

1996 ASSESSMENT REPORT

BM 1 - 6, 9 - 12, & 36 - 41

105 D/16 **093544**

WHITEHORSE MINING DIVISION, YUKON

by

Larry W. Carlyle, F.G.A.C., P. Geol.



TRIP REPORT FOR PERIOD 1961

TO: [illegible]

FROM: [illegible]

AT: [illegible]

DATE: [illegible]

This report has been examined by
the Geological Evaluation Unit
under Section 60 (4) Yukon Quartz
Mining Act and is allowed as
representation work in the amount

\$ 3200.

M. Beher

fw Regional Manager, Exploration and
Geological Services for Commissioner
of Yukon Territory.

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INTRODUCTION:

The first BM Claims were staked by Larry W. Carlyle and S. Drew MacDonald in July, 1986. From this time to the present, sporadic prospecting, claim staking, geological mapping, rock and soil sampling, VLF-EM surveying, as well as hand and blast trenching have been performed on the property.

In 1996, Larry Carlyle and his field assistant, Will Skitmore, spent from July 4, 1996 until July 16, 1996 working in the vicinity of the property. Of this time, 6 days were spent doing blast trenching on VLF and grid soil geochemical anomalies in the area of the Main Zone. An additional day was spent doing fill-in contour soil sampling at 100 metre intervals between some of the samples taken in 1995; which had returned interesting gold, arsenic, and copper values; at 300 metre intervals along the 1700 metre contour south of the R-17 Zone. On the same day, five samples were taken along the 1700 metre contour at 100 metre intervals north of the R-17 Zone. These contour soil samples may show if the R-17 has a north-south strike or, as the writer suspects, a northwest-southeast strike.

The object of this report is to summarize the information obtained from the blast trenching on the property.

LOCATION, ACCESS AND CLAIMS:

The BM Claims cover an area of ground on the northwest ridge of Mt. Byng on NTS Map Sheet 105 D/16. The claim group was reduced to a single grouping of 16 claims in 1994.

In 1984, a winter road was constructed by placer miners from the Michie Creek road up Byng Creek to the divide and into the headwaters of Sheldon Creek (See Location Map).

An attempt was made to access the property with the use of ATV'S on July 4, 1996.

The Michie Creek road was in very poor repair in many places, as well, Michie Creek itself was in flood so was impassable. It became necessary to again use a helicopter to win access to the property.

CLAIM NAME	GRANT NUMBERS	EXPIRY DATE
BM 1 - 4	YA 95347 - YA 95350	July 16, 1996
BM 5 - 6	YA 97128 - YA 97129	July 16, 1996
BM 9 - 12	YB 20540 - YB 20543	July 16, 1996
BM 36 - 41	YB 21567 - YB 21572	July 16, 1996

PROPERTY GEOLOGY:

The February, 1995 release of preliminary geological mapping on 50,000 scale of the NTS 105 D/16 area has significantly improved the geological knowledge of the area.

Most of the 16 claim block cover an area of Middle Triassic, coarse-grained, and variably textured pyroxene gabbro. The gabbro has leucocratic weathering and contains small bodies of anorthosite and pyroxenite. The gabbro is considered to represent the hypabyssal portion of the magma chamber which fed the Joe Mountain volcanic complex.

The Mount Byng massif and areas south, west, and north of the claim block are underlain by Joe Mountain Volcanic Complex volcanic rocks and intrusive equivalents. Joe Mountain volcanic rocks are dark, grey-green weathering, fine-grained and locally medium-grained, massive andesitic and basaltic flows and diabase.

The northeastern corner of the claim block touches the edge of Upper Triassic Lewes River Group sedimentary rocks. These rocks are black and white, varved shale having some bands of gritty sandstone and light grey weathering limestone. The sedimentary rocks are in contact with the pyroxene gabbro, Joe Mountain Volcanics, and the Mount Byng felsite south and east of the claims.

The Mount Byng felsite has a Middle Cretaceous age and is associated with the Teslin Plutonic Suite having an approximate age of 120 million years. The felsite is fine-grained to porphyritic feldspar-hornblende felsite and hornblende granodiorite. It is leucocratic and recessive, and exhibits white to pale grey weathering. North-trending dykes and small plugs on the property, commonly referred to as rhyolite, are thought by the writer to be a late phase of the Mt. Byng felsite.

Faulting

Very significant faulting exists on the property. There are at least two well developed sets of faults on the claims. The earliest set have an east-west strike and, where visible, appear to have a nearly vertical dip. The second set of faults are much stronger, having north-south strike lengths of several kilometres. These faults cut and displace the east striking faults. The R-17 Zone may have a north-south strike, but the writer suspects that it may have a northwest-southeast strike, parallel the strike seen in faults paralleling the Teslin Suture in the northeast corner of the map area.

MT. BYNG GEOLOGICAL LEGEND

CRETACEOUS

mK _B	Byng Creek Volcanic Complex (ca. 109 Ma) Nested cauldера complex
mK _{qM}	Mount McIntyre Plutonic Suite (ca. 109 Ma)
mK _{dW}	Whitehorse Plutonic Suite (ca. 115 Ma)
mK _{gT}	Teslin Plutonic Suite (ca. 120 Ma)
mK _{rT}	Mt. Byng felsite (ca. 120 Ma)

JURASSIC

J _L	Laberge Group
----------------	---------------

TRIASSIC

uTA	Upper Triassic Sediments – Alksala Formation Divided into Units 1, 2, and 3 by Hart and Hunt
uT _{scv}	Sheldon Creek Volcanics Newly discovered unit by Hart and Hunt
mT _{JM}	Joe Mountain Volcanic Complex
mT _{JMb}	Coarse-grained pyroxene gabbro Considered by Hart and Hunt to be Hypabyssal source of Joe Mountain volcanics

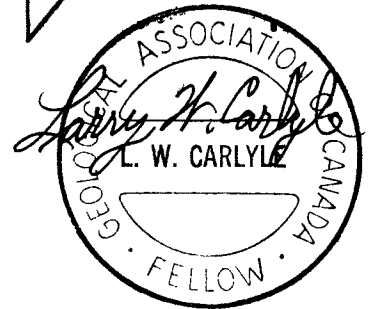
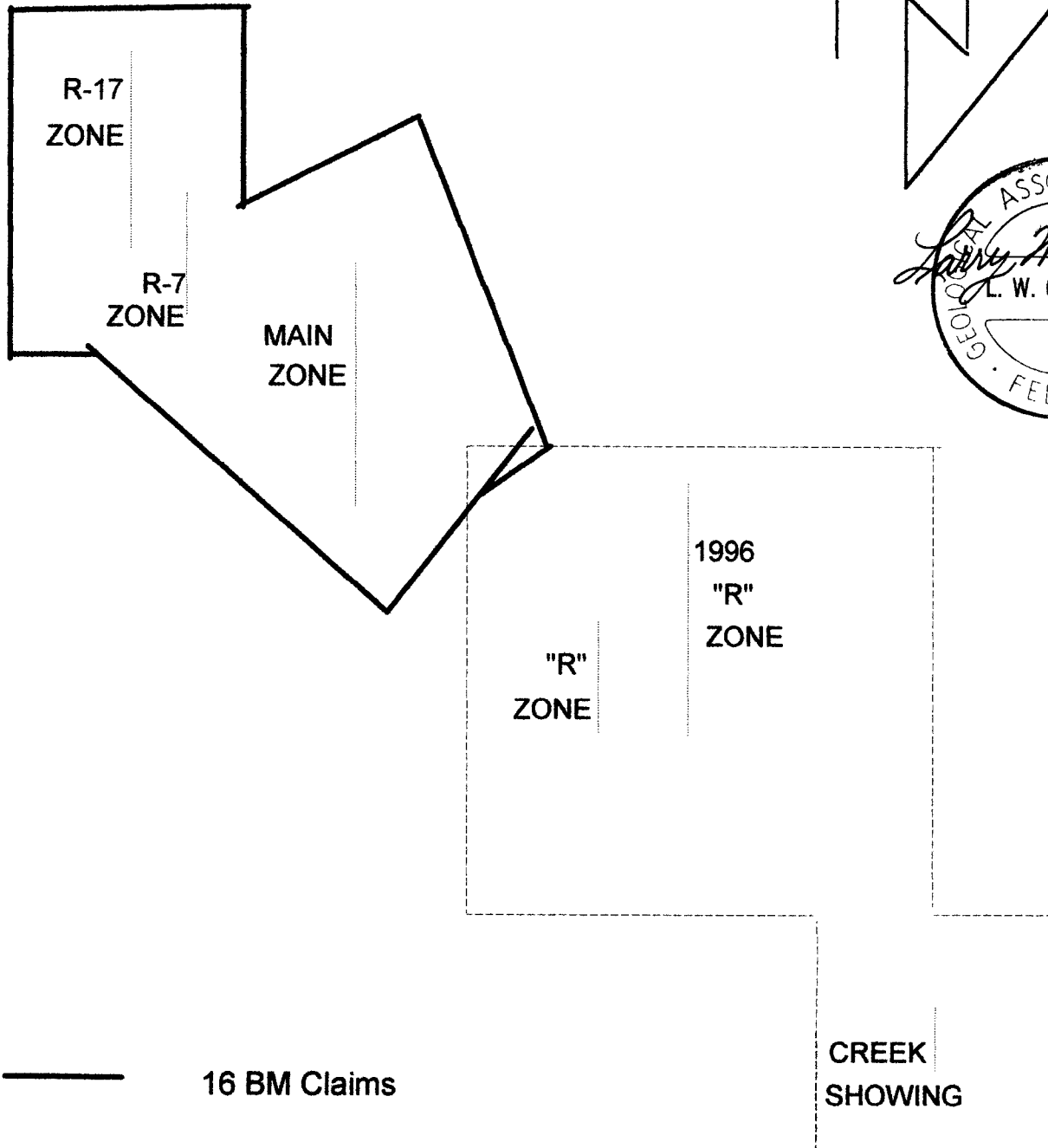
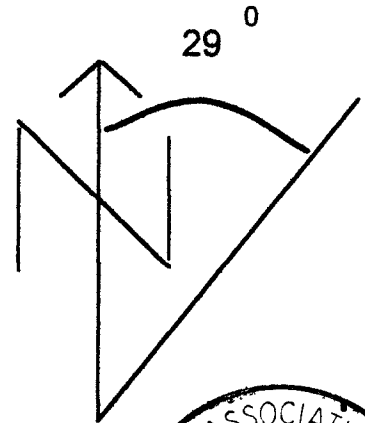
Showings

The R-17 Zone is a conspicuous orange weathering gossan overlying a breccia of altered and silicified fragments up to 15 cm. across and cemented by vuggy chalcedony. The writer considers this to be the silica cap of a hot spring deposit; which suggests that higher grade precious metal values may exist at depth.

At the Main Zone, the writer has noted that the several flat-dipping, vuggy quartz veins do not have the north strike of the prominent recessive rhyolite dykes with which they are associated. The veins appear to have a northwest strike; and the writer believes he has found the fault the veins are associated with. The fault strikes from the northwest corner of the 1980 metre peak on which the majority of the claims lie southeast along the peak and through the saddle and cliff which separates this peak from the north ridge of Mt. Byng (See Property Geology Figure). This fault is believed to be slightly later than the north-south striking faults and may be responsible for the gold bearing, malachite, azurite, chalcopryite, and tetrahedrite in the quartz veins. Samples of vein material have returned gold values up to 126.9 g/tonne. Samples also frequently have anomalous values in mercury, arsenic, antimony, tungsten, and barium.

There are three other known areas of interest on the property; the R-7 Zone, the "R" Zone, and the newly discovered Creek Showing (See Property Geology Figure). The "R" Zone and Creek Showing were staked in 1995 as the BC Claims. They will be discussed in more detail in a later report. The R-7 Zone appears to exist at the intersection of 2 faults: a major north striking fault and a northeast striking fault at the northwestern contact of Mt. Byng felsite. A sample of limonitic and silicified rhyolite with trace pyrite and malachite staining returned a gold value of 840 ppb, 3.2 PPM silver,

BM and BC CLAIMS VLF AND SOIL SURVEY AREAS

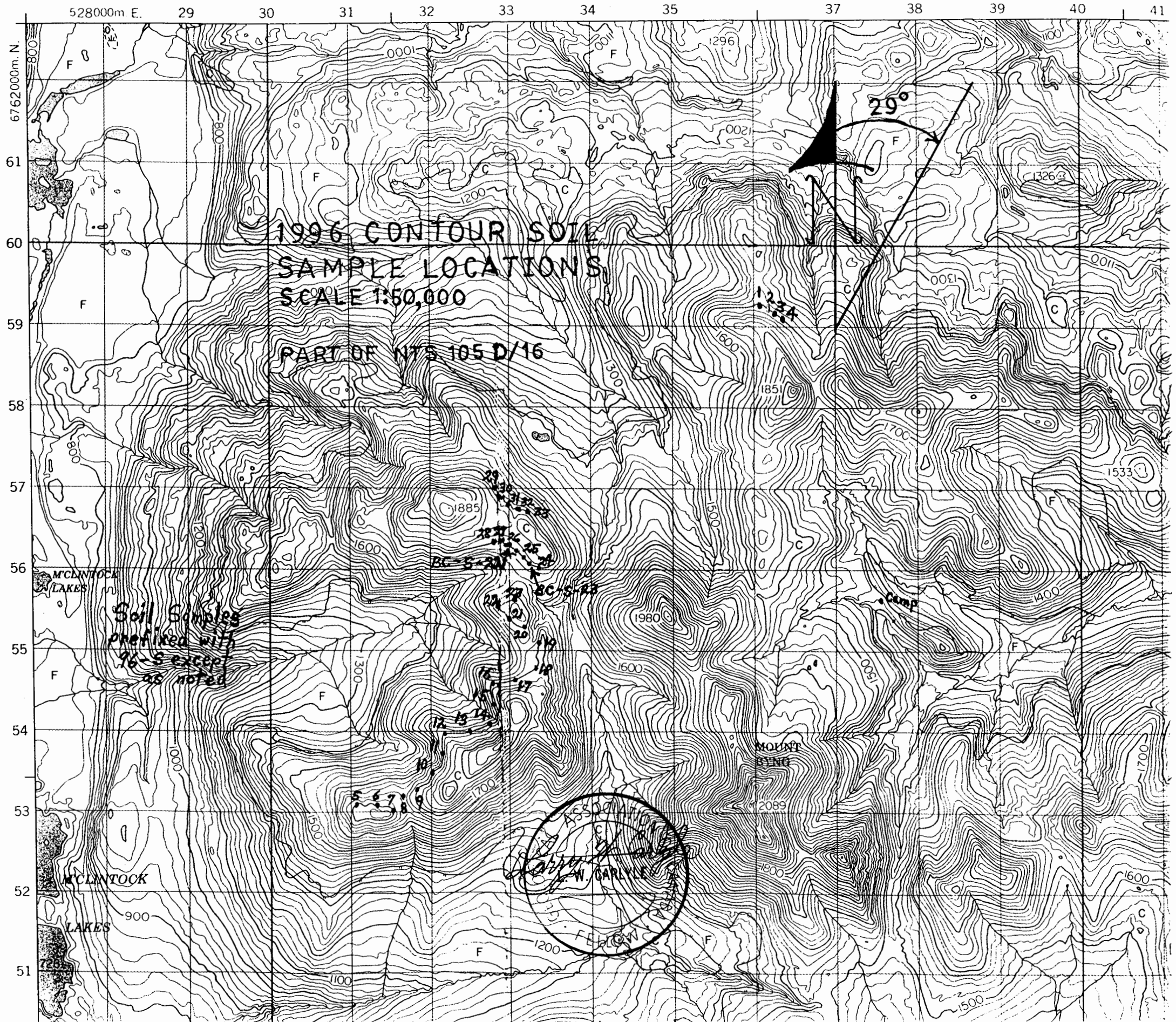


- 16 BM Claims
- - - 20 BC Claims

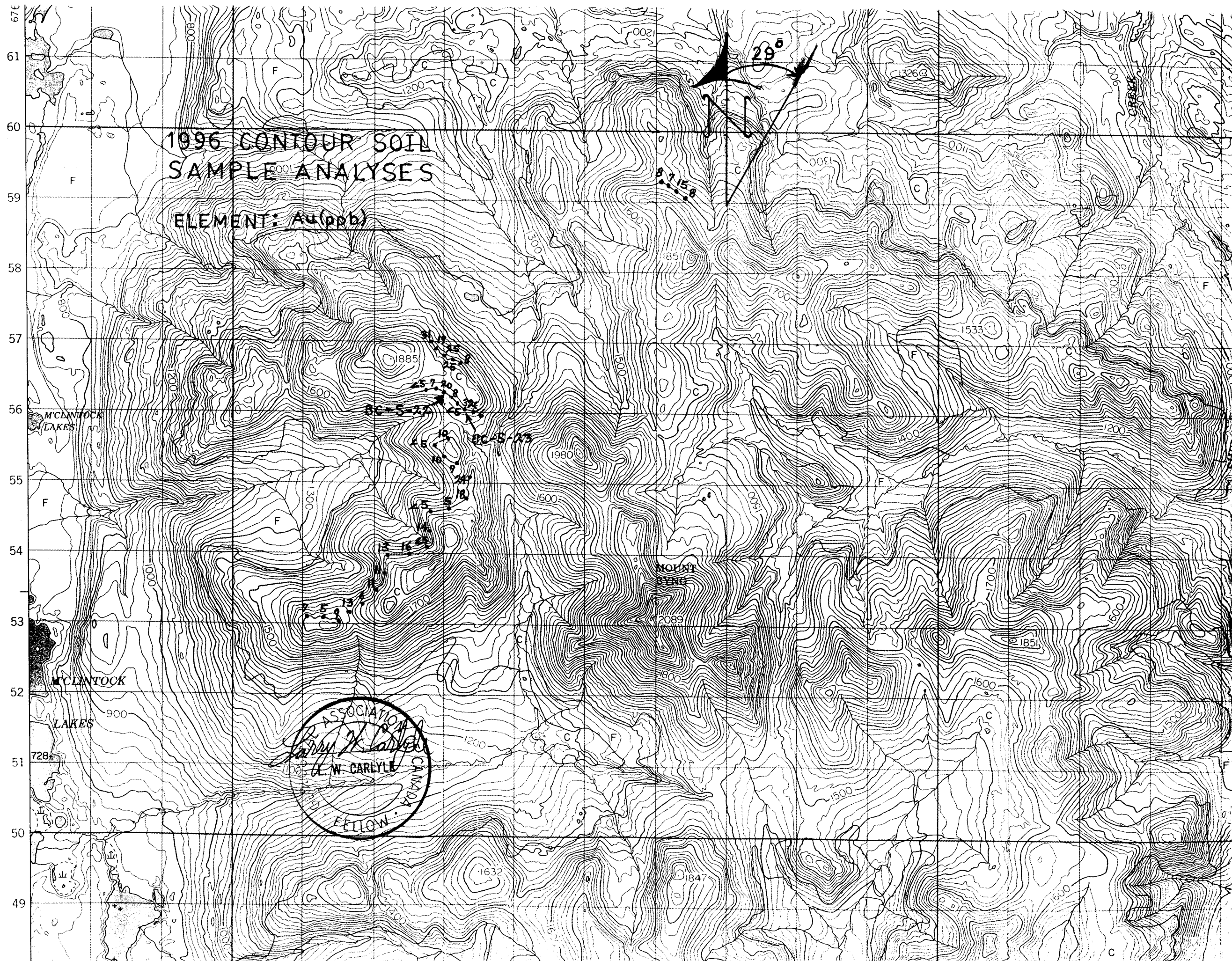
and 340 PPM copper. At the "R" Zone, up to 2% arsenopyrite fracture fillings were located in 1995 in the volcanics at the northeast corner of the cliff. Previously, gossaned and brecciated quartz-carbonate vein material associated with strong VLF anomalies have returned gold values up to 1.70 opt. and anomalous values in copper, arsenic, and molybdenum. Molybdenite has been located in the Mt. Byng felsite at its contact with these volcanics.

1996 WORK PROGRAM:

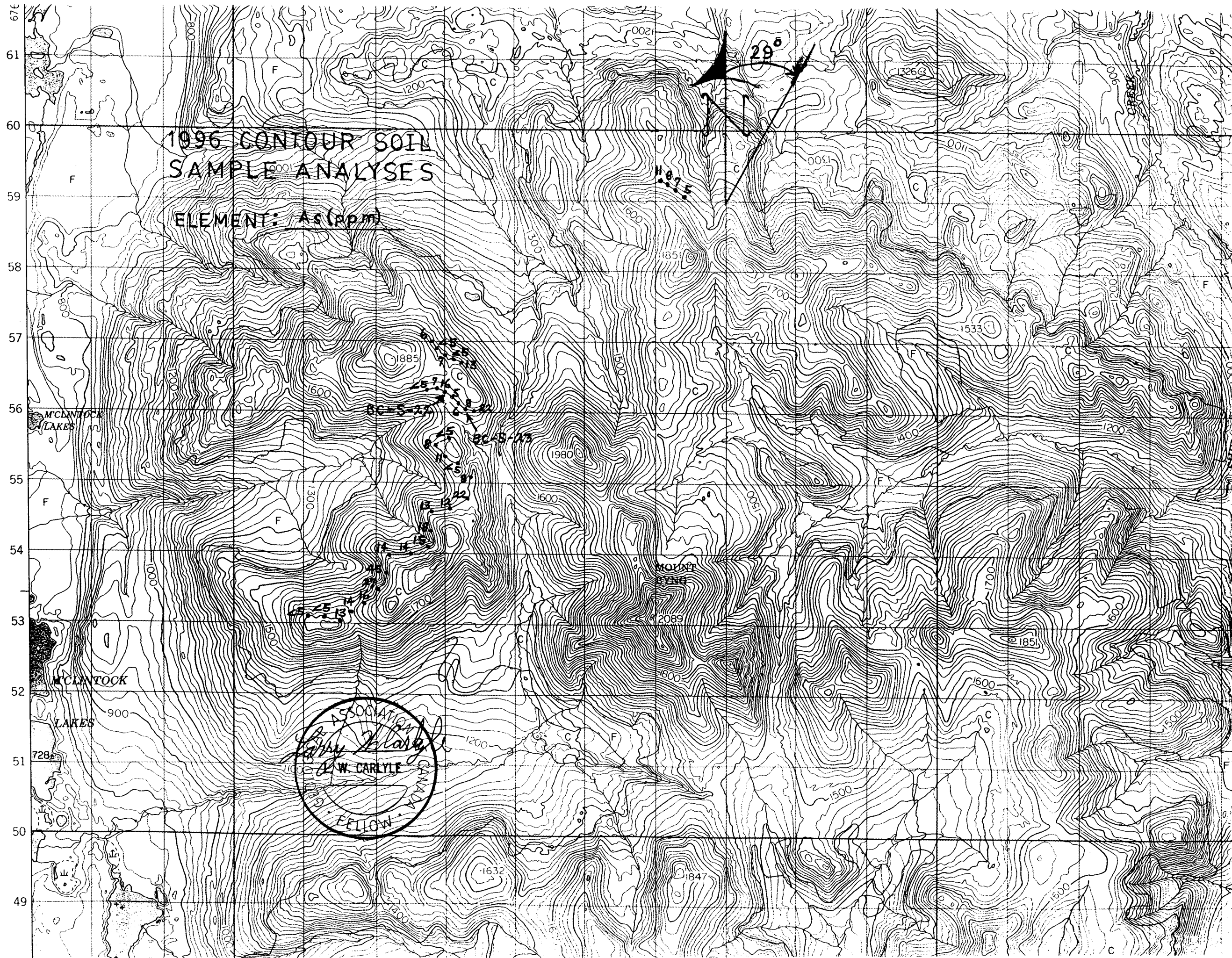
The 1996 work program consisted of blast trenching on significant VLF and gold, arsenic, and copper geochemical anomalies north of the Main Zone (See BM Claim Trenching Drawing). In addition to the trenching, fill-in contour soil samples at 100 metre spacings were added to part of the area sampled at 300 metre spacings along the 1700 metre contour south of the R-17 Zone in late 1995. The 1995 samples were called BC-S-21 to 23. The 1996 fill-in samples were called 96-S-24 to 28. Five contour soil samples were also taken at 100 metre intervals along the 1700 metre contour north of the R-17 Zone. These samples were labelled 96-S-29 to 33. These samples were part of a more regional program of contour soil sampling which was not part of the assessment work. The regional work is reported on in another report. In addition to the trench samples, a grab sample of pink to light brown rhyolite cutting peridotite was taken. The rhyolite and peridotite are cut by later phase(s) of banded quartz giving the rock a banded appearance. The rock contained trace amounts of oxidized pyrite. The sample came from 100 N, ~ 50 E and was numbered BM-96-1. Assays for these samples and other samples in the area are included in this report.



ÉTRIQUE



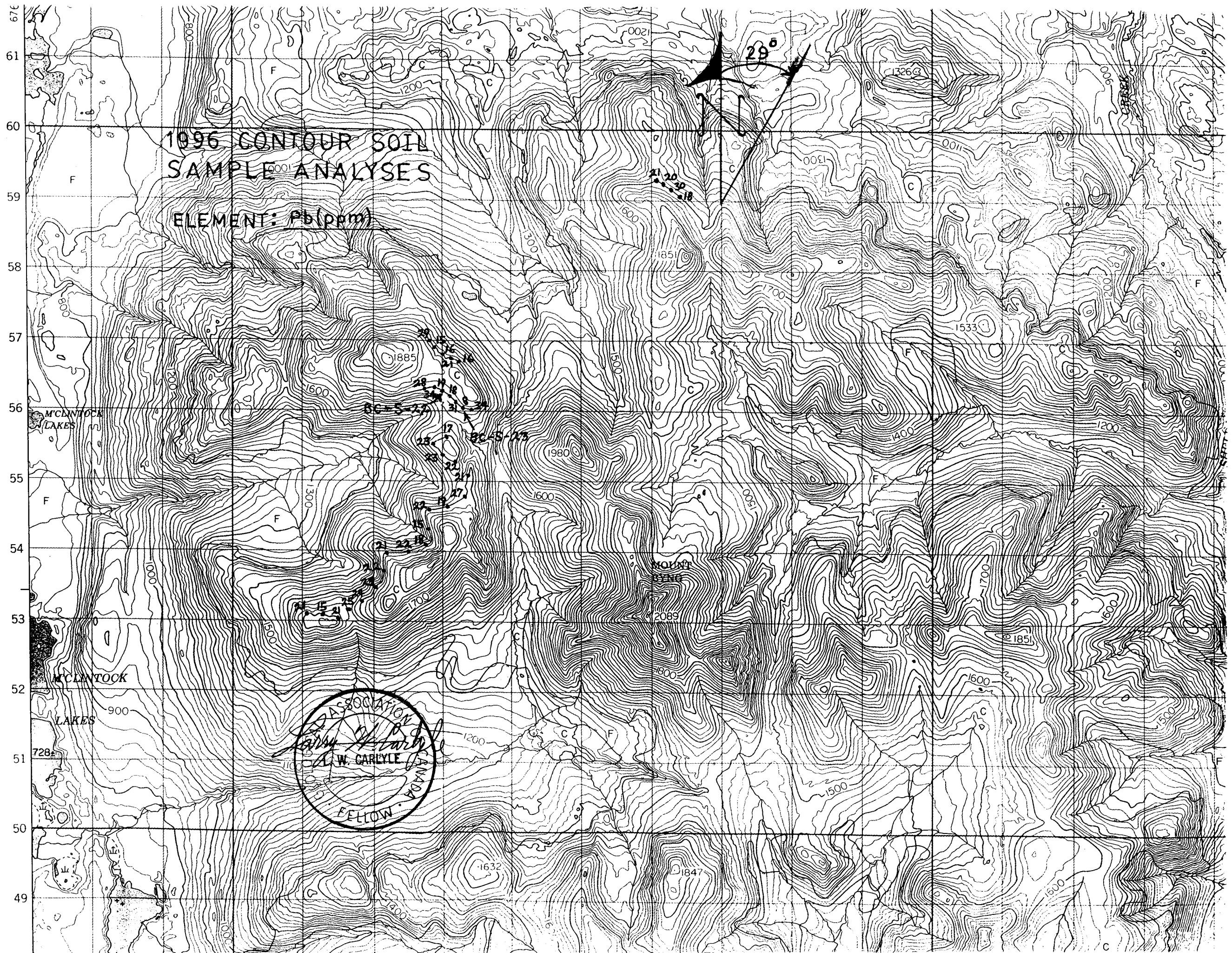
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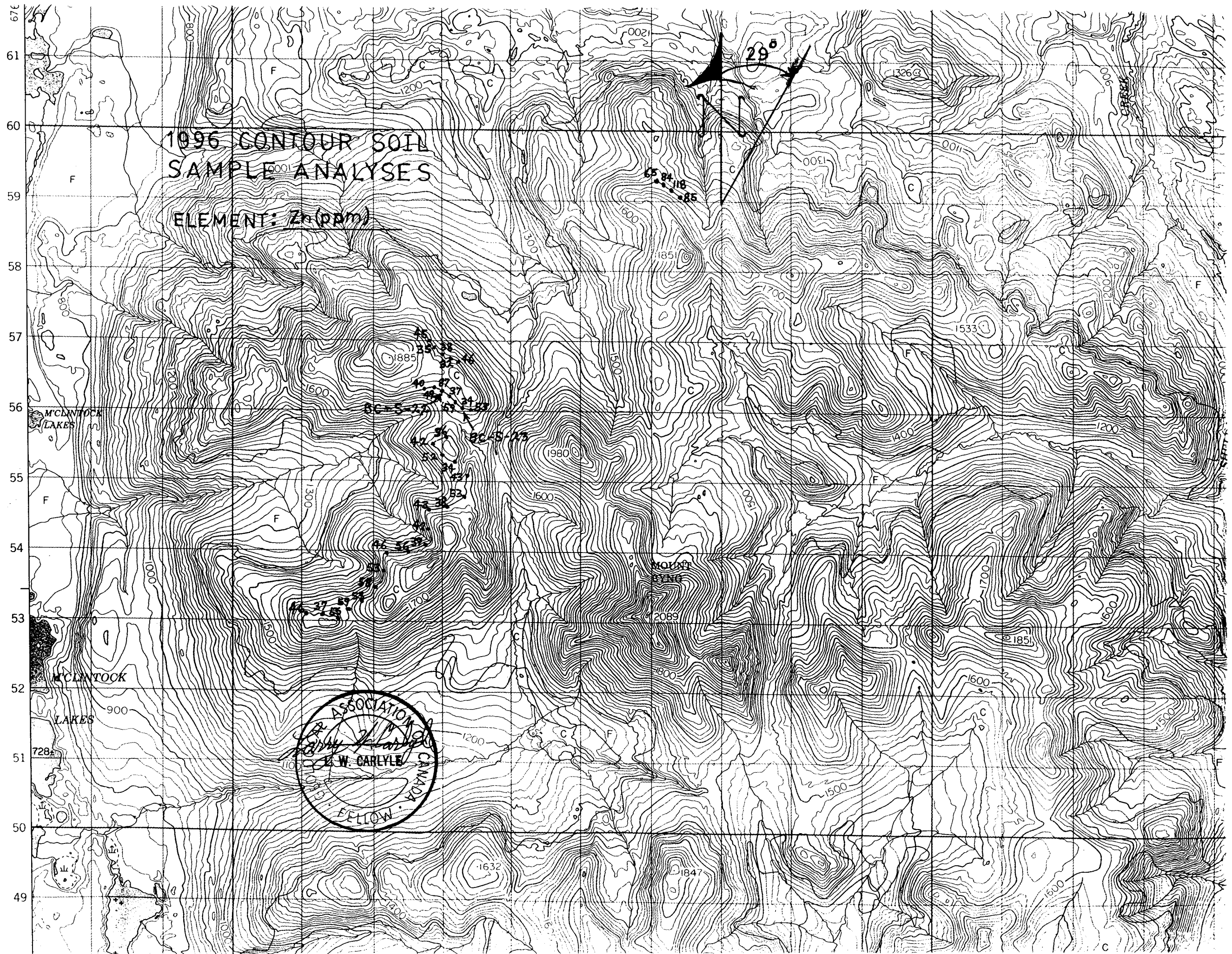
1996 CONTOUR SOIL
SAMPLE ANALYSES

ELEMENT: As (ppm)

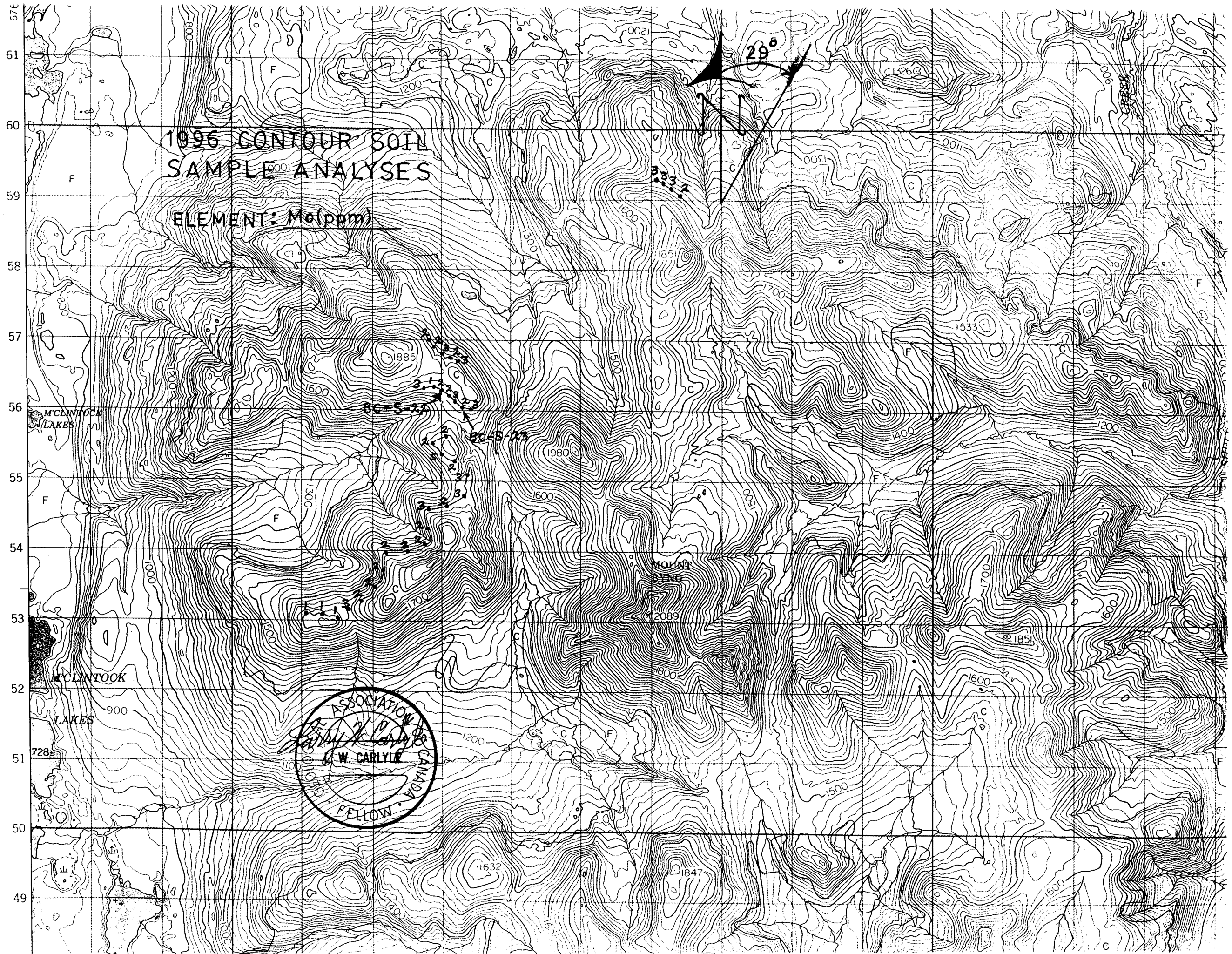
ASSOCIATION
of Geologists of Canada
W. CARLYLE
FELLOW



ÉTRIQUE



ÉTRIQUE



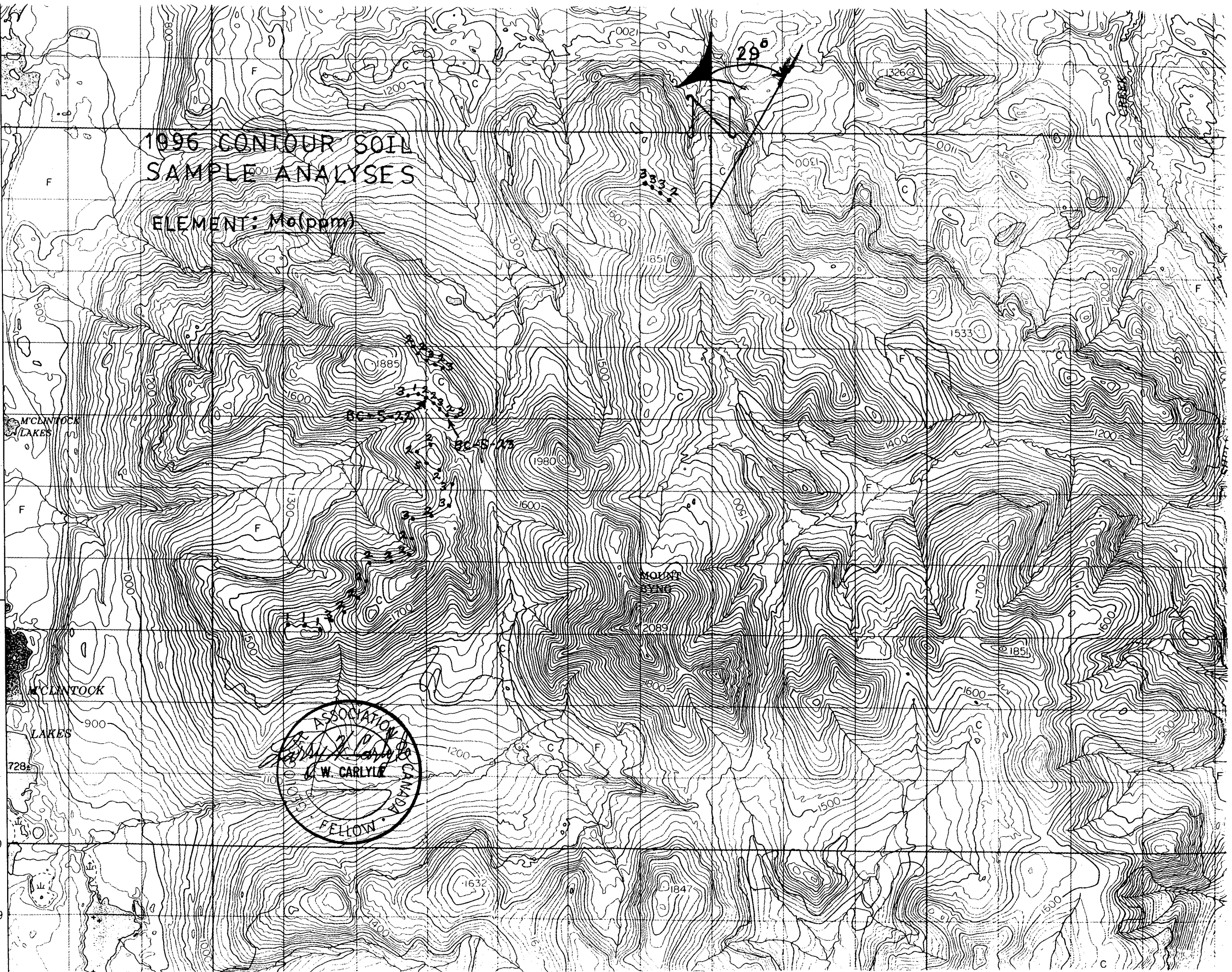
1996 CONTOUR SOIL
SAMPLE ANALYSES

ELEMENT: Mo(ppm)

ASSOCIATION OF
PROFESSIONAL GEOMORPHOLOGISTS
CANADA
W. CARLYLE
FELLOW

29°

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49



Main Zone Trenching

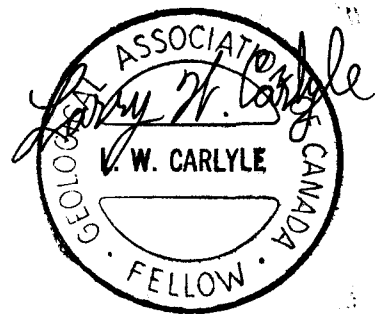
Eight blast trenches were done on BM Claims 3, 10 and 12. The trench locations are shown on Figure "1996 BM Claim Trenching". Due to the frozen nature of the ground, the trenches reached only shallow depths. For this reason, most trenches had soil samples taken from them. Rock samples were taken only from the trenches at 400 N, 300 E, and 400 N, 100 E. All samples returned somewhat anomalous values in gold, arsenic, and copper (See Figure). A value of 307 ppb in gold was obtained from the trench at 300 N, 50 E.

Trench Volumes

Trench	Length (ft)	Width (ft)	Depth (ft)	Cubic Feet	Cubic Yards
200 N, 100 E	5	4	2	40	1.5
300 N, 50 W	7	6	2	84	3.1
300 N, 30 W	6	5	2	60	2.2
300 N, 50 E	8	8	2.5	160	5.9
400 N, 100 E	6	6	2	72	2.7
400 N, 300 E	7	6	2	84	3.1
500 N, 250 E	8	8	1.5	96	3.5
600 N, 250 E	8	8	1.5	96	3.5
				Total	25.5

1996 STATEMENT OF COSTS: (See Appendix B for Invoices)

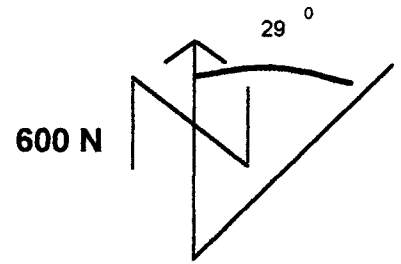
Helicopter	\$ 930.90
Dynamite & Fuse	\$ 277.91
Telephone	\$ 55.00
Field Assistant (Wages & Benefits)	\$ 707.24
Labour (6 days @ \$50/day)	\$ 300.00
Report Writing (2 days @ \$200/day)	\$ 400.00
Room & Board (6 days @ \$70/day)	\$ 420.00
Assaying - 6 soil samples @ \$18 ea.	\$ 108.00
-- 3 rock samples @ \$21 ea.	\$ 63.00
GST	\$ 11.97
Coupons -	\$ 31.50
Field Supplies (Fuel, Flagging, Topofil, etc.)	\$ 50.00
Representation Work (25.5 yd ³ @ \$1/yd ³)	\$ 25.50
Total	\$3318.02



1996 BM CLAIM TRENCHING

BASELINE

8 ft X 8 ft X 1.5 ft
 28 ppb Au
 71 ppm As
 56 ppm Cu



8 ft X 8 ft X 1.5 ft
 33 ppb Au
 146 ppm As
 69 ppm Cu

500 N

6 ft X 6 ft X 2ft
 19 ppb Au
 366 ppm As
 83 ppm Cu

6 ft X 7 ft X 2 ft
 11 ppb Au
 421 ppm As
 56 ppm Cu

400 N

5 ft X 6 ft X 2 ft
 36 ppb Au
 73 ppm As
 75 ppm Cu

8 ft X 8 ft X 2.5 ft
 307 ppb Au
 645 ppm As
 46 ppm Cu

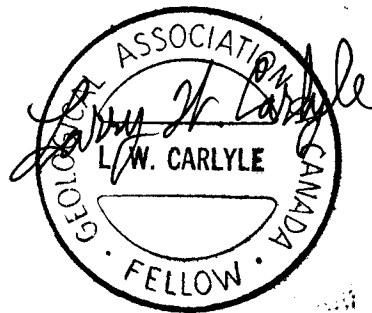
300 N

7 ft X 6 ft X 2 ft
 51 ppb Au
 48 ppm As
 64 ppm Cu

4 ft X 5 ft X 2 ft
 16 ppb Au
 78 ppm As
 64 ppm Cu

200 N

BM-96-1
 5 ppb Au
 117 ppm As
 16 ppm Cu



100 N

BM 1 - 4
 CLAIM POSTS

0 + 00

50 W 0 + 00 50 E 100 E 150 E 200 E 250 E 300 E

CONCLUSIONS:

The somewhat anomalous gold values obtained from the rock and soil samples taken from the trenches show the grid soil sampling of the area done earlier is a useful exploration tool on the property. This success would also indicate that the anomalous values obtained during contour soil sampling north of the trenched area in 1995 probably show a further extension to the Main Zone.

The anomalous values obtained in the contour soil samples northwest of the R-17 Zone, joined with those obtained toward the southeast during the 1995 contour soil sampling, indicate a possible northwest-southeast strike for the R-17 Zone.

RECOMMENDATIONS:

The trenches excavated on the Main Zone again demonstrate the ineffectiveness of hand or blast trenching on this property and the need for machinery to be used in excavating the veins and other showings. It is only through this means that in-situ chip sampling of the mineral occurrences can be achieved.

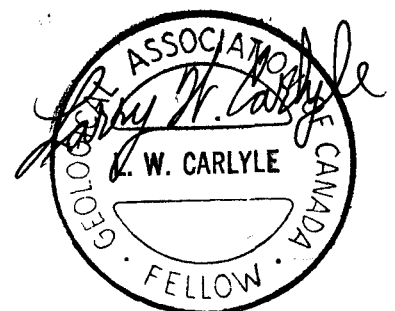
REFERENCES:

Carlyle, L.W. (1994) "Report on the 1994 Work Program BM Claims, Mt. Byng Area"

Carlyle, L.W. (1995) "Report on the 1995 Work Program BM Claims, Mt. Byng Area"

INAC, Open File 1995-4 (G) "Preliminary geology of Mount M'Clintock map area southern Yukon NTS 105 D/16"

INAC, (1995) "Yukon Exploration & Geology 1994", pgs. 87 - 103



STATEMENT OF QUALIFICATIONS

I, LARRY W. CARLYLE, do certify:

That I am a professional geologist resident at 74 Tamarack Drive, Whitehorse, Yukon Y1A 4Y6.

That I hold a B. Sc. Degree in geology from the University of British Columbia (1970).

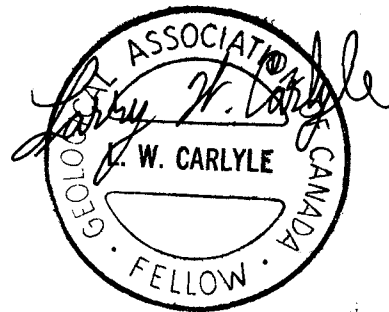
That I am a Fellow of the Geological Association of Canada (F - 4355).

That I am a Registered Professional Geologist in the Association of Professional Engineers, Geologists and Geophysicists of the Province of Alberta (41097).

That I have practised my profession as a mine and exploration geologist for nineteen years.

The conclusions and recommendations in the attached report are based on work I performed on the property and on a review of available private and public reports on the property.

DATED at Whitehorse, Yukon this 7th day of October, 1996.



APPENDIX A
ANALYTICAL CERTIFICATES

24/07/96

Assay Certificate

Page 1

Larry Carlyle

WO#10402

Sample #	Au ppb
96S-1	8
96S-2	7
96S-3	15
96S-4	8
96S-5	7
96S-6	5
96S-7	9
96S-8	13
96S-9	6
96S-10	11
96S-11	11
96S-12	13
96S-13	16
96S-14	<5
96S-15	14
96S-16	<5
96S-17	5
96S-18	18
96S-19	24
96S-20	9
96S-21	10
96S-22	<5
96S-23	10
96S-24	6
96S-25	<5
96S-26	8
96S-27	7
96S-28	<5
96S-29	31
96S-30	19

Certified by



24/07/96

Assay Certificate

Page 2

Larry Carlyle

WO#10402

Sample #	Au ppb
96S-31	25
96S-32	25
96S-33	8
T2N 1E	16
T3N 50E	307
T3N 30W	36
T3N 50W	51
T5N 250E	33
T6N 250E	28
T4N 1E	19
T4N 3E	11
BM-96-1	5

Certified by





CERTIFICATE OF ANALYSIS

iPL 96G0653

2036 Columbia Street
 Vancouver, B.C.
 Canada V5Y 3E1
 Phone (604) 879-7878
 Fax (604) 879-7898

INTERNATIONAL PLASMA LABORATORY LTD.

Client: Northern Analytical Laboratories
 Project: W.O. 10402 42 Pulp

iPL: 96G0653

Out: Aug 02, 1996
 In: Jul 30, 1996

Page 2 of 2
 [065317:15:20:69080296]

Section 1 of 1
 Certified BC Assayer: David Chiu

Sample Name	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Hg ppm	Mo ppm	Tl ppm	Bi ppm	Cd ppm	Co ppm	Ni ppm	Ba ppm	W ppm	Cr ppm	V ppm	Mn ppm	La ppm	Sr ppm	Zr ppm	Sc ppm	Ti %	Al %	Ca %	Fe %	Mg %	K %	Na %	P %
T-4N- 3E	<	56	11	27	421	15	<	4	<	<	<	8	21	81	5	59	30	271	8	20	9	4	0.01	0.54	0.96	1.74	0.22	0.09	0.09	0.05
T-5N-250E	<	69	27	123	146	9	<	6	<	<	<	16	46	175	8	48	63	518	11	40	3	6	0.04	1.64	0.67	2.65	0.91	0.11	0.12	0.06
T-6N-250E	0.1	56	24	64	71	<	<	3	<	<	<	17	34	148	7	48	80	522	11	32	4	6	0.08	1.32	0.57	2.86	0.88	0.23	0.09	0.08

Min Limit 0.1 1 2 1 5 5 3 1 10 2 0.1 1 1 2 5 1 2 1 2 1 1 1 1 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01
 Max Reported* 99.9 20000 20000 20000 9999 9999 9999 9999 999 999 99.9 999 999 9999 999 9999 999 9999 9999 9999 999 999 999 999 1.00 9.99 9.99 9.99 9.99 9.99 5.00 5.00
 Method ICP
 --=No Test ins=Insufficient Sample S=Soil R=Rock C=Core L=Silt P=Pulp U=Undefined m=Estimate/1000 %=Estimate % Max=No Estimate

APPENDIX B
INVOICES SUPPORTING
STATEMENT OF COSTS

Invoice for Analytical Services

To:

Larry Carlyle

Invoice Date: 24/07/96

WO# 10402

QTY	DESCRIPTION	UNIT PRICE	AMOUNT
3	Sample Preparation: Rock Sample Preparation	5.00	15.00
39	Soil/Sediment Sample Preparation	2.00	78.00
42	Analyses: Au + 30	16.00	672.00
Subtotal			765.00
GST @7% (R 121285662)			53.55
Total due on receipt of invoice			\$818.55

2% per month charged on overdue accounts

PAID CK# 862
JR

3 ASSAY COUPONS

~~(12.00)~~ (31.50)
~~\$785.55~~ 787.05



Heli Dynamics Ltd.

Helicopter Charter Services

Phone : (403) 668-3536 or 667-4971

Fax : (403) 668-5637

P.O. Box 4280

Whitehorse, Yukon Y1A 3T3

INVOICE No.

4075

Charterer Billing Address <i>Larry Carlisle</i>			Customer P.O. #			
Aircraft : <i>KOY</i>			Type : <i>Bell 206</i>	Rate/Hour : <i>650.00</i>	Flight Authorized By: <i>Larry H. Carlisle</i>	
Date :			Fuel : <input checked="" type="checkbox"/> HD <input type="checkbox"/> Customer	Pilot : <i>Brian Guthrie</i>		
From :			To :	Base : <i>YXY</i>		
				Time Up	Time Down	Flight Time
<i>July 14/96</i>	<i>YXY</i>	<i>→</i>	<i>MT. Byron</i>	<i>5:53</i>	<i>6:16</i>	<i>.3</i>
<i>July 14/96</i>	<i>MT. Dynes</i>	<i>→</i>	<i>YXY</i>	<i>6:28</i>	<i>7:46</i>	<i>.3</i>
<i>July 16/96</i>	<i>YXY</i>	<i>→</i>	<i>MT Byron - XYX</i>			<i>.6</i>
<i>Pol by check #830</i>						
TOTAL REV HOURS :					<i>1.2</i>	

EXPENSES	G.S.T	FUEL		
		Cost/Litre	Hours @ 100 Litres/hour	FUEL COST
Hotel				
Food		<i>.75</i>	<i>120</i>	<i>90.00</i>
Transport				
TOTAL EXPENSES				
TOTAL G.S.T.		TOTAL FUEL COSTS =		

SUMMARY	AMOUNT	G.S.T.	TOTAL
<i>1.2</i> Hours FLYING	<i>780.00</i>	<i>54.60</i>	<i>834.60</i>
<i>1.2</i> Hours FUEL & OIL	<i>90.10</i>	<i>6.3</i>	<i>96.30</i>
Expenses			
TOTALS			
GRAND TOTAL			<i>#930.90</i>

256454

BRANCH

WHS

NO.

42

PLEASE REMIT TO: BOX 5247, STN. A, CALGARY, ALBERTA T2H 1X6
PHONE (403) 255-7776 • FAX (403) 255-2226

LARRY CARLYLE



RHP# 182197

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ACCOUNT NO. <i>VISA</i>	PURCHASE ORDER NUMBER	PARTY/JOB NO.	PROV. OF DEST. <i>Y.T.</i>	G.S.T. REGISTRATION NO. R101719698	PROVINCIAL SALES TAX NO.	DATE SHIPPED MONTH <i>04</i> DAY <i>21</i> YEAR <i>91</i>	SLSM.
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ITEM NO.	DESCRIPTION	CLASS	GRP	UN CODE	PKG. GRP	ORDERED	SHIPPED	PRICE	PER	EXTENSION
<i>GD-25X200</i>	<i>GBLDYNE 25X200MM</i>					<i>1</i>	<i>1</i>	<i>176.00</i>	<i>CS</i>	<i>176 00</i>
<i>SFA3</i>	<i>FUSE ASSEMBLY 3M, MANSTART</i>					<i>10</i>	<i>10</i>	<i>373.30</i>	<i>C</i>	<i>37 33</i>
	<i>R.C.C (3% of \$213.33)</i>					<i>1</i>	<i>1</i>	<i>6.40</i>	<i>E</i>	<i>6 40</i>
	<i>MAG TRIP</i>					<i>1</i>	<i>1</i>	<i>40.00</i>	<i>B</i>	<i>40 00</i>

VISA# 5-241

EMERGENCY RESPONSE PLAN ERP2 - 0081	EMERGENCY PHONE 403-255-7776	EMERGENCY PHONE 1-800-561-3636	PLACARDS APPLIED	TRANSPORTATION CALCULATION	FLAT RATE	SUB TOTAL
NUMBER OF UNITS	GROSS WEIGHT DANGEROUS GOODS	NET EXPLOSIVES WEIGHT		KILOMETRES	LOAD / UNLOAD	TRANSPORT TOTAL
SHIPPED VIA	COLL.	PPD.	PPD & CHG.	COD	RUN TIME HOURS	WAITING TIME HOURS
SEE REVERSE FOR TERMS AND CONDITIONS				7% G.S.T. ON \$		<i>259.73</i>
				% PROV. TAX ON \$		<i>18.18</i>
				TOTAL AMOUNT		<i>277.91</i>

SALES
CUSTOMER'S COPY

RECEIVED IN GOOD ORDER BY _____