

0122-068/10  
01979E

GEOLOGIC REPORT

TOY MINERAL CLAIM GROUP

SHELDON LAKE AREA

Watson Lake Mining Division

Yukon Territory

Lat. 61 deg. 39' North

Long. 128 deg. 49' West

Claim Sheet 105 H 10

by

John S. Brock

Atlas Explorations Limited

July 11, 1967 and August 14-20, 1967

GEOLOGIC REPORT  
TOY MINERAL CLAIMS

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LIST OF CLAIMS

Claim No.

Grant Nos.

Date Recorded

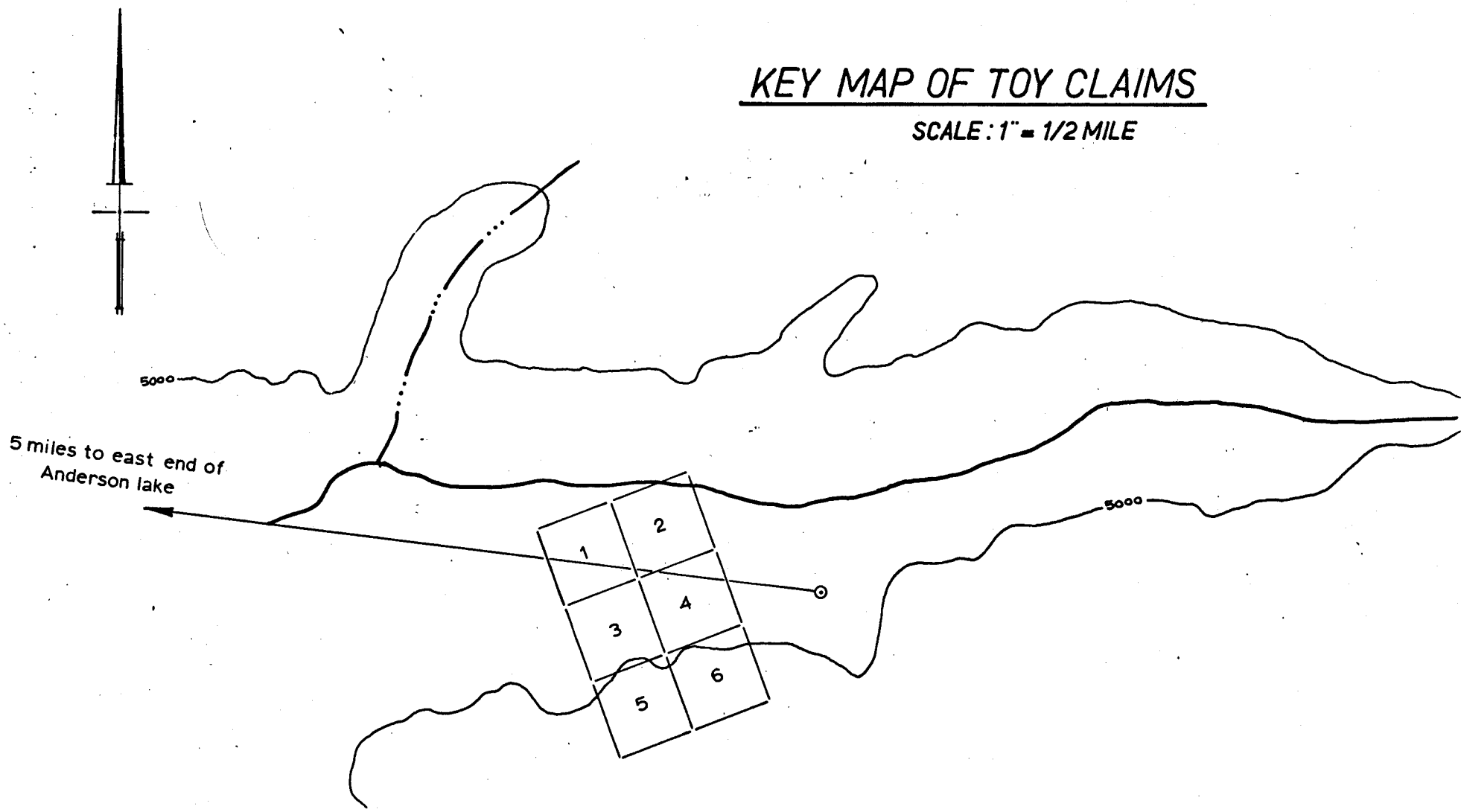
TOY 1 - 6

Y 16366 - Y 16371

September 22, 1966

# KEY MAP OF TOY CLAIMS

SCALE: 1" = 1/2 MILE



ATLAS EXPLORATIONS LIMITED

ROSS RIVER (Y.T.)

drawn. p.v.

# ATLAS EXPLORATIONS LIMITED

(N. P. L.)

330 MARINE BUILDING  
355 BURRARD STREET  
VANCOUVER 1, B.C.

## INTRODUCTION

Through a prospecting program conducted by Atlas Explorations during the late summer and fall of 1966, numerous lead, zinc, and copper showings were discovered and staked. Hugo Brodell, prospector, of Watson Lake, Yukon, brought the Toy Mineral Claims to the attention of Atlas Explorations in September, 1966. The discovery of copper, lead and zinc sulphides by Brodell prompted Atlas to option the Toy Mineral Claims, numbers 1 to 6, from the prospector in order that a detailed examination of the ground could be made.

On July 11, 1967, Brodell accompanied Atlas Exploration's geologist, C. L. Smith to the property for a preliminary examination. From August 14th to August 20, 1967, geologic mapping and geophysical (magnetic) - geochemical investigations were carried out.

## LOCATION AND ACCESS

The Toy 1 - 6 Group is located five miles east of the east end of Anderson Lake, about 58 miles southeast of the abandoned Pelly Lakes Trading Post and 12 miles west of the Cantung Road. The claims are situated on the steep south slope of an east-west valley.

Access to the property for the purposes of preliminary examinations was made by helicopter from the Pelly Lake Post. Transportation was later provided by fixed-wing aircraft equipped with floats which were able to land on Anderson Lake.

## GEOLOGY

Three days were spent mapping and sampling the Toy Mineral Claims by Atlas Explorations' geologists, T. Adamson and W. Roberts; control was maintained by the use of aerial photographs. In the immediate area of the sulphide occurrence a small grid was laid out. Over this grid, geologic mapping (1:50), soil sampling and a magnetometer survey were carried out.

The rock units in the area of interest consist mainly of granite that has intruded quartz-feldspar-mica gneiss, biotite schist and minor quartz and marble. All that remains of the host are random lenses and inclusions. The contacts between the host and the intrusive are indefinite and transitional because much granitization appears to have occurred. Many of the calcareous members of the host have been altered to skarn.

The mineral occurrence seems to be one small "bleb" of sulphides including sphalerite, galena, and minor chalcopyrite in a lense of grossularite-calcite diopside skarn. This lense, or large inclusion appears to be surrounded on all sides by the granite intrusive.

The sulphide zone, a stratiform replacement body, has a maximum thickness of about ten feet on the western margin, where it passes abruptly into barren calcite-grossularite skarn across a small north-south vertical shear. The direction of movement along this shear could not be determined. The sulphides pinch out into barren skarn 25 feet to the east of the shear.

It is not known whether the sulphide zone has been terminated by the north-south shear, or whether the fault was pre-mineralization, giving access to sulphide bearing solutions. If the later situation was the case, the skarn zone to the east of the fault was only chemically favourable to replacement by the sulphides.

A chip sample (Y 1517) was taken across the widest part of the showing (6 inch chips across 10 feet). Assay results were:


A magnetometer survey was run over the area mapped geologically. The sulphide zone was not detected. A magnetic 'high' to the northwest of the sulphide zone reflects a remnant inclusion of highly altered and granitized gneiss and schist with a high magnetite content (up to 3 percent).

#### CONCLUSIONS AND RECOMMENDATIONS

The sulphide occurrence on the Toy Mineral Claims, although of good grade, appears to be limited in size and economic potential. Further prospecting and mapping of the surrounding Toy Mineral Claims failed to reveal any other mineral occurrences worthy of

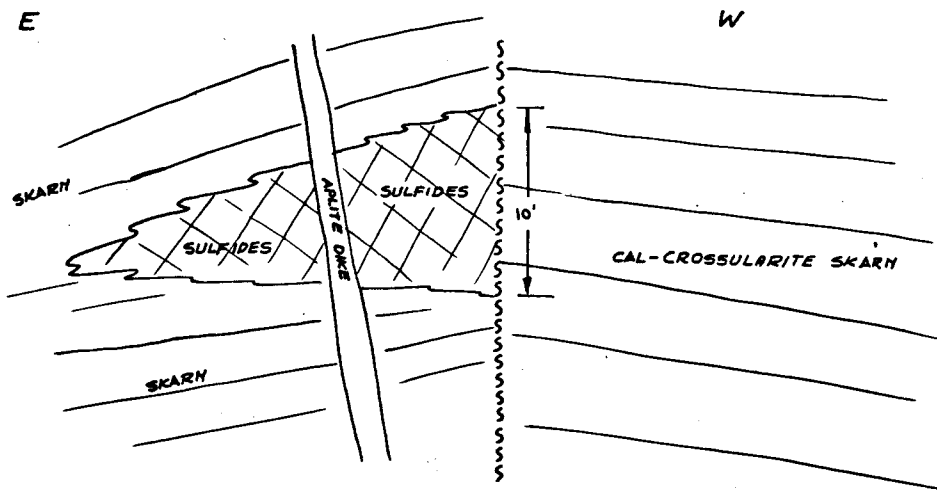
development. It is therefore recommended that the option on the Toy Group be dropped and that the claims be returned in good standing to Brodell.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "John S. Brock". The signature is written in dark ink and is positioned above the typed name.

John S. Brock,  
Assistant Exploration Manager,  
Atlas Explorations Limited.

GEOLOGIC CROSS-SECTION  
TOY MINERAL CLAIMS  
BRODEL SHOWING



NOTE: NOT TO SCALE

drawn: p.v.

# ATLAS EXPLORATIONS LIMITED

ROSS RIVER (Y.T.)

## GEOLOGY AND KEY MAP OF TOY GROUP

SCALE 1" = 1/2 MILE

GEOLOGY : T. ADAMSON

DATE : AUGUST 1967

### SYMBOLS :

- CONTACT
- - - - - BEDDING
- FOLIATION

### LEGEND :

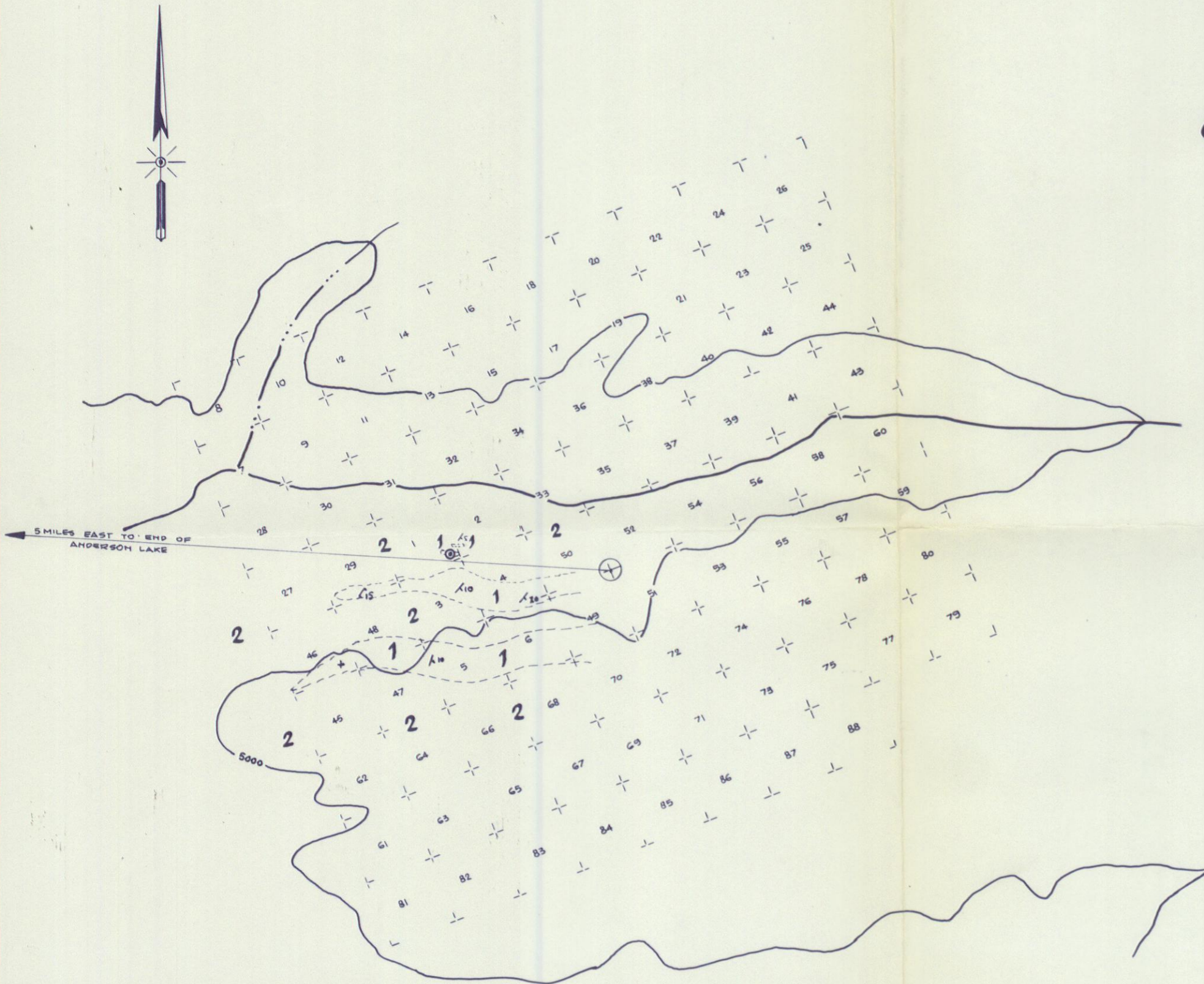
#### CRETECEOUS

- 2** GRANITE TO GRANODIORITE, MEDIUM GRAINED BIOTITE RICH.

#### PROTEROZOIC

- 1** GRANITE GNEISS, BIOTITE SCHIST, MARBLE, CALCITE - GROSSULARITE - DIOPSIDE SKARN, MINOR QUARTZITE.

◎ TOY Pb-Zn SHOWING (ASSAY # )



**ATLAS EXPLORATIONS LIMITED**  
**ROSS RIVER (Y.T.)**

**TOY GROUP GRID GEOLOGY**

SCALE 1"=50'  
 GEOLOGY: T. ADAMSON  
 DATE: AUGUST '67

**SYMBOLS**

- OUTCROP LIMIT
- CONTACT
- - - - - CONTACT (ASSUMED)
- — — — — BEDDING
- — — — — FOLIATION
- ~~~~~ FAULT

**LEGEND**

- 5 GRANITE TO GRANODIORITE, MEDIUM GRAINED, BIOTITE RICH
- 4 APLITE (DYKE)
- 3 GROSSULARITE - CALCITE SKARN; MINOR DIOPSIDE & KYANITE
- 2 MARBLE, CLEAN, WHITE, COARSELY CRYSTALLINE
- 1 GRANITIC GNEISS, BIOTITE SCHIST FELDSPATHIC QUARTZITE
- SULFIDES (MAINLY SPHALERITE, GALENA, MINOR CHALCOPYRITE);
- A STRATIFORM REPLACEMENT BODY, IN SKARN.

