CONTACT INFORMATION
Mining Records Curator
Arizona Geological Survey
416 W. Congress St., Suite 100
Tucson, Arizona 85701
602-771-1601
http://www.azgs.az.gov
inquiries@azgs.az.gov

The following file is part of the Grover Heinrichs Mining Collection

ACCESS STATEMENT

These digitized collections are accessible for purposes of education and research. We have indicated what we know about copyright and rights of privacy, publicity, or trademark. Due to the nature of archival collections, we are not always able to identify this information. We are eager to hear from any rights owners, so that we may obtain accurate information. Upon request, we will remove material from public view while we address a rights issue.

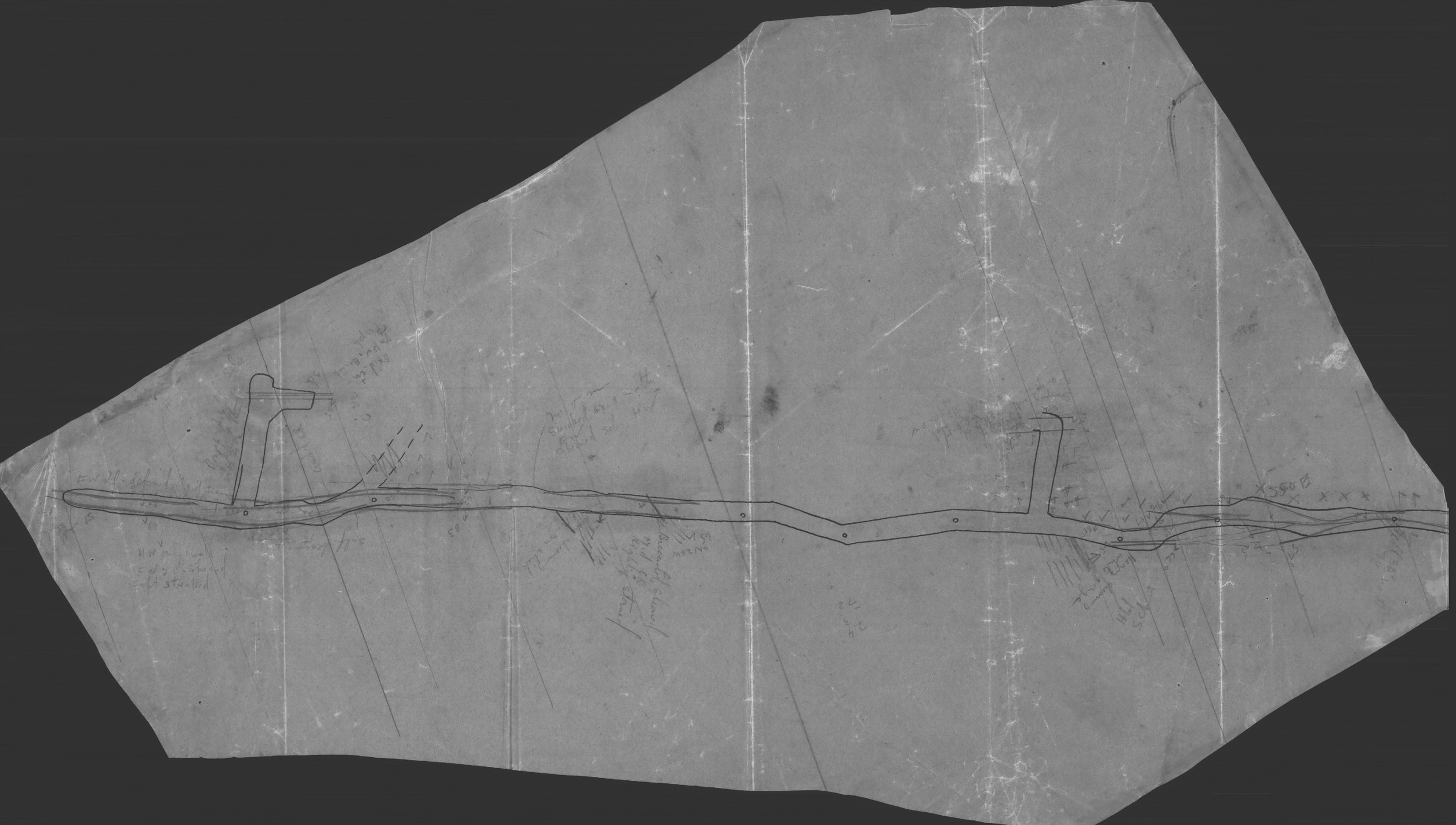
CONSTRAINTS STATEMENT

The Arizona Geological Survey does not claim to control all rights for all materials in its collection. These rights include, but are not limited to: copyright, privacy rights, and cultural protection rights. The User hereby assumes all responsibility for obtaining any rights to use the material in excess of "fair use."

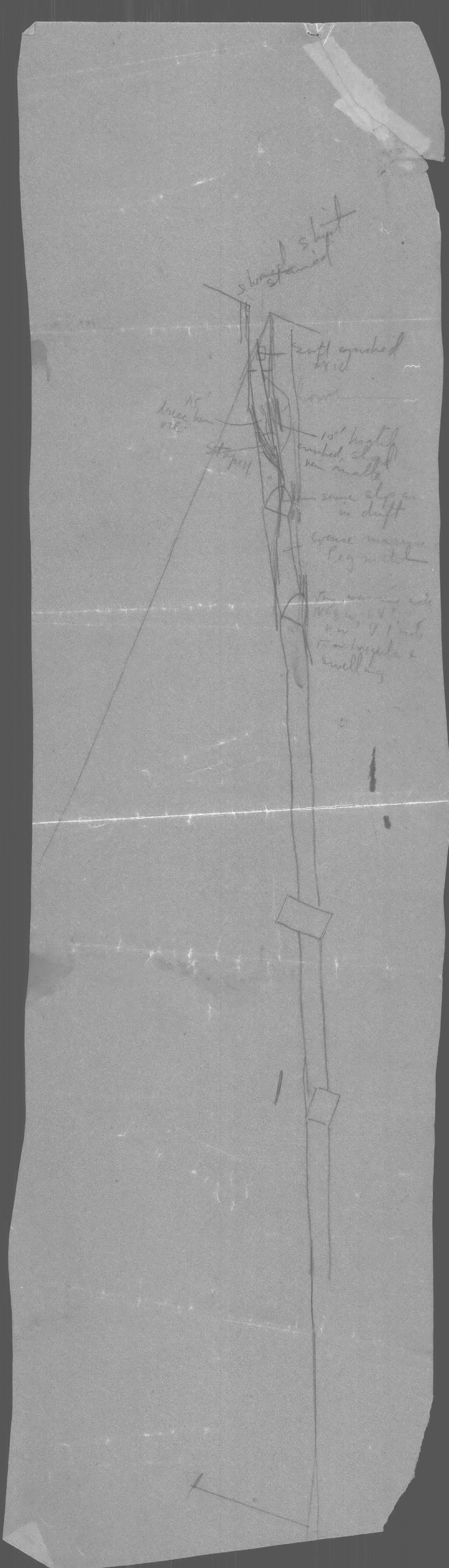
The Survey makes no intellectual property claims to the products created by individual authors in the manuscript collections, except when the author deeded those rights to the Survey or when those authors were employed by the State of Arizona and created intellectual products as a function of their official duties. The Survey does maintain property rights to the physical and digital representations of the works.

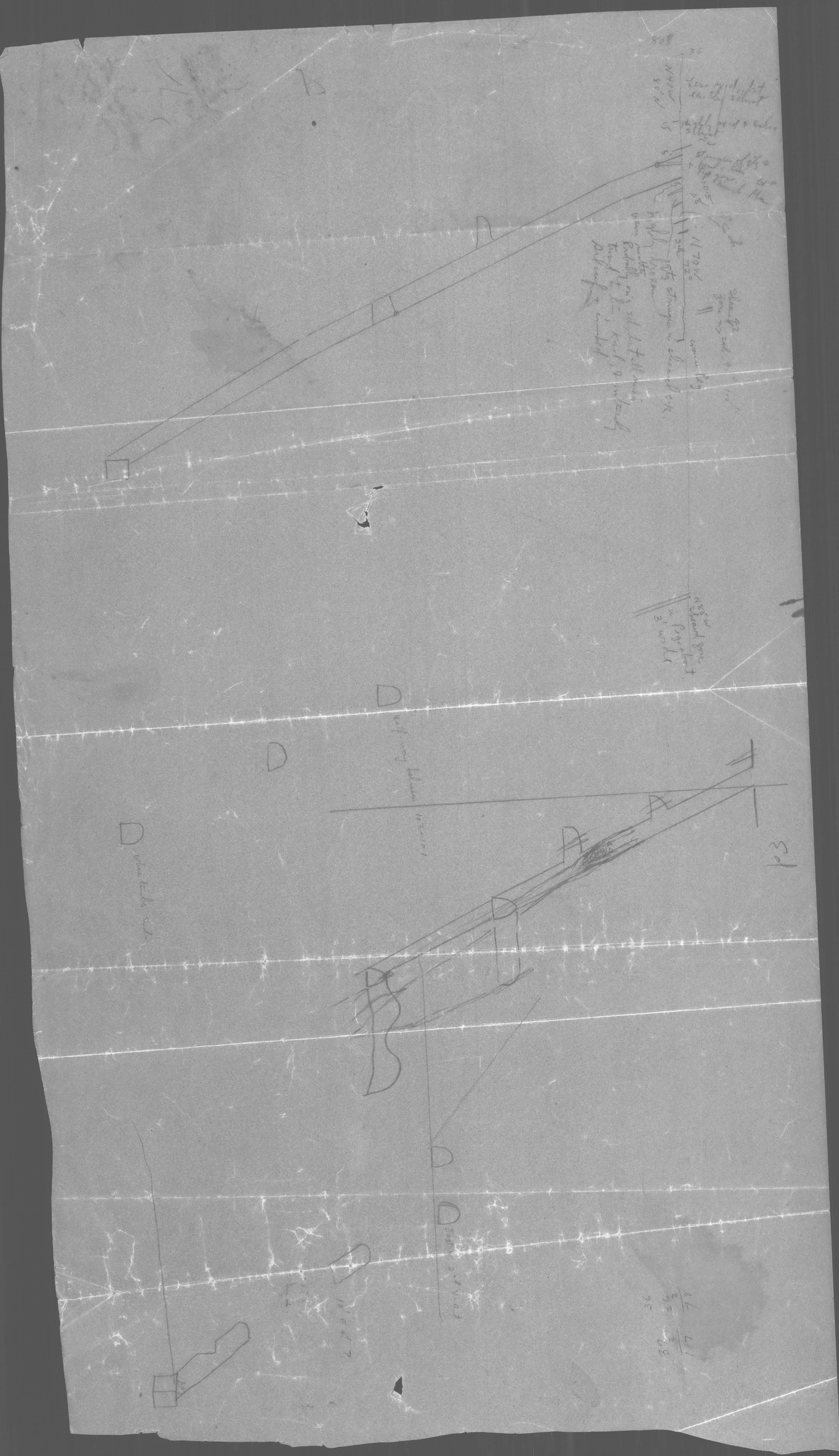
QUALITY STATEMENT

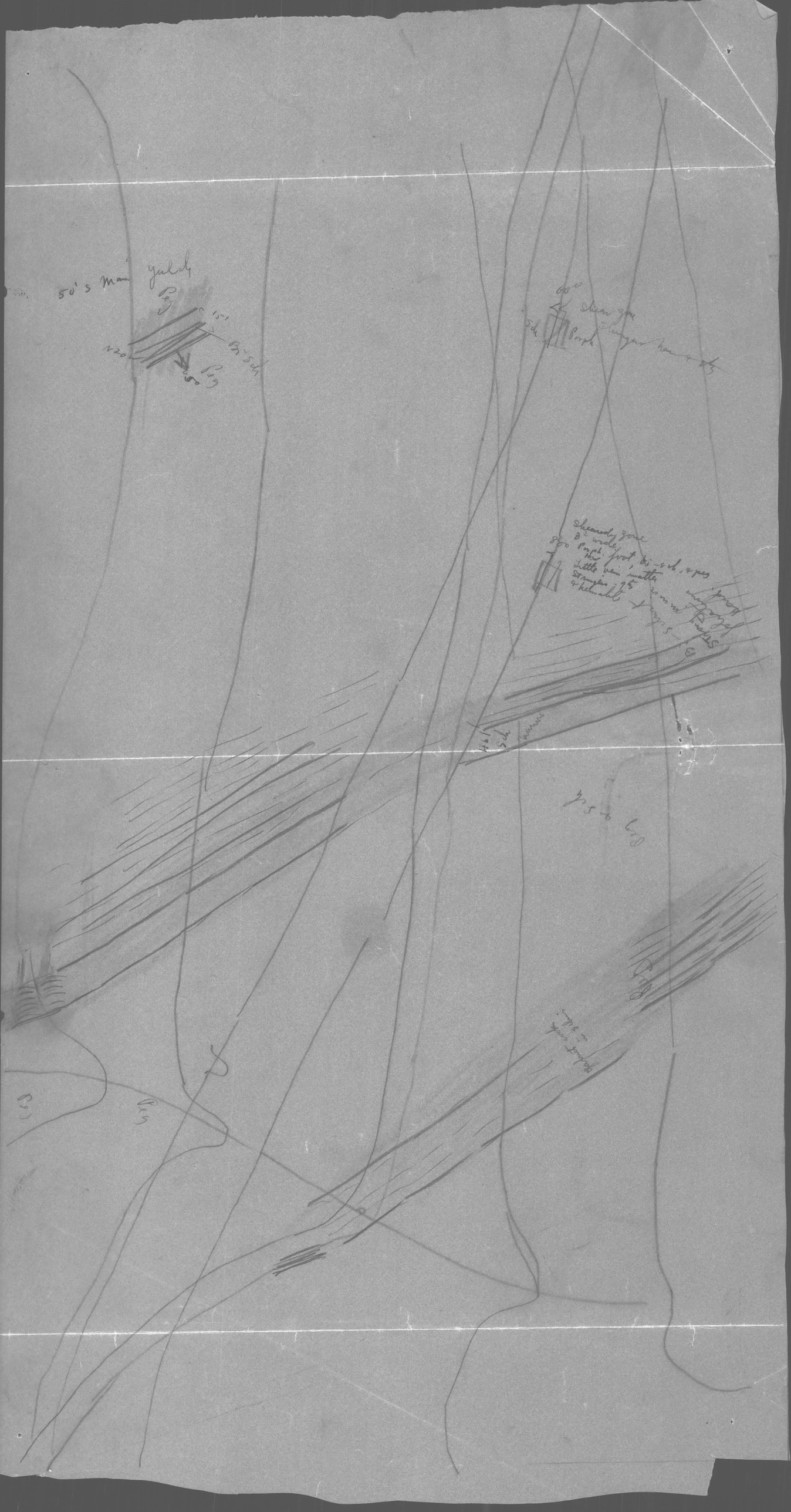
The Arizona Geological Survey is not responsible for the accuracy of the records, information, or opinions that may be contained in the files. The Survey collects, catalogs, and archives data on mineral properties regardless of its views of the veracity or accuracy of those data.



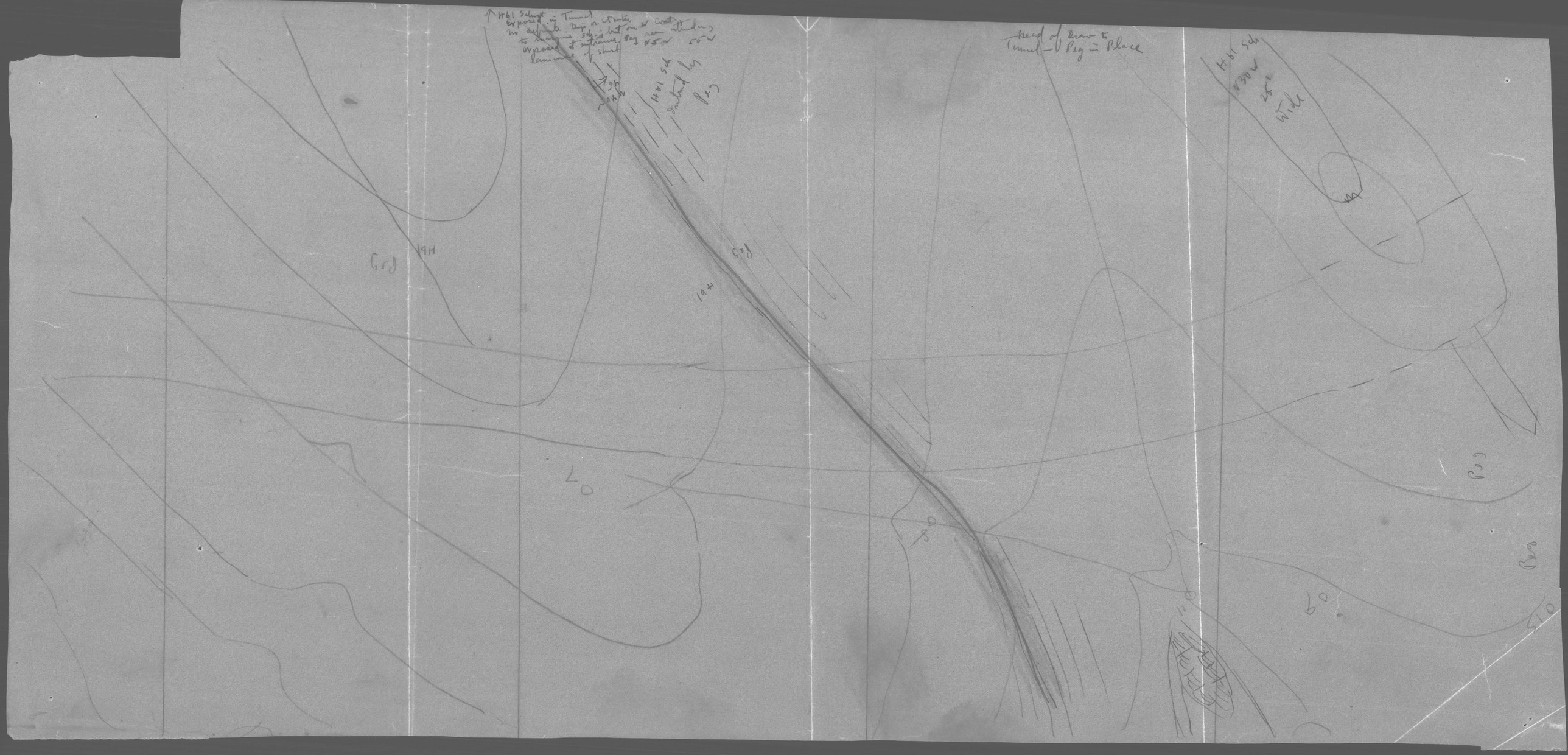
Peg
37
Hbl
N 20 W
N70W-N 0B
S60 W 6H
50' Wide
Split 100 NW
1 branch Due N
Peg


shaft stained
drift crushed
1.5' trace hem ore
1.5' highly crushed, shaft hem matter
stopped
same slip as in drift
coarse massive Peg matter
swelling




50's Main Gulch
Peg
151
N20
Bi-Sch
Peg
60°
Shear zone
Sch
Porph
Shearing zone
B² wide
800
Porph. foot, bi-sch. & peg
Little vein matter
Stringers .95
& hematite
Sch
Peg
Peg
Peg

Strong Wall
Strong branch mineral
Strong slip Red go
Intricate interlaced shearing
Intricate slipping White
mach gouge
Si-Schist
Pegmatite
Coarse Peg
Heavy shearing
Banded vein
Blocky trac
Kaol peg
Looking W
Oxid ore
Schist
Coarse vein
Looking E
vein qtz
hem stringers in
sheared qtzite



Head of Draw to Tunnel — Peg in Place
Hbl Sch
N30W
Wide
Hbl Sch
Peg

Notes on Physiography

Main draw - Willow springs
See Pipe Line

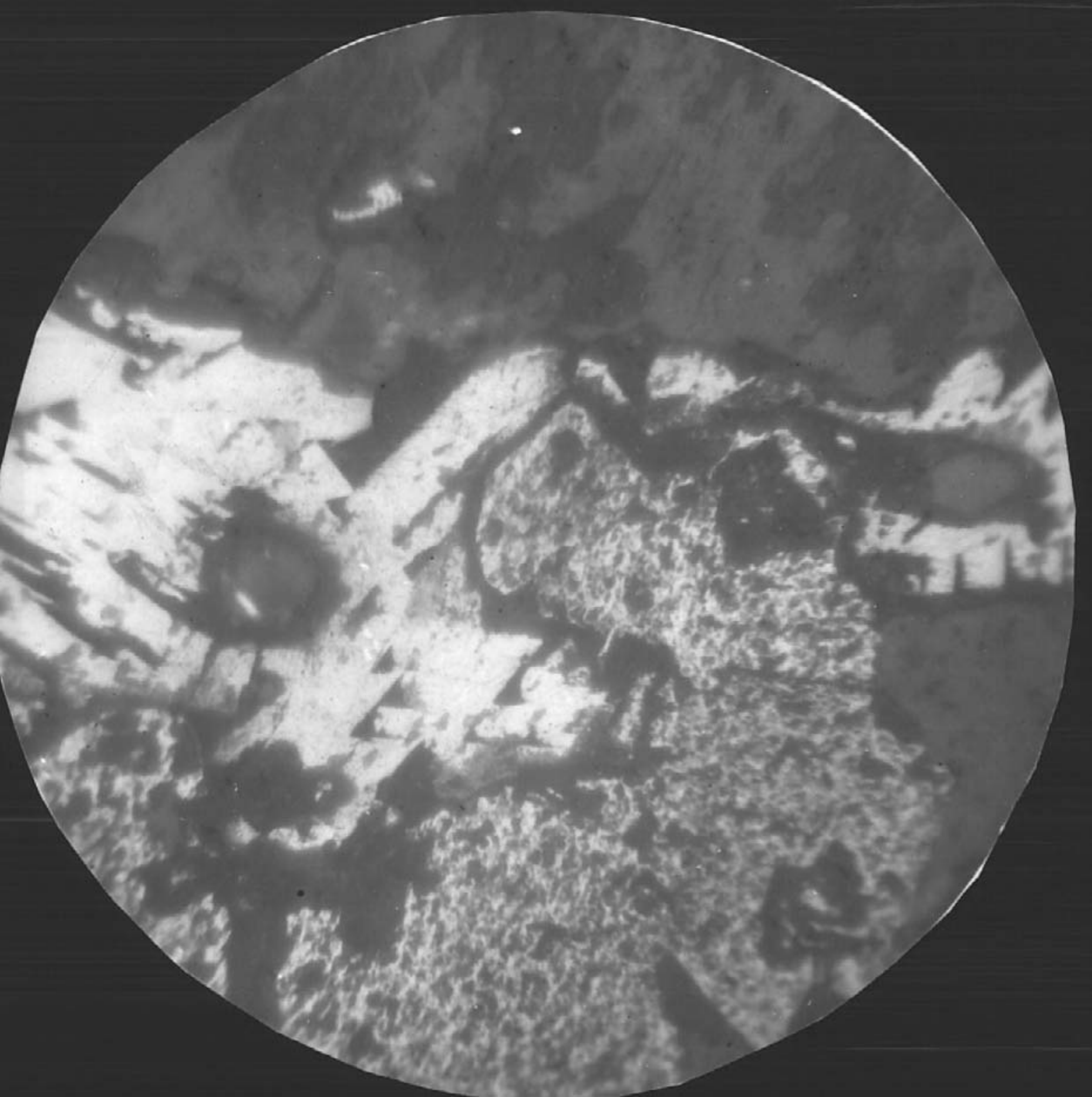
Streams of vicinity markedly influenced by structure - follow lines of soft brittle schist. Hbl schist & peg form ridges. All N-N 20 W. Highest ridges formed by Hbl schist, or heavily impregnated Bi schist. Foliated makes for resistance

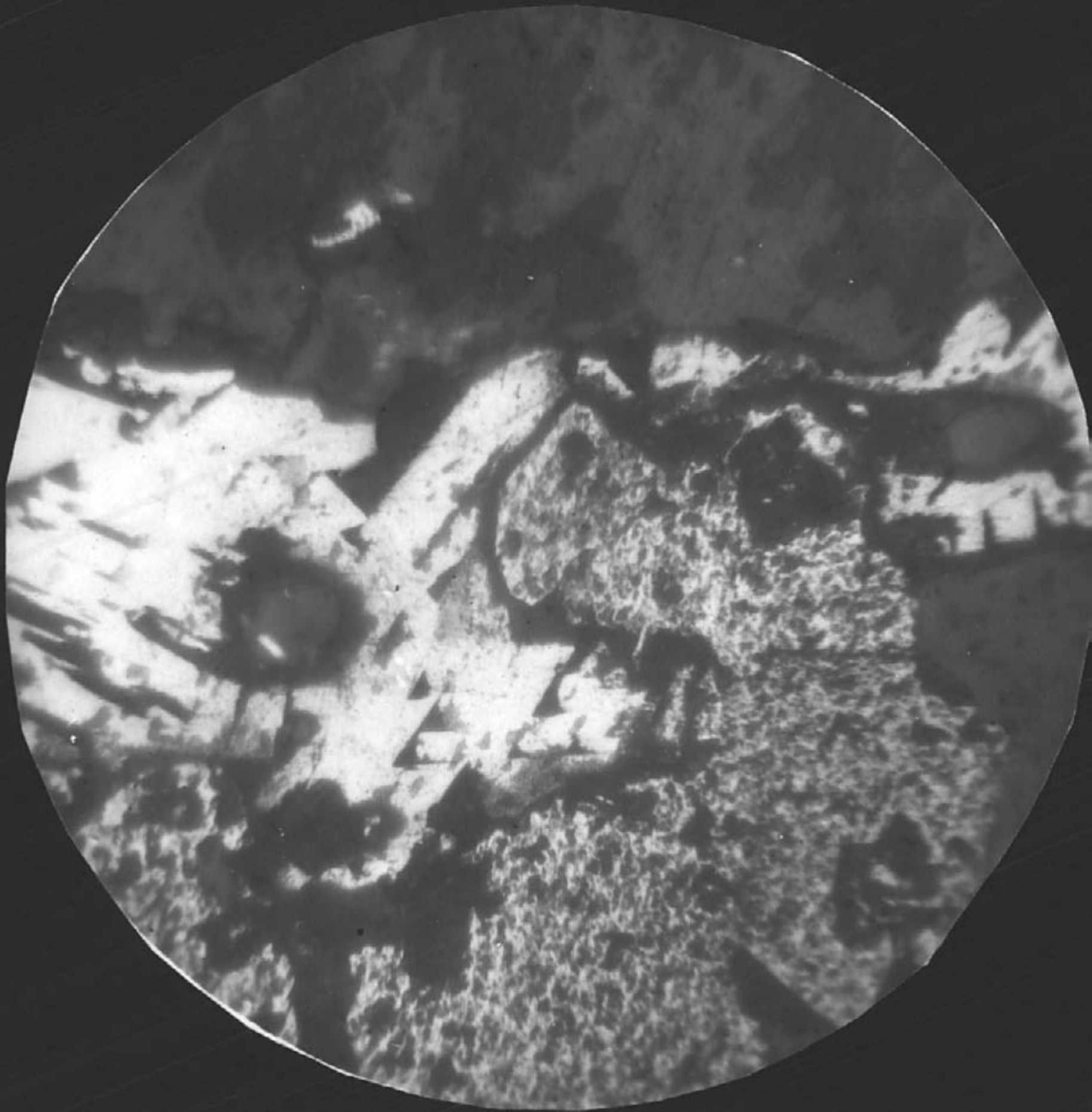
FW opp
N Cross-Cut

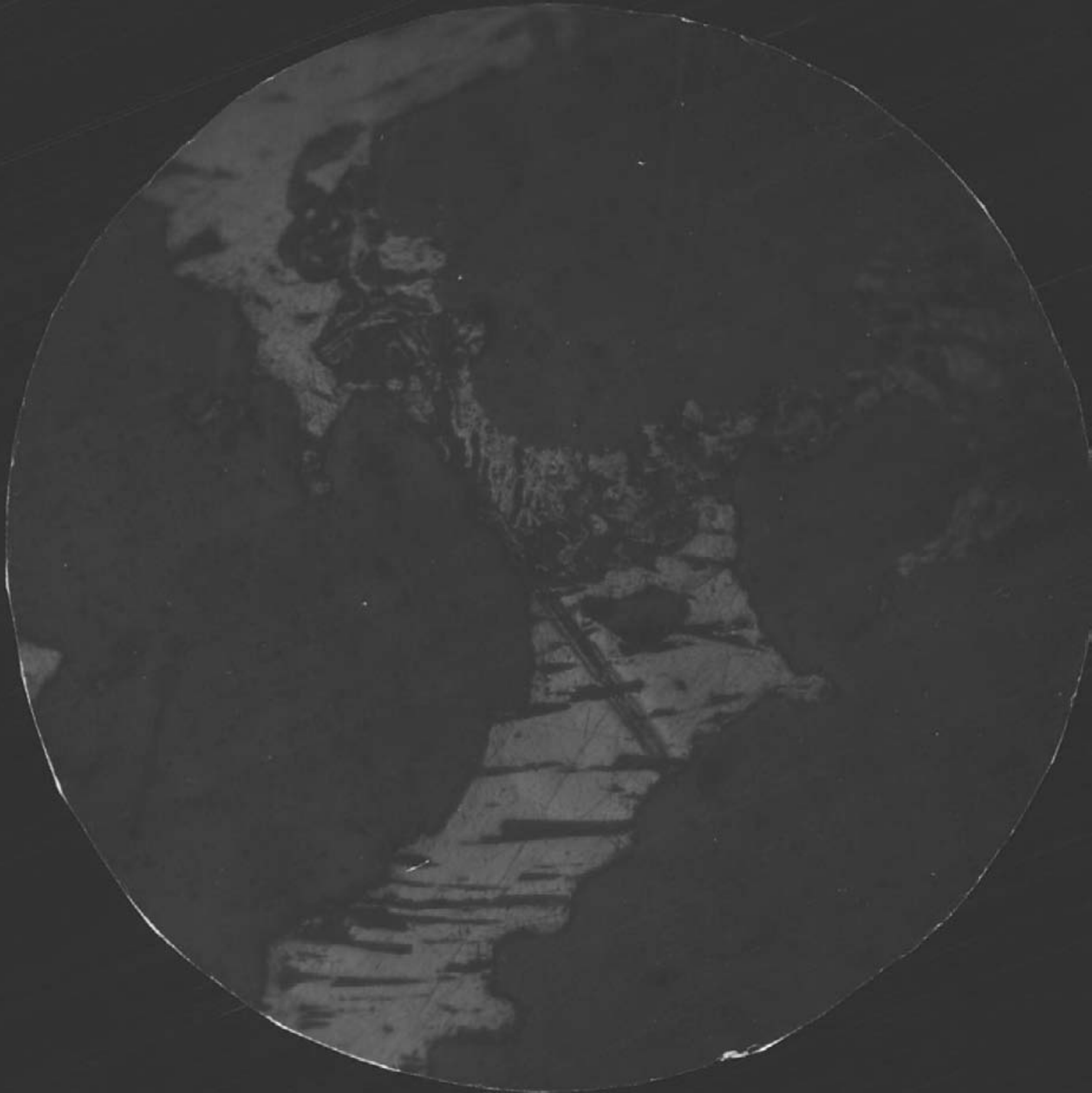
150
W Baldwin

II - 93

The Braun Corporation,
Los Angeles, Cal.







Vanderbilt Mine

Geological Report
Outline.

Dec. 28, 1923.
by Ed Wisser ?

General.

A. 1. Geology simple, considering schist & pegmatite area as one geologic unit; the geology of this complex is exceedingly complicated. The various formations cover large areas ~~at~~ are easily distinguished.

2. Types, according to age: Latest at Top.

1. Volcanic gravels - Stream & Delta
2. Basaltic flows
3. Acidic flow
4. Intrusions of granite & granite or alaskite porphyry dikes.
5. The Bed Rock complex, hornblende schist, biotite schist, limestones; the schist impregnated with a pegmatite or intrusion gneiss consisting of quartz & feldspar.

Faults of large displacement are apparently lacking, & the mining problems do not appear to be complicated by them.

2 vein systems, 1 approx. E-W, other N-S. ?

St. George, or Gold Bar vein - strikes approx. N65°W & dips 65° N. O.C. Traced for about 2500'.

Influence of Wall Rock. Study Structure of C.R.

Peg. intimately mixed with Schist. Schist varies from soft, friable biotite schist to hard hbl. schist.

Study silicif. of schist — On surface & v.g., relative to origin of quartz — whether before intrusion (original in complex), connected with porphyry, or with veins.

Relative age of porphyry — before veins.

Peg. as wall rock — 200 Level, & thrust w workings, except isolated patches of schist.

Put wall rock on maps — samples. Grain of peg., or possibly a 3rd C.R.

Mineralization of wall rock — Peg — 1. Ox. if.
2. Qtz & Sulf stringers
3. Kaolin.

Schist — Silicif; pyritz.

System of Branching — V & H, & its relation to mineralization. Wall rock very favorable to mineralization. Tendency to split in small branching stringers in schist; to shear in thin ∥ walls in peg. Where ore bodies have formed in peg., at branches — rock between brecciated & mineralized.

→ Breccia — Vein & peg., & % of each.

Intra-mural faulting - Intralaced slips. HW seems to show most slick.

Displacement of vein - Geologic mapping of O.C.

Vicinity of Ed Shaft

GB 100, S of N X-cut, just W Ed Shaft

Fine to med. grained rock; chiefly qtz & orthoclase; of same comp. as peg., but holocrystalline rather than pegmatite. Well kaolinized. Seams of limonite in fissures.

E of the Ed shaft, on the 150, sericitization instead of kaolinization of the fldsp. has taken place - sericite can be seen in rectangular patches representing the phenocrysts.

W of the Ed Shaft, on the GB 100, & W from the N X-cut here, the pegmatite becomes coarser & more quartzose. Kaolinization persists.

The finer-grained rock, still highly kaolinized, can be seen at the E end of the GB 200 Level.

X-Cut into HW - just E of Ed Sh., out of Stope at 100

Highly oxid. coarse peg - ~~high~~ moderate kaolinization. Deep red; all fracture faces with red stain.

Notes on Wall Rock

Dec. 28th 1923.

Baldwin 300.

Biotite schist intruded by pegmatite, both as thick (3'+) & thin Tabular injections.

Rock is fresh, except for oxidation along slipping planes & along certain bands of schist. Some kaolinization.

Local distortions of the schist around lumps of thickenings of the pegmatite.

Oxidized specimen of the Pegmatite: Yellow brown stain on fracture faces. More advanced kaolinization - destroyed clayey order. Biotite partially altered to limonite. Dendritic MnO_2 on the fracture faces.

Bed of Re-crystalized black Ls; with crystals & bunches of FeS_2 in minute fissures & app. dissem.

Vicinity of Baldwin Shaft

HW 150W Drift
Soft, altered Hbl sch. with cons. fine crystals of fld.sp. Limonite in masses & surface coatings. Diss. sulf. Leached - Hbl crystals as iron stained cavities

Vicinity of Gold Bar Shaft

Hbl Schist cutting across GB 100 drift, 20'± E of GB 4.
Hbl. crystals as oblong rectangular specks of limonite.
Limonite diffused thru the rock. Specimens are highly sheared

HW- 1/2 way between E end (open) GB 200 & 200 Ks.
Med. grained peg. Fresh - some kaolinization. Silic not marked Unmineralized

GB 100 HW N of E X-cut.
a mass of sericite, qtz & limonite
Similar rock, HW of GB 200, E end timbered section near shaft;
except less limonite.