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2022 PROSPECTING REPORT

– Drill Holes: SW-21-01

CLAIMS#

139364,325110,295338,139364,295338,295338,105806,105000,
105001,105002,107882,105372,114381,104022,110611,109020,
111905,106894,130899,130900,128642,132424,119279,131647,
125281,125282,125283,130474,166690,171733,171734,175305,
175306,175340,165736,165737,157779,159618,167188,167189,
167190,162601,162602,161363,142466,155261,155262,140126,
140127,140128,156587,147989,136739,136815,173398,140676,
148331,148332,146080,146081,147327,147328,196648,208546,
209754,214677,213659,213822,212925,212926,212927,196452,
196453,200982,201003,202442,184670,190721,176970,182040,
189749,188807,182310,193704,185112,192647,192684,189022,
176208,176209,176210,176211,213160,189265,179158,181588,
250317,250318,251577,251578,251579,249235,242068,247422,
238388,242479,249884,183771,183772,238691,240124,240125,
241811,226561,232503

Swill Diamond Drill Project

THUNDER BAY MINING DISTRICT

Prepared By: Martin Drennan, P. Eng

August 14, 2022

(Updated for NOD - Jan. 21, 2023)

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1. Work Summary

Work during Spring 2022 was based on a surface anomaly identified during 2016/2017 as well as drilling completed in 2019, 2020, and 2021. 3 drill hole are planned for this program. This is the first hole of the program completed to 479m. The initial logging completed has been interpreted as not warranting any sampling/assay. However, a second review has been completed and samples have been taken from areas of interest. These samples will be added once assays are complete. Work was performed by Martin Drennan, Chris Bottomley, Luke Whalen and Henry Koski.

2. Introduction

This report is a description of the drilling completed on claim 188122 (42F04E153) which is a claim in the Leslie Townships in the Thunder Bay Mining District. The claim(s) can be described as being located in the Manitouwadge mining camp (as defined by previous copper producers – Wilroy and Geco Mines). These claims are held by the author (Martin Drennan).

The objective of this work and a 9 hole plan submitted to MNDM in early 2020 is to firstly test a specific area of interest developed from previous prospecting work. Secondly, this area of interest may have mineralization of gold, but more likely similar base metals as have been found in the region.

Coordinate information in the following text and associated support materials is UTM coordinate system within Zone 16 and uses NAD27.

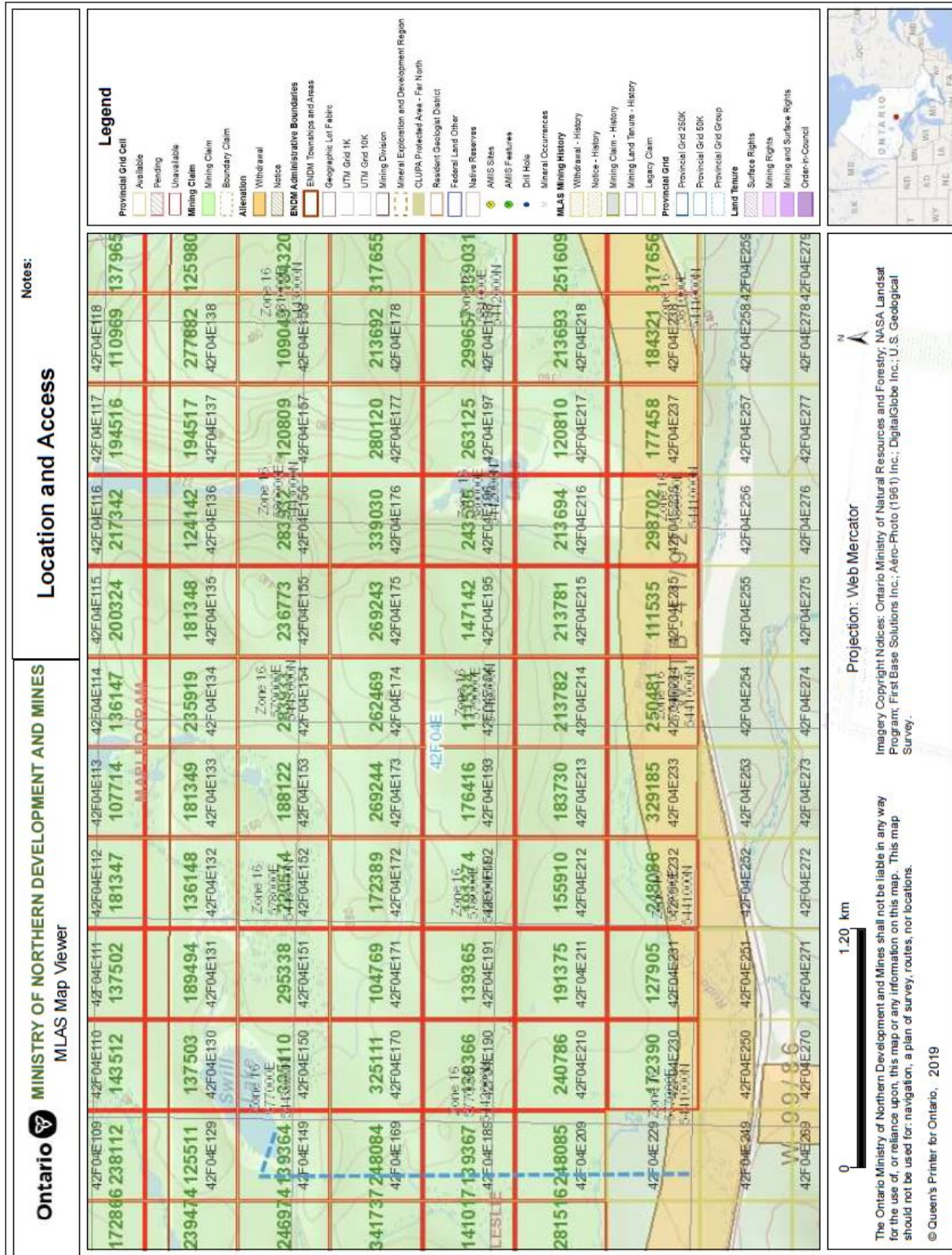
This drill work was performed on PR-21-000073 drill permit.

The work in this report has been reviewed by the author and determined to be accurate.

Leslie Township is located south east of Thunder Bay. Access is via Regional Road 614 to Caramat Industrial road. Caramat Industrial leads to the access road – Swill Lake Road. Swill Lake road was used to access the work area. See Figure 1 – Location and Access (work areas are highlighted with blue lines). No area organize was established to define “working areas” as the initial work was to establish anomaly locations. Once anomaly locations are established – a reference will be defined.

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Figure 1 – Location and Access



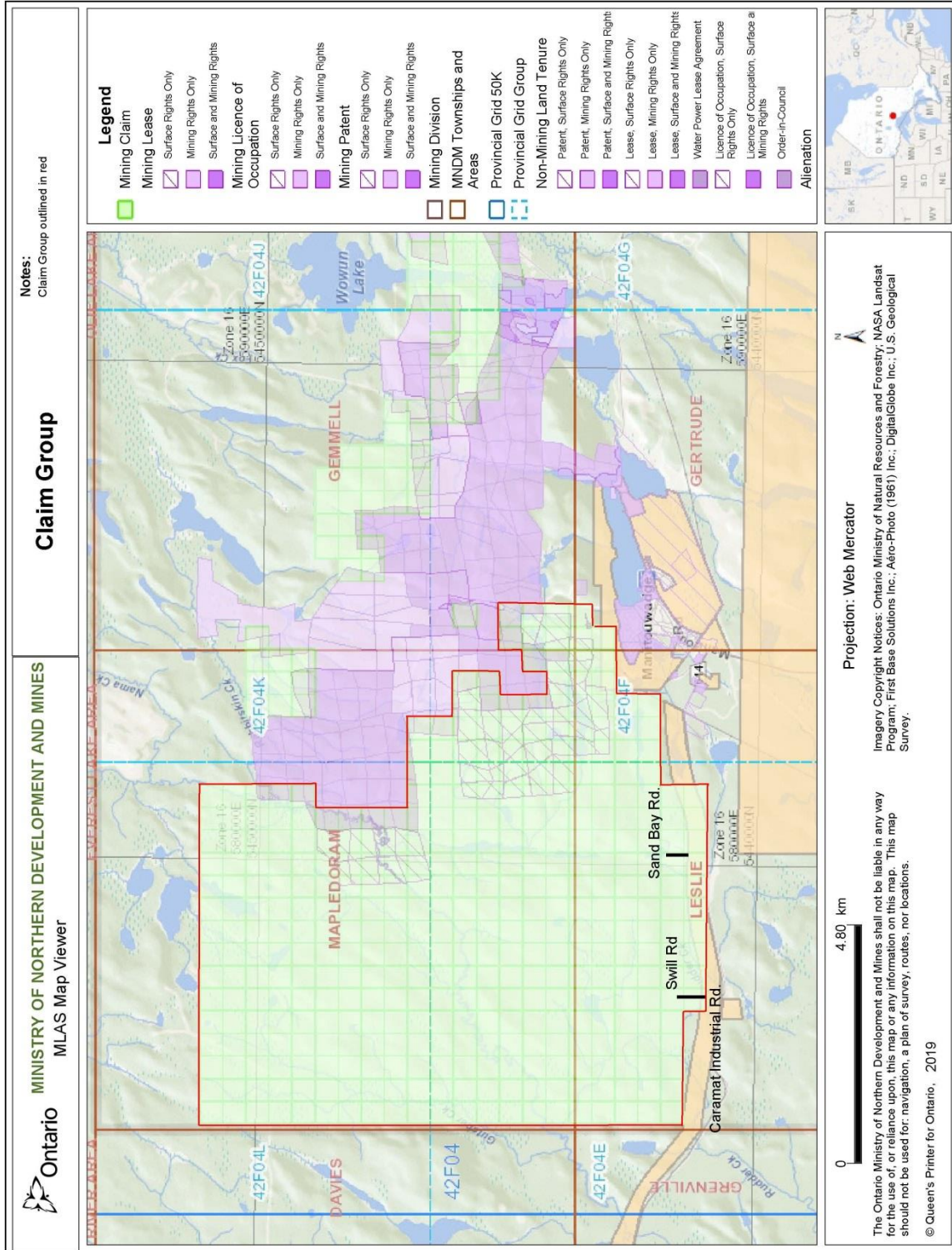
3. Property Description

The claim group consists of 381 claims in Manitouwadge area within the Thunder Bay Mining District. See Figure 2 –Claim Group Map. The claims are a continuous package (outlined in red) with the eastern claims adjacent to the patented Geco Mine claims and some surface property lots. The claims are:

103541,103542,103543,103544,103545,104022,104769,105000,105001,105002,105003,105372,105577,105578,105579,105806,106894,107714,107882,109020,109049,110611,110968,110969,111534,111535,111589,111905,112279,112280,113567,114381,118817,119279,120809,120810,122552,124142,124353,124354,125281,125282,125283,125511,125977,125978,125979,125980,127905,128642,130474,130899,130900,131647,132424,135753,135754,136147,136148,136739,136815,137212,137502,137503,137963,137964,137965,139364,139365,139366,139367,140126,140127,140128,140129,140676,141017,142329,142466,143191,143512,144292,146080,146081,147142,147327,147328,147989,148331,148332,153306,155261,155262,155910,156587,157779,159618,161056,161363,162601,162602,165736,165737,166690,167188,167189,167190,170517,170518,170519,170520,171733,171734,171913,172389,172390,172642,172643,172866,172867,172888,173398,175305,175306,175340,176208,176209,176210,176211,176416,176970,177458,179158,180515,181347,181348,181349,181588,182040,182310,183730,183771,183772,184320,184321,184670,185112,186579,187051,188122,188381,188382,188807,189022,189265,189494,189749,190721,190810,191374,191375,192647,192684,193704,194516,194517,196452,196453,196648,200324,200982,201003,201041,201042,201904,202442,202932,207066,207882,207883,208546,209592,209609,209754,212925,212926,212927,213160,213659,213692,213693,213694,213781,213782,213822,214677,215523,215853,217342,220513,220514,220515,220674,221930,224709,224710,226561,229860,229901,231364,232503,232504,232704,234403,234404,234405,234406,235919,236773,238112,238388,238527,238691,239474,240124,240125,240786,241811,242068,242479,243566,245122,246321,246570,246571,246959,246974,247422,248084,248085,248086,249235,249884,250317,250318,250481,251577,251578,251579,251609,252729,255686,256365,256630,257076,257433,260356,260357,260358,260359,261983,262374,262469,263125,263872,265206,266361,266362,267164,267165,267678,268654,268655,268656,269243,269244,269285,269701,269702,269703,271781,271929,275130,275381,277882,278851,280092,280120,281514,281515,281516,281865,281866,283932,283933,285805,286538,286539,288462,288463,288464,289938,292647,292648,292649,292661,292880,292881,294115,295338,296566,296567,296568,297451,297452,297453,297454,298702,299162,299657,299924,300526,300527,302945,304782,304820,304821,304822,305200,305314,305315,305491,306014,308719,309864,310185,312232,312500,315217,315218,316891,317035,317036,317037,317655,317656,319123,321819,321820,322527,323846,323847,323885,324447,325110,325111,327733,327734,327735,328015,329185,329385,329386,329656,329657,330570,332376,332541,332542,333019,336634,336838,337292,337931,338494,339030,339031,341516,341737,341738,345446

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Figure 2 – Claim Group Map



4. Regional Geography

Topography in the area is a mix of low areas with water and hills/ridges with a general east-west orientation. Outcrops are common of hillsides with numerous fragmented rocks buried in soil.

Vegetation is principally coniferous, and deciduous trees as well as numerous alder bush. In low lying areas, grass and cedars are predominant.

Wildlife activity is principally moose, bear, wolves, and beaver. Numerous bird species are present including grouse, and crows.

5. Regional Geology

The property is located within the Manitouwadge greenstone belt, which is located within the Wawa subprovince of the Archean Superior province. The Manitouwadge greenstone belt is located south of a tectonic boundary between the volcano-plutonic Wawa subprovince and the metasedimentary-migmatitic Quetico subprovince to the north (Zaleski and Peterson 1995). The Manitouwadge greenstone belt consists of bimodal felsic-mafic volcanic rocks, greywacke, iron-formation, and intrusive rocks that have all been metamorphosed to upper amphibolite facies and subject to four episodes of deformation (Zaleski and Peterson 1995). The Manitouwadge synform is the major structure present in the Swill Lake area. It is part of a group of regional Z-shaped D3 folds formed in response to dextral transpression (Zaleski and Peterson 1995). The Manitouwadge synform consists of an inner and outer volcanic belt which mantle a synvolcanic trondhjemite (Lodge 2013). The inner and outer belt are separated on the southern limb of the synform by metasedimentary rocks. Previously mined volcanogenic massive sulfide deposits are located on the southern limb of the Manitouwadge synform and have all been hosted in the inner volcanic belt (Lodge 2013).

6. Property Geology

The Swill Lake claims cover the hinge and the upper limbs of the Manitouwadge synform and have previously been interpreted to be stratigraphically above the Geco Mine Horizon (Degagne 1989). The metavolcanic rocks on this property belong to the outer volcanic belt of the Manitouwadge synform. The surficial geology of the claims from the southern limb to the core consists of mafic metavolcanics rocks including amphibolites, mafic schists and gneisses as well as foliated gabbroic units. Thin bands of felsic metavolcanics rocks including felsic gneisses and felsic schists are interlaid within the main mafic component. North of these units are felsic to intermediate metavolcanics rocks generally as muscovite-garnet to amph-muscovite-garnet schists and gneisses. Metasedimentary rocks, predominantly metagreywacke overlay the felsic to intermediate metavolcanics and

are mainly located in the eastern claims. A massive tonalite is present in the core. In the northeastern portion of the claims granodiorite-monzadiorite of the Nama Creek pluton is present. NE-SW trending and NW-SE trending diabase dikes cut through the previously described units. A minor orthoamphibole-garnet ± cordierite gneiss outcrops SW of Swill Lake. Quartz veining observed on outcrop consists of thin 1-15 cm veins with occasional minor pyrite mineralization.

7. Mineral deposit types-model-reasons

Exploration in the Swill Lake mining claims has targeted volcanogenic massive sulfide mineralization- Cu, Zn ± Au, Ag.

The Swill Lake mining claims lie east of four past producing volcanogenic massive sulfide deposits: Geco (55 Mt at 2.3% Cu, 8.2 Zn, 74 g/t Ag), Willroy (4.6 Mt at 1.3% Cu, 5.7% Zn, 48 g/t Ag), Willecho (3.8 Mt at 0.6% Cu, 3.9% Zn, 53 g/t Ag) and Nama Creek (0.3 Mt at 0.8% Cu, 3.9 % Zn, 28 g/t Ag) (Lodge 2012 and ref. within).

Although all known economic mineralization occurs in the inner volcanic belt, Zaleski and Peterson, 1995 correlated the inner and outer volcanic belts of the Manitouwadge synform as a product of D2 fold repetition. This is significant as, barring removal from erosion or faulting, altered and/or mineralized zones from the Wilroy-Geco area should be repeated (Zaleski and Peterson 1995).

8. Drill Hole Summary Tables:

Drill hole number:	SW-22-01
Collar Location (UTM Zone 16N)	578586 N, 5443215 E
Azimuth:	337°
Dip:	-76
Hole length:	479m
Number of Samples:	X (Pending)
Number of Assays:	X (Pending)

9. Work History

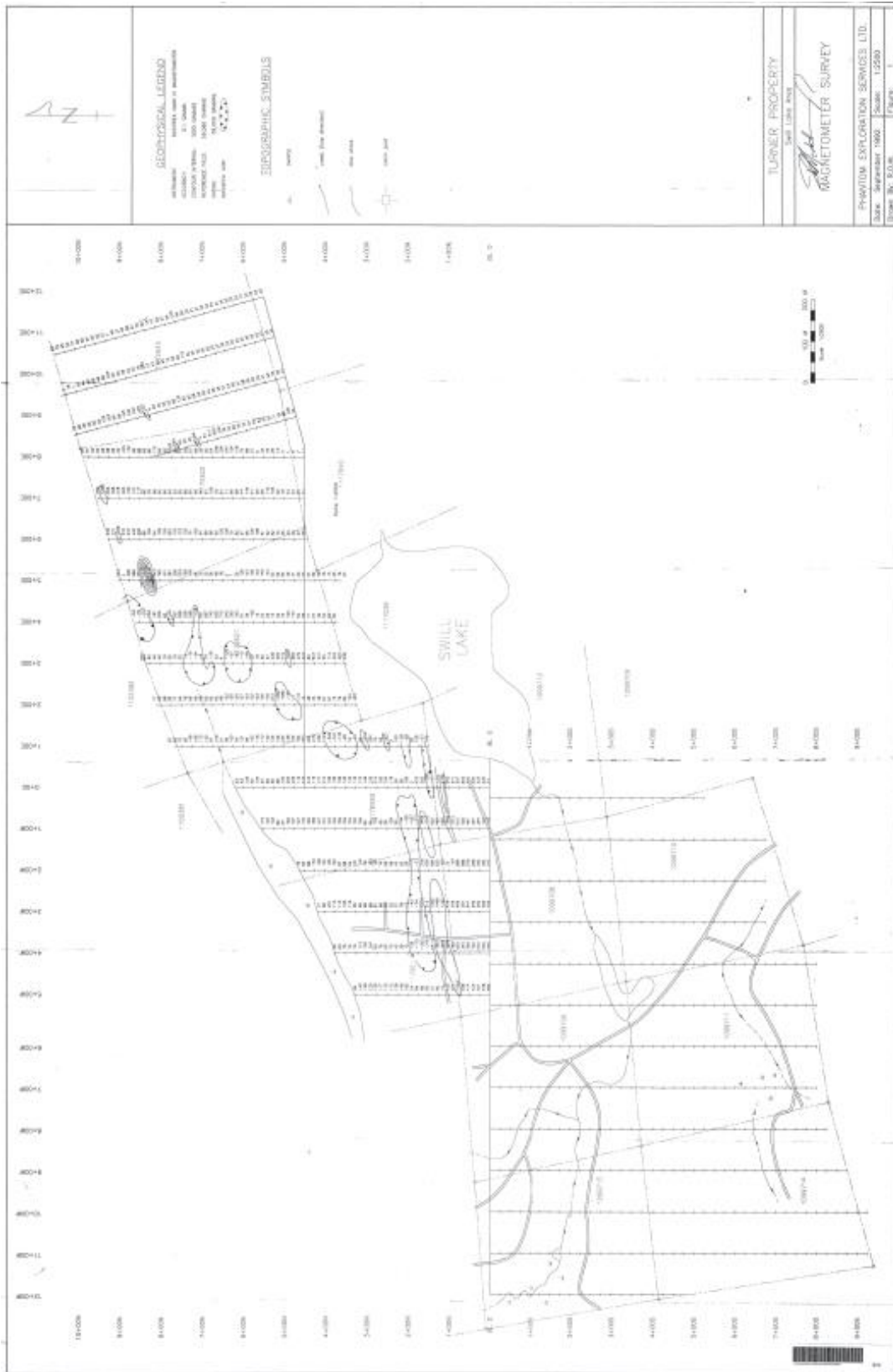
Work has been completed by Noranda which included magnetometer, followed by diamond drilling in any anomalous areas.² Other companies such as OKLECO, OKLEND, Delmico Mines and C.H.I.P. Mines performed magnetometer and geological surveys.³ Anomalies appear to have been followed up with additional work including diamond drill. Unfortunately, no details on diamond drill results have been found by this author. Previous authors elude to finding results and reference to "G.D.I.F. 190 for further information".⁴

Further research was performed and work of interest was identified. Claims in this area were held in the early 1990's by Albert Turner. Mr. Turner drilled several shallow (less than 30m) drill holes. No significant assay data was recorded. Assays were for Ag, Au, Cu, Zn.⁵ Additionally, Mr. Turner employed Phantom Exploration Services Ltd. (Phantom) of Thunder Bay to perform a geophysics study. The study consisted of VLF and proton magnetometer surveys. The surveys were conducted as per Figure 3.⁶

The results were summarized as a local magnetic high was noted as a diabase dyke. The next notable magnet anomaly was noted as iron rich mafic volcanics. Additionally, the results were cautioned as the topography and the soil clay content made all trends to be "considered superficial in nature"⁷

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Figure 3 - Phantom Geophysics Testing



10. Work this Period

a. April-June, 2022

Period Summary

Work was focused on getting materials/supplies for drilling the claims. A 10ft container was sourced for a pump shack and bits/inner tubes and fluids were lined up. A collar seal on the drill failed but was sourced from Epiroc/Odyssey Fluid Power to replace the failed seal. Drilling commenced on May 13th and was completed after seal replacement on June 16th. Subsequently, the drill was moved to the next drill location. Initial logging was completed and is attached. No samples/assay areas were identified in this initial pass. In the "master plan" submitted to MNDM in 2020 – SW-22-01 is "hole#6

Luke Whalen (driller) and Henry Koskski (driller helper) were sourced from Sault Ste. Marie and Thunder Bay respectively. They arrived in early May.

11. Conclusion and Recommendations

The work performed in 2022 to the date is the completion of SW-22-1. This work with drill repair was completed in around 1 month and was reasonable with respect to obtaining this drill hole data. The presence of granodiorite and mass volcanics as well as mass volcanic sulfides as well as and chloritized zones was noted in the drill core. The recommendation is simply to continue the next planned hole ("hole#7) in the program and assemble data as it is acquired to realign drilling. Some additional drilling maybe warranted after the first and second hole during 2022 drilling.

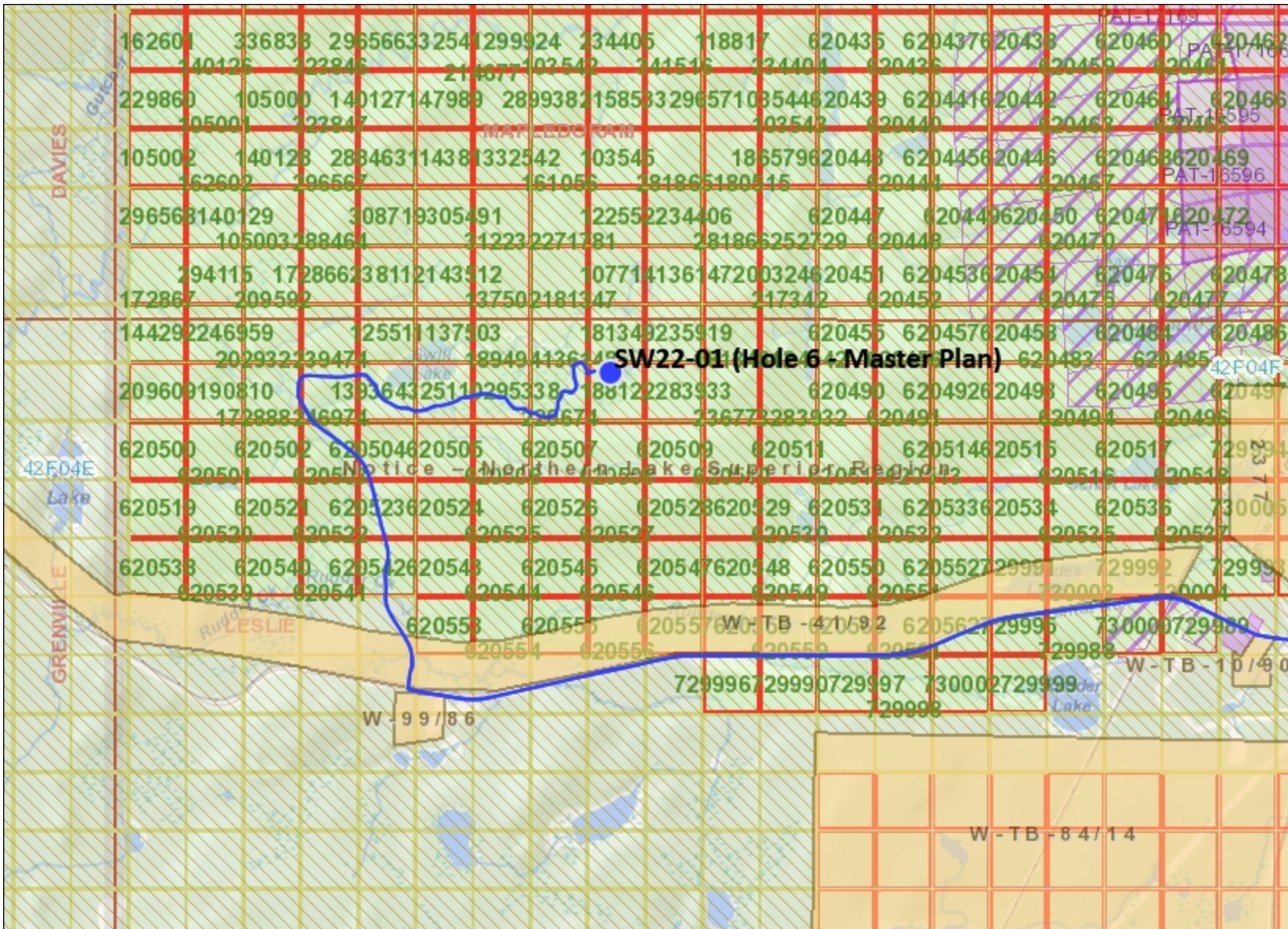
12. References

1. GRANGES INC., MAN PROJECT, GEMMEL, GERTRUDE, MAPLEDORAM AND LESLIE TOWNSHIPS CENTRAL AND NORTH CENTRAL GRID GEOLOGY REPORT, Warren Bates, B.Se., Hons. Geol August 6, 1993 (Page 2)
2. GRANGES INC., MAN PROJECT, GEMMEL, GERTRUDE, MAPLEDORAM AND LESLIE TOWNSHIPS CENTRAL AND NORTH CENTRAL GRID GEOLOGY REPORT, Warren Bates, B.Se., Hons. Geol August 6, 1993 (Page 3)
3. GRANGES INC., MAN PROJECT, GEMMEL, GERTRUDE, MAPLEDORAM AND LESLIE TOWNSHIPS CENTRAL AND NORTH CENTRAL GRID GEOLOGY REPORT, Warren Bates, B.Se., Hons. Geol August 6, 1993 (Page 3)
4. GRANGES INC., MAN PROJECT, GEMMEL, GERTRUDE, MAPLEDORAM AND LESLIE TOWNSHIPS CENTRAL AND NORTH CENTRAL GRID GEOLOGY REPORT, Warren Bates, B.Se., Hons. Geol August 6, 1993 (Page 3)
5. 42F04NW0001-Turner – Assessment work after staking a claim – work report number 1
6. 42F04NW0033-Turner-Maps - Geological and Geophysical Reports – Phantom Exploration Services Ltd. September 1992
7. 42F04NW0033-Turner – Geological and Geophysical Reports – Phantom Exploration Services Ltd. September 1992 (Page 5)

13. Appendices

13.1 Drill Log

13.2 Key Map – Land Drilled



Legend

- Provincial Grid Cell**
 - Available
 - Pending
 - Unavailable
- Mining Claim**
 - Mining Claim
 - Boundary Claim
- Alienation**
 - Withdrawal
 - Notice
- MINES Administrative Boundaries**
 - MINES Townships and Areas
 - Geographic Lot Fabric
 - UTM Grid 1K
 - UTM Grid 10K
 - Mining Division
 - Mineral Exploration and Development Region
 - CLUPA Protected Area - Far North
 - Resident Geologist District
 - Federal Land Other
 - Native Reserves
- AMIS Sites**
 - AMIS Sites
 - AMIS Features
 - Drill Hole
 - Mineral Occurrences
- MLAS Mining History**
 - Withdrawal - History
 - Notice - History
 - Mining Claim - History
 - Mining Land Tenure - History
 - Legacy Claim
- Provincial Grid**
 - Provincial Grid 250K
 - Provincial Grid 50K
 - Provincial Grid Group
- Land Tenure**
 - Surface Rights
 - Mining Rights
 - Mining and Surface Rights
 - Order-in-Council

Those wishing to register mining claims should consult with the Provincial Mining Recorders' Office of the Ministry of Mines (MINES) for additional information on the status of the lands shown hereon. This map is not intended for navigational, survey, or land title determination purposes as the information shown on this map is compiled from various sources. Completeness and accuracy are not guaranteed. Additional information may also be obtained through the local Land Titles or Registry Office, or the Ministry of Natural Resources and Forestry. The information shown is derived from digital data available in the Provincial Mining Recorders' Office at the time of downloading from the Ministry of Mines (MINES) web site.



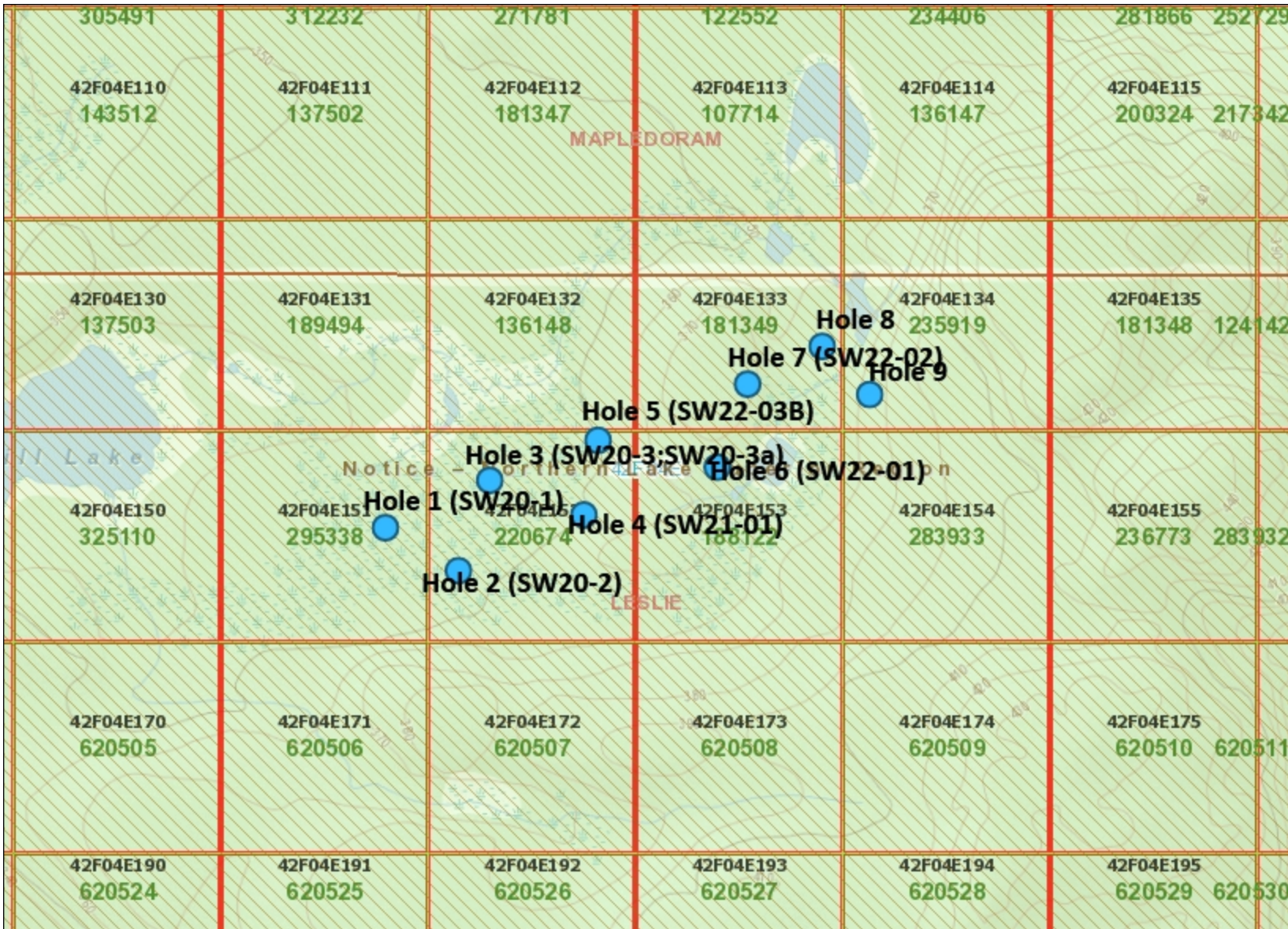
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13.3 Drill Plan - Holes 1 through 9 (March 2020 to Current)



Legend

- Provincial Grid Cell**
 - Available
 - Pending
 - Unavailable
- Mining Claim**
 - Mining Claim
 - Boundary Claim
- Alienation**
 - Withdrawal
 - Notice
- MINES Administrative Boundaries**
 - MINES Townships and Areas
 - Geographic Lot Fabric
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 - AMIS Features
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 - Withdrawal - History
 - Notice - History
 - Mining Claim - History
 - Mining Land Tenure - History
 - Legacy Claim
- Provincial Grid**
 - Provincial Grid 250K
 - Provincial Grid 50K
 - Provincial Grid Group
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Projection: Web Mercator



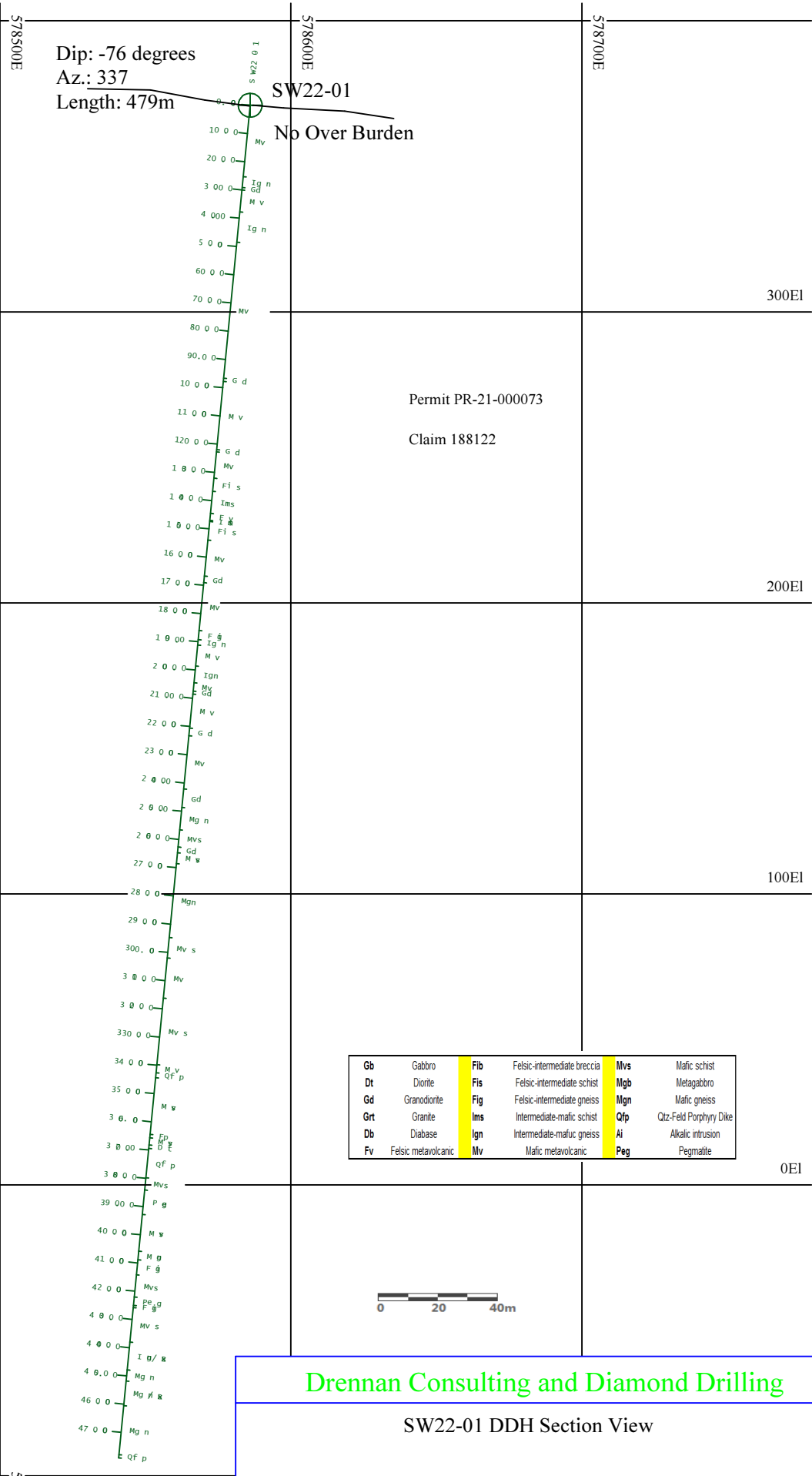
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13.4 Drill Section View - Hole SW22-01

Dip: -76 degrees
 Az.: 337
 Length: 479m

SW22-01
 No Over Burden



Permit PR-21-000073
 Claim 188122

Gb	Gabbro	Fib	Felsic-intermediate breccia	Mvs	Mafic schist
Dt	Diorite	Fis	Felsic-intermediate schist	Mgb	Metagabbro
Gd	Granodiorite	Fig	Felsic-intermediate gneiss	Mgn	Mafic gneiss
Grt	Granite	Ims	Intermediate-mafic schist	Qfp	Ctz-Feld Porphyry Dike
Db	Diabase	Ign	Intermediate-mafic gneiss	Ai	Alkalic intrusion
Fv	Felsic metavolcanic	Mv	Mafic metavolcanic	Peg	Pegmatite



Drennan Consulting and Diamond Drilling

SW22-01 DDH Section View

Scale: 1:	2000	Plan No.	Date:	20-Jan-23
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