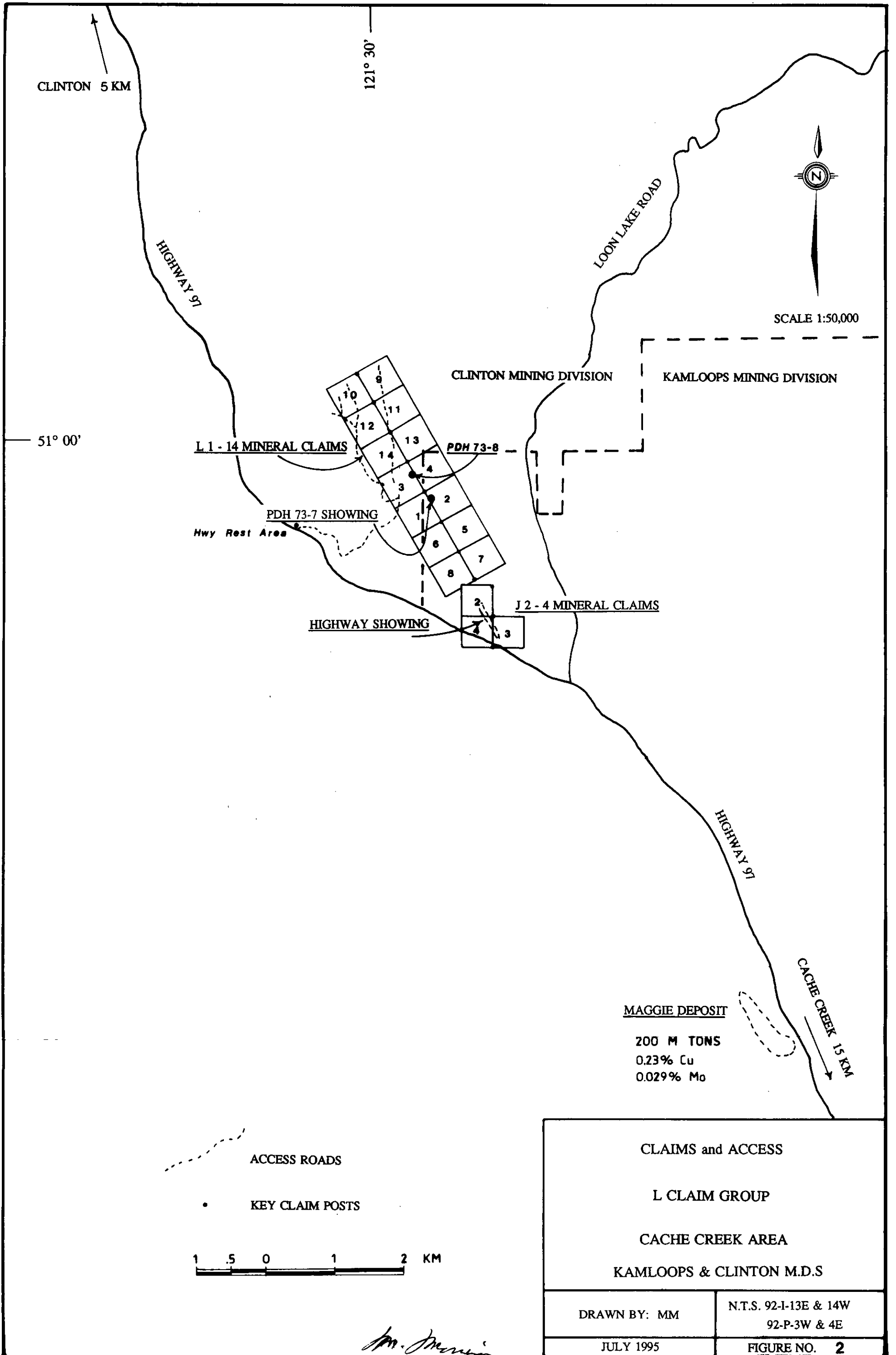
INTRODUCTION continued

In 1985, Esso Minerals "twinned" the successful 1973 percussion drill hole with a diamond drill hole. The 1985 hole returned only 430 parts per billion gold from the same interval, but core recovery was poor and no sludge was collected. The test was inconclusive in the writer's opinion.

There remains an intriguing gold target on the property that has not been fully explored, and the heavy cover of till (15 to 25 metres deep) has greatly hampered exploration efforts to date. A ground magnetometer survey over a portion of the property conducted by the writer in 1992 proved to be of little value (Morrison, 1992). However, a ground VLF-EM survey carried out by the writer in 1985 over the southern portion of the property did outline several moderately strong conductors. In 1985 it was interpreted that these conductors might represent graphitic argillite beds of the Cache Creek Group, and that the conductors were therefore useful in outlining the strike of the subcrop geology. It was considered that the conductors might also guide exploration efforts aimed at defining the strike direction of the ankeritic gold zone (Morrison, 1985).

The success of the 1985 VLF-EM survey prompted the decision to extend the survey on to the L 9-14 mineral claims this year. The new L mineral claims lie immediately northwest of the 1985 survey area.

The results of this year's VLF-EM survey are displayed on Maps L-95-1 and L-95-2 accompanying this report. Map L-95-1 shows the Dip Angle and Field Strength data measured during the survey, while Map L-95-2 represents the VLF-EM data in a Fraser Filtered contour form.



CLINTON 5 KM

121° 30'

HIGHWAY 97

LOON LAKE ROAD

SCALE 1:50,000

CLINTON MINING DIVISION

KAMLOOPS MINING DIVISION

51° 00'

L 1 - 14 MINERAL CLAIMS

PDH 73-8

PDH 73-7 SHOWING

Hwy Rest Area

HIGHWAY SHOWING

J 2 - 4 MINERAL CLAIMS

HIGHWAY 97

CACHE CREEK 15 KM

MAGGIE DEPOSIT

200 M TONS
0.23% Cu
0.029% Mo

ACCESS ROADS

KEY CLAIM POSTS

1 .5 0 1 2 KM

CLAIMS and ACCESS

L CLAIM GROUP

CACHE CREEK AREA

KAMLOOPS & CLINTON M.D.S

DRAWN BY: MM

N.T.S. 92-I-13E & 14W
92-P-3W & 4E

JULY 1995

FIGURE NO. 2

Mr. Morrison

LOCATION AND ACCESS

The L Claim Group lies immediately north of Highway 97, 23 km northwest of Cache Creek, or 15 km southeast of Clinton, B.C. (Lat. 51°00'; Long. 121°30'; N.T.S. Maps 92-I-13E & 14W and 92-P-3W & 4E).

Access to the L 1-14 mineral claims is via a dirt logging road which leaves Highway 97 at a Tourist Rest Area 3.8 km west of the Loon Lake road turn-off (please see Figure 2).

PHYSICAL FEATURES AND CLIMATE

The L Claim Group straddles the southern end of Hart Ridge - a spur of land that separates the Bonaparte River Valley on the east from the valley of Maiden Creek on the southwest.

The upland surface of Hart Ridge is covered with deep glacial drift and most of the rock exposures on the L Claim Group are restricted to the flanks of the ridge adjacent the two main valleys.

The L Claim Group lies near the northern end of the Cache Creek - Ashcroft desert. The sagebrush of the Bonaparte River Valley at 580 metres elevation gives way to a forest of Douglas fir along Highway 97 as it climbs away from the valley towards Clinton. The L property lying just north of the highway is forested with Douglas fir. (The mean elevation of the property is 900 metres above sea level).

The Douglas fir has been selectively logged from portions of the property. Elsewhere, a severe caterpillar infestation of several years ago has killed half of the forest. Some of the dead forest still stands, but much of it has fallen in recent years to rot on the forest floor.

The property receives approximately 40 cm of precipitation annually. Winter snow generally covers the property from early November until mid-March and can reach up to 70 cm in depth.

CLAIM STATUS

The L Claim Group is comprised of 17, 2-post mineral claims all staked and owned by the writer, M. Morrison of Kelowna, B.C. The Claim Group straddles the boundary of the Clinton and Kamloops Mining Divisions. Particulars of the 17 mineral claims are listed below:

<u>CLAIM NAME</u>	<u>UNITS</u>	<u>DATE OF RECORD</u>	<u>TENURE NUMBER</u>	<u>MINING DIVISION</u>	<u>EXPIRY* DATE</u>
J2	1	May 11/82	217044	Kamloops	May 11/96
J3	1	May 11/82	217045	Kamloops	May 11/96
J4	1	May 11/82	217046	Kamloops	May 11/96
L1	1	May 12/94	325709	Kamloops	May 12/96
L2	1	May 12/94	325710	Kamloops	May 12/96
L3	1	May 12/94	325711	Kamloops	May 12/96
L4	1	May 12/94	325712	Kamloops	May 12/96
L5	1	May 14/94	325713	Kamloops	May 14/96
L6	1	May 14/94	325714	Kamloops	May 14/96
L7	1	May 14/94	325715	Kamloops	May 14/96
L8	1	May 14/95	325716	Kamloops	May 14/96
L9	1	Mar 29/95	334809	Clinton	Mar 29/97
L10	1	Mar 29/95	334810	Clinton	Mar 29/97
L11	1	Mar 29/95	334811	Clinton	Mar 29/97
L12	1	Mar 29/95	334812	Clinton	Mar 29/97
L13	1	Mar 29/95	334813	Clinton	Mar 29/97
L14	1	Mar 29/95	334814	Clinton	Mar 29/97

Note: the new Expiry Date is based on the acceptance of this report for Assessment Work Credits.

HISTORY

The discovery of the Maggie Mine copper-molybdenum porphyry deposit by Bethlehem Copper Corporation in 1970, 15 km northwest of Cache Creek, B.C., sparked a staking rush that extended for several kilometers north and south of the discovery. The southern spur of Hart Ridge, now covered by the L Claim Group was covered during the Maggie staking rush by the Ranger and Paw mineral claims owned by Calgary-based Peyto Oil Ltd.

The large Ranger-Paw property, consisting of 159, 2-post mineral claims, was explored for its porphyry copper-molybdenum potential from 1970 until 1973 in the wake of the Maggie discovery. Exploration surveys included: geological mapping, geochemical soil sampling (for copper and molybdenum only), magnetometer surveying and induced polarization surveying carried out under the direction of Cordilleran Engineering and others. The geochemical results were negligible, but in 1973, fifteen percussion drill holes were drilled to test several of the induced polarization survey anomalies. No significant copper-molybdenum mineralization was discovered, but percussion drill hole 73-7 did intercept 3 metres of 15 grams of gold per tonne from 42.7 to 45.7 metres. The gold occurred with pyritic, quartz-carbonate material.

In 1974 the original 159 claim property was reduced to 17 claims (covering much of the same country that is now covered by the L Claim Group. Four widely separated percussion drill holes were drilled in an attempt to extend the gold zone discovered in PDH 73-7. No gold was found the property was allowed to lapse (Sanguinetti, 1974).

The ground remained open until 1982 when the J 1-4 mineral claims were staked by the writer. A prospecting survey accompanied by some litho-geochemical sampling was carried out on the J 1-4 mineral claims in 1983 (Morrison, 1983). In 1984 the J 5 mineral claim was added to the property.

HISTORY continued

A VLF-EM ground survey was conducted over the central portion of the J 5 mineral claim in early 1985 (Morrison, 1985) and later the same year Esso Minerals drilled 3 diamond drill holes, totalling 186.5 metres, in the vicinity of PDH-73-7 (with one of the diamond drill holes "twinning" the 1973 drill hole). The best intercept was only 430 parts per billion gold over 2.4 metres from the "twinned" drill hole. Core recoveries were poor and no sludge was collected, but the drill test was considered negative by Esso Minerals and they returned the property to the writer (Melnyk, 1985).

A ground magnetometer survey was conducted over the central portion of the J 5 mineral claim by the writer in 1992. The magnetic character of the property, however, proved to be weak.

The J 5 mineral claim subsequently lapsed and the L 1-14 mineral claims were staked by the writer in 1994 & 95 to cover some of the area previously covered by the J 5 mineral claim.

This year's VLF-EM ground survey on the L 9-14 mineral claims was conducted immediately northwest of the area covered in the 1985 survey.

REGIONAL GEOLOGY

The Geological Survey of Canada, 1"=4 mile scale geological maps, 1010A - Ashcroft Area and 1278A - Bonaparte Area by Duffell and McTaggart (1952) and Campbell and Tipper (1971), respectively, outline a 10 by 75 km belt of Permian Cache Creek Group rock which is centered at Cache Creek and extends south to Martel and north to Clinton. The sedimentary and volcanic rocks of the Cache Creek Group are highly faulted and generally disrupted throughout much of the belt, and they are locally intruded by small bodies of ultrabasic intrusions which are serpentinized.

The L Claim Group, located near the northern end of the belt, covers highly disrupted Cache Creek Group sediments and meta-volcanics 7 km northwest of the well-known Maggie copper-molybdenum deposit.

The Maggie deposit, with published reserves of 200 million Tons of 0.23% copper and 0.029% molybdenum, is associated with an elongate Tertiary intrusive of biotite-quartz monzonite porphyry which strikes 143 degrees and intrudes the Cache Creek Group rocks.

The quartz-carbonate replacement zone at the L Claim Group Highway Showing strikes 150 degrees; semi-conformable with the general shearing/bedding in the district.

PROPERTY GEOLOGY

The L Claim Group is believed to be underlain by a succession of Permian Cache Creek Group sedimentary rocks which include interbedded pyroclastic rocks. The general bedding appears to strike at 150 degrees and dip 60 to 70 degrees southwest although on the bluffs north of Highway 97 (on the J 1-4 mineral claims) the rocks are locally warped, drag-folded and generally dislocated by strong faulting and a wide range of bedding attitudes are displayed.

The dominant rock unit north of the highway is a black, thin-bedded argillite which is sometimes cherty and often graphitic. The argillite is highly foliated and erodes easily. Limestone is known to be interbedded with the argillites and at grid 26+50N, 17+65W (1992 survey) a mass of limestone 30 metres thick is exposed.

Dacitic to andesitic tuff is locally interbedded with the argillites also, and at the Highway Showing these tuffs have been selectively replaced with quartz, carbonate and mariposite.

The main carbonate replacement zone north of the highway was traced for 700 metres during a 1983 prospecting program (Morrison, 1983). The central part of the lense-shaped zone has been particularly disrupted by drag-folding and over a distance of a few metres the original rock is brecciated and entirely replaced with ankerite/dolomite (65%), quartz (30%) and mariposite (5%). A sample of this rock was found to contain 1155 parts per million arsenic in 1983.

Two kilometers northwest of the Highway Showing a second quartz-carbonate replacement zone was found within Cache Creek Group argillites at a depth of 42.7 metres in a percussion drill hole drilled in 1973. PDH 73-7, drilled by Cordilleran Engineering, returned 15 grams of gold per tonne from the 3 metre quartz-carbonate zone.

Attempts by Cordilleran Engineering to trace the PDH 73-7 gold-bearing replacement zone back towards the Highway Showing with a series of three widely spaced drill holes along Hart Ridge in 1974 failed. The 1974 drill program was hampered by overburden and this

PROPERTY GEOLOGY continued

writer believes that the follow-up drill holes were all drilled too far east of the projected strike of the replacement zone. The 1974 drill holes intercepted interbedded argillites and cherts of the Cache Creek Group.

Another drill hole of the 1973 program, PDH 73-8, located 435 meters northwest of PDH 73-7, returned an average of 23 parts per billion gold over the 76 metre bedrock interval of the drill hole. None of the 1974 follow-up drilling was conducted in the vicinity of PDH 73-8 by Cordilleran Engineering.

The thick cover of drift continues to impede exploration on the central portion of the property. Geology can be mapped on the flanks of Hart Ridge, but due to the high degree of faulting cannot with any certainty be projected to the centre of the property. As an example, a large outcrop of Limestone mapped at grid 26+50N, 17+65W has a 010/vertical foliation, which is at odds with other bedding/foliation measurements on the property.

An attempt to geophysically trace the Cache Creek Group geology across the drift covered J 5 mineral claim was made in 1985 by the writer (Morrison, 1985). A VLF-EM survey was carried out to trace conductive graphitic argillite units. The survey did identify several conductors crossing the property at 150 to 160 degrees - a direction that could represent the strike of the underlying Cache Creek Group rocks. The success of the 1985 survey prompted the decision to conduct this year's VLF-EM survey over the L 9-14 mineral claims located immediately northwest of the 1985 survey area.

Mapping on the bluffs north of Highway 97 reveals that late northeast and northwest transverse faults offset beds of the Cache Creek Group a few metres here and there across the property.

Badly broken, thin-bedded, sandstones and grits of Jurassic (?) Age are in fault contact with Cache Creek Group rocks on the western side of the L Claim Group.

VLF-EM SURVEY - 1995

Grid

The L9-14 mineral claim location line at 330 degrees azimuth was used as a Baseline for this year's survey. Seven grid lines at a spacing of 200 metres were then run perpendicular to the Baseline for 500 metres on either side of the Baseline to the boundaries of the mineral claims. Seven, shorter, intermediate grid lines were later established between the original grid lines over portions of the property considered to be the most interesting. In all, 10 km of grid line were flagged across the property and stations for the VLF-EM survey were marked at 25 metre intervals. A Topolite belt chain and a Silva Ranger compass were used to establish the grid lines in conjunction with the survey. The grid coordinates of the of the 1985 VLF-EM survey were used for this year's extended survey to the northwest.

Program

The VLF (very low frequency) exploration method makes use of high-powered electromagnetic transmissions broadcast by naval radio communication stations distributed around the world. These transmissions induce electric currents in conductive bodies. The induced current produces secondary magnetic fields which can be detected by measuring deviations in the normal VLF fields. VLF-EM instruments are designed to detect these deviations.

A Sabre, Model 27, VLF-EM instrument made by Scintrex was used to conduct the survey over 10 km of grid on the L property. The Seattle, Washington, VLF signal (25.8kHz) was received strongly from a direction of 175 degrees, azimuth, and was used for the entire survey.

In-Phase Tilt Angle readings were taken facing a direction of 355 degrees at each survey station. East tilts were recorded as positive (+) and west tilts were recorded as negative (-). Field Strength readings were also recorded at each survey station with the instrument facing 265 degrees, azimuth, perpendicular to the Signal Station.

VLF-EM SURVEY - 1995 continued**Program** continued

Field Strength readings were taken along the Baseline and all grid station readings were then corrected for diurnal variation using the Base Stations along the Baseline in much the same manner as is used for magnetometer surveys. The corrected Field Strength values have been contoured on Map L-95-1, which also displays the In-Phase Tilt Angles.

The In-Phase Tilt Angle values have been Fraser Filtered and contoured on Map L-95-2. The Fraser Filtering of VLF-EM data has had widespread use for several years, and a full explanation of the technique is given in the geophysical papers by Fraser, Peterson and Ronka that are listed with references at the end of this report.

The Fraser filtering technique may be briefly summarized as follows: by means of simple mathematical operations the tilt data can be transformed into contourable form, and the effects of noise and topography can be filtered from data. By averaging pairs of stations and taking differences between pairs separated by the appropriate distance, values may be plotted and contoured in plan that transform cross-overs into peaks, and a low-pass smoothing mathematical operator reduces noise.

Results

The contoured Fraser Filtered In-Phase data on Map L-95-2 outlines six conductors of moderately weak to moderate strength that generally strike between 145 and 180 degrees across the L9-14 mineral claims. Some of these conductors extend from conductors first defined during the 1985 survey to the southeast, and the letters F, G, K and L used to identify the conductors on maps made in 1985 have been retained on this year's map.

VLF-EM SURVEY - 1995 continued**Results** continued

The conductors of this year's survey are listed in the Table that follows:

<u>CONDUCTOR</u>	<u>LENGTH METRES</u>	<u>GRID FROM</u>	<u>TO</u>	<u>CONDUCTOR STRENGTH</u>	<u>FIELD STRENGTH CORRELATION</u>	<u>INTERPRETATION</u>
D	1100m	34N	43N	moderately weak & discontinuous	good (N.end only)	possible fault covered by deep till
M	700m	36N	43N	moderately weak	weak	possible fault
F	*1200m	22N	34N	moderately weak & discontinuous	weak	possibly graphitic argillite covered by deep till
G	*1500m	20N	35N	moderate to weak & discontinuous	good	possibly graphitic argillite
K	*3300m	8N	41N	moderate	good	possibly graphitic argillite
L	200m	30N	32N	moderate	good	possibly graphitic argillite

Note: these conductor lengths also include portions outlined during the 1985 VLF-EM survey.

The very deep till overlying much of the L 9-14 mineral claims is believed to be responsible for the weak Field Strength readings and the general discontinuity of the Fraser Filtered conductors. The overburden is estimated to range from 10 to 30 metres deep, and it is not known whether the conductors fade out below such a deep cover of till or whether there are true interruptions in the conductive material.

Conductors F, G, K and L, all sub-parallel to each other, and striking at 145 to 155 degrees are thought to represent graphitic argillite beds within the Cache Creek Group sequence of metasediments. The average 150 degree strike conforms with the regional strike of the Cache Creek Group.

VLF-EM SURVEY - 1995 continued**Results** continued

Conductor K is particularly strong and consistent and it crosses the L property for 3300 metres. If this conductor does in fact represent a single graphitic argillite unit within the Cache Creek Group then it would define the strike of the subcrop geology across the property.

Conductors F and G, likewise, would define the strike of the subcrop geology, although these conductors are best expressed in the 1985 survey data to the southeast and fade out to the northwest in the area covered by this year's survey.

Conductors D and M are moderately weak and discontinuous and heavy overburden is thought to mask these conductors. Both conductors strike 180°, at odds with the general 150° strike of most of the other conductors on the property, and these conductors may represent oblique fault structures.

Discussion

The real significance of VLF-EM conductors K, F and G is that they may define the strike of the subcrop geology below 10 metres of till, and in so doing, guide future exploration programs on the property.

The key exploration target on the L Claim Group is the ankeritic gold zone (15g/tonne gold over 3m) encountered in PDH 73-7 during Cordilleran Engineering's drilling program of 1973 (see History). In 1985, it was determined that the axis of VLF-EM Conductor G passes within 15 metres of PDH 73-7 and that the conductor may represent the graphitic argillite footwall of the ankeritic gold zone.

VLF-EM SURVEY - 1995 continued**Discussion** continued

It is also of interest to note that PDH 73-8 of the Cordilleran drilling program yielded elevated gold values of 23 parts per billion over the 76m bedrock interval of the hole, and that this drill hole lies within 60 metres of Conductor G. PDH 73-8 is located 435 metres northwest of PDH 73-7.

It is considered that Conductor G may be the key in finding and following the ankeritic gold zone. Conductor G shows up strongly on the 1985 VLF-EM survey maps from L24N to 30N. Conductor G was also identified on L31N at 17+90W during this year's VLF-EM survey. North of L31N the Conductor fades (below thick overburden?) and then reappears strongly 300 metres away on L35N at 16+20W.

The 700 metre segment of Conductor G, lying between L24N and L31N, in the vicinity of 1973 drill holes PDH-73-7 & 8 is the best exploration target on the property. It is proposed that a series of low-cost Reverse Circulation Percussion drill holes be drilled from southwest to northeast across Conductor G to at least the 60 metre depth to test for the ankeritic gold zone. Drilling should be commenced on L28N where PDH 73-8 demonstrated that the overburden was relatively shallow (15 metres).

The chip samples from the drilling project should be analyzed for gold, silver, mercury, antimony and arsenic.

CONCLUSIONS AND RECOMMENDATIONS

The 1995 VLF-EM ground survey conducted over the L 9-14 mineral claims was an extension from a successful VLF-EM survey first carried out in 1985. It was determined in 1985 that several VLF-EM conductors crossed the property in a direction conformable with that of the underlying Permian Age Cache Creek Group metasediments (i.e. 150 degrees). It was interpreted that these conductors could represent the northwestern projections of graphitic argillite beds that outcrop on bluffs near the southeastern end of the property.

One conductor in particular, Conductor G, was considered of significance, because it appeared to represent a graphitic argillite bed that occurs at the footwall of an ankeritic gold zone (15 g/tonne gold over 3 m) first discovered by cordilleran Engineering in percussion drill hole PDH 73-7 in 1973. It was recognized in 1985 that Conductor G might be used as a guide to trace the ankeritic gold zone across the property. However, limited diamond drilling by Esso Minerals in 1985 failed to find any significant gold (see History).

In this writer's opinion the 1985 drilling program was limited in scope and inconclusive, and the ankeritic gold zone is still a valid exploration target.

This year's VLF-EM survey confirmed the results of the 1985 survey and extended some of the stronger conductors, F, G and K, up to 1300 metres further, northwest.

Conductor G is still considered to represent a graphitic argillite bed that lies immediately below the ankeritic gold zone, and a 700 metre segment of Conductor G (L24N to 31N) in the vicinity of drill holes PDH 73-7 & 8 of the 1973 drilling program is considered a high priority exploration target on the property.

It is recommended that Conductor G be drilled with a series of inclined Reverse Circulation Percussion Drill holes from southwest to northeast to depths of at least 60 metres in an attempt to locate the ankeritic gold zone.

CONCLUSIONS AND RECOMMENDATIONS continued

The drill chips should be analyzed for gold, silver, mercury, antimony and arsenic.

The proposed target area is easily accessible.

July 31, 1995
Kelowna, B.C.


Murray Morrison, B.Sc.

REFERENCES

Campbell, R.B. and Tipper, H.W.

1971: Geology of Bonaparte Lake Map-Area, British Columbia, G.S.C. Memoir 363.

Duffell, S. and McTaggart, K.C.

1952: Ashcroft Map-Area, British Columbia, G.S.C. Memoir 262.

Melnyk, W.

1985: Diamond Drilling Report, J Property, Kamloops Mining Division.*

Miller, D.C.

1976: Maggie, Porphyry Deposits of the Canadian Cordillera, C.I.M. Special Volume 15, pp. 329-335.

Morrison, M.S.

1983: Prospecting Report on the J 1-4 Mineral Claims, Cache Creek Area, Kamloops Mining Division.*

1985: VLF-EM 16 Ground Survey, Assessment Report, J 1-5 Mineral Claims, Cache Creek Area, Kamloops Mining Division.*

1992: Geophysical (Ground Magnetometer Survey) Assessment Report, on the J Claim Group, Cache Creek Area, Kamloops Mining Division.*

Prendergast, J.B.

1972: Report on Geophysical Surveys, RANGER, PAW, SAM, GW Claims, Bonaparte Valley, Clinton and Kamloops Mining Division. Assessment Report #4026.*

REFERENCES continued

Sanguinetti, M.H.

1974: Summary Report of Exploration on Certain RANGER and PAW Mineral Claims, Maggie Mine Area, Clinton and Kamloops Mining Division. Assessment Report #5238.*

Smellie, D.W.

1971: Geophysical-Geochemical Report on the RANGER, PAW, SAM, GW Mineral Claims, Bonaparte Valley, Kamloops Mining Division. Assessment Report #3681.*

* Assessment Reports on file with the Ministry of Energy, Mines and Petroleum Resources of British Columbia.

G.S.C. = Geological Survey of Canada.

APPENDIX A**STATEMENT OF QUALIFICATIONS**

I, Murray Morrison, of the City of Kelowna, in the Province of British Columbia, do hereby state that:

1. I graduated from the University of British Columbia in 1969 with a B.Sc. Degree in Geology.
2. I have been working in all phases of mining exploration in Canada for the past twenty-five years.
3. During the past twenty-five years, I have intermittently held responsible positions as a geologist with various mineral exploration companies in Canada.
4. I have conducted several geological, geochemical, and geophysical surveys on mineral properties in Southern British Columbia during the past twenty-five years.
5. I conducted the VLF-EM survey on the L 9-14 mineral claims.
6. I own a 100% interest in the J 2-4 and L 1-14 mineral claims.

July 31, 1995
Kelowna, B.C.


Murray Morrison - B.Sc.

APPENDIX B**STATEMENT OF EXPENDITURES - ON THE L CLAIM GROUP**

Statement of Expenditures in connection with a VLF-EM Survey carried out on the L Claim Group, located 12 km southeast of Clinton, B.C. (N.T.S. Maps 92-P-3W, 4E and 92-I-13E & 14W) for the year 1995.

VLF-EM SURVEY (10 km)

M. Morrison, geologist	4 days @ \$250.00/day	\$ 1,000
Truck, 4 x 4 (including gasoline and insurance)	4 days @ \$75.00/day	300
Meals and Lodging	4 days @ \$70.00/day	280
Flagging and belt chain thread		20
VLF-EM instrument rental	4 days @ \$25.00/day	<u>100</u>
	Sub-total:	\$ 1,700

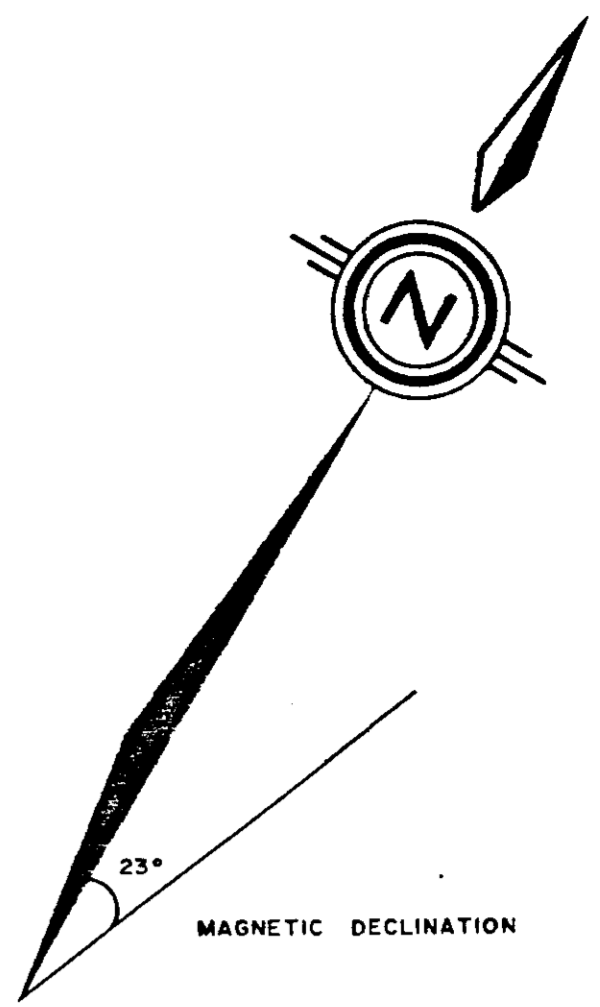
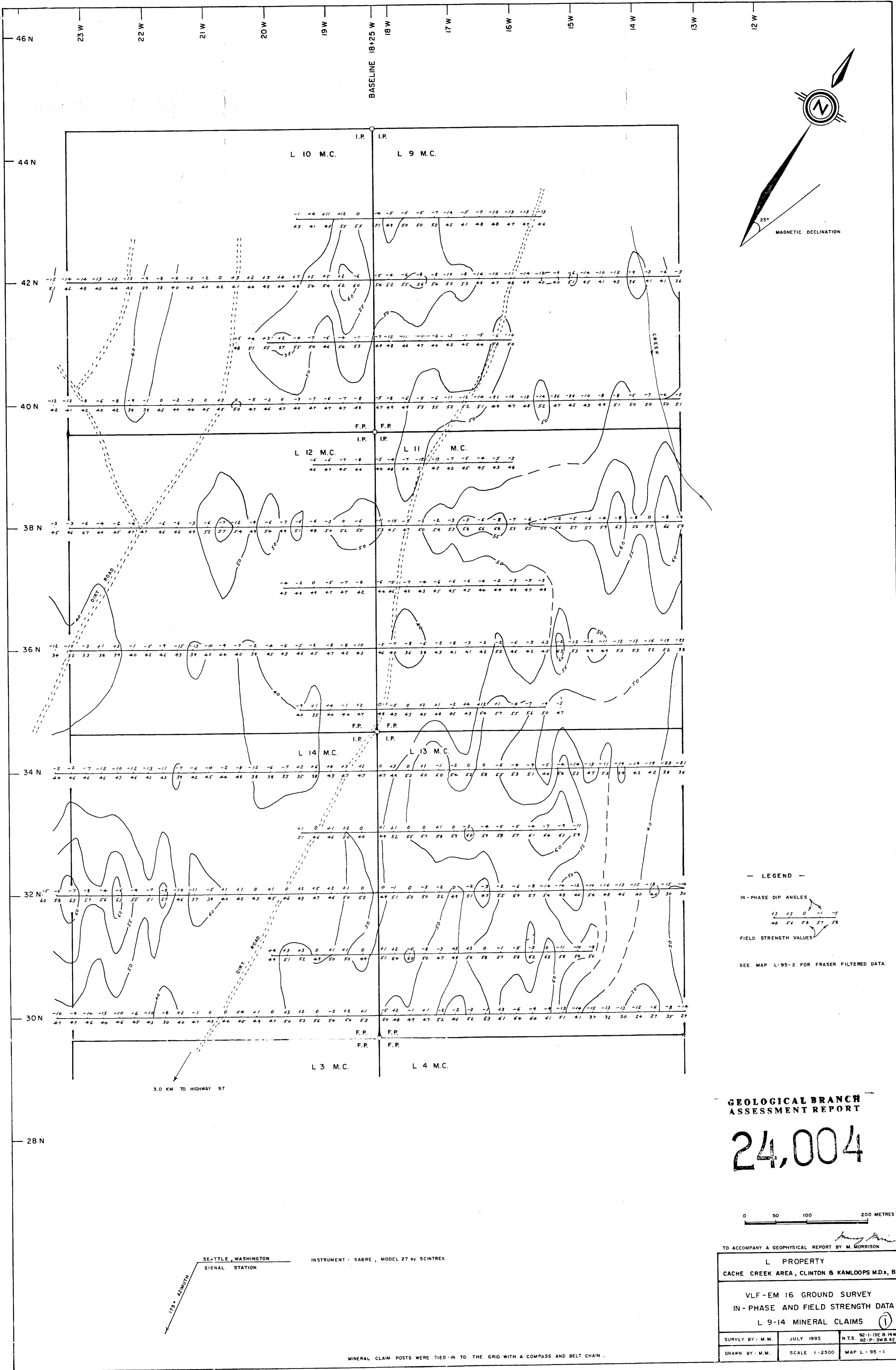
REPORT PREPARATION COSTS

M. Morrison, geologist (Fraser Filter calculations; plotting and contouring results; analyzing data and writing report)	2 days @ \$250.00/day	\$ 500
Drafting		53
Typing		140
Copying reports		<u>20</u>
	Sub-total:	\$ 713
	Grand Total:	\$ <u>2,413</u>

I hereby certify that the preceding statement is a true statement of monies expended in connection with the VLF-EM Survey carried out March 30 - May 8, 1995.

July 31, 1995
Kelowna, B.C.


Murray Morrison - Geologist



— LEGEND —

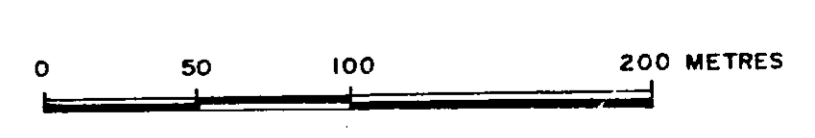
IN-PHASE DIP ANGLES

FIELD STRENGTH VALUES

SEE MAP L-95-2 FOR FRASER FILTERED DATA.

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

24,004



TO ACCOMPANY A GEOPHYSICAL REPORT BY M. MORRISON

M. Morrison

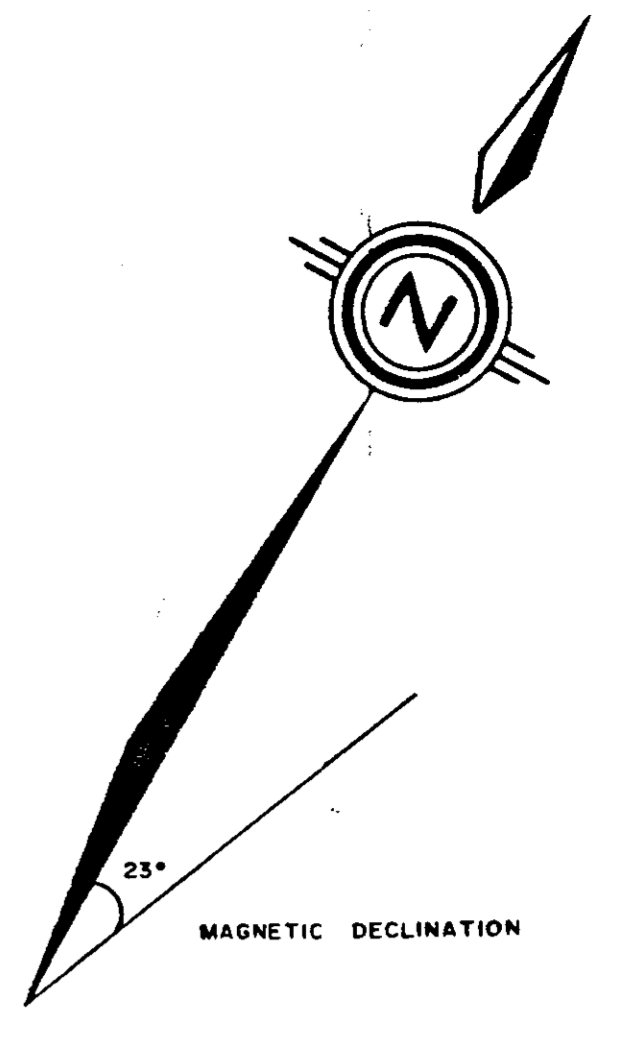
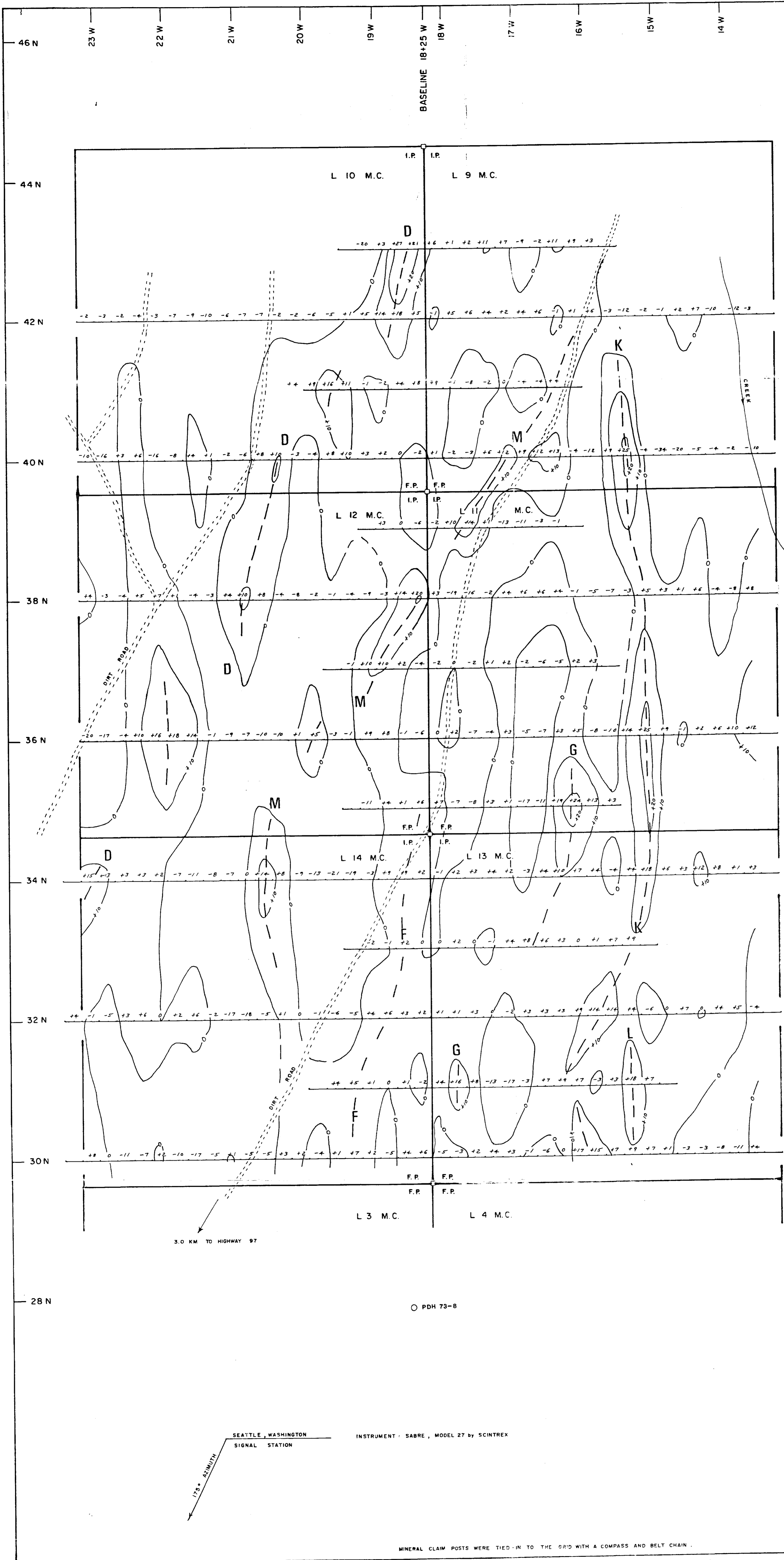
L PROPERTY CACHE CREEK AREA, CLINTON & KAMLOOPS M.D.s, BC		
VLF-EM 16 GROUND SURVEY IN-PHASE AND FIELD STRENGTH DATA L 9-14 MINERAL CLAIMS ①		
SURVEY BY: M.M.	JULY 1995	N.T.S. 92-1-15E & 14W 92-P-3WB.4E
DRAWN BY: M.M.	SCALE 1:2500	MAP L-95-1

MINERAL CLAIM POSTS WERE TIED-IN TO THE GRID WITH A COMPASS AND BELT CHAIN.

SEATTLE, WASHINGTON
SIGNAL STATION

INSTRUMENT: SABRE, MODEL 27 by SCINTREX

175° 30' 00" 175° 30' 00"



— LEGEND —

CONTOUR INTERVALS + 10%

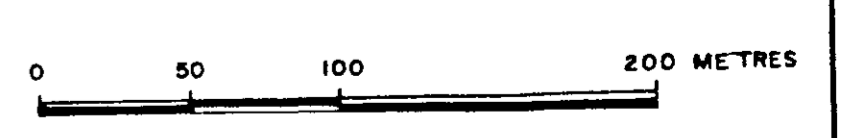
AXIS OF CONDUCTORS

M

SEE MAP L-95-1 FOR BASIC VLF-EM DATA.

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

24,004



TO ACCOMPANY A GEOPHYSICAL REPORT BY M. MORRISON

L PROPERTY CACHE CREEK AREA, CLINTON & KANLOOPS M.D.s, BC		
VLF-EM 16 GROUND SURVEY FRASER FILTERED DATA L 9-14 MINERAL CLAIMS (2)		
SURVEY BY: M.M.	JULY 1995	N.T.S. 92-1-13E B 14W 92-P-3W B 4E
DRAWN BY: M.M.	SCALE 1:2500	MAP L-95-2

MINERAL CLAIM POSTS WERE TIED IN TO THE GRID WITH A COMPASS AND BELT CHAIN.