ALBERT LAKE TECHNICAL REPORT

ALBERT LAKE PROJECT, NORTHERN SASKATCHEWAN

NTS 74-A-7

510750E / 6244600N

UTM NAD83 Zone13

Submitted to:

Fathom Nickel Inc.

Submitted by:

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1.0 Summary

The Albert Lake Project is a past producer of nickel-copper-platinum group elements and a modern exploration project located in the La Ronge Mining District of Saskatchewan, approximately 135km north-northeast of La Ronge. Co-Authors Stephen Kenwood, P.Geo and Alanna Ramsay, P.Geo were commissioned by Fathom Nickel Inc. ("Fathom") to complete a technical report for Albert Lake reporting on the exploration results over the entire property and recommend a two-phase exploration program to follow up on promising targets.

The Albert Lake Project comprises twenty-seven mineral claims covering an aggregate area of 90,127.49ha. The center of the property is located at 104° 49' 33'' longitude west and 56° 20' 39'' latitude north. The project is located in the drainage of Rottenstone Lake. Elevations average approximately 453m at lake level with up to 30m of elevation to the top of surrounding hills. A 14-person camp was constructed at the historic Rottenstone mine site in 2018 and remains in place.

Rights to the Albert Lake Project were acquired by Fathom in June 2015 and are subject to two underlying agreements.

The first underlying agreement is a Purchase and Sale Agreement dated 29 April 2015 between Fathom and Uravan Minerals Inc. (Uravan) which grants Uravan a 2% NSR royalty over an area of mutual interest. Fathom can purchase 1% of the NSR royalty for a payment of $1,000,000 to Uravan at Fathom's discretion.

The second underlying agreement is a Purchase and Sale Agreement dated 8 June 2015 between Fathom and Mr. Dorian Leslie which grants Mr. Leslie a 1% NSR on claims MC00002913 and MC00002965. Fathom can purchase the NSR royalty in its entirety for a payment of $500,000 to Mr. Leslie at Fathom's discretion.

Mineral exploration in the Albert Lake area was initiated by the Hall brothers in 1928 and resulted in the discovery of the Hall deposit, later renamed to the Rottenstone deposit. Exploration has continued through to the present. It is estimated during this period, the Albert Lake property area has been tested by approximately 140 drillholes totaling over 13,500m of diamond drilling (drilling).

Between 1964 and 1969 a total of slightly over 26,000t was mined from the Rottenstone deposit grading 3.23% Ni, 1.63% Cu, and 9.63 g/t combined Pt, Pd, and Au (Saskatchewan Mineral Deposit Index # 0958). Note; although present as part of the mineral assemblage and recognized as a by-product of Ni-Cu+PGE deposits, Cobalt was not recovered. Fathom has recognized the Cobalt content of Rottenstone mineralization to be very significant.

Uravan completed airborne geophysical surveys, a heliborne tree top biogeochemical survey, ground MAG, TEM, gravity, IP surveys as well as drilling between 1998 – 2003. In 2001 BHP Billiton optioned the property and completed reconnaissance TEM, detailed HLEM surveys, soil sampling programs and drilling. Between 2007 and 2008 Mantis Minerals Corporation performed a VTEM/MAG survey as well as drilling.

The Albert Lake property lies within the Rottenstone Domain of the Proterozoic Trans-Hudson orogenic belt. The Trans-Hudson Orogen is a major orogenic belt that stretches from the United States through Canada and extends to Greenland and defines the boundary between the Hearne and Superior cratons. The Rottenstone Domain is a broad belt of early to late syntectonic, northeast trending arcuate tonalite to granite intrusive rocks with associated injection migmatites. The 1200km wide Wathaman batholith

(1855±6 Ma) is a magnetite rich granite-granodiorite within the Rottenstone Domain. The metamorphic grade of the Rottenstone domain is mid-upper amphibolite.

The Albert Lake property geology is dominated by a northeast striking, northwest dipping meta-tonalite-trondhjemite-pelitic migmatite complex of Paleoproterozoic age. MacLachlan (2003, 2005) divided the immediate Albert Lake property area into granitoids and supracrustal rocks. The supracrustal rocks; the oldest rocks occurring on the Albert lake property, include pelite, psammite, migmatitic psammitic to pelitic metasedimentary rocks, a variety of supracrustal rocks including layered calc-silicate, melanocratic biotite-hornblende-plagioclase rich metasedimentary/metavolcanic rocks, along with amphibolite. The ultramafic intrusions; host to the Rottenstone deposit, the Tremblay-Olson showing, and other known ultramafic occurrences occur within metasedimentary rocks (the supracrustal rocks).

Three styles of mineralization occur at the Albert Lake property. Style one; occurring within the host migmatite complex; consisting of metasedimentary supracrustal rocks, disseminated and stringer pyrrhotite occurs with minor pyrite and rare chalcopyrite, along with fine disseminated graphite. The second type of mineralization recognized is formational semi-massive to massive pyrrhotite with lesser pyrite and chalcopyrite occurring within the metasedimentary assemblages. The third style; the Rottenstone-style of mineralization, is the mineralization comprising the Rottenstone deposit. The Hall Showing (Rottenstone deposit) contained up to 50% sulphides in the form of pyrrhotite and lesser chalcopyrite. Most of the mineralization occurs in the form of dense net-textured sulphides consisting of pyrrhotite, pentlandite and chalcopyrite. The Rottenstone deposit is unique; the contained precious metal content is higher grade than ores of most deposits of this type.

The Rottenstone deposit would appear to be typical of a deep-rooted, mantle derived, magmatic Ni-Cu+PGE ultramafic hosted, sulphidic type of mineral deposit. One possible deposit scenario for the Rottenstone deposit suggests that it is one of several pods of metal enriched ultramafic bodies occurring within the supracrustal rocks at the Albert Lake property. Glencore's Raglan nickel-copper mine in northern Quebec is a deposit model consisting of multiple sulphide lenses consisting of disseminated, net-textured and massive pyrrhotite-pentlandite-chalcopyrite mineralization contained in individual lenses that average 0.2Mt in size; but lenses can be as small as 0.01Mt. Although not proven to date, the geologic setting / model, mineralization and the Rottenstone deposit occurring at the Albert Lake property has similarities to the Raglan deposits.

Exploration by Fathom inclusive of drilling and B-horizon soil geochemistry, and ongoing compilation of all available historical data from the Albert Lake property, suggests the Rottenstone deposit is unique in terms of size and grade; however, common in many respects with known magmatic Ni-Cu+PGE deposits. Compilation work has identified a set of geophysical and geochemical "fingerprints" that can be used to guide exploration moving forward.

Drilling, specifically drilling performed from 1999-2018, has identified numerous ultramafic intersections in and around the historic mine workings and in areas well removed from the historic Rottenstone Mine. Interpretive work is ongoing; however, progress has been made within a 3D model, mapping the ultramafic occurrences and defining ultramafic pathways. The Rottenstone deposit is one occurrence along an ultramafic pathway and geochemical data in drill core is suggestive of other well mineralized Rottenstone-type deposit(s) possibly occurring along the ultramafic pathway identified and possibly other similar ultramafic pathways. Interpretive work performed by Fathom to date indicates the exploration model to be one more analogous to a multi-pod / lens type deposits in which individual lenses vary in size and most likely grade. At present, numerous drill ready targets exist at the Albert Lake property; and in

addition, numerous other promising geophysical targets exist that are in need of upgrade to the drill ready stage by further surface geochemical and geology work.

In 2017, Kemetco Research Inc. conducted a preliminary exploratory metallurgical test was performed on two Rottenstone-type mineralized samples.

Results of the test confirmed the presence of significant Co associated with the Rottenstone mineralization. Overall, the metallurgical results were positive, but not optimized. Significant differences were seen between the two samples tested, and PGE recovery in particular would appear to have room for further optimization. No upgrading or separation of concentrates was attempted, but differing responses in recovery of different metals pointed to the potential for separation.

Author Kenwood visited the property on April 27, 2021. The Authors conducted a series of routine verifications to ensure the reliability of the electronic data provided by Fathom, and believe the electronic data are reliable. The Authors examined assaying quality control data produced by various analytical laboratories, authors of previous technical reports, and Fathom and believe these data are reliable. Author Kenwood was accompanied on the site visit by Ian Fraser, P.Geo., VP Exploration of Fathom Nickel. During the visit, six drill casings from the 2016 drill program were located near the Albert Lake camp; their positions were verified using a handheld GPS and confirmed the location data found in the Fathom database. Drill core from the 2016 and 2018 drilling programs was observed at various on-site core storage areas. A total of eight representative samples from mineralized and unmineralized intervals were collected for independent verification check assays. A PGE reference standard sample, TDB-1, was also included for verification.

Recommendations for further work on the Albert Lake Project area include a two-phase program. Note as of the Effective Date of this report Phase 1 was in progress and all results of Phase 1 exploration are pending.

Phase-1 (February – April 2021)

Pre-drilling data compilation and target refinement	=$60,000
Diamond drilling and borehole EM surveys, re-establishing camp, air support, geological support, geophysical support and analysis	=$740,000
Property wide Heli MAG survey (90,000 Ha), interpretation and target generation (including incorporation of historic VTEM survey information)	=$400,000

Phase-2 (May – October 2021)

Borehole EM surveys on historic drillholes	=$50,000
Ground follow-up of heli MAG survey targets (Prospecting, sampling, ground geochemistry and airborne / ground geophysics), interpretation and drill target generation	=$700,000
Diamond drilling and borehole EM	=$1,500,000
Geochemical Analysis	=$50,000
Total of Phase 1 & Phase 2	**=$3,500,000**

2.0 Introduction

Fathom Nickel Inc. ("Fathom") holds the rights to the Albert Lake property in Saskatchewan, through its wholly owned subsidiary Fathom Minerals Ltd. Fathom Minerals is the registered owner of the mineral concessions and the operator of the project.

Stephen Kenwood, P.Geo and Alanna Ramsay, P.Geo were retained by Fathom to complete a technical report compliant with NI 43-101 (the Instrument) and Form 43-101F1 for the Albert Lake Project and to recommend an exploration program to further delineate known targets. The report will accompany the Prospectus filed with the Alberta Securities Commission (ASC) as part of the required package prepared for listing on the Canadian Securities Exchange (CSE).

Author Kenwood conducted a site visit to the Albert Lake property on April 27, 2021. Both Authors verified selected records of past exploration reported on the property. Author Kenwood observed drill core from the 2016 and 2018 drill programs that is stored on site in several different locations. Select drill hole casings were located, positions verified and representative samples were collected for independent verification check assays as part of the QP due diligence. While actively involved in the preparation of the report, the Authors had no direct involvement or responsibility in the collection of the data and information or any role in the execution or direction of the work programs conducted for the project on the property or elsewhere. Much of the data has undergone thorough scrutiny by project staff which was then reviewed by the Authors.

Sources of information are listed in the references; Section 27.0. Please note that the Albert Lake Property has historically been referred to as the Rottenstone Property. Sources or figures referred to herein may also reference Fathom Minerals Ltd. which is a wholly owned subsidiary of Fathom Nickel Inc.

3.0 Reliance on Other Experts

The Authors have relied on Fathom Nickel for the legal description of the Property. The Authors express no legal opinion as to the land tenure title or ownership status, other than to comment on the status of mining lands and other information that is publicly available:

- Mineral Administration Registry System Saskatchewan (https://mars.isc.ca)

The Authors are not experts with respect to legal, land title, or environmental liabilities and are therefore not qualified to comment on issues related to the status of permitting or environmental liabilities. This disclaimer applies to sections 4.2 and 4.3 of this report.

4.0 Property Descriptions and Location

4.1 Location

The Albert Lake property is located in northern Saskatchewan, approximately 500km northeast of Saskatoon and 135km north-northeast of La Ronge, (Figure 4-1 and Figure 4-2). The nearest community is the hamlet of Missinipe, located 83km to the south.

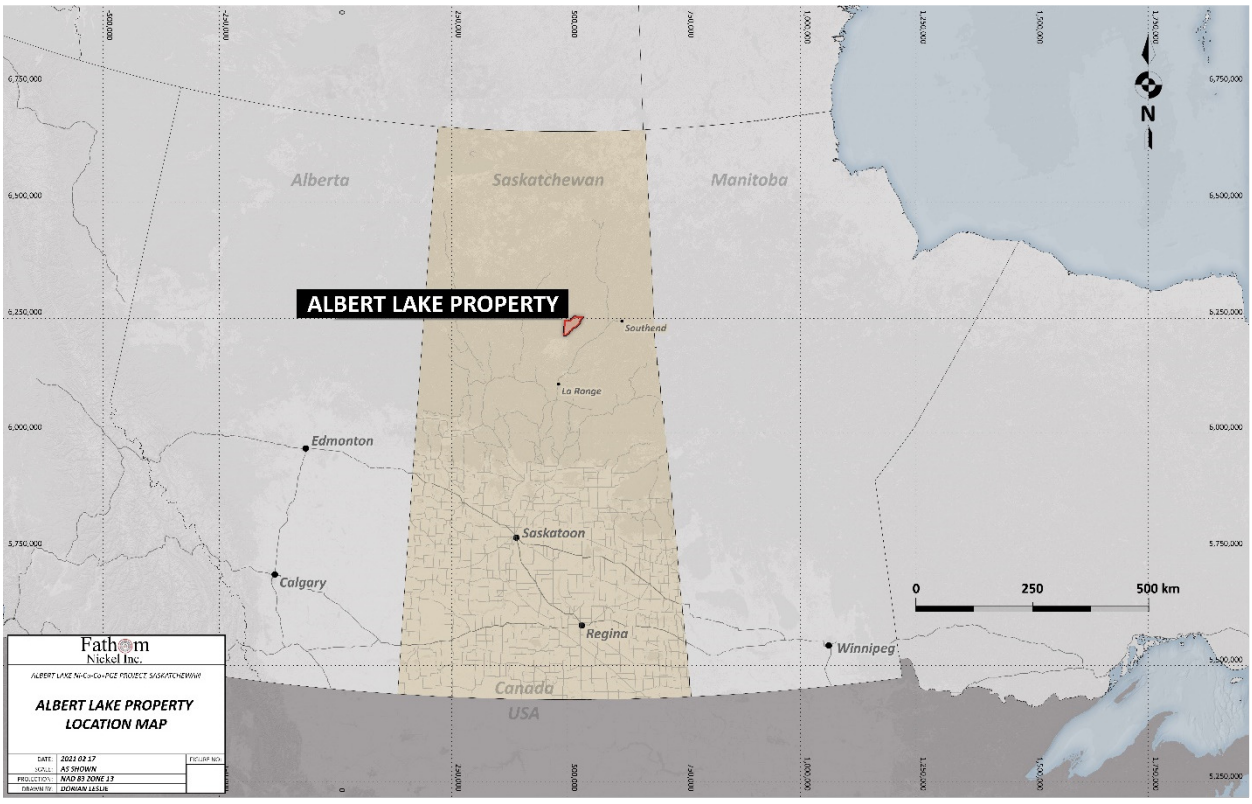

Figure 4-1 Albert Lake Property Location Map

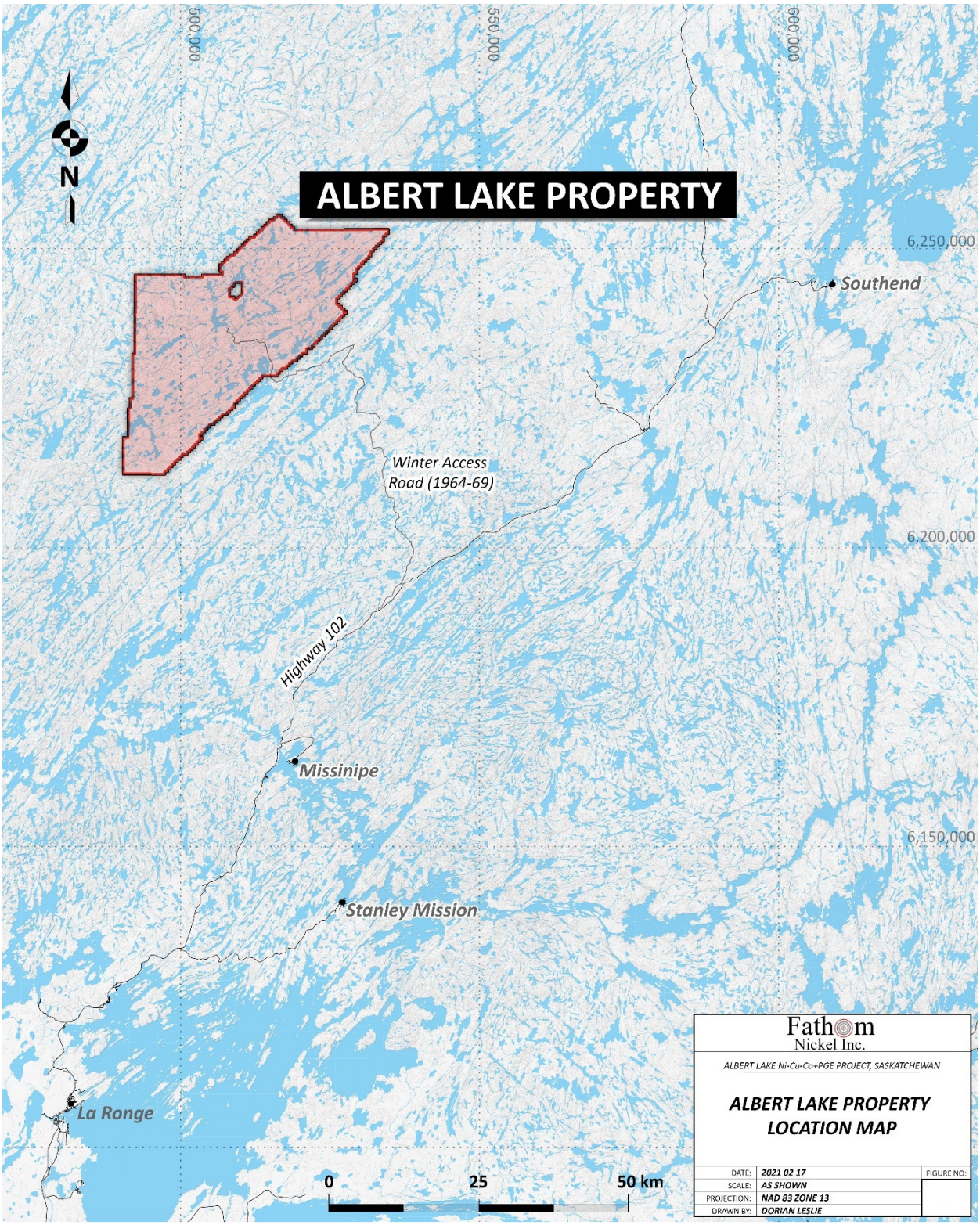

Figure 4-2 Albert Lake Property, Missinipe Location Map

4.2 Claim Status and Title

In May-June 2015, Fathom acquired mineral claims comprising the Albert Lake property from Uravan and Mr. Dorian Leslie. Subsequent to the acquisition, Fathom has staked additional mineral claims at the Albert Lake Project. At present the Albert Lake property consists of 27 claims totaling 90,127 ha (Figure 4-3). The claims are all in good standing and 100% owned by Fathom, subject to two agreements, including:

The first underlying agreement is a Purchase and Sale Agreement dated 29 April 2015 between Fathom and Uravan which grants Uravan a 2% NSR royalty over an area of mutual interest. Fathom can purchase 1% of the NSR royalty for a payment of $1,000,000 to Uravan at Fathom's discretion.

The second underlying agreement is a Purchase and Sale Agreement dated 8 June 2015 between Fathom and Mr. Dorian Leslie which grants Mr. Leslie a 1% NSR on claims MC00002913 and MC00002965. Fathom can purchase the NSR royalty in its entirety for a payment of $500,000 to Mr. Leslie at Fathom's discretion.

Table 4-1 lists the Mineral Dispositions.

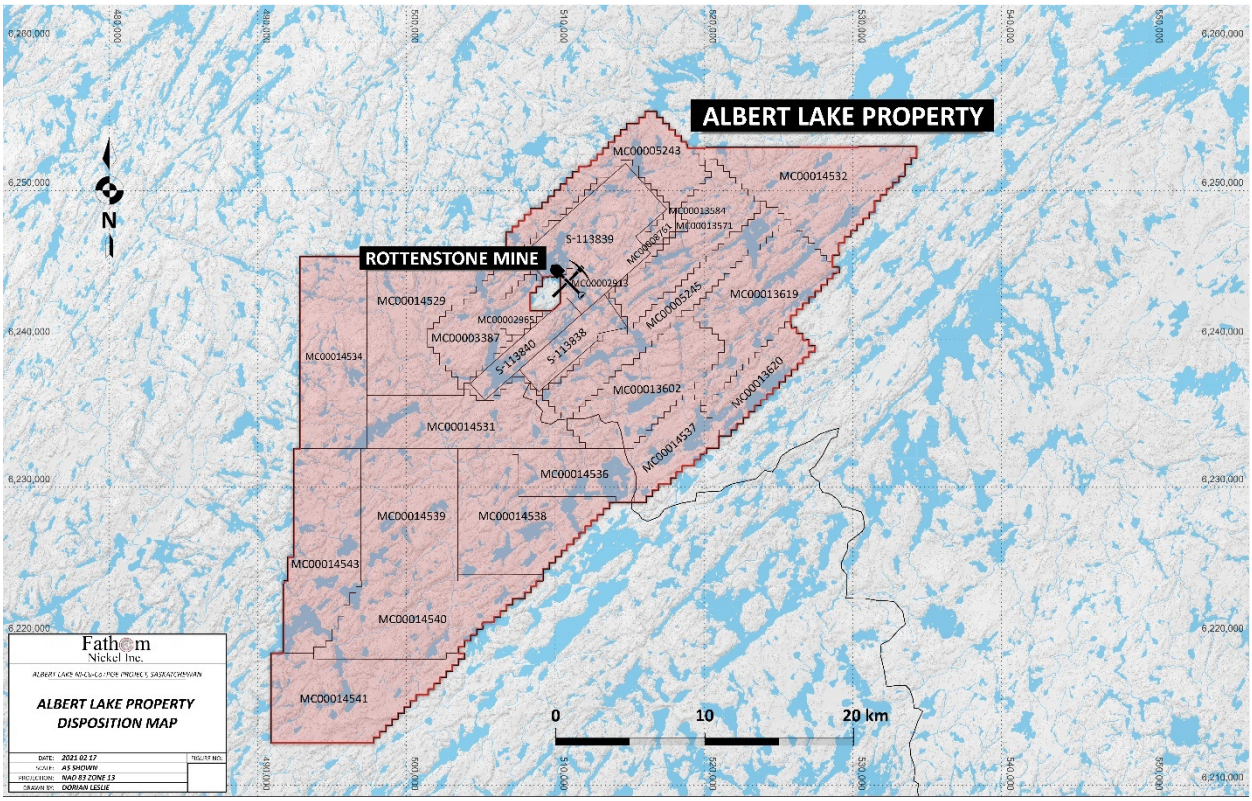

Figure 4-3 Albert Lake Property Mineral Disposition Map

Table 4-1 Fathom Nickel Inc. Mineral Dispositions

Mineral Disposition	Type	Total Area (ha)	Recording Date	Expiry Date
MC00002913	Mineral Claim	116.42	06/11/2014	04/02/2028
MC00002965	Mineral Claim	740.17	20/11/2014	18/02/2026
MC00003387	Mineral Claim	2677.94	20/04/2015	19/07/2021
MC00005243	Mineral Claim	3585.49	14/03/2017	12/06/2022
MC00005244	Mineral Claim	3607.67	14/03/2017	12/06/2022
MC00005245	Mineral Claim	3899.54	14/03/2017	12/06/2022
MC00008761	Mineral Claim	264.16	28/09/2017	27/12/2021
MC00013571	Mineral Claim	80.78	30/01/2020	30/04/2022
MC00013584	Mineral Claim	16.15	30/01/2020	30/04/2022
MC00013589	Mineral Claim	82.46	30/01/2020	30/04/2022
MC00013602	Mineral Claim	4503.74	30/01/2020	30/04/2022
MC00013619	Mineral Claim	5197.91	31/01/2020	01/05/2022
MC00013620	Mineral Claim	2201.05	31/01/2020	01/05/2022
MC00014529	Mineral Claim	5569.71	16/02/2021	17/05/2023
MC00014531	Mineral Claim	5013.44	16/02/2021	17/05/2023
MC00014532	Mineral Claim	5793.27	16/02/2021	17/05/2023
MC00014534	Mineral Claim	5824.26	16/02/2021	17/05/2023
MC00014536	Mineral Claim	2575.10	16/02/2021	17/05/2023
MC00014537	Mineral Claim	2299.25	16/02/2021	17/05/2023
MC00014538	Mineral Claim	5581.21	16/02/2021	17/05/2023
MC00014539	Mineral Claim	5810.39	16/02/2021	17/05/2023
MC00014540	Mineral Claim	5681.55	16/02/2021	17/05/2023
MC00014541	Mineral Claim	5676.14	16/02/2021	17/05/2023
MC00014543	Mineral Claim	5908.09	16/02/2021	17/05/2023
S-113838	Mineral Claim	1536.60	11/06/1998	08/09/2022
S-113839	Mineral Claim	4553.51	11/06/1998	08/09/2022
S-113840	Mineral Claim	1331.49	11/06/1998	08/09/2021
Totals: 27		**90127.49**		

The authors are not aware of any royalties, back-in rights, payments or other agreements and encumbrances to which the property is subject, other than the ones discussed above.

The surface rights are held by the Crown.

In Saskatchewan in order to maintain the claims beyond the expiry date (Table 4-1) Fathom Nickel or an agent must on or before the expiry date register either exploration and development work that was performed on the claim in a filed assessment report, or make a payment in lieu of exploration and development work. The following are the work requirement costs required to maintain a claim for one year:

$15.00 per hectare per year for claims that have existed for 10 years or less;

$25.00 per hectare per year for claims that have existed in excess of 10 years.

4.3 Permits and Environmental Liabilities

An Exploration Permit is required for surface exploration activities inclusive of drilling, trenching, geophysical, geochemical surveys and line cutting.

Fathom applied for and was granted its most recent Exploration Permit December 17, 2019. The permit allowed Fathom to conduct exploration on the property through to December 31, 2020 on the dispositions of record December 17, 2019. Fathom staked additional land in January 2020 and these dispositions do not fall within the current Exploration Permit. Due to the COVID-19 pandemic the Ministry of Environment SK (MOE) approved a process allowing for exploration companies to apply for an extension to existing Exploration Permits. The application for extension was granted and subsequent to this an amendment has been applied for and granted January 20, 2021, to allow for diamond drilling as part of the exploration permit originally granted December 17, 2019. Fathom did not conduct exploration on the property in 2020. Previously, Fathom applied for and was granted Exploration Permits for work conducted on the property in 2016 and 2018. Of note, an all-season camp was constructed on the property in 2018. The camp is capable of housing up to 14 persons.

There are no current land use restrictions that exclude mineral exploration and development on the Albert Lake claims

There are no known environmental liabilities to Fathom with respect to the abandoned Rottenstone Mine status. The government of Saskatchewan recognizes the Rottenstone Mine site as a site for environmental remediation and lists the Rottenstone Mine as number three on the list for remediation. Fathom has had some preliminary discussion regarding this subject with the government and the responsibility for remediation lies with the crown. The Authors are not aware of any significant factors environmental, social or permitting issues and risks that may affect access, title, or the right or ability to perform work on the Albert Lake property.

5.0 Accessibility, Climate, Local Resources, Infrastructure and Physiography

5.1 Accessibility

Access to the property is by float or ski equipped aircraft from float bases in La Ronge or Missinipe. A winter only access bush road / trail was constructed during the 1960's for the Rottenstone mining operation and has subsequently been used to transport diamond drills and associated equipment to the property from 2000-2008.

The Rottenstone Mine is located approximately 56km northwest of Highway 102; however, the length of the winter access road / trail is approximately 100km (Figure 4-2). The dormant Jolu Gold Mill is very near to the intersection of the winter road and highway 102. The abandoned Rottenstone Mine is located at Latitude 56°20'39" N and Longitude 104°49'33" W; or 510750E/6244600N, UTM NAD83 Zone 13. The property falls within NTS map sheets 74 A-7 (Rottenstone Lake).

5.2 Climate and Physiography

La Ronge and the project area experiences a subarctic climate with long, dry, very cold winters and short, warm, wetter summers. Precipitation is low, with an annual average of 484mm. The mean temperature is -0.5°C. Winter temperatures average -13°C for the daytime high and -24°C for the nighttime low. Spring and fall daytime highs average 6.8°C and 5.6°C with nighttime low -6.6°C and -3.6°C respectively. Summer temperatures average a high of 21.6°C and low of 9.5°C. Break-up or ice-free lakes occur from late April to May and freeze-up typically occurs from late October into early December. During break-up and freeze-up the use of fixed wing aircraft is hindered leaving access to the property by helicopter only during this period.

The property is typical of the Canadian Shield and boreal forest. Recent forest fires have exposed outcrop ridges and overall, outcrop exposure is moderate to good with local areas having up to 60% exposure. Topography is considered moderate to locally rugged, with numerous lakes, ponds, swamps and muskeg occupying areas of low relief. Gently rolling spruce and pine covered hills is the dominant physiographic feature of the property; however locally, 75m high cliffs and ridges are present. Rottenstone Lake is at approximately 453m above sea level.

5.3 Local Resources and Infrastructure

The closest community is La Ronge with a population of about 2,700 and an area population of approximately 6,000. Several mining companies, government agencies, and airlines now keep offices in La Ronge, and the local Chamber of Commerce has other retail and service businesses amongst its members.

La Ronge is connected to southern Saskatchewan by Highway 2, which continues north as Highway 102. The community of La Ronge is served by the La Ronge (Barber Field) airport and the La Ronge water Aerodrome.

6.0 Exploration History

The origin of the term Rottenstone comes from the "hill of rotten stone" used by local first nation peoples to describe a 10m high outcrop of rubbly, gossanous rock occurring along the east shore of what is now Rottenstone Lake. In 1928 first nation peoples brought this outcrop to the attention of the Hall brother's, two prospectors familiar with the area who recognized the nickel – copper plus precious metals contained within the outcrop and subsequently called the showing, the Hall Showing. In 1929 the Hall brothers optioned the Hall Showing to Consolidated Mining and Smelting Co. of Canada; current day Teck, thus initiating an exploration history that is ongoing ninety years later.

The exploration history has been drawn from The Saskatchewan Mineral Assessment Database (SMAD), The Saskatchewan Mineral Deposit Index (SMID) and Assessment Reports that Fathom acquired along with the property acquisition. All information is in the public domain.

The following is a history of the exploration conducted by various operators in the Rottenstone Lake area:

1928 – First nation's people introduce the "hill of rotten stone" to G. & R. Hall. The Hall brother's stake the Ni-Cu + precious metal showing; described as a mineralized knoll approximately 49m x 40m x 9m high and named it the Hall Showing.

1929 – The Hall brothers optioned the property to Consolidated Mining and Smelting Co. of Canada Ltd., who drilled nineteen drillholes in the Hall Showing area. Four holes intersected the Hall Showing, results of which were used to estimate a mineral resource of approximately 36,300t at 1.81% Ni and 1.01% Cu. Drilling indicated a flat lying lens approximately 55m long, 36m wide, and 9m thick (SMAD 74A07-0005). The deposit was called the Hall deposit but was not considered economic due to its isolation and the option was dropped the same year. The reliability of the historical data and resource estimate presented here cannot be confirmed by the authors, nor can the assumptions, parameters and methods used to prepare the estimates. The estimate is not considered NI 43-101 compliant by the definition of a "mineral resource" and further work is required to verify the historical estimate as a current mineral resource. Furthermore, records suggest (Saskatchewan Mineral Deposit Index #0958) that some of this historical resource has been exploited making a delineation of this mineral resource impossible. Fathom Nickel is not treating the historical estimate as a current mineral resource.

1928-1929 – Manitoba Basin Mining Co. Ltd. did some trenching and stripping on the Tremblay-Olson Showing, a similar Ni-Cu occurrence located 2.4km southwest of the Hall Showing.

1946 – J.B. Mawdsley on behalf of the Canadian Department of Mines and Resources mapped an area of 52km^2, covering the Hall and Tremblay-Olson Showings. Ore microscopy was performed on both showings. Mawdsley reported 45,000t of 1% copper and 2% nickel and 5.5 g/t (combined platinum, palladium and rhodium) to be contained at the Hall Showing; based on previous drilling results (Mawdsley, 1946). The reliability of the historical data and resource estimate presented here cannot be confirmed by the authors, nor can the assumptions, parameters and methods used to prepare the estimates. The estimate is not considered NI 43-101 compliant by the definition of a "mineral resource" and further work is required to verify the historical estimate as a current mineral resource. Furthermore, records suggest (Saskatchewan Mineral Deposit Index #0958) that some of this historical resource has been exploited making a delineation of this mineral resource impossible. Fathom Nickel is not treating the historical estimate as a current mineral resource.

1948 – The mineral claims covering the Hall deposit lapsed.

At about this time period, construction of a bush road that evolved into highway 102 passing within 55km of the Hall deposit, increased interest in the area leading to resurgence in exploration.

1950 – V.J. Studer staked claims covering the Hall deposit.

1951 – Cape Copper Mines Ltd. acquired the Hall deposit property.

1952–1953 – Cape Copper Mines Ltd. completed fourteen drillholes (228m) around the Hall deposit and performed ground magnetometer (MAG) surveys and geological mapping over the Hall deposit and Tremblay-Olson Showing. Assessment reports suggest core recovery was very poor and drilling was performed mainly to keep the mineral claims in good standing (SMAD 74A07-0004).

1954 – Trans-Dominion Mining and Oils Corporation acquired the property covering the Hall deposit and Tremblay-Olson Showing. Nineteen drillholes (772m) were drilled in the Hall deposit area, and an airborne MAG survey covering 161km^2 in the vicinity of the Hall deposit and Tremblay-Olson Showing was flown. Two drillholes intersected the Hall deposit and were assayed, four other drillholes were drilled in the Hall deposit area; two noted the presence of Ni mineralization but were not assayed (SMAD 74A07-0001).

1955 – INCO flew a high frequency airborne electromagnetic (EM) survey over the Rottenstone Lake area as part of a larger airborne survey (Indian Lake).

1957 – Sico Mining Corporation obtained a mineral lease covering much of the Rottenstone Lake area.

1957-1961 – PreCam Exploration & Development Company; an affiliate of Sico Mining Corporation, performed ground MAG, EM, and gravity surveys over the Hall deposit and Tremblay-Olson Showing. A prominent MAG anomaly, and weak gravity signature was defined associated with the mineralized Hall deposit (Rottenstone outcrop to be discussed in greater detail within this report). Six drillholes intersected the Hall deposit and nine additional drillholes were drilled in the Tremblay-Olson Showing area. In all, there were fifteen drillholes; 886m of drilling. Mineralized pyroxenite, 2.1m long, with copper and nickel values (no record of assay) at a depth of 60.96m was reported within a drillhole (60-11) northeast of the Tremblay-Olson Showing and on trend with the Hall deposit. This intercept and immediate surrounds are referred to as the NIC 5 Showing (SMAD 7407-0007, 0017).

1960 – W. T. Knox staked the Tremblay-Olson Showing for Milldale Minerals Ltd. as the Stone 1 – 4 claims.

1961 – Milldale Minerals Ltd. drilled two drillholes (146.9m) near the Tremblay-Olson Showing, no significant results reported (SMAD 74A07-0003).

1962 – B.R. Richards re-staked the Hall deposit area and drilled two drillholes (21m) into the Hall deposit and assayed two representative samples of the Ni-Cu + PGE(Au) mineralization (SMAD 74A07-0008).

1966 – Richards, Robinson (1966) reported that Mawdsley (1946) conservatively estimated that the Hall Showing contained some 50,000t of 2% nickel and 1% copper and combined platinum, palladium and rhodium values of about 0.20 ounces per ton (6.22 g/t). The reliability of the historical data and resource estimate presented here cannot be confirmed by the authors, nor can the assumptions, parameters and methods used to prepare the estimates. The estimate is not considered NI 43-101 compliant by the definition of a “mineral resource” and further work is required to verify the historical estimate as a current

mineral resource. Furthermore, records suggest (Saskatchewan Mineral Deposit Index #0958) that some of this historical resource has been exploited making a delineation of this mineral resource impossible. Fathom Nickel is not treating the historical estimate as a current mineral resource.

1964-1969 – Rottenstone Mining Ltd. was formed; the name, Hall deposit was changed to the Rottenstone deposit and mining commenced (Figure 6-1) 1965. In all, 26,058t grading 3.23% Ni, 1.63% Cu, 9.63 g/t Pt+Pd+Au was recovered in an open pit mine (SMID #:0958). Unfortunately, there is very little data available within the Saskatchewan assessment files that document the Rottenstone Mine production and any direct drilling and mapping of the Rottenstone deposit whilst the mine was in production.

Figure 6-1 The Rottenstone Outcrop and Mill; circa 1965 looking north (pre-mining)

1967-1968 – Sherritt Gordon Mines Ltd. flew an airborne EM survey that covered the Rottenstone Lake area.

1968 – Rottenstone Mining Limited completed one drillhole at the Tremblay-Olson Showing below a historic trench; 1.73m of ultra-basic rock was reported and sampled; but there is no record of the assay (SMAD 74A07-0018).

1970 – Rottenstone Mining Limited performed ground MAG survey over the NIC 1-7 claims, covering the NIC 5 Showing. MAG anomalies were reported northeast of the Tremblay-Olson Showing (SMAD 74A07-0016).

1971-1973 – Canadian Occidental Petroleum Ltd. flew airborne EM, MAG surveys and did geological mapping covering the Rottenstone Lake area. Four drillholes (457m) tested EM conductors well removed from the Rottenstone Mine (SMAD 74A07-0025).

1974-1976 – Saskatchewan Department of Mineral Resources and Department of Energy Mines and Resources Canada, performed regional lake sediment surveys, regional prospecting and airborne gamma-ray spectrometry surveys, parts of which covered the Rottenstone Lake area. A Ni-Cu anomaly was detected in a lake 2.4km northwest of the Rottenstone Mine (Friske, 1985).

1982 – C.F. Gilboy, Saskatchewan Geological Survey mapped the Rottenstone deposit area and Rottenstone Lake area (Geology of an Area around Rottenstone and Dobbin Lakes) at a scale 1: 100,000 (Gilboy, 1982).

1983 – Claude Resources Inc. staked ground to cover favourable geology surrounding the Rottenstone Mine.

1983-1988 – L. Hulbert, C. Dunn; Geological Survey of Canada performed a geological overview and a biogeochemical baseline study respectively at the Rottenstone Mine area (Coker et al., 1990, Hulbert, 1985).

1984-1986 – D. Partridge staked the Tremblay-Olson Showing, prospected and did reconnaissance VLF surveys in the area. Within the historic trench narrow zones of pyroxenite with significant sulphides was recognized and four grab/chip samples taken from within the trench assayed up to 3.1% Ni, 0.907% Cu, 1050 ppb Pd and 460 ppb Pt (SMID #:0959), (SMAD 74A07-0027).

1985 – Claude Resources Ltd. acquired the mineral lease covering the Rottenstone Mine (the Albert Lake property) from Rottenstone Mining Ltd.

1987-1988 – Claude Resources Inc. did geological compilation and performed ground VLF-EM and MAG surveys over the Rottenstone Mine area (SMAD 74A07-0031, 0035).

1986 – American Platinum Inc. and Fleck Resources optioned the Tremblay-Olson property. Ground VLF-EM and MAG surveys, mapping, prospecting and trenching, rock and soil sampling was performed. B-horizon soil geochemistry results revealed significant anomalies associated with the Tremblay-Olson and NIC 5 Showing areas (SMAD 74A07-0028).

1987 – Placer Dome Inc. optioned the Tremblay-Olson property drilled eight drillholes (693m) to test anomalous soil sample values and geophysical anomalies slightly northeast of the Tremblay-Olson Showing (NIC 5 Showing area). In drillhole 87-8, elevated Ni, Cu (up to 630 ppm Ni, 1320 ppm Cu) was reported occurring over 26.9m. Up to 115 ppb Pd and up to 90 ppb Pt occurs associated with elevated Ni and Cu over 21.1m in drillhole 87-5 (SMAD 74A07-0030). Placer Dome Inc. dropped their option and the property remains under the ownership of American Platinum Inc.; recognized as a dormant company, however the property has sufficient assessment credits through to 2021.

1990-1992 – INCO optioned the Albert Lake property (formerly Rottenstone Lake property) from Claude Resources Inc. Approximately 50-line km of grid mapping at 100 to 200m line spacing produced a 1:2,500 scale map. Prospecting included the collection of 116 samples assayed for Au, Pd, Pt Cu and Ni along with 22 additional elements as part of a multi-element ICP package. INCO discovered the Island Showing (up to 4.36% Cu, 1218 ppm Ni, 106 ppm Co, 285 ppb Pd, 60 ppb Pt) occurring in pyroxenite 600m north-

northwest of the Rottenstone Mine. Prospecting in an area approximately 3km north-northeast of the Rottenstone Mine returned several samples of elevated Cr, and Ni (up to 3114 ppm Cr, 991 ppm Ni). A ground UTEM survey in the Rottenstone Mine area revealed seven conductors of varying strike length, conductivity, and depth below surface. The lack of significant strike length and conductance discouraged INCO from drill testing these conductors (SMAD 74A07-0033, 0034).

1997 – Claude Resources Inc. performed prospecting, channel sampling, soil and till sampling in immediate surrounds of the Rottenstone Mine area. Anomalous Au (gold grains) and Pd, and Pt was encountered in heavy metal concentrate, up-ice and northeast of the Rottenstone Mine suggestive of a bedrock source in this direction (SMAD 74A07-0036).

1998-2003 – Uravan Minerals Inc. (Uravan) performed extensive exploration at the Albert Lake property (formerly Rottenstone Lake property) and is summarized as follows (Fraser, 2000), (Fraser, 2002), (Lahusen, 2003):

- 1998; staked ground totaling > 35,000 ha covering the Rottenstone Mine area and an ultramafic showing occurring at Friesen Lake 75km to the south.

- 1998; Goldak Exploration Technology Limited performed a fixed wing MAG/VLF-EM survey over an approximate area of 518km^2 (74 x 7km) amounting to 2,776-line kilometers of recorded data. Quantec Geoscience Ltd. supervised and provided detailed interpretive maps. Survey results revealed geophysical anomalies; notably MAG highs, EM conductive trends, and a regional structural picture of the property area.

- 1999; Landsat air photo imagery was provided by Kokanee Information Services Ltd., and structural interpretation on the Landsat images was performed. Airborne geophysical survey results were meshed and properly registered to Landsat images. Regional structural dynamics; notably faults and folds observed.

- 1999; heliborne biogeochemical survey was completed under the supervision of Dr. Colin Dunn, a world-renowned biogeochemical specialist. The tops of black spruce trees were sampled within a 130km^2 area inclusive of the Rottenstone Mine. A GPS controlled grid consisting of 500m spaced sample lines with points every 500m along the sample lines was designed and utilized as control. In areas of key interest; notably the Rottenstone Mine and other known ultramafic-PGE occurrences, additional samples were collected at a 250 x 250m grid. A total of 887 black spruce treetops and 72 bark samples (collected on surface) were collected and analyzed for 60 elements including Ni, Pd, Pt, and Te by ICP-MS.

At the time results of the biogeochemical survey were unique in that no similar program for detecting PGE's in tree tissue had ever been undertaken.

- 1999; Quantec Geoscience Ltd. performed ground MAG (45-line km) and in-loop transient electromagnetic (TEM) surveys (39-line km) in the Rottenstone Mine area. The surveys were designed to provide follow-up detail to the airborne survey flown in 1998. Several flat lying and steeply dipping conductors were defined coincident with MAG features.

- 1999; nine BQ drillholes (1273m) tested the Rottenstone Mine area and other geophysical targets. All holes intersected ultramafic rock. Four drillholes intersected the continuation of the ultramafic

intrusive 40.0m south of the Rottenstone Mine (RL99001, 002, 008, and RL99009; (see Tables 6-1). Of note, all these drillholes were collared on the Rottenstone Mine tailings now occupying an area that was Rottenstone Lake prior to the mining operation. Drillhole RL99005 1.8km east-northeast of the Rottenstone Mine intersected up to 9m of ultramafic (only 4m sampled/assayed) coincident with a strong MAG/TEM anomaly. Sampled drill core was assayed at ACME Labs – high sulphide samples for Cu, Zn, Ni, Co, and Cr by Aqua – Regia Digestion, followed by ICP-ES; and for Ag, Au, Pt and Pd by fire assay. Low sulphide – low economic potential samples were assayed by 30 element ICP + Geochem for Au, Pt, Pd by Ultra/ICP. Selected intervals for check assay were analyzed at Activation Labs. At Activation, full PGE analyses by NiS fire assay followed by INAA finish was performed on mineralized ultramafic samples, and S, Se, As, Sb was assayed by INAA, and checks for Ni, Cu, Zn, Co and Cr was done by Fire Assay. Six of the nine drillholes were surveyed by Borehole TEM. Several in-hole and off-hole responses were detected of varying intensity and remain untested by further drilling.

- 2000; Quantec Geoscience Ltd. performed follow up MAG/TEM surveys resulting in additional MAG (90.5-line km) and TEM (78-line km) performed on, and in addition to, the grid established in 1999. As in the 1999 survey coincident MAG / TEM anomalies were confirmed and new features established in areas previously not surveyed. The combined 1999-2000 MAG/TEM ground geophysical surveys covered an area roughly 4 x 3km; that is, 3km north-northeast of the Rottenstone Mine, approximately 1km south-southwest of the mine site and 1.5km west and east of the mine site.

- 2000; fourteen BQ drillholes (2845m) tested the Rottenstone Mine area and other geophysical targets. One drillhole RL00017 intersected unconsolidated Rottenstone-type ultramafic and mineralization over a narrow width 80m south of the Rottenstone Mine. Drillholes RL00010 and RL00012 intersected thin highly anomalous ultramafic sills associated with the Rottenstone deposit. Strong and deep TEM response occurring 700m south of the Rottenstone Mine tested by drilling (RL00019, and RL00020) proved to be the result of sulphidic iron formation; however, with some associated ultramafic rock highly anomalous in Ni. All sampled drill core was analyzed at Activation Labs – Fire Assay for Ni, Cu, Pb, Mo, S, Zn, Ag, Cd, and Mn. A geochem assay for Au, Pt, and Pd and Cr, Co, and Se assays were obtained by (INAA). Borehole TEM surveys performed on eight of the fourteen drillholes had mixed results and at the time the results were not fully understood.

- From the 1999-2000 drill programs, 56 samples of drill core were presented to Kishar Research Inc. for thin section and polished section preparation for the purpose of petrographic analyses. Lithologies, alteration and deposit character parameters were established.

- 1999-2003; physical property evaluation by Quantec Geoscience Ltd. of Rottenstone-type ores, and country rocks. Results discriminated responses between net-textured and massive type mineralization. It is believed that the net-textured component of the Rottenstone deposit far exceeded that of the massive component. As per the study, net-textured ore would yield a very poor to negligible conductive EM response; but, EM-type surveys would be a good tool for detecting the massive component of a Rottenstone-type deposit. Furthermore, the physical property evaluation suggested that very good chargeability and resistivity responses can be expected from net-textured material, and the ultramafic host rock, and hence IP surveys may be a useful tool in detecting net-texture dominant Rottenstone-type deposits.

- 2001; BHP Billiton World Exploration Inc. entered into an option agreement with Uravan.

- 2001; Quantec Geoscience Ltd. performed reconnaissance TEM surveys over select, large airborne MAG anomalies and features away from Rottenstone Mine (14-line km in total).

- 2001; Quantec Geoscience Ltd. performed a gravity survey at a multiple MAG/TEM anomaly area at north end Rottenstone Lake (3.35-line km).

- 2001; BHP supervised a reconnaissance B-horizon soil geochemical surveys along the same grid lines used for TEM survey covering several widely spaced airborne MAG anomalies. In total 550 B-horizon soil samples were collected and analyzed at ALS Chemex. Precious metals Au, Pt, Pd were detected for by fire assay with an ICP-MS finish and in addition multi-element geochemistry (32 elements) was also performed on each sample by aqua regia digestion with ICP-AES. Results of this survey were encouraging and highlighted several Ni-Cu+PGE type anomalies immediately north of the Rottenstone Mine and in an area at the north end of Rottenstone Lake and further to the north adjacent to significant MAG/TEM features. A B-horizon soil sample returned 411 ppb Pt and 23 ppb Pd near to a large MAG feature occurring 5.5km northeast of Rottenstone Mine.

- 2002; Quadra Surveys performed gravity surveys within the Rottenstone Mine area, an extension to 2001 survey at MAG/TEM anomalous area, north end of Rottenstone Lake and a third area well to the north over prominent MAG/soil geochem feature (41-line km in total). Results suggest significant density contrast features occurring immediately west of the Rottenstone Mine measuring 1400 x 300m, and at the north end of Rottenstone Lake coincident with previously defined soil geochem anomalies, numerous INCO grab samples anomalous in Cr and Ni, and strong MAG/TEM anomalies defined in 2000 ground survey. A third anomaly occurs coincident with 411 ppb Pt soil anomaly discussed above.

- 2002; Patterson Mining Geophysics performed horizontal loop (HLEM) surveys (35-line km) at north end Rottenstone Lake and anomalous features (gravity, 411 ppb Pt soil) occurring further to the north.

- 2002; five BQ drillholes (1004.4m) tested the gravity anomaly within the Rottenstone Mine area, coincident anomalies north end of Rottenstone Lake and gravity feature at northern part of property. All sampled drill core was sent to Chemex Labs for analyses. A BHP Billiton proprietary procedure Pt, Pd + Au (FA ICPMS trace) and multi element (32 element ICP-AES) was utilized. No significant results were encountered, and the gravity anomalies were not resolved by drilling.

- 2002; channel sampling, and detailed mapping of the INCO Island Showing discovery returned (1882 ppm Ni, 842 ppm Cu, 122 ppm Co, 122 ppb Pt, and 106 ppb Pd / 2.4 m), and the discovery, detailed mapping, channel sampling of the Pyroxenite Island Showing returned (378 ppm Ni, 27 ppm Cu, 25 ppm Co, 13 ppb Pt, 13 ppb Pd/4m).

BHP Billiton dropped the option to earn agreement with Uravan the fall of 2002. Uravan continued with exploration, commencing the Fall – Winter 2002.

- 2002 (November – December); Patterson Mining Geophysics performed induced polarization (IP) (9.2-line km) and infill gravity surveys (9.1-line km) in the Rottenstone Mine area. The IP and additional gravity surveys established detailed profiles for drill targeting within the Rottenstone

Mine area and particularly focused on the gravity feature (1400 x 300 m) occurring immediately west of the Rottenstone Mine.

- 2003; twelve BQ drillholes (3021.3m) tested anomalies defined by IP and gravity surveys. Significant mineralized ultramafic intersections are present in drillholes RL03029, RL03030, RL03031, RL03032, RL03034 and RL03039. Of note, 1,087 samples were collected from the 2003 drill programs; but only 93 samples were sent to Activation Labs for analyses. A combination of INAA for Cr, Se, Co, Fire Assay for Cu, Ni, Co and Fire Assay ICP-OES for Au, Pt, Pd and INFRARED analyses for S% was used.

2003-2005 – K. MacLachlan, as part of Saskatchewan Geological Survey initiative performed bedrock geology mapping within the Rottenstone Domain. Several maps at varying scales (1:5,000 – 1:50,000) and reports detailing an area including the Rottenstone Mine and part of the current Fathom Nickel Inc. Albert Lake property were released.

- 2007 – Mantis Minerals Corporation (Mantis) entered into an option agreement with Uravan.
- 2008 – Geotech Ltd. flew a heliborne VTEM/MAG survey (1444-line km) and follow-up ground HLEM-MAG surveys (5.5- and 3.5-line km respectively) was performed by Patterson Mining Geophysics over some of the most prominent coincident VTEM/MAG features defined.
- Seven BQ drillholes (1176.5m) tested various anomalies as defined by VTEM/MAG survey. Drilling was interpreted to be a technical success in that VTEM conductors proved to be related to semi-massive and massive sulphide concentrations some of which are associated with ultramafic rock occurring within or proximal to. Drillhole MR08-05 intersected up to 6m of ultramafic rock at depth, and drillhole MR08-06 intersected 4.79m of ultramafic associated with sulphidic iron formation at a downhole depth of 13.63-18.42m. The ultramafic in drillhole MR08-05 is possibly associated with the gravity anomaly immediate west of the Rottenstone Mine discussed above, and the ultramafic intersection in MR08-06 occurs associated with a very strong VTEM/MAG anomaly 600m east-northeast of the Rottenstone Mine. Assaying of drill core was performed at ALS Minerals using a multi-acid digestion and ME-ICP61 multi element analyses.
- 2008 – Uravan retrieved seventy-six samples from the 1999 biogeochemical survey collected at the north end of Fathom property boundary; but not previously analyzed. These samples were sent to ACME Labs for multi-element analysis. In addition, As, Cr, P, Se and V – not part of assay package in 1999, were assayed for on a set of samples (107) from the Rottenstone Mine area. Dr. Colin Dunn, as with the 1999 biogeochemical survey, supervised and interpreted results of this exercise.

Mantis did not meet the obligations of the option agreement with Uravan and all data collected was obtained by Uravan.

7.0 Geological Setting and Mineralization

7.1 Regional Geology

The Albert Lake property lies within the Rottenstone Domain of the Proterozoic Trans-Hudson orogenic belt (Figure 7-1). The Trans-Hudson Orogen is considered a major orogenic belt that stretches from the United States through Canada and extends to Greenland and defines the boundary (interpreted zone of accretion) between the Hearne and Superior cratons (provinces). The Rottenstone Domain is described as a broad belt of early to late syntectonic, northeast trending arcuate tonalite to granite intrusive rocks with associated injection migmatites. Within the Rottenstone Domain, occurs the Wathaman batholith (1855±6 Ma); an early Proterozoic intrusive of significant proportion (up to 1200km in width) consisting of magnetite rich granite-granodiorite. The metamorphic grade of the Rottenstone domain is mid-upper amphibolite.

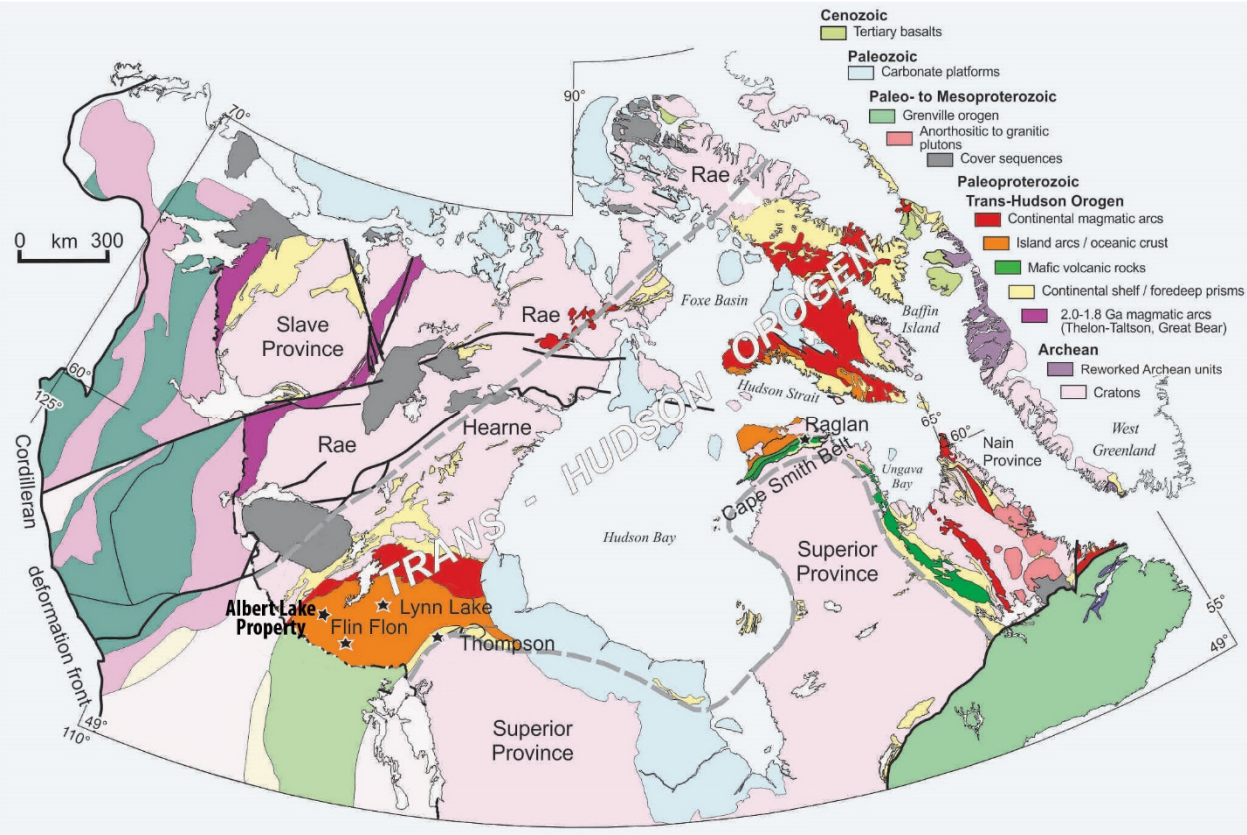

Figure 7-1 Map of Precambrian Geology of North America and Archean Cratons (Corrigan, 2007)

7.2 Property Geology

The Albert Lake property bedrock geology is dominated by northeast striking, northwest dipping meta-tonalite-trondhjemite-pelitic migmatite complex of Paleoproterozoic age. The local geology/stratigraphy as defined by available drill logs, property scale mapping and most recent 2003-2005 government of Saskatchewan mapping at the Albert Lake property, is complex. MacLachlan (2003, 2005) divided the central part of the current Albert Lake property area into two phase granitoids and supracrustal rocks. The granitoids are mapped as pre-strong foliation and post strong foliation. Pre-strong foliation granitoids comprise of granodiorite to monzogranite with minor diorite, tonalite and quartz monzonite. Post strong

foliation granitoids consist of white to pink tonalite to monzogranite that contain abundant metasedimentary xenoliths and schlieren. The supracrustal rocks; the oldest rocks occurring on the Albert Lake property, include pelite, psammite, migmatitic psammitic to pelitic metasedimentary rocks, a variety of supracrustal rocks including layered calc-silicate, melanocratic biotite-hornblende-plagioclase rich metasedimentary/metavolcanic rocks, along with amphibolite (Figure 7-2).

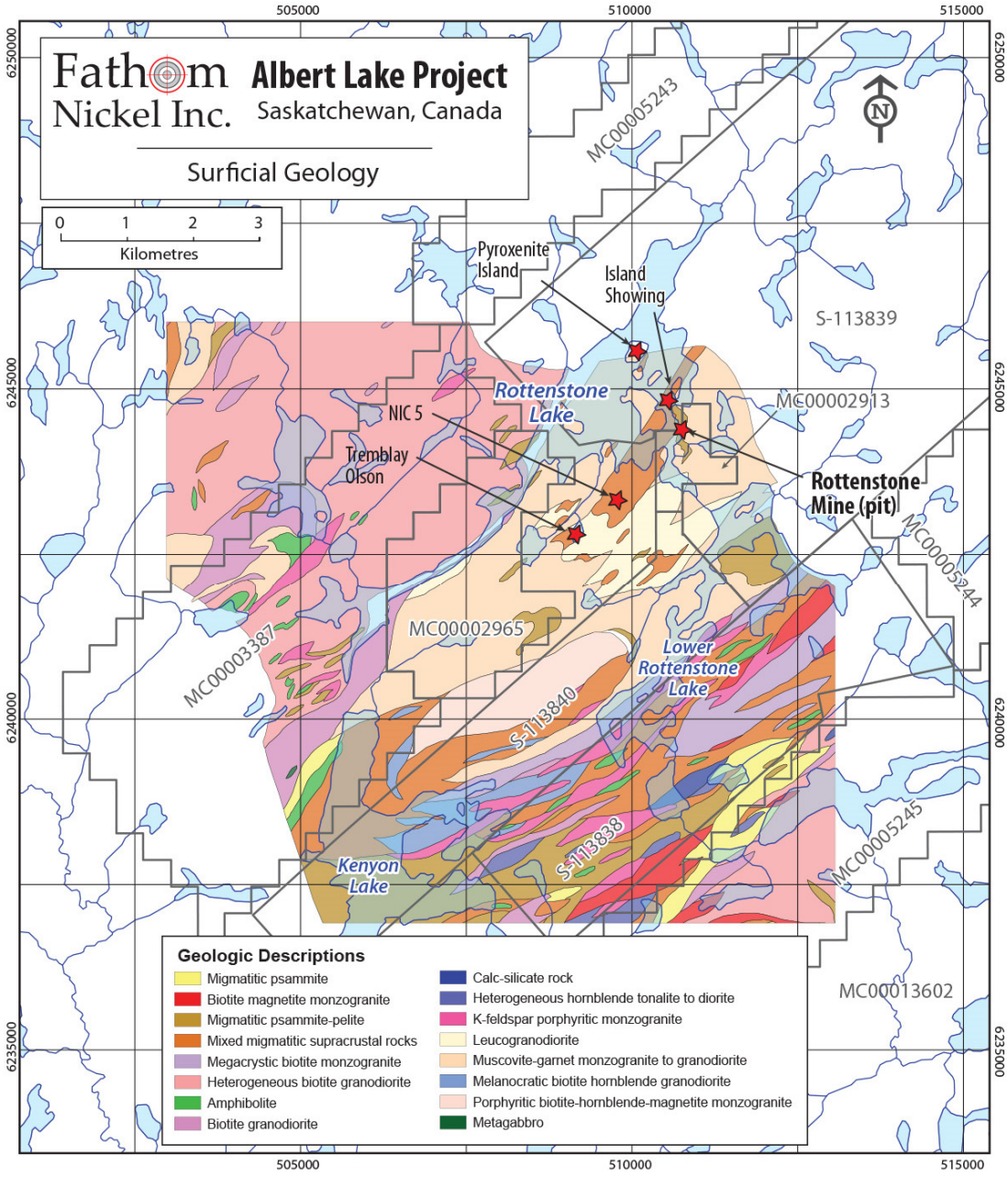

Figure 7-2 Albert Lake Property Geology Map (MacLachlan, 2005)

The ultramafic intrusions; host to the Rottenstone deposit, the Tremblay-Olson showing, and other known ultramafic occurrences occur within metasedimentary rocks (the supracrustal rocks). The Rottenstone

deposit occurs within a harzburgite-orthopyroxenite sill-like body. The Tremblay-Olson Showing occurring 2.5km southwest of the Rottenstone deposit occurs within a pyroxenite.

Structurally, the history of the Rottenstone Domain and locally the Albert Lake property is complex, and the particulars of the structural events have been masked by the formation of the migmatite complex. MacLachlan (2003-2005) discusses various fold types with northeast-striking axial planes. Also, it is very obvious from Landsat images and from available regional geophysical data (MAG) the property area is cut by several northwest – southeast structural lineaments suggestive of deep-rooted multi-phase faults and shears. A very significant fault (Fraser Fault) striking northeast and dipping 15° to the northwest was recognized by drilling in the Rottenstone deposit area. The Rottenstone deposit sits in the immediate hanging wall of the fault. The Fraser Fault could be the conduit for the ultramafic host; or, possibly truncates the deposit suggesting there should be more Rottenstone-type mineralization in the footwall of the fault. The fault has been interpreted to be a reverse fault. Hence, the continuation of the Rottenstone deposit; if in the footwall, should be at depth.

7.3 Mineralization

Three styles of mineralization occur at the Albert Lake property. Style one; occurring within the host migmatite complex; consisting of metasedimentary supracrustal rocks, disseminated and stringer pyrrhotite occurs with minor pyrite and rare chalcopyrite, along with fine disseminated graphite.

The second type of mineralization recognized is formational semi-massive to massive pyrrhotite with lesser pyrite and chalcopyrite occurring within the metasedimentary assemblages. Locally, these formational sulphides can have significant strike length; up to and > 1.0km. These units have been interpreted to be sedimentary sulphidic iron formation and have been further interpreted to be an important source of sulphur to contaminate intruding ultramafic intrusions and trigger sulphide immiscibility within the magma.

The third style; the Rottenstone-style of mineralization, is the mineralization comprising the Rottenstone deposit. Mawdsley (1946) described the Hall Showing (Rottenstone deposit) to contain up to 50% sulphides in the form of pyrrhotite and lesser chalcopyrite. A whitish mineral (in reflected light) associated with the pyrrhotite/chalcopyrite was identified as violarite. Very rare tiny blebs of pentlandite were reported. Dr. Larry Hulbert (1988) concluded from examining mineralized samples around the abandoned Rottenstone open pit that approximately 50% of the ultramafic intrusion; which he refers to as a harzburgite-orthopyroxenite sill, consisted of sulphides. Most of the mineralization occurs in the form of dense net-textured sulphides consisting of pyrrhotite, pentlandite and chalcopyrite. Hulbert (1988) noted the net-texture mineralization was dominant in the harzburgites and disseminated sulphides were more dominant in the pyroxenites (orthopyroxenite and clinopyroxenites) and occasionally massive sulphides were found in both lithologies. Figure 7-3 illustrates net-textured and massive styles of Rottenstone mineralization; both samples were retrieved from ore dump at Rottenstone Mine site.

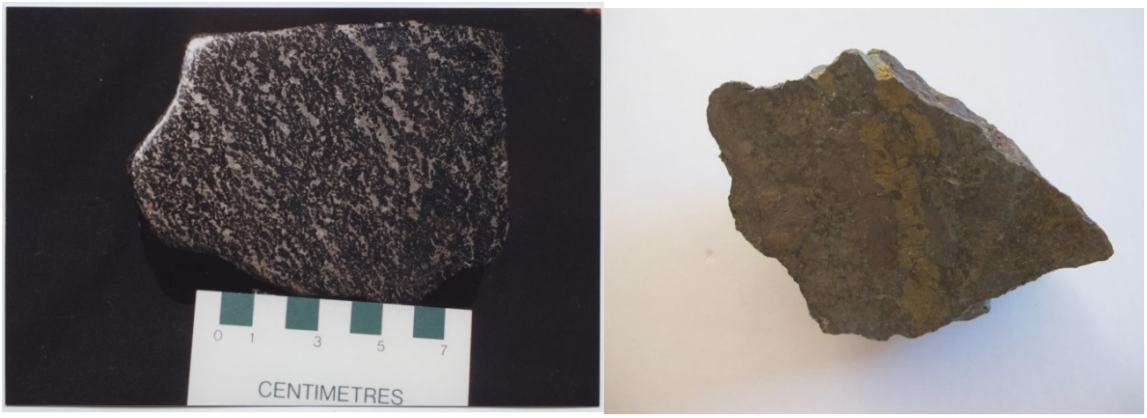

Figure 7-3 Rottenstone Net-texture or Matrix style mineralization (left); Rottenstone Massive style mineralization (right)

A composite sample (Hulbert, 1985) was obtained by traversing the perimeter of the Rottenstone pit and taking a small chip off any mineralized ultramafic material encountered (Hulbert, personal communication). The goal was to obtain a representative mineralized sample that would best reflect or replicate the reported average mining grade of Rottenstone-style mineralization. Included in the assay of the composite sample were assay results for the four other Platinum Group Elements (PGE's); notably, osmium, rhodium, iridium and ruthenium. The composite sample revealed the following values: 3.3% Ni, 2.4% Cu, 0.08% Co, 7400 ppb Pd, 2900 ppb Pt, 120 ppb Os, 190 ppb Rh, 110 ppb Ir, 75 ppb Ru, and 940 ppb Au. Richards and Robinson (1966) record that from September 5 to November 7, 1965, 4,990t of ore averaging 3.28% Ni, 1.83% Cu, and 3.92 ppm Pd, 4.79 ppm Pt, 1.03 ppm Au were milled at the Rottenstone Mine. The Ni, Cu values of the composite sample validates the early recorded mining grade; however, the composite sample suggests a higher precious metal grade (PGE + Au) for Rottenstone mineralization, and a significant amount of cobalt.

Hulbert (1988) also discusses sulphur and selenium ratios. In general, sulphides of sedimentary origin have extremely low to negligible concentrations of selenium, whereas sulphides derived from a mantle source are known to be enriched in selenium. The sulphidic iron formations at the Albert Lake property have very low contents of selenium and thus high S/Se ratios. In contrast, the sulphides and ores sampled at the Rottenstone deposit area have high contents of selenium and low S/Se ratios suggesting that Rottenstone mineralization was not contaminated by sulphidic iron formation and that Rottenstone mineralization is from a deep mantle source. Furthermore, the high proportion of sulphides at the Rottenstone deposit indicates the bulk of the sulphides were derived from a much larger magma chamber at depth. Such an environment would have allowed the sulphides to equilibrate with a large volume of magma from which they can scavenge the PGE's and nickel.

Table 7-1 lists recorded samples of Rottenstone mineralization collected from outcrop (1945) and values for samples of Rottenstone-type mineralization/ore collected from the ore dump or remnant samples within the Rottenstone deposit area. The sample results listed are indicative of the material mined while the mine was in production 1965-1969. For comparison the historic reported grade for Rottenstone Mine production is included. Note; PGE+Au includes assay for all the six Platinum Group Elements + gold.

Table 7-2 lists historic drillhole results inclusive of intersections of ultramafic rock deemed significant; potential ultramafic pathways, as a result of Fathom's ongoing compilation work of historic data.

The Rottenstone deposit is unique; the contained precious metal content is higher grade than most deposits of this type. The high sulphide content of the ore in such a small ultramafic body is rare and is indicative of a much larger magma chamber; the source of the Rottenstone deposit. The extremely high Ni-Cu+PGE grade of Rottenstone ore is a function of the *R* factor, specifically a very high *R* factor. The *R* factor is; the ratio of, mass of silicate magma to sulphide melt. To achieve the high Ni-Cu-Co + PGE grades; a direct result of the high sulphide content of the ore, the sulphides had to have the chance to equilibrate with a large volume of magma enabling the sulphides to scavenge Ni-Cu-Co and PGE's. The inference being the Rottenstone deposit is part of a large magmatic system.

Table 7-1 Historic Sampling Rottenstone Outcrop and Rottenstone-type Mineralization

Year	Description	Production (t)	Sample Type	Ni %	Cu %	Co %	Pd+Pt (g/t)	Pd-Pt+Au (g/t)	PGE+Au (g/t)
1945[1]	Bureau Mines Canada		Grab	4.29	0.7				
1945[1]	Bureau Mines Canada		Grab	4.29	2.07				
1965-1969[2]	Rottenstone Mining Ltd.	26,058		3.28	1.83			9.63	
1985[3]	Dr. L. Hulbert GSC		Composite	3.30	2.40	0.08	10.3	11.24	11.74
1990[4]	INCO		Grab	6.16	2.64	0.09	35.98		
1990[4]	INCO		Grab	6.29	1.14	0.08	7.92		
1990[4]	INCO		Grab	1.69	1.23	0.04	1.85		
1997[5]	Claude Res.		Grab	4.80	0.71	0.01	9.65	10.44	11.32
1997[5]	Claude Res.		Grab	4.43	1.78	0.09			
1999[5]	Uravan Matrix Mineralization Figure 7-3		Grab	4.00	1.12	0.09	9.25	10.02	10.48
1999[5]	Uravan Massive Mineralization Figure 7-3		Grab	8.30	4.67	0.19	8.18	8.28	9.09

[1]Saskatchewan Assessment File (74A07-0005)

[2]Saskatchewan Energy and Mines: Mineral Deposit Index #:0958

[3]Ni-Cu-PGE Mineralization Associated with the Rottenstone Lake Harzburgite-Pyroxenite Intrusion, Saskatchewan: Preliminary Findings; in Summary of Investigations 1985.

[4]Saskatchewan Assessment File (74A07-0033)

[5]Obtained Company Reports – Fathom Minerals Ltd. database

Table 7-2 Significant Drillhole Intercepts from the Rottenstone Project Area

Hole ID	Year Drilled	From (m)	To (m)	Length (m)*	Ni %	Cu %	Co %	Pt (g/t)	Pd (g/t)	Pt+Pd (g/t)
29-1	1929[1]	-	-	2.60	2.180	1.320				
29-5	1929[1]	-	-	7.90	2.520	1.310				
29-17	1929[1]	-	-	9.80	1.280	0.620				
29-18	1929[1]	-	-	9.90	1.460	0.810				
54-01	1954[2]	2.87	8.53	5.66	1.370	0.620		0.497	0.905	1.402
54-01	1954[2]	9.91	11.58	1.67	0.830	0.640		0.343	0.686	1.029
54-17	1954[2]	15.54	20.27	4.73	2.070	1.280		4.834	8.759	13.593
60-01	1960[3]	6.10	9.14	3.04	0.340	0.150				
60-01	1960[3]	15.24	17.68	2.44	0.750	0.240		1.158	0.944	2.102
60-02	1960[3]	1.83	6.10	4.27	3.052	1.391		2.396	4.825	7.221
60-02	1960[3]	8.53	11.28	2.75	0.584	0.330				
60-03	1960[3]	3.08	13.78	10.70	1.947	1.262				
60-03	1960[3]	8.38	13.78	5.40	2.680	1.795		2.100	7.880	9.980
60-08	1960[3]	6.10	10.85	4.75	1.210	1.050		3.748	2.905	6.652
60-09	1960[3]	7.62	9.14	1.52	0.750	0.580				
60-10	1960[3]	7.92	16.70	8.78	1.067	1.462				
60-10	1960[3]	10.97	15.54	4.57	1.426	2.027		2.833	2.213	5.046
62-01	1962[4]	0.61	8.07	7.46	2.670	2.800		5.486	6.857	12.343
62-02	1962[4]	0.00	9.14	9.14	2.670	2.350		0.549	0.686	1.234
RL99001	1999[5]	7.80	15.30	7.50	1.645	0.795	0.05	0.722	1.216	1.938
RL99001	1999	15.30	20.90	5.60	0.060	0.044		0.023	0.031	0.054
RL99002	1999	17.10	22.00	4.90	0.136	0.055		0.079	0.110	0.189
RL99005	1999	99.00	103.00	4.00	0.033	0.008		0.002	0.005	0.006
RL99008	1999	15.20	17.50	2.30	0.076	0.041		0.020	0.040	0.060
RL99008	1999	45.00	47.00	2.00	0.025	0.003		0.008	0.004	0.012

Hole ID	Year Drilled	From (m)	To (m)	Length (m)*	Ni %	Cu %	Co %	Pt (g/t)	Pd (g/t)	Pt+Pd (g/t)
RL99009	1999	12.20	12.90	0.70	0.085	0.015		0.026	0.030	0.056
RL00012	2000	18.00	19.10	1.10	0.045	0.018		0.030	0.051	0.080
RL03029	2003	8.60	14.10	5.50	0.062	0.010				
RL03029	2003	11.00	14.10	3.10	0.061	0.014		0.060	0.107	0.167
RL03030	2003	186.60	189.00	2.40	0.021	0.008		0.023	0.029	0.053
RL03031	2003	80.30	83.00	2.70	0.043	0.113		0.003	0.003	0.005
RL03031	2003	213.50	216.00	2.50	0.026	0.001		0.003	0.003	0.006
RL03032	2003	26.00	28.00	2.00	0.051	0.011				
RL03032	2003	31.00	34.10	3.10	0.088	0.005		0.141	0.169	0.310
RL03032	2003	37.50	39.30	1.80	0.026	0.001				
RL03032	2003	64.00	67.00	3.00	0.075	0.023		0.003	0.143	0.146
RL03032	2003	76.50	78.70	2.20	0.563	0.086		0.104	0.543	0.647
RL03032	2003	77.20	78.20	1.00	1.000	0.082	0.03	0.178	0.990	1.168
RL03034	2003	27.00	28.20	1.20	0.100	0.001				
RL03034	2003	50.80	52.90	2.10	0.030	0.010				
RL03034	2003	69.00	71.00	2.00	0.035	0.001		0.008	0.030	0.039
RL03037	2003	178.00	179.70	1.70	0.037	0.001		0.019	0.023	0.041
RL03039	2003	83.40	86.70	3.30	0.026	0.007				
RL03039	2003	123.10	125.40	2.30	0.099	0.024				
RL03039	2003	269.00	271.00	2.00	0.030	0.005				
MR08-05	2008	264.57	267.33	2.76	0.044	0.002				
MR08-05	2008	292.30	299.16	6.86	0.040	0.003				
MR08-06	2008	13.63	16.59	2.96	0.054	0.009				

[1]SK Assessment File (74A07-0005); only mineralized drillhole widths and not from and to intervals available in Assessment File

[2]SK Assessment File (74A07-0001)

[3]SK Assessment File (74A07-0007)

[4]SK Assessment File (74A07-0025)

[5] Drillholes drilled 1999 – 2003, MR08-05, MR08-06; Uravan Minerals Inc. Company Reports

Drillhole composites were calculated using a 200 ppm Ni cut-off, intervals needed to be consecutive and greater than 1.5m in length and some do include internal dilution (intervals < 200 ppm Ni); furthermore, exceptions were made to accommodate intervals < 1.5m that were deemed important due to proximity to the Rottenstone deposit. Significant intercepts assume association with ultramafic rock. Drillholes drilled 1999 – 2008 that do not have Pd, Pt values is a function of the elements were not assayed for. Also note; for 1929 drillholes, from and to intervals not provided in assessment file, only the drillhole width of mineralized intersection.

**Note the lengths reported are not true widths, but drillhole widths. There is insufficient data in the historic drillhole database to determine true widths.*

8.0 Deposit Types

The Rottenstone deposit would appear to be typical of a deep-rooted, mantle derived, magmatic Ni-Cu+PGE, ultramafic hosted, sulphidic type of mineral deposit. The Rottenstone deposit hosts rich concentrations of PGE's, possibly the richest of any deposit of its type mined in Canada. It has been suggested up to 50% of the host ultramafic intrusion consisted of sulphides and that the intrusion is the result of a significant magma chamber at depth within the vicinity of the Rottenstone deposit. Rottenstone Mining Ltd. from 1965 to 1969 mined the original mineralized Rottenstone outcrop and continued mining east by open pit method to a depth of approximately 13.0m below surface. In all, 26,058t of Rottenstone ore was extracted with a reported average grade of 3.28% Ni, 1.63% Cu + 9.63 g/t Pd-Pt+Au (Saskatchewan Energy and Mines: Mineral Deposit Index #: 0958).

World nickel production is sourced from two types of deposits; sulphide deposits and laterite deposits. Sulphide deposits are typically higher grade (1-5% Ni) and the Ni is commonly associated with Cu, Co and PGE's plus Au, Ag. Nickel laterite deposits are typically of lower grade (<1-2% Ni), Co is a common recoverable byproduct, and these deposits tend to be very large (up to and greater than 50 million tonnes) and occur predominantly in tropical climates.

Ni-Cu+PGE sulphide deposits (cobalt as a byproduct) typically form by the equilibration of immiscible magmatic sulphide and silicate magma (Naldrett, 2004). The extent to which the sulphides are enriched in Ni, Cu, Co and PGE's is then a measure of not only the composition of the parental magma, but it is a function of the inherent efficiency of the chemical and physical process of equilibration between the two melts (Naldrett, 2004). Key features commonly associated with Ni sulphide mineralization include; available source of metals (mafic and ultramafic magmas), a source of sulphur (S) to saturate the magma (e.g., sulphidic iron formations), gravitational segregation of dense immiscible sulphide liquid, and concentration of the sulphides into physical traps at the base of intrusions, within conduits, or in rock bodies emplaced in significant shears or fault systems. Unique geochemical characteristics will be associated with the original magma, depletion of Ni, Cu and PGE's in the silicate melt due to the removal of sulphide melts and contamination of the magma by assimilation of continental crust. Geophysical signatures of Ni systems can (but don't always) include magnetic high signatures, gravity highs, and/or either conductivity (due to the presence of massive sulphide) or chargeability (due to disseminated sulphides) (Lightfoot, 2007).

At the Albert Lake property there is a significant geochemical database in place and geochemical evidence that can be used to vector to additional Rottenstone-type mineralization and deposits. In addition, there is significant airborne and ground geophysical data inclusive of magnetic susceptibility (MAG), electromagnetic (EM, TEM, HLEM), gravity and chargeability surveys (IP).

Figure 8-1 and Figure 8-2 portray a possible deposit scenario for the Rottenstone deposit. Figure 8-1 suggests the Rottenstone deposit is one of several pods of metal enriched magma chambers occurring within the supracrustal rocks at the Albert Lake property. Glencore's Raglan nickel-copper mine in northern Quebec is a deposit model consisting of multiple sulphide lenses consisting of disseminated, net-textured and massive pyrrhotite-pentlandite-chalcopyrite mineralization contained in individual lenses that average 0.2Mt in size; but lenses can be as small as 0.01Mt (Desharnais, Arne and Bow, 2014). Although not proven to date, the geologic setting / model, mineralization and the Rottenstone deposit occurring at the Albert Lake property has similarities to the Raglan deposits. Figure 8-2 depicts typical style of mineralization in a Ni-Cu+PGE sulphide type deposit; Massive Ore (see Figure 7-3) at the bottom of a structural trap / embayment grading up through Matrix Ore, also referred to as net-texture ore (Figure 7-3). The Rottenstone deposit fits both scenarios depicted in Figure 8-1 and Figure 8-2.

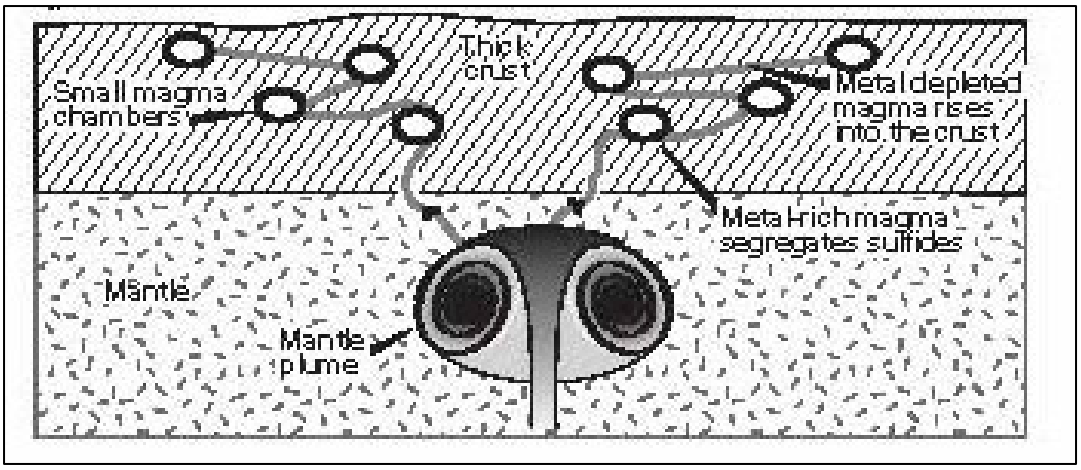

Figure 8-1 Geological Setting of Ni-Cu + PGE Sulphide Deposits; Barnes and Lightfoot (2005)

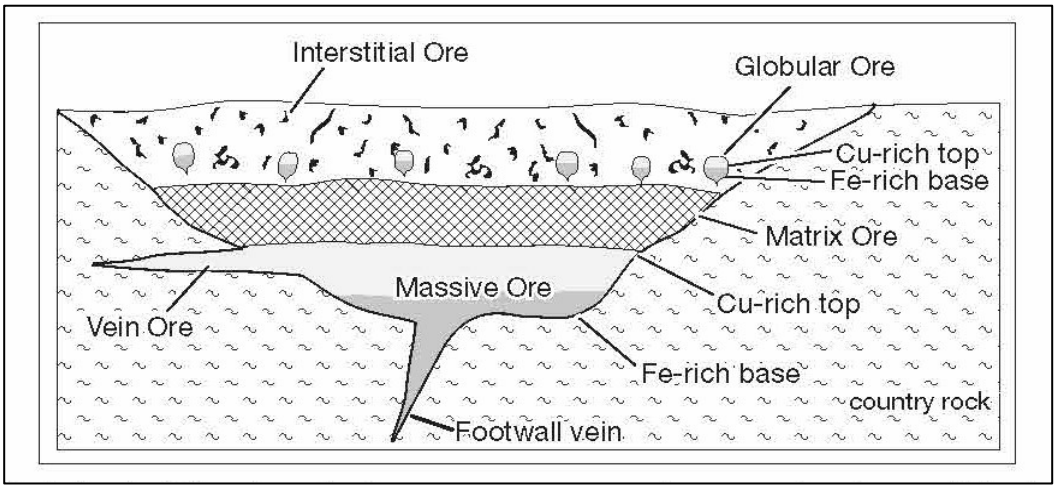

Figure 8-2 Relationship between Massive, Matrix, Disseminated and Vein Sulphides Ni-Cu + PGE Sulphide Deposits; Barnes and Lightfoot (2005)

9.0 Exploration

Fathom acquired the Rottenstone property from Uravan in June 2015. Fathom has recently renamed the Rottenstone property (project) the Albert Lake property (project). With the acquisition from Uravan, Fathom inherited a significant high-quality database plus 1007 drill core samples that had been collected; but not assayed and had been in storage since 2003. Through to the end 2018 Fathom has conducted several exploration programs on the property and in conjunction with the exploration programs, Fathom has completed a very comprehensive compilation exercise of all historical data. Since property acquisition two separate drill programs have taken place on the property and are covered within Section 10.0.

A summary of Fathom exploration:

- 2015 – July to September; assayed 543 samples (inclusive of standards) of the 1007 drill core samples collected in the 2003 drill program, but not previously analyzed. Fathom utilized a multi-acid digestion, multi-element (41) ICP-MS finish assay to identify ultramafic intersections and ultramafic drill cores anomalous in nickel-cobalt+copper and other pathfinder elements. Note assays were not performed to determine Pd and Pt contents (Fraser, 2016).
- 2015 – August to September; re-interpreted, relogged drillholes and collected an additional 226 drill core samples (inclusive of standards) from the 2008 drilling program performed at the Rottenstone property. As above; a multi-acid digestion, multi-element (41) ICP-MS finish assay was utilized to identify ultramafic intersections and ultramafic drill cores anomalous in nickel-cobalt+copper and other pathfinder elements. Note assays were not performed to determine Pd and Pt contents (Fraser, 2016).
- 2016 – 2018; a comprehensive compilation of data collected at the Albert Lake property 1954 through to the end of the last exploration at Albert Lake; 2008. The emphasis being; putting all data in a consistent Datum; NAD83 Zone 13, and defining geophysical, geochemical fingerprints analogous to the Rottenstone deposit style of mineralization and utilizing these fingerprints within existing geophysical, geochemical databases for the purpose of defining drill targets and areas to focus exploration (Morris, Galbraith, Meintjes, 2018).
- 2017 – June to October; Fathom submitted to Kemetco Research Inc. (Richmond, BC) two samples of Rottenstone-type mineralization for a “Preliminary Mineralogical and Metallurgical Scoping of Rottenstone Ore” (Warkentin, 2017). See Section 13.0.
- 2018 – July; assayed an additional 162 samples (inclusive of standards) from the 1007 drill core samples collected in the 2003 drill program, but not previously analyzed. As above; a multi-acid digestion, multi-element (41) ICP-MS finish assay was utilized to identify ultramafic intersections and ultramafic drill cores anomalous in nickel-cobalt+copper and other pathfinder elements. Note assays were not performed to determine Pd and Pt contents (Morris, Galbraith, Meintjes, 2018) (Fraser, 2019).
- 2018 – June to September; review and re-interpretation of historic borehole electromagnetic (BHEM) data from drillholes drilled 1999, 2000.
- 2018 – July to August; Fathom located, dummy probed and performed BHEM surveys on fifteen historic drillholes drilled 1999 – 2016. Notably, drillholes RL99006, RL99007, RL00020, RL00021, RL02024, RL02025, RL03029, RL03030, RL03032, RL03033, RL03035, RL03036, RL03037, MR08-05 and FMRS16-008. Fathom has the raw data for these surveys; however, the contractor did not

provide a formal report. Fathom continues to evaluate this data through the services of geophysical consultants (Fraser, 2019).

- 2018 – July to September; review, interpretation and Maxwell Plate Modelling of conductors within an area of the 2008 VTEM survey, corresponding to area where 2018 soil geochemical survey took place (Fraser, 2019).

- 2018 – July to August; B-horizon soil geochemical survey covering an approximate 20km^2 area encompassing the historic Rottenstone mine and corresponding to an area in which 2008 VTEM survey conductors were modelled using Maxwell Plate Modelling software. In all 1559 (inclusive of standards) from a proposed 1746 sample grid were collected. Soil samples were dried and sieved with an -80 mesh and from a 30g split, an aqua regia digest 37-element assay was obtained by inductively coupled plasma mass spectrometry (Fraser, 2019).

- 2020 – January to February; a structural interpretation report was produced that provided an overall structural interpretation of a large area incorporating the Albert Lake property. Several areas considered to be prospective for magmatic-Ni sulphide and PGE mineralization were proposed (Stewart, Williams, 2020).

9.1 Analysis of Sampled; not Assayed, Historic Drill Cores

A multi-element assay; approach to assaying, was not utilized consistently for drilling programs performed 1999 – 2008. Unfortunately, there is a significant gap in what Fathom now realizes as potentially very significant geochemical data within the Fathom compiled drillhole database. Table 9-1 documents the assaying of historic drill cores plus additional sampling performed on 2008 drillholes.

To summarize results of assaying historical drill cores, Fathom has interpreted drillhole intervals within the historical database that are indicative of ultramafic intervals not previously recognized. Fathom now recognizes multiple ultramafic intervals believed to be ultramafic sills/pathways that are associated with the historic Rottenstone deposit. Furthermore; magnesium oxide (MgO), is a very significant pathfinder element associated with magmatic Ni-Cu+PGE deposits. MgO can be used to interpret the character of the ultramafic sills/pathways and be used to vector towards where the ultramafic sill/pathway is potentially sulphur saturated and potentially hosts a Rottenstone-like deposit. Table 9-2 illustrates percentile values obtained from within the Master drillhole database for key pathfinder elements associated with magmatic Ni-Cu+PGE type deposits. The reader is referred to Table 9-3 and Table 9-4 and specifically the MgO column. Note the very anomalous MgO for drillhole RL03039 (Table 9-3) occurring at the drillhole interval 123.1m – 125.4m and compare the MgO value to the Rottenstone-type mineralization illustrated for drillhole FMRS16-002; 6.08m – 10.77m, in Table 9-4. Drillhole FMRS16-002 was drilled approximately 35.0m south of, and is a continuation of the historic Rottenstone deposit. It is Fathom's interpretation historic drillhole RL03039; originally drilled to test subsurface the Island Showing (refer to section 6.0), intersected potentially very favourable ultramafic sills/pathways that are proximal to a Rottenstone-type deposit.

Table 9-1 Historic Drill Core Assayed by Fathom

Drillhole	Date Drilled	# of Samples Collected - Assayed
RL00022	March 2000	6
RL03029	January 2003	24
RL03030	January 2003	37
RL03031	January 2003	48
RL03032	February 2003	88
RL03033	February 2003	40
RL03034	February 2003	42
RL03035	February 2003	36
RL03036	February 2003	35
RL03037	February 2003	53
RL03038	March 2003	136
RL03039	April 2003	107
RL03040	April 2003	61
MR08-04	October 2008	4
MR08-05	October 2008	131
MR08-06	October 2008	37
MR08-07b	October 2008	49

Table 9-2 Percentile Data Fathom Master Drillhole Database – Key Pathfinder Elements

Element	50th Percentile	75th Percentile	90th Percentile	95th Percentile	98th Percentile
Co ppm	14.00	22.58	42.94	56.87	97.11
Cr ppm	137.00	206.75	293.70	748.20	1371.98
Cu ppm	37.68	93.00	244.57	473.69	1300.00
Fe%	4.50	6.14	8.15	13.90	32.53
Mg %	1.30	1.93	3.67	6.18	9.30
MgO	2.16	3.20	6.08	10.25	15.42
Ni ppm	36.70	58.23	219.40	518.64	1734.37
S%	0.07	0.40	2.34	5.52	10.00

Individual colours are used for each element and intensity of colour increases up to the 98th percentile in Tables 9-3 and Table 9-4.

Table 9-3 Historic Drillhole RL03039 – Key Pathfinder Elements

HoleID	From (m)	To (m)	Length (m)	LithCode	SampleID	Co_ppm	Cr_ppm	Cu_ppm	MgO%	Ni_ppm	S %
RL03039	81.20	81.90	0.70	Gran	13460	54.0	168.0	966.3	2.5	573.1	2.2
RL03039	81.90	82.60	0.70	Gran	13461	10.8	120.0	16.7	2.3	25.1	-0.1
RL03039	82.60	83.40	0.80	Sed	13462	18.0	119.0	9.7	2.6	16.9	-0.1
RL03039	83.40	84.30	0.90	UM	13463	59.8	1394.0	22.0	17.0	539.8	-0.1
RL03039	84.30	84.60	0.30	UM	13464	39.5	738.0	17.8	4.8	234.8	-0.1
RL03039	84.60	85.00	0.40	UM	13465	49.6	906.0	102.1	3.4	269.5	0.3
RL03039	85.00	85.50	0.50	UM	13466	35.4	619.0	133.0	2.4	118.2	0.4
RL03039	85.50	86.20	0.70	Sed	13467	18.3	157.0	125.2	2.0	30.3	0.3
RL03039	86.20	86.70	0.50	UM	13468	48.2	1038.0	11.4	7.5	242.6	-0.1
RL03039	86.70	87.10	0.40	Sed	13469	15.9	175.0	46.5	3.5	31.9	-0.1
RL03039	122.80	123.10	0.30	Gran	13488	9.4	118.0	41.2	1.5	27.4	0.1
RL03039	123.10	124.00	0.90	UM	13489	101.9	2023.0	339.1	19.6	1388.6	0.6
RL03039	124.00	125.00	1.00	UM	13490	80.8	1298.0	191.5	20.2	694.7	0.4
RL03039	125.00	125.40	0.40	UM	13491	87.3	1171.0	162.4	15.1	823.3	0.4
RL03039	125.40	126.00	0.60	Sed_Plt	13492	41.7	237.0	169.6	5.0	195.8	0.5
RL03039	126.00	127.00	1.00	Sed_Plt	13493	22.9	210.0	34.6	3.8	64.5	0.1
RL03039	127.00	128.00	1.00	Sed_Plt	13494	14.5	179.0	41.6	2.3	36.3	0.1
RL03039	128.00	129.00	1.00	Sed_Plt	13495	23.7	218.0	80.9	4.1	70.3	0.2
RL03039	129.00	130.00	1.00	Sed_Plt	13496	15.1	222.0	82.0	2.8	39.9	-0.1
RL03039	134.00	134.50	0.50	Sed	13497	33.4	201.0	103.6	3.7	55.4	0.4
RL03039	134.50	135.00	0.50	Sed	13498	61.3	215.0	1417.7	2.1	99.6	5.1
RL03039	135.00	135.30	0.30	Sed	13499	15.3	196.0	76.1	2.9	37.7	0.3
RL03039	267.00	268.00	1.00	Gabbro	13542	31.0	194.0	64.0	5.3	69.3	0.2
RL03039	268.00	269.00	1.00	Gabbro	13543	39.9	213.0	101.1	6.3	96.6	0.2
RL03039	269.00	270.00	1.00	UM	13544	56.0	1089.0	47.9	13.6	367.0	-0.1
RL03039	270.00	271.00	1.00	UM	13545	42.6	727.0	53.6	10.1	235.0	0.1
RL03039	271.00	272.00	1.00	UM	13546	51.6	334.0	66.9	10.2	159.0	0.1
RL03039	272.00	273.00	1.00	UM	13547	56.8	782.0	63.8	11.4	195.2	0.1
RL03039	273.00	273.30	0.30	UM	13548	50.7	560.0	64.1	9.6	170.0	-0.1
RL03039	273.30	274.00	0.70	Sed_Plt	13549	15.3	188.0	44.5	4.1	46.9	-0.1

In LithCode Column: Gran = Granite, UM = Ultramafic, Sed = Sediment, Sed_Plt = Metapelite, Gabbro = Gabbro

Table 9-4 Fathom Drillhole FMRS16-002 – Key Pathfinder Elements Rottenstone-type Mineralization

HoleID	From (m)	To (m)	Length (m)	LithCode	SampleID	Co_ppm	Cr_ppm	Cu_ppm	MgO%	Ni_ppm	S %
FMRS16-002	6.08	7.00	0.92	UM_Min	771273	188.4	1515.0	1400.0	22.22	5200.0	1.100
FMRS16-002	7.00	8.00	1.00	UM_Min	771274	215.7	1948.0	2300.0	20.99	5700.0	1.600
FMRS16-002	8.00	9.00	1.00	UM_Min	771275	286.0	1490.0	3600.0	20.54	8200.0	3.000
FMRS16-002	9.00	10.17	1.17	UM_Min	771276	569.3	1077.0	10200.0	18.10	17700.0	6.500
FMRS16-002	10.17	10.77	0.60	UM_Min	771278	666.1	929.0	3200.0	13.99	22400.0	9.100
FMRS16-002	10.77	11.00	0.23	Gran_Dk	771279	41.4	394.0	800.0	1.76	1300.0	0.600
FMRS16-002	11.00	12.00	1.00	Gran_Dk	771289	33.2	168.0	340.1	0.61	1037.9	0.400

In LithCode Column: UM_Min = Mineralized Ultramafic, Gran_Dk = Granite Dyke

Fathom has recognized other ultramafic sills/pathways within the historic database and several have MgO content ≥ 90th percentile value. In addition to drillhole RL03039, Fathom recognizes other noteworthy intervals high in MgO and other pathfinder elements; indicative of Rottenstone-type mineralization, occurring in drillholes RL03025, RL03029, RL03030, RL03031, RL03034, RL03038, MR08-05 and MR08-06 (Figure 9-1). The reader is reminded of the gap in the geochemical database and specifically Mg, MgO was not included in assay packages for most drillholes drilled at the Albert Lake property 1999 – 2003.

Figure 9-1 Drillhole Location Map, Drillholes Drilled 1999 - 2016

9.2 Review of Historic BHEM Data

A component of the Fathom 2018 exploration program was borehole EM surveying (BHEM). Fathom proposed BHEM surveying of drillholes drilled 1999 – 2016 at the Albert Lake Project in hope of defining a BHEM signature associated with Rottenstone-type mineralization and to look for off-hole conductive bodies missed by drilling that may be indicative of Rottenstone-type mineralization.

As a precursor to this program, Fathom deemed it necessary to review the historic BHEM work done on the Albert Lake property 1999 – 2000. From March to July 2018, Fathom utilized a geophysical consultant to review and re-interpret borehole EM (BHEM) data originally collected from drillholes drilled on the Albert Lake property 1999 – 2000. As part of the exercise notable conductors were modelled using Maxwell Plate Modelling software.

Figure 9-2 illustrates the location of historic drillholes RL99001 – RL00023 drilled in 1999, 2000 and distinguishes between drillholes that had BHEM performed 1999, 2000 (drillholes illustrated in red) and those that did not (those illustrated in black).

To summarize, a strong, rod-like in shape, off-hole conductor was detected in drillholes RL99006, RL99007 and RL00021 and strong EM responses was detected sub-parallel to and off-hole of drillhole RL00020. Anomalous responses were detected within the area of drillholes RL99003 – RL99005. The rod-like conductive feature is described as a north-northeast trending feature off-hole of RL00021 and plunging towards drillhole RL99006 and RL99007 (Fraser, 2019). What is encouraging about this conductive rod-like BHEM anomaly, it occurs within favourable geologic environment as defined by high MgO ultramafic rock in drillhole MR08-06 (Figure 9-1).

9.3 Maxwell Plate Modelling Select Area 2008 VTEM Survey

In conjunction with a B-horizon soil geochemistry program performed in 2018, Fathom decided to evaluate data from the 2008 VTEM survey; specifically, Fathom geophysical consultant created Maxwell Plate Models for the strongest conductors occurring within the same window as the area designated for the B-horizon soil geochemistry program. The area covered by the 2008 VTEM Maxwell Plate Modelling exercise measures approximately 6km x 4km and contains 55 flight lines from the original 2008 VTEM survey. Figure 9-3 illustrates the location and orientation of Maxwell Plate Models within the B-horizon soil geochemical survey area, Note Maxwell Plate VTEM-17A corresponds to the area discussed above where the rod-like conductive body was interpreted plunging north of drillhole RL00021 and Maxwell Plate Models VTEM-19A, VTEM-19B, VTEM-20A and VTEM-20B correspond to conductive features defined in the area of drillholes RL99003 – RL99005.

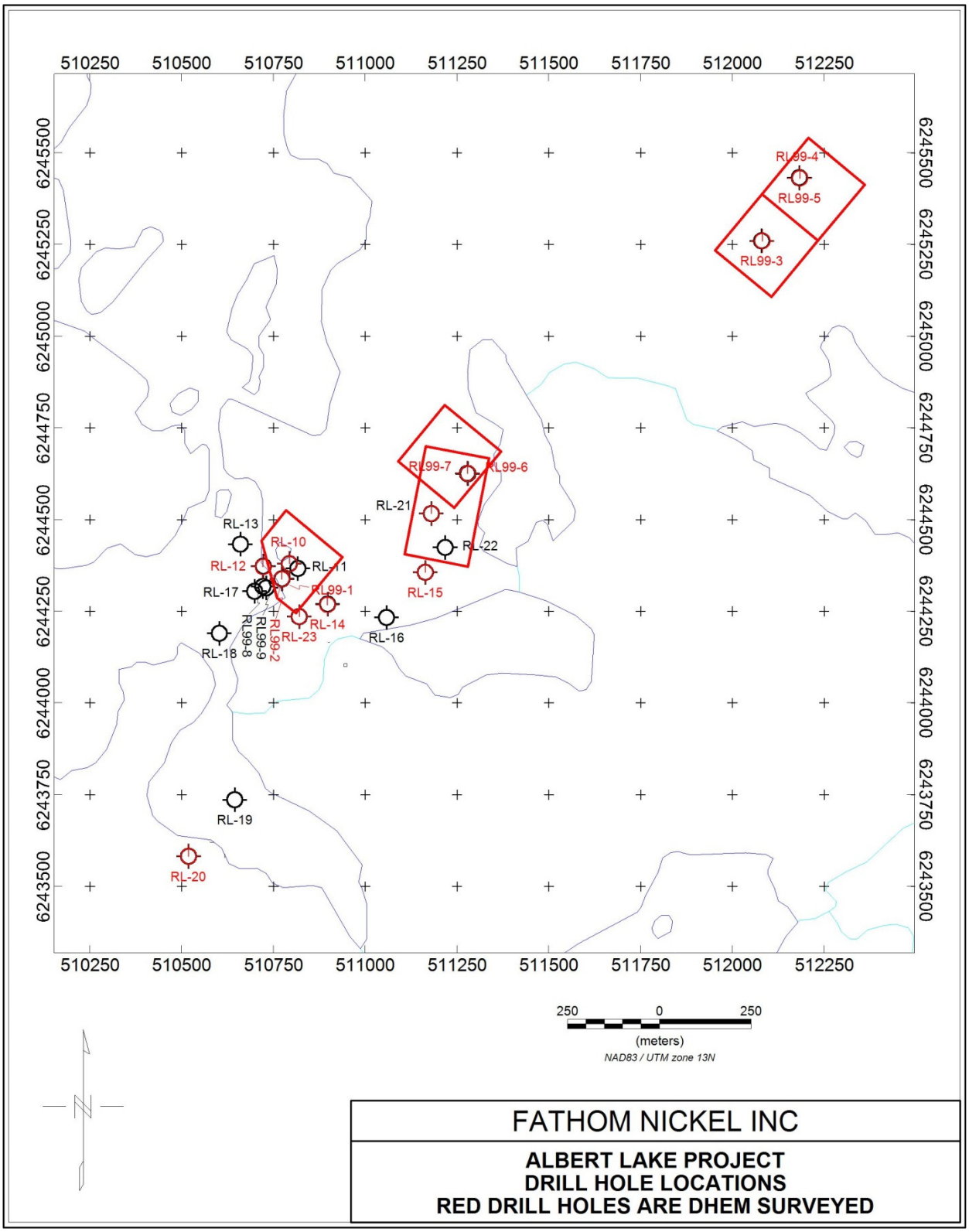

Figure 9-2 Historic BHEM Drillhole Location Map

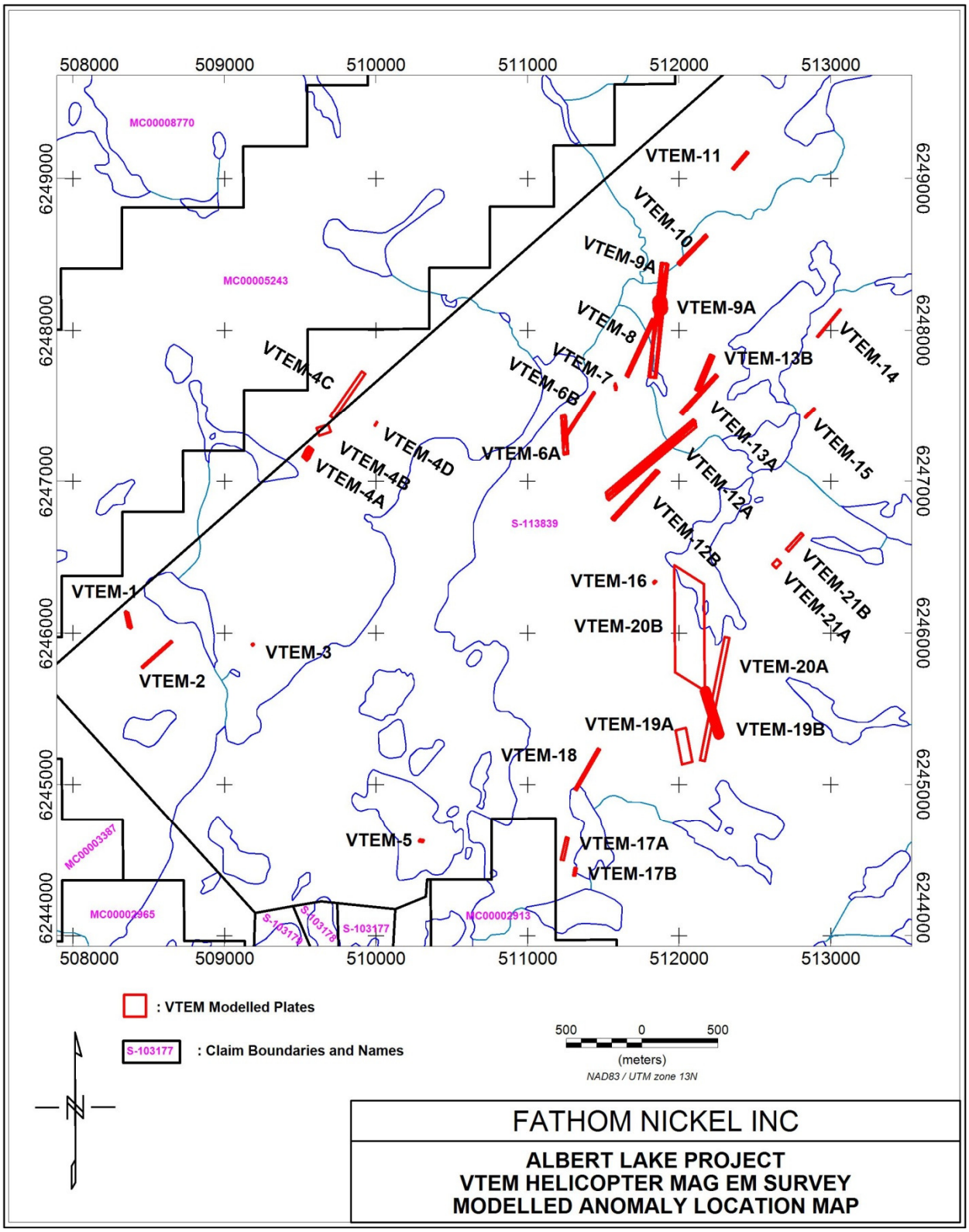

Figure 9-3 Location Map 2018 Maxwell Plate Models – 2008 VTEM Survey

9.4 B-Horizon Soil Geochemistry Survey

In June of 2018 Fathom performed a B-horizon soil geochemistry survey covering an area of approximately 20km^2 encompassing the Rottenstone mine area (Figure 9-4). Fathom prepared a 100-meter x 100-meter grid within the sampling area and two separate 50-meter x 50-meter grids; one covering the Rottenstone mine area, and a second grid approximately 2.5 kilometers north-northeast of the Rottenstone mine within what is referred to as the North Dome area. From the 1746 proposed sites, 1478 samples were collected. In addition to B-horizon soils, grab samples of rock were collected from 13 outcrop locations within survey area (Stewart, 2019).

Within the Fathom extensive compilation exercise, anomalous B-horizon soils are recognized occurring associated with the Tremblay-Olson showing approximately 2.5 kilometers southwest of the Rottenstone mine. Reconnaissance-style soil geochemistry programs completed by previous operators on the property reveal multiple pathfinder element anomalies north of the Rottenstone mine and at various other locales within the Rottenstone property.

Fathom's approach in 2018 was to perform a multi-element analysis on B-horizon soils to see if there was any correlation between surface geochemistry and lithogeochemistry results obtained from drill cores. Specifically, can pathfinder elements indicative of an ultramafic protolith (i.e.; Co, Cr, Cu, Fe, Mg, MgO, Ni) obtained in soils be an indication of sub surface occurrence of mafic – to ultramafic rock. Fathom did not include analyses for Pd and Pt as part of its assay package.

Figure 9-5 illustrates B-horizon Ni in soils results. Nickel results when viewed with Cr in soils and Mg in soils consistently overlap and illustrate areas of known ultramafic sills/pathways occurring subsurface as well as in areas where known ultramafic rock outcrops. Also, of significance is anomalous Ni, Cr, Mg occurring within the areas of known conductivity discussed above; the areas discussed are labelled the Mawdsley area, 99-Five and the Island Showing area where drillhole RL03039 was drilled falls just outside and to north of polygon depicting the Big Island area (Figure 9-5).

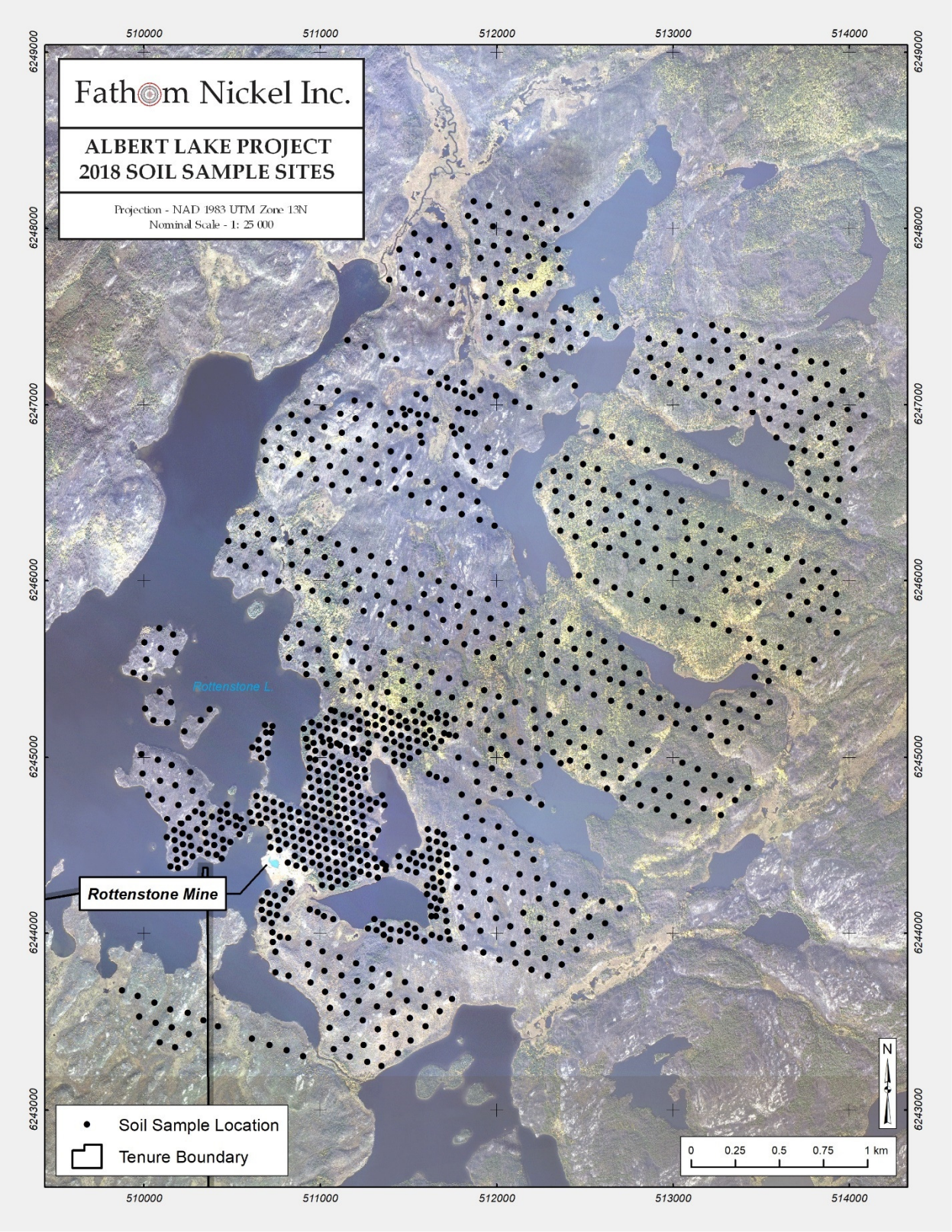

Figure 9-4 Proposed B-Horizon Soil Sample Points

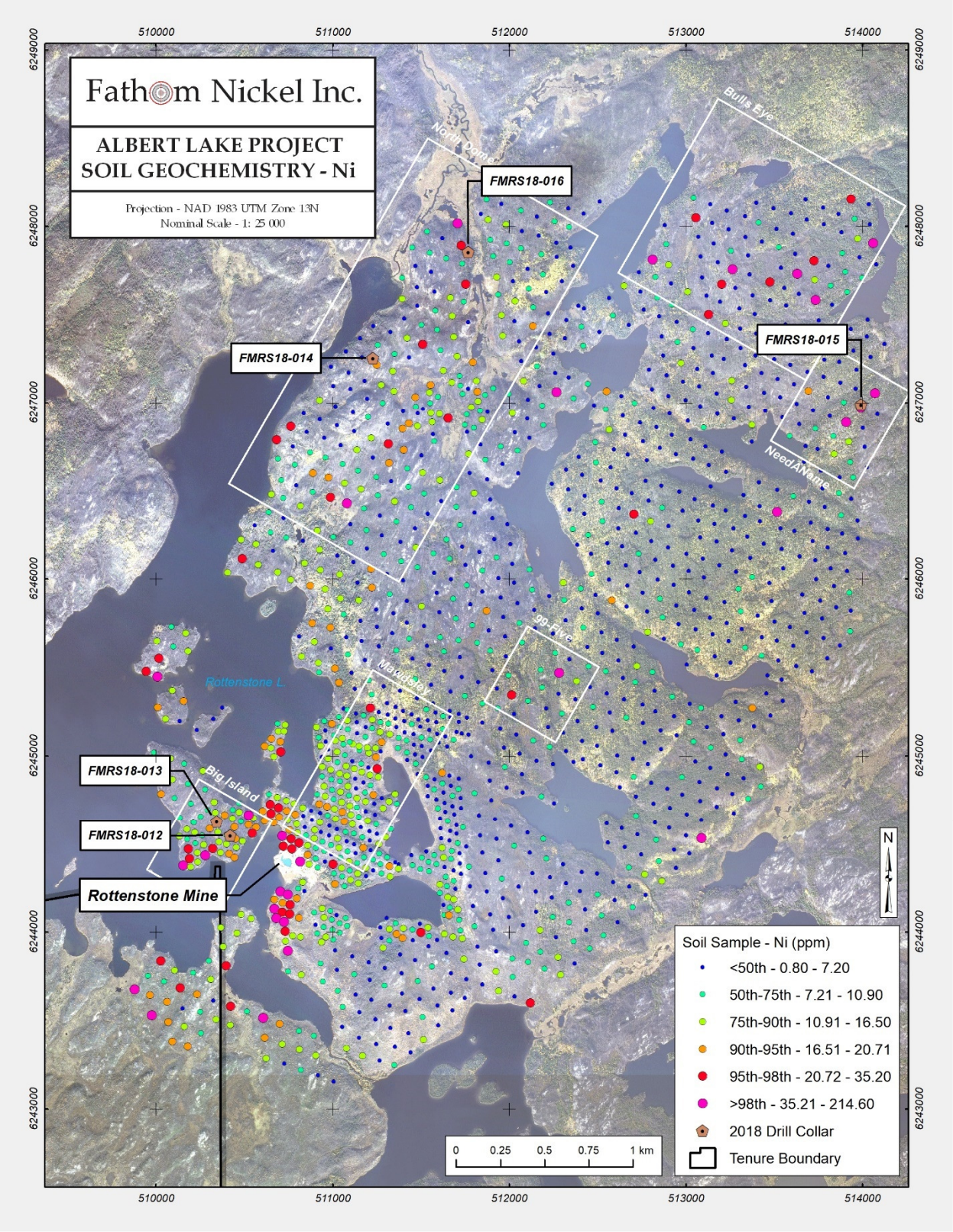

Figure 9-5 Ni in B-Horizon Soils

9.5 Structural Interpretation: Rottenstone AOI, Saskatchewan Canada

A comprehensive structural interpretation of a large area of interest (AOI) encompassing the historic Rottenstone Mine has provided a macro-scale structural framework over the Albert Lake property area (Stewart, Williams, 2020). The report lists several observations and recommendations:

- Several areas were recognized to be prospective for magmatic-Ni sulphide + PGE mineralization.
- Mineralized ultramafic rocks host to the Rottenstone deposit and Island Showing are preserved within an isolated asymmetric fold whose limbs have been sheared.
- Faults within the AOI are interpreted to trend northeast, have long strike lengths (>30km), and been active as steep reverse faults.
- Three generations of folding are interpreted.
- A pronounced Bouger gravity anomaly within the AOI is interpreted as a potential deeply buried source to the mafic-ultramafic rocks within the AOI.
- Given the complicated deformation history at the Rottenstone Mine area, it is recommended that detailed structural mapping of target areas be undertaken in conjunction with interpretation of high-resolution geophysical data.

Within the Albert Lake property boundary three target areas were identified by the AOI Structural Interpretation (Figure 9-6). During the writing of this report Fathom staked additional ground southeast of target areas 1, 2 and 3 depicted on Figure 9-6.

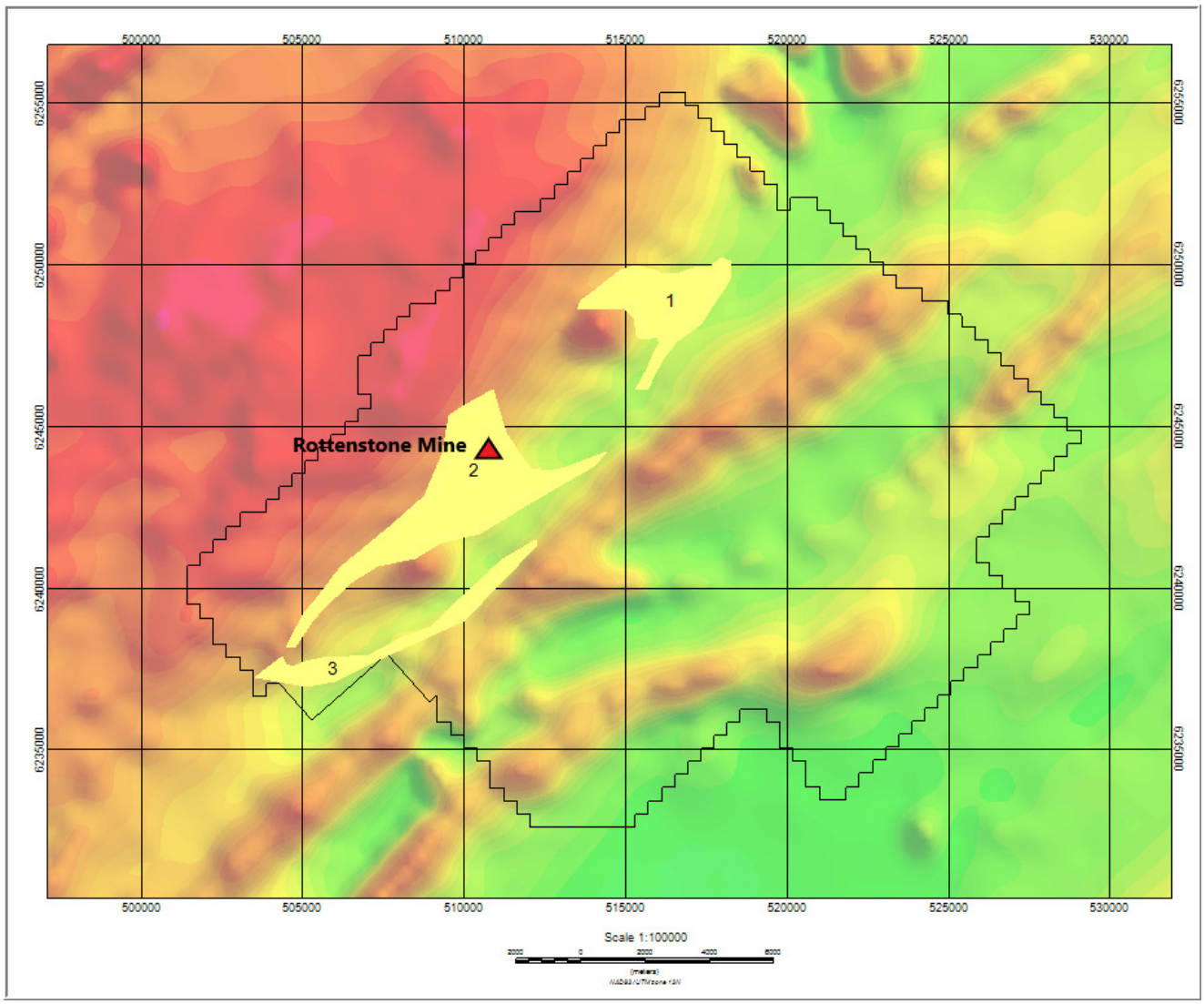

Figure 9-6 Recommended Target Areas Within Albert Lake Property

10.0 Drilling

10.1 Introduction

Fathom has completed two drill programs at the Albert Lake property. The initial program drilled March 19th – April 1st, 2016 amounted to eleven BTW-size drillholes and 466.94m drilled. The second drill program commenced September 26, 2018 and was completed October 5, 2018. In all, five NQ-size drillholes amounting to 922m were drilled. Table 10-1 and Figures 10-1 and 10-2 document their locations and details.

Table 10-1 2016, 2018 Drillhole Locations; Orientation

Drillhole	Date Start / Finish	Coordinates (NAD83 Zone13)	Elevation (ASL m)	Azimuth (Start/End)	Dip (Collar/TD)	TD (m)
FMRS16-001	Mar 19 / Mar 21	510761E / 6244349N	454.28	129° / 130.7°	-75° / -76.1°	42.37
FMRS16-002	Mar 21 / Mar 22	510761E / 6244349N	454.28	129° / 129°	-65° / -65°	23.47
FMRS16-003	Mar 21 / Mar 22	510775E / 6244370N	454.03	125° / 124.8°	-75° / -74.6°	39.01
FMRS16-004	Mar 23 / Mar 24	510773E / 6244373N	453.85	318° / 318.4°	-75° / -75.3°	60.35
FMRS16-005	Mar 24 / Mar 25	510784E / 6244408N	457.32	302° / 304.8°	-70° / -70.6°	70.71
FMRS16-006	Mar 26 /Mar 26	510757E / 6244396N	453.21	0°	-90° / -90°	45.11
FMRS16-007	Mar 27 / Mar 28	510740E / 6244361N	453.80	132° / 133.3°	-70° / -69.1°	42.06
FMRS16-008	Mar 28 / Mar 30	510773E / 6244457N	460.55	0°	-90° / -87.7°	69.49
FMRS16-009	Mar 30 / Mar 31	510755E / 6244347N	453.98	133° / 133°	-65° / -65°	23.77
FMRS16-010	Mar 31 / Mar 31	510755E / 6244347N	453.98	119° / 118.9°	-65° / -64.9°	17.68
FMRS16-011	Mar 31 / Apr 1	510773E / 6244329N	454.26	273° / 268.7°	-80° / -78°	32.92
FMRS18-012	Sep 26 / Sep 28	510419.9E / 6244547.5N	456.3	117.9° / 121.3°	-79° / -78°	251.0
FMRS18-013	Sep 28 / Sep 30	510345.2E / 6244627.0N	449.8	269.8° / 278.0°	-60° / -57.5°	152.0
FMRS18-014	Sep 30 / Oct 1	511229.1E / 6247255.0N	487.7	150.2° / 152.8°	-58° / -57.4°	152.0
FMRS18-015	Oct 2 / Oct 4	513992.6E / 6246992.0N	510.9	179.9° / 183.8°	-45° / -47.1°	185.0
FMRS18-016	Oct 4 / Oct 5	511769.9E / 6247854.5N	462.1	300.0° / 301.8°	-50° / -51°	182.0
Total						***1388.94***

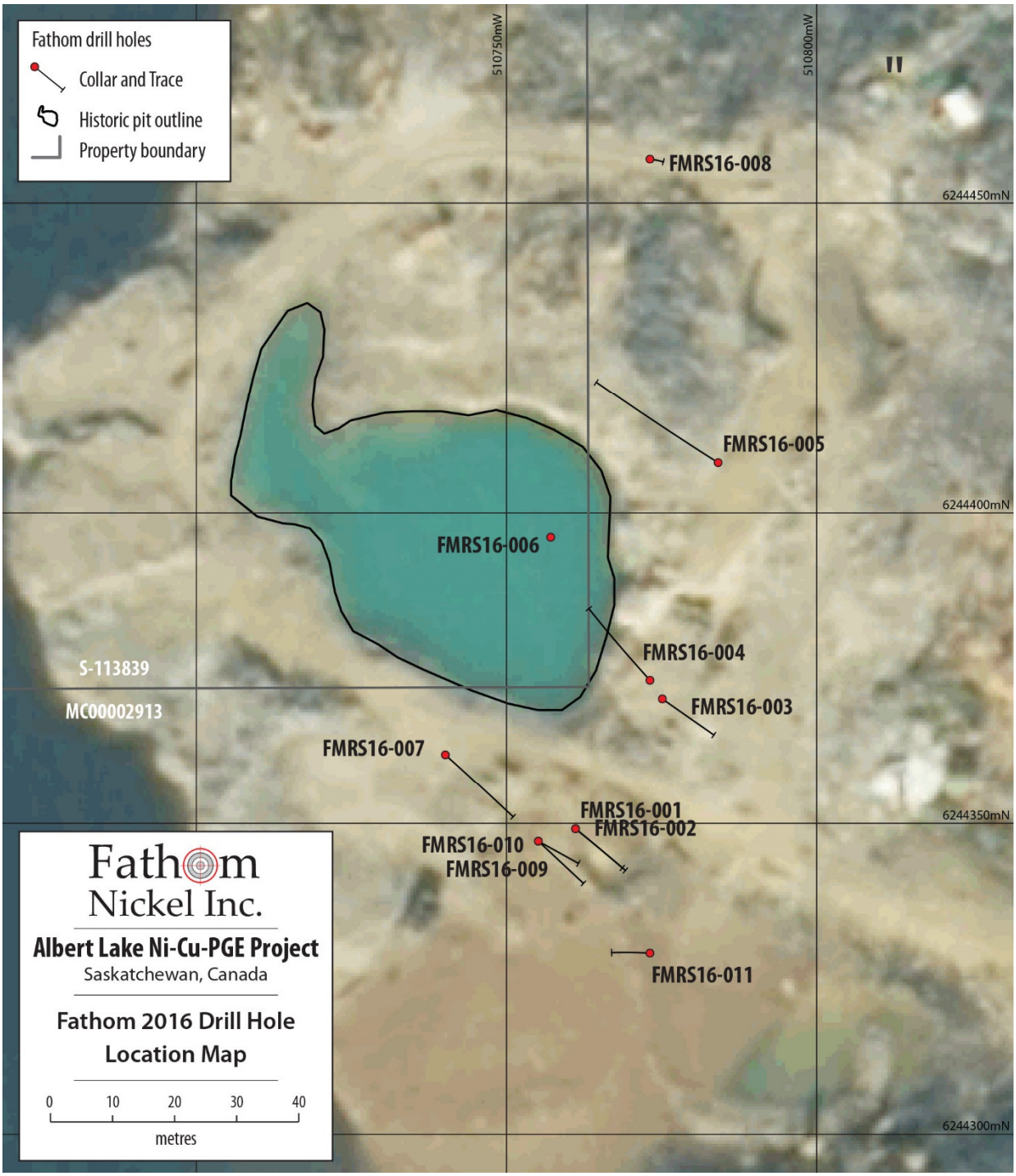

Figure 10-1 Fathom 2016 Drillhole Location Map

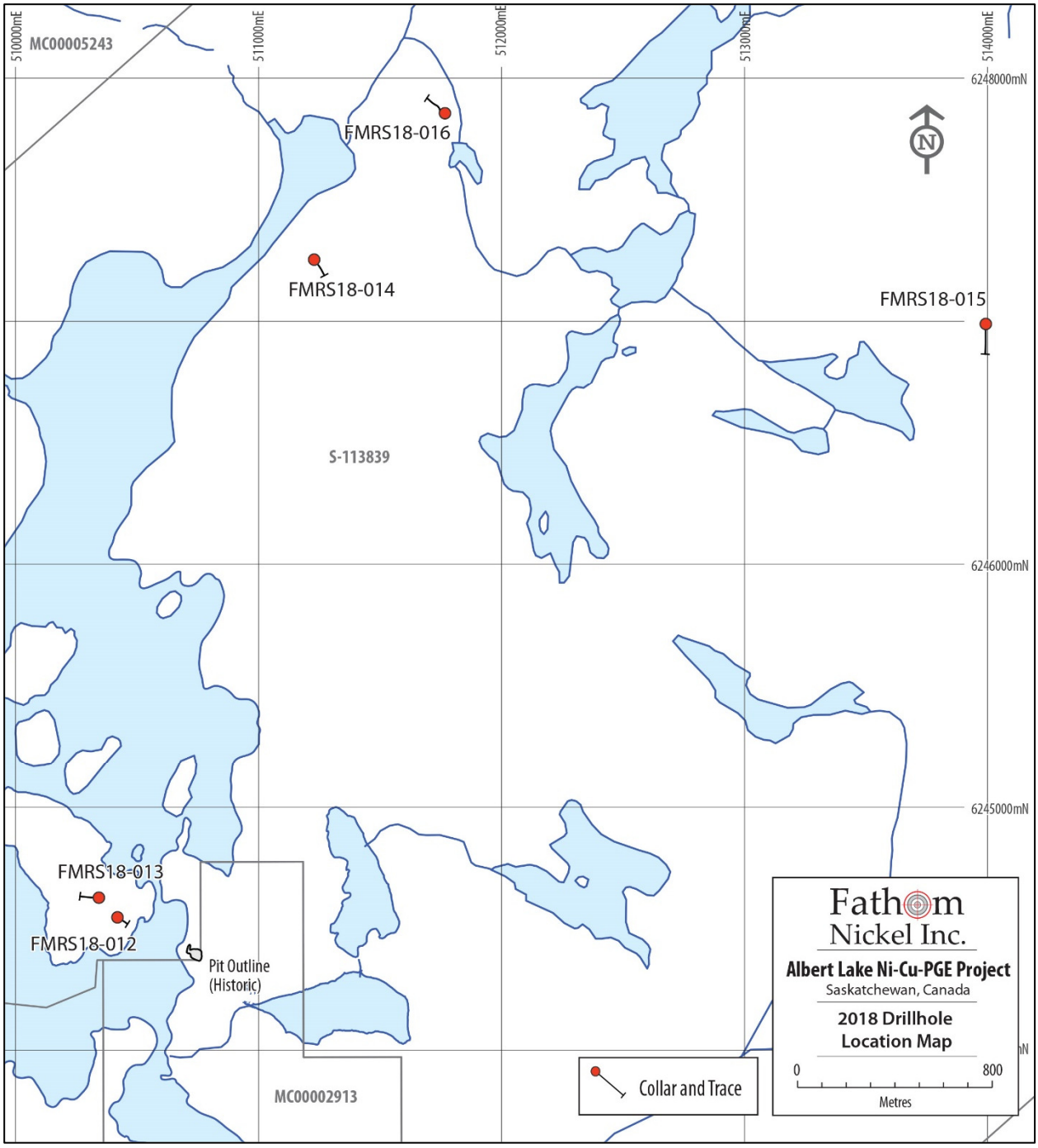

Figure 10-2 Fathom 2018 Drillhole Location Map

10.2 Drilling Methods

The 2016 drill program was carried out under contract with Larson diamond drilling of Martensville SK, the 2018 drill program was under contract with Bryson Drilling Ltd. of Archerwill, SK. Both drill programs were helicopter supported by Access Helicopters of Okotoks, AB.

Drillhole locations were pre-determined and located in the field using a combination of Brunton compass and hand-held GPS. Front sites were established along the desired azimuth of the proposed drillhole, and then a level drilling platform was constructed using timbers and planks. Once the platform was completed the helicopter moved the drill into position and once the drill was assembled, the geologist made sure the drill was on the proper azimuth then the drill was set to the desired dip for the drillhole. A Reflex NORTHFINDER APS drill mounted azimuth pointing system assured accuracy during the 2018 drill program. Both drill programs utilized a Reflex downhole orientation tool through the course of a drillhole to monitor and record change in dip and azimuth, and to record final dip and azimuth. Final drillhole collar coordinates for the 2016 drill program were determined by hand-held GPS; collar coordinates for the 2018 program were measured by an Arrow DGPS system. All collar positions are recorded in the UTM NAD83 Zone13 datum.

Upon the completion of each drillhole, all drill sites were cleaned and inspected to ensure site recovery procedures; as determined by the Exploration Permit, were met. To allow for future borehole surveys, the casing was left in the ground at certain locations during the 2016 drill program, all other casings were removed. All casing remains in ground for the 2018 drill program and casing caps were put in place for each drillhole.

Upon completion of logging and sampling the drill core, core boxes were stacked near to a pre-existing core farm established by previous operators and adjacent to the core shack utilized for the 2018 drill program. For both the 2016 and 2018 drill programs, all drill cores that were sampled; but not assayed, remain in an enclosed secure storage at JP Enterprises in La Ronge, SK. The permitted, all season, 14-person camp constructed for the 2018 drill program remains on site near to the historic Rottenstone Mine.

10.3 Core Logging Procedures

During both drill programs, the drill core logging and sampling took place at core logging facilities established near to the historic Rottenstone Mine.

The 2016 drill program; drill core was logged manually on a log sheet then entered into an Excel template. The 2018 drillhole data was entered into proprietary logging software and all results / data collected from both drilling programs has been added to Fathom's all-encompassing drillhole database that stores drilling data at the Rottenstone property 1954 to present. Core logging / geological data recorded from drilling programs included:

- Lithology; rock type definition.
- Alteration; noticeable alteration of ultramafic hosts and immediate wall rock.
- Structure; measurement of structure including faults, shears, foliation, relative to the core axis.
- Mineralization; occurrence of mineralization in ultramafic and non-ultramafic rock, type of mineralization, and sulphide content and texture of mineralization.

- For the 2018 drill program RQD measurements were taken.

Typically, drillholes drilled in the vicinity of the historic Rottenstone Mine, were drilled to encounter the Fraser Fault and then terminated in the footwall of the fault. All other drillholes drilled were terminated near to pre-determined termination points and were terminated by the project geologist if the drillhole was not in significant mineralization. The Fraser Fault was recognized in the 2003 drill program and it became apparent the Rottenstone deposit occurs in the hanging wall of the fault.

The geologist was also responsible for determining drill cores for sampling and properly marking on the drill cores / core boxes the intervals to be sampled. Sampling was typically controlled by the occurrence of sulphide mineralization; notably in ultramafic rock, or suspected ultramafic rock, and if sulphide mineralization occurred in abundance in non-ultramafic rock. Sample intervals were based on lithologic intervals and where mineralization starts and ends. Typically, sample intervals had a minimum / maximum sample length of 0.5m – 1.0m; however, exceptions were made to capture geological features of narrower widths. All drill cores were photographed dry and wet for future reference. See Figure 10-3 for an example of photographed core illustrating the drillhole depths marked on core box, and determined intervals for sampling, along with sample number, marked on core box and drill core.

Figure 10-3 Photograph Drillhole FMRS16-002; from 6.08-18.34m (wet)

10.4 Drill Core Storage

The 2016 drill core is stacked on blocks at the Rottenstone Mine site proximal to core racks housing drill cores drilled 2000-2003. The 1999 drill cores were stored at the mine site; however, were destroyed in a

forest fire 2002. The drill core from the 2008 program was moved from Missinipe to secure storage in La Ronge following the Fathom re-logging and sampling exercise 2015. The 2018 drill core was stacked on blocks and in core racks near to the 2018 core logging shack. Drill cores drilled prior to the 1999 drill program are not available. Figure 10-4 is a photograph of the core storage area at the Rottenstone Mine site.

Figure 10-4 Drill Core Storage (September 2016)

10.5 Drilling Results / Interpretation

The purpose of the 2016 drill program was fourfold (Fraser, 2016):

1. Test the continuation of the Rottenstone deposit south of the Rottenstone Mine.

2. Collect significant samples of the ultramafic host rock; but equally as important, to collect samples of the immediate country rock to determine lithological geochemistry of host rocks proximal to and distal to the Rottenstone deposit.

3. Collect a vertical section of the mine tailings to confirm and determine precious and base metal credits remaining in the historic mine tailings.

4. Collect sufficient mineralized material for a preliminary metallurgical test.

The 2016 Fathom drill program did confirm more Rottenstone-type mineralization remains in the Rottenstone Mine pit floor; albeit very little at the location of drillhole FMRS16-006. However, it was very encouraging to intersect in situ Rottenstone-type mineralization and high-grade Rottenstone-type mineralization comparable to reported historic production grades. The Rottenstone deposit remains open to the south as referenced by results in drillholes FMRS16-001, FMRS16-002 and possibly FMRS16-011. However, results suggest the Rottenstone deposit has possibly terminated in the northeast direction (FMRS16-004, 005), and possibly immediately southwest (FMRS16-007). However; results in drillholes FMRS16-003, FMRS16-008; specifically, the ultramafic rock in both drillholes, suggest the Rottenstone deposit remains open to the east and north respectively. Results recovered in the tailings suggests significant base metal and precious metal (PGE +Au) remains in the tailings at grades that may be worthy of recovery.

The interval 8.53m–10.64m in drillhole FMRS16-011 (Table 10-2) intersected what Fathom interprets to be Rottenstone-type ultramafic regolith. Drill core recovery through this interval was < 25%. The regolith occurs south of the Rottenstone Mine; within what was Rottenstone Lake prior to the extraction of the Rottenstone deposit and is now covered by historic mine waste and mine tailings. The nature of the ultramafic regolith; “incoherent rock material”, has proven to be very difficult to recover by drilling. However; the presence of “incoherent” pegmatite dyke along with serpentinized ultramafic rock and intervals of Rottenstone-type mineralization; albeit, of poor recovery and very broken in drillhole FMRS16-011, suggests the continuation of the Rottenstone deposit >40m south of the Rottenstone Mine. Historic drillhole RL00017 drilled on the lake 80.0m SW of the Rottenstone Mine in 2000, references 0.9m of poorly recovered ultramafic regolith intersected just prior to interpreted bedrock. The regolith is described as an altered, weakly mineralized ultramafic; with chalcopyrite mineralization noted, along with mineralized fragments of pegmatite dyke. This suggests the ultramafic host to the Rottenstone deposit continues >80m south of the Rottenstone Mine.

Figure 10-5 is a composite cross-section illustrating geo-referenced positions of the historic Rottenstone outcrop and pit, historic drillholes drilled 1960 – 1962; prior to deposit extraction, and new mineralization discovered 1999-2016 immediately south of the Rottenstone Mine. The plan map at top of section (Analytical Signal 2008 VTEM/MAG survey) illustrates the new discoveries relative to the Rottenstone Mine and suggests in which directions the mineralization remains open based on the Analytical Signal and drilling performed within the immediate surrounds of the Rottenstone Mine. The Rottenstone deposit remains open to the south and possibly to the north-northeast and east.

Table 10-2 Length Weighted Averages Significant Intersections Fathom 2016 Drilling

Drillhole	From (m)	To (m)	Width (m)*	Ni (%)	Cu (%)	Co (%)	Pt+Pd (g/t)
FMRS16-001	6.76	12.00	5.24	0.887	0.527		1.183
including	6.76	10.00	3.24	1.229	0.754	0.04	1.638
including	7.50	9.50	2.00	1.470	0.985	0.05	1.825
FMRS16-002	6.08	19.46	13.38	0.947	0.392		
including	6.08	10.77	4.69	1.127	0.449	0.04	1.569
including	14.73	19.46	4.73	1.129	0.485	0.04	1.678
including	14.73	16.00	1.27	2.556	0.431	0.07	3.231
FMRS16-003	8.63	16.70	8.07	0.140	0.058		
FMRS16-004	*No significant results*						
FMRS16-005	*No Significant results*						
FMRS16-006	11.65	13.00	1.35	0.466	0.252		
Including	***11.65***	***11.80***	***0.15***	***3.630***	***1.450***	***0.09***	***9.730***
FMRS16-007	*No Significant Results*						
FMRS16-008	9.95	10.15	0.20	0.143	0.005		0.205
FMRS16-008	24.37	25.38	1.01	0.097	0.003		0.215
FMRS16-008	52.24	53.09	0.85	0.070	0.009		0.075
FMRS16-009	**Mineralized UM, Bulk sample – material not assayed*						
FMRS16-010	**Mineralized UM, Bulk sample – material not assayed*						
FMRS16-011	**0.00	8.53	8.53	0.412	0.140	0.01	1.690
FMRS16-011	7.90	10.64	2.74	0.062	0.014		
FMRS16-011	****Grab sample (772117) mineralized UM @ approx. 10.00 m*			0.53	0.54	0.02	1.055

** Note the lengths reported are not true widths, but drillhole widths. There is insufficient data in the historic drillhole database to determine true widths.*

UM = ultramafic rock, host to the Rottenstone deposit.

**Drill core FMRS16-009, FMRS16-010 in storage Calgary, AB; drill core was intended for Metallurgical work; however, a different approach to Metallurgy was used – Section 13.0 this report*

***The interval 0 – 8.53m in FMRS16-011 in mine tailings.*

****The interval 8.53 – 10.64m (FMRS16-011) intersected an interpreted regolith. The grab sample collected (772117) of mineralized rubble within the interval, suggests Rottenstone-type mineralization.*

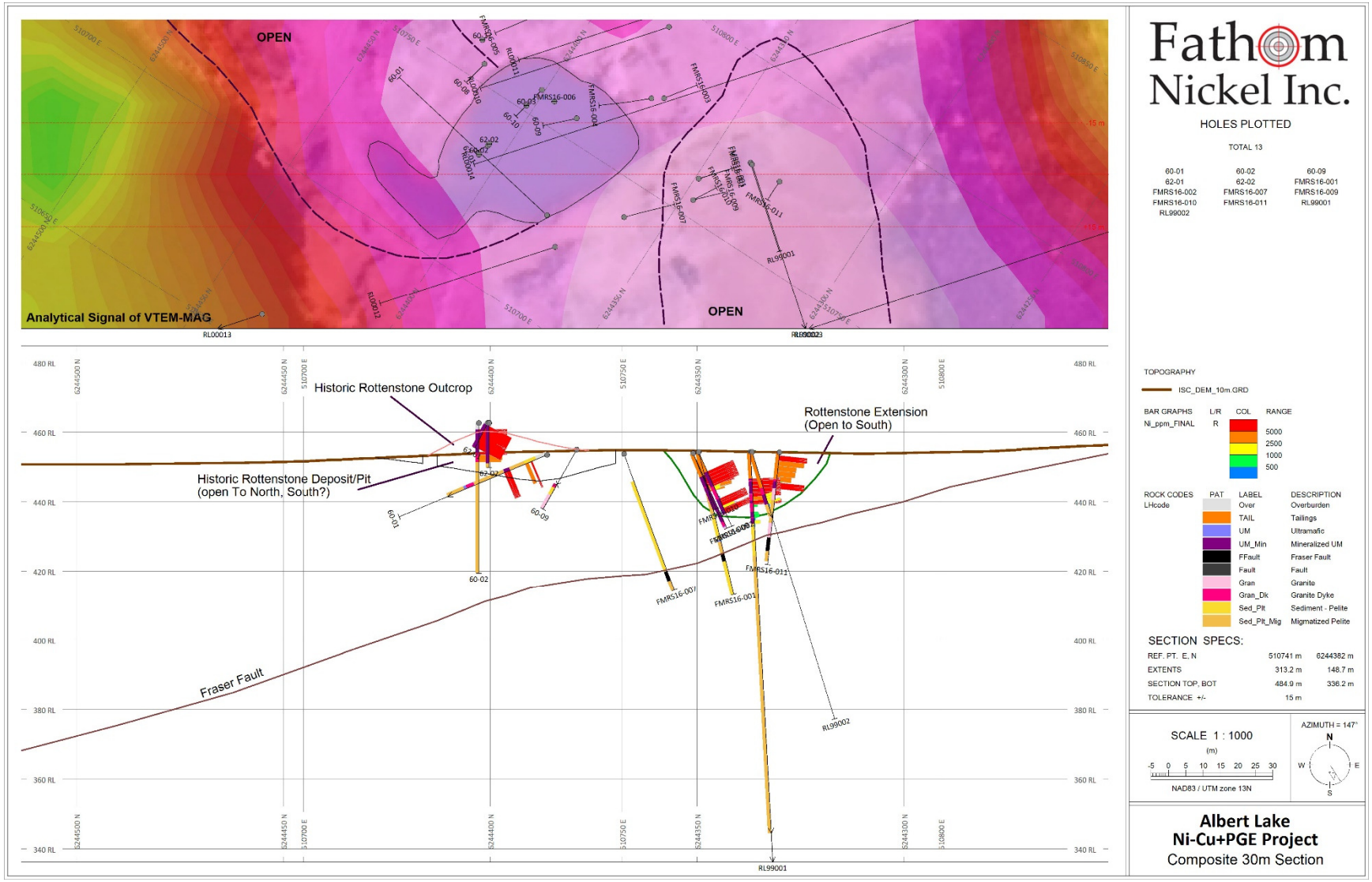

Figure 10-5 Composite Cross-section Rottenstone Mine Area

The purpose of the 2018 drill program (Fraser, 2019):

- Follow-up on a BHEM anomaly detected in the summer of 2018 in drillhole RL03030. Drillhole FMRS18-012 was designed for this purpose.
- Fathom reviewed internally, results of the 2008 VTEM survey flown over the Albert Lake property and highlighted discreet conductive features that Fathom interpreted to be analogous to an electromagnetic (EM) signature that may define Rottenstone-type mineralization. Drillholes FMRS18-013, FMRS18-014 and FMRS18-016 were designed to test three individual VTEM conductors.
- Drillhole FMRS18-015 was designed to test a B-horizon soil geochemical anomaly defined in the summer of 2018 that did not have any associated conductivity, but was coincident with a strong magnetic feature.

Drillhole FMRS18-012 (Figure 10-2) was designed to test an off-hole BHEM conductor occurring in historic drillhole RL03030 (Figure 9-1). A weak off-hole response was detected at approximately 185.0m downhole in RL03030. In RL03030 from 184.7m–190.0m ultramafic rock occurs within the host metapelite rocks. The off-hole response was modelled and produced a flat-lying plate slightly north and east of the trace of drillhole RL03030 (Figure 10-6). It was anticipated this weak off-hole conductive response was possibly the result of net-textured to semi-massive sulphides occurring within and along the ultramafic horizon occurring at 184.7m–190.0m in drillhole RL03030.

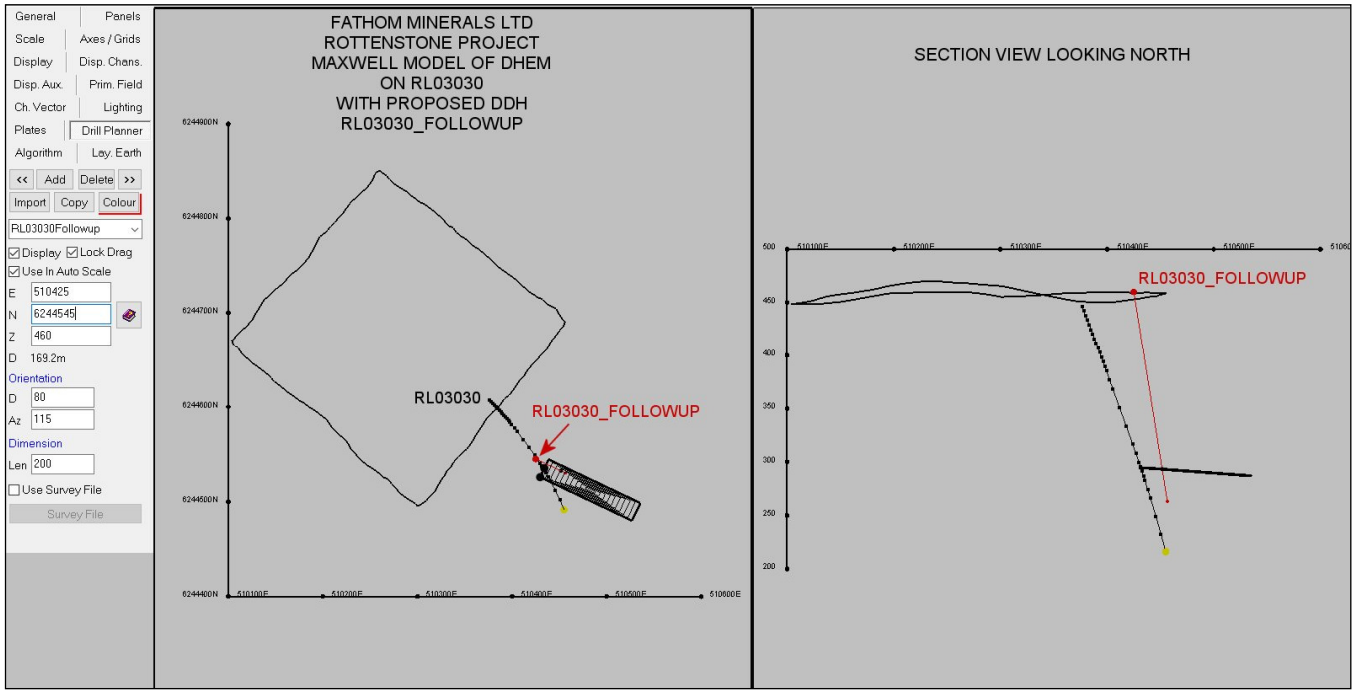

Figure 10-6 Position of BHEM Off-hole Conductor in Drillhole RL03030

Drillhole FMRS18-012 (Figure 10-2) was positioned and drilled to test the weak conductive plate depicted in Figure 10-6 near to drillhole RL03030. It remains unclear if drillhole FMRS18-012 intersected the intended target. There was no indication of ultramafic rock at the intended depth, nor any indication of what caused the off hole conductive response in drillhole RL03030.

In summary, FMRS18-012 collared into and remained in metapelite rock to 125.0m. Ultramafic horizons were intersected at 23.0m–23.4m, 26.4m–27.1m. The Fraser Fault was intersected at 125.0m–129.0m and the drillhole continued in metapelite with intermittent granitic dykes through to the end of the drillhole at 251.0m. Ultramafic rock was intersected at 153.52m–153.74m. At the depth of the modelled plate (Figure 10-6); approximately 173.0m–181.0m, a pegmatitic–granitic dyke occurs at 173.0m–175.3m. Immediately following the pegmatitic–granitic dyke at 175.3m–178.5m, elevated sulphides and anomalous Co, Cr, Cu and Ni occur in metapelite rock suggesting the possible occurrence of an ultramafic source proximal to the drillhole. The pegmatitic granitic dyke is possibly analogous to the pegmatite dykes that have been recorded occurring throughout the Rottenstone deposit and have been interpreted to be the result of intense heat and melting of the host metapelite country rock due to an ultramafic presence (Hulbert; personal communication). Figure 10-7 is a sectional view of FMRS18-012 illustrating the spatial relationship to drillhole RL03030.

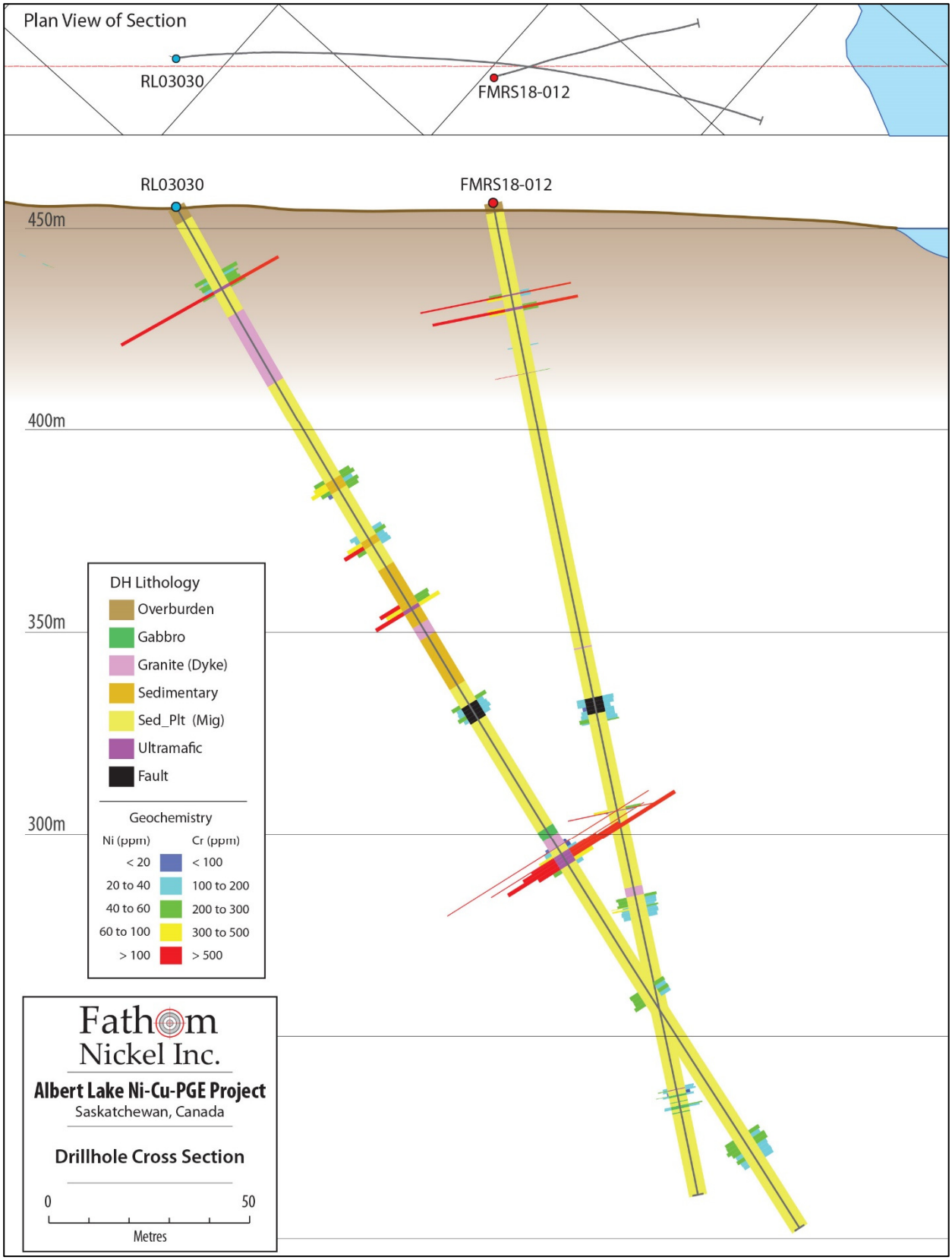

Figure 10-7 Interpretive X-Section RL03030 and FMRS18-012

Drillhole FMRS18-013:

Drillhole FMRS18-013 was designed to target a strong, one-line VTEM conductor; conductor VTEM-5, occurring on the Big Island (Figure 9-3). The Big Island in the area of drillholes MR08-05, RL03030 and RL03031 is geochemically anomalous as defined by the 2018 B-horizon soil geochemistry program (Figures 9-5). Furthermore, Fathom's interpretation has defined multiple ultramafic horizons occurring within the hanging wall and footwall of the Fraser Fault within drillholes collared on the Big Island.

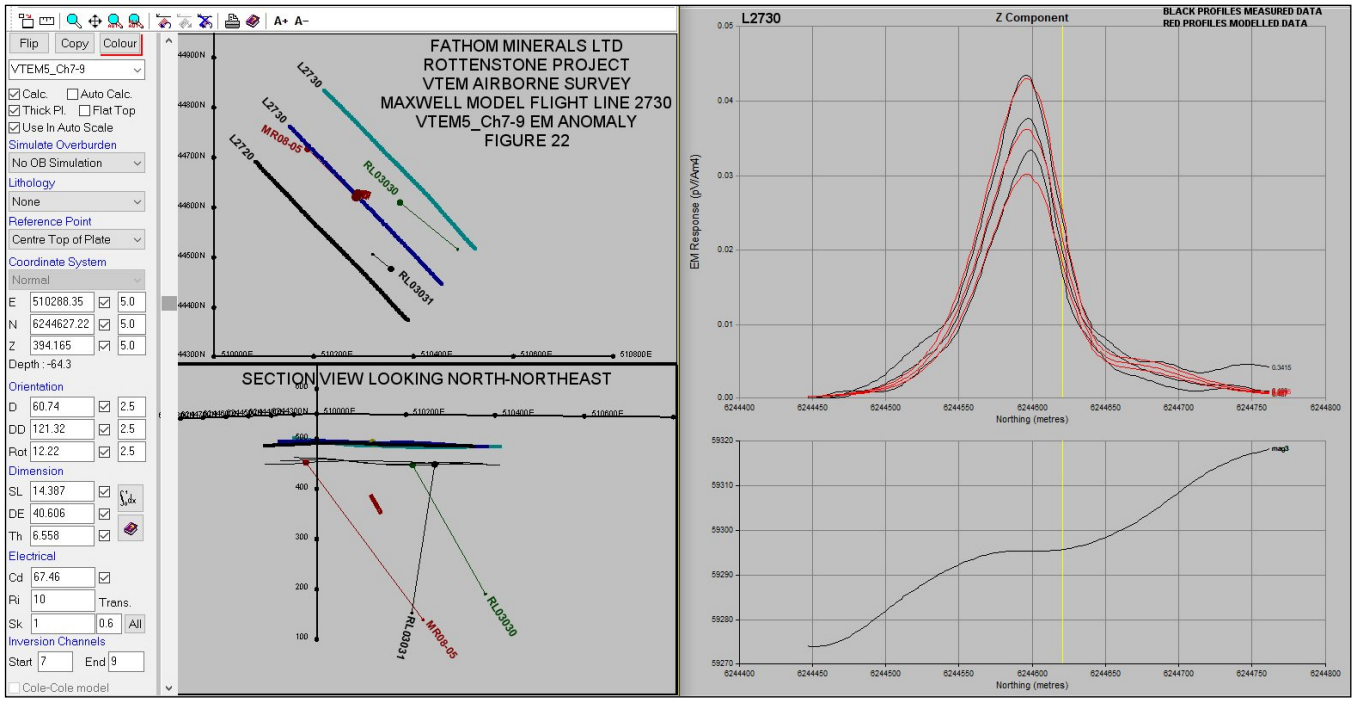

Figure 10-8 VTEM Conductor / Maxwell Model VTEM-5, Flight-line 2730

Figure 10-8 illustrates the position of conductor VTEM-5 on flight-line 2730 and the subsequent Maxwell Plate Model relative to drillholes MR08-05, RL03030 and RL03031. Drillhole FMRS18-013 was designed and drilled oblique to the section view (Figure 10-8) and did not define the conductor illustrated. The drillhole collared into metapelites and remained in metapelite with intermittent sections of interpreted gabbro, possible ultramafic and granite through to the end of drillhole at 152.0m. The Fraser Fault was not intersected in the drillhole and this is interpreted to be a function of the drillhole azimuth drilling semi-parallel to the dip of the Fraser Fault.

Drillhole FMRS18-014:

Drillhole FMRS18-014 was drilled in an area referred to by Fathom as the North Dome area. The North Dome area derives its name from a concentric Mag feature that hosts anomalous gravity features, surface and airborne defined TEM and VTEM conductors that are in turn coincident with surface geochemistry anomalies defined in 2018 soil geochemistry program. Drillhole FMRS18-014 was designed and targeted the strong conductor VTEM-6A (Figure 9-3) from which the Maxwell Plate Model suggests a near surface (outcropping?) north plunging conductive feature approximately 330 meter in length, 28 meter in width

and 17 meters thick (Figure 10-9). Modelling of this feature suggests the drillhole RL02026 drilled in 2002 missed this conductive feature.

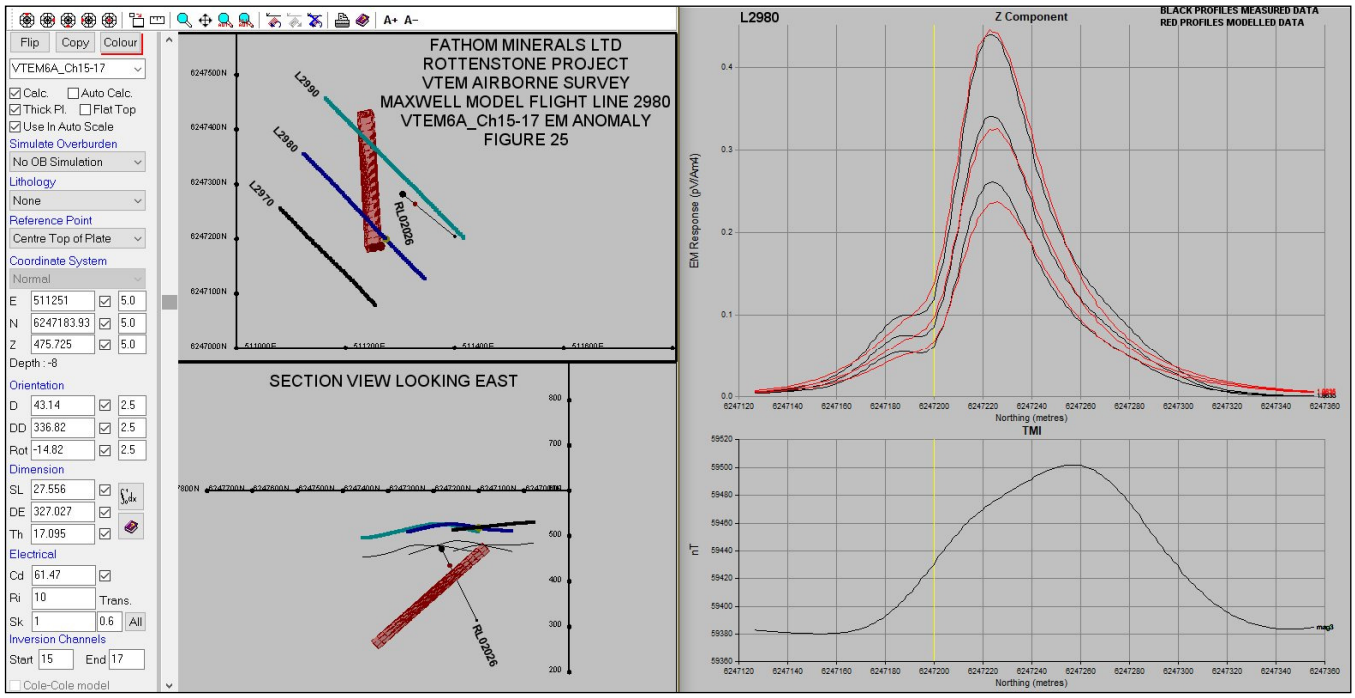

Figure 10-9 VTEM Conductor / Maxwell Model VTEM-6A, Flight-line 2980

Drillhole FMRS18-014 targeted the southern end of conductor VTEM-6A and intersected the following:

0.00-0.55m; overburden; 0.55m-12.77m sulphidic iron formation; 12.77m-49.95m granite with local pegmatitic granite; 49.95m-55.72m sulphidic iron formation; 55.72m-62.22m granite; 62.22m-65.15m mafic – ultramafic unit; 65.15m-108.66m granite with intermittent gabbro and possible ultramafic units intruding granite; 108.66m-110.64m ultramafic unit; 110.64m-143.20m granite; 143.20m-152.00m sulphidic iron formation; end of drillhole.

Drillhole FMRS18-015:

Drillhole FMRS18-015 was designed to test the NeedAName B-horizon surface geochemical anomaly defined in 2018. The B-horizon soil geochemical anomaly is comprised of three individual Ni in soil sample results consisting of 35.7ppm, 39.4ppm and 82.4ppm. The Ni in soil anomaly is supported by anomalous Co, Cr, Mg and one highly anomalous Cu result at the three soil sample locations. The high, Ni, Cr, Mg and Co supports ultramafic rock in the area. The B-horizon multiple-element soil anomaly is coincident with a strong magnetic feature (Figure 10-10) as determined by the 2008 VTEM survey. On a regional scale this magnetic feature has a fold-like shape.

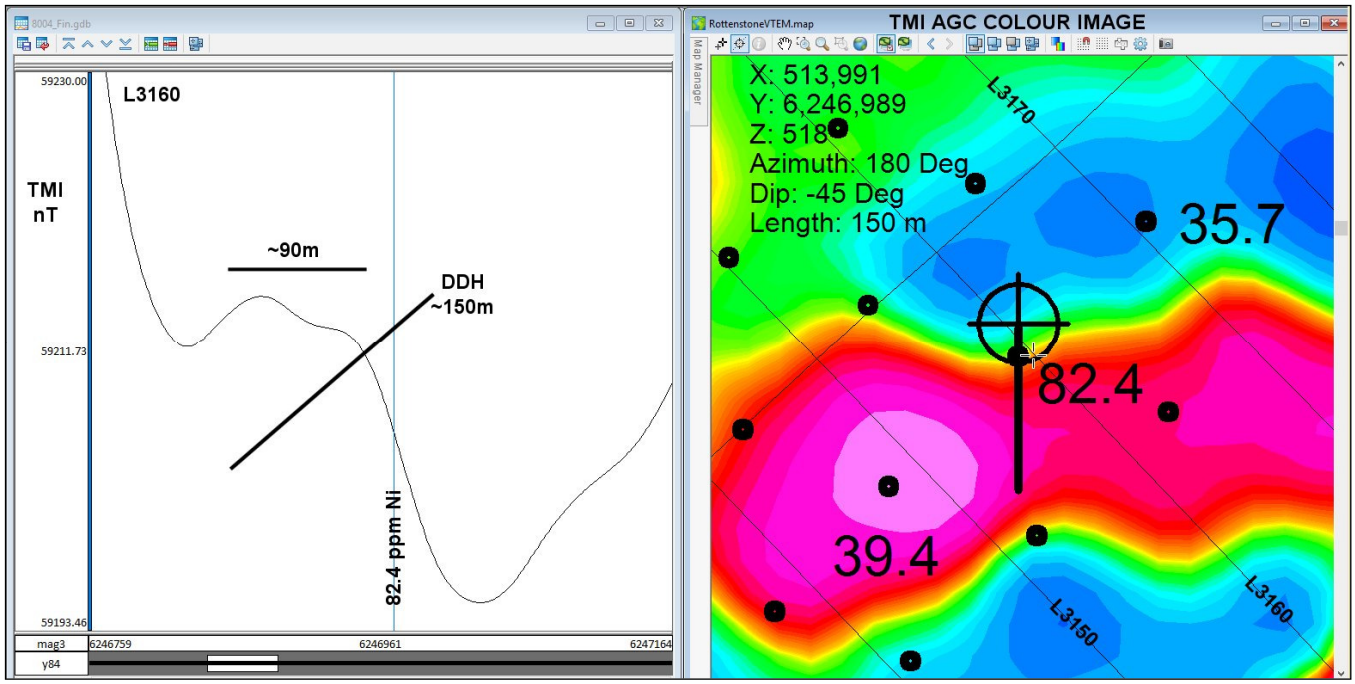

Figure 10-10 NeedAName Coincident Ni-in soil MAG Feature (Mag profile on left, looking north – south; Ni-in soil contour on right)

Drillhole FMRS18-015 intersected the following:

0.00-0.59m overburden; 0.59m-185.00m granite, end of drillhole.

Of the six representative samples taken from drillhole FMRS18-015, one sample was sent for analysis. Analytical results returned anomalous Co, Cr, Fe, Mg and Ni values and suggests a possible mafic component or mafic protolith to the interpreted granite unit.

Drillhole FMRS18-016:

Drillhole FMRS18-016 targeted another VTEM defined conductor at the north end of the North Dome feature. VTEM-8 (Figure 9-3) is a very strong, narrow, north-northeast plunging conductor detected over three flight lines that produced a Maxwell Plate Model >400 meters in strike, approximately 12 meters in width with a thickness of 27.5 meters. Depth to top of conductor was interpreted to be 42 meters. FMRS18-016 was drilled in an east-west direction and designed to intersect the conductor in the approximate middle of the Maxwell Plate Model (Figure 10-11). The drillhole intersected the following:

0.00-1.30m overburden; 1.30m-9.19m granite to pegmatitic granite containing thin ultramafic sill(?); 9.19m-12.04m sulphidic iron formation; 12.04m-18.00m pegmatitic granite; 18.00m-86.19m granite; 86.19m-88.50m ultramafic unit in sharp contact with sulphidic iron formation; 88.50m-99.22m sulphidic iron formation with intermittent sections of granite, pegmatitic granite; 99.22m-103.85m gabbro with pegmatitic granite sections; 103.85m-124.33m sulphidic iron formation containing granite – pegmatitic granite; 124.33m-149.94m granite; 149.94m-156.30m sulphidic iron formation; 156.30m-182.00m granite, end of drillhole.

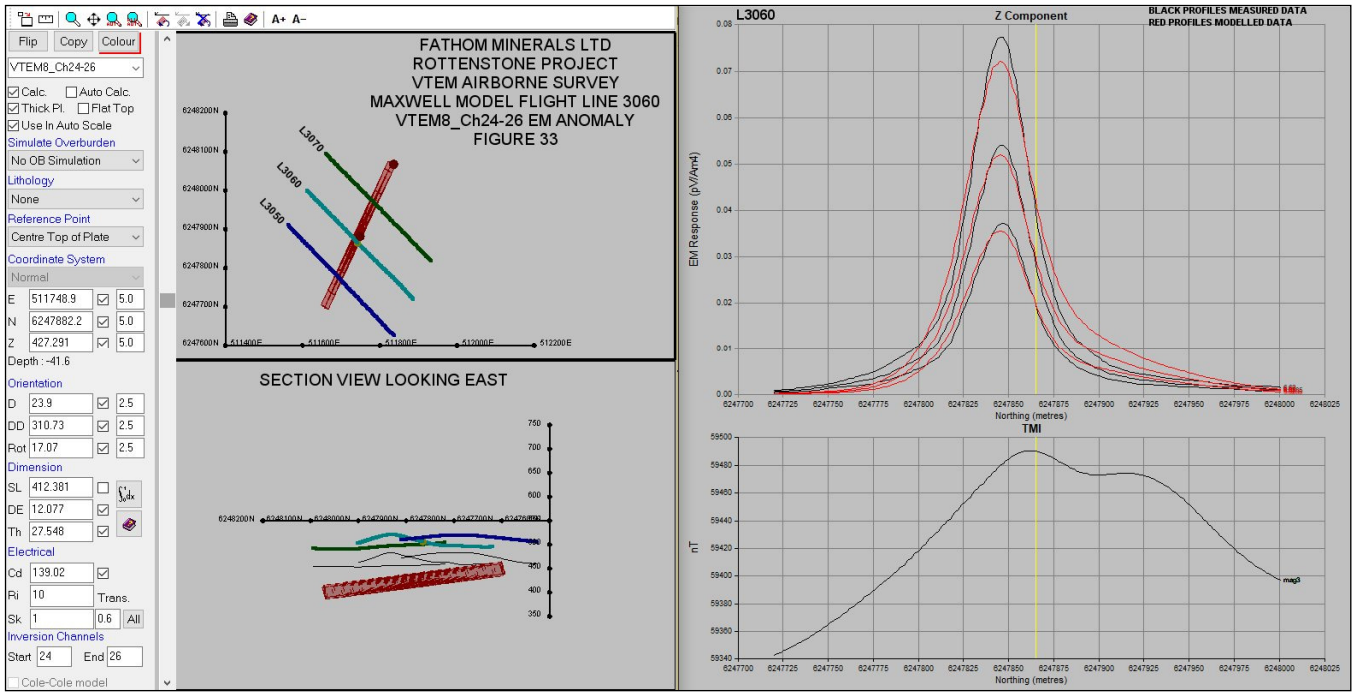

Figure 10-11 VTEM-8 Conductor Maxwell Plate Model Flight-line 3060

The following summarizes Fathom drilling results 2016, 2018:

- Drilling programs have recognized additional ultramafic sills within the immediate surrounds of the historic Rottenstone Mine. Fathom interprets these ultramafic sills as “pathways” in which the Rottenstone deposit developed; but also, as possible links to the source of Rottenstone-type mineralization.

- 2016 drilling results suggest the Rottenstone deposit was not completely exploited during the mid-1960’s mining operation and the extent of the deposit remains open to the south and possibly to the north-northeast.2018 drilling was not successful in identifying additional Rottenstone-type mineralization. However; the cause of the off-hole BHEM anomaly identified in historic drillhole RL03030 has not been resolved.

- 2018 drilling also suggests 2018 VTEM have a very strong probability of being the result of highly conductive sulphidic iron formation. The risk is many of these conductors are false conductors; i.e., not caused by magmatic Ni-Cu + PGE mineralization and a better system of scrutiny inclusive of ground proofing of conductive source is required.

- It is important to understand; although historically, drillholes have targeted well developed conductors and these conductors have proved to be the result of sulphidic iron formation, there are ample examples within the Fathom drillhole database where drillholes have intersected ultramafic rock in direct contact with sulphidic iron formation, and ultramafic rock has been intersected multiple meters below some sulphidic iron formations.

- Drilling has intersected mafic bodies up to 3km north of the Rottenstone Mine. These mafic bodies; interpreted to be gabbro's, are weakly anomalous in the pathfinder elements associated with Rottenstone-type mineralization.

11.0 Sample Preparation, Analyses and Security

11.1 Introduction

Analyses of drill core from 1999-2008 used a variety of methodologies and various assaying facilities. With the exception of the 2002 and 2008 drill programs (BHP Billiton, Mantis) there was not a QAQC program in place. The various Assessment Reports detailing these drill programs do speak of logging, sampling, assaying procedures; but there is little mention if any, of protocols in place regarding the transport and security to the various labs cited below. Laboratories and assay types include:

- 1999; ACME Labs, combination of 30 element ICP, Ultra/ICP, Fire Assay and ICP-ES. Acme is now Bureau Veritas, a SCC accredited laboratory.

- 1999; Activation Labs, combination of NiS Fire Assay / INAA finish, INAA on select elements. Activation Labs is now Actlabs, a SCC accredited laboratory.

- 2000; Activation Labs, combination of Fire Assay, Geochem, and INAA assay for select elements.

- 2002; Chemex Labs, a BHP Billiton proprietary procedure involving FA ICPMS trace, and a 32 element ICP-AES. Chemex is now ALS, a SCC accredited laboratory.

- 2003; Activation Labs, combination of INAA, Fire Assay, Fire Assay ICP-OES, and INFRARED on select elements.

- 2008; ALS Minerals, multi-acid digestion and ME-ICP61.

All this assay data 1999-2008 and assay results from 1954-1962 (where available) has been captured by Fathom in an all-encompassing Assay database; Access format. All laboratories mentioned above operate, operated in accordance with Standard Council Canada (SCC) ISO/IEC 17025 general requirements and all labs are independent of Fathom Nickel.

11.2 Fathom 2015-2018 Assaying Historic Drill Core Samples and Historic Drill Core

The 1,007 historic drill core samples acquired by Fathom; had been previously sampled and split by core saw. The individual samples were in secured; stapled sample bags, complete with sample tags enclosed (for the most part sample #'s still readable). The individual samples were in individual rice bags containing approximately 15 samples each. The rice bags were labelled as to the contents and secured by packing tape. All samples prior to the acquisition were in a secure Uravan warehouse in Calgary, AB. Fathom was able to access records, drill logs, and assay sample logs regarding the 1,007 historic drill core samples.

Fathom selected 931 (inclusive of Standards supplied by Fathom) samples from the historic 2003 drill core samples and from drill cores drilled in 2008 for analyses. The selected samples were recorded on a Fathom Assay Sample Log, arranged and placed into rice bags for shipping and were delivered by Fathom via personal truck to TSL Laboratories (TSL) in Saskatoon; a Standards Council of Canada Accredited Laboratory (Scope of Accreditation 538) and independent of Fathom. Fathom recorded all samples selected for assay and utilized a TSL supplied shipping form to relay assay instructions. Prior to analyses

Fathom and TSL checked to ensure samples sent to laboratory matched samples received. Once cleared for analyses, individual samples were:

- Crush entire sample to 70% passing 10 mesh (1.70 mm); riffle split and pulverized to 250g – 95% passing 150 mesh (0.106 mm).

- Assay; Multi-acid digestion, followed by multi-element (41) ICP-MS analyses; note Pd and Pt were not assayed for.

The Standard utilized by Fathom was TDB-1; a recognized Standard prepared and certified in cooperation with the Analytical Method Development Section of the Mineral Deposits Division of the Geological Survey of Canada. TSL was instructed to run a Standard after every 50th sample prepped for analysis. Along with the Standard analyses, Fathom included some field duplicates in the 2008 sample stream, and TSL performed laboratory repeat assays, along with their own internal Standards on all drill core samples delivered to the laboratory.

During the re-logging of 2008 drill core, Fathom personnel marked sections of drill core for sampling and analyses. Selected samples were split by core saw. Samples were then collected as per marked sample interval, and the sample interval(s) were recorded on a Fathom Assay Sample Log. Half of the sample split was placed in a marked sample bag containing the predetermined sample tag number, other half of sample remained in core box. Samples were then placed in sequential order, in a labelled rice bag containing up to 15 samples. Rice bags were recorded with respect to contained samples and sealed with packing tape. All rice bags remained in secured storage at the facility being used prior to shipment to TSL for analyses. All samples were transported from Missinipe and delivered to TSL by Fathom personal truck. The same checks, shipping forms and assay procedure discussed above was used for the 2008 drill cores.

11.3 Fathom 2016 and 2018 Drilling Programs

For consistency Fathom utilized the same processes and protocol discussed above for the 2016 and 2018 drilling programs. A rock saw was used to split selected intervals for sampling and assaying. The Standard (TDB-1) was inserted into the sampling stream with a predetermined sample number (tag) approximately every 25th sample. Fathom field duplicates were taken approximately every 50th sample within an individual drillhole. As above, individual samples were placed in rice bags; fifteen samples per rice bag, and secured rice bags were shipped by helicopter from the Rottenstone property and delivered to TSL Laboratories by Fathom personnel.

In all, 600 drill core samples (inclusive of Fathom supplied Standards, Field Duplicates and blanks) were collected, from the 2016 and 2018 drill programs. However, not all samples were sent to TSL for analyses. Fathom prioritized samples for analysis from both drill programs. A summary of the number of samples and the assay procedure used is as follows.

From the 2016 drill program:

- 49 samples of mineralized to well mineralized ultramafic rock was assayed for Ni, Cu, using an Ore Grade – AA Finish; whilst Pd, Pt and Au were assayed using a Fire Assay with ICP Finish.

- 267 samples; inclusive of the 49 Ore Grade samples and six sludge tailings samples, were assayed by multi-acid digestion with ICP-MS finish similar to the 2003 and 2008 drill cores discussed above.

- The six sludge samples of Rottenstone Mine tailings were also subjected to a Specific Gravity determination.

- TSL internal Standards and lab repeats were part of the Final Assay Certificates received.

- 171 drill core samples collected, but not assayed are in secure storage; JP Enterprise's, La Ronge SK.

From the 2018 drill program:

- 202 samples were collected (inclusive of Fathom supplied standards, field duplicates and blanks).

- Of the 202 samples, 101 were submitted to TSL Laboratories for multi-element, multi-acid digestion with ICP-MS finish analysis consistent with the 2016 drill program and assaying of historic drill core samples and historic drill core discussed above.

- The remaining 101 drill core samples are in safe storage; JP Enterprises, La Ronge SK.

11.4 Fathom 2018 Rock Sampling

Fathom with the help of TerraLogic Exploration Inc., collected grab rock samples from outcrops with a rock hammer. In field notebooks, samples were assigned a geostation with spatial locations and recorded a variety of characteristics which include: major rock type, texture, grain size, mineralogy, mineralization, alteration and structure measurements. All structural measurements were done using the right-hand rule. Daily, all sample notes were entered into a Rottenstone Microsoft Access database. Samples were then laid out and compared to entries in the database to avoid mistakes or discrepancies. The rock samples were pack and shipped using the same process and protocols from the above mentioned 2016 and 2018 drilling programs.

A total of 13 rock samples submitted to TSL for multi-element, multi-acid digestion with ICP-MS finish analysis consistent with the 2016 drill program and assaying of historic drill core samples and historic drill core discussed above.

No QAQC samples were submitted with the rock sample shipment. TSL performed their own internal standards and blanks on all rock samples delivered to the laboratory.

11.5 Fathom 2018 Soil Program

Fathom with the help of TerraLogic Exploration Inc., conducted the 2018 soil sampling traverses along specific, predetermined lines, navigated on the ground using a handheld GPS and Da Silva compass. Soil samples were collected at 100-meter intervals with two localized grids around the historical mine site at 50-meter intervals. Where possible, samples were collected from the B-horizon of pits dug using a hand-held Dutch Auger. If the B-horizon could not be reached or was not present a sample was collected from the mineral soil layer below surface organic material. Where there was significant thicknesses of organic material and mineral soil could not be accessed no sample was collected. Each soil sample collected was entered into a digital data collection device and daily uploaded to Rottenstone geochemical database. Characteristics of the soil sample sites were taken for each sample and include: sample size, quality, depth, soil horizon, slope of the sample site, colour and notes. Photos were taken of each soil sample. Field duplicate samples were collected at one per every other grid or approximately every 25th sample. A soil

blank was inserted randomly into the sample stream. The soil samples were pack and shipped using the same process and protocols from the above mentioned 2016 and 2018 drilling programs.

A total of 1479 soil samples were submitted to TSL. Prior to analyses Fathom and TSL checked to ensure samples sent to laboratory matched samples received. Once cleared for analyses, individual samples were:

- Dried, screened entire sample passing 80 mesh (0.18 mm)

- Aqua regia digestion; a 30 g sample digested with 3:1 HCl-HNO_3 at 95^{o}C for 1 hour and diluted with DI H_2O; followed by multi-element (37) ICP-MS analyses; note Pd and Pt were not assayed.

The standards utilized by Fathom were TILL-1 and LKSD-4; recognized standards prepared and provisionally certified in cooperation the Geological Survey of Canada and CANMET. TSL was instructed to run one of these standards after every 75th sample prepped for analysis. Along with the standard analyses, TSL performed laboratory repeat assays, along with their own internal standards and blanks on all soil samples delivered to the laboratory.

The QP's are of the opinion the sampling methodology, sample preparation, transport of samples to the lab and analytical processes utilized 2016 – 2018 meet industry standards and are adequate. Results of Fathom QAQC program in place are well documented. The QP's have relied upon documentation provided by Fathom and consider the QAQC protocols to be acceptable and in line with standard industry practice.

12.0 Data Verification

The co-Authors, Stephen Kenwood, P.Geo. and Alanna Ramsay, P.Geo. have completed several levels of data verification including:

- Review and QAQC of the Fathom database inclusive of drilling and soil sampling.
- Review of assay certificates and confirmation the original lab assay certificates conform to values within the Fathom database.

Although quality control measures used in historic work on the Albert Lake project are not known to the Authors, the methodologies and measures undertaken more recently by Fathom are described above. Additionally, in 2016 to early 2018 Moose Mountain Technical Services performed several levels of verification including QAQC of the Fathom drillhole database, the collection of field duplicate samples, and checked previous operators' standards and duplicate sample data (Morris, Galbraith, Meintjes, 2018). The Authors have reviewed this data and believes it to be reliable.

The Authors have reviewed all of the assay certificates from the 2018 exploration work undertaken on the Rottenstone property and is of the opinion that the data presented in this report can be relied upon and is more than adequate for the purposes used in this report. Author Kenwood conducted a site visit to the Albert Lake property on April 27, 2021, accompanied by Ian Fraser, P.Geo., Vice President of Exploration for Fathom Nickel Inc. On the day of the property visit, snow and ice still covered most of the property but the area around the exploration camp was mostly free of snow. Selected drill hole casings from the 2016 drilling near the camp were located and positions were verified using a handheld GPS; results of verification of collar locations are found in Table 12-1 and are consistent with collar locations found in the Fathom database.

Table 12-1: Verification of selected drillhole collar locations (NAD 83)

	Original		Verification	
HoleID	**East_Final (m)**	**North_Final (m)**	**East (m)**	**North (m)**
FMRS16-001	510761.0	6244349.0	510760.0	6244350.0
FMRS16-002	510761.0	6244349.0	510760.0	6244350.0
FMRS16-003	510777.0	6244368.0	510777.0	6244371.0
FMRS16-004	510773.0	6244373.0	510774.0	6244373.0
FMRS16-005	510784.0	6244408.0	510785.0	6244409.0
FMRS16-008	510773.0	6244457.0	510774.0	6244457.0

Drill core from the 2016 and 2018 drill programs was observed at the various on-site core storage areas. A total of eight representative samples from mineralized and unmineralized intervals were collected for independent verification check assays and are compiled in Table 12-2. A PGE reference standard sample, TDB-1, was also included for verification.

The samples were bagged, sealed on site, and delivered to Activation Laboratories Ltd. ("ActLabs") in Kamloops, British Columbia. ActLabs is accredited to international quality standards through the ISO/IEC

17025 and ISO 9001 specifications. The samples were assayed using multi-element ICP plus over-limits for nickel, copper, cobalt, and silver with fire assay for gold, platinum, and palladium.

Results from the verification samples were received on May 7, 2021 results are portrayed in Table 12-2. Overall, the verification results conform to the original assay results. Palladium and platinum; like gold, can be difficult to replicate due to the "nugget effect" very common with precious metals.

Table 12-2: Verification Samples from selected Drillholes

HoleID	From (m)	To (m)	Length (m)	Fathom Lithocode	SampleID	Ni (ppm)	Cu (ppm)	Co (ppm)	Pd (ppb)	Pt (ppb)
FMRS16-001	6.76	7.50	0.74	UM_Min	771227	9,100.0	4,100.0	308.6	870.0	540.0
Check					123671	9350	4110	340	414	258
FMRS16-001	8.50	9.50	1.00	UM_Min	771229	13,900.0	10,100.0	454.8	1,380.0	330.0
Check					123672	12600	9870	430	1130	236
FMRS16-003	10.24	11.00	0.76	UM	771299	1,761.2	658.9	61.0	NS	NS
Check					123673	1390	963	51		
FMRS16-003	11.00	11.50	0.50	UM	771300	5,451.1	4,225.3	260.1	NS	NS
Check					123674	3730	1040	133		
FMRS18-012	26.00	26.40	0.40	Sed_Plt	772310	79.0	140.5	20.8	NS	NS
Check					123675	89	177	25		
FMRS18-012	26.40	27.10	0.70	UM	772311	331.2	10.4	49.4	NS	NS
Check					123676	313	14	49		
FMRS18-012	27.10	27.60	0.50	Sed_Plt	772312	73.6	88.1	22.9	NS	NS
Check					123677	66	87	25		
FMRS18-014	51.00	52.00	1.00	S_Fe_Fm	772277	68.7	49.5	22.5	NS	NS
Check					123678	64	54	23		
Standard					TDB-1	92.0	323.0	47.0	22.4	5.8
Check					123679	83	336	32	25	<5

UM = Ultramafic rock - unmineralized

UM_Min = Mineralized Ultramafic - the Rottenstone Ore Body / Deposit

Sed_Pl = Metapelite

S_Fe_Fm = Sulphidic Iron Formation

13.0 Mineral Processing and Metallurgical Testing (Warkentin, 2017)

13.1 Introduction

The Rottenstone Ni-Cu-PGE mineralization occurs as net textured to semi-massive sulphide (40-60% sulphides) hosted in an ultramafic sill.

Recent exploration has included a drill program conducted early in 2016. Figure 13-1 illustrates the distribution of the 11 drillholes drilled in that program, relative to the historical Rottenstone Mine.

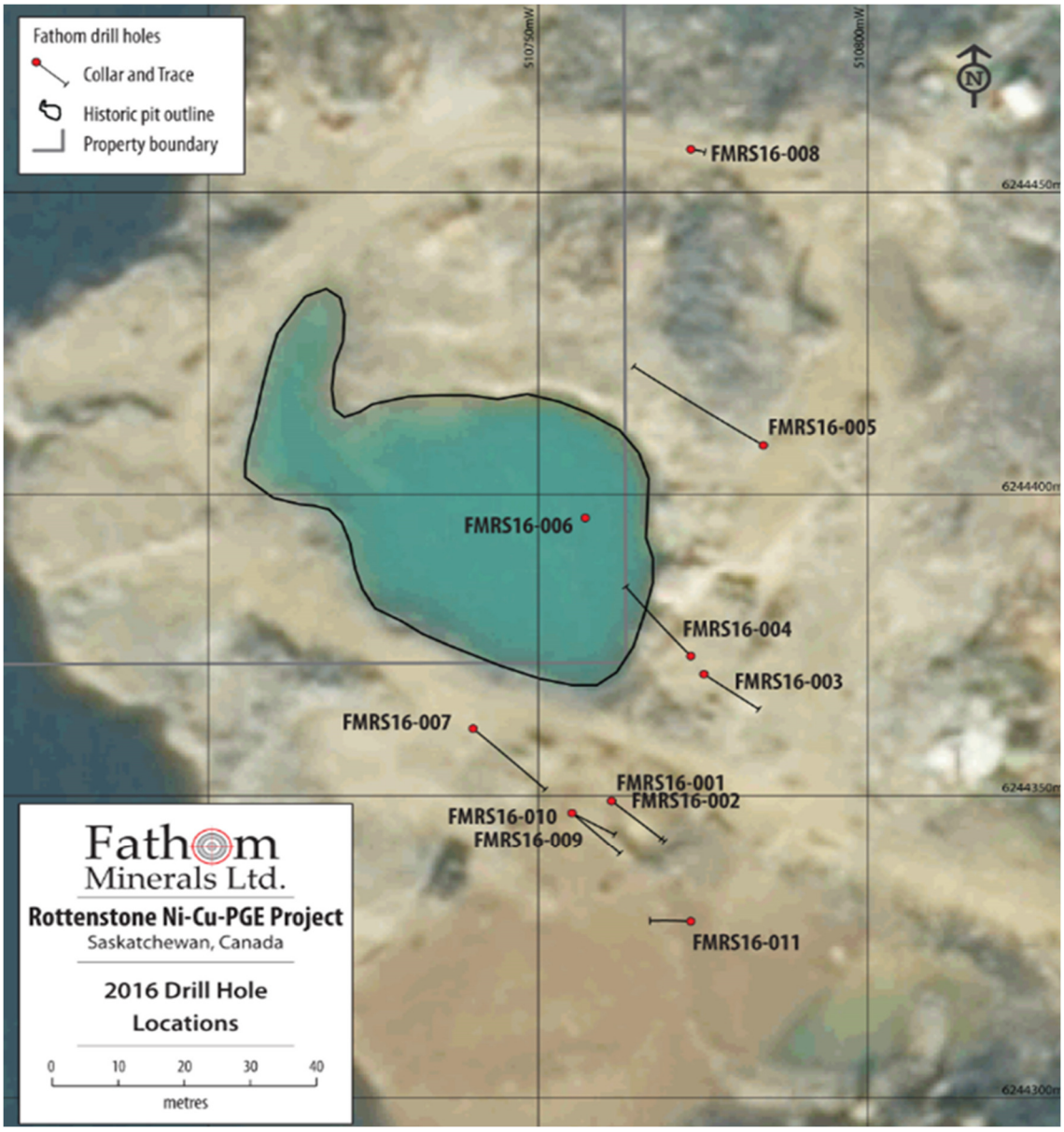

Figure 13-1 2016 Drillholes relative to the historical mining footprint

Several of the holes drilled in 2016 intersected significant mineralized zones in ultramafic rock. Assay results have been provided from drillholes FMRS16-001 and -002, which did not reach the historically reported mining grades, but did show significant widths of near surface 'ore-grade' Ni, Cu, Co, Pt & Pd values. A total of 13 kg of split core samples of drillhole FMRS16-002 was retained for metallurgical testing, which corresponds with the drill core samples received by Kemetco for testing. The core assay results provided by Fathom are compiled in Table 13-1 for the mineralized ultramafic zones intersected.

In addition, 52 kg and 35 kg samples are available from the drillholes FMRS16-009 and FMRS-010, respectively. These two drillholes also interested the Rottenstone-type mineralization, but no assays are available at this time.

Table 13-1 Mineralized intersections from drillholes FMRS16-001 and -002

Hole ID	From	To	Length	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (%)	Ni (ppm)	Pd (ppb)	Pt (ppb)	S (%)
FMRS16-001	6.76	7.50	0.74	308.6	1150	4100	11.6	9100	870	540	3.1
FMRS16-001	7.50	8.50	1.00	519.9	1506	9600	16.0	15500	1580	360	6.2
FMRS16-001	8.50	9.50	1.00	454.8	954	10100	14.9	13900	1380	330	6.7
FMRS16-001	9.50	10.00	0.50	250	1743	3400	11.3	7400	410	820	3.1
FMRS16-001	10.00	10.90	0.90	154.9	2490	1300	8.79	4400	340	210	1.7
FMRS16-001	10.90	11.16	0.26	167.7	1378	4400	7.62	4300	440	640	1.8
FMRS16-001	11.28	11.78	0.50	78.7	185	1700	4.86	3000	220	<10	1.3
Total	**6.76**	**11.78**	**5.02**	**308.8**	**1369**	**5498**	**11.4**	**9245**	**864**	**370**	**3.9**
FMRS16-002	6.08	7.00	0.92	188.4	1515	1400	7.87	5200	520	360	1.1
FMRS16-002	7.00	8.00	1.00	215.7	1948	2300	8.12	5700	610	390	1.6
FMRS16-002	8.00	9.00	1.00	286	1490	3600	9.51	8200	930	500	3
FMRS16-002	9.00	10.17	1.17	569.3	1077	10200	15.8	17700	1920	210	6.5
FMRS16-002	10.17	10.77	0.60	666.1	929	3200	16.0	22400	2100	610	9.1
FMRS16-002	10.77	11.00	0.23	41.4	394	800	2.43	1300	120	45	0.6
FMRS16-002	11.00	12.00	1.00	33.2	168	340.1	1.15	1037.9			0.4
Total	**6.08**	**12.00**	**5.92**	**301.3**	**1167**	**3643**	**9.23**	**9150**	**938**	**311**	**3.2**
FMRS16-002	14.73	15.40	0.67	717.2	1544	3700	17.7	24900	3060	540	10
FMRS16-002	15.40	16.00	0.60	769.1	1616	5000	17.6	26300	2550	270	10
FMRS16-002	16.00	17.00	1.00	229.1	1954	1300	9.99	6900	790	190	2.8
FMRS16-002	17.00	17.70	0.70	97.8	1762	2200	6.61	2200	200	100	0.7
FMRS16-002	17.70	18.00	0.30	320.3	729	31700	9.13	6100	520	880	4
FMRS16-002	18.00	19.00	1.00	241	1583	4200	8.82	7400	820	850	3.1
FMRS16-002	19.00	19.46	0.46	226.9	967	2000	7.83	7100	710	490	2.2
Total	**14.73**	**19.46**	**4.73**	**355.4**	**1573**	**4852**	**11.0**	**11289**	**1229**	**401**	**4.5**

In addition to the core split rejects, Fathom has also collected approximately 25 kg of surface grab samples from the old mine workings and from an area believed to have been the ore dump. Visually, these samples appeared better mineralized than the drill cores FMRS16-001, FMRS16-002, FMRS16-009 and FMRS16-010 and were expected to be closer to the historic mining grades. No analysis was provided for this surface grab sample.

While the project is currently at an early exploration stage, with no established reserves, Rottenstone-type mineralization is present and a preliminary metallurgical test was considered to be of value in providing an indication of the response to be expected for elements of economic interest. For ultramafic-hosted nickel-cobalt ores and for PGM bearing ores in particular, the potential for recovery of values through conventional means, or the possible need for more intensive treatment processes can have an important bearing on ore zone determination, cut-off grades and even exploration targeting. Identification of mineralogy associated with recoverable values would be a valuable exploration tool, even at an early stage, allowing resources to be targeted at the most economically attractive mineralization or the geological units with the highest potential for hosting viable ore types.

13.2 Description of Testwork

Following agreement on a test plan, two pails of sample material were received at Kemetco's facilities on June 13, 2017. A separate composite was prepared from the material in each pail, one from drill core and the other from site grab samples. Characterization and testing then proceeded in parallel for each composite sample.

13.2.1 Sample Characterization and Preparation

The two samples were very distinct, and were subjected to crushing, mixing and splitting to prepare uniform composites for testing. The grab sample consisted of 23.75 kg of coarse rock showing yellow/orange surface oxidation and significant visible sulphides. The drill core consisted of 12 individual bags containing pieces of split drill core, which were generally gray (unoxidized) in colour and showing relatively lesser amounts of sulphide when compared with the grab sample (Figure 13-2). The total weight of drill core was 13.5 kg.

Figure 13-2 Sample material as received: Surface grab sample (left) and drill core (right)

In order to prepare suitable composite sample material, each sample was jaw crushed to -1/4" and composited into a single grab sample and single drill core sample. After thorough mixing, each composite was riffle-split into individual representative test lots of approximately 1 kg for the metallurgical testing.

A separate small representative split was also taken from each composite for head analysis. These samples were pulverized and split, with sub-samples sent to external laboratories for mineralogical analysis by XRD, XRF analysis, fire assay for Au, Pt and Pd, total carbon and sulphur analysis and sulphur

speciation. Sub-samples were also digested and analyzed by ICP for a suite of metals by Kemetco's analytical department.

13.2.2 **Grind-Flotation Testing**

For Grind-Flotation testing a standardized flowsheet was established based on typical responses of the expected copper and nickel bearing minerals occurring in ultramafic rocks. Available information related to the process used by the historical operations at the site was also reviewed and confirmed the general suitability of the planned flowsheet.

For each of the two composites, a total of 5 grind-float tests were conducted using the same flotation reagents and dosages, with only minor variations to accommodate different frother requirements and scavenger times, based on the observed froth conditions. Each grind was conducted using one composite test lot of approximately 1 kg at 65% solids in a laboratory rod mill. Both ores proved to be relatively fast grinding, indicating a low work index potential. Grind times ranged from 4 to 9 minutes for the grab sample composite and from 3 to 10 minutes for the drill core composite.

A small split of ground pulp from each grind was subjected to a screen analysis to determine the slurry P_{80} (80% passing) size. For the grab sample composite the P_{80} ranged from 160 µm down to 43 µm. For the drill core, the P_{80} ranged from 142 µm down to 43 µm.

Flotation followed a simple two stage rougher-scavenger flowsheet, with a primary Cu-Ni rougher stage using the strong collector's potassium amyl xanthate (PAX) and sodium diisobutyl dithiophosphate (Aero 3477), and a pyrrhotite scavenger stage using additional PAX as a collector following activation with copper sulphate. Flotation was carried out at natural pH and methyl isobutyl carbinol (MIBC) was used as a frother. The detailed test conditions are listed on the individual test reports included in the Appendix.

For each test the rougher concentrate, scavenger concentrate and final tails were dried and weighed, and samples were submitted for analysis by digestion/ICP and fire assay.

13.2.3 **Flotation Flowsheet Testing**

As analytical results were obtained from the grind-float tests, material balances were prepared to determine the recovery to concentrate for the principal metals of interest. Recoveries were plotted against grind size to determine the optimal grind size for further testing. The optimal size for recovery varied somewhat for different metals and between the two composites, but overall, both composites showed optimal results around the particle size obtained with a 5-minute grind, even though the actual size was different (P_{80} of 74 µm for drill core and 81 µm for grab). All subsequent tests were therefore conducted using a 5-minute grind time.

Additional testing was aimed at expanding the understanding of the flotation response and comparing different reagent combinations and dosages. Based on the variable results seen in the grind-flotation testing, a secondary objective of this work was to enhance PGM recovery to the concentrates.

A total of ten tests were carried out, consisting of 5 different test procedures repeated for each of the two composites. The first tests (F-01 and F-02 on the grab and drill core composites, respectively) were kinetic float tests and used almost the same reagent scheme as the grind-float tests, aside from the addition of a single drop of the precious metal collector, Maxgold 900, into the grind, with a very minor reduction of xathate addition to the rougher and an increased copper sulphate dosage in the scavenger. The changes were intended to aid precious metal recovery, which had been quite variable in the grind-

float tests. The previous rougher and scavenger stages were each divided into four timed float stages with a cumulative total of 16 minutes of flotation divided evenly between the rougher and the scavenger. Concentrates were all dried, weighed and assayed separately to allow cumulative recoveries to be plotted both against time and concentrate grade.

For the next set of tests (F-03 to F-06) the same principal collectors (PAX and A3477) were used along with a lesser dosage of the precious metal promoter Aero 208. The PAX to A3477 ratio was changed from 1:1 to 1:3 as suggested in literature for flotation of nickel with PGM values. For each composite a test was conducted using this reagent scheme at a low dosage, amounting to 50% of the total collector addition in the grind-float tests, and a second high-dose test was run using the same reagent addition ratios with a total addition 20% higher than the grind-float tests. Copper sulphate addition was also increased.

The final set of tests (F-07 to F-10) followed this same low-dose and high-dose approach, but using an entirely different reagent combination (Aero 3302 and Aero 407), which are also used in similar applications.

As with previous testing, a test report with mass balance was prepared for each test, and is included in the Appendix.

13.3 Results and Discussion

13.3.1 Sample Characterization

Composite head samples were analyzed for all relevant metals, along with carbon content and sulphur species. Results summarized in Table 13-2 show the difference in grade between the two samples, with the grab sample showing much higher levels of all the most important economic metals. In general, this sample has a much higher sulphide content, as reflected also in the iron and sulphur analyses. Sulphur speciation indicated that relatively little sulphide oxidation have occurred, even with the surface grab samples. Lower carbon in the grab sample is likely related to the differing minerals present, but may also partly represent loss of carbonate due to weathering.

Table 13-2 Composite Metal Analysis by ICP-ES, with PGM, C and S Analysis

Sample	Cu (%)	Ni (%)	Co (%)	Fe (%)	Cr (%)	Ca (%)	Mg (%)	Au (ppb)	Pt (ppb)	Pd (ppb)	C_{TOT} (%)	S_{SO4} (%)	S_{S2^-} (%)	S_{TOT} (%)
K1506 HEAD - GRAB	1.32	3.99	0.097	23.16	0.05	0.06	11.59	743	5914	5943	0.22	0.08	15.53	15.61
K1506 HEAD - DRILL	0.37	0.77	0.026	7.25	0.07	0.99	4.02	22	1363	753	0.84	0.07	3.64	3.71

Whole rock analysis by XRF confirmed the major difference in iron content and also showed the major background elements (Table 13-2). Magnesium was about the same in both samples, while other common components in silicate gangue were much lower, indicating that the grab sample composite material had a higher proportion of ultramafic minerals in the background matrix.

The drill core composite showed a somewhat lower nickel grade than that calculated from the core assays provided, while other elements of interest compared more favorably. This may indicate some analytical variation, as calculated heads from flotation tests were closer to the calculated amount, ranging from 0.82% to 0.96%. Some variation from the values calculated from core assays could also be expected as the composite was prepared using all available samples, and was not specifically weighted to match the sample intervals that were assayed.

Table 13-3 Composite Whole Rock Analysis by XRF

Sample	SiO_2 (%)	Al_2O_3 (%)	Fe_2O_3 (%)	CaO (%)	MgO (%)	K_2O (%)	MnO (%)	TiO_2 (%)	P_2O_5 (%)	Cr_2O_3 (%)
K1506 HEAD - GRAB	23.5	1.01	34.5	0.51	20.1	0.05	0.05	0.05	0.02	0.34
K1506 HEAD - DRILL	45	5.12	15.2	4.54	19.4	0.8	0.15	0.24	0.09	0.37

Table 13-4 Qualitative Modal Mineralogy by XRD Analysis

Mineral	Ideal Chemical Formula	K1506 HEAD - DRILL	K1506 HEAD - GRAB
Tremolite	$Ca_2Mg_5(Si_8O_{22})(OH)_2$	22.4	3.7
Quartz	SiO2	8.9	3.6
Phlogopite	$KMg_3AlSi_3O_{10}F(OH)$	14.6	3.5
Annite	$KFe^{2+}{}_3AlSi_3O_{10}(OH)_{1.5}F_{0.5}$	15.4	3.0
Talc	$Mg_3Si_4O_{10}(OH)_2$	4.0	10.8
Lizardite	$Mg_3Si_2O_5(OH)_4$	0.0	20.4
Chlorite	$Mg_5Al(AlSi_3O_{10})(OH)_8$	6.5	0.0
Chalcopyrite	$CuFeS_2$	1.8	3.8
Pyrite	FeS_2	5.5	1.2
Pyrrhotite	$Fe_{(1-x)}S$	0.7	29.4
Pentlandite	$(Fe, Ni)_9S_8$	0.0	8.0
Violarite	$FeNi_2S_4$	0.0	5.4
Magnetite	Fe_3O_4	1.8	6.3
Calcite	$CaCO_3$	1.0	0.0
Siderite	$FeCO_3$	9.0	0.9
Dolomite	$CaMg(CO_3)_2$	2.7	0.0
Titanite	$CaTiSiO_5$	5.8	0.0
Total		**100.0**	**100.0**

The qualitative XRD analysis included in Table 13-4 confirms that the mineral matrix is primarily formed by magnesium silicate minerals in both samples, but that different minerals are predominant in each sample. The drill core sample contained significantly more silicate minerals, including more than one third alumino-silicate minerals while the grab sample only had a few percent of this type. The XRD result also suggested a significant difference in iron sulphide minerals between the two composites, which may be relevant both to interpreting exploration results and designing a suitable flotation flowsheet. Pyrrhotite is much more likely to carry nickel values than pyrite, and it can be weakly magnetic which can be an aid to exploration. From the XRD results, it is not clear where the nickel occurs in the drill core sample. This may simply reflect the lower grade and the presence of multiple nickel-bearing minerals resulting in quantities falling below the detection limit for this analysis.

13.3.2 Grind-Flotation Testing

A total of 5 different grinds were completed for each of the two composites, with the grind times and the resulting P_{80} particle sizes for each test summarized in Table 13-5. While the two samples did not quite fit the same curve, the grinding characteristics were similar between the two materials, with both requiring fairly short grind times, suggesting a low Work Index for both types of rock. Grind times ranging from 3 minutes to 10 minutes resulted in P_{80} sizes ranging from 160 to 43 microns. This range is fairly narrow, but covers the commonly accepted optimal range of particle sizes for conventional flotation equipment.

Table 13-5 Grind-Flotation Testing – Grind Size Data

Sample	Grind #	Initial Sample Wt (g)	Time (min)	P80 (um)
Grab	1	1085.68	7.5	60.73
Grab	2	909.21	5	80.80
Grab	3	974.56	4	159.53
Grab	4	1027.37	9	42.52
Grab	10	1045.72	4.5	126.96
Drill	5	939.93	5	74.33
Drill	6	1075.36	4	108.51
Drill	7	1050.32	8	57.37
Drill	8	1086.77	3	142.25
Drill	9	951.56	10	43.34

Table 13-6 summarizes the metallurgical results for all 10 grind-recovery tests. In addition to listing recoveries for the principal elements of economic interest, the table includes rougher and total concentrate grades for Cu, Ni and Co.

Table 13-6 Grind-Flotation Testing – Grind Size Data

Test	Sample	Grind	Total Conc	Cu-Ni Ro Grade			Total Conc Grade			Total Conc Recovery			Total Conc Recovery - PGM		
		P_{80} (um)	(%)	Cu (%)	Ni (%)	Co (%)	Cu (%)	Ni (%)	Co (%)	Cu (%)	Ni (%)	Co (%)	Pt (%)	Pd (%)	Au (%)
GF1	Grab	61	42.0	6.45	15.5	0.38	2.87	9.00	0.21	91.6	91.4	93.9	32.2	74.1	65.4
GF2	Grab	81	46.9	3.17	10.2	0.22	2.64	8.87	0.19	92.4	93.0	94.7	88.2	81.5	72.1
GF3	Grab	160	46.1	3.35	9.42	0.22	2.63	8.45	0.19	89.7	89.4	91.8	94.6	75.1	69.7
GF4	Grab	43	43.0	5.95	15.8	0.37	3.03	9.89	0.22	92.9	92.0	94.4	32.4	79.6	76.9
GF10	Grab	127	48.6	2.71	8.94	0.20	2.48	8.36	0.19	91.0	92.4	94.8	91.6	81.0	72.7
GF5	Drill Core	74	20.8	2.07	3.68	0.13	1.74	3.23	0.12	96.3	81.3	72.7	84.0	87.0	84.6
GF6	Drill Core	109	19.3	2.13	3.98	0.14	1.76	3.52	0.12	94.7	80.5	81.0	80.6	82.0	68.5
GF7	Drill Core	57	21.0	2.49	4.31	0.15	1.75	3.34	0.12	96.4	82.1	82.7	56.3	87.8	87.2
GF8	Drill Core	142	19.9	2.01	3.53	0.13	1.71	3.20	0.11	93.5	78.0	78.2	88.4	84.7	87.4
GF9	Drill Core	43	20.0	2.79	4.86	0.15	1.73	3.49	0.11	96.4	77.3	78.1	45.9	87.6	80.4

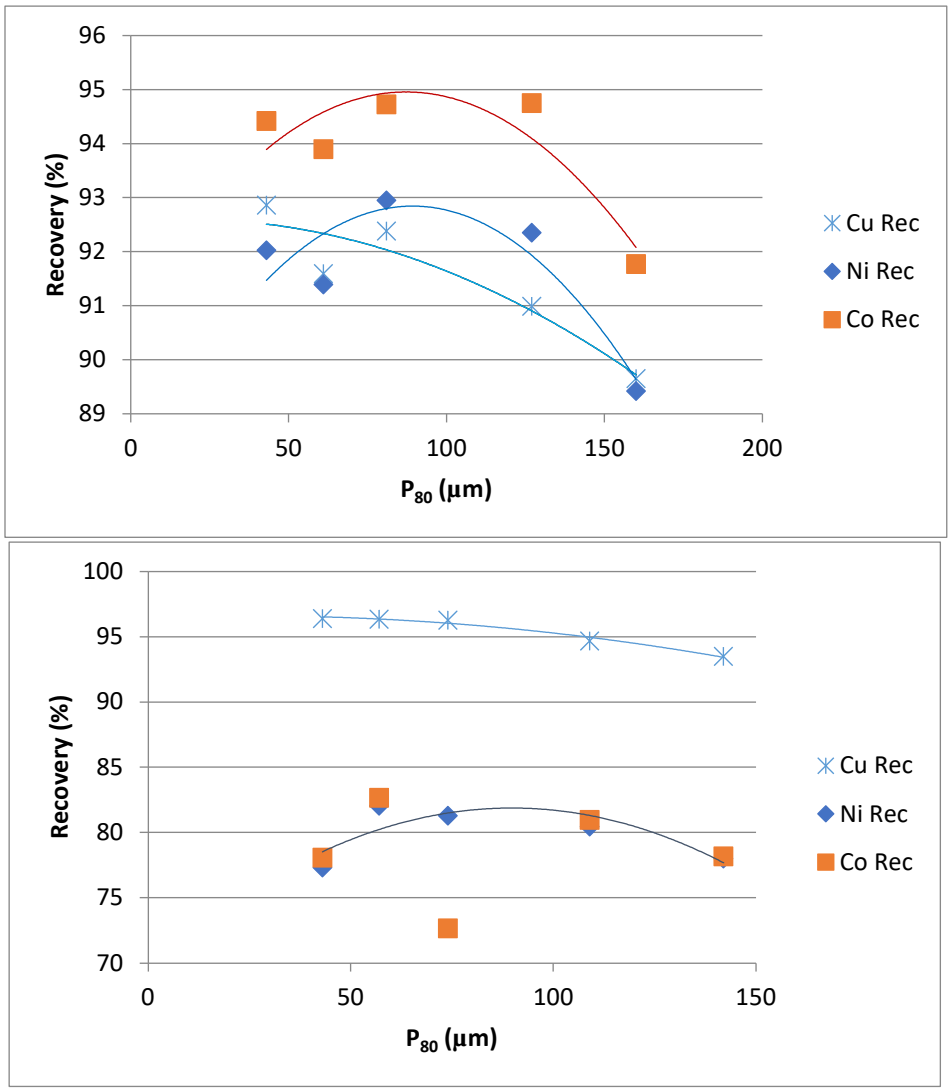

Figure 13-3 Grind-Recovery for Grab Sample (Top) and Drill Core Sample (Bottom) Composites

Figure 13-3 and Figure 13-4 show the grind-recovery curves plotted for the major elements, with base metals in Figure 13-3 and precious metals in Figure 13-4. From these plots it is clear that the higher-grade Grab Sample composite is more sensitive to grind than the drill core, and it is also apparent that nickel and cobalt have a different response than copper, which continues to improve at the finest grind while nickel and cobalt recovery drop off.

Figure 13-4 shows the high variability seen in the flotation response for Pt while also showing relatively consistent results for Pd and Au. The separate response for all of these metals was taken into account to settle on a target grind size of P_{80}=81 microns for the grab composite and 74 microns for the drill core. For these sample materials both targets were reached with a 5-minute grind.

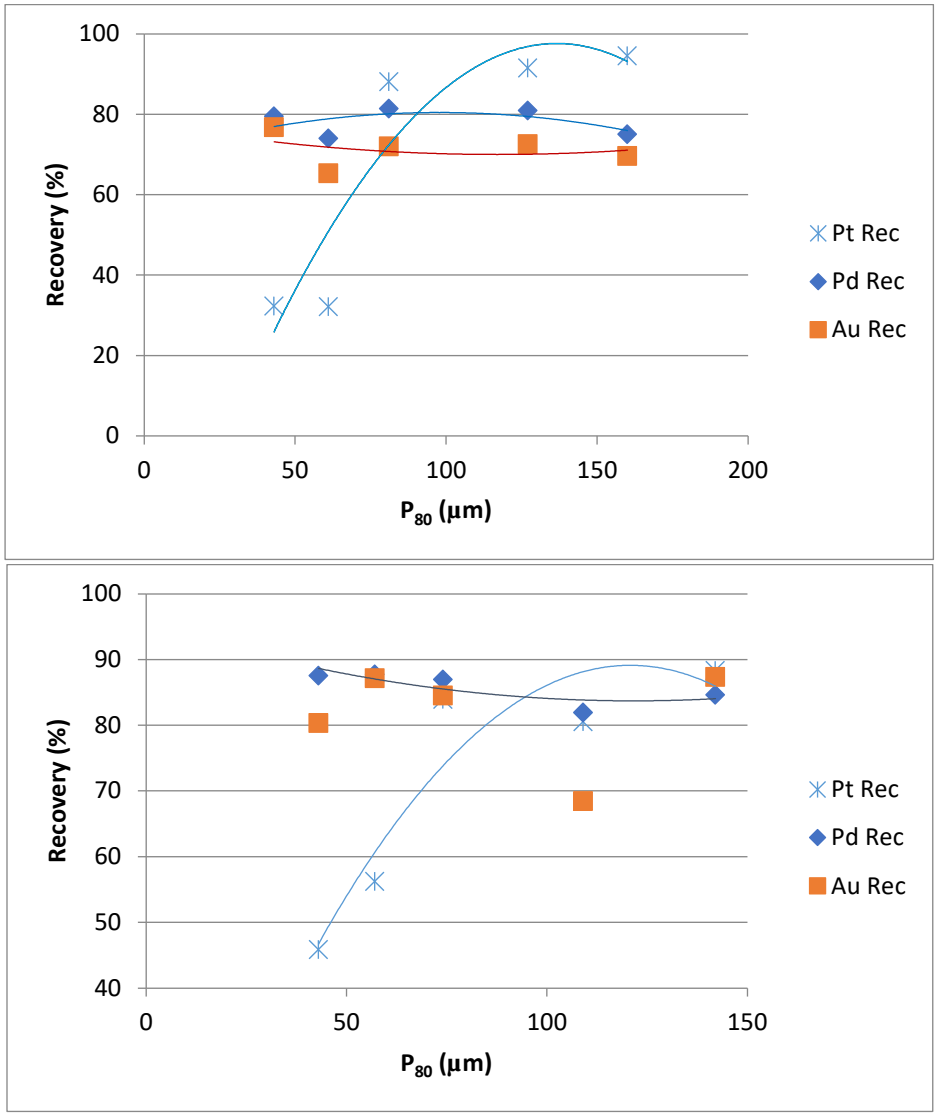

Figure 13-4 Precious Metal Grind-Recovery Curves: Top - Grab Composite; Bottom - Drill Core Composite

While these tests were aimed principally at recovery, the grind size also had an effect on the grade of the recovered concentrates. This effect was most significant for the grab sample, and for both samples the effects were clearest in the Cu-Ni rougher product. These grades were therefore plotted in Figure 13-5.

These tests were not optimized for grade and there were no cleaning stages, so there should be significant room for upgrading to meet commercially acceptible concentrate grades. The increased grade with finer grinding suggests that regrinding of coarse rougher-scavenger concentrates would be a benefit for cleaning stages. All tests aimed at producing bulk Cu-Ni concentrates, and no attempt was made to separate copper and nickel bearing minerals. The difference in recovery response to particle size between copper and nickel suggests that some degree of separation should be possible, if needed.

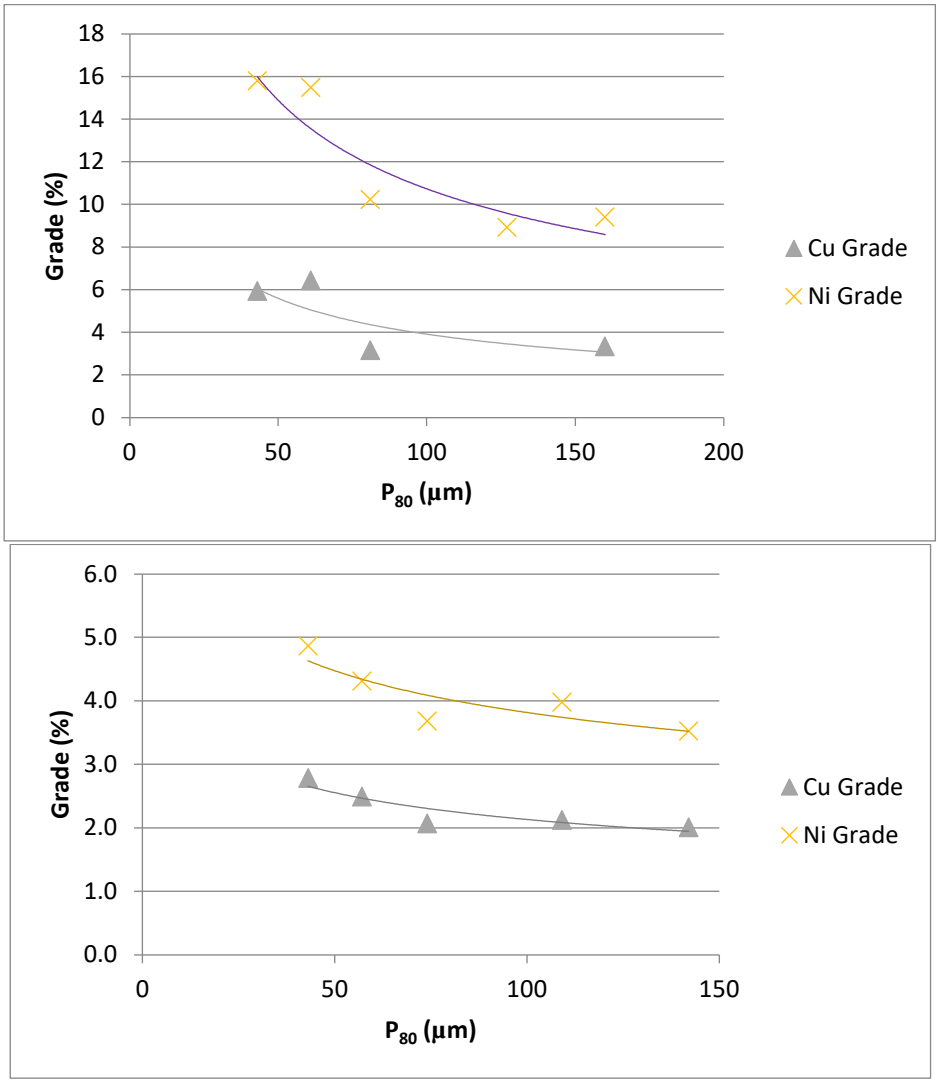

Figure 13-5 Cu-Ni Rougher Grade by Grind Size: Top – Grab Composite; Bottom – Drill Core Composite

13.3.3 Flotation Flowsheet Testing

A total of 10 flotation optimization tests were conducted to obtain a better understanding of the response of the two samples to a range of possible flotation conditions. For each of the samples five parallel tests

were conducted looking at flotation kinetics and the effects of alternative flotation collectors and reagent dosing. The results for all of these tests are summarized in Table 13-7. Full test reports with material balances are included for each test in the Appendix.

Table 13-7 Flotation Flowsheet Testing – Summary of Results

Test	Sample	Grind	Total Conc	Cu-Ni Ro Grade			Total Conc Grade			Total Conc Recovery			Total Conc Recovery - PGM		
		P_{80} (um)	(%)	Cu (%)	Ni (%)	Co (%)	Cu (%)	Ni (%)	Co (%)	Cu (%)	Ni (%)	Co (%)	Pt (%)	Pd (%)	Au (%)
F1	Grab	81	45.6	4.07	12.74	0.3	2.55	8.65	0.20	92.01	92.53	95.35	62.9	96.7	74.4
F2	Drill Core	74	21.0	2.13	4.07	0.13	1.67	3.45	0.11	96.7	82.0	84.3	47.7	88.3	94.7
F3	Grab	81	45.8	3.34	10.43	0.26	2.55	8.44	0.21	91.6	91.5	94.5	77.4	79.9	70.4
F4	Drill Core	74	20.3	2.56	4.1	0.14	1.73	3.43	0.11	96.6	79.4	82.0	44.8	88.1	79.0
F5	Grab	81	50.0	3.10	8.65	0.24	2.33	6.74	0.18	92.4	93.3	95.6	56.4	83.0	73.0
F6	Drill Core	74	23.8	2.04	3.67	0.12	1.52	2.96	0.09	95.2	81.0	81.8	59.5	87.5	83.8
F7	Grab	81	33.5	7.90	13.21	0.32	3.60	10.47	0.25	88.4	81.5	84.4	28.6	62.0	60.0
F8	Drill Core	74	16.5	2.69	2.53	0.09	2.03	2.60	0.09	95.0	50.8	54.4	27.9	78.8	54.6
F9	Grab	81	43.8	3.96	11.18	0.27	2.88	8.90	0.21	90.9	90.7	93.7	79.0	75.1	62.0
F10	Drill Core	74	17.8	2.67	4.60	0.16	2.14	3.99	0.13	94.6	73.8	77.8	32.1	84.1	56.1

13.3.4 Kinetic Testing

Kinetic testing for each sample was carried out using a slightly modified version of the reagent scheme chosen for the grind testing. The changes consisted of reducing the xanthate addition from 100 to 90 g/t and instead adding 7 g/t of the precious metal collector Mx900 to the grind stage, along with an increase of copper sulphate in the scavenger stage to 150 g/t (a 50% increase over grind testing). The test was still divided into a copper-nickel rougher and a nickel-pyrrhotite scavenger, but timed concentrates were collected during each of these stages to determine how the composition and quantity of the material floating changes over time.

Overall, the kinetic test results gave similar recoveries to the closest corresponding grind tests, indicating that the addition of Mx900 did not have a significant effect on the precious metal recovery. The results of the kinetic sampling for the grab sample test (F1) are shown in Figure 13-6, and those for the drill core test (F2) in Figure 13-7. These show the increasing overall recovery for the major elements of interest as the test progresses.

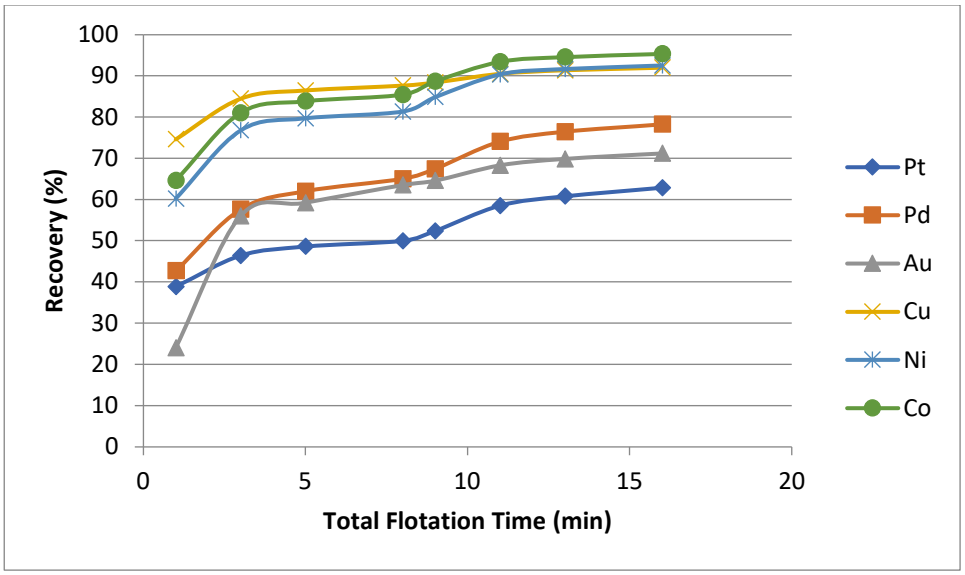

Figure 13-6 Test F1: Grab Sample Flotation Kinetics

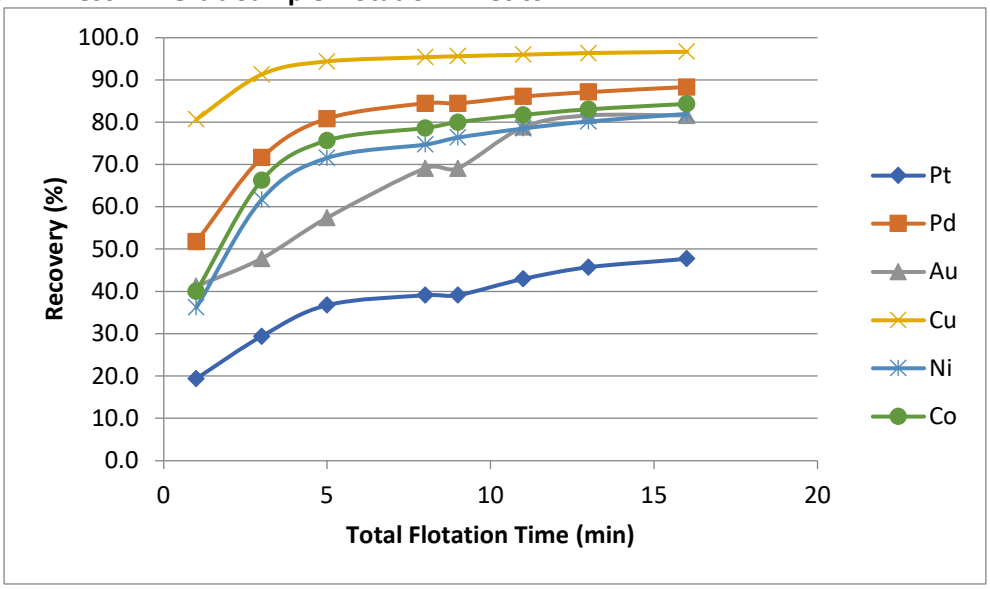

Figure 13-7 Test F2: Drill Core Sample Flotation Kinetics

For the grab sample, the bulk of the recovery for all elements occurs within the first three minutes, with base metal recoveries much higher than precious metals. Precious metal recoveries do show a little improvement over time in the first stage. After 8 minutes the scavenger stage begins with the addition of copper sulphate and additional collector. A distinct improvement in recoveries is seen at that stage for every element of interest except Cu, which had the highest recovery in the first stage. For Ni and Co the improved recovery occurs in the first 3 minutes of the scavenger, while for precious metals the recovery continues to improve with additional float time. This profile likely reflects the high pyrrhotite in the grab sample, as that is the main target of the scavenger. Recovered pyrrhotite appears to carry a portion of the precious metals, along with the expected Ni and Co content.

The drill core sample showed a much different profile, with less response to the scavenger stage. Copper responded similarly to the grab sample, with very high recovery in 3-5 minutes and very minor incremental recovery after that time. The other base metals were slower floating, and continued to show significant incremental recovery in later stages. They also showed almost no discernible response to the additional reagents added in the scavenger stage at 8 minutes. Also, of note were the differing responses of the precious metals in this test. The Pd recovery profile closely followed Ni and Co, giving a high overall recovery, while that for Pt and Au had different patterns. The Au recovery appeared to rise steadily, but these results are of limited importance due to the low Au grade in this sample. In all drill core tests the Pt grade tended to be erratic and, in this test, the calculated head grade was well under the assayed grade. Recovery was very low, but did improve steadily with flotation time. The Au and Pt results also showed distinct improvements with the scavenger stage, suggesting that there could be a fraction that is not associated with any of the principal base metal minerals targeted.

13.3.5 **Reagent Testing**

Following the kinetic tests, two additional sets of tests were conducted looking at different collector reagent addition schemes. The first set (Tests F3 to F6) tested high and low dosages of a similar reagent combination to that tested in the kinetic and grind testing, using a combination of potassium amyl xanthate (PAX) and the dithiophosphate Aero 3477. For these tests the ratio of PAX to A3477 was much lower than the previous tests (1:3 rather than 1:1) and a small addition of the common precious metal promoter Areofloat 208 was also added to the rougher.

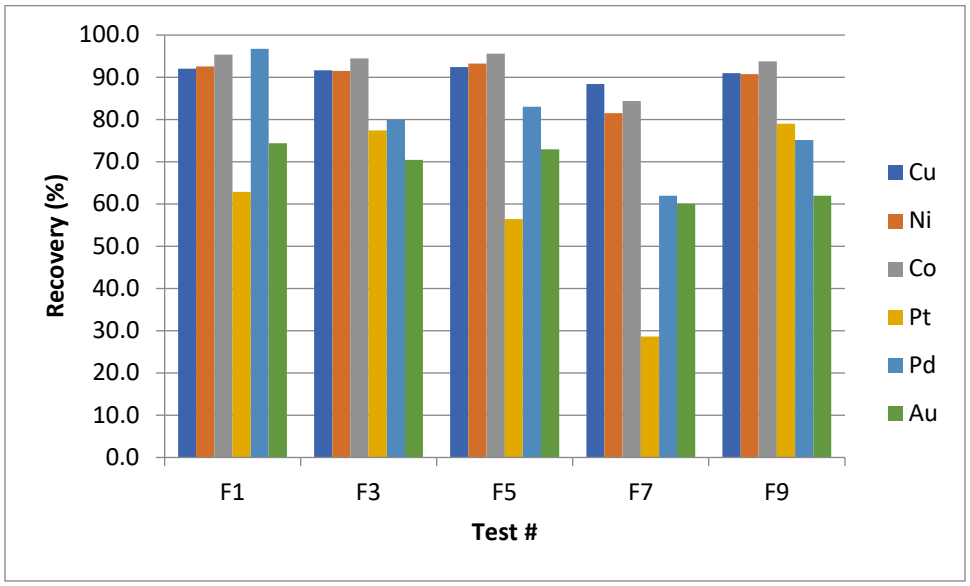

Figure 13-8 Grab Sample – Reagent Testing Recovery Response by Metal

For the first two of these tests (F3 and F4 with grab and drill core respectively) the total reagent addition was 70 g/t, compared with 140 g/t used previously, while in the following two (F5 and F6) the reagents were increased to nearly 170 g/t. Figure 13-8 and Figure 13-9 show the comparative recoveries for metals of interest for tests F1 through F10. For these four dosage tests, the results show relatively little sensitivity to reagent dose in the range tested. The higher dose gives only a minor improvement in base metal recovery with the grab sample and mixed results for precious metals (the lowest dose actually gave the best Pt recovery while Pd and Au were slightly improved with higher dosage). For the drill core increasing

the reagent dosage had minimal effect on base metal recoveries with only Pt and possibly Au showing any significant benefit with the higher dose.

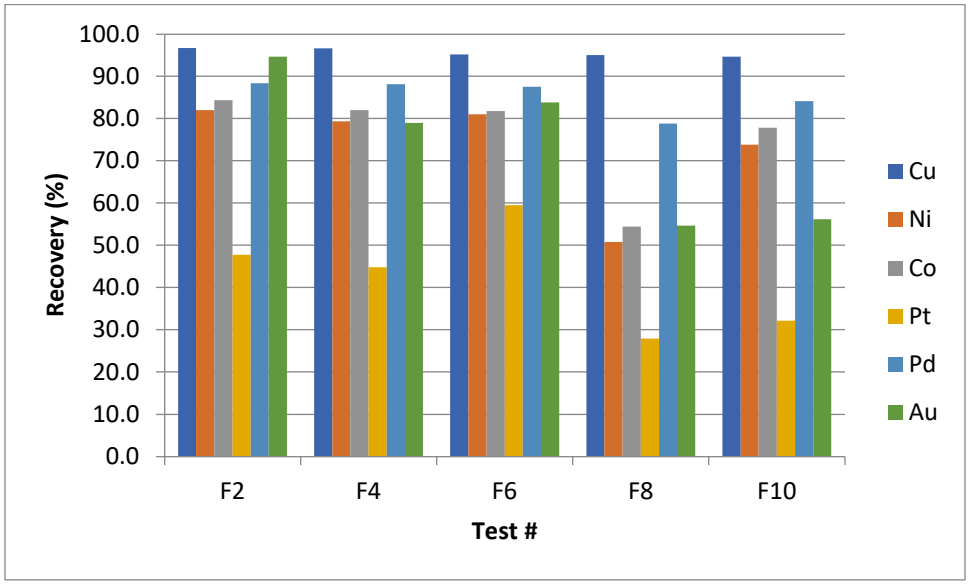

Figure 13-9 Drill Core Composite – Reagent Testing Recovery Response by Metal

For the last four tests (F7 to F10) an entirely different reagent scheme was tested using the xanthate ester Areo 3302 along with the mercaptan/dithiophosphate mixture Aero 407. This combination was also tested at low and high dosage on each sample, with a combined dose of 55 g/t in tests F7 and F8 and 137 g/t in tests F9 and F10. Results showed much lower recovery for every metal but copper with the low dose but these recoveries improved significantly with the higher dosage. Results were best with the grab sample, where base metal recoveries were very similar to the best results from the other reagent scheme. With these tests the precious metals gave a somewhat erratic response. For Pt in particular, in the grab sample test F9 gave the best overall recovery while the drill core sample tests F8 and F10 showed the lowest Pt recovery. The results for the drill core sample also suggested a correlation between copper and palladium which was not as apparent in other tests.

13.4 Conclusions and Recommendations

A preliminary exploratory metallurgical program including sample characterization and flotation testing was carried out on grab samples from historical surface workings, and mineralized drill core from a recent drill program at Fathom's Albert Lake property in northern Saskatchewan. The samples provided were used to prepare two composites, one of surface grab samples and the other of drill core. Each was tested separately. In addition to a full analysis of each composite, the test work consisted of grind-recovery flotation testing, kinetic flotation tests and preliminary testing of dosage and collector variations in flotation. While preliminary in nature, the work was successful in demonstrating flotation recovery of the principal values in the Rottenstone samples. More specifically, the following conclusions are apparent:

- The two composites tested varied significantly in both grade and mineralogy. The surface grab ore is high in sulphides, with pyrrhotite as the dominant sulphide mineral along with

chalcopyrite and nickel sulphide minerals. The drill core was much lower in sulphide and the main sulphide mineral was pyrite.

- The grab sample composite assayed 4.0% Ni and 1.3% Cu along with nearly 6 g/t each of Pt and Pd and close to 0.1% Co. The drill core composite assays showed a much lower grade, with less than 0.4% Cu, 0.8% Ni and 1.4 and 0.75 g/t for Pt and Pd respectively.
- Both samples were relatively easily ground, and based on a preliminary flotation flowsheet the best recoveries were obtained with a P_{80} of 81 and 74 microns for the grab sample and for drill core, respectively.
- Nickel, Cobalt and especially Platinum recovery were relatively sensitive to grind, while Copper and other precious metals were less sensitive.
- The initial flotation conditions chosen provided high base metal recovery for the grab sample, with more than 92% Cu and Ni recovery and 95% Co recovery. PGM recovery was lower, but was still over 80% for both Pt and Pd. Drill core tests showed even higher Cu recovery at 96%, but Ni and Co recovery were somewhat lower at approximately 82% each. PGM recovery was relatively strong for drill core, at approximately 85%.
- Kinetic sampling showed that most of the base metal recovery occurred within three minutes for both samples. The pyrrhotite scavenger stage had no effect on Cu recovery, but aided Ni and Co recovery in the grab sample. This was not seen in the drill core, although Pt recovery was enhanced in that stage.
- Copper mineralization shows distinct behavior from Ni and Co, suggesting that production of separate concentrates may be possible. There are some indications that Pd is more closely associated with the copper.
- Alternative reagents and dosages did not significantly enhance recoveries. Lower dosage of the preferred PAX/A3477 combination also gave similar results, indicating an optimal dosage well below the original levels chosen.

Overall, the results were positive, but were not fully optimized. Significant differences were seen between the two samples tested, and PGM recovery in particular would appear to have room for further optimization. No upgrading or separation of concentrates was attempted, but differing responses in recovery of different metals pointed to the potential for separation.

For the existing samples some additional optimization, separation and upgrading tests would be beneficial in further defining potential flowsheets, recoveries and concentrate quality. This additional work would be important in defining economic potential as mineralized zones are defined. At this stage a more beneficial follow-up may be comparative baseline testing of additional samples from mineralized zones identified in ongoing site exploration.

14.0 Mineral Resource Estimate

There is no applicable disclosure under Section 14.0.

15.0 Mineral Reserve Estimate

There is no applicable disclosure under Section 15.0.

16.0 Mining Methods

There is no applicable disclosure under Section 16.0.

17.0 Recovery Methods

There is no applicable disclosure under Section 17.0. te.

18.0 Project Infrastructure

The 2016 and 2018 Fathom drill programs were fixed-wing and helicopter supported. In 2018 Fathom established an all season 14-person camp.

Access to the Albert Lake property is by float / ski-equipped aircraft, or by helicopter. There was a winter trail to the abandoned mine site established to transport concentrate from the mine to HWY 102 during the mining operation 1965-1969.

19.0 Market Studies

There is no applicable disclosure under Section 19.0.

20.0 Environmental Studies, Permitting and Social Community Impact

There is no applicable disclosure under Section 20.0.

21.0 Capital and Operating Costs

There is no applicable disclosure under Section 21.0.

22.0 Economic Analysis

There is no applicable disclosure under Section 22.0.

23.0 Adjacent Properties

There is no applicable disclosure under Section 23.0.

24.0 Other Relevant Data and Information

All relevant information has been presented in report, and there is no additional relevant material to present in this section.

25.0 Interpretation and Conclusion

The exploration history and compilation of all available data for the Albert Lake property has produced the following important results, including:

1. A small, high-grade Ni-Cu+PGE deposit was discovered, delineated and mined producing slightly more the 26,000t @ 3.28% Ni, 1.63% Cu and 9.63 g/t Pd-Pt+Au; the Rottenstone deposit.

2. Rottenstone-type mineralization is of exceptional grade and metal tenor. At current market metal prices Rottenstone-type mineralization has high metal value.

3. Preliminary metallurgical testing of Rottenstone-type mineralization suggests mineral recovery of 92% Ni, Cu, 95% Co and 85% recovery for Pd and Pt and separate concentrates are possible.

4. Note; although present as part of the Rottenstone mineral assemblage mined out, Cobalt was not recovered. Furthermore; PGE elements Iridium, Osmium, Rhodium, Ruthenium and in particular Rhodium, occur within the Rottenstone mineral assemblage. Fathom recognizes the occurrence of Cobalt and Rhodium to be very significant.

5. The Rottenstone deposit is on trend with other known mineralized ultramafic showings and occurrences within the Albert Lake property area.

6. Drilling up to 40m south of the Rottenstone Mine has yielded results up to 1.65% Ni, 0.80% Cu, 0.05% Co and 1.94 g/t Pd+Pt / 7.5m; confirming additional Rottenstone-type mineralization at the mine site, and that the deposit remains open to the south.

7. Drilling 110m north of the Rottenstone Mine, intersected 0.78% Ni, 0.12% Cu, 0.02% Co and 0.90 g/t Pd+Pt / 1.5m. Within this interval a massive sulphide vein (0.10m) resulted in a mineralized intercept of 1.13% Ni, 0.17% Cu, 0.03% Co and 1.34 g/t Pd+Pt / 0.5m, confirming that the Rottenstone deposit mineralization processes are in place north of the mine.

8. Systematic sampling of historic drill cores plus Fathom drilling, has recognized a system of ultramafic sills; pathways, at the Rottenstone Mine surrounds and up to 3.0km north of the historic mine site.

9. B-horizon soil geochemistry is a successful method of delineating pathfinder elements associated with the ultramafic host rock and Rottenstone-type mineralization, and defining areas to focus additional exploration.

10. Significant off-hole BHEM conductive responses have been recognized associated with ultramafic host rock within several historic drillholes drilled at Rottenstone.

11. The historic Rottenstone deposit is recognized to occur within structurally complex geology. Several areas of similar structural complexity and geology are recognized to be prospective for magmatic Ni-Cu + PGE mineralization.

No resource estimate of an extension at the Rottenstone deposit has been undertaken to date due to insufficient drilling in the areas mentioned above. Furthermore; at present, there is insufficient geologic support to understand the controls and orientation of the Rottenstone deposit extension if it exists to the

south and north. However; “Exploration Target Potential” of multiple, Rottenstone-type deposits exists on the Rottenstone property. This statement is based on geologically favorable factors for the property:

- The mineral tenor and grade at the Rottenstone deposit is the result of a significant magmatic event, not likely confined to one small deposit

- Presence of numerous other ultramafic intersections characterized by anomalous Ni, Cu, Co and Pd, Pt, and pathfinder elements Cr, Mg within the ultramafic rock and adjacent supracrustal rocks occurring throughout the property area.

- Several coincident gravity / MAG / EM features at 0-150m depths, remain untested.

- New prospective areas have been developed by Fathom’s ongoing compilation and exploration to date.

The authors suggest a “Target for Further Exploration” of 0.5 to 1Mt grading between 1 – 4% Ni, 0.5 – 2% Cu and 1.5 – 9 g/t PGE’s . This estimate is conceptual in nature as there is insufficient data to declare a “Mineral Resource” under CIM and NI 43-101 guidelines currently at the Albert Lake property. Furthermore; it is uncertain whether further exploration of the targets discussed in this report will result in delineating a mineral resource.

26.0 Recommendations

The following exploration program is recommended for the Albert Lake property based on the geology, historic exploration and mining and current exploration results. It is recommended to complete the exploration in two phases. Phase 1 designed to take advantage of the winter ice conditions required to test some of the targets and Phase 2 designed to expand on successes from Phase 1 as well as develop and test additional regional targets.

Phase 1 (February – April 2021)

It is recommended that Phase 1 exploration drilling program be designed to:

- Identify additional Rottenstone-type mineralization to the south and southeast of the historic Rottenstone Mine where it remains open based on the geological model;
- Test additional targets within the Rottenstone Mine area identified through geophysical compilation work, where winter ice conditions are required to effectively position drillholes;
- Conduct a property wide helicopter-borne MAG survey designed to give 100 meter line spacing coverage over the entire Albert Lake property inclusive of the recently acquired concessions.

Specifics of the Phase 1 program should include the following to ensure maximum use of available data in planning the program:

- Historic data to be incorporated with the findings of the Regional Structural Interpretation and to include other available data sets (2008 VTEM survey, ground Gravity surveys, ground MAG survey, ground TEM survey and historic BHEM surveys);
- Review of BHEM surveys performed within the Rottenstone Mine area to date with recommendations of re-surveying specific drillholes with Induction probe technology; a method better suited to identifying lower conductive sources;
- Design open hole BHEM surveys on drillholes drilled in 2018 and other significant historic drillholes within the Rottenstone Mine area;
- Use all results of above to design a mid-winter drill program to take advantage of ice conditions on the property;
- Diamond drilling and downhole EM surveys.

Phase 2 (June to October 2021)

- It is anticipated results and interpretation of the helicopter-borne MAG survey will define numerous targets property wide;
- Specific areas interpreted to be favorable to host ultramafic bodies should be further defined with either airborne or on the ground geophysical EM surveys;
- Specific MAG and EM targets will need proper “boots on the ground” follow-up exploration consisting of; prospecting, geological mapping and soil geochemistry with the aim to identifying favourable geology; specifically, the occurrence of ultramafic rock;
- Additional drilling to take place summer-fall based on success of late winter drill program, results of MAG / EM surveys, and results of summer field work.

Item	Unit Cost	Total Cost $
Phase 1		
Pre-drilling data compilation and target refinement	Fixed	$60,000
Diamond drilling and borehole EM surveys, re-establishing camp, air support, geological support, geophysical support and analysis	$500/m (all in)	$740,000
Property Wide Heli MAG survey (90,000 Ha), interpretation and target generation (including incorporation of historic VTEM survey information)	$45/line-km (all in)	$400,000
Total Phase 1		**$1,200,000**
Phase 2		
Borehole EM surveys on historic drillholes	$3200/day	$50,000
Ground follow-up of heli MAG survey targets. Prospecting, sampling, ground geochemistry and airborne / ground geophysics, interpretation and drill target generation	$800/man day (all in)	$700,000
Diamond drilling and borehole EM	$500/m (all in)	$1,500,000
Geochemical Analysis	$50/sample	$50,000
Total Phase 2		**$2,300,000**

Note: all field activity costs include camp and required support

27.0 References

Barnes, S.-J., and Lightfoot, P.C., 2005, Formation of magmatic nickel sulfide deposits and process affecting their copper and platinum group element contents: ECONOMIC GEOLOGY 100th Anniversary Volume, p. 179-213.

Coker, W.B., Dunn, C.E., Hall, G.E.M., Rencz, A.N., DiLabio, R.N.W., Spirito, W.A., and Campbell, J.E., 1991, The behaviour of platinum group elements in the surficial environment at Ferguson Lake, N.W.T., Rottenstone Lake, Sask. and Sudbury, Ont., Canada: Journal of Geochemical Exploration, v. 40, p. 165-192.

Corrigan, D., Galley, and A.G., Pehrsson, S., 2007, Tectonic evolution and Metallogeny of the southwestern Trans-Hudson Orogen, in Mineral Deposits of Canada, A synthesis of major deposit types, district Metallogeny, the evolution of geological provinces and exploration methods: Special Publication No.5, Mineral Deposits Division, Geological Association of Canada, p. 881-902.

Desharnais, G., Arne, D., and Bow, C., 2014, West Raglan Technical Report Northern Quebec, Canada, submitted to True North Nickel Inc. and Royal Nickel Corporation by SGS Canada Inc. (NI 43-101 compliant Technical Report).

Fraser, I.R., 2000, Assessment Report, Summary of exploration on the Rottenstone property, northern Saskatchewan: Uravan Minerals Inc. company report.

Fraser, I.R., 2002, Assessment Report, Assessment report detailing exploration (UVN / BHP Billiton joint venture) Rottenstone property, Saskatchewan July 2001 – September 2002: Uravan Minerals Inc. company report.

Fraser, I.R., 2016, Assessment Report, Analysis of, Re-Interpretation of Historic Drill Cores, and Results of 2016 Diamond Drill Program Rottenstone Property, Saskatchewan June 2015 – July 2016: Fathom Minerals Ltd. company report.

Fraser, I.R., 2019, Assessment Report, Metallurgical Study of Rottenstone-type Ores, Drillhole Orientation Survey, Analysis of, Re-Interpretation of Historic Drill Cores, Re-Interpretation of 1999-2000 BHEM Surveys, Results of 2018 Soil Geochemistry, and Results of Fall 2018 Diamond Drilling Program Rottenstone Property, Saskatchewan June 2017 – October 2018: Fathom Minerals Ltd. company report.

Friske, P.W.B., 1985, Regional reconnaissance geochemical lake sediment and water surveys, central Saskatchewan (Parts of NTS 73O, 73P, 74A, 74B and 74C): in Summary of Investigations 1985, Saskatchewan Geological Survey; Saskatchewan Energy and Mines, Miscellaneous Report, 85-4.

Gilboy, C.F., 1982, Geology of an area around Rottenstone and Dobbin Lakes: Saskatchewan Mineral Resources, Report 193, 68p.

Hanych, W. and Hulbert, L., 2009, Report on 2008 diamond drill program Rottenstone nickel-copper-PGM property, Rottenstone Lake, Saskatchewan, Canada: Mantis Exploration Inc. company report.

Hulbert, L., 1985, Ni-Cu-PGE mineralization associated with the Rottenstone Lake harzburgite-pyroxenite intrusion, Saskatchewan, preliminary findings, in Summary of Investigations 1985, Saskatchewan Geological Survey, Saskatchewan Energy and Mines, Miscellaneous Report, 85-5.

Hulbert, L., Duke, J.M., Eckstrand, O.R., Lydon, J.W., Scoates, R.F.J., 1988, Geological environments of the platinum group elements: Geological Survey of Canada Open File 1440, p. 87-93.

Lahusen, G.L., 2003, Assessment Report 2003 Diamond drilling and geophysical program Rottenstone Ni-Cu-PGE property northern Saskatchewan: Uravan Minerals Inc. company report.

Lightfoot, P.C., 2007, Advances in Ni-Cu-PGE sulphide deposit models and implications for exploration technologies, in Proceedings of Exploration 07: "Fifth Decennial International Conference on Mineral Exploration" edited by B. Milkereit, 2007, p. 629-646.

MacLachlan, K., 2003, Bedrock geology of the Rottenstone Lake area (part of NTS 74A/07), 1:20 000 scale map with Summary of Investigations 2003, Volume 2, Saskatchewan Geological Survey, Sask. Industry and Resources, Misc. Rep. 2002-4.2.

MacLachlan, K., Lesperance, J., and Procknow, D., 2005, Bedrock geology of the Rottenstone Domain – Davin Lake transect (parts of 64D/12, 13), 1:50 000 scale prelim. Map with Summary of Investigations 2005 Volume 2, Saskatchewan Geological Survey, Sask. Industry and Resources, Misc. Rep. 2005-4.2.

Mawdsley, J.B., 1946, Rottenstone Lake area, Saskatchewan, Geological Survey of Canada, Paper 46-24.

Morris, R. J., Galbraith, J. L., Meintjes, T., 2018, Rottenstone Technical Report Rottenstone Project, Northern Saskatchewan: Fathom Minerals Ltd. company report.

Naldrett, A.J., 2004, Magmatic sulphide deposits: Geology, geochemistry and exploration: Berlin, Springer, 727 p.

Richards, B.R. and Robinson, B.G.W., 1966, Mining and milling a small ore deposit …. Rottenstone Mining Limited: The Canadian Mining and Metallurgical Bulletin for December, 1966.

Stewart, J., Williams, H., 2020, Structural Interpretation: Rottenstone AOI, Saskatchewan Canada – Prepared for AuussieCan Geosciences Inc. February 2020: Fathom Minerals Ltd. company report.

Warkentin, D., 2017, Preliminary Mineralogical and Metallurgical Scoping of Rottenstone Ore, Kemetco Research Inc.: Fathom Minerals Ltd. Internal Company report.

CERTIFICATE OF QUALIFIED PERSON

I, Stephen Kenwood, P.Geo., hereby certify that:

I am an independent Consulting Geologist and Professional Geoscientist residing at 13629 Marine Drive, White Rock, B.C. V4B 1A3.

I graduated from the University of British Columbia, Vancouver B.C. in 1987 with a Bachelor's Degree in Science (B.Sc.) in the field of Geology. I have practiced my profession continuously since graduation. I have experience in advanced exploration, resource delineation, and development precious metals projects, at the Snip mine from 1987-1990 and Eskay Creek mine from 1990-1992 in northern British Columbia as well as advanced exploration and resource delineation at the Petaquilla porphyry copper-gold deposits (renamed Cobre Panama) located in western Panama, from 1992-1995. I have worked for Majestic Gold Corp. ("Majestic") from 2003-2007 and from 2014-present; Majestic discovered and now operates the Songjiagou open pit and underground gold mine in Shandong Province, China.

I am registered as a Professional Geoscientist in the Province of British Columbia (No. 20477).

I have jointly prepared this report, titled Albert Lake Technical Report for Fathom Nickel Inc., dated May 7, 2021, based on a review of all available data concerning the subject property supplied by the current owners. I visited the property on April 27, 2021.

For the purposes of this Technical Report, I am a Qualified Person as defined in National Instrument 43-101. I am jointly responsible for all of the items in this technical report. I have read the Instrument (NI 43-101) and this report is prepared in compliance with its provisions.

I am independent of Fathom Nickel Inc.

I have no prior involvement with the Albert Lake property, the subject of this technical report.

At the effective date of this technical report, to the best of the qualified person's knowledge, information, and belief, the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Dated at White Rock, B.C. this May 7, 2021

Respectfully Submitted,

"Stephen Kenwood"

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Stephen Kenwood, P.Geo.

CERTIFICATE OF QUALIFIED PERSON

I, Alanna Ramsay, P.Geo., hereby certify that:

I am an independent Project Geologist and Professional Geoscientist residing at #205-1585 West 11th Ave, Vancouver, B.C. V6J 2B5.

I graduated from Simon Fraser University, Burnaby B.C. in 2008 with a Bachelor's Degree in Science (B.Sc.) in the field of Earth Science. I have practiced my profession continuously since graduation. I have experience in advanced exploration and development of both precious and base metal deposits on the Schaft Creek porphyry deposit from 2009-2012, the Dolly Varden VMS deposit from 2011-2014 and Gibraltar mine from 2016-2018 in British Columbia. As well as exploration of placer gold and porphyry copper deposits in northern Mexico, from 2014-2015. I am currently employed by the mineral exploration consultant company Terralogic Exploration Inc.

I am registered as a Professional Geoscientist in the Province of British Columbia with Engineers & Geoscientists British Columbia (No. 38408).

I have jointly prepared this report, titled Albert Lake Technical Report for Fathom Nickel Inc., dated May 7, 2021, based on a review of all available data concerning the subject property supplied by the current owners.

For the purposes of this Technical Report, I am a Qualified Person as defined in National Instrument 43-101. I am jointly responsible for all of the items of this technical report. I have read the Instrument (NI 43-101) and this report is prepared in compliance with its provisions.

I am independent of Fathom Nickel Inc.

I have no prior involvement with the Albert Lake property, the subject of this technical report.

At the effective date of this technical report, to the best of the qualified person's knowledge, information, and belief, the technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Dated at Vancouver, B.C. this May 7, 2021

Respectfully Submitted,

"Alanna Ramsay"

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Alanna Ramsay, P.Geo.