

VLF-EM and Horizontal Field Strength Survey
Vidette Area

for

TUGOLD RESOURCES INCORPORATED

GEOLOGICAL BRANCH
ASSESSMENT REPORT

PART
2 OF 2

13,453

by

DIRK MORAAL
204-156 Victoria St.,
Kamloops, B.C.
V2C 1Z7

OCT 1984

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VLF profile, Cutler	in pocket

1.0 Introduction

This survey was undertaken at the request of Tugold Resources, company which holds the option on the property. It was felt that a VLF-EM survey would further define target areas previously located with a magnetometer survey and soil sampling program.

2.0 Location and access

These seven reverted crown grants are adjacent and south of the site of the old Vidette Mine, and are situated on the west side of Vidette Lake, located some 50 Km north west of Savona B.C.

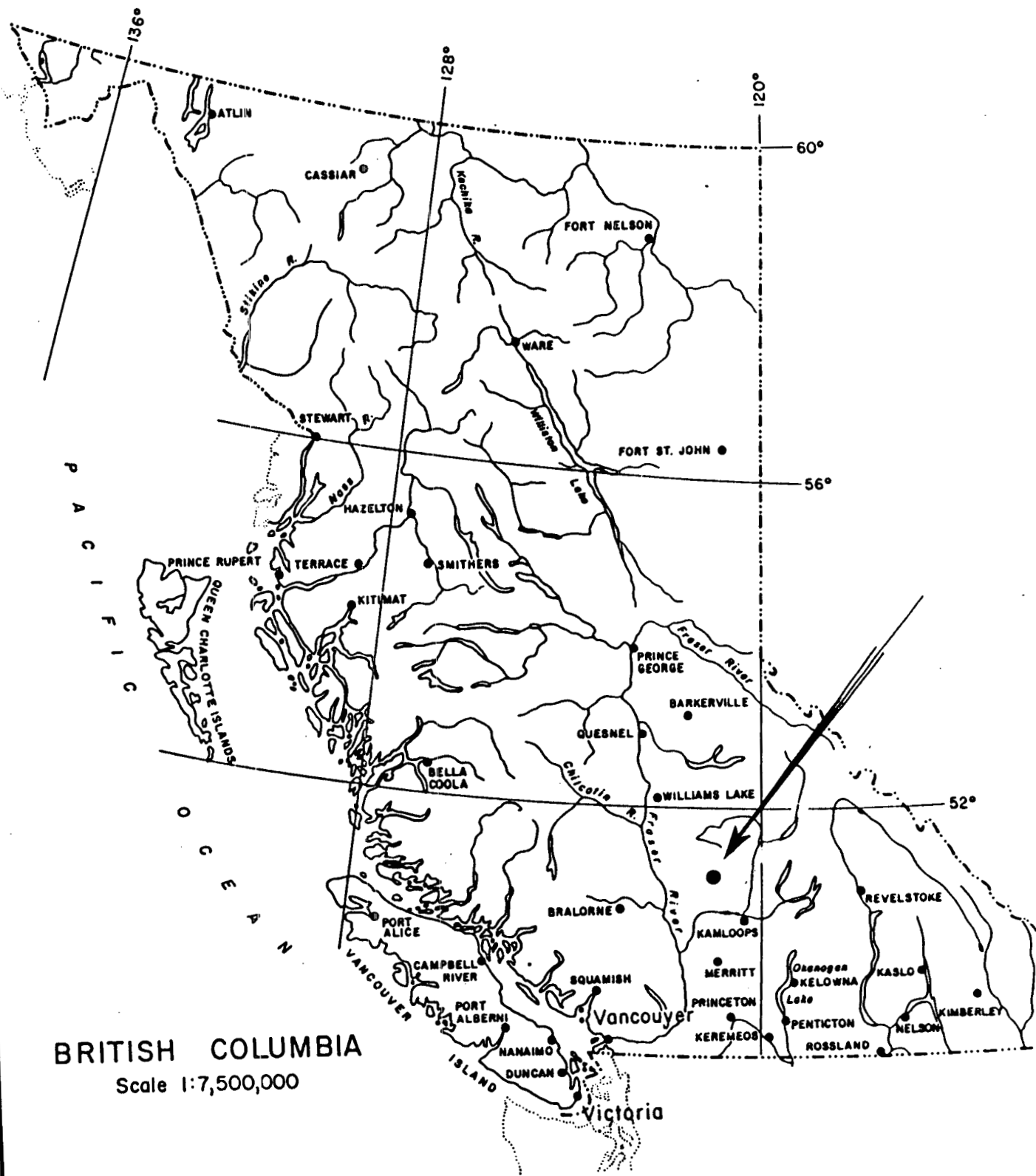
Access is via the Deadman Creek Rd., a maintained gravel road that leaves Highway 1 from a point 8 Km west of Savona.

3.0 Ownership and Claim Status

The property consists of the following Reverted Crown Grants, currently under option to Tugold Resources Ltd. of Kamloops B.C.

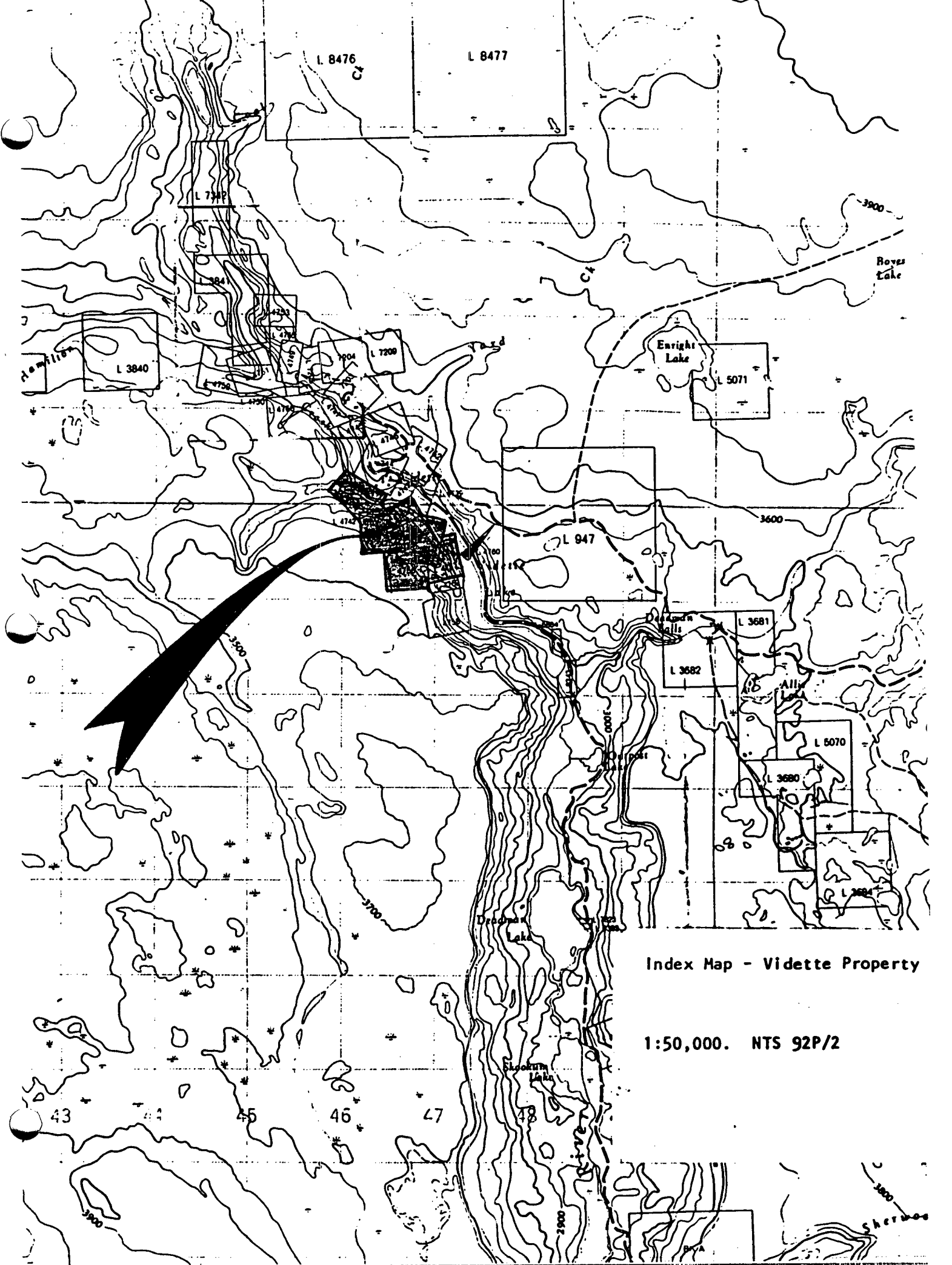
<u>Lot #</u>	<u>Name</u>	<u>Expiry Date</u>	<u>Owner</u>
4755 ✓	Searcher #2	Jan 22, 1989	Whopper Holdings 1599 Dufferin Dr. Kamloops B.C.
4743 ✓	Searcher #6	Jan 22, 1989	
? 4756	Searcher #4	Sept 22, 1988	
4760 ✓	EB Fraction	Sept 22, 1989	
4739	Searcher # 5	Jan 22, 1989	Richard Carey Box 67 Savona B .C.
4741	White Pass	Jan 22, 1989	
4754	Monarch	Jan 22 1989	

(GROJF)



BRITISH COLUMBIA
Scale 1:7,500,000





Index Map - Vidette Property

1:50,000. NTS 92P/2

4.0 History and previous work

Gold and sulphide Veins were discovered in the Vidette area prior to 1931. The Vidette Mine, across the lake to the north produced significant gold till it closed during World War II. Development work was started on the Dexheimer vein, and several thousand ounces of gold have been mapped out there. This vein is located adjacent to the northern edge of the property, and may extend south into the survey area.

The most recent work reported consists of geophysical surveys, geochemical sampling and trenching along the southern border of the claim group where Lakewood Mining overlapped. Their surveys showed anomalous gold which led to trenching. Still more recently, a soil and magnetometer survey in 1983 produced high copper and gold values in places coincidental with magnetic anomalies. This led to recommendation for further EM work.

5.0 Work described in this report

- 5.1 VLF-EM dip angle survey using Annapolis and Cutler transmitters.
- 5.2 Horizontal Field Strength survey using Seattle, Wash. transmitter.
- 5.3 Residual Field Strength

6.0 Geology

Porphyritic to massive Nicola Volcanics locally outcrop along the south and western sides of the survey area. The geology is mainly overburden covered. Farther to the west, Tertiary Basalt covers the volcanics. Quartz veins are visible in at least two places on the grid, coinciding, in one instance with geophysical surveys.

7.0 Results

7.1 Dip angle Survey

Very erratic field strength readings on both Cutler and Annapolis stations limited their use to Dip angle and Residual Field readings. Data was treated with Frasers Filter, using a simple computer program designed by the writer for pocket computers. Both sets of data indicate an anomalous area on lines 900 and 800, at a point roughly 100 m west of the baseline. Cutler data shows an additional anomalous area on line 1600 at the baseline. Both show small anomalies on line 1100 at 170 E. All anomalies are weak, which is to be expected given the nature of the targets sought. Correlation, rather than anomaly strength appears to be more important.

7.2 Horizontal field strength

Seattle was selected for this survey, rather than the theoretically more adequate Annapolis or Cutler due to the highly unstable character of the field during the period of the survey. Data was corrected for drift before plotting. Five areas of high field strength were defined by this method. Two on line 900. at 700 E and a broader one centered about 925 E Line 1600 at the baseline, Line 1400 at 1100 E, and 1200 E, Line 1300 at 825 E and a broad zone between 900 E and 950 E. The anomalous F.S at Line 1300, 825 E coincides with a magnetic polarity reversal noted during a previous survey. Anomalies on Line 1400 are on strike south of the noted Dexheimer vein. The anomaly on line 900 and 1000 at 700 E occurs in the vicinity of a disseminated sulphide showing.

7.3 Residual Field Strength

This less common parameter is recorded as the minimum reading on the field strength meter (Null) at the moment the dip angle is measured. It is useful in defining poor conductors. Three well defined areas appear on both Annapolis and Cutler, these being Line 900 at 975 E, line 900 from 1150 E to 1225 E and a larger area at the west end of lies 1400, 1500 and 1600. Two areas that appear to flank further anomalies are Line 1600 at the baseline and Line 1400 at 1175 E.

8.0 Conclusions

The VLF EM survey indicates several weak but valid conductors, as expected in this geological environment. Several of these conductors coincide with magnetic and soil (Au, Cu) anomalies.

Horizontal Field strength is perhaps the most useful parameter measured, since it is difficult to locate lensy quartz veins with low sulphide concentrations using only dip andle surveys. Field strength will define weaker conductors at times when other parameters will fail to record changes. This makes the results of this survey encoraging.

9.0 Recommendations

Extension of the grid to the north and east followed by geological mapping and extension of the geophysical surveys to cover the slopes above the lake. Due to the abruptness of the terrain, lines must be secant chained.

Statement of Costs

5 days wages D. Moraal @ 100/day	500.00
Truck expense 212Km @ .30/Km	63.00
Food expense 4 days @ 15.00	60.00
Instrument rental 1 week @ 100.00	100.00
Photocopying	15.00
Total	\$738.00

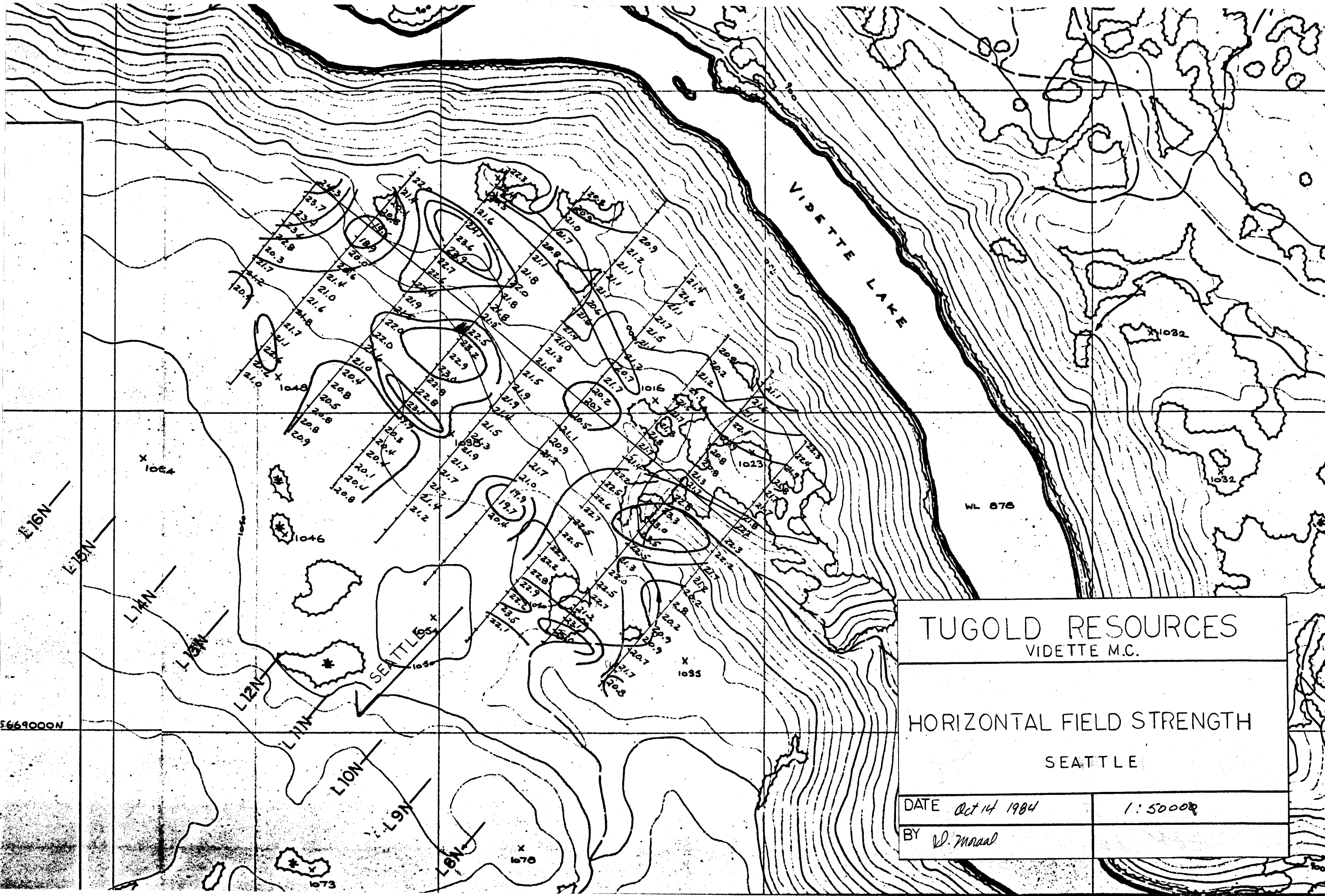
Statement of Qualificatiois

I, Dirk Nicolaas Moraal, of the city of Kamloops,
British Columbia do hereby certify that:

1. I am a professional prospector and geophysical operator.
2. I have been carrying out my profession continually since 1969
3. I am a graduate of the British Columbia Department of Mines Exploration course for Prospectors
4. This report is based on information obtained by myself during October, 1984

Kamloops B.C.
October 14, 1984

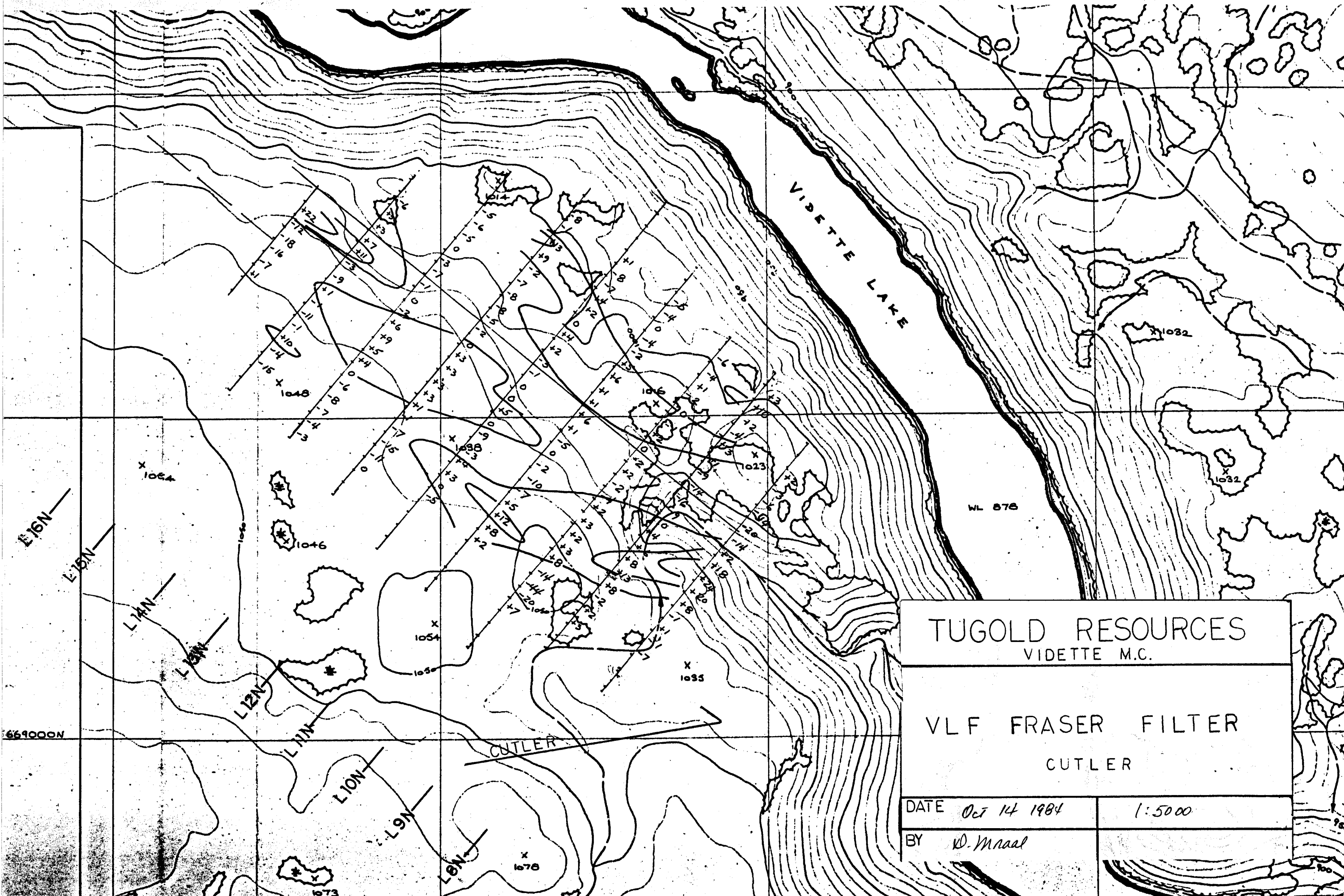

Dirk Moraal



TUGOLD RESOURCES
VIDETTE M.C.

HORIZONTAL FIELD STRENGTH
SEATTLE

DATE <i>Oct 14 1984</i>	<i>1:50000</i>
BY <i>D. Mordal</i>	



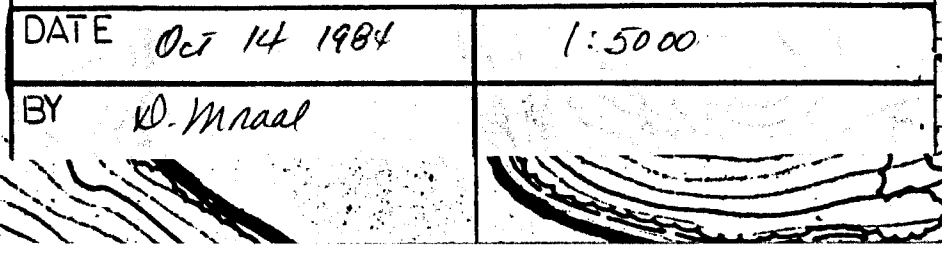
TUGOLD RESOURCES
VIDETTE M.C.

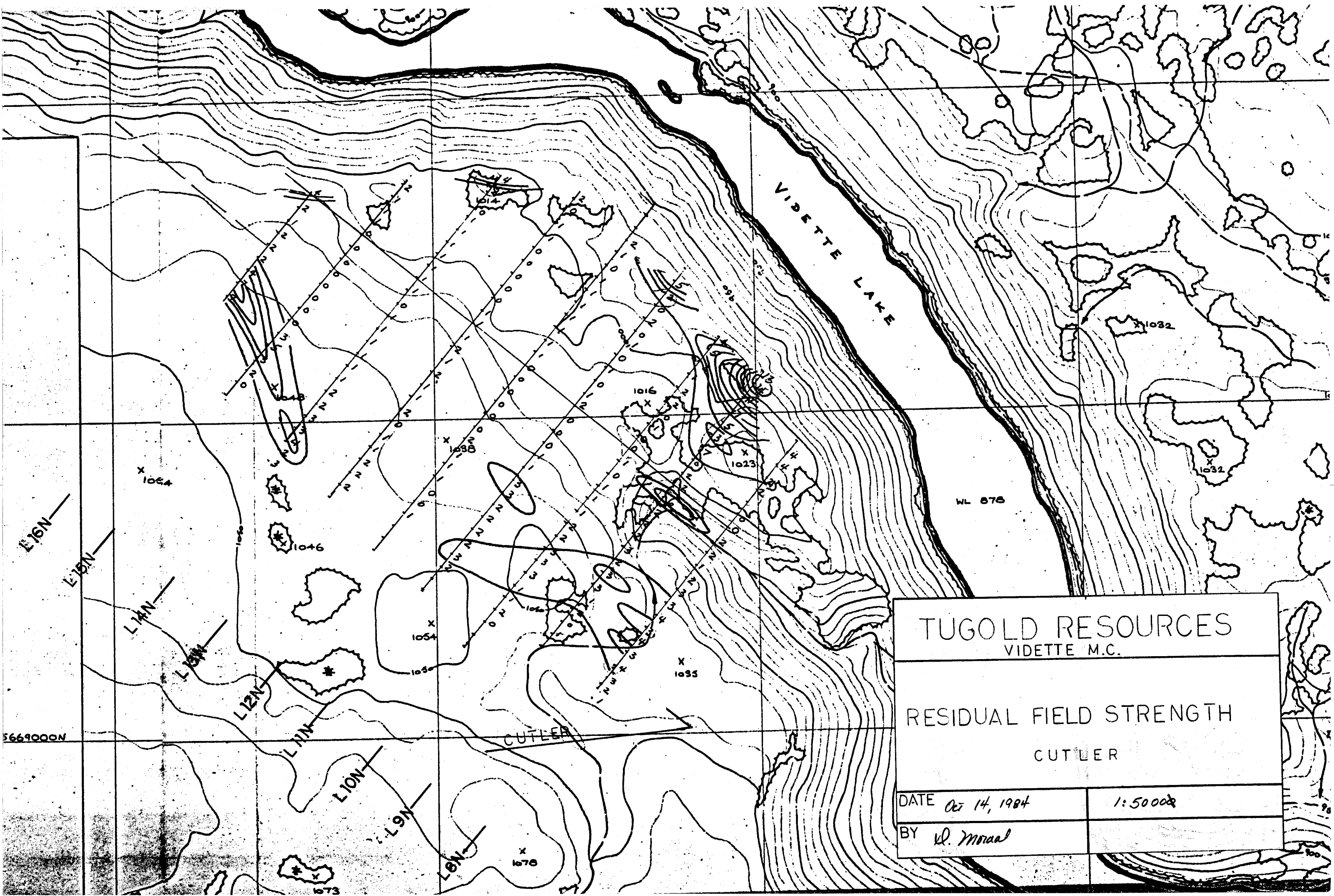
VLF FRASER FILTER
CUTLER

DATE Oct 14 1984

1:5000

BY D. Mnaal

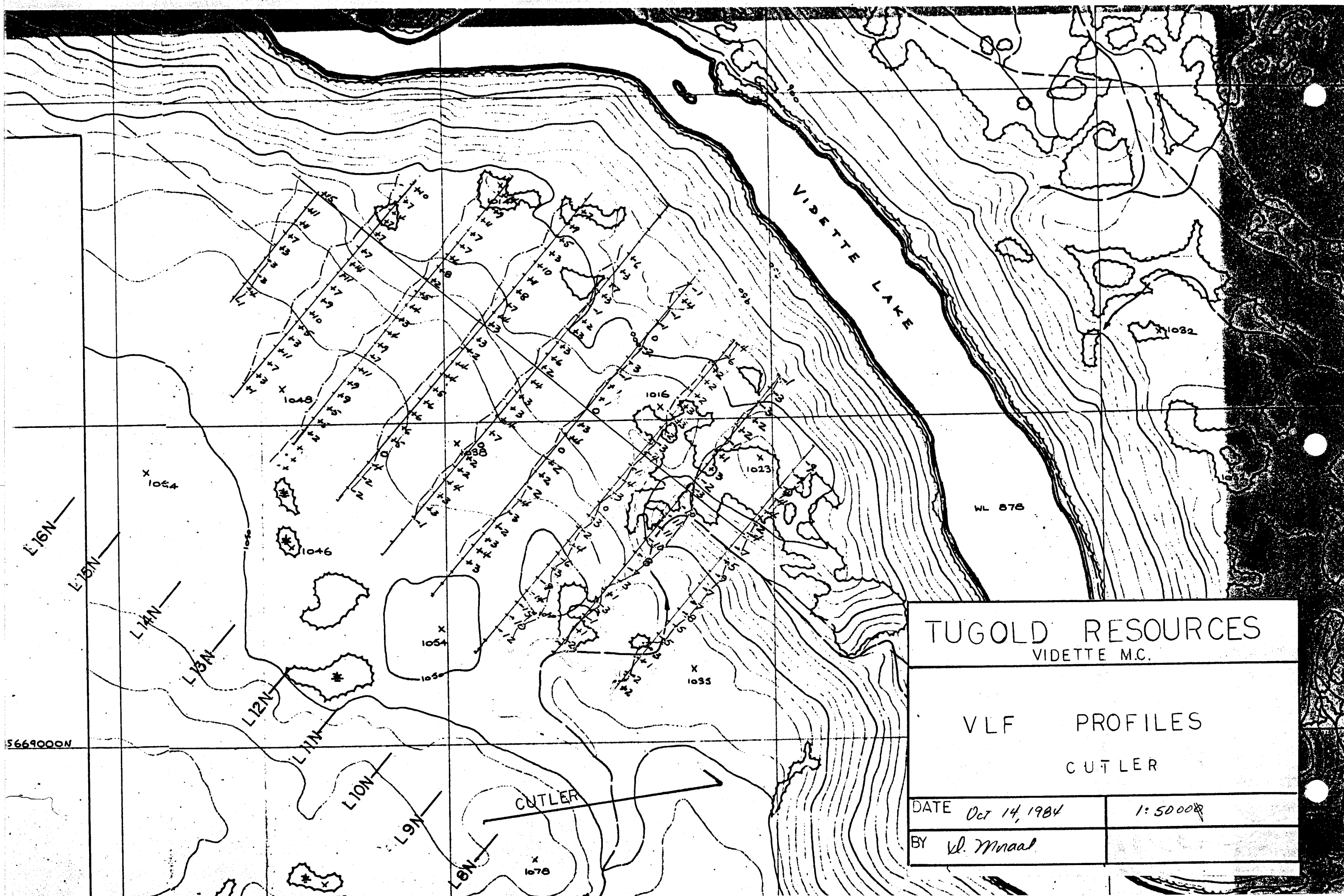




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RESIDUAL FIELD STRENGTH
CUTLER

DATE Oct 14, 1984	1:50000
BY D. Morad	

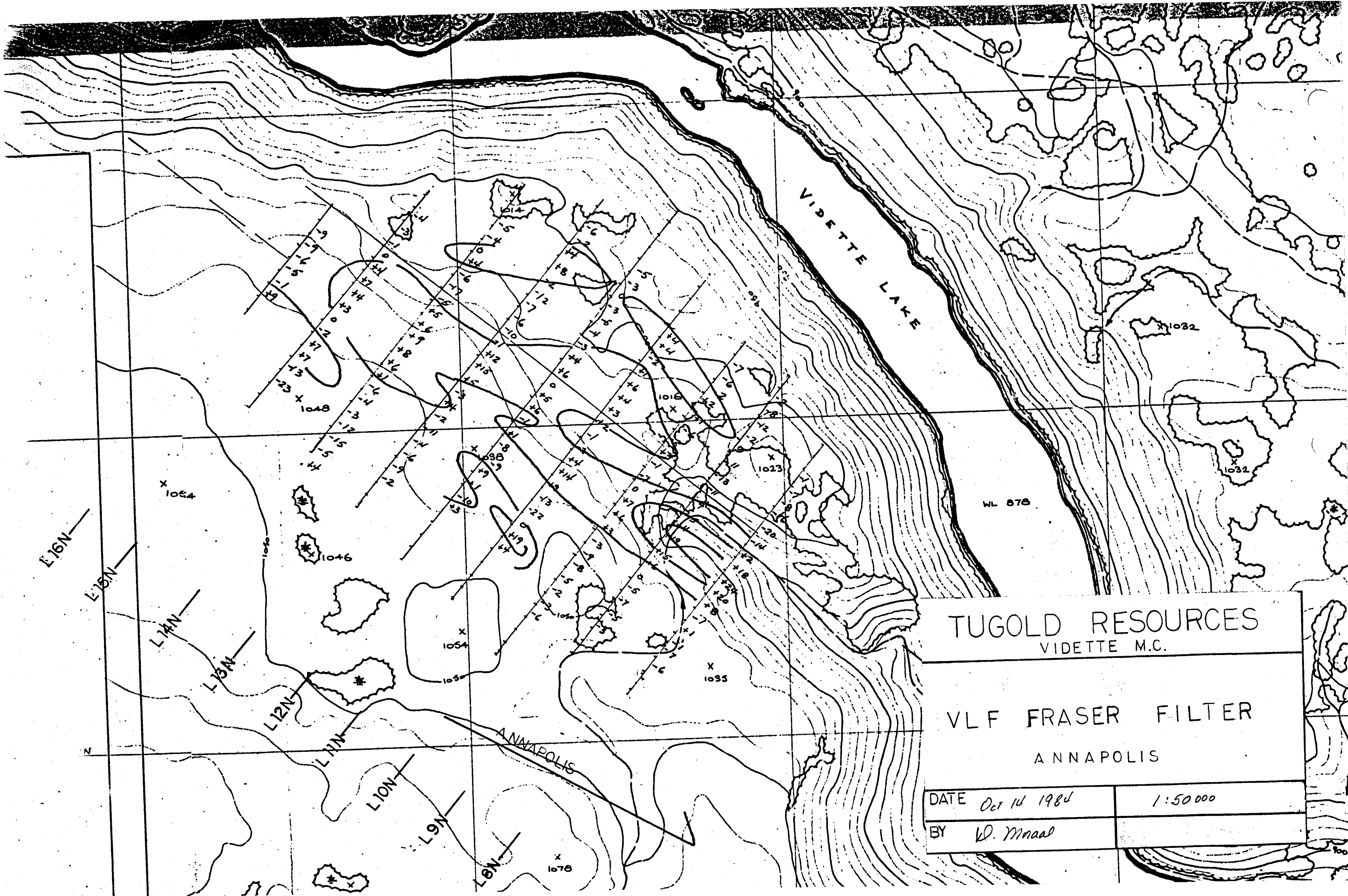


TUGOLD RESOURCES
VIDETTE M.C.

VLF PROFILES
CUTLER

DATE Oct 14, 1984 1:5000

BY W. Mnaal



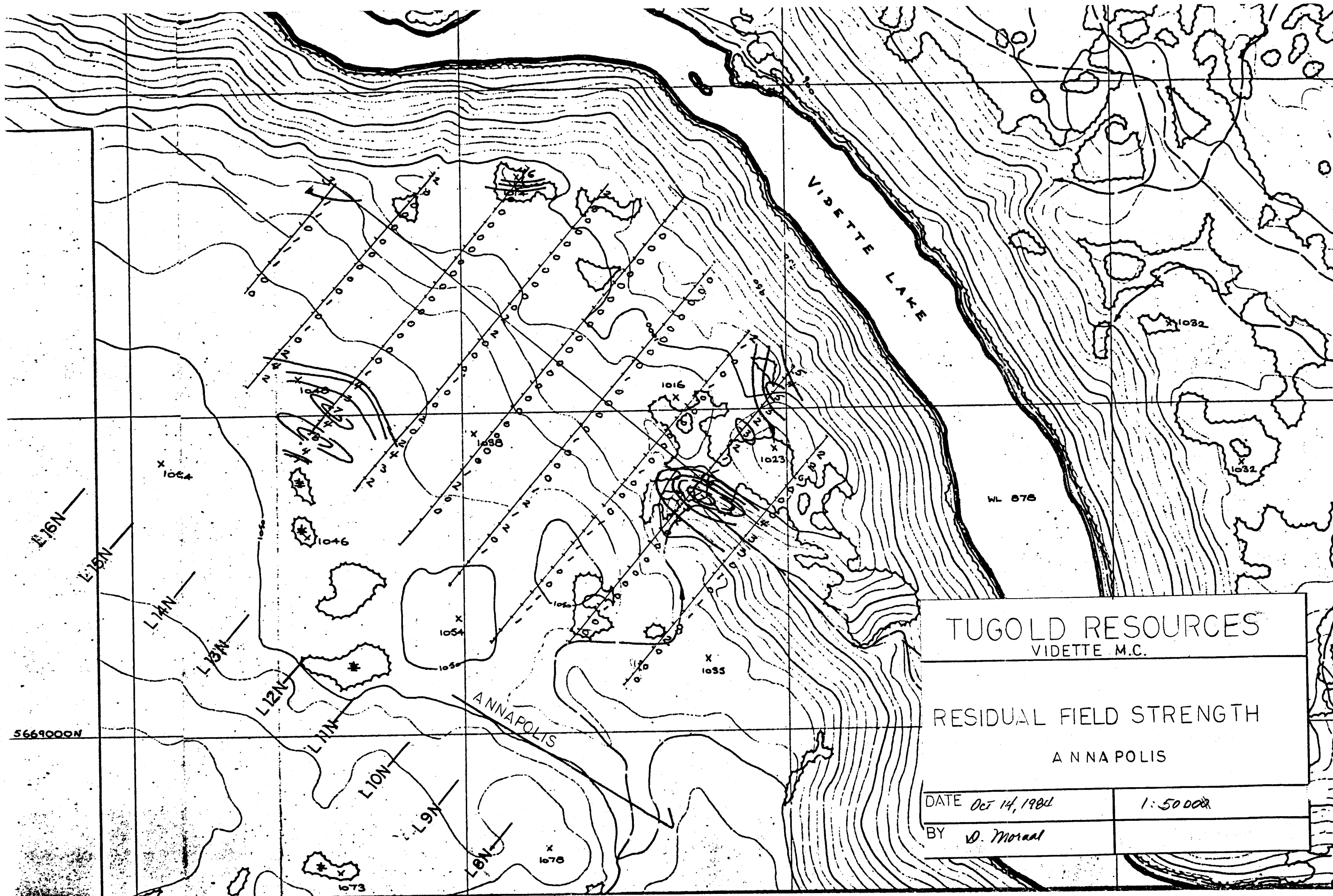
TUGOLD RESOURCES
VIDETTE M.C.

VLF FRASER FILTER
ANNAPOLIS

DATE Oct 14 1984

1:50 000

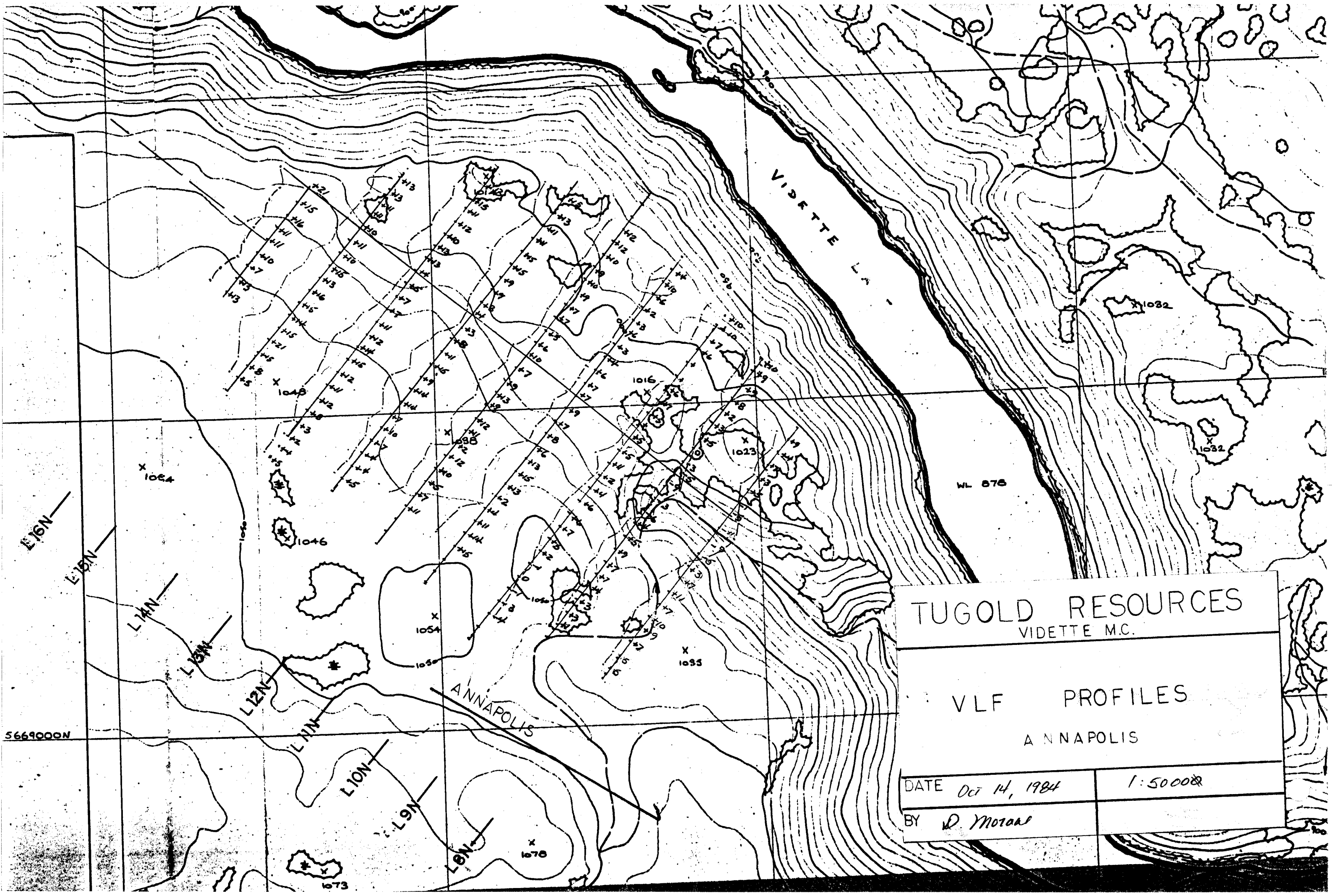
BY W. Maal



TUGOLD RESOURCES
VIDETTE M.C.

RESIDUAL FIELD STRENGTH
ANNA POLIS

DATE Oct 14, 1981	1:50000
BY D. Moral	



TUGOLD RESOURCES
VIDETTE M.C.

VLF PROFILES
ANNAPOLIS

DATE Oct 14, 1984	1:50000
BY D. Moran	