(10, 3, 4, 6)

55° 15'
130° 59' W

PE-120-08

PE 120-8

PRELIMINARY REPORT OF MOL GROUP OF CLAIMS
(MOLYBDENUM PROSPECT) BEHM CANAL,
KETCHIKAN MINING DISTRICT, ALASKA RX 120-90
MAY 23, 1939.

Location and Accessibility:

The Mol group of four claims; namely, Mol and Mol Nos. 1 to 3, inclusive, is located one-half mile east of Roe Point on the south shore of Behm Canal. The claims extend from the beach at a point directly behind the Roe Point cannery (now obsolete) in a southerly direction, with the center line following up Roe Creek for a distance of 6,000 feet.

Owners:

This claim group is held by M. L. and Andrew Langloe of Ketchikan. The discovery of molybdenite was found several years ago by Wm. Fromholtz and Wendell Dawson, while cruising timber for the Forest Service. They staked the property and started the present short crosscut tunnel and did considerable stripping. The present owners re-staked the property on November 23, 1938.

Geology:

The formations along the south shore of Behm Canal and contained on this claim group consist of a metamorphic complex of undetermined age, but classified as Ordovician or younger. This complex includes intrusive sills of the Coast Range Batholith into a complex of gneissic and highly altered sedimentary schists. Bands of graphitic schists and limestone which are highly altered and in places altered to marble, were found. The prevailing strike of the various bands and the schistosity ranges from N. 40 to N. 45° W. and the dip averages 60° E.

On the Mol claim, located on the beach, the claim group follows the contact of the hornblende granite sill, which lies on the footwall, and a thinly bedded magnesia limestone on the hangwall. Overlying the limestone, which has an outcrop thickness of 30 to 40 feet, is a thin band of graphitic schists. At a point 400 feet up the creek from the beach, and beginning on the contact in the bed of the stream, a quartz vein is exposed by outcroppings, cuts and a 12-foot crosscut tunnel for a distance of 200 feet. The vein is traceable for 1,000 feet along the west bank of the stream. It has a strike of N. and S. and dips 17° W. Over its entire length it is within the hornblende granite. It has soft gouge walls and is pegmatitic in texture. The width varies from two to four and one-half feet. Farther up the creek and farther from the contact, due to the strike of the vein, it is of a much narrower width.

Origin of Vein:

The conditions existing in this vein and its surrounding environment show that it was formed by segregation and slow growth. The hornblende granite near the contact has a gneissic phase caused by pressure, and prior to the applied pressure large crystals of hornblende and masses of hornblende crystals have segregated by slow cooling during the apparent cooling of the intrusive itself. Quartz masses and crystals of large size are also enclosed as segregations in the granite. The vein structure has been a fissure caused by the applied stress along the contact. This pressure has been present both during the formation of the vein and after, as shown by the banded nature and the gouge on both walls. Within the bands of quartz a large crystalline structure of quartz and feldspar is evident. Large crystals of pyrite, some over one inch in diameter, and surrounded by smaller masses, were found. Associated with the pyrite crystals, and contained in the feldspar crystals, are scattered flakes of molybdenite. Other minerals evident and associated were mica and contact lime silicates. The heaviest concentration of molybdenite is confined to a six-inch gouge band on the footwall. The vein appears to be narrowing rapidly on the dip away from the contact. While the gouges are distinct, the pressure has not been great, and the vein is not expected to continue at a great depth. Generally, the molybdenite other than the gouge band occurs in bunches in the vein associated with the pyrite and lime minerals and with the large crystal textures of the vein, it is considered as pegmatitic in origin.

Showings and Development:

Showing No. 1 consists of a 12-foot crosscut tunnel driven on the dip of the vein, at a point 450 feet up from the beach along the west bank of the creek, at an elevation of 20 feet. The vein is banded and has a 4-foot width. While molybdenite is disseminated throughout the vein, the greatest concentration is on the 6-inch gouge band on the footwall and a 4-inch gouge band on the hanging wall. Since the tunnel follows the vein on the dip, further development would have to convert to an incline shaft.

Showing No. 2 consists of a rock cut 20 feet long at a point 20 feet south of the tunnel. The vein is 4 feet in width and the footwall band of gouge ranges from one foot to eighteen inches in width and contains considerable molybdenite. This cut contains the best showing of molybdenite.

Showing No. 3 is located 20 feet south of No. 2 showing and consists of a rock cut on the vein 25 feet long. The vein narrows down to 2 feet, of which 12 inches contains considerable pyrite with some molybdenite. In the cut the vein is displaced 4 feet by a small fracture fault.

Showing No. 4 is located 40 feet south of showing No. 3 and consists of stripping, exposing a bunch of large crystalline quartz which has a maximum width of eight feet. Minor amounts of molybdenite were noted in the quartz, with a larger amount on the footwall. The footwall has weathered considerably and no representative sample could be taken.

Other outcrops were noted on the west bank of the creek along a low bluff. They consisted of quartz with small amounts of feldspar. Only minor amounts of molybdenite were noted.

In the limestone band on the hanging wall of the contact, which follows upstream for 2,000 feet, minor amounts of magnesite, barite, witherite and thin bands of green mica, the latter with either a chromium or nickeliferous content, were found. The amounts were small and deserve mention only.

Sampling and Assays:

Due to the pockety nature of the occurrence of the molybdenite along the vein, channel sampling would not give a representative assay. Further, the vein considered as a whole would not be a large enough deposit or contain sufficient molybdenite to be of economic value. Sample 647 was taken across the footwall gouge band in the tunnel a width of six inches. This gave a result of 4.29 per cent molybdenum. This gouge, with what appears the same molybdenum content, occurs for a distance of 50 feet. The hanging wall gouge of four inches contains much less molybdenite. Since both gouges and vein narrow rapidly in depth, the amount of ore would not be economical to mine.