Compilation of the Qipuqqaq/Postville Area, Eastern-Central Labrador, Newfoundland and Labrador

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This is a Geological Survey of Canada (GSC) and Geological Survey of Newfoundland and Labrador (GSNL) joint publication. Final products of the compilation are six merged data grids and six corresponding open file series maps, at 1:200 000 scale. The coordinate system is NAD83/UTM zone 20 North.

1. Residual Total Magnetic Field.
GSC Open File 8642
GSNL Open File; LAB/1756, Map 2019-11

2. First Vertical Derivative of the Magnetic Field.
GSC Open File 8643
GSNL Open File; LAB/1756, Map 2019-12

3. Potassium.
GSC Open File 8644
GSNL Open File; LAB/1756, Map 2019-13

4. Uranium.
GSC Open File 8645
GSNL Open File; LAB/1756, Map 2019-14

5. Thorium.
GSC Open File 8646
GSNL Open File; LAB/1756, Map 2019-15

6. Total Count.
GSC Open File 8647
GSNL Open File; LAB/1756, Map 2019-16

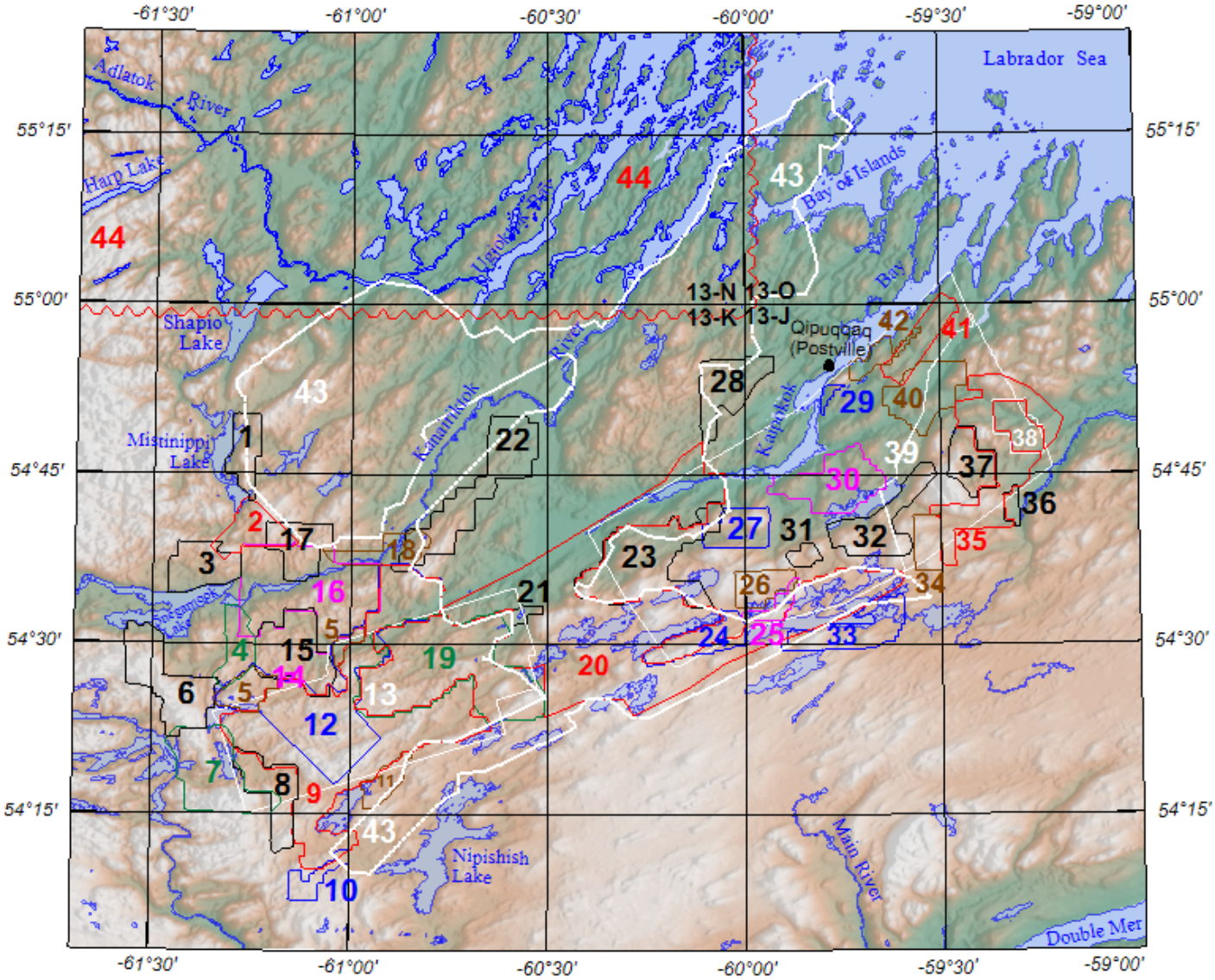
Descriptive Notes

Regional aeromagnetic data used in this compilation were acquired from the Geological Survey of Canada (GSC) Geophysical Data Repository. Digital data from high-resolution surveys flown by mineral exploration companies were made available through the Geoscience Atlas, Newfoundland and Labrador Department of Natural Resources.

Apparent mismatches between survey blocks are a result of differing line spacing, flight altitudes and equipment platforms. Results from all high-resolution surveys were statistically levelled to the regional data and each other using Geosoft GridKnit software. The resolution of the final data is 25m grid cell size; all data were re-interpolated to this resolution before merging. Lower resolution data were knitted into the regional data first and the higher resolution data last, so that all areas on the maps and digital datasets show the highest resolution data available. The first vertical derivative of the magnetic field enhances higher frequency magnetic anomalies compared to the residual total magnetic field. This tends to accentuate contacts between bedrock geological units, but can also highlight mismatches at the boundaries between lower and higher resolution datasets.

Magnetic field measurements reflect magnetic properties of the underlying bedrock and radiometric measurements reflect radiological properties of the surficial geology and bedrock. They both provide qualitative and quantitative information used in geological mapping. An improved understanding of the geology assists in mineral exploration activities and provides a valuable reference to communities, aboriginal associations, and

government in making informed land-use decisions. The following map and table provides source/resolution information for the industry magnetic survey data that were merged in this project. Survey locations can be identified by their corresponding number in the Survey Index map below.



SURVEY INDEX AND NATIONAL TOPOGRAPHIC SYSTEM REFERENCE

Number	Survey Name (Report)	Flown By	Flown For	Year	Line Spacing (m)	Mag Sensor Height (m)	Survey Type	Platform
1	Mistinippi Lake	Aero Surveys	Labrador International Mining	1995	200	33	E-M	H
2	Block 1	Aeroquest	Capella Resources	2007	100	47	E-M	H
3	Snegamook Lake Block	McPhar	Silver Spruce Resources	2007	100	61	M-R	H
4	Block 3	Aeroquest	Capella Resources	2007	100	47	E-M	H
5	Moran Lake	Fugro	Crosshair Exploration and Mining	2006	100	50	M-R	H
6	Block D	Aeroquest	Monster Copper	2008	100	47	E-M-R	H
7	Block 5	Aeroquest	Capella Resources	2007	100	30	E-M-R	H
8	CMB Portage Lake	Fugro	Silver Spruce Resources	2006	100	50	M-R	H
9	Moran Lake	Fugro	Crosshair Exploration and Mining	2005	100	60	M-R	H
10	Stormy Lake 1 and 2	Fugro	Belmont Resources	2006	100	50	M-R	H
11	CMB Otter Lake	Fugro	Silver Spruce Resources	2006	100	50	M-R	H
12	Block 1	Fugro	Crosshair Exploration and Mining	2007	100	100	E-M	H
13	Altius Property	Sander	Monster Copper Resources	2003	100	150	M-G	F
14	CMB West	Fugro	Silver Spruce Resources	2006	100	50	M-R	H
15	Bruce/Gravelly River	Fugro	Santoy Resources	2005	100	60	M-R	H
16	CMB Northwest	Fugro	Silver Spruce Resources	2006	100	50	M-R	H
17	Block B	Dighem	Fleck Resources	1995	100	30	E-M	H
18	Block 2	Aeroquest	Capella Resources	2007	100	47	E-M	H
19	Bruce/Gravelly River	Fugro	Santoy Resources	2005	100	60	M-R	H
20	Bayswater Properties	Aeroquest	Bayswater Uranium	2007	200	47	E-M	H
21	CMB 2	Fugro	Silver Spruce Resources	2006	100	50	M-R	H
22	Block 2	SIAL	Intercap Resource Management	1996	200	60	E-M	H
23	West Micmac	Fugro	Santoy Resources	2005	100	60	M-R	H
24	West Michelin	Fugro	Santoy Resources	2005	100	60	M-R	H
25	CMB Southeast	Fugro	Silver Spruce Resources	2006	100	50	M-R	H
26	Michelin Area	Fugro	Fronteer Development Group	2005	50	30	M-R	H
27	Melody Hill Area	Fugro	Fronteer Development Group	2005	50	30	M-R	H
28	Block B	Novatem	Bayswater Uranium	2007	100	61	M-R	H
29	Block K	Aeroquest	Mega Uranium	2008	100	47	E-M-R	H
30	CMB Jacques Lake	Fugro	Silver Spruce Resources	2006	100	50	M-R	H
31	Mustang Lake	Fugro	Santoy Resources	2005	100	60	M-R	H
32	Jacques Lake/Otter Lake	Fugro	Fronteer Development Group	2005	50	30	M-R	H
33	Block A	Novatem	Bayswater Uranium	2007	100	61	M-R	H
34	Aillik Block	McPhar	Cash Minerals	2007	100	61	M-R	H
35	Block CEFG	Novatem	Bayswater Uranium	2007	100	61	M-R	H
36	Block 9a	Aeroquest	Capella Resources	2007	100	30	E-M-R	H
37	CMB East	Fugro	Silver Spruce Resources	2006	100	50	M-R	H
38	Makkovik Block	McPhar	Silver Spruce Resources	2007	100	61	M-R	H
39	CMB	Fugro	Fronteer Development Group	2004	200	100 & 60	M-R	F & H
40	CMB Northeast	Fugro	Silver Spruce Resources	2006	100	50	M-R	H
41	Post Hill Area	Fugro	Fronteer Development Group	2005	50	30	M-R	H
42	Block L	Aeroquest	Mega Uranium	2008	100	47	E-M-R	H
43	Hopedale Area	Fugro	Bayswater Uranium	2006	100 & 200	60	M-R	H
44	Hopedale (SW part)	EON	Geological Survey of Canada	2018	200	100	M	F

E=Electromagnetic G=Gravimetric M=Magnetic R=Radiometric F=Fixed Wing H=Helicopter

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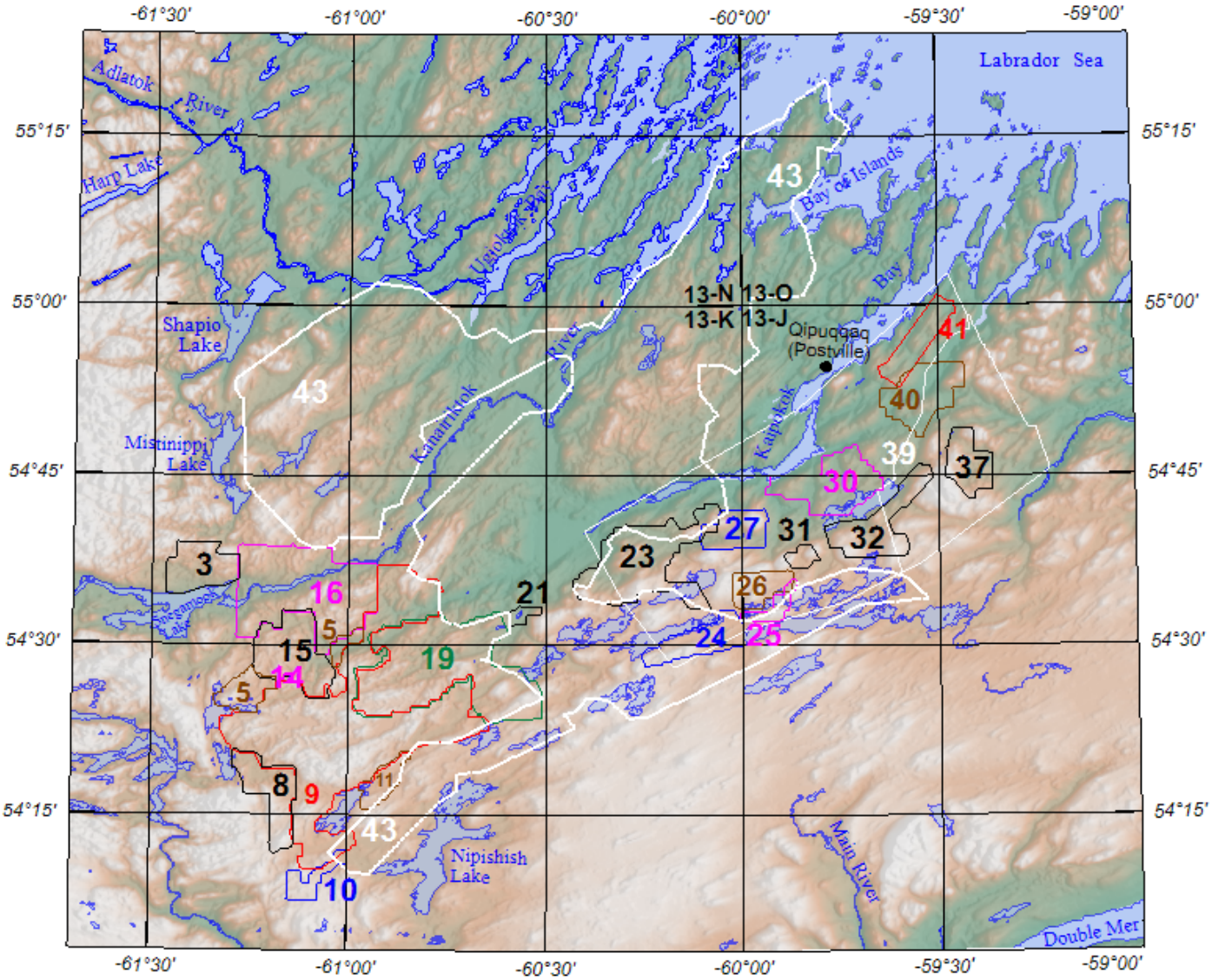

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M=Magnetic R=Radiometric F=Fixed Wing H=Helicopter

Radiometric data units are counts per second (cps).

This publication is available for free download through GEOSCAN https://geoscan.nrcan.gc.ca. Corresponding digital profile and gridded data for GSC surveys can be downloaded, at no charge, from Natural Resources Canada's Geoscience Data Repository for Aeromagnetic Data at http://gdr.agg.nrcan.gc.ca. Digital data and further information regarding detailed Labrador surveys can be accessed or downloaded through GSNL's Geoscience Atlas, at https://gis.geosurv.gov.nl.ca/.

This Open File is a contribution to the Targeted Geoscience Initiative (TGI) program of the Lands and Minerals Sector, Natural Resources Canada.

Recommended Citation for gridded data

Compilation of the Qipuqqaq/Postville Area, Eastern-Central Labrador,
Newfoundland and Labrador, Parts of NTS 13-J, K, N and O;
Geoscience Data Repository for Geophysical Data,
http://gdr.agg.nrcan.gc.ca.
Airborne Geophysics Section,
GSC - Central Canada Division,
Geological Survey of Canada,
Natural Resources Canada