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Claims 721454, 721455, 721456; Report of Assessment Work 2023

Lost Hope Mine Burt Project

Burt Township, Larder Lake Mining Division, Ontario, Canada

Prepared by: M.A. Raitanen, Prospector, on behalf of Lost Hope Mine Ltd.

10/01/23

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Summary

The purpose of this report is to detail & summarize the work performed on claims 721454, 721455, 721456; Lost Hope Mine's 'Burt Project', for assessment reporting during the 2023 exploration season. During this period; preliminary surface sampling was conducted and samples were submitted for assay at Swastika Laboratories. Controls are referenced to UTM grid coordinates, Zone 17N, North American Datum 1983 (NAD 83) projected coordinate system.

Location & Description

The three cell claim group is located in the Larder Lake mining division approximately 15 km south-west of the Town of Kirkland Lake & 30 km north-east of Matachewan. It is roughly 600 km north of Ottawa or Toronto via Highway 11. 4 km west of Highway 11, the group of claims lies to the west of Highway 66, on West Road. The project is in the Kirkland Lake Resident Geologist's District, Larder Lake Mining Division (see figure 1).

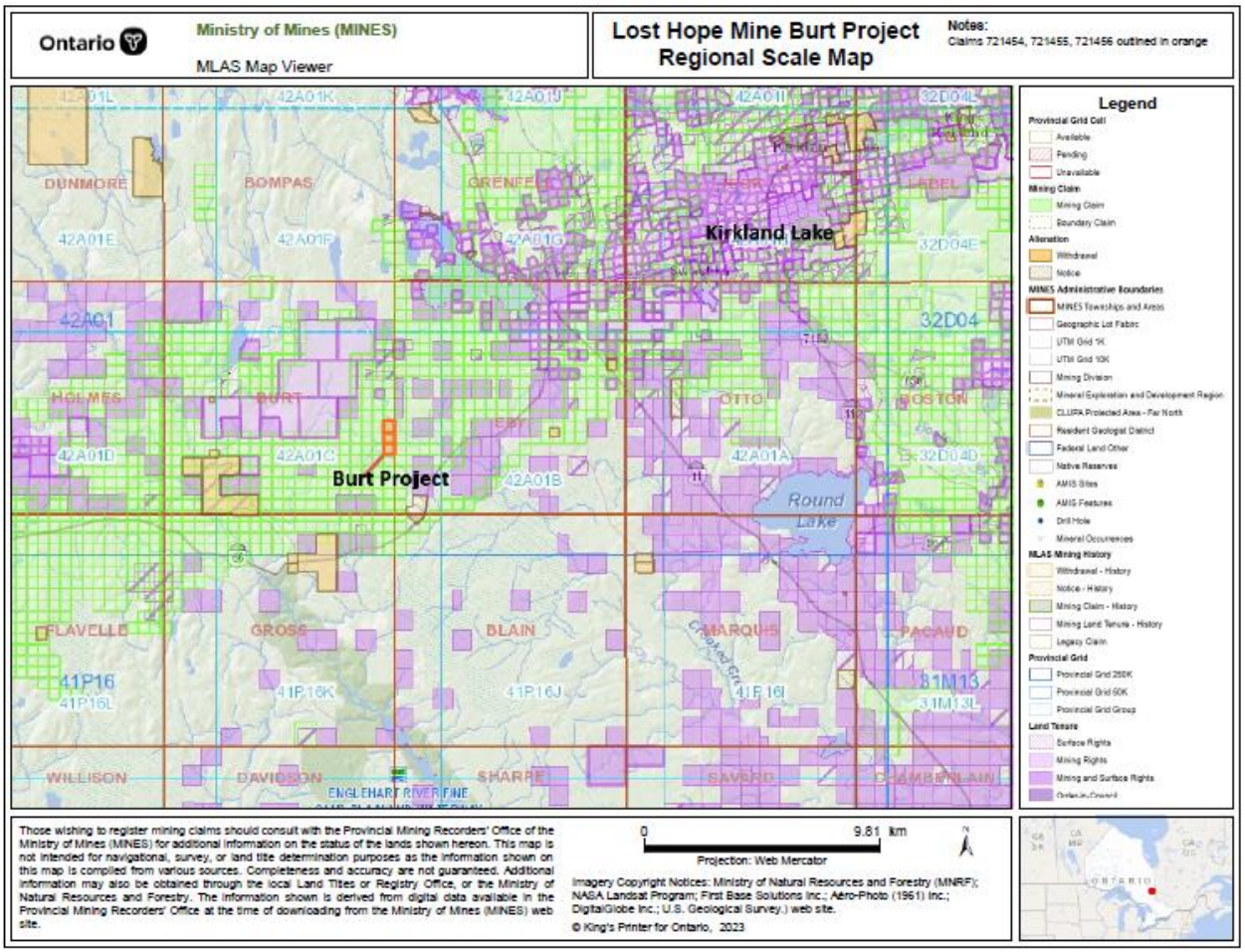


Figure 1 – Regional map showing property location.

Marcus Raitanen (MLAS client number 10004410) is the registered claim holder. The subject claim group has a gross area of approximately 150 acres (60 hectares) and is located on Crown Land with no encumbrances from nearby surface or patented title holders. These claims were most recently held by Meteoric Resources (in a larger land package) as part of their Burt Cobalt Project prior to the author restaking them in 2022 on behalf of Lost Hope Mine Ltd. as an extension of Lost Hope Mine's Kirkland West Gold Project in Eby Township.

No past assessment work was found on file for these specific claim cells, nor for the underlying legacy claims. There is a history of exploration work in Burt Township dating back to the early days of the gold

rush. HC Cooke, a geologist with the Geological Survey of Canada, visited the area in 1919 and published the following account:

"The Solid Silver Mining Company did considerable work some years ago in lot 3, concession 2, Burt township. Little of value appears to have been discovered, however, and the work was discontinued. The buildings erected have fallen to pieces or been burned, although the road cut to the property has been kept in fair condition by prospectors who use it to reach the southern end of the township. The discoverers claim to have found leaf silver in a number of the diabase dykes cutting the Keewatin in the neighbourhood, but did not show the writer anything to substantiate this claim.

A number of claims have been staked throughout the district on the tuff bands in the Keewatin. Concentrations of sulphides, particularly of pyrite and pyrrhotite, occur in tuffs here and there, and are said to carry values in gold, silver, platinum, and nickel. Small bodies of these minerals have been found in lot 2, concession 1, Burt township…" see figure 2.

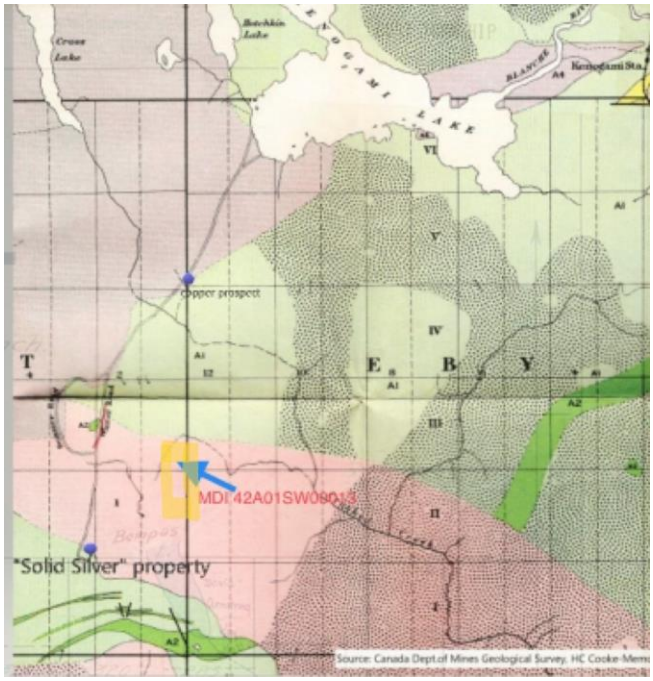


Figure 2 – The Solid Silver Mining Company project location circa 1919.

MDI42A01SW00013 is located in Claim 721456, an approximate distance of 2.2km from the presumed location of the Solid Silver operation. MDI42A01SW00013 is described in Ontario's Mineral Identifier database as pyrite (see figure 3). Additional commentary attached to MDI42A01SW00013 about the Graff-Kaplan-Hahn, Red Shirt Larder exploratory shaft appears to be misfiled with the OGS, the author understands it's location to be further North (location noted as "copper prospect") in figure 2.

Burt Township is an unorganized township; it is located to the West of Eby Township, which is contiguous to Teck Township. The Town of Kirkland Lake is located in Teck Township where seven gold mines were discovered along Kirkland Lake's 'Mile of Gold' following the 'gold rush' of 1912. Eby

Township hosted its own gold mine west of the Mile of Gold, the Baldwin Mine, which is now the subject of renewed interest. There is an MDI about 4km east of the subject claims Preston Mines advanced a diamond drill hole in the 1950's which revealed a gold occurrence (MDI 42A01SW0102).

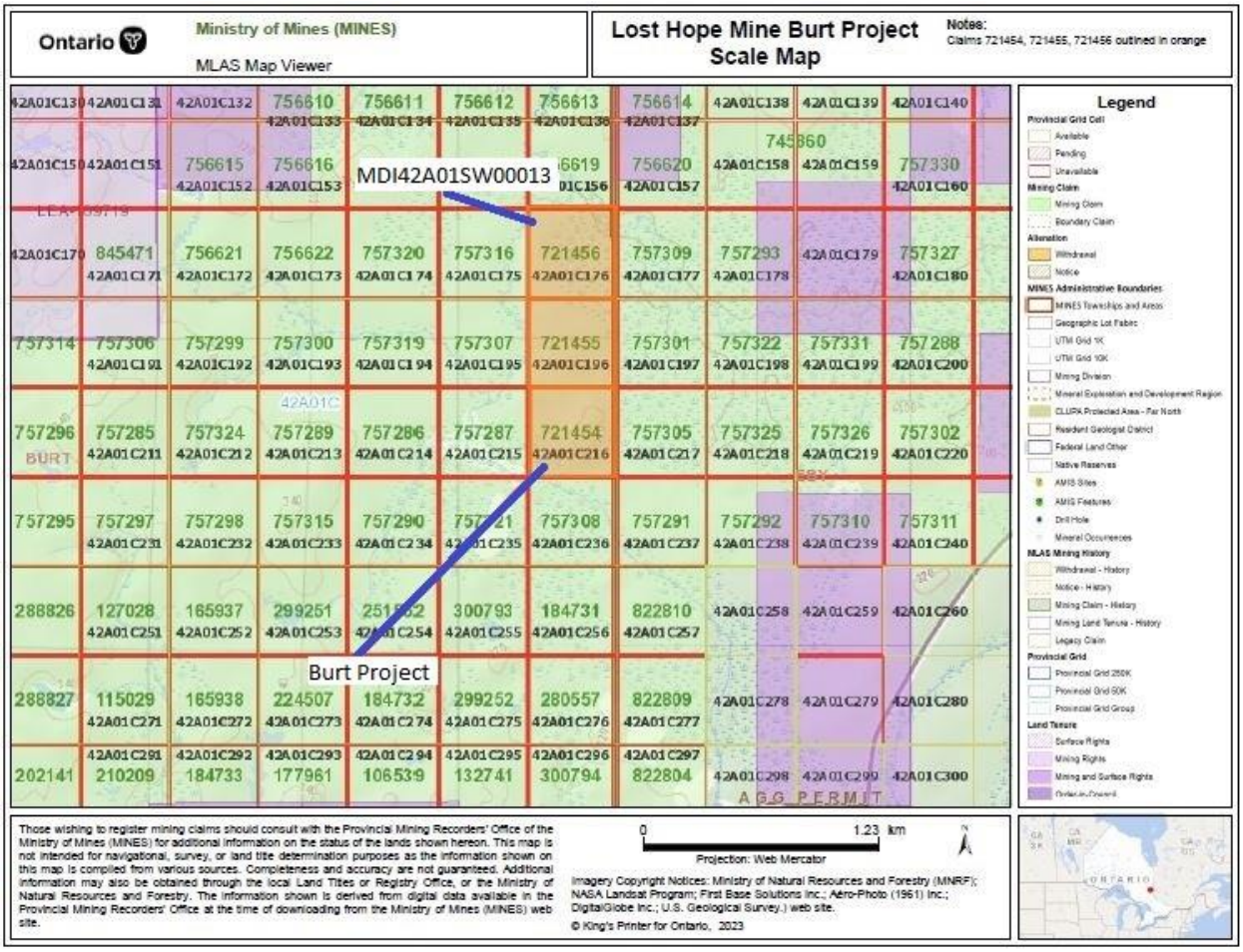


Figure 3 – Project scale map showing MDI42A01SW00013

Access & Geography

These claims were not accessible by foot without crossing private lands to access skid roads from recent forestry activities. A neighbouring land owner provided access and transportation by atv to and from the locations sampled through the logging skid roads, crossing Crooked Creek on a primitive wooden bridge (figures 4 & 5).



Figure 4 & 5 – Primitive wooden bridge crossing at Crooked Creek

Access may also be possible by canoe from Crooked Creek, portages would likely be required at beaver dams, of which there appear to be several. Off-trail, the vegetation is extremely thick and by most definitions impassible. Dense transitions of tag alder and poplar appear to have been created by past small scale logging operations, likely wood lots used by the early settlers. Areas of undisturbed boreal forest consists principally of balsam, black spruce, & tamarack. To the south & east, there is a peat bog and low-lying area that the author surmises to be a remnant of glacial Lake Barlow-Ojibway (figure 6).

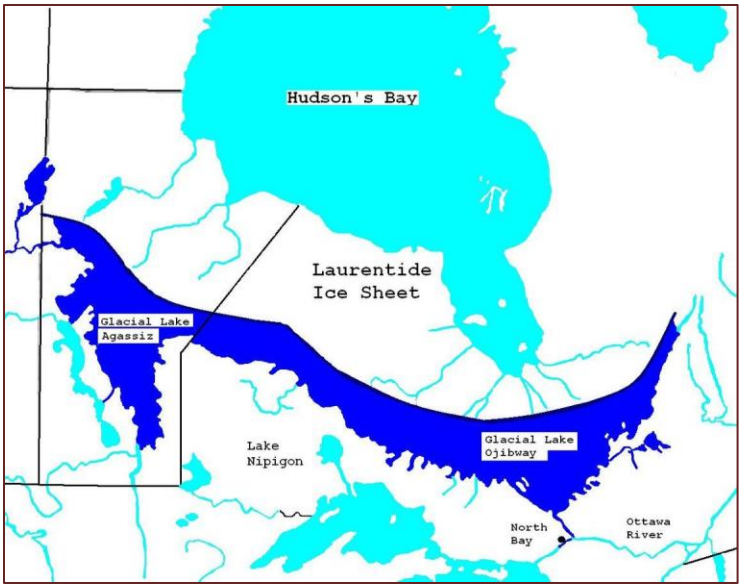


Figure 6 - Map of Glacial Lake Agassiz and Lake Ojibway ca 7900 YBP. Designed from Teller and Leverington, 2004 (U.S. Geological Survey) Creative Commons License, Source: Wikipedia

General Geology

The subject area is within the south-west limit of the Abitibi greenstone belt (Goodwin 1966) which consists of Archean era volcanic, meta-sedimentary, and intrusive rocks (Lovell 1972). The greenstone belt extends roughly from Wawa in Ontario to Val D'Or, Quebec. Kirkland Lake falls in the Abitibi greenstone belt and was the site of a gold rush, the Kirkland Lake Gold Rush (1912) which followed the Cobalt Silver Rush (1903), Larder Lake Gold Rush (1906), and the Porcupine Gold Rush (1909). Gold was also discovered in Swastika, west of Kirkland Lake.

Kirkland Lake lies north-east of the subject area and the locale, informally known as the Kirkland Lake gold camp, is one of the world's largest gold producing regions. Gold mines are currently in production in Teck Township (Kirkland Lake) and Powell Township (Matachewan) and the subject property is located between them, roughly 15 km from Kirkland Lake & 30 km from Matachewan.

The setting of gold occurrences in Kirkland Lake have been studied in great detail over the last 100 years and numerous resources are available for further research (Isplatov, et al., 2008).

Site Geology

There are a number of outcroppings (diabase dikes) throughout the property. The dikes have granitic (syenite) intrusions and a number of quartz veins. Additionally, pyrites were visible in most rock inspected and sampled. The author collected samples in the mid to southern extent of claim 721455. Several of the typical rock types are shown in the following pictures:



Figures 7 & 8 – Diabase outcropping

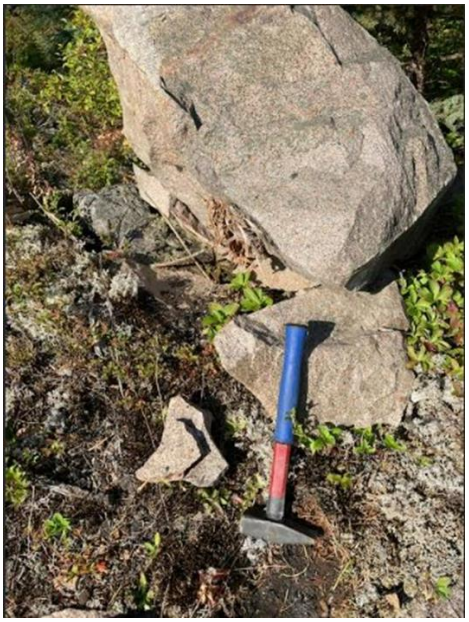


Figure 9 – Granitic float

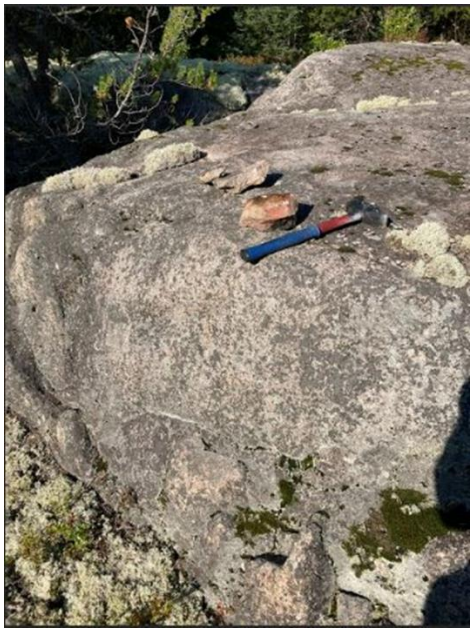


Figure 10 – Diabase with syenite intrusion (sampled as Burt GB-03)



Figures 11 & 12 – Sample locations Burt GB-01, and Burt GB-02

Field Work & Methodology

The initial exploration work conducted consisted in summer 2023 consisted of one trip to Kirkland Lake between the dates of May 25th – 28th for the purpose of conducting a site visit:

Site Visit - May 27th

A site visit was conducted, escorted by a neighbouring landowner who provided an ATV for transportation. Logging skid roads were used, following West Road and then heading south and east onto the claims roughly at the midpoint of the 3 cells, just past Crooked Creek.

May 25th & May 28th were travel days

Summary of Sample Locations with Assay Results:

Sample Number	UTM Easting	UTM Northing	Description	Au g/MT	Ag ppm	Cu ppm	Co ppm	Ni ppm
GB2301	553738.42	5321403.77	diabase w/quartz	<0.1	<0.2	72.0	16.0	7.0
GB2302 A/B	553729.95	5321408.36	syenite	<0.1	<0.2	5.0	2.6	3.0
GB2303 A/B	553813.23	5321206.94	syenite	<0.1	0.3	4.0	4.3	11.0
GB2304	553825.24	5321219.66	syenite	-	-	-	-	-
GB2305	553824.41	5321218.04	syenite	-	-	-	-	-

Field Notes: Samples collected by Marcus Raitanen (field tech). GB2304 & GB2305 logged as specimen samples and not sent for assay. All samples are grab samples collected with a rock pick from exposed bedrock surfaces. In total, 7 samples were collected (including 2 A/B specimens). Of which, 3 were submitted for assay and 4 samples were retained for future verification or analysis.

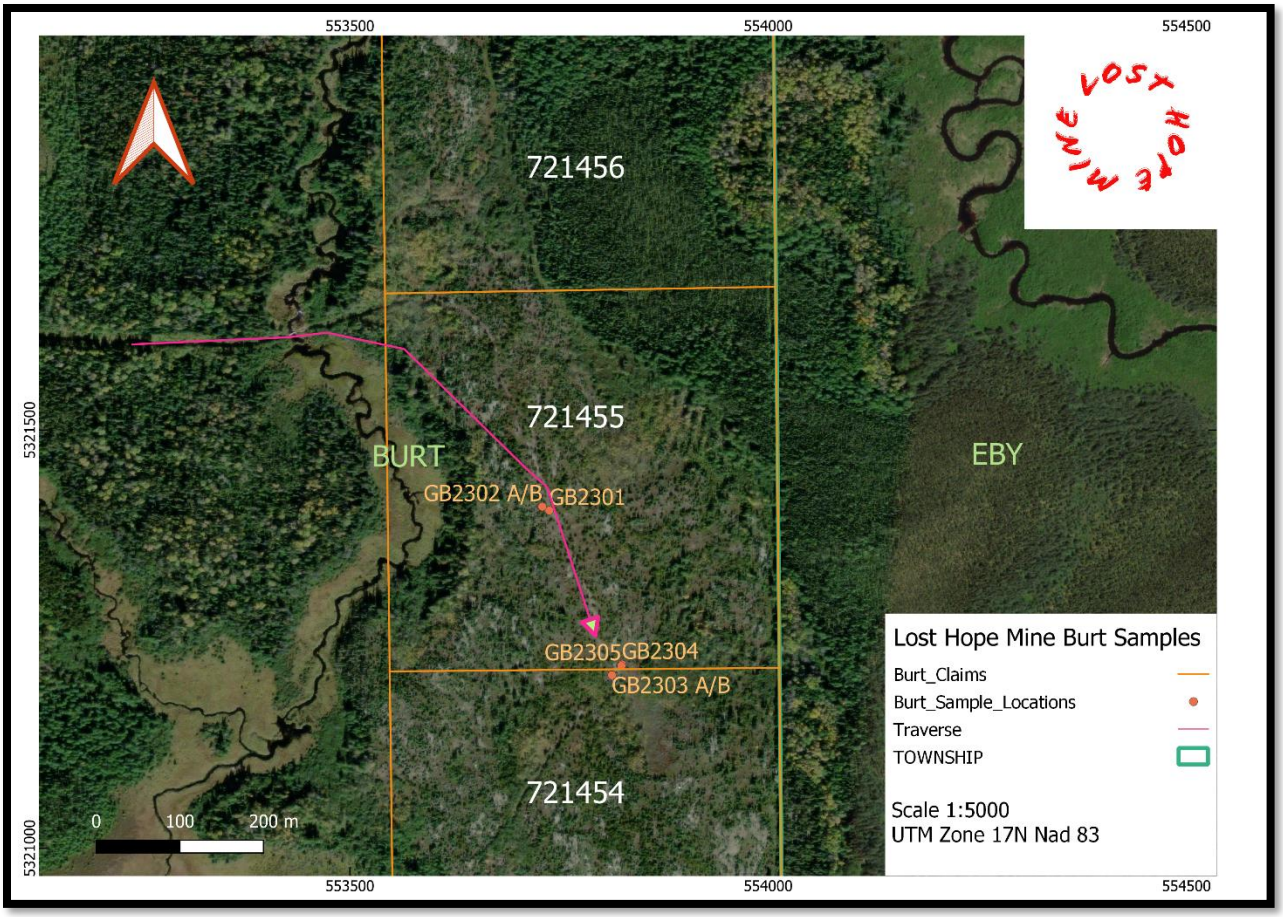


Figure 13 – Sample location map

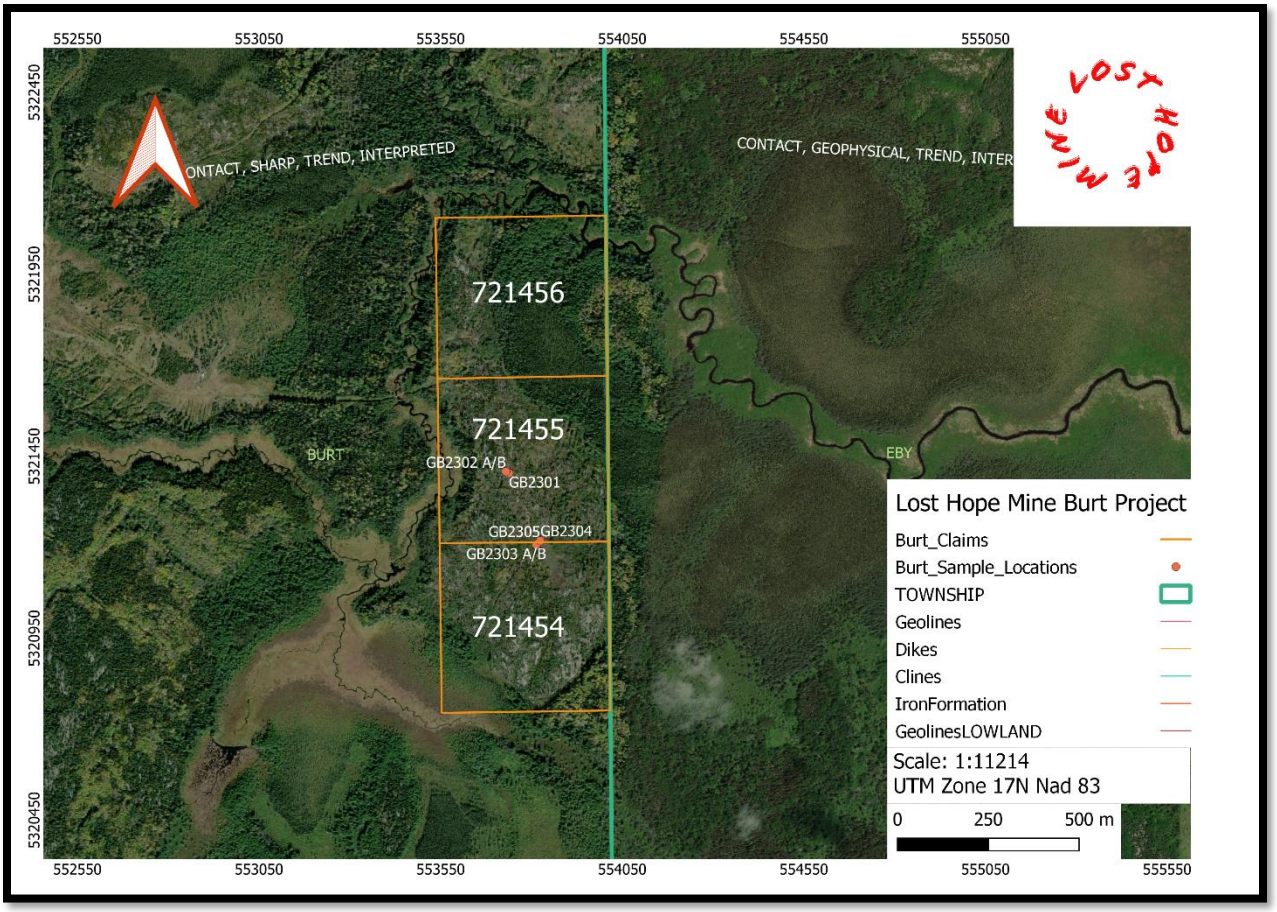


Figure 14 – Project scale map

Findings

Although the assay results were somewhat disappointing, this property lies along a trend of outcrops just south and west of Lost Hope Mine's Kirkland West Gold Project. Further investigation of the outcrops & throughout the rest of the claim to locate additional exposures and investigative targets would be helpful in fully appraising the likelihood of a gold or critical mineral resource on these claims. Geophysics and soil sampling in and around Crooked Creek may also prove revealing. Lastly, a follow up visit to explore the location around MDI42A01SW00013 in Claim 721456 to verify the OGS's reported findings related to the MDI. The author will plan exploration activities for 2024 accordingly.

References:

Cobalt Silver Rush. (n.d.) In Wikipedia. https://en.wikipedia.org/wiki/Cobalt_silver_rush

Davis, George H. 1984. Structural Geology of Rocks and Regions, Wiley & Sons, ISBN 0-471-09267-3

Easton, R.M. 1995. Lichens and Rocks: A Review, Geoscience Canada; Volume 21, No.2, Revision date January 15

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Ispolatov, V., Lafrance, B., Dube, B., Creaser, R., Hamilton, M., 2008. Geologic and Structural Setting of Gold Mineralization in the Kirkland Lake-Larder Lake Gold Belt, Ontario, Society of Economic Geologists, Inc. Economic Geology, v. 103, pp. 1309–1340

Larder Lake, Ontario. (n.d.) In Wikipedia. https://en.wikipedia.org/wiki/Larder_Lake,_Ontario

Lovell, H.L. 1972. Geology of the Eby and Otto Area, District of Timiskaming; Ontario Dept. of Mines and Northern Affairs, GR99, 30p.

Ontario Ministry of Northern Development, Mines, Natural Resources and Forestry Mineral Deposit Inventory; https://www.geologyontario.mndm.gov.on.ca/MDI_Description.html

Porcupine Gold Rush. (n.d.) In Wikipedia. https://en.wikipedia.org/wiki/Porcupine_Gold_Rush

Appendix A, Author's Qualifications

Author's Qualifications

- I am a licensed Prospector in the Province of Ontario & have completed the Mining Act Awareness Program (MAAP, 2021).
- I have worked as a Civil Engineering Technologist since graduating from Loyalist College (1998). My experience consists of both field work and inspection in construction & geotechnical engineering as well as risk management of construction projects through the insurance industry.
- I have a Canadian Risk Management (CRM) designation & have passed professional ethics exams to acquire a Fellow Chartered Insurance Professional (FCIP) designation. I hold registered insurance broker's licenses in both Ontario & British Columbia which require completion of an annual ethics course to maintain.
- I have undertaken a self-directed study of Q GIS, Geographic Information Systems (GIS), and, Geographic Information Science (GIS).
- I was taught to prospect for gold in and around Kirkland Lake by my father, Bill Raitanen, grandfather, Lasse Raitanen, and their partners Fern & Phil Rivard (operating under the trade name Lost Hope Mine) in the 1980's. My first job was working for Lost Hope Mine as a Diamond Drill Helper.
- I have personally written this report & conducted the prospecting work described herein.

This report is not intended to meet NI 43-101 requirements.

MARaitanen

Appendix B, Software Used

Mapping -

i) QGIS version 3.16.11 'Hannover', Windows 10, macOS Ventura 13.2

ii) the ArcGIS tool in the Ontario Mining Lands Administration System (MLAS)

GPS field data – Tomstrails GPS UTM, Google Maps, iOS

Report writing – MS Word, Office Professional 2013, Windows 10

Data collection – MS Excel, Office Professional 2013, Windows 10

Photography – Camera, iPhone SE 2020, iOS 16.1.2

Appendix C, Assay Results

Established 1928

Swastika Laboratories Ltd

Assaying - Consulting - Representation

Assay Certificate

Certificate Number: 23-5020

Company: **Lost Hope Mine**

Project: BURT

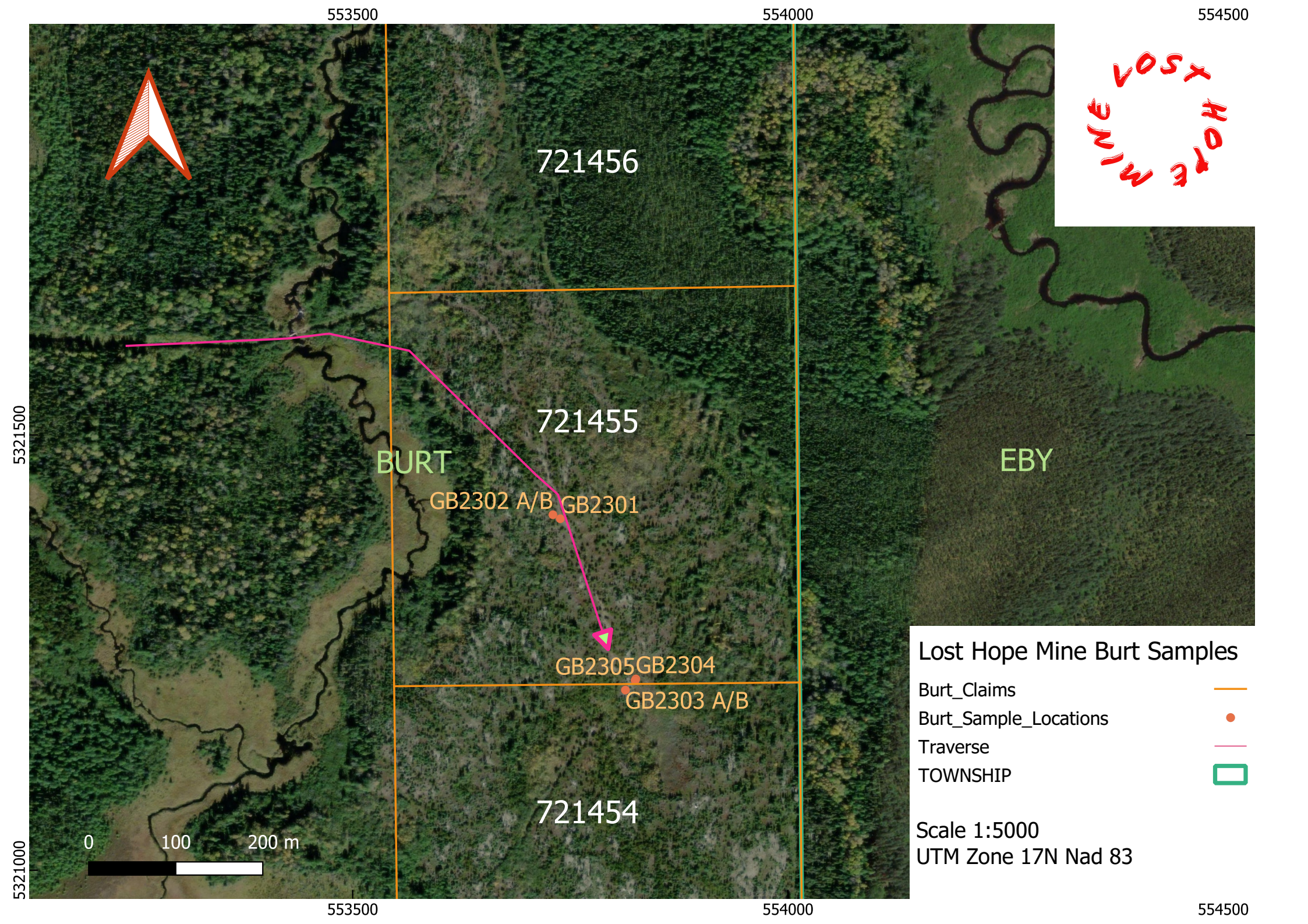
Report Date: 13-Sep-23

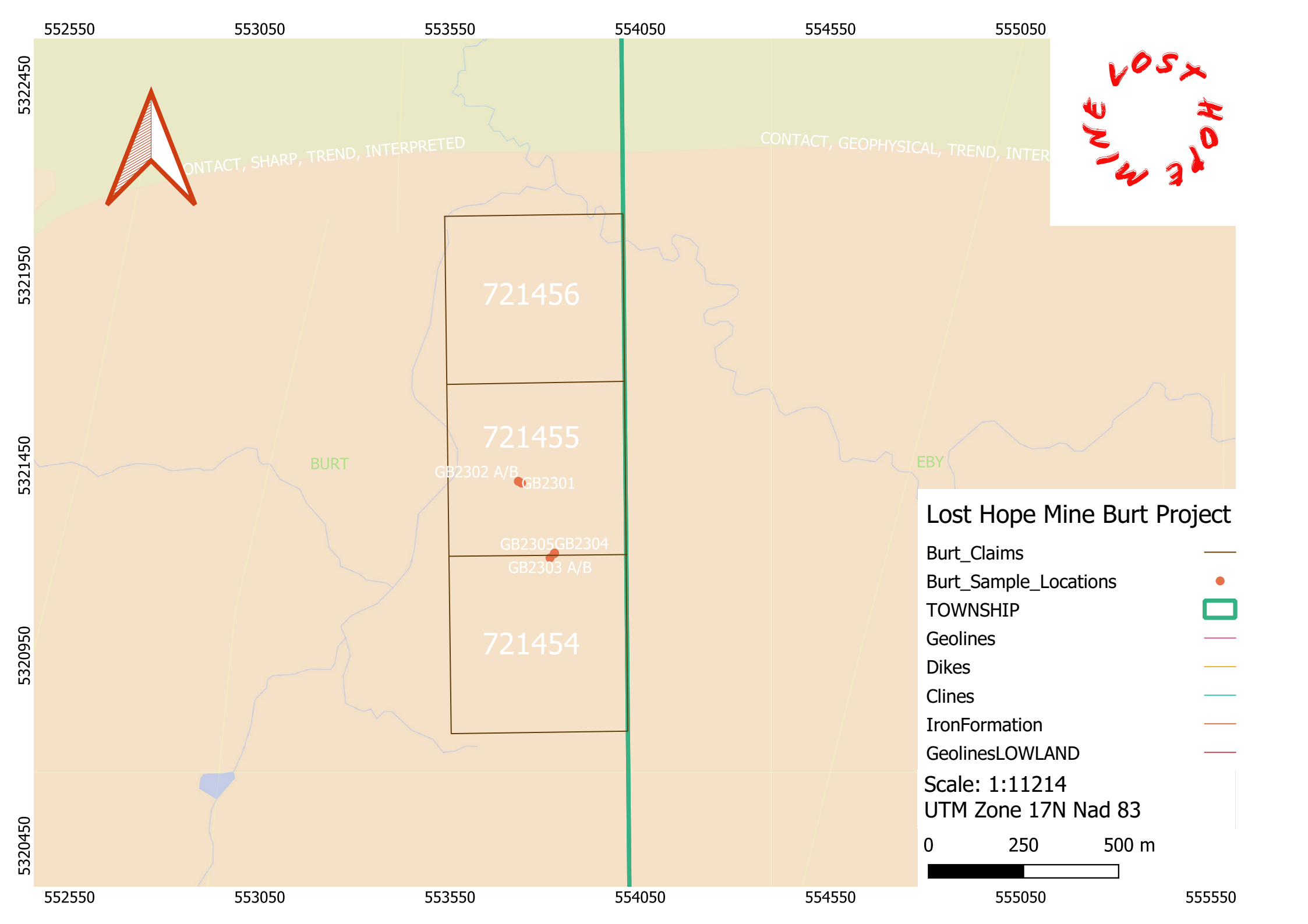
Attn: Marcus Raitanen

We hereby certify the following Assay of 3 rock/grab samples submitted 07-Sep-23 by Marcus Raitanen

Sample Number	Au FA-AAS g/Mt	Ag AR-AAS ppm	Cu AR-AAS ppm	Co AR-AAS ppm	Ni AR-AAS ppm
Blank Value	< 0.01				
OREAS L13	1.26				
BURT GB2301	< 0.01	< 0.2	72	16.0	7
BURT GB2302	< 0.01	< 0.2	5	2.6	3
BURT GB2303	< 0.01	0.3	4	4.3	11


552550
553050
553550
554050
554550
555050
5322450
5321950
5321450
5320950
5320450
ONTACT, SHARP, TREND, INTERPRETED
CONTACT, GEOPHYSICAL, TREND, INTER
721456
721455
721454
BURT
EBY
GB2302 A/B
GB2301
GB2305
GB2304
GB2303 A/B
Lost Hope Mine Burt Project
Burt_Claims
Burt_Sample_Locations
TOWNSHIP
Geolines
Dikes
Clines
IronFormation
GeolinesLOWLAND
Scale: 1:11214
UTM Zone 17N Nad 83
0
250
500 m
552550
553050
553550
554050
554550
555050
555550


553500
554000
554500
5321500
5321000
721456
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BURT
EBY
GB2302 A/B
GB2301
GB2305
GB2304
GB2303 A/B
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Lost Hope Mine Burt Samples
Burt_Claims
Burt_Sample_Locations
Traverse
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Scale 1:5000
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IronFormation
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