

9328

GEOCHEMICAL REPORT
ON THE DUNN CREEK PROPERTY

GOLDEN DUCHESS #1 to 4 Mineral Claims
GOLDEN PRINCESS #1 to 8 Mineral Claims
GOLDEN QUEEN #1 to 6 Mineral Claims

NTS 92 P/8E

Lat. $51^{\circ}30.5'N$ Long. $120^{\circ}02'W$

KAMLOOPS MINING DIVISION

OWNER:

S. J. Courte
E. Montgomery
B. Price

OPERATOR:

J.M.T. Services Corp.
8827 Hudson Street
Vancouver, B.C.

and

E & B. Explorations Ltd.
#1440 - 800 West Pender Street
Vancouver, B.C.

WRITTEN BY:

W. A. Howell
J.M.T. Services Corp.
8827 Hudson Street
Vancouver, B.C.

SUMMARY

A molybdenum/tungsten anomalous area has been identified within biotite-quartz monzonite of the Baldy batholith. Prospecting has shown the rocks to contain minor molybdenite, but lacks general indication of a porphyry type deposit. Tungsten mineralization was not recognized. Rock exposures are such as to eliminate most of the property from an exploration potential. The anomalies are not conclusively explained.

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INTRODUCTION

The Dunn Creek property was staked in early June 1980 as a result of data released by the B. C. Ministry of Mines as part of the 1980 Regional Stream Sediment Survey. A total of 384 analyses were completed on 119 samples collected.

LOCATION AND ACCESS

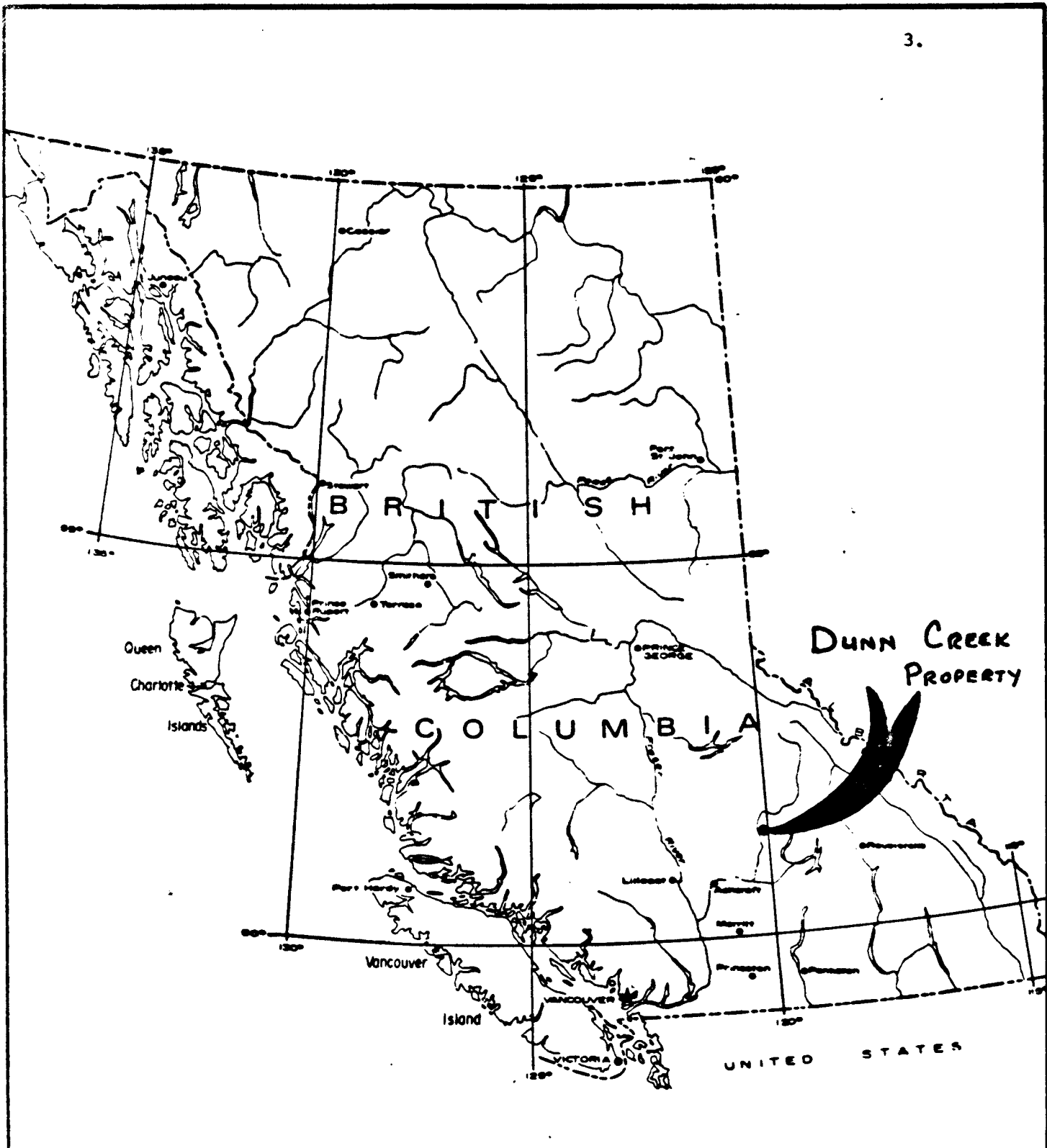
A total of 18 two post claims are located on the upper portion of Dunn Creek between elevations of approximately 4500 feet and 6000 feet or 1350 m and 1850 m and situated in the Kamloops mining district on N.T.S. sheet 92 P/8E. The geographic location is latitude $51^{\circ} 30.5'N$, longitude $120^{\circ} 02'W$. The claim locations are shown on Fig. 2 and 3.

Access to the property was achieved either by helicopter to upper Dunn Creek where work was carried out from a small camp, or by hiking from the end of an old road up Dunn Creek. Access to the area may be possible by hiking from existing logging roads south of the headwaters of Dunn Creek. The feasibility of the latter has not been ascertained by the writer.

MINERAL CLAIMS

The located mineral claims are the Golden Queen, Golden Princess, and Golden Duchess claims. All were located as two post claims, the claim record information is as follows:

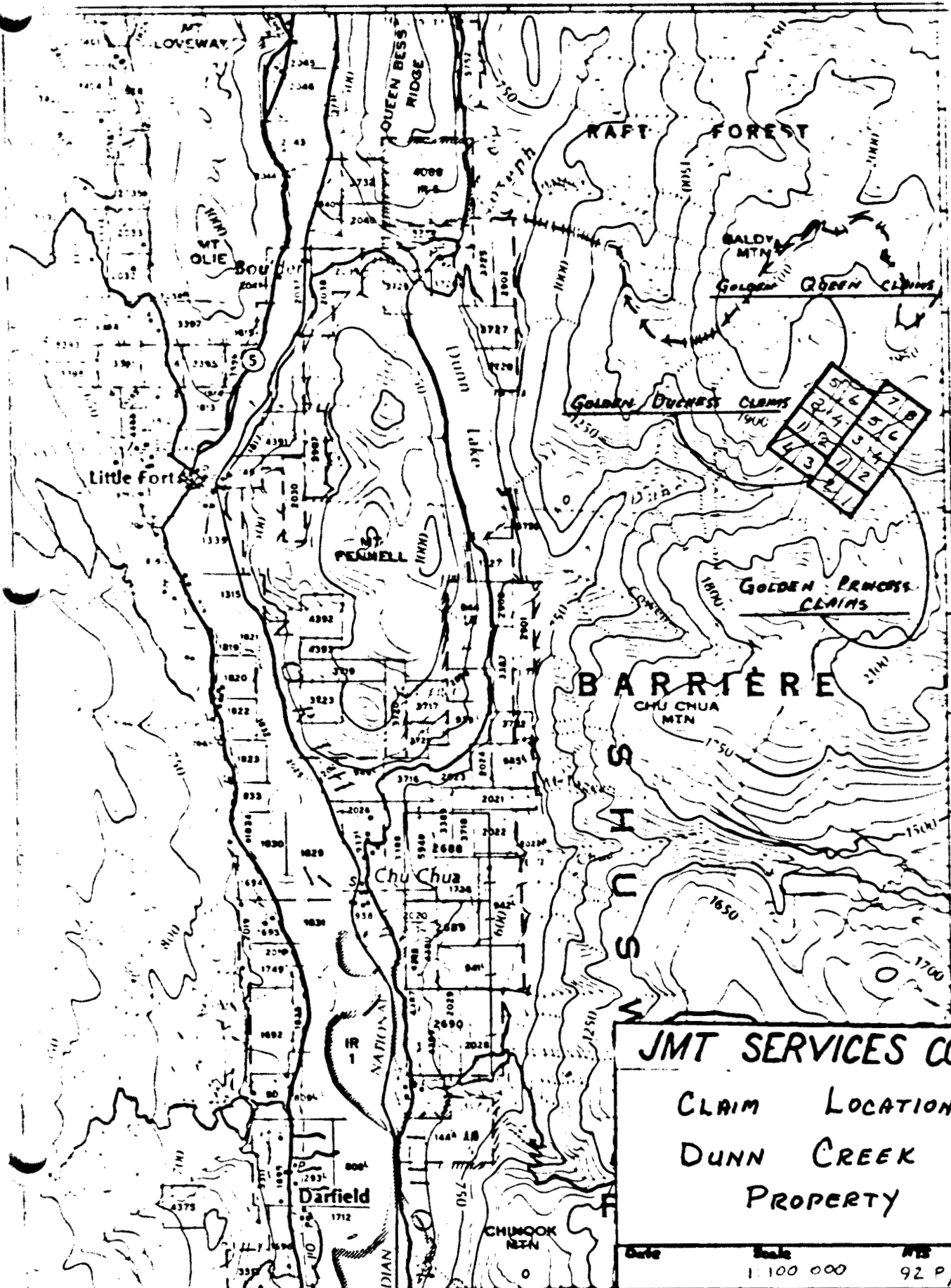
<u>CLAIM NAME</u>	<u>RECORD NUMBER</u>	<u>RECORD DATE</u>
Golden Duchess #1	2778	July 4, 1980
#2	2779	"
#3	2780	"
#4	2781	"



J M T SERVICES CORP.			
Fig 1			
PROPERTY LOCATION MAP			
SCALE			
Mile 1:36		136 Mile	
Prepared by:	Date:	NTS MAP AREA	DRAWING No.
Drawn by:	Revised:		

Clearwater - 25 km To Clearwater

120° 30'
51° 30'



JMT SERVICES CORP.

CLAIM LOCATIONS

DUNN CREEK

PROPERTY

Fig 2

Date	Scale	N/S
	1:100 000	92 P/se

LIST OF CLAIMS

<u>CLAIM NAME</u>	<u>RECORD NUMBER</u>	<u>RECORD DATE</u>
Golden Queen #1	2782	July 4, 1980
#2	2783	"
#3	2784	"
#4	2785	"
#5	2786	"
#6	2787	"
Golden Princess #1	2788	July 4, 1980
#2	2789	"
#3	2790	"
#4	2791	"
#5	2792	"
#6	2793	"
#7	2794	"
#8	2795	"

The owner of record of the GOLDEN DUCHESS CLAIMS is Mr. S. J. Courte, 6889 Kamloops Street, Powell River, B.C.

The owner of record of the GOLDEN QUEEN CLAIMS is Mr. Barry Price, 2121 West 5th Avenue, Vancouver, B.C.

The owner of record of the GOLDEN PRINCESS CLAIMS Mr. E. Montgomery, c/o J. M. T. Services, 8827 Hudson Street, Vancouver, B.C.

TOPOGRAPHY AND VEGETATION

Dunn Creek flows through a deeply incised valley between Baldy Mountain to the north (el 7400' +) or (2250 m+) and unnamed 7300' (2200 m) mountains to the south. Dunn Lake (el 1450' or 440 m) lies at the base of Baldy Mountain and discharges into the North Thompson River (el 1250' or 380 m). The local regional relief is thus, approximately 6200 feet (or 1900 metres). Slopes range from moderate or steeply wooded and forested, to cliffs with little or no vegetation. Except for major valleys (generally north-south) the stream gradients (eg Dunn Creek) are approximately 200 m/km

Tree line at this latitude is approximately 6500' (1980 m). Above that elevation scrub and creeping forms of conifer trees quickly give way to alpine grasses and shrubs. Below that elevation, the scrub conifers yield to the true fir or balsam which is progressively more lush at lower elevations. On the less steep slopes where not modified by fire or agriculture, the forests develop into marketable timber. Logging and saw mill operations

utilizing local fir, pine, and cedar species contribute significantly to the local and provincial economies.

GEOLOGY

General

The regional geology is described in "Geology of Bonaparte Lake Map Area British Columbia" by R. B. Campbell and H. W. Tipper, Geological Survey of Canada Memoir 363. Included in the publication is a geological map (map 1278A) at a scale of 1:250,000.

The Dunn Creek property is on the eastern edge of the map area and is shown as being underlain by Cretaceous intrusive rocks of the Baldy batholith.

"Most of the rocks of...Baldy batholith are granodiorite or quartz monzonite...with a preponderance of biotite over hornblende ... the rocks are distinctly porphyritic with pinkish somewhat rectangular potash feldspar phenocrysts up to 1 cm long that are common though not ubiquitous..."

The claims are located close to the margin of the batholith (which measures approximately 40 km long by 24 km wide). Rocks contacting the batholith along the western margin are depicted as belonging to the Fennel formation which is composed of Mississippian and/or later, pillow lava/flows, greenstone, foliated greenstone, greenschists, argillite, chert, minor amphibolite, limestone, breccia.

The Fennel formation has been actively prospected for base and precious metals since the early part of the century. As early as 1916 gold had been discovered on the Windpass claim located about 3km N.W. of the Dunn Creek property. More recently, a significant prospect for massive sulphides has been developed about 7 km S.W. of the Dunn Creek property.

PROPERTY MINERALIZATION AND ALTERATION

The claims cover an area underlain by intrusive rocks which meet very closely with the general description of the batholith provided by Campbell and Tipper in Mem. 363.

Within the claim block, Dunn Creek divides into 2 major branches. A gossan of rusty, clay altered quartz-monzonite is exposed on the north side of the north fork near the junction. Most sulphides have been weathered out of the surficial rocks at this point but fine pyrite is suggested by the nature of the weathered remanent material. Minor molybdenite associated with quartz veining was also found in south fork exposures further upstream of the gossan area.

Mapping of the property has been confined to basic prospecting and sampling. Rock exposures are fairly abundant throughout the property except for an area of cover adjacent to the junction of the south and north forks of Dunn Creek. With the exception of the small gossanous zone previously mentioned, all outcroppings were of relatively fresh looking, medium to coarse granular and porphyritic biotite quartz monzonite. The minor molybdenite was found in widely spaced small quartz veinlets or stringers on the north side of the south fork in the area north and east of the camp location.

Little or no alteration effects were noted associated with the minor quartz veins.

GEOCHEMISTRY

General

Attention was drawn to the area as a result of data released by the B. C. Ministry of Mines in early June 1980 as part of the Regional Accelerated Geochemical Survey Program. Sample No. 5288, a silt originating from the south fork drainage near the junction responded with values for Mo = 57 ppm, W = 9 ppm, Mn = 2600 ppm. These values in silts over intrusive rocks of quartz monzonitic composition are considered significant. On this basis and the presence of a visually obvious gossan, the 18 two post claims were located. Subsequent prospecting and geochemical sampling was carried out, a total of 103 soil samples and 16 rock samples were analysed variably for Cu, Mo, W, Sn, F, Pb, Zn, Mn, Ag., that is, not every sample was analysed for every element. A total of 384 analyses were performed.

The samples were collected on widely spaced traverses established by chain and compass, air photos and topographic maps. In this manner, maximum exposure was enjoyed without the rigours and restrictions of commonly used grid techniques.

Soil samples were collected from the B horizon or the best developed mineral precipitate or mineral soil available. Sample sites were excavated using a hand pick or grub hoe to a depth of 30 - 50 cm and a suitable sample collected using a stainless steel spoon or scoop. Care was taken to try and ensure an adequate sized sample for a multitude of analyses.

The bagged sample was shipped to Chemex Labs Ltd., 212 Brooksbank Avenue, North Vancouver, B.C. for drying, sieving and analysis of the -80 mesh fraction.

In the case of rock samples, the sample was placed in a kraft paper bag and shipped to Chemex as were the soils. The rock samples were crushed in a ring grinder to approximately - 100 mesh. The -100 mesh fraction was then analysed for the appropriate elements.

DISCUSSION AND CONCLUSION

The bulk of the samples were analysed for molybdenum and tungsten. Selected samples or groups of samples were also analysed for one or multiples of copper, zinc, lead, silver, manganese, fluorine, and tin

In all cases, the sample populations are far too small to apply rigorous statistical analysis of the results. Even basic statistical analysis should not be applied to very small populations. The reader is referred to Hawkes and Webb (Geochemistry in Mineral Exploration, Harper and Row 1969) pp 359-377 for average crustial abundances in those cases where samples populations are very small.

ELEMENTS

Copper, molybdenum, lead, zinc, silver, and manganese were treated with a perchloric-nitric acid extraction process and analysed by commonly used atomic absorption analytical techniques.

Fluorine analyses were completed using a carbonate fusion with a standard specific ion extraction finish.

Tin was analysed using an ammonium iodide sublimate on a 1 gram sample, TOPO MIDK extraction with routine AA finish in N_2O acetylene flame.

Tungsten was analysed using a pyrosulphate fusion on 0.5 gm sample, concentrated HCl leach of the melt, amyl acetate 3, 4 di thio extraction with colorimetric finish.

Lead and silver analyses were all background corrected.

Tin - Fourteen samples were analysed for tin, all values were at or close to the lower detection limit no significant response was encountered.

Fluorine - Fourteen samples were analysed for fluorine, geochemical values ranged from 110 to 500 ppm. Hawkes and Webb quote an average felsic igneous rocks content to be 800 ppm, and an average soil content to be 200 ppm. No significant response was encountered.

Manganese - Fourteen samples were analysed for manganese. Values ranged from 50 to 2400 ppm. Hawkes and Webb list an average felsic rock content of 600 ppm. An average 200 - 3000 ppm is listed for soils. No significant response was encountered.

Silver - Fourteen samples were analysed for silver. All samples reported .1 ppm values except one which was .2 ppm. The lower detection limit for silver is .1 ppm. No significant response was detected.

Lead - Fourteen samples were analysed for lead. Values ranged from 6 ppm to 40 ppm. Hawkes and Webb list an average of 48 ppm for felsic rocks and an range of 2 to 200 ppm for soils. No significant response was encountered.

Zinc - Thirty-three samples were analysed for zinc. Values ranged from 4 ppm to 70 ppm plus one sample of 630 ppm. Hawkes and Webb list an average felsic rock content of 60 ppm and a soil range of 10 - 300 ppm. One sample of 630 ppm is considered anomalous.

Copper - Forty-three samples were analysed for copper. Values ranged from 1 to 22 ppm. Hawkes and Webb list an average felsic rock content of 30 ppm and a soil range of 2 to 100 ppm. No significant copper response was encountered.

Molybdenum - 119 Samples were analysed for molybdenum. Values ranged from 1 ppm to 250 ppm (the upper limit of geochemical analytic reliability) Hawkes and Webb list an average felsic rock content of 1.9 ppm and a soil range of 0.2 to 5 ppm. Personal experience by the writer in similar terranes to the Dunn Creek property lead to the assumption that Mo soil values in excess of 10 ppm are significant. Forty-six soil samples analysed 10 ppm or greater. Results are shown on Fig. 4 enclosed in the pocket of this report.

Tungsten - 110 samples were analysed for tungsten. Values ranged from 1 ppm to 350 ppm. Hawkes and Webb list an average of 2 ppm for igneous rocks with no listing for soil content. Limited personal experience by the writer indicate that values and consideration similar to molybdenum apply for tungsten, however, it is probably less mobile under ordinary conditions than is molybdenum. Forty-one soil samples had values greater than 10 ppm. The geochemical results are depicted on Fig. 5 enclosed in the pocket of this report.

With the exception of molybdenum and tungsten, the geochemical response of the other elements is not considered exceptional or significant. The values are plotted on Fig. 6 which is enclosed in the pocket of this report.

The presence of significant anomalous geochemical values for molybdenum and tungsten lose considerable significance when the degree and amount of unaltered rock exposed is taken into account. The anomalies,

however, remain largely unexplained.

RECOMMENDATIONS

Detailed prospecting/geological mapping in conjunction with further sampling in the area south of the gossan and northeast of the lakes periferal to the swampy covered region is required to determine the possibility of a porphyry style system being present in that area.

APPENDIX I

STATEMENT OF QUALIFICATIONS

I, **WILLIAM A. HOWELL**, do hereby certify that:

1. I am a professional geologist working in British Columbia and residing at 10611 Ainsworth Crescent, Richmond, B.C. V7A 3V5
2. I am a graduate of the University of British Columbia, Bachelor of Science (Geology) 1971
3. I have been employed in the mineral exploration industry since 1967 and have practiced my profession as a geologist since 1971.
4. I am a member of the Geological Association of Canada.
5. This report is based on my personal knowledge of the district and the mapping and sampling done on the property.



William A. Howell

July 1981

STATEMENT OF COSTS

DUNN GROUP

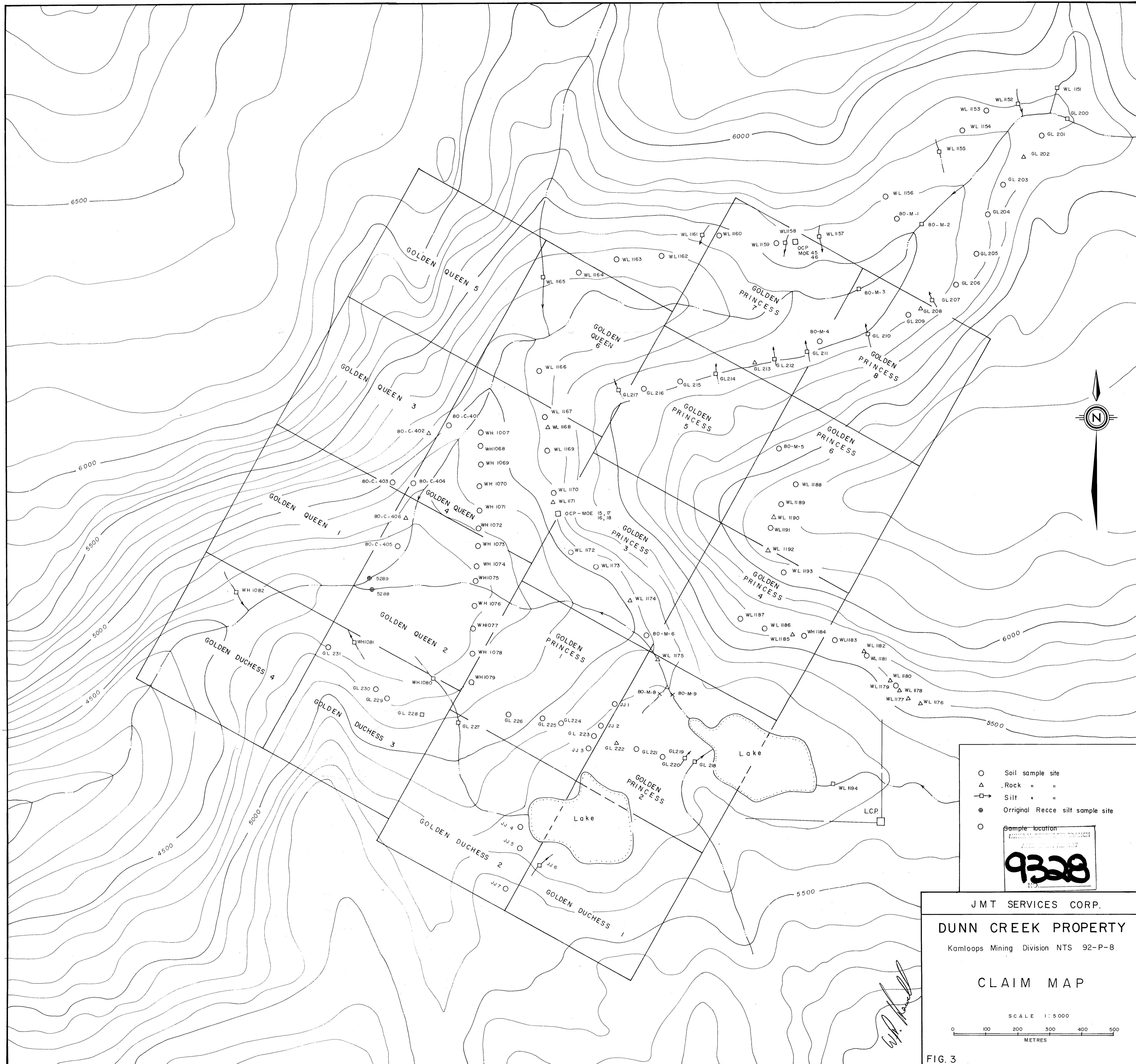
GOLDEN QUEEN 1-6; GOLDEN PRINCESS 1-8; GOLDEN DUCHESS 1-4 MINERAL CLAIMS

PERSONNEL

K. W. Livingstone - Oct. 2,5,6,7,8	5 days @ \$175	\$875.00
W.A. Howell - Oct 16,17,18,19	4 days @ \$175	700.00
G.Lauzon, Assist. - Oct. 4,5,6,7,8	4 days @ \$90	360.00

DISBURSEMENTS

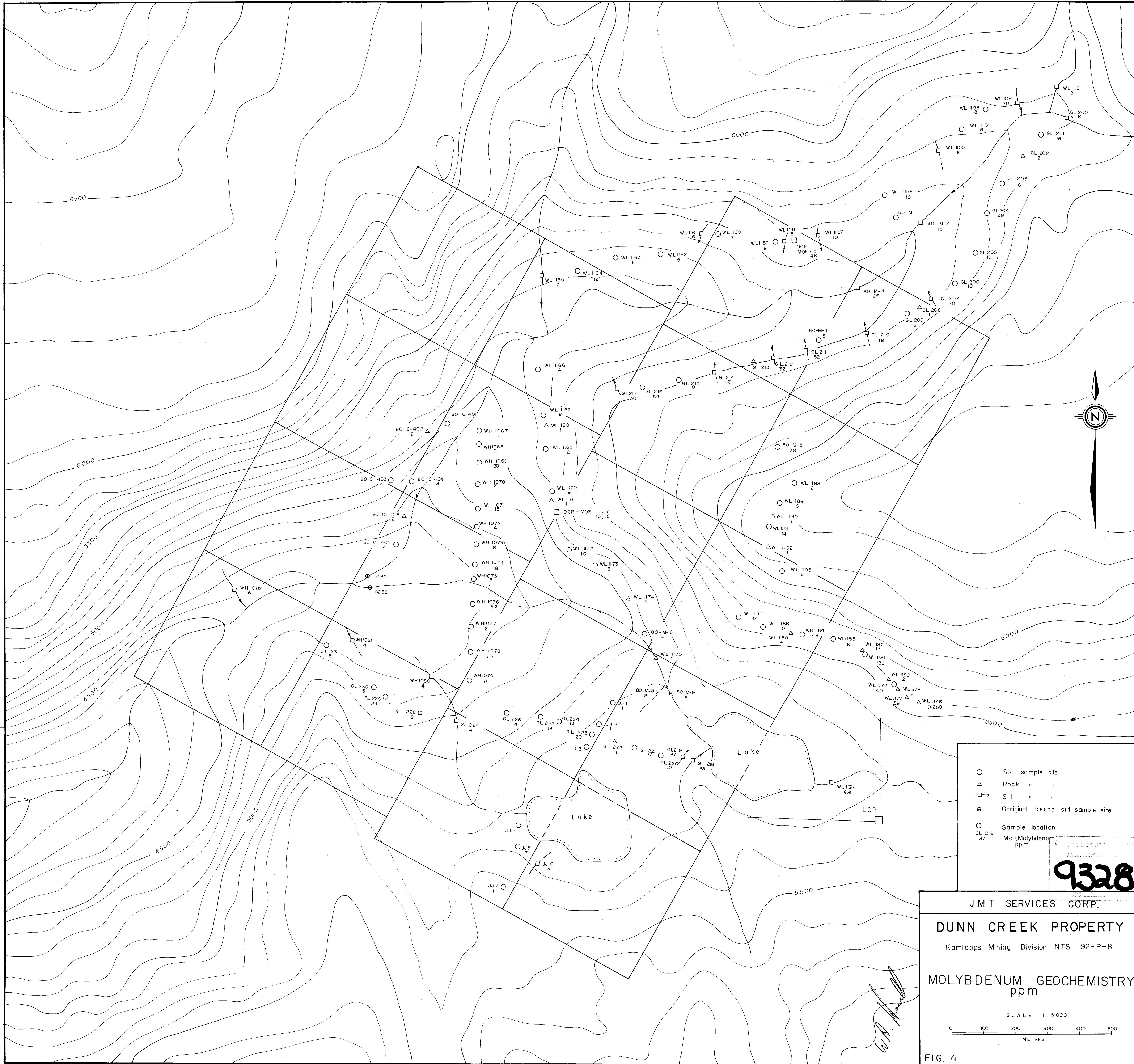
Okanagan Helicopter #H17475	895.95
Truck Rental	275.58
Chemex Labs - #40443,40293,39838,39843,39837	907.61
Airfares - Vancouver-Kamloops	218.57
P.W.A.Freight - #5812G, 1451F	83.60
Vancal Reproductions #85465,85507	49.78
Drafting Base Maps	214.50
K.W.Livingstone - Expenses	81.84
G.S.Lauzon - Expenses	31.95
W.A.Howell - Expenses	198.57
Report and final maps	<u>750.00</u>
	<u>\$5,642.95</u>



○ Soil sample site
 △ Rock " "
 □→ Silt " "
 ⊙ Original Recce silt sample site
 ○ Sample location
 9328
 NO.

JMT SERVICES CORP.
 DUNN CREEK PROPERTY
 Kamloops Mining Division NTS 92-P-8.
 CLAIM MAP
 SCALE 1:5000
 0 100 200 300 400 500
 METRES

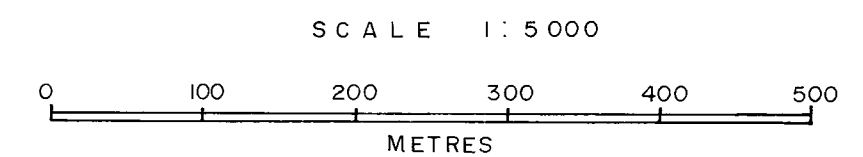
FIG. 3



- Soil sample site
- △ Rock " "
- Silt " "
- ⊙ Original Recce silt sample site
- Sample location
GL 219
Mo (Molybdenum)
ppm

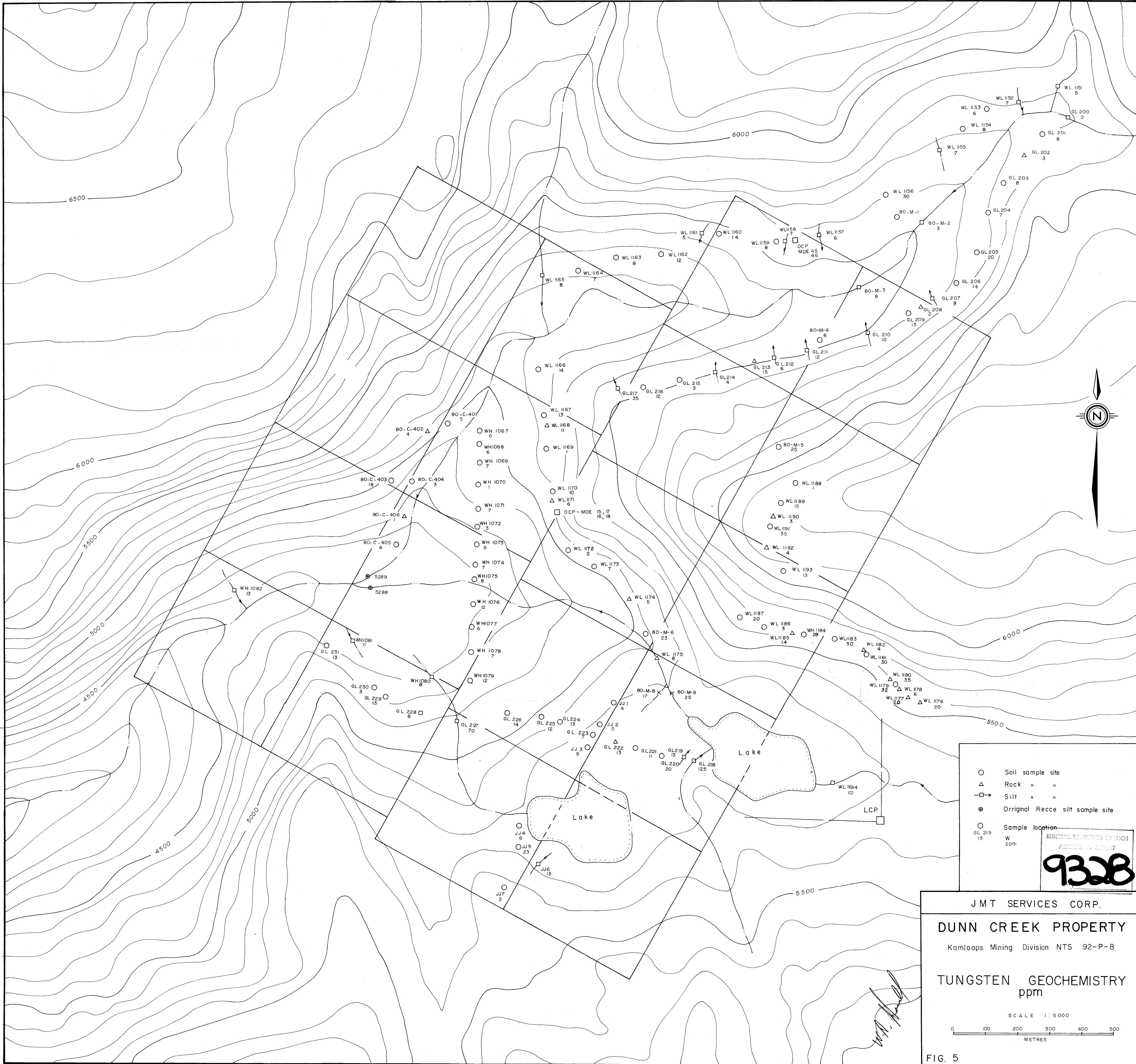
9328

JMT SERVICES CORP.
DUNN CREEK PROPERTY
 Kamloops Mining Division NTS 92-P-8
MOLYBDENUM GEOCHEMISTRY
 ppm



W.A. [Signature]

FIG. 4



○	Soil sample site
△	Rock " "
□	Silt " "
⊙	Original RECCE silt sample site
○	Sample location
GL 219	W
13	ppm

MINIMUM REQUIREMENTS TO OBTAIN ACCESS TO ADJACENT

9328

JMT SERVICES CORP.

DUNN CREEK PROPERTY

Kamloops Mining Division NTS 92-P-8

TUNGSTEN GEOCHEMISTRY

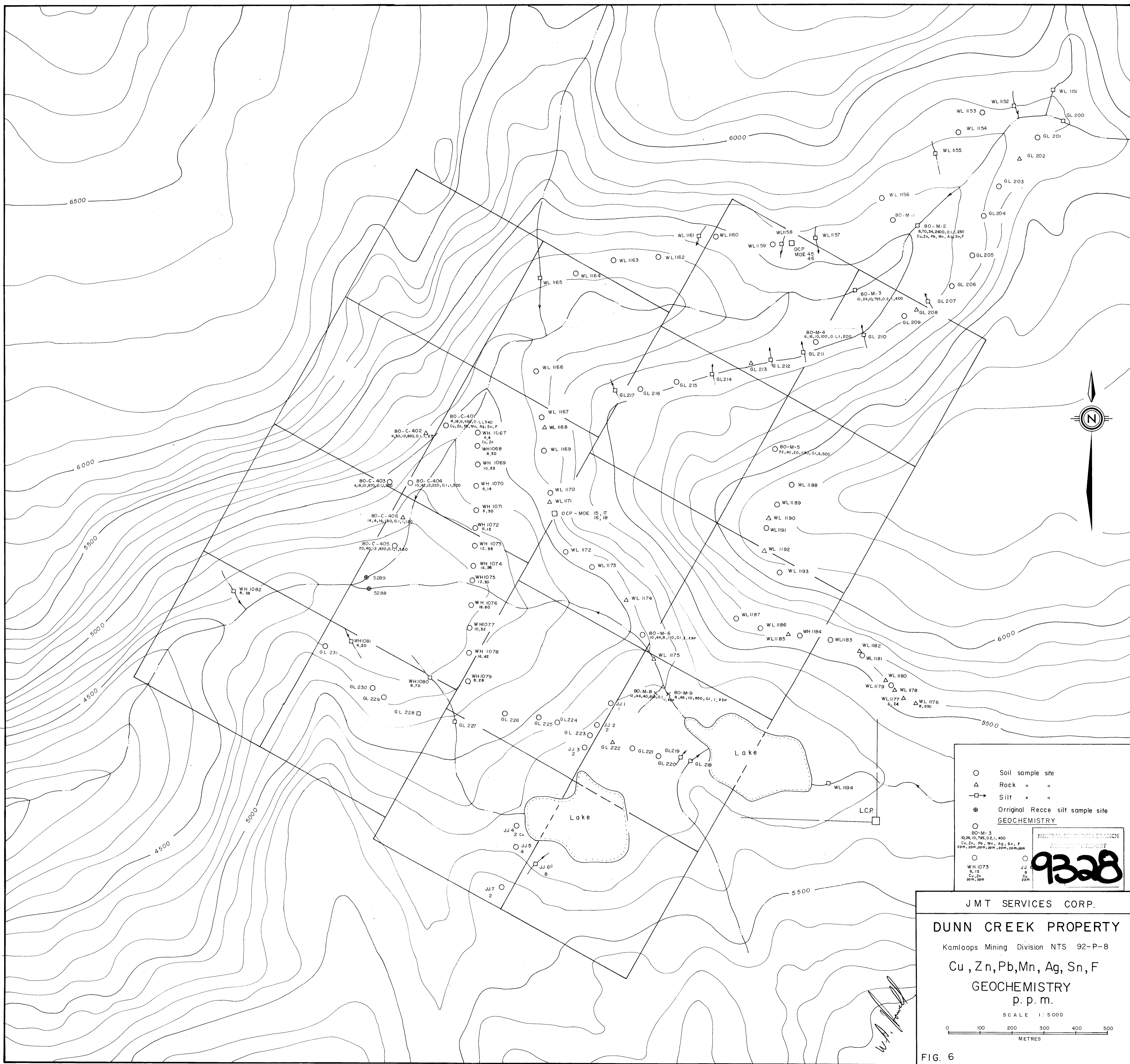
ppm

SCALE 1:5000

0 100 200 300 400 500 METRES

W.A. [Signature]

FIG. 5



○ Soil sample site
 △ Rock " "
 □ Silt " "
 ⊙ Original Recce silt sample site
 ○ GEOCHEMISTRY
 ○ 80-M-3
 10,24,10,795,0.1,1,400
 Cu, Zn, Pb, Mn, Ag, Sn, F
 ppm, ppm, ppm, ppm, ppm, ppm, ppm
 ○ WH 1073
 5.12
 Cu, Zn
 ppm, ppm
 ○ JJ 8
 Cu
 ppm
9328

JMT SERVICES CORP.
DUNN CREEK PROPERTY
 Kamloops Mining Division NTS 92-P-8
 Cu, Zn, Pb, Mn, Ag, Sn, F
GEOCHEMISTRY
 p. p. m.
 SCALE 1:5000
 0 100 200 300 400 500
 METRES

W.A. Powell

FIG. 6