

memo to ASB.  
Chief geologist

July 28, 1980

005615

re Licker Project, July, 1980

The 1980 program can best be explained with ref. to Prelim May 40. Several ~~features~~ <sup>features</sup> should be fairly obvious:

1. A belt of gneiss comes extends fr W of the Id Hwy to S of Brean Lk & around Crofton Lake, thence to Oaborn Bay Rd. Outcrops on the most northerly rj of Maple mtr offered some hope of filling in this sec'n of the Licker lyp, but instead stocks of granite & shonkinite were fr. It was soon that the granite was a stock of the Island Intrusions, therefore mapping was extended far enough to the E to show that the shonkinite clearly transgresses the granite. This shonkinite was traced back to a tail shown on P.M. <sup>40</sup> just W of Oaborn Bay Rd. There is evidently no offset of the shonkinite in the valley occupied by Richards Ch & Oaborn Bay Rd. A 2dy consid'n in extending mapping over this ridge was an advertized housing dev't.

2. A considerable sec'n of the Licker lyp has been more or less obliterated by shonkinite intrusion on both sides of Richards Trail. Prelim mapping along the S part of Oaborn Bay Rd. indic'd the absence of shonkinite except for a rel. narr. dyke. Detailed 1/4 mapping was done in the unmapped SE cor. of P.M. 40. At new, post-airphoto, road eventually provided good access, but the disturbance to the land by Escarpment Way & the concomitant housing dev't rendered airphoto recognition time-consuming. A plan of the roads obtained fr the District Municipality was of limited help. The shonkinite termination is complex, & is not yet mapped along the S border of P.M. 40.

3. The airphoto linears are possible X-faults, but detailed bracketing of the N ct. of the main shonkinite body <sup>across the Ely fair</sup> indic's that any offset is too small to register at mapping scale.

4. Fill-in mapping is needed immediately E of the Ely linear & NE of Richards Trail. That E of the linear is nearly completed.

The work depends heavily on aerial photos & has consequently been somewhat hampered by rain. Short breaks have been utilized to map along & near roads in the Barron Ch-Cheminu Lake area, a few minutes drive NW of the road. Cooke described the Licker vldcs as least altered in this area, & it seemed desirable at least to look at them. However a rather small outc has been seen, because he completely missed a large shonkinite dyke. There is no massive egl. W of the lake, as shown by Clapp & Cooke; scat'd shonkinite 1/4s ext. down to the shore.

PROPERTY FILE

Notes for P. M. 40

Au-Ag-Cu-Pb-Zn-Cd

The Licker group is best to the Tenora - Tye orebodies on Big Licker mtn & to the orebodies of Western mines near Battle Lake. The latter orebodies appear to be controlled stratigraphically as well as structurally, therefore detailed mapping was begun to determine the strat. sequence near the Tye area. On Big Licker mtn. the nature & relationships of the rock are obscured by intense shearing, but in the Richards group intense shearing is largely confined to the most westerly ridge.

<sup>on the N part of the Richards group</sup>  
There is a N-S progression of rock types in the Licker by which appear, for comparison with the sequence in the Cowichan Lake area, to be in order of increasing age. Poor graded bedding in a few places, <sup>was</sup> consistent with this interpretation. Along the crest & S face of Mt. Richards ridge the Licker rocks are more or less coarsely frag'l, & con. at least 2 bands characterized by med. to coarse Pb. grain in a fgl matrix. These grains may be phenocrysts, but are more likely detrital. It is <sup>uncertain</sup> whether the sequence is homoclinal or whether the Combs-like layer has been repeated by folding.

The Licker rocks have been successively intruded by mainly small bodies of QF porph & med. to large bodies of charbonite. The charbonite resembles gabbro in texture & the abundance of dark nichs, but the feldspar is albite-digoclase.

The older rocks are overlapped on the N by poorly-exposed clastic rocks of the Comins type, & are prob. in fault ct. with them to the S. Post-Comins faulting has produced a Licker outlier along the Comins River.

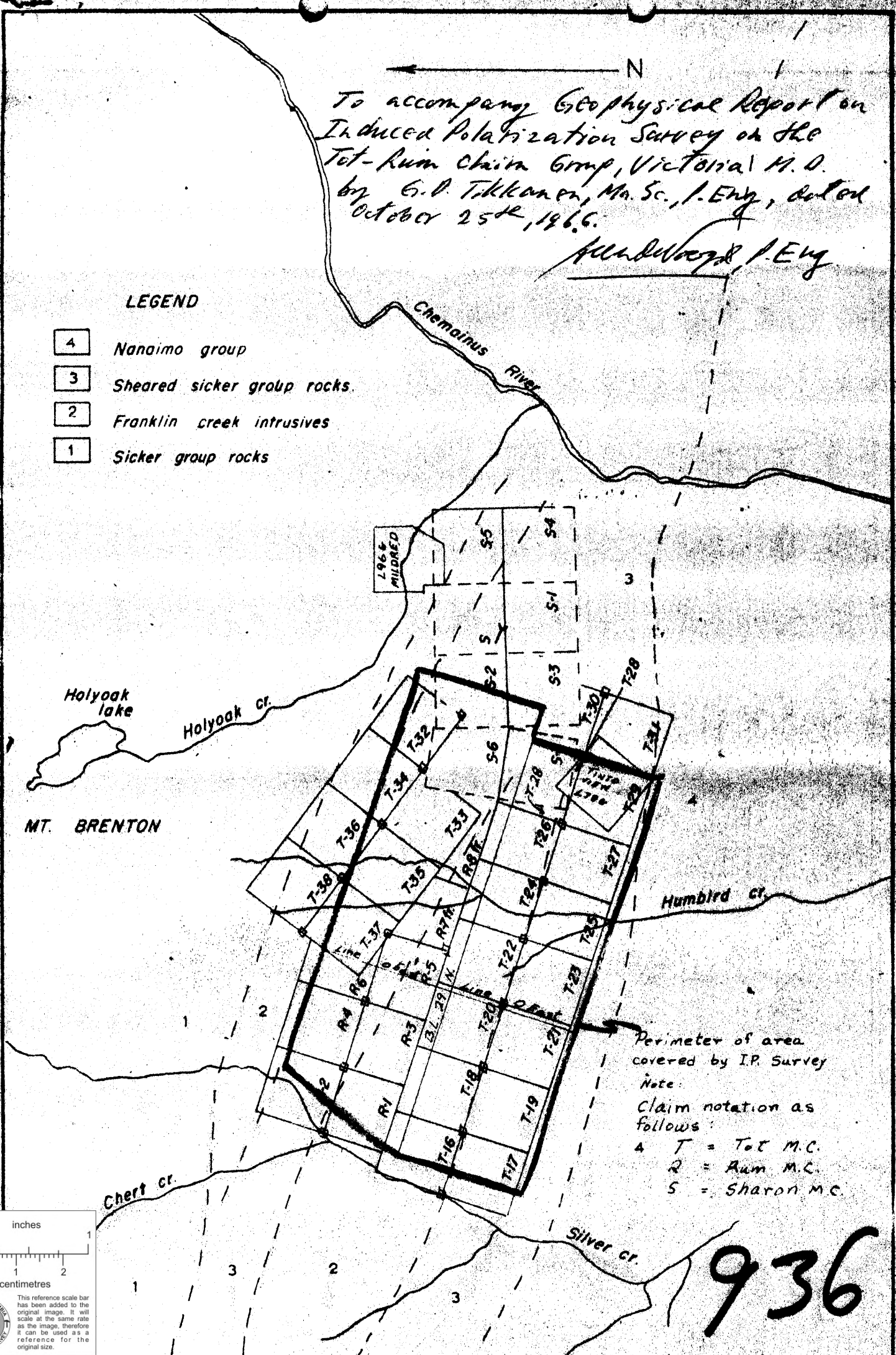
Pyrite is <sup>common to</sup> abundant, particularly in the Licker upper div., but also only traces of Au & Ag. Small amt. of copr & mal. occur in sev. small shear zones & qtz veins.

To accompany Geophysical Report on  
 Induced Polarization Survey on the  
 Tot-Rum Claim Group, Victoria M.D.  
 by G.D. Tikkanen, M.Sc., P.Eng., dated  
 October 25<sup>th</sup>, 1966.

*Handwritten signature*

**LEGEND**

- 4 Nainimo group
- 3 Sheared sicker group rocks
- 2 Franklin creek intrusives
- 1 Sicker group rocks



Perimeter of area covered by IP Survey

Note:  
 Claim notation as follows:  
 T = Tot M.C.  
 R = Rum M.C.  
 S = Sharon M.C.

936

**The Consolidated Mining and Smelting Company of Canada Limited**

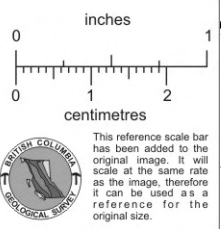
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**PROPERTY FILE**

**GENERAL GEOLOGY**







**TOT, SHARRON AND RUM CLAIM GROUP**







SCALE: 1" = 1/2 mi      DATE: JAN. 12, 1967      PLATE:








Mount Richards





- 8023  Gabbro-diorite
- 8024  Quartz-feldspar porphyry - intrusive
- 8027  " " " - tuffaceous
- 8018  Hard cherty tuff
- 8038  Felsic volcanics & tuffs
- 8028  Mafic to intermediate volcanics & tuffs

- 8007  Nanaimo sandstone & undifferentiated Nanaimo.
- 8022  Nanaimo conglomerate
- 8023  Gabbro-diorite
- 8024  Tye porphyry
- 8025  Sicker sediments
- 8028  Sicker volcanics - andesite




NANAIMO GROUP

-  Shale
-  Sandstone & siltstone
-  Conglomerate












INTRUSIVE ROCKS

-  Quartz diorite
-  Gabbro
-  Quartz & quartz-feldspar porphyry - Tye
-  Felsite, aplite, & quartz-sericite schist

SICKER GROUP

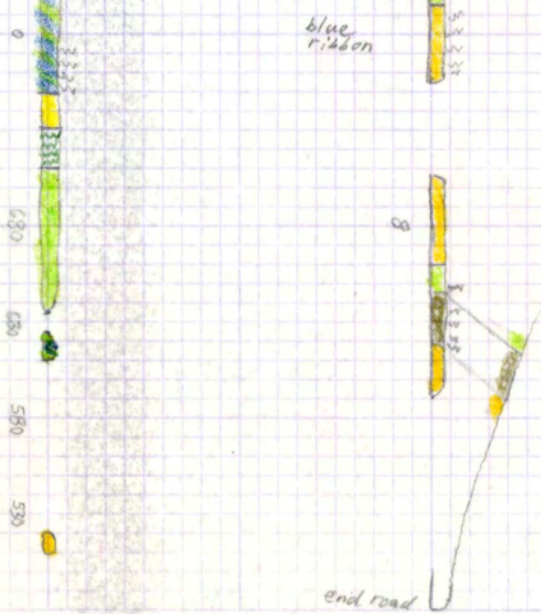
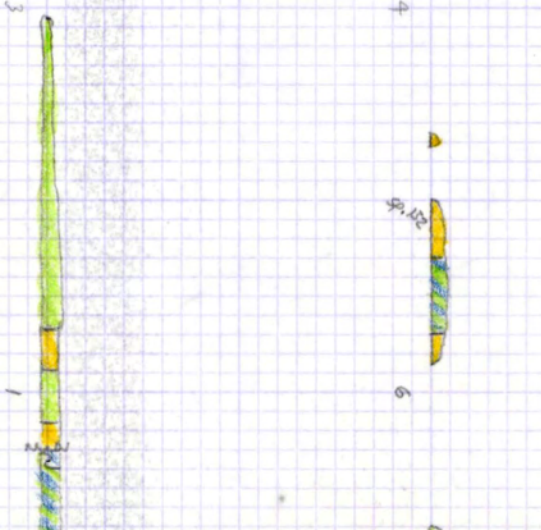
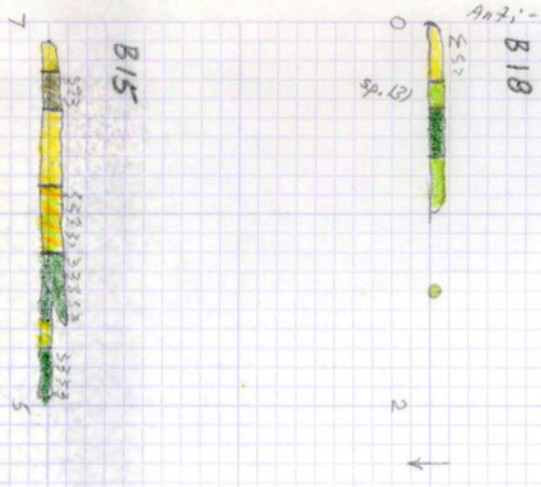
-  Tuff-breccia, containing rounded feldspars, with or without hornblende plates, with or without epidote clasts
-  Granule tuff
-  Fine-grained mafic - tuff or massive lava

Sicker

- 8065  Nanaimo shale
- 7  " sandstone
- 8  " conglomerate
- 50  Gabbro
- 32  Quartz porphyry
- 8025  Argillite
- 4  Chert, siliceous schist
- 12  Felsic volcanic
- 55  Featureless volcanic
- 11  Hornblendic volcanic
- 17  Fragmental volcanic, breccia



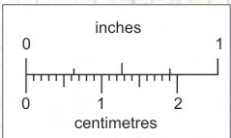
Anti-Catpa CA



main bend

blue ribbon

end road



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1" = 100'





Sicker Project '78

- June 6 AM: Page & cruise B9 to snarl of rds at top of B14B.  
 PM: Spot-mapping along Chemainus Mt.
- 7 AM: Detail adjct. to McIvor Ck., mis-locating rd. B15.  
 PM: Cret. cgl. at upper twin brj, then Sicker W of Silver Ck. - aa-ab
- 8 AM: more detail on B15, then %cs nr. water truck.  
 PM: more %cs of Sicker betw twin brjs & Silver Ck on M.L. ac-ag
- 9 AM: %cs along Id Hwy S, fr Chemainus R. ba-bh
- 13 Fin under brj by water truck; Puska Ck. & 14A; B17 & 17A
- 14 B Line fr B15 to divide; B20; B18A; B18-small qy
- 15 B18 fr small qy to McIvor Ck; B Line betw B14 & 14A
- 16 B16; B15 to McIvor Ck.; N 1/2 B14B; B14C; %cs SW of Puska Ck.
- 19 Cret. exps. on Id. Hwy. fr Chemainus SE. fa-fe
- 20 B18 fr McIvor Ck. to anti-Latta Ck.
- 21 B15A & an upper sec'n. of B15
- 22 B15
- 23 AM: %cs along Id Hwy S, fr Chemainus R. bf-bm
- 26 PM: Cret. exps. on Id. Hwy SE of Chemainus ff-fg.
- 27 Fin. B15 & B18 main
- 28 AM: Polychain & map 600' of W12A down fr Latta Ck.  
 PM: Cruise parts of Chipman Ck & Chemainus R. down to brj D4 ah-ak
- 29 CM & S grid #1 betw Silver & Humbird Cks. ga-gd
- 30 " " " - Sharon Copper
- Aug 1 Cruise Lenora-Tyee area for familiarization & check Watson's map - no notes
- 2 Drive in to Tyee shaft on alt. access & map back to Nanaimo ct. - bn-bz, ha-hj
- 3 Cruise H.T.T.L. N fr Mt Prevest Rd. to behind %bm hk-ht
- 4 " W of bf & H.T.T.L. almost to chicken farm hu-hx
- 9 Fin. mapping Id Hwy cuts S to E & N %pass hy-hz, ia-ic
- 10 Gabbro across Bell-McKinnon, Nanaimo ct zone, & cruise off Westholme Rd id-if
- 11 Fin. mapping Chemainus R M/L N of Park bend, & cruise water tank road al-ar
- 12 Recce S of westholme im-it
- 13,15,16 Systematic %c mapping E & W of LTTL S of Richards Trail iu-iy
- 17 Cleanup betw Id Hwy & Westholme Rd.; Nanaimo %c on Hwy at Mays Rd jz-kh
- 18 Betw. HTRL & Id Hwy S fr bm ki-kl
- 22,23 Nanaimo exps. on Mt. Prevest Rd & pre-Nan on SE slopes of Big & Little Sicker km-kt, la-ln
- 24 Richards Trail ma-mk
- 25 Nimmo Road & adjct P.L. ml-mp
- 26,27 Mt. Sicker Road oa-pd
- 28 Crofton Rd, Reservoir rd, Cecil St. to 2-quarries area mq-nb
- 29,30,31 Betw. Westholme Rd, Richards Trail, & water pipeline; fin. SW of R. Trail nc-nz, ra-rn
- Sept. 1 Cruise in to Crofton Lk qa-qt
- 6,7 H.T.T.L. & up to main face of Little Sicker ku-kz, la-lw
- 8 Nimmo Rd. to Eves Park

aa-ar - Chemainus R. line

as-az

ba-bm - Id Hwy S of Ch. R.

bn-bz - E access to Tyce shaft

ca-dx - W Chipman Ck.

dy-dz

fa-fg - Id. Hwy N of ch. R.

ea-ez Nimmo Rd.

ga-gd - CMTS grid #1.

fh-fz Banon Ck

ha-hj - E access to Tyce shaft

ge-gz

hk-hx - H. T. T. L.

hy-iz - Id Hwy & valley flat to Nimmo Rd.

ja-kl - " " " " " " " "

la-jy, ma-mk - Richards Trail & SW

kn-kt - Mt. Prevost Rd, SE slopes Big & Little Sicker.

Little Sicker

la-lw - " " " " " "

lx-lz " "

ml-mp - Nimmo Rd & adjet P.L.

mq-nb - Crofton to 2 quarries

nc-nz - Richards W. Hill.

oa-pd - Mt Sicker Rd.

pe-pz

ra-rn - Richards W. Hill

qa-qz ✓

qa-qf - SW of Crofton

ra-rz Nimmo Rd. ✓

ro-rt - Nimmo Rd. to Eves Park



B18: S. of Anti-600 to Ch

sheared gs. & ser. sch.

99" arg., dk & med. gray

132" siliceous gs.

42" arg., mauve-gray

91" gs

110" arg. & silty arg., strongly cleaved

40' ± 474", 18' of itgs.

B18: McIvor Ch. to intrus. complex

B18: quarry

50'+ greenstone, mass.

? dk grey arg.

? gs.

96"+ chert, silty chert, & cherty siltite

→ 14' ± 17' arg. & argillac. to cherty siltite

36"+ siltite, light grey, siliceous, less cleaved

18" arg. or siltite, thinly-bedded, siliceous

20"+ arg., dark grey

48"+ gs.

6'+ greenstone

40"+ silty arg., grey to brownish

18" gs

42" gze, f/g

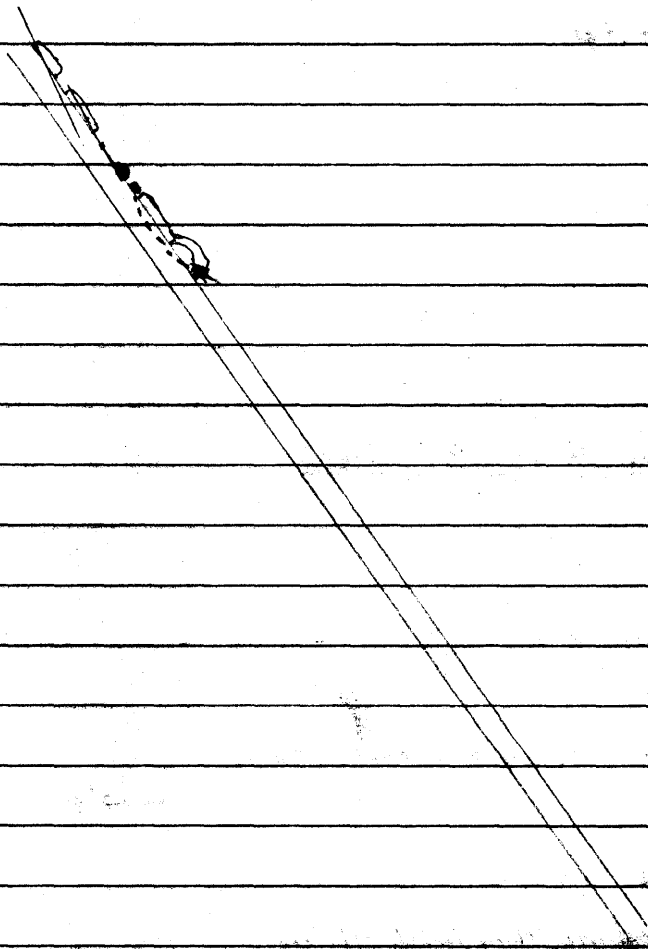
6" chert, pale grn.

cherty arg., pyritic

gs?

Sp. 11 - 79.2 mi on Mt Sicker rd (78.6 at start)

81.3 " at Lenora camp





26 Crown Granted Mineral Claims and Fractions

<u>Lot No.</u>	<u>Name</u>	<u>Lot No.</u>	<u>Name</u>
35 G	Lenora*	43 G	N T Fraction*
36 G	Tyee*	39 G	Richard III*
37 G	Key City*	41 G	Magic Fraction*
60 G	International Fraction*	53 G	Estelle*
18 G	Tony*	18 G	Donagan***
19 G	X L*	54 G	Westholme*
63 G	Donald*	51 G	Blue Bell*
108 G	Muriel Fraction*	50 G	Moline Fraction*
87 G	Doubtful Fraction**	59 G	Westholme Fraction***
85 G	Thelma Fraction**	21 G	Dixie Fraction***
86 G	Imperial Fraction**/**	44 G	Golden Rod*
20 G	Herbert*	47 G	Nellena*
110 G	Phil Fraction**	4 G	Acme***

\* Chemainus District      \*\* Seymour District      \*\*\* Somenos District

Lands Optioned From V. H. Patriarche

"All those parcels of land situate in the Chemainus Land District on Vancouver Island in the Province of British Columbia lying within the boundaries of the area outlined in red shown on the attached sketch marked Plate I described as commencing at a point nine thousand (9000) feet due east of the northwest corner of Block 278, thence due north in a straight line a distance of six thousand (6000) feet, thence east at a right angle in a straight line to the western boundary of the east one-half of section seven (7), range one (1), thence northerly along said western boundary of the east one-half of section seven (7), range one (1) to the northern boundary of section seven (7), thence easterly along said northern boundary of section seven (7) to the eastern boundary of range two (2), thence southerly along said eastern boundary of range two (2) to the point of intersection with the southern boundary of the Chemainus Land District, thence westerly along the said southern boundary of the Chemainus Land District to a point on said southern boundary being the intersection of the southerly extension of the first described line, thence northerly along said extension to point of commencement, the area herein described comprising twenty-five hundred and forty (2540) acres, more or less."

OWNERSHIP

The properties described above are owned or held under option by Mt. Sicker Mines Ltd, N.P.L.

92B/136 - Mt. Richards - Sirius, etc. As. R. 19 - geol.  
 2397 - geol. map - copy E&N file  
 E&N correspondence file.

92C/16h - Anderson - McIvor Cks - Yam - Ohm As. R. 935 - IP - copy E&N file  
 Geol. map in E&N file - Cominco grid #2.

92C/16h - Pogo As. R. 566 - geol.

92B/13e - Chipman CK - Lady A E&N file 1953  
 MMAR 1956 p. 135.

92B/13c, f - Silver & Humbird Cks - Sharon Copper - E&N file - Cominco grid #1 - IP & geol. maps

92B/13c, f - " " " - Tet, Run, Tinto View - As. R. 936 - Cominco IP grid #1

92B/13c - Copper Canyon - As. R. 3099 - IP  
 9626 - geol. -

92B/13c, f CF, Dawn, ML13, 12 - As. R. 3950 - geol. - Duncanex  
 " " 3951 - P "  
 " " 4904 - P Mt. Sicker M.L.

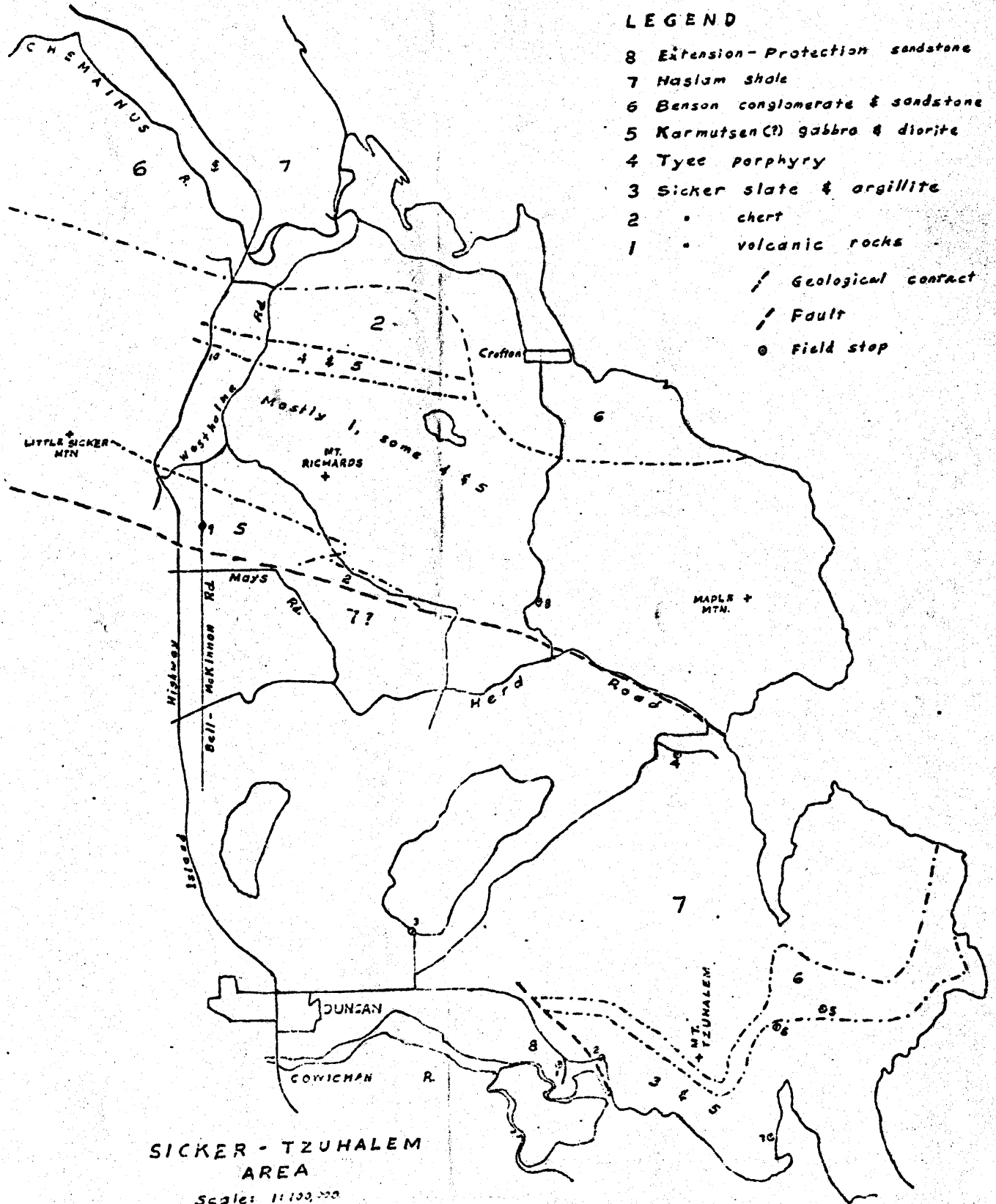
92B/13c Lenora - Tyco - Rich - 1104 - geol. - Mt. Sicker M.L.  
 1714 - P " " "  
 5164 - D Dresser Ind.



**LEGEND**

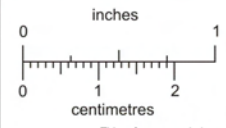
- 8 Extension-Protection sandstone
- 7 Haslam shale
- 6 Benson conglomerate & sandstone
- 5 Karmutsen(?) gabbro & diorite
- 4 Tye porphyry
- 3 Sicker slate & argillite
- 2 • chert
- 1 • volcanic rocks

- / Geological contact
- Fault
- o Field stop



**SICKER - TZUHALEM AREA**

Scale: 1:100,000



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SECTION 14

SECTION 13

OCM 4499

DETAIL

Not to Scale

PLAN 3366

SECTION 13  
SECTION 12

PLAN 28418

PLAN 834 BL

1  
2.02 Ac

2  
2.00 Ac

3  
2.01 Ac

4  
2.11 Ac

PART LOT 1

PLAN 3365

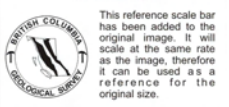
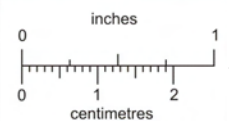
PLAN 28197

PLAN 24903

26246

PLAN

PLAN 24543



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