Troy Minerals Reports Drilling Results

from the Lake Owen Project, Wyoming. Critical Minerals inclusive of Scandium (Rare Earths Element) Discovered

Vancouver, B.C. – February 28, 2025 - Troy Minerals Inc. ("Troy" or the "Company") (CSE: TROY; OTCQB: TROYF; FSE: VJ3) is pleased to announce that its two-hole maiden drilling program at Lake Owen Project has been completed and assays of the first pass of selective sampling have been received. The 100% owned Lake Owen Project (the "Project") is located 50 km southwest of Laramie, Wyoming, USA (see Figures 1,2).

The Project is a Proterozoic layered mafic intrusion complex with a long history of sporadic exploration primarily for Platinum Group Elements. Similar in style to the Stillwater Complex in USA and the Merensky Reef of South Africa, the Lake Owen Complex is a highly prospective North American based target with a strong potential for significant vanadium, titanium, PGE and associated metals mineralization.

In Q3 2024, the Company drilled two diamond holes totalling 607.77 metres (see Table 1). The holes were scouting in nature, drilled near the southwestern claims boundary and they represent the first holes drilled by Troy Minerals on the Project (see Figure 3). This release is for all initial selective core samples for which analytical results have now been received. Follow up infill / continuous sampling results are pending and once received and processed, reported intersections will be recalculated.

Key Highlights

- The two DDH holes at the Lake Owen Project targeted titanium (TiO₂) and vanadium (V₂O₅) mineralization associated with magnetite in gabbro, as well as potential reef style PGE mineralization.
- Although sampling along the holes was visually selective, associated with high magnetite zones, several anomalous zones of **Titanium** (>1%) have been encountered.
- Elevated values of Vanadium are also associated with increased titanium enrichment.
- Most importantly, associated with these anomalous zones, is elevated concentration of **Scandium (Sc)**, a rare critical metal belonging to the REE group with no domestic supply in the United States.

"The first hole drilled by Troy at our Lake Owen project, from historical data knowledge, was planned targeting to intersect magnetite, titanium and vanadium mineralization; beyond that, it also revealed seriously elevated Scandium, a rare-earth element (REE), classified by the USGS as a critical metal." said Yannis Tsitos, President of Troy Minerals. "Scandium has green-energy technologies applications, but additionally it is the most effective known microalloying element that can strengthen aluminium, while also offering improved flexibility, resistance to heat and corrosion, and lighter weight, therefore Scandium finds applications in the space, military and civilian aviation industries. We have recently expanded our total Claims footprint over the mafic layered intrusion at Lake Owen in Wyoming to 185 Claims and Troy is currently designing the 2nd Phase, summer 2025, exploration program."

Figure 1. Lake Owen, Location Map, Wyoming, USA



Figure 2. Lake Own Project, Troy's Claims on Topo Map



Drilling Results & Exploration Outlook

Several anomalous zones of titanium (>1%) were encountered. Elevated values of vanadium are correlative with the titanium. Sampling was highly selective to assess various lithological units and all zones with magnetite content up to 15-20% and or visible sulfide mineralization. Magnetite content in the gabbro in hole LO24-01 is consistently about 5-10%. In LO24-01, the limited sampling to date suggests a large zone of titanium and vanadium-enrichment and higher relative values correlate with the green gabbro.



Figure 3. Drill Hole Locations on top of Geology and Company's Claims

Associated with these anomalous zones are elevated concentration of scandium. Anomalous values of scandium were found in sampled Mag Gabbro and especially with Green Gabbro zones containing >10% magnetite. Scandium is considered a critical metal by the United States Geologic Survey (USGS) and a rare earth element (REE). This presents an additional critical element with no current domestic supply. The USGS recognizes the critical metal potential of the Lake Owen Complex and flew an airborne survey over the entire complex in 2023, including all of Troy's claims. The high value of scandium coupled with the total dependence on the metal from China and Russia makes scandium a potentially high-value critical metal target for the Lake Owen Project.

Table 1: Drill hole specifications

Holo ID	Location (L	JTM Zone 13 No	orth, NAD83)	Total Depth	Orientation (°)	
noie ib	Easting	Northing	Elevation (m)	(m)	Azimuth	Dip
LO24-01	402871	4553588	2731	281.33	210	-45

LO24-01 403004 4553382 2732 326.44 210 -4	-45
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Drill hole LO24-01 was designed to test the extent of the Lower Mag Gabbro down to the basement contact. Drilling revealed a series of interlayered magnetic gabbro and a distinctive coarse-grained green gabbro. The green coloration is imparted by pyroxenes altering to chlorite. These layers are generally constrained to widths of less than 4 metres.

Hole ID	Intersection (m) ^{1,3}			$TiO_{2}(\%)^{2}$	$V_{2} O_{2} (9/)^{2}$	Sc (nnm)	Lith Lipit
	From	То	Length	1102 (%)	V2U5 (%)	sc (ppin)	
LO24-01	28.35	29.93	1.58	1.744	0.120	42.1	Green Gabbro
	46.63	48.46	1.82	1.710	0.103	46.6	Mag Gabbro
	67.97	70.71	2.73	1.616	0.092	44.9	Mag Gabbro
	91.44	94.18	2.73	1.626	0.101	45.2	Mag Gabbro
	112.53	115.61	3.08	1.303	0.080	42.9	Altered
							Gabbro
	141.43	144.17	2.74	1.224	0.076	38.4	Mag Gabbro
	171.30	174.04	2.74	1.199	0.080	36.0	Green and
							Mag Gabbro
	183.79	186.54	2.75	0.989	0.061	26.7	Green and
							Mag Gabbro
	206.87	211.23	4.35	1.581	0.101	41.0	Green Gabbro
							Olivine
	220.68	223.11	2.44	1.752	0.106	45.5	Gabbro
							Norite

Table 2. Drill hole LO24-01 intersections

¹: All intersections lengths are drill indicated thicknesses; insufficient work has been completed to reliably determine true thicknesses.

²: Analysis of titanium and vanadium converted to titanium oxide and vanadium oxide using conversion factor of 1.6681 and 1.7852, respectively.

³: The release is for all initial selective core samples for which analytical results have now been received. Follow up infill / continuous sampling results are pending and once received and processed, reported intersections will be recalculated.

Drill hole LO24-02 was also planned to test the extent of the Lower Mag Gabbro as well as the contact with basement rocks. This was collared lower in the stratigraphic sequence than hole LO24-01 starting in a weakly magnetite gabbro. At 28 metres, weak to strong foliation or schistosity was present. This schist is likely of gabbroic to slightly granitic in composition. It is speculated that these schists reflect basement rock ripped up into the intrusion as large xenoliths.

The drill program was managed on-site day-to-day by BRS Engineering Inc. of Riverton, WY under the supervision of Troy personnel. The drill core was quick-logged at the drill site by BRS staff including collection of geotechnical, magnetic susceptibility data and selective testing utilizing an XRF device. Upon completion of drilling, all drill core was shipped directly to BRS Engineering's secure facility in Riverton, WY. Drill core was detail logged and sampled by Company staff. Core was selectively sampled based on lithology and mineralization with 45 samples taken. Core was split by saw with samples sent to ALS Global's laboratory in Reno, NV for preparation and analysis. Samples were analyzed for multi-elements (ME-MS61) and gold plus PGE's (PGM-MS23L).

The Company's quality control monitoring consisted of inserting certified reference material in the sample stream. No quality control issues were identified.





Drill hole LO24-02 intersected gabbroic units that are weakly magnetic and contain no anomalous values of titanium, vanadium, or scandium.

Only a very small portion of the Lake Owen Complex has been drill-tested to date. As currently mapped, the prospective Lower Mag Gabbro unit continues along strike to the west. The Company has yet to drill test the stratigraphically higher Upper Mag Gabbro. Surface mapping and sampling in 2023 identified two massive magnetite rock samples that returned 8.812% TiO₂ and 0.548% V₂O₅, and 15.505% TiO₂ and 0.586% V₂O₅ (Figure 5) These represent priority drill targets for 2025. An historical drill hole was completed here but there was no assessment of titanium, vanadium, or scandium.

Figure 5. Rock Geochemistry, Titanium



Rock sampling also returned four anomalous scandium results (>59 ppm): three collected from gabbro-norite outcrop within the mapped "Layered Unit" which strikes across the Property and is stratigraphically situated between the Upper Mag and Lower Mag Gabbro units; and one from near the collar of LO24-02, within the Lower Mag Gabbro (Figure 6).



Figure 6. Rock Geochemistry, Scandium on top of Airborne Magnetics (1st Vertical Derivative)

A massive magnetic anomaly due to the very high magnetite content that covers Troy's claims and the interpretation of the airborne magnetic survey will be reported and discussed in another news release in due course.

* Cautionary Note

The reader is cautioned that grab samples are selective by nature and may not represent the true grade or style of mineralization across the property.

Qualified Person

The information contained in this news release has been reviewed and approved by Ted Vander Wart, *P.Geo.*, a consultant to the Company, who is a qualified person as defined under National Instrument 43-101.

About Troy Minerals

Troy Minerals is a Canadian based publicly listed mining company focused on building shareholder value through acquisition, exploration, and development of strategically located "critical" mineral assets. Troy is aggressively advancing its projects within the silica (silicon), vanadium, and rare earths industries within regions that exhibit high and growing demand for such commodities, in both North America and Central-East Asia. The Company's primary objective is the near-term prospect of production with a vision of becoming a cash-flowing mining company to ultimately deliver tangible monetary value to shareholders, state, and local communities.

ON BEHALF OF THE BOARD,

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Forward-Looking Statements

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The Canadian Securities Exchange has not reviewed this press release and does not accept responsibility for the adequacy or accuracy of this news release.