RESULTS OF GEOPHYSICAL SURVEYING

ST. PAUL BAY,

RED LAKE, ONTARIO

for

FREEWEST RESOURCES CANADA INC

by

J. B. Boniwell

Exploration Geophysical Consultant

February 19, 2001

EXCALIBUR INTERNATIONAL CONSULTANTS LTD.

LIST OF CONTENTS

LIST OF DRAWINGS

DWG. NO.	TITLE	SCALE
Fig. 1	Claims and Survey Locality	1:31,680
Fig. 2	Regional Disposition of Deformation Zones	1:200,000
EIC-2752	VLF Stacked Profiles, NAA	1:5,000
-2753	VLF Fraser Filtered Contours	1:5,000
-2754	Total Field Magnetic Profiles	1:5,000
-2755	Total Field Magnetic Contours	1:5,000
-2756	Plan of Interpretation	1:5,000

INTRODUCTION

A grid of lines, 50 m apart, has been surveyed across St. Paul Bay with both VLF and magnetics from winter ice. The target of this work was the projected interaction of the Pipestone Bay - St. Paul Bay deformation zone (PBDZ) with the East Bay deformation zone (EBDZ) under the lake adjacent to the Dome stock. This was considered a highly prospective situation, especially since a system of ultramafic rocks are seen to thread the local setting.

DESCRIPTION OF PROPERTY

The subject property is comprised of 12 contiguous regular 16 ha (40 acre) claims as listed below and disposed as shown (Fig. 1). The survey area was confined to St. Paul Bay and its western approaches in Red Lake and involved the four claims KRL 775731, KRL 963600, KRL 1143079 and KRL 1143080 only. The grid was laid out entirely on lake ice.

Access to this portion of the property was readily had from the town of Red Lake by road and a bush track suitable for 4x4 transport. Total distance to the grid per this route was 5.5 kms, 2.6 kms along the Madsen Highway from the intersection with the Howey Bay Road, 2.9 kms along a track to the east end of St. Paul Bay. Access was further improved by an ice road which ran the length of the bay. All traversing itself however was undertaken by foot (snowshoes).

Claim #	Twp.	Size	Remarks
KRL 775725	Fairlie	16 ha	
775726	"	"	
775727	"	"	

Claim # (cont.)	Twp.	Size	Remarks
775728	Fairlie	16 ha	
775731	"	"	
963598	"	"	
963599	"	"	
1235866	"	"	Previously #775732
KRL 963600	Baird	"	
1143079	"	"	
1143080	"	"	
KRL 963597	Heyson	"	
Totals: 12 claims		192 ha	

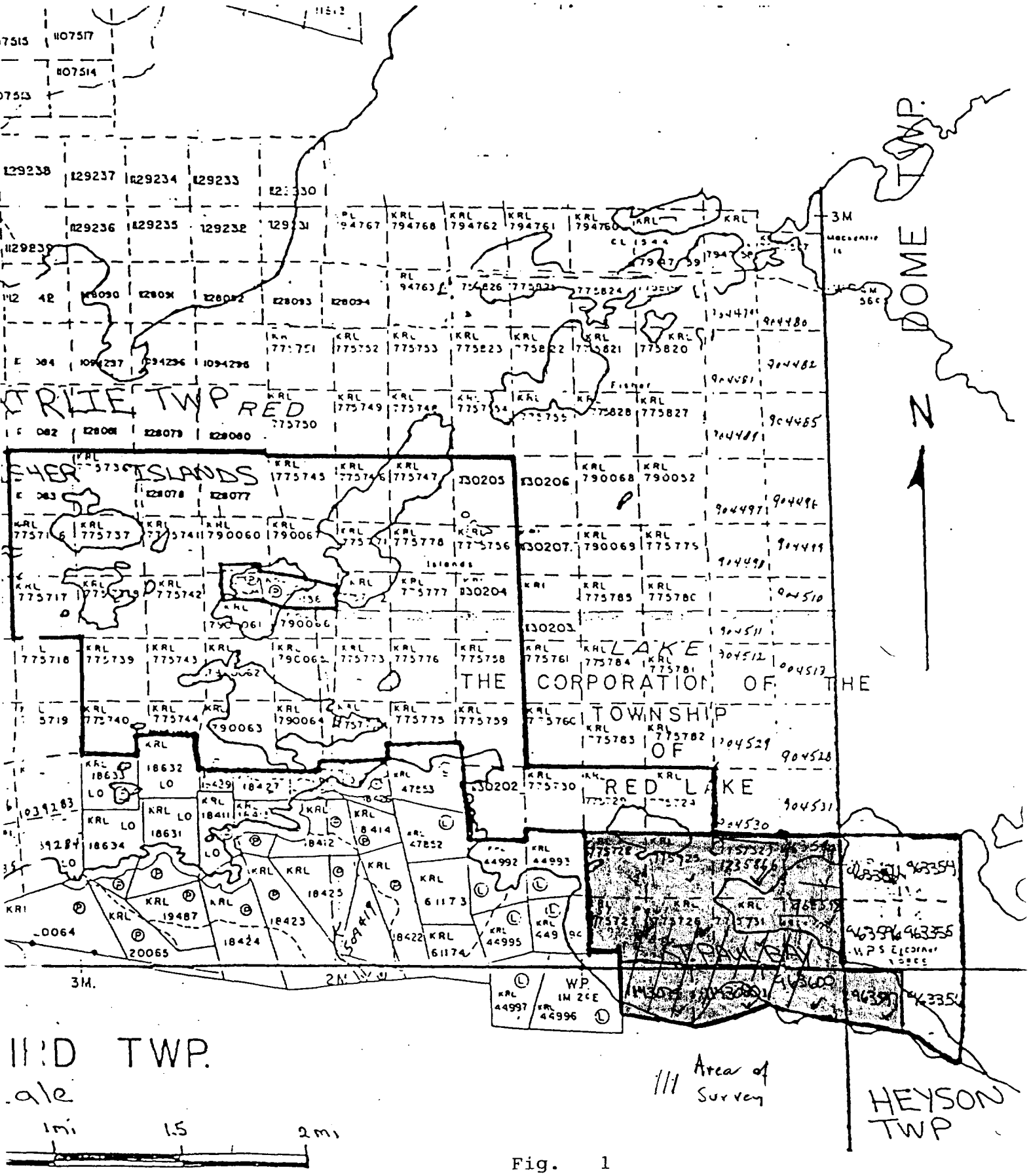


Fig. 1

CLAIMS AND SURVEY LOCALITY

1:31,680

DETAILS OF SURVEY

Grid lines were oriented due N-S spaced 50 m apart and pegged every 25 m.

The VLF survey was conducted with a Geonics model Em-16 receiver tuned to NAA broadcasting at 24.0 kHz from Cutler, Maine. Measurements of the in-phase and out-of-phase component of the vertical field were made at each observation point to a sensitivity of 1^0 of tilt and 1% of primary field respectively. The operator faced north throughout the survey for all observations.

The magnetic readings of the terrestrial field were collected with a Geometrics model GM-816 with a sensitivity of 1 nT to an accuracy of $^{+}2$ nT. Diurnal changes were monitored by looping back to established bases approximately every 2 hours during the working day.

No attempt was made to final process the collected data locally, instead all results were relayed to Toronto where all appropriate corrections to them could be made and processed into

maps. Specifically the VLF readings were plotted in stacked profiles, then (Fraser) filtered to remove extremes of response and to supply a first derivative peaking over all inflection points. The latter were contoured to depict all those spatial relationships of anomaly that promised to occur across the area. The magnetic data for their part were compensated for diurnal drift and brought to a common datum. They then too were plotted in profile, posted in plan and contoured.

These geophysical outputs are all presented herewith at a plan scale of 1:5000.

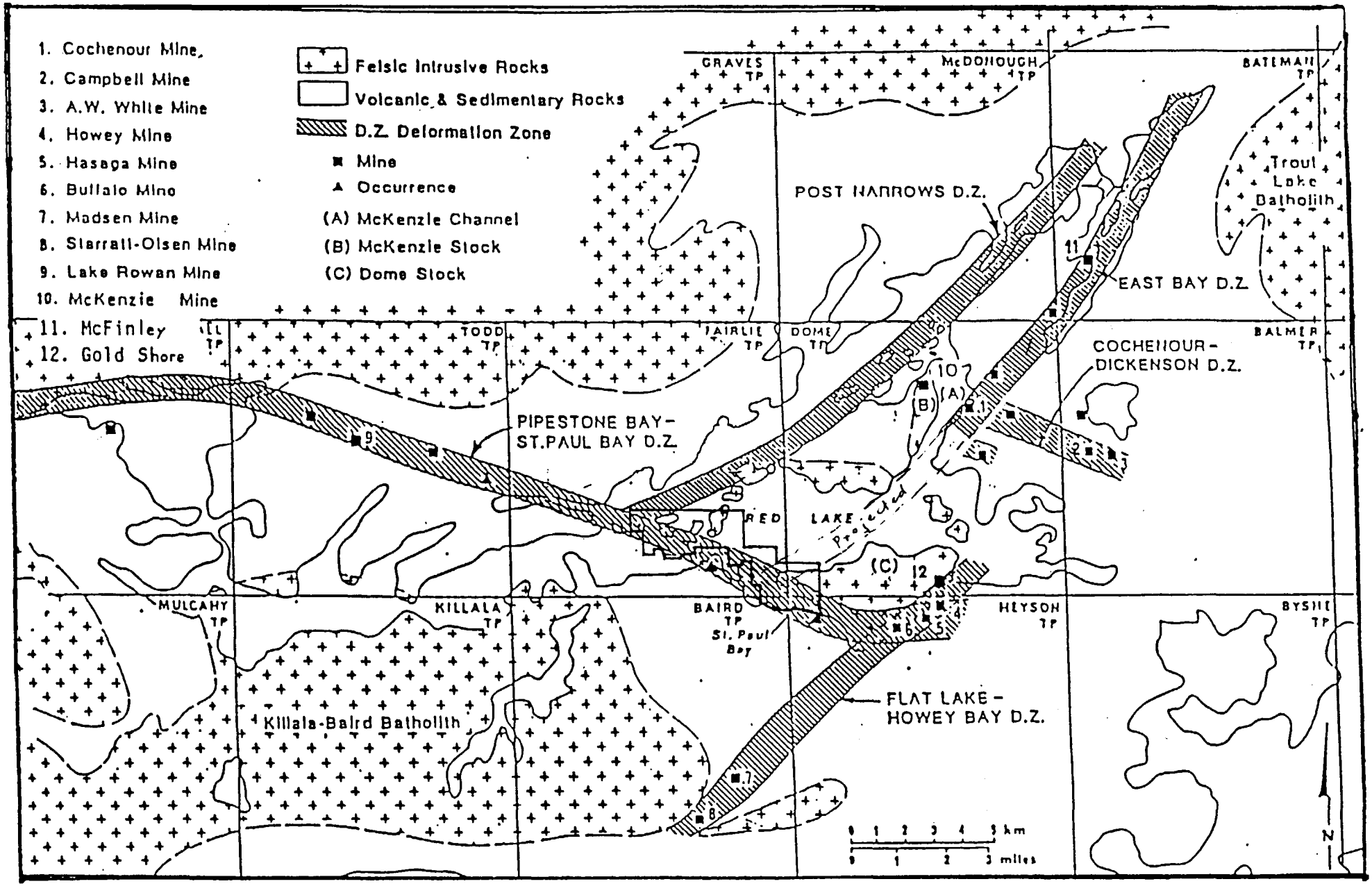
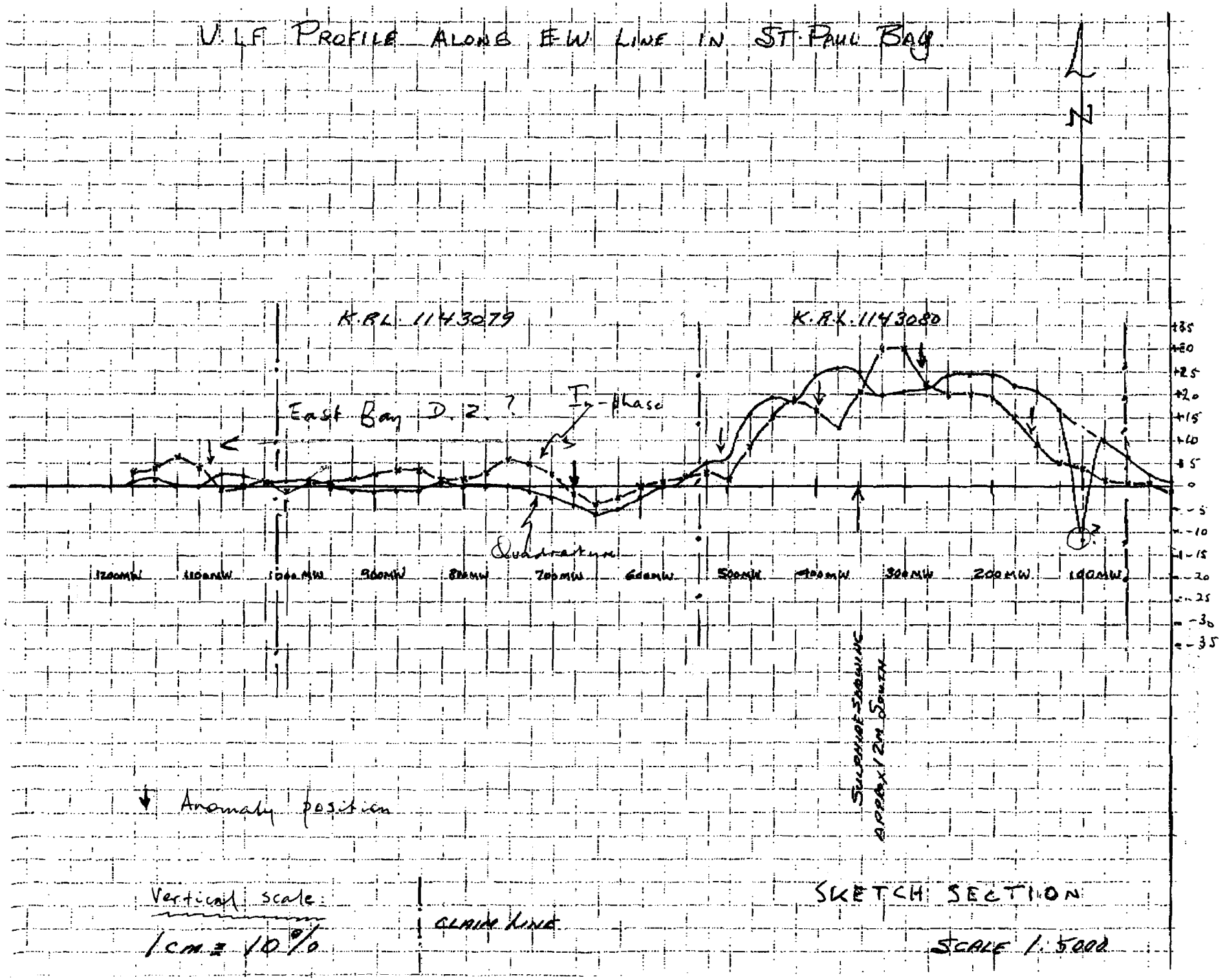


Figure 2: Past and present producing mines as well as regional deformation zones.

V.L.F. Profile along E-W line in St. Paul Bay



DISCUSSION

The VLF traverses are aligned N-S. This orientation provides a good attitude with respect to the NAA field which is broadcast at 24.0 kHz from Cutler, Maine; it also supplies an excellent sampling of the PBDZ as it passes through the St. Paul Bay environment and a reasonable description of the EBDZ should it enter the area from the northeast as prescribed (Fig. 2). A previous trial traversing E-W with VLF utilizing the NAA field showed that there was a very fair chance that the EBDZ could be picked up even in the deeper parts of the lake, even though response signals would naturally be weaker (see sketch).

As it turns out, the new survey data disclose a slightly more complicated picture. This is regarded as inevitable, given the structural and lithologic heterogeneity of the bedrock geology. Notwithstanding, some definite trends can be perceived, the most eminent of which flanks, to either one side or the other, the strong magnetic horizon to the south side of the grid. Water is more shallow here and near-outcrop conditions are projected to prevail, especially around the edges of the central line 100W land

protuberance into the lake.

Other trends exist, even well out into the lake. These are seen despite the weakness of the secondary signal in some places. Such a circumstance was anticipated and comes as no surprise. However since weak anomalies can be important anomalies in these conditions, these are treated here with all due consideration. Thus some credence can be attached to the weak but persistent anomaly system that angles across line 250W at the BL, also across lines 350W and 400W at the BL. This fits the EBDZ projection, at least in orientation and general position of the zone's east edge. This is best seen in the Fraser filter presentation (Dwg. No. EIC-2753) where in effect this trend becomes the dominant new addition to area knowledge.

From the perspective of gold incidence, the most prospective section on this system's axis falls near the south end of line 450W as it interacts with the ultramafic magnetic feature and the PBDZ there and is lost. It is in this location that drilling is recommended. A suitable first hole would be:

Collar at: 00+25S/450W

to be drilled grid S at -50^0 for 155.m

It is to be noted that the magnetics have been abated locally in this vicinity, and could well represent thereby an alteration by either magnetite depletion or silica flooding or both. In any of these events, the chances of gold occurrence would be substantially improved hereabouts.

In addition, there exist other possibilities in the sub-region. The main magnetic relief is due to ultramafic volcanics and intrusives on drill and outcrop evidence, and such rocks are important hosts to high grade gold in the Campbell and Red Lake (ex Dickenson) mines. Across the present grid area, they have ostensibly been deformed and broken up by a combination of folding and faulting. Since some of these same ultramafic bodies could well be carrying platinum/palladium independently of gold, they emerge as the target occurrences for future work.

JBB:sb

February 19, 2001

J. B. Boniwell

Exploration Geophysical Consultant

EXCALIBUR
INTERNATIONAL
CONSULTANTS LTD.

10 Hurontario Street
Mississauga, Ontario, Canada L5G 3G7
Bus: 905-271-1043 • Fax: 905-271-7258

CERTIFICATE

I, JOHN B. BONIWELL, of 1522 Clearwater Dr., in the City of Mississauga, County of Peel, in the Province of Ontario do hereby certify:

1. That I am an exploration geophysical consultant holding office at 10 Hurontario St., Mississauga, Ontario.

2. That I am a graduate of the University of Tasmania in physics, maths and geology, and that I have been practising my profession of exploration geophysics for over 40 years.

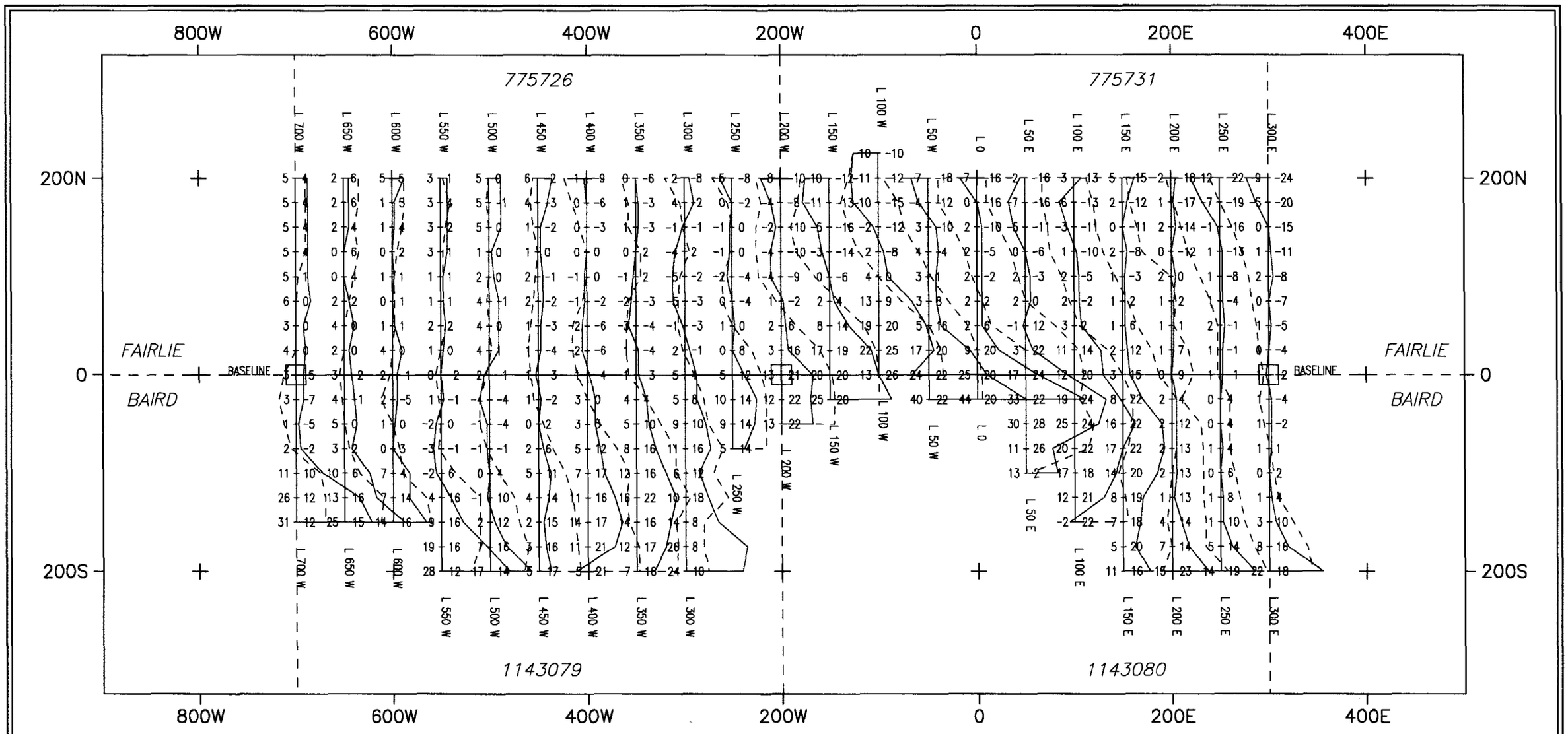
3. That I am a Fellow of the Geologic Association of Canada and a member in good standing of the Society of Exploration Geophysicists, KEGS, and the Prospector's & Developer's Association.

4. That I have no interest, direct or indirect in the property discussed herein, nor do I expect to receive any such interest.

5. That this report is based on field data recently collected in survey from lake ice by Excalibur International Consultants during February 2001, from prior survey results in the area (Meunier, Chevron), and from OGS geology, maps and files.

March 15, 2001
MISSISSAUGA, Ontario

J. B. Boniwell
Exploration Geophysical Consultant



Scale 1:5000

100 0 100 200 300

(metres)

N

VLF LEGEND

Profile scale 1 cm = 20 %

Inphase profile ——————

Quadrature profile – – – –

In

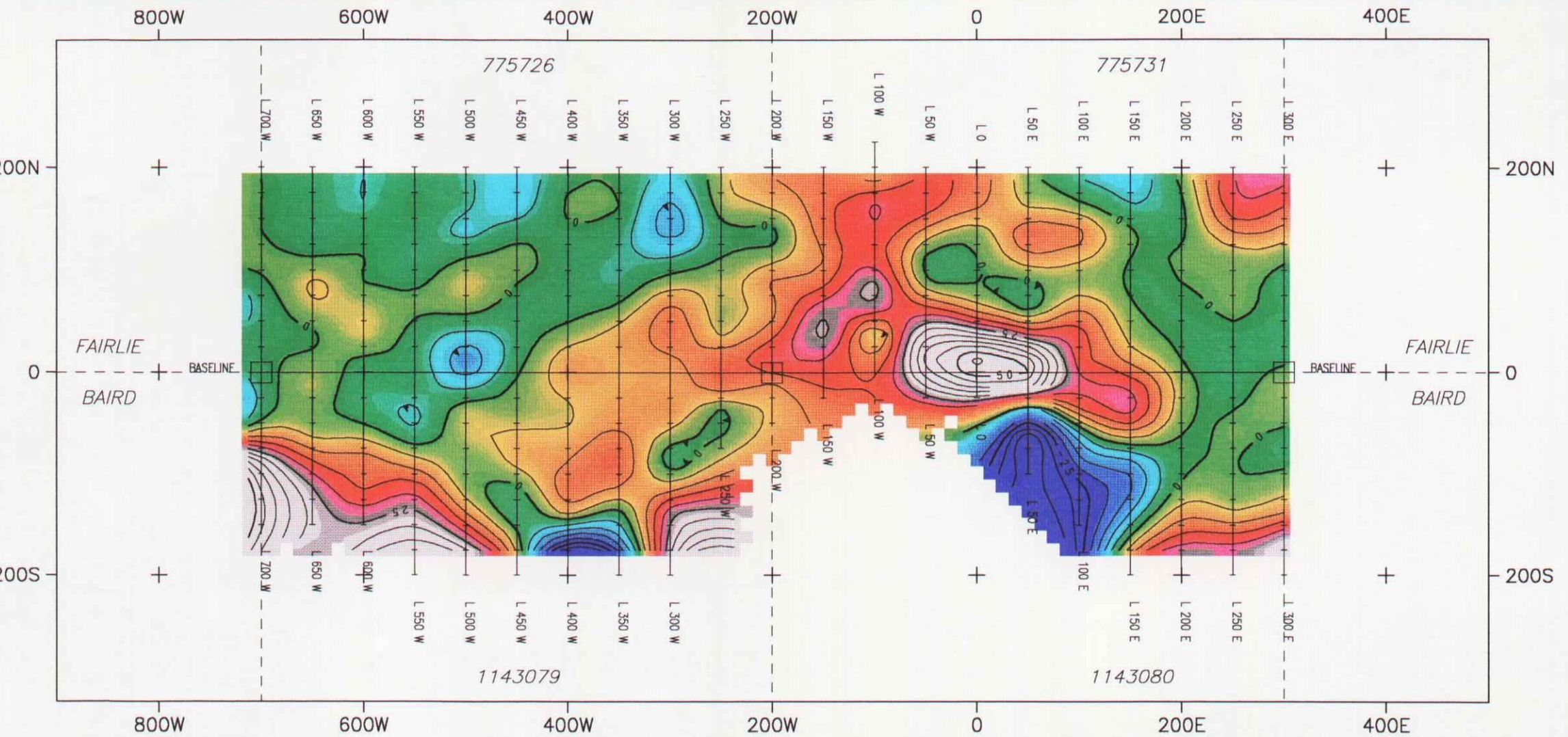
Qu

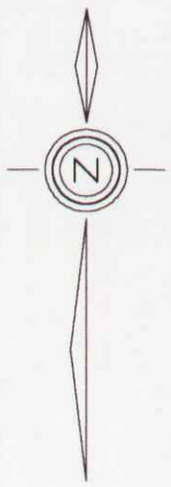
FREEWEST RESOURCES CANADA INC.

St. Paul Bay, Red Lake, Ont.

VLF SURVEY (NAA) PROFILES

EXCALIBUR INTERNATIONAL CONSULTANTS LIMITED TORONTO ONTARIO		PREP. BY: T.J.M. UTM Zone DATE: February 2001 SCALE: 1:5,000
Tel. 905-271-1043	DWG. No. E.I.C. 2752	





Scale 1:5000

100 0 100 200 300

(metres)

CONTOUR INTERVAL

5

25

100

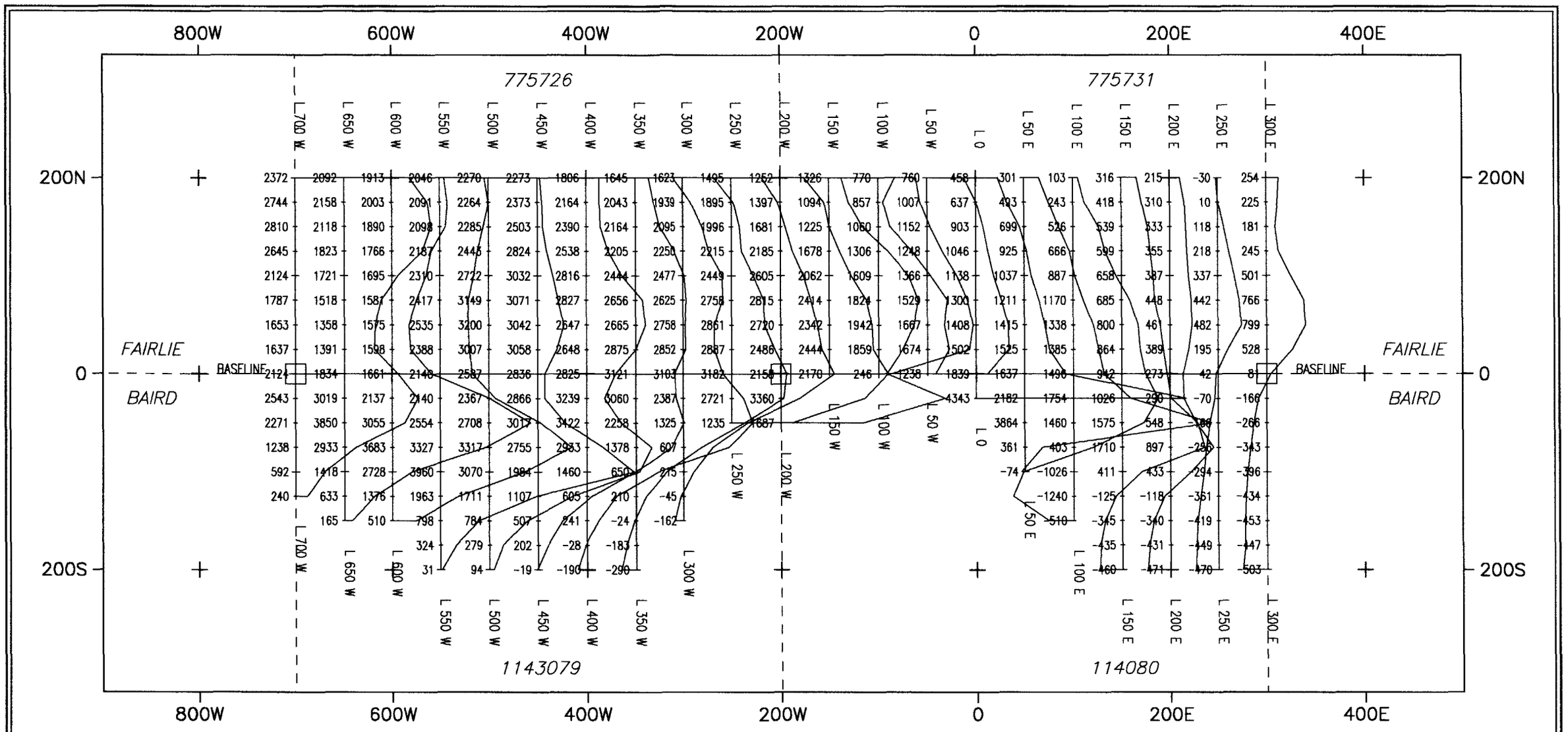
FREEWEST RESOURCES CANADA INC.

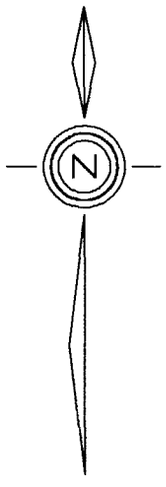
St. Paul Bay, Red Lake, Ont.

VLF SURVEY (NAA)
FRASER FILTER CONTOURS

EXCALIBUR INTERNATIONAL CONSULTANTS LIMITED
TORONTO ONTARIO
Tel. 905-271-1043

PREP. BY: T.J.M.
UTM Zone
DATE: February 2001
SCALE: 1:5,000
DWG. No. E.I.C. 2753





Scale 1:5000

100 0 100 200 300

(metres)

PROFILE LEGEND

Profile Scale 1000nT. = 1cm.

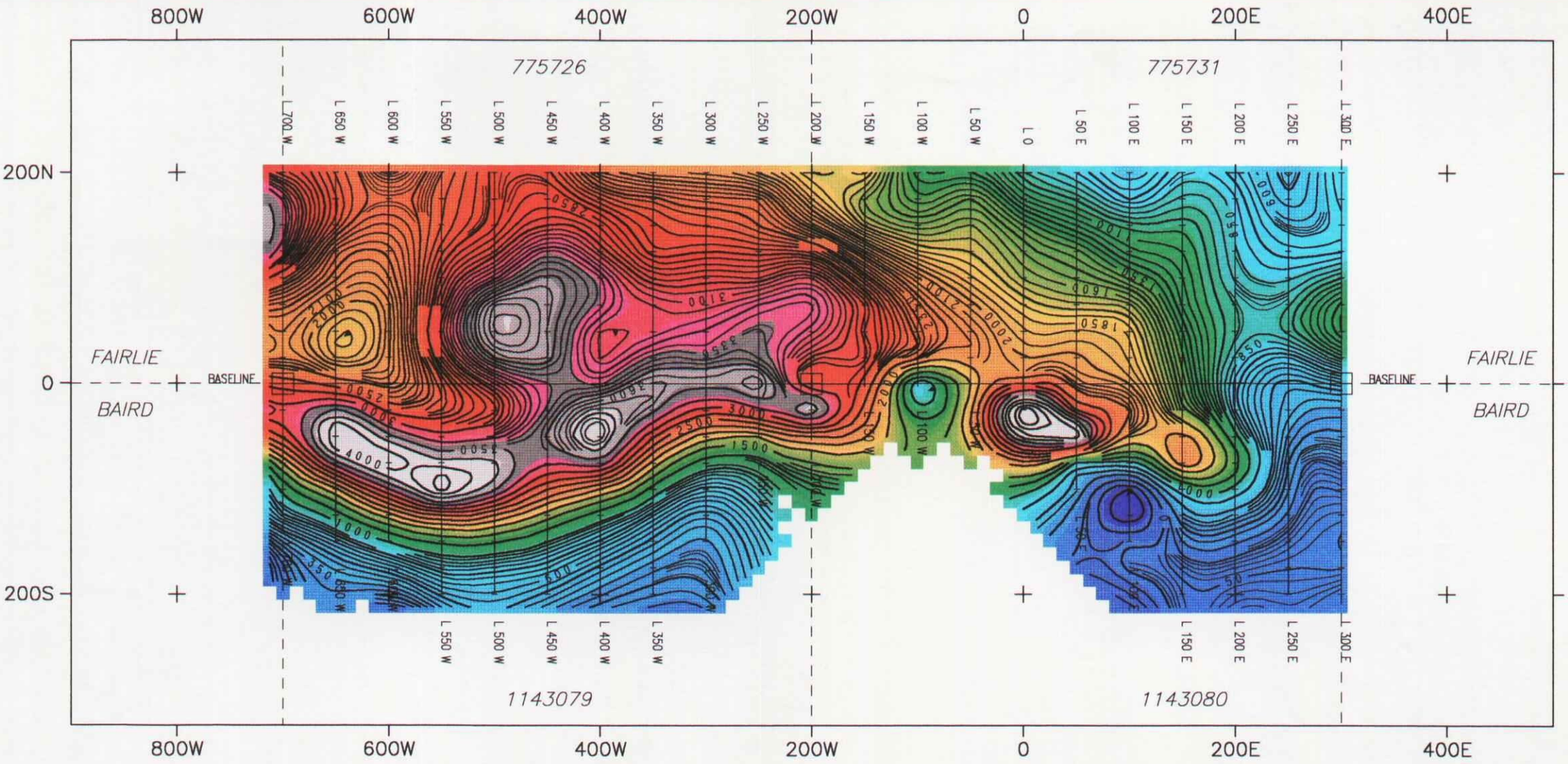
Base Level = 59500nT.

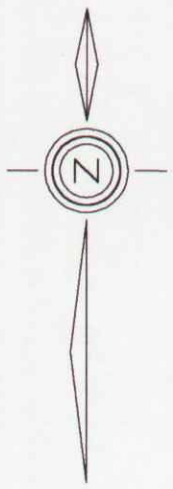
FREEWEST RESOURCES CANADA INC.

St. Paul Bay, Red Lake, Ont.

MAGNETIC SURVEY
VALUES & PROFILES

EXCALIBUR INTERNATIONAL CONSULTANTS LIMITED TORONTO ONTARIO		PREP. BY: T.J.M.
		UTM Zone
		DATE: February 2001
		SCALE: 1:5,000
Tel. 905-271-1043	DWG. No. E.I.C. 2754	





Scale 1:5000

100 0 100 200 300

(metres)

LEGEND

10

50

250

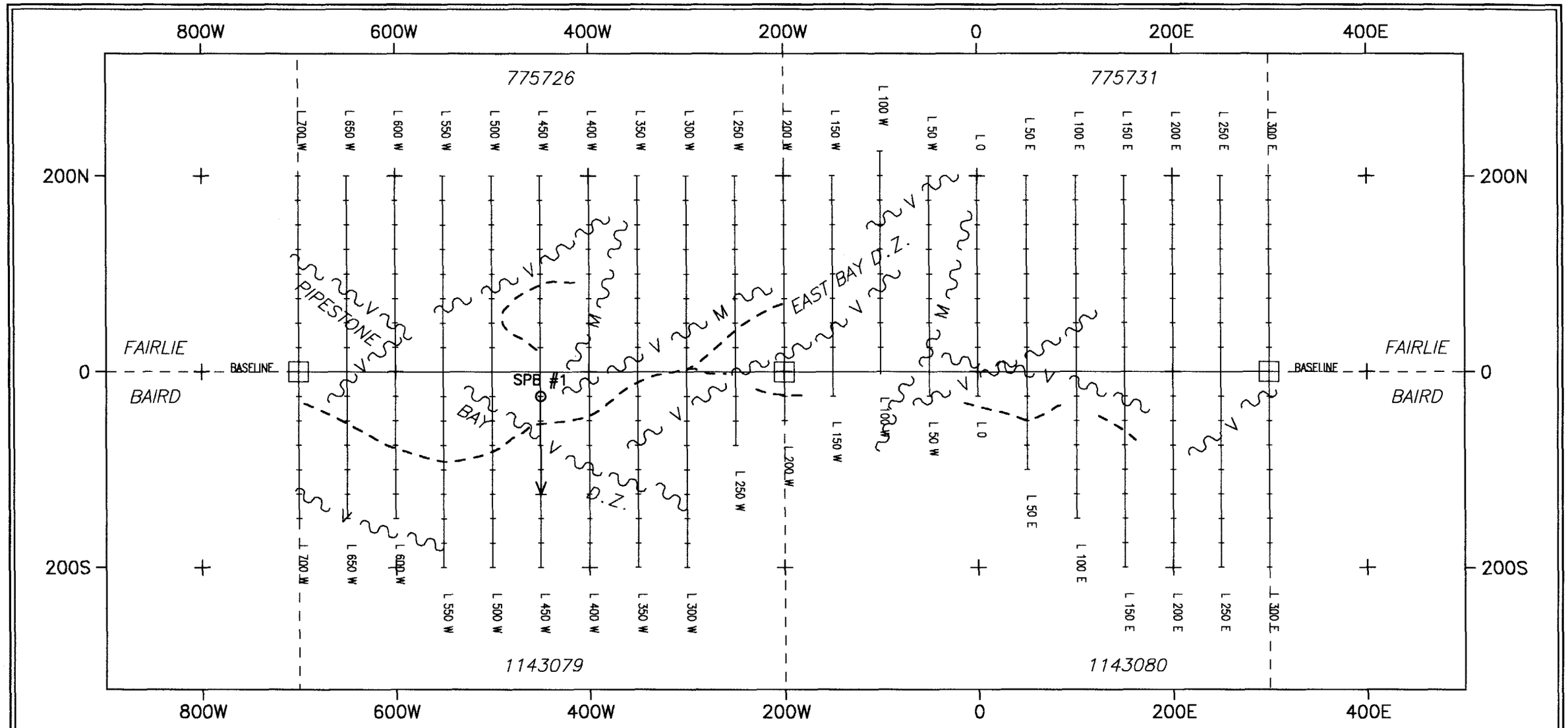
Base Level = 59000nT.

FREEWEST RESOURCES CANADA INC.

St. Paul Bay, Red Lake, Ont.

MAGNETIC SURVEY
CONTOURS

EXCALIBUR INTERNATIONAL CONSULTANTS LIMITED TORONTO ONTARIO		PREP. BY: T.J.M.
		UTM Zone
		DATE: February 2001
		SCALE: 1:5,000
Tel. 905-271-1043	DWG. No. E.I.C. 2755	



Scale 1:5000

100 0 100 200 300

(metres)

N

INTERPRETATION LEGEND

— — —	Magnetic u/m horizon
∿∿	Projected Fault
M	Magnetic Fault
V	VLF Fault
SPB #1 ⊙ ↓	Proposed Drill Hole

FREEWEST RESOURCES CANADA INC.

St. Paul Bay, Red Lake, Ont.

PLAN of INTERPRETATION

EXCALIBUR INTERNATIONAL CONSULTANTS LIMITED
TORONTO ONTARIO
Tel. 905-271-1043

PREP. BY: T.J.M.
UTM Zone
DATE: February 2001
SCALE: 1:5,000
DWG. No. E.I.C. 2756

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

Ontario

GEOSCIENCE ASSESSMENT OFFICE
933 RAMSEY LAKE ROAD, 6th FLOOR
SUDBURY, ONTARIO
P3E 6B5

Date: 2001-MAY-22

Tel: (888) 415-9845
Fax:(877) 670-1555

DAVID MEUNIER
P.O. BOX 1624
403 DOME STREET
SOUTH PORCUPINE, ONTARIO
P0N 1H0 CANADA

Submission Number: 2.20987
Transaction Number(s): W0120.00043

Dear Sir or Madam

Subject: Approval of Assessment Work

We have approved your Assessment Work Submission with the above noted Transaction Number(s). The attached Work Report Summary indicates the results of the approval.

At the discretion of the Ministry, the assessment work performed on the mining lands noted in this work report may be subject to inspection and/or investigation at any time.

If you have any question regarding this correspondence, please contact LUCILLE JEROME by email at lucille.jerome@ndm.gov.on.ca or by phone at (705) 670-5858.

Yours Sincerely,

Ron Gashinski
Supervisor, Geoscience Assessment Office

Cc: Resident Geologist

David Meunier
(Claim Holder)

Assessment File Library

David Meunier
(Assessment Office)

52N04SW2026 2.20987 FAIRLIE 900

Work Report Summary

Transaction No: W0120.00043 **Status:** APPROVED
Recording Date: 2001-MAR-22 **Work Done from:** 2001-FEB-14
Approval Date: 2001-MAY-01 **to:** 2001-FEB-18

Client(s):

169976 MEUNIER, DAVID

Survey Type(s):

MAG VLF

Work Report Details:

Claim#	Perform	Perform Approve	Applied	Applied Approve	Assign	Assign Approve	Reserve	Reserve Approve	Due Date
KRL 775726	$386	$386	$0	$0	$221	221	$165	$165	2002-FEB-20
KRL 775731	$391	$391	$0	$0	$0	0	$391	$391	2002-FEB-27
KRL 1143079	$300	$300	$800	$800	$0	0	$0	$0	2002-SEP-24
KRL 1143080	$279	$279	$0	$0	$279	279	$0	$0	2002-SEP-24
	$1,356	$1,356	$800	$800	$500	$500	$556	$556	

External Credits: $0

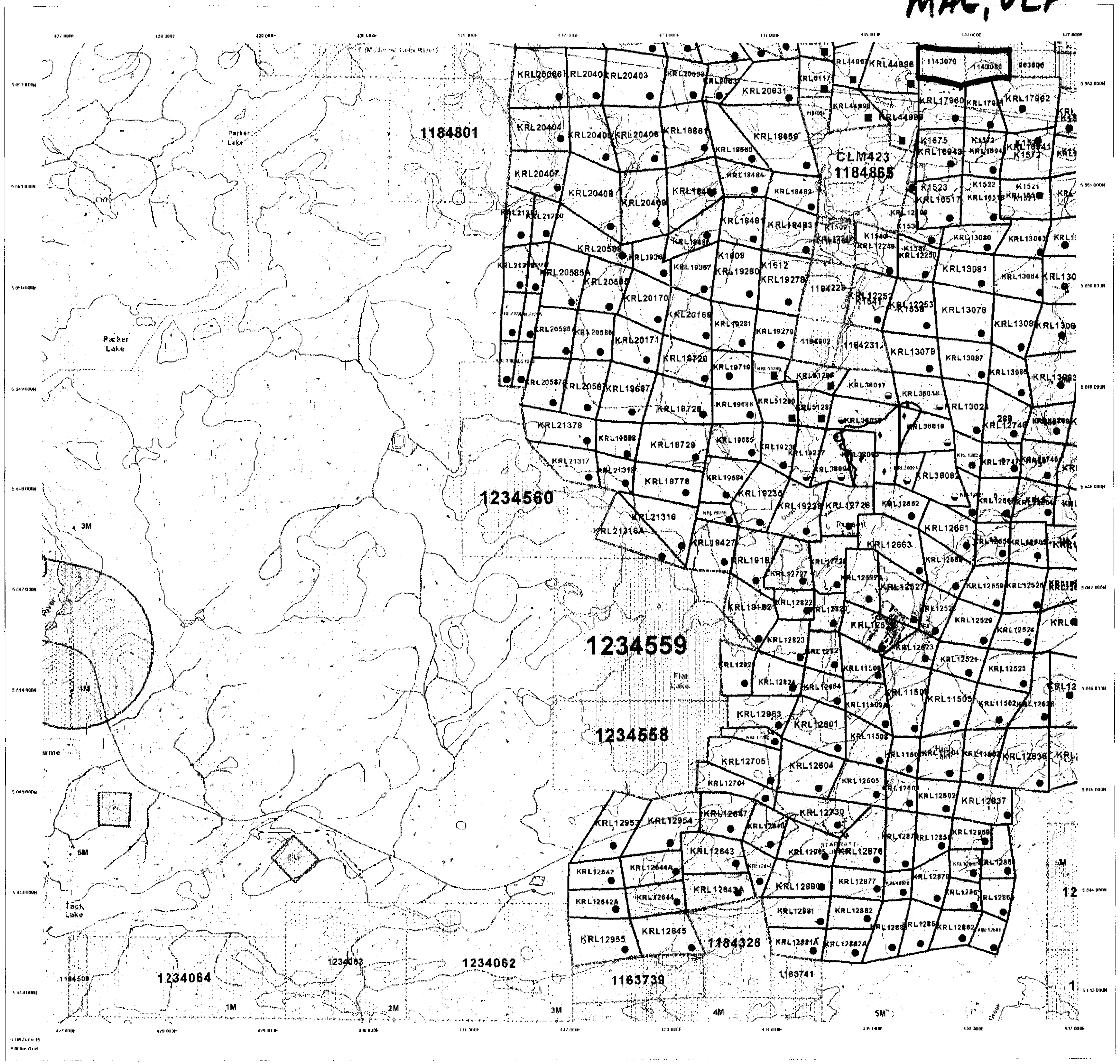
Reserve:

$556 Reserve of Work Report#: W0120.00043

$556 Total Remaining

Status of claim is based on information currently on record.

2.20987
MAG, VLF



MINISTRY OF NORTHERN DEVELOPMENT AND MINES
PROVINCIAL MINING RECORDER'S OFFICE

MINING LAND TENURE MAP

Date / Time of Issue Apr 27 2001 10:51h Eastern

TOWNSHIP / AREA	PLAN
BAIRD	G-3739

ADMINISTRATIVE DISTRICTS / DIVISIONS

Mining Division	Red Lake
Land Titles/Registry Division	KENORA
Ministry of Natural Resources District	RED LAKE

TOPOGRAPHIC

LAND TENURE

LAND TENURE WITHDRAWALS

IMPORTANT NOTICES

LAND TENURE WITHDRAWAL DESCRIPTIONS

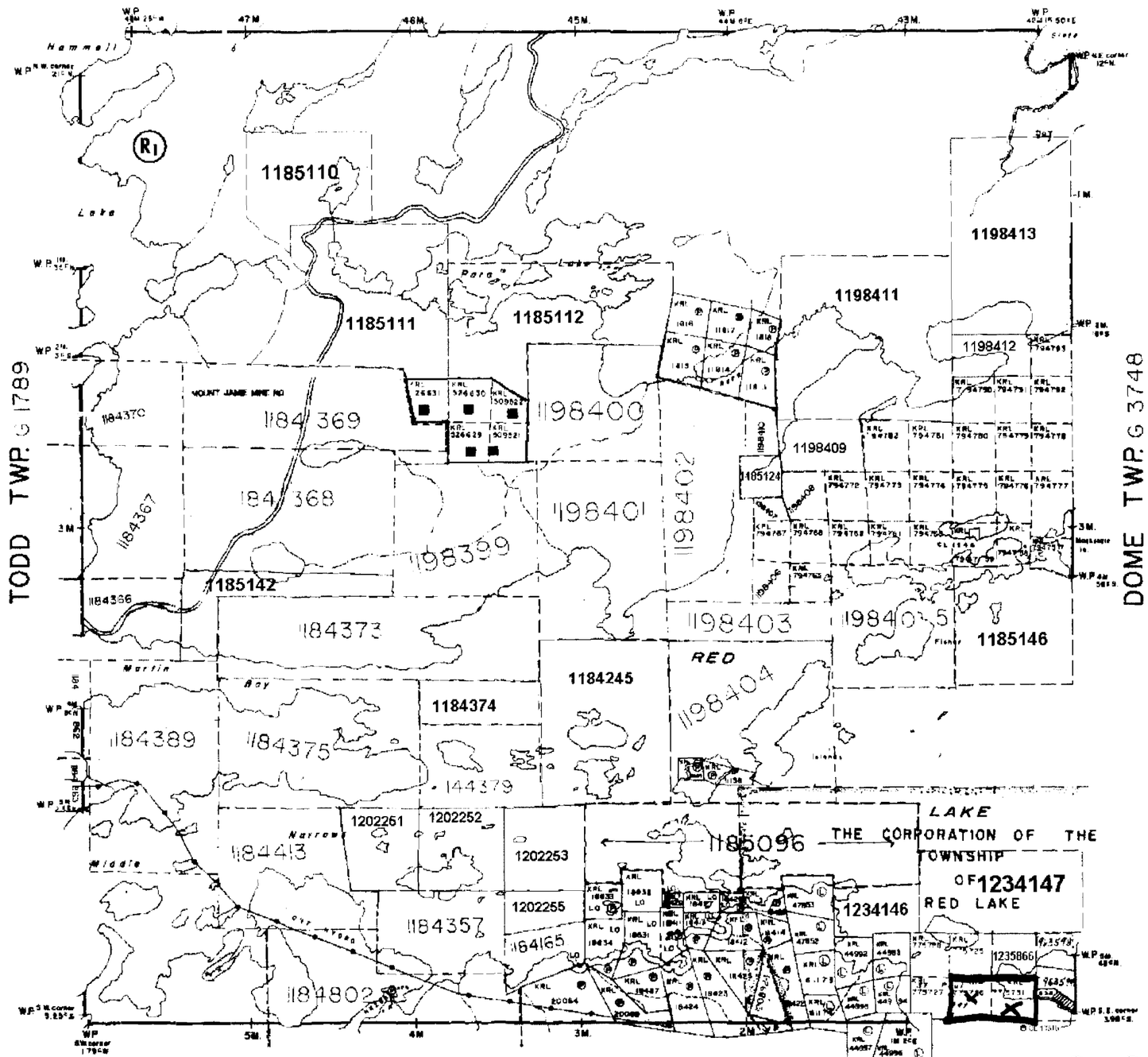
IMPORTANT NOTICES

General Information and Limitations

52N04SW2026 2.20987 FAIRLIE

200

GRAVES TWP. G 3751



THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

THE TOWNSHIP OF

FAIRLIE

DISTRICT OF KENORA
(PATRICIA PORTION)

RED LAKE MINING DIVISION

SCALE: 1-INCH=40 CHAINS

LEGEND

PATENTED LAND	P.
CROWN LAND SALE	C.S.
LEASES	L.
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	
CANCELLED	C.

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

FOREST ACTIVITY INFORMATION

THIS TOWNSHIP/AREA FALLS WITHIN THE
RED LAKE CROWN
AND MAY BE SUBJECT TO FORESTRY OPERATIONS. THE M.N.R. UNIT FORESTER FOR THIS AREA CAN BE CONTACTED AT:
P.O. BOX 5000
RED LAKE, ONTARIO P0V 2M0
(807) 727-2253

Sec.35 W-LL-C2354/99 ONT 06/05/99 S & M

Ontario Ministry of Natural Resources | Ministry of Northern Development and Mines

Date: AUGUST, 1986

Number: G-3731

2.20987
MAG, VLF