

Searchlight Resources Inc.  
218-744 West Hastings Street, Vancouver, British Columbia, Canada, V6C 1A5  
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12/88

SUMMARY REPORT

LOG NO: 0217	RD.
ACTION:	
FILE NO:	

on the

**TOM PROPERTY**  
(TOM 1-3 CLAIMS)

KAMLOOPS MINING DIVISION  
BRITISH COLUMBIA

FILMED

Latitude: 050° 34' N  
Longitude: 121° 18' W

N.T.S. 92 I/11W

Owner

**PETER G. DASLER**  
4511 Pendlebury Road,  
Richmond, B.C., V7E 1E6

by

**PETER G. DASLER, M.Sc.**

and

**F. MARSHALL SMITH, P.Eng.**

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

16,963

DATE: December 22, 1987.

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## SUMMARY

The Tom Property is a significant epithermal precious metal style target transversed by the Trans-Canada highway, approximately 25 kilometres south of Cache creek in southern B.C.

The property has a long history as a gypsum occurrence, and is readily recognised from the highway because of the intense gossan formation. It was most recently considered as a massive sulphide style deposit by Cominco Ltd., who held the property from the mid 1970's until late 1986. The geophysical surveys from their work highlight the style of the epithermal alteration along a significant north-south trending fault zone. The present interpretation, is supported by the geophysical data, field observations, and microscope studies. It is believed that the vein gypsum is part of the zoning of the epithermal event.

Geochemical soil sampling in areas of shallow overburden or outcrop produced very large anomalies in copper, lead, zinc and mercury. The potential for gold mineralization has never been recorded against the property, however placer gold is known from the area. There is also speculation that one of the short adits on the property was constructed to investigate gold mineralization in quartz veins in the schist adjacent to the main zone of epithermal style alteration. Gold-bearing quartz veins were mined 10 kilometres to the south of the property, just north of Spences Bridge, and gold-moly mineralization was mined at the Martel Mine in Venables Valley 3 kilometres to the west.

This summary report utilizes the Cominco information, and that of previous land owners, to supplement the authors field surveys. The trenching and roadbuilding completed on the property in December 1987 was to allow drill targets to be accessed. The petrological study identified the alteration features of the deposit.

A work programme including a geophysical IP resistivity survey is recommended to pre-phase drilling of the recognised vein fault system. Stage 1 of this programme is budgeted at \$90,000.

## INTRODUCTION

The Tom property is situated on the west margin of the Quesnel Trough Structural Province in metamorphosed andesitic and rhyolitic rocks. The volcanoclastic sequence has been locally intruded by diorite, dacite and rhyolite dykes and plugs, and there is ample evidence of hydrothermal alteration in the surrounding rocks.

The claims are traversed by the Trans-Canada Highway, and access is easily achieved to all parts of the property from there, or via farm access tracks.

Gypsum mineralization on the property has been prospected since 1898, but was never developed, save for several short adits. In the late 1970's Cominco explored the potential of a Kuroko-type massive sulphide deposit as the source of the alteration halos, but after geophysical work and eight short percussion drill holes, the programme was discontinued.

In 1986, the property lapsed from Cominco's control, and was staked by the author, because of the potential for epithermal style gold mineralization.

### Location and Access

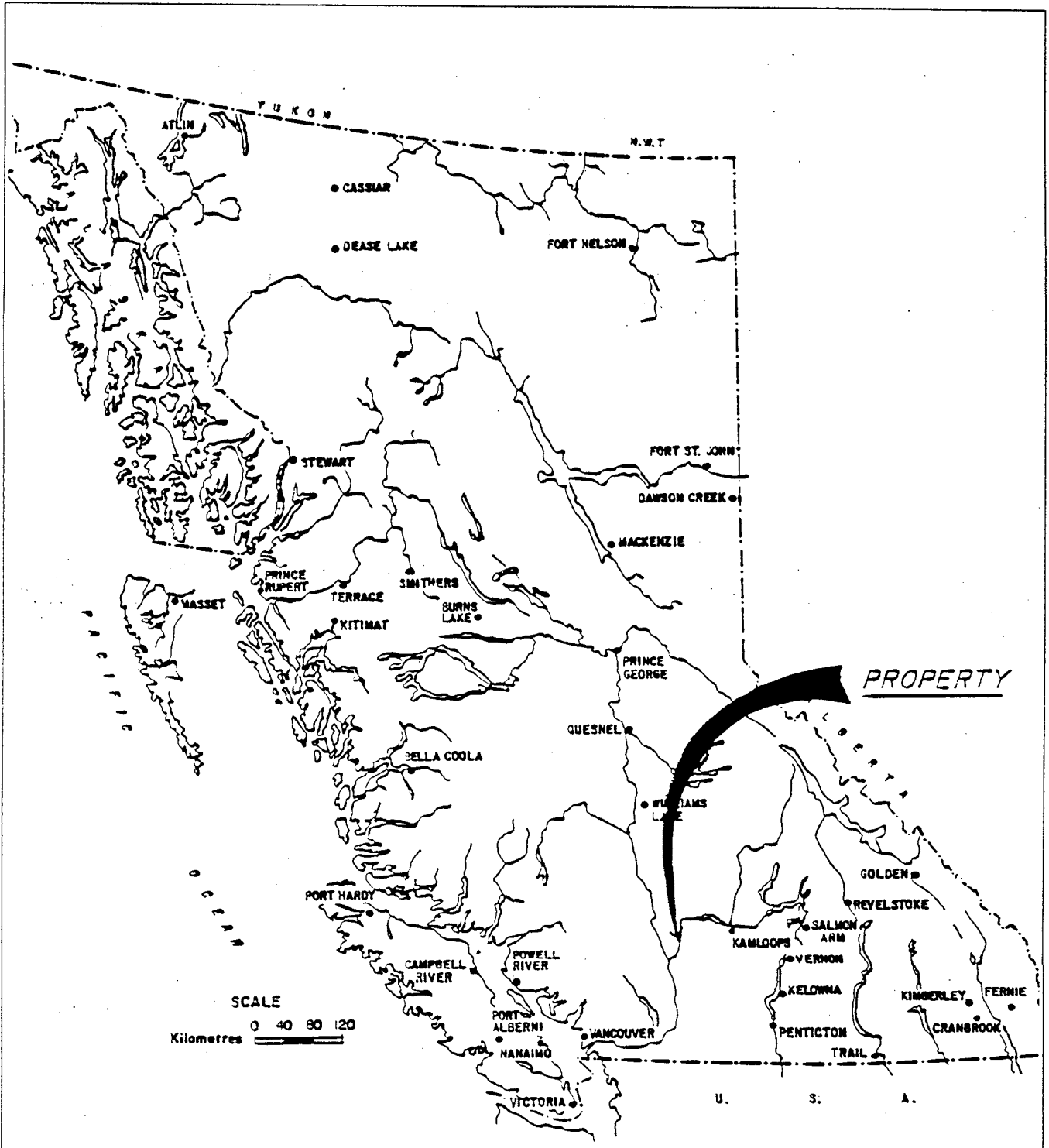
The property straddles the Trans-Canada highway approximately 317 kilometres east of Vancouver, and approximately half way between Spences Bridge and Cache Creek. The Highland Valley pumping building on the Thompson river is opposite the property, near the old railway station of Spatsum.

The main showings are visible from the highway, and can be accessed from a small dozer track about 150 metres long from the highway, or via farm tracks off the old Venables Valley road, which is about one kilometer north of the road showings.

### Physiography and Vegetation

The property lies between 300 and 600 metres above sea level, and from the west, where there is some moderate relief, the property levels off onto two flat river terraces. The highway climbs the interface of the high terrace and the present river valley flat.

Most of the claims are sagebrush and grass covered, with pine trees occurring sporadically. On the western side of the property there are significantly more pine trees, and sage brush is predominant in the east. There is scattered pasture land, under government lease, over most of the terrace area.



SCALE  
Kilometres 0 40 80 120

Searchlight Resources Inc	
<b>TOM PROPERTY</b>	
PROPERTY LOCATION	
Scale: as shown	Figure No 1

Rainfall is low, with precipitation mainly as light snow in the winter months. Arid grassland to desert conditions prevail.

### Property

The property is recorded in the Kamloops Mining District, British Columbia, and comprises 16 metric units and one two-post claim. The property was staked as noted below, due to the two periods of previous claim expiry.

Claim	Units	Record No	Anniversary Date
Tom 1	12	6863	11 Dec. 1987
Tom 2	4	6864	11 Dec. 1987
Tom 3	1, 2 post	6911	30 Jan. 1988

### History

About 1898, a prospector by the name of Munroe discovered the gypsum deposits and staked three claims over the main showings. He drove a small tunnel about 25 feet into the deposit and sunk a small winze at the end of it, in a deposit of extremely pure gypsum<sup>1</sup>. This gypsum was reported to have been used to chink the log cabins of the settlers, and the buildings used as waystations of the Cariboo stage lines.

In 1907, the claims were restaked and surveyed as the Hart, Flora, Marie, and Belle, but again these lapsed in 1912, after very little work was performed.

The claims subsequently were held from time to time, by various interested parties, but no real development has ever been attempted. A tunnel of about 100 feet was reported to have been excavated in the east bank of the south gossanous zone, above and east of the original workings of Monroe. This tunnel is reported to have cut several pure lenses of gypsum, but no development was attempted

A second tunnel was driven in the west wall of the north gossan, and this apparently was an attempt to intercept bedrock to check for molybdenum and silver values<sup>1</sup>. Later in 1973 three drill holes were completed to the north of the main showing, but the logs are not available.





All this exploration and prospecting appears to have been aimed at developing the gypsum mineralization into a mineable deposit. It was not until about 1974, when El Paso Mining and Milling Co., carried out geophysical mapping and soil geochemistry surveys, that gold and copper-lead-zinc sulphide mineralization appeared possible. (NB: The long adit to the south was postulated to have been in search of gold within quartz stringer veins<sup>2</sup>, but there is no record of their findings).

When Cominco acquired the ground in 1978, the property was considered to potentially host massive sulphide Kuroko style mineralization. They completed mapping of the property, and soil sampled the high terrace areas. A geophysical survey of IP resistivity and conductivity produced several anomalies coincident with the geochemical survey (Cu-Pb-Zn-Hg). Drilling of 1950 feet of percussion coring followed. One of these holes did not reach bedrock, the others intercepted pyritized metavolcanics, but no economic massive sulphide mineralization. Only the first hole was analyzed for gold content. These values only reached 20 ppb.

The main showing lapsed from Cominco's control in the following years, and the rest of the property expired in late 1986. The two-post claim overlying the main showing lapsed in early 1987, and was subsequently staked by the author.

The property is very similar to the "Silica" property of BP-Selco, immediately to the north. According to assessment reports from this property there was background gold mineralization within the volcanics of 10-200 ppb. In one reverse circulation drill hole, however, a 5 foot section of core reported as "consolidated overburden" assayed 0.11 opt gold. This assay is most significant, as the rock drilled most probably was alteration around a vein system. It was not recognised as such, because the drill targets were massive sulphide deposits.

## REGIONAL GEOLOGY

The property lies on the west margin of the Quesnel Trough Structural Province, in what is mapped as Paleozoic Cache Creek Group rocks (greenstone, chert, argillite, minimal limestone and quartzite, chlorite and mica schist),<sup>3</sup> map GSC, 1386A, Fraser River. In 1977, McKinnon of the BCDM, interpreted some of these these rocks as Triassic<sup>2</sup>.

To the southeast of the property the Guichon Creek batholith, of Lower Triassic age dominates the geological picture, but the mineralization associated with this intrusive would pre-date the epithermal event.

The Fraser Fault, of probable late Cretaceous-Tertiary age, lies 30 kilometres to the west of the property, and is most likely to have influenced the mineralization on the property.

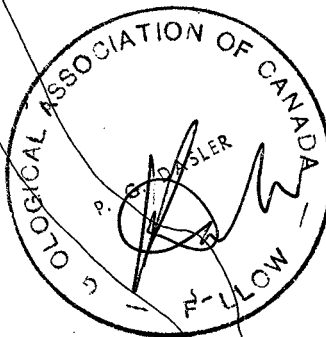
## PROPERTY GEOLOGY

Mapping in 1978, by Cominco, determined that the property covers a intercalated sequence of andesite and rhyolite pyroclastics with minor flows and intercalated sediments comprising chert and limestone. These units are northwest striking and have been folded into a syncline. They are locally intruded by diorite, dacite and rhyolite plugs. The re-interpretation based on the geophysical surveys indicates the "rhyolite", as previously mapped, consists in part, of altered mafic volcanics and other members of the Paleozoic/Triassic age suite of rocks. This altered area is most likely intimately related to a northerly striking vein/fault (associated with the Fraser Fault) with probable Eocene age epithermal alteration.

The outcrops of highly leached and altered (gypsum-bearing, pyritized, silicified and containing trace talc and barite), and weakly mineralized (trace sphalerite, galena and chalcopyrite) rhyolitic pyroclastics, were interpreted by Cominco to represent the gypsum-rich facies which commonly develops adjacent to base rich massive sulphide lenses in deposits of the Kuroko type. Typically in the Kuroko, the favourable rhyolite horizon is overlain by andesite flows and pyroclastics. Here on the property this sequence exists under overburden which at times reaches 30 metres in depth. The authors consider the gypsum facies to represent the outer shell of the *low pH* ("rhyolite" zone) alteration zone and not part of a bedded Kuroko zone.

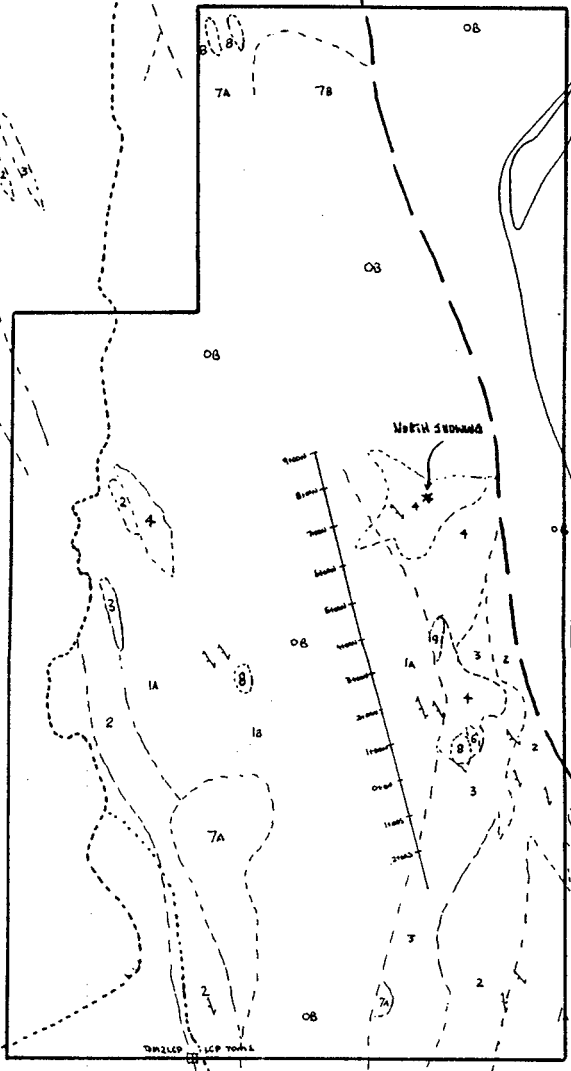
The geophysical survey completed by Cominco indicated, two weak to moderate, anomalies coincident with the subcrop of the "rhyolite" horizon on both limbs of the postulated syncline, and these were interpreted to be the pyrite-rich facies in the Kuroko halo. A magnetometer anomaly and several weak VLF-EM conductors were found to be roughly coincident with some of the IP anomalies. It should be noted, however, that a pyrite-rich zone commonly occurs as a shell around the principal bleached "rhyolite" zone in many epithermal alteration events.

There is very little outcrop on the property, in the vicinity of the main zones of alteration, near the highway. These zones, 300 metres apart, are exposed by the deep incisions of two small streams as they break over the terrace scarp. On the western portion of the property there is little evidence of similar clay and gypsum alteration; however, there is intense silicification in brecciated metasediments in the vicinity and north of the Tom 1 & 2 LCP (legal corner post). The linearity of the alteration zones, and the internal zonation, is most consistent with epithermal activity along a fault zone, and not from the periphery of a Kuroko deposit.



- 1 Andesite A-transtitf  
B-Flow
- 2 Dacite pyroclastics
- 3 Rhyolite pyroclastics
- 4 Altered zones - Fe oxides, quartz sandstone, gypsum  
Heard, silified, native sulphur, dolomite
- 6 Limestone
- 7 Diorite plugs
- 8 Dacite plugs, sills, dykes
- 9 Granite - plugs, sills, dykes

- TRANS-CANADA HIGHWAY
- - - Secondary roads, tracks
- - - Geological contacts





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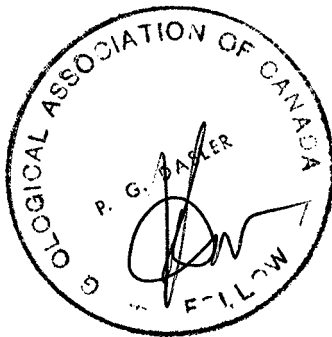
**TOM PROPERTY  
PROPERTY GEOLOGY**

Scale: as shown

Figure No 3

FP  
Tom3

-  green alt. volcs
-  green dyke
- FV. siliceous felsic volcanics
- Cl yellow-brown clays
- Wgs white gypsum silica
- 85457 Sample site.
- OB disturbed



OB

OB

OB

OB

FP  
Tom3

TRANSCANADA HWY.

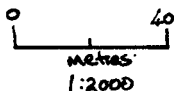
Searchlight Resources Inc

**TOM PROPERTY**  
TRENCHING, NORTH SHOWING

Scale: as shown

Figure No 4

--- dozer tracks  
- - - approx 15m contours



## GEOPHYSICAL SURVEY INTERPRETATION

The 1977 IP survey results assisted in the location of the drillholes by Cominco, but were not used to determine the detail of the subsurface, because, as noted by the geophysicist<sup>2</sup>, they only produced distorted pseudosections. This is partially due to the pole-dipole electrode array which was used at the time. This type of survey tends to orient anomalies in the direction of the survey traverse. The authors have had some experience with defining the location of the alteration events surrounding epithermal-style precious metal mineralization, where to help overcome this problem, dipole-dipole surveys are generally used.

For the Cominco results, and pseudo sections, it is obvious to the authors that the mineralizing event defined is that of epithermal alteration adjacent to a moderately steeply dipping (eastwards) vein/fault system. The pyrite alteration halo in the hangingwall of the vein is apparent, as well as the silica fill zone.

## MINERALIZATION

The geochemical soil surveys indicated anomalous lead, zinc, copper and mercury in the vicinity of the main showing, and at the southern showing outcrops. The values obtained were at times well above the anomalous threshold, e.g. 1750 ppm Zn against threshold of 150 ppm, and 2260 ppm Pb against threshold 4 ppm. Values away from these zones had occasional spot anomalies, but otherwise were low. This is to be expected with the thick overburden on the property.

Systematic sampling of the outcrop at the northern gossan zone, has now been completed for gold content, but no significant values were obtained. The clay alteration restricted the first phase of sampling, because there were numerous slumps and debris slides. The trenching and cleanup programme in December allowed better sampling and mapping, but no central veining was discovered. The alteration is considerably more intense on the western side of the northern gossan, but there is still limited outcrop in this area.

It is postulated by the authors that there is quartz veining in the central fracture fill of this large epithermal style mineralization event. There will most likely be several vein zones. At this stage, the southern alteration zone may either be a separate vein system, or be the continuation of the main zone. The geophysical survey indicates that the two zones are continuous.

## PETROLOGICAL STUDY

A suite of rocks showing typical epithermal clay alteration and silicification was forwarded for thin section study.

At the time of sampling the silicified formation was thought to be part of a vein. There was evidence of quartz crystal growth and open cavity fill with some minor sulphides. This rock has now been identified as extensively altered and recrystallized felsic volcanic.

All of the rocks submitted were described as being extensively altered by acid-sulphate solutions. (See report in Appendix). The least altered rock appears to be a series of later green dykes crossing the alteration, see fig,4.

This acid sulphate alteration confirms the epithermal alteration pattern within the deposit. The linear style, and the clay/ pyrite zonation of the alteration, implies that the present exposures are at the top of an epithermal vein system. At depth we should progress through a precious metals zone, and then into the massive sulphide zones. These will be the targets of the proposed drilling.

## CONCLUSIONS

1.0 The similarity of the alteration on the Tom claims to that of a typical epithermal precious metal vein system, was apparently not appreciated during the early exploration of the property, and hence gold mineralization was rarely tested for.

2.0 The geophysical survey completed by Cominco has not clearly defined the alteration system, because of the style of the survey. It does, however, show alteration around a vein/fault system.

3.0 With present knowledge, the geophysical survey can be reinterpreted to show the alteration halo adjacent to a typical epithermal vein deposit. A dipole-dipole geophysical survey would provide better definition of this alteration.

4.0 The epithermal event which caused the alteration should be investigated for precious metal mineralization. Gold mineralization is shown to be present in trace values in the alteration halo therefore the primary target is the downward extension of the near surface vein zone. Gold values are known within altered rocks to the north of the property.

## RECOMMENDATIONS

1.0 Map and surface sample the present outcrops, and use an excavator or small dozer to provide new outcrop for sampling in the vicinity of the central vein zone.

2.0 Conduct a dipole-dipole resistivity survey across the trace of the alteration zones to determine drill targets.

3.0 Drill test the depth extension of the quartz vein zone.

## BUDGET

The following is a budget for the project to carry out the programmes described in this report.

## Phase I

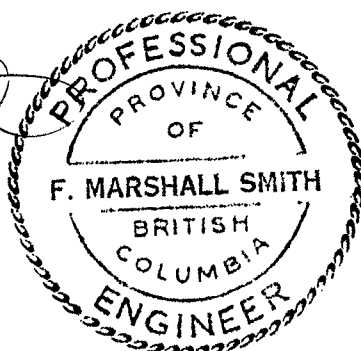
Geophysical Survey-----	\$15,000
Assays-----	\$2,500
Trenching-----	\$15,000
Drilling-----	\$40,000
Room and Board-----	\$2,500
Travel-----	\$2,000
Salaries-----	\$7,000
Support and Supervision-----	\$2,500
Sub Total-----	\$86,500
Contingencies-----	\$3,500
Total Phase I-----	\$90,000

The following is the expected Phase II budget which will be carried out if the results of the first phase as detailed above results in the definition of significant mineralization on the property.

Geophysical /Geochemical Survey-----	\$15,000
Geology-----	\$10,000
Assays-----	\$10,000
Trenching-----	\$15,000
Room and Board-----	\$5,000
Travel-----	\$2,500
Salaries-----	\$15,000
Support and Supervision-----	\$4,000
Drilling-----	\$30,000
Total-----	\$106,500
Contingencies-----	\$3,500
Total Phase II-----	\$110,000
Total Phase I & II-----	\$200,000

*F. Marshall Smith*

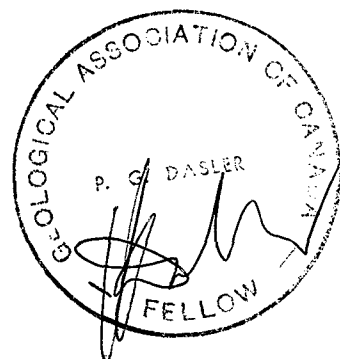
F. Marshall Smith, P.Eng.  
December 22, 1987.





## SUMMARY OF EXPLORATION COSTS (1987)

Field Personnel-----	
P. Dasler MSc 1 day @ \$160.00	
S Coombes BSc .1 day @ \$125	
T Nielsen 1.5 hr @ \$15 -----	\$195.00
Food & Accomodation	
Meals and 1 Night-----	\$53.58
Contract Wages	
P Dasler MSc 2 days @ \$250 plus WCB -----	\$542.33
Vehicles	
4X4-----	\$394.40
Equipment & Supplies	
Misc field supplies -----	\$20.18
Assays	
7 ICP plus gold-----	\$115.50
2 ICP plus 4 gold geochem-----	\$52.50
1 gold geochem -----	\$11.50
Contractors	
Copper Valley Excavators -----	\$455.00
Report Preparation	
P Dasler 3.35 Days @ \$225 -----	\$653.75
Office Overheads	
WCB, Photocopies, phone-----	\$42.36
Mineralogical Study	
Vancouver Petrographics -----	\$285.75
<b>TOTAL EXPENSES -----</b>	<b>\$2,972.49</b>



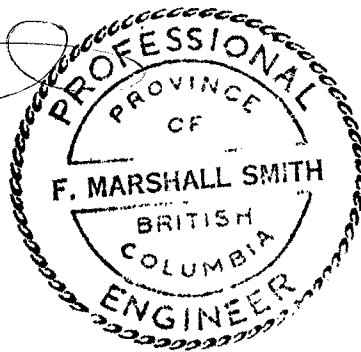
## CERTIFICATE

I, F. Marshall Smith, do hereby certify that:

1. I am a consulting geologist and geochemist with offices at 218-744 West Hastings Street, Vancouver, British Columbia.
2. I am a graduate at the University of Toronto with a degree of B.Sc., Honors Geology.
3. I am a member in good standing of the Association of Professional Engineers of the Province of British Columbia.
4. I have practiced my profession continuously since 1967.
5. This report is based on reports by Professional Engineers and others working for the previous owners and operators of the property, and field work by P.G. Dasler.
6. I have no interest in the property or of the companies with contiguous property to the TOM Project claims, but have assisted Mr. Peter Dasler to finance the staking of the property.



F. Marshall Smith, P.Eng.  
December 22, 1987.



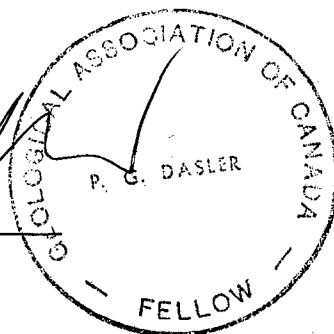
## CERTIFICATE

I, Peter G. Dasler, do hereby certify that:

1. I am a geologist for Searchlight Resources Inc. with offices at 218-744 West Hastings Street, Vancouver, British Columbia.
2. I am a graduate at the University of Canterbury, Christchurch, New Zealand, with a degree of M.Sc., Geology.
3. I am a Fellow of the Geological Association of Canada, an Associate Member in good standing of the Australasian Institute of Mining and Metallurgy, and a Member of the Geological Society of New Zealand.
4. I have practiced my profession continuously since 1975.
5. This report is based on information received from old exploration records, the writers personal field work, and reports by Professional Engineers and others working for the previous owners and operators of the property.
6. I own the TOM Project claims.



Peter G. Dasler, M.Sc.  
December 22, 1987



**BIBLIOGRAPHY**

1. D. Wilson (1978): BCDM Assessment report 6483
- 2 Cominco (1978): BCDM Assessment Report 8263.
- 3 Rodderick, J.A. et al (1976): Geological Survey Of Canada, Map 1386A, Fraser River.

**APPENDIX 1**

Petrological report

Assay certificates



# Vancouver Petrographics Ltd.

JAMES VINNELL, Manager  
JOHN G. PAYNE, Ph. D. Geologist

P.O. BOX 39  
8887 NASH STREET  
FORT LANGLEY, B.C.  
VOX 1J0

PHONE (604) 888-1323

Invoice # 6924  
Nov. 15, 1987

Report for: Peter Dasler  
Searchlight Resources Inc.  
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Vancouver, B.C.  
V6C 1A5

## Samples:

Five (5) samples numbered 54251, 54252, 54254, 54255 and 54256 for preparation as thin sections and for petrographic description.

## Summary:

The samples are divisible into two groups. Samples 54251, -4, -5 and -6 are similar to one another and were probably felsic igneous rocks (either extrusive or hypabyssal intrusive). They contain remnant quartz phenocrysts set in a highly altered, aphanitic to cryptocrystalline, quartzose groundmass. All consist of varying proportions of quartz, sericite, alunite +/- jarosite and various opaque materials (hematite and limonite). None contains true vein quartz though some of the quartz in the groundmass must be secondary and due to the breakdown of feldspar by acid-sulphate solutions. Thin veinlets present are filled by sericite and alunite.

Sample 54252 is different from the others in that it appears to have been more mafic in composition. It contains epidote - calcite patches which may be pseudomorphs after mafic minerals. It also contains significant chlorite. It differs from the other samples in containing relict plagioclase in the groundmass and does not contain alunite. For this reason, it may not have been subjected to the acid-sulphate alteration that affected the other four samples.

Individual petrographic descriptions are attached.

D.W.A. McMullin M.Sc.

Sample #: 54251

Altered felsite

#### ESTIMATED MODE

<u>Mineral</u>	<u>%</u>
Quartz	60
Sericite	30
Hematite	4
Alunite	4
<u>Limonite</u>	<u>2</u>

The hand sample shows rounded quartz 'eyes' (up to 5.0mm) set in an altered, red to greenish, aphanitic groundmass. Weathered surfaces are coated in hematite. Cracks appear to have limonite in them.

In thin section, the quartz 'eyes' are recognisable as phenocrysts set in an aphanitic groundmass. These phenocrysts reach 5.0mm across and are rounded and anhedral. The rounded nature may be due to magmatic resorption. Several of the phenocrysts are fractured and show microcrystalline, fibrous quartz growing in the fractures. Fibres are generally perpendicular to the walls of the fractures but do not show any preferred orientation in the sample as a whole. Several of the phenocrysts show undulose extinction and sub-grain development.

Sericite appears to pseudomorph a second phenocryst phase, possibly feldspar. The original phenocrysts were subhedral laths up to 2.0mm long and constituted about 5% of the rock. Sericite is also prominent in the groundmass. It is commonly associated with cryptocrystalline quartz and probably replaces groundmass feldspar. Some sericite, associated with limonite, hematite and quartz in diffuse patches up to 2.0mm, is considered to be an alteration product of a mafic mineral, biotite perhaps.

Hematite is present in diffuse patches and in fractures. In the diffuse patches, it is present as pseudomorphs after small (0.4mm), euhedral, six-sided grains, possibly pyrite. These pseudomorphs are commonly surrounded by alunite in the groundmass. Hematite is also present as amorphous dustings in the groundmass. Hematite and limonite are present as thin films in fractures.

Alunite is present as euhedral cubes up to 0.1mm across, usually associated with limonite near fractures. It is also present as anhedral grains of similar size near the hematite pseudomorphs (after pyrite).

The rock is of felsic, igneous (either volcanic or high level intrusive) origin. It has been extensively altered by acid-sulphate solutions.

Sample #: 54252

Altered intermediate volcanic

### ESTIMATED MODE

<u>Mineral</u>	<u>%</u>
Quartz	45
Sericite	18
Plagioclase(?)	15
Epidote	12
Chlorite	5
Calcite	5
Hematite	trace
<u>Leucoxene</u>	<u>trace</u>

In hand sample the rock is mid-green and fine grained. The etched chip shows pistachio-green, subhedral patches up to 5.0mm set in the finer grained groundmass.

In thin section the rock is seen to be extensively altered. It consists of epidote - calcite patches set in a quartz - sericite - plagioclase groundmass of variable grain size.

Subhedral epidote grains and anhedral calcite grains up to 0.5mm occur as rounded patches up to 3.0mm across. There is no indication of the original shape of these patches but they may have been mafic phenocrysts, possibly pyroxene.

Quartz appears to make up the bulk of the rock in the groundmass. The groundmass consists of quartz, chlorite, sericite and relict plagioclase and it shows a patchy variation in grain size. Some patches, up to 1.0mm, are amorphous and appear to consist mostly of sericite. These patches vary from rounded and coherent to diffuse and wispy. They may be altered feldspar phenocrysts. Coarser grained (0.1mm) patches of the groundmass are quartz rich and appear to contain some highly altered plagioclase. Chlorite is evenly scattered throughout the groundmass as tiny (<0.01mm) grains. It also occurs in diffuse concentrations. Some chlorite is associated with epidote and calcite (after pyroxene?), some is associated with sericite (after biotite?).

Trace amounts of hematite and leucoxene are scattered throughout as dustings, usually associated with chlorite epidote and carbonate and probably result from the breakdown of mafic minerals.

The patchy areas in the groundmass, described above, are discontinuous and wispy probably due to deformation. One side of the thin section is more sericite rich and shows a crude foliation. Very thin (0.1mm), anastomosing domains, rich in sericite, chlorite, hematite and leucoxene may be the result of pressure solution.

The rock is highly altered but its overall aspect implies an igneous origin. It may have been an extrusive of felsic to intermediate composition.



Sample #: 54254

Altered felsite

ESTIMATED MODE

<u>Mineral</u>	<u>%</u>
Quartz	70
Alunite	28
Jarosite	1
Sericite	1

In hand sample the rock is creamy coloured and aphanitic. Some patches and veinlets are white and soft.

In thin section the rock is seen to consist almost entirely of quartz and alunite.

Quartz is present as sparse, small (1.0mm), rounded phenocrysts set in a groundmass showing patchy variation in grain size. The phenocrysts show both magmatic resorption and overgrowth features. The groundmass grain size varies from cryptocrystalline to fine grained (0.2mm). The cryptocrystalline quartz may be secondary in origin.

Alunite is present as subhedral laths up to 1.0mm in veinlets and discontinuous patches. It is also present as poikiloblastic, anhedral grains up to 0.1mm in the groundmass.

Jarosite is very fine grained (0.01mm) and occurs in small rounded or subrounded patches up to 0.5mm across usually associated with alunite. One accumulation of jarosite is a rhombohedral pseudomorph, possibly after an opaque mineral.

Sericite is present in a few sparse patches intergrown with alunite (after feldspar).

The presence of quartz phenocrysts indicates a felsic origin (either volcanic or hypabyssal). It has been extensively altered by acid-sulphate solutions.

Sample #: 54255

Altered felsite

ESTIMATED MODE

<u>Mineral</u>	<u>%</u>
Quartz	50
Alunite	50
Sericite	trace
Hematite	trace
Jarosite	trace

In hand sample the rock is creamy coloured and aphanitic. It contains some honey-coloured veinlets and discontinuous wispy patches.

In thin section the rock is seen to consist of quartz and alunite. Rounded, anhedral quartz phenocrysts up to 0.3mm are set in a highly altered, fine grained, quartzose groundmass. These show magmatic resorption and outgrowth features. The thin (0.1mm) outgrowths are rich in sericite inclusions.

The groundmass is highly altered and shows variable grain size. Cryptocrystalline material appears to be mostly quartz, coarser grained (0.1mm) material is both quartz and alunite.

Discontinuous patches up to 1.0cm long consist of subhedral laths (0.5mm) of alunite. Alunite is also scattered throughout the altered groundmass as small (0.1mm), anhedral grains.

Trace amounts of sericite are scattered throughout the sample as tiny (<0.01mm) grains in the groundmass.

Trace amounts of very fine grained (0.01mm) jarosite are scattered throughout, usually associated with alunite.

Hematite is present as thin intergranular films in some patches.

The quartz 'eyes' indicate a felsic igneous origin. The rock has been subjected to acid-sulphate alteration.

Sample #: 54256

Altered felsite

ESTIMATED MODE

<u>Mineral</u>	<u>%</u>
Quartz	50
Sericite	30
Alunite	20
Jarosite	trace

The hand sample shows quartz 'eyes' set in a pale grey aphanitic groundmass. The rock is randomly cut by thin veinlets of soft white micaceous material.

In thin section the rock is seen to contain quartz phenocrysts, up to 3.0mm, set in a cryptocrystalline, quartzose groundmass. This is cut by thin veinlets of sericite, muscovite and alunite and contains discontinuous patches of alunite.

Quartz phenocrysts are rounded and anhedral and show evidence of magmatic resorption and later outgrowth. Quartz in the groundmass is microcrystalline to cryptocrystalline and much is probably secondary in origin.

Alunite is present in veinlets up to 1.0mm across, either on its own or associated with sericite and muscovite. Subhedral grains up to 0.4mm are also present in discontinuous patches up to 2.0mm. These patches may be altered feldspar phenocrysts. Small (0.1mm), anhedral, alunite grains occur in the groundmass.

Amorphous sericite and coarser grained (0.5mm) muscovite are concentrated in wispy veinlets which cross-cut the sample. Some veinlets are almost pure mica, others contain associated alunite.

Trace amounts of very fine grained (0.01mm) jarosite occur with alunite either in veins or patches.

The rock is probably of felsic igneous origin and has been subjected to acid-sulphate alteration.



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VANCOUVER, B.C.  
V6C 1A5

A8725685

Comments: ATTN: P. DASLER

## CERTIFICATE A8725685

SEARCHLIGHT RESOURCES INC.

PROJECT : TOM

P.O.# : NONE

Samples submitted to our lab in Vancouver, BC.

This report was printed on 13-NOV-87.

### SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	7	Rock & core: Ring
238	7	ICP: Aqua regia digestion

#### \* NOTE 1:

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.

### ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
100	7	Au ppb: Fuse 10 g sample	FA-AAS	5	10000
921	7	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
922	7	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	200
923	7	As ppm: 32 element, soil & rock	ICP-AES	5	10000
924	7	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
925	7	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
926	7	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
927	7	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
928	7	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
929	7	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
930	7	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
931	7	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
932	7	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
933	7	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
951	7	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
934	7	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
935	7	La ppm: 32 element, soil & rock	ICP-AES	10	10000
936	7	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
937	7	Mn ppm: 32 element, soil & rock	ICP-AES	1	10000
938	7	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
939	7	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
940	7	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
941	7	P ppm: 32 element, soil & rock	ICP-AES	10	10000
942	7	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
943	7	Sb ppm: 32 element, soil & rock	ICP-AES	5	10000
952	7	Se ppm: 32 element, soil & rock	ICP-AES	10	10000
944	7	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
945	7	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
946	7	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
947	7	U ppm: 32 element, soil & rock	ICP-AES	10	10000
948	7	V ppm: 32 element, soil & rock	ICP-AES	1	10000
949	7	W ppm: 32 element, soil & rock	ICP-AES	5	10000
950	7	Zn ppm: 32 element, soil & rock	ICP-AES	1	10000



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Project : TOM

Comments: ATTN: P. DASLER

Page # : 1-A  
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Date : 13-NOV-87  
Invoice # : I-8725685  
P.O. # : NONE

## CERTIFICATE OF ANALYSIS A8725685

SAMPLE DESCRIPTION	PREP CODE		Au ppb	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
			FA+AA	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	%	ppm
54251 G	205	238	< 5	5.98	< 0.2	10	30	< 0.5	< 2	0.02	< 0.5	4	424	20	5.11	< 10	< 1	< 0.01	< 10	2.84	246
54252 G	205	238	< 5	1.54	< 0.2	5	10	< 0.5	< 2	0.57	< 0.5	4	38	2	1.93	< 10	< 1	0.07	< 10	1.05	653
54253 G	205	238	< 5	1.51	< 0.2	10	10	< 0.5	< 2	0.11	< 0.5	< 1	30	18	3.51	< 10	< 1	0.04	< 10	0.52	88
54254 G	205	238	< 5	0.41	< 0.2	< 5	< 10	< 0.5	< 2	0.02	< 0.5	< 1	87	1	0.22	< 10	< 1	0.02	< 10	< 0.01	16
54255 G	205	238	< 5	0.41	< 0.2	< 5	< 10	< 0.5	< 2	< 0.01	< 0.5	< 1	75	1	0.17	< 10	< 1	0.02	< 10	< 0.01	9
54256 G	205	238	< 5	0.23	< 0.2	< 5	< 10	< 0.5	< 2	0.01	< 0.5	< 1	86	1	0.11	< 10	< 1	< 0.01	< 10	< 0.01	6
54257 G	205	238	< 5	0.11	< 0.2	< 5	40	< 0.5	< 2	1.63	< 0.5	< 1	64	1	0.08	< 10	< 1	< 0.01	< 10	0.02	13

CERTIFICATION :



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Project: TCM

Comments: ATTN: P. DASLER

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Date: 13-NOV-87  
Invoice #: I-8725685  
P.O. #: NONE

## CERTIFICATE OF ANALYSIS A8725685

SAMPLE DESCRIPTION	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Se	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
54251 G	205	238	< 1	< 0.01	101	< 10	< 2	< 5	10	3	< 0.01	< 10	< 10	178	5	65
54252 G	205	238	< 1	0.03	2	450	< 2	< 5	< 10	14	0.04	< 10	< 10	9	10	40
54253 G	205	238	< 1	0.04	1	< 10	< 2	< 5	10	9	< 0.01	< 10	< 10	74	5	34
54254 G	205	238	< 1	0.09	1	20	2	< 5	< 10	24	< 0.01	< 10	< 10	4	5	< 1
54255 G	205	238	< 1	0.09	1	20	< 2	< 5	< 10	24	< 0.01	< 10	< 10	3	5	< 1
54256 G	205	238	< 1	0.04	2	10	< 2	< 5	10	22	< 0.01	< 10	< 10	2	5	< 1
54257 G	205	238	1	0.01	2	< 10	< 2	< 5	< 10	20	< 0.01	< 10	< 10	1	5	1

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## CERTIFICATE OF ANALYSIS A8725685

SAMPLE DESCRIPTION	PREP CODE		Au ppb	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
	FA+AA																				
54251 G	205	238	< 5	5.98	< 0.2	10	30	< 0.5	< 2	0.02	< 0.5	4	424	20	5.11	< 10	< 1	< 0.01	< 10	2.84	246
54252 G	205	238	< 5	1.54	< 0.2	5	10	< 0.5	< 2	0.57	< 0.5	4	38	2	1.93	< 10	< 1	0.07	< 10	1.05	653
54253 G	205	238	< 5	1.51	< 0.2	10	10	< 0.5	< 2	0.11	< 0.5	< 1	30	18	3.51	< 10	< 1	0.04	< 10	0.52	88
54254 G	205	238	< 5	0.41	< 0.2	< 5	< 10	< 0.5	< 2	0.02	< 0.5	< 1	87	1	0.22	< 10	< 1	0.02	< 10	< 0.01	16
54255 G	205	238	< 5	0.41	< 0.2	< 5	< 10	< 0.5	< 2	< 0.01	< 0.5	< 1	75	1	0.17	< 10	< 1	0.02	< 10	< 0.01	9
54256 G	205	238	< 5	0.23	< 0.2	< 5	< 10	< 0.5	< 2	0.01	< 0.5	< 1	86	1	0.11	< 10	< 1	< 0.01	< 10	< 0.01	6
54257 G	205	238	< 5	0.11	< 0.2	< 5	40	< 0.5	< 2	1.63	< 0.5	< 1	64	1	0.08	< 10	< 1	< 0.01	< 10	0.02	13

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Invoice # : I-8725685  
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## CERTIFICATE OF ANALYSIS A8725685

SAMPLE DESCRIPTION	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Se	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
54251 G	205	238	< 1	< 0.01	101	< 10	< 2	< 5	10	3	< 0.01	< 10	< 10	178	5	65
54252 G	205	238	< 1	0.03	2	450	< 2	< 5	< 10	14	0.04	< 10	< 10	9	10	40
54253 G	205	238	< 1	0.04	1	< 10	< 2	< 5	10	9	< 0.01	< 10	< 10	74	5	34
54254 G	205	238	< 1	0.09	1	20	2	< 5	< 10	24	< 0.01	< 10	< 10	4	5	< 1
54255 G	205	238	< 1	0.09	1	20	< 2	< 5	< 10	24	< 0.01	< 10	< 10	3	5	< 1
54256 G	205	238	< 1	0.04	2	10	< 2	< 5	10	22	< 0.01	< 10	< 10	2	5	< 1
54257 G	205	238	1	0.01	2	< 10	< 2	< 5	< 10	20	< 0.01	< 10	< 10	1	5	1

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SEARCHLIGHT RESOURCES INC.

218 - 744 W. HASTINGS ST.  
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A8728052

Comments:

## CERTIFICATE A8728052

SEARCHLIGHT RESOURCES INC.

PROJECT : TOM

P.O.# :

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 20-DEC-87.

### SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	4	Rock & core: Ring
238	2	ICP: Aqua regia digestion

#### \* NOTE 1:

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.

### ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
100	4	Au ppb: Fuse 10 g sample	FA-AAS	5	10000
921	2	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
922	2	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	200
923	2	As ppm: 32 element, soil & rock	ICP-AES	5	10000
924	2	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
925	2	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
926	2	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
927	2	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
928	2	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
929	2	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
930	2	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
931	2	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
932	2	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
933	2	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
951	2	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
934	2	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
935	2	La ppm: 32 element, soil & rock	ICP-AES	10	10000
936	2	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
937	2	Mn ppm: 32 element, soil & rock	ICP-AES	1	10000
938	2	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
939	2	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
940	2	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
941	2	P ppm: 32 element, soil & rock	ICP-AES	10	10000
942	2	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
943	2	Sb ppm: 32 element, soil & rock	ICP-AES	5	10000
952	2	Se ppm: 32 element, soil & rock	ICP-AES	10	10000
944	2	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
945	2	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
946	2	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
947	2	U ppm: 32 element, soil & rock	ICP-AES	10	10000
948	2	V ppm: 32 element, soil & rock	ICP-AES	1	10000
949	2	W ppm: 32 element, soil & rock	ICP-AES	5	10000
950	2	Zn ppm: 32 element, soil & rock	ICP-AES	1	10000



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Invoice # : I-8728052  
P.O. # :

## CERTIFICATE OF ANALYSIS A8728052

SAMPLE DESCRIPTION	PREP CODE		Au ppb	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
	FA-AA																				
8551D	205	238	< 5	2.19	0.2	< 5	10	0.5	< 2	1.58	0.5	18	45	23	5.04	10	< 1	0.05	< 10	1.62	175
8552D	205	238	< 5	2.84	0.2	< 5	30	< 0.5	< 2	0.12	< 0.5	4	17	9	4.85	< 10	1	0.05	< 10	2.21	850
8553D	205	—	< 5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8554D	205	—	< 5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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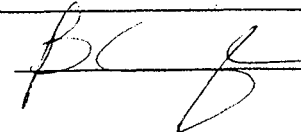
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Project : TOM  
Comments :

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Date : 20-DEC-87  
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P.O. # :

## CERTIFICATE OF ANALYSIS A8728052

SAMPLE DESCRIPTION	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Se	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
8551D	205	238	< 1	0.06	7	50	6	< 5	10	40	< 0.01	< 10	< 10	83	< 5	19
8552D	205	238	< 1	0.03	< 1	130	6	< 5	10	8	< 0.01	< 10	< 10	45	< 5	203
8553D	205	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
8554D	205	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

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Project : TOM

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P.O. # :

## CERTIFICATE OF ANALYSIS A8728052

SAMPLE DESCRIPTION	PREP CODE		Au ppb	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
			FA+AA	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	%	ppm
8551D	205	238	< 5	2.19	0.2	< 5	10	0.5	< 2	1.58	0.5	18	45	23	5.04	10	< 1	0.05	< 10	1.62	175
8552D	205	238	< 5	2.84	0.2	< 5	30	< 0.5	< 2	0.12	< 0.5	4	17	9	4.85	< 10	1	0.05	< 10	2.21	850
8553D	205	---	< 5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
8554D	205	---	< 5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

CERTIFICATION :



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

212 BROOKSBANK AVE., NORTH VANCOUVER,  
BRITISH COLUMBIA, CANADA V7J-2C1

PHONE (604) 984-0221

SEARCHLIGHT RESOURCES INC.

218 - 744 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 1A5

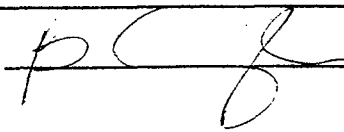
Project: TOM

Comments:

Page No: 1-B  
Tot. Pages: 1  
Date: 20-DEC-87  
Invoice #: I-8728052  
P.O. # :

## CERTIFICATE OF ANALYSIS A8728052

SAMPLE DESCRIPTION	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Se	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
8551D	205	238	< 1	0.06	7	50	6	< 5	10	40	< 0.01	< 10	< 10	83	< 5	19
8552D	205	238	< 1	0.03	< 1	130	6	< 5	10	8	< 0.01	< 10	< 10	45	< 5	203
8553D	205	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
8554D	205	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

CERTIFICATION : 



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
212 BROOKSBANK AVE . NORTH VANCOUVER,  
BRITISH COLUMBIA, CANADA V7J-1C1  
PHONE (604) 984-0221

## CERTIFICATE OF ANALYSIS A87 077

To : SEARCHLIGHT RESOURCES INC.

218 - 744 W. HASTINGS ST.  
VANCOUVER, B.C.  
V6C 1A5

Page No. : 1  
Tot. Pages: 1  
Date : 15-JAN-87  
Invoice # : I-8710077  
P.O. # : NONE

Project : TOM  
Comments :

SAMPLE DESCRIPTION	PREP CODE		Au ppb									
8678 D	207	--	< 50									

CERTIFICATION : W. Stan Amadori



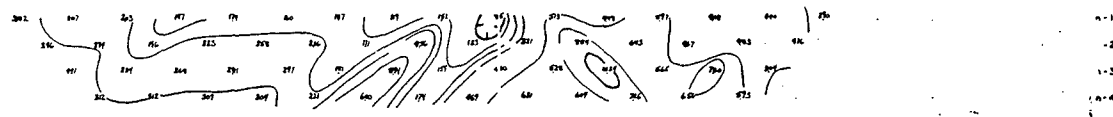
**APPENDIX 2**

**Magnetometer Survey**

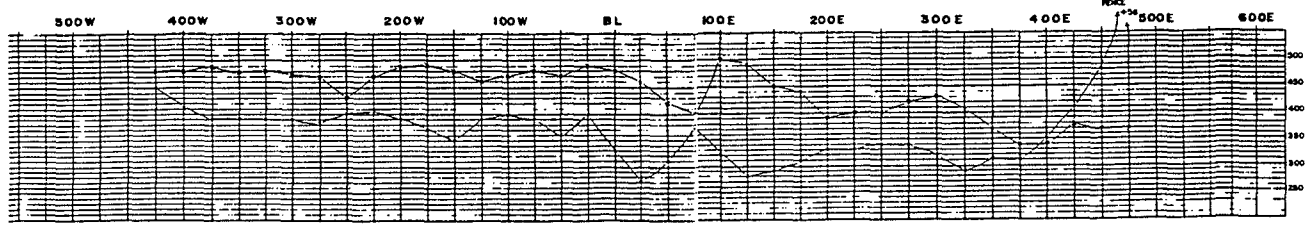
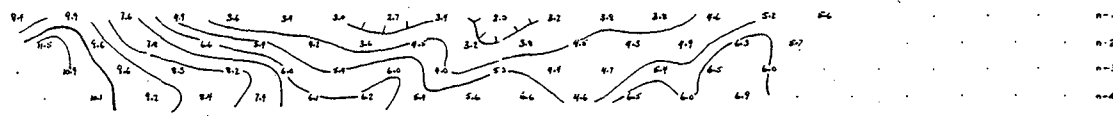
**IP Pseudosections**



500W 400W 300W 200W 100W BL 100E 200E 300E 400E 500E 600E



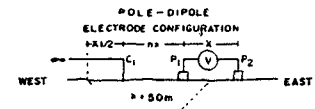
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N.T.S. 92 I II DWG. NO. 144-

**COMINCO LTD.  
LOFAR PROPERTY  
LOFAR CLAIM  
KAMLOOPS MD., B.C.**

LINE NO. 2+005



PLOTTING POINT  
n=1, 2, 3, 4  
CURRENT ELECTRODE WEST OF POTENTIAL DIPOLE

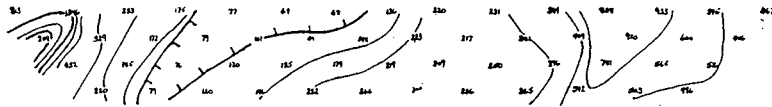
DATE SURVEYED SEPTEMBER 3 1972  
APPROVED [Signature]  
MINERAL RESOURCES BRANCH  
ASSISTANT GEOPHYSICIST

CONTOUR INTERVALS:  
APP. RES. — LOGARITHMIC  $\frac{1}{2}$  m  
APP. CHARG. — 1.0 Mv/V  
IN PHASE (DP ANGLE) RIGHT  
WAVE CROSSOVER

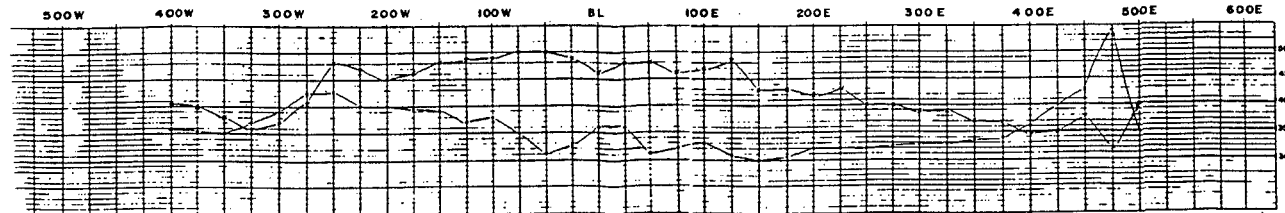
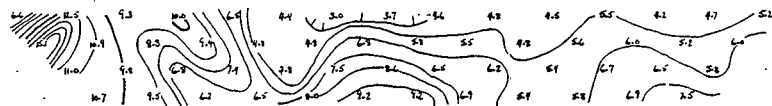
— FIELD STRENGTH  
TRANSMITTER — MUNTEC 7.5 Km  
RECEIVER — IFRS  
VLF INSTRUMENT — CRONE RADEN  
FROM NLK STATION, SEATTLE WASH USA

INDUCED POLARIZATION AND RESISTIVITY SURVEY  
SURVEYED BY COMINCO LTD., EXPLORATION DIVISION

500W 400W 300W 200W 100W BL 100E 200E 300E 400E  
 Apparent Resistivity  $\rho_a$   
 500E 600E



500W 400W 300W 200W 100W BL 100E 200E 300E 400E  
 Apparent Chargeability  $M_a$   
 500E 600E



92111 A. No. 144-78

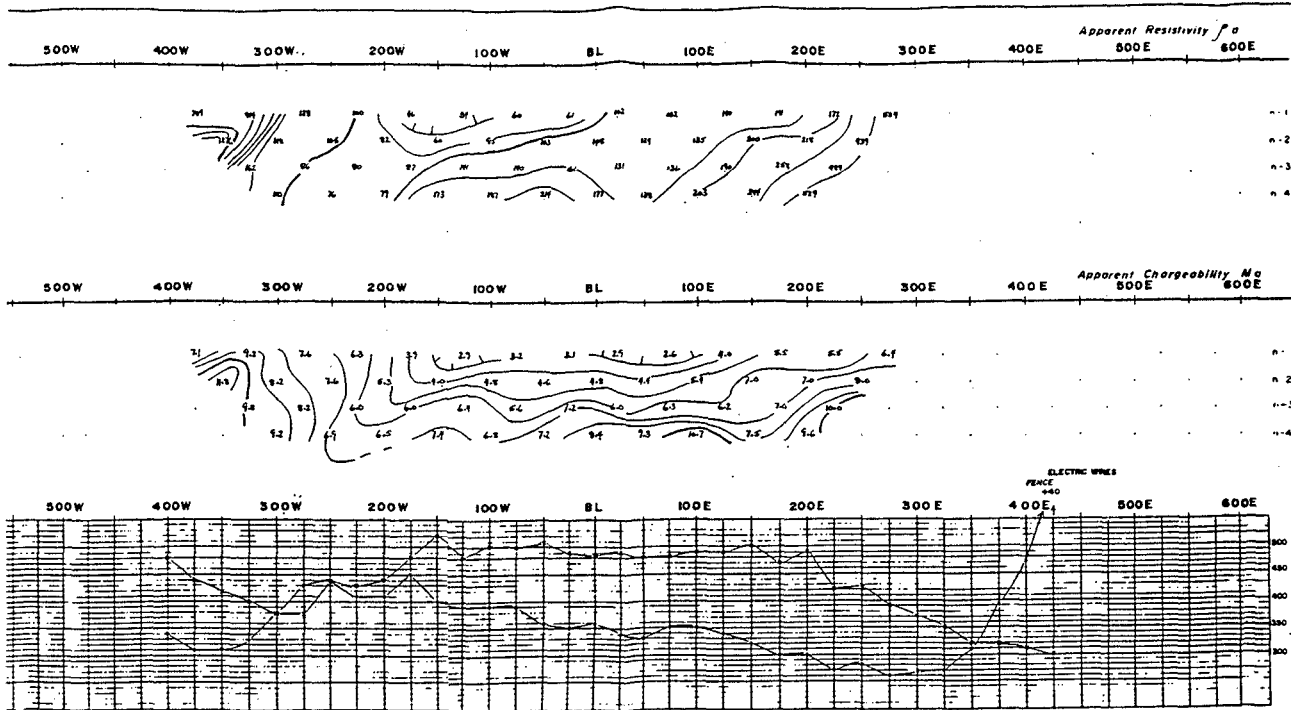
**COMINCO LTD.  
 LOFAR PROPERTY  
 LOFAR CLAIM  
 KAMLOOPS MD., B.C.**

LINE NO. 00 B

POLE TO POLE  
 LINE MODE ORIENTATION  
 WEST EAST  
 150m

PLOTTING POINT  
 WEST EAST  
 POTENTIAL D POLE

DATE SURVEYED SEPTEMBER 3, 1978  
 APPROVED [Signature]  
 APP. RES. - LOGARITHMIC JUM  
 APP. CHARG. - 10 MV/V  
 IN PHASE (DP ANGLE) RIGHT  
 WAVE CROSSOVER  
 FIELD STRENGTH  
 TRANSMITTER - MUNTEC 7.5 Km  
 RECEIVER - IPRB  
 VLF INSTRUMENT - CRONE RADEN  
 FROM NLK STATION, SEATTLE WASH. USA.  
 INDUCED POLARIZATION AND RESISTIVITY SURVEY  
 SURVEYED BY COMINCO LTD., EXPLORATION DIVISION



N.T.S. 92 I II      DWG NO. 144-78-6

## COMINCO LTD. LOFAR PROPERTY LOFAR CLAIM KAMLOOPS M.D., B.C.

LINE NO. 2 ± 00N

POLE - DIPOLE  
ELECTRODE CONFIGURATION

CURRENT ELECTRODE WEST OF POTENTIAL DIPOLE

DATE SURVEYED SEPTEMBER 2 1978

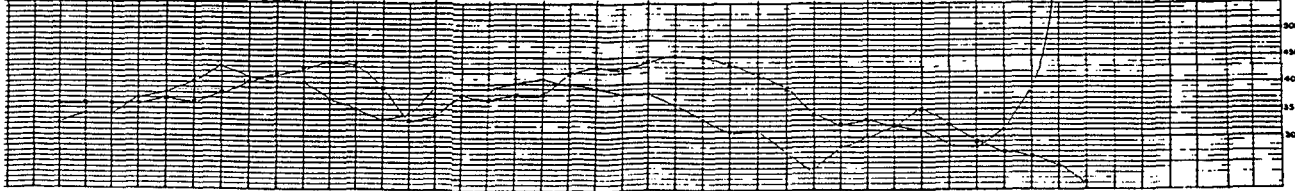
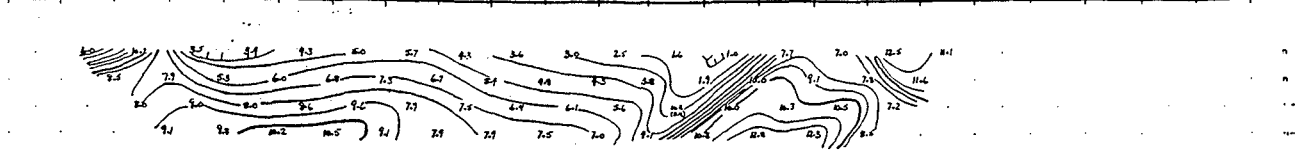
APPROVED at

DATE \_\_\_\_\_

LOWTOUT INTERVALS:  
 APP. RES. - LOGARITHMIC  $\frac{1}{2}$  M  
 APP. CHARG. - 1.0 MV/V  
 — IN PHASE (DP ANGLE) RIGHT  
 — WAVE CROSSOVER

— FIELD STRENGTH  
 TRANSMITTER - MUNTEC 7.5 Km  
 RECEIVER - IPRS  
 VLF INSTRUMENT - CRONE RADEM  
 FROM NLK STATION, SEATTLE WASH. USA

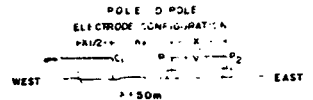
INDUCED POLARIZATION AND RESISTIVITY SURVEY  
 CONDUCTED BY COMINCO LTD. EXPLORATION DIVISION



N.T.S. 92111 DWG NO. 144-78-7

**COMINCO LTD.  
LOFAR PROPERTY  
LOFAR CLAIM  
KAMLOOPS M.D., B.C.**

LINE NO. 4+00N



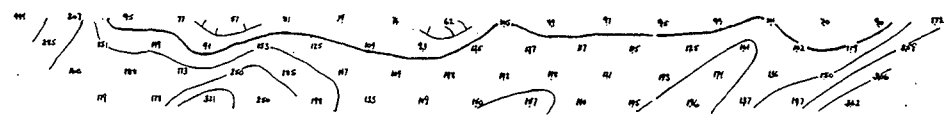
PIPING POINT  
CURRENT ELECTRODE WEST POTENTIAL D. POLE

DATE SURVEYED SEPTEMBER 2, 1970

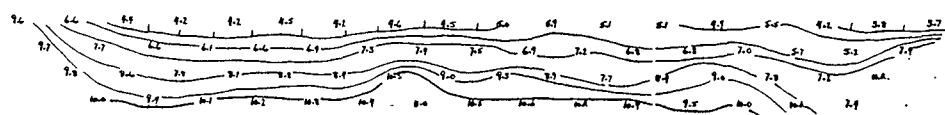
CONTOUR INTERVALS  
APP. RES. - LOGARITHMIC JUM  
APP. CHRG. - 1.0 MV/V  
IN PHASE (DIP ANGLE) RIGHT  
WAVE CROSSOVER  
FIELD STRENGTH  
TRANSMITTER - HUNTEC 7.5 Km  
RECEIVER - IPR8  
VLF INSTRUMENT - CRONE RADEM  
FROM N.E.K. STATION, SEATTLE WASH. USA  
INDUCED POLARIZATION AND RESISTIVITY SURVEY  
SURVEYED BY COMINCO LTD. EXPLORATION DIVISION

LINE 4+00N

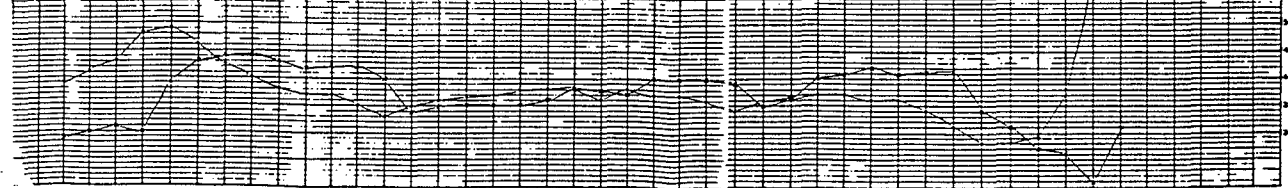
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500W 400W 300W 200W 100W BL 100E 200E 300E 400E 500E 600E

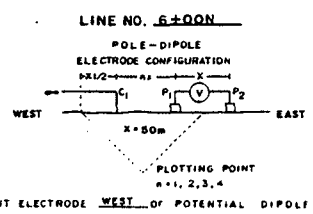


500W 400W 300W 200W 100W BL 100E 200E 300E 400E 500E 600E



N.T.S. 92 I II DWG NO. 144-78-8

**COMINCO LTD.  
LOFAR PROPERTY  
LOFAR CLAIM  
KAMLOOPS MD., B.C.**



DATE SURVEYED AUGUST 2, 1978

APPROVED at

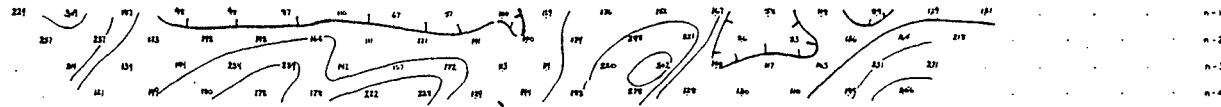
CONTOUR INTERVALS:  
APP. RES. - LOGARITHMIC 1/10  
APP. CHARG. - 1.0 M.V.F.V.  
- - - - - IN PHASE (DIP ANGLE) RIGHT  
- - - - - WAVE CROSSOVER  
- - - - - FIELD STRENGTH

TRANSMITTER - HUNTEC 7.5 Km  
RECEIVER - IPR8  
VLF INSTRUMENT - CROWE RADEN  
FROM NLX STATION, SEATTLE WASH USA

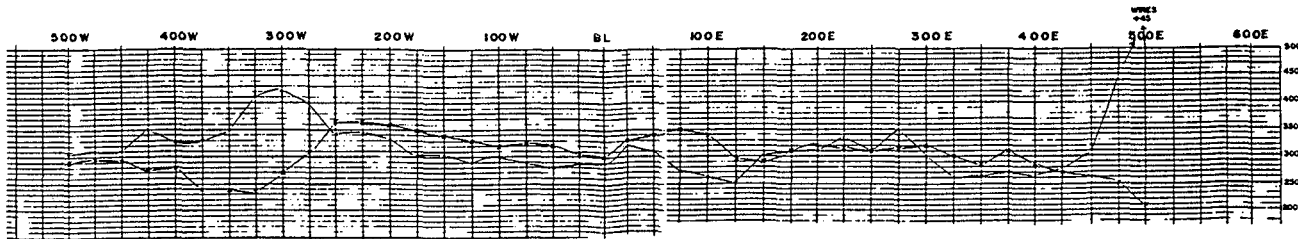
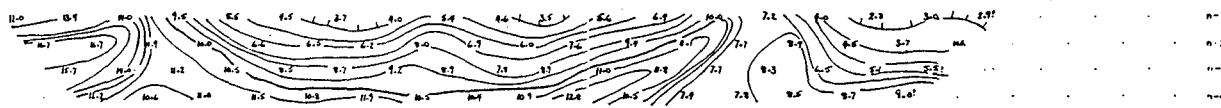
INDUCED POLARIZATION AND RESISTIVITY SURVEY  
SURVEYED BY COMINCO LTD., EXPLORATION DIVISION

LINE SECTION

500W 400W 300W 200W 100W BL 100E 200E 300E 400E 500E 600E  
 Apparent Resistivity  $f_a$



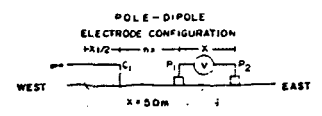
500W 400W 300W 200W 100W BL 100E 200E 300E 400E 500E 600E  
 Apparent Chargeability  $M_a$



N.T.S. 92111 DWG. NO. 144-78-9

**COMINCO LTD.  
 LOFAR PROPERTY  
 LOFAR CLAIM  
 KAMLOOPS MD., B.C.**

LINE NO. B-00N



PLOTTING POINT  
 n=1, 2, 3, 4  
 CURRENT ELECTRODE WEST OF POTENTIAL DIPOLE

DATE SURVEYED SEPTEMBER 1, 1978  
 APPROVED [Signature]  
 DA  
 FIELD STRENGTH  
 TRANSMITTER - MUNTEC 7.5 Km  
 RECEIVER - IPR8  
 VLF INSTRUMENT - CRONE RADEM  
 FROM NLK STATION, SEATTLE WASH. USA.

INDUCED POLARIZATION AND RESISTIVITY SURVEY