

**CURRAGH RESOURCES INC.**

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**TELEFAX TRANSMISSION**

**TO:** Carl Freitang, Kilborn Engineering

Toronto, Ontario

**FROM:** Gregg A. Jilson, Vice-President, Exploration

WHITEHORSE OFFICE

**DATE:** August 29, 1990      **TIME:** \_\_\_\_\_

**SUBJECT:** WILLIAMS CREEK OXIDE COPPER PROPERTY

The deposit is a copper carbonate cap on a sulphide impregnated shear zone, sulphides oxidized to 600'-800' depth.

**Open Pit**

Side hill pit to 600' depth  
8,000,000 tons @ 1.12% copper in oxides/carbonates  
2 tons waste to 1 ton ore - no cutoff given

Steeply dipping zone (-70°) 1,500' long averages approximately 100' thick

**Heap Leach**

Sulphide acid leach, ammonia leach did not work  
Approximately 85% extraction in 33 days with 3/4" crush  
3 lb. acid per lb. copper produced

**Infrastructure**

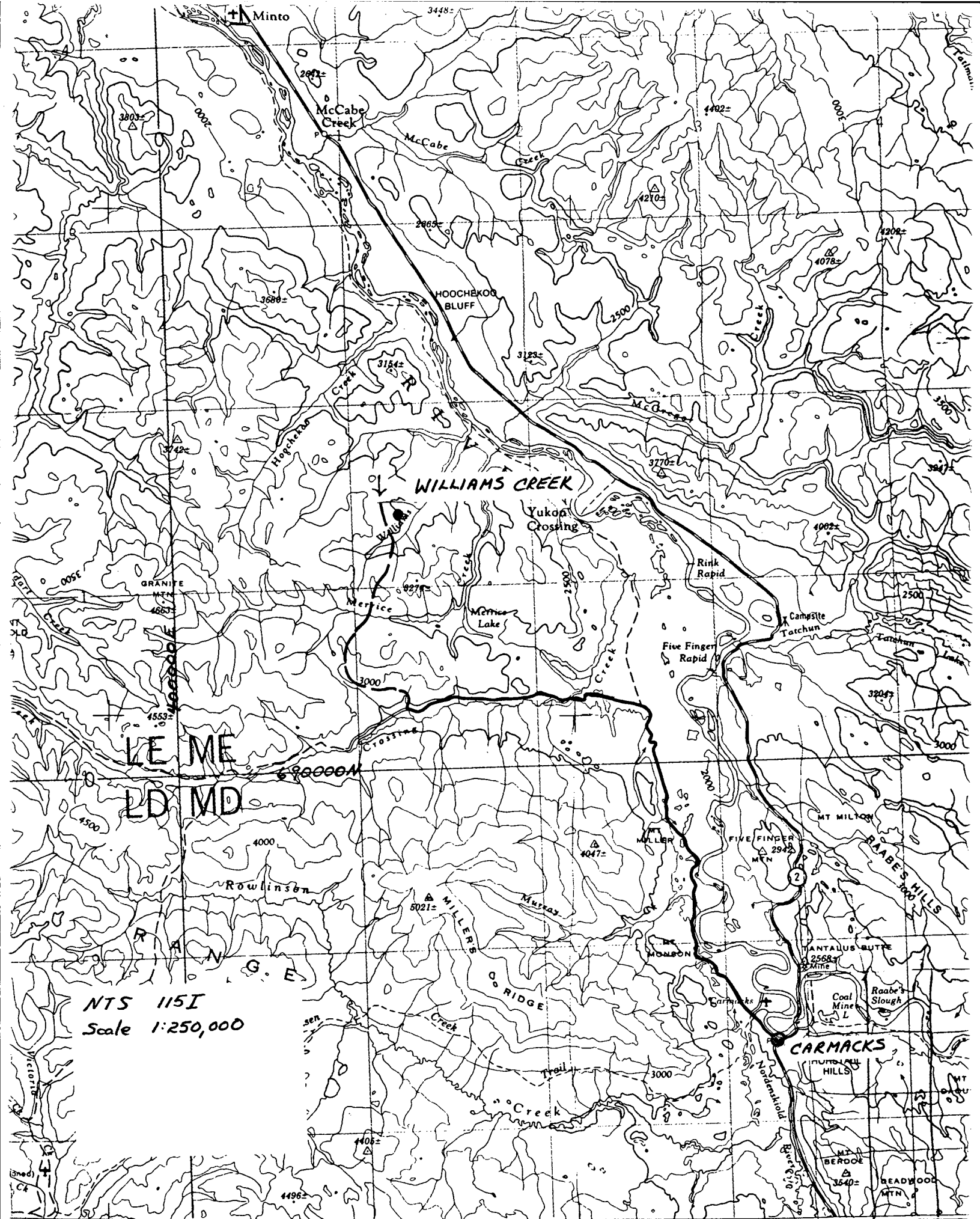
Thirty road miles north of Carmacks - may not need any bridges over Yukon River if come up west side.

Power grid is into Carmacks, however there is not sufficient capacity on Yukon network for a new mine.

Summaries from two previous studies attached.

If all pages are not received, please contact Geraldine at 668-8034

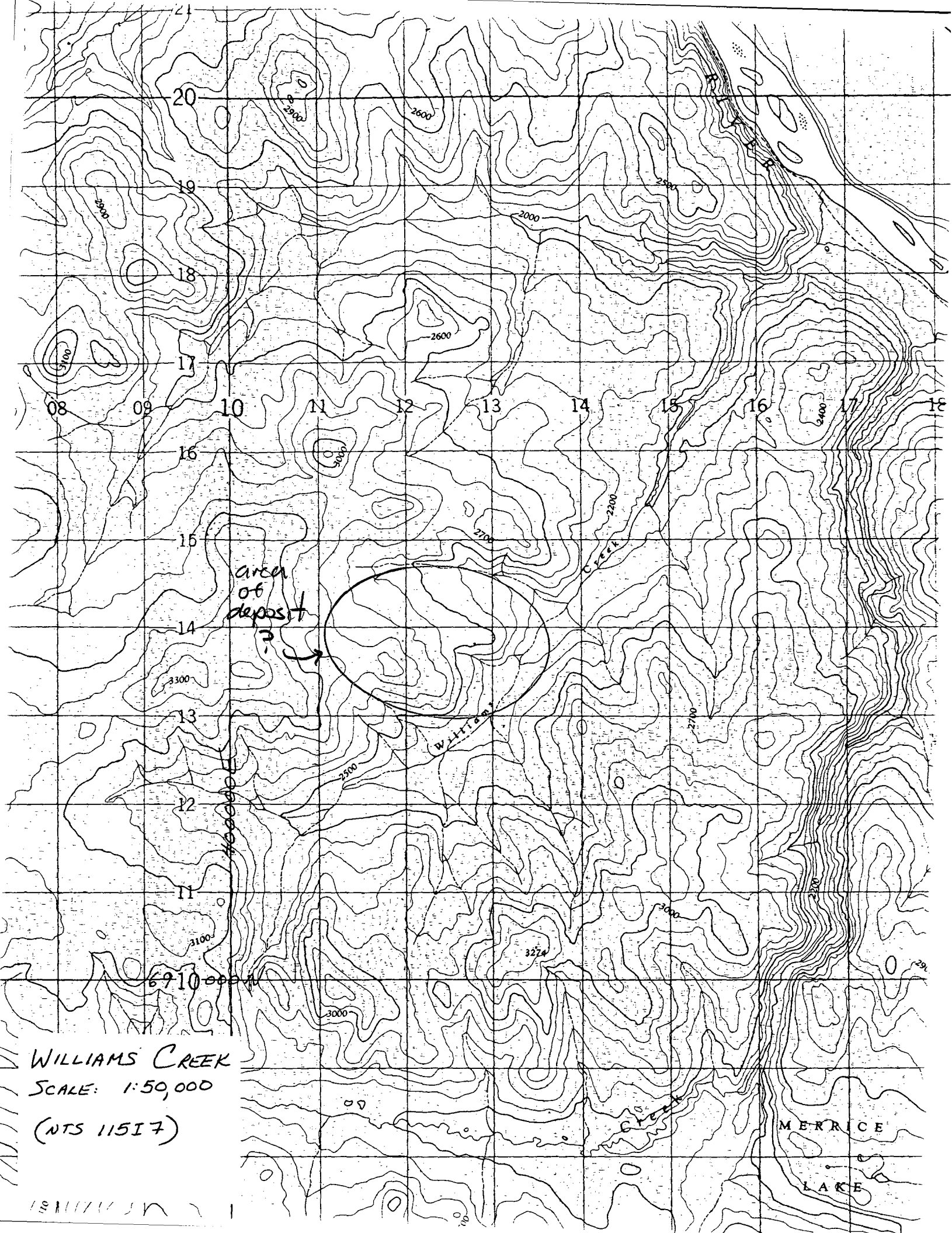
**THIS TRANSMISSION CONSISTS OF 6 PAGE(S)**



LE ME  
LD MD

NTS 115I  
Scale 1:250,000

137°00' 0 45' 1 2 30' 3 15' 440000m E.



area of deposit

WILLIAMS CREEK  
SCALE: 1:50,000  
(NTS 11517)

MERRICE  
LAKE



## 1.0 INTRODUCTION

At the request of Mr. Robert Quartermain of Consolidated Silver Standard Mines Ltd, metallurgical test work was carried out on bulk samples of oxide copper ore from the Williams Creek property. Two composites of run of mine sized ore were provided, with an average head grade of approximately 1.5% Cu. Total testwork in this investigation consisted of six bottle roll sulphuric acid leach tests, one bottle roll ammonia leach test, and two larger-scale sulphuric acid column leach tests. The purpose of the investigation was to provide detailed metallurgical information on the amenability of the Williams Creek ore to heap leaching with sulphuric acid.

This investigation was initiated by a phone call to Bacon, Donaldson & Associates (BDA) by Mr. Robert Quartermain on August 29, 1989. Further correspondence followed to define more fully the scope of the investigation. Actual testwork began on October 16, 1989. Throughout this investigation, testwork results were provided to Mr. Quartermain as soon as they became available.