# Fathom Continues to Intersect High-Grade Mineralization and Expand the Historic Gochager Lake Deposit in All Directions

written by Raj Shah | May 28, 2024

May 28, 2024 (Source) – **Highlights of Q1/Q2-24 Gochager Lake Project drill program include:**

- **GL24016:**
  - 7.39m @ 1.43% Ni, 0.38% Cu, 0.11% Co (1.80% NiEq) from 182.05m downhole; including:
  - 2.94m @ 2.43% Ni, 0.55% Cu, 0.19% Co (3.00% NiEq) from 186.50m downhole; within:
  - 48.54m @ 0.64% Ni, 0.19% Cu, 0.05% Co (0.82% NiEq) from 172.00m downhole; within:
  - 185.49m @ 0.31% Ni, 0.09% Cu, 0.03% Co (0.40% NiEq) from 101.70m downhole.

- **GL24013:**
  - 3.96m @ 2.28% Ni, 0.51% Cu, 0.18% Co (2.82% NiEq) from 354.77m downhole; within:
  - 21.31m @ 0.64% Ni, 0.20% Cu, 0.05% Co (0.76% NiEq) from 349.09m downhole.

- **GL24012:**
  - 4.32m @ 1.15% Ni, 0.16% Cu, 0.10% Co (1.38% NiEq) from 417.91m downhole.

- Drill tested, borehole electromagnetic (BHEM) conductors

coincide with high-grade, nickel zones of semi-massive to massive sulphide mineralization.
- The historic Gochager Lake deposit is open for expansion in multiple directions and, importantly, to depth.

**Fathom Nickel Inc.** (CSE: FNI) (FSE: 6Q5) (OTCQB: FNICF) (the "**Company**" or "**Fathom**") is pleased to announce results of the Q1/Q2-24 seven drillhole, 2,656 meter drill program at the Company's Gochager Lake Project.

**Gochager Lake Deposit 2023-2024 Overview**

Fathom commenced drilling the historic Gochager Lake deposit in February of 2023. To date, 16 drillholes totaling 5,543 meters have been completed. The Company has now defined a mineralized gabbro unit containing interstitial disseminated magmatic pyrrhotite, pentlandite and chalcopyrite, over a northeast-southwest strike of approximately 300 meters and a vertical extent exceeding 400 meters and remains open in all directions (see Figures 1-3 & 4). This unit is crosscut by semi-massive to massive sulphide veins and stringers that tend to be aligned within vertical oriented chutes. The sulphide mineralogy of the massive and disseminated sulphides is similar, with both styles of mineralization having similar sulphide Ni tenor of 3-4% and similar sulphide chemistry.

The Company believes the disseminated and massive sulphides are related to a common source and may have been injected as a separate pulse from a larger, yet undiscovered magma chamber. These sulphide-rich zones coincide consistently with downhole BHEM conductors occurring within the mineralized gabbro unit. Continued success and confidence utilizing the BHEM tool and drilling sulphide-rich, conductive zones will continue to increase tonnes and the historic grade of the Gochager Lake deposit but importantly guide drilling to the source of the

semi-massive to massive nickel sulphide mineralization. Fathom believes the existence of semi-massive to massive, high-grade sulphide veins of up to 3.25% Ni (as was drilled in hole GL23008) are positive indications that our exploration efforts are getting closer to identifying the late phase source. Refer to Tables 1 & 2 for complete Q1/Q2-24 Assay Results and Drillhole Locations.

***Drill Update Webinar: Investors are invited to attend Fathom Nickel's drill results live webinar taking place at 10:00 AM PST/1:00 PM EST today, Tuesday May 28, 2024.***

*Link here: https://us06web.zoom.us/j/89728636795*

Ian Fraser, CEO and VP Exploration stated, *"We have now gained a much better understanding of the potential of the Gochager Lake deposit. We now recognize the emplacement of the Gochager Lake intrusion as a multi-phased, complex, chaotic, and open magmatic process; descriptors of many of the world's operating magmatic nickel sulphide mining camps. The >1% nickel mineralization we have intersected at depths exceeding 400 meters below surface is wide open for expansion and the deposit is wide open for expansion in all directions. The nickel mineralization intersected in GL24016 resulted from the testing of a BHEM anomaly below GL23005 drilled in 2023. While GL23005 did not itself contain significant high-grade nickel mineralization, we now know that large areas of consistent, disseminated interstitial mineralization have the potential to contain high-grade mineralized intercepts like we generated in GL24016 during this campaign. Areas with consistent disseminated interstitial mineralization combined with BHEM anomalies are a good recipe for discovery and we have several more of these targets to drill test.*

*When we acquired the Gochager Lake project in September 2022, we*

*hypothesized that high-grade, nickel-copper-cobalt mineralization was confined to steeply oriented chutes and thus, the historic vertical drilling quite simply missed this steep geometry and the high-grade nickel mineralization contained within the deposit. Our decision to approach drilling utilizing variable inclined drillholes but each with a consistent azimuth has allowed us to better define the semi-massive to massive sulphide zones and to better understand the controls and geology of the deposit.*

*As stated earlier, the Gochager Lake deposit is complex, and complexity is good. It is also now apparent that the semi-massive to massive vein-like, nickel sulphide mineralization is coming from yet another phase of this complex intrusive. This later phase, the source of the high-grade mineralization, is out there to be discovered. The semi-massive to massive sulphide mineralization we are recognizing at depth and the associated conductivity we recognize beyond our drillholes is suggesting we are getting closer. In just over 5,000 meters of drilling we are beginning to unlock the true potential at Gochager Lake, a testament to our exploration approach and to the efforts of our exploration team".*

**Table – 1 Drillhole Assay Summary**

| Drillhole | From (m) | To (m) | Interval (m)* | Ni wt%** | Cu wt% | Co wt% | NiEq %*** |
|---|---|---|---|---|---|---|---|
| GL24013 | 354.77 | 358.73 | 3.96 | **2.28** | 0.51 | 0.18 | 2.82 |
| *Within* | 349.09 | 370.40 | 21.31 | 0.64 | 0.20 | 0.05 | 0.76 |
| *Within* | 302.11 | 372.61 | 70.50 | 0.33 | 0.10 | 0.03 | 0.42 |
| GL24016 | 186.50 | 189.44 | 2.94 | **2.43** | 0.55 | 0.19 | 3.00 |
| GL24016 | 182.05 | 183.01 | 0.96 | **2.15** | 0.59 | 0.17 | 2.40 |
| *Within* | 182.05 | 189.44 | 7.39 | **1.43** | 0.38 | 0.12 | 1.79 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Within* | 175.33 | 189.44 | 13.91 | **1.12** | 0.30 | 0.09 | 1.39 |
| GL24016 | 208.90 | 209.53 | 0.63 | **1.58** | 0.11 | 0.14 | 1.84 |
| GL24016 | 219.00 | 219.63 | 0.63 | **1.21** | 0.24 | 0.11 | 1.50 |
| *Within* | 172.00 | 220.54 | 48.54 | 0.64 | 0.19 | 0.05 | 0.82 |
| *Within* | 101.70 | 285.48 | 183.78 | 0.31 | 0.09 | 0.02 | 0.40 |
| GL24012 | 417.91 | 422.23 | 4.32 | **1.15** | 0.16 | 0.09 | 1.38 |
| *Within* | 417.11 | 442.79 | 27.44 | 0.41 | 0.08 | 0.03 | 0.50 |
| *Within* | 390.88 | 444.55 | 53.67 | 0.30 | 0.07 | 0.02 | 0.37 |
| GL24015 | 324.79 | 325.12 | 0.33 | **1.49** | 0.55 | 0.10 | 1.93 |
| *Within* | 323.72 | 325.12 | 1.40 | 0.66 | 0.19 | 0.05 | 0.82 |
| *Within* | 319.53 | 332.00 | 12.47 | 0.27 | 0.06 | 0.02 | 0.33 |
| GL24014 | 203.89 | 212.53 | 8.64 | 0.29 | 0.06 | 0.03 | 0.38 |
| *Within* | 201.00 | 237.53 | 36.53 | 0.20 | 0.04 | 0.02 | 0.25 |
| GL24017 | 179.44 | 196.14 | 16.70 | 0.29 | 0.07 | 0.02 | 0.36 |
| *Within* | 166.00 | 204.86 | 38.86 | 0.25 | 0.06 | 0.02 | 0.31 |
| GL24017 | 201.77 | 202.35 | 0.58 | **1.02** | 0.24 | 0.08 | 1.26 |
| GL24018 | 121.00 | 122.4 | 1.40 | 0.61 | 0.14 | 0.04 | 0.75 |
| *Within* | 99.88 | 139.00 | 39.12 | 0.28 | 0.08 | 0.02 | 0.35 |

** Interval (m) are downhole intervals and not true thickness. Insufficient data currently to determine true thickness.*

*** Mineralized intersections calculated using a 0.2% Ni grade cut-off for overall zones and 0.5% Ni and 1.0% Ni was used for high-grade zones.*

**** Where used in this news release NiEq% (Nickel Equivalent) = Ni%+Cu%*Cu$/lb/Ni$/lb+Co%*Co$/lb/Ni$/lb where Ni (US$8.67/lb), Cu (US$4.62/lb), Co (US$12.62/lb) and NiEq calculation assumes 100% metal recovery. Fathom has not performed any metallurgical recovery tests on Gochager Lake mineralization.*

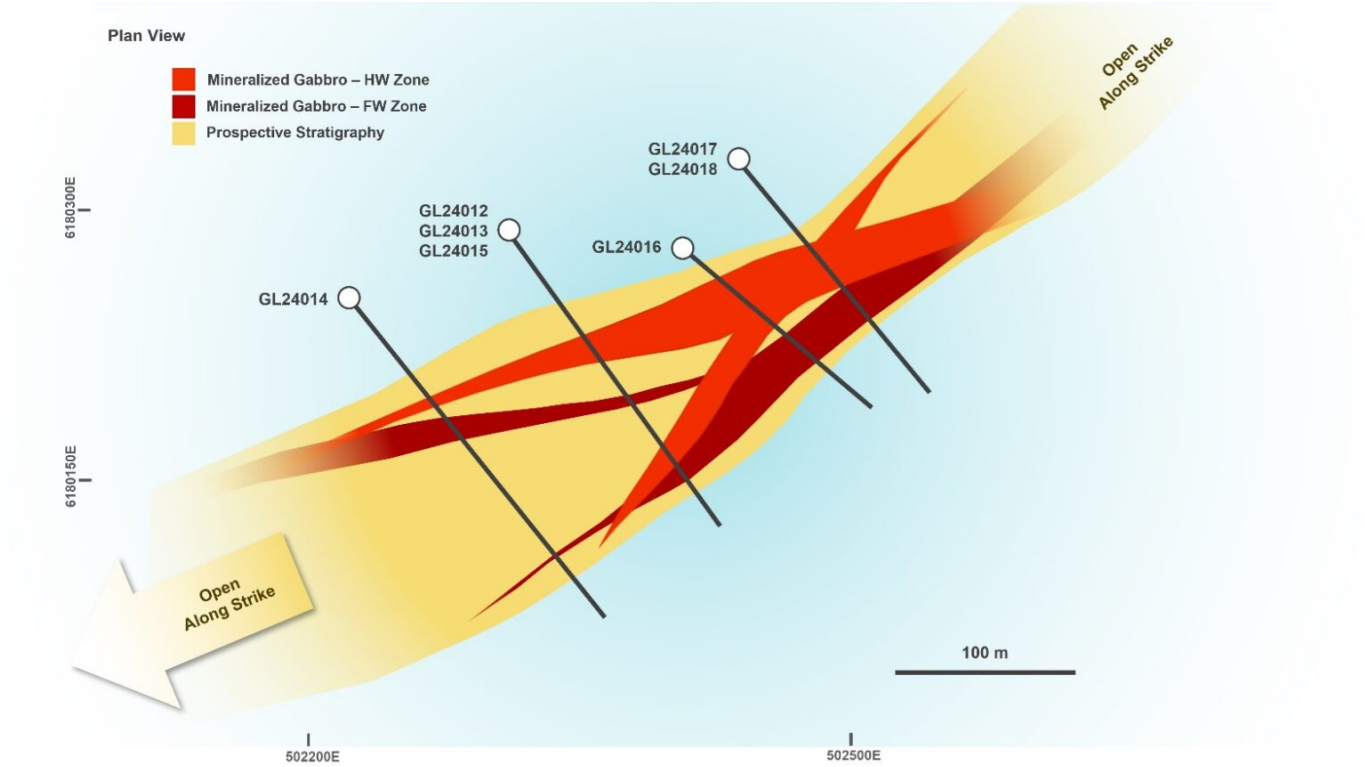



**Figure – 1 Q1/Q2-24 Drillhole Plan Map**

To view an enhanced version of this graphic, please visit: https://images.newsfilecorp.com/files/7843/210753_af55c309d4d4dac1_001full.jpg

- Drillhole traces projected to surface.
- A shallow dipping fault has been mapped across the area of Fathom drilling.
- Zones of mineralized gabbro have been defined in the hanging wall (HW) and footwall (FW) of the fault. At present we interpret an offset to the south along this fault, opening up an area for expansion not previously recognized.
- Zones of mineralized gabbro are defined using a 0.1% Ni cut-off. Broad zones of mineralized gabbro >0.1% Ni are well defined in the hanging wall and footwall locally with true widths up to 75m. An example of very broad, consistent >0.1% Ni mineralization:

- GL24016; 185.49m @ 0.31% Ni, 0.09% Cu, 0.03% Co from 101.7m downhole.

- Not illustrated on Figure 1, drillhole GL23011 collared ~400m to the northeast intersected magmatic nickel sulphides in a gabbro host and BHEM anomalies were detected off-hole. This widens the field of further targets and discoveries.

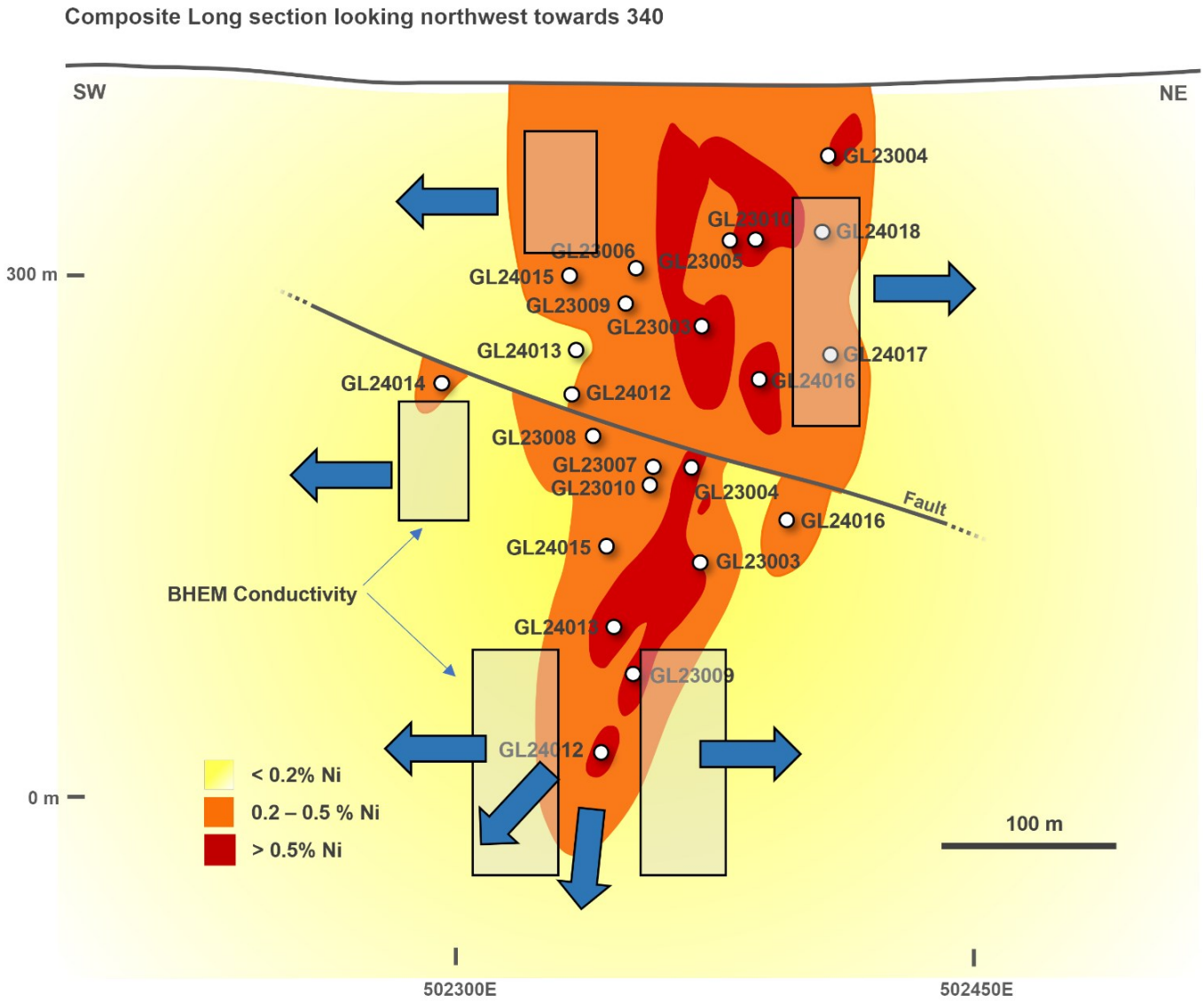



**Figure – 2 Composite Long Section Derived from 2023-2024 Drilling**

To view an enhanced version of this graphic, please visit: https://images.newsfilecorp.com/files/7843/210753_af55c309d4d4dac1_002full.jpg

- The grey rectangles are defining areas of BHEM conductivity, the extent of conductivity remains undefined and thus open.
- The high-grade nickel sulphides intersected in GL23009, GL24012, GL24013 coincide with BHEM conductors (grey rectangles), and this mineralization remains open up plunge, down plunge, to depth, to the south, and along strike illustrating the potential for extension of existing mineralized zones and new discoveries.
- For Example:
    - Strong off-hole BHEM conductors were detected in GL24014 @ ~170m and ~240m downhole.
    - Strong, broad off-hole BHEM conductors detected in GL24017 @ ~165m and ~205m downhole.

- In addition to the expansion potential discussed above, BHEM and mineralized gabbro occurring within GL24014, GL24017 and GL24018 confirm that the Gochager Lake deposit remains open for expansion to SW and NE. Strong BHEM conductors suggest the presence of semi-massive to massive nickel bearing sulphides.
- Strong BHEM conductivity measured in front of holes GL23009, GL24012, GL24013 and GL24015 @ ~140m downhole, suggestive of hanging wall mineralization, has not been drill tested.
- Many of the 2023-2024 drillholes exhibit building conductivity to end of the drillhole, indicative of a mineralized source extending beyond end of the drillholes.
- As on Figure 1 and not illustrated on Figure 2, drillhole GL23011 collared ~400m to the northeast intersected

magmatic nickel sulphides in a gabbro host and BHEM anomalies were detected off-hole.

This slightly oblique view of the Gochager Lake deposit illustrates, in some respects, the chronology and understanding of the deposit based on drilling to date. **The key takeaways are the zones of >0.5% Ni, containing >1.0% Ni mineralization resulted from drilling BHEM targets derived from both historic drilling and Fathom drillholes. BHEM conductivity on the margins of Fathom drilling (GL24014, GL24017 & GL24018) is very compelling evidence that this deposit is very open along strike and it is also very evident the deposit is very open for expansion to depth.**

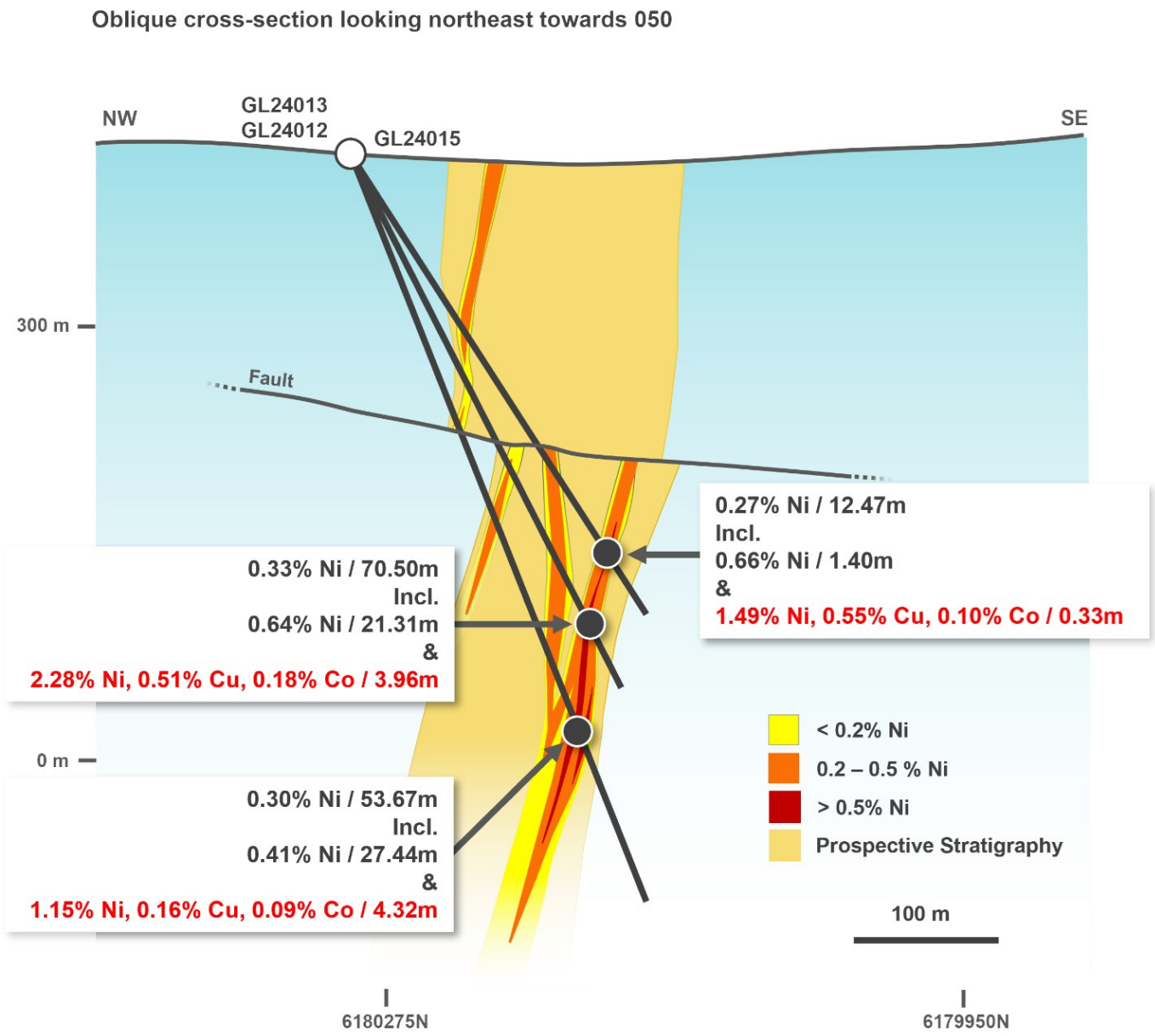



**Figure – 3 Cross-Section of Drillholes GL24012, GL24013 & GL24015**

To view an enhanced version of this graphic, please visit: https://images.newsfilecorp.com/files/7843/210753_af55c309d4d4dac1_003full.jpg




**Figure 3a – Coarse granular pentlandite @ 356.32m; 2.65% Ni, 0.62% Cu, 0.21% Co**

To view an enhanced version of this graphic, please visit: https://images.newsfilecorp.com/files/7843/210753_af55c309d4d4dac1_004full.jpg

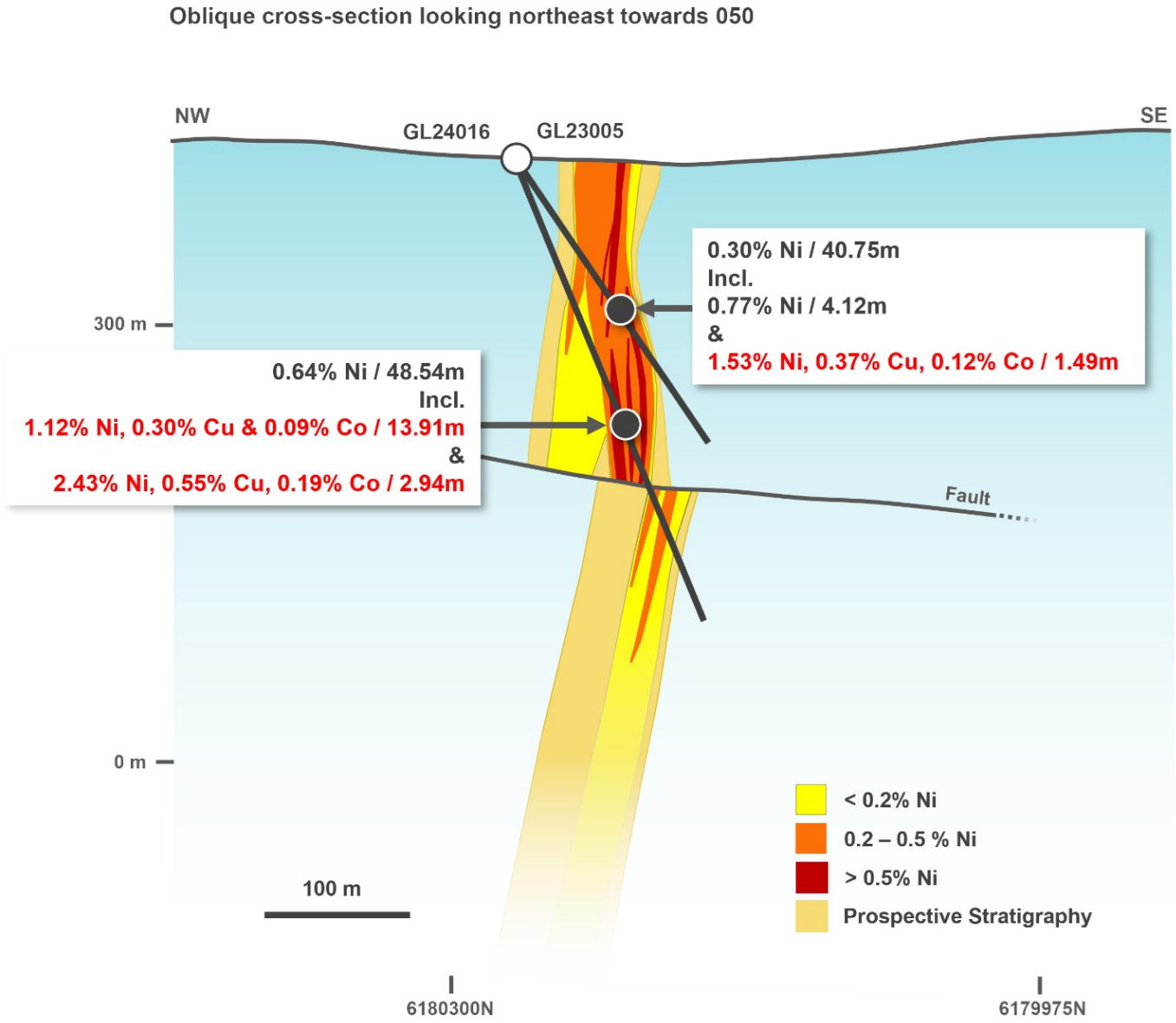



**Figure – 4 Cross-Section of Drillholes GL23005 & GL24016**

To view an enhanced version of this graphic, please visit: https://images.newsfilecorp.com/files/7843/210753_af55c309d4d4dac1_005full.jpg

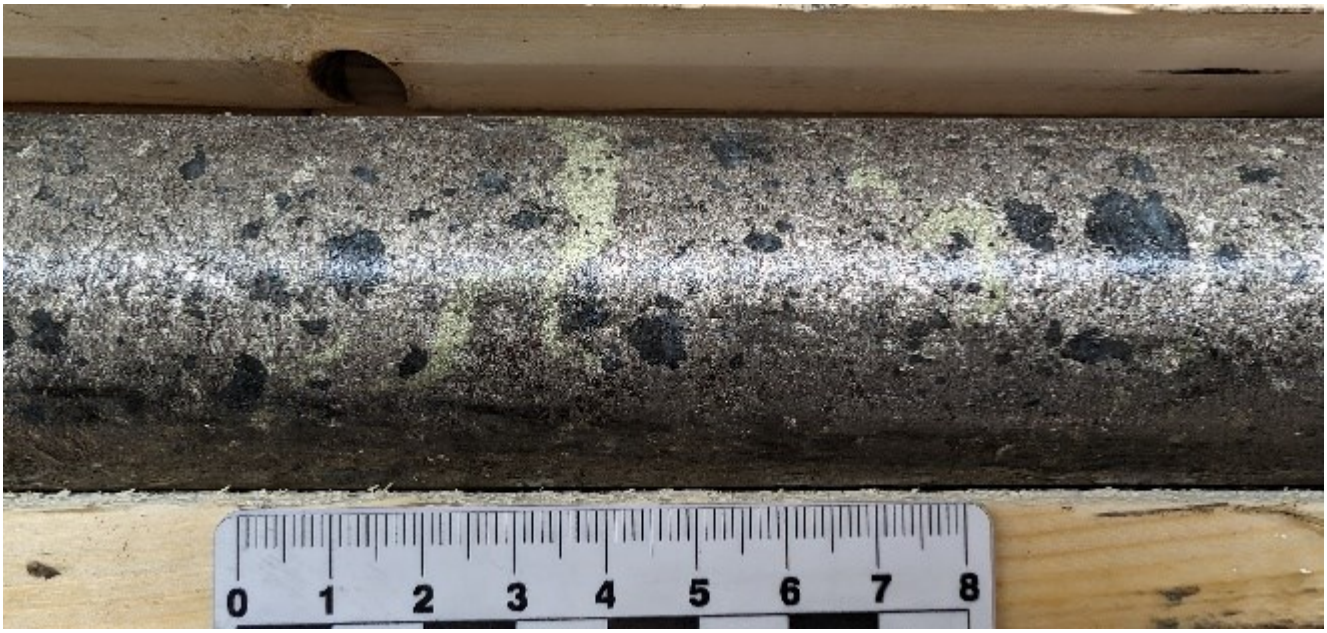



**Figure 4a – Blebby chalcopyrite disseminated granular pentlandite @ 186.5m; 2.84% Ni, 0.86% Cu, 0.23% Co**

To view an enhanced version of this graphic, please visit: https://images.newsfilecorp.com/files/7843/210753_af55c309d4d4dac1_006full.jpg

Fathom is very pleased with results of its methodical approach to, first defining the geometry and style of mineralization(s) occurring at the Gochager Lake deposit, and then discovering high-grade mineralization at depth and beyond the boundary of the historic deposit. The Company intends to continue to build on both the mineral grade and tonnage of the historic deposit but remains focused on defining the source of the high-grade nickel-copper-cobalt mineralization.

Field exploration consisting of soil geochemistry, mapping and prospecting and a detailed drone MAG survey over high-priority targets defined by our interpretation of a 2008 VTEM survey is scheduled to commence during the week of June 10. Our understanding of the complex textures associated with the Gochager Lake gabbro provides an important guide for our field crews to define prospective geology within, and outside of the

deposit area. Crews will follow-up on TDEM geophysical conductors Fathom has defined in the deposit area, and follow-up on Gochager-like 2008 VTEM targets derived from the historic airborne survey. From the analysis of the historical 2008 VTEM survey, we recognize a plethora of untested EM and Magnetic anomalies to follow-up on.

***Drill Update Webinar: Again, investors are invited to attend Fathom Nickel's drill results live webinar taking place at 10:00 AM PST/1:00 PM EST today, Tuesday May 28, 2024.***

*Link here: https://us06web.zoom.us/j/89728636795*

**Table – 2 Drillhole Location Summary**

| Drillhole | Easting* | Northing* | Elevation ASL | Azimuth (°) | Dip (°) | Final Depth (m) |
|---|---|---|---|---|---|---|
| GL24012 | 502309.5 | 6180290 | 413.97 | 145 | -70 | 551 |
| GL24013 | 502309.2 | 6180290 | 413.97 | 145 | -63 | 414 |
| GL24014 | 502222.1 | 6180252 | 419.99 | 145 | -61 | 440 |
| GL24015 | 502309.2 | 6180290 | 413.97 | 145 | -59 | 374 |
| GL24016 | 502409.3 | 6180278 | 408.17 | 142 | -67 | 344 |
| GL24017 | 502439.1 | 6180328 | 406.76 | 141 | -59 | 309 |
| GL24018 | 502438.4 | 6180328 | 406.76 | 141 | -45 | 224 |

** Drillhole locations are UTM NAD83 – Zone 13.*

**Quality Assurance / Quality Control (QA/QC) Disclosure Statement**

Fathom implements an industry-standard QA/QC for all field and diamond drill programs. Fathom, through the services of TerraLogic Exploration Inc., inserts QA/QC samples in its diamond drill programs at a rate of one sample per approximately

every 12-13 samples collected. Standards sourced from OREAS (OREAS-86, OREAS-72B and OREAS-74B) were inserted into the sample stream at a rate of 1 in 30 samples. Additionally, lab duplicates (coarse rejects) were inserted and positioned in the sample sequence at a rate of 1 in 30 samples and positioned in the sample sequence alternating with standards to result in a QA/QC insertion rate of no less than 1 in 15 samples. Blanks were inserted at the start of every sample batch and additionally after samples of anticipated high-grade or high sulphide content.

Assaying is performed at ALS Canada Ltd. ("ALS"). ALS is an accredited laboratory (SCC – CAN-P-1579 and CAN-P-4E ISO/IEC 17025) and is independent of Fathom. All drill core samples are analyzed using a 4-Acid digestion followed by 33 element ICP-AES analyses (Code ME-ICP61). Over limit Ni, Cu results are further analyzed by 4-Acid ore grade elements ICP-AES process (Code ME-OG62). Analyses for Au, Pd and Pt utilized the ore grade Pt, Pd and Au by ICP-AES (Code PGM-ICP27). Total sulphur by (S-IR08) is used to determine overlimit S (>10%) as determined by the ICP analysis.

**Qualified Person and Data Verification**

Ian Fraser, P.Geo., CEO, VP Exploration, and a Director of the Company and the "qualified person" as defined by National Instrument 43-101, has verified the data disclosed in this news release, and has otherwise reviewed and approved the technical information in this news release on behalf of the Company.

**About Fathom Nickel Inc.**

Fathom is an exploration company that is targeting magmatic nickel sulphide discoveries to support the rapidly growing global electric vehicle market.

The Company now has a portfolio of two high-quality exploration projects located in the prolific Trans Hudson Corridor in Saskatchewan: 1) the **Albert Lake Project**, a 90,000+ hectare project that was host to the historic and past producing Rottenstone deposit (produced high-grade Ni-Cu+PGE, 1965-1969), and 2) the 22,000+ hectare **Gochager Lake Project** that is host to a historic, NI43-101 non-compliant open pit resource consisting of 4.3M tons at 0.295% Ni and 0.081% Cu[2]

*1 – The Saskatchewan Mineral Deposit Index (SMID#0950) Tremblay-Olson Ni-Cu Deposit or Showing*

*2 – The Saskatchewan Mineral Deposit Index (SMID#0880) reports drill indicated reserves at the historic Gochager Lake Deposit of 4,262,400 tons grading 0.295% Ni and 0.081% Cu mineable by open pit. Fathom cannot confirm the resource estimate, nor the parameters and methods used to prepare the reserve estimate. The estimate is not considered NI43-101 compliant and further work is required to verify this historical drill indicated reserve.*

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This news release contains “forward-looking statements” that are based on expectations, estimates, projections and

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