Report

Assessment and
VLF Survey,

Mining Claims

K 508432 and K 508433

Bennett Lake Area

Land - Mining Division

Ontario

Prepared By:

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Wahnapitae, ON
P0M 2N0

October 27, 1987

Introduction:

Claims K 580422 and -423 cover the workings of the Alice A mine - a gold showing discovered during the 1890's. Vertical magnetic and VLF surveys were conducted to further clarify the structural setting of the gold occurrence.

Location and Access:

The claims are located about 1.5km north of Hwy.11, 13km east of Mine Centre between Atikokan and Fort Frances in Northwestern Ontario. A bush road leads to the claims from the Manion Lake Road 1km north of Hwy.11.

The location and access are shown on Fig.1.

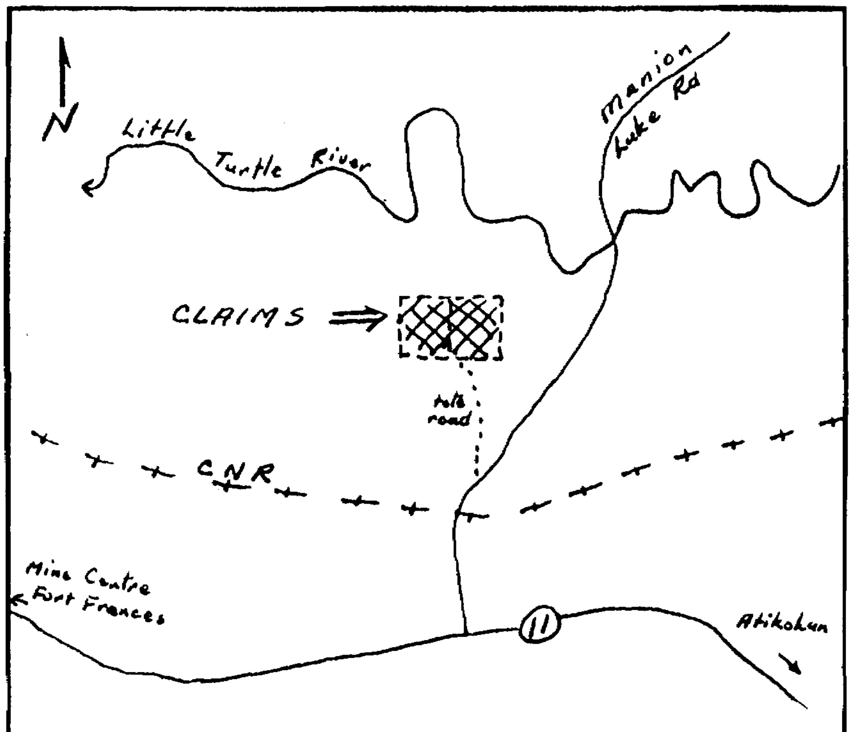


Fig. 1 LOCATION MAP scale 1:50,000

Previous Work:

During the 1890's two shafts and several trenches and test pits were dug. The shafts are recorded to be 50 and 100 feet deep. Recent work has included geophysical, trenching, sampling and analyses.

Geology:

The gold occurrence consists of a series of drag-folded quartz veins within an area 30x60m. Sulphides are common in this area and appear to be closely associated with the presence of gold. Other veins are present on the claims however they are not drag-folded, contain very sparse sulphide and only a trace of gold.

The main rock types are a series of felsic volcanics. Lesser quantities of intermediate volcanics also occur. All have been folded and/or sheared with the development of sericite and chlorite. The Quetico Fault, a major regional structure lies about 0.5km to the north of the claims.

Vertical Magnetic Survey:

Results of this survey are presented in Fig.2.

The results confirm the general east-west trend of the formations. The higher magnetic values indicate the intermediate volcanics with their higher magnetic susceptibility and appear to outline the foldings. At 8475N on line 31GE the rocks do not indicate any feature which would account for the highest value on the property.

VLF Survey:

Results of this survey are presented in Fig.3.

The results indicate a number of weak generally east-west conductors. The conductor at 1487N on 31GE is due to a shear zone. This is exposed in a trench and consists of chlorite with a few quartz stringers.

The remaining conductors are most likely due to conductive clay overburden occupying depressions in the bedrock.

Conclusions:

Geophysical surveys carried out to date do not yield a distinct signature for the gold occurrence.

The vertical magnetic survey does indicate some promise as a tool to define the structure.

Induced Polarization or a geochemical technique may provide a distinct signature for the gold mineralization.

Recommendations:

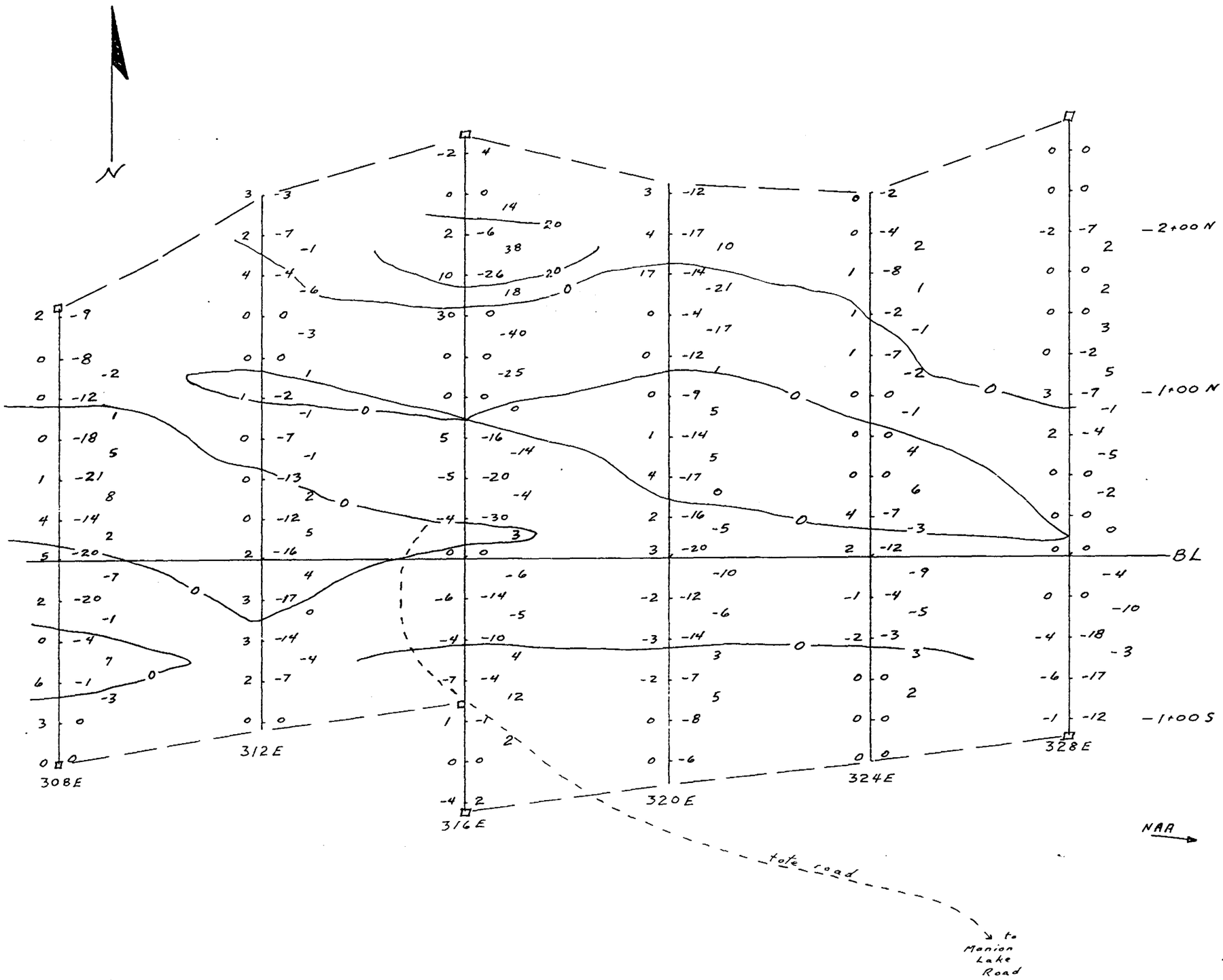
An orientation induced Polarization survey should be undertaken to determine the application of this method to the discovery of additional zones of similar mineralization believed to occur in the area.

An examination of the geochemical associations the known gold occurrence is underway. Based on the results a geochemical survey should be carried out.

ALICE A PROPERTY

BENNETT LAKE AREA
KENORA MINING DIV.
ONTARIO

scale 1:2500



Legend

- tote road
- base line — BL
- picket line
- claim corner
- claim line

VLF SURVEY

in phase	quadrature
6	4
-3	-8

14 Fraser Filter Value

Fig. 3

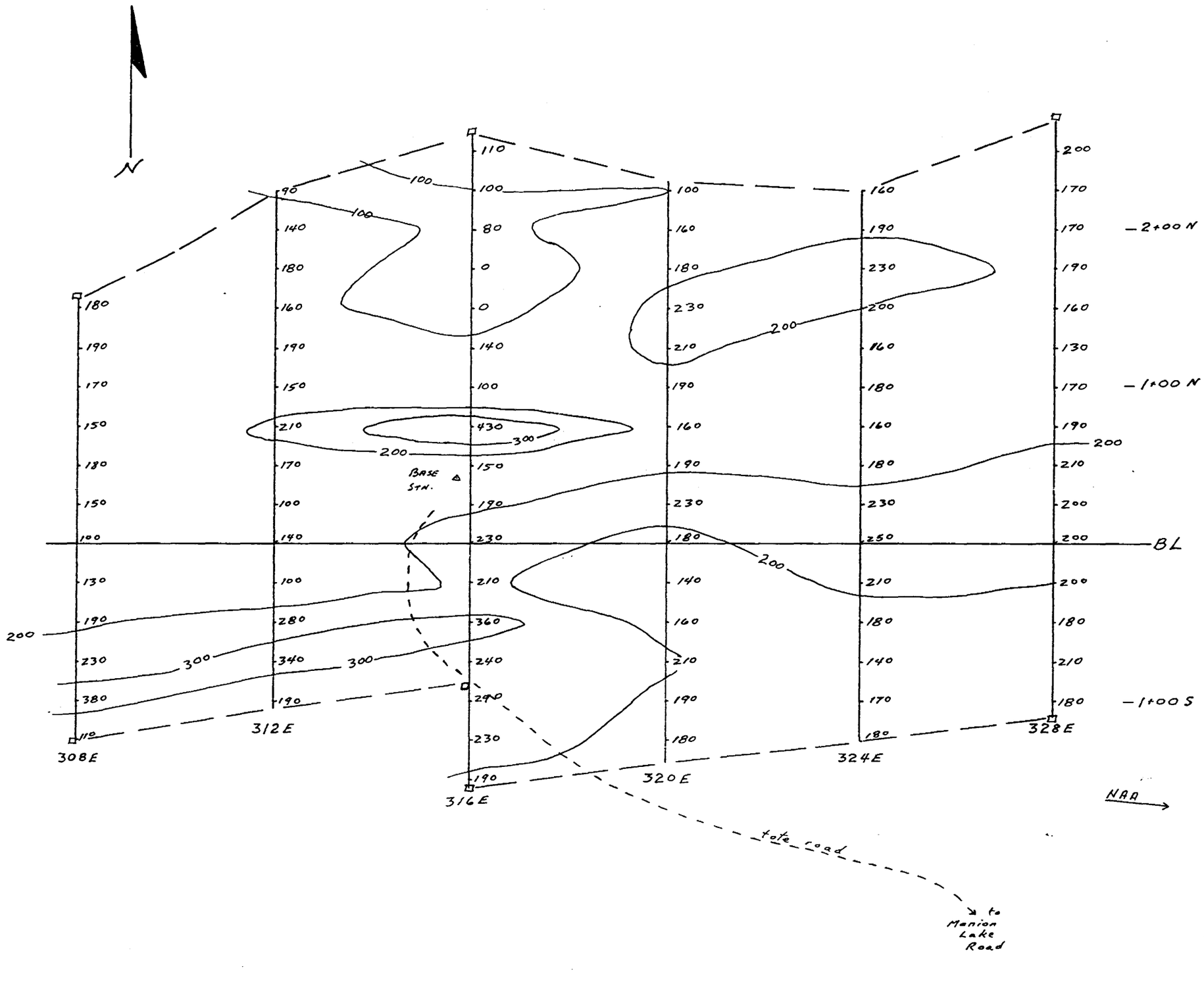
Oct. 27/87

JW Redale

ALICE A PROPERTY

BENNETT LAKE AREA
KENORA MINING DIV.
ONTARIO

scale 1:2500



Legend

- tote road
- base line — BL
- picket line
- claim corner
- claim line

MAGNETIC SURVEY

corrected value *

160

* values corrected to a Base Station reading of +160 γ to eliminate negative numbers

Fig. 2

Oct. 27/87

J.W. Kedden

Ontario

Ministry of Natural Resources

File _____

GEOPHYSICAL – GEOLOGICAL – GEOCHEMICAL TECHNICAL DATA STATEMENT

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) MAGNETIC & ELECTROMAGNETIC

Township or Area BENNETT LAKE AREA

Claim Holder(s) J. W. REDDEN

Survey Company J.W. REDDEN

Author of Report J.W. REDDEN

Address of Author BOX 117 WABIGOON ONT P0V2W0

Covering Dates of Survey May 25/85 - Oct 16/87
(linecutting to office)

Total Miles of Line Cut 2

MINING CLAIMS TRAVERSED
List numerically

K 580422 (prefix) (number)
K 580423

If space insufficient, attach list

TOTAL CLAIMS 2

SPECIAL PROVISIONS CREDITS REQUESTED

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

	DAYS per claim
Geophysical	
--Electromagnetic	20
–Magnetometer	20
–Radiometric	
–Other	
Geological	
Geochemical	

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: 17/11/87 SIGNATURE: J.W. Redden
Author of Report or Agent

Res. Geol. _____ Qualifications 9 19/2

Previous Surveys

File No.	Type	Date	Claim Holder

OFFICE USE ONLY

837 (5/79)

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS - If more than one survey, specify data for each type of survey

Number of Stations 89 Number of Readings 89 (+4 hr mag)

Station interval 25m Line spacing 122m (400')

Profile scale

Contour interval magnetic : 50 γ , 0 + 120 : VLF

MAGNETIC

Instrument McPhar M700

Accuracy -- Scale constant ± 5 γ

Diurnal correction method assumed linear drift between base stn. tie-in

Base Station check-in interval (hours) 1.5 hr

Base Station location and value 5m west of 316E 0+40mN

assigned value +160 γ

ELECTROMAGNETIC

Instrument GEONICS EM-16

Coil configuration

Coil separation

Accuracy

Method: ☐ Fixed transmitter ☐ Shoot back ☐ In line ☐ Parallel line

Frequency CUTLER NAA 24.0 KHz
(specify V.L.F. station)

Parameters measured IN PHASE , QUADRATURE

GRAVITY

Instrument

Scale constant

Corrections made

Base station value and location

Elevation accuracy

INDUCED POLARIZATION RESISTIVITY

Instrument

Method ☐ Time Domain ☐ Frequency Domain

Parameters -- On time Frequency

-- Off time Range

-- Delay time

-- Integration time

Power

Electrode array

Electrode spacing

Type of electrode

SELF POTENTIAL

Instrument _____ Range _____

Survey Method _____

_____

Corrections made _____

_____

RADIOMETRIC

Instrument _____

Values measured _____

Energy windows (levels) _____

Height of instrument _____ Background Count _____

Size of detector _____

Overburden _____

(type, depth -- include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey _____

Instrument _____

Accuracy _____

Parameters measured _____

_____

Additional information (for understanding results) _____

_____

_____

AIRBORNE SURVEYS

Type of survey(s) _____

Instrument(s) _____

(specify for each type of survey)

Accuracy _____

(specify for each type of survey)

Aircraft used _____

Sensor altitude _____

Navigation and flight path recovery method _____

_____

Aircraft altitude _____ Line Spacing _____

Miles flown over total area _____ Over claims only _____

GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken _____

_____

_____

Total Number of Samples _____

Type of Sample _____
(Nature of Material)

Average Sample Weight _____

Method of Collection _____

_____

Soil Horizon Sampled _____

Horizon Development _____

Sample Depth _____

Terrain _____

_____

Drainage Development _____

Estimated Range of Overburden Thickness _____

_____

_____

SAMPLE PREPARATION
(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis _____

_____

_____

_____

General _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

ANALYTICAL METHODS

Values expressed in: per cent ☐
p. p. m. ☐
p. p. b. ☐

Cu, Pb, Zn, Ni, Co, Ag, Mo, As,-(circle)

Others _____

Field Analysis (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Field Laboratory Analysis

No. (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Commercial Laboratory (_____ tests)

Name of Laboratory _____

Extraction Method _____

Analytical Method _____

Reagents Used _____

General _____

_____

_____

_____

_____

_____

_____

_____

_____

Ministry of Northern Development and Mines

Ontario

Report of Work #174

(Geophysical, Geological, Geochemical and Expenditures)

MINING LANDS -87

Minir

52C16SW8243 2.10548 BENNETT LAKE

900

Type of Survey(s)	Township or Area
GEOPHYSICAL	BENNETT LK AREA

Claim Holder(s)	Prospector's Licence No.
J. W. Redden	E 23950

Address: Box 117, Wabigoon, Ont P0V2W0

Survey Company	Date of Survey (from & to)	Total Miles of line Cut
J.W. Redden	10 09 87 (Day Mo. Yr.) 10 09 87 (Day Mo. Yr.)	-

Name and Address of Author (of Geo-Technical report)

Box 117, Wabigoon, Ont. P0V2W0 (J.W. Redden)

Credits Requested per Each Claim in Columns at right

Special Provisions		Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Geophysical - Electromagnetic	20
	Geophysical - Magnetometer	20
For each additional survey: using the same grid: Enter 20 days (for each)	Geophysical - Radiometric	
	Geophysical - Other	
	Geological	
	Geochemical	

Man Days		Days per Claim
Complete reverse side and enter total(s) here	Geophysical - Electromagnetic	
	Geophysical - Magnetometer	
	Geophysical - Radiometric	
	Geophysical - Other	
	Geological	
	Geochemical	

Airborne Credits		Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
K	580422	
	580423	

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.

MINING DIV. SEP 15 1987 PM 12 1 2 3 4 5 6 7 8 9 10 11 12

RECEIVED 1987

MINING LANDS SECTION

Total number of mining claims covered by this report of work: 2

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures: $ ÷ 15 = Total Days Credits

Instructions: Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
80	87.09.15	
	Date Approved as Recorded	Branch Director
	87 09 17 R.M.	

Date: Sept 11/87

Recorded Holder or Agent (Signature)

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying

J.W. Redden

Box 117 Wabigoon, Ont. P0V2W0

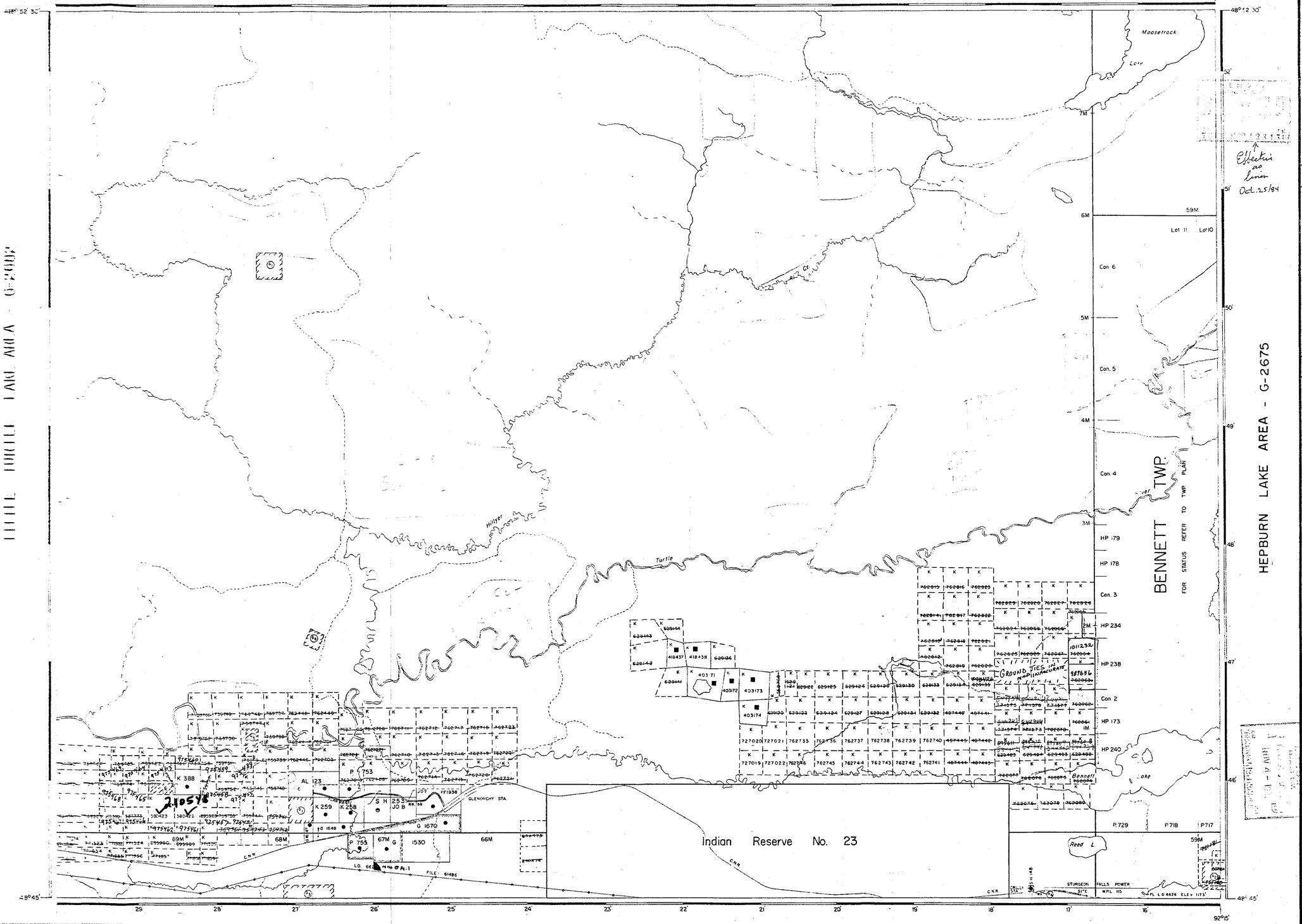
K 580422

Date Certified: Sept 11/87

Certified by (Signature)

(365, 85/12)

MANION LAKE AREA - G-2686



WILD POTATO LAKE AREA - G-2703

LEGEND

- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES
  - TOWNSHIPS BASE LINES, ETC.
  - LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES:
  - LOT LINES
  - PARCEL BOUNDARY
  - MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OF COMPOSITE PLAN
- RESERVATIONS
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES
- TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" , SURFACE RIGHTS ONLY	◓
" , MINING RIGHTS ONLY	◒
LEASE, SURFACE & MINING RIGHTS	■
" , SURFACE RIGHTS ONLY	▬
" , MINING RIGHTS ONLY	▬
LICENCE OF OCCUPATION	▼
ORDER-IN-COUNCIL	OC
RESERVATION	⑥
CANCELLED	⑥
SAND & GRAVEL	⑤

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC 1.

REFERENCES

AREAS WITHDRAWN FROM DISPOSITION

M.R.O. – MINING RIGHTS ONLY
S.R.O. – SURFACE RIGHTS ONLY
M.+ S. – MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File

SAND AND GRAVEL

⑤ GRAVEL FILE 162718
⑤ M.T.C. PIT 1089 GRAVEL FILE 162718
⑤ M.T.C. PIT 1058
⑤ GRAVEL FILE 16799 vol 7
⑤ M.N.R. Gravel Reserve No 228, File 162718
⑤ M.T.C. PIT Nº 18-14

SCALE: 1 INCH = 40 CHAINS

FEET 0 1000 2000 4000 6000 8000
METRES 0 200 1000 2000
(1 KM) (2 KM)

AREA 2.10548

BENNETT LAKE

M.N.R. ADMINISTRATIVE DISTRICT
FORT FRANCES
MINING DIVISION
KENORA
LAND TITLES / REGISTRY DIVISION
RAINY RIVER

Ministry of Natural Resources — Land Management Branch
Ontario

Date FEBRUARY, 1984
Number G-2667
M-2392

52C16SW8243 2.10548 BENNETT LAKE

200