

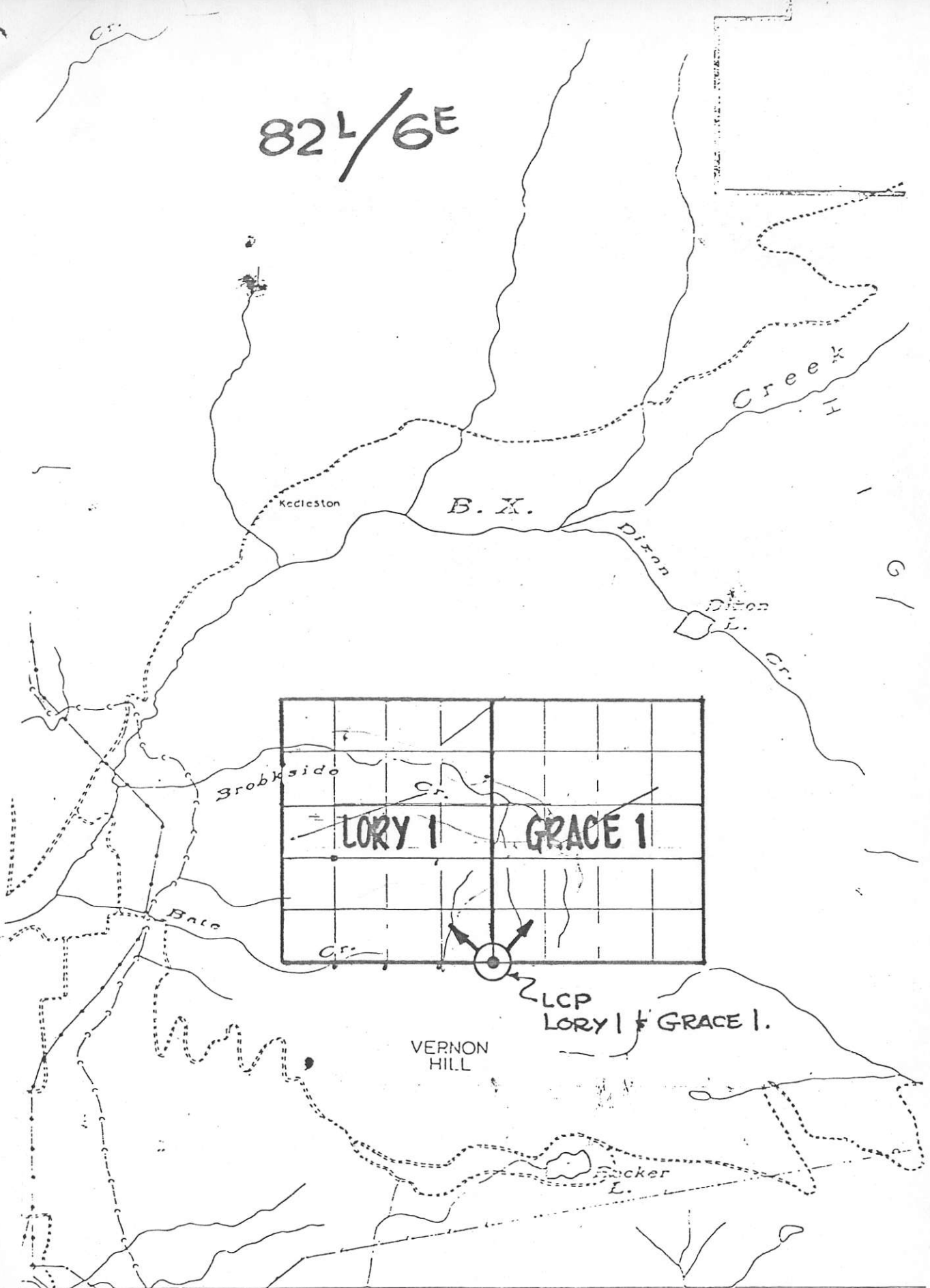
82E
823394

KING GRAYBARR MINES LTD. (N.P.L.)

PRELIMINARY REPORT ON THE
VERNON HILL MINERAL CLAIMS GROUP
VERNON MINING DIVISION
BRITISH COLUMBIA

28 FEBRUARY 1969

82L/6E



KING GRAYBARR MINES LTD. (N.P.L.)

PRELIMINARY REPORT ON THE
VERNON HILL MINERAL CLAIMS GROUP
VERNON MINING DIVISION
BRITISH COLUMBIA

CONTENTS

		<u>Page:</u>
1.0	PROPERTY	1
2.0	LOCATION	1
3.0	DESCRIPTION	2
4.0	ACCESSIBILITY	2
5.0	CLIMATE	3
6.0	PHYSIOGRAPHY	3
7.0	LOCAL RESOURCES	3
8.0	GEOLOGY	3
	LOCAL GEOLOGY	4
9.0	MINERAL ZONES	5
10.0	EXPLORATION AND DEVELOPMENT	6
11.0	ASSAY RESULTS	7
12.0	ORE RESERVES AND ECONOMICS OF PRODUCTION	7
13.0	OPINION	7
14.0	RECOMMENDATIONS	8

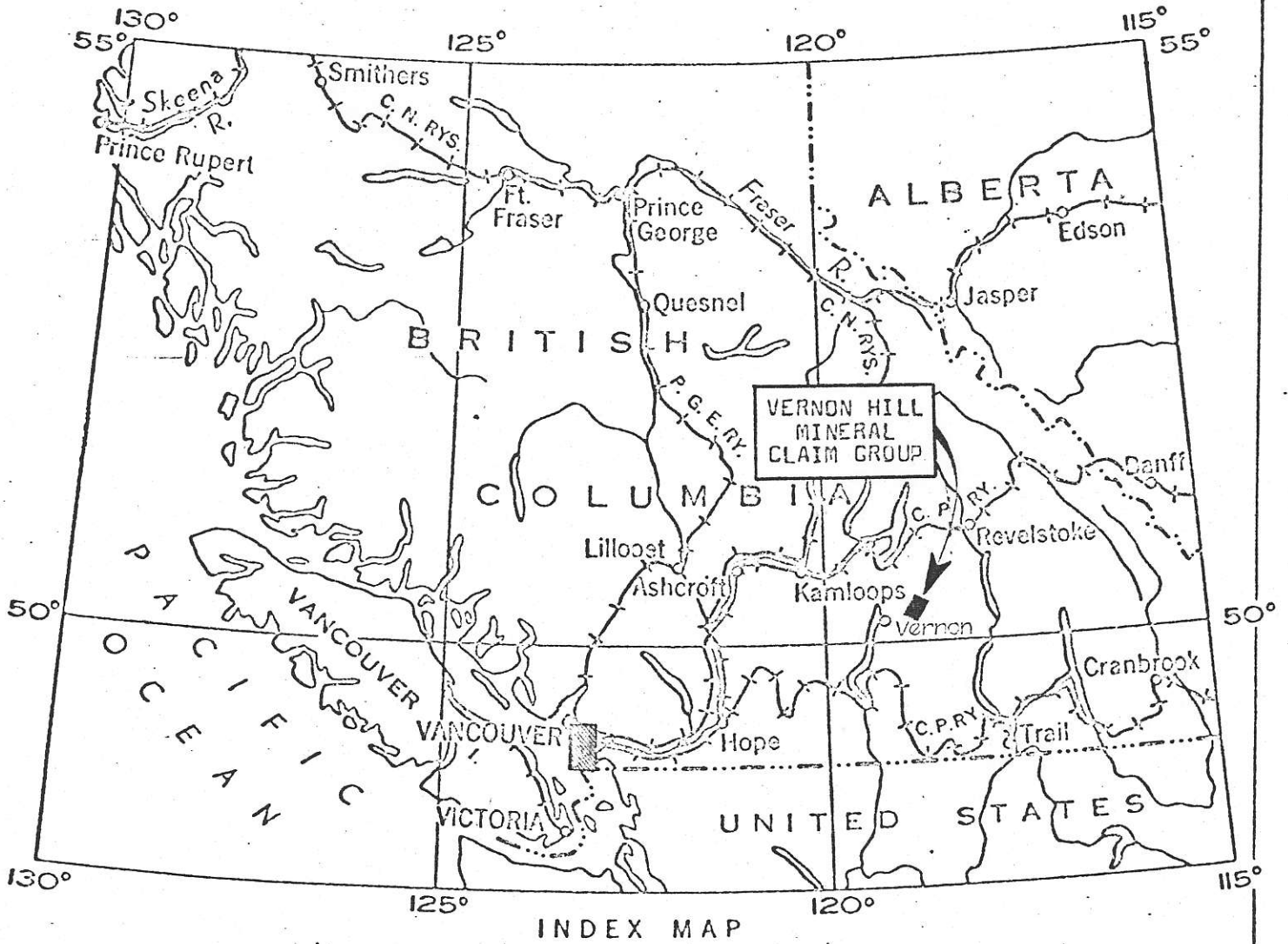
APPENDICES

ANNEX: A-1	"A" - Vernon Copper Optioned Claims
ANNEX: A-2, 3	"B" - King, Rotar, Mykytiw Recorded Claims
ANNEX: B	Extracts; B.C. Minister of Mines' Reports, 1897, 1899 and 1902 re "Bon Diable Mining Company"
ANNEX: C	Lead Settlement Sheet, 16 Jan/1967 - The Consolidated Mining and Smelting Company of Canada Limited, Trail, British Columbia
ANNEX: D	Assay Certificates; 4 Jan/1969, 13 Jan/1969 and 28 Jan/1969 and Spectrographic Analysis 27 Jan/1969 - Okanagan Assayers and Geo-Chemists, Summerland, British Columbia
ANNEX: E-1	Assay Certificate No: V-5377, 7 Feb/1969, T.S.L. Laboratories Ltd., Vancouver, B.C.
ANNEX: E-2	Spectrographic Analysis No: V-5377, 13 Feb/1969, T.S.L. Laboratories Ltd., Vancouver, B.C.
ANNEX: F-1	Assay Certificate No: V-5415, 27 Feb/1969, T.S.L. Laboratories Ltd., Vancouver, B.C.
ANNEX: F-2	Assay Certificates; 24 Feb/1969 and 18 Mar/1969 - Okanagan Assayers and Geo-Chemists, Summerland, British Columbia

ILLUSTRATIONS

Figure: 1	Frontispiece, General Location
Figure: 2	Claims location
Figure: 3	Topographical and Access Route Features
Figure: 3a	Roads and Utilities
Figure: 4	Electromagnetometer Survey, 1967
Figure: 5	Magnetometer Survey, 1967
Figure: 6	Regional Geology
Figure: 7	Regional Tectonic Map
Figure: 8	Sampling and Assays

Loky 1 - GRACE 1



LOCATION

KING GRAYBARR MINES LTD. (NPL)
VERNON HILL MINERAL CLAIMS GROUP

VERNON MINING DIVISION
BRITISH COLUMBIA

WEYMARK ENGINEERING LTD.

Consulting Engineers

3310 WESTMOUNT ROAD
WEST VANCOUVER, B.C.
CANADA

1.

TELEPHONE
922-1536

28 February 1969

Mr David C. King,
King Graybarr Mines Ltd. (N.P.L.),
Box 904,
VERNON,
British Columbia.

Dear Mr King,

RE: Vernon Hill Mineral Claims Group
Vernon Mining Division
British Columbia

I am pleased to submit for your information the results of the examination carried out by myself and Mr E. S. Asano (Fellow of the Geological Association of Canada), of the exposed mineral zones on the Vernon Hill Mineral Claims, Vernon Mining Division, British Columbia on 1st and 2nd February 1969, and the subsequent review of the available data relating thereto.

1.0 PROPERTY:

This mining property consisting of 112 located claims reportedly under the process of acquisition by King Graybarr Mines Ltd., comprises two (2) separate blocks of claims, viz: "A" - those under option from Vernon Copper Limited (N.P.L.) (Vernon Copper Group) consisting of 60 located claims and "B" - those claims located by Messrs. King, Rotar and Mykytiw and consisting of 52 claims (King Graybarr Group). The designated names and staking numbers relating to each of the claims are listed on Annex: A. The relative location of the claims is shown on Figures: 1 and 2. The claims are in good standing with respect to assessment work requirements with the earliest applicable date being 26 May 1969. The schedule of expiry dates is given in Annex: A.

No information is presently available as to conformity of the staking relative to lines, posts, tags, etc to the requirements of the Mineral Act of the Province of British Columbia. There is an apparent contravention recorded on the A Forms with respect to claims numbers: DCK-54 thru DCK-59 and DCK-61. The mineral zones examined are located within the presently defined boundaries of the claims.

2.0 LOCATION:

The claims are located about three miles north-easterly of Vernon, British Columbia. The geographic reference is 50°16' North - 119°10' West. The reference maps are: Vernon 82.L/6 West, Vernon 82.L/6 East, Oyama 82.L/3 West and Oyama 82.L/3 East, Department of Mines and Technical Surveys, Ottawa, 1961.

Vernon Hill Mineral Claims Group, Vernon Mining Division, British Columbia:
28 February 1969

2.0 Location (continued):

The claims are located within the Dsoyoos Division of the Yale Land District and partially within the Aberdeen Mountain Provincial Forest. Reference is to Figures: 1, 2 and 3 for location details.

3.0 DESCRIPTION:

The mining property consists of 112 located claims, 60 of which are owned by Vernon Copper Limited (N.P.L.) and now under option to King Graybarr Mines Ltd, details of which are outlined in the prospectus of Vernon Copper Limited, dated 18th August 1967. The remainder of 52 claims were staked during the latter part of 1968 by Messrs. King, Rotar and Mykytiw and are reportedly in the process of being transferred to King Graybarr Mines Ltd. The location lines of the claims generally run north-south. A perimeter survey of a portion of the Vernon Copper Group was carried out in 1966-1967 by S. R. Leggett and Associates, British Columbia Land Surveyors. Forty miles of grid lines have been cut and a 9200 foot base line established with hub stations established at 400 foot intervals, see Figure: 4. Apart from a few shacks, there are no structures of equipment on the property belonging to Vernon Copper Limited or King Graybarr. Workings consist of access and old logging roads and open pit trenches.

Details relating to the history of the property are given in the prospectus of Vernon Copper Limited (N.P.L.).

At the present time there are no producing mines in the immediate area. However, the Kalamka Gold Mines - formerly known as the Chance Prospect - is located some 8 miles south-east of the claims. This gold property produced 7267 tons between 1935 and 1944, from which 298 ozs. Gold, 3474 ozs. Silver, 458 lbs. Copper, 926 lbs. Lead and 379 lbs. Zinc were recovered, according to B.C. Minister of Mines' Reports.

The Bon Diable prospect, see Figure: 6 is located miles to the north of the property. Details relating to this prospect are given in Annex: B.

Two (2) shipments of hand-sorted ore have been made from the mineral zones located on the property. A shipment of 4,243 tons was made to the Consolidated Mining and Smelting Company of Canada Limited in November 1966. According to the Lead Settlement Sheet, included as Annex: C, the gross value of the contained gold - silver - lead and zinc metals was \$320.10. On the basis of current metal prices the gross value would be over \$500.00 or approximately \$125.00 per ton. Another shipment of about 5 tons was reportedly made to the Bunker Hill Mining Company in Kellogg, Idaho but Settlement Records are not available.

4.0 ACCESSIBILITY:

The claims area is readily accessible by automobile-pickup road as shown on Figure: 2. Paved roads are within 2 miles of the claims. The access road from the end of the pavement to the working site is restricted during snow-covered periods but this section could be kept open by snow removal equipment. The right of access over B.X. ranch land area is also subject to certain restrictions. Some improvements are required to reduce the steep grade of the road on the claims area. Facilities are available within the area for communication ties with those operating in Vernon and other local communities. Air,

Vernon Hill Mineral Claims Group, Vernon Mining Division, British Columbia;
28 February 1969

4.0 Accessibility (continued):

rail and truck transportation facilities are available in Vernon, Penticton and Kelowna.

5.0 CLIMATE:

Climatic conditions are continental in nature within the claims region with recorded extremes of 103°F and -18°F and a mean of 46°F being recorded during the period of record for Vernon. Rainfall averages about 16 inches annually with about 50 inches of snowfall. The elevation of the recording station is 1581 feet above sea level. The elevation range of the claims area is between 2000 feet and 4600 feet. Climatic conditions would not be a significant limiting factor in carrying out of the work on the claims area.

6.0 PHYSIOGRAPHY:

The claims are located on the slopes of Vernon Hill which forms a part of the Interior Plateau of British Columbia. Generally, the topography is characterized by subdued physical expressions and gentle rolling hills. A few isolated peaks and knobs are present. The main drainage is to the west, represented mainly by the Coldstream River and the B.X. Creek with short tributary and intermittent streams. In places, these streams have fairly deep incised walls and probably represent the lines of weakness in the north-south trending faults of shears. The elevation range of the claims varies from 2000 feet to 4600 feet above sea level, see Figure: 3. The area is mostly covered with timber, some of which is second growth and commercial. Overburden varies from a few inches to several feet in depth. There are only a few outcrops of rock exposed on the claims area.

7.0 LOCAL RESOURCES:

Except for timber, water and sand and gravel, there are no resources on the claims area to support mining exploration work. Power transmission lines are available on the outskirts of Vernon. Labour and hardware, fuel and small support supplies are available in Vernon and other nearby communities as well as certain types of equipment. Major supplies and specialty equipment would be available through services located in Vancouver or Calgary. Generally speaking, the claims area is most conveniently situated with respect to support resources for carrying on mining exploration development work.

8.0 GEOLOGY:

The published reference relating to the geological characteristics of the area is Memoir 295, Vernon Map Area, British Columbia, by A. C. Jones of the Geological Survey of Canada 1959. With reference to Figure 6, a reproduction of the accompanying map to that Memoir, it will be noted that the base formations are Jurassic and/or Cretaceous Coast Intrusions of granite and granodiorite rocks. Most of the joints and shearings are northerly trending. Illustrated on Figure 7 is the Tectonic expression of the region which indicates a major north-south fault trending zone on the claims area. This strong regional fault passes from Mara Lake through Enderby, Armstrong, Swan Lake and

Vernon Hill Mineral Claims Group, Vernon Mining Division, British Columbia;
 28 February 1969

8.0 Geology (continued);

Vernon and farther to the south through Kalamalka Lake and Wood Lake. This divides the Vernon area into two sectors. To the west belong the rocks of late Archean characterized by the pre-Windermere-Shuswap series, mainly metamorphized sediments and volcanics. Along with this assemblage, rocks of the Proterozoic, Palaeozoic and Mesozoic are found either overlaying or intruding, the latter being the granites and granodiorites of the coast intrusions. To the east are found formations of the early Archean period presumably the Monashee group, the most extensive member of the Shuswap Terrane which includes gneisses, schists, quartzites, altered limestones and dolomites with some shaley members. The Monashee is overlain by some Proterozoic and later Permian sediments but in most parts is widely exposed. Intruding the Monashee are bodies of coast intrusive granitic faces.

Characterizing the fault system are north-south to north-east, south-west major breaks. Almost perpendicular to this is an east-west or north-west, south-east system of tension fractures and gashes related to the major breaks. The regional deformation appears to be east-west on the east side of this major north-south fault and almost parallel to the faulting on the west side, the contrast in deformation being due to dehydrated Tectonic movements and the character of the formation.

LOCAL GEOLOGY:

The oldest local formation would be that of the Monashee group, the lowest member of the Shuswap Terrane and having thicknesses up to 50,000 feet. In the area of Becker Lake and to the south are found the phyllite faces of the Monashee which are of lower metamorphic grade than the gneiss faces found covering the greater part of the claims group. The gneiss assemblage is of a higher order of metamorphism as exemplified by the presence of garnet and locally to the north part of the claims group, the presence of garnet is noted (around the area of the B.X. Creek) (Jones, G. S. C. Memoir 295). Biotite is the most common dark mineral in the gneiss. Beds of schist are interbedded with the gneiss of the Monashee group. The schists are locally very thin and a few noted in the trenches were of thin dimensions about 1 - 2 feet.

Overlying the Shuswap Terrane unconformity is the Cache Creek group of Permian age. This is believed to be an erosional unconformity. The Cache Creek group can be divided into three sections - (a) argillites (b) andesitic lavas and argillites (c) limestone, quartzite and argillites. The total thickness of this group, being massive, fissile and with a blocky nature. The argillites found in the trenches of King Graybarr mines appear to weather from gray to dark brown and rust colours. To the north end of the claims group, north of the Anne claims the main exposure of the B.X. Creek unconformity is found. Midway up this conical hill near the B.X. Creek is the unconformity with lavas of the Cache Creek group overlying the gneisses of the Monashee group. This is intruded by pegmatites and granites of the Silver Star group. A former geophysical survey run on the Vernon Copper option outlined a magnetic and electro-magnetic anomaly near this area.

Vernon Hill Mineral Claims Group, Vernon Mining Division, British Columbia:
28 February 1969

8.0 Geology (continued):

At the south east area of the Vernon Copper option, disseminated sulphides were noted in a few outcrops, pyrite being more predominant than chalcopyrite. However, a geochemical survey run by Vernon Copper showed a dispersed pattern with a large geochemical anomaly.

Faulting appears to be north-south as the major breaks and tension gashes being near east-west. Trenching to date has uncovered galena, sphalerite and silver in various vein systems and chalcopyrite and molybdenite in another instance, the occurrence being directly related. It appears that the mineralization has occurred in fractures possibly axial to the deformation or tension fractures on a regional tectonic scale. The occurrences are found in both the Monashee group and near the contact of the overlying Permian group of argillites. In this environment appears the possibility of (a) interformational fractures filling (b) contact metasomatic deposits and (c) contact metamorphic near the unconformable contacts or in fractures related to both of the above.

Near the north part of the claims group at 50°18'North and 119°13'West is an old showing called the Bon Diable with low grade gold and silver values from quartz veins in the quartzites, see Annex: B.

It would appear lithologically and structurally that this area is favourable for mineral deposition.

Detailed geological mapping is a pre-requisite to the assessment of the mineral potentialities of the claims area, as controls as evidenced to date have not been sufficient to permit an adequate interpretation. Reference is to Figure: 8 for a preliminary interpretation of the geological features.

9.0 MINERAL ZONES:

To date, three mineral zones have been exposed on the claims, namely: The Proctor, The Rotar and The King, see Figure: 8. The original discovery was made on the Silver Streak #1 claim staked by Vern Proctor, who worked the property in the 1950's. This was subsequently staked by William Rotar and sold to Vernon Copper Ltd.

① The Proctor Vein has sharp contacts and is found associated with quartz in argillaceous and gneissic host rock. The strike is north-easterly and dips 35° to the east. It has been traced for a length of 100 feet. Assays by S. S. Gilmour, P.Eng., former consultant for Vernon Copper showed 0.88 ozs Ag and 1.6% Pb and 0.6% Zn (see Figure: 8).

② A large trench located south-east of the Proctor Vein has revealed a system of small veins called the "Rotar Zone". The mineralization is essentially galena, sphalerite, tetrahedrite and argentiferous galena. The strike is north-south and the dips are to the east. The veins vary from 3 inches to 1 foot and approximately 5 tons were shipped from the "Rotar Zone" by Vernon Copper Limited in 1966. The first shipment of two tons was sent to the Bunker

Vernon Hill Mineral Claims Group, Vernon Mining Division, British Columbia;
28 February 1969

9.0 Mineral Zones (continued):

Hill Smelter at Kellogg, Idaho and the second shipment of four tons was sent to Cominco at Trail, British Columbia. See Annex: C. The gross value reported was \$320.10 equivalent to about \$80.00 per ton. The value, on the basis of current metal prices, would be of the order of \$525.00 equivalent to about \$125.00 per ton. There has been no drilling done to determine the horizontal and dip extent of the "Rotar Zone". There is chalcopryrite associated with the Pb-Zn mineralization. Assays taken by Gilmour, see Figure: 8, some showed the following values:

<u>Silver</u>	<u>Lead</u>	<u>Zinc</u>
0.09 ozs	0.6%	0.2%
1.62 ozs	2.3%	1.8%
0.11 ozs	0.2%	2.0%
12.78 ozs	26.4%	0.4%

There was reported however, one sample taken by Gilmour which assayed: 0.22 ozs Au, 462.94 ozs Ag, 9.5% Pb, and 2.0% Zn with 3.26% Au from the area of the "Rotar Zone".

③ To the east of the "Rotar Zone" is a series of veins found in the trench termed the "King Zone". The trench was first worked by Vernon Copper and samples taken by Gilmour assayed: 0.60 ozs Ag, 0.1% Pb, 0.81% Cu and 0.38% MoS₂. See Figure: 8. Grab samples taken by W. C. Rotar on behalf of D. King gave values as follows (see Annex: D):

<u>Sample No:</u>	<u>Ag.ozs</u>	<u>Cu.%</u>	<u>MoS₂%</u>
11694	0.24	0.1	0.62
11695	0.18	0.45	0.55
11714	21.10	3.9	-----
11716(Grab)	-----	-----	3.77

The spectrographic analysis of the above sample is also given on Annex: D.

A sample at the south end of the trench taken earlier by Gilmour assayed: 0.01 ozs Au, 0.07 ozs Ag, 0.1% Pb, 0.1% Zn, 0.25% Cu and 0.33% MoS₂.

The molybdenite is associated ferrimolybdenite in an almost vertical vein cutting the argillites and gneisses.

----- Samples taken during the examination on February 1st and 2nd are given in Section 11.0 hereof.

10.0 EXPLORATION AND DEVELOPMENT:

Reference is to the Vernon Copper Limited prospectus for details relating to work completed under their initial operations. This included (a) geochemical survey run for copper and heavy minerals. The method used was pubberic acid for copper and dithiazone for total heavy. The survey was run on a 100' grid which could not be tied in to any of the other surveys. (b) Also (see Figures: 4 and 5) a SE-250 Electromagnetic survey using an MF-1 Fluxgate, over approximately 60 claims. Various anomalies were located with these surveys, with drilling recommended. (c) A perimeter survey covers part of the 60 claims optioned from Vernon Copper. There is difficulty in relating the geophysical

Vernon Hill Mineral Claims Group, Vernon Mining Division, British Columbia:
28 February 1969

10.0 Exploration and Development (continued):

results to the geochemical results from the past surveys. In addition, much development has been carried out for road work and improvements on the former logging roads. Reference is to Figure: 2. The major part of the physical work has been in trenching within the Silver Streak #1 claim boundaries. Many of the trenches are incised down to 25 feet below the surface and results showed a good exposure of the lithology.

King Graybarr Mines has carried out further trenching and bull-dozing in the area of Silver Streak #1 to show more exposure. Two dams were built near the headworks of B.X. Creek for further drilling water supply. This was started by Vernon Copper Limited and finished by King Graybarr Mines.

11.0 ASSAY RESULTS:

On Figure: 8 is shown the results of sampling completed to date on the property. Annex: C presents results of the 4.243 tons shipped to the Consolidated Mining and Smelting Company in 1966-1967. Annex: D presents the assay results obtained of specimen samples taken by King Graybarr, with results ranging from 0.18 to 0.24 ozs Ag., 0.1 to 0.45% Cu and 0.55 to 3.77% MoS₂ from the King Zone and 21.19 ozs Ag and 3.9% Cu from the Silver Streak. Annexes: E-1 and E-2 present the results of samples taken by Weymark Engineering Ltd. from the various zones. Annexes F-1 and F-2 present the results of sampling by King Graybarr during February 1969, viz:

<u>Sample No:</u>	<u>Au.ozs</u>	<u>Ag.ozs</u>	<u>Cu.%</u>	<u>Pb.%</u>	<u>Zn.%</u>
11769	0.03	3.65	0.08	2.2	0.4
11770	0.01	1.45	0.01	0.8	0.3
11779	----	70.34	----	41.1	---
11781	----	71.96	----	35.6	7.1
11782	----	108.56	----	53.9	---
11783	----	62.50	0.19	38.9	---
11784	0.005	1.98	----	0.9	---
11787	----	12.74	----	7.6	---

The above are representative grab samples.

From a review of the forelisted results, it will be observed that metallics of gold, silver, lead, zinc, copper and molybdenum are present in varying amounts in the various zones; some of which are of commercial significance. Detailed channel and bulk sampling of the zones is a requirement in order to assess continuity of length and depth characteristics of the indicated mineral zones.

12.0 ORE RESERVES AND ECONOMICS OF PRODUCTION:

Because of the preliminary extent of the exploration work completed to date, no assessment may be made with reference to possible ore reserves or to the scope of economic controlling factors. No information is immediately available on which to reference actual metallic mining operational experience in the immediate area. However, Brenda Mines Ltd. is developing their reported ore reserves of 177,000,000 tons averaging 0.183% copper and 0.049% molybdenite, located 20 miles north-west of Peachland. The carrying out of exploration and development mining

Vernon Hill Mineral Claims Group, Vernon Mining Division, British Columbia;
28 February 1969

12.0 Ore Reserves and Economics of Production (continued):

work and actual operations on the Vernon Hill Mineral Claims, if substantiated, should not be burdensome for on-cost items, because of the close proximity of the claims to servicing, transportation and communications facilities.

13.0 OPINION:

Within the scope of the information presently available, I am of the opinion that, in view of the indicated presence of copper, molybdenum, silver, lead and other metallic minerals of economic significance in zones probed in a preliminary manner, additional tests and investigations are required and justifiable in order to assess the commercial mineral potentialities of the Vernon Hill Mineral Claims.

14.0 RECOMMENDATIONS:

The following programme of works is recommended in order to assess the commercial mineral possibilities of the Vernon Hill Mineral Claims:

	VERNON COPPER GROUP	KING GRAYBARR GROUP	TOTAL
1. Access Road Improvement.....	10,000.00	10,000.00	20,000.00
2. Topographic Surveys & Controls..	2,000.00	2,000.00	4,000.00
3. Geological Mapping.....	3,000.00	3,000.00	6,000.00
4. Geophysical Surveys.....	5,000.00	5,000.00	10,000.00
5. Trenching.....	10,000.00	10,000.00	20,000.00
6. Diamond Drilling.....	25,000.00	25,000.00	50,000.00
7. Bulk Sampling.....	25,000.00	25,000.00	50,000.00
8. Engineering & Tests.....	10,000.00	10,000.00	20,000.00
9. Camp Establishment.....	10,000.00	10,000.00	20,000.00
10. Travelling & Administration.....	10,000.00	10,000.00	20,000.00
11. Miscellaneous.....	2,500.00	2,500.00	5,000.00
TOTAL.....	\$112,500.00	\$112,500.00	\$225,000.00

In the carrying out of the aforelisted programme of works, it must be duly recognized that some variation in the scope and extent of the work must be exercised from time to time, in accordance with the results obtained and in keeping with good engineering practise. Frequent appraisal of the programme as it advances will be necessary.

On completion of this phase of the investigation, an assessment should be made to determine economic and commercial potentialities of the indicated metalliferous zones.

WJW/et

W. J. Weymark, P.Eng.,
President,
WEYMARK ENGINEERING LTD.

EXTRACTS FROM B.C. MINISTER OF MINES REPORTS RE "BON DIABLE MINING COMPANY"B.C. MINISTER OF MINES REPORT 1897, Page: 609:

These claims lie on the hills 3.5 miles S.W. of Vernon and a 35 foot shaft had been started on a 3-foot quartz vein, which narrows quickly in depth and is cut off by a fault, and a 75-foot drift had not picked up the vein again. Good silver assays are said to have been got from this vein. Higher up this hill a tunnel was being run in an irregular mass of crushed quartz, and on the surface are very large boulders of quartzose rock, probably of quartzite, of which a strong bed lies further up the hill-side.

B.C. MINISTER OF MINES REPORT 1899, Page: 747:

The BON DIABLE mineral claim, situated $3\frac{1}{2}$ miles north-east from Vernon, has considerable work done on it, consisting of a 47-foot shaft, a 100-foot tunnel, and 100 feet of open cut. Values in gold and silver. Has shipped one ton as a sample.

B.C. MINISTER OF MINES REPORT 1902, Page: 1125-1126:

Some 3 miles to the N.E. of Vernon, on the B.X. mountain, there has been considerable work done on its claims by the BON DIABLE MINING COMPANY. The property of this company lies on and near the top of a grassy knoll, at an elevation of 2,250 feet.

The country rock is probably a highly altered and disturbed sedimentary, and is cut by a number of large white quartz veins having a general strike of almost N.20°E., and a dip to the N.W. of 75°, though in places much flatter. These veins are seemingly associated with certain igneous dykes, but exactly in what way is not very clear from the development done. The principal workings consist of a shaft some 36 feet deep, from the bottom of which a drift of 80 feet to N.75°E. is said to have been made, but this could not be examined, as the shaft was half full of water. The shaft seems to have followed down a quartz vein of about 30 inches in width at the surface and probably less at the bottom, where it is reported by the men who worked on the property to have been faulted, an attempt to pick it up again having been made in driving the drift, with what success is not known.

There are a number of other small excavations on outcroppings of quartz, but apparently these have been conducted without any system and they indicate but little. Some copper stain is apparent, but the values are chiefly in gold and are reported to be low, which is confirmed by the assays of samples taken. The development is very unsatisfying; the property has possibilities, but what has been done has not proved any ore of a workable character. A good cabin has been built, but it is situated on land held as ranch property.

SUBMITTER: Mr. King,

King Graybarr Mines Ltd. (NPL),

P.O. Box 904, Vernon, B.C.

Date 4th January 1969

Certificate of Analysis

OKANAGAN ASSAYERS & GEO-CHEMISTS

CHEMISTS & PROVINCIAL ASSAYERS

S. LAKESHORE DRIVE — PHONE 494-4566

SUMMERLAND, B.C.

Values per ton

DESCRIPTION	No.	Ag oz	Cu %	MoS ₂ %
2451 S-1	11694	.24	.1	.62
2452 S-2	11695	.18	.45	.55

Analyst: *[Signature]*

SUBMITTER: King Graybarr Mines Ltd. (NPL),

P.O. Box 904,

Vernon B.C.

Date 13th January 1969

Certificate of Analysis

OKANAGAN ASSAYERS & GEO-CHEMISTS

CHEMISTS & PROVINCIAL ASSAYERS

S. LAKESHORE DRIVE — PHONE 494-4566

SUMMERLAND, B.C.

DESCRIPTION	No.	Ag oz	Cu %
2453/ S 3	11714	21.10	3.9

Analyst: *[Signature]*

SUBMITTER: Mr. P. P. Falkowski,

Penticton, B.C.

Date 23th January 1969

Certificate of Analysis

OKANAGAN ASSAYERS & GEO-CHEMISTS

CHEMISTS & PROVINCIAL ASSAYERS

S. LAKESHORE DRIVE — PHONE 494-4566

SUMMERLAND, B.C.

DESCRIPTION	No.	MoS ₂ %
grab sample	11713	3.77

[Signature]

SUBMITTER:

Mr. Falkowski,

Penticton, B.C.

Date 27th January 1969

Spectrographic Analysis

OKANAGAN ASSAYERS & GEO-CHEMISTS

CHEMISTS & PROVINCIAL ASSAYERS

S. LAKESHORE DRIVE — PHONE 494-4566

SUMMERLAND, B.C.

T
S
L

Laboratories Limited

325 HOWE STREET - VANCOUVER 1, B.C.

TELEPHONE 688-3504

ASSAYERS
CHEMISTS
GEOCHEMISTS

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM KING GRAYBALL/MR. W.J. WEYMARK

REPORT NO.

V-5377

SAMPLE(S) OF ROCK Submitted on February 5, 1969.

Sample No.	Gold . (Au)oz:ton	Silver (Ag)oz:ton	Copper (Cu)%	Lead (Pb)%	Molybdenum (MoS ₂)%
10185	trace	trace	0.16	----	0.03
10186	0.01	1.28	1.12	----	0.11
10187	0.02	trace	0.14	----	0.03
10188	trace	0.85	0.02	0.29	----
10189	trace	1.30	0.04	0.39	----
10190	trace	0.62	0.34	0.03	0.22
10191	trace	0.26	0.13	----	0.04
10192	0.05	0.60	0.26	----	0.19
10193	----	0.15	0.08	----	0.03
10194	0.03	0.63	0.19	----	0.28

oz:ton - Troy ounces per 2,000 lbs.

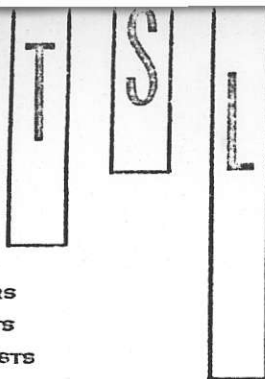
DATE February 7, 1969.

SIGNED

Ernest J. Robertson

PULP AND REJECTS DISCARDED AFTER 3 MONTHS

DIVISION OF TECHNICAL SERVICE LABORATORIES



Laboratories Limited

325 HOWE STREET - VANCOUVER 1, B.C.

TELEPHONE 688-3504

ASSAYERS
CHEMISTS
GEOCHEMISTS

CERTIFICATE OF ANALYSIS

Semiquantitative Spectrographic

SAMPLE(S) FROM

MR. W.J. WEYMARK
KING GRAYBALL

REPORT NO.

V-5377

SAMPLE(S) OF

ROCK Submitted on February 6, 1969.
COMPOSITE 10192 - 10194

	Sample	Sample	Sample		Sample	Sample	Sample
Antimony	-			Phosphorus	-		
Arsenic	-			Platinum	-		
Barium	.05%			Rhenium	X		
Beryllium (BeO)	-			Rhodium	-		
Bismuth	.003%			Rubidium	X		
Boron	-			Ruthenium	-		
Cadmium	-			Silver	.2 oz t		
Cerium (CeO ₂)	-			Strontium	.05%		
Caesium	X			Tantalum (Ta ₂ O ₅)	-		
Chromium	.03%			Tellurium	-		
Cobalt	.01%			Thallium	-		
Columbium (Cb ₂ O ₅)	-			Thorium (ThO ₂)	-		
Copper	.2%			Tin	.003%		
Gallium	.001%			Titanium	.2%		
Germanium	-			Tungsten	-		
Gold	-			Uranium (U ₃ O ₈)	-		
Hafnium	-			Vanadium	.01%		
Indium	-			Yttrium (Y ₂ O ₃)	.002%		
Iridium	-			Zinc	-		
Lanthanum (La ₂ O ₃)	-			Zirconium (ZrO ₂)	.01%		
Lead	.02%			ROCK FORMING METALS			
Lithium (Li ₂ O)	-			Aluminum (Al ₂ O ₃)	M		
Manganese	.01%			Calcium (CaO)	1%		
Mercury	-			Iron (Fe)	MH		
Molybdenum	.2%			Magnesium (MgO)	LM		
Neodymium (Nd ₂ O ₃)	-			Silica (SiO ₂)	H		
Nickel	.003%			Sodium (Na ₂ O)	1%		
Palladium	-			Potassium (K ₂ O)	-		

Figures are approximate:

CODE

H — High — 10 — 100% approx.
MH — Medium High — 5 — 50% approx.
M — Medium — 1 — 10% approx.

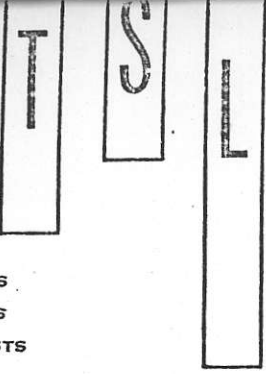
LM — Low Medium — .5 — 5% approx.
L — Low — .1 — 1% approx.
TL — Trace Low — .05 — .5% approx.
T — Trace — .01 — .1% approx.

FT — Faint Trace — approx. less than .01%.
PT — Possible Trace — Presence not certain.
— — Not Detected — Elements looked for but not found.
X — Not looked for

DATE February 13, 1969.

SIGNED

Ernest J. Oberstman



Laboratories Limited

325 HOWE STREET - VANCOUVER 1, B.C.

TELEPHONE 688-3504

ASSAYERS
CHEMISTS
GEOCHEMISTS

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM MR. W.J. WEYMARK - GRAYBALL

REPORT NO.
V-5415

SAMPLE(S) OF ROCK Submitted on February 24, 1969.

Sample No.	Gold (Au)oz:ton	Silver (Ag)oz:ton	Copper (Cu)%	Lead (Pb)%	Zinc (Zn)%
10682	0.03	38.10	0.03	19.82	5.60
10683	0.05	6.20	0.15	8.32	0.53

oz:ton - Troy ounces per 2,000 lbs.

DATE February 27, 1969.

SIGNED Ernest W. Hesterman

SUBMITTER: M. r. King,

KING GREYBARR MINES LTD. (NPL)

2811 30th St., Vernon, B.C.

Date 24th February 1969

Certificate of Analysis

OKANAGAN ASSAYERS & GEO-CHEMISTS

CHEMISTS & PROVINCIAL ASSAYERS

S. LAKESHORE DRIVE — PHONE 494-4566

SUMMERLAND, B.C.

DESCRIPTION	No.	Au oz	Ag oz	Cu %	Pb %	Zn %
no. 2455	11769	.03	3.65	.08	2.2	.4
no. 2456	11770	.01	1.45	.01	.8	.3

Analyst

SUBMITTER: Mr. D. King,

KING GREYBARR MINES LTD. (NPL)

Box 504, Vernon, B.C.

Date 18th March 1969

Certificate of Analysis
cc. Weymark Engineering Ltd.

OKANAGAN ASSAYERS & GEO-CHEMISTS

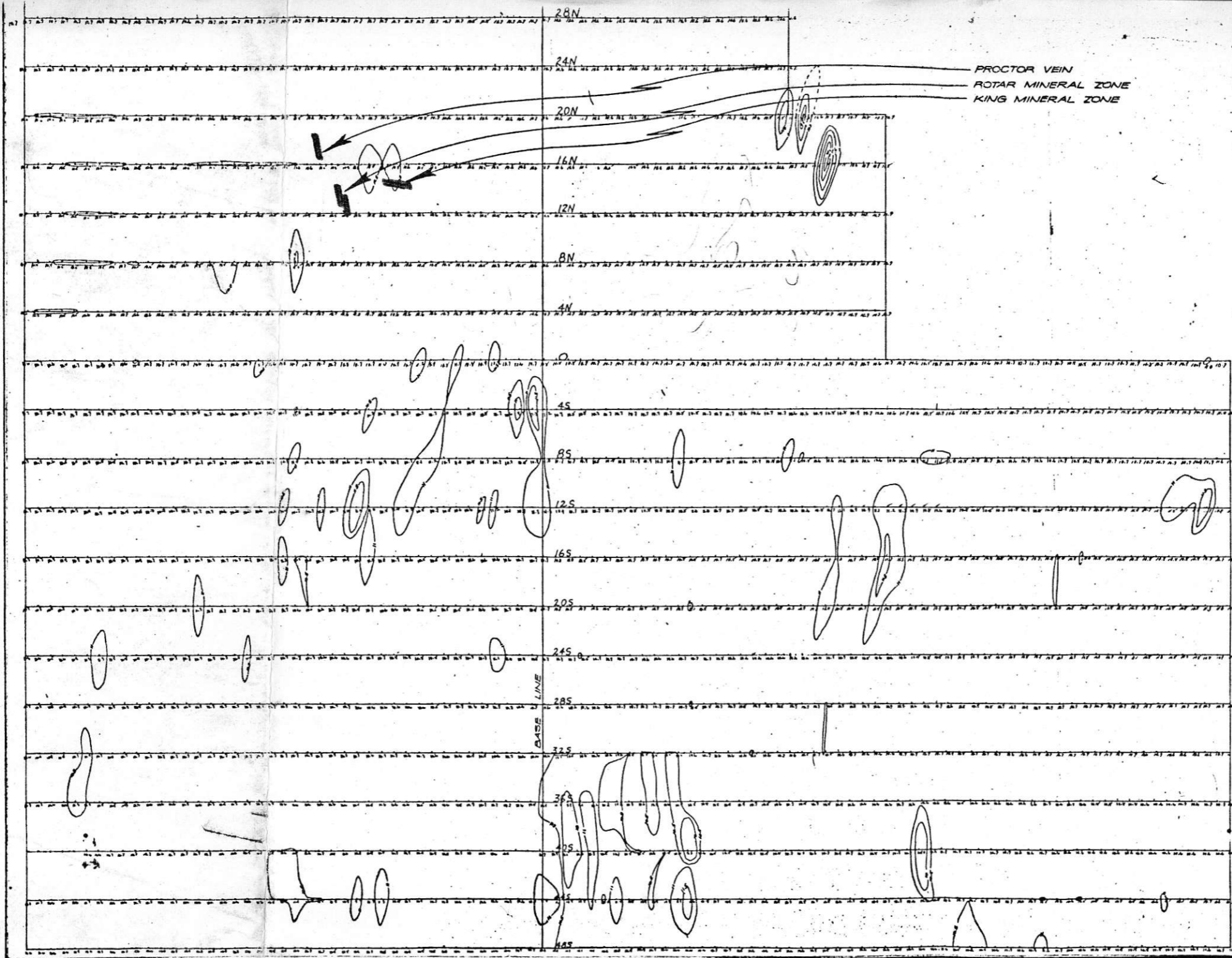
CHEMISTS & PROVINCIAL ASSAYERS

S. LAKESHORE DRIVE — PHONE 494-4566

SUMMERLAND, B.C.

DESCRIPTION	No.	Au oz	Ag oz	Pb %	Zn %	Cu %
2458	11770		70.34	41.1		
2450	11731		71.96	35.6	7.1	
2 01	11782		108.56	53.9		
292	11733		62.50	38.9		.19
293	11734	.005	1.98	.9		
206	11737		12.74	7.6		

Bill Peppert



PROCTOR VEIN
 ROTAR MINERAL ZONE
 KING MINERAL ZONE



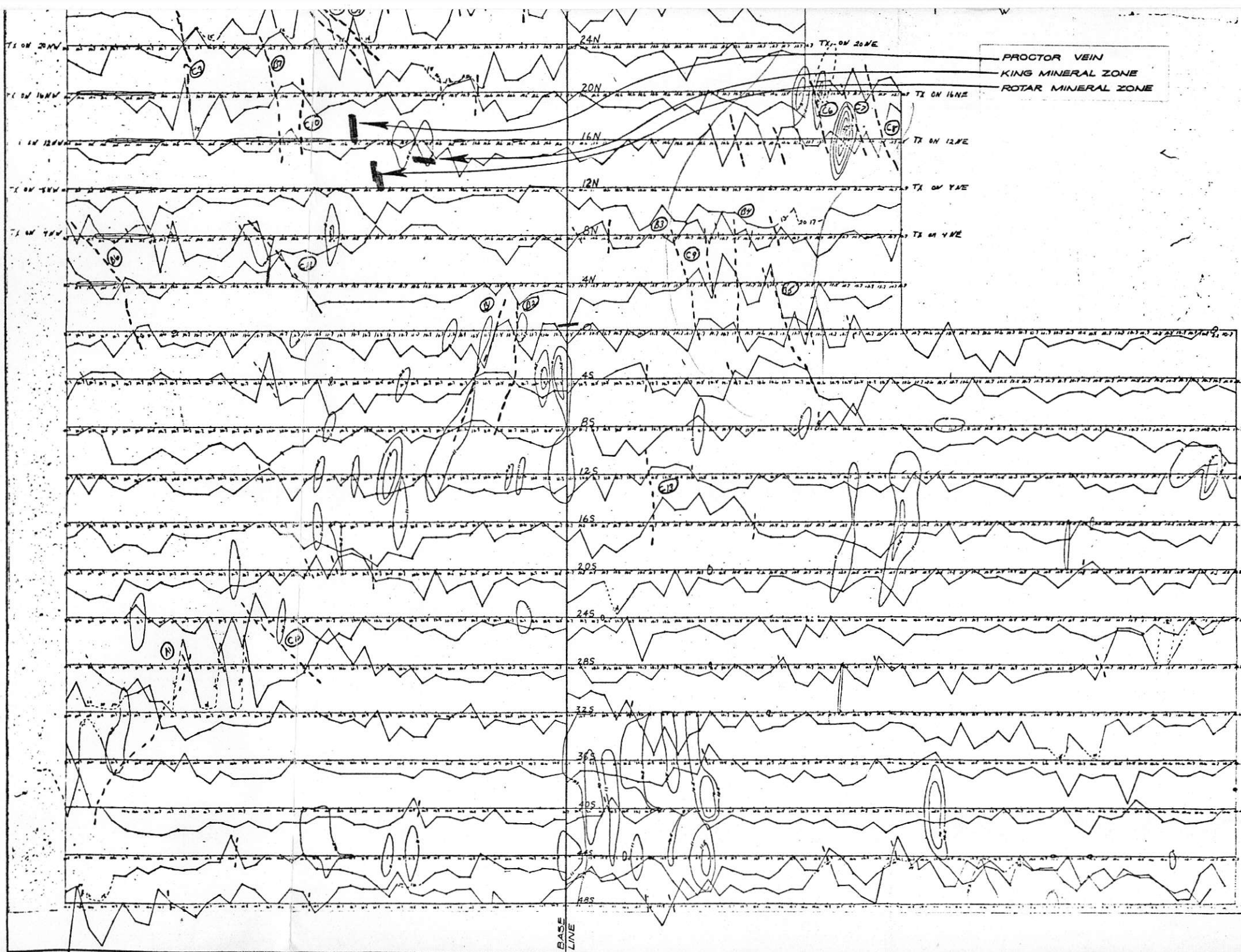
INSTRUMENT:-----MF-1 FLUXGATE.
 CONTOUR INTERVAL:500 GAMMAS.
 NOTE: 10,000 GAMMAS ADDED TO
 ELIMINATE NEGATIVE VALUES.



REFERENCE: MAGNETOMETER SURVEY
 (VERNON AREA) BY VERNON COPPER
 LIMITED, JANUARY 1967, (E. ASANO,
 GEOLOGIST).

KING GRAYBARR MINES LTD (NPL)	
WEYMARK ENGINEERING LTD. CONSULTING ENGINEERS WEST VANCOUVER, BRITISH COLUMBIA CANADA	
VERNON HILL MINERAL CLAIMS GROUP MAGNETOMETER SURVEY: 1967	
DATE 28 FEBRUARY/69	SCALE AS SHOWN
SUBMITTED W.W.W.	CHECKED W.W.W.
DRAWN	FILE No. KG-1.
TRACED E. Taylor	CONTRACT KG-1.

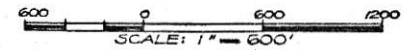
FIG: 5.



PROCTOR VEIN
 KING MINERAL ZONE
 ROTAR MINERAL ZONE

1000' = 1"

INSTRUMENT: MF-1 FLUXGATE, SE-25
 CONTOUR INTERVAL: 500 GAMMAS
 NOTE: 10,000 GAMMAS ADDED TO ELIMINATE NEGATIVE RESULTS.



REFERENCE: ELECTROMAGNETOMETER SURVEY (VERNON AREA), BY VERNON COPPER LIMITED, JANUARY 1967, (E. ASANO, GEOLOGIST).

KING GRAYBARR MINES LTD (NPL)

WEYMARK ENGINEERING LTD.
 CONSULTING ENGINEERS
 WEST VANCOUVER, BRITISH COLUMBIA
 CANADA

VERNON HILL MINERAL CLAIMS GROUP
 ELECTROMAGNETOMETER SURVEY: 1967

DATE 28 FEBRUARY/63	SCALE AS SHOWN
SUBMITTED W.J.W.	CHECKED W.J.W.
DRAWN	FILE No. KG-1.
TRACED E. Taylor	CONTRACT KG-1.

WS
March 13th, 1961.

Mr. Ralph Sostad,
510 Randall Building,
535 West Georgia Street,
VANCOUVER 2, B.C.

Dear Ralph:

I return herewith your file on the
Greenwood Area.

I was very glad to peruse the information
but prefer to work on an area which has been somewhat less
picked-over than the Greenwood Area. I am not, however,
discounting the possibilities which may exist in the area
and I wish you the best of luck in your efforts.

Yours sincerely,

William Sirola

KERR-ADDISON GOLD MINES LIMITED

WS:rl