

ROTARY DRILLING

SUN CLAIM GROUP

by

R.S. Adamson, P. Eng.

March 1966

091234

March 22nd, 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 Sun Claim Groupings, as previously submitted, in compliance with Sections 52 (1 and 2) of the Yukon Quarts Mining Act. All claims are owned by Anvil Mining Corporation Limited in the Vangorda Creek area.

The area covered is contained on Claim  
Map No. 105K6.

Yours truly,



R.S. Adamson, P. Eng.  
Geologist for  
ANVIL MINING CORPORATION LIMITED



091234

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## ROTARY DRILLING

## SUN CLAIM GROUP

Introduction

Aeromagnetic and electromagnetic survey results disclosed a large number of anomalies in the Anvil Range district. In many cases these airborne anomalies were followed up on the ground by magnetic and electromagnetic anomalies. Rotary drilling was initiated on those magnetic anomalies which had some coincidence with electromagnetic anomalies.

The Mayhew 1000, oil-well type rig, mounted on a Nodwell (track vehicle), drills dry or wet according to conditions, and provided substantial decreases in footage costs and mobilization down time, with increased penetration rates, although with less accrued information compared to standard diamond drilling.

Five rotary holes, totalling 1355 feet, were placed on magnetic "highs". (See map in Appendix for locations).

Drilling and Sampling Method

Operations are continuous with four drillers and a foreman working two twelve hour shifts. Two samplers, employed by Dynasty, collected samples, and panned these for heavy metal content at the drill site.

The Mayhew 1000 drill has a standard Kelly drive with power take off from the Nodwell engine. Depth limitation is approximately 1000 feet. One compressor (580 c.f.m. @ 50 p.s.i.) plus a water pump and reservoir is mounted on a separate Nodwell. An auxiliary compressor, a Gardner-Denver (365 c.f.m. @ 100 p.s.i.) and used to drive the down-the-hole hammer is self-contained. Various bit types have been tried, but to date, the 4½ inch tricone has been most used. A 6 1/8 inch tricone is used in overburden, in theory allowing casing to be placed to bedrock. Penetration and bitlife is improved by attaching a down-the-hole hammer in dry drilling conditions. Overall penetration rate including bit-change time is approximately 6 ft/hr. Actual penetration may be up to 1 ft./min. in soft rock.

Samples are taken over 5 feet intervals, giving an average dry sample weight of 120 lb. of this, a representative 15 lb. is retained. A portion of the cuttings and pannings are kept on tack boards for microscopic examination and a continuous record. Caving of the overburden may occasionally dilute samples as much as 40% but generally stays within acceptable limits to 0 to 5%.

### Results

No sulphides of any commercial significance were intersected in any of the five holes. In each case graphitic schist was responsible for the conductivity as manifested by the electromagnetic anomalies. In the case of the magnetic anomalies the pyrrhotite content of the intersected sulphides was considered sufficient to cause the anomalies.

The drill cuttings are stored in the Anvil Mining Corp. Ltd. office in Whitehorse. The cuttings were not assayed.

STATEMENT OF COSTS

<u>Rotary</u>	<u>Hole</u>	<u>Footage</u>	<u>Rate</u>	<u>Cost</u>
SRH	1	300'	\$9 per foot	\$2700
SRH	2	300'	9	2700
SRH	3	110'	9	990
SRH	4	310'	9	2790
SRH	5	335'	9	<u>3015</u>
		<u>1355</u>		<u>\$ 12195</u>

*R. S. Adanson*



Drill Hole LogsSRH No. 1 (300')

- 0 - 20' Biotitic quartz schist, no sulphides.  
 20 - 30' Sericitic quartz schist, 1% sulphides largely pyrite with lesser pyrrhotite.  
 30 - 130' Quartz - sericite schist, 1% sulphides to 80', 15% sulphides to 90', and 10% sulphides to 100', sulphides largely pyrite with lesser pyrrhotite.  
 130 - 160' Biotitic quartz schist, 10% sulphides to 150', 5% sulphides to 160', pyrite with lesser pyrrhotite.  
 160 - 170' Graphitic biotite schist, 10% sulphides, pyrite with lesser pyrrhotite.  
 170 - 300' Graphite schist, 10% sulphides to 240', 5% sulphides to 260' and 10% the remainder of the hole, sulphides larger pyrite with lesser pyrrhotite.

SRH No. 2 (300')

- 0 - 20' Biotitic quartz schist, 3% sulphides to 10', largely pyrite with lesser disseminated pyrrhotite, no sulphides 10 - 20'.  
 20 - 40' Sericitic quartz schist, 1% sulphides, pyrite with minor pyrrhotite.  
 40 - 60' Graphitic biotite schist, 2% sulphides to 50' and 3% to 60' crystalline pyrite with lesser pyrrhotite.  
 60 - 70' Sericitic quartz schist, 4% sulphides, pyrite and pyrrhotite.  
 70 - 90' Biotitic quartz schist, 5% sulphides, py and po.  
 90 - 120' Graphitic biotite schist, 4% pyrite with minor pyrrhotite.  
 120 - 130' Biotitic quartz schist, 4% sulphides.  
 130 - 140' Graphitic biotite schist, 5% sulphides, pyrite and pyrrhotite.  
 140 - 300' Graphite Schist, 140 - 150 5% sulphides, 150 - 160 4%, 160 - 190 3%, 190 - 200 4%, 200 - 300 5% sulphides except for 270 - 280 which is 3%, sulphides essentially crystalline pyrite with lesser indeterminate amount of pyrrhotite.

SRH No. 3 (110')

- 0 - 30' Sericitic quartz schist, 1% sulphides to 10', 3% 10 to 20' and 4% 20 to 30', pyrite with minor pyrrhotite.  
 30 - 40' Biotitic quartz schist, somewhat graphitic, 3% sulphides.  
 40 - 50' Sericitic quartz schist, 1% sulphides, pyrite with lesser pyrrhotite.  
 50 - 70' Biotitic quartz schist, graphitic, 2% sulphides 50-60' and 4% sulphides 60 - 70', pyrite and minor pyrrhotite.  
 70 - 90' Sericitic quartz schist, 4% sulphides to 30' and 3% from 80 - 90'.

SRH No. 3 (110')

- 90 - 100' Biotitic quartz schist, graphitic, 5% sulphides, crystalline pyrite with minor pyrrhotite.  
 100 - 110' FAULT ZONE - mud and water.

SRH No. 4 (310')

- 0 - 10' Overburden  
 10 - 30' Sericite schist, 5% sulphides to 20' and 15% from 20 to 30', pyrite with pyrrhotite.  
 30 - 50' Massive sulphides, 75% pyrite with an indeterminate amount of pyrrhotite.  
 50 - 70' Sericite schist, 50% sulphides to 60' and 15% sulphides to 70'.  
 70 - 80' Sericitic biotite schist, 35% sulphides, pyrite.  
 80 - 130' Graphitic biotite schist, 5% sulphides, pyrite with pyrrhotite.  
 130 - 310' Graphite schist, 5% sulphides, crystalline pyrite with an indeterminate amount of lesser pyrrhotite.

SRH No. 5 (335')

- 0 - 40' Sericite schist, no sulphides to 10', 3% from 10 to 30', 4% sulphides 30 to 40', largely pyrite with lesser pyrrhotite.  
 40 - 50' Graphitic sericite schist, 5% sulphides.  
 50 - 335' Graphite schist, pyrite in excess of pyrrhotite.
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ANVIL MINING CORPORATION LIMITED

Whitehorse, Yukon

PROPERTY NAME **SUN**

LOCATION CLAIM # 48 72+00W; 17+00S

DATE DRILLED OCT 16 - OCT 25, 1970

SCALE OF LOG 1" = 40' LOGGED BY J. GOND! DATE NOV 2, 1970 TOTAL RECOVERY

HOLE NO 70-SUN-1 DEPTH 417'

SHEET 1 OF 2

COLLAR ELEVATION ..... CORE SIZE N Q INCLINATION TESTS

BEARING ..... (MAG OR TRUE DIP -90°)

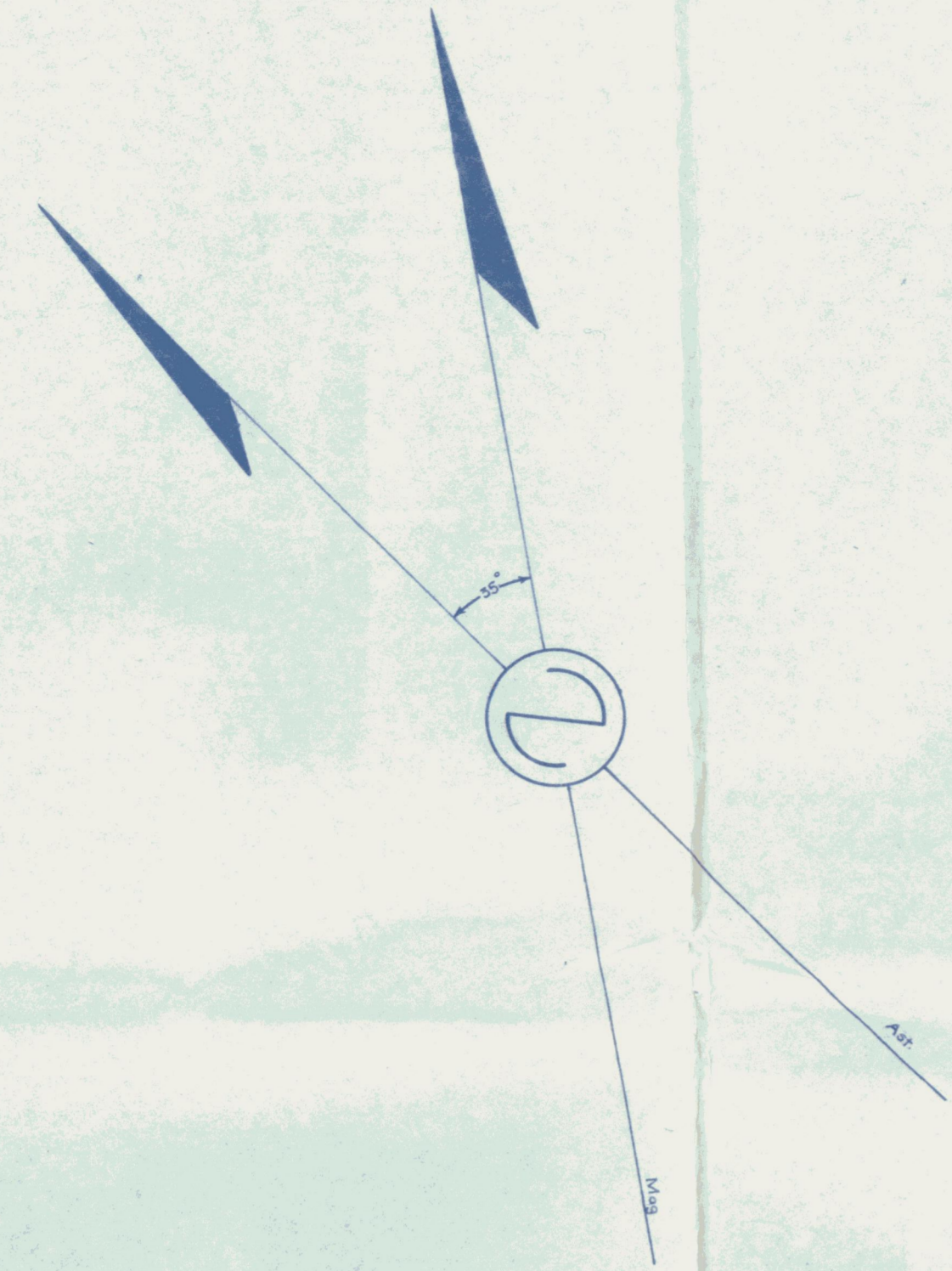
CO-ORDINATES ..... N ..... E

SURFACE  OR UNDERGROUND

ROCK TYPES AND ALTERATION	MINERALIZATION AND STRUCTURES	FOOTAGE BLOCKS	% RECOVERY	SAMPLE		INTERVAL								
				No.		FROM	TO							
0-21' - OVER BURDEN. 21'-82' - GREEN SCHIST.	IRREGULARLY FOLIATED SCHIST CONSISTS OF ESSENTIALLY CHLORITE													
40	AND A MINOR AMOUNT OF AMPHIBOLES. QUARTZ & Biotite OCCUR OCCASSIONALLY. PROBABLE EQUIVALENT OF META TUFF.													
80	CONTACT NOT APPARENT. BROKEN CORE & POOR RECOVERY. QUARTZ BANDS DIP AT 45°. CALCITE OCCURS AS FRACTURE FILLING. FAULT NOT AVAILABLE. BRECCIA CONSIST OF QUARTZ, GR. PHY.													
120	CHLORITE IN A MATRIX OF CALCITE. FOR 55' CONSISTS OF MORE THAN 50% CHL. QUARTZ OCCURS AS DISSEMINATED AND BANDED, BANDS DIPPING AT 45°. 107-107.5 - PY 2% COARSE CLBS OF C. 2"													
160	CONTACT: 45° HIGHLY GRAPHITIC AT 139-155. HIGHLY SILICEOUS IN THIS ZONE. 183 - LAMINATIONS DIP AT 45°													
200	207-207.5 - QUARTZ CHLORITE BIOTITE SCHIST. FOR 58°													
240	218-220; 224-225 - QUARTZ VEINS.													

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**LEGEND**

- 1 Quartz Vein: milky quartz with carbonate sections.
- 2 Carbonate Zone: hydrothermal (?), crystalline limestone(?).
- 3 Granitoid: massive & amygdaloidal basic volcanic rocks, minor tuff, volcanic breccia.
- 4 Schistose Volcanic Rocks: chlorite, sericite schist, highly carbonatized, abundant quartz-carbonate stringers, veinlets.
- 5 Graphitic Schist: black, in part graphitic, platy schist.
- 6 Schistosity: inclined, vertical.
- 7 Contact.
- 8 Outcrop.
- 9 Glacial debris: terraces, hummocks.
- 10 Depression, low ground.
- 11 Swamp.
- 12 Road.
- 13 Pit.
- 14 Location.

NOTE  
ROTARY DRILL HOLE SHOWN ©

DD-137

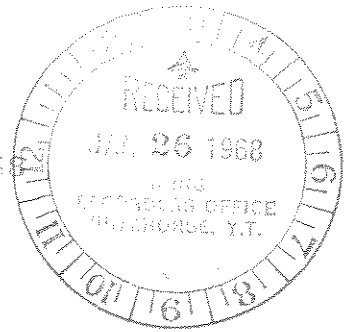
**DYNASTY EXPLORATIONS LTD.**

**GEOLOGICAL MAP**  
SUN Claim Group  
Vangorda Creek District, Y.T.

SCALE 1" to 400'    Drawn: 25/10/65    J.D.C.

**ANVIL MINING CORPORATION LIMITED**

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



January 22, 1968

Mr. G.A. McIntyre  
Chief Mining Recorder  
Federal Building  
Whitehorse  
Yukon Territory

Dear Mr. McIntyre:

The accompanying statement of costs of rebuilding the tote road to the townsite area is submitted to support applications for certificates of work on some WHI Fractions (SUN Group).

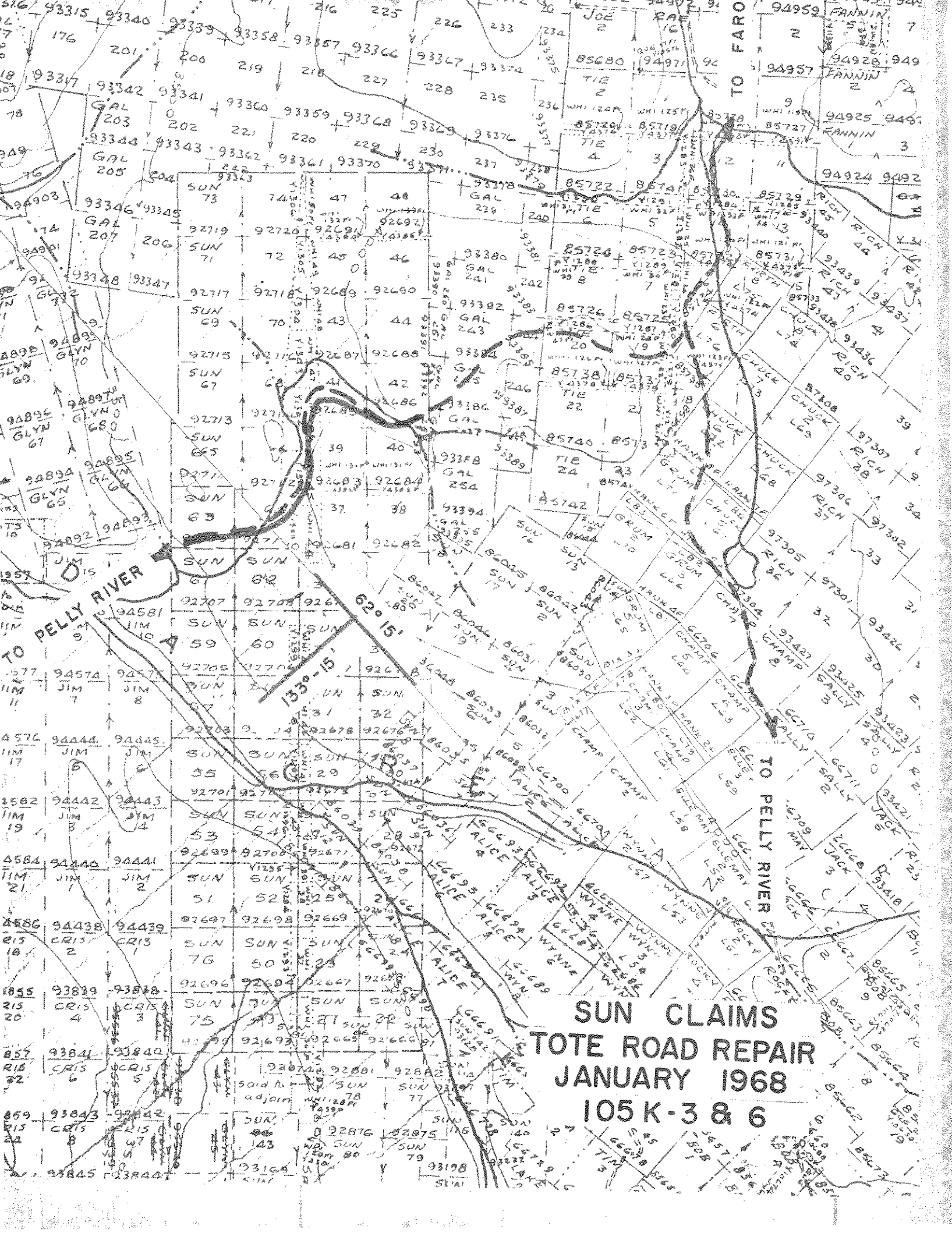
The bulk of the work was done within the boundaries of the SUN Group of claims.

Yours very truly,

M.O. Hampton, P. Eng.  
Chief of Exploration for  
ANVIL MINING CORP. LTD.

MOH/ew

Attach.



**SUN CLAIMS  
TOTE ROAD REPAIR  
JANUARY 1968  
105 K-3 & 6**

The Ralph M. Parsons Construction Co. of Canada, Ltd.

January 16, 1968

ACCESS ROAD TO TOWNSITE

ANVIL MINING CO.

	<u>Hours</u>	<u>Amount</u>
Grader	25	500.00
John Deere	20	320.00
Pick Up	14	152.60
Supervision	14	210.00
Master Mechanic	8	104.64
D-8 Tractor (G.E.)	18	630.00
Supervision	8	120.00
Master Mechanic	4	52.32
Pick Up	8	<u>87.20</u>
		<u>2,176.76</u>