Cardinal Resources Ltd.: Mineralised Downdip Extension Confirmed with Step-Out Hole

06.07.2016 | ABN Newswire

Perth - Cardinal Resources Ltd. (ASX:CDV) ("Cardinal" or "the Company") is pleased to report the results of a down dip RC/diamond drill hole, NMRD483-749, recently completed on the Namdini Project ("Namdini"), Ghana (Figure 1, see link below).

Highlights:

- Namdini mineralised gold zone extended down dip with step-out diamond drilling

- 200m wide mineralised gold zone extends to 290m vertical depth

- Significant gold mineralised intersections within Section O include:

-- 54m @ 2.00 g/t gold
-- 47.5m @ 1.30 g/t gold
-- 27m @ 1.56 g/t gold
-- 12m @ 2.61 g/t gold

This drill hole has enabled Section O to be compiled with a 200m wide gold mineralised zone extending to a 290m vertical depth (Figure 2, see link below). This mineralised section confirms the continuation of wide gold mineralisation at depth within the Namdini Project.

The potential of the Namdini Project to host a world-class gold project continues to be confirmed by the intersection of long mineralised zones, including 54m @ 2.00 g/t Au, 47.5m @ 1.30 g/t Au and 27m @ 1.56 g/t Au.

Recently received assay results have enabled Section J to be compiled with a 300m mineralised zone within altered volcaniclastics, granitoids and diorites (Figure 5, Appendix 2 and Appendix 3 - see link below).

The hydrothermally altered volcaniclastics, granitoids and diorites intersected in these drill holes are mineralised throughout which confirm that gold mineralisation is consistently being intersected along strike and at depth.

Infill diamond drilling has been completed on 50m spacings, between previous 100m spaced diamond drill sections, to confirm and enhance the gold mineralisation previously intersected within the volcaniclastics, granitoids and diorites (Figure 1).

Assay results are pending for a further 13 diamond and 9 RC drill holes, which should provide a constant flow of results in the weeks ahead. The Company has divided up its core submissions between SGS Laboratories in Burkina Faso and Ghana to assist in accelerating receipt of assay results (Figure 1).

NMRD483-749 intersected 192m of gold mineralisation within hydrothermally altered volcaniclastics, granitoids and diorites from 100m to 292m vertical depths with multiple zones of mineralisation down the drill hole, including 7m @ 1.14 g/t, 27m @ 1.56 g/t, 12m @ 2.61 g/t and 3m @ 3.41 g/t, confirming continuity of mineralisation with depth (Figures 2 to 4, see link below).

Drill hole NMRD483-749 was drilled from surface through unmineralised metasediments to 78m by Reverse Circulation (RC) method. The drill rig was aligned at -65DEG dip drilling east which allows for the shallowing of the drill hole with depth. The azimuth was set at 095DEG instead of 100DEG (normal to the strike of the formations) as the borehole trace usually deflects to the right with depth due to the clockwise rotation of the drill rods.

The RC portion of the drill hole was surveyed at the top of the drill hole which showed that the drill rig had been set up correctly. Once harder rock was encountered, PVC casing was inserted for stability of the RC portion of the drill hole which was drilled to 78m.

HW steel casing was inserted to 78m for stability of the hole and HQ size core was then drilled to the final

depth of 414.05m. This drill hole was surveyed at a depth of 90m down hole, then every 30m down the remainder of the drill hole to determine the dip and azimuth of the drill hole with depth.

Drill holes NMDD433-740 and NMDD428-758 were drilled from surface. The soft near surface materials were drilled with a Triple Tube core barrel to reduce core losses. Once harder rock was encountered, HW steel casing was inserted for stability of the holes and HQ size core was then drilled to their final depths of 360.50m and 277.37m respectively.

The drill holes were surveyed every 30m down the drill holes to determine their dips and azimuths. The core was orientated at each drill run using a digital instrument. The core was marked showing the base of the drill hole, then the core from each drill run was laid in a length of angle iron to fit the core together so that the orientation line could be drawn along the length of the core at the drill site. Geotechnical parameters were measured using this orientation line as the datum line.

The core was photographed, cut in half and then quartered. One quarter of the core was consistently sampled, with the remaining three quarters stored in metal core trays and placed on metal racks under cover in the core shed at Bolgatanga. The quarter core samples were sent to the SGS Laboratory in Tarkwa, Ghana for sample preparation and fire assay.

Infill Diamond Drilling Program

The 50m spaced infill diamond drilling programme designed to evaluate the NNE trending gold mineralised corridor has been completed. All of the infill diamond drill holes were orientated to drill across this mineralised corridor to confirm the continuation of gold mineralisation along strike and at depth (Figure 1).

Updip RC Drilling Program

The recently announced shallow updip RC drilling programme (ASX announcement dated 17 June 2016) is in progress along the eastern side of the Namdini mineralised corridor. The RC drill holes are positioned on each previously drilled 50m section line so that 3 drill holes will be on each section (Figure 1).

Where water is encountered and dry samples cannot be obtained, the drilling to planned depths will be competed by diamond drilling.

Once all assay results are received, all drill data collected will form the basis for Cardinal to provide guidance on an initial Exploration Target, anticpated to be reported during Q3 2016.

Namdini Geology

The Namdini Project is located within a Paleo-Proterozoic Greenstone Belt comprising Birimian metavolcanics, volcaniclastics and metasediments located in close proximity to a major 30 km ~N-S regional shear zone with splays. These rock units are intruded by felsic monzonite granitoids and quartz diorites.

The gold mineralisation is developed within foliated, sheared and highly altered volcaniclastic rocks containing sulphides (pyrite and arsenopyrite). The host rocks dip approximately 60DEG W and strike 010DEG . Hydrothermal alteration of the volcaniclastics is comprised of silica, iron carbonate (ankerite), sericite, epidote and chlorite.

The highly altered rocks contain disseminated gold-bearing sulphides and are distinguished from the grey, unaltered, unmineralised host rocks by characteristic pale to medium green colours.

The monzonite granitoids are medium to coarse grained with quartz vein stockworks and are usually altered to pale green epidote with patches of pink to reddish albite (alkali feldspar). Sulphides of pyrite and arsenopyrite are contained within these granitoids.

The monzonite granitoid intrusive is considered to have been the "heat engine" which remobilised gold bearing sulphide rich fluids which altered the host rocks and precipitated the gold mineralisation within them.

The NNE-SSW trending corridor containing the gold mineralisation is bounded on both east and west sides by foliated metasediments of varying compositions, also dipping 60DEG W and striking 010DEG .

The quartz diorites contain primary pyrite sulphides which are weakly mineralised when unaltered. However, the diorites become partly mineralised when they are hydrothermally altered or sheared with quartz veining, or when some mineralised zones of altered volcaniclastics or granitoids occur within them.

Monitoring Of Drilling Programs

Cardinal's technical and management team evaluates all of the available data on a daily basis with the main focus being the expansion of the gold potential.

Cardinal, together with the contract drill rigs, are providing the samples for express assaying services from SGS Laboratories in Ghana and Burkina Faso. This enables the Company to continuously improve its drill plan strategy as new information becomes available.

To view tables and figures, please visit:
http://abnnewswire.net/lnk/GG6JK1Q0

To view Cardinal's latest Quarterly Report, please visit:
http://abnnewswire.net/lnk/R3URJ0C4

About Cardinal Resources Ltd:

Cardinal Resources Ltd. (ASX:CDV) is a focused gold exploration and development company with its key assets located in the mineral-rich country of Ghana, West Africa. Cardinal owns and operates 2 drill rigs and has in country infrastructure which allows it to be a low cost exploration and development company.

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