FOR IMMEDIATE RELEASE

Aton reports reconnaissance sampling of the Semna East area, sampling up to 9.13 g/t Au, and identifies the potential for intrusion-related gold mineralisation

Vancouver, December 19, 2019: Aton Resources Inc. (AAN: TSX-V) (“Aton” or the “Company") is pleased to update investors on the results of preliminary fieldwork at the Semna East prospect. Semna East is located within the Company’s 100% owned Abu Marawat Concession (“Abu Marawat” or the “Concession”), approximately 4 km east-southeast of the historic Semna gold mine, in the Eastern Desert of Egypt.

Highlights:

- Aton has completed reconnaissance sampling at the Semna East prospect, first identified during the 2017 regional exploration programme, which hosts a series of altered orogenic diorites, quartz diorites and granodiorites, associated with extensive ancient and more modern alluvial gold workings – 112 samples;
- Grab samples from Semna East returned assays including **9.13 g/t Au, 9.00 g/t Au and 8.83 g/t Au**. Gold mineralisation is typically cryptic with little or no visible evidence for mineralisation;
- 8 rock samples were also collected for petrographic analysis and wholerock geochemistry. The results strongly indicate the presence of a shallow buried extension to the W-rich Gaharish granite beneath the Semna East area, and suggest **potential for the development of intrusion-related gold mineralisation in the area**, associated with the roof zone and margins of any such buried intrusive;
- 29 samples were also collected from a distinctive carbonate body to the northwest of Semna East, returning Au grades of up to 3.47 g/t.

“What could be better, another intriguing target on our doorstep,” said **Mark Campbell, President and CEO**. *“Semna East represents a very attractive intrusion-related gold target, and the presence of alluvial gold in the area, combined with our new bedrock sampling is supportive of this interpretation, and we have again identified mineralisation in an area where none had been previously reported. We continue to be excited by the IR gold-hosting potential of the Gaharish granite, and this new work just confirms that our Abu Marawat Concession has real potential to become a mining district in its own right.”*

Semna East

The Semna East prospect is centrally located within Aton’s Abu Marawat Concession (Figure 1), 30 km east-northeast of Hamama West, and approximately 4 km east-southeast of the British-era Semna gold mine (see news release dated November 21, 2017), which operated during the first decade of the twentieth century. There are no known records of any mining activity or mineralisation in the Semna East area. The prospect is located on the northern margin of the Gaharish granite pluton which hosts gold mineralisation at Abu Gaharish and North Gaharish (see news release dated April 23, 2018). The Semna carbonate body is approximately 1.5 km northeast of the Semna mine.

The Semna East area was first identified during the remote sensing and spectral study undertaken by the Company during 2016 (see news releases dated August 29, 2016 and April 4, 2017). Initial inspection of satellite imagery indicated the existence of ancient alluvial workings at Semna East. Follow-up field inspection and the high resolution WorldView-3 satellite imagery acquired by the Company in January 2017, showed more extensive modern mechanical alluvial workings in the area, apparently less than 20 years old in age (Figure 2). Anecdotal evidence from local Bedouin sources indicated that good quantities of gold were known to have been extracted from these modern alluvial workings. Field inspection also confirmed the presence of extensively altered intrusive rocks of granodioritic to dioritic composition in the general area.

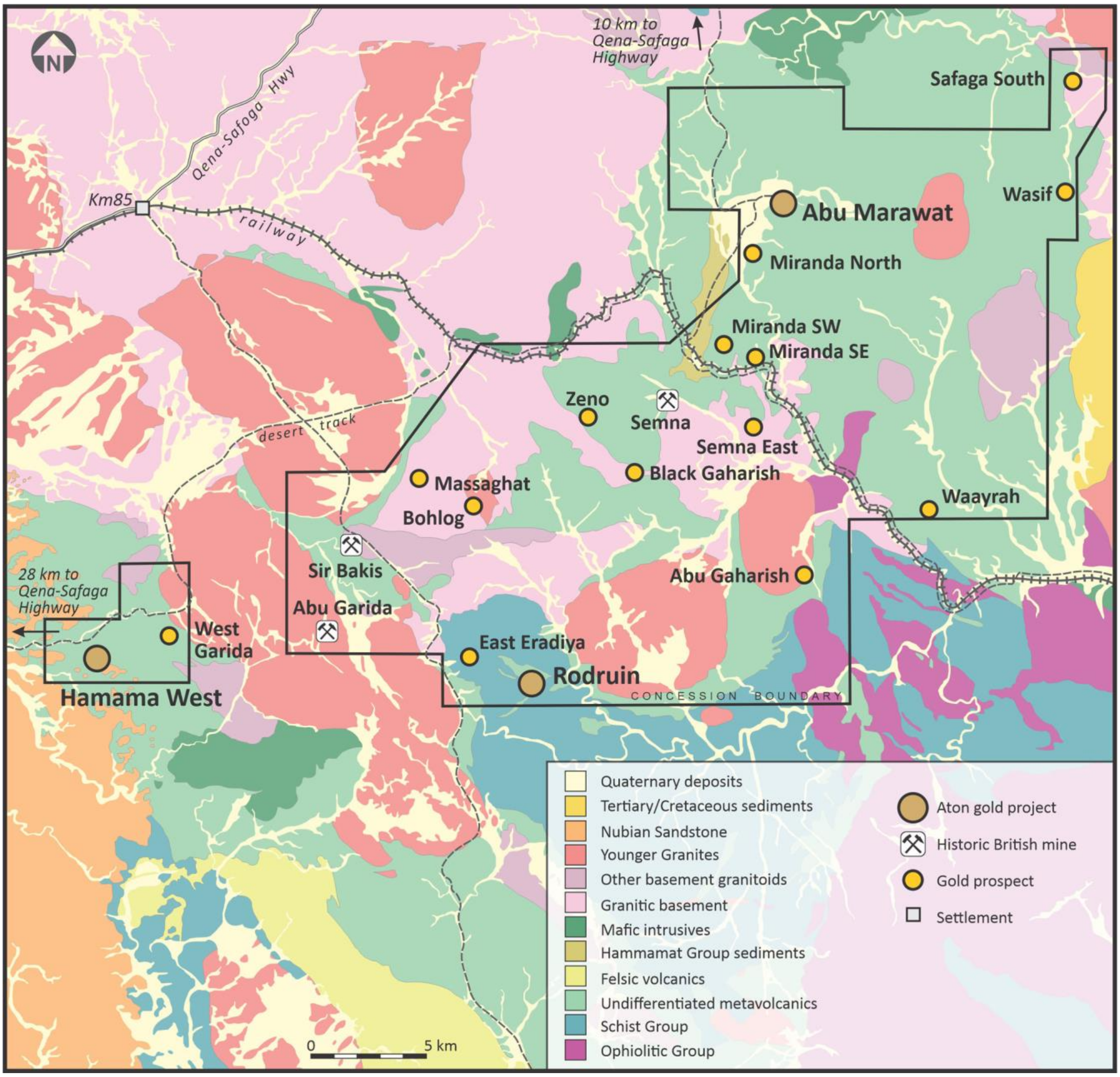

Figure 1: Geological map of the Abu Marawat Concession, showing the location of the Semna East prospect

Following the initial field inspections and the discovery of extensive alluvial mining activity at Semna East it was determined that further follow-up was required. Further field reconnaissance was undertaken, and several phases of sampling were completed. In total 122 surface samples were collected from the overall Semna East area, of which 116 were selective grab samples, and 6 were channels. A further 8 samples were collected specifically for petrographic analysis as well as wholerock and trace element geochemistry.

Results and Discussion

The Semna East area hosts a sequence of altered quartz diorites and diorites similar to those found at the Semna mine, and granodiorites. These are intensely sericite-chlorite-kaolinite altered and sometimes contain stringer stockworks of quartz, chlorite and epidote veinlets. These rocks are deemed to be part of the basement suite of orogenic granitoids, or the so-called "Older or Grey Granites". These basement granitoids are bounded to the north by a major regional shear or thrust structure, which is marked by an east-west trending line of irregular carbonate bodies, including the Semna carbonate. Talc schists and metavolcanics are structurally emplaced against the basement granitoids by this structure. The area is bounded to the southeast by a major NNE-striking felsic dyke, and further to the south and southeast by the Gaharish granite pluton (Figures 2 and 3), a highly evolved late post-orogenic alkali granitoid, which hosts Au and tungsten ("W") mineralisation at Abu Gaharish and North Gaharish.

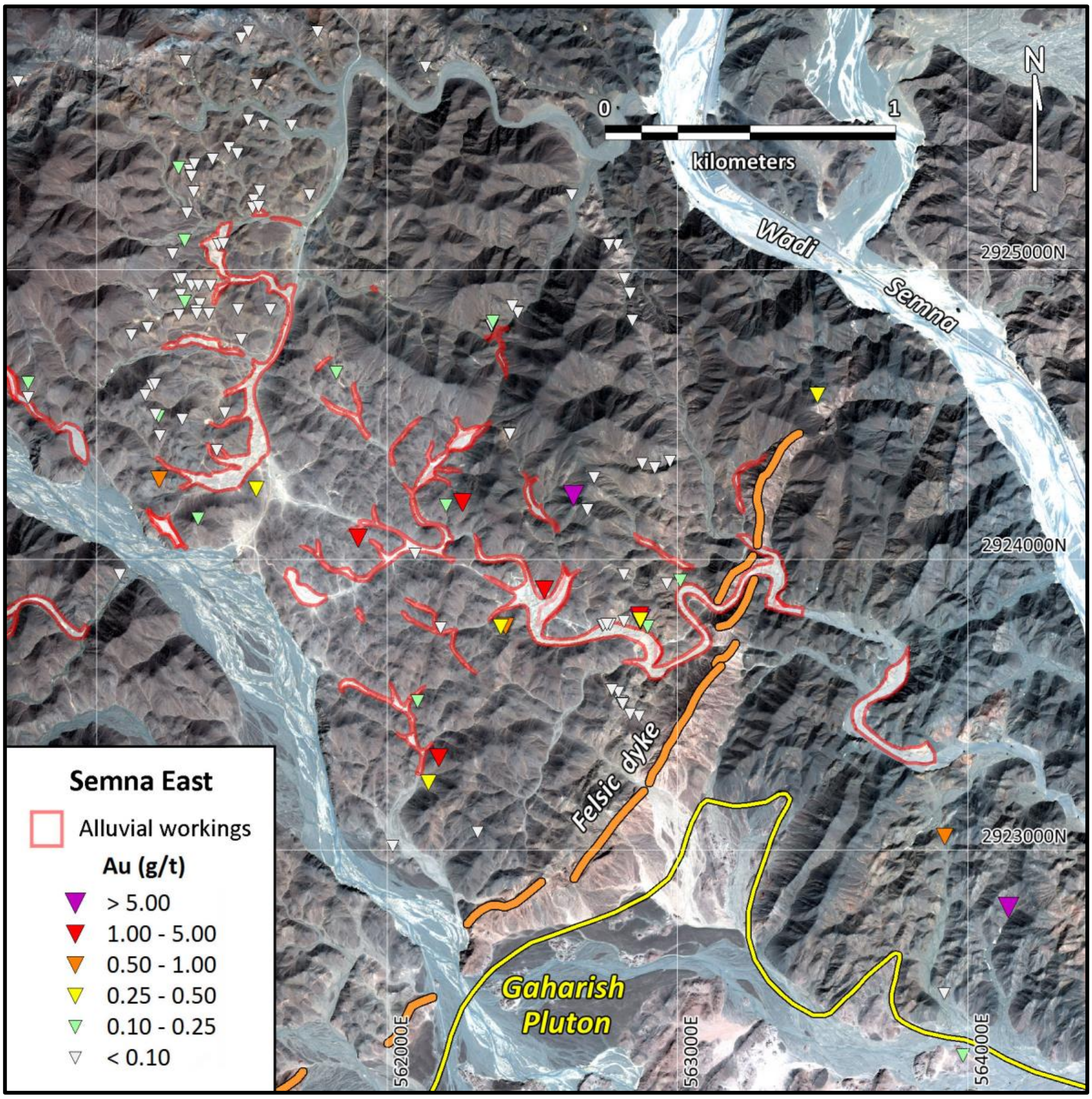

Figure 2: Sample locations at Semna East, showing the location of alluvial workings, overlain on 2017 WorldView-3 satellite imagery (false colour composite, simulated true colour)

There is a major NNE trending structural fabric through the basement granitoids at Semna East, as evidenced by fault offsets of the granitoids (Figure 3), the favoured orientation for dyke emplacement including the regional felsic dyke, and possible apophyses from the northern margin of the Gaharish granite (Figures 2 and 3). Other regional lineaments control wadi orientation including a major NW striking lineament which largely bounds the main area of interest to the southwest and runs into the northern margin of the Gaharish pluton (Figure 3).

Despite the presence of extensive alluvial workings throughout the Semna East area, and the extensively altered rocks, very little evidence was seen of mineralisation in the field, which concurs with the absence of ancient bedrock workings in the area. However it does appear likely that bedrock-hosted gold mineralisation is locally present, albeit it in a cryptic form, and provides the source of the alluvial gold at Semna East. Only minor surface scratchings were observed in the field; along with minor discrete and narrow quartz veins and stringers, occasionally stockworked or sheeted; narrow shears and breccia or crush zones; and occasional small gossanous zones and patches, after primary sulphides.

The results of the surface sampling at Semna East were most encouraging and are deemed to be in line with expectations from the field observations (Figures 2 and 3). **8 samples returned grades of greater than 1 g/t Au, with the highest grades being 9.13 g/t Au, 9.00 g/t Au and 8.83 g/t Au.** Selected analytical data from samples returning significant values of 0.20 g/t Au and above is provided in Appendix A. The identified gold mineralisation appears to be primarily located in the southeastern part of the Semna East area, closest to the Gaharish pluton. Samples from highly altered basement granitoids to the northwest were generally very weakly or unmineralised (Figures 2 and 3).

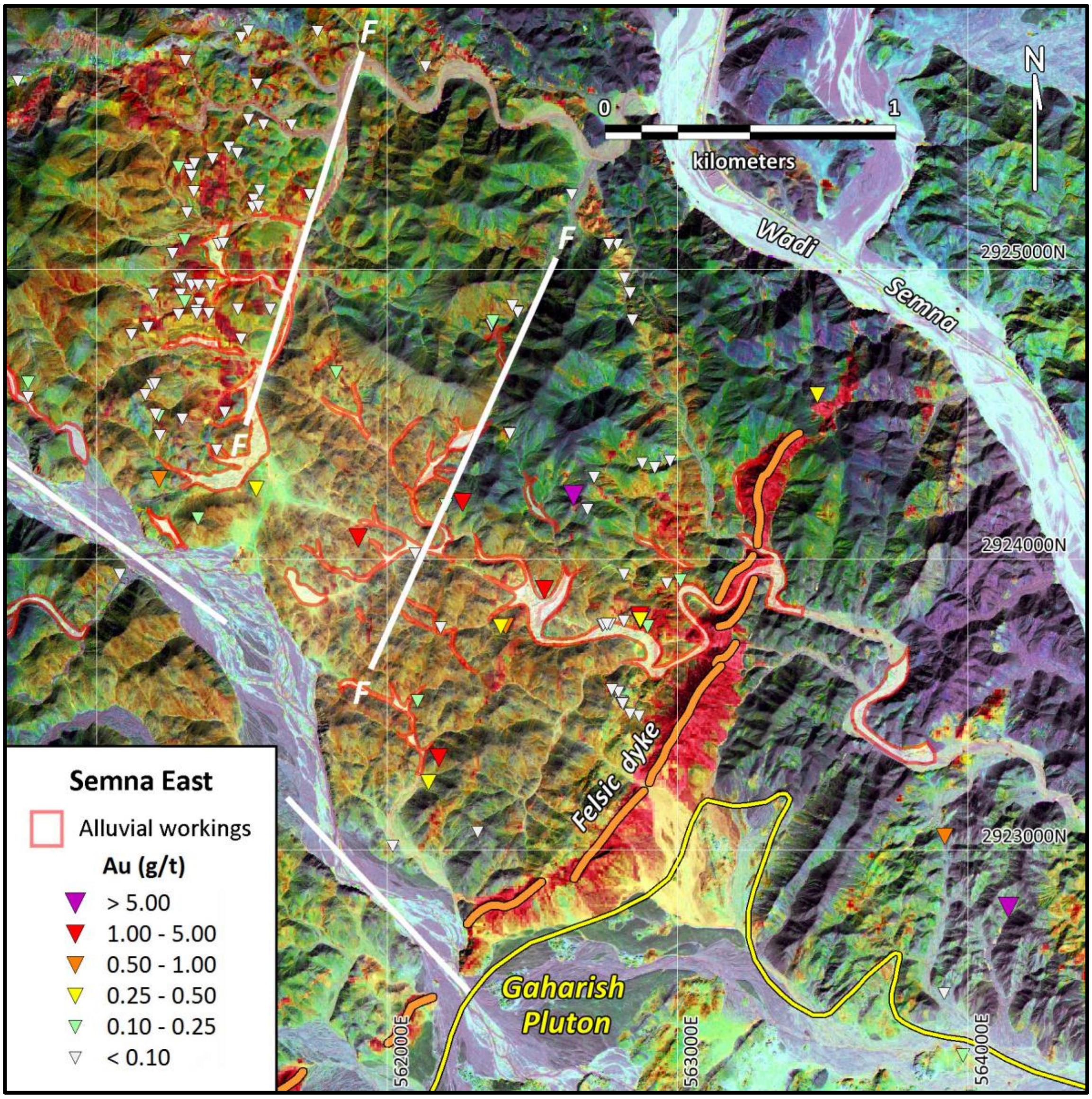

Figure 3: Sample locations at Semna East, showing the location of alluvial workings, and interpreted NNE-trending faults (F), dykes and structures, overlain on 2017 WorldView-3 satellite imagery (clay-iron processing)

Analysis of the minor and major element geochemistry along with microscopy of the 8 petrographic samples confirms field observations that the rock types at Semna East are rather similar diorites, quartz diorites and granodiorites. The trace element geochemistry of the samples is limited in range and points to a genetic relationship between them, and to the source rocks being part of the older suite of orogenic granitoids.

Microscopic analysis of the samples indicates that the original plagioclase in the rocks is extensively saussuritised, confirming field observations that the rocks are strongly altered.

The most significant trace element is W, which is unusually anomalous in all of the samples and particular so in the rather mafic quartz diorite sample AHA-09427, which returned an assay of 12ppm. This enrichment of W in the less evolved mafic members of the suite, relative to the more evolved, could suggest a heterogeneous magma source, but a more likely explanation is that the W is of metasomatic origin. This possibility is consistent with the high LOI, reflecting the high degree of alteration, and with the presence of mapped garnet-bearing quartz veins in the Semna East area. These garnet-bearing quartz veins do not carry mineralisation but are indicative of contact metamorphism of early metamorphic quartz-chlorite-carbonate veins, and this would seem to be **compelling evidence that the area is underlain at shallow depth by a blind younger W-bearing intrusion**.

Petrographic and geochemical analysis of further samples from the Gaharish granite pluton indicates that it is in fact a complex and highly evolved multiphase quartz syenite-syenogranite pluton, cut by NE-SW trending rhyolite/aplite dykes. Heavy rare earth ("HRE")/niobium and HRE/light rare earth fractionation suggest a common and evolving magma for all phases of the Gaharish pluton, which are enriched in niobium, tungsten, tin, tantalum and uranium. The presence of Au (±W-Bi) mineralisation along the 5 km eastern margin of the Gaharish granite is suggestive of an intrusion-related style of gold mineralisation (see news release dated April 23, 2018).

The proximity of Semna East to the Gaharish pluton and the general continuity of the elevated Bi, Sb and Mo anomalism, in addition to W, northwards from the Gaharish pluton into the Semna East area, along with the evidence for contact metamorphism, strongly suggest that the pluton itself, or related blind stocks or apophyses are present under the Semna East area at shallow depth. **The presence of cryptic gold mineralisation in the older basement granitoids at Semna East, combined with a potentially mineralised carapace associated with the roof zone of any blind intrusive represents a very attractive target for intrusion-related gold mineralisation at Semna East**.

A grid programme of lithogeochemical sampling was subsequently undertaken over Semna East, with a nominal 400m x 400m sample spacing. Samples were dispatched for gold and trace element analysis, and results are pending. The aim of this programme is to attempt to determine the existence, or not, of any regional geochemical or alteration trends that may provide a vector to blind gold mineralisation at Semna East.

Semna Carbonate

The Semna carbonate is a distinctive carbonate unit that is localised by a major regional structure which runs in an E-W direction, and represents the structural contact between a series of talc schists of ophiolitic origin, and the basement granitoids detailed above at Semna East.

Due to the apparent similarities between the Semna carbonate, and the mineralised carbonate rocks at Rodruin, field inspection of the Semna carbonate was undertaken which indicated the development of localised gossan, particularly on sheared margins or contacts. A short reconnaissance sampling programme was therefore undertaken. A total of 29 selective grab samples were collected (Figure 4), which were submitted for gold and trace element analysis.

The samples returned a single significant gold grade of 3.47 g/t Au, with most samples returning very low grades. Grades of up to 10.8 g/t Ag, 0.30% Cu, and 0.61% Zn were also returned, associated with gossanous and sheared carbonate, indicating the possible presence of sporadic gold and base metal mineralisation similar to that at Rodruin. Samples were typically very highly elevated in nickel (up to 0.26%), and Cr (up to 0.20%), indicating the Semna carbonate to have an ophiolitic origin.

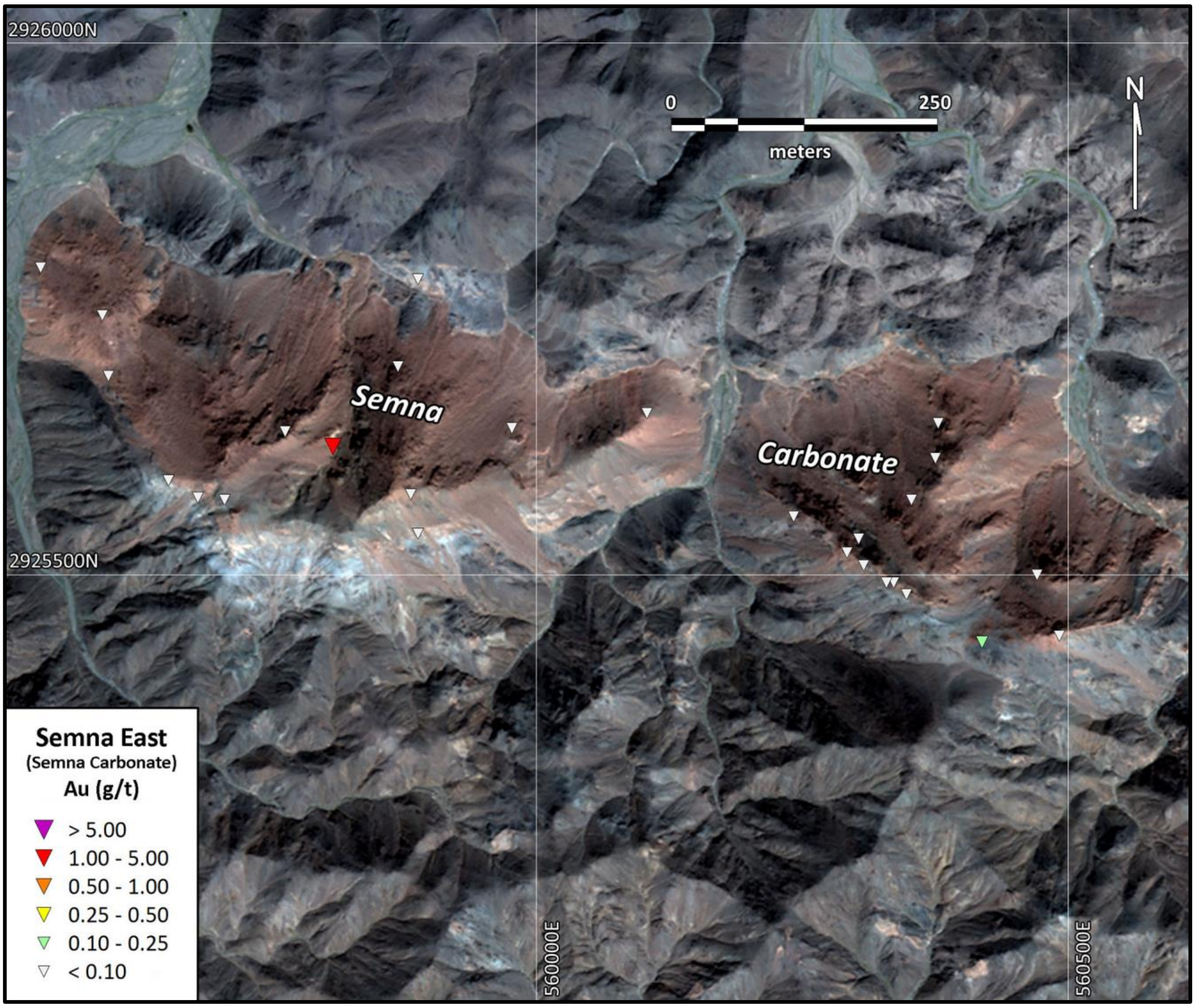

Figure 4: Sample locations at the Semna carbonate

Exploration activity update

- Assay results from the lithogeochemical grid sampling programme at Semna East, and the follow-up surface sampling at the Wasif prospect and the general Wasif-Waayrah area towards the eastern margin of the Concession are expected shortly, and are expected to be released early in 2020.

- A preliminary programme of mobile metal ion geochemical sampling has been completed at the Abu Gaharish prospect (Figure 1) to follow up on the results of the 2017 GPR geophysical survey, which identified potentially mineralised structures buried beneath wadi sediments (see news release dated December 19, 2017). The aim of this programme was to identify potential blind mineralisation buried beneath wadi sediments at Abu Gaharish, and to further refine targeting. The Company has previously identified significant outcropping mineralisation in granitic 'islands' at Abu Gaharish, within a broad, flat-lying zone of wadi sediment cover. Dispatch of these samples for analysis remains pending.

Sampling and analytical procedures

Grab samples were selectively taken at Semna East, and channels were manually collected using a hammer and chisel. Samples typically weighed in the order of 3-5 kg per individual sample. The samples were transported to and crushed to -4mm at the Company's onsite sample preparation facility at Hamama. The final

c. 500g splits were shipped to ALS Minerals at Rosia Montana, Romania for analysis. All samples were analysed for gold by fire assay with an atomic absorption spectroscopy ("AAS") finish (analytical code Au-AA23). Most, but not all, samples were also analysed for a trace element suite including base metals, using a four acid digest followed by an inductively coupled plasma ("ICP") atomic emission spectroscopy ("AES") finish (analytical code ME-ICP61). Petrographic samples were analysed for a trace element suite by ICP mass spectrometry (analytical code ME-MS81), and for major elements by ICP-AES (analytical code ME-ICP06). Thin sections were produced in the UK, and examined by Tim Neall, Aton Senior Project Geologist.

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. Three historic British mines are also located on the Concession at Sir Bakis, Semna and Abu Garida. 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 over 596 km^2 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.

Appendix A

Sample ID	Easting	Northing	Au (g/t)	Ag (g/t)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Be (ppm)	Bi (ppm)	Cd (ppm)	Mo (ppm)	Sb (ppm)	Te (ppm)	W (ppm)
AHA-18739	564140	2922801	9.00	15.0	34	104	5	11	0.5	24	<0.5	1	30	n/a	<10
AHA-18744	563921	2923046	0.72	37.6	100	229	100	5	11.6	175	4.3	2	7	n/a	<10
AHA-19299	561303	2925101	0.25	<0.5	431	115	166	797	<0.5	10	4.2	61	10	<10	10
AHA-19332	561549	2924244	0.44	20.7	118	1190	714	362	<0.5	107	4.7	4	<5	260	<10
AHA-19334	561214	2924277	0.60	1.5	337	50	261	174	<0.5	8	2.1	3	6	<10	<10
AHA-19345	562541	2923896	1.42	6.2	230	361	533	782	0.5	14	2.2	6	13	60	<10
AHA-19347	562873	2923793	8.83	5.1	22	126	44	10	17.9	4	<0.5	3	8	10	80
AHA-19350	562408	2923771	0.53	2.9	36	54	73	315	<0.5	39	2.4	2	8	50	<10
AHA-19351	562392	2923768	0.42	7.5	53	35	27	135	<0.5	6	<0.5	2	<5	10	<10
AHA-19352	561900	2924074	3.16	6.6	68	433	476	421	<0.5	28	1.6	3	<5	70	<10
AHA-19354	562260	2924198	3.88	19.2	196	105	19	29	<0.5	21	<0.5	6	<5	40	<10
AHA-19383	561212	2924493	0.23	2.9	65	12	11	154	<0.5	43	<0.5	<1	6	30	<10
AHA-19392	563011	2923927	0.24	<0.5	162	12	15	537	<0.5	11	<0.5	1	10	<10	<10
AHA-19585	562870	2923806	3.97	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
AHA-19593	562178	2923318	4.59	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
AHA-19594	562105	2923511	0.20	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
AHA-19597	562143	2923231	0.33	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
AHA-20448	562643	2924221	9.13	1.1 [4]	833 [4]	6 [4]	9 [4]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
AHA-25068	563483	2924568	0.37	0.7 [4]	570 [4]	25 [4]	19 [4]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Notes:

1) *All coordinates are UTM (WGS84) Zone 36R*
2) *Samples are all grabs, or grab composites*
3) *Au analysed by ALS Minerals using analytical technique Au-AA23; base metals and trace elements using analytical technique ME-ICP61*
4) *Ag, Cu, Pb and Zn analysed by ALS Minerals using analytical technique AA45 (aqua regia digest followed by an AAS finish)*
5) *n/a: not assayed*