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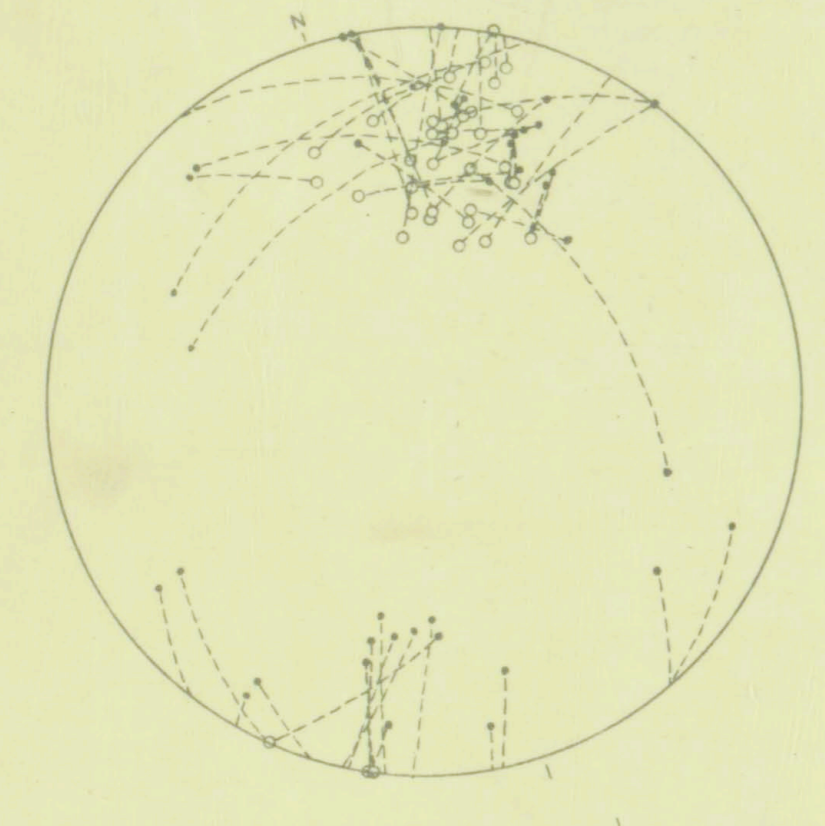
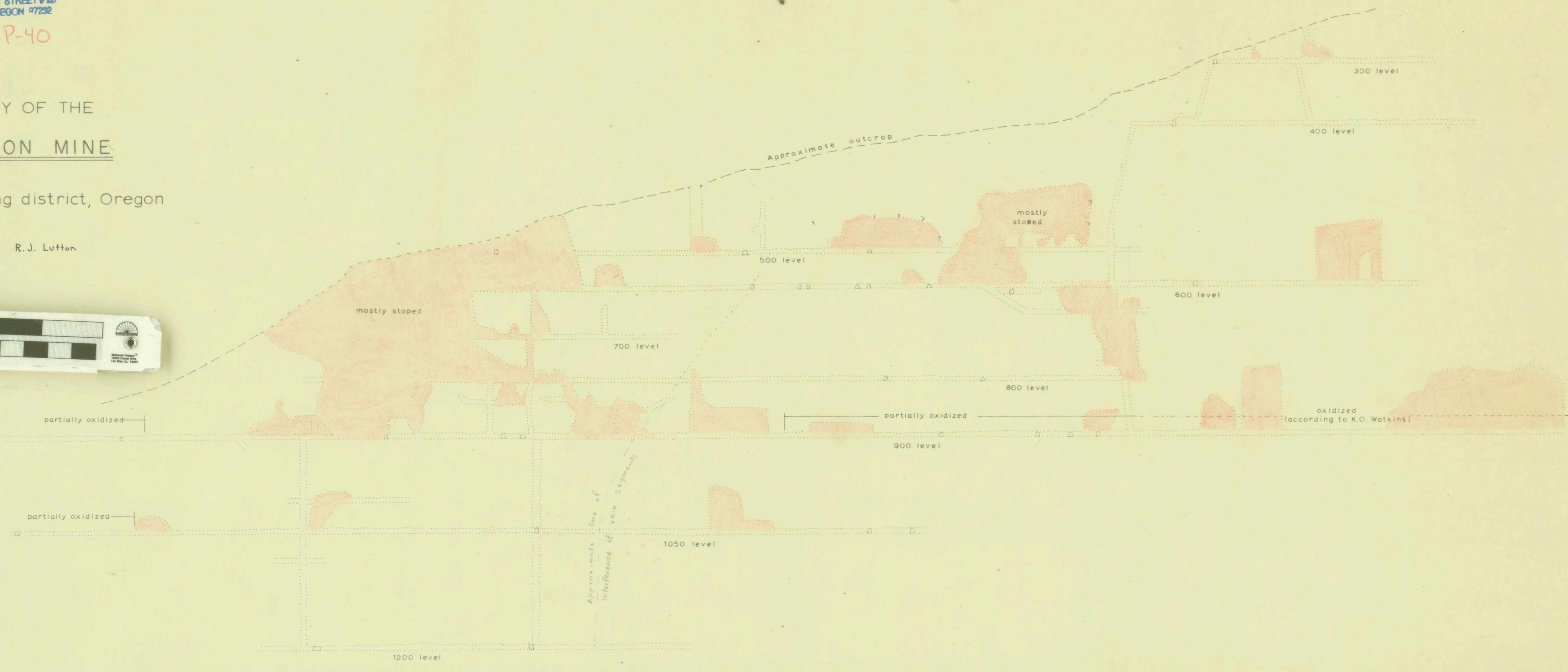
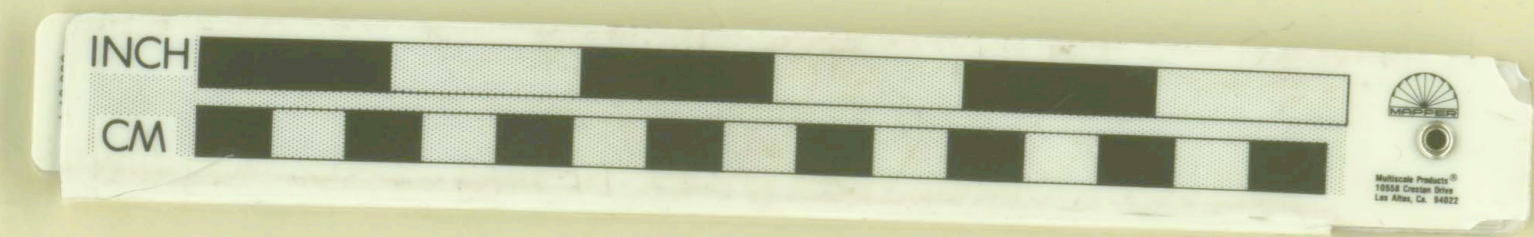
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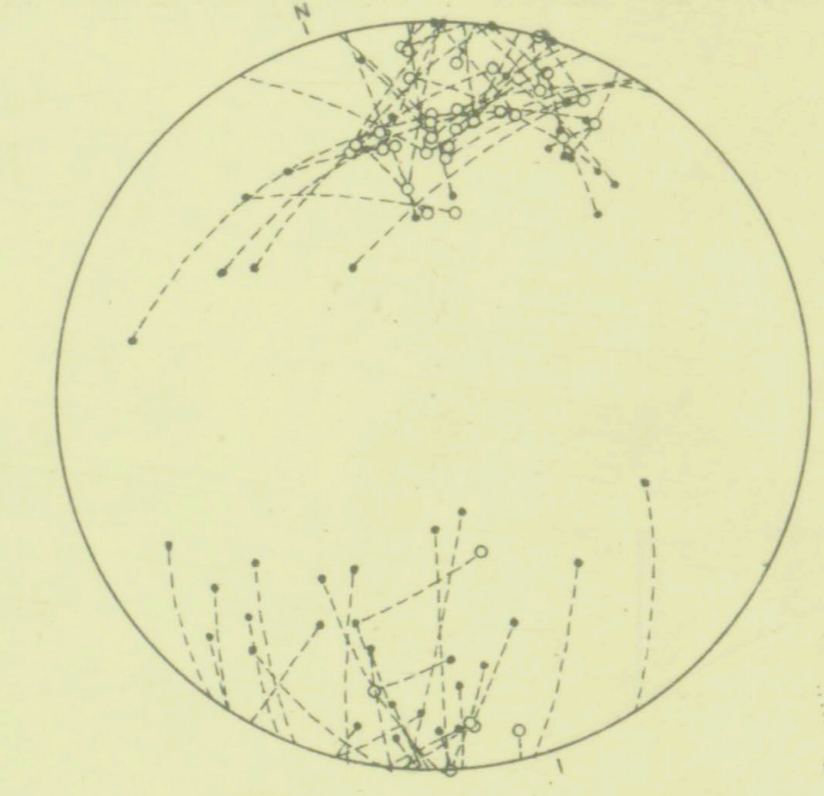
GEOLOGY OF THE CHAMPION MINE

Bohemia mining district, Oregon

Preliminary copy R. J. Lutton

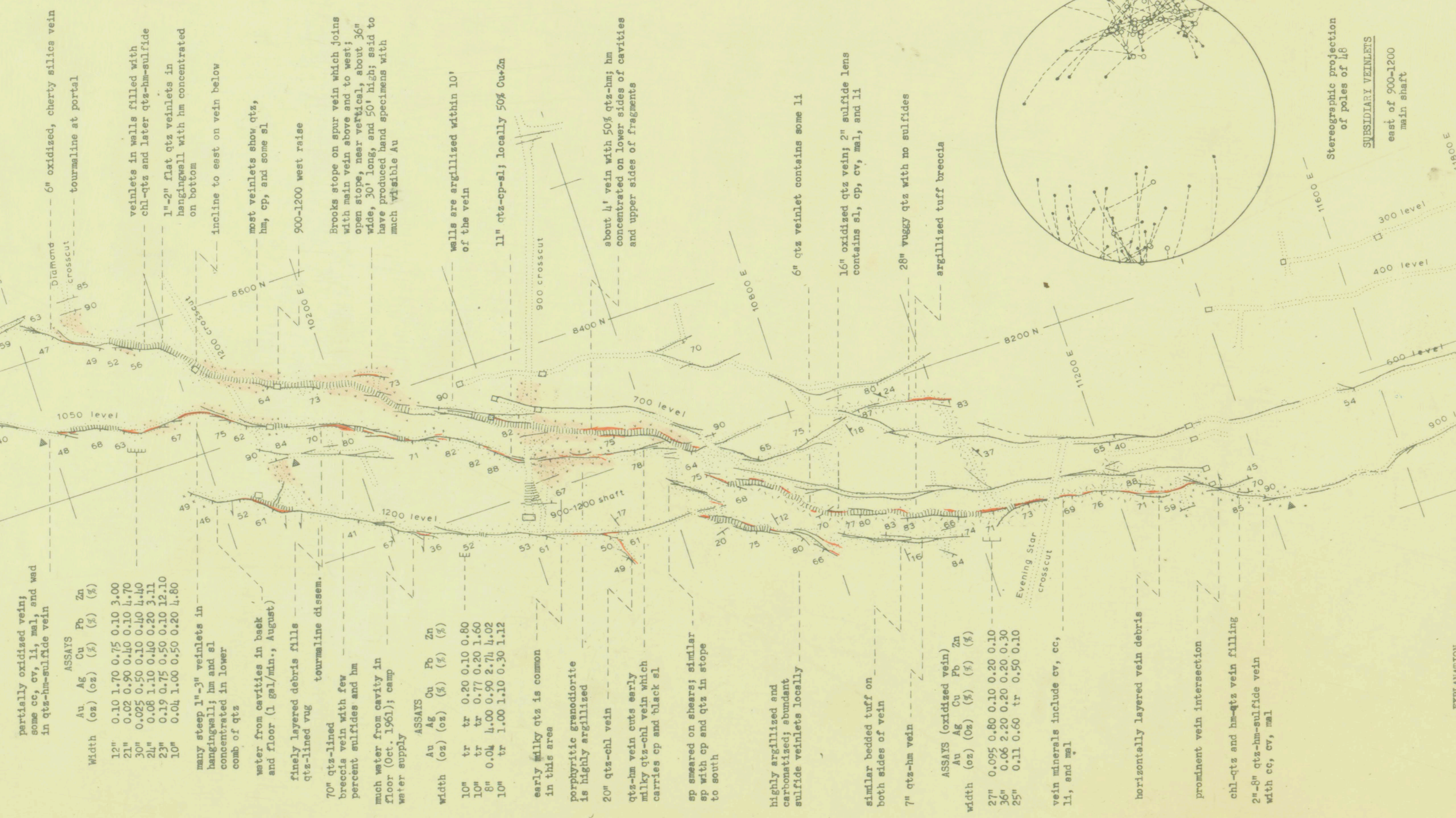
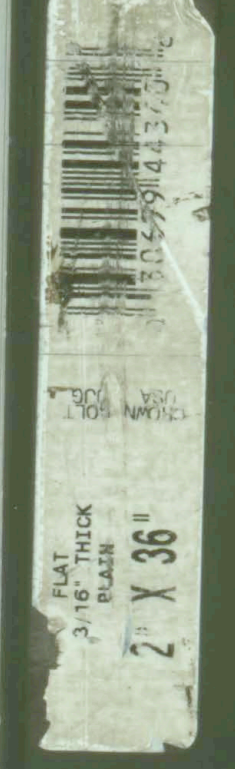


Stereographic projection
of poles of veins
west of 900-1200
main shaft



Stereographic projection
of poles of veins
east of 900-1200
main shaft

41-39-29



partially oxidized veins
in quartzite vein

Width	Au	Ag	Cu	Pb	Zn
1 1/2"	0.15	0.70	0.70	0.15	0.00
2 1/2"	0.22	0.90	0.10	0.10	0.70
3 1/2"	0.025	0.50	0.10	0.10	0.40
2 1/2"	0.08	1.10	0.40	0.20	3.11
1 1/2"	0.11	1.00	0.50	0.20	0.80
1 1/2"	0.04	1.00	0.50	0.20	0.80

many steep 1-3" veins in
comb of qtz
concentrated in lower

water from cavities in back
and floor (1 gal/min, August)

finely layered debris fills
circled rag tourmaline dross

70' qtz-lined
breccia with 10%
percent sulfide and hm

much water from cavity in
360' camp

water supply

ASASXS

width	Au	Ag	Cu	Pb	Zn
10"	tr	tr	0.20	0.10	0.80
10"	tr	tr	0.77	0.20	1.60
10"	0.04	4.00	0.50	2.70	1.02
10"	tr	1.00	1.10	0.30	1.14

early gilly qtz is common
in this area

porphyritic granodiorite
is highly argillized

20' qtz-chl vein

shale vein with early
silky qtz-chl vein which
carries ep and black al

ep smeared on shears; similar
ep with cp and qtz in stope
to south

highly argillized and
carbonatized; abundant
sulfide veinlets locally

similar bedded turf on
both sides of vein

7' qtz-hm vein

ASASXS (oxidized vein)

width	Au	Ag	Cu	Pb	Zn
2 1/2"	0.05	0.80	0.10	0.20	0.10
2 1/2"	0.05	0.80	0.10	0.20	0.10
2 1/2"	0.11	0.50	tr	0.50	0.10

vein minerals include cv, cc,
ll, and mal

horizontally layered vein debris

prominent vein intersection

chl-qtz and hm-qtz vein filling

2-8" qtz-hm-sulfide vein
with cv, ep, mal

EXPLANATION
(Datum planes are 3.5 feet above floor)
coordinates at 200-foot intervals)

- Tunnel walls
- Shaft, raise, or winze
- Lagging across back (some stopes above)
- Principal shear plane or zone (showing dip and coarse silicification)
- Vein filling (mostly quartz)
- Shale and silty of bedding and foliation in wallrock
- Wallrock types
- Pyroclastic
- Porphyritic granodiorite
- Basic lava or dike
- Impelite

- Abbreviations of minerals
- ep epithermal
 - hm hematite
 - cp calcopryrite
 - al sphalerite
 - qtz quartz
 - mal malachite
 - cc calcocite
 - ll limonite
 - mi malachite

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