COMINCO LTD.

EXPLORATION

WESTERN DISTRICT

REPORT ON GEOCHEMICAL SURVEY

LEW GROUP GRID

FORT STEELE MINING DIVISION
Grassy Mountain Area

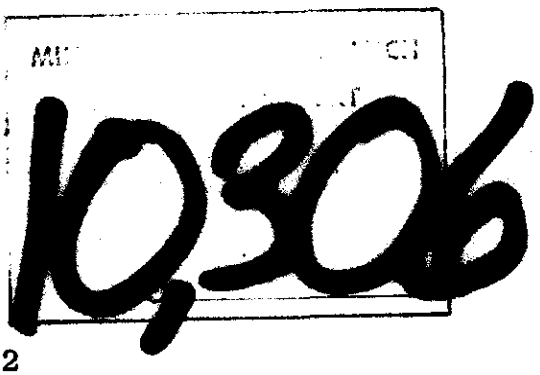
82F/8

Lat: 49° 22'

Long: 116° 07'

Submitted by:

M. Waskett-Myers



OWNER

Cominco Ltd.
Kootenay Exploration
#1051, Industrial Road No. 2
Cranbrook, B.C.
V1C 4K7

Work Performed During August 1981

Under the Supervision of:

D. Anderson, P. Eng.

COMINCO LTD.

EXPLORATION WESTERN DISTRICT

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1.00 SUMMARY

The Lew geochem grid covers portions of Lew 18 (9 units) Lew 22 (12 units) and Lew 23 (12 units) and is located approximately 30 km S.W. of Cranbrook.

A total of 839 soil samples were collected from the Lew grid. The line spacing was 100m and the sample spacing was 30m.

The -80 mesh fraction of the samples were analysed for lead, zinc and arsenic at the Cominco Lab in Vancouver. Both lead and zinc were analysed using atomic absorption; a colorimetric method was used for the arsenic determinations.

Histogram data, log transform histograms & cumulative probability plots for Pb, Zn, As are included in this report.

Total expenditures on this survey were $8,802.90. This will be applied to Lew 18, 19, 20, 22 & 23.

2.00 INTRODUCTION

2.10 Status of Ownership

The Lew is 100% Cominco owned.

2.20 Location and Access

The Lew geochem grid is 30 km S.W. of Cranbrook. It is however considerably further by road. The grid is situated between Kutlits Creek and North Moyie Creek. The grid is easily accessible by logging roads up each of these Creeks.

2.30 Topography and Vegetation

The survey grid is situated in an area of moderate relief at an elevation of 1500m to 1850m above sea level. The area is well wooded and in parts has dense undergrowth.

2.40 Objectives

The geochemical survey was undertaken to explore for Pb/Zn deposits in Precambrian rocks of the Aldridge formation.

3.00 GEOCHEMISTRY

3.10 Sampling Procedure

A 1500m baseline, bearing due north, was established and sample lines at 100m intervals were extended 810m east and west from the base line. The sample interval along the lines was 30 meters. Samples were collected using a shovel. Preferentially the 'B' horizon was sampled but in areas of talus or outcrop this is not always possible, with the result that a certain amount of organic material will be included in the sample collected in such areas thereby possibly giving rise to elevated values.

3.20 Sample Preparation and Analysis

Samples were collected in wet strength kraft bags, air dried packed and shipped to the Vancouver Lab for analysis.

Cominco's process for soil analysis:

Weigh 0.5 gm of -80 Mesh soil into a test tube and add 5 ml of 20% HNO_3. Digest for 90 minutes in water bath @ 95° C (shake every 15 minutes). After digestion make up to 10 ml with deionised H_2O shake well and run on A.A.

LEW

HISTOGRAM DATA FOR LEAD

CLASS	LIMITS		FREQ	%FREQ	CUM	CUM%
1	LESS THAN	1.95	0	0.0	839	100.00
2	1.95TO	2.21	1	0.1	839	100.00
3	2.21TO	2.50	0	0.0	838	99.88
4	2.50TO	2.83	0	0.0	838	99.88
5	2.83TO	3.20	0	0.0	838	99.88
6	3.20TO	3.62	0	0.0	838	99.88
7	3.62TO	4.09	1	0.1	838	99.88
8	4.09TO	4.63	0	0.0	837	99.76
9	4.63TO	5.24	3	0.4	837	99.76
10	5.24TO	5.93	0	0.0	834	99.40
11	5.93TO	6.70	9	1.1	834	99.40
12	6.70TO	7.58	13	1.5	825	98.33
13	7.58TO	8.58	25	3.0	812	96.78
14	8.58TO	9.70	24	2.9	787	93.80
15	9.70TO	10.98	54	6.4	763	90.94
16	10.98TO	12.42	110	13.1	709	84.51
17	12.42TO	14.05	113	13.5	599	71.39
18	14.05TO	15.89	58	6.9	486	57.93
19	15.89TO	17.97	97	11.6	428	51.01
20	17.97TO	20.33	96	11.4	331	39.45
21	20.33TO	22.99	43	5.1	235	28.01
22	22.99TO	26.01	49	5.8	192	22.88
23	26.01TO	29.42	25	3.0	143	17.04
24	29.42TO	33.27	31	3.7	118	14.06
25	33.27TO	37.64	16	1.9	87	10.37
26	37.64TO	42.57	14	1.7	71	8.46
27	42.57TO	48.15	16	1.9	57	6.79
28	48.15TO	54.47	12	1.4	41	4.89
29	54.47TO	61.61	6	0.7	29	3.46
30	61.61TO	69.69	7	0.8	23	2.74
31	69.69TO	78.82	6	0.7	16	1.91
32	78.82TO	89.16	2	0.2	10	1.19
33	89.16TO	100.84	2	0.2	8	0.95
34	100.84TO	114.07	2	0.2	6	0.72
35	114.07TO	129.02	1	0.1	4	0.48
36	MORE THAN	129.02	3	0.4	3	0.00

PPM IN INTERVALS OF .053 LOG (BASE 10)UNITS
THERE ARE 34 REGULAR CLASSES ,AN OVERFLOW AND UNDERFLOW CLASS
THE RANGE CONSIDERED IS 8 STD DEVIATIONS CENTRED ON THE GEOMETRIC MEAN
THE CLASS INTERVAL IS APPROX ONE-QUARTER STD DEVIATION
ERL JOB V81-898S/ SOILS / REQUESTED BY M. HASKETT-MYERS

LEW
HISTOGRAM DATA FOR ZINC

CLASS	LIMITS	#	FREQ	%FREQ	CUM	CUM%
1	LESS THAN	4.17	1	0.1	839	100.00
2	4.17TO	4.80	0	0.0	838	99.88
3	4.80TO	5.53	0	0.0	838	99.88
4	5.53TO	6.37	1	0.1	838	99.88
5	6.37TO	7.34	2	0.2	837	99.76
6	7.34TO	8.45	1	0.1	835	99.52
7	8.45TO	9.73	5	0.6	834	99.40
8	9.73TO	11.21	5	0.6	829	98.81
9	11.21TO	12.91	0	0.0	824	98.21
10	12.91TO	14.86	15	1.8	824	98.21
11	14.86TO	17.11	15	1.8	809	96.42
12	17.11TO	19.71	14	1.7	794	94.64
13	19.71TO	22.69	18	2.1	780	92.97
14	22.69TO	26.13	32	3.8	762	90.82
15	26.13TO	30.09	50	6.0	730	87.01
16	30.09TO	34.65	51	6.1	680	81.05
17	34.65TO	39.90	71	8.5	629	74.97
18	39.90TO	45.95	90	10.7	558	66.51
19	45.95TO	52.91	88	10.5	468	55.78
20	52.91TO	60.93	67	8.0	380	45.29
21	60.93TO	70.16	89	10.6	313	37.31
22	70.16TO	80.79	59	7.0	224	26.70
23	80.79TO	93.03	44	5.2	165	19.67
24	93.03TO	107.12	40	4.8	121	14.42
25	107.12TO	123.35	30	3.6	81	9.65
26	123.35TO	142.04	21	2.5	51	6.08
27	142.04TO	163.56	12	1.4	30	3.58
28	163.56TO	188.34	8	1.0	18	2.15
29	188.34TO	216.87	2	0.2	10	1.19
30	216.87TO	249.73	3	0.4	8	0.95
31	249.73TO	287.56	2	0.2	5	0.60
32	287.56TO	331.12	1	0.1	3	0.36
33	331.12TO	381.29	1	0.1	2	0.24
34	381.29TO	439.05	0	0.0	1	0.12
35	439.05TO	505.57	1	0.1	1	0.12
36	MORE THAN	505.57	0	0.0	0	0.00

PPM IN INTERVALS OF .061 LOG (BASE 10)UNITS
THERE ARE 34 REGULAR CLASSES ,AN OVERFLOW AND UNDERFLOW CLASS
THE RANGE CONSIDERED IS 8 STD DEVIATIONS CENTRED ON THE GEOMETRIC MEAN
THE CLASS INTERVAL IS APPROX ONE-QUARTER STD DEVIATION
ERL JOB VB1-898S/ SOILS / REQUESTED BY M. MASKETT-MYERS

LEW

HISTOGRAM DATA FOR ARSENIC

CLASS	LIMITS #		FREQ	%FREQ	CUM	CUM%
1	LESS THAN	0.73	0	0.0	839	100.00
2	0.73TO	0.83	0	0.0	839	100.00
3	0.83TO	0.95	0	0.0	839	100.00
4	0.95TO	1.08	8	1.0	839	100.00
5	1.08TO	1.22	0	0.0	831	99.05
6	1.22TO	1.39	0	0.0	831	99.05
7	1.39TO	1.59	0	0.0	831	99.05
8	1.59TO	1.80	0	0.0	831	99.05
9	1.80TO	2.05	21	2.5	831	99.05
10	2.05TO	2.33	0	0.0	810	96.54
11	2.33TO	2.66	0	0.0	810	96.54
12	2.66TO	3.02	42	5.0	810	96.54
13	3.02TO	3.44	0	0.0	768	91.54
14	3.44TO	3.91	0	0.0	768	91.54
15	3.91TO	4.45	65	7.7	768	91.54
16	4.45TO	5.06	108	12.9	703	83.79
17	5.06TO	5.75	0	0.0	595	70.92
18	5.75TO	6.55	131	15.6	595	70.92
19	6.55TO	7.44	104	12.4	464	55.30
20	7.44TO	8.47	91	10.8	360	42.91
21	8.47TO	9.63	45	5.4	269	32.06
22	9.63TO	10.96	67	8.0	224	26.70
23	10.96TO	12.46	73	8.7	157	18.71
24	12.46TO	14.17	29	3.5	84	10.01
25	14.17TO	16.12	13	1.5	55	6.56
26	16.12TO	18.33	11	1.3	42	5.01
27	18.33TO	20.85	4	0.5	31	3.69
28	20.85TO	23.72	8	1.0	27	3.22
29	23.72TO	26.97	2	0.2	19	2.26
30	26.97TO	30.68	4	0.5	17	2.03
31	30.68TO	34.89	4	0.5	13	1.55
32	34.89TO	39.69	2	0.2	9	1.07
33	39.69TO	45.14	3	0.4	7	0.83
34	45.14TO	51.34	0	0.0	4	0.48
35	51.34TO	58.39	0	0.0	4	0.48
36	MORE THAN	58.39	4	0.5	4	0.00

PPM IN INTERVALS OF .055 LOG (BASE 10) UNITS
THERE ARE 34 REGULAR CLASSES ,AN OVERFLOW AND UNDERFLOW CLASS
THE RANGE CONSIDERED IS 8 STD DEVIATIONS CENTRED ON THE GEOMETRIC MEAN
THE CLASS INTERVAL IS APPROX ONE-QUARTER STD DEVIATION
ERL JOB V81-898S/ SOILS / REQUESTED BY M. WASKETT-MYERS

LEW
LOG TRANSFORM HISTOGRAM FOR LEAD

FREQUENCY (ARITHMETIC SCALE)
SCALED FOR LARGEST CLASS =100

MID-POINT	FREQ%	0 20 40 60 80 100
129.07	0.4	##
121.36	0.1	#
107.30	0.2	#
94.87	0.2	#
83.88	0.2	#
74.16	0.7	###
65.57	0.8	####
57.98	0.7	###
51.26	1.4	######
45.33	1.9	########
40.08	1.7	########
35.44	1.9	########
31.34	3.7	###############
27.71	3.0	############
24.50	5.8	########################
21.67	5.1	#####################
19.16	11.4	###
16.95	11.6	###
14.99	6.9	############################
13.26	13.5	##
11.72	13.1	##
10.37	6.4	##########################
9.17	2.9	###########
8.12	3.0	############
7.18	1.5	######
6.35	1.1	####
5.62	0.0	#
4.98	0.4	##
4.40	0.0	#
3.90	0.1	#
3.45	0.0	#
3.06	0.0	#
2.71	0.0	#
2.40	0.0	#
2.13	0.1	#
2.00	0.0	#

PPM
NOTE :CONC SCALE IS LOGARITHMIC(INTERVAL=.053),VALUES ARE MID-POINTS OF CLASSES
ERL JOB V81-8985/ SOILS / REQUESTED BY M. WASKETT-MYERS

LEW
LOG TRANSFORM HISTOGRAM FOR ZINC

FREQUENCY (ARITHMETIC SCALE)
SCALED FOR LARGEST CLASS =100

MID-POINT	FREQ%	0 20 40 60 80 100
505.62	0.0	*
471.19	0.1	*
409.20	0.0	*
355.37	0.1	*
308.62	0.1	*
268.03	0.2	**
232.77	0.4	**
202.15	0.2	**
175.56	1.0	*****
152.47	1.4	*******
132.42	2.5	************
115.00	3.6	******************
99.88	4.8	************************
86.74	5.2	**************************
75.34	7.0	************************************
65.43	10.6	***
56.83	8.0	**
49.36	10.5	***
42.87	10.7	**
37.23	8.5	***
32.34	6.1	********************************
28.09	6.0	********************************
24.40	3.8	*******************
21.20	2.1	**********
18.42	1.7	********
16.00	1.8	*********
13.90	1.8	*********
12.08	0.0	*
10.49	0.6	***
9.12	0.6	***
7.93	0.1	*
6.89	0.2	**
5.99	0.1	*
5.21	0.0	*
4.53	0.0	*
4.22	0.1	*

PPM
NOTE :CONC SCALE IS LOGARITHMIC(INTERVAL=.061),VALUES ARE MID-POINTS OF CLASSES
ERL JOB V81-898S/ SOILS / REQUESTED BY M. NASKETT-MYERS

LEW
LOG TRANSFORM HISTOGRAM FOR ARSENIC

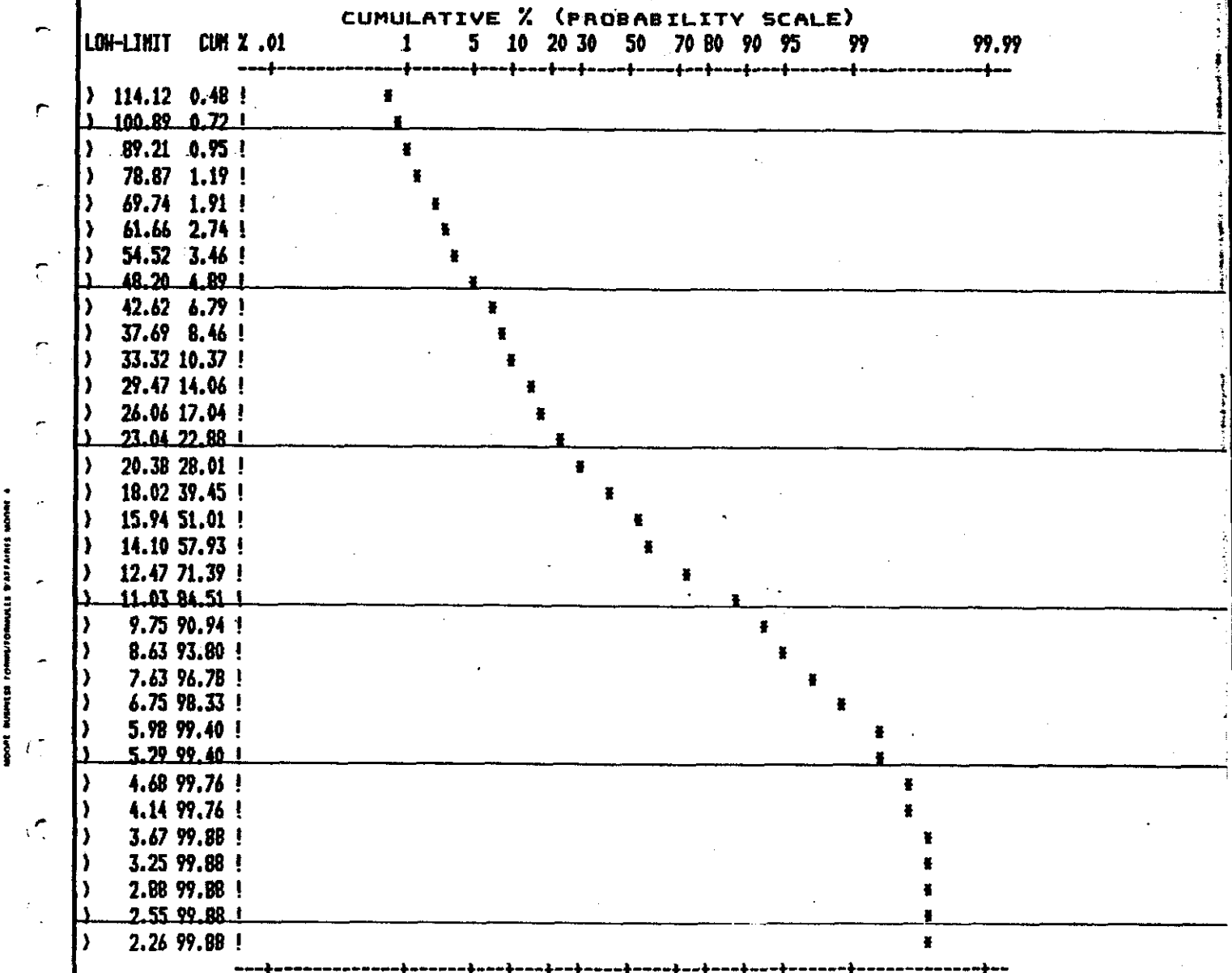
FREQUENCY (ARITHMETIC SCALE)
SCALED FOR LARGEST CLASS =100

MID-POINT	FREQ%	0 20 40 60 80 100
58.44	0.5	##
54.80	0.0	#
48.19	0.0	#
42.37	0.4	##
37.26	0.2	#
32.77	0.5	##
28.82	0.5	##
25.34	0.2	#
22.29	1.0	####
19.60	0.5	##
17.24	1.3	#####
15.16	1.5	#####
13.34	3.5	############
11.73	8.7	##############################
10.32	8.0	############################
9.08	5.4	###################
7.99	10.8	#####################################
7.03	12.4	###
6.19	15.6	###
5.45	0.0	#
4.79	12.9	##
4.22	7.7	##########################
3.72	0.0	#
3.27	0.0	#
2.88	5.0	##################
2.54	0.0	#
2.24	0.0	#
1.97	2.5	#########
1.74	0.0	#
1.54	0.0	#
1.36	0.0	#
1.20	0.0	#
1.06	1.0	####
0.94	0.0	#
0.83	0.0	#
0.78	0.0	#

PPM
NOTE :CONC SCALE IS LOGARITHMIC(INTERVAL=.055),VALUES ARE MID-POINTS OF CLASSES
ERL JOB V81-898S/ SOILS / REQUESTED BY M. WASKETT-MYERS

LEW

CUMULATIVE PROBABILITY PLOT FOR LEAD



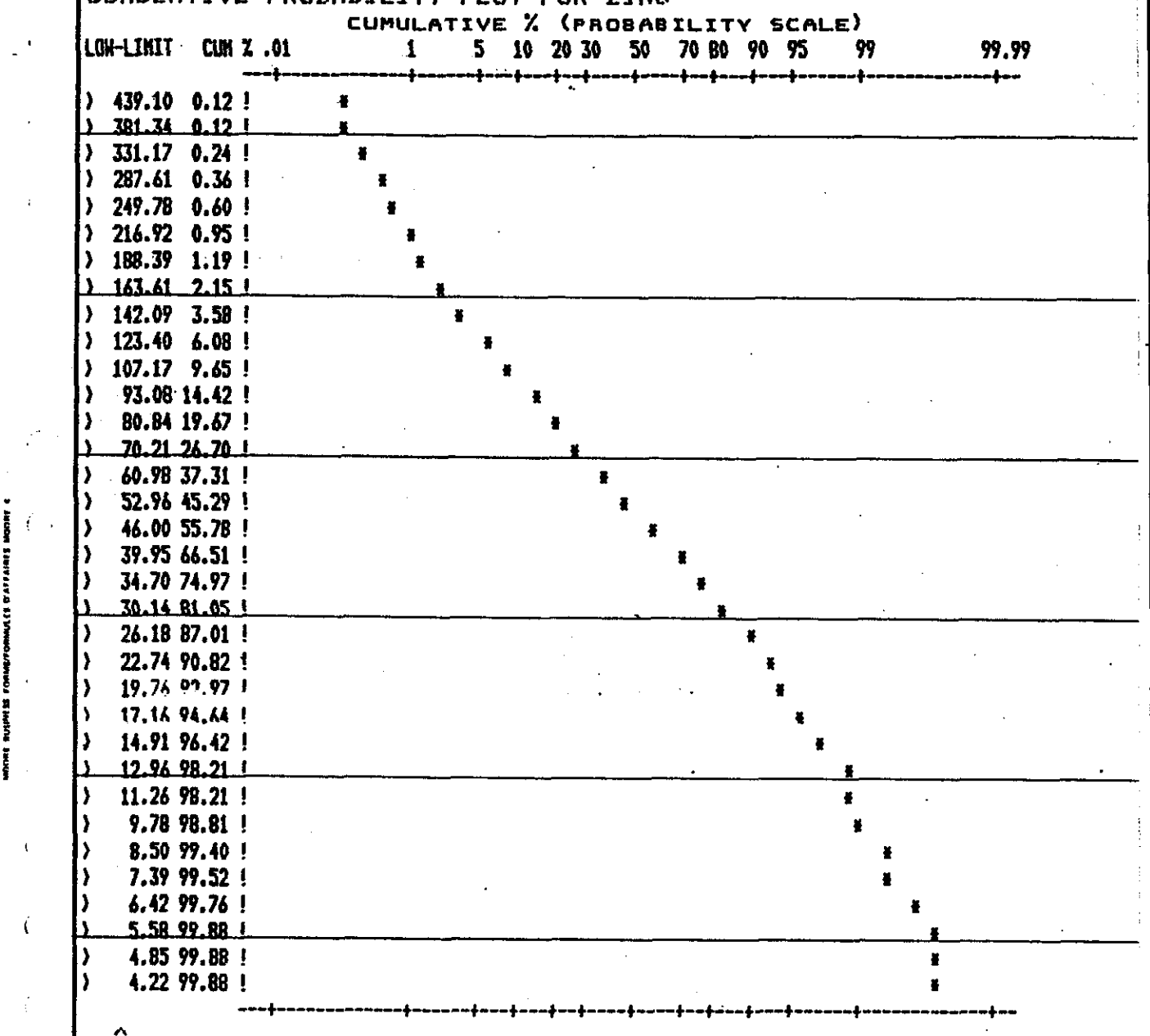
PPM

NOTE: CONCENTRATION SCALE IS LOGARITHMIC(INTERVAL=.053),VALUES ARE CLASS LOWER LIMITS

ERL JOB V81-8985/ SOILS / REQUESTED BY M. NASKETT-MYERS

LEW

CUMULATIVE PROBABILITY PLOT FOR ZINC



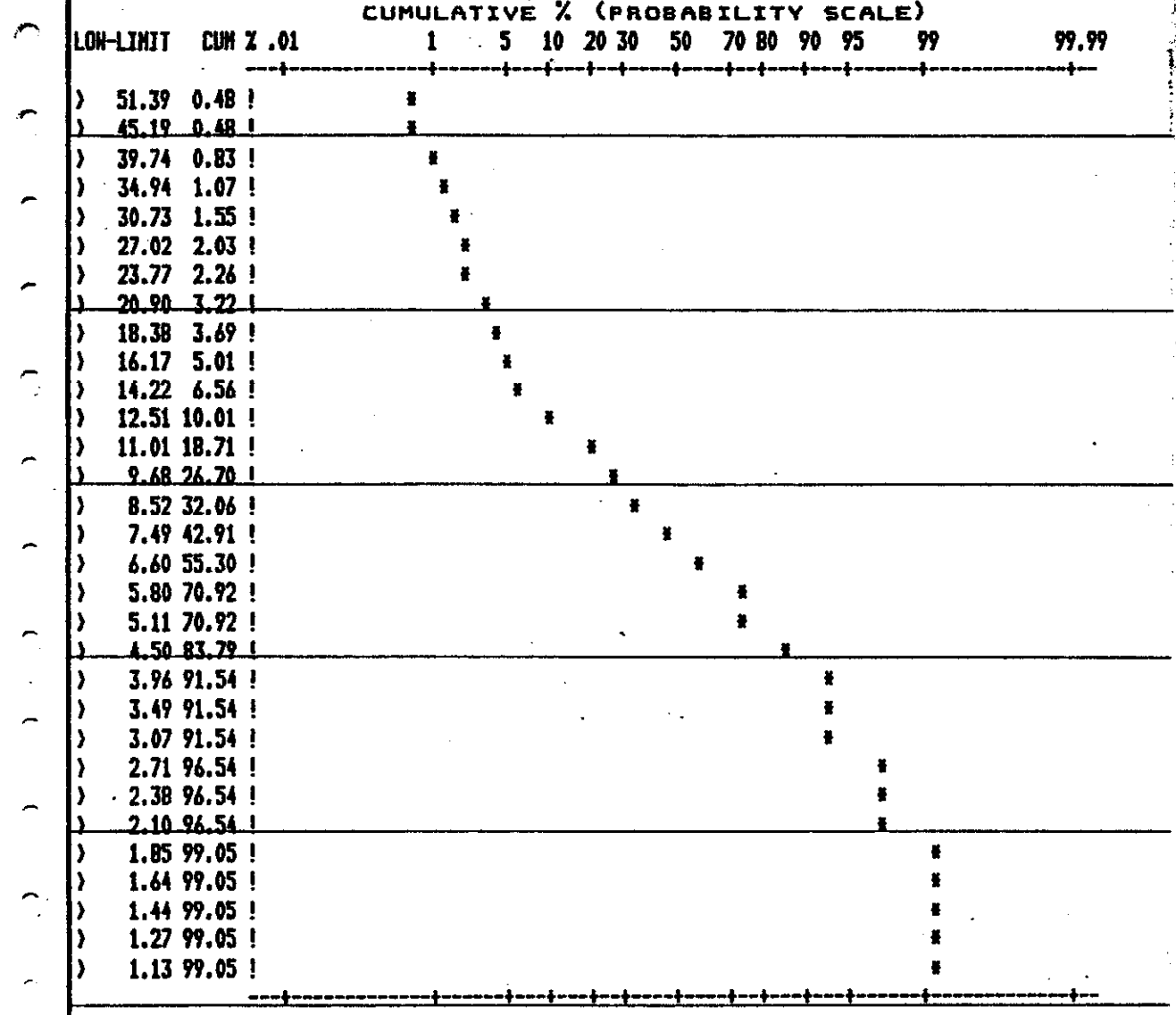
PPM

NOTE: CONCENTRATION SCALE IS LOGARITHMIC(INTERVAL=.061),VALUES ARE CLASS LOWER LIMITS

ERL JOB V81-898S/ SOILS / REQUESTED BY M. WASKETT-MYERS

LEW

CUMULATIVE PROBABILITY PLOT FOR ARSENIC



PPM

NOTE: CONCENTRATION SCALE IS LOGARITHMIC(INTERVAL=.055),VALUES ARE CLASS LOWER LIMITS

ERL JOB V81-898S/ SOILS / REQUESTED BY M. WASKETT-MYERS

SUMMARY OF STATISTICS FOR LEW

ERL JOB VB1-898S/ SOILS / REQUESTED BY M. WASKETT-MYERS

ELEMENT	NO OF ANALYSES	RANGE UNITS	ARITH MEAN (M+2STD DEV)	GEO MEAN (M+2STD DEV)
LEAD	839	211 TO (4 PPM	20.1 (53)	16.9 (49)
ZINC	839	458 TO 4 PPM	59.4 (141)	49.3 (169)
ARSENIC	839	118 TO (2 PPM	8.4 (23)	6.9 (21)

PLATES 1, 2 & 3 shows the distribution of Pb, Zn, As in soils in the Lew Grid. Areas of elevated metal content will be further investigated by geological mapping, with follow up trenching in the more favourable areas.

Submitted by: M. Waskett-Myers
M. WASKETT-MYERS
Technician II

Endorsed by:
D. ANDERSON, P.Eng.
Project Geologist

Approved for release by: John Hamilton
J.M. HAMILTON, P.Eng.
Chief Geologist
Sullivan Mine

EXHIBIT "A"

STATEMENT OF EXPENDITURES

GEOCHEMICAL SURVEY - LEW CLAIMS GRID

Salaries:			
Paul Gilbert	9 days @ $65/day	=	$585
Brian Smith	" "	=	585
Les Molnar	10 days @ $65/day	=	650
Hans Roesler	10 days @ $65/day	=	650
Transportation	11 days @ $25/day	=	275
Materials	Flagging, sample bags, etc.		130
Supervision	M. Waskett-Myers 4 days @ $130/day		520
Assaying	839 samples for Pb/Zn/As @ $6.10/sample		5117.90
Computer Time	Statistical analysis		30
Report Preparation	M. Waskett-Myers Technician 2 days @ $130/day		260
	Total Expenses		$8802.90
Contract. line. 56 km @ $250/km			14 000.00
			22802.90

TEK.

Signed: M. Waskett-Myers
M. WASKETT-MYERS

IN THE MATTER OF THE

B.C. MINERAL ACT

AND

IN THE MATTER OF A GEOCHEMICAL PROGRAMME

CARRIED OUT ON THE LEW MINERAL CLAIMS

in the Fort Steele Mining Division of the
Province of British Columbia

More Particularly N.T.S. 82F/8

A F F I D A V I T

I, M. Waskett-Myers, of the City of Cranbrook in the Province of British Columbia, make Oath and say:

1. That I am employed as a Technician with 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 true copy of expenditures incurred on a geochemical survey program, on the Lew mineral claims.

3. That the said expenditures were incurred between the 4th day of August, 1981 and 21st day of August, 1981; for the purpose of mineral exploration on the above noted claims.

M. Waskett-Myers

M. WASKETT-MYERS

COMINCO LTD.

EXPLORATION WESTERN DISTRICT

STATEMENT OF QUALIFICATION

M.D. WASKETT-MYERS has worked in Mineral Exploration for the past thirteen years. He has spent the last five years working for Cominco Ltd., principally in the field of geochemistry.

I consider him qualified to prepare this report.

DOUGLAS ANDERSON, P. Eng.
Project Geologist

NE

LEW 22

GEOCHEM GRID

LEW 23

LEW 20

LEW 19

LEW 18

LEW 16

LEW 17

LEW 15

LEW 12

LEW 13

LEW 14

LEW 21

LEW 11

LEW 10

LEW 6

LEW 7

LEW 8

LEW 9

LEW 3

LEW 4

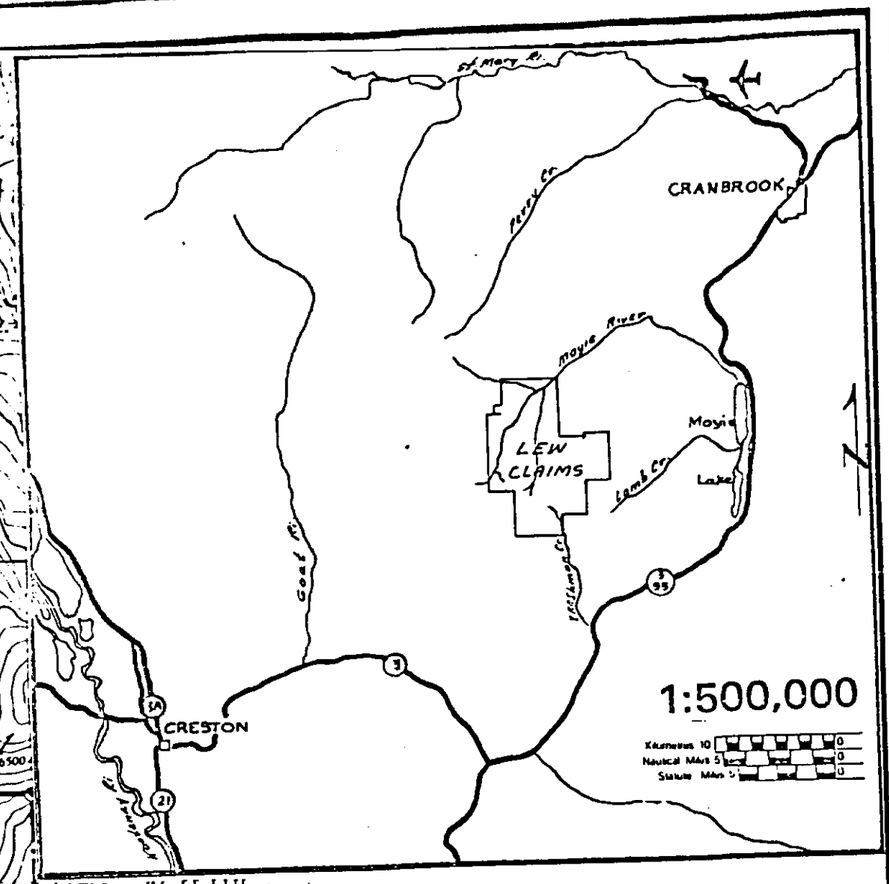
LEW 5

LEW 1

LEW 2

BLOCK

MAP 1



0 1 2Km

10,306

Cominco

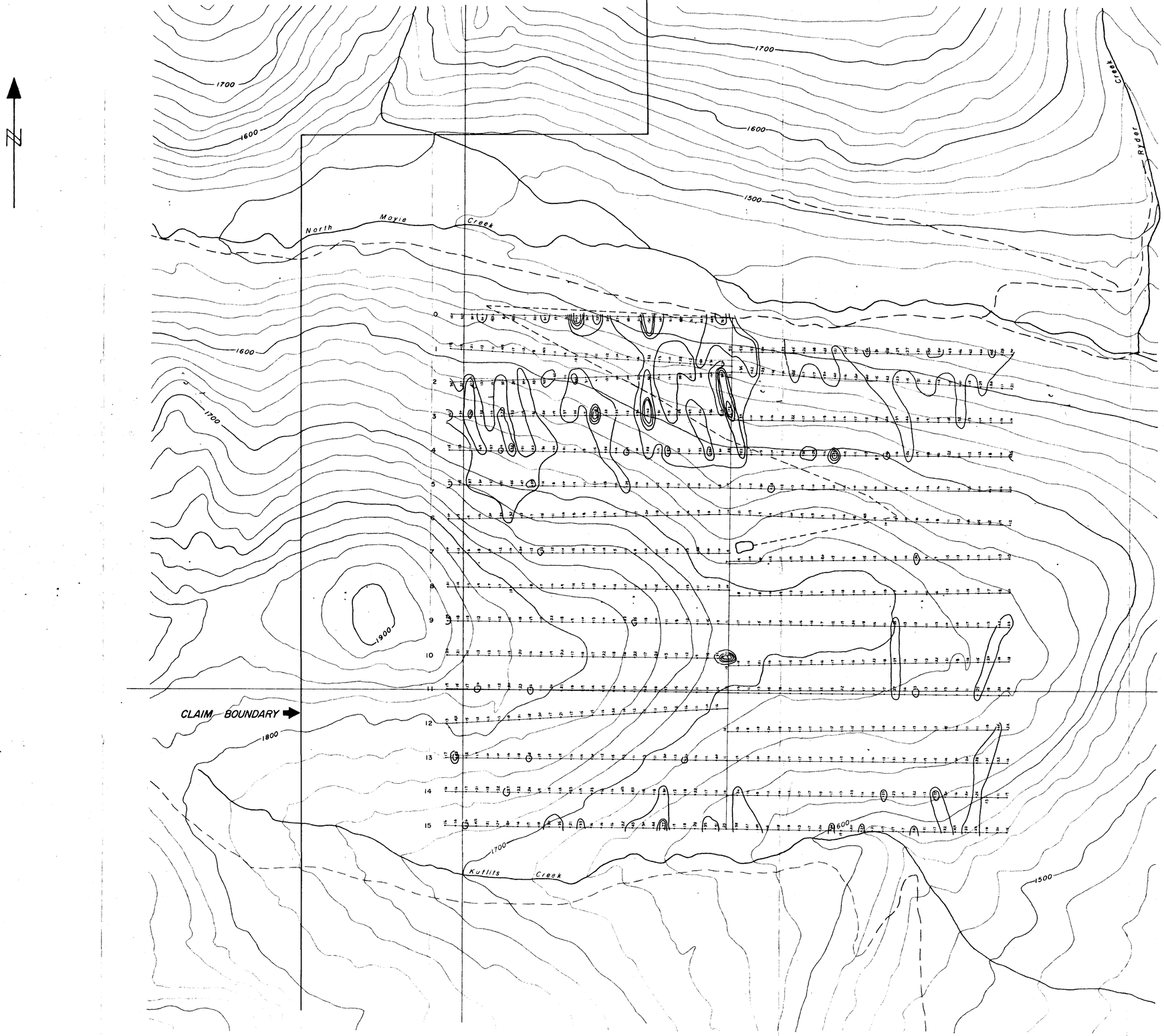
Drawn by:		Traced by:	
Revised by	Date	Revised by	Date
GLW			
MWM	FEB 1982		

LEW CLAIMS

82F/8

Scale: 1:50,000 | Date: MAY 1980 | Plate:

210-0620



0 100 200 300 metres

LEGEND

- > 100
- 75-100
- 50-74
- 25-49

10,306

NORTH MOYIE – LEW PROPERTY

GEOCHEMISTRY GRID
LEAD VALUES (ppm)

Drawn by MW-M | Traced by | Revised by | Date | Revised by | Date

Scale 1:5000 | Date Nov. 1981

NCI-118 CL

NORTH MOYIE - LEW PROPERTY

Drawn by M.W.-M.	Traced by
Revised by Date	Revised by Date

GEOCHEMISTRY GRID
ZINC VALUES (ppm)

Scale 1:5000 Date Nov. 1981

N

1700

1600

1600

1700

1500

CLAIM BOUNDARY

1800

1700

1600

1500

Kutlits Creek

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

0 100 200 300 metres

LEGEND

- >24
- 15-24
- 10-14

19306

NORTH MOYIE - LEW PROPERTY

Drawn by: MW-M. Traced by:

GEOCHEMISTRY GRID

ARSENIC VALUES(ppm)

Scale 1:5000 Nov. 1981