

Geophysical Report

LAUREL Claim Group

Anvil Mining Corp.

10 S/K/7

Dec. 1966

R. S. Adamson

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

December 12, 1966

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

Dear Mr. McIntyre:

The accompanying report is submitted to
apply as assessment work on the LAUREL Claim Group.

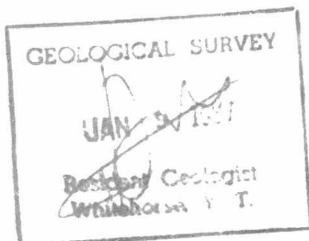
The area covered is on Claim Map Sheet
105 1/7.




Yours truly,



**Murray O. Hampton
Geologist for
ANVIL MINING CORP. LTD.**

/s



This report has been examined by the Assessment Unit. Appraised at worth by:	
2704.75	
Assessment work done on 12/12/66	

GEOPHYSICAL REPORT

On

LAUREL CLAIM GROUP

at

TAY RIVER, YUKON
(62° 25' N, 132° 50' W)

for

ANVIL MINING CORP. LTD.

by

EXPLORATION GEOPHYSICS (YUKON) LTD
WHITEHORSE, YUKON

NOVEMBER 1966

REPORT BY:

M.C. Hampton
Geologist for
ANVIL MINING CORP LTD.

APPROVED BY:

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

PROPERTY SURVEYED:

July 6 - 7, July 18 - 23, 1966

GEOPHYSICAL SURVEY

LAUREL CLAIM GROUP

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INTRODUCTION

A combined magnetic and electromagnetic geophysical survey was carried out by Exploration Geophysics (Yukon) Limited for Anvil Mining Corporation Ltd. on L.S. mineral claims Laurel 41 to 56 inclusive, Laurel 37 to 100 inclusive and Laurel 102 during the period July 6-7, July 18-23, 1966.

Preparatory line cutting was done by contract linecutters of White, Hosford and Inpey Ltd. of Whitehorse.

Access to the property by all people involved with the property was by helicopter.

The object of the ground survey was to follow up magnetic and electromagnetic anomalies detected from an airborne geophysical survey done in September of 1965.

All geophysical data is presented in the form of profiles, using a distance scale of 1 inch to 400 feet. Vertical scales are 1 inch to 40 degrees and 1 inch to 400 gammas for electromagnetics and magnetics respectively.

Rocks in the survey area are cherts and quartzites. These rocks are recorded as Upper Devonian or Lower Mississippian age on the preliminary 4 mile to 1 inch map of regional geology of the TAY RIVER map sheet done by Dr. J.A. Heddick and Dr. L.H. Green of the Geological Survey of Canada.

SURVEY SPECIFICATIONS

Grid System

Baselines were laid out with a transit and picket lines were

turned off at 400 foot intervals along base lines by transit. Stations were established along the picket lines at 100 ft. intervals.

Magnetometer Survey

A Charpe's MF-1 fluxgate type vertical component magnetometer was used during the entire magnetic survey. This instrument is hand held and needs only coarse levelling and no orientation. The magnetometer has a maximum sensitivity of 20 gammas per scale division on 1000 gamma range and a readability of 5 gammas per scale division.

Readings were taken at 400 foot intervals along the baseline and 100 foot intervals along picket lines. Baseline stations were looped and re-read within every two hours as a means of controlling drift and diurnal variations.

Electromagnetic survey

A CRONE JEM (18 volt) unit was employed for the electromagnetic survey. The instrument is a modification of the original JEM unit designed by Crone in 1963. The power supply has been increased thus increasing effective depth penetration to approximately 300 feet under normal operating conditions using the horizontal loop method. The CRONE measures resultant dip angles of the primary and secondary fields, it is dual frequency (400 and 1800 c.p.s.) and may be used either as a vertical or horizontal loop system.

In contrast to the magnetometer survey no checking back to previously established baseline stations is required. A 400 foot separation of the coils was used and readings were taken at 100 foot station intervals along the picket lines.

RESULTS and INTERPRETATION

Magnetometer Survey

After each gamma value was corrected for diurnal variation, they were plotted on a plan of the survey grid (1 inch = 400 feet). Profiles of each line were drawn to a 1" = 400 gamma scale (see map in folder).

Two main anomalous areas are established by this survey. One area at the northeast of the survey and the other in the west central portion of the area.

Electromagnetic Survey

High and low frequency electromagnetic readings were plotted on a plan of the survey grid (1 inch = 400 feet). Profiles of each line were drawn to a 1 inch to 40 degrees scale (see map in folder).

The electromagnetic survey lends some support to the magnetic anomaly in the west central portion of the surveyed area.

CONCLUSIONS and RECOMMENDATIONS

The most interesting anomalous area established by these surveys lies in the west central portion of the surveyed area on mineral claims 91 to 98 inclusive. This area is covered by overburden and should be investigated by bulldozer trenching, or, if overburden is very deep, by drilling.

Murray C. Hampton, B.A.Sc.
Geologist for
ANVIL MINING CORP. LTD.



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

APPENDIX I (11)

PERSONNEL

(A) Linecutting - White, Mosford and Impey Ltd
Contract

(B) Geophysics - Exploration Geophysics (YUKON) Ltd
Contract

W. Cannon	Party Chief	Box 1188, Whitehorse, Y.T.		
B. Shillington	Electromagnetic	" "	" "	" "
J. Hollins	Electromagnetic	" "	" "	" "
G. Cannon	Mag. & E.M.	" "	" "	" "
G. Gamble	Mag. & E.M.	" "	" "	" "

(C) Compilation of report
M.C. Hampton Geologist " 2470 " "

(D) Supervision
R.S. Adamson Exploration Chief " " "
M.C. Hampton Geologist " " "

APPENDIX 1 (111)

A F F I D A V I T

SUPPORTING STATEMENT OF COSTS
Geophysical Report
July 15th - 27th, 1966

I, Robert S. Adamson, Chief of Exploration for ANVIL MINING CORPORATION LIMITED, have compiled the statement of costs as presented in this report "Geophysical Survey of LAUREL 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 LAUREL 1 to 28 inclusive, 41 to 43 inclusive, 45 to 68 inclusive, 83 to 115 inclusive, and 131 to 142 inclusive mineral claims.

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

SWORN before me in the City of Whitehorse, Yukon Territory

this *15th* day of *August*, 1966.

William

EXPLORATION GEOPHYSICS (Yukon) LTD.

WHITEHORSE, Y.T.

3 Aug. 1966

Statement of Account

With: Anvil Mining Corporation
 Box 1470
 Whitehorse, Y.T.

For: Electromagnetic and Magnetic Surveys performed.

Location: Laurel Group.

Electromagnetic Survey

<u>Date</u>	<u>Lines</u>	<u>Footage</u>	<u>Contract</u>	
July 6	200N 15E-15W	3000	Rollins & Shillington	
	204N 15E-15W	3000		
		<u>6000</u>		6,000
July 7	208N 15E-15W	3000	Rollins & Shillington	
	212N 15E-15W	3000		
	216N 15E-15W	3000		
	220N 15E-15W	3000		
		<u>12000</u>		12,000
July 18	224N 00 -15W	2000	G. Cannon G. Gamble	
	228N 00 -15W	2000		
		<u>4000</u>		4,000
July 19	200N 00 -15W	1000	G. Cannon G. Gamble	
	206N 00 -15W	4500		
	206N 00 -15W	1000		
	202N 00 -15W	1500		
	198N 00 -15W	1500		
		<u>11500</u>		11,700
July 20	202N 00 -15W	3000	W. Cannon G. Cannon	
	206N 00 -15W	1000		
	234N 15E-15W	3000		
	272N 15E-15W	4000		
	270N 00 -15E	1500		
	272N 00 -15E	1500		
		<u>16500</u>		17,400
July 21	274N 00 -15W	2000	W. Cannon G. Cannon	
	276N 00 -15W	2000		
	268N 00 -15W	1500		
	264N 00 -15W	2500		
		<u>8000</u>		10,400

EXPLORATION GEOPHYSICS (Yukon) LTD.

WHITEHORSE, Y.T.

1954

Laurel Group

<u>Date</u>	<u>Lines</u>	<u>Footage</u>	<u>Operator</u>	
July 27	262N 00 -15E	1500	Rollins & Shillington	
	264N 00 -15E	1500		
	266N 15E-25W	4000		
	268N 15E-25W	4000		
	270N 15E-25W	4000		
	272N 15E-25W	4000		
		<u>19000^T</u>		19,000
July 28	240N 15E-25W	4000	Rollins & Shillington	
	244N 15E-25W	4000		
	248N 15E-25W	4000		
	252N 15E-27W	4200		
	256N 15E-27W	4200		
	260N 15E-00	1500		
274N 15E-00	1500			
		<u>19500^T</u>		19,500
Total footage of E.M. Survey-----				<u>100,400</u>
Total mileage of E.M. Survey-19.3/m @ \$47.50/m-----				\$916.75

Magnetic Survey

<u>Date</u>	<u>Lines</u>	<u>Footage</u>	<u>Operator</u>	
July 6	Baseline	10000	G. Cannon	10,000
July 7	200N 15E-15W	3000	G. Cannon	
	204N 15E-15W	3000		
	208N 15E-15W	3000		
	212N 15E-15W	3000		
	216N 15E-15W	3000		
	220N 00 -15E	1500		
		<u>16500^T</u>		16,500
July 20	292N 00 -30W	3000	G. Gamble	
	288N 00 -25W	2800		
	284N 15E-28W	4300		
	280N 15E-29W	4200		
	276N 00 -15E	1500		
	272N 00 -15E	1500		
		<u>17400^T</u>		17,400

EXPLORATION GEOPHYSICS (Yukon) LTD.

WHITEHORSE, Y.T.

(3)

Laurel Group

<u>Date</u>	<u>Lines</u>	<u>Footage</u>	<u>Operator</u>
July 21	277N 60 - 27W	2500	G. Cannon
	276N 60 - 27W	2500	
	268N 60 - 25W	2500	
	264N 60 - 25W	2500	
		<u>10000</u>	
July 22	269N 60 - 25E	1500	G. Garbley
	268N 60 - 25E	1500	
	268N 60 - 25W	4000	
	257N 60 - 25W	4000	
	257N 60 - 25E	4000	
	247N 60 - 25E	4000	
	247N 60 - 25W	4000	
		<u>25000</u>	
July 23	300N 15E - 27W	4200	G. Cannon
	297N 15E - 27W	4500	
	292N 60 - 25E	1500	
	289N 60 - 25E	1500	
	288N 60 - 25E	1500	
	284N 60 - 25W	1500	
	282N 60 - 25W	1500	
	282N 60 - 25E	1500	
		<u>19500</u>	

25,000

19,500

17,650

2500

10,150

19,500

110,400

Total footage of Magnetic Survey ----- 110,400

Total mileage of "Magnetic Survey" 21.2/m @ \$30.00/m ----- \$636.00

Additional Charges:

The Laurel grid was completed on Saturday July 23rd and Anvil were informed of our readiness to move onto the next grid on that day. However the crew consisting of G. Cannon & G. Garbley were not moved onto the next grid until Wednesday July 27th. An additional charge of 3 days standby time charges will be made.

2 men @ \$40.00 per man-day ----- \$120.00

E.M. Survey charges ----- \$ 916.75

Magnetic Survey charges ----- \$ 636.00

Standby time charges ----- \$ 120.00

TOTAL THIS INVOICE ----- \$1,672.75

EXPLOATION GEOPHYSICS (Yukon) LTD.

WHITEHORSE, Y.T.

(3)

Survey Party

<u>Date</u>	<u>Mileage</u>	<u>Footage</u>	<u>Operator</u>	
July 17	1000	2000	G. Gamble	
18	1000	2000		
19	1000	2000		
20	1000	2000		
		<u>8000</u>		10,40
July 21	1000	1000	G. Gamble	
22	1000	1000		
23	1000	4000		
24	1000	4000		
25	1000	4000		
26	1000	4000		
		<u>16000</u>		19,000
July 27	1000	4000	G. Cannon	G. Cannon July 27 4000 19000 Total 23000 23000 Total 42000 42000 Total 84000 84000 Total 126000 126000
28	1000	4000		
29	1000	4000		
30	1000	4000		
31	1000	4000		
Aug 1	1000	4000		
2	1000	4000		
July 31	1000	4000		
1	1000	4000		
2	1000	4000		
3	1000	4000		
4	1000	4000		

Total footage -----

Total mileage ----- \$636.00

Additional Charges

Asvils were down for 3 days Saturday July 23rd and Sunday July 24th and were not on the road grid on that day. However, the survey was continued on that day. Gamble was not moved onto the grid on that day. Additional charge of 3 days stand-by time is \$120.00.

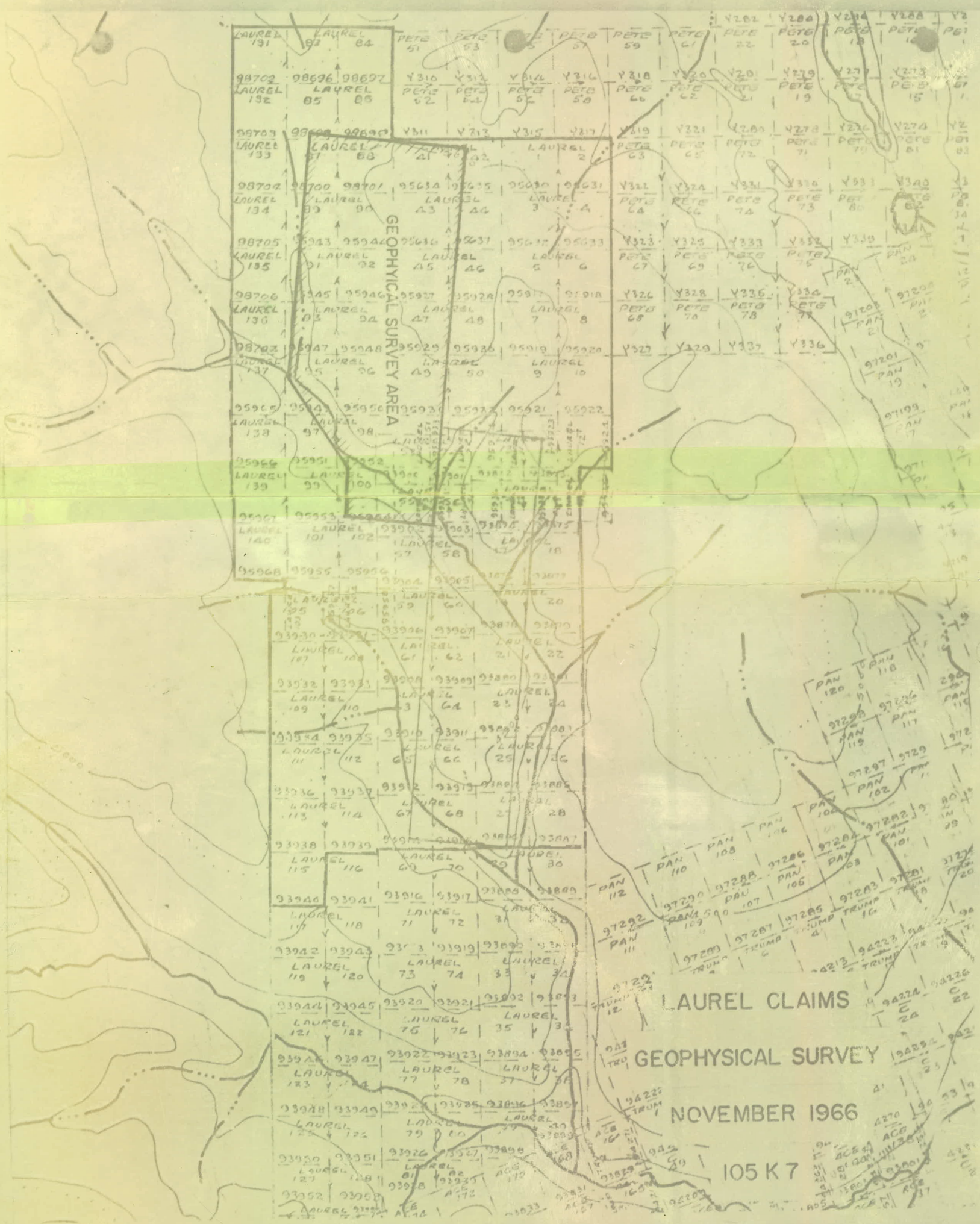
Stand-by time for Asvils ----- \$120.00

E.M. Survey charges ----- \$ 916.75

Magnetic Survey charges ----- \$ 636.00

Standby time charges ----- \$ 120.00

TOTAL THIS INVOICE ----- \$1,672.75



GEOPHYSICAL SURVEY AREA

LAUREL CLAIMS

GEOPHYSICAL SURVEY

NOVEMBER 1966

105 K 7