

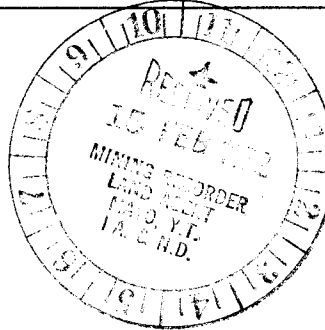
115-P-15

ARCHER, CATHRO
AND ASSOCIATES LTD.
CONSULTING GEOLOGICAL ENGINEERS



Box 4127, WHITEHORSE, Y.T. 667-4415

BENTALL CENTRE, VANCOUVER, B.C. 688-2568



1475 TWO BENTALL CENTRE
555 BURRARD ST.
VANCOUVER 1, B.C.

PROSPECTING AND GEOCHEMICAL SAMPLING

Lugdush 1-16 Claims

Mayo Mining District, Yukon



January 31, 1972

This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of

\$ 2521.73

[Signature]

~~Regional Geologist or
Qualified Mining Engineer~~

R.J. Cathro , P. Eng.

Consulting Engineer

Considered as representation work under
Section 53 (2) Yukon Quartz Mining Act.

[Signature]

Commissioner of Yukon Territory

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Figure 1 - Claim Location, Geology and Geochemical Sampling-Scale 1"=500 ft.

INTRODUCTION

The Lugdush 1-16 mineral claims (Grant Numbers Y56063 to Y56078) were staked on June 23, 1971, and recorded at Mayo, Yukon, on July 2, 1971. The property, located at 63°45' lat. and 136°57' long. near the headwaters of Vancouver Creek, was staked to cover an area of tungsten stream sediment geochemical response located during a regional exploration program conducted by Archer, Cathro and Associates Ltd. in 1969.

The property was explored on July 6, 7 and 18, 1972, with detailed prospecting and grid soil sampling by Archer, Cathro and Associates Ltd., P.O. Box 4127, Whitehorse for Chevron Standard Oil, 225 Bush Street, San Francisco, California. Exploration during July 6 and 7 was conducted from a field camp established on the Clear Creek road and was supported by helicopter supplied by Mayo Helicopters Ltd. of Mayo. Field crew personnel on July 6 were consulting engineer R.J. Cathro, geological engineer G. Abbott and field men T. McLeod and K. Carswell. On July 18, T. McLeod extended several of the lines of soil samples using a helicopter directly from Mayo.

A map illustrating claim location and results of prospecting and soil sampling is found in the pocket of this report.

PROSPECTING OBSERVATIONS

The Lugdush claims are above timberline in a portion of Yukon that escaped Pleistocene glaciation. Overburden consists of bedrock fragments up to two feet long in a thin soil layer. Outcrop is virtually nonexistent but a fair approximation of bedrock geology can be obtained by examination of rock fragments in the overburden. The overall geological setting is a contact between Cretaceous porphyritic granite and mica-schists and phyllites that probably

belong to the Cambrian or older Yukon Group. A small fine grained granodiorite stock is found near the southeast corner of the claims.

Mineralized skarn float is found scattered over an area some 2000 feet in length and up to 1000 feet in width near the centre of the claim block. Float is also found along a linear feature followed by Baseline D near the southwest corner of the claims. Two types of float are found. The first is a light green medium grained diopside skarn with a siliceous appearance. The second is a dark green coarse grained diopside skarn that occasionally contains quartz veinlets with black tourmaline. Both contain various quantities of scheelite that is sometimes accompanied by minor pyrrhotite and occasionally traces of arsenopyrite and chalcopyrite. Representative specimens of mineralized skarn were assayed by Chemex Labs Ltd., North Vancouver, B.C., with the following results:

<u>Sample No.</u>	<u>Description</u>	<u>Assay% WO₃</u>
10009	dark oxidized skarn - Type 1	0.98
10010	dark skarn - Type 1	0.12
10011	medium skarn - Type 2	0.22
10012	light skarn - Type 2	0.60

The relative abundance of the two types of skarn float suggests that two separate parallel horizons might exist. No estimates of widths are possible. The Yukon Group, on the basis of attitude of schistosity in one or two outcrops (outside the claims) appears to strike north and dip about 20° east. The skarn is probably formed in limy sections of the Yukon Group and should have a similar attitude.

GEOCHEMICAL SAMPLING

A northeast baselines system was established by tape and brunton compass across the claims. Soil samples were taken at 200 foot intervals on lines

400 feet apart established by pace and compass at right angles to the baseline. Samples were obtained by digging below the surface vegetation to a B or B+C soil horizon. Sample points were marked with a lath picket numbered according to the position relative to the baseline. Soil samples were collected in a standard kraft envelope and shipped to Chemex Labs Ltd. for tungsten analyses. Each sample was pulverized prior to obtaining a -80 mesh split for treatment. The tungsten assay was obtained by spectrophotometer analyses of a sample pulp dissolved in a hydrofluoric-phosphoric acid medium.

A contour of the soil values using 50 ppm tungsten as threshold indicates that the mineralized skarn has a strike length of at least 1500 feet and, assuming that the high values on the D baseline indicate a southern continuity, could have a length of more than 3000 feet. A portion of the anomaly on both the north and south end may be a result of downhill migration rather than an extension of the skarn.

RECOMMENDATIONS AND CONCLUSIONS

The general area of mineralized skarn is fairly well defined by prospecting and soil sampling. Further exploration will require either hand or bulldozer trenching to determine the exact width, assay, attitude and continuity of the skarn.

Respectfully submitted,

ARCHER, CATHRO & ASSOCIATES LTD.



R.J. Cathro, P. Eng.

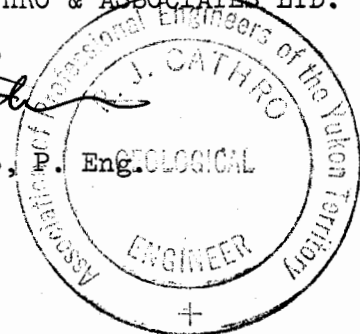


TABLE OF EXPENDITURE
Prospecting and Soil Sampling
 Lugdush 1-16 Mineral Claims, Mayo Mining District

Supervision

R.J. Cathro - July 6, 1 day field plus 1 day office
 compiling data for report @ \$150/day \$ 300.00

Labour

G. Abbott - July 6 @ \$60/day\$60.00
 T. McLeod - July 6,7,18 @ \$50/day150.00
 K. Carswell - July 6,7 @ \$40/day 80.00

290.00

Expenses

Field room and board supplied by Archer, Cathro
 at \$15/man-day - 6 man days 90.00 ✓
 Radio rental - 2 days @ \$5. 10.00 ✓
 Geochemical analyses - 125 samples @ \$2.45 each ...306.25 ✓ -
 Rock Assays - 4 @ \$6.25 each 25.00 ✓
 Helicopter rental, Mayo Helicopters1256.00 ✓ -
 Avgas 155.78 ✓ -
 Lath pickets 6.70 ✓
 Drafting - 6 hrs @ \$8/hr 48.00 ✓
 Two days truck rental (part of cost of maintaining
 camp at Clear Creek, Mobilizing avgas etc) ... 34.00 ✓ -

Total - 1921.73 \$2521.73 ✓

In Account With

Chevron Standard Ltd.

July 31, 1971

North Stewart River Joint Venture

Consulting Fees

S.J. Cathro - field trip July 5-8,
10-11 (5 days) plus 1 1/2 day
office - total 6 1/2 days @ \$150 \$ 975.00

Labour

G. Abbott - July 1-14, 18, 24 - 16 days
@ \$60/day \$960.00
K. Carswell - July 1-14 - 14 days
@ \$40/day \$560.00
T. Macleod - July 1-14, 18 - 15 days
@ \$50/day \$750.00
B. Way - July 19-31 - 13 days
@ \$50/day \$650.00

\$2,920.00

Expenses

Commercial Printers \$ 11.00 -
Carmacks Hotel (gas) 13.00 ✓
Territorial Ventures - truck
rental .. 520.00 ✓
Beaver Lumber (lath) 20.25 ✓
Klondike Helicopters 300.00 ✓
Receiver General (maps) 36.00 ✓ (GSC)
Room and board, field supplies
(78 man/days total including
Cathro, Dennett and bulldozer
operatr of which 8 man/days
at Mayo @ \$20/day and 70 days
field @ \$15/day) \$1,210.00 -

Radio rental July 1-31 @ \$5/day	\$155.00-
Xerox copies, 14 @ 15¢	2.10-
Expediting, R. Dennett July 5-7, total 2 1/2 days including travel time	125.00-
R.J. Cathro expenses July 16	10.50✓
Receiver General (maps)	2.00✓
G. Abbott expense acct (gas & maps)	11.00✓
Receiver General, recording fees	
Gwaihir claims 1-24	240.00✓
Van Cal (maps)	117.13✓
White Pass	87.71✓
G.N.A. - freight	37.53✓
Westcoast Air Services	8.80-
Mayo Helicopters	3416.00✓
McDiarmid & Kates - gas	187.37✓
Consultant's travel - R.J. Cathro Whitchose-Mayo (3 trips)	75.00✓
CP Air - freight	32.26✓
Receiver General, claim transfer fees	19.00
T.N.T.A. - helicopter	782.70✓
Chemex Labs	1544.92✓
Seidler & Assoc - printing	8.16✓
Drafting - 52 hrs @ \$8/hr	416.00-
Telephone	22.80-
B. Way expenses Aug 2	5.00✓
Yukon Airways	<u>353.50</u> ✓

\$ 9,769.73

\$13,664.73

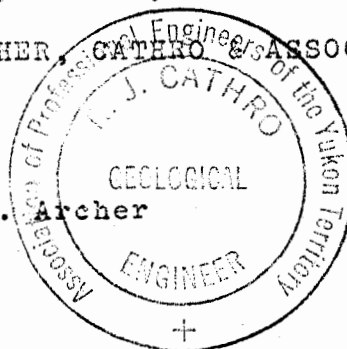
Less credit June billing - \$ 5,275.72

Total - \$ 8,389.01

Respectfully submitted,

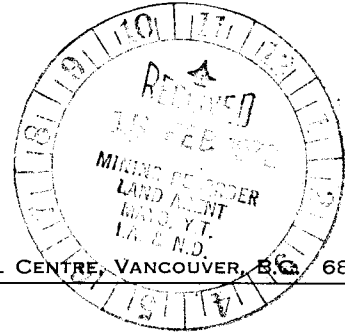
ARCHER, CATHRO & ASSOCIATES LTD.

A.R. Archer



ARA:sh

ARCHER, CATHRO
AND ASSOCIATES LTD.
CONSULTING GEOLOGICAL ENGINEERS



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BENTALL CENTRE, VANCOUVER, B.C. 688-2568

1475 TWO BENTALL CENTRE
555 BARRARD ST.
VANCOUVER 1, B.C.

AFFADAVIT

I, R.J. Cathro of Vancouver hereby make oath and say:

That to the best of my knowledge and belief the table of Expenditure and invoices as shown in my report Prospecting and Geochemical Sampling, Lugdush 1-16 Mayo Mining District is true and accurate.

R.J. Cathro, P.Eng.

Sworn and subscribed to
at Vancouver, B.C. this

7 day of Feb

1972.

Notary Public, Yukon Territory



DEPARTMENT OF INDIAN AFFAIRS
AND NORTHERN DEVELOPMENT
GENERAL RECEIPT

MINISTÈRE DES AFFAIRES INDIENNES ET
DU NORD CANADIEN
RÉCÉPISSÉ GÉNÉRAL

B 96456

BRANCH
DIRECTION

NEB

DATE <i>3 Aug 71</i>	NATURE AND NUMBER OF REMITTANCE - FORME ET NUMÉRO DE LA REMISE <i>Cheque</i>	INVOICE NO. - FACTURE N°	LOCATION - ENDROIT <i>Dawson</i>
RECEIVED THE SUM OF - REÇU LA SOMME DE <i>Nineteen</i>		1100 DOLLARS \$ <i>19⁰⁰</i>	

FROM - DE

Archer, Catho & Assoc
Box 1708
Whitehouse YT

FOR - POUR

2 Transfers
FUGELMAN & RHODES
Olden Creek - 115-P-1

[Signature]

AUTHORIZED OFFICER - FONCTIONNAIRE AUTORISÉ

1 AND 10-38 (4-68) 7530-21-023-4068

Not Applicable

McDIARMID & KATES

BOX 68 • PH. 2221 • TELEX 0493 - 262

Garage - MAYO, YUKON - Taxi

Hauling • Aviation Gas — Backhoe • Contracting

DATE July 5 1971

NAME Robert + Cathy

ADDRESS Box 1708 Whitehorse

QUANTITY	DESCRIPTION	AMOUNT
	GALS. GAS	
	QTS. OIL	
	LUBRICATION	
	DIESEL FUEL	
140.2	100/130	110.78
	Drum Change	45.00
TOTAL		155.78

REC'D BY NSRTU
SOLD BY CASH CHARGE ON ACCT.

5757

McDIARMID & KATES

BOX 68 • PH. 2221 • TELEX 0493 - 262

Garage - MAYO, YUKON - Taxi

Hauling • Aviation Gas — Backhoe • Contracting

DATE July 27 1971

NAME Robert + Cathy

ADDRESS Box 1708 Whitehorse

QUANTITY	DESCRIPTION	AMOUNT
5.0	GALS. GAS	3.35
9	QTS. OIL	1.30
	LUBRICATION	
	DIESEL FUEL	
1	Spark plug	1.25
	Drum Change	9.00
TOTAL		19.90

REC'D BY NSRTU
SOLD BY CASH CHARGE ON ACCT.

5971



INVOICE

CHEMEX LABS LTD. 212 BROOKSBANK AVE., NORTH VANCOUVER, B.C. TELEPHONE 985-0648

Archer Cathro & Assoc. Ltd.,

Box 1708,

Whitehorse, Yukon

NSRJV

DATE August 4, 1971

INVOICE NO. 5636

CERTIFICATE NO. 20063

ATTN: Mr. Archer, Mr. B. Cathro

ITEM	DESCRIPTION	SUB-TOTAL	TOTAL
	4 samples assayed for WO_3 @\$6.25		\$ 25.00
TERMS — NET 30 DAYS			



CHEMEX LABS LTD. 212 BROOKSBANK AVE., NORTH VANCOUVER, B.C. TELEPHONE 985-0648

Archer Cashro & Associates Ltd.,

DATE July 12/71

Box 1708

INVOICE NO. 5359

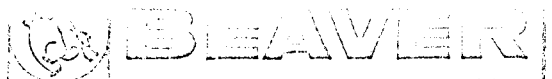
Whitehorse, Yukon

CERTIFICATE NO. 14893-14902

"NSRJV Project"

ATTN: _____

ITEM	DESCRIPTION	SUB-TOTAL	TOTAL
388	Analyzed for Tungsten @ \$2.25	\$873.00	
388	Prepared @ \$0.20	77.60	
			\$950.60
	125 Lygend @ 2.45 each =		
	TERMS — NET 30 DAYS		



BOX 3208, WHITEHORSE, YUKON T.

01247

BEAVER LUMBER COMPANY LIMITED

SOLD TO <i>Arthur Lath</i>					DELIVER TO				
YOUR ORDER NO.			ACCOUNT NO.		DATE ORDERED <i>June 19/11</i>		TELEPHONE NUMBER		
TAKEN <input type="checkbox"/>	DELIVER <input type="checkbox"/>	MATERIAL RETURNED <input type="checkbox"/>	CASH <input type="checkbox"/>	C.O.D. <input type="checkbox"/>	APPROVED, CHARGE PAYABLE ON RECEIPT OF STATEMENT. <input type="checkbox"/>	BUDGET PLAN (BLACO) <input type="checkbox"/>	SOLD BY <i>Laurie</i>		
QUANTITY ORDERED	✓	SIZE & LENGTH	GRADE & KIND	FOOTAGE	PRICE	AMOUNT			
<i>3</i>		<i>logs</i>			<i>7.50</i>	<i>22 50</i>			
					<i>1.25</i>	<i>2 25</i>			
		<i>1/2 Log dual</i>				<i>6.70</i>			
TERMS NET PAYABLE ON RECEIPT OF STATEMENT. OVERDUE ACCOUNTS ARE SUBJECT TO A SERVICE CHARGE. SALES SLIP MUST ACCOMPANY ALL RETURNED GOODS. GOODS RETURNED WILL BE SUBJECT TO A 10% HANDLING CHARGE.							PROV. SALES TAX		
PURCHASER'S SIGNATURE <i>[Signature]</i>				ORDER FILLED	SHIPPER	DRIVER	E. & O. E.		
DELIVERY							CARTAGE		
							TOTAL	<i>20 25</i>	

FORM 102 MOORE BUSINESS FORMS LTD.

MAR. 1971

Date *30 June 1971*

M. R. Carter & Associates

Whitehorse Yukon

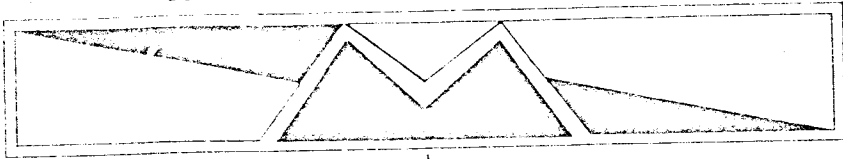
1	<i>4x4</i>	<i>LEASE</i>	<i>100</i>		
2	<i>2</i>	<i>TRUCK</i>	<i>100</i>		
3	<i>2</i>	<i>TRUCK</i>	<i>100</i>		
4				<i>1650</i>	<i>00</i>
5		<i>discount</i>	<i>200</i>		<i>130 00</i>
6		<i>if paid on 2/5/71</i>			<i>520 00</i>
7		<i>for 30 July</i>			
8					
9					
10					
11					
12					
13					
14					
15					

40

M. R. Carter & Associates
Whitehorse Yukon

2 day Log dual - 34.00

CHARTER TICKET
MAYO HELICOPTERS



MAYO, Y.T. BOX 57 PHONE 996-3291

WHITEHORSE, Y.T. BOX 2295 PHONE 633-2214

A/C HILLIAR OF MLW DATE JULY 18 1971
 BY RECTOR & CATRO & ASSOCIATES

FROM:	MILES	HOURS	CARGO	PASS.	REMARKS
<u>MAYO</u>					
<u>Clear Creek</u>		<u>5.3</u>			
					<u>Paul Thompson</u> PILOT'S SIGNATURE
SPECIAL INSTRUCTIONS					
OUR FUEL	<input checked="" type="checkbox"/>	GALS.	@ 160	PER HOUR	848 00
THEIR FUEL		GALS.	@	PER MILE	
AREA			WAITING TIME	@	PER HOUR
PICK UP DATE			EXTRA LANDINGS	@	PER LANDING
LOCATION			OTHER		
SEE REVERSE FOR CONDITIONS					TOTAL
					<u>848 00</u>

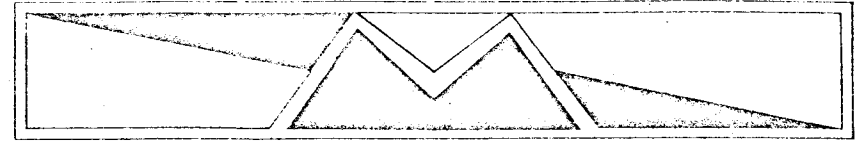
714 MAYO
 BASE

CHARTER'S AUTHORIZATION

1/2 regional charge - 424.00
 1/2 regional exp. -

CHARTER TICKET

MAYO HELICOPTERS



MAYO, Y.T. BOX 57 PHONE 996-3291

WHITEHORSE, Y.T. BOX 2295 PHONE 633-2214

A/C HILLIAR OF MLW DATE JULY 16 1971
 NAME RECTOR & CATRO & ASSOCIATES

ADD.

FROM:	MILES	HOURS	CARGO	PASS.	REMARKS
<u>MAYO</u>					
<u>Clear Creek</u>		<u>3.2</u>			
					<u>Paul Thompson</u> PILOT'S SIGNATURE
SPECIAL INSTRUCTIONS					
OUR FUEL	<input checked="" type="checkbox"/>	GALS.	@ 160	PER HOUR	512 00
THEIR FUEL		GALS.	@	PER MILE	
AREA			WAITING TIME	@	PER HOUR
PICK UP DATE			EXTRA LANDINGS	@	PER LANDING
LOCATION			OTHER		
SEE REVERSE FOR CONDITIONS					TOTAL
					<u>512 00</u>

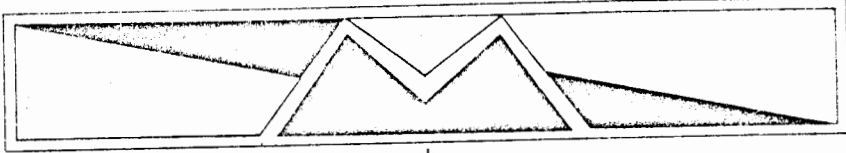
1673 MAYO
 BASE

CHARTER'S AUTHORIZATION

add regional ch.

CHARTER TICKET

MAYO HELICOPTERS



MAYO, Y.T. BOX 5/ PHONE 996-3291

WHITEHORSE, Y.T. BOX 2295/ PHONE 633-2214

A/C Holland CF MHW DATE JULY 7 1971

NAME Arford & Catdo & Associates

ADD. _____

FROM:		MILES	HOURS	CARGO	PASS.	REMARKS
<u>Chadok</u>						
TO:						
<u>hoca</u>			<u>4.0</u>			
SPECIAL INSTRUCTIONS						
OUR FUEL	<input checked="" type="checkbox"/> GALS.			@ <u>160</u>	PER HOUR	<u>640 00</u>
THEIR FUEL	GALS.			@	PER MILE	
AREA					PER HOUR	
PICK UP DATE					PER LANDING	
LOCATION						
SEE REVERSE FOR CONDITIONS						TOTAL
X <u>Arford</u>						<u>640 00</u>

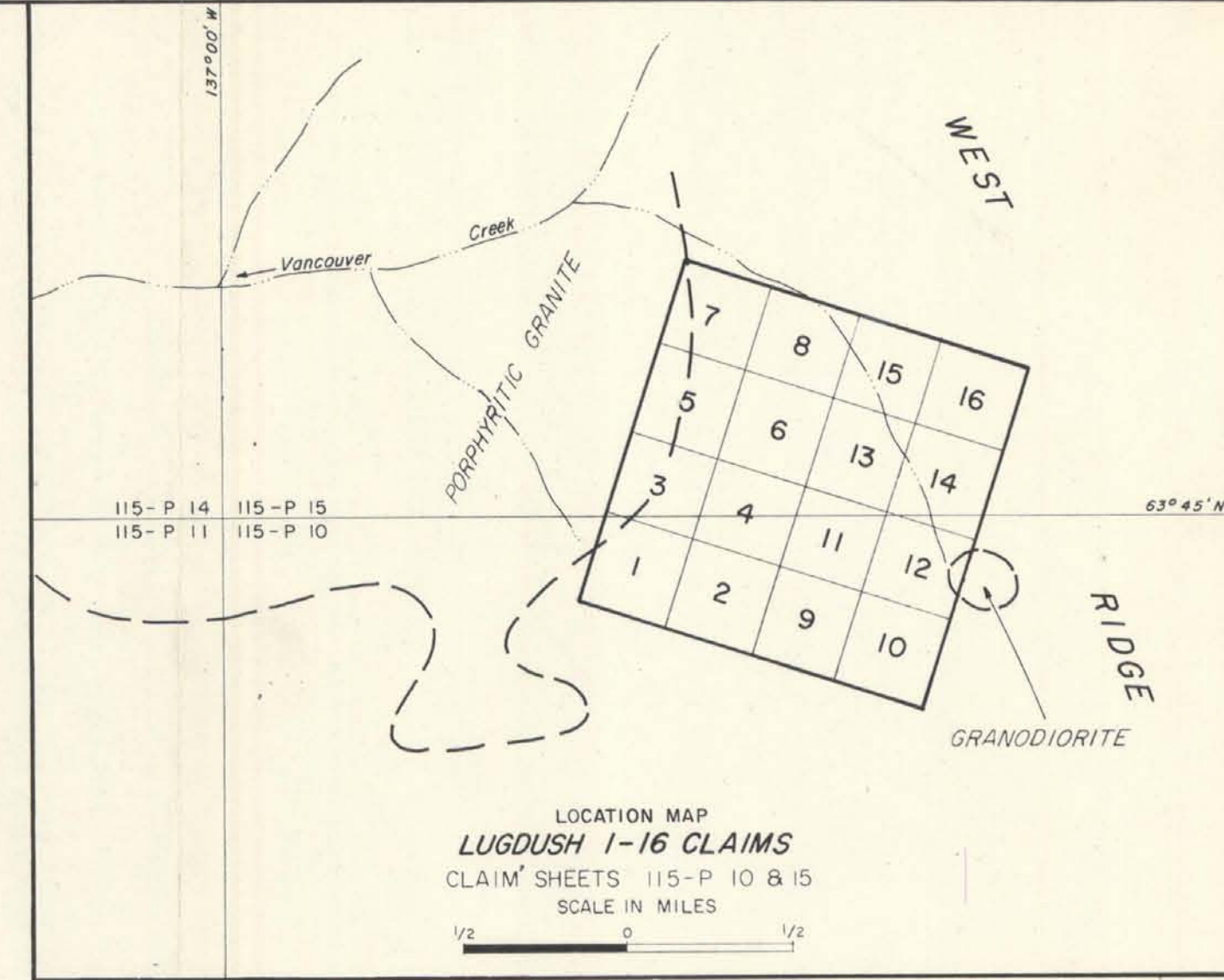
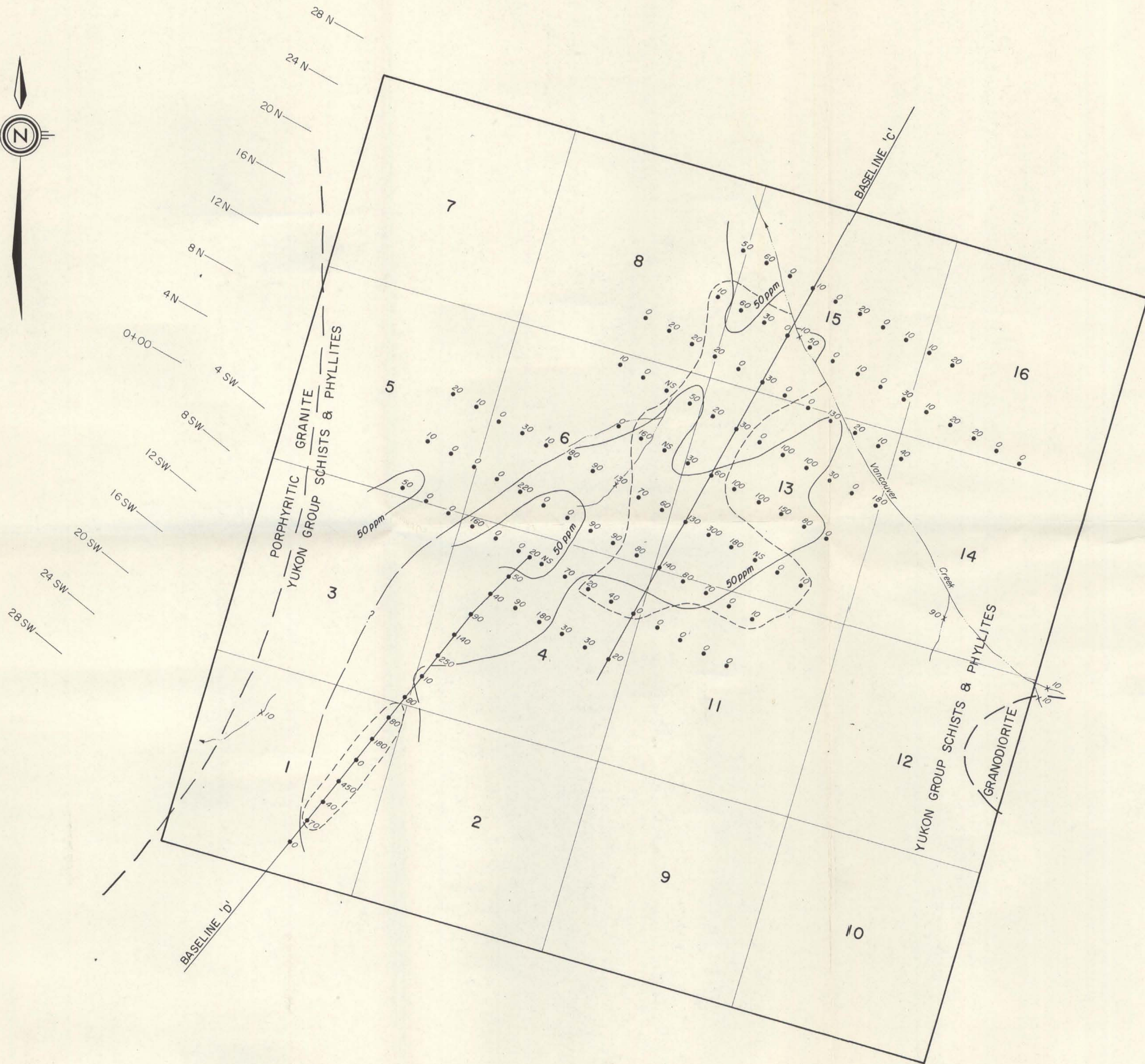
Arford
PILOT'S SIGNATURE

WESTERN BUSINESS FORMS LIMITED

1674 MAYO
BASE

CHARTER'S AUTHORIZATION

V. Langford etc - 320.00



LEGEND

- X Silt assays in tungsten ppm by Chemex Labs Ltd.
- Soil
- - - Areas of skarn float



FIG. 1
 ARCHER, CATHRO & ASSOCIATES LTD.
MAPPING AND SOIL SAMPLING
 LUGDUSH 1-16 MINERAL CLAIMS
 VANCOUVER CREEK 115-P 10 & 15

