



41J01NE0031 0014B1 VICTORIA

010

63A.234

GEOLOGICAL REPORT BLIND RIVER URANIUM MINES, VICTORIA TOWNSHIP, SUDBURY, M.D.

INTRODUCTION

This property of Blind River Uranium Mines Limited is a uranium prospect in the Blind River Area.

The claims were staked during the summer of 1953.

The property is overlain by the uranium favourable Mississagi quartzite formation.

A Geological Mapping Program and a diamond drilling program were carried out during the Summer and Autumn of 1954.

PROPERTY DESCRIPTION

The property consists of 27 unsurveyed mining claims located in Victoria Township, Sudbury M.D. The claims are numbered as follows:

S 67559 to S 67585 inclusive.

The property is owned by Blind River Uranium Mines Limited, with offices at 85 Richmond Street, West, Toronto, Ontario.

ACCESSIBILITY

The property lies within 1 1/2 miles of Highway No. 17 and the C.P.R. Railway immediately north of Walford, Ontario. An all weather gravel road transects the property near the west end of Sugar Lake.

WORK PROGRAMS

The geological mapping program and diamond drilling program were carried out under the direction of Mr. R. J. Cook, Box 400, Blind River, Ontario.

The mapping program was completed between July 16th, and October 31st, 1954.

The Diamond drilling program was completed between August 4th, and December 2nd, 1954.

GEOLOGY

(1) TABLE OF FORMATIONS

| | | |
|----------------------|---|------------------------------------------|
| Pleistocene & Recent |) | Sand, gravel, boulder, clay, and swamp. |
| Keeweenawan |) | Diabase, Diorite and granite. |
| Huronian |) | Quartzite, Conglomerate and Argillite. |
| Prehuronian |) | Granite, Granite Gneiss, and greenstone. |

(11) SUMMARY OF GEOLOGY

The geology of the property is one of Huronian sediments unconformably overlying a basement complex of granite, granite gneiss and greenstone. Post - sediment intrusives include diabase, diorite, and granite.

The sediments have been faulted into near vertical positions.

GEOLOGY (CONTINUED)

This assemblage is overlain by sand, gravel, boulder clay, and swamp material of Pleistocene and recent age.

(111) DESCRIPTION OF ROCK TYPES

The Huronian sediments may be divided into three (3) principal rock types as follows:

- (1) Quartzite
- (2) Argillite and greywacke.
- (3) Boulder Conglomerate.

All of these sediments belong to the Lower Huronian or Bruce Series. The Mississagi formation includes quartzite, argillite and greywacke. The Bruce Conglomerate formation outcrops in claim # S 67559 and is associated with some argillite and greywacke zones.

The outcrop of the contact of the Mississagi quartzite formation and the Basement Complex extends in an east-west direction over the full width of the property. The Mississagi formation consists of fine-grained, siliceous, white to pink quartzites, argillite and greywacke. There are a few occurrences of pebble conglomerate lenses within the quartzites. These rock types are typical of the upper part of the Mississagi formation.

The Bruce formation which outcrops in claim number S 67559 consists of boulder conglomerate, argillite, and greywacke.

GEOLOGY (CONTINUED)

(IV) STRUCTURAL GEOLOGY

NOT TO BE REMOVED FROM
THE OFFICE OF THE RESIDENT
GEOLOGIST, ONT. DEPT. OF MINES
BAULT, STE. MARIE, ONT.

The sediments on the property have been faulted into near vertical positions. In claim numbers S 67567 and S 67569, there appears to have been some overturning of the sediments. This also appears true farther east in claim number S 67585. The contact of the sediments and the Basement Complex is faulted along its entire length. There is also some post-sediment intrusive rock along this contact. In most instances this intrusive is basic and is of dioritic composition and texture. However, near the east end of Sugar Lake there are several outcrops of granite which appears to be post-sediment in age. This granite contains pink salmon - coloured feldspar and the mafic content is very low. Feldspar content is predominant, with low quartz content. These intrusives appear to have come in along the contact of the sediments and Basement Complex. This appears true on the surface and is evident in drilling results. The maximum vertical distance that the contact was intersected is 585 feet. At 560 feet intrusive contact between sediments and diorite was intersected. Near the base of the drill hole granitic stringers cut the diorite. There has been some post-intrusive movement along the contact zone.

At least one other fault traverses the property south of the contact zone. Between this fault and the contact there has been some overthrusting of the sediments.

GEOLOGY (CONTINUED)

West of Sugar Lake this southern fault is terminated against a north westerly trending fault which cuts the contact zone in claim Number S 67561. This fault cuts off the argillite member which outcrops in claim number S 67562.

(V) MINERALIZED ZONES

There are two principal types of mineralized zones on the property; as follows:

- (1) Radioactive columbium, thorium, and uranium bearing zones in sheared impure quartzites.
- (2) Brecciated zones in altered quartzites which carry uranium, titanium and columbium values and 9 trace elements.

Of the two, the latter appears the most interesting economically. An occurrence of the first type is located in claim number S 67559. Anomalous radioactivity up to fifteen (15) times background was obtained in narrow shear zones in impure quartzites. However, lateral and vertical continuity of these were disappointing.

An occurrence of the second type occurs in claim number S 67578 and S 67579. The mineralized zone occurs in brecciated altered zones in quartzites. Diamond drill hole numbers 6, 7, 8, 9, and 10 intersected this material. Values in columbium, uranium, and titanium were obtained. Investigation proved the mineral to be one of metamict variety.

NOT TO BE REMOVED FROM
THE OFFICE OF THE RESIDENT
GEOLOGIST. ONT. DEPT. OF MINES
SAULT STE. MARIE, ONT.

SUMMARY OF EXPLORATION WORK TO DATE

A geological mapping program on a scale of one (1) inch equals 400 feet has been completed on the group.

A diamond drilling program has been completed. Surface sampling has been carried out using a Packsack diamond drill.

TOTAL FOOTAGE OF A X T type core is as follows:

D.D.H. # 2 to D.D.H. # 11 inclusive - 3642.5 ft.

TOTAL FOOTAGE OF E X T type core is as follows:

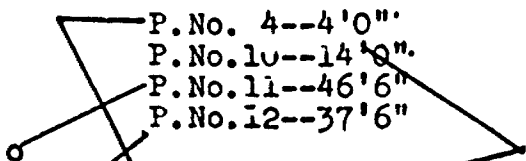
D.D.H. # 1 311.0 ft.

Packsack Holes Nos. 1, 2, 3, 4, 5, 10, 11, 12, 154.0 ft.
sum total 4107.5 ft.

Respectfully Submitted,


R. J. Cook. MSc.

RJC;awg



400'0"
D.D.H. No.11

S.67569

S.67576

SUGAR

L'AKE

S.67579

PLAN SHOWING
POSITION OF

DIAMOND DRILL HOLE No.11

ALSO OF P.I. 4, 10, 11, 12

ON MINING CLAIMS S.67569, S.67579.

VICTORIA TOWNSHIP
SUDBURY MINING DIVISION

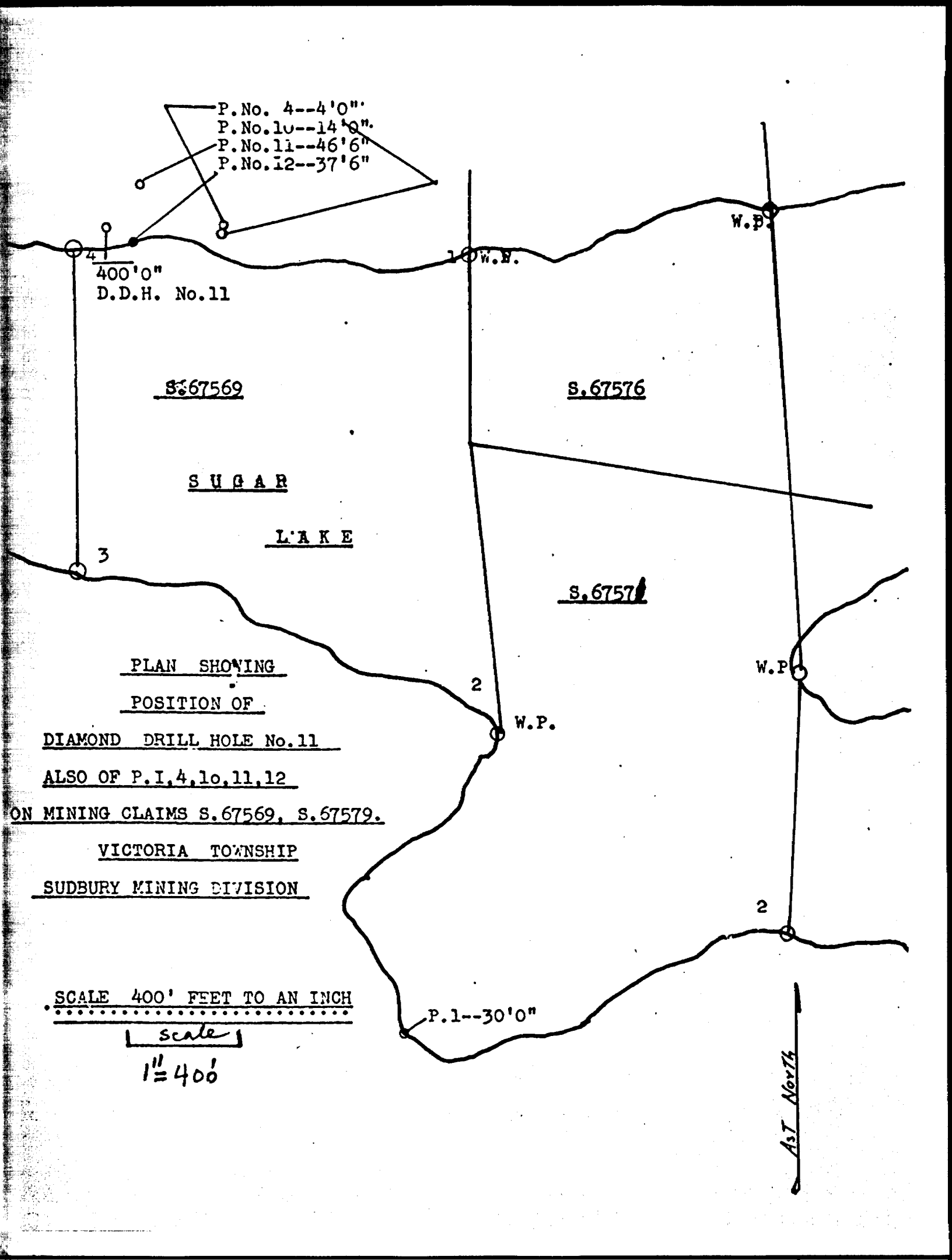
SCALE 400' FEET TO AN INCH

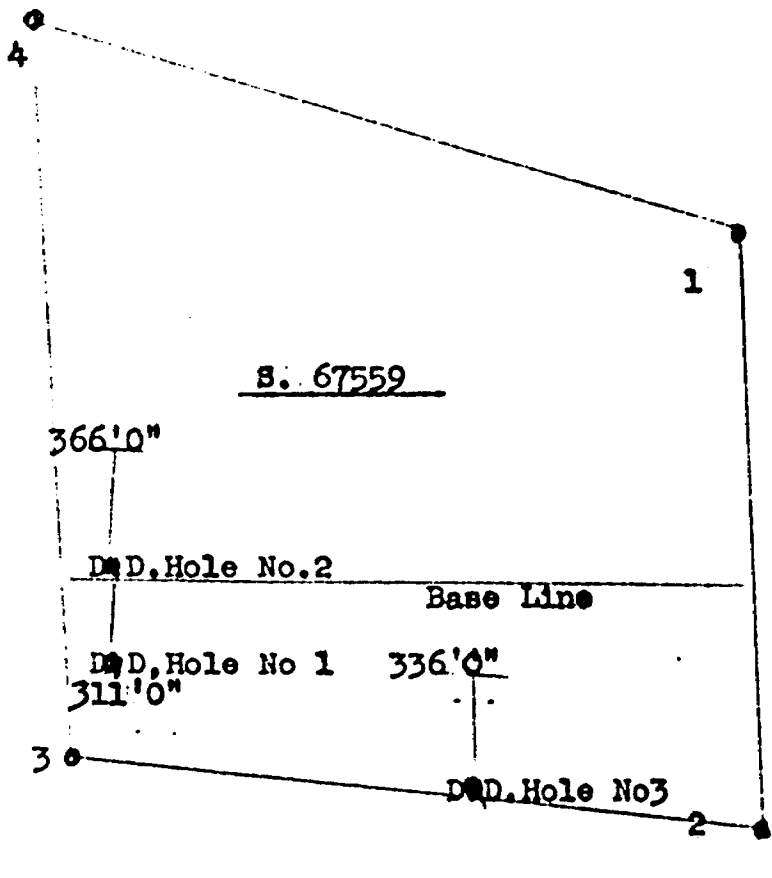
scale

1" = 400'

P.1--30'0"

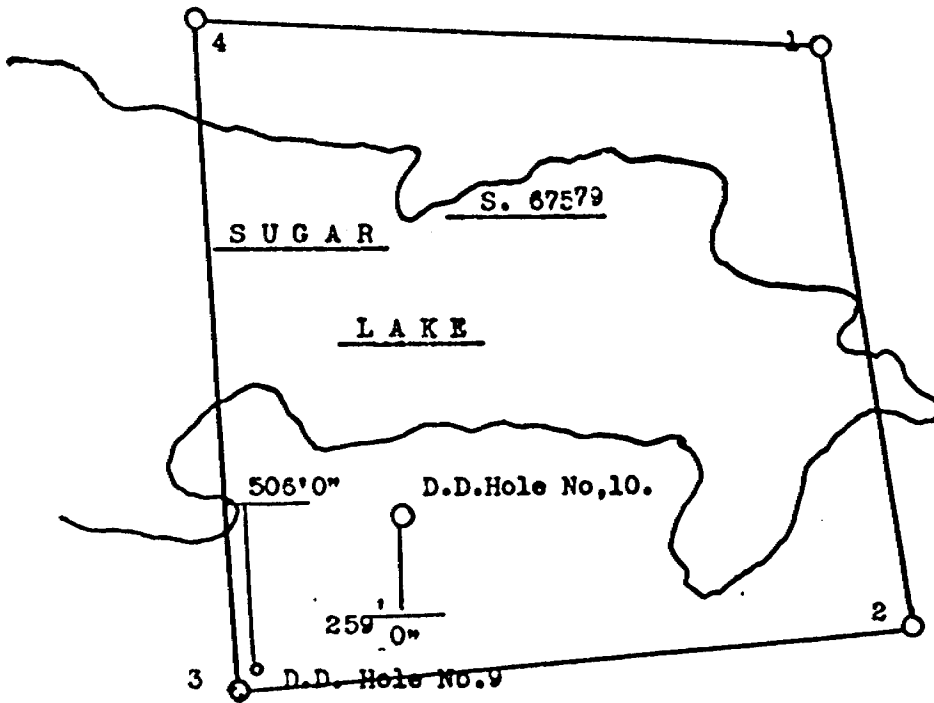
AsT North





PLAN SHOWING
POSITION OF
DIAMOND DRILL HOLES 1, 2, & 3.
ON MINING CLAIM S. 67559
VICTORA TOWNSHIP
SUDBURY MINING DIVISION

Scale:- 400 feet to an Inch
scale
 1" = 400'



Ast. North

PLAN SHOWING

POSITION OF

DIAMOND DRILL HOLES NOS. 9 and 10,

on mining claims S. 67579

VICTORIA TOWNSHIP

SUBBURY MINING DIVISION

Scale 400 feet to an inch

Scale

1" = 400'

NOT TO BE REMOVED FROM
THE OFFICE OF THE RESIDENT
GEOLOGIST, ONT. DEPT. OF MINES
'SAULT STE. MARIE, ONT.

NAMES OF MEN EMPLOYED ON GEOLOGICAL MAPPING PROGRAM FOR BLIND RIVER URANIUM MINES LIMITED IN VICTORIA, SUDBURY MINING DIVISION.

James Brown -- University of Western Ontario, London, Ontario.
Geological Mapping.
July 27th - September 21st 56 days
1954

William Thorne - University of Manitoba, Winnipeg, Manitoba.
Geological mapping.
August 31st - Sept. 15th, 1954 16 days

R.J. Cook -- Blind River, Ontario.
July 16th to October 31st, 1954 (2 days
per week) 32 days

TOTAL FOR GEOLOGICAL MAPPING 104 days

NAMES OF MEN EMPLOYED FOR LINE CUTTING FOR BLIND RIVER URANIUM MINES LIMITED IN VICTORIA, SUDBURY MINING DIVISION.

Ivan Beckerton - Spanish, Ontario.
August 31st to October 31st, 1954.----- 62 days

Wayne Sandie - Sault Ste. Marie, Ontario.
September 6th, to Oct. 15th, 1954.----- 40 days

Ray Daniher - Callander, Ontario.
October 1st to October 31st, 1954.----- 31 days

TOTAL FOR LINE CUTTING ----- 133 days

DRAUGHTING AND PREPARATION OF REPORT FOR BLIND RIVER URANIUM MINES LIMITED IN VICTORIA TOWNSHIP, SUDBURY MINING DIVISION.

R.J. Cook - Blind River, Ont. Draughting and preparation of
report.
Nov. 15th to Dec.31st, 1954.----- 21 days

Ray Daniher - Callander, Ontario.
Draughting and office work.
November 23rd to December 15th ----- 18 days

TOTAL FOR DRAUGHTING AND OFFICE WORK 39 days




TOTAL NUMBER OF MAN DAYS FOR GEOLOGICAL PROGRAM 276 days

NORTH

DDH. No. 5

DIAMOND DRILL HOLE SECTION.
BLIND RIVER URANIUM MINES LTD.
VICTORIA TWP. SUDBURY MD.
PROVINCE of ONTARIO
SHOWING DDH. No. 5.
SCALE 1 inch = 40 feet SEPTEMBER, 1954.

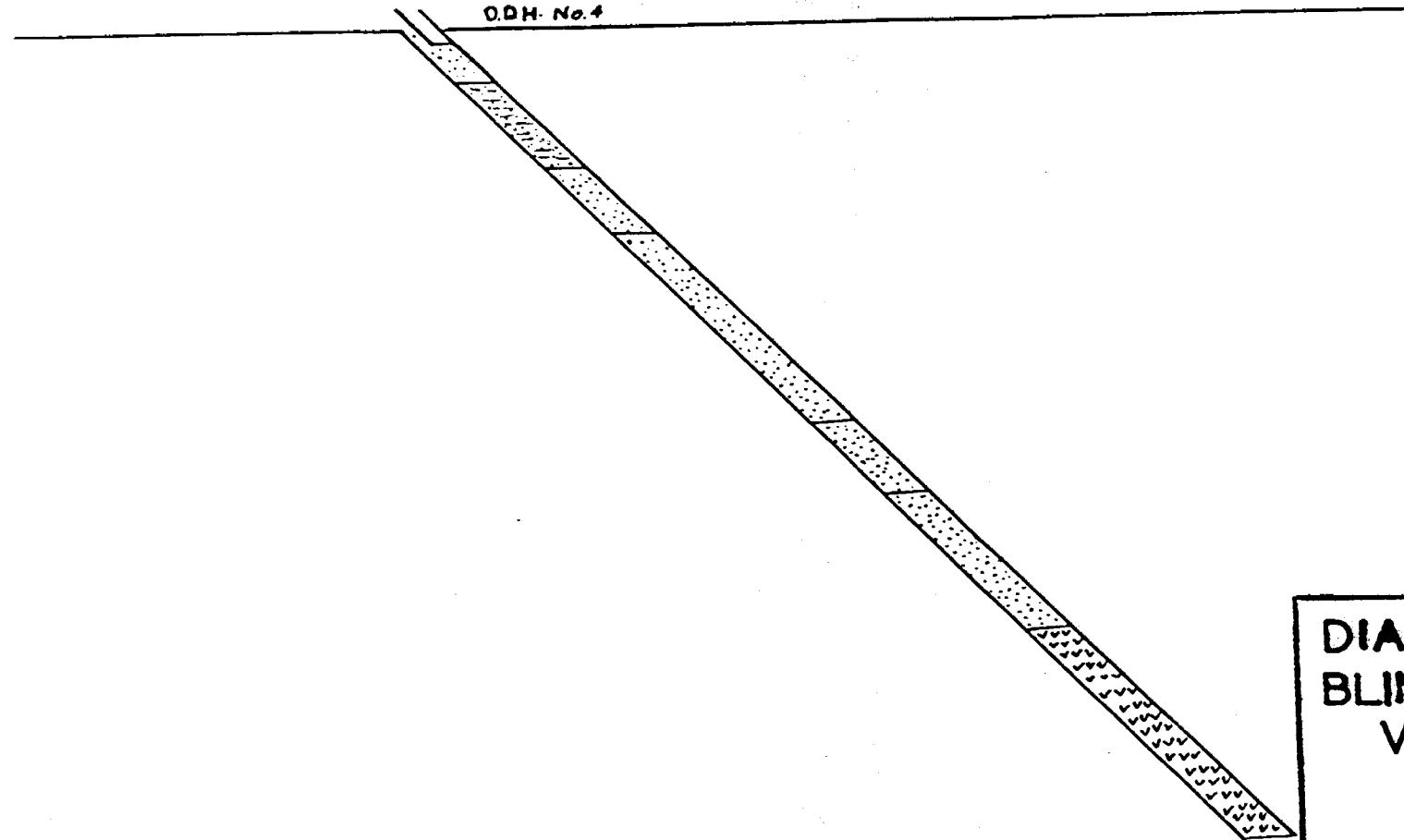
LEGEND

-  ARGILLITE
-  QUARTZITES
-  GREENSTONE


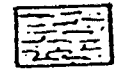

387.0'

NORTH

D.D.H. No. 4



LEGEND

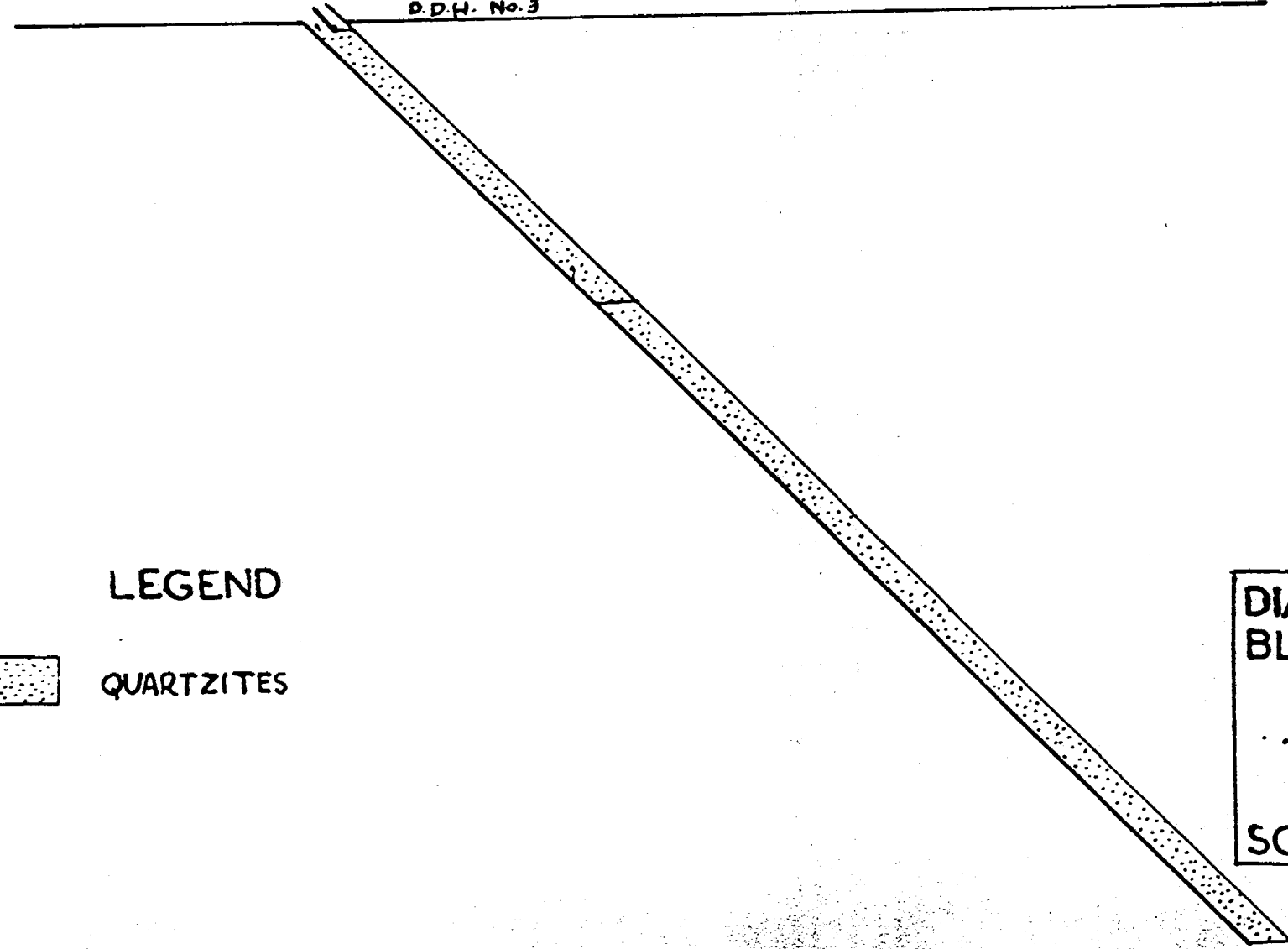
-  QUARTZITES
-  GREY WACHE
-  GREENSTONE

DIAMOND DRILL HOLE SECTION
BLIND RIVER URANIUM MINES LTD.
VICTORIA TWP. SUDBURY M.D.
PROVINCE OF ONTARIO
SHOWING D.D.H. NO.4
SCALE 1 INCH = 40 FEET SEPTEMBER,
1954



NORTH

D.D.H. No. 3



LEGEND

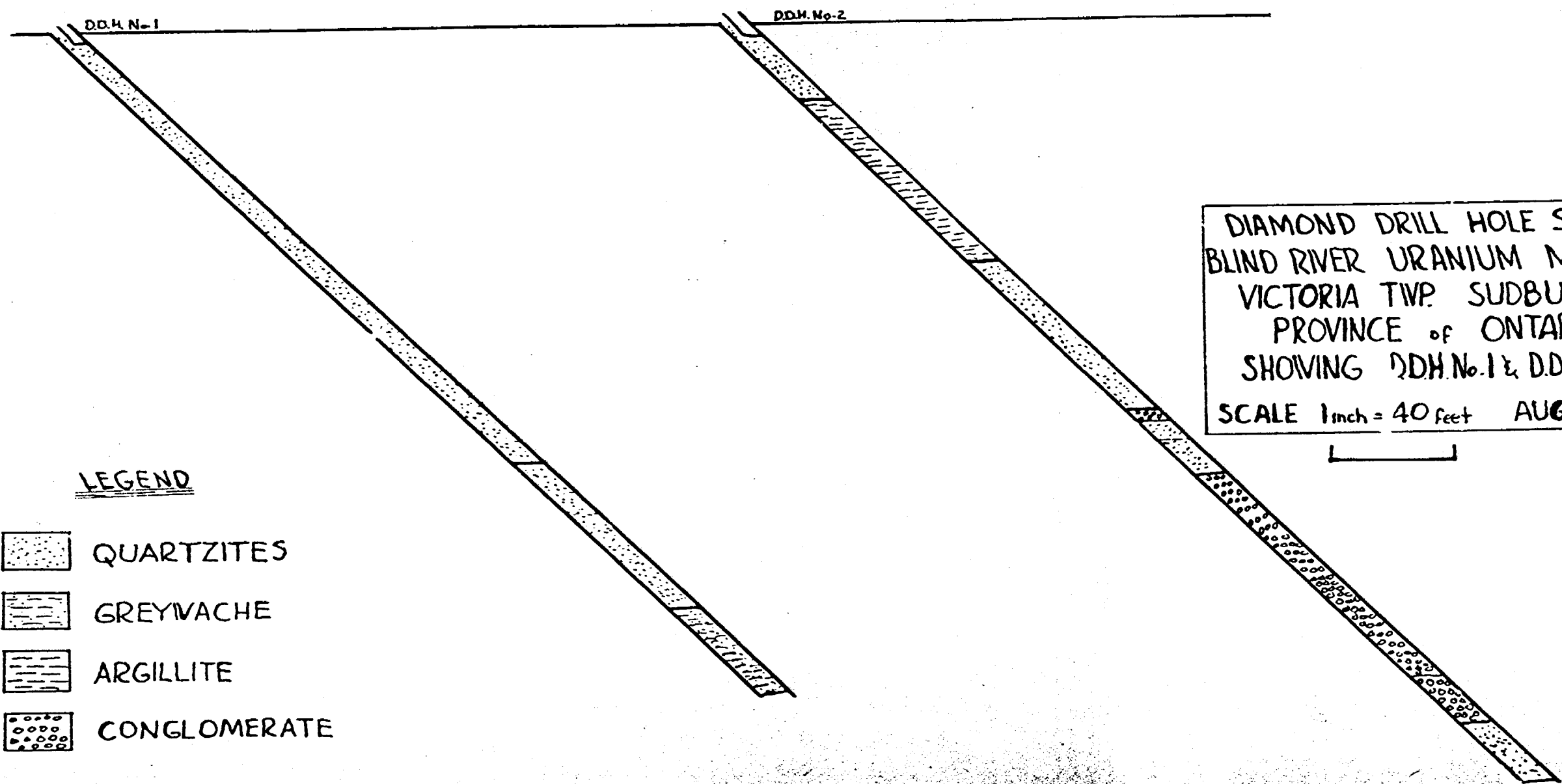


QUARTZITES

DIAMOND DRILL HOLE SECTION
BLIND RIVER URANIUM MINES LTD.
VICTORIA TWP. SUDBURY M.D.
PROVINCE OF ONTARIO
SHOWING D.D.H. NO. 3
SCALE 1 INCH = 40 FEET SEPTEMBER







NORTH



DIAMOND DRILL HOLE SECTION
BLIND RIVER URANIUM MINES LTD.
VICTORIA TWP. SUDBURY M.D.
PROVINCE of ONTARIO
SHOWING D.D.H. No. 1 & D.D.H. No. 2
SCALE 1 inch = 40 feet AUGUST, 1954

LEGEND



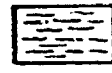

-  QUARTZITES
-  GREYWACHE
-  ARGILLITE
-  CONGLOMERATE

NORTH

DDH. No. 6

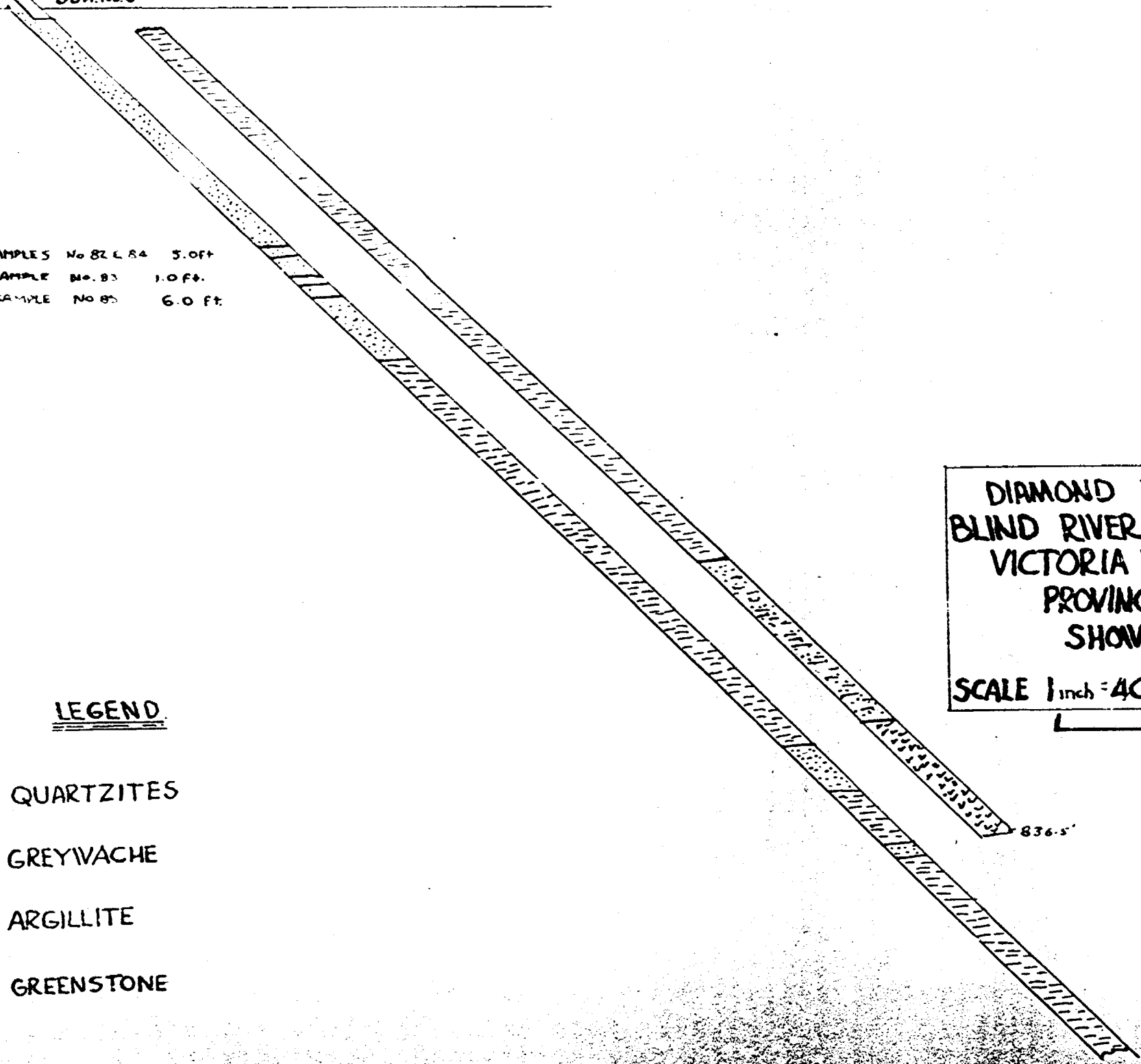
SAMPLES No 82 & 84 5.0 FT
 SAMPLE No. 83 1.0 FT.
 SAMPLE No 85 6.0 FT.

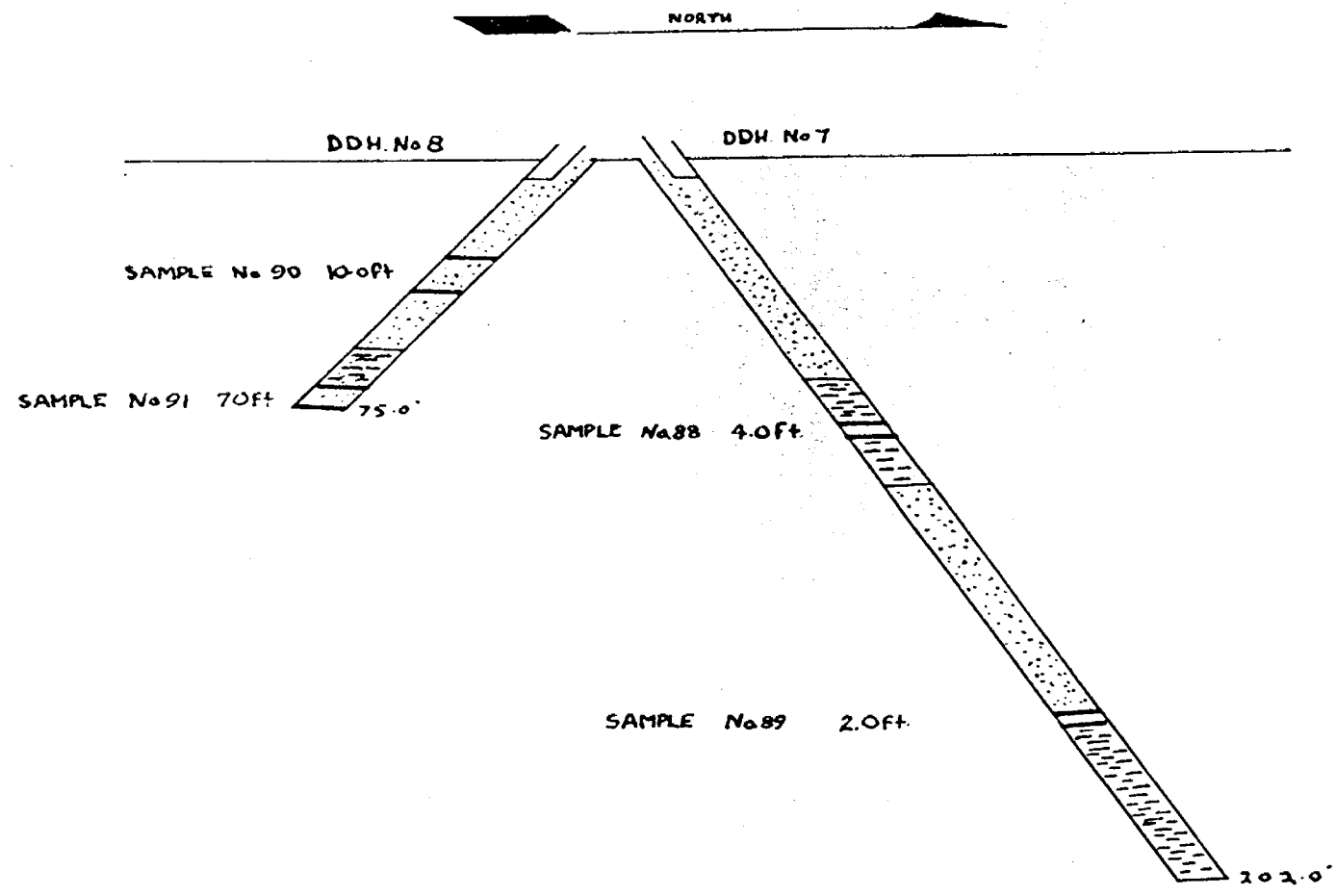
LEGEND

-  QUARTZITES
-  GREYWACHE
-  ARGILLITE
-  GREENSTONE


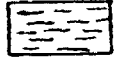
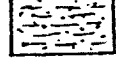
DIAMOND DRILL HOLE SECTION
 BLIND RIVER URANIUM MINES LTD.
 VICTORIA TWP. SUDBURY MD.
 PROVINCE of ONTARIO
 SHOWING DDH. No. 6.
 SCALE 1 inch = 40 feet OCTOBER 1954.

836.5'

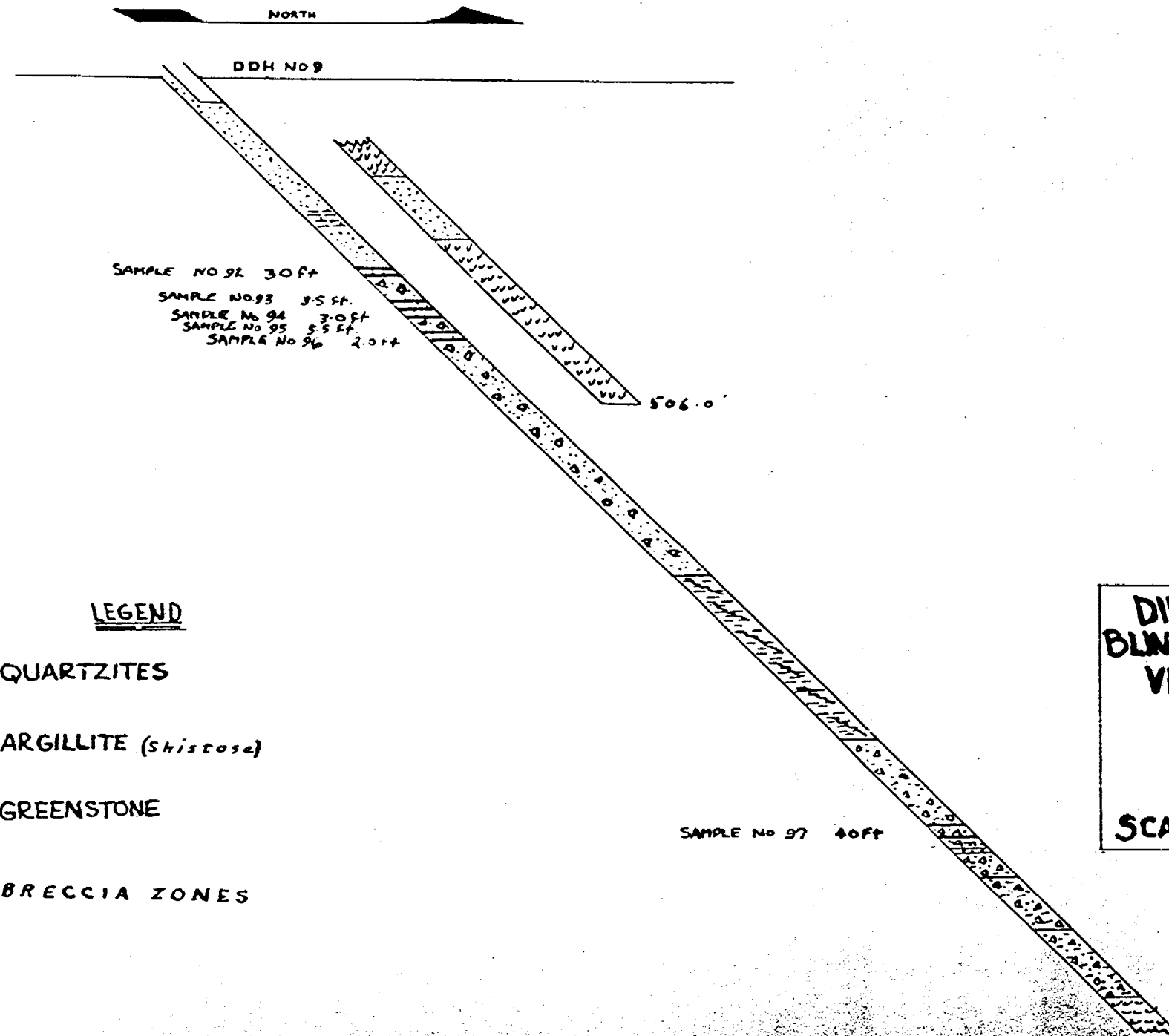








LEGEND

-  QUARTZITES
-  ARGILLITE
-  GREYWACHE

DIAMOND DRILL HOLE SECTION
 BLIND RIVER URANIUM MINES LTD.
 VICTORIA TWP. SUDBURY M.D.
 PROVINCE of ONTARIO
 SHOWING DDH No. 7. DDH No. 8.
 SCALE 1 inch = 40 feet NOVEMBER, 1954

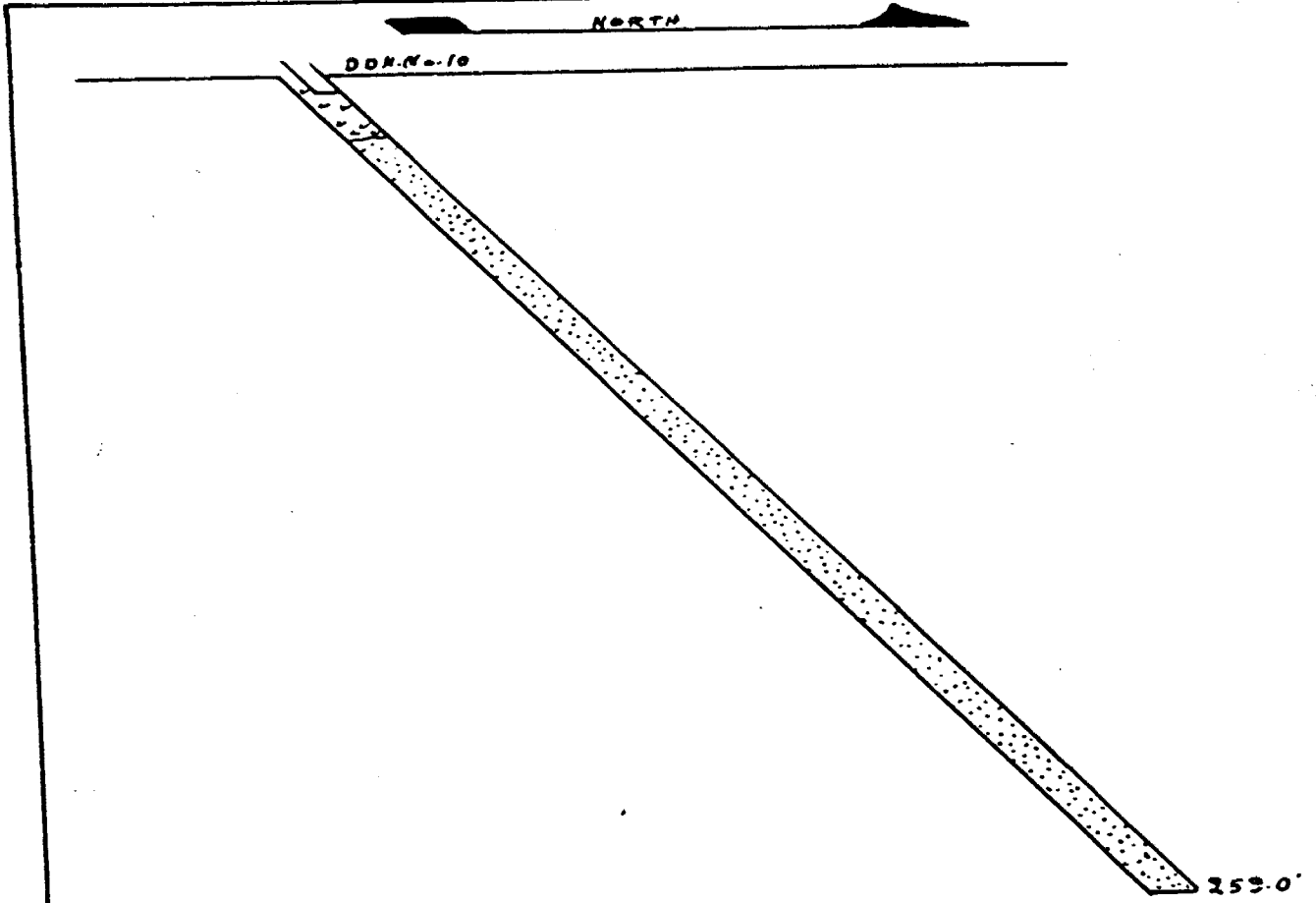


LEGEND


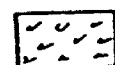
-  QUARTZITES
-  ARGILLITE (*shistose*)
-  GREENSTONE
-  BRECCIA ZONES

DIAMOND DRILL HOLE SECTION
 BLIND RIVER URANIUM MINES LTD.
 VICTORIA TWP. SUDBURY M.D.
 PROVINCE of ONTARIO
 SHOWING DDH No 9.

SCALE: 1 INCH = 40 ft NOVEMBER, 1954.

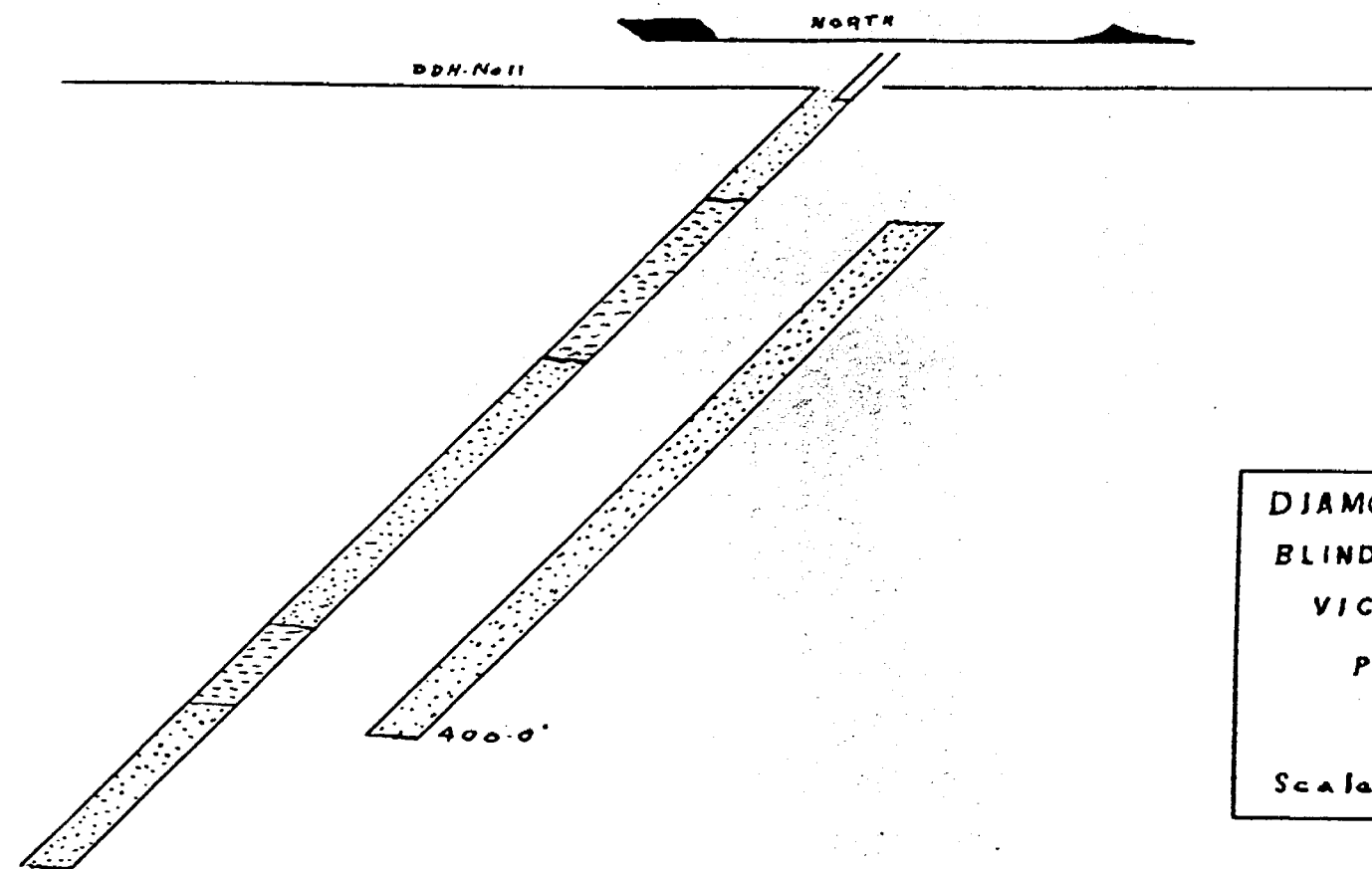


LEGEND

-  QUARTZITES
-  GREENSTONE



DIAMOND DRILL HOLE SECTION
 BLIND RIVER URANIUM MINES LTD.
 VICTORIA TWP. SUDBURY M.D.
 PROVINCE OF ONTARIO
 SHOWING D.D.H. No. 10
 Scale 1 inch = 40 feet November, 1954





DIAMOND DRILL HOLE SECTION
 BLIND RIVER URANIUM MINES LTD
 VICTORIA TWP. SUDBURY M.D
 PROVINCE of ONTARIO
 SHOWING D.D.H. No. 11
 Scale 1 inch = 40 feet December, 1954

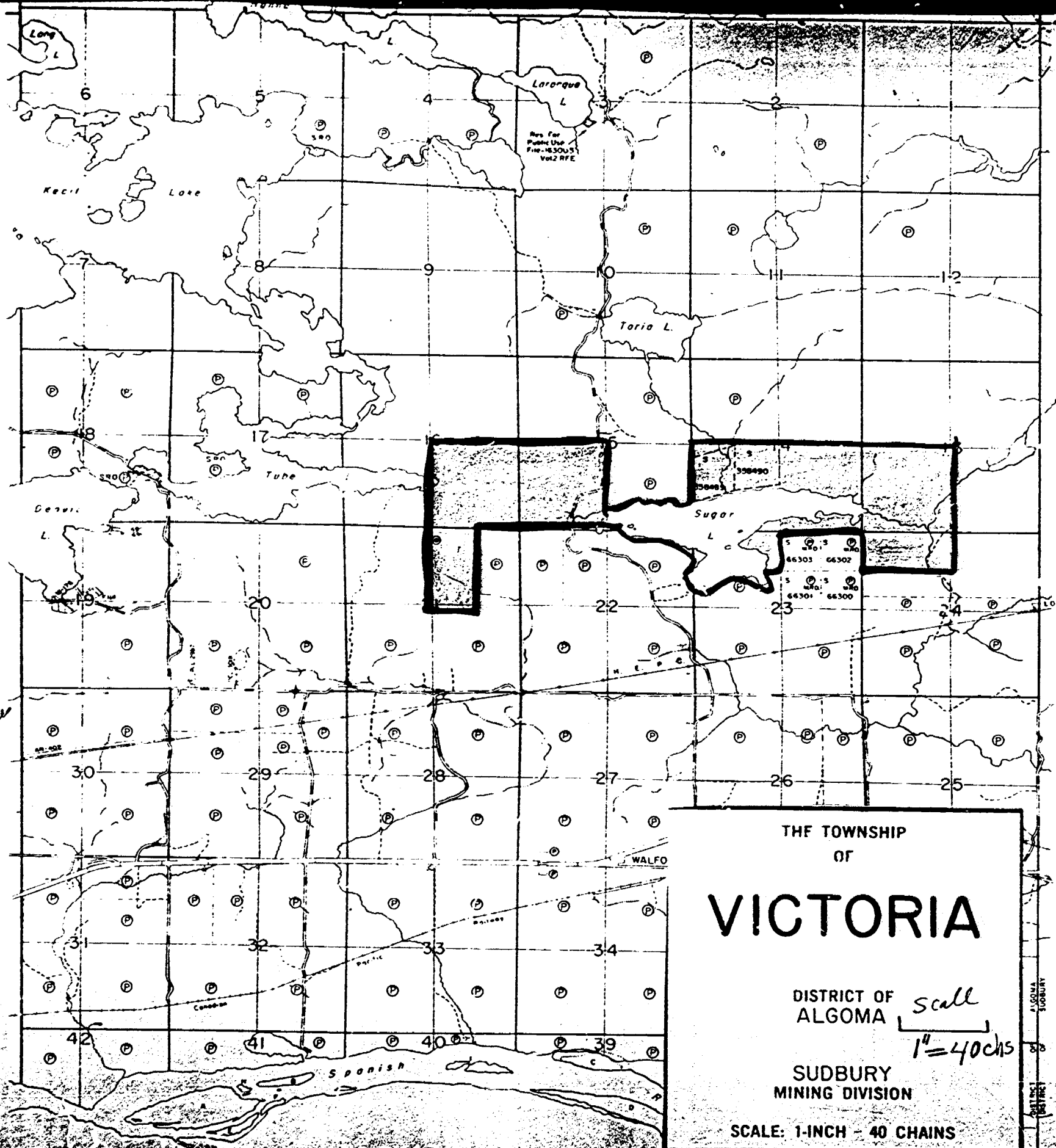
LEGEND

-  Argillite
-  Quartzites

SHELDEN TWP. M. 109

SALTER TWP. M. 1087

*Blind River
The Mining
R.R.*



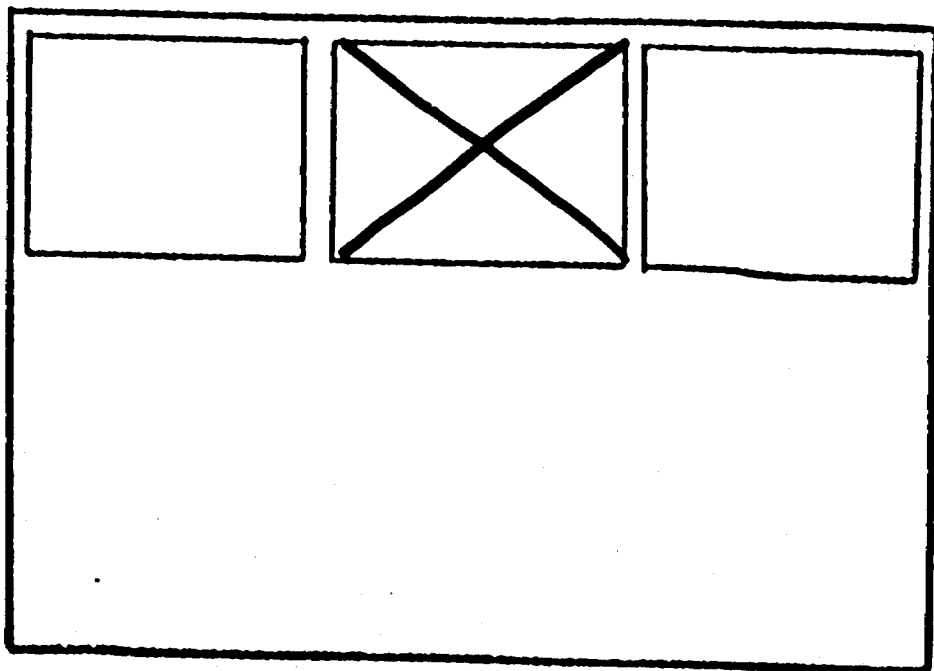
THE TOWNSHIP
OF
VICTORIA
DISTRICT OF ALGOMA *Scale*
1" = 40 chs
SUDBURY
MINING DIVISION
SCALE: 1-INCH = 40 CHAINS

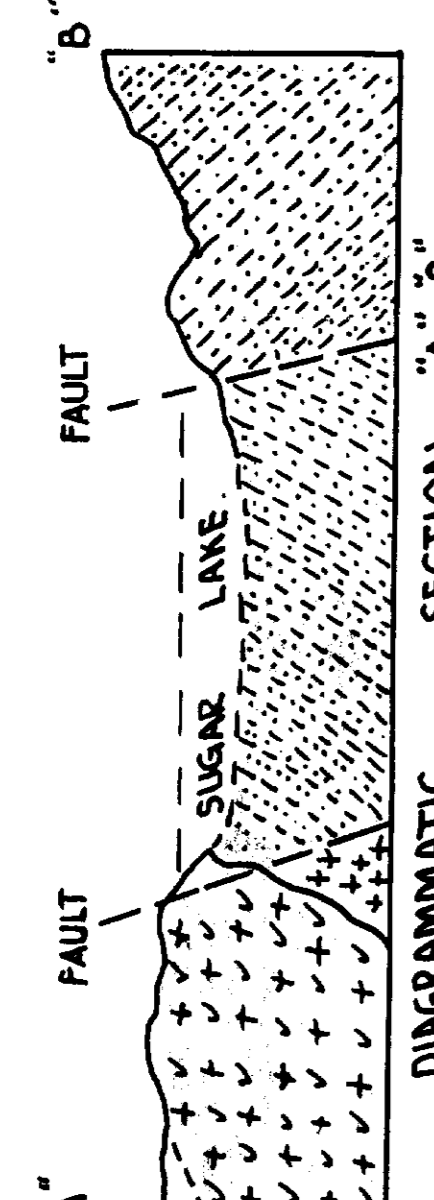
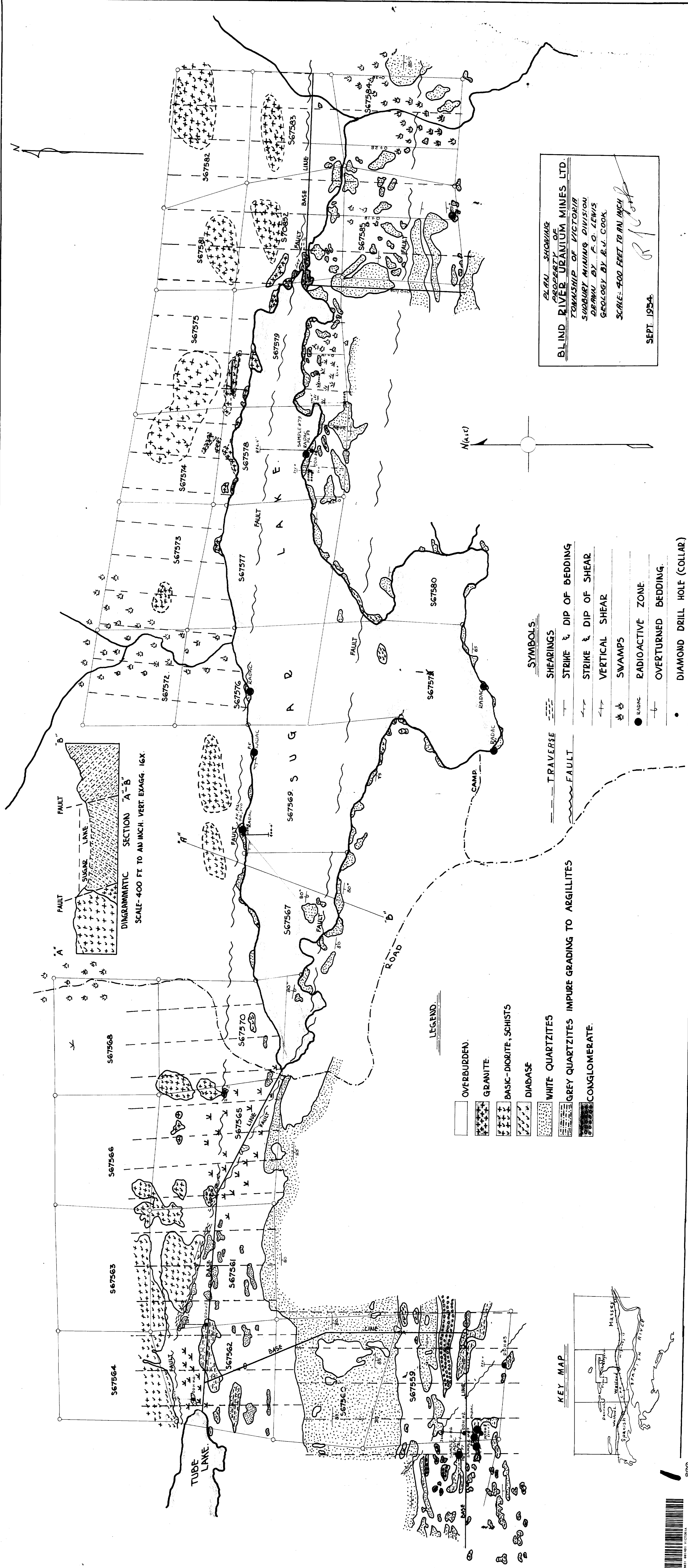
SPANISH RIVER R. No. 5

SEE ACCOMPANYING
MAP(S) IDENTIFIED AS

VICTORIA-0014-B1 #1

LOCATED IN THE MAP
CHANNEL IN THE FOLLOWING
SEQUENCE (X)

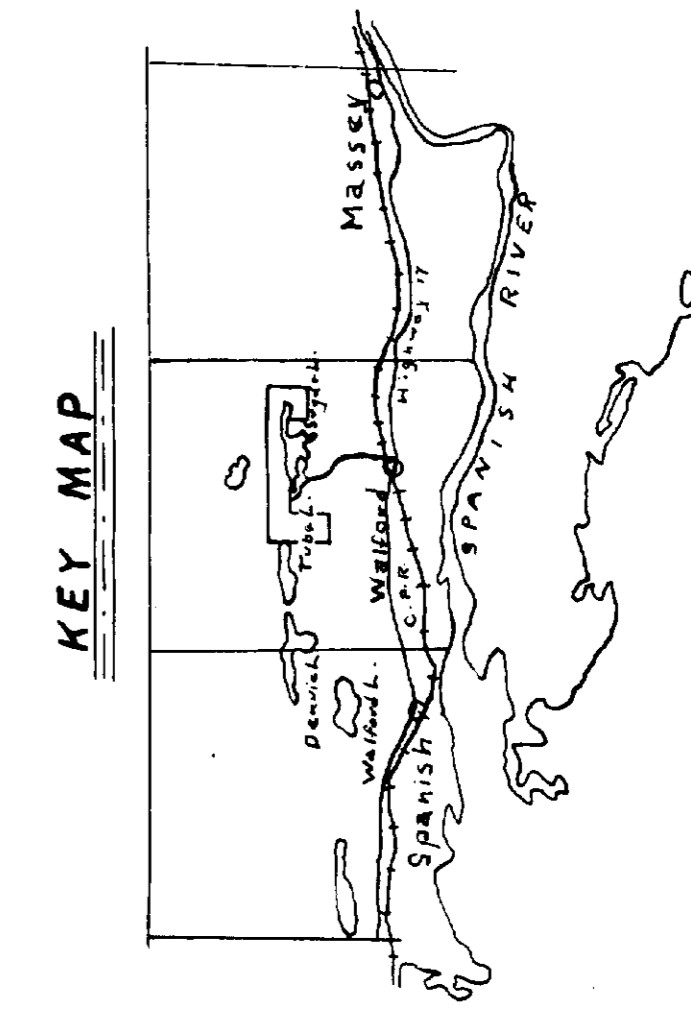




- LEGEND**
- OVERBURDEN.
 - GRANITE.
 - BASIC-DIORITE, SCHISTS
 - DIABASE
 - WHITE QUARTZITES
 - GREY QUARTZITES IMPURE GRADING TO ARGILLITES
 - CONGLOMERATE.

- SYMBOLS**
- TRAVERSE
 - FAULT
 - SHEARINGS
 - STRIKE & DIP OF BEDDING
 - STRIKE & DIP OF SHEAR
 - VERTICAL SHEAR
 - SWAMPS
 - RADIOACTIVE ZONE
 - OVERTURNED BEDDING
 - DIAMOND DRILL HOLE (COLLAR)

BLAU SHOWING
 PROPERTY OF
BLIND RIVER URANIUM MINES LTD.
 SUBURBY MINING DIVISION
 TORONTO, ONTARIO
 DRAWN BY F.O. LEWIS
 GEOLOGY BY R.V. COOK.
 SCALE-400 FEET TO AN INCH
 SEPT. 1954.



G.S.A. 234