

GEOCHEMICAL REPORT

BNOB CLAIM GROUP

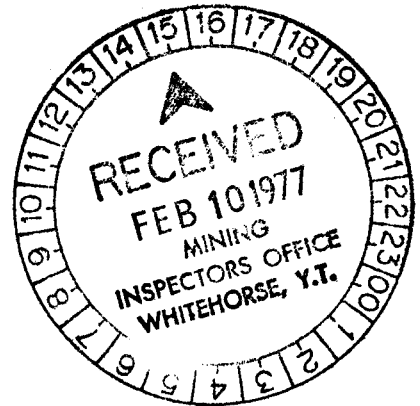
Watson Lake
~~Whitehorse~~ Mining District
Yukon Territory



N.T.S. 105 F - 10

Latitude: 61° 35' N

Longitude: 132° 30' W



By:

P. Dean

CYPRUS ANVIL MINING CORPORATION

January 10, 1977.

090170



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 \$ 2400.00

W.D. Sinclair

a/Resident Geologist or
~~Resident Mining Engineer~~

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

B.R. Baxter

B.R. BAXTER
Supervising Mining Recorder

for Commissioner of Yukon Territory

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Field Work Done from July 16/76 - Aug 18/76

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Figure 3 - in pocket	- Geochem Values Map	- 1" : 400 feet

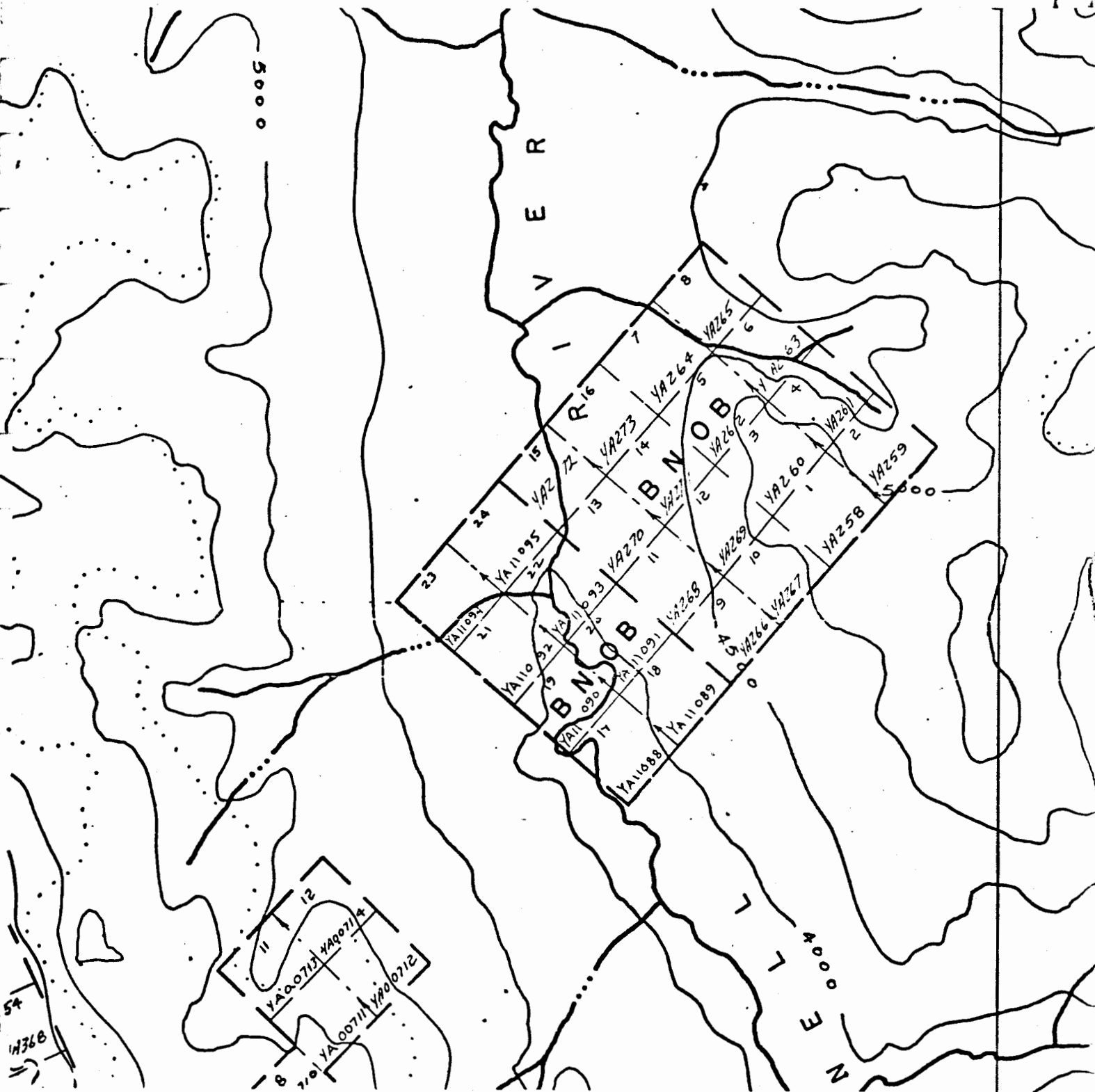
APPENDICES

Appendix I	List of Personnel
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LIST OF CLAIMS

<u>Claims</u>	<u>Grant Nos.</u>	<u>Recording Dates</u>
BNOB 1 - 16	YA 258 - YA 273	July 26, 1976
BNOB 17 - 24	YA 11088 - YA 11095	September 20, 1976

PELLE PROJECT



BNOB CLAIM GROUP

Figure 2

nts.: 105-F-10

scale: 1 inch : 1/2 mile

GEOCHEMICAL REPORT

BNOB CLAIM GROUP

INTRODUCTION

The BNOB claim group consisting of 24 contiguous claims, lies in the valley of the McConnell River at about 132° 30' West x 61° 35' North (Figure 1). The claims are accessible only by helicopter and the nearest helicopter base is at Ross River, about 30 miles to the north. The claims cover a prominent knob of gossanous felsenmeer and adjacent valley bottom, with a topographic range of about 1,000 feet.

The claim group was staked as a result of a regional prospecting program carried out by the Pelly Project, a joint venture exploration program carried out by Cyprus Anvil Mining Corporation and Hudson Bay Oil and Gas. The claims were staked when sedimentary barite exhalite and geochemical anomalies were discovered within a sequence of strongly pyritic acid volcanic breccias.

SUMMARY AND CONCLUSIONS

During 1976 a small grid was flagged in over a part of the claim group, and geochemical sampling and detailed prospecting were carried out. Geologic mapping and magnetic and electromagnetic surveys are recommended to be carried out during 1977 to test for massive sulfide conductors associated with the sedimentary barite. Line cutting is recommended for control of geologic and geophysical work, since the flagged compass line grid completed in 1976 proved to be inaccurate in the thick brush and steep slopes encountered on the claims.

GEOLOGIC SETTING

The BNOB claim group is underlain by Mississippian volcanic-clastic rocks of acid composition. A bed of sugary white barite exhalite 30 feet thick outcrops for a length of 150 feet and is traceable in talus float for an additional 1,000 feet. This bedded barite is identical to the barite associated with the massive sulfide deposits on the MM claim group a few miles to the southwest. The acid volcanic breccias which host the barite on the BNOB claim group are strongly sheared and highly pyritic. The rocks generally weather into piles of blocky felsenmeer and form few good outcrops, so detailed mapping is difficult. The strong shearing evident in hand specimens suggests that the geology on the claim group is structurally complex, with probably at least two phases of folding. Without subsurface information it is unlikely that the detailed geometry of the barite horizon can be unravelled.

GEOCHEMISTRY

Soil sampling was carried out at 200 foot spacing on the claim group on flagged lines spaced 400 feet apart. A total of 216 samples were collected. Wherever possible samples were taken from the B and C soil horizons, but over much of the grid area the only sampling material available was fine scree slope debris.

The analytical procedure used on the samples began with air drying in Kraft paper bags, followed by sieving to yield a -80 mesh fraction. The oversize material was discarded. The -80 mesh material was digested in a nitric-perchloric acid reagent, which results in the total extraction of copper, lead, and zinc from the sample, including that portion bound up in silicate minerals. The quantities of copper, lead, and zinc are then determined using an atomic absorption instrument.

The results from the survey are plotted at a scale of 1" : 400 feet (Figure 3). Anomalous values ranging up to 1500 ppm lead and 1460 ppm zinc occur in an arcuate pattern which conforms to the outcrops and float occurrences of the

barite beds. The total length of the anomaly is about 3,000 feet. Traces of galena which occur with the barite may explain part of the anomaly, but much of the geochem could also result from more significant sulfide mineralization suboutcropping under talus or overburden.


PROPOSED EXPLORATION

Magnetic and electromagnetic surveys are the next logical step in the exploration for massive sulfide bodies associated with the sedimentary barite on the BNOB claims. Establishment of a cut-line grid would have to precede the geophysical work, since the flagged lines utilized for the soil sampling are inaccurate and impermanent. Geologic mapping of the property can be carried out using the new grid for control. Work on the property cannot commence until early or mid July because of the persistence of snow cover on the important north-facing hillside.

PROPOSED 1977 BUDGET

	<u>Geophysics</u>	<u>Mapping & Other Work</u>	<u>Total</u>
01 Salaries and Wages	\$ 1,200	\$ 2,500	\$ 3,700
03 Consulting	500		500
04 Line Cutting	3,000		3,000
11 Geochem		100	100
12 Equipment and Supplies	220	200	420
13 Camp Maintenance	530	700	1,230
15 Rotary Wing	3,200	2,000	5,200
17 Miscellaneous Transportation		300	300
Expediting		200	200
TOTALS	\$ 8,650	\$ 6,000	\$ 14,650

Respectfully submitted,



PETER DEAN.

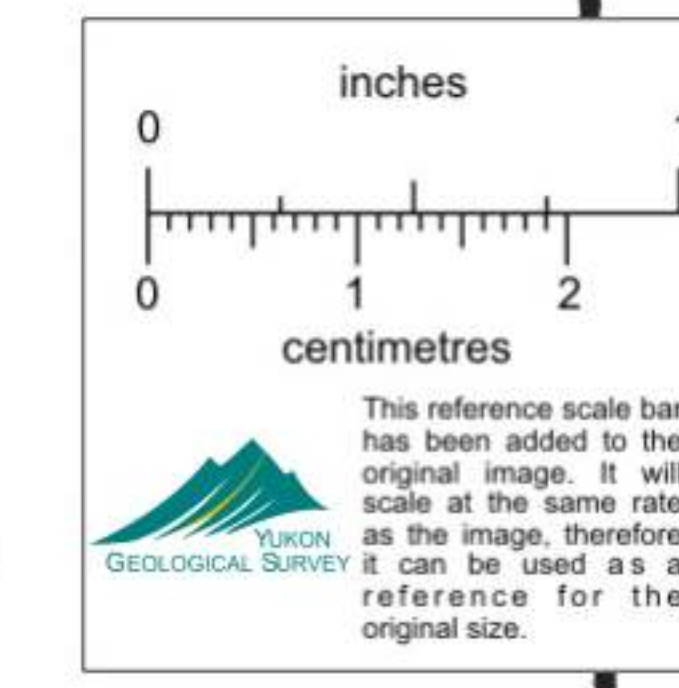
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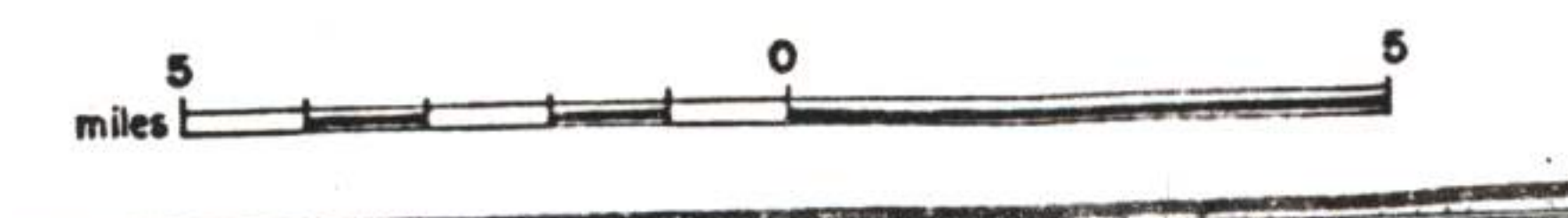
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PELLY PROJECT Figure 1

- PROJECT AREA OUTLINE: [Solid line]
- CLAIM GROUPS: [XYZ]
- SHOWING LOCATIONS: [Black dot]
- ROADS: [Dashed line]



Scale: 1:250,000



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PELLELY PROJECT

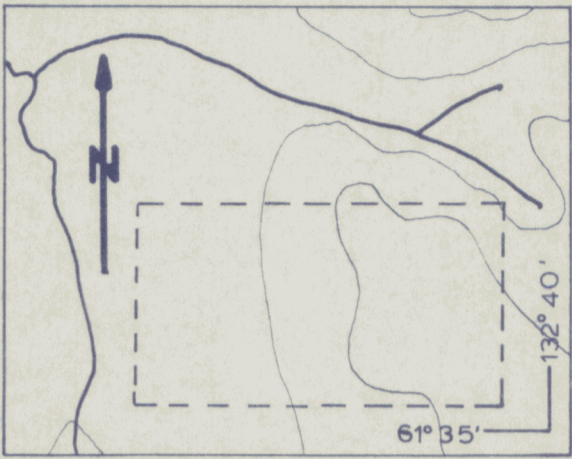
BNOB CLAIM GROUP

GEOCHEM GRID

Fig 3

NTS: 105-F-10

1 inch = 400 ft.



OCT 76

	L116	L112	L108	L104	L100	L96	L92	L88
000	28,24,28	22,18,72	26,34,62	6,10,10	26,16,22			
200	18,30,60	14,26,42	10,12,20	10,14,24	22,28,30	40,22,32	20,16,28	20,20,52
400	22,42,110	7,4,12	10,12,20	12,22,66	22,52,40	104,44,42	24,30,62	12,16,54
600	14,18,62	10,16,26	20,30,70	20,18,50	20,32,78	34,32,50	30,16,34	18,22,40
800	18,174,50	12,1040,82	40,60,300	8,960,20	22,54,70	30,34,60	76,36,92	76,64,80
BL 1000	10,610,60	32,920,186	26,300,300	6,40,92	6,104,52	18,34,50	22,38,102	20,20,40
						24,36,58	26,40,72	44,38,50
1200	50,1500,250	20,1040,270	14,68,910	8,38,172	10,92,80	28,90,66	16,46,32	30,25,37
1400	12,106,82	4,64,10	14,58,330	8,44,110	12,220,32	42,43,100	20,32,34	24,27,54
1600	16,74,46	26,940,350	14,28,570	10,48,172	16,22,62	26,94,37	4,8,18	10,15,46
1800	20,70,110	22,290,240	12,54,180	6,30,140	14,42,210	28,41,58	10,18,46	4,4,11
2000	10,60,40	22,86,230	24,96,92	34,130,176	10,30,72	16,1280,132	30,42,176	8,7,38
2200	10,36,40	20,70,160	24,110,86	32,126,90	8,34,162	32,94,170	38,60,290	16,35,148
2400	27,78,160	24,112,100	26,98,122	52,98,80	6,16,64	50,29,220	20,62,150	34,60,154
2600	28,94,130	48,210,260	30,660,104	26,140,60	8,26,102	56,58,215	20,74,124	24,84,128
2800	20,48,152	40,270,600	38,140,330	48,90,124	50,42,130	22,38,154	68,90,150	40,126,270
3000	24,94,350	8,72,40	102,84,1460	34,280,520	72,490,1030	42,86,170	58,68,270	40,118,230
3200	18,33,176	25,32,146	22,164,96	22,230,450	50,365,740	76,62,150	26,84,194	28,76,152
3400	15,12,290	31,146,186	36,310,158	28,168,280	30,184,410	26,56,128	42,60,240	40,84,260
3600	13,25,184	39,25,48	26,235,114	8,32,122	4,10,14	28,47,3900	40,46,176	52,60,340
3800	11,19,96	36,25,122	22,36,140	8,30,152	14,34,240	20,35,225	42,60,182	34,54,730
4000	14,27,136	33,24,136	26,30,240	12,32,510	4,8,132	26,31,400	46,80,450	12,32,110
4200	12,27,186	32,33,420	20,26,136	16,24,320	28,44,450	12,26,114	46,40,410	74,84,310
4400	26,35,98	24,33,102	40,36,520	14,20,192	32,44,550	19,36,510	20,58,270	52,78,280
4600		26,34,104	12,20,260	2,8,32	22,32,410	20,46,170	38,46,170	36,84,280
4800				24,46,470	14,32,290			
5000				26,36,166	22,39,134			