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# 2022 Prospecting Report

## Prospecting & Manual Trenching
## BenoMath Property – Esther Project
## Connaught & Churchill Townships
## Larder Lake Mining Division, Ontario

**By:**
**Todd Mathieu**
**May 3, 2023**

## CONTENTS

# 1.0 INTRODUCTION

## 1.1 Scope of Work

This report describes the prospecting, manual trenching, work completed between July 8, 2022 to October 15, 2022 on the BenoMath Property – Esther & Oddur Projects.

## 1.2 Technical Parameters

GPS Receiver Type:

- Garmin GPSmap 60CSx
- Differential correcting enabled
- Averaging (minimum 150 positional fixes over 150 seconds)

Coordinate System:

- NAD83, UTM Zone 17

Camera Type:

- Canon PowerShot D30, 12.1MP, waterproof/shockproof,

## 1.3 Current Plans & Permits

No plans or permits currently in place.

# 2.0 PROPERTY DESCRIPTION

## 2.1 Location and Access

The BenoMath Property lies 6 kilometers northwest of the town of Shinning Tree in the Larder Lake Mining Division. (Figure 1)

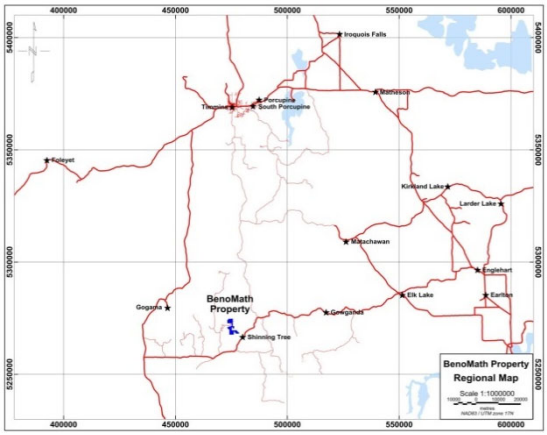



**Figure 1**

Ground access to the BenoMath Property – Esther Project from Timmins, Ontario, Canada begins by traveling approximately 22km west of Timmins on highway 101. Precede an additional 118km south on highway 144 until reaching highway 560 (Watershed). Precede an additional 34km east on highway 560 until reaching Nabakwasi Lake Road. From this point travel 17km north to northeast until reaching the BenoMath Property.
(Figure 2)

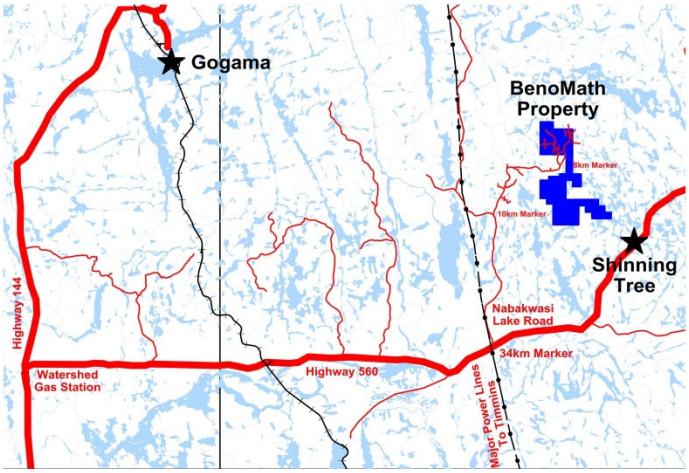



**Figure 2**

## 2.2 Property Overview

The BenoMath Property currently consists of the Esther & Oddur Projects. The Esther Project currently consists of 24 claim cells (Figure 3) The BenoMath – Esther Project contains the historic Goldhurst Cu mineral showing which has been expanded with the discovery of the BenoMath veins and is the main area of focus for this program. Due to the local geology and EM conductors highlighted in earlier airborne geophysics, the property was selected for examination for VMS/Sedex, metamorphic/magmatic, and potential Au type deposits.

To the northwest, IAMGOLD is currently exploring for gold on the Elephant Head Au Project. Directly to the west southwest is Knightsbridge Exploration's North Wind Property where they are exploring for several commodities along with hosting the historic Elephant Head Cu, Au, showing. Directly to the east, Eagle Ridge Mining Ltd. is exploring the historic Pacesetter Au mineral showing.

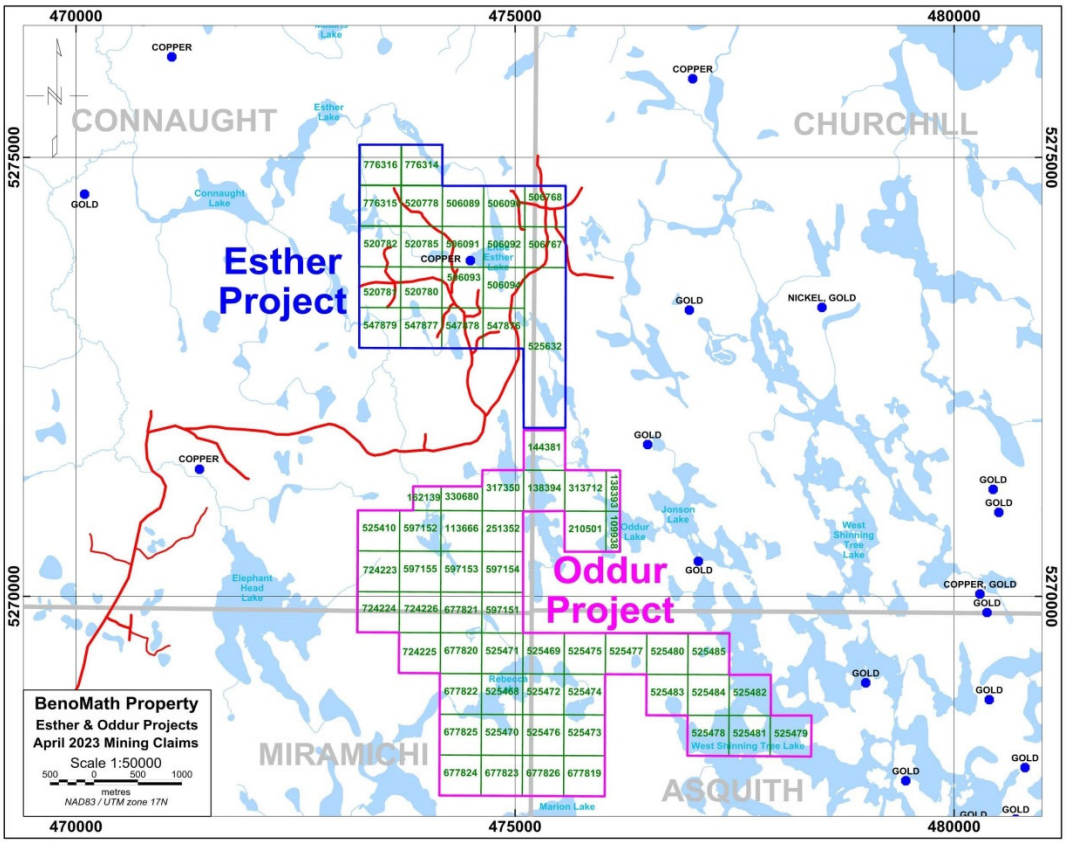



**Figure 3**

## 3.0 GPS GEOREFERENCING OF DATA

### 3.1 Collection of Data & Quality Control

Data was collected by Todd Mathieu. The technical specifications as outlined in the document labelled "Georeferencing Standards for Unpatented Mining Claims" was used as a guide. Weather on the days of data collection varied from sunny to overcast with minimal precipitation. Satellite reception was adequate over most of the property and provided accuracy of 3-5 meters during the program.

## 4.0 BenoMath Property – Esther & Oddur Projects

### 4.1 BenoMath Property Historic Work

The BenoMath Property area has seen intermittent exploration over the last century mostly during peak commodity cycles. Portions of the properties have had several forms of airborne and ground geophysics performed but with very little physical work reported.

The writer believes this is due to the limited access to the area as most historical reports indicate access was via skidoo in winter and float plane or boat by summer. Table 1 summarizes the historic work associated with both the current Esther & Oddur Projects.

**BenoMath Property - Historical Work**

| Current Project | Year | Type | Assessment File Number | Performed For/By Company |
|---|---|---|---|---|
| Esther | 1972-1974 | Compilation & Interpretation, Geology | 41P11SW0040 | Goldhurst Resources Inc. & Ontario Securities Commission |
| Esther | 1981 | VLF Survey | 41P11SW0039 | Goldhurst Resources Inc. |
| Oddur | 1981 | Geophysical Surveys | 41P11NW0406 | Texas Gulf Canada Ltd. |
| Esther | 1982 | Magnetic Survey | 41P11SW0037 | Goldhurst Resources Inc. |
| Oddur | 1984 | AEM | 41P11NW8518 | Narex Ore Search Consultants |
| Oddur | 1984 | AEM | 41P11NE0464 | Manwa Exploration Services Ltd. |
| Oddur | 1984 | Electromagnetic & Magnetic Surveys | 41P11SW0015 | TGR Resources |
| Oddur | 1984 | Electromagnetic & Magnetic Surveys | 41P11SW0016 | TGR Resources |
| Esther | 1990 | Magnetic & VLF Surveys | 41P11NW0402 | Northgate Exploration Ltd. |
| Esther & Oddur | 1991 | Prospecting, Mapping, Assaying | 41P11SW8445 | C Suchanek |
| Oddur | 1992 | Electromagnetic & Magnetic Surveys | 41P11SW8442 | Strike Minerals Inc. & T&H Resources Ltd. |
| Oddur | 1992 | Diamond Drilling, Assaying | 41P11SW0201 | Strike Minerals Inc. |
| Esther | 1992 | Geochemical, Geological, Mapping | 41P11NW0401 | Northgate Exploration Ltd. |
| Esther | 2000 | Magnetic Survey, Prospecting, Assaying | 41P11SW2003 | J B Hinzer |
| Esther & Oddur | 2008 | AEM | 20000005923 | Slocan Minerals (Ashley Gold Mines Ltd & Sedex Mining Corp.) |
| Esther & Oddur | 2008-2009 | AEM, Diamond Drilling, Assaying | 20000004462 | Creso Rescources Inc. |
| Oddur | 2010 | Downhole Geophysics | 20000004757 | Cresco Resources Inc. |
| Esther & Oddur | 2010-2011 | Stripping, Mapping, Assaying | 20000006516 | Cresco Resources Inc. & Platinex Inc. |
| Oddur | 2018-2019 | Prospecting, Assaying | 20000019168 | Todd Mathieu |
| Esther | 2018-2020 | Prospecting, Assaying | 20000018564 | Todd Mathieu |
| Esther & Oddur | 2021-2022 | Prospecting, Assaying | | Todd Mathieu |
| Oddur | 2022 | Prospecting, Assaying | | Todd Mathieu |

**Table 1**

## 4.1.1 Esther Project Significant Historic Work

### 1974 - Prospectus by Goldhurst Resources

Property described as “A silicified zone in a fault breccia with chalcopyrite mineralization has been located on the southwest shore of Little Esther Lake in claim 342562. This zone is in evidence for thirty feet along the shore line when it is covered by the lake on both ends. The lake also obscures its width as in low water only a six foot width could be seen.

A parallel structure, also with chalcopyrite mineralization, has been located by stripping some thirty feet to the south, also in claim 342562. Three spots were opened up over a strike length of 130 feet with a width of 5 feet. The east end of the showing goes into the lake and the west end is hidden by swamp and heavy overburden.

Both zones appear to be more heavily mineralized to the west and an assay of 2.34% copper in a representative grab sample has been obtained.”

### 1980 – OGS Report 190 – Geology of Connaught and Churchill Township

Senior mapping assistant commented: “The deposit consisted of chalcopyrite and bornite in quartz-carbonate veins in fragmental andesite. This is probably the more southerly showing referred to above in the company report.”

### 1981 – VLF Survey/Report by Goldhurst Resources.

“Conclusion: The east-west trending fault-breccia zone has been traced for an extent of at least 3800 feet. Mineralized concentrations bearing gold and copper values have been found to be associated with or in close proximity to sections of this zone thus several diamond drill targets have been located.”

1982 – Magnetic Survey/Report by Goldhurst Resources.

2008 – VTEM survey performed by Geotech LTD for Slocan Minerals Corp.

2018 BenoMath Property, Oddur Project, 2018 Prospecting Report, Todd Mathieu (discovery of the BenoMath high grade vein, doubled size of historic Goldhurst showing)

Based on historic work compiled for the Esther Project, it is believed that no diamond drilling has been completed to test the known VLF anomalies or the surface mineralization at the Goldhurst/BenoMath Cu Showing. Although there is mention of historic sampling results by Goldhurst indicating significant copper and gold values, it does not appear as though certificates of analysis have been provided for the historic sampling.

## 4.2 Geology

Historically the area has seen intermittent mapping with limited information and sampling provided for the area due to poor access and limited physical work programs. For this reason, the writer believes that the historic geological mapping is loosely based and is only provided as a basic reference.

Currently on regional maps the BenoMath Property is interpreted to be part of the Pacaud formation, consisting mostly of mafic volcanics, and potential rhyolite felsic volcanics. Intrusive units tend to consist of northwest trending mafic diabase dykes most likely part of the Matachawan swarm, and several large Nipissing diabase/gabbro bodies within and surrounding the property. Of note, on the south portion of the Oddur project in the location of 3 historic AEM anomalies, there is a felsic intrusive syenite body that should be further evaluated.

There is a significant amount of major and minor faulting in the area. The Elephant Head Lake Fault to the west of the property and the Esther Lake Fault are both prominent major north/south faults. Additional minor faults have been interpreted regionally and locally by the writer striking northeast/southwest, north to northwest/south to southeast, and east/west and continue to be a major focus of the BenoMath programs.

Based off the layers provided as part of the “Ontario Geological Survey 2011, 1:250 000 scale bedrock geology of Ontario – MRD126-REV1”, Figure 4 illustrates the location of the Esther & Oddur Projects and the regional Precambrian bedrock geology for the area.

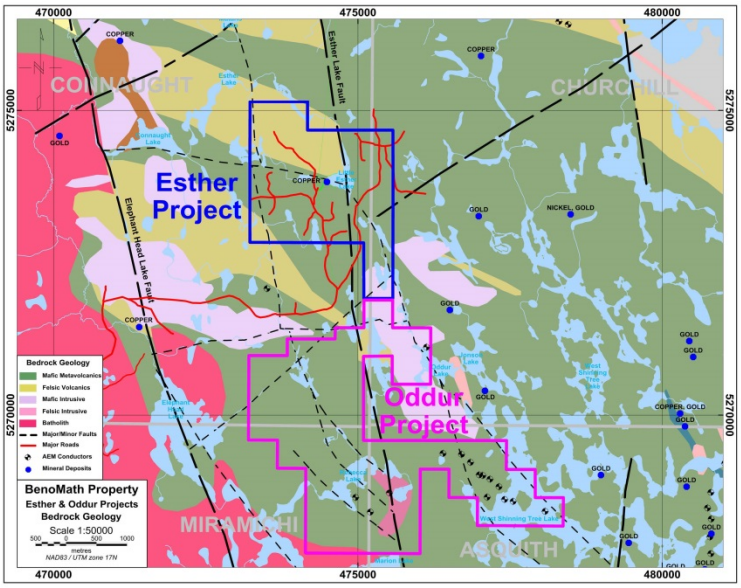



**Figure 4**

## 4.3 Prospecting, Manual Trenching

The 2022 prospecting and manual trenching program was initiated to perform further detailed prospecting along the edges of the known mineralization to date and with the use of a Beep Mat 8 to further test for conductivity and magnetics associated with the local geology. This also included detailed prospecting within the water along the shore line of Little Esther Lake. Manual trenching focused on extending current bedrock exposures further along strike and in directions where bedrock appears to be within distance of manual trenching.

Channel sampling was planned as part of the work, but due to the area being heavily faulted, sheared/fractured, weathered, the quality of the available cuts would not have been sufficient to correctly quantify mineralized envelopes of the veins along with their hanging/footwall contacts. In addition due to the loose fractured bedrock, it was deemed unsafe. Additional trenching will be required and may require a permit and use of machinery as some areas are proving to be challenging for manual trenching and mapping of the mineralized structures.

As the geology is much more complicated with faulting and fracturing in east/west, northwest/southeast, and north/south, it is clear by the current manual trenching that the mineralization has utilized these weaknesses as direct conduits for fluid flow and that mineralization could be focus in any of these three directions.

The continued goal is to determine which key structures may have provided the main conduit for this mineralization and if there is a key rock unit that may provide more of a porphyry type deposit of mineralization vs the more focused high grade quartz calcite vein system currently observed based on the Goldhurst/BenoMath vein systems.

Figure 6 represents a brief compilation of sampling work completed between 2018 and 2022 on the Esther Project Goldhurst/BenoMath showing. Due to the complecated geology, and thick till overburden, additional trenching is still required to fully expose all important structures and mineralization there after.

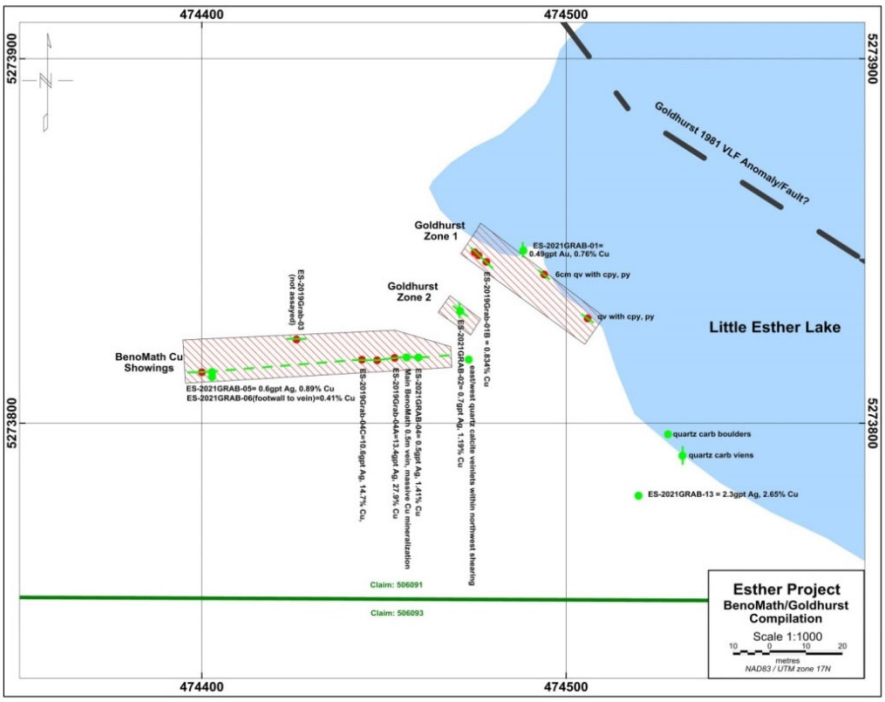



**Figure 6 – BenoMath & Goldhurst Cu – Compilation of sampling 2019-2022**

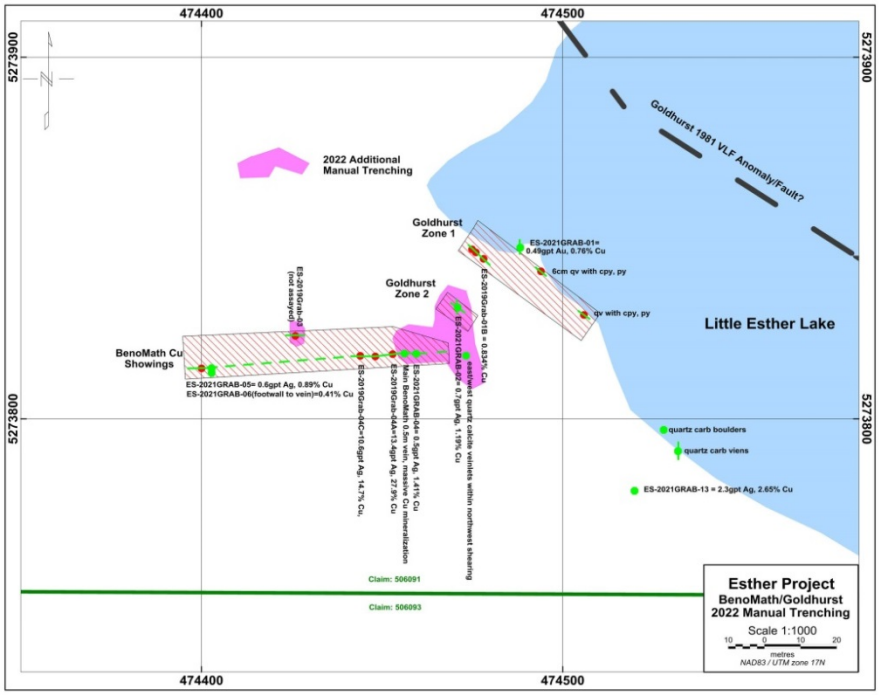



**Figure – BenoMath & Goldhurst Cu – location of 2022 manual trenching**

In addition to the work completed at the Goldhurst/BenoMath Cu showing, one day of prospecting with the use of a Beep Mat 8 was conducted in the area of sample ES-2021GRAB-07. There appears to be a mafic magnetic dyke associated with this sample location. A channel sample was to be taken, but due to the start of rifle season for moose, and local moose hunters, this was delayed until 2023.

The weak conductor halos to the west gave no conductive responses with the Beep Mat 8 and appeared to be related to the clay/silt like overburden in the area. No further prospecting will be completed in this area of the weak conductivity halos from the historic Slocan VTEM survey.

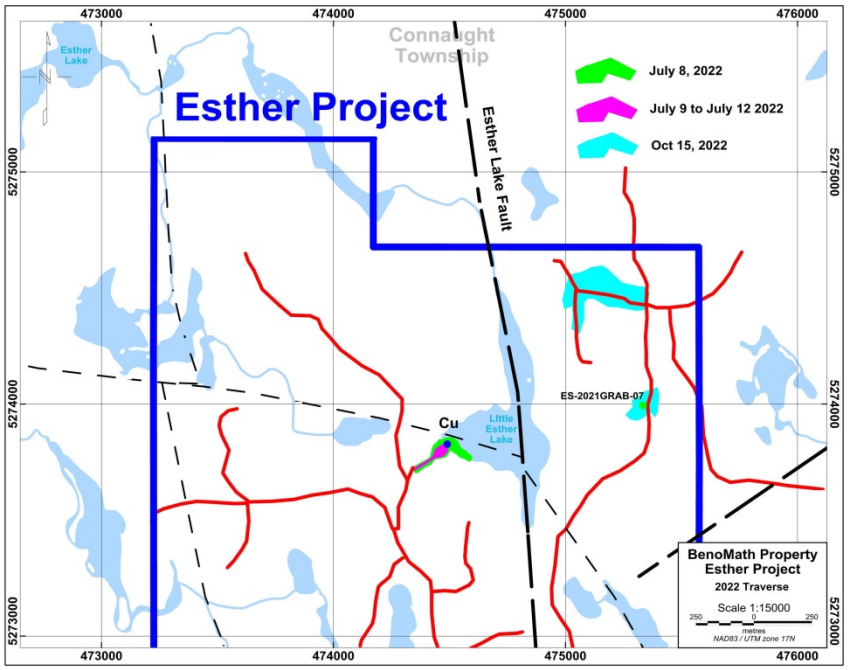



**Figure 8 – 2022 traverses**

## 5.0 Conclusion

The program was successful in exposing additional hard bedrock containing partially mineralized veins/structures, but in the areas where the bedrock is weaker/faulted and more susceptible to increases in vein/mineralized material there tends to be thick gravel like till. This gravely till is proving difficult to move manually and expose bedrock which is suggesting that machinery maybe required to expose these key areas for review and proper sampling. The challenge being that these areas are within anywhere from 15-70 meters from Little Esther Lake and why this manually trenching was attempted first.

It is the writers expectation that permitting of mechanical stripping in these areas maybe severely limited. The writer anticipates submitting a permitting application in the near future for exploration trail creation, mechanical stripping, and line cutting to establish a tight detailed grid as part of the next stage of detailed mapping/work to be completed at the Goldhurst/BenoMath showing. If mechanical stripping is limited and or not allowed, it may be in the best interest of the property to be optioned to a junior with the funding capable to perform the necessary geophysics and drilling to further test the known mineralization/structures.

2021 analysis of sample ES-2021GRAB-07 demonstrated elevated values of K, and P and is believed to be associated with a larger geophysical response. Additional prospecting completed in October of 2022 suggests it may be part of a larger mafic magnetic dyke. Channel sampling was planned, but due a hand injury in August 2023 and the start of the rifle moose hunt season during the October planned program, channel sampling has been delayed until 2023. Once completed this channel sampling will be analyzed for industrial minerals/metals including REE.

Overall there is still a significant amount of work that needs to be completed at the Goldhurst/BenoMath showing, and elsewhere on the property to better understand the local geology and structures that maybe contributing to increases in mineralization.

Todd Mathieu

## 6.0 STATEMENT OF QUALIFICATIONS

I, Todd Mathieu, do hereby certify that:

1. I reside at 216 Tisdale Street, South Porcupine, Ontario, Canada, P0N 1H0.

2. I am a graduate of the Computer Programmer/Analyst Program at Canadore College, North Bay, Ontario.

3. I have practiced my geological and geophysical profession intermittently from 1994 to 2009, and consistently from 2009 to present. I have been directly involved in the exploration of several mineral commodities in Ontario and have a strong technical background in geophysics and GIS.

4. I have successfully completed courses on advanced 3D orebody modeling within the Datamine Studio 3 software package and advanced GIS using the Oasis Montaj software package.

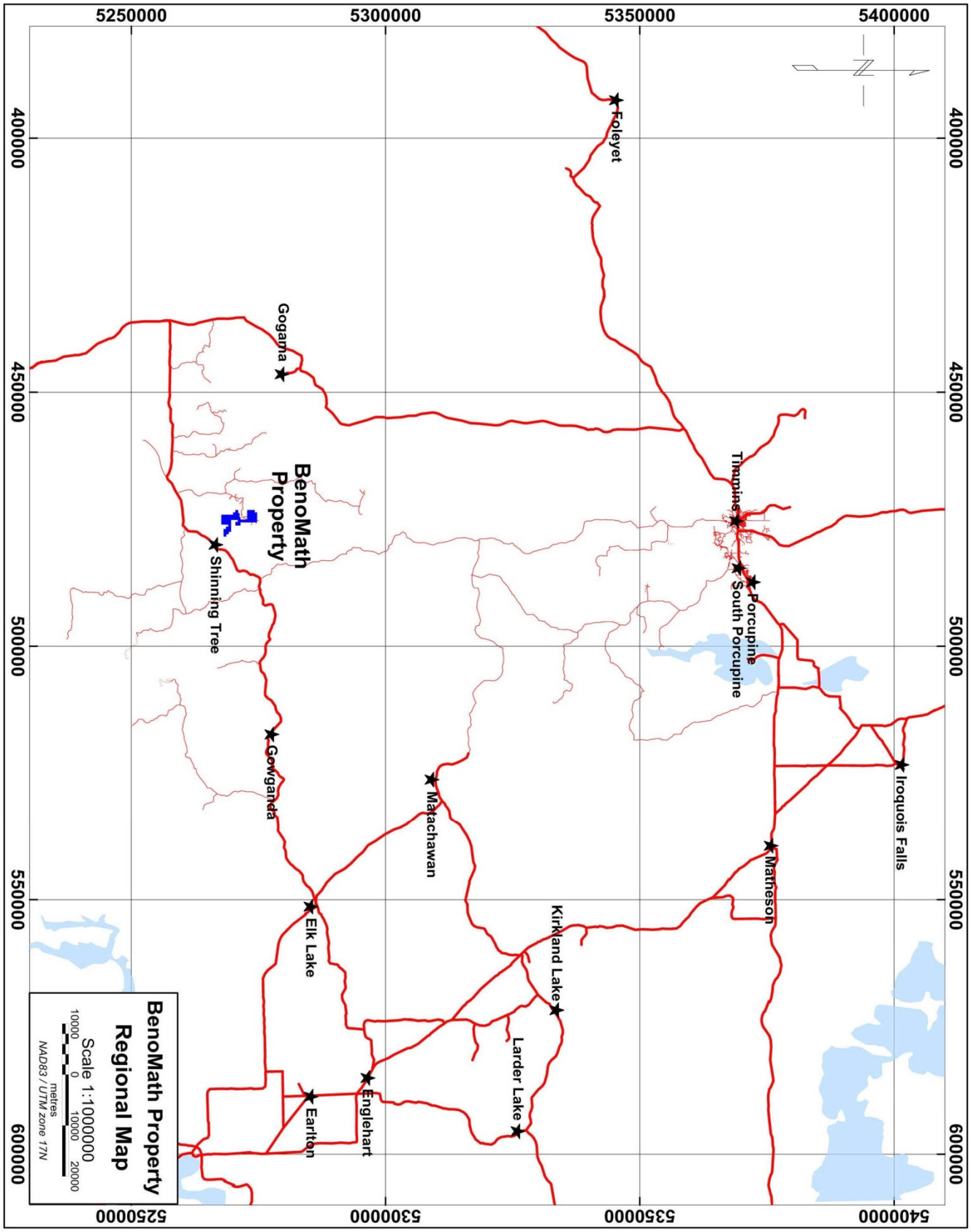
5. I have completed the Mining Act Awareness Program, verification number: BE8C-9100-C9D2-3E6E, and I am familiar with the mining act regulations, policies and procedures.

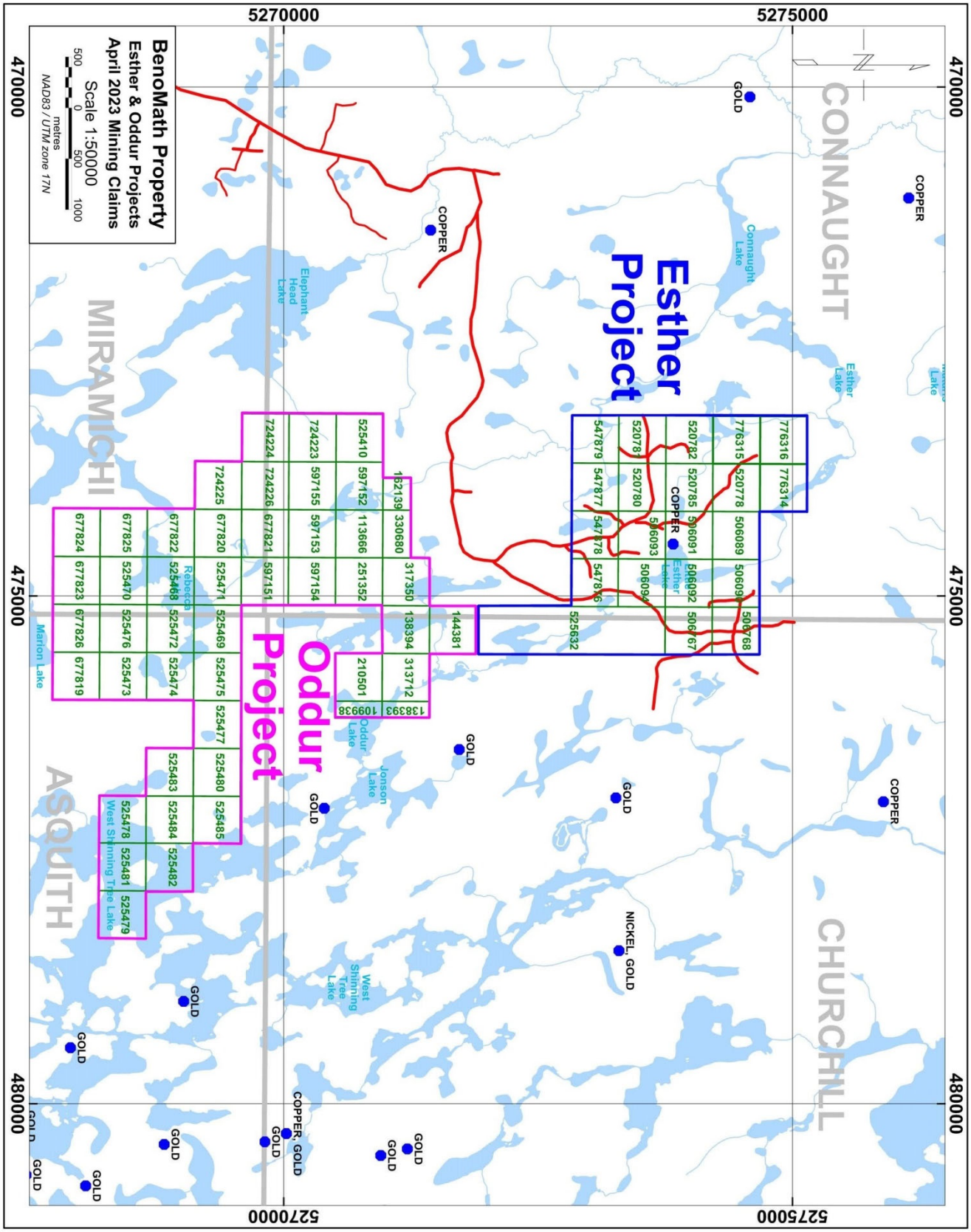
May 3, 2023

_____

Todd Mathieu

# 7.0 Appendix A – Property Maps

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April 2023 Mining Claims
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metres
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Esther Project
Oddur Project
CONNAUGHT
MIRAMICHI
ASQUITH
CHURCHILL
Connaught Lake
Esther Lake
Elephant Head Lake
Marion Lake
Oddur Lake
Jonson Lake
West Shinning Tree Lake
Rebecca
West Shinning Tree Lake
776316 776314
776315 520778 506089 506088 506087
520782 520785 506091 506092 506067
520781 520780 506093 506094
547879 547877 547878 547876
525632
144381
162139 330680 317350 138394 313712
525410 597152 113666 251352 210501
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724225 677820 525471 525469 525475 525477 525480 525485
677822 525468 525472 525474 525483 525484 525482
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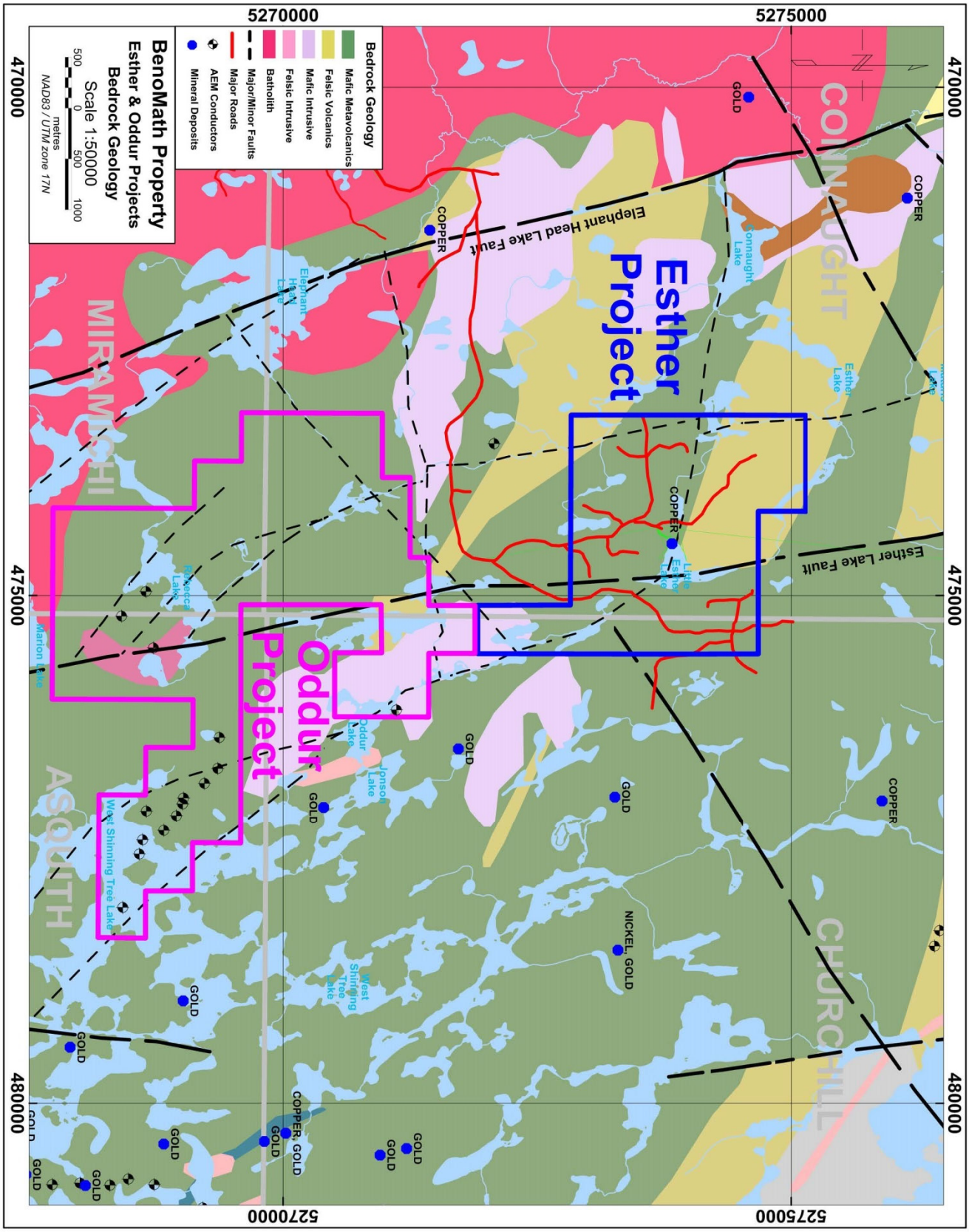
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NAD83 / UTM zone 17N
Bedrock Geology
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Felsic Volcanics
Mafic Intrusive
Felsic Intrusive
Batholith
Major/Minor Faults
Major Roads
AEM Conductors
Mineral Deposits
Esther Project
Oddur Project
Elephant Head Lake Fault
Esther Lake Fault
CONNAUGHT
MIRAMICHI
ASQUITH
CHURCHILL
Connaught Lake
Esther Lake
Little Esther Lake
Elephant Head Lake
Rebecca Lake
Marion Lake
Oddur Lake
Jonson Lake
West Shinning Tree Lake
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NICKEL
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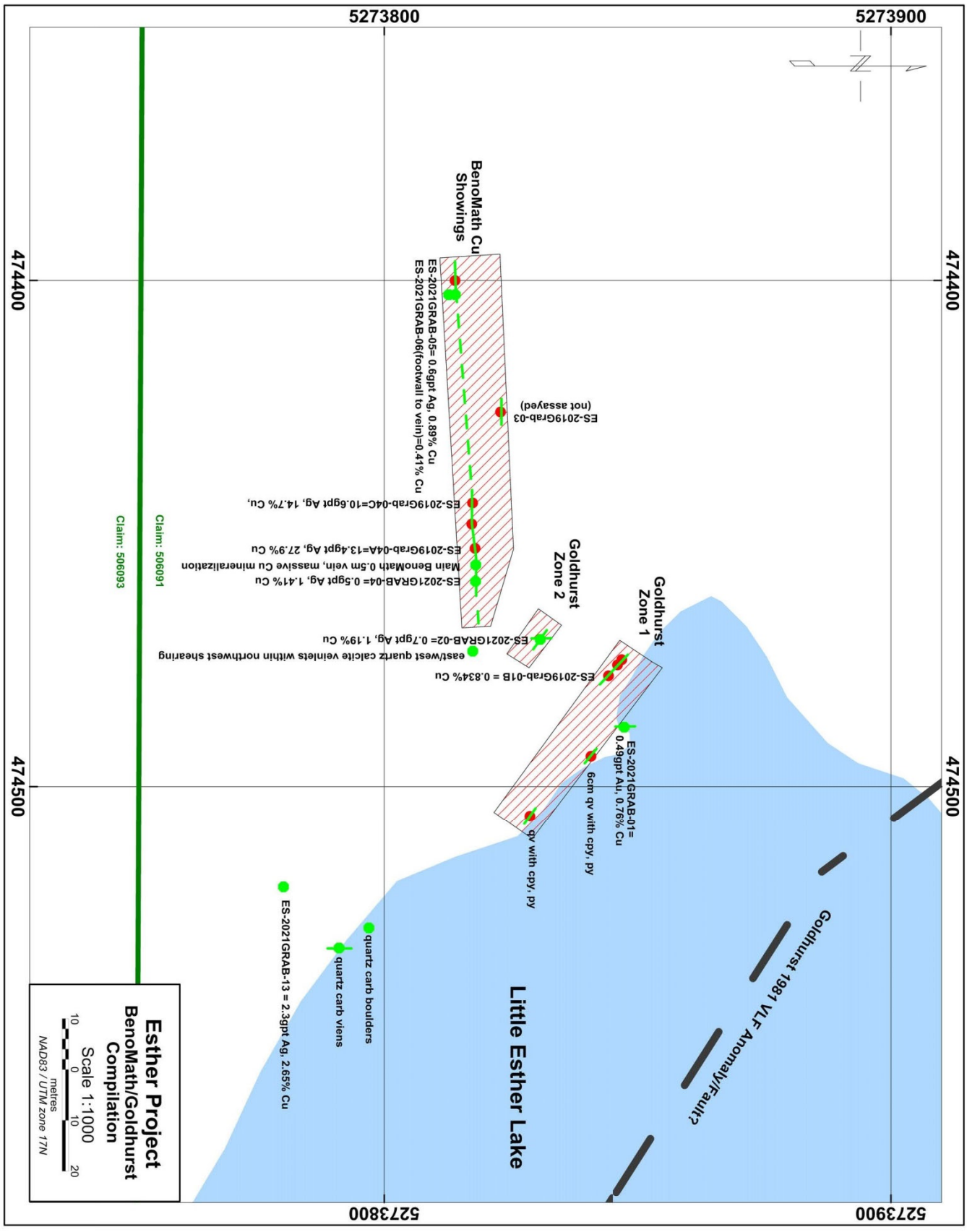
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474500
BenoMath Cu Showings
ES-2021GRAB-05= 0.6gpt Ag, 0.89% Cu
ES-2021GRAB-06(footwall to vein)=0.41% Cu
ES-2019Grab-03 (not assayed)
ES-2019Grab-04C=10.6gpt Ag, 14.7% Cu,
ES-2019Grab-04A=13.4gpt Ag, 27.9% Cu
Main BenoMath 0.5m vein, massive Cu mineralization
ES-2021GRAB-04= 0.5gpt Ag, 1.41% Cu
Goldhurst Zone 2
ES-2021GRAB-02= 0.7gpt Ag, 1.19% Cu
eastwest quartz calcite veinlets within northwest shearing
Goldhurst Zone 1
ES-2019Grab-01B = 0.834% Cu
ES-2021GRAB-01= 0.49gpt Au, 0.76% Cu
6cm qv with cpy, py
qv with cpy, py
Goldhurst 1981 VLF Anomaly/Fault?
Little Esther Lake
ES-2021GRAB-13 = 2.3gpt Ag, 2.65% Cu
quartz carb boulders
quartz carb viens
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Claim: 506091
Esther Project
BenoMath/Goldhurst Compilation
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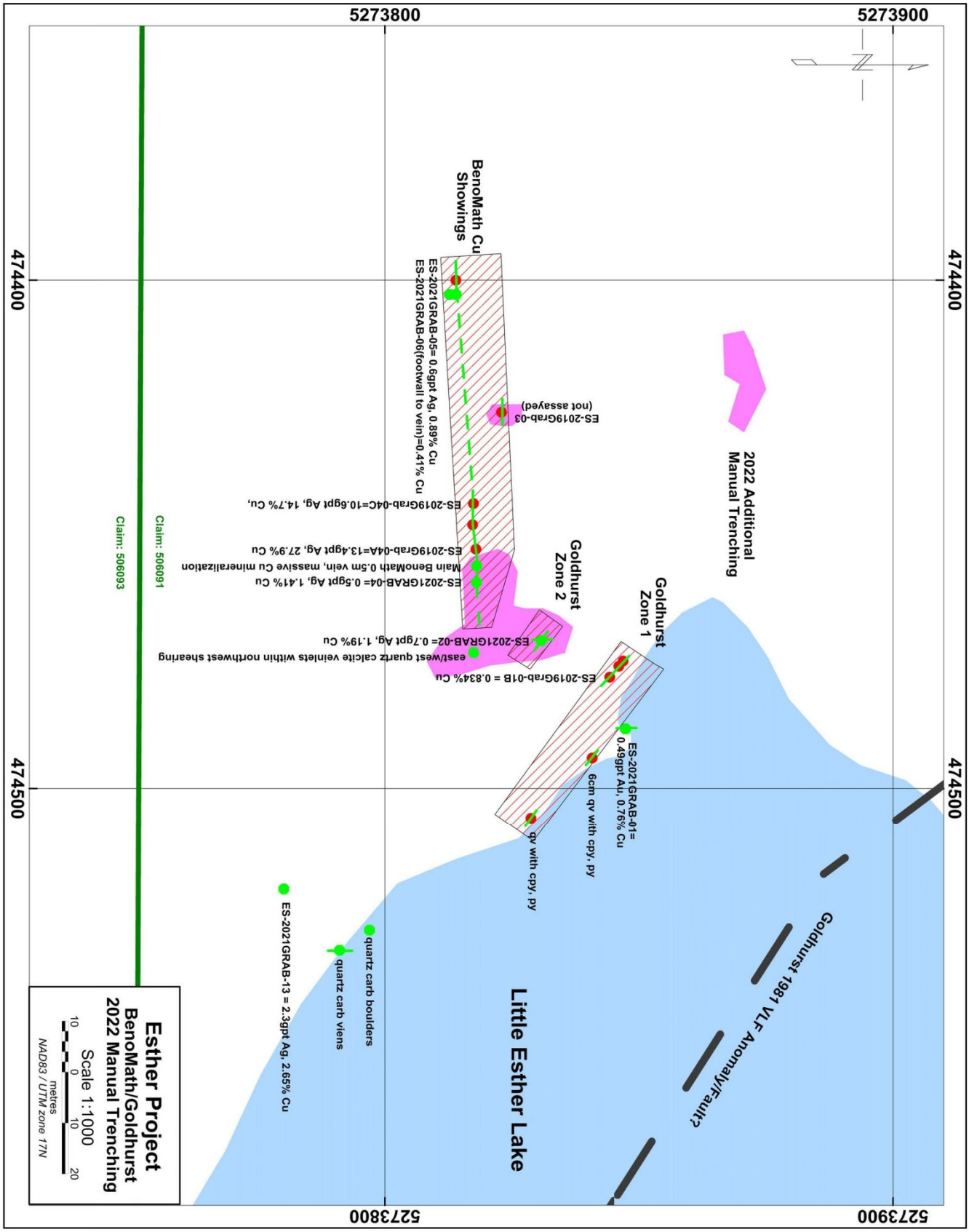
metres
NAD83 / UTM zone 17N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BenoMath Cu Showings
ES-2021GRAB-05= 0.6gpt Ag, 0.89% Cu
ES-2021GRAB-06(footwall to vein)=0.41% Cu
ES-2019Grab-03 (not assayed)
2022 Additional Manual Trenching
ES-2019Grab-04C=10.6gpt Ag, 14.7% Cu,
ES-2019Grab-04A=13.4gpt Ag, 27.9% Cu
Main BenoMath 0.5m vein, massive Cu mineralization
ES-2021GRAB-04= 0.5gpt Ag, 1.41% Cu
Goldhurst Zone 2
ES-2021GRAB-02= 0.7gpt Ag, 1.19% Cu
east/west quartz calcite veinlets within northwest shearing
Goldhurst Zone 1
ES-2019Grab-01B = 0.834% Cu
ES-2021GRAB-01= 0.49gpt Au, 0.76% Cu
6cm qv with cpy, py
qv with cpy, py
Claim: 506093
Claim: 506091
Goldhurst 1981 VLF Anomaly/Fault?
Little Esther Lake
ES-2021GRAB-13 = 2.3gpt Ag, 2.65% Cu
quartz carb boulders
quartz carb veins
Esther Project
BenoMath/Goldhurst
2022 Manual Trenching
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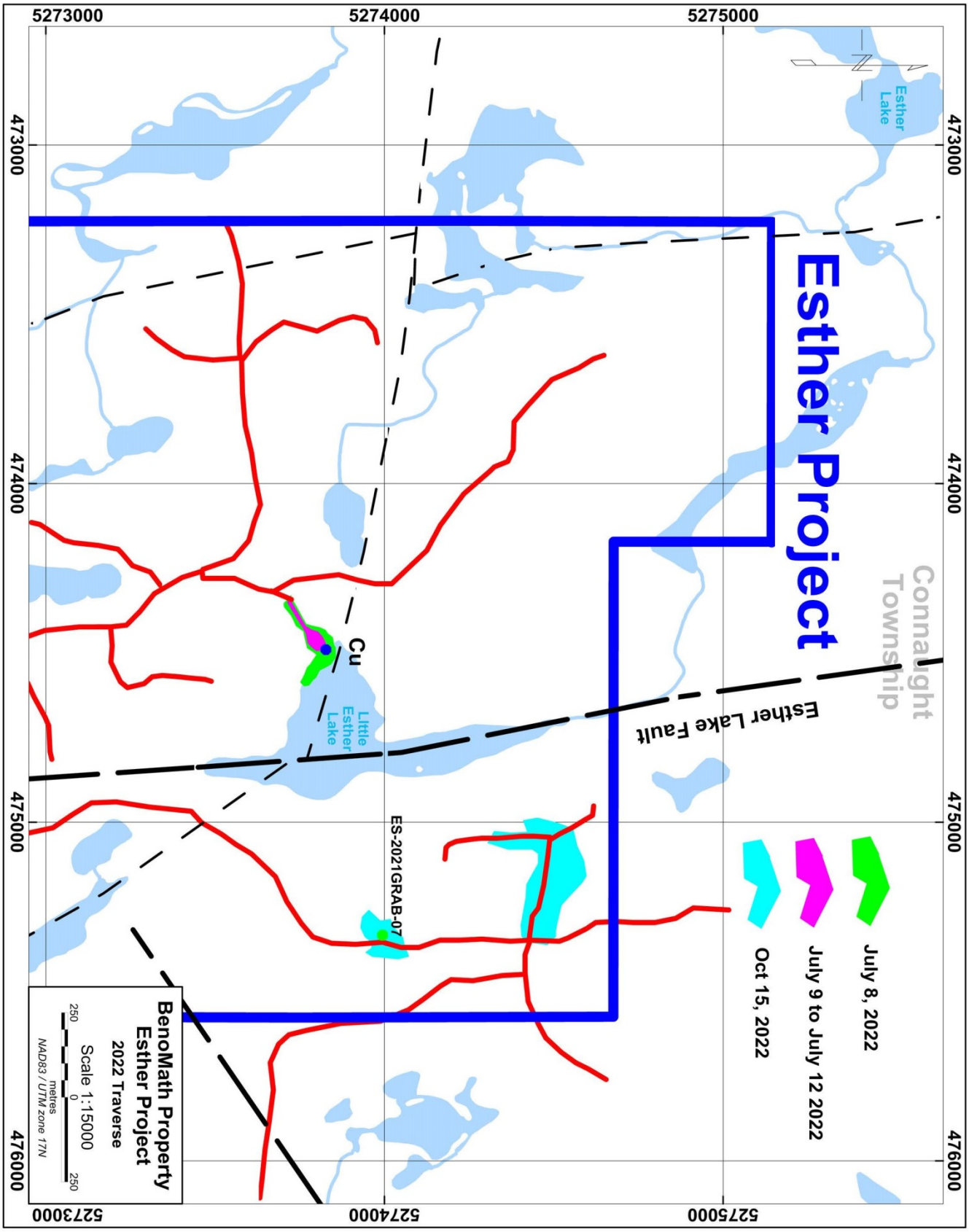
NAD83 / UTM zone 17N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474000
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476000
Esther Lake
Esther Project
Connaught Township
Esther Lake Fault
Cu
Little Esther Lake
ES-2021GRAB-07
July 8, 2022
July 9 to July 12 2022
Oct 15, 2022
BenoMath Property
Esther Project
2022 Traverse
Scale 1:15000
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metres
NAD83 / UTM zone 17N

# 8.0 Appendix B – Esther Project – 2022 Daily Log

## BenoMath Property – Esther Project

**Access from South Porcupine, Ontario:** 2.75 hours of travel one way.
**Access from Oshawa, Ontario:** 7.5 hours of travel one way.
**Performed By: Todd Mathieu**
**Norm Mathieu**
**Kelly Mathieu**
**Jimmy Mathieu**

July 8, 2022
I, Todd Mathieu mobilized remote camp equipment, ATV, trailer and other field gear in the form of water pump, hoses, channel saw, shovels, buckets, etc from Timmins Ontario, while Norm, Kelly, and Jim mobilized field/remote camp gear from Oshawa and North Bay Ontario. I had also purchased 10 bales of straw of which 5 were mobilized to site with the remaining room that was available in the trailer. I had also borrowed the Timmins branch ENDM Beep Mat for further testing of the Goldhurst/BenoMath showings/area as detailed prospecting and manual trenching took place.



Basic tools/field gear used during the program.

I began assembling the remote camp/staging area while awaiting Norm, Kelly, Jim, as their mob/travel is much more lengthy from Oshawa, Ontario. Once they arrived closer to dark, we proceeded to set up the remaining remote camp site.

10.25 hour day.

Equipment/Supplies Mobilized: remote camp gear, food, water, 2 trucks, camper, ATV, trailer, chainsaw, water pump & hoses, miscellaneous prospecting/manual trenching gear, and water gear in the form of life jackets, goggles/snorkels and fins, safety ropes, and 5 bales of straw/hay.

July 9, 2022
With the use of the ATV for the first 160 meters we physically mobilized all field gear including the water pump and hoses, channel saw, chain saw, water gear, straw bales, and other prospecting/manual trenching gear in the total of 270 meters to the work site. As a proactive safety measure, although not necessarily required as we have created sumps where water can collect and naturally filter through organics, sediment control in the form of the bales of straw were moved and placed within the run off

ditch that drains the local area during high precipitation events. The run off ditch was dry at this time due to the limited precipitation/dry June months.

With the use of the chainsaw we began with brushing of the continued manual trenching areas removing fallen trees/brush. The water pump and hoses were assembled with the current showings being hosed down removing the organics/fallen leaves from the past fall.
As it was a sunny, hot, clear day it was decided to switch to the detailed prospecting of the shore line for the afternoon, but within the water and with the use of the water gear and brushes. As it had been a dry month, water levels were at their lowest seen to date. Due to the associated risks as the water is murky with steep drop offs and soft bottom in places, along with slippery rocks, we maintained one spotter on shore per person in the water and both were equipped with safety gear in the form of life jackets and ropes to act in the case of an emergency. Kelly acted as Norm's spotter and Jim as my spotter. The purpose was to review the mineralization within the lake and to see if it increased in size/potential as we proceed closer to what has historically been proposed of a west northwest/east southeast fault/structure cutting through the center of the western bay of Little Esther Lake.

With the use of hand brushes, we began tracing quartz veining/mineralization from the shore into the water as far as we could safely proceed. Along the exposed bedrock along the shoreline we immediately realized that the lake is murky with a lot of organic sediment sitting on the bedrock/lake bottom. Although we were able to trace the quartz/mineralization into the lake and it maintained a similar resemblance of what has been documented above the water line along the shore, as we moved around in the water, previous brushed off bedrock exposures would immediately be covered with silt. In an effort to not stir up the sediments in the bottom while walking around, we attempted to wear life jackets with the goggles and fins, but even the pressure from the fins would immediately stir up organic sediments from the bottom with the water becoming so murky it was impossible to see even with the goggles.

Although the water prospecting program confirmed that the mineralization extends in the bedrock deeper into the lake, nothing new of interest was noted, and it was confirmed that any further water prospecting would be a waste of time within Little Esther Lake. As the water is murky with organic sediments, no pictures of the quartz veining/mineralization seen within the water were able to be taken. That being said, the mineralization in the form of fracture filled quartz veining was similar to what has historically been reported above the water line along the shoreline.

8.5 hour day
Equipment: camp gear, prospecting gear, water gear, ATV, chainsaw, water pump & 115ft of hose, and other hand tools.

July 10, 2022
Due to a scheduled visit by Peter Chadwick, Resident Geologist for the Kirkland Lake District, to be completed July 12$^{th}$, one of the main goals of this program was to expose as much bedrock and local structures as possible in the area of the Goldhurst/BenoMath showings and prepare for channel sampling.

With the use of shovels, buckets, grub hoe, axe, along with the water pump and hoses for rinsing trenched areas, Norm and Kelly began trenching southwards from the Goldhurst two showing, while Jim and I attempted to trench deep in the direction east of the BenoMath vein where overburden becomes thick with till. After the full mornings work with zero success of reaching bedrock, Jim and I also cleared off a small area on the north edge of the Goldhurst number two showing, and also provided support in

Norm and Kellys stripped area. Most of the successful manual trenching was completed along a very hard, mafic to intermediate unit with shallow overburden/till that runs north northwest, is somewhat fractured, but due to its hardness the quartz and mineralization seen is very pinched and narrow. Due to the fractured nature of the bedrock in places, roots are difficult to remove and very time consuming to manually trench. We intermittently attempted to use the Beep Mat 8 for testing around the veins in the hope that it would act as a secondary tool for directing the direction of our manual trenching, but it proved to be of no direct assistance.

8.25 hour day
Equipment: camp gear, prospecting gear, Beep Mat 8, ATV, chainsaw, water pump & 115ft of hose, and other hand tools such as shovels, grub hoe, pails, etc.

July 11, 2022
Norm and Kelly began trenching westward from the previous days work, and later continued to trench southward along their bedrock structure in the hopes of intercepting the BenoMath main vein while Jim and I began further manual trenching/clearing of debris along the north side of the BenoMath vein where the vein is approximately 40-50 centimeters wide with the hanging wall extremely fractured/broken. Goal for Jim and I was to attempt to hit bedrock where it would be safe to take a channel sample from the foot wall, through the vein, and into the hanging wall.

Although we successfully exposed the vein and hanging wall/footwall further, we were unsuccessful in clearing an area safe to channel sample due to the fractured nature of the vein itself.


Oct 15, 2022 – BenoMath main vein trench down to bedrock (looking south)

Oct 15, 2022 – BenoMath main vein trench – fractured vein/massive sulphides (looking north northwest)

The remainder of our day was spent south of Norm and Kelly assisting with continuing trenching in the direction of the BenoMath main vein. This area remains thick with broken till and so we worked as a four person team. We continue to trench, rinse, and detailed prospect.

Oct 15, 2022 – location of part of Norm and Kelly's manual trenching through thick roots

At one point we located several large mineralized quartz boulders all in a line which have a remarkable resemblance to the BenoMath main vein.

Oct 15, 2022 - large mineralized quartz boulders (right) removed from till/trench (left).

In the hopes we had located and extended the vein, we carefully trenched, and washed repeatedly to remove debris from around the mineralized boulders only to discover they were sitting atop of another layer of till. The boulders were set alongside the trench in the order they were found. Exhausted and frustrated we ended our day.

8.5 hour day
Equipment: Equipment: truck, trailer, camper, remote camp gear, prospecting gear, Beep Mat 8, ATV, chainsaw, water pump & 115ft of hose, and other hand tools such as shovels, grub hoe, pails, etc.

July 12, 2022
Jim and I were up early and began further manual trenching in the location of the large mineralized quartz boulders. Upon realizing we were still not close to bedrock, we began washing all the exposures in preparation for pictures and Peter Chadwick's visit later that morning.

Starting with the Goldhurst one showing, Peter sampled his way through the property taking multiple samples, pictures, and direction of veins. Due to the visible rich nature of the mineralization in the BenoMath main vein, Peter took multiple samples from three separate locations. Peter has recommended further exposing bedrock, but to also establish a detailed grid for detailed mapping of the structures due to the complicated geology. Last Peter and I spoke, Peter Chadwick's field visit will be listed within the field visit section of the Kirkland Land Region OFR and released in early 2023.

Upon Peter leaving the project area, Jim and I mobilized the water pump and hoses, and other trenching gear to the location of the BenoMath three vein showing while Norm and Kelly began trenching/clearing off the bedrock exposure further to better evaluate the visible fault structure related to the mineralization. At the same time, Jim and I began demobilizing all excess gear to the area of the ATV, so we could begin closing down the work site. Norm and Kelly worked hard cutting roots, chain sawing and moving fallen brush and boulders and exposed as much of the outcrop as possible before the evening light set in. Due to poor lighting in the evening, pictures were not taken and will have to be scheduled for a later date this year.


Oct 15, 2022 – BenoMath 3 vein area (looking north)–faulted with additional local/trace quartz stringers

Together we demobed the rest of the gear to the ATV location, and made several trips with the ATV to migrate all the gear back to the truck/trailer, where it along with a portion of the camp gear, was all reloaded in my truck and trailer for travel.

I travelled/demobed back to South Porcupine that night. Jim, Norm, and Kelly were exhausted and decided to stay the night.

15.5 hour day for Todd, 10.25 hour day for Jim, and 8 hour day for Norm & Kelly.
Equipment: truck, trailer, camper, remote camp gear, prospecting gear, Beep Mat 8, ATV, chainsaw, water pump & 115ft of hose, and other hand tools such as shovels, grub hoe, pails, etc.

July 13, 2022
Norm, Kelly, and Jim packed up the remaining camp site/gear, and travelled/demobed back to North Bay and Oshawa.

9 hour day
Equipment: truck, camper, remote camp gear,

Oct 14, 2022
I, Todd Mathieu, mobilized camp equipment and gear in the form of field gear, channel saw, and I had borrowed the Beep Mat 8 from the ENDM office in South Porcupine. Goal was to prospect an area that is mostly overburden covered, while running the Beep Mat 8 over an area in the historic Slocan VTEM survey that showed elevated conductance. Secondary goal of this trip was to channel sample the location of ES-2021GRAB-07 and the BenoMath number three vein area, and take pictures and additional measurements for the report. If weather/temperature permitted, a one day prospecting trip was also planned in the vicinity of the north end of Oddur Lake with use of the Beep Mat 8. I arrived in the dark and briefly set up camp for the night at the location of ES-2021GRAB-07.

4.5 hour day.
Equipment/Supplies Mobilized: remote camp gear, truck, ATV, Beep Mat 8, channel saw and accessories, prospecting/field gear.

Oct 15, 2022
I was up and working by the dawn of light. Warmed up the Beep Mat 8, and began prospecting/surveying around ES-2021GRAB-07. Several magnetic conductors where noted and believed to be related to a mafic magnetic dyke.

Unfortunately a hand injury in the form of a detached/damaged tensor tendon in August put my right hand in a splint for three months and require a couple further months of rehabilitation, so this was my only opportunity to perform this basic work with an injured hand that wasn't fully recovered. To my surprise, moose rifle season opened this weekend. Typically the rifle season usually starts one weekend early. The moose hunters were not happy that I was in the area, and continued to provide dirty looks each time they passed. I decided channel sampling would not be acceptable, so I continued to prospect with the use of the Beep Mat 8 along what I believed to be an area of higher conductivity in the Slocan VTEM survey. No conductors where noted. It is the belief of the writer that the elevated conductance is related to a clay like overburden seen in this area that appears to be holding water. No further time will be spent prospecting this area.

To obtain pictures for the report of the July manual trenching/prospecting, in the afternoon I mobilized the truck and gear over to Little Esther Lake, and spent some time taking photographs of the trenches.

To not interfere any further with the moose hunt, all gear was packed up and demobilized back to South Porcupine.

13.5 hour day.
Equipment/Supplies Mobilized: remote camp gear, truck, ATV, Beep Mat 8, channel saw and accessories, prospecting/field gear.

# BenoMath Property – Esther Project – 2022 Daily Log

## BenoMath Property – Esther Project

**Access from South Porcupine, Ontario:** 2.75 hours of travel one way.
**Access from Oshawa, Ontario:** 7.5 hours of travel one way.
**Performed By: Todd Mathieu** Todd Mathieu
**Norm Mathieu**
**Kelly Mathieu** Kelly Mathieu
**Jimmy Mathieu** Jimmy Mathieu

July 8, 2022
I, Todd Mathieu mobilized remote camp equipment, ATV, trailer and other field gear in the form of water pump, hoses, channel saw, shovels, buckets, etc from Timmins Ontario, while Norm, Kelly, and Jim mobilized field/remote camp gear from Oshawa and North Bay Ontario. I had also purchased 10 bales of straw of which 5 were mobilized to site with the remaining room that was available in the trailer. I had also borrowed the Timmins branch ENDM Beep Mat for further testing of the Goldhurst/BenoMath showings/area as detailed prospecting and manual trenching took place.


Basic tools/field gear used during the program.

I began assembling the remote camp/staging area while awaiting Norm, Kelly, Jim, as their mob/travel is much more lengthy from Oshawa, Ontario. Once they arrived closer to dark, we proceeded to set up the remaining remote camp site.

10.25 hour day.

Equipment/Supplies Mobilized: remote camp gear, food, water, 2 trucks, camper, ATV, trailer, chainsaw, water pump & hoses, miscellaneous prospecting/manual trenching gear, and water gear in the form of life jackets, goggles/snorkels and fins, safety ropes, and 5 bales of straw/hay.

July 9, 2022
With the use of the ATV for the first 160 meters we physically mobilized all field gear including the water pump and hoses, channel saw, chain saw, water gear, straw bales, and other prospecting/manual trenching gear in the total of 270 meters to the work site. As a proactive safety measure, although not necessarily required as we have created sumps where water can collect and naturally filter through