

**REPORT ON THE 1995 WORK PROGRAM  
EM CLAIMS, MT. BYNG AREA  
WHITEHORSE MINING DISTRICT, YUKON**

**NTS 105 D - 16**

**by**

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

**Whitehorse, Yukon**

**July, 1995**

**095319**

## TABLE OF CONTENTS

	Page
Introduction	1
Location, Access and Claims	1
Property Geology	2
Faulting	3
1995 Work Program	
R-17 Zone Trenching	5
R-17 Zone Trench Volumes	5
Main Zone Trenching	5
Main Zone Trench Volumes	6
Rock Description Table	6
1995 Statement of Costs	6
Conclusions	7
Recommendations	7
Proposed Work Program	8
References	8
Statement of Qualifications	9
<b>FIGURES</b>	
	Following Page
Location Map	1
Figure 1: Survey Areas	2
Property Geology Figure	4
1995 Trenches: R-17 Zone	5
1995 Trenches: Main Zone	6
<b>APPENDICES</b>	
Appendix A -- Assay Certificates	
Appendix B -- Invoices Supporting Statement of Costs	

**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 and ground magnetic surveying, and hand and blast trenching have been performed on the property.

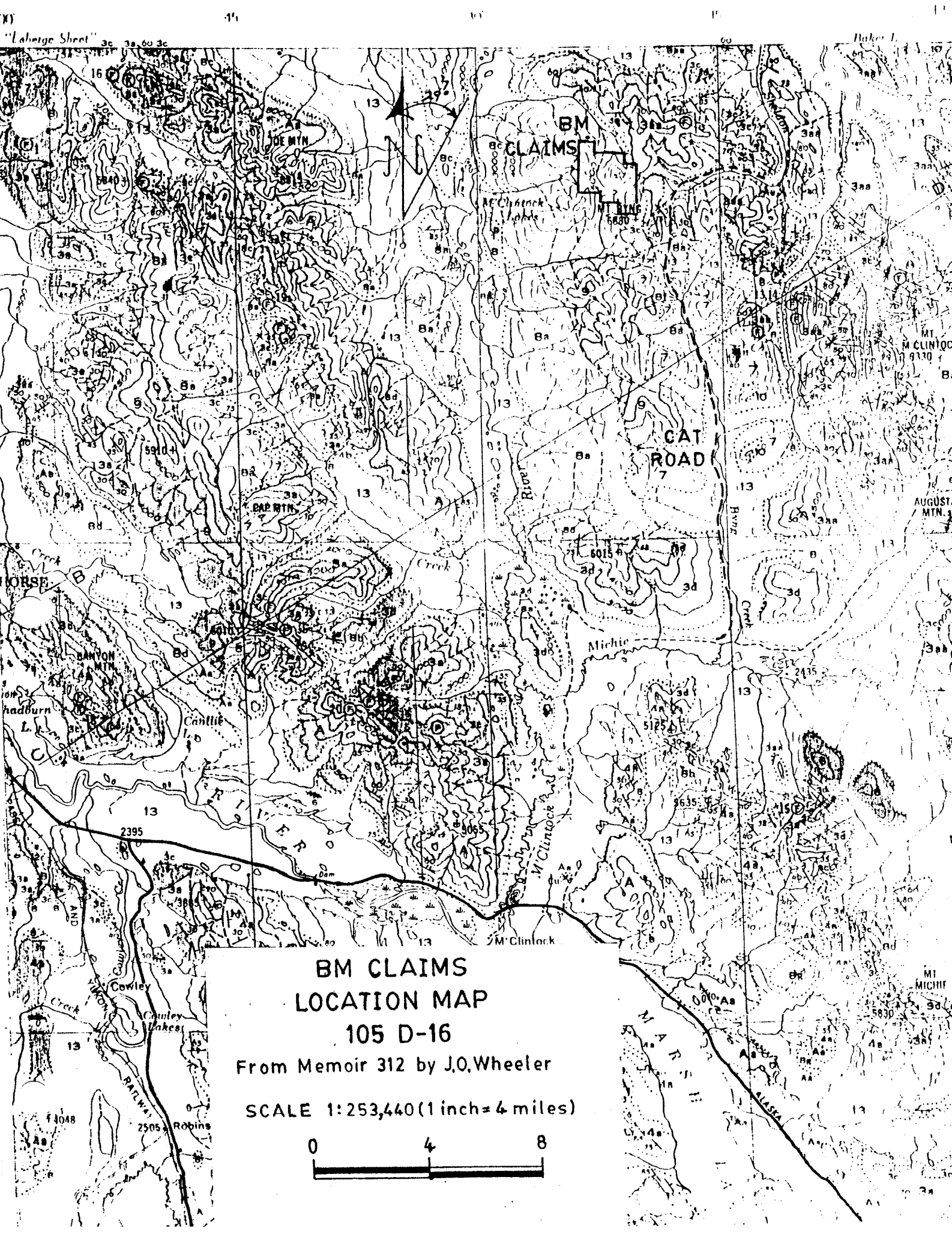
In 1995, Larry Carlyle spent a number of days prospecting in the vicinity of the property with 3 days being spent doing blast trenching in areas of interest at the R-17 Zone and Main Zone (See Figure 1). Contour soil sampling was done along the 1700 metre contour south of the R-17 Zone and along the 1600 metre contour south of the Main Zone.

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 all-terrain vehicle may help in accessing the property from this road.



**BM CLAIMS  
LOCATION MAP  
105 D-16**

From Memoir 312 by J.O. Wheeler

SCALE 1:253,440 (1 inch = 4 miles)



CLAIM NAME	GRANT NUMBERS	EXPIRY DATE
BM 1 - 4	YA 95347 - YA 95350	July 16, 1995
BM 5 - 6	YA 97128 - YA 97129	July 16, 1995
BM 9 - 12	YB 20540 - YB 20543	July 16, 1995
BM 36 - 41	YB 21567 - YB 21572	July 16, 1995

**PROPERTY GEOLOGY:**

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

Most of the remaining 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 coarse-grained 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.

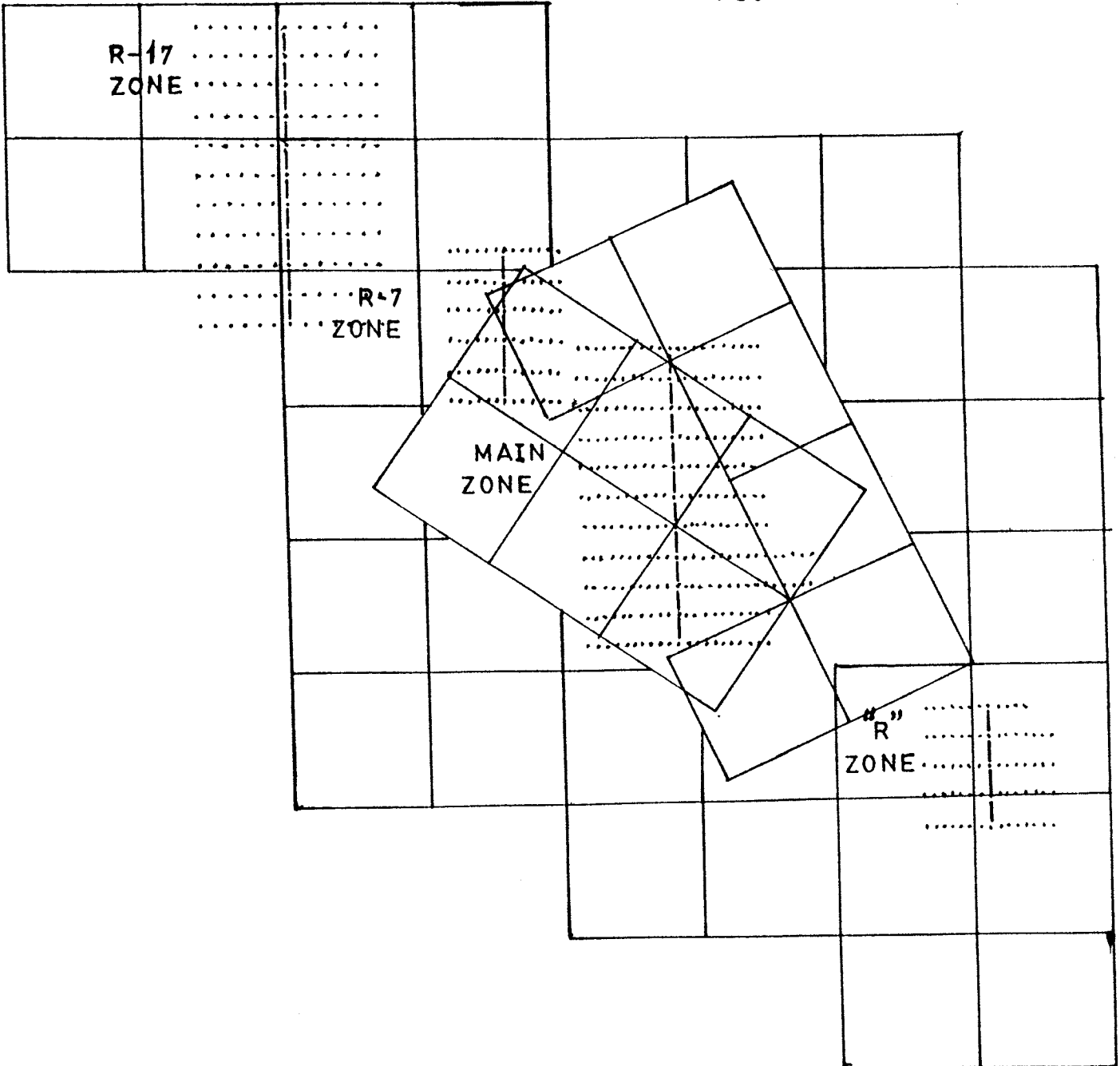
The northeastern corner of the claim block touches the edge of Upper Triassic Lewes River Group sedimentary rocks. These rocks are black and white, varved shale having some bands of gritty sandstone and light grey weathering limestone. The sedimentary rocks are in contact with the pyroxene gabbro, Joe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

BM CLAIMS  
VLF and SOIL SURVEY AREAS

SCALE: 1=2000



FIGURE 1



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. This felsite exists as north-trending dykes and small plugs on the property. These have commonly been referred to as rhyolite.

#### Faulting

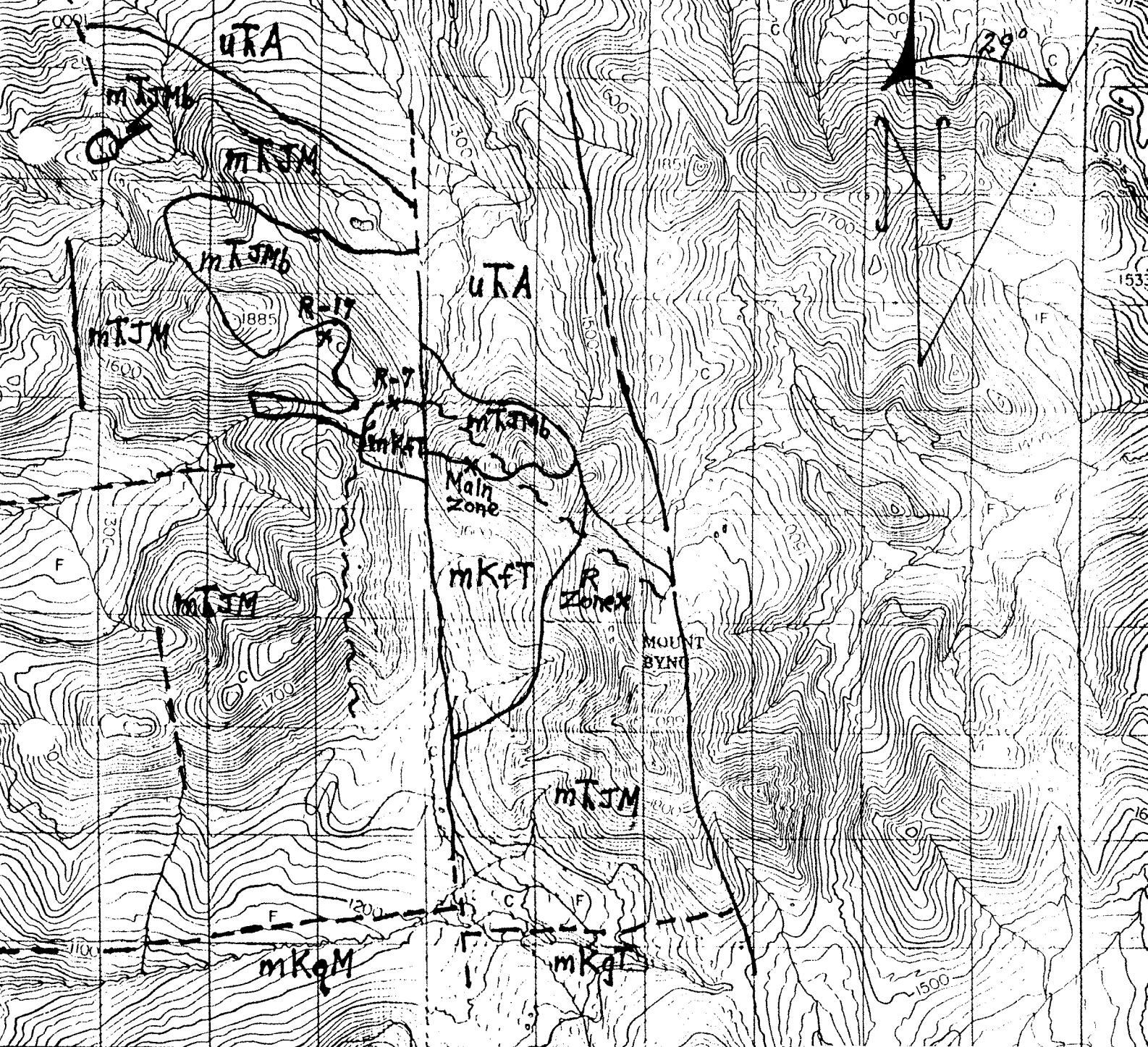
Very significant faulting exists on the property. There are at least two well developed sets of faults on the claims. The earliest set have an east-west strike and, where visible, appear to have a nearly vertical dip. The second set of faults are much stronger, having a north-south strike length of several kilometres, and cut and displace the east striking faults. The R-17 Zone (See Figure 1) appears to have the same strike as the younger set of faults. It is a conspicuous orange weathering gossan overlying a breccia of 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 here.

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, chalcopyrite, 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 two other known areas of interest on the property; the R-7 Zone, and the R Zone (See Figure 1). 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 (See Property Geology Figure). A sample of limonitic and silicified rhyolite with trace pyrite and malachite staining returned a gold value of 840 ppb, 3.2 PPM silver, and 340 PPM copper. At the R Zone 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.





**GEOLOGICAL LEGEND**

**Mid-Cretaceous**

- mKqM Byng Creek Pluton (109 Ma)
- mKqT McClinton Lakes Granite (120 Ma)
- mKqF Mount Byng felsite (120 Ma)

**Upper Triassic**

- uTA Sedimentary rocks

**Middle Triassic**

- mEJM Joe Mountain Volcanics
- mEJMb Joe Mountain Pyroxene Gabbro

**BM CLAIMS**

**PROPERTY GEOLOGY**

**SCALE: 1:50,000**

**1995 WORK PROGRAM:**

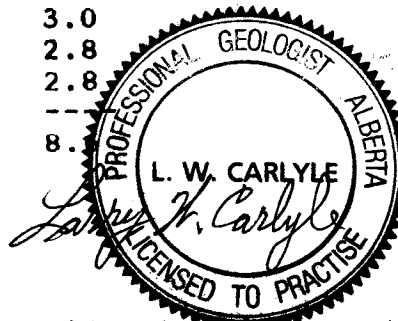
The 1995 work program consisted of blast trenching in the R-17 and Main Zones. Three additional trenches (95-1 to 95-3) were made in the R-17 Zone and six additional trenches were reopened or made in the Main Zone (T#9, 95-1 to 95-5).

**R-17 ZONE TRENCHING**

All 3 trenches were blasted along strike from the last exposure of the silica cap in an attempt to expose more of it along strike to the south (See Figure Page Following). No samples were taken from the trenches since none reached bedrock or exposed vein material.

**R-17 ZONE TRENCH VOLUMES**

Trench	Length(ft.)	Width(ft.)	Depth(ft.)	Cubic Feet	Cubic Yards
95-1	5.0	4.0	4.0	80.0	3.0
95-2	5.0	5.0	3.0	75.0	2.8
95-3	5.0	5.0	3.0	75.0	2.8
				Total	8.6

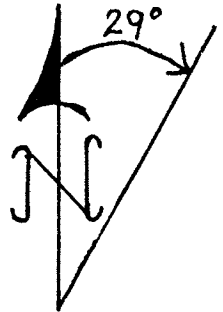


**MAIN ZONE TRENCHING**

Blast trenching was done in 1994 trench T # 9 and an earlier hand dug trench located at 0 + 30 S, 1 + 00 E (Numbered 95-1) in an attempt to expose bedrock. None was found.

Trenches 95-2 and 95-3 were blasted on exposures of limonite stained, silicified rhyolite. Sample BC-14 was taken of strong red-brown and green gouge from the bottom of Trench 95-2.

B L



□ T#6

8+00 N

7+00 N

▷ T#1

▷ T#2

○ T#3

○ T#4 (Original Showing) 6+00 N

○ T#5

∴ 95-1

□ T#7

∴ 95-2

∴ 95-3

□ T#8

1995 TRENCHES

R-17 ZONE

SCALE 1:2000

○ Earlier Trenches

∴ 1995 Trenches

B L

Trenches 95-4 and 95-5 were blasted in an attempt to see if there was an intersection of the vein materials exposed in T # 1 and T # 3. Vein material was only exposed in Trench 95-5. Sample BC-15 was taken of vuggy quartz vein material, rhyolite, and iron oxide. No visible mineralization was present.

#### MAIN ZONE TRENCH VOLUMES

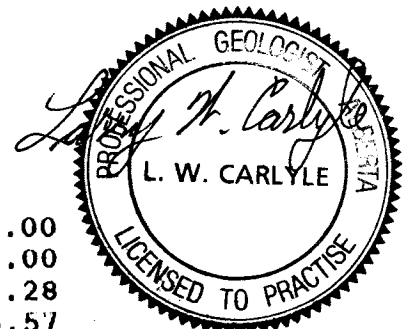
Trench	Length(ft.)	Width(ft.)	Depth(ft.)	Cubic Feet	Cubic Yards
T # 9	6.0	6.0	3.0	108.0	4.0
95-1	5.0	5.0	3.0	75.0	2.8
95-2	5.0	4.0	3.0	60.0	2.2
95-3	5.0	4.0	3.0	60.0	2.2
95-4	8.0	4.0	4.0	128.0	4.7
95-5	8.0	5.0	4.0	160.0	5.9
				Total	21.8

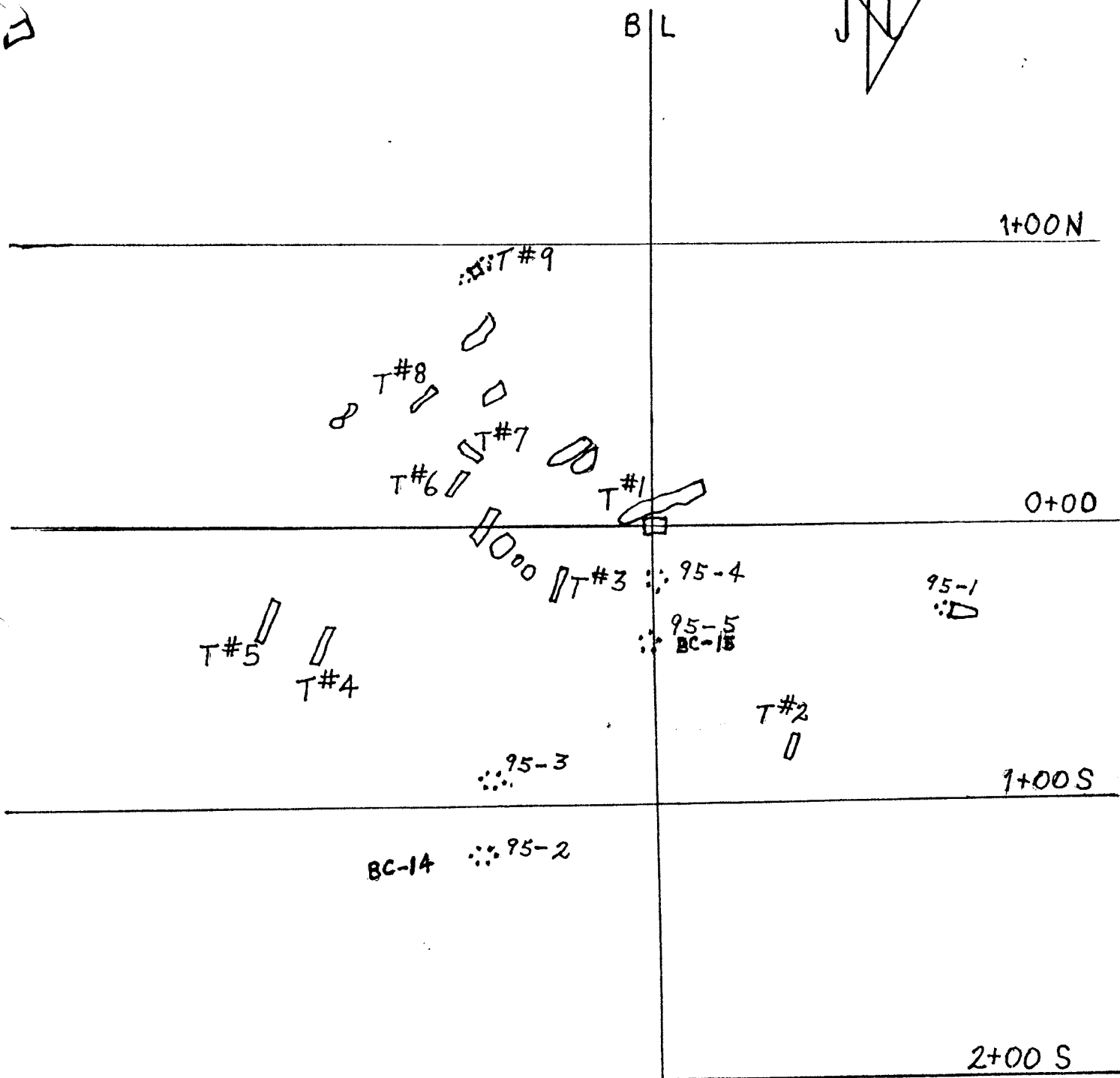
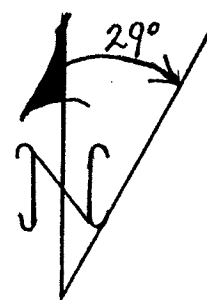
#### ROCK DESCRIPTION TABLE

SAMPLE #	DESCRIPTION	Au (ppb)	Cu (PPM)	As (PPM)
<b>MAIN ZONE</b>				
BC - 14	Rust red-brown and green gouge. Trench 95-2	< 5	56	21
BC - 15	Vuggy quartz V.M., Rhyolite, iron oxide No visible minerals Trench 95-5	6721	68	372

#### 1995 STATEMENT OF COSTS:

Labour (3 days @ \$50/day)	\$ 150.00
Report Writing (2 days @ \$200/day)	\$ 400.00
Helicopter	\$1,233.28
Explosives and Fuses	\$ 345.57
Room and Board (3 days @ \$25/day)	\$ 75.00
Assaying (2 @ \$9.88)	\$ 19.75
Representation Work (30.4 yd <sup>3</sup> @ \$1/yd <sup>3</sup> )	\$ 30.40
Total	\$2,254.00





1995 TRENCHES  
MAIN ZONE

SCALE 1:2000

▭ Earlier Trenches

⋯ 1995 Trenches

B L

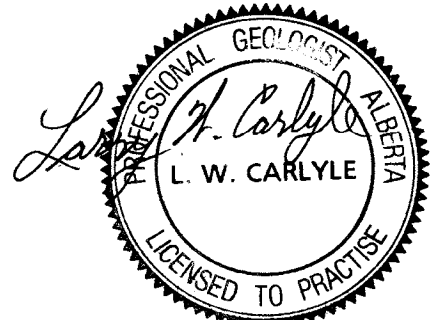
B L

**CONCLUSIONS:**

1. The quartz veins on the Main Zone appear to have a strike of approximately N 32° W. This fracture pattern was considered, in 1994, to be a later feature than the north-south fracture pattern which controls the rhyolite dykes and small stocks. The writer believes that in 1995 he has located a fault with this strike cutting through the area and which is slightly later than the north-south faults (See Property Geology Figure).
2. Blast and hand trenching has proven to be quite ineffectual at advancing the property because of the presence of more overburden than can effectively be excavated by these methods, the presence of frozen ground, and the presence of significant areas covered by large talus.
3. The Mt. Byng felsite and the strong faulting in the area appear to have great significance in both the vein mineralization seen and the potential for skarn mineralization within the property.

**RECOMMENDATIONS:**

1. Mechanized trenching should be done on the property to further expose and sample the known veins and to locate and sample new veins and skarn mineralization.



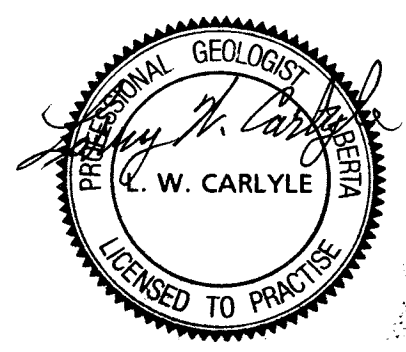
- 2. Diamond drilling is recommended to test the down dip extensions of the sub-parallel veins in the Main Zone. Diamond drilling should also be done on the R-17 Zone to test if a high grade precious metal zone exists below the surface silica cap.

**PROPOSED WORK PROGRAM:**

No costs have been determined to carry out the recommendations expressed above.

**REFERENCES:**

- 1. Carlyle, L.W. (1994) "Report on the 1994 Work Program BM Claims, Mt. Byng Area"
- 2. INAC, Open File 1995-4 (G) "Preliminary geology of Mount M'Clintock map area southern Yukon NTS 105 D/16"
- 3. INAC, (1995) "Yukon Exploration & Geology 1994", pgs. 87 - 103

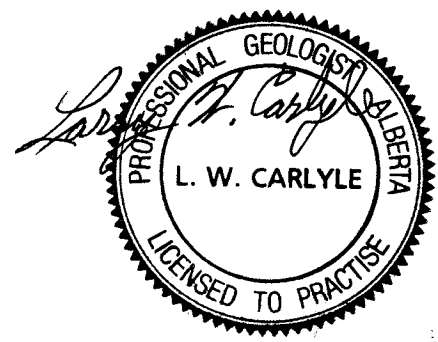


**STATEMENT OF QUALIFICATIONS**

I, LARRY W. CARLYLE, do certify:

- 1. That I am a professional geologist resident at 74 Tamarack Drive, Whitehorse, Yukon Y1A 4Y6.
- 2. That I hold a B. Sc. degree in geology from the University of British Columbia (1970).
- 3. That I am a Fellow of the Geological Association of Canada (F - 4355).
- 4. That I am a Registered Professional Geologist in the Association of Professional Engineers, Geologists and Geophysicists of the Province of Alberta (41097).
- 5. That I have practiced my profession as a mine and exploration geologist for eighteen years.
- 6. 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 30<sup>th</sup> day of July, 1995.





**APPENDIX A**

**ASSAY CERTIFICATES**

26/07/95

Assay Certificate

Page 1

Larry Carlyle

WO#27978

Sample #	Au ppb
BC-11	<5
BC-12	<5
BC-13	<5
BC-14	<5
BC-15	6721
BC-16	98
BC-17	17
BC-S-1	7
BC-S-2	10
BC-S-3	19
BC-S-4	14
BC-S-5	6
BC-S-6	12
BC-S-7	21
BC-S-8	15
BC-S-9	42
BC-S-10	<5
BC-S-11	6
BC-S-12	6
BC-S-13	19
BC-S-14	9
BC-S-15	7
BC-S-16	11
BC-S-17	10
BC-S-18	8
BC-S-19	10
BC-S-20	20
BC-S-21	16
BC-S-22	20
BC-S-23	32
BC-S-24	10
BC-S-25	15
BC-S-26	9
BC-S-27	18

Main Zone Trench 95-2  
Main Zone Trench 95-5

Certified by





INTERNATIONAL PLASMA LABORATORIES LTD.

CERTIFICATE OF ANALYSIS

ii 95G2501

2036 Columbia Street  
Vancouver, B.C.  
Canada V6J 3E1  
Phone (604) 879-7878  
Fax (604) 879-7898

Client: Northern Analytical Laboratories  
Project: 27978  
40 Pulp  
IPL: 95G2501  
Page 1 of 2  
Section 1 of 1  
Certified BC Assayer: David Chiu

Table with columns: Sample Name, Ag, Cu, Pb, Zn, As, Sb, Hg, Mo, Tl, Bi, Cd, Co, Ni, Ba, W, Cr, V, Mn, La, Sr, Zr, Sc, Ti, Al, Ca, Fe, Mg, K, Na, P. Rows include samples BC-S-1 through BC-S-20 and BC-13 through BC-16.

Min Limit  
Max Reported  
Method  
---No Test  
International Plasma Lab Ltd.  
2036 Columbia St. Vancouver BC V5Y 3E1 Ph: 604/879-7878 Fax: 604/879-7898

**APPENDIX B**

**INVOICES SUPPORTING  
STATEMENT OF COSTS**



REMIT PAYMENT TO:  
**TRANS NORTH AIR**  
 TRANS NORTH TURBO AIR LTD  
 AIRPORT HANGAR "C" • WHITEHORSE • YUKON • Y1A 3E4  
 TELEPHONE (403) 668-2177 FAX (403) 668-3420

ACCOUNT NUMBER	JONVICAS		
INVOICE NUMBER	08922		
INVOICE DATE	20/06/95		AREA B.C. YUKON NWT ALTA
A/C TYPE	2063	AIRCRAFT REGISTRATION C GPHB	
FLIGHT DATE	16	06	95
PURCHASE ORDER NO.			

*LARRY Carlyle*  
 CHARTERER  
*74 Tamarack Drive*  
 BILLING ADDRESS  
*Whitehorse, Y.T. Y1A 4Y6*

FUEL & OIL-X TNTA CUST.	TNTA FUEL USED	HRS/LITRES	FROM
-	X9 1P4		

FROM	HOURS	REMARKS - NO. OF PASS - FREIGHT Kg
X4		
TO BYING MAT		
X4	1.5	

SUB	GL	AMOUNT			
1014	502	1050.00		@	
1014	511	102.60	1.5	@ 700 <sup>00</sup>	1050.00
			HOLDING TIME:	@ / HR.	
0000	323	80.68	FUEL	@ / LITRE	
			FUEL	171.8 @ .60 / LITRE	102.60
			MEALS & LODGINGS		
			OTHER		
			OTHER		
			SUB TOTAL		1152.60
			GOODS & SERVICES TAX REGISTRATION NO. R121483135		80.68

TERMS: PAYABLE UPON RECEIPT OF INVOICE.  
 2% INTEREST PER MONTH (24% PER ANNUM) WILL BE CHARGED ON ALL OUTSTANDING AMOUNTS OVER 30 DAYS. IF INTEREST IS NOT PAID, FUTURE FLIGHTS WILL BE ON A CASH BASIS

X \_\_\_\_\_ CHARTERER'S SIGNATURE

\_\_\_\_\_  
 CHARTERER'S NAME (PRINTED)

INITIALS *CPK* *Rho* *MM*  
 \_\_\_\_\_ PILOT'S SIGNATURE

\_\_\_\_\_  
 ENGINEER'S NAME

**TOTAL \$ 1233.28**

CARRIAGE SUBJECT TO TERMS OF PUBLISHED TARIFF.  
 TARIFF AVAILABLE TO PUBLIC VIEW AT TRANS NORTH OFFICE  
**THIS IS YOUR ONLY INVOICE - PAY UPON RECEIPT**

*paid 1000.00*  
*bal 233.28*

SELECT TICKET AND CASH SALE INVOICE

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

BRANCH WHS NO. 42

251125

LARRY CARLYLE



S H I P T O  
ACCOUNT NO. CEC 114  
PURCHASE ORDER NUMBER 171249  
PARTY/JOB NO. 171249  
PROV. OF DEST. VT  
G.S.T. REGISTRATION NO. R101719698  
CLASS GRP 1 ON GRP 1 PER GRP 1  
DANGEROUS GOODS SHIPPER'S NAME R.C.C. (3% of \$274.72)

ACCOUNT NO.	PURCHASE ORDER NUMBER	PARTY/JOB NO.	PROV. OF DEST.	G.S.T. REGISTRATION NO.	CLASS GRP	ON GRP	PER GRP	DATE SHIPPED	AMOUNT	DATE SHIPPED	EXTENSION
CEC 114	171249	171249	VT	R101719698	1	1	1	06/28/95	160.70	CS	160.70
GD-25X200-GENDYNE 25X200MM					40	40	1		285.05	C	114.02
SFA 2 - FUSE ASSEMBLY 2M, MARKSTART					1	1	1		8.24	E	8.24
MAC TRIP					1	1	1		40.00	E	40.00
<i>Ed G. Hughes # 689</i>											
EMERGENCY RESPONSE PLAN ERP2 - 0081	EMERGENCY PHONE 403-255-7776	EMERGENCY PHONE 1-800-561-3636	PLACARDS APPLIED								
NUMBER OF UNITS	GROSS WEIGHT DANGEROUS GOODS	NET EXPLOSIVES WEIGHT									
SHIPPED VIA	COLL. PPD	COLL. COD									
SEE REVERSE FOR TERMS AND CONDITIONS											
SUB TOTAL			322.96								
TRANSPORT TOTAL			22.61								
SUB TOTAL			345.57								
TOTAL AMOUNT			345.57								

CUSTOMER'S COPY

RECEIVED IN GOOD ORDER BY

## Invoice for Analytical Services

To:

Larry Carlyle

Invoice Date: 26/07/95

WO# 27978

QTY	DESCRIPTION	UNIT PRICE	AMOUNT
	Sample Preparation:		
7	Rock Sample Preparation	4.25	29.75
33	Soil/Sediment Sample Preparation	2.00	66.00
	Analyses:		
40	Au + 30	15.50	620.00

Subtotal 715.75

GST @7% (R 121285662) 50.10

Total due on receipt of invoice **\$765.85**

2% per month charged on overdue accounts

*PAID HB 700*

*PAID 10-10-15.*

*69.16.*  
696.69

