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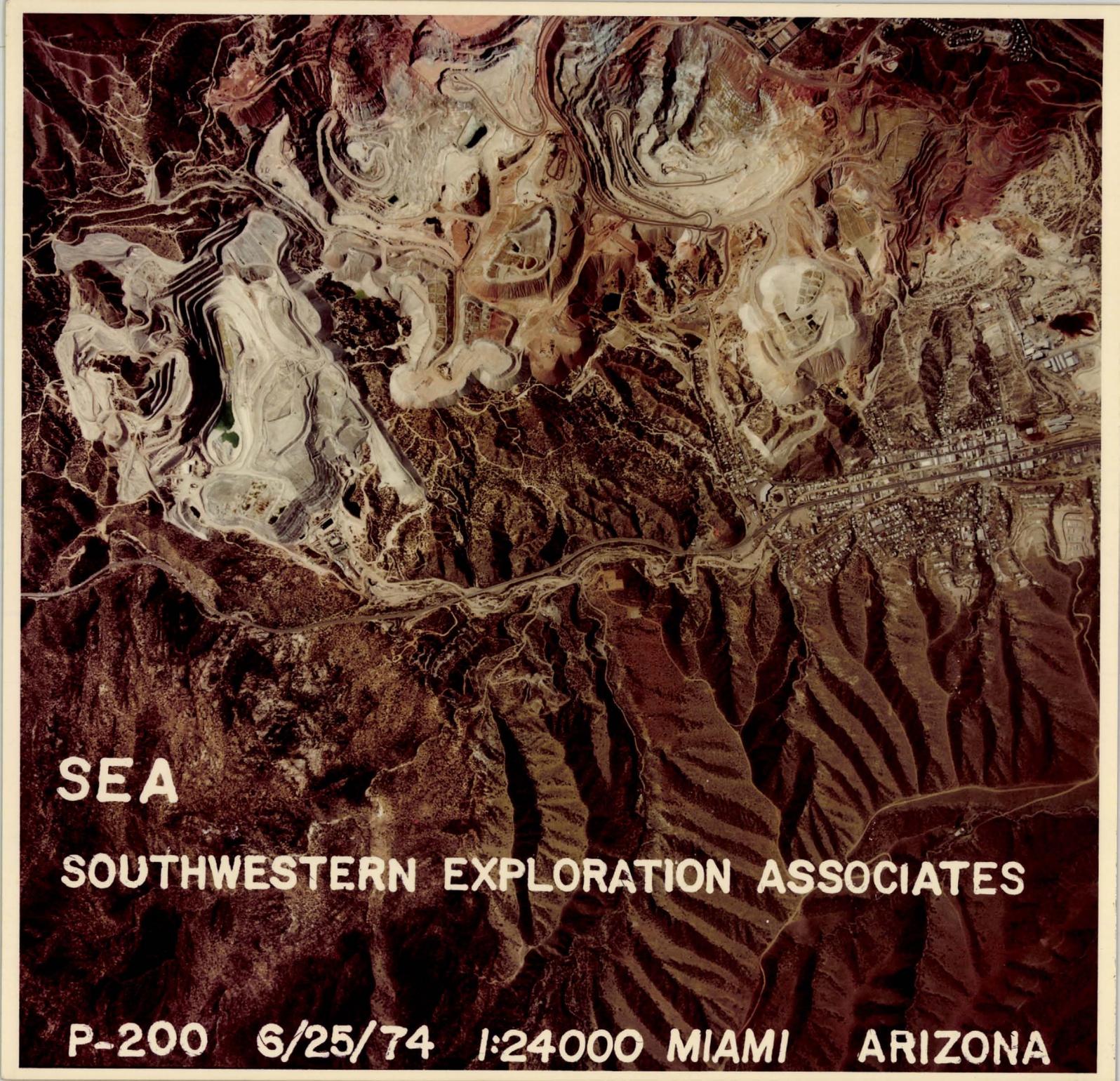
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An aerial photograph of a rugged, mountainous landscape in Arizona. The terrain is characterized by deep, winding canyons and ridges, with a river valley visible in the lower center. A town or settlement is located on the right side of the image, nestled in a valley. The overall color palette is dominated by earthy tones of brown, tan, and red, with some green patches indicating vegetation. The image is framed by a white border.

SEA

SOUTHWESTERN EXPLORATION ASSOCIATES

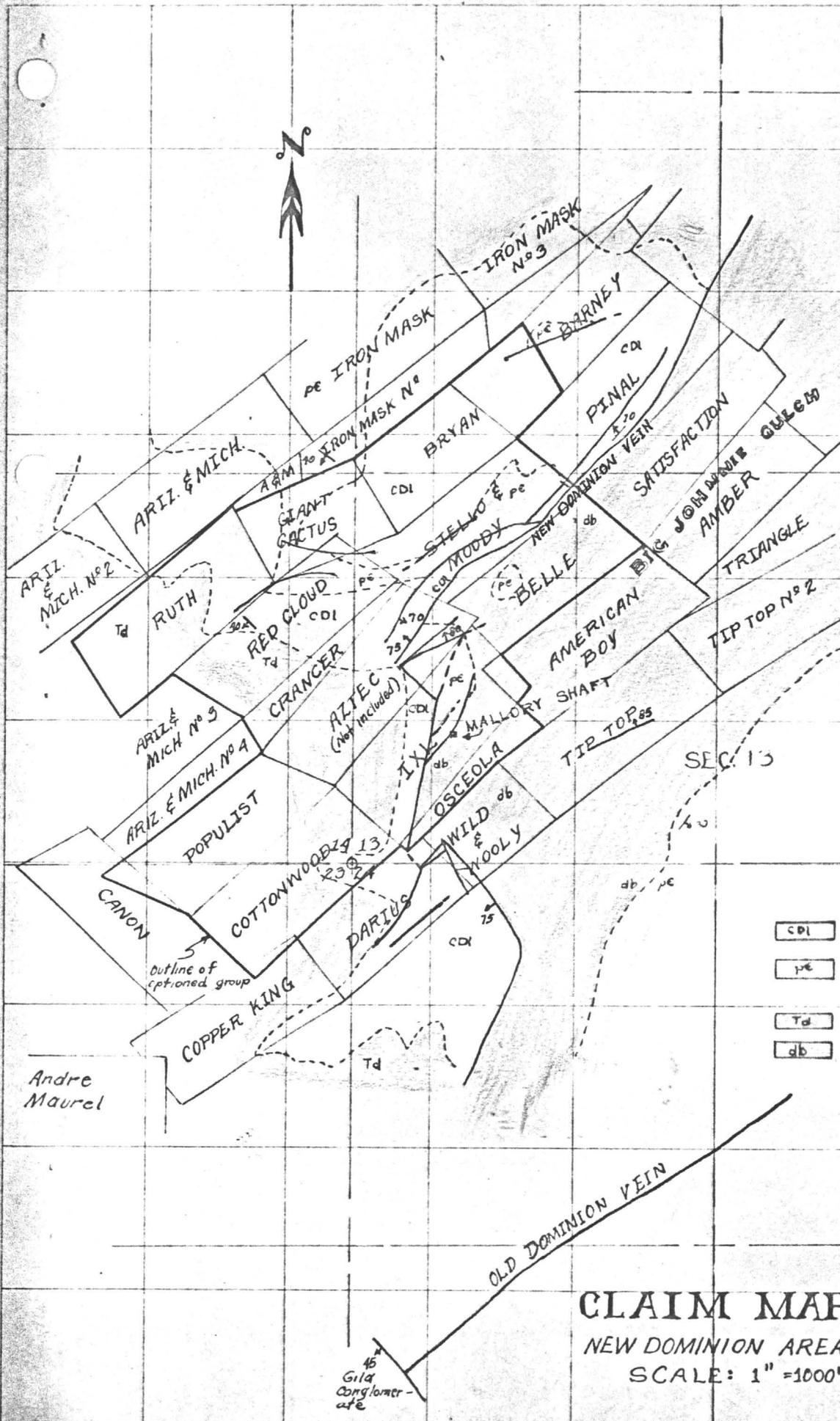
P-200 6/25/74 1:24000 MIAMI ARIZONA

SEA

Southwestern Exploration Associates

8550 East Miramar Drive

Tucson, Arizona 85715



LEGEND

- CDI Carboniferous & Devonian limestone
- pe Cambrian Troy quartzite
pre-Cambrian Apache group
- Td Tertiary Dorte
- db Diabase (intrusive)
- Fault 75 vertical
- Vein 80
- Contact
- Strike & Dip of bedding 25

CLAIM MAP

NEW DOMINION AREA

SCALE: 1" = 1000'

Compiled by JER 2/17/55
Sources: Ransome 1904
Claim map 1921

New Dominion Property

AS&R Report.

Dec 12 1977

Mr. Stockden

"The total production of the property has been insignificant; the bulk has come, since May, 1917, from the 800 ft. level stopes on the south vein, totaling 1145 tons of sulphide ore, with 4.5% Cu, and \$16,372.00 net smelter returns."

800 level, "Buffalo Ridge crosscut", was done prior to reopening the mine in 1916. Stockden's map shows the face 454' from shaft on Jan 14, 1908. Not stated if it connects to any other mine.

1145 x 90[±]

Send this to C. Vea

May 29, 1956

Mr. Clarence Via
Via Development Corporation
Santa Fe, New Mexico

Dear Sir:

Pursuant to your request, I have examined the New Dominion property, spending two days on the ground and compiling available data, working intermittently from December of 1955 through March of 1956, and herewith present my report thereon.

REPORT ON THE NEW DOMINION PROPERTY

LOCATION

The New Dominion property, located on the northern edge of the city of Globe, Arizona, consists of a group of mining claims covering the New Dominion Vein and the Mallory mine. The Aztec Claim (Pl. 1) is not included in the optioned group and must be obtained if any mining is done on the Mallory veins.

HISTORY AND PRODUCTION

Small quantities of silver ore were produced during the 'Seventies and 'Eighties. The Mallory shaft was sunk

to a depth of 800 feet in 1906, and development was done on the 125, 200, 460, and 800 levels. The New Dominion Copper Co. obtained the property in 1916 and resumed active development work in 1923, at which time the shaft reportedly was deepened to the 1200 level, with crosscuts to and drifting on two veins.

The Mines Handbook of 1924 states that during the last half of 1917, the Mallory mine produced 2,997,884 pounds of copper from ore averaging 4.20 per cent copper. This would require a production rate of nearly 250 tons per day for a total of about 37000 tons. I cannot find a verification of these figures from any other source. Level maps (1919) do not show sufficient development from which the required production rate could have been obtained. Mr. Sid Gribble, who has leased many of the local properties and is familiar with the mining history of Globe, states that he can not remember any production at all from the Mallory Mine. Judging from the level maps, nearly all production came from the 800 level, and at a maximum was about 2500 tons.

Development by the New Dominion Copper Co. was halted in 1925.

During 1955 a leaser produced 1300 tons of 24 per cent manganese ore.

*Prob prod is
103,050 P Cu
See A5 ER
Stockden Report*

GENERAL GEOLOGY

ROCKS:

The sedimentary rocks of the district are tabulated below:

Mississippian: Escabrosa limestone

Devonian: Martin limestone

Erosional disconformity, cutting through pioneer shale

Cambrian: Troy quartzite

Erosional disconformity, cutting into Dripping Spring quartzite

Younger pre-Cambrian: Apache group
Mescal limestone
Dripping Spring quartzite
Barnes conglomerate
Pioneer shale

Unconformity

Older pre-Cambrian granite

The only intrusive igneous rock in the New Dominion area is Laramide diabase, which occurs as a sill between the Troy quartzite and Mescal limestone. This sill may be 1200 feet thick.

Late Tertiary dacite flows once covered the entire Globe district, and lie with angular unconformity on the older rocks.

STRUCTURE:

The region was cut by numerous high angle faults during the Tertiary period, both before and after the

dacite eruptions. The latest faulting, of the basin-range type, produced small, tilted fault blocks. Many of the pre-dacite faults were caused by diabase intrusion.

The New Dominion vein occupies a line of major discordance of the diabase. South of the vein the sill intrudes between the Troy quartzite and Mescal limestone, and north of the vein intrudes either higher or lower in the stratigraphic section.

Although the region is cut by faults of various trends, only those with a northeast strike became mineralizing channels.

ORE DEPOSITS

GENERAL STATEMENT:

The ore deposits of the Globe district may be grouped into two classes: replacement deposits in limestone, and vein filling with minor replacement. Most of the production of the Globe district has come from limestone replacement deposits.

Lithologic control is pronounced in both vein and replacement deposits, and is related to ease of replacement and accessibility of the channel to ore solutions.

Favorable conditions exist where the walls are:

Limestone and quartzite - most favorable
Limestone and limestone
Limestone and diabase - less favorable
Dripping Spring quartzite and Dripping
Spring quartzite
Dripping Spring quartzite and
diabase - less favorable

Dripping Spring quartzite and Troy
quartzite - probably not favorable

Unfavorable conditions exist where the walls
are:

Diabase and Diabase - channel too tight
for solutions
Troy quartzite and Troy quartzite

Structural control is pronounced in all deposits,
and commercial ore bodies are related only to northeast
fractures or faults.

On the basis of mineralogy, the deposits may be
grouped into three classes, two of which occur on the
New Dominion property.

The copper deposits, which include the Mallory vein,
are best exemplified by the Old Dominion vein (Pl. 1).
The primary ore consists of pyrite, chalcopyrite, bornite,
and specularite. The oxidized ore consists of iron and
copper oxides, copper carbonates and silicates, and
specularite. Secondary chalcocite is an important ore
mineral. Most of the production has come from the oxide
and secondary ore.

Lead-zinc-manganese ore has been mined from shallow
workings on several veins. The New Dominion vein, and
those smaller veins shown to the northwest (Pl. 1) belong
to this group. Oxidized lead and zinc minerals, manganese
oxides, and silver halides constitute the minerals of the
oxide zone. According to Peterson, the veins generally
contain more zinc (up to about 12 per cent) than would be
guessed from observation. The primary ore is not exposed

by the shallow workings, but probably consists of galena, sphalerite, and rhodochrosite.

NEW DOMINION PROPERTY:

Mallory Mine. -- Underground and surface geology is shown in Plate 2. Underground mapping was done in 1919 by Bjorgi (Geologist, Old Dominion Co.) on a scale of 1 inch to 50 feet. These maps are the only available data on the underground workings. Cross sections through the mine are shown in Plates 3 and 4. Because there is insufficient data on which to base accurate cross sections, Plates 3 and 4 necessarily involve considerable interpretation.

The No. 1 vein is unmineralized at the surface and on the 200 level. The vein apparently splits above the 460 level, one split being mineralized on the 460 level. The splits reconnect above the 800 level, and the vein is weakly mineralized along the Mescal-diabase contact on the 800 foot level. On the 1200 level the vein is reported (Mines Handbook, 1924) to be 6 feet wide and average $3\frac{1}{2}$ per cent copper.

The No. 2 vein, the only productive vein in the mine, is 2 to 4 feet wide where stoped above the 800 level, and contains about 4 per cent copper. This ore shoot is restricted to the Mescal limestone. The No. 2 vein has not been observed on the surface, as is to be expected because both walls are diabase and probably unmineralized. On the 1200 level the vein is reported (Mines Handbook,

1924) to be 30 feet wide, with the first 5 feet next to the diabase assaying 5 per cent copper.

The No. 1 and 2 veins presumable have walls of diabase and Dripping Spring quartzite on the 1200 level.

The No. 3 vein is 1 to 3 feet wide on the surface, with much limonite and some manganese oxide. It is exposed in the mine workings only on the 200 level, where it is less than one foot wide and slightly stained with copper. Its intersection with Carboniferous limestone on the west side of the North fault is exposed on the surface and on the 200 level, and shows very weak copper mineralization.

The No. 4 vein is not exposed in the mine workings. It cuts Troy quartzite over most of its outcrop length, but near the dacite capping, the walls are Troy quartzite and Carboniferous limestone. The vein in Troy quartzite is $\frac{1}{2}$ to 3 feet wide with some limonite, and where adjacent to limestone is apparently unmineralized, although the outcrop is very poor.

Northwest of the Mallory Shaft, a fault whose strike is N. 15 degrees E. (designated the North fault) intersects veins No. 1 and 3 at a slight angle. On the surface at its contact with Paleozoic limestone, it consists of a breccia zone 2 feet wide with sparse limonite stain. It is unmineralized where exposed underground.

Oxidation in the Mallory mine extends through the 460 level, but does not occur on the 800 level.

New Dominion vein.-- The New Dominion vein system is

shown in Plates 1, 2, and 3. On the surface the vein varies from $\frac{1}{2}$ to 4 feet in width, averaging one foot. The oxidized minerals are mainly limonite and manganese oxides. The vein has been mined from shallow workings for silver and manganese. A zinc content of several per cent is generally present (see General Statement).

Several small veins, similar to the New Dominion vein, crop out to the north. One of these veins was mined for manganese during 1955, the ore shoot containing 25 per cent manganese over a width of 20 to 30 feet.

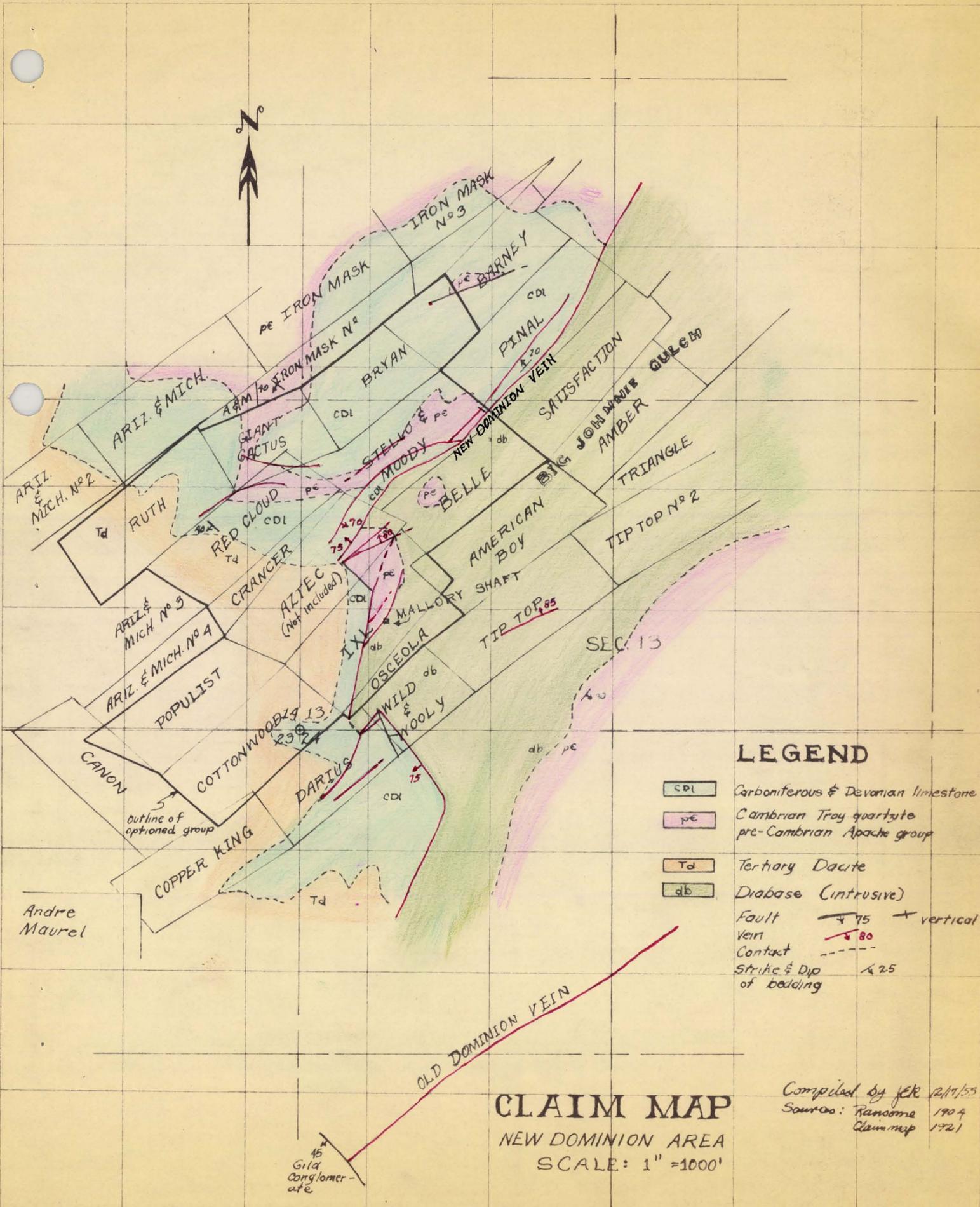
CONCLUSIONS:

Any future production from the Mallory mine must come from the 800 level and below. There is no reasonable hope of finding enough ore to justify exploration and development at that depth.

The narrow width of the New Dominion vein precludes its exploration at depth for primary zinc ore. Such silver ore as may have been present at the surface was probably removed by early miners. The manganese vein has a potential for a limited production of manganese ore.

Respectfully submitted,

John E. Kinnison,
Geologist;
Dominion Hotel,
Globe, Arizona



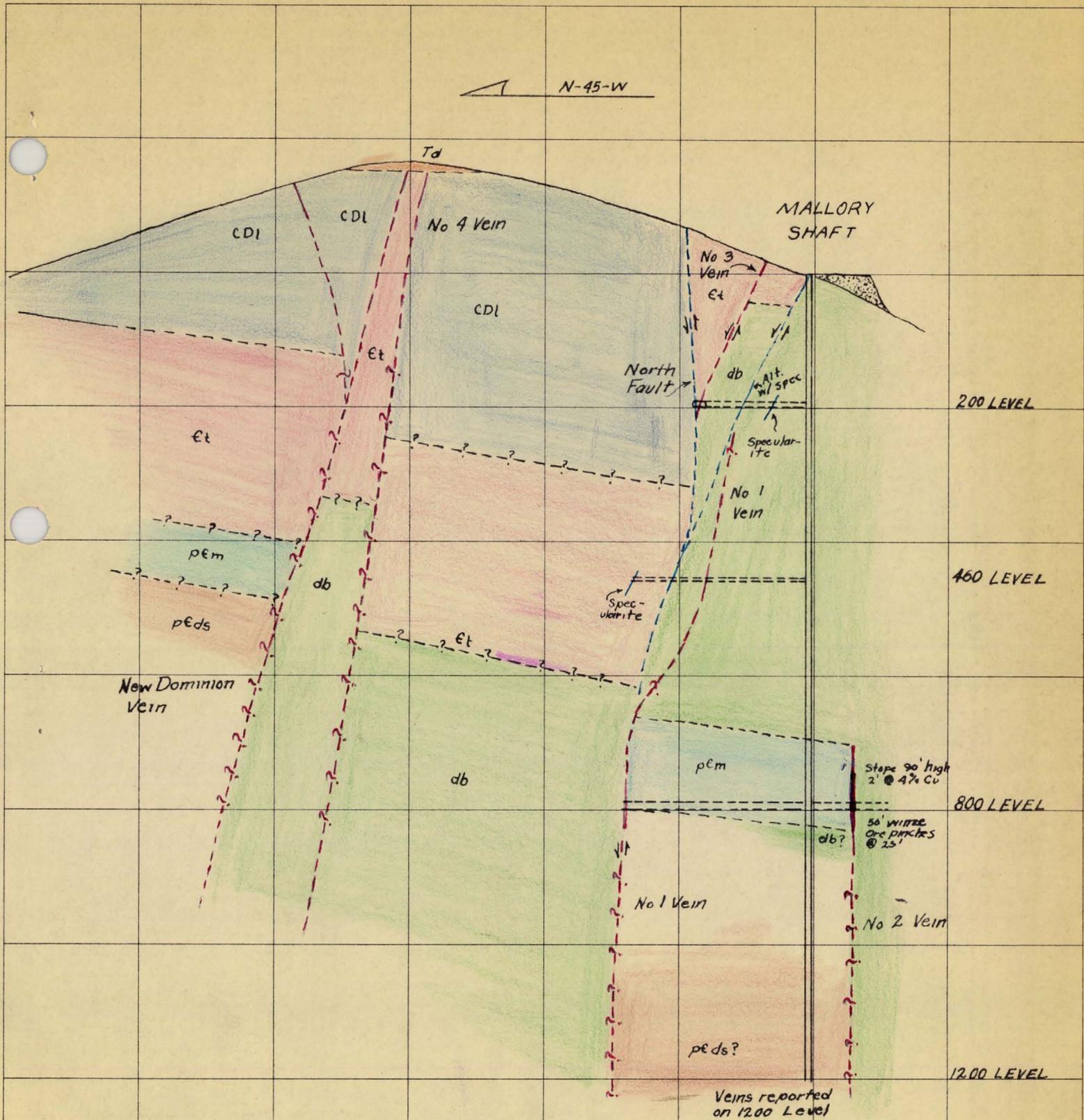
LEGEND

- cdl Carboniferous & Devonian limestone
- pe Cambrian Troy quartzite
pre-Cambrian Apache group
- Td Tertiary Dacite
- db Diabase (intrusive)
- Fault 75 vertical
- Vein 80
- Contact
- Strike & Dip of bedding 25

CLAIM MAP

NEW DOMINION AREA
SCALE: 1" = 1000'

Compiled by JER 12/17/55
Source: Ransome 1904
Claim map 1921



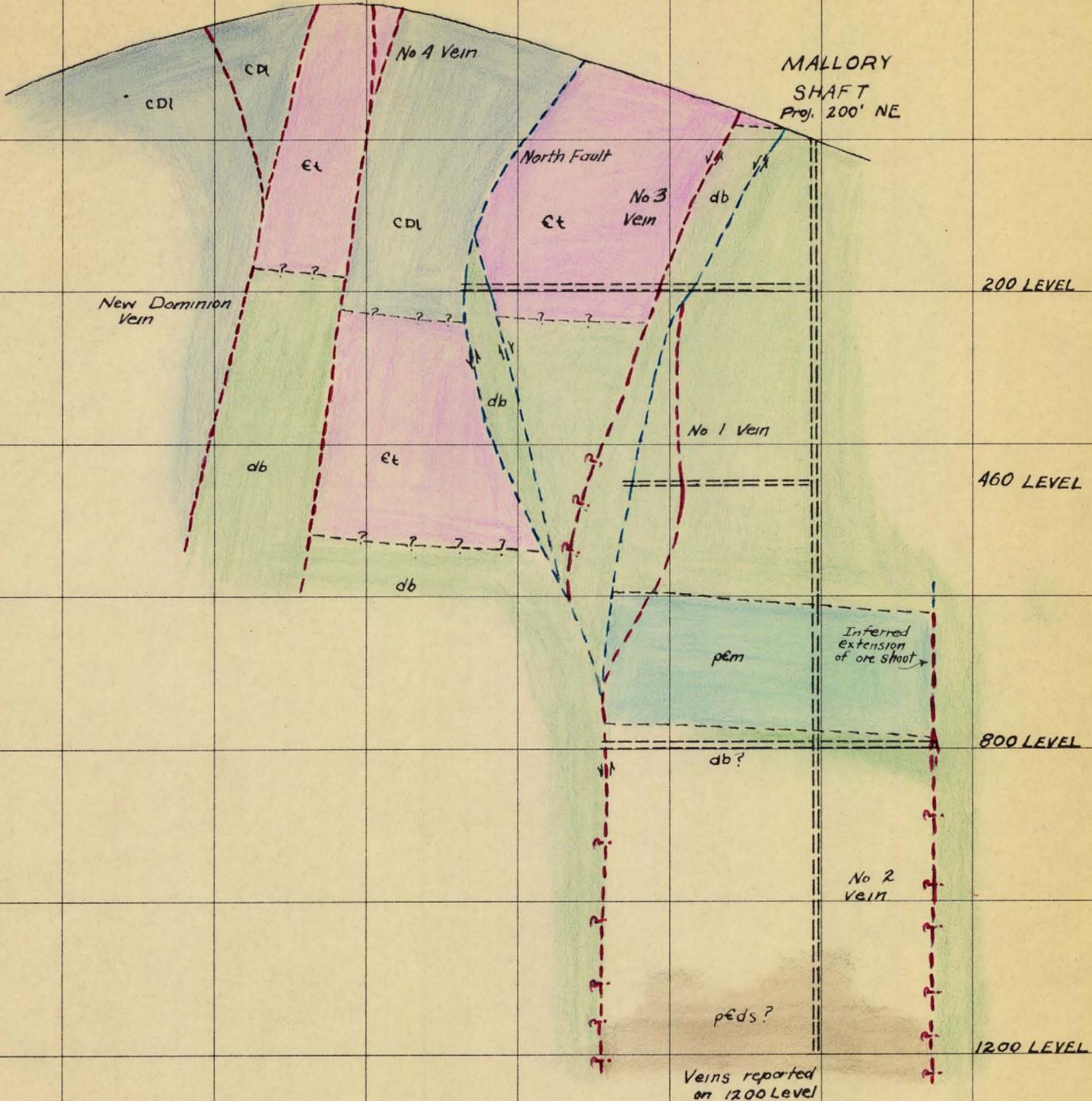
**CROSS SECTION
MALLORY MINE**

Section through Shaft, N-45-W
Looking NE

SCALE: 1"=200'

JCR March 1956

N-45-W



**CROSS SECTION
MALLORY MINE**

Section 200' NE of Shaft, N-45-E
Looking NE

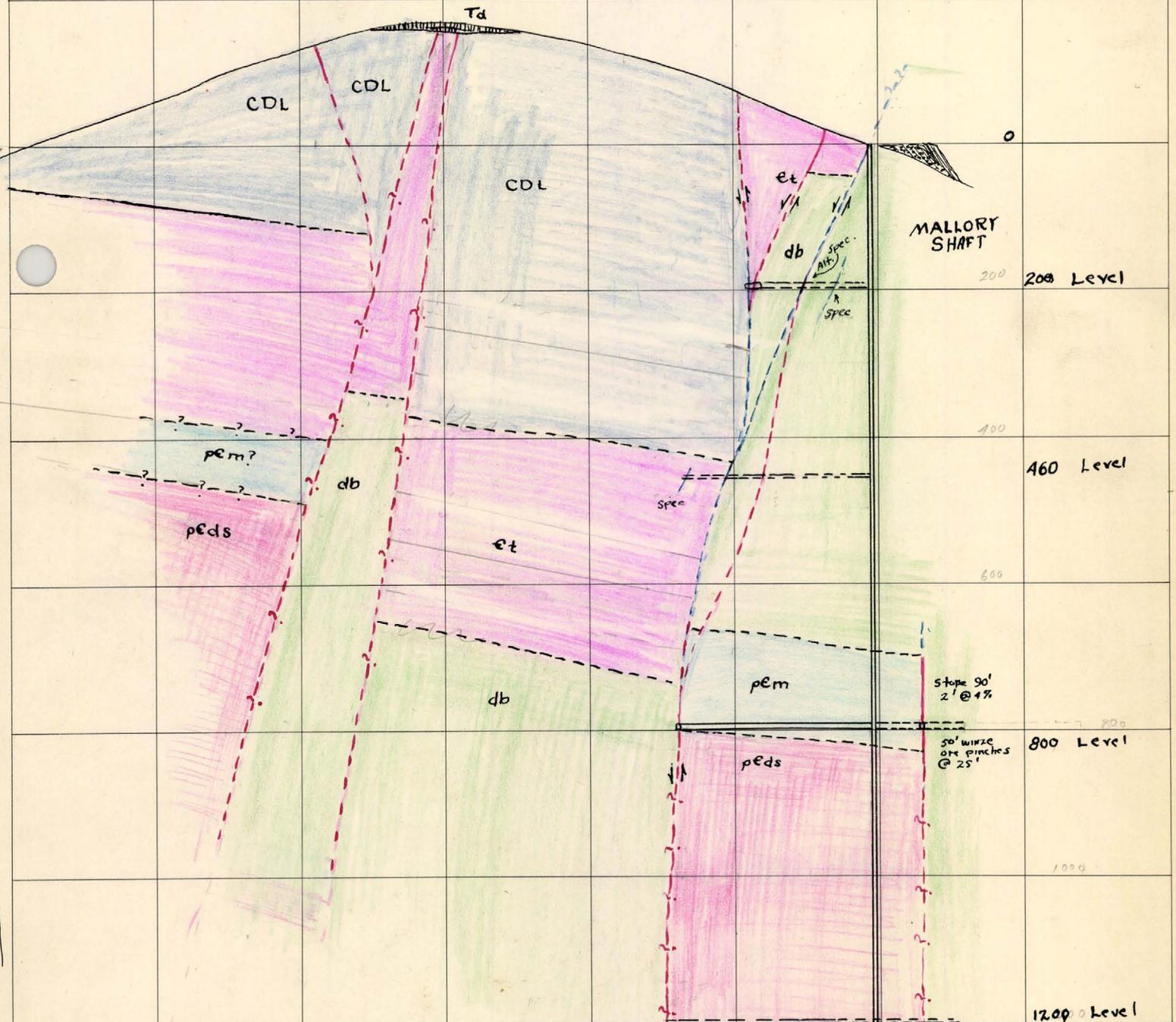
SCALE: 1"=200'

JK March 1956

3001 M303

N-45-W

200' Elev. above Collar



MINE MALLERY

LOCATION GLOBE

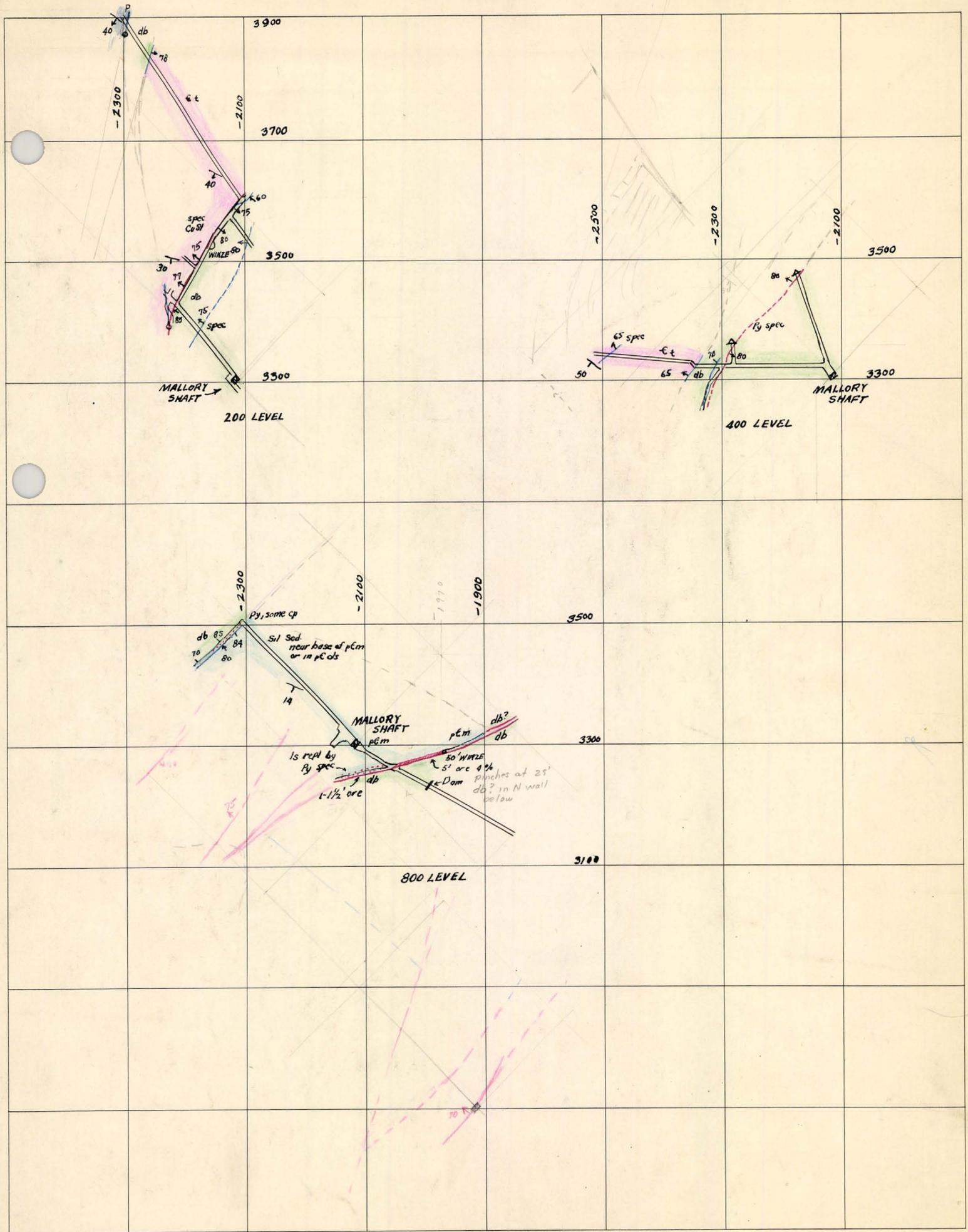
LEVEL MALLERY SHAFT

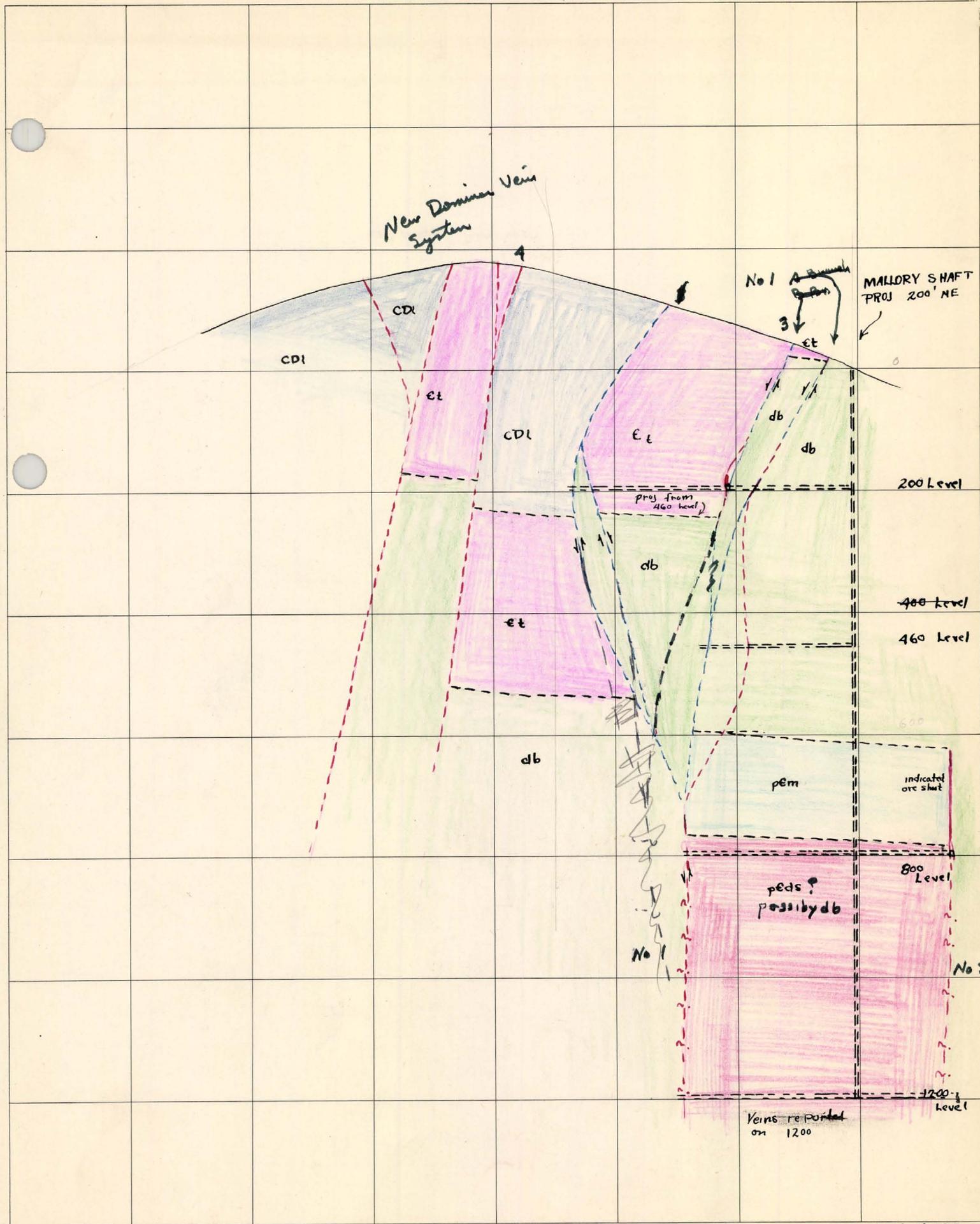
GEOLOGY BY Underground - Bjorgi
Surface - Ransome

SURVEY Compiled by JEK

SCALE 1" = 200

DATE March 1956





MINE MALLERY
GEOLOGY BY _____

LOCATION GLOBE
SURVEY _____

LEVEL _____
SCALE 1" = 200'
DATE _____

x-SEC 200' N 45 E
From Mallery Shaft