

81-71137-9921  
Assessment Report

A Report on the Geology of the  
Koots 1, Sean 1, Windy 1 Claims

Denison Mines Limited  
November, 1981



A REPORT ON THE GEOLOGY OF THE  
KOOTS 1, SEAN 1, WINDY 1 CLAIMS

N.T.S. 930/3W

Latitude: 55°06'41" North

Longitude: 123°23'47" West

CARIBOO MINING DIVISION

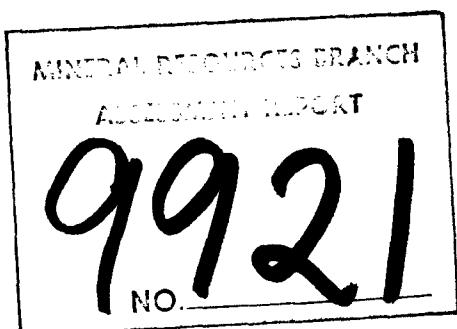
by

R.L. Faulkner B.Sc.

Owner: Denison Mines Limited

Operator: Denison Mines Limited

November, 1981



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MAPS

- |     |                                       |            |
|-----|---------------------------------------|------------|
| 1.  | British Columbia Location Map         |            |
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| 3.  | Koots Group Geology Map               | Map Pocket |
| 4.  | Soil Sample Locations and Trenches    | "          |
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| 6.  | Plot of W Soil Geochemistry           | "          |
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FIGURES

Figure 1      Diagram of Trench 1, Trench 2, and Trench 3

APPENDIX

Appendix I   Certificates of Analysis

## I INTRODUCTION

1.

### 1. GENERAL

#### 1.1 History

Denison Mines Limited staked the Koots Group of Claims in 1980. During the 1980 field season, preliminary geological mapping at a scale of 1:10,000 was undertaken on the Koots 1 Claim and vicinity. Also, a geochemical soil sampling program comprised of 46 samples in conjunction with a ground magnetometer survey of 4.5 kilometres was done.

#### 1.2 Summary of Work Done

During 1981, geological mapping at a scale of 1:5,000 was done on the Koots Group. A geochemical soil sampling program of 650 samples and a ground magnetometer survey of 31.5 kilometres were done. Follow up consisted of 3 trenches from which 7 channel samples were taken.

The field work was carried out by geologists Mr. R. Faulkner and Mr. R. Helgason, assisted by Mr. R. Cornock and Mr. J. Hayden.

### 2. LOCATION AND ACCESS

Situated within the Wolverine Range between the Nation and Parsnip Rivers, the Koots 1 Claim is 35 kilometres southwest of Mackenzie, British Columbia (Map 1). Access is by helicopter from Mackenzie or, by truck, along the Philips Creek logging road, 45 kilometres from Highway 97. This road comes to within 4 kilometres of the claim.

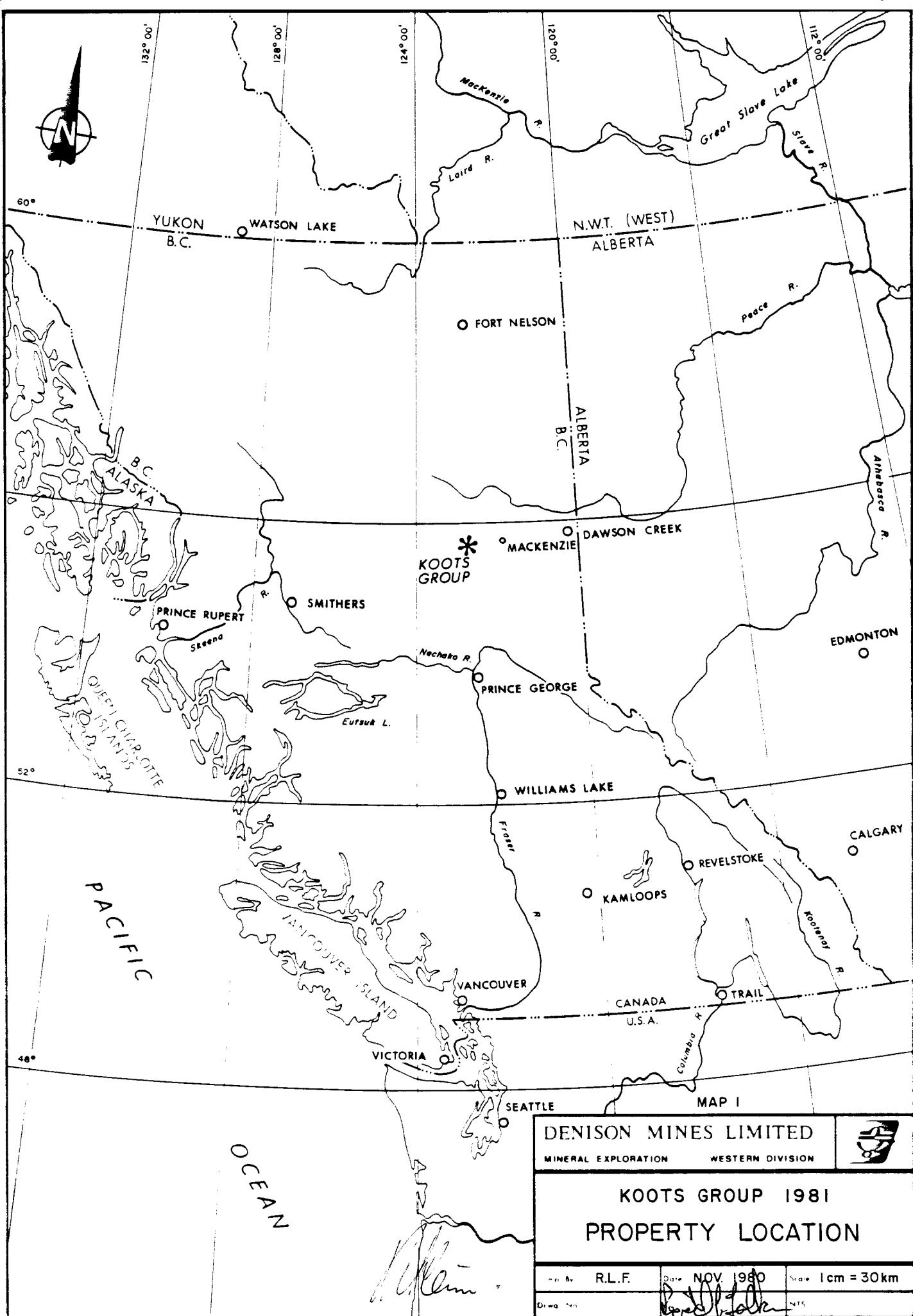
### 3. TOPOGRAPHY AND VEGETATION

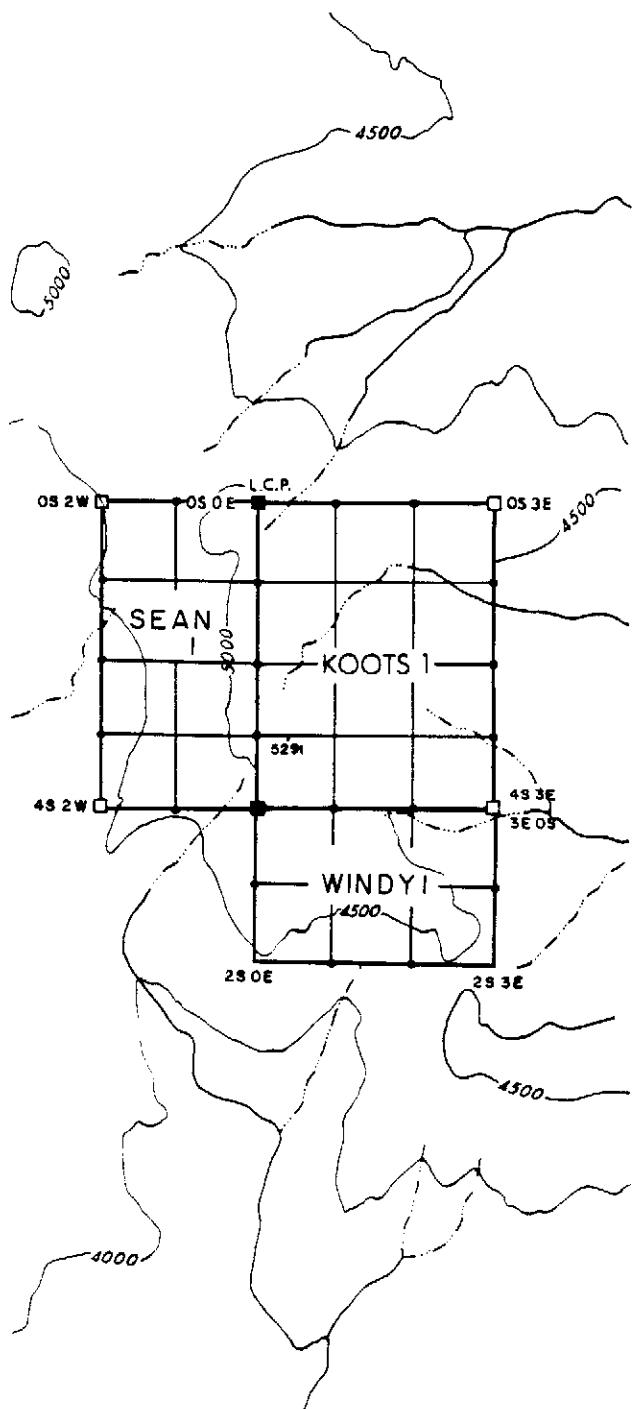
The rolling hills and rounded mountains of the Wolverine Range rise from the undulating lowlands of the Interior Plateau. Elevations vary from 1000 metres in the low wetlands, through rolling hills to mountains of 2000 metres. The Koots 1 Claim lies between 1200 metres and 1600 metres, straddling one of the mountain ridges.

Vegetation is locally quite variable but characterized by white spruce, lodgepole pine and trembling aspen. Black spruce grows in low wetlands, with alpine fir at the higher, more exposed elevations. Cedars, birches, and alders occur on the slopes of the hills and mountains. Grasses, wild parsnip and oregon grape are found in the undergrowth and on open slopes.

### 4. Claims: (Map 2)

Name	No. of Units	Record No.	Month of Record
Koots 1	12	1719	June, 1980
Sean 1	8	1720	June, 1980
Windy 1	6	1718	June, 1980





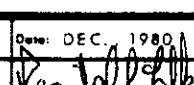
#### LEGEND

- Legal Corner Post
- Corner Post
- 49 0E Corner Post Identification Number
- Intermediate Post
- Outer Claim Boundary
- Inner Unit Boundary
- - Stream

L.C.P. Latitude 55° 06' 41" Longitude 123° 23' 47"

SCALE  
0.5 0 0.5 1.0 1.5 Kilometres  
CONTOUR INTERVAL 500 FEET

MAP 2

DENISON MINES LIMITED			
MINERAL EXPLORATION		WESTERN DIVISION	
KOUTS GROUP 1981			
Claim Location			
Comp. Dr: RLF	Date: DEC. 1980	Scale: 1: 50,000	
Drawn: No			NTS: 93 D / 3W

## 1. REGIONAL GEOLOGY

The Wolverine Range is a northwesterly trending ridge of metamorphic and sedimentary rocks. The rocks of the Wolverine Metamorphic Complex consist of granitoid gneiss, pegmatite, schist, amphibolite and quartzite. Andesitic volcanics, greenstone, argillite, shale and limestone of Upper Paleozoic and younger or older rocks are interwoven with the metamorphic rocks. Minor intrusions of Cretaceous and/or Tertiary age occur, consisting of small stocks of coarse grained granitic and/or granodioritic material.

## 2. LOCAL GEOLOGY

### 2.1 Description

The Koots Group is underlain by a Cretaceous and/or Tertiary stock which intruded and metamorphosed marine sediments of Upper Paleozoic and younger or older age. During emplacement, the granite intrusion created a contact metamorphic gradient which decreases rapidly from the stock. In sharp contact with the intrusive, skarns, within tens of metres, grade into coarse then fine grained, recrystallized limestone. In gradient contact with the stock, gneisses and schists, in a few metres, grade to pervasively silicified argillite and phyllitic argillite. Emplacement of the granitic intrusion appears to be associated with a northerly trending fault system (Map 3).

The main faulting of the areal rocks is a high angle normal fault set trending northeast-southwest. Three faults make up the set and cut the north central, central and southeast sections of the property. A small high angle dip slip fault is thought to be transverse to the main faulting.

The Cretaceous and/or Tertiary intrusion grades southwards from coarse grained quartz monzonite-granodiorite through medium grained quartz monzonite into granular granites, then to fine to medium grained alaskites. The quartz monzonite-granodiorite contains 20% quartz, 65% combined feldspars and 15% biotite and hornblende. The granite is equigranular, with 40% quartz, 40% orthoclase, 10-15% plagioclase and 5% biotite and hornblende. The alaskite contains 40% quartz, up to 60% combined feldspars and less than 1% mafic minerals.

Finer grained equivalents of the intrusives occur as dykes, sills, and aplites in the stock and the surrounding metamorphosed sediments. In contrast, large crystals of quartz, feldspars, and micas occur in pods throughout the stock. Quartz veining and pods of quartz, centimetres in size, are found in the metamorphosed sediments and less frequently within the granitic material. The intrusive is well fractured and jointed with northeast as the preferred direction. Locally in the western segment of the stock the rocks are slightly porphyritic with a slight chloritic alteration.

Calc-silicate skarns are in sharp contact with the stock, and in gradational contact with metasomatized shales. In both cases the contact skarn is fine grained, highly siliceous and light green, diopside skarn. These skarns are from a few centimetres to metres thick. The outer skarn is generally dark green to brown, highly crystalline, inhomogeneous and garnetiferous. Thicknesses range from a few centimetres to tens of metres. This type of skarn can contain massive sulphides.

In sharp contact with the calc-silicate skarns are recrystallized limestones. They are generally coarse grained, dirty grey, banded, with the occasional carbonate vein, but no visible metallic mineralization. Bedding is visible but distorted. Thicknesses are generally in the order of tens of meters.

A gradational contact occurs between the stock and metamorphosed shales. The intrusive rocks become coarser grained with an increase in mafic content further into the contact zone. These rocks grade through slightly foliated gneisses into schists. This gradation or contact zone is only a few metres thick. Metasomatism seems to have effected the country rock for a few metres from the contact zone, giving rise to siliceous and micaceous skarn. From this point low grade pervasive metamorphism created siliceous and phyllitic argillites.

Sulphide minerals occur throughout the intrusives and meta-sediments. Pyrrhotite is dominant and pervasive in both rock types as fine grained disseminations and in masses associated with magnetite, chalcopyrite and sphalerite along skarn, limestone contacts. Molybdenite, found as flakes and rosettes, occurs in the skarns and frequently in the aplites, alaskites and, rarely, in pegmatitic pods. Galena is rare and has only been found as small crystals in a garnetiferous skarn.

Scheelite is noted in the calc-silicate skarns. Magnetite associated with biotite is found as fine grained disseminated crystals in the intrusives as well as the skarns. Epidote exists locally in veinlets and fracture fillings in the contact zone of the stock and metamorphosed sediments.

## 2.2 Discussion

The metamorphosed sediments that exist on and around the Koots Group were laid down as interbedded limestones and fine grained clastic sediments. These sediments are thought to be of either the Slide Mountain or Cache Creek Groups. Tectonic activity during the Columbian Orogeny created local uplift, folding and emplacement of acid intrusives. In the study area, faulting controlled the emplacement of multi-phased acid intrusions.

Underlying the Koots Group, the stock consists of zoned phases within gradational contacts from quartz monzonite on the periphery through granite into an alaksite. Pegmatitic pods exist in and aplites cut through all phases of the stock. Magmatic and hydrothermal fluids were controlled by faulting and fracturing of the stock and the faulting, fracturing and bedding of the surrounding metamorphosed sediments.

Metasomatism produced garnet, diopside/garnet and diopside skarns and siliceous and phyllitic argillites. Metasomatic fluids were the source of elements for the metallic minerals.

Pyrrhotite, sphalerite, molybdenite, scheelite, chalcopyrite, magnetite, and rarely galena have been deposited in the calc-silicate skarns. In the siliceous and phyllitic argillites, pyrrhotite was recognizable, with rare molybdenite. Magnetite and pyrrhotite were noted to occur in the more mafic intrusives, and molybdenite was very local and limited.

### III GEOCHEMISTRY

#### 1. SAMPLING PROCEDURE

A geochemical soil sampling program, consisting of six hundred and fifty locations, numbers 81030010 to 81030660, was undertaken on the Koots Group in 1981. Six hundred and thirty-five samples were taken from the apparent "B" soil horizon at an average depth of 18 centimetres. Twenty-one 1500 metre east-west lines, 100 metres apart, with 50 metre stations comprised the sampling grid (Map 4).

Two blast hole trenches approximately 1.5 metres wide, 6 metres long and 1 metre deep plus 1 hand trench 1 metre wide, 3 metres long and .2 metres deep were used to investigate a soil sample anomaly and mineralized outcrops. Seven channel samples averaging 1.5 metres long and .5 centimetres deep were taken from the exposed bedrock of the trenches. Samples 81030744 to 81030747 were taken from Trench 1 to sample bedrock beneath soil sample 81030042, which was anomalous in molybdenum, tungsten and copper. 81030748-81030749 from Trench 2 and 81030750 from Trench 3 to sample mineralized outcrops. (Map 4).

#### 2. ANALYTICAL TECHNIQUES

The soil samples, packaged in consecutively numbered kraft paper sample bags, were sent to Bondar Clegg and Company Limited in North Vancouver, British Columbia, for geochemical analysis. These samples were dried, sieved to minus 80 mesh and analyzed for: Mo, Cu, Pb, Zn, utilizing HNO<sub>3</sub>-HCL hot extraction and atomic absorption spectrometry and for W using carbonate sinter and colourimetry.

The channel samples, placed in consecutively numbered plastic sample bags, were also sent to Bondar Clegg and Company Limited for assaying. These samples were crushed and pulverized, then quantitatively analyzed using acid digestion and atomic absorption end point techniques.

The analysis results are tabled in Appendix I.

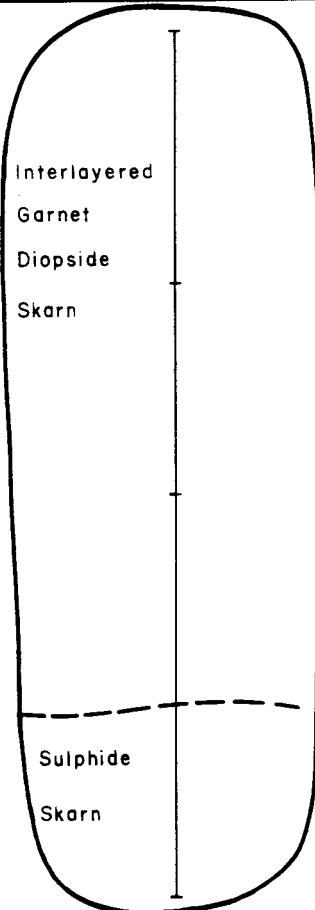
### 3. DISCUSSION

Statistical manipulation of the soil geochemistry results consisted of grouping the data and determining the arithmetic mean,  $\bar{x}$ , and the standard deviation,  $s$ , of the data around the mean for each element. Threshold values range from  $\bar{x} + 2s$  to less than  $\bar{x} + 4s$ , first order anomalies range from  $\bar{x} + 4s$  to less than  $\bar{x} + 8s$ , second order anomalies range from  $\bar{x} + 8s$  to less than  $\bar{x} + 16s$  and third order anomalies are greater than  $\bar{x} + 16s$ .

For molybdenum there are twenty-seven threshold values, six first order anomalies, three second order anomalies and two third order anomalies of 1480 ppm. and 2100 ppm. Mo (Map 5). The tungsten data show thirteen threshold values, eight first order anomalies, one second order anomaly and two third order anomalies of 180 ppm. and 585 ppm. W (Map 6). Copper has seventeen threshold values, eight first order anomalies, no second order anomalies and two third order anomalies of 965 ppm. and 6262 ppm. Cu (Map 7). For lead there are twenty-one threshold values, nine first order anomalies, one second order anomaly of 186 ppm. Pb and one third order anomaly of 710 ppm. Pb (Map 8). The zinc data show thirty-five threshold values, fourteen first order anomalies, and eight second order anomalies from 1410 ppm. to 2370 ppm. Zn (Map 9).

The plotted anomalous soil sample results closely reflect the geology, with skarns appearing to be the source of a majority of anomalies. There is some dispersion of the more mobile elements resulting in scattered point anomalies.

Two of the three trenches have interesting sample results. From Trench 1 sample 81030744 has 0.075% Mo over 1.65 metres, 81030745 has 0.037% Mo and 0.68% W over 1.35 metres, 81030746 has 0.038% Mo over 1.35m and 81030747 has 0.036% Mo and 0.11% Cu over 1.2 metres. Trench 2 has no notable values and the one sample 81030750 of Trench 3 shows 3.10% Mo over 1.38 metres (Figure 1).



TRENCH 1

81030744

1.65 m

0.075 , 0.04 , <0.01 , <0.01 , <0.01

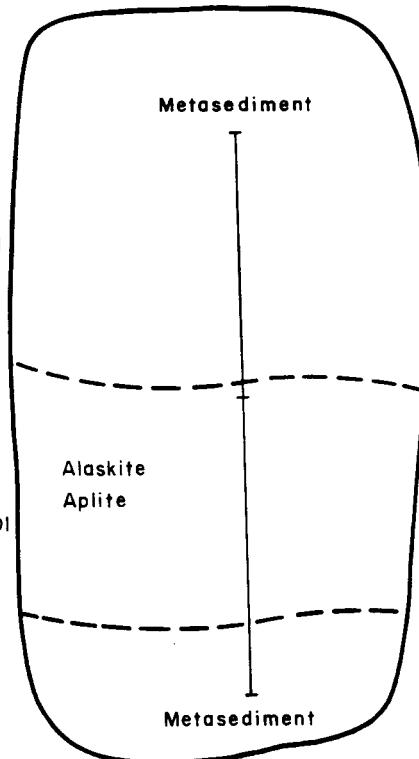


TRENCH 2

81030748

1.7 m

0.005 , <0.01 , <0.01 , <0.01 , <0.01



Metasediment

Alaskite  
Aplite

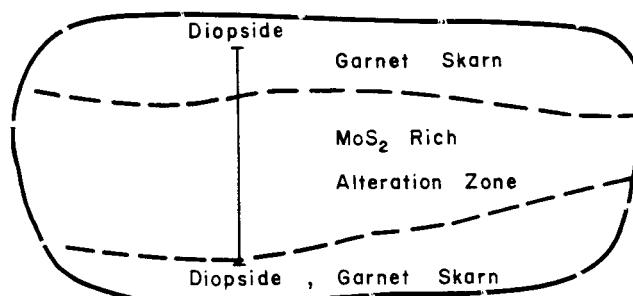
Metasediment

TRENCH 3

81030750

1.38 m

3.10 , 0.05 , <0.01 , <0.01 , 0.01



SCALE 1:50

.5 0 .5 1 2 meters

FIGURE I

DENISON MINES LIMITED			
MINERAL EXPLORATION	WESTERN DIVISION		
KOOTS GROUP 1981			
TRENCHES			
Lot No.	R.L.F.	Date	Scale
		NOV. 1981	1: 50
Drawn No.			
930/3W			

## IV GEOPHYSICS

### 1. SURVEY PROCEDURE

A geoMetrics Model G816 Portable Proton Magnetometer was used to conduct a 31.5 kilometre ground magnetic survey. The survey grid consisted of 21, 1.5 kilometre east-west lines, 100 metres apart, with 50 metre stations.

This magnetometer measures the total intensity of the earth's magnetic field with a sensitivity up to  $\pm 1$  gamma through the use of proton precession. By measuring the total field intensity orientation errors are minimized.

To ensure optimum results the sensor was always oriented north-south so that the sensor axis was perpendicular to the earth's field, held still to reduce random noise and mounted on a staff to reduce the effect of very high local magnetic gradients. Station 10+00N 12+50E was used as the base station. By referring back to this station on closure of the traverse, a check on the accuracy of the survey and diurnal variations were obtained.

No corrections have been made to the data obtained.

### 2. DISCUSSION

The recorded data from the magnetometer survey are plotted on a 1:5000 scale map with 2000 gamma contour intervals (Map 10). At this scale the data reflect the mapped geology. The highs are associated with magnetite, pyrrhotite bearing skarns and the lows with the alaskite and/or recrystallized limestone.

## V SUMMARY AND CONCLUSIONS

A multi-phased acid intrusion has been emplaced in interbedded limestones and fine grained clastic sediments. In contact with the stock, metasomatism has created skarns and schists. Outwards, pervasive low grade metamorphism occurs as recrystallized limestones and siliceous and phyllitic argillites.

Metallic minerals occurring in these rocks are pyrrhotite, magnetite, pyrite, molybdenite, scheelite, chalcopyrite, rare galena and sphalerite. Skarn is the major host of economic metallic mineralization with minor occurrences contained in the argillites and intrusives.

Soil sampling results showed anomalous values for molybdenum 1480 ppm. and 2100 ppm Mo, tungsten 180 ppm. and 585 ppm. W, copper 965 ppm. and 6262 ppm. Cu, and lead 710 ppm. Pb with zinc having a large number of minor anomalies. These anomalous values are closely related to the geology with skarns appearing to be the major source of the elements.

Follow up blast hole trenching has shown interesting molybdenum values associated with minor values in tungsten and copper. Of specific interest is Trench 3, which has 3.10% Mo over 1.38 metres. Trench 1 contains 0.046% Mo and 0.21% W over 5.5m and 0.11% Cu over 1.2m. There were no values of interest for Trench 2.

The magnetometer survey reflects the mapped geology, with highs associated with magnetite, pyrrhotite bearing skarns and the lows the alaskite and/or recrystallized limestone.

The 1981 exploration program has shown the property contains interesting molybdenum and tungsten values in soils and trenches and minor values for copper, lead and zinc in soils. The magnetometer survey has shown that a tighter grid is necessary to delineate buried skarns. Further work is necessary to outline the continuity, extent and economic mineral grades of the important skarns and to determine the type and extent of mineralization in the intrusives.

## VI RECOMMENDATIONS

The following program is recommended for the 1982 field season:

1. Further geological mapping at a scale of 1:5000.
2. Extension of the geochemical soil sample grid to cover additional mineralization. A total 155 soil samples to be taken for analysis of Mo, W, Cu, Pb, Zn.
3. A ground magnetometer survey to cover the soil sample grid extension to define massive sulphide, magnetite showings, and structure.
4. Further trenching and channel sampling to investigate soil sample anomalies and mineralized outcrop.
5. Three hundred metres of drilling to define mineral occurrences, grades and tonnages.

Respectfully submitted,



Reginald L. Faulkner  
Geologist  
Denison Mines Limited



VII - ITEMIZED COST STATEMENT

8.

June 17, 1981 to September 21, 1981

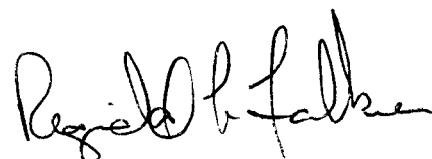
Wages:	Geologist	58 man days @ \$130.00/manday	\$ 7,540.00
	Field Assistant	58 man days @ \$ 90.00/manday	5,220.00
	Blaster(contractor)	4 man days @ \$200.00/manday	800.00
	Blasting Assistant (contractor)	4 man days @ \$165.00/manday	660.00
Food:		124 mandays @ \$ 25.00/manday	3,100.00
Accommodation:		32 mandays @ \$ 20.00/manday	640.00
Transportation:	Northern Mountain Helicopters Bell 206III:		
		11.7 hours @ \$410.00/hour	1,797.00
		11.7 hours @ 23.0 gal./hour @ 1.80/gallon	484.38
	: CP Air; Vancouver to Prince George ; Prince George to Vancouver		410.40
	: Northern Thunderbird Air; Mackenzie to Prince George		273.00
Equipment Rental:	Trucks	58 days @ \$850.00/30 days	1,643.33
	Rock Drill	4 days @ \$ 50.00/day	200.00
Geochemical Analysis:	635 soil samples, geochemical		
	Mo, Cu, Pb, Zn @ \$4.00/sample		2,540.00
	W @ \$3.75/sample		2,381.00
	Sample Prep @ \$0.60/sample		381.00
	: 7 channel samples, assay		
	Mo, Zn @ \$13.00/sample		91.00
	Cu, Pb @ \$12.00/sample		84.00
	W @ \$ 9.00/sample		63.00
	Sample Prep. @ \$2.50/sample		18.00
Miscellaneous:	Explosives		<u>300.00</u>
		TOTAL	<u>\$31,626.11</u>

VIII - STATEMENT OF QUALIFICATIONS

9.

I, Reginald L. Faulkner, Geologist, with business address in Vancouver, British Columbia, and residential address in North Vancouver, British Columbia, hereby certify that:

1. I graduated from the University of British Columbia in 1974 with a B.Sc., returned in 1977 completing a geological program in 1979 for a combined Geology, Physical Geography degree.
2. From 1970 to 1979, I have been engaged in various aspects of mineral exploration in British Columbia, Alberta, Yukon and the North West Territories. From 1979 to present, I have actively participated in mineral exploration in British Columbia as a Geologist with Riocanex Limited and Denison Mines Limited.
3. I personally participated in the field work on the Koots Group and I have compiled the data resulting from this work.



Reginald L. Faulkner

APPENDIX I

To: Denison Mines Ltd.

REPORT NO. A21 - 1524

PAGE No. 1

DATE: November 5, 1981

P. O. Box 11575  
650 West Georgia Street  
Vancouver, B. C.  
V6B 4N7

## BONDAR-CLEGG &amp; COMPANY LTD.

## CERTIFICATE OF ASSAY

Samples submitted: September 28, 1981  
Results completed: November 5, 1981  
PROJECT: WA0117 WA0118

I hereby certify that the following are the results of assays made by us upon the herein described core samples.

MARKED	GOLD		SILVER		Cu	Pb	Zn	Mo	W		
	Ounces per Ton	Grams per Metric Ton	Ounces per Ton	Grams per Metric Ton	Percent						
81030744					LO.01	LO.01	LO.01	0.075	0.04		
81030745					LO.01	LO.01	0.01	0.037	0.68		
81030746					0.04	LO.01	0.03	0.038	0.04		
81030747					0.11	0.01	0.01	0.036	0.07		
81030748					LO.01	LO.01	LO.01	0.005	LO.01		
81030749					LO.01	LO.01	LO.01	0.014	LO.01		
81030750					LO.01	LO.01	0.01	3.10	0.05		

L denotes 'less than'

## NOTE:

Rejects retained three weeks  
Pulps retained three months  
unless otherwise arranged.



BONDAR-CLEGG & COMPANY LTD.

130 PEMBERTON AVE., NORTH VANCOUVER, B.C. V7P 2R5 PHONE: (604) 985-0681 TELEX: 04-352667

Geochemical Lab Report

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Mo PPM	W NOTES	SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Mo PPM	W NOTES
8103-0010	SOILS	11	17	66	8	3	8103-0042		960	42	274	2100	585
8103-0011		15	15	44	6	4	8103-0043		26	22	77	13	4
8103-0012		17	34	67	5	3	8103-0044		32	14	103	8	4
8103-0013		19	20	65	14	3	8103-0045		77	12	104	4	3
8103-0014		23	17	106	12	2	8103-0046		28	21	165	12	3
8103-0015		33	28	63	12	2	8103-0048		14	12	50	5	4
8103-0016		14	14	50	5	25	8103-0049		15	7	42	9	2
8103-0017		6	9	19	3	3	8103-0050		21	10	74	40	2
8103-0018		20	17	88	2	3	8103-0051		22	13	93	20	3
8103-0019		9	12	41	2	3	8103-0052		10	15	40	28	4
8103-0020		6	22	37	4	5	8103-0053		11	13	33	2	8
8103-0021		31	12	71	2	3	8103-0054		13	15	42	4	3
8103-0022		16	19	95	4	6	8103-0055		18	13	57	11	2
8103-0023		18	23	376	4	2	8103-0056		11	9	89	34	2
8103-0024		16	32	284	2	2	8103-0057		18	13	196	34	3
8103-0025		13	18	102	30	7	8103-0058		18	18	149	27	14
8103-0026		21	96	1100	13	6	8103-0059		28	19	161	45	12
8103-0027		15	14	670	24	4	8103-0060		18	14	66	22	3
8103-0028		25	29	580	24	3	8103-0061		20	32	197	47	3
8103-0029		19	35	420	17	4	8103-0062		19	17	114	29	3
8103-0032		10	42	71	11	4	8103-0063		14	44	108	28	2
8103-0033		13	58	118	11	15	8103-0064		18	88	217	22	3
8103-0034		20	50	169	10	3	8103-00066		12	61	114	9	4
8103-0035		26	43	122	12	2	8103-00067		18	24	116	40	2
8103-0036		15	38	111	6	6	8103-00068		17	23	75	66	6
8103-0037		17	36	78	6	4	8103-00069		17	42	28	14	5
8103-0038		8	32	76	4	3	8103-00070		19	48	565	7	3
8103-0039		13	29	123	5	2	8103-00071		19	31	67	23	4
8103-0040		13	15	75	8	2	8103-00072		16	26	82	12	4
8103-0041		8	10	39	4	8	8103-00073		15	32	62	4	6



**BONDAR-CLEGG & COMPANY LTD.**

130 PEMBERTON AVE., NORTH VANCOUVER, B.C. V7P 2R5 PHONE: (604) 985-0681 TELEX: 04-352667

### Geochemical Lab Report

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Mo PPM	W PPM	NOTES	SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Mo PPM	W PPM	NOTES
8103-00074		18	60	113	7	2		8103-00104		15	31	64	10	8	
8103-00075		16	22	66	4	3		8103-00105		16	31	61	5	8	
8103-00076		8	30	39	5	3		8103-00106		17	40	104	11	4	
8103-00077		8	15	53	3	2		8103-00107		15	42	60	7	4	
8103-00078		23	8	84	28	3		8103-00108		11	18	77	5	3	
8103-00079		26	19	248	6	15		8103-00109		13	26	74	8	4	
8103-00080		10	24	56	6	4		8103-00110		24	39	98	8	4	
8103-00081		24	21	82	14	26		8103-00111		17	26	97	6	3	
8103-00082		81	11	76	28	180		8103-00112		15	23	61	6	4	
8103-00083		14	17	90	23	40		8103-00113		26	40	128	10	2	
8103-00084		20	44	194	15	20		8103-00114		17	27	49	10	8	
8103-00085		20	9	67	47	2		8103-00115		14	38	108	11	2	
8103-00086		7	10	20	9	8		8103-00116		14	31	96	21	3	
8103-00087		15	11	44	78	5		8103-00117		14	23	137	12	4	
8103-00088		12	15	40	34	4		8103-00118		7	18	33	10	4	
8103-00089		27	43	126	42	4		8103-00119		15	29	116	14	5	
8103-00090		45	73	420	5	16		8103-00120		17	37	142	17	15	
8103-00091		25	32	197	6	5		8103-00121		20	91	770	11	6	
8103-00092		15	29	302	8	4		8103-00122		117	13	172	52	26	
8103-00093		66	68	1780	28	25		8103-00123		26	17	82	16	3	
8103-00094		12	28	141	49	6		8103-00124		16	68	600	34	15	
8103-00095		48	27	247	132	6		8103-00125		15	68	1690	14	30	
8103-00096		160	26	219	31	9		8103-00126		20	29	148	3	3	
8103-00097		15	30	46	21	5		8103-00127		12	20	277	8	65	
8103-00098		16	53	186	15	3		8103-00128		43	8	58	4	3	
8103-00099		12	24	68	3	4		8103-00129		15	14	103	7	5	
8103-00100		22	23	197	11	3		8103-00130		23	10	175	18	3	
8103-00101		20	56	126	8	4		8103-00131		18	10	91	6	6	
8103-00102		14	52	388	16	50		8103-00132		24	10	83	3	6	
8103-00103		13	26	43	8	8		8103-00133		46	15	155	4	5	



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### Geochemical Lab Report

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Mo PPM	W NOTES PPM	SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Mo PPM	W NOTES PPM
8103-00134		20	16	64	11	8	8103-00164		20	14	63	3	6
8103-00135		18	25	192	16	4	8103-00165		20	12	76	9	2
8103-00136		16	21	73	12	4	8103-00166		21	24	73	5	7
8103-00137		21	26	101	12	3	8103-00167		17	38	122	4	9
8103-00138		133	12	470	18	8	8103-00168		132	107	985	55	58
8103-00139		17	10	72	23	8	8103-00169		47	16	111	36	14
8103-00140		16	30	74	6	3	8103-00170		11	20	54	16	5
8103-00141		11	19	81	10	5	8103-00171		15	71	98	4	20
8103-00142		24	36	109	6	5	8103-00172		8	17	40	3	9
8103-00143		14	22	84	6	8	8103-00173		6	10	58	3	9
8103-00144		11	23	30	4	11	8103-00174		3	7	15	2	3
8103-00145		11	40	56	13	3	8103-00175		22	13	158	12	4
8103-00146		17	54	152	14	5	8103-00176		25	16	153	17	6
8103-00147		27	91	207	13	3	8103-00177		39	19	164	25	19
8103-00148		6	11	37	5	5	8103-00178		6262	13	460	21	8
8103-00149		11	26	84	10	7	8103-00179		15	6	21	2	9
8103-00150		32	63	1190	6	19	8103-00180		12	17	81	7	7
8103-00151		18	27	191	33	5	8103-00181		20	63	229	5	58
8103-00152		16	22	108	45	7	8103-00182		54	56	231	147	8
8103-00153		11	47	119	20	5	8103-00183		16	11	28	25	3
8103-00154		97	98	227	1480	5	8103-00184		17	10	34	24	18
8103-00155		29	32	136	9	2	8103-00185		17	78	136	45	6
8103-00156		10	35	435	10	9	8103-00186		17	108	460	5	8
8103-00157		47	16	71	7	8	8103-00187		30	75	750	21	6
8103-00158		23	16	97	24	3	8103-00188		17	49	128	13	3
8103-00159		37	10	297	16	6	8103-00189		8	20	34	4	4
8103-00160		23	10	166	6	3	8103-00190		32	105	179	12	15
8103-00161		16	13	324	11	3	8103-00191		11	48	73	9	6
8103-00162		17	11	302	8	3	8103-00192		20	30	85	8	8
8103-00163		15	9	79	2	3	8103-00193		25	39	161	6	6



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### Geochemical Lab Report

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SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Mo PPM	W NOTES PPM
8103-00194		17	30	44	10	8
8103-00195		17	33	109	19	4



**BONDAR-CLEGG & COMPANY LTD.**

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### Geochemical Lab Report

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Mo PPM	W PPM	NOTES	SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Mo PPM	W PPM	NOTES
0196	SOILS	20	19	134	8	4		9103-0226		27	49	100	12	10	
9103-0197		19	19	23	13	9		9103-0227		5	12	13	4	19	
9103-0198								9103-0228		19	21	52	4	12	
9103-0199		14	10	47	7	6		9103-0229		10	12	53	8	12	
9103-0200		15	16	73	15	4		9103-0230		12	11	74	5	16	
9103-0201		10	10	49	4	5		9103-0231		5	4	19	3	10	
9103-0202		14	14	114	6	6		9103-0232		40	8	79	52	4	
9103-0203		24	23	1900	14	5		9103-0233		13	26	272	13	3	
9103-0204		20	32	1130	13	5		9103-0234		26	17	186	29	49	
9103-0205		23	17	415	9	5		9103-0235		21	13	450	16	13	
9103-0206		24	18	6000	20	5		9103-0236		10	13	147	24	2	
9103-0207		19	15	1000	15	5		9103-0237		15	17	144	14		
9103-0208		26	16	1700	15	5		9103-0238		22	14	302	11	6	
9103-0209		15	14	234	19	5		9103-0239		21	14	70	14	3	
9103-0210		22	14	162	18	5		9103-0240		18	13	57	13	2	
9103-0211		17	14	98	6	5		9103-0241		20	14	87	14	9	
9103-0212		20	12	4400	10	5		9103-0242		13	12	50	9	1	
9103-0213		26	20	1100	10	5		9103-0243		15	25	114	13	8	
9103-0214		20	16	1100	10	5		9103-0244		12	14	149	13	8	
9103-0215		16	18	950	10	5		9103-0245		38	36	353	15	2	
9103-0216		42	36	1000	11	9		9103-0246		28	24	231	30		
9103-0217		27	13	1000	13	9		9103-0247		14	19	110	50		
9103-0218		16	11	1000	12	8		9103-0248		34	35	600	31		
9103-0219		20	11	1000	12	8		9103-0249		12	20	79	13		
9103-0220		16	10	1000	12	8		9103-0250		23	21	182	40		
9103-0221		12	36	79	17	8		9103-0251					15		1*
9103-0222		11	44	83	19	8		9103-0252		26	39	294	23		
9103-0223		10	26	85	23	8		9103-0253		20	52	145	25		
9103-0224		8	42	113	33	8		9103-0254		13	36	90	14		
9103-0225		6	22	92	19	8		9103-0255		8	39	173	10		



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### Geochemical Lab Report

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Mo PPM	W NOTES	SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Mo PPM	W PPM
8103-0286	ppm	30	60	225	8		8103-0286	ppm	24	13	60	4	23
8103-0287	ppm	17	34	107			8103-0287	ppm	18	10	85	10	23
8103-0288	ppm	14	9	36			8103-0288	ppm				10	23
8103-0289	ppm	33	31	331	29		8103-0289	ppm	24	12	100	10	23
8103-0290	ppm	38	12	695	39	4	8103-0290	ppm	7	7	33	1	23
8103-0291	ppm	51	70	1376	13		8103-0291	ppm	7	7	33	1	4
8103-0292	ppm	11	13	375	34		8103-0292	ppm	9	12	38	1	16
8103-0293	ppm	30	26	1130	27		8103-0293	ppm	60	12	105	8	30
8103-0294	ppm	27	30	133	19	4	8103-0294	ppm				19	23
8103-0295	ppm	56	8	560	12	2	8103-0295	ppm	13	11	154	20	19
8103-0296	ppm	30	15	322	15		8103-0296	ppm	20	8	214	13	4
8103-0297	ppm	22	14	153	24		8103-0297	ppm	21	14	188	19	23
8103-0298	ppm	25	19	135	23		8103-0298	ppm	33	14	108	6	23
8103-0299	ppm	33	13	495	15		8103-0299	ppm	21	12	367	13	33
8103-0300	ppm	54	15	1140	11		8103-0300	ppm	46	11	330	15	33
8103-0301	ppm	24	10	138	23		8103-0301	ppm	14	11	214	17	23
8103-0302	ppm	12	16	111	34		8103-0302	ppm	44	25	330	19	23
8103-0303	ppm	10	14	55	12		8103-0303	ppm	17	14	108	9	23
8103-0304	ppm	24	22	132	20		8103-0304	ppm	22	15	185	20	23
8103-0305	ppm	26	22	89	21		8103-0305	ppm	34	14	213	32	23
8103-0306	ppm	14	25	80	29		8103-0306	ppm	9	12	49	9	33
8103-0307	ppm	14	29	75	12		8103-0307	ppm	9	13	59	4	33
8103-0308	ppm	12	37	93	17		8103-0308	ppm	6	11	45	24	33
8103-0309	ppm	13	35	93	15		8103-0309	ppm	9	16	57	21	33
8103-0310	ppm	19	37	101	10		8103-0310	ppm	9	10	36	10	33
8103-0311	ppm	28	37	180	6		8103-0311	ppm	19	26	318	19	33
8103-0312	ppm	25	32	140	8		8103-0312	ppm	19	23	33	17	33
8103-0313	ppm	17	33	180	8		8103-0313	ppm	32	33	187	10	33
8103-0314	ppm	16	41	95	12		8103-0314	ppm	6	22	74	5	33
8103-0315	ppm	21	19	94	1		8103-0315	ppm	17	29	122	6	33



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### Geochemical Lab Report

Sample Log No. 10002

SAMPLE NUMBER	ELEMENT	UNITS	Ca PPM	Pb PPM	Zn PPM	Mo PPM	W NOTES PPM	SAMPLE NUMBER	ELEMENT	UNITS	Ca PPM	Pb PPM	Zn PPM	Mo PPM	W NOTES PPM
8103-0316			13	43	70	9	2	8103-0346			22	42	111	6	3
8103-0317			12	26	119	9	2	8103-0347			20	110	970	1	20
8103-0318			18	36	167	10	2	8103-0348			12	111	46	20	60
8103-0319			22	49	147	11	4	8103-0349			18	16	61	2	20
8103-0320			27	63	171	10	2	8103-0350			17	20	78	2	20
8103-0321			19	29	320	13	2	8103-0351			18	29	108	1	20
8103-0322			8	10	10	10		8103-0352			16	26	47	NB	
8103-0323			26	9	91	19	3	8103-0353			30	26	95	1	30
8103-0324			4	8	19	3		8103-0354			12	17	69	NB	3
8103-0325			64	16	353	13	11	8103-0355			22	26	94	4	20
8103-0326			26	26	365	15	3	8103-0356			14	13	51	6	4
8103-0327			23	28	273	16		8103-0357			133	7	121	5	6
8103-0328			18	16	135	15	3	8103-0358			16	12	92	1	20
8103-0329			107	24	3370	16	20	8103-0359			12	6	48	9	6
8103-0330			48	10	345	13	6	8103-0360			6	7	32	5	8
8103-0331			16	14	77	40	2	8103-0361			16	10	30	1	20
8103-0332			37	15	153	15	2	8103-0362			22	11	18	10	20
8103-0333			12	11	49	16	3	8103-0363			18	6	191	1	20
8103-0334			15	16	67	9	53	8103-0364			22	21	133	3	20
8103-0335			14	19	71	12	6	8103-0365			10	10	163	4	20
8103-0336			7	32	129	4	6	8103-0366			11	8	139	10	3
8103-0337			12	51	78	14	3	8103-0367			13	13	115	6	6
8103-0338			21	30	80	10	6	8103-0368			15	12	71	4	20
8103-0339			12	14	50	16	6	8103-0369			30	5	148	10	6
8103-0340			18	23	135	12	2	8103-0370			26	18	149	12	20
8103-0341			23	42	209	12	2	8103-0371			26	14	56	3	4
8103-0342			17	37	161	34		8103-0372			23	12	53	3	3
8103-0343			20	49	167	12	4	8103-0373			12	14	57	4	20
8103-0344			36	32	159	23	4	8103-0374			17	26	134	10	6
8103-0345			14	26	94	9	3	8103-0375			16	33	147	10	20



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### Geochemical Lab Report

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Mo PPM	W NOTES PPM	SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Mo PPM	W NOTES PPM
8103-0376		10	15	39	8	3	8103-0406		38	16	209	23	9
8103-0377		14	13	64	10	2	8103-0407		16	22	108	12	9
8103-0378		15	35	117	11	6	8103-0408		30	42	240	11	15
8103-0379		12	18	68	12	2	8103-0409		27	13	510	6	6
8103-0380		22	20	49	10	2	8103-0410		27	13	116	8	8
8103-0381		14	13	42	15	3	8103-0411		20	24	91	4	7
8103-0382		23	39	145	12	3	8103-0412		39	22	126	11	6
8103-0383		16	24	191	16	4	8103-0413		23	22	102	4	8
8103-0384		16	21	450	7	8	8103-0414		38	34	282	20	4
8103-0385		19	10	142	11	9	8103-0415		16	38	224	10	8
8103-0386					18		8103-0416		39	12	232	13	9
8103-0387			9	415	18		8103-0417		18	16	227	10	9
8103-0388		37		355	26		8103-0418		60	20	896	15	3
8103-0389		4	11	355	5	9	8103-0419		14	13	98	3	3
8103-0390		10	9	32	3	2	8103-0420		24	19	1010	12	9
8103-0391		22	11	221	21	6	8103-0421		12	21	242	13	2
8103-0392		11	7	93	15	3	8103-0422		102	10	950	11	4
8103-0393		12	8	70	18	2	8103-0423		23	11	770	9	9
8103-0394		15	20	128	8	4	8103-0424		14	10	211	20	13
8103-0395		19	6	348	19	2	8103-0425		11	6	46	13	6
8103-0396		10	6	254	14	9	8103-0426		6	5	8	NB	9
8103-0397		29	13	120	12	2	8103-0427		10	15	59	4	4
8103-0398		32	21	232	12	3	8103-0428		17	7	136	14	4
8103-0399		24	12	73	20	3	8103-0429		6	6	97	15	6
8103-0400		12	22	108	9	3	8103-0430		9	24	107	9	9
8103-0401		10	37	163	6	15	8103-0431		10	7	76	6	9
8103-0402		16	240	1520	23	15	8103-0432		24	16	236	21	9
8103-0403		12	20	65	7	6	8103-0433		15	9	57	23	9
8103-0404		10	12	48	6	3	8103-0434		16	11	48	12	9
8103-0405		6	8	21	4	4	8103-0435		14	17	227	34	4



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### Geochemical Lab Report

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Mo PPM	W NOTES	SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Mo PPM	W NOTES
8103-0436		40	29	180	23	3	8103-0466		20	11	83	16	2
8103-0437		15	21	262	7	4	8103-0467		12	23	133	5	3
8103-0438		18	19	176	14	3	8103-0468		17	25	153	14	3
8103-0439		13	14	94	18	4	8103-0469		13	20	79	20	5
8103-0440		18	16	125	11	4	8103-0470		15	20	83	17	2
8103-0441		14	14	50	14	3	8103-0471		15	25	75	15	2
8103-0442		22	26	181	20	3	8103-0472		14	15	166	19	2
8103-0443		20	23	168	13	3	8103-0473		10	21	54	7	2
8103-0444		23	26	156	14	3	8103-0474		16	21	105	11	3
8103-0445		16	26	73	6	3	8103-0475		34	12	114	20	3
8103-0446		11	16	63	11	2	8103-0476		25	17	114	22	2
8103-0447		34	32	1290	14	3	8103-0477		39	21	147	6	2
8103-0448		24	32	1460	16	3	8103-0478		25	16	263	11	2
8103-0449		30	31	130	12	3	8103-0479		18	22	162	12	2
8103-0450		10	13	23	6	4	8103-0480		6	11	14	2	2
8103-0451		12	11	27	4	3	8103-0481		34	30	297	15	2
8103-0452		15	23	263	10	3	8103-0482		13	22	78	4	2
8103-0453		36	19	255	18	3	8103-0483		22	22	107	3	3
8103-0454		20	16	24	4	3	8103-0484		29	19	160	12	3
8103-0455		20	13	193	23	2	8103-0485		11	9	84	10	4
8103-0456		16	17	233	23	2	8103-0486		28	18	186	21	2
8103-0457		26	13	1070	27	4	8103-0487		46	19	174	12	2
8103-0458		7	136	17	30	3	8103-0488		19	16	230	33	5
8103-0459		16	9	57	22	4	8103-0489		12	15	160	16	4
8103-0460		16	11	68	12	2	8103-0490		72	10	160	16	4
8103-0461		19	16	223	17	2	8103-0491		34	15	130	18	6
8103-0462		18	26	126	15	3	8103-0492		19	20	130	18	7
8103-0463		19	24	550	16	3	8103-0493		20	19	90	25	6
8103-0464		16	13	86	14	2	8103-0494		16	19	34	14	5
8103-0465		11	13	153	17	2	8103-0495		6	9	37	11	6



BONDAR-CLEGG & COMPANY LTD.

130 PEMBERTON AVE., NORTH VANCOUVER, B.C. V7P 2R5 PHONE: (604) 985-0681 TELEX: 04-352667

### Geochemical Lab Report

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Mo PPM	W PPM	NOTES	SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Mo PPM	W PPM	NOTES
8103-0496		14	10	71	13	2		8103-0526		14	38	285	15	20	
8103-0497		21	10	123	29	5		8103-0527		32	30	550	12	10	
8103-0498		32	11	219	100	8		8103-0528		13	11	122	12	12	
8103-0499		16	11	89	35	7		8103-0529		14	23	45	7	3	
8103-0500		26	17	656	11	19		8103-0530		12	17	61	11	6	
8103-0501		46	21	545	20	11		8103-0531		14	17	68	17	20	
8103-0502		14	13	145	17	2		8103-0532		20	13	92	17	13	
8103-0503		18	13	47	5	2		8103-0533		22	13	167	13	13	
8103-0504		14	15	193	10	4		8103-0534		14	15	207	15	15	
8103-0505		16	21	96	11	6		8103-0535		16	10	46	10	10	
8103-0506		164	39	269	7	3		8103-0536		24	53	119	10	4	
8103-0507		26	37	120	14	4		8103-0537		13	11	87	13	13	
8103-0508		29	29	211	10	10		8103-0538		26	13	118	13	13	
8103-0509		10	9	8	10	5		8103-0539		59	10	970	10	10	
8103-0510		12	27	127	1	2		8103-0540		18	13	165	12	12	
8103-0511		12	16	138	6	4		8103-0541		17	16	138	10	10	
8103-0512		25	11	253	23	5		8103-0542		24	23	140	10	10	
8103-0513		45	7	445	23	5		8103-0543		24	42	195	16	16	
8103-0514		26	9	210	10	5		8103-0544		13	30	81	10	10	
8103-0515		29	7	139	10	5		8103-0545		20	8	19	ND	ND	
8103-0516		10	10	43	11	1		8103-0546		9	12	65	17	17	
8103-0517		9	10	50	9	1		8103-0547		14	38	178	10	8	
8103-0518		15	12	110	11	3		8103-0548		23	14	525	16	16	
8103-0519		13	10	71	10	2		8103-0549		14	6	93	10	10	
8103-0520		15	11	58	10	3		8103-0550		16	12	154	10	10	
8103-0521		10	16	95	62	2		8103-0551		14	14	133	10	20	
8103-0522		7	11	41	6	2		8103-0552		11	11	70	7	5	
8103-0523		9	18	37	9	3		8103-0553		2	10	6	1	1	
8103-0524		14	17	49	11	4		8103-0554		13	14	101	7	4	
8103-0525		13	12	50	10	3		8103-0555		10	17	88	10	10	



BONDAR-CLEGG & COMPANY LTD.

130 PEMBERTON AVE., NORTH VANCOUVER, B.C. V7P 2R5 PHONE: (604) 985-0681 TELEX: 04-352667

### Geochemical Lab Report

SAMPLE NUMBER	ELEMENT UNITS	CU PPM	PB PPM	Zn PPM	Mo PPM	W PPM	NOTES	SAMPLE NUMBER	ELEMENT UNITS	CU PPM	PB PPM	Zn PPM	Mo PPM	W PPM
8103-0556		6	11	35	9	9		8103-0586		7	13	39	8	3
8103-0557					18		1%	8103-0587		54	8	384	18	3
8103-0558		17	13	114	8	4		8103-0588		10	7	41	7	2
8103-0559		16	15	123	15	5		8103-0589		9	9	23	4	2
8103-0560		19	14	158	15	5		8103-0590		20	16	60	14	19
8103-0561		24	20	135	23	2		8103-0591		12	10	75	9	4
8103-0562		22	22	126	9	4		8103-0592		36	22	178	19	4
8103-0563		19	15	164	16	3		8103-0593		14	14	71	12	3
8103-0564		26	28	226	17	3		8103-0594		24	15	112	15	3
8103-0565		12	12	54	3	4		8103-0595		21	16	135	9	3
8103-0566		32	18	709	5	2		8103-0596		26	19	226	12	14
8103-0567		28	19	175	12	2		8103-0597		26	19	190	8	10
8103-0568		23	22	57	7	2		8103-0598		19	31	181	14	5
8103-0569		18	7	45	6	2		8103-0599		19	10	128	6	4
8103-0570		38	8	30	5	2		8103-0600		18	11	293	7	3
8103-0571		91	21	1450	18	6		8103-0601		33	22	410	6	3
8103-0572		25	14	225	6	2		8103-0602		29	32	206	7	4
8103-0573		46	17	357	13	2		8103-0603		28	17	286	8	3
8103-0574		49	9	44	3	2		8103-0604		27	29	485	12	2
8103-0575		26	29	85	3	2		8103-0605		10	23	164	6	3
8103-0576		32	19	123	12	2		8103-0606		16	12	134	19	3
8103-0577		29	41	410	15	2		8103-0607		7	14	65	16	5
8103-0578		11	6	57	10	2		8103-0608		15	6	90	12	3
8103-0579		16	13	104	4	2		8103-0609		15	6	16	16	1%
8103-0580		29	14	113	1	2		8103-0610		14	13	96	5	2
8103-0581		12	8	89	5	2		8103-0611		6	6	22	5	18
8103-0582		24	5	220	33	2		8103-0612		7	6	22	3	6
8103-0583		13	2	50	3	2		8103-0613		12	9	59	9	5
8103-0584		29	5	196	9	2		8103-0614		10	12	45	5	5
8103-0585		9	11	31	8	2		8103-0615		9	9	54	5	3

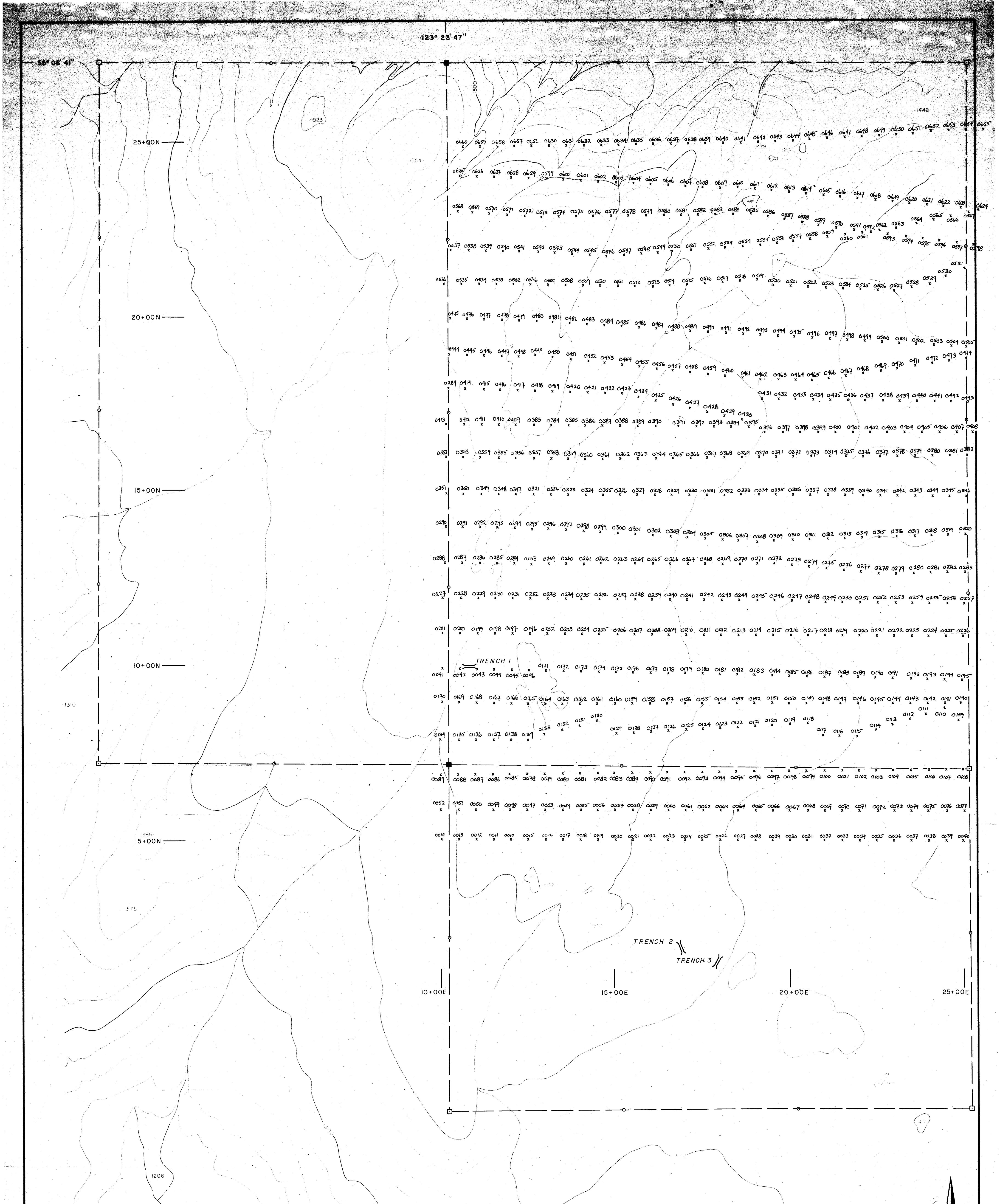


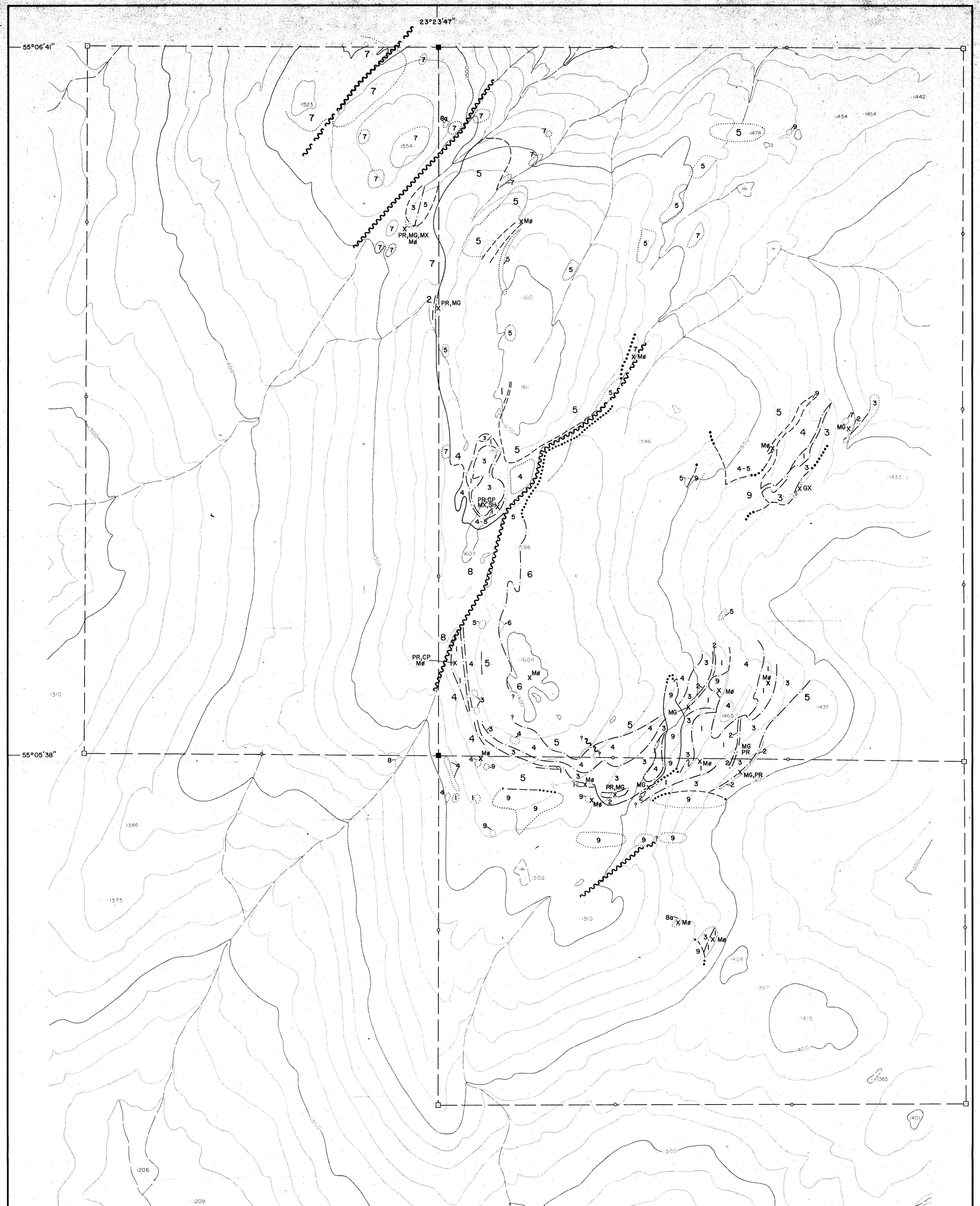
BONDAR-CLEGG & COMPANY LTD.

130 PEMBERTON AVE., NORTH VANCOUVER, B.C. V7P 2R5 PHONE: (604) 985-0681 TELEX: 04-352667

### Geochemical Lab Report

SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Mo PPM	W NOTES	SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	Pb PPM	Zn PPM	Mo PPM	W NOTES
8103-0616		15	10	75	19	4	8103-0646		18	4	18	1	2
8103-0617		20	12	158	13	3	8103-0647		4	8	29	9	5
8103-0618		20	9	80	11	4	8103-0648		15	9	96	7	3
8103-0619		18	14	153	18	3	8103-0649		16	17	179	13	3
8103-0620		37	19	161	27	4	8103-0650		16	13	120	12	6
8103-0621		35	21	222	31	5	8103-0651		13	16	178	19	4
8103-0622		18	13	92	12	5	8103-0652		9	19	69	8	4
8103-0623		20	12	109	6	5	8103-0653		16	16	119	6	5
8103-0624		18	19	185	14	4	8103-0654		12	19	77	7	3
8103-0625		16	53	106	9	4	8103-0655		20	19	139	9	6
8103-0626				16	16	1*	8103-0656		15	35	96	13	3
8103-0627		30	14	300	75	60	8103-0657		13	23	70	4	3
8103-0628		18	16	81	6	3	8103-0658		10	33	117	4	5
8103-0629		2	6	8	2	10	8103-0659		9	11	55	5	3
8103-0630		7	6	10	NB	3	8103-0660		18	31	47	1	4
8103-0631		4	27	14	NB	4							
8103-0632		10	9	77	17	3							
8103-0633		32	12	185	14	3							
8103-0634		38	15	425	10	2							
8103-0635		52	19	478	10	4							
8103-0636		11	20	96	5	3							
8103-0637		13	17	213	14	4							
8103-0638		9	9	91	5	3							
8103-0639		12	18	115	5	3							
8103-0640		18	11	127	7	4							
8103-0641				18	18	1*							
8103-0642		43	6	203	20	4							
8103-0643		8	9	74	9	5							
8103-0644		8	9	156	3	4							
8103-0645		13	6	415	22	5							

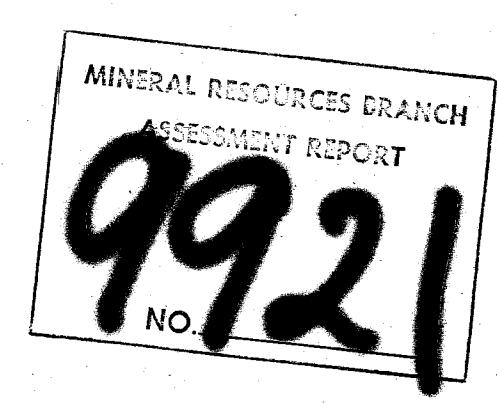




LEGEND

CRETACEOUS OR TERTIARY	
■	Legal Corner Post
□	Corner Post
○	Intermediate Post
—	Claim Boundary
-1383-	Spot Elevation
—	Stream
△	Swamp
UPPER PALEOZOIC AND (?) YOUNGER OR OLDER	
[9]	Alaskite
[8]	Granite; A Aplite
[7]	Quartz Monzonite - Granodiorite
[6]	Phyllitic Argillite
[5]	Siliceous Argillite
[4]	Biotite Schist, Fine Grained
[3]	Limestone, Recrystallized
[2]	Skarn, Pyrrhotite, Magnetite
[1]	Skarn, Garnet, Diopside

—****	Geological Boundary (defined, approximate, assumed)
————	Metamorphic Boundary
·····	Outcrop Boundary
~~~~~	Fault (defined, assumed)
X	Showing
CP	Chalcopyrite
GX	Galena/Sphalerite
PR	Pyrrhotite
SH	Scheelite
MG	Magnetite
SL	Sphalerite
Mo	Molybdenite



MAP 3

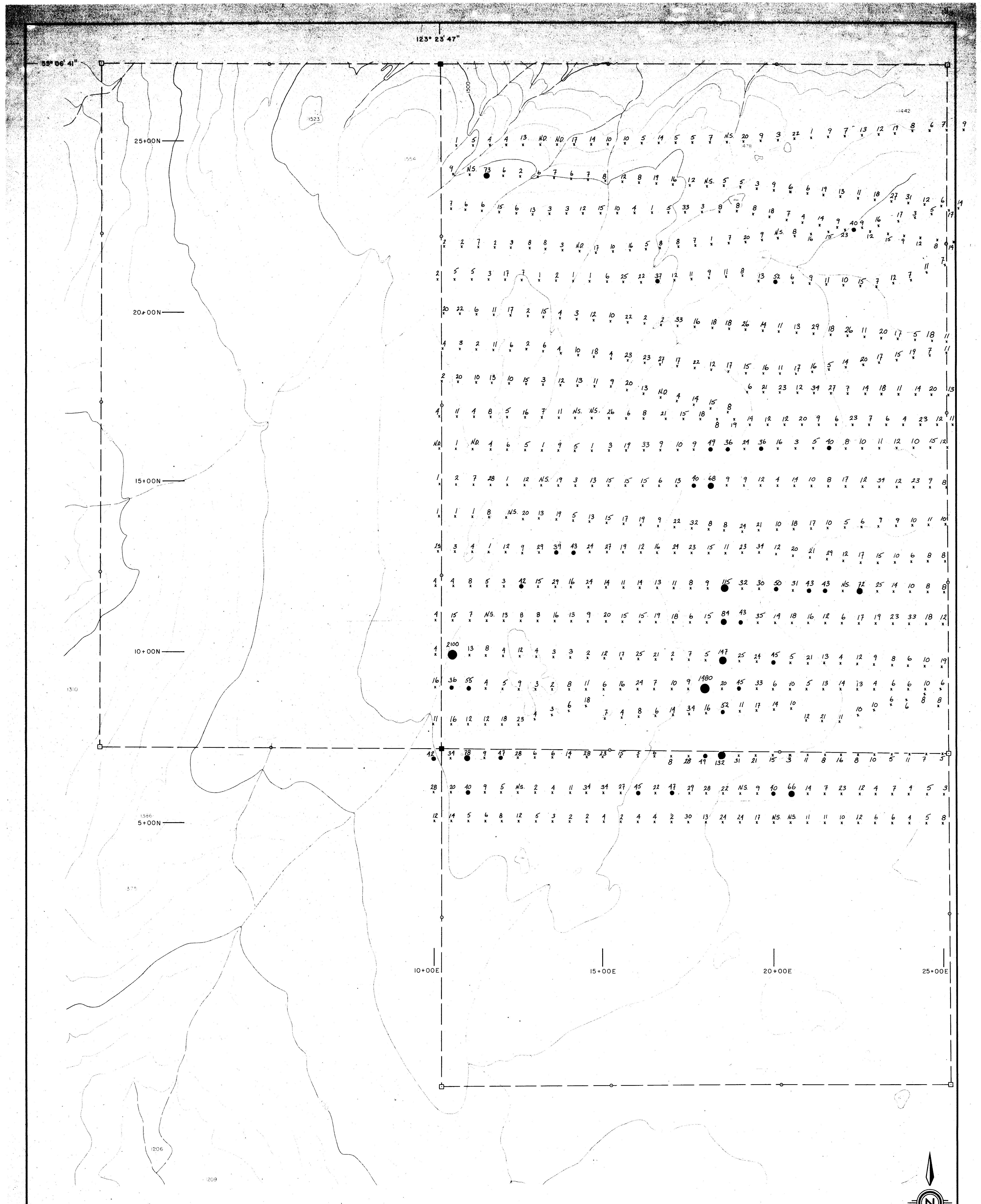
DENISON MINES LIMITED  
MINERAL EXPLORATION WESTERN DIVISION

KOOTS GROUP 1981

**GEOLOGY**



Comp. By: R.L.F., R.R.H.	Date: OCT. 1981	Scale: 0 100 M
Drawg. No.: 9921	NTS: 93-0/3W	



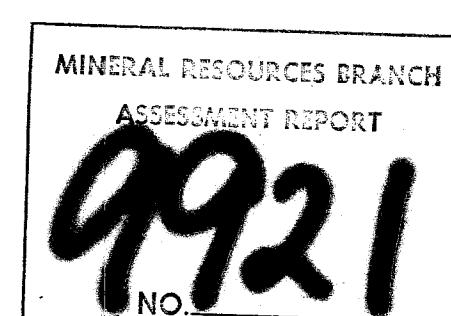
#### LEGEND

- Legal Corner Post
- Corner Post
- Intermediate Post
- Claim Boundary
- 1383 Spot Elevation
- Stream
- ▲ Swamp

- 25+00N Soil Sample Grid
- × Soil Sample Location
- 2100 Soil Sample Analysis Results in ppm. Mo

#### Anomalies

- Threshold 36-57 ppm. Mo
- First Order Anomaly 58-101 ppm. Mo
- Second Order Anomaly 102-189 ppm. Mo
- Third Order Anomaly 190+ ppm. Mo



MAP 5

DENISON MINES LIMITED

MINERAL EXPLORATION WESTERN DIVISION

KOOTS GROUP 1981

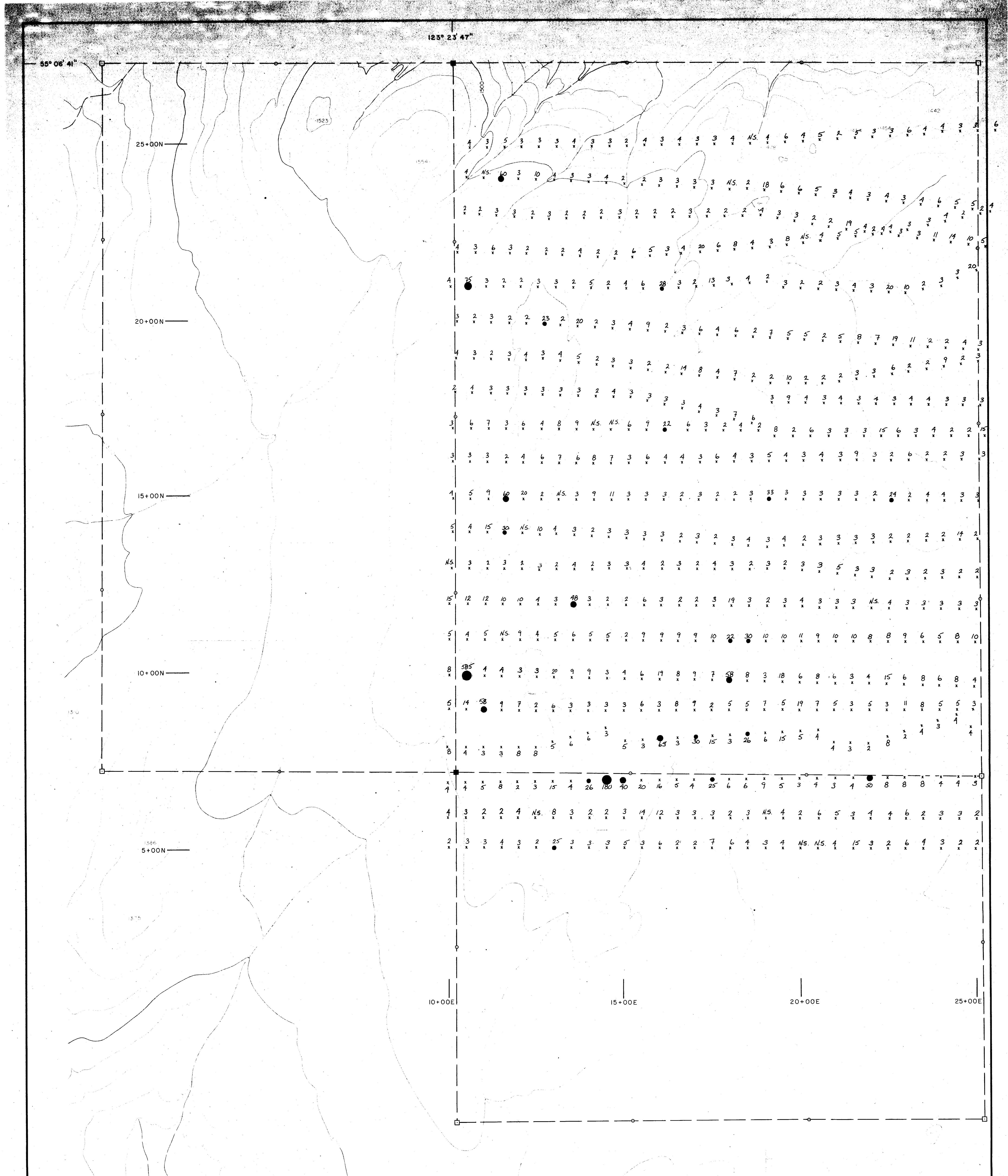
Mo SOIL GEOCHEMISTRY



Comp. By: R.L.F.	Date: AUG 1981	Scale: 1:5000
------------------	----------------	---------------

Drawn No.: 1000	NTS: 93-0 / 3W
-----------------	----------------

SCALE 1:5000  
100 50 0 100 200 300 400 Metres  
Contour Interval 20 Metres



## LEGEND

-  Legal Corner Post  
 Corner Post  
 Intermediate Post  
 Claim Boundary  
 1383 Spot Elevation  
 Stream  
 Swamp

 25+ OON Soil Sample Grid  
 x Soil Sample Location  
 585 x Soil Sample Analysis Results in ppm. W

Anomalies

  - Threshold 22-37 ppm. W
  - First Order Anomaly 38-69 ppm. W
  - Second Order Anomaly 70-133 ppm. W
  - Third Order Anomaly 134+ ppm. W

MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
9921  
NO.

MAP 6

# **DENISON MINES LIMITED**

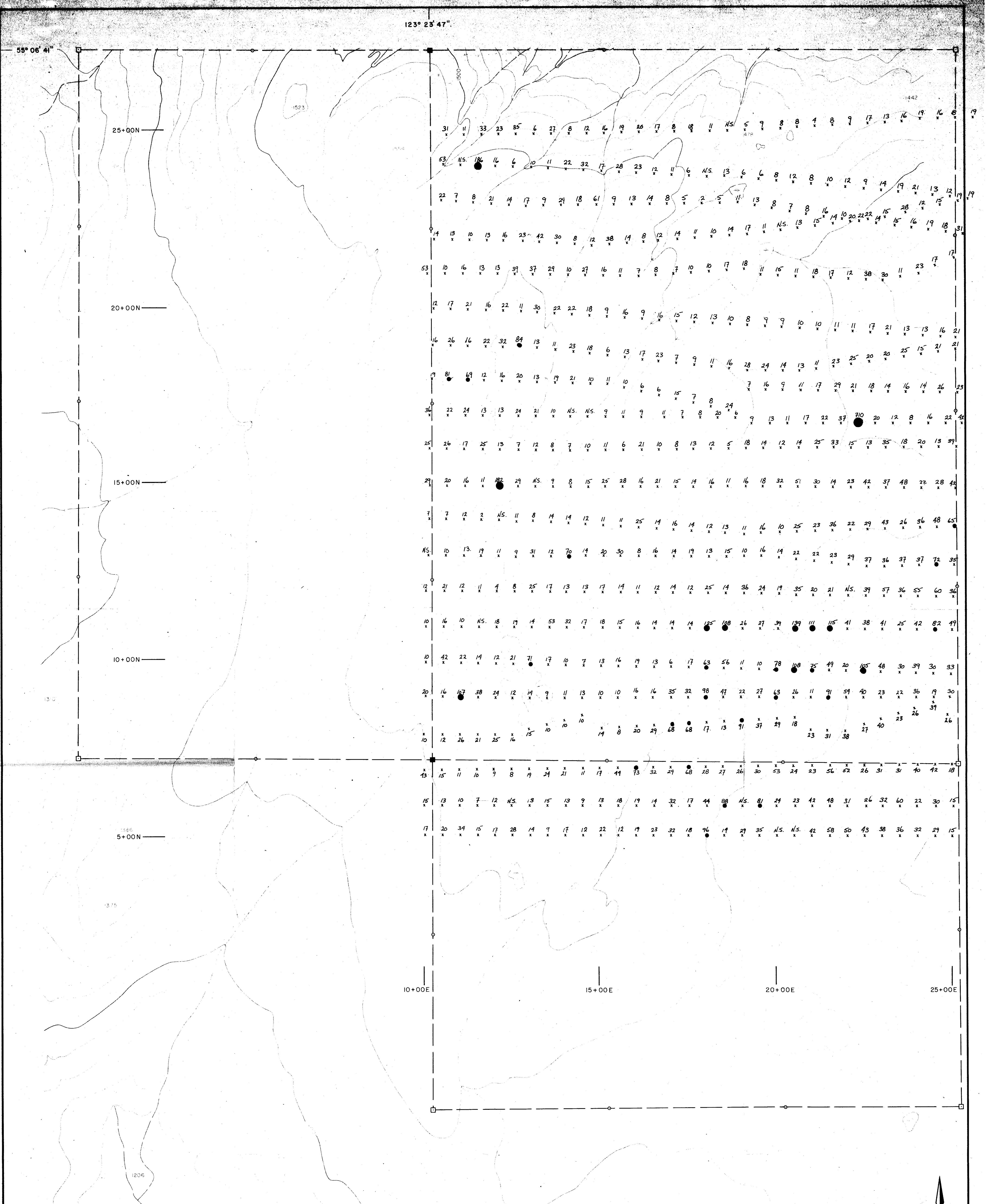
**EXPLORATION**      **WESTERN DIVISION**

WATER GEOCHEMISTRY

SCALE 1:5000

Contour Interval 20 Metres

**Contour Interval 20 Metres**



## LEGEND

- Legal Corner Post  
 □ Corner Post  
 ○ Intermediate Post  
 — Claim Boundary  
 -1383 Spot Elevation  
 — Stream  
 \* Swamp

— 25+ OON Soil Sample Grid  
 x Soil Sample Location  
 710<sub>x</sub> Soil Sample Analysis  
 Results in ppm. Pb

Anomalies

  - Threshold 63-102 ppm. Pb
  - First Order Anomaly 103-182 ppm. Pb
  - Second Order Anomaly 183-342 ppm. Pb
  - Third Order Anomaly 343+ ppm. Pb

MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
**9921**  
NQ

MAP 8

# DENISON MINES LIMITED

**MICROSCOPIC  
MINERAL EXPLORATION**      **WESTERN DIVISION**

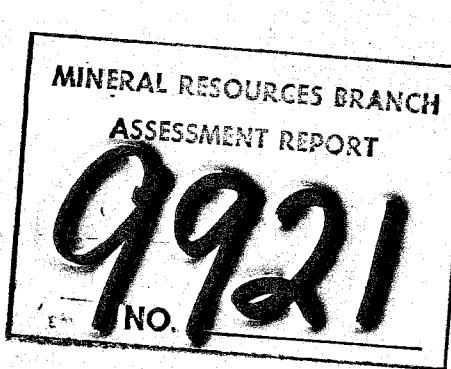
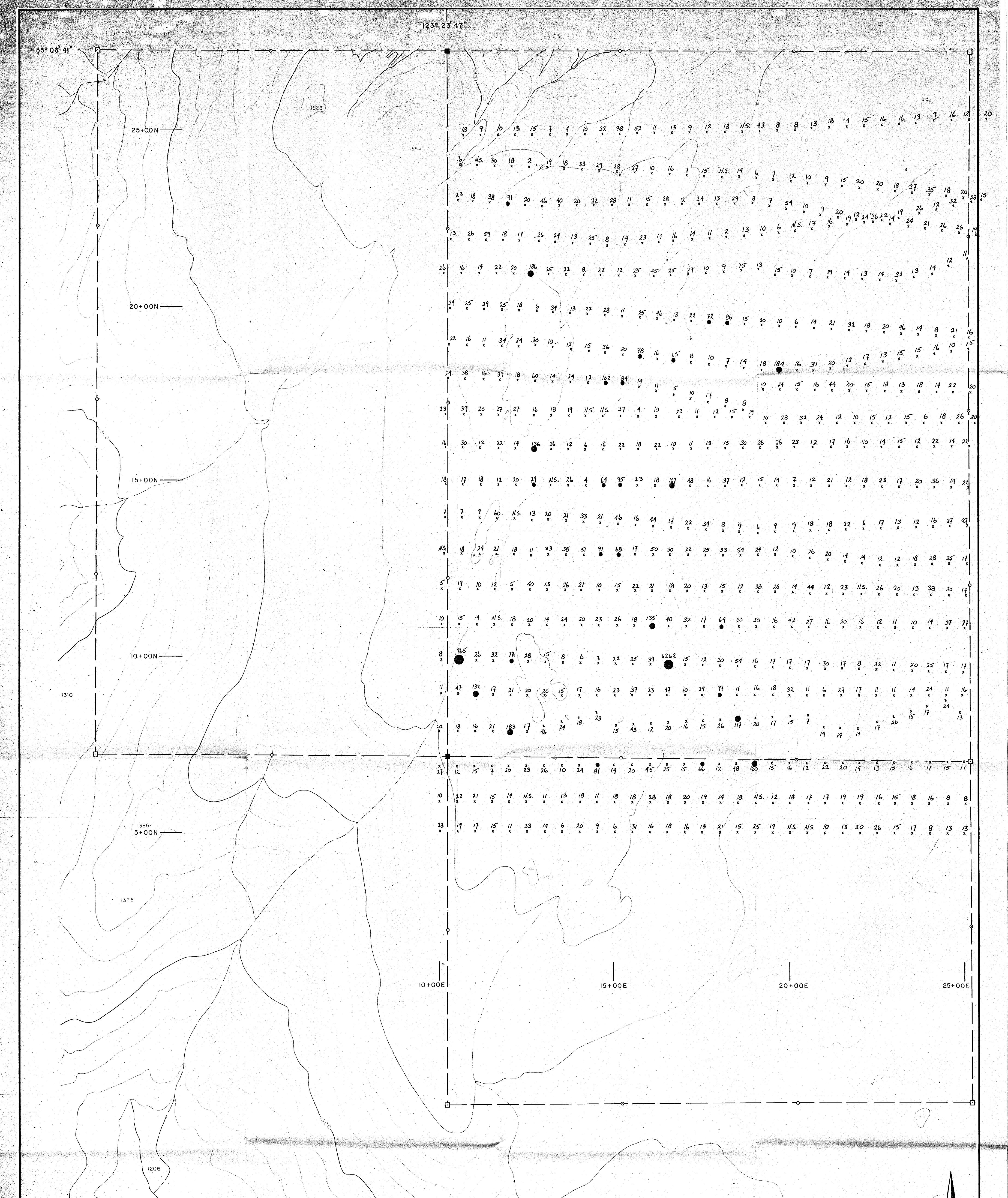
KOOTS GROUP 1981

## Pb SOIL GEOCHEMISTRY

**SCITE SECURE**

Date: AUG 1981 Scale: 1:5000

Comp. By: R.L.F.	Date: AUG. 1981	Scale: 1:5000
Drwg. No.:	<i>Ridgeback</i>	NTS: 93-0 / 3 W



MAP 7

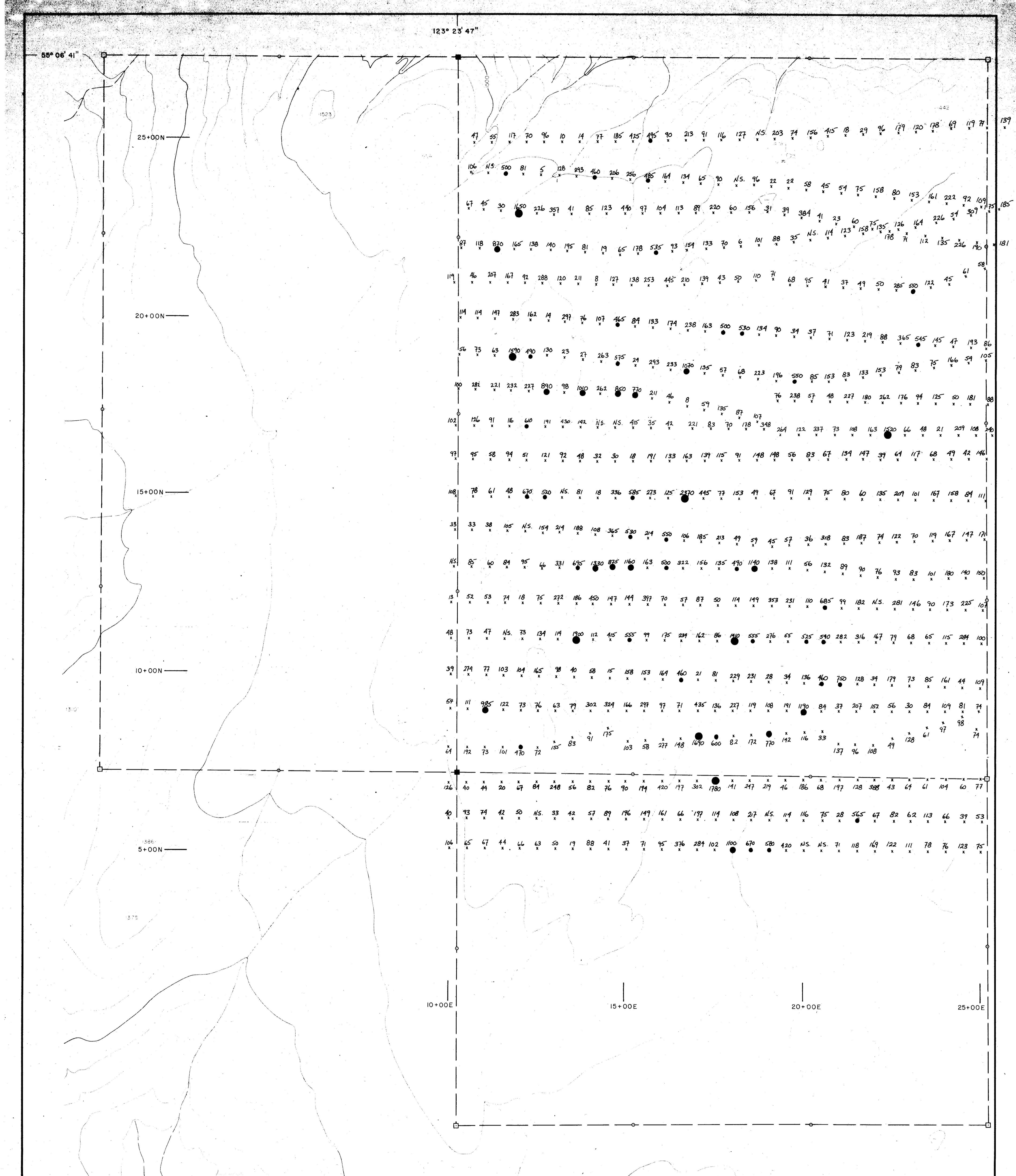
DENISON MINES LIMITED  
MINERAL EXPLORATION WESTERN DIVISION

KOOTS GROUP 1981

Cu SOIL GEOCHEMISTRY

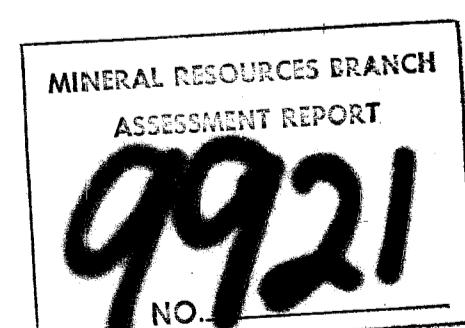
Comp. By: R.L.F.	Date: AUG. 1981	Scale: 1:5000
Draw. No.: 93-023 W		NTS: 93-023 W

SCALE 1:5000  
100 50 0 100 200 300 400 Metres  
Contour Interval 20 Metres



#### LEGEND

- Legal Corner Post
- Corner Post
- Intermediate Post
- Claim Boundary
- 1383 Spot Elevation
- Stream
- \* Swamp
- 25+00N Soil Sample Grid
- \* Soil Sample Location
- 2370 Soil Sample Analysis Results in ppm. Zn
- Anomalies
- Threshold 458-757 ppm. Zn
- First Order Anomaly 758-1357 ppm. Zn
- Second Order Anomaly 1358-2557 ppm. Zn



MAP 9

DENISON MINES LIMITED

MINERAL EXPLORATION WESTERN DIVISION

KOOTS GROUP 1981

Zn SOIL GEOCHEMISTRY

Comp. By: R.L.F.	Date: AUG. 1981	Scale: 1:5000
Drawg. No.: Rev. D. Falls		NTS: 93-0 / 3 W

SCALE 1:5000  
100 50 0 100 200 300 400 Metres  
Contour Interval 20 Metres



