

006342

PROPERTY FILE

092E 063

**REPORT
ON THE
VIG 3 AND 5 CLAIMS**

Located in the
Tahsis Area of Vancouver Island
Alberni Mining Division
British Columbia
NTS 92E/15E
49°48' North Latitude
126°31' West Longitude

- Prepared for -

GREAT KEPPEL RESOURCES LTD.

- Prepared by -

C.K. IKONA, P.Eng.

August, 1987

1.0 INTRODUCTION

The Head Bay property, comprising the VIG 3 and VIG 5 mineral claims, was staked in February and June of 1987 to cover a rich gold-bearing pyrite-quartz vein exposed in a logging road approximately 16 kilometres southeast of Tahsis on the west coast of Vancouver Island (Figure 1). The Head Bay property partially covers the former TAH 22 claim, which was explored for gold by Aberford Resources Ltd. and Homestake Mineral Development Company in the early 1980s, and surrounds three Crown granted mineral claims which host a magnetite skarn deposit and which are subject to third party ownership.

An exploration program, consisting of geological mapping, prospecting, geochemistry, geophysics and hand trenching was conducted over the Head Bay property in June 1987. Equity Engineering Ltd. of Vancouver carried out this program. Much of this report is based on the work conducted by Equity. White Geophysical Inc. conducted the electromagnetic geophysical surveys discussed. The writer examined the property on June 23, 1987 accompanied by Mr. H. Awmack, P.Eng. of Equity Engineering.

2.0 LIST OF CLAIMS

Records of the British Columbia Ministry of Energy, Mines and Petroleum Resources indicate that the following claims, which comprise the Head Bay property (Figure 2) are owned by David A. Caulfield. Separate documents indicate that the claims are under option to Great Keppel Resources Ltd.

<u>Claim Name</u>	<u>Record Number</u>	<u>No. of Units</u>	<u>Record Date</u>	<u>Expiry Date</u>
VIG 3	3150	16	March 12, 1987	March 12, 1988
VIG 5	3255	<u>20</u>	June 11, 1987	June 11, 1988
		36		

The location of both legal corner posts has been verified by the author.

3.0 LOCATION, ACCESS AND GEOGRAPHY

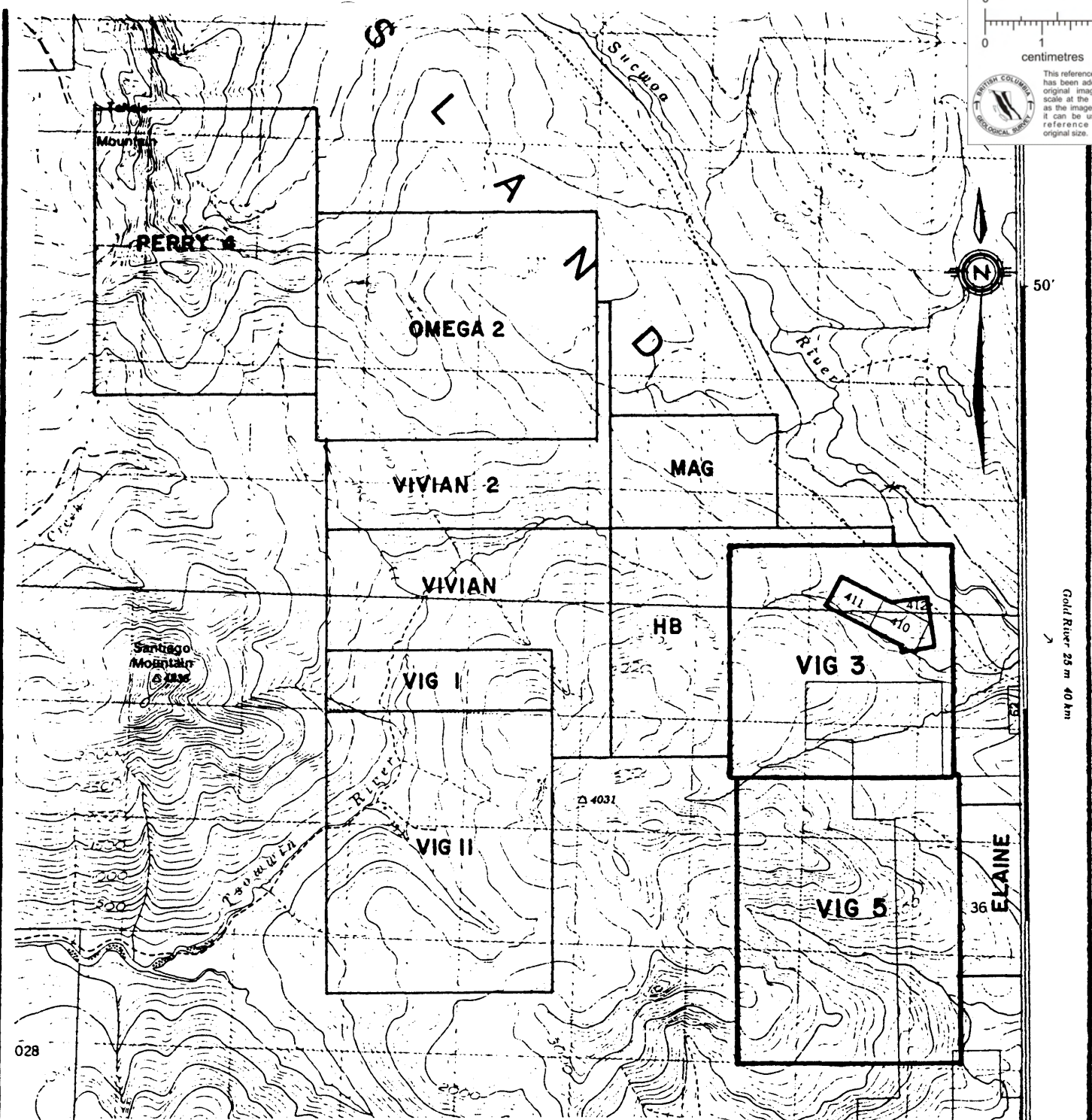
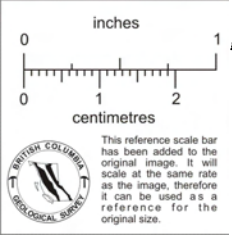
The Head bay property is located one kilometre west of the Head Bay logging camp on Tlupana Inlet, approximately 16 kilometres southeast of the Village of Tahsis on the west coast of Vancouver Island (Figure 1). It lies within the Alberni Mining Division at 49° 48' north latitude and 126° 31' west longitude.

The Head Bay Forest Road, an improved gravel road which connects Tahsis to Gold River, passes by the northeastern corner of the VIG 3 claim. Branch roads from it and the Sucwoa Main Line extend throughout VIG 3 and provide access to the eastern and northern portions of VIG 5. Active logging by BCFP on the eastern part of the property will continue to improve access to VIG 5. A high voltage power line crosses the northeastern part of VIG 3.

The Head Bay property covers the eastern flank of an unnamed mountain of the Vancouver Island Ranges. Topography is rugged, with deeply incised creeks and steep rock bluffs. Elevations range from 25 metres above sea level at the Sucwoa River to over 900 metres along the western boundary of the property. Outcrop exposure is excellent throughout.

Mature forest covers the southern part 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. A substantial area in the east-central part of the property is currently being logged, with falling, yarding and hauling in progress, causing the disruption of parts of the geochemical grid before the geophysical surveys could be undertaken.

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.



Gold River 25 m 40 km

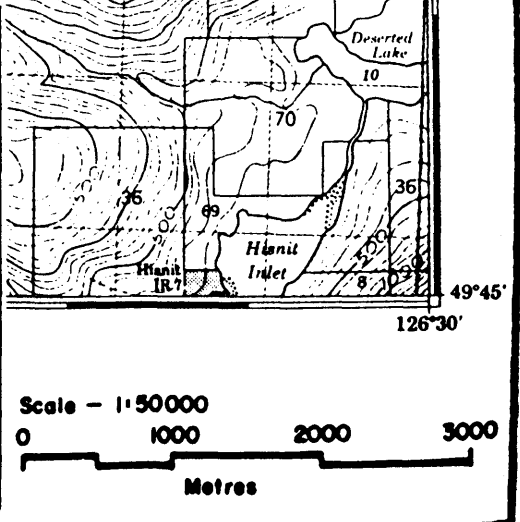
GREAT KEPPEL RESOURCES LTD.

Head Bay Property

CLAIM MAP

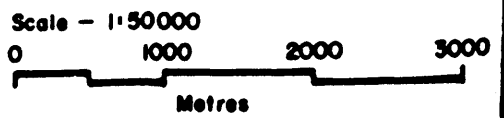
ALBERNI MINING DISTRICT
NTS 92E/15E

DWN BY JJE.	PROJECT GKR87-01	DATE July, 1987	FIGURE 2
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4.0 PREVIOUS WORK

The rich, narrow, quartz-sulphide veins of the Zeballos camp, approximately 35 kilometres northwest of the Head Bay property, were discovered in the 1920s and 1930s upstream from coarse placer gold pockets in the Zeballos River. These veins produced a total of 8930 kilograms (287,811 ounces) of gold and 3880 kilograms (124,700 ounces) of silver until 1948. The Zeballos deposits are currently the subject of intensive exploration by New Privateer Mines Ltd. and McAdam Resources Ltd.

Development of the Zeballos gold camp resulted in increased exploration throughout the Tahsis area and led to the discovery in 1939 of the Mohawk and Vivian veins less than two kilometres west of the Head Bay property (Figure 3). Several adits were driven on these quartz-calcite-pyrite veins but were abandoned in 1940 as a result of the war.

The Glengarry-Stormont magnetite deposit, located on Crown granted mineral claims enclosed within the VIG 3 claim, was discovered in 1902 but received little exploration until 1951. Surface exploration and diamond drilling in 1951 and 1952 indicated 330,000 tonnes of ore averaging 42.7% Fe (MMAR-1956, p. 133). Small scale production in the early 1960s yielded 23,000 tonnes of magnetite concentrate from 60,000 tonnes of ore.

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. In the course of follow-up work, they discovered several rich gold showings including a narrow pyrite-quartz vein traced by Aberford over 23 metres in a road cut on what is now the VIG 3 claim. Robinson (1983) reported that the 15 Aberford samples taken from this vein, which forms the hanging wall of the Road Zone as described in this report, averaged 54.76 grams gold per tonne (1.598 oz/ton) with the highest sample assaying 282.0 grams gold per tonne (8.828 oz/ton).

Homestake Mineral Development Company optioned the TAH 22 claim which contained the Road Zone, but dropped the option after limited property reconnaissance (Flanagan, 1984).

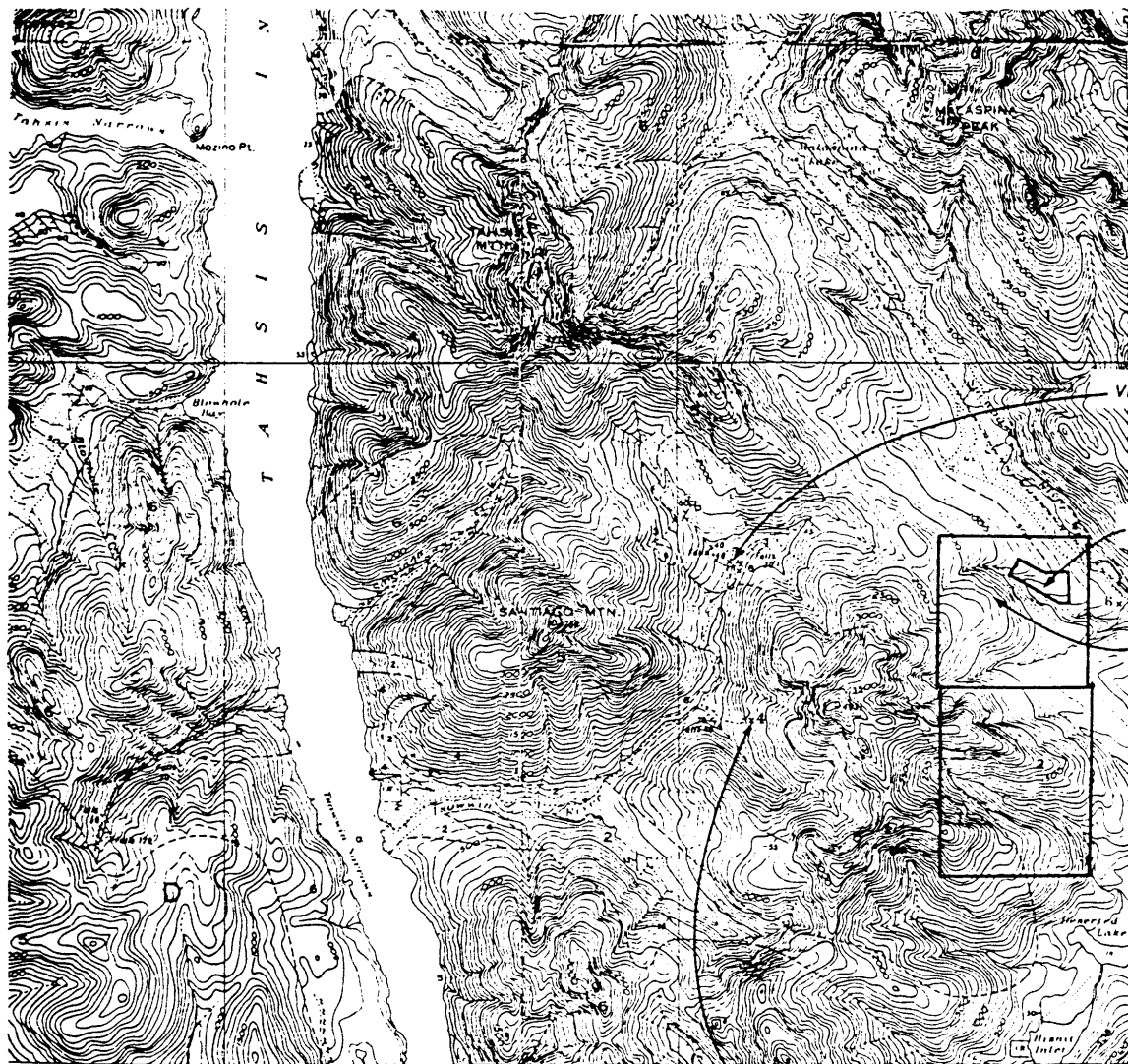
The TAH 22 claim was allowed to lapse in February 1987, and was immediately restaked as the VIG 3 for subsequent option to Great Keppel Resources Ltd. VIG 5 was staked in June 1987 to cover favourable lithology and the regional trend of stratigraphy and mineralization.

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 (1980), 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, limey 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.

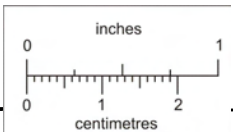


Geology after Hoadley (1953)

MOHAWK ZONE (Au)

49° 45'

126° 30'



This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

LEGEND

- JURASSIC AND/OR CRETACEOUS**
UPPER JURASSIC AND/OR LOWER CRETACEOUS
COAST INTRUSIONS
- 6 Granite, granodiorite, diorite, quartz diorite, minor syenite, apatite, and micropegmatite
- TRIASSIC AND (?) JURASSIC**
UPPER TRIASSIC AND (n) 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 (n) EARLIER**
KARMUTSEN GROUP
- 1 Basaltic and andesitic lavas, agglomerates, breccias, and tuffs, minor intercalated limestone

MESOZOIC

SONNATZ GROUP

- 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



GREAT KEPPEL RESOURCES LTD.

Head Bay Property

REGIONAL GEOLOGY

ALBERNI MINING DISTRICT
NTS 92E/15E

DWN BY J.J.E.	PROJECT GKR87-01	DATE July, 1987	FIGURE 3
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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, 1980).

Stocks of the Eocene Catface Intrusions (Unit 6) are mapped on the northeast shore of Hisnit Inlet and the northern slopes of Santiago and Tahsis Mountains (Muller, 1980). The unmapped stock which extends southeasterly from the Head Bay property may also belong to the Catface Intrusions. 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. The Glengarry-Stormont magnetite deposit is hosted by a banded garnet-magnetite-epidote-diopside skarn in Quatsino limestone near its contact with the underlying Karmutsen volcanics close to the Head Bay stock.

The gold deposits of the Zebaloz camp generally occur within steeply dipping narrow quartz-sulphide veins hosted by a Catface quartz diorite stock near its intrusive contact with the limestone and volcanics of the Bonanza and Vancouver Groups. These banded veins are composed of quartz with 25 percent sulphides, principally pyrite, sphalerite, arsenopyrite and chalcopyrite. They exhibit good vertical and horizontal continuity, with an average grade of approximately 15.1 grams gold per tonne (0.44 oz/ton) of ore mined. This included a considerable amount of dilution by waste rock, since the veins rarely exceed 35 centimetres in width (Stevenson, 1950).

The Mohawk and Vivian showings, approximately two kilometres west of the Head Bay property, are also associated with a Catface stock which intrudes Quatsino limestone and Bonanza volcanics (Figure 3). The Mohawk vein, which is 35

centimetres wide and strikes northeast, is a vertical quartz-filled fissure vein with fine pyrite. The Vivian vein is a five to ten centimetre wide, steeply dipping quartz-calcite vein which strikes northwesterly (Hoadly, 1953). Sampling of the Vivian ore dump by Aberford in 1983 yielded two assays averaging 121.2 grams gold per tonne (3.537 oz/ton) and 361 grams silver per tonne (10.53 oz/ton) (Robinson, 1983).

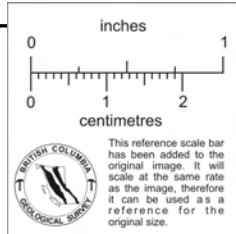
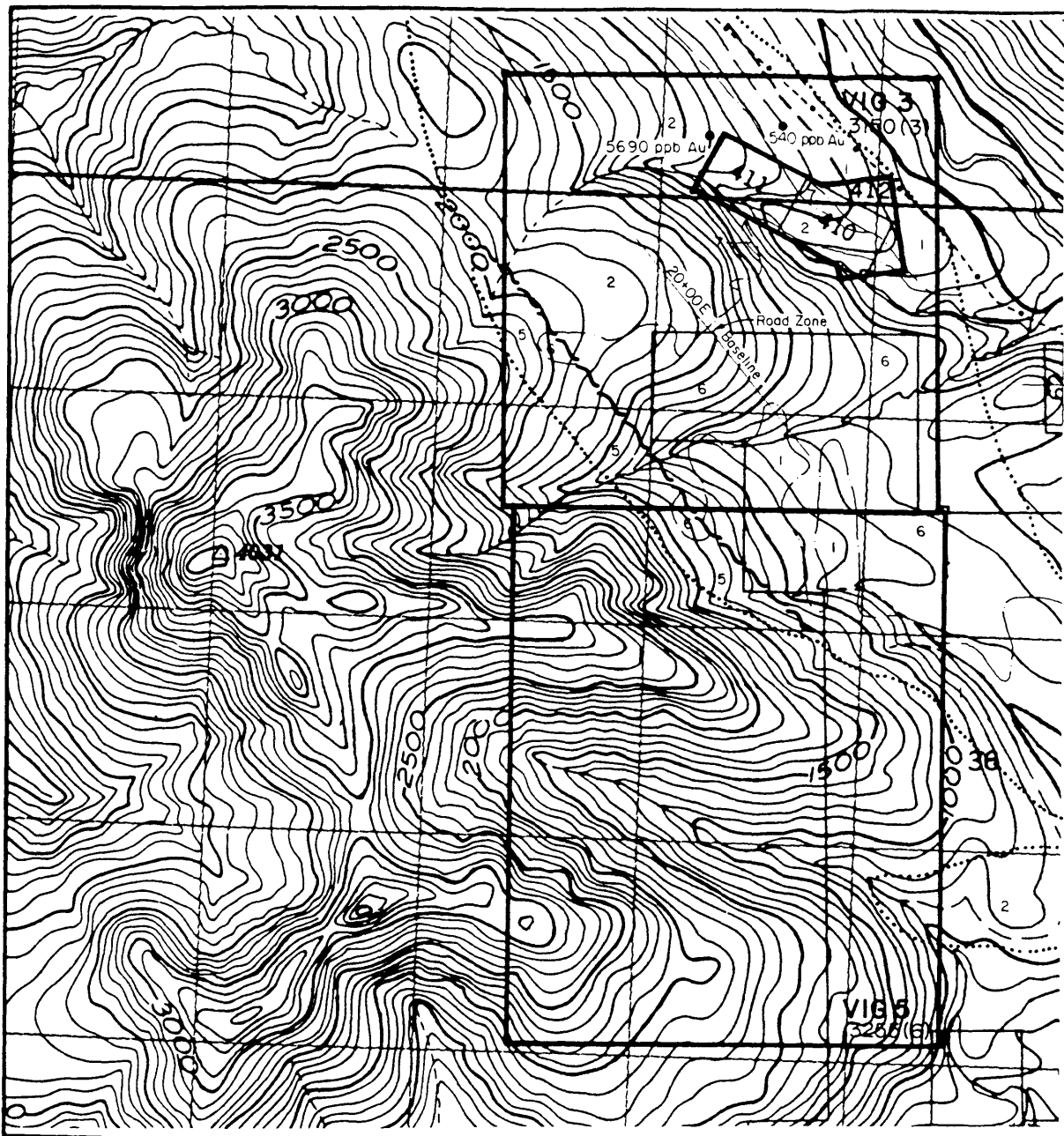
6.0 PROPERTY GEOLOGY, GEOCHEMISTRY AND GEOPHYSICS

6.1 GEOLOGY

Two Karmutsen/Quatsino sequences on the Head Bay property (Figure 4) are separated by an inferred easterly fault. Subsequent northwesterly faulting has downdropped Bonanza volcanics to the west of the Karmutsen/Quatsino sequences. Intrusion of the multiphase Head Bay stock along the easterly trending fault produced skarn in favourable beds of the Quatsino limestone.

Dark green, generally fine-grained, massive, basaltic to andesitic flows of the Karmutsen Formation (Unit 1) are exposed on the northeastern and east-central parts of the Head Bay property. They are soft, pervasively chloritized and locally diopside or epidote-altered. Fine-grained disseminated pyrite or magnetite is rare.

Massive grey limestone of the Quatsino Formation (Unit 2) overlies the Karmutsen volcanics throughout the northern part of VIG 3 and the southern part of VIG 5, dipping moderately to the west or southwest. Basaltic flows are intercalated with massive limestone near the bottom of the section and thinly-bedded limestone bands become more pronounced upwards. One outcrop of black limey argillite may represent the bottom of the overlying Parson Bay Formation (Unit 3).



LEGEND

TERTIARY

EOCENE

- 7 SKARV: Garnet-magnetite-epidote-diopside
- 6 HEAD BAY STOCK: diorite, gabbro, monzonite

JURASSIC

LOWER JURASSIC

- 5 BOMANZA GROUP: Felsic pyroclastics, flows and sills

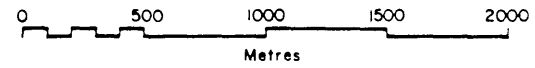
TRIASSIC

VANCOUVER GROUP:

- 3 Parson Bay Formation: limey argillite
- 2 Quatsino Formation: limestone
- 1 Karmutsen Formation: basalt flows

- Fault (inferred)
- Outline of mapped area
- Anomalous silt values

Scale - 1:20000



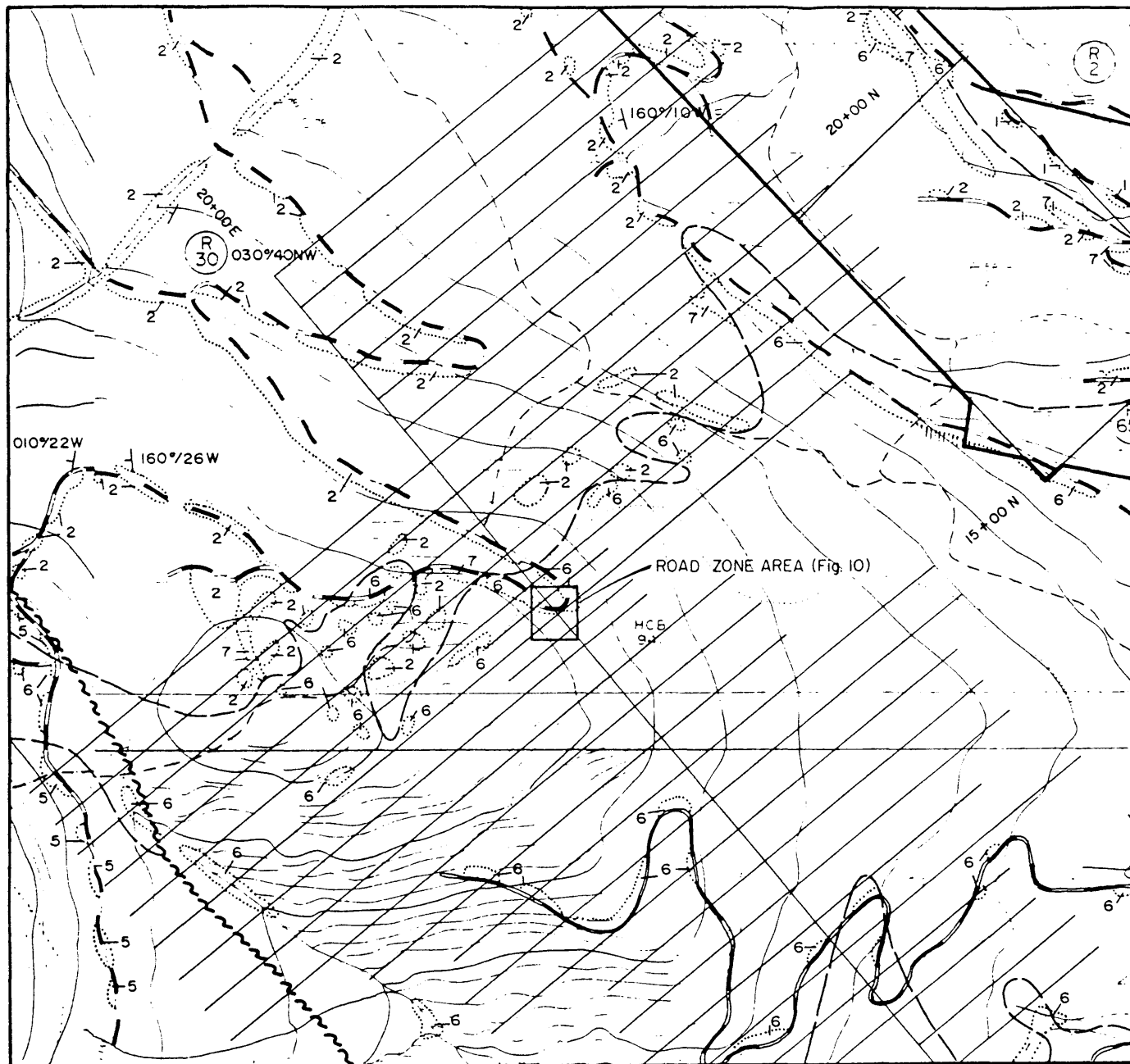
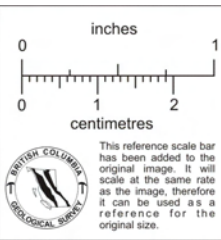
GREAT KEPPEL RESOURCES LTD.			
Head Bay Property			
PROPERTY GEOLOGY			
ALBERNI MINING DISTRICT NTS 92E/15E			
PAMICON DEVELOPMENTS LTD.			
DWN BY	PROJECT	DATE	FIGURE
J.J.E.	GKR87-01	July, 1987	4

The two Karmutsen/Quatsino sequences on the Head Bay property were probably displaced vertically by an easterly trending fault prior to intrusion of the Head Bay stock.

A later inferred northwesterly trending fault has downdropped Bonanza Group (Unit 5) felsic volcanoclastics and flows relative to the Karmutsen/Quatsino sequences in the western part of the Head Bay property. Where exposed, the Bonanza Group consists mainly of tuffs, tuff breccias, agglomerates and feldspar porphyry flows with little lateral or vertical continuity. They are generally dacitic to rhyolitic in composition, green to purple in colour and contain 1% finely disseminated pyrite.

All rock types have been intruded by the multiphase Head Bay stock (Unit 6) which is probably one of the Catface Intrusions. This stock extends easterly from the centre of the property toward Head Bay along the inferred fault which separates the two Karmutsen/Quatsino sequences. In its central and southern outcrops, the stock is a medium-grained, equigranular diorite composed of 70% plagioclase, 20% hornblende, 5% biotite and 5% plagioclase and orthoclase with 5% biotite, occur sporadically along the southern contact of the Head Bay stock. In its northern and northeastern exposures, and elsewhere near its intrusive contacts, the stock is highly variable in composition and texture, ranging from diorite to coarse gabbro to anorthosite to pyroxenite. This mafic to ultramafic phase, which contains up to 25% magnetite, is related to the Glengarry-Stormont magnetite skarns and hosts the gold-bearing sulphide-quartz veins of the Road Zone.

Skarn (Unit 7) has formed wherever the gabbroic phase of the Head Bay stock has intruded Quatsino limestone, especially near the Quatsino/Karmutsen contact. It varies considerably in thickness from a few centimetres in road cuts west of the Road Zone (Figure 5) to several metres in the Glengarry-Stormont magnetite deposit. Contact skarns generally consist of fine-grained diopside and epidote with variable amounts of quartz and calcite. Up to 5% pyrite, 20% magnetite and traces of chalcopyrite are present locally. The Glengarry-Stormont skarns, located on the Crown granted mineral claims



LEGEND

- TERTIARY**
Eocene
- 7 SKARN Garnet — magnetite — epidote — diopside
 - 6 HEAD BAY STOCK diorite, gabbro, monzonite
- JURASSIC**
Lower Jurassic
- 5 BONANZA GROUP Feisic pyroclastics, flows and sills
- TRASSIC**
vancouver Group
- 3 PARSONS BAY FORMATION, Limey argillite
 - 2 QUATSINO FORMATION Limestone
 - 1 KARMUTSEN FORMATION basalt flows
- Outcrop
 - - - Geological contact
 - ~ ~ ~ Fault (inferred)
 - 160°/26w Bedding strike/dip



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Head Bay Property

PROPERTY GEOLOGY

ALBERNI MINING DISTRICT
NTS: 92 E/15E

PAMICON DEVELOPMENTS LTD.

DWN. BY	PROJECT	DATE	FIGURE
		JULY, 1987	5

enclosed within VIG 3, are composed of alternating bands of andradite garnet and magnetite with lesser epidote, diopside, quartz and calcite. Beryl, pyrite, chalcopyrite and specularite are rare. These banded skarns are replacements of chemically favourable beds near the bottom of the Quatsino limestones. A similar skarn zone is exposed over 60 metres with a thickness of two to five metres on VIG 3 southwest of the Crown granted mineral claims.

Small shear zones are common in all rock types on the property, generally trending northwesterly or easterly, following the trends of the major inferred faults on the Head Bay property.

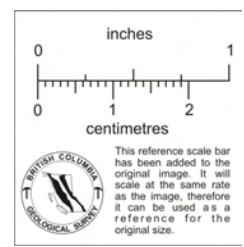
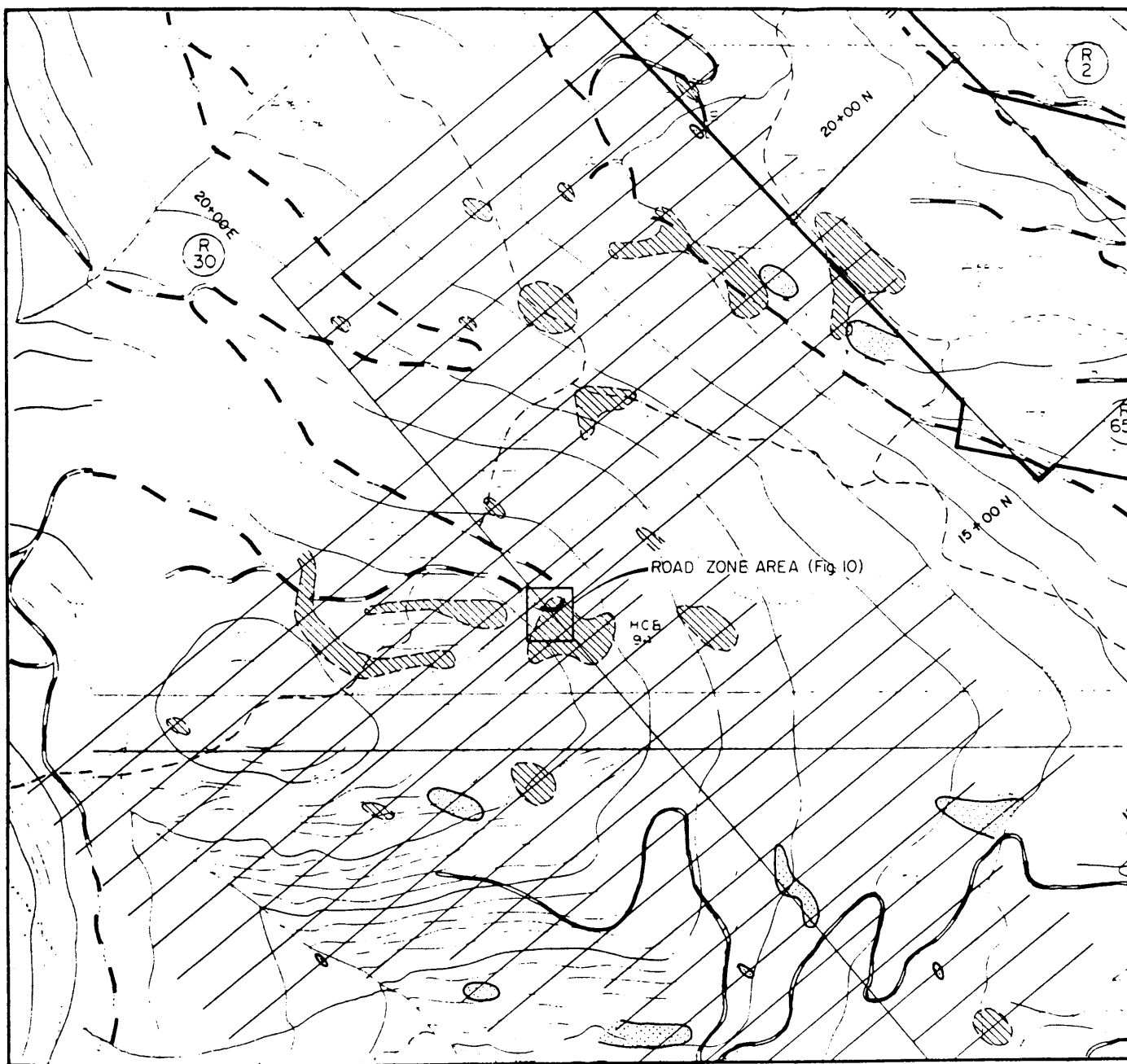
6.2 GEOCHEMISTRY

Six heavy sediment samples were taken from the major drainages on the Head Bay property (Figure 5). Only one sample, taken from the stream which drains the southern end of the soil geochemical grid, was moderately anomalous with 832 ppb Au.

Stream sediment samples, screened in the field to minus 40 mesh, were taken from all accessible streams. The most noteworthy sample (Figure 4), with 5690 ppb Au, drains the Karmutsen/Quatsino contact on the northern edge of VIG 3, in an area which received little prospecting. A sample containing 540 ppb Au is further downstream. By comparison, the stream which drains the Road Zone contained no detectable gold in its comparable stream sediment sample.

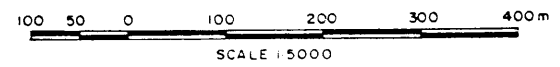
Soil geochemical samples were taken over an area 1200 metres by 1300 metres, with samples every 25 metres on lines spaced 50 metres apart (Figures 6 to 8). In addition, a line of soil samples were taken at the 150 metre contour in the eastern part of the property. Several soil samples contained highly anomalous gold concentrations, with values up to 2845 and 3080 ppb Au.

Two highly anomalous soil samples (17 + 50 N 25 + 25 E with 3080 ppb Au and CL150-36 with 2845 ppb Au) probably indicate the nearby presence of bedrock

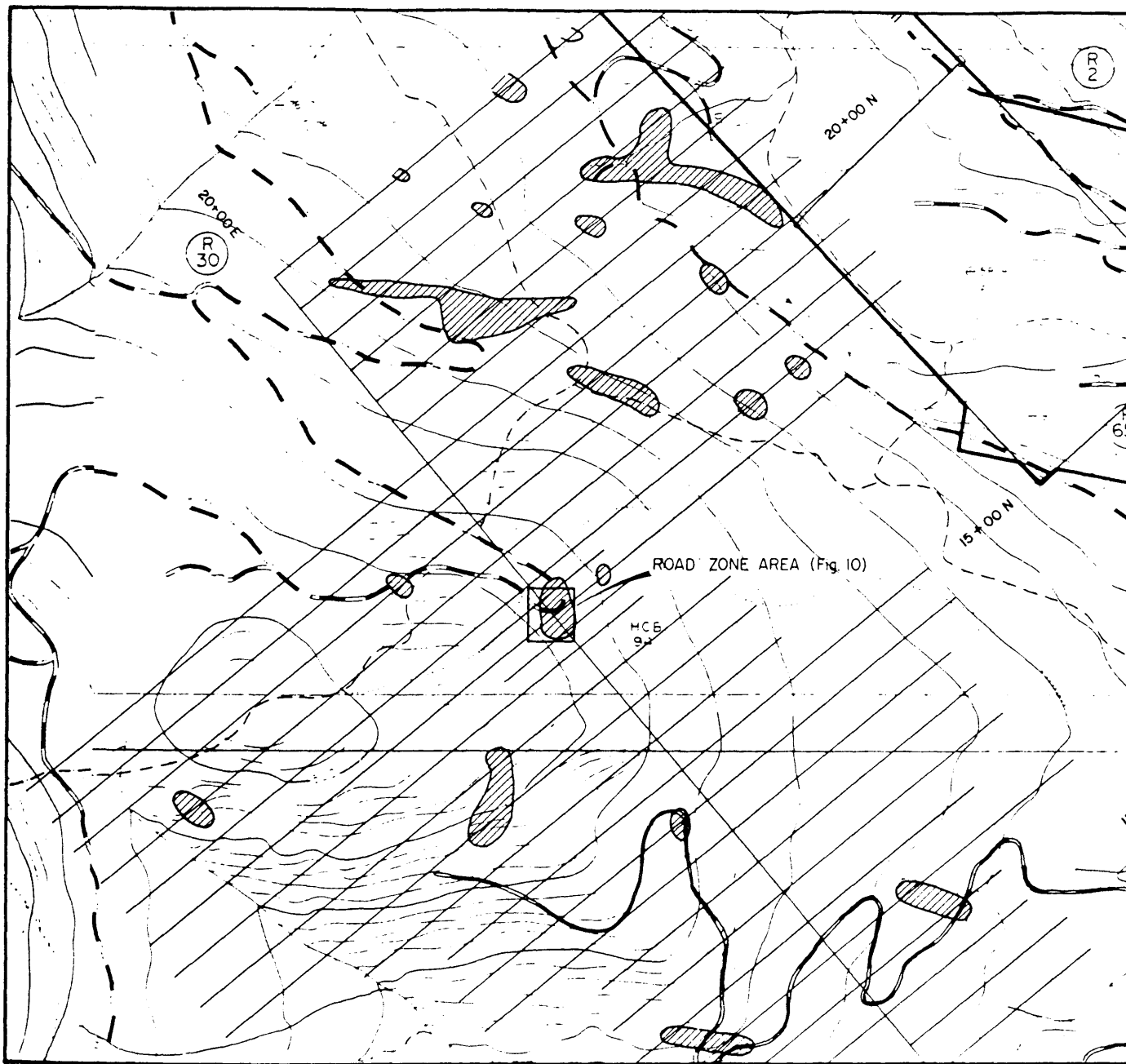
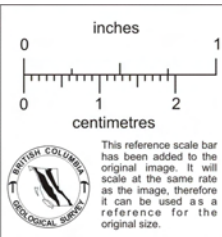


LEGEND


- ≥ 19 ppm Ag
- ≥ 60 ppb Au



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Head Bay Property			
SOIL GEOCHEMISTRY			
Ag (ppm), Au (ppb)			
ALBERNI MINING DISTRICT			
NTS: 92 E/15E			
PAMICON DEVELOPMENTS LTD.			
DWN BY	PROJECT	DATE	FIGURE
		JULY, 1987	6

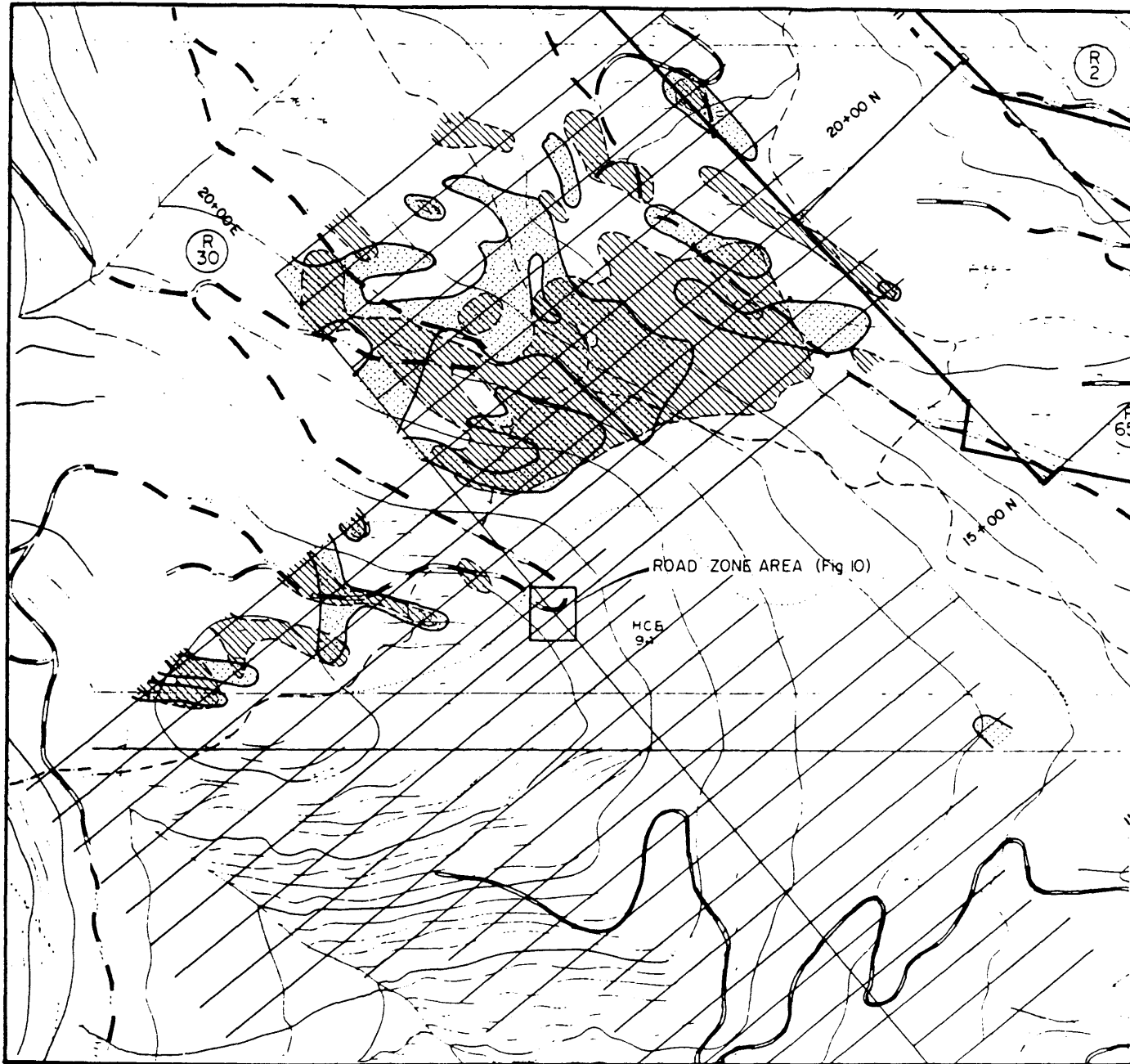
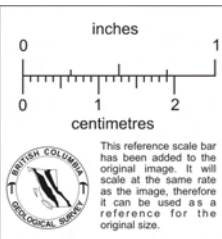


LEGEND



 ≈ 50 ppm Cu



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Head Bay Property			
SOIL GEOCHEMISTRY			
Cu (ppm)			
ALBERNI MINING DISTRICT			
NTS 92 E/15E			
PAMICON DEVELOPMENTS LTD.			
DWN BY	PROJECT	DATE	FIGURE
		JULY, 1987	7



LEGEND

-  ≥ 27 ppm Pb
-  ≥ 210 ppm Zn



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Head Bay Property			
SOIL GEOCHEMISTRY			
Pb(ppm), Zn(ppm)			
ALBERNI MINING DISTRICT			
NTS: 92 E/15E			
PAMICON DEVELOPMENTS LTD.			
DWN. BY	PROJECT	DATE	FIGURE
		JULY, 1987	3

gold mineralization. The causes for other multi-station gold soil anomalies within the Head Bay stock remain to be discovered.

The Road Zone has no gold soil geochemical signature, but rather a strong Cu-Ag-As association. Soil sample 21 + 00 N 21 + 50 E, with 1282 ppm Cu, 5052 ppm Pb, 1992 ppm Zn, 2.1 ppm Ag and 91 ppm As deserves investigation on that basis.

The drainage represented by stream sediment sample 87HA-39 (5690 ppb Au) has received little prospecting attention and no source has yet been found for this highly anomalous sample.

6.3 GEOPHYSICS

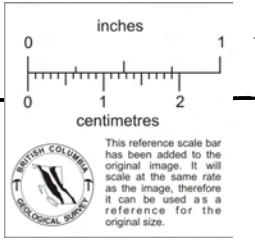
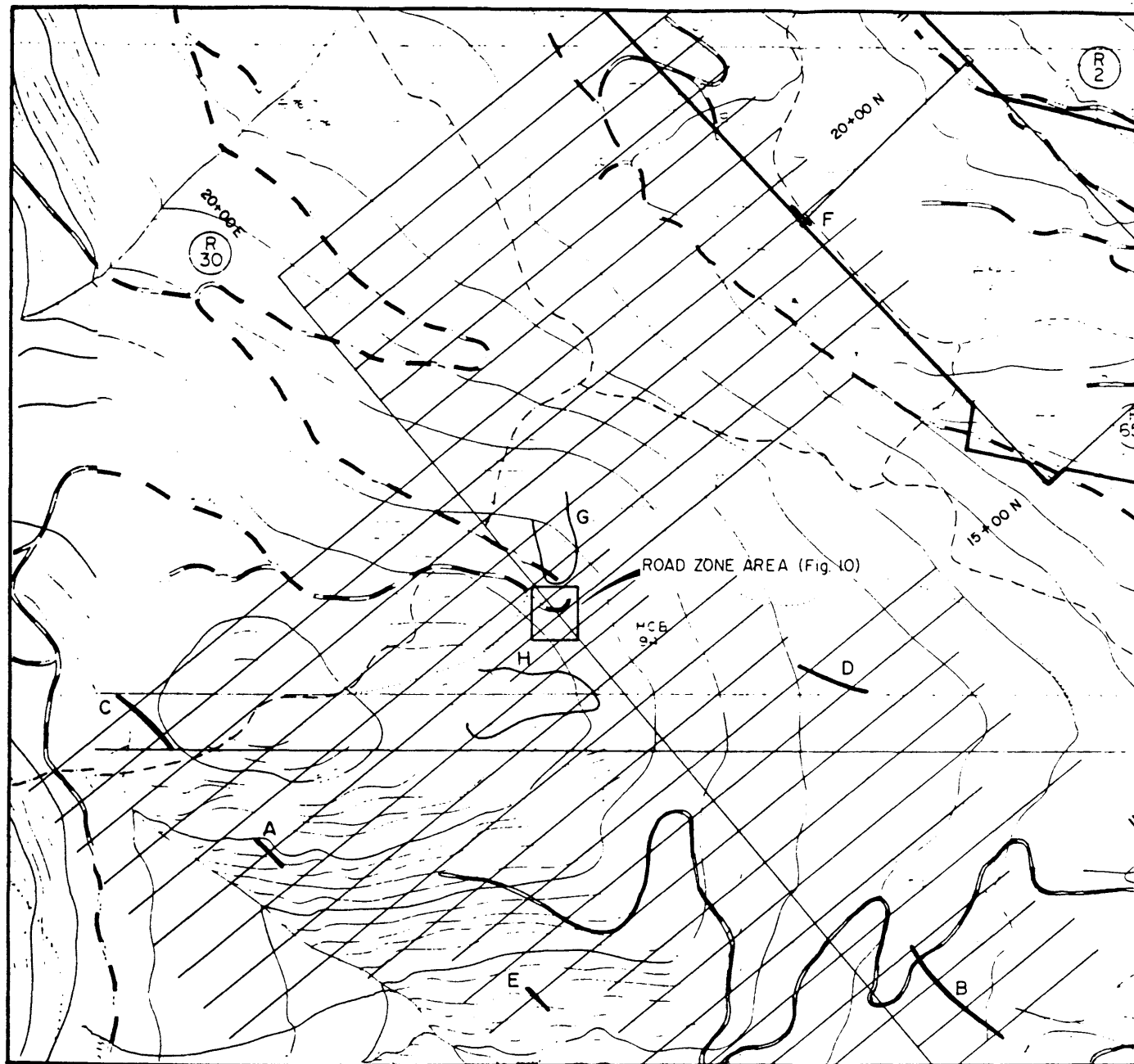
White Geophysical Inc. was contracted to perform a Pulse Electromagnetic Survey, EM-16 Survey and EM-EGR Survey on the grid located on a portion of the VIG 3 claim which includes the Road showing.

Results of this survey are reported on in a report by Markus Seward, B.Sc. dated August 5, 1987.

Figure 9 of this report presents a composite of anomalies reported by the surveys.

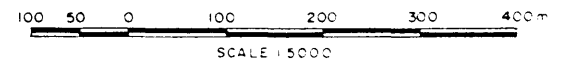
These show several small scattered anomalies which cannot be interpreted to reflect any of the known mineralization and may represent graphitic shears and/or changes in overburden.

No further geophysical work on the property appears justified at this time.



LEGEND

- A, B Composite profile anomalies
- C, D, E, F VLF-EMi&R profile anomalies
- G, H Fraser filter anomalies



GREAT KEPPEL RESOURCES LTD.			
Head Bay Property			
GEOPHYSICAL ANOMALIES			
ALBERNI MINING DISTRICT			
NTS: 92 E/15E			
PAMICON DEVELOPMENTS LTD.			
DWN BY	PROJECT	DATE	FIGURE
		JULY, 1987	9

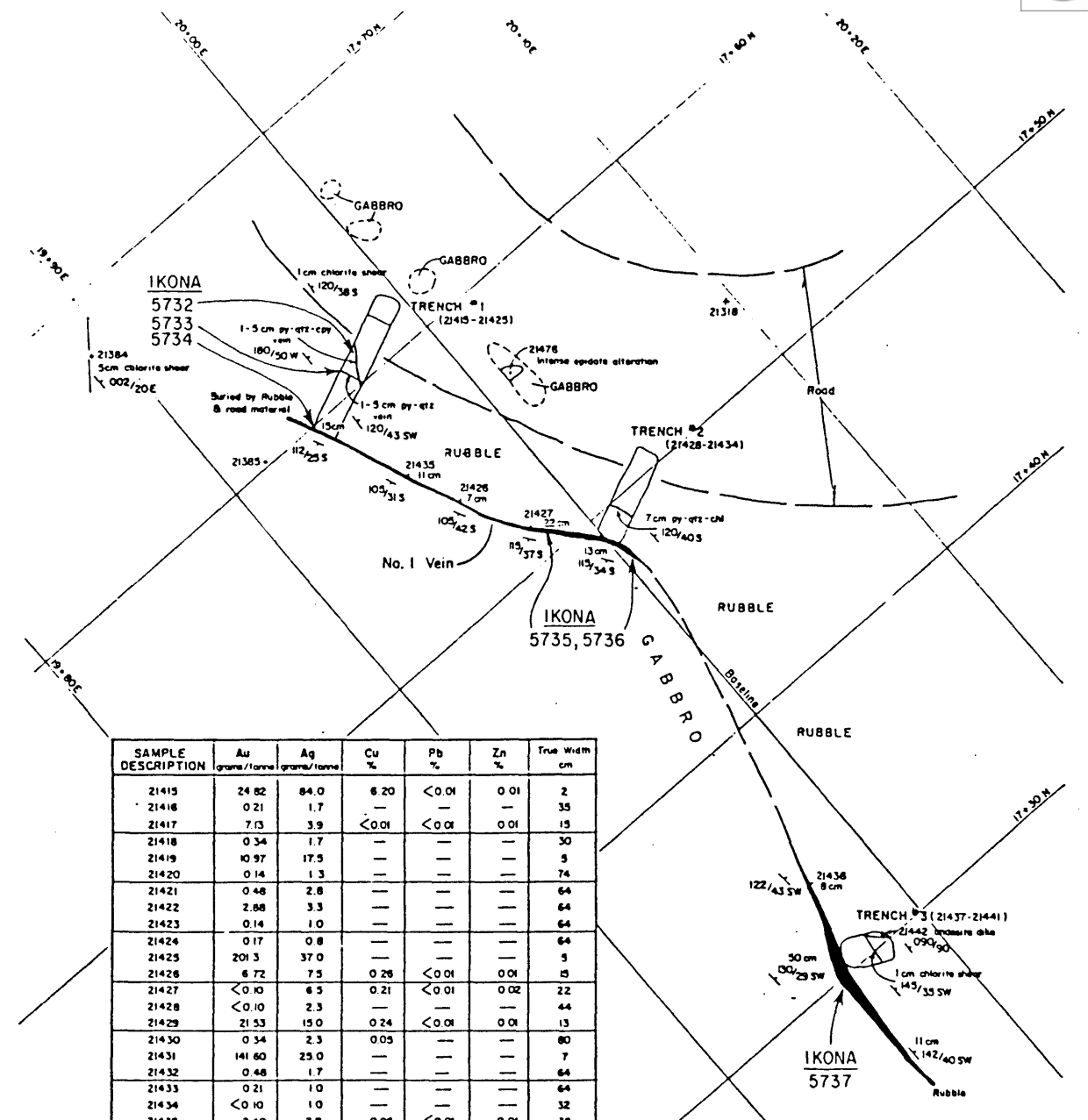
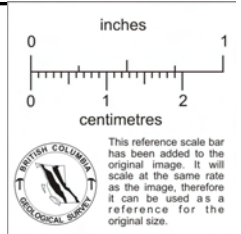
7.0 MINERALIZATION

The most significant gold mineralization found to date on the Head Bay property occurs in the Road Zone (Figure 10). This shallowly dipping system of rich pyrite-quartz-chlorite-chalcopyrite lenses is hosted by weakly sheared, coarse magnetite-rich gabbro. It strikes west-northwesterly along 38 metres of exposed strike length. The writer collected six samples for assay from this area with the following results.

Table I

<u>Number</u>	<u>Description</u>	<u>Au oz/ton</u>
5734	#1 or hanging wall vein north end 6" - 8" composite sample of entire vein	0.11
5733	#2 vein, 6' north of #1 vein 8" channel	4.424
5732	#2 vein, 1.5' north of #2 vein 6" channel	0.796
5735	#1 vein, 6" channel 30' south of 5734 limonite and quartz, minor sulphides	0.075
5736	#1 vein, 6" channel 10' south of 5735 massive sulphides	0.550
5737	#1 vein, 30' south of 5736 2' chip, quartz and massive sulphides	0.177

Sample locations noted on Figure 10.



SAMPLE DESCRIPTION	Au grams/tonne	Ag grams/tonne	Cu %	Pb %	Zn %	True Width cm
21415	24.82	84.0	6.20	<0.01	0.01	2
21416	0.21	1.7	—	—	—	35
21417	7.13	3.9	<0.01	<0.01	0.01	15
21418	0.34	1.7	—	—	—	30
21419	10.97	17.5	—	—	—	5
21420	0.14	1.3	—	—	—	74
21421	0.48	2.8	—	—	—	64
21422	2.88	3.3	—	—	—	64
21423	0.14	1.0	—	—	—	64
21424	0.17	0.8	—	—	—	64
21425	201.3	37.0	—	—	—	5
21426	6.72	7.5	0.28	<0.01	0.01	15
21427	<0.10	6.5	0.21	<0.01	0.02	22
21428	<0.10	2.3	—	—	—	44
21429	21.53	15.0	0.24	<0.01	0.01	13
21430	0.34	2.3	0.05	—	—	80
21431	141.60	25.0	—	—	—	7
21432	0.48	1.7	—	—	—	64
21433	0.21	1.0	—	—	—	64
21434	<0.10	1.0	—	—	—	32
21435	2.40	2.8	0.05	<0.01	0.01	38
21436	43.26	18.8	0.33	<0.01	0.01	11
21437	0.55	1.9	—	—	—	73
21438	<0.10	1.9	—	—	—	25
21439	4.46	4.7	0.09	<0.01	0.01	30
21440	<0.10	1.3	—	—	—	44
21441	<0.10	1.3	—	—	—	48
21442	0.14	1.0	—	—	—	28
21318	3700 ppb	7.4 ppm	—	—	—	GRAB
21384	N.D.	2.0 ppb	183 ppm	28 ppm	280 ppm	GRAB
21385	1040 ppb	1.0 ppm	153 ppm	24 ppm	31 ppm	GRAB
21478	N.D.	0.1 ppb	18 ppm	18 ppm	39 ppm	GRAB

SCALE - 1:250



GREAT KEPPEL RESOURCES LTD.

Head Bay Property

GEOLOGY

Road Zone

ALBERNI MINING DISTRICT
N.T.S. 92E/15E

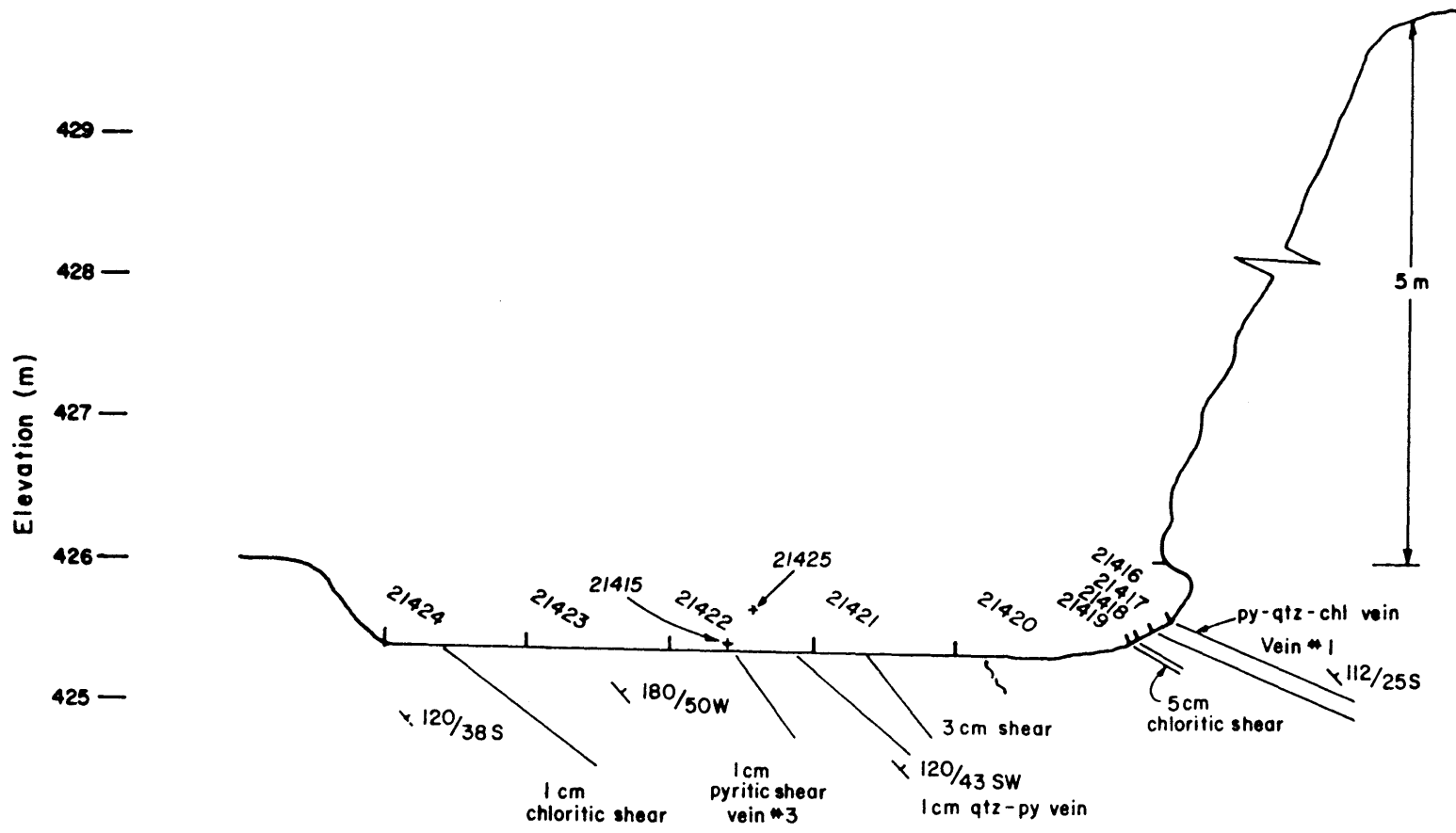
OWN. BY J.J.E.	PROJECT GKR87-01	DATE July, 1987	FIGURE 10
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Locations of these samples are shown on Figure 10. A more detailed sampling project was conducted by Mr. Awmack who presents the following discussion:

"A persistent pyrite-quartz vein (the No. 1 Vein) forms the hanging wall of the Road Zone. Seven channel samples taken from it show an average width of 10 centimetres grading 9.16 grams gold per tonne. Parallel sulphide lenses have been exposed by trenching from 30 to 200 centimetres beneath the No. 1 Vein. These lenses are highly discontinuous both vertically and horizontally, but contain up to 201.3 grams gold per tonne over a few centimetres. The best values are found in heavy sulphide lenses with black chloritic ribbons and shears.

Three trenches cut the Road Zone. Trench #1 averaged 1.41 grams gold per tonne across a true width of 2.87 metres, including a hanging wall section grading 3.44 grams gold per tonne across 0.50 metres (Figure 11). Not included in these averages are two grab samples grading 201.3 and 24.82 grams gold per tonne from sulphide lenses which pinch out downwards in the trench walls. Trench #2 averaged 12.98 grams gold per tonne across 1.00 metres (Figure 12) and Trench #3 averaged 4.46 grams gold per tonne across a true width of 0.50 metres (Figure 13). Overall, this yields an average grade for the zone of 4.41 grams gold per tonne across 1.46 metres.

The gabbro between sulphide lenses is auriferous, with an arithmetic average of 0.20 grams gold per tonne for the trench samples. Trenching has not yet defined the footwall of the Road Zone, exposing sporadic sulphide lenses and weakly auriferous gabbro throughout their lengths. The No. 1 Vein and the sulphide lenses are recessive weathering and the Road zone as a whole is exposed on the south side of a recessive gut approximately sixteen metres wide and trending west-northwesterly, indicating that the zone may be considerably wider than presently recognized.



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Head Bay Property

ROAD ZONE

Trench 1

Section Looking Towards 116°

ALBERNI MINING DISTRICT

NTS 92E/15E

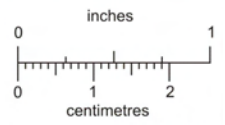
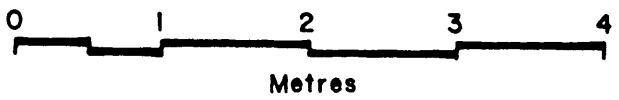
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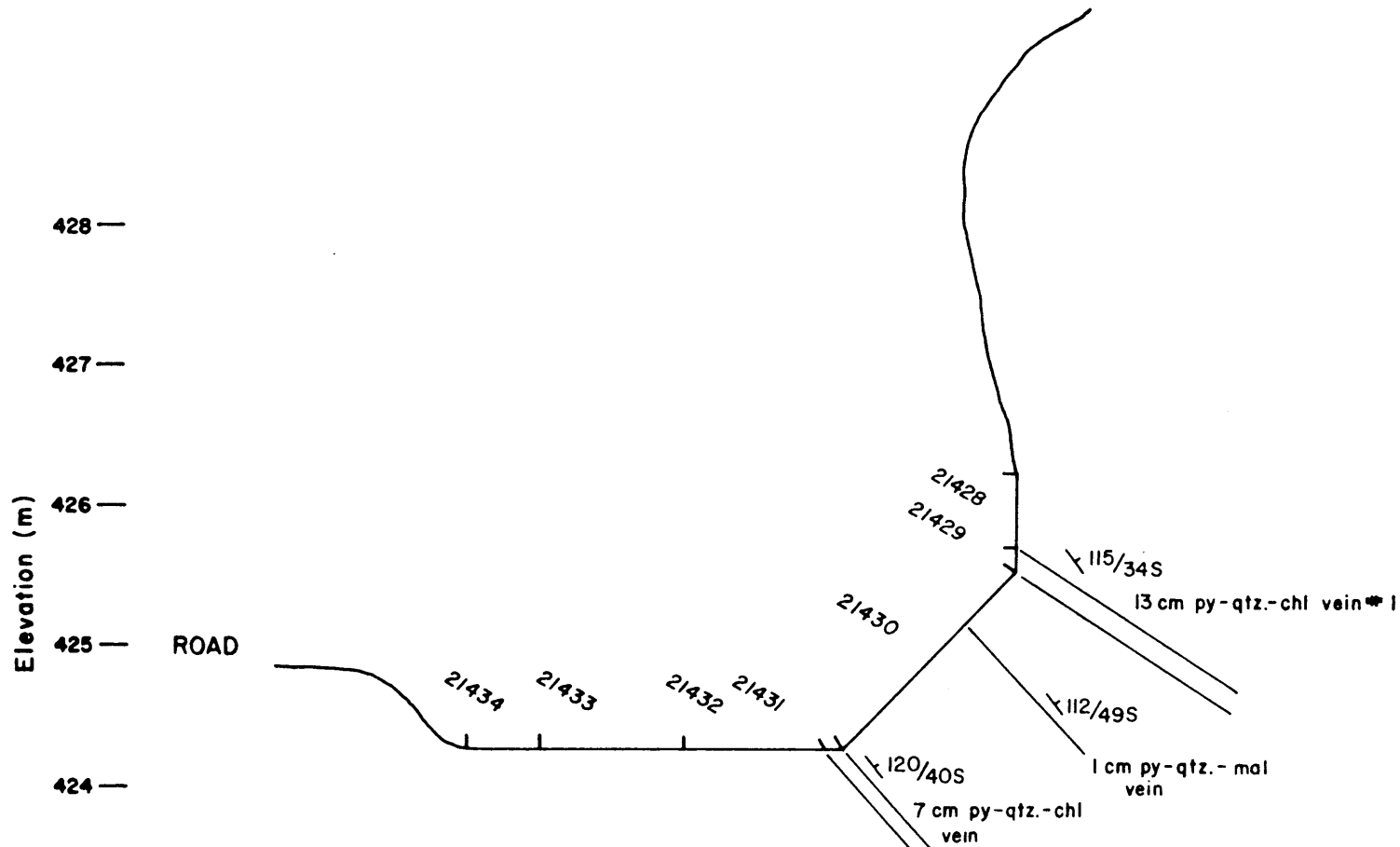
FIGURE 11

SCALE - 1:50

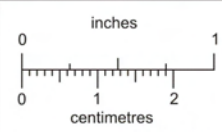


BRITISH COLUMBIA
GEOLOGICAL SURVEY

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SCALE - 1:50



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Head Bay Property

**ROAD ZONE
Trench 2**

Section Looking Towards 114°

ALBERNI MINING DISTRICT

NTS 92E/15E

DWN BY JJE.	PROJECT GKR87-01	DATE July, 1987	FIGURE 12
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The gold mineralization of the Road zone is accompanied by lesser quantities of silver, with values up to 84 grams silver per tonne. Copper assays range from nil to 6.2% Cu, but are economically insignificant. No lead, platinum or palladium was revealed by assaying, and zinc assays are extremely low."

The magnetite skarns of the Glengarry-Stormont deposit and those extending onto VIG 3 contain only traces of precious metals. The best sample has only 40 ppb Au, 4.0 ppm Ag with 0.3% Cu. No effort was made to estimate their value as a source of iron ore.

8.0 DISCUSSION AND CONCLUSIONS

The Road Zone hosts significant gold mineralization, with very rich lenses and veins separated by weakly auriferous gabbro. Due to its recessive nature, the zone remains open along strike and in width. The recessive notch in which it is situated is 16 metres wide and may be a topographic expression of the zone's extent. If so, potential exists for a true width of ten metres for the Road Zone.

Rock geochemical Samples 21328 (640 ppb Au) and 21413 (995 ppb Au) were taken from chlorite-epidote-quartz altered diorite similar to some found near the Road Zone with elevated gold values (Sample 21385, with 1040 ppb Au, was taken four metres above the No. 1 Vein of the Road Zone). The anomalous gold values and alteration in each case may be indications of proximity to significant gold mineralization.

To date, no work has been directed toward following up on soil and stream sediment geochemical anomalies. The sources for each of the anomalies outlined in Section 6.1 have not been located. Given the relatively subtle geochemical signature of the Road Zone, these deserve further investigation.

The geological setting of the Head Bay property is very similar to that of the Zeballos camp some 35 kilometres to the northwest from which 8.9 tonnes (288,000 oz) of gold were produced. Similar potential exists for narrow, rich gold-bearing sulphide-quartz veins or for wider, lower grade mineralized shear zones. The Road zone presents an attractive target under either scenario, and strong geochemical anomalies indicate that other mineralized zones remain to be discovered.

9.0 RECOMMENDATIONS

A localized trenching and drill program is recommended for the Road showing area. This would entail several dozer trenches across the projected 10 to 16 metre wide shear zone hosting the Road Zone mineralization as well as five 200 foot drill holes to test the zone at depth. Cost of this is estimated to be \$55,000.

The geochemical anomalies located in the northeast portion of the VIG 3 claim should be investigated further by closer spaced geochemical sampling, both silt and soil and by prospecting and mapping. Cost of this is estimated to be \$10,000 for a total recommended program of \$65,000.

A more detailed cost breakdown of these expenditures is presented below.

Recommended Program - Stage I

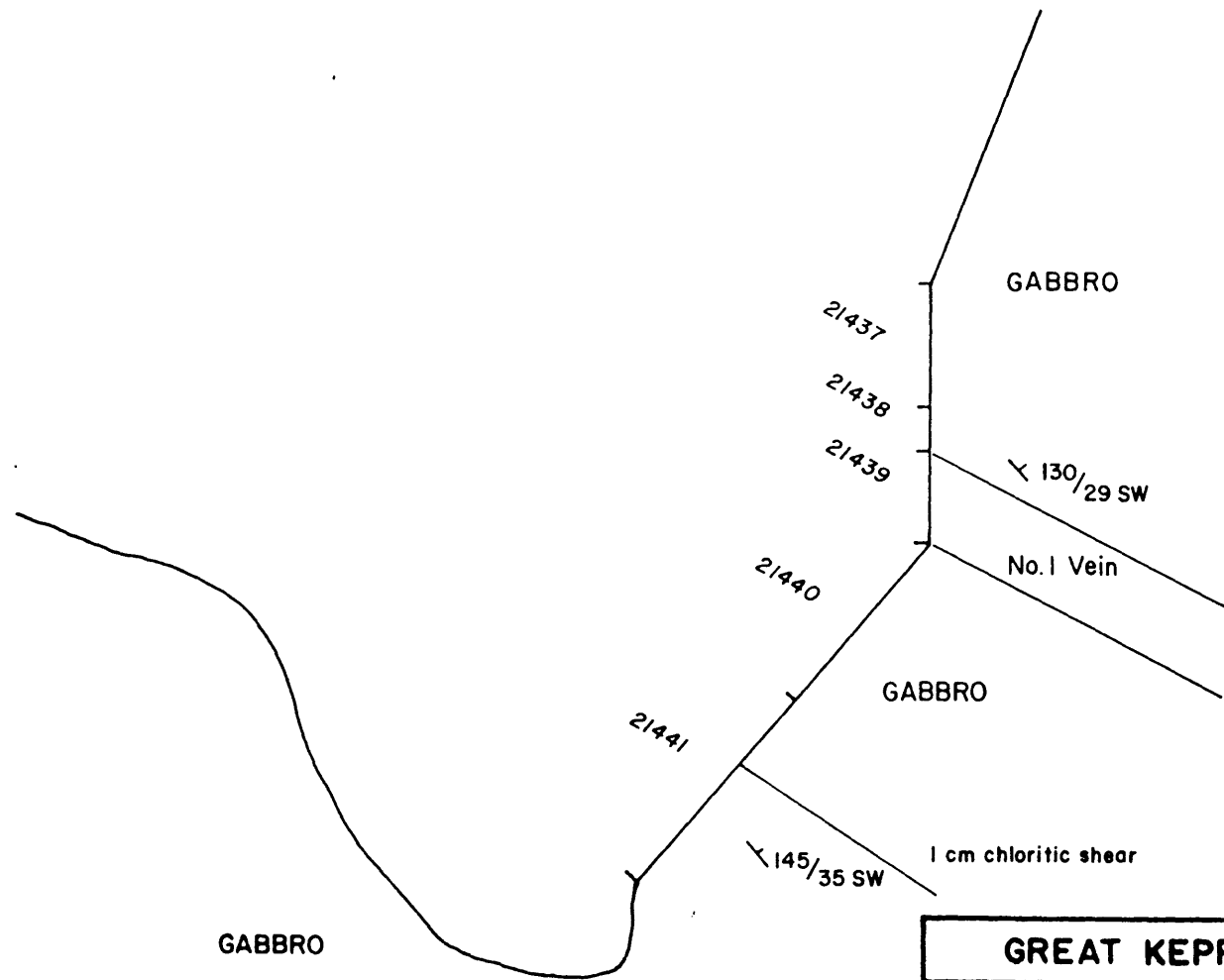
Trenching

Machine mobilization and demobilization	\$ 1,000
48 machine hours @ \$85/hour all inclusive	4,080

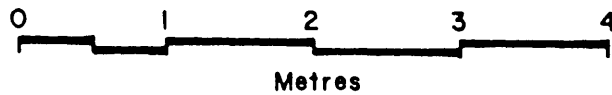
Drilling

Mobilization and demobilization	1,000
1,000 feet @ \$25/foot	25,000

Elevation (m)
425 —
424 —
423 —
422 —
421 —
420 —
419 —
418 —



SCALE - 1:50



GREAT KEPPEL RESOURCES LTD.

Head Bay Property

ROAD ZONE
Trench 3

Section Looking Towards 160°

ALBERNI MINING DISTRICT

NTS 92E/15E

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PROJECT

GKR87-01

DATE

July, 1987

FIGURE 13



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