

003540

Mayook

AR 1929-299, 442

* 1945-131

1949-255

1947 pit opened up

C+S →

1950-220 - 1000 tons/month

1952-257

1953-190

Sunrise, Cave - 082 GSW 045 - 04

Mayook - 082 GSW 044

82G/5E

Fort Steele Mining Division

Mayook Deposits

Within the past few years gypsum deposits of considerable extent have been discovered in the district 10 to 15 miles to the southeast of Cranbrook, the more important claims being in the Mayook, Wardner (Chipka creek), and Bull River areas. Up to the present time only one of these has been operated, namely the Sunrise claim at Mayook.

The deposits in the vicinity of Mayook consist of two groups of claims. One group consists of two claims situated to the north of the Canadian Pacific railway, three-quarters of a mile to the west of Mayook station,



Face of quarry of the Canada Cement Company, at Mayook, B.C.

and the second group composed of 7 claims lies to the south of the track just to the east of Mayook station. Whether these two deposits are the same could not be determined, since the intervening ground is heavily drift covered.

The two claims to the north of the track, namely the Cave and Sunrise claims, are owned by the Canada Cement Company, and shipments from this deposit have been made to the company's plant at Exshaw, Alberta, for cement retarder.

The deposit which is found on almost the whole of the Sunrise claim and the eastern half of the Cave claim occurs in steeply dipping beds between limestone, and is, in all probability, formed from the limestone by the action of sulphate waters coming from below. The strike of the gypsum beds is approximately south to a few degrees to the west of south, and they dip steeply from 60 to 70 degrees to the east.

A quarry has been opened up on the Sunrise claim about 100 yards to the north of the highway from Cranbrook to Mayook, and pits have been dug exposing gypsum 90 feet above the level of the quarry on the top of the ridge. The lateral extent of the gypsum has not yet been fully proven but test pits have shown it to extend for 600 yards at least.

The rock varies from a dark grey to a creamy white, some of it being soft and granular. Fragments of limestone, only slightly altered, are occasionally found in gypsum, and in places small flakes of native sulphur are to be noticed.

A quarry (Plate XIX) has been opened up for a length of 100 feet with a face of 15 feet. The rock is drilled by hand augers and the broken gypsum loaded into wagons and hauled to the railway. When this property was visited in August 1926, shipments at the rate of 2 to 3 carloads a week were being made; but on a second visit in September 1928, operations had been suspended.

Four samples were taken from this deposit in August 1926, for analysis, representing the different grades of rock occurring in the quarry, and the results obtained are as follows:—

	1	2	3	4
	Per cent	Per cent	Per cent	Per cent
Insoluble.....	21.07	2.08	4.13	3.24
CaO.....	24.03	31.86	31.00	31.32
MgO.....	7.04	1.15	4.18	1.35
Fe ₂ O ₃ & Al ₂ O ₃	2.70	0.20	0.52	0.40
SO ₃	23.95	43.40	35.72	42.32
Loss on ignition (water).....	13.38	19.56	16.47	19.04
Total.....	92.17	98.25	92.02	97.67

1. Sunrise claim, Canada Cement Co., Mayook, B.C., dark band.
2. " " " " " general sample, soft.
3. " " " " " banded gypsum.
4. " " " " " general sample, hard.

H. A. Leverin, Analyst.

In September 1928 a general sample, No. 70, weighing 183 pounds, from this quarry was taken for testing.

The group of claims to the south of Mayook station consists of the Badger, directly to the south of the station, with the Sheeny adjoining it on the south, and the Mayook adjoining the Sheeny on the east. To the south of the Sheeny is the Renfrew while to the south of the Mayook is the Primrose, the four latter claims making a solid block 3,000 feet square. The Roughneck adjoins the Primrose on the south, its eastern boundary being 300 feet to the east of the eastern boundary of the Primrose. To the south of the Roughneck is the Jean claim, its eastern boundary also being 300 feet east of the eastern boundary of the Roughneck.

The best exposures of gypsum found on this group occur on the west side of the Mayook, the northwest end of the Primrose, and the east side of the Sheeny claims, but potholes indicate that the deposit extends southwards through the Roughneck and Jean claims. A number of test pits and shallow shafts have been made on both sides of the deep valley face on the west side of the Mayook claim, exposing gypsum in all of them. On the east side of the Mayook, Primrose, and Roughneck claims limestone is encountered dipping 70 degrees to the east.

The rock is very similar to that found on the Sunrise claim to the north of the track, varying from a dark grey to a creamy white and in all cases is very soft, some of the surface material being disintegrated into a gypsite.

Only a superficial stripping had been done on this group when visited in August 1926 and again in September 1928.

Two samples taken in August 1926 for analysis gave the following results:—

	1	2
	Per cent	Per cent
Insoluble.....	7.85	3.08
CaO.....	28.54	30.40
MgO.....	5.00	5.78
Fe ₂ O ₃ & Al ₂ O ₃	1.40	0.57
SO ₃	33.03	33.50
Loss on ignition (water).....	16.25	17.23
	92.07	90.56

1. Mayook claim—Mayook, B.C. Average sample from trenches on west half of claim.

2. Mayook claim—Mayook, B.C. From pit 10 feet deep in gully on west half of claim.

H. A. Leverin, Analyst.

The claims are controlled by a group of men from Cranbrook and Mayook and arrangements were made with them to get a large-sized sample for further testing. A series of ten samples was thus obtained in October 1928, from the following localities:—

Mayook claim, samples.....	1-5 inclusive.
Primrose claim, samples.....	6-9 "
Sheeny claim, sample.....	10

For the purpose of testing, in order to obtain a large enough sample, the samples obtained from the Primrose claim were all grouped together as sample No. 73 (weight 76 pounds). Likewise samples Nos. 1 to 5 from the Mayook claim and No. 10 from the northeast corner of the Sheeny claim were grouped as sample No. 74 (weight 103 pounds).