Callinex Identifies Highly Conductive Anomalies on Known Mine Horizon in the Flin Flon Mining District of Manitoba

23.06.2020 | CNW

Highlights:

- Multiple highly conductive anomalies identified off-hole from sulphide stringers that include copper, zinc, gold and silver mineralization;
- These anomalies are interpreted to occur within the Centennial mine horizon, which hosts the past producing Centennial Mine and the Sourdough VMS deposit; and
- The location, modeled size and conductivity of these anomalies represent an exceptional exploration opportunity that warrants immediate follow-up.

VANCOUVER, June 23, 2020 - Callinex Mines Inc. (the "Company" or "Callinex") (TSXV: CNX) (OTC: CLLXF) is pleased to announce results from its 2019/2020 drilling campaign (the "Campaign") at its Pine Bay Project (the "Project") located 16 km away from processing facilities in Flin Flon, Manitoba (See Figure 1). The Campaign encompassed 5,906m of diamond drilling at the Project to test eight target areas that have the potential to host high-grade zinc, copper, gold and silver-rich Volcanogenic Massive Sulphide ("VMS") deposits. The target areas were generated from a recently completed Induced Polarization ("IP") and magnetic survey completed along favourable geologic trends. Subsequent borehole pulse electromagnetic surveys ("BPEM") completed as part of the vectoring process identified highly conductive anomalies off-hole from sulphide stringers that include copper, zinc, gold and silver mineralization (See Figure 2 and Figure 3). These anomalies are interpreted to occur within the Centennial mine horizon, which hosts the past producing Centennial Mine and the Sourdough VMS deposit located 7.5 kms and 4 kms to the south (See Figure 4 and Figure 5).

Max Porterfield, President and CEO of Callinex, stated, "We are eager to drill test the newly identified BPEM anomalies as soon as possible. We are optimistic, based on the geologic location, size and conductivity, that these anomalies have the potential to represent Flin Flon's next discovery." Mr. Porterfield continued, "The introduction of Induced Polarization to our exploration toolset and reinterpretation of historic data has proven to be exceptionally valuable as our team vectors towards a discovery. Electromagnetics is the best geophysical tool for directly vectoring to high-grade base and precious metals rich massive sulphide mineralization in the Flin Flon Greenstone Belt."

Target Area 1

Hole PBM-033 was drilled to test Target Area 1 which was highlighted by a large 700m by 300m, strong chargeability isoshell (>40mV/V) coincident with a deep magnetic low believed to be related to intense footwall alteration (See Figure 2 and Figure 3). The hole intersected a thick favourable package of altered quartz and feldspar-phyric rhyodacite flows, hyaloclastites and pyroclastics intermittently cut by sulphide stringers dominated by pyrrhotite, pyrite and trace chalcopyrite and sphalerite. In addition, the hole intersected 40m thick, megacrystic quartz and feldspar-phyric rhyolitic intrusions which can be found in footwall assemblages situated immediately below and/or adjacent to VMS deposits found in the Flin Flon and Snow Lake Greenstone Belts.

A BPEM survey completed in drill hole PBM-033 provided a vector to a highly conductive 260m by 600m anomaly ("Anomaly A") possessing a conductivity thickness ("CT") of 450 siemens that sits off-hole, within the known interpreted Centennial mine horizon and 600m below surface (See Figure 6, Figure 7 and Figure 8). Any EM conductor with a strike extent over 100m and a CT of over 100 siemens in a known mine horizon is regarded as a highly prospective target within the Flin Flon Mining District.

Subsequently, drill hole PBM-037 was completed in late May to test Anomaly A identified from PBM-033. However, hole PBM-037 (along with drill hole PBM-036) deviated from its intended path and failed to test the anomaly (See Figure 6, Figure 7 and Figure 8). PBM-037 intersected chlorite-altered rhyodacite flow-hosted, coarse red-brown sphalerite and chalcopyrite-bearing sulphide stringers between 945.8 and 946.8 metres in a setting typical of a footwall alteration zone (See Core Photo 1). Red-brown sphalerite often is an indication of higher temperatures and close proximity to VMS systems than its iron-poor and lighter yellow coloured variety of sphalerite. This sulphide stringer intersection is located 170m off-hole and immediately adjacent to the interpreted plane of Anomaly A. Intermittent stringers and disseminated sulphides with weakly anomalous gold values were also noted in drill hole PBM-037 between 940m and 1050m, including a 0.61 g/t Au-bearing interval from 997.75m to 998.0m (See Table 1). Elevated gold (>0.5 g/t Au) levels are also frequently noted in very close proximity to significant VMS deposits within the Flin Flon and Snow Lake Greenstone Belts.

In addition, a subsequent BPEM survey completed on hole PBM-037 identified a second anomaly ("Anomaly B") 20m off-hole to the north and in the same plane as the interpreted Centennial mine horizon. The newly identified Anomaly B is modeled to be 200m by 500m with a CT of 350 siemens and located 720m below surface. Anomalies A and B are located off-hole and on the same plane as the disseminated to semi-massive sulphide stringers intersected by PBM-037. It should be noted that VMS deposits generally consist of multiple plunging sulphide lenses and can be modeled as separate conductive bodies through BPEM surveys.

Of geological importance are the 650m left-lateral offsets displayed by the fold repeated Pine Bay and Cabin VMS deposits and the likelihood that the next fold repeat of those two deposits to the southwest would be in the immediately area of the track of drill hole PBM-037, where Anomalies A and B are located, along an assumed mineralized-controlling, gently folded (concave southeastward) traverse paleofault corridor (See Figure 9). It is important to note that late dyke swarms following this same southwestern left-lateral orientation were noted in late-2016, where the Company discovered a 10.3m thick high-grade zone that assayed 6.0% Zn, 1.8 g/t Au, 60.4 g/t Ag, 0.7% Cu and 0.4% Pb by extending a historic Placer Dome Inc. drill hole an additional 38m (See News Release dated October 18, 2016). Parallel dyke swarms are commonly associated with the growth faults controlling VMS mineralization in the Flin Flon area. Another impressive Electromagnetic feature in the Pine Bay area, that is likely directly related to transverse growth faults regularly spaced at 2 to 4 km intervals, is the locally stronger, more conductive and thicker massive sulphides +/- graphitic argillite marker horizons apparent in the VTEM survey data (See Figure 4, Figure 5). Stratigraphically below or east of those locally thicker barren 'marker' Centennial hanging wall sulphide +/- graphite accumulations noted in the VTEM survey are the felsic volcanic associated A and B Anomalies along with a series of fold equivalent and/or stacked VMS deposits beneath (i.e., the Pine Bay, Cabin, Baker Patton, North Star and Don Jon VMS deposits).

Two other holes from the 2019-2020 drilling campaign, PBM-034 and PBM-035, were designed and completed to test the shallow, northern extension of the Target Area 1 IP chargeability anomaly. Both of those holes cut a thick favourable package of feldspar-phyric rhyodacite flows and hyaloclastites that locally contained appreciable disseminated sulphides (up to 8% pyrite and lesser pyrrhotite) along with significant sericite/chlorite alteration and the odd semi massive pyrite band, as noted from 37.66m to 39.43m in PBM-035. A 0.9m interval within that interval occurs from 38.5 to 39.4m and contains 0.32 g/t Au, 1.28 g/t Ag, 0.03% Cu, 0.41% Zn, 0.01% Pb and 16.39% Fe (See Table 1). Additionally, PBM-007DPN was drilled to test a chargeability anomaly associated with Target Area 1 coincident with a modeled BPEM anomaly ahead of the end of the original hole. PBM-007DPN intersected a favorable package of weakly altered, feldspar-phyric rhyodacite flows and hyaloclastites locally containing up to 15% disseminated pyrite between 715.85 and 904 metres (with gradually increasing sulphide contents towards the middle and lower parts of that interval) before the hole was eventually abandoned. Excessive hole flattening made it quite difficult to extend the hole to the favourable Centennial mine horizon and a subsequent BPEM probe was not able to get down to survey the end of the drill hole.

Target Area 2

Drill hole PBM-031 tested a large 350m by 300m, strong chargeability isoshell (>40mV/V), associated with a magnetic low signature, and situated along the known northeastern strike extension of the Pine Bay VMS deposit. The hole collared into a minor chalcopyrite-bearing andesite flow marker unit interpreted to form the immediate hanging wall of the northwest-facing Cabin VMS horizon (See Figure 2 and Figure 9). The southeast-facing Pine Bay VMS horizon that occupies the opposite limb of the tight isoclinal fold with the marker hanging wall andesite flow unit in its axial core was readily apparent and intersected between 518m and 536.2m in hole PBM-031. Up to 15% sulphides (mainly pyrite with lesser pyrrhotite and traces of sphalerite and chalcopyrite) were intermittently encountered in that 18.2m sulphidic interval and readily provided an explanation for the IP chargeability anomaly being tested in Target Area 2. Although the quartz and feldspar-phyric rhyodacitic hyaloclastite host rocks for the Pine Bay VMS horizon were quite highly sericite-altered, there were no appreciable precious and base metals intersected.

A BPEM survey completed on hole PBM-031 identified an untested, new anomaly ("Anomaly C") located 220m off-hole to the northeast and along the interpreted overturned Pine Bay horizon (See Figure 10). Anomaly C has been modeled to be 400m by 200m with a CT of 35 siemens and 80m below surface. This anomaly will require additional ground work to accurately locate the source of the anomaly for further follow-up.

Target Area 3

Drill hole PBM-032 tested Target Area 3, a strong chargeability anomaly (>40mV/V) located in the southeast portion of the Pine Bay mining lease and considered to occur along strike from the northwest-facing Cabin VMS horizon and its underlying extensive Baker Patton VMS alteration system. Two thick intervals of disseminated to stringer sulphides (with up to 18% pyrite and lesser pyrrhotite with traces of chalcopyrite and sphalerite) hosted by highly sericite and chlorite-altered, feldspar-phyric rhyodacitic hyaloclastites were cut by drill hole PBM-032 from 7.5m to 138.0m and from 188.25m to 345.4m. Although these sulphides readily explain the Target Area 3 IP chargeability anomaly and collectively represent the southernmost explored and mineralized extension of the Cabin VMS horizon, there was only one significant 2.0m interval containing 0.65 g/t Au and 0.02% zinc from 120.0m to 122.0m (See Table 1). PBM-032 was shut down in typical hanging wall andesite flow marker rocks that started at 351.9m.

Target Area 4

Target Area 4 is located roughly 350m west of Target Area 1 and is a slightly weaker, but still rather strong, mostly untested chargeability version of the Target Area 1 anomaly. The locally stronger IP chargeability anomaly in Target Area 4 occurs along a much longer, formational pyrite and/or graphite -caused EM anomaly that collectively forms a regional geophysical and geological "marker" unit immediately above the favourable Centennial mine horizon. The most proximal and favourable portion of the Centennial mine horizon likely occurs along its northeastern termination area where the thickest package of felsic volcanics are concentrated, namely the Baker Patton Complex ("BPC") in the Pine Bay area. This means any untested gaps along that mine horizon, adjacent to any drill holes returning appreciable precious and base metal values should be drill-tested. Historic drill holes S-122 and S-123 are two of those such holes and are located approximately 200m along strike from where the newly proposed drill hole will intersect the local Target Area 4 chargeability high. While Target Area 4 was not drill-tested near the surface in the latest drill program, it likely has now been adequately explained by the pyritic +/- pyrrhotitic graphitic argillite bands intersected near the end of drill hole PBM-037 between 1293.90m and 1390.66m. It seems likely that these weakly conductive and IP chargeable sulphidic graphitic argillite marker horizons represent the rocks that define the immediate hanging wall of the Centennial mine horizon. If so, the sulphide-rich felsic volcanics cut between 940m and 1050m in PBM-037 definitely represent favourable Centennial VMS horizon opportunities to follow up.

Callinex's Pine Bay Project encompasses the majority of the Baker Patton Complex, the largest exposed felsic (rhyolitic) volcanic accumulation in the Flin Flon portion of the Flin Flon-Snow Lake Greenstone Belt. This is especially important since the majority of the VMS deposits occurring within the Flin Flon Belt of Saskatchewan and Manitoba are almost always hosted by rhyolitic flows and volcaniclastic rocks within predominantly mafic terranes. Of additional importance is that these felsic (rhyolitic) rocks only account for a small portion of the total volcanic pile (5-10%). Of particular exploration interest to Callinex's Pine Bay Project, is the very large exposure of intensely altered (chloritic, sericitic and silicic alteration) felsic rocks that have collectively been called the Baker Patton Alteration Zone, encompassing an area with a minimum of a 700m by 1000m footprint. A very large footwall alteration system such as this would normally be expected to be accompanied by a large VMS system and has consequently been the target of many exploration companies preceding Callinex. Using all of this historic work and applying new search techniques may improve the potential for Callinex to make a discovery. As an example, recently confirmed by 3D geophysical inversions performed on ground magnetic data covering the Baker Patton Alteration Zone, a very large directly coincident 3D magnetic low anomaly shows up over the Baker Patton Alteration Zone. Similar magnetic lows (likely the result of demagnetization within strongly and extensively silica-flooded deep footwall alteration zones) coincident with IP chargeability highs are therefore excellent new VMS targets in the BPC.

For these reasons and more, the dominantly felsic, approximately 50km², BPC is believed to represent one of the largest and most favourable felsic volcanic centers and relatively underexplored VMS target areas remaining in the Flin Flon Greenstone Belt.

J.J. O'Donnell, P.Geo, a qualified person under National Instrument 43-101 and a Consulting Geologist for Callinex, has reviewed and approved the technical information in this news release.

Figure 1: Flin Flon Mining District Region Overview

Figure 2: Pine Bay 2019 IP Chargeability Isoshells with 2019/2020 Drilling

Figure 3: Pine Bay Plan View with Magnetic Low Contours and 2019/2020 Drilling

Figure 4: Pine Bay Regional Plan View with VTEM Channel 30

Figure 5: Northern Pine Bay Area Plan View with VTEM Channel 30

Figure 6: Pine Bay 3D Plan View Looking Down the Plane of BPEM Plates A & B

Figure 7: Pine Bay 3D View Looking NE with BPEM Plates A & B

Figure 8: Pine Bay 3D View Looking Westerly with Plates A & B

Figure 9: Pine Bay Plan View with Geology and Growth Fault Corridor

Figure 10: Pine Bay 3D Plan View with 2019/2020 Drilling, Geology and BPEM Plates

Core Photo 1: PBM-037 at 944.5m ~1.5cm Solid Red-Brown Sphalerite Stringer Hosted in Strongly Altered Chloritized Rhyodacite Flow

Table 1: Pine Bay Assay Results from 2019-2020 Drilling Campaign

Highlighted 2019-2020 Pine Bay Project Assay Intervals

Hole	From (m)	To (m)	Interval (m)	Au g/t	Ag g/t	Cu%	Zn%
PBM-037	945.8	946.8	1.0	0.06	1.21	0.25	0.84
PBM-037	997.8	998.0	0.2	0.61	0.09	0.01	0.01
PBM-035	38.5	39.4	0.9	0.32	1.28	0.03	0.41
PBM-032	120.0	122.0	2.0	0.65	1.00	0.01	0.02

Note: (1) True widths will require further drilling to determine

QA / QC Protocols

Individual samples were labeled, placed in plastic sample bags, and sealed. Groups of samples were then placed in security sealed bags and shipped directly to SGS's lab in Vancouver, BC for analysis. Samples were weighed then crushed to 75% passing 2mm and pulverized to 85% passing 75 microns in order to produce a 250g split. 35 elements including lead, zinc and silver assays were determined by Aqua Regia digestion with a combination of ICP-MS and ICP-AES finish, with overlimits (>100 ppm Ag, >10,000 ppm Zn, and >10,000 ppm Pb) completed by fire assay with gravimetric finish (Ag) or Aqua Regia digestion with ICP-AES finish (lead and zinc). If gold was analyzed a Fire Assay of a 30 gram charge by AAS, or if over 10.0 g/t were re-assayed and completed with a gravimetric finish. QA/QC included the insertion and continual monitoring of numerous standards, blanks, and duplicates.

About Callinex Mines Inc.

Callinex Mines Inc. (TSXV: CNX) (OTC: CLLXF) is advancing its portfolio of zinc rich deposits located in established Canadian mining jurisdictions. The portfolio is highlighted by its Nash Creek and Superjack deposits in the Bathurst Mining District of New Brunswick. A 2018 PEA outlined a mine plan that generates a strong economic return with a pre-tax IRR of 34.1% (25.2% post-tax) and NPV8% of $230 million ($128 million post-tax). The projects have significant exploration upside over a district-scale land package that

encompasses several high-grade mineral occurrences along a 20km trend. Click here to view a video overview of the Nash Creek Project.

Callinex has a project portfolio that also includes projects within the Flin Flon Mining District of Manitoba that are located 25km to an operating processing facility that requires additional ore.

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content:http://www.prnewswire.com/news-releases/callinex-identifies-highly-conductive-anomalies-on-known-mine-hori

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