

2 December 2024

UP TO 90% COPPER RECOVERY DEMONSTRATED AT HORDEN LAKE

Excellent copper recovery to high grade concentrates confirmed in preliminary metallurgical results, supplemented by substantial value addition from byproducts.

Highlights

- Excellent copper recoveries to high grade concentrates from multiple batch flotation tests:
 - o 85% to 90% Cu recovery
 - o 25% to 30% Cu concentrate grade produced
 - o Fast-floating chalcopyrite, with no deleterious elements present
- **Significant byproduct contribution** from precious metals reporting to the Cu concentrate. Additional byproduct recoveries expected in the nickel concentrate.
- **Conventional flotation flowsheet established**, producing widely marketable copper and nickel concentrates.
- Saleable nickel concentrates produced, with considerable progress made in understanding the drivers of nickel flotation. Additional composites are being prepared to further develop the nickel flotation circuit.
- Testwork, including locked cycle tests, scheduled to be completed over the next 2 months.
- Horden Lake property wide EM survey also in progress.

Pivotal Metals Limited (ASX:PVT) ('Pivotal' or the 'Company') is pleased to provide an update from its maiden metallurgical testwork program on the 100% owned Horden Lake Project in Quebec. The excellent copper performance demonstrated here supports the development credibility of the Horden Lake deposit, and complements the growing resource potential as evidenced in recent drilling and geophysics on the property.

Ivan Fairhall, Pivotal Managing Director, commented: "We are excited to share preliminary results from our maiden testwork program at our 100% owned Horden Lake project. Copper is the dominant metal on the project, and these excellent copper results are a strong endorsement of the future development potential of the project.

"Not only have we achieved high copper recoveries, but the production of clean highgrade concentrates containing value adding precious metals byproducts maximises the revenue and financing potential of the deposit, adding significant strategic value to the company given the severe copper market deficits being widely forecast.

"We continue to develop and optimise the flow sheet, in particular the nickel circuit, and we look forward to sharing further testwork results in the first quarter of 2025."

Pivotal Metals Limited ABN: 49 623 130 987

ASX: PVT

Projects CANADA

- Horden Lake
 Ni-Cu-PGM development
- Belleterre-Angliers Ni-Cu-PGM exploration



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Overview and Results Summary

Horden Lake is a copper dominant Cu-Ni-Au-Ag-PGM-Co project located 131km north-northwest of Matagami, in Quebec Canada. Quebec is a world class mining province with over 20 operating mines, copper smelting and refining, and extensive infrastructure network which includes some of the globally lowest cost green hydropower.

The Project hosts an Indicated and Inferred Mineral Resource Estimate (MRE) of 28mt at 1.5% CuEq, as a result of over 52,464m of previous drilling on the property. Pivotal has recently completed its maiden diamond drilling campaign of 34 holes totalling 7,072m. The drill program confirmed an expanding mineralised envelope, defined significant precious metals across the deposit, and provided sample for this metallurgical test work and ore characterisation study. A MRE update will follow the completion of the metallurgical testwork program. 2024 downhole EM results (Figure 5) indicate that mineralisation continues well beyond the current drill tested limits, and further geophysics and drilling is planned to exploit the further exploration potential on the property.

Excellent copper concentrates produced in preliminary work

The preliminary metallurgical testwork results reported here demonstrate that the Horden Lake can produce a clean high-grade copper concentrate at excellent recovery levels of 85 - 90%, using conventional flotation techniques (Figure 2). No deleterious elements of concern have been observed. Essentially all copper occurs as fast-floating chalcopyrite.

In addition, good precious metal recoveries of 55% Au, 50% Ag and 38% Pd were demonstrated in the copper concentrate¹ under unoptimised conditions, with expected high payabilities of these metals substantially increasing the value and attractiveness of the concentrate. Further precious and cobalt recoveries are expected in the nickel circuit.

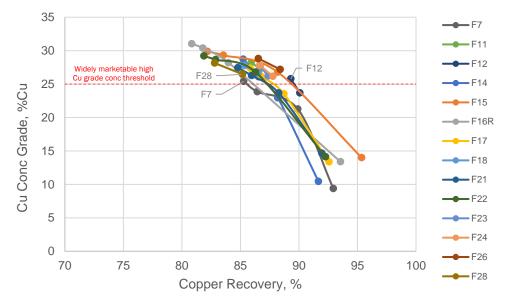


Figure 1: Copper cleaner grade recovery curves from multiple batch tests on gabbro

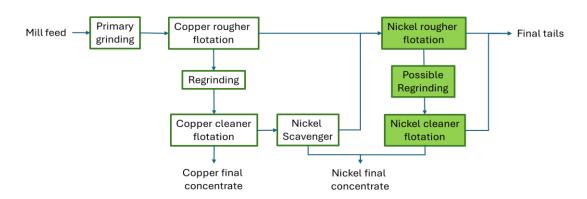


Figure 2: Horden Lake preliminary flowsheet showing conventional sequential flotation



Nickel flowsheet development is in progress. Work to date has shown that a nominally marketable nickel concentrate can be made, but more work, focused on the green boxes in Figure 2, is needed before any reasonable estimate of nickel recovery can be made.

Nickel has been found to be present in both Ni-rich pentlandite, and Ni-poorer pyrrhotite. The economic nickel recovery potential is driven by how the nickel is distributed between these two minerals, and how well the two minerals can be separated by flotation. This is the key focus of the next phase of the program.

Testwork Supporting Information

The testwork is being conducted by Blue Coast Research in Parksville BC, Canada, and was initiated to develop a baseline metallurgical treatment scheme aimed at making a saleable grade copper and nickel concentrates. Comminution and flotation data sufficient to provide cost input into a potential future economic study of the project were to be created, together with preliminary estimates of recoveries and concentrate quality.

Sample Selection

As part of testing program, Blue Coast reviewed the drilling data and provided guidance on sampling to create metallurgical composites for the main rock types, being gabbro and metasedimentary rock.

Sample ID Method	Cu (%) 4AD-ICP	Ni (%) 4AD-ICP	Pd (g/t) FA-ICP	Au (g/t) FA-ICP	Ag (ppm) 4AD-ICP	Co (ppm) 4AD-ICP	Pt (g/t) FA-ICP	Fe (%) 4AD-ICP	S _{total} (%) ELTRA
Flot Comp 1 - Gabbro	0.83	0.33	0.21	0.15	12	385	0.05	21	10.5
Flot Comp 2 - MetaSed	0.87	0.26	0.28	0.25	14	355	0.04	22	11.2

Table 1: Flotation composite head assays

Two flotation composites 'gabbro' and 'metased' were compiled using drill holes from a wide spatial distribution of the orebody. Flotation composites were designed using freshly drilled mineralised intervals of $\frac{1}{2}$ and $\frac{1}{4}$ core from the 2024 drilling program (Figure 3). For comminution, gabbro and metasediment composites were taken from the $\frac{1}{2}$ HQ core in the central zone of the deposit, and near to mineralised intervals (Figure 4).

Each composite included intercepts of massive sulphide mineralisation to ensure this too was represented.

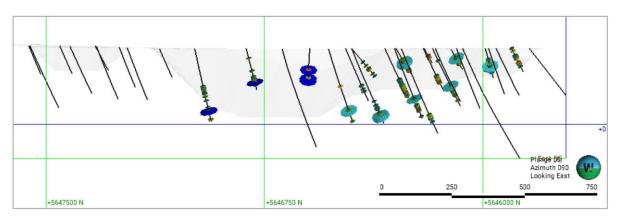


Figure 3: Location of flotation sample composites, looking south-east

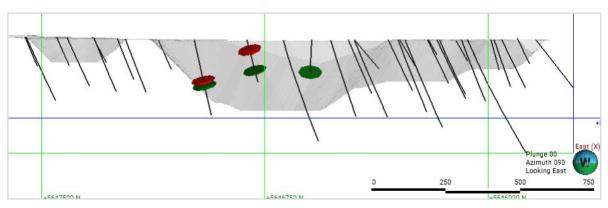


Figure 4: Location of comminution sample composites, looking south-east



Comminution

The two comminution composites were tested by the SMC Test® methodology. Results returned Axb value of 28.9 for gabbro and 41.5 for metased, whilst SCSE values returned 12.5 kWh/t and 10.14 kWh/t respectively. Results indicate the material is moderately hard and suggest amenability to conventional SAG milling.

The Bond ball mill work indices were 15.4 kWh/t for gabbro and 16.6 kWh/tonne for metased. This correlates with a moderate hardness and therefore power intensity. Assuming grid power, which is among the lowest cost globally in Quebec², it is not envisaged the project economics will be particularly sensitive to ore hardness. Economic trade off studies are warranted to determine the optimum comminution solution.

Mineralogy

Essentially all copper in the deposit occurs as fast-floating chalcopyrite. It is relatively coarse-grained and liberates easily at the current grind size. The mineralogical data on 30 samples so far all point to favourable copper flotation, which is supported by the metallurgical data.

At Horden Lake, nickel is almost entirely hosted in sulphides, predominately Ni-rich pentlandite and Ni-poor pyrrhotite (roughly one percent occurs in non-sulphide and a similar amount occurs in pyrite). Pentlandite is the target economic host of nickel for the conventional flotation concentrate market, and the amount of nickel it hosts varies across the project. Analyses of 25 different samples with at least 0.2% Ni showed that between 47% and 91% of the nickel was hosted in pentlandite. This is a major driver of nickel recovery to a marketable concentrate.

Further, the nature of the pentlandite mineralisation varies widely. Some is coarse-grained, easily liberated upon grinding and easily recovered. Some is fine-grained and therefore harder to liberate and float.

Understanding the above has been a key objective of Pivotal's recent work on nickel recovery. Further variability testwork is planned to support predictive nickel mineralogy and metallurgy, and this will help further develop the nickel flotation circuit.

Flotation

To date, some 30 flotation tests with varying process conditions have been completed on the two composites, predominantly on the gabbro composite. Copper circuit performance is consistently very good.

A grind of 80% passing 75-85 microns is employed in the currently favoured flowsheet. Iron sulphide depression is achieved using depressants in wide use in Canadian operations (lime, sodium sulphite and TETA), and the use of aeration prior to flotation. Copper rougher flotation uses 3418A, a commonly used collector and MIBC, a widely used frother. All reagent doses are relatively low compared with other Cu/Ni ores being processed commercially, and the rougher flotation time is short. This all points to favourable capital and operating processing costs.

The copper rougher concentrate contains the copper sulphides (chalcopyrite) and the most floatable nickel sulphides (pentlandite). This is subjected to a light regrind, and the same reagents are then used to effect copper flotation away from the nickel sulphides. The concentrate from this circuit is the final copper concentrate, while the tails is directed to a nickel flotation circuit.

Results from test F7, a typical unoptimised batch test on the copper circuit, are shown below.

Product		Assays			% Distribution	
Product	Cu (%)	Ni (%)	S (%)	Cu	Ni	S
Cu Cleaner 3 Conc	25.4	0.9	31.3	85.3	6.9	8.8
Cu Cleaner 2 Conc	23.9	0.9	30.3	86.4	8.0	9.2
Cu Cleaner 1 Conc	21.3	1.1	28.8	89.9	10.8	10.2
Cu Rougher Conc	9.4	2.1	23.8	92.9	48.2	19.7

Table 2: Batch copper circuit test (F7 - gabbro) result: base metals

Test F7 has been tabulated here as precious metal assays are also available on the final concentrate. Recoveries to the copper concentrate range from 55% for gold to 38% for palladium, with gold, silver and palladium expected to attract excellent payability from copper smelters.

² Comparison of Electricity Prices in Major North American Cities 2023 <u>www.hydroguebec.com/data/documents-donnees/pdf/comparison-electricity-</u> prices.pdf. Patriot Battery Metals (ASX:PMT) recent Shaakichiuwaanaan PEA assumes \$0.05/kWh (21 August, 2024)



Product	Ag	Au	Pd	Pt			
Copper Cleaner 3 Conc (ppm)	216.6	3.1	2.9	0.5			
Head (ppm)	12.0	0.2	0.2	0.1			
Recovery (%)	49.4	55.4	38.3	29.3			

Table 3: Test F7 Precious Metal Concentrate Grades and Recoveries

More recent tests have seen reduced nickel losses to the copper final concentrate of <4% (test F28), whilst maintaining copper recoveries (85.2% recovery @ 26.8% Cu). In addition nickel in those copper tails has been refloated to make a nickel concentrate assaying 9.7% nickel (the nickel scavenger stage in Figure 2).

An initial batch copper cleaner flotation test on the metased composite again yielded 85% copper recovery and the same or better precious metal recoveries as F7, to a copper 3rd cleaner concentrate assaying slightly less in copper, and grades of gold, palladium and silver that were similar to Test F7.

Nickel process development is still underway (see boxes in green in the flowsheet Figure 2). Further advancing the nickel flotation circuit and enhancing the nickel (and copper) geometallurgical picture for the project are key objectives of work to be undertaken in the next 2 months.

Locked cycle testwork will be completed on the final processing configuration.



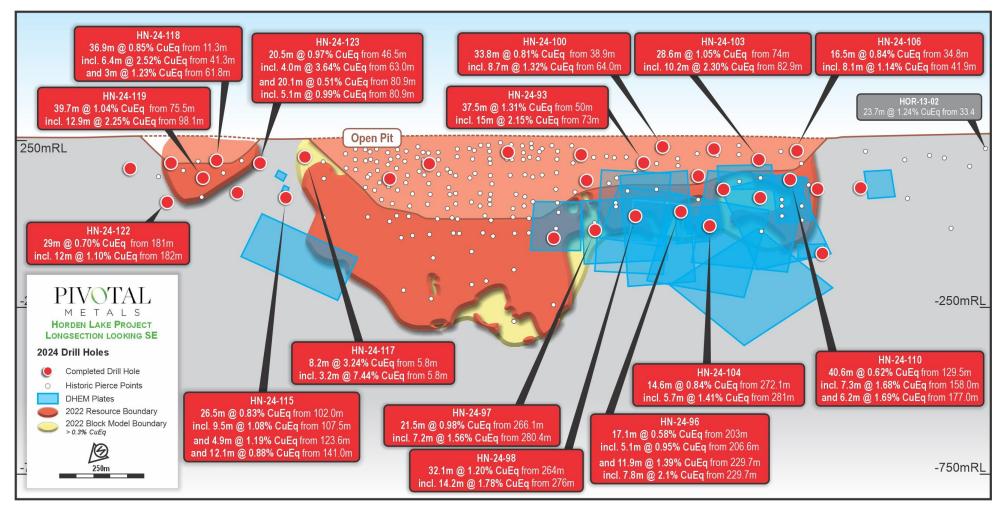


Figure 5: Longitudinal section looking southeast through the Horden Lake deposit, showing selected highlight intercepts from 2024 drilling and 2024 DHEM conductors indicating continuity of mineralisation at depth



Background

The Horden Lake deposit was discovered by INCO Ltd. in the 1960s. Between 1962 and 1969, INCO completed geophysics and 157 diamond drill holes totalling 32,229m. At the time the Project was remote, with access only possible via float plane or helicopter. INCO focused solely on the nickel and copper content, without assaying for other metals, and given the difficult access, metal prices, and its primary nickel focus on the larger Sudbury Nickel Camp, did not proceed, working only sporadically on the Project into the 1970s.

Subsequent drilling programs by Southampton and El Condor in 2008 and 2012 completed a further 18,136m and 2,037m respectively. Multi-element assays taken as part of these programs confirmed the presence of valuable byproducts such as platinum, palladium, gold, silver and cobalt, however these did not appear to be of focus, and were constrained to the central part of the deposit. In 2013, the Project was forfeited as security for a delinquent loan, and the Project sat dormant in private ownership prior to Pivotal's 100% acquisition in late-2022.

The Horden Lake deposit extends in excess of 2,100m along strike, and has been intersected at its deepest point 540 metres deep / 700m down-dip along the footwall contact zone. The deposit occurs as remobilised concentrations of polymetallic sulphide accumulations along a contact zone between mafic intrusive and metasediment. Local concentrations of Cu and Ni sulphide and precious metals also frequently occur higher up within the mafic intrusion. The wide distribution of the mineralised sulphide within the mafic intrusion and remobilized along the footwall contact is indicative of a large system.

Pivotal is continuing to broaden its search area with geophysics and additional drilling over the full 3,200 metres of contact strike, as well as other regional anomalies, to target new areas for resource growth on the Project.

Mineral Resource Estimate

In 2022, Pivotal completed a comprehensive evaluation of all historical data, and calculated an updated Inferred and Indicated Mineral Resource Estimate totalling 27.8mt at 1.49% CuEq (refer Table 4). Owing to the limited distribution of multi-element assays, gold was only domained in the central portion of the deposit. Palladium showed high correlation to nickel and was therefore able to be extrapolated. The balance of the gold, platinum, cobalt and silver which have been observed, but not modelled, represents potential upside on the Project.

Ostarani	egory Tonnes			Grade	Grade			Contained Metal			
Category	Tonnes	CuEq (%)	Cu (%)	Ni (%)	Au (g/t)	Pd (g/t)	CuEq (kt)	Cu (kt)	Ni (kt)	Au (koz)	Pd (koz)
Indicated	15.2	1.50	0.77	0.20	0.13	0.19	228.6	117.6	30.5	59.4	91.3
Inferred	12.5	1.47	0.67	0.25	0.02	0.20	184.3	84.0	31.4	6.9	76.7
Total	27.8	1.49	0.74	0.22	0.08	0.19	413.9	201.6	61.9	66.2	168.0

Table 4: 2022 Horden Lake Mineral Resource Estimate, broken down by resource category and open pit/underground

Cotogony	Category Tonnes Grade			Contained Metal							
Category	Tonnes	CuEq (%)	Cu (%)	Ni (%)	Au (g/t)	Pd (g/t)	CuEq (kt)	Cu (kt)	Ni (kt)	Au (koz)	Pd (koz)
Open Pit	17.3	1.38	0.67	0.21	0.08	0.19	239.6	115.7	35.6	43.9	100.5
Underground	10.5	1.66	0.82	0.25	0.01	0.13	173.9	85.9	26.3	22.3	67.5
Total	27.8	1.49	0.74	0.22	0.08	0.19	413.9	201.6	61.9	66.2	168.0

Refer to ASX announcement dated 16 November 2022 "Outstanding Horden Lake 27.8Mt JORC estimate".

PVT CuEq formula adopted is consistent with the 2022 MRE. CuEq = Cu(%) + Ni(%)*2.59 + Au(ppm)*0.63 + Pd(ppm)*0.74. Assumes (recovery / US\$ prices): Cu 90% / \$7,300, Ni 80% / \$21,300, Au 80% / \$1,600, Pd 80% / 1,900. Excludes any Pt, Co or Ag credit. It is the company's opinion that all the elements included in the metal equivalents calculation have a reasonable potential to be recovered and sold.

This announcement has been authorised by the Board of Directors of the Company.

For further information, please contact:

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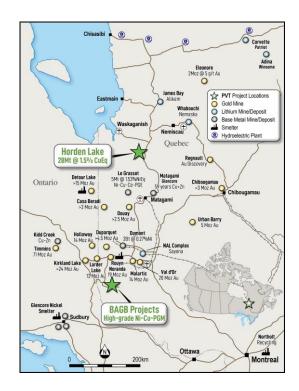
About Pivotal Metals

Pivotal Metals Limited (ASX:PVT) is an explorer and developer of world-class critical mineral projects.

Pivotal holds the recently acquired flagship Horden Lake property, which contains a JORC compliant Indicated and Inferred Mineral Resource Estimate of 27.8Mt at 1.49% CuEq, comprising copper, nickel, palladium and gold. Pivotal intends to grow the mineral endowment of Horden Lake, in parallel with de-risking the project from an engineering, environmental and economic perspective.

Horden Lake is complemented by a battery metals exploration portfolio in Canada located within the prolific Belleterre-Angliers Greenstone Belt comprised of the Midrim, Laforce, Alotta and Lorraine high-grade nickel copper PGM sulphide projects in Quebec. Pivotal intends to build on historic exploration work to make discoveries of scale which can be practically bought into production given their proximity to the world famous Abitibi mining district.

To learn more please visit: www.pivotalmetals.com



Forward Looking Statements Disclaimer

This announcement contains forward-looking statements that involve a number of risks and uncertainties. These forward-looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more of the risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. No obligation is assumed to update forward looking statements if these beliefs, opinions, and estimates should change or to reflect other future developments.

Competent Person Statement

The information in this announcement that relates to Exploration Results is based on information compiled and conclusions derived by Mr Paul Nagerl. Mr Nagerl is a Professional Geologist Ordre des géologues du Québec OGQ PGeo and consultant of Pivotal Metals.

The information in this announcement that relates to Metallurgical Results is based on information compiled by Mr Chris Martin. Mr Martin has 40 years of experience in metallurgy and is a Member of the UK Institute of Materials, Minerals and Mining, is a Chartered Engineer, and is a consultant to the Company.

The information in this announcement that relates to the Horden Lake Mineral Resource Estimate is based on information compiled and conclusions derived by Dr. Scott Jobin-Bevans and Mr. Simon Mortimer, both Competent Persons as defined by JORC Code (2012). Dr Jobbin-Bevans is a P.Geo with Professional Geoscientists Ontario, Principal Geoscientist Caracle Creek International Consulting Inc. Mr Mortimer is a P.Geo practicing as a member of the Australasian Institute of Mining and Metallurgy, for Atticus Consulting S.A.C.

Mr Nagerl, Mr Martin, Mr Jobin-Bevans and Mr Mortimer have sufficient experience that is relevant to the Technical Assessment of the Mineral Assets under consideration, the style of mineralisation and types of deposit under consideration and to the activity being undertaken to qualify as a Practitioner as defined in the 2015 Edition of the "Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets", and as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". They consent to the inclusion in the Announcement of the matters and the supporting information based on his information in the form and context in which it appears.



Certain information in this announcement also relates to prior drill hole exploration results, are extracted from the following announcements, which are available to view on <u>www.pivotalmetals.com</u>.

- <u>2 May 2024</u>: HN-24-92/93, <u>16 May 2024</u>: HN-24-94/95, <u>6 June 2024</u>: HN-24-96/97, <u>2 July 2024</u> HN-24-98/99/100, <u>15 July 2024</u>: HN-24-101/102/103/104, <u>24 July 2024</u>: HN-24-105/107/109, <u>5 August 2024</u>: HN-24-105/107/109, <u>19 August 2024</u>: HN-24-106/110/111. <u>4 September 2024</u>: HN-24-112/114/114A/115/117/120. <u>19 September 2024</u>: HN-24-116/123. <u>3 October 2024</u>: HN-24-118/119/121/122/124.
- <u>16 November 2022</u>: Historic holes

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JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

JORC Code criteria and explanation	Commentary
 Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g., 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). 	 Program consisted of 34 diamond drill holes (31 NQ / 3 HQ) for a total of 7072m. The casing and bedrock depth and core at 3m intervals were marked on wooden blocks in the core boxes. Any lost core was also marked in the box. A technician oriented and measured the core from the start to the end of the hole in 1 m marked intervals. The core recoveries and RQD were recorded over a 3 m. Logging was done using the Quebec Ministry Lithology codes including description of other characteristics as alteration, structure, vein, and mineralization. Down hole directional survey was recorded at every 3 m with a Gyro instrument. Magnetic susceptibility of the core was recorded at every meter with an MPP-EM2S instrument. Sample intervals are marked on the core. Sample widths varied from 0.5 m to 1.5 m and in mineralized sections generally 1 m or less. ALS assay laboratory provided sample ticket books with bar code. Unique sample numbers were assigned and recorded in the logging software Core for assay was sawn; half for NQ, and quarter for HQ. Laboratory density measurements were requested for every unit and at every sample in the mineralized zones.
• Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g., core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type,	 Pivotal 2024: NQ (47.6 mm diameter) and HQ (63.5 mm diameter). HW casing was driven through the overburden and 0.5 m to 3 m into the bedrock to stabilize the casing. The drill rods size was then reduced to NQ or HQ respectively for the drilling into the bedrock. 2 shells of 45 cm and 1 hexagonal stabilizing bar used to keep the hole stable to reduce deviation. Core orienter tool ACTIII used at every 3 m. A Gyro Sprint IQ Tool used to record the hole orientation at every 3 m. Details on historical programs can be found in ASX Announcement dated 16 November 2022
Drill sample recovery	 Privotal (2024) A technician would all orient the core and measure the core from the start to the end of the hole in 1 m intervals and marked. All of the core is assembled to fit together through to the end of the hole. Sections of broken or fragmented core are gathered together noting any core losses. 1 metre interval marking of the core, recovery and RQD measurements are taken as described above.



JORC Code criteria and explanation	Commentary
 Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	Details on historical programs can be found in ASX Announcement dated 16 November 2022
 Logging Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	 The drill core was logged for geology, structural, technical, veins, and minerals (RQD, Magnetism, Main Lithology, Sub-Lithology, Structures, Alteration, Veins, Minerals (Sulphides), and Samples. Samples were marked and referred to the meterage markings on the core and marked in the sample ticket booklet and in the logging software. The Competent Persons have reviewed historical drill logs (El Condor, 2012) but have not verified the information independently for quality control and quality assurance nor been to site. In the CPs opinion the historical core has been geologically and geotechnically logged to a level of detail to support future Mineral Resource Estimation, mining studies and metallurgical studies. Core logs were made for the full length of the core and are qualitative in nature. Both wet and dry core photographs exist for 2008 and 2012 drilling programs.
 Sub-sampling techniques and sample preparation If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 2024 Pivotal Drilling The core was marked for the sampling with wax crayon using meterage corresponding to the measurements marked in the sample ticket booklet. The core is half cut by rock saw with the bottom half of the core (quarter core if size is HQ) placed in a plastic sample bag with the sample tag and sample number written on the plastic bag. The sample booklet tag is put at the beginning of the sample in the core tray. Samples are minimum 0.5 m to 1 m in mineralized sections and up to 1.5 m in lightly or unmineralized sections. Sample limits respect lithological contacts. Control samples for QA/QC were placed systematically in the sample sequence with blanks at every 10, 30, 50, 70 and 90 samples, and standards alternating between 2 OREAS Standards OREAS683 and OREAS86, every at 20, 40, 60, 80, and 100 samples. Results from control sample standards exceeding 2 standard deviations would trigger a reanalysis. Individual sample bags are collected in rice bags for transport to the prep laboratory. Sample bags and rice bags are sealed with zip ties. Pulps are forwarded to the assay laboratory. Rejects are stored for future use. Details on historical programs can be found in ASX Announcement dated 16 November 2022
 Quality of assay data and laboratory tests The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (e.g., 	 2024 Pivotal Drilling The samples are all sent to ALS prep laboratory in Val-d'Or with pulps sent to ALS assay laboratory for analysis. All samples were prepped by PREP-31 method, samples are weighed, wet and dry, samples dried overnight in an oven, crushed to 70% passing -2mm, then riffle split to create a 250g sample and pulverized split to 85% passing 75 microns (0.075mm), then samples prepared for ME-ICP61 4 acid ICP-AES Multi-Element Package with 48 elements with principles being Ag+Co+Cu+Ni+Pb+Zn in a sample of 10g of pulp, and PGM-ICP23 analysis for Pt+Pd+Au by fire assay and ICP-AES finish, a 30g pulverized sample. The specific gravity measurements utilised the OA-GRA08 water displacement method also by ALS laboratory. Some samples were selected for whole rock analysis, 14 oxides and LOI.



JORC Code criteria and explanation	Commentary
standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	Details on historical programs can be found in ASX Announcement dated 16 November 2022
 Verification of sampling and assaying The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. Location of data points Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	 Pivotal 2024 Significant intersections were verified using the logged description of the core and supported by the QA/QC protocols The logging software provides rigidity in the data entry phase and includes a data verification option which was used to ensure data quality. Digital data is stored at various locations for security and backup. Details on historical programs can be found in ASX Announcement dated 16 November 2022 The grid system is in UTM NAD 83 Zone 18 SCRS HT2 CGVD28. 2024 Pivotal Drilling 2024 drill hole collars were surveyed with a Trimble mobile receptor GNSS R12i and a base station Trimble R10 providing a lateral precision of 2cm or 0.02 m and elevation precision of 5cm or +/-0.05m. 3 survey control points were placed in the project area to assist in the accuracy of the location data; survey stations JCL-2024-1, JCL-2024-2 and JCL-2024-3. All down hole survey orientations were taken with a Gyro Sprint IQ Tool Multishot taken every 3m up the hole while pulling out the rods, After 15 m passed the casing a singleshot was taken to control the orientation of the hole and at every 50 m down the hole. The Core Orientation Tool ACTIII was used at every 3 m and marked on the core for core orientation.
 Data spacing and distribution Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	 Details on historical programs can be found in ASX Announcement dated 16 November 2022 Drill hole spacing (168 holes) varies from 25m to 100m, and was sufficient for declaration of an Inferred and Indicated resource estimate (refer ASX Announcement dated 16 November 2022 The data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource estimation procedure(s) and classifications applied. 2024 drilling was a combination of infill and step-out drilling. Any increases in resources or upgrading of estimate confidence will be assessed at the next resource estimate stage.
 Orientation of data in relation to geological structure Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	Oriented core was not recorded in the 2024 program. Details on historical programs can be found in ASX Announcement dated 16 November 2022
Sample security	• The 2024 core quick log description and orientation was carried out at the drilling camp, ~45km from the



JORC Code criteria and explanation	Commentary
• The measures taken to ensure sample security.	 drill site. All the core was packed tightly and transported to a logging facility in Val-d'Or, 450 km south of the Project. All samples are precisely marked and recorded in the sample booklet and in the logging database. Samples were cut at MNG Services in Val d'Or, individually bagged and collected in rice bags for transport to the local ALS prep laboratory along with a sample requisition sheet listing the samples required assay work. ALS provides work order listing the samples and required work. Final results are provided by ALS in a "protected" pdf file. Details on historical programs can be found in ASX Announcement dated 16 November 2022
 Audits or reviews The results of any audits or reviews of sampling techniques and data. 	 No formal third party audits have been completed since Pivotal's ownership of the project Third party resource consultant Caracle Creek has had input into the sampling methodologies and completed QA/QC checks of laboratory data when received.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

JORC Code explanation	Commentary
 Mineral tenement and land tenure status Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	 The Horden Lake Cu-Ni-Au-PGM-Co Project is located approximately 131 km north-northwest of the town of Matagami in the NTS sheet 32K13, James Bay District (Eeyou Istchee James Bay Regional Gouvernment), Quebec. It is located approximately 9.6 km west and 11.6 km west on a winter road from the kilometre 197 on Route 109 (Billy Diamond James Bay Highway), an all-weather road connecting Matagami to the Hydro-Québec James Bay power complex at Radisson, Quebec. The approximate location of the Horden Lake Deposit (the "Deposit") is UTM 303367mE, 5646592mN, Elevation 259.5m ASL map 32K13 datum NAD83 Zone 18 North, equivalent to 50.9374°N latitude and 77.7988°W longitude. The boundaries of the Property have not been legally determined by surveying. Claim outlines are obtained from GESTIM website, the online title management system of the Ministry of Energy and Natural Resources of Quebec. The Project consists of 18 mining claims (CDCs) in two non-contiguous groups, totalling 814.81 ha as of April 26, 2024. The Project is 100 owned by 9426-9198 Quebec Inc, a wholly owned Quebec registered subsidiary of Pivotal Metals Ltd ("Pivotal"). Pivotal does not own the surface rights over the mining claims, these rights remain with the Crown. The 18 mining claims are subject to two (2) separate Net Smelter Return Royalties ("NSR"), defined as a production royalty, each of which is payable at a rate of 1.0% (2% total) from material derived from the Property during production. Permits are required to conduct exploration programs that will disturb the surface there are no known material issues with First Nations , historical sites, wilderness or national parks and environmental settings with respect to exploration or eventual mining.
Exploration done by other parties	• Exploration to date has been completed by other parties including INCO and Caracle Creek International



Acknowledgment and appraisal of exploration by other parties.	 Consulting Inc. on behalf of Southampton ventures and EI Condor Minerals (Kelso et al., 2009; El Condor, 2012). The Competent Person has reviewed reports and files pertaining to the 1960s, 2008 and 2012 exploration work and drilling campaigns but has not independently verified the contained information. Historical exploration in the area included airborne magnetic/EM survey (Noranda Mines 1957/58) and regional airborne geophysical surveys, and 32,229 m of diamond drilling (157 holes) culminating in an historical resource estimate of 6,088,900 t @ 1.24 % Cu, 0.33 % Ni, 184.0 g/t Ag (INCO 1963-69) (Kelso et al., 2009) on three properties including Horden Lake. A Pre-Feasibility Study in 1993 identified an historical resource of 1,238,333 t @ 1.91% Cu 0.40% Ni. (Kingswood Resources Inc.) (WGM, 1993; Kelso et al., 2009). These historical resources have not been reviewed by a Competent person and cannot be considered compliant under JORC guidelines. In the early 1970s, INCO performed preliminary flotation testing on five drill core samples from the Horden Lake Deposit. The tests showed recoveries from 85% to 96% Cu with concentrates of Ni, Cu, Ag and traces of Au and platinum-group elements (PGE), demonstrating the presence of significant cobalt from the composite sampling. Copper grades in the concentrate range from 21.5% to 30.4% Cu (WGM, 1993; Kelso et al., 2009; Thompson, 1981). A Fugro DIGHEM EM-Mag survey was completed in the area 2005 by Pacific North West Capital Corp., consisting of 445.5 line-km and identifying multiple EM conductors in the region. A Fugro DIGHEM EM-Mag survey was completed in the area association with magnetic and conductive responses (Kelso et al., 2009). Six targets were selected from the northeast block and may represent a grouping of several conductive targets. It was difficult to select isolated magnetic/conductive targets because magnetic features in this block had strong conductive association. One target was selected (Kelso et al., 2009
	of the Horden Lake Deposit
 Geology Deposit type, geological setting and style of mineralisation. 	 Magmatic Cu-Ni-PGE (platinum-group element) sulphide mineralization within the Frotet-Evans Greenstone Belt in the Opatica Subprovince. Dominant rock types are metavolcanic and metasedimentary rocks. Metagabbro occurs as a long and narrow, concordant body and with inclusions of metasedimentary rocks. Granites intrude the metasedimentary and metavolcanic package and are cut by granitic dikes and pegmatites. The youngest rocks in the area are gabbro and diabase dikes. Host of the mineralization is variable between the gabbroic rocks and the footwall metasedimentary rocks, with up to 5% disseminated to massive pyrrhotite, pentlandite, pyrite and chalcopyrite, and blebby sulphides also occur in shear zones within the gabbro, along the contact and within the metasediments



	(Kelso et al., 2009; El Condor, 2012). Local sphalerite and galena occur in altered gabbro and metasediments (Kelso et al., 2009).
 Drill hole Information A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	 Details of 2024 drilling can be found in the following announcements: <u>2 May 2024</u>: HN-24-92/93, <u>16 May 2024</u>: HN-24-94/95, <u>6 June 2024</u>: HN-24-96/97, <u>2 July 2024</u>: HN-24-98/99/100, <u>15 July 2024</u>: HN-24-101/102/103/104, <u>24 July 2024</u>: HN-24-105/107/109, <u>5 August 2024</u>: HN-24-105/107/109, <u>19 August 2024</u>: HN-24-106/110/111. <u>4 September 2024</u>: HN-24-112/114/114A/115/117/120. <u>19 September 2024</u>: HN-24-116/123. <u>3 October 2024</u>: HN-24-118/119/121/122/124. For details of the historical holes refer to ASX announcement dated 16 November, 2022 "Outstanding Horden Lake 27.8Mt JORC estimate"
 Data aggregation methods In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	 Reporting of the metal concentrations in drill hole intercepts is done through the weighted averaging of the assays over the given sample intervals. Selection of potential mineralized intervals for drilling (prior to any resource update) are outlined by running a grade cut-off of using the same formula as used in the 2022 Technical Report (below). CuEq = Cu(%) + Ni(%)*2.59 + Au(ppm)*0.63 + Pd(ppm)*0.74. Assumed recovery / US\$ prices: Cu 90% / \$7,300/t Cu Ni 80% / \$21,300/t Cu Au 80% / \$1,600/ oz Au Pd 80% / 1,900/oz Pd CuEq excludes any Pt, Co or Ag credit. Copper is chosen as the equivalent metal due to its dominant economic average weighting at the assumptions stated. Metal ratios vary across the deposit meaning some selected intersections may not be copper dominant. Criteria are minimum mineralised zones of 1.5m, minimum zone spacings of 3m and maximum waste of 5 m. CuEq 0.3% (lower) and 1.1% (upper) are indicative of the open pit and underground cut-offs used in the calculation of the 2022 Mineral Resource Estimate.
 Relationship between mineralisation widths and intercept lengths These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the 	 True widths of the mineralized intercepts are estimated to be 70-100%, but not certain and as such are reported as drill hole core lengths.



 drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known'). Diagrams Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole 	 Refer to the body of this ASX Announcement for plans, sections and tabulations of the exploration resulbeing disclosed.
 collar locations and appropriate sectional views. Balanced reporting Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	 Known exploration results arising from Company work have been reported Reports on other exploration activities at the project can be found in ASX Releases that are available of our website www.pivotalmetals.com
 Other substantive exploration data Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	 The metallurgical work reported herein was completed by Blue Coast Research, an established miner and metallurgical testing laboratory specialising in mineralogical analysis, flotation and comminute testwork at their testing facilities in Parksville, BC, Canada. The program was independently supervised the Competent Person, Chris Martin. Previously assayed quarter and half core intersections were selected for metallurgical testing composite Each was subject to confirmatory weighing and assay at Blue Coast Research. The table below shows the samples selected for the metallurgical test work: Sample name Drillhole Weight From (m) To (m) Comm Comp 1 - Gabbro HN-24-105 Al.4 141.9 148.5 Comm Comp 2 - MetaSed HN-24-107 Al.4 141.9 148.5 Comm Comp 2 - MetaSed HN-24-107 Al.4 141.9 148.5 Comm Comp 2 - MetaSed HN-24-107 Al.4 10.0 116.5 Comm Comp 2 - MetaSed HN-24-107 13.3 Flot Comp 1 - Gabbro HN-24-107 14.9 14.9 148.5 Comm Comp 2 - MetaSed HN-24-107 13.3 Flot Comp 1 - Gabbro HN-24-93 7.3 7.3.7 75.8 Flot Comp 1 - Gabbro HN-24-96 2.8 207.1 208.



 Further work The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 The locations of these holes were most recently provided in Table 3 of ASX release "Latest Drilling Unites Horden Lake Deposit Areas", 19 Sept 2024. The metallurgical characterisation test work consisted of: Sample preparation at the laboratory. Head grade assay confirmation. Grind calibration testing and quartitative mineralogy to ascertain mineral phase classification, modal abundance, grain & particle size distribution, liberation data, mineral associations and theoretical grade-recovery curves. Master composite preparation. Comminution testing. Rougher batch flotation iterations to investigate impact of primary grind size, pH, collector type & dosage, depressant type & dosage and potential pre-float treatments on recoveries and concentrate grades. Cleaner batch flotation iterations to assess impact of residence time, pulp pH, collector dosage, depressant dosage and potential re-grind option on final recovery and concentrate. Once the flowsheet is finalised, the program will include locked cycle flotation tests (LCT) to determine final metal grades and recoveries under closed circuit conditions, with final detailed concentrate analysis and minor element scan. Additional geophysical surveys, in particular EM, to exploit the highly conductive nature of mineralisation Additional drilling to test open extensions of the mineralisation and other EM targets. In-fill drilling to improve the confidence and upgrade the categorization of the resources from Inferred to Indicated and eventually Indicated to Measured for future higher level economic studies. In order to gain a better understanding of the structures within the Deposit and the host rocks and their bearing on the distribution and grade of mineralization, a selected number of oriented drill cores should be considered as part of the geotechnical drilling program. Information and data from the hard copy drill core
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