NEW CINCH URANIUM LTD.
Geochemical Survey Report
on the Cinch 1 - 48 Claims

ALRAE ENGINEERING LTD.

This report has been examined by
the Geological Evaluation Unit.
Approved as to technical worth by:

RESIDENT GEOLOGIST

Approved as to cost in the amount
of: $4,800.

RESIDENT MINING ENGINEER

Accepted as representation work
under Section 53(4) Yukon Quartz
Mining Act.

COMMISSIONER OF YUKON

July 9, 1969

TO PROTECT OUR CLIENTS, THE PUBLIC AND OURSELVES, ALL REPORTS ARE SUBMITTED AS THE CONFIDENTIAL PROPERTY OF CLIENTS AND AUTHORIZATION FOR PUBLICATION OF STATEMENTS, CONCLUSIONS AND EXTRACTS FROM OUR REPORTS MUST RECEIVE OUR WRITTEN APPROVAL.

ALRAE ENGINEERING LTD.
VANCOUVER, B.C.
ENGINEERS & GEOLOGISTS
MEMORANDUM

RESTRICTED

Box 1767,
Whitehorse, August 18, 1969.
M.I. M-252 (Eval)

Mining Recorder,
Mayo, Y.T.

Dear Sir:

Report on Geochemical Survey
Cinch 1 - 48 Claims
Hart River Area, Y.T.
New Cinch Uranium Ltd.
by G. Torrinsdale, P. Eng.

On the recommendation of the Resident Geologist and the Mining Inspector
I hereby authorize you to accept this report as representation work under
Section 53 (h) of the Yukon Quartz Mining Act to the value of Four Thousand
Eight Hundred Dollars ($4,800.00).

Yours sincerely,

Original signed by
Commissioner J. Smith

James Smith,
Commissioner.

Attach.
J. C. Torrington:ram

cc: Chief, Oil and Mineral Division
Attention: Geological Evaluation Unit
Central Mining Records - Whitehorse
Resident Geologist
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>CONCLUSIONS AND RECOMMENDATIONS</td>
<td>1</td>
</tr>
<tr>
<td>LOCATION AND ACCESS</td>
<td>1</td>
</tr>
<tr>
<td>TOPOGRAPHY AND VEGETATION</td>
<td>1</td>
</tr>
<tr>
<td>CLAIM DATA</td>
<td>2</td>
</tr>
<tr>
<td>HISTORY</td>
<td>2</td>
</tr>
<tr>
<td>GEOLOGY</td>
<td>2</td>
</tr>
<tr>
<td>GEOCHEMICAL SURVEY</td>
<td>3</td>
</tr>
<tr>
<td>INTERPRETATION</td>
<td>3</td>
</tr>
<tr>
<td>TIME AND COST DISTRIBUTION</td>
<td>5</td>
</tr>
</tbody>
</table>

Figure 1 - Background Determination for Copper  
Figure 2 - Background Determination for Lead  
Figure 3 - Background Determination for Zinc
INTRODUCTION

The Cinch 1 - 48 group of claims consists of 48 contiguous full sized mineral claims, situated in the Hart River area, 80 miles north of Mayo, Y.T. These claims were recorded July 2nd, 1968.

The survey was conducted at the request of New Cinch Uranium Ltd. to locate possible areas of commercial mineralization.

Field work was carried out from June 5th to June 25th, 1969.

CONCLUSIONS AND RECOMMENDATIONS

There are two anomalous areas in the claim group. One copper, in the central section of area at the base of a steep slope facing north. This is associated with an argillite-diorite contact which is a favourable environment in the area.

The other anomaly is lead in the cirque in the south section of the claims. This is in an area of limestone outcropings.

These areas indicate that further work, primarily detailed prospecting and mapping, should be carried out in the precipitous areas surrounding the soil sampled area.

LOCATION AND ACCESS

The claims are located at approximately 64°36'N latitude and 136°51'W longitude. This site is approximately 80 air miles northwest of Mayo, Y.T. and 90 air miles northeast of Dawson, Y.T.

Access to the property was by helicopter to the Hart River Mines camp which was the base of operations.

TOPOGRAPHY AND VEGETATION

The relief in the area varies from broad 'U' shaped
valleys, to steep talus slopes, to percipitous limestone cliffs. The valleys are swampy, covered with minor buckbrush and willows. Trees are almost non-existent on the claim group.

CLAIM DATA

The block of 48 contiguous full sized claims are shown on claim sheet 116A-10. These claims are all held by New Cinch Uranium Ltd.

HISTORY

These claims were staked during June 1968 and recorded on July 2nd, 1968.

This is the first work to be done on the claims to the knowledge of the author. The New Cinch claims abut the Hart River Mines claims. The latter company is at present developing a copper-silver deposit on their claims to the north of the New Cinch ground.

GEOLOGY

The geologic information following is taken from Map 116A, the Larsen Creek Sheet, 1" = 4 miles, which accompanies Geological Survey of Canada paper 62-7 by L.H. Green and J.A. Roddick.

Table of Formations

<table>
<thead>
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<tr>
<td>Cretaceous</td>
<td>orange to brown weathering, diorite and gabbro and altered equivalents.</td>
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<tr>
<td>Cambrian, Ordovician</td>
<td>dolomite and limestone, thick bedded, grey-buff weathering.</td>
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<td>and Silurian</td>
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<td>8</td>
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<td>Unconformity</td>
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<td>2</td>
<td>buff, orange and pink dolomite, black shale, minor black limestone. Red dolomite; green argillite, maroon quartzite and shale, and greenstone.</td>
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mainly dark grey, grey-green, and black thin bedded argillite, slate and phyllite.

Relatively narrow bands of sediments of map units 1, 2 and 2d trend easterly or southeasterly through the area usually dipping vertically or steeply south. These units are capped by thick-bedded limestones of unit 8 which form the predominant outcrops in the area.

**GEOCHEMICAL SURVEY**

1. **Control Grid**
   
   Approximately 20 miles of baseline and crosslines were marked with flagging as outlined in figures 1, 2 and 3. Lines were put in, using compass and nylon chain, at 400 foot intervals and sampling stations at 200 feet along the lines. These lines were continued beyond the soil sampling area for future geophysical work.

2. **Field Procedure**
   
   The geochemical survey carried out was a program of soil sampling. Samples were collected along crosslines and consisted of residual soil immediately underlying the organic layer. A total of nine miles of grid lines were sampled.

3. **Laboratory Procedure**
   
   All samples were analysed for copper, lead and zinc. Laboratory work was performed by the Whitehorse assay office, Whitehorse, Y.T.
   
   After drying and screening to -80 mesh, the metals were extracted by a hot HNO₃-HCl solution. The quantities of each metal in the sample were determined by atomic absorption spectrographic analysis. Contoured laboratory results for copper, lead and zinc are shown on figs. 1, 2 and 3.

**INTERPRETATION**

There is one copper anomaly and one lead anomaly revealed by the soil sampling. The copper anomaly is below a steep area facing north in the central section of the claims. This anomaly is
in the vicinity of an argillite-diorite contact. This association appears to be a favourable environment for the district.

The lead anomaly is again at the base of a steep talus covered slope in the cirque in the southern part of the claims. The predominant outcrop in this area is the limestone capping prevalent in the district.

Thus, from these anomalies further work is indicated which should initially be detailed prospecting of the area with mapping to localize favourable environment in the percolation areas surrounding the soil sampling area.

Respectfully Submitted:

G. Trowsdale

G. Trowsdale, P. Eng.
BACKGROUND DETERMINATION

FOR

LEAD

96% ← ANOMALOUS
BACKGROUND DETERMINATION

FOR ZINC

96% ANOMALOUS
**TIME AND COST DISTRIBUTION**

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<tr>
<td>D. Read</td>
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<td>9</td>
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<td>I. McMurtrie</td>
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*Total Cost: $2,850.00*

**Camp Costs**
- **66-1/2 @ $12.00**
  - **Total: $798.00**

**Air Fares**
- **281.00**

**Supplies**
- **276.69**

**Assays (Whitehorse Assay Office)**
- **434.00**

**Helicopter**

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*Total: 9 hrs @ $110.00 = $990.00*

--

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the City of Vancouver, in the Province of British Columbia, this day of July, 1969, A.D.

*Commissioner for taking Affidavits for British Columbia or Notary Public in and for the Province of British Columbia.*
INVOICE TO: New Cinch Uranium Ltd., Room 416, 2075 Adelaide Avenue, Toronto, Ontario

INVOICE No. 69-849
DATE: June 30, 1969

G. Trowdale Supervision 16½ 1500.00
D. Read Soil Sampler 9 225.00
I. McMurtrie Soil Sampler 13 450.00
G. Jilson Soil Sampler 7 175.00
D. King Soil Sampler 17 425.00
R. Jury Consultant 1 75.00

2850.00

Air Fares – Vancouver – Hart River 281.00
Assays – Whitehorse Assay Office 434.00
Supplies – Field 276.69 991.69

$ 3841.69

GEOLOGY
CONSULTANTS
MINING

Exploration
Development
Production

E. & O. E. Over 30 days — 1% interest per month will be added to account rendered.
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69-849

1 PER CENT INTEREST PER MONTH ON OVERDUE ACCOUNTS.
**Hilroy Envelopes & Stationery Limited**

PACIFIC COAST BRANCH
COMMERCIAL ENVELOPE DIVISION

250 BOWIE AVENUE, TORONTO 10, CANADA
PHONE 782-4411

---

**Date of Order to be Shipped**: June 2/69

**Salesman**: Hewer C2

**Ship to No**: Same

**Province Sales Tax**: Extra

**P.E.C.**:

**Order No**: SH 2534

**Terms**
Net 30 Days

---

**Sold to**
Alrae Engineering Ltd
644 West Hastings St
Vancouver B.C.

**Shipped to**
Hart River Mines Ltd
Box 2762
Whitehorse YT
Attn: G. Trowsdale

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**PLUS FREIGHT CHARGES AT 5.30 LON**

New Conch Uranium

---

* Invoice * *

---

Any items not shipped complete have been back ordered and will be shipped as soon as available.
**HART TVS. LTD.**

848 W. Hastings St., Vancouver 1, B.C.  Telephone 685-3744

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| **To:** Flying Time - June, 1969.  
8 hrs. 25 min. @ $125.00 per hr. | | **$1,052.00** |