

FOR IMMEDIATE RELEASE

Aton drills further high grade gold mineralisation at its new Semna drill discovery, including 12.54 g/t Au over an interval of 16 metres, and doubles the strike extent

Vancouver, British Columbia, November 7, 2023: Aton Resources Inc. (AAN: TSX-V) ("Aton" or the "Company") is pleased to update investors on the latest results from the recent reverse circulation percussion ("RC") drilling at the Semna prospect, located within its 100% owned Abu Marawat Concession ("Abu Marawat" or the "Concession"), in the Eastern Desert of Egypt.

Highlights:

- 21 holes were drilled at the Semna prospect, for a total of 3,662m, during the recently completed RC drilling programme. Preliminary drill results of 4m composite sampling of the final 4 holes, SMP-017 to SMP-020, are now available;
- 3 of the final 4 holes, targeting a potential eastern extension of the Semna Main Vein zone ("MVZ"), intersected significant zones of gold mineralisation, assaying >5 g/t Au;
- Significant high grade mineralised intersections include:
 - 12.54 g/t Au over a 16m interval, from 60m downhole depth (hole SMP-018);
 - **5.19 g/t Au over a 16m interval**, from 56m downhole depth (hole SMP-017);
 - **6.30 g/t Au over a 16m interval**, from 124m downhole depth (hole SMP-019). This hole also returned an additional lower grade mineralised intersection of **1.69 g/t Au over a 20m interval**, from 96m downhole depth;
- The holes confirm the existence of blind and previously unrecognised high grade mineralisation to the east of the historically exploited Semna MVZ, buried beneath alluvial wadi sediments, approximately 10m in thickness;
- The best drill intersection of the entire programme was returned from the easternmost hole, SMP-018, indicating the mineralisation remains open to the east;
- The final 4 holes of the programme have doubled the strike length of the drilled mineralisation on the Semna MVZ, which remains fully open at depth and along strike to both the east and the west.

"We are delighted with these exceptional results from the eastern extension of the Semna Main Vein zone, which clearly demonstrate the potential of Semna to develop into a very significant new drill discovery for us" said Tonno Vahk, Interim CEO. "During the 20th Century period of gold mining in Egypt the Semna mine was regarded as one of the most significant and prospective by the British mining syndicates working there, and the high grades from our first phase of RC drilling appear to confirm anecdotal evidence suggesting the existence of very high to bonanza grade mineralisation at Semna. We are particularly encouraged by the results from these last 4 holes that have effectively doubled the strike length of the known mineralisation on the Main Vein zone. We believe that the blind mineralisation drilled in these holes was not previously identified or exploited as it is covered by alluvial wadi sediments, and it is likely that the high grade mineralisation subcrops under this thin veneer of alluvial cover, which is very encouraging. Our application for the mining licence at Abu Marawat, based on the Hamama and Rodruin open pit mine and heap leach oxide projects, is proceeding in accordance with the terms of our Concession Agreement, and we expect to be able to provide a positive update on this soon. It is our intention to fast-track ongoing exploration of the Semna project, and to start a follow-up second phase of diamond drilling in early 2024."

Semna Prospect

The Semna prospect is located approximately 27km east-northeast of the Hamama West deposit and 13km north-northeast of the Rodruin deposit, and is accessed via desert tracks from either Hamama, Rodruin or the Abu Marawat deposit to the north (Figure 1). The Semna area has a long history of gold mining, during both ancient and modern times. There was archaeological evidence in the area suggesting that mining dates back as far as the Old Kingdom period, over 4,500 years ago. In modern times, Semna was exploited between 1904 and 1906 by two British companies, which worked the Main Vein on two underground levels. By about 1908 however, the British gold mining industry in Egypt had been almost totally eclipsed by the discovery of oil, and was more or less moribund. There was also some further development work carried out at Semna in the 1950's by a subsidiary of the Egyptian Phosphate Company. It has been reported that the Semna mine had the widest vein exploited during the British era of mining in Egypt, which reached up to 6m width in places, and the British companies reported mining grades of over 2 ounces per ton. Reports from the Mining Journal from 1905 indicated that some remnant pillars within the ancient Pharaonic-era stopes assayed up to 5.5 ounces per ton of gold.



Figure 1: Geology plan of the Abu Marawat Concession, showing the location of the Semna prospect



Figure 2: Semna gold mine drill hole collar plan

The mineralisation at Semna appears to be mainly hosted in a granodiorite body that has been intruded into a package of mafic to intermediate composition metavolcanic rocks. The mineralisation is strongly structurally controlled, and is hosted in a series of steeply south-dipping shear zones that contain the gold-bearing quartz veins. These sub-parallel quartz veins strike approximately east-west and dip 60-75° to the south, but the dip and strike is quite variable within each vein, and the veins noticeably pinch and swell.

Aton completed a first phase of RC drilling at the Semna prospect in August 2023, and has reported the results of the first 17 holes (see news release dated October 13, 2023). Previously reported results include high grade mineralised intercepts including **14.63 g/t Au over a 12m interval** (hole SMP-016), and **29.8 g/t Au over a 4m interval** (hole SMP-003). Aton has also undertaken a survey of the underground workings at Semna, which have recently been further exploited by artisanal miners, confirming that the mineralisation is continuous beneath the old British mine workings to an approximate elevation of 550m (see news release dated October 13, 2023).

Semna gold mine RC drilling

21 drill holes, SMP-001 to SMP-020, were completed at the Semna prospect, for a total of 3,662m metres during the recently completed RC drill programme (see Table 1, Figure 2 and Appendix A). Preliminary results are now available from the final 4 holes SMP-017 to SMP-020, from 4m composite samples (refer to the next section for details of sampling procedures). Following receipt of the 4m composite sample assay results, selected 1m samples have now been dispatched to the laboratory for final analysis, and the results of these will be reported soon.

| Hole ID | Collar co-ordinates ^{1,2} | | | EOH | Din | Grid | Commente | | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|-----------|-------|-----------|-------|---------|------------------------------|--|--|--|--|
| | X | Y | Z | depth (m) | ыр | azimuth | Comments | | | | |
| SMP-017 | 558852.6 | 2924704.1 | 569.3 | 200 | -47.6 | 356.3 | Main Vein zone (E extension) | | | | |
| SMP-018 | 558939.8 | 2924792.9 | 567.0 | 140 | -52.0 | 342.7 | Main Vein zone (E extension) | | | | |
| SMP-019 | 558851.9 | 2924677.7 | 570.3 | 152 | -51.6 | 357.6 | Main Vein zone (E extension) | | | | |
| SMP-020 | 558883.8 | 2924732.4 | 568.8 | 112 | -46.7 | 4.1 | MVZ (EX) faulted out? | | | | |
| Notes:1)All co-ordinates are UTM (WGS84) Zone 36R2)Collar surveys undertaken using a Leica Viva GS15 differential GPS system3)All drill holes were surveyed using a gyroscopic survey tool | | | | | | | | | | | |

Table 1: Collar details of RC exploration drill holes at Semna

The final 4 holes of the RC programme, SMP-017 to SMP-020, were drilled from the wadi to the east of the historic British mine workings, and were designed to intersect an interpreted extension of the MVZ mineralisation beneath the wadi sediments east of the old mine (Figure 2). All 4 holes intersected mineralisation, with 3 of the holes returning high grade intercepts grading >5 g/t Au over significant widths (see Table 2 below).

| Hole ID | Intersection (m) | | | Au | | 7000 | Commonto |
|---------|------------------|-----|----------|-------|--------------|----------|-----------------------|
| | From | То | Interval | (g/t) | Sample type | Zone | Comments |
| SMP-017 | 56 | 72 | 16 | 5.19 | RC composite | MVZ (EX) | |
| SMP-018 | 60 | 76 | 16 | 12.54 | RC composite | MVZ (EX) | |
| SMP-019 | 96 | 116 | 20 | 1.69 | RC composite | MVZ (EX) | |
| | 124 | 140 | 16 | 6.30 | RC composite | MVZ (EX) | |
| SMP-020 | 100 | 104 | 4 | 1.20 | RC composite | - | MVZ (EX) faulted out? |

Table 2: Significant intersections from Semna RC drilling

Hole SMP-017, was drilled on a northerly azimuth on the 558850E section approximately 80m east of the now exposed eastern entrance to the underground mine workings (Figure 2), and the most easterly mineralisation

drilled to date (holes SMP-015 and SMP-016, see news release dated October 13, 2023). SMP-017 returned a mineralised intersection of **5.19 g/t Au over a 16m interval**, from 56m downhole depth, or approximately 40m beneath ground level (see Appendix A). This interval included a single 4m composite sample which returned an assay of 11.65 g/t Au. The true width of this zone is interpreted as being approximately 12m.

Hole SMP-019 was drilled beneath hole SMP-017 (Figure 2), and returned mineralised intersections of **1.69** g/t Au over a 20m interval, from 96m downhole depth, or approximately 75m below ground level, and 6.30 g/t Au over a 16m interval (see Appendix A). The lower intercept included a single 4m composite sample which returned an assay of 18.65 g/t Au. The true width of the overall zone including both the mineralised intercepts is interpreted as being approximately 30-35m.

Hole SMP-018 was drilled oblique to the 558930E section approximately 160m east of the underground mine workings, and was the easternmost hole in the programme (Figure 2). SMP-018 returned a mineralised intersection of **12.54 g/t Au over a 16m interval**, from 60m downhole depth, or approximately 45m beneath ground level (See Appendix A). This interval included 2 consecutive 4m composite samples which returned assays of 33.8 g/t Au and 11.1 g/t Au. The true width of this zone is interpreted as being approximately 10-12m.

Hole SMP-020 was drilled on a northerly azimuth on the 558890E section between the other holes (Figure 2), and returned a mineralised intersection of **1.20 g/t Au over a 4m interval**, from 100m downhole depth, or approximately 75m below ground level (see Appendix A). This hole is believed to have missed the eastern extension of the MVZ, which is interpreted as having been offset by a NNE-striking fault, oblique to the section.

Discussion of results

In the Semna area both the mineralisation and topography are structurally controlled. The historic Semna mine is located between two wadis orientated in a NNE direction, which are interpreted as being controlled by NNE-striking faults (Figure 3). Mapping has indicated the presence of a sub-parallel series of these NNE fault structures, which offset the mineralised zones. There is a significant such structure close to the eastern entrance to the mine workings, which appears to offset the MVZ to the south. There is also a change in the orientation of the MVZ associated with this fault. In the underground workings to the west of this fault the MVZ has an ESE strike, but this changes to an ENE strike to the east of this structure (Figure 3). There is also a significant jog in the eastern wadi in this location, and this is thought to be controlled by the sub-crop of the MVZ beneath the wadi alluvium.

The final 4 holes of the RC drilling programme have intersected good widths of high grade gold mineralisation sub-cropping under alluvial wadi sediments to the east of the MVZ where it has been historically mined at Semna. This mineralisation in this eastern extension of the MVZ is expected to sub-crop immediately beneath the alluvial cover, which is interpreted as being approximately 10m thick.

The mineralisation at Semna is orogenic in style, and is interpreted as being associated with dilational zones, accompanied by shearing, which are localised between the series of NNE-striking fault structures. Mineralisation on the MVZ is associated with at least one mineralised quartz vein, which anastomoses and pinches and swells. Historically the mineralised zone has been described as being up to 6m in thickness, but interpretation of the results from holes SMP-017 to SMP-019 suggests that the mineralisation is associated with multiple veins, and the overall mineralised zone to be potentially as much as 10-35m in true width in the eastern extension of the MVZ under the alluvial wadi sediments.

The mineralisation is open along strike at both ends, with the final 4 holes having now doubled the drilled strike length of the mineralisation on the MVZ to approximately 400m, with the best mineralised intersection in the programme coming from the easternmost hole, SMP-018. The mineralisation is open at depth along the entire drilled strike length. Grades of the mineralised intersections are high, typically above 5 g/t Au, and locally of bonanza grade, which is consistent with historical anecdotal information about the old Semna mine.



Figure 3: Sketch map of the interpreted outcrop/sub-crop of the MVZ at Semna

Sampling and analytical procedures

The RC holes were drilled at 5³/₄" or 5¹/₂" diameter, and the bulk percussion chip samples were collected directly into pre-written large plastic bags from the cyclone every metre, numbered with the hole number and hole depths, and laid out sequentially at the drill site. Between each metre of drilling the cyclone and top box were cleaned out with compressed air. The bags were logged on the drill sites by Aton geologists. The bulk 1m samples were weighed, and subsequently riffle split through a 3-tier splitter at the drill site by Aton field staff to produce an approximately 1/8 split, which was collected in cloth bags, numbered and tagged with the hole number and depth. The splitter was cleaned with compressed air between each sample. The reject material from this initial bulk split was re-bagged, labelled and tagged, and retained on the drill sites. A representative sample of each metre was washed and stored in marked plastic chip trays, each containing 20m of samples, photographed, and retained onsite as a permanent record of the drill hole.

The 1m split samples, weighing approximately 5kg each were then transported to the Rodruin sample processing facility, where they were 1/2 riffle split into 2 separate sub-samples, weighing approximately 2.5kg. One of these sub-samples was marked and labelled, and retained at the laboratory for storage. The second 1m sub-samples were then combined into 4m composite samples, weighing approximately 10kg. These were thoroughly mixed and again riffle split to produce nominal *c.* 250-500g 4m composite samples which were dispatched to ALS Minerals for analysis. Again the splitter was cleaned with compressed air between each sample. The 4m composite samples were allocated new sample numbers. The bulk reject material from the riffle split 4m composite samples was disposed of. QAQC samples were inserted into the 4m composite sample stream at a rate of approximately 1 certified reference material (or "standard" sample) every 60 samples, 1 blank sample every 30 samples, and 1 field duplicate split sample every 30 samples.

The 4m composite samples were shipped to ALS Minerals sample preparation laboratory at Marsa Alam, Egypt, where they were pulverised to a size fraction of better than 85% passing 75 microns. From this pulverised material a further sub-sample was split off with a nominal *c*. 50g size, which was shipped on to ALS Minerals at Rosia Montana, Romania for analysis. The 4m composite samples were analysed for gold by fire assay with an atomic absorption spectroscopy ("AAS") finish (analytical code Au-AA23. High grade samples (Au >10 g/t) were re-analysed using analytical code Au-GRA21 (also fire assay, with a gravimetric finish).

Following the receipt of the final 4m composite assay results for the full Semna programme from ALS, a number of the retained 1m sub-samples were selected by a senior Aton geologist for re-assaying, corresponding to 4m composite assays deemed to be of significance. The selected 1m sub-samples were again riffle split to produce nominal *c*. 250-500g 1m split samples which were allocated new sample numbers. These have been dispatched to ALS Minerals for the same sample preparation at Marsa Alam, and for subsequent analysis at Rosia Montana. The bulk reject material from the 1m sub-sample splits was re-bagged and retained onsite for storage at Rodruin. QAQC samples were inserted into the 1m split sample stream at a rate of approximately 1 standard every 30 samples, 1 blank sample every 15 samples, and 1 field duplicate split sample every 15 samples.

The 1m split samples will again be analysed for gold by fire assay (analytical code Au-AA23), and for silver, copper, lead and zinc using an aqua regia digest followed by an AAS finish (analytical code AA45). Any high grade gold samples (Au >10 g/t) will again be re-analysed using analytical code Au-GRA21 (also fire assay, with a gravimetric finish). Any high grade Ag and base metal samples (Ag >100 g/t, and Cu, Pb and Zn >10,000ppm or >1%) will be re-analysed using the ore grade technique AA46 (also an aqua regia digest followed by an AAS finish).

All intersections herein reported relate to 4m composite samples, results from the subsequent 1m splits will be reported when they become available.

About Aton Resources Inc.

Aton Resources Inc. (AAN: TSX-V) is focused on its 100% owned Abu Marawat Concession ("Abu Marawat"), located in Egypt's Arabian-Nubian Shield, approximately 200 km north of Centamin's world-class Sukari gold mine. Aton has identified numerous gold and base metal exploration targets at Abu Marawat, including the Hamama deposit in the west, the Abu Marawat deposit in the northeast, and the advanced Rodruin exploration prospect in the south of the Concession. Two historic British gold mines are also located on the Concession at Sir Bakis and Semna. Aton has identified several distinct geological trends within Abu Marawat, which display potential for the development of a variety of styles of precious and base metal mineralisation. Abu Marawat is 447.7 km² in size and is located in an area of excellent infrastructure; a four-lane highway, a 220kV power line, and a water pipeline are in close proximity, as are the international airports at Hurghada and Luxor.

Qualified person

The technical information contained in this News Release was prepared by Javier Orduña BSc (hons), MSc, MCSM, DIC, MAIG, SEG(M), Exploration Manager of Aton Resources Inc. Mr. Orduña is a qualified person (QP) under National Instrument 43-101 Standards of Disclosure for Mineral Projects.

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Note Regarding Forward-Looking Statements

Some of the statements contained in this release are forward-looking statements. Since forward-looking statements address future events and conditions; by their very nature they involve inherent risks and uncertainties. Actual results in each case could differ materially from those currently anticipated in such statements.

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