

GEOLOGIC REPORT

NAR MINERAL CLAIM GROUP

SHELDON LAKE AREA

Watson Lake Mining Division

Yukon Territory

Long. 62 deg. 01' West

Lat. 129 deg. 52' North

Claim Sheet 105 I 4

by

John S. Brock

Atlas Explorations Limited

June 22 - July 23, 1967

GEOLOGIC REPORT

NAR MINERAL CLAIMS

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LIST OF CLAIMS

Claim No.

Grant Nos.

Date Recorded

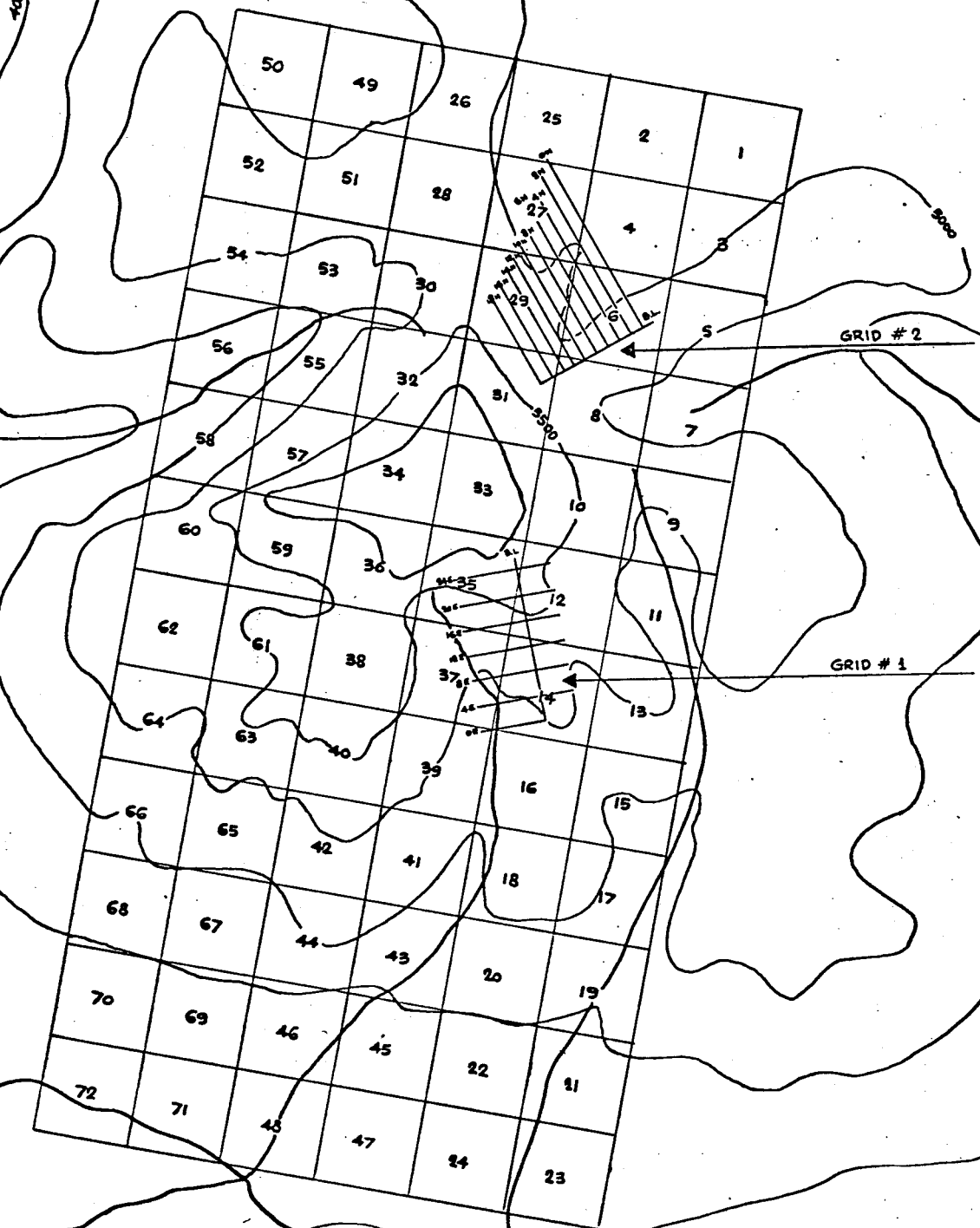
NAR 1 - 72

Y 16294- Y 16365

September 21, 1966

# KEY MAP OF NAR CLAIMS + GRID 1 & 2

SCALE 1" = 1/2 mile



ATLAS EXPLORATIONS LIMITED

ROSS RIVER (Y.T.)

DRAWN BY: 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. One of these claim groups, the Nar Mineral Claims, is located some 12-1/2 miles east-southeast of the Pelly Lakes Trading Post and covers all known mineral occurrences in that area. Follow-up prospecting revealed sulphides of high silver assay as well as encouraging geochemical soil sample results over areas related to known mineral occurrences.

From June 22 to July 23, 1967, a crew consisting of linecutters, prospectors, geologists and technical field operators, conducted geological, geophysical and geochemical surveys over the Nar Mineral Claims in order to further determine its economic potential.

## LOCATION AND ACCESS

The NAR Mineral Claims are located approximately 12-1/2 miles east-southeast of the Pelly Lake Trading Post on Pelly Lakes. The location of the Claim Group may be found at 129 deg. 52' North Latitude and 62 deg. 01' West Longitude on mineral-claim sheet 105 I 4. The central portion of the NAR Group is located on the peak of a mountain southeast of Ptarmigan Lake. Elevations rise to 6,000 feet above sea level, treeline is at approximately 4,800 feet.

Access to the property was made by helicopter from the Atlas Exploration field base at Pelly Lakes, however, float-

equipped aircraft may land with ease on Ptarmigan Lake. A winter tote road was constructed from Finlayson Lake on the Ross River - Watson Lake Highway to Pelly Lake in order that bulk supplies could be brought within close proximity to the NAR Claims.

### GEOLOGY

About twelve miles east of Pelly Lakes Trading Post and in the extreme southwest corner of sheet 105 I 4, is an extensive area of rust stain associated with galena sphalerite and pyrrhotite showings. On the ridge above and to the north of this gossan is a small intrusive body about 500 feet across in an east-west direction but of undetermined extent to the north and south. The rock is a light grey to faint pink granite, porphyrite in places, and containing feldspar phenocrysts with the occasional euhedral crystal of quartz. Disseminated pyrrhotite is also present. No mineralization was observed on the contacts on the ridge but the mineralized gossans below appear to be related to the contacts where they would occur in the valley.

The granite intrudes interbedded quartzites, cherts, limestones and possibly some rocks of volcanic origin. Several small shear zones mineralized with galena, sphalerite and pyrrhotite occur in the general vicinity of the intrusive and float consisting of massive galena in quartzite is found on the south slope of the mountain to the east of the main showing. A sample of this material assayed 118 ounces of silver.

The area was prospected by Risby, French, and Waugh during the 1966 field season (employees of Atlas Explorations) and on August 27th and 28, 1966 the Nar 1 to 72 mineral claims were staked.

Outcrop is abundant in cirque walls on the west, north and east sides of NAR Mountain where a fairly reliable geologic picture has been developed. The south slope of the mountain is covered with a thick blanket of talus at a repose angle of about 30 degrees.

Seven stratigraphic units have been distinguished. The older five units are complex, consisting of varying thicknesses of quartzite, chert, rhyolite and dolomite; the two younger units consist of limestone with local skarn and fresh dolomite. The sediments are cut by a small granite body west of the mountain peak. Structure is simple, consisting of a moderately tight, gently plunging, east-west trending anticline. Along the north, limb dips are steep and locally recumbent, gentle dips prevail over the crest, the south limb is not exposed.

Two varieties of mineralization have been noted, - lead, zinc, copper replacement in diopside-pyrrhotite skarn and lead-zinc replacement and fillings in quartz veins and quartzite breccia. Mineralization appears to be generally related to the axis of the anticline.

A narrow (up to 2 feet wide) band of diopside-pyrrhotite skarn interbedded in a steeply dipping, east-west striking succession of chert, limestone, dolomite and skarn, contains massive copper, lead, and zinc mineralization. Float occurs westerly from the area of exposure over a distance of about 1,000 feet. Marginal to the band is a 15 foot by 200 foot lense of low grade chalcopyrite-bearing crystalline limestone.

#### SOUTH NAR

Three float locations are known in the south Nar talus slope

1. The 'French' No. 2 Float consists of a 20 by 30 foot area of frost heaved rubble of quartz vein and quartzite breccia material with filling and replacement lead-zinc mineralization; a sample of about 30 representative chips of all mineralized

material ran: (Assay No. 1678)

Au	Ag	Cu	Pb	Zn
.02	48.9	0.11	9.5	3.8

2. The 'Risby' No. 1 Float consists of a 5 by 20 foot area on the steep talus slope of a diopside-pyrrhotite skarn with replacement (some banded) lead-zinc. A representative sample assayed: (Assay No. 1679)

Au	Ag	Cu	Pb	Zn
0.02	53.8	0.01	14.0	1.2

3. The 'Waugh' Float consists of a large boulder and minor talus about 200 feet south of the 'Risby' Float; the boulder is diopside-pyrrhotite skarn with lead-zinc which assayed: (Assay No. 1680)

Au	Ag	Cu	Pb	Zn
Tr.	4.56	0.15	9.3	13.9

#### NORTH NAR

A mineralized zone of significance was located on the North Nar. It is a 17 by 200 foot lense of diopside-pyrrhotite skarn and calcite-gossularite skarn mineralized with zinc and minor copper. A continuous chip assay ran: (Assay No. 1681)

Au	Ag	Cu	Pb	Zn
Tr.	0.28	Tr.	Tr.	3.9

The lense occurs in a steeply dipping sequence of skarn, crystalline limestone, cherty dolomite and chart. The area is well exposed and no other mineralization of significance was noted.

About 3/4 mile west of the above described local floats of zinc, minor lead and copper in skarn were found. A geochemical survey was done over the area and nothing anomalous detected. Although the source of the float has not been located, it is not believed to be of much significance for material is sparse and mainly zinc bearing with only minor lead, therefore holding limited silver potential.

#### WEST NAR

Fifteen representative grab samples from float and showings of zinc, minor lead replacement in diopside-pyrrhotite skarn (originally believed to be fine-grained altered monzonite) were re-run in the Ross River Lab. and gave an average of 14.22% Zinc with minor silver and lead. Mineralization is scattered over 2,000 feet along strike in a gently dipping sequence of quartzite, chert, rhyolite, and skarn which occurs along the axial area of the main Nar anticline.

#### CONCLUSIONS AND RECOMMENDATIONS

The South Nar Area appears to hold the best potential for economic sulphide mineralization. Two float locations indicate high grade potential (over \$100.00 per ton). Both are associated with distinct coincident geochemical-magnetic anomalies which suggest continuity along strike. Although both are probably narrow, small tonnage situations (comparable to narrow skarn leses located elsewhere on the Nar), it is believed that trenching is definitely warranted.

Respectfully submitted,

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

PERSONNEL

SHELDON LAKE GEOLOGICAL CREW

NAR MINERAL CLAIM

T. Adamson	Geologist, Party Chief	302 - 2044 West 3rd Avenue, Vancouver 9, B. C.
C. Scott	Geologist's Helper	1895 - 26 Street, West Vancouver, B.C.
P. Risby	Prospector	Ross River, Y. T.
E. Dick	Prospector's helper	Ross River, Y.T.

# NAR GROUP (NORTH-SHOWING)

SCALE 1"=100'

GEOLOGY: T. ADAMSON

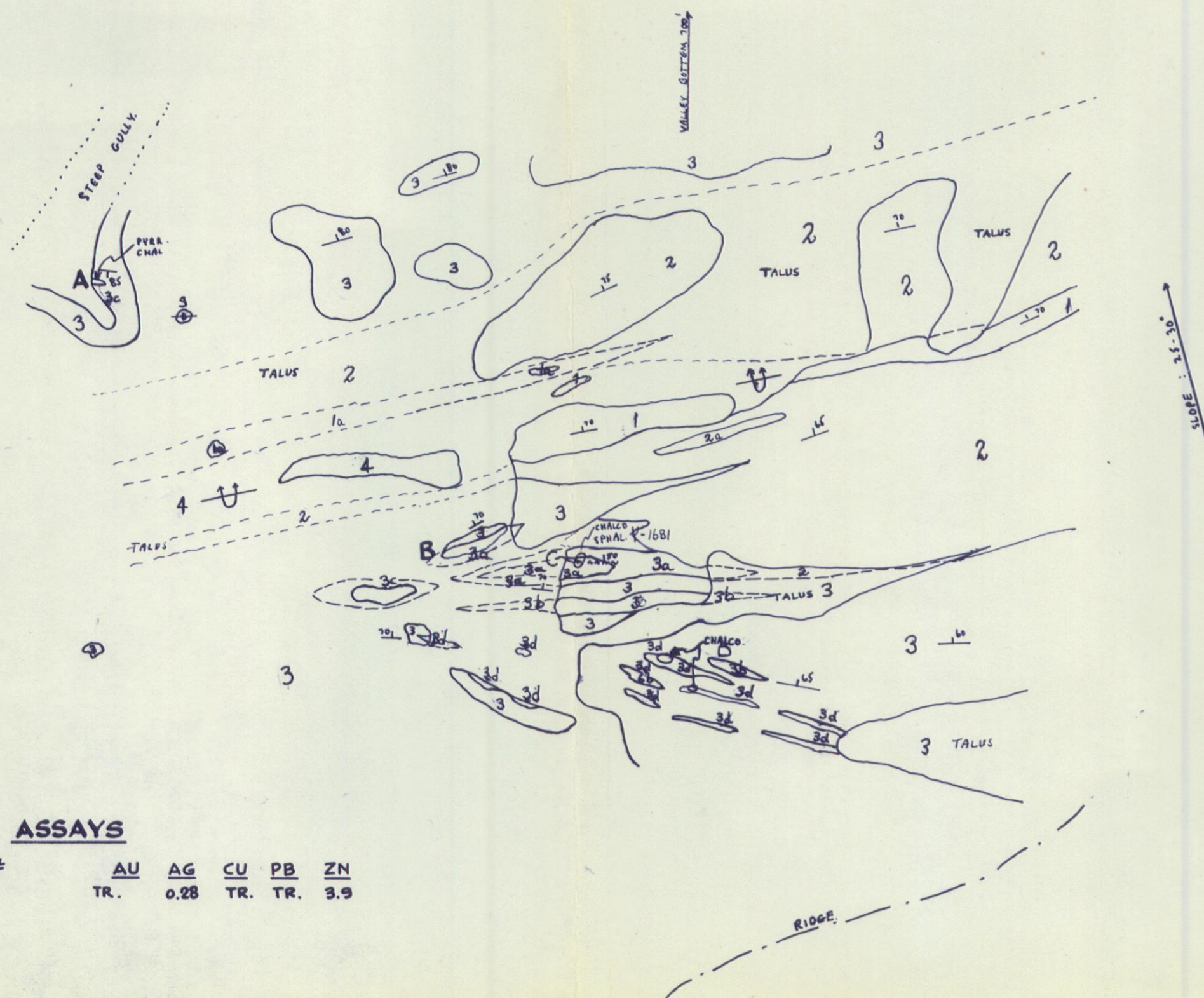
DATE: JULY 1967

LOCATION SEE 1000'/1" NAR GEOLOGY MAP

## LEGEND:

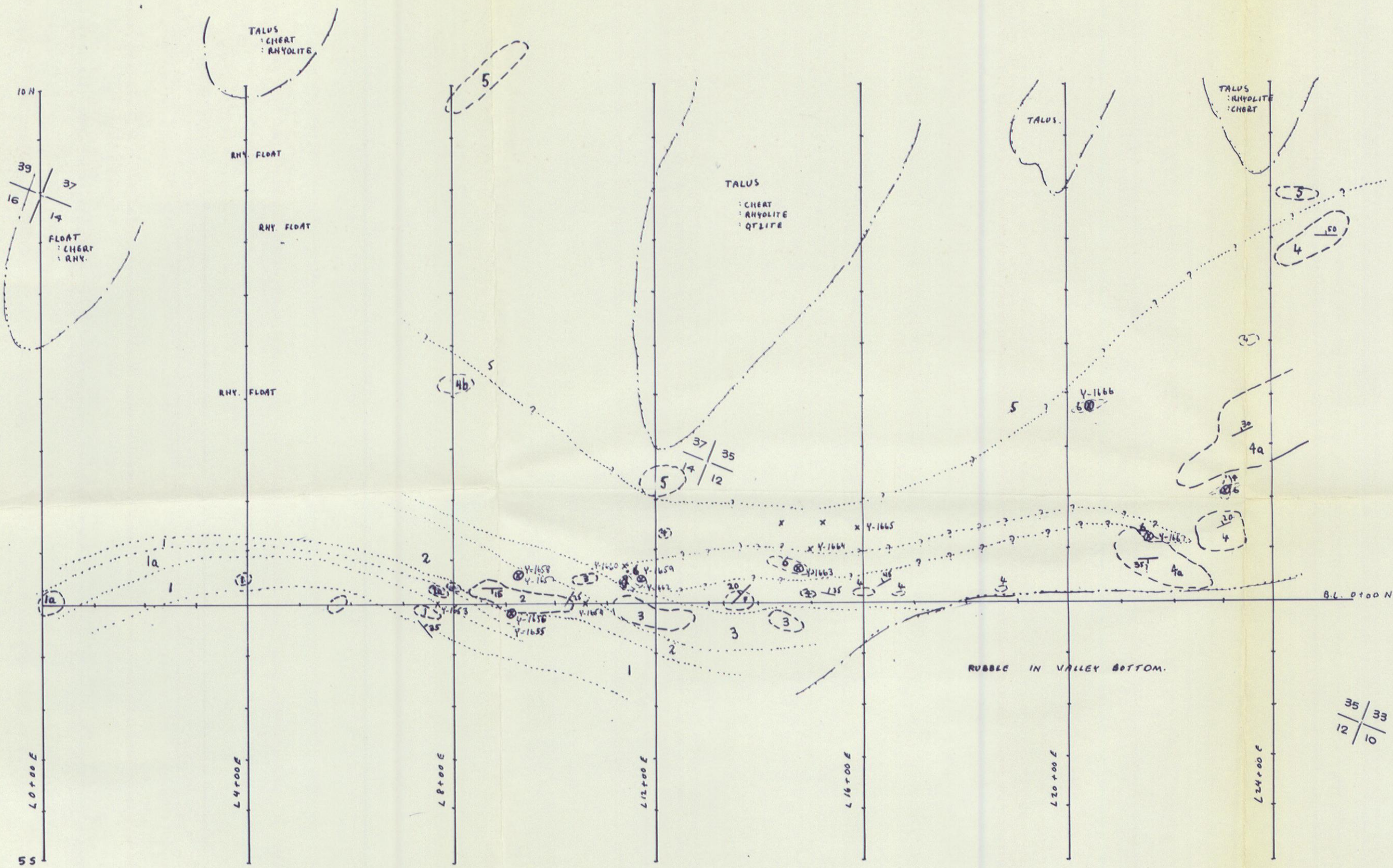
- 3** CHERT
    - A) LIMESTONE
    - B) BLACK SLATE
    - C) DIOPSIDE SKARN
    - D) GROSSULARITE CALCITE SKARN
  - 2** INTERBEDDED CHERT + LIMESTONE
    - A) LIMESTONE
  - 1** CHERTY DOLOMITE
    - A) CHERT
- A - DIOPSIDE SKARN  
B - GROSSULARITE CALCITE SKARN

- A) DIOPSIDE SKARN; DISSEMINATED PYRRHOTITE; MINOR SPHALERITE (< 1%) AND CHALCOPYRITE (< 1%) WIDTH 1', EXPOSED FOR LENGTH OF 4' ASSAY #
- B) FLOAT ONLY. DIOPSIDE SKARN. HEAVELY DISSEMINATED ARSENOPYRITE + PYRRHOTITE. VERY MINOR CHALCOPYRITE AND SPHALERITE ASSAY #
- C) CHALCOPYRITE (DISSEMINATED) AND SPHALERITE (DISSEMINATED) TO MASSIVE PARALLEL TO BEDDING. IN WHITE SHEARED LIMESTONE + DIOPSIDE SKARN. MAXIMUM WIDTH OF MINERALIZATION 15'. EXPOSED FOR 20'. VISUAL GRADE ESTIMATION, ACROSS 15': .5% CU, 3% ZN.
- D) MINOR CHALCOPYRITE (< 1%) DISSEMINATED IN A SMALL AREA OF TWO GROSSULARITE-CALCITE SKARN LENSES.



## ASSAYS

ASSAY #	AU	AG	CU	PB	ZN
Y-1681	TR.	0.28	TR.	TR.	3.9



# NAR GROUP (WEST)

GEOLOGY GRID # 1

SCALE 1" = 200'

GEOLOGY: T. ADAMSON

DATE: JUNE '67

## LEGEND:

- 6 MONZONITE FINE GRAINED
- 5 RHYOLITE
- 4 CHERT
  - A) INTERBEDDED CHERT + RHYOLITE
  - B) QUARTZITE
- 3 QUARTZITE
- 2 CHERT, WHITE TO RUSTY, MOSTLY MASSIVE
- 1 QUARTZITE, WHITE TO BLACK, FINE GRAINED
  - A) RHYOLITE, WHITE TO BUFF, PROMINENT QTZ. EYES
- ⊗ SPHALERITE IN MONZONITE
- ⊗ SPHALERITE IN MONZONITE (FLOAT)
- OUT CROP LIMIT
- CONTACT
- ASSUMED CONTACT

## ASSAYS:

#	AU	AG	CU	PB	ZN
Y-1653	ND	.23	ND	.04	12.0
Y-1654	ND	4.85	ND	2.75	5.25
Y-1655	ND	2.35	ND	2.75	.75
Y-1656	ND	.17	ND	.01	10.0
Y-1657	ND	.31	ND	.04	11.5
Y-1658	ND	.17	ND	.008	9.75
Y-1659	ND	.47	.04	.27	8.00
Y-1660	ND	.16	ND	.037	19.5
Y-1661	ND	.12	ND	.031	2.63

## RESULTS

#	AU	AG	CU	PB	ZN
Y-1662	ND	-	.05	.01	4.3
Y-1663	ND	.33	.06	.01	3.6
Y-1664	ND	-	.05	.01	9.5
Y-1665	ND	-	.12	-	9.6
Y-1666	ND	-	.01	.01	16.0
Y-1667	-	-	.11	.02	.95

