

ARIS SUMMARY SHEET

District Geologist, Prince George

Off Confidential: 89.08.26

ASSESSMENT REPORT 18035

MINING DIVISION: Cariboo

PROPERTY: Dock  
LOCATION: LAT 53 29 00 LONG 121 20 00  
UTM 10 5927115 610596  
NTS 093H06W

CLAIM(S): Dock 24  
OPERATOR(S): Noranda Ex.  
AUTHOR(S): Savell, M.J.  
REPORT YEAR: 1988, 11 Pages

COMMODITIES  
SEARCHED FOR: Lead, Zinc, Gold

GEOLOGICAL  
SUMMARY: The property is underlain by Upper Proterozoic shales and limestones of the Isaac and Cunningham formations. The soil survey did not detect any significant gold, lead or zinc anomalies. No outcrop was observed in the grid area. No further work is recommended.

WORK  
DONE: Geochemical  
LINE 3.7 km  
SOIL 100 sample(s) ;AU, PB, ZN  
Map(s) - 2; Scale(s) - 1:2500

RELATED  
REPORTS: 16549, 17599, 17612

LOG NO: 1125	REV:
ACTION:	
DATE:	

GEOCHEMICAL REPORT

ON THE

DOCK 24 CLAIM

FILMED

N. T. S. 93 H/06

CARIBOO MINING DIVISION

SITUATED AT COORDINATES: 53<sup>0</sup> 27'  
121<sup>0</sup> 17'

NORANDA EXPLORATION COMPANY, LIMITED  
(NO PERSONAL LIABILITY)

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

BY: M. J. SAVELL

NOVEMBER, 1988

18-035

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SUMMARY:

The Dock 24 mineral claim was acquired by Noranda in August, 1987. This report describes the subsequent exploration program undertaken to assess the economic potential.

The property lies in the Cariboo Mountains of the Omineca belt and is underlain by Upper Proterozoic shales and limestones (Isaac and Cunningham Formations).

The soil survey did not detect any significant Au, Pb or Zn anomalies. No outcrop was observed in the grid area. No further work is recommended.

## INTRODUCTIONS:

The Dock 24 mineral claim was acquired by Noranda in August, 1987. The claim was staked to secure ground considered favorable for the occurrence of structurally controlled, sediment hosted gold mineralization.

This report described the subsequent geochemical survey undertaken in August, 1988 to assess the economic potential of the prospect. All geological surveys were performed by employees of Noranda Exploration Company, Limited.

The survey was designed to test cross cutting linear features observed in landsat imagery and their association with gold mineralization observed on nearby claims.

The claim is part of a much larger group of claims known as the Dominion Creek property.

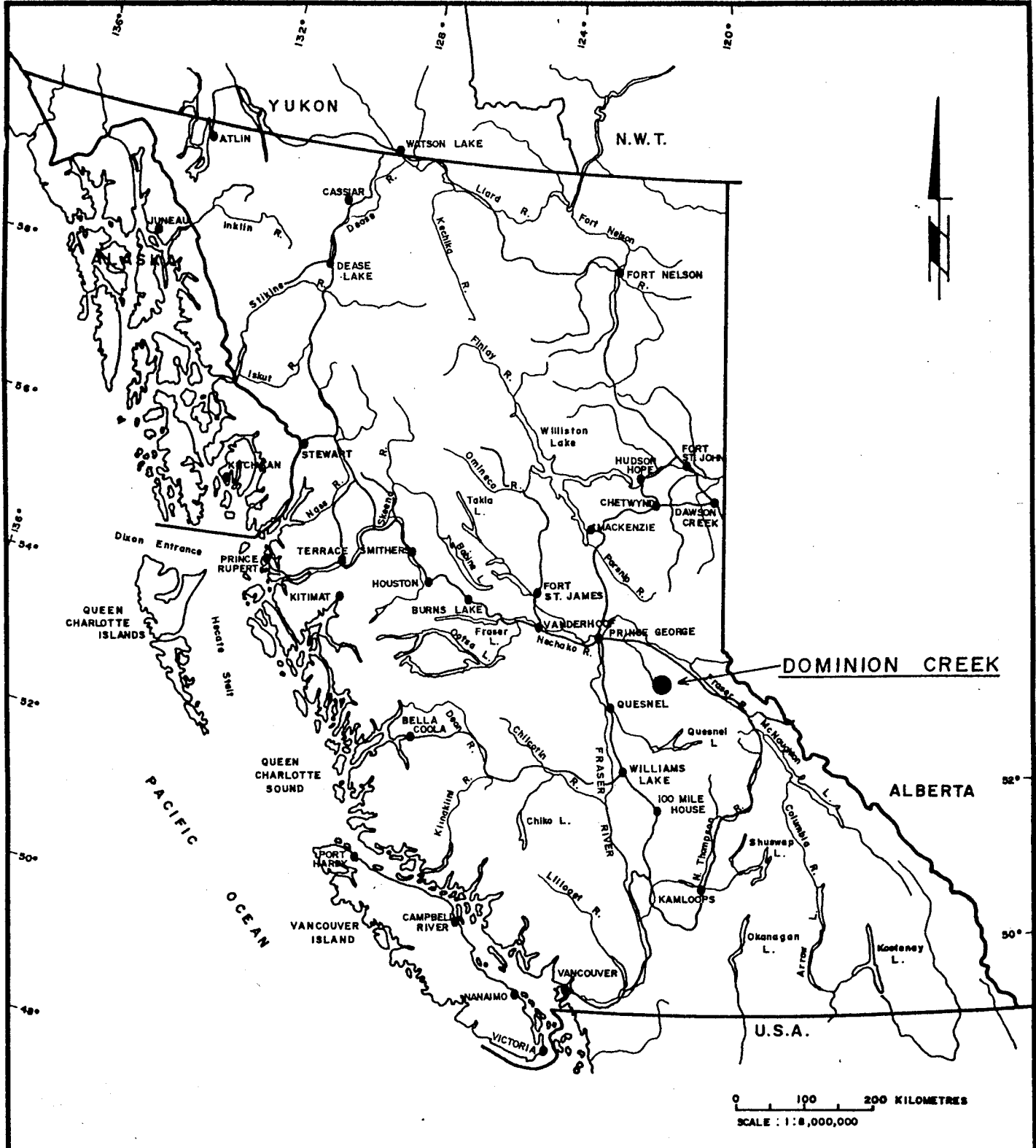
## LOCATION & ACCESS:

The property is located approximately 110 km east-southeast of Prince George and 43 km north-northwest of Wells, B. C. (Figure #1). It can be reached via forest service roads from Prince George (approximately 155 km).

## PHYSIOGRAPHY & VEGETATION:

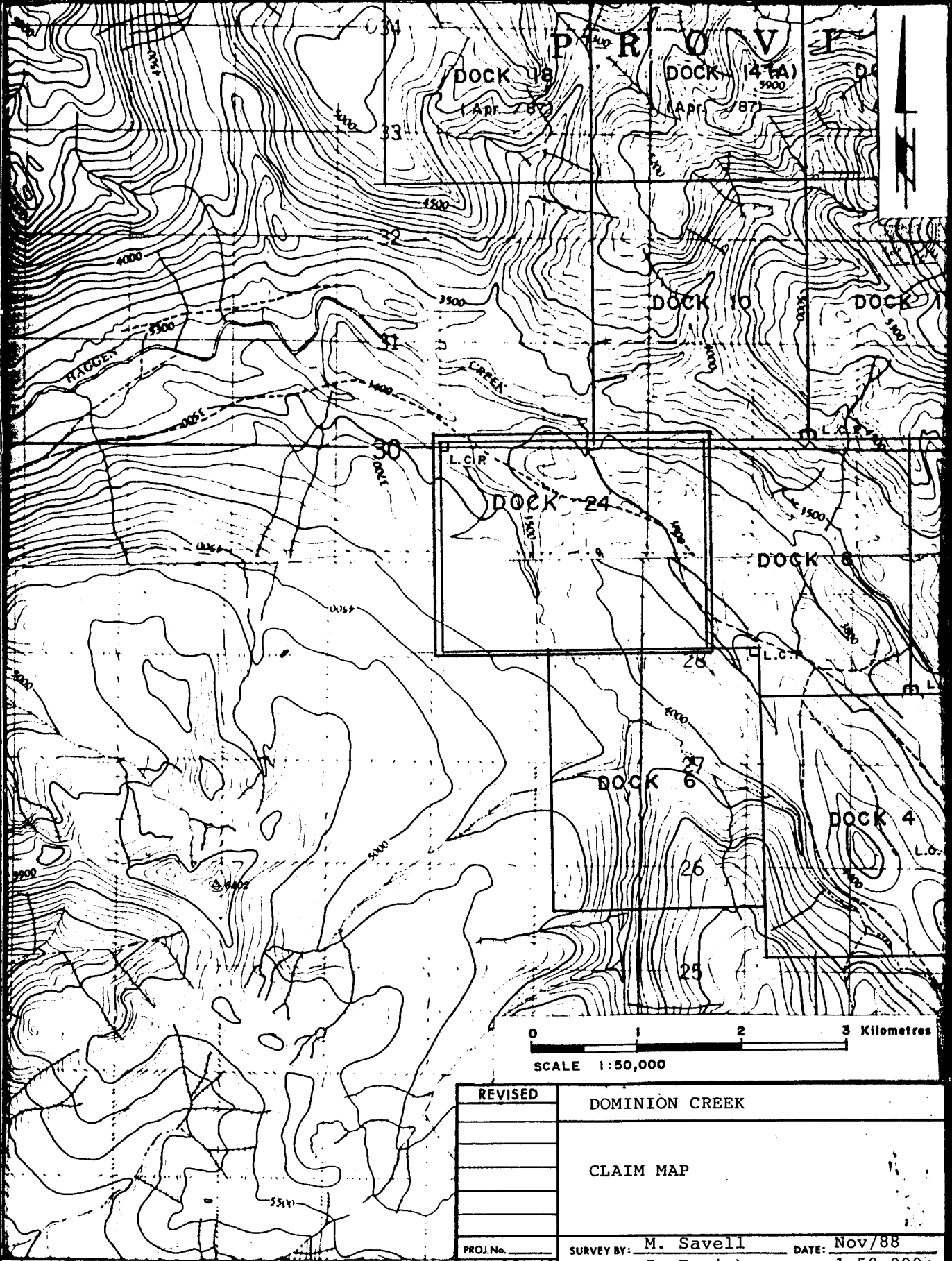
The claims lie within the Cariboo Mountains. Local terrane is gentle to steeply sloping and almost entirely logged. Local relief ranges from about 1000 to 1500 meters.

Vegetation consists of mature white spruce and balsam fir. A moderately dense undergrowth of dwarf willows, huckleberry and devils club covers most of the property.



REVISED	DOMINION CREEK	
	LOCATION MAP	
PROJ. No. <u>290</u>	SURVEY BY: <u>MS</u>	DATE: <u>MAR 1988</u>
N.T.S. <u>93H6</u>	DRAWN BY: <u>S.K.B.</u>	SCALE: <u>1:8,000,000</u>
DWG. No.	<b>NORANDA EXPLORATION</b>	
1	OFFICE: <u>PRINCE GEORGE, B.C.</u>	

VANCAL 1192.



0 1 2 3 Kilometres  
SCALE 1:50,000

REVISED	DOMINION CREEK	
	CLAIM MAP	
PROJ. No.	SURVEY BY: M. Savell	DATE: Nov/88
N.T.S. 93H/6	DRAWN BY: S. Buziak	SCALE: 1:50,000
DWG. No.	<b>NORANDA EXPLORATION</b>	
2	OFFICE: Prince George	

### CLAIM STATISTICS:

The property is comprised of a 20 unit block modified grid claim as listed below. (Figure #2). Upon acceptance of this report, the claim will be in good standing until the indicated expiry date.

TABLE 1 - CLAIM STATISTICS

<u>NAME</u>	<u>RECORD #</u>	<u>UNITS</u>	<u>RECORD DATE</u>	<u>EXPIRY DATE</u>
Dock 24	8597	20	Aug. 28, 1987	Aug. 28, 1989

### PREVIOUS WORK:

There is no record of any previous exploration work having been conducted in the area prior to staking in 1987. The 1984 government Regional Geochemical Survey detected a geochemically anomalous drainage (Clear Mountain area) which was followed up by the B. C. Ministry of Energy, Mines and Petroleum Resources (B.C.M.E.M.P.R.) in 1985. This follow up survey is reported in B.C.M.E.M.P.R. Paper 1986-1 and suggests a northwesterly trending linear zone is geochemically anomalous in Pb-Co-Fe-As and Sb.

Exploration surveys on the remaining claims of the Dominion Creek property have been documented and filed for assessment.

### REGIONAL GEOLOGY:

The property lies in the Cariboo Mountains of the Omineca belt. The regional geology is comprised of Upper Proterozoic to Cambrian continental margin sediments including quartzite, sandstone, siltstone, shale and limestone. The area has been mapped at a scale of 1 inch to four kilometers (Map 1356A) and studied in Paper 72-35. Struik (1986) considers these rocks part of the Cariboo sub-terrane which is part of the Cassiar Terrane of displaced continental margin sediments.

These rocks have been grouped with the Upper Proterozoic Windermere tectonic assemblage, which consists of mainly clastic continental margin sediments and the Lower Cambrian Gog tectonic assemblage, which consists of rifted and passive continental margin sediments. On the property only rocks of the Isaac and Cunningham Formation (Windermere assemblage) are exposed.

The area has been deformed into a series of northwest plunging major fold structures. The northwest trending Isaac Lake Fault which roughly cuts through the centre of the property separates the Isaac Lake Synclinorium to the east and the Lanezi Arch or Anticlinorium to the west. This deformational episode



appears to have resulted in folding of deeper, older formations where as younger, high level formations display more fault dominated structures. This is probably a function of the physical characteristics (less competent shales at depth) of the rocks and the higher temperatures at depth. The rocks display low-grade metamorphic effects.

#### GEOCHEMICAL SURVEY:

For control purposes, a grid was established as presented on Figures 3 & 4. A baseline with a 135 degree azimuth was cut and designated 11,300E. Lines at 100 meter spacings were surveyed perpendicular to the baseline and designated lines 16,900N to 17,400N. This grid uses the same co-ordinate system as the grid on the other Dominion Creek claims, and is connected by tie line 10,500E (Figure 3, 4). Sample intervals are 25 meters. All lines are compass and hipchain controlled and stations are marked at 25 meter or closer intervals by fluorescent surveyors ribbon. A total of 3.7 km of grid lines were surveyed.

A total of 100 samples were collected and analyzed for Au, Pb and Zn. The samples were collected from the "B" soil horizon by digging a small hole with a grubhoe. The samples were placed in Kraft paper envelopes and shipped for analysis to Noranda's lab at 1050 Davie St., Vancouver, B. C. The details of the analytical procedure is given in Appendix III. Line, sample locations and analytical values are presented on Figures 3 & 4.

**Zinc:** The range of values is from 50 to 160 ppm. There are no clearly defined high or low areas, and it is suggested that all these values fall within the expected background levels.

**Lead:** The range of values is from 1 to 44 ppm. Again, no clear anomalies are defined, and the range is believed to fall within the expected background levels for this terrain and geology.

**Gold:** All values are below the detectable limits of 10 ppb.

CONCLUSIONS:

The geochemical survey has failed to detect any significant concentrations of lead, zinc or gold. As overburden thickness is believed to be in the 2 to 5 meter range, as observed on nearby road cuts, the chances of the intersecting lineaments covered with this survey having any significant associated mineralization appear low.

RECOMMENDATIONS:

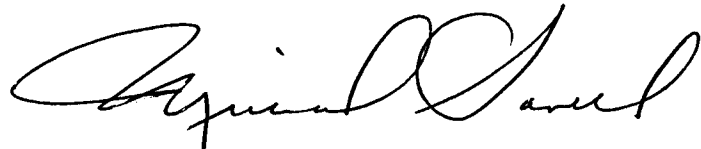
No further work is recommended on the property.

APPENDIX I

STATEMENT OF QUALIFICATIONS

I, Michael J. Savell of the City of Prince George, Province of British Columbia, do certify that:

1. I am a geologist residing at 3507 Rosia Road, Prince George, British Columbia.
2. I am a graduate of Dalhousie University with a Bachelor of Science (Honors) in Geology.
3. I am a member in good standing of the Geological Association of Canada, Canadian Institute of Mining, Prospector's and Developer's Association and the B.C.-Yukon Chamber of Mines.
4. I presently hold the position of Project Geologist with Noranda Exploration Company, Limited and have been in their employ since 1980.



-----  
Michael J. Savell  
Geologist  
Noranda Exploration Company, Limited  
(No Personal Liability)

APPENDIX II

STATEMENT OF COSTS

PROJECT - DOMINION CREEK - DOCK 24 CLAIM

DATE: AUGUST, 1988

TYPE OF REPORT - GEOCHEMICAL

a)	Wages:		
	No. of Days - 7		
	Rate per Day - \$120.68		
	Dates from - Jan. 1, 1988 to Aug. 27, 1988		
	Total Wages:		\$ 844.76
b)	Food & Accommodation:		
	No. of Days - 7		
	Rate per Day - \$25.00		
	Dates from - Jan. 1, 1987 to Aug. 27, 1988		
	Total Cost:		\$ 175.00
c)	Transportation:		
	No. of Days - 7		
	Rate per Day - \$26.06		
	Dates from - Jan. 1, 1988 to Aug. 27, 1988		
	Total Cost:		\$ 182.42
d)	Analysis:		
	100 soils - Pb,Zn @ \$2.70/sample	\$ 270.00	
	100 soils - Au @ \$3.50/sample	\$ 350.00	
	Total Cost:		\$ 620.00
e)	Cost of Preparation of Report:		
	Author	\$ 100.00	
	Drafting	\$ 100.00	
	Typing	\$ 25.00	
	Total Cost:		\$ 225.00
			-----
	TOTAL COST		\$2,047.18

ANALYTICAL METHOD DESCRIPTIONS FOR GEOCHEMICAL ASSESSMENT REPORTS

Revised:01/86

The methods listed are presently applied to analyse geological materials by the Noranda Geochemical Laboratory at Vancouver. (March, 1984)

Preparation of Samples

Sediments and soils are dried at approximately 80°C and sieved with a 80 mesh nylon screen. The -80 mesh (0.18 mm) fraction is used for analysis.

Rock specimens are pulverized to -120 mesh (0.13 mm). Heavy mineral fractions (panned samples) are analysed in its entirety, when it is to be determined for gold without further sample preparation. See addendum.

Analysis of Samples.

Decomposition of a 0.200 g sample is done with concentrated perchloric and nitric acid (3:1), digested for 5 hours at reflux temperature. Pulps of rock or core are weighed out at 0.2 g or less depending on the matrix of the rock, and twice as much acid is used for decomposition than that is used for silt or soil.

The concentrations of Ag, Cd, Co, Cu, Fe, Mn, Mo, Ni, Pb, V and Zn (all the group A elements of the fee schedule) can be determined directly from the digest (dissolution) with an atomic absorption spectrometer (AA). A Varian-Techtron Model AA-5 or Model AA-475 is used to measure elemental concentrations.

Elements Requiring Specific Decomposition Method

**Antimony - Sb:** 0.2 g sample is attacked with 3.3 mL of 6% tartaric acid, 1.5 mL conc. hydrochloric acid and 0.5 mL of conc. nitric acid, then heated in a water bath for 3 hours at 95° C. Sb is determined directly from the acid solution with an AA-475 equipped with electrodeless discharge lamp (EDL).

**Arsenic - As:** 0.2 - 0.4 g sample is digested with 1.5 mL of 70 % perchloric acid and 0.5 mL of conc. nitric acid. A Varian AA-475 equipped with an As-EDL measures the arsenic concentration of the digest.

**Barium - Ba:** 0.1 g sample is decomposed with conc. perchloric, nitric and hydrofluoric acid. Atomic absorption using a nitrous oxide-acetylene flame determines Ba from the aqueous solution.

**Bismuth - Bi:** 0.2 g - 0.3 g is digested with 2.0 ml of perchloric 70% and 1.0 ml of conc. nitric acid. Bismuth is determined directly from the digest into the flame of the AA instrument c/w EDL.

**Gold - Au:** 10.0 g sample (Pan-concentrates see below) is digested with aqua regia (1 part nitric and 3 parts hydrochloric acid). Gold is extracted with Methyl iso-Butyl ketone (MIBK) from the aqueous solution. Gold is determined from the MIBK solution with flame AA.

**Magnesium - Mg:** 0.05 - 0.10 g sample is digested with 4 ml perchloric/nitric acid (3:1). An aliquot is taken to reduce the concentration to within the range of atomic absorption. The AA-475 with a nitrous oxide flame determines Mg from the aqueous solution.

**Tungsten - W:** 1.0 g sample sintered with a carbonate flux and thereafter leached with water. The leachate is treated with potassium thiocyanate. The yellow tungsten thiocyanate is extracted into tri-n-butyl phosphate. This permits colourimetric comparison with standards to measure tungsten concentration.

**Uranium - U:** An aliquot, taken from a perchloric-nitric (3:1) decomposition, usually from the multi-element digestion, is diluted with water and a phosphate buffer. This solution is exposed to laser light, and the luminescence of the uranyl ion is quantitatively measured on the UA-3 (Scintrex).

LOWEST VALUES REPORTED IN PPM

Ag - 0.2	Mn - 20	Zn - 1	Au - 0.01 (10PPB)
Cd - 0.2	Mo - 1	Sb - 1	W - 2
Co - 1	Ni - 1	As - 1	U - 0.1
Cu - 1	Pb - 1	Ba - 10	
Fe - 100	V - 10	Bi - 1	

NORANDA VANCOUVER LABORATORY

\*\*\*\*\*

PROPERTY/LOCATION: DOMINION CREEK

CODE : 8809-045

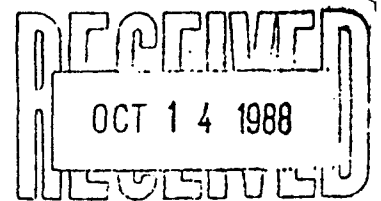
Project No. : 290  
 Material : 374 SOILS  
 Remarks :

Sheet: 1 of 7  
 Geol.: C.C.

Date rec'd: SEPT 12  
 Date compl: OCT. 07

Values in PPM, except where noted.

T. T. No.	SAMPLE No.	Zn	Pb	PPB Au
62	16900N-11100E	66	14	10
63	11125	88	18	10
64	11150	56	16	10
65	11175	52	14	10
66	11200	100	18	10
67	11250	88	16	10
68	11275	100	26	10
69	11300	98	18	10
70	11325	96	14	10
71	11350	90	16	10
72	11375	70	16	10
73	11425	100	12	10
74	11450	84	14	10
75	11475	80	10	10
76	11500	96	18	10
77	11525	120	22	10
78	11550	86	10	10
	16900N-11575E	90	18	10
80	17000N-11100N	110	16	10
81	11125	84	20	10
82	11150	100	18	10
83	11175	94	20	10
84	11200	88	20	10
85	11225	94	18	10
86	11275	78	18	10
87	11300	98	18	10
88	11325	78	20	10
89	11350	84	12	10
90	11375	90	16	10
91	11400	84	12	10
92	11425	110	14	10
93	11450	110	16	10
94	11475	120	14	10
95	11500	100	20	10
96	11525	52	10	10
97	11550	96	16	10
98	11575	150	20	10
99	17000N-11600E	100	8	10
100	CHECK NL-6	150	68	-
101	17100N-11175E	100	20	10
102	11200	92	22	10
103	11225	94	18	10
	11250	50	14	10
	11275	100	44	10
106	11400	110	20	10
107	11425	86	10	10
108	11475	96	14	10
109	17100N-11525E	84	14	10



Copy to Mike

13 Oct MS EP

T. T.  
No.SAMPLE  
No.

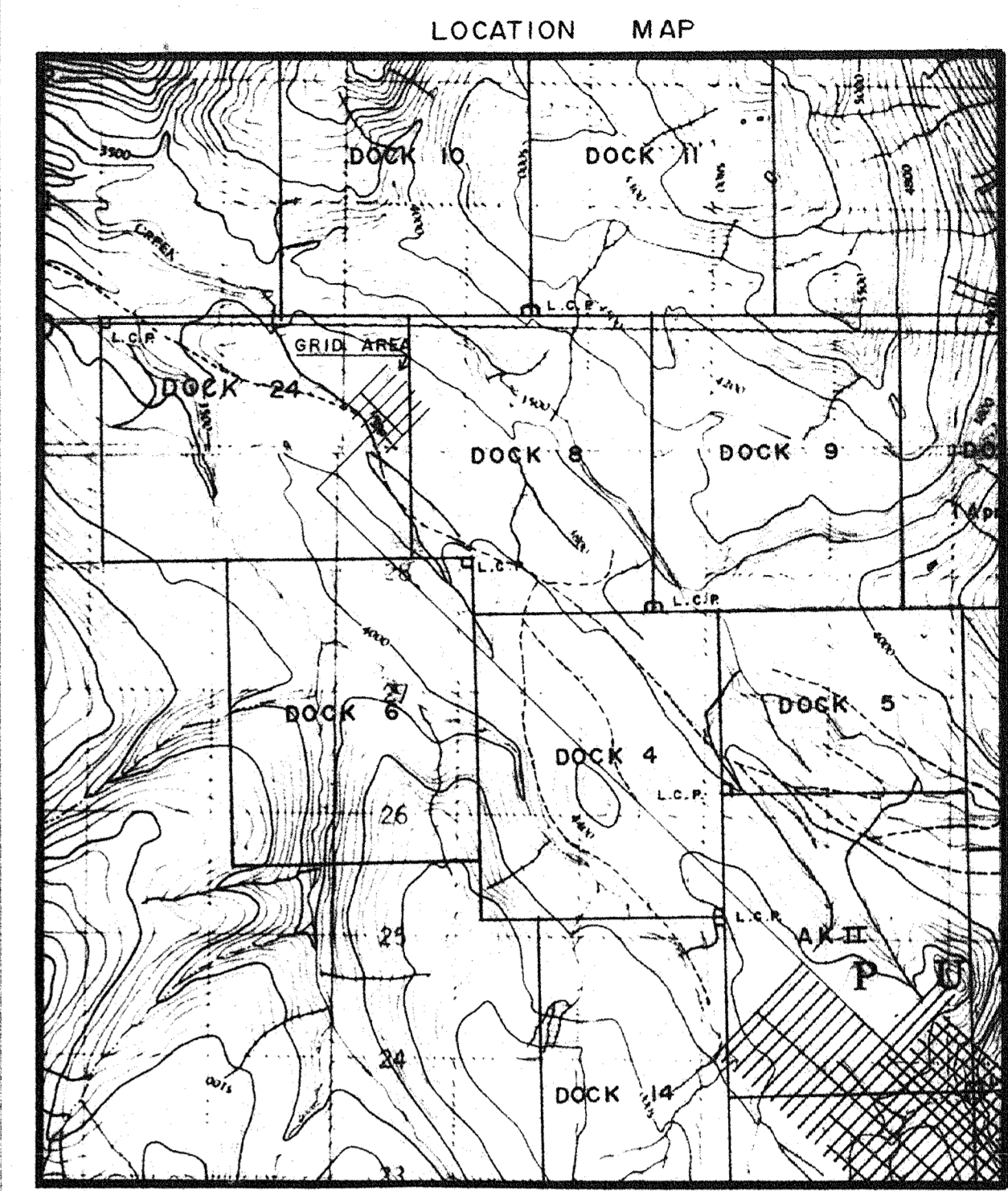
Zn

Pb

PPB  
Au8809-045  
Pg. 2 of 7

1	17100N-11550E	100	16	10
111	11575	120	18	10
112	17100N-11600E	120	16	10
113	17200N-11000E	90	16	10
114	11025	140	18	10
115	11050	140	20	10
116	11085	98	26	10
117	11100	100	16	10
118	11125	110	16	10
119	11150	160	22	10
120	11175	90	18	10
121	11200	80	18	10
122	11225	90	22	10
123	11250	70	14	10
124	11275	90	20	10
125	11325	96	24	10
126	11425	70	1	10
127	11450	92	1	10
128	11475	96	16	10
129	11500	88	22	10
130	11525	80	12	10
131	11550	94	16	10
132	17300N-11575E	96	20	10
133	17300N-11100E	76	22	10
134	11125	120	16	10
135	11150	94	18	10
	11175	110	32	10
137	11200	92	18	10
138	11225	88	22	10
139	11250	82	10	10
140	11275	80	18	10
141	11300	92	20	10
142	11325	90	18	10
143	11350	90	20	10
144	11375	110	16	10
145	11400	64	10	10
146	11425	62	14	10
147	11475	110	18	10
148	11500	72	12	10
149	11525	110	16	10
2	11550	98	14	10
3	11575	96	14	10
4	17300N-11600E	100	14	10
5	17400N-11100E	140	14	10
6	11200	90	16	10
7	11225	80	18	10
8	11250	60	10	10
9	11325	86	16	10
10	11400	88	12	10
11	11450	88	10	10
12	11525	120	14	10
13	11575	110	20	10
14	17400N-11600E	110	14	10
15	10000N-7700E	68	16	10
16	7725	74	16	10
17	7750	120	30	10
18	10000N-7775E	66	16	10



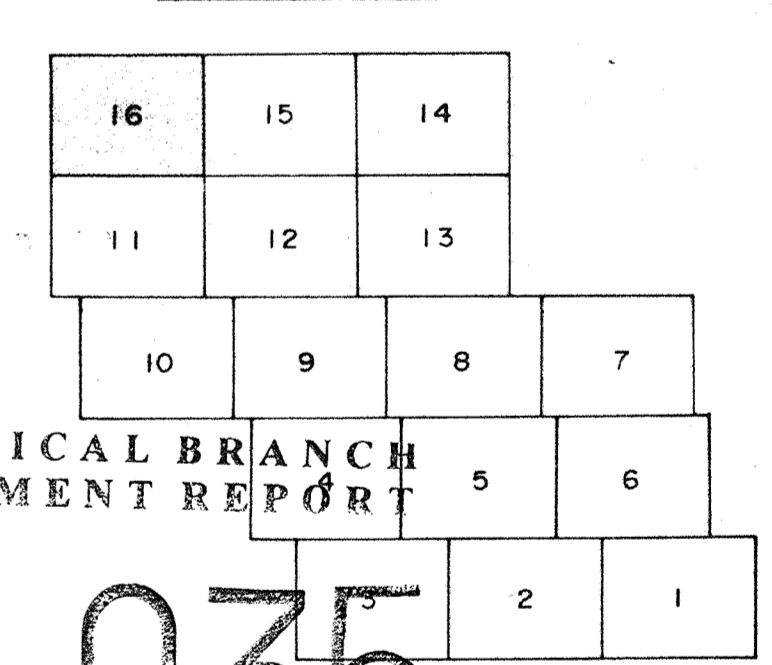


SCALE : 50,000

**LEGEND**

06/12 Soil Geochem Survey Zn/Pb (ppm)

**MAP SHEET INDEX**



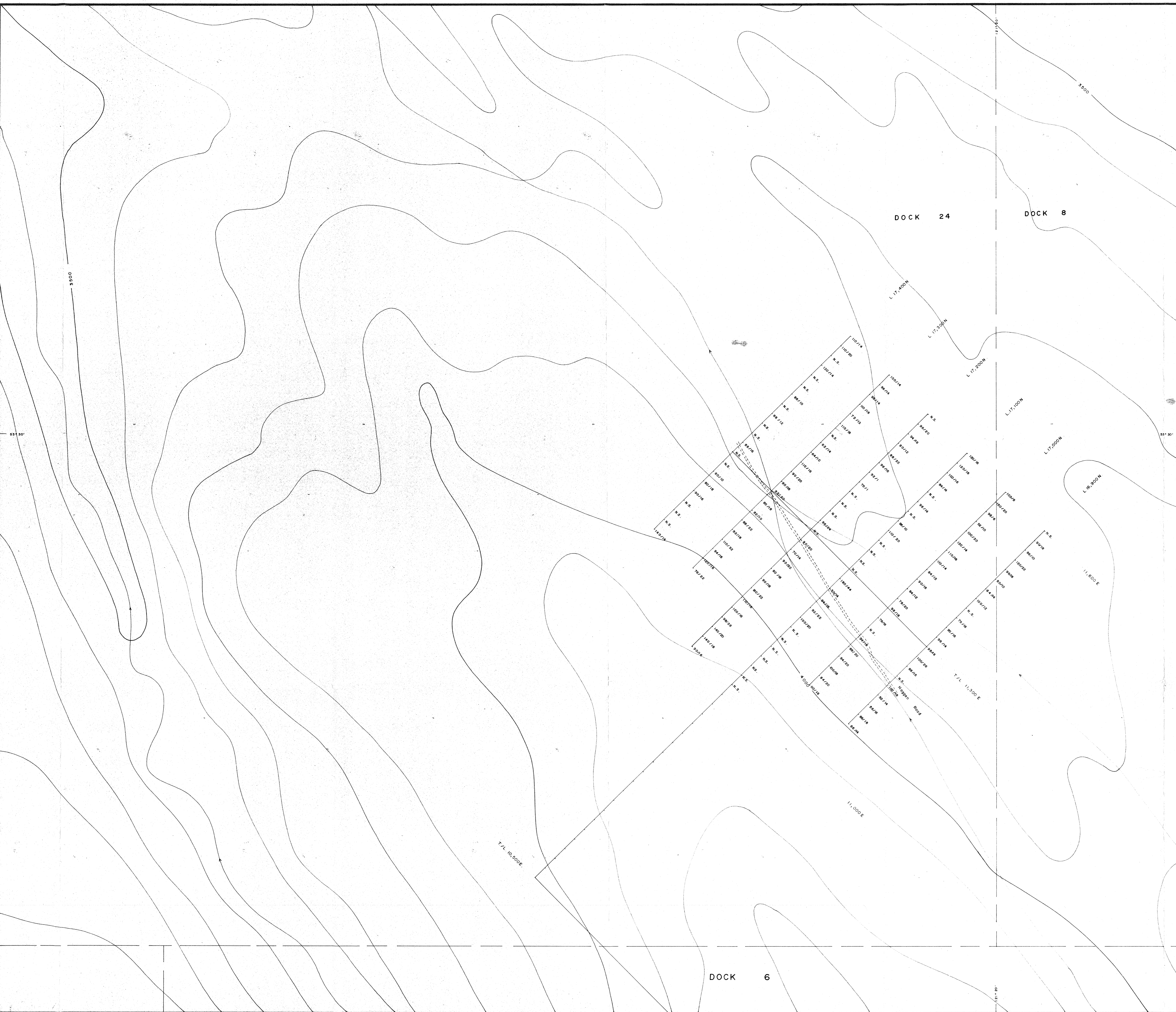
**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**18,035**

NOTE Topography based on photocopy enlargement of N.T.S. 1:50,000 scale map 93H/5.

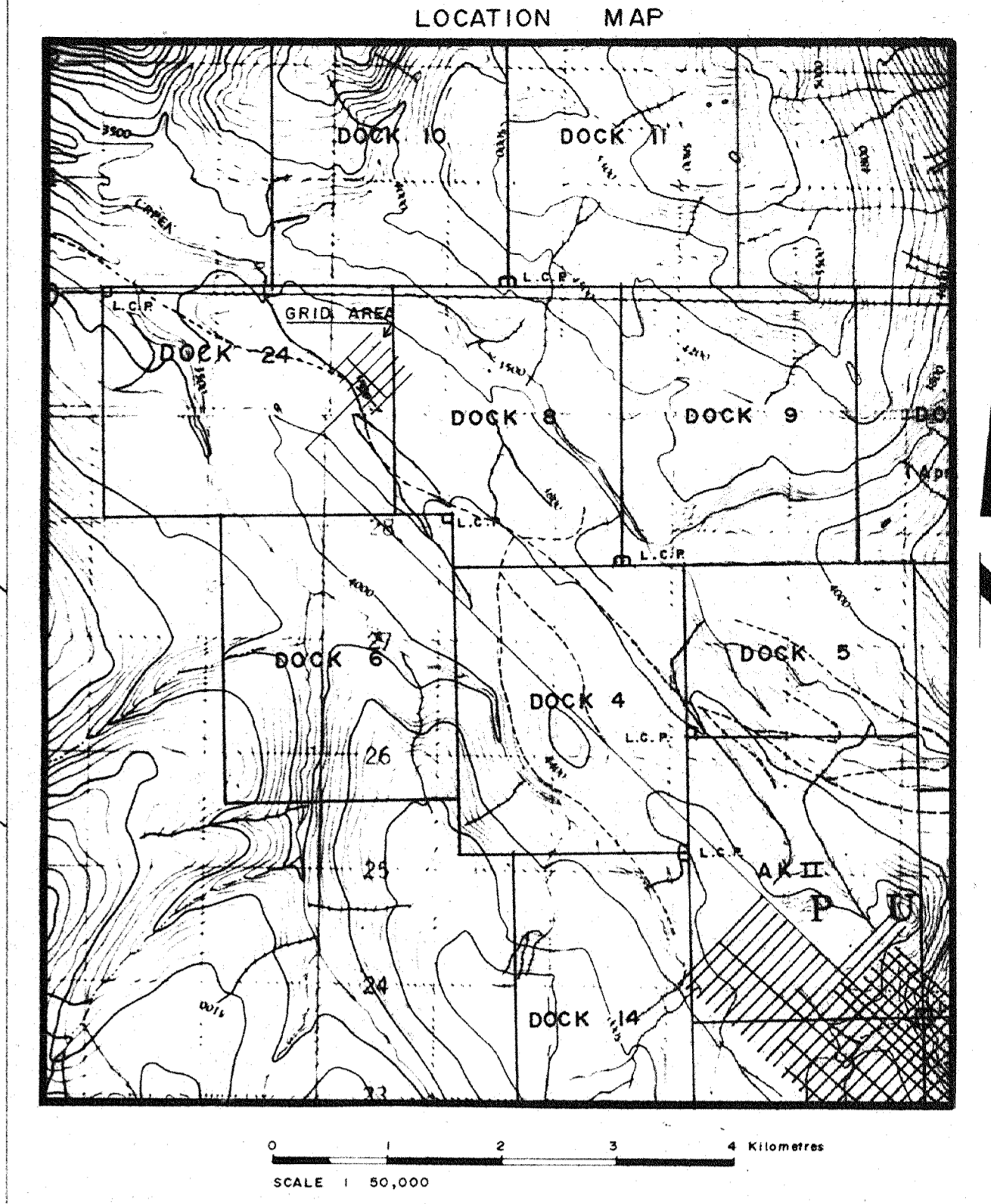
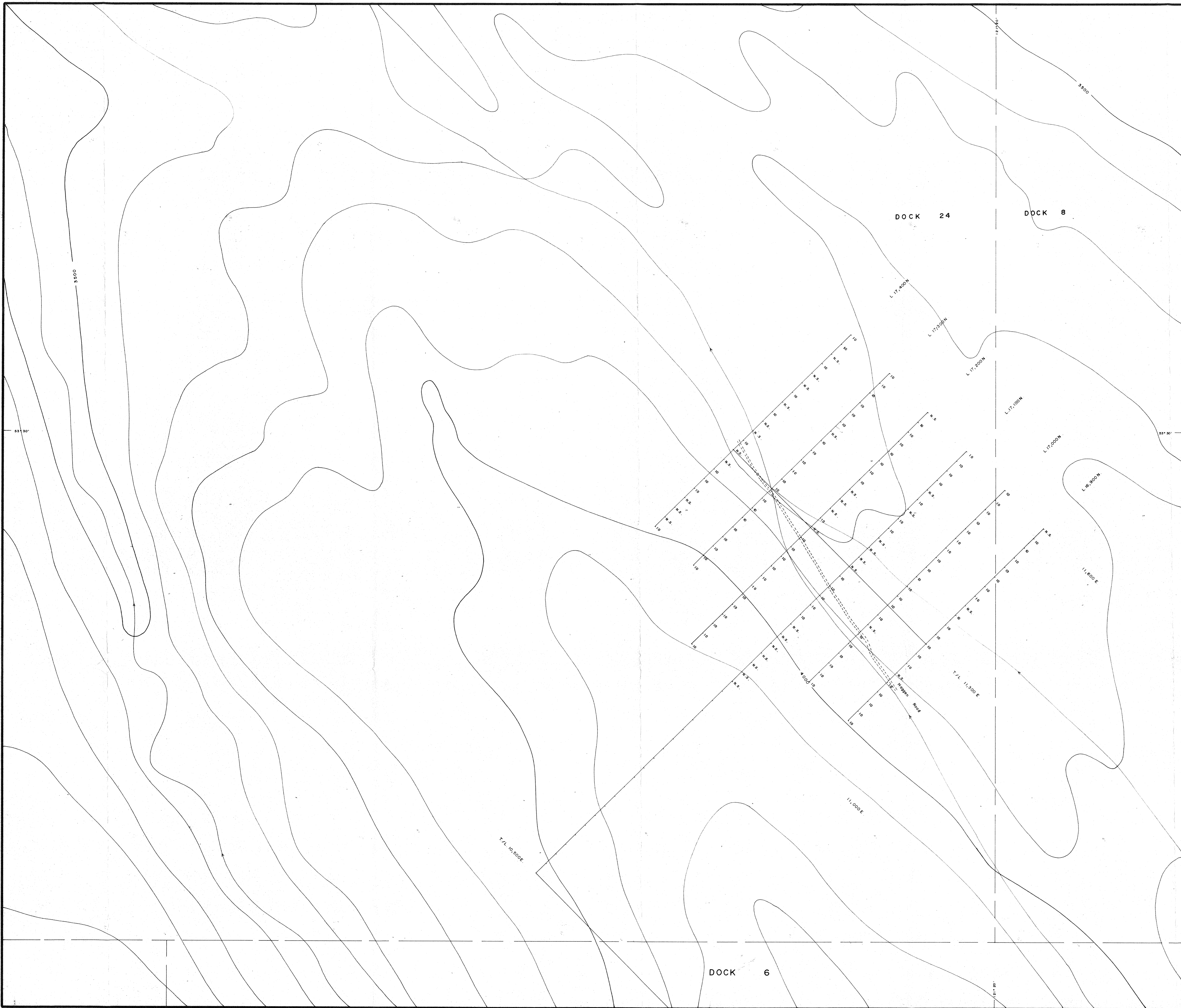
SCALE : 2,500

REVISED	<b>DOMINION CREEK</b>	
	<b>DOCK 24 CLAIM</b>	
	<b>SOIL GEOCHEM SURVEY</b>	
	<b>Zn/Pb (ppm)</b>	
PROJ. No. 280	SURVEY BY: C.M.	DATE: Aug. 1988
N.T.S. 33M/5, II	DRAWN BY: S.K.B.	SCALE: 1:2500
DWG. No.	<b>NORANDA EXPLORATION</b>	
<b>FIG. 3</b>	OFFICE: PRINCE GEORGE, B.C.	

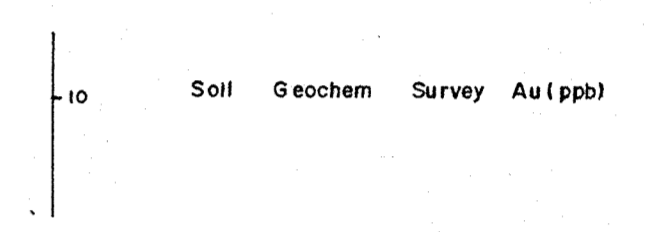


DOCK 6

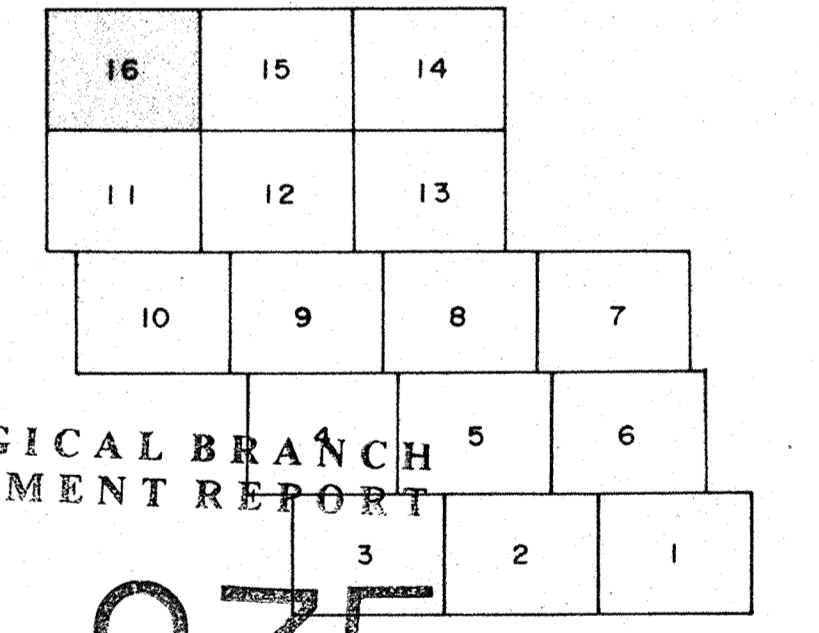




**LEGEND**



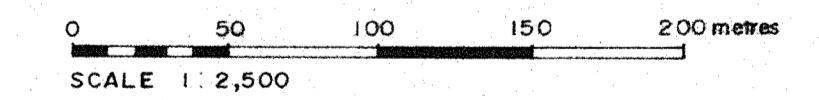
MAP SHEET INDEX



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

**18,035**

NOTE: Topography based on photocopy enlargement of N.T.S. 1:50,000 scale map 93H/6



REVISED	<b>DOMINION CREEK</b>		
	<b>DOCK 24 CLAIM</b>		
	<b>SOIL GEOCHEM SURVEY</b>		
	<b>Au(ppb)</b>		
PROJ. No. 280	SURVEY BY: C.H.	DATE: Apr. 1988	
N.T.S. 93H/6, 11	DRAWN BY: S.K.B.	SCALE: 1:2500	
DWG. No.	<b>NORANDA EXPLORATION</b>		
FIG. 4	OFFICE: PRINCE GEORGE, B.C.		