Velox Drilling Identifies High-grade Vanadium Zone within the Cambridge Deposit in Queensland, Australia

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TORONTO, January 23, 2024 - Velox Energy Materials Inc. (TSXV:VLX) ("Velox" or "the Company") is pleased to announce the drilling results from its Phase 1 diamond drill program at the Company's flagship Cambridge Vanadium deposit, its 100% owned North Queensland Vanadium Project ("NQVP") located in Queensland, Australia (Figure 1).

Highlights

Assay results received are very encouraging, with the mineralized zone identified at shallow depths, uniform thicknesses throughout the drilled area and consistent grades across the drilled area. Results include:

- Hole NQVP23_008 - 4.7 m @ 0.44% V_2O_5 from 8.6 m (0.30%V_2O_5 cut-off) including 1.1 m @ 0.84% V_2O_5 from 10.5 m;
- Hole NQVP23_005 - 5.4 m @ 0.41% V_2O_5 from 19.5 m (0.30%V_2O_5 cut-off) including 0.8 m @ 0.77% V_2O_5 from 12.9 m; and
- Hole NQVP23_004 - 4.7 m @ 0.47% V_2O_5 from 9.5 m (0.30%V_2O_5 cut-off) including1.1 m @ 0.72% V_2O_5 from 20.5 m.
- The mineralized zone at a cut-off grade of 0.30 % V_2O_5 is typically 4.2 m thick at 0.41 % V_2O_5.
- Drilling indicates a laterally continuous high-grading layer within the mineralized zone, with V_2O_5 grades commonly exceeding 0.60 % V_2O_5 over a 1.5 m thick interval.
- Assay results have also identified a 0.5 m -1.0 m layer demonstrating a mild rare earth element enrichment thought to be associated with the vanadium mineralized zone, with TREO grades commonly between 400 - 500 ppm.

The overall Cambridge Deposit understanding has been enhanced due to:

- Improved lithological understanding;
- Improved stratigraphic correlation with the addition of downhole geophysics (Gamma and Density plots);
- Identification of higher-grade units within the mineralized zone;
- Strong correlation to historical aircore assays; and
- Potential to apply new parameters across the entire deposit and regional targets.

Velox's President and CEO, Simon Coyle, commented:

"The drill program completed last year has significantly increased our understanding of the Cambridge Deposit. The latest diamond core assay results have exceeded our expectations and support our initial confidence in the deposit. The recent assay results also suggest that we have a laterally continuous high-grading layer within the mineralized zone, with V_2O_5 grades up to 0.60 % V_2O_5 over a 1.5 m thick interval.

"As our understanding of the deposit develops, we are seeing signs Cambridge is shallower and thicker than previous explorers had initially anticipated. Additionally, the potential in a newly identified high-grade zone and a REE enrichment zone has provided a welcomed upside, that will be further investigated.

"These encouraging assay results validate our planned next steps for the NQVP, which include metallurgical studies, a potential update to the existing resource and application of new geological knowledge over the entire project area to prioritize our target generation and development."

Figure 1: North Queensland Vanadium Project - Location

Exploration Summary

A total of ten (10) infill large diameter (100mm) 4C diamond core drill holes totaling 333 m were completed at the Cambridge Vanadium deposit on EPM26494 located in central northern Queensland, Australia (Table 1). The drilling was designed to increase overall stratigraphic knowledge for the deposit and provide ample representative material for metallurgical testwork as well as additional data for future mineral resource definition.

The Cambridge Vanadium Deposit currently hosts a CIM compliant Mineral Resource Estimate (MRE) consisting of an Indicated Mineral Resource of 61.33 Mt @ 0.34% V_2O_5 and 234.6 ppm MoO_3 along with an Inferred Mineral Resource of 144.87 Mt @ 0.33% V_2O_5(cut-off grade of 0.25% V_2O_5) and 241.9 ppm MoO_3 (Dufresne et al., 2022) and the recent program covered a representative portion of the currently defined deposit (Figure 2).

Drilling was undertaken by J&S Drilling Pty Ltd (Queensland) using a Fraste FS400 drill rig. Downhole gamma and density geophysical logs were completed by Weatherford International PLC using equipment to the American Petroleum Institute (API) standards Q1 and 14A, and logs recorded to international Logging Ascii Standards (LAS).

A detailed geological assessment, sample selection and Toolebuc Formation correlation was completed by John T Boyd Company. A total of 201 samples were selected for testing. Sample intervals were determined by stratigraphic lithological changes with sample intervals ranging from 0.10 m to 2.7 m thick (averaging 1.0 m).

Drill cores were dispatched to Mitra PTS Laboratory in Gladstone, Queensland for sample preparation and dispatched to Bureau Veritas, Perth, Australia, for analysis.

Table 1: 4C Core Holes Location

Hole ID	Core Type	Easting X	Northing Y	Depth (m)	Dip (deg)
NQVP23_001	4C Core	692239	7734776	30	90
NQVP23_002	4C Core	692122	7733776	31	90
NQVP23_003	4C Core	693171	7734158	37	90
NQVP23_004	4C Core	693047	7733163	36	90
NQVP23_005	4C Core	694351	7735523	37	90
NQVP23_006	4C Core	694201	7734286	25	90
NQVP23_007	4C Core	695095	7733418	36	90
NQVP23_008	4C Core	695221	7734412	26	90
NQVP23_009	4C Core	692334	7735515	20	90
NQVP23_010	4C Core	693297	7735149	55	90
			Total	333	

EPSG: 7854 - GDA2020 / MGA zone 54

Figure 2: Drill Hole Location Plan

Assay Results Summary

Assay results for 201 samples have been received from the 10 diamond core drillholes drilled within the defined Cambridge deposit with the overburden depth ranging from 2.5 m to 21.0 m. Drillhole NQVP23_010 returned no significant vanadium results. The hole was collared in the basal section of the Toolebuc Formation and drilled into the underlying (barren) Willumbimba Formation.

In summary, the results are very encouraging and analysis of grade cut-offs at 0.40% V_2O_5 (current MRE used a 0.25% V_2O_5 cutoff) below demonstrates the potential for higher grade material to be selected from the overall mineralized unit (Table 2) and as shown in the cross-section below (Figure 3).

Table 2: Mineralized Zone with a 0.40% V_2O_5 cut-off grade

Hole ID	From (m)	To (m)	Interval (m)	V_2O_5%
NQVP23_001	17.4	19	1.6	0.43%
NQVP23_002	10.2	11.5	1.3	0.49%
NQVP23_003	14.9	17.4	2.5	0.49%
NQVP23_004	20.2	21.6	1.4	0.65%
NQVP23_005	10.6	13.2	2.6	0.60%
NQVP23_006	8.6	9.7	1.1	0.67%
NQVP23_007	21	22.6	1.6	0.52%
NQVP23_008	10	11.6	1.6	0.71%
NQVP23_009	4.4	5.6	1.2	0.48%

Figure 3: Cross Section

Sample Analysis and QA/QC Program

Velox uses a quality assurance/quality control (QA/QC) program that monitors the chain of custody of samples and includes the insertion of blanks, duplicates, and reference standards in each batch of samples sent for analysis. The drill core is photographed, logged, and longitudinally cut, then ¼ core sampled and shipped for analysis. The ¾ retained sample is held in a secured location for verification purposes. Sample preparation (drying, crushing and pulverizing) is performed at Mitra PTS Laboratory, an independent (NATA Accreditation No 14525) laboratory, in Gladstone, Queensland, Australia. The entire sample is crushed to 70% passing -6 mm, and a riffle split of 250 grams is taken and pulverized to 75 microns. Pulps are sent to Bureau Veritas, in Perth, Australia (and other independent Laboratories) for analysis with the sample and pulp rejects stored as reserve.

Mitra PTS also complete density, moisture, carbon and sulfur testing on all samples.

Samples are analysed for vanadium and 50 other trace elements using Laser Ablation ICP-MS (LA101) from a 30-gram pulp. All samples are also subject the assay by XRF (XF202), testing 13 major element oxides with Umpire laboratory checks completed by ALS in Brisbane using lithium-borate fused digest ICP-MS (ME-MS81) at 1:10 sample ratio.

Blind duplicates were included in the (LA101/XF202) at a 1:10 sample ratio and certified reference standards (CRSs) and blanks were included in the assay program, including CRSs selected to represent the expected vanadium assay grades.

No QA/QC issues were noted with the results reported herein.

About Velox Energy Materials

Velox Energy Materials is a publicly traded energy materials company developing and progressing high-value assets in resource and research-friendly jurisdictions. The Company's priority focus is the advanced NQV Project in Queensland, Australia. The NQV Project hosts the Cambridge Deposit with an CIM compliant Indicated Mineral Resource of 61.33 Mt @ 0.34% V_2O_5 and 234.6 ppm MoO_3 along with an Inferred Mineral Resource of 144.87 Mt @ 0.33% V_2O_5 (cut-off grade of 0.25% V2O5) and 241.9 ppm MoO_3 (Dufresne et al., 2022). The Company is targeting shallow, high-grade mineralisation that can be developed using low-cost mining and processing options.

The Company additionally owns Kotai Energy and the option to acquire 100% of the intellectual property rights associated with the Solid-State Hydrogen Storage Project from Curtin University in Western Australia. Kotai is focused on the commercialisation of technology that can produce high-pressure hydrogen following transport as an inert powder.

In October 2023, the Company acquired a package of tenements that are prospective for lithium in eastern Quebec.

The Indicated Resource of 61.33 Mt @ 0.34% V2O5 and an Inferred Resource of 144.87 Mt @ 0.33% V2O5 for the Cambridge Deposit was announced in November 2022 (see Currie Rose news release dated November 1, 2022 and the Technical Report by Dufresne et al., 2022).

Please visit our website at www.veloxenergymaterials.com.au for further information.

Approved by the Board of Velox Energy Materials Inc.

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Qualified Persons

The Velox Energy Materials scientific and technical information in this news release has been prepared in accordance with the Canadian regulatory requirements set out in National Instrument 43-101 (Standards of Disclosure for Mineral Projects) and reviewed and approved on behalf Velox Energy Materials by Michael Griffiths, FAusIMM, Director & VP Exploration for Velox Energy Materials, a Qualified Person.

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