Aton Resources Inc. Reports Further Diamond Drilling Results From Abu Marawat

20.05.2025 | ACCESS Newswire

Including 8.52 g/t Gold and 88.7 g/t Silver Over 15.4 Metres, and 6.06 g/t Gold and 59.6 g/t Silver Over 17.3 Metres

Aton Resources Inc. (TSXV:AAN) ("Aton" or the "Company") updates investors on the results of its ongoing diamond drilling programme at the Abu Marawat deposit ("Abu Marawat"), located within the retained exploration areas of the Company's Abu Marawat Concession (the "Concession") in the Eastern Desert of Egypt.

Highlights:

- To date 95 diamond drill holes have been drilled at Abu Marawat, for a total of 7,917m. All holes have been drilled horizontally or at shallow angles to test near-surface mineralisation in an area of steep and mountainous terrain that is hard to access for conventional drilling rigs, and is largely undrilled;
- Results for a further 21 holes, AMD-146 to AMD-166, are now available, with significant high grade polymetallic mineralised intersections including:
    - 8.52 g/t Au, 88.7 g/t Ag, 9.50 g/t AuEq, 2.15% Cu and 0.59% Zn over a 15.40m interval on the Central Vein zone ("CVZ"), from 23.50m downhole depth (hole AMD-151);
    - 6.06 g/t Au, 59.6 g/t Ag, 6.72 g/t AuEq, 1.02% Cu and 1.24% Zn over a 17.30m interval on the CVZ, from 32.80m downhole depth (hole AMD-146);
    - 4.14 g/t Au, 40.7 g/t Ag, 4.59 g/t AuEq, 0.85% Cu and 0.17% Zn over a 13.90m interval on the CVZ, from 13.30m downhole depth (hole AMD-149);
    - 3.07 g/t Au, 33.7 g/t Ag, 3.44 g/t AuEq, 0.45% Cu and 0.43% Zn over a 16.50m interval on the CVZ, from 8.00m downhole depth (hole AMD-148).

"This latest tranche of results from the horizontal diamond drilling programme at Abu Marawat is very pleasing, and is indicating the presence of a significant near-surface core of high grade mineralisation on the CVZ" said Tonno Vahk, CEO. "We are also seeing some nice looking mineralisation in the ongoing RC programme at Semna, and we expect to be able to release the first results from this programme in the coming weeks. The programme at Abu Marawat is approaching the finish line, and we are also now doing some additional drilling there for a metallurgical testwork programme. The identification and delineation of high grade mineralisation near to surface at both Abu Marawat and Semna is very positive as Aton looks to the long term development of multiple mining operations at the Abu Marawat Concession. Work on the Hamama West PFS and ESIA is continuing steadily, with the ongoing establishment of the environmental baseline, and we are planning to start the next phase of hydro drilling at Hamama in the coming weeks, as we seek to establish a viable groundwater supply for the mining projects."

Abu Marawat gold-silver-copper-zinc deposit

The Abu Marawat gold-silver-copper-zinc deposit is located approximately 35km northeast of the Hamama West deposit and 10km north-northeast of the Semna gold mine project, and is accessed via a well maintained desert track from the Qena-Safaga highway, approximately 25km to the north (Figure 1). On March 1, 2012 Aton Resources, when formerly named Alexander Nubia International Inc, announced a maiden Inferred Mineral Resource at Abu Marawat, prepared by Roscoe Postle Associates Inc., in compliance with the requirements set out in Canada's National Instrument 43?101. The resource was subsequently restated in an updated Technical Report without amendment (see news release dated January 24, 2017), and which is available online at Aton's website at

https://atonresources.com/investors/reports-and-presentations. This Inferred Mineral Resource was based on 98 diamond drill holes totalling 19,573 metres. 19 of these holes were drilled by a former property owner, Minex Minerals Egypt, a wholly owned subsidiary of Greenwich Resources Plc during the late 1980's, and the remainder were drilled by Aton in 2011. The Inferred Mineral Resource comprises 2.9 million tonnes at an average grade of 1.75 g/t Au, 29.3 g/t Ag, 0.77% Cu and 1.15% Zn, containing 162 thousand ounces of gold, 2.7 million ounces of silver, 49 million lbs of copper, and 73 million lbs of zinc, and was based on net smelter return ("NSR") cut?off grades.

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

The polymetallic mineralisation at Abu Marawat is interpreted as being mesothermal in origin, and occurs in a series of discrete and roughly parallel N-S to NNW-SSE trending veins and structures, of which the Fin Vein and the CVZ are the most significant, hosted within a sequence of intensely hydrothermally altered, felsic metavolcanic rocks (Figure 2). The Fin Vein and the CVZ are about 50-100m apart and have been traced for at least 800m in surface outcrop and drill holes. Aton's previous drilling has demonstrated that these structures extend to at least 200m in depth. The bulk of the Inferred Mineral Resource at the Abu Marawat deposit encompasses parts of the CVZ and the Fin Vein, but there are also other subparallel mineralised veins to the east and to the west of these structures, such as the J Vein, the JVZ structure, and the Valley Vein zone (Figure 2).

The mineralisation at Abu Marawat comprises a series of steep to near vertical finely brecciated quartz-carbonate-sulphide "veins". At surface the Fin Vein and CVZ are expressed by quartz-rich gossans, and all the larger structures display development of intense wallrock alteration in outcrop. Several of the veins, notably the CVZ, were mined at surface in ancient times, apparently primarily for copper. The mineralised system at Abu Marawat currently remains open both laterally and at depth.

Further to the north, the Abu Marawat deposit appears to be truncated by a large WNW-ESE trending fault postulated to run beneath wadi sediments. To the east a prominent ridge composed of altered ultramafic rocks is thought to represent a significant geological terrane boundary (Figure 2).

Figure 2: Geology plan of the Abu Marawat area, showing the location of pre-2024 Aton drill holes

Figure 3: Geology and drill hole collar plan of holes targeting the CVZ and Fin Vein structures, AMD-146 to AMD-164

Abu Marawat diamond drilling programme

The current diamond drill programme started in June 2024, and to date 95 diamond drill holes (holes AMD-101 to AMD-195) have been completed, for a total of 7,917.2 metres. All the holes have been drilled horizontally or at shallow angles to test previously undrilled near-surface mineralisation.

Assay results are now available for a further 21 holes, AMD-146 to AMD-166, and the collar details of these holes are provided in Appendix A. The holes were predominantly designed to test the CVZ, near to the surface, with the drilling on west-southwesterly azimuths. Some holes were extended to intersect the Fin Vein further to the west. The drilling was focussed on the central area of the Abu Marawat deposit (Figure 2).

Holes AMD-165 and AMD-166 were also drilled on west-south westerly azimuths towards the southern end of the CVZ.

Discussion of results

All intersection details from the currently reporting holes AMD-146 to AMD-166 are provided in Appendix B, with selected intersections shown below in Table 1.

Hole ID	Intersection (m)			Au (g/t)	Ag (g/t)	AuEq (g/t) [1]	Cu (%)	Pb (%)	Zn (%)	Comments
	From	To	Interval							
AMD-146	32.80	50.10	17.30	6.06	59.6	6.72	1.02	0.01	1.24	CVZ
incl.	35.70	47.20	11.50	8.99	79.7	9.88	1.48	0.01	1.25	
AMD-147	29.50	53.00	23.50	1.65	23.5	1.91	0.34	0.01	1.44	CVZ
incl.	44.90	53.00	8.10	3.43	43.1	3.91	0.75	0.02	1.28	
AMD-148	8.00	24.50	16.50	3.07	33.7	3.44	0.45	0.00	0.43	CVZ
AMD-149	13.30	27.20	13.90	4.14	40.7	4.59	0.85	0.01	0.17	CVZ
incl.	13.30	19.30	6.00	8.94	55.8	9.56	0.79	0.02	0.20	
AMD-150	18.60	36.30	17.70	1.84	26.2	2.14	1.37	0.01	0.58	CVZ
AMD-151	23.50	38.90	15.40	8.52	88.7	9.50	2.15	0.02	0.59	CVZ
incl.	23.50	32.60	9.10	11.68	102	12.81	1.79	0.03	0.59	
AMD-154	13.70	30.40	16.70	2.49	36.0	2.89	1.02	0.01	0.49	CVZ
incl.	24.10	30.40	6.30	5.68	42.8	6.16	1.84	0.02	0.75	
AMD-156	82.90	94.20	11.30	1.37	15.5	1.54	0.11	0.04	0.87	Fin Vein zone

Notes:

1. Gold equivalent calculated using Au and Ag only, with a Au:Ag ratio of 90

Table 1: Selected intersections from the Abu Marawat diamond drilling programme, AMD-146 to AMD-166

This latest tranche of drill holes again returned significant polymetallic mineralised intersections from the CVZ, in some cases carrying notably high grades of gold, silver and also copper over consistent widths. These intersections including 8.52 g/t Au, 88.7 g/t Ag, 9.50 g/t gold equivalent ("AuEq", calculated using Au and Ag only, with a Au:Ag ratio of 90), 2.15% Cu and 0.59% Zn over a 15.40m interval, from 23.50m downhole depth (hole AMD-151); 6.06 g/t Au, 59.6 g/t Ag, 6.72 g/t AuEq, 1.02% Cu and 1.24% Zn over a 17.30m interval, from 32.80m downhole depth (hole AMD-146); and 4.14 g/t Au, 40.7 g/t Ag, 4.59 g/t AuEq, 0.85% Cu and 0.17% Zn over a 13.90m interval, from 13.30m downhole depth (hole AMD-149). These intersection widths effectively reflect the true width of the mineralised CVZ structure. Please refer to the news release dated March 11, 2025 for further details about the CVZ mineralisation.

Hole AMD-165, drilled at the southern outcropping extent of the CVZ also intersected a wide zone of mineralisation on the CVZ (0.69 g/t Au, 19.4 g/t Ag, 0.90 g/t AuEq and 0.21% Cu, over a 23.90m interval from 33.10m downhole depth), albeit at a lower grade. This phase of the drilling has indicated a continuous body of near-surface mineralisation in excess of 250m strike length in the central part of the CVZ, with notably high grades of gold, silver, copper and also zinc, particularly in its central core, although the grades diminish towards the southern and northern ends of the structure. A further phase of reverse circulation percussion ("RC") drilling is planned to test the deeper parts of the CVZ and to infill and confirm the previous diamond drilling carried out by Aton during 2011 and Minex during the 1980's.

Activity Update

- The Company is continuing its discussions with its JV partners at the Egyptian Mineral Resources Authority, and the Ministry of Petroleum and Mineral Resources, with regards to the proposed changes to the Hamama West Pre-Feasibility Study (see news release dated November 8, 2024). The Company intends to change the focus from the originally envisaged heap leach processing route, to a modular CIL processing route to allow for the processing of mineralisation from Semna and Abu Marawat.
- The Company has engaged Wardell Armstrong International ("WAI"), part of the SLR Consulting Group, to undertake a programme of metallurgical testwork on the different Abu Marawat mineralisation types. Drilling is currently ongoing to collect whole PQ3 sized core samples at Abu Marawat for comminution testing, as well as leach testing. Additionally further testwork will be undertaken to assess the viability of SART (sulphidisation, acidification, recycling and thickening) processing to recover copper from the Abu Marawat mineralisation.
- The initially planned c. 5,000 metre phase 3 RC drilling programme at the Semna deposit to follow up on the 2023 phase 1 RC and 2024 phase 2 diamond drilling programmes, is ongoing, with 39 holes completed for a total of 4,639 metres drilled to date. The Company expects to be able to release the first results of this programme in the coming weeks.
- The Company plans to suspend the RC programme at Semna at the end of May 2025 and mobilise the drill rig and crews to Hamama to carry out the next phase of hydro drilling as part of the plan to develop a viable groundwater source for the Hamama project. RC drilling in January 2025, has confirmed that the Nubian Sandstone aquifer has sufficient properties to yield adequate water for the Hamama West mine project (WAI internal technical note, 17/2/2025). The next step will be the drilling, using mud rotary drilling methods, and construction of a c. 300-350m deep monitoring well in June 2025. After this has been completed a 300mm diameter pump test well will be drilled, and it is planned to construct this for future use as a production well.
- Environmental monitoring programmes for the Hamama West Environmental and Social Impact Assessment, also being undertaken by WAI, are ongoing at Hamama West. A weather station was installed at Hamama in November 2024, and air quality and dust monitoring equipment have since been installed.

Sampling and analytical procedures

The Abu Marawat diamond drill holes were drilled at a combination of either HQ3 size (61.1mm diameter) and/or PQ3 size (83mm diameter). Core was loaded into metal core boxes by the drill crew under supervision of Aton geologists. The core was metre marked onsite at the Abu Marawat camp, with basic geotechnical measurements (total core recovery, solid core recovery, and rock quality designation) undertaken by Aton geologists, as well as specific gravity measurements. It was also photographed in both wet and dry states at Abu Marawat. The core was then carefully packed and transported to the Rodruin exploration camp, where it was geologically logged by senior Aton geologists, and marked up for cutting and sampling at the Rodruin core farm. Samples were typically selected over nominal 1m intervals, but as determined by the logged lithologies. The core was half-cut by Aton staff at the onsite Rodruin sample preparation facility. After the core had been cut, the relevant cut intervals were then photographed again.

The split half-core samples were collected and bagged up in cloth bags, weighed and crushed to -4mm onsite, and split to a nominal c. 500-1,000g sample size. The coarse crushed reject samples are retained onsite at the Rodruin sample preparation facility.

QAQC samples were inserted into the sample runs at a rate of approximately 1 certified reference material (or "standard" sample) every 30 samples, 1 blank sample every 15 samples, and 1 duplicate split sample every 15 samples.

The dried, crushed and split 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. 100g size, which was shipped on to ALS Minerals at Rosia Montana, Romania for geochemical analysis. The reject pulp material was returned to the sample preparation facility at Rodruin, where it is also retained onsite

The samples were analysed for gold by fire assay (30g charge) with an atomic absorption spectroscopy

("AAS") finish (analytical code Au-AA23). Any high grade gold samples (>10 g/t Au) were re-analysed using analytical code Au-GRA21 (also fire assay, with a gravimetric finish).

Samples were also analysed for silver, copper, lead and zinc using an aqua regia digest followed by an AAS finish (analytical code AA45). Any high grade silver and base metal samples (Ag >100 g/t, and Cu, Pb or Zn >10,000ppm or >1%) were re-analysed using the ore grade technique AA46 (also an aqua regia digest followed by an AAS finish).

About Aton Resources Inc.

Aton Resources Inc. (TSXV:AAN) is focused on its 100% owned Abu Marawat Concession ("the Concession"), located in Egypt's Arabian-Nubian Shield, approximately 200 km north of AngloGold Ashanti's world-class Sukari gold mine. Aton has identified numerous gold and base metal exploration targets at the Concession, including the Hamama deposit in the west, the Abu Marawat deposit in the northeast, and the Rodruin deposit in the south of the Concession. Two historic British gold mines are also located on the Concession at Semna and Sir Bakis. Aton has identified several distinct geological trends within the Concession, which display potential for the development of a variety of styles of precious and base metal mineralisation. The Abu Marawat exploitation lease is 57.66 km^2 in size, covering the Hamama West and Rodruin mineral deposits, and was established In January 2024 and is valid for an initial period of 20 years. The Concession also includes an additional 255.0 km^2 of exploration areas, retained for a further period of 4 years from January 2024. The Concession 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), Chief Geologist of Aton Resources Inc. Mr. Orduña is a qualified person (QP) under National Instrument 43-101 Standards of Disclosure for Mineral Projects.

For further information regarding Aton Resources Inc., please visit us at www.atonresources.com or contact:

TONNO VAHK
Chief Executive Officer
Tel: +1 604 318 0390
Email: info@atonresources.com

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.

Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

Appendix A -Abu Marawat diamond drill hole collar details, holes AMD-146 to AMD-166

Hole ID	Collar co-ordinates [1,2]			EOH depth (m)	Dip	Grid azimuth	Target
	X	Y	Z				
AMD-146	563912.1	2933060.3	651.4	69.4	-0.8	240.0	CVZ

AMD-147	563912.3	2933060.4	650.6	62.5	-19.6	240.0	CVZ
AMD-148	563874.9	2933088.9	648.3	38.9	0.1	230.3	CVZ
AMD-149	563874.9	2933089.7	646.9	173.8	-35.2	239.5	CVZ, Fin Vein
AMD-150	563889.6	2933076.0	649.6	48.1	0.8	231.5	CVZ
AMD-151	563889.8	2933076.2	648.7	49.5	-30.6	231.2	CVZ
AMD-152	563899.4	2933104.4	639.0	73.6	-31.6	241.4	CVZ
AMD-153	563863.3	2933110.5	643.4	66.5	0.7	229.3	CVZ
AMD-154	563863.4	2933110.7	642.0	63.2	-35.3	228.5	CVZ
AMD-155	563848.0	2933140.7	645.9	52.5	-9.4	239.9	CVZ
AMD-156	563829.2	2933182.6	637.4	101.0	0.3	239.9	CVZ, Fin Vein
AMD-157	563794.7	2933219.1	632.7	104.9	-0.5	239.8	CVZ, Fin Vein
AMD-158	563795.6	2933219.5	631.7	30.1	-30.5	239.6	CVZ
AMD-159	563795.7	2933219.5	631.7	52.0	-34.5	239.8	CVZ
AMD-160	563763.0	2933237.1	635.0	81.0	-0.5	231.8	CVZ, Fin Vein
AMD-161	563763.3	2933237.4	634.1	40.2	-30.1	230.7	CVZ
AMD-162	563739.3	2933258.5	629.7	61.1	0.0	239.2	Fin Vein
AMD-163	563738.7	2933260.0	629.8	68.8	-0.7	260.8	Fin Vein
AMD-164	563739.4	2933259.5	628.6	62.8	-30.2	249.3	Fin Vein
AMD-165	563965.0	2932973.6	663.0	83.8	-0.6	234.6	Southern end of the CVZ
AMD-166	563965.3	2932973.8	662.1	76.6	-31.1	235.6	Southern end of the CVZ

Notes:

1. All co-ordinates are UTM (WGS84) Zone 36R
2. Collars have all been RTK surveyed using an eSurvey E800 integrated GNSS base and receiver
3. All drill holes were downhole surveyed using a magnetic survey tool

Appendix B - Abu Marawat significant intersections, holes AMD-146 to AMD-166

Hole ID	Intersection (m)			Au (g/t)	Ag (g/t)	AuEq (g/t) [2]	Cu (ppm)	Pb (ppm)	Zn (ppm)	Comments
	From	To	Interval							
AMD-146	32.80	50.10	17.30	6.06	59.6	6.72	1.02	0.01	1.24	CVZ
incl.	35.70	47.20	11.50	8.99	79.7	9.88	1.48	0.01	1.25	

AMD-147	29.50	53.00	23.50	1.65	23.5	1.91	0.34	0.01	1.44	CVZ
incl.	29.50	30.30	0.80	4.91	67.2	5.66	0.12	0.04	1.32	
and incl.	36.50	41.10	4.60	1.45	16.6	1.63	0.30	0.00	2.88	
and incl.	44.90	53.00	8.10	3.43	43.1	3.91	0.75	0.02	1.28	
AMD-148	8.00	24.50	16.50	3.07	33.7	3.44	0.45	0.00	0.43	CVZ
AMD-149	13.30	27.20	13.90	4.14	40.7	4.59	0.85	0.01	0.17	CVZ
incl.	13.30	19.30	6.00	8.94	55.8	9.56	0.79	0.02	0.20	
and	154.80	155.30	0.50	0.82	15.5	1.00	0.22	0.02	1.59	Fin Vein?
AMD-150	18.60	36.30	17.70	1.84	26.2	2.14	1.37	0.01	0.58	CVZ
AMD-151	23.50	38.90	15.40	8.52	88.7	9.50	2.15	0.02	0.59	CVZ
incl.	23.50	32.60	9.10	11.68	101.9	12.81	1.79	0.03	0.59	
and incl.	37.00	38.90	1.90	12.15	178.9	14.14	4.02	0.02	1.08	
AMD-152	54.50	60.30	5.80	2.39	40.6	2.84	0.47	0.00	0.44	CVZ
AMD-153	9.40	13.00	3.60	3.50	21.8	3.75	0.51	0.00	0.25	CVZ
and	21.40	22.20	0.80	1.92	21.2	2.15	0.09	0.01	0.16	
AMD-154	13.70	30.40	16.70	2.49	36.0	2.89	1.02	0.01	0.49	CVZ
incl.	16.20	19.50	3.30	1.03	9.9	1.14	0.23	0.00	0.12	
and incl.	24.10	30.40	6.30	5.68	42.8	6.16	1.84	0.02	0.75	
AMD-155	11.70	16.60	4.90	2.09	12.4	2.22	1.13	0.00	0.36	CVZ
and	23.60	24.60	1.00	3.94	33.1	4.31	0.45	0.01	0.43	
AMD-156	82.90	94.20	11.30	1.37	15.5	1.54	0.11	0.04	0.87	Fin Vein zone
AMD-157	64.00	65.00	1.00	1.16	8.0	1.24	0.14	0.00	1.80	
and	87.00	88.35	1.35	2.06	25.1	2.33	0.42	0.01	2.31	Possible Fin Vein (eastern
and	94.10	95.10	1.00	1.41	19.1	1.62	0.98	0.06	2.38	Fin Vein
AMD-158	-	-	-	-	-	-	-	-	-	NSA
AMD-159	-	-	-	-	-	-	-	-	-	NSA
AMD-160	13.60	14.60	1.00	1.50	5.9	1.56	0.07	0.00	0.46	Possible CVZ?
and	60.00	62.40	2.40	2.74	38.7	3.17	0.30	0.05	1.66	Possible Fin Vein (eastern
AMD-161	-	-	-	-	-	-	-	-	-	NSA > 0.47 g/t Au
AMD-162										

29.00

31.40

2.40

1.01

28.8

1.33

0.25

0.00

0.73

Possible Fin Vein (eastern

AMD-163	-	-	-	-	-	-	-	-	-	NSA > 0.21 g/t Au
AMD-164	-	-	-	-	-	-	-	-	-	NSA > 0.44 g/t Au
AMD-165	33.10	57.00	23.90	0.69	19.4	0.90	0.21	0.01	0.61	Southern end of the CVZ
and	64.50	66.00	1.50	1.44	18.1	1.64	0.05	0.00	0.12	

Hole ID	Intersection (m)			Au (g/t)	Ag (g/t)	AuEq (g/t) [2]	Cu (ppm)	Pb (ppm)	Zn (ppm
	From	From	From						
AMD-166	37.80	40.70	2.90	1.84	20.3	2.07	0.04	0.06	0.75
and	60.70	62.50	1.80	0.75	14.4	0.91	0.06	0.03	0.47

Notes:

1. Mineralised intervals were typically calculated using a nominal cut-off of 0.5 g/t gold equivalent (AuEq), other low
2. Gold equivalent calculated using Au and Ag only, with an Au:Ag ratio of 90

SOURCE: Aton Resources, Inc.