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TRUAX CREEK SILVER-ANTIMONY PROPERTY

GREY ROCK MINING CO. LTD.

EXAMINATION REPORT AND DATA REVIEW

LILLOOET MINING DIVISION

N.T.S. 92J/15E

50°48' N. Latitude

122°42' W. Longitude

November 20, 1979

G.H. Rayner, P.Eng.

TABLE OF CONTENTS

	Page
INTRODUCTION	1
CONCLUSIONS	1
RECOMMENDATIONS	1
LOCATION AND ACCESS	2
PROPERTY	2
HISTORY AND PREVIOUS WORK	2
GEOLOGY	3
MINERALIZATION	4
ORE RESERVES	5
GEOCHEMISTRY	5
METALLURGY	6
APPENDIX 'A' - MINISTER OF MINES REPORTS	

INTRODUCTION

The Grey Rock deposit consists of a strong mineralized vein carrying values in silver, antimony and lead. It has been known and intermittently explored since 1936 or earlier. Several vein structures are known in the area of which only the strongest, the number 1, has been significantly investigated.

This report is based on available reports and data and on a visit by the writer to the property on September 18, 1979.

CONCLUSIONS

The work done to date has indicated a reasonable potential in discontinuous ore lenses along a continuous structure. In view of the lensey nature of the mineral zones and their rather narrow widths it is felt that development and mining costs per ton would be high.

Metallurgical work done to date indicates that the values would have to be recovered in a bulk silver-lead-antimony concentrate. Premium silver-lead and antimony concentrates do not seem attainable with acceptable recoveries.

The area around and below the workings is subject to very high avalanche risk. Consequently, the locations for surface installations must be chosen with care.

Because of the avalanche risk it is probable that only a seasonal operation could be carried out at this site, making it difficult to build and maintain the staff required for a successful venture.

RECOMMENDATIONS

For the reasons outlined above it is recommended that Esperanza take no action on this property at the present time.

LOCATION AND ACCESS

The property lies in the headwaters of Truax Creek, a tributary of the Bridge River in the Bridge River Mining Division.

Road access is from Goldbridge, a small village on the Bridge River highway. From Goldbridge a rough road runs to the northeast along the side of Carpenter Lake for about 9 miles and then follows Truax Creek for about the same distance to the property. This road is not maintained but was open to four-wheel drive traffic during the summer of 1979.

Elevations on the property vary from about 1800 meters (6000 feet) above sea level at the camp to about 1980 meters (6500 feet) at the No. 2 portal and over 2130 meters (7000 feet) at the surface outcrops.

PROPERTY

The ground is presently held by location by the:

Grey Rock Mining Co. Ltd.
c/o Mr. C.H. Mitchell, President
1070 West 33rd Avenue
Vancouver, B.C.

Details of title were not further investigated.

HISTORY AND PREVIOUS WORK

The Grey Rock property was first staked in 1931 and work has continued intermittently since that time. Some of the more important events were as follows:

- 1948: Mr. C. Rutherford, P.Eng. examined the property and sampled 1340 feet of surface exposure on the No. 1 vein.
- 1950: No. 1 cross-cut adit was collared at the 5800-foot elevation and driven 400 feet.

- 1951: No. 1 adit was continued 25 feet to cut the No. 1 vein. 25 feet of drifting and four diamond drill holes were put in.
- 1952: Bralorne Mines optioned the property and commenced the No. 2 cross-cut adit at the 6500-foot elevation. The No. 1 vein was intersected at 994 feet from the portal and the adit was continued for 202 feet beyond it. 576 feet of drift was driven on the vein.
- 7.232 tons of hand-cobbed ore from surface trenches were shipped to Antwerp, Belgium. The shipment contained 50.2% antimony.
- 1953: A further 241 feet of drift was driven on the No. 1 vein in the No. 2 adit. In addition they completed 959 feet of underground diamond drilling.
- 1954: W.R. Bacon examined and sampled the property for the B.C. Department of Mines.
- 1966: E.P. Sheppard examined the property and calculated preliminary ore reserves.
- 1968: Consolidated Faraday optioned the property and completed 1295 feet of underground drilling in 4 holes.
- 1976: Falconbridge Nickel Mines Ltd. carried out E.M. and magnetometer surveys and a limited geochemical survey over the ground.

No further work has been done to date.

GEOLOGY

The showings are quartz veins in metamorphosed sediments in an embayment of the Bendor Batholith.

The metasediments are mainly dark grey to greyish-green greywackes consisting of varying proportions of hornblende, biotite, chlorite, quartz and plagioclase feldspar. Some thick inequigranular layers contain fragments which have been squeezed and silicified. Bedding in the metasediments is generally obscure.

Fractures are fairly common. Measurements of 81 joints by Falconbridge showed main joint trends at 045°/40°S and 010°/80°W. The quartz veining has entered along the 045°/40°S set.

Several parallel veins are exposed on the property of which the No. 1 is the strongest and most continuous. Work by Falconbridge in 1976 indicates some modest ULF-EM conductors under cover to the north of the No. 1 vein. These may represent another parallel structure or structures.

MINERALIZATION

The No. 1 vein material consists mainly of lenticular masses of quartz containing some stibnites, tetrahedrite, galena and a little sphalerite. Pyrite is not common and arsenopyrite is rare. A very minor amount of realgar is noted here and there on the margins of the vein underground and in certain parts of the vein fracture where other sulphides and quartz are lacking. Realgar is more abundant on the dump where it presumably derives from the surface oxidation of stibnite.

In 1954 Dr. W.R. Bacon of the B.C. Department of Mines sampled the vein in the No. 2 adit workings at 5-foot intervals. The results are presented in Appendix A. These results agree fairly well with earlier underground sampling but are somewhat lower than results reported from the surface exposures some 500 feet above the workings.

The sampling indicates that the better grade mineralization is lensy along strike, however the controlling structure is strong and continuous.

In addition to the values sampled, modest tonnages of massive stibnite have been uncovered in the surface trenching. In 1952 a shipment of 7.2 tons of hand-cobbed ore was sent to Belgium. The reported grade was 50.2% antimony.

ORE RESERVES

In 1966 E.P. Sheppard, P.Eng. calculated ore reserves for the No. 1 vein using previous sampling results of C. Rutherford, Bralorne Mines and W.R. Bacon, B.C. Department of Mines. His calculated results are as follows:

<u>Tons</u>		<u>Ag oz./ton</u>	<u>Sb %</u>	<u>Pb %</u>
Proven	19,600	10.00	4.00	2.40
Probable	38,100	11.30	4.00	2.10
Possible	<u>30,000</u>	<u>8.32</u>	<u>2.10</u>	<u>1.80</u>
Total	77,700	10.00	3.00	2.10

Some minor gold credits may also be expected.

Although the plan showing the layout of these ore blocks was not available to the writer, the figures appear quite reasonable.

In addition there is further potential to develop similar material along the strike of the No. 1 vein and in other structures on the property.

GEOCHEMISTRY

During 1976 Falconbridge Nickel Mines Ltd. carried out a limited amount of

soil and silt geochemistry in the area to the north of the vein outcrops. The results were generally high but an inspection of the areas sampled shows they were all down slope from mineralized exposure, and have an excellent chance of reflecting transported material. The west anomaly on L. 7N lies in the lower part of an avalanche channel which crosses the west extension of the No. 1 vein at a higher level.

The one anomalous zone to which Falconbridge attaches significance; the west anomaly on L. 7. This anomaly probably involves transported material as well.

METALLURGY

The Grey Rock galena-stibnite ores have presented a metallurgical challenge for a number of years. Laboratory testing has been carried out by various parties in 1948, 1949, 1952, 1967 and 1968. The results of these investigations would indicate that separate silver-lead and antimony flotation concentrates cannot be made with acceptable recoveries.

Testing does indicate that a bulk flotation product carrying silver, lead and antimony can be made with good recoveries. Such a concentrate would incur high smelter charges. In addition it would have to be shipped to the western U.S. or overseas to find a smelter which would accept such a high antimony content.

APPENDIX "A"

MINISTER OF MINES REPORTS

Antimony-Silver-Lead

Gray Rock (Gray Rock Mining Company Limited)* (50° 122° N.W.) Company office, 355 Burrard Street, Vancouver. G. H. Clarke, president. Capital: 3,000,000 shares, no par value. The Gray Rock property, comprising sixteen claims, is on the south side of Bridge River, near the headwaters of Truax Creek. It is reached by 18 miles of truck-road from Gold Bridge. The surface showings are described in detail in the Annual Reports for 1936 and 1949. In recent years attention has been confined to the No. 1 vein because it is the strongest most promising structure on the property.

The No. 1 crosscut adit was started on August 1st, 1950, at an elevation of 6,800 feet and was driven 400 feet before work stopped for the winter. In 1951 the adit was driven an additional 12 feet to intersect the No. 1 vein, which was followed by a drift for 25 feet and further explored by four short diamond-drill holes. Engineers of Bralorne Mines Limited examined the property in 1951.

On March 31st, 1952, the Gray Rock Company made an agreement with Bralorne Mines Limited whereby development was to be undertaken by the latter company. The No. 2 crosscut adit was started in July at an elevation of 6,500 feet, and work in this adit was continuous until December. The No. 1 vein was intersected at 994 feet from the portal, and the adit was continued an additional 202 feet. A total length of 576 feet of drift was driven on the vein.

In 1953 an additional 241 feet of drift was driven on the No. 1 vein in the No. 2 adit. Two raises, 40 and 37 feet long, were driven on the vein above this level. Bralorne also did 959 feet of exploratory diamond drilling in the No. 2 adit.

The present report results from an examination made in August, 1954. The surface and underground workings were examined and mapped, the available drill core logged, and ninety-six channel samples were taken in the No. 2 adit.

The showings are quartz veins in metamorphosed sediments in an embayment of the Bendor batholith. The batholithic rock is a uniformly medium-grained granodiorite consisting of 60 per cent plagioclase (An_{30}), 17 per cent quartz, 15 per cent biotite partly altered to chlorite, and 7 per cent hornblende.

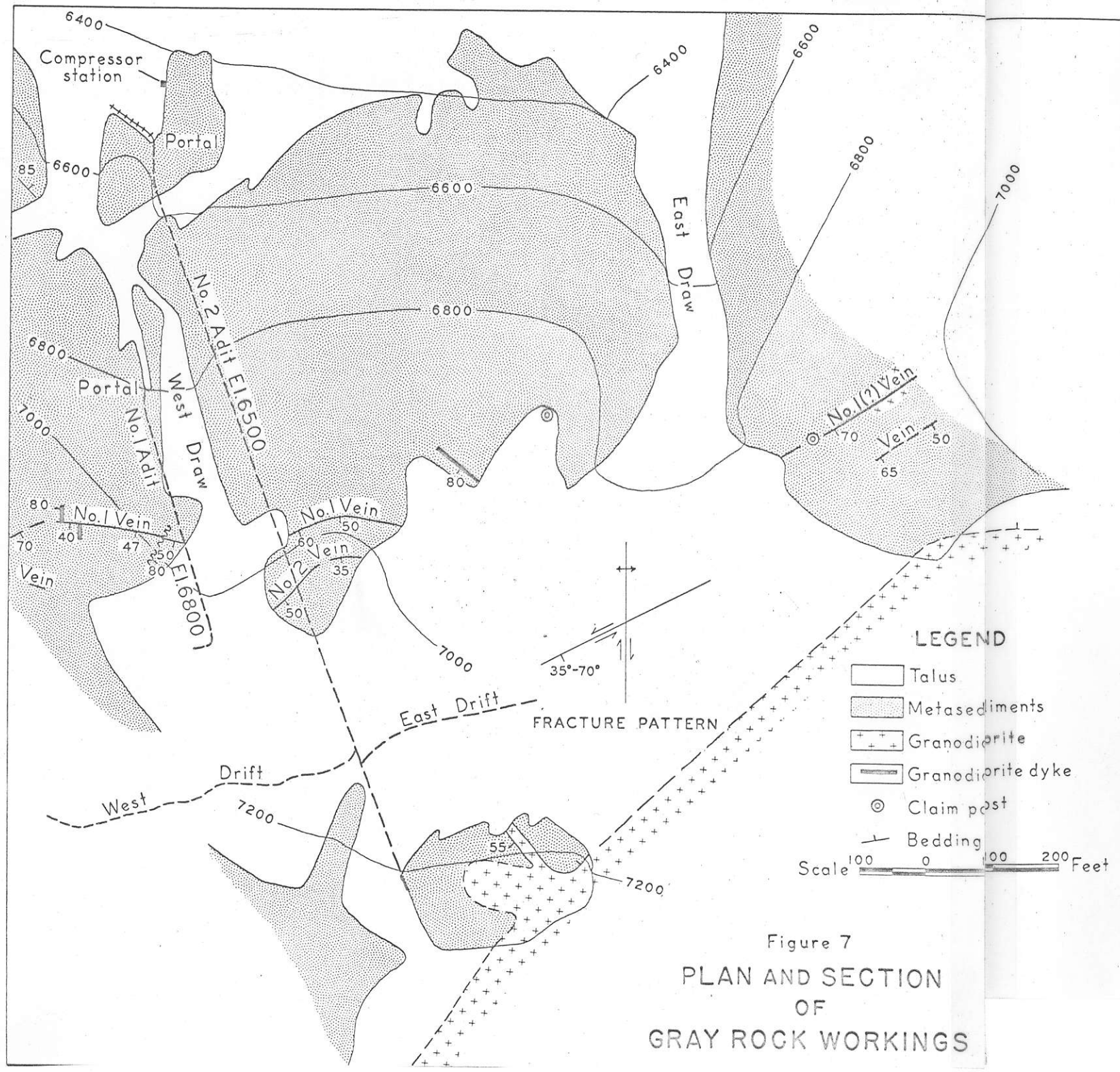
The metasediments are mainly dark-grey to greenish-grey greywackes consisting of varying proportions of hornblende, biotite, chlorite, quartz, and plagioclase feldspar of intermediate composition. Some thick inequigranular layers contain fragments which have been squeezed and silicified. Conglomerate containing white to bluish chert fragments and limestone pebbles and boulders and calcite fragments occurs west of Figure 7. Bedding in the metasediments was noted in the northwest corner of Figure 7, but elsewhere it is obscure.

Fractures are fairly common. Two sets predominate. One set strikes northward and dips steeply to vertical. The other set strikes north 65 degrees east and dips 35 to 70 degrees southward. These two sets of fractures have influenced the pattern of erosion and appear to be responsible for the West and East draws.

The northerly striking fractures are particularly abundant in the vicinity of the portal of No. 2 adit, and these fractures extend to the south up the steep West draw. The No. 1 and No. 2 veins occur in northeasterly striking, southerly dipping fractures. Both sets are shear fractures. The net horizontal movement along the No. 1 vein fracture cannot be great, for the narrow granitic dyke near the western edge of Figure 7 is offset only 27 feet. The net horizontal movement along the northerly striking fractures is small, at most a few feet. Several such fractures have been responsible for turning the No. 1 vein northward at the west end of No. 2 adit (see Fig. 7), and their cumulative effect on the No. 1 vein fracture is a right-hand offset of about 35 feet.

* By W. R. Bacon.

† See under Bellare Mines Limited.

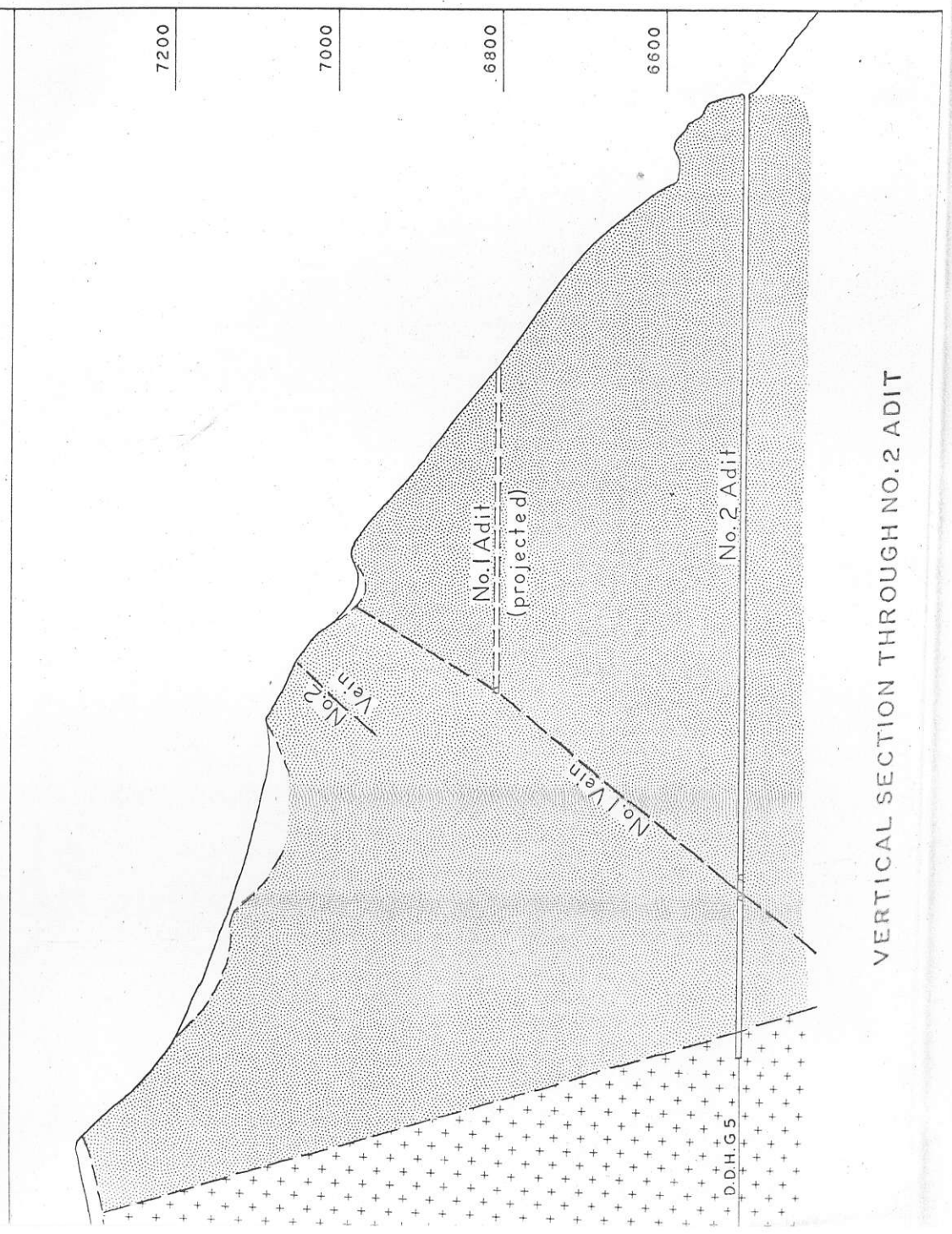


LEGEND

- Talus
- Metasediments
- Granodiorite
- Granodiorite dyke
- + Claim post
- Bedding

Scale 100 0 100 200 Feet

Figure 7
 PLAN AND SECTION
 OF
 GRAY ROCK WORKINGS



VERTICAL SECTION THROUGH NO. 2 ADIT

D.H.G.S.

The No. 1 vein material consists mainly of lenticular masses of quartz containing arsenic, tetrahedrite, galena, and a little sphalerite. Pyrite is not common and arsenic is rare. A very minor amount of realgar was noted here and there on the surface of the vein and in certain parts of the vein fracture where other sulphides and arsenic are lacking. Apple-green chromium-bearing muscovite was noted at several places in the vein.

Stibnite is present in the quartz, but is most abundant in lenticular bands a few inches to a foot or more wide on either wall of the vein. In places the stibnite is coarsely crystalline; crystals as much as 3 inches long were noted immediately east of the West adit.

Department of Mines engineers, O'Grady (1936) and Stevenson (1949), sampled the surface showings. The results of their sampling gave assays of the same order as were obtained by more detailed sampling by company engineers.

No. 1 vein at surface contained several shoots of mineral, of which the two principal ones are on either side of the West draw. According to information supplied by the company, the western shoot, 90 feet long and 4.8 feet wide, assayed: Silver, 12.4 oz. per ton; lead, 0.8 per cent; antimony, 3.0 per cent. The eastern shoot, 100 feet long and 1.3 feet wide, assayed: Silver, 45.4 oz. per ton; lead, 3.9 per cent; antimony, 10.7 per cent.

No. 1 vein is exposed for 25 feet in a drift at the end of the No. 1 crosscut adit. Company sampling showed an average width of 2.6 feet, and an average assay: Silver, 11.2 oz. per ton; lead, 10.1 per cent; antimony, 6.9 per cent.

The underground work has shown that the No. 1 vein structure persists down the drift at least 600 feet. In this distance there is no change in mineralogy.

Figure 8 is a plan of the No. 1 vein in No. 2 adit, showing the location of samples taken by the writer. Samples were cut across the vein at intervals of 5 feet where there was any appreciable vein material. Narrow bands of well-mineralized material were sampled separately. Antimony and lead assays were determined by chemical methods, and more than half of these were checked by quantitative spectrographic methods.

Gray Rock Sampling Results

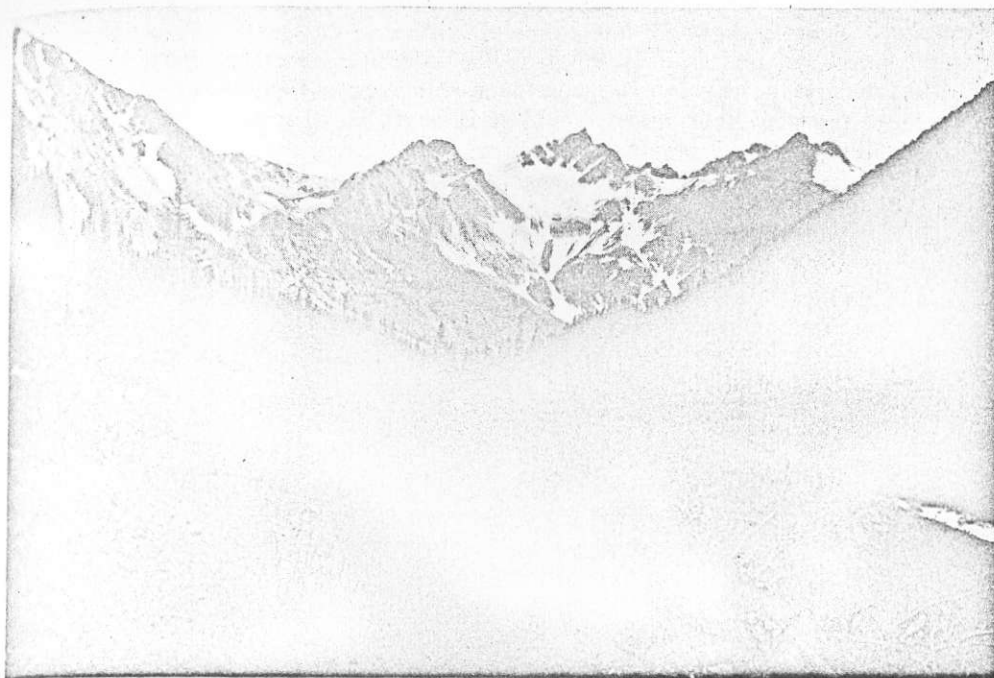
Sample No.	Width	Gold	Silver	Lead	Antimony
	Ft.	Oz. per Ton	Oz. per Ton	Per Cent	Per Cent
	1.0	Trace	Trace	N.D.	T.
	1.5	Nil	1.1	T.	T.
	1.0	0.01	0.8	0.07	0.05
	5.4	Trace	3.6	0.13	1.81
	5.4	0.01	5.9	0.34	0.83
	5.0	0.01	6.8	0.26	2.12
	3.6	0.01	19.4	0.48	0.94
	3.1	0.01	3.6	T.	0.20
	3.1	0.02	6.9	0.31	5.20
	2.8	0.01	2.3	0.08	3.70
	2.7	0.01	0.7	T.	0.14
	2.7	Trace	0.2	T.	1.40
	4.2	0.01	0.7	T.	1.00
	4.7	Trace	0.7	0.15	3.01
	4.7	0.01	1.2	T.	0.88
	4.8	0.01	1.9	0.18	0.33
	3.8	0.01	1.0	T.	1.77
	2.0	Trace	0.4	N.D.	0.49
	2.3	0.01	2.5	0.48	0.61
	0.8	Nil	0.5	N.D.	T.
	1.0	Nil	1.0	T.	T.
	1.8	Trace	0.6	T.	T.
	2.2	Trace	1.2	0.12	T.
	0.5	Nil	0.1	T.	T.
	5.1	Trace	1.5	0.17	0.10
	2.2	0.02	7.4	1.56	0.44
	3.3	0.01	2.2	0.33	0.19

Gray Rock Sampling Results—Continued

Sample No.	Width	Gold	Silver	Lead	Antimony
	Ft.	Oz. per Ton	Oz. per Ton	Per Cent	Per Cent
28	3.6	0.01	16.0	1.08	0.51
29	3.0	0.02	18.9	1.52	0.38
30	2.0	0.03	23.3	5.09	0.47
31	1.2	0.03	30.4	4.56	0.43
32	2.9	0.01	2.8	0.19	T.
33	3.6	0.02	8.8	2.30	0.28
34	4.4	0.01	12.4	0.56	0.31
35	2.9	0.01	2.3	0.16	0.09
36	3.8	Trace	12.8	0.69	0.41
37	2.3	0.01	2.2	0.58	0.47
38	4.0	0.01	2.6	0.81	0.47
39	3.7	0.01	7.2	1.06	0.31
40	2.4	Trace	1.7	0.15	T.
41	1.6	Trace	4.8	0.80	T.
42	1.1	Trace	1.7	0.19	T.
43	1.6	Trace	1.9	T.	T.
44	1.6	0.01	2.6	0.19	0.10
45	1.4	Nil	0.4	T.	T.
46	1.0	Trace	0.2	T.	T.
47	0.9	Trace	Nil	T.	T.
48	2.3	Trace	Nil	N.D.	T.
49	2.1	Trace	0.4	0.05	0.31
50	0.9	0.01	0.2	N.D.	T.
51	1.9	Trace	0.1	T.	0.39
52	0.8	Trace	0.1	N.D.	T.
53	0.9	Trace	0.2	N.D.	T.
54	2.0	Trace	Nil	N.D.	T.
55	0.9	Trace	Nil	N.D.	T.
56	1.2	0.01	6.2	2.58	0.24
57	0.5	0.01	Trace	T.	0.20
58	0.8	Trace	1.2	T.	0.25
59	1.9	Trace	3.1	0.24	0.19
60	2.4	0.01	7.7	1.34	0.33
61	2.5	Trace	2.4	0.83	1.13
62	2.7	Trace	2.0	0.16	0.12
63	2.3	Trace	8.7	0.44	0.75
64	2.7	0.01	3.5	0.47	0.19
65	2.0	Trace	5.1	1.32	0.25
66	1.0	0.01	10.0	2.73	0.19
67	0.4	0.01	Trace	T.	T.
68	2.5	Trace	0.4	T.	0.50
69	4.0	Trace	1.6	1.16	0.44
70	3.0	0.03	3.8	1.07	0.47
71	3.4	Trace	3.5	0.54	0.35
72	2.6	Trace	2.5	0.51	6.15
73	2.7	Trace	2.7	1.17	5.65
74	3.0	0.01	4.9	0.83	1.78
75	2.3	Trace	1.1	0.20	0.75
76	1.1	0.01	0.8	0.07	2.16
77	2.3	0.01	0.7	T.	2.66
78	1.0	0.01	0.6	T.	1.07
79	1.9	0.05	0.3	T.	T.
80	3.0	0.01	0.8	0.11	4.01
81	3.9	0.01	0.5	0.23	4.00
82	4.0	Trace	3.0	0.27	9.48
83	4.3	Trace	2.4	0.22	6.00
84	3.2	0.01	31.1	1.01	7.16
85	1.7	Trace	10.8	1.20	0.56
86	1.4	Trace	6.8	1.99	0.50
87	1.4	Trace	0.3	0.10	0.08
88	2.9	Trace	1.5	0.13	0.82
89	3.5	0.01	22.5	2.42	0.56
90	4.4	0.01	13.9	3.49	0.44
91	5.1	0.01	11.8	1.67	0.69
92	2.8	0.01	10.4	3.94	0.38
93	2.3	Trace	3.3	0.41	0.25
94	2.0	Trace	1.4	0.07	0.04
95	3.1	Trace	1.7	0.27	0.19
96	1.0	0.01	1.8	0.12	0.16

T.—Means detected spectrographically, and thereby estimated to be less than 0.2 per cent.
 N.D.—Means not detected.





Gray Rock property, headwaters of Truax Creek.



Ground-slucing on steep hillside, Chalco group.

**Golden Ledge
Syndicate**

(50° 122° N.W.) Company office, 503 Rogers Building, Vancouver. J. S. Harrison, president and manager. This private syndicate holds four Crown-granted mineral claims and twenty-one located claims astride the Hurley River half a mile below its junction with Cadwallader Creek. The camp is halfway between Bralorne and B.R.X. mines on the Bridge River road.

On No. 4 adit level a crew of five men extended the main crosscut 30 feet in a westerly direction, extended the Jupiter north drift a distance of 105 feet, and did 20 feet of crosscutting from the Jupiter drift.

Antimony**Gray Rock
(Gray Rock Mining
Company Limited)**

(50° 122° N.W.) Company office, 207 West Hastings Street, Vancouver. G. H. Clark, president. Capital: 3,000,000 shares. \$1 par value. This property, comprising twenty claims, is near the headwaters of Truax Creek, a tributary of the Bridge River. It is reached by 18 miles of truck-road from Gold Bridge. Bralorne Mines Limited continued operations on the property until the end of September. No. 1 west drift was extended 241 feet to a total length of 505 feet. Raises were driven on the best mineralized sections of the east and west drifts. That on the east drift was driven for a distance of 40 feet and that on the west drift was driven 37 feet. In addition, three exploratory diamond-drill holes, totalling 742 feet, were completed. One drill-hole intersected No. 1 vein below the level, and the other two were directed in a southerly direction to intersect No. 2 vein, which parallels No. 1 vein.

Work was suspended when it was decided that the information obtained by exploration did not warrant further development. A crew of ten men was employed.

Tungsten

Tungsten Queen.—(51° 122° S.W.) This property, owned by E. Phillips, of Gold Bridge, is on the east bank of Tyaughton Creek about 17 miles north of Minto. A crew of two men did 25 feet of exploratory drifting.

Cobalt-Gold-Uranium**Little Gem**

(50° 122° N.W.) This property, composed of eight Crown-granted claims and one located mineral claim, is on Roxey and Jewel Creeks, tributaries to Gun Creek. The joint owners, J. M. Taylor, 1949 Beach Avenue, and R. R. Taylor, 7111 Beechwood Avenue, Vancouver, optioned the property to Estella Mines Limited, 917 Vancouver Block, Vancouver.

Under the direction of Evan Harris, mine manager, this company constructed a log-stringer bridge with a 60-foot span over Gun Creek, at the end of the Gun Creek road; built 5 miles of road, including two small bridges over Roxey Creek, from the end of the Gun Creek bridge to the mine camp; and erected a camp located conveniently near the mine.

Underground, twelve diamond-drill holes with a total length of 751 feet were drilled. This drilling showed a westerly extension of the ore exposed in the lower drift, and demonstrated a mineralized section at this level in excess of 70 feet long, but did not locate a downward extension of the ore exposed in the upper drift. Work was suspended early in September and the option was allowed to expire. An average of nine men was employed.

[Reference: *Minister of Mines, B.C., Ann. Rept., 1948, pp. 112-119.*]

On the surface a new two-story dry-house, 45 by 75 feet, was completed. This building contains offices, lecture and first-aid rooms, showers, and change-rooms for men and underground clothes.

The average number of men employed was 276, of which 155 were employed underground. First-aid services were supplied by twenty crew members who held either John or Industrial First Aid certificates.

Golden Ledge Syndicate (50° 122° N.W.) Company office, 503 Rogers Building, Vancouver. J. S. Harrison, president and manager. This private syndicate holds four Crown-granted mineral claims and twenty-one located claims astride the Hurley River, half a mile below its junction with Cadwallader Creek. The camp is halfway between Bralorne and B.R.X. mine on the Bridge River road.

A crew of four men completed a total of 835 feet of exploratory drifting and crosscutting in No. 4 adit, the portal of which is on the west side of the Hurley River. This work included extending the main crosscut, crosscutting to the Jupiter and Louise veins, drifting on the Louise vein to north and south, and drifting on the Jupiter vein to the west.

Wayside (L.A.P. Mining Company Limited) (50° 122° N.W.) Company office, Gold Bridge. L. A. Prosser, manager; W. H. Clarke, general superintendent; J. Marshall, mine superintendent. Capital: 3,000,000 shares, \$1 par value. This private company owns seventeen claims and seven fractions astride the Bridge River road, between Gold Bridge and Minto. The property was formerly owned by the Wayside Consolidated Gold Mines Limited.

Exploratory development work on No. 9 level comprised 125 feet of drifting and 100 feet of crosscutting, as well as the opening of a small hoist-room at the south end of the level where it is proposed to sink a winze. To facilitate the handling of ore and waste, a chute and pocket were completed in the shaft at and below No. 9 station. In addition to this, 80 feet of raising was done.

A used Riverside Iron Works single-drum hoist, 3 by 4 feet in dimension, and a 10-horsepower 440-volt General Electric motor were installed in the hoist-room. In the shaft the skip was equipped with a safety crosshead, and guides were installed to control the hoisting of men.

Repair work was completed on the storage dam and 10-inch pipe-line for the hydro plant on Fergusson Creek.

The development work produced 1,000 tons of ore, of which 900 tons was treated experimentally by flotation and cyanidation in order to establish a satisfactory milling circuit. This work was done under the supervision of P. Schultz, consulting mill operator.

The average number of men employed was eighteen.

Antimony
Gray Rock (Gray Rock Mining Company Limited) (50° 122° N.W.) Company office, 207 West Hastings Street, Vancouver; mine office, Gold Bridge. G. H. Clark, president. Capital: 3,000,000 shares, \$1 par value. This property of twenty claims is near the headwaters of Truax Creek, a tributary of the Bridge River. It is reached by 18 miles of truck-road from Gold Bridge. Bralorne Mines Limited optioned this property early in 1952, and as soon as mining conditions permitted the lower crosscut, commenced the previous year, was advanced 1,186 feet. This crosscut intersected No. 1 vein at a distance of 994 feet from the portal. The east drift on No. 1 vein was driven 312 feet and the west drift, 264 feet. The vein exposed by this work ranged in width from a fracture filling to 4 feet, and showed lower antimony content than in the surface outcrop or in the upper drift. A diamond-drill hole was drilled 217 feet from the south face of the lower crosscut. The drill core revealed a poorly mineralized vein, 1.3 feet wide, at a depth of 152.7 feet.

The raise will be 11.5 feet in diameter. Diamond-drill ring-drilling totalled 13,264 feet during the year, and exploratory drilling totalled 4,610 feet.

On 2400 level the temporary hoistroom for the No. 5 shaft, the hoisting-rope crosscut and the crosscut to the bottom of the ventilation raise were completed. In addition, the 2500 level crosscut to No. 5 shaft was completed.

All stopes on the 27 vein were converted to ore-filled rill or cut-and-fill stopes, weather scrapers being used to move all ore and waste fill. The normal stull-and-lagging stopes have been converted to boxhole and subdrift sills.

The underground drainage pumping system was converted from manual operation to automatic flooded control.

A total of 102 family housing units is now maintained on the surface.

The average number of men employed was 254, of whom 135 were employed underground.

Golden Ledge Syndicate

Company office, 503 Rogers Building, Vancouver. J. S. Harrison, president and manager. This private syndicate holds four Crown-granted mineral claims and twenty-one located claims astride the Hurley River, half a mile below its junction with Cadwallader Creek. The camp is halfway between Bralorne and B.R.X. mines on the Bridge River road. During 1951 a crew of four men completed a total of 570 feet of exploratory drifting on Nos. 3, 4, and 5 levels.

Wayside (L.A.P. Mining Company Limited)

Company office, 626 West Pender Street, Vancouver; mine office, Gold Bridge. L. A. Prosser, manager; W. H. Clarke, superintendent; J. Marshall, foreman. Capital: 3,000,000 shares, \$1 par value. This private company owns seventeen claims and seven fractions astride the Bridge River road, midway between Gold Bridge and Minto. The property was formerly owned by Wayside Consolidated Gold Mines Limited. Mill machinery was installed for the flotation and cyanidation of concentrates.

Underground, caved stopes on No. 3 and No. 4 levels were retimbered, and ore was by-passed down to the main, or No. 5, level. On the surface a box chute 320 feet long was constructed from near the main adit to a surface ore dump below No. 3 level. Ore from both sources was used for mill test purposes. The hoistroom has been increased in size preparatory to the installation of larger hoisting equipment.

In August a fire destroyed the machine-shop, compressor-house, and compressor. The building was replaced in September, and a 500-cubic-feet-per-minute compressor was installed in October.

A new two-story office building measuring 22 feet by 12 feet was constructed. The average number of men employed was eighteen.

Antimony

Gray Rock (Gray Rock Mining Company Limited)

Company office, 207 West Hastings Street, Vancouver; mine office, Gold Bridge. G. H. Clark, president; L. Belliveau, vice-president and manager. Capital: 3,000,000 shares, \$1 par value. This property comprises twenty claims which are near the headwaters of Truax Creek, a tributary of Bridge River. It is reached by 18 miles of truck-road from Gold Bridge. Diamond drilling was successful in locating the No. 1 vein, which had been the objective of the crosscut completed in 1950. The vein was drifted on in a westerly direction for a distance of 35 feet and was found to be shattered and slightly displaced by minor faulting. It was estimated to have an average width of 1.5 feet and that the stibnite constituted between 20 and 30 per cent of the vein material. Further diamond drilling from the drift established a minimum length of vein of 150 feet at a horizon 175 feet below the surface outcrop.