924/6E6W

#### GEOLOGICAL REPORT

#### COQUIHALLA PROPERTY B. C.

"Menzies - Hornby Project"

#### NEW WESTMINSTER MINING DIVISION

Claim Sheet No. 92H/6

Red Group	EVE I5 to EVE 28 (incl)

EVE 62 to EVE 68 FR (incl) TAX 47 to TAX 61 (incl)

EBJ 1, 3, 15, 17.

MAK I to MAK 18 (incl) Green Group

MAK 21 to MAK 26 (incl)

TAX 21, 22

GWH I to GWH 10 (incl)

EBJ 2, 4, 16, 18.

TAX I to TAX 20 (incl) Brown Group

TAX 37 to TAX 46 (incl)

TOY II to TOY 16 (incl)

EVE I to EVE 14 (incl) Purple Group

EVE 29 FR

GWH II to GWH 16 (incl) MLJ I to MLJ 8 (incl)

TOY 3 to TOY 10 (incl)

#### REPORT BY

J. A. Chamberlain, P. Eng., Ph D. on work completed between Oct.1, 1970 and May 2, 1971.

92H/6E4W

DOLMAGE CAMPBELL & ASSOCI VANCOUVER, CANADA

May 2, 1971.



40 claims

40 claims

36 claims

37 claims

Department of

Mines and Petroleum Resources

ASSESSMENT REPORT

NO. 3000

MAP

GEOLOGICAL REPORT

COQUIHALLA PROPERTY B. C.

"Menzies - Hornby Project"

3000

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Assay Certificates, TSL, Sudbury, Seymour Laboratories.

List of claims, registration numbers, tag numbers and expiry dates.

#### INTRODUCTION

The present report provides a summary of the work completed to date by the "Menzies Hornby Project" on the Coquihalla Claim Groups. An up to date map and interpretation of the geology of the claims based on the writers' mapping, and diamond drilling, air photo interpretation, airborne magnetometer surveying, and petrographic work is included and forms part of the report.

# LOCATION, ACCESS: (121° 15' W., 49° 29' N)

The location of the Coquihalla property described in this report is shown in Figure 71-7, approximately 10 miles east of Hope, B. C., or 110 miles east of Vancouver. The abandoned Kettle Valley rail line of the CPR crosses the property at the former station of Jessica. The property may be reached now via a well-maintained private logging road which in part, follows the old rail-bed up the Coquihalla River from Hope.

Pipelines carrying both oil and natural gas are routed through the Coquihalla Valley. These also cross the subject property in the vicinity of Jessica.

The coquihalla property consists of 153 contiguous mineral claims, the outer boundaries of which are indicated approximately in Figure 71-8 (inpocket). The claims have been divided into 4 groups for assessment purposes as shown on the cover of this report.

#### SUMMARY OF RECENT WORK

During 1970, five exploration holes were drilled on the Menzies-Hornby property. The core from these holes, which total 740 feet was logged by the writer in November, 1970. In April, 1971, additional holes were drilled for a total of 251 feet.

The writer made a geological reconnaissance of the property on November 22nd, 1970, using a Bell-206 chartered from Okanagan Helicopters Ltd. Snow conditions hindered geological mapping, but several samples were taken which were subsequently studied petrographically in some detail. The writer made a second trip to the property on April 18, 1971, in the company of Mr. G. W. Hornby and two diamond drillers, Paul Andre and helper. During this second trip, the writer selected drill sites in the main valley of the Coquihalla River, and carried out a geological examination in the same vicinity. On April 22, 27, and 28, 1971, the writer carried out additional geological mapping of the property and supervised diamond drilling.

An airborne geophysical survey of the Coquihalla property was flown and completed in April, 1971. The survey was conducted with a Scintrex magnetometer mounted in a Jet Ranger helicopter, using a line spacing of 650 feet, with a terrain clearance of 300 feet. The results of this high-resolution airborne work are given in a separate report by Seigel Associates Ltd., dated April, 1971.



#### GEOLOGY

#### REGIONAL

The Coquihalla ultramafic body is the southern extension of a northwest-trending linear belt of ultramafic rocks that the writer has referred to in previous reports as the Hope-Lillooet arc. From the Coquihalla area, the narrow but consistent ultramafic body extends northwestward toward China Bar where it crosses the Fraser River and continues across the Nahatlatch River to Skihist Mountain. The width of the ultramafics is typically between one and two thousand feet, but in the vicinity of the Coquihalla it widens to a maximum of 7000 feet.

The country rocks adjacent to the ultramafic belt vary along its length from acid plutonic to volcanic or redimentary. They show little in the way of alteration close to the ultramafics, though the contacts themselves are characterized by strong shearing. This fact lends credence to the theory that emplacement of the ultramafics took place along a major structeral break parallel to the northwest-trending axis of the Coast Range. The precise mechanism of emplacement and the physical state of the ultramafic body during this stage are still somewhat debatable.

### LOCAL

The geology of the Coquihalla segment of the Hope-Lillooet ultramafic belt has been clarified by the results of the present study, though more detailed work remains to be done on the internal structure and composition of the body.

As now defined from ground examination and high-resolution aeromagnetic work, the shape of the ultramafic (Figure 71-9 in pocket) body bears only a general similarity to that shown on published geological maps. The east contact, for example, has been relocated westward about 4000 feet in the vicinity of jessica, reducing the width of the body to about 2000 feet at this point. A series of east-west trending faults is now believed to transect the ultramafics as indicated in Figure 71-9.

The rocks bordering the intrusion are commonly fine to medium-grained, fresh diorite, (Figures 71-1 to 71-3) though exceptions occur at the southeast contact where the country rock appears to be a sheared meta-sediment. The diorite also occurs as isolated bodies within the ultramafic north of Jessica, and in the southern part of the complex east of the small group of lakes. The genetic relationship between the diorite and the ultramafics has not yet been resolved, though field evidence accumulated so far points to a tectonic rather than an intrusive history.

The ultramafics themselves are generally of massive structure, being highly serpentinized (Figures 71-4, 71-5) particularly near contacts. Prior to serpentinization, they ranged in composition from peridotite and possibly dunite to alinopyroxenfte. The pyroxenite - rich rocks are generally much less serpentinized than those containing abundant olivine. One distinct band of alinopyroxenite forms a mappable unit east of the small lakes in the southern part of the claim group. Detailed mapping will likely disclose the presence of other such units elsewhere through the ultramafic body.

#### ECONOMIC

Minerals of economic interest in the ultramajics and adjacent diorites include magnetite, chromite and various sulphide phases.

Magnetite locally consitutes up to 20 percent of the host serpentinite (Figure 71-6). The average figure for larger segments of the ultramafic appears to be on the order of 4 to 5 percent.offhe magnetite is largely of secondary origin, formed during serpentinization of the host silicates.

Chrome spinels have been identified in the ultramafics. The average spinel content is in the range of I to 2 percent which is typical for this type of host. No zones of chromite enrichment have been discovered to date.

Sulphides are present locally in the diorite and in the ultramafics themselves. Pyrite and pyrrhiotite occur as fine disseminations, which in places constitutes 5 percent or more of the rock (Refer to logs of holes H-I, H-2, H-3, Appendix). Chalocopyrite has been observed in trace quantities only.

Extremely fine nickel-bearing sulphide specks have been observed in places in the ultramafics, along with relatively coarse phenocrysts of pyrite. (Refer to log of drill hole H-6, for example.) The background nickel content of the ultramafics as judged by the assay results obtained to date is in the range of 0.22 to 0.24 percent.

#### DISCUSSION AND RECOMMENDATIONS

The internal constitution of the Coquihalla ultramafic body is considerably more complex than has hitherto been believed. Distinctive zones of pyroxenite and diorite have been located, and both their relationships to the serpentinites and their areal extent require better definition.

The high-resolution aeromagnetic survey recently completed over the Coquihalla ultramafic body by Seigel Associates Ltd. has necessitated additional revision of its shape, relative to that shown on published maps. Diamond drilling has provided further definitive information in the Coquihalla Valley, an area of obvious structural complexity. All such information obtained to date has been incorporated into the map accompanying the present report (Figure 71-8).

Target metals in a long range exploration program of the Coquihalla ultramafic include chrome, iron, nickel and precious metals. The next priority in an exploration program for these metals is the preparation of a detailed geological map based on a systematic examination and sampling of all outcrop areas. It is recommended that such a map be prepared on a scale of I" = 1000 feet, and that the required field work be completed during the 1971 field season.

Respectfully submitted,
DOLMAGE CAMPBELL & ASSOCIATED LTD.

J. A. Chamberlain, P. Eng. Ph. D.

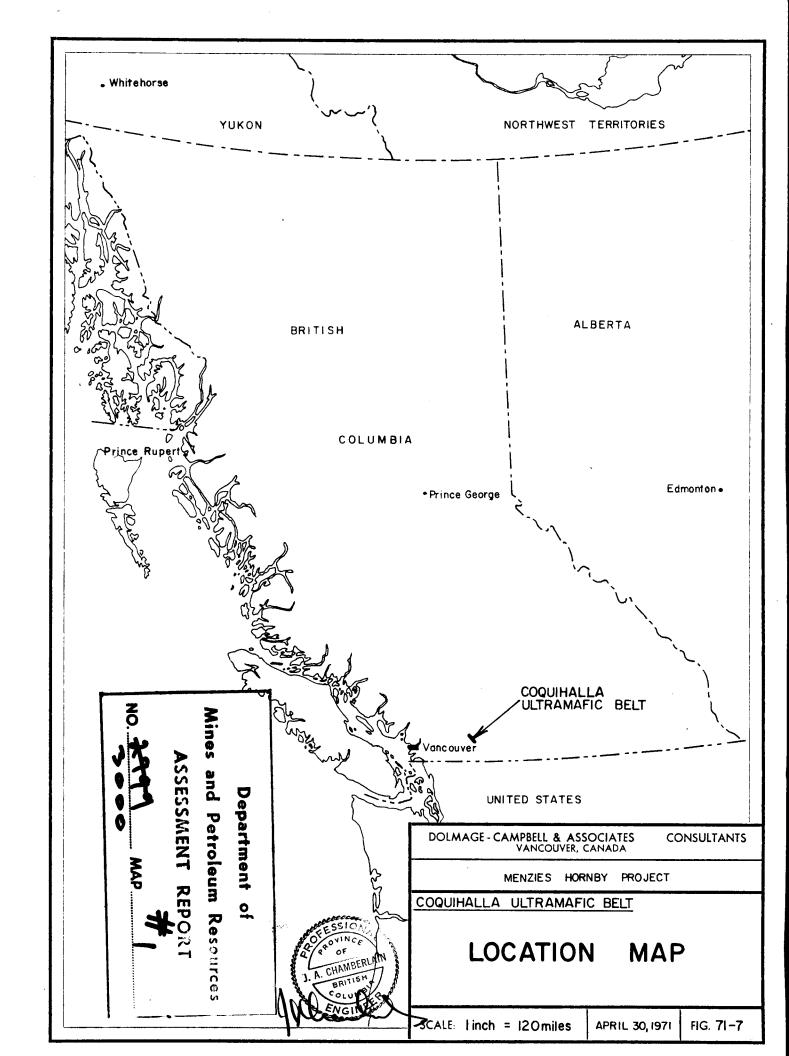
Vancouver, B. C.

#### STATEMENT OF EXPENDITURES

GEOLOGICAL MAPPING, REPORT, EXPLORATION DIRECTION, PETROGRAPHIC RESEARCH AND REPORT, AIRPHOTO INTERPRETATION, AERO MAG INTERPRETATION, ALL ON THE COQUIHALLA SUBJECT PROPERTY, BY J. A. CHAMBERLAIN

Invoice No.	1500, Nov. 1970 1545, Dec. 1970 1575, Jan. 1 1618, Feb. 1971 1652, Mar. 1971 April 1971 May 1971		4 Days 12 " 1/2 " 1/2 " 1/2 " 91/2 "	
	Total		29 Days	3,100.00
			3724	
HELICOPTER CHARTE	R			
Invoice No. I	500, Nov. 1970			613.35
VEHICLE RENTAL & E				y 4 . L. B.
April 22 (Hert:				44.17
April 28 (Budg				87.56
PREPARATION OF TH				
Invoice 1500,				39.00
TYPING SECRETARIAL	[1] [7] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1	, DRAFT	NG	
Invoice 1500,			17	15.52
Invoice 1545,				84.59
Invoice 1575,				39.79
Invoice 1618, 1				20.29
Invoice 1652,	Mar. 1971			.60
EXPENSES, SUPPLIES				
Invoice No. I	500, Nov. 1970			44.04
AIR PHOTOS				
Invoice No. 13	545, Dec. 1970			27.30
ASSAYS				
Invoice No. I	545, Dec. 1970			30.00
			Total	\$4,146,21

J. A. Chamberlain, P. Eng. Ph. D.



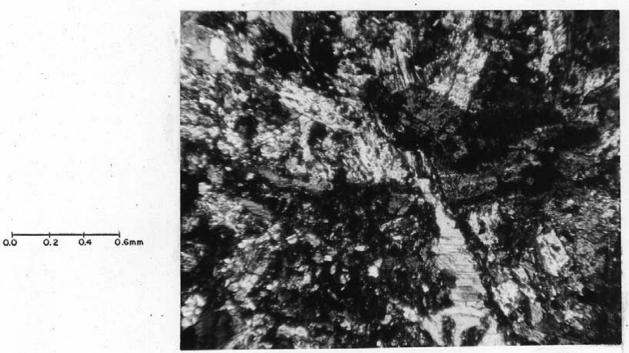


Figure 71-1 Mag = 46X. Photomicrograph of thin section 446 showing chaotic intergrowth of chlorite and altered plagioclase, plus carbonate.



Figure 71–2 Mag. = 46X. Photomicrograph of thin section 447 showing coarse plagioclase with patches of sericite. Large irregular grain on right is chlorite.



Figure 71-3 Mag = .46X. Photomicrograph of thin section 449 showing felted intergrowth of relatively fresh plagioclase graines with chlorite and opaques.

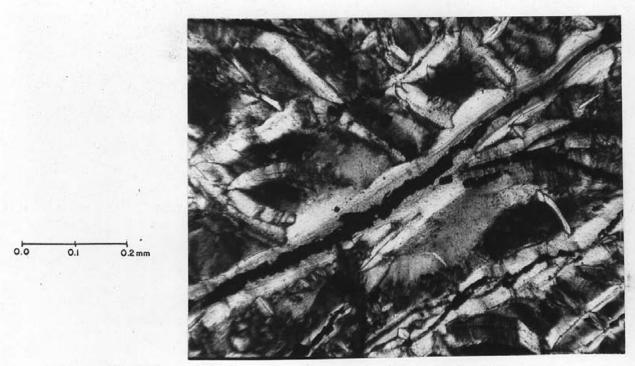


Figure 71-4 Mag = 130 X. Photomicrograph of thin section 450 showing typical development of serpentine (main phase) and secondary magnetite (black veinlet).



0.0 0.2 0.4 0.6 mm

Figure 71-5 Mag. = 46X. Photomicrograph of thin section 453 showing contorted textures in serpentine. Abundant secondary magnetite is present (black in photo.)

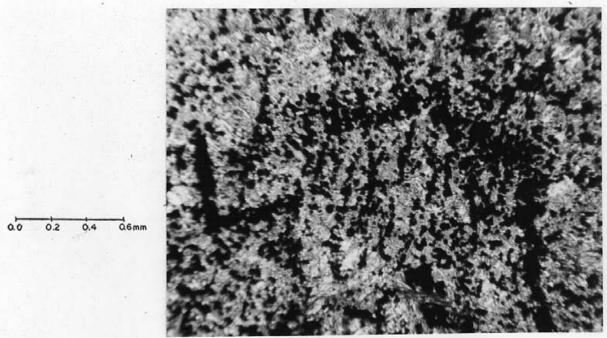


Figure 71-6 Mag = 46X. Photomicrograph of thin section 457 showing abundant finely dispersed secondary magnetite (plus other opaque minerals, black) in fine-grained serpentine matrix.

#### APPENDIX

Description of thin sections

446 to 452, incl. 454 to 457, incl.

Drill Logs, Holes HI to H8, incl 2.

Assay Certificates, TSL, Sudbury Assay Lab, Seymour Lab. 3.

# Thin Section (Drill hole H-1 @ 77")

Chaotic intergrowth of finely crystalline, altered plagioclase and chlorite with local veinlets of carbonate and minor quartz.

#### Approximate modal analysis:

Plagioclase Chlorite Carbonate Quartz Opaques	(partly sericitized)	50 35 10 2 2
		100

Rock name: Diorite

#### Thin Section 447 (Drill hole H-1 @ 105')

Medium-grained, equi-granular rock consisting primarily of plagicalese and chlorite. Relict hornblende observed locally.

#### Approximate modal analysis:

Plagiocia	se	50
Chlorite	(after hornblende)	45
Carbonate	9	2
Opaques		3
		******
	•	100

Rock name: Diorite

#### Thin Section 448 (Drill hole H-2@ 22')

Massive, fine, intergrowth of chlorite and plagioclase. Fairly fresh aspect. Plagioclase acts as interstitial "matrix" mineral. Local rare carbonate threads. Opaques disseminated uniformly through section. No quartz.

#### Approximate modal analysis:

Plagioclase (fairly fresh)	60
Chlorite	45
Carbonate	2
Opaques	3
	100

Rock name: Diorite

#### Thin Section 449 (Drill hole H-3@ 67')

Massive, fine, rock texture consisting of plagioclase and chlorite in a ratio of roughly 2:1. Opaque fraction is only other important constituent, and is uniformly distributed through the section. It appears to be associated with the mafic fraction.

#### Approximate modal analysis:

Plagioclase	60
Chlorite	30
Opaques	10
	100
	100

Rock name: Diorite

#### Thin Section 450 (Drill Hole h-4@21')

Completely serpentinized rock consisting of at least 95% serpentine plus opaque mineral fraction, discussed under polished section. Relict grains of pyroxene are visible in places(not shown above.)

Rock name: Serpentinite

#### Thin Section 451 (Drill Hole H-4 @ 31')

Completely serpentinized rock consisting of about 92-93% serpentine plus secondary magnetite and chromite plus possible sulphides. Relict grains of serpentine after pyroxene are present locally in the section.

Rock name: Serpentinite

#### Thin Section 452 (Drill Hole H-4 @ 53')

Completely serpentinized rock containing 3-5 opaque minerals plus moderately abundant chlorite in veinlets. The chlorite is obviously a later formed (post serpentinization) phase. Rare possible relict pyroxene present.

Rock name: Serpentinite

#### Thin Section 453 (Drill Hole H-5@ 11')

Completely serpentinized rock showing development of abundant secondary magnetite. Contorted banding of serpentine is evidence of deformation. Opaque fraction is close to 10% of section. Pyroxene relict grains observed in places.

Rock name: Serpentinite

#### Thin Section 454 (Drill Hole H-5@ 39')

Completely serpentinized with moderately abundant secondary magnetite and other opcque minerals. Contorted textures present in serpentine as in Section 453. Rare possible pyroxene relicts present locally.

Rock name: Serpentinite

#### Thin Section 455 (Station 70-1)

Medium grained rock having a massive igneous texture. Plagioclase is moderately abundant and largely altered to saussurite. Hornblende and chlorite-after-hornblende is most abundant mineral. Rare quartz-filled veinlets present in places.

The modal composition is estimated as:

Hornblende (and some chlorite)	60
Plagioclase (saussuritized)	36
Opaque minerals	4
	100

Rock name: Diorite

#### Thin Section 456 (Station 70-2)

Coarse-grained rock having a massive texture and consisting mainly clinopyroxene plus lesser amounts of interstitial serpentine and opaque minerals. Clinopyroxene is moderately fresh and contains rounded inclusions of a clear, polikilitic mineral showing relatively high birefringence (Mineral X). Carbonate is present in accessory amounts.

#### The modal composition is approximately:

Augite	80
Serpentine	10
Carbonate	5
Mineral X (see above)	4
Opaques	1
••	100

Rock name: Pyroxenite

#### Thin Section 457 (Station 70=3)

Rock is virtually 100% serpentinized, but exhibits an unusual perphyritic texture in which fine serpentine grains form a matrix to coarse, relict orthopyroxene (now also completely serpentinized). Opaque minerals are extremely abundant, in places constituting as much as 30 percent of the section.

Ror' name: Serpentinite

#### Thin Section 461 (Station 70-4)

Rock is a highly altered assemblage of saussurite plus chlorite having a vaguely banded texture. Carbonate veinlets are present locally. Saussuritization has been so severe that the section is semi-opaque. A separate opaque fraction is also present.

Rock name: Altered Diorite

				MENZIES -	HORNBY	Y PROJECT : COQUIHALLA.					
Coc	ord		Length .	2061	ORD—DOL	MAGE, CAMPBELL & ASSOCIATES LTD. HORNBY PROJECT	Hole No.	H-Nov. 2	1 5/70	<del></del>	_
Elev	, A	рргож. 1500'	Azimuth	~0	Location _	COQUIHALLA	Logged I	ny J.	A.C.		-
	e Size		Din	-65°	Purpose	EXPLORATION.	Logged i	J)			-
	TAGE				rurpose				ORE LOS		Ē
FROM	TO	ROCK TYPE	E			DESCRIPTION		FROM	TO	LOST	$\dashv$
0	7	CASING									1-
7	30	GREENSTONE		Dk. cm. fig c	chloritic re	ock. Lody braccioted, healed with sarp.	Irregular				15
						. Corb. strs fly common. Massive text.				1 .	13
						assay @ 19'.	·			11-19	1
30	36	GREENSTONE				, irregular fragments, healed with chlor.			-		11
		BRECCIA									$\parallel$
36	146	GREENSTONE		Dk. gm. fig. ch	Moritic, w	vith significant fine feldspar centant which	locally makes				]
				rock an ob	vious chle	crite. Fine disseminated po and cp. be ob	served in most				]
				specimens					!	11-77	$\rfloor  $
				Samples of	f more dig	ritic mati taken for T.S. and poss. assay @	77' & 105'			1-1-1	35
				133-139 b	anded 40°	to c.a. wht.gtz felds, loc limonite state	ined.				$\prod$
146	164	QUARTZ-FELDS	S.	Rusty, gray-whit	te to green	n elteration zone. Banding fly consistent (	© 35°-40° to				$\parallel$
		BRECCIA				rainly quartz-felispers. Mefic zones brec	ciated diorite.			ļ	$\prod$
	ļ					veggy. Few sulphidos.				ļ	$\rfloor \rfloor$
164	205	GREENSTONE				ó, lest more fractured and healed with chlor				ļ	$\prod$
						minus cp) usually present in frace quant.	Sample for			ļ	$\parallel$
	<u> </u>			study @ 18		,				H 1-18	<u>3</u> 7
						o distinctly brecciated : rock appears to be	e mixture of			ļ.	41
Ę.	О.Н.			greenstone	and blk.	slate or hornfels.					$\parallel$
											$\prod$
				<u></u>				<b> </b>		<u> </u>	$\frac{1}{2}$
	<u> </u>					<u> </u>				<del> </del>	
	ļ				·					<b>}</b>	-   G
<del></del>	-									ļ	1 2
	<del> </del>									-	łί
										<del> </del>	$\parallel$
										<del> </del>	-
	<b></b>							<b> </b>		<u> </u>	41

# MENZIES - HORNBY PROJECT : COQUIHALLA.

Coor Elev Core			nuth 315 approx. Location Rail grads. Logged	b. H-2 Nov.25/7 by J.A.	0 logged
FOOT	AGE	ROCK TYPE	DESCRIPTION	CC	ORE LOSS
FROM	то		DESCRIPTION	FROM	TO LOST
0	છે.	CASING			
i i	12	GREENSTONE	Broken, freetured care. Fresh.	4	
12	138	GREENSTONE	Dr. grn. to black, mainly fig. massive rock, but in place a faint primary banding		,
			(flow banding?) is seen at 30° to a.a.		•
			Fine discern. po is generally precent in amounts of 1% or less, rising to 10%	1	
			over a few inches. Local purches of felds; also miner felds and carb. strs		
			and fracture-fillings.	1	
			Typical sample taken @ 22'		12-22
			94-96 narrow carb. vein, vugginess, hamatite staining.		
			103-104; 103-111 - acid, banded rock, gneissocity @ 30°-40° to c.a. Some		
303		(A) 2 (A) 1	leaching and staining. No sulphides.	<u> </u>	
133	157	GREENSTONE	Med. gm. to black, petchy rock. Metrix met'l is fig. chlorfelds (+etz.?) and	1	·
		BRECCIA	fragments are f.g. blk, angular to streaked, basaltic, or pessibly slate.	1	
			Need thin section to determine nature of frags. Sample of both matrix and		
			frags taken at 153.		H2-15
157	170	GREENSTONE	Dk. grn. to blk, fig. rock similar to 12-138 above, but containing same fig. blk.	<b></b>	
			rock over 6' to 1' with streaked cts neally parallel to c.a. 2" wht. qtz. ve in		
E.O.	н.		at 165'. Scattered po present in places. Less abundant than provious.		
				- <del>  </del>	

HORNBY PROJECT

				MENZIES - HORNBY PROJECT : COQUINALLA.	~,		
Cor	ord			DRILL RECORD—DOLMAGE, CAMPBELL & ASSOCIATES LTD.	. No	H-: 3	
Coord			Length _	250' Project lightly Project.		.25/70	
Ele	v. A	гргож. 2000'	Azimuth	315 Approx. Location Coguinalla.	ged by	J.A.C.	
	re Size	EXT.	Dip	-65 Purpose Exploration.	, ,		
FOC	TAGE	50011 710	<u>.</u>	OFGODIOTION		CORE LOS	s
FROM		ROCK TYP	't.	DESCRIPTION	FROM	ТО	LOST
)	3	CASING					
<u> </u>	53	DIORITE		Grey-gm. diorite, grading to greenstone in places. Quartz is a minor constitue	mt.		
		,		Typically, rocks are voind by irregular felds strs. Folds-rich bands also present			
	ļ			tranding 30 to c.a. In district portions, felds is roughly 35% of rock, remainde	<i>x</i>		
	ļ <u>.                                    </u>			mainly fine amphibole (?).			<u> </u>
	<del> </del>			Discem. po present in trace amounts.			<del> </del>
0	000	COURTECTON		3-37 core broken.			<del> </del>
8	250	GREENSTONE		Dk. grn, fig. massive, greensione, gradational into previous rock. Sections her	· <del>9</del>		<del> </del>
				also dioritic, and microscopic study would probably indicate entire sec'n is diorite.			<del></del>
F (	Н.		11	Rare feldsp. strs. Rock is fresh, unaltered, and relatively homogeneous.		-	<del> </del>
- Lu @ 6	/	· · · · · · · · · · · · · · · · · · ·		Dissem. po is prosent in trace to accessory amounts. Typical sample taken at			<del> </del>
				67'.		H 3-67	7:
	-			152-153 pegmatitic voin.			1
	<del>                                     </del>			160-161 pale green fig. siliceous banc's @ 20° to c.a.		-	
				230-232 vague foliction in digritic zone @ 30° to c.a.			<del>                                     </del>
	<del></del>			247-250 broken core.			
				•			
	i	11	11		{{	ſ	1 .

HORNBY PROJECT

**1-3** 

## MENZIES - HORMBY PROJECT : COQUINALIA.

			•	DRILL RECORD—DOLMAGE, CAMPBELL & ASSOCIATES LTD.		H-4		
Cod	ord			62' Project HORNBY FROJECT. Hole No.	Nov. 2			-
		рргож. 1350'	Length	Approx.315 Project HORNINY PROJECT. Date Logged	<del></del> -	J.AC.		-
Ele	٧	EXT	Azımuth	Approx.315 Location COCUMEALIA Logged	by	, , , <del>, , , , , , , , , , , , , , , , </del>		-
	re Size		Dip	Purpose Exploration.				-
FROM	FOOTAGE ROCK TYPE		:	DESCRIPTION	FROM	CORE LOSS	LOST	-
0	44	SERPINITINITE		Derk green, soft, waxy rock, generally fig. with massive structure. Texture	TROW	10		<sup>†</sup> דְּי
				veries from f.g. block-green, uniform to mod. gray-green "spotted" rock. The	-			Project
	· · · · · ·			ciark phonocrysts are less some direments of the original ultramatic rock (cliving	1	<del>   </del>		유
				or pyroxwill resolve in thin specien). Fine possi diesem. sulphides (?) are	-		· <del></del>	1]
	-			visible under head lens in places. Tree quentities only.		·		11
				2" samples of cero removed for study from following				]] 돗
				fcotegos 12, 21, 31, 40.				] ≱
								HORNBY PROJECT.
44	62	ALT'D SERIENT	UNITE	Similar rock to above, but leaded with irregular strs of carbonate (magnetite?)				
	ļ			which constitute 10-15% of the core. No apparent sulps. observed. in this	<u> </u>			IJö
	-			section (light becoming very poer).		<b></b>		1 8
	<del>-</del>			44-45 Messive white voin of substiferm met'l, brittle fibre, pulverizes into	_			$  \Omega  $
ļi				tala-iiko powder between fingers.				╢╹
				56-62 Core is 20 to 50% white corbanate and tale with local threads of brittle				11
	-			cubestos as abovo.	+			11
	·			Construct to a fine description of the second secon				<b>1</b>   '
<u> </u>	† <del>-</del>			2" sample removed for study from 53".				11
		·						]
								][
								]
								' <sub>≖</sub>
								Hole No
	ļ				_			Z
					_			
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#### MENZIES HORNBY PROJECT

			DRILL RECORD—DOLMAGE, CAMPBELL & ASSOCIATES LTD. Hole N		H-5	
Coor	'đ		53' Project MENZIES HORNBY PROJECT Date	o. Nov.		***
Elev.		Approx 1400' Azimu	A 005°		J.A.C.	
	Size	EXT. Dip	-65° Purpose Explorations.	<b>-</b>	. 7 77 ( 7.27.27.	
FOOT		I		ļ	CORE LOSS	3
FROM	TO	ROCK TYPE	DESCRIPTION	FROM		LOST
				1		
0	53	SERPENTINITE	Dark Green, soft, f.g. serpentinite, Wk, banding a low angles to c.a.			
			expressed by paler green serp, threads. Very homogeneous section, no			
			calcite veining. Local platiness probably caused by minor shearing 13/.14			
			Mud @ 35-37, probably from grinding. Fine possible sulphides (?) observed			
		and the same and the same of t	in places, (to be examined microscopically at later date.)			
				<u>_</u> L		ادر هماست د د د د
्रीक्ष			2" segments at core removed.	ينظار بإدا	-	
			from following footages for more dtailed study:		.i. ,. i	ند ند
			11', 16', 22', 39', 47', 53'.			
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DRILL	RECORD—DOLMAGE,	CAMPBELL	ጲ	ASSOCIATES	LTD
DIVILL	NECOND—DOLINIAGE,	ONIVII DELEE	CX.	ASSOCIATES	L. 1 D.

Coord.	DRILL RE	CURD—DULIVIAGE, CAIVIPBELL & ASSOCIATES LTD.	Hole No. H-6			
	Length 150"	Project Menzies Hornby	Date April 30, 1971			
Elev. <u>1960'</u>	Azimuth 265°	Location Coquihalla (North-side)	Logged by J.A. Chamberlain			
Core Size XRT	Dip <b>-</b> 35	Purpose Exploration: east contact				

Cor	e Size	XKI Dip _	-35 Purpose Exploration: east contact			
FOOTAGE		DOOK TURE	DESCRIPTION	erall	CORE LOS	s=15%
FROM	ТО	ROCK TYPE	DESCRIPTION	FROM	ТО	LOST
	7	Diorite	Chloritic, w dissem py fly abund, up to 5% of rk Rock is fig mg, massive, w local carb patches. Felds constitutes 20% of rk. No vis qtz Sulps occur as true disaveraging about 2% overall, in 2mm diam grains, w cubic form common No cp. Rk appears fresh	s, av		
7	9	Talc Zone	Mottled wht, pale grn to dk grn talcose rk. Core lost at upper ct. Rare sups pres less than 0.1% Rk vaguely streaked @ 70° to ca.			
9	33	Serpentinite	Dark to apple grn mottled rk, vaguely banded @ 45' to ca Rock is virtually all serp plus scattered phenocrysts of py which locally reach 2%. (I" sample removed for study @ 13')		ection	534
33	35	Diorite	fg med grn, similar to 0-7' Sulps extremely rare.			
35	- 58	Serpentinite	dk grn w distinct wht blotches carb. Rare scattered specs py Core ground @ 58'			
58	106	Diorite	Fresh fg to mg, grn to about 30% felds Py observed locally, not abund.  90-94 more altered, chloritic, felds/phenocrysts give porph appearance  97-99! dissem coarse py, but less than 1% of rock  99! 2" qtz vein w 10% coarse py, sub //'l to c.2			
106	110	Greenstone	fg dk grn chloitic, wkly schistose Broken core @110', possible fault			
110	150	(E,O,H,) Diorite	mg to fg, grn, wkly banded @ 50° to ca Broken core @ 127-128, qtz veining wk py			

Project \_\_\_\_

Hole No.

DRILL RECORD—DOLMAGE, CAMPBELL & ASSOCIATES LTD. Hole No. H-7 Coord. Date \_\_April\_30,\_1971\_ Project Menzies - Hornby Elev. <u>1940'</u> Location Coquihalla (North) Logged by J.A.Chamberlain Purpose Exploration east contact Core Size XRT overall CORE LOSS = |4%|FOOTAGE DESCRIPTION ROCK TYPE FROM LOST FROM TO Alt'd Diorite Pale grn - grey, cut by min fine irreg veinlets of brn weathed felds, talc and some 0 carb. Scattered dissem py to 1% is common l' - l" talc zone 5 1/2 - I" talc zone some gauge (fault?) Dk grn w dendritic or rosette-shaped blotches wht carb. Fine dissem py to 0.2% of rk 24 Serpentinite Colour variable from pale grn - grey to dk grn. Coarse to mg rk, gen'y mass 28 Diorite (E.O.H.) structure 20-50% felds plus chlor and minor carb. Sulps v scarce Hole *Z* 

Coord.		DRILL RECORD—DOLMAGE, CAMPBELL & ASSOCIATES LTD.  Hole No  Length _50						
	v1500	XRT —	Azimuth 27	Coquihalla Logged Purpose Exploration Logged	•			
	FOOTAGE ROCK TYPE			DESCRIPTION	rall FROM	ORE LOSS	≈ 20% LOST	
_0	34	Diorite		assive, salt and pepper variety, mg, cut by irreg threads wht felds Gen'y fresh as	pect			
34	40	Lost Core	No	blocks.				
40	_43	Greenstone	-y. -Fir	f.g., blk, fly soft chloritic, cut by num carbonate threads.  ne scattered py less than 0.5%				
43.	47	Diorite	As	0-34				
47	50	Greenstone	As	40-43, Ground core @ 49'				

Yes and the second

TSL

Laboratories Limited

325 HOWE STREET - VANCOUVER 1, B.C.

**TELEPHONE 688-3504** 

#### CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM

ASSAYERS CHEMISTS

GEOCHEMISTS

DOLMAGE, CAMPBELL & ASSOCIATES LTD.

REPORT NO.

V 8454

SAMPLE(S) OF

ROCK

Sample No.	Total Nickel (Ni)%	Ni As Silicates (Ni)%	Ni As Non-Sulphides (Ni)%	Ni As Sulphide (Ni)%
457	0.24	0.04	0.04	0.16
458	0.24	0.02	0.06	0.16

DATE December 7, 1970

BIGNED X

DIVISION OF TECHNICAL SERVICE LABORATORIES



Dec 8-70

256 OAK STREET SUDBURY, ONTARIO TEL: 705-673-1953

ANALYTICAL CHEMISTS — ASSAYERS — SHIPPERS' REPRESENTATIVES — CONSULTANTS

### **CERTIFICATE OF ANALYSIS**

Receive	d from: Do	lmage Ca	umpbell &	Associat	es Ltd		·	
Samples	10 s of:	000-1055	W Hasti	ngs Str.				·
• *			Vancouve	er. B. C.				•
LAB NO.	SAMPLE NO.	GOLD OZ. PER TON	SILVER OZ. PER TON	COPPER %	ZINC %	NICKEL %		
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	·							
2976	459					0.23		
2978	460					0.18		
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	Sam	ples run :	n duplic	ate				
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A DIVISION OF ASSAYERS LIMITED - QUEBEC: 183 GAMBLE ST. W., P.O. BOX 665, ROUYN, TEL: 819-762-3010 - ONTARIO: 200 BAY STREET, SUITE 402, TORONTO 1, TEL: 416-366-3100

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RED GROUP EVE #15 to EVE# 28 (INC) EVE # 62 to EVE 68 FR (INCL.) TAX HAT to TAX HGI FR (INCL) EBJ-4/9 43 9 4 15- 9 4 17 (40 CLAIMS) CREEN GROUP MAR#1 to MAK#18 (INCL.). MAK #21 - MAK #26 (INCL) TAX# 21 , TAX# 22 CWH # 1 to CWH # 10 (INCL.) E.B.J\_#2, #16, #18 (HO CLAIMS) BROWN BROUP TAX #1 to TAX # 20 (INCL.) TAX#37 to TAX#46 (INCL) TOY # 11 to TOY # 16 (INCL.) \_\_\_\_(36 CLAIMS) PURPLE CROUP EVE # 1 to EVE # 14 (INCL.) 14 EVE #29 FR. CWH # 11 to GWH #16 (Incl.) MLJ# 1 to MLJ 48 (1~c2) 8 Toy 143 to Toy # 10 (INCL.) 8

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