

Dec. 22/82

GRANKLE COPPER

883625

TGS

Production: (1966 to 1982 incl.) = 57.5 million tons

Cu = 457.5 million lbs

Au = 148,000 oz (4,195,800 g)

Ag = 1,906,000 oz (54,035,100 g)

Rate: 15,000 tpd (13,200 to mill; 1,800 waste)

Reserves: Ore left in ground

Closure Date: June, 1982

BELL COPPER

Production: (1972-1982 incl.) = 46,584,720 tons

Cu = 346,113,278 lb

Au = 269,395 oz (7,637,348 g)

Ag = 0

Rate: 50,000 tpd (16,500 to mill; 33,500 waste)

Reserves: Ore left in ground

Closure Date: October, 1982

GRANISLE

Ca

457,500,000  
.65

297,375  
14,800  
7,624  
319,799

2287500000  
2745000000  
# 297,375,000.00

Au 148,000 @ \$100/oz  
= \$14,800,000

Ag 1,906,000  
4  
\$7624,000

Total ~ \$320 million

BELL 346,113,278  
Cu .65  
17,305,663.90  
# 207,667,966.8  
224,973,630.70

224,975  
40,2410  
265,3355

Total ~ \$265.4 m.

Au 269,395 @  
150  
00,000.00  
13,469,750  
26,939,250  
40,409,250

GRANISLE

Location: 65 km NE Smithers

History: 1929 - Cominco - 5 dth = 7.2 m tonnes of 0.8% Cu + Au + Ag  
1955 - Granby  
1966 - Production @ 4500 tonnes/day - 20 m tonnes @ .53 Cu

Age: 51.2 my K-Ar

Geol.: earlier QD intruded by 120-200 m dyke of BFP incl. inter-mineral & nearly post-min. por. phases of sim. comp.

Mineralization: - cpy + bn + py + minor MoS<sub>2</sub> in gtz filled frac. esp. between contact of BFP & QD. Py. halo - high grade bn pods.

Alt'n: central potassic (sec. bio.) zone enveloped successively by a gtz-ser-carb-py zone & chl-carb-ep. zone.

Production: (to 1975) 25 m tonnes = 114,000 tonnes Cu  
3.26 m grams Au  
30.8 m grams Ag

Reserves: (1972) - 81 m tonnes @ .43% Cu (1200 tpd)  
1975 - 60 m tonnes of .43% Cu + Au + Ag  
Strip Ratio 1:1  
0.005 0.05

# GRANISLE

Nov. 24/78

14,000 - 15,000 ypd

Bob Johnson - Temporary Mine Manager

Mike Macleod - at Bell now co-ordinating amalgamation with Bob Hamaguchi.

Jan? - new man in Engineering office

- proposed rd. between Granisle & Bell to replace Bell d.t. ferry  
→ requires pollution control approval for culverts/on bridge

- Morrison in plans

- no "go" (money) for moly circuit - lab cannot reproduce results

- planned expansion at Bell (re. since last couple of yrs)

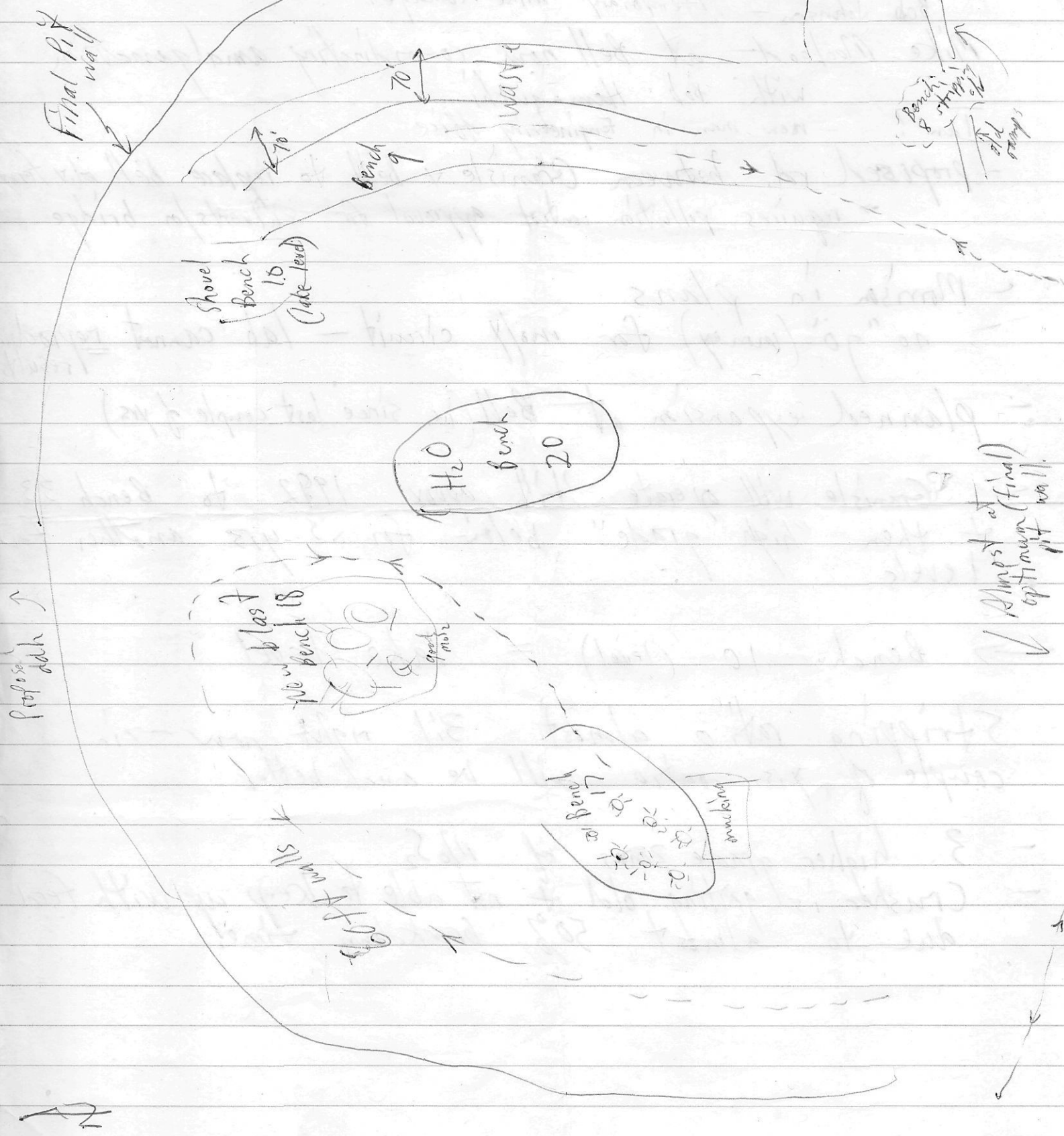
- Granisle will operate 'til approx 1992 to Bench 33  
& then "high grade" below for 3 yrs another few levels

→ Bench 10 (level) = lake level

Stripping ratio almost 3:1 right now → in a couple of yrs. ratio will be much better

- 3 higher grade zones of  $MoS_2$

- Crusher is getting old & not able to keep up with feed due to almost 50% breakdown time!

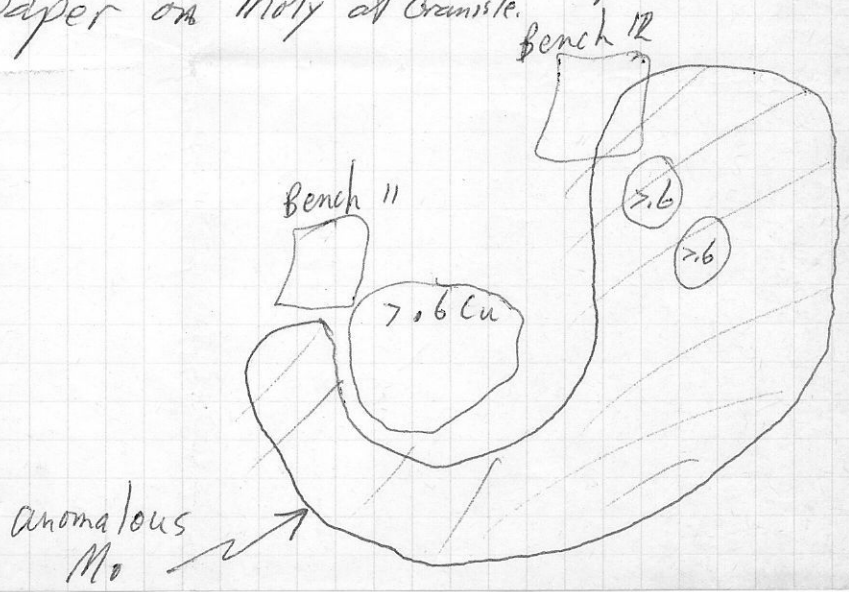


Granisle Visit - Nov. 23/77

Don Barker  
Ass. Mine Super.

- Av. Mo grade = 0.01 Mo (not MoS<sub>2</sub>)
- approx. 350 analyses for Mo indicate possibility of setting up economical recovery circuit
- analyses in % Mo is approx 60% better (higher) than ppm. (Chemex Labs)
- Mo surrounds Cu-rich core (orebody) - esp. on east + south sides. Preliminary suggestions are that it closes to the west + north
- Mo preferential to "Waste A" + not "Waste B"
- Moly assoc with gtz-carb veins + dry frac ± cpv, py.
- Moly observed on main joint plane on benches 5, 7, 9
- Mining continuing on Bench 12 + finished bench 11
- Mining also on Bench 19 (lowest)
- Mining .42% Cu
- Will be mining higher grade core next few yrs. (.62%)
- Granisle wants to know about rhenuim but no lab in Van. or EMR will do.
- Our Lab assisting by running samples ?!
- Don + Louis planning paper on Moly at Granisle.

ST wants  
Ass. Rpts.  
ST  
RD



Dr. Bartley  
- Iron Ore

# GRANISLE VILLAGE INN

BOX 130 • GRANISLE, B.C. • PHONE 697-2273



Feb, 15/77

CIMM Dinner Meeting

69 m. tons of .43% Ca

- started 17th bench  $\rightarrow$  60 blast holes  
av. .6% Ca

but some holes of  $> 3\%$  Ca

MoS<sub>2</sub> becoming important

ie. starting to analyze for with hopes  
of recovering

- 14,000 tons/day

- Rock mechanics important - study started  
last summer - completed now & analyzing data

$\rightarrow$  good bornite "pipe" area (1st in a long  
while)

- 2 main faults - East & West in pit

- 3 types of inclusions - each within each other

- New contract signed with Sumitomo