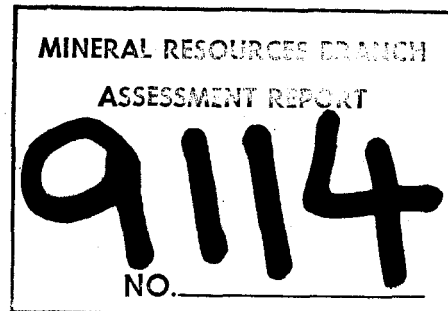


GEOLOGICAL AND GEOCHEMICAL REPORT

- on the -

DUG CLAIMS  
Kamloops & Lillooet Mining Divisions  
British Columbia

- for -



DENISON MINES LTD.,  
#2300-650 W. Georgia Street,  
Vancouver, B.C. V6B 4N7.

Covering: Dug (20 units); Dug #5 (18 units);  
Dug #2 (20 units); Dug #6 (20 units);  
Dug #3 (20 units); Dug #7 (20 units);  
Dug #4 (18 units); Dug #8 (15 units).

Work Performed: July 22 - July 30, 1980.

Location: (1). 40 km. southwest of Lillooet, B. C.  
(2). NTS 92J8/E & W.  
(3). Latitude 50°20.5' North;  
Longitude 122°11' West.

PREPARED BY:  
KERR, DAWSON AND ASSOCIATES LTD.,  
#1-219 Victoria Street,  
KAMLOOPS, B.C.

W. Gruenwald, B. Sc.,  
March 6, 1981.

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233-8	- Geological Plan - Dug, Dug #4 & 6 Claims	1: 5,000
233-9	- Geochemical Plan - (Molybdenum) Dug, Dug 4 & 6 Claims	1: 5,000
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## INTRODUCTION

Kerr, Dawson and Associates Ltd., under agreement to Denison Mines Ltd. completed a regional silt sampling programme over a 250 square mile area immediately southwest of Lillooet, B. C.

Since the area examined hosts several molybdenum occurrences the primary objective of the programme was "porphyry type" molybdenum (copper) deposits. Other objectives included massive sulphides (Cu, Pb, Zn, + Au, Ag), skarns (W, Cu, Zn, Mo) and veins (Cu, Ag, Au).

As a result of the initial sampling programme, anomalous copper, molybdenum (and minor zinc, silver) values were encountered in silt samples draining a large gossan zone approximately 4 km. south of Gott Peak. This led to the staking of the Dug claims, followed by more detailed geological mapping and geochemical sampling, the results of which are described in this report and the appended maps.

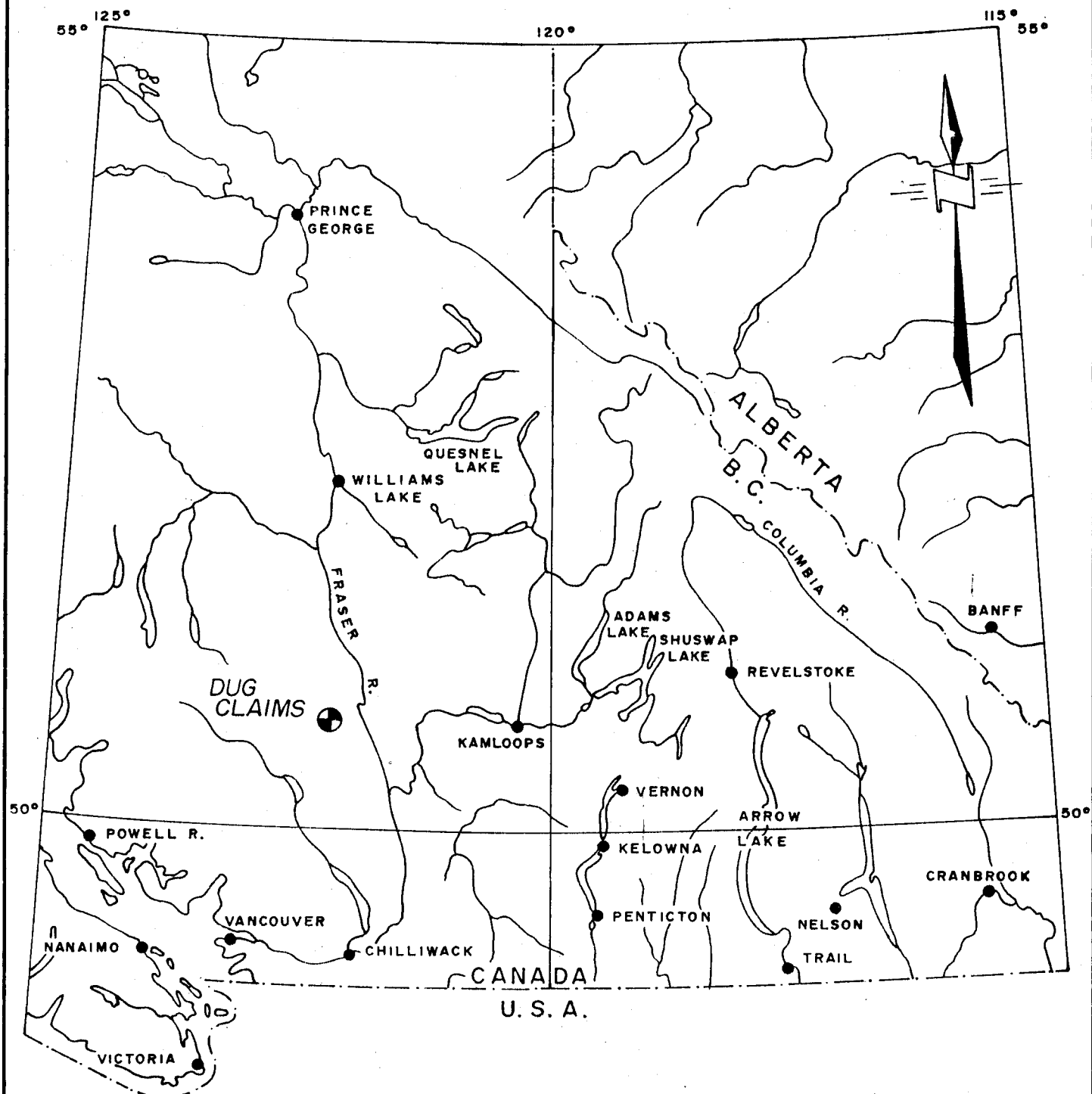
SUMMARY AND CONCLUSIONS

- (1). The Dug property consists of 8 contiguous claims totalling 151 units. The property is located in the Coast Mountains approximately 40 km. southwest of Lillooet, B. C. Only the northern edge of the property is accessible by road, the remainder requiring the use of a helicopter to gain access.
- (2). The Dug claims were acquired after the discovery of anomalous copper, molybdenum, zinc, and silver values in streams in and around a large gossan zone. Further detailed prospecting resulted in the discovery of copper-molybdenum mineralization in a separate zone to the west of the original gossan area.
- (3). The geology of the Dug claims consists of Mesozoic quartz monzonites and granodiorite. A very rusty quartz porphyry (gossan) and dioritic phase are found within the relatively fresh, acidic intrusive. Found within the gossan zone is a large plug and several dykes of black feldspar porphyritic material.

Copper-molybdenum mineralization was found in quartz-sericite veinlets over a large area in a weakly altered quartz monzonite-granodiorite approximately 2 km. northwest of the gossan zone. This second area appears separate and unrelated to the main gossan area.

Approximately 1.5 km. further west, molybdenite mineralized float was found in quartz monzonite-granodiorite near the contact with a darker biotite rich quartz diorite→diorite.

- (4). Geochemical sampling indicates fair to good coincidence between copper and molybdenum values in all three of the above areas. Anomalous tungsten values were found over much of the gossan zone; however, these do not correlate well with any of the copper-molybdenum values.



DENISON MINES LTD.

LOCATION MAP  
**DUG CLAIMS**

LILLOOET MINING DIVISION, B.C.

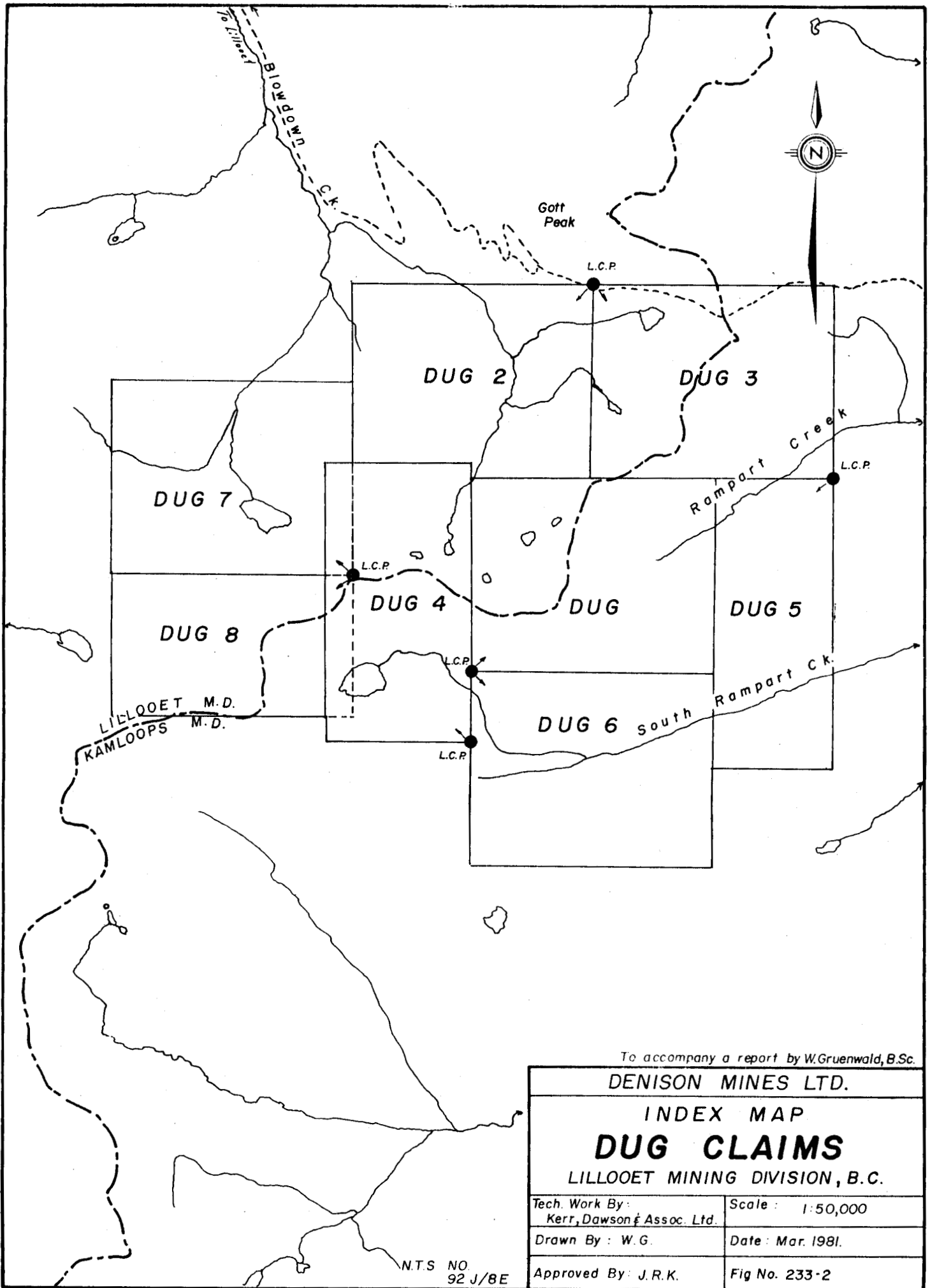
Date: Mar. 1981.	Scale: 1" = 64 Miles
Dwn by: W.G.	Dwg no. 233-1

LOCATION AND ACCESS

The Dug claims are situated immediately south of Gott Peak at the headwaters of Blowdown, Rampart and South Rampart creeks, the former flowing into Cayoosh Creek and the latter two of which are tributaries of the Stein River. By air the claims are located approximately 40 km. southwest of Lillooet, B. C. (See figure 233-1,2).

The approximate geographic co-ordinates at the center of the property are  $50^{\circ}20.5'$  North latitude and  $122^{\circ}11'$  West longitude on NTS Sheet 92J/8. A road intersecting the northern portion of the claim block is used to gain access to the Rampart Mines property found approximately 5 km. east of the Dug claims.





To accompany a report by W.Gruenwald, B.Sc.

**DENISON MINES LTD.**

INDEX MAP

**DUG CLAIMS**

LILLOOET MINING DIVISION, B.C.

Tech. Work By: Kerr, Dawson & Assoc. Ltd.	Scale: 1:50,000
Drawn By: W.G.	Date: Mar. 1981.
Approved By: J.R.K.	Fig No. 233-2

N.T.S NO. 92 J/BE

TOPOGRAPHY AND VEGETATION

The Dug claims are situated within the Coast Range Mountains and are therefore not without the typical rugged terrain found in this region of British Columbia. Topographic relief over the claims is in excess of 3,000' (900 m) ranging from a low of 5,100' in the southeast corner of the property to over 8,000' in the western portion of Dug #7 and #8.

Slopes vary from moderate to steep. Locally precipitous areas are found. The bottoms of the main creek valleys are often the broad, "U" shaped valleys typical of well glaciated areas. Numerous small lakes and ponds are found in the cirques and amongst the morainal debris common to such areas.

Vegetation above the 6,000' (1,830m) level consists primarily of alpine shrubs, grasses and stunted balsam trees. Relatively thick stands of spruce and balsam are found in the lower portions (below 6,000') of Blowdown, Rampart and South Rampart Creeks.

PROPERTY

The Dug claim group consists of eight contiguous claims containing a total of 151 units. The details of the claims are as follows:

<u>Claim Name</u>	<u>No. of Units</u>	<u>Mining Division</u>	<u>Record No.</u>	<u>Expiry Date</u>
Dug	20	Kamloops	2840	July 28/81
Dug #2	20	Lillooet	1492	Aug. 1/81
Dug #3	20	Lillooet	1493	Aug. 1/81
Dug #4	18	Kamloops	2852	July 31/81
Dug #5	18	Kamloops	2853	July 31/81
Dug #6	20	Kamloops	2854	July 31/81
Dug #7	20	Kamloops	2855	July 31/81
Dug #8	<u>15</u>	Kamloops	2856	July 31/81
TOTAL	151			

The registered owner of the Dug claims is Denison Mines Ltd. of Vancouver, B. C.

### HISTORY

The region investigated during the July regional silting programme has a history of mining dating back to the late 1890's with such properties as the Grand Cache (Au) (1895-1910); Silver Queen (Ag, Au) (1930's); and the Index property (Mo) (early 1900's).

The nearest mining property to the Dug claims is the Silver Queen (Patrick) property located on Rampart Creek. Discovered in the 1930's, this property consists of lenses of massive galena and sphalerite carrying silver and gold values in shear zones in a granodiorite.

Old claim posts on the gossan zone in the Dug claim indicate that this area received some attention; however, no record or evidence of any work was found.

## GEOLOGY

Regionally the Dug claims are situated within the Coast Plutonic Complex which consists of several varieties of granitic rocks of upper Mesozoic to Tertiary age. Roof pendants of metasedimentary rocks are found scattered throughout the intrusive complex, probably being largely derived from rocks of the Lower Mesozoic Bridge River Group.

Rhyolitic volcanics of Miocene age are found approximately 8-10 km. east of the Dug property.

On a local scale the geology of the Dug claims consists of at least four rock types.

The most common rock type found on the property consists of white to pale gray, medium grained quartz monzonite-granodiorite (Unit 1). This rock type often has a low mafic content with biotite + muscovite micas generally exceeding all other mafic minerals. Locally a feldspar porphyritic texture has been observed.

Found primarily within the Dug claim (see figure 233-4 & 8) is a large gossan zone which appears to represent a phase within the quartz monzonite-granodiorite. The rock is in general a red-orange to yellowish, altered, medium to coarse grained quartz porphyry or quartz monzonite (Unit 2). The mafic content is usually very low probably due to alteration. In many areas there appears to be an abundance of clay (?) minerals which may have been derived from the hydrothermal alteration of feldspars (ie. argillic alteration). Sericitic mica is also a common alteration product found in the gossan zone. Secondary K-feldspar is also locally present.

Pyrite, though seldom seen, is undoubtedly the source of the intense limonitic coloration of the rock. The presence of small miarotitic cavities observed in areas such as DR-4 may suggest that the intrusion was emplaced under low pressure or at shallow depths. The approximate dimensions of this altered phase are 1,200 meters (east-west) and 500 meters + (north-south).

Located within this altered phase is a smaller zone of pale brown-gray, fine to medium grained, platy diorite (Unit 3). This rock type contains approximately 1-3%

disseminated pyrite. Chloritic alteration of the mafic minerals was found to varying degrees throughout this rock type. The dioritic phase measures approximately 200 m by 200m; however, it appears open (?) toward the northwest (cliffs) and south (talus slope).

Several dykes of similar composition (andesitic) were observed in the area in and around the gossan zone. (See figure 233-8).

The youngest rock type in the gossan area (and in the area to the east) is a dark gray to black, fine grained massive feldspar porphyritic dyke rock, (Unit 4). This basic dyke material is most conspicuous in the gossan area where there is a large plug of it immediately northeast of the dioritic phase. This plug(?) measuring at least 200 meters x 200 meters is seen to cut both the fresh, unaltered quartz monzonite-granodiorite and the limonitic quartz porphyry phase. Several northeasterly trending feldspar porphyritic dykes found both east and west of the plug probably represent lateral off shoots of the plug-like mass. No mineralization was associated with the plug or the dykes.

Several felsic dykes found along the easterly ridge of the gossan zone probably represent the last of the granitic intrusive activity in this area.

During the course of detailed prospecting, copper mineralized talus was found in the northwest corner of Dug #4. (See figure 233-8). Further prospecting to the south (uphill) of the mineralized talus led to the discovery of much more such mineralization, both in talus and outcrop.

The host rock is a buff to gray-medium grained, biotite, quartz monzonite to granodiorite. Muscovite + sericite are subordinate or in places equal to the biotite content. Found within this rock are numerous blue-gray, sometimes "granular" quartz veinlets containing disseminations of chalcopyrite, and bornite. Malachite and azurite are invariably found along with the copper sulphides. Molybdenite mineralization was also observed in several localities.

The margins of the quartz veinlets as well as the surrounding rock often contain abundant sericite, probably as a result of hydrothermal alteration. The density of quartz



veinlets observed is generally low, in the order of 1 to 2 per meter; however, higher densities undoubtedly exist. Most quartz veinlets average between 0.5 and 4 cm. in thickness. The majority of the quartz veinlets observed strike from 085° to 092° and dip from 20° to 40° south. Felsic dykes commonly observed in the copper + molybdenum mineralized zone are invariably cut by the quartz veinlets and thus must pre-date the quartz veining.

Copper mineralized quartz veinlets have so far been found over a length of 900 meters from DR-33 to DS-37 (near L.C.P. Dug #7, #8). The core of the mineralized zone measures approximately 350m x 350m; however, further prospecting could expand these dimensions considerably.

Basic dykes (0.5-2m wide) observed in many parts of the above area generally strike north-northwesterly and dip nearly vertically. A swarm of basic dykes near DR-43 would appear to outline some structural trend in the area. The contacts of these dykes are always sharp with chill borders being noted. These dykes, as those in the gossan area to the east, appear to be the most recent rock type on the property.

Further prospecting approximately 1.5 km to the west led to the discovery of several pieces of molybdenite

bearing talus on the border between Dug #7 and #8. One notable piece (DR-49) was a piece of pinkish, coarse grained, muscovite granodiorite (quartz monzonite) containing several large flakes of molybdenite along with minor purple fluorite. No bedrock source for any of the molybdenite mineralization was located.

The western most part of Dug #7 and #8 is underlain by a darker, coarse grained biotite rich quartz diorite or diorite that has a weak foliation of mafic minerals. No mineralization of any significance was found in this rock type.

In summary, three areas worthy of further investigation are obvious, and as follows:

- (1). Gossan area - center of Dug claim.
- (2). Copper + molybdenum mineralized zone - northwest corner of Dug #4.
- (3). Molybdenite in talus occurrences - Dug #7 and #8.

GEOCHEMISTRY

During late July, 1980, geochemical sampling was carried out to follow-up anomalous copper, molybdenum and to a lesser extent zinc and silver values obtained from the regional sampling programme. A total of 60 soils, 53 rock chips and 55 stream sediments were collected from most parts of the Dug claims. Soil samples often consisted of talus "fines" or residual soils derived from the decomposition of rock outcrops. Most silt samples were of good quality. All samples, upon collection were placed in kraft waterproof envelopes and labelled with a designated code number. The samples were later packaged and shipped to the Rossbacher Laboratory in Burnaby, B. C. for analysis.

After drying, soil and silt samples were sieved to obtain an aliquot of minus 80 mesh material. Rock samples were crushed to obtain the appropriate mesh size. All samples were then analyzed as follows:

<u>Element</u>	<u>Digestion</u>	<u>Determination</u>
Copper Molybdenum	A 0.5 gm sample is digested in hot aqua regia.	Atomic absorption
Tungsten	A 1.0 gm sample is fused with KCl, KNO <sub>3</sub> , and Na <sub>2</sub> CO <sub>3</sub> flux in a test tube, and leached with 10 mls water. An aliquot is used to develop a complex with SnCl <sub>2</sub> , KSCN and HCl which is extracted by n-6 tributyl phosphate and carbon tetra chloride.	Colorimetric

The results for each element was stated in parts per million (ppm). Values below 2 ppm tungsten were assigned a value of zero. All values were plotted on base maps at a scale of 1:20,000 (entire claim block) and 1:5,000 (detailed area). Regional silt samples were plotted on the current geochemical maps so as to correlate them with values obtained in the follow-up programme.

A statistical analysis was done for each element with the resultant geochemical categories being derived.

	<u>Molybdenum</u>	<u>Copper</u>	<u>Tungsten</u>
Mean ( $\bar{x}$ )	4.8 ppm	31.4 ppm	2 ppm
Standard Deviation (s)	4.9 ppm	41.4 ppm	2.5 ppm
Background	< 4.8 ppm	< 31.4 ppm	< 2 ppm
Possibly Anomalous	4.8-9.8 ppm	31.4-72.8 ppm	2-4.5 ppm

	<u>Molybdenum</u>	<u>Copper</u>	<u>Tungsten</u>
Probably Anomalous	9.8-14.8 ppm	72.9-114.2 ppm	4.5 - 7 ppm
Definitely Anomalous	> 14.8 ppm	> 114.2 ppm	> 7 ppm

In these calculations, the extremely "high" copper, molybdenum and tungsten values were "cut" to avoid obtaining unrealistically high geochemical categories. Upon applying the calculated geochemical categories to the metal values, the following anomalous areas are indicated and described as follows:

(a). Molybdenum Anomalies: (See figure 233-5 & 9).

- 1)-many of the silts draining the gossan area in the Dug claim are in the probably to definitely anomalous categories.
  - anomalous values indicated to the northwest and east of the gossan zone.
  - few weakly anomalous rock and soil samples within the gossan area.
  - regional silt samples found to be anomalous, south of the gossan area in south Rampart creek.
  - values up to 58 ppm Mo (DSL-30).
- 2)-definitely anomalous molybdenum values associated with Cu-Mo mineralized area in northwest corner of Dug #4.
  - anomalous values in silts, soils and especially rocks.
  - anomaly "open" to northwest and southeast.
  - values up to 114 ppm (DR-38).
  - co-incident copper values.

3)-definitely anomalous Mo values in acidic intrusive rocks on the border between Dug #7 & #8.

-associated with the presence of molybdenite bearing float.

-values up to 1,600 ppm Mo.

-fair-good co-incident Cu values.

(b). Copper Anomalies: (See figure 233-6,10).

1)-anomalous Cu values associated with gossan and streams draining to the northwest and east.

-good co-incident with molybdenum anomalies.

-values appear to be more associated with quartz porphyry and diorite phases.

-values range to 452 ppm Cu (DSC-30).

2)-definitely anomalous Cu values found in northwest corner of Dug #4.

-associated with Cu, Mo mineralization in quartz veinlets in quartz monzonite-granodiorite.

-fair to good co-incident with molybdenum, especially rock samples.

-values to 1,140 ppm (DR-38).

-no indications of Cu anomalies to the southeast (require further sampling).

3)-anomalous copper values associated with border area between Dug #7 and #8.

-fair co-incident with molybdenum, values to 1,030 ppm.

(c). Tungsten: (See figure 233-7,11).

1)-largest anomaly associated with gossan in the Dug claim.

-only rocks gave anomalous response, range to 200 ppm (DR-1).

-anomalous values cover diorite, altered quartz porphyry and unaltered granodiorite or quartz monzonite.

-little co-incidence with Mo and Cu.

2) -one anomalous silt in northwest corner of Dug #4 (Cu-Mo area).

RECOMMENDATIONS

With the encouraging geochemical results and the discovery of copper-molybdenum mineralization within the Dug claims, a more detailed exploration programme is definitely warranted. Further recommended work on the Dug claims should be as follows:

- (1). Carry out detailed geological mapping in and around the gossan zone (Dug claim), copper-molybdenum zone (Dug #4) and Dug #7 and #8 Mo talus occurrences. The first two areas should receive the highest priority.
  
- (2). Carry out detailed geochemical rock, soil and silt sampling using grid lines or some other accurate control system over the first two areas to delineate the extent of the anomalous metal values.

Respectfully Submitted:

KERR, DAWSON & ASSOCIATES LTD.,



*W. Gruenwald*  
\_\_\_\_\_  
W. Gruenwald, B. Sc.,  
GEOLOGIST

KAMLOOPS, B. C.,  
March 6, 1981.



APPENDIX A

GEOCHEMICAL RESULTS

# Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 SPRINGER AVE.,  
BURNABY, B. C.  
CANADA  
TELEPHONE: 299-6910

## CERTIFICATE OF ANALYSIS

TO:

KERR-DAWSON & ASSOC. LTD  
219 VICTORIA ST  
KAMLOOPS B.C.

CERTIFICATE NO.

80424-1

INVOICE NO.

269

DATE ANALYSED

AUG. 1980

PROJECT

W. GRUENWALD

No.	Sample	pH	Mo	Cu	W	*)							No.
01	DSL	1	4	18	0								01
02		2	9	12	0								02
03		3	6	6	0								03
04		4	6	18	0								04
05		5	7	34	0								05
06		6	11	36	0								06
07		7	11	37	0								07
08		8	16	106	0								08
09		9	14	26	0								09
10	DSL	10	10	12	0								10
11		11	2	6	2								11
12		12	2	6	0								12
13		13	3	6	2								13
14		14	2	8	5								14
15		15	2	14	2								15
16		16	2	8	2								16
17		17	3	10	2								17
18		18	4	10	2								18
19		19	2	10	0								19
20	DSL	20	2	20	0								20
21		21	1	9	0								21
22		22	3	6	0								22
23		23	2	14	0								23
24		24	2	8	0								24
25		25	1	10	0								25
26		26	2	12	0								26
27		27	2	10	0								27
28		28	4	10	0								28
29	DSL	30	58	452	0								29
30		31	24	210	0								30
31		32	5	36	0								31
32		33	9	68	0								32
33		34	6	60	0								33
34		35	7	60	0								34
35		36	6	16	0								35
36		37	7	8	0								36
37		38	12	10	0								37
38		39	60	10	0								38
39	DSL	40	12	22	0								39
40	STD 69		17	220									40

\*) 0 = < 2 PPM

Certified by

P. Rossbach

# Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,  
 BURNABY, B. C.  
 CANADA  
 TELEPHONE: 299-6910

## CERTIFICATE OF ANALYSIS

TO:

KERR, DAWSON & ASSOC. LTD  
 219 VICTORIA ST.  
 KAMLOOPS, B.C.

CERTIFICATE NO. 80424-2  
 INVOICE NO. 269  
 DATE ANALYSED AUG. 1980  
 PROJECT W. GRUENWALD

No.	Sample	pH	Mo	Cu	W	*)							No.
01	DSL 41		9	36	15								01
02	42		1	16	0								02
03	43		1	10	0								03
04	44		1	10	0								04
05	45		1	12	0								05
06	46		2	26	0								06
07	47		3	34	0								07
08	48		1	20	0								08
09	49		1	12	0								09
10	DSL 50		1	10	0								10
11	51		1	16	0								11
12	52		1	18	0								12
13	53		1	30	0								13
14	54		1	20	0								14
15	DSL 55		1	14	0								15
16													16
17													17
18													18
19													19
20													20
21													21
22													22
23													23
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38													38
39													39
40													40

\*) 0 = < 2 PPM

Certified by

*P. Rossbach*

# Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2220 FINCH AVE.  
 BURNABY, B. C.  
 CANADA  
 TELEPHONE: 299-6910

## CERTIFICATE OF ANALYSIS

TO: KERR. DAWSON & ASSOC. LTD  
 219 VICTORIA ST  
 KAMLOOPS, B.C.

CERTIFICATE NO. 80424-3  
 INVOICE NO. 269  
 DATE ANALYSED AUG. 1980  
 PROJECT W. GRUENWALD

No.	Sample	pH	Mo	Cu	W	⊕						No.
01	DS 1		5	44	2							01
02	2		2	20	12							02
03	3		2	64	0							03
04	4		8	26	0							04
05	5		3	18	0							05
06	6		11	2	0							06
07	7		8	4	5							07
08	8		3	102	0							08
09	9		9	32	0							09
10	DS 10		4	101	0							10
11	11		13	154	0							11
12	11A		3	112	0							12
13	12		1	129	0							13
14	13		5	56	0							14
15	14		9	96	0							15
16	15		3	122	0							16
17	16		8	60	0							17
18	17		2	236	0							18
19	18		4	6	0							19
20	19		4	16	0							20
21	DS 20		1	25	0							21
22	21		1	24	0							22
23	22		1	10	0							23
24	23		2	20	0							24
25	24		1	6	0							25
26	25		2	12	0							26
27	26		3	24	0							27
28	27		4	8	0							28
29	28		5	06	0							29
30	29		6	12	0							30
31	29A		2	18	0							31
32	DS 30		1	16	0							32
33	31		6	36	0							33
34	32		6	76	0							34
35	33		12	140	0							35
36	34		3	42	0							36
37	35		8	66	0							37
38	36		12	102	0							38
39	DS 37		2	56	0							39
40	STD 69		8	228	15							40

\* 0 = < 2ppm

Certified by P. Rossbach

# Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,  
 BURNABY, B. C.  
 CANADA  
 TELEPHONE: 299-6910

## CERTIFICATE OF ANALYSIS

TO: **KERR, DAWSON & ASSOC. LTD.**  
**219 VICTORIA ST.**  
**KAMLOOPS B.C.**

CERTIFICATE NO. **80424-Y**  
 INVOICE NO. **269**  
 DATE ANALYSED **AUG. 1980**  
 PROJECT **W. GRUENWALD**

No.	Sample	pH	Mo	Cu	W	*)							No.
01	DS 38		2	54	0								01
02		39	2	40	0								02
03		40	1	16	0								03
04		41	1	28	0								04
05		42	1	22	0								05
06		43	1	20	0								06
07		44	1	16	0								07
08		45	1	12	0								08
09		46	1	10	0								09
10		47	6	14	0								10
11		48	3	10	0								11
12		49	8	12	0								12
13	DS 50		10	40	0								13
14		51	16	42	0								14
15		52	16	42	0								15
16		53	5	40	0								16
17		54	4	100	0								17
18		55	9	47	0								18
19		56	6	34	0								19
20		57	19	32	0								20
21	DS 58		1	46	0								21
22	STD 69		13	240	-								22
23													23
24													24
25													25
26													26
27													27
28													28
29													29
30													30
31													31
32													32
33													33
34													34
35													35
36													36
37													37
38													38
39													39
40													40

\*) 0 = < 2 PPM

Certified by P. Rossbach

# Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

BURNABY, B. C.  
CANADA  
TELEPHONE: 299-6910

## CERTIFICATE OF ANALYSIS

TO: **KERR. DAWSON & ASSOC. LTD**  
**219 VICTORIA ST.**  
**KAMLOOPS, B.C.**

CERTIFICATE NO. **80424-5**  
INVOICE NO. **269**  
DATE ANALYSED **AUG. 1980**  
PROJECT **W. GRUENWALD**

No.	Sample	pH	Mo	Cu	W	*					No.
01	DR 1		1	10	200						01
02	2		1	94	15						02
03	3		1	72	35						03
04	4		1	10	40						04
05	5		1	8	40						05
06	6		1	2	30						06
07	7		1	2	18						07
08	8		1	36	25						08
09	9		1	4	10						09
10	DR 10		1	2	12						10
11	11		1	10	10						11
12	12		2	56	8						12
13	13		1	8	12						13
14	14		4	14	8						14
15	15		2	16	8						15
16	16		2	34	5						16
17	17		1	14	5						17
18	18		2	6	2						18
19	19		3	20	2						19
20	DR 20		5	30	2						20
21	21		5	22	2						21
22	22		5	212	0						22
23	23		1	20	0						23
24	24		1	6	0						24
25	25		1	4	0						25
26	26		1	4	2						26
27	27		1	4	2						27
28	28		1	4	2						28
29	29		1	4	2						29
30	DR 30		1	22	5						30
31	31		22	4	2						31
32	32		2	4	0						32
33	33		75	490	0						33
34	34		42	700	0						34
35	35		47	12	2						35
36	36		4	6	0						36
37	37		29	410	0						37
38	38		114	1140	0						38
39	DR 39		4	14	0						39
40	STD 66		46	380							40

\* 0 = < 2 ppm

Certified by

*P. Rossbacher*

# Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S SPRINGER AVE.,  
BURNABY, B. C.  
CANADA  
TELEPHONE: 299-6910

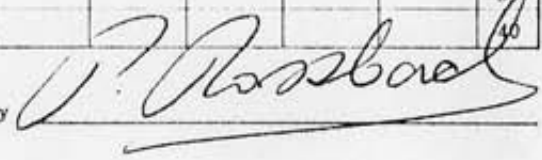
## CERTIFICATE OF ANALYSIS

TO: KERR, DAWSON & ASSOC. LTD.  
219 VICTORIA ST.  
KAMLOOPS, B.C.

CERTIFICATE NO. 80424-6  
INVOICE NO. 269  
DATE ANALYSED AUG. 1980  
PROJECT W. GRUENWALD

No.	Sample	pH	Mo	Cu	W	X)									No.
01	DR 40		1	2	0										01
02	41		41	1022	0										02
03	42		3	60	5										03
04	43		1	10	0										04
05	44		12	454	0										05
06	45		1	50	0										06
07	46		1	6	20										07
08	47		1	24	0										08
09	48		1	2	0										09
10	49		560	8	0										10
11	DR 50		13	1030	0										11
12	51		1600	170	0										12
13	52		24	10	0										13
14	DR 53		8	6	0										14
15	STD G6		47	346	-										15
16															16
17															17
18															18
19															19
20															20
21															21
22															22
23															23
24															24
25															25
26															26
27															27
28															28
29															29
30															30
31															31
32															32
33															33
34															34
35															35
36															36
37															37
38															38
39															39
40															40

X) 0 = > 2 PPM

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# Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

BURNABY, B. C.  
CANADA  
TELEPHONE: 299-6910

## CERTIFICATE OF ANALYSIS

TO: KERR-DAWSON & ASSOC. LTD  
219 VICTORIA ST.  
KAMLOOPS B.C.

CERTIFICATE NO. 80424-7  
269  
INVOICE NO.  
DATE ANALYSED AUG. 1980  
PROJECT W. GRUENWALD

No.	Sample	pH	Mo	Cu	W (A)						No.
01	MSL 1		28	52	15						01
02	2		3	86	0						02
03	3		5	48	0						03
04	4		18	72	5						04
05	5		5	46	0						05
06	6		18	60	2						06
07	7		4	50	2						07
08	8		50	80	0						08
09	9		40	110	2						09
10	MSL 10		40	109	0						10
11	11		8	22	2						11
12	12		12	36	2						12
13	13		4	14	0						13
14	14		9	72	0						14
15	15		14	24	2						15
16	16		2	7	0						16
17	17		3	2	0						17
18	18		1	72	0						18
19	MSL 19		2	78	0						19
20	STD G 6		43	360	15						20
21											21
22											22
23											23
24											24
25											25
26											26
27											27
28											28
29											29
30											30
31											31
32											32
33											33
34											34
35											35
36											36
37											37
38											38
39											39
40											40

(\*) 0 = < 2 PPM

Certified by

*P. Rossbach*



# Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

BURNABY, B. C.  
CANADA  
TELEPHONE: 299-6910

## CERTIFICATE OF ANALYSIS

TO: KERR, DAWSON & ASSOC. LTD  
219 VICTORIA ST.  
KAMLOOPS, B.C.

CERTIFICATE NO. 80424-8  
INVOICE NO. 269  
DATE ANALYSED AUG. 1980  
PROJECT W. GRUENWALD

No.	Sample	pH	Mo	Cu	W	(%)							No.
01	MS 1		4	78	15								01
02	2		6	80	0								02
03	3		96	90	5								03
04	4		115	184	0								04
05	5		15	36	0								05
06	6		55	116	5								06
07	7		6	12	0								07
08	8		3	118	0								08
09	9		5	44	0								09
10	MS 10		1	45	0								10
11	11		3	60	0								11
12	12		4	136	5								12
13	13		40	226	0								13
14	14		65	80	0								14
15	15		21	82	0								15
16	16		7	46	5								16
17	17		1	16	0								17
18	18		1	36	0								18
19	19		4	140	0								19
20	MS 20		12	126	0								20
21	21		5	194	0								21
22	MS 22		4	94	0								22
23	STD (1)		6	90	20								23
24													24
25													25
26													26
27													27
28													28
29													29
30													30
31													31
32													32
33													33
34													34
35													35
36													36
37													37
38													38
39													39
40													40

\* 0 = < 2 ppm

Certified by P. Rossbach

# Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S SPRINGER AVE.,  
BURNABY, B. C.  
CANADA  
TELEPHONE: 299-6910

## CERTIFICATE OF ANALYSIS

TO:

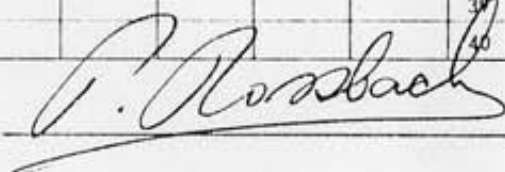
KERR DAWSON & ASSOC. LTD  
219 VICTORIA ST.  
KAMLOOPS B.C.

CERTIFICATE NO. 80424-9  
269  
INVOICE NO.  
DATE ANALYSED AUG. 1980  
PROJECT W. GRUENWALD

No.	Sample	pH	Mo	Cu	W	(*)							No.
01	MR 1		2	24	0								01
02	2		1	5	0								02
03	3		1	6	0								03
04	4		5	58	0								04
05	5		6	144	0								05
06	6		25	26	0								06
07	7		2	36	0								07
08	8		3	36	0								08
09	9		1	12	0								09
10	MR 10		4	26	10								10
11	11		12	6	15								11
12	12		1	2	0								12
13	13		1	4	5								13
14	14		1	4	0								14
15	MR 15		6	26	0								15
16													16
17													17
18													18
19													19
20													20
21													21
22													22
23													23
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34													34
35													35
36													36
37													37
38													38
39													39
40													40

(\*) 0 = < 2 ppm

Certified by



# Rossbacher Laboratory

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,  
 BURNABY, B. C.  
 CANADA  
 TELEPHONE: 299-6910

## CERTIFICATE OF ANALYSIS

TO:

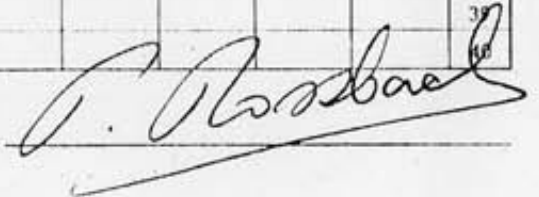
KERR, DAWSON & ASSOC. LTD  
 219 VICTORIA ST.  
 KAMLOOPS, B.C.

CERTIFICATE NO. 80424-10  
 INVOICE NO. 269  
 DATE ANALYSED AUG. 1980  
 PROJECT W. GRUENWALD

No.	Sample	pH	Mo	Cu	W	(*)									No.
01	LS	1	1	30	0									01	
02		2	1	18	0									02	
03		3	1	14	10									03	
04		4	1	12	0									04	
05		5	7	32	0									05	
06		6	1	26	0									06	
07		7	1	14	0									07	
08		8	1	10	0									08	
09		9	1	30	2									09	
10	LS	10	1	24	0									10	
11	LR	1	1	2	2									11	
12		2	1	2	15									12	
13		3	190	44	2									13	
14		4	6	4	2									14	
15		5	12	26	0									15	
16		6	3	68	10									16	
17		7	5	62	0									17	
18	LR	8	3	24	10									18	
19	LSL	1	1	16	10									19	
20		2	2	12	0									20	
21		3	1	12	0									21	
22		4	2	22	0									22	
23		5	1	26	0									23	
24	LSL	6	1	26	15									24	
25														25	
26														26	
27														27	
28														28	
29														29	
30														30	
31														31	
32														32	
33														33	
34														34	
35														35	
36														36	
37														37	
38														38	
39														39	
40														40	

(\*) 0 = < 2 PPM

Certified by



APPENDIX B

PERSONNEL

PERSONNEL

FIELD:

W. Gruenwald, B. Sc., Geologist  
July 22-26, 29, 1980 - 6 days

B. Cross, Assistant,  
July 22-26, 29, 1980 - 6 days

J. R. Kerr, P. Eng.,  
July 22, 1980 - 1 day

OFFICE:

W. Gruenwald, B. Sc., Geologist  
August 2, 13, September 18, October  
14-17, 20, 1980  
February 23-27, March 2-5, 1981 - 10 days

J. R. Kerr, P. Eng.,  
September 18, 1980 - 1 day

APPENDIX C

STATEMENT OF EXPENDITURES

STATEMENT OF EXPENDITURES

LABOUR:

W. Gruenwald, B. Sc., 16 days @ \$150.00/day . . . . .	\$2,400.00	
B. Cross, Assistant, 6 days @ \$100.00/day . . . . .	600.00	
J. R. Kerr, P. Eng., 2 days @ \$200.00/day . . . . .	<u>400.00</u>	\$3,400.00

EXPENSES AND DISBURSEMENTS:

(a). Geochemical Analyses . . . . .	\$ 794.70	
(b). Helicopter Transport:		
Pacific Helicopters	\$1,867.60	
Central B. C. Helicopters	<u>2,264.95</u>	4,132.55
(c). Truck Rental:		
6 days @ \$30.00/day	\$ 180.00	
150 mi. @ 30¢/mile	<u>45.00</u>	225.00
(d). Flagging, sample bags, field equipment, sample shipping . . . . .		150.00
(e). Room and Board - Lillooet . . . . .		681.05
(f). Map enlargements, printing, xeroxing, secretarial, telephone . . . . .	<u>340.33</u>	<u>6,323.63</u>
TOTAL HEREIN . . . . .		<u><u>\$9,723.63</u></u>

APPENDIX D

REFERENCES



REFERENCES

Roddick, J. A. &  
Hutchison, W. W.

- 1973

- G.S.C. Paper 73-17,  
Geology of the Pemberton  
(East Half) Map Area, B.C.

Kerr, J. R.

- 1980

- Summary Report on the  
Lillooet Regional Programme.

APPENDIX F

WRITER'S CERTIFICATE

**Werner GRUENWALD, B. Sc.**

Geologist

#1-219 VICTORIA STREET • KAMLOOPS, B.C. V2C 2A1 • TELEPHONE (604) 374-0544

CERTIFICATE

I, WERNER GRUENWALD, OF KAMLOOPS, BRITISH COLUMBIA, DO HEREBY  
CERTIFY THAT:

- (1). I am a geologist residing at 45 West Battle Street, Kamloops, British Columbia, and employed by Kerr, Dawson and Associates Ltd. of Suite #1-219 Victoria Street, Kamloops, B. C.
- (2). I am a graduate of the University of British Columbia, B. Sc., (1972), and a fellow of the Geological Association of Canada. I have practised my profession for 8 1/2 years.
- (3). I am the author of this report which describes the results of the geological and geochemical exploration programme carried out under the supervision of John R. Kerr, P. Eng., on the Dug claims, Kamloops and Lillooet Mining Divisions, British Columbia.

KERR, DAWSON AND ASSOCIATES LTD.,

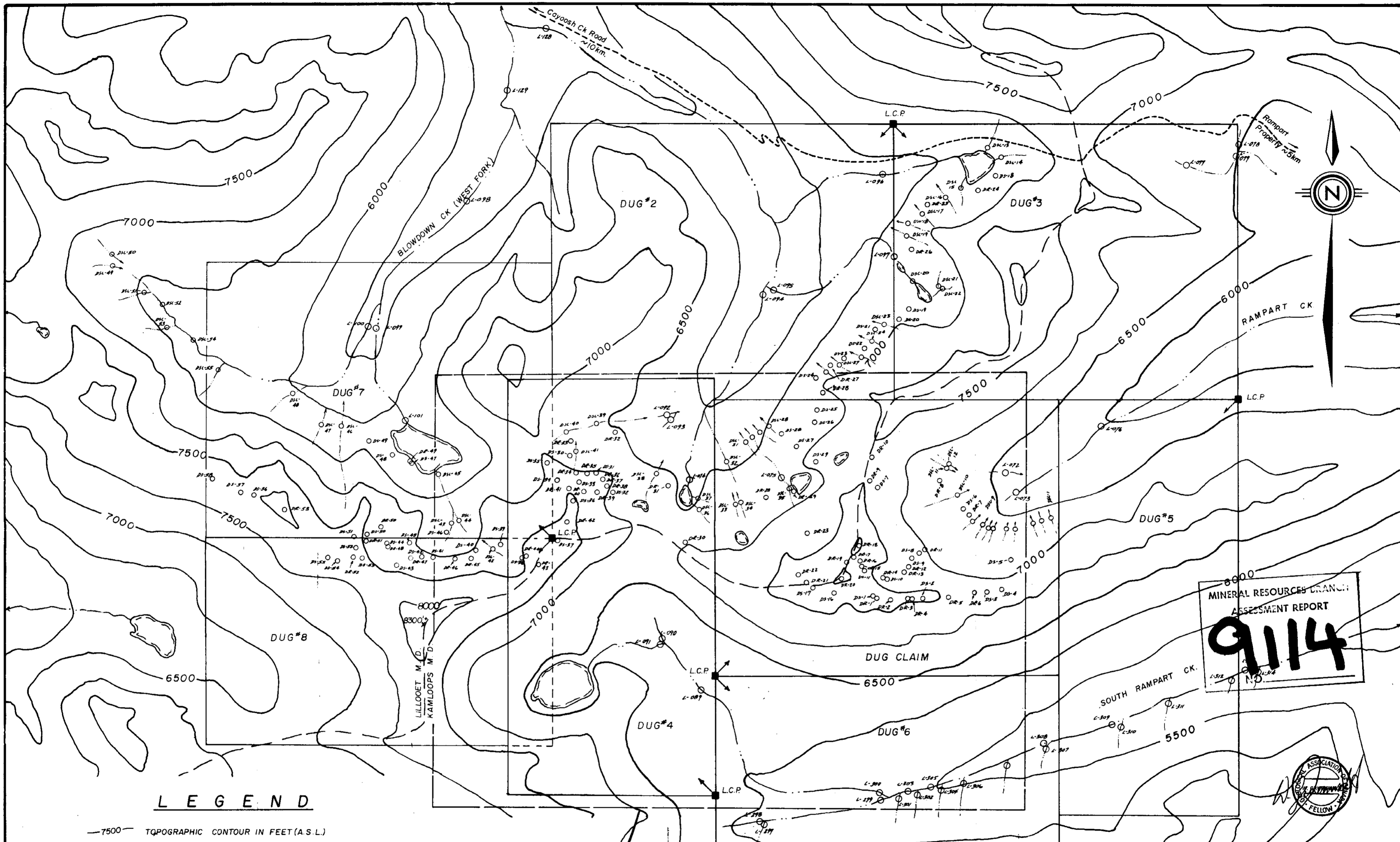


*Werner Gruenwald*  
Werner Gruenwald, B. Sc.,  
GEOLOGIST

KAMLOOPS, B. C.,  
March 6, 1981.

APPENDIX F

MAPS



**LEGEND**

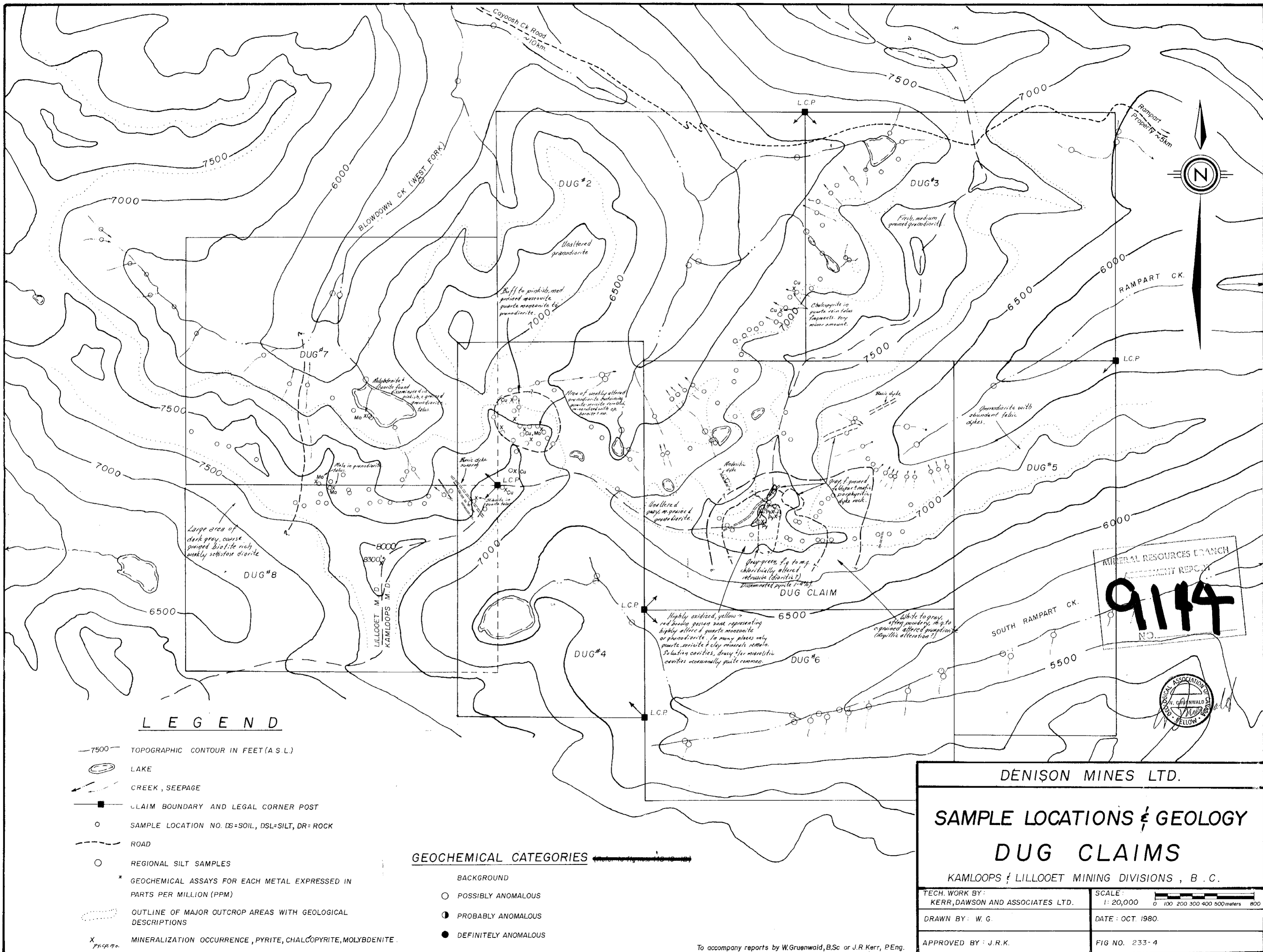
- 7500— TOPOGRAPHIC CONTOUR IN FEET (A.S.L.)
- LAKE
- CREEK, SEEPAGE
- CLAIM BOUNDARY AND LEGAL CORNER POST
- SAMPLE LOCATION NO. DS=SOIL, DSL=SILT, DR=ROCK
- ROAD
- L-097 ○ REGIONAL SILT SAMPLES

**NOTE:** SAMPLE LOCATIONS APPROXIMATE, GREATER ACCURACY ON DETAILED PLANS (1:5,000 SCALE)

Area outlined on Detailed Plans See Figs. 233-8 toll.

<b>DENISON MINES LTD.</b>	
<b>SAMPLE LOCATION MAP</b>	
<b>DUG CLAIMS</b>	
KAMLOOPS & LILLOOET MINING DIVISIONS, B.C.	
TECH. WORK BY: KERR, DAWSON AND ASSOCIATES LTD.	SCALE: 1: 20,000
DRAWN BY: W. G.	DATE: OCT. 1980.
APPROVED BY: J.R.K.	FIG NO. 233-3

To accompany reports by W.Gruenwald, B.Sc. or J.R. Kerr, P.Eng.



MINERAL RESOURCES BRANCH  
 ASSESSMENT REPORT  
**9144**  
 NO.

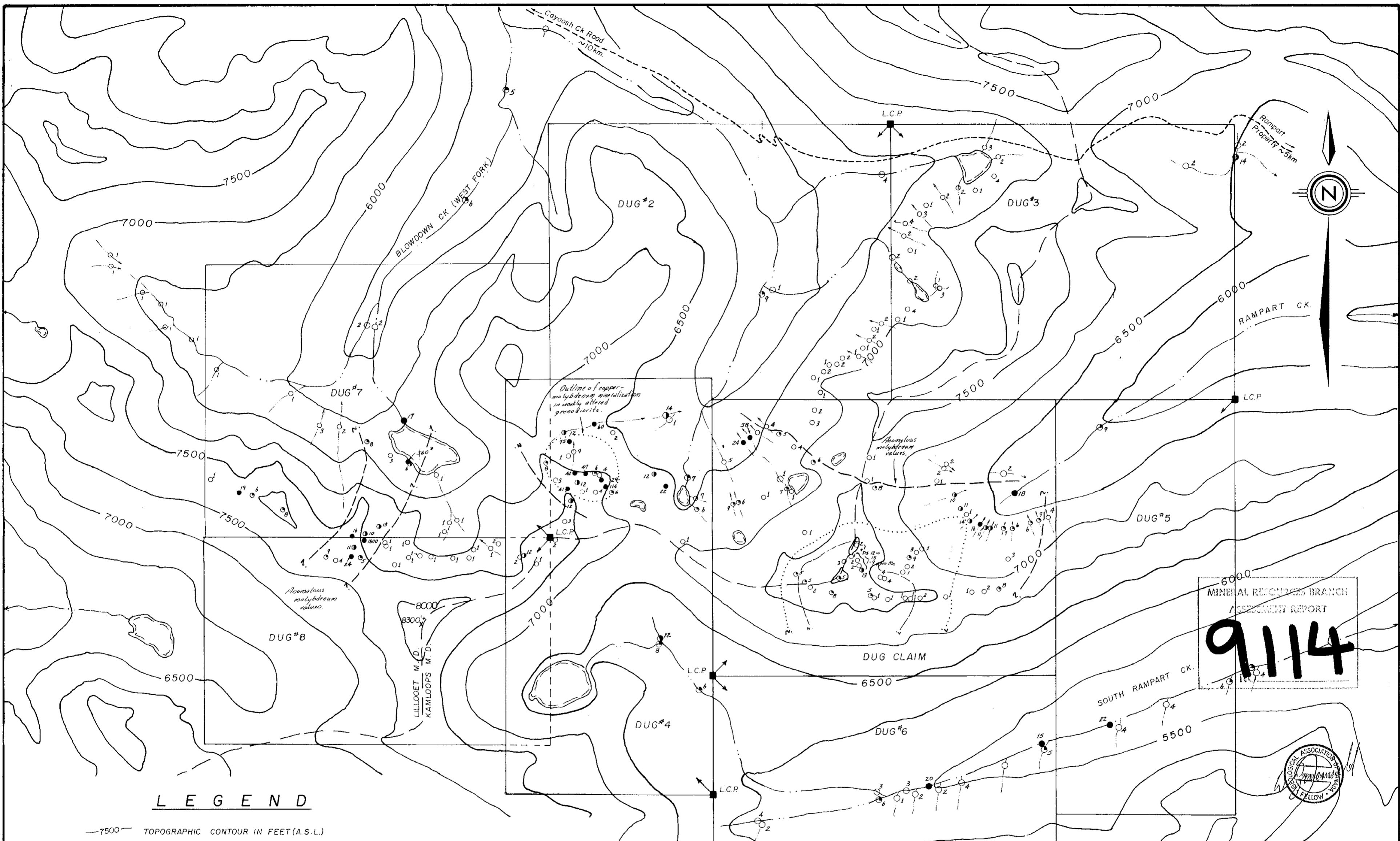


DENISON MINES LTD.

**SAMPLE LOCATIONS & GEOLOGY  
 DUG CLAIMS**

KAMLOOPS & LILLOOET MINING DIVISIONS, B.C.

To accompany reports by W.Gruenwald, B.Sc. or J.R.Kerr, P.Eng.



**LEGEND**

- 7500— TOPOGRAPHIC CONTOUR IN FEET (A.S.L.)
- LAKE
- CREEK, SEEPAGE
- CLAIM BOUNDARY AND LEGAL CORNER POST
- SAMPLE LOCATION NO. DS=SOIL, DSL=SILT, DR=ROCK
- ROAD
- REGIONAL SILT SAMPLES
- \* GEOCHEMICAL ASSAYS FOR EACH METAL EXPRESSED IN PARTS PER MILLION (PPM)

**GEOCHEMICAL CATEGORIES**

CATEGORY	MOLYBDENUM RANGE (PPM)
BACKGROUND	< 4.8
POSSIBLY ANOMALOUS	4.8 - 9.8
PROBABLY ANOMALOUS	9.8 - 14.8
DEFINITELY ANOMALOUS	> 14.8

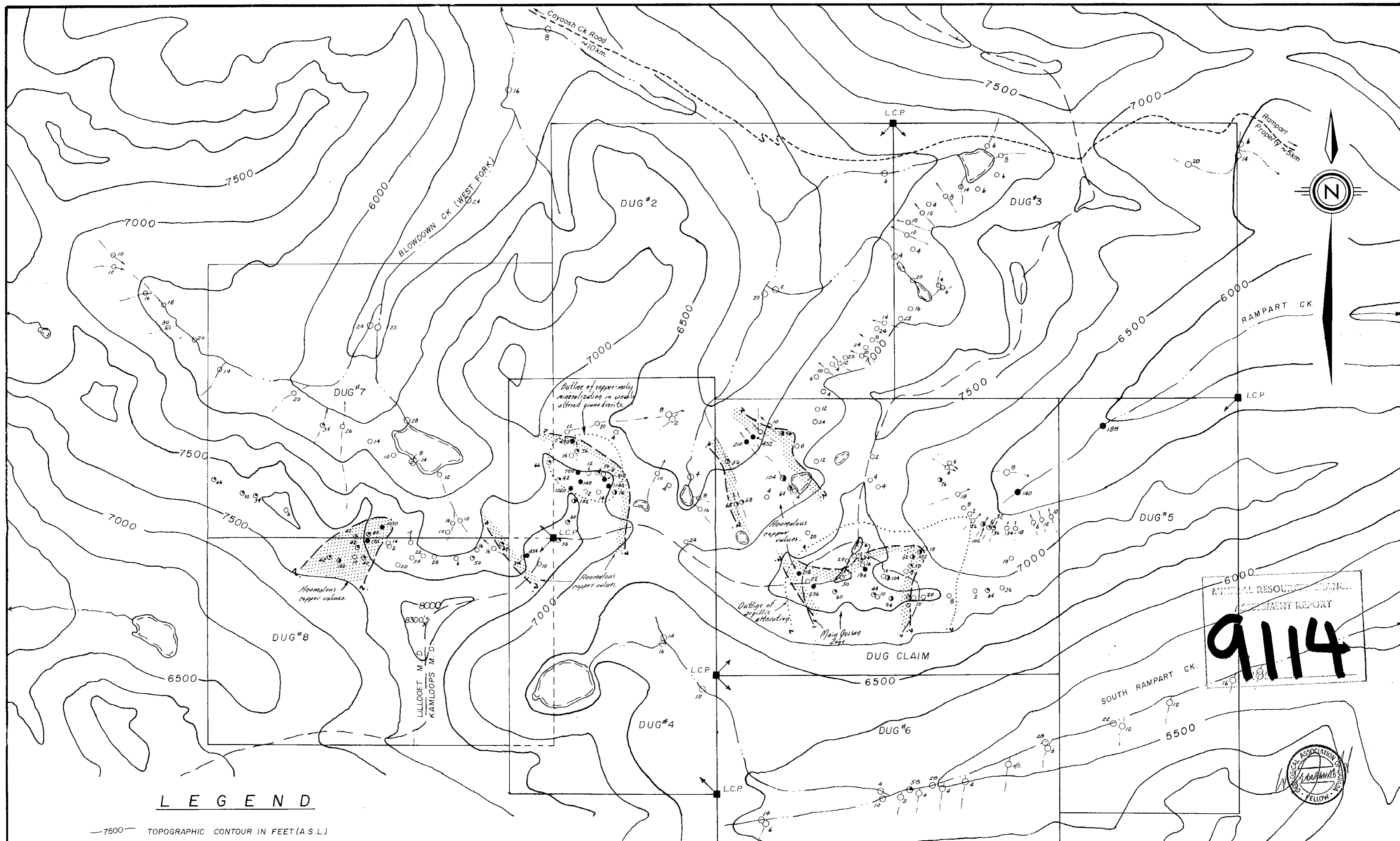
**DENISON MINES LTD.**

**GEOCHEMICAL PLAN  
(Molybdenum)  
DUG CLAIMS**

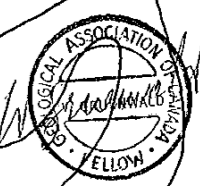
KAMLOOPS & LILLOOET MINING DIVISIONS, B.C.

TECH. WORK BY: KERR, DAWSON AND ASSOCIATES LTD.	SCALE: 1:20,000
DRAWN BY: W. G.	DATE: OCT. 1980.
APPROVED BY: J.R.K.	FIG NO. 233-5

To accompany reports by W.Gruenwald, B.Sc or J.R.Kerr, P.Eng.



MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
**9114**



**LEGEND**

- 7500— TOPOGRAPHIC CONTOUR IN FEET (A.S.L.)
- LAKE
- CREEK, SEEPAGE
- CLAIM BOUNDARY AND LEGAL CORNER POST
- SAMPLE LOCATION NO. DS=SOIL, DSL=SILT, DR=ROCK
- ROAD
- REGIONAL SILT SAMPLES
- \* GEOCHEMICAL ASSAYS FOR EACH METAL EXPRESSED IN PARTS PER MILLION (PPM)

**GEOCHEMICAL CATEGORIES**

BACKGROUND	< 31.4 ppm Cu
POSSIBLY ANOMALOUS	31.4 - 72.8
PROBABLY ANOMALOUS	72.9 - 114.2
DEFINITELY ANOMALOUS	> 114.2

**DENISON MINES LTD.**

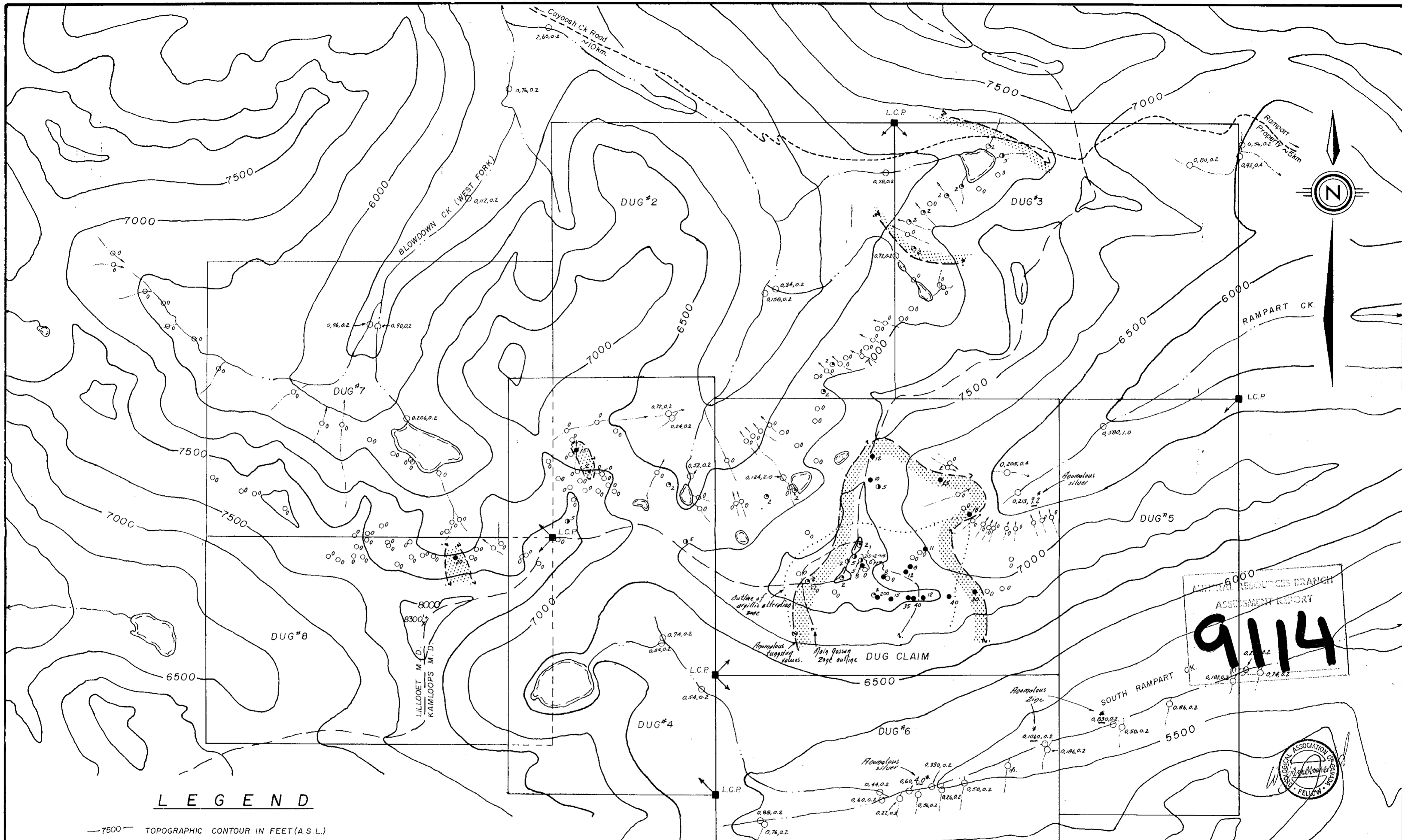
**GEOCHEMICAL PLAN  
(Copper)  
DUG CLAIMS**

KAMLOOPS & LILLOET MINING DIVISIONS, B.C.

TECH. WORK BY: KERR, DAWSON AND ASSOCIATES LTD.	SCALE 1:20,000
DRAWN BY: W.G.	DATE: OCT 1980.
APPROVED BY: J.R.K.	FIG NO. 233-6

To accompany reports by W.Gruenwald, B.Sc or J.R.Kerr, P.Eng.





**LEGEND**

- 7500— TOPOGRAPHIC CONTOUR IN FEET (A.S.L.)
- LAKE
- CREEK, SEEPAGE
- CLAIM BOUNDARY AND LEGAL CORNER POST
- SAMPLE LOCATION NO. DS=SOIL, DSL=SILT, DR=ROCK
- ROAD
- REGIONAL SILT SAMPLES
- \* GEOCHEMICAL ASSAYS FOR EACH METAL EXPRESSED IN PARTS PER MILLION (PPM)

**GEOCHEMICAL CATEGORIES**

- |                      |           |
|----------------------|-----------|
| BACKGROUND           | < 2 ppm W |
| POSSIBLY ANOMALOUS   | 2 - 4.5   |
| PROBABLY ANOMALOUS   | 4.6 - 7   |
| DEFINITELY ANOMALOUS | > 7       |

Note: Zinc and Silver given for regional silts only.

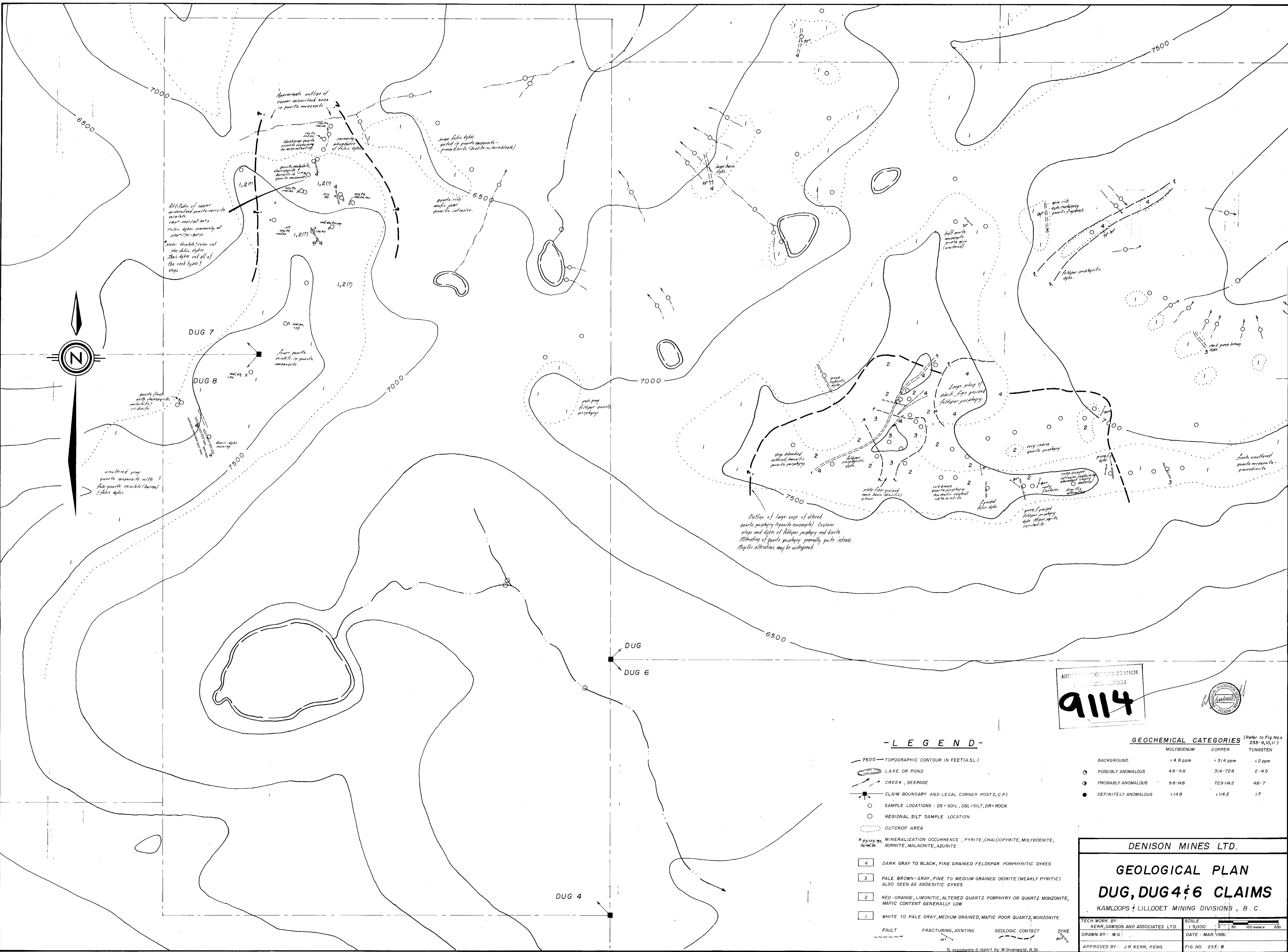
**DENISON MINES LTD.**

**GEOCHEMICAL PLAN**  
**(Tungsten, Zinc, Silver)**  
**DUG CLAIMS**

KAMLOOPS & LILLOOET MINING DIVISIONS, B.C.

TECH. WORK BY: KERR, DAWSON AND ASSOCIATES LTD.	SCALE: 1: 20,000
DRAWN BY: W.G.	DATE: OCT. 1980.
APPROVED BY: J.R.K.	FIG NO. 233-7

To accompany reports by W.Gruenwald, B.Sc. or J.R.Kerr, P.Eng.



Altitudes of copper mineralized quartz monzonite veins - 2000-2050-2070-2080-2100-2150-2200-2250-2300-2350-2400-2450-2500-2550-2600-2650-2700-2750-2800-2850-2900-2950-3000-3050-3100-3150-3200-3250-3300-3350-3400-3450-3500-3550-3600-3650-3700-3750-3800-3850-3900-3950-4000-4050-4100-4150-4200-4250-4300-4350-4400-4450-4500-4550-4600-4650-4700-4750-4800-4850-4900-4950-5000-5050-5100-5150-5200-5250-5300-5350-5400-5450-5500-5550-5600-5650-5700-5750-5800-5850-5900-5950-6000-6050-6100-6150-6200-6250-6300-6350-6400-6450-6500-6550-6600-6650-6700-6750-6800-6850-6900-6950-7000-7050-7100-7150-7200-7250-7300-7350-7400-7450-7500-7550-7600-7650-7700-7750-7800-7850-7900-7950-8000-8050-8100-8150-8200-8250-8300-8350-8400-8450-8500-8550-8600-8650-8700-8750-8800-8850-8900-8950-9000-9050-9100-9150-9200-9250-9300-9350-9400-9450-9500-9550-9600-9650-9700-9750-9800-9850-9900-9950-10000

DUG 7

DUG 8

DUG

DUG 6

DUG 4

**- LEGEND -**

- 7500 TOPOGRAPHIC CONTOUR IN FEET (A.S.L.)
- LAKE OR POND
- CREEK, SEEPAGE
- CLAIM BOUNDARY AND LEGAL CORNER POST (L.C.P.)
- SAMPLE LOCATIONS: DS = SOIL, DSL = SILT, DR = ROCK
- REGIONAL SILT SAMPLE LOCATION
- OUTCROP AREA
- MINERALIZATION OCCURRENCE: PYRITE, CHALCOPYRITE, MOLYBDENITE, BORNITE, MALACHITE, AZURITE
- 4 DARK GRAY TO BLACK, FINE GRAINED FELDSPAR PORPHYRITIC DYKES
- 3 PALE BROWN-GRAY, FINE TO MEDIUM GRAINED DIORITE (WEAKLY PYRITIC) ALSO SEEN AS ANDESITIC DYKES
- 2 RED-ORANGE, LIMONITIC, ALTERED QUARTZ PORPHYRY OR QUARTZ MONZONITE, MAFIC CONTENT GENERALLY LOW
- 1 WHITE TO PALE GRAY, MEDIUM GRAINED, MAFIC POOR QUARTZ MONZONITE
- FAULT
- FRACTURING, JOINTING
- GEOLOGIC CONTACT
- DYKE

MINING DIVISIONS BRANCH  
 TECHNICAL REPORT  
**9114**



**GEOCHEMICAL CATEGORIES** (Refer to Fig. Nos. 233-9, 10, 11)

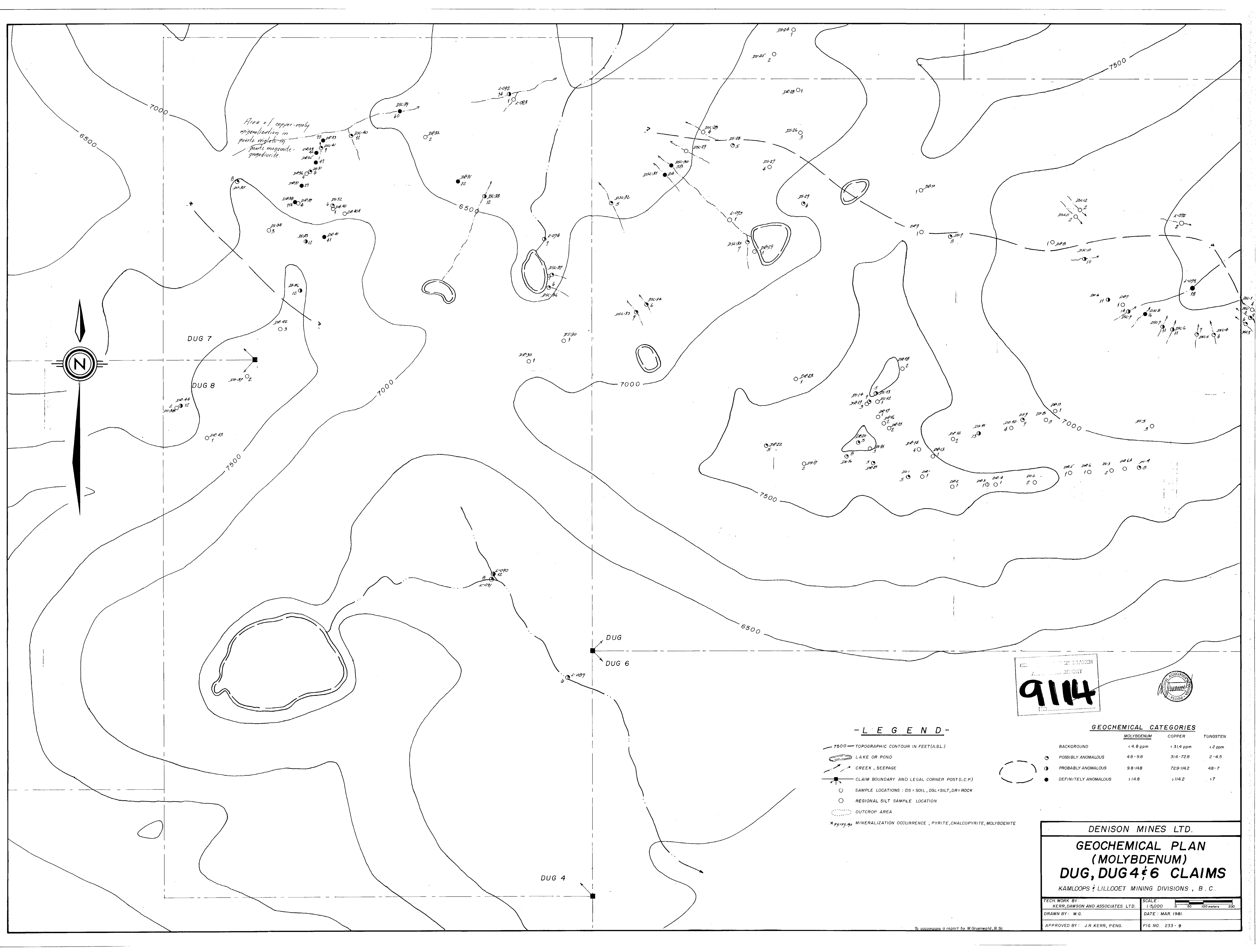
	MOLYBDENUM	COPPER	TUNGSTEN
BACKGROUND	< 4.8 ppm	< 31.4 ppm	< 2 ppm
POSSIBLY ANOMALOUS	4.8-9.8	31.4-72.8	2-4.5
PROBABLY ANOMALOUS	9.8-14.8	72.8-144.2	4.5-7
DEFINITELY ANOMALOUS	> 14.8	> 144.2	> 7

DENISON MINES LTD.

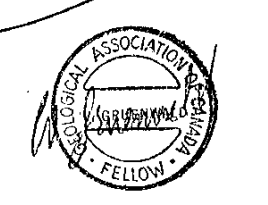
**GEOLOGICAL PLAN  
 DUG, DUG 4 & 6 CLAIMS**  
 KAMLOOPS & LILLOOET MINING DIVISIONS, B. C.

TECH WORK BY: KERR, DAWSON AND ASSOCIATES LTD.  
 DRAWN BY: W.G.  
 APPROVED BY: J.R. KERR, P.E.G.  
 SCALE: 1:5,000  
 DATE: MAR. 1981  
 FIG. NO. 233-8

To accompany a report by W. Gruenwald, B.Sc.



MINING ENGINEERING REPORT  
**9114**



**- LEGEND -**

- 7500 TOPOGRAPHIC CONTOUR IN FEET (A.S.L.)
- LAKE OR POND
- CREEK, SEEPAGE
- CLAIM BOUNDARY AND LEGAL CORNER POST (L.C.P.)
- SAMPLE LOCATIONS : DS = SOIL, DSL = SILT, DR = ROCK
- REGIONAL SILT SAMPLE LOCATION
- OUTCROP AREA
- \* pyrrhotite MINERALIZATION OCCURRENCE ; PYRITE, CHALCOPYRITE, MOLYBDENITE

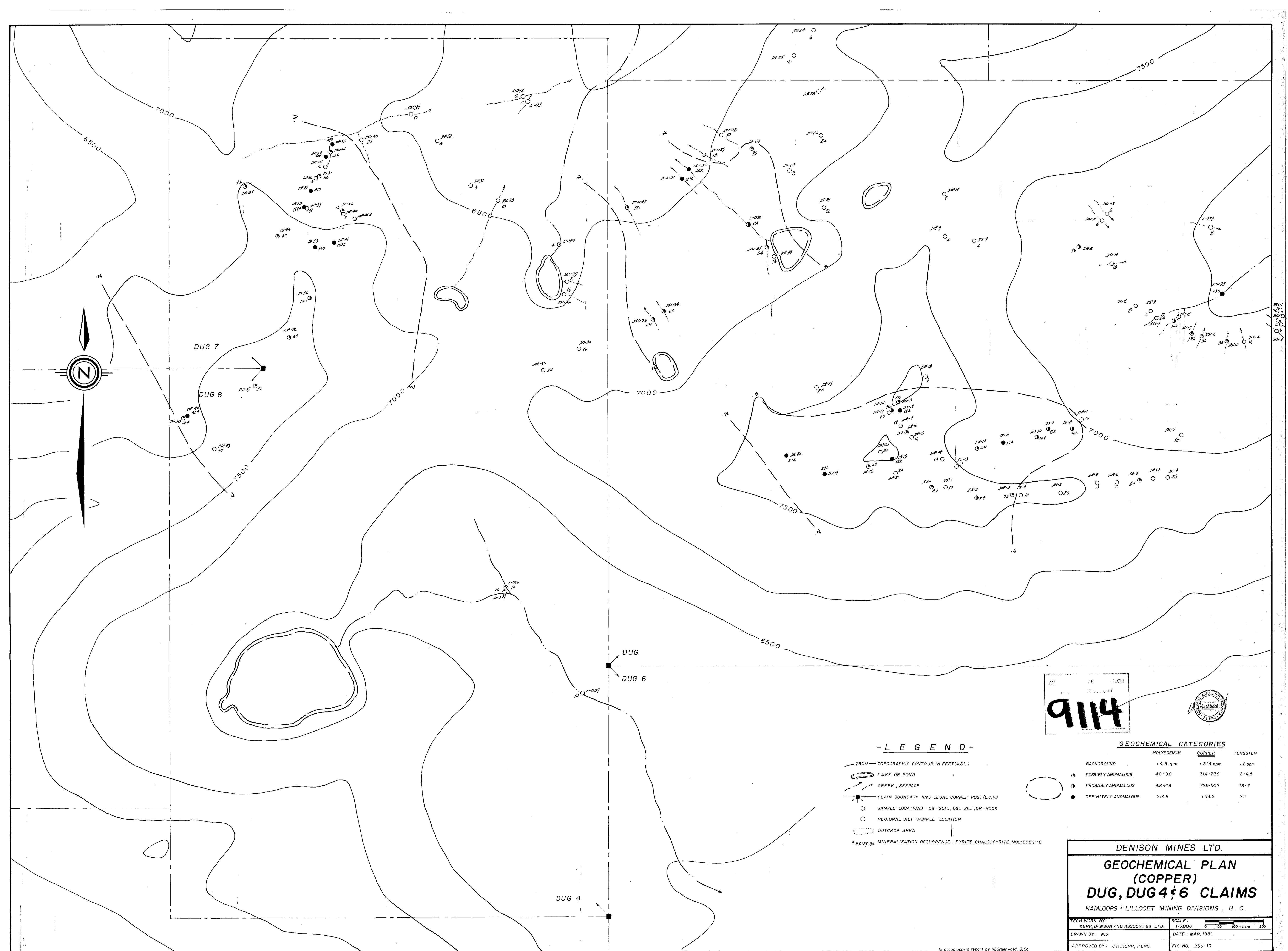
**GEOCHEMICAL CATEGORIES**

	MOLYBDENUM	COPPER	TUNGSTEN
BACKGROUND	< 4.8 ppm	< 31.4 ppm	< 2 ppm
POSSIBLY ANOMALOUS	4.8 - 9.8	31.4 - 72.8	2 - 4.5
PROBABLY ANOMALOUS	9.8 - 14.8	72.9 - 114.2	4.5 - 7
DEFINITELY ANOMALOUS	> 14.8	> 114.2	> 7

**DENISON MINES LTD.**  
**GEOCHEMICAL PLAN**  
**(MOLYBDENUM)**  
**DUG, DUG 4 & 6 CLAIMS**  
 KAMLOOPS & LILLOOET MINING DIVISIONS, B. C.

TECH. WORK BY: KERR, DAWSON AND ASSOCIATES LTD.	SCALE: 1:5,000 0 50 100 meters 200
DRAWN BY: W.G.	DATE: MAR. 1981.
APPROVED BY: J.R. KERR, P.ENG.	FIG. NO. 233 - 9

To accompany a report by W. Gruenwald, B.Sc.



9114



**- L E G E N D -**

- 7500 — TOPOGRAPHIC CONTOUR IN FEET (A.S.L.)
- LAKE OR POND
- CREEK, SEEPAGE
- CLAIM BOUNDARY AND LEGAL CORNER POST (L.C.P.)
- SAMPLE LOCATIONS: DS = SOIL, DSL = SILT, DR = ROCK
- REGIONAL SILT SAMPLE LOCATION
- OUTCROP AREA
- x pyrope, py MINERALIZATION OCCURRENCE; PYRITE, CHALCOPYRITE, MOLYBDENITE

**GEOCHEMICAL CATEGORIES**

	MOLYBDENUM	COPPER	TUNGSTEN
BACKGROUND	< 4.8 ppm	< 31.4 ppm	< 2 ppm
POSSIBLY ANOMALOUS	4.8 - 9.8	31.4 - 72.8	2 - 4.6
PROBABLY ANOMALOUS	9.8 - 14.8	72.9 - 144.2	4.8 - 7
DEFINITELY ANOMALOUS	> 14.8	> 144.2	> 7

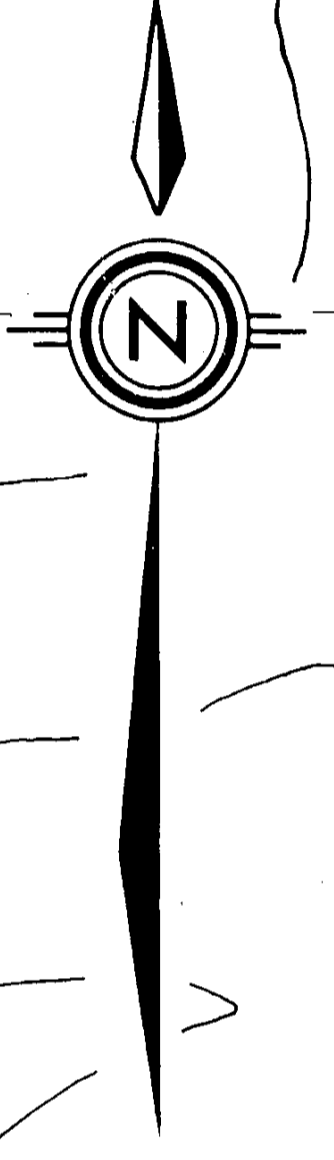
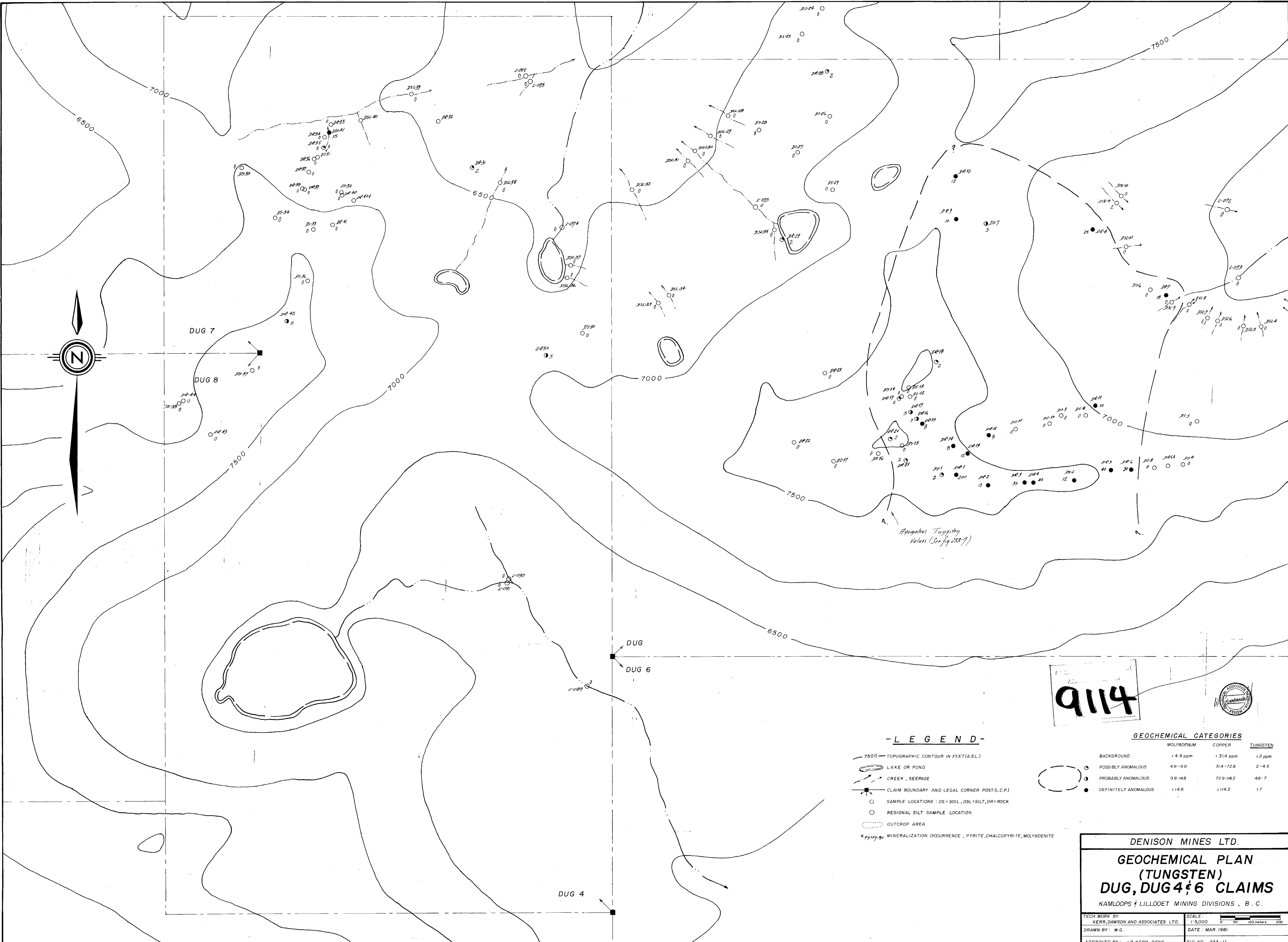
**DENISON MINES LTD.**

**GEOCHEMICAL PLAN  
(COPPER)  
DUG, DUG 4 & 6 CLAIMS**

KAMLOOPS & LILLOET MINING DIVISIONS, B. C.

TECH. WORK BY: KERR, DAWSON AND ASSOCIATES LTD.	SCALE: 1" = 5,000'
DRAWN BY: W.G.	DATE: MAR. 1981
APPROVED BY: J.R. KERR, P.ENG.	FIG. NO. 233-10

To accompany a report by W. Grunwald, B.Sc.



**- L E G E N D -**

- 7500 TOPOGRAPHIC CONTOUR IN FEET (A.S.L.)
- LAKE OR POND
- CREEK, SEEPAGE
- CLAIM BOUNDARY AND LEGAL CORNER POST (L.C.P.)
- SAMPLE LOCATIONS: DS = SOIL, DSL = SILT, DR = ROCK
- REGIONAL SILT SAMPLE LOCATION
- OUTCROP AREA
- MINERALIZATION OCCURRENCE: PYRITE, CHALCOPYRITE, MOLYBDENITE

**9114**

**GEOCHEMICAL CATEGORIES**

	MOLYBDENUM	COPPER	TUNGSTEN
BACKGROUND	< 4.8 ppm	< 31.4 ppm	< 2 ppm
POSSIBLY ANOMALOUS	4.8 - 9.8	31.4 - 72.8	2 - 4.5
PROBABLY ANOMALOUS	9.8 - 14.8	72.8 - 114.2	4.5 - 7
DEFINITELY ANOMALOUS	> 14.8	> 114.2	> 7

**DENISON MINES LTD.**

**GEOCHEMICAL PLAN  
(TUNGSTEN)  
DUG, DUG 4 & 6 CLAIMS**

KAMLOOPS & LILLOOET MINING DIVISIONS, B. C.

TECH WORK BY: KERR, DAWSON AND ASSOCIATES LTD.	SCALE: 1:5,000
DRAWN BY: W.G.	DATE: MAR. 1981.
APPROVED BY: J.R. KERR, PENG.	FIG. NO. 233-11

To accompany a report by W. Gruenwald, B.Sc.