

ASX Announcement

9 December 2024

## **Manyoni Uranium Project – Validation Drilling Program Completed**

### **Highlights:**

- 110 PQT core holes for 1,608m completed, and downhole gamma logging for  $eU_3O_8$ <sup>1</sup> also completed at the Manyoni Uranium Project.
- The first batch of core samples involving 51 drill holes from the Manyoni Uranium Project has been spilt and sampled and submitted to an ISO certified laboratory (laboratory) in South Africa for assay – results expected late December 2024 or early January 2025.
- A second batch of core samples for the remainder of the drill holes is currently being prepared for shipment to the laboratory.
- The completed drill program was designed to validate the grades of uranium mineralisation in historical drill holes and to provide information on the different styles of mineralisation for input to a maiden JORC (2012) Mineral Resource Estimate (MRE) in calendar year 2025.
- Other work in progress includes metallurgical testwork on selected composites of drill core and specific gravity and bulk density measurements of drill core samples.
- In light of upcoming completion of the acquisition of the AuKing Mining Limited tenements (refer ASX:MOM announcement dated 16 October 2024) an expanded drill program will be necessary in 2025 to report the historical drilling on these tenements in accordance with the JORC Code 2012.
- Moab intends to release its Maiden JORC (2012) MRE in calendar year 2025 following completion of validation drilling activities and metallurgical testwork in the newly acquired tenements.
- Scoping or Preliminary Feasibility Study, planned for second half of calendar year 2025.

Moab Minerals Limited (ASX:**MOM**) (**Moab**, the **Company**) is pleased to provide an update on drilling at its Manyoni Uranium Project in Manyoni Province in Tanzania, Africa.

**Moab Managing Director, Mr Malcolm Day, commented:** *“Drilling at the Manyoni Uranium Project has been completed and the first batch of the assay results is expected in late December or early January. The acquisition of additional surrounding tenements from AuKing (expected to be completed in the March 2025 Quarter) which contain three uranium Projects known as E, F and G, adds significant upside potential*

<sup>1</sup>  $eU_3O_8$  means radiometric equivalent  $U_3O_8$  from a calibrated total gamma downhole probe.

to Manyoni. We'll now look at expanding the drill program in 2025 to evaluate the resource potential of these new tenements".

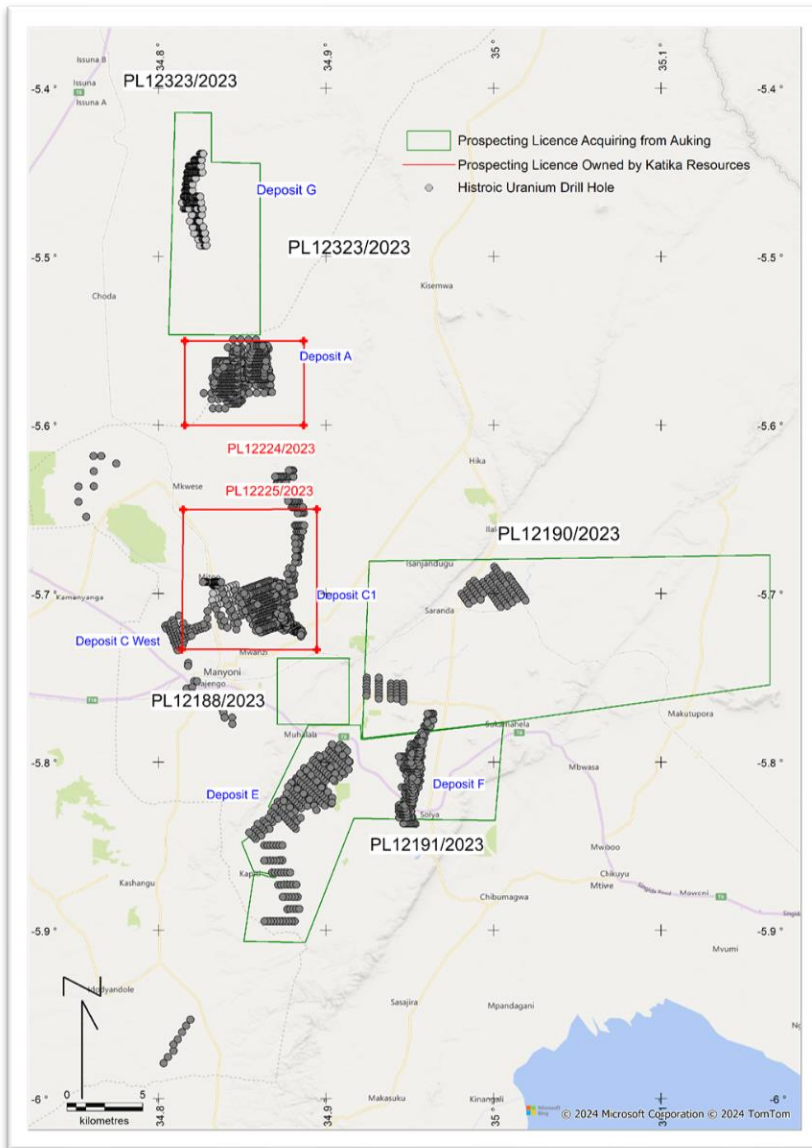


Figure 1: Moab Tenements, Uranium projects and historical drilling

## Validation Drilling Program

Moab has now completed the Stage One validation drill program designed to check and verify a statistically valid number of the historical drill results. The program has involved 105 PQ core holes for a total of 1,608m on the Manyoni C1 and A projects. All holes were designed to twin pre-existing drill holes and to check and verify the uranium results in those holes by physical assay of the Moab drill core and downhole gamma spectral logging for  $eU_3O_8$ . The collection of QA/QC information, systematic core photography, specific gravity and other physical properties of the core, is also designed to comply with the standards required for a JORC Code 2012 compliant Mineral Resource estimation (**MRE**). Figures 2 and 3 below, show the distribution of the recent Moab drill holes and the historical drill holes in the Manyoni C1 and A project areas where the validation drilling was carried out. Drill hole coordinates are in Table 1 below.

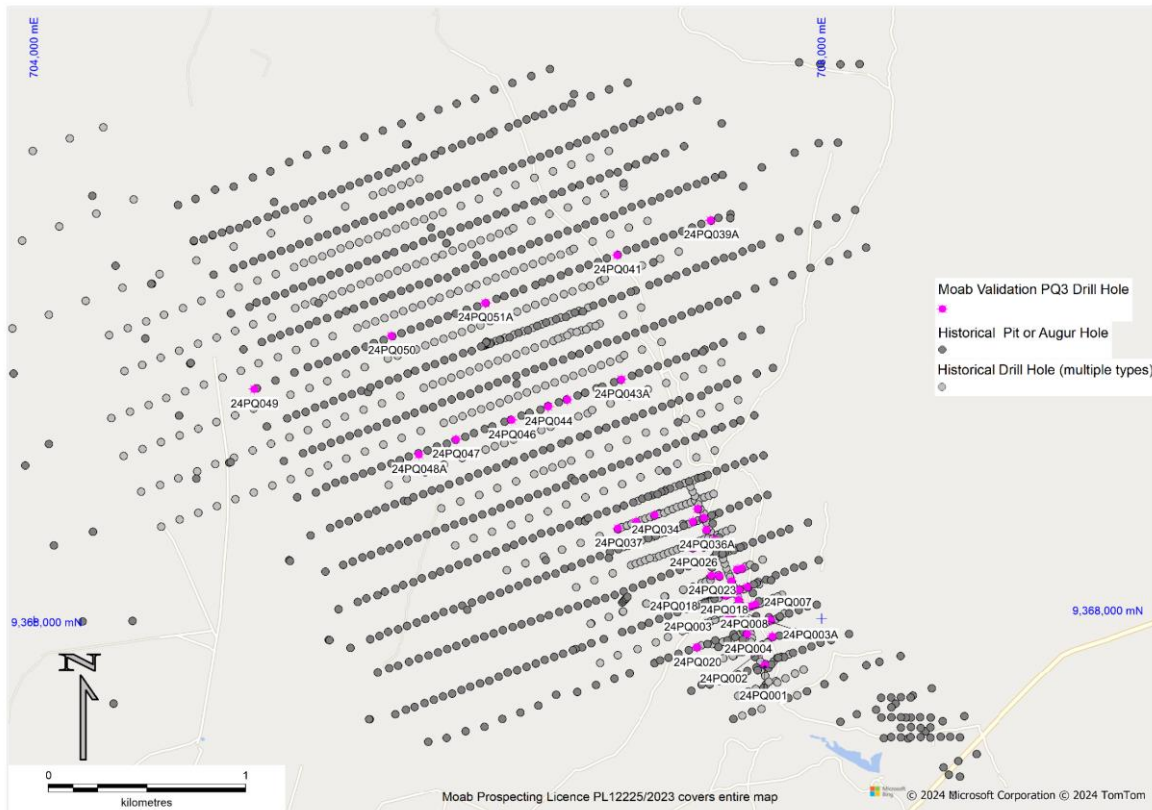


Figure 2: Manyoni C1 Project area showing historical drill holes and recent Moab validation drill holes

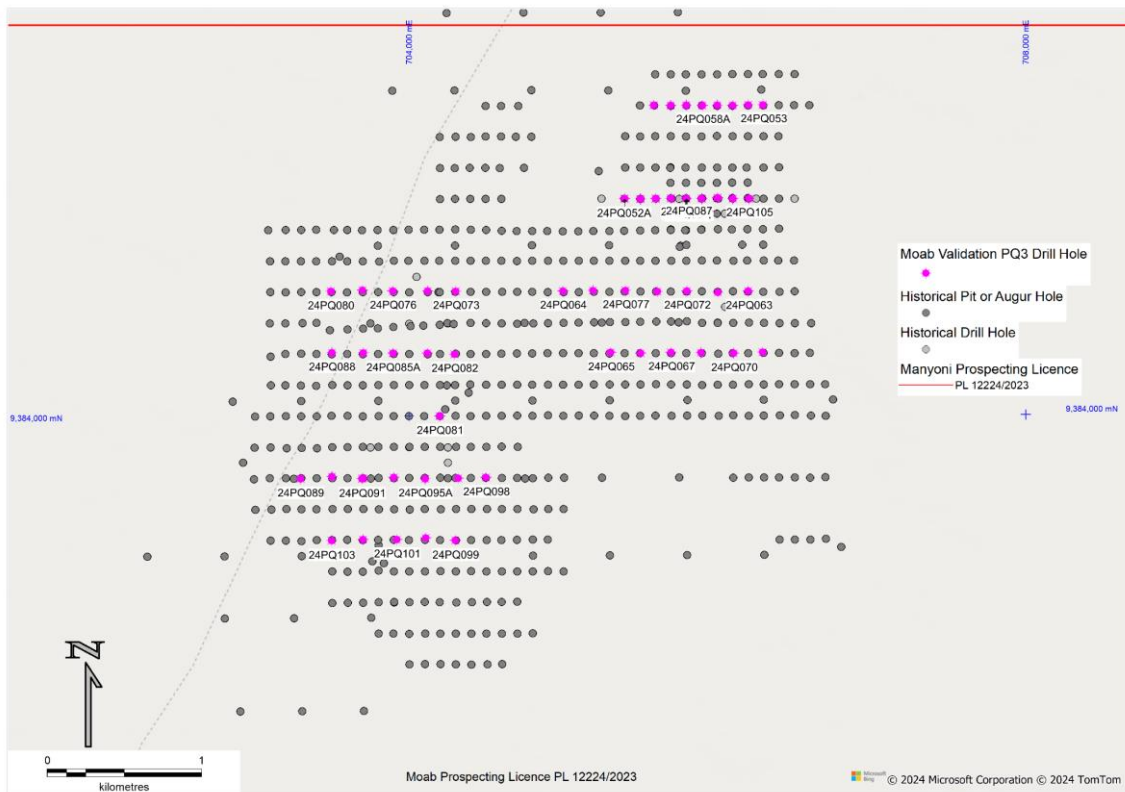


Figure 3: Manyoni A Project area showing historical drill holes and recent Moab validation drill holes



## Drillhole Geology Profile

Uranium mineralisation in the Manyoni area occurs in a Quaternary playa lake system with connecting palaeochannels. The mineralisation is flat lying and typically within 0.5m to 3m of the surface. All drill holes are vertical, so vertical thickness is also the true width of the mineralisation. There are two distinct types of mineralisation:

1. An upper carbonate rich organic clay 1.0 to 5m thick known as the “Mbuga Clay” – dominant uranium mineral is **schröckingerite** ( $\text{NaCa}_3(\text{UO}_2)(\text{CO}_3)_3(\text{SO}_4)\text{F} \cdot 10\text{H}_2\text{O}$ )
2. A lower granitic saprolite 2.0 to 10m thick which lies on granitic bedrock – the dominant uranium mineral is **carnotite** ( $\text{K}_2(\text{UO}_2)_2(\text{VO}_4)_2 \cdot 3\text{H}_2\text{O}$ )

The plate below shows a representative example of drill core (24PQ003 is shown on Figure 4) that tests both types of mineralisation:

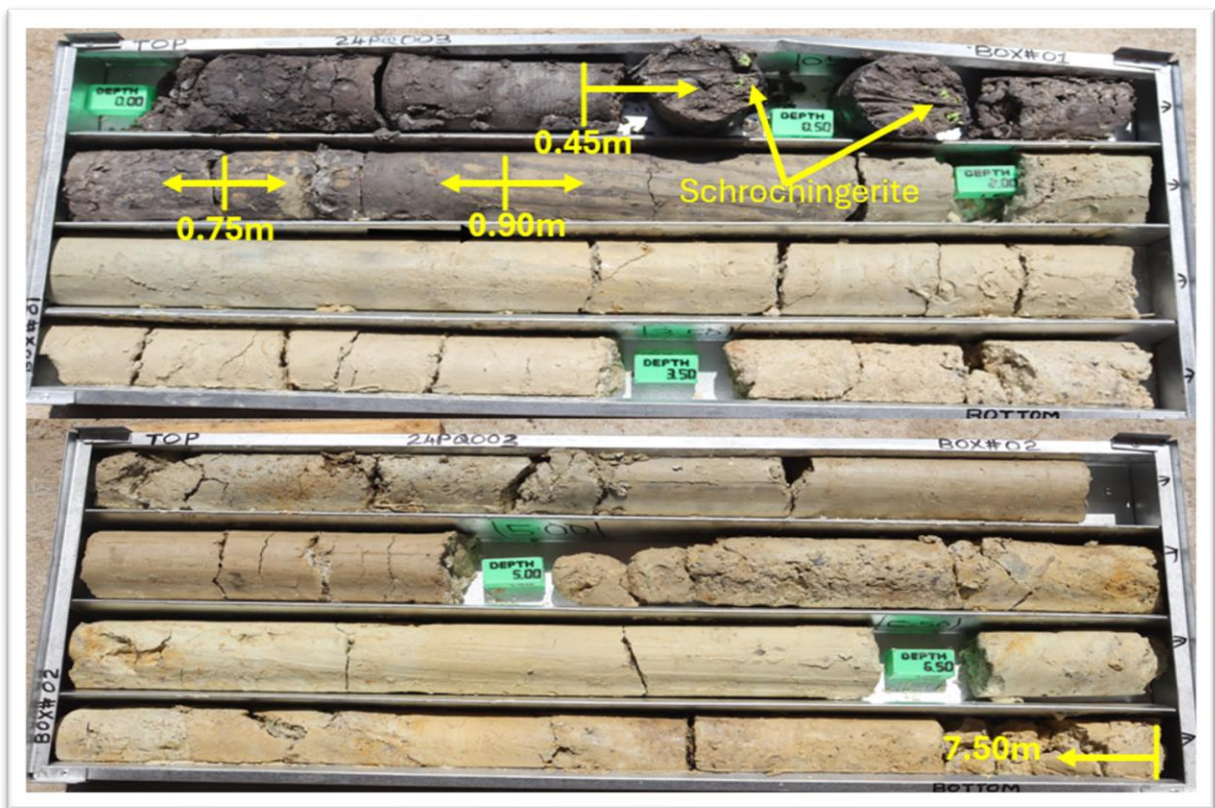


Figure 4: Photo showing hole 24PQ003, mineralised Mbuga Clay with 0.5% **schröckingerite** from 0 - 0.90m, including 2% of disseminated blebs of **schröckingerite** from 0.45 - 0.75m, and mineralized saprolite with disseminated **carnotite** traces (0.5%) from 0.90 - 7.50m

**Cautionary statement:** Visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analyses where concentrations or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding the impurities or deleterious physical properties relevant to valuations.

## Downhole Gamma Logging and $\text{U}_3\text{O}_8$ Results

Downhole gamma logging, used to obtain  $\text{eU}_3\text{O}_8\%$ , is now complete. This gamma logging was carried out by Namibian contractor **terratec** using a Gamma Ray Spectrometer (**GRS**) collecting total count gamma, U and Th data for each hole. All data was calibrated and processed as per the instrument and manufacture’s guidelines. The GRS data was processed using standard formula to calculate

eU<sub>3</sub>O<sub>8</sub> using the relevant k factor as applied to total count data for the GRS probe and U<sub>3</sub>O<sub>8</sub> and ThO<sub>2</sub> from the U and Th channels. These data sets are derived using calibrations from Pelindaba in South Africa.

The use of eU<sub>3</sub>O<sub>8</sub>% in Mineral Resource estimation is accepted industry practice. eU<sub>3</sub>O<sub>8</sub>% measurement by GRS provides smoother data than core assays because the GRS samples gamma emission for a volume of rock about 1m radius around the probe. In addition, GRS data is collected every 10cms down the drillhole giving a much larger amount of analytical data than is acquired by classical sampling and analytical techniques. Classical assay methods give an accurate assay for the width of the drill core only. Hence classical assay methods are more sensitive to the natural variability of the uranium in the rock compared to GRS.

When all analytical results are at hand, Moab will carry out a grade comparison of the different methods to decide which method should be used in future MRE work.

## Core Sampling, QA/QC

Core samples have been split with a diamond saw and then half core sampled on 0.5m intervals. Certified Reference Material (**CRM**) is inserted in the assay stream at a frequency of 1:20 samples and blank samples at a frequency of 1:25. Samples have been submitted to an ISO certified laboratory in Mwanza, Tanzania for sample prep and S.G. determination followed by XRF assay of pulps at the lab's South African laboratory. Results are expected in either late December 2024 or early January 2025.

## About the Manyoni Uranium Project

### Project Location

The Manyoni Uranium Project tenements are located in the Republic of Tanzania (pop. 65 million), Africa, approximately 100km northwest of the capital city of Dodoma (pop. 765,000). The location of the uranium project at Manyoni is shown in Figure 5. Whilst Figure 1 shows the location of the AuKing Mining Limited (**AuKing**) tenements that Moab (via its 80% owned local subsidiary company Katika Resources Ltd) has agreed to acquire subject to satisfaction of a number of conditions precedent (refer to the Company's ASX announcement dated 16 October 2024 for details of the acquisition agreement).



Figure 5: Location of the Manyoni Uranium Project

## Geological Setting and Uranium Mineralisation

The tenements are located in the central part of the Tanzanian Archaean Shield, which is a stable platform of granite-gneiss terrane with marginal greenstone belts. Radiometrically “hot” granites have been subject to erosion over geological time and have contributed uranium and other metals into the pluvial streams and lakes which drain the shield.

In the Manyoni area the uranium is deposited in a shallow playa lake system as schröckingerite (in the lake sediments) and carnotite in the granitic saprolite below the lake sediments. The mineralisation varies from flat lying to shallowly dipping as it follows the direction of the palaeo-drainage to the south-east while the average depth to the top of mineralisation varies from 3m to 10m.

## Updates to Historical Exploration

The work currently in progress by Moab at the Manyoni Uranium Project is directed at verifying historical data, in order for Moab to be able to report the data in accordance with the JORC Code 2012. The current program includes twinning of a statistically valid number of drill holes using PQ3 drilling which provides the highest core recovery and sample quality. The Company drilled 105 drill holes to an average depth of 15m for the validation program. This program is designed to address assay reliability through systematic QA/QC analysis as well as improving geological understanding of the different styles of mineralisation. Bench scale metallurgical test work on a representative suite of bulk samples from the above drill program will be carried out. Additional bulk density measurements to check historical records are in progress.

## The Tenements

The tenements that comprise the Manyoni Uranium Project are:

Prospecting (PL) No.	Licence	Area (km <sup>2</sup> )	Date Granted
12188/2023 from AuKing)	(acquiring	19.90	26 January 2023
12190/2023 from AuKing)	(acquiring	268.99	26 January 2023
12191/2023 from AuKing)	(acquiring	126.05	26 January 2023
12323/2023 from AuKing)	(acquiring	73.56	5 May 2023
12224/2023		43.81	3 February 2023
12225/2023		81.69	3 February 2023

## Next Steps

- Down hole gamma logging results – December 2024,
- Assay results – December 2024 (batch 1), January 2025 (batch 2),
- Metallurgical testwork results – March 2025 Quarter,

- Validation drilling of AuKing tenements and Exploration drilling – September 2025 Quarter, and
- Resource Studies – December 2025 Quarter.

This announcement is authorised for release by the Board of Directors.

**For further information, please contact:**

**Malcolm Day**

Managing Director  
Moab Minerals  
mal@moabminerals.com.au  
+61 417 770 315

**Jane Morgan**

Investor and Media Relations  
JMM  
jm@janemorganmanagement.com.au  
+61 405 555 618

**Competent Person Statement**

*The information in this report regarding the Tanzanian uranium project as it relates to exploration results and geology was compiled by Mr Geoff Balfe who is a Member of the Australasian Institute of Mining and Metallurgy and a Certified Professional. Mr Balfe is a consultant to Moab Minerals Limited. Mr Balfe has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Balfe consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.*

**ABOUT MOAB MINERALS**

Moab Minerals Limited (ASX:MOM) is an exploration and project development company with a portfolio of exploration projects including:

- The Manyoni and Octavo Uranium Projects located in Tanzania,
- The REX Uranium-Vanadium Project located in the famed Uravan Mineral Belt of Colorado,
- The Highline Copper-Cobalt Project in Southern Nevada, and
- The Woodlands Project in Western Australia

Moab also holds a 11.02% interest in CAA Mining, an exploration and development company focused on lithium and gold exploration in Ghana, Africa, providing Moab shareholders with an interest in three lithium projects that are complementary to its existing assets, expanding its business as a junior exploration company.

**Table 1: Drill Hole Coordinates**

HoleID	Northing	Easting	Elevation	Target	Azimuth	Inclination	EOH(m)
24PQ001	9367764.020	707710.162	1240.584	Manyoni C	360	-90	13.50
24PQ002	9367830.987	707679.079	1241.396	Manyoni C	360	-90	15.00
24PQ003	9368038.584	707576.953	1243.730	Manyoni C	360	-90	12.50
24PQ004	9367921.364	707621.696	1242.727	Manyoni C	360	-90	15.00
24PQ005	9367973.901	707621.169	1242.870	Manyoni C	360	-90	15.00

24PQ006	9367975.694	707680.155	1241.605	Manyoni C	360	-90	6.50
24PQ007	9368041.960	707587.544	1243.637	Manyoni C	360	-90	15.00
24PQ008	9368046.102	707601.246	1243.482	Manyoni C	360	-90	15.00
24PQ009	9367989.558	707738.093	1241.426	Manyoni C	360	-90	9.50
24PQ010	9368027.472	707548.657	1244.229	Manyoni C	360	-90	19.50
24PQ011	9368024.176	707527.983	1244.320	Manyoni C	360	-90	21.00
24PQ012	9368054.835	707592.942	1243.547	Manyoni C	360	-90	15.00
24PQ013	9368063.146	707589.169	1243.694	Manyoni C	360	-90	13.50
24PQ014	9368061.118	707639.965	1243.012	Manyoni C	360	-90	13.50
24PQ015	9368070.217	707662.934	1242.477	Manyoni C	360	-90	12.00
24PQ016	9368092.266	707578.111	1243.660	Manyoni C	360	-90	13.00
24PQ017	9367907.102	707749.020	1241.238	Manyoni C	360	-90	11.00
24PQ018	9368119.583	707501.412	1244.477	Manyoni C	360	-90	16.50
24PQ019	9368117.052	707515.152	1244.374	Manyoni C	360	-90	18.00
24PQ020	9367853.587	707364.553	1246.053	Manyoni C	360	-90	20.00
24PQ021	9368125.968	707531.178	1244.188	Manyoni C	360	-90	17.50
24PQ022	9368132.999	707542.130	1243.934	Manyoni C	360	-90	13.50
24PQ023	9368219.215	707439.995	1244.563	Manyoni C	360	-90	11.00
24PQ024	9368140.893	707560.383	1243.844	Manyoni C	360	-90	15.00
24PQ025	9368146.463	707581.914	1243.670	Manyoni C	360	-90	10.50
24PQ026	9368357.016	707346.014	1244.498	Manyoni C	360	-90	20.00
24PQ027	9368157.974	707623.093	1243.014	Manyoni C	360	-90	12.00
24PQ028	9368251.421	707593.163	1242.514	Manyoni C	360	-90	17.50
24PQ029	9368247.067	707570.120	1242.954	Manyoni C	360	-90	22.50
24PQ030	9368364.044	707405.743	1244.407	Manyoni C	360	-90	15.50
24PQ031	9368213.966	707481.160	1244.608	Manyoni C	360	-90	30.00
24PQ032	9368193.978	707540.465	1243.994	Manyoni C	360	-90	21.00
24PQ033	9368396.189	707457.044	1244.591	Manyoni C	360	-90	15.50
24PQ034	9368522.819	707154.124	1245.897	Manyoni C	360	-90	21.00
24PQ035	9368487.102	707058.355	1246.237	Manyoni C	360	-90	24.00
24PQ036	9368449.082	707415.763	1244.985	Manyoni C	360	-90	8.00
24PQ037	9368451.791	706963.806	1246.647	Manyoni C	360	-90	21.00
24PQ038	9368488.168	707347.040	1245.513	Manyoni C	360	-90	17.00
24PQ039	9370010.462	707442.883	1250.299	Manyoni C	360	-90	13.50
24PQ040	9368509.924	707404.128	1244.934	Manyoni C	360	-90	12.50
24PQ041	9369834.725	706966.268	1244	Manyoni C	360	-90	19.50
24PQ042	9368555.960	707370.848	1244.810	Manyoni C	360	-90	8.00
24PQ043	9369207.097	706988.270	1248.095	Manyoni C	360	-90	11.00
24PQ044	9369070.371	706614.304	1248.590	Manyoni C	360	-90	12.5
24PQ045	9369107.879	706709.534	1248.491	Manyoni C	360	-90	9.5
24PQ046	9369004.037	706428.943	1248.580	Manyoni C	360	-90	8
24PQ047	9368922.828	706145.518	1249.241	Manyoni C	360	-90	8
24PQ048	9368832.063	705958.200	1249.646	Manyoni C	360	-90	9.5
24PQ049	9369164.107	705123.575	1251.304	Manyoni C	360	-90	12.5
24PQ050	9369431.555	705820.767	1250.177	Manyoni C	360	-90	20



24PQ051	9369600.484	706296.771	1249.483	Manyoni C	360	-90	21
24PQ052	9385397.488	705401.278	1317.902	Manyoni A	360	-90	51
24PQ053	9385997.474	706301.459	1318.457	Manyoni A	360	-90	9.5
24PQ054	9385997.402	706205.818	1318.075	Manyoni A	360	-90	8
24PQ055	9385995.592	706103.661	1318.071	Manyoni A	360	-90	9.5
24PQ056	9385995.641	706006.142	1318.049	Manyoni A	360	-90	8
24PQ057	9385394.549	705503.092	1317.968	Manyoni A	360	-90	51
24PQ058	9385997.248	705908.325	1318.082	Manyoni A	360	-90	8
24PQ059	9385998.017	705803.103	1317.917	Manyoni A	360	-90	6.5
24PQ060	9385395.970	705702.461	1318.012	Manyoni A	360	-90	51
24PQ061	9385997.113	705701.943	1317.915	Manyoni A	360	-90	6.5
24PQ062	9385998.573	705593.197	1317.985	Manyoni A	360	-90	6.5
24PQ063	9384797.671	706196.873	1318.169	Manyoni A	360	-90	6.5
24PQ064	9384801.946	705001.775	1318.072	Manyoni A	360	-90	7.5
24PQ065	9384409.170	705307.885	1317.909	Manyoni A	360	-90	7.5
24PQ066	9384400.053	705504.771	1317.906	Manyoni A	360	-90	7.5
24PQ067	9384408.861	705701.245	1317.877	Manyoni A	360	-90	6
24PQ068	9384401.992	705893.885	1317.916	Manyoni A	360	-90	6
24PQ069	9384786.344	706002.713	1317.949	Manyoni A	360	-90	6.5
24PQ070	9384397.631	706106.902	1317.979	Manyoni A	360	-90	6
24PQ071	9384404.713	706294.132	1318.491	Manyoni A	360	-90	7.5
24PQ072	9384799.553	705803.096	1317.891	Manyoni A	360	-90	6.5
24PQ073	9384800.705	704308.424	1317.864	Manyoni A	360	-90	7.5
24PQ074	9384795.242	705613.357	1317.857	Manyoni A	360	-90	8
24PQ075	9384802.698	704125.314	1318.318	Manyoni A	360	-90	6
24PQ076	9384804.444	703896.650	1318.693	Manyoni A	360	-90	7.5
24PQ077	9384803.500	705405.373	1317.853	Manyoni A	360	-90	6.5
24PQ078	9384811.428	703699.914	1318.677	Manyoni A	360	-90	7.5
24PQ079	9384803.070	705194.949	1317.877	Manyoni A	360	-90	6.5
24PQ080	9384801.919	703496.594	1318.672	Manyoni A	360	-90	9
24PQ081	9384002.350	704197.634	1318.586	Manyoni A	360	-90	7.5
24PQ082	9384395.915	704296.887	1318.054	Manyoni A	360	-90	8
24PQ083	9384403.278	704119.358	1318.648	Manyoni A	360	-90	8
24PQ084	9385396.441	705600.680	1318.032	Manyoni A	360	-90	51
24PQ085	9384404.730	703895.587	1318.669	Manyoni A	360	-90	6.5
24PQ086	9384405.780	703703.537	1318.650	Manyoni A	360	-90	8
24PQ087	9385397.019	705802.152	1318.032	Manyoni A	360	-90	51
24PQ088	9384408.416	703500.212	1318.663	Manyoni A	360	-90	8
24PQ089	9383594.220	703293.787	1317.941	Manyoni A	360	-90	8
24PQ090	9383606.670	703496.520	1318.150	Manyoni A	360	-90	8
24PQ091	9383594.279	703693.703	1318	Manyoni A	360	-90	11
24PQ092	9385395.144	705902.239	1318.088	Manyoni A	360	-90	51
24PQ093	9383604.832	703898.930	1318.225	Manyoni A	360	-90	8
24PQ094	9383598.124	703700.866	1318.208	Manyoni A	360	-90	8
24PQ095	9383595.138	704102.945	1318.114	Manyoni A	360	-90	8

24PQ096	9383595.476	704325.836	1317.900	Manyoni A	360	-90	8
24PQ097	9385399.681	706007.543	1318.170	Manyoni A	360	-90	51
24PQ098	9383606.325	704506.136	1317.818	Manyoni A	360	-90	8
24PQ099	9383195.816	704300.502	1317.800	Manyoni A	360	-90	8
24PQ100	9383211.505	704109.030	1317.790	Manyoni A	360	-90	8
24PQ101	9383202.420	703921.170	1317.770	Manyoni A	360	-90	8
24PQ102	9383202.620	703703.525	1317.868	Manyoni A	360	-90	8
24PQ103	9383195.832	703496.198	1317.841	Manyoni A	360	-90	8
24PQ104	9385393.378	706103.724	1318.312	Manyoni A	360	-90	51
24PQ105	9385392.869	706208.338	1317.968	Manyoni A	360	-90	51
24PQ106	9373146.181	706446.640	1265.055	Manyoni C	360	-90	11
24PQ107	9373100.751	706462.149	1265.748	Manyoni C	360	-90	9.5
24PQ108	9373090.660	706510.413	1264.395	Manyoni C	360	-90	6.5
24PQ109	9373045.447	706459.615	1264.538	Manyoni C	360	-90	6.5
24PQ110	9373097.482	706411.105	1264.791	Manyoni C	360	-90	6.5

Coordinate System UTM Arc 60 Zone36 south

# JORC Code, 2012 Edition – Table 1 report template

## Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
<i>Sampling techniques</i>	<ul style="list-style-type: none"> <li>• <i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li>• <i>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i></li> </ul>	<ul style="list-style-type: none"> <li>• PQ size drill core is cut in half onsite with a diamond saw and one half of the core is bagged for assay. Soft or clay rich samples may be cut with a chisel.</li> <li>• Sample intervals are a nominal 0.5m in mineralisation and 1.0m in sub-grade material.</li> <li>• Samples are dispatched by courier to an ISO certified laboratory in Mwanza, Tanzania, for sample prep and assay.</li> <li>• Drill holes are logged on completion with a downhole spectral gamma probe recording U, K and Th channels. The data sets are derived using calibrations from Pelindaba in South Africa.</li> </ul>
<i>Drilling techniques</i>	<ul style="list-style-type: none"> <li>• <i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></li> </ul>	<ul style="list-style-type: none"> <li>• PQTT core drilling is carried out using split inner tube to maximise sample recovery and preserve the condition of the core when transferring to the core trays.</li> <li>• Drilling is carried out with low water pressure and minimal pull-down pressure to avoid washing away soft formations and/or grinding of core in the tube.</li> <li>• Short core runs are employed if there is any risk of losing core.</li> <li>• Core is not oriented.</li> </ul>
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Core recovery is measured at the drill site by Geotechnicians and notes taken as to any reason for core loss.</li> <li>• Drill holes with excessive core loss have been redrilled</li> <li>• Core recovery data is entered into the OCIRIS software logging system and stored in the company's SQL server database.</li> <li>• It is too early in the program to draw conclusions on any correlation between grade and core loss. Visual examination of the core leads to the conclusion that there is no physical difference between core in the</li> </ul>

Criteria	JORC Code explanation	Commentary
		zones of core loss and the recovered core. This is because the dominant style of mineralisation for uranium minerals is disseminated.
Logging	<ul style="list-style-type: none"> <li>• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>• The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>• Drill core is logged at the company's core farm in Manyoni.</li> <li>• Prior to starting drilling the company carried out investigations into the key geological and geotechnical parameters for the Manyoni uranium mineralisation in conjunction with the company's geotechnical and resource advisors Snowdens-Optiro.</li> <li>• The OCRIS software system was chosen as the most useful geo-logging software and the necessary parameters for future MRE and mining studies were identified and recorded in the logging template.</li> <li>• The entire drill hole is logged and sampled with mineralisation intervals sampled on 0.5m intervals and sub-grade material sampled on 1.0m intervals.</li> <li>• Where possible, all logging is quantitative, with efforts made to estimate the percentage of uranium minerals based on visual identification of the main uranium minerals.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>• If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>• For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>• Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>• Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>• The holes are cored from surface using PQ3 size drill equipment which provides core that is 83mm diameter.</li> <li>• Core is cut in half on-site using a diamond saw and half core is bagged on 0.5m or 1.0m intervals for shipment to the lab.</li> <li>• The grain size of the mineralisation is typically less than 2mm and due to its disseminated habit there is no indication of potential sample bias caused by crushing and splitting samples. Statistical analysis of duplicate samples will be carried out when enough sample data is at hand to enable such a study.</li> <li>• In the lab the entire sample is crushed to -2mm and a split sample is further pulverized to -75µm.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>• For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>• Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels</li> </ul>	<ul style="list-style-type: none"> <li>• The determination of U and Th by pressed powder XRF is preferred for samples of potentially ore grade due to precision and accuracy being higher than for other techniques such as digestion by 4 acids and ICP finish. The XRF method is considered to be a total analytical method.</li> <li>• The downhole geophysical logging carried out at Manyoni involves a downhole spectral gamma probe recording U, and Th channels. The data sets are derived using calibrations made at Pelindaba in South Africa prior to mobilization to Tanzania. Readings are taken on 10cm</li> </ul>



Criteria	JORC Code explanation	Commentary
	<i>of accuracy (ie lack of bias) and precision have been established.</i>	intervals.
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• In Tanzania the company employs an Exploration Manager, a Senior Geologist and a consultant who has significant experience in uranium exploration and evaluation including the Manyoni Uranium Project prior to 2010. The entire core has been visually inspected by the geological team and visual confirmation of uranium mineralisation confirmed and photographed.</li> <li>• The entire drilling program is essentially a program of twinning historical drill holes to confirm the grade of uranium mineralisation. Statistical analysis of the results of all the twinned holes will be carried out on completion of the program.</li> <li>• Primary geotechnical and sample data is recorded in the OCRIS Mobile software logging system and uploaded to SQL server Datashed at Mitchell River Group in Perth.</li> </ul>
<i>Location of data points</i>	<ul style="list-style-type: none"> <li>• <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill holes were located by hand held GPS to +/- 6m and on completion will be surveyed by DGPS to +/- 10mm.</li> <li>• There are no other mine workings or trenches.</li> <li>• The grid system is Arc60 UTM zone 36.</li> <li>• On completion of the drilling it is planned to fly a DTEM survey of the project area so as to capture the new drill holes and topographic information.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill hole spacing has been chosen as suitable for Mineral Resource Estimation and Ore Reserves; hole spacing varies from 100m x 200m to 50m x 200m. In the case of twinned holes the holes may be less than 1.0 metre apart.</li> <li>• Sample compositing is not applied to the reporting of exploration drill holes.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The mineralisation is essentially a flat lying tabular deposit so vertical drill holes are an appropriate drill test.</li> <li>• The drill data is amenable to geostatistical analysis for directional bias which will be carried out on completion of the drill program.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Samples and drill core are kept in a secure compound on the Manyoni property with security guards on site at all times. Samples are periodically shipped to Mwanza for analysis by private courier</li> </ul>

Criteria	JORC Code explanation	Commentary
		services.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>During the validation drilling the project was visited by a Resource Specialist from Snowdens-Optiro who made suggestions on core handling and use of additional CRM samples which have been implemented.</li> </ul>

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li><i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></li> <li><i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Manyoni Uranium Project is secured by two Prospecting Licences which are held by Katika Resources Pty Ltd, a Tanzanian company owned by Moab Minerals Limited. Details of the tenements held are presented in the body of this report.</li> <li>The tenure is secure providing that the tenement holder complies with the Mining Act, Revised Edition, 2019.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>The area now covered by the Katika Tenements and the Auking tenements was formerly explored for uranium by Uranex in the period 2006 – 2010.</li> <li>Uranex carried out an extensive drill program on five separate project areas involving multiple types of drilling followed by metallurgical testwork and Mineral Resource Estimates. A summary of this work is contained in ASX:MOM 12 March 2024.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>The uranium mineralisation at Manyoni is hosted by a series of Quaternary palaeochannels and playa lake beds situated within an Archaean granite-gneiss terrane that is the source for the uranium mineralisation. The mineralisation is shallow, usually no more than 3m to the top of mineralisation, and varying from 3m to 10m vertical thickness. The mineralized beds are essentially horizontal and consist of an upper carbonate and organic rich layer known as the Mbuga Clay overlying palid granitic saprolite. Uranium minerals are dominantly Schröckingerite in the Mbuga Clay and Carnotite in the saprolite. The uranium minerals can readily be identified in the core.</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li><i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information</i></li> </ul>	<ul style="list-style-type: none"> <li>Table 1. In the body of this report presents the drill hole information.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p>for all Material drill holes:</p> <ul style="list-style-type: none"> <li>○ easting and northing of the drill hole collar</li> <li>○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>○ dip and azimuth of the hole</li> <li>○ down hole length and interception depth</li> <li>○ hole length.</li> </ul> <ul style="list-style-type: none"> <li>● If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	
Data aggregation methods	<ul style="list-style-type: none"> <li>● In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>● Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>● The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>● Not relevant until assay results are received</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>● These relationships are particularly important in the reporting of Exploration Results.</li> <li>● If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>● If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg ‘down hole length, true width not known’).</li> </ul>	<ul style="list-style-type: none"> <li>● Not relevant until assay results are received</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>● Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>● Pending availability of assay results</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>● Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>● Pending availability of assay results</li> </ul>
Other substantive	<ul style="list-style-type: none"> <li>● Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density,</li> </ul>	<ul style="list-style-type: none"> <li>● Specific Gravity measurements are being carried out by the laboratory using the air pycnometer method. Bulk Density determinations will be carried out on pieces of drill core during the</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>exploration data</i>	<i>groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	metallurgical test program.
<i>Further work</i>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>Subject to the results of the validation drilling it is planned to carry out a program of step-out drilling on 400m x 400m grid spacing around the known mineralisation to test for extensions in the undrilled areas around the known mineralisation.</li> </ul>

### **Section 3 Estimation and Reporting of Mineral Resources – not applicable at this time**