

**BACON AND CROWHURST**  
CONSULTING ENGINEERS

861922

February 8th, 1973.

Dome Mines Limited,  
702 - 360 Bay St.,  
Toronto, 1, Ontario.

Attention: Mr. J.B. Redpath

Dear Mr. Redpath:

Herewith what we consider the pertinent data on  
BURN, exclusive of actual drill logs.

I hope this will be sufficient for Dr. Webber's  
purposes and that he will be able to enlighten us on the  
geochemistry.

Sincerely,

BACON AND CROWHURST



W.R. Bacon

WRB/ic  
Encl.

RECEIVED

FEB 9 1973

SUMMARY REPORT

BURN CLAIM GROUP

LOCATION

The BURN claim group consists of 80 mineral claims at 55°30'N, 125°15'W, five miles south of Kwanika Creek and four miles east of the Pinchi Fault.

TOPOGRAPHY

The claim group occupies a valley between two large north trending ridges. The main anomalous area lies at 4200 to 4500 foot elevation on a northeast facing, timbered slope that is mainly below the talus area. This slope is about 10° toward northerly flowing "Burn" Creek. To the south the valley heads in cirques which lie above timberline.

GENERAL GEOLOGY

BURN claim group occupies a portion of the central part of Hogen batholith which trends sub-parallel to the Pinchi Fault from Nation Lakes to the head of Meselinka River, a distance of about 90 miles. The batholith is about nine miles wide in the vicinity of the claims.

The western portion of the BURN group is underlain by dioritic rocks which are relatively well exposed on the ridge trending south from the camp area.

In contact with the diorite, monzodiorites and monzonite extend to the east limits of the claim group. These rock types appear to be somewhat younger than the diorite and are in turn intruded by a pink porphyritic granite in the southern part of the claim group and an alaskite dyke striking north in the central portion of the claim group.

Molybdenite mineralization has been found in the alaskite outcrops both disseminated and along fractures. It has also been found on fractures and associated with narrow quartz veins in the monzonite and monzodiorite.

Minor pyrite and rare chalcopyrite have been found associated with the molybdenite, and some pyrite occurs in the diorite west of the anomalous zone and in monzonites north of this zone.

#### PROGRAM

Prospecting was conducted in the area during 1971. Interest was aroused, and initial staking done, on discovery of pyrite mineralization with minor molybdenite and rare chalcopyrite on what are now claims BURN 1-6. Streams in the vicinity were silt sampled and returned results up to 50 ppm Mo and 224 ppm Cu, which led to enlarging the claim group.

Soil sampling was conducted on tape and compass lines, as indicated on Plate I.

Sample holes were dug with a grub hoe at 200' intervals in an attempt to sample the 'B' horizon. Holes were 8" to 14" in depth

and samplers' notes indicate the majority of samples were reddish brown or grey brown in colour and were considered to be 'B' horizon. The area is generally quite heavily timbered and poorly drained.

Samples were collected in kraft paper bags, dried and sifted to -40 mesh at the base camp and forwarded to Chemex Labs Ltd., North Vancouver, for determination of total Cu and Mo content. Determinations were made by atomic absorption.

Check soil sampling was carried out on part of line 126E. These samples were examined at Chemex Labs and run for Cu, Mo, CrCu, Mn. Results are shown on the enclosed sheet together with the original Cu, Mo determinations.

Upon completion of the soil sampling, a magnetometer survey was conducted together with geological mapping as shown on Plates II and III.

Early in October 1971, a tractor road was pushed through to the property and two trenches attempted. The southerly trench started on bedrock at about 50N, 27E on the grid Plate III. In places the trench reached depths of 10 feet and did not hit bedrock all the way. However, overburden probably averages somewhat less than four feet.

In trench 2 at 64N, only the first 600' of trench was completed due to heavy snow and tractor breakdown. Overburden was still only about 4 feet deep on the average, bedrock was generally quite broken up near surface and several occurrences of quartz, well mineralized with molybdenite, minor pyrite and minor chalcopyrite, were turned up.

This limited trenching indicated the best mineralized fractures trend about 300° and are steeply dipping. Minor mineralized fractures were located with similar strike and dipping 35° southwest. This fracture trend appears to be reflected in the pattern of soil geochemical anomalies.

During the summer of 1972, an IP survey was carried out by McPhar Geophysics over the grid area. The results of this survey were largely negative and indicated from the outset that there was little chance for a large disseminated copper deposit of economic grade, in spite of some very high geochemical copper readings. In other words, it was confirmed before drilling commenced that the objective was essentially a porphyry molybdenum deposit.

Twelve holes were diamond drilled during August and September; the data on these are as follows:

<u>No.</u>	<u>Coordinate Location</u>	<u>Dip</u>	<u>Azimuth</u>	<u>Total Length</u>	<u>Cumulative Total Length</u>
72-1	64N, 30E	-90°		298 (feet)	298 (feet)
-2	72N, 30E	-90°		303	601
-3	72N, 38E	-90°		308	909
-4	72N, 38E	-45°	North	450	1,359
-5	84N, 38E	-45°	South	396	1,755
-6	60N, 30E	-55°	South	559	2,314
-7	56N, 34E	-55°	South	511	2,825
-8	54N, 30E	-55°	South	383	3,208
-9	32N, 42E	-45°	210°	800	4,008
-10	54N, 38E	-55°	South	436	4,444
-11	50N, 30,25E	-55°	225°	401	4,845
-12	64N, 42E	-55°	South	386	5,231

Some mineralization was cut in Holes 1, 6, 7 and 10 but nothing approached an economic section of ore. Logs of the holes were distributed to the Parties.

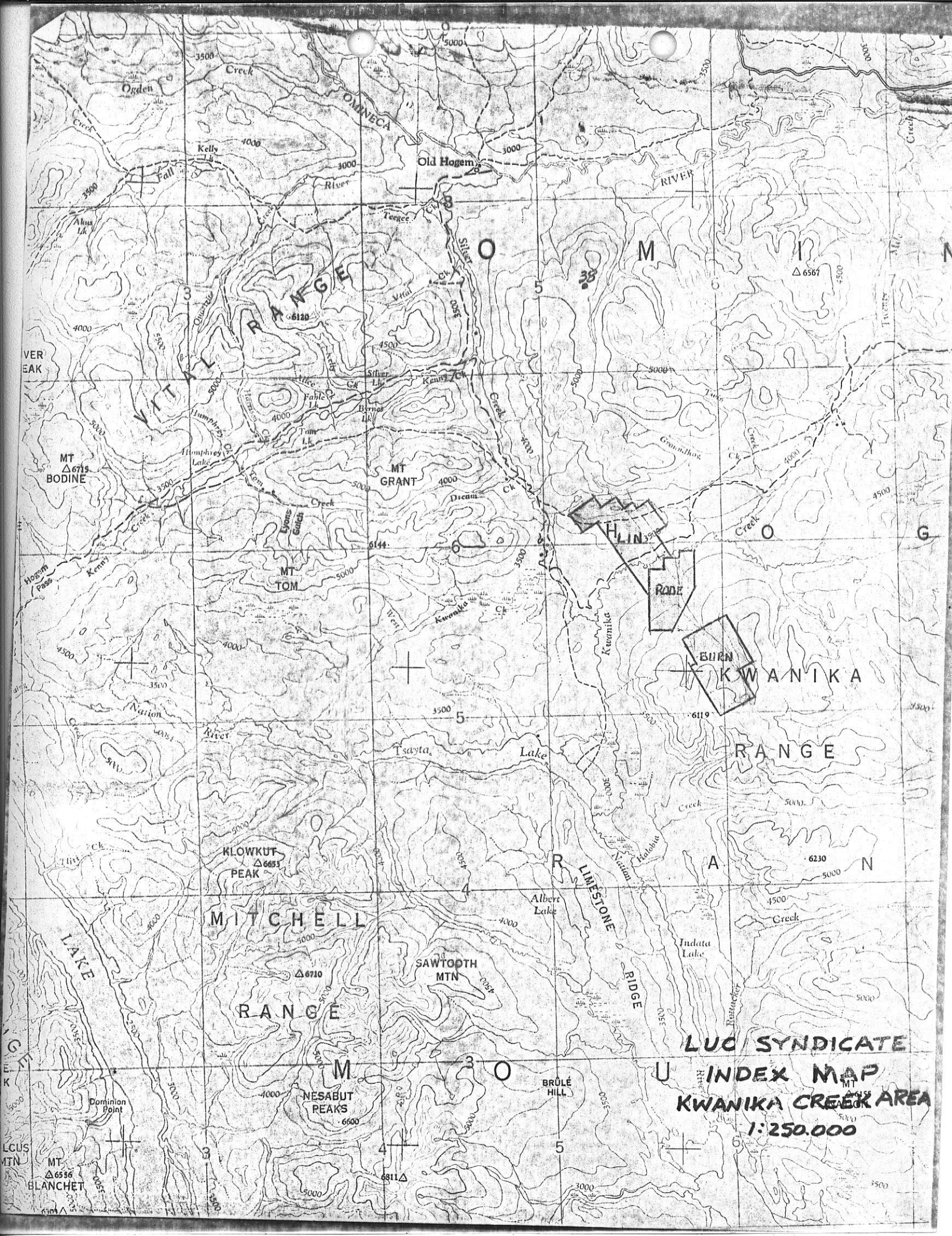


The following observations on the core are from property geologist Mr. Herb Toohey:

Molybdenum (and copper) mineralization is found predominantly in diorite, with several minor occurrences of disseminated molybdenite in alaskite and syenite.

There are three principal modes of occurrence of mineralization, as follows:

- (1) Molybdenite and chalcopyrite in quartz stringers within the diorite; they rarely exceed one half inch in width and are accompanied by a well developed potassium feldspar selvage which in some cases is intergrown with a moderate amount of epidote. Mineralization occurs principally along the quartz and potassium feldspar interface and disseminated a short distance into the feldspar zone. Minor chalcopyrite and relatively abundant pyrite occur randomly within the entire zone of alteration and sometimes closely intergrown with molybdenite.
- (2) Molybdenite in gouge and shear zones most commonly as a thin smear along planes of movement. Frequently remnants of quartz were also observed along the surfaces. The mineralized gouge and shear zones are generally highly epidotized and graphite was seen to be present also.
- (3) Molybdenite in disseminated flakes and rosettes occurs in the more acidic rocks. There is very little accompanying alteration other than moderate to weak, pervasive potassium feldspar. Drill results indicated this mode to be erratic in occurrence.



**LUC SYNDICATE**  
**INDEX MAP**  
**KWANIKA CREEK AREA**  
**1:250,000**

**MITCHELL**  
**RANGE**

**MT NESABUT PEAKS**  
**6600**

**BURN**  
**KWANIKA**  
**RANGE**

**OGDEN**  
**CREEK**

**OLD HOGEM**

**MT BODINE**  
**Δ 6715**

**MT GRANT**  
**4000**

**MT TOM**  
**5000**

**KLOWKUT PEAK**  
**Δ 6693**

**SAWTOOTH MTN**  
**4054**

**BRULÉ HILL**

**MT BLANCHET**  
**Δ 6596**

**Δ 6567**

**6119**

**6230**

**6144**

**6130**

**6811**

**VER EAK**

**LCUS MTN**

**Δ 6567**

**6230**

**6811**





# CHEMEX LABS LTD.

212 BROOKSBANK AVE.  
NORTH VANCOUVER, B.C.  
CANADA  
TELEPHONE: 985-0648

• CHEMISTS • GEOCHEMISTS • ANALYSTS • ASSAYERS

## CERTIFICATE OF ANALYSIS

TO: L. U. C. Syndicate,  
#1720 - 1055 W. Hastings,  
Vancouver, B. C.

CERTIFICATE NO. 16194  
INVOICE NO. 6323  
DATE RECEIVED Oct. 5/71  
DATE ANALYSED Oct. 13/71

ATTN:

RESULTS OF CHECK RE-SAMPLING  
BURN GROUP - SEE SIMPLE NOTES

SAMPLE NO.:	PPM Copper	PPM Molybdenum	PPM Gold Extractable	PPM Manganese	Soil Horizon	Colour Code
			Copper			
DVL 126E 44N (1)	540	36	6	1220	XAoA1	Dk.Br.
126E 46N (2)	30	10	< 1	162	A1A2	Grey Br.
48N (3)	44	9	1	265	A2 B	Br.
50N (4)	386	10	14	580	B.	L. Br.
52N (5)	200	28	4	625	B	L.Br.
54N (6)	362	25	21	685	B&C	L.Br.
56 (7)	22	35	< 1	207	B&C	Grey
58 (8)	270	52	18	400	B&C	L.Br.
60 (9)	72	70	1	440	B&C	L.Br.
62 (10)	40	41	1	291	B&C	L.Br.
64 (11)	100	20	22	166	B.	Brown
66 (12)	141	55	4	336	B	L.Br.
68 (13)	90	130	1	1110	XAo A1&B	Br.
DVL 126E 70N (14)	96	115	< 1	3140	XAo A1	Dk. Br.
DVL 126E 72N (15)	21	33	< 1	400	AoA1A2	Dk.Br.Grey
Std. #24	52	15	< 1	426		

O - ORGANIC

126E 44N	484	32
46	54	17
48	21	4
50	340	55
52	53	50
54	1120	85
56	24	37
58	63	27
60	63	70
62	34	42
64	14	16
66	41	37
68	76	165
126E 70N	212	105

RESULTS OF ORIGINAL  
SOIL SAMPLING

check line



MEMBER  
CANADIAN TESTING  
ASSOCIATION

Certified by

*John W. Emery*