BRITISH COLUMBIA

PROSPECTORS ASSISTANCE PROGRAM

MINISTRY OF ENERGY AND MINES

GEOLOGICAL SURVEY BRANCH

PROGRAM YEAR:	1998/99
REPORT #:	PAP 98-1
NAME:	RON WALTON

INTRODUCTION

The following report is the result of a season of prospecting various areas along a ridge known as " hill 60 " to locals . The length of this ridge being approximately 15 km. . Residents of the community of Cowichan Lake named the hill after local war heroes were victorious in capturing a " hill 60 " in the first world war .
The same war effort led to the discovery of several manganese showings along this ridge overlooking the Cowichan valley . The manganese ore was needed in the production of good quality steel .
The " hill 60 " manganese mine produced approximately 1000 tons of ore during it's short life . Later it was to be mined for it's carving stone and other lapidary interests . Recent visits to the site of a small quarry and to some much older workings reveal little obvious rhodonite left . Perhaps the leases 12G and 13G could yield some valuable gem stone if they were quarried as well . The underground workings on these leases are dangerous and have partly filled with rubble . Downhill from the work site are piles of tailings and twisted , small guage rails .
To access the " original hill 60 " minesites may be difficult in the near future . The rains of last winter have taken their toll on the old logging road , which is 4WD or a healthy uphill climb for 3 km. From the main road .
The object of the '98 prospecting program I initiated was to sample each of the 3 showings recorded in the minfile reports . As well , I had set out to visit other localities known to host rhodonite . Due to the extreme fire hazard conditions and road diffusing by private logging companies I was unable to visit the rhodonite showings . Instead I concentrated on finding a new showing by traversing the " hill 60 " ridgetop on either side , following the contact of the sicker volcanics and the island intrusives .
Prospecting " hill 60 " north yielded little manganese but good sulphides and a copper showing . " Hill 60 " south was where I found a large manganese showing . I call this new showing , found by my son and I , the " View claim " .
The terrain is generally steep where the sedimentary rock has worn away at the contact with the granitoid intrusives . Prospecting is difficult and requires stamina but it is these slopes that will yield good outcrop .
The foliage at ground level consists of salal , licorice ferns and quite often devils club . Most of the tree stands are mature douglas fir , spruce , western red cedar , western hemlock and big leaf maple . Red alder is abundant in old clearings . The pine is rare and found usually at the higher elevations .

Myra showing

Minfile # 092B 093

NTS map 092B 13W

Coordinates Lat 48 50 26
Long 123 57 34

UTM zone 10 northing 5409950 easting 429600

LOCATION AND ACCESS

Access to the " sure bet " claim is along the forestry road that winds up the " hill 60 " ridge .
Take highway #18 west towards Cowichan Lake . About 13 km. Along watch for the access road leaving the north side of the highway . Drive into the 9 km. Sign and parking is available . The myra showing is about 75 m. NE. of the 9 km. Sign . The opening where the showing outcrops is visible from the road .
The " sure bet 2 " claim unit was staked in '97 and covers the myra showing .
The myra occurrence location was recorded using a Magellan trailblazer GPS . The readings are as follows ; UTM zone 10 429609E , 5409991N and 654 m. elevation .

MAIN COMMODITIES SEARCHED FOR

"The 1.5 m. thick horizon of rhodonite that occurs discontinuously in lenses over a 45 m. length " is what I staked . The occurrence had been held previously by a local prospector and before him by a mining company searching for gold and copper deposits . The showing has only been known of since the mid eighties when exploration in the area uncovered it .
One lense sampled may be of gemstone quality . Besides being fine grained it has an attractive red colour .
Most of the rhodonite observed is a pale pink with a " marblelised " look . The chert host appears to have invaded some of the lenses and given the rhodonite an ash grey colour .

KNOWN MINERAL OCCURENCES IN PROJECT AREA

The " hill 60 " minesites are about 2 km. south and there is another rho occurrence at the Stanley creek showing nearby . Also the possibility of a massive sulphide deposit is always a factor in these " sicker volcanic " geological settings .
Assessment reports 15389 , 16200 and 16237 concluded that this showing may have gem quality carving stone and should be prospected along strike . These reports were written during the mid eighties exploration .

WORK PERFORMED

The conventional prospecting for this program covered the areas of exposed bedrock within the unit boundaries . Detailed work was initiated when sulphides were located and sampling followed .
To the east the hillside sloped away quickly and very little work was done in the southeast area of the claim .
To the north a concentrated effort was launched following some anomolous values picked up when taking S P survey readings .
Fractured and faulted areas were found directly NE of the initial post . Argillite with leached out surfaces and deposits of iron rich sulphides were found before the zone was buried in overburden downslope .
The geophysical tool used to attempt to follow the Mn. Horizon was a self potentiometer survey . The width of the largest lense was only 4.5 ft. so readings were spaced close together .
The Total amount of line cut and picketted was 2700 ft.. Over 600 readings were taken and plotted on a map with a scale of 1" to 10 feet . Pickets were set up using cedar lath every 3 ft. . The base line ran at 130 degrees and parallel to the strike of the showing and 150 ft. beyond either end .
The readings were taken using a meter reading in millivolts . The pots were calibrated in a reasonably neutral area in the SW corner of the grid area .
One long wire was used for all readings and confirmation readings were taken in anomolous areas . The conditions were very dry and ideal for this tool . All readings were taken in the " B " horizon of the soil .
The physical work involved two men stripping moss back to uncover at least twice as much Mn as originally noted . The length of the strike was extended an additional ten feet to the north . It seemed to pinch out and disappear .
Each of the prominent lenses were sampled and taken away to be sawn at a later date . The pails were labelled to identify their origin . The pionjar rock drill was needed to break out the rock .

SIGNIFICANT RESULTS

The commodity searched for on the " sure bet 2 " claim is the dimension stone rhodonite . This rhodonite was generally pale as much of the material is mixed with a grey chert or marble . The pink is flesh tone with some inclusions of darker pink lines running through it . Perhaps the colour may change to the darker pink at depth . The usual dendrites of manganese are found at this showing . What is not found is the spessartite of the other showings or any amount of quartz .
Ash grey chert is the host rock of the manganese , rhodonite showing . The Minfile report lists chert , cherty siltstone and cherty argillite . Along the roadcuts of the logging road only 80 ft. away is the granite contact . A contact metamorphysm is the quartz diorite body pushed up between the myra occurrence and the granite .

Southeast of the occurrence , quartz and porphyry are found . At the top of a steep slope just to the east there is a lot of fractured chert and volcanic rock . Not a lot of sulphides in either area .

Within 150 ft. east of the manganese black , slaty argillite rock with minor sulphides registered high negative readings during the survey . Another anomolous reading was taken between the showing and the road at line #7 . This was uncovered and found to be the same argillite .

Directly north of the showing 100 ft. a sulphide body of some 70 to 100 ft. width strikes off in a northerly direction . The SP survey found the unit where it terminated as it entered the grid area .

This sulphide unit was followed until it terminated in the overburden downslope . Some interesting , pock marked samples were found .

Best assay found was sample #32 , taken in this sulphide unit about 150 ft. north of the center of the myra anomaly . It ran 180 ppb AU .

BRITISH COLUMBIA
PROSPECTORS ASSISTANCE PROGRAM
PROSPECTING REPORT FORM (continued)

B. TECHNICAL REPORT

- One technical report to be completed for each project area.
- Refer to Program Requirements/Regulations, sections 15 to 17.
- If work was performed on claims a copy of the applicable assessment report may be submitted in lieu of the supporting data (see section 16) required with this TECHNICAL REPORT.

Name RON WALTON Reference Number 97/98 PL

LOCATION/COMMODITIES

Project Area (as listed in Part A) MYRA SHOWING MINFILE No. if applicable #092B 093

Location of Project Area NTS 092B 13W Lat 48 50 26 Long 123 57 34

Description of Location and Access 13 KM WEST ALONG HWY 19 TO COULHAN LAKE. TURN NORTH FROM HWY. DRIVE INTO 9 KM SIGN ON HILL 60 FOREST ACCESS ROAD. JUST BEFORE THE 9 KM SIGN IS THE CLEARING OR OUTCROP 25 M NORTH OF THE LOGGING ROAD.

Main Commodities Searched For RHODONITE

Known Mineral Occurrences in Project Area OLD HILL 60 MINESITES APPROX. 2 KM SOUTH.

WORK PERFORMED

1. Conventional Prospecting (area) DETAILED SEARCH WITHIN CLAIM BOUNDARIES
2. Geological Mapping (hectares/scale)
3. Geochemical (type and no. of samples)
4. Geophysical (type and line km) SELF POTENTIAL METHOD — 2700 FT
5. Physical Work (type and amount) GRUBHOE WORK
6,. Drilling (no,. holes, size, depth in m, total m)
7. Other (specify) SOME PIONJAR RECK DRILL SAMPLING

SIGNIFICANT RESULTS

Commodities RHODONITE Claim Name SURE BET II.

Location (show on map) Lat. 48 50 26 Long 123 57 34 Elevation 650 M.

Best assay/sample type 180 PPB AU, SAMPLE #32, 10-15% SULPHIDES IN CHERTY TUFF

Description of mineralization, host rocks, anomalies THE MYRA SHOWING WAS EXPLORED USING A S.P. SURVEY. THE CHERT HOST EXHIBITED VERY LITTLE ANOMOLOUS VALUES BUT JUST NORTH OF THE TARGET AREA AND JUST WITHIN THE GRID PATTERN, ARGILLITE FORMATIONS EXHIBITED NEGATIVE READINGS IN EXCESS OF -500 MILLIVOLTS. THIS SULPHIDE UNIT WAS FOUND TO STRIKE NORTH. THIS BLACK, SLATY ARGILLITE IS 70' WIDE AND WAS FOLLOWED 50' INTO THE OVERBURDEN. VARIOUS SAMPLES WERE ASSAYED.
THE RHODONITE AT THE MYRA IS POOR TO MEDIUM PALE COLOUR ON SURFACE.

Supporting data must be submitted with this TECHNICAL REPORT

Information on this form is confidential for one year from the date of receipt subject to the provisions of the *Freedom of Information Act*.

THE SELF POTENTIAL METHOD

INTRODUCTION

Like the magnetic method, the self-potential method is also a simple, easy and cheap geophysical tool to use in prospecting. If two metal stakes are driven into the ground about 200 feet apart and connected to the terminals of a sensitive voltmeter, an electric voltage will be found to exist between them. Such ground voltages normally range from a few millivolts to a few tens of millivolts. For comparison, a flashlight battery is 1.5 volts or 1500 millivolts. Especially important, it has been found that above some sulphide orebodies, notably those containing pyrite, chalcopyrite, pyrrhotite and also above graphite bodies, negative voltages as high as several hundred millivolts may be attained.

In the self-potential exploration method, the potential (or electric voltage) is measured over the area of interest, in the hope of finding strong negative anomalies in the range of hundreds of millivolts which may reflect sulphide mineralization.

ORIGIN OF SELF POTENTIALS

There are two types of self-potentials observed in the ground:

1. Background potentials are positive and negative potentials ranging up to a few tens of millivolts. These potentials are thought to be caused by various electrochemical phenomena in the ground such as variations in the concentration of electrolytes from place to place.

2. Mineralization potentials are strong negative potentials up to several hundred millivolts. The origin of these potentials is not clearly understook, but is thought to arise from the difference in the oxidation capacity of the waters near the upper and lower surface of an orebody. At the top and bottom of the orebody an exchange of ionic and electronic charges takes place, with the orebody serving to transport electrons from the lower surface to the upper surface until electrochemical equilibrium is reached.

The net result is that the upper surface of the orebody becomes negatively charged and the sulfide zone acts like a battery in the ground with the negative terminal at the upper end and the positive terminal at the lower end as shown in Figure 6, along with a sample SP profile across the top of the sulfide zone.

EQUIPMENT

The basic apparatus required for SP measurements comprise a) electrodes, b)cable, and c) voltmeter.

a) electrodes - usually the electrodes consist of porous pots cortaining saturated copper sulphate solution. This is preferable over metal rods or stakes since the latter may polarize, this is, electrolytic action may set up a variable potential difference between the metal electrode and the ground and this, of course, does not reflect geology.

b) cable - almost any type of sheathed, multistrand copper wire will do. A cable winder with an external slip ring for electrical connection, like the one used in the prospectors course is very convenient.

c) voltmeter - the voltmeter should have a sensitivity of one millivolt.

The basic elements for an SP survey can be aquired for under $100.00. A more practical set up however can cost up to $300 or $400.00.

DATA ACQUISITION

A grid is prepared over the area of interest. One convenient station, usually at one end of the baseline is chosen as the base station. One electrode, called the reference electrode, remains at the base station. The other electrode, called the surveying electrode, moves from station to station, and with the help of long wires, the electrodes are connected to a voltmeter. Therefore voltage differences are measured relative to the base station which has a voltage of zero. Care must be taken to note the sign of the voltage.

As the length of wire becomes exhausted, new base stations may be established as required. Actually it is quite common to have base stations established at the intersection of the baseline and all lines. To establish the first new base station, the voltage of the first new base station relative to the old base station is measured. Let's say it is 20 millivolts. The reference electrode is then moved to the first new base station. The survey then continues but all measurements using the first new base station as reference will require a base shift correction of +20 millivolts. Let's say we need a second new base station. The voltage of the second new base station relative to the first new base station is measured. Let's say it is 40 millivolts. After the reference electrode is moved to the second new base station, all measurements will require a base shift correction of 60 millivolts (20 + 40). As many new base stations may be established as desired.

The following is an example of a note book setup for an SP survey showing the application of base shift corrections:

	STATION	OBSERVED POTENTIAL (MV)	BASE SHIFT CORRECTION (MV)	FINAL POTENTIAL (MV)
Base Station	0N	0	0	0
	1N	+40	0	+40
	2N	+60	0	+60
1st new Base Stn.	3N	+50	0	+50
	4N	+20	+50	+70
	5N	-10	+50	+40
2nd new Base Stn.	6N	+40	+50	+90
	7N	+30	+90	+120
	8N	-20	+90	+70
	ETC.			

The 'observed potential' at 3N of 50mv was measured with the reference at 0N. The reference was then moved to 3N. Therefore subsequent 'observed potentials' require a base shift correction of 50mv. The same argument applies again for station 6N.

DATA PRESENTATION

A plan map of the grid is prepared at a convenient scale clearly showing the baseline and all the survey lines. The station locations on the lines should be "ticked" on the map and the voltage values written down beside them. The reference base station should be clearly shown. The data should be contoured at a convenient contour interval to show the important features in the data. The legend of the plan map should contain all information pertinent to the survey, such as survey dates, operators, equipment type, and brand name, etc.

DATA INTERPRETATION

The interpretation of self potential data is quite simple. One simply looks for sharp negative anomalies with amplitudes of hundreds of millivolts. Such anomalies are likely due to sulphides or graphite directly under the most negative part of the anomaly.

EXAMPLE

Figure 7 shows SP measurements in an area of Precambrian granulite rocks. The negative SP anomaly of about 500 millivolts is due to a mineralized zone, approximately 100 to 200 metres thick. It contains galena, sphalerite, pyrite, pyrrhotite and some chalcopyrite. After drilling it was found that the ore zone could be roughly delineated by the 200 millivolt SP contour. The mineralized zone in cross section and the corresponding SP data on this section are shown at the bottom of Figure 7.

NOTES AND OPERATIONAL HINTS

BATTERIES

Battery life in the voltmeter unit will exceed 1 year. Do not store the unit with the battery installed as corrosion will ruin the circuit board. Alkaline batteries are recommended as they have better corrosion histories, and will operate at lower temperatures.

TEMPERATURE

This unit will cease to read out when very cold, (-10 C or less) but will not be harmed, and will resume proper operation upon warming up. However, it can be irrevocably damaged if subjected to extremely warm temperatures as found in automobile trunks and dashboards during the summer months. 40° C (105° F) is about the limit for unimpaired operation of the unit without replacing the display, which currently sells for $35. Unit in transit case in trunk will probably survive.

CALIBRATION AND ZEROING

The unit is self-zeroing but if a residual reading is noticed, the area around the terminals may be dirty and/or very wet. Usually once cleaned up, the problem disappears. If not, replace the battery as it is probably low.

Calibration is done with a fresh dry cell, (any size 1½ V). The voltage measured by connecting across this source will be approximately ± 1550 mv. (1.550 volts) depending on how the clip leads are connected. If a reading somewhat higher is obtained, replace the 9 volt battery.

POROUS POTS

Copper sulfate ($CuSO_4$) is corrosive and extremely poisonous, not only to man and animal life, but also to fish and aquatic plants. Do not dispose of any excess pot solution in creeks, no matter how large.

Dispose of excess $CuSO_4$ solution in a hole well removed from creeks so that it will disperse adequately prior to entering the water. Rinse the pots into the hole also and dry thoroughly before packing away; better still, store in a sealed plastic bag to minimize corrosion.

Copper sulfate can be purchased in some drug stores in small quantity, at feed stores and some nurseries in bulk as 'bluestone crystals'.

A saturated solution of $CuSO_4$ in an unglazed ceramic-bottomed container will make a non-polarized contact with the ground allowing SP measurements to be made. Serious errors can arise if the solution in either pot is not saturated or making good soil contact. Excess crystals in the pot ensure saturated solutions. In order for the pots to stabilize, they should be made up well in advance of commencing a survey as it takes time for the solution to seep through the ceramic.

Connection to the ground is made by 'screwing' the pot to the ground in a 'geochem' hole, free of loose organic material, roots and rocks, using firm downward pressure. In extremely dry locations, a jug of water can be used to prewet the contact area for more reliable contact. Some of the pot solution can also be used.

OPERATION

a) Determine strike of structure.

b) Lay out baseline parallel to structure and several lines at right angles crossing structure and extending some distance beyond in both directions. Mag surveys are often too limited in extent, and detailed interpretation is impossible.

c) Select a base station, preferably away from the structure in order to get a reasonable zero and also to minimize gradient errors.

d) Place both pots at the base station and read. The reading should be less than ± 002. If not, check pots for saturated solutions, organics under the bases, or poor connections to the ground. Interchange the clip leads, reading other polarity. Choose the negative reading. The pot connected to the black (negative) terminal becomes the 'base' or 'back' electrode. The small negative reading (if there is one) means that all subsequent measurements are that much too low and the calibration must be added to all further readings (at least until we recheck the calibration). If this precaution of frequently checking the pots is done, surveys progress with little error accumulation.

e) Gradient Method 'short wire'

The pot connected to the red (positive) terminal is known as the 'forward' pot, and is then placed at the first survey point at the other end of the short wire (20 metres supplied with 2 metres extra to allow for slope corrections and some deviation along the line). The reading is taken by connecting the 'back' pot to the wire and the wire to the black terminal and the 'forward' pot to the red. The line number, station number, and the reading (complete with sign) are then entered in the notebook along with any pertinent details, such as outcrop proximity, rock type and sulfide content, topographic information, etc.

Then, the 'back' pot moves up to occupy the spot taken by the 'forward' pot, and the forward pot moves to the next survey point. A reading is made, noted and the survey continues, up one line and down another, reading and noting even between lines.

When the survey again reaches the base line, the survey should encompass the base station, and the pots calibrated. Electrical theory states that the sum of the voltages around a loop must be zero, so we have a check of the accuracy of the survey. In fact, if the sum of all the readings in the just completed loop is not zero, either a sign error, a notation error, or a systematic error occurred. If the pots were checked periodically, and the calibration applied properly, no systematic error is possible.

Closure errors of 10 mv. are acceptable, since most anomalies are greater than 50 mv.

Data can be plotted on plan or section midway between the pot locations, or the successive sum can be plotted at the forward pot location. This second method allows a contour map to be made, provided that all loops originate at the base station or can be tied to it mathematically.

If the base station was not anomalous, all negative data will reflect interesting areas. If however the base was in an anomaly, then data surrounding the base will have a positive bias. In any event, contouring at 50 mv. or 20 mv. intervals will outline the interesting areas which are below the average or background values.

f) Long Wire Method

The 'red' pot is the 'moving' pot and occupies sequentially the survey points to be read, again noting the line, station and readings as above.

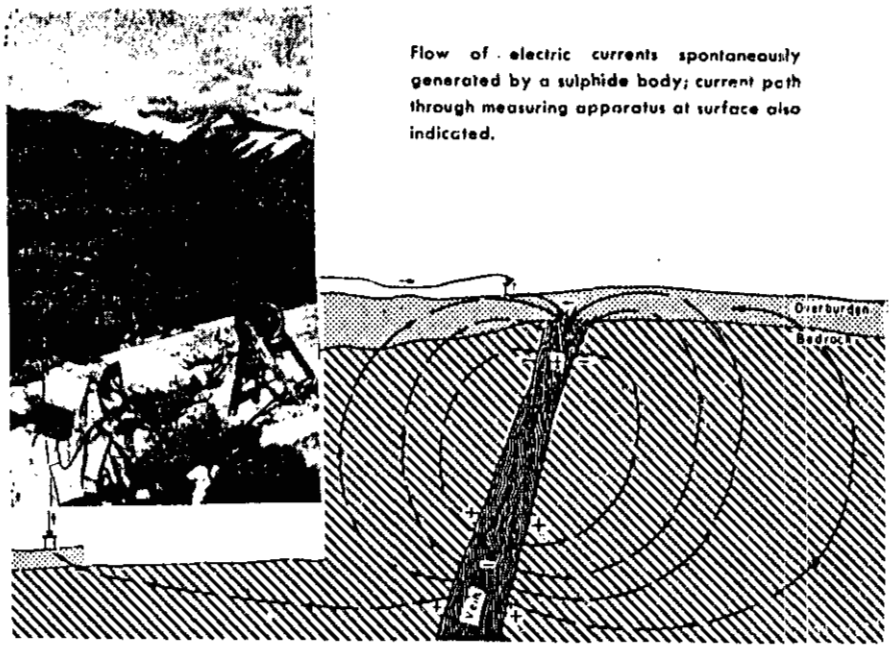
When the end of the wire is reached, the last measured station becomes a temporary base from which a new series of readings are taken. As above, all loops are closed; but in this method only the bases are considered in calculating the closure. For example:

The base station is defined as 000. The first base might read 125 with respect to the base station. The second base may read -80 with respect to the first. The third base may read -25 with respect to the second. Now, from the third, we read the base station and get -15. The first temperature base was 125 with respect to base station, the second is 125+(-80)= 45, the third is 45+(-25)= 20, and the base reads as 20+(-15)= 5. All measurements made from the first temperature base have 125 added to make them compatible with measurements made from the base station. From the second, 45 is added and the third has 20 added to all readings.

It can be seen that with a long enough wire, no arithmetic need be done at all; that all measurements are made with respect to the base station, (i.e. the location of the base pot).

Once plotted in profile as potential differences, SP data can be easily analyzed. Subcropping sources give rise to sharp strong anomalies, whereas those at depth cause weaker broader anomalies. The depth to the source can be interpreted from the half-width, (the width of the anomaly where it has half of its maximum amplitude) and is equal to half the distance. Nothing specific can be said about dip except in specific cases. Graphite, and flowing groundwater can give rise to spurious anomalies.

The best indicator of a valid SP anomaly is its repeatability and correlation with other methods; magnetics, VLF-EM, gravity, and other disciplines, geochemistry and geology. Overlays of contoured magnetometer and Fraser filered VLF data are invaluable in developing a geologic model of an area.



Flow of electric currents spontaneously generated by a sulphide body; current path through measuring apparatus at surface also indicated.

the earth's crust is presumed to be due, in part at least, to solar influences. When solar flares and sun spots produce particularly violent magnetic disturbances and auroral displays on earth, these telluric currents sometimes suffer such violent fluctuations as to preclude reliable observations with the spontaneous polarization technique. On the other hand, milder fluctuations in telluric currents have been employed as an exploration technique.

Primarily, however, exploration procedures based on the flow of natural currents, rely on the "self-potential" currents which arise spontaneously in certain mineral bodies, due to the polarization of these bodies. In other words, such mineral deposits are natural batteries, buried in the ground. In utilizing this phenomenon, the geophysicist is profiting from a natural field of force offered ready to his hand. He is spared the necessity of taking into the field apparatus, more or less cumbersome, to apply an artificially created field of force to the earth. On the other hand, he can neither vary the place of application nor the magnitude of the force, but must accept it as nature provides it.

The manner of origin of spontaneous polarization currents may not be fully understood, but enough is known to permit correcting some misconceptions and to give a general idea of the processes involved. The statement is often made that these currents arise from the oxidation of sulphide bodies. That this is partly erroneous is demonstrated by the fact that deposits of graphite, with very small amounts of sulphides, yield remarkably strong currents. Beds of anthracite, but not bituminous, coal also give mocerately strong currents. Furthermore, currents noted in underground workings, far below the surface, have actually been found to arise from sulphides apexing well below those working levels.

For an electrical current to be generated in a manner similar to the process taking place in a galvanic cell, one or more metallic conductors of electricity must be in contact with one or more electrolytes (solutions of salts, acids or alkalies that are themselves electrically conductive). Most of the sulphides are metallic conductors of electricity, the general rule being that minerals possessing metallic lustre are metallic conductors of electricity, thus excluding sphalerite and cinnabar. An exception is stibnite, the antimony sulphide, a non-conductor in spite of its metallic lustre.

The oxides are mostly non-conductive, except for the manganese minerals pyrolusite and psilomelane. Graphite is a good metallic conductor, and anthracite coal owes its electrical activity to the sooty layers of conductive, graphitic material often interleaved with the bright, shiny, non-conductive portions. This sooty, graphitic material is absent from the lower orders of coal (and occasionally from some anthracites) which therefore yield no currents.

Metallic conductors, such as those just described, are bathed by various electrolytes in the rock forma-

SAMPLES TAKEN FOR ASSAY

1/ Malachite , Mn. Staining , sulphides 2 - 5 % . Taken from nose of jasperoidal intrusive within Stanley Cr. Showing .

2/ Rusty lge. Pyrite cubes , 10 % sulphides , chert with quartz phenocryst . 50 ft. SW. of Stanley Cr. Showing .

3/ Oxidized , rusty , white crusty , Mn. Blue black chert . Quartz stringer . taken 10 ft. below #2 sample .

4/ 2 % sulphides , cherty jasper . 150 ft. SW. of Stanley Cr. Showing .

5/ Rusty , Mn. Stain , 2 % sulphides , 70 ft. N. of location line of lookout claims and SW. of pond .

6/ 2 % sulphides , bright glassy serecite . 200 ft. east of pond .

7/ Iron staining , tightly banded , phyllite shear roadcut N.

8/ Similar sample to #7 except 100 ft. S. in roadcut .

9/ Railway grade E. , 5 - 10 % sulphides in volcanics .

10 / 15 - 20 % sulphide lense in volcanics . railway grade W.

11/ Railway grade , cliff face shear , 5 - 15 % sulphides , quartz serecite .

12/ Sure bet 2 , middle of 45 M. strike length , some sulphides , visible rho. and quartz .

13/ Grid line # 11 , sure bet 2 , float with sulphides and rho .

14/ Line 0 of sure bet 2 , cliff top , rusty zone , sulphides 2 - 5 % .

15/ Only sulphides found of any importance found SW. of clearing , ridge top , hematitic volcanics west of sure bet 1 .

16/ Taken 25 ft. east of grid line # 12 . , sure bet 2 , lense of rho and Mn.

17/ Jasperoidal zone on strike with rho . showing , 5 % sulphides , sure bet .

18/ Blue grey quartz on location line of sure bet 2 , east of grid 100 ft. , contact zone .

19/ Sample taken just west of sure bet 2 claim . First creek west . On east side , contact zone , 150 ft. wide iron staining .

20/ Just west of convergence of two small creeks . Also west of sure bet 2 . 650 M. elevation . Large andesite dike , 340 degree bedding , contact area .

21/ West hilltop , contact zone , convergence of two small creeks . Halfway between sure bet 2 and railway grade turnoff . 2 % sulphides .

22/ New Mn. - rho hill 60 showing @ 550 M. elevation . UTM 10 , 427896E , 5408377N. Cu. Stain , rho .

23/ Man claims , area of gold showing , feldspar porphyry , 2 % sulphides .

24/ Man claims , area of gold showing , feldspar porphyry , 2 % sulphides .

25/ Man claims , area of gold showing , roadcut volcanics , hematitic , 5 % sulphides .

26/ Man claims , shear zone in opening , just south of road , 150 ft.west of creek , heavy malchite staining .

27/ Mn showing on unstaked ground . East of view claim at 700 M. elevation , 100 ft.

28/ Chip sample over 8 ft. , sure bet 2 , anomaly A . Some chalco , argyllite .

29/ 500 ft. north of Bl # 7 , sure bet 2 , slaty argyllite , 10 % sulphides .

30/ 450 ft. north of Bl # 7 , sure bet , chert , 5 - 15 % sulphides .

31/ 45 ft. north of the end of Bl # 8 , 5 % sulphides , cherty tuff , glassy .

32/ 65 ft. north of the end of Bl # 7 , 10 - 15 % sulphides , chert .

33/ Anomaly B , baseline # 7 , 20 ft. along line , black , slaty argyllite , 5 % sulphides .

Chemex Labs Ltd.

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CERTIFICATE OF ANALYSIS A9829905

SAMPLE	PREP CODE		Au ppb FA+AA	Ag ppm	Al %	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
RW 01	205	226	25	0.4	1.18	12	60	< 0.5	2	0.94	< 0.5	22	77	1225	3.10	< 10	1	< 0.01	10	0.10	>10000
RW 02	205	226	125	1.0	0.05	84	50	< 0.5	< 2	0.05	< 0.5	25	156	455	7.24	< 10	< 1	< 0.01	< 10	< 0.01	740
RW 03	205	226	< 5	0.2	0.41	14	630	< 0.5	6	0.47	< 0.5	16	159	175	7.67	< 10	< 1	0.04	< 10	0.04	>10000
RW 04	205	226	80	< 0.2	0.04	4	110	< 0.5	< 2	0.04	< 0.5	3	291	9	4.98	< 10	< 1	< 0.01	< 10	< 0.01	415
RW 05	205	226	< 5	< 0.2	1.06	< 2	60	< 0.5	< 2	1.12	< 0.5	7	48	54	2.54	< 10	< 1	0.10	< 10	0.65	775
RW 06	205	226	< 5	< 0.2	2.52	< 2	80	< 0.5	< 2	0.51	< 0.5	11	111	27	3.59	< 10	< 1	0.13	< 10	2.09	545
RW 07	205	226	< 5	< 0.2	1.81	< 2	110	< 0.5	< 2	0.66	< 0.5	4	81	17	1.84	< 10	< 1	0.21	< 10	0.53	570
RW 08	205	226	< 5	< 0.2	1.45	< 2	330	< 0.5	< 2	0.58	< 0.5	7	92	19	3.07	< 10	< 1	0.24	< 10	0.59	390
RW 09	205	226	< 5	< 0.2	1.54	28	100	0.5	< 2	0.02	< 0.5	33	118	33	7.79	< 10	< 1	0.13	< 10	0.43	675
RW 10	205	226	10	0.6	2.85	200	120	0.5	< 2	0.11	0.5	8	24	43	5.88	< 10	< 1	0.47	< 10	2.18	515
RW 11	205	226	10	1.0	1.43	28	100	< 0.5	< 2	0.12	< 0.5	7	149	31	4.41	< 10	< 1	0.39	10	0.74	260
RW 12	205	226	< 5	< 0.2	0.20	52	1770	0.5	12	0.51	< 0.5	2	127	4	0.30	< 10	2	0.02	< 10	0.41	>10000
RW 13	205	226	< 5	< 0.2	0.19	8	810	< 0.5	14	1.89	< 0.5	3	142	< 1	0.61	< 10	2	< 0.01	< 10	0.33	>10000
RW 14	205	226	5	0.4	2.40	100	320	0.5	< 2	0.03	< 0.5	6	63	40	3.82	< 10	< 1	0.23	10	2.08	715
RW 15	205	226	< 5	< 0.2	2.12	18	60	0.5	< 2	0.96	< 0.5	15	50	80	4.29	< 10	< 1	0.11	10	1.20	900
RW 16	205	226	< 5	< 0.2	0.12	136	490	0.5	< 2	0.82	< 0.5	2	81	< 1	0.19	< 10	< 1	0.02	< 10	0.23	>10000
RW 17	205	226	< 5	< 0.2	1.77	4	170	< 0.5	< 2	0.23	< 0.5	5	82	28	2.85	< 10	< 1	0.12	< 10	1.33	885
RW 18	205	226	< 5	< 0.2	0.11	2	250	< 0.5	< 2	0.13	< 0.5	1	230	1	0.41	< 10	< 1	0.04	< 10	0.03	520
RW 19	205	226	< 5	< 0.2	4.18	8	90	< 0.5	< 2	0.06	0.5	22	22	126	11.75	10	< 1	0.05	< 10	2.06	340
RW 20	205	226	< 5	< 0.2	2.09	4	180	< 0.5	< 2	0.47	< 0.5	14	63	50	3.47	< 10	< 1	0.12	< 10	1.34	800
RW 21	205	226	< 5	< 0.2	1.52	2	120	< 0.5	< 2	0.24	< 0.5	9	45	6	2.85	< 10	< 1	0.13	< 10	0.83	990
RW 22	205	226	15	< 0.2	0.34	52	160	< 0.5	10	0.41	< 0.5	21	92	< 1	0.83	< 10	1	0.09	< 10	0.03	>10000
RW 23	205	226	< 5	< 0.2	2.74	2	40	< 0.5	< 2	0.59	< 0.5	20	79	67	4.58	< 10	< 1	0.06	10	1.96	830
RW 24	205	226	< 5	0.2	2.69	2	40	< 0.5	< 2	0.49	< 0.5	18	86	55	4.68	< 10	< 1	0.07	10	1.87	1105
RW 25	205	226	10	< 0.2	1.95	6	60	< 0.5	< 2	1.81	< 0.5	15	83	67	3.78	< 10	< 1	0.14	< 10	1.43	1010
RW 26	205	226	325	10.8	1.69	2	90	< 0.5	< 2	0.14	< 0.5	14	90	4720	4.56	< 10	< 1	0.17	< 10	0.79	1305
RW 27	205	226	165	0.6	0.86	60	100	< 0.5	6	0.20	< 0.5	68	179	440	0.67	< 10	< 1	0.06	< 10	0.16	>10000

CERTIFICATION: Hartfriedler

Chemex Labs Ltd.

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212 Brooksbank Ave., North Vancouver
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PHONE: 604-984-0221 FAX: 604-984-0218

To: WALTON, RON

4141 LARK RD.
VICTORIA, BC
V8X 2M6

Project :
Comments: ATTN: RON WALTON

Page Number :1-B
Total Pages :1
Certificate Date: 13-SEP-199
Invoice No. :I9829905
P.O. Number :
Account :QLI

CERTIFICATE OF ANALYSIS A9829905

SAMPLE	PREP CODE	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
RW 01	205 226	< 1	< 0.01	102	350	168	< 2	< 1	11	0.03	< 10	< 10	27	< 10	22
RW 02	205 226	2	< 0.01	45	230	2	< 2	< 1	3	< 0.01	< 10	< 10	22	< 10	2
RW 03	205 226	3	< 0.01	32	150	< 2	< 2	< 1	152	0.01	< 10	< 10	42	< 10	32
RW 04	205 226	2	< 0.01	8	130	< 2	< 2	< 1	3	< 0.01	< 10	< 10	25	< 10	2
RW 05	205 226	< 1	0.10	10	710	< 2	< 2	6	29	0.17	< 10	< 10	90	< 10	30
RW 06	205 226	< 1	0.04	19	460	< 2	< 2	9	53	0.20	< 10	< 10	116	< 10	56
RW 07	205 226	1	0.01	3	110	< 2	< 2	3	189	< 0.01	< 10	< 10	14	< 10	32
RW 08	205 226	22	0.04	5	1720	2	< 2	3	55	0.03	< 10	< 10	14	< 10	36
RW 09	205 226	3	0.01	14	260	< 2	< 2	4	3	< 0.01	< 10	< 10	40	< 10	144
RW 10	205 226	8	0.01	37	200	12	< 2	3	6	0.09	< 10	< 10	33	< 10	210
RW 11	205 226	55	< 0.01	22	1000	42	< 2	3	5	< 0.01	< 10	< 10	83	< 10	50
RW 12	205 226	< 1	< 0.01	29	50	12	2	< 1	164	< 0.01	< 10	< 10	11	< 10	56
RW 13	205 226	< 1	< 0.01	56	50	4	2	< 1	443	< 0.01	< 10	< 10	17	< 10	22
RW 14	205 226	1	< 0.01	15	540	16	< 2	1	4	< 0.01	< 10	< 10	61	< 10	62
RW 15	205 226	1	0.04	15	1040	4	< 2	5	14	0.20	< 10	< 10	125	< 10	54
RW 16	205 226	1	< 0.01	90	70	8	20	< 1	167	< 0.01	< 10	40	33	< 10	46
RW 17	205 226	< 1	0.03	5	160	< 2	< 2	8	15	0.12	< 10	< 10	58	< 10	42
RW 18	205 226	< 1	< 0.01	5	50	< 2	< 2	< 1	6	< 0.01	< 10	< 10	1	< 10	< 2
RW 19	205 226	< 1	0.01	13	910	2	2	16	7	< 0.01	< 10	< 10	254	< 10	116
RW 20	205 226	< 1	0.02	9	690	< 2	< 2	5	21	< 0.01	< 10	< 10	50	< 10	58
RW 21	205 226	< 1	0.01	7	230	< 2	< 2	3	9	< 0.01	< 10	< 10	25	< 10	44
RW 22	205 226	< 1	0.01	3	100	< 2	6	2	44	0.05	< 10	< 10	4	< 10	18
RW 23	205 226	1	0.03	34	1020	< 2	< 2	8	13	< 0.01	< 10	< 10	86	< 10	74
RW 24	205 226	1	0.03	34	860	6	2	10	11	< 0.01	< 10	< 10	88	< 10	70
RW 25	205 226	1	0.02	32	700	< 2	< 2	7	40	< 0.01	< 10	< 10	53	< 10	48
RW 26	205 226	1	0.01	32	660	< 2	< 2	7	7	< 0.01	< 10	< 10	34	< 10	26
RW 27	205 226	< 1	< 0.01	16	50	4	4	1	18	0.04	< 10	< 10	37	< 10	22

CERTIFICATION: Ron Fuller

Chemex Labs Ltd.

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To: WALTON, RON

4141 LARK RD.
VICTORIA, BC
V8X 2M6

Project :
Comments: ATTN: R. WALTON

Page Number :1-B
Total Pages :1
Certificate Date: 03-NOV-1998
Invoice No. : I9834470
P.O. Number :
Account :QLI

CERTIFICATE OF ANALYSIS A9834470

SAMPLE	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
RW #28	205	226	1	< 0.01	13	270	84	< 2	1	2	< 0.01	< 10	< 10	24	< 10	870
RW #29	205	226	4	< 0.01	38	520	18	< 2	1	3	< 0.01	< 10	< 10	27	< 10	74
RW #30	205	226	< 1	0.02	13	1030	6	< 2	16	15	0.06	< 10	< 10	308	< 10	262
RW #31	205	226	< 1	< 0.01	8	240	4	< 2	1	2	< 0.01	< 10	< 10	20	< 10	24
RW #32	205	226	< 1	< 0.01	6	390	< 2	< 2	4	2	0.04	< 10	< 10	115	< 10	48
RW #33	205	226	22	< 0.01	18	2400	16	< 2	2	9	< 0.01	< 10	< 10	97	< 10	48

CERTIFICATION: Ian Fiddler

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
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To: WALTON, RON

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Project :
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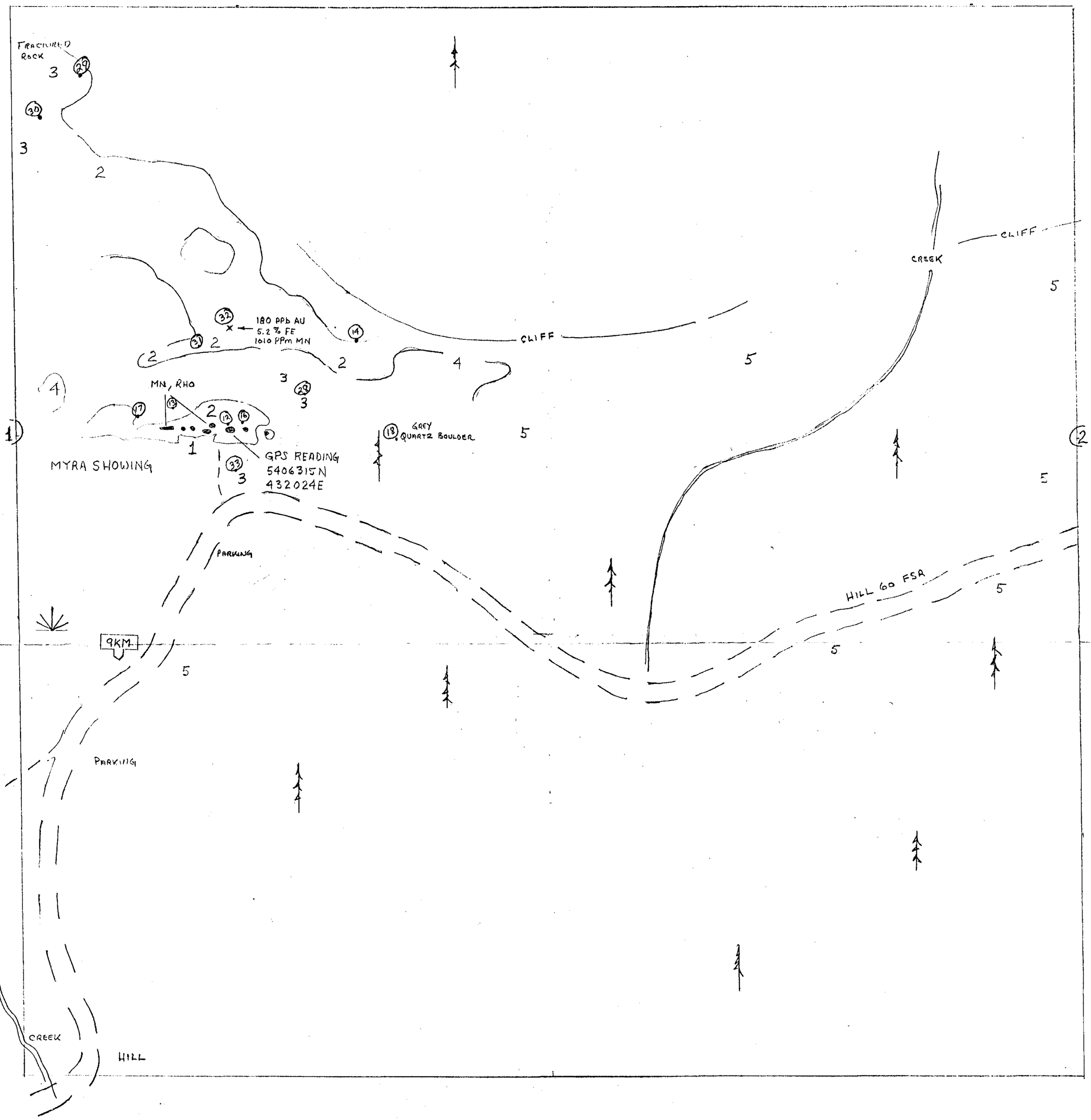
Page Number :1-A
Total Pages :1
Certificate Date: 03-NOV-1998
Invoice No. :I9834470
P.O. Number :
Account :QLI

CERTIFICATE OF ANALYSIS A9834470

SAMPLE	PREP CODE		Au ppb FA+AA	Ag ppm	Al %	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
RW #28	205	226	< 5	7.2	0.62	24	140	< 0.5	< 2	0.04	4.5	3	143	22	1.70	< 10	< 1	0.13	< 10	0.37	375
RW #29	205	226	< 5	0.4	1.50	12	70	< 0.5	< 2	0.06	< 0.5	14	42	56	3.60	< 10	< 1	0.34	< 10	1.01	350
RW #30	205	226	< 5	0.2	3.94	20	140	< 0.5	< 2	0.25	2.5	34	25	50	8.08	10	< 1	0.27	< 10	3.05	835
RW #31	205	226	< 5	< 0.2	1.01	10	40	< 0.5	< 2	0.05	< 0.5	2	126	9	2.53	< 10	< 1	0.06	< 10	0.57	620
RW #32	205	226	180	< 0.2	1.93	2	10	< 0.5	< 2	0.06	< 0.5	1	79	13	5.22	< 10	< 1	0.01	10	0.99	1010
RW #33	205	226	5	0.2	1.74	54	570	< 0.5	< 2	0.25	< 0.5	4	62	38	4.03	< 10	< 1	0.38	20	0.74	220

CERTIFICATION: Ian Fichler



SCALE 1"- 110'

0 110 220 330 440

N

98-01
P9. 43

SURE BET II CLAIM

ROCK TYPES
1 QUARTZ DIORITE
2 CHERT, CHERTY TUFF
3 ARGYLLITE
4 VOLCANICS
5 ISLAND INTRUSIVES

LEGEND	NOV 20/98

1) CLAIM POST
TRAIL
CLEARING, OUTCROP
MN LENSES
(16) SAMPLE LOCATION

R. Walton

ANGELA 1
359323
35X6E

CHEMAINUS RIVER

092B 13W
VICTORIA MINING DISTRICT
N

1401
4SX5W

MINERAL & PLACER RESERVE
B.C. REG. 63/94 MARCH 03, 1994.
+ NO STAKING

364108
364110
364111
364109
MAIN II
MAIN III

360924 LOOKOUT II
360925 LOOKOUT III
FORESTRY LOOKOUT
360923 LOOKOUT I
360926 LOOKOUT IV

MINERAL & PLACER RESERVE
OIC 3646 14-11-74
+ NO STAKING

SURE BET I
360933

COWICHAN RIVER PROVINCIAL PARK

VIEW CLAIM
364210

STRIKER 1
260250
1MX1W
44
551
NEELY 1
334181
KEITHA 1
334179
L 12G c.d.
L 13G c.d.
NEELY 2
334182
KEITHA 2
334180

Josiah Cr

E & N

Cowichan

RAL & PLACER RESERVE
ER 91/93

ADJACENT MINERAL TITLES MAP
092C 16E

MINERAL & PLACER RESERVE
B.C. 3547
1972 SEP
SURE BET
NO STAK
P 3548131

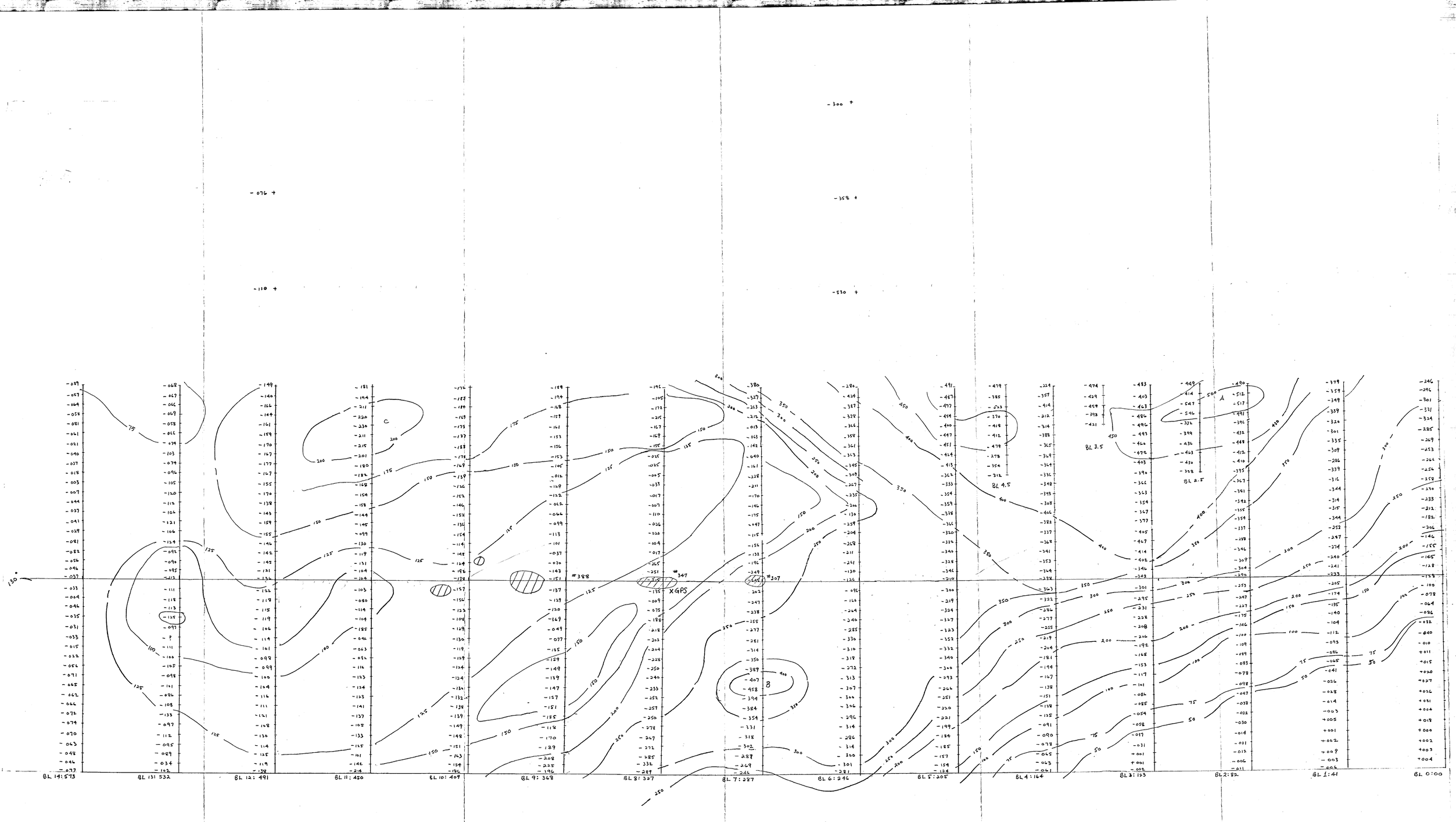
MINERAL & PLACER RESERVE
BC REG 46/93
1993 FEB 12
NO STAKING

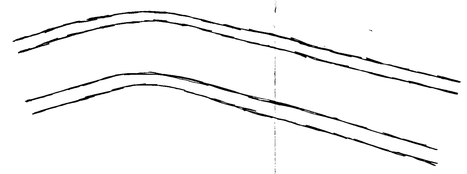
MINERAL RESERVE
NO STAKING
O/C 32, 29 JAN 1988

ESQUIMALT AND NANAIMO RLY.

CANADIAN NATIONAL

Chanlog COWICHAN RIVER PROVINCIAL PARK





SURE BET II
SELF POTENTIOMETER SURVEY

SEPT 15/98
R. Walter

NTS MAP 092B 13W

MN LENSE	READINGS TAKEN IN MILLIVOLTS -340	SCALE 1" = 10 FT.
XGPS READING TAKEN: UTM ZONE 10, 427609E, 5409991N		
MYRA SHOWING	MINFILE # 092B 093	VICTORIA MINING DIVISION

98-01
PG. 95

N

INTRODUCTION

The following report is the result of a season of prospecting various areas along a ridge known as " hill 60 " to locals . The length of this ridge being approximately 15 km. . Residents of the community of Cowichan Lake named the hill after local war heroes were victorious in capturing a " hill 60 " in the first world war .
The same war effort led to the discovery of several manganese showings along this ridge overlooking the Cowichan valley . The manganese ore was needed in the production of good quality steel .
The " hill 60 " manganese mine produced approximately 1000 tons of ore during it's short life . Later it was to be mined for it's carving stone and other lapidary interests . Recent visits to the site of a small quarry and to some much older workings reveal little obvious rhodonite left . Perhaps the leases 12G and 13G could yield some valuable gem stone if they were quarried as well . The underground workings on these leases are dangerous and have partly filled with rubble . Downhill from the work site are piles of tailings and twisted , small guage rails .
To access the " original hill 60 " minesites may be difficult in the near future . The rains of last winter have taken their toll on the old logging road , which is 4WD or a healthy uphill climb for 3 km. From the main road .
The object of the '98 prospecting program I initiated was to sample each of the 3 showings recorded in the minfile reports . As well , I had set out to visit other localities known to host rhodonite . Due to the extreme fire hazard conditions and road diffusing by private logging companies I was unable to visit the rhodonite showings . Instead I concentrated on finding a new showing by traversing the " hill 60 " ridgetop on either side , following the contact of the sicker volcanics and the island intrusives .
Prospecting " hill 60 " north yielded little manganese but good sulphides and a copper showing . " Hill 60 " south was where I found a large manganese showing . I call this new showing , found by my son and I , the " View claim " .
The terrain is generally steep where the sedimentary rock has worn away at the contact with the granitoid intrusives . Prospecting is difficult and requires stamina but it is these slopes that will yield good outcrop .
The foliage at ground level consists of salal , licorice ferns and quite often devils club . Most of the tree stands are mature douglas fir , spruce , western red cedar , western hemlock and big leaf maple . Red alder is abundant in old clearings . The pine is rare and found usually at the higher elevations .

Melore showing

Minfile # 092B 016

NTS map 092B 13W

Coordinates Lat. 48 48 25
Long. 123 55 46

UTM zone 10 northing 5406315 easting 432024

LOCATION AND ACCESS

Access to the " sure bet " claim is along an old trail used by forestry workers and salal workers .
The trail begins just opposite the 3 km. Sign on the " hill 60 ' forest access road . The access road leaves highway #18 to Cowichan lake 13 km. In from highway #1 . There are parking spots just past the trail beginning .
The forest access road is in good condition and is still by logging trucks on occasion . As the road is on crown land there isn't a gate .

MAIN COMMODITIES SEARCHED FOR

The dimension stone rhodonite is the object of this prospector's program . The area sampled previously had yielded some promising colour and so it was the intention to see if the deposit had some size .
Approximately 4.5 km. West and within the same geological setting , the old " hill 60 " minesites had produced gemstone and carving material . Many local giftshops and craft stores have had this jewellery and figurines for sale . These days there is no " local " island rhodonite produced that the author knows of .

WORK PERFORMED

The contact zone between the Melore showing and the leased claims protecting the old " hill 60 " workings was prospected . The " sure bet " claim was staked in 1997 to cover the Melore prospect .
To prospect the contact zone overlooking the cowichan valley we were driven by 4x4 transportation to the leases 12G and 13G . From the east boundary of the leases we traversed the area until the contact was found . The contact of the sicker volcanics and the granidorite can be seen on the logging road where the road breaks out of the forest driving west .
Once found we followed this zone east , generally along the top of the ridge overlooking some steep slopes and spectacular views . An aerial photo assisted in finding the few clearings where bedrock was exposed , again along the cliffs .

Another day was used to prospect the unit staked . we checked the float below the occurrence as well as what was gathered in a nearby creek bed just west of the showing . Three days of labour went into the sampling of the visible rhodonite . This involved the use of the pionjar rock drill .

SIGNIFICANT RESULTS

The rhodonite sampled on the " sure bet " claim is some of the best found during the summer project . The samples were taken at the following GPS coordinates ; UTM zone 10 , 5406315N and 432024E , elevation is 400 m .
The pyrolusite , rhodonite veins strike northeast . In the one large opening there are 3 veins , each about 20 m. apart .
Although they differ in width , the common factors are the chert host , associated quartz and similar colour . All carry the garnet spessartite .
A sample taken to the industrial geologists office in Victoria was called pyroxmangite , 2nd only such showing in BC .
Little sulphides were present and so no samples were taken out for assay .
The western vein was stripped with grubhoe work and found to extend an additional 2 m . before the outcrop plunges to depth . The easterly vein still has depth even though I had previously mined a large boulder of material from it .
Of interest is the area of exposed outcrop directly north of the initial post . Here conventional prospecting uncovered two small veins of Mn. Bearing rhodonite and the yellow mineral spessartite , striking 330 degrees .
This new showing of rhodonite , some 120 m . east of the Melore veins , has enough similarities to assume that there are more veins present .
There are few openings and very little outcrop . Perhaps the overburden can be sampled for manganese using samples from the " B " horizon along a baseline joining the known showings .
The presence of pyroxmangite and the purple colour of some of the rhodonite may indicate other manganese minerals may be found . There is a demand for Sugillite in todays market .
At the termination of the last days effort to mine some of the rhodonite for testing purposes , a bright green chert was encountered . This also will be cut and polished .
The work at this site will continue .

BRITISH COLUMBIA
PROSPECTORS ASSISTANCE PROGRAM
PROSPECTING REPORT FORM (continued)

B. TECHNICAL REPORT

- One technical report to be completed for each project area.
- Refer to Program Requirements/Regulations, sections 15 to 17.
- If work was performed on claims a copy of the applicable assessment report may be submitted in lieu of the supporting data (see section 16) required with this TECHNICAL REPORT.

Name RON WALTON Reference Number 97/98 P1

LOCATION/COMMODITIES

Project Area (as listed in Part A) MELORE SHOWING MINFILE No. if applicable 092B 016

Location of Project Area NTS 092 B 13W Lat 48 48 25 Long 123 55 46

Description of Location and Access 13 KM WEST ALONG HWY 18 TO COWICHAN LAKE. TURN NORTH FROM HWY. DRIVE INTO 3 KM SIGN ON HILL 60 FOREST ACCESS ROAD. DIRECTLY ACROSS FROM SIGN TAKE OLD TRAIL IN APPROX 500 M. TO LGE. CLEARING, 150 M. S.W. OF CLEARING.

Main Commodities Searched For RHODONITE

Known Mineral Occurrences in Project Area OLD HILL 60 MINESITES APPROX. 4.5 KM WEST.

WORK PERFORMED

1. Conventional Prospecting (area) 3.5 KM. OF HILL 60 RIDGE TOP. AREA OF "SURE BET" UNIT
2. Geological Mapping (hectares/scale)
3. Geochemical (type and no. of samples)
4. Geophysical (type and line km)
5. Physical Work (type and amount) GRUBHOE STRIPPING, TRENCHING OF 1 M^2
6,. Drilling (no,. holes, size, depth in m, total m)
7. Other (specify) BREAK SAMPLES OUT OF ROCK.

SIGNIFICANT RESULTS

Commodities RHODONITE Claim Name "SURE BET"

Location (show on map) Lat. 48 48 25 Long 123 55 46 Elevation 400 M.

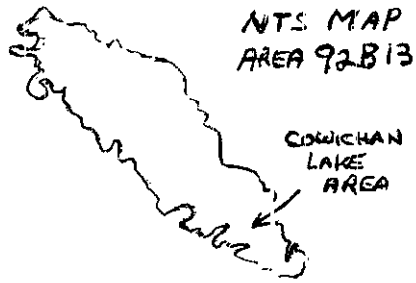
Best assay/sample type GEM STONE QUALITY. GOOD HARDNESS, BRIGHT COLOUR. FOUND IN MOST WESTERLY VEIN.

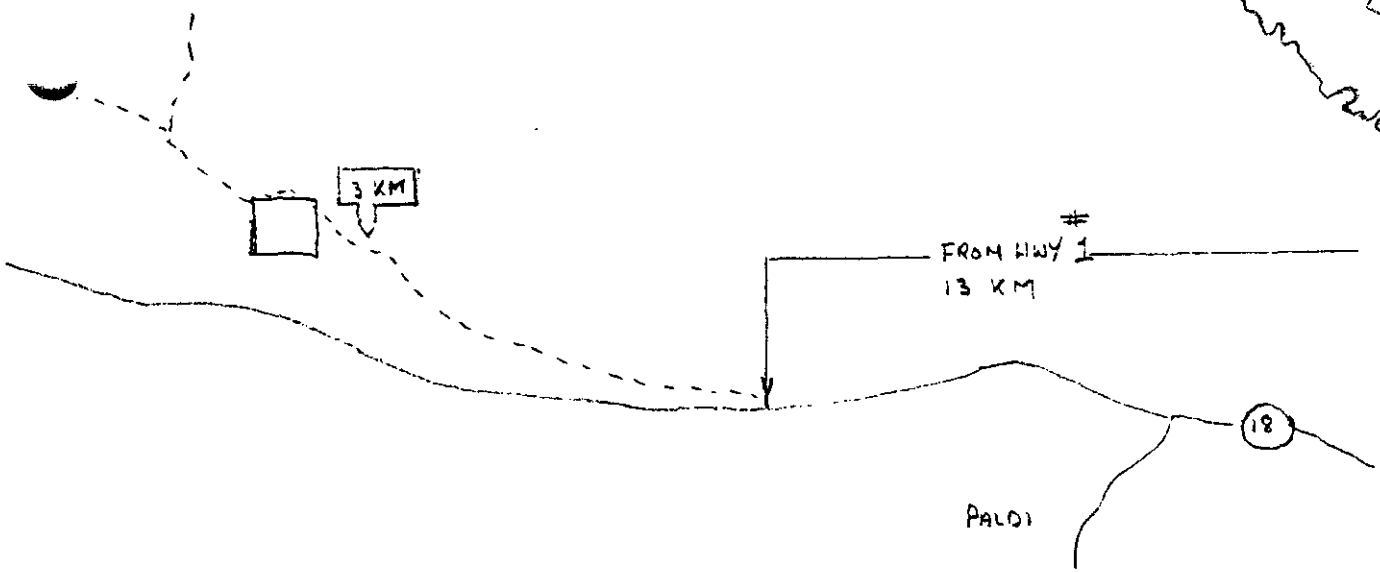
Description of mineralization, host rocks, anomalies RHODONITE, PYROLUSITE, SPESSARTITE, PYROXMANGITE FOUND IN CLOSE ASSOCIATION WITH QUARTZ. VEIN TYPE STRIKING 45° NORTH. HOST ROCK AT THE ANOMALY, CHERT WITH BRIGHT GREEN CHERT A POSSIBLE PRODUCT OF THE METAMORPHYSM. 200 M. TO THE N.E. THE ISLAND INTRUSIVE GRANITE IS VISIBLE. BELOW THE SHOWING IS EVIDENCE OF FRACTURING AND A CONGLOMERATE.

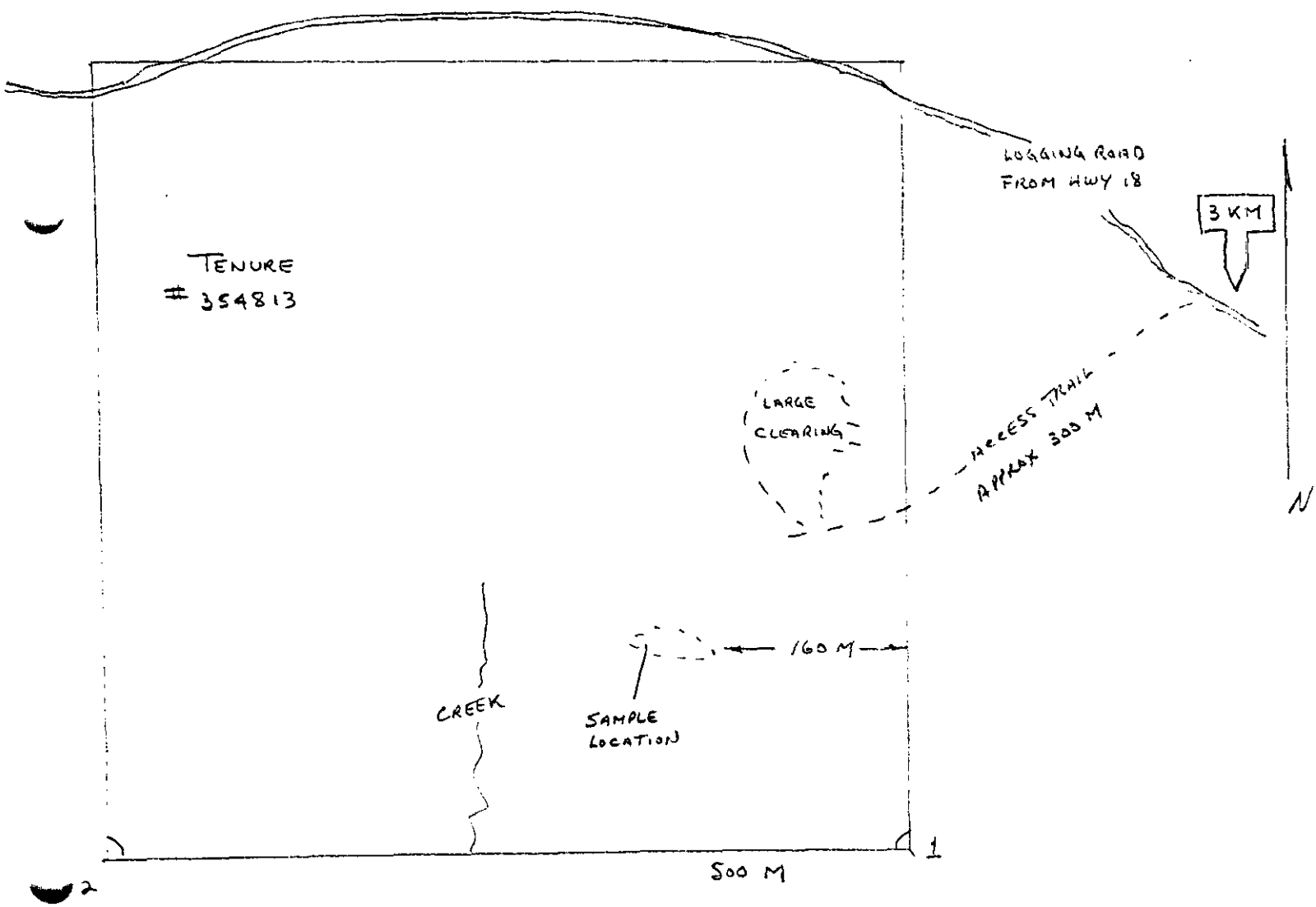
Supporting data must be submitted with this TECHNICAL REPORT

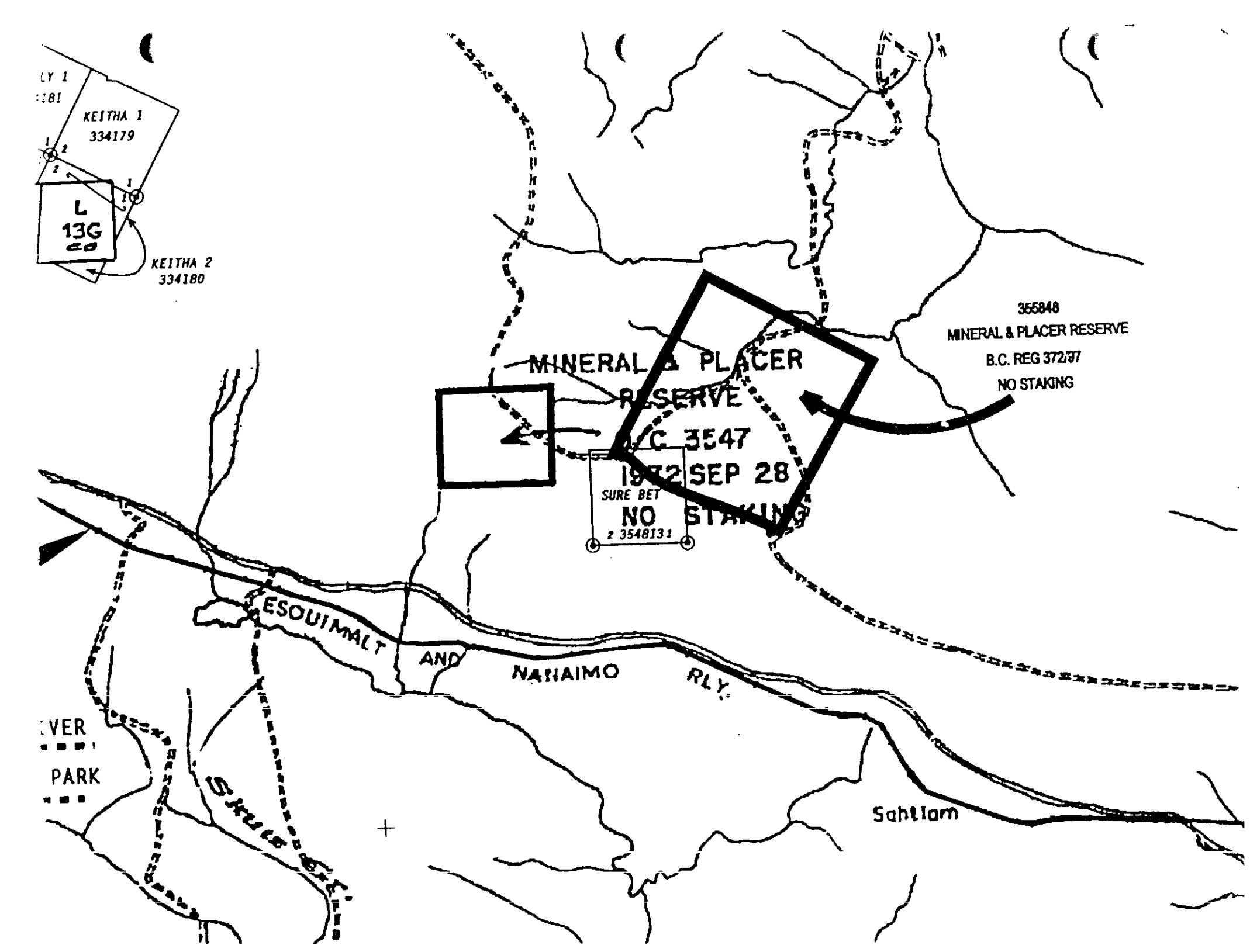
Information on this form is confidential for one year from the date of receipt subject to the provisions of the *Freedom of Information Act*.

SURE BET
CLAIM








KEITHA 1
334179
L
13G
KEITHA 2
334180
355848
MINERAL & PLACER RESERVE
B.C. REG 372/97
NO STAKING
MINERAL & PLACER
RESERVE
L.C. 3547
1972 SEP 28
SURE BET
NO STAKING
z 3548131
ESQUIMALT AND NANAIMO RLY.
PARK
Sahtlam

HILL 60 FSR

CREEK

LARGE CLEARING

5

2

5

5

ACCESS TRAIL

5

5

5

5

MELORE SHOWING

AREA OF '98 SAMPLING

AREA OF '97 SAMPLING

MN., RHO., QV

QV

MN, RHO, QV

2

2

2

GPS READING
5906315 N
432024 E

FRACTURED ROCK

QUARTZ

BLACK CONGLOMERATE

4

SCALE 1" = 110'

0 110 220 330 440

N

98-01
pg. 63

SURE BET CLAIM

ROCK TYPE

5 - GRANITE, DIORITE

2 - CHERT, CHERTY TUFF, QUARTZ,

LEGEND | NOV 20/98

- 1 CLAIM POST
- TRENCH
- TRAIL

R. Walton

ANGELA 1
359323
35X6E

CHEMAINUS RIVER

092B 13W
VICTORIA MINING DISTRICT
N

1401
4SX5W

MINERAL & PLACER RESERVE
OIC 3646 14-JAN-74
+ NO STAKING

364108
364110
364111
364109
MAIN I
MAIN II
MAIN III
MAIN IV

360924 LOOKOUT II
360925 LOOKOUT III
FORESTRY LOOKOUT
360923 LOOKOUT I
360926 LOOKOUT IV

MINERAL & PLACER RESERVE
B.C. REG. 63/94 MARCH 03, 1994.
+ NO STAKING

SURE BET II
360933

COWICHAN RIVER
PROVINCIAL PARK

E & N

Cowichan

RAL & PLACER RESERVE
ER 91/93

VIEW CLAIM
364210

Josiah Cr

STRIKER 1
260250
INXIN
44
551
NEELY 1
334181
KEITHA 1
334179
L 12G
L 13G
NEELY 2
334182
KEITHA 2
334180

COWICHAN RIVER
PROVINCIAL PARK

MINERAL & PLACER RESERVE
B.C. REG. 91/93

ADJACENT MINERAL TITLES MAP 092C16E

MINERAL & PLACER RESERVE
BC REG 46/93
1993 FEB 12
NO STAKING

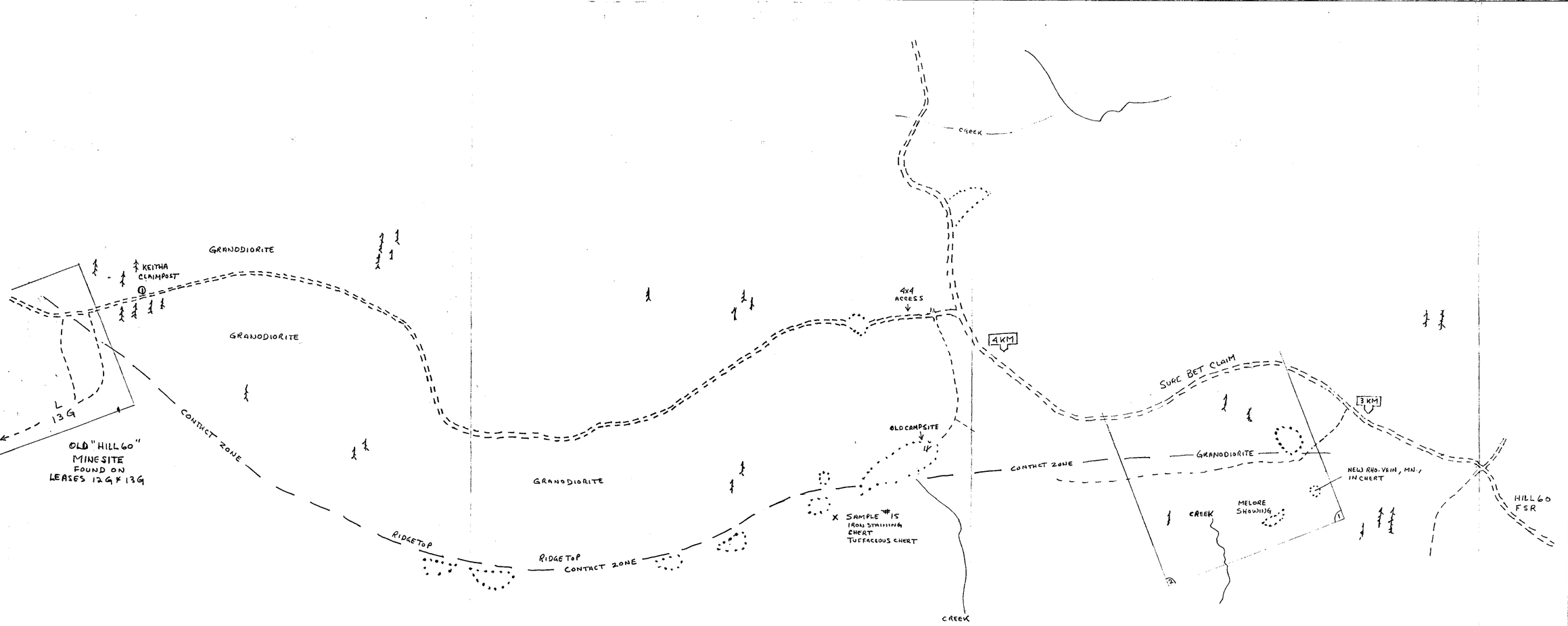
MINERAL RESERVE
NO STAKING
O/C 32, 29 JAN 1988

CANADIAN NATIONAL

Chanlog COWICHAN RIVER PROVINCIAL PARK

ESQUIMALT AND NANAIMO RLY.

MINERAL & PLACER RESERVE
O/C 3547
1972 SEP
SURE BET
NO
2 3548131


GRANODIORITE
KEITHA CLAIMPOST
1
GRANODIORITE
L 13G
OLD "HILL 60" MINESITE FOUND ON LEASES 12G & 13G
CONTACT ZONE
GRANODIORITE
RIDGETOP
RIDGETOP
CONTACT ZONE
4x4 ACCESS
OLD CAMPSITE
X SAMPLE #15 IRON STAINING CHERT TUFFACEOUS CHERT
CREEK
CREEK
4 KM
SURE BET CLAIM
3 KM
CONTACT ZONE
GRANODIORITE
NEW RHD. VEIN, MN. IN CHERT
CREEK
MELORE SHOWING
1
2
HILL 60 FSR
MELORE SHOWING
MINFILE # 092B 016
NTS MAP 092B 13W
N
LEGEND:
ROAD
TRAIL
1 CLAIMPOST
CLEARING
CONTACT ZONE
SCALE 1" = 550'
R. Walton NOV 18/98
98-01 P9.65

INTRODUCTION

The following report is the result of a season of prospecting various areas along a ridge known as " hill 60 " to locals . The length of this ridge being approximately 15 km. . Residents of the community of Cowichan Lake named the hill after local war heroes were victorious in capturing a " hill 60 " in the first world war .
The same war effort led to the discovery of several manganese showings along this ridge overlooking the Cowichan valley . The manganese ore was needed in the production of good quality steel .
The " hill 60 " manganese mine produced approximately 1000 tons of ore during it's short life . Later it was to be mined for it's carving stone and other lapidary interests . Recent visits to the site of a small quarry and to some much older workings reveal little obvious rhodonite left . Perhaps the leases 12G and 13G could yield some valuable gem stone if they were quarried as well . The underground workings on these leases are dangerous and have partly filled with rubble . Downhill from the work site are piles of tailings and twisted , small guage rails .
To access the " original hill 60 " minesites may be difficult in the near future . The rains of last winter have taken their toll on the old logging road , which is 4WD or a healthy uphill climb for 3 km. From the main road .
The object of the '98 prospecting program I initiated was to sample each of the 3 showings recorded in the minfile reports . As well , I had set out to visit other localities known to host rhodonite . Due to the extreme fire hazard conditions and road diffusing by private logging companies I was unable to visit the rhodonite showings . Instead I concentrated on finding a new showing by traversing the " hill 60 " ridgetop on either side , following the contact of the sicker volcanics and the island intrusives .
Prospecting " hill 60 " north yielded little manganese but good sulphides and a copper showing . " Hill 60 " south was where I found a large manganese showing . I call this new showing , found by my son and I , the " View claim " .
The terrain is generally steep where the sedimentary rock has worn away at the contact with the granitoid intrusives . Prospecting is difficult and requires stamina but it is these slopes that will yield good outcrop .
The foliage at ground level consists of salal , licorice ferns and quite often devils club . Most of the tree stands are mature douglas fir , spruce , western red cedar , western hemlock and big leaf maple . Red alder is abundant in old clearings . The pine is rare and found usually at the higher elevations .

Stanley Creek showing

Minfile # 092C 116

NTS map 092C 16E

Coordinates Lat 48 51 29
Long 124 00 56
UTM zone 10 northing 5411849 easting 425353 elev. 850 M.

LOCATION AND ACCESS

Access to the " hill 60 " area is via highway # 18 to Cowichan lake . About 13 km. along this highway the forest access road branches off to the north . The road follows the high ground for 15 km. to where it switchbacks in the last .5 km. to end at the old forestry lookout site .
The showing is found an the lookout 1 claim , one of 4 units staked to cover the height of land . 280 M. north along the road from the switchback and 30 M. east is the outcrop . Blast rock is evident along the hillside , east of the road .

MAIN COMMODITIES SEARCHED FOR

The two lenses of rhodonite described in the minfile report were found under several tons of blast rock . To verify the quality of the rhodonite I needed to drill out samples . These were sawn and then tumble polished .
Due to the possibility of other metamorphic products along the contact zone all sulphides were inspected carefully and assays taken to look for the presence of gold , silver and copper .

KNOWN MINERAL OCCURENCES IN PROJECT AREA

The old " hill 60 " manganese mine was a producer within the early years of this century . As the minesite is within a similar geographic setting as this showing , the chances of a deposit of good dimensions is likely . Also to the west , the Meade creek occurrence is also a rhodonite showing of importance .
The gold , silver and copper reported to be within 300 M. of the " stanley creek " showing was not found . Instead a thorough research in the mines library yielded the answer . Another rhodonite showing , approximately 1 km. to the north , had been carefully mapped out by exploration in 1986 - 87 . The description of the location , mineralization and sample assays match a showing they got of gold , silver and copper from a sample # 352 in asst. rpt. # 16053 . This gold showing was 300 m. NE of the minor rho. showing on a railway grade one km. north of the " stanley creek " showing .

WORK PERFORMED

The " stanley creek " showing had been blasted in at least 4 areas . Blast rock covered any evidence of depth or what was in place . Blasted rhodonite may be worthless as gem stone, personal communication with members of Victoria lapidary and Mineral society .
Two small pits were obvious along strike of the NE trending bedding . Both pits were approximately 8 ' x 8 ' , in a clearing of 41 ' length . The width of the work area is about

27'. At the east side of the clearing the slope falls away quickly to the road , 50 ' away . Once a trail was put into the blast area the foliage was brushed out to view the work site . Using shovels and grubhoe the blast rock was removed . After 3 days we were able to brush and wash off the exposed bedrock to examine the 2 lenses . Running parallel for 10 ', one lense is wide enough to sample . The other lense is narrow and fractures easily , perhaps the result of the blasting .
Another 3 days were spent finding and breaking rock along the contact zone . This zone is very important to the finding of other rho as the " stanley creek " showing is only 100' from the granite contact .
This contact was followed as closely as possible and a map compiled . samples were taken and plotted .
Traverses were made using landmarks to adequately prospect Lookout claims 1 and 2 . Lookout claims 3 and 4 are within the granite body .

SIGNIFICANT RESULTS

The rhodonite found at the showing is of good quality . The colour grades from pink to an orange where the spessartine is abundant . The stone is fine grain and seems to polish well. The dendrites running through sampled pieces add character . The quantity is the only questionable factor .
An oxidised , white crusty , blue - black sample taken 50' south assayed 10,000 mn. This would indicate a strike length of 70 ' or a parallel lense . Overburden is 2 ' - 3 ' deep .
A malachite stained sample taken at the nose of a jasperoidal intrusion in the blast pit yielded 1225 ppm. Cu. .
Mineralisation is found within 200 ' of the contact zone . Jasper is common and is a yellow - brown . Many narrow quartz stringers are found within the sediment package . At least two large iron formations parallel the contact zone . Fe. samples grade from 2.5 to 8 % .
Exploration geologists mapped in an area explained to belong to Fording Coal . As the area covered the " stanley creek " showing it was a concern .
" Base metal rights of a small part of the southwest corner of the Cow 7 claim are owned by Fording Coal Ltd. by virtue of the E and N land grant " .
Mineral titles , land titles and crown land registry offices were visited on several occasions . Satisfaction was achieved by phone calls and correspondence with fording Coal who graciously checked their records and reported back that on December 7 / 73 that area was surrendered to the crown .

2.0 PROPERTY LOCATION, ACCESS, TITLE

The Chem property is located in the Chemainus River valley approximately 23 km northwest of the city of Duncan on Vancouver Island, British Columbia (Figure 1). The property is in the Victoria Mining Division, on NTS sheets M92C/16E and M92B/13W and centred at approximately 123°59'W longitude; 48°52'N latitude (Figure 2).

Access to the property is via MacMillan Bloedel's all weather Copper Canyon Main road from Chemainus. Smaller logging roads provide reasonable access to much of the property although many of these are blocked to vehicle traffic.

The Chem property consists of four mineral claims totalling 62 units, as summarized below:

CLAIM	RECORD NUMBER	UNITS	ANNIVERSARY DATE	YEAR REGISTERED
Cow 7	1439 (3)	18	March 6, 1993	1985
9	1441 (3)	12	March 6, 1992	1985
10	1442 (3)	16	March 6, 1993	1985
11	1443 (3)	16	March 6, 1992	1985

The claims were grouped as the Chem Group on March 5, 1986.

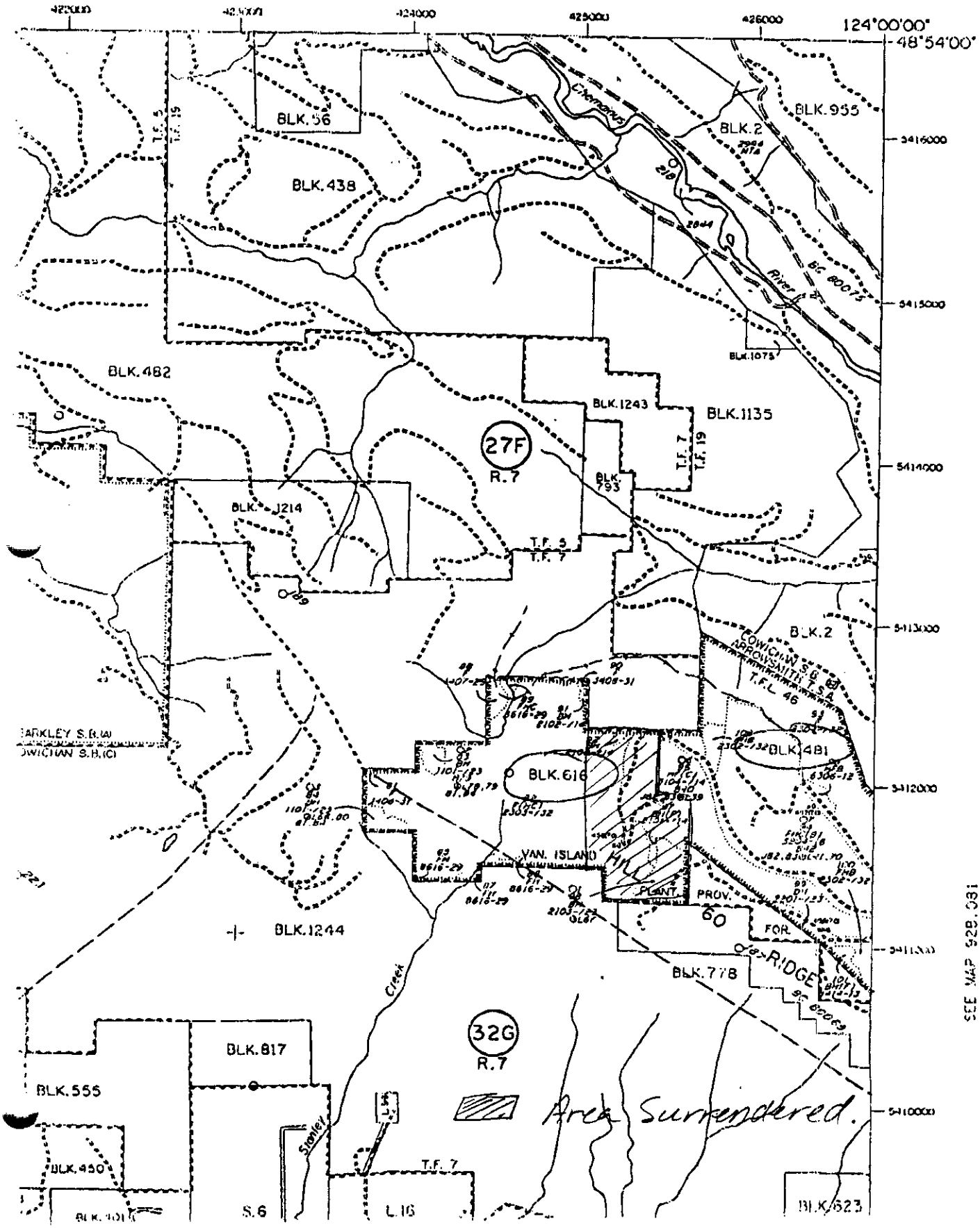
Lee A. Balak, James Simpson and Richard Watson each own one-third of the Chem Group. International Cherokee Developments Ltd. has the right to earn a 50% interest in the property by virtue of an option agreement dated December 27, 1985.

? *

Base metal rights of a small part of the southwest corner of the Cow 7 claim are owned by Fording Coal Ltd. by virtue of the E and N Land Grant (Figure 2).

FROM ASST RPT # 16053

92C.090


424000
425000
426000
124°00'00"
48°54'00"
5416000
5415000
5414000
5413000
5412000
5411000
5410000
BLK.56
BLK.438
BLK.955
BLK.2
Chemainus
River
BLK.482
BLK.1243
BLK.1135
27F
R.7
BLK.793
BLK.1214
T.F. 5
T.F. 7
T.F. 19
BLK.2
T.F.L. 46
BLK.481
BLK.616
VAN. ISLAND
PLANT
PROV.
FOR.
60
RIDGE
BLK.778
BLK.1244
Creek
BLK.817
BLK.555
32G
R.7
Stanley
BLK.450
S.6
L.16
BLK.623
Area Surrendered.
SEE MAP 92B.081

SAMPLES TAKEN FOR ASSAY

1/ Malachite , Mn. Staining , sulphides 2 - 5 % . Taken from nose of jasperoidal intrusive within Stanley Cr. Showing .

2/ Rusty lge. Pyrite cubes , 10 % sulphides , chert with quartz phenocryst . 50 ft. SW. of Stanley Cr. Showing .

3/ Oxidized , rusty , white crusty , Mn. Blue black chert . Quartz stringer . taken 10 ft. below #2 sample .

4/ 2 % sulphides , cherty jasper . 150 ft. SW. of Stanley Cr. Showing .

5/ Rusty , Mn. Stain , 2 % sulphides , 70 ft. N. of location line of lookout claims and SW. of pond .

6/ 2 % sulphides , bright glassy serecite . 200 ft. east of pond .

7/ Iron staining , tightly banded , phyllite shear roadcut N.

8/ Similar sample to #7 except 100 ft. S. in roadcut .

9/ Railway grade E. , 5 - 10 % sulphides in volcanics .

10 / 15 - 20 % sulphide lense in volcanics . railway grade W.

11/ Railway grade , cliff face shear , 5 - 15 % sulphides , quartz serecite .

12/ Sure bet 2 , middle of 45 M. strike length , some sulphides , visible rho. and quartz .

13/ Grid line # 11 , sure bet 2 , float with sulphides and rho .

14/ Line 0 of sure bet 2 , cliff top , rusty zone , sulphides 2 - 5 % .

15/ Only sulphides found of any importance found SW. of clearing , ridge top , hematitic volcanics west of sure bet 1 .

16/ Taken 25 ft. east of grid line # 12 . , sure bet 2 , lense of rho and Mn.

17/ Jasperoidal zone on strike with rho . showing , 5 % sulphides , sure bet .

18/ Blue grey quartz on location line of sure bet 2 , east of grid 100 ft. , contact zone .

19/ Sample taken just west of sure bet 2 claim . First creek west . On east side , contact zone , 150 ft. wide iron staining .

20/ Just west of convergence of two small creeks . Also west of sure bet 2 . 650 M. elevation . Large andesite dike , 340 degree bedding , contact area .

21/ West hilltop , contact zone , convergence of two small creeks . Halfway between sure bet 2 and railway grade turnoff . 2 % sulphides .

22/ New Mn. - rho hill 60 showing @ 550 M. elevation . UTM 10 , 427896E , 5408377N. Cu. Stain , rho .

23/ Man claims , area of gold showing , feldspar porphyry , 2 % sulphides .

24/ Man claims , area of gold showing , feldspar porphyry , 2 % sulphides .

25/ Man claims , area of gold showing , roadcut volcanics , hematitic , 5 % sulphides .

26/ Man claims , shear zone in opening , just south of road , 150 ft.west of creek , heavy malchite staining .

27/ Mn showing on unstaked ground . East of view claim at 700 M. elevation , 100 ft.

28/ Chip sample over 8 ft. , sure bet 2 , anomaly A . Some chalco , argyllite .

29/ 500 ft. north of Bl # 7 , sure bet 2 , slaty argyllite , 10 % sulphides .

30/ 450 ft. north of Bl # 7 , sure bet , chert , 5 - 15 % sulphides .

31/ 45 ft. north of the end of Bl # 8 , 5 % sulphides , cherty tuff , glassy .

32/ 65 ft. north of the end of Bl # 7 , 10 - 15 % sulphides , chert .

33/ Anomaly B , baseline # 7 , 20 ft. along line , black , slaty argyllite , 5 % sulphides .

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: WALTON, RON

4141 LARK RD.
VICTORIA, BC
V8X 2M6

Project :
Comments: ATTN: RON WALTON

Certificate Date 13-SEP-89
Invoice No. I-9829905
P.O. Number :
Account :

CERTIFICATE OF ANALYSIS A9829905

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Ag ppm	Al %	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
RW 01	205 226	25	0.4	1.18	12	60	< 0.5	2	0.94	< 0.5	22	77	1225	3.10	< 10	1	< 0.01	10	0.10	>10000
RW 02	205 226	125	1.0	0.05	84	50	< 0.5	< 2	0.05	< 0.5	25	156	455	7.24	< 10	< 1	< 0.01	< 10	< 0.01	740
RW 03	205 226	< 5	0.2	0.41	14	630	< 0.5	6	0.47	< 0.5	16	159	175	7.67	< 10	< 1	0.04	< 10	0.04	>10000
RW 04	205 226	80	< 0.2	0.04	4	110	< 0.5	< 2	0.04	< 0.5	3	291	9	4.98	< 10	< 1	< 0.01	< 10	< 0.01	415
RW 05	205 226	< 5	< 0.2	1.06	< 2	60	< 0.5	< 2	1.12	< 0.5	7	48	54	2.54	< 10	< 1	0.10	< 10	0.65	775
RW 06	205 226	< 5	< 0.2	2.52	< 2	80	< 0.5	< 2	0.51	< 0.5	11	111	27	3.59	< 10	< 1	0.13	< 10	2.09	545
RW 07	205 226	< 5	< 0.2	1.81	< 2	110	< 0.5	< 2	0.66	< 0.5	4	81	17	1.84	< 10	< 1	0.21	< 10	0.53	570
RW 08	205 226	< 5	< 0.2	1.45	< 2	330	< 0.5	< 2	0.58	< 0.5	7	92	19	3.07	< 10	< 1	0.24	< 10	0.59	390
RW 09	205 226	< 5	< 0.2	1.54	28	180	0.5	< 2	0.02	< 0.5	33	118	33	7.79	< 10	< 1	0.13	< 10	0.43	675
RW 10	205 226	10	0.6	2.85	200	120	0.5	< 2	0.11	0.5	8	24	43	5.88	< 10	< 1	0.47	< 10	2.18	515
RW 11	205 226	10	1.0	1.43	28	180	< 0.5	< 2	0.12	< 0.5	7	149	31	4.41	< 10	< 1	0.39	10	0.74	260
RW 12	205 226	< 5	< 0.2	0.20	52	1770	0.5	12	0.51	< 0.5	2	127	4	0.30	< 10	2	0.02	< 10	0.41	>10000
RW 13	205 226	< 5	< 0.2	0.19	8	810	< 0.5	14	1.89	< 0.5	3	142	< 1	0.61	< 10	2	< 0.01	< 10	0.33	>10000
RW 14	205 226	5	0.4	2.40	100	120	0.5	< 2	0.03	< 0.5	6	63	48	3.82	< 10	< 1	0.23	10	2.06	715
RW 15	205 226	< 5	< 0.2	2.12	18	60	0.5	< 2	0.96	< 0.5	15	50	80	4.29	< 10	< 1	0.11	10	1.20	900
RW 16	205 226	< 5	< 0.2	0.12	136	490	0.5	< 2	0.82	< 0.5	2	81	< 1	0.19	< 10	< 1	0.02	< 10	0.23	>10000
RW 17	205 226	< 5	< 0.2	1.77	4	170	< 0.5	< 2	0.23	< 0.5	5	82	28	2.85	< 10	< 1	0.12	< 10	1.33	885
RW 18	205 226	< 5	< 0.2	0.11	2	250	< 0.5	< 2	0.13	< 0.5	1	230	1	0.41	< 10	< 1	0.04	< 10	0.03	520
RW 19	205 226	< 5	< 0.2	4.18	8	90	< 0.5	< 2	0.06	0.5	22	22	126	11.75	10	< 1	0.05	< 10	2.06	340
RW 20	205 226	< 5	< 0.2	2.09	4	180	< 0.5	< 2	0.47	< 0.5	14	63	50	3.47	< 10	< 1	0.12	< 10	1.34	800
RW 21	205 226	< 5	< 0.2	1.52	2	120	< 0.5	< 2	0.24	< 0.5	9	45	6	2.85	< 10	< 1	0.13	< 10	0.83	990
RW 22	205 226	15	< 0.2	0.34	52	160	< 0.5	10	0.41	< 0.5	21	92	< 1	0.83	< 10	1	0.09	< 10	0.03	>10000
RW 23	205 226	< 5	< 0.2	2.74	2	40	< 0.5	< 2	0.59	< 0.5	20	79	67	4.58	< 10	< 1	0.06	10	1.96	630
RW 24	205 226	< 5	0.2	2.69	2	40	< 0.5	< 2	0.49	< 0.5	18	86	55	4.68	< 10	< 1	0.07	10	1.87	1105
RW 25	205 226	10	< 0.2	1.95	6	60	< 0.5	< 2	1.81	< 0.5	15	83	67	3.76	< 10	< 1	0.14	< 10	1.83	1010
RW 26	205 226	325	10.8	1.69	2	90	< 0.5	< 2	0.14	< 0.5	14	90	4720	4.56	< 10	< 1	0.17	< 10	0.79	1305
RW 27	205 226	165	0.6	0.86	68	100	< 0.5	6	0.20	< 0.5	68	179	440	0.67	< 10	< 1	0.06	< 10	0.16	>10000

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

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PHONE: 604-984-0221 FAX: 604-984-0218

To: WALTON, RON

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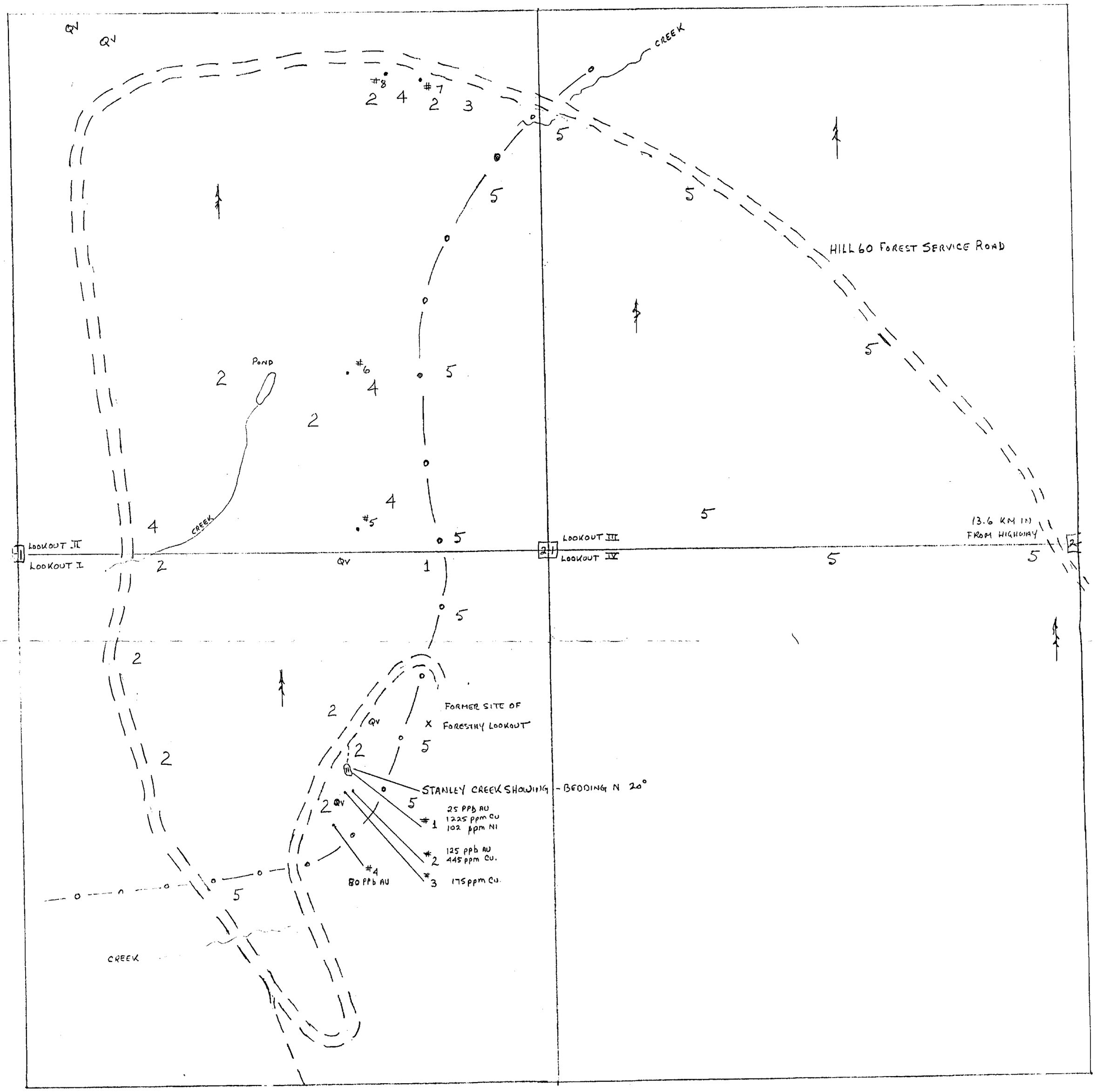
Project :
Comments: ATTN: RON WALTON

Certificate Date: 13-SEP-199
Invoice No. :19829905
P.O. Number :
Account :QLI

CERTIFICATE OF ANALYSIS A9829905

SAMPLE	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
RW 01	205	226	< 1	< 0.01	102	350	168	< 2	< 1	11	0.03	< 10	< 10	27	< 10	22
RW 02	205	226	2	< 0.01	45	230	2	< 2	< 1	3	< 0.01	< 10	< 10	22	< 10	2
RW 03	205	226	3	< 0.01	32	150	< 2	< 2	< 1	152	0.01	< 10	< 10	42	< 10	32
RW 04	205	226	2	< 0.01	8	130	< 2	< 2	< 1	3	< 0.01	< 10	< 10	25	< 10	2
RW 05	205	226	< 1	0.10	10	710	< 2	< 2	6	29	0.17	< 10	< 10	90	< 10	30
RW 06	205	226	< 1	0.04	19	460	< 2	< 2	9	53	0.20	< 10	< 10	116	< 10	56
RW 07	205	226	1	0.01	3	110	< 2	< 2	3	189	< 0.01	< 10	< 10	14	< 10	32
RW 08	205	226	22	0.04	5	1720	2	< 2	3	55	0.03	< 10	< 10	14	< 10	36
RW 09	205	226	3	0.01	14	260	< 2	< 2	4	3	< 0.01	< 10	< 10	40	< 10	144
RW 10	205	226	8	0.01	37	200	12	< 2	3	6	0.09	< 10	< 10	33	< 10	210
RW 11	205	226	55	< 0.01	22	1000	42	< 2	3	5	< 0.01	< 10	< 10	83	< 10	50
RW 12	205	226	< 1	< 0.01	29	50	12	2	< 1	164	< 0.01	< 10	< 10	11	< 10	56
RW 13	205	226	< 1	< 0.01	56	50	4	2	< 1	443	< 0.01	< 10	< 10	17	< 10	22
RW 14	205	226	1	< 0.01	15	540	16	< 2	1	4	< 0.01	< 10	< 10	61	< 10	62
RW 15	205	226	1	0.04	15	1040	4	< 2	5	14	0.20	< 10	< 10	125	< 10	54
RW 16	205	226	1	< 0.01	90	70	8	20	< 1	167	< 0.01	< 10	40	33	< 10	46
RW 17	205	226	< 1	0.03	5	160	< 2	< 2	8	15	0.12	< 10	< 10	58	< 10	42
RW 18	205	226	< 1	< 0.01	5	50	< 2	< 2	< 1	6	< 0.01	< 10	< 10	1	< 10	< 2
RW 19	205	226	< 1	0.01	13	910	2	2	16	7	< 0.01	< 10	< 10	254	< 10	116
RW 20	205	226	< 1	0.02	9	690	< 2	< 2	5	21	< 0.01	< 10	< 10	50	< 10	58
RW 21	205	226	< 1	0.01	7	230	< 2	< 2	3	9	< 0.01	< 10	< 10	25	< 10	44
RW 22	205	226	< 1	0.01	3	100	< 2	6	2	44	0.05	< 10	< 10	4	< 10	18
RW 23	205	226	1	0.03	34	1020	< 2	< 2	8	13	< 0.01	< 10	< 10	86	< 10	74
RW 24	205	226	1	0.03	34	860	6	2	10	11	< 0.01	< 10	< 10	88	< 10	70
RW 25	205	226	1	0.02	32	700	< 2	< 2	7	40	< 0.01	< 10	< 10	53	< 10	48
RW 26	205	226	1	0.01	32	660	< 2	< 2	7	7	< 0.01	< 10	< 10	34	< 10	26
RW 27	205	226	< 1	< 0.01	16	50	4	4	1	18	0.04	< 10	< 10	37	< 10	22

CERTIFICATION: David Fuller



SCALE 1" = 220'

0 110 220 440 660 880

N

98-01
P9. 83

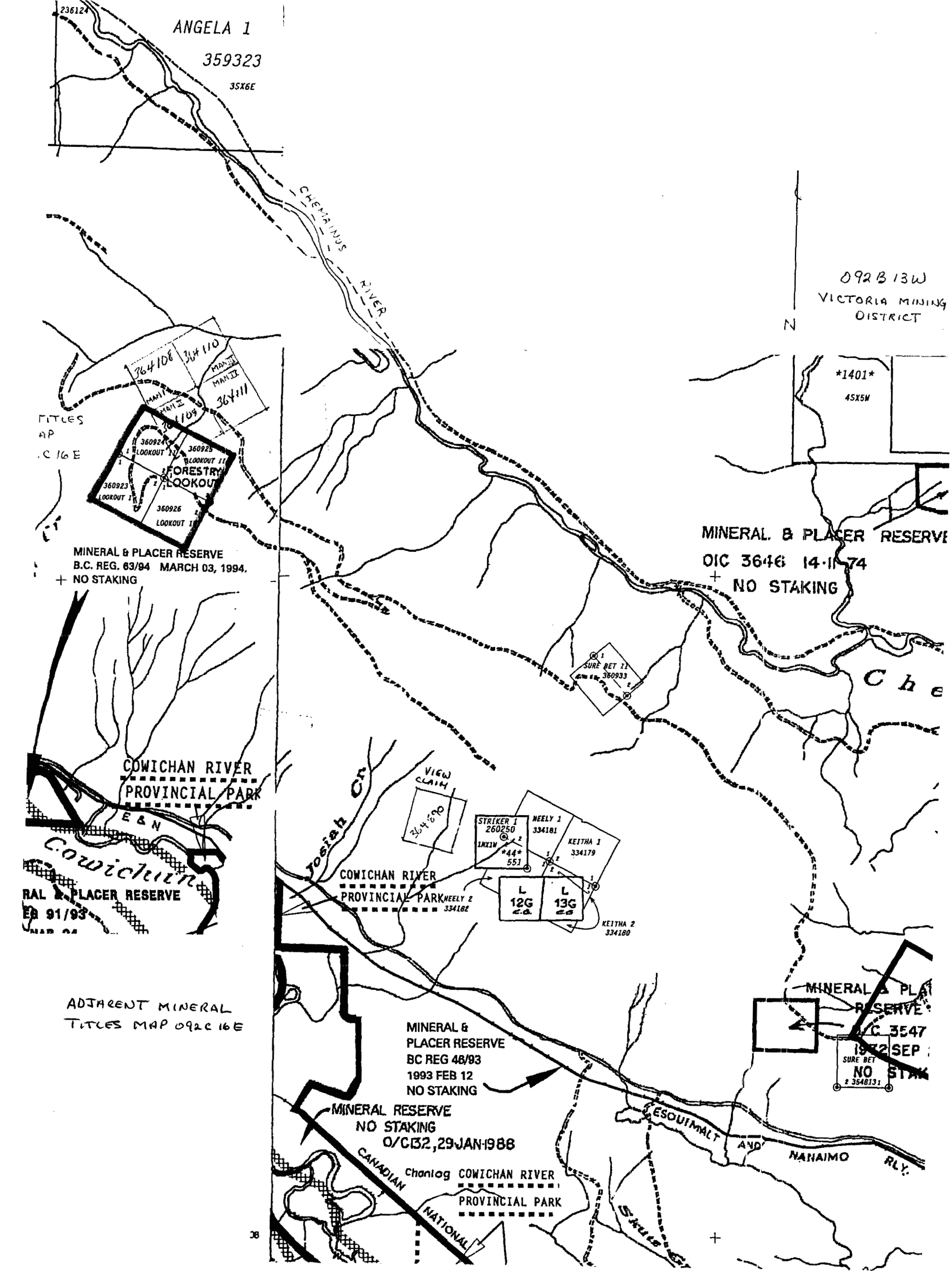
STANLEY CREEK SHOWING

ROCK TYPE	1 - QUARTZ DIORITE
Qv- QUARTZ	2 - CHERT, TUFF
	3 - ARGILLITE
	4 - VOLCANICS
	5 - ISLAND INTRUSIVES

LEGEND — NOV 20/98

- 1 CLAIM POST
- #6 SAMPLE LOCATION
- CONTACT ZONE
- ROAD
- TRAIL
- CREEK

R. Walton



ADJACENT MINERAL
TITLES MAP 092C 16E

INTRODUCTION

The following report is the result of a season of prospecting various areas along a ridge known as " hill 60 " to locals . The length of this ridge being approximately 15 km. . Residents of the community of Cowichan Lake named the hill after local war heroes were victorious in capturing a " hill 60 " in the first world war .
The same war effort led to the discovery of several manganese showings along this ridge overlooking the Cowichan valley . The manganese ore was needed in the production of good quality steel .
The " hill 60 " manganese mine produced approximately 1000 tons of ore during it's short life . Later it was to be mined for it's carving stone and other lapidary interests . Recent visits to the site of a small quarry and to some much older workings reveal little obvious rhodonite left . Perhaps the leases 12G and 13G could yield some valuable gem stone if they were quarried as well . The underground workings on these leases are dangerous and have partly filled with rubble . Downhill from the work site are piles of tailings and twisted , small guage rails .
To access the " original hill 60 " minesites may be difficult in the near future . The rains of last winter have taken their toll on the old logging road , which is 4WD or a healthy uphill climb for 3 km. From the main road .
The object of the '98 prospecting program I initiated was to sample each of the 3 showings recorded in the minfile reports . As well , I had set out to visit other localities known to host rhodonite . Due to the extreme fire hazard conditions and road diffusing by private logging companies I was unable to visit the rhodonite showings . Instead I concentrated on finding a new showing by traversing the " hill 60 " ridgetop on either side , following the contact of the sicker volcanics and the island intrusives .
Prospecting " hill 60 " north yielded little manganese but good sulphides and a copper showing . " Hill 60 " south was where I found a large manganese showing . I call this new showing , found by my son and I , the " View claim " .
The terrain is generally steep where the sedimentary rock has worn away at the contact with the granitoid intrusives . Prospecting is difficult and requires stamina but it is these slopes that will yield good outcrop .
The foliage at ground level consists of salal , licorice ferns and quite often devils club . Most of the tree stands are mature douglas fir , spruce , western red cedar , western hemlock and big leaf maple . Red alder is abundant in old clearings . The pine is rare and found usually at the higher elevations .

Hill 60 North

NTS maps 92C16E and 92B13W

LOCATION AND ACCESS

The purpose of the " hill 60 north " portion of this prospector's program was to follow the contact zone along between the " myra " (minfile # 092 B 093) and the " stanley creek (minfile # 092C 116) rhodonite showings . This involved following the ridgetop above the chemainus river valley .
The traverses began at the 9 km. sign along the " hill 60 forest service road " . The logging road leaves highway # 18 west of highway #1 , 13 km. . North trending valleys were searched out for float or outcrop of any mineral importance . The prospecting took in the " railway grade area " just north of the " stanley creek showing " where the author has 4 units called the " lookout claims " .

MAIN COMMODITIES SEARCHED FOR

The 2 minfile showings mentioned above were known to be within a short distance of the contact between the sicker volcanics and the island intrusives .
This search was for evidence of more manganese or any other contact metamorphism . All sulphides were examined because of the possibilities of finding massive sulphide mineralization . The " sicker volcanics " or " myra formation " is host to mines and known deposits , ie; the Boliden mine at the head of Myra creek .
Part of the project involved prospecting an area believed to have yielded small values of gold , silver and copper . These minerals were found in the mid eighties and confirmed the following year " 86 with a set of assays , asst. rpt. # 16053 .
A new rhodonite showing , 1 km. north of the " stanley creek showing " , was reported to have been found on an old railway grade , asst. rpt. # 15013 .

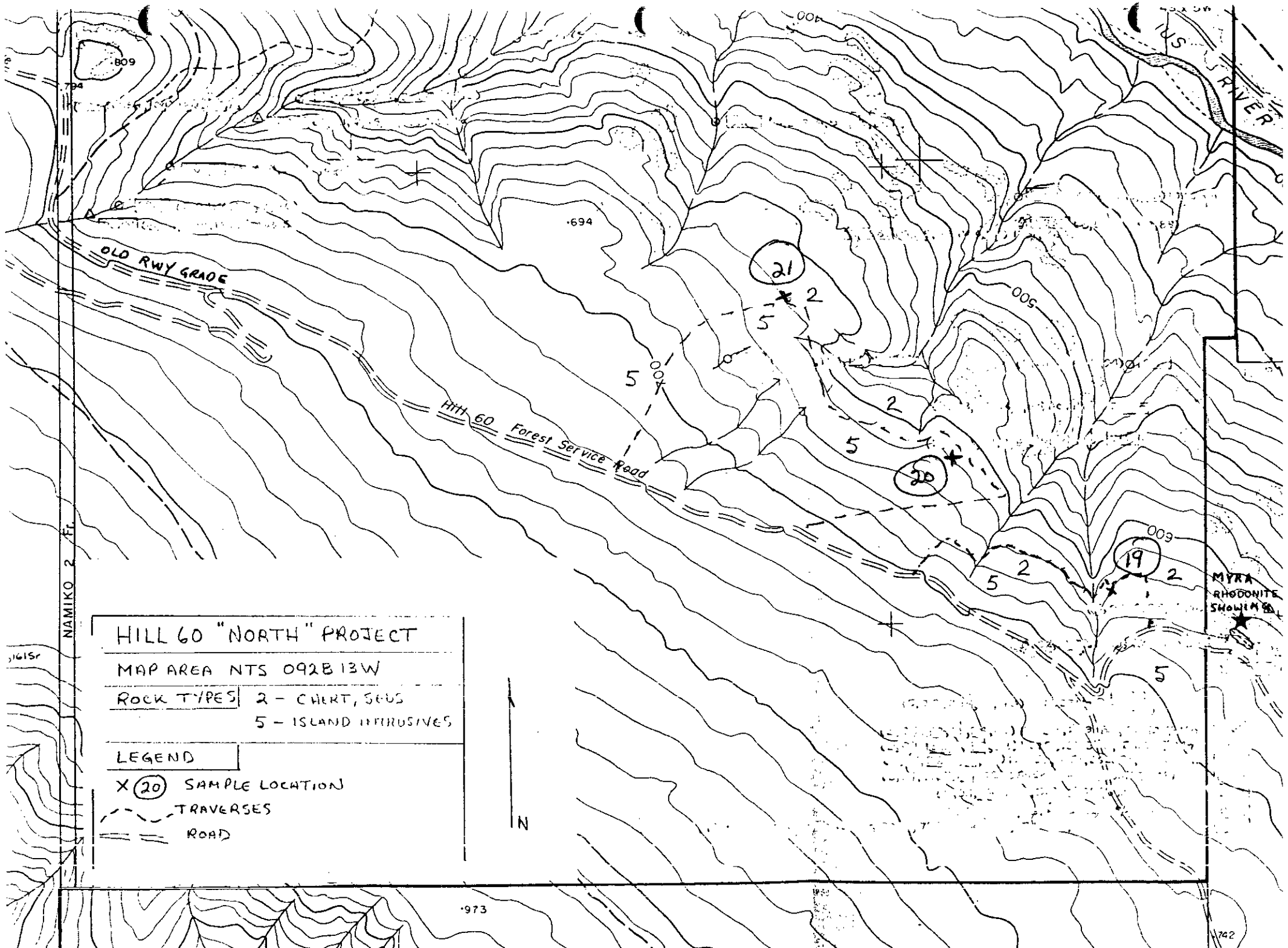
WORK PERFORMED

Conventional prospecting made up th bulk of these 3 days spent .10 samples were collected at interesting sites .
The staking of 4 units to protect the main area of interest was accomplished . Traverses were done over the area staked . Using maps provided by International Cherokee geologists and availlable in the mines library , a lot of rock was examined .
Traverses just west of the " myra " covered a lot of ground . Evidence of early " tree spikers " was found as we approached a section of the old railway about 11 km. distance of the " hill 60 " forest service road . At least 20 rail spikes adorned 2 old growth trees .

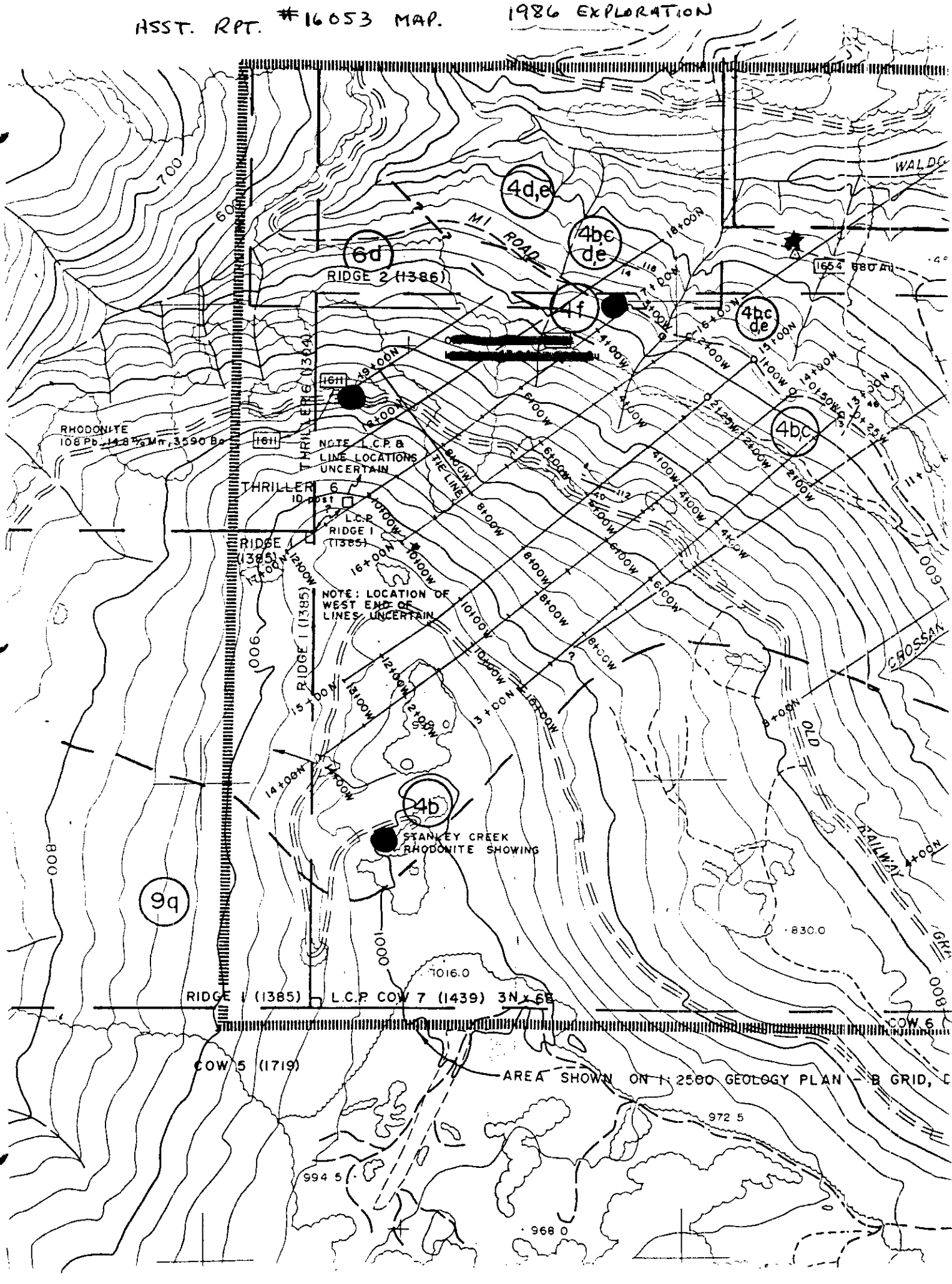
SIGNIFICANT RESULTS

The area north of the " lookout claims " appears to be the most promising . No manganese or rhodonite were found in the search area . A large body of brown jasper coincides closely with Mn. soil anomalies noted on previous work done in this area .
The minor rho. occurence on the railway grade likely came from the vicinity of this jasper body . Rock piles , used for road bed , were still evident . These were used , most likely , and pushed into the area of the rho. occurence where the grade hugs a cliff face .

Future prospecting upslope or east of the rho. occurence may reveal the source of this material .
The gold showing area was sampled in 4 places approximately 50 ' apart . No values matching the reported 1.4 gm. au , 17.6 gm . ag , and 1.58 % cu.. of asst. rpt. # 16053 . One sample did have some anomolous value .
Elevated copper values of 4720 ppm. and 325 ppb. au . were revealed in the assays done from samples taken in the " gold showing " vicinity . Values are interesting enough to warrant further investigation .
This sample location is 300 M. north east of the minor rho. occurence reported by the International Cherokee geologists . The sample location is protected by the Man 3 claim. It was taken from a feldspar porphyry adjacent to a shear zone striking east . Chlorite schist appears to be the host of various mineralised samples checked .
Along the railway grade there were various place where dark brown jasper was visible . The largest body of it was the area near the minor rho. occurence .
Just west of the " myra " the first creek was checked . Along the east slope a 150 ' wide rusty section yielded 12 % fe. , 4.18 % al. , and 116 ppm. zn. .


HILL 60 "NORTH" PROJECT
MAP AREA NTS 092B 13W
ROCK TYPES 2 – CHERT, SEDS
5 – ISLAND INTRUSIVES
LEGEND
X (20) SAMPLE LOCATION
TRAVERSES
ROAD
N
OLD RWY GRADE
Hill 60 Forest Service Road
NAMIKO 2 Fr.
MYRA RHODONITE SHOWING
809
694
973
21
20
19
2
5

ASST. RPT. #16053 MAP. 1986 EXPLORATION



SAMPLES TAKEN FOR ASSAY

1/ Malachite , Mn. Staining , sulphides 2 - 5 % . Taken from nose of jasperoidal intrusive within Stanley Cr. Showing .

2/ Rusty lge. Pyrite cubes , 10 % sulphides , chert with quartz phenocryst . 50 ft. SW. of Stanley Cr. Showing .

3/ Oxidized , rusty , white crusty , Mn. Blue black chert . Quartz stringer . taken 10 ft. below #2 sample .

4/ 2 % sulphides , cherty jasper . 150 ft. SW. of Stanley Cr. Showing .

5/ Rusty , Mn. Stain , 2 % sulphides , 70 ft. N. of location line of lookout claims and SW. of pond .

6/ 2 % sulphides , bright glassy serecite . 200 ft. east of pond .

7/ Iron staining , tightly banded , phyllite shear roadcut N.

8/ Similar sample to #7 except 100 ft. S. in roadcut .

9/ Railway grade E. , 5 - 10 % sulphides in volcanics .

10 / 15 - 20 % sulphide lense in volcanics . railway grade W.

11/ Railway grade , cliff face shear , 5 - 15 % sulphides , quartz serecite .

12/ Sure bet 2 , middle of 45 M. strike length , some sulphides , visible rho. and quartz .

13/ Grid line # 11 , sure bet 2 , float with sulphides and rho .

14/ Line 0 of sure bet 2 , cliff top , rusty zone , sulphides 2 - 5 % .

15/ Only sulphides found of any importance found SW. of clearing , ridge top , hematitic volcanics west of sure bet 1 .

16/ Taken 25 ft. east of grid line # 12 . , sure bet 2 , lense of rho and Mn.

17/ Jasperoidal zone on strike with rho . showing , 5 % sulphides , sure bet .

18/ Blue grey quartz on location line of sure bet 2 , east of grid 100 ft. , contact zone .

19/ Sample taken just west of sure bet 2 claim . First creek west . On east side , contact zone , 150 ft. wide iron staining .

20/ Just west of convergence of two small creeks . Also west of sure bet 2 . 650 M. elevation . Large andesite dike , 340 degree bedding , contact area .

21/ West hilltop , contact zone , convergence of two small creeks . Halfway between sure bet 2 and railway grade turnoff . 2 % sulphides .

22/ New Mn. - rho hill 60 showing @ 550 M. elevation . UTM 10 , 427896E , 5408377N. Cu. Stain , rho .

23/ Man claims , area of gold showing , feldspar porphyry , 2 % sulphides .

24/ Man claims , area of gold showing , feldspar porphyry , 2 % sulphides .

25/ Man claims , area of gold showing , roadcut volcanics , hematitic , 5 % sulphides .

26/ Man claims , shear zone in opening , just south of road , 150 ft.west of creek , heavy malchite staining .

27/ Mn showing on unstaked ground . East of view claim at 700 M. elevation , 100 ft.

28/ Chip sample over 8 ft. , sure bet 2 , anomaly A . Some chalco , argyllite .

29/ 500 ft. north of Bl # 7 , sure bet 2 , slaty argyllite , 10 % sulphides .

30/ 450 ft. north of Bl # 7 , sure bet , chert , 5 - 15 % sulphides .

31/ 45 ft. north of the end of Bl # 8 , 5 % sulphides , cherty tuff , glassy .

32/ 65 ft. north of the end of Bl # 7 , 10 - 15 % sulphides , chert .

33/ Anomaly B , baseline # 7 , 20 ft. along line , black , slaty argyllite , 5 % sulphides .

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver
British Columbia Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: WALTON, RON

4141 LARK RD.
VICTORIA, BC
V8X 2M8

Project :
Comments: ATTN: RON WALTON

Page Number 1-A
Total Pages 1
Certificate Date 13-SEP-89
Invoice No. I-9829905
P.O. Number :
Account :

CERTIFICATE OF ANALYSIS A9829905

SAMPLE DESCRIPTION	PREP CODE		Au ppb FA+AA	Ag ppm	Al %	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
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RW 02	205	226	125	1.0	0.05	84	50	< 0.5	< 2	0.05	< 0.5	25	156	455	7.24	< 10	< 1	< 0.01	< 10	< 0.01	748
RW 03	205	226	< 5	0.2	0.41	14	630	< 0.5	6	0.47	< 0.5	16	159	175	7.67	< 10	< 1	0.04	< 10	0.04	>10000
RW 04	205	226	80	< 0.2	0.04	4	110	< 0.5	< 2	0.04	< 0.5	3	291	9	4.98	< 10	< 1	< 0.01	< 10	< 0.01	415
RW 05	205	226	< 5	< 0.2	1.06	< 2	60	< 0.5	< 2	1.12	< 0.5	7	48	54	2.54	< 10	< 1	0.10	< 10	0.65	735
RW 06	205	226	< 5	< 0.2	2.52	< 2	80	< 0.5	< 2	0.51	< 0.5	11	111	27	3.59	< 10	< 1	0.13	< 10	2.09	545
RW 07	205	226	< 5	< 0.2	1.81	< 2	110	< 0.5	< 2	0.66	< 0.5	4	81	17	1.84	< 10	< 1	0.21	< 10	0.53	570
RW 08	205	226	< 5	< 0.2	1.45	< 2	330	< 0.5	< 2	0.58	< 0.5	7	92	19	3.07	< 10	< 1	0.24	< 10	0.59	390
RW 09	205	226	< 5	< 0.2	1.54	28	180	0.5	< 2	0.02	0.5	33	116	33	7.79	< 10	< 1	0.13	< 10	0.43	675
RW 10	205	226	10	0.6	2.85	200	120	0.5	< 2	0.11	0.5	8	24	43	5.88	< 10	< 1	0.47	< 10	2.18	515
RW 11	205	226	10	1.0	1.43	28	180	< 0.5	< 2	0.12	< 0.5	7	149	31	4.41	< 10	< 1	0.39	10	0.74	260
RW 12	205	226	< 5	< 0.2	0.20	52	1770	0.5	12	0.51	< 0.5	2	127	4	0.30	< 10	2	0.02	< 10	0.41	>10000
RW 13	205	226	< 5	< 0.2	0.19	8	810	< 0.5	14	1.89	< 0.5	3	142	< 1	0.61	< 10	2	< 0.01	< 10	0.33	>10000
RW 14	205	226	5	0.4	2.40	100	320	0.5	< 2	0.03	< 0.5	6	63	40	3.82	< 10	< 1	0.23	10	2.08	715
RW 15	205	226	< 5	< 0.2	2.12	18	60	0.5	< 2	0.96	< 0.5	15	50	80	4.29	< 10	< 1	0.11	10	1.20	900
RW 16	205	226	< 5	< 0.2	0.12	136	490	0.5	< 2	0.62	< 0.5	2	81	< 1	0.19	< 10	< 1	0.02	< 10	0.23	>10000
RW 17	205	226	< 5	< 0.2	1.77	4	170	< 0.5	< 2	0.23	< 0.5	5	82	28	2.85	< 10	< 1	0.12	< 10	1.33	865
RW 18	205	226	< 5	< 0.2	0.11	2	250	< 0.5	< 2	0.13	< 0.5	1	230	1	0.41	< 10	< 1	0.04	< 10	0.03	520
RW 19	205	226	< 5	< 0.2	4.18	8	90	< 0.5	< 2	0.05	0.5	22	22	126	11.75	10	< 1	0.05	< 10	2.06	340
RW 20	205	226	< 5	< 0.2	2.09	4	180	< 0.5	< 2	0.47	< 0.5	14	63	50	3.47	< 10	< 1	0.12	< 10	1.34	800
RW 21	205	226	< 5	< 0.2	1.52	2	120	< 0.5	< 2	0.24	< 0.5	9	45	6	2.85	< 10	< 1	0.13	< 10	0.83	990
RW 22	205	226	15	< 0.2	0.34	52	160	< 0.5	10	0.41	< 0.5	21	92	< 1	0.83	< 10	1	0.09	< 10	0.03	>10000
RW 23	205	226	< 5	< 0.2	2.74	2	40	< 0.5	< 2	0.59	< 0.5	20	79	67	4.58	< 10	< 1	0.06	10	1.96	830
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RW 25	205	226	10	< 0.2	1.95	6	60	< 0.5	< 2	1.81	< 0.5	15	83	67	3.76	< 10	< 1	0.14	< 10	1.43	1010
RW 26	205	226	125	10.8	1.69	2	90	< 0.5	< 2	0.14	< 0.5	14	90	4720	4.56	< 10	< 1	0.17	< 10	0.79	1305
RW 27	205	226	165	0.6	0.86	64	100	< 0.5	6	0.20	< 0.5	68	179	440	0.67	< 10	< 1	0.06	< 10	0.16	>10000

Chemex Labs Ltd.

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British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: WALTON, RON

4141 LARK RD.
VICTORIA, BC
V8X 2M6

Project :
Comments: ATTN: RON WALTON

Page Number :1-B
Total Pages :1
Certificate Date: 13-SEP-1998
Invoice No. :19829905
P.O. Number :
Account :QLI

CERTIFICATE OF ANALYSIS A9829905

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RW 02	205 226	2	< 0.01	45	230	2	< 2	< 1	3	< 0.01	< 10	< 10	22	< 10	2
RW 03	205 226	3	< 0.01	32	150	< 2	< 2	< 1	152	0.01	< 10	< 10	42	< 10	32
RW 04	205 226	2	< 0.01	8	130	< 2	< 2	< 1	3	< 0.01	< 10	< 10	25	< 10	2
RW 05	205 226	< 1	0.10	10	710	< 2	< 2	6	29	0.17	< 10	< 10	90	< 10	30
RW 06	205 226	< 1	0.04	19	460	< 2	< 2	9	53	0.20	< 10	< 10	116	< 10	56
RW 07	205 226	1	0.01	3	110	< 2	< 2	3	189	< 0.01	< 10	< 10	14	< 10	32
RW 08	205 226	22	0.04	5	1720	2	< 2	3	55	0.03	< 10	< 10	14	< 10	36
RW 09	205 226	3	0.01	14	260	< 2	< 2	4	3	< 0.01	< 10	< 10	40	< 10	144
RW 10	205 226	8	0.01	37	200	12	< 2	3	6	0.09	< 10	< 10	33	< 10	210
RW 11	205 226	55	< 0.01	22	1000	42	< 2	3	5	< 0.01	< 10	< 10	83	< 10	50
RW 12	205 226	< 1	< 0.01	29	50	12	2	< 1	164	< 0.01	< 10	< 10	11	< 10	56
RW 13	205 226	< 1	< 0.01	56	50	4	2	< 1	443	< 0.01	< 10	< 10	17	< 10	22
RW 14	205 226	1	< 0.01	15	540	16	< 2	1	4	< 0.01	< 10	< 10	61	< 10	62
RW 15	205 226	1	0.04	15	1040	4	< 2	5	14	0.20	< 10	< 10	125	< 10	54
RW 16	205 226	1	< 0.01	90	70	8	20	< 1	167	< 0.01	< 10	40	33	< 10	46
RW 17	205 226	< 1	0.03	5	160	< 2	< 2	8	15	0.12	< 10	< 10	58	< 10	42
RW 18	205 226	< 1	< 0.01	5	50	< 2	< 2	< 1	6	< 0.01	< 10	< 10	1	< 10	< 2
RW 19	205 226	< 1	0.01	13	910	2	2	16	7	< 0.01	< 10	< 10	254	< 10	116
RW 20	205 226	< 1	0.02	9	690	< 2	< 2	5	21	< 0.01	< 10	< 10	50	< 10	58
RW 21	205 226	< 1	0.01	7	230	< 2	< 2	3	9	< 0.01	< 10	< 10	25	< 10	44
RW 22	205 226	< 1	0.01	3	100	< 2	6	2	44	0.05	< 10	< 10	4	< 10	18
RW 23	205 226	1	0.03	34	1020	< 2	< 2	8	13	< 0.01	< 10	< 10	86	< 10	74
RW 24	205 226	1	0.03	34	860	6	2	10	11	< 0.01	< 10	< 10	88	< 10	70
RW 25	205 226	1	0.02	32	700	< 2	< 2	7	40	< 0.01	< 10	< 10	53	< 10	48
RW 26	205 226	1	0.01	32	660	< 2	< 2	7	7	< 0.01	< 10	< 10	34	< 10	26
RW 27	205 226	< 1	< 0.01	16	50	4	4	1	18	0.04	< 10	< 10	37	< 10	22

CERTIFICATION: Ian Kuhlen

#10
2
2
APPROX. AREA OF REPORTED RHO OCCURRENCE
3
LARGE IRON FORMATION
CLIFF FACE
#11
2
3
#9
2
MAN I
2
QV
3
MAN III
1
2
1
MAN II
4
QV
MAN IV
QV
ROCK PILES
JASPER, IRON FORMATION
JASPER BOULDERS
JASPER FLOAT
14.6 KM
LOOKOUT II
LOOKOUT III
5
HILL 60 FSR
4
2
#23
#24
#25
#26
4
325 ppb AU
1720 ppm CU.
CHLORITE SCHIST
FELDSPAR PORPHYRY
ASST RPT #16053
SAMPLE #352
.041 oz/TON AU,
17.6 gm Ag, 1.58 % CU
CREEK
2
4
OVERGROWN LOGGING ROAD
RAILWAY GRADE

SCALE 1" = 220'

0 220 440 660 880

N

98-01
P9. 95

HILL 60 "NORTH"

ROCK TYPE	1 – QUARTZ DIORITE
QV-QUARTZ	2 – CHERT, TUFF, SEDS
	3 – ARGILLITE
	4 – VOLCANICS
	5 – ISLAND INTRUSIVES

LEGEND — NOV 23/98

- CLAIM POST
- #10 SAMPLE LOCATION
- 0—0 CONTACT ZONE
- ROAD
- CREEK

R. Walton

INTRODUCTION

The following report is the result of a season of prospecting various areas along a ridge known as " hill 60 " to locals . The length of this ridge being approximately 15 km. . Residents of the community of Cowichan Lake named the hill after local war heroes were victorious in capturing a " hill 60 " in the first world war .
The same war effort led to the discovery of several manganese showings along this ridge overlooking the Cowichan valley . The manganese ore was needed in the production of good quality steel .
The " hill 60 " manganese mine produced approximately 1000 tons of ore during it's short life . Later it was to be mined for it's carving stone and other lapidary interests . Recent visits to the site of a small quarry and to some much older workings reveal little obvious rhodonite left . Perhaps the leases 12G and 13G could yield some valuable gem stone if they were quarried as well . The underground workings on these leases are dangerous and have partly filled with rubble . Downhill from the work site are piles of tailings and twisted , small guage rails .
To access the " original hill 60 " minesites may be difficult in the near future . The rains of last winter have taken their toll on the old logging road , which is 4WD or a healthy uphill climb for 3 km. From the main road .
The object of the '98 prospecting program I initiated was to sample each of the 3 showings recorded in the minfile reports . As well , I had set out to visit other localities known to host rhodonite . Due to the extreme fire hazard conditions and road diffusing by private logging companies I was unable to visit the rhodonite showings . Instead I concentrated on finding a new showing by traversing the " hill 60 " ridgetop on either side , following the contact of the sicker volcanics and the island intrusives .
Prospecting " hill 60 " north yielded little manganese but good sulphides and a copper showing . " Hill 60 " south was where I found a large manganese showing . I call this new showing , found by my son and I , the " View claim " .
The terrain is generally steep where the sedimentary rock has worn away at the contact with the granitoid intrusives . Prospecting is difficult and requires stamina but it is these slopes that will yield good outcrop .
The foliage at ground level consists of salal , licorice ferns and quite often devils club . Most of the tree stands are mature douglas fir , spruce , western red cedar , western hemlock and big leaf maple . Red alder is abundant in old clearings . The pine is rare and found usually at the higher elevations .

Hill 60 South

NTS map 092B 13W

LOCATION AND ACCESS

The " hill 60 south " area is the ridge that overlooks the Cowichan valley . Having prospected the ridge beginning at the Lease claims 12G and 13g and the " melore " showing , the west ridge was next .
The forest access road that leaves highway # 18 , 13 km. along , on the north shoulder was the route of initial entry . Four km. along the " hill 60 " road watch for a road that turns off to the left .
Access to the top of the hill 60 ridge is 4 x 4 . The road up the hill is 3 km. long . The rains of last winter have taken their toll , this road will soon wash out .

MAIN COMMODITIES SEARCHED FOR

Manganese and rhodonite were the object of the search . The known " hill 60 " deposits were a good place to start . The " striker " pit appears to be mined out and the older workings just south east are small . The possibility of other deposits in this geology was excellent .
The project proposal was to spend a couple of days in the area of the old minesites . Conditions this past summer were extremely dry and access to forestry roads was denied . Also the road into the " meade creek " showing was diffused . This showing will be very difficult to get to .
Instead of spending 5 days visiting other rho showings in the area , the time was spent investigating and improving the " new " Mn. - rho showing found by this prospecting program.

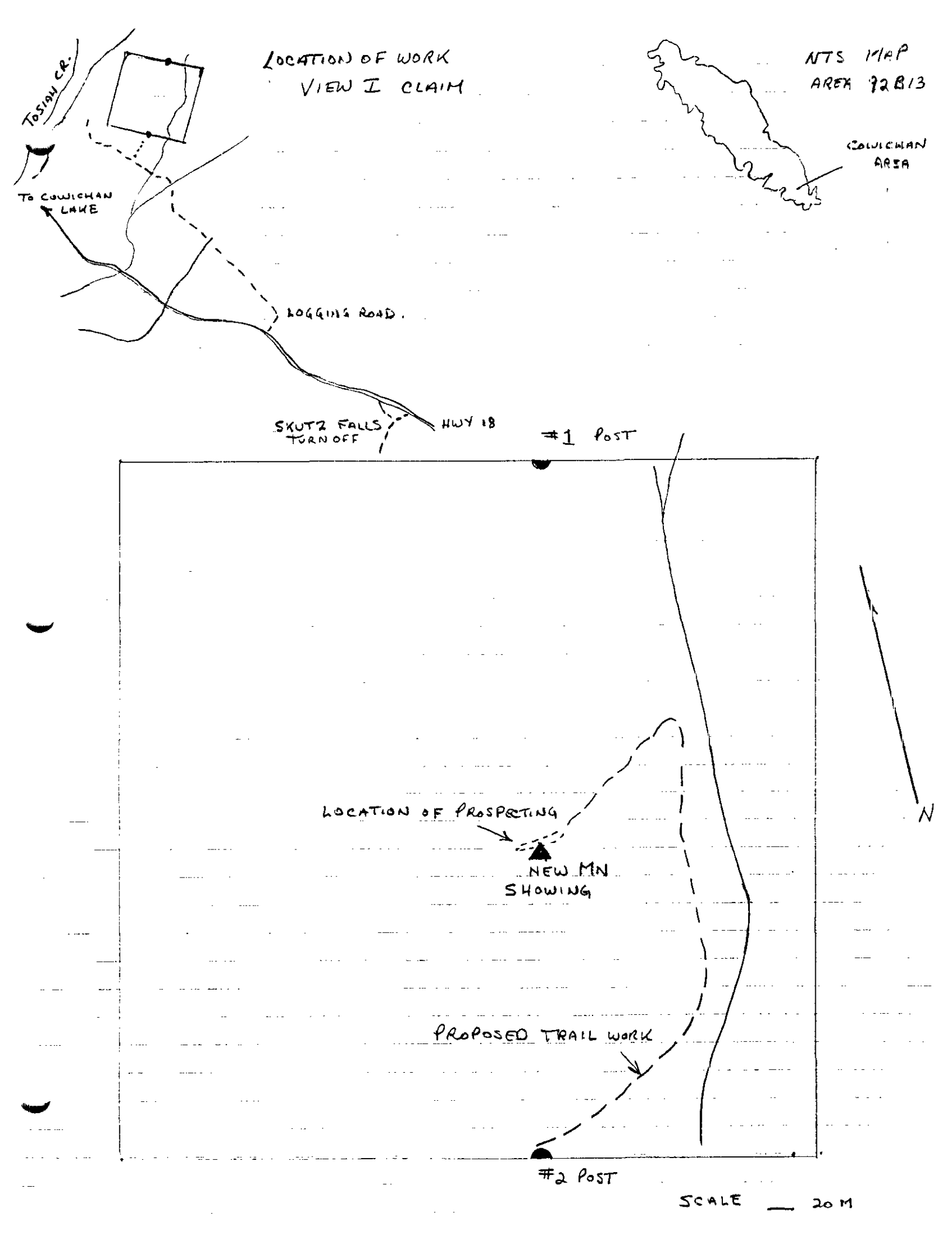
WORK PERFORMED

Conventional prospecting led to the discovery of a new mn. - rho showing . On the 2nd day of the " hill 60 south " program , a trail of strewn manganese boulderswere located over some 200 M. of slope downhill from the source . This source being some 1200 M . west of the " striker " quarry .
The mines inspector was notified and two rough trails were established . One along the same elevation as the " striker " pit . The other is an uphill climb from a recent logging road , 300 M. , owned by Timber West .
Grubhoe work and brush removal have disclosed a strike length of 20 M.. Large boulders weighing several tons have been found uphill , but generally on strike .
The industrial geologist George Simandl has paid a property visit to the showing. His sampling and notes verify this deposit .

SIGNIFICANT RESULTS

It is too early to know what the value of this deposit is . The market for rhodonite is questionable .
It is encouraging to have a substantial amount of material to develop . The size of the strike length , boulders and the close proximity to the old " hill 60 " deposits warrant much

investigation .
Once a market is developed for rhodonite then surely the silicate in this deposit can be found at depth , or as suggested by Mr. Simandl , along strike .
The " view claim" , a single unit , protects the showing found in the UTM zone 10 , 427870E , 5408333N and at the 587 elevation .
Also , samples were taken from a small Mn. showing along the trail east to the " striker " pit . Just off the unit staked , the sample assayed 165 ppb. au. , 100 ppm. ba. , and 440 ppm cu. .
The showing area is adjacent to a deep faulted area . Fractured rock can be found well up the sides of the nearby ravine , mostly chert .
To the north 350 M. are granite outcroppings . The contact runs more or less 240 degrees along the west side of the " View claim " . The grade is 42 degrees . The showing strikes 220 degrees and dips 80 degrees .
This Rho is a " bubblegum" pink mixed with spessartine . On surface the rho is seen as " blebs " within the chert host .


LOCATION OF WORK
VIEW I CLAIM
TOSHAW CR.
TO COWICHAN LAKE
LOGGING ROAD.
SKUTZ FALLS TURN OFF
HWY 18
NTS MAP
AREA 92B/3
COWICHAN AREA
#1 POST
LOCATION OF PROSPECTING
NEW MN SHOWING
PROPOSED TRAIL WORK
#2 POST
N
SCALE ___ 20 M

SAMPLES TAKEN FOR ASSAY

1/ Malachite , Mn. Staining , sulphides 2 - 5 % . Taken from nose of jasperoidal intrusive within Stanley Cr. Showing .

2/ Rusty lge. Pyrite cubes , 10 % sulphides , chert with quartz phenocryst . 50 ft. SW. of Stanley Cr. Showing .

3/ Oxidized , rusty , white crusty , Mn. Blue black chert . Quartz stringer . taken 10 ft. below #2 sample .

4/ 2 % sulphides , cherty jasper . 150 ft. SW. of Stanley Cr. Showing .

5/ Rusty , Mn. Stain , 2 % sulphides , 70 ft. N. of location line of lookout claims and SW. of pond .

6/ 2 % sulphides , bright glassy serecite . 200 ft. east of pond .

7/ Iron staining , tightly banded , phyllite shear roadcut N.

8/ Similar sample to #7 except 100 ft. S. in roadcut .

9/ Railway grade E. , 5 - 10 % sulphides in volcanics .

10 / 15 - 20 % sulphide lense in volcanics . railway grade W.

11/ Railway grade , cliff face shear , 5 - 15 % sulphides , quartz serecite .

12/ Sure bet 2 , middle of 45 M. strike length , some sulphides , visible rho. and quartz .

13/ Grid line # 11 , sure bet 2 , float with sulphides and rho .

14/ Line 0 of sure bet 2 , cliff top , rusty zone , sulphides 2 - 5 % .

15/ Only sulphides found of any importance found SW. of clearing , ridge top , hematitic volcanics west of sure bet 1 .

16/ Taken 25 ft. east of grid line # 12 . , sure bet 2 , lense of rho and Mn.

17/ Jasperoidal zone on strike with rho . showing , 5 % sulphides , sure bet .

18/ Blue grey quartz on location line of sure bet 2 , east of grid 100 ft. , contact zone .

19/ Sample taken just west of sure bet 2 claim . First creek west . On east side , contact zone , 150 ft. wide iron staining .

20/ Just west of convergence of two small creeks . Also west of sure bet 2 . 650 M. elevation . Large andesite dike , 340 degree bedding , contact area .

21/ West hilltop , contact zone , convergence of two small creeks . Halfway between sure bet 2 and railway grade turnoff . 2 % sulphides .

22/ New Mn. - rho hill 60 showing @ 550 M. elevation . UTM 10 , 427896E , 5408377N. Cu. Stain , rho .

23/ Man claims , area of gold showing , feldspar porphyry , 2 % sulphides .

24/ Man claims , area of gold showing , feldspar porphyry , 2 % sulphides .

25/ Man claims , area of gold showing , roadcut volcanics , hematitic , 5 % sulphides .

26/ Man claims , shear zone in opening , just south of road , 150 ft.west of creek , heavy malchite staining .

27/ Mn showing on unstaked ground . East of view claim at 700 M. elevation , 100 ft.

28/ Chip sample over 8 ft. , sure bet 2 , anomaly A . Some chalco , argyllite .

29/ 500 ft. north of Bl # 7 , sure bet 2 , slaty argyllite , 10 % sulphides .

30/ 450 ft. north of Bl # 7 , sure bet , chert , 5 - 15 % sulphides .

31/ 45 ft. north of the end of Bl # 8 , 5 % sulphides , cherty tuff , glassy .

32/ 65 ft. north of the end of Bl # 7 , 10 - 15 % sulphides , chert .

33/ Anomaly B , baseline # 7 , 20 ft. along line , black , slaty argyllite , 5 % sulphides .

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver
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PHONE: 604-984-0221 FAX: 604-984-0218

To: WALTON, RON

4141 LARK RD.
VICTORIA, BC
V8X 2M6

Project :
Comments: ATTN: RON WALTON

Certificate Date 13-SEP-98
Invoice No. I-9829905
P.O. Number :
Account :

CERTIFICATE OF ANALYSIS A9829905

SAMPLE DESCRIPTION	PREP CODE		Au ppb FA+AA	Ag ppm	Al %	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
RW 01	205	226	25	0.4	1.16	12	60	< 0.5	2	0.94	< 0.5	22	77	1225	3.10	< 10	1	< 0.01	10	0.10	>10000
RW 02	205	226	125	1.0	0.05	84	30	< 0.5	< 2	0.05	< 0.5	25	156	435	7.24	< 10	< 1	< 0.01	< 10	< 0.01	740
RW 03	205	226	< 5	0.2	0.41	14	630	< 0.5	6	0.47	< 0.5	16	159	175	7.67	< 10	< 1	0.04	< 10	0.04	>10000
RW 04	205	226	80	< 0.2	0.04	4	110	< 0.5	< 2	0.04	< 0.5	3	291	9	4.96	< 10	< 1	< 0.01	< 10	< 0.01	415
RW 05	205	226	< 5	< 0.2	1.06	< 2	60	< 0.5	< 2	1.12	< 0.5	7	48	54	2.54	< 10	< 1	0.10	< 10	0.65	775
RW 06	205	226	< 5	< 0.2	2.52	< 2	80	< 0.5	< 2	0.51	< 0.5	11	111	27	3.59	< 10	< 1	0.13	< 10	2.09	545
RW 07	205	226	< 5	< 0.2	1.81	< 2	110	< 0.5	< 2	0.66	< 0.5	4	61	17	1.84	< 10	< 1	0.21	< 10	0.53	570
RW 08	205	226	< 5	< 0.2	1.45	< 2	330	< 0.5	< 2	0.58	< 0.5	7	92	19	3.07	< 10	< 1	0.24	< 10	0.59	390
RW 09	205	226	< 5	< 0.2	1.54	28	100	0.5	< 2	0.02	< 0.5	33	118	33	7.79	< 10	< 1	0.13	< 10	0.43	675
RW 10	205	226	10	0.6	2.85	200	120	0.5	< 2	0.11	0.5	8	24	43	5.88	< 10	< 1	0.47	< 10	2.18	515
RW 11	205	226	10	1.0	1.43	28	100	< 0.5	< 2	0.12	< 0.5	7	149	31	4.41	< 10	< 1	0.19	10	0.74	260
RW 12	205	226	< 5	< 0.2	0.20	52	1770	0.5	12	0.31	< 0.5	2	127	4	0.30	< 10	2	0.02	< 10	0.01	>10000
RW 13	205	226	< 5	< 0.2	0.19	6	610	< 0.5	24	1.89	< 0.5	3	142	< 1	0.61	< 10	2	< 0.01	< 10	0.33	>10000
RW 14	205	226	5	0.4	2.40	100	120	0.5	< 2	0.03	< 0.5	6	63	40	3.82	< 10	< 1	0.23	10	2.08	715
RW 15	205	226	< 5	< 0.2	2.12	18	60	0.5	< 2	0.96	< 0.5	15	50	80	4.29	< 10	< 1	0.11	10	1.20	900
RW 16	205	226	< 5	< 0.2	0.12	136	490	0.5	< 2	0.82	< 0.5	2	81	< 1	0.19	< 10	< 1	0.02	< 10	0.23	>10000
RW 17	205	226	< 5	< 0.2	1.77	4	170	< 0.5	< 2	0.23	< 0.5	5	82	28	2.85	< 10	< 1	0.12	< 10	1.33	885
RW 18	205	226	< 5	< 0.2	0.11	2	250	< 0.5	< 2	0.13	< 0.5	1	230	1	0.41	< 10	< 1	0.04	< 10	0.03	520
RW 19	205	226	< 5	< 0.2	4.18	8	90	< 0.5	< 2	0.06	0.5	22	22	126	11.75	10	< 1	0.05	< 10	2.06	340
RW 20	205	226	< 5	< 0.2	2.09	4	180	< 0.5	< 2	0.47	< 0.5	14	63	50	3.47	< 10	< 1	0.12	< 10	1.34	800
RW 21	205	226	< 5	< 0.2	1.52	2	120	< 0.5	< 2	0.24	< 0.5	9	45	6	2.85	< 10	< 1	0.11	< 10	0.83	990
RW 22	205	226	15	< 0.2	0.34	52	160	< 0.5	10	0.41	< 0.5	21	92	< 1	0.83	< 10	1	0.09	< 10	0.03	>10000
RW 23	205	226	< 5	< 0.2	2.74	2	40	< 0.5	< 2	0.59	< 0.5	20	79	67	4.58	< 10	< 1	0.06	10	1.96	630
RW 24	205	226	< 5	0.2	2.69	2	40	< 0.5	< 2	0.49	< 0.5	18	86	55	4.68	< 10	< 1	0.07	10	1.87	1105
RW 25	205	226	10	< 0.2	1.95	6	80	< 0.5	< 2	1.81	< 0.5	15	83	67	3.76	< 10	< 1	0.14	< 10	1.43	1010
RW 26	205	226	325	10.8	1.69	2	90	< 0.5	< 2	0.14	< 0.5	14	90	4720	4.56	< 10	< 1	0.17	< 10	0.79	1305
RW 27	205	226	165	0.6	0.86	64	100	< 0.5	6	0.20	< 0.5	68	179	440	0.67	< 10	< 1	0.06	< 10	0.16	>10000

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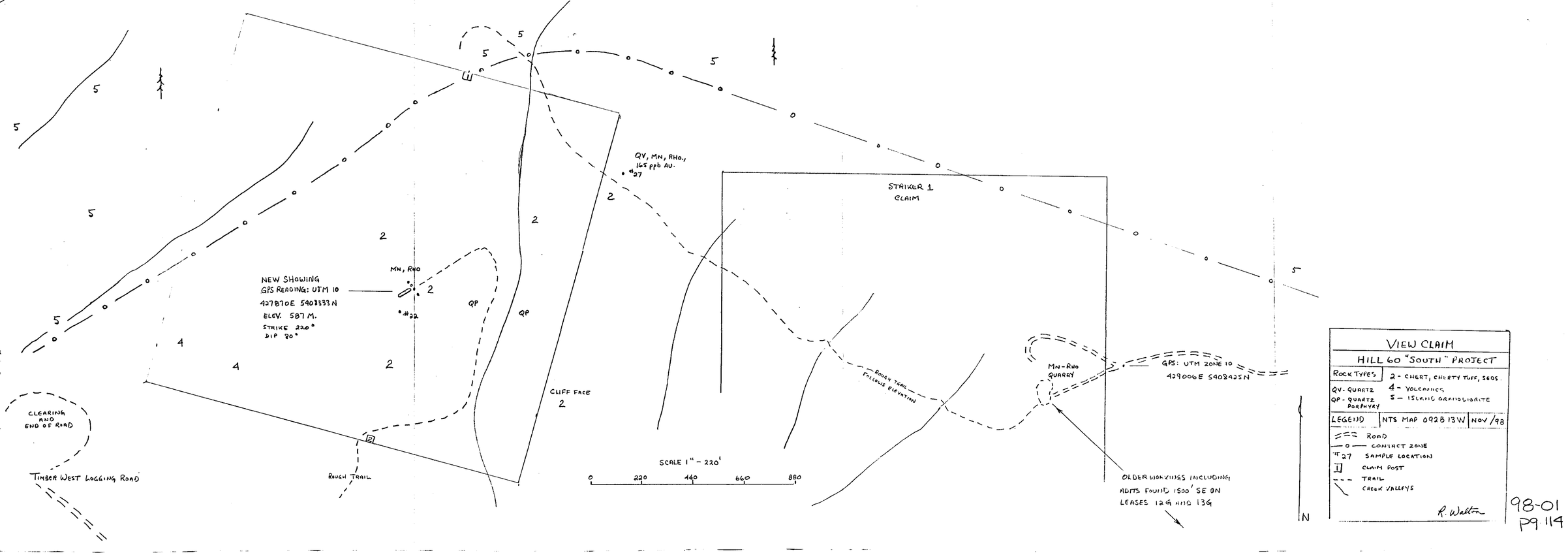
Project :
Comments: ATTN: RON WALTON

Certificate Date: 13-SEP-1998
Invoice No. :19829905
P.O. Number :
Account :QLI

CERTIFICATE OF ANALYSIS A9829905

SAMPLE	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
RW 01	205	226	< 1	< 0.01	102	350	168	< 2	< 1	11	0.03	< 10	< 10	27	< 10	22
RW 02	205	226	2	< 0.01	45	230	2	< 2	< 1	3	< 0.01	< 10	< 10	22	< 10	2
RW 03	205	226	3	< 0.01	32	150	< 2	< 2	< 1	152	0.01	< 10	< 10	42	< 10	32
RW 04	205	226	2	< 0.01	8	130	< 2	< 2	< 1	3	< 0.01	< 10	< 10	25	< 10	2
RW 05	205	226	< 1	0.10	10	710	< 2	< 2	6	29	0.17	< 10	< 10	90	< 10	30
RW 06	205	226	< 1	0.04	19	460	< 2	< 2	9	53	0.20	< 10	< 10	116	< 10	56
RW 07	205	226	1	0.01	3	110	< 2	< 2	3	189	< 0.01	< 10	< 10	14	< 10	32
RW 08	205	226	22	0.04	5	1720	2	< 2	3	55	0.03	< 10	< 10	14	< 10	36
RW 09	205	226	3	0.01	14	260	< 2	< 2	4	3	< 0.01	< 10	< 10	40	< 10	144
RW 10	205	226	8	0.01	37	200	12	< 2	3	6	0.09	< 10	< 10	33	< 10	210
RW 11	205	226	55	< 0.01	22	1000	42	< 2	3	5	< 0.01	< 10	< 10	83	< 10	50
RW 12	205	226	< 1	< 0.01	29	50	12	2	< 1	164	< 0.01	< 10	< 10	11	< 10	56
RW 13	205	226	< 1	< 0.01	56	50	4	2	< 1	443	< 0.01	< 10	< 10	17	< 10	22
RW 14	205	226	1	< 0.01	15	540	16	< 2	1	4	< 0.01	< 10	< 10	61	< 10	62
RW 15	205	226	1	0.04	15	1040	4	< 2	5	14	0.20	< 10	< 10	125	< 10	54
RW 16	205	226	1	< 0.01	90	70	8	20	< 1	167	< 0.01	< 10	40	33	< 10	46
RW 17	205	226	< 1	0.03	5	160	< 2	< 2	8	15	0.12	< 10	< 10	58	< 10	42
RW 18	205	226	< 1	< 0.01	5	50	< 2	< 2	< 1	6	< 0.01	< 10	< 10	1	< 10	< 2
RW 19	205	226	< 1	0.01	13	910	2	2	16	7	< 0.01	< 10	< 10	254	< 10	116
RW 20	205	226	< 1	0.02	9	690	< 2	< 2	5	21	< 0.01	< 10	< 10	50	< 10	58
RW 21	205	226	< 1	0.01	7	230	< 2	< 2	3	9	< 0.01	< 10	< 10	25	< 10	44
RW 22	205	226	< 1	0.01	3	100	< 2	6	2	44	0.05	< 10	< 10	4	< 10	18
RW 23	205	226	1	0.03	34	1020	< 2	< 2	8	13	< 0.01	< 10	< 10	86	< 10	74
RW 24	205	226	1	0.03	34	860	6	2	10	11	< 0.01	< 10	< 10	88	< 10	70
RW 25	205	226	1	0.02	32	700	< 2	< 2	7	40	< 0.01	< 10	< 10	53	< 10	48
RW 26	205	226	1	0.01	32	660	< 2	< 2	7	7	< 0.01	< 10	< 10	34	< 10	26
RW 27	205	226	< 1	< 0.01	16	50	4	4	1	18	0.04	< 10	< 10	37	< 10	22

CERTIFICATION: Hari Ruckle



VIEW CLAIM

HILL 60 "SOUTH" PROJECT

ROCK TYPES	2 - CHERT, CHERTY TUFF, SEDS.
QV - QUARTZ	4 - VOLCANICS
QP - QUARTZ PORPHYRY	5 - ISLETIC GRANODIORITE

LEGEND	NTS MAP 092B 13W	NOV/98

- ROAD
- CONTACT ZONE
- #27 SAMPLE LOCATION
- CLAIM POST
- TRAIL
- CREEK VALLEYS

R. Walton

98-01
P9 114

ADJACENT MINERAL
TITLES MAP 092C 16E