# 680252

# REPORT ON THE BRETT PROPERTY

FOR

,

# BEATON-VICORE GROUP

ΒY

LIVGARD CONSULTANTS Vancouver, B.C. January 9, 1992



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LIVGARD CONSULTANTS LTD. 230 - 470 Granville St., Vancouver, B.C. V6C 1V5 Ph. 669-2426 .

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#### INTRODUCTION

- 1 -

The writer was asked by Al Beaton, Mining Engineer of the Beaton-Vicore Group, to examine information from the Brett Property located west of Vernon, B.C. and report on the property. The writer received the information as listed in the references from Geoquest Consulting Ltd., Werner Gruenwald. This information and numerous conversations with Werner Gruenwald, conversations with Pat Mooney, Northspan Explorations (Driller of Hole RC 88-11), Dr. Bacon of Bacon Donaldson & Associates Ltd. Metallurgists, Dr. Al Sinclair, Geology Department U.B.C. and Dr. Neil Church, B.C.D.M., are the basis of this report.

The writer is very grateful for the able, knowledgeable, extensive and willing assistance rendered by geologists of Geoquest Consulting Ltd.

Responsibility for the opinions expressed and reserves calculated in this report are the writer's own.



#### SUMMARY

(from Geoquest Consultants, January 3, 1989)

The Brett property is located 25 kilometres west of the City of Vernon in southcentral British Columbia. The property consists of four contiguous claims totalling 51 units or 1,275 hectares (3,150 acres). A major logging road and property road system provide easy access to the claims.

The district first received attention at the turn of the century with the discovery of placer gold in Whiteman and Bouleau Creeks. In 1939, two small gold bearing quartz veins were discovered in the claim area.

Exploration since 1983 has resulted in the discovery of several precious metal bearing zones. Work to date includes extensive geochemical surveys, an 11.5 kilometre road system, trenching and 9,429 metres (30,935 ft.) of drilling.

The property is underlain by Mesozoic granitic rocks (Okanagan Batholith) which are overlain in part by a thick, undeformed assemblage of basalt, andesite and tuffaceous rocks of probable Eocene (Tertiary) age. Intruding these rocks in the extreme southern portion of the property is a small granitic intrusion of Tertiary age. Numerous dykes thought to be related to this intrusion cut the Tertiary volcanic rocks. A major north-northwesterly trending fault zone is inferred to project through the western portion of the property. The trend of this fault parallels the recently discovered mineralized structures.

Precious metal mineralization on the property is found as "mesothermal type" quartz veins in granitic rocks of the Okanagan Batholith, and "epithermal type" structurally controlled shear, vein and silicified zones cutting the Tertiary volcanic sequence. The latter have been the focus of the most recent exploration. To date, several such zones have been identified and are referred to as the Main Shear, New Discovery, East and Gossan zones. Each zone was examined during the 1988 exploration season with the primary emphasis on the Main Shear zone.



The Main Shear zone, located in the southwestern portion of the Brett 1 claim, is a north-northwesterly trending, steeply west-dipping shear that cuts the Tertiary volcanic rocks. This zone is represented by intense clay alteration (gouge) containing silicified rock and sporadic quartz vein fragments. A feldspar porphyry dyke is often found to intrude this zone. Based on exploration work to date, the Main Shear zone is interpreted to have a strike length in the order of 1.5 kilometres. The zone varies from less than one metre, to 3 metres or more in width and is open to depth.

Gold and silver mineralization is found within the shear, but more commonly in the host volcanic rocks. When found in the shear, precious metal mineralization is generally associated with fragmented, quartz-rich sections. In many instances a "halo" of mineralization, often accompanied by distinct alteration may extend 20 metres and more laterally into the host rocks. A strong footwall association of the mineralization is often evident. Favourable host rocks include andesite and tuffs, the latter consisting of permeable horizons up to 40 metres in thickness.

Precious metal mineralogy is relatively simple, consisting of native gold, electrum and argentite. Gold ranges in size from coarse, visible particles, to very fine disseminations. Pyrite is the only notable sulphide present, generally ranging from 1% to 3%.

Exploration in 1988 was concentrated along a 200 metre portion of the Main Shear zone. Drilling revealed numerous gold intercepts covering a 140 metre vertical range. One of the most significant intersections occurred in RC 88-11 where 71.65 metres averaged 2.03 oz/t Au and contained abundant coarse, visible gold. On the basis of the geological setting, style of mineralization and dimensions, the Main Shear zone is considered to have excellent potential for the development of sizable reserves.

Recent drilling by Brican Resources Inc., near the claim boundary, intersected a large shear at a considerable depth. This hole, located over 600 metres



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northerly of the current exploration area greatly expands the potential of the Main Shear zone.

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The New Discovery (1987) zone is situated along the eastern flank of Brett Creek, approximately 400 metres east of the Main Shear zone. Lithologies in this area are similar to those in the Main Shear zone, however, no such structure is apparent. The gold found in Brett Creek is thought to emanate from the New Discovery zone. Drilling revealed that the majority of the intersections occur below the level of the surface exposure and Brett Creek. One of the more significant intercepts returned 1.65 metres grading .107 oz/ton gold and 1.64 oz/ton silver.

The East zone was discovered in 1988 approximately 200 metres east of the New Discovery zone. Drilling tested a gently west-dipping zone of altered and mineralized volcanics, which returned generally low values at depth. As with the New Discovery zone, drilling below the target depth revealed several gold/silver intersections. The largest of these intervals was 6.15 metres averaging .052 oz/ton gold.

The elevational levels at which the intersections occur in both the New Discovery and East zones, along with the absence of any identifiable controlling structure(s), suggest the possibility of some stratigraphic control of mineralization. The underlying Tertiary intrusive may also be a possible factor in this area of mineralization.

The Gossan zone is a large northerly trending, strongly silicified zone up to 50 metres wide and at least 500 metres long, situated near the contact of the Mesozoic granitic and Tertiary volcanic rocks. This westerly dipping zone has been drill tested over a vertical range of 220 metres and is still considered to be open at depth and along strike. Although only sporadic, weakly anomalous gold and silver values have been obtained to date, geological and geochemical evidence suggests that this zone may be situated at the upper levels of an epithermal system.

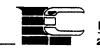


A cyanidation study of drill core and chips from several areas of the property, revealed that for the most part, gold is readily extractable and likely found in its free state. Overall, the samples used in this study displayed an average increase in grade of 18%.

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#### CONCLUSIONS

- 1) The writer has no knowledge regarding property, ownership or any details of agreements made regarding the property by the Beaton-Vicore Group.
- 2) The Beaton-Vicore Group of mining contractors intend to develop the property and ship to the mill at Robert Mines in Greenwood.
- 3) The writer believes that the property will sustain such a program for some time and return a profit on pre-production expenditures.
- 4) The calculation of reserves in vein type deposits of gold (and silver) is at the best of times difficult and hazardous to engineers.
- 5) Reserve calculations are particularly difficult at the Brett property for four reasons:
  - a) There has been no underground exploration.
  - b) There is a discrepancy between diamond drill hole and rotary hole results. Not considering Rotary Hole 88-11, there is better grade shown in rotary holes than in diamond drill holes. Corona Corporation has assumed that diamond drilling is more reliable than rotary drilling. The writer believes this is true only in specific cases.
  - c) Cyaniding tests on 57 samples using 20 assay tonnes has given highly variable, but on the average 20% better grade, than the fire assaying using one assay tonne. To assume as Corona Corp. does



LIVGARD CONSULTANTS LTD. 230 - 470 Granville St., Vancouver, B.C. V6C 1V5 Ph. 669-2426 that "this can be explained in part by larger samples including more vein material, hence more gold" does not answer the question. The conclusion must be that the sample used for cyaniding being much larger is more reliable and that grades therefore are on the average 20% higher than that shown by the fire assaying.

- d) Rotary Hole 88-11 intersected two very high grade zones and there has undoubtedly been "auto-salting", that is high grade material from these zones has caved and made its way down the hole gradually and relatively evenly. The writer has therefore used the values from the two high grade intersections only and ignored the values in the rest of the hole. This is not entirely correct but carefully conservative. The chip geology and assays show clearly that whenever the hole intersects geology which by experience contains gold the assay values go up.
- 6) The width of the high grade intersections have been reduced from 4.6 m to 1.5 m and 1.0 m to reflect as closely as possible a true shear width.
- 7) The value in the high grade intersections has not been cut as the writer believes this represents more than just two small high grade pockets. The intersections are 15 metres apart both are on the same curving shear (as shown by diamond drilling) and they show very similar geology, grade and wall rock. It is probable that this is a high grade zone of some extent.
- 8) The soil survey suggests that another zone may intersect the shear at this point. This is weak evidence but a possible explanation.
- 9) The writer believes that there is frequently, as is in this case, an over reliance on diamond drilling. In vein type gold and silver deposits diamond drilling frequently fails to do justice to the deposit. The companies exploring such deposits should move to underground exploration earlier in the exploration sequence.



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- 10) The writer concludes that there is a deposit here which contains 11,972 tonnes which grade 1.141 ounces of gold per tonne.
- 11) The writer concludes that the recommended exploration-development program is fully justified.



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#### RECOMMENDATIONS

### First Stage

- 1) The required permitting must be acquired.
- 2) In order to examine the nature of the shear (its width and competence or lack thereof) and the nature and extent of the mineralization, it is recommended that an excavator be brought in and some trenching carried out. The trenching should commence about at Section 8+38N at elevation 12+80 m. The objective of this trenching is to expose a probable intersection of the upper footwall dyke and the shear. This intersection has been cut by diamond drill and rotary holes 50 to 80 metres to the northwest and given encouraging gold values. If the results of this trenching are encouraging, this should be the site of adit number two.
- 3) Moving down the hill to Trench #21 (2.05 oz. Au/2.4 m) on Section 7+70N and at EL 1267 m, trenching some distance northwest and southeast to Trench #22 (0.103 oz. Au/5.0 m) along the shear should be carried out. A total distance of about 40-50 metres of trench is recommended. The objective of this trenching is primarily to outline the mineralization in the shear and to ascertain the nature of the shear in order to guide the underground development.
- 3) The #1 Portal site must be prepared.
- 4) The road from Whitman Creek to the recommended development work needs to be improved primarily by lowering the grade. About 900 to 950 metres of road should be built.
- 5) A portal should be collared at elevation 1,225 m at Section 6+50N and a drift should be driven on the shear to the high grade intersections at Section 8+50N and some distance past this point. About 175 metres of drift (575 feet) should be driven.



Depending on the mineralization and the nature of the shear the drift should be driven (a) in the shear; (b) in the footwall dyke with the shear exposed on the left wall; or (c) in the footwall rock with occasional short cross-cuts through the shear.

- 6) A raise must be driven on the shear from near the end of the driff to surface (at 55 degrees). This is a distance of about 50 metres (165 feet).
- 7) The trenches, the drift and the raise should be mapped geologically and sampled every day.
- 8) Any good grade (over .25 oz?) material encountered in the developed should be stockpiled until near the end of the development when it should be trucked to a mill and concentrated (Robert Mines, Greenwood) in order to determine gold recovery (and incidentally to produce some gold).
- 9) A camp should be established on the site to accommodate miners, supervision, mechanic, geologist and cook a total of 10 personnel.
- 10) When this recommended work has been completed, a production feasibility study should be done: including ore reserves, mining costs, milling costs and recoveries.

It should be kept in mind that a maximum of 10,000 tonnes can be produced before an environmental permit is required.

### Second Stage

If the feasibility is favourable production mining should start.



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- If the trenching at Section 8+38N exposes good mineralization, an adit should be started here and extended 88 m (290 feet) to develop reserve block #H.
- 2) If trenching between Trenches 21 and 22 is favourable, a second raise should be driven from adit level #1 to the surface.
- 3) If mineralization in the drift on adit level #1 warrants, a decline from 1,225 m elevation on the contour west of the adit should be started. About 132 m (433 feet) at -10 degrees would give access to below reserve Block G.



LIVGARD CONSULTANTS LTD. 230-470 Granville St., Vancouver, B.C. V6C 1V5 Ph. 669-2426 ESTIMATED COSTS OF RECOMMENDATIONS HAVE BEEN DISCUSSED WITH MR. AL BEATON, MINING ENGINEERING AND WILL BE OUTLINED BY HIM



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## **RESERVE CALCULATIONS**

# A) INTERSECTIONS AND GRADE

# Block A

Intersection	Grade <u>Ounces Au</u>	Width (m)	True Width (m)	Average Grade/Width (m)
D.D.H. 87-29 RC 88-32	.735 0.311	5.25 4.60	3.6 3.2	$\frac{0.535}{3.4}$
Block B		•		
RC 88-11	8.32 2.85	3.05 1.50	1.5	$\frac{3.269}{1.5}$
D.D.H. 88-57	0.03	2.65	1.0	
Block C				
RC 88-17 D.D.H. 88-51	0.400 0.540	3.05 2.20	3.05 2.20	0.499 2.63
<u>Block D - Surfa</u>	ce			
Trench 21	2.052	2.4		<u>2.052</u> 2.4
Block G				
RC 88-11 D.D.H. 87-47	7.460 0.882	4.6 1.0	1.0 1.0	$\frac{2.781}{1.5}$
Block H				
RC 88-7 D.D.H. 86-9 D.D.H. 86-15	.503 .290 .284	4.60 1.53 1.84	4.60 1.50 1.50	$\frac{0.411}{2.35}$



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#### B) TONNAGE AND GRADE

Block A Specific Tonnage and Length Height Thickness (Gravity) Grade (m) (m) (m) 13 3.4 2.6 3,792 tonnes 33 @ 0.535 oz. Au/+ Block B 1.5 2.6 796 tonnes 17 12 (a 3.269 oz. Au/+ Block C 2.6 1,627 tonnes 16 2.63 14 @ 0.499 oz. Au/+ Block D (Surface) 406 tonnes 2.40 2.6 13 5 @ 2.052 oz. Au /+ Block G 2.6 1,227 tonnes 17 18.5 1.5 @ 2.781 oz. Au/+ Block H 2.6 4,124 tonnes 45 x 15 x 2.35 @ 0.411 oz. Au/+ Total reserves between Section 7+70N to 9+25N: 13,197 tons 0.951 07/ton 11,972 tonnes grading 0.951 oz. Au/tonne 0.863 Probable true grade increase (cyanide test) to 0.951 + (20%) 0.19 cy = 1.141 oz. Au/tonne CONSULTANTS LTD. LIVGARD

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### C) CALCULATION PARAMETERS

Reserve calculations by Livgard Consultants used the following parameters:

- Reserve blocks had to average 0.4 ounces per tonne or better over a true width of 1.5 metres or greater.
- 2) Block dimensions were measured using longitudinal and cross-sections.
- 3) Blocks were extended 10 metres along strike and up and down-dip or halfway to next waste intersection (if smaller) - most extensions were 6 to 8 feet.
- 4) One surface trench was used Block D.
- 5) Both diamond drill and rotary intersections were used.
- 6) The high grade Hole RC 88-11 was used as to two high grade intersections. The rest of the intersections were assumed to be salted by the high grade. The high grades were not cut.
- 7) Waste grade intersections within a block were included in the averages.



#### ROTARY HOLE RC 88-11

Reverse circulation rotary hole #88-11 was drilled May 21st to 24th, 1988 by Northspan Explorations, Kelowna. The drill chips were sampled and logged by W. Gruenwald, Geologist, with Geoquest Consulting Ltd., Vernon. The chips were assayed by Kamloops Research, Kamloops. The owner and operator, Huntington Resources Inc., decided to drill the hole in order to further examine an area where diamond drilling had previously given encouraging results.

The hole cut 44.2 metres grading 2.95 oz. Au/tonne from 39.6 m to 83.8 m and 27.45 m grading 0.548 oz. Au/tonne from 83.8 m to 111.25 m.

The writer has carefully examined the geological description of the hole (log) and has compared this to the corresponding assay values. He has also had discussions with the geologist on site, Werner Gruenwald and the Driller, Patric Mooney, regarding the hole. The writer has reached the following conclusions:

- The first values in the hole were encountered from 41.15 to 42.65 metres. This section ran 2.85 ounces Au per tonne. It was logged as highly bleached and silicified wall rock. It is concluded that the gold value here is reliable.
- 2) From 42.65 m to 44.95 metres the hole encountered very highly bleached and silicified andesite and up to 80% quartz fragments with visible gold and argentite in the quartz. Fragments of gold up to several millimetres across were noted. Water was encountered and the ground was caving. This is the main shear zone.

From 44.95 to 45.7 metres abundant black siliceous material was encountered. Experience from surface suggests that material like this will give high values in gold (W. Gruenwald).

This interval of 3.05 m assayed 8.32 ounces Au per tonne (5.66 oz. over 1.55 m and 11.06 oz. over 1.5 m).



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The coarse free gold and caving may have "salted" the lower quarter of this section (0.75 m) although this kind of black siliceous material found here runs high in surface samples.

It seems doubtful that the caving area will "salt" itself, but it probably "salted" samples further down the hole.

- 3) The wall rock immediately following the main shear (above) is bleached, silicified and shows micro-veining. The section assayed 3.65 oz. per tonne. There has probably been "salting" and although the chip log describes geology which normally gives gold values, the writer will assume nil values for the section.
- 4) The next 7.60 metres cut more or less altered andesite and minor quartz. The values averaged 1.78 oz. Au per ton. This will be assumed to be due to "salting".
- 5) From 54.85 metres to 57.90 metres the chip log describes increasing andesite bleaching, silicification, micro-veining and quartz. This is interpreted as being wall rock near the shear. The section assayed 2.429 oz. Au per tonne. If the 100% "salting" of values assumed for the above is applied here the values from the section itself would be 0.691 oz. Au per tonne, but nil values will be assumed.
- 6) From 57.90 m to 62.5 m the hole cut the main shear again. The shear is curving. This is consistent with information from previous diamond drilling. The chip log describes strong bleaching, silicification, and 5-20% quartz fragments with visible gold. The section of 4.60 m gave an average value of 7.46 oz. Au per tonne. If any contamination of this section took place by material from above it would tend to dilute the values rather than "salt" them.



LIVGARD CONSULTANTS LTD. 230 - 470 Granville St., Vancouver, B.O. V6C 1V5 Ph. 669-2426 The high degree of similarity both in the geology and the values of the two shear zone intersections substantially strengthens the reliability of the values and also strengthens the possibility of a connection between them of similar material.

- 7) The wall rock below the shear cut altered andesite and pervasive silicification and variable quartz content from 62.5 m to 65.55 m. Two pieces of visible gold were noted. The section averaged 3.595 oz. Au per tonne. Although the geology suggests that some gold values may be present in the wall rock, none will be assumed due to undoubted "salting".
- 8) From 65.55 m to 71.65 m the hole cut altered andesite with intense bleaching and silicification. Quartz content is 5-10%. The average value is 2.962 oz. Au per tonne. Nil values will be assumed for the section.
- 9) From 71.65 m to 73.15 m the hole cut first intensely bleached and silicified andesite and then cut into feldspar porphyry dyke. The assay value was 3.02 oz. Au per tonne. The values drop off quickly following this section and it appears that some shearing and mineralization may have taken place next to and partly in the dyke. Such shearing and mineralization has been noted on the surface (W. Gruenwald). Some value is probably present but nil will be assumed.
- 10) The remainder of the unmineralized dyke gave an average grade of 0.543 ounces per tonne. This may perhaps be taken as a reliable(?) value for the "salting" taking place at this depth.
- 11) The Tuff Horizon and the footwall side of the dyke gave 27.45 m grading 0.543 ounces. If the dyke value of 0.543 ounces, which is considered due to salting, is subtracted from each sample in the Tuff Horizon, the remaining values average 0.151 ounces Au per tonne over 27.45 metres.



### CYANIDE GESTS

A total of 57 samples from intersection on the Main zone were cyanide leach tested.

20 "assay tons" were taken from each sample and given a 22 hour weak cyanide leach test.

The results show a leach recovery of 88.7% of contained gold.

More importantly the leaching shows that the grade may be 20% higher than the fire assays indicate.

The results are highly variable from +200% to -50%.

This large discrepancy is of course serious. Conversations with Dr. Bacon of Bacon, Donaldson Metallurgists suggest that cyanidation using a larger sample should be more reliable.

Respectfully submitted, Livgard Consultants Ltd. Egil Livgard, P.Eng Vancouver, B.C.

January 9, 1992



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# APPENDIX



LIVGARD CONSULTANTS LTD. 230 - 470 Granville St., Vancouver, B.C. V6C 1V5 Ph. 669-2426

·		GEO	QUEST CONSUL	TING LTD.	DRTL	L HOLE RECORD			•
	PROPE			HOLE NO: RC		PAGE NO.	1 OF 7		
<u>DIP AND AZIMU DEPTH ANGL</u>	TH TESTS		ANGLE OF R CLAIM: Br SECTION: BEARING:	8+05N	TOTAL DEPTH RECOVERY(%) ELEV. COLLAN LATITUDE: DEPARTURE: )	: 100 R: 1276.0m 8+04.5N	DATE F Logged Analys	INISHED BY: V IS BY:	May 21, 1988 D: May 24, 1988 W. Gruenwald Kamloops Researc AT: Property
DEPTH (Metres)	CORE LOST		DESCRIPTIO	N	SAMPLE NO .	SAMPLE Interval	Au (02/t)	Ag (ppm)	
0.00- 6.10	OVERBUI	DEN							
6.10- 10.65	- bleac		canic is int	E (HANGING WALL? ense.	?) 51661 51662 51663	6.10- 7.60 7.60- 9.15 9.15- 10.65	.008 .008 .003	· · •	
10.65- 13.70	- chara due t - sever	o pyrite ox al pieces o fragments a	idation). f quartz up	ontent (red-brow to 2-3cm. very bleached	51664 vn 51665	10.65- 12.20 12.20- 13.70	.007 .005		
13.70- 18.30	ANDESIT - low t - suspe to Ma - minor - last	E/TUFF o moderate ct this is in Shear Zo quartz. (1	clay. immediately he. -2%).	H-GRZEN PYRITIC adjacent (lootwa bleached andesi		13.70- 15.25 15.25- 16.75 16.75- 18.30	.007 *.066 *.017	0.8 1.3 1.9	1.50m @ .066 oz/
18.30- 24.40	AND ALT - fine - rock	ERED ANDESI grained pyr	TE ite (2-3%, l ification an	VARIABLY 3LEACE ocally 5%). d fine veinlets	IED 51669 51670 51671 51672	18.30-19.90 19.80-21.35 21.35-22.85 22.85-24.40	.002 .002 .005 .011		

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DRILL HOLE RECORD

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HOLE NO: RC 88-11

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DEPTH (METRES)	CORE LOST	DESCRIPTION	SAMPLE NO.	SAMPLE Interval	Au (oz/t)	Ag (ppm)	
24.40- 38.10		GREEN-GREY, WEAKLY ALTERED ANDESITE/AMYGDALOIDAL ANDESITE	51673 51674	<b>24.40</b> - 25.90 <b>25.90</b> - 27.45	.002 *.011	0.4	
		<ul> <li>clay content minor (probably further into footwall).</li> </ul>	51675 51676	27.45- 28.95 28.95- 30.50	.013	0.8	
		- minor basalt noted as purplish grey chips,	51677	30.50- 32.00	*-022	0.7	
		occasional jasper. - pyrite content variable 1-3%.	51678 51679	32-00- 33.55 33.55- 35.05	.046 *.042	1.5	6.05m @ .039 oz/t
		- some fragments of bleached andesite.	51680	35.05- 36.55	.045		
		<ul> <li>quartz content appears low ~1-2%.</li> <li>0 30-35m, intersected area of DDH 87-29 that assayed .737 oz/ton Au across 5.25m.</li> <li>as in the DDH 87-29 intersection, the rock does not appear unusual.</li> </ul>	51681	36.55- 38.10	*.008	1.0	
38.10-44.95	~~~~	HIGHLY BLEACHED AND SILICIFIED FOOTWALL ANDESITE	51602	38.10- 39.60	.027		
·		SHEAR-VEIN ZONE ( <u>VISIBLE GOLD</u> ) - this may represent area along edge of or very	51683 51684	39.60- 41.15 41.15- 42.65	*.130 *7.85		Ag - 0.72 oz/t
		near MAIN SHEAR ZONE.	51685	42.65- 44.20A	*5.66	>20.0	Ag = 2.99  oz/t
		<ul> <li>clay content increasing to moderate to locally high.</li> </ul>	51686 51687	42.65- 44.20B		N20 0	Ag - $3.00 \text{ oz/t}$
		- 38.10 to 42.65m consists of pale green-grey, bleached and increasingly silicified andesite with minor guartz ((5%) and generally low clay content.	51007			720.0	AG - 3.00 02/C
and the second		- 42.65 to 44.95 is comprised of a zone of extremely high quartz content (locally 80%).					
		- quartz ranges from milky white to dark grey. - clay content is moderate to high.					
		<ul> <li>pyrite content is high in both clay gouge and quartz/silicified fragments (5%).</li> </ul>					
		- bright green mineral(?) that is typically					
		associated with shear zones on the Brett property is locally evident.					
		to invally cylocule					

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DRILL HOLE RECORD

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HOLE NO: RC 88-11

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DEPTII (METRES)	CORE LOST	DESCRIPTION	SAMPLE NO.	Sample Interval	Au (oz/t)	Ag (ppm)	
38.10- 44.95 cont'à)		<ul> <li>hole is caving badly and water is coming in at a considerable rate (10 gallons/minute).</li> <li>caved material has produced larger reject samples thus the (A) and (B)</li> <li><u>COARSE VISIBLE GOLD ± ARGENTITE NOTED IN QUARTZ</u> in intervals 41.15m to 42.65m and 42.65 to 44.20m</li> <li>fragments of gold up to several mm across.</li> </ul>					
44.95- 55.50		PREDOMINANTLY ANDESITIC VOLCANICS - VARIABLY ALTERED AND SILICIFIED - <u>VISIBLE GOLD</u> - 44.95 to 45.70m - abundant black siliceous materia possibly quartz (?) - suspect argentite in quartz.	al,				
		- 45.70 to 47.25m - 70% mafic porphyritic andesite, 25% basalt, 5% quartz.	51689	45.70- 47.25	*3.65	>20.0	Ag - 1.20 oz/t
		- 47.25 to 48.75m - andesite as above, 103+ basalt, 5-103 guartz and silicified fragments, minor clay. - 3 pieces of coarse gold noted.	51689	47.25- 48.75	*1.87	>20.0	Ag - 1.08 oz/t
		- 48.75 to 50.30m - paler green andesite, <5% basalt, 10-15% bleached and silicified fragments and 10% milky white and grey guartz (argentiferous?) - minor clay, pyrite 3%*. - limonitic volcanic fragments becoming notable ~2%.	51690	48.75- 50.30	*2.47	>20.0	Ag - 1.53 oz/t
		- 50.30 to 51.80m - pale green, grey and brown finely amygdaloidal and silicified andesite, quartz 5% minor clay.	51691	50.30- 51.80	*1.35	>20.0	Ag - 0.95 oz/t

		GEOQUEST CO	NSULTING LTD.	DRILL	HOLE RECORD				
	PROPRRTY :	BRETT	HOLE NO: RC 88	-11	PAGE NO. 4	OF 7			
DEPTH (Metres)	CORE LOST	DESCRI	PTION	SAMPLE NO.	SAMPLE Interval	Au (oz/t)	Ag (ppm)	, ,	
44.95 - 55.50	- 51.80 to	53.35m - as abo quartz	ve, some <u>argentite</u> in .	51692	51.80- 53.35	*1.56	>20.0	Ag - 1.36 oz/	t
		- pyrite 54.05m - as abo ments, 3-5%, 55.50m - increa silici	3-5%, <u>Buspect Au</u> . ve, 3% limonitic frag- grey and white guartz minor clay. singly bleached and fied volcanics likely proximity of shear zo		53.35- 54.85	*1.44	>20.0	λg - 0.86 oz/	<b>t</b>
55.50- 57.90			ED AND SILICIFIED	51694	54.85- 56.40	*3.55	>20.0	Ag - 1.18 oz/	
	in fragme andesitc. - pyrite co - clay cont	nts of amygdalo mmon throughout ent slightly in 56.40m - quartz <u>visibl</u>		c ted	56.40- 57.90	*1.27	>20.0	Ag - 0.79 oz/	t ,
57.90- 62.50	- rock frag silicifie - limonitic due to ab	ent moderate to ments very blea d. fragments up t undance of wate	ched and generally o 5% (oxidation of pyr		57.90- 59.45	*9.07	› 20 . Đ	Aq ~ 2.15 oz/1	
		gold i	quartz, <u>5 pieces visi</u> quartz; <u>2 pieces visib</u>					Ag - 1.99 oz/	
	- 50.95 to	<u>gold a</u> 62.50m - 10% qu gold a	nd argentite in quartz artz; 6 pieces visible nd argentite.	•	60.95- 62.50	*5.83	>20.0	Ag - 2.13 oz/t	
	- gold appe more acro	ars as distinct	grains up to 1mm or						

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				PROPERTY		UEST CON		NG LTD. HOLE NO:	: RC {	38-11	DRILL	HOLE RE	CORD	OF 7				1
-		Depth Metres )	CORE LOST			DESCRIE	PTION	<u></u>			AMPLE 10.	SAMP Inter		Au (oz/t)	Ag (ppm)	<b></b>	a annu an an an an an an an an	
	62.5	50- 64.00		is pyrit	efinite fra e clay con ion and si	agmental itent. licifica	l textu ation a	ure. are perva		51	1699	62.50-	64.00	*2.06	>20.0	TO B. C.	92 oz/t ; FROM 39.6( )M (44.20M) ) 2.95 oz/T	
	64.0	00- 65.55		QUARTZ RIC - 30 to 40 differen - pyrite 3 <u>visible</u>	0% milky an ot from abo 3%, low to	nd grey ove.	quartz	z, rock v			700	64.00-	65.55	*5.08	>20.0	Ag - 1.9	8 oz/t	
	65.6	66- 72.25		PURPLISH G (FOOTWALL) - rock app porphyri - silicifi intense. - pyrite i locally - clay con - 65.55 to argentit - quartz c	) pears to ha itic andes. ication and is ubiquite to 2%t. ntent is lo <u>71.65m no</u> te.	ave orig ate. d bleach ous 0 3 ow, loca ot.ed 9 p	ginally hing ar to 5%, ally hi <u>pieces</u>	y been a re genera , decreas igher. of visib	mafic ally sing	51 51 51	701 702 703 704	67.05- 68.60-	67.05 68.60 70.10 71.65	*4.25	>20.0 12.0	Ag - 0.0 Ag - 0 9 Ag - 0.7	3 oz/t	
	72.2	25- 83.80		FELDSPAR P - minor qu - few limo fracture - few % vo - pyrite - usual mi - clay con	uartz notec onitic fra ed dyke. olcanic fr: "1-2%. inor amethy	d. gments s agments yst note	may be ed.			51 51 51 51 51 51	705 706 707 708 709 710 711 712		77.70 79.25 80.75 82.30	*3.02 *1.01 *.580 *.347 .395 *.986 *.474 *.480	13.0 11.9 9.0 9.5 8.7 10.6 5.5 7.3			100 - 00

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DRILL HOLE RECORD

PROPERTY: SRETT

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HOLE

HOLE NO: RC 88-11

PAGE NO. 6 OF 7

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DEPTH (METRES)	CORE LOST	DESCRIPTION	SAMPLE NO.	SAMPLE Interval	Au (oz/t)	Ag (ppm)	
83.80- 94.50		MEDIUM TO PALE GREEN ANDESITE AND FINE GRAINED - contact with dyke is sharp (not sheared).	TUFFS				
		- 83.80 to 85.35m - green and minor purplish andesite, weakly silicifie	51713 d.	83.80- 85.35	*-496	8.0	
		- 85.35 to 86.85m - pale green-grey, well silicified, 3% pyrite. - quartz 3%, microveining lo abundant suggesting silica flooding.		05.35- 86.85	*.123	5.6	
		- 86.85 to 88.40m - similar to above except 10 quartz, low clay.	\$ 51715	86.05- 08.40	*.152	б.4	
		- 88.40 to 89.90m - 60% weak to moderately silicified tuff and 40% silicified andesite, quart to 2-3%. - limonitic chips still press		88-40- 89-90	*.436	12.0	*INTERVAL FROM 83.8 TO 111.25M (27.45M AVERAGED .548 02/T Au.
		- 89.90 to 91.45m - as above, minor white and quartz veining.		89.90- 91.45	.191	7.8	•
		- 91.45 to 92.95m - similar to above. - still suspect silicified to	51718 uff.	91.45- 92.95	*.863	4.0	
·		- 92.95 to 94.50m - varicolored silicified tuf considerable bleaching. - guartz 3-5%, epidote increa suspect argentite.	£, 51719	92.95- 94.50	1.81	15.1	•••
94.50-106.35		PALE TO DARK GREEN, COARSE TUFF - 94.50 to 96.00m - very silica flooded, micro veined, quartz 1-2%. - limonitic fractures still present.	- 51720	94.50- 96.00	*.189	3.9	
		- 96.00 to 97.55m - notably higher quartz (15% suspect argentite in quart: - pyrite ~2%.		96.00- 97.55	*1.08	>20.0	Ag - 0.61 oz∕t ↔

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			GBOQI	EST CONSULTING LTD.	DRILI	HOLE RECORD			
		PROPERTY :	BRETT	HOLE NO: RC 88-	-11	PAGE NO. 7	OF 7		
DEPTH (METRES)	CORE LOST			DESCRIPTION	SAMPLE NO.	SAMPLE Interval	Ли (oz/t)	Ag (ppm)	
94.50-106.35		- 97.55 to 9	9.05m	<ul> <li>well silicified, moderately epidotized.</li> <li>quartz decreased to 5-10%.</li> </ul>	y 51722	97.55- 99.05	*.817	16.2	
		- 99.05 to 1	00.60m	<ul> <li>- epidotized weakly silicific quartz 2-3%.</li> <li>- pyrite ~2%, minor limonite</li> </ul>	ed, 51723	99.05-100.60	*.384	8-5	
		- 100.60 to	102.10m	<pre>fracturing decreasing silicification, guartz 5% some guartz may contain argentite.</pre>	51724	100.60-102.10	*.614	14.1	
		- 102.10 to	103.65m	- guartz decreased to 2%, moderate epidote.	51725	102.10-103.65	*.385	9.1	
		- 103.65 to		<ul> <li>guartz and silicified fragments ~5%.</li> <li>minor limonitic fractures, suspect argentite?</li> </ul>	- 51726	103.65-105.15	*.497	10.2	
		- 105.15 to	106.70m	- similar to above except wit 15% epidotized amygdaloidal andesite, guartz 2-3%.	th 51727 l	105.15-106.70	*.266	5.7	
106.35-111.25				ICIFIED AND EPIDOTIZED ANDESI		106.70-108.20	• 740	<b>7</b> 0	
		- quartz ran	iges from	amygdaloidal. 1-3%.	51728 51729	108.20-109.75	*.249 *.703	10.5	
		- Iow pyrite	(~1%),	locally higher	51730	109.75-111.25	*.609	15.1	
		end of hole							*Sample has been screened and four to contain coarse gold.

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# TABLE NO. 2

# SUMMARY OF CYANIDATION RESULTS

DESCRIPTION	NO. OF SAMPLES	AVERAGE RECOVERY	AVERAGE CHANGE <u>%</u>	AVG % CHNG FOR VALUES ≥.07 oz/t
MAIN SHEAR ZONE:				
a) Hanging wall - andesite ± tuff	10	85.6	+41.1	+45.1
b) Shear	2	91.7	-11.8	-16.3
<pre>c) Footwall</pre>	39 16 23 1	88.6 84.7 91.4 96.8	+14.0 -10.5 +31.1 -29.5	+11.7 -3.1 +27.9
NEW DISCOVERY ZONE	3	91.4	+33.0	+33.0
EAST ZONE	2	95.7	÷20.7	+48.8
Samples containing coarse gold (from assay certificates)	24	85.1	+9.3	+23.8
OVERALL RESULTS (ALL ZONES)	57	88.7	+18.3	+19.8

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#### REFERENCES

The following are all private company reports and maps:

- Report on the Brett Property Exploration Program 1988 for Huntington Resources Ltd. and Corona Corp. by W. Gruenwald, B.Sc. and L. Walters, B.Sc. of Geoquest Consulting Ltd.
- 2) Drill hole record of Hole RC 88-11 (chip log and assays).
- 3) 1989 Program Recommendations and 1988 Reserve Calculations, Brett Property, Vernon M.D. for Huntington Resources and Corona Corp., prepared by R.C. Wells, Corona Corp. Reserve Calculations by Geoquest Consulting Ltd. with Tables #1, 2A, 2B, 3 (reserve calculations) and #2 Summary of Cyanide Leach Study Results.
- 4) 3 pages of cyanide leach study details.
- 5) a) Two longitudinal sections hangingwall and footwall of the main shear (1:500) by Corona Corp.
  - b) Two topographic surface maps (with) geology (1:20,000, 1:2,500).
  - c) Twelve cross-sections: 7+30N, 7+38N, 7+41N, 7+61N, 7+70N, 7+88N, 8+05N, 8+20N, 8+33N, 8+66N, 8+95N and 9+24N (1:500).



## CERTIFICATE

I, EGIL LIVGARD, of 1990 King Albert Avenue, Coquitlam, B.C., DO HEREBY CERTIFY:

- I am a Consulting Geological Engineer, practicing from #436 470 Granville Street, Street, Vancouver, B.C.
- 2. I am a graduate of the University of British Columbia, with a B.Sc., 1960 in Geological Sciences.
- 3. I am a registered member in good standing of the Association of Professional Engineers of the Province of British Columbia, Reg. No. 07236.
- 4. I have practised my profession for over 30 years.
- 5. This report dated January 9, 1992 is based on the references as listed in the Appendix.
- 6. The writer has no interest, direct or indirect, in the Beaton-Vicore Group, in any associated company or in any of the properties and does not expect to receive any such interest.

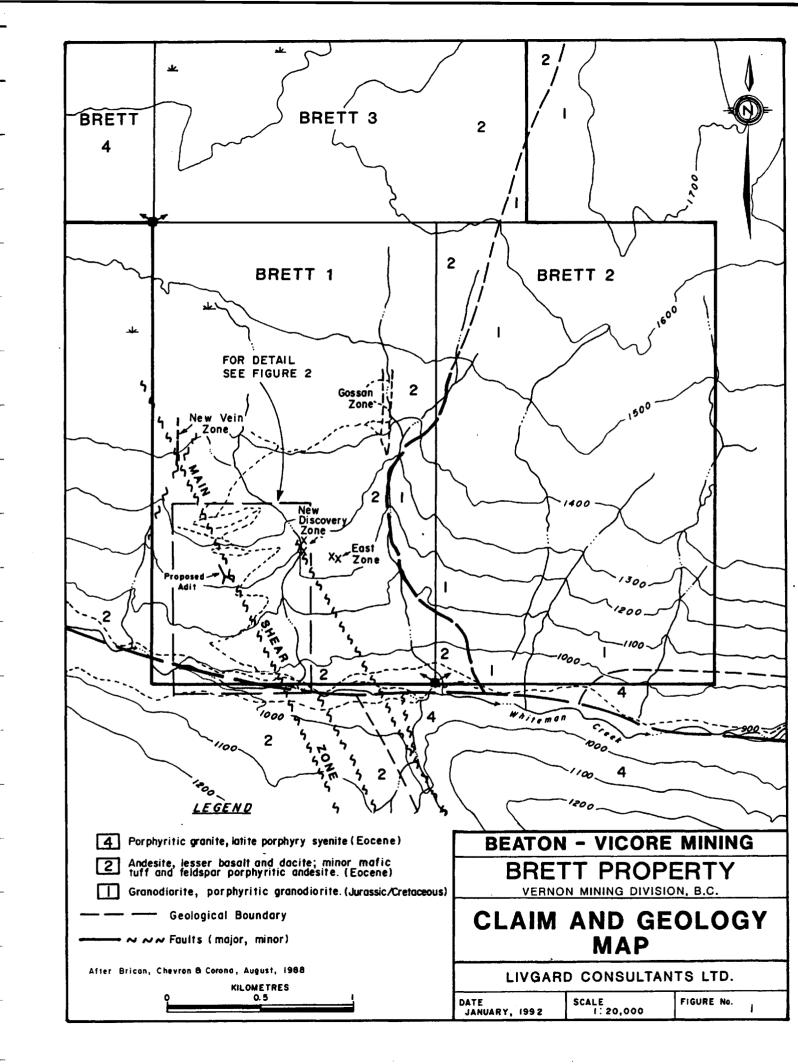
DATED AT VANCOUVER, BRITISH COLUMBIA THIS 9TH DAY OF JANUARY, 1992.

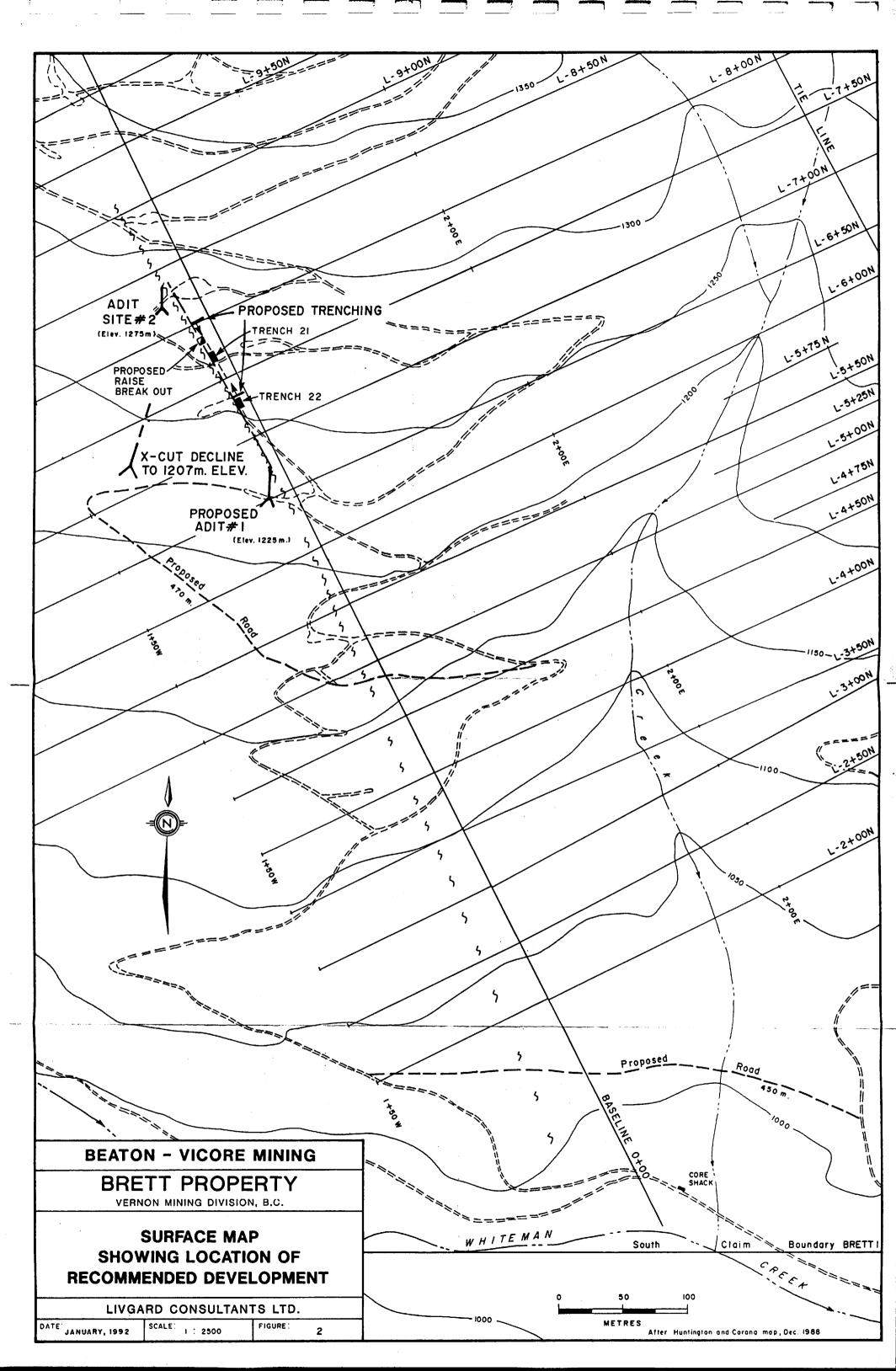


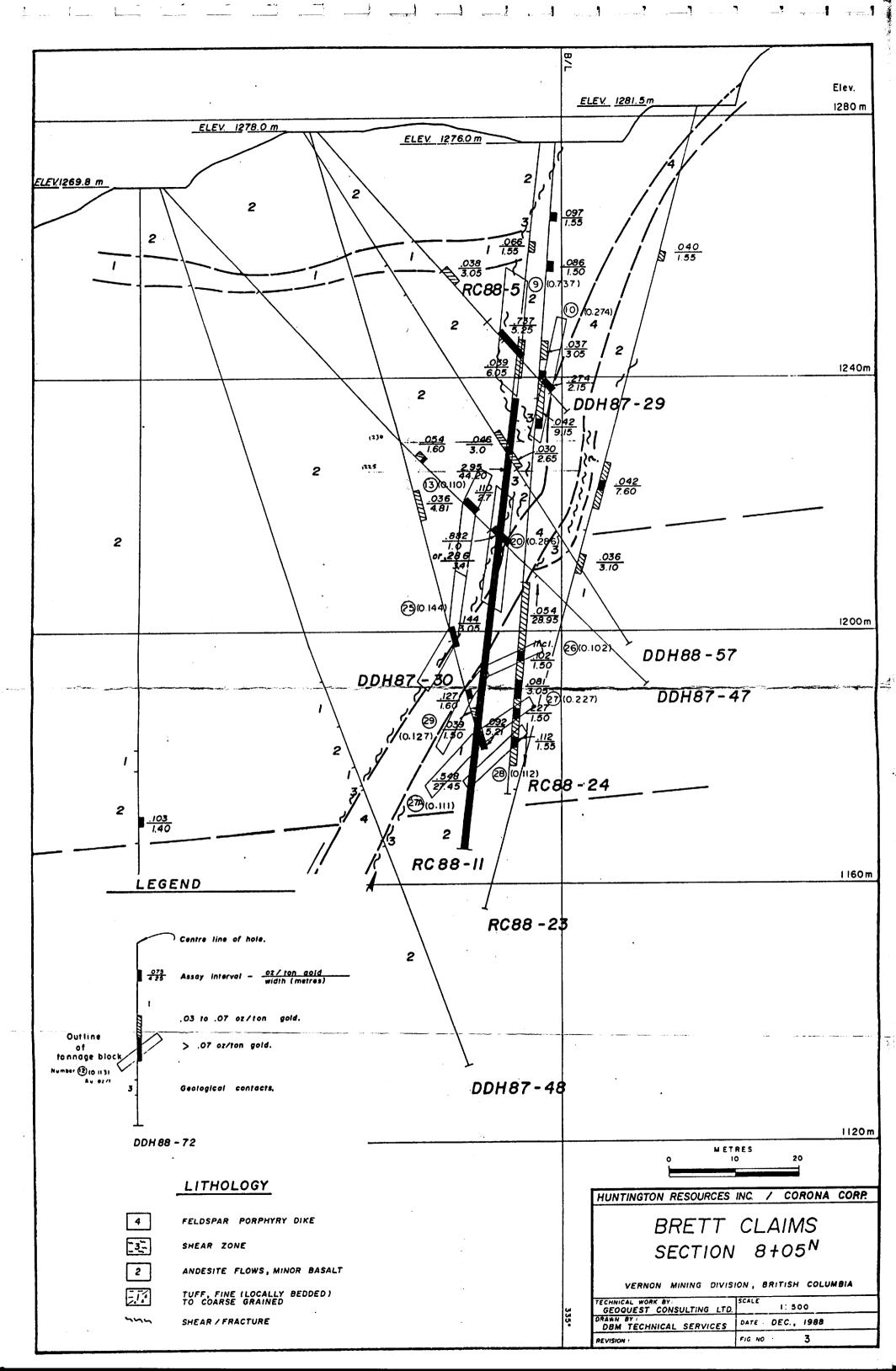
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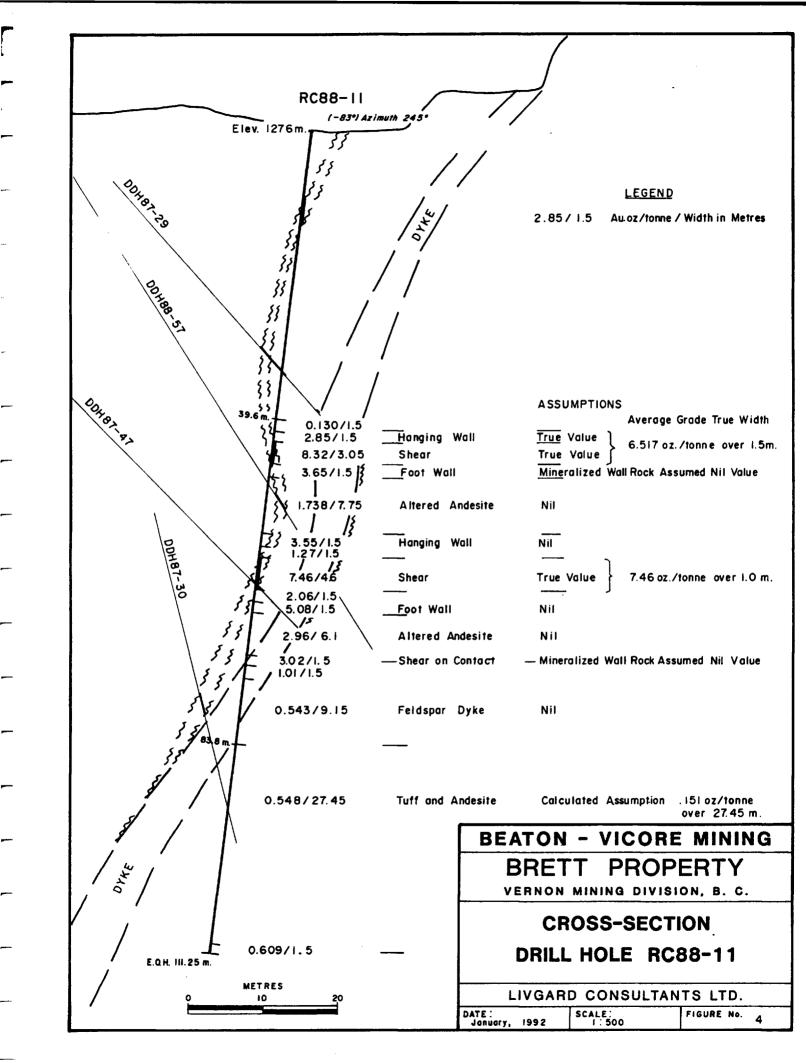
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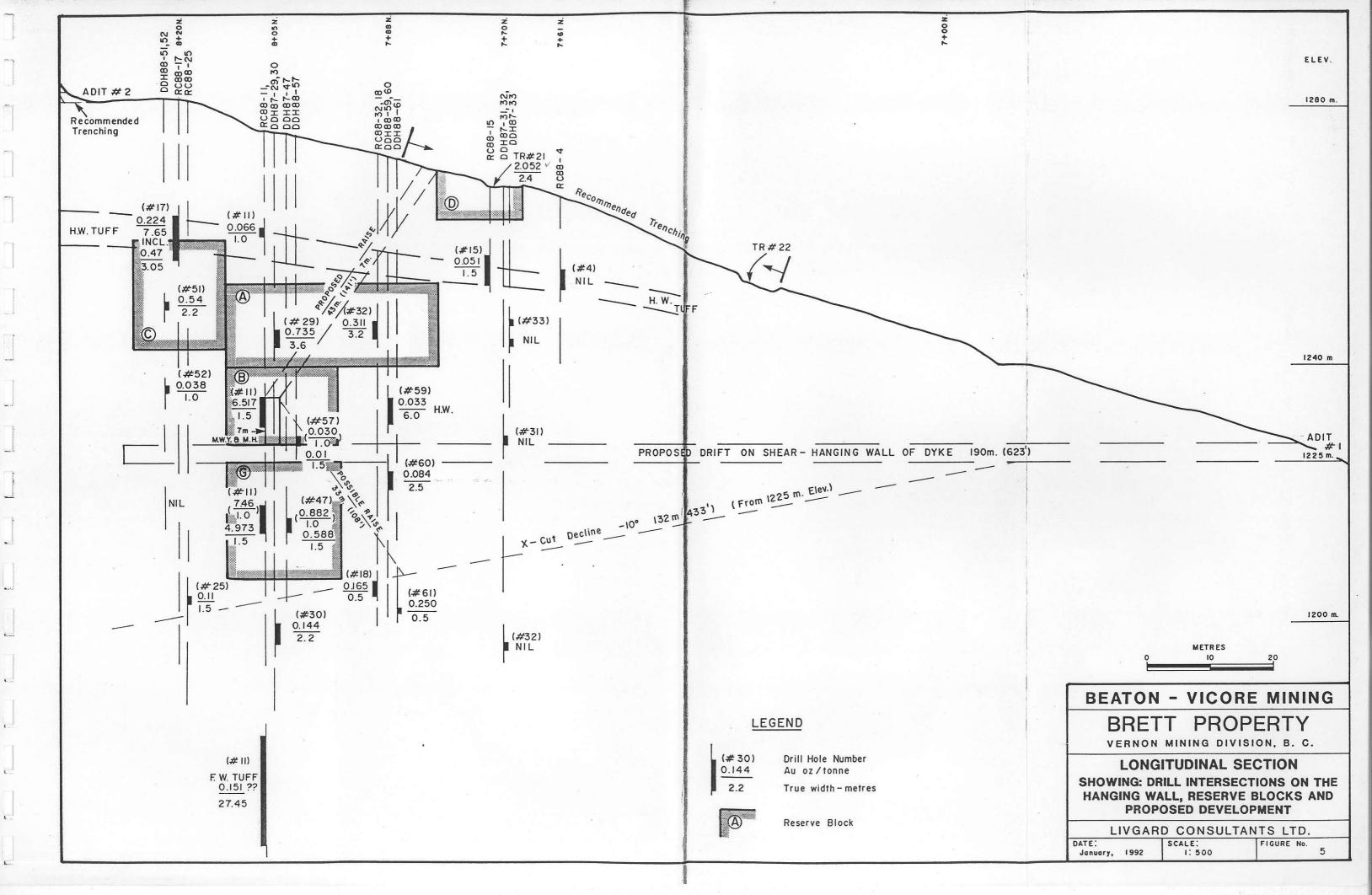
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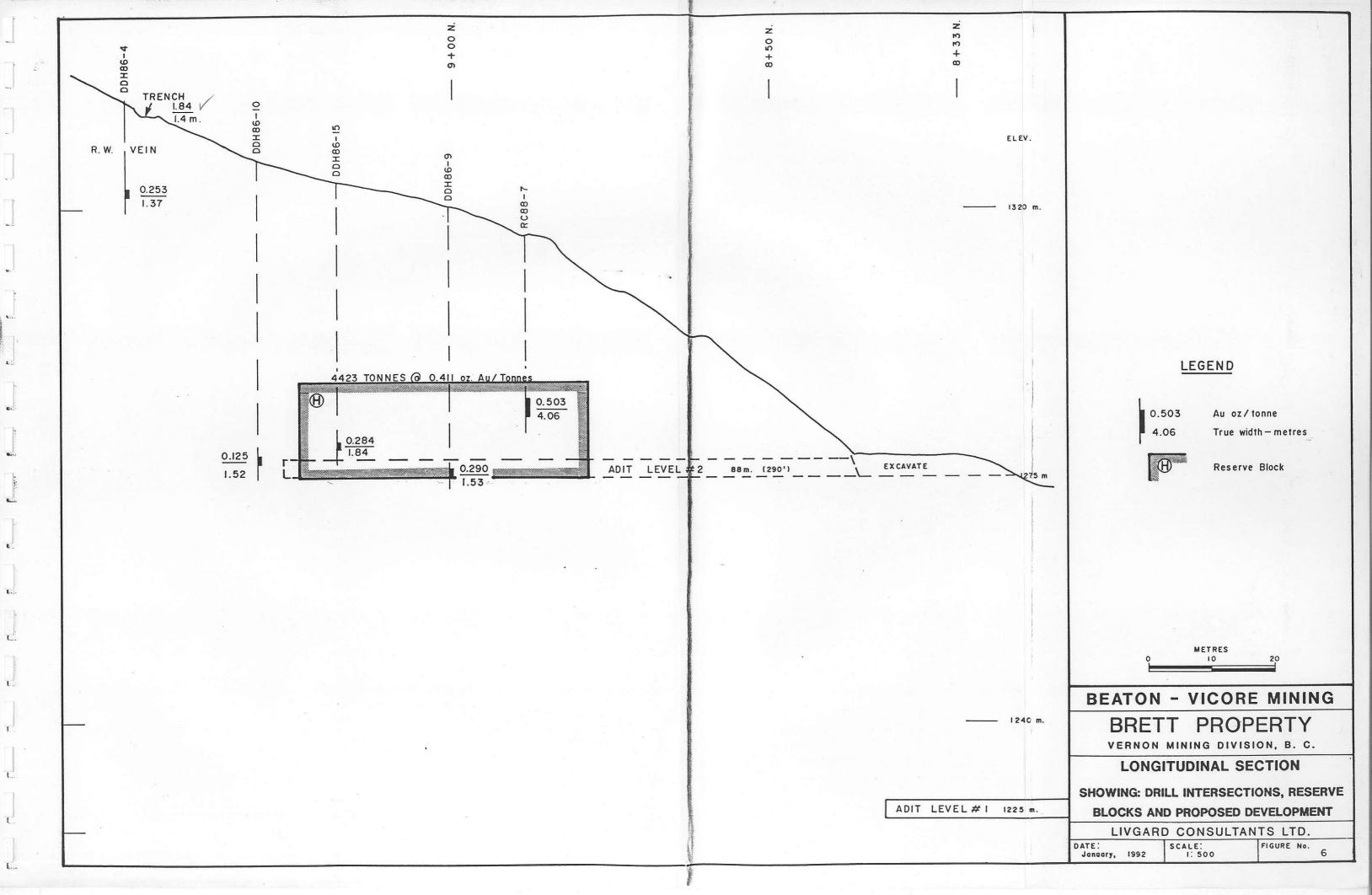












ELEV. 1320 m. 🛓	13+50N.		13+ 00 N.	
Collar at 1390m. EV.	68 - 68 HQ Q	Coltar af 1380m. E DDH89 - 91	26	
			0.125 0.32	
		<u>0.726</u> 2.55	1.59 1.14	
1240 m.		2.55		
		-		
	0.28 1.95	BEATON - VICOR BRETT PRO VERNON MINING DIVE LONGITUDINAL DRILLING AT NEW	PROPERTY G DIVISION, B. C. NAL SECTION	
	METRES 0 10 20	LIVGARD CONSULT, DATE: January, 1992 SCALE: 1:500	ANTS LTD.	

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