

86-560-15109

COMINCO LTD.

EXPLORATION

WESTERN DISTRICT

REPORT ON SOIL GRID GEOCHEMISTRY

SHA PROPERTY

SHA 24 AND 25

NELSON MINING DIVISION

CRESTON AREA

N.T.S. 82F/1

FILMED

LATITUDE: 49° 06' 11"

LONGITUDE: 116° 19'

OWNER

COMINCO LTD.

KOOTENAY EXPLORATION
1051 INDUSTRIAL ROAD #2,
CRANBROOK, B.C.
VIC 4K7

Work Performed During July, 1986

Report by: **GEOLOGICAL BRANCH**
ASSESSMENT REPORT

15,109

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EXPLORATION

WESTERN DISTRICT

REPORT ON SOIL GRID GEOCHEMISTRY

SHA CLAIMS 24 and 25

NELSON M. D.

1.00 INTRODUCTION

1.10 Location and Access

The Sha property lies within the Fort Steele and Nelson Mining Divisions. The claims are located 40 km east of Creston, B.C., at latitude 49° 06' N and longitude 116° 17' W.

Access to the property is gained via Highway 3 and thence by various old logging roads.

1.20 Property Definition

The property consists of Sha claims 1-28 and Sun 12, totalling 450 units. All the claims are 100% owned by Cominco Ltd.

1.30 Topography and Vegetation

The Sha property covers a large tract of densely forested, mountainous terrain. The mountains are steep sided with rounded to flat ridge tops. The major valleys have been glaciated, however, there is no evidence of Alpine glaciation.

Vegetation consists mainly of lodgepole pine, douglas fir and larch on south and east facing slopes. North and north-west slopes host thick stands of mature spruce, cedar, hemlock, minor grand fir and white pine.

1.40 Objective

Grid soil geochemistry was undertaken to help evaluate an area thought to be underlain by favourable geology.

2.00 GEOCHEMISTRY

2.10 Sampling Procedure

Soil samples were taken at 50 m intervals on E-W lines 100 m apart. Samples were taken from the B horizon at depths of 10-20 cm.

2.20 Analytical Procedure

All samples were shipped to Cominco's Exploration Research Laboratory in Vancouver.

One half gram of -80 mesh soil is weighed into a test tube, 5 ml of 20% HNO₃ is added. The samples are digested for 90 minutes in a water bath at 95°C (samples are shaken every 15 minutes). After digestion the sample is made up to 10 ml with deionized water shaken and run on the A.A. for Pb, Zn. Background correction is used for Pb determinations.

The readout sheets for all elements are included with the report.

3.00 CONCLUSIONS

The soil survey located a number of co-existing Pb and Zn anomalies. These anomalies are open at the south end of the grid, therefore, extending the existing soil geochemical grid south is recommended.

Report by: *Dave L. Pighin*
D.L. Pighin
Geologist III

Endorsed by: *D. Anderson*
D. Anderson
Project Geologist

Approved by: *John Hamilton*
J.M. Hamilton
Manager
Exploration

xc: Mining Recorder (2 copies) ✓
Western District, Exploration
Kootenay Exploration

EXHIBIT "A"
 STATEMENT OF EXPENDITURES
 SOIL GRID GEOCHEMISTRY SURVEY
 ON SHA 24 & 25
 NELSON M. D.

Covering the Period July 17 to 22, 1986

SALARIES:

D.L. Pighin - Supervision, Field work 2 days @ \$210/day	= \$	420.00
J. Aikman - Field Assistant 4 days @ \$84/day	=	336.00
J. Allen - Field Assistant 4 days @ \$84/day	=	336.00
C. Schultze - Field Assistant 4 days @ \$101/day	=	404.00

GEOCHEM ASSAYS:


Cominco Exploration Research Laboratory - Vancouver 270 samples @ \$3.95/sample	=	1,066.50
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<u>DOMICILE:</u> Accomodations, Groceries etc.	=	225.00
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TRANSPORTATION:

One 4X4 Truck - 4 days @ \$40/day	=	160.00
One 4X4 Truck - 2 days @ \$40/day	=	80.00

<u>TOTAL</u>	=	\$3,027.50
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 D.L. Pighin
 Geologist

IN THE MATTER OF THE

B.C. MINERAL ACT

AND

IN THE MATTER OF A SOIL GEOCHEMISTRY PROGRAMME

CARRIED OUT ON THE SHA 24 AND 25

CRESTON AREA

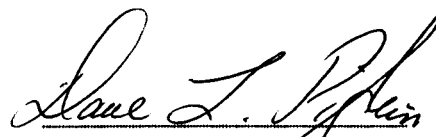
in the Nelson Mining Division of
the Province of British Columbia

More Particularly N.T.S. 82F/1

A F F I D A V I T

I, D.L. Pighin, of the City of Cranbrook, in the Province of British Columbia, make Oath and say:

1. That I am employed as a Geologist by Cominco Ltd. and as such, have a personal knowledge of the facts to which I hereinafter depose:
2. That annexed hereto and marked as Exhibit "A" to this my Affidavit is a true copy of expenditures incurred on a soil geochemistry programme, on the Sha 24 and 25 Mineral Claims.
3. That the said expenditures were incurred between the 17th day of July, 1986 and the 22nd day of July, 1986 for the purpose of mineral exploration on the above noted claims.


D.L. Pighin
Geologist

COMINCO LTD.

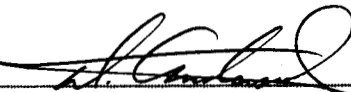
EXPLORATION

WESTERN DISTRICT

STATEMENT OF QUALIFICATIONS

D.L. PIGHIN has personally conducted many types of mineral exploration work for Cominco Ltd. over the last twenty years.

I consider him well qualified to prepare this report



D. ANDERSON, P.Eng.
Project Geologist

ANALYTICAL RESULTS

EXP LAB NUMBER	FIELD NO	MAP ZONE	EAST	NORTH	#	MAT'L	ORIG SITE	COLOUR	SIZE	ORG	DEPTH WIDTH FLOW			PPT #H	Pb	Zn
											WET	CM	SLOPE			
SR604300	14077		+2	+400	1	SOIL	RESID	MED-BROWN	SILT	LOW	M'ST	30	MED	B	10	130
SR604301	14098		+2	+450	1	SOIL	TALUS	MED-BROWN	SILT	LOW	M'ST	20	MED	B	32	201
SR604302	14099		+2	+500	1	SOIL	RESID	MED-BROWN	SILT	LOW	M'ST	30	LOW	B	18	148
SR604303	14122		+2	+550	1	SOIL	RESID	MED-BROWN	SILT	LOW	M'ST	25	MED	B	20	74
SR604304	14101		+2	+600	1	SOIL	RESID	MED-BROWN	SILT	LOW	M'ST	25	MED	B	18	71
SR604305	15104		+3	+0	2	SOIL	TALUS	MED-BROWN	SILT	LOW	M'ST	15	MED	B	23	79
SR604306	15105		+3	-50	2	SOIL	TALUS	MED-BROWN	SILT	LOW	M'ST	20	LOW	B	20	56
SR604307	15106		+3	-100	2	SOIL	TALUS	MED-BROWN	SILT	LOW	M'ST	15	STEEP	B	22	98
SR604308	15107		+3	-150	2	SOIL	TALUS	MED-BROWN	SILT	LOW	M'ST	15	STEEP	B	27	81
SR604309	15108		+3	-200	2	SOIL	TALUS	MED-BROWN	SILT	LOW	M'ST	20	MED	B	24	128
SR604310	15109		+3	-250	2	SOIL	TALUS	MED-BROWN	SILT	LOW	M'ST	20	STEEP	B	37	120
SR604311	15110		+3	-300	2	SOIL	TALUS	MED-BROWN	SILT	LOW	M'ST	10	STEEP	B	39	150
SR604312	15111		+3	-350	2	SOIL	TALUS	DK-BROWN	SILT	MED	M'ST	10	STEEP	B	43	132
SR604313	15112		+3	-400	2	SOIL	TALUS	MED-BROWN	SILT	MED	M'ST	20	STEEP	B	34	159
SR604314	15113		+3	-450	2	SOIL	TALUS	LT-BROWN	SILT	MED	DAY	20	STEEP	B	47	127
SR604315	15114		+3	-500	2	SOIL	TALUS	DK-BROWN	SILT	MED	M'ST	10	STEEP	B	80	120
SR604316	15115		+3	-600	2	SOIL	TALUS	MED-BROWN	SILT	MED	M'ST	10	STEEP	B	71	171
SR604317	15103		+3	+50	2	SOIL	TALUS	MED-BROWN	SILT	LOW	M'ST	15	LOW	B	16	74
SR604318	15102		+3	+100	2	SOIL	COLLU	MED-BROWN	SILT	LOW	M'ST	15	LOW	B	13	98
SR604319	15101		+3	+150	2	SOIL	COLLU	MED-BROWN	SILT	LOW	M'ST	15	MED	B	14	97
SR604320	15100		+3	+200	2	SOIL	COLLU	MED-BROWN	SILT	LOW	M'ST	20	MED	B	16	74
SR604321	15099		+3	+250	2	SOIL	COLLU	MED-BROWN	SILT	LOW	M'ST	15	MED	B	17	84
SR604322	15098		+3	+300	2	SOIL	TALUS	MED-BROWN	SILT	LOW	M'ST	15	MED	B	18	86
SR604323	15097		+3	+350	2	SOIL	TALUS	MED-BROWN	SILT	LOW	M'ST	15	MED	B	24	80
SR604324	15096		+3	+400	2	SOIL	TALUS	MED-BROWN	SILT	LOW	M'ST	15	MED	B	10	139
SR604325	15095		+3	+450	2	SOIL	TALUS	MED-BROWN	SILT	LOW	M'ST	15	MED	B	7	26
SR604326	15094		+3	+500	2	SOIL	TALUS	MED-BROWN	SILT	LOW	M'ST	15	MED	B	20	84
SR604327	15093		+3	+550	2	SOIL	TALUS	DK-BROWN	SILT	LOW	M'ST	15	MED	B	20	67
SR604328	15092		+3	+600	2	SOIL	COLLU	MED-BROWN	SILT	LOW	M'ST	20	MED	B	16	82
SR604329	14102		+4	-50	1	SOIL	RESID	MED-BROWN	SILT	LOW	M'ST	30	LOW	B	18	74
SR604330	14103		+4	-100	1	SOIL	RESID	MED-BROWN	SILT	LOW	M'ST	25	STEEP	B	27	71
SR604331	14104		+4	-150	1	SOIL	RESID	MED-BROWN	SILT	LOW	M'ST	20	STEEP	B	37	87
SR604332	14105		+4	-200	1	SOIL	RESID	MED-BROWN	SILT	LOW	M'ST	20	MED	B	31	74
SR604333	14106		+4	-250	1	SOIL	TALUS	DK-BROWN	SILT	LOW	M'ST	20	STEEP	B	38	115
SR604334	14107		+4	-300	1	SOIL	TALUS	DK-BROWN	SILT	MED	M'ST	15	STEEP	B	28	128
SR604335	14108		+4	-350	1	SOIL	TALUS	MED-BROWN	SILT	LOW	DAY	20	STEEP	B	52	149

EXP LAB NUMBER	FIELD NO	MAP ZONE	EAST	NORTH	#	MAT'L	ORIG SITE	COLOUR	SIZE	ORG	DEPTH WIDTH FLOW			PPT #H	Pb	Zn
											WET	CM	SLOPE			
SR604336	14109		+4	-400	1	SOIL	TALUS	MED-BROWN	SILT	LOW	M'ST	20	STEEP	B	31	119
SR604337	14110		+4	-450	1	SOIL	TALUS	MED-BROWN	SILT	LOW	DAY	20	STEEP	B	34	241
SR604338	14111		+4	-500	1	SOIL	TALUS	DK-BROWN	SILT	LOW	DAY	20	STEEP	B	54	129
SR604339	14112		+4	-550	1	SOIL	TALUS	MED-BROWN	SILT	LOW	M'ST	10	STEEP	B	47	114
SR604340	14113		+4	-600	1	SOIL	TALUS	MED-BROWN	SILT	LOW	M'ST	15	STEEP	B	33	102
SR604341	15099		+4	+0	2	SOIL	TALUS	MED-BROWN	SILT	LOW	M'ST	15	MED	B	21	64
SR604342	15080		+4	+50	2	SOIL	TALUS	MED-BROWN	SILT	MED	M'ST	20	MED	B	20	93
SR604343	15081		+4	+100	2	SOIL	TALUS	MED-BROWN	SILT	LOW	M'ST	10	MED	B	15	105
SR604344	15082		+4	+150	2	SOIL	TALUS	MED-BROWN	SILT	LOW	M'ST	15	MED	B	21	161
SR604345	15083		+4	+200	2	SOIL	TALUS	MED-BROWN	SILT	LOW	M'ST	20	MED	B	14	89
SR604346	15084		+4	+250	2	SOIL	TALUS	MED-BROWN	SILT	LOW	M'ST	10	MED	B	8	57
SR604347	15085		+4	+300	2	SOIL	TALUS	MED-BROWN	SILT	LOW	M'ST	20	MED	B	13	79
SR604348	15086		+4	+350	2	SOIL	TALUS	MED-BROWN	SILT	LOW	M'ST	25	MED	B	13	95
SR604349	15087		+4	+400	2	SOIL	TALUS	MED-BROWN	SILT	LOW	M'ST	15	MED	B	11	132
SR604350	15088		+4	+450	2	SOIL	TALUS	MED-BROWN	SILT	LOW	M'ST	20	MED	B	12	71
SR604351	15089		+4	+500	2	SOIL	TALUS	MED-BROWN	SILT	MED	M'ST	20	MED	B	11	81
SR604352	15090		+4	+550	2	SOIL	TALUS	MED-BROWN	SILT	LOW	M'ST	15	MED	B	10	74
SR604353	15091		+4	+600	2	SOIL	TALUS	MED-BROWN	SILT	LOW	M'ST	15	MED	B	6	75

I=INSUFFICIENT SAMPLE J=SMALL SAMPLE E=EXCESS CALIBRATION C=BEING CHECKED R=REVISED
IF REQUESTED ANALYSES ARE NOT SHOWN (RESULTS ARE TO FOLLOW)

ANALYTICAL METHODS

Pb 20% HNO3 DECOMPOSITION / AAS

Zn 20% HNO3 DECOMPOSITION / AAS

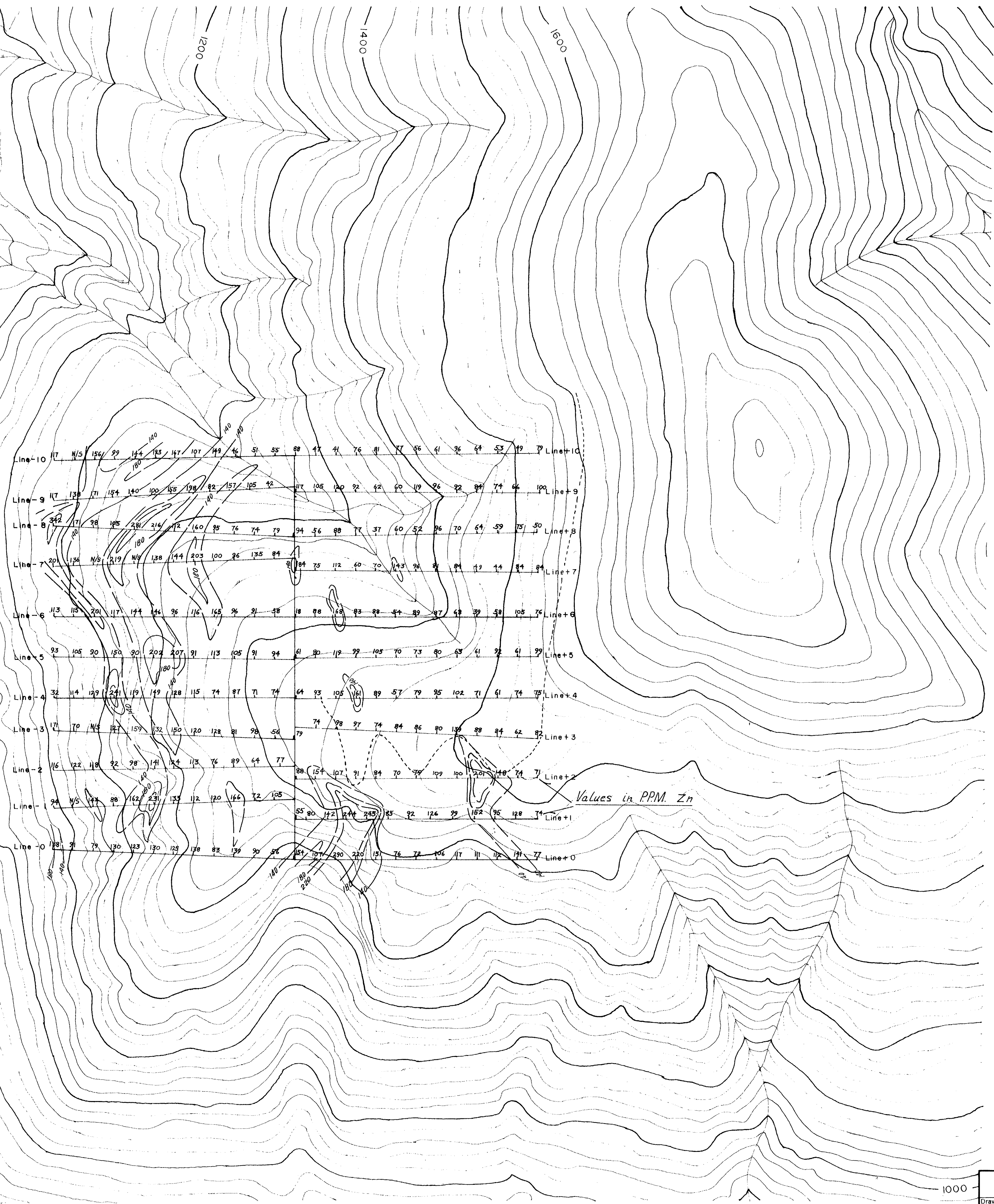
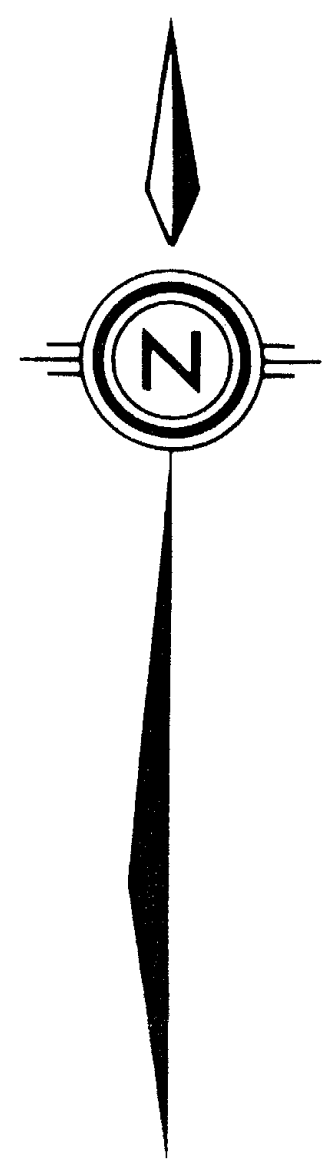
EXP LAB FIELD		DEPTH WIDTH FLOW													Px	Zn		
NUMBER	NO	MAP ZONE	EAST	NORTH	I	NAT'L ORIG	SITE	COLOR	SIZE	ORG	WET	CH	SLOPE	HORIZ	PPT	PH	PPB	PPM
SB604109	14205		+10	+350	1	SOIL TALUS		LT BROWN	SILT	LOW	DAY	10	STEEP	D			17	61
SB604110	14206		+10	+400	1	SOIL TALUS		Med-BROWN	SILT	LOW	DAY	20	STEEP	D			34	96
SB604111	14207		+10	+450	1	SOIL TALUS		Med-BROWN	SILT	LOW	DAY	20	STEEP	D			17	64
SB604112	14208		+10	+500	1	SOIL TALUS		Med-BROWN	SILT	LOW	DAY	25	STEEP	D			4	53
SB604113	14209		+10	+550	1	SOIL COLLU		Med-BROWN	SILT	LOW	DAY	20	STEEP	D			8	49
SB604114	14210		+10	+600	1	SOIL COLLU		Med-BROWN	SILT	LOW	N'BY	35	STEEP	D			14	79

I=INSUFFICIENT SAMPLE X=SMALL SAMPLE E=EXCEEDS CALCULATION C=CHZNG CHECKED D=DEVIANT
 IF REQUESTED ANALYSES ARE NOT SHOWN RESULTS ARE TO FOLLOW

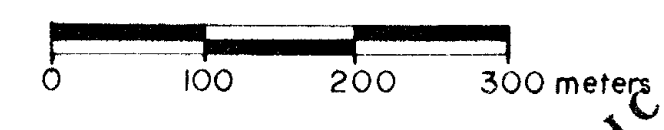
ANALYTICAL METHODS

- Px 20% HNO3 DECOMPOSITION / AAS
- Zn 20% HNO3 DECOMPOSITION / AAS

008



Values in PPM Zn



GEOLOGICAL BRANCH
ASSESSMENT REPORT

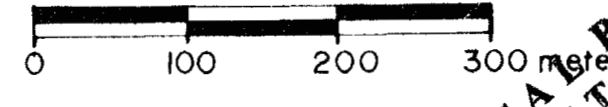
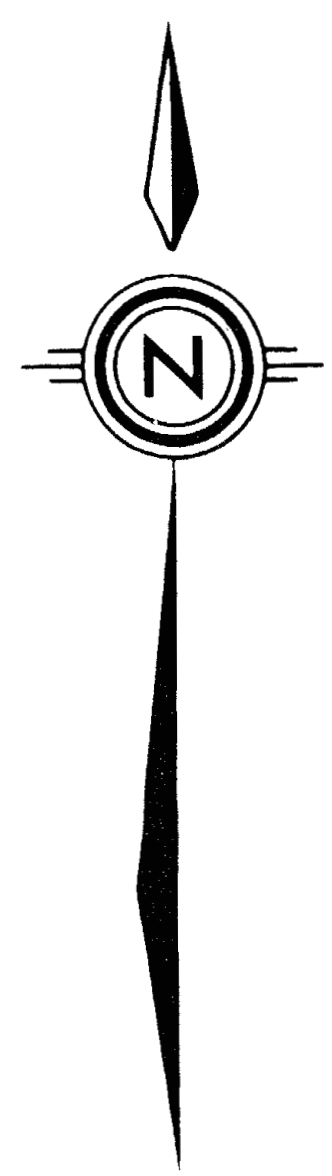
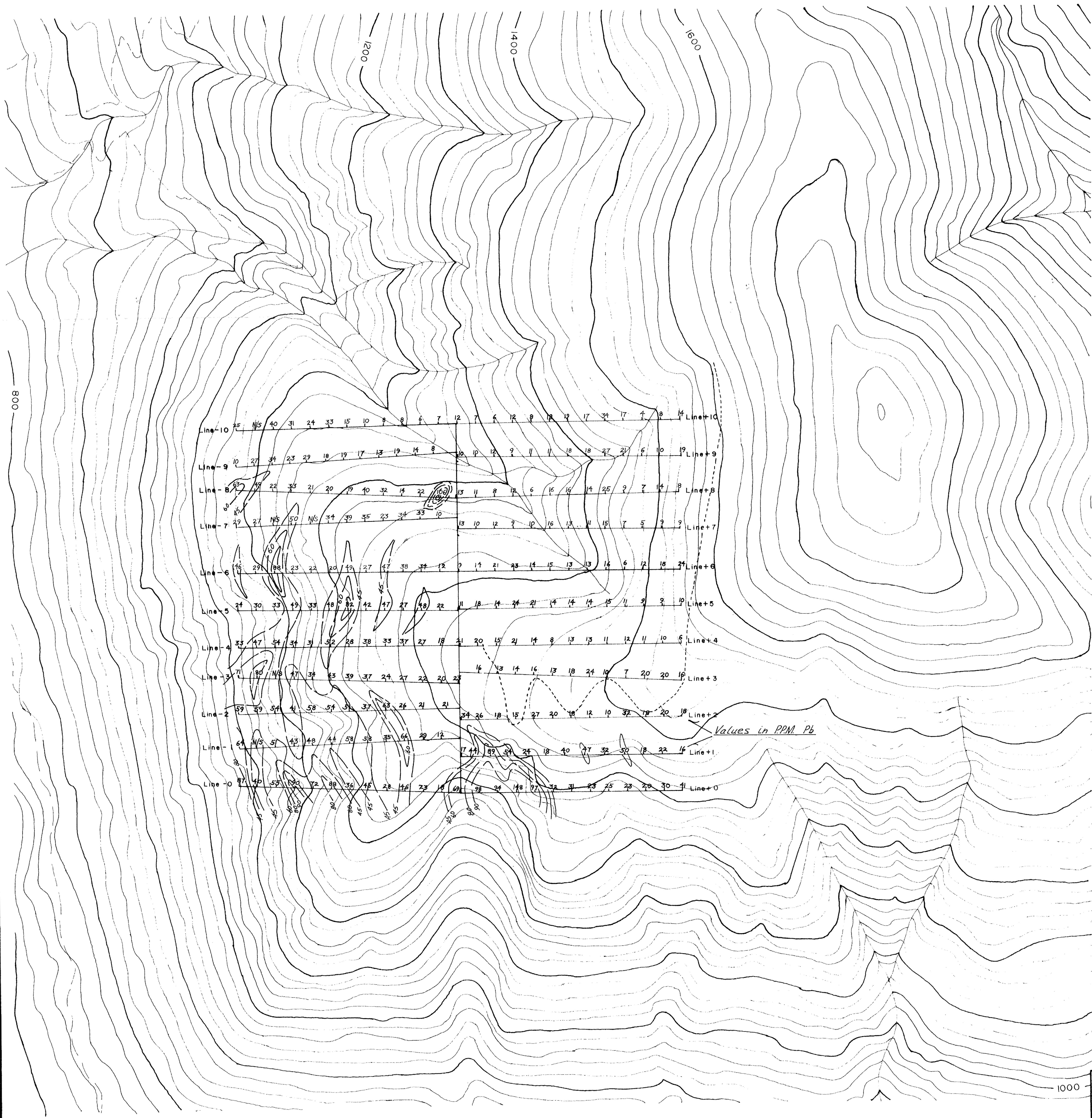
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SHA PROPERTY

Drawn by B. L. Whelan	Traced by J. S. A.
Revised by	Revised by
Date	Date

SOIL GEOCHEMISTRY
NORTH GRID: Zn

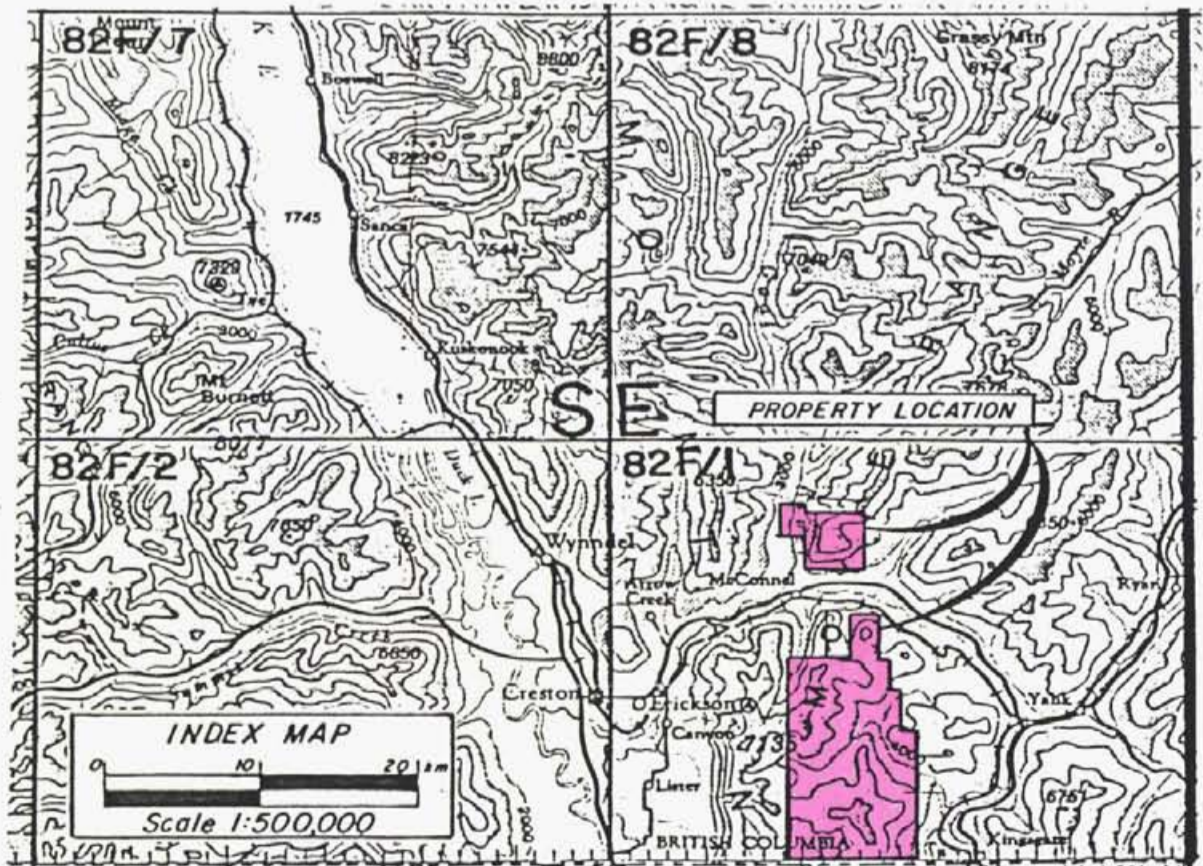
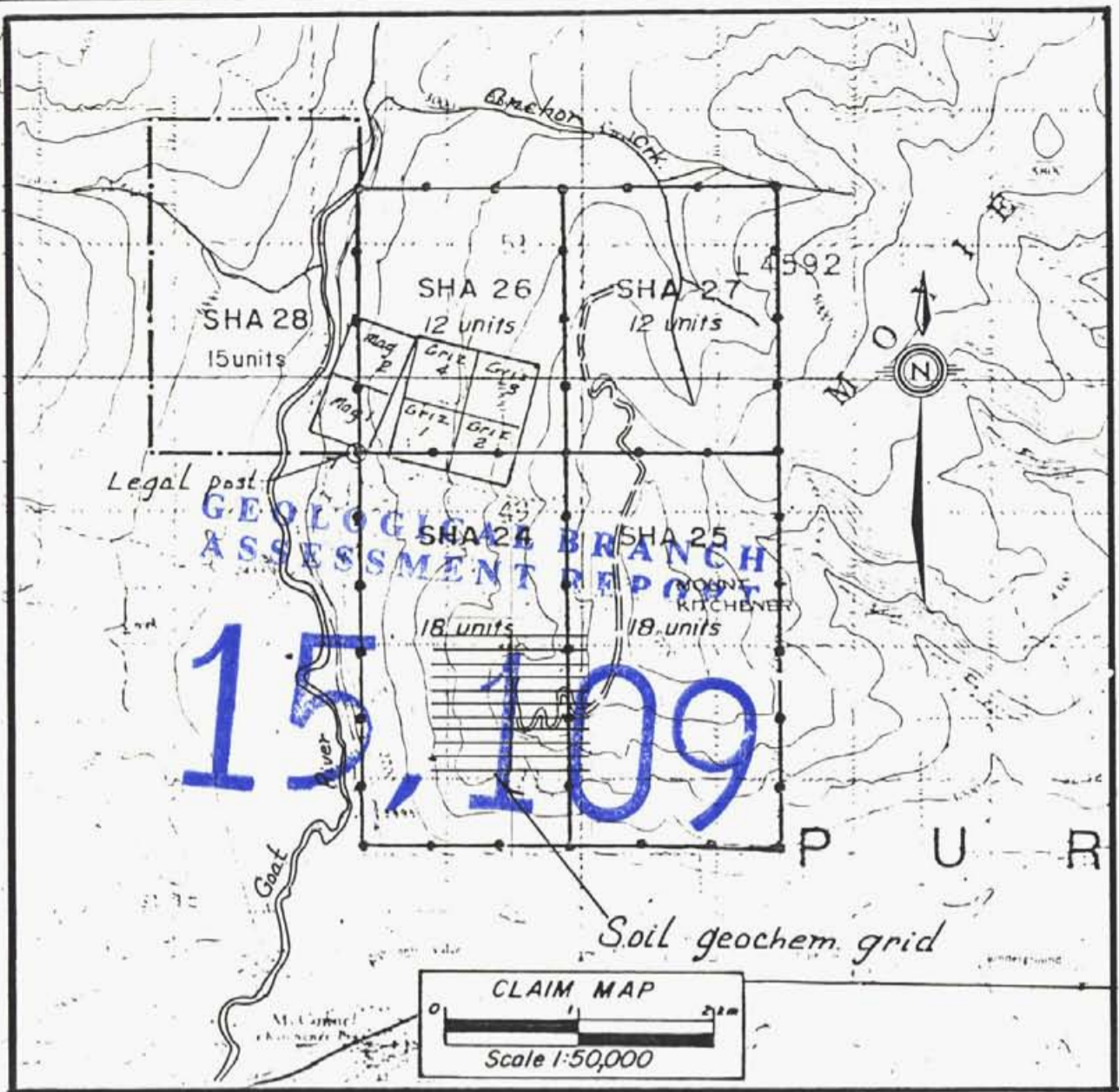
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ASSESSMENT REPORT

15.109

SHA PROPERTY		SOIL GEOCHEMISTRY	
NORTH GRID: Pb		Date: 1986 Oct 1	
Scale: 1:5000	Date: 1986 Oct 1	Plate: 2	



Drawn by: D.L. Pidgin		Traced by:	
Revised by	Date	Revised by	Date

SOIL GEOCHEMISTRY 1986
SHA CLAIMS 24 & 25

Scale: As Shown Date: OCT. 2, 1986 Plate: 3