

81-#1001-9772

GEOLOGICAL & GEOCHEMICAL REPORT

- ON THE -

DUG CLAIMS

KAMLOOPS & LILLOOET MINING DIVISIONS

BRITISH COLUMBIA

- FOR -

DENISON MINES LTD.,
#2300 - 650 W. GEORGIA ST.,
VANCOUVER, B. C.

FIELD WORK PERFORMED: JULY 8 - AUGUST 27, 1981

LOCATION:

- 1). 40 KM SOUTHWEST OF LILLOOET, B.C.
- 2). N.T.S. 92J/8
- 3). 50°20'N; 122°11'W

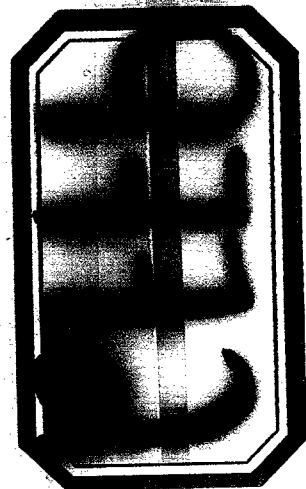
PREPARED BY

KERR, DAWSON & ASSOCIATES LTD.

#6 Nicola Place, 310 Nicola Street
Kamloops, B.C.

JOHN R. KERR,

NOVEMBER 10, 1981



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Prepared by:

KERR, DAWSON & ASSOCIATES LTD.,
#206, 310 Nicola Street,
Kamloops, B. C.

John R. Kerr,
November 10, 1981

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SUMMARY

- 1). The Dug claims were staked as the result of a regional exploration programme. The 7 claims (136 Units) are located approximately 40 km southwest of Lillooet. The claims occur within the rugged Coast Range Mountains at elevations greater than 6000 ft (a.s.l.). Showings on the claims are considered new discoveries.
- 2). Rocks within the claim block are dominantly a complex variety of intrusive rocks. Small roof pendants of metasedimentary rocks occur in the western portion of the property. At least 5 various intrusive rocks have been identified, ranging from large intrusive masses of quartz monzonite and granodiorite to dykes and small stocks of basalt. Phases of the main intrusive mass have been recognized, mainly textural variations, ranging from fine - medium grained to porphyritic.
- 3). An intrusive center has been identified, which apparently localizes three of the various intrusive rocks. This center has been subjected to intense fracturing, typical argillic alteration, and invasion of sulphides. Leaching and weathering of this zone has created an intense gossan.
- 4). Quartz veins carrying pyrite, chalcopyrite, bornite and molybdenite have been recognized in two zones in the western portion of the claim block. Alteration associated with these veins is typically argillic, however is localized to only the selvages of the veins, and a short distance into the wall-rock. The density of the veins, and content of sulphides is insufficient to consider any portion of these zones as economic.

- 5). Soil, silt and rock chip sampling was completed over the central portion of the claim area. Samples were collected at 50 meter intervals along preselected contours. In areas of precipitous terrane, mountain climbers (also geologists) were utilized to collect data. A total of 624 samples were collected, all being analyzed for copper and molybdenum. Statistical analyses were completed for each metal to derive various anomalous limits. Anomalies were subsequently interpreted on individual metal maps.
- 6). A weak to moderate copper anomaly is associated with the gossan zone. Rock chip samples collected from the gossan indicate only background copper content. The soil anomaly reflects the residual copper in the rock prior to leaching.
- 7). A strong molybdenum anomaly and a weak copper anomaly are associated with the two vein showings in the western portion of the property. These anomalies, although not coincident, are subparallel and form a semi-arcuate pattern within a 1.5 km radius from the intrusive center. The two anomalies also appear to be controlled by elevations; the copper anomaly confined to the 6800 to 7300 ft. contours, and the molybdenum confined to the 6500 to 7000 ft. contours. The vein showings and associated geochemical anomalies are therefore related to the intrusive center, and show a possible vertical zoning related to the textural zoning of the original batholith. The strongest Mo anomalies appear to be associated with the gradational contact of the porphyritic quartz monzonite, and the med - coarse grained granodiorite.
- 8). The complex, highly fractured, and altered intrusive center offers the potential for the discovery of a porphyritic Cu deposit, and a peripheral zone within 1.5 km of this zone offers potential for discovery of a porphyry Mo(Cu) deposit. Prior to drilling, a detailed surface evaluation programme is recommended to refine drill targets.

INTRODUCTION

General Statement

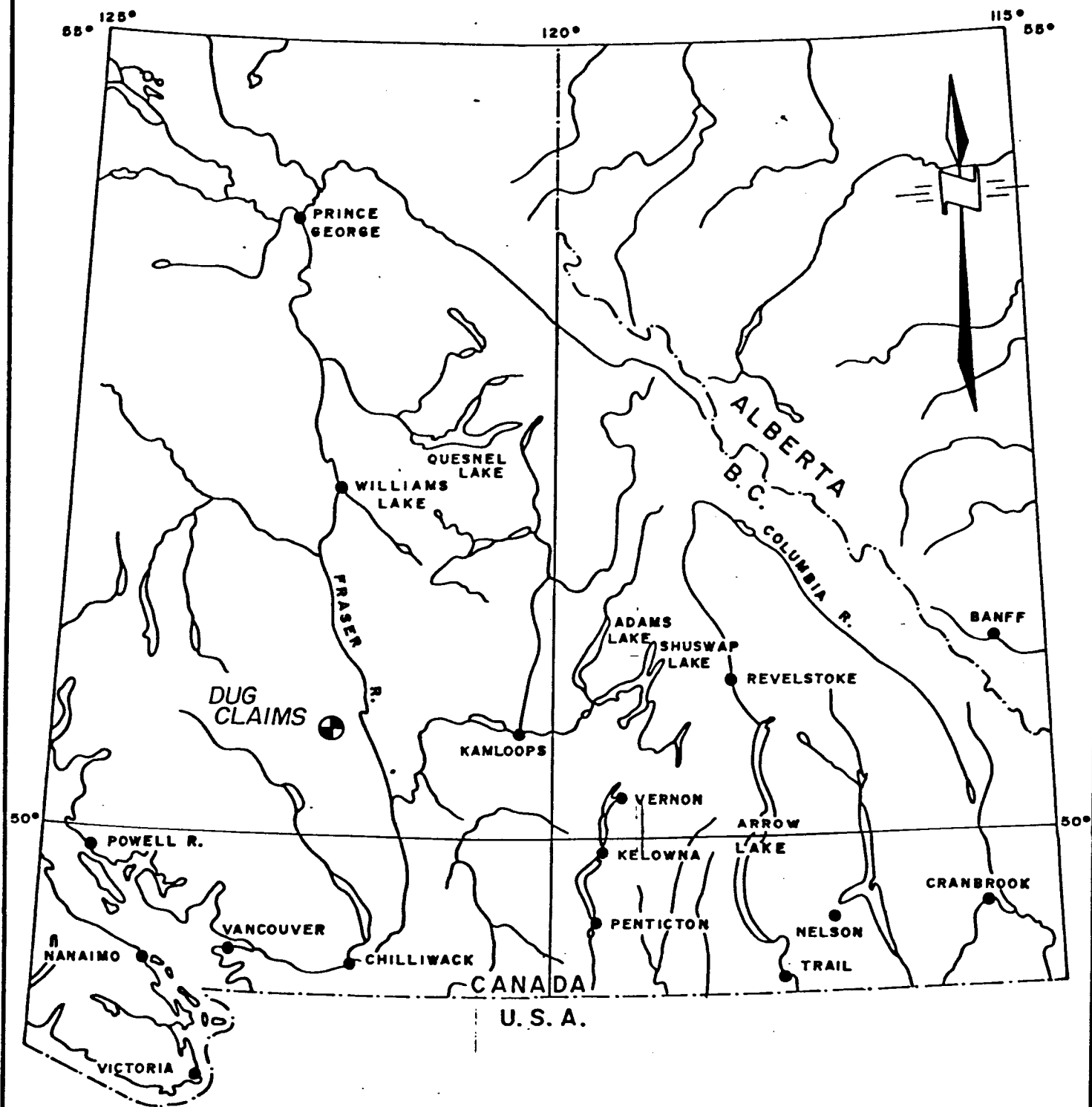
A regional exploration programme in a 640 square kilometer area southwest of Lillooet, completed by Denison Mines Ltd. during the summer of 1980, led to the staking of the DUG 1 - 8 claims. The claims cover a prominent gossan zone and widely disbursed anomalous silt samples (Mo, Cu, Zn & Ag). The potential of a major porphyry Mo, Cu deposit existing within this claim block is considered excellent.

Follow-up work completed during 1980 led to the discovery of copper and molybdenum bearing quartz veins in a weakly altered granodiorite in the western portion of the claims, and outlined a broad geochemical anomaly associated with this mineralization and with the gossan. Assessment work was filed on the DUG 1 - 7 claims. As DUG 8 is located within a mineral reserve area, this claim was permitted to lapse.

The 1981 programme consisted of detailed geochemical and geological mapping traverses in areas of known mineralization and over the gossan area. The skills of professional mountain climbers (also geologists) were used to sample and map areas of very precipitous terrane. This report documents the 1981 data.

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 flowing into the Stein River. By air, the claims are located approximately 40 km. southwest of Lillooet, B. C.



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

The approximate geographic coordinates at the center of the property are 50°20' N and 122°11'W (N.T.S. 92J/8). A road intersects the northern portion of the claim block. This road connects with the main Lillooet - Pemberton highway 11 km. to the north. It would not be difficult to construct a 4-wheel drive road to the central portion of the property, a distance of 4 - 5 kilometers.

Topography & 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' (1,830 m) 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.

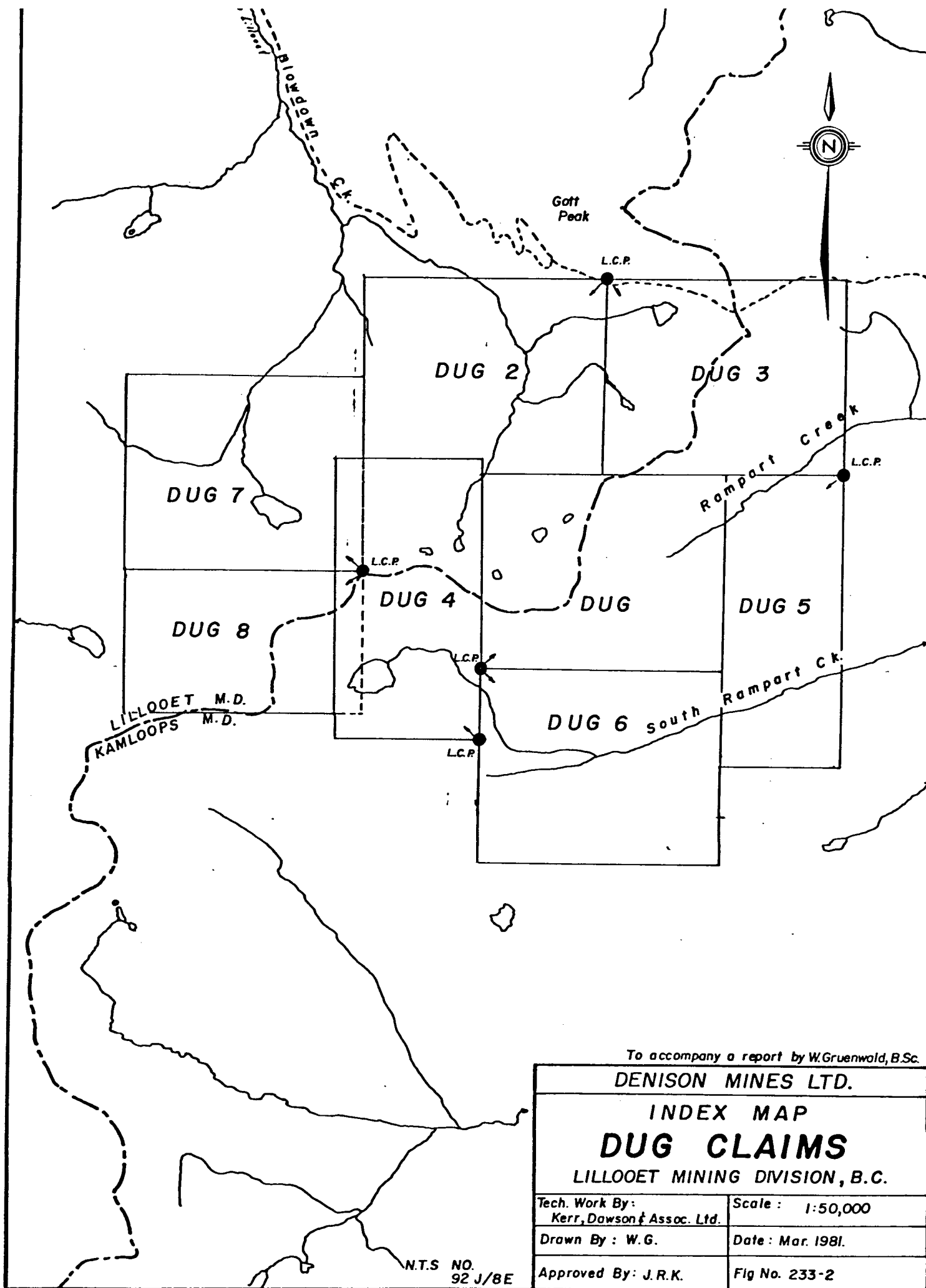
Claims

The DUG claim group consists of seven contiguous claims (136 units) staked under the Modified Grid System. Details of the claims are as follows:

<u>Claim Name</u>	<u>Record No.</u>	<u>No. Units</u>	<u>Mining Division</u>	<u>Expiry Date*</u>
DUG	2840	20	Kamloops	July 28, 1983
DUG 2	1492	20	Lillooet	August 1, 1982
DUG 3	1493	20	Lillooet	August 1, 1982
DUG 4	2852	18	Kamloops	July 31, 1983
DUG 5	2853	18	Kamloops	July 31, 1983
DUG 6	2854	20	Kamloops	July 31, 1983
DUG 7	2855	20	Kamloops	July 31, 1983

* Statement of work completed July 8 - 23, 1981 has previously been filed, and dates shown are subject to approval of this report. These dates are to be amended with filing of additional work completed after August 1, 1981.

All claims are recorded in the name of Denison Mines Ltd.



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

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

The geology of the area of the Dug claims is generalized in G.S.C. paper 73-17, Pemberton (East Half) Map-Area, by J. A. Roddick and W. W. Hutchison, and accompanying 1:250,000 scale map sheet.

In summary, the entire claim block is shown to be underlain by granodiorite, quartz diorite and quartz monzonite of two batholiths related to the Coast Range Intrusive Complex. Small roof-pendants of metasedimentary rocks of the Triassic Bridge River Group exist to the west of the property.

Concurrently with soil, rock and silt sampling, the DUG claims were geologically mapped on a scale of 1:5000 (See Figure 233-81-4). All outcrops encountered on each traverse were tied into the nearest sample station. Rock types were identified, noting alteration, veining and mineralization. Major fracture and fault zones were plotted where encountered. As four various geologists completed work on this property, some difficulty was encountered in compiling all data and interpreting the geology.

Rock Descriptions:

The oldest rocks encountered on the property are metasedimentary rocks, probably occurring as small roof-pendants, of the Bridge River Group. At least five various intrusive rocks have been identified within the mapped area. The following is a description of all rock - types encountered on the property; numbered chronologically from oldest to youngest:

ROCK UNIT 1 - Dark grey to black, thermally altered, phyllites, argillites and schists of the Triassic Bridge River Group. These rocks were mapped only as talus scree and boulders along the 7500' contour in the western portion of the property, and probably reflect small roof pendants of metasediments on ridges in the western border of the map sheet.

ROCK UNIT 2 - Med - coarse grained, generally massive and dense, occasionally porphyritic, mafic rich biotite/hornblende granodiorite or quartz diorite. This rock-type is located on a ridge top in the southwest corner of the map sheet, and is identified as being the oldest intrusive rock in the area. The rock is locally well fractured with quartz veins, aplite and basic dykes. Occasional quartz veins carry pyrite and traces of MoS_2 .

ROCK UNIT 3 - The most common rock found in all areas of the property, has been subdivided in three distinct phases.

3A - Coarse grained, massive, dense, porphyritic, grey to white, biotite > muscovite rich quartz monzonite. Phenocrysts, up to 2 cm diameter, are dominantly orthoclase, however some quartz phenocrysts are noted. This rock phase has been identified in the northern portion of the property at the head of the east fork of Blowdown Creek. Minor veining and fracturing, with no associated mineralization appear characteristic of this rock.

3B - Pale grey/brown, medium to coarse grained, generally massive and dense quartz monzonite or granodiorite. This rock is located in all portions of the map area. Locally the rock is highly fractured, with a high density of quartz veins and dykes. Alteration of the rock is along selvages and as envelopes along quartz veins. Alteration can be quite intense and includes sericite, muscovite, clays, minor chlorite and K-feldspar. Associated with the quartz veins are pyrite, chalcopyrite, bornite, molybdenite and malachite. Vein and mineralization intensity is dominant in the northwest and southwest portion of the map area.

In the east-central portion of the map area, near the contact with Rock Unit 4, general widespread weak to moderate alteration of the granodiorite occurs. This is apparently a gradational feature, becoming most intense at the contact zone.

3C - Creamy white/grey, fine - medium, massive, dense granodiorite. The rock occurs as a small capping on top of a steep high knoll in the west/central portion of the map area. Only minor veining, with traces of chalcopyrite and molybdenite were noted in this rock.

There appears to be a possible zoning feature of the three phases of Rock Unit 3. 3A is located in the Blowdown Creek valley at elevations below 6500 ft. 3B occupies most of the map area between elevations of 6500 - 7500 ft. 3C occurs as a small capping on a mountain peak over 7500 ft. elevation. A vertically zoned intrusion is hypothesized, phasing from fine-grained at the top to coarse-grained (porphyritic) at depth.

ROCK UNIT 4 - Pale brown, yellow and brick red, medium grained, highly altered and well-fractured quartz monzonite or quartz \pm feldspar porphyry. Alteration includes intense sericite, quartz and clays, with minor K-feldspar. Fracture density is intense estimated to be up to 25 per square meter. The rock mass is in part totally altered showing no original textural features. The rock unit occupies the top and southern portion of a high mountain peak (\gt 8000 ft) in the east central portion of the claim area. The rock is inundated with small irregular stocks, dykes and plugs of Rock Units 5 and 6. Pyrite is by far the most common sulphide found in this rock. Occasional specks of chalcopyrite were noted.

The contact of Rock Unit 3 and 4 has not been observed. It was originally proposed that Rock Unit 4 may be only an altered and well fractured phase of Rock Unit 3. The textural variation, and abundance of quartz eyes (or phenocrysts) in Rock Unit 4 leads the writer to conclude that this Unit is a separate and later intrusion.

ROCK UNIT 5 - Green, fine to medium grained, rusty, altered and pyrite-rich quartz diorite, pyrite content locally up to 15%. Alteration includes moderate to high chlorite, minor sericite and clay.

Some traces of chalcopyrite are associated with pyrite.

This rock unit occurs as large dykes and plugs, showing a general N - S elongation, and appears to intrude only rocks of Unit 4. The rock in general is not as well fractured and as rusty as the rocks of Unit 4. The massive nature of this rock is probably why leaching is not as prevalent as in Unit 4.

ROCK UNIT 6 - The youngest rocks located on the property are dark grey, brown & black, fine grained, occasionally porphyritic basic dykes. At one location within the gossan zone, this rock occurs as a plug or small stock.

These dykes occur in all areas of the claim block, however the frequency appears most dense in areas of located mineralization. Dykes are associated with the N - S trending, steep dipping fractures, however in the gossan zone, basic dykes were mapped showing a N45E, and E - W trend.

Structural Geology:

Small scale structural features mapped on the property reflect general regional structural trends. A major fault zone transects the main gossan zone and Rock Unit 4 in a N30W direction. Movement along this fault has displaced the large basalt dyke by as much as 30 meters. It is obvious that this fault happened after the emplacement of all rocks in the area, and as the basic dykes are associated with other major fracture trends, this fault must have been one of the last tectonic events in the area. This feature was recognized on the Snow claims.

The most dominant fracture trends on the property are the N - S, vertically dipping fractures hosting the majority of basic dykes. Occasional displacement along this fracture trend was mapped. The N - S fractures rarely contain quartz veins.

Quartz veins were mapped at orientations in many directions. The most common directions are associated with fractures trending in general E - W and N45W directions. Mineralization and alteration are most abundant in quartz veins of these directions. Generally these veins are steep dipping. A third quartz vein trend appears to be in a N45 - 60W direction.

Mineralization and Alteration:

The most common sulphide found on the property is pyrite, most abundant in Rock Unit 5. It is obvious that Rock Unit 4 probably contains as much pyrite at depth, however surface weathering has leached up to 100% of the sulphides. Occasional traces of chalcopyrite were found as disseminations in Rock Unit 5. Locally sulphide content in this Unit exceeded 15%. Sulphide mineralization is associated with strong chlorite and minor sericite and clay alteration. In Rock Unit 4, alteration includes strong sericite, clay, silica and minor secondary K-feldspar (typical argillic alteration).

Economic minerals are dominantly associated with quartz veins. These include chalcopyrite, bornite, molybdenite and malachite, and are generally accompanied by secondary muscovite and biotite, sericite, and clay alteration occurring along vein selvages and occasionally penetrating the wallrock.

GEOCHEMISTRY

During the period July 8 - August 27, 1981, detailed geochemical sampling was completed over the known mineralized zones and gossan area. Control of sampling were contour traverses along accessible 500 ft. contour intervals. Elevation control was accomplished with the aid of altimeters. Samples were collected mainly at 50 meter intervals, using either chain or topofil methods. In areas of inaccessible contours, sample traverses were completed at the crew's discretion. Location of all sample stations are shown on geochemical plans (Figures 233-81-5 & 6). A total of 624 rock, soil and silt samples were collected.

All samples were placed in kraft waterproof envelopes, and shipped to Bondar - Clegg & Co. Ltd. for geochemical analysis. All samples were analyzed for copper and molybdenum. Initially samples were analyzed for tungsten, based on some erratic high values obtained from the 1980 programme. This analysis was discontinued as results were negative. Selected traverses were analyzed for arsenic and zinc.

After drying, soil and silt samples were sieved to obtain an aliquot of minus 80 mesh material. Rock samples were pulverized to obtain a minus 100 mesh material. All samples were analyzed as follows:

<u>Element</u>	<u>Digestion</u>	<u>Determination</u>
Copper) Molybdenum) Zinc)	HNO ₃ - HCl Hot Extract ^{n/}	Atomic Absorption
Tungsten	Carbonate Sinter	Colourimetric
Arsenic	Nitric Perchloric Digest ^{n/}	Colourimetric

Statistical analyses were completed on the copper and molybdenum soil and silt samples only. A total of 211 rock chip samples were eliminated from statistical analyses as many samples were selected. Tungsten values are totally insignificant, and indicate no anomalous patterns. Zinc and arsenic data are insufficient for statistical analyses.

Results of these analyses are as follows:

<u>Metal</u>	<u>No. Samples</u>	<u>Mean</u>	<u>Std. Deviation</u>
Cu	413	18.81 ppm	25.02 ppm
Mo	413	7.14 ppm	8.13 ppm

This provided the following geochemical categories:

	<u>Copper (ppm)</u>	<u>Molybdenum (ppm)</u>
Negative	0 - 18	0 - 7
Possibly Anomalous	19 - 43	8 - 15
Probably Anomalous	44 - 68	16 - 23
Definitely Amomalous	> 68	> 23

All copper and molybdenum values were plotted on 1:5000 scale individual metal maps (Mo - Figure 233-81-5 & Cu - Figure 233-81-6). Anomalous sample stations were appropriately coded. Approximately 100 samples fall outside the boundary of the 1:5000 scale map. Location of these samples are shown on the 1:20,000 scale plan (Figure 233-81-3).

Anomaly interpretation was provided by contouring the possibly and definitely anomalous samples. Discussion of these results are included in the next chapter.

DISCUSSION OF RESULTS

The DUG claims offer potential for development of a major porphyry Mo (Cu) deposit. Three areas within the claim block have been delineated as potential targets for exploration:

- ZONE I
- The main gossan zone is located on the DUG claim in the central portion of the claim block. The principal rock type is the highly altered, rusty, and weathered medium grained quartz monzonite (Rock Unit 4), intruded by qtz diorite dykes and small stocks (Rock Unit 5) and basic dykes (Rock Unit 6). Sulphide mineralization of economic content was not observed in any of the exposed rocks. Chalcopyrite was observed as trace content in the quartz diorite.

 - The gossan zone appears to be geochemically inactive for molybdenum. Although weak, the entire gossan area is delineated by a possible copper anomaly. Definitely anomalous zones are located within the main zone, and show a weak to moderate correlation with the quartz diorite (Rock Unit 5) intrusions. It is interesting to note that rock geochemistry completed over the gossan indicated no copper response. The anomaly is interpreted only from copper content in soil.

 - The fact that only background content of copper was found in rock can be explained by the fact that copper has been totally leached from surface exposures. The copper soil anomaly is a residual effect, reflecting the copper content in rock prior to leaching, or the copper content in rock below the leached capping. Depth of leaching cannot be estimated at this time.

-Drill targets within Zone I have not been refined, and drilling at this time would be considered a high risk proposition. In order to upgrade the zone and delineate better drill targets, the following surface evaluation programme is suggested:

- i). Test pitting with hand drill to determine if copper content increases with depth.
- II). Fracture density counts, and gossan and texture interpretation to determine areas within the main gossan that offer the best potential.

ZONE II

-Copper and molybdenum geochemical anomalies are related to quartz veins carrying chalcopyrite, bornite and molybdenite on the DUG 4 claim in the northwest portion of the claim block. The quartz veins are located within the anomaly at elevations between 6800 - 7300 ft., and are at too low a density and contain insufficient content of sulphides to be considered of economic interest.

-Strong molybdenum anomalies in soil are located to the northeast of the sulphide bearing quartz veins in relatively flat-lying, overburden covered land. Outcrops in much of this area are scarce.

-This portion of Zone II offers the best potential for discovery of a porphyry deposit. Further detailed soil sampling and geological mapping on a grid are required to refine potential targets.

ZONE III -Quartz veins carrying molybdenite and a coincident Mo geochemical anomaly occur on DUG 4 in the southwest corner of the claim. Most of the geochemical anomaly can be explained by subeconomic contents of MoS_2 in quartz veins.

-The geochemical expression of this zone bounds three sides of a small alpine lake. It is within this area, and possibly under the lake that offers most potential for discovery of a porphyry deposit. Further detailed sampling and geological mapping in this area are required to refine potential drill targets.

There is an apparent zoning and spatial relationship that may explain a correlation between all three zones. The gossan zone represents a multiphase intrusive center causing considerable fracturing, alteration and deposition of sulphides within the center of this zone.

The main molybdenum anomaly forms a semi arcuate pattern within a 1.5 km radius from this intrusive center. It is also interesting to note that with the exception of the extreme southern end of the molybdenum anomaly, anomaly boundaries approximate the 6500 ft. and 7000 ft. contours. Associated with the Mo anomaly, is a parallel copper anomaly, with boundaries approximating the 6800 ft. and 7300 ft. contours. This suggests a possible vertical zoning of the two metals, with copper overlying the molybdenum.

This vertical zoning of metals is coincident with the vertical textural and chemical zoning developed for the main batholith. The highest Mo geochemical anomalies appear to be associated with the base of the medium to coarse grained granodiorite (Unit 3B), or at the top of the porphyritic quartz monzonite.

RECOMMENDATIONS

Three targets have been delineated on the DUG claims that are worthy of further exploration. All three target areas require further surface exploration to refine possible drill targets. The following 2-Phase programme is recommended for the 1982 field programme.

PHASE I

- 1). Trenching by drilling and blasting rock outcrop within the main gossan zone to investigate if copper content increases with depth.
- 2). Fracture density counts, and colour and texture interpretation to determine areas within the main gossan that offer the best potential for underlying mineralization.
- 3). Detailed grid work over flat-lying area of Zone II consisting of geological mapping and geochemistry.
- 4). Detailed geological mapping and geochemistry around the lake area of Zone III.

PHASE II

Allow 350 meters (~1150 ft.) to test the best two targets delineated in Phase I.

Respectfully Submitted By:

KERR, DAWSON & ASSOCIATES LTD.,


John R. Kerr, P. Eng.

APPENDIX A

COST STATEMENTS

COST STATEMENT
DUG CLAIMS
JULY 8 - 15, 1981

LABOUR

John R. Kerr, P. Engineer 5 days @ \$250.00/day	\$1,250.00	
Werner Gruenwald, Geologist 8 days @ \$180.00/day	1,440.00	
Karen Davies, Assistant 8 days @ \$120.00/day	960.00	
Brian Cross, Sr. Assistant 8 days @ \$130.00/day	1,040.00	
Alan Lingor, Assistant 3 days @ \$120.00/day	<u>360.00</u>	
		\$5,050.00

TRANSPORTATION

Truck Rental 8 days @ \$35.00/day	280.00	
Helicopter Charter 10.4 hrs @ \$350.00/hr.	3,640.00	
Fuel - 1100 litres @ 51.5¢/l	<u>610.50</u>	
		4,530.50

ASSAYS & GEOCHEMICAL ANALYSIS

444 Samples @ \$5.35	<u>2,375.40</u>	
		2,375.40

ROOM & BOARD

32 man days @ \$35.00/man/day	<u>1,120.00</u>	
		1,120.00

MISCELLANEOUS SUPPLIES & EQUIPMENT RENTAL

	<u>342.80</u>	
		<u>342.80</u>

TOTAL	<u><u>\$13,428.30</u></u>	
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JULY 8 - 15, 1981 - This work was recorded in the Mining Recorder's Office
at Lillooet and Kamloops during July, 1981.

COST STATEMENT

AUGUST 12 - NOVEMBER 10, 1981

LABOUR

John R. Kerr, P. Engineer		
3 days @ \$250.00/day		\$750.00
W. Gruenwald, Sr. Geologist		
6 days @ \$180.00/day		1,080.00
G. Radford, Geologist & Mtn. Climber		
2 days @ \$300.00/day		600.00
Wm. Kitson, Geologist & Mtn. Climber		
2 days @ \$300.00/day		600.00
K. Davies, Assistant		
5 days @ \$120.00/day		<u>600.00</u>
		\$3,630.00

HELICOPTER CHARTER

7.2 hrs @ \$350.00/hr.		2,520.00
Fuel - 745 litres @ 0.60/l		<u>447.00</u>
		2,967.00

ASSAYS & GEOCHEMICAL COSTS

180 samples @ \$2.80/sample		<u>504.00</u>
		504.00

ROOM & BOARD

10 man days @ \$35.00/man/day		<u>350.00</u>
		350.00

MISCELLANEOUS SUPPLIES & EQUIPMENT RENTAL

		<u>226.40</u>
		226.40

REPORT PREPARATION

J. R. Kerr, P. Eng. (3 days)		750.00
Drafting		120.00
Secretarial, Photocopying, Blueprinting & Report Binding		<u>232.00</u>
		<u>1,102.00</u>

August 12 - November 10, 1981	TOTAL	<u><u>\$8,779.40</u></u>
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APPENDIX B

GEOCHEMICAL DATA



Geochemical Lab Report

REPORT: 121-1874

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	Mo PPM	As PPM	W PPM	NOTES	SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	Mo PPM	As PPM	W PPM	NOTES
BC-101	SOIL	18	46	3	0.2	2		GD-13		8		3		2	
BC-102		7	24	2	0.2	3		GD-14		14		6		3	
BC-103		42	26	2	0.2	2		GD-15		5		2		2	
BC-104		44	41	2	0.2	2		GD-17		19		1		2	
BC-105		55	25	ND	0.2	3		GD-18		10		2		2	
BC-106		31	26	ND	0.2	2		GD-19		11		3		2	
BC-107		34	28	2	0.2	2		GD-20		55		4		2	
BC-108		25	29	3	0.2	3		GD-21		66		3		2	
BC-109		37	23	ND	0.2	2		GD-23		43		2		2	
BC-110		26	22	ND	0.2	2		GD-24		27		ND		2	
BC-111		13	51	7	0.2	5		GD-25		38		1		3	
BC-112		28	23	ND	0.2	2		GD-26		100		5		2	
BC-113		36	37	1	0.2	2		GD-27		35		3		2	
BC-114		14	37	1	0.2	3		GD-28		35		4		3	
BC-115		5	20	6	0.2	4		GD-31		22		1		2	
BC-116		8	53	7	0.2	3		GD-32		22		1		2	
BC-117		6	49	3	0.2	3		GD-33		34		2		2	
BC-118		7	38	5	0.2	2		GD-35		24		5		2	
BC-119		8	41	4	0.2	2		GD-36		32		5		2	
BC-120		10	46	3	0.2	2		GD-37		20		3		3	
BC-121		5	50	5	0.2	3		GD-38		20		2		2	
BC-122		9	99	5	0.2	3		GD-39		17		5		3	
BC-123		28	70	5	0.2	2		GD-40		9		2		2	
GD-3		13		9		4		GD-41		10		4		2	
GD-4		15		11		5		GD-43		50		10		2	
GD-6		15		8		3		GD-44		6		2		2	
GD-7		38		7		4		GD-45		10		2		2	
GD-8		10		2		2		GD-46		2		ND		2	
GD-11		10		4		2		GD-49		7		ND		2	
GD-12		10		3		3		GD-50		5		ND		2	

Dug Clams

Dug Clams

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SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	Mo PPM	As PPM	W PPM	NOTES	SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	Mo PPM	As PPM	W PPM	NOTES
GD-51		7		ND		2		GD-93		71		ND		2	
GD-52		2		ND		3		GD-96		51		ND		2	
GD-53		5		1		4		GD-97		65		ND		2	
GD-54		16		3		3		GD-100		66		18		2	
GD-55		8		1		2		GD-101		48		11		2	
GD-56		23		2		2		GD-102		63		10		2	
GD-57		8		ND		2		GD-104		353		3		2	
GD-59		9		1		3		GD-108		16		1		5	
GD-60		11		1		2		GD-115		7		ND		13	
GD-61		12		ND		3		GD-118		69		7		2	
GD-62		10		1		2		GD-119		43		2		2	
GD-63		13		4		3		GD-120		56		2		2	
GD-64		56		3		2		GD-121		42		2		2	
GD-66		11		ND		2		GD-122		29		2		2	
GD-67		24		3		2		GD-123		20		6		2	
GD-68		9		1		2		GD-124		1		ND		5	
GD-69		6		ND		2		GD-125		5		5		5	
GD-70		84		ND		3		GD-129		4		ND		3	
GD-71		38		ND		11		GD-130		8		3		2	
GD-72		12		ND		3		GD-131		11		7		5	
GD-73		140		ND		3		GD-135		5		ND		5	
GD-74		19		1		3		GD-136		11		3		2	
GD-76		49		3		3		GD-137		4		6		2	
GD-78		40		3		3		GD-138		1		3		2	
GD-81		10		ND		2		GD-140		4		3		2	
GD-82		39		2		4		GD-141		5		3		2	
GD-85		43		ND		10		GD-142		10		6		2	
GD-88		65		2		2		JK-132		10	46	7	0.2	2	
GD-90		50		4		2		JK-133		10	44	6	0.2	3	
GD-91		102		ND		2		JK-134		7	45	7	0.2	3	

Dug Claims

Dug Claims

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SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	Mo PPM	Ag PPM	W PPM	NOTES	SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	Mo PPM	Ag PPM	W PPM	NOTES
JK-135		29	79	2	0.2	2		KD-05		10		8		2	
JK-136		30	67	3	0.2	2		KD-06		21		6		2	
JK-137		14	56	2	0.2	2		KD-07		16		7		2	
JK-138		35	91	5	0.4	2		KD-08		12		14		2	
JK-139		15	61	3	0.2	2		KD-09		6		5		2	
JK-140		22	129	4	0.2	2		KD-10		1		1		2	
JK-141		18	71	5	0.2	2		KD-11		3		ND		2	
JK-142		13	77	8	0.2	2		KD-12		4		3		2	
JK-143		8	70	6	0.2	2		KD-13		10		1		2	
JK-144		32	100	4	0.2	2		KD-14		5		3		2	
JK-145		5	58	13	0.2	2		KD-15		10		1		2	
JK-146		24	67	4	0.2	2		KD-18		15		4		2	
JK-147		35	102	4	0.2	2		KD-19		14		4		2	
JK-148		24	87	2	0.2	2		KD-20		51		2		2	
JK-149		24	95	1	0.2	2		KD-21		10		1		2	
JK-150		5	46	2	0.2	2		KD-22		27		3		2	
JK-151		32	109	2	0.2	2		KD-28		22		8		2	
JK-152		24	61	2	0.4	2		KD-31		12		3		2	
JK-153		15	91	2	0.3	2		KD-32		4		2		2	
JK-154		17	80	5	0.2	2		KD-33		10		2		2	
JK-155		16	91	6	0.2	2		KD-34		26		4		2	
JK-156		19	95	1	0.2	2		KD-35		16		5		2	
JK-157		18	72	2	0.2	2		KD-36		22		3		2	
JK-158		54	77	4	0.2	2		KD-37		1		ND		2	
JK-159		41	122	6	0.2	2		KD-38		3		2		2	
JK-160		30	72	2	0.2	2		KD-39		7		2		2	
JK-161		43	147	2	0.4	2		KD-40		38		3		2	
JK-162		23	76	2	0.2	2		KD-41		10		2		2	
KD-2		10		7		2		KD-42		1		ND		2	
KD-3		10		5		2		KD-43		6		3		2	

Dug
class

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SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	Mo PPM	As PPM	W PPM	NOTES	SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	Mo PPM	As PPM	W PPM	NOTES
KD-44		10		8		2	} <i>Dug claims</i>	KD-77		10		13		2	} <i>Dug claims</i>
KD-46		29		22		2		KD-78		4		9		2	
KD-47		11		5		2		KD-79		1		7		2	
KD-48		9		7		2		KD-80		10		9		2	
KD-50		3		3		2		KD-81		1		6		2	
KD-51		5		3		2		KD-82		10		5		2	
KD-52		54		10		2		KD-83		1		4		4	
KD-53		55		18		2		KD-84		3		5		4	
KD-54		4		8		2		KD-85		3		3		3	
KD-55		5		4		2		KD-86		10		5		3	
KD-56		26		7		2		KD-87		6		20		3	
KD-57		60		10		2		KD-89		65		13		3	
KD-58		26		11		2		KD-90		30		2		2	
KD-59		63		12		2		KD-91		25		36		2	
KD-61		25		13		2		KD-92		5		3		2	
KD-62		11		9		2		KD-93		22		9		2	
KD-63		5		6		2		KD-94		20		7		2	
KD-64		21		10		2		KD-95		7		8		2	
KD-65		20		19		2		KD-097		44		3		2	
KD-66		10		27		2		KD-098		40		2		2	
KD-67		16		12		2		KD-099		10		ND		2	
KD-68		11		11		2		KD-100		6		2		2	
KD-69		18		31		2		KD-101		4		1		2	
KD-70		13		15		2		KD-102		9		41		2	
KD-71		45		15		2		KD-103		17		13		2	
KD-72		24		37		2	KD-104		7		3		2		
KD-73		32		31		2	KD-105		39		2		2		
KD-74		23		32		2	KD-106		35		3		2		
KD-75		93		11		3	KD-107		25		5		2		
KD-76		41		18		2	KD-108		12		9		2		

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SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	Mo PPM	As PPM	W PPM	NOTES	SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	Mo PPM	As PPM	W PPM	NOTES
KD-197		3		25		2		WG-113		27	71	4	0.2	2	
WG-084		7	26	2	0.2	2		WG-114		47	89	8	0.2	2	
WG-085		20	33	ND	0.2	2		GD-1	ROCK	12		7		2	
WG-086		14	26	1	0.2	2		GD-2		9		9		2	
WG-087		11	38	2	0.2	2		GD-5		6		5		2	
WG-088		29	37	3	0.2	2		GD-9		5		5		2	
WG-089		21	24	2	0.2	2		GD-10		1		5		2	
WG-090		19	70	3	0.2	2		GD-16		57		5		2	
WG-091		12	45	1	0.2	2		GD-22		12		6		2	
WG-092		14	58	2	0.2	2		GD-29		19		7		2	
WG-093		13	56	3	0.2	3		GD-30		32		6		2	
WG-094		12	60	3	0.2	3		GD-34		15		5		2	
WG-095		9	40	4	0.2	2		GD-42		2		5		2	
WG-096		10	35	3	0.2	2		GD-47		2		6		2	
WG-097		7	16	ND	0.2	2		GD-48		5		16		2	
WG-098		16	41	2	0.2	2		GD-58		1		12		2	
WG-099		6	25	2	0.2	2		GD-65		10		9		2	
WG-100		11	36	4	0.2	2		GD-75		7		12		2	
WG-101		7	35	4	0.2	2		GD-77		11		11		2	
WG-102		10	28	ND	0.2	2		GD-79		11		10		2	
WG-103		10	20	1	0.2	2		GD-80		12		11		2	
WG-104		7	25	2	0.2	2		GD-83		7		13		2	
WG-105		23	64	5	0.2	2		GD-84		9		6		2	
WG-106		7	24	ND	0.2	2		GD-86		20		8		2	
WG-107		11	52	2	0.2	2		GD-87		7		7		2	
WG-108		22	56	3	0.2	2		GD-89		7		6		3	
WG-109		52	71	4	0.2	2		GD-92		7		5		3	
WG-110		27	46	2	0.2	2		GD-94		24		8		3	
WG-111		48	56	4	0.2	2		GD-95		9		11		2	
WG-112		15	49	5	0.2	2		GD-98		ND		4		2	

See Claims

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SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	Mo PPM	As PPM	W NOTES PPM	SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	Mo PPM	As PPM	W NOTES PPM
GD-99		9		11		2	KD-49		11		4		2
GD-103		2		5		2	KD-88		16		70		2
GD-105		3		9		4	KD-96		13		7		2
GD-106		4		3		2	KD-111		39		18		2
GD-107		3		8		2	KD-114		5		3		2
GD-109		7		6		2	KD-118		13		7		2
GD-110		3		11		3	KD-119		3		12		2
GD-111		25		9		2	KD-121		20		3		2
GD-112		7		9		4	KD-130		22		8		2
GD-113		3		3		2	KD-157		3		8		2
GD-114		4		11		2	KD-158		1		6		2
GD-126		2		6		2	KD-159		12		6		2
GD-127		2		3		3	KD-160		31		8		2
GD-128		2		8		2	KD-161		7		8		2
GD-132		1		5		2	KD-163		130		25		2
GD-133		7		12		2	KD-165		7		8		2
GD-134		3		6		2	KD-166		5		9		2
GD-139		7		11		2	KD-167		77		22		3
KD-1		5		6		3	KD-168		2		7		2
KD-4		4		11		2	KD-169		2		14		2
KD-16		2		5		2	KD-170		215		29		2
KD-17		2		10		3	KD-171		1380		37		2
KD-23		1		5		2	KD-172		23		7		2
KD-24		2		10		2	KD-175		2000		58		2
KD-25		2		4		2	KD-177		4		2		2
KD-26		5		16		2	KD-178		25		12		2
KD-27		4		8		2	KD-180		57		9		3
KD-29		3		12		2	KD-183		3		25		2
KD-30		3		5		2	KD-185		2		8		3
KD-45		1		7		2	KD-187		1		14		2

Dug. Claims

Dug. Claim

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SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Mo PPM	W PPM	NOTES	SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Mo PPM	W PPM	NOTES
CD002	SOIL	5	3	2	Dug claims	CD045		19	1	2	Dug claims
CD003		4	9	2		CD048		10	1	2	
CD004		10	3	2		CD049		10	2	2	
CD006		11	5	2		CD050		3	ND	2	
CD011		3	ND	2		CD051		5	ND	2	
CD012		1	1	2		CD052		2	ND	3	
CD013		29	14	ND		CD053		4	1	2	
CD014		2	3	2		CD054		8	7	2	
CD015		1	ND	2		CD055		2	4	2	
CD016		2	ND	2		CD056		12	6	2	
CD017		55	3	2		CD057		5	5	2	
CD018		6	1	2		CD058		5	5	2	
CD019		6	ND	2		CD060		10	6	4	
CD021		8	ND	2		CD061		1	6	2	
CD022		17	ND	2		CD062		12	8	2	
CD024		15	1	2		CD063		5	5	2	
CD026	20	2	2	CD064		3	4	2			
CD031	10	6	2	CD065		5	8	2			
CD032	10	2	2	CD066		7	7	2			
CD034	12	1	2	CD067		5	6	2			
CD035	15	1	2	CD068		3	4	2			
CD036	3	ND	2	CD069		5	4	2			
CD037	2	ND	2	CD070		3	3	2			
CD038	6	ND	2	CD071		1	4	2			
CD039	11	ND	2	CD072		1	2	2			
CD040	20	1	2	CD073		5	1	2			
CD041	10	ND	2	GD144		17	8	3			
CD042	11	ND	2	GD146		15	7	2			
CD043	6	ND	2	GD147		5	5	2			
CD044	10	ND	2	GD148		5	6	2			



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SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Mo PPM	W PPM	NOTES	SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Mo PPM	W PPM	NOTES
GD149		2	5	2		GD186		23	12	2	
GD150		11	10	2		GD188		65	15	2	
GD151		2	3	2		GD189		20	8	2	
GD152		4	3	2		GD191		6	7	2	
GD153		10	3	2		GD192		8	9	2	
GD154		7	1	2		GD193		8	7	2	
GD157		25	13	2		GD194		15	9	2	
GD158		17	5	2		GD195		15	9	2	
GD159		20	7	2		GD196		7	6	2	
GD162		26	11	2		GD197		8	7	2	
GD163		25	12	2	<i>Dug Claims</i>	GD198		5	5	2	<i>Dug Claims</i>
GD164		10	4	2		GD200		10	13	2	
GD165		40	13	2		GD201		12	5	2	
GD166		10	4	2		GD202		5	4	2	
GD167		40	43	NI		GD203		6	6	2	
GD168		7	7	2		GD204		5	12	2	
GD169		13	9	2		GD205		7	8	2	
GD170		8	6	2		GD206		3	7	2	
GD171		7	5	3		GD207		14	6	2	
GD175		5	5	2		GD208		9	4	2	
GD176		7	5	2	GD209		18	11	2		
GD177		5	8	2	GD210		29	9	2		
GD178		7	7	2	GD211		14	31	2		
GD179		4	4	2	GD212		13	18	2		
GD180		7	5	2	GD213		3	10	6		
GD181		3	6	3	GD214		10	21	3		
GD182		5	7	2	GD215		5	39	3		
GD183		9	6	2	GD216		26	11	2		
GD184		28	9	2	GD217		17	8	3		
GD185		21	12	2	GD218		12	8	2		

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SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Mo PPM	W PPM	NOTES	SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Mo PPM	W PPM	NOTES
GD219		14	10	3		GD174		2	9	ND	} Dug Claims
GD222		15	18	2		GD187		4	5	2	
GD223		55	26	2		GD190		65	73	2	
GD224		8	28	3		GD199		5	8	2	
GD225		3	20	3		GD220		2	117	2	
CD001	ROCK	9	1	2		GD221		15	9	2	
CD005		5	4	2							
CD007		3	3	2							
CD008		10	9	2							
CD009		3	2	3							
CD010		100	83	2	} Dug Claims						
CD020		5	2	2							
CD023		3	4	2							
CD025		6	ND	2							
CD027		5	5	2							
CD028		2	2	2							
CD029		4	5	2							
CD030		4	55	2							
CD033		3	252	2							
CD046		3	4	2							
CD047		2	8	2							
CD059		2	3	2							
GD143		4	8	2							
GD145		2	2	2							
GD154		5	8	2							
GD156		2	2	2							
GD160		5	46	2							
GD161		3	6	2							
GD172		2	6	2							
GD173		2	4	2							



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SAMPLE NUMBER	ELEMENT UNITS	Zn PPM	As PPM	NOTES	SAMPLE NUMBER	ELEMENT UNITS	Zn PPM	As PPM	NOTES
BM-1	ROCKS	29	7	<i>Mel. Claim</i>	GD-273		38	2	<i>Drug Claims</i>
BM-2		52	6		GD-274		26	7	
BM-3		20	13		GD-275		36	6	
BM-4		23	10		GD-276		26	7	
BM-5		66	4		GD-277		20	4	
BMT-1:022		53	42	GD-278		40	12		
BMT-1:061		381	30	GD-279		52	8		
BMT-1:132		109	62	GD-280		44	6		
BMT-2:212		140	140	GD-281		54	8		
GD-252		50	85	GD-282		38	7		
GD-253		25	12	GD-283		41	6		
GD-254		93	11	GD-284		65	5		
GD-255		62	8	GD-285		32	5		
GD-256		41	37	GD-286		50	5		
GD-257		29	3	GD-287		80	5		
GD-258		35	7	GD-288		87	6		
GD-259		31	6	GD-289		51	4		
GD-260		18	3	GD-290		33	5		
GD-261		58	5	GD-291		17	5		
GD-262		41	11	GD-292		73	ND		
GD-263		45	4	GD-293		46	6		
GD-264		27	5	GD-294		49	7		
GD-265		27	3	GD-295		60	7		
GD-266		28	5	GD-296		67	12		
GD-267		57	7	GD-297		69	6		
GD-268		36	4	GD-298		76	6		
GD-269		13	2	GD-299		86	7		
GD-270		47	3	GD-300		66	6		
GD-271		37	5	GD-301		80	6		
GD-272		33	21	GD-302		76	7		



Geochemical Lab Report

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PAGE 2

SAMPLE NUMBER	ELEMENT UNITS	Zn PPM	As PPM	NOTES	SAMPLE NUMBER	ELEMENT UNITS	Zn PPM	As PPM	NOTES
GD-303		110	5		GM-097		84	21	
GD-304		105	5		GM-098		115	67	
GD-305		28	2		GM-099		100	26	
GD-306		94	5		GM-100		81	28	
GD-307		263	6		GM-101		154	35	
GD-308		103	6		GM-102		34	32	
GD-309		227	7		GM-103		112	82	
GD-310		9	6		GM-104		67	12	
GD-311		77	11		GM-105		92	98	
GD-312		50	6		GM-106		13	7	
GD-313		23	5	GM-107		76	11		
GD-314		74	5	GM-108		11	> 1000		
GD-315		66	6	GM-109		86	400		
GD-316		66	4	GM-110		31	15		
GD-317		55	6	GM-111		63	12		
GD-318		69	3	GM-112		125	250		
GD-319		61	5	GM-113		59	120		
GD-320		70	7	GM-114		53	11		
GD-321		60	53	GM-115		73	4		
GD-322		58	7	GM-116		71	7		
GD-323		51	28	GM-117		44	14		
GD-324		61	5	GM-118		47	22		
GD-325		57	12	GM-119		44	70		
GD-326		59	6	GM-120		42	85		
GD-327		50	3	GM-121		55	58		
GM-092		104	40	GM-122		78	125		
GM-093		106	30	GM-123		50	12		
GM-094		10	7	GM-124		158	60		
GM-095		97	34	GM-125		8	43		
GM-096		34	12	GM-126		74	12		

Mel Claim ->

Geochemical Lab Report

REPORT NO. 3749

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Mo PPM	NOTES	SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Mo PPM
BM-1	ROCKS	15	22		GD-273		5	37
BM-2		99	4		GD-274		7	9
BM-3		13	1		GD-275		7	18
BM-4		20	12		GD-276		7	31
BM-5		104	46		GD-277		3	11
BMT-1:022		8	10		GD-278		10	9
BMT-1:061		6	24		GD-279		12	15
BMT-1:132		123	71		GD-280		11	12
BMT-2:212		50	43		GD-281		10	14
GD-252		4	19		GD-282		11	23
GD-253		5	4		GD-283		11	12
GD-254		39	7		GD-284		12	10
GD-255		9	5		GD-285		6	12
GD-256		3	5		GD-286		9	14
GD-257		6	4		GD-287		10	26
GD-258		5	9		GD-288		20	7
GD-259		6	6		GD-289		8	10
GD-260		6	9		GD-290		11	11
GD-261		44	4		GD-291		30	9
GD-262		110	123		GD-292		61	15
GD-263		5	9		GD-293		24	36
GD-264		8	13		GD-294		19	18
GD-265		9	8		GD-295		32	6
GD-266		3	7		GD-296		26	10
GD-267		18	11		GD-297		31	6
GD-268		4	4		GD-298		40	13
GD-269		4	9		GD-299		31	10
GD-270		4	17		GD-300		15	10
GD-271		4	12		GD-301		24	8
GD-272		4	39		GD-302		18	10

Dug Claims

Dug Claims

NOTES



Geochemical Lab Report

REP 1571 321-2749

PAGE

SAMPLE NUMBER	ELEMENT UNITS	CU PPM	MO PPM	NOTES	SAMPLE NUMBER	ELEMENT UNITS	CU PPM	MO PPM
GB-303		55	47	} <i>Dug Claims</i>	GM-097		44	5
GB-304		35	72		GM-098		50	10
GB-305		140	1000		GM-099		30	6
GB-306		84	25		GM-100		56	8
GB-307		25	16		GM-101		76	10
GB-308		43	46		GM-102		59	2
GB-309		69	59		GM-103		56	27
GB-310		4	450		GM-104		52	38
GB-311		24	39		GM-105		64	43
GB-312		15	7		GM-106		25	62
GB-313		6	7		GM-107		233	7
GB-314		32	7		GM-108		16	75
GB-315		19	11		GM-109		18	25
GB-316		19	12		GM-110		47	348
GB-317		14	5		GM-111		5	8
GB-318		27	6		GM-112		72	70
GB-319		11	7		GM-113		25	12
GB-320		16	13	GM-114		5	7	
GB-321		17	5	GM-115		6	6	
GB-322		13	11	GM-116		4	5	
GB-323		12	4	GM-117		4	6	
GB-324		4	10	GM-118		4	7	
GB-325		15	7	GM-119		6	6	
GB-326		9	8	GM-120		4	7	
GB-327		4	5	GM-121		18	7	
GB-328		54	4	GM-122		22	10	
GB-329		38	9	GM-123		32	21	
GB-330		15	14	GM-124		101	32	
GB-331		45	6	GM-125		27	9	
GB-332		9	2	GM-126		220	6	

Dug Claims

Mel Claim

Mel Claim

Geochemical Lab Report

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PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	Mo PPM	As PPM	NOTES	SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	Mo PPM	As PPM	NOTES
GA:02	SOIL	5		1	16	<i>Bri-July claims</i>	GA:47		16		5	60	
GA:03		28		3	57		GA:48		10		3	88	
GA:07		13		4	55		GA:49		31		7	85	
GA:08		12		4	62		GA:50		20		4	43	
GA:10		5		6	7		GA:52		18		3	14	
GA:11		21		1	7		GA:53		13		3	12	
GA:12		18		1	7		GA:54		39		4	32	
GA:13		7		ND	2		GA:55		19		3	70	
GA:14		11		1	2		GA:57		21		6	22	
GA:15		17		2	2		GA:59		27		3	75	
GA:16		17		2	2		GA:62		31		4	30	
GA:17		11		1	2		GA:64		24		2	9	
GA:20		24		1	2		GA:66		12		2	30	
GA:22		5		2	2		GA:67		20		3	41	
GA:24		7		1	2		GA:69		13		2	25	
GA:25		24		2	2		GA:70		20		3	38	
GA:26		43		3	2		GA:71		10		14	63	
GA:28		40		9	6		GA:72		18		11	110	
GA:29		28		3	7		GA:73		27		3	30	
GA:30		24		4	20		GD:225		35	86	4		
GA:31		7		2	3		GD:228		32	85	8		
GA:32		14		3	5		GD:229		30	105	9		
GA:33		12		6	13		GD:231		38	105	31		
GA:34		6		2	10		GD:235		55	80	19		
GA:35		19		3	8		GD:235A		105	165	18		
GA:36		9		8	12		GD:236		61	120	16		
GA:37		11		2	7		GD:239		50	126	10		
GA:40		22		3	8		GD:243		50	128	6		
GA:43		19		3	23		GD:244		17	35	3		
GA:46		11		4	55		GD:245		18	43	1		

Dug Claims



Geochemical Lab Report

REPORT: 421-2585

PAGE 3

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	Mo PPM	As PPM	NOTES	SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Zn PPM	Mo PPM	As PPM	NOTES
GA:68		3		6	15		GK:44		3	8	3	2	
GD:226		2	58	4			GK:45		36	73	4	5	
GD:227		38	56	5			GM:05		14	14	22	ND	
GD:230		8	54	5			GM:08		98	90	112	9	
GD:232		141	30	76			GM:10		39	80	18	85	
GD:233		9	54	8		<i>Dog Claims</i>	GM:14		3	41	2	140	
GD:234		21	49	6			GM:15		4	62	4	16	
GD:237		4	28	4			GM:19		2	110	2	55	
GD:238		1270	139	12			GM:23		2	57	3	3	
GD:240		9	36	4			GM:28		4	33	2	160	
GD:241		58	48	8			GM:31		10	64	4	20	
GD:242		7	40	4		GM:33		58	40	15	12		
GD:249		3	52	4		GM:36		139	84	3	12		
GD:251		5	44	3		GM:40		8	10	ND	25		
GE:33		18	47	5		GM:41		57	64	7	30		
GE:38		41	87	13		<i>Mel Claim</i>	GM:42		4	15	2	210	
GE:41		3	2	11			GM:43		34	34	2	12	
GK:29		18	5	4	13		GM:44		36	84	2	62	
GK:30		11	107	3	4		GM:49		40	107	4	47	
GK:31		63	73	9	7		GM:56		38	83	1	8	
GK:32		77	25	7	22		GM:72		5	228	7	14	
GK:34		13	12	5	7	GM:73		18	83	12	63		
GK:35		3	2	3	2	GM:76		29	40	55	400		
GK:36		22	160	3	11	GM:79		17	65	2	6		
GK:37						GM:83		22	50	3	30		
GK:38		11	23	1	6		KM:07		50	51	2	2	
GK:39		11	15	5	5		KM:09		44	40	5	2	
GK:40		12	32	ND	4		KM:15		8	25	3	30	
GK:41		32	57	6	2		KM:19		1	21	2	3	
GK:43		50	80	3	5		KM:22		25	185	3	200	

5*



Geochemical Lab Report

REPORT: 121-2848

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SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Mo PPM	NOTES	SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Mo PPM	NOTES
GA-134		7	1	} <i>Bei-July claims.</i>	KD-202		17	2	} <i>Dug Claims</i>
GA-135		12	3		KD-203		16	1	
GRD-01		21	5		KD-204		33	5	
GRD-02		19	2		KD-205		15	3	
GRD-03		22	5		KD-206		17	4	
GRD-04		12	2	KD-207		15	2		
GRD-05		10	4	KD-208		22	6		
GRD-06		15	2	KD-209		21	4		
GRD-07		57	3	KD-209A		14	12		
GRD-08		12	4	KD-210		32	8		
GRD-09		10	2	KD-211		4	15		
GRD-10		19	3	KD-212		19	4		
GRD-11		7	2	KD-213		20	5		
GRD-12		8	3	KD-214		23	7		
GRD-13		55	2	KD-215		30	11		
GRD-14		8	2	KD-216		25	9		
GRD-15		16	2	KD-217		32	11		
GRD-16		7	3	KD-218		15	30		
GRD-17				KD-219		17	10		
GRD-18		11	1	KD-220		7	840		
GRD-19		7	3	KD-221		11	23		
GRD-20		5	2	KD-222		11	20		
GRD-21		6	1	KD-223		16	13		
GRD-22		12	5	KD-224		7	13		
GRD-23		4	4	KD-225		6	10		
GRD-24		6	4	KD-226		12	24		
GRD-25		8	2	KD-227		13	9		
GRD-26		4	4	KD-228		20	17		
GRD-27		29	29	KD-229		5	25		
KD-201		26	3	KD-230		14	13		

APPENDIX C

WRITER'S CERTIFICATE

JOHN R. KERR, P. ENG.

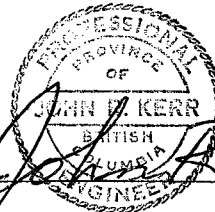
Geological Engineer

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

CERTIFICATE

I, JOHN R. KERR, OF THE CITY OF KAMLOOPS, BRITISH COLUMBIA, DO HEREBY CERTIFY THAT:

- (1). I am a member of the Association of Professional Engineers of British Columbia, and a Fellow of the Geological Association of Canada.
- (2). I am a geologist employed by Kerr, Dawson and Associates Ltd., of #206 - 310 Nicola Street, Kamloops, B. C.
- (3). I am a graduate of the University of British Columbia (1964), with a B.A. Sc. degree in Geological Engineering. I have practised my profession continuously since graduation.
- (4). I supervised and assisted in the collection of data as compiled in this report.
- (5). I hold no interest, either direct or indirect in the DUG claims such as described in this report.

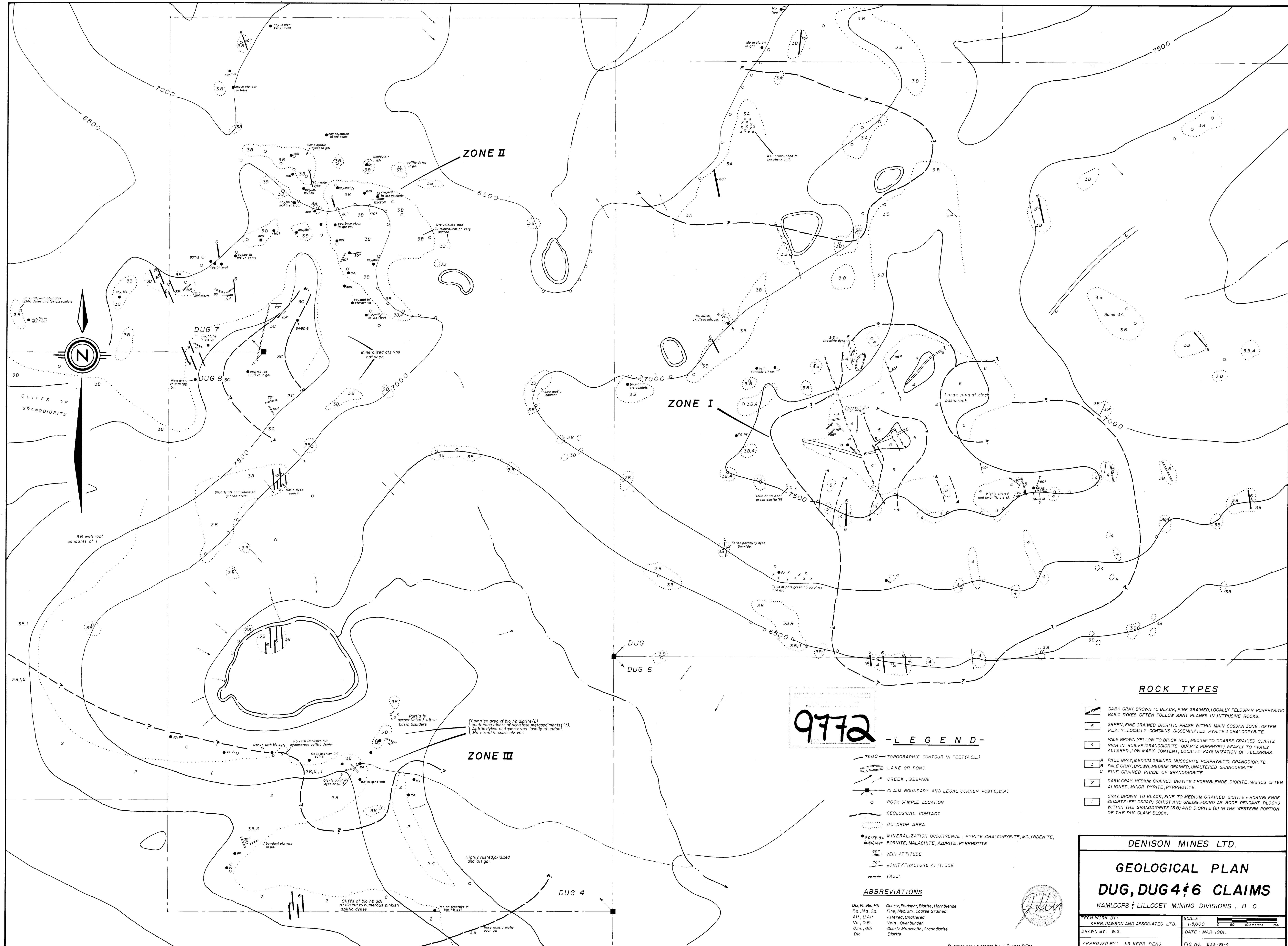


John R. Kerr, P. Eng.

GEOLOGIST

Kamloops, B. C.

November 10, 1981



9772 - LEGEND -

- 7500 - TOPOGRAPHIC CONTOUR IN FEET (A.S.L.)
- LAKE OR POND
- CREEK, SEEPAGE
- CLAIM BOUNDARY AND LEGAL CORNER POST (L.C.P.)
- ROCK SAMPLE LOCATION
- GEOLOGICAL CONTACT
- OUTCROP AREA
- MINERALIZATION OCCURRENCE: PYRITE, CHALCOPYRITE, MOLYBDENITE, BORNITE, MALACHITE, AZURITE, PYRRHOTITE
- VEIN ATTITUDE
- JOINT/FRACTURE ATTITUDE
- FAULT

- ABBREVIATIONS**
- Qtz, Fs, Bio, Hb - Quartz, Feldspar, Biotite, Hornblende
 - F.g., Mg, Cg - Fine, Medium, Coarse Grained
 - Alt., U, Alt - Altered, Unaltered
 - Vn, O, B - Vein, Overburden
 - Q.m., Gdi - Quartz Monzonite, Grandiorite
 - Dio - Diorite

ROCK TYPES

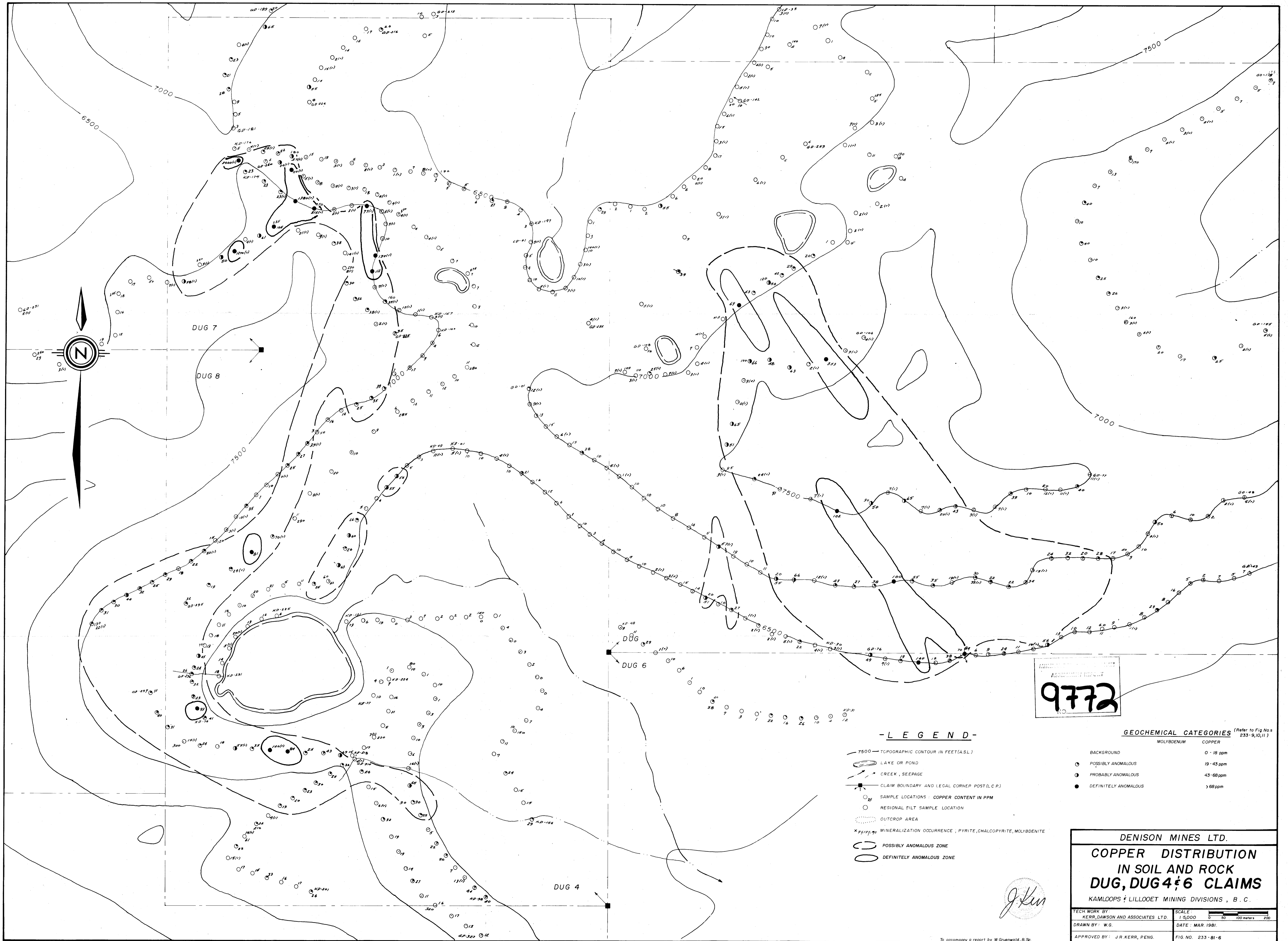
- 5 - DARK GRAY, BROWN TO BLACK, FINE GRAINED, LOCALLY FELDSPAR PORPHYRITIC BASIC DYKES. OFTEN FOLLOW JOINT PLANES IN INTRUSIVE ROCKS.
- 4 - GREEN, FINE GRAINED DIORITIC PHASE WITHIN MAIN GOSSAN ZONE. OFTEN PLATY, LOCALLY CONTAINS DISSEMINATED PYRITE ± CHALCOPYRITE.
- 3B - PALE BROWN, YELLOW TO BRICK RED, MEDIUM TO COARSE GRAINED QUARTZ RICH INTRUSIVE (GRANDIORITE - QUARTZ PORPHYRY). NEARLY TO HIGHLY ALTERED, LOW MAFIC CONTENT, LOCALLY KAGULINIZATION OF FELDSPARS.
- 3A - PALE GRAY, MEDIUM GRAINED MUSCOVITE PORPHYRITIC GRANDIORITE.
- 3B - PALE GRAY, BROWN, MEDIUM GRAINED, UNALTERED GRANDIORITE.
- 3C - FINE GRAINED PHASE OF GRANDIORITE.
- 2 - DARK GRAY, MEDIUM GRAINED BIOTITE ± HORNBLENDE DIORITE, MAFICS OFTEN ALIGNED, MINOR PYRITE, PYRRHOTITE.
- 1 - GRAY, BROWN TO BLACK, FINE TO MEDIUM GRAINED BIOTITE ± HORNBLENDE QUARTZ-FELDSPAR SCHIST AND GNEISS. FOUND AS ROOF PENDANT BLOCKS WITHIN THE GRANDIORITE (3B) AND DIORITE (2) IN THE WESTERN PORTION OF THE DUG CLAIM BLOCK.

DENISON MINES LTD.

**GEOLOGICAL PLAN
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. 233-81-4



MINING ASSOCIATION OF CANADA
 ASSOCIATION REPORT
9772
 NO.

- 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 - COPPER CONTENT IN PPM
- REGIONAL SILT SAMPLE LOCATION
- OUTCROP AREA
- MINERALIZATION OCCURRENCE; PYRITE, CHALCOPYRITE, MOLYBDENITE
- POSSIBLY ANOMALOUS ZONE
- DEFINITELY ANOMALOUS ZONE

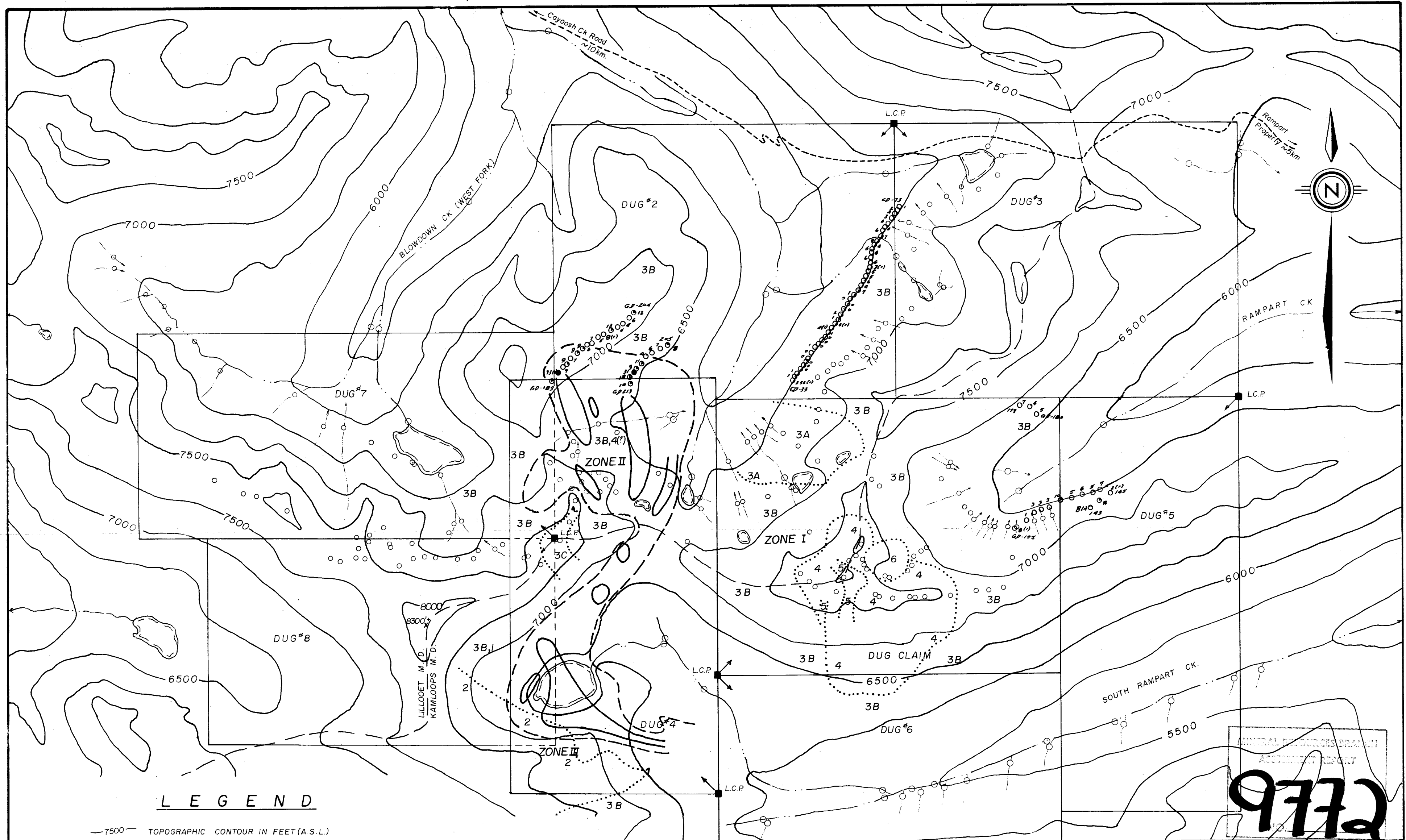
GEOCHEMICAL CATEGORIES (Refer to Fig No's 233-9,10,11)

	MOLYBDENUM	COPPER
○	0 - 18 ppm	0 - 18 ppm
○	19 - 43 ppm	19 - 43 ppm
○	43 - 68 ppm	43 - 68 ppm
●	> 68 ppm	> 68 ppm

DENISON MINES LTD.
COPPER DISTRIBUTION
IN SOIL AND ROCK
DUG, DUG 4 & 6 CLAIMS
 KAMLOOPS & LILLOOET MINING DIVISIONS, B. C.

TECH WORK BY: KERR, DAWSON AND ASSOCIATES LTD. SCALE: 1:5000
 DRAWN BY: W.G. DATE: MAR 1981.
 APPROVED BY: J.R. KERR, PENG. FIG. NO. 233-81-6

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



LEGEND

- 7500— TOPOGRAPHIC CONTOUR IN FEET (A.S.L.)
- LAKE
- CREEK, SEEPAGE
- CLAIM BOUNDARY AND LEGAL CORNER POST
- SAMPLE LOCATION (Mo CONTENT IN PPM)
- ROAD
- REGIONAL SILT SAMPLES
- * GEOCHEMICAL ASSAYS FOR EACH METAL EXPRESSED IN PARTS PER MILLION (PPM)
- POSSIBLY ANOMALOUS ZONE (Mo)
- PROBABLY ANOMALOUS ZONE (Mo)

GEOCHEMICAL CATEGORIES

BACKGROUND	0 - 7 ppm Mo
POSSIBLY ANOMALOUS	8 - 15
PROBABLY ANOMALOUS	16 - 23
DEFINITELY ANOMALOUS	> 23

Note: For rock classification refer to fig no: 233-81



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

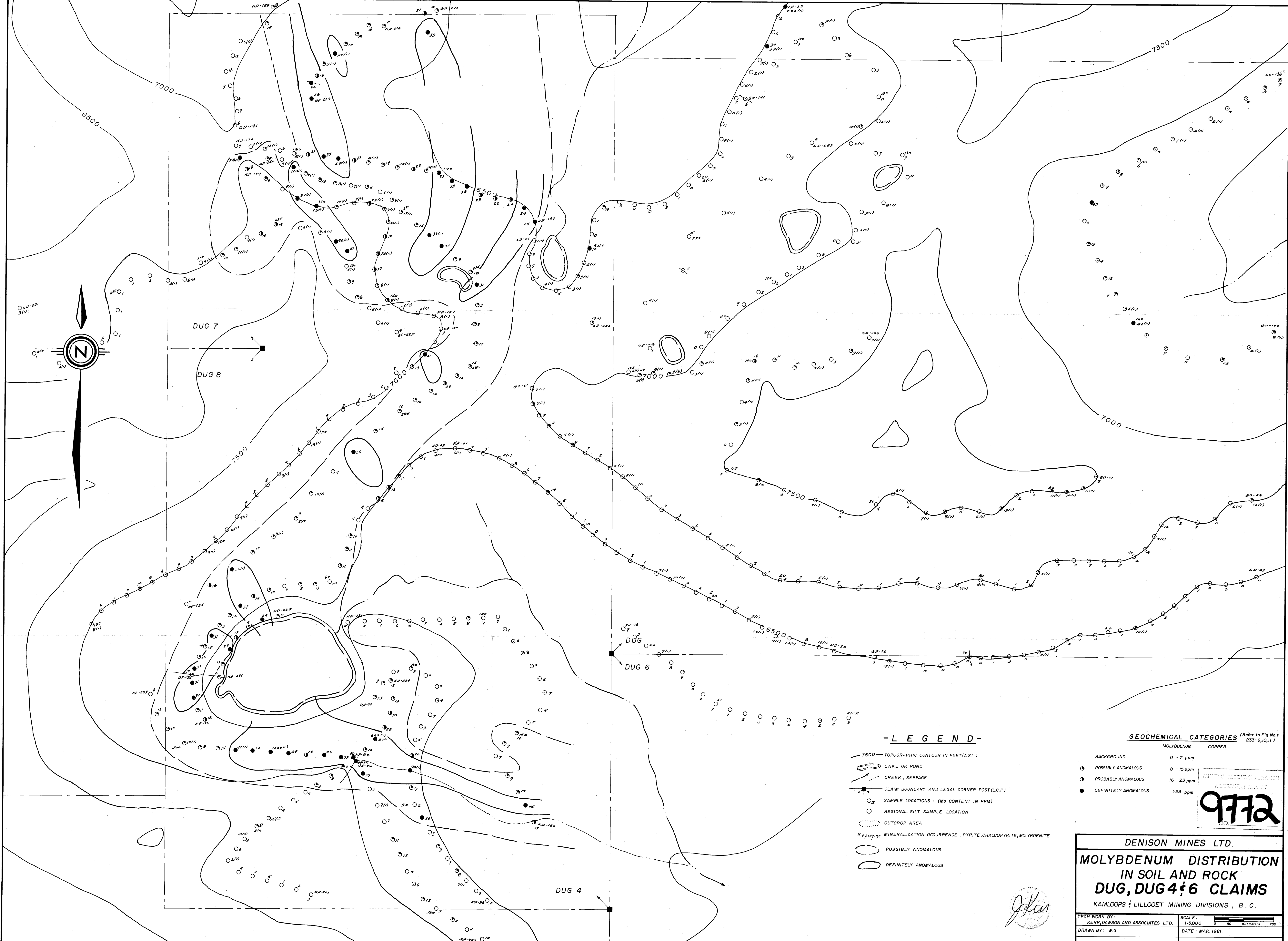
MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
9772

DENISON MINES LTD.

COMPILATION PLAN
-GENERALIZED GEOLOGY
-GEOCHEMICAL ANOMALIES
DUG CLAIMS

KAMLOOEPS & 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. 233-81-3

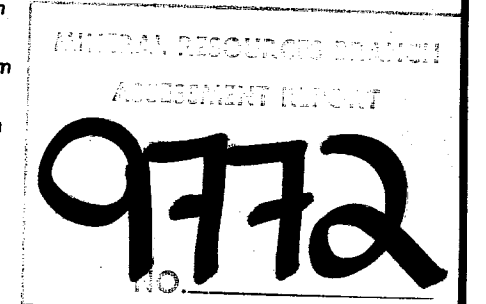


- LEGEND -

- 7500 — TOPOGRAPHIC CONTOUR IN FEET (A.S.L.)
- LAKE OR POND
- CREEK, SEEPAGE
- CLAIM BOUNDARY AND LEGAL CORNER POST (L.C.P.)
- ₂₂ SAMPLE LOCATIONS: (Mo CONTENT IN PPM)
- REGIONAL SILT SAMPLE LOCATION
- OUTCROP AREA
- x pyrrhotite MINERALIZATION OCCURRENCE: PYRITE, CHALCOPYRITE, MOLYBDENITE
- POSSIBLY ANOMALOUS
- DEFINITELY ANOMALOUS

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

	MOLYBDENUM	COPPER
BACKGROUND	0 - 7 ppm	
● POSSIBLY ANOMALOUS	8 - 15 ppm	
● PROBABLY ANOMALOUS	16 - 23 ppm	
● DEFINITELY ANOMALOUS	>23 ppm	



DENISON MINES LTD.
MOLYBDENUM DISTRIBUTION
IN SOIL AND ROCK
DUG, DUG 4 & DUG 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. 233-81-5



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