

**ANVIL MINING CORPORATION LIMITED**

P.O. BOX 2470  
103 POLARIS BLOCK  
WHITEHORSE, YUKON TERRITORY  
CANADA

VANCOUVER OFFICE:  
510 WEST HASTINGS STREET  
VANCOUVER 2, B.C.  
CANADA

October 24th, 1966

Mr. G. McIntyre  
Chief Mining Recorder  
Federal Building  
Whitehorse, Yukon

Dear Mr. McIntyre:

The accompanying report is submitted to  
apply as assessment work on the RICH, DY, & BOB  
Groups.

The area covered is on claim map sheet  
105 K/6.

Yours truly,



R.S. Adamson, F. Eng.,  
Chief of Exploration for  
ANVIL MINING CORP LTD

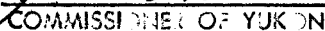
This report has been examined by  
the Geological Evaluation Unit.  
Approved as to technical worth by:

  
RESIDENT GEOLOGIST

Approved as to cost in the amount  
of: \$ 5104.47

  
RESIDENT MINING ENGINEER

Accepted as representation work  
under Section 53(4) Yukon Quartz  
Mining Act.

  
COMMISSIONER OF YUKON

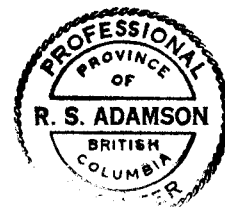
GEOCHEMICAL REPORT  
on  
RICH CLAIM GROUP  
at  
VANGORDACKREEK, YUKON

FOR  
ANVIL MINING CORP. LTD.

October, 1966

Report By:

R.S. Adamson, P. Eng.  
Chief of Exploration for  
ANVIL MINING CORP LTD

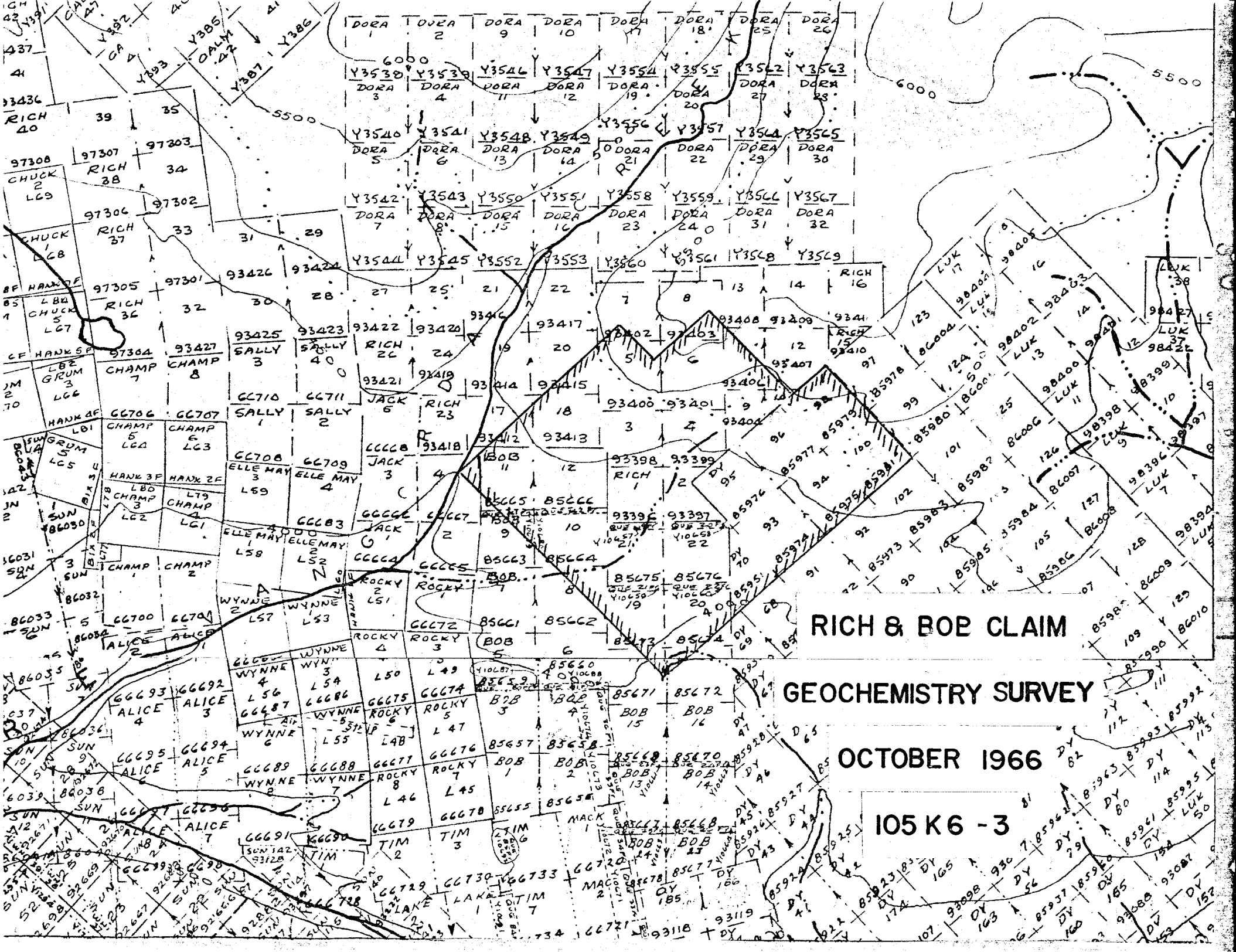


Property Surveyed: July 13th to 18th, 1966

GEOCHEMICAL SURVEY  
RICH CLAIM GROUP

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RICH & BOB CLAIM

GEOCHEMISTRY SURVEY

OCTOBER 1966

105 K 6 - 3

## INTRODUCTION

A geochemical survey was carried out on an area embracing part of the RICH, BOB and DY claim groups during the period July 3rd to 18th, 1966. The RICH and DY claims are owned by ANVIL MINING CORP. LTD. while the BOB claims are owned by PELLY RIVER MINES LTD. The sampling and analysis, excepting the preparatory line cutting, was done by ANVIL MINING personnel.

Linecutting was done by contract linecutters of White, Hosford and IMPEY Ltd. of Whitehorse, Y.T.

Access to the property by the linecutting crew was by helicopter and by the soil sampling crew by vehicle.

The object of the survey was to establish relatively large and generally defined areas of possible valuable metal content (Cu, Pb, Zn) with a view to following up on geochemically anomalous areas with geophysical techniques. Any geochemical anomalies located within a larger general geochemical anomaly would provide the necessary finer definition for diamond drilling.

Further, the geochemical survey is a method to establish whether airborne magnetic and electromagnetic anomalies, which often in the Vangorda area are caused by basic flows, intrusives

and graphic sediments respectively, could be massive sulphides carrying copper, lead or zinc.

#### SOIL SAMPLING SURVEY TECHNIQUES

A baseline was laid out with a transit and picket lines turned off at 800 foot intervals along the base line by transit. Stations were established along the picket lines at 100 foot intervals.

Soil sampling was done on 400 foot centres. Where possible the B horizon was sampled. However no time was wasted obtaining the B horizon in the event permafrost prevailed or an organic soil was thicker than one foot. In the latter case the organic soil would be analyzed in the lab when possible. In that the target was a large near surface sulphide deposit it was felt that a generally defined as opposed to a well defined geochemical anomaly was sufficient.

#### LABORATORY ANALYSIS

Test methods used involved a hot aqua regia extraction of heavy metal ions from the soil sample, followed by reaction with dithizone or biquinoline to give coloured products. The coloured reaction products were then matched with solutions of known metal content, which had been reacted with dithizone or biquinoline, to determine the metal content of the soil sample.

Separate and specific tests for each of the three metals, copper, lead, and zinc were carried out on each soil sample.

#### RESULTS and INTERPRETATION

Of the three metals analyzed for, copper over 60 parts per million, lead over 40 parts per million and zinc over 200 parts per million might be considered anomalous.

Of the 739 samples taken in the field only 652 were run in the lab, usually because of the exceptionally high organic content of the sample.

In general, four areas containing erratic copper, lead and zinc values can be grouped. These are designated geochemical zones A, B, C and D.

In the case of Zone A it is directly associated with a coincident magnetic and electromagnetic geophysical anomaly which occurs on the hillside above the baseline on lines 44, 48, 52 and 56 West. Zones B and C are both down slope from this coincidence and also immediately overlying magnetic anomalies.

Mapping of the bedrock underlying the generally anomalous area reveals gently north east dipping quartzites and sericitic quartz schists, the most favourable rocks for ore replacement

in the ANVIL district. No rocks which would account for either the magnetic or the electromagnetic geophysical anomalies are visible.

#### CONCLUSIONS and RECOMMENDATIONS

An area of interesting copper, lead, zinc geochemistry occurs on the northwestern part of the RICH - BOB - DY survey grid.

In that a very favourable geological and geophysical setting is related to this area of generally anomalous geochemistry, further work is considered fully justified.

A gravity survey followed by diamond drilling is recommended.

R.S. Adamson, P. Eng.  
Exploration Chief for  
ANVIL MINING CORP LTD

APPENDIX I (1)

STATEMENT OF COSTS

Geochemical Survey RICH - BOB

(A)	Line cutting (Invoice submitted)		\$2,863.15
	Baseline 1.74 miles	\$ 435.00	
	Ticket Lines 145,000 feet	<u>2,128.15</u>	
	Contract	\$2,563.15	
	Transportation, Helicopter	<u>300.00</u>	
		\$2,863.15	
(B)	Soil Sampling (739 Samples)		\$ 809.00
	Wages 33 man days @ \$15.	\$ 495.00	
	Maintenance 33 man days @ \$15.	264.00	
	Transportation, vehicle	<u>50.00</u>	
		\$ 809.00	
(C)	Laboratory Analysis (652 Samples)		\$1,082.32
	652 Samples @ \$1.66 = \$1,082.32		
(D)	Compilation of Report		\$ 200.00
(E)	Supervision		\$ 150.00
			<hr/>
		Total:	\$5,104.47

APPENDIX I (ii)

PERSONNEL

- (A) Line cutting - Contract: White, Hosford & Impey Ltd.  
Box 1188  
Whitehorse, Yukon Territory
- (B) Soil Sampling
- |             |              |                            |
|-------------|--------------|----------------------------|
| R. Beaumont | Soil Sampler | Box 2470, Whitehorse, Y.T. |
| R. Haaflaub | " "          | " " " "                    |
| G. Sprogis  | " "          | " " " "                    |
- (C) Laboratory Analysis
- |             |                    |                            |
|-------------|--------------------|----------------------------|
| J. Kirkland | Geochemist         | Box 2470, Whitehorse, Y.T. |
| L. Olsen    | Lab. Assistant     | " " " "                    |
| N. Fringle  | Lab. Assistant     | " " " "                    |
| W. Rundle   | Sample Preparation | " " " "                    |
- (D) Compilation of Report
- |              |                   |       |
|--------------|-------------------|-------|
| R.S. Adamson | Exploration Chief | " " " |
| F. Byers     | Draughtsman       | " " " |
- (E) Supervision
- |              |                   |       |
|--------------|-------------------|-------|
| R.S. Adamson | Exploration Chief | " " " |
| D. Hayes     | Geologist         | " " " |
| F. Byers     | Lead Soil Sampler | " " " |

APPENDIX I (111)

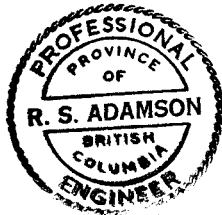
A F F I D A V I T

Supporting Statement of Costs  
Geochemical Survey

July 13th to 18th, 1966

I, Robert S. Adamson, Chief of Exploration for ANVIL MINING CORPORATION, Limited, have compiled the statement of costs as presented in this report "Geochemical Survey of RICH Claim Group", DO MAKE OATH AND SAY AS FOLLOWS:

That to the best of my knowledge and belief, the statement of costs as presented, is true and an accurate representation of expenditures to be applied as representative work on the RICH, DY and BOB Claims.



Robert S. Adamson, B.A.Sc., P.Eng.  
Chief of Exploration for  
ANVIL MINING CORP LTD.

DATED this.....*26*.....day of...*October*....., 1966, in the City of Whitehorse in the Yukon Territory.

  
A Commissioner for taking Affidavits  
in and for the Yukon Territory,



# White, Hosford & Impey Limited

LEGAL SURVEYS :: ENGINEERING

Whitehorse, Yukon

Paul S. White, P.Eng., A.L.S., D.L.S.  
A. Denis Hosford, A.L.S.,  
Hugh E. Impey, A.L.S., S.L.S., M.L.S., D.L.S.

29 June, 1966

## INVOICE FOR LINE CUTTING CONTRACT

### DY, RICH, FOB LINECUTTING

(1) Baseline: 0+00-92+00W = 1.74 miles @ \$250.00-----\$ 435.00

(2) Picket Line: 3000N to 4000S(0+00 to 32+00W)=7000 x 9=63000'  
2000N to 4000S(3600 to 7600W) =6000 x 11=66000'  
0+0N to 4000S(8000 to 9200W) =1600 x 4=16000'

145,000'

27.46/m @ \$77.50-----\$2128.15

TOTAL-----\$2563.15

### EXTRA ON ACE LINECUTTING

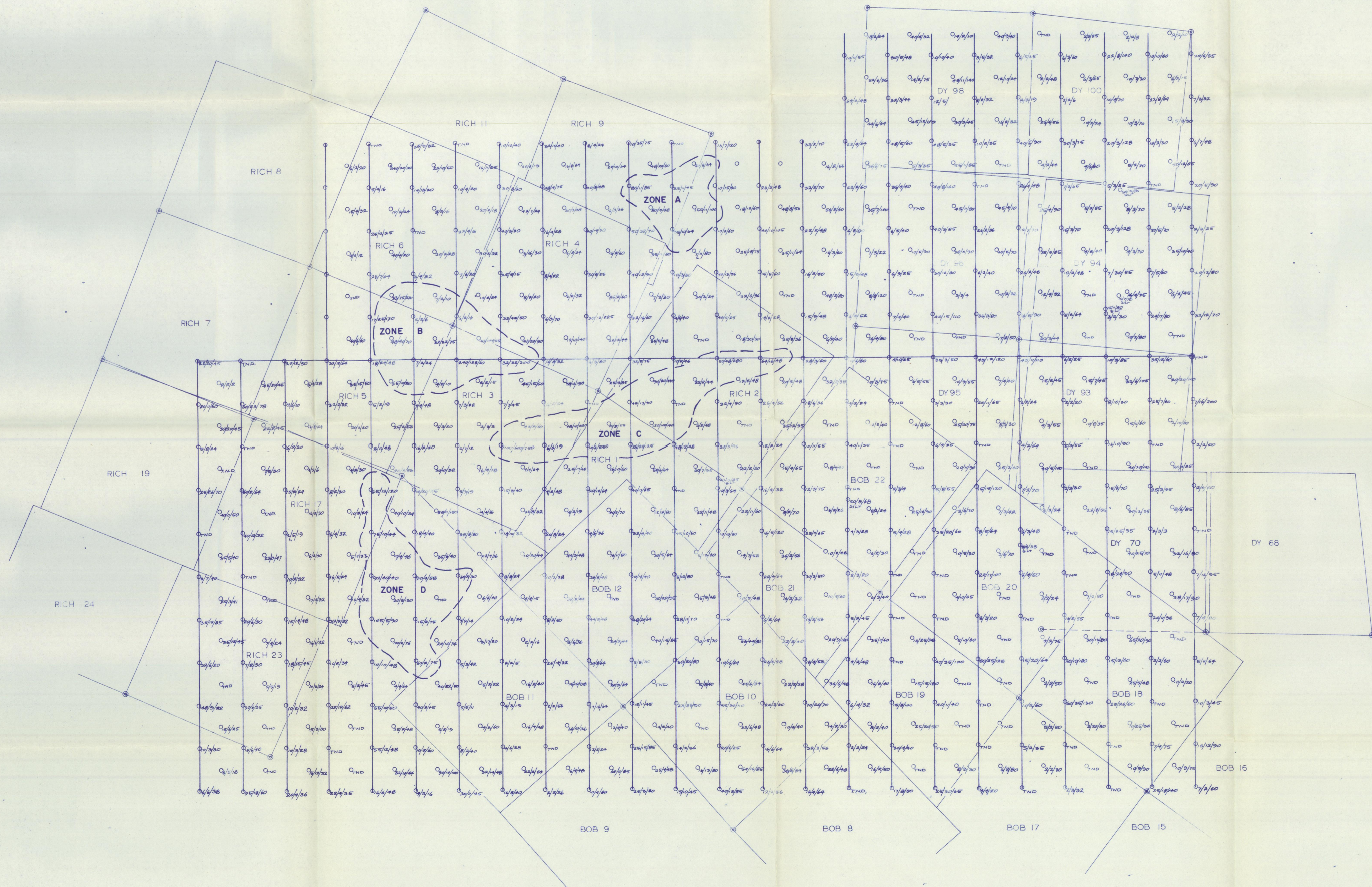
128+00W to 156+00W(0N to 2500N)=2500 x 8=20,000'

3.79/m @ \$77.50-----\$ 293.73

TOTAL THIS INVOICE-----\$2,856.88

P. O. NUMBER.....
PRICE CHECKED.....
QUANTITY CHECKED.....
COMPUTATIONS CHECKED <i>UB</i> .....
ACCOUNT NUMBER <i>1403 Line 5/P-90</i> .....
CHECK NUMBER.....
APPROVED FOR PAYMENT <i>PRE</i> .....

*Approved*  
*R.S. Adams*



LEGEND  
 ○ SAMPLE LOCATION  
 ⊙ CLAIM POST  
 ⊕ SAMPLE ANALYSIS C/M/Z  
 TND TAKEN NOT ANALYSED  
 SIF SILT SAMPLE

ANVIL MINING CORP.
FARO
DY GEOCHEMISTRY
SCALE: 1" = 400'
SAMPLES TAKEN: 739
SAMPLES ANALYSED: 652
SAMPLED BY: BEAUMONT, RAAFLAUB, SPROGIS.
DATE SAMPLED: JULY 3-12, JULY 18
DRAWN BY: P.L.B.