ASX Release 26 June 2024

Honeymoon Uranium Project, South Australia

Strong intercepts confirm significant production potential at Gould's Dam

Latest results support Boss' strategy to significantly increase Honeymoon's annual production capacity and mine life

Highlights

- **Gould's Dam is located ~80km northwest of the Honeymoon Mine and currently contains a JORC-compliant resource of 25Mlbs of indicated and inferred U_3O_8**
- **The results highlight the potential for Gould's Dam to help lift Honeymoon's production rate from the current nameplate capacity of 2.45M lbs a year to the Export Permit limit of 3.3M lbs a year and/or extend the mine's useful life**
- **The latest drilling is targeting three key areas within the inferred resource envelope at Gould's Dam – Sunrise, Billeroo and Beulah; The program will assist with wellfield planning and other pre-development work**
- **Infill and step-out drilling at Sunrise and Billeroo targets is almost complete. A total of 96 mud rotary holes have been drilled to date for 12,911m, with uranium mineralisation highlights including (PFN results, ppm pU_3O_8):**

○ **4.00m @ 2,925ppm pU_3O_8**	**GT 11,700**	(WRM0151 from 122.75m)
○ **4.25m @ 2,230ppm pU_3O_8**	**GT 9,478**	(WRM0109 from 120.75m)
○ **3.25m @ 1,406ppm pU_3O_8**	**GT 4,570**	(WRM0128 from 123.75m)
○ **5.25m @ 800ppm pU_3O_8**	**GT 4,200**	(WRM0099 from 117.00m)
○ **2.25m @ 1,717ppm pU_3O_8**	**GT 3,863**	(WRM0159 from 121.75m)
○ **1.25m @ 2,877ppm pU_3O_8**	**GT 3,596**	(WRM0114 from 124.50m)
○ **1.75m @ 1,990ppm pU_3O_8**	**GT 3,483**	(WRM0142 from 120.25m)
○ **3.75m @ 773ppm pU_3O_8**	**GT 2,899**	(WRM0130 from 123.75m)
○ **1.50m @ 1,855ppm pU_3O_8**	**GT 2,783**	(WRM0121 from 120.25m)
○ **4.50m @ 545ppm pU_3O_8**	**GT 2,453**	(WRM0140 from 103.25m)
○ **4.75m @ 506ppm pU_3O_8**	**GT 2,404**	(WRM0157 from 122.50m)
○ **4.75m @ 484ppm pU_3O_8**	**GT 2,299**	(WRM0143 from 123.00m)
➢ ***plus* 1.75m @ 1,294ppm pU_3O_8**	**GT 2,265**	(WRM0143 from 128.50m)
○ **3.00m @ 756ppm pU_3O_8**	**GT 2,268**	(WRM0084 from 118.50m)

- **Exploration will now focus on the Beulah satellite deposit where 40 holes are planned to better define the mineralisation and geological characteristics of this region**
- **Ongoing detailed geological and mineralisation modelling will support further development work and preparation for an ISR Mining Lease proposal at Gould's Dam**

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Boss Energy Limited (ASX: BOE; OTCQX: BQSSF) is pleased to announce high-grade drill results on the Gould's Dam satellite deposit.

These results support the Company's strategy to increase the nameplate production rate and mine life at its 100 per cent-owned Honeymoon Uranium Mine in South Australia.

In light of these strong results, work has commenced on accelerating the development of Gould's Dam, which is an important satellite project to the nearby Honeymoon Mine.

The current delineation program provides important data which will be used in wellfield planning and other advanced pre-development activity.

It will also enable Boss to complete detailed geological and mineralisation models which will support the ongoing development work and preparation for an ISR Mining Lease proposal for Gould's Dam.

This will lead into the next phase of mine plan development, including pump testing of the mineralised aquifer within the Gould's Dam Indicated resource (utilising monitoring wells installed during the 2023 drilling campaign) and core sample test work. This will provide important baseline hydrogeological and metallurgical characteristics of the mineralised aquifers.

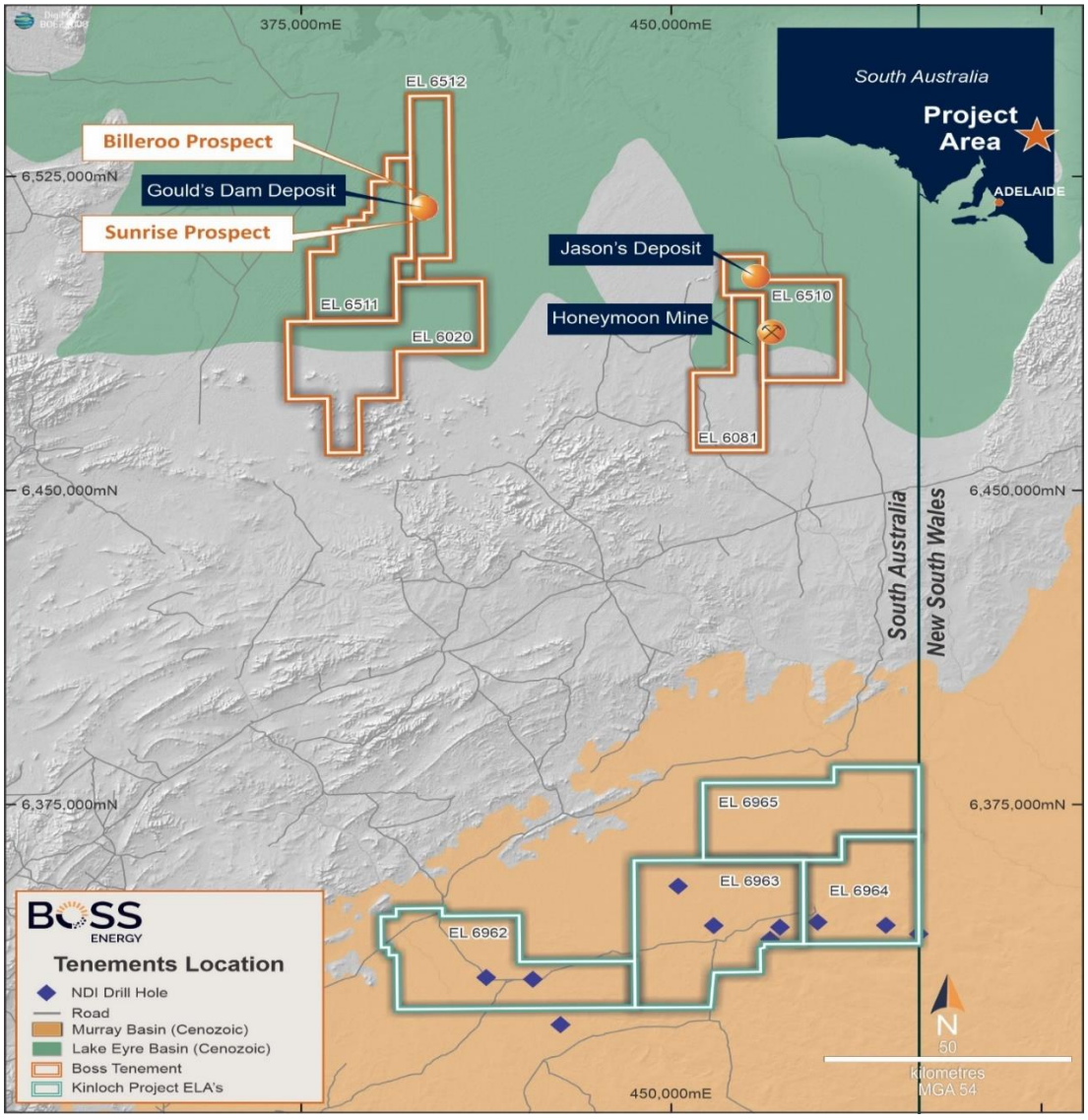

Figure 1: *Overview of Boss Energy tenure in South Australia.*

Resource Infill Drilling Program

Three key areas within the current Inferred resource envelope at Gould's Dam were targeted as part of this infill drilling program – namely the Sunrise, Billeroo and Beulah targets (Figure 2). Holes were logged with the Boss Energy in-house PFN tools for uranium grade characterisation, and Borehole Magnetic Resonance (BMR) tools for lithological determination.

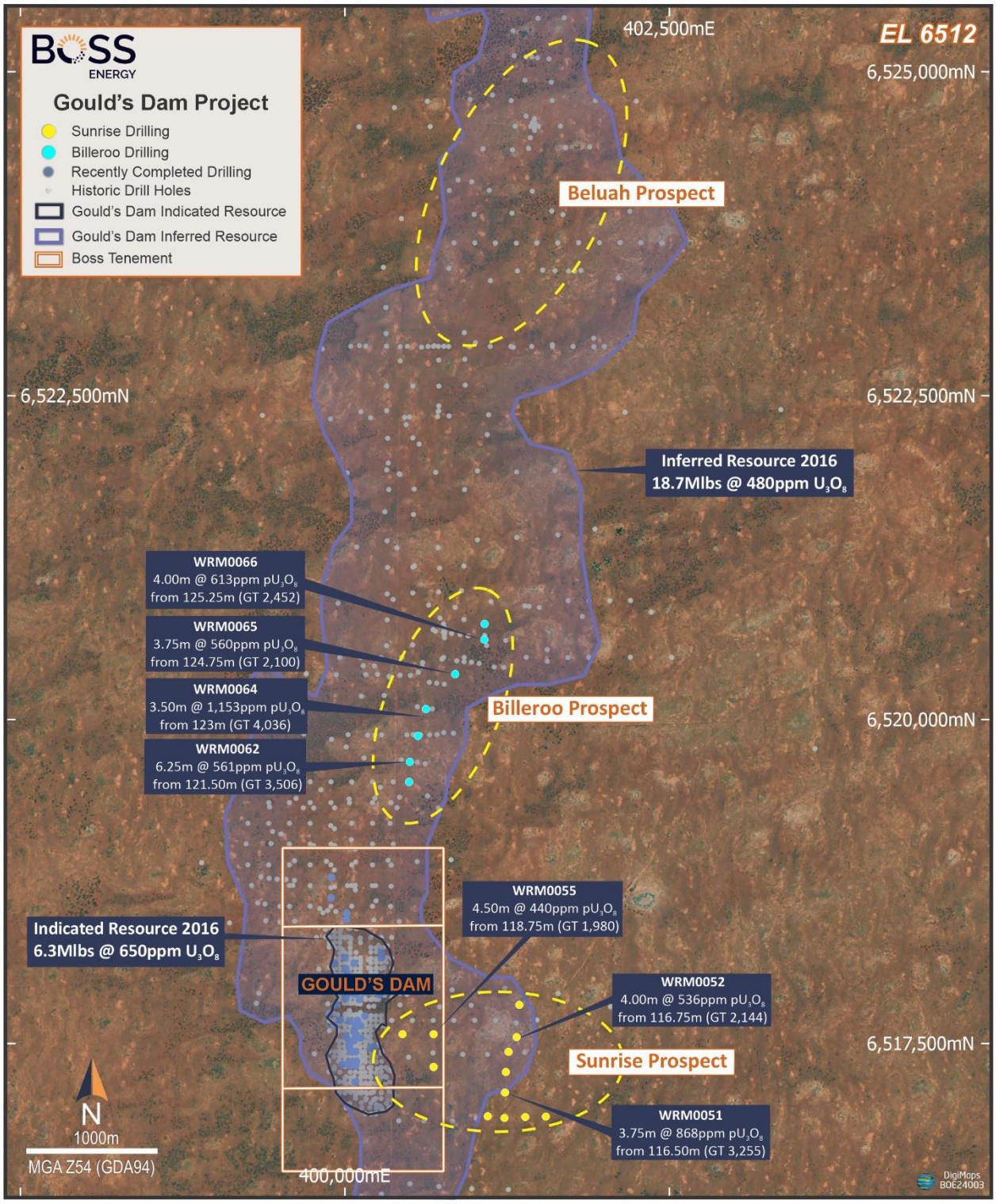

Figure 2: *Overview of drilling completed in 2023 within the Inferred Resource at the Gould's Dam project.*

Billeroo area drill results

The Billeroo area is located within the "Inferred" resource envelope between ~1.2km - 3km north of the Gould's Dam deposit. The area is characterised by a significant deepening of the Billeroo Palaeovalley and the deposition of thick sequences of sand within the lower Eyre Formation. A total of 59 mud rotary drill holes for 8,080m have been completed so far, comprising a series of largely east-west oriented infill drill lines and step-out holes along a strike length of ~1.5km (Figure 3).

The program to date has produced excellent results, including the best uranium intercepts to date outside of the Gould's Dam Indicated Resource within the Western project area. Uranium mineralisation highlights include the following (PFN results, ppm pU_3O_8):

- **4.00m @ 2,925ppm pU_3O_8** **GT 11,700** (WRM0151 from 122.75m)
- **4.25m @ 2,230ppm pU_3O_8** **GT 9,478** (WRM0109 from 120.75m)
- **3.25m @ 1,406ppm pU_3O_8** **GT 4,570** (WRM0128 from 123.75m)
- **2.25m @ 1,717ppm pU_3O_8** **GT 3,863** (WRM0159 from 121.75m)
- **1.25m @ 2,877ppm pU_3O_8** **GT 3,596** (WRM0114 from 124.50m)
- **1.75m @ 1,990ppm pU_3O_8** **GT 3,483** (WRM0142 from 120.25m)
- **3.75m @ 773ppm pU_3O_8** **GT 2,899** (WRM0130 from 123.75m)
- **1.50m @ 1,855ppm pU_3O_8** **GT 2,783** (WRM0121 from 120.25m)
- **4.50m @ 545ppm pU_3O_8** **GT 2,453** (WRM0140 from 103.25m)
- **4.75m @ 506ppm pU_3O_8** **GT 2,404** (WRM0157 from 122.50m)
- **4.75m @ 484ppm pU_3O_8** **GT 2,299** (WRM0143 from 123.00m)
  - ***plus* 1.75m @ 1,294ppm pU_3O_8** **GT 2,265** (WRM0143 from 128.50m)
- **3.25m @ 689ppm pU_3O_8** **GT 2,239** (WRM0145 from 121.50m)
- **1.75m @ 1,222ppm pU_3O_8** **GT 2,139** (WRM0111 from 122.00m)
- **3.25m @ 655ppm pU_3O_8** **GT 2,129** (WRM0116 from 121.00m)
- **2.50m @ 757ppm pU_3O_8** **GT 1,893** (WRM0136 from 120.25m)
  - ***plus* 2.00m @ 548ppm pU_3O_8** **GT 1,096** (WRM0136 from 126.50m)
- **3.00m @ 601ppm pU_3O_8** **GT 1,803** (WRM0132 from 125.75m)

Mineralisation is typically hosted within a thick basal sand package within the lower Eyre Formation, associated directly below a well-defined redox boundary between relatively clean, variably oxidised sands and more reduced "dirty" sands beneath (Figure 4). These lower sands sit above the underlying basement and are often coarser grained, with higher proportions of interstitial fine silt and organic material and occasionally pyrite. Importantly, BMR data obtained throughout the program to date indicates that the mineralisation at Billeroo should be amenable to ISR mining.

The average uranium grades encountered have largely exceeded expectations, with several "pods" of high-grade uranium over often significant thicknesses occurring throughout the Billeroo area. Upon conclusion of the current round of drilling, the average spacing between drill holes and drill lines will be between ~80-100m which highlights the potential for identifying additional high-grade mineralisation with further delineation drilling.

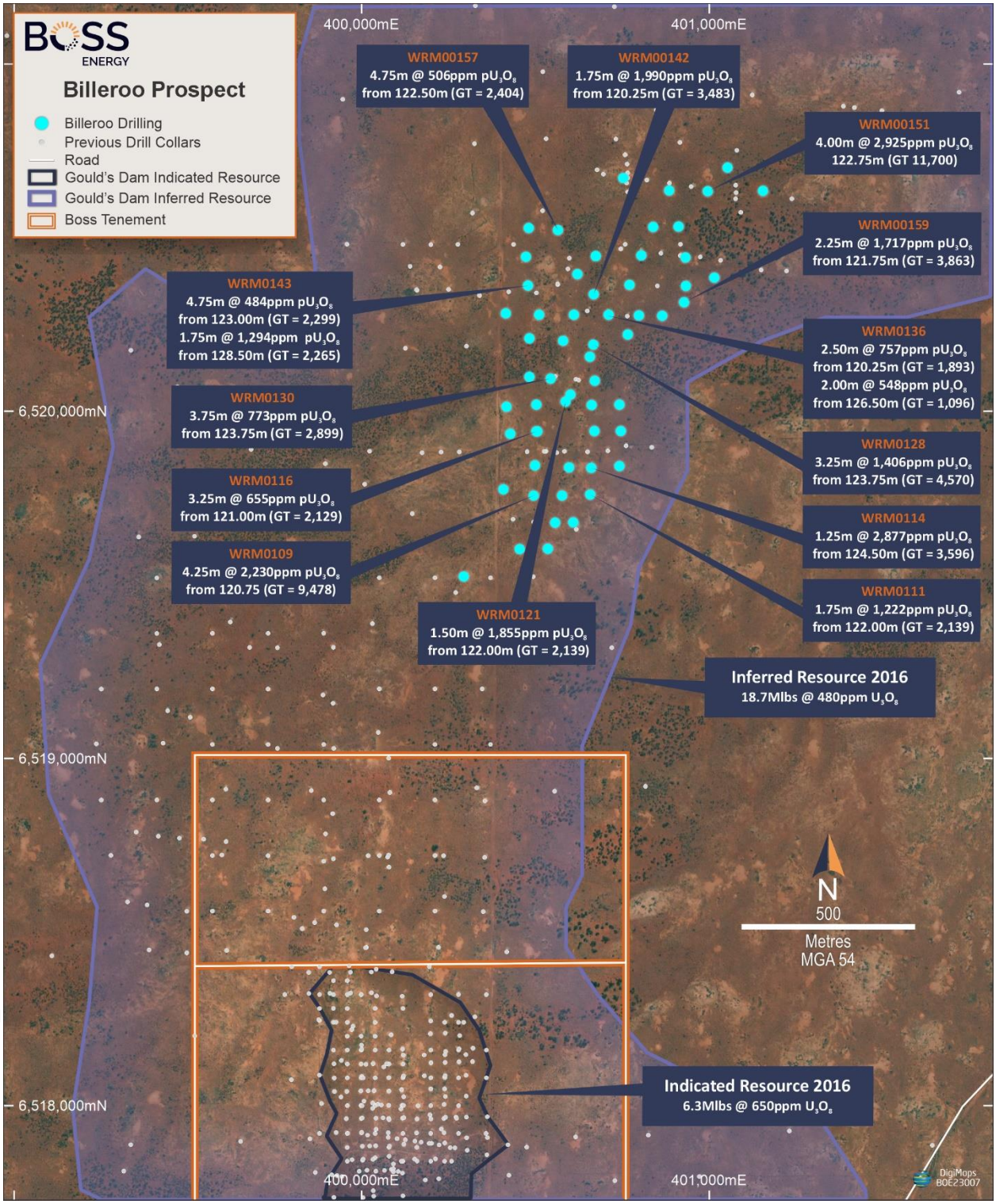

Figure 3: *Overview of results from the current drilling campaign to date at Billeroo.*

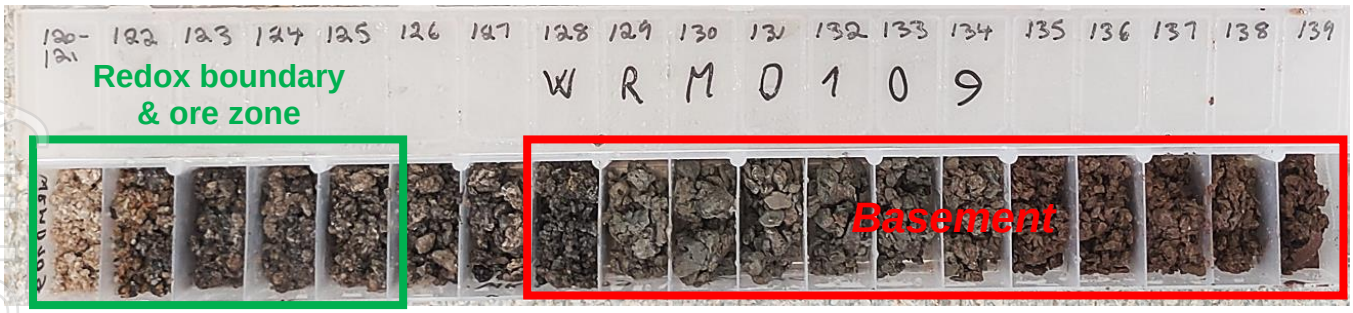

Figure 4: *Example of mineralized zone within lower Eyre Formation at Billeroo (hole WRM0109).*

Sunrise area drill results

The Sunrise area is predominantly located within the "Inferred" resource envelope and is located ~800m east of the Gould's Dam "Indicated" resource. A review of limited historic drilling results suggested a similar geological setting to the Billeroo area, with well-developed lower Eyre Formation sands along with uranium mineralisation encountered below a redox boundary within these sands. A limited number of holes were drilled during the 2023 campaign to try and validate the historic work, with several very promising intercepts identified (PFN results, ppm pU_3O_8):

- **3.75m @ 868ppm pU_3O_8** **GT 3,255** (WRM0051 from 116.50m)
- **4.00m @ 536ppm pU_3O_8** **GT 2,144** (WRM0052 from 116.75m)
- **4.50m @ 440ppm pU_3O_8** **GT 1,980** (WRM0055 from 118.75m)
- **5.50m @ 330ppm pU_3O_8** **GT 1,815** (WRM0056 from 122.00m)
  - ***plus* 2.00m @ 639ppm pU_3O_8** **GT 1,278** (WRM0056 from 102.50m)

The aim of the 2024 drilling campaign at Sunrise was to infill and step out in these promising areas to try and establish potential continuity of mineralisation and geological/hydrogeological characteristics of the mineralized zone. Highlights from the latest drilling include (Gamma-derived ppm eU_3O_8 & PFN-derived ppm pU_3O_8):

- **5.25m @ 800ppm pU_3O_8** **GT 4,200** (WRM0099 from 117.00m)
- **3.00m @ 756ppm pU_3O_8** **GT 2,268** (WRM0084 from 118.50m)
  - ***plus* 1.25m @ 393ppm pU_3O_8** **GT 491** (WRM0084 from 123.50m)
- **2.75m @ 432ppm eU_3O_8** **GT 1,188** (WRM0091 from 119.25m)
- **1.25m @ 769ppm pU_3O_8** **GT 961** (WRM0082 from 120.75m)
- **0.50m @ 1,086ppm pU_3O_8** **GT 543** (WRM0076 from 120.75m)
  - ***plus* 1.25m @ 720ppm pU_3O_8** **GT 900** (WRM0076 from 124.25m)
- **0.50m @ 1,340ppm pU_3O_8** **GT 670** (WRM0096 from 125.00m)
  - ***plus* 2.25m @ 418ppm pU_3O_8** **GT 941** (WRM0096 from 126.75m)
- **1.25m @ 478ppm pU_3O_8** **GT 598** (WRM0077 from 118.75m)
  - ***plus* 2.50m @ 356ppm pU_3O_8** **GT 890** (WRM0077 from 122.25m)

A total of 37 mud rotary holes for 4,831m were completed (Figure 5), with the results suggesting that economic intercepts tend to be relatively isolated and surrounded by lower grade sub-economic mineralisation.

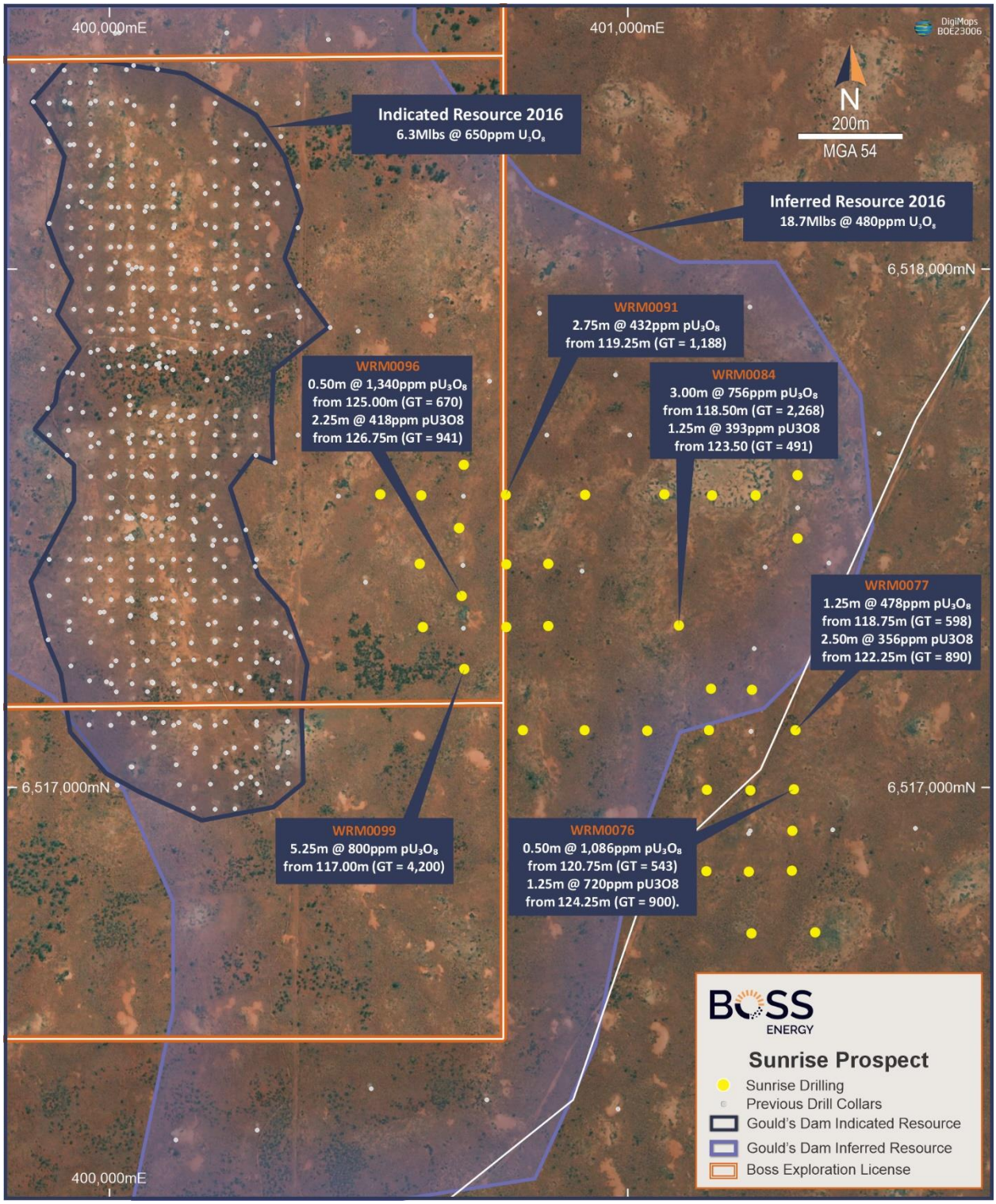

Figure 5: *Overview of results from the current drilling campaign at Sunrise.*

Beulah Target Area

The current drill program is ongoing with the drill rig now due to move north to the Beulah area, where up to 40 holes are planned to better define the extent of uranium mineralisation and geological characteristics of this area.

The Beulah target is located ~6.5km north of the Gould's Dam Indicated Resource within the Billeroo Palaeovalley and has been subject to sporadic drilling campaigns between the late 1970's and 2006 (Figure 2). Available geological data from the historic drilling indicates a potentially favourable geological environment similar to the Billeroo area, with thick lower Eyre Formation sands and uranium mineralisation associated with a redox boundary developed within these sands. Highlights from historic drilling in this area includes (PFN-derived pU_3O_8 & gamma-derived eU_3O_8):

- **2.25m @ 1,542ppm pU_3O_8** **GT 3,470** (GLD129 from 118.00m)
- **5.25m @ 575ppm pU_3O_8** **GT 3,019** (GLD142 from 121.25m)
- **7.40m @ 349ppm eU_3O_8** **GT 2,583** (BW116 from 108.80m)
- **1.25m @ 1,725ppm pU_3O_8** **GT 2,156** (GLD149 from 114.50m)
- **7.20m @ 288ppm eU_3O_8** **GT 2,074** (BW003 from 121.50m)
- **4.10m @ 468ppm eU_3O_8** **GT 1,919** (BW122A from 123.20m)

Historic drilling within this area is limited and relatively sporadic, therefore the aim of the proposed drilling program is to complete infill and step out drilling and test several interesting geological targets. Results of this initial first pass drilling program will then be interpreted to determine the scope for further work in this area.

Gould's Dam deposit

The Gould's Dam deposit is located ~80km northwest of the Honeymoon Mine and currently contains a JORC-compliant resource (Table 1) of 4.4Mt @ 650ppm U_3O_8 for 6.3Mlbs contained U_3O_8 (Indicated) and 17.7Mt @ 480ppm $U_3O_8$for 18.7Mlbs contained U_3O_8 (Inferred).

Table 1: Summary of Mineral Resource for satellite deposit of Gould's Dam

Resource Classification	Tonnage (Million Tonnes)	Average Grade (ppm U_3O_8)	Contained Metal (Kt, U_3O_8)	Contained Metal (Mlb, U_3O_8)
Gould's Dam (April 2016) [1]				
Indicated	**4.4**	**650**	**2.9**	**6.3**
Inferred	**17.7**	**480**	**8.5**	**18.7**

Honeymoon Project Mineral Resource

The global Honeymoon Mineral Resource stands at 71.6Mlbs (52.4Mt) with an average grade of 620ppm U_3O_8, using a cut-off grade of 250ppm, as summarised in Table 2.

The current Honeymoon restart feasibility studies utilise only a portion of Honeymoon's JORC resource, excluding 36Mlbs of JORC resource outside the HRA, which could expand the mine life, and Boss' defined exploration target could potentially extend the mine life beyond the initial 11 years and increase the production profile. Honeymoon's Federal EPIP Act approvals allow export of more than 3Mlbs/annum U_3O_8 equivalent.

[1] Refer to ASX: BOE Announcement dated 8 April 2016

In addition to the global Mineral Resource, the Honeymoon Uranium Project also has an Exploration Target range of 28Mt to 133Mt of mineralisation at a grade of 340ppm to 1,080ppm U_3O_8 for a contained 58Mlbs to 190Mlbs U_3O_8 (26,300 to 86,160 tonnes of contained U_3O_8), using a cut-off of 250ppm[2]. Note the potential quantity and grade of the Exploration Target range is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain whether future exploration will result in the definition of a Mineral Resource.

Table 2: Summary of Mineral Resource for satellite deposits of Gould's Dam and Jason's

Resource Classification	Tonnage (Million Tonnes)	Average Grade (ppm U_3O_8)	Contained Metal (Kt, U_3O_8)	Contained Metal (Mlb, U_3O_8)
Jason's (March 2017)[3]				
Inferred	6.2	790	4.9	**10.7**
Gould's Dam (April 2016)[4]				
Indicated	4.4	650	2.9	**6.3**
Inferred	17.7	480	8.5	**18.7**
Honeymoon Restart Area (January 2019)				
Measured	3.1	1,100	3.4	**7.6**
Indicated	14	610	8.7	**19**
Inferred	7.0	590	4.1	**9.1**
GLOBAL HONEYMOON URANIUM PROJECT				
Measured	3.1	1,100	3.4	**7.6**
Indicated	18.4	630	12.0	**25.3**
Inferred	30.9	570	18.0	**38.5**
Total	**52.4**	**620**	**32.5**	**71.6**

This ASX announcement was approved and authorised by the Board of Boss Energy Limited.

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[2] *Refer to ASX: BOE announcement dated 25 March 2019.*
[3] *Refer to ASX: BOE announcement dated 15 March 2017.*
[4] *Refer to ASX: BOE announcement dated 8 April 2016.*

Competent Person's Statement

The information contained in this announcement that relates to exploration results is provided by Mr Jason Cherry, who is a Member of the Australasian Institute of Geoscientists (AIG). Mr Cherry has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration, and to the activity being undertaken to qualify as a Competent Person, as defined in the JORC 2012 edition of the "Australasian Code for Reporting of Mineral Resources and Ore Reserves". Mr Cherry has 17 years' experience and is a full-time employee as Geology Manager for Boss Energy Ltd. Mr Cherry consents to the inclusion in this report of the matters based on this information in the form and context in which they appear.

Reference to previous ASX announcements

In relation to the results of the Feasibility Study announced 21 January 2020, the Company confirms that all material assumptions underpinning the production target and forecast financial information included in that announcement continue to apply and have not materially changed. Nothing in this announcement pre-empts the findings of the Enhanced Feasibility Study currently being undertaken.

In relation to the Mineral Resource announced on 8 April 2016, 25 February 2019 and the Exploration Targets announced on 25 March 2019, the Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in that market announcement continue to apply and have not materially changed.

Forward-Looking Statements

This announcement includes forward-looking statements. These forward-looking statements are based on the Company's expectations and beliefs concerning future events. Forward-looking statements are necessarily subject to risks, uncertainties, and other factors, many of which are outside the control of Boss Energy, which could cause actual results to differ materially from such statements. Boss Energy makes no undertaking to subsequently update or revise the forward-looking statements made in this announcement, to reflect the circumstances or events after the date of this announcement.

APPENDIX 1 – Table 1: Historical drill results

In accordance with ASX Listing Rule 5.7.2, the Company provides the following information:

Hole ID	Easting	Northing	RL	EOH	From	To	Width	eU_3O_8	Grade Thickness
	MGA94, z54		(m)	(m)	(m)	(m)	(m)	(ppm)	(m.ppm)
BW003	401329	6523464	71	145	121.54	128.74	7.20	288	2,074
					102.10	105.10	3.00	1,040	3,120
BW016	401964	6524019	71	133	108.79	116.19	7.40	349	2,583
					96.44	96.94	0.50	967	483
BW122A	401396	6524659	70	139	111.40	114.30	2.90	254	737
					118.40	120.30	1.90	1,121	2186
					123.10	127.30	4.20	468	1,966
					130.60	131.70	1.10	261	287
BW123	401305	6525125	69	139	120.50	126.50	6.00	358	2,148
GLD129 *	401763	6524085	75	150	118.00	120.25	2.25	1,542	3,470
GLD142 *	401929	6524778	75	138	121.25	126.50	5.25	575	3,019
GLD149 *	402442	6523679	73	132	105.20	109.20	4.00	380	1,520
					114.50	115.75	1.25	1,725	2,156

All results reported as gamma-derived eU_3O_8 in the above table unless otherwise indicated.
** indicates PFN-derived equivalent pU_3O_8.*

Values are reported above the nominal 250ppm eU_3O_8 cutoff grade, 0.5m minimum interval thickness and maximum 1m internal dilution.

All holes were drilled vertically (-90˚ inclination and 0˚ azimuth).

APPENDIX 1 – Table 2: Current drill results (Billeroo area)

Hole ID	Easting	Northing	RL	EOH	From	To	Width	pU3O8	Grade Thickness
	MGA94, z54		(m)	(m)	(m)	(m)	(m)	(ppm)	(m.ppm)
WRM0104	400295	6519524	75.2	139	123.50	124.00	0.50	477	239
WRM0105	400456	6519603	75.4	139	107.25	107.75	0.50	637	319
WRM0106	400537	6519604	75.4	139	123.00	124.50	1.50	1,054	1,581
	plus				126.00	126.50	0.50	325	163
WRM0107	400558	6519679	75.2	133	126.75	127.25	0.50	397	199
WRM0108	400610	6519680	75.1	139	125.50	126.25	0.75	331	248
WRM0109	400496	6519757	74.9	139	109.75	110.50	0.75	1,306	980
	plus				120.75	125.00	4.25	2,230	9,478
WRM0110	400578	6519757	74.9	139	-	-	-	-	-
WRM0111	400659	6519760	75.1	139	122.00	123.75	1.75	1,222	2,139
WRM0112	400500	6519844	74.8	139	120.00	120.50	0.50	1,048	524
	plus				124.25	124.75	0.50	464	232
WRM0113	400598	6519838	74.8	139	-	-	-	-	-
WRM0114	400662	6519837	75.0	139	124.50	125.75	1.25	2,877	3,596
WRM0115	400743	6519842	75.4	139	122.25	123.25	1.00	316	316
WRM0116	400504	6519942	74.8	139	121.00	124.25	3.25	655	2,129
WRM0117	400507	6519942	74.7	139	-	-	-	-	-
WRM0118	400671	6519943	75.3	139	123.00	124.75	1.75	537	940
	plus				127.50	128.25	0.75	500	375
WRM0119	400504	6520019	74.8	139	127.00	127.75	0.75	268	201
WRM0120	400418	6520013	74.4	139	122.25	122.75	0.50	1,267	634
	plus				126.00	127.00	1.00	307	307
WRM0121	400588	6520028	74.4	139	120.25	121.75	1.50	1,855	2,783
	plus				124.50	125.50	1.00	324	324
WRM0122	400602	6520048	74.4	139	121.25	123.50	2.25	297	668
	plus				127.50	128.00	0.50	312	156
WRM0123	400663	6520018	74.7	139	120.75	121.25	0.50	607	304
	plus				123.25	123.75	0.50	750	375
	plus				125.50	126.50	1.00	545	545
WRM0124	400743	6520019	75.1	139	121.00	123.25	2.25	515	1,159
WRM0125	400672	6520088	74.9	139	123.50	125.50	2.00	394	788
	plus				126.25	127.25	1.00	1,038	1,038
WRM0126	400484	6520099	74.8	139	123.50	127.50	4.00	365	1,460
WRM0127	400,658	6,520,157	74.8	139	121.75	122.75	1.00	668	668
	plus				124.25	125.75	1.50	352	528
WRM0128	400668	6520192	74.6	139	123.75	127.00	3.25	1,406	4,570
	plus				127.75	129.00	1.25	503	629
WRM0129	400581	6520203	74.2	139	122.50	124.75	2.25	361	812
	plus				125.25	125.75	0.50	382	191
WRM0130	400545	6520094	74.3	139	123.75	127.50	3.75	773	2,899
	plus				130.75	131.50	0.75	293	220
WRM0131	400747	6519943	75.4	139	122.50	123.50	1.00	694	694
	plus				125.50	126.50	1.00	631	631

Hole ID	Easting	Northing	RL	EOH	From	To	Width	pU3O8	Grade Thickness
	MGA94, z54		(m)	(m)	(m)	(m)	(m)	(ppm)	(m.ppm)
WRM0132	400484	6520210	74.0	139	125.75	128.75	3.00	601	1,803
WRM0133	400,416	6,520,282	74.3	139	106.50	107.50	1.00	719	719
	plus				121.75	122.50	0.75	616	462
	plus				131.25	131.75	0.50	528	264
WRM0134	400,512	6,520,278	73.7	139	121.00	122.00	1.00	1,534	1,534
	plus				124.50	125.75	1.25	376	470
	plus				129.25	129.75	0.50	430	215
WRM0135	400,612	6,520,278	74.6	139	120.00	120.75	0.75	367	275
	plus				123.75	124.75	1.00	634	634
	plus				125.75	126.25	0.50	608	304
WRM0136	400712	6520278	74.6	139	120.25	122.75	2.50	757	1,893
	plus				126.50	128.50	2.00	548	1,096
WRM0137	400799	6520276	75.3	139	127.25	127.75	0.50	1,361	681
WRM0138	400866	6520275	75.3	139	120.25	121.25	1.00	638	638
	plus				126.75	127.50	0.75	2,681	2,011
	plus				129.25	129.75	0.50	317	159
WRM0139	400934	6520361	75.1	133	Hole collapsed - no logs obtained				
WRM0140	401016	6520385	75.0	139	103.25	107.75	4.50	545	2,453
	plus				125.50	126.00	0.50	361	181
	plus				129.25	131.00	1.75	275	481
WRM0141	400772	6520364	74.6	139	121.75	124.25	2.50	295	738
	plus				125.50	128.75	3.25	516	1,677
WRM0142	400669	6520337	74.9	139	120.25	122.00	1.75	1,990	3,483
	plus				125.00	125.50	0.50	294	147
WRM0143	400480	6520362	74.5	139	121.25	122.25	1.00	480	480
	plus				123.00	127.75	4.75	484	2,299
	plus				128.50	130.25	1.75	1,294	2,265
WRM0144	400474	6520445	74.5	139	105.00	107.25	2.25	329	740
	plus				121.50	125.25	3.75	373	1,399
	plus				126.50	129.25	2.75	280	770
	plus				130.50	132.75	2.25	298	671
WRM0145	400622	6520395	74.8	139	121.50	124.75	3.25	689	2,239
	plus				128.00	129.00	1.00	668	668
WRM0146	400675	6520447	74.2	139	108.25	108.75	0.50	390	195
	plus				124.25	125.50	1.25	497	621
WRM0147*	400933	6520443	76.1	139	122.50	123.75	1.25	890	1,113
	plus				126.50	129.00	2.50	337	843
	plus				131.00	131.75	0.75	1,052	789
WRM0148	400806	6520449	74.8	139	106.50	107.00	0.50	290	145
	plus				122.75	124.50	1.75	400	700
WRM0149	400913	6520532	76.4	139	107.75	108.25	0.50	357	179
	plus				121.75	123.25	1.50	483	725
	plus				131.75	133.00	1.25	369	461
WRM0150	400840	6520531	75.1	139	124.75	125.25	0.50	916	458
	plus				128.00	129.25	1.25	606	758
	plus				132.50	133.00	0.50	347	174

Hole ID	Easting	Northing	RL	EOH	From	To	Width	pU3O8	Grade Thickness
	MGA94, z54		(m)	(m)	(m)	(m)	(m)	(ppm)	(m.ppm)
WRM0151	400997	6520634	75.7	139	122.75	126.75	4.00	2,925	11,700
	plus				131.25	132.25	1.00	276	276
WRM0152	401054	6520702	76.3	30	Hole collapsed - no logs obtained				
WRM0153	401156	6520635	75.7	139	112.25	113.00	0.75	334	251
	plus				128.25	129.25	1.00	986	986
WRM0154	400886	6520636	75.0	139	109.75	110.50	0.75	402	302
	plus				123.50	125.25	1.75	326	571
	plus				130.00	130.50	0.50	355	178
WRM0155	400754	6520672	74.0	139	109.25	110.50	1.25	296	370
	plus				128.25	129.25	1.00	311	311
	plus				130.75	131.25	0.50	304	152
WRM0156	400482	6520528	74.2	139	123.25	124.25	1.00	746	746
WRM0157	400566	6520522	74.7	139	122.50	127.25	4.75	506	2,404
WRM0158	400767	6520221	74.2	139	125.00	126.50	1.50	327	491
WRM0159	400929	6520314	74.4	139	121.75	124.00	2.25	1,717	3,863
WRM0160	400675	6520447	74.2	139	128.00	128.50	0.50	563	282
WRM0161	400429	6519935	74.8	139	118.00	120.00	2.00	519	1,038
WRM0162	400409	6519775	74.9	139	-	-	-	-	-

Values are reported above the nominal 250ppm pU_3O_8 cutoff grade, 0.5m minimum interval thickness and maximum 1m internal dilution. All results reported as PFN-derived pU_3O_8 in the above table unless otherwise indicated.

All holes were drilled vertically (-90˚ inclination and 0˚ azimuth).

** Denotes drill hole result reported as calibrated gamma derived equivalent U_3O_8 (eU_3O_8).*

APPENDIX 1 – Table 3: Current drill results (Sunrise area)

Hole ID	Easting	Northing	RL	EOH	From	To	Width	pU3O8	Grade Thickness
	MGA94, z54		(m)	(m)	(m)	(m)	(m)	(ppm)	(m.ppm)
WRM0068	401317	6516916	81.3	133	120.25	121.50	1.25	522	653
	plus				125.25	125.75	0.50	377	189
WRM0069	401316	6516839	81.4	137	125.00	126.00	1.00	381	381
WRM0070	401361	6516720	80.7	131	103.50	104.00	0.50	481	241
	plus				123.75	124.25	0.50	712	356
WRM0171	401238	6516718	81.3	137	121.00	121.50	0.50	1,089	545
	plus				123.25	123.75	0.50	717	359
WRM0072	401233	6516837	81.1	138	126.00	126.50	0.50	523	262
WRM0073	401151	6516838	80.9	83	Hole collapsed - no logs obtained				
WRM0074	401152	6516995	80.4	137	123.75	125.25	1.50	258	387
WRM0075	401236	6516994	81.0	138	121.75	123.00	1.25	429	536
WRM0076	401320	6516996	81.2	137	120.75	121.25	0.50	1,086	543
	plus				124.25	125.50	1.25	720	900
WRM0077	401323	6517110	80.7	137	118.75	120.00	1.25	478	598
	plus				122.25	124.75	2.50	356	890
WRM0078	401156	6517110	80.1	137	119.25	119.75	0.50	1,230	615
WRM0079	401037	6517109	80.0	138	Hole collapsed - no logs obtained				
WRM0080	400916	6517110	80.3	138	125.25	125.75	0.50	423	212
WRM0081	400797	6517110	79.9	137	102.00	102.50	0.50	386	193
	plus				123.75	124.50	0.75	327	245
WRM0082	401239	6517188	80.4	131	120.75	122.00	1.25	769	961
WRM0083	401160	6517190	80.2	137	115.00	115.75	0.75	366	275
	plus				118.00	119.00	1.00	296	296
	plus				121.25	122.50	1.25	270	338
	plus				124.50	125.00	0.50	339	170
WRM0084	401098	6517312	79.3	137	118.50	121.50	3.00	756	2,268
	plus				123.50	124.75	1.25	393	491
WRM0085	401327	6517480	79.0	131	Hole collapsed - no logs obtained				
WRM0086	401327	6517602	78.7	131	-	-	-	-	-
WRM0087	401246	6517563	78.3	131	-	-	-	-	-
WRM0088	401162	6517563	78.3	131	-	-	-	-	-
WRM0089	401070	6517565	78.4	84	Hole collapsed - no logs obtained				
WRM0090	400917	6517564	78.5	138	102.00	102.75	0.75	251	188
	plus				116.25	117.00	0.75	258	194
WRM0091*	400764	6517564	78.8	138	119.25	122.00	2.75	432	1,188
WRM0092	400683.1	6517621.9	78.6	133	117.25	119.25	2.00	409	818
	plus				120.50	121.00	0.50	444	222
WRM0093	400600.9	6517563.5	78.6	133	118.50	119.50	1.00	808	808
	plus				121.50	122.50	1.00	420	420
WRM0094	400522.5	6517565.5	78.3	133	103.75	104.50	0.75	649	487
	plus				125.00	125.50	0.50	992	496
WRM0095R	400674	6517499.8	78.9	139	113.00	114.25	1.25	384	480
WRM0096	400679	6517369	79.1	139	120.00	120.75	0.75	394	296
	plus				125.00	125.50	0.50	1,340	670

Hole ID	Easting	Northing	RL	EOH	From	To	Width	pU3O8	Grade Thickness
	MGA94, z54		(m)	(m)	(m)	(m)	(m)	(ppm)	(m.ppm)
	plus				126.75	129.00	2.25	418	941
WRM0097	400764.7	6517309.4	79.5	139	118.50	119.25	0.75	698	524
	plus				120.50	121.00	0.50	500	250
	plus				123.00	123.50	0.50	339	170
WRM0098	400846.3	6517310.6	79.4	139	118.25	119.75	1.50	529	794
	plus				125.00	125.50	0.50	315	158
WRM0099	400684.2	6517227.8	79.8	139	117.00	122.25	5.25	800	4,200
	plus				126.00	126.50	0.50	379	190
WRM0100	400604.4	6517309.4	79.0	139	-	-	-	-	-
WRM0101	400846	6517431	78.8	139	101.50	102.00	0.50	816	408
	plus				121.25	121.75	0.50	445	223
	plus				125.25	125.75	0.50	494	247
WRM0102	400765	6517430	78.7	139	-	-	-	-	-
WRM0103	400598	6517431	78.9	139	128.25	128.75	0.50	473	237

Values are reported above the nominal 250ppm pU_3O_8 cutoff grade, 0.5m minimum interval thickness and maximum 1m internal dilution. All results reported as PFN-derived pU_3O_8 in the above table unless otherwise indicated.

All holes were drilled vertically (-90˚ inclination and 0˚ azimuth).

** Denotes drill hole result reported as calibrated gamma derived equivalent U_3O_8 (eU_3O_8).*

JORC Code, 2012 Edition – Table 1

Section 1 – Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *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.*	• The latest WRM series drill holes have been geophysically logged upon completion with a combination of Prompt Fission Neutron (PFN), Borehole Magnetic Resonance (BMR), calibrated gamma and induction tools. Data is collected at 1cm intervals and incorporated in the Boss Energy drilling database. • The GLD series holes were drilled in during 2005 – 2006 by Uranium One Australia. Drill holes were logged Prompt Fission Neutron (PFN) where available, along with calibrated gamma and induction tools. Data was collected at 1cm and 5cm intervals. • Historic uranium grade data from the BW series drilling (completed in the 1970's and early 1980's) was digitised from paper logs by Southern Cross Resources. • All natural gamma and Prompt Fission Neutron (PFN) tools used during the current drilling program were calibrated at the PIRSA calibration facility in Adelaide prior to the program commencing.
Drilling techniques	• *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).*	• The drilling technique used for all holes was the Rotary Mud, with all drilling completed by highly experienced contractor Watson Drilling. Drill cuttings were collected at 1m intervals for geological logging.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	• Drill chips were collected for geological logging purposes only, with very good sample recoveries. • Due to the historic nature of the BW and GLD series drill holes, it is not possible to comment further regarding sample recoveries.

Criteria	JORC Code explanation	Commentary
Logging	• *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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• All WRM series drill holes have been geologically logged and incorporated into the Boss Energy database. • Chip samples were collected at 1m intervals and final chip trays photographed.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• The PFN tool has a depth of investigation radius of approximately 25-40 cm around the borehole. This provides an accurate measurement of epithermal/thermal neutron ratios for the calculation of pU_3O_8. • No chemical assay sampling was carried out for the drill holes in question. • Given the historic nature of the BW and GLD series holes, it is not possible to comment on the gamma and PFN logging carried out at the time.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *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.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• All PFN and gamma tools being used as part of the current drilling campaign have been calibrated at the PIRSA calibration facility in Adelaide by both Boss Energy and logging contractor Borehole Wireline prior to the program commencing. • Gamma and PFN tools used to log the GLD series drill holes were typically calibrated prior to a drilling program commencing, both at the PIRSA facility in Adelaide and purpose built pits at the Honeymoon Uranium Mine. • Given the historic nature of the BW series holes, it is not possible to comment on the calibration of gamma logging tools carried out at the time.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Several twin holes are being drilled as part of the current campaign. The PFN and calibrated gamma results from this drilling will be used to verify the historic gamma logging from the 1970's/1980's. • Natural gamma logs are used to depth match all geophysical tool runs to ensure accuracy.

Criteria	JORC Code explanation	Commentary
Location of data points	• *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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• The current WRM series drill holes have been pegged using a hand-held Garmin GPS with a nominal accuracy of ±4m. Coordinates are cited in MGA94 grid, z54.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• The Competent Person has reviewed all available data and, based on their knowledge and experience with the various exploration techniques employed, is satisfied that the historical drilling data included here is of sufficient quality and accuracy to provide a reasonable, if indicative, basis for the mineralisation reported herein. • Historic drill hole spacing within the Inferred Resource footprint varies greatly from ~100m up to 500m. • The current WRM series drill hole spacing ranges from 80m to ~120m within the Billeroo area and ~80-200m within the Sunrise area. • All PFN and gamma-derived eU_3O_8 data (both new and historic) has been composited to 25cm intervals where possible.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	• All new & historical holes were drilled vertically which provides an accurate intersection of the flat laying mineralised bodies.
Sample security	• *The measures taken to ensure sample security.*	• All new data from the current campaign is processed and verified on site and then incorporated directly into the Boss Energy database.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• All information and data used in this report have been reviewed by the Boss Energy Competent Person. Multiple PFN tools are being run on several of the new WRM series holes for validation and comparison purposes.

Section 2 – Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *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.* • *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.*	• The Boss Energy tenure within South Australia currently comprises 1 granted Mining Lease, 10 granted Exploration Licenses, two Exploration Licence Applications, 3 Retention Leases and 2 Miscellaneous Purpose Licenses.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The Gould's Dam project area was first explored for uranium in the late 1960's and has been subject to fluctuating levels of uranium exploration since this time. • The Gould's Dam deposit has been the subject of several resource estimates since the mid-late 1970's, with the most recent being completed by Boss Energy in 2016.
Geology	• *Deposit type, geological setting and style of mineralisation.*	Palaeovalley-type, sand-hosted, tabular style uranium of the following model: • Narrower, mineralised, palaeochannels within a broader palaeovalley system, • Underlying basement faults reactivated sporadically, greatly influencing the shape and formation of the overlying fluvial system, creating uplifted ridges of basement and the meandering narrow palaeochannels described above; • REDOX interfaces from the vertical and lateral movement of uraniferous (oxidised) fluids from south (granitic source rocks in the Olary Ranges) to north (towards Lake Frome); • Organic/sulphide-rich horizons and possible hydrocarbon fluids, the latter seeping upwards along the basement faults. Organic- and sulphide-rich material formed within shallow channel embankments and ledges.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
		• Please refer to Appendix 1, Table 2 for drill collar information.

Criteria	JORC Code explanation	Commentary
	○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *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.*	
Data aggregation methods	• *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.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Mineralised intervals were chosen based upon a nominal 250ppm U_3O_8 cutoff, 0.50 m minimum interval thickness and maximum 1m internal dilution for reporting. Where available, Prompt Fission Neutron (PFN) data is used which is designated pU_3O_8. For historical drilling or in instances during modern drilling where the PFN tool data was unavailable, gamma tool derived data is used which is designated eU_3O_8 and may be affected by radiometric disequilibrium. There have been no disequilibrium correction factors applied to eU_3O_8 data collected during the recent program at this stage.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *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').*	• Historic drill traverses were oriented at oblique angles across the strike of the palaeovalley as per the historical interpretation current at the time of drilling. • Modern drill traverses are often oriented at right angle across the domain strike, although this can vary depending on the interpreted geological setting of each area.
Diagrams	• *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.*	• Appropriate and relevant diagrams have been included in the announcement
Balanced reporting	• *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.*	• Balanced reporting has been adhered to.
Other substantive	• *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*	• Not applicable.

Criteria	JORC Code explanation	Commentary
exploration data	*treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• All results will be used to update the geological and resource models in the coming months, which will then be used to plan the next phase of exploration activity at the Gould's Dam project.