GEOLOGICAL, GEOPHYSICAL AND GEOCHEMICAL REPORT

ON THE

SAN JUAN PROPERTY

OF

TRI-PACIFIC RESOURCES LTD.

LINDA, TERI, DEBBIE, WOLF AND COUGAR CLAIMS RECORD #'s 650, 677, 678, 1256, 1257

VICTORIA MINING DIVISION NTS. 92B/12W - 92C/09E LATITUDE 48°37'N LONGITUDE 124°00'W

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AND

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GEOLOGICAL BRANCH ASSESSMENT REPORT

October, 1985 Vancouver, British Columbia

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SUMMARY

The 1985 exploration program was successful in tracing gold bearing quartz - stibnite vein systems on to the San Juan property of Tri-Pacific Resources Ltd. In conjunction with this, extensive zones of pyritized and altered volcanics, fragmental tuffs and volcanoclastics were noted to host low but anomalous gold values.

Detailed VLF/EM and soil geochemistry (10m stations) traced the Pansy vein system westward on to the Linda claims. This survey was unsuccessful however, in delineating the Ruby vein because of the orientation of the vein with respect to the transmitting station (Cutler). An orientation survey suggested that a tightly spaced VLF/EM program, using Hawaii as the transmitting station, may be more useful in following the Ruby structure.

Pyritized alteration zones, hosting low gold values, were also better defined by the close spaced VLF/EM survey. These lens like bodies were followed for 3 km across the property and individually obtained widths up to 100 m+ and strike lengths of 600 m+.

The potential intersection area of the Ruby vein structure with the pyritized alteration zones, to the northeast of the Ruby claim, is a high priority explortion target for gold mineralization. Low but anomalous (55 ppb) gold values are associated with sheared and silicified pyrite bearing volcanics and significant gold values (0.60 oz/t Au) have been recorded from the Ruby vein system.

Fill in, close spaced VLF/EM and soil geochemistry lines are suggested, to better define trenching targets in this region and to the west of the Pansy vein system. This phase of exploration, combined with road rehabilitation, is estimated to cost \$52,217.00.

Contingent upon the favourable results of the trenching program, a second exploration phase of diamond drilling would best define the strike length and down dip extension of the mineralized zones.

INTRODUCTION

At the request of Mr. James H. Hirst (president) of Tri-Pacific Resources Ltd., Azimuth Geological carried out the first phase exploration program as outlined by Crowe and Magrum (1984). Three geologists completed detailed and reconnaissance geological mapping along with detailed geophysical and limited geochemical surveys between September 22 and October 9, 1985. The following report is based upon these surveys and a review of previous operators technical data.

Location, Access and Physiography

The San Juan Property is located in the Victoria Mining Division, approximately 60 km northeast of Victoria and 30 km east of Port Renfrew, British Columbia. The southeast corner of the claim group is near the confluence of Clapp Creek and the San Juan River; latitude 48°37'N, longitude 124°00'W.

Access is gained by two well maintained logging roads (Figure 1). One road follows the Fleet River south from Mesachie Lake, terminating at the Debbie - Teri claim boundary. The last kilometer of this road however, is suitable for foot traffic only. The eastern portion of the property is accessible from the San Juan Main, along the eastern side of the San Juan River. An old exploration road, presumably established by Concorde Explorations Ltd. (1968), transects the Teri, Linda, Wolf and Cougar claims. The road is extensively overgrown and the bridge across the San Juan River has been washed out.

Open forested, gently sloping hills dominate the Debbie claim group and the northern part of the Teri and Linda claims. Steeper hillsides, locally marked by 20 - 30 m cliffs, are common in the central portion of the Wolf and Cougar claims and where the Teri and Linda claims are cut by the San Juan Fault Zone. Here the slopes are heavily vegetated with trees and salal. A precipitous north-south trending canyon, occupied by the San Juan River, transects the Wolf claim block.



Property

The property consists of the Linda, Teri, Debbie, Wolf and Cougar claim blocks, forming the Debbie Group supplement (March 27, 1984). This group is comprised of 46 units, recorded in the Victoria Mining Division, on map sheets 92B/12W and 92C/9E. The Ruby and Pansy two-post claim units lie within the Linda claim block, but are not owned by Tri-Pacific Resources Ltd.

Claim Name	Units	Record #	Owner	Expiry
Linda	10	650	Tri-Pacific	August 18, 1988
Teri	4	677	Tri-Pacific	September 27, 1988
Debbie	4	678	Tri-Pacific	September 27, 1988
Wolf	16	1256	Tri-Pacific	June 12, 1988
Cougar	12	1257	Tri-Pacific	June 12, 1988

PREVIOUS WORK

The southern portion of Vancouver Island has long been known for its placer gold production, the source of which is believed to be quartz veins hosted predominately by Jurassic - Cretaceous Leech River Formation argillites. With the exception of copper production in the Jordan River area, little exploration activity has been recorded. The discovery of epithermal gold veins with values up to 34 oz/t Au (O'Keefe, 1984), by Beau-Pre Explorations Ltd., has given the area renewed potential for the discovery of lode gold deposits. A recent joint venture with Falconbridge Ltd. has led to an agreement to spend \$ 1.3 million, by 1988, to aquire 51% and \$ 1.8 million to earn a further 9%. Airborne geophysics and trenching have delineated new showings with values up to 3.891 oz/t Au (G.C.N.L. and Stockwatch, 1985).

Gold - antimony bearing quartz veins occur at the boundary of the Ruby two-post claim and Tri-Pacific's Linda, Cougar and Wolf claims. These showings were discovered prior to World War I and were referred to as the Victory, Todd's Crevice, West Bank, West Showing and San Juan prospects (Min-file #92B-095, MMAR - 1952, A215-216).

The Ruby quartz vein system is northeast striking and dips steeply to the southeast. It is composed of quartz, stibnite +/- scheelite veins and lenses developed within a carbonate (ankerite) alteration zone. Values of 0.60 oz/t Au with 5.4% Sb were obtained from a shaft sunk during World War I (Stevenson, 1944; MMAR - 1952). Approximately 300 m of shallow diamond drilling was completed in 1943. Quartz veins exposed on surface were not encountered in the drilling, but the carbonate zone, which obtained widths up to 30 m traceable for 330 m along strike, did extend to depth (Stevenson, 1944).

Similar vein mineralization exists on the Pansy two post claim, in the eastern portion of the Linda claim block (Min-file #092B - 061, MMAR - 1952). Here east-west trending, steeply dipping quartz - stibnite veins are hosted by limestone interbedded with Bonanza Group greenstones. Several open cuts and an adit exposed these showings over a strike length of 125 m and a vertical extent of 60 m. Channel samples taken along the 125 m strike length averaged 0.240 oz/t Au with 1.69% Sb over 0.5 m (Donaldson, 1968; MMAR - 1952). More recent grab samples have yielded 0.804 oz/t Au, 0.442 oz/t Au and 0.030 oz/t Au (Shepperd, 1983).

A program run in 1984 (Crowe and Magrum, 1984) consisted of grid establishment combined with detailed geological mapping, soil geochemistry and VLF/EM. These surveys were successful in delineating two types of gold related mineralization.

Grab samples from the Ruby vein system and its associated carbonate alteration zone returned 0.125 oz/t Au and 0.015 oz/t Au respectively. Limonite coated quartz, with no visible sulphide, yielded 0.058 oz/t Au (Crowe and Magrum, 1984). Soil geochemistry and VLF/EM, although not definitive, extended the strike length of the known showings. The altered and pyritized volcanics were found to contain low but anomalous concentrations of gold and geochemical combined with geophysical anomalies suggest this system extends to the east and west along strike.

REGIONAL GEOLOGY

Southwestern Vancouver Island consists of a complex mosaic of fault blocks ranging in age from Paleozoic Sicker Group sediments and volcanics to Eocene and Oligocene clastic sediments (Muller 1981, 1982). The area in the vicinity of the San Juan property is predominantly underlain by Jurassic Island intrusives, Jurassic Bonanza Group volcanics and consaguineous Westcoast Complex intrusives, Triassic to Cretaceous Leech River Formation volcanics and associated sediments and Cretaceous to Tertiary sediments, gabbroic intrusives and basaltic lavas.

Two major east - west fault systems transect the region. Outcrop patterns associated with the northerly San Juan Fault suggest it to be a steep, south dipping zone which juxtaposes the Triassic to Cretaceous Leech River Formation against the Jurassic Bonanza Group and Upper Paleozoic to Jurassic Westcoast Complex intrusives. The Leech River Frult is parallel to and 10 km to the south of the San Juan Fault, placing Cretaceous to Tertiary units against the more northerly Leech River Formation. Recent seismic surveys (Marshall, 1985) suggest the two fault systems shallow with depth and bound major northerly directed underthrust blocks.

PROPERTY GEOLOGY

A description of the geology underlying the Linda, Teri and Debbie claims, as presented in the 1984 report of Crowe and Magrum, appears in Appendix 2. The 1985 survey extended the geology to the east, across the San Juan River. Limited reconnaissance mapping was also conducted over the Wolf and Cougar claims.

In general the property is underlain by chloritized (lower greenschist facies) submarine basaltic to andesitic volcanics, tenatively assigned to the Jurassic Bonanza Group (Muller 1981, 1982). These volcanics (Jv on Figure 2) are overlain (?) to the north series of fragmental volcanics, fragmental by а tuffs, volcanoclastics, lapilli tuffs and subareal fragmental tuffs, (Jb) intercalated with massive and porphyritic flows and or sills (Jv). Grey green chert, poorly bedded siliceous siltstone, well bedded siltstone, argillites and shales (Jc) sporatically mark the contact of the fragmentals and massive volcanics to the south. This contact is exposed in the vicinity of the baseline. Fetid black limestone (J1) occurs within the Bonanza volcanics, in the eastern portion of the Linda claim.

The steeply dipping San Juan Fault Zone transects the massive volcanics in the centre of the Linda and Teri claims. As the fault is approached the volcanics become well foliated and sheared (Jvs) with the local development of gneissic textures and quartz sheeting. Large bodies of serpentinite (Js) occupy the eastern core of the fault.

Leech River Formation argillites (Ks) are exposed in the southeastern extremities of the Linda claim block, to the south of the San Juan Fault Zone. East of the San Juan River, the Leech River Formation is juxtaposed against the volcanics along the San Juan Fault.

The Upper Paleozoic to Jurassic Westcoast Complex (Pi) crops out along the western border of the Debbie claim. Small intrusive bodies of granitic to intermediate composition host volcanic inclusions. These small bodies are thought to represent apophyses of a larger intrusion exposed to the northwest of the property. No intrusive units were located elsewhere on the claim group.

Reconnaissance geological mapping was conducted over the bulk of the Wolf and Cougar claims (Figure 2). Exposure is limited to road cuts,

creek beds and cliffs occupying the central portion of this claim block. Coarse fragmental tuffs with intermediate to felsic fragments are intercalated with massive to porphyritic andesitedacite flows and or sills. The development of purple - red weathering, hematized tuffs and coarse fragmental tuffs suggests these sequences are in part subareal. These coarse fragmental tuffs were not encountered in the 1984 survey.

Detailed mapping was attempted in the vicinty of the 1985 grid, which extended the 1984 grid mapping eastwards and filled in lines in the vicinty of the Ruby and Pansy vein systems (Figure 3). Exposure however, was limited, making detailed correlation of rock units difficult.

MINERALIZATION AND ROCK GEOCHEMISTRY

Two types of gold related mineralization were described by Crowe and Magrum (1984). Quartz - stibnite bearing veins, exposed on the Ruby and Pansy claims, returned 0.60 oz/t Au (Stevenson, 1944) and 0.804 oz/t Au respectively. More extensively developed zones of pyritized and/or silica, sericite, chlorite and clay altered volcanics, volcanoclastics and fragmental tuffs were found to host low gold values (up to 65 ppb Au).

The 1985 exploration program was designed to trace the vein systems on to Tri-Pacific's property and to determine the extent and significance of the pyrite alteration zones with respect to gold mineralization. This was achieved by extending the 1984 grid to the north and by establishing closer spaced fill in lines using 10 meter reading intervals. Magnetometer, VLF/EM and limited soil geochemical surveys were conducted over this grid.

Resampling of the Ruby vein material confirmed the existance of significant gold values associated with the quartz - antimony veins and their ankeritic envelopes. Only dump and sub-crop material could be collected, "ue to extensive cat excavations performed by Concorde Explorations Ltd. (1967). Values up to 0.084 oz/t Au were recorded from 0.5 meter blocks of quartz with massive and bladed stibnite (see Table 1 and Figures 2 & 3).

Several trenches expose the Pansy vein along its strike. Values of up to 0.192 oz/t Au over 1.7 meters were returned from one trench (#09723, Table 1 and Figures 2 & 3). The surface expression of the vein could not be traced westwards on to the Linda claims.

Pyrite alteration zones were found to represent a series of lens like bodies developed over a strike length of 3 kilometers from west to east across the Debbie, Cougar and Wolf claims. Sampling of surface exposures indicates that low but anomalous (80 ppb- #09711, 60 ppb-#09750, 55 ppb-#09719) gold values are locally associated with these zones. Strong copper and moderate arsenic values were found to be characteristic of the zones developed on the Cougar claims (Crowe and Magrum, 1984). East of the Cougar - Wolf boundary however, copper and arsenic are less significant.

The altered volcanics cover a vertical range of 600 m+, extending from the San Juan River valley (250 meters) to the ridge top on the Debbie claim block (950+ meters). These zones are characterized by abundant (to 5%) disseminated pyrite, and may locally be silicified, sericitized, chloritized and/or kaolinized. The alteration affects several rock types but a distinct spatial relationship exists between it and the gross contact between the massive volcanics and the siliceous sediments, vocanoclastics and fragmental tuffs to the north. Locally intense shearing and brecciation were observed within the zones of alteration.

Two models can be invoked to explain the mineralization on the San Juan Property. The quartz - stibnite veins are thought to be epithermal in origin and may be related to the San Juan F⁻ult zone or to the intrusive activity associated with the Westcoast Complex. The spatial relationship to and subparallel nature of the San Juan Fault suggests a possible genetic link between the two. The presence of antimony characterizes the upper levels of an epithermal event while the associated ankeritic alteration suggests a somewhat deeper fracture system.

The origin of the pyritized, altered volcanics, volcanoclastics and fragmental tuffs is as equally uncertain. These zones are also subparallel to the San Juan Fault Zone. The local appearance of shear and breccia textures may imply a fault related epigenetic origin with fluids taking advantage of the more porous tuffaceous horizons lying north of the massive volcanics. A volcanogenic exhalative origin however, may better explain the close spatial relationship between the alteration zones and the volcanoclastics, siliceous sediments, cherts and fragmental tuffs.

Table l

Rock Sample Descriptions

Legend

alt	æ	altered	and	=	andesite	cc	=	calcite
chl	=	chlorite	conc	=	concentrate	diss	#	disseminated
ep	=	epidote	f.g.	=	fine grained	frag	=	fragmental
ls		limestone	mal	=	malachite	mass	=	massive
porph	=	porphyritic	ру	=	pyrite	qtz	=	quartz
qv	=	quartz vein	sb	=	stibnite	ser	=	sericite
shear	=	sheared	sil	=	silicified	sulph	=	sulphide
						volc	-	volcanic

SAMPLE	LOCATION	TYPE	WIDTH	DESCRIPTION	Au (ppb) = oz/t
09701	San Juan Creek	disc chip	3.5 m	shear, ser votc, local diss & vein py	40
09702	35 m E of L19+25E, 0+90N	grab	sub-crop	voic, sil & ser, f.g. diss py	5
09703	45 m E of L19+25E, 0+90N	grab	sub-crop	volc, sil +/- ser, diss py and mass py seams	nd
09704	L 20+00E, 1+28N	grab	sub-crop	volc, sil with ser & clay, 5% diss & vein py	nđ
09705	L21+50E, BL	grab	float	voic, ait, f.g. diss & voin py	nd
09706	N of L14+75E, 3+50N	grab	outcrop .	coarse frag, diss & vein py	nd
09707	NW Of 09706	grab	outcrop	sil volc & chert, diss & vein py	nd
09708	Cougar Claim 925 m el.	grab	float	porph and, ep clots, py & mal stain	nd
09709	NE of 09707	grab	outcrop	sil volc and chert, diss & vein py	nd
09710	N boundary of Wolf Claim	grab	sub-crop	sil voic, py pods, local ser, minor vein py	nd
09711	N boundary of Wolf Claim	chíp	2.5 m	frag volc, local shear, chl, diss py & py pods & veins	80
09712	N boundary of Wolf Claim	chip	2.5 m	frag voic, local shear, chl, diss py & py pods & veins	nd
09713	N boundary of Wolf Claim	disc chip	6.0 m	volc, local shear & breccia, py veins, pods & diss, cc vein	nd
09714	N boundary of Wolf Claim	disc chip	7.0 m	voic, local shear, pods & diss py	nd
09715	Ruby Claim	grab	outcrop	volc, chl, qtz-op-chl voins	nd

SAMPLE	LOCATION	TYPE	WIDTH	DESCRIPTION	Au (ppb) = = oz/t
09716	Ruby Claim	grab	outcrop	volc, chl, qtz~ep∽chl veins, minor diss py	nd
09717	Ruby shaft	grab	dump	qv, mass & bladed sb, blocks to 0.5m	*0.084
09718	Ruby Claim	grab	trench	qv, mass & bladed sb	*0.058
09719	Toby Creek L14+75E	disc chip	7.0 m	shear volc, minor qv, diss py, sil & ser	55
09720	Pansey trench	chip ,	2.0 m	shale & alt volc, shear, minor qv & py	nd
09721	Pansey trench	chip	2.5 m	volc, minor shear, minor py & qv	120
09722	Pansey trench	chip	1.0 m	0.2 m qv in 1.0 m shear, alt volc, limonite staining	*0.062
09723	Pansey trench	chip	1.7 m	0.5 m qv in alt volc, sb	*0.192
09724	Pansey trench	chip	0.5 m	qv with sb	*0.094
09725	Pansey trench	chip	1.05 m	voic, shear, chl & ser, minor sb, minor qv	*0.106
09726	Pansey adlt	chip	1.6 m	ls & shale, qv & cc vein, no sulph	40
09726a	Bell shaft	disc chip	2.2 m	is/volc contact, diss py in volc	nd
09727	Bell pit	disc chip	1.4 m	ls/voic contact, diss py in voic	nd
09728	Wolf road	grab	10.0 m	ls/volc contact, qv & cc vein, diss & vein py	nd
09729	Wolf road	chip	1.2 m	volc, shear, alt, sil, ser, chl, diss & vein py, oxidized	nđ
09730	Wolf road	disc chip	3.0 m	chert/chl phyllite contact,diss py	nd
09731	Wolf road	grab.	outcrop	volc?, shear, ch1, limonite after py	10
09732	Wolf road	grab	outcrop	volc?, shear, chl, limonite after py, minor qv	nd

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SAMPLE	LOCATION	TYPE	WIDTH	DESCRIPTION	Au (ppb) * = oz/t
09733	Wolf road	disc chip	7.0 m	shear, limonite after py	5
09734	Wolf road	disc chip	10.0 m	shear, gouge, chl, clay, limonite after py	nd
09735	Wolf road	grab	outcrop	volc, shear, chl, ser, limonite after py	nd
09736	Wolf road	disc chip	3.5 m	volc, sil, shear, minor chl & ser, diss & vein py	nd
09737	Wolf road	chip	1.2 m	voic, sil, ser, diss py	nd
09738	San Juan River	disc chip	3.4 m	voic & frag volc, shear, sil & ser, diss & vein py	nd
09739	San Juan River	disc chip	3.2 m	volc & frag votc, shear, sit & ser, diss & vein py	nd
09740	San Juan River	disc chip	3.9 m	frag volc, sil & ser, diss & vein py	nd
09741	San Juan River	disc chip	3.4 m	frag volc, sil & ser, diss & vein py	nd
09742	San Juan River	chlp	5.0 cm	py conc, py rich lens	nd
09743	San Juan River	disc chip	3.8 m	volc & frag volc, shear, sil & ser	nd
09744	San Juan River	grab	20 m	frag volc, shear, rust weath	nđ
09745	San Juan River	grab	outcrop	frag volc, diss py, minor cpy	nd
09746	San Juan River Cabin show	grab	outcrop	voic, sit, diss & vein py	nd
09747	L14+00E, 1+35N	grab	sub-crop	frag volc, sil, 5% py	nd
09748	L17+00E, 2+50N	grab	sub-crop	volc, sil, qv, minor cc, diss py	35
09749	L16+25E, 2+57N	grab	sub-crop	volc, sil, qv, minor cc, diss py	10
09750	L16+25E, 3+18N	grab	sub-crop	frag volc (?), sil, diss py	60

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GEOPHYSICS

Introduction

A total of fifteen lines (9.1 line kilometers) were established at 75 meter spacings and evaluated utilizing VLF/EM and/or magnetometer (Figures 4-7). These were completed in conjunction with soil geochemistry to determine the feasibility of the following:

1) further delineation along surface of the trace of the Pansy and Ruby vein systems,

2) further definition of the east-west trending pyritized and/or altered zones.

Procedure-Magnetometer

A Scintrex MP-2 Proton Precession magnetometer was utilized to survey the established lines. Results were corrected back to baseline and then contoured. Raw and corrected magnetometer data appear on Figures 6 and 7 respectively.

Procedure-VLF-EM

The grid was evaluated with a Geonics VLF/EM 16 unit. Two transmitters were required. Cutler (NAA 17.8 kHz) was used for the east-west trending Pansy vein system and pyritized alteration zones. A large portion of the grid was therefore completed with the Cutler frequency. A test survey using Hawaii (NPM 23.4 kHz) was conducted over three lines (L12+50E,L13+25E,L14+00E) which transect the northeasterly trending Ruby vein. Orientation of the two transmitters with respect to the property is 90° (Cutler) and 230° (Hawaii).

Inphase and quadrature responses are profiled on Figure 4. All data was reduced by Fraser Filtering and then contoured as seen on Figure 5.

A check line completed over the 1984 L8+00E (Crowe and Magrum) indicated that data from the 1984 VLF/EM survey is reproducible and compatible with the 1985 data.

Results-Magnetometer

The total field intensity of the magnetometer ranges from approximately 55,600 gammas at the southern boundary of the grid to 56,100 gammas along the most northerly edge of the grid. The progressive increase of the magnetic field northward may reflect the transition from massive volcanics to volcanoclastics and the proximity to subareal and therefore more oxidized units.

A subtle shadow zone of slightly elevated magnetics surrounds both of the vein systems. Neither the significance nor the definition of these zones is clear enough to render the magnetometer a useful exploration tool.

Recommendations-Magnetometer

While the magnetometer reflects variations in lithlology it is not effective in the exploration for either the vein systems or the pyritized alteration zones. No further magnetometer surveys are recommended.

Results-VLF/EM

The two most prominent VLF/EM conductors (maximum Fraser Filtered value of +37) are coincident with extensive pyritized alteration zones. Silicification appears to be the dominant alteration noted in outcrop. The most westerly of the two extends from L11+00E to L17+75E. The second anomaly begins on L17+75E, continues to the edge of the grid at L23+00E and is open to the east. The maximum width of these conductors is approximately 50 meters.

A weaker but wider anomaly is present on the northern portion of lines 21+50E and 23+00E. Two isolated conductors, both of which are open the the east, occur on L23+00E at approximately 1+20N and 0+50S. The above three areas are also thought to correlate with pyritized alteration zones, many of which were observed to the east in the San Juan River Valley.

The Pansy vein system can be traced from L23+00E westward to approximately L21+00E by a weak to moderate conductor. Geochemistry indicates the presence of the vein on L20+00E. The lack of both a VLF/EM and geochemical signature suggests that the Pansy either weakens or pinches out on L19+25E. The vein is evidenced further westward by favourable gold geochemistry on lines 18+50E and 17+75E and a conductor on L18+50E.

The Ruby vein is defined by a weak anomaly (Figure 5a). The use of Hawaii as a transmitter coupled with 10 meter stations will be a useful tool in further delineating the vein to the northeast.

Recommendations-VLF/EM

Although lines 20+00E westward to line l1+00E were surveyed with VLF/EM in 1984 (Crowe and Magrum), the 25 meter spacing was not adequate to trace the Pansy vein westward. It is therefore recommended that lines 17+00E to 11+00E be rerun utilizing a ten meter spacing and using Cutler as the transmitter. This will also yield additional data for defining the southern portion of the pyritized alteration zone located south of the baseline.

An attempt to further delineate the Ruby vein to the northeast should be made using Hawaii as the transmitter in conjunction with station spacings of 10 meters.

Intermediary VLF/EM lines are recommended to assist in defining the possible intersection of the Ruby vein system with pyritized alteration zones.

GEOCHEMISTRY

Introduction/Procedure

A total of 81 soil samples were collected at 10 meter intervals from lines 17+00E, 17+75E, 18+50E, 19+25E, 20+00E and 21+50E in an attempt to further delineate the Pansy vein system. Soils were obtained from a depth of 10-35 centimeters and included predominantly "B" with some "C" horizon representatives. Soil values are illustrated and contoured on Figure 3.

All soils were geochemically analyzed for gold. A twenty-eight element ICAP was also completed. Analyses were done by Vangeochem Lab Limited, North Vancouver, B.C. (see Appendix 5). Duplicate soil samples were obtained as a check measure.

For details regarding analytical procedures see Appendix 3.



Results

The threshold value for anomalous gold in soils as per the 1984 report (Crowe and Magrum) is 25 ppb. Non isolated gold values greater than 10 ppb were contoured at 10 ppb intervals.

The results from the ten meter spacing of the soil samples in conjunction with the VLF/EM data indicates that the Pansy quartz-stibnite vein system can be traced westward from the showings on L21+50E to L17+75E. Gold values in this zone range from non-detected to 105 ppb.

Values adjacent to and downslope from the workings (1+40S) on line 21+50E are 35 and 95 ppb gold (1+30S, 1+40S), with no detectable gold on either side of these stations. This indicates that in the vicinity of the mineralized veins gold values are low and dispersion restricted, reinforcing the necessity of closely spaced sample intervals.

ICAP results in soils further support the existance of the Pansy vein to the west. Strongly anomalous Sb - As and weaker Sr values are associated with the workings on L21+50E and extend across to L20+00E. The arsenic forms a halo up to 40m to the north and 30m southwards of the gold highs on these lines. The Sb halo is restricted to 10m north and south of the elevated gold values and does not extend west of L20+00E.

Anomalous values of Au, Sb or Sr were not returned from soils on L19+25E. This combined with the apparent lack of a VLF/EM signature suggests a weakening or pinching of the vein system. The westerly transition from Sb to Sr may further indicate a change in the chemistry and/or mineralization associated with this structure. A wide (50m) Sr halo is associated with a gold anomaly (105 ppb) on L17+25E.

The closely spaced (10m) soil survey appears to have been successful in tracing the Pansy vein to the west. It is recommended that similar spaced soil geochemistry combined with VLF/EM be conduced on intermediary lines to further define this structure.

CONCLUSIONS AND RECOMMENDATIONS

Surface expression of quartz - stibnite vein mineralization, located on the Ruby and Pansy claims, was not encountered on the Linda and Wolf claims of Tri-Pacific Resources Ltd. Geochemistry combined with VLF/EM anomalies suggest gold mineralization associated with the Pansy vein system may extent up to 375 m westwards on to the Linda claim block. These anomalies however, are not continuous. No geochemical signature occurs on L19+25E, 225 m west of the Pansy trenches and the Sb, As halo associated with the vein does not extend past L20+00E. This suggests a possible change in the chemistry of the vein system, a pinching of the vein in the vicinity of L19+25E, or that soils are not representative of underlying mineralization.

No VLF/EM signature was obtained to the northeast of the Ruby vein, due to the orientation of the vein with respect to the transmitting station. A test survey of three lines however, suggests that Hawaii may be useful in tracing this system. Grab samples of sub-crop indicate that gold bearing vein material extends for at least 50 m on to the Linda claims and previous reports (Stevenson, 1944) suggest it may extend as much as 250 m+ to the northeast.

Pyritized, altered volcanics were found to sporadically host low but anomalous gold values. Copper and arsenic signatures, which are associated with these zones, appear to be spatially restricted to the area west of the Cougar - Wolf claim boundary. Surface exposures combined with VLF/EM traced these pyritized bodies for 3 km+ over the San Juan property. They are east to slightly north of east trending and VLF/EM suggests a lens like nature, with individual lenses obtaining widths of 100 m+ and strike lengths up to 600 m+.

One area of interest is in the creek bed to the northeast of the Ruby vein system. Here silicified and pyritized volcanics have a sheared appearance and host low, but anomalous (55 ppb) gold values. This area is close to the projected intersection of the Ruby vein with the pyrite alteration zone and could be important with respect to economic gold mineralization.

Two further stages of exploration are recommended. Road rehabilitation should accompany fill in geochemistry and VLF/EM lines in the vicinity of the Ruby and Pansy veins. Both Cutler and Hawaii transmitting stations should be utilized. In conjunction with this phase, but after the results of the geochemistry and geophysics have been studied, cat trenching should be initiated. The northeast extention of the Ruby vein and its area of intersection with the pyrite alteration zones and the western extension of the Pansy vein system should be tested.

Contingent upon favourable results, the Pansy and Ruby claims should be aquired. With the aquisition of this ground, a second explortion program of diamond drilling would test the strike length and down dip extensions of these zones.

The estimated cost of Phase 1 is \$ 52,217.00

Respectfully submitted;

(ACTUAL States

Joanne R. Forbes, B.Sc.

Gregory G. Crowe, M.Sc., P.Geol.

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TABLE 2

ESTIMATED COSTS FOR CONTINUED EXPLORATION

Mobilization				\$ 2,000.00
Supervisor Geologist Assistant Technician	21 21 15 10	0 0 0 0 0	225/day 200/day 175/day 150/day	4,725.00 4,200.00 2,625.00 1,500.00
Accomodation	21 3	6	50/day 500/week	1,050.00 1,500.00
Transportation Ferry	21	6	70/day	1,470.00 300.00
Fuel				1,000.00
Food	67	0	25/man-day	1,675.00
Equipment				1,500.00
Overhead				750.00
Geochemistry soil rock	400 225	6	12/sample 15/sample	4,800.00 3,375.00
Road Rehabilitatio Trenching	n			2,000.00 10,000.00
Report				3,000.00
Contingency 10%	·			4,747.00
	т	ot	al	\$ 52,217.00

REFERENCES

- Crowe, G.G. and Magrum, M.M., 1984, Geological, geochemical and geophysical report on the San Juan property of Tri-West Resources Ltd., B.C.D.M. assessment report.
- Donaldson, T.J., 1968, Report on the San Juan antimony gold prospect, Vancouver Island, B.C., unpublished report.
- Elwell, J.P., 1983, Evaluation Report on the Tuff #2 Claim, Clapp Creek area., for Daffrey Resources Inc., B.C.D.M. assessment report #12608.
- Muller, J.E., 1981, Geology Victoria Map area, Vancouver Island and Gulf Islands, B.C., Geol. Surv. Canada, Open File 701.
- Muller, J.E., 1982, Geology of Nitinat Lake Map area, Geol. Surv. Canada, Open File 821.
- O'Keefe, D., 1984, Vancouver Island's Leech River camp uncovering widespread gold mineralization, International Prospectors and Developers Inc., v 7, #4, pp 10 - 11.
- Philip, R.D.H., 1968, Report on a geochemical survey on the San Juan Property of Concorde Explorations Ltd., B.C.D.M. assessment report #1656.
- Sheppard, E.P., 1983, Geological report on the San Juan property, Victoria Mining Division, Vancouver Island, B.C., for Nu-Sun Energy Corp., Tri-West Resources Ltd., prospectus, 1984.
- Sinclair, A.J., 1981, Applications of probability graphs in mineral exploration, Association of Exploration Geochemists, Special Volume #4, 95p.
- Smallwood, A.C., 1984, Prospecting report on the Tuff Three Claim for Ryder Petroleums Inc., B.C.D.M. assessment report #12568.

Stevenson, J.S., 1944, Victory Group, B.C.D.M., unpublished report.

CERTIFICATE

I, JOANNE R. FORBES, of the city of Vancouver, British Columbia hereby certify that:

- I am a consulting geologist with offices at 404 850 West Hastings St., Vancouver, B.C.
- 2) I hold a degree of Bachelor of Science in Geology from the University of Calgary, May, 1981.
- 3) I have been employed in my profession for the past 7 years.
- 4) I have no interest either directly or indirectly, nor do I expect to receive any interest in the property covered in this report or in the shares of Tri-Pacific Resources Ltd.
- 5) This report is based on a field examination conducted between September 22, 1985 and October 9, 1985 and on a detailed evaluation of previous operators technical data.

Dated on this 12th day of December, 1985 at Vanacouver, B.C.

Gianni Alylina

Jóanne R. Forbes, B.Sc. Consulting Geologist

VANGEOCHEM LAB LIMITED

MAIN DFFICE: 1521 PEMBERTON AVE. N.VANCOUVER B.C. V7P 253 PH: (604)986-5211 TELEX:04-352578 BRANCH DFFICE: 1630 PANDORA ST. VANCOUVER B.C. V5L 1L6 PH: (604)251-5656

ICAP GEOCHEMICAL ANALYSIS

A .5 GRAN SAMPLE IS DIGESTED WITH 5 ML OF 3:1:2 HCL TO HNO3 TO H20 AT 95 DEG. C FOR 90 MINUTES AND IS DILUTED TO 10 ML WITH WATER. This leach is partial for SN,MN,FE,CA,P,CR,MG,BA,PD,AL,NA,K,N,PT AND SR. AU AND PD DETECTION IS 3 PPM. IS= Insufficient sample, ND= NOT DETECTED, -= NOT AMALVIED

COMPANY: AZIMUTH GEOLOGICAL	REPORT#: 85-06-008A	DATE RECEIVED: 85/10/15	ANALYST W. Reeves
ATTENTION: Mr. Greg Crowe	Job#: 85490	DATE COMPLETED: 85/10/19	
Project: 85-09-20	Invoice#: 9091	COPY SENT TO: Azimuth Geological	
		PAGE 1 OF 3	

SAMPLE HAME	4 P	16 1911	AL. 1	as PPN	AU PPN	BA Ppn	BI PPM	CA I	CD PPN	CO PPM	CR PPM	CU PPN	FE 1	K 1	M6 1	- ИН Рри	NO Pph	NA I	NI PPM	P I	PB PP %	PD PPN	PT PPN	SD Pph	SN PPN	SR Pph	U PPN	N PPN	ZN PPM
L17+00E 0+40 L17+00E 0+50 L17+00E 0+60 L17+00E 0+70 L17+00E 0+70	s S S S	.1 .1 .1 .1 .1	1.83 1.45 4.50 2.38 .83	5 B ND ND 12	ND ND ND ND	120 125 216 111 43	N9 ND ND ND ND	.08 .11 .19 .14 .10	.1 .2 .4 .1 .1	4 5 74 5 2	9 10 15 14 7	20 14 70 20 7	3.62 2.52 3.40 3.30 1.67	.05 .06 .09 .06 .05	.29 .17 .50 .32 .10	247 364 4047 421 157	1 ND 2 ND HD	.01 .01 .01 .01 .01	4 3 17 6 2	.07 .04 .11 .06 .02	6 8 10 7 6	XD ND ND ND ND	nd Nd Nd Nd Nd	ND 7 ND ND ND	3 ND 19 4 No	9 16 19 14 12	ND ND ND ND ND	ND ND ND ND	47 27 130 36 12
L17+00E 1+00 L17+00E 1+10 L17+00E 1+20 L17+00E 1+30 L17+00E 1+40	5 5 5 5 5	.1 .4 .2 .1 .5	2.75 1.36 1.50 2.61 1.39	2X 3 8 9 4 3 3	ND ND ND NB	75 29 81 54 63	ND ND ND 3	.10 .13 .16 .13 .20	.2 .1 .1 .1	6 4 6 9	13 8 9 32 42	33 14 21 25 13	3.35 1.70 2.34 3.37 2.97	.07 .05 .06 .07 .05	.51 .19 .26 .45 .56	289 210 653 278 515	ND ND ND ND	.01 .01 .01 .01 .01	8 3 4 13 22	.06 .02 .07 .06 .03	9 9 8 7 7	ND ND ND ND	NŬ ND ND ND	ND ND ND ND	1 ND ND ND ND	10 19 17 16 23	ND ND ND ND ND	ND ND ND ND	33 14 47 35 20
L17+00E 1+50 L17+00E 1+60 L17+00E 1+70 L17+00E 1+80 L17+00E 1+90	15 6 15 5 15	.1 .2 .1 .2 .2	2.29 1.12 3.60 1.64 1.77	ND 11 NG 7 6	ND ND ND ND	48 42 70 60 62	ND ND ND ND ND	.08 .10 .10 .13 .13	.3 .4 .1 .1	5 4 5 3	12 10 12 13 11	23 11 39 18 9	3.84 2.79 4.65 3.33 3.47	.07 .06 .08 .07 .08	.40 .25 .56 .32 .24	338 172 285 272 155	NÐ ND ND ND	.01 .01 .01 .01 .01	5 4 6 4 3	.07 .03 .08 .05 .04	7 6 7 8	ND ND ND ND	ND ND ND ND	ан 2 10 10 2 2	NÐ ND ND ND	10 12 11 15 16	ND ND ND ND	ND 4 ND 4 ND ND	37 18 49 26 19
L17+00E 2+00 L17+00E 2+10 L17+00E 2+30 L17+75E 0+40 L17+75E 0+50	15 15 15 15	.2 .3 .1 .1	2.79 1.67 3.79 1.36 2.04	ND S ND ND	ND ND ND ND	115 111 73 59 85	ND ND ND NB NB	.16 .22 .11 .06 .16	.1 .1 .2 .1 .1	8 7 6 3 7	21 21 13 8 8	35 12 39 12 31	4.05 3.16 4.32 3.29 3.79	.08 .07 .08 .07 .08	.52 .32 .48 .17 .34	346 554 255 236 363	ND ND ND 1 1	.01 .01 .01 .01 .01	9 7 5 4 11	.08 .04 .08 .03 .05	11 8 9 5 0	ND ND ND ND	nd Nd Nd Nd Nd	ND ND ND	ND ND ND ND	22 28 13 7 13	ND ND ND ND	3 ND ND ND ND	48 25 49 19 31
L17+75E 0+70 L17+75E 0+80 L17+75E 0+90 L17+75E 0+90 L17+75E 1+00 L17+75E 1+10	DS DS DS DS	.1 .5 .1 .2 .2	3.00 .93 2.25 2.49 2.47	ND 10 ND ND	ND ND ND ND ND	170 34 61 90 42	NB ND ND ND	.26 .07 .11 .13 .08	.8 .1 .1 .3 .3	24 3 4 4 4	12 9 13 8 13	68 6 15 17 10	3.97 2.25 3.58 2.95 3.17	.10 .06 .08 .08 .09	.94 .08 .22 .20 .28	1624 95 261 307 197	i ND ND ND	.01 .01 .01 .01 .01	9 2 1 12	.08 .01 .07 .07 .05	11 6 7 8 5	ND ND ND ND	ND ND ND ND	ND ND NB ND ND	ND ND ND ND	17 9 13 15 10	ng Nd Nd Nd	NG ND ND ND	76 8 31 58 25
L17+75E 1+20 L17+75E 1+30 L17+75E 1+50 L17+75E 1+50 L17+75E 1+50 L17+75E 1+70	05 05 05 05	,1 ,3 ,1 ,1 ,2	3.94 1.70 2.88 2.75 3.16	ND ND ND ND	ND ND ND ND ND	110 58 88 66 118	нр Ир Лр	.15 .22 .22 .15 .17	.3 .1 .2 .4 .2	B 4 7 8 9	13 11 17 16 23	39 35 40 57 42	4.01 3.18 3.77 3.79 3.84	.08 .08 .08 .08 .08	. 36 . 14 . 46 . 56 . 44	713 282 403 339 906	ND MD ND ND	.01 .01 .01 .01 .01	6 4 9 8 11	.14 .00 .13 .07 .15	51 9 10 9	ND ND ND ND	ND ND ND ND ND	ND ND ND ND	ND ND ND ND	18 49 22 18 21	ND ND ND ND	ND ND ND ND	67 28 46 41 52
L17+75E 1+80 L18+50E 0+40 L18+50E 0+50 L18+50E 0+60 L18+50E 0+70	DS DS DS DS DS	.3 .1 .1 .1 .1	2.56 2.08 1.67 2.61 3.65	nd Ng Ng Ng Ng	ND ND ND ND ND	77 56 51 80 107	NÐ ND ND ND ND	.14 .08 .10 .12 .08	.2 .1 .4 .3	7 4 3 8	22 E0 9 13	23 11 9 20 25	3.47 3.45 2.99 3.34 3.92	. 08 . 08 . 07 . 08 . 09	.24 .30 .25 .41 .44	441 190 198 403 443	ND ND ND ND 1	.01 .01 .01 .01 .01	8 3 5 9	.07 .05 .04 .04 .08	10 7 5 8 13	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	20 9 10 11 10	ND ND 3 ND	ND ND ND ND	48 33 32 62 172
L18+50E 0+80 L18+50E 0+90 L18+50E 1+00 Detection L	05 05 05 1MIT	.1 .1 .2	1.01 2.82 1.37	5 ND 10 3	ND ND ND 3	59 81 50 1	ND ND ND 3	.14 .08 .10	.1 .1 .1	4	9 9 8	9 16 9	3.45 3.64 2.93	.08 .08 .07	.26 .29 .17	301 214 145	нр Н <u>р</u> 1	.01 .01 .01	2 3 2	. 04 . 05 . 02	8 10 6 7	ND ND XD	ND ND XD	ND ND ND	ND ND 2	13 10 11	ND ND ND	ND ND ND	34 47 21

CLIENT:	IENT: AZIMUTH GEOLOGICAL					108	#: 85	5490	90 PRDJECT: 85-09-20 R				-20 REPORT: 85-06-008A j			08A DATE: 85/10/19					PAGE 2 OF 3								
SAMPLE NAME	AG PP:	M	AL 1	AS PPN	AU PPN	BA PPM	BI PPN	CA I	CØ PPN	CO PPN	CR PPN	CU Ppn	FE I	K I	Я6 1	NN PPN	NO PPN	NA I	NI PPM	P I	PB PPM	PD PPH	PT PPN	SB Ppm	SN PPH	SR PPN	U PP N	N PPN	ZN PPN
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L19+25E 0+505 L19+25E 0+609 L19+25E 0+709 L19+25E 0+709 L19+25E 1+009		1 1 3 1 1	.00 2.87 1.15 1.50 1.68	15 XD 11 5	NB KD KD MD NB	45 65 80 153 62	ND ND ND ND	.08 .07 .07 .13 .12	.1 .1 .1 .2	2 5 4 5 4	4 10 8 9 7	7 19 12 19 12	2.00 3.40 2.47 2.77 2.34	.06 .08 .06 .06	.10 .28 .17 .19 .22	352 317 186 801 552	NÜ L NB ND	.01 .01 .01 .01 .01	1 4 3 3 2	.03 .06 .03 .07 .04	6 16 12 9 7	KD ND ND ND	ND ND ND ND	ND 4 ND ND ND	nð Nd Ng Ng	8 9 10 15 11	6 7 4 ND 3	MD M9 4 M9 M9	15 40 16 38 37
L19+25E 1+105 L19+25E 1+209 L19+25E 1+305 L19+25E 1+409 L19+25E 1+455		1 1 1	3,50 3,32 3,74 3,67 4,50	XB ND ND ND	ND ND ND ND ND	120 83 79 67 119	ND ND ND ND	.17 .10 .11 .08 .13	.5 .3 .2 .4 .3	10 9 10 9 15	15 19 14 16 18	33 29 45 41 80	2.66 3.82 3.79 4.52 4.41	.08 .08 .09 .08 .10	.64 .41 .60 .65 1.02	1444 478 567 420 889	1 Nđ Nđ Nđ 1	.01 .01 .01 .01 .01	11 8 9 7 15	.05 .08 .12 .12 .08	9 10 10 11 11	ND XD ND XD ND	nd ND ND ND NS	2 2 2 80 80	ND ND ND ND	15 12 11 10 11	3 XD 4 ND NS	ND ND ND ND ND	53 58 54 57 71
L19+25E 1+606 L20+00E 0+105 L20+00E 0+505 L20+00E 0+505 L20+00E 0+705		2 .1 .1 .1	3.08 2.45 1.91 5.02 1.08	ND ND 11 ND 3	NB NB ND NB	116 270 87 145 139	nd Ng Ng Ng Ng	.16 .14 .06 .13 .04	.1 .1 .2 .2	10 10 4 9 2	14 6 9 15 5	31 30 16 54 16	2.63 2.45 2.90 5.64 2.77	.08 .08 .07 .11 .07	.63 .20 .26 .44 .03	2308 5276 445 632 388	ND ND 1 ND	.01 .01 .01 .01 .01	12 5 10 8 2	.04 .08 .05 .24	11 7 7 13 7	ND ND ND ND	NB ND ND ND	ND ND ND S N9	ND ND ND S ND	13 12 6 14 7	ND ND ND 2	ND ND ND ND	50 90 28 104 14
L20+00E 0+803 L20+00E 0+905 L20+00E 1+003 L20+00E 1+105 L20+00E 1+105	S . S . S .	.1 .1 .1	3.45 2.36 2.57 2.87 3.54	ND 4 NB ND 174	NB ND ND ND	120 107 112 125 101	ND ND ND ND ND	.11 .13 .12 .06 .05	.5 .7 .1 .1 .1	8 6 7 11 9	13 12 11 14 10	38 19 22 27 38	4.87 3.33 3.40 3.54 3.47	. 11 . 09 . 09 . 08 . 08	.34 .29 .30 .14 .28	481 477 703 1422 328	MB ND ND ND 1	.01 .01 .01 .01 .01	6 5 4 5 5	.12 .06 .11 .15 .08	9 8 12 8 9	ND ND ND ND	ND ND ND ND	2 01 01 01 9	3 ND 1 2 4	11 14 12 11 7	3 ND 4 3 ND	ND 7 6 ND ND	70 93 58 43 63
L20+00E 1+305 L20+00E 1+405 L20+00E 1+505 L21+50E 0+905 L21+50E 1+005	5 . 5 . 5 .	.1 .1 .1 .1	2.62 2.47 3.99 3.04 2.25	49 20 MB 13 10	ND ND ND ND	136 109 126 134 66	NÖ ND ND ND	.11 .07 .12 .11 .07	.4 .1 .4 .6 .2	9 10 12 9 3	13 12 19 13 8	33 36 33 36 14	3.99 4.65 4.15 4.23 2.84	.08 .10 .08 .10 .07	. 43 . 34 . 48 . 40 . 22	1204 549 680 527 190	ND ND ND 2 ND	.01 .01 .01 .01	8 12 11 10 3	.08 .10 .11 .06 .03	9 8 12 16 5	ND ND ND ND	ND ND ND ND	8 9 6 ND	2 2 6 8 ND	11 8 11 13 9	NĐ Nđ Nđ Nđ	ND ND ND 2 ND	51 50 79 219 31
L21+50E 1+10 L21+50E 1+20 L21+50E 1+30 L21+50E 1+40 L21+50E 1+50 L21+50E 1+50	S S S S	.1 .1 .1 .1	1.54 2.47 4.47 1.56 3.05	11 12 49 307 6	NB ND ND ND	63 92 123 76 89	ND ND ND ND	.02 .05 .11 .04 .10	.1 .1 .3 .1 .2	1 3 15 11 8	5 6 14 7 13	8 18 104 44 39	2,06 2,83 4,51 4,74 2,81	.05 .07 .11 .08 .06	.08 .20 .68 .12 .39	112 339 576 519 472	ND 1 6 1 ND	.01 .01 .01 .01	1 2 13 10 6	.02 ,03 .10 .06 .05	5 7 9 7 11	ND ND ND ND	ND KD KD N9	5 7 23 250 3	ND 1 6 ND 1	4 7 9 5 12	ND ND ND ND	5 ND ND ND	19 34 73 59 44
L21+50E 1+60 L21+50E 1+70 DETECTION L1	S S MIT	.1 .2 .1	2.54 1.53 .01	8 17 3	ND ND 3	54 43 1	ND ND 3	.08 .15 .01	.3 .1 .1	5 7 1	17 34 1	22 B 1	3,47 2,84 .01	.08 .05 .01	. 30 . 36 . 01	217 190 1	NÐ ND 1	.01 .01 .01	6 11 1	.04 .05 .01	19 9 2	ND ND 3	ND ND 5	6 ND 2	ND ND 2	9 22 1	ND ND 5	8 8 3	34 25 1

CLIENT: AZ	ZIMUTH	1 GE 0	LOGI	CAL	JOB	: 85	5490	PRO	JECT	: 85	-09-	20	REPO	RT: 1	85-06	-008A	D	ATE:	857	10/19	,		PA	6E 3	OF	2		
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L21+50E 1+805 L21+50E 1+905 L21+50E 2+005	.3 .1 .1	.59 1.63 2.30	8 12 Ng	NS NS QN	25 56 66	ND ND ND	. 14 . 08 . 07	.1 .1 .3	3 4 3	10 11 7	3 12 12	1.17 2.96 2.85	.02 .07 .07	. 08 . 26 . 25	271 170 202	1 1 1	.01 .01 .01	ND 4 1	.02 .11 .03	2 3 1	ND ND ND	ND ND ND	2 MD	6 1 ND	19 10 9	ND ND	QK 2 QN	6 31 28
DETECTION LINIT	.1	.01	3	3	1	2	.01	.1	1	ſ	1	.01	.01	.01	I	1	.01	ł	.01	2	3	5	2	2	1	5	3	I

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CERTIFICATE

I, GREGORY G. CROWE, of the city of Vancouver, British Columbia hereby certify that:

 I am a consulting geologist with offices at 404 - 850 West Hastings St., Vancouver, B.C.

- 2) I hold a degree of Master of Science in Geology from the University of Calgary, November, 1981 and a Bachelor of Science in Geology from Carleton University in Ottawa, June, 1977.
- 3) I am a member of the Association of Professional Engineers, Geologists and Geophysicists of Alberta.
- 4) I am a fellow of the Geological Association of Canada.

5) I have been employed in my profession for the past 10 years.

- 6) I hold 2,000 shares in Tri-Pacific Resources Ltd., but I hold no particular interest in the Debbie Group claims nor do I expect to receive an interest as a result of writing this report.
- 7) This report is based on a field examination conducted between September 22, 1985 and Ortober 9, 1985 and on a detailed evaluation of previous operators technical data.

Dated on this 12th day of December, 1985 at Vancouver, B.C.

Gregory G. Crowe, M.Sc., P.Geol., Consulting Geologist

Appendix 1

Costs Incurred

COSTS INCURRED

Mobilization				\$ 1,000.00
Project Geologist Senior Geologist Geologist	19 19 13	@ @	250/day 200/day 175/day	4,750.00 3,800.00 2,275.00
Vehicle	19 1926	@ @	50/day .35/km	950.00 674.10
Accommodation				250.00
Food	51	@	25/man-day	1,275.00
Fuel				300.00
Equipment				1,000.00
Supplies				316.80
Expediting				500.00
Geochemistry				2,800.00
Report				3,500.00

Total

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\$ 23,390.90

Appendix 2

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Rock Unit Descriptions - 1984 Report

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PROPERTY GEOLOGY

Rock units of the Bonanza Group and Leech River Formation underlie a major portion of the San Juan property. Granitic to intermediate intrusives of the Westcoast Complex are exposed in the northwest portion of the Debbie claim group.

The San Juan Fault (Figures 2 & 3) transects the Bonanza Group in the southern portion of the Linda and Teri claims. To the east of the Linda claim, this fault places the Leech River Formation in contact with the Bonanza Group.

Several distinct rock units have been recognized within the Bonanza Group. Andesitic to basaltic volcanics (Jv - Figure 2) comprise the dominant rock type. These are brown to tan weathering and are generally fine grained and structureless, although local porphyritic and amygdaloidal phases have been noted. Chlorite is ubiquitous, a product of lower greenshist regional metamorphism.

As the San Juan Fault zone is approached, the volcanics become increasingly foliated and sheared (Jvs) and a second generation growth of chlorite can be documented. Gneissic textures, defined by alternate feldspar and chlorite rich bands, are locally developed in rocks within the fault zone. Quartz sheeting may also lend a gneissic appearance to the outcrops.

Large bodies of serpentinite (Js), up to 100 m across (exposed on L12+50E -Figure 2), compose the eastern core of the San Juan Fault zone. A second smaller body outcrops on the Teri claims (L2+50W). These units are characterized by intensely foliated, dark green chlorite rich rocks with lighter green serpentine.

Foliations within the sheared and altered volcanics and serpentinites are generally steep north to moderate south dipping (60°). As reflected by its outcrop pattern on a topographic map (fig.3), the fault is interpreted to be steep to moderate south dipping. A major east - west trending volcanoclastic unit (J_b) occurs within the Bonanza volcanics and is exposed in the region of the base line on the Linda, Teri, Debbie, Wolf and Cougar claims. It is characterized by its tan to white weathering and the existence of white altered feldspar (?) and light green siliceous angular fragments up to 5cm in size. Fragments of chert and black siltstone are present locally. The matrix is composed of a fine grained siliceous material.

A series of grey green cherts, poorly bedded siliceous sandstones and siltstones, well bedded dark grey siltstones and argillites and black shales (Jc) are exposed along the southern contact of the volcanoclastic unit, (L1+00W to 2+00E). Rare sedimentary structures, interpreted to be original bedding, indicate the units have a gross east - west, moderate (60°) north dipping orientation.

Chlorite rich tuffaceous rocks (Jt), probably andesitic in composition, crop out along the western margin of the Debbie claims. These can be very well bedded on the centimeter scale and grading and scour textures confirm tops are to the north and east. Small (1 cm) resistant nodules probably represent rock fragments or lapilli.

Minor amounts of limestone (JI) have been recorded within the Bonanza Group. This fetid, black limestone crops out in the eastern portion of the Linda claims.

The Leech River Formation (Ks) is exposed in the southeastern extremities of the Linda claim group, well south of the San Juan Fault Zone. Its contact with the Bonanza Group volcanics was not observed. It is represented by a black fissile, southeast trending shale. Compositional layering is indistinct, but where noted it parallels the fissility.

The Upper Paleozoic to Jurassic Westcoast Complex (Pi) crops out along the western border of the Debbie claims. Small bodies of granitic to intermediate composition host inclusions of the Bonanza Group volcanics. These small bodies are probably apophyses or a larger intrusion exposed to the northwest of the property.



LEGEND

to accompany Figure 2

TRIASSIC TO CRETACEOUS - Leech River Formation

Ks siltstone, shale, phyllite

JURASSIC - Bonanza Group

J_v	andesite, basalt - chlorite rich
Jt	lapilli tuff - chlorite rich
^J b/J _c	volcanoclastic breccia / chert - siliceous siltstone
J _{vs}	andesite, basalt - intensely sheared/foliated
Js	serpentinite
J ₁	limestone

UPPER PALEOZOIC TO JURASSIC - Westcoast Complex

	Pi	granitic	to ii	nterme	diate	int	rusives		
							-		
;		silica, p	yrite	e +/-	chlori	te	sericite	alteratio	n

Symbols

\sim	geological contact
	quartz - stibnite veins
هم جه مه مه	shear
h /	compositional layering, tops known/unknown
×	foliation
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Appendix 3

Sample Preparation and Analytical Procedures

VANGEOCHEM LAB LTD. 1521 Pemberton Ave. North Vancouvelr. B.C. V7P 2S3

- TO: AZIMUTH GEOLOGICAL SERVICE #404 - 850 W. Hastings Street Vancouver, B.C. V6C 1E1
- FROM: Vangeochem Lab Ltd. 1521 Pemberton Ave. North Vancouver, B.C. V7P 283
- SUBJECT: Analytical procedure used to determine multiple elements in hot acid soluble by Induction Couple Plasma Spectrometer (ICP) analysis.

1. Method of Sample Preparation

- (a) Geochemical soil, silt or rock samples were received in the laboratory in wet-strength 4" x 6" Kraft paper bags or rock samples sometimes in 8" x 12" plastic bags.
- (b) The dried soil and silt samples were sifted by hand using a 8" diameter 80-mesh stainless steel sieve. The plus 80-mesh fraction was rejected and the minus 80mesh fraction was transferred into a new bag for analysis later.
- (c) The dried rock samples were crushed by using a jaw crusher and pulverized to 100-mesh or finer by using a disc mill. The pulverized samples were then out in a new bag for later analysis.

2. <u>Method_of_Digestion</u>

- (a) 0.500 gram of -80 mesh sample was used.
- (b) Samples were digested in a hot water bath at $95 \ C$ for $75 \ minutes$ with diluted acua regia acids. (3 : 1 : 3, HC1 : HNO3 : H2O)
- (c) The dipested samples were diluted to a fixed volume and shaken well.

3. Method of Analysis

The analyses were determined by using a Jarrel Ash ICAP model 9002 direct reading emission spectrometer with an inductively coupled plasma excitation source. Background and inter-element corrections (IEC'S) were applied. All data is compiled into an Apple IIe computer. stored on floppy disk and printed by an Epson 100 dot-matrix printer.

4.

The analyses were supervised by Mr. Wade Reeves and Mr. Conway Chun of Vangeochem Lab Ltd. and their staff.

Conway Chun / VANGEOCHEM & AB LTD. VANGEDCHEM LAB LTD. 1521 Pemberton Ave. North Vancouver, B.C. V7P 283

- TO: AZIMUTH GEOLOGICAL SERVICE #404 - 850 W. Hastings Street Vancouver, B.C. VEC 1E1
- FROM: Vangeochem Lab Ltd. 1521 Pemberton Ave. North Vancouver, B.C. V7P 283
- SUBJECT: Analytical procedure used to determine gold by fireassay method and detected by atomic absorption spec. in goelogical samples.

1. Method_of_Sample_Preparation

- (a) Geochemical soil, silt or rock samples were received in the laboratory in wet-strength 4" x 6" Kraft paper bags or rock samples sometimes in 8" x 12" plastic bags.
- (b) The dried soil and silt samples were sifted by hand using a 8" diameter 80-mesh'stainles steel sieve. The plus 80-mesh fraction was rejected and the minus 80mesh fraciton was transferred into a new bag for analysis later.
- (c) The dried rock samples were crushed by using a jaw crusher and pulverized to 100-mesh for finer by using a disc mill. The pulverized samples were then put in a new bag for later analysis.

2. <u>Method of Extraction</u>

- (a) 20.0 30.0 grams of the pulo samples were used. Samples were weighed out by using a too-loading balance into fusion pot.
- (b) A Flux of litharge, soda ash, silica. borax, flour, or potassium nitrite is added. then fused at 1900 degrees F and a lead button is formed.

- (c) The gold is extract by cupellation and part with diluted nitric acid.
- (d) The gold bead is saved for measurement later.

3. <u>Method of Detection</u>

- (a) The gold bead is disolved by boiling with sodium cyanide, hydrogen peroxide and amonium hydroxide.
- (b) The gold analyses were detected by using a Techtron model AAS Atomic Absorption Spectrophotometer with a gold hollow cathode lamp. The results were read out on a strip chart recorder. The gold values in parts per billion were calculated by comparing them with a set of gold standards.
- 4. The analyses were supervised or determined by Mr. Conway Chun or Mr. David Chiu and his laboratory staff.

David Chiu VANGEOCHEM LAB LTD.

Appendix 4

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Rock Geochemistry - Analytical Results



VANGEOCHEM LAB LIMITED

MAIN OFFICE 1521 PEMBERTON AVE. NORTH VANCOUVER, B.C. V7P 2S3 (604) 986-5211 TELEX: 04-352578

BRANCH OFFICE 1630 PANDORA ST. VANCOUVER, B.C. V5L 1L6 (604) 251-5656

REPORT	NUMBER:	85-06-009	JOB	NUMBER:	85489	AZIMUTH SEOLOGICA	L	PAGE	1	0F	2
SAMPLE	#		Au								
			dea								
09701			40								
09702			5								
09703			nd								
09704			nd								
09705			nđ								
09706			nd								
09707			'nd								
09708			nd								
09709			nd								
09710			nd								
29 711			80								
3 9712			nd								
29713			nd								
09714			nd								
09715			nd								
297 16			nd								
29717			2980								
29718			1505								
09719			ככ								
09720			ne								
8 9721			120								
09722			2700								
09723			6480								
09724			2810								
09725			4360								
Ø9726			40								
09726 9	l .		nd								
0 97 27			nd								
39723			nd								
Ø9729			nd								
09730			nd								
09731			10								
897 32			nd								
09733			5								
09734			nci								
09735			nd								
09735			nd								
Ø9737			nd								
0 9 738			nci								



29749

23750

VANGEOCHEM LAB LIMITED

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REPORT NUMBER: 85-06-009	JOB NUMBER: 85489	AZIMUTH GEOLOGICAL	PAGE	ŝ	ØF	2
SAXPLE #	Au					
	daa					
09739	nd					
09740	nd					
09741	nd					
09742	nd					
09743	nd					
Ø9744	nd					
09745	nd					
0 9746	nd					
09747	nd					
@9 748	35					

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10

60

VANGEOCHEM LAB LIMITED

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MAIN DFFICE: 1521 PEMBERTON AVE. N.VANCOUVER B.C. V7P 2S3 PH: (604)986-5211 TELEX:04-352578 BRANCH DFFICE: 1630 PANDORA ST. VANCOUVER B.C. V5L 1L6 PH: (604)251-5656

ICAP GEOCHEMICAL ANALYSIS

A .5 BRAM SAMPLE IS DIGESTED WITH 5 ML DF 3:1:2 HCL TO HNO3 TO H20 AT 95 DEG. C FOR 90 MINUTES AND IS DILUTED TO 10 KL WITH WATER. This leach is partial for SN,MM,FE,CA,P,CR,NG,BA,PD,AL,NA,K,M,PT AND SR. AU AND PD DETECTION IS 3 PPM. IS= INSUFFICIENT SAMPLE, ND= NOT DETECTED, ~= NOT ANALYTED

COMPANY: A ATTENTION: PROJECT: 8	PANY: AZIMUTH GEOLOGICAL REPORT#: 85-06-009 A ENTION: Mr. Greg Crowe JOB#: 85489 JECT: 85-09-20 INVOICE#: 9091									A			DATE DATE COPY	E REC E COM Y SEN	EIVE PLET	ED: E IED: D:	85/10 85/1 Azimu	0/15 0/19 1th Ge	ologi	ical			ANAL	YST_	<u>v.</u> 7	Peer	~~;		
																						PAG	5E 1 OF	2					
SAMPLE NAME	AG PPN	AL Z	AS PPN	au Ppri	BA PPN	81 PPN	CA 1	CB PPM	CO PPN	CR PPN	cu PPN	FE 1	K I	46 1	MN PPM	NO PPN	NA 1	NI PPN	Р 1	PB PPM	PD PPM	P T PPN	58 PPH	SN PPN	SR PPN	U PPN	N PPM	ZH PPN	
09701 09702 69703 09704 09705	.1 .1 .1 .1	1.43 1.66 .32 1.25 3.32	6 10 12 17	NŮ ND ND ND ND	107 142 31 89 79	ND 3 ND ND 5	.12 .08 .03 .13 .11	.1 .3 .1 .2 .4	10 18 16 19 6	58 11 110 9 38	53 12 14 6 15	6.59 4.19 13.46 6.76 7.00	.14 .10 .22 .15 .14	.64 1.14 .05 .91 1.92	402 163 32 93 539	18 1 21 3 1	.01 .01 .01 .01 .01	4 4 7 8 1	.07 .08 .03 .10 .14	10 4 13 4 15	NÛ ND ND ND	ND NG ND ND	2 ND ND ND	1 1 2 2 Na	6 9 3 6 12	ND ND ND	ND ND ND ND	29 14 10 5 20	
09706 09707 09708 09709 09710	.2 .5 .7 .3 .1	1.48 .59 3.72 2.14 3.00	21 12 ND 13 ND	ND ND ND ND	281 88 44 380 101	5 XB 3 4	.07 .10 1.15 .32 .70	.3 .1 .4 .9	5 4 33 6 17	10 12 29 10 6	112 25 2116 15 35	2.62 2.37 4.66 3.11 5.12	.07 .08 .14 .08	1.00 .44 3.45 1.82 1.89	365 98 1348 237 1041	S 1 ND ND ND	.01 .01 .01 .01 .01	3 2 10 3 6	.05 .06 .14 .11 .09	3 4 ND 5 3	ND ND ND ND ND	nd Nd Nd Nd	NQ ND ND ND	4 3 ND	5 7 58 30 26	nd Ng Ng Ng	на Ио Ио Хо Хо	14 6 137 17 84	
09711 09712 09713 09714 09715	.1 .1 .2 .5 1.2	3.29 3.32 2.13 .76 3.09	ND ND 13 ND	nð Ng Ng Ng Ng	126 124 156 144 48	ND ND ND ND ND 12	2.13 2.63 1.82 .13 1.33	.6 .5 .1 .3	16 17 13 7 22	17 5 19 5 53	32 32 23 12 78	4.99 5.08 4.07 3.49 4.34	.17 .17 .17 .12 .16	2.34 2.29 1.03 .32 2.25	1212 1210 859 383 1011	NÐ ND 1 2 1	.01 .01 .01 .01 .01	7 6 5 2 20	.10 .11 .12 .08 .17	NÐ 4 11 3	ND XD ND ND	NÐ ND ND ND ND	ND ND 27 111	ND ND 2 11	40 43 39 8 27	4 XD 7 XD 4	ND ND + ND 91	97 94 63 21 59	
09716 09717 09718 09719 09719	1.1 .6 .2 .2 .2	3.20 .02 .05 .56 1.21	ND 178 74 20 51	ND B ND ND ND	62 76 13 113 141	12 ND ND ND	1.13 .08 .02 1.62 .13	.4 -1 .1 .3	24 2 1 5 13	40 157 32 55 17	26 20 11 28 25	4.70 .B1 .83 2.14 3.95	.15 .03 .02 .14 .13	2.36 .02 .51 .34	1012 93 121 411 1173	ND 2 1 3 1	.01 .01 .01 .01 .01	27 14 5 7 20	.12 .01 .06 .07	2 9 21 ND 2	J ND ND ND	NÐ ND ND ND	844 67148 384 302 66	8 6 1 1 ND	33 10 2 65 9	ND ND ND ND ND	3 7 ND 3 ND	63 11 19 11 59	
09721 09722 09723 09724 09725	.1 .1 .5 .2 ,2	2.77 .41 .17 .34 .46	144 2284 6614 1664 4258	ND 80 80 3	100 61 76 83 85	ND ND ND ND ND	2.77 .71 .02 .07 .86	.8 1.7 5.4 1.1 3,1	23 7 1 9 10	25 16 14 74 8	98 25 11 12 32	6,16 3,80 1,70 1,79 4,83	. 22 . 11 . 07 . 06 . 15	2.25 .13 .01 .03 .26	1645 588 80 457 1194	ND 2 1 1	.01 .01 .01 .01 .01	23 7 2 6 8	.13 .06 .01 .02 .04	2 1 7 3 3	ND ND NB ND	ND ND ND ND	987 110 1194 18645 159	ND 1 1 2 1	89 20 5 5 35	4 ND ND ND	2 ND ND ND	83 36 8 22 36	
09726 09726A 09727 09728 09729	.i .7 .6 .7	.12 2.58 1.20 2.47 3.65	134 34 9 13 ND	ND ND ND ND	25 29 52 37	н) 3 ND 80 5	26.60 7.23 .13 1.46 .11	.1 .8 .2 .5	3 12 4 11 18	21 28 8 24 20	16 28 28 28	L. L4 3.49 2.86 3.34 6.44	.01 .15 .08 .13 .14	.26 1.77 .13 1.39 2.72	537 406 252 491 628	I ND 1 2 ND	.01 .01 .01 .01 .01	11 14 3 17 6	.03 .05 .08 .08 .11	ND 17 12 7 6	ND ND ND ND ND	ND ND ND ND	498 5 HD 3 4	ND 6 3 4 ND	371 79 16 18 10	ND ND ND ND ND	ИД ИД ИД	26 60 21 53 30	
09730 09731 09732 09733 09733	.2 .2 .1 .1	.85 .46 1.51 1.37 1.08	34 16 ND 7	nd Nd Nd Nd Nd	170 163 482 239 325	ND ND ND ND ND	.10 .06 .17 .17 .17	.4 .2 .1 .2	10 4 19 19 9	8 43 8 29 4	31 696 46 20 4	2.98 2.12 5.30 4.99 3.20	.10 .08 .13 .13 .13	.15 .05 .48 .55 .29	931 928 1629 1575 1057	2 6 ND 2 ND	.01 .01 .01 .01 .01	11 3 10 7 2	.03 .02 .08 .08	17 1 4 34 5	ND ND ND ND	ND ND ND ND	4 15 ND ND	ND 1 1 1	6 5 9 8 7	ND ND ND ND	ND ND ND ND ND ND	60 63 114 93 68	
09735 09736 09737 09738 Detection limit	1.1 .3 .1 .1	2.70 1.04 4.20 1.63 .01	80 9 90 90 3	NG ND ND ND 3	304 159 85 76	3 ND 4 3	.41 1.45 .20 .30 .01	.4 .3 .6 .2	18 4 20 22	9 5 17 22 1	37 7 43 92	4.89 2.33 7.39 7.16 .01	. 15 . 15 . 16 . 17 . 01	.60 .41 2.02 .85 .01	674 915 2308 383 1	но но но но	.01 .01 .01 .01 .01	6 19 7	.10 .08 .17 .15 .01	12 6 8 4 2	ND ND ND ND S	ND Ne Ng Ng	ND ND 5 29 1 29	8 ND ND 2 2	24 30 19 9	4 אם אם גר	2 ди 2 Ир	47 64 65 23 1	

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SAMPLE NAME	AG PPN	AL I	as Ppr	AU Pph	BA PPN	B I PPN	CA Z	CD PPN	CO PPN	CR PPM	CU PPN	FE I	K I	NG I	HN PPH	NO PPN	NA I	N1 PPM	P I	РВ РРН	PD PPM	PT PPN	SB PPM	SN PPN	SR PPN	U PPN	N PPN	2N PPN
09739	.1	2.15	ND	ND	123	ND	.14	.1	22	17	10	6.43	.15	. 45	468	ND	.01	7	.11	5	MD	ND	ND	ND	10	ND	ND	25
09740	.3	.84	13	ND	113	ND	.22	.1	8	13	,	3.57	.11	. 76	424	2	. 01	4	. 06	14	ND	ND	2	NB	7	5	6	28
09741	.4	. 48	15	ND.	118	NÐ	. 17	.2	6	14	10	2.41	.10	. 28	148	1	.01	1	.06	7	ND	ND	NŪ	KO	6	7	4	6
09742	.1	. 32	4	НÐ	18	ND	.04	.1	7	99	3	20.60	. 31	.10	57	8	.01	3	.01	3	NÛ	DК	3	ND	2	XD	ND	ND
09743	.5	1.67	10	N9	121	5	.73	.3	15	54	61	4.05	.17	1.26	591	4	.01	4	.12	8	KŪ	ND	3	ND	21	3	ND	36
09744	1,	3,28	ND	ND.	55	4	. 35	.4	35	43	10	12.19	. 22	3.94	829	i	.01	12	.11	3	Na	ND	4	ND	7	NB	NB	69
09745	.1	2.44	6	ND	36	. 5	.45	. 6	25	17	675	2.01	. 09	2.78	517	6	.01	15	.13	5	KD	ND	ND	ND	8	3	6	46
09746	.1	1.70	9	NÐ	80	ND	. 34	.4	19	39	15	5.83	.13	1.48	128	2	.01	1	.10	2	NO	NB	6	NB	12	ND	5	- 11
09747	.4	4.29	ND	КŶ	28	5	1.87	.6	19	42	46	5.46	. 16	2.03	211	2	.01	10	. 09	2	ИD	ND	ND	ND	34	7	NQ	8
09748	.4	4.38	ND	ND	150	3	1.49	.6	23	30	64	5.19	. 16	2,75	754	KD	.01	18	.09	2	ND	ND	NÐ	жD	57	5	ND	38
09749	. 6	2,51	6	XD	72	10	. 36	. 3	16	42	22	7.41	-14	2.73	545	1	.01	10	.10	10	ND	ND	2	1	8	ND	7	50
09750	.5	2.70	6	NB	86	8	. 39	.4	10	42	8	5.80	.13	2.34	399	L	.01	6	.10	5	NÐ	ND	ND	ND	30	ND	3.	47
DETECTION LIMIT	.1	.01	3	2	1	2	. 01	.1	1	1	ł	.01	.01	.01	1	1	.01	1	.01	2	3	5	2	2	i	5	3	1

CLIENT: AZIMUTH GEOLOGICAL JOB#: 05489 PROJECT: 05-09-20 REPORT: 05-06-009A DATE: 05/10/19 PAGE 2 OF 2

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BRANCH OFFICE 1630 PANDORA ST. VANCOUVER, B.C. V5L 1L6 (604) 251-5656

ASSAY ANALYTICAL REPORT

CLIENT:	AZIMUTH	GE	DLOGICAL		DATE:	Nov	22	1
ADDRESS:	404-850	ω.	Hastings	St.				

REPORT#: 85-06-010 JOB#: 85567

985

INVOICE#: 9162 TOTAL SAMPLES: 7 REJECTS/PULPS: 90 DAYS/1 YR SAMPLE TYPE: 7 ROCK PULP

PROJECT#: 85-09-20 SAMPLES ARRIVED: Nov 20 1985 REPORT COMPLETED: Nov 22 1985 ANALYSED FOR: Au

> SAMPLES FROM: REPORT 85-06-009 COPY SENT TO: AZIMUTH GEOLOGICAL

: Vancouver, B.C.

: V6C 1E1

.

PREPARED FOR: MR. GREG CROWE

ANALYSED BY: David Chiu SIGNED:

•

Redistered Provincial Assaver

GENERAL REMARK: None



REPORT NUMBER: 85-06-010

VANGEOCHEM LAB LIMITED

AZIMUTH GEOLOGICAL

MAIN OFFICE 1521 PEMBERTON AVE. NORTH VANCOUVER, B.C. V7P 2S3 (604) 986-5211 TELEX: 04-352578 8RANCH OFFICE 1630 PANDORA ST. VANCOUVER, B.C. V5L 1L6 (604) 251-5656

PAGE 1 OF 1

SAMPLE #	Au oz/st	
09717	. 084	
09718	. 258	
09721	<.005	
09722	.062	
09723	.192	
09724	. 294	
Ø9725	. 106	

JDB NUMBER: 85567

DETECTION LIMIT .005 1 Troy oz/short ton = 34.28 ppm 1 ppm = 0.0001% (ppm = parts per million (= less than signed: Appendix 5

Soil Geochemistry - Analytical Results



VANGEOCHEM LAB LIMITED

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.

REPORT NUMBER: 85-0	5-008 JOB NUMBER:	35490 AZIMUTH GEOLO	GICAL PAGE	1 1]:F	3
SAMPLE #	<u> Gu</u>					
	dao dao					
L17+00E 0+40S	nd					
L17+00E 0+50S	nd					
L17+00E 0+605	5					
L17+005 0+705	5					
L17+00E 0+90S	nd					
L17+00E 1+00S	nd					
L17+00E 1+10S	nd					
L17+00E 1+20S	nd					
L17+00E 1+305	nd					
L17+00E 1+405	na					
L17+00E 1+50S	nd					
L17+00E 1+60S	nc					
11/+00E 1+70S	າດ					
L17+00E 1+80S	nd					
L1/+00E 1+905	no					
17+03E 0+00C	(3					
117+000 2+003	12					
117+005 2+205	nc					
17+00E 2+205	15					
L17+75E 0+405	nc					
L17+75E 0+50S	ne .					
L17+75E 0+70S	nd					
L17+75E 0+80S	nc					
L17+75E 0+90S	5					
L17+75E 1+005	12	-				
L17+75E 1+10S	10					
L17+75E 1+205	5					
L17+75E 1+305	105					
L1/+/3E 1+50S	nd					
L1/+/32 1+605	10					
17+755 1+700	F					
17+75E 1+ADS	u nd					
114+50E 0+405	nci					
L18+50E 0+505	5					
L18+50E 0+60S	101					
	14.					
L18+50E 0+705	10					
L18+50E @ 805	20					
L18+50E 2+905	15					
L18+50E 1+00S	5					
DETECTION LIMIT	5					
nd = none detected	= <u>not</u> analysed	is = insufficient sample				



REPORT NUMBER: 85-06-008

VANGEOCHEM LAB LIMITED

AZIMUTH GEOLOGICAL

MAIN OFFICE 1521 PEMBERTON AVE. NORTH VANCOUVER, B.C. V7P 2S3 (604) 986-5211 TELEX: 04-352578

JOB NUMBER: 85498

BRANCH OFFICE 1630 PANDORA ST. VANCOUVER, B.C. V5L 1L6 (604) 251-5656

. . . .

246E 8 0F 3

SAMPLE #	Au	
	למפ	
L18+50E 1+10S	nd	
L18+50E 1+20S	20	
L18+50E 1+30S	nd	
18+50E 1+40S	5	
14+50F 1+50S	ב	
210,002 1,000	50	
L18+50E 1+60S	15	
13+25E 8+485	10	
19+25E 0+50S	15	
i 1910EE BLERS	10 20	
: 101055 01700	। स्ट	
L13T232 07/03	20	
+ 910FE 81085	5	
LISTER 07900	5	
LIJTCUS 17003	0 16	
L13420E 14105	10	
L19+25E 1+20S	5	
L19+25E 1+30S	nd	
L19+25E 1+405	18	
L19+25E 1+45S	5	
L19+25E 1+60S	15	
L20+00E 0+40S	:5	
L20+00E 0+50S	15	
L20+00E 0+60S	nc	
L20+00E 0+70S	nd	
L20+00E 0+80S	nd	
L20+00E 0+905	nd	
120+00E 1+00S	nd	
L20+00E 1+10S	5	
120+00F 1+205	5	
1 20+00E 1+205	29	
1 20+305 1+405	101	
LEUTUDE 17403	10	
L207002 17005	1.6	
121+50F 0+909	20	
1 21150C 01303	10 11	
LO1-SOF (+100 101-SOF (+100	ne	
LC17302 17103	riC	
L21+50E 1+20S	nd	
L21+50E 1+30S	35	
	~~	
L21+50E 1+40S	95	
L21+50E 1+50S	nd	
L21+50E 1+60S	15	
L21+50E 1+70S	nd	
DETECTION LIMIT	5	
nd = none detected	= not anelysed	is = insufficient sample



L21+50E 2+00S

VANGEOCHEM LAB LIMITED

MAIN OFFICE 1521 PEMBERTON AVE. NORTH VANCOUVER, B.C. V7P 2S3 (604) 986-5211 TELEX: 04-352578

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8RANCH OFFICE 1630 PANDORA ST. VANCOUVER, B.C. V5L 1L6 (604) 251-5656

REPORT NUMBER: 85-06-008	JEB NUMBER: 85490	AZIMUTH GEOLOGICAL	FAGE	3	OF	3
SAMPLE *	Au					
	999					
L21+50E 1+80S	nd					
L21+50E 1+905	nd					

DETECTION LIMIT 5 no = none detected -- = not analysed is = insufficient sample



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