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**1992 GEOLOGICAL AND GEOCHEMICAL REPORT  
ON THE  
VIG 6 PROPERTY**

<b>SUB-RECORDER RECEIVED</b>
MAY 26 1992
M.R. # ..... \$.....
VANCOUVER, B.C.

Located in the Tahsis Area of Vancouver Island  
Alberni Mining Division  
NTS 92E/15E  
49° 49' North Latitude  
126° 34' West Longitude

-prepared by-  
Bruno Kasper, Geologist

**GEOLOGICAL BRANCH**  
May 1992 **ASSESSMENT REPORT**

**22,335**

# 1990 GEOLOGICAL AND GEOCHEMICAL REPORT ON THE VIG 6 PROPERTY

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## 1.0 INTRODUCTION

The VIG 6 property was staked in 1987 to cover the rich gold-bearing quartz-calcite Vivian vein which outcrops in the Tsowwin River valley approximately fourteen kilometres south-east of Tahsis on the west coast of Vancouver Island (Figure 1). The Vivian vein was first discovered in 1939 and initially developed with an inclined shaft and a 15 metre adit. Aberford Resources Ltd. conducted an exploration program in the summer of 1983 which led to the discovery of the El Zone, a series of narrow gold-rich quartz veins within a shear zone 300 metres northeast of the Vivian vein.

An exploration program consisting of geological mapping, prospecting and geochemical sampling was conducted over the property in March of 1992 to further delineate the Vivian Vein and EL Zone and to determine the presence of other gold-quartz vein systems.

## 2.0 LIST OF CLAIMS

Records of the British Columbia Ministry of Energy, Mines and Petroleum Resources indicate that the VIG 6 (Figure 2) claim is owned by Neil DeBock. Claim data for the VIG 6 claim is summarized in Table 2.0.1.

**TABLE 2.0.1  
CLAIM DATA**

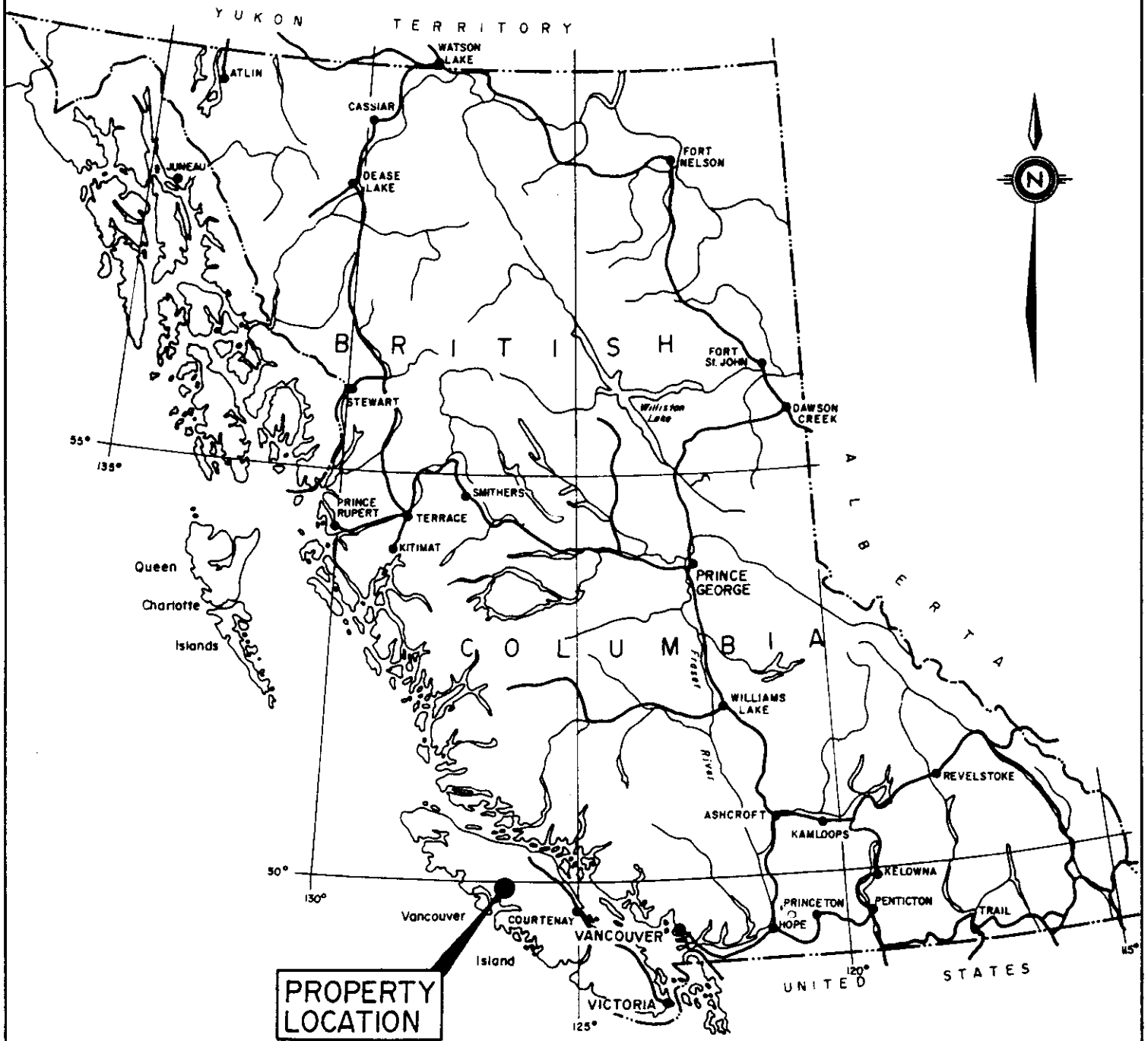
<b>Claim Name</b>	<b>Record Number</b>	<b>No. of Units</b>	<b>Record Date</b>	<b>Expiry Year</b>
VIG 6	3531	16	March 10, 1988	1992*

\* Subject to the approval of assessment work filed in March, 1992.

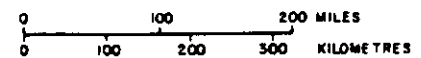
The location of the legal corner post has not been verified by the author.

## 3.0 LOCATION, ACCESS AND GEOGRAPHY

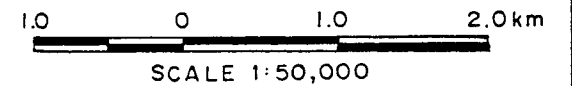
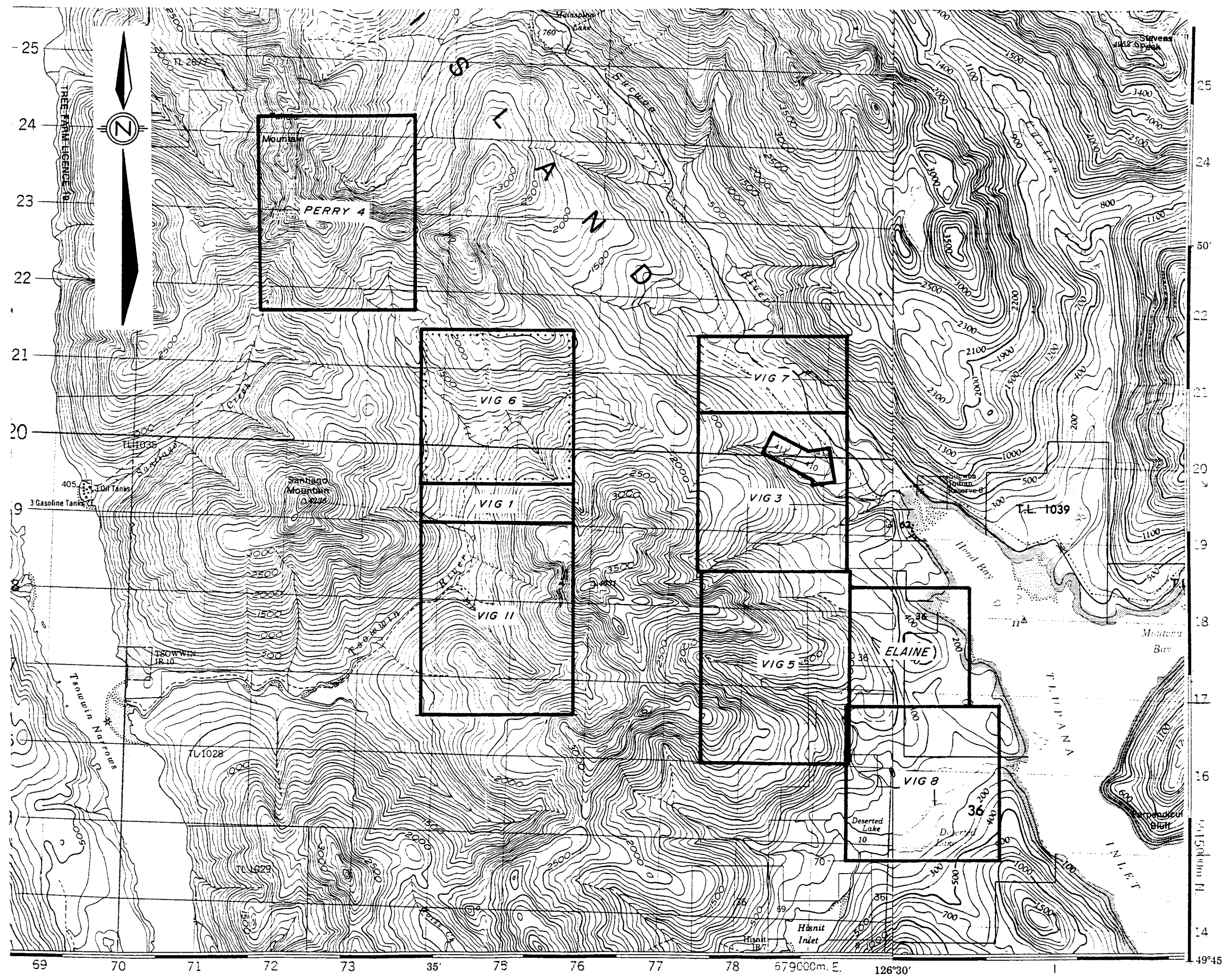
The VIG 6 property is located five kilometres northeast of the Tsowwin logging camp on Tahsis Inlet and approximately fourteen kilometres southeast of the village of Tahsis on the west coast of Vancouver Island (Figure 1). It lies within the Alberni Mining Division, centred at 49° 49' north latitude and 126° 34' west longitude.



# VIG 6 CLAIM PROPERTY LOCATION MAP



Drawn.	N.T.S.	Date.	FIG. No. 1.
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VIG 6 CLAIM  
CLAIM MAP

ALBERNI MINING DISTRICT  
NTS: 92 E/15 E

Dwn. by:	Project:	Date:	Figure:
B.A.M.		June, 1988	2

The Tsoowin River mainline logging road passes through the VIG 6 claim approximately six kilometres west of the Gold River-Tahsis road. A network of branch roads provide access to most parts of the property.

The VIG 6 property covers the northern end of the Tsoowin drainage and the southeastern flank of the south ridge of Tahsis Mountain in the Vancouver Island Ranges. Topography is rugged, with deeply incised creeks and steep rock bluffs. Elevations range from approximately 155 metres along the Tsoowin River in the southwestern corner of the property to over 760 metres on the southeastern flank of Tahsis Mountain. Outcrop exposure is excellent throughout.

Mature forest covers parts of the property with hemlock, red cedar, fir and a moderate undergrowth of salal, devil's club, huckleberry and salmonberry. Areas logged five to twenty years ago are choked with slash and shrubbery.

The Tahsis area receives approximately 500 centimetres of precipitation annually in an otherwise moderate climate, with cool temperatures year-round. Heavy snowfalls can occur at higher elevations.

#### **4.0 PROPERTY MINING HISTORY**

##### **4.1 Previous Work**

The rich, narrow, quartz-sulphide veins of the Zeballos camp, approximately 32 kilometres northwest of the VIG 6 property, were discovered in the 1920's and 1930's upstream from coarse placer gold pockets in the Zeballos River. These veins produced a total of 11,347 kilograms (331,000 ounces) of gold with substantial silver until 1953 (Barr, 1980).

Development of the Zeballos gold camp resulted in increased exploration throughout the Tahsis area and led to the discovery in 1939 of the Vivian vein (Figure 3). The first recorded work on the property was conducted in the same year with the sinking of a short inclined shaft on the Vivian Vein. The vein extension was explored to the northwest by a series of open cuts at 10 metre spacings and a 15 metre adit was driven along the vein 60 metres northwest of the inclined shaft. The workings were abandoned in 1940, likely as a result of the war. All workings are now inaccessible due to caving and infilling with forest debris and water.

Aberford Resources Ltd. conducted an extensive reconnaissance exploration program for disseminated gold deposits throughout the Tahsis peninsula in 1979 and 1980 and staked several claims to cover anomalous drainages, including the TAH 15 and TAH 18 claims. In the course of follow-up work, they discovered several rich gold

showings including a zone of narrow quartz veining within a shear zone located 300 metres northeast of the Vivian vein and exposed in two quarries 300 metres apart. An Aberford sample from the upper quarry averaged 7.0 g/tonne gold across 15 centimetres. In the lower quarry, now part of the EL Zone (Figure 4), Aberford sampling returned values of 76.8 g/tonne gold and 46.1 g/tonne silver across five to ten centimetres (Robinson, 1983).

Homestake Mineral Development Company optioned the TAH claims from Aberford Resources in 1984 and carried out a limited reconnaissance program consisting of geological mapping and prospecting (Ronning, 1985). No significant mineralization was found during this program on ground now covered by the VIG 6 claim.

The TAH 15 and TAH 18 claims were allowed to lapse in 1987, and the Vivian and EL showings were subsequently staked as the VIG 6 by Neil DeBock.

During the summer of 1988, the federal and provincial geological surveys conducted a joint regional silt sampling program over the entire Nootka map sheet, taking a total of 385 moss-mat sediment samples (GSC, 1989). The one moss-mat sediment sample taken on the VIG 6 claim from the Tsowwin River did not exceed the 90th percentile in gold.

In 1988, Neil DeBock carried out a prospecting and geochemical sampling program on the Vig 6 claim, taking 21 rock samples and 50 soil samples. Samples of the vein and gouge material from the southern adit of the Vivian vein assayed up to 114.63 g/tonne gold with 82.8 ppm silver, while grab samples of narrow, shear-hosted quartz veins from the lower EL Zone assayed up to 30.31 g/tonne gold with 72.6 ppm silver (DeBock, 1989). Resampling of the upper quarry was also carried out and grab samples from a strongly limonitic shear zone assayed up to 1.68 g/tonne gold.

#### **4.2 1992 Exploration Program**

During March of 1992, three days of geological mapping, prospecting and geochemical sampling was carried out on the VIG 6 claim. This program was designed to extend geological and geochemical coverage and to further evaluate areas of interest defined during previous programs.

During the course of this program, 2 stream sediment samples, 10 moss-mat sediment samples, 35 soil samples and 17 rock samples were taken. Moss-mat sediment samples were collected from moss exposed in the creek beds below the high water mark. If no moss was present, stream sediment samples were taken from the backwaters of the drainage. Both type of samples were analyzed geochemically for gold and 9 elements by ICP (Figure 4). Samples with insufficient fines were pulverized to minus 150 mesh before being analyzed.

Two soil lines were used to test for northern extensions of the Vivian vein and the EL Zone. Soil line CL5 was run on a bearing of 070° while soil line CL3, which was established during the 1988 field program, was extended west towards North Tsowin Creek (Figure 4). Wherever possible, soil samples were taken from the red-brown B horizon and then analyzed geochemically for gold and 9 elements by ICP.

Prospecting and reconnaissance geological mapping were carried out over the property, using a 1:5,000 topographic map as a base (Figure 4). Rock samples, described in Appendix C, were taken from zones of alteration and mineralization and analyzed geochemically for gold and 32 elements by ICP. Samples returning geochemical values in excess of 1000 ppb gold or 100 ppm silver were fire assayed. Analytical certificates are attached in Appendix D.

## 5.0 REGIONAL GEOLOGY

The Tahsis area is underlain by thick northwesterly trending sequences of oceanic basalts and sediments of the Upper Triassic Vancouver Group and extrusive volcanics of the Lower Jurassic Bonanza Group. These have been intruded by Lower Jurassic batholithic Island Intrusions and by Eocene stocks of the Catface Intrusions, with attendant regional and contact metamorphism (Figure 3).

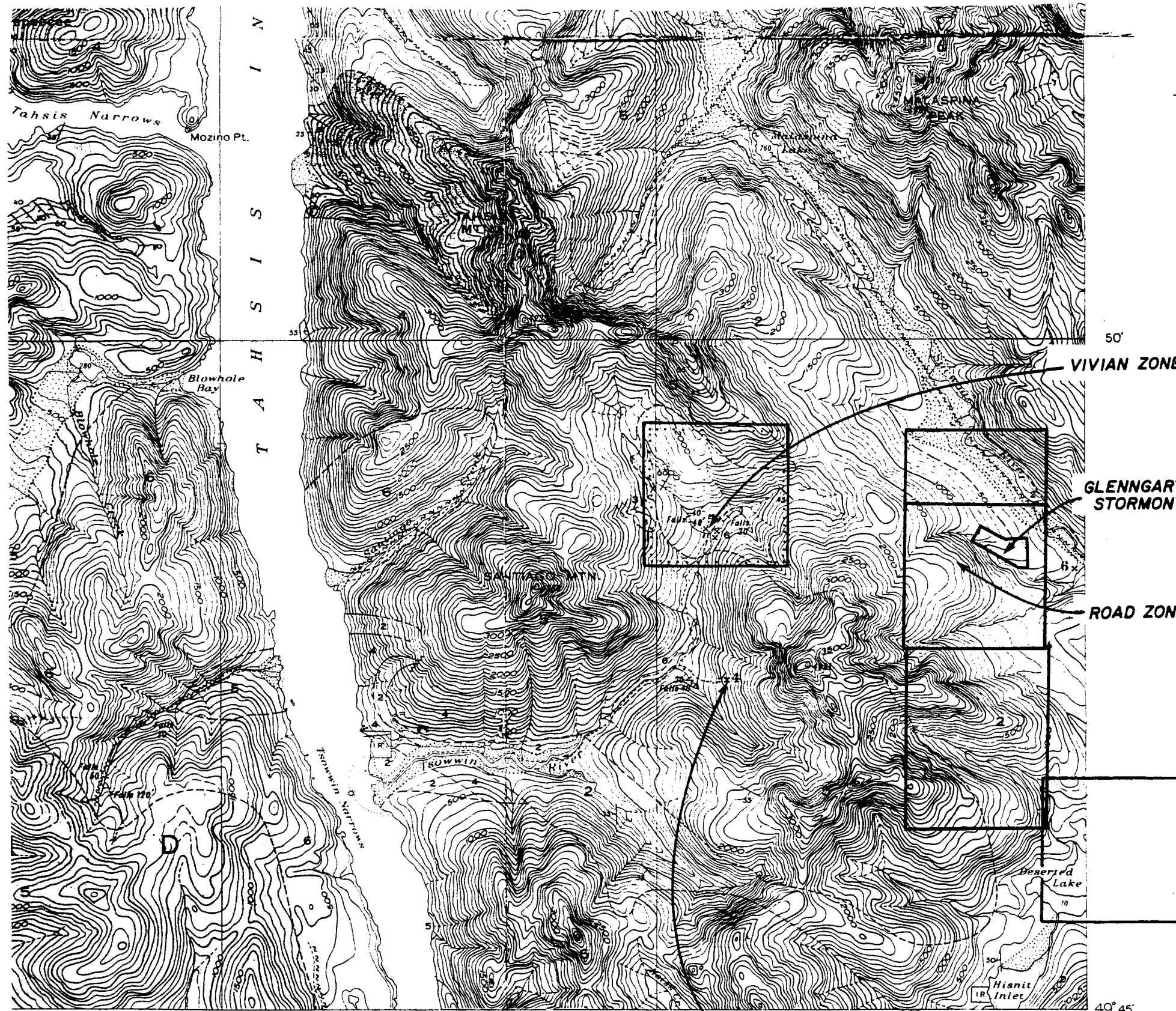
The Vancouver Group, as defined by Muller et al (1981), consists of up to 6,000 metres of Karmutsen Formation (Unit 1) basaltic pillow lavas, pillow breccias, lava flows and intervolcanic limestone, overlain by up to 750 metres of massive Quatsino Formation limestone (Unit 2). This grades upwards into thinly-bedded silty limestones, limy sandstones and reef limestones of the Parson Bay Formation (Unit 3).

The Bonanza Group (Units 4 and 5) comprises a complex sequence of maroon to green interbedded volcanic flows and pyroclastics ranging from basalt to rhyolite in composition. These formed in an island arc environment, and contain both marine and terrestrial facies. The volcanics are locally overlain by clastic sediments ranging from pebble conglomerate to shale, siltstone and coaly beds.

Lower Jurassic Island Intrusion batholiths (Unit 6) are mapped on the southern end of Tahsis Inlet and to the east of Tlupana Inlet. They are generally moderately-grained quartz diorites to leucogranites and may be cogenetic with the Bonanza volcanics (Muller et al, 1981).

Stocks of the Eocene Catface Intrusions (Unit 6) are mapped on the northeast shore of Hisnit Inlet and the northern slopes of





**LEGEND**

- JURASSIC AND/OR CRETACEOUS**  
**UPPER JURASSIC AND/OR LOWER CRETACEOUS**  
**COAST INTRUSIONS**
- 6 Granite, granodiorite, diorite, quartz diorite; minor syenite, aplite, and micropegmatite
- TRIASSIC AND (?) JURASSIC**  
**UPPER TRIASSIC AND (?) LATER**
- 4, 5 4. Andesitic lavas, agglomerates, tuffs and breccias; basaltic, trachytic, and dacitic lavas; minor, intercalated limestone  
 5. Similar to 4, but may include some undifferentiated 3
- TRIASSIC**  
**UPPER TRIASSIC**
- 3 Thin-bedded argillite, tuffaceous argillite, impure limestone, and tuffaceous limestone; agglomeratic limestone and quartzite; numerous, thin, intercalated andesitic lavas and associated pyroclastic rocks
- 2 **QUATSINO FORMATION**: crystalline limestone, with minor volcanic rocks
- UPPER TRIASSIC AND (?) EARLIER**  
**KARMUTSEN GROUP**
- 1 Basaltic and andesitic lavas, agglomerates, breccias, and tuffs, minor intercalated limestone
- Heavily drift-covered area .....  
 Bedding (horizontal, inclined, vertical) .....  
 Schistosity (inclined) .....  
 Fault (arrow indicates direction of dip) .....  
 Shear zone .....  
 Glacial striae .....  
 Fossil locality .....  
 Mineral prospect .....  
 Adit .....

MESOZOIC

BONANZA GROUP

**VIG 6 CLAIM**

**REGIONAL GEOLOGY**

ALBERNI MINING DISTRICT  
 NTS 92E/15E

DWN BY	PROJECT	DATE	FIGURE 3
		June, 1988	



Geology after Hoadley (1953)

MOHAWK ZONE (Au)

Santiago and Tahsis Mountains (Muller et al, 1981). These intrusives are generally massive, light-coloured, fine- to medium-grained quartz diorites and granodiorites.

The Vancouver and Bonanza Group rocks form a southwest dipping monocline which is disrupted and offset by numerous northwesterly, northerly and easterly faults of unmeasured displacement. Amphibolite-grade regional metamorphism and migmatization are associated with the Island Intrusions. Contact metamorphism and skarn formation are common near Catface stocks.

## **6.0 PROPERTY GEOLOGY AND MINERALIZATION**

### **6.1 Geology**

Two Quatsino-Parson Bay-Bonanza sequences have been recognized on the VIG 6 claim north of the Tsowin River. Robinson (1983) inferred a northwesterly-trending fault separating the two sequences. These sequences were later intruded by the Santiago Stock, which is one of the Eocene Catface Intrusives. Figure 4 is a compilation of geological mapping completed by Robinson (1983), Ronning (1985) and Awmack (1988) and complemented by field mapping from the 1992 field program.

Limestone (Unit 2) of the Quatsino Formation outcrops between North Tsowin Creek and the Vivian and El Zones as well as to the east of Quarry Creek. The limestone is generally white to grey, cryptocrystalline and massive to thick bedded. Associated epidote and chlorite alteration is found in conjunction with numerous thin beds of tuffaceous to argillaceous clastics. These thin layers increase in frequency towards the contact with the andesites and may be the first indicator of the stratigraphically overlying Parson Bay Formation which is gradational with the Quatsino Formation north of the property.

Fine-grained siliciclastics of the Parson Bay Formation (Unit 3) overlie the Quatsino limestone east of Quarry Creek. Robinson (1983) describes this formation as "comprised of bedded to thin bedded dark brown to black argillite" whose contact is gradational with the underlying Quatsino Formation. Ronning (1985) mapped a band of thinly bedded volcanoclastic siltstone, minor greywacke and rare tuffaceous horizons in the northeast corner of the VIG 6 claim. He inferred that this sequence was separated from the Quatsino limestone to the south by an easterly-trending fault.

Andesitic volcanics of the Bonanza Group (Unit 4) overlie the Parson Bay Formation west of Quarry and North Tsowin Creeks. Awmack (1988) described the Bonanza as consisting "mainly of tuffs, tuff breccias, agglomerates and feldspar-porphyry flows with little lateral or vertical continuity". The agglomerates and flows appear massive, dark green in colour and contain feldspar and mafic laths

in a fine-grained groundmass. Subrounded clasts up to 15 centimetres in diameter distinguish the agglomerate from the andesitic flows.

Although no contact was observed between the Quatsino limestone and the Bonanza Group volcanics, Robinson (1983) inferred two northwest trending faults separating the two units. A shear zone, greater than ten meters in width and containing two narrow quartz veins, is found near the marble-andesite contact (Figure 4) along the EL Zone and is believed to represent one of the faulted contacts. The fault contact west of North Tsowwin Creek was not observed during the 1992 field program.

Dioritic intrusives (Unit 6) outcrop in the southwestern corner of the Vig 6 claim. A medium-grained quartz diorite, diorite and monzonite containing up to 20% accessory magnetite and grading from hornblende diorite in the west to hornblende monzonite in the east was mapped by Robinson (1983) at the confluence of the Tsowwin River with North Tsowwin Creek. This intrusive also hosts numerous xenoliths of surrounding limestone and volcanic rocks as well as mafic dykes. Awmack (1988) mapped a medium-grained, equigranular diorite composed of 80% plagioclase, 10% hornblende, 5% biotite and 1-5% magnetite intruding Bonanza tuffs along a logging road near the Vig 6 legal corner post. The similarity of these intrusives with the ones mapped by Muller et al (1981) on the west side of Mt. Santiago and the north side of Tahsis Mtn. suggests that it is part of the Santiago Stock, which is one of the Eocene Catface Intrusions.

Tertiary or older dykes ranging in composition from felsic to mafic are exposed along creeks and in road exposures throughout the property. Robinson (1983) noted felsic (Unit 7a) and hornblende-porphry (Unit 7b) dykes within the Quatsino limestone near the eastern boundary of the VIG 6 claim. He described the felsic dykes as being "orange brown weathering, fine grained quartz-feldspar rocks containing up to 5% visible pyrite plus minor arsenopyrite". Ronning (1985) mapped a similar felsic dyke within the Parson Bay Formation in the northeast corner of the property. Fine-grained mafic dykes (Unit 7c) are exposed in limestone outcrops north and west of the Vivian vein. Robinson (1983) noted mafic dykes within the Santiago Stock along the Tsowwin River, indicating that at least some of the mafic dykes post-date the Eocene stock.

## 6.2 Mineralization

Narrow gold-bearing quartz-sulphide veins are the most important mineralization found on the property. These northwesterly-trending veins are found within narrow, well-gouged, heavily oxidized, shear zones. The veins are mainly composed of clear to milky white quartz and in places contain abundant calcite. Up to 5% sulphides are associated with these veins, including pyrite, sphalerite, galena and arsenopyrite. Visible gold is

rarely present in hand specimens. High silver values and anomalous geochemical values for arsenic, copper, zinc and lead are generally associated with high gold grades. The flanking shear zones vary in width from tens of centimetres to greater than ten metres and are limonitic throughout. They locally contain high gold assays and associated arsenic, lead and zinc geochemical values. Sampling by Aberford of the surrounding competent wall rock returned high arsenic values but no significant gold mineralization (Robinson, 1983).

The Vivian Vein is the most completely investigated of these gold-quartz veins. The five to twenty centimetre wide quartz vein, which strikes approximately 150° and dips 70° to the northeast, is flanked by a twelve to twenty centimetre wide gouge zone containing minor pyrite and limonite. Sampling along a strike length of 220 metres extending through the known adits and prospect pits on both sides of Tsowin River, revealed strong gold mineralization (Figure 4). Table 6.2.1 summarizes sampling data for the Vivian Vein.

**TABLE 6.2.1**  
**VIVIAN VEIN SAMPLING RESULTS**

Sample Number	Type	Width (m)	Au (ppb)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
53954*	Grab V	0.12	114.63g/t	60.8	>10000	66	2280	1106
53955*	Grab G	0.20	16.29g/t	17.8	>10000	73	286	288
53956*	Grab V	0.20	90.71g/t	82.8	>10000	113	1630	1168
53957*	Float V	---	0.80g/t	1.0	545	44	28	111
53958*	Grab V	0.05	2.75g/t	13.8	2635	136	132	171
53959*	Grab V	?	0.06g/t	1.4	410	77	18	198
53960*	Float V	---	12.57g/t	67.2	4115	142	1140	407
484301	Loose V	---	1.85g/t	4.0	914	45	12	44
484302	Grab V	?	205	6.2	2770	214	10	178
484303	Grab G	?	<5	<0.2	118	59	2	212
484304	Grab V	?	160	0.8	1570	48	48	122
509151	Dump V	---	271.70g/t	3480.0g/t	3670	4600	3940	2540
509156+	Grab V	0.10	1.41g/t	2.0	>10000	38	250	122
509158	Grab V	0.20	53.30g/t	486.9g/t	7320	696	2930	1515
509159	Grab H	0.30	205	4.4	1345	106	36	346
509160	Grab V	0.15	114.17g/t	51.0	1855	69	4280	4910

\* 1988 sample; + Probable Vivian Vein extension.

V Quartz vein; G Gouge material; H Hanging wall rock.

Three samples, samples 509158, 509159 and 509160, tested the extension of the Vivian vein between the southern adit and the Tsowin River. Grab samples 509158 and 509160 taken of quartz vein material, returned high gold and silver up to 114.17 g/tonne gold and 486.9 g/tonne. Both samples also contained high levels of

arsenic, lead and zinc up to 7230 ppm, 4280 ppm and 4910 ppm, respectively. These assay and geochemical results are similar to those collected from the southern adit in 1988. Visible gold was found at the site of grab sample 509160 and is closely associated with prismatic arsenopyrite crystals within a sulphide-rich portion of the vein. The gouge zone that elsewhere flanks the vein is not present here and a 30 centimetre grab sample (sample 509159) of the hanging wall contained low precious metal (205 ppb gold and 4.4 ppm silver) but high arsenic (1345 ppm) values.

North of the Tsowin River, a previously unknown collapsed adit was located along the trend of prospect pits which marks the trace of the Vivian vein. Sample 484301, taken from loose quartz vein material in the adit assayed 1.85 g/tonne gold. However, quartz material (sample 509151) collected from the adit's spill pile, assayed 271.7 g/tonne gold along with 3480.0 g/tonne silver and anomalous amounts of arsenic (3670 ppm), copper (4600 ppm), lead (3940 ppm) and zinc (2540 ppm). Freibergite probably accounts for the sample's high silver content. The spill pile from which sample 509151 was taken is believed to be the "Vivian ore dump" referred to by Robinson (1983). Samples taken from this dump in 1983 assayed up to 134.54 g/tonne gold and 454.3 g/tonne silver.

An auriferous shear-hosted quartz vein is exposed in the road cut at 365 metres elevation east of North Tsowin Creek (Figure 4). A ten centimetre grab sample from the narrow vein (sample 509156) assayed 1.41 g/tonne gold with high arsenic (>10,000 ppm), but low silver and base metal values. The vein, which strikes  $150^{\circ}$  and dips  $80^{\circ}$  to the northwest, is similar to the Vivian Vein and located 680 metres along strike from the adits along the Tsowin River. This vein probably represents the strike extension of the Vivian Vein.

Prospecting also concentrated on searching for the northwestern continuation of the EL Zone and gold-bearing mineralization similar to that found near the upper quarry during the 1988 field program (Figure 4). Samples taken from the EL Zone, which consists of narrow quartz veins within a larger shear zone, assayed up to 5.48 g/tonne gold with generally low silver and base metal values (DeBock, 1989). Prospecting along soil line CL5 in 1992 failed to locate the extension of the EL Zone. A strongly limonitic shear zone, found in 1988 in the upper quarry, assayed up to 1.68 g/tonne gold with low silver and base metal values (DeBock, 1989). Sampling in the same area during the 1992 field program did not locate any further mineralization.

## 7.0 GEOCHEMISTRY

One moss-mat sediment sample (sample 881126) was taken from the Tsoowin River in the southern part of the Vig 6 property during the course of regional geochemical sampling conducted by the government surveys (GSC, 1989) (Figure 4). Although gold was detected in the sample, the level cannot be considered anomalous (>90th percentile) when compared statistically with all samples taken from the Nootka map sheet. However, the sample returned anomalous lead (10 ppm) and zinc (112 ppm) values which were equivalent to the 95th percentile for lead and exceeded the 90th percentile for zinc.

During the course of the 1992 exploration program, two stream sediment samples and ten moss-mat sediment samples were taken from the drainages on the Vig 6 claim (Figure 4). Although the samples are not strictly comparable because moss-mat sediment samples, whose gold values have been variably enhanced during the natural sieving process, cannot be comparable to the stream sediment results, the sampling results were compared with the results of the 1988 government regional geochemical survey; the percentiles listed in Table 7.0.1 are those of the government survey (GSC, 1989). All the 1992 samples, with the exception of stream sediment sample 92NBD-05, were anomalous (>90th percentile) in at least one of the precious or base metals. Drainage sampling results for the 1992 field program are summarized in Table 7.0.1.

Four of the moss-mat sediment samples contained anomalous levels of gold including one (sample 92BK-02) which was equivalent to the government's maximum value (815 ppb) for their regional survey. Sample 92BK-02 was also strongly anomalous in silver and arsenic, and moderately anomalous in lead. The high gold, silver, arsenic and lead content of sample 92BK-02, which was taken at approximately the 240 metre elevation in Quarry Creek, reflects the geochemical signature of the EL Zone located 220 metres to the northwest on the west bank of Quarry Creek. Moss-mat sediment sample 92BK-01, taken from a small stream located 250 metres south of and downstream of the lower EL Zone, also contained strongly anomalous arsenic (123.0 ppm) and weakly anomalous lead.

Moss-mat sediment sample 92DAC-03, taken from an unnamed stream draining the southeast corner of the Vig 6 claim, returned 315 ppb gold and weakly anomalous zinc (102 ppm). Another moss-mat sample (sample 92NBD-01) taken approximately 450 metres upstream, was also weakly anomalous in zinc (108 ppm). No source for these anomalies is unknown.

**TABLE 7.0.1**  
**1992 STREAM AND MOSS-MAT SEDIMENT SAMPLES**

Sample Number	Sample Type	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm
92BK-01	M	<5	0.06	15.0	8.0*	91	123.0***
92BK-02	M	815***	0.48***	62.0	10.0*	92	89.8***
92DAC-01	M	10	0.04	11.8	8.0*	145**	16.6
92DAC-02	M	<5	0.12	26.6	6.5	95	24.2*
92DAC-03	M	305**	0.04	22.2	6.0	102*	8.8
92NBD-01	M	10	0.02	25.6	5.5	108*	7.8
92NBD-02	M	<5	0.08	18.8	5.0	127**	17.0
92NBD-03	M	<5	0.14	28.0	9.5*	97	158.5***
92NBD-04	M	185**	0.14	23.0	11.0**	102*	158.0***
92NBD-05	S	<5	0.06	19.2	7.0	77	10.6
92NBD-06	S	<5	0.28***	25.8	5.5	83	58.4**
CL5 0+25W	M	70*	0.08	40.2	4.5	92	56.2**
90th percentile		36	<0.2	110	7	97	23
95th percentile		86	<0.2	146	10	118	36
99th percentile		373	0.2	188	16	185	75

M Indicates a moss-mat sediment sample.

S Indicates a stream sediment sample.

\* Weakly anomalous, exceeds the 90th percentile.

\*\* Moderately anomalous, exceeds the 95th percentile.

\*\*\* Strongly anomalous, exceeds the 99th percentile.

In the southwestern corner of the claim, moss-mat sediment sample 92NBD-04, collected from Little Santiago Creek, returned 185 ppb gold and 158 ppm arsenic along with anomalous levels of lead and zinc. Moss-mat sample 92NBD-03, taken from a parallel stream located 20 metres to the north, was also anomalous in arsenic, lead and zinc, but contained no detectable gold. The creeks drain the contact area between the Santiago Stock and Bonanza volcanics, a setting similar to that of the Vivian Vein is hosted. The high arsenic, lead and zinc values also reflect the geochemical signature of the Vivian Vein.

A moss-mat sediment sample taken along soil line CL5 returned a weak gold anomaly (70 ppb) and moderate arsenic anomaly (56.2). The sample was collected from a small tributary of Quarry Creek which drains the area below the upper quarry and probably reflects the auriferous shear zone exposed within it.

Soil sampling was used to locate the probable northern extensions of the Vivian Vein and EL Zone as well as to locate new gold-bearing structures. Numerous gold highs were located along soil line CL3, which was extended 425 metres west towards North Tsowwin Creek. Station CL3 4+00 returned a gold value of 125 ppb along with 711 ppm arsenic. This soil sample station is located



along the northwestern strike extension of the Vivian vein and may indicate an extension of the vein. Other spot gold (30 ppb) and arsenic highs (up to 268 ppm) occur within fifty metres of this soil sample station.

The 2.92 g/tonne soil anomaly located in 1988 at CL3 1+00 was confirmed during the 1992 field program. Resampling of the soil pit returned a value of 330 ppb gold, which is still highly anomalous. Although no source for this anomaly was recognized, the soil sample station is underlain by limestone of the Quatsino Formation. It's source is probably the lower EL Zone which occurs 45 metres directly upslope from this sample location. Volcanic rock debris deposited downslope near the soil station as a result of logging and road building supports this point.

Only one individual station along soil line CL5 registered any detectable gold. Soil sample 2+00W contained 20 ppb gold and was taken in an area where an andesitic dyke crosscuts the Quatsino limestone. An arsenic high of 66.6 ppm 25 metres to the east at station 1+75W is also associated with andesitic dyking. These two soil sample locations are located along strike of the shear zone which hosts the EL Zone.

Soil line CL1 was completed during the 1988 field program and was used to help locate the southern extension of the Vivian Vein. Robinson (1983) indicated this area to be underlain by a diorite-monzonite stock. The lack of any gold soil geochemical anomalies along soil line CL1 may indicate that the Vivian Vein is not present within in the stock.

## 8.0 DISCUSSION AND CONCLUSIONS

The VIG 6 claim is underlain by Upper Triassic Vancouver Group sedimentary rocks and Jurassic volcanic rocks of the Bonanza Group. These rocks have been intruded by the dioritic Santiago Stock which is part of the Eocene Catface Intrusions. This geological setting is similar to that of the Zeballos gold camp located 32 kilometres to the northwest, which produced 11.3 tonnes of gold from narrow quartz-sulphide veins (Barr, 1980). The Zeballos gold camp is British Columbia's tenth largest gold producing district.

The VIG 6 claim contains numerous narrow, gold-rich quartz veins within northwest trending shear zones. These veins contain minor pyrite with local arsenopyrite, sphalerite and galena. Visible gold has been located in only one locality on the property. Strong silver, lead, zinc and arsenic geochemical signatures are also associated with higher gold grades within the veins. Gold mineralization also occurs in the surrounding shear zones with values being either comparable to or lower than those within the quartz veins.



The Vivian Vein, which has a minimum strike length of 220 metres as outlined by previous workings, has returned several high gold and silver values, including one of 271.70 g/tonne gold and 3480.0 g/tonne silver from a sample taken from a dump on the north side of the Tsowin River. Gold was observed in the Vivian Vein along the Tsowin River, just north of the south adit. Grab samples from this part of the vein contained up to 114.17 g/tonne gold and 486.9 g/tonne silver across fifteen centimetres. Sampling of the hanging wall rock confirmed that the gold was confined to the quartz vein.

Prospecting and soil sampling along the probable northwestern extension of the Vivian Vein returned encouraging results. A narrow, shear-hosted quartz vein was located in a road cut approximately 490 metres along strike from the northernmost prospect pit. A grab sample from this vein contained significant gold (1.41 g/tonne) and arsenic, but was lower in silver and base metals than the Vivian Vein. A gold and arsenic anomaly along soil line CL3 occurs along strike between the Vivian workings and the new road exposure, supporting the likelihood that the new road exposure is an extension of the Vivian vein. This would give the Vivian vein a strike length of at least 700 metres.

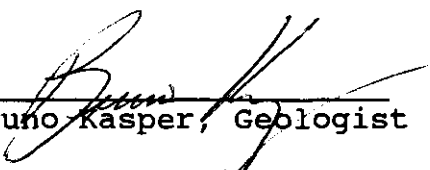
The EL Zone consists of several narrow quartz veins within a shear zone located to the east of the Vivian Vein and paralleling its trend. Rock samples collected from this zone during previous work programs assayed up to 30.31 g/tonne gold with significant silver and base metal values. This zone is believed to be the source of the strong gold, silver and arsenic silt anomaly located downstream along Quarry Creek. A strong gold soil geochemical anomaly along soil line CL3 was thought to outline the southern extension of the EL Zone. However, prospecting around the soil anomaly failed to locate any significant mineralization and it is now believed that the soil anomaly may be the result of debris from the lower EL Zone that was pushed down slope as a result of logging and road building. Soil sampling north of the EL zone did not reveal any significant anomalies.

Moss-mat sediment sampling on the Vig 6 claim has outlined two drainages that were highly anomalous in gold: an unnamed drainage in the southeast corner of the property and Little Santiago Creek. Quatsino limestone underlies the area of the gold anomaly in the unnamed drainage in the southeast corner of the property. This drainage has not been explored and the source of the anomaly has yet to be discovered. Little Santiago Creek in the southwest corner of the property drains an area in which Bonanza Group andesitic rocks have been intruded by the Santiago stock, a setting similar to that of the Vivian vein to the northeast. Both Little Santiago Creek and a smaller drainage to the north were also anomalous in arsenic, lead and zinc, elements that are also found in significant quantities in the Vivian vein. Although some work has been conducted in this area, the source for the stream

geochemical anomalies in the Little Santiago Creek area is still unknown.

Except for the limited underground development of the Vivian vein around 1939 and recent sampling of road exposures and old trenches, systematic exploration over the VIG 6 property has been limited. Soil geochemistry and prospecting has outlined a possible extension to the Vivian vein while stream geochemistry has identified two geochemically anomalous drainages in which only little work has been done. Although the veins found to date on the Vig 6 property are narrow and gold values are erratic, the possibility of other vein systems on the property cannot be ignored. In addition, significant quantities of gold have been mined from narrow veins in a very similar geological setting of the nearby Zeballos camp.

Respectfully submitted,



Bruno Kasper, Geologist

Vancouver, British Columbia  
May, 1992

**APPENDIX A**

**BIBLIOGRAPHY**

## BIBLIOGRAPHY

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- Barr, D.A. (1980): Gold in the Canadian Cordillera; The Canadian Mining and Metallurgical Bulletin, Vol. 73, No. 818, p. 59-76.
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- Robinson, J.E. (1983): Geological and Geochemical Report on the TAH Group; BCMEMP Assessment Report #12,058.
- Ronning, P.A. (1985): Geology and Lithochemistry of the TAH Claim Group; British Columbia Ministry of Energy, Mines and Petroleum Resources Assessment Report #13,681.

**APPENDIX B**

**STATEMENT OF EXPENDITURES**

**STATEMENT OF EXPENDITURES  
VIG 6 CLAIM  
MARCH 6-10, 1992**

**PROFESSIONAL FEES AND WAGES:**

David A. Caulfield, P.Geo.		
5.0 days @ \$375/day	\$ 1,875.00	
Bruno Kasper, Geologist		
9.5 days @ \$300/day	2,850.00	
Neil DeBock, Prospector		
5.0 days @ \$250/day	1,250.00	
Elmer DeBock, Prospector		
5.0 days @ \$250/day	1,250.00	
Clerical		
15 hours @ \$20/hour	<u>300.00</u>	
		\$ 7,525.00

**CHEMICAL ANALYSES:**

Rock Geochemical Analyses		
17 @ \$ 14.43 each	\$ 245.31	
Soil Geochemical Analyses		
47 @ \$ 14.50 each	681.50	
Assays	<u>16.47</u>	

943.28

**EQUIPMENT RENTAL:**

2 - 4x4 Trucks		
9 days @ \$80/day		720.00

**EXPENSES:**

Accommodation	\$ 419.92	
Drafting	141.75	
Materials and Supplies	21.48	
Maps and Publications	26.92	
Printing and Reproductions	71.07	
Meals	463.09	
Travel	155.14	
Automotive Fuel	277.06	
Automotive Expenses	5.84	
Telephone Distance Charges	<u>8.96</u>	
		1,591.23

**MANAGEMENT FEES:**

15% on expenses only:		<u>380.18</u>
-----------------------	--	---------------

<b>TOTAL:</b>		\$ <u>11,159.69</u>
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## APPENDIX C

### ROCK DESCRIPTIONS

#### Mineral Abbreviations:

AK	Ankerite	HE	Hematite
AS	Arsenopyrite	JA	Jarosite
AZ	Azurite	KF	Potassium Feldspar
BI	Biotite	LI	Limonite
BO	Bornite	MC	Malachite
CA	Calcite	MG	Magnetite
CC	Chalcocite	MO	Molybdenite
CB	Fe-Carbonate	MN	Manganese-oxides
CL	Chlorite	MR	Mariposite
CP	Chalcopyrite	MS	Sericite
CV	Covellite	MU	Muscovite
CY	Clay	PO	Pyrrhotite
DO	Dolomite	PY	Pyrite
EP	Epidote	QZ	Quartz
FR	Freibergite	SI	Silica
GA	Garnet	SM	Smithsonite
GE	Goethite	SP	Sphalerite
GL	Galena	TA	Talc
GY	Gypsum	TT	Tetrahedrite

Alteration Intensities:	tr	trace
	w	weak
	m	moderate
	s	strong





Property : VIG 6 Claim

NTS : 92E/15E

Date : 05/13/92

Sample No.	Location :	Type :	Alteration :	Au	Ag	As	Cu	Pb	Zn
				(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
509151	5520 130 N	Float	sQZ						
	674 460 E	Strike Length Exp. : --- m	Sulphides : <1%PY, 2%FR	>10000	>200.0	3672	4603	3942	2544
	Elevation: 235 m	Sample Width : --- m	Oxides : AZ, MC						
	Orientation: -- / --	True Width : --- m	Host : Unknown						

Comments : Sulphides disseminated throughout. Taken from the spill pile of a 20 to 25 metre long collapsed adit. Adit trends approximately 356 degrees. Labelled as ED001-92 in the field.

Sample No.	Location :	Type :	Alteration :	Au	Ag	As	Cu	Pb	Zn
				(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
509152	5520 670 N	Grab	mCA, w to mCL						
	673 825 E	Strike Length Exp. : ? m	Sulphides : trPY	130	8.6	72	104	12	70
	Elevation: 380 m	Sample Width : ? m	Oxides : trGE						
	Orientation: 085 / 85 N	True Width : ? m	Host : Volcanic and limestone						

Comments : 4 to 5 cm. wide alteration zone within limestone. Labelled as ED002-92 in the field.

Sample No.	Location :	Type :	Alteration :	Au	Ag	As	Cu	Pb	Zn
				(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
509153	5520 690 N	Grab	wMS						
	673 800 E	Strike Length Exp. : 0.5 m	Sulphides : 5%PY	140	7.4	80	81	14	46
	Elevation: 370 m	Sample Width : 4 cm	Oxides : GE						
	Orientation: 085 / 70 N	True Width : ? m	Host : Limestone/andesite dyke margin						

Comments : Same orientation as ED002-92. Labelled as ED003-92 in the field.

Sample No.	Location :	Type :	Alteration :	Au	Ag	As	Cu	Pb	Zn
				(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
509154	5521 310 N	Grab	sMS						
	674 320 E	Strike Length Exp. : 125 m	Sulphides : 20%PY	30	<0.2	186	81	14	38
	Elevation: 650 m	Sample Width : ? m	Oxides : GE						
	Orientation: ? / ?	True Width : ? m	Host : Volcanic						

Comments : Pyrite mainly concentrated in bands, but is also is very finely disseminated in places.

Sample No.	Location :	Type :	Alteration :	Au	Ag	As	Cu	Pb	Zn
				(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
509155	5521 235 N	Grab	sCA, wCL, wMS, sQZ						
	674 320 E	Strike Length Exp. : ? m	Sulphides : 5% PY	40	2.4	90	23	6	58
	Elevation: 640 m	Sample Width : ? m	Oxides : None visible						
	Orientation: 304 / 40 NE	True Width : ? m	Host : Limey volcanic						

Comments : QZ-CA vein and QZ stockwork found within CA-MS-PY altered area. QZ veins mainly barren. Exposed in road exposure.

Sample No.	Location :	Type :	Alteration :	Au	Ag	As	Cu	Pb	Zn
				(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
509156	5520 550 N	Grab	wMS, sQZ, GR selvage						
	674 080 E	Strike Length Exp. : 10 m	Sulphides : 3-5%AS, PY?	1350	2.0	>10000	38	250	122
	Elevation: 365 m	Sample Width : 10 cm	Oxides : GE						
	Orientation: 150 / 80 SW	True Width : 10 cm	Host : Altered volcanics						

Comments : Vein shear pinches and swells from 1 to 25 cm. before going under road and overburden upslope. Vein has a rusty gossanous appearance and is highly sheared. Well formed silver needles of AS.

Property : VIG 6 Claim

NTS : 92E/15E

Date : 05/13/92

Sample No.	Location :	5520 040 N	Type :	Grab	Alteration :	wCA, wCL, sQZ	Au	Ag	As	Cu	Pb	Zn
		674 730 E		Strike Length Exp. :		? m	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
509157	Elevation:	240 m		Sample Width :		? m	35	<0.2	28	4	2	8
	Orientation:	212 / 022 NW		True Width :		? m						
Comments : Coarsely crystalline quartz vein with coxcomb texture. Vein is 2 to 4 cm. wide and exposed in road ditch.												

Sample No.	Location :	5520 070 N	Type :	Grab	Alteration :	sCA, wCY, sQZ	Au	Ag	As	Cu	Pb	Zn
		674 555 E		Strike Length Exp. :		8 m	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
509158	Elevation:	190 m		Sample Width :		90 cm	>10000	167.8	7316	696	2932	1514
	Orientation:	150 / 70 NE		True Width :		20 cm						
Comments : Sample taken of 2 narrow veins (<10 cm. wide) at the base of the adit on the south side of the Tsowwin River. Veins pinches and swells from 5 to 20 cm.. Sulphides are generally diss. throughout. Abundant veinlets also parallel the veins.												

Sample No.	Location :	5520 070 N	Type :	Grab	Alteration :	wCA, w to mCL, wQZ	Au	Ag	As	Cu	Pb	Zn
		674 555 E		Strike Length Exp. :		15 m	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
509159	Elevation:	190 m		Sample Width :		55 cm	205	4.4	1344	106	36	346
	Orientation:	150 / 70 NE		True Width :		30 cm						
Comments : Hanging wall host for sample 509158. Sulphides are either in or found around CA fracture fillings.												

Sample No.	Location :	5520 070 N	Type :	Grab	Alteration :	wCA, wCL, wCY, sQZ	Au	Ag	As	Cu	Pb	Zn
		674 555 E		Strike Length Exp. :		8 m	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
509160	Elevation:	190 m		Sample Width :		70 cm	>10000	51.0	1855	69	4284	4912
	Orientation:	145 / 70 NE		True Width :		15 cm						
Comments : Continuation of vein from sample 509158. Vein swells out to its widest here. Sulphides all found within the QZ. Parallel veins found over 1.0 metre width (3 veins). Visible gold (GD) generally associated with arsenopyrite.												

Sample No.	Location :	5521 055 N	Type :	Float	Alteration :	mMS	Au	Ag	As	Cu	Pb	Zn
		674 410 E		Strike Length Exp. :		--- m	(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
509163	Elevation:	570 m		Sample Width :		--- m	50	0.4	326	52	20	46
	Orientation:	-- / --		True Width :		--- m						
Comments : Composite of two subangular floats <10 cm. in size; minor ferricrete development in creek. Taken 20 metres up creek from moss-mat sample CL5 0+25W. Labelled as DAC001-9 in the field.												

**APPENDIX D**

**CERTIFICATES OF ANALYSIS**



# Chemex Labs Ltd.

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

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
VANCOUVER, BC  
V6B 1N2

A9212215

Comments: ATTN: BRUNO KASPER

**CERTIFICATE**

**A9212215**

EQUITY ENGINEERING LTD.

Project: VIG 6  
P.O. #: VIG88-02

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 19-MAR-92.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
207	1	Assay pulv, screen -150, roll
294	1	Crush and split (0-10 pounds)
298	1	ICP - AQ Digestion charge

\* NOTE 1:

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

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
996	1	Au oz/T: 1 assay ton	FA-GRAVIMETRIC	0.002	20.000
922	1	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	200
921	1	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
923	1	As ppm: 32 element, soil & rock	ICP-AES	5	10000
924	1	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
925	1	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
926	1	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
927	1	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
928	1	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
929	1	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
930	1	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
931	1	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
932	1	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
933	1	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
951	1	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
934	1	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
935	1	La ppm: 32 element, soil & rock	ICP-AES	10	10000
936	1	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
937	1	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
938	1	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
939	1	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
940	1	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
941	1	P ppm: 32 element, soil & rock	ICP-AES	10	10000
942	1	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
943	1	Sb ppm: 32 element, soil & rock	ICP-AES	5	10000
958	1	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
944	1	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
945	1	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
946	1	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
947	1	U ppm: 32 element, soil & rock	ICP-AES	10	10000
948	1	V ppm: 32 element, soil & rock	ICP-AES	1	10000
949	1	W ppm: 32 element, soil & rock	ICP-AES	10	10000
950	1	Zn ppm: 32 element, soil & rock	ICP-AES	2	10000



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

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
VANCOUVER, BC  
V6B 1N2

Project : VIG 6  
Comments: ATTN: BRUNO KASPER

Page Number : 1-A  
Total Pages : 1  
Certificate Date: 19-MAR-92  
Invoice No. : 19212215  
P.O. Number : VIG88-02  
Account : EIA

## CERTIFICATE OF ANALYSIS

### A9212215

SAMPLE	PREP CODE	Au FA oz/T	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
509160	207 294	3.330	51.0	0.52	1855	20	< 0.5	< 2	9.29	< 0.5	3	37	69	1.40	< 10	1	0.14	10	0.40	1280

CERTIFICATION:

*Jhai J Ma*



# Chemex Labs Ltd.

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

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
VANCOUVER, BC  
V6B 1N2

Project : VIG 6  
Comments: ATTN: BRUNO KASPER

Page Number :1-B  
Total Pages :1  
Certificate Date: 19-MAR-92  
Invoice No. :19212215  
P.O. Number :VIG88-02  
Account :EIA

## CERTIFICATE OF ANALYSIS A9212215

SAMPLE	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
509160	207	294	1	0.01	11	100	4280	< 5	3	174	< 0.01	< 10	< 10	16	< 10	4910

CERTIFICATION: *Phai D Ma*



# Chemex Labs Ltd.

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

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
VANCOUVER, BC  
V6B 1N2

A9212216

Comments: ATTN: BRUNO KASPER

**CERTIFICATE**

**A9212216**

EQUITY ENGINEERING LTD.

Project: VIG 6  
P.O. #: VIG88-02

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 19-MAR-92.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	15	Geochem ring to approx 150 mesh
294	15	Crush and split (0-10 pounds)
2500	15	Winter special code
229	15	ICP - AQ Digestion charge

\* NOTE 1:

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

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	15	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
997	4	Au g/tonne: 1 assay ton	FA-GRAVIMETRIC	0.07	500.0
2118	15	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	200
2119	15	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
2120	15	As ppm: 32 element, soil & rock	ICP-AES	2	10000
2121	15	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
2122	15	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2123	15	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
2124	15	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
2125	15	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2126	15	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
2127	15	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
2128	15	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
2150	15	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
2130	15	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
2131	15	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
2132	15	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
2151	15	La ppm: 32 element, soil & rock	ICP-AES	10	10000
2134	15	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
2135	15	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
2136	15	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
2137	15	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
2138	15	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
2139	15	P ppm: 32 element, soil & rock	ICP-AES	10	10000
2140	15	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
2141	15	Sb ppm: 32 element, soil & rock	ICP-AES	2	10000
2142	15	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
2143	15	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
2144	15	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
2145	15	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
2146	15	U ppm: 32 element, soil & rock	ICP-AES	10	10000
2147	15	V ppm: 32 element, soil & rock	ICP-AES	1	10000
2148	15	W ppm: 32 element, soil & rock	ICP-AES	10	10000
2149	15	Zn ppm: 32 element, soil & rock	ICP-AES	2	10000



# Chemex Labs Ltd.

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

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
 VANCOUVER, BC  
 V6B 1N2

Project: VIG 6  
 Comments: ATTN: BRUNO KASPER

Page Number :1-A  
 Total Pages :1  
 Certificate Date: 19-MAR-92  
 Invoice No. :I9212216  
 P.O. Number :VIG88-02  
 Account :EIA

## CERTIFICATE OF ANALYSIS A9212216

SAMPLE	PREP CODE	Au ppb FA+AAg/tonne	Au FA Au/tonne	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 %
484301	205 294	1640	1.85	4.0	1.24	914	40	< 0.5	2	0.02	< 0.5	4	141	45	1.79	< 10	< 1	0.24	< 10	0.76
484302	205 294	205	-----	6.2	4.48	2770	30	< 0.5	< 2	0.08	< 0.5	22	128	214	5.99	< 10	< 1	0.18	< 10	4.62
484303	205 294	< 5	-----	< 0.2	5.45	118	10	< 0.5	< 2	0.12	< 0.5	29	199	59	7.63	10	< 1	0.03	< 10	5.40
484304	205 294	160	-----	0.8	1.18	1570	60	< 0.5	< 2	0.03	< 0.5	5	56	48	1.65	< 10	< 1	0.39	10	0.51
484410	205 294	< 5	-----	< 0.2	5.17	42	20	< 0.5	< 2	0.87	0.5	14	84	37	4.46	20	< 1	0.06	< 10	2.48
484411	205 294	< 5	-----	< 0.2	3.55	46	10	< 0.5	< 2	1.30	< 0.5	10	14	22	8.42	10	< 1	0.02	< 10	1.85
509151	205 294	>10000	271.7	>200	0.30	3670	10	< 0.5	8	2.10	9.0	1	198	4600	1.22	< 10	7	0.01	< 10	0.65
509152	205 294	130	-----	8.6	2.62	72	40	< 0.5	< 2	1.21	< 0.5	23	44	104	8.73	10	< 1	0.51	< 10	1.34
509153	205 294	140	-----	7.4	2.42	80	80	< 0.5	< 2	0.34	< 0.5	17	19	81	4.55	10	< 1	0.62	< 10	1.13
509154	205 294	30	-----	< 0.2	1.63	186	20	< 0.5	< 2	0.05	< 0.5	13	30	81	>15.00	50	< 1	0.14	< 10	0.61
509155	205 294	40	-----	2.4	1.45	90	20	< 0.5	< 2	7.11	< 0.5	16	93	23	5.36	< 10	< 1	0.12	< 10	0.64
509156	205 294	1350	1.41	2.0	2.45	>10000	180	< 0.5	< 2	0.25	9.0	13	21	38	4.74	< 10	< 1	0.85	20	0.74
509158	205 294	>10000	53.30	168.0	0.94	7320	20	< 0.5	10	1.00	6.0	4	155	696	2.08	< 10	< 1	0.11	< 10	0.65
509159	205 294	205	-----	4.4	2.80	1345	40	< 0.5	< 2	4.06	< 0.5	28	95	106	4.60	< 10	< 1	0.33	< 10	2.52
509163	205 294	50	-----	0.4	2.06	326	10	< 0.5	< 2	0.08	< 0.5	123	203	52	>15.00	30	< 1	0.07	< 10	1.24

CERTIFICATION:

*Yhai J Ma*





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PHONE: 604-984-0221

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
VANCOUVER, BC  
V6B 1N2

Project : VIG 6  
Comments: ATTN: BRUNO KASPER

Page Number :1-B  
Total Pages :1  
Certificate Date: 19-MAR-92  
Invoice No. :19212216  
P.O. Number :VIG88-02  
Account :EIA

## CERTIFICATE OF ANALYSIS

A9212216

SAMPLE	PREP CODE		Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
484301	205	294	835	< 1	0.02	6	130	12	< 2	3	2	< 0.01	< 10	< 10	23	< 10	44
484302	205	294	1115	< 1	0.02	29	560	10	2	22	3	< 0.01	< 10	< 10	167	< 10	178
484303	205	294	1235	< 1	0.02	48	670	2	< 2	24	4	0.02	< 10	< 10	193	< 10	212
484304	205	294	810	< 1	0.04	6	130	48	< 2	3	2	< 0.01	< 10	< 10	19	< 10	122
484410	205	294	1085	< 1	0.03	19	660	6	< 2	10	10	0.10	< 10	< 10	96	< 10	150
484411	205	294	1115	< 1	0.17	1	3850	6	2	15	23	0.04	< 10	< 10	61	< 10	88
509151	205	294	695	< 1	< 0.01	4	180	3940	888	1	45	< 0.01	< 10	< 10	13	< 10	2540
509152	205	294	320	129	0.09	52	180	12	2	7	34	0.16	< 10	< 10	136	< 10	70
509153	205	294	260	2	0.03	9	190	14	2	5	16	0.10	< 10	< 10	42	< 10	46
509154	205	294	195	< 1	0.01	< 1	430	14	16	6	4	0.01	< 10	< 10	110	50	38
509155	205	294	1115	< 1	0.01	1	340	6	2	7	136	< 0.01	< 10	< 10	77	< 10	58
509156	205	294	1140	25	0.01	3	1730	250	10	6	15	0.01	< 10	< 10	44	< 10	122
509158	205	294	670	1	0.03	6	190	2930	42	2	29	< 0.01	< 10	< 10	23	< 10	1515
509159	205	294	1180	< 1	0.01	38	800	36	< 2	14	90	< 0.01	< 10	< 10	83	< 10	346
509163	205	294	175	20	0.02	553	380	20	16	9	6	0.01	10	< 10	121	< 50	46

CERTIFICATION:

*Phai D Ma*



# Chemex Labs Ltd.

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

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
VANCOUVER, BC  
V6B 1N2

Project : VIG 6  
Comments: ATTN: BRUNO KASPER

Page Number :1-A  
Total Pages :1  
Certificate Date: 29-MAR-92  
Invoice No. :19212442  
P.O. Number :VIG88-02  
Account :EIA

## CERTIFICATE OF ANALYSIS A9212442

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
509157	205 294	35	< 0.2	0.36	28	< 10	< 0.5	< 2	0.02	< 0.5	1	340	4	0.73	< 10	< 1	< 0.01	< 10	0.22	440

CERTIFICATION:

*Yhai D Ma*



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VANCOUVER, BC  
V6B 1N2

Project: VIG 6  
Comments: ATTN: BRUNO KASPER

Page Number :1-B  
Total Pages :1  
Certificate Date: 29-MAR-92  
Invoice No. :I9212442  
P.O. Number :VIG88-02  
Account :EIA

## CERTIFICATE OF ANALYSIS

A9212442

SAMPLE	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
509157	205	294	1	< 0.01	4	60	2	< 2	1	1	< 0.01	< 10	< 10	6	< 10	8

CERTIFICATION:

*Yhai D Ma*



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To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
VANCOUVER, BC  
V6B 1N2

A9212412

Comments: ATTN: BRUNO KASPER

**CERTIFICATE**

**A9212412**

EQUITY ENGINEERING LTD.

Project: VIG 6  
P.O. #: VIG88-02

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 22-MAR-92.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
214	2	Received sample as pulp

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
383	2	Ag oz/T	FA-GRAVIMETRIC	0.01	20.00



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212 Brooksbank Ave., North Vancouver  
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To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
VANCOUVER, BC  
V6B 1N2

Project : VIG 6  
Comments: ATTN: BRUNO KASPER

Page Number : 1  
Total Pages : 1  
Certificate Date: 22-MAR-92  
Invoice No. : I9212412  
P.O. Number : VIG88-02  
Account : EIA

## CERTIFICATE OF ANALYSIS

A9212412

SAMPLE	PREP CODE	Ag FA oz/T									
509151 509158	214 -- 214 --	101.50 14.20									

CERTIFICATION: 



# Chemex Labs Ltd.

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

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
VANCOUVER, BC  
V6B 1N2

A9212218

Comments: ATTN: BRUNO KASPER

**CERTIFICATE**

**A9212218**

EQUITY ENGINEERING LTD.

Project: VIG 6  
P.O. #: VIG88-02

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 22-MAR-92.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
201	29	Dry, sieve to -80 mesh
217	18	Geochem ring entire sample
2500	47	Winter special code

\* NOTE 1:

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

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	47	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
1941	47	Ag ppm: Ultra trace package	EXT-ICP	0.02	200
1092	47	As ppm: Ultra trace package	EXT-ICP	0.2	5000
1094	47	Bi ppm: Ultra trace package	EXT-ICP	0.2	5000
1097	47	Cu ppm: Ultra trace package	EXT-ICP	0.2	5000
1935	47	Hg ppm: Ultra trace package	EXT-ICP	0.1	5000
1939	47	Mo ppm: Ultra trace package	EXT-ICP	0.2	5000
1933	47	Pb ppm: Ultra trace package	EXT-ICP	0.5	5000
1089	47	Sb ppm: Ultra trace package	EXT-ICP	0.2	1000
1946	47	Zn ppm: Ultra trace package	EXT-ICP	1	5000



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207 - 675 W. HASTINGS ST.  
 VANCOUVER, BC  
 V6B 1N2

Project : VIG 6  
 Comments: ATTN: BRUNO KASPER

Page Number : 1  
 Total Pages : 2  
 Certificate Date: 22-MAR-92  
 Invoice No. : 19212218  
 P.O. Number : VIG88-02  
 Account : EIA

## CERTIFICATE OF ANALYSIS A9212218

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	As ppm	Bi ppm	Cu ppm	Hg ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm
92BK-01	2012500	< 5	0.06	123.0	< 0.2	15.0	0.1	1.6	8.0	0.2	91
92BK-02	2012500	815	0.48	89.8	< 0.4	62.0	7.0	2.2	10.0	2.4	92
92DAC-01	2012500	10	0.04	16.6	< 0.2	11.8	< 0.1	1.2	8.0	< 0.2	145
92DAC-02	2012500	< 5	0.12	24.2	< 0.2	26.6	0.1	1.6	6.5	0.4	95
92DAC-03	2012500	305	0.04	8.8	< 0.2	22.2	0.2	0.6	6.0	< 0.2	102
92NBD-01	2012500	10	0.02	7.8	< 0.2	25.6	< 0.1	0.6	5.5	< 0.2	108
92NBD-02	2012500	< 5	0.08	17.0	0.2	18.8	0.1	0.2	5.0	0.2	127
92NBD-03	2012500	< 5	0.14	158.5	0.6	28.0	0.2	2.8	9.5	0.4	97
92NBD-04	2012500	185	0.14	158.0	1.6	23.0	0.6	1.8	11.0	0.4	102
92NBD-05	2172500	< 5	0.06	10.6	0.4	19.2	0.4	2.0	7.0	0.2	77
92NBD-06	2012500	< 5	0.28	58.4	0.2	25.8	0.1	1.6	5.5	< 0.4	83
509161	2012500	< 5	0.12	36.8	0.4	8.4	0.2	2.4	6.5	< 0.2	30
CL3 1+00	2172500	330	0.26	56.0	0.4	8.2	0.3	1.2	39.0	0.2	73
CL3 2+25	2172500	< 5	0.14	9.2	0.2	16.2	0.4	2.0	18.5	0.2	198
CL3 2+50	2172500	< 5	0.84	77.4	0.2	17.0	< 0.1	1.4	12.0	< 0.2	101
CL3 2+75	2012500	< 5	0.28	37.8	0.4	19.2	< 0.1	2.4	14.0	< 0.2	130
CL3 3+00	2012500	< 5	0.12	23.0	0.2	13.4	< 0.1	2.0	7.5	< 0.2	55
CL3 3+25	2012500	< 5	0.14	187.0	4.2	11.6	0.1	3.0	15.5	1.2	85
CL3 3+50	2012500	30	0.20	23.6	0.2	20.6	0.7	1.4	6.0	0.2	57
CL3 3+75	2012500	< 5	0.16	26.0	0.2	21.0	0.5	1.0	4.5	0.2	52
CL3 4+00	2012500	125	0.14	711	0.4	7.4	< 0.1	0.8	4.5	0.4	17
CL3 4+25	2012500	< 5	0.10	63.6	0.8	8.4	< 0.1	1.0	4.0	0.4	24
CL3 4+50	2012500	< 5	0.12	268	1.4	19.4	< 0.1	5.2	39.5	1.4	95
CL3 4+75	2012500	< 5	0.32	56.6	0.2	11.0	< 0.1	3.2	9.0	< 0.2	83
CL3 5+00	2172500	< 5	0.14	25.4	0.2	13.2	< 0.1	1.6	8.0	0.2	45
CL3 5+25	2012500	< 5	0.24	175.0	0.2	18.8	< 0.1	1.8	11.0	< 0.2	265
CL3 5+50	2012500	< 5	0.08	57.0	0.4	5.8	< 0.1	2.8	5.5	0.2	23
CL3 5+75	2012500	< 5	0.06	35.6	0.2	18.4	< 0.1	12.6	20.0	0.6	39
CL3 6+00	2012500	< 5	0.08	26.0	0.8	5.0	< 0.1	0.8	5.5	0.2	30
CL3 6+25	2012500	< 5	0.08	34.6	0.2	18.4	0.1	0.8	5.0	0.6	66
CL5 0+00W	2172500	< 5	0.06	9.6	< 0.2	19.4	< 0.1	0.4	3.5	0.4	33
CL5 0+25W	2012500	70	0.08	56.2	< 0.2	40.2	< 0.1	1.8	4.5	3.2	92
CL5 0+50W	2172500	< 5	0.08	8.4	< 0.2	32.8	< 0.1	2.4	3.0	0.6	77
CL5 0+75W	2172500	< 5	0.04	3.2	0.6	13.2	0.1	0.6	3.0	0.2	33
CL5 1+00W	2172500	< 5	0.12	7.2	< 0.2	35.0	< 0.1	9.2	5.5	1.4	36
CL5 1+25W	2012500	< 5	0.06	14.4	< 0.2	21.2	< 0.1	3.0	6.0	1.2	39
CL5 1+50W	2012500	< 5	0.08	28.8	< 0.2	18.0	0.1	2.0	4.0	1.0	54
CL5 1+75W	2012500	< 5	0.04	66.6	< 0.2	32.2	0.1	1.6	4.0	0.8	98
CL5 2+00W	2172500	20	0.10	25.8	0.4	16.4	< 0.1	2.8	4.5	1.2	46
CL5 2+25W	2172500	< 5	0.14	47.4	0.2	27.0	0.1	39.4	11.0	7.6	104

CERTIFICATION:

*Jhai D Ma*



# Chemex Labs Ltd.

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PHONE: 604-984-0221

To: EQUITY ENGINEERING LTD.

207 - 675 W. HASTINGS ST.  
VANCOUVER, BC  
V6B 1N2

Project: VIG 6  
Comments: ATTN: BRUNO KASPER

Page Number :2  
Total Pages :2  
Certificate Date: 22-MAR-92  
Invoice No. :19212218  
P.O. Number :VIG88-02  
Account :EIA

## CERTIFICATE OF ANALYSIS A9212218

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	As ppm	Bi ppm	Cu ppm	Hg ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm
CL5 2+50W	2172500	< 5	0.04	11.0	< 0.2	16.4	< 0.1	20.2	10.0	2.6	82
CL5 2+75W	2172500	< 5	0.04	11.0	< 0.2	16.4	< 0.1	2.8	5.0	1.0	56
CL5 3+00W	2172500	< 5	0.04	20.4	< 0.2	35.8	< 0.1	3.6	3.5	0.4	102
CL5 3+25W	2172500	< 5	0.06	20.8	< 0.4	6.8	< 0.1	2.4	5.5	0.8	28
CL5 3+50W	2172500	< 5	0.04	21.2	< 0.2	10.0	< 0.1	1.0	5.0	0.4	43
CL5 3+75W	2172500	< 5	0.02	17.0	< 0.2	8.8	< 0.1	0.8	4.0	< 0.2	60
CL5 4+00W	2172500	< 5	0.04	17.8	0.2	10.6	< 0.1	1.2	4.0	< 0.2	42

CERTIFICATION:

*Jhas D Ma*



**APPENDIX E**

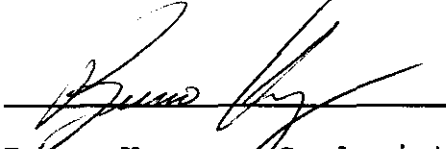
**STATEMENT OF QUALIFICATIONS**

## STATEMENT OF QUALIFICATIONS

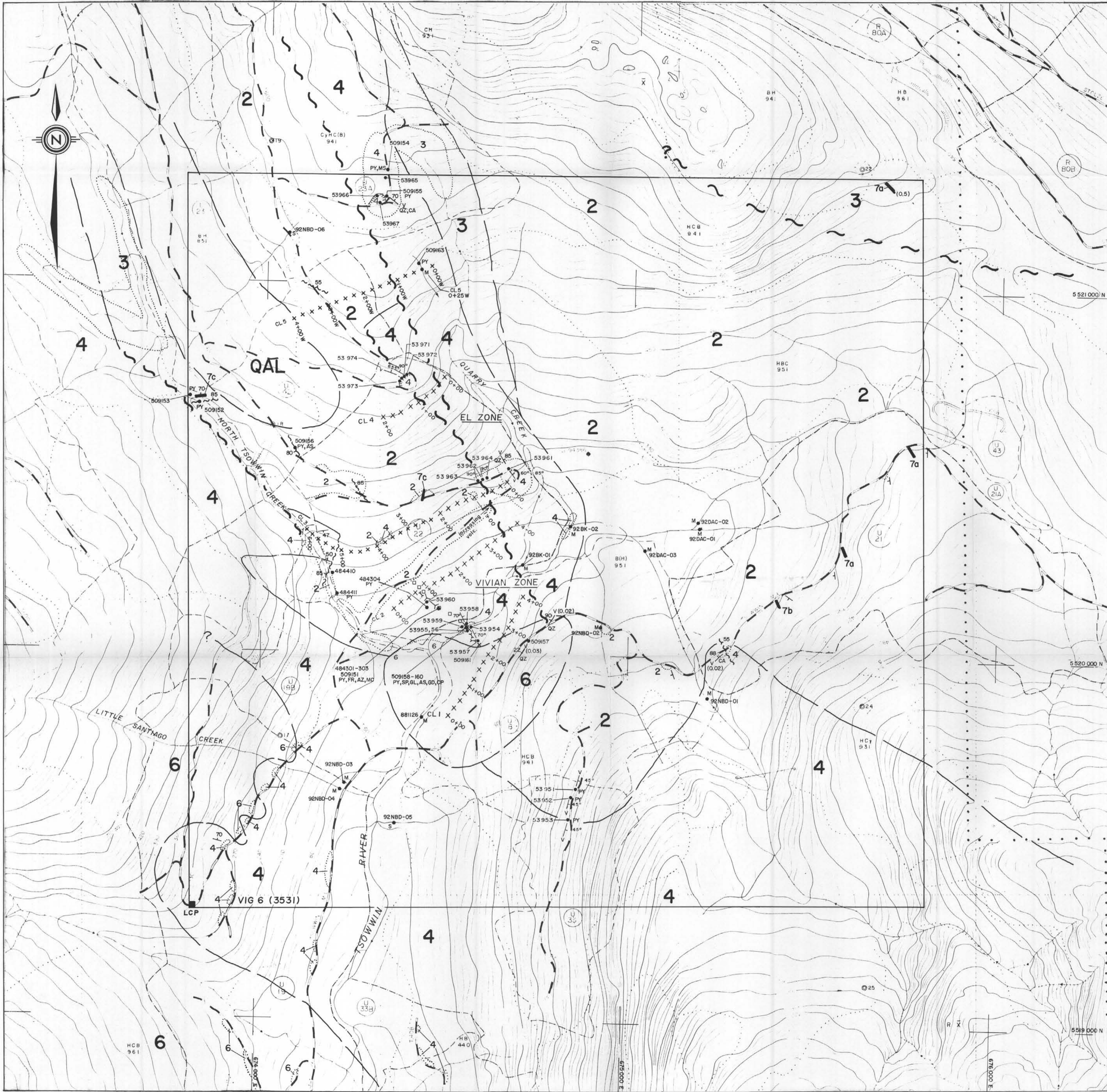
I, BRUNO KASPER, of 2190 Pinecrest Avenue, Coquitlam, in the Province of British Columbia, DO HEREBY CERTIFY:

1. THAT I am a Consulting Geologist with offices at Suite 207, 675 West Hastings Street, Vancouver, British Columbia.
2. THAT I am a graduate of the University of Alberta with a Bachelor of Science degree in Geology.
3. THAT my primary employment since June, 1988 has been in the field of mineral exploration.
4. THAT this report is based on fieldwork carried out under my direction.
5. THAT I have no interest, directly or indirectly, in the VIG 6 claim.

DATED at Vancouver, British Columbia, this 19<sup>th</sup> day of May, 1992.

  
\_\_\_\_\_  
Bruno Kasper, Geologist





**1992 ROCK GEOCHEMICAL RESULTS**

Sample	Au(ppb)	Ag(ppm)	As(ppm)	Cu(ppm)	Pb(ppm)	Zn(ppm)
484301	1.85g/t	4.0	914	45	12	44
484302	205	6.2	2770	214	10	178
484303	<5	<0.2	118	59	2	212
484304	160	0.8	1570	48	48	122
484410	<5	<0.2	42	37	6	150
484411	<5	<0.2	46	22	6	88
509151	271.70g/t	3480.0g/t	3670	4600	3940	2540
509152	130	8.6	72	104	12	70
509153	140	7.4	80	81	14	44
509154	30	<0.2	186	81	14	38
509155	40	2.4	90	23	6	58
509156	1.41g/t	>10000	38	250	122	25.32
509157	35	<0.2	28	4	2	8
509158	53.30g/t	486.9g/t	7320	696	2930	1515
509159	205	4.4	1345	106	36	346
509160	114.17g/t	51.0	1855	69	4280	4910
509163	50	0.4	326	52	20	46

**1992 SILT GEOCHEMICAL RESULTS**

Sample	Au(ppb)	Ag(ppm)	As(ppm)	Cu(ppm)	Pb(ppm)	Zn(ppm)
92BK-01	<5	0.06	123.0	15.0	8.0	91
92BK-02	815	0.48	89.8	62.0	10.0	92
92DAC-01	<5	0.04	16.6	11.8	8.0	145
92DAC-02	<5	0.12	24.2	26.6	6.5	95
92DAC-03	305	2.0	8.8	22.2	6.0	102
92NBD-01	10	0.02	7.8	25.6	5.5	108
92NBD-02	<5	0.08	17.0	18.8	5.0	127
92NBD-03	<5	0.14	158.5	20.0	9.5	97
92NBD-04	185	0.14	158.0	23.0	11.0	102
92NBD-05	<5	0.06	10.6	19.2	7.0	77
92NBD-06	<5	0.28	58.4	25.8	5.5	83
CLS 0-25W	70	0.08	56.2	40.2	4.5	92

**1992 SOIL GEOCHEMICAL RESULTS**

Sample	Au(ppb)	Ag(ppm)	As(ppm)	Cu(ppm)	Pb(ppm)	Zn(ppm)
509161	<5	0.12	36.8	8.4	6.5	30
CL3 1+00	330	0.26	56.0	8.2	39.0	73
2+25	<5	0.14	9.2	16.2	18.5	198
2+50	<5	0.84	77.4	17.0	12.0	101
2+75	<5	0.28	37.8	19.2	14.0	130
3+00	<5	0.12	23.0	13.4	7.5	55
3+25	<5	0.14	187.0	11.6	15.5	85
3+50	30	0.20	23.6	20.6	6.0	57
3+75	<5	0.16	26.0	21.0	4.5	52
4+00	125	0.14	711.0	7.4	4.5	17
4+25	<5	0.10	63.6	8.4	4.0	24
4+50	<5	0.12	268.0	19.4	39.5	95
4+75	<5	0.32	56.6	11.0	9.0	83
5+00	<5	0.14	25.4	13.2	8.0	45
5+25	<5	0.24	175.0	18.8	11.0	265
5+50	<5	0.08	57.0	5.8	5.5	23
5+75	<5	0.06	35.6	18.4	20.0	39
6+00	<5	0.08	26.0	5.0	5.5	30
6+25	<5	0.08	34.6	18.4	5.0	66
CLS 0+00W	<5	0.06	9.6	19.4	3.5	33
0+50W	<5	0.08	8.4	32.8	3.0	77
0+75W	<5	0.04	3.2	13.2	3.0	33
1+00W	<5	0.12	7.2	35.0	5.5	36
1+25W	<5	0.06	14.4	21.2	6.0	39
1+50W	<5	0.08	28.8	18.0	4.0	54
1+75W	<5	0.04	66.6	32.2	4.0	98
2+00W	20	0.10	25.8	16.4	4.5	46
2+25W	<5	0.14	47.4	27.0	11.0	104
2+50W	<5	0.04	11.0	16.4	10.0	82
2+75W	<5	0.04	11.0	16.4	5.0	56
3+00W	<5	0.04	20.4	35.8	3.5	102
3+25W	<5	0.06	20.8	6.8	6.5	28
3+50W	<5	0.04	21.2	10.0	5.0	43
3+75W	<5	0.02	17.0	8.8	4.0	60
4+00W	<5	0.04	17.8	10.6	4.0	42

**1988 ROCK GEOCHEMICAL RESULTS (DeBock, 1988)**

Sample	Au(g/t)	Ag(ppm)	As(ppm)	Cu(ppm)	Pb(ppm)	Zn(ppm)
53951	0.07	0.4	10	7	8	180
53952	0.12	1.0	15	19	12	81
53953	0.08	0.4	10	41	8	92
53954	114.63	60.8	>10000	66	2280	1106
53955	16.29	17.8	>10000	73	286	288
53956	90.71	82.8	>10000	113	1630	1168
53957	0.80	1.0	545	44	28	111
53958	2.75	13.8	2635	136	132	171
53959	0.06	1.4	410	77	18	188
53960	12.57	67.2	4115	142	1140	407
53961	1.23	1.0	2465	5	14	47
53962	21.32	26.0	>10000	68	1750	553
53963	30.31	33.0	2280	41	416	89
53964	22.46	72.6	4960	112	1550	235
53965	1.68	1.8	275	44	46	94
53966	0.53	0.8	300	41	20	41
53967	0.07	5.2	145	9	10	47
53971	1.15	1.2	6210	22	14	64
53972	5.48	27.0	6910	83	12	211
53973	5.56	4.8	905	126	14	100
53974	0.86	1.0	4240	10	12	62

**1988 SOIL GEOCHEMICAL RESULTS (DeBock, 1988)**

Sample	Au(ppb)	Ag(g/t)	As(ppm)	Cu(ppm)	Pb(ppm)	Zn(ppm)
CL1 0+00	30					
0+25	10					
0+50	<5					
0+75	5					
1+00	10					
1+25	5					
1+50	5					
1+75	<5					
2+00	<5					
2+25	5					
2+50	<5					
2+75	<5					
3+00	5					
3+25	<5					
3+50	10					
3+75	<5					
4+00	5					
CL3 0+00	60					
0+50	5					
0+75	5					
1+00	>1000	2.92				
1+25	555					
1+50	10					
1+75	35					
2+00	20					
CL4 0+00	<5					
0+25	5					
0+50	5					
0+75	5					
1+00	>1000	2.92				
1+25	555					
1+50	10					
1+75	35					
2+00	20					

**1988 GOVERNMENT REGIONAL GEOCHEMICAL ANALYSES (GSC OPEN FILE 2038, 1989)**

Sample	Au(ppb)	Ag(ppm)	As(ppm)	Cu(ppm)	Pb(ppm)	Zn(ppm)
881126	5	<0.2	22	32	10	112
90th Mile	36	<0.2	23	110	7	97
95th Mile	86	<0.2	36	144	10	118
99th Mile	373	0.2	75	188	16	185

**LEGEND**

**LITHOLOGIES**

**QUATERNARY**  
 QAL Unconsolidated fluvial and glacial deposits.

**TERTIARY OR OLDER**  
 Dykes and sills  
 7a Felsic  
 7b Hornblende-porphry  
 7c Mafic

**EOCENE**  
 Catface Intrusions  
 6 Santiago Stock: Diorite to diorite-monzonite.

**JURASSIC**  
 Bonanza Group  
 4 Andesitic flows, tuffs, tuff breccias and agglomerates.

**UPPER TRIASSIC**  
 Vancouver Group  
 3 Parson Bay Formation: Calcareous siltstone, shale and limestone.  
 2 Quatsino Formation: Limestone; minor interbeds of tuffs present.

Geology adapted in part from Ammack (1988), DeBock (1988), Robinson (1983) and Ronning (1985).

**MINERALS AND ALTERATION TYPES**

AS arsenopyrite	AZ azurite	CA calcite
CL chlorite	CP chalcopyrite	EP epidote
FR freibergite	GD gold	GL galena
MC malachite	MS sericite	PY pyrite
QZ quartz	SP sphalerite	

**SYMBOLS**

- Rock outcrop
- Geological boundary (approximate, inferred)
- Fault with dip (approximate, inferred)
- Bedding with dip
- Dyke with true width in metres
- Vein with dip and true width in metres
- Rock sample
- Silt sample
- Moss-mat sediment sample
- Soil sample line with 25 metre stations.
- Prospect Pit
- Trench
- Adit
- Quarry
- L.C.P. Legal corner post (located)

0 100 METRES

**VIG 6 CLAIM  
 COMPILATION MAP**

BRITISH COLUMBIA

EQUITY ENGINEERING LTD.

DRAWN: B.K. / J.J.E.	MINING DIV.: ALBERNI	FIGURE
N.T.S.: 92E/15E	SCALE: 1:5000	4
DATE: MAY, 1992	REVISED:	

22,335  
 GEOLOGICAL BRANCH  
 ASSESSMENT REPORT