

GEOLOGICAL REPORT ON THE H-K GROUP PROPERTY

of

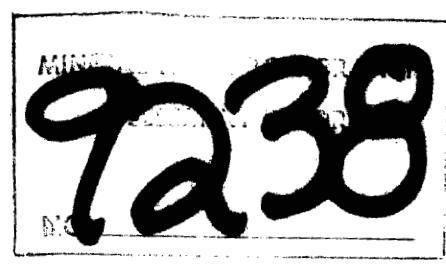
Roy D. Kregosky

Greenwood Mining Division

82E/7

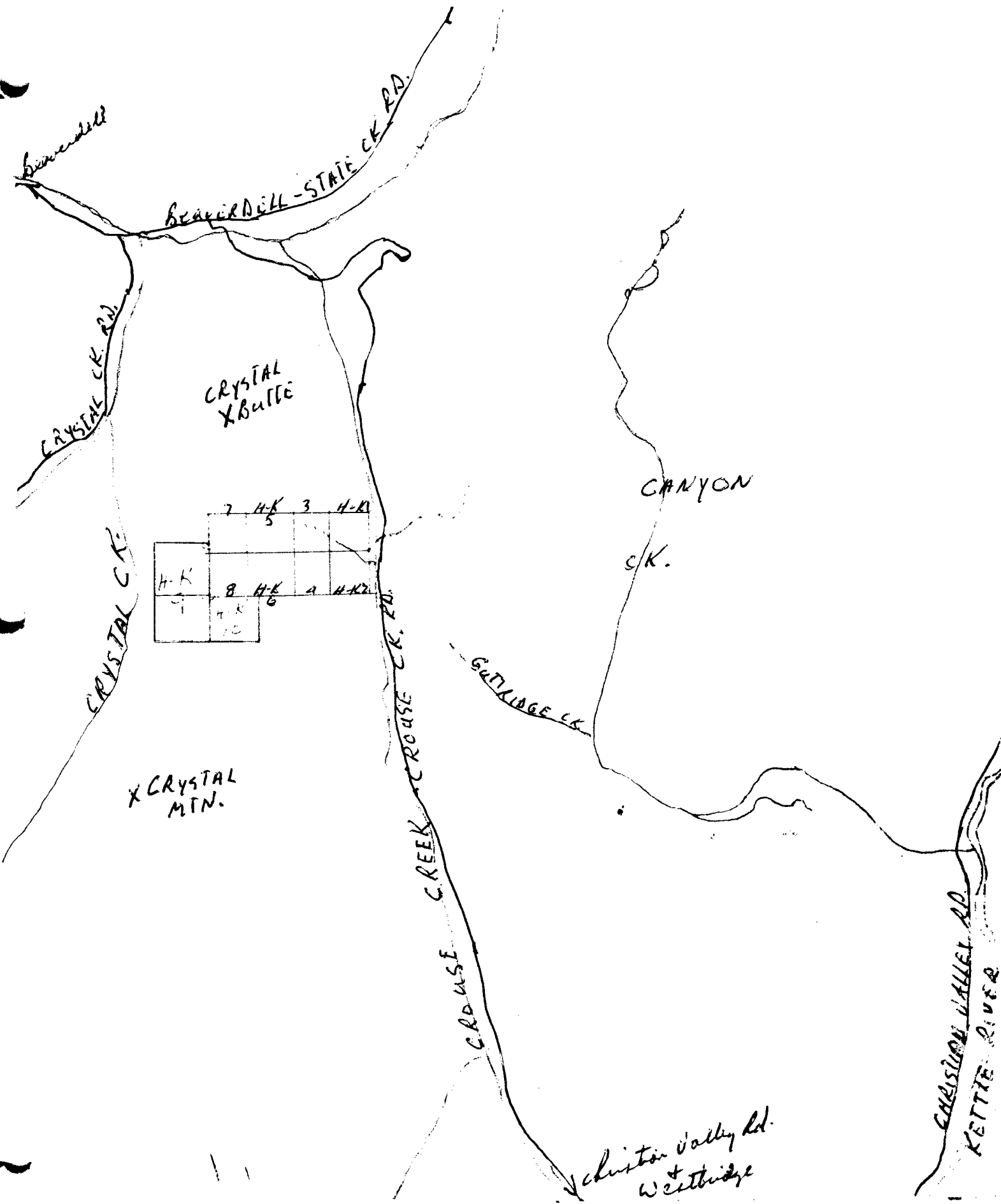
Latitude...49° 28'

Longitude..118° 57'



May 12, 1981

R. Kregosky
BSc. Geology



CRYSTAL X BUTTE

CANYON

CK.

GULLIDGE CK.

X CRYSTAL MTN.

CHRISTON VALLEY RD.
KETTLE RIVER

CHRISTON VALLEY RD.
W. WEATHERIDGE

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INTRODUCTION

The H-K Group property is located approximately 10 kilometers in a direct line northeast from Beaverdell in the Greenwood Mining Division. They extend from Crouse Creek on the east to Crystal Creek on the west and are partially situated on a saddle between Crystal Butte to the north and Crystal Mountain to the south. Elevations range from 1,100 meters at Crouse Creek to a maximum of 1,400 meters on the flank of Crystal Mountain. The property is readily accessible by motor vehicle from Beaverdell 12 kilometers northeast along Beaverdell Creek Road and then south for 6.8 kilometers at the junction of Larsen Creek Road.

HISTORY

The H-K Group property, currently registered in the author's name, is underlain by Anarchist Group rock of Palaeozoic age consisting mainly of metamorphosed igneous rocks (greenstone), greywacke, paragneiss and a marblized limestone. Nelson intrusive rocks of Mesozoic age outcrop locally in the claim group as well as along the southwestern boundary. Crystal Butte, to the north, is of Cenozoic age and consists of the Phoenix Volcanic group of rocks consisting mainly of tr^Achyte and andesite.

The western portion of the claim group contains several old trenches, an adit, one winze plus two diamond drill holes. Personal investigation failed to turn up any history in the form of reports or assessment work pertaining to the above mentioned

workings. Examination of the old showings indicated fracture-filled mineralized quartz veins (occurrences that are similar to the productive veins at the Beaverbell Teck Corporation Mine). Contact mineralization also occurs between the arenaceous rocks and metamorphosed igneous rocks of the Anarchist group. These showings indicate lead, zinc, copper and accessory silver mineralization.

During the latter part of May and early June of 1980, the author prospected and made field notes of the claim group. A preliminary baseline of 1 kilometer was established for the purpose of geological mapping of the old workings as well as for future ~~geological mapping of the old workings as well as for future~~ geological, geochemical and geophysical surveys. The final post of the H-K 7-8 claim and the common boundary line with the H-K 9 claim (Plate 1) was used for establishing the baseline point of reference. The claim line of the H-K 1-8 claims was used as a reference point for making field notes. Four traverses were made parallel to the H-K 1-8 claim line on the northern boundary as well as an equal number of traverses along the southern boundary. Including the baseline, the prospecting traverses cover a lineal distance of over 15 kilometers and an area of over 150 hectares. The most detailed area prospected was located in the H-K 9 and H-K 10 units where the old workings are located.

The field reconnaissance was undertaken so as to better

understand and interpret the local geological setting and the mode of mineralization as is evident in the old trenches and adit. The field traverses along the southern boundary indicate outcroppings of Nelson intrusive rocks consisting of granodiorite and a quartz monzonite that were possible the parent rock for percolating hydrothermal fluids that were injected into various fractures and shear zones. This is most evident in the vertical pit or winze (Bl 2+80S, Plate 1 and 2) where the country rock is heavily altered along the contact of the quartz vein which shows some galena, chalcopyrite and sphalerite mineralization. The area has a halo of pyritic mineralization extending into the country rock. The adit located at BL5+50S (Plate 1, 2 & 3) also shows evidence of quartz veins that are associated with small shear zones. One of these veins was chip sampled and assayed (Plate 4) Pb-2.75% Zn-65% AG-.72 oz/ton, Au was not assayed for. Other field observations of the northern trenches (BL 3+75N, Plate 1,2) indicate galena, malachite and sphalerite associated with the altered marblized limestone - greenstone contact. The traverses along the northern boundary indicate a paragneiss with local outcroppings of the Phoenix Volcanic group. A possible mineralized zone based on field observations would trend northeasterly from the dit to the north trenches. This is the area that appears to have the most concentrated geological activity. Further observations and field studies need to be continued to better

delineate and interpret the various contacts, rock types and their interactions. Soil samples should be taken to help to locate any anomolous mineral zones as well as a possible ULF-EM survy to delineate any conductive ore bodies and/or shear zones.

COST STATEMENT

Field Work

12 Days @ \$75.00/day.....\$ 900.00
(May 23-25, May 27-30, June 2-6)

Transportation

90 kilometer/trip @ 15¢/km.\$ 162.00

Rock Assay

Pb - Zn - Ag\$ 22.00

Report Preparation

1 day @ \$75.00\$ 75.00

Typing, F. Harrop

4 hours @ \$10.00/hr.....\$ 40.00

TOTAL

\$1,199.00

Roy Dennis Kregosky, BSc, Geology, Univ. of Calgary, 1970

May 12, 1981 *Roy Kregosky*

OLD TRENCH 142 MTS.
debris Filled

TAILINGS INDICATE
a possible Fe_2O_3 vein
MINOR sulfide MINERALIZATION

BL 2005

greenstone of aphanitic ground MASS
WITH pyroxene + Hornblende LATHS

VERTICAL PIT

BL 3005



OLD TRENCH 245 MTS.
MINOR PYRITE MINERALIZATION
CONTACT OF greenstone + LIMESTONE WITH Hornfels

BL 4005

SCALE 1CM = 25 MTS.

■ H-K CLAIM Post

■ L.C.P.
H-K 10

○ old workings

— height of land

BL 5005

TRENCH

PLATE 1 (BOTTOM)

TAL
444

(11) (12) .A6 + CH STAINING N
(13) a quartzose - Hornfelsic zone
of bedded arenaceous rocks

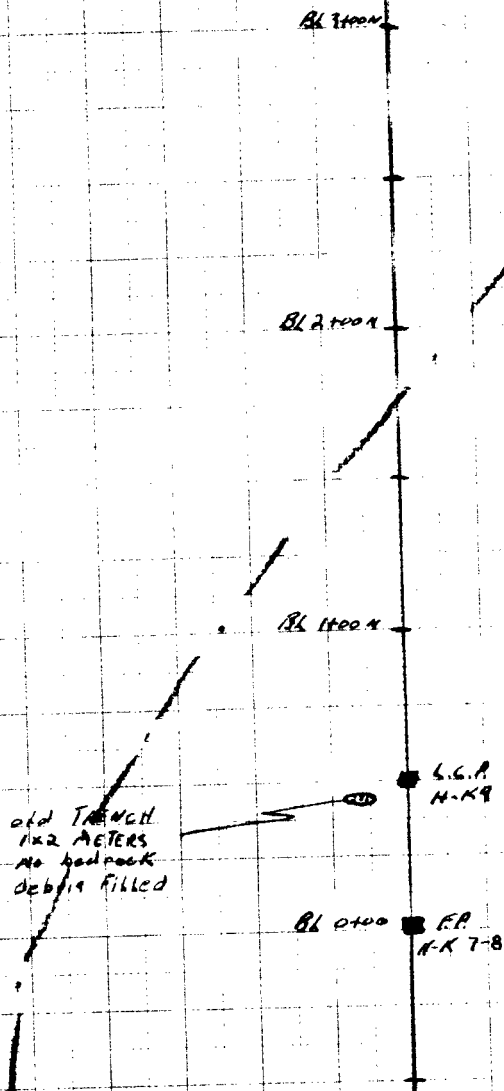
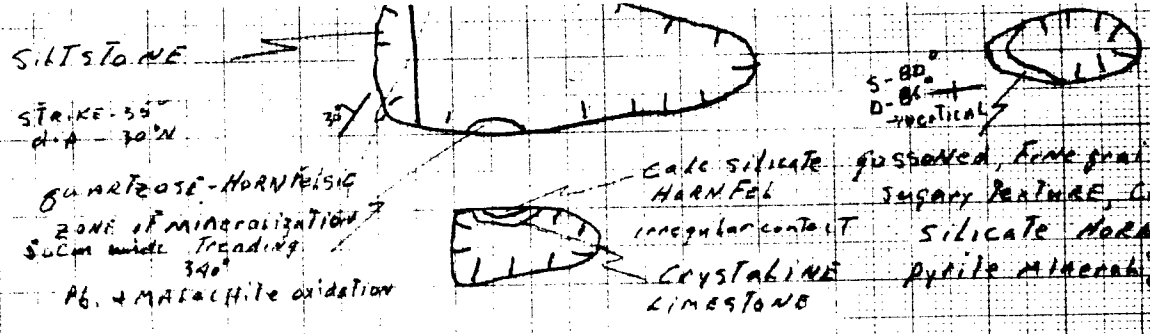


PLATE 1 (TOP)

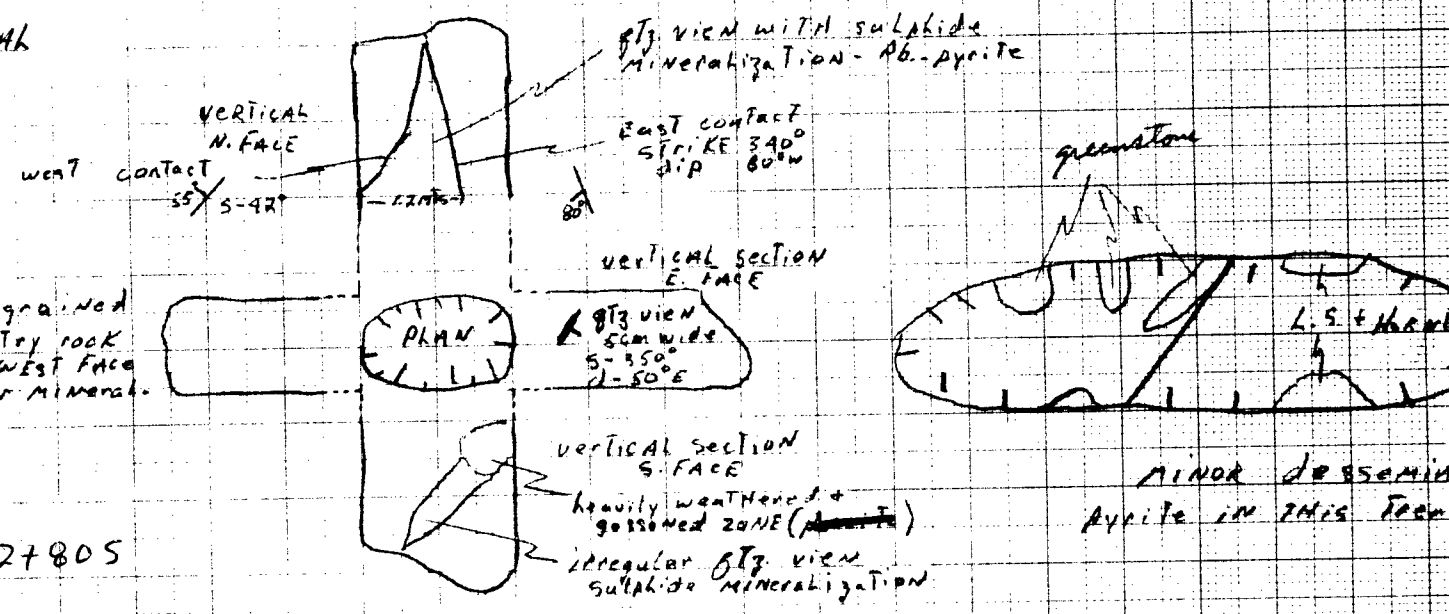
TRENCHES

Bl 3775 N

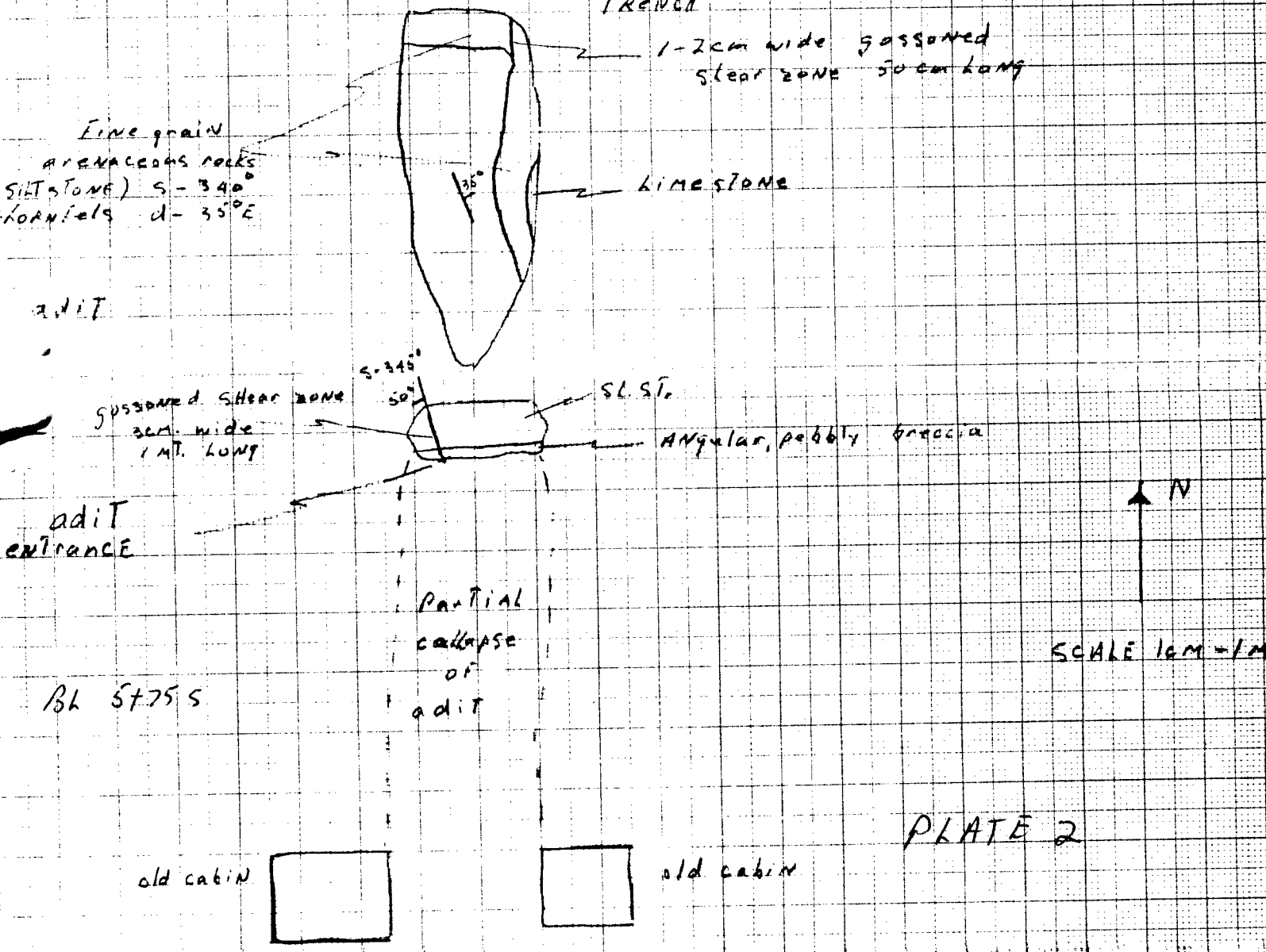


VERTICAL

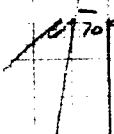
P.T
 +
 TRENCH



TRENCH



gossamer
mineralized
qtz vein
1-3 cm wide
2 m long
strike - 10°
Dip - 74°E



area of small gossamer
quartz veins (1 cm wide)
1 main vein 1 cm x 3 m long
strike - NORTH
dip - 75°W

breccia, calcareous,
angular
pebbly

140°

155°
SL ST.

PORTAL ELEV. 1,335 MTs.

SCALE 1 CM

PLATE 3

qtz vein - minor
1-2 cm
1.5 m long
strike - 60°
dip - 55°N

mineralized qtz vein (S)
3-6 cm wide 120 cm long
strike - 50° dip 55°W

qtz vein (sample #1)
3-10 cm
70 cm long

qtz vein Pb. mineralization
10 cm wide
30 cm long Pb.

135°

55°

70°

75°

