

# **First Cobalt Intersects Three Cobalt Veins at Keeley**

TORONTO, ON — (December 19, 2017) – First Cobalt Corp. (TSX-V: FCC, ASX: FCC, OTCQB: FTSSF) (the "Company") is pleased to announce new positive drill results from its 2017 drill program, confirming the presence of three cobalt bearing veins to the southwest of the past-producing Keeley mine in the Canadian Cobalt Camp. First Cobalt's 2017 drill campaign is targeting cobalt mineralization over a two kilometre strike length, representing less than two percent of its land package with several known historic cobalt-rich mines.

# Highlights

- **0.12% Co over 5.50m**, including **0.68% Co over 0.34m** in the Woods vein system which, together with the Watson vein, accounted for over 80% of the production in the Cobalt South area of the Cobalt Camp
- Greater than 1.00% Co over 0.42m\* in the KeeleyCo#1 vein and 0.60% Co over 0.38m in the KeeleyCo#2 vein
- KeeleyCo#1 and KeeleyCo#2 veins are two metres apart and are interpreted as parallel structures to the Woods vein, where only minor mine workings exist
- Zinc and lead intersected as part of a hydrothermal halo around the vein systems provides another example of previously unknown metal zoning now seen elsewhere in the Cobalt Camp

Trent Mell, President & Chief Executive Officer, commented:

"We have identified cobalt mineralization to the north and south of the historic Keeley and Frontier silver-cobalt mines. Intersecting meaningful cobalt veins at the Woods Vein Extension and now at the southern extent of the Keeley mine has provided important data points and insights into historic mining operations. We are learning valuable structural information in this first drill program that will be applied to an ambitious camp-wide drill program commencing in January 2018."

## **Keeley 5 Results**

Assays have been received from an additional nine holes from four target areas: Keeley 5 shaft area, Keeley 2, Haileybury and Frontier 1. The most significant results were in drillhole KF-KD-0005 which intersected three different cobalt veins in an area south of the historic Keeley mine and to the west of the Woods Vein (Figure 1).

	From	То	Length	Со	Ag	Ni	Cu	Zn	Pb
Vein	m	m	m	%	g/t	%	%	%	%
Woods	75.00	80.50	5.50	0.12	109	0.03	0.02	0.06	0.20
Including	78.42	78.76	0.34	0.68	>1,000*	0.84	0.11	0.53	>1.00*
KeeleyCo #1	198.62	199.00	0.38	0.60	5	0.06	0.02	0.01	0.00
KeeleyCo #2	201.00	201.42	0.42	>1.00*	6	0.55	0.02	0.00	0.00

#### Table 1. Assay Results Summary for KF-KD-0005

\*Note: Over-range assays are pending for Co (1%), Ag (1000g/t), and Pb (1%)

The Keeley 5 shaft area was targeted because historic mining assays reported high values for cobalt and nickel over several metres at the 8th Level, approximately 130 metres below surface outlining another vein system west of the Woods Vein. Drillhole KF-KD-0005 targeted below a ten metre length of historic workings along the Woods vein, which was assumed to occur as a single cobalt-nickel vein (Figure 2). Assays from this hole returned two additional cobalt intercepts, the KeeleyCo#1 vein and the KeeleyCo#2 vein, suggesting more than one vein occurs in this area.

Limited workings were developed into the KeeleyCo#1 and KeeleyCo#2 veins for test mining and it is believed they were abandoned due to the low silver, high cobalt nature of the veins. A total of five drillholes targeted this area in the current drilling program. The grades in these new cobalt veins, ranging from 0.60% to 1.00% Co or greater, are consistent with other known veins in Cobalt South such as Haileybury and Frontier 1. Skudderudite is the dominant Co-mineral and niccoline is the dominant Ni-mineral; both identified in drillcore logging. Overrange assays are pending for the >1% Co value, which will be calculated with an ICP finish.



Figure 1. Bedrock geology of the Keeley-Frontier-Bellellen mines in Cobalt South area.

Similar cobalt-nickel mineralization to KF-KD-0005 has also been logged in KF-KD-0004 further south. Assays are pending for this hole, but cobalt and nickel mineralization has been identified using a portable X-Ray Fluorescence (XRF) analyzer.

Both drillholes have been surveyed using borehole electromagnetics (EM) and an in-hole response was detected in each. An off-hole response was detected in KF-KD-0004 as well, suggesting the intersections are part of a vein system developed west of the Woods Vein.

Results may indicate a multiple cobalt-bearing vein system in the area. Cobalt veining is interpreted to extend to mineralization intersected further south and is open along strike to the north.

Follow-up drilling is planned for this area in January to test the cobalt vein system along strike and closer to surface.

# Woods Vein

Cobalt mineralization was intersected in the Woods Vein along with high grade silver. Zinc and lead were also intersected, reflecting a broader hydrothermal system capable of transporting metals. This broader hydrothermal system was noted in previous assay results from the Woods Vein Extension, but has not been well documented by previous companies in the Cobalt Camp.

Drillhole KF-KD-0005 intersected 0.12% Co over 5.50m, including 0.68% Co over 0.34m. The 0.34m intercept also assayed at >1,000 g/t Ag, 0.84% Ni, 0.53 Zn and >1.00% Pb. Presently, results have not been received for over-range assays. Fire assay methods will be used for silver and an ICP finish for elevated Co and Pb will be completed. The Woods and Watson vein system accounted for over 80% of the production in the Cobalt South area of the Cobalt Camp.



Figure 2: East-west cross section showing KF-KD-0005 and nearby drillholes.

The intersection of the Woods Vein appears as a zone of broken core containing abundant clay material. The host rocks are highly silicified and brittle in nature so fracture easily. Core recovery was poor; as such the complete vein may not have been adequately sampled.

#### **Other Targets**

First Cobalt has completed 61 holes in its maiden drill campaign in the Canadian Cobalt Camp. The 6,366 metre diamond drilling program was designed to test vein sets mapped in outcrop in ten areas known to be cobalt-rich over a two kilometre strike length encompassing the past producing Keeley, Frontier, Haileybury and Bellellen mines. All drill holes have been geologically logged, sampled and submitted for assays and multi-element geochemistry; assay results have been returned from 17 holes, including those reported in this release.

At the Woods Vein Extension area, assays previously reported from four holes were returned with anomalous metals in separate veins including 0.83% Co and 30 g/t Ag over 0.48 metres in one hole north of the Frontier Mine (see November 2, 2017 press release).

At Frontier 1, results from five of nine holes have been received, which included a previously reported new silver-bearing vein intersected in one of the holes: 27.75 g/t Ag and 0.10% Cu over 9.53 metres (see November 2, 2017 press release). The drilholes targeted calcite stockwork veining and cobalt mineralization mapped at surface and from historic underground plans.

A total of seven holes were drilled at Haileybury. Assay results from four holes were previously reported and an additional hole has also returned no significant Co values (<0.02% Co) despite intersecting calcite veins similar to the vein exposed at surface containing Co and Ni. These results suggest the mineralizing structure here is not well developed.

At Keeley 2 in the eastern portion of the Keeley mine, assays were received from two drillholes without significant Co values.

For a table of drill hole locations and assay results to date, visit <u>https://firstcobalt.com/projects/greater-cobalt-project.</u>

## **Next Steps**

The 2017 drill program was designed to test structures to learn more about vein orientations and determine the grades in the host rocks to known Ag-Co calcite veins and in the veins themselves. Cobalt had been identified near the Woods Vein and Watson Vein, the main sources of silver at the Keeley and Frontier mines, as well as recorded on historic underground mine maps, making them a logical starting point for the drill program.

All drill data, downhole geophysical surveys, bedrock geochemical surveys and interpretations from the summer-fall mapping at the Keeley-Frontier property are being incorporated into a 3D geological model for 2018 exploration work which will include a much larger drill campaign. Successful results from the Company's electromagnetic surveys (announced December 12, 2017) have prompted testing of a new ground-based electromagnetic system to determine if the cobalt veins encountered by drilling can be detected from surface.

Recent surface sampling results including the Drummond, Juno and Silver Banner mines in Cobalt North, the Caswell mine in Cobalt Central and the Bellellen mine in Cobalt South, together with 2017 drilling assays, will be integrated into First Cobalt's geological model to plan the 2018 drill program.

## **Quality Assurance and Quality Control**

First Cobalt has implemented a quality-control program to comply with common industry best practices for sampling and analyses. Samples are collected from drill core from a range of 30 to 100cm length. Half-core samples are submitted for analyses. Standards and blanks are

inserted every 20 samples. Duplicates are made from quarter core splits every 20 samples. Geochemical data were received from SGS Minerals laboratories in Lakefield, Ontario, Canada. No QA/QC issues have been noted. SGS Laboratories has used a sodium-peroxide fusion and ICP finish for analyses on all samples.

## **Qualified and Competent Person Statement**

Dr. Frank Santaguida, P.Geo., is the Qualified Person as defined by National Instrument 43-101 who has reviewed and approved the contents of this news release. Dr. Santaguida is also a Competent Person (as defined in the JORC Code, 2012 edition) who is a practicing member of the Association of Professional Geologists of Ontario (being a 'Recognised Professional Organisation' for the purposes of the ASX Listing Rules). Dr. Santaguida is employed on a full-time basis as Vice President, Exploration for First Cobalt. He has sufficient experience that is relevant to the activity being undertaken to qualify as a Competent Person as defined in the JORC Code.

# About First Cobalt

First Cobalt is the largest land owner in the Cobalt Camp in Ontario, Canada. The Company controls over 10,000 hectares of prospective land and 50 historic mines as well as a mill and the only permitted cobalt refinery in North America capable of producing battery materials. First Cobalt began drilling in the Cobalt Camp in 2017 and seeks to build shareholder value through new discovery and growth opportunities.

On behalf of First Cobalt Corp.

Trent Mell President & Chief Executive Officer

## For more information visit <u>www.firstcobalt.com</u> or contact:

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