



## **Early Crater Lake Drill Results Return Better Than Expected Grades and Intersection Lengths – 79.7 meters at 311 g/t Scandium Oxide, 0.326% Rare Earths Oxides and Yttrium**

**MONTREAL, QUEBEC – October 20, 2022 – Imperial Mining Group Ltd. ("Imperial") (TSX VENTURE: IPG; OTCQB: IMPNF)** is pleased to announce that it has completed its Summer 2022 exploration and definition diamond drill program on the Ta-Nb Target and the TG Zone. Early results are encouraging and give inference to grade and tonnage increases to the TG North Lobe Deposit resource ([see Imperial Press release - SEP 23, 2021](#)).

The TG scandium mineralized Zone (the “Zone”) continues to return substantial intersection widths of scandium-bearing Olivine and Pyroxene Ferrosyenite (Table 1). The drilling program was performed from July 8<sup>th</sup> to September 8<sup>th</sup>, with a total of 8 drillholes having tested the different targets. Partial analytical results were received but due to longer turnaround processing by our laboratory service, several analyses have yet to be received. All core samples from boreholes CLE22001 and from CL22056 to CL22062 have been sent out for analyses. Results for the remaining drillholes are anticipated to be delivered within eight to ten weeks of receipt at the lab.

### **Summer Drill Program**

A total of 8 drillholes for 1,663.0 m have been completed (Table 1, Figure 1). All drillholes at the TG Zone have intersected the target mafic intrusive host rock (Ferrosyenite), host to all scandium-rare earth mineralization on the property. The drilling indicates that the TG scandium Zone is doubly dipping between 83<sup>o</sup> west to 70<sup>o</sup> east, with a north-northeast strike direction. The widths of the mineralized intersections observed from the program vary between 78 and 105 m in true thickness. Mineralization remains open at depth below the 250 m vertical level and along strike and appears as a thickening, conical-shaped body in cross-section.

### **TG Zone Definition Drilling Program**

The program completed seven diamond drill holes totaling 1,588.0 m (Figure 1). The intent of the program was to complete sufficient infilling drillholes to undertake a review of the 43-101 Preliminary Resource Estimate of the TG Zone and to convert most of all Inferred Mineral Resources ([see Imperial Press Release – SEP 23, 2021](#)) into the Indicated Mineral Resources category.

To date, assays have been received for borehole CL22057, which **returned 79.7 m (261.5 feet) grading 311 g/t scandium oxide (Sc<sub>2</sub>O<sub>3</sub>) and 0.326% Total Rare Earths and Yttrium (TREO+Y)**. This hole

was drilled as a deep cut on Section 650N and intersected a cumulative thickness of 83.7 m of Sc-bearing Olivine-rich Ferrosyenite (OLFESYN) commencing at 55.5 m in the hole.

Of particular interest was the appearance of higher frequency of higher-grade PXFESYN (Pyroxene-rich Ferrosyenite) in the deeper intersections into the TG Zone (see description of holes CL22061 and CL22062 in Table 2).

**Table 1 – Borehole Location Table – Crater Lake Project, Quebec**

<b>Borehole</b>	<b>Section</b>	<b>Easting</b>	<b>Northing</b>	<b>Elevation</b>	<b>Azimuth</b>	<b>Dip</b>	<b>Length (m)</b>
<b>CLE22001</b>	<b>N/A</b>	444076	6137176	501	0	-90	75.0
<b>CL22056</b>	<b>400N</b>	440730	6133700	551	305	-45	147.0
<b>CL22057</b>	<b>650N</b>	441011	6133792	545	305	-47	202.0
<b>CL22058</b>	<b>100N</b>	440685	6133363	533	305	-50	234.0
<b>CL22059</b>	<b>600N</b>	440992	6133751	542	305	-49	267.0
<b>CL22060</b>	<b>550N</b>	440967	6133713	541	305	-50	267.0
<b>CL22061</b>	<b>400N</b>	440815	6133629	541	305	-48	240.0
<b>CL22062</b>	<b>350N</b>	440780	6133586	541	305	-52	231.0

\* Borehole Coordinate Datum : NAD83 Zone 20N

### **Crater Lake Extension Tantalum-Niobium Target Drilling**

**CLE22001** – The hole was drilled vertically (-90<sup>0</sup>) to the north of the scandium target area and intersected a few 10 to 30 cm thick felsic dikes cross-cutting the Mistastin Rapakivi Granite. Alteration zones of up to 10 and 20 cm thick are encountered within the vicinity of the dikes. These dikes are mostly observed at the top of the hole.

### **QA-QC Protocol**

Strict QA/QC protocols have been implemented for the Crater Lake Project, including the insertion of certified reference materials (standards), duplicates and blanks at regular intervals throughout the sequence of samples.

A total of 1,331 drillcore samples, including 92 QA-QC samples, were sent to Activation Laboratories Ltd. All sample preparation and analytical work will be carried out at their facilities in Ancaster, Ontario. Several analytical techniques were used to characterize the samples, which are combined at Actlabs into the analytical package “8-REE”. This package includes whole-rock and trace element analytic techniques. Whole Rock analyses are done via a lithium metaborate/tetraborate fusion inductively coupled plasma (ICP) finish. Trace elements are also analyzed by fusion ICP/MS.

The technical content in this press release was prepared, reviewed and certified by Pierre Guay, P. Geo., Imperial's Vice-President, Exploration, a Geologist and Qualified Person as defined by NI43-101.

## **ABOUT IMPERIAL MINING GROUP LTD.**

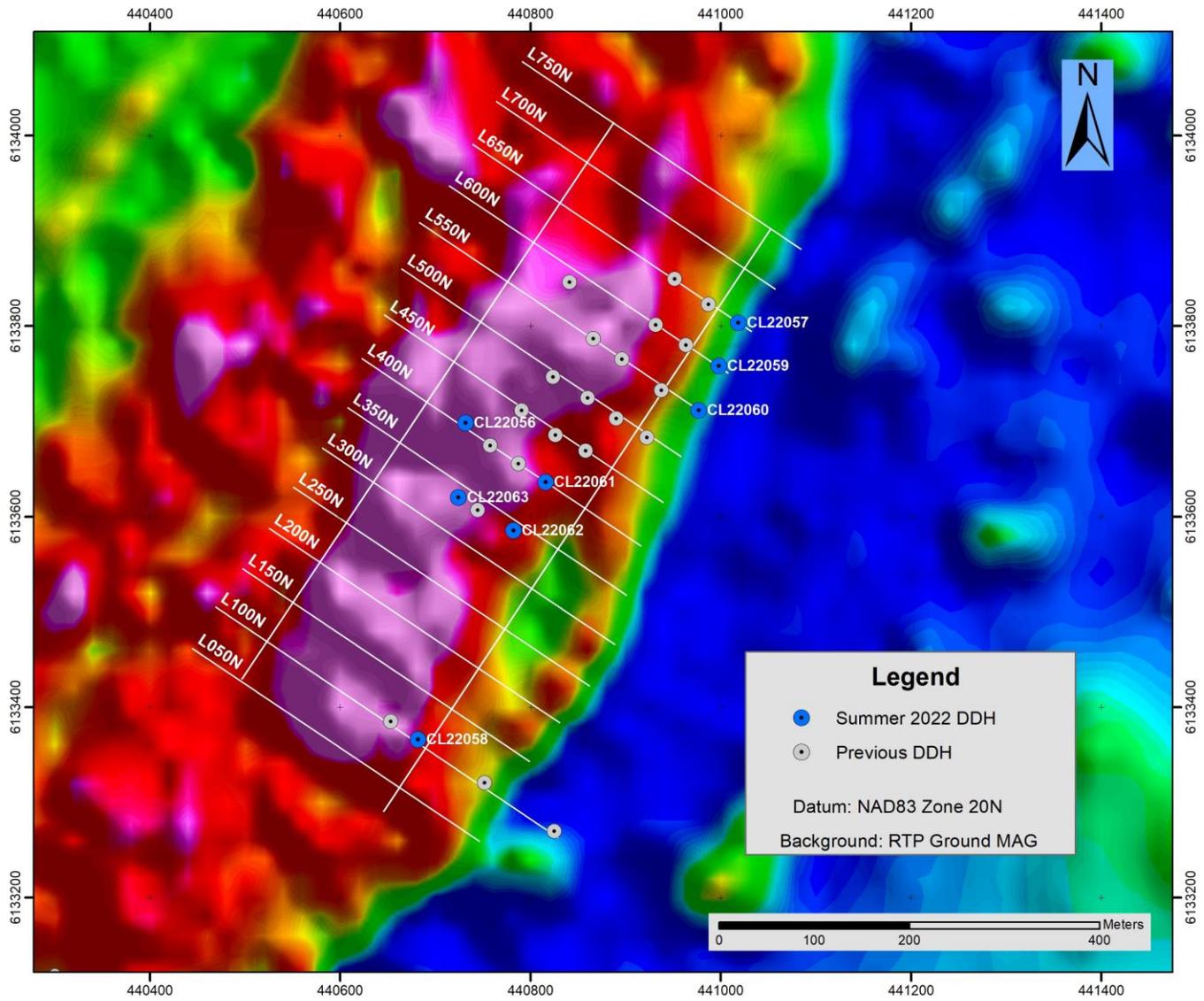
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**Figure 1 – TG Zone Definition Drillhole Location Map**

**Table 2 – Drillhole Geology Descriptions, TG Zone, Crater Lake Project, Quebec**

<b>Borehole</b>	<b>General Geology</b>	<b>Cumulative Ferrosyenite Thickness (meters)</b>	<b>Comments</b>
<b>CL22056</b>	The hole intersected several sections of felsic and intermediate syenites (mixing zone between syenites and Olivine-rich Ferrosyenite (OLFESYN) and a continuous section of OLFESYN.	<b>13.5</b>	This hole was drilled to determine the footwall extent of the mineralization at surface. The hole intersected the scandium mineralized OLFESYN which has a surface expression.
<b>CL22057</b>	The hole intersected a wide and continuous interval of OLFESYN with some narrower sections of Ferrosyenites. The Ferrosyenite is bordered by intervals of felsic Syenites of up to 40 m.	<b>83.7</b>	This hole was drilled as a deep cut with one zone of continuous OLFESYN intersected at 107.5 m depth for over <b>79.7 m and returned 311 g/t Sc<sub>2</sub>O<sub>3</sub>, 0.326% TREO+Y</b>
<b>CL22058</b>	The hole intersected several sections of alternating felsic syenites and OLFESYN before hitting a continuous and massive OLFESYN zone after 105 m depth.	<b>126.5</b>	This hole was drilled as an undercut of borehole CL19033 (113.9 m grading 310.0 g/t Sc <sub>2</sub> O <sub>3</sub> , <i>see <a href="#">Imperial Mining press release: June 18, 2019</a></i> ). <b>This borehole intersection shows good potential for additional Scandium Mineral Resources at the Southern Lobe.</b>
<b>CL22059</b>	The hole intersected a continuous section of OLFESYN of over 50 m and two sections of mixed Ferrosyenite and Syenites of up to 6 m in core length.	<b>102.4</b>	The hole was drilled as a deep cut and intersected favourable OLFESYN starting at 85.8 m. A major fault was intersected at 166.8 m down the hole.
<b>CL22060</b>	The upper approximate 100 meters intersected mostly felsic and intermediate syenites. Several structurally significant zones below 122 m bordering the major intersections of OLFESYN.	<b>77.3</b>	The hole was drilled as a deep cut and intersected OLFESYN commencing at 98.2 m. The largest intersection returned 67.5 m of OLFESYN, starting at 154.4 m depth. The hole also intersected a major fault at 171.9 m.
<b>CL22061</b>	The hole intersected several sections of felsic syenites as well as a major fault above significant intersections of Pyroxene-Rich Ferrosyenite (PXFESYN) and continuous OLFESYN units below 76 m.	<b>84.0</b>	This hole was drilled as a deep cut and collared into OLFESYN at surface with a continuous zone of OLFESYN further down hole over approximately 50.0 m. Several zones of mixed PXFESYN and felsic Syenite fragments of up to 36.3 m in core length were also intersected.
<b>CL22062</b>	The hole intersected several sections of felsic and intermediate syenites as well as significant intersections of PXFESYN and continuous OLFESYN units below 60 m.	<b>55.7</b>	This hole was drilled as a deep cut with an intersection of mixed PXFESYN and felsic Syenite fragments of up to 30.0 m in core length as well as several sections of mixed OLFESYN and Syenites of up to 16.6 m in core length.