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April 5h 2021 **NTS Map 52/N/08**

Report of 2021 Gradient IP Survey

Newrange Gold Corp

North Birch Project

Report Prepared by

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On Behalf of

Newrange Gold Corp.

Table of Contents

1. INTRODUCTION

Newrange Gold Corp.acquired the North Birch Project (north of Birch Lake) in the Red Lake Mining Division of Northwestern Ontario (Figure 1) for it potential to host gold mineralization of economic interest, based on previous work in the area and the favourable geological environment. The following " Interpretation Report " was prepared at the request of Mr. Brent Patrie of Dan Patrie Exploration Ltd. an experienced IP contractor who had just completed a Gradient Induced Polarization Survey (GIPS) on the North Birch Grid. The survey was carried out over a 44 day period from February 10 to March 25, 2021. The Survey Grid (Figure 2) is centred at UTM co-ordinates, NAD 83,, Zone 15, 539000 mE, 5705000 mN, trends N 65°W and is approximtely 8000 metres long and 2000 m wide (N 25 W). There are 42 survey lines spaced at 200 metres and a total of 74.5 line-km was surveyed. Figures 6 and 7 show the plotted IP Chargeability and Resistivity measured/calculated GIPS values respectively and were prepared by Mr Gab Roy, Smooth Rock Falls, Ontario. Figures 2,3 and 5 were provided by Newrange Gold Corp and the writer prepared Figures 1 and 4.

2. BACKGROUND AND GEOLOGY

Figure 4 is a geological map of the Birch Lake Area taken from OGS Map 2175 Red Lake-Birch Lake Area. The North Birch Project area is in the top, northeast part and its location is labelled. It is centred at UTM539000 mE, 5705000 mN, northwest of Birch Lake and specifically in an area mapped as mafic metavolcanics (1a); massive lava, pillow lava,,tuff and agglomerate, amphibolite and derived schists and gneiss. The presence of sulphides and gold mineralization is noted for the area. (Au,S). The location of the Project, in the northern part of the map indicates that it is hosted in basal units of a large regional syncline, opening to the south, into the Birch Lake area and further south. Here the geological units are felsic to intermediate meta volcanics (2e) and then metasediments (3a) further south. The Project area appears to be on the northeasterly limb of a small second order fold in the basal part of the main synclinal structure. Here the units dip steeply and trend N 65°W. The other limb of this fold is to the west, dips steeply , trends N 20°E. and joins with the northeasterly limb in the area of the northwest end of the Survey Grid (Figure 3), a satellite photo , provided by Newrange Gold which includes the Project Grid Area. The Grid is also shown in this Figure

Figure 5, also provided by Newrange Gold Corp, shows an outline of the North Birch Project Area claims and in the western two-thirds of the Property the small satellite fold is outlined by the results from a Total Magnetic Field Survey. Superimposed on the magnetics are the locations of historic exploration/development sites The locations of previous sampling sites and some gold assay values are also provided. and are of interest

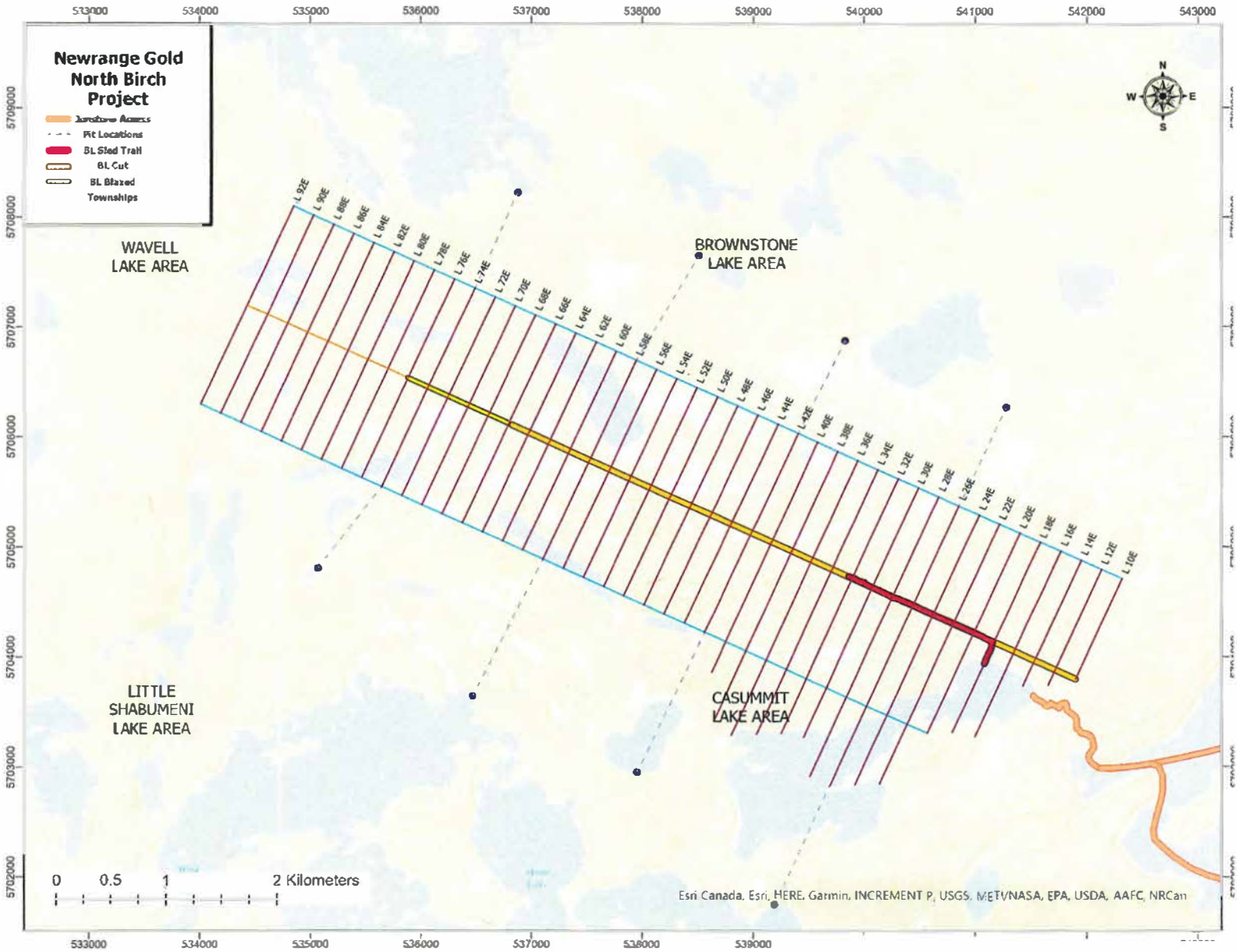


FIGURE 2

NEWRANGE GOLD CORP
NORTH BIRCH PROJECT
GRADIENT IP SURVEY

SURVEY GRID

Scale: as shown April 2021

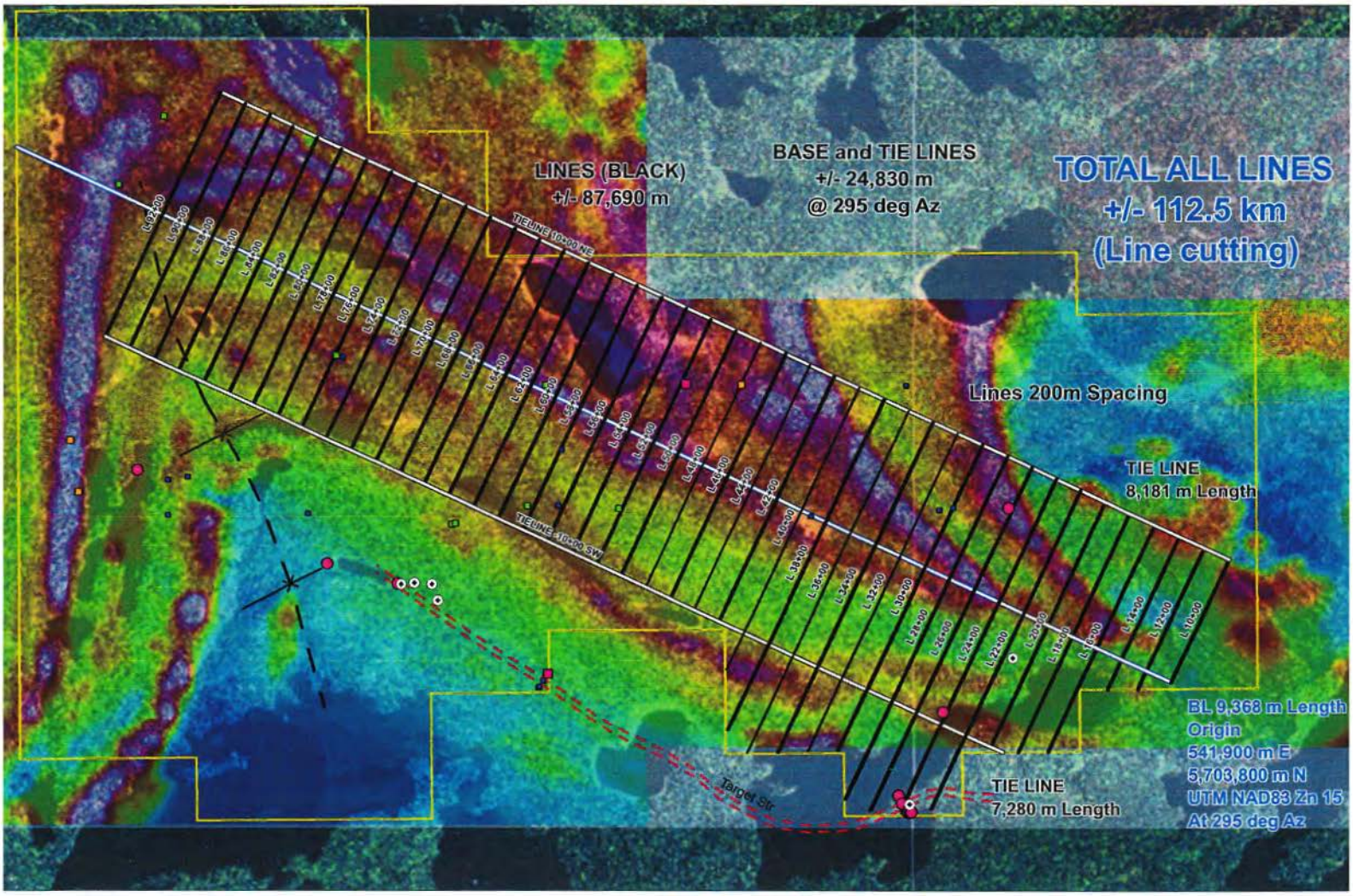


FIGURE 3

NEWRANGE GOLD CORP
NORTH BIRCH PROJECT
GRADIENT IP SURVEY

SURVEY GRID AND TOPOGRAPHY

Scale: 2 cm = 1000 m April 2021

LEGEND

CENOZOIC

PLEISTOCENE AND RECENT

Sand, gravel, clay

UNCONFORMITY

PRECAMBRIAN

ARCHEAN

FELSIC IGNEOUS AND METAMORPHIC ROCKS

GRANITIC ROCKS

5 — *Undifferentiated granitic rocks.*
5a — *Biotite-and (or) hornblende-quartz-feldspar gneiss, augen gneiss, migmatite, granite gneiss, hybrid granite gneiss, amphibolite gneiss.*
5b — *Granite, granodiorite, quartz monzonite, quartz diorite, porphyritic granite and quartz monzonite, pegmatite, quartz porphyry, feldspar porphyry.*

INTRUSIVE CONTACT

MAFIC AND ULTRAMAFIC IGNEOUS ROCKS

4 — *Undifferentiated.*
4a — *Gabbro, metagabbro, meladiorite.*
4b — *Peridotite, serpentinite.*

INTRUSIVE CONTACT

METASEDIMENTS[a]

3 — *Undifferentiated.*
3a — *Conglomerate, arkose, greywacke, siltstone, argillite, slate, and derived schists.*
3b — *Metasediments with some metavolcanics.*
3c — *Paragneiss, lit-par-lit gneiss.*

IF — *Iron formation.*

METAVOLCANICS[b]

FELSIC TO INTERMEDIATE METAVOLCANICS

2 — *Undifferentiated.*
2a — *Rhyolitic and dacitic tuff, agglomerate and flows.*
2b — *Tuff with some metasediments.*

IF — *Iron formation.*

MAFIC METAVOLCANICS

1 — *Undifferentiated.*
1a — *Massive lava, pillow lava, tuff, agglomerate, amphibolite, and derived schists and gneisses.*
1b — *Metavolcanics with some metasediments.*

IF — *Iron formation.*

S — *Sulphide mineralization.*

NORTH BIRCH PROJECT
539000 mE; 5705000 mN

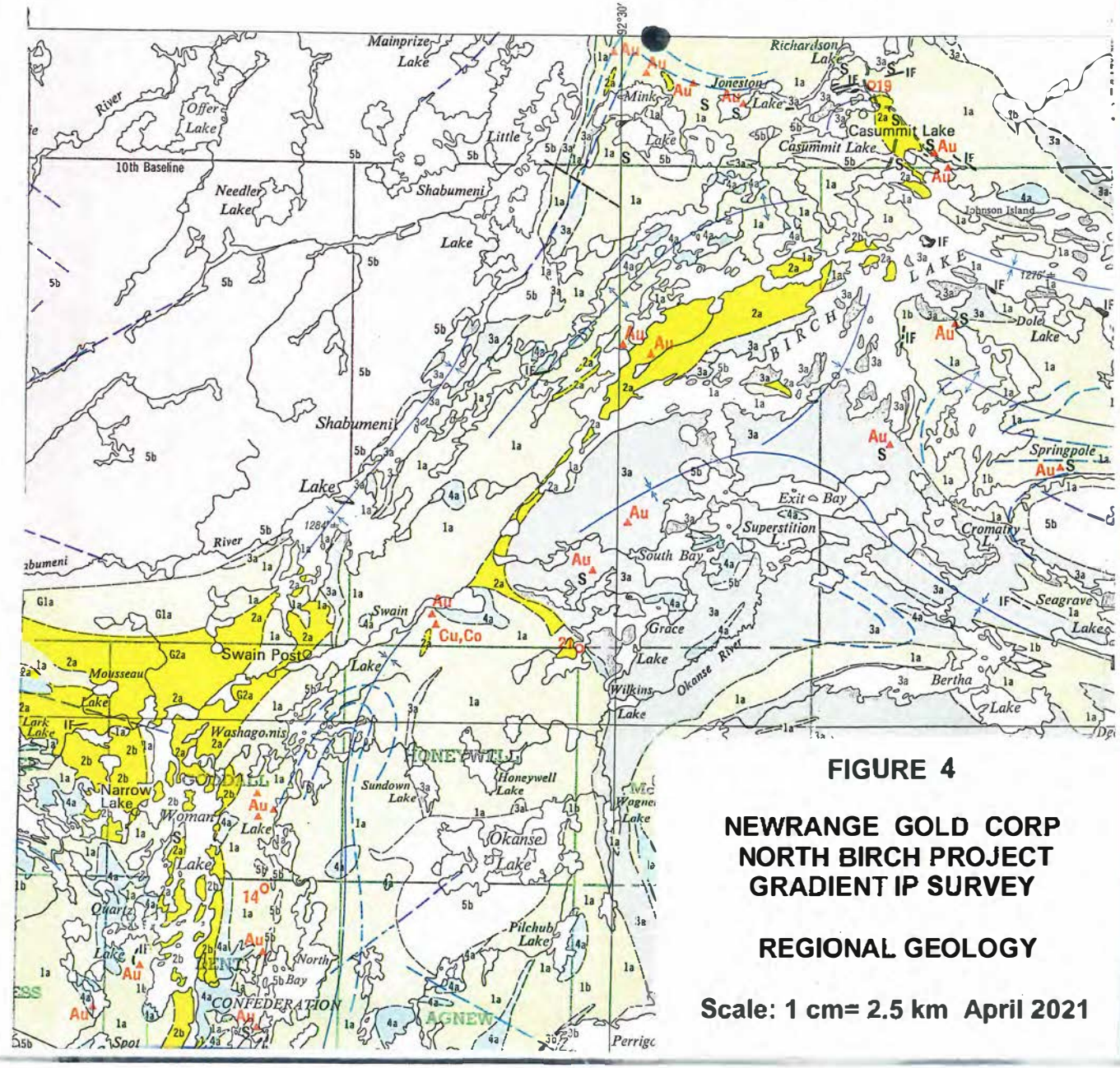


FIGURE 4

NEWRANGE GOLD CORP
NORTH BIRCH PROJECT
GRADIENT IP SURVEY

REGIONAL GEOLOGY

Scale: 1 cm= 2.5 km April 2021

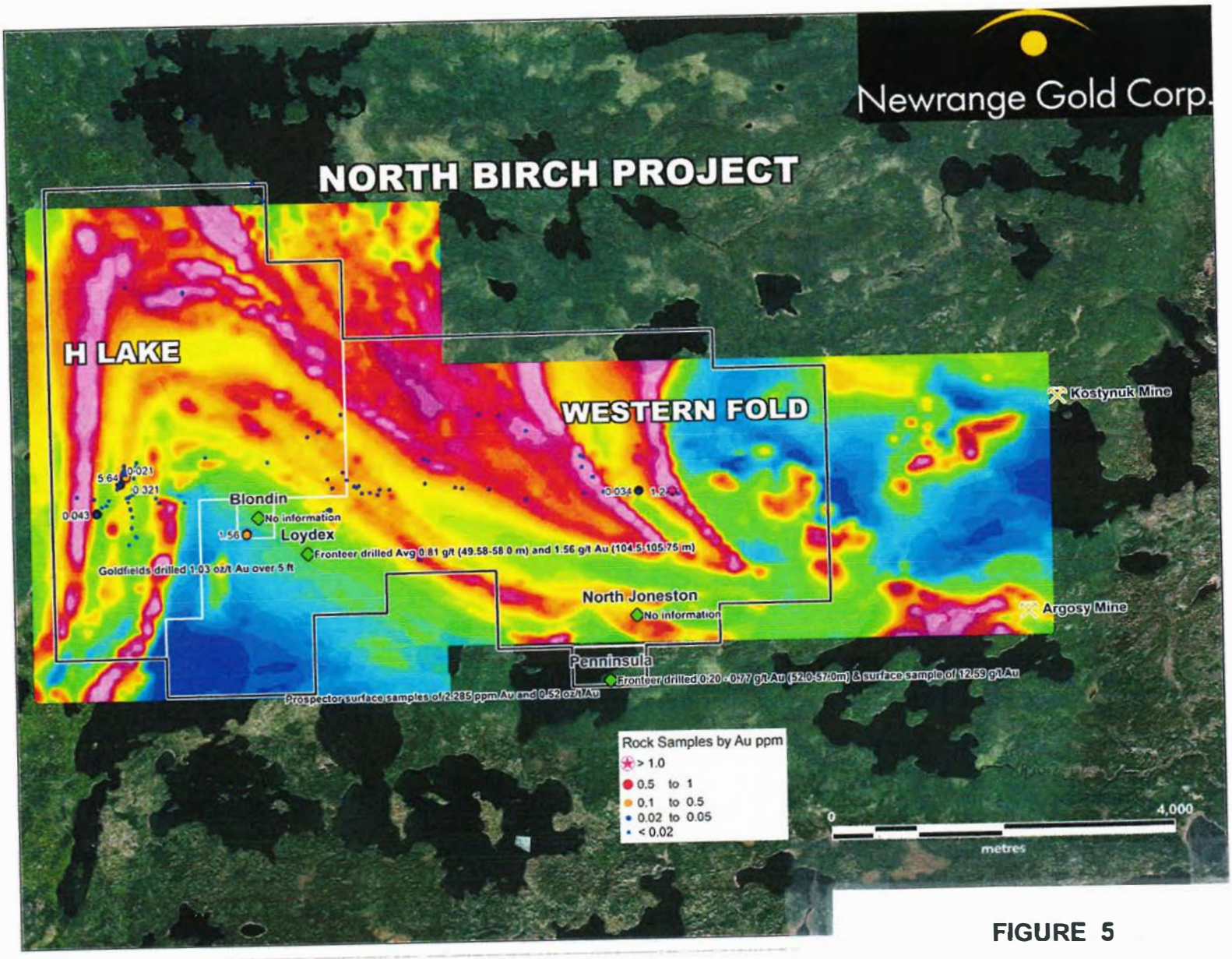


FIGURE 5

NEWRANGE GOLD CORP
NORTH BIRCH PROJECT
GRADIENT IP SURVEY

GOLD SHOWINGS
and
PROPERTY MAGNETICS

Scale: as shown Aprril 2021

3. GRADIENT INDUCED POLARIZATION SURVEY

Between the 10th of February and the 25th of March 2021, Dan Patrie Exploration Ltd, carried out a Gradient Induced Polarization Survey on the North Birch Project Grid with a total of 74.5 line-km in 42 lines being surveyed. The measured/ calculated Chargeability and Resistivity values are plotted respectively in Figures 6 and 7.

In Figure 6, the Chargeability values are plotted in mV/V and fall into five(5) ranges:

< 10 mV/V	--	blue
10 to 20 mV/V	--	green to yellow
20 to 30 mV/V	--	yellow to red
30 to 40 mV/V	--	red
>40 mV/V	--	pink

Background values are considered to be 20 mV/V, with elevated values, zones of interest, >30 mV/V and greater to maximum values of plus 40 mV/v. In Figure 6z the Zones of higher Chargeabilities, occur in different shapes and sizes; small circular to elliptical zones from 100 m to 200 m in diameter plus some up to +400 m as well as more elongated zones.

N 30° to N 40° W	----	600m to 1000m long
East-West	---	Up to 800m long
N 25° E parallel to the lines	---	800m to 1200m long

In some areas, two trends meet and in doing so produce longer Chargeability and Resistivity zones. And so as can be seen in Figures 6 , these zones of higher values occur in two rather irregular groups trending N 75° W to to East - West, separated by zones of very low Chargeabilities (blue), with similar trends.

Figure 7 shows the Resistivity values measured/calculated in the GIPS As can be seen, the orange to red to pink, higher Resistivity values, appear to form patterns overall that are quite irregular., however, there are some common trends;

N 25° E, parallel to the survey lines
East--West
Curved to linear zones comprised of small circular zones

The Survey Grid Area lies along the northeast arm of the small satellite fold structure so the Chargeability and Resistivity plots/zones would appear to be the reflection of zones, structures, stratigraphy in the underlying metavolcanics. For example, sulphides are reported from the area and in turn areas of sulphides may be represented by the higher Chargeability zones. Similarily, gold-bearing areas may be represented by areas of high Resistivity values (quartz veining and/or silicification). Areas of high Resistivity with high Chargeability could be areas of quartz veining and/or silicification as well as some sulphides.

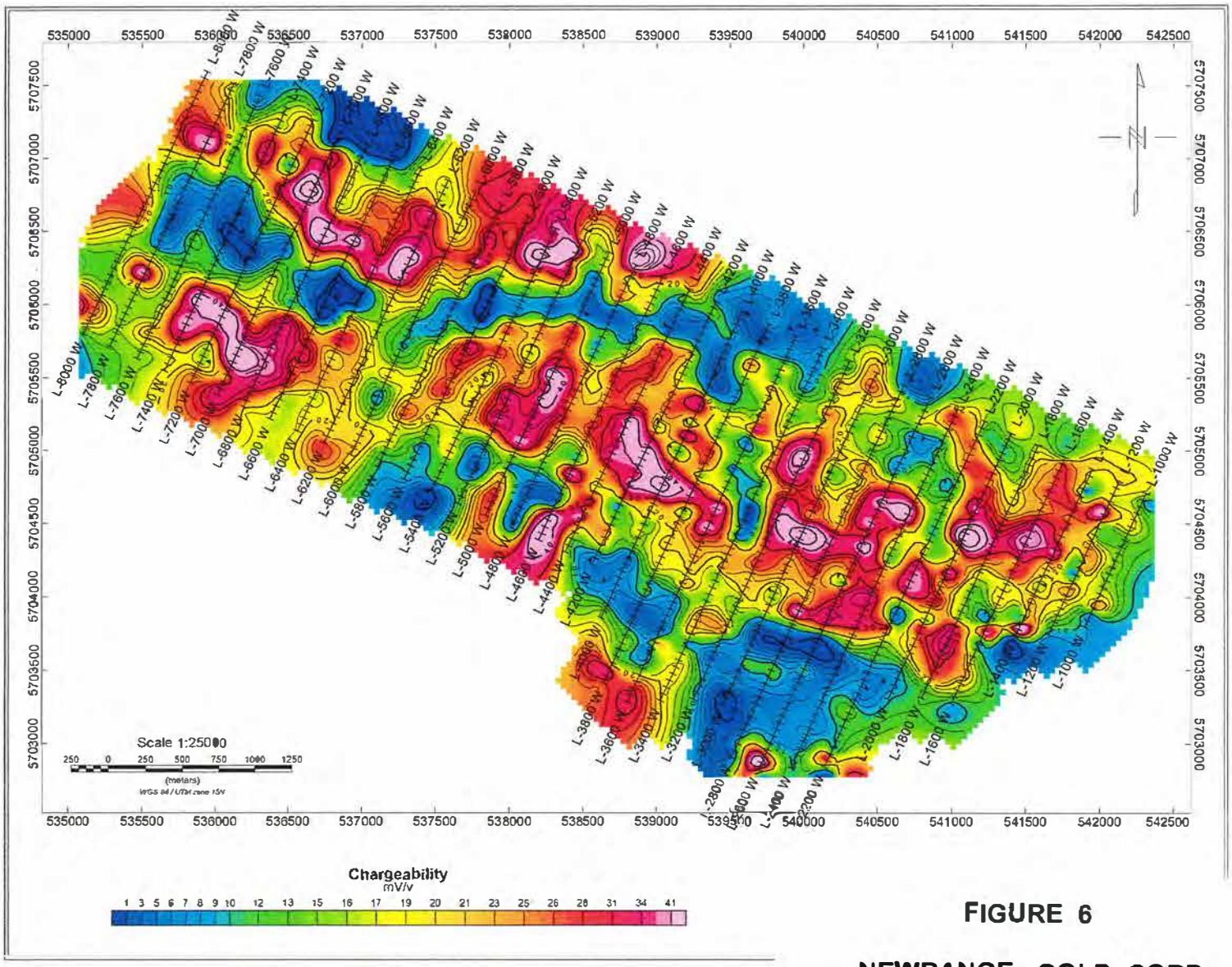


FIGURE 6

NEWRANGE GOLD CORP
NORTH BIRCH PROJECT
GRADIENT IP SURVEY

IP CHARGEABILITY MAP

Scale: as shown April 2021

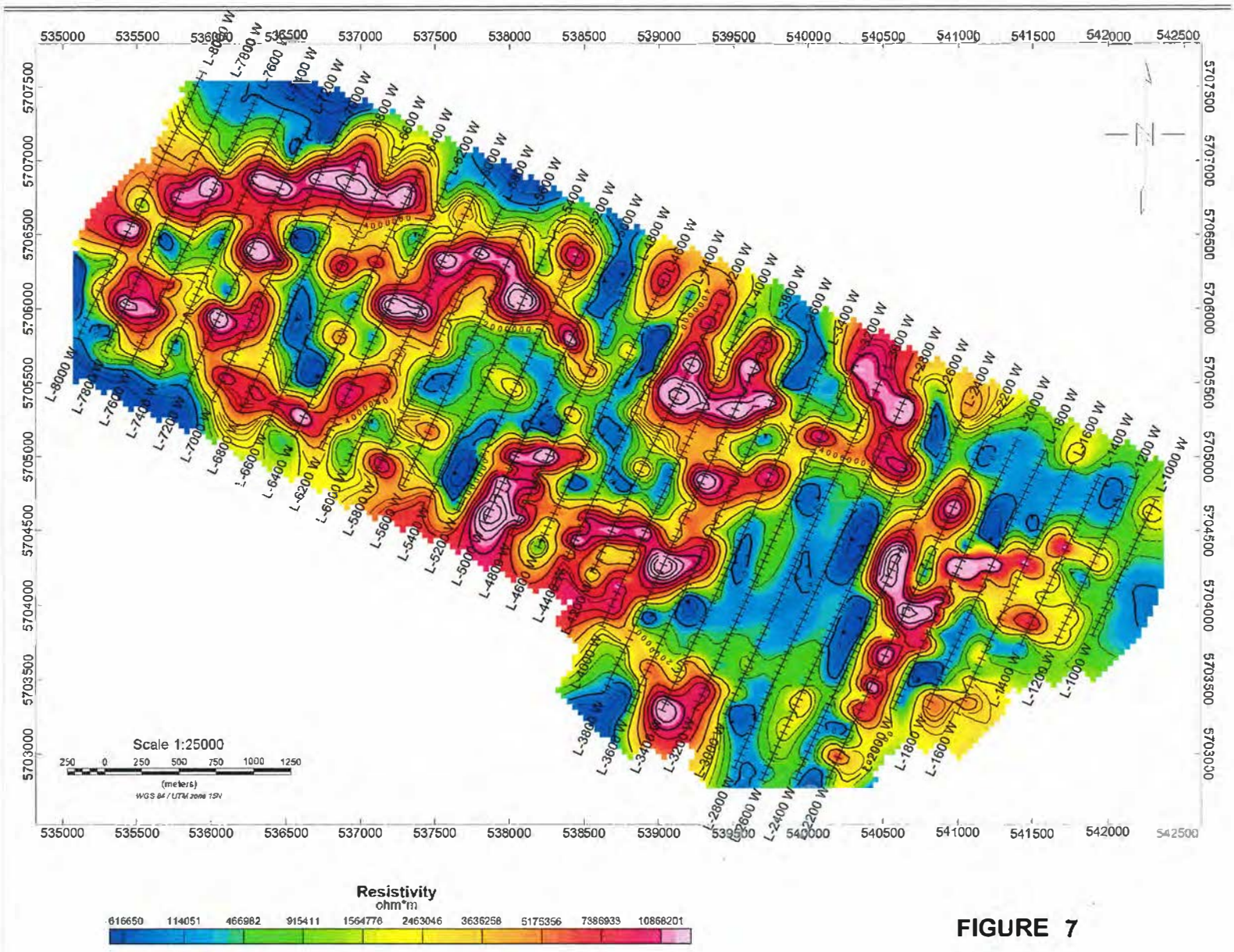


FIGURE 7

NEWRANGE GOLD CORP
NORTH BIRCH PROJECT
GRADIENT IP SURVEY

IP RESISTIVITY MAP

Scale: as shown April 2021

4. SUMMARY

The Gradient Induced Polarization Survey, in conjunction with previous work has indicated zones of reasonable size that could host mineralization of economic potential and so at this point the question is, what to do now ?

To further evaluate the Newrange North Birch Project Area, several approaches are possible..

1. Review and compilation of historic data from the area. This may have already been done.
2. Correlate areas of interest from the historic data with zones of increased Chargeability and Resistivity as appropriate for sulphides or quartz veins and silicification.
3 For the Chargeability zones, perhaps it would be appropriate to look at some longer zones as well as some shorter ones to see if they have different characteristics.
4 After a review of the historic data nd any recent work look at field programs of prosecting, geological mapping and sampling as well as soil geochemistry if soil types/conditions are acceptable.

L. D. S. Winter

BASc, MSc (App)

15 April 2021

Personnel

Brent Patrie - Sudbury, Ontario
Gabriel Roy – Smooth Rock Falls, Ontario
Justin Abramson – Sudbury, Ontario
Robert Kippax – Sudbury, Ontario
Joshua Francis – Toronto, Ontario
Calder McKenna – Toronto, Ontario
Mario Pilon – Timmins, Ontario
Samuel Pilon – Timmins, Ontario
Roger Jacklin – Sudbury, Ontario

Equipment Specifications

Figure 1, Scintrex IPR-12 Receiver

IPR-12 SPECIFICATIONS

The IPR-12 IP receiver has been successfully used for many years as a mineral exploration tool, specifically for gold exploration.

Induced polarization can also be used as a method for mapping hydrocarbon plumes and geotechnical applications.

Inputs:	1 to 8 dipoles are measured simultaneously.
Input Impedance:	16 MΩ
SP Bucking:	±10 volt range. Automatic linear correction operating on a cycle by cycle basis.
Input Voltage (Vp) Range:	50 µV to 14 V
Chargeability (M) Range:	0 to 300 mV/V
Tau Range:	60 microseconds to 2000 seconds.
Reading Resolution of Vp, SP and M:	Vp - 10 µV; SP - 1 mV; M - 0.01 mV/V
Absolute Accuracy of Vp, Sp and M:	Better than 1%
Common Mode Rejection:	At input more than 100dB.
Vp Integration Time:	10% to 80% of the current on time.
IP Transient Program:	Pulse selectable at 1,2,4,8,16 or 32 seconds. Programmable windows also available. 50% duty cycle.
Transmitter Timing:	On/off times of 1,2,4,8,16 or 32 seconds.
External Circuit Test:	All dipoles measured individually in sequence. Range 0 to 2 MΩ with 0,1 kΩ resolution. Circuit resistances displayed and recorded.
Filtering:	RF filter, 10 Hz 6 pole low pass filter, statistical noise spike removal.
Internal Test Generator:	1200 mV of SP; 807 mV of Vp and 30.28 mV/V of M.
Analog Meter:	For monitoring input signals; switchable to any dipole via keyboard.
Memory Capacity:	Stores approximately 400 dipoles of information when 8 dipoles are measured simultaneously.
Power Supply:	Rechargeable Ni-Cad D cells. More than 20 hours service at +25°C. (77°F), more than 8 hours at -30°C (-22°F)
Operating Temperature:	-30°C to +50°C (-22°F to 122°F)
Dimensions and Weights:	Console: 355 x 270 x 165 mm (14" x 10.6" x 6.5")
	Charger: 120 x 95 x 55 mm (4.7" x 3.7" x 2")
	Console: 5.8 kg (12.8 lbs.)
	Batteries: 1.3 kg (2.8 lbs.)
	Charger: 1.1 kg (2.4 lbs.)

Figure 2, Walcer TX-KW10 Transmitter & Walcer MG-12A Generator

MG-12A

Output
Self Excite / Regulated
120 / 220V AC
20 KVA Max
400 Hz / 3 phase

Generator
Bendix Aircraft Type
Very durable
Forced Air Cooled

Engine
24 HP Honda
Electric Start

Size
79cm. x 61cm. x 48cm.

Weight
89 kg.

Gasoline Tank
External - to minimize
shipping problems with airlines

Walcer Model TX KW10

Voltage Input
125V line to neutral
400 Hz / 3 phase
Powered by MG12, MG6 and MG12A

Output
100 - 3200V in 10 steps
0.05 - 20 Amps
Tested to 10.5 kVA

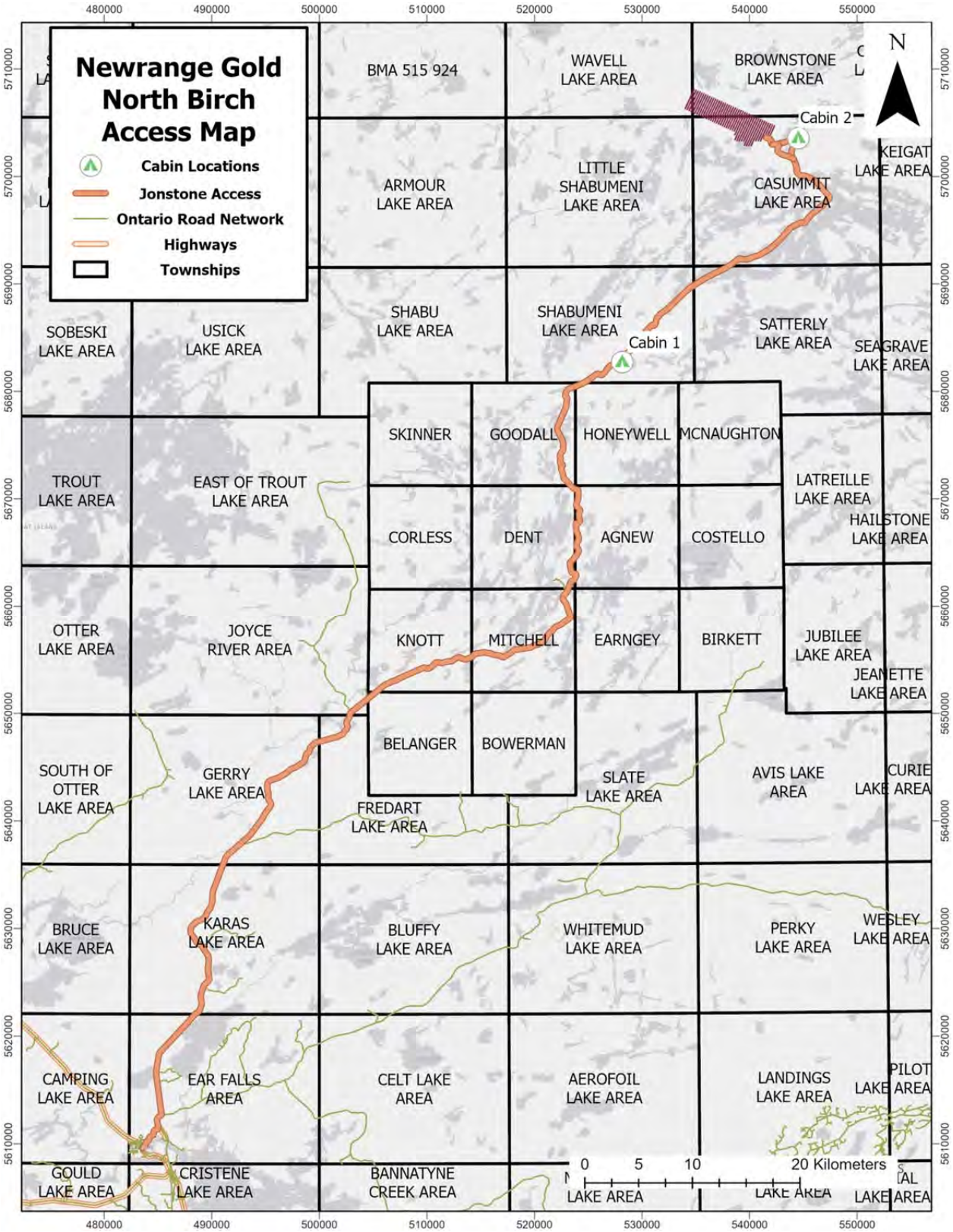
Switching
1 sec., 2 sec., 4 sec., 8 sec.

Metering
LED for line voltage
and output current

Size
63cm. x 54cm. x 25cm.

Weight
44 kg.

Map A


Newrange Gold
North Birch
Access Map
Cabin Locations
Jonstone Access
Ontario Road Network
Highways
Townships
N
Cabin 2
Cabin 1
BMA 515 924
WAVELL LAKE AREA
BROWNSTONE LAKE AREA
KEIGAT LAKE AREA
ARMOUR LAKE AREA
LITTLE SHABUMENI LAKE AREA
CASUMMIT LAKE AREA
SOBESKI LAKE AREA
USICK LAKE AREA
SHABU LAKE AREA
SHABUMENI LAKE AREA
SATTERLY LAKE AREA
SEAGRAVE LAKE AREA
SKINNER
GOODALL
HONEYWELL
MCNAUGHTON
TROUT LAKE AREA
EAST OF TROUT LAKE AREA
LATREILLE LAKE AREA
HAILSTONE LAKE AREA
CORLESS
DENT
AGNEW
COSTELLO
OTTER LAKE AREA
JOYCE RIVER AREA
KNOTT
MITCHELL
EARNGEY
BIRKETT
JUBILEE LAKE AREA
JEANETTE LAKE AREA
BELANGER
BOWERMAN
SOUTH OF OTTER LAKE AREA
GERRY LAKE AREA
FREDART LAKE AREA
SLATE LAKE AREA
AVIS LAKE AREA
CURIE LAKE AREA
BRUCE LAKE AREA
KARAS LAKE AREA
BLUFFY LAKE AREA
WHITEMUD LAKE AREA
PERKY LAKE AREA
WESLEY LAKE AREA
CAMPING LAKE AREA
EAR FALLS AREA
CELT LAKE AREA
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PILOT LAKE AREA
GOULD LAKE AREA
CRISTENE LAKE AREA
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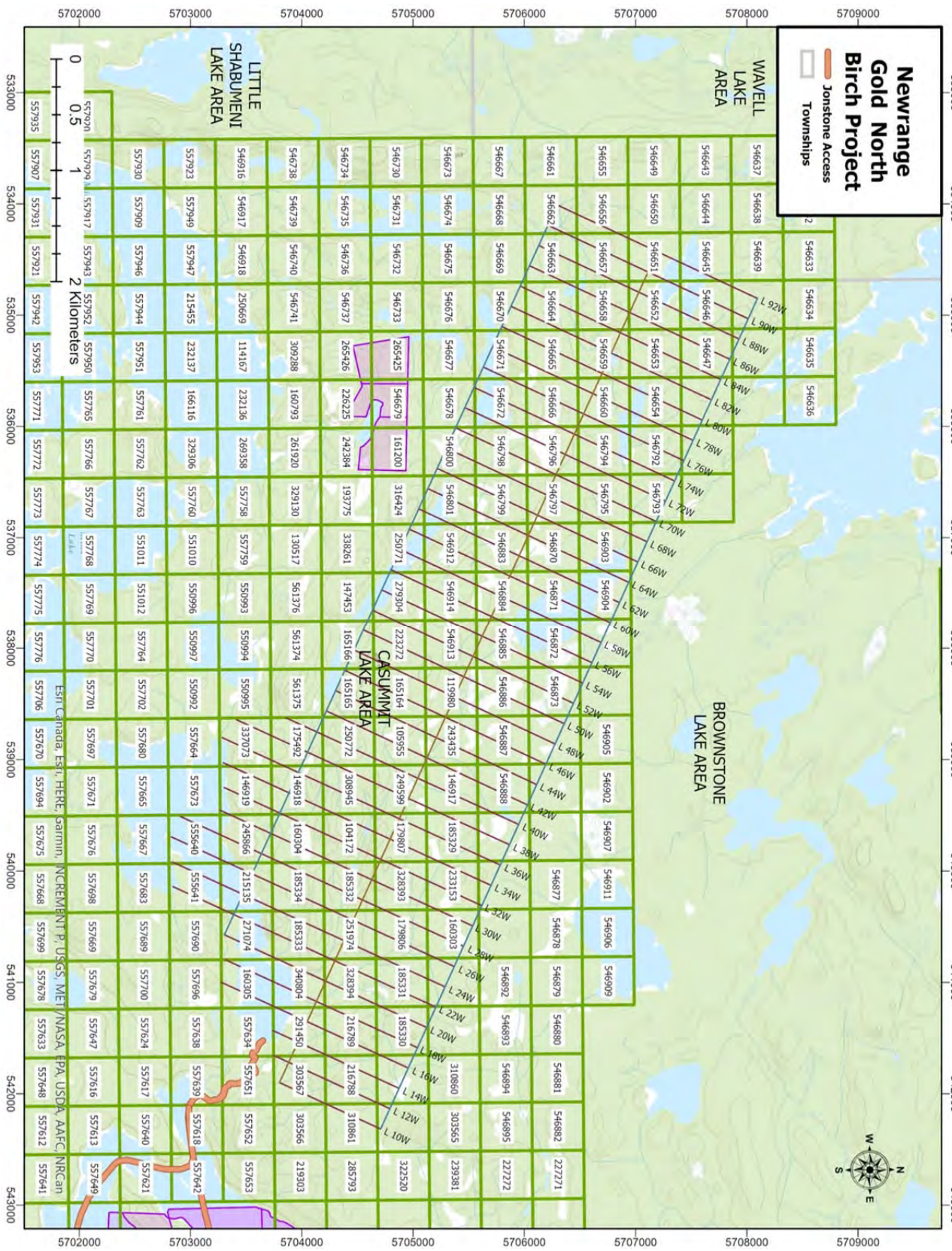
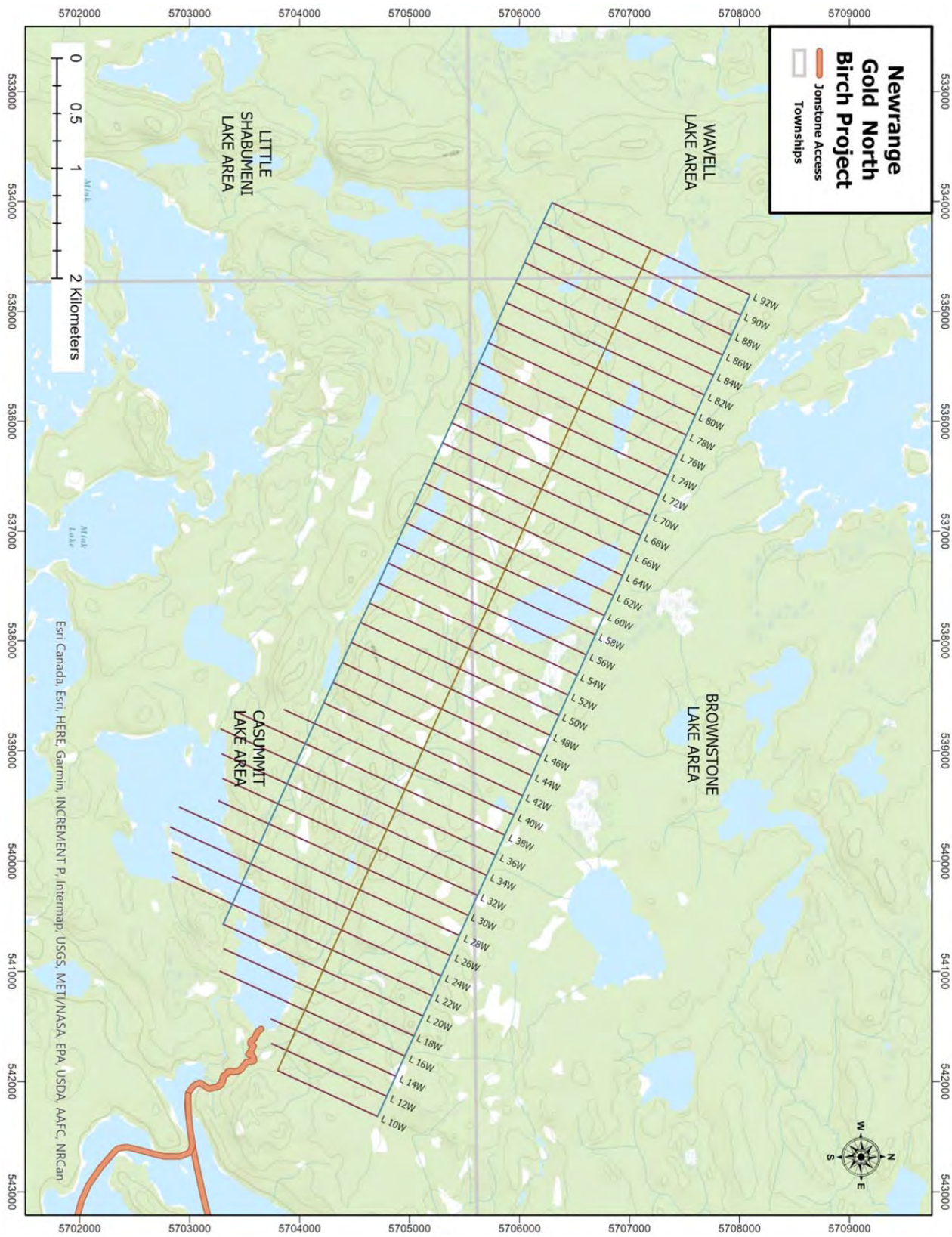
Map B


Newrange Gold North Birch Project
Jonstone Access
Townships
WAVELL LAKE AREA
LITTLE SHABUMENI LAKE AREA
CASUMMIT LAKE AREA
BROWNSTONE LAKE AREA
0 0.5 1 2 Kilometers
Esri Canada, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA, AAFC, NRCan

Map C


Newrange Gold North Birch Project
Jonstone Access
Townships
WAVELL LAKE AREA
LITTLE SHABUMENI LAKE AREA
BROWNSTONE LAKE AREA
CASUMMIT LAKE AREA
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